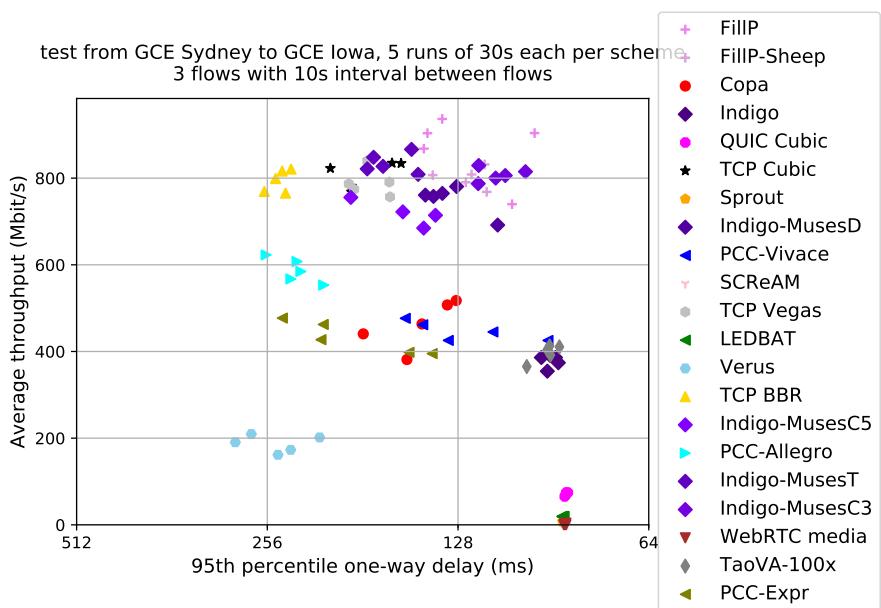
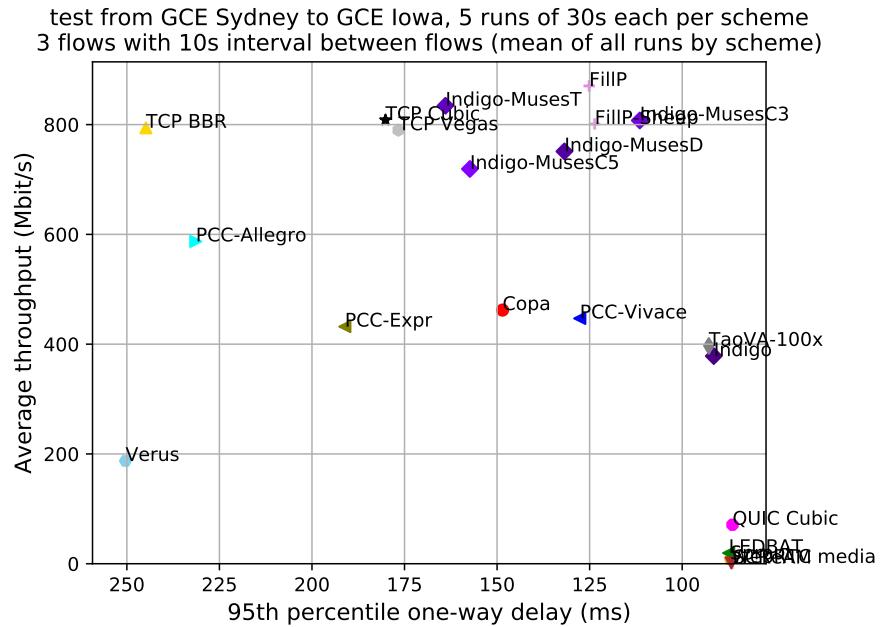


## Pantheon Report

Generated at 2019-02-05 12:14:33 (UTC).  
Data path: GCE Sydney on `ens4 (local)` → GCE Iowa on `ens4 (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 `time.google.com` and have been applied to correct the timestamps in logs.

```
System info:  
Linux 4.15.0-1026-gcp  
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



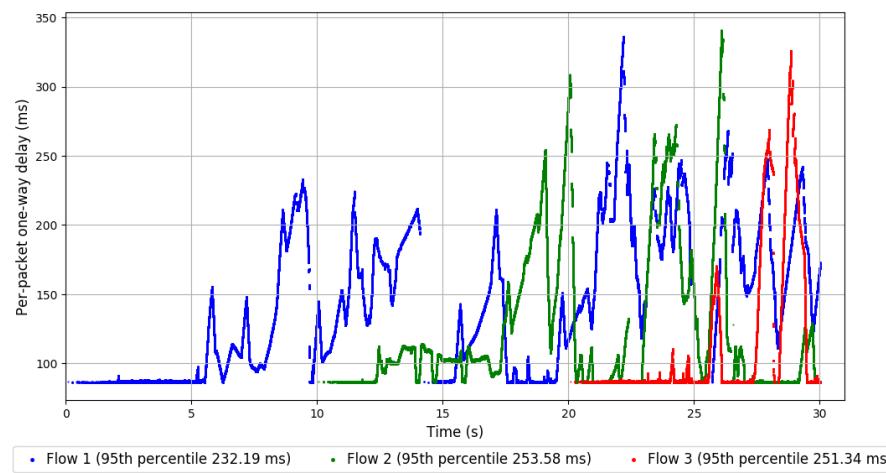
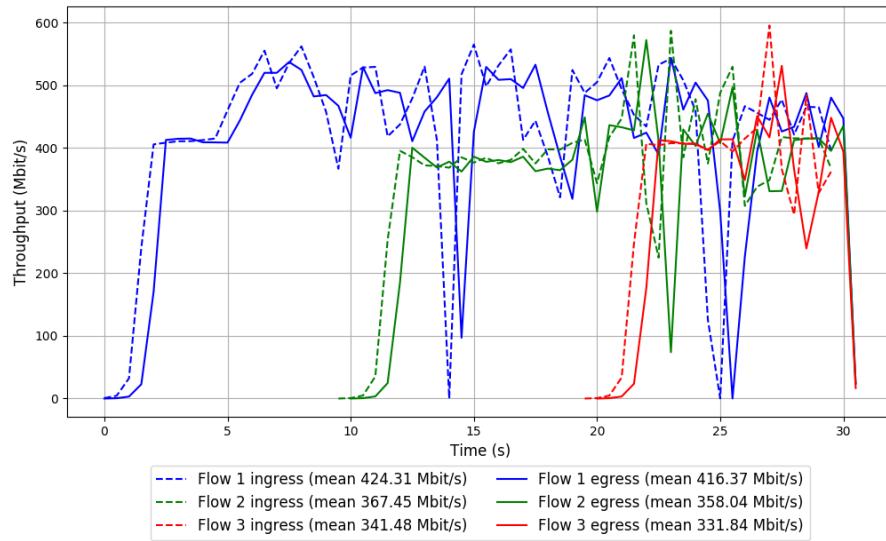
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	428.14	380.93	337.82	222.46	260.22	254.79	2.29	4.13	4.16
Copa		248.37	221.76	198.43	135.78	135.23	168.55	0.00	0.01	0.13
TCP Cubic		442.81	368.91	360.67	178.75	150.16	190.15	0.11	0.40	0.89
FillP		533.04	374.00	266.61	128.46	94.87	91.85	1.20	0.03	0.00
FillP-Sheep		498.67	335.68	239.73	134.56	93.33	91.86	1.12	0.00	0.00
Indigo		200.53	192.38	157.13	91.34	91.46	91.92	0.00	0.00	0.01
Indigo-MusesC3		476.01	399.26	284.69	114.27	103.01	95.68	0.00	0.01	0.05
Indigo-MusesC5		441.95	377.83	124.18	161.48	118.99	89.63	0.38	0.00	0.07
Indigo-MusesD		438.27	369.69	270.89	139.46	105.08	96.36	0.02	0.03	0.02
Indigo-MusesT		494.20	408.43	292.10	172.12	138.44	106.36	0.33	0.09	0.33
LEDBAT		12.54	8.34	4.10	87.49	87.30	86.97	0.00	0.00	0.00
PCC-Allegro		322.32	278.78	243.49	219.04	167.14	211.90	6.32	1.79	2.27
PCC-Expr		235.76	212.01	167.39	185.21	153.29	174.67	2.21	5.41	0.85
QUIC Cubic		42.79	31.30	22.82	86.29	86.44	86.30	0.00	0.00	0.00
SCReAM		0.22	0.22	0.22	86.37	86.27	86.28	0.00	0.00	0.00
Sprout		4.23	4.05	3.53	87.08	86.92	86.83	0.00	0.00	0.00
TaoVA-100x		205.95	200.88	171.93	91.76	92.41	95.24	0.01	0.01	0.00
TCP Vegas		437.57	358.77	340.32	160.86	170.80	170.08	0.17	0.20	0.61
Verus		104.38	90.24	71.57	178.31	192.83	185.78	2.29	3.13	3.45
PCC-Vivace		277.89	188.21	132.74	139.91	89.23	120.33	0.01	0.00	0.00
WebRTC media		0.82	0.51	0.20	86.62	86.66	86.65	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-05 05:42:45
End at: 2019-02-05 05:43:15
Local clock offset: -0.234 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-02-05 09:23:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 765.40 Mbit/s
95th percentile per-packet one-way delay: 239.614 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 416.37 Mbit/s
95th percentile per-packet one-way delay: 232.191 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 358.04 Mbit/s
95th percentile per-packet one-way delay: 253.577 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 331.84 Mbit/s
95th percentile per-packet one-way delay: 251.336 ms
Loss rate: 2.83%
```

