

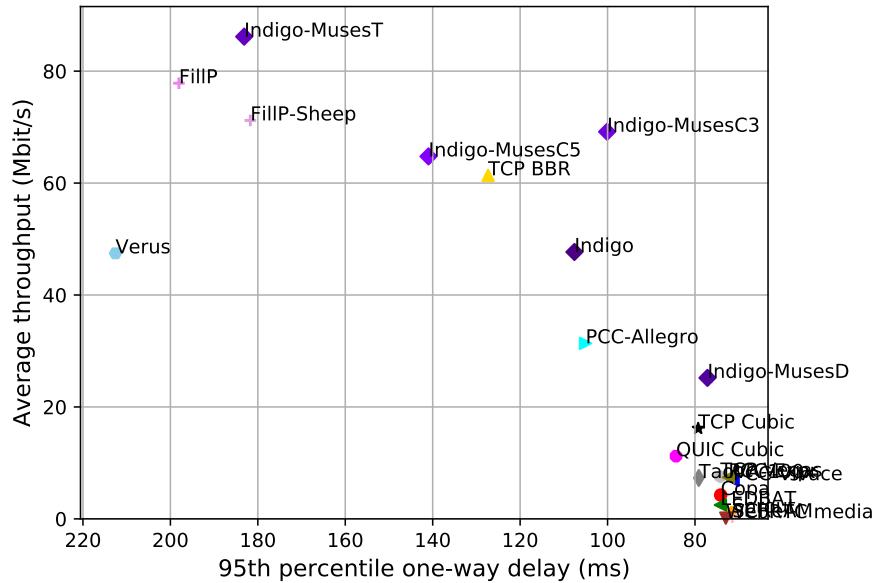
## Pantheon Report

Generated at 2019-02-20 03:37:12 (UTC).  
Data path: AWS Korea on `ens5` (*local*) → China on `eno1` (*remote*).  
Repeated the test of 21 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

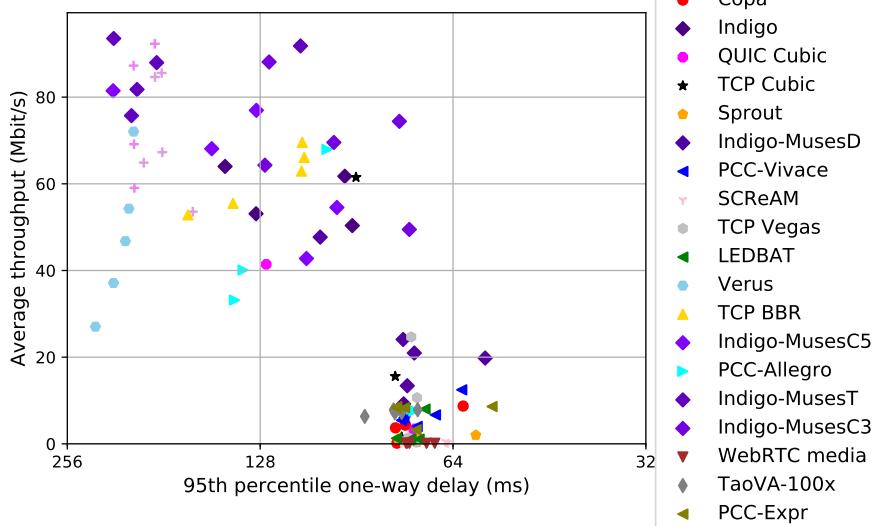
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS Korea to China, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



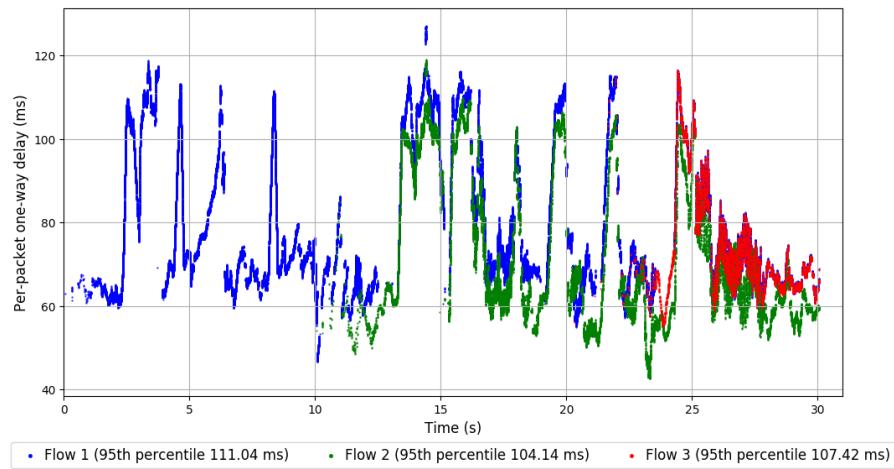
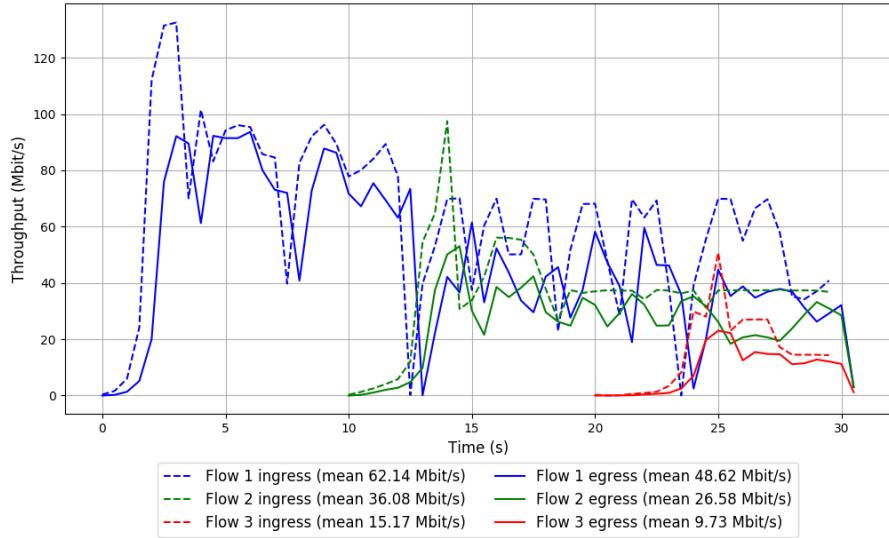
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	42.36	24.08	9.00	125.40	132.01	119.32	17.90	24.67	26.36
Copa	5	1.97	2.21	2.49	73.94	74.09	74.32	8.85	8.14	6.09
TCP Cubic	5	11.68	2.17	9.12	77.82	75.76	77.11	1.30	1.24	1.71
FillP	5	48.45	37.36	13.80	195.58	197.11	195.25	12.22	17.00	20.61
FillP-Sheep	5	32.53	45.55	25.15	180.13	180.55	188.99	3.98	2.38	3.31
Indigo	5	32.61	13.27	19.99	104.83	107.75	109.17	6.48	6.01	13.14
Indigo-MusesC3	5	35.36	33.22	40.22	84.99	103.93	112.02	2.28	2.14	1.93
Indigo-MusesC5	5	43.23	25.95	15.11	135.02	139.37	148.95	2.08	2.50	3.53
Indigo-MusesD	5	13.21	11.45	14.76	72.64	78.58	65.61	2.08	1.90	2.14
Indigo-MusesT	5	63.26	29.35	12.54	175.06	184.44	188.45	4.12	4.94	4.29
LEDBAT	5	1.32	1.29	0.94	70.83	69.94	71.42	1.55	1.99	1.41
PCC-Allegro	5	29.82	9.97	4.43	103.08	104.36	97.56	19.78	32.59	30.97
PCC-Expr	5	0.01	9.19	3.99	69.99	72.37	72.21	79.14	34.22	48.82
QUIC Cubic	5	2.56	8.84	8.65	79.87	80.01	88.20	1.95	1.79	1.75
SCReAM	5	0.14	0.15	0.15	70.03	68.80	70.79	1.64	1.57	2.15
Sprout	5	0.61	0.51	0.56	68.91	71.88	70.21	2.15	2.46	1.33
TaoVA-100x	5	0.01	7.84	6.37	68.41	80.19	79.17	91.46	9.94	21.18
TCP Vegas	5	0.94	4.28	11.35	64.52	68.01	72.86	1.81	2.63	3.26
Verus	5	28.21	24.49	9.56	198.20	201.30	203.29	19.15	12.69	23.75
PCC-Vivace	5	3.13	2.32	6.79	67.55	71.18	70.37	1.16	1.00	0.89
WebRTC media	5	0.04	0.05	0.05	67.39	68.37	71.74	2.29	1.18	0.58

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-20 00:54:40
End at: 2019-02-20 00:55:10
Local clock offset: 8.022 ms
Remote clock offset: -8.261 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.57 Mbit/s
95th percentile per-packet one-way delay: 110.029 ms
Loss rate: 23.74%
-- Flow 1:
Average throughput: 48.62 Mbit/s
95th percentile per-packet one-way delay: 111.038 ms
Loss rate: 21.75%
-- Flow 2:
Average throughput: 26.58 Mbit/s
95th percentile per-packet one-way delay: 104.136 ms
Loss rate: 26.32%
-- Flow 3:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 107.417 ms
Loss rate: 35.91%
```

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

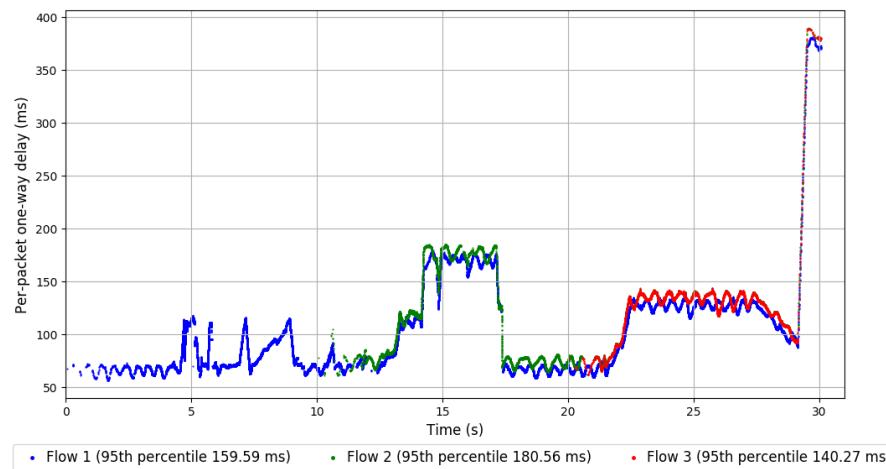
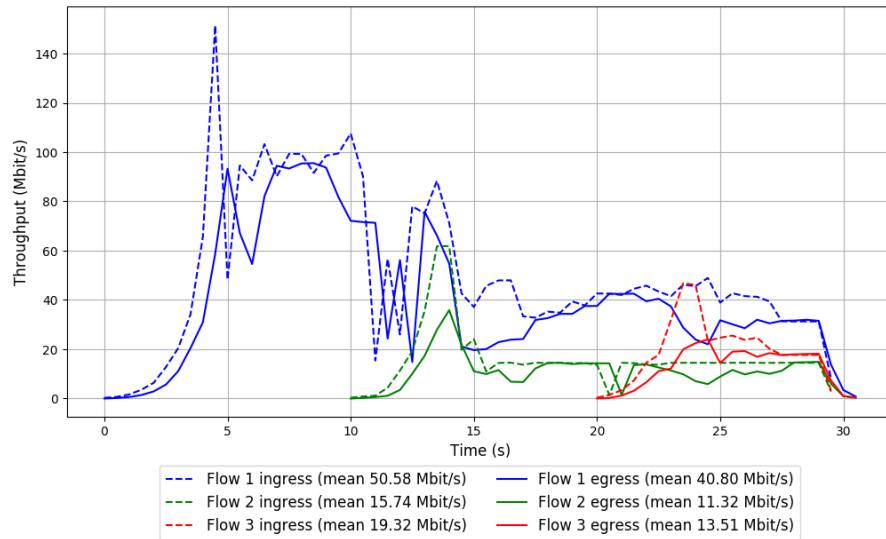


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-20 01:34:57
End at: 2019-02-20 01:35:27
Local clock offset: 0.989 ms
Remote clock offset: -5.521 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.84 Mbit/s
95th percentile per-packet one-way delay: 165.944 ms
Loss rate: 21.72%
-- Flow 1:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 159.588 ms
Loss rate: 19.32%
-- Flow 2:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 180.562 ms
Loss rate: 28.10%
-- Flow 3:
Average throughput: 13.51 Mbit/s
95th percentile per-packet one-way delay: 140.273 ms
Loss rate: 30.17%
```

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

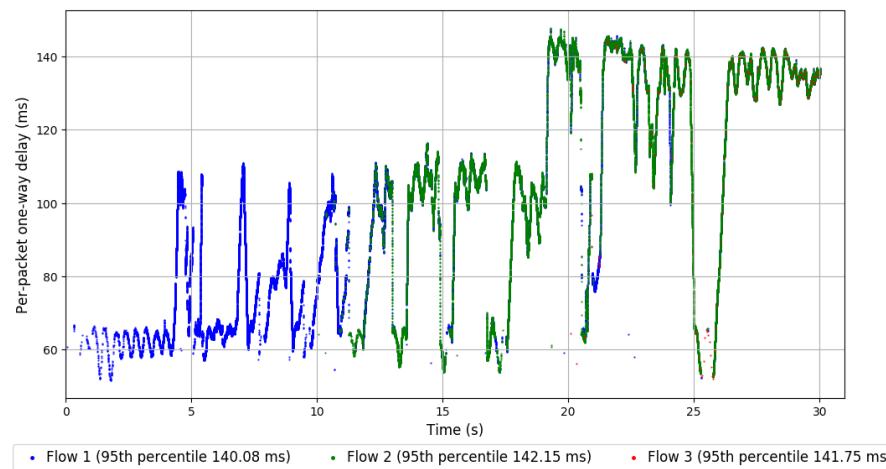
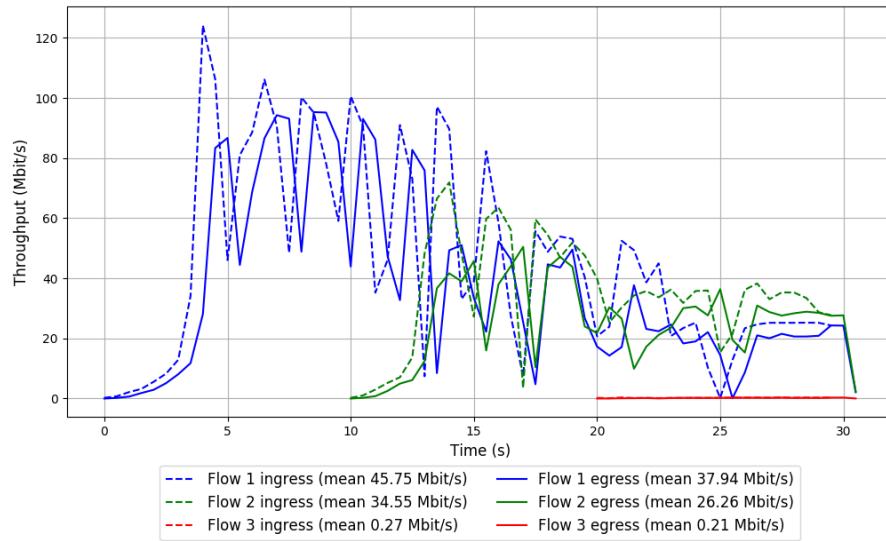


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-20 02:13:16
End at: 2019-02-20 02:13:46
Local clock offset: 6.393 ms
Remote clock offset: -14.989 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 141.098 ms
Loss rate: 19.39%
-- Flow 1:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 140.083 ms
Loss rate: 17.06%
-- Flow 2:
Average throughput: 26.26 Mbit/s
95th percentile per-packet one-way delay: 142.147 ms
Loss rate: 24.02%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 141.755 ms
Loss rate: 22.61%
```

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

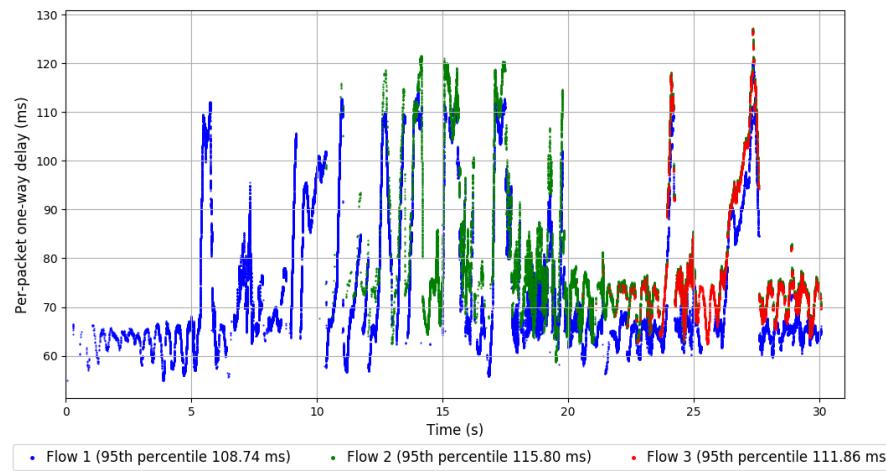
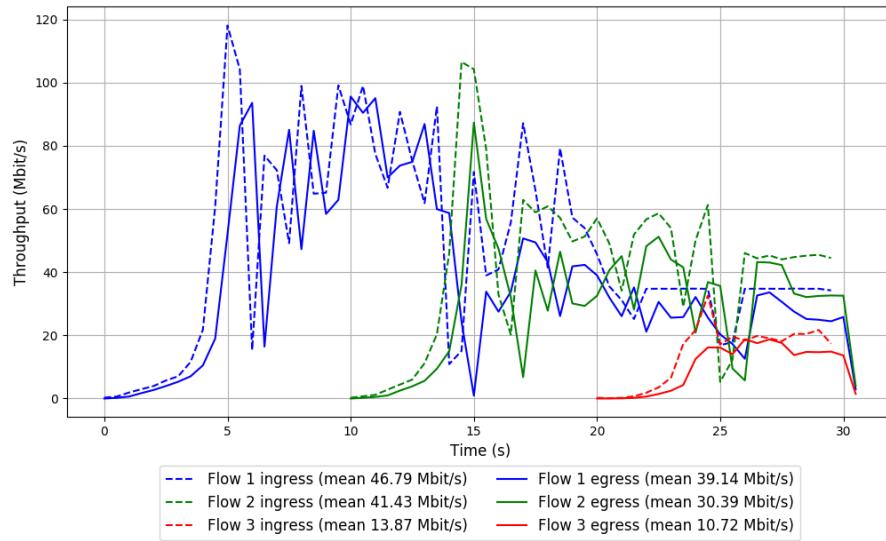


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-20 02:53:27
End at: 2019-02-20 02:53:57
Local clock offset: 5.948 ms
Remote clock offset: -15.234 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.94 Mbit/s
95th percentile per-packet one-way delay: 110.322 ms
Loss rate: 20.32%
-- Flow 1:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 108.738 ms
Loss rate: 16.33%
-- Flow 2:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 115.795 ms
Loss rate: 26.66%
-- Flow 3:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 111.858 ms
Loss rate: 22.76%
```

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

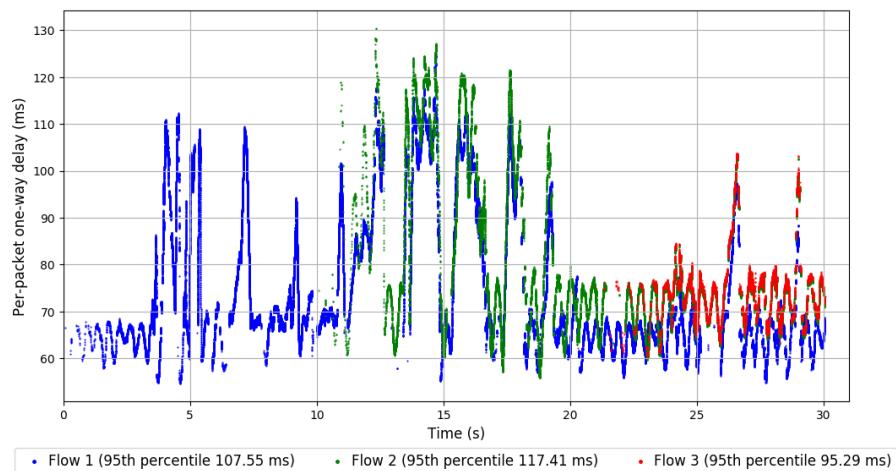
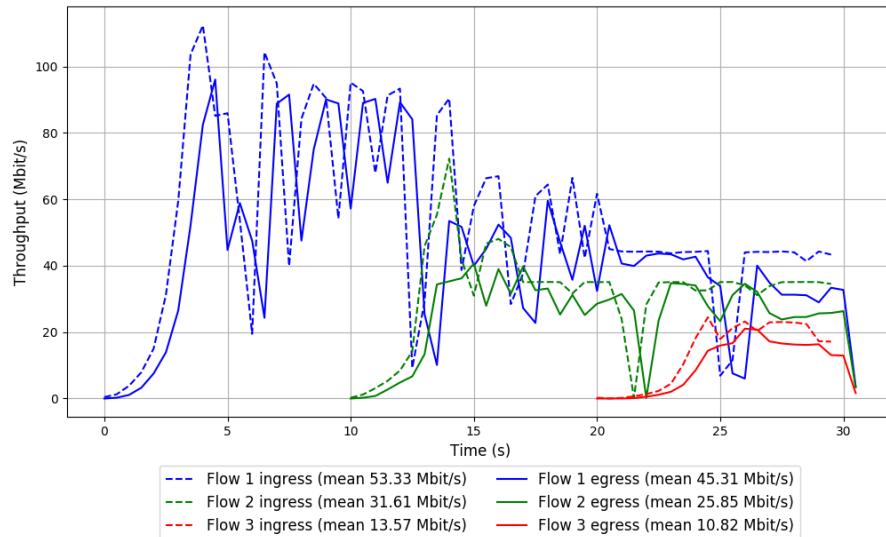


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-20 03:29:22
End at: 2019-02-20 03:29:52
Local clock offset: 3.454 ms
Remote clock offset: -14.07 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 109.250 ms
Loss rate: 16.20%
-- Flow 1:
Average throughput: 45.31 Mbit/s
95th percentile per-packet one-way delay: 107.551 ms
Loss rate: 15.04%
-- Flow 2:
Average throughput: 25.85 Mbit/s
95th percentile per-packet one-way delay: 117.409 ms
Loss rate: 18.24%
-- Flow 3:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 95.286 ms
Loss rate: 20.34%
```

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

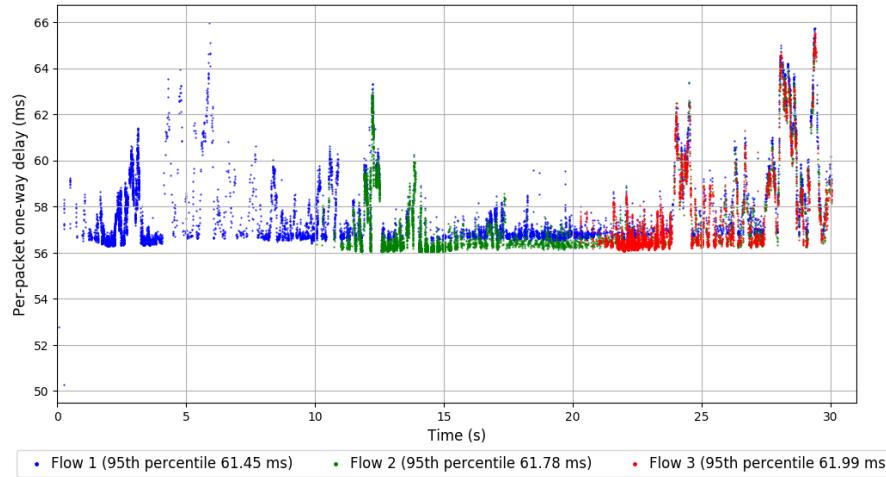
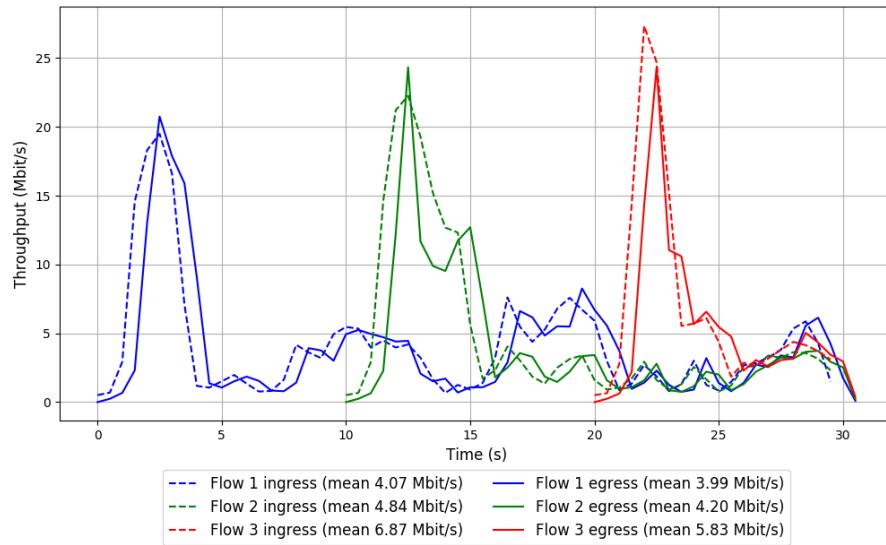


Run 1: Statistics of Copa

```
Start at: 2019-02-20 00:30:59
End at: 2019-02-20 00:31:29
Local clock offset: -0.71 ms
Remote clock offset: 1.066 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.72 Mbit/s
95th percentile per-packet one-way delay: 61.716 ms
Loss rate: 8.95%
-- Flow 1:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 61.449 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 61.783 ms
Loss rate: 13.28%
-- Flow 3:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 61.986 ms
Loss rate: 15.25%
```

## Run 1: Report of Copa — Data Link

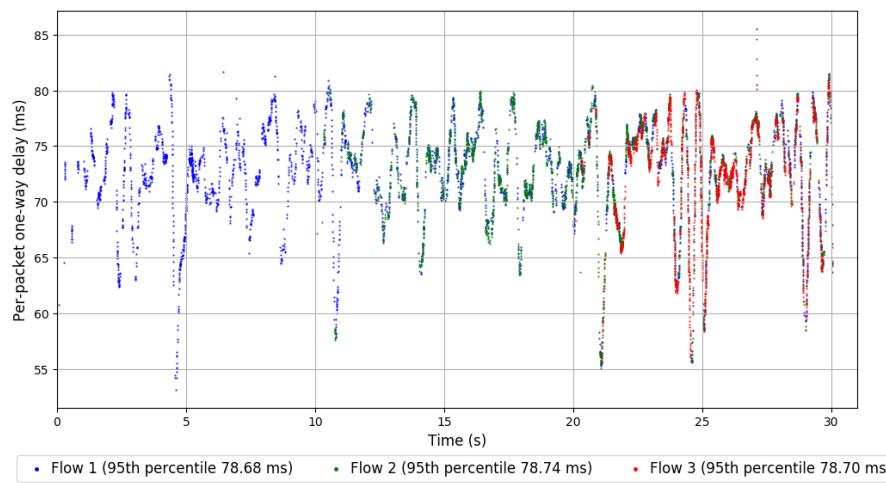
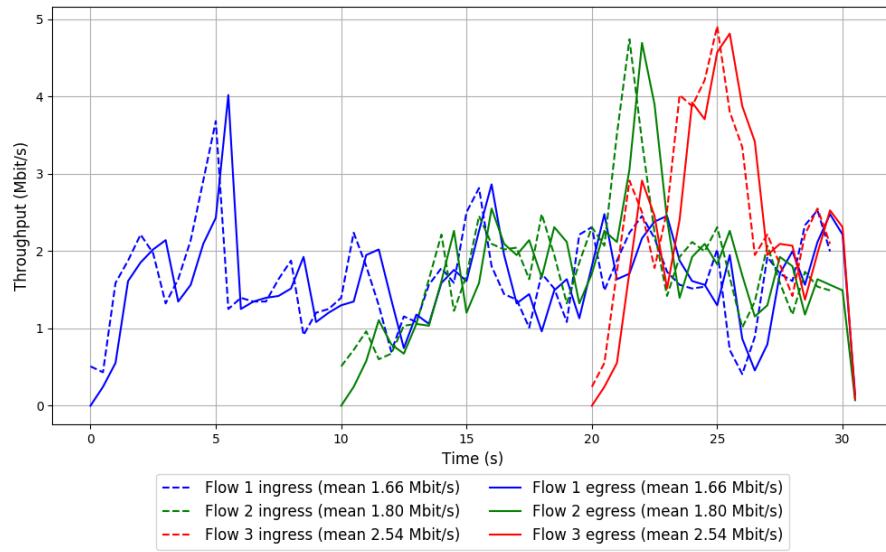


Run 2: Statistics of Copa

```
Start at: 2019-02-20 01:07:32
End at: 2019-02-20 01:08:02
Local clock offset: 5.88 ms
Remote clock offset: -1.718 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 78.699 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 78.676 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 78.743 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 78.703 ms
Loss rate: 0.33%
```

## Run 2: Report of Copa — Data Link

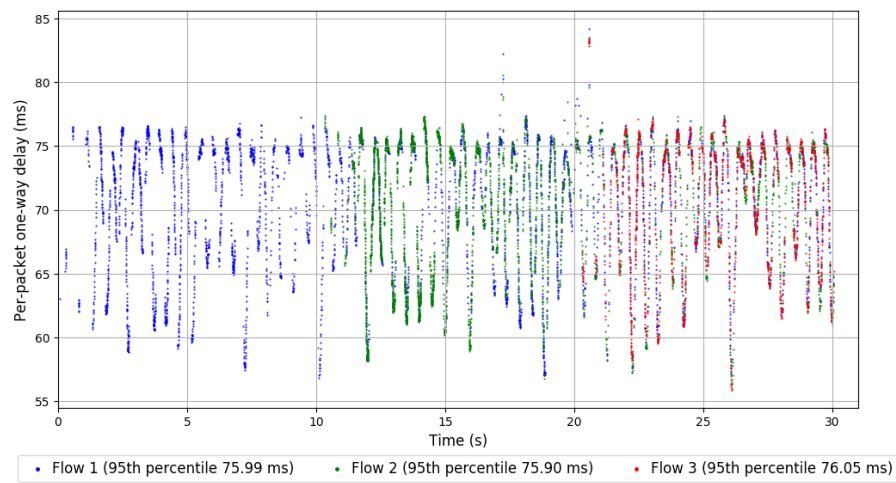
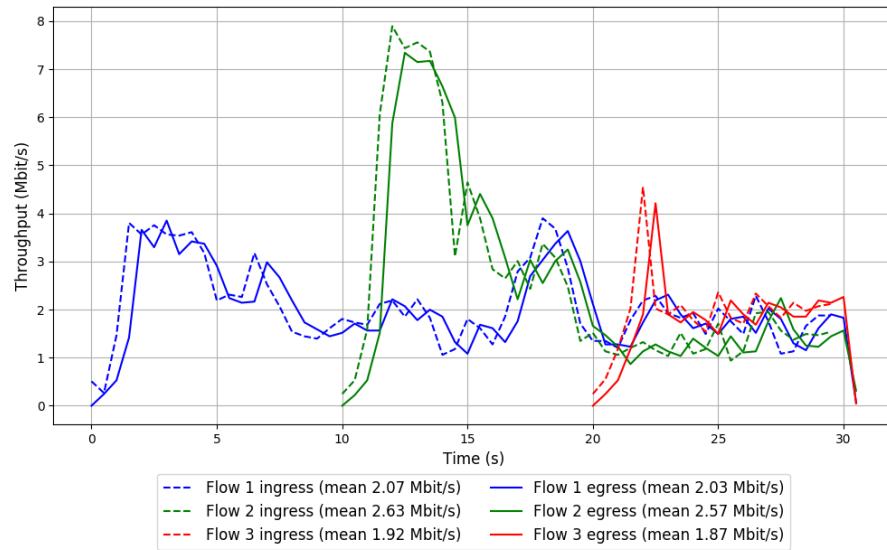


Run 3: Statistics of Copa

```
Start at: 2019-02-20 01:48:03
End at: 2019-02-20 01:48:33
Local clock offset: -3.245 ms
Remote clock offset: -13.23 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 75.974 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 75.986 ms
Loss rate: 2.23%
-- Flow 2:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 75.904 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 76.050 ms
Loss rate: 2.83%
```

Run 3: Report of Copa — Data Link

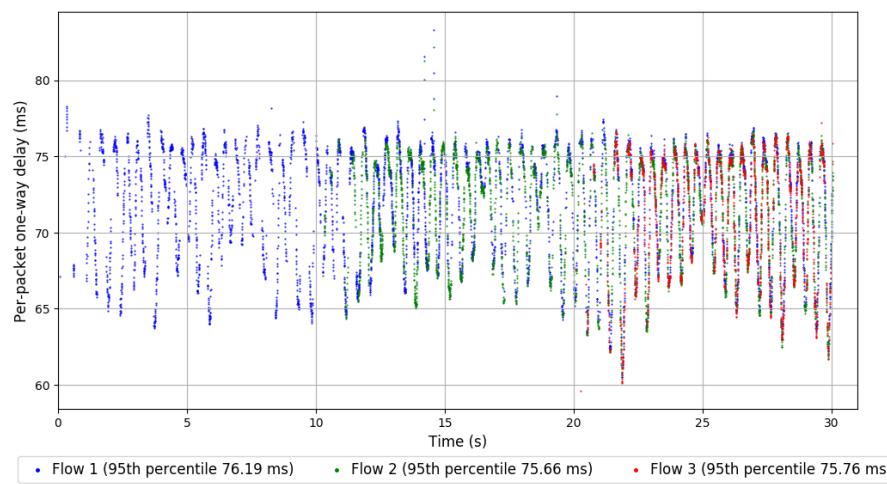
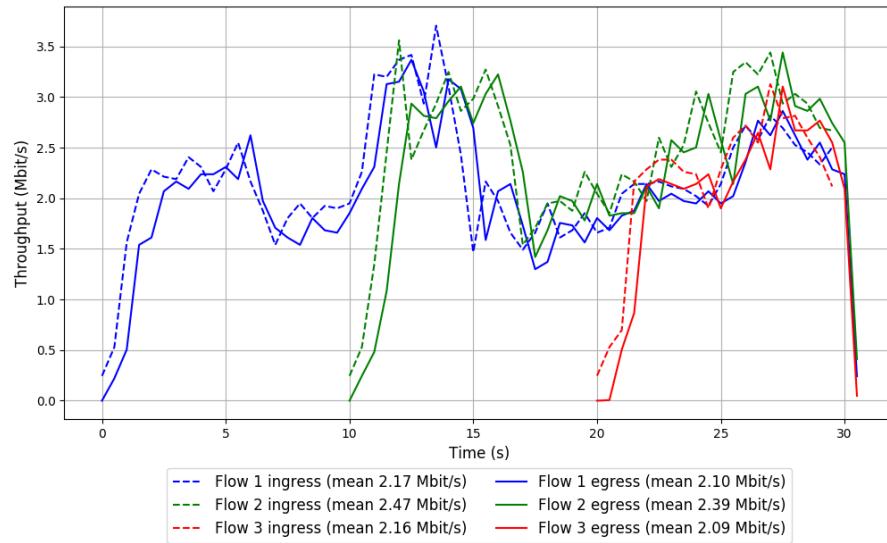


Run 4: Statistics of Copa

```
Start at: 2019-02-20 02:27:06
End at: 2019-02-20 02:27:36
Local clock offset: 10.077 ms
Remote clock offset: -10.955 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 75.963 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 76.186 ms
Loss rate: 3.35%
-- Flow 2:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 75.664 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 75.757 ms
Loss rate: 3.52%
```

Run 4: Report of Copa — Data Link

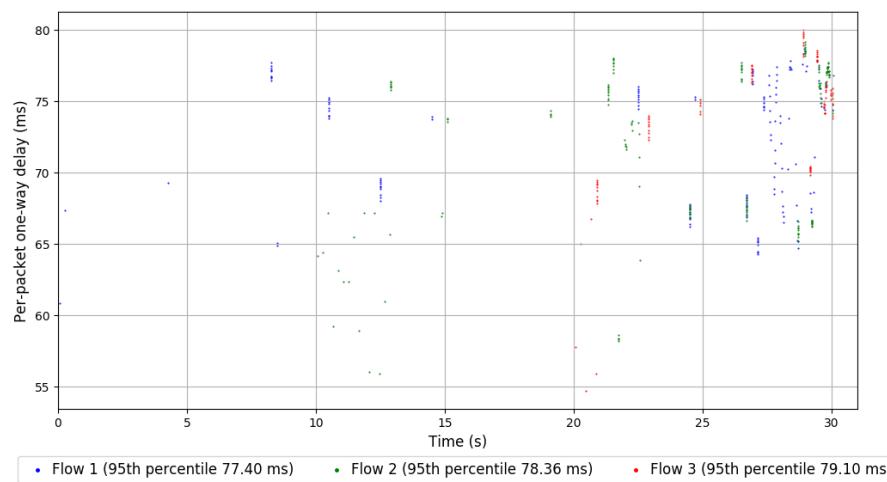
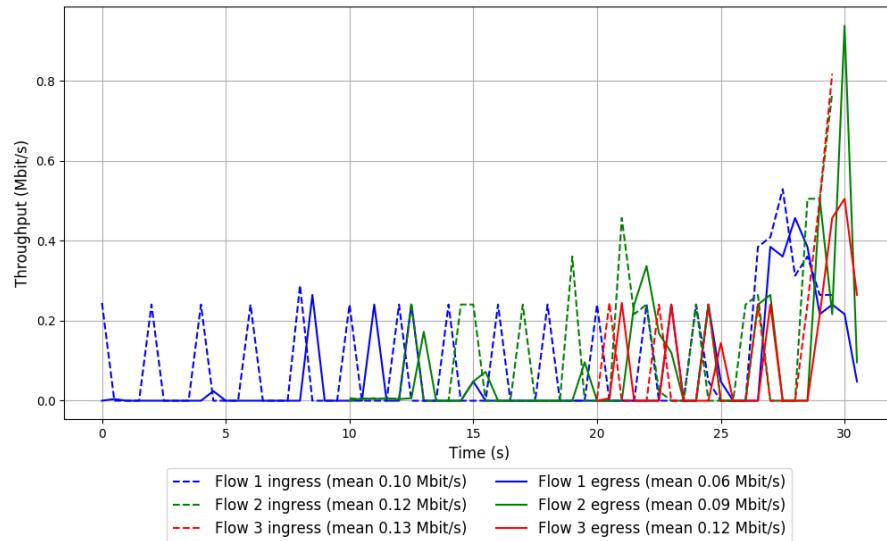


Run 5: Statistics of Copa

```
Start at: 2019-02-20 03:06:22
End at: 2019-02-20 03:06:52
Local clock offset: 4.712 ms
Remote clock offset: -12.382 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 78.299 ms
Loss rate: 25.51%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 77.401 ms
Loss rate: 36.38%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 78.363 ms
Loss rate: 21.47%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 79.103 ms
Loss rate: 8.54%
```

## Run 5: Report of Copa — Data Link

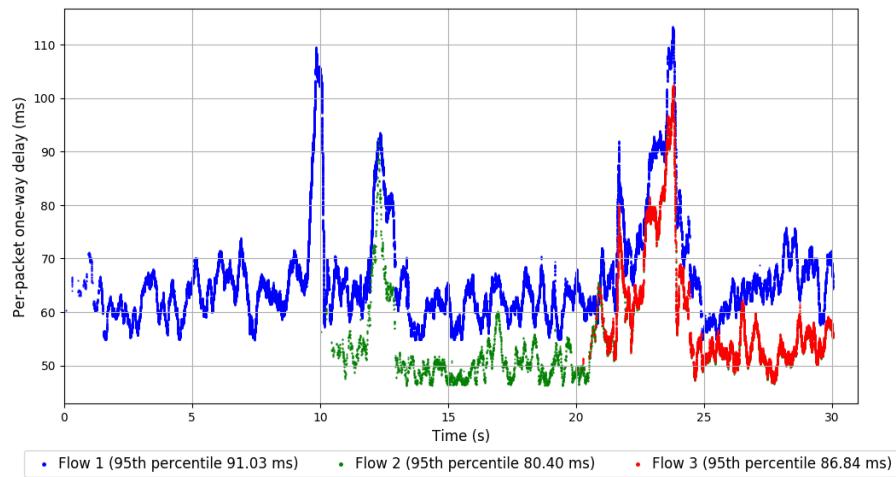
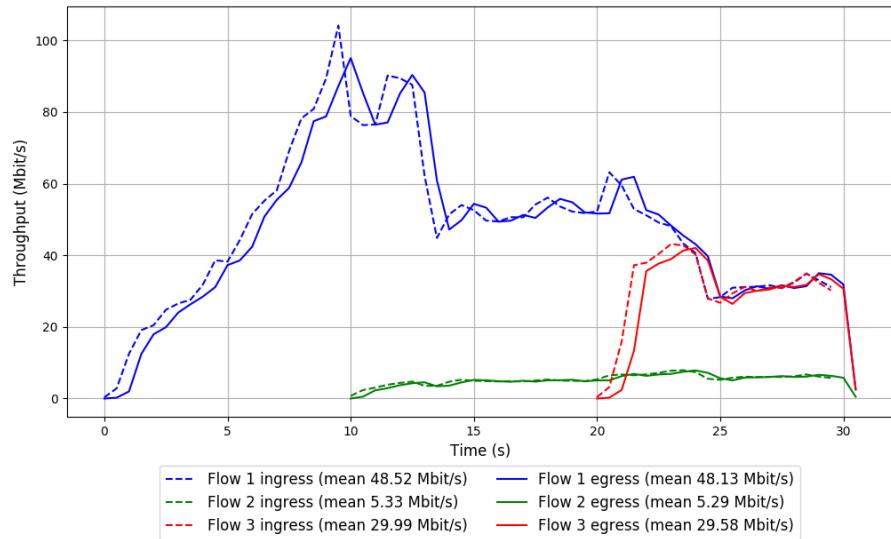


```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-20 00:35:43
End at: 2019-02-20 00:36:13
Local clock offset: 2.747 ms
Remote clock offset: 0.498 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.51 Mbit/s
95th percentile per-packet one-way delay: 90.706 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 48.13 Mbit/s
95th percentile per-packet one-way delay: 91.025 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 80.404 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 86.844 ms
Loss rate: 1.30%
```

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

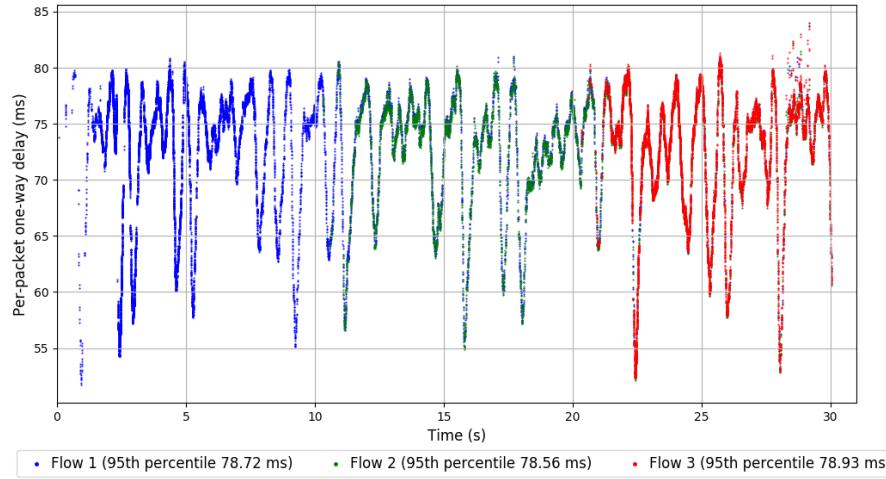
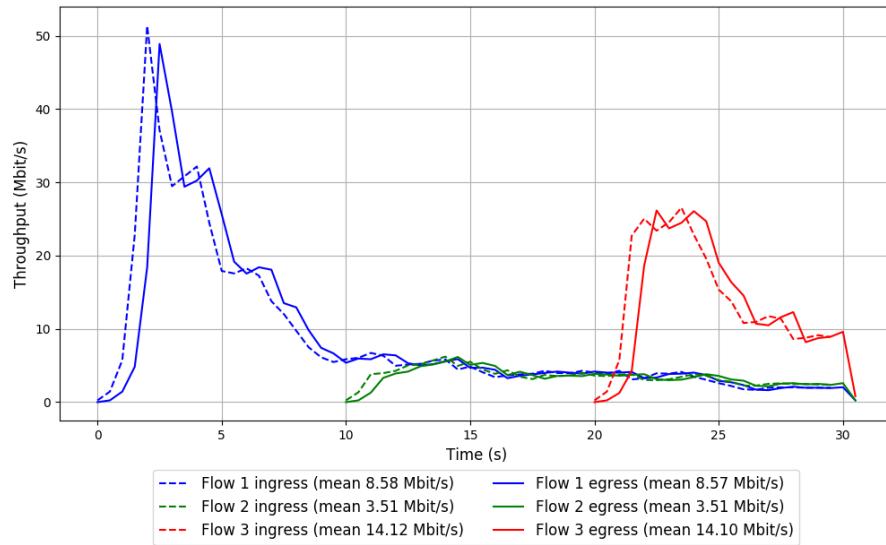


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-20 01:13:17
End at: 2019-02-20 01:13:47
Local clock offset: 4.984 ms
Remote clock offset: -1.964 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 78.763 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 78.715 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 78.558 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 14.10 Mbit/s
95th percentile per-packet one-way delay: 78.931 ms
Loss rate: 0.26%
```

Run 2: Report of TCP Cubic — Data Link

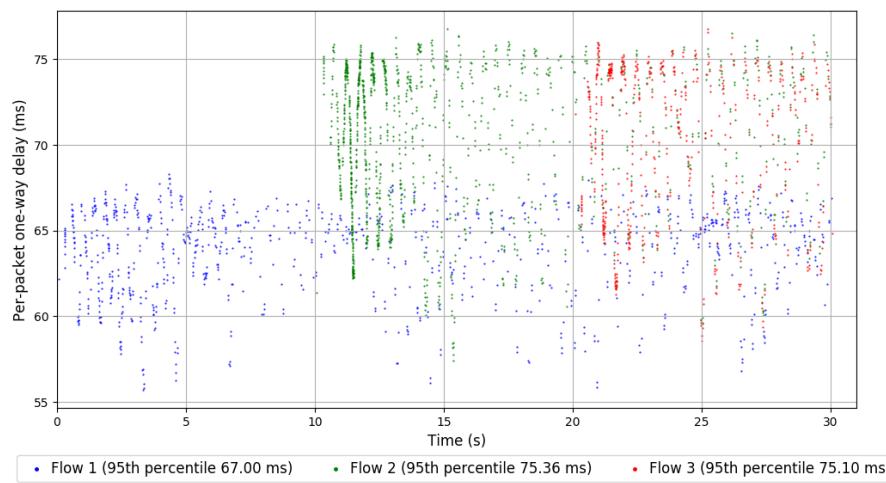
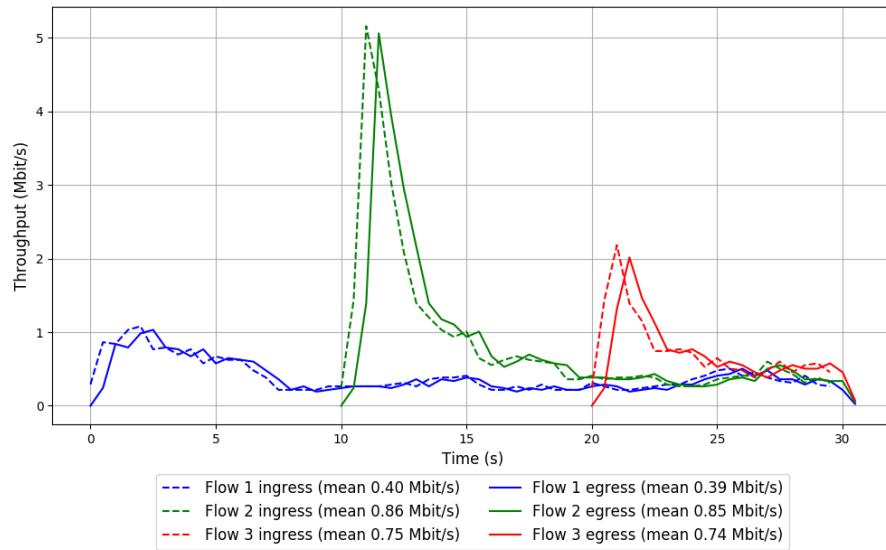


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-20 01:52:55
End at: 2019-02-20 01:53:25
Local clock offset: -3.934 ms
Remote clock offset: -15.151 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 75.048 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 67.003 ms
Loss rate: 2.41%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 75.365 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 75.103 ms
Loss rate: 1.91%
```

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

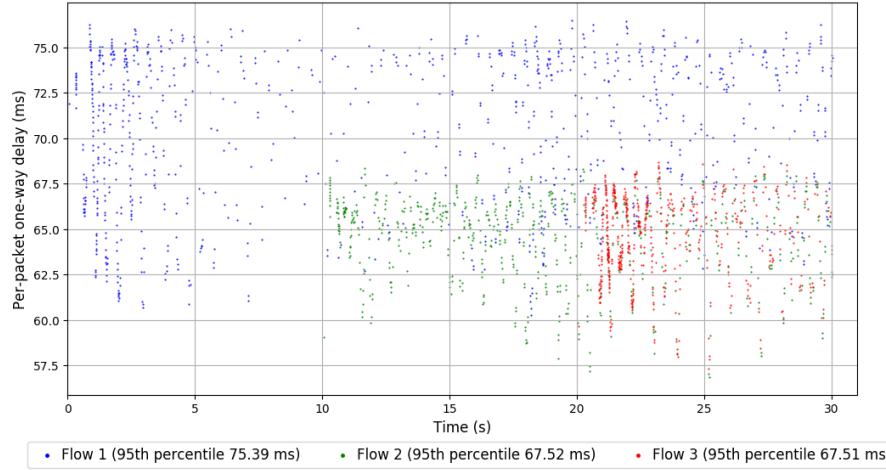
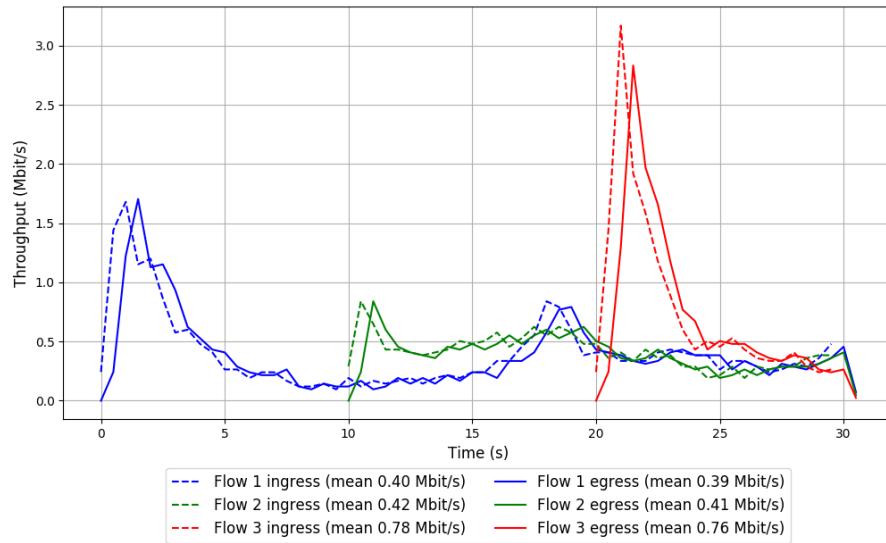


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-20 02:32:21
End at: 2019-02-20 02:32:51
Local clock offset: 9.426 ms
Remote clock offset: -10.93 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 74.865 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 75.392 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 67.523 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 67.512 ms
Loss rate: 2.92%
```

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

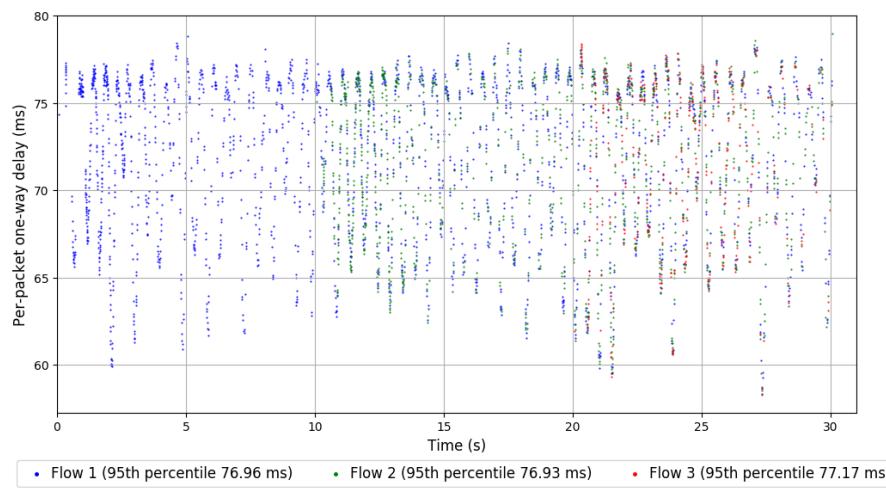
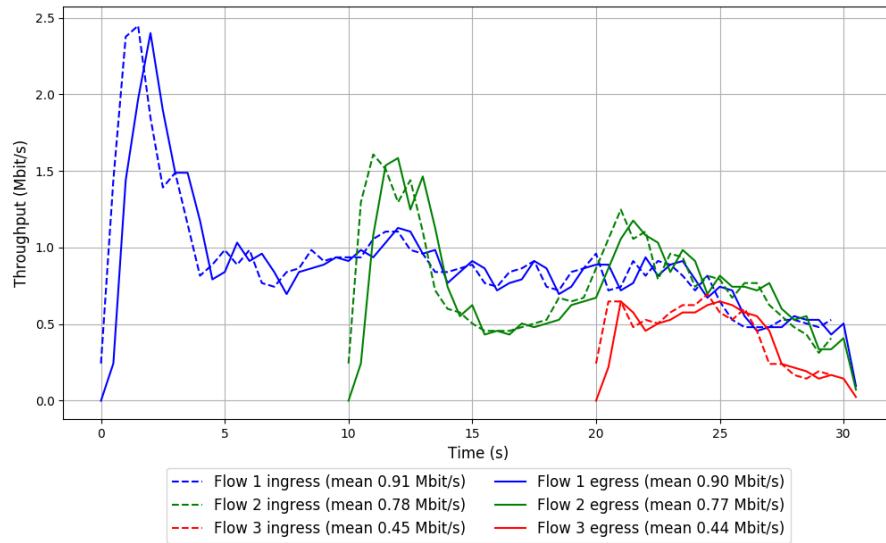


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-20 03:12:21
End at: 2019-02-20 03:12:51
Local clock offset: 4.128 ms
Remote clock offset: -12.772 ms

# Below is generated by plot.py at 2019-02-20 03:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 76.988 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 76.958 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 76.927 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 77.175 ms
Loss rate: 2.16%
```

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

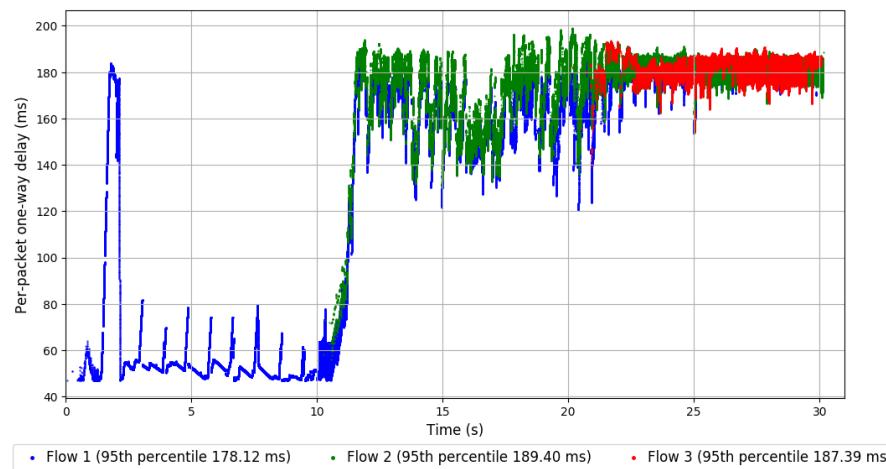
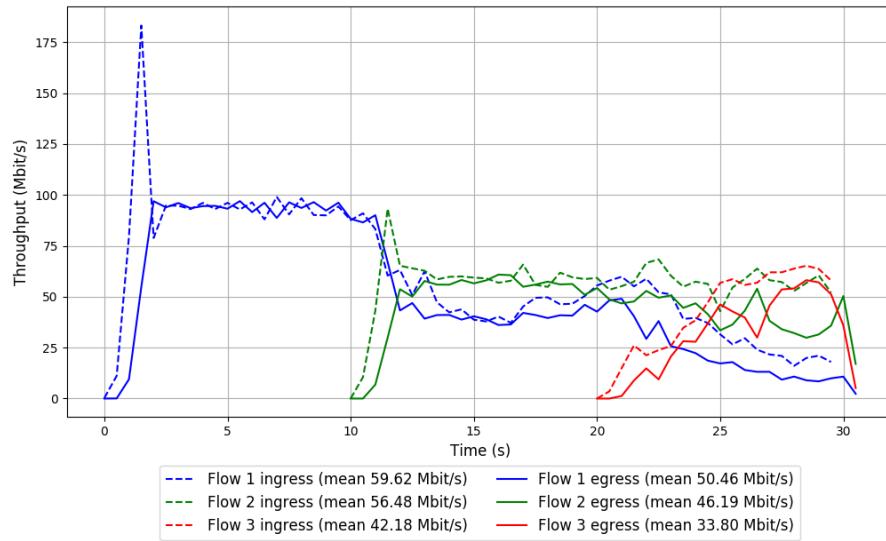


```
Run 1: Statistics of FillP

Start at: 2019-02-20 00:28:56
End at: 2019-02-20 00:29:26
Local clock offset: -1.5 ms
Remote clock offset: 0.592 ms

# Below is generated by plot.py at 2019-02-20 03:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 186.910 ms
Loss rate: 16.60%
-- Flow 1:
Average throughput: 50.46 Mbit/s
95th percentile per-packet one-way delay: 178.119 ms
Loss rate: 15.01%
-- Flow 2:
Average throughput: 46.19 Mbit/s
95th percentile per-packet one-way delay: 189.398 ms
Loss rate: 17.69%
-- Flow 3:
Average throughput: 33.80 Mbit/s
95th percentile per-packet one-way delay: 187.394 ms
Loss rate: 20.42%
```

## Run 1: Report of FillP — Data Link

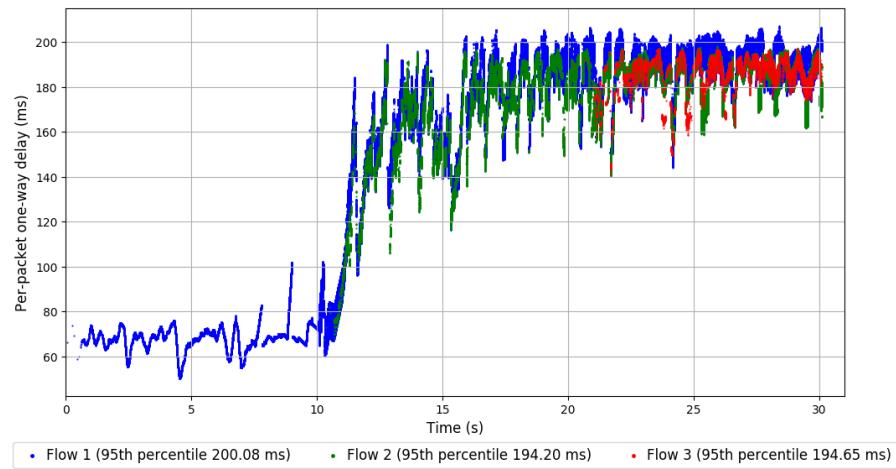
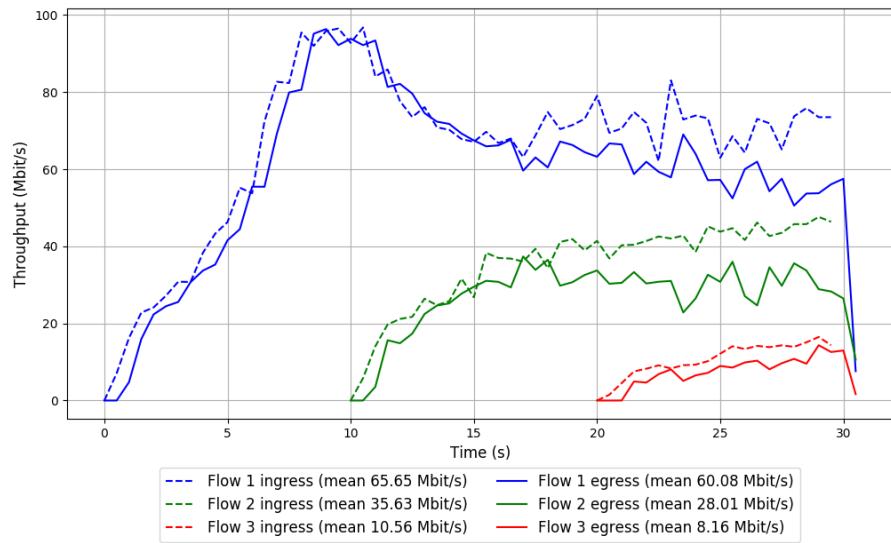


Run 2: Statistics of FillP

```
Start at: 2019-02-20 01:05:03
End at: 2019-02-20 01:05:33
Local clock offset: 6.631 ms
Remote clock offset: -6.179 ms

# Below is generated by plot.py at 2019-02-20 03:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.39 Mbit/s
95th percentile per-packet one-way delay: 199.098 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 60.08 Mbit/s
95th percentile per-packet one-way delay: 200.077 ms
Loss rate: 8.30%
-- Flow 2:
Average throughput: 28.01 Mbit/s
95th percentile per-packet one-way delay: 194.197 ms
Loss rate: 21.09%
-- Flow 3:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 194.649 ms
Loss rate: 23.35%
```

## Run 2: Report of FillP — Data Link

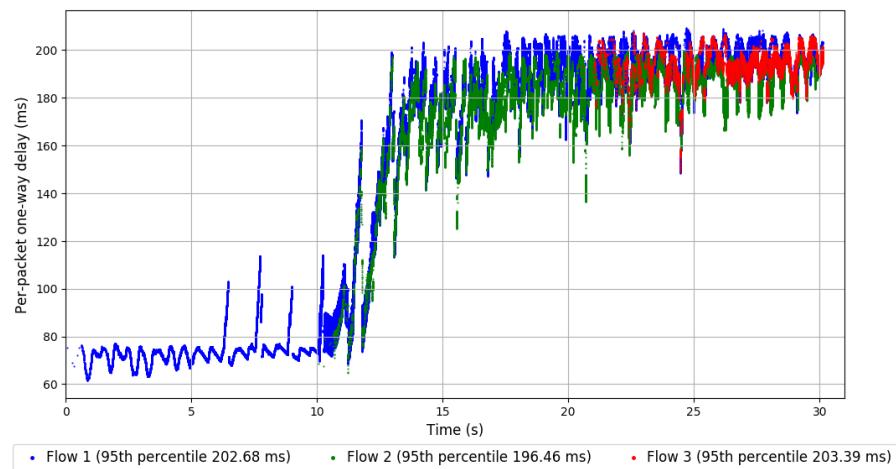
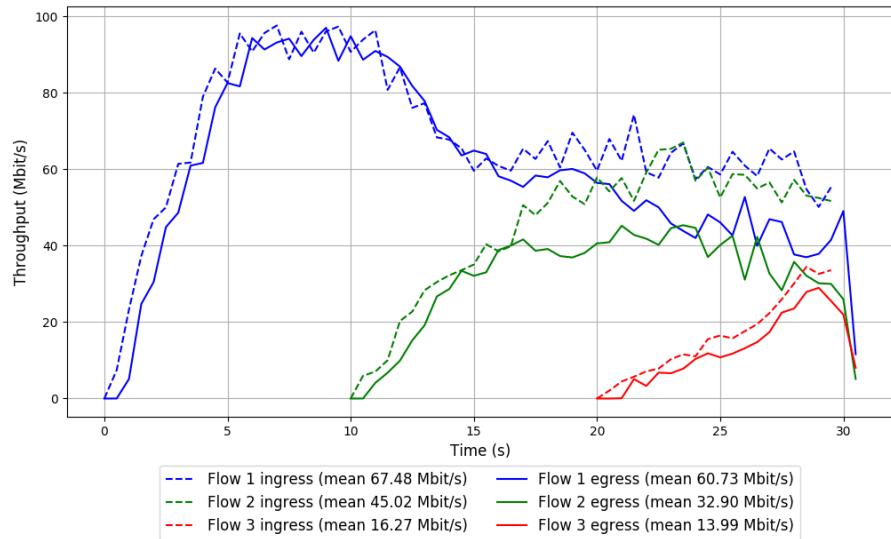


Run 3: Statistics of FillP

```
Start at: 2019-02-20 01:45:32
End at: 2019-02-20 01:46:02
Local clock offset: -2.776 ms
Remote clock offset: -12.887 ms

# Below is generated by plot.py at 2019-02-20 03:33:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.27 Mbit/s
95th percentile per-packet one-way delay: 201.701 ms
Loss rate: 14.92%
-- Flow 1:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 202.680 ms
Loss rate: 9.80%
-- Flow 2:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 196.455 ms
Loss rate: 26.60%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 203.392 ms
Loss rate: 14.17%
```

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

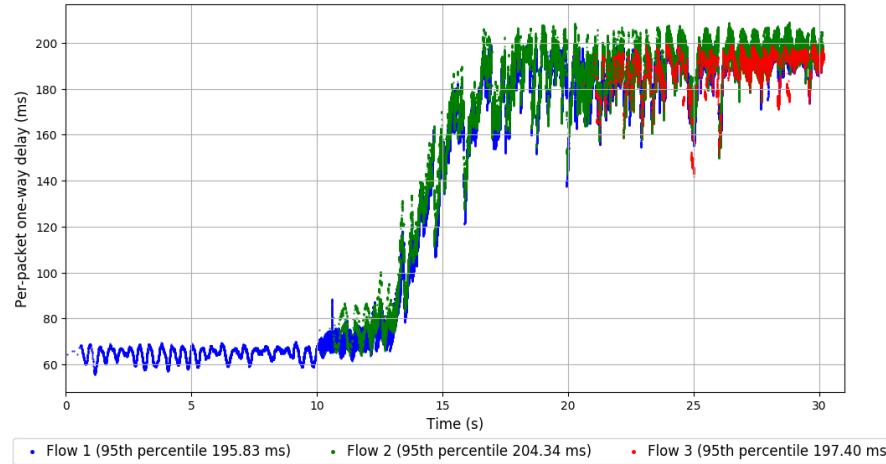
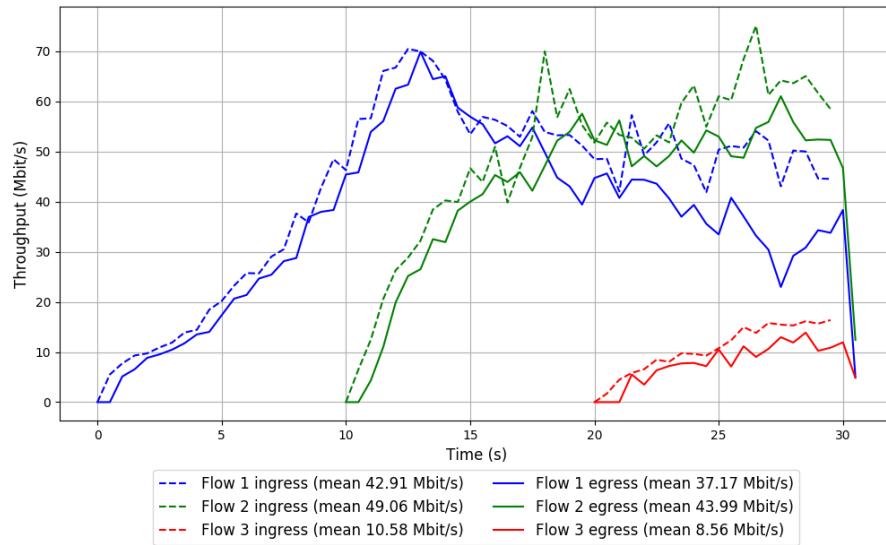


Run 4: Statistics of FillP

```
Start at: 2019-02-20 02:24:27
End at: 2019-02-20 02:24:57
Local clock offset: 9.681 ms
Remote clock offset: -10.32 ms

# Below is generated by plot.py at 2019-02-20 03:33:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.15 Mbit/s
95th percentile per-packet one-way delay: 201.399 ms
Loss rate: 12.15%
-- Flow 1:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 195.828 ms
Loss rate: 13.23%
-- Flow 2:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 204.344 ms
Loss rate: 9.99%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 197.398 ms
Loss rate: 19.05%
```

Run 4: Report of FillP — Data Link

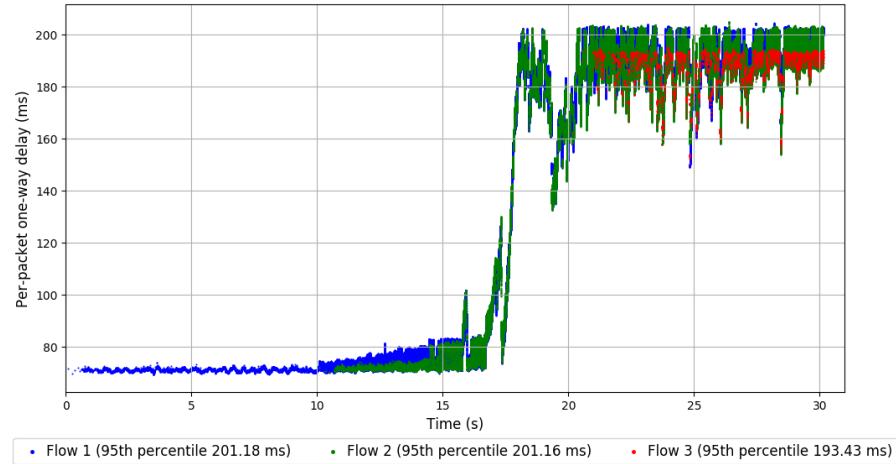
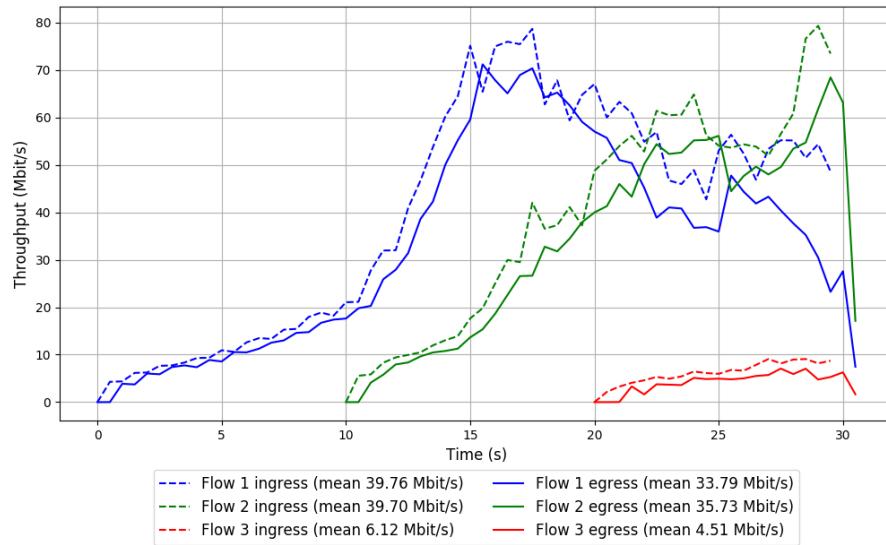


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-20 03:04:31
End at: 2019-02-20 03:05:01
Local clock offset: 5.028 ms
Remote clock offset: -17.535 ms

# Below is generated by plot.py at 2019-02-20 03:33:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 201.147 ms
Loss rate: 13.10%
-- Flow 1:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 201.178 ms
Loss rate: 14.75%
-- Flow 2:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 201.158 ms
Loss rate: 9.62%
-- Flow 3:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 193.434 ms
Loss rate: 26.08%
```

## Run 5: Report of FillP — Data Link

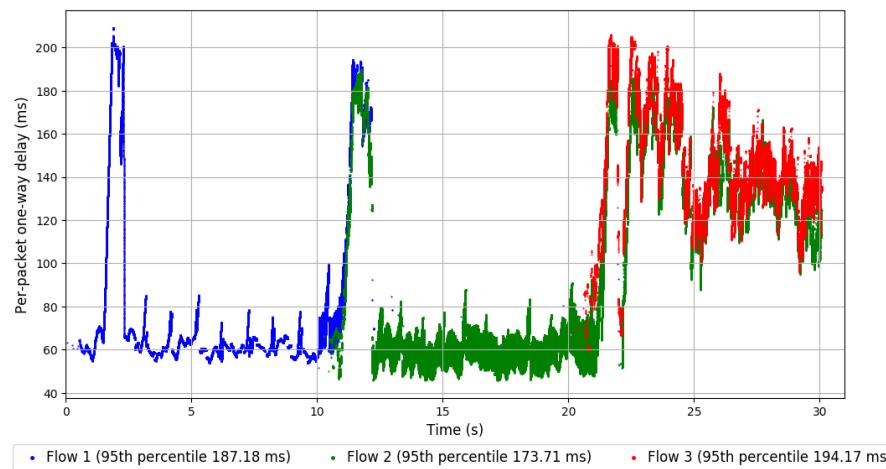
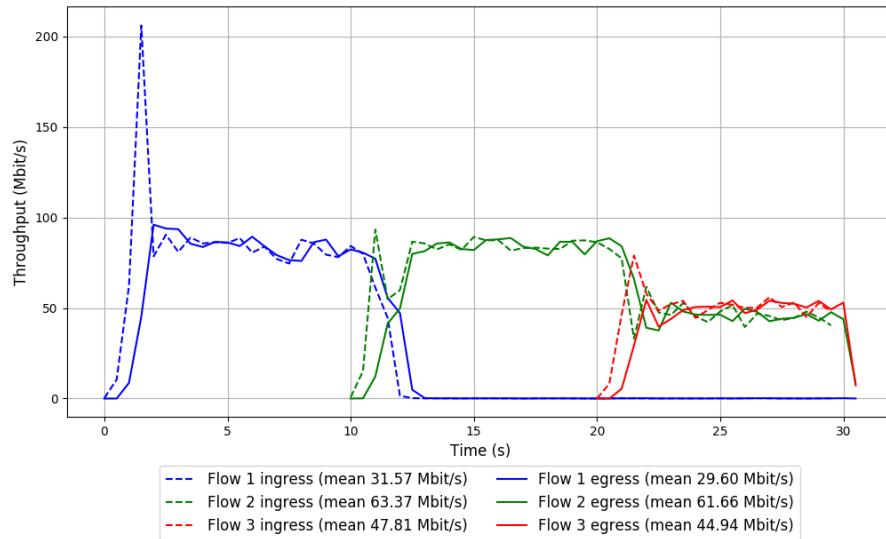


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-20 00:37:24
End at: 2019-02-20 00:37:54
Local clock offset: 3.55 ms
Remote clock offset: 0.399 ms

# Below is generated by plot.py at 2019-02-20 03:33:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.58 Mbit/s
95th percentile per-packet one-way delay: 182.339 ms
Loss rate: 4.22%
-- Flow 1:
Average throughput: 29.60 Mbit/s
95th percentile per-packet one-way delay: 187.184 ms
Loss rate: 6.04%
-- Flow 2:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 173.712 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: 194.174 ms
Loss rate: 5.59%
```

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

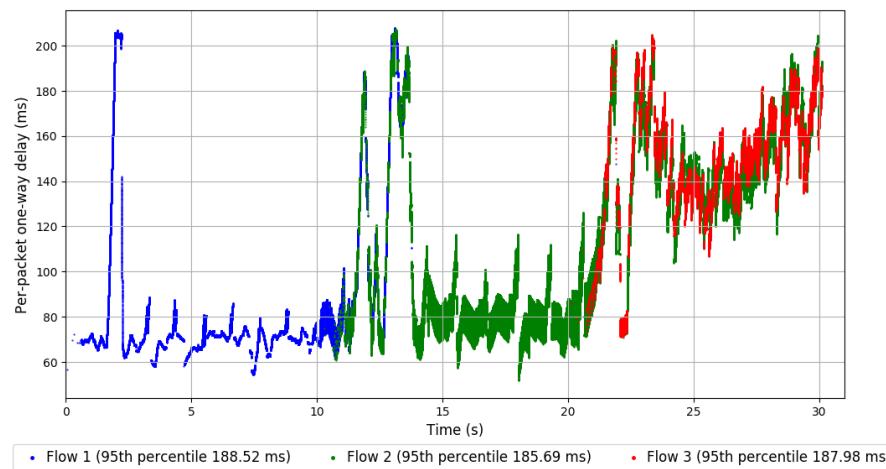
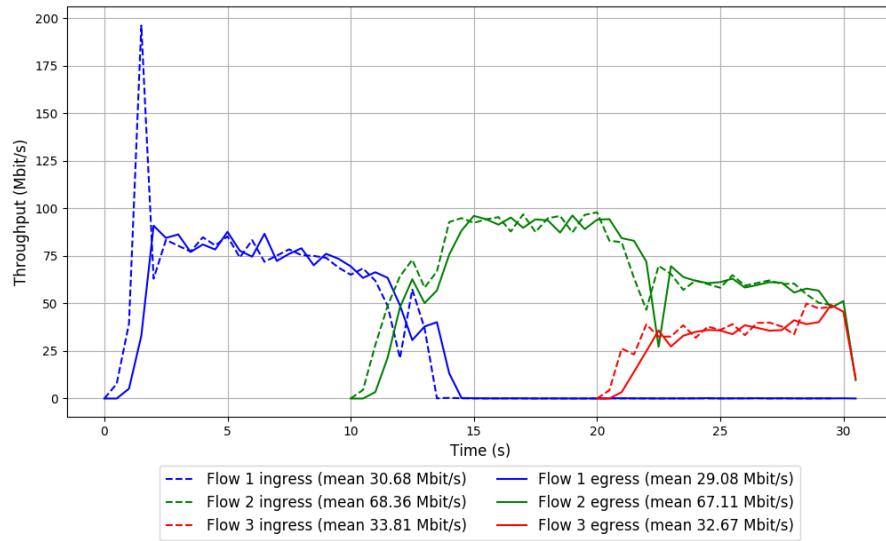


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-20 01:15:01
End at: 2019-02-20 01:15:31
Local clock offset: 4.797 ms
Remote clock offset: -5.477 ms

# Below is generated by plot.py at 2019-02-20 03:33:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.65 Mbit/s
95th percentile per-packet one-way delay: 186.775 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 188.518 ms
Loss rate: 4.91%
-- Flow 2:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 185.685 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 187.984 ms
Loss rate: 2.89%
```

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

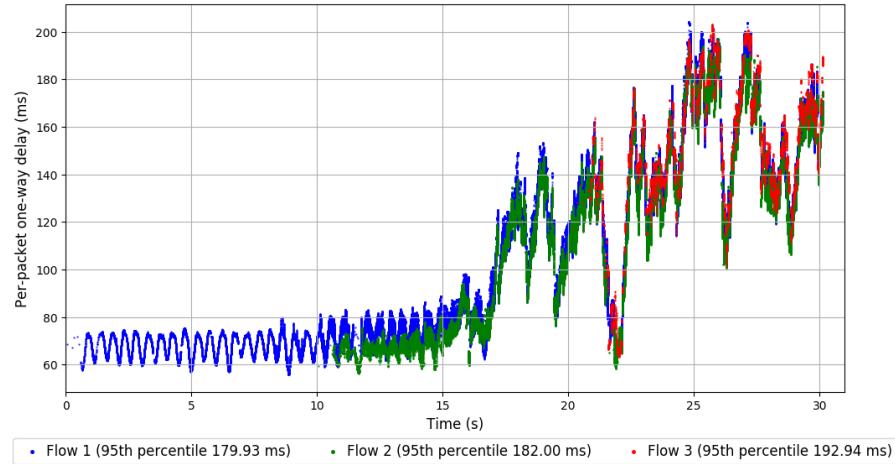
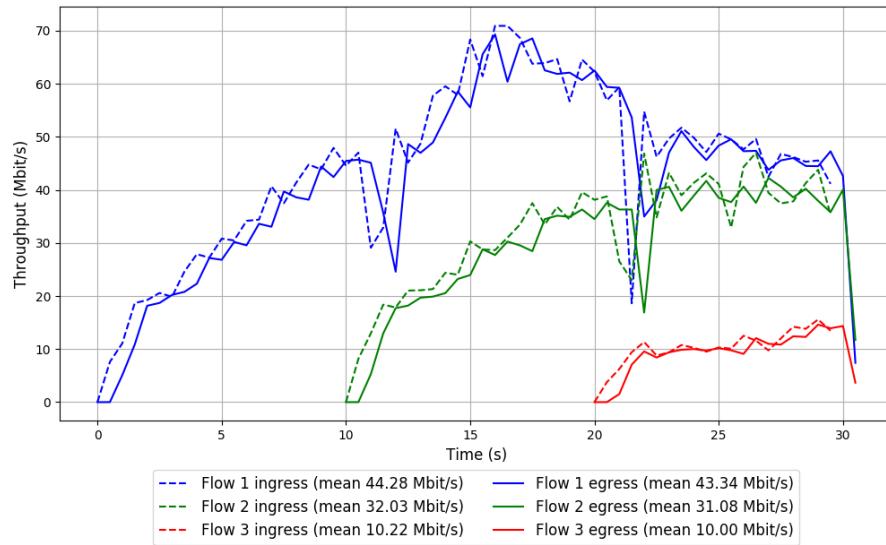


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-20 01:54:21
End at: 2019-02-20 01:54:51
Local clock offset: -4.122 ms
Remote clock offset: -16.068 ms

# Below is generated by plot.py at 2019-02-20 03:33:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.31 Mbit/s
95th percentile per-packet one-way delay: 181.952 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 43.34 Mbit/s
95th percentile per-packet one-way delay: 179.929 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 31.08 Mbit/s
95th percentile per-packet one-way delay: 181.995 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 192.944 ms
Loss rate: 1.52%
```

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

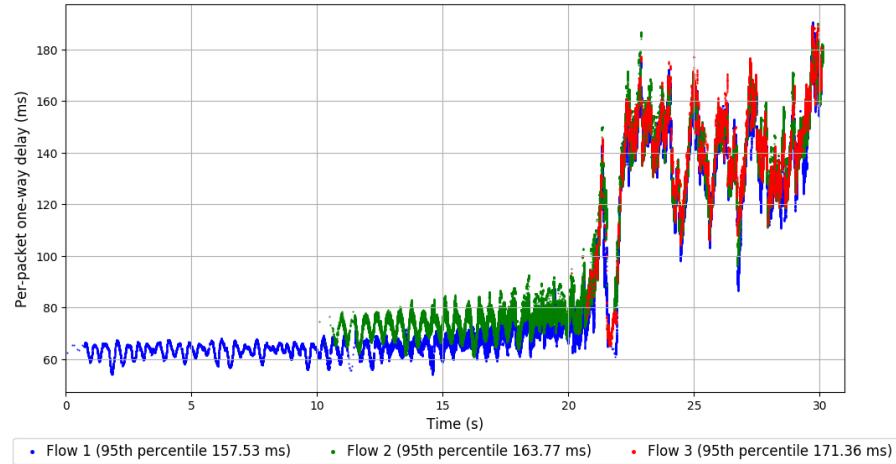
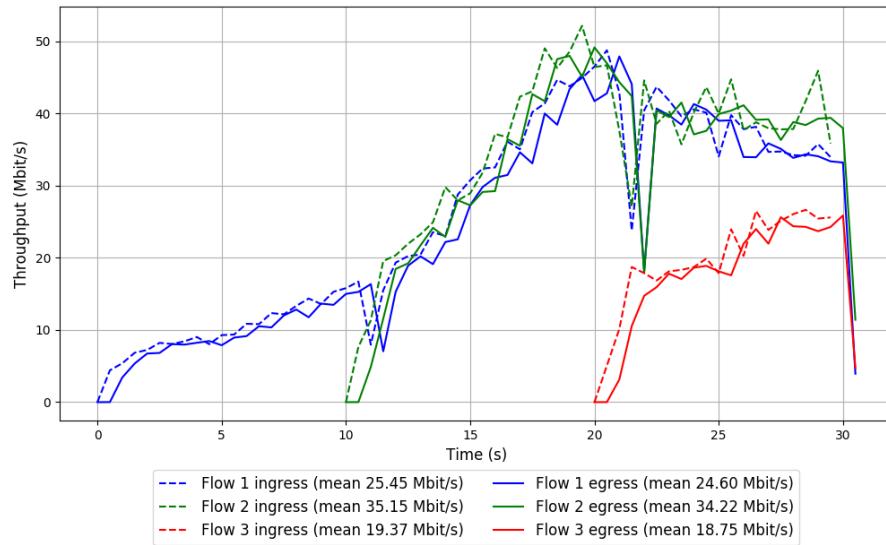


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-20 02:33:42
End at: 2019-02-20 02:34:12
Local clock offset: 8.801 ms
Remote clock offset: -10.834 ms

# Below is generated by plot.py at 2019-02-20 03:33:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 163.061 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 157.527 ms
Loss rate: 3.18%
-- Flow 2:
Average throughput: 34.22 Mbit/s
95th percentile per-packet one-way delay: 163.768 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 171.361 ms
Loss rate: 3.09%
```