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

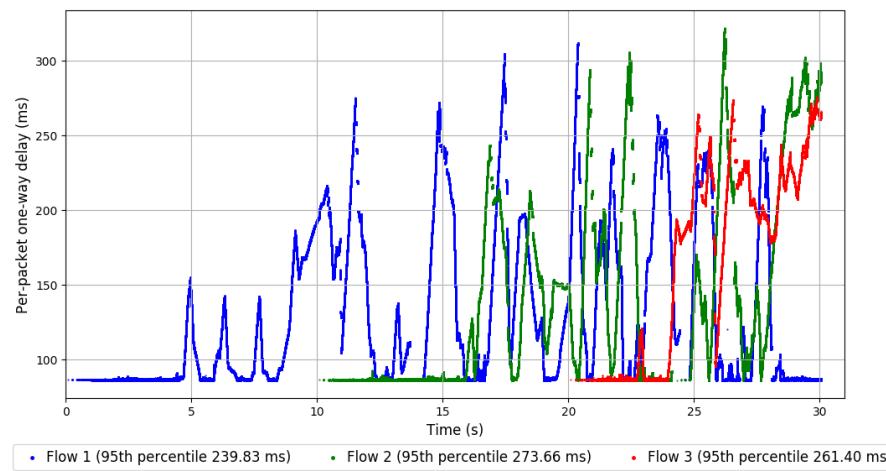
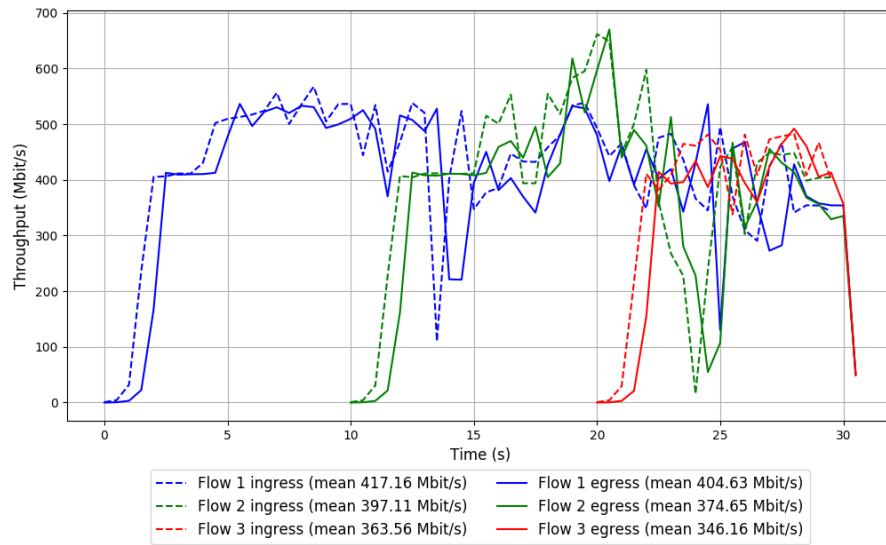


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-05 06:19:16
End at: 2019-02-05 06:19:46
Local clock offset: 0.389 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-02-05 09:23:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 769.25 Mbit/s
95th percentile per-packet one-way delay: 258.778 ms
Loss rate: 4.15%
-- Flow 1:
Average throughput: 404.63 Mbit/s
95th percentile per-packet one-way delay: 239.834 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 374.65 Mbit/s
95th percentile per-packet one-way delay: 273.660 ms
Loss rate: 5.65%
-- Flow 3:
Average throughput: 346.16 Mbit/s
95th percentile per-packet one-way delay: 261.399 ms
Loss rate: 4.78%
```

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

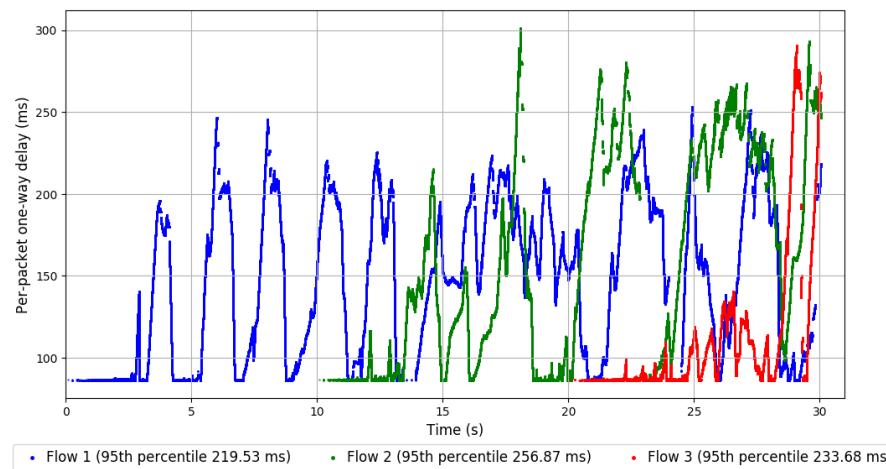
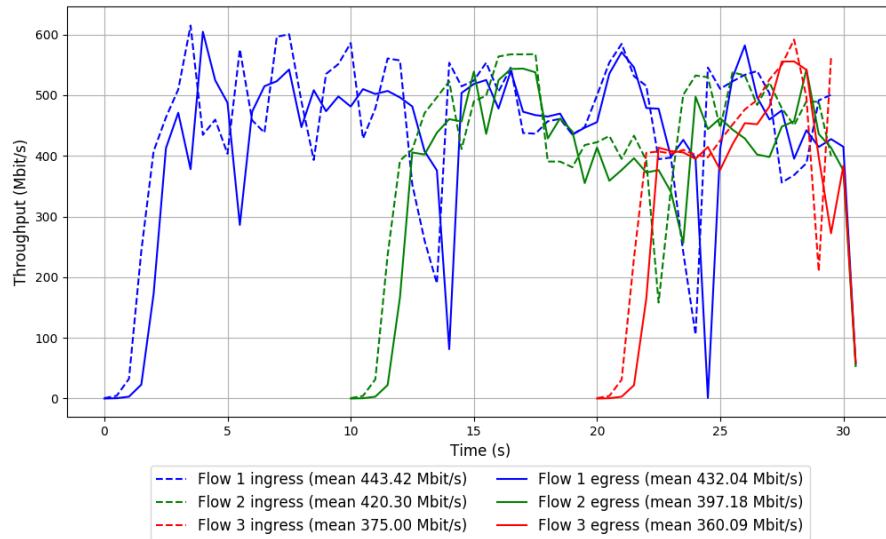


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-05 06:56:57
End at: 2019-02-05 06:57:27
Local clock offset: 0.109 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-02-05 09:24:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 816.34 Mbit/s
95th percentile per-packet one-way delay: 242.598 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 432.04 Mbit/s
95th percentile per-packet one-way delay: 219.527 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 397.18 Mbit/s
95th percentile per-packet one-way delay: 256.871 ms
Loss rate: 5.50%
-- Flow 3:
Average throughput: 360.09 Mbit/s
95th percentile per-packet one-way delay: 233.684 ms
Loss rate: 3.97%
```

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

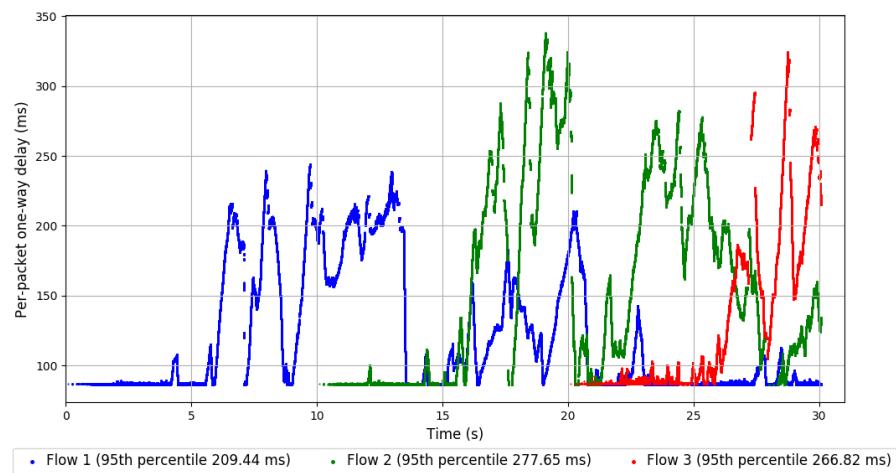
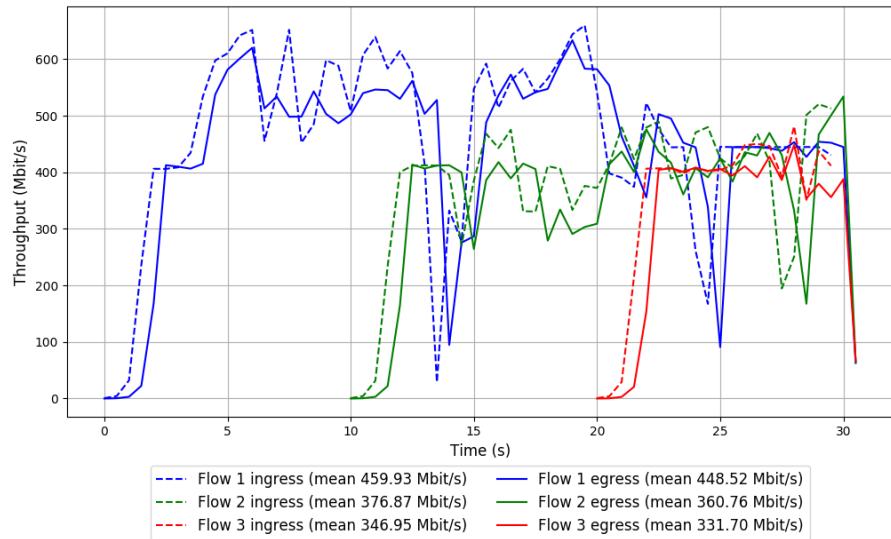


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-05 07:34:40
End at: 2019-02-05 07:35:10
Local clock offset: 0.009 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-02-05 09:24:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 799.05 Mbit/s
95th percentile per-packet one-way delay: 248.451 ms
Loss rate: 3.29%
-- Flow 1:
Average throughput: 448.52 Mbit/s
95th percentile per-packet one-way delay: 209.443 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 360.76 Mbit/s
95th percentile per-packet one-way delay: 277.651 ms
Loss rate: 4.27%
-- Flow 3:
Average throughput: 331.70 Mbit/s
95th percentile per-packet one-way delay: 266.816 ms
Loss rate: 4.40%
```

Run 4: Report of TCP BBR — Data Link

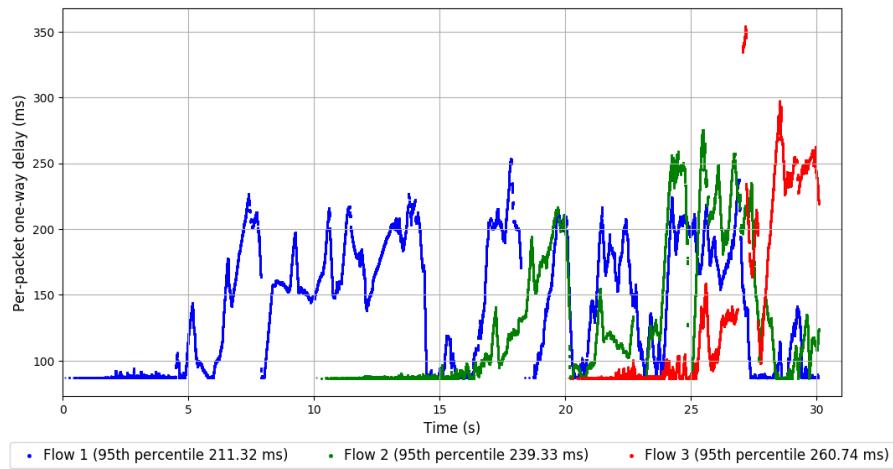
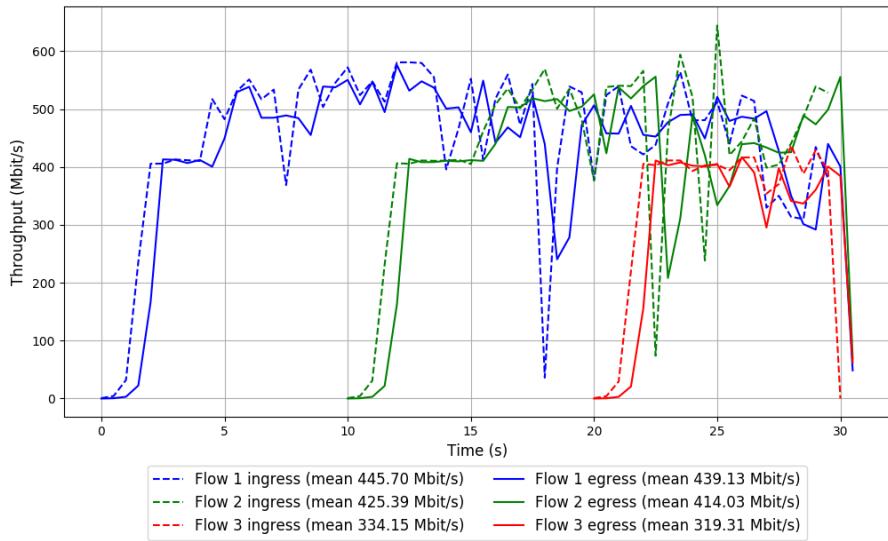


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-05 08:12:11
End at: 2019-02-05 08:12:41
Local clock offset: -0.376 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-02-05 09:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 820.88 Mbit/s
95th percentile per-packet one-way delay: 234.807 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 439.13 Mbit/s
95th percentile per-packet one-way delay: 211.318 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 414.03 Mbit/s
95th percentile per-packet one-way delay: 239.331 ms
Loss rate: 2.68%
-- Flow 3:
Average throughput: 319.31 Mbit/s
95th percentile per-packet one-way delay: 260.737 ms
Loss rate: 4.80%
```

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

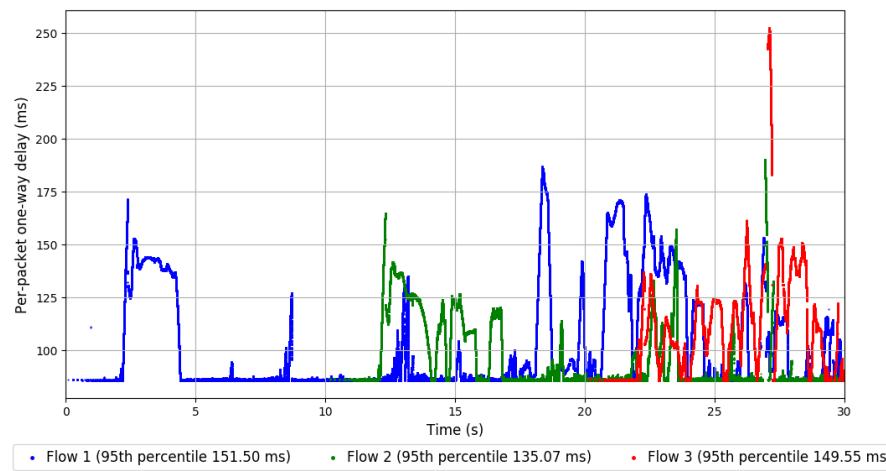
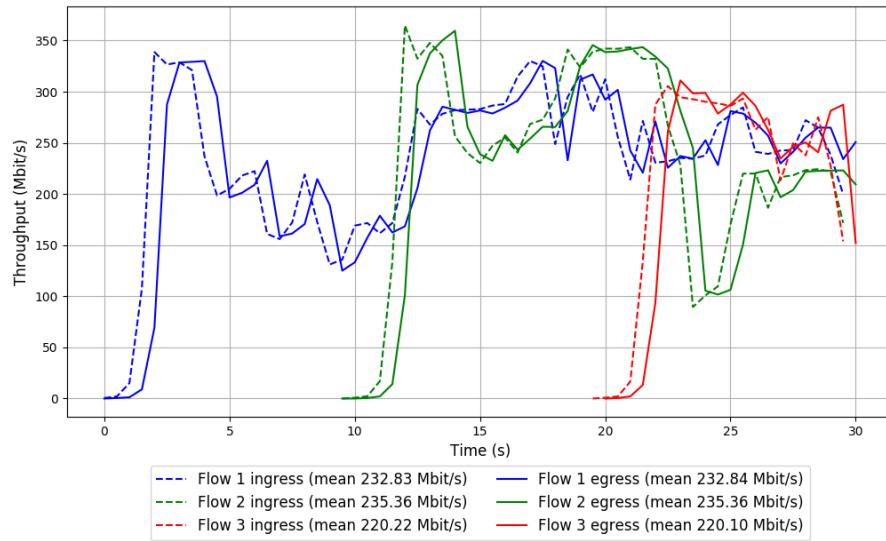