Run 4: Report of FillP-Sheep — Data Link

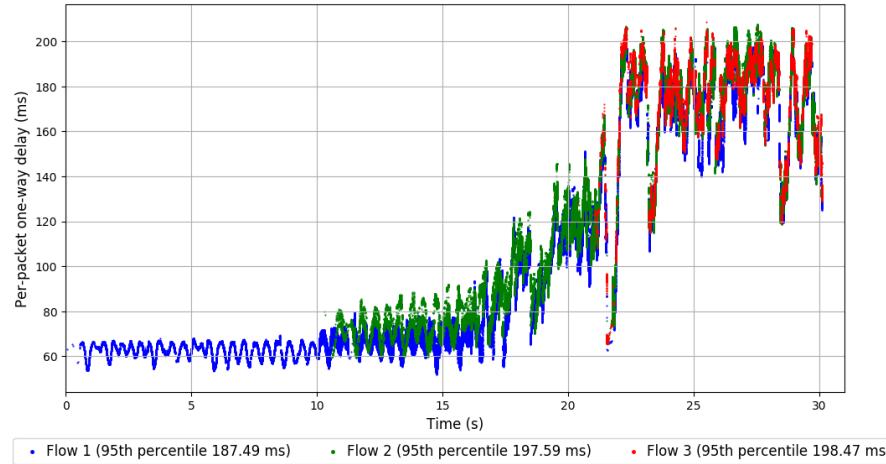
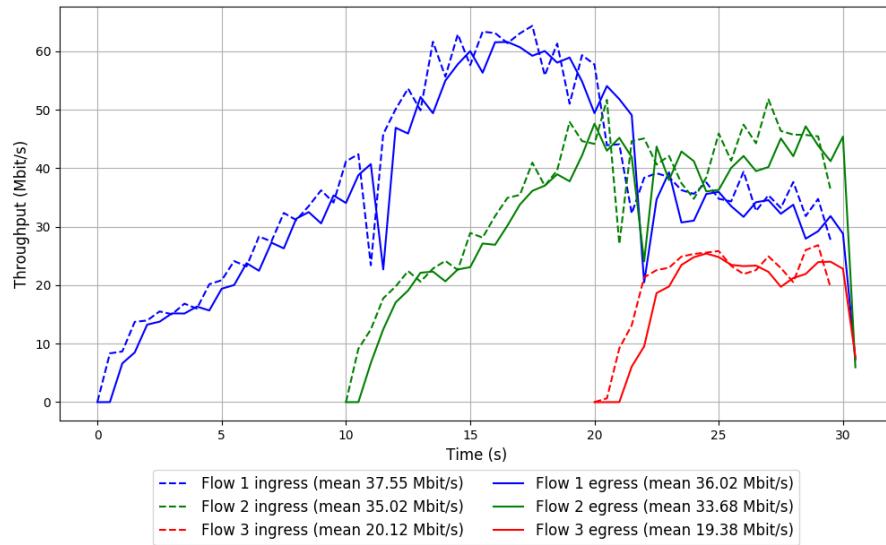


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-20 03:13:43
End at: 2019-02-20 03:14:13
Local clock offset: 4.0 ms
Remote clock offset: -14.63 ms

# Below is generated by plot.py at 2019-02-20 03:33:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 194.468 ms
Loss rate: 3.68%
-- Flow 1:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 187.487 ms
Loss rate: 3.84%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 197.589 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 19.38 Mbit/s
95th percentile per-packet one-way delay: 198.466 ms
Loss rate: 3.48%
```

Run 5: Report of FillP-Sheep — Data Link

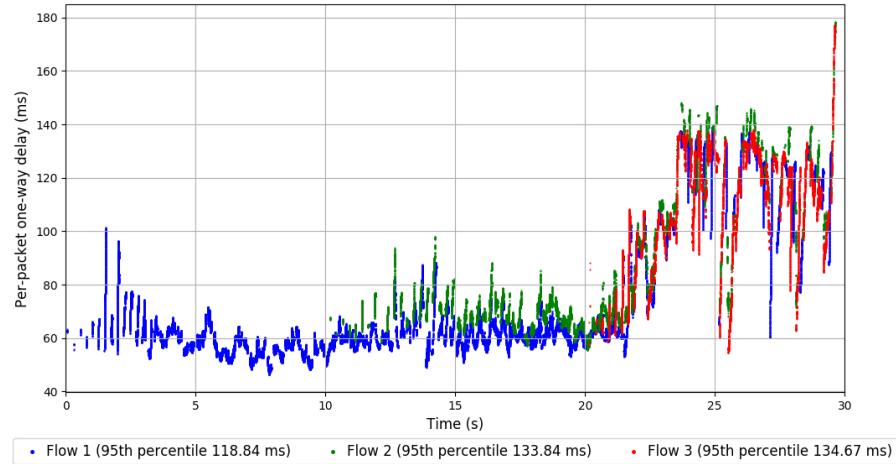
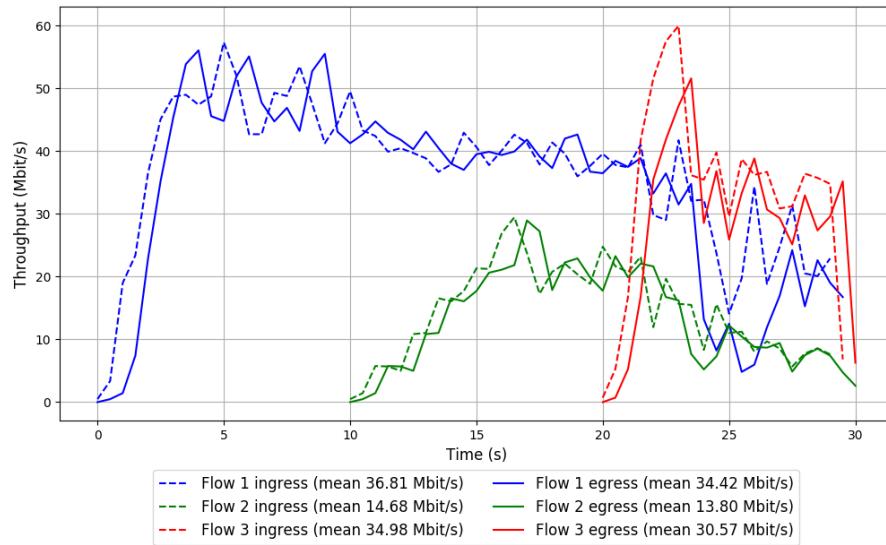


Run 1: Statistics of Indigo

```
Start at: 2019-02-20 00:47:44
End at: 2019-02-20 00:48:14
Local clock offset: 6.828 ms
Remote clock offset: -1.991 ms

# Below is generated by plot.py at 2019-02-20 03:33:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 129.906 ms
Loss rate: 7.38%
-- Flow 1:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 118.840 ms
Loss rate: 6.28%
-- Flow 2:
Average throughput: 13.80 Mbit/s
95th percentile per-packet one-way delay: 133.842 ms
Loss rate: 5.56%
-- Flow 3:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 134.669 ms
Loss rate: 12.56%
```

## Run 1: Report of Indigo — Data Link

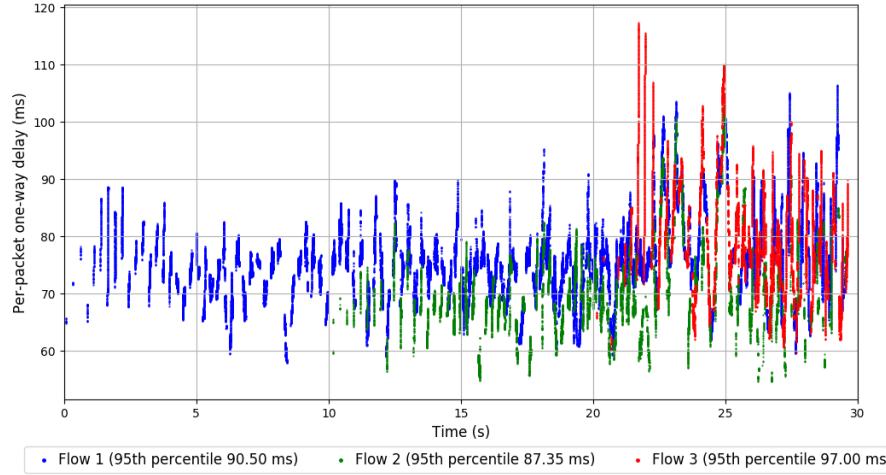
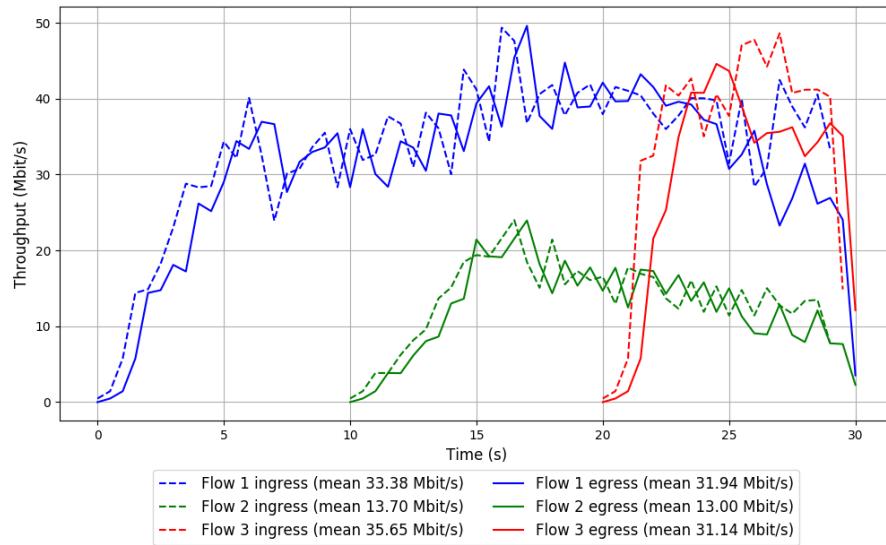


Run 2: Statistics of Indigo

```
Start at: 2019-02-20 01:27:45
End at: 2019-02-20 01:28:15
Local clock offset: 4.197 ms
Remote clock offset: -3.896 ms

# Below is generated by plot.py at 2019-02-20 03:33:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.36 Mbit/s
95th percentile per-packet one-way delay: 91.924 ms
Loss rate: 6.19%
-- Flow 1:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 90.504 ms
Loss rate: 4.29%
-- Flow 2:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 87.354 ms
Loss rate: 4.98%
-- Flow 3:
Average throughput: 31.14 Mbit/s
95th percentile per-packet one-way delay: 97.004 ms
Loss rate: 12.65%
```

## Run 2: Report of Indigo — Data Link

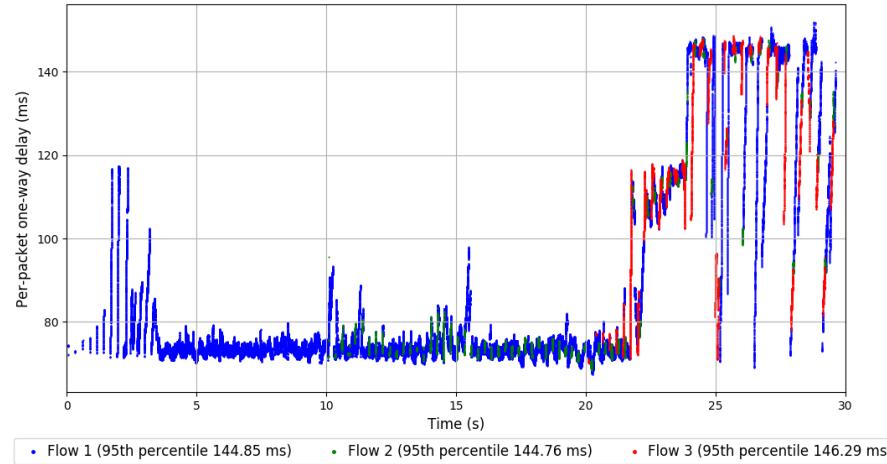
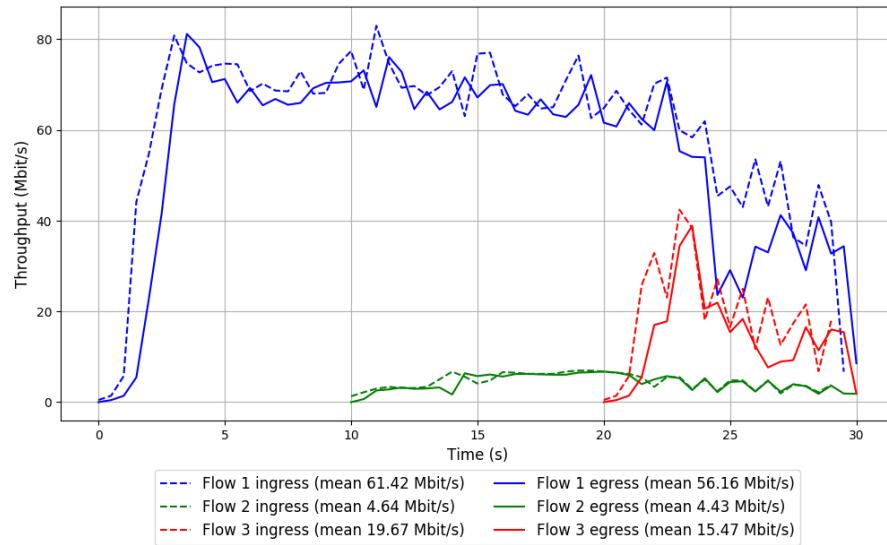


Run 3: Statistics of Indigo

```
Start at: 2019-02-20 02:06:13
End at: 2019-02-20 02:06:43
Local clock offset: 2.311 ms
Remote clock offset: -17.417 ms

# Below is generated by plot.py at 2019-02-20 03:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.01 Mbit/s
95th percentile per-packet one-way delay: 145.211 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 56.16 Mbit/s
95th percentile per-packet one-way delay: 144.849 ms
Loss rate: 8.57%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 144.756 ms
Loss rate: 4.28%
-- Flow 3:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 146.288 ms
Loss rate: 20.85%
```

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

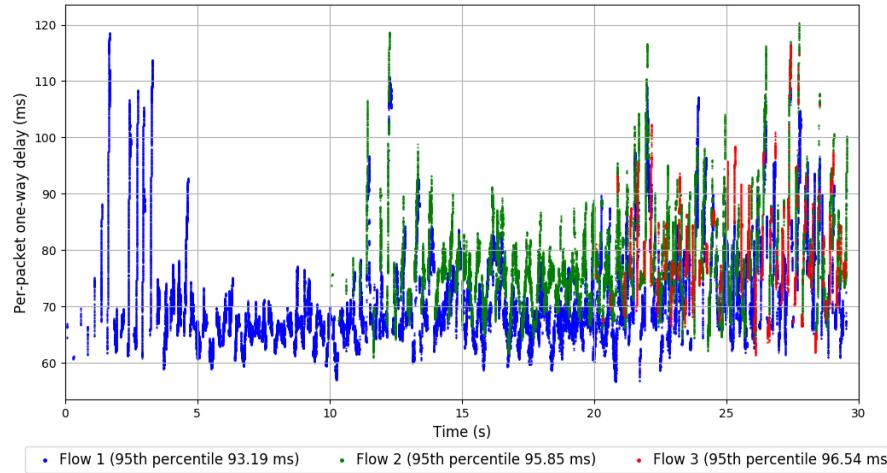
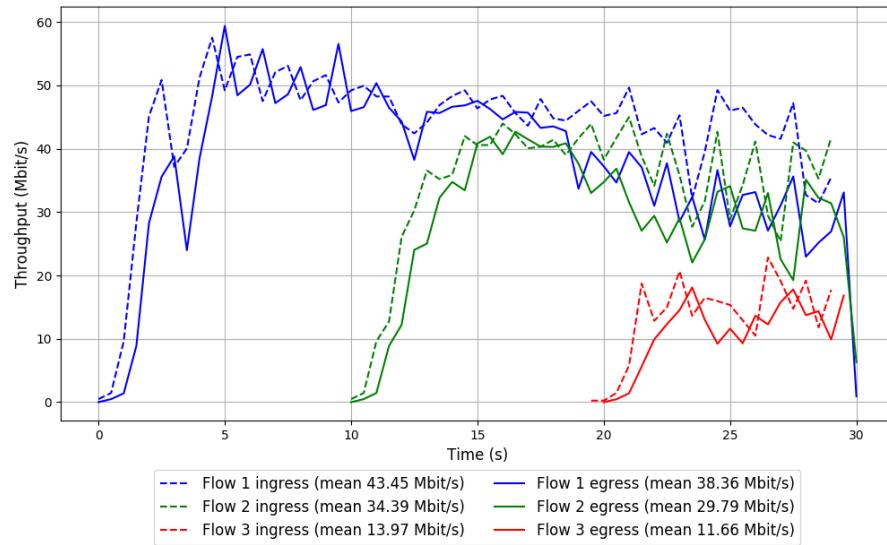


Run 4: Statistics of Indigo

```
Start at: 2019-02-20 02:46:19
End at: 2019-02-20 02:46:49
Local clock offset: 6.361 ms
Remote clock offset: -13.351 ms

# Below is generated by plot.py at 2019-02-20 03:34:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.74 Mbit/s
95th percentile per-packet one-way delay: 94.430 ms
Loss rate: 12.60%
-- Flow 1:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 93.190 ms
Loss rate: 11.73%
-- Flow 2:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 95.853 ms
Loss rate: 13.36%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 96.538 ms
Loss rate: 17.11%
```

## Run 4: Report of Indigo — Data Link

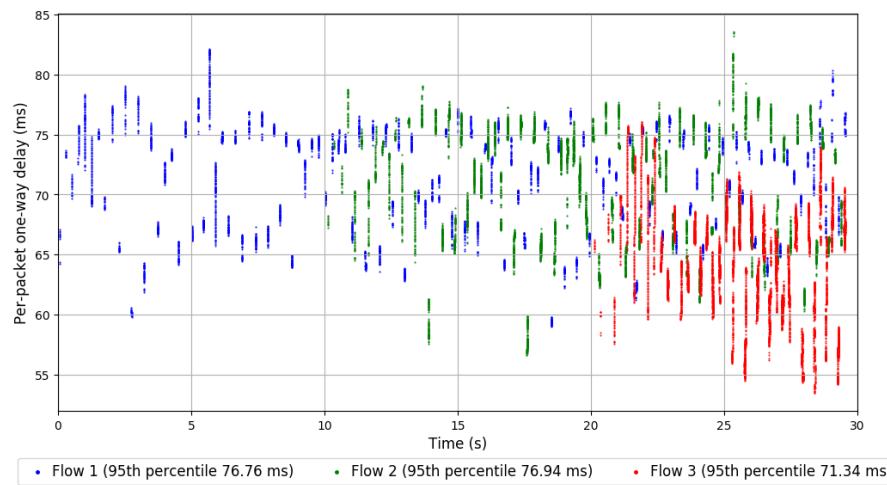
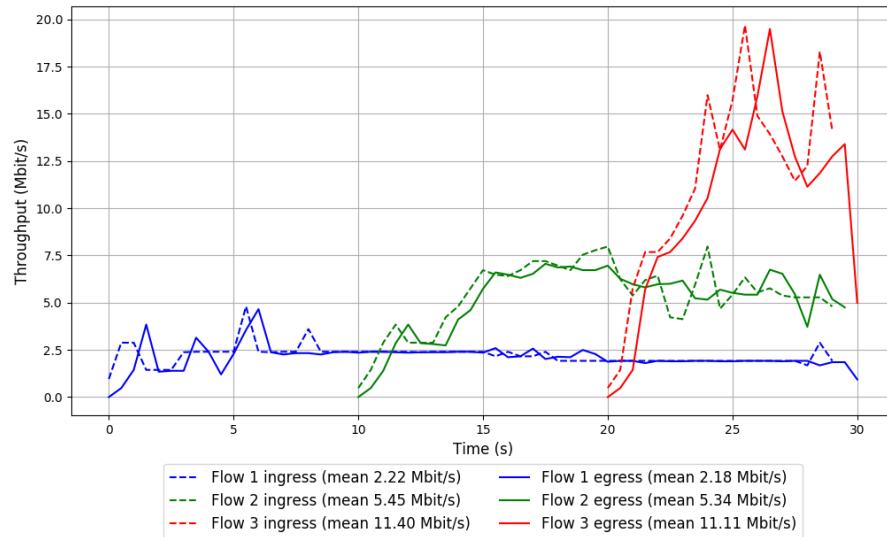


Run 5: Statistics of Indigo

```
Start at: 2019-02-20 03:23:47
End at: 2019-02-20 03:24:17
Local clock offset: 3.564 ms
Remote clock offset: -15.056 ms

# Below is generated by plot.py at 2019-02-20 03:34:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 76.428 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 76.764 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 76.939 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 11.11 Mbit/s
95th percentile per-packet one-way delay: 71.338 ms
Loss rate: 2.51%
```

Run 5: Report of Indigo — Data Link

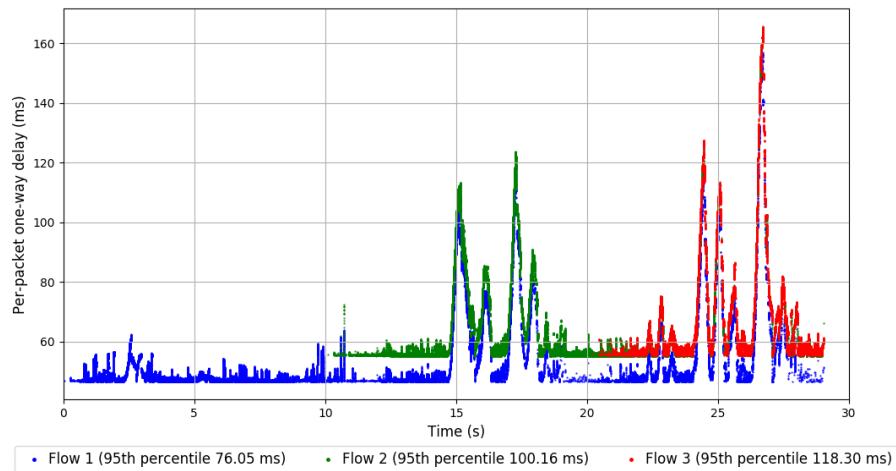
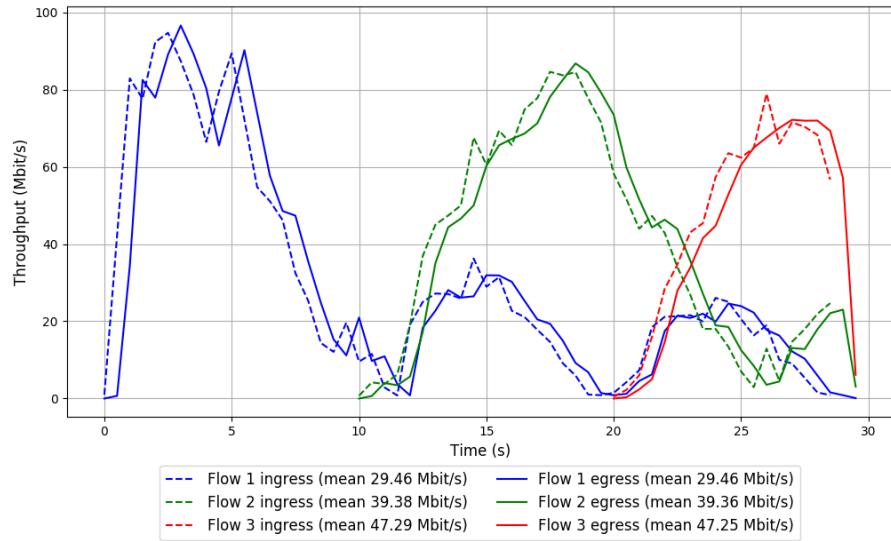


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-02-20 00:22:52
End at: 2019-02-20 00:23:22
Local clock offset: -1.269 ms
Remote clock offset: -0.785 ms

# Below is generated by plot.py at 2019-02-20 03:34:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.55 Mbit/s
95th percentile per-packet one-way delay: 98.214 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 76.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.36 Mbit/s
95th percentile per-packet one-way delay: 100.164 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 118.298 ms
Loss rate: 0.13%
```

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

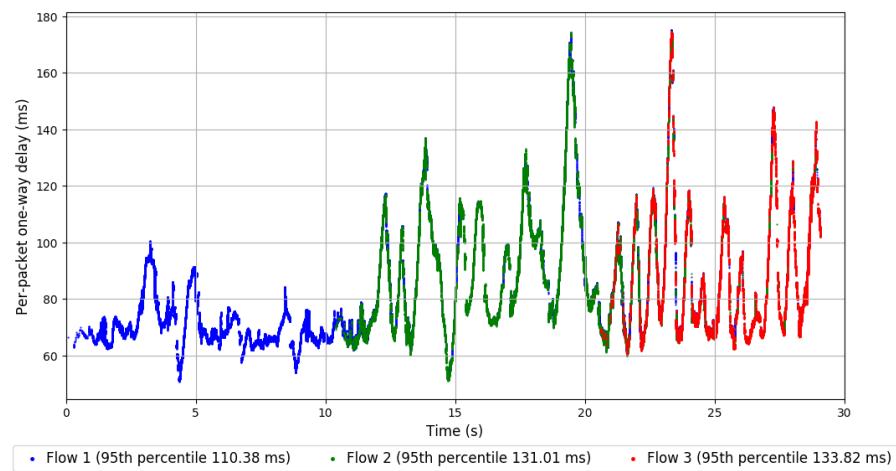
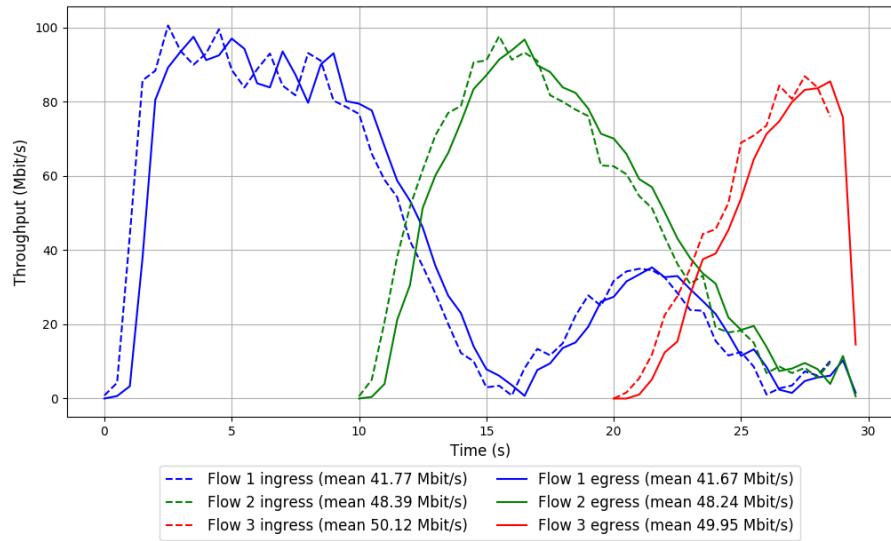


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 00:58:23
End at: 2019-02-20 00:58:53
Local clock offset: 8.447 ms
Remote clock offset: 1.273 ms

# Below is generated by plot.py at 2019-02-20 03:34:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.12 Mbit/s
95th percentile per-packet one-way delay: 123.950 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 41.67 Mbit/s
95th percentile per-packet one-way delay: 110.380 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.24 Mbit/s
95th percentile per-packet one-way delay: 131.008 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 49.95 Mbit/s
95th percentile per-packet one-way delay: 133.819 ms
Loss rate: 0.09%
```

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

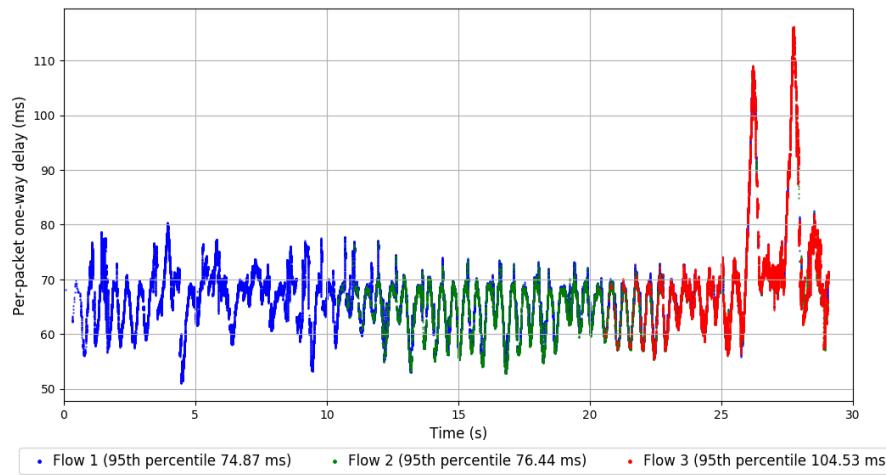
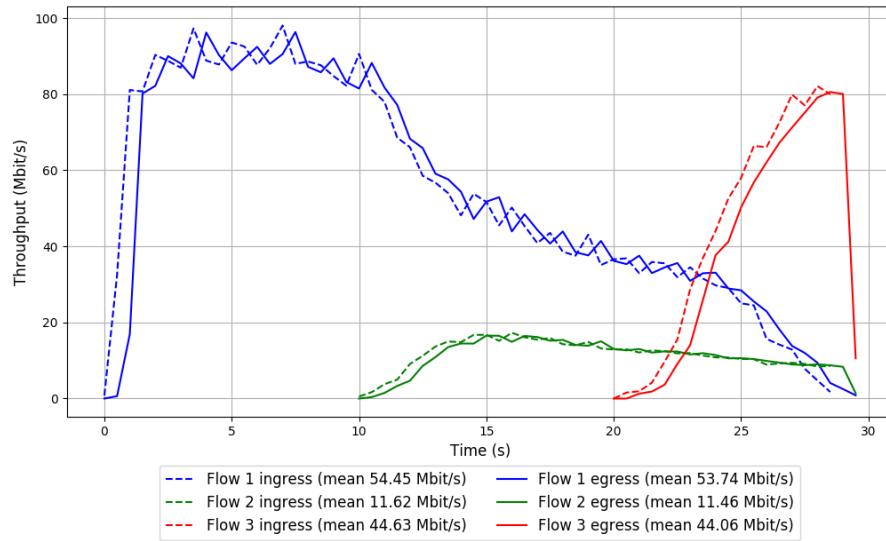


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 01:38:42
End at: 2019-02-20 01:39:12
Local clock offset: -0.711 ms
Remote clock offset: -8.581 ms

# Below is generated by plot.py at 2019-02-20 03:34:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 77.610 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 53.74 Mbit/s
95th percentile per-packet one-way delay: 74.868 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 76.437 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 44.06 Mbit/s
95th percentile per-packet one-way delay: 104.526 ms
Loss rate: 1.23%
```

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

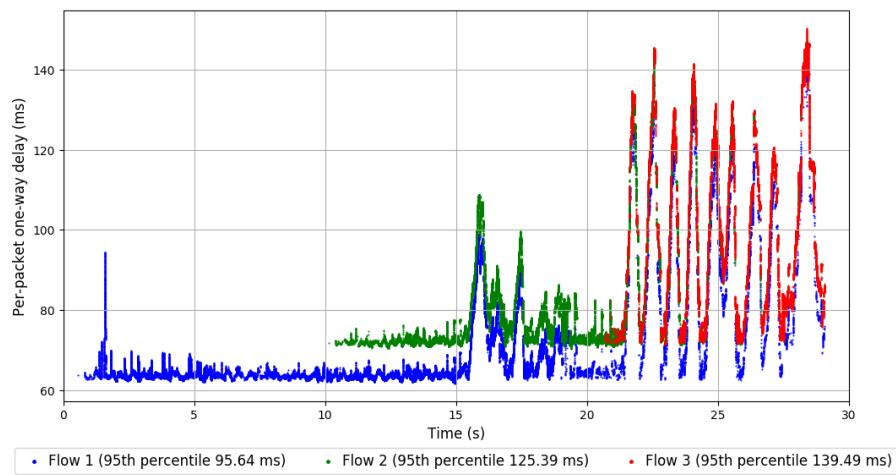
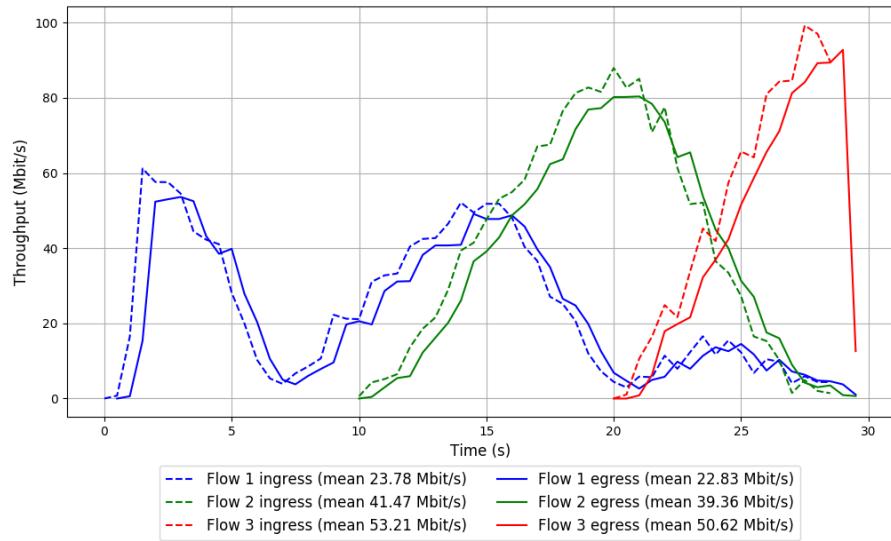


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 02:17:11
End at: 2019-02-20 02:17:41
Local clock offset: 7.824 ms
Remote clock offset: -14.811 ms

# Below is generated by plot.py at 2019-02-20 03:34:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.30 Mbit/s
95th percentile per-packet one-way delay: 125.839 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 22.83 Mbit/s
95th percentile per-packet one-way delay: 95.643 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 39.36 Mbit/s
95th percentile per-packet one-way delay: 125.390 ms
Loss rate: 5.03%
-- Flow 3:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 139.490 ms
Loss rate: 4.83%
```

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

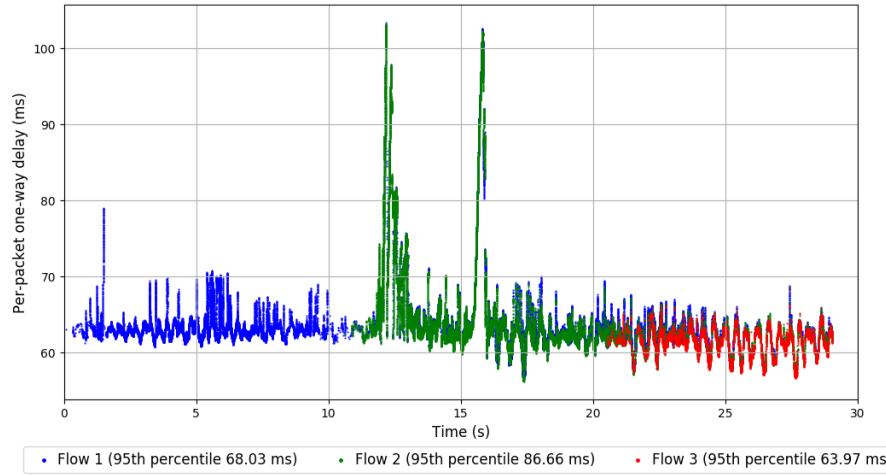
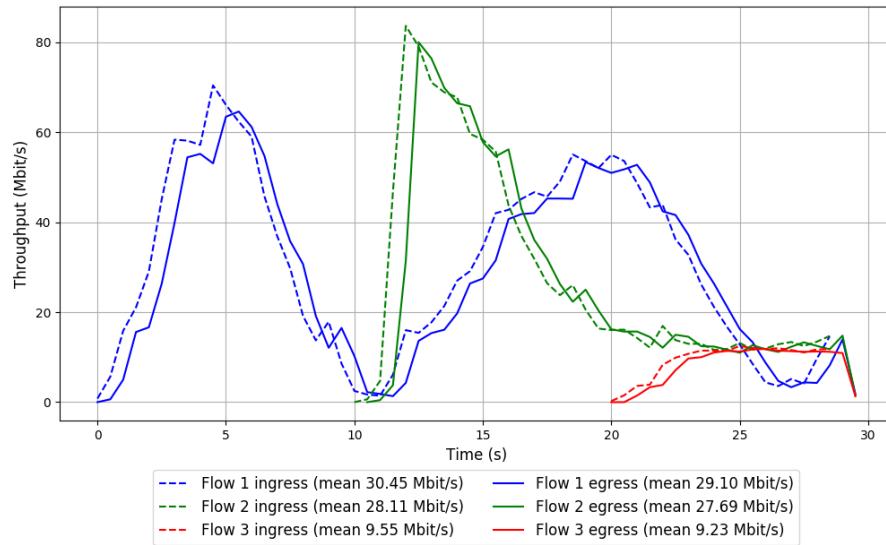


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 02:57:20
End at: 2019-02-20 02:57:50
Local clock offset: 6.099 ms
Remote clock offset: -17.375 ms

# Below is generated by plot.py at 2019-02-20 03:34:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.47 Mbit/s
95th percentile per-packet one-way delay: 74.890 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 29.10 Mbit/s
95th percentile per-packet one-way delay: 68.027 ms
Loss rate: 4.43%
-- Flow 2:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 86.659 ms
Loss rate: 4.12%
-- Flow 3:
Average throughput: 9.23 Mbit/s
95th percentile per-packet one-way delay: 63.972 ms
Loss rate: 3.39%
```

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

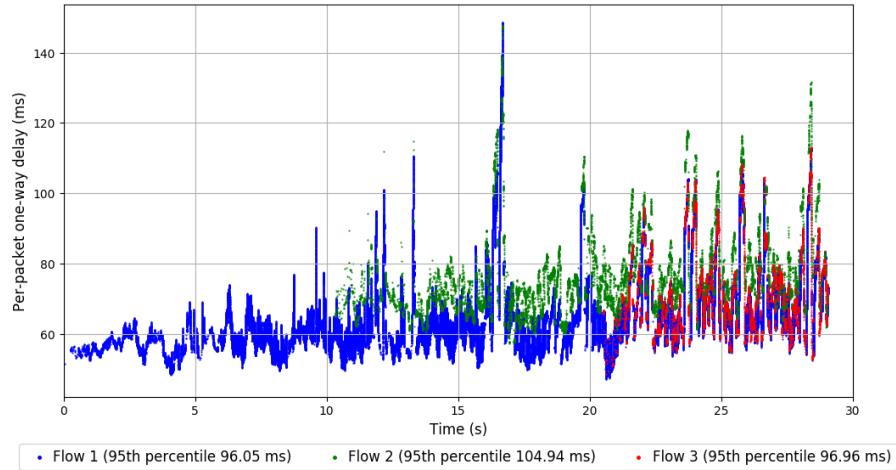
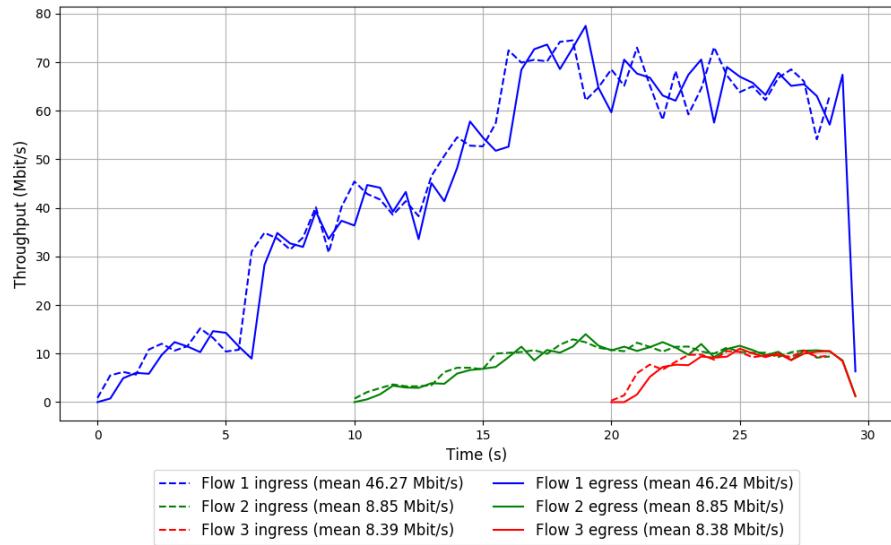


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 00:45:48
End at: 2019-02-20 00:46:18
Local clock offset: 6.418 ms
Remote clock offset: -1.807 ms

# Below is generated by plot.py at 2019-02-20 03:34:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.54 Mbit/s
95th percentile per-packet one-way delay: 97.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.24 Mbit/s
95th percentile per-packet one-way delay: 96.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 104.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 96.956 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

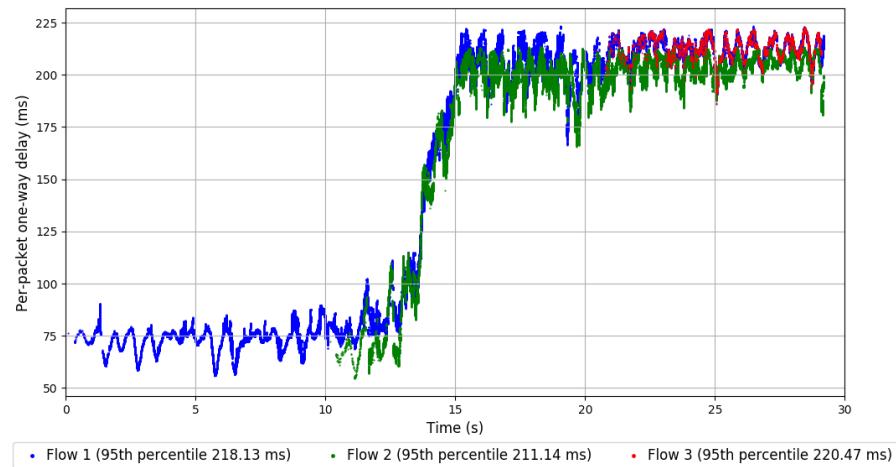
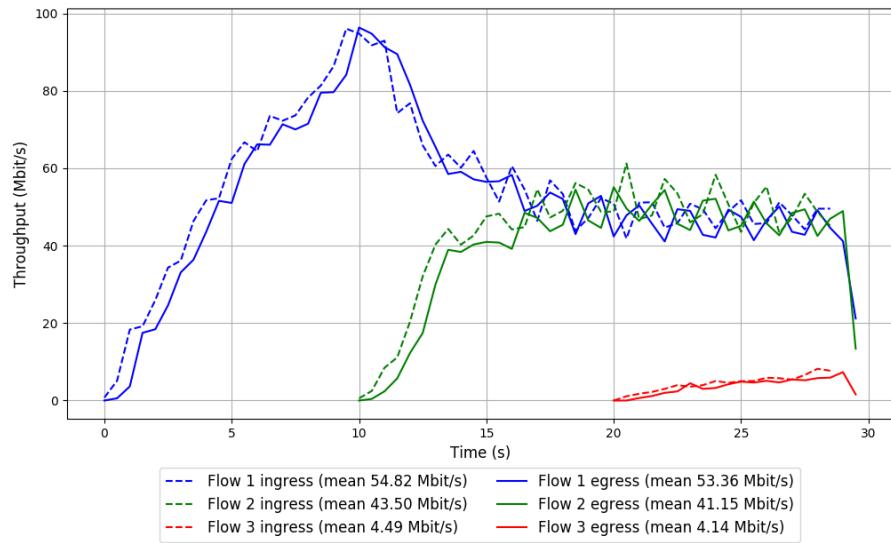


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 01:24:54
End at: 2019-02-20 01:25:24
Local clock offset: 4.234 ms
Remote clock offset: -2.349 ms

# Below is generated by plot.py at 2019-02-20 03:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.47 Mbit/s
95th percentile per-packet one-way delay: 217.142 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 53.36 Mbit/s
95th percentile per-packet one-way delay: 218.129 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 211.139 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 220.469 ms
Loss rate: 9.07%
```

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

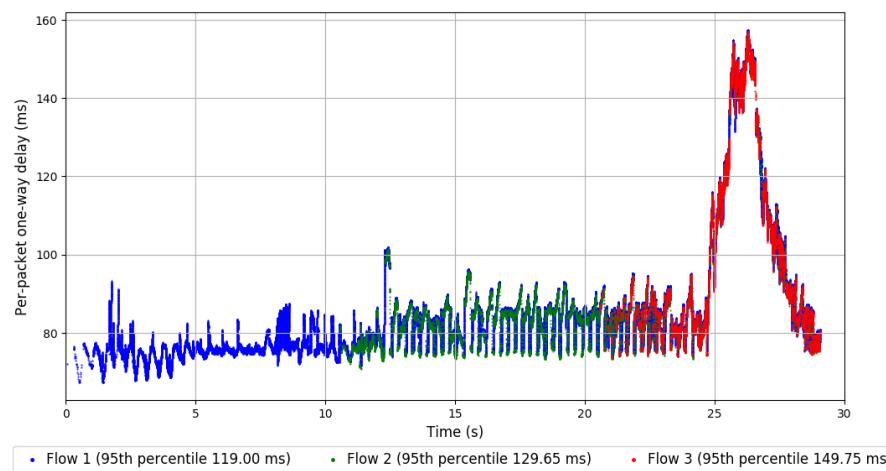
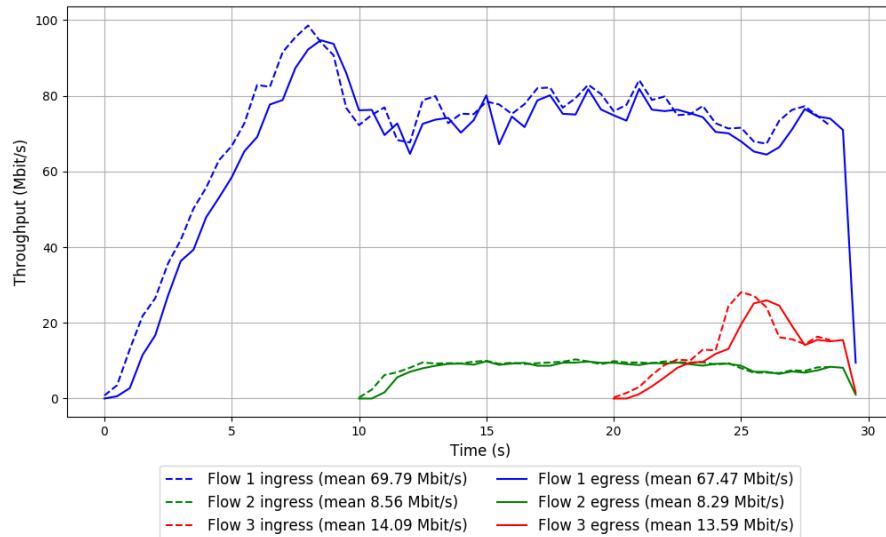


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 02:03:10
End at: 2019-02-20 02:03:40
Local clock offset: -0.718 ms
Remote clock offset: -15.43 ms

# Below is generated by plot.py at 2019-02-20 03:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 129.766 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 118.996 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 129.648 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 149.747 ms
Loss rate: 3.67%
```

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

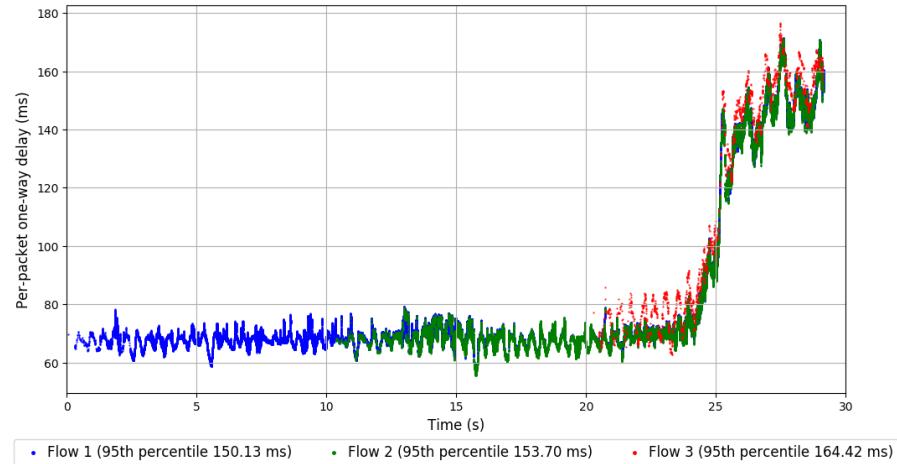
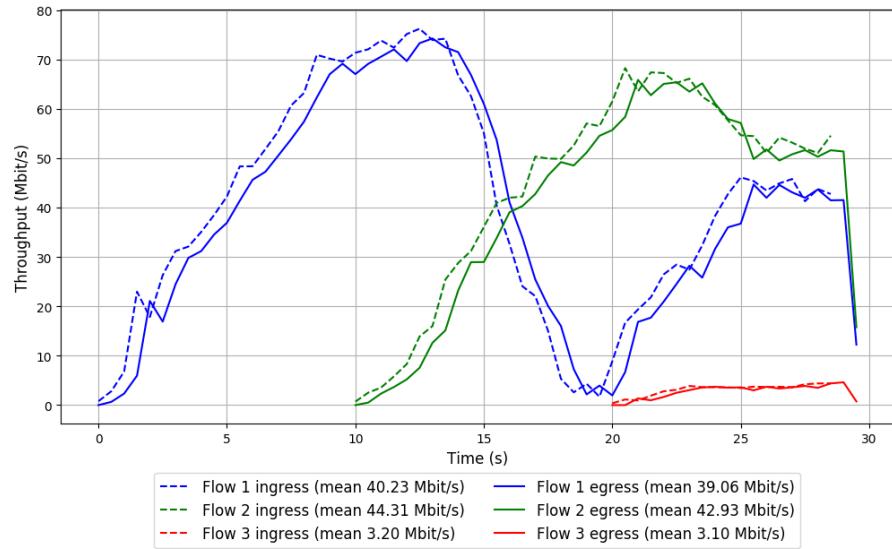


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 02:43:55
End at: 2019-02-20 02:44:25
Local clock offset: 6.463 ms
Remote clock offset: -10.246 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 152.347 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 150.135 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 153.701 ms
Loss rate: 2.64%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 164.416 ms
Loss rate: 2.70%
```

Run 4: Report of Indigo-MusesC5 — Data Link

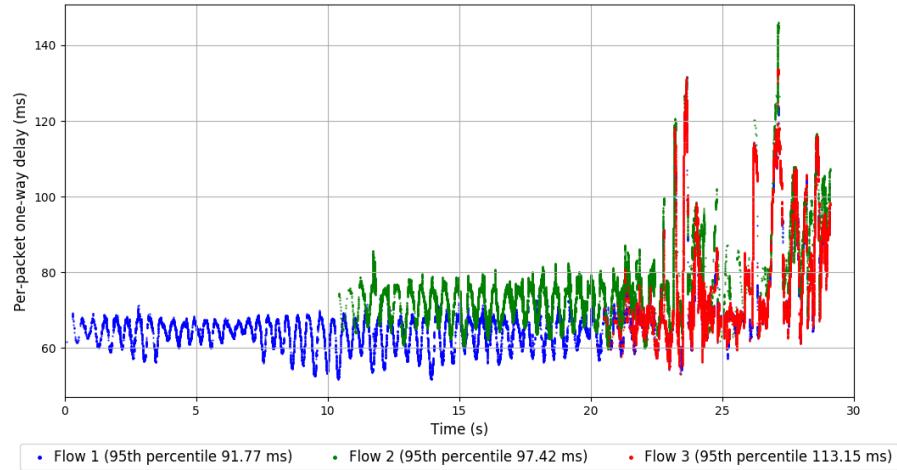
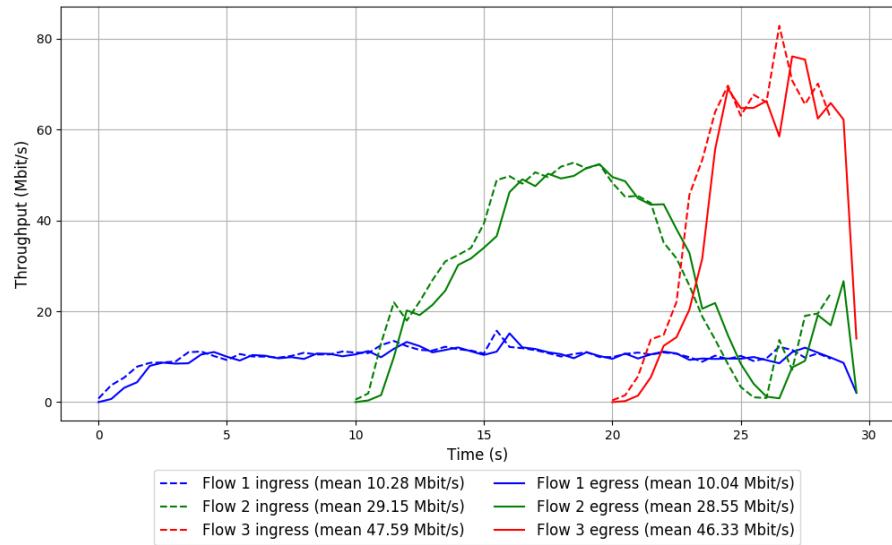


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 03:22:17
End at: 2019-02-20 03:22:47
Local clock offset: 3.685 ms
Remote clock offset: -13.62 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 108.384 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 91.765 ms
Loss rate: 2.21%
-- Flow 2:
Average throughput: 28.55 Mbit/s
95th percentile per-packet one-way delay: 97.422 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 46.33 Mbit/s
95th percentile per-packet one-way delay: 113.148 ms
Loss rate: 2.22%
```

Run 5: Report of Indigo-MusesC5 — Data Link

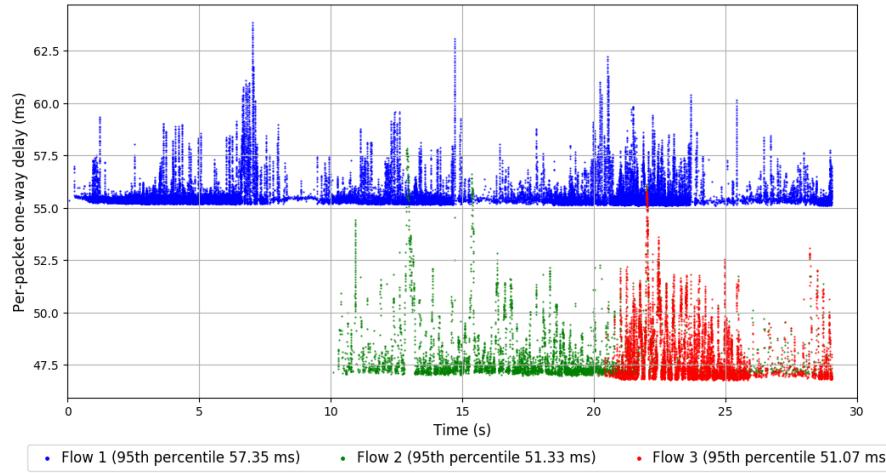
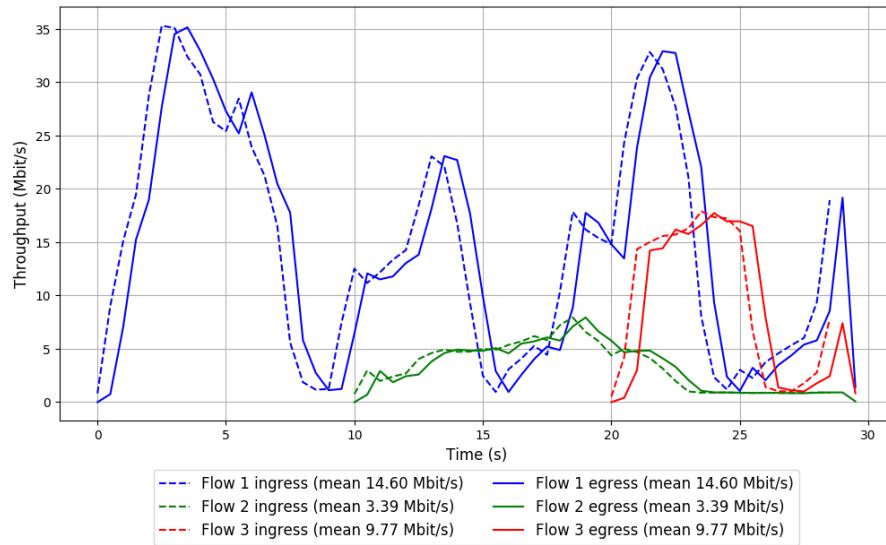


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 00:25:49
End at: 2019-02-20 00:26:19
Local clock offset: -1.419 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 57.019 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 14.60 Mbit/s
95th percentile per-packet one-way delay: 57.352 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 51.066 ms
Loss rate: 0.00%
```

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

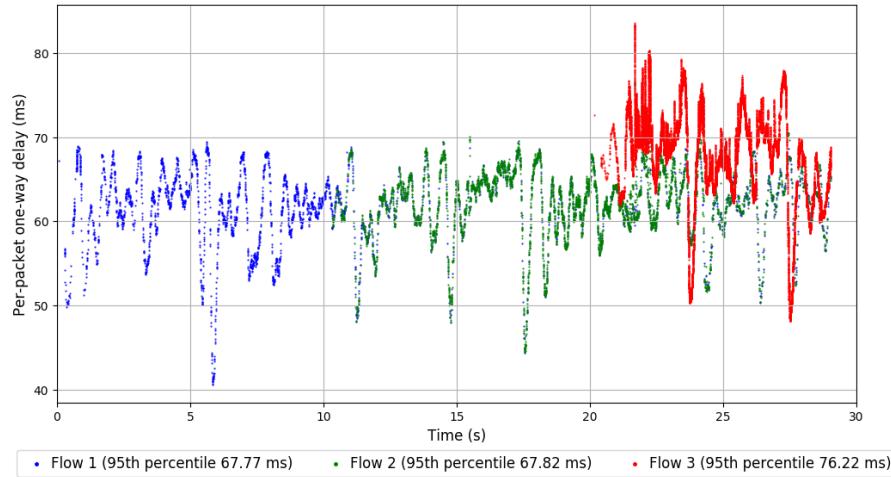
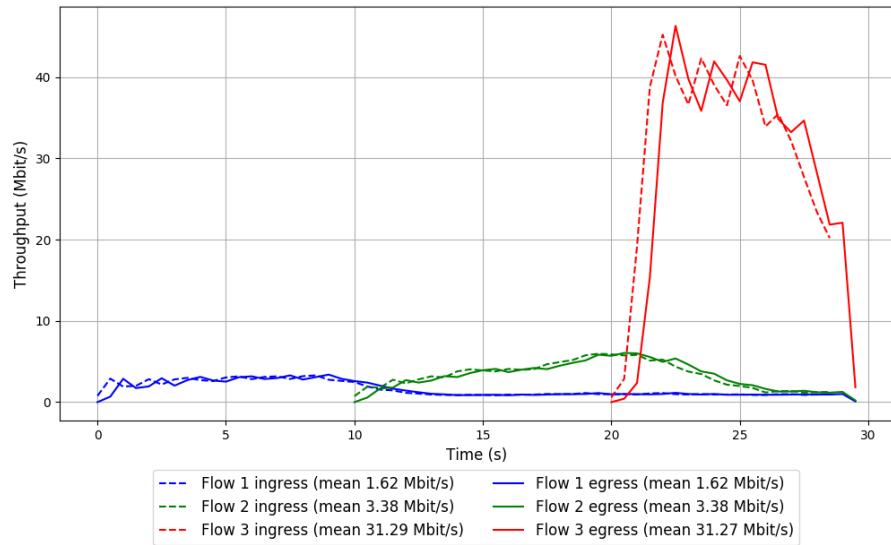


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 01:02:10
End at: 2019-02-20 01:02:40
Local clock offset: 7.934 ms
Remote clock offset: -4.137 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 75.439 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 67.768 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 67.823 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 76.220 ms
Loss rate: 0.13%
```

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

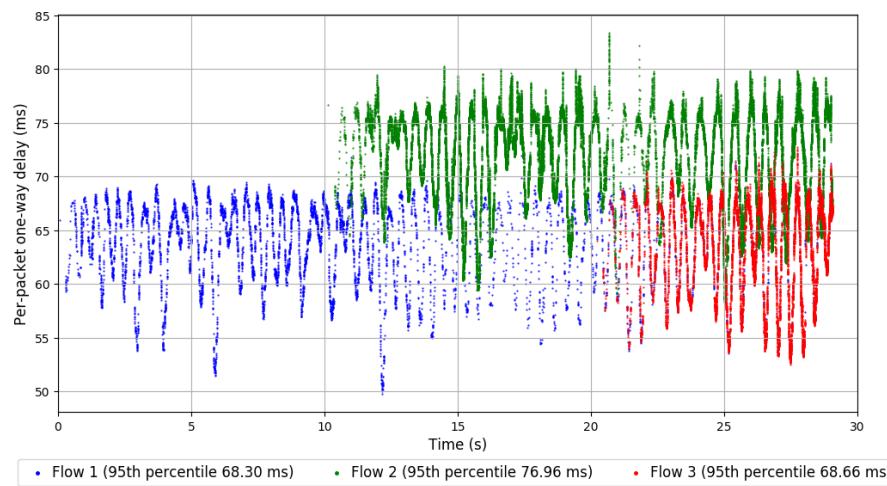
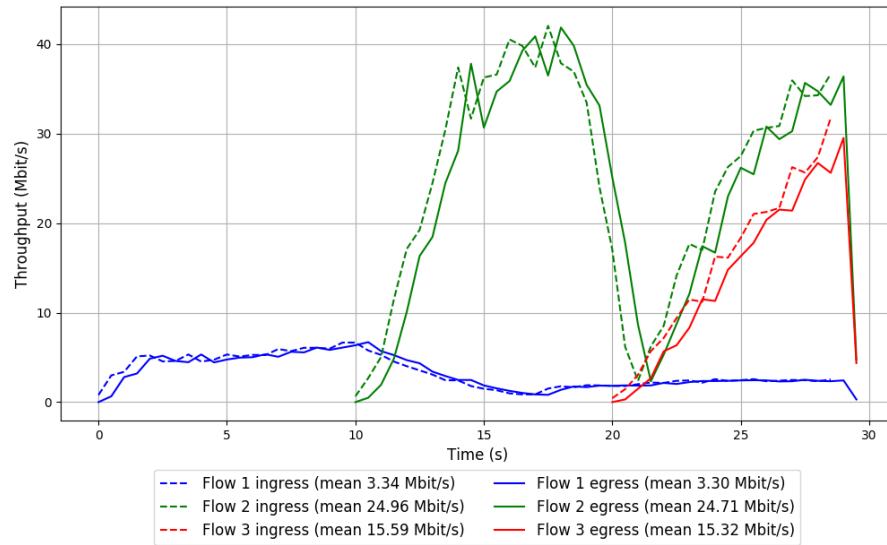


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 01:42:37
End at: 2019-02-20 01:43:07
Local clock offset: -1.861 ms
Remote clock offset: -10.838 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 76.570 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 68.298 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 76.960 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 15.32 Mbit/s
95th percentile per-packet one-way delay: 68.662 ms
Loss rate: 1.73%
```

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

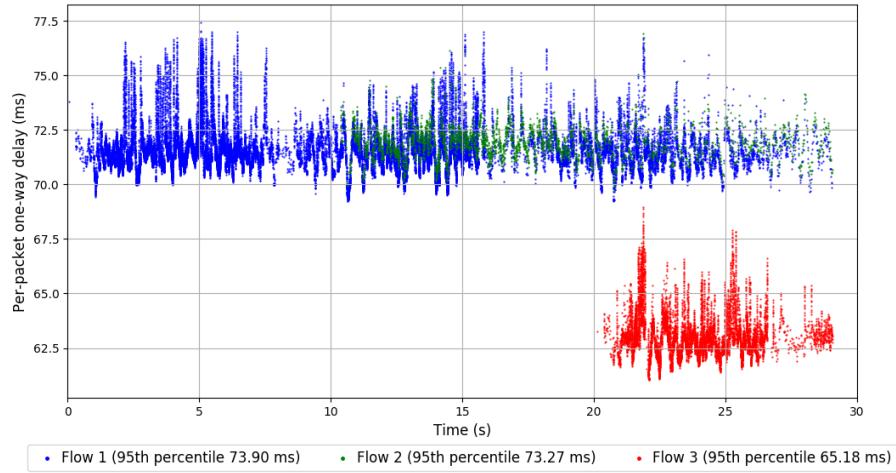
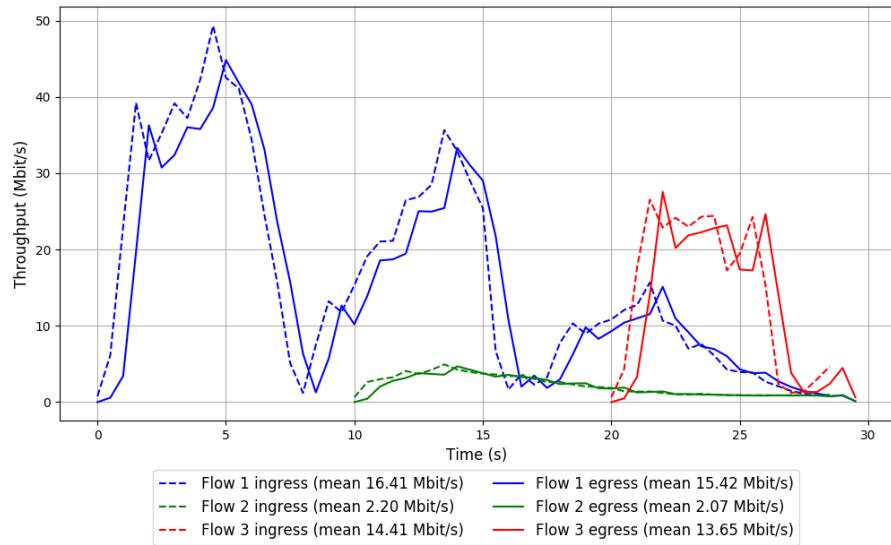


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 02:21:05
End at: 2019-02-20 02:21:35
Local clock offset: 8.846 ms
Remote clock offset: -15.438 ms

# Below is generated by plot.py at 2019-02-20 03:35:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 73.554 ms
Loss rate: 5.95%
-- Flow 1:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 73.900 ms
Loss rate: 6.13%
-- Flow 2:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 73.268 ms
Loss rate: 5.79%
-- Flow 3:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 65.179 ms
Loss rate: 5.31%
```

Run 4: Report of Indigo-MusesD — Data Link

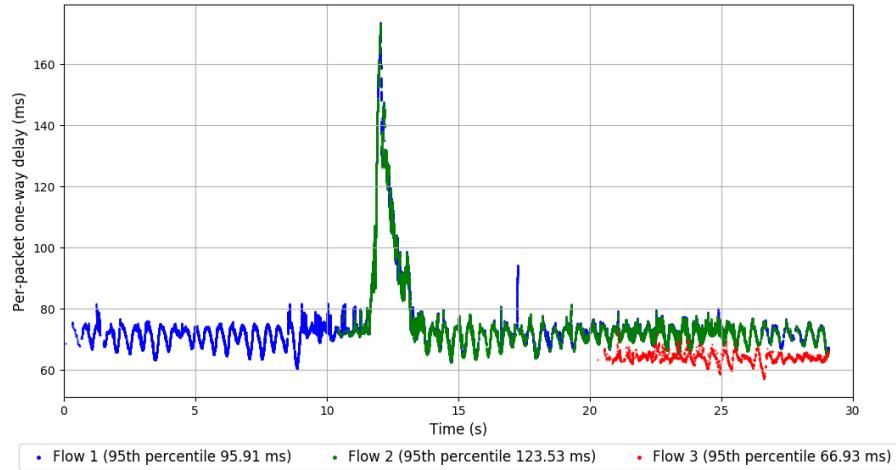
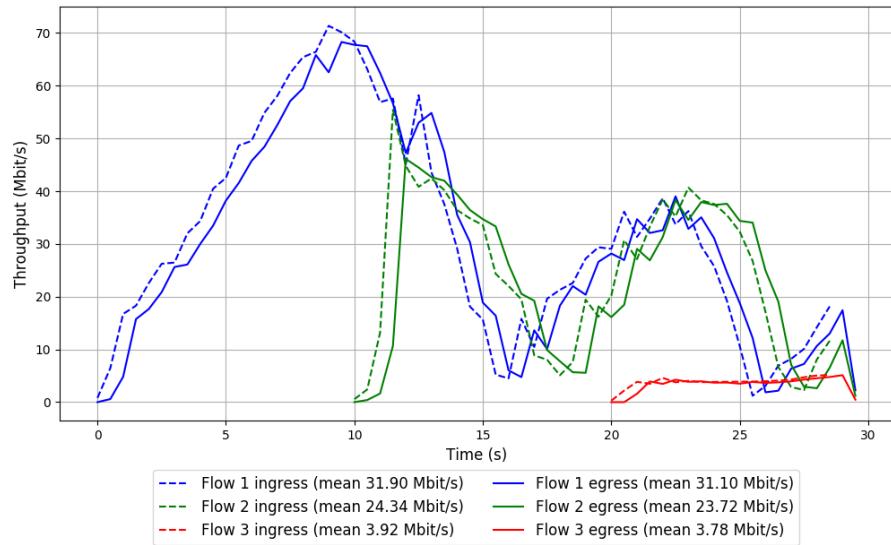


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 03:00:51
End at: 2019-02-20 03:01:21
Local clock offset: 5.69 ms
Remote clock offset: -15.712 ms

# Below is generated by plot.py at 2019-02-20 03:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 103.161 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 95.906 ms
Loss rate: 2.53%
-- Flow 2:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 123.526 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 66.934 ms
Loss rate: 3.54%
```

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

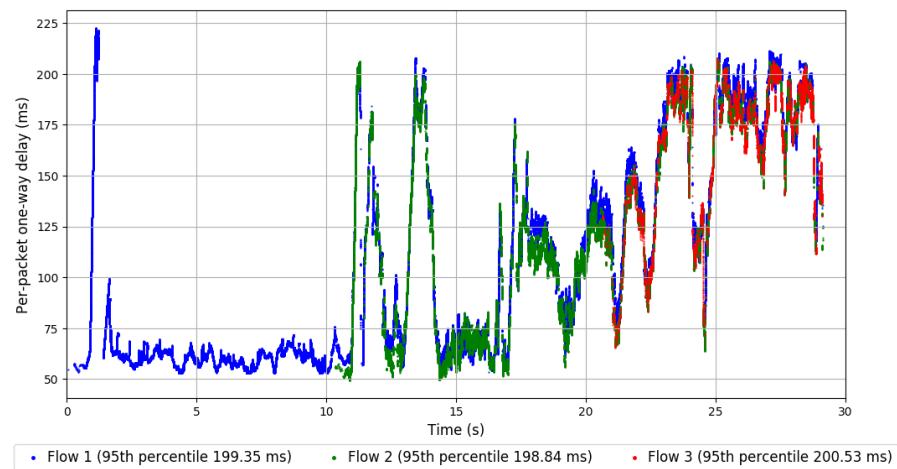
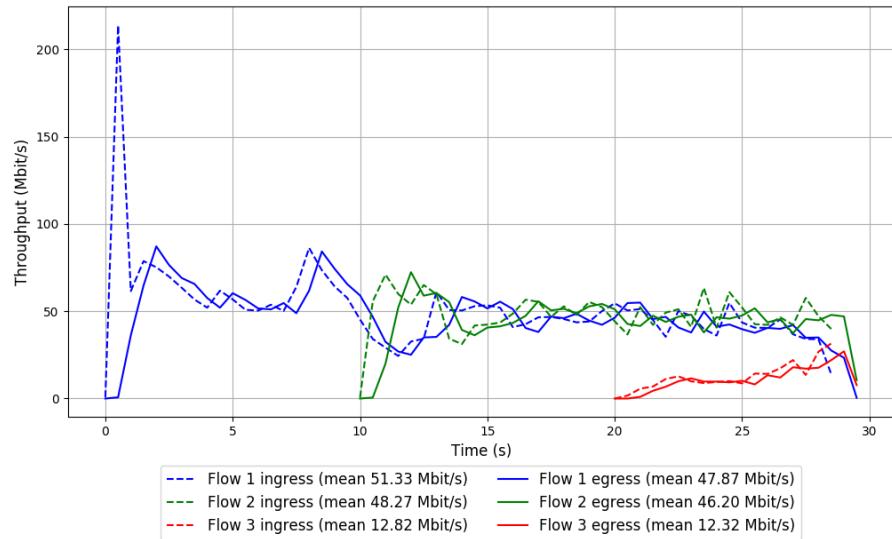


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 00:39:27
End at: 2019-02-20 00:39:57
Local clock offset: 4.576 ms
Remote clock offset: -0.455 ms

# Below is generated by plot.py at 2019-02-20 03:35:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.77 Mbit/s
95th percentile per-packet one-way delay: 199.248 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 47.87 Mbit/s
95th percentile per-packet one-way delay: 199.353 ms
Loss rate: 6.51%
-- Flow 2:
Average throughput: 46.20 Mbit/s
95th percentile per-packet one-way delay: 198.837 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 12.32 Mbit/s
95th percentile per-packet one-way delay: 200.529 ms
Loss rate: 4.14%
```

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

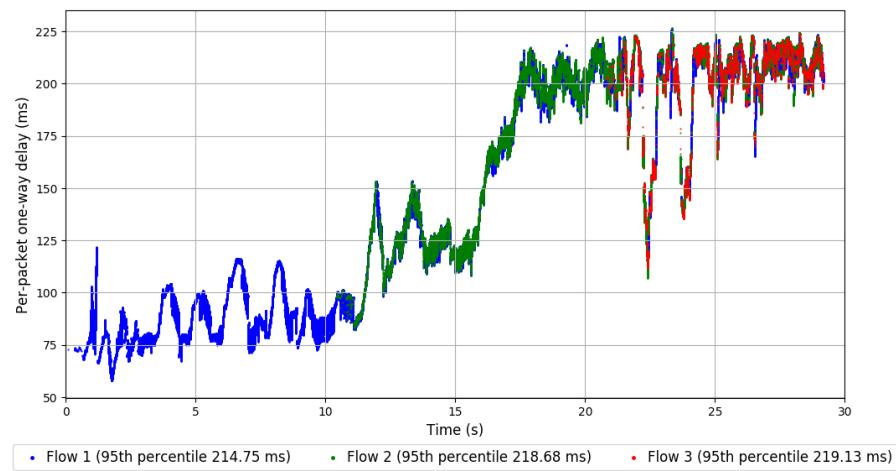
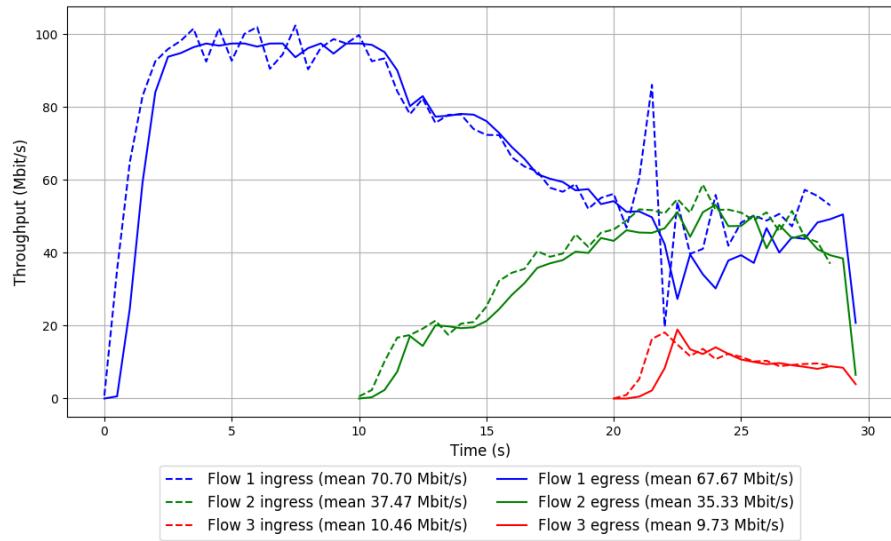


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 01:17:47
End at: 2019-02-20 01:18:17
Local clock offset: 4.597 ms
Remote clock offset: -1.799 ms

# Below is generated by plot.py at 2019-02-20 03:36:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 216.689 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 67.67 Mbit/s
95th percentile per-packet one-way delay: 214.753 ms
Loss rate: 3.86%
-- Flow 2:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 218.683 ms
Loss rate: 5.62%
-- Flow 3:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 219.126 ms
Loss rate: 7.14%
```

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

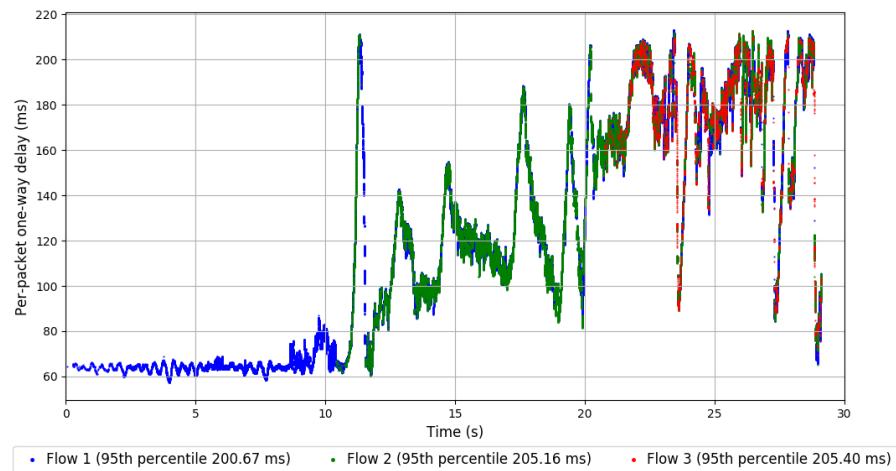
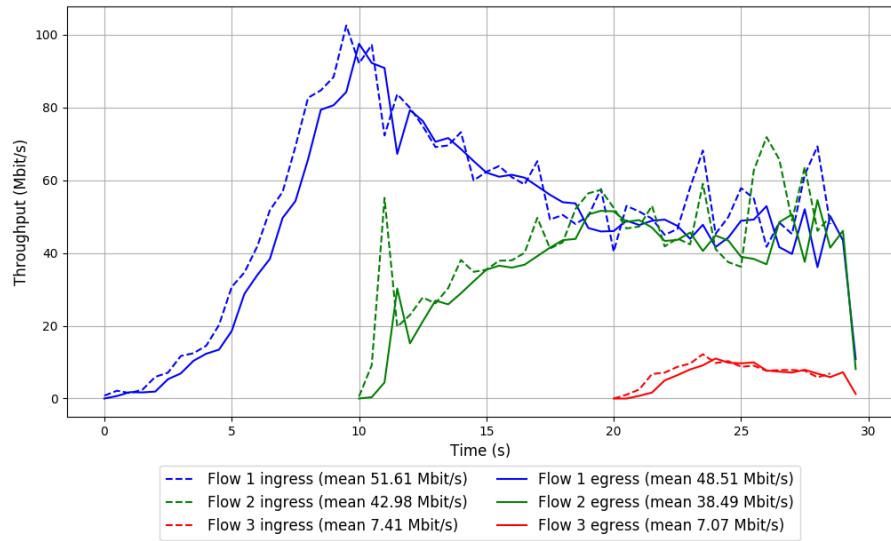


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 01:56:22
End at: 2019-02-20 01:56:52
Local clock offset: -4.361 ms
Remote clock offset: -16.658 ms

# Below is generated by plot.py at 2019-02-20 03:36:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.73 Mbit/s
95th percentile per-packet one-way delay: 203.270 ms
Loss rate: 7.38%
-- Flow 1:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 200.671 ms
Loss rate: 5.89%
-- Flow 2:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 205.155 ms
Loss rate: 10.30%
-- Flow 3:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 205.398 ms
Loss rate: 5.13%
```

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

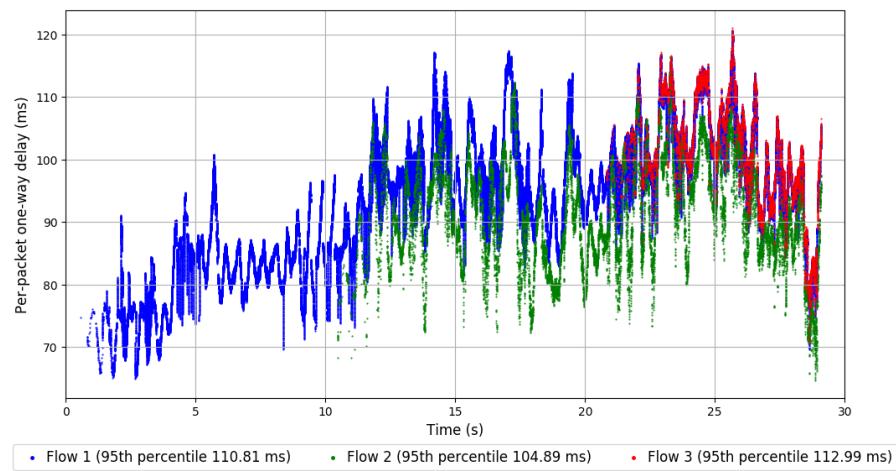
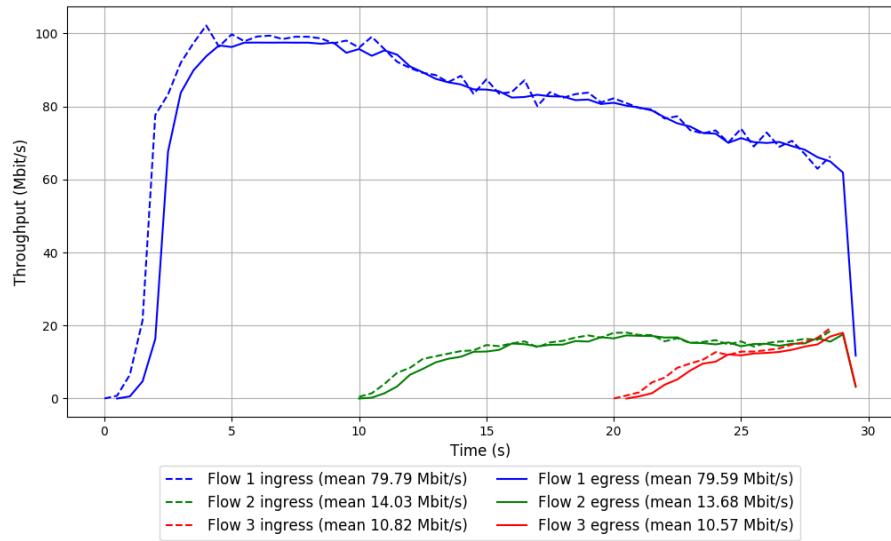


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 02:35:30
End at: 2019-02-20 02:36:00
Local clock offset: 8.135 ms
Remote clock offset: -9.743 ms

# Below is generated by plot.py at 2019-02-20 03:36:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 110.727 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 79.59 Mbit/s
95th percentile per-packet one-way delay: 110.809 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 13.68 Mbit/s
95th percentile per-packet one-way delay: 104.888 ms
Loss rate: 2.51%
-- Flow 3:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 112.994 ms
Loss rate: 2.19%
```

Run 4: Report of Indigo-MusesT — Data Link

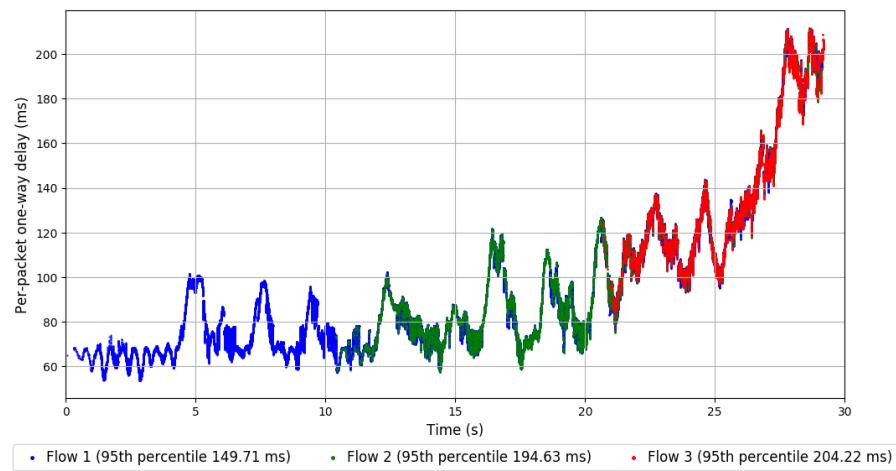
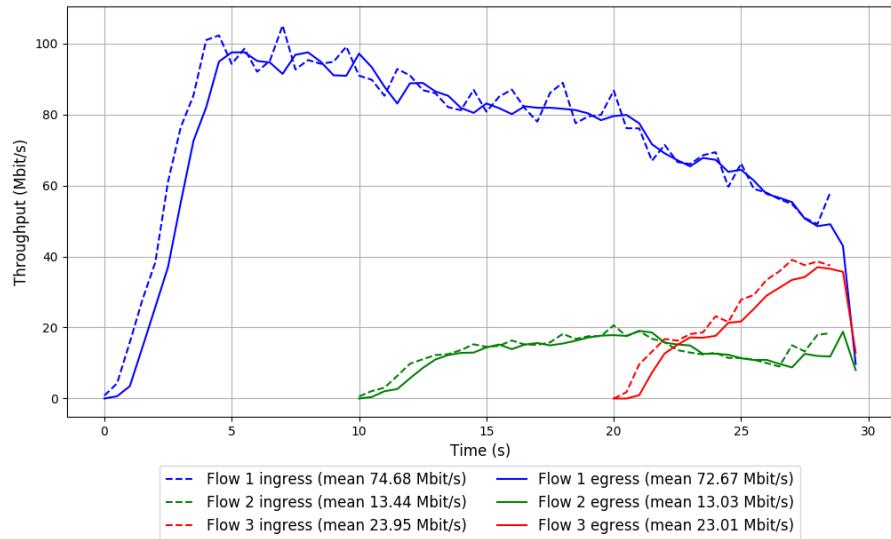


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 03:15:55
End at: 2019-02-20 03:16:25
Local clock offset: 3.868 ms
Remote clock offset: -13.232 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 185.685 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 72.67 Mbit/s
95th percentile per-packet one-way delay: 149.706 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 13.03 Mbit/s
95th percentile per-packet one-way delay: 194.634 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 204.220 ms
Loss rate: 2.84%
```