Run 1: Statistics of Copa

```
Start at: 2019-02-05 06:01:23
End at: 2019-02-05 06:01:53
Local clock offset: 0.394 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-02-05 09:26:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.49 Mbit/s
95th percentile per-packet one-way delay: 145.914 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 232.84 Mbit/s
95th percentile per-packet one-way delay: 151.504 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 235.36 Mbit/s
95th percentile per-packet one-way delay: 135.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 220.10 Mbit/s
95th percentile per-packet one-way delay: 149.551 ms
Loss rate: 0.04%
```

Run 1: Report of Copa — Data Link

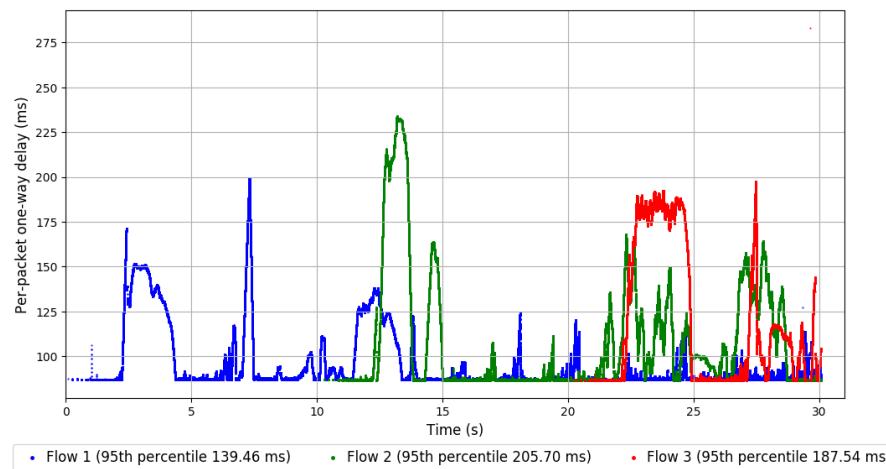
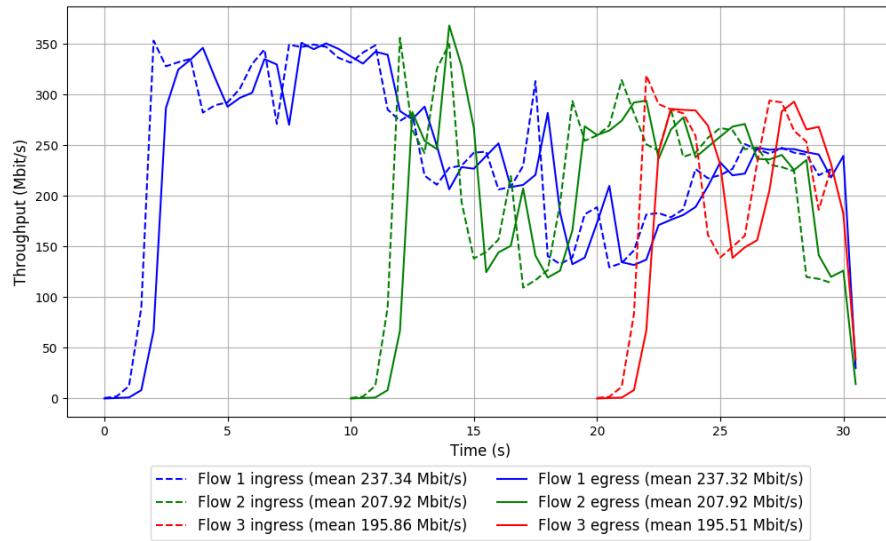


Run 2: Statistics of Copa

```
Start at: 2019-02-05 06:38:37
End at: 2019-02-05 06:39:07
Local clock offset: -0.367 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2019-02-05 09:26:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.64 Mbit/s
95th percentile per-packet one-way delay: 180.638 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 237.32 Mbit/s
95th percentile per-packet one-way delay: 139.458 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 207.92 Mbit/s
95th percentile per-packet one-way delay: 205.702 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 195.51 Mbit/s
95th percentile per-packet one-way delay: 187.536 ms
Loss rate: 0.17%
```

## Run 2: Report of Copa — Data Link

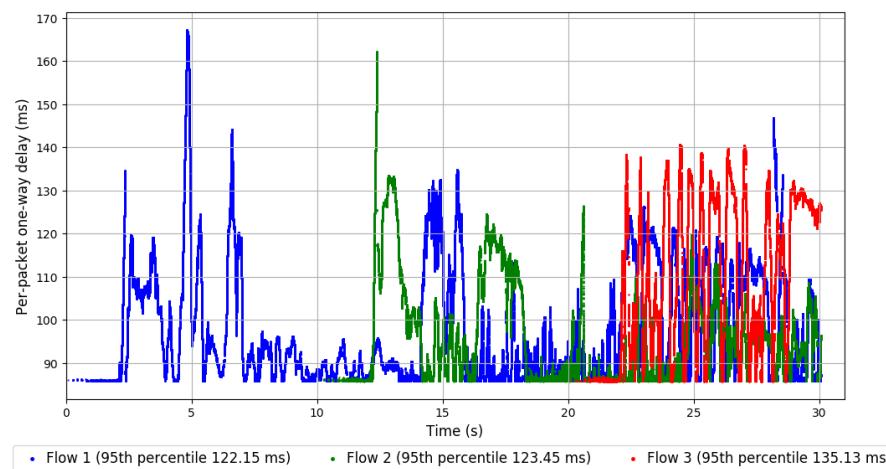
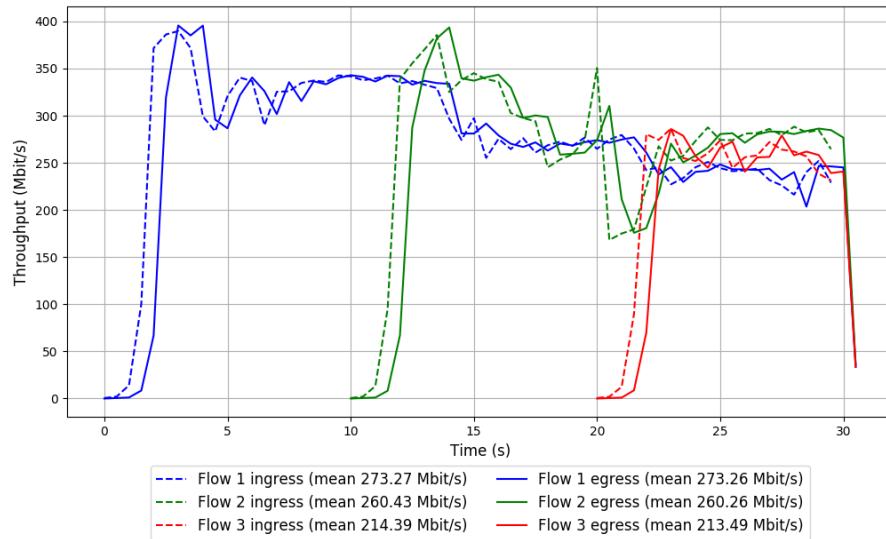


Run 3: Statistics of Copa

```
Start at: 2019-02-05 07:16:31
End at: 2019-02-05 07:17:01
Local clock offset: 0.394 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2019-02-05 09:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.54 Mbit/s
95th percentile per-packet one-way delay: 128.843 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 273.26 Mbit/s
95th percentile per-packet one-way delay: 122.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 260.26 Mbit/s
95th percentile per-packet one-way delay: 123.448 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 213.49 Mbit/s
95th percentile per-packet one-way delay: 135.134 ms
Loss rate: 0.41%
```