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

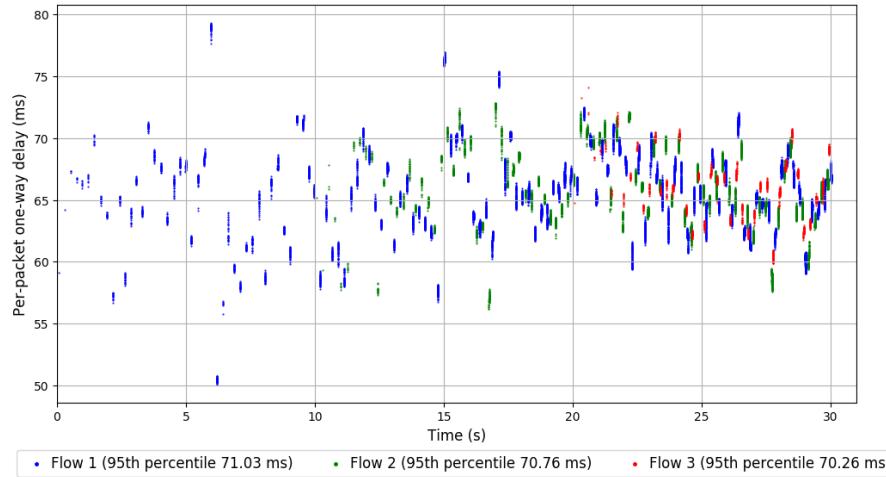
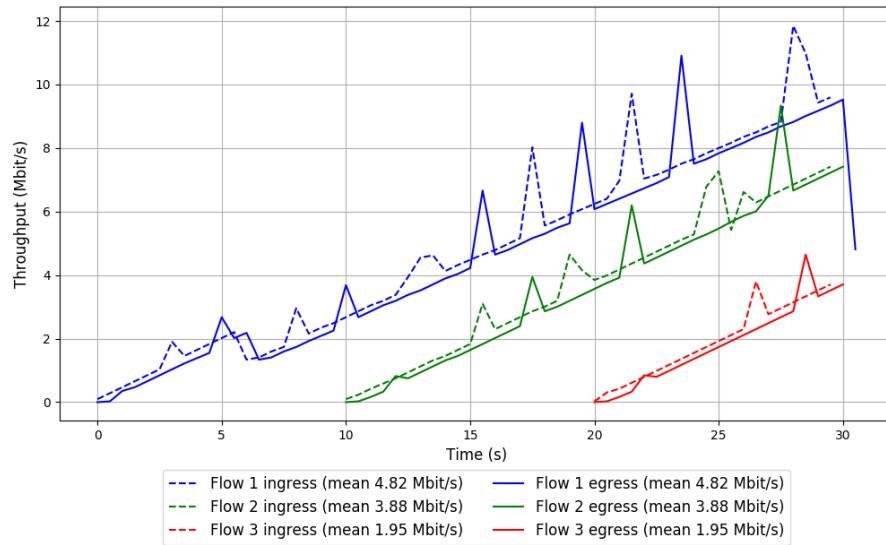


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-20 00:51:42
End at: 2019-02-20 00:52:12
Local clock offset: 7.514 ms
Remote clock offset: -5.15 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 70.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 71.028 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 70.758 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 70.263 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

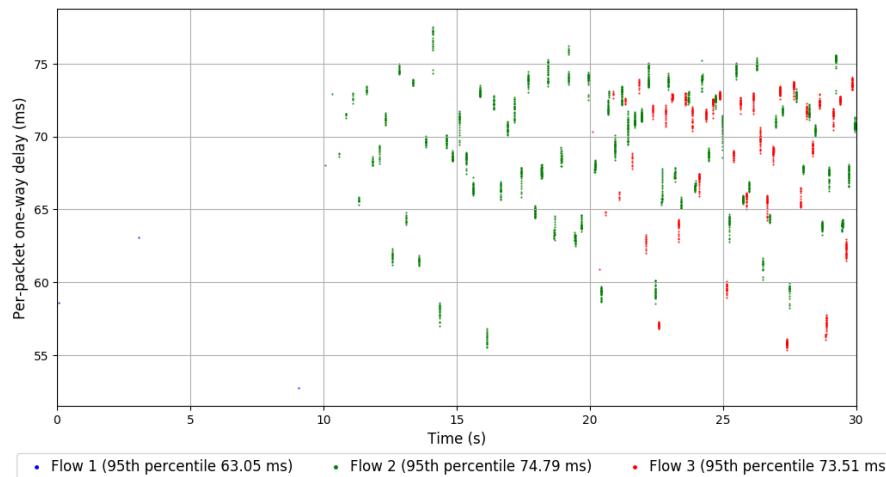
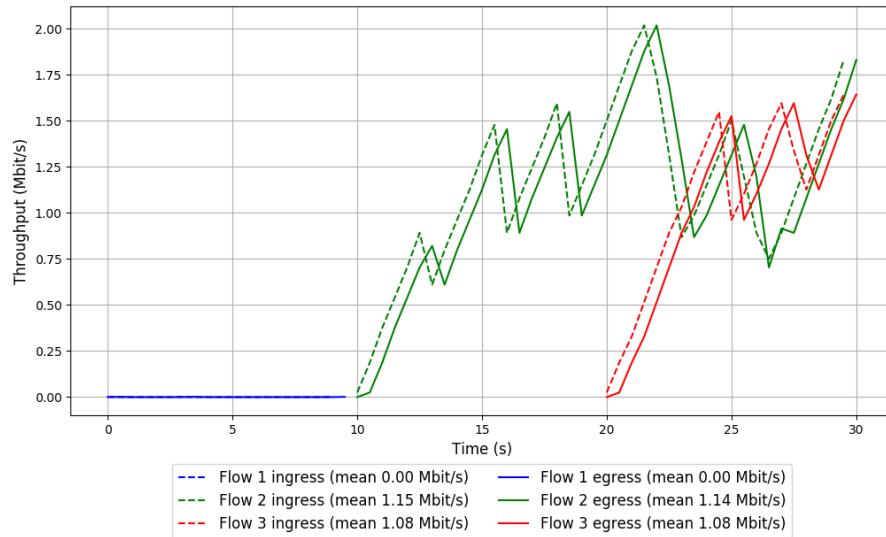


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-20 01:31:29
End at: 2019-02-20 01:31:59
Local clock offset: 3.338 ms
Remote clock offset: -7.842 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 74.461 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 74.790 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 73.513 ms
Loss rate: 0.22%
```

Run 2: Report of LEDBAT — Data Link

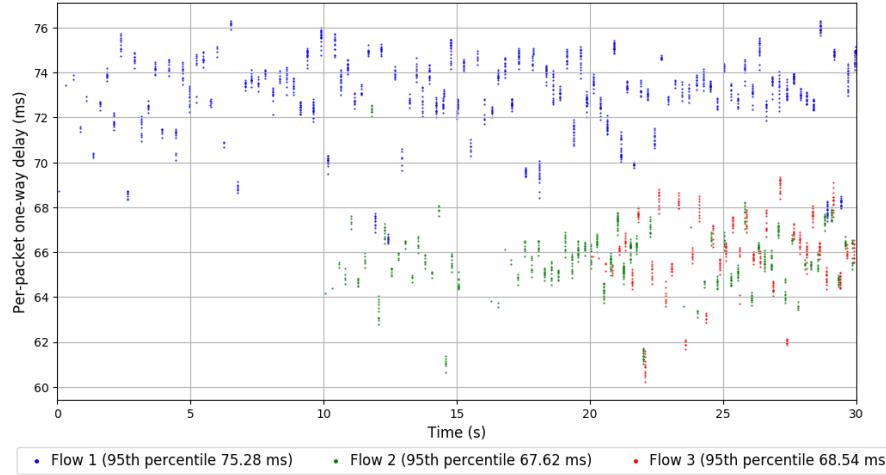
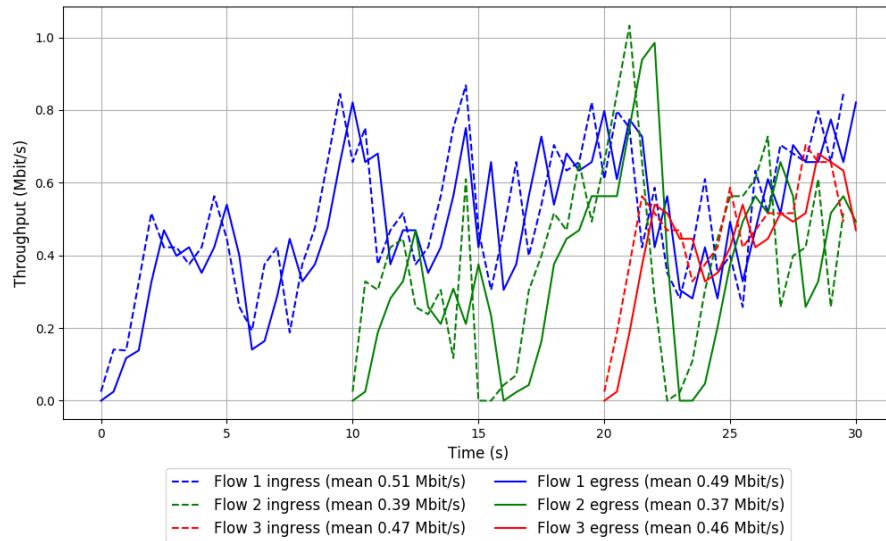


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-20 02:10:24
End at: 2019-02-20 02:10:54
Local clock offset: 5.054 ms
Remote clock offset: -14.336 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 74.984 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 75.281 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 67.621 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 68.541 ms
Loss rate: 2.79%
```

Run 3: Report of LEDBAT — Data Link

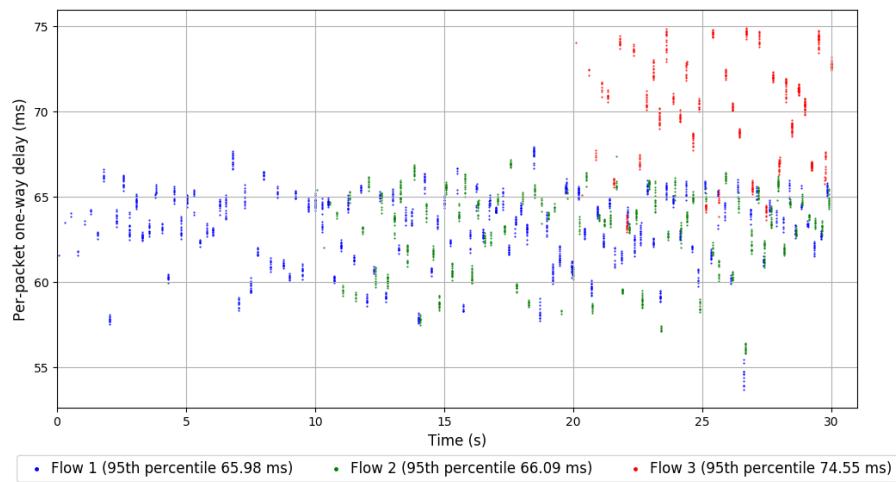
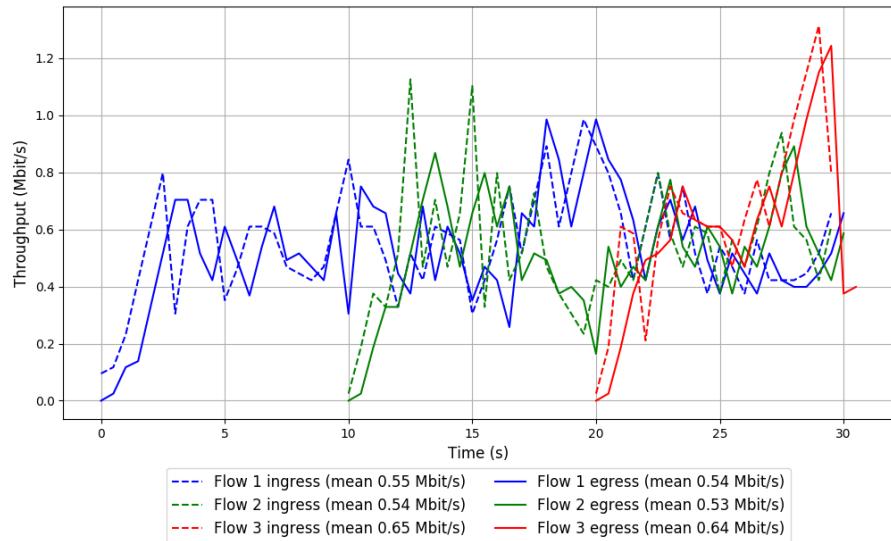


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-20 02:50:39
End at: 2019-02-20 02:51:09
Local clock offset: 6.226 ms
Remote clock offset: -14.965 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 72.315 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 65.984 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 66.086 ms
Loss rate: 3.06%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 74.549 ms
Loss rate: 1.81%
```

Run 4: Report of LEDBAT — Data Link

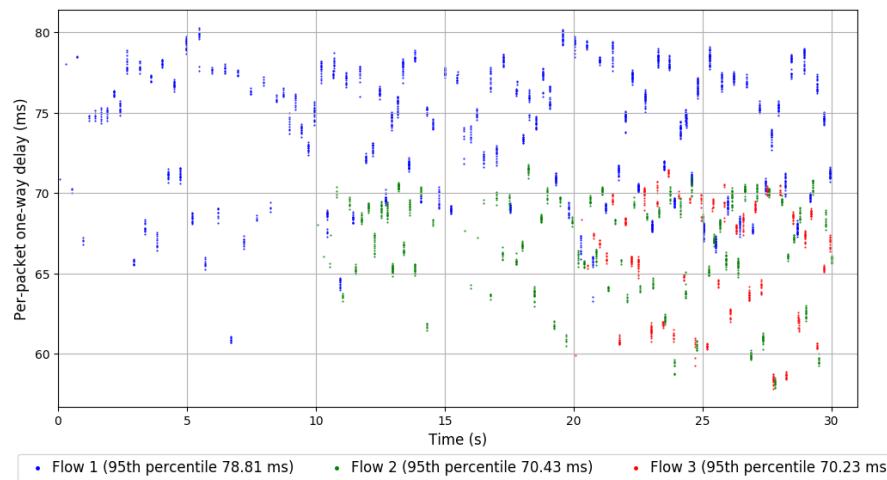
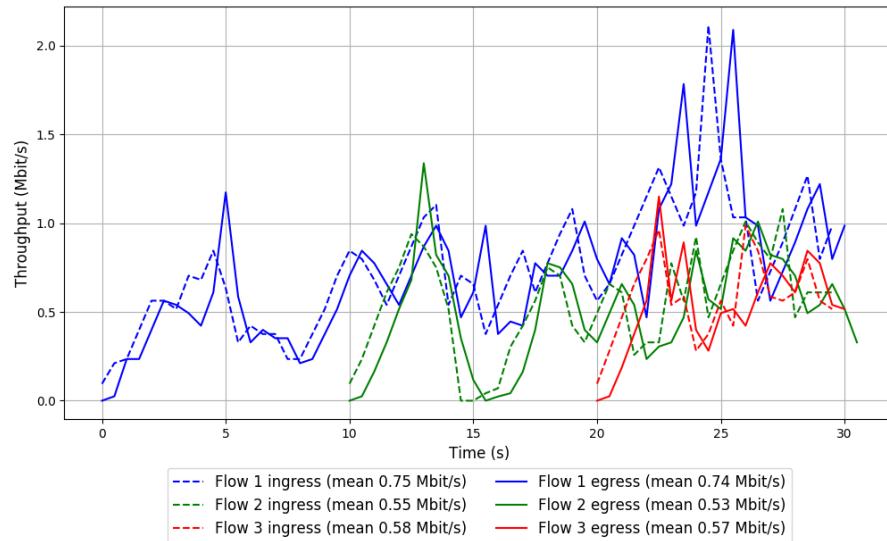


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-20 03:26:33
End at: 2019-02-20 03:27:03
Local clock offset: 3.39 ms
Remote clock offset: -11.914 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 78.420 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 78.809 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 70.431 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 70.232 ms
Loss rate: 2.24%
```

Run 5: Report of LEDBAT — Data Link

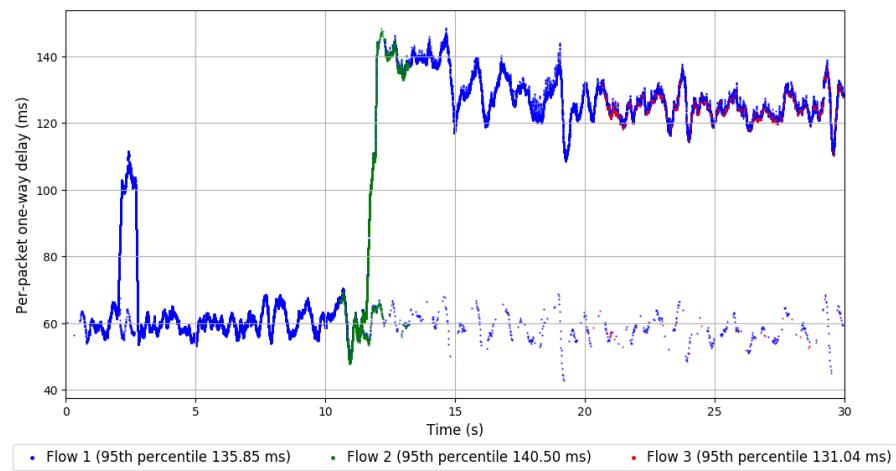
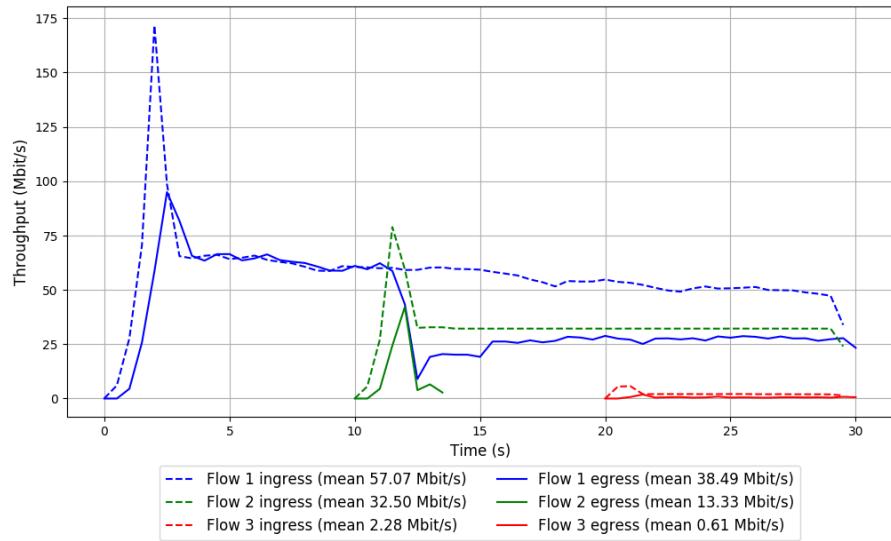


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-20 00:53:05
End at: 2019-02-20 00:53:35
Local clock offset: 7.789 ms
Remote clock offset: -5.238 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 136.113 ms
Loss rate: 49.52%
-- Flow 1:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 135.850 ms
Loss rate: 32.57%
-- Flow 2:
Average throughput: 13.33 Mbit/s
95th percentile per-packet one-way delay: 140.499 ms
Loss rate: 93.48%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 131.037 ms
Loss rate: 73.16%
```

Run 1: Report of PCC-Allegro — Data Link

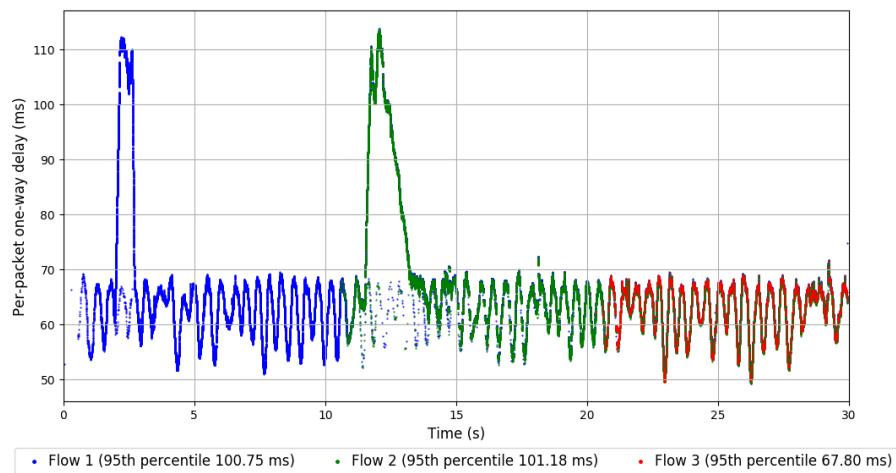
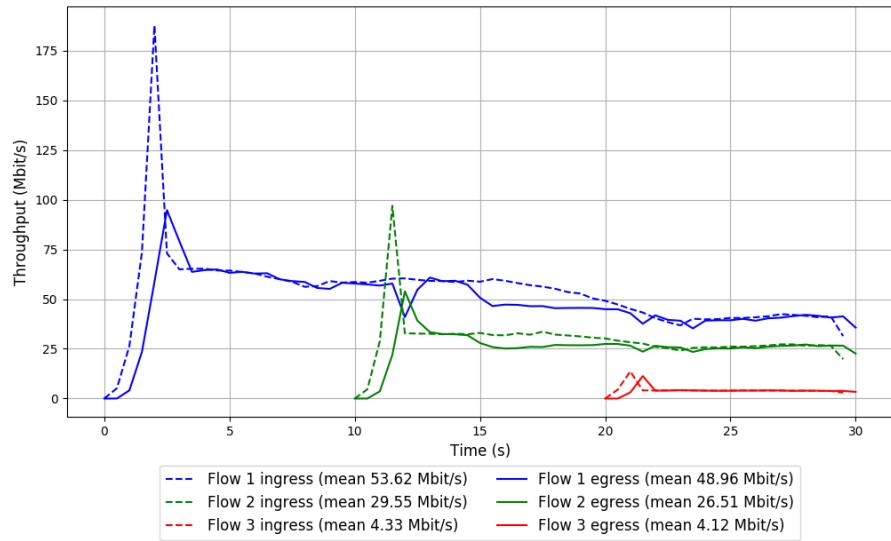


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-20 01:32:52
End at: 2019-02-20 01:33:22
Local clock offset: 2.195 ms
Remote clock offset: -7.297 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.94 Mbit/s
95th percentile per-packet one-way delay: 100.676 ms
Loss rate: 8.97%
-- Flow 1:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 100.750 ms
Loss rate: 8.62%
-- Flow 2:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 101.178 ms
Loss rate: 10.25%
-- Flow 3:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 67.798 ms
Loss rate: 4.80%
```

Run 2: Report of PCC-Allegro — Data Link

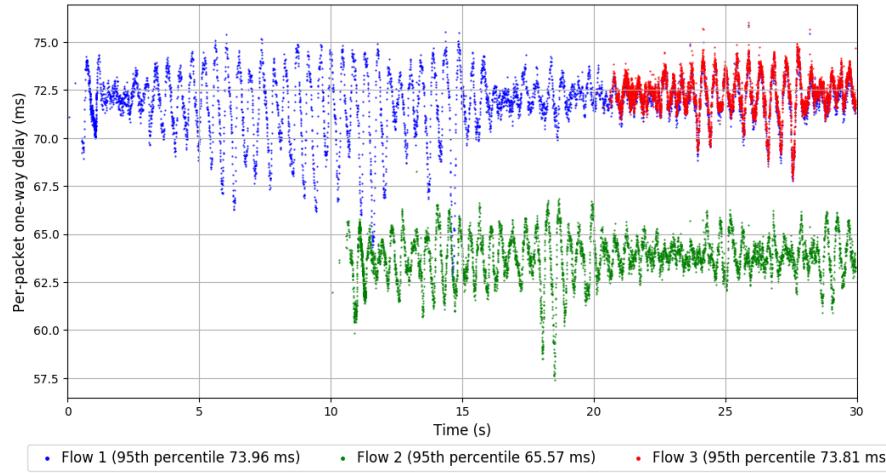
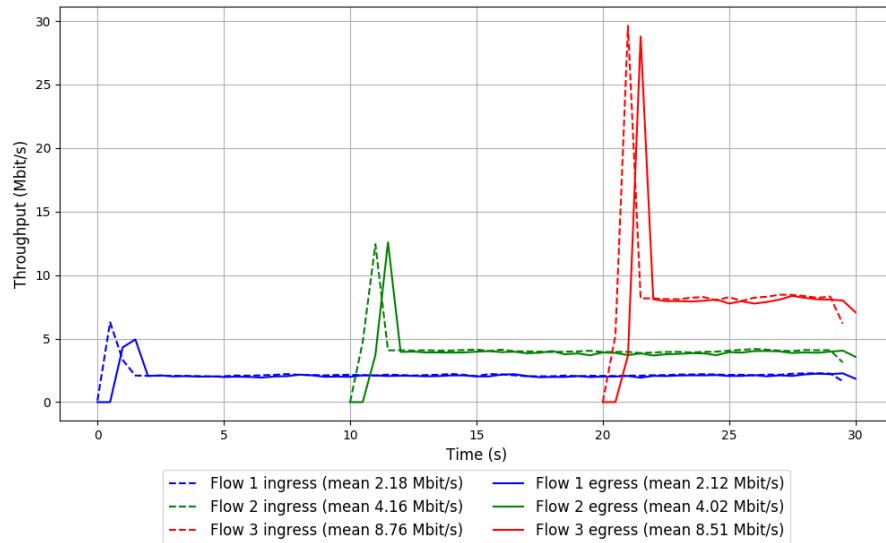


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-20 02:11:46
End at: 2019-02-20 02:12:16
Local clock offset: 5.542 ms
Remote clock offset: -15.418 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 73.668 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 73.956 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 65.566 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 73.811 ms
Loss rate: 2.85%
```

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

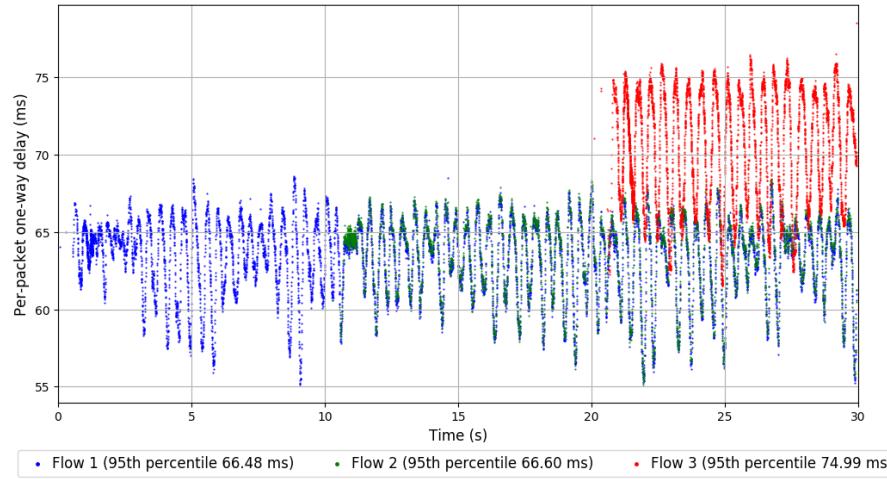
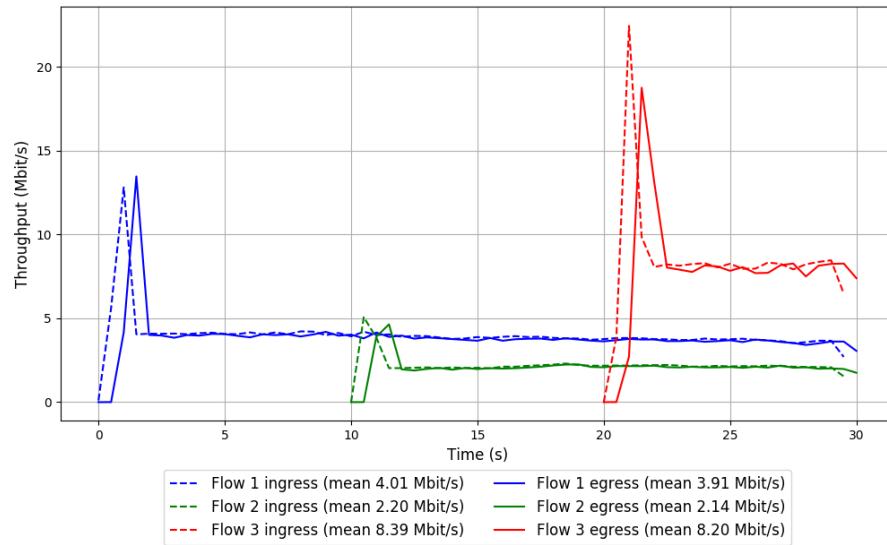


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-20 02:51:59
End at: 2019-02-20 02:52:29
Local clock offset: 6.049 ms
Remote clock offset: -14.195 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 74.251 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 66.485 ms
Loss rate: 2.46%
-- Flow 2:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 66.600 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 74.991 ms
Loss rate: 2.15%
```

Run 4: Report of PCC-Allegro — Data Link

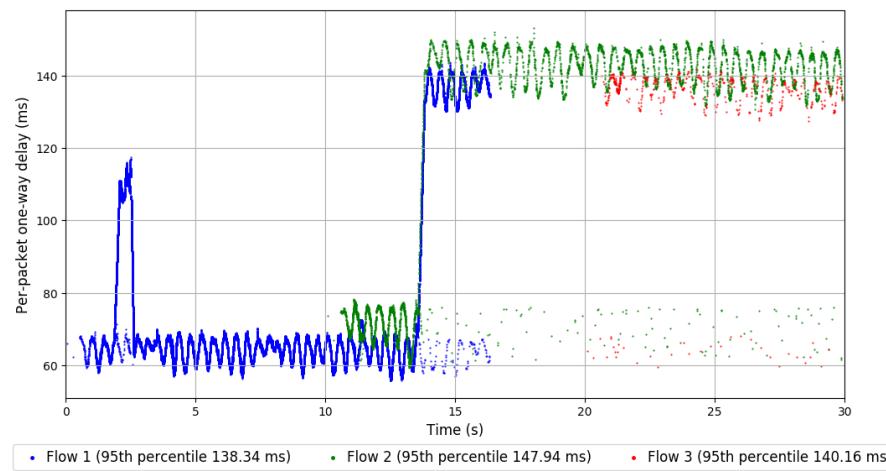
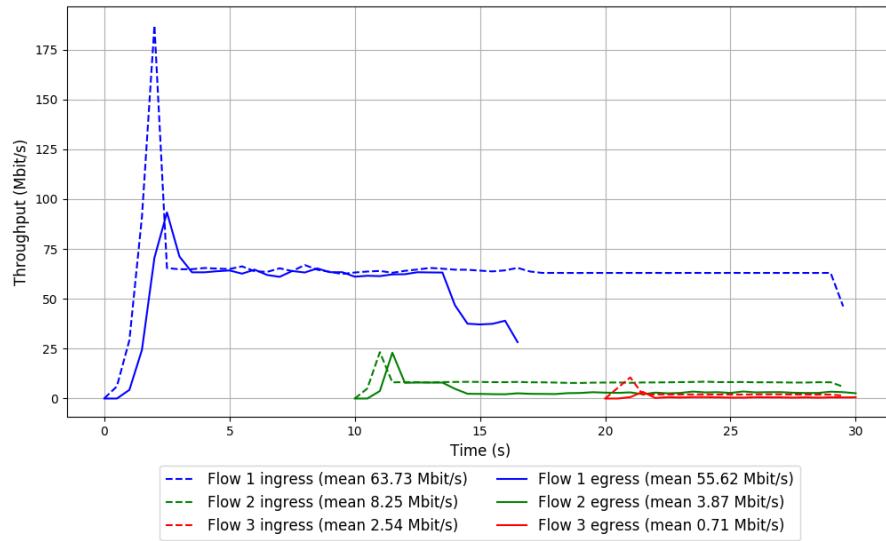


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-20 03:27:54
End at: 2019-02-20 03:28:24
Local clock offset: 3.486 ms
Remote clock offset: -13.401 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 140.391 ms
Loss rate: 52.68%
-- Flow 1:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 138.335 ms
Loss rate: 52.39%
-- Flow 2:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 147.938 ms
Loss rate: 53.14%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 140.159 ms
Loss rate: 71.90%
```

Run 5: Report of PCC-Allegro — Data Link

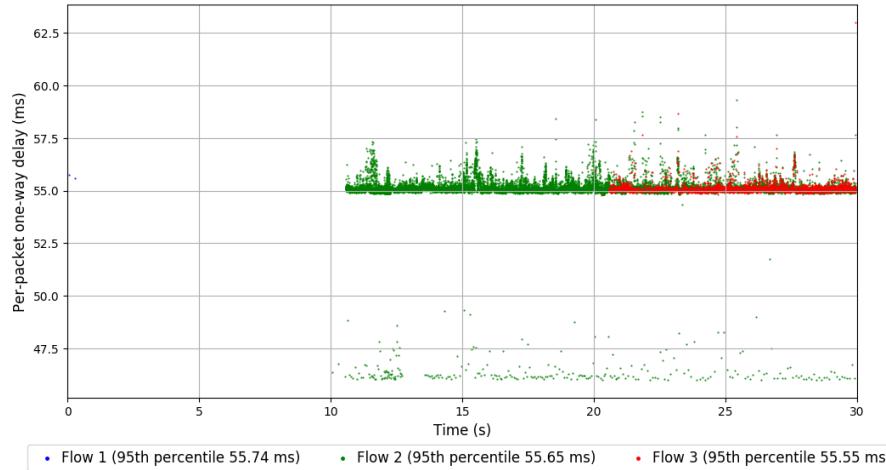
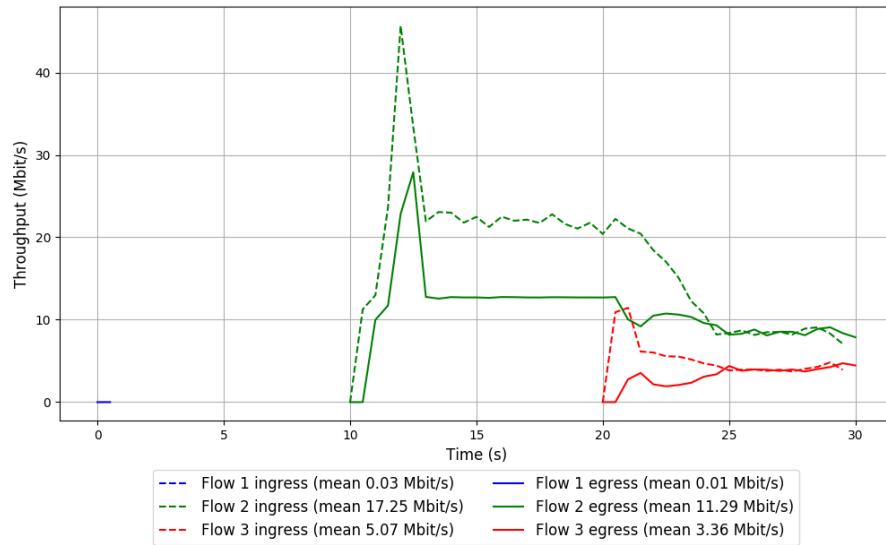


Run 1: Statistics of PCC-Expr

```
Start at: 2019-02-20 00:27:19
End at: 2019-02-20 00:27:49
Local clock offset: -1.291 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 55.638 ms
Loss rate: 34.46%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 55.741 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 55.649 ms
Loss rate: 34.55%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 55.550 ms
Loss rate: 33.82%
```

Run 1: Report of PCC-Expr — Data Link

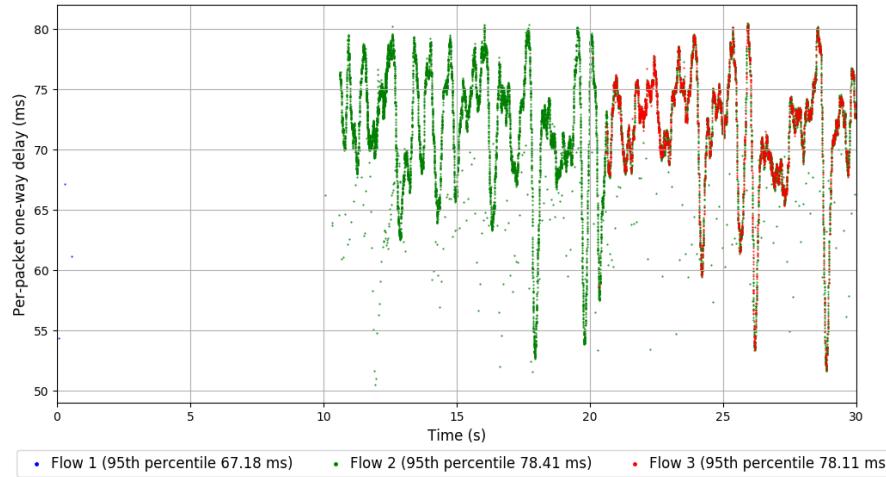
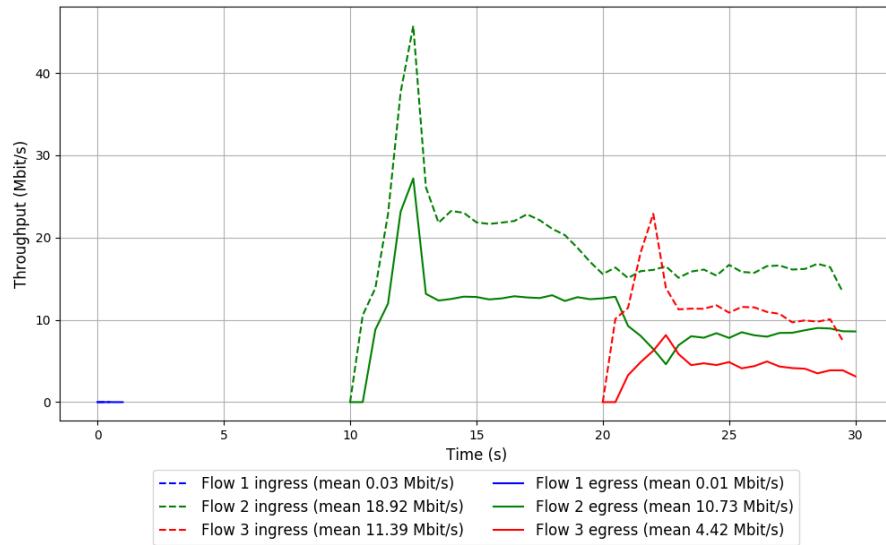


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-20 01:03:37
End at: 2019-02-20 01:04:07
Local clock offset: 6.957 ms
Remote clock offset: -2.418 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 78.355 ms
Loss rate: 47.41%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 67.179 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 78.406 ms
Loss rate: 43.29%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 78.108 ms
Loss rate: 61.18%
```

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

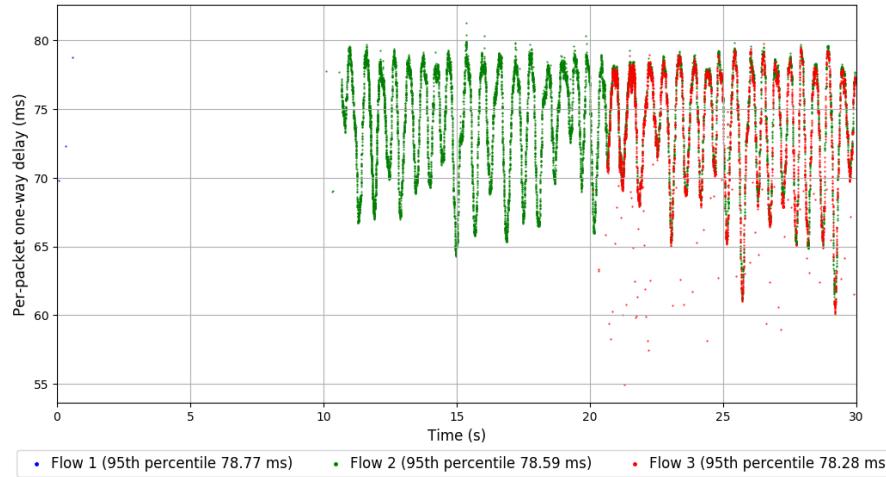
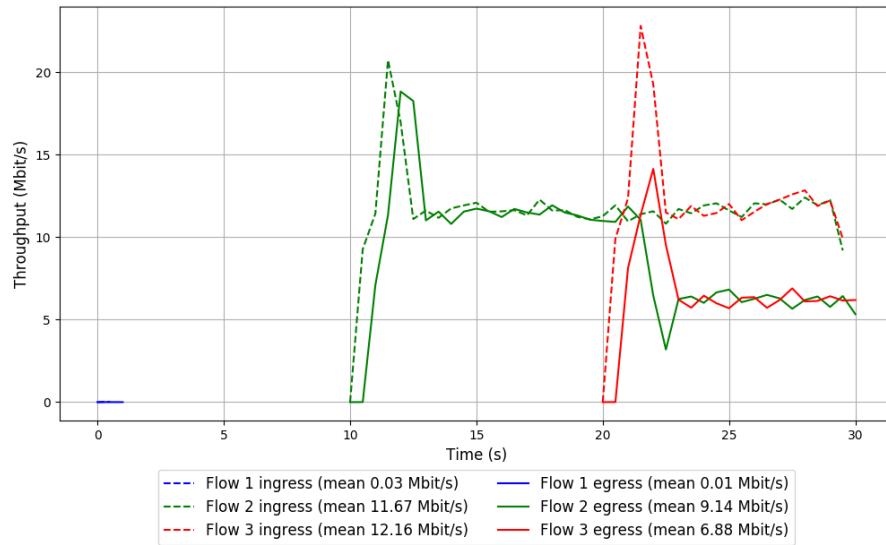


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-20 01:44:09
End at: 2019-02-20 01:44:39
Local clock offset: -2.364 ms
Remote clock offset: -9.201 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 78.538 ms
Loss rate: 29.14%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 78.768 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.14 Mbit/s
95th percentile per-packet one-way delay: 78.595 ms
Loss rate: 21.74%
-- Flow 3:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 78.278 ms
Loss rate: 43.43%
```

Run 3: Report of PCC-Expr — Data Link

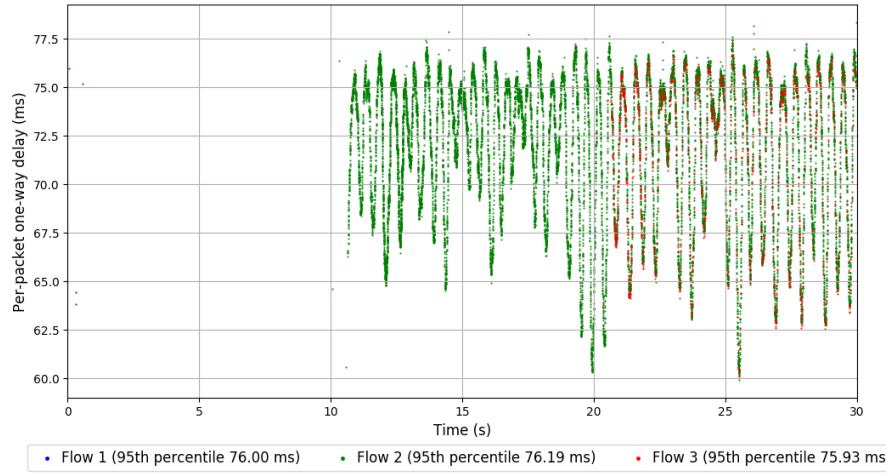
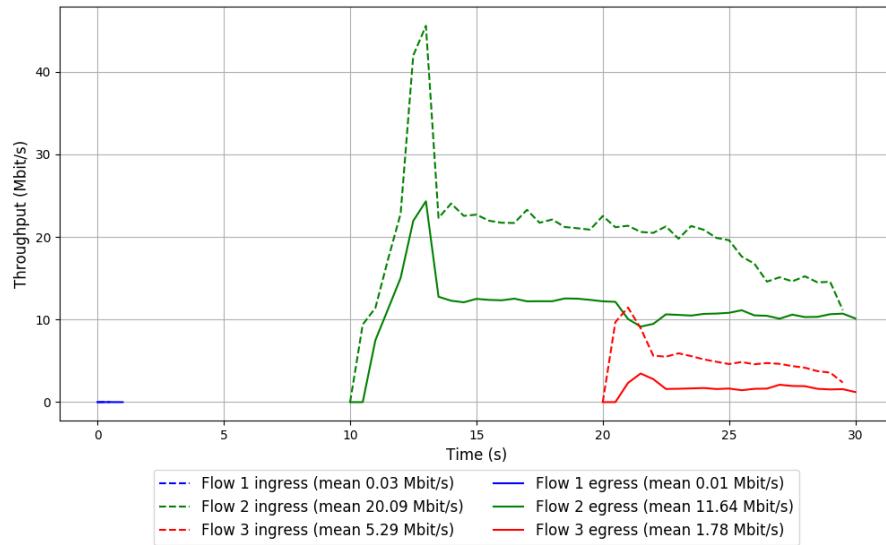


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-20 02:22:57
End at: 2019-02-20 02:23:27
Local clock offset: 9.378 ms
Remote clock offset: -10.766 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 76.176 ms
Loss rate: 44.87%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 75.995 ms
Loss rate: 75.00%
-- Flow 2:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 76.192 ms
Loss rate: 42.05%
-- Flow 3:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 75.930 ms
Loss rate: 66.44%
```

Run 4: Report of PCC-Expr — Data Link

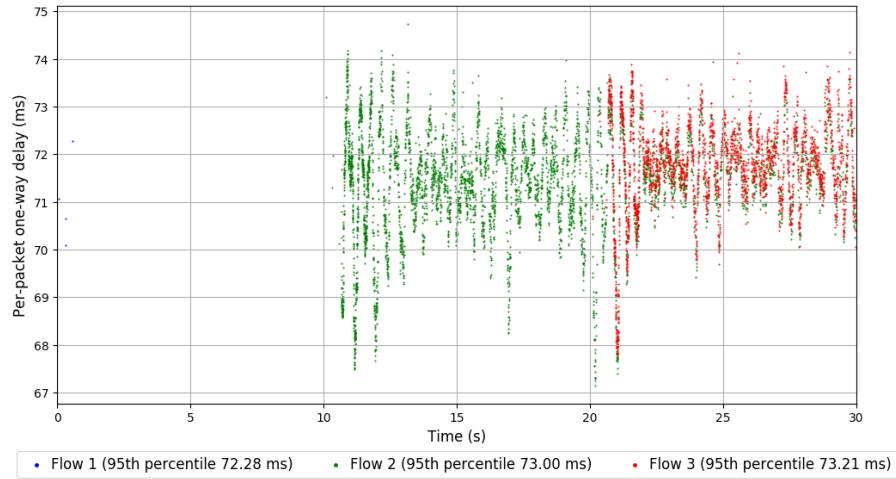
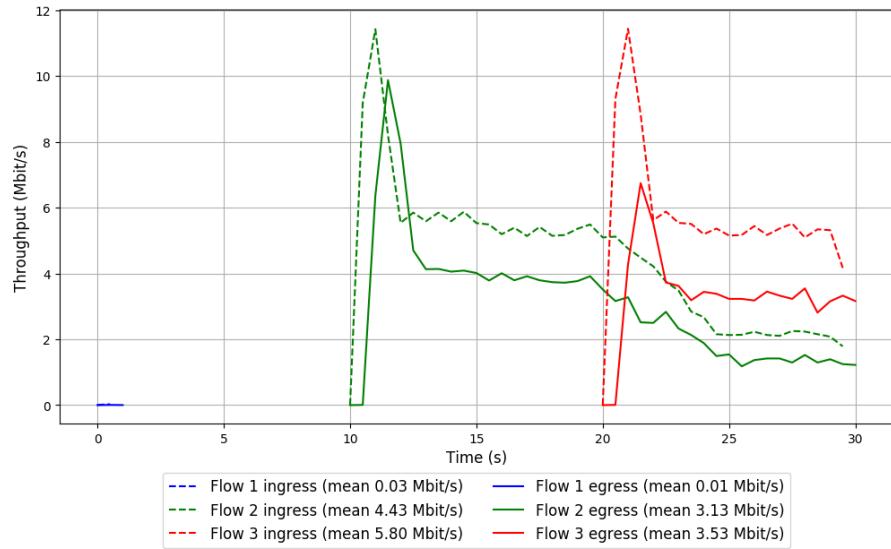


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-20 03:03:05
End at: 2019-02-20 03:03:35
Local clock offset: 5.285 ms
Remote clock offset: -16.6 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 73.088 ms
Loss rate: 33.31%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 72.277 ms
Loss rate: 75.00%
-- Flow 2:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 72.998 ms
Loss rate: 29.47%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 73.208 ms
Loss rate: 39.21%
```

Run 5: Report of PCC-Expr — Data Link

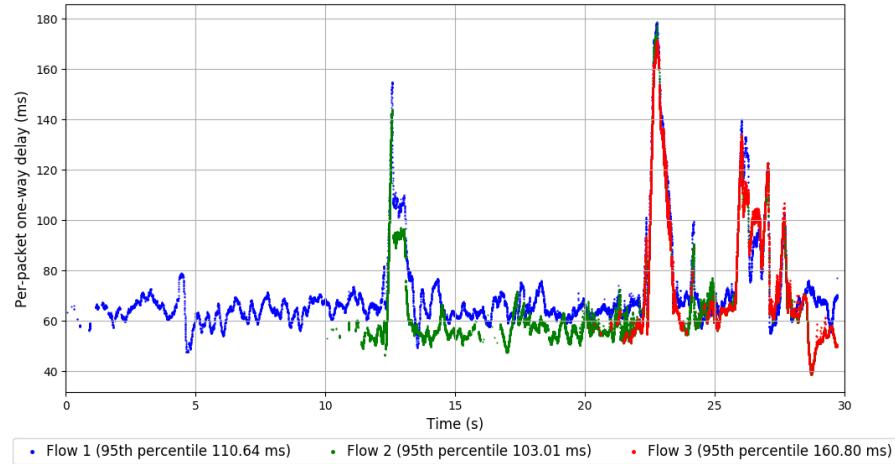
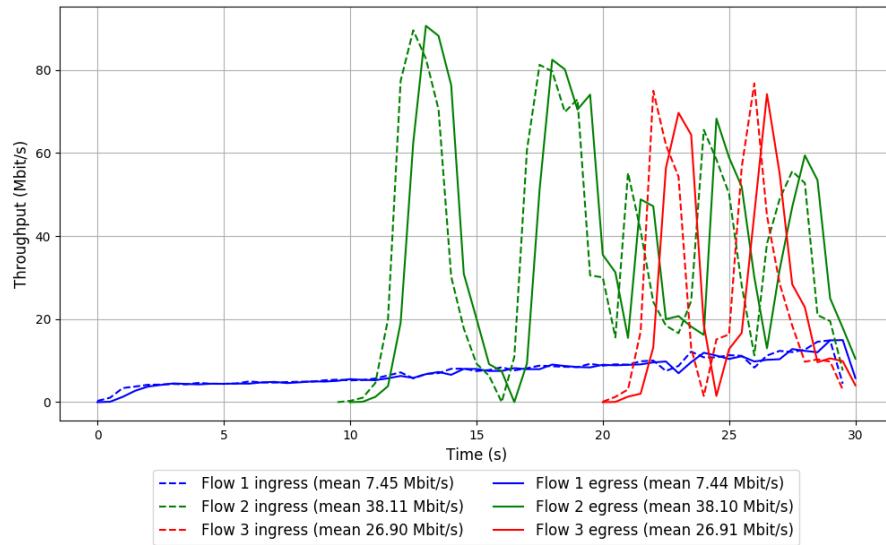


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-20 00:49:54
End at: 2019-02-20 00:50:24
Local clock offset: 7.391 ms
Remote clock offset: -4.707 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.41 Mbit/s
95th percentile per-packet one-way delay: 125.215 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 110.639 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 103.014 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 160.799 ms
Loss rate: 0.02%
```

Run 1: Report of QUIC Cubic — Data Link

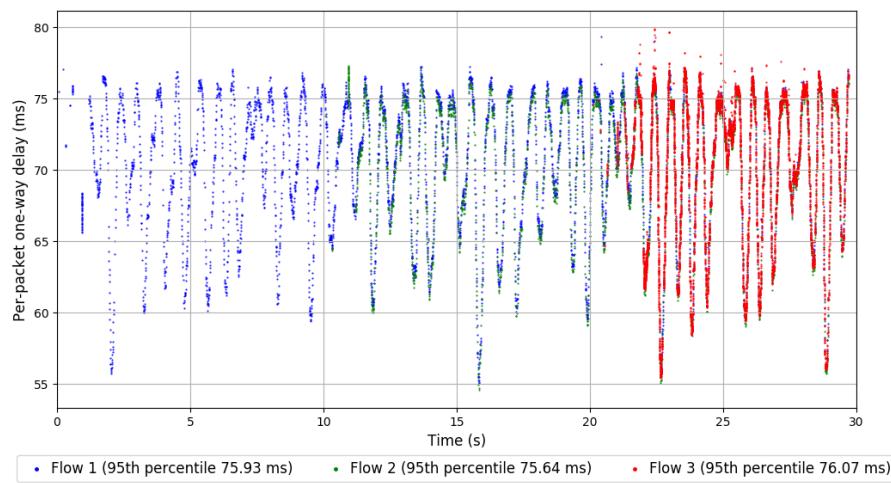
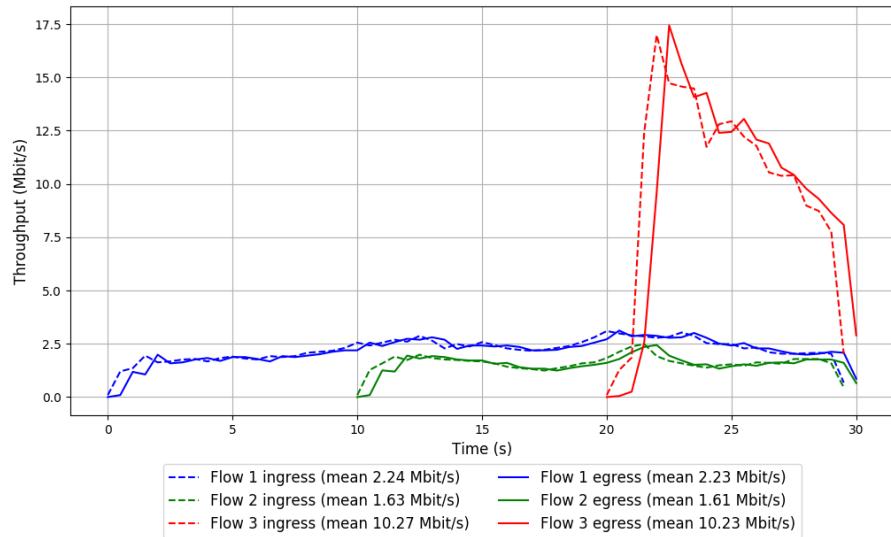


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-20 01:30:03
End at: 2019-02-20 01:30:33
Local clock offset: 4.181 ms
Remote clock offset: -4.566 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 75.948 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 75.929 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 75.639 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 76.070 ms
Loss rate: 0.55%
```

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

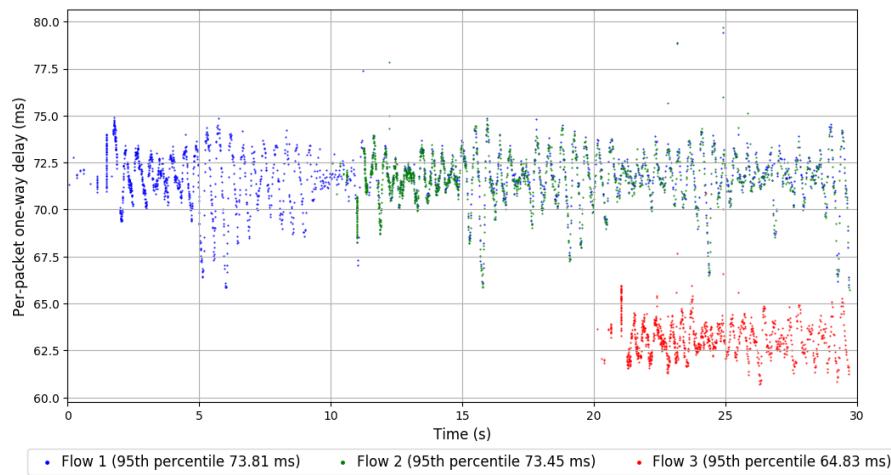
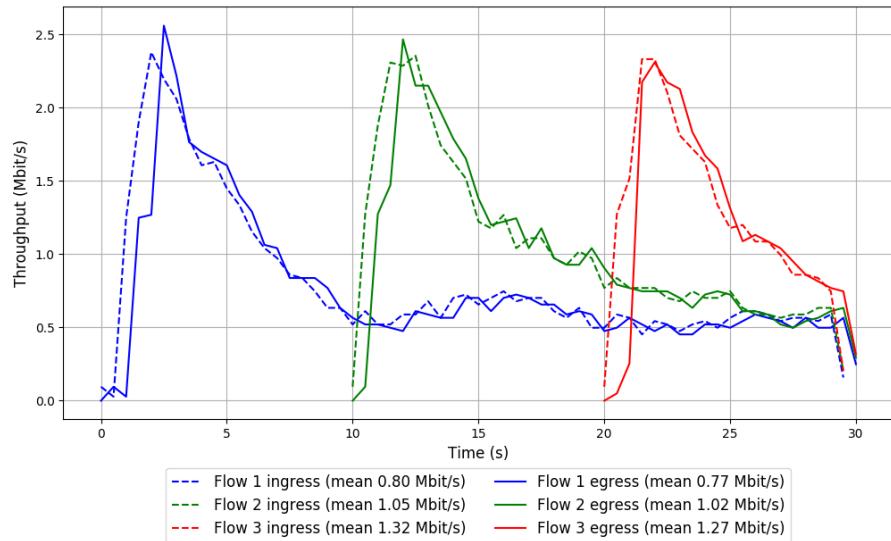


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-20 02:09:00
End at: 2019-02-20 02:09:30
Local clock offset: 4.228 ms
Remote clock offset: -16.234 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 73.481 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 73.805 ms
Loss rate: 4.27%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 73.452 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 64.832 ms
Loss rate: 3.59%
```

Run 3: Report of QUIC Cubic — Data Link

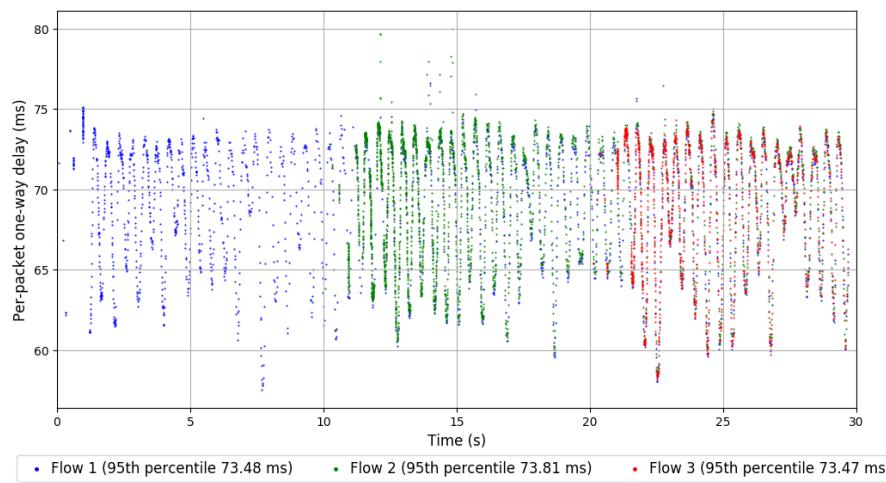
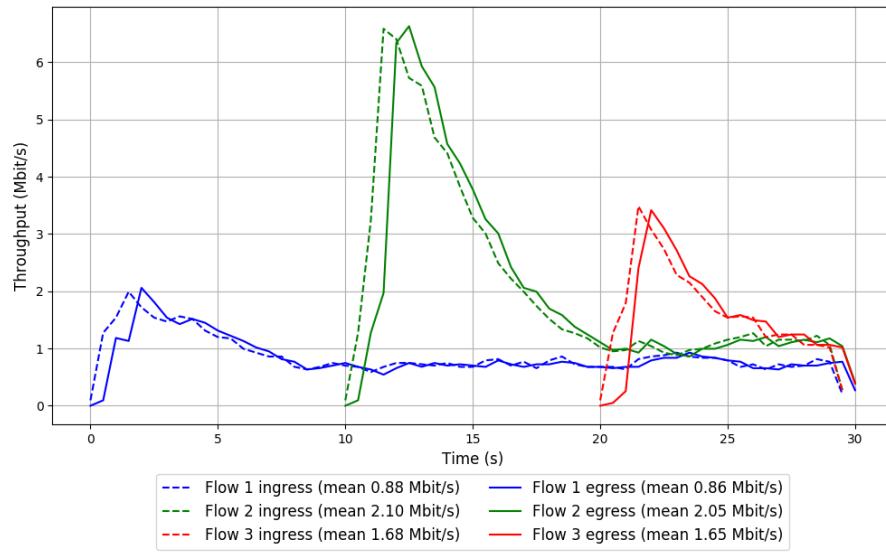


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-20 02:49:15
End at: 2019-02-20 02:49:45
Local clock offset: 6.266 ms
Remote clock offset: -15.133 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 73.641 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 73.477 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 73.807 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 73.471 ms
Loss rate: 2.11%
```

Run 4: Report of QUIC Cubic — Data Link

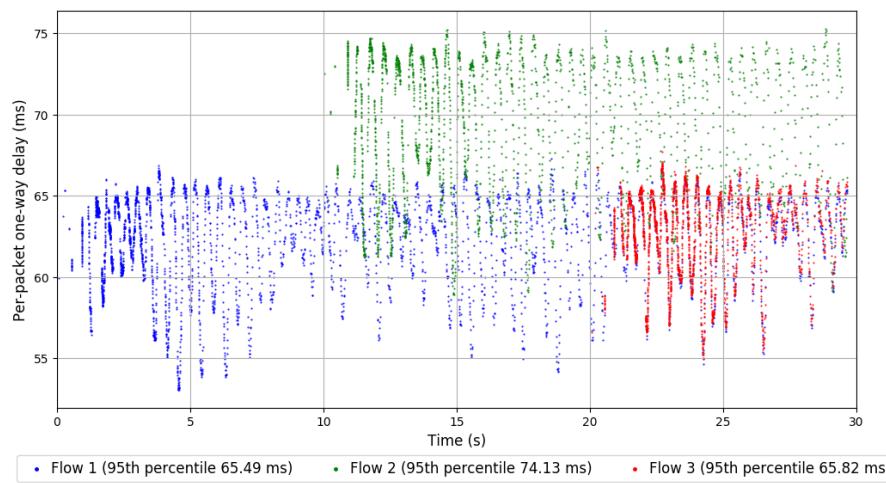
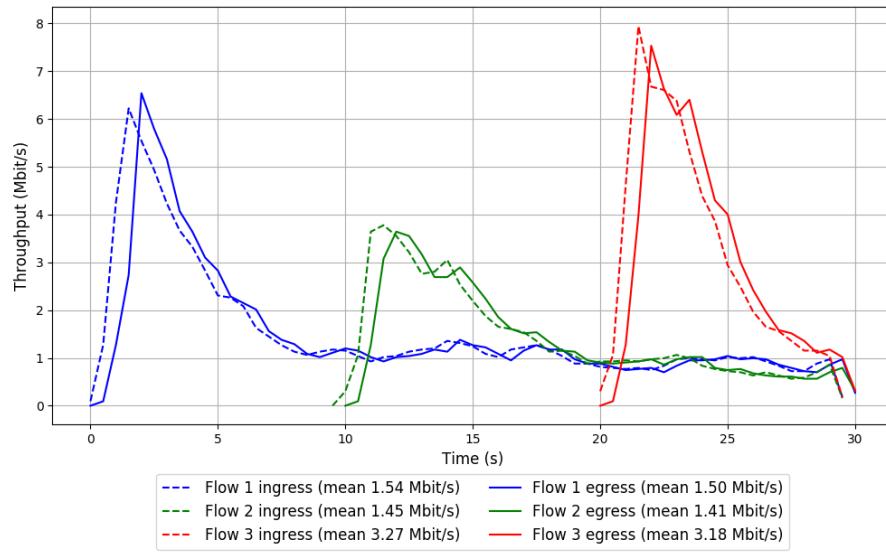


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-20 03:25:12
End at: 2019-02-20 03:25:42
Local clock offset: 3.341 ms
Remote clock offset: -15.874 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 73.380 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 65.492 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 74.126 ms
Loss rate: 2.71%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 65.819 ms
Loss rate: 2.49%
```

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

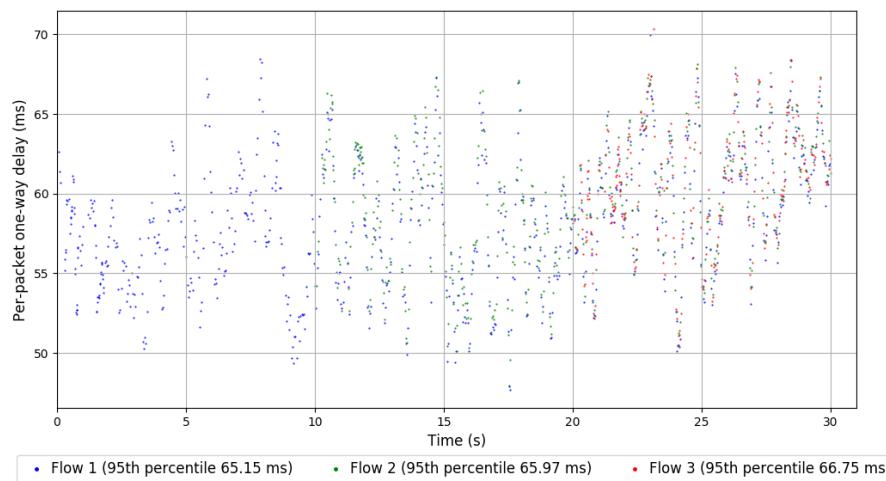
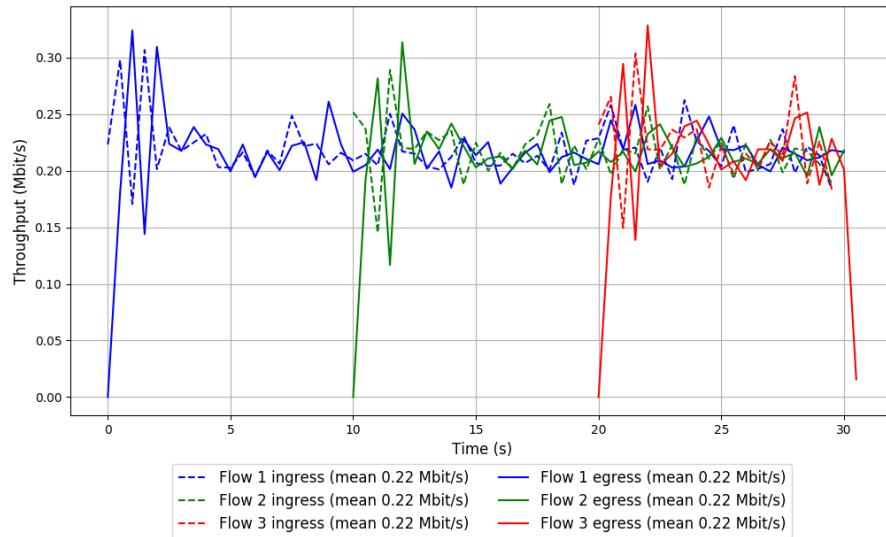


Run 1: Statistics of SCReAM

```
Start at: 2019-02-20 00:42:49
End at: 2019-02-20 00:43:19
Local clock offset: 5.923 ms
Remote clock offset: -0.397 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.974 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.751 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

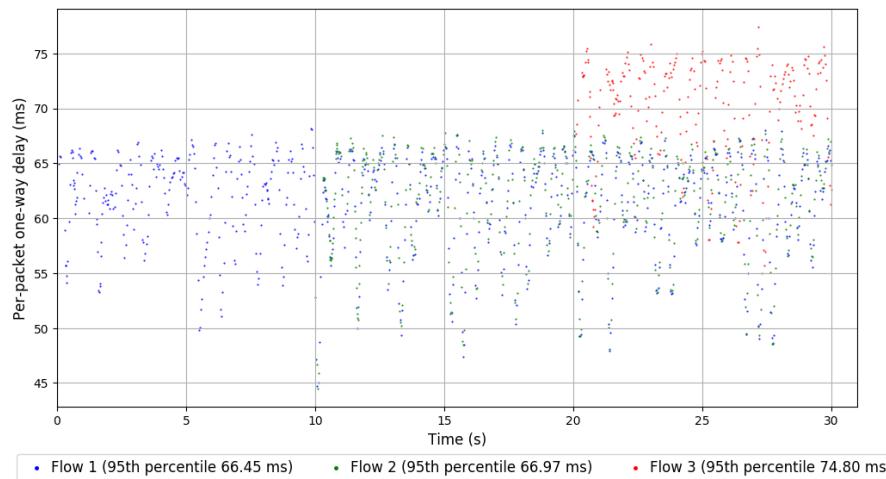
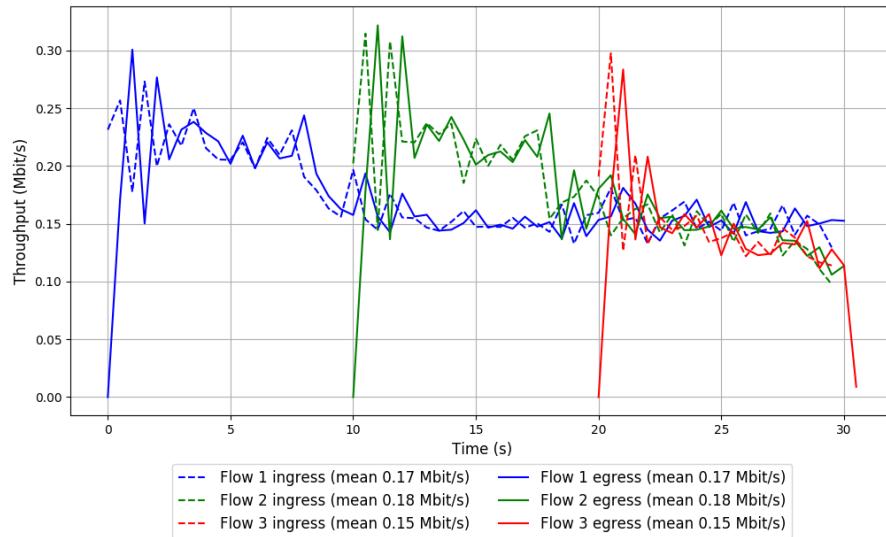


Run 2: Statistics of SCReAM

```
Start at: 2019-02-20 01:22:06
End at: 2019-02-20 01:22:36
Local clock offset: 4.247 ms
Remote clock offset: -4.855 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 73.179 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 66.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 66.975 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 74.799 ms
Loss rate: 0.44%
```

Run 2: Report of SCReAM — Data Link

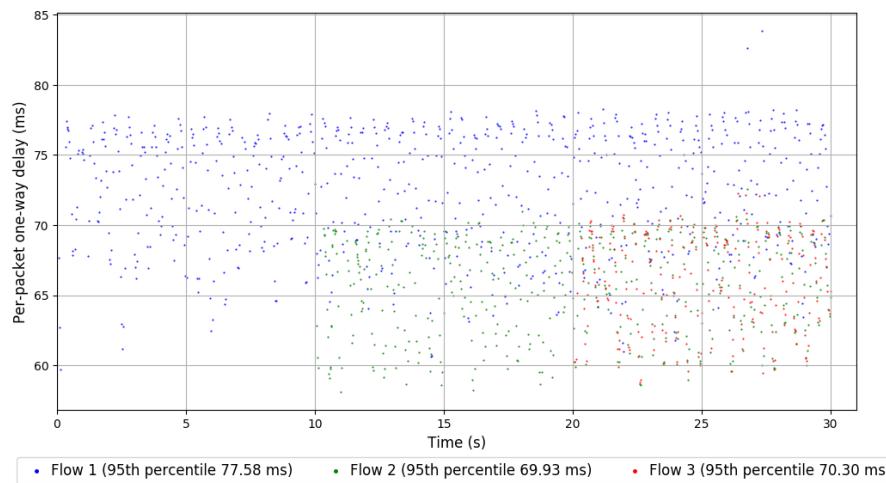
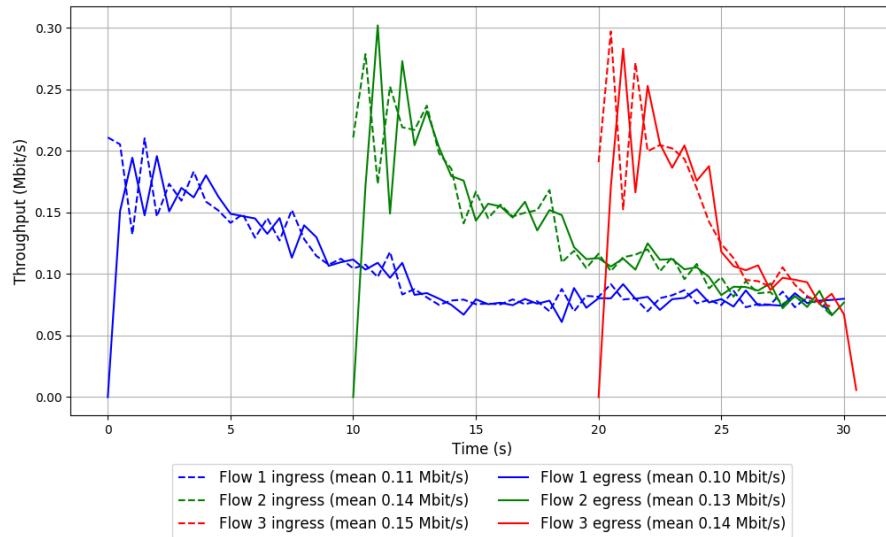


Run 3: Statistics of SCReAM

```
Start at: 2019-02-20 02:00:10
End at: 2019-02-20 02:00:40
Local clock offset: -4.721 ms
Remote clock offset: -13.745 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 77.123 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 77.576 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 69.927 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 70.303 ms
Loss rate: 3.24%
```

Run 3: Report of SCReAM — Data Link

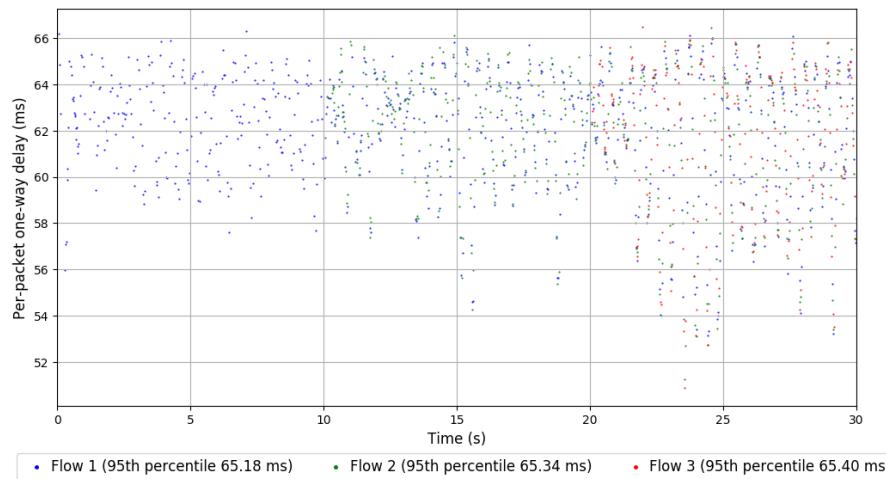
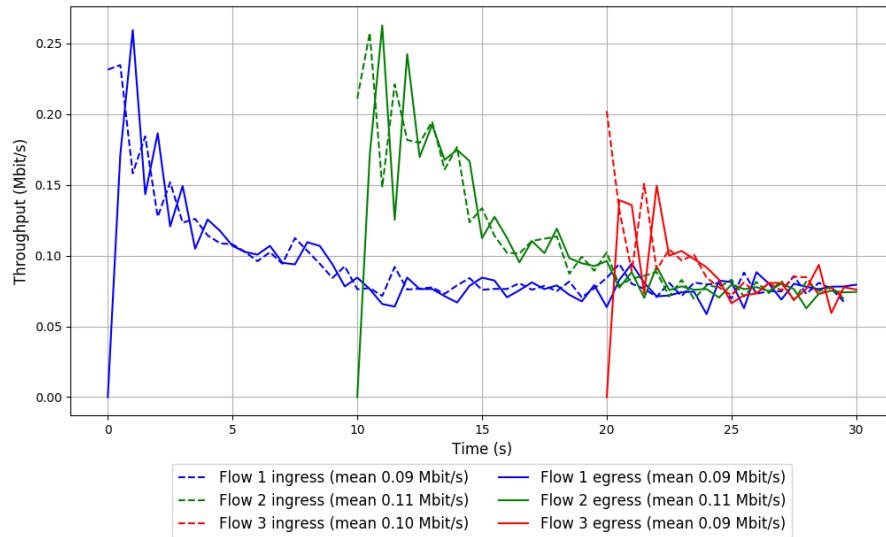


Run 4: Statistics of SCReAM

```
Start at: 2019-02-20 02:40:51
End at: 2019-02-20 02:41:21
Local clock offset: 7.056 ms
Remote clock offset: -13.515 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 65.235 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 65.183 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 65.341 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 65.404 ms
Loss rate: 5.40%
```

Run 4: Report of SCReAM — Data Link

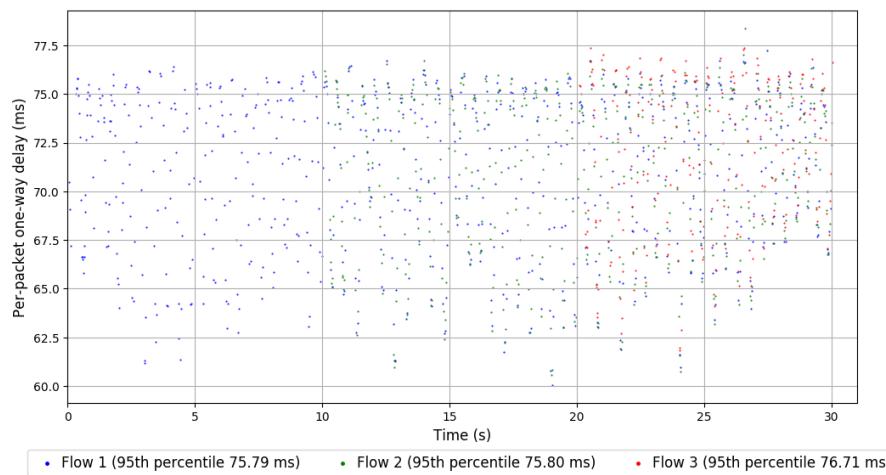
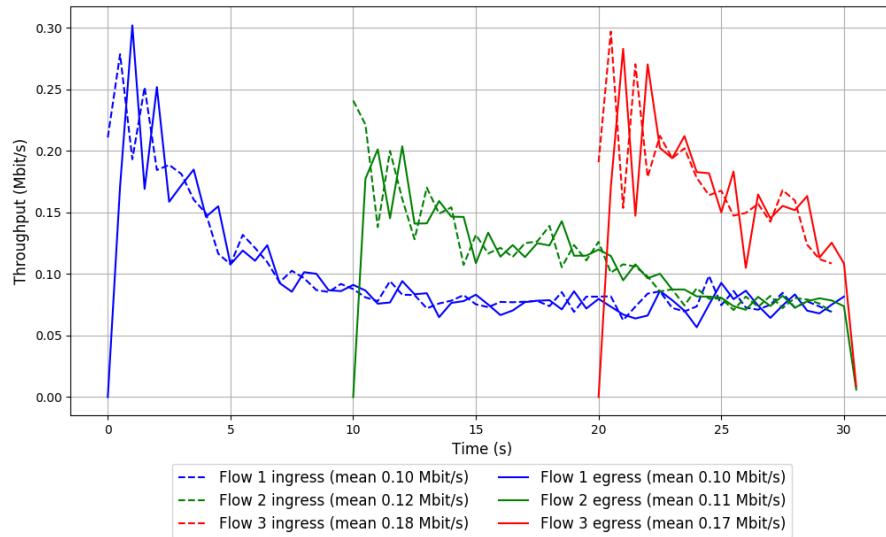


Run 5: Statistics of SCReAM

```
Start at: 2019-02-20 03:19:29
End at: 2019-02-20 03:19:59
Local clock offset: 3.867 ms
Remote clock offset: -13.356 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 75.970 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 75.792 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 75.795 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 76.710 ms
Loss rate: 1.68%
```

Run 5: Report of SCReAM — Data Link

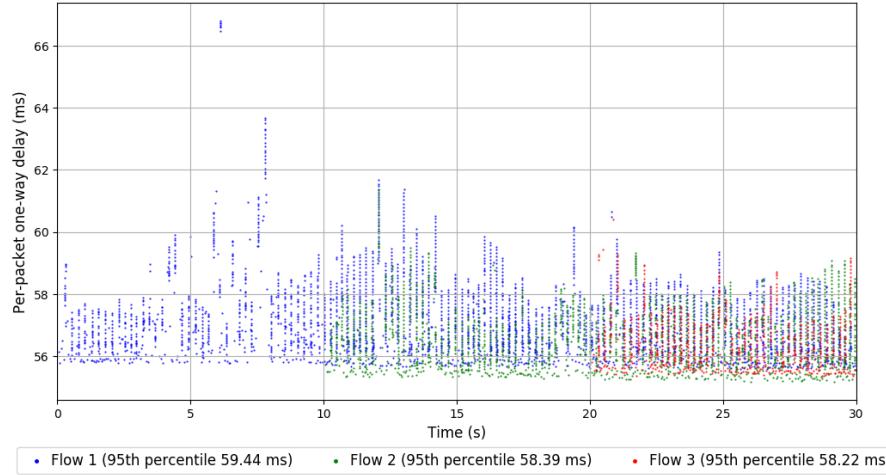
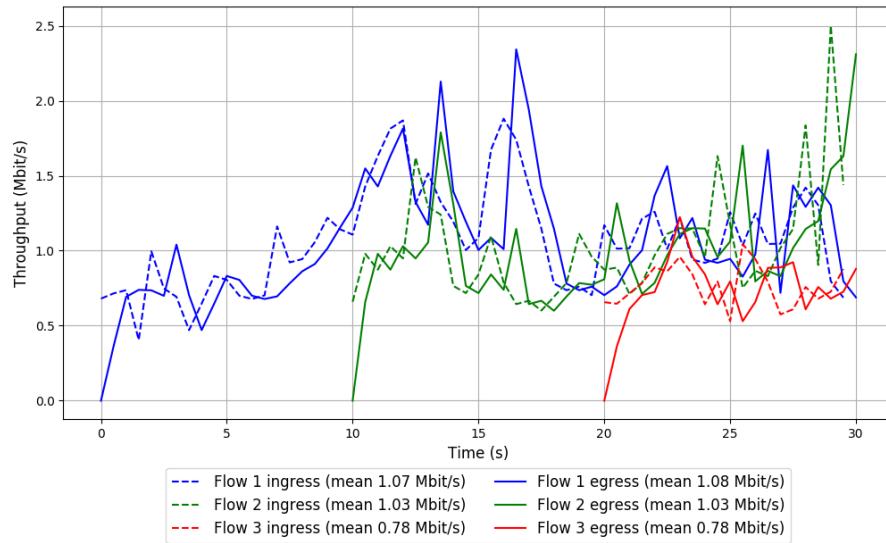


Run 1: Statistics of Sprout

```
Start at: 2019-02-20 00:24:31
End at: 2019-02-20 00:25:01
Local clock offset: -1.478 ms
Remote clock offset: -0.497 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 58.969 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 59.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 58.391 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 58.220 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

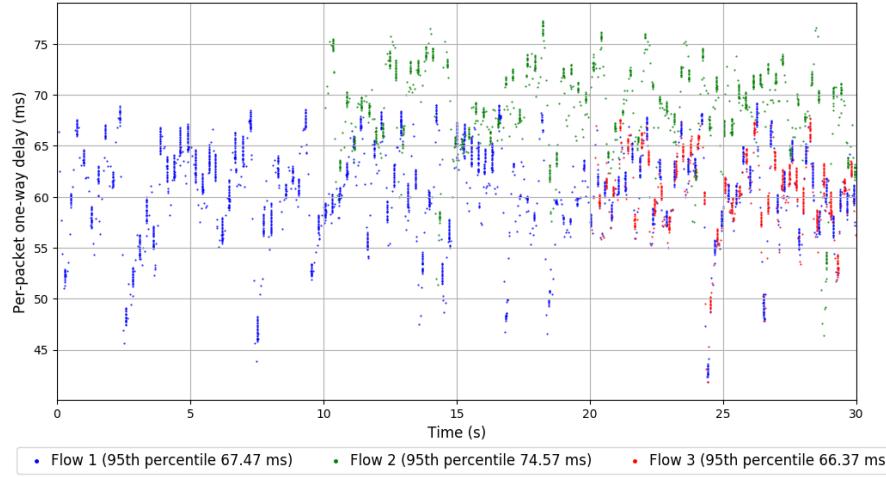
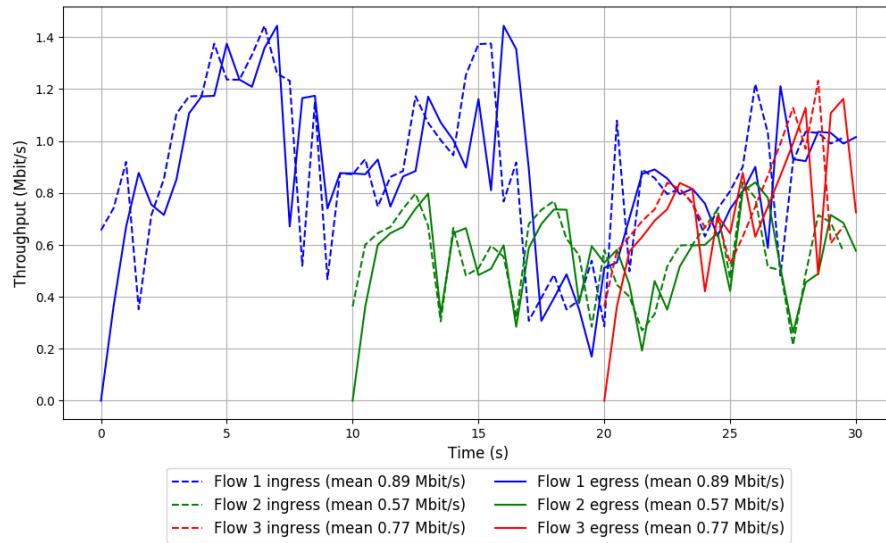


Run 2: Statistics of Sprout

```
Start at: 2019-02-20 01:00:45
End at: 2019-02-20 01:01:15
Local clock offset: 8.555 ms
Remote clock offset: -5.088 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 72.576 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 67.471 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 74.567 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 66.374 ms
Loss rate: 0.01%
```