### Run 3: Report of Copa — Data Link

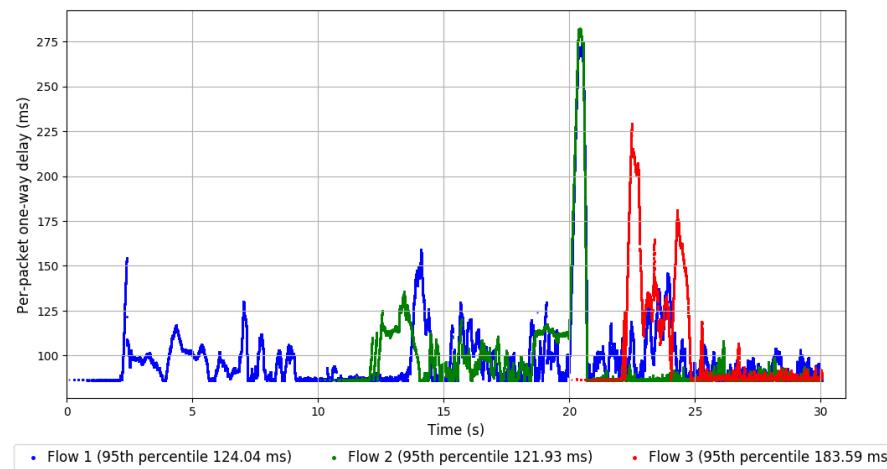
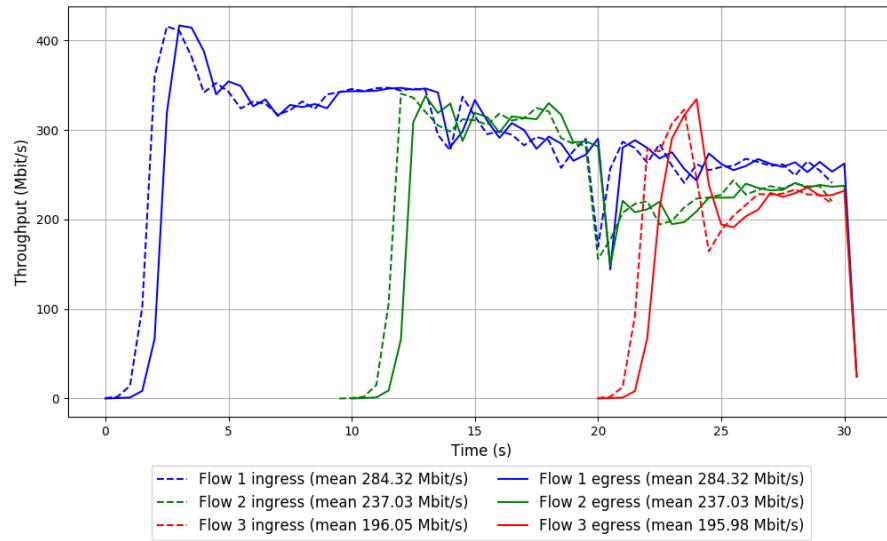


Run 4: Statistics of Copa

```
Start at: 2019-02-05 07:53:31
End at: 2019-02-05 07:54:01
Local clock offset: -0.004 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 507.35 Mbit/s
95th percentile per-packet one-way delay: 133.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 284.32 Mbit/s
95th percentile per-packet one-way delay: 124.044 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 237.03 Mbit/s
95th percentile per-packet one-way delay: 121.930 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 195.98 Mbit/s
95th percentile per-packet one-way delay: 183.586 ms
Loss rate: 0.02%
```

Run 4: Report of Copa — Data Link

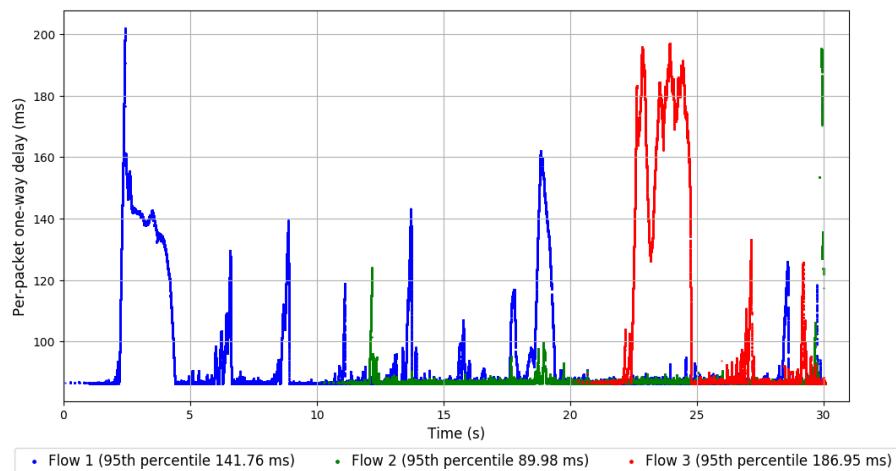
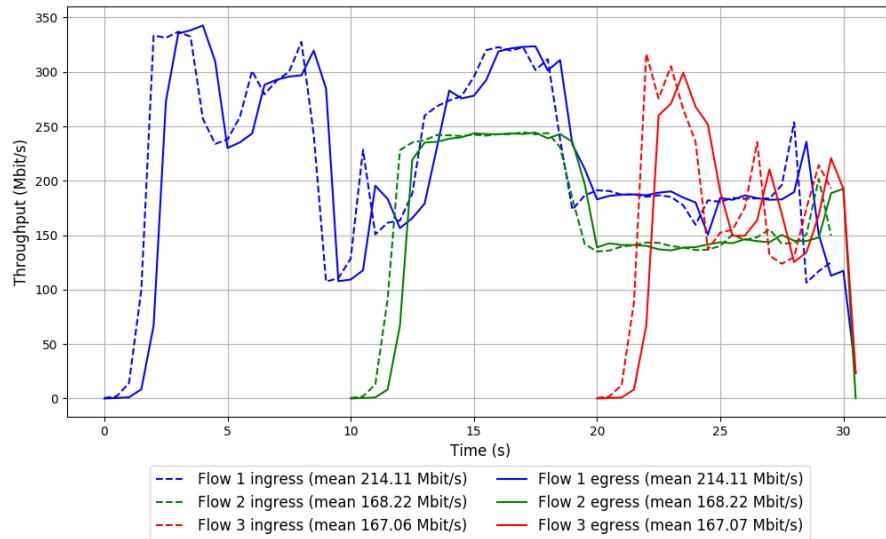


Run 5: Statistics of Copa

```
Start at: 2019-02-05 08:31:20
End at: 2019-02-05 08:31:50
Local clock offset: -0.202 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 381.41 Mbit/s
95th percentile per-packet one-way delay: 154.121 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.11 Mbit/s
95th percentile per-packet one-way delay: 141.761 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 168.22 Mbit/s
95th percentile per-packet one-way delay: 89.984 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.07 Mbit/s
95th percentile per-packet one-way delay: 186.950 ms
Loss rate: 0.00%
```

## Run 5: Report of Copa — Data Link

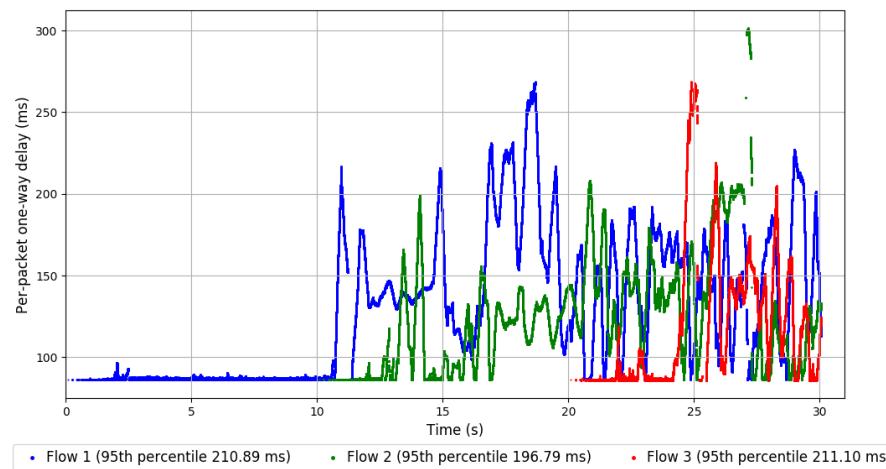
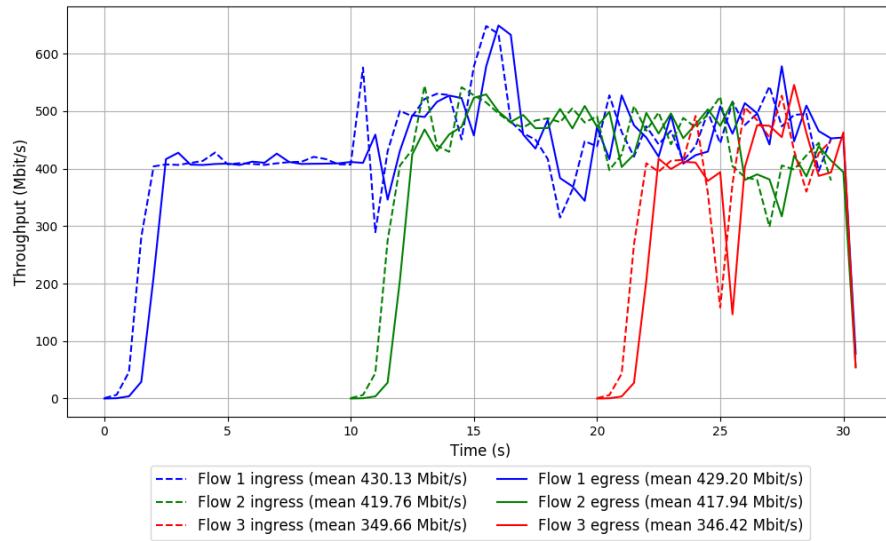