## Run 2: Report of Sprout — Data Link

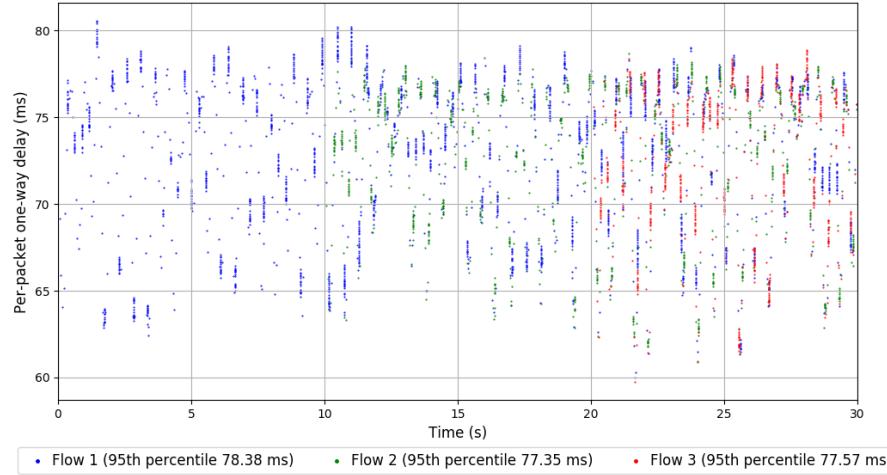
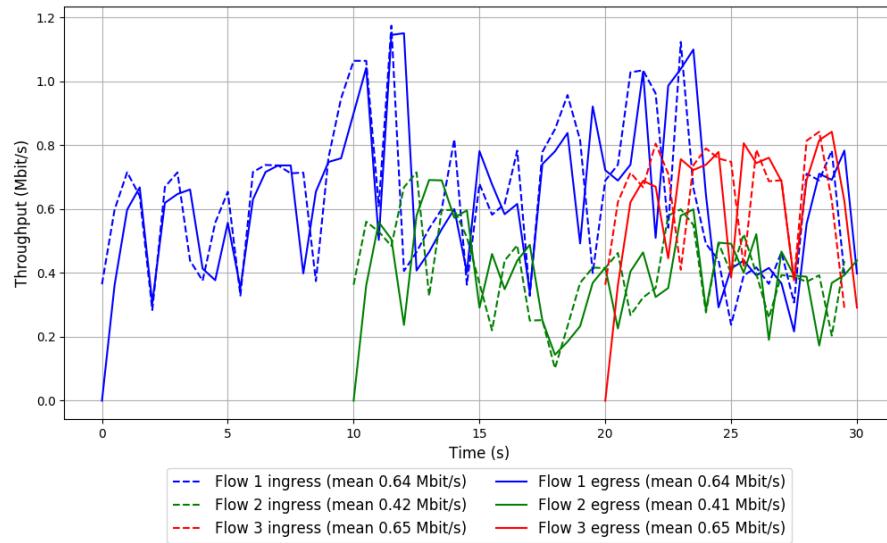


Run 3: Statistics of Sprout

```
Start at: 2019-02-20 01:41:17
End at: 2019-02-20 01:41:47
Local clock offset: -1.405 ms
Remote clock offset: -9.478 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 77.967 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 78.378 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 77.346 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 77.570 ms
Loss rate: 0.38%
```

Run 3: Report of Sprout — Data Link

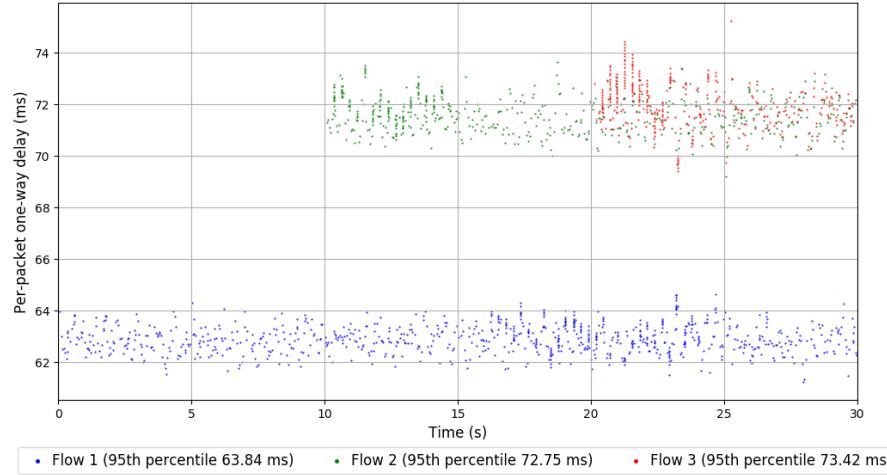
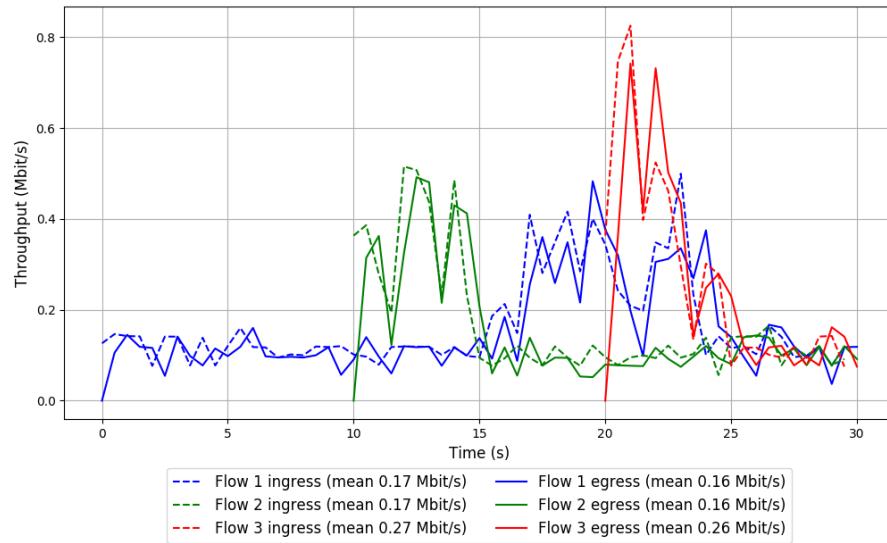


Run 4: Statistics of Sprout

```
Start at: 2019-02-20 02:19:44
End at: 2019-02-20 02:20:14
Local clock offset: 8.508 ms
Remote clock offset: -15.253 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 72.840 ms
Loss rate: 6.14%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 63.838 ms
Loss rate: 5.87%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 72.745 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 73.417 ms
Loss rate: 4.37%
```

Run 4: Report of Sprout — Data Link

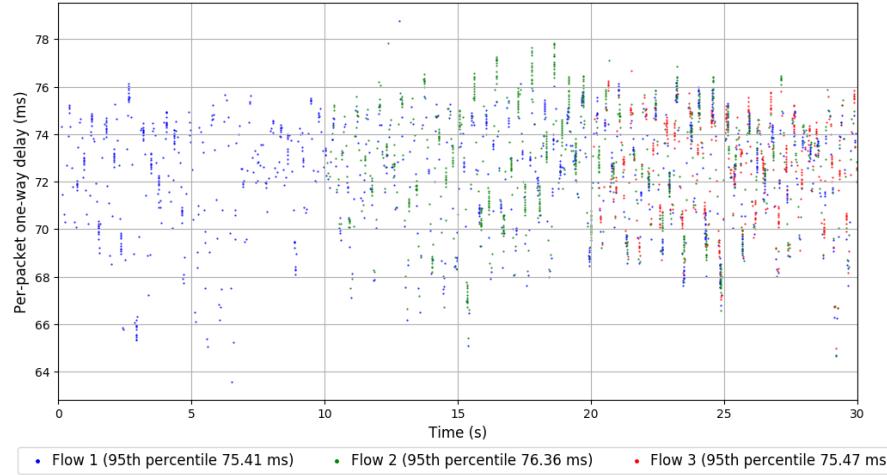
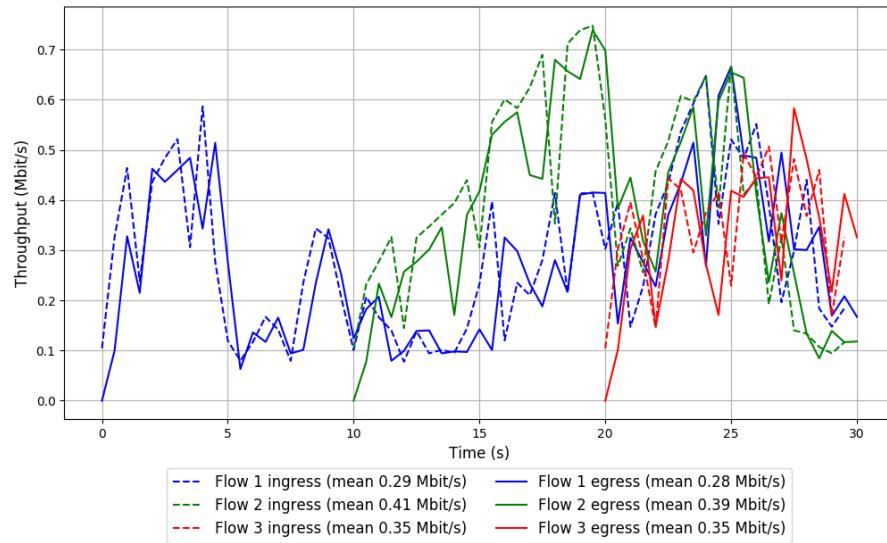


Run 5: Statistics of Sprout

```
Start at: 2019-02-20 02:59:28
End at: 2019-02-20 02:59:58
Local clock offset: 5.883 ms
Remote clock offset: -14.495 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 75.816 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 75.414 ms
Loss rate: 3.65%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 76.364 ms
Loss rate: 3.13%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 75.475 ms
Loss rate: 1.91%
```

Run 5: Report of Sprout — Data Link

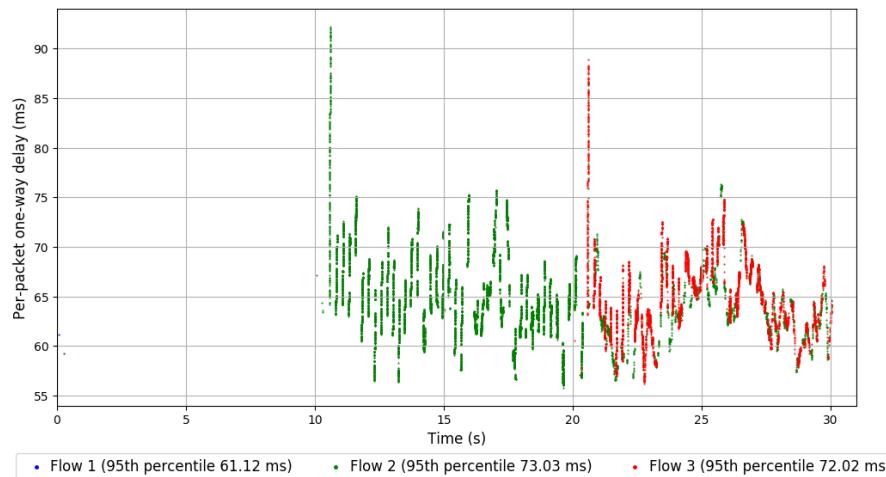
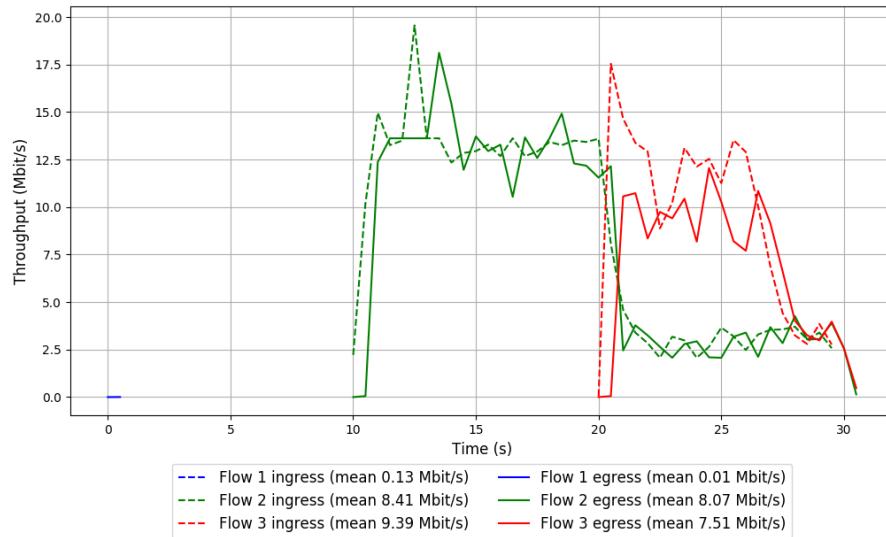


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-20 00:44:13
End at: 2019-02-20 00:44:43
Local clock offset: 6.095 ms
Remote clock offset: -3.207 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 72.668 ms
Loss rate: 9.80%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 61.122 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 73.029 ms
Loss rate: 4.06%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 72.015 ms
Loss rate: 20.07%
```

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

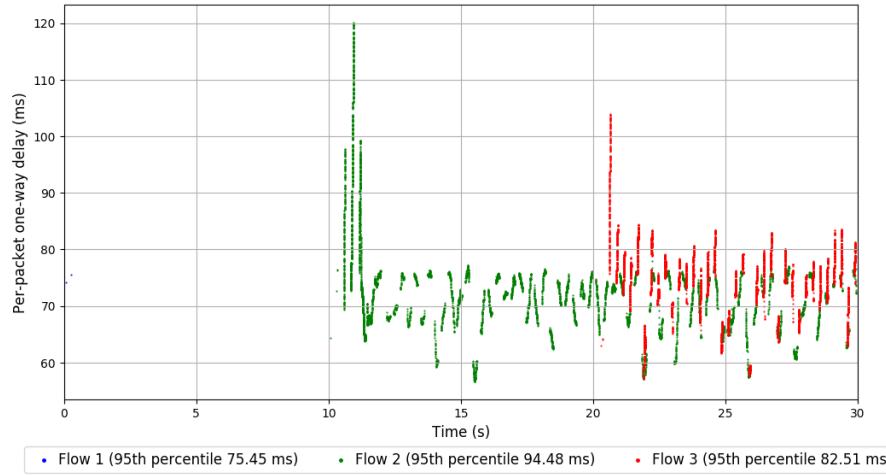
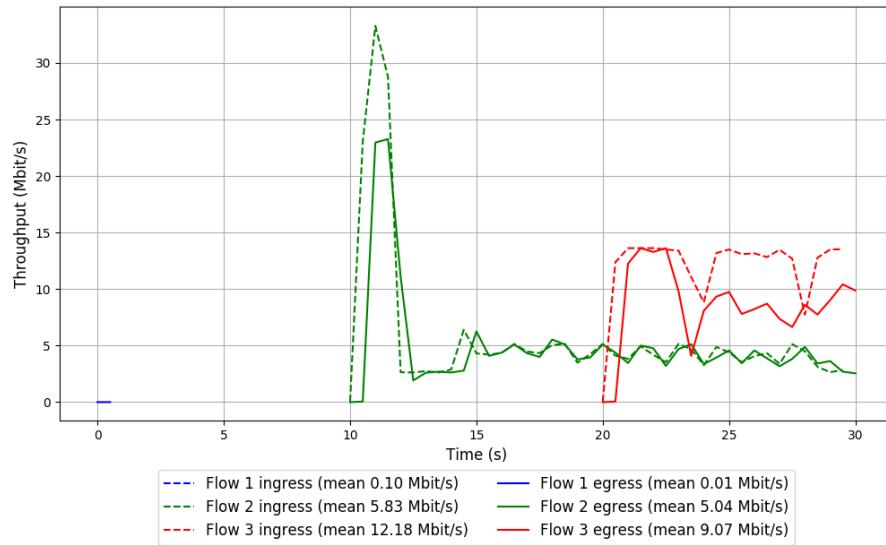


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-20 01:23:26
End at: 2019-02-20 01:23:56
Local clock offset: 4.383 ms
Remote clock offset: -3.983 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 87.889 ms
Loss rate: 19.65%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 75.453 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 94.481 ms
Loss rate: 13.51%
-- Flow 3:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 82.510 ms
Loss rate: 25.56%
```

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

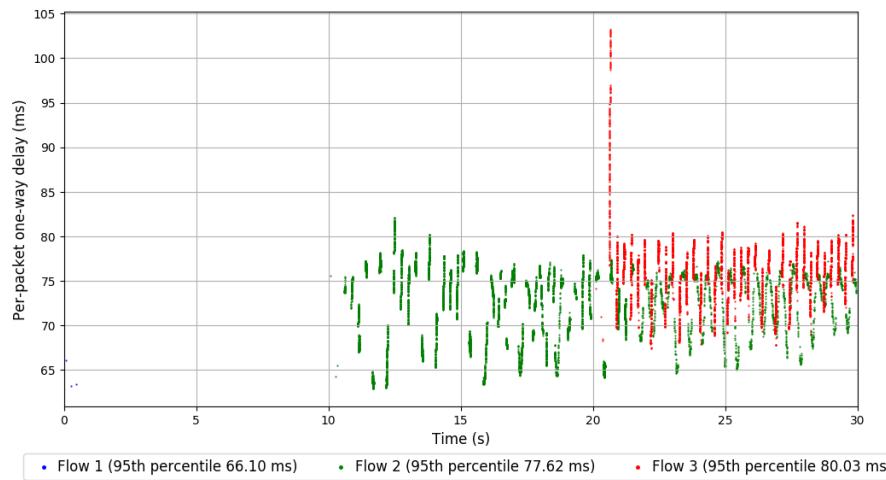
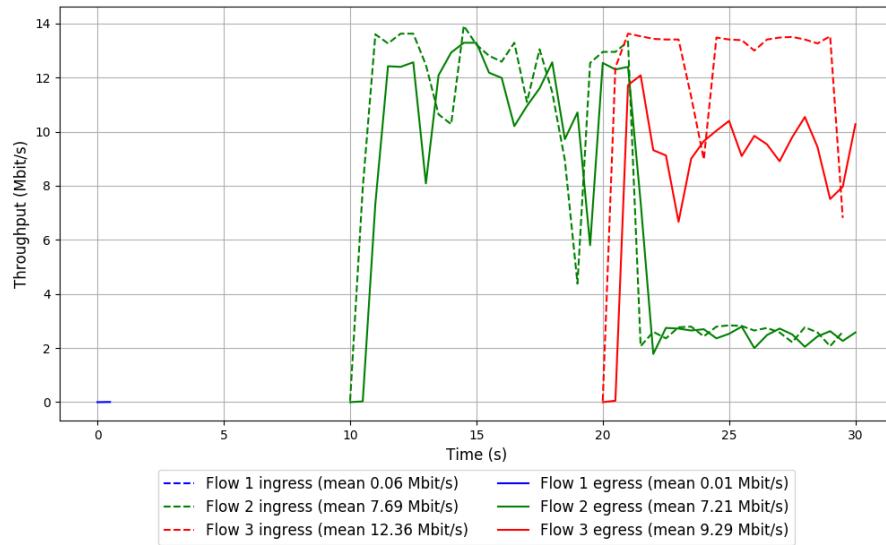


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-20 02:01:35
End at: 2019-02-20 02:02:05
Local clock offset: -2.828 ms
Remote clock offset: -16.443 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 79.250 ms
Loss rate: 14.42%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 66.098 ms
Loss rate: 88.68%
-- Flow 2:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 77.620 ms
Loss rate: 6.21%
-- Flow 3:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 80.025 ms
Loss rate: 24.83%
```

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

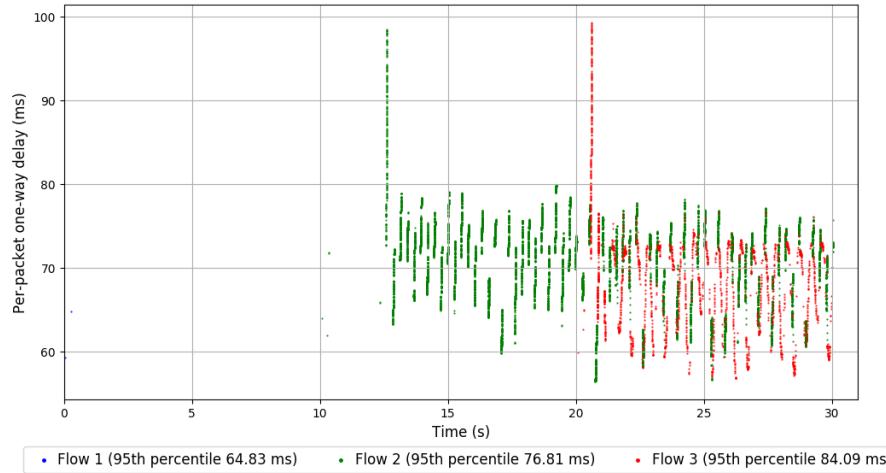
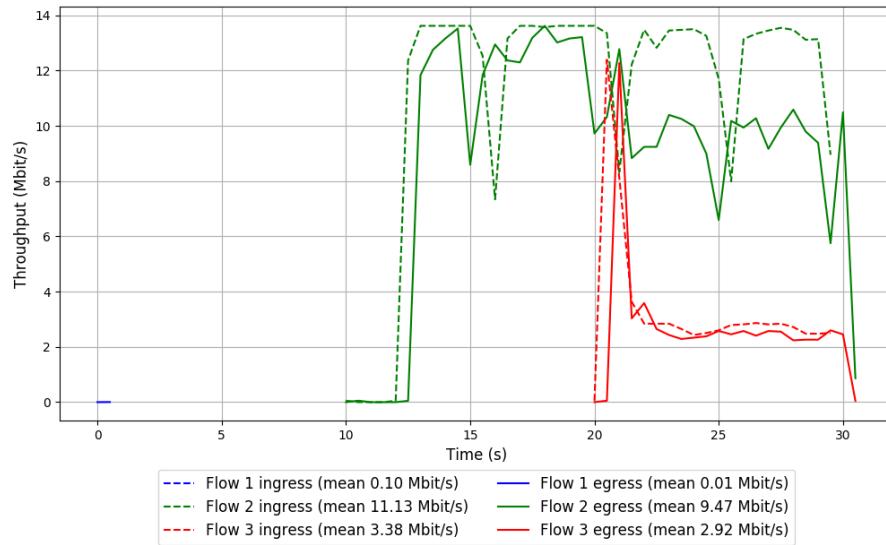


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-20 02:42:16
End at: 2019-02-20 02:42:46
Local clock offset: 6.537 ms
Remote clock offset: -15.021 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 76.976 ms
Loss rate: 14.75%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 64.826 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 76.814 ms
Loss rate: 14.90%
-- Flow 3:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 84.087 ms
Loss rate: 13.65%
```

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

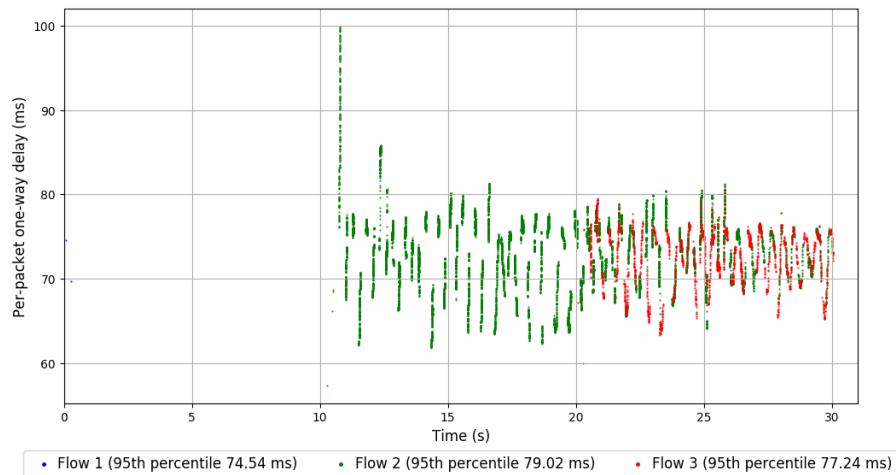
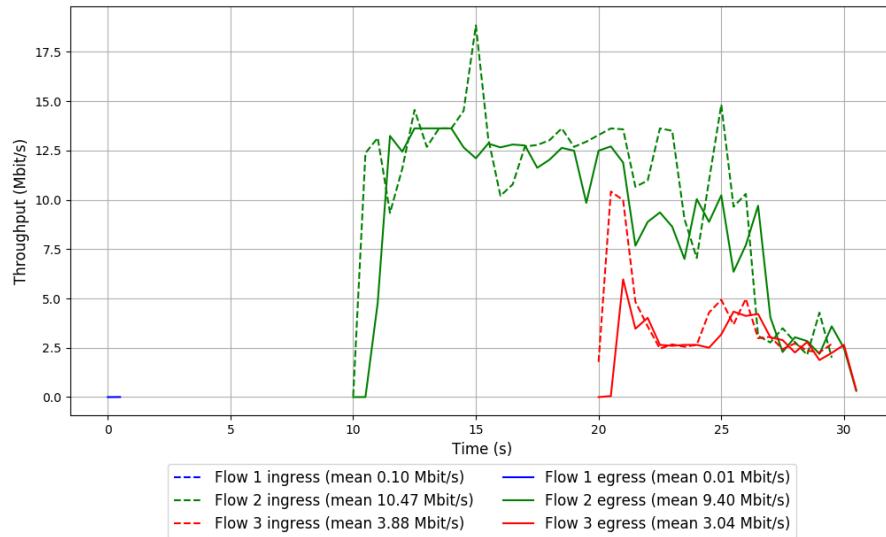


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-20 03:20:49
End at: 2019-02-20 03:21:19
Local clock offset: 3.653 ms
Remote clock offset: -13.883 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 78.854 ms
Loss rate: 12.72%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 74.539 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 79.020 ms
Loss rate: 11.04%
-- Flow 3:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 77.238 ms
Loss rate: 21.79%
```

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

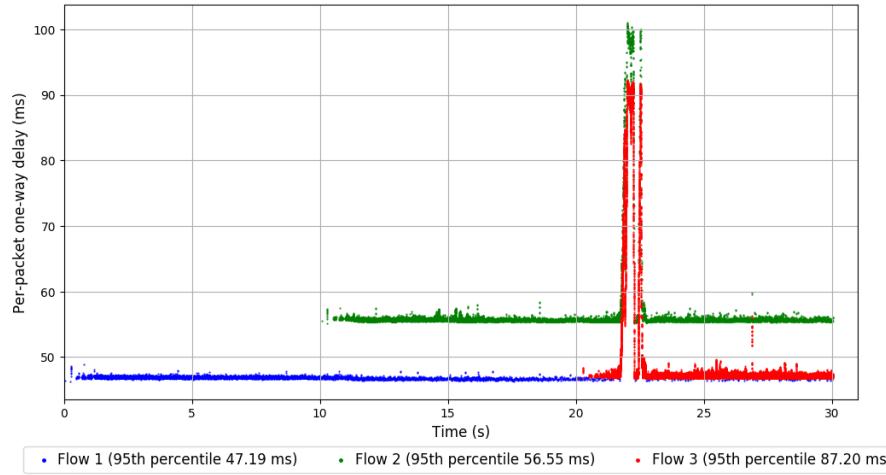
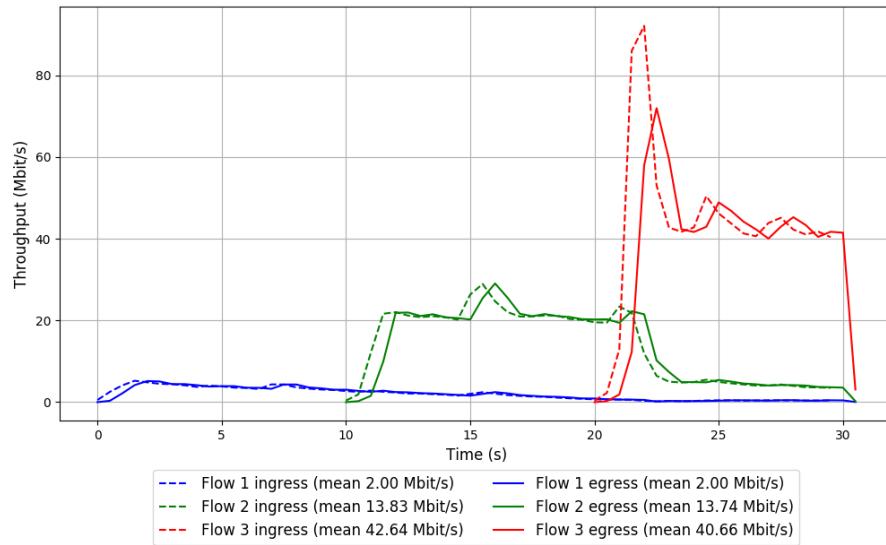


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-20 00:21:19
End at: 2019-02-20 00:21:49
Local clock offset: -1.17 ms
Remote clock offset: -1.708 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 74.375 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 47.188 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 13.74 Mbit/s
95th percentile per-packet one-way delay: 56.547 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 87.203 ms
Loss rate: 4.64%
```

Run 1: Report of TCP Vegas — Data Link

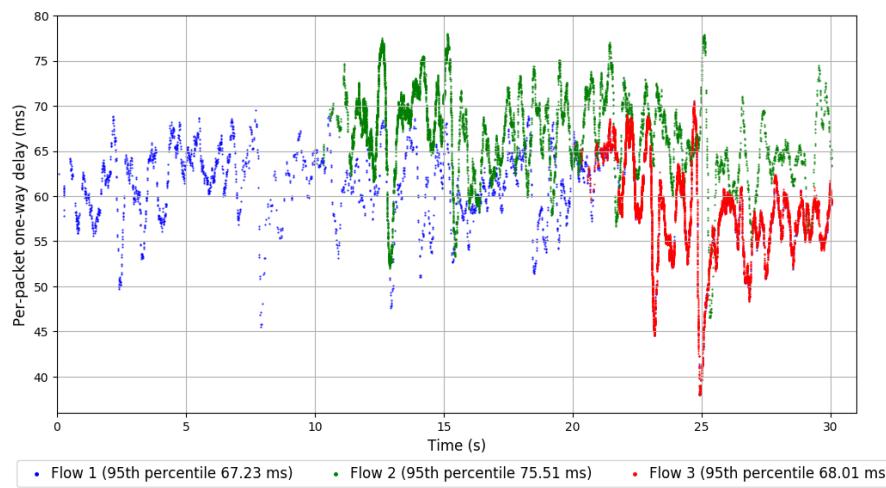
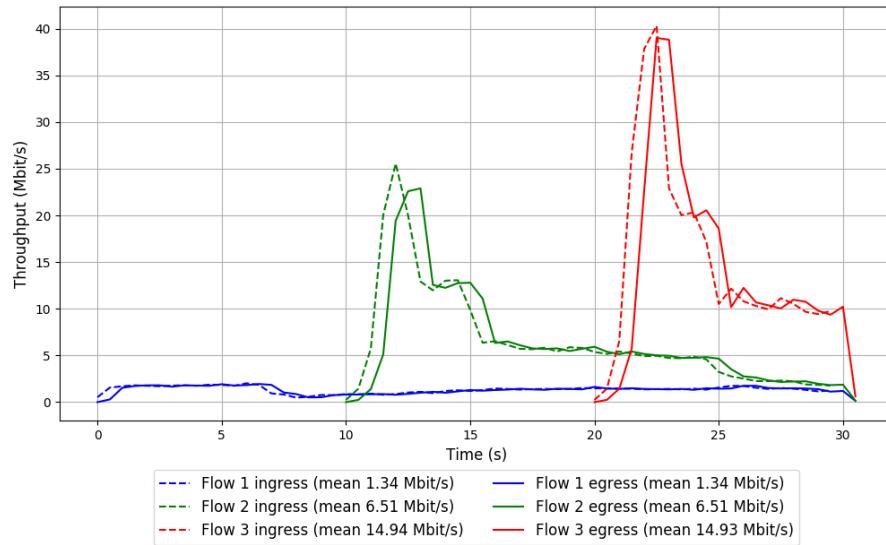


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-20 00:56:56
End at: 2019-02-20 00:57:26
Local clock offset: 8.399 ms
Remote clock offset: -5.343 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 72.841 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 67.229 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 75.508 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 14.93 Mbit/s
95th percentile per-packet one-way delay: 68.009 ms
Loss rate: 0.09%
```

Run 2: Report of TCP Vegas — Data Link

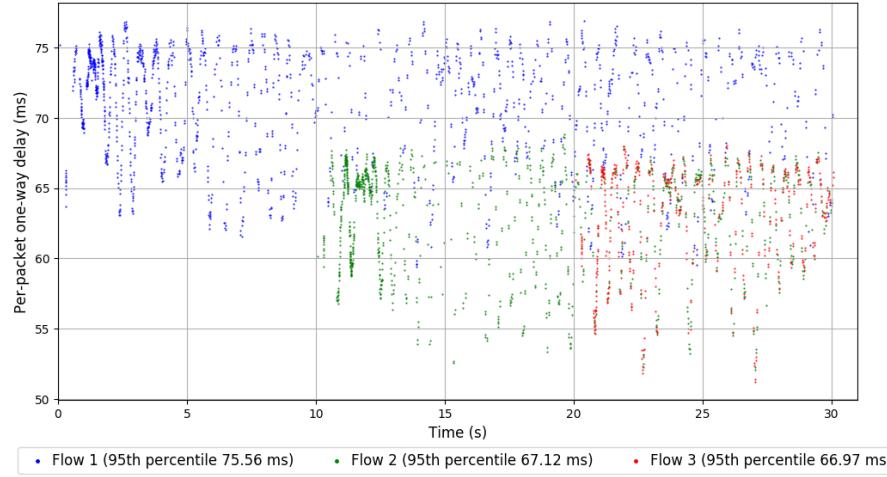
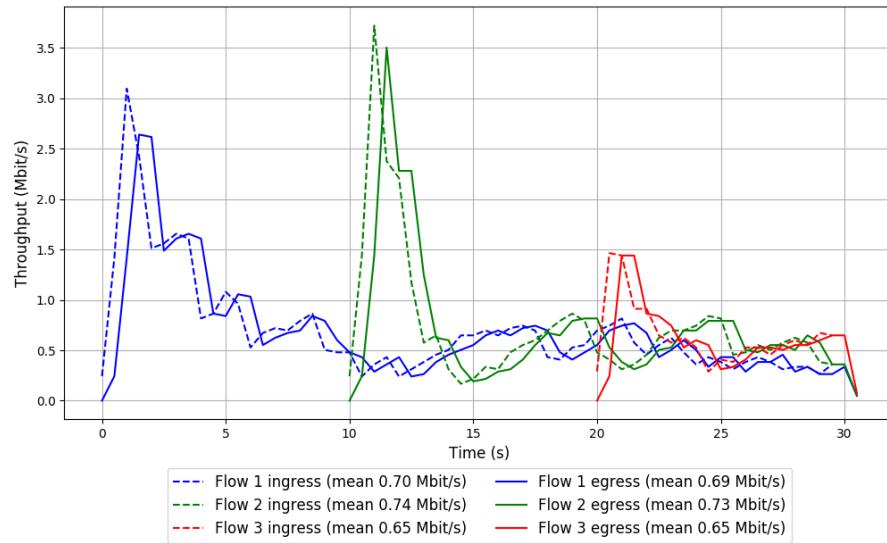


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-20 01:37:22
End at: 2019-02-20 01:37:52
Local clock offset: -0.199 ms
Remote clock offset: -10.381 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 75.156 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 75.565 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 67.121 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 66.965 ms
Loss rate: 0.55%
```

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

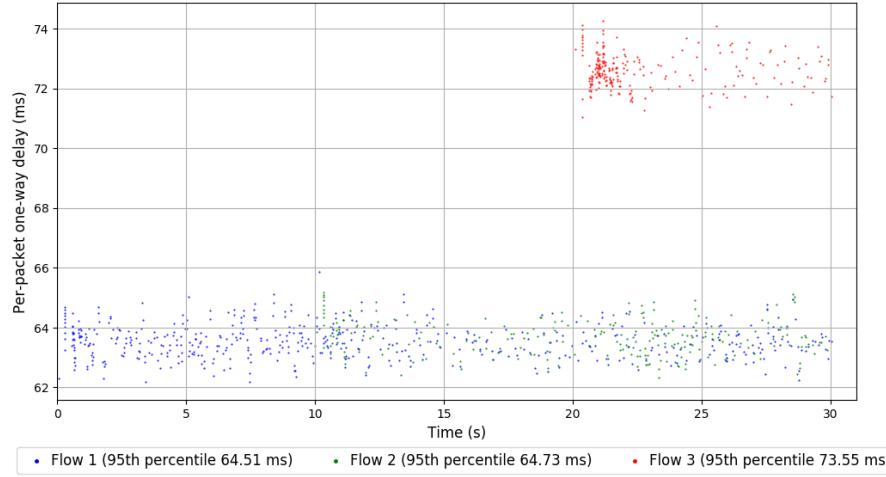
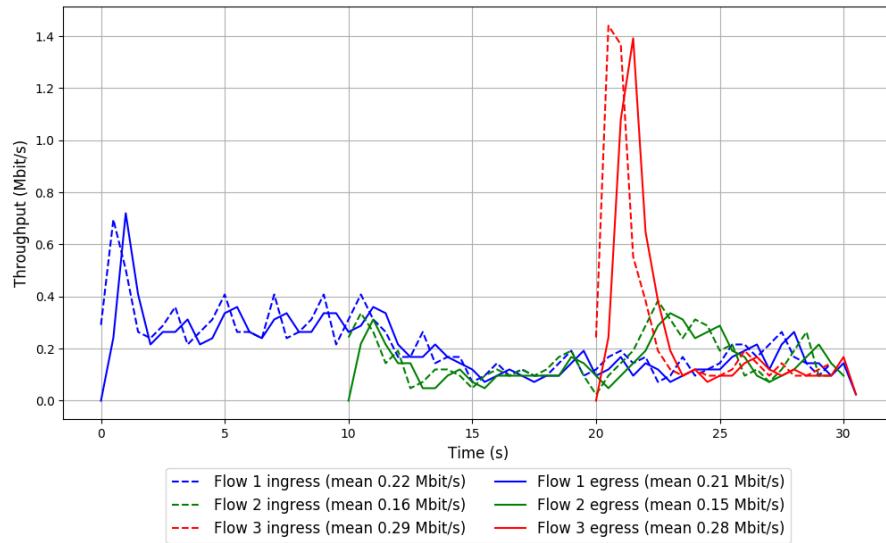


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-20 02:15:49
End at: 2019-02-20 02:16:19
Local clock offset: 7.216 ms
Remote clock offset: -15.56 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 73.035 ms
Loss rate: 6.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 64.510 ms
Loss rate: 5.69%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 64.730 ms
Loss rate: 7.72%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 73.548 ms
Loss rate: 5.33%
```

Run 4: Report of TCP Vegas — Data Link

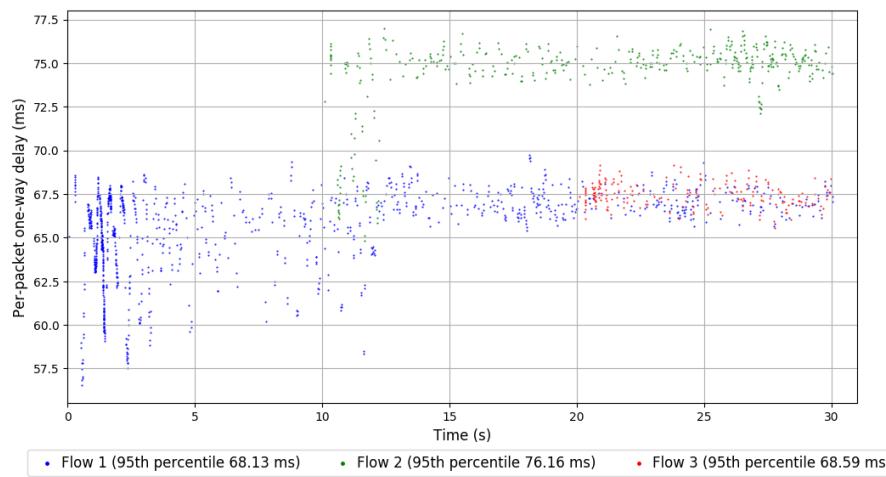
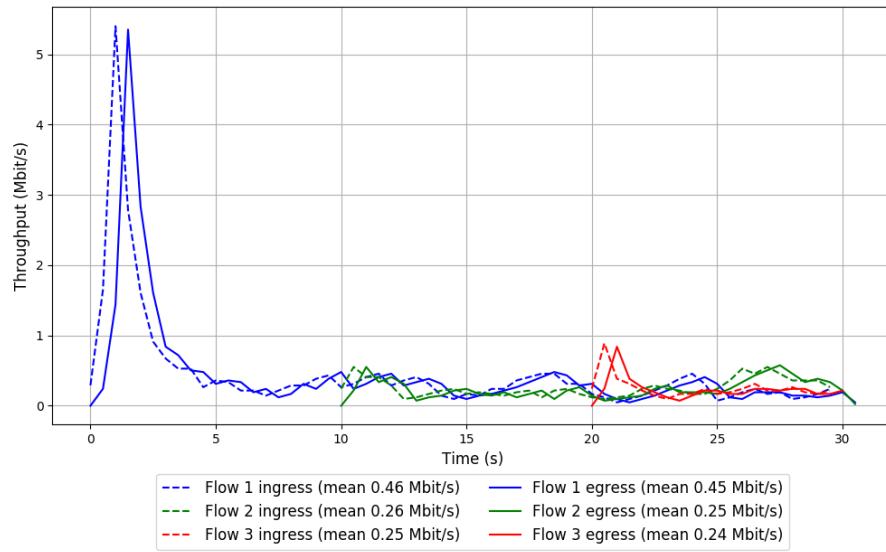


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-20 02:55:53
End at: 2019-02-20 02:56:23
Local clock offset: 5.979 ms
Remote clock offset: -13.444 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 75.605 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 68.130 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 76.158 ms
Loss rate: 3.96%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 68.590 ms
Loss rate: 5.71%
```

Run 5: Report of TCP Vegas — Data Link

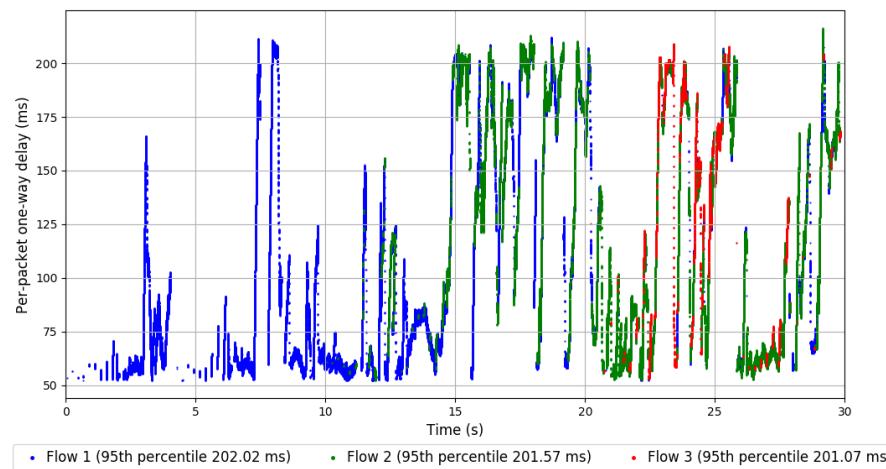
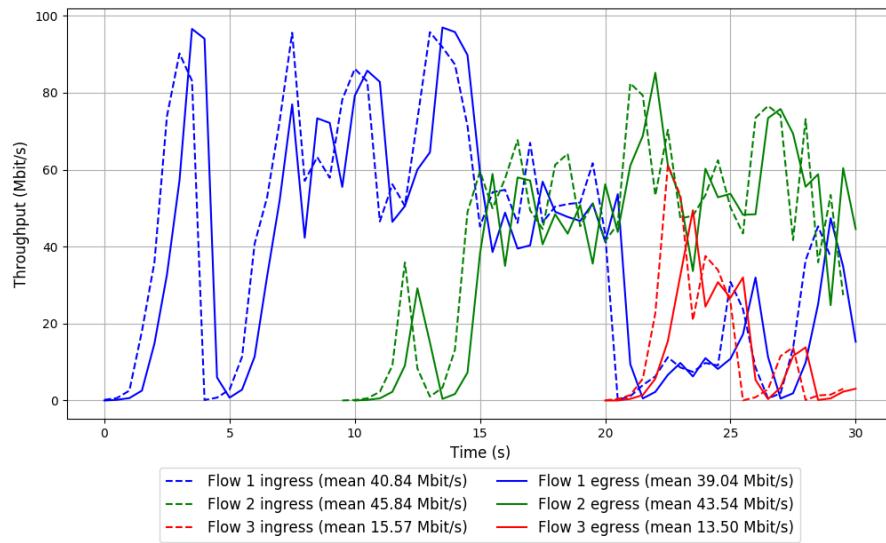