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-02-05 05:59:23
End at: 2019-02-05 05:59:53
Local clock offset: 0.123 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 822.75 Mbit/s
95th percentile per-packet one-way delay: 203.555 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 429.20 Mbit/s
95th percentile per-packet one-way delay: 210.889 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 417.94 Mbit/s
95th percentile per-packet one-way delay: 196.790 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 346.42 Mbit/s
95th percentile per-packet one-way delay: 211.100 ms
Loss rate: 0.92%
```

Run 1: Report of TCP Cubic — Data Link

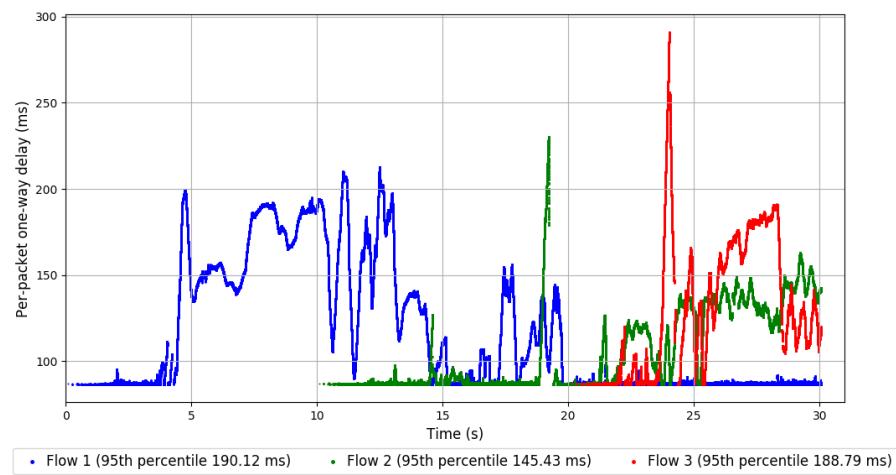
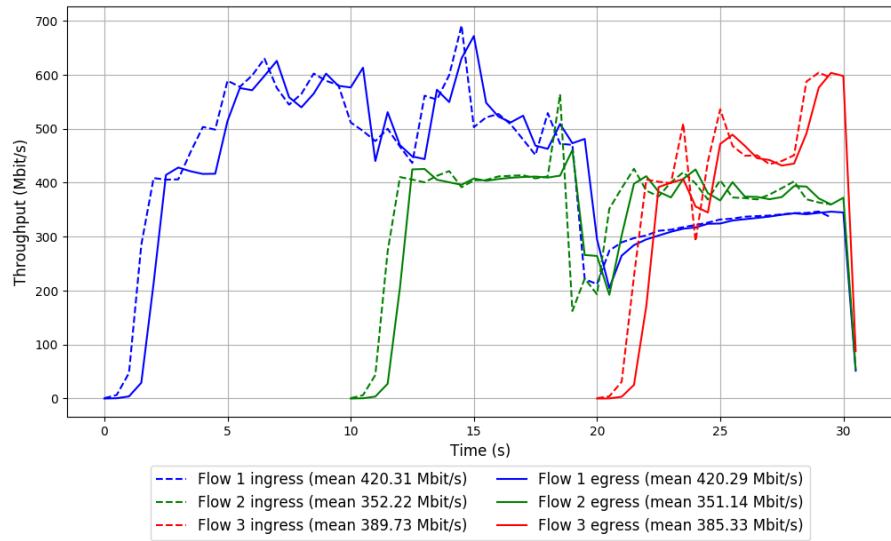


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-05 06:36:36
End at: 2019-02-05 06:37:06
Local clock offset: -0.284 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 781.59 Mbit/s
95th percentile per-packet one-way delay: 188.504 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 420.29 Mbit/s
95th percentile per-packet one-way delay: 190.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.14 Mbit/s
95th percentile per-packet one-way delay: 145.425 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 385.33 Mbit/s
95th percentile per-packet one-way delay: 188.795 ms
Loss rate: 1.13%
```

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

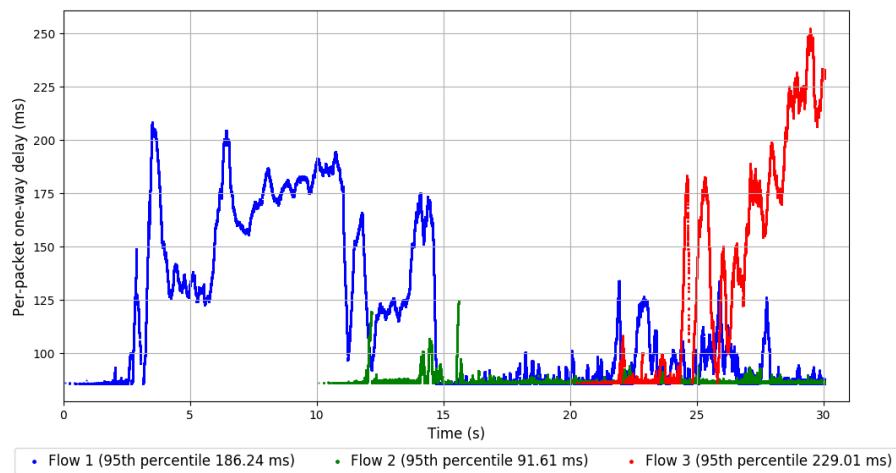
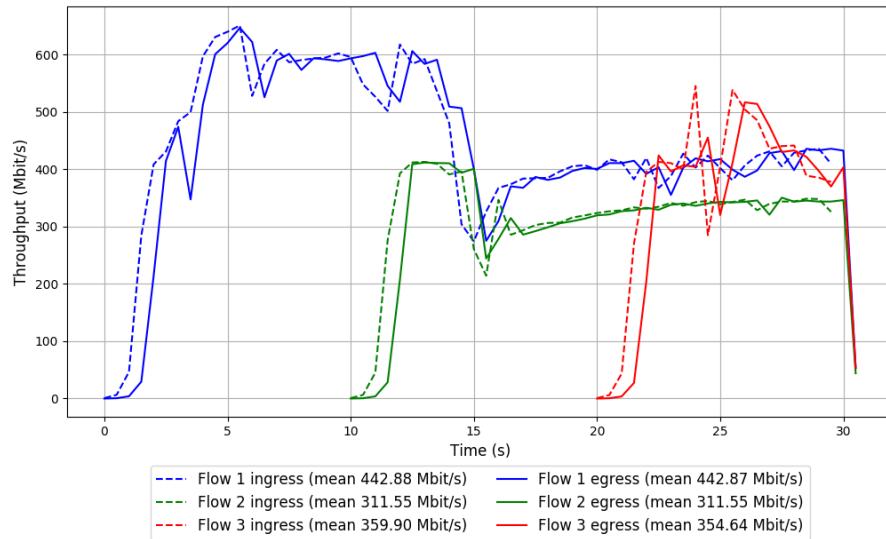


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-05 07:14:31
End at: 2019-02-05 07:15:01
Local clock offset: -0.022 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 768.27 Mbit/s
95th percentile per-packet one-way delay: 188.546 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 442.87 Mbit/s
95th percentile per-packet one-way delay: 186.243 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 311.55 Mbit/s
95th percentile per-packet one-way delay: 91.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 354.64 Mbit/s
95th percentile per-packet one-way delay: 229.011 ms
Loss rate: 1.46%
```

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

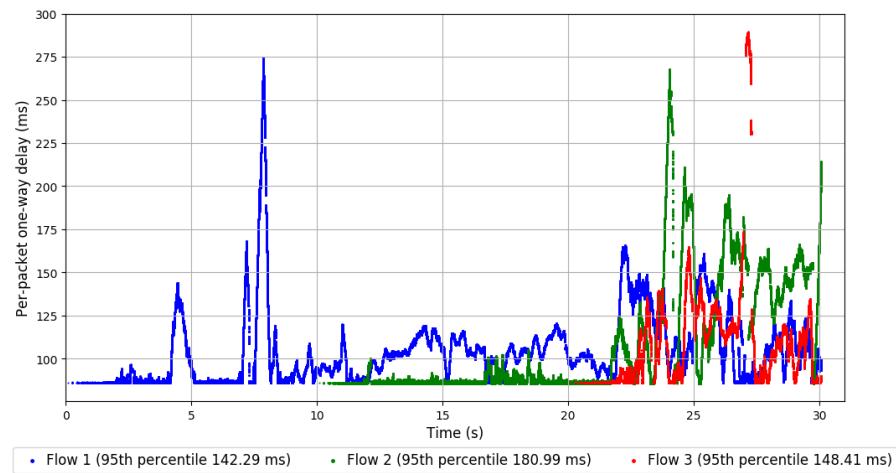
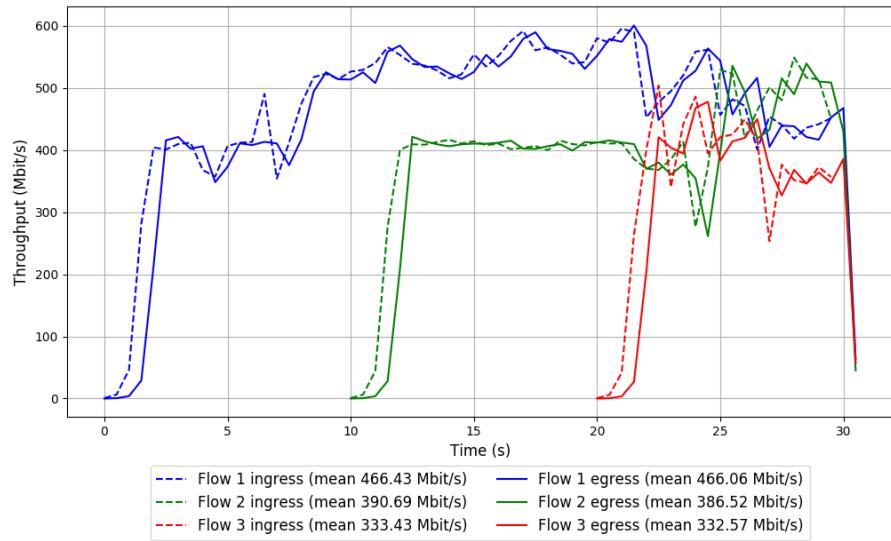


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-05 07:51:31
End at: 2019-02-05 07:52:01
Local clock offset: 0.24 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 834.09 Mbit/s
95th percentile per-packet one-way delay: 157.443 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 466.06 Mbit/s
95th percentile per-packet one-way delay: 142.294 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 386.52 Mbit/s
95th percentile per-packet one-way delay: 180.993 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 332.57 Mbit/s
95th percentile per-packet one-way delay: 148.406 ms
Loss rate: 0.25%
```

Run 4: Report of TCP Cubic — Data Link

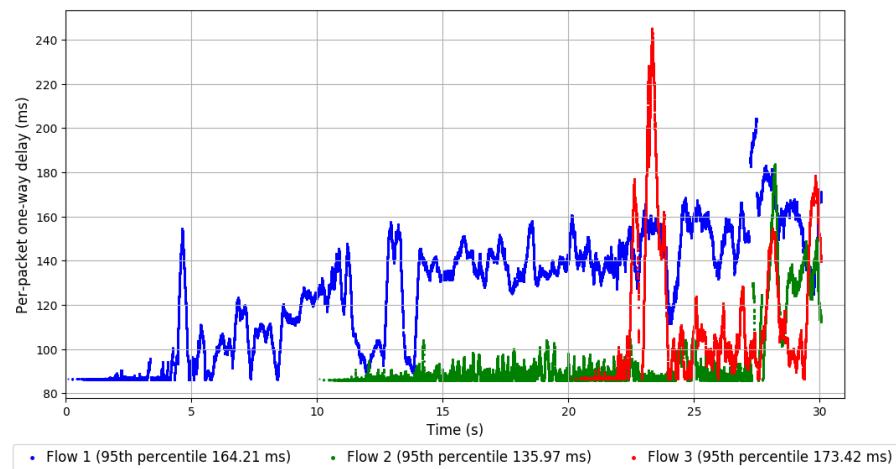
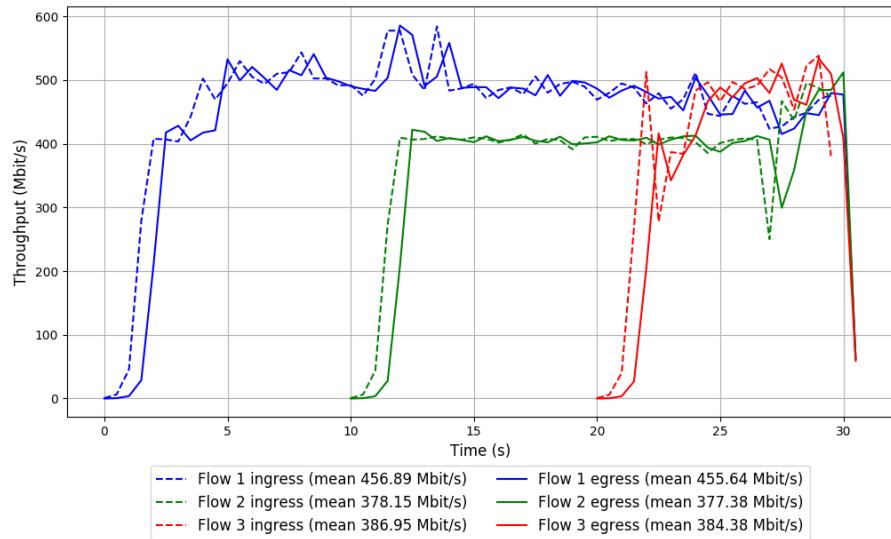


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-05 08:29:14
End at: 2019-02-05 08:29:44
Local clock offset: 0.005 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-02-05 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 834.77 Mbit/s
95th percentile per-packet one-way delay: 162.675 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 455.64 Mbit/s
95th percentile per-packet one-way delay: 164.213 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 377.38 Mbit/s
95th percentile per-packet one-way delay: 135.967 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 384.38 Mbit/s
95th percentile per-packet one-way delay: 173.421 ms
Loss rate: 0.67%
```

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

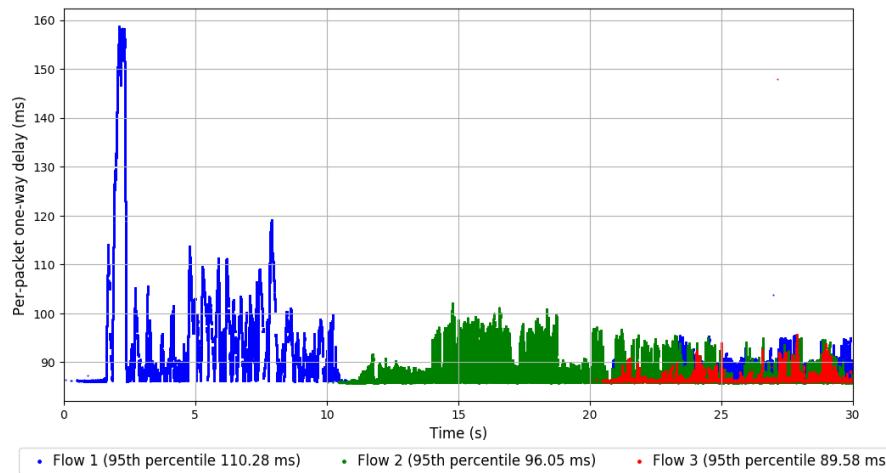
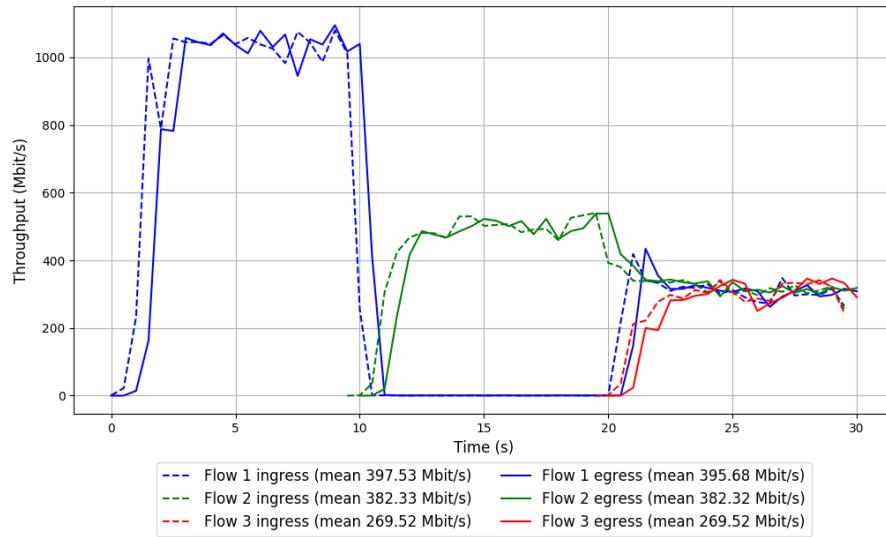