Run 1: Statistics of Verus

```
Start at: 2019-02-20 00:32:25
End at: 2019-02-20 00:32:55
Local clock offset: 0.641 ms
Remote clock offset: -2.5 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 201.740 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 202.024 ms
Loss rate: 4.05%
-- Flow 2:
Average throughput: 43.54 Mbit/s
95th percentile per-packet one-way delay: 201.574 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 13.50 Mbit/s
95th percentile per-packet one-way delay: 201.066 ms
Loss rate: 12.87%
```

Run 1: Report of Verus — Data Link

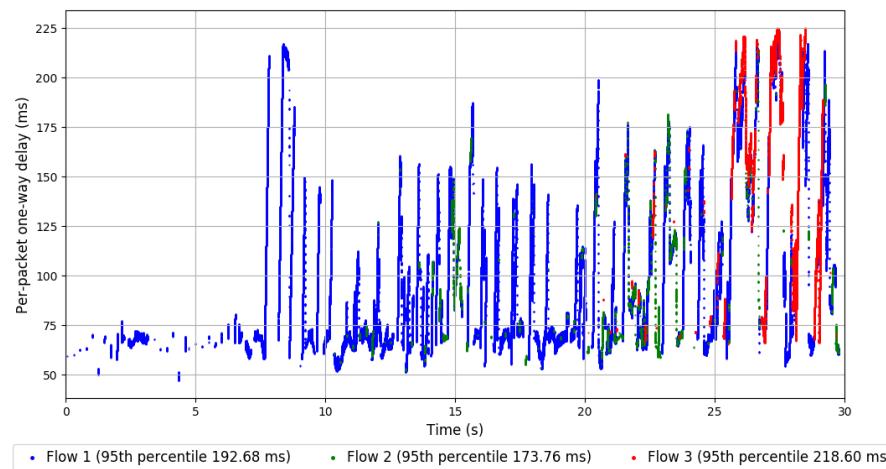
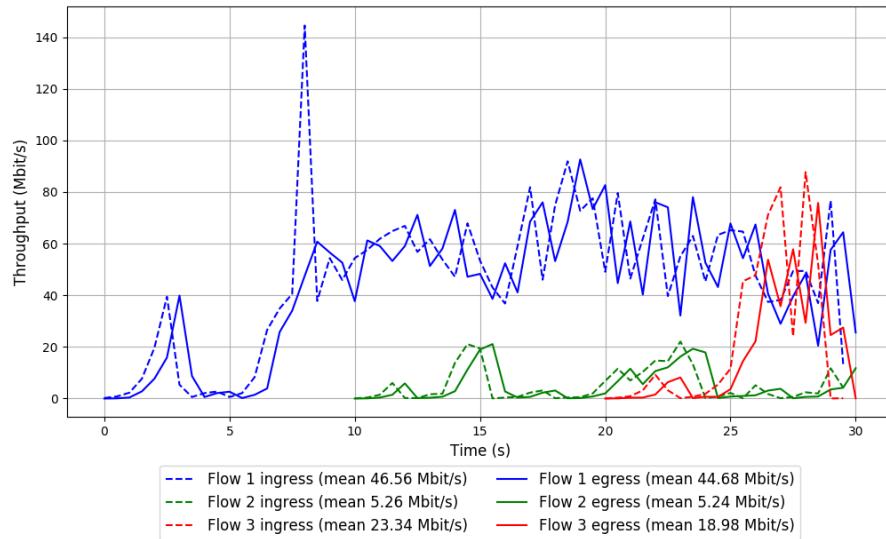


Run 2: Statistics of Verus

```
Start at: 2019-02-20 01:08:56
End at: 2019-02-20 01:09:26
Local clock offset: 5.619 ms
Remote clock offset: -2.924 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 205.131 ms
Loss rate: 5.73%
-- Flow 1:
Average throughput: 44.68 Mbit/s
95th percentile per-packet one-way delay: 192.681 ms
Loss rate: 4.03%
-- Flow 2:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 173.762 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 218.600 ms
Loss rate: 18.67%
```

Run 2: Report of Verus — Data Link

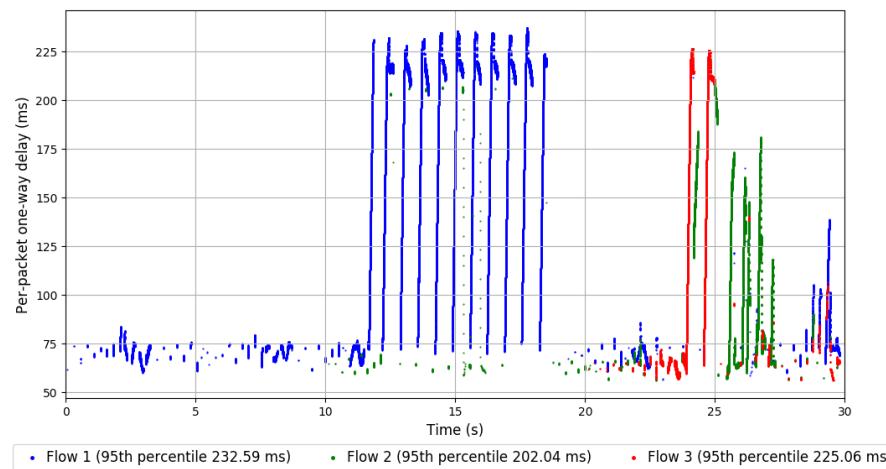
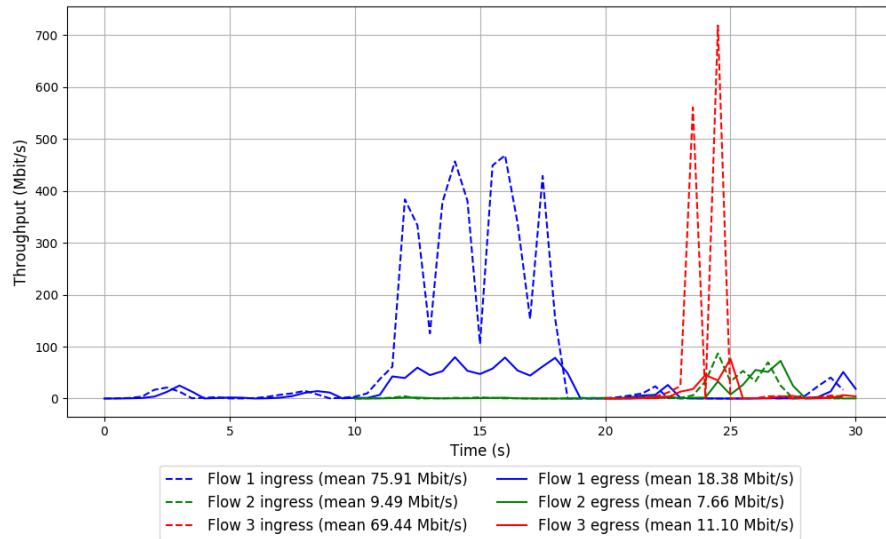


Run 3: Statistics of Verus

```
Start at: 2019-02-20 01:49:27
End at: 2019-02-20 01:49:57
Local clock offset: -3.407 ms
Remote clock offset: -15.091 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 231.376 ms
Loss rate: 74.19%
-- Flow 1:
Average throughput: 18.38 Mbit/s
95th percentile per-packet one-way delay: 232.585 ms
Loss rate: 75.78%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 202.043 ms
Loss rate: 19.31%
-- Flow 3:
Average throughput: 11.10 Mbit/s
95th percentile per-packet one-way delay: 225.062 ms
Loss rate: 84.02%
```

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

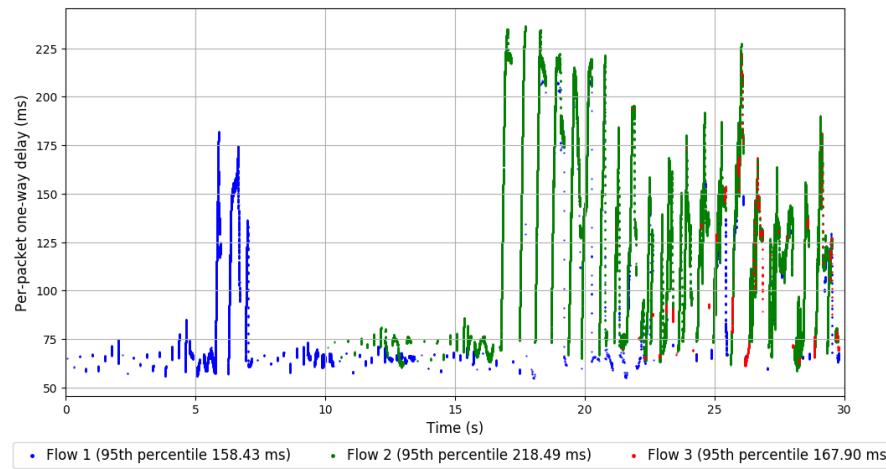
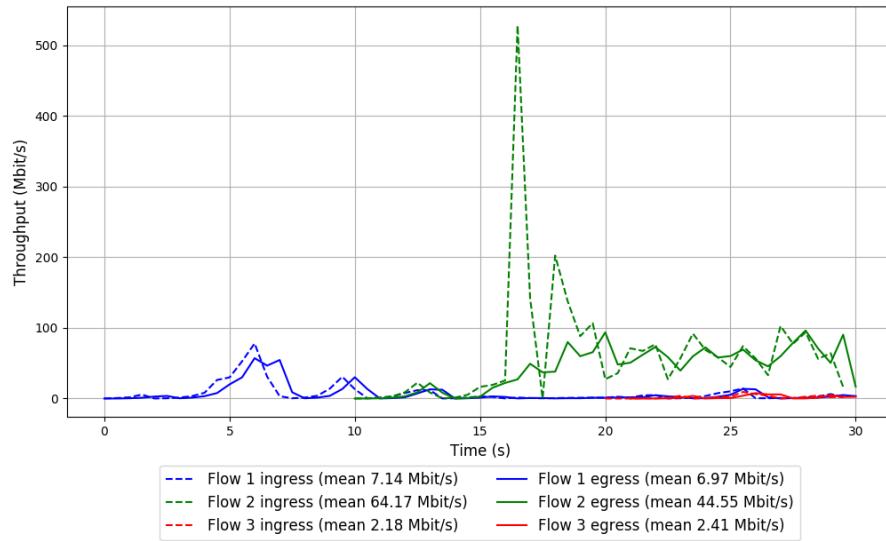


Run 4: Statistics of Verus

```
Start at: 2019-02-20 02:28:32
End at: 2019-02-20 02:29:03
Local clock offset: 10.255 ms
Remote clock offset: -11.386 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 216.850 ms
Loss rate: 26.13%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 158.428 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 44.55 Mbit/s
95th percentile per-packet one-way delay: 218.486 ms
Loss rate: 30.55%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 167.898 ms
Loss rate: 1.63%
```

## Run 4: Report of Verus — Data Link

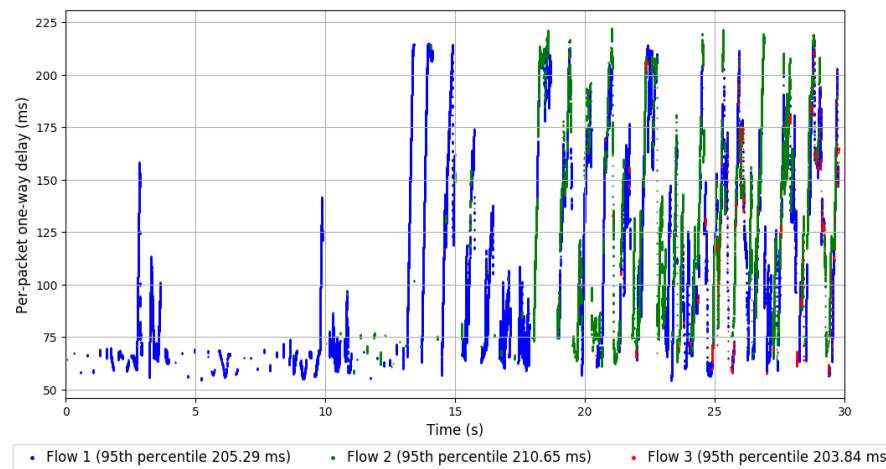
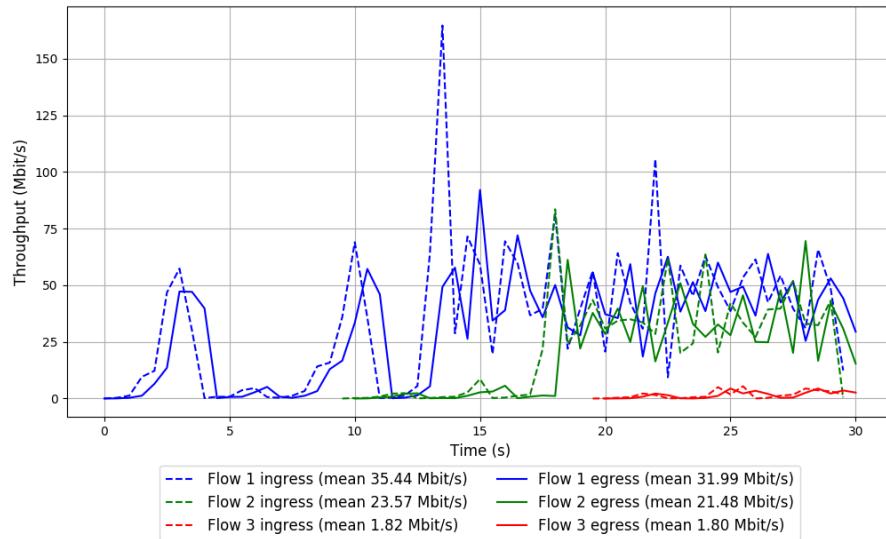


Run 5: Statistics of Verus

```
Start at: 2019-02-20 03:08:07
End at: 2019-02-20 03:08:37
Local clock offset: 4.417 ms
Remote clock offset: -14.205 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.77 Mbit/s
95th percentile per-packet one-way delay: 207.750 ms
Loss rate: 9.14%
-- Flow 1:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 205.288 ms
Loss rate: 9.61%
-- Flow 2:
Average throughput: 21.48 Mbit/s
95th percentile per-packet one-way delay: 210.647 ms
Loss rate: 8.36%
-- Flow 3:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 203.836 ms
Loss rate: 1.55%
```

Run 5: Report of Verus — Data Link

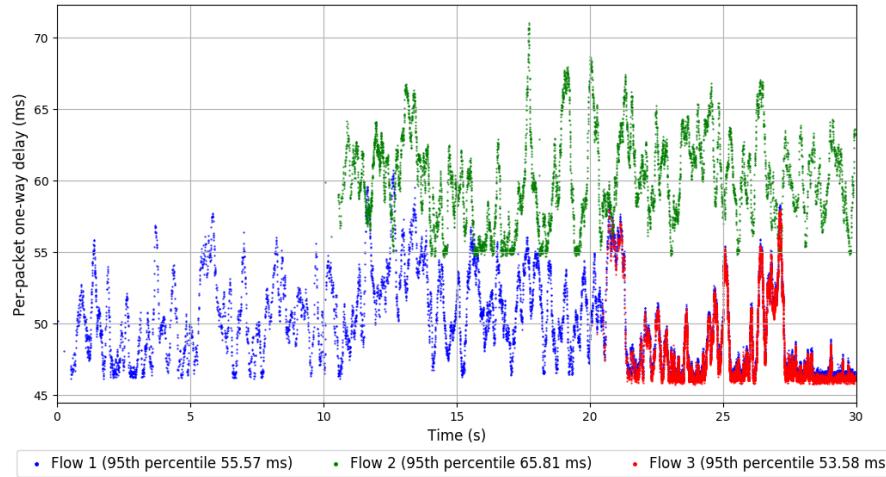
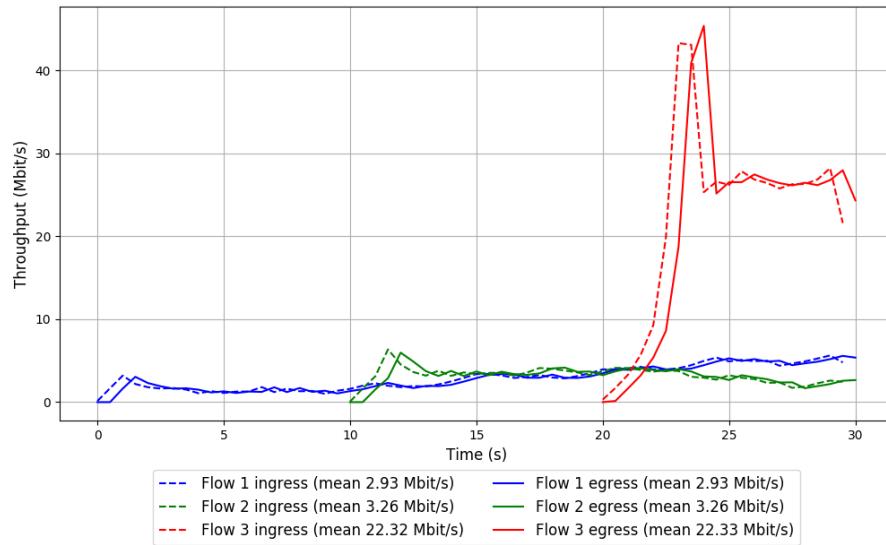


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-02-20 00:34:14
End at: 2019-02-20 00:34:44
Local clock offset: 2.14 ms
Remote clock offset: 0.657 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 62.036 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 55.574 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 65.813 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

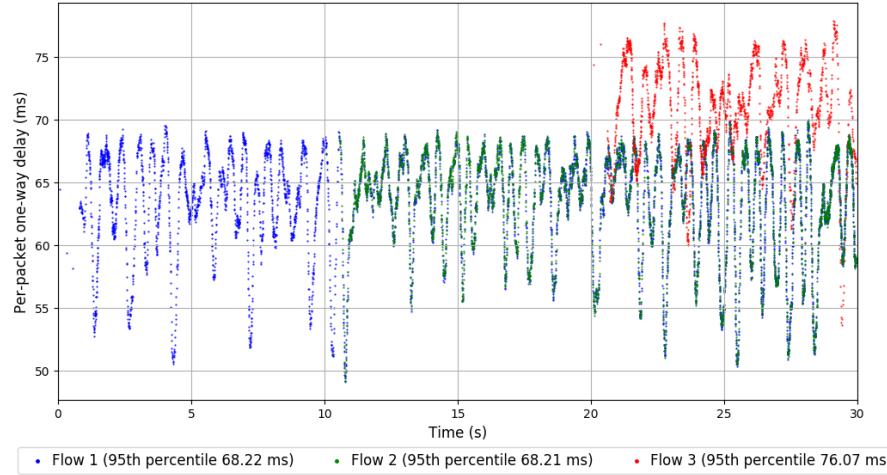
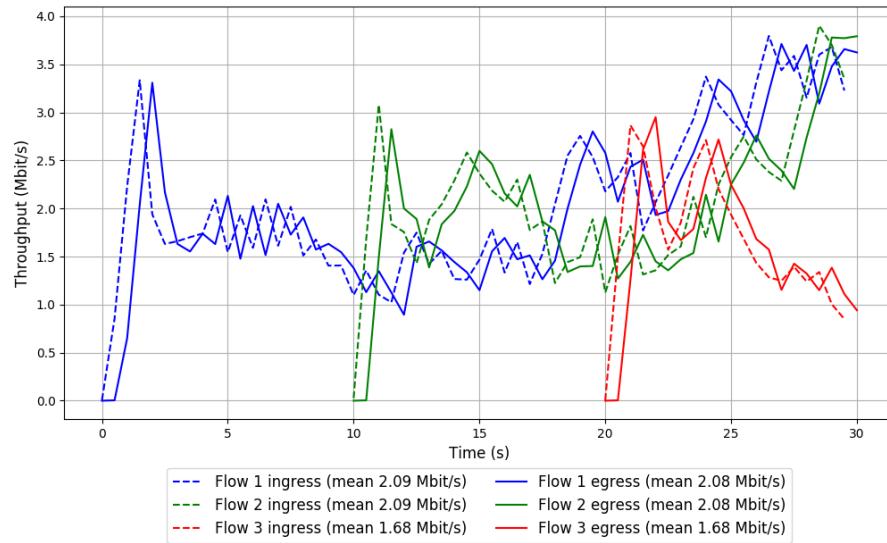


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-20 01:11:47
End at: 2019-02-20 01:12:17
Local clock offset: 5.119 ms
Remote clock offset: -3.92 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 72.819 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 68.225 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 68.206 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 76.069 ms
Loss rate: 0.06%
```

Run 2: Report of PCC-Vivace — Data Link

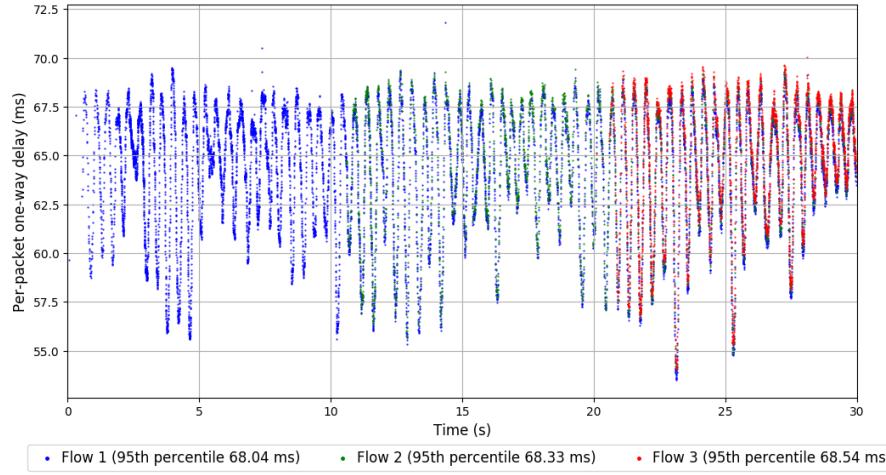
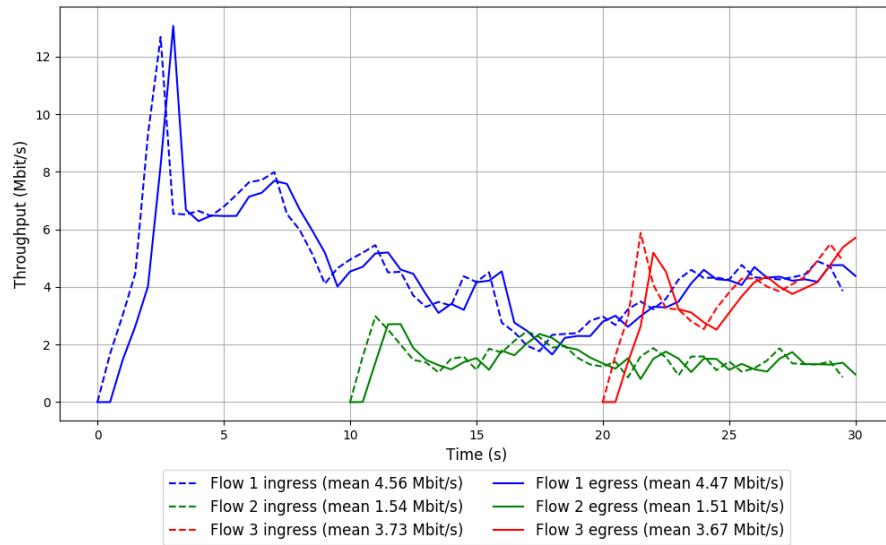


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-20 01:51:20
End at: 2019-02-20 01:51:50
Local clock offset: -3.616 ms
Remote clock offset: -12.78 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 68.186 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 68.038 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 68.335 ms
Loss rate: 2.32%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 68.543 ms
Loss rate: 1.68%
```

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

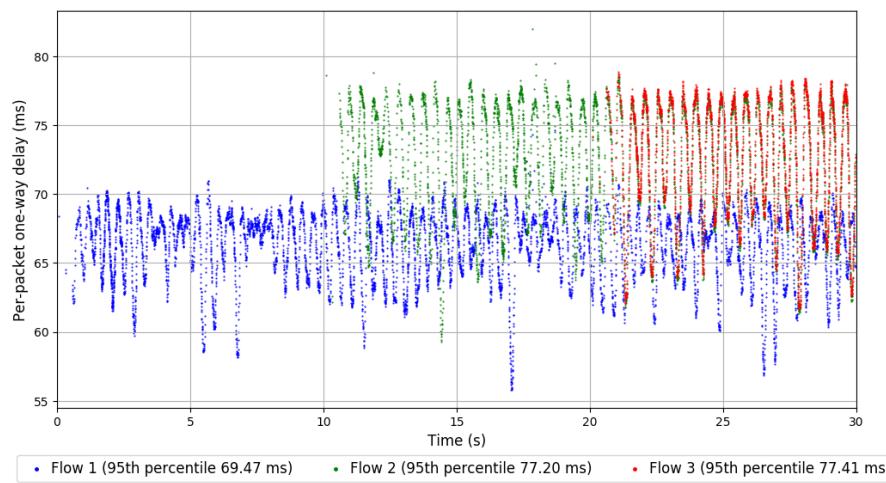
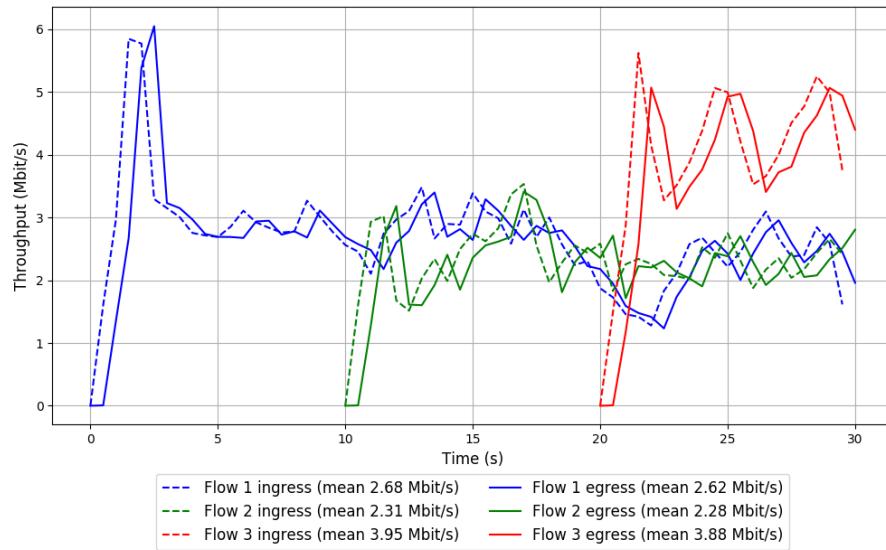


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-20 02:30:51
End at: 2019-02-20 02:31:21
Local clock offset: 10.07 ms
Remote clock offset: -8.326 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 77.009 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 69.468 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 77.199 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 77.414 ms
Loss rate: 1.82%
```

Run 4: Report of PCC-Vivace — Data Link

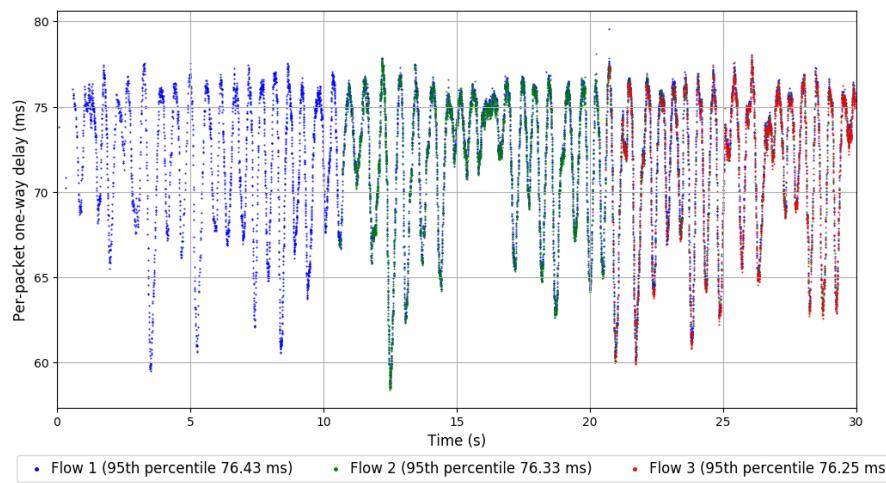
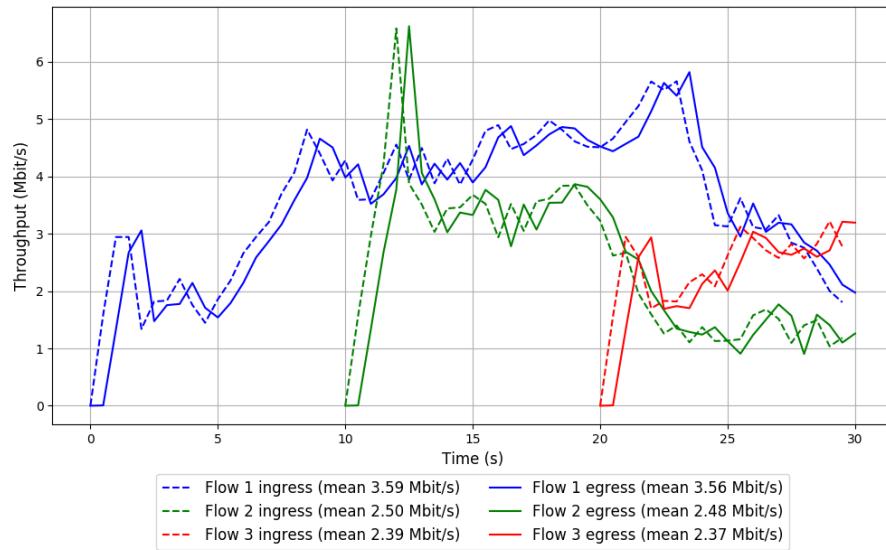


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-20 03:10:51
End at: 2019-02-20 03:11:21
Local clock offset: 4.022 ms
Remote clock offset: -12.682 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 76.378 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 76.434 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 76.326 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 76.245 ms
Loss rate: 0.90%
```

Run 5: Report of PCC-Vivace — Data Link

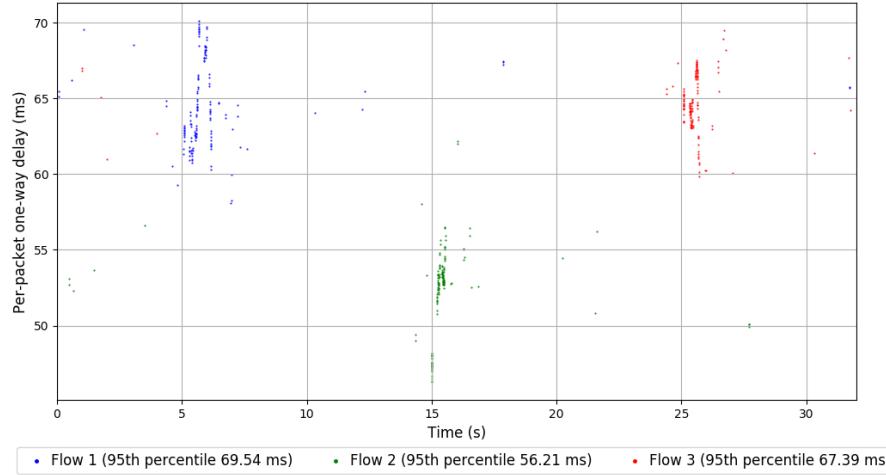
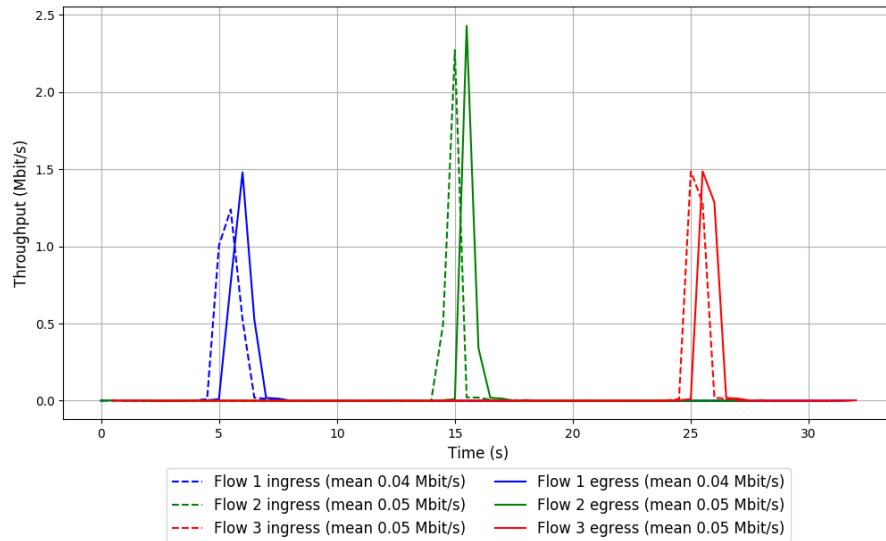


```
Run 1: Statistics of WebRTC media

Start at: 2019-02-20 00:41:26
End at: 2019-02-20 00:41:57
Local clock offset: 5.33 ms
Remote clock offset: 1.33 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 68.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 69.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.387 ms
Loss rate: 0.00%
```

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

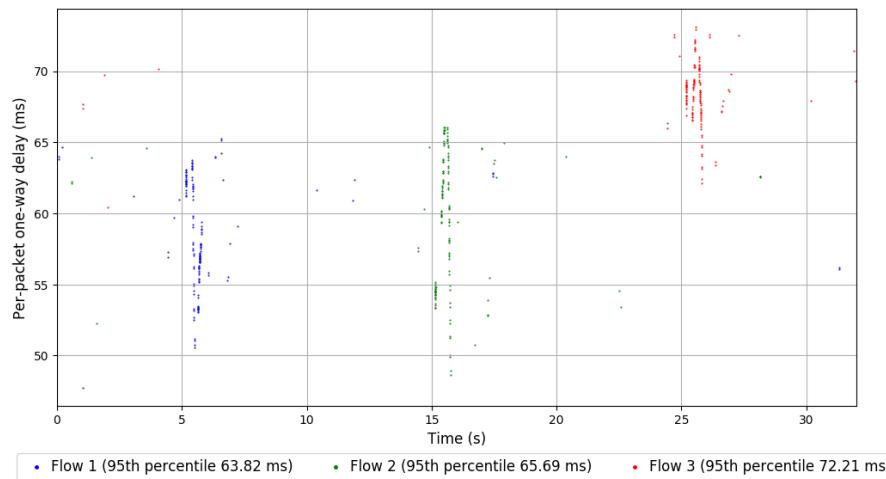
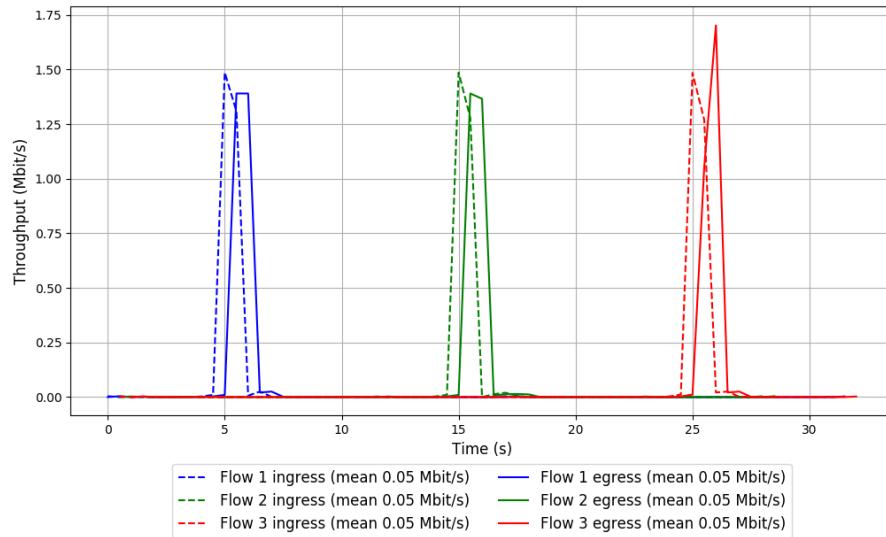


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-20 01:20:47
End at: 2019-02-20 01:21:17
Local clock offset: 4.243 ms
Remote clock offset: -6.644 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 70.400 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.693 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 72.207 ms
Loss rate: 0.00%
```

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

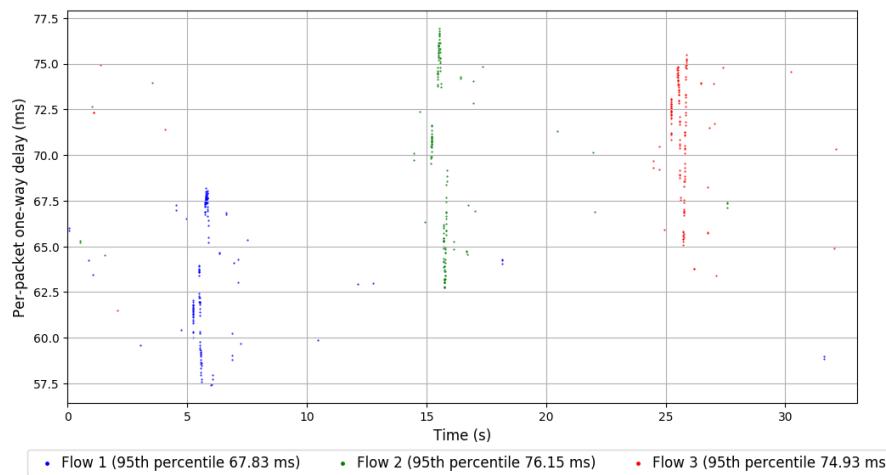
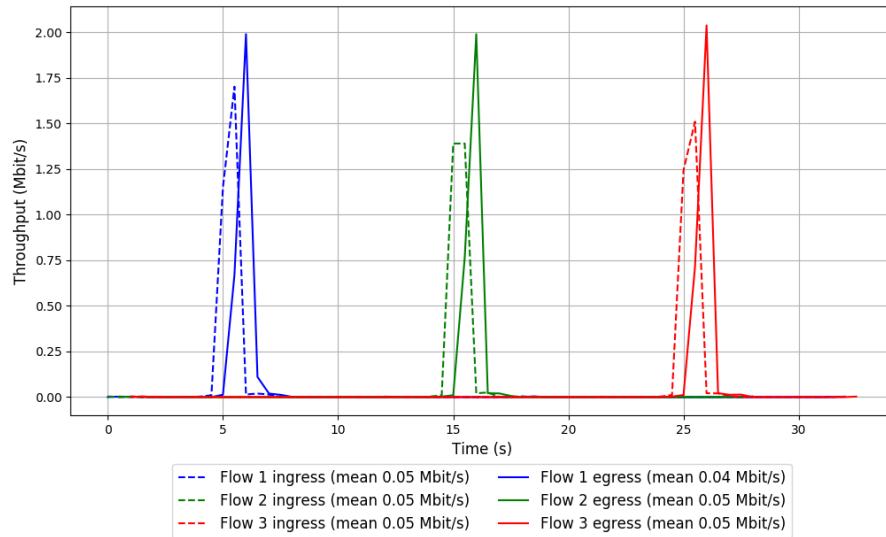


Run 3: Statistics of WebRTC media

```
Start at: 2019-02-20 01:58:45
End at: 2019-02-20 01:59:15
Local clock offset: -4.576 ms
Remote clock offset: -14.873 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 75.498 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.835 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.148 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 74.932 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

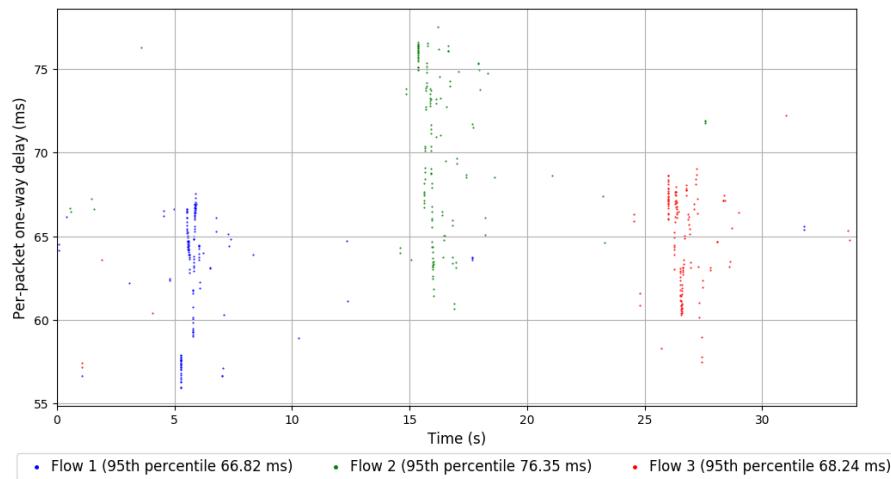
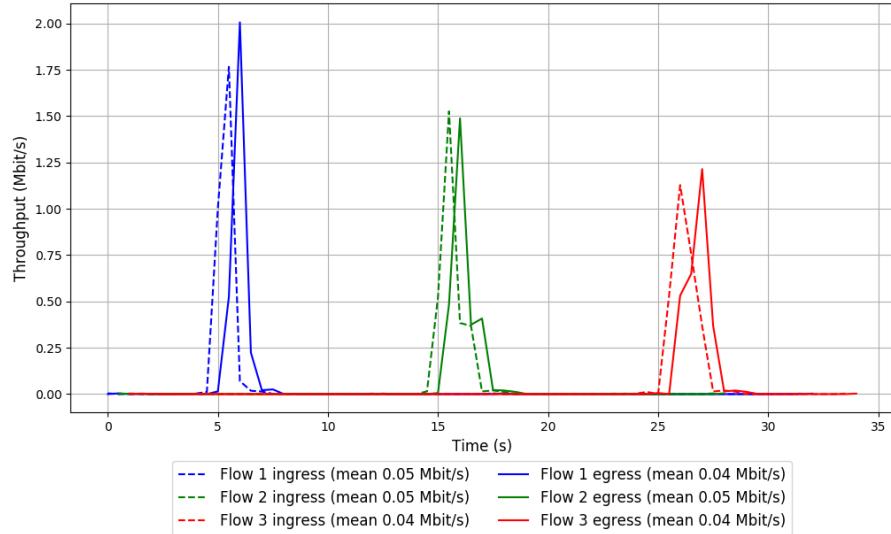


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-20 02:39:27
End at: 2019-02-20 02:39:57
Local clock offset: 7.068 ms
Remote clock offset: -11.758 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 75.688 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 66.818 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.353 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 68.243 ms
Loss rate: 1.25%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-20 03:18:11
End at: 2019-02-20 03:18:41
Local clock offset: 3.712 ms
Remote clock offset: -14.003 ms

# Below is generated by plot.py at 2019-02-20 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 74.868 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 68.931 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.433 ms
Loss rate: 3.28%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 75.951 ms
Loss rate: 1.67%
```

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