```
Run 1: Statistics of FillP

Start at: 2019-02-05 05:52:49
End at: 2019-02-05 05:53:19
Local clock offset: 0.112 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-02-05 09:48:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 739.87 Mbit/s
95th percentile per-packet one-way delay: 105.168 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 395.68 Mbit/s
95th percentile per-packet one-way delay: 110.277 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 382.32 Mbit/s
95th percentile per-packet one-way delay: 96.054 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 269.52 Mbit/s
95th percentile per-packet one-way delay: 89.580 ms
Loss rate: 0.00%
```

## Run 1: Report of FillP — Data Link

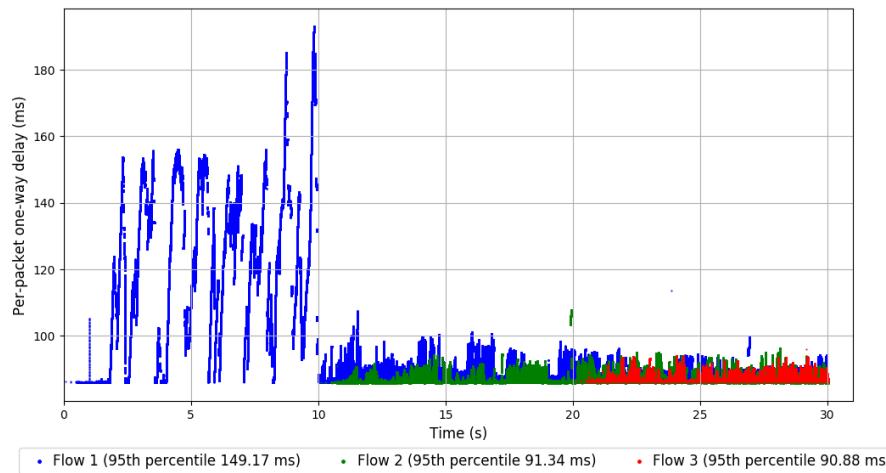
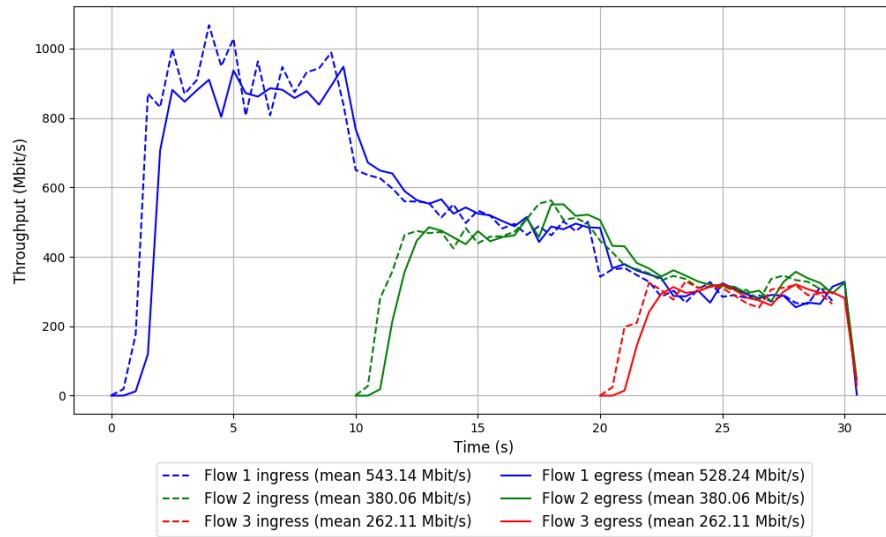


Run 2: Statistics of FillP

```
Start at: 2019-02-05 06:29:50
End at: 2019-02-05 06:30:20
Local clock offset: 0.217 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-02-05 10:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 867.98 Mbit/s
95th percentile per-packet one-way delay: 144.945 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 528.24 Mbit/s
95th percentile per-packet one-way delay: 149.167 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 380.06 Mbit/s
95th percentile per-packet one-way delay: 91.343 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 262.11 Mbit/s
95th percentile per-packet one-way delay: 90.880 ms
Loss rate: 0.00%
```

## Run 2: Report of FillP — Data Link

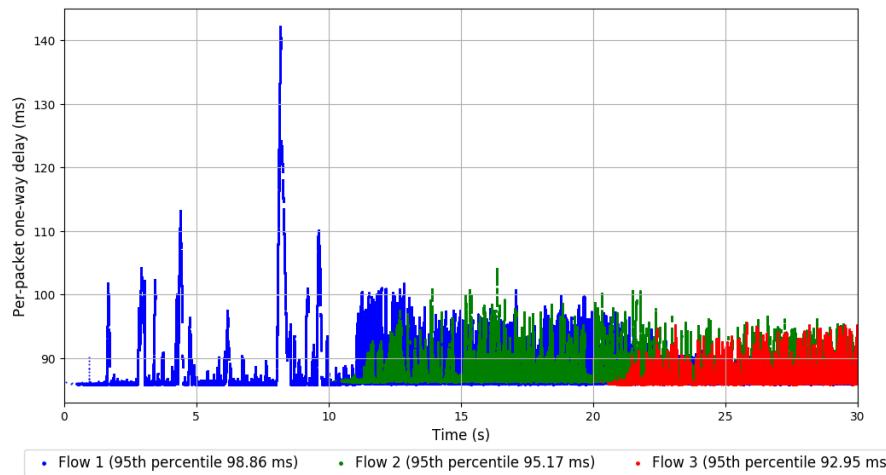
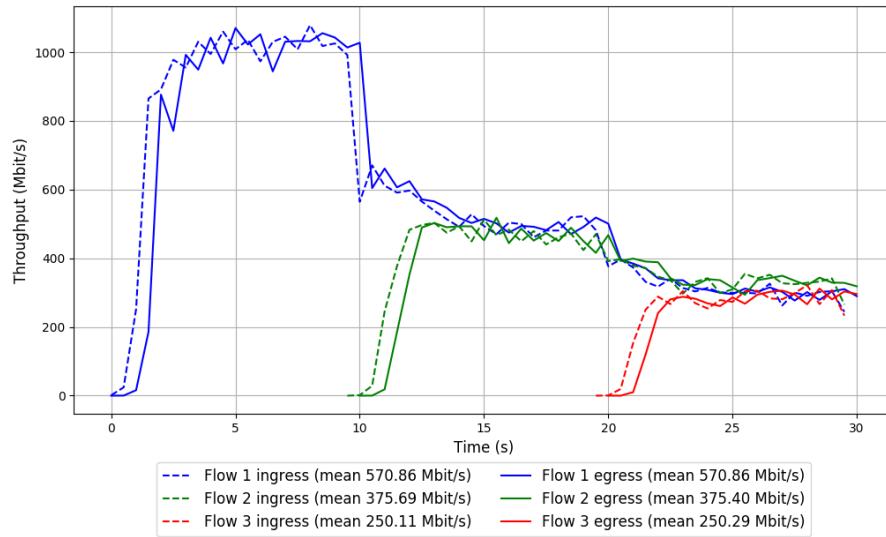


Run 3: Statistics of FillP

```
Start at: 2019-02-05 07:07:32
End at: 2019-02-05 07:08:02
Local clock offset: -0.034 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-02-05 10:08:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 903.97 Mbit/s
95th percentile per-packet one-way delay: 96.912 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 570.86 Mbit/s
95th percentile per-packet one-way delay: 98.862 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 375.40 Mbit/s
95th percentile per-packet one-way delay: 95.175 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 250.29 Mbit/s
95th percentile per-packet one-way delay: 92.951 ms
Loss rate: 0.00%
```

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

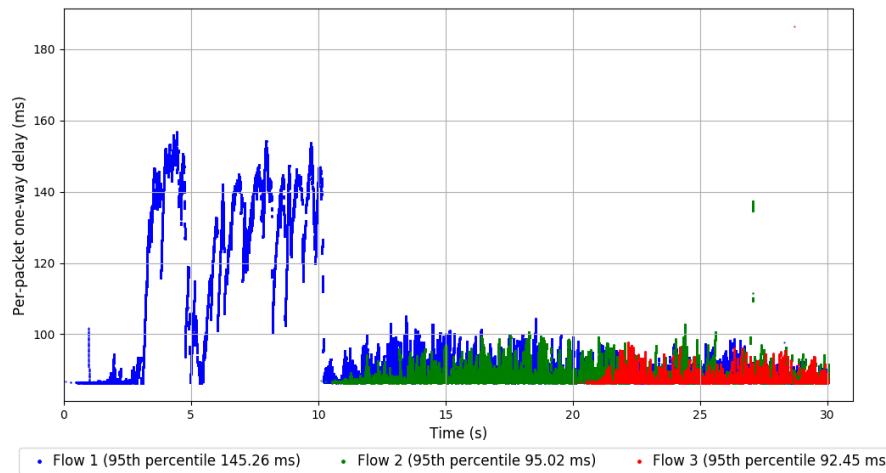
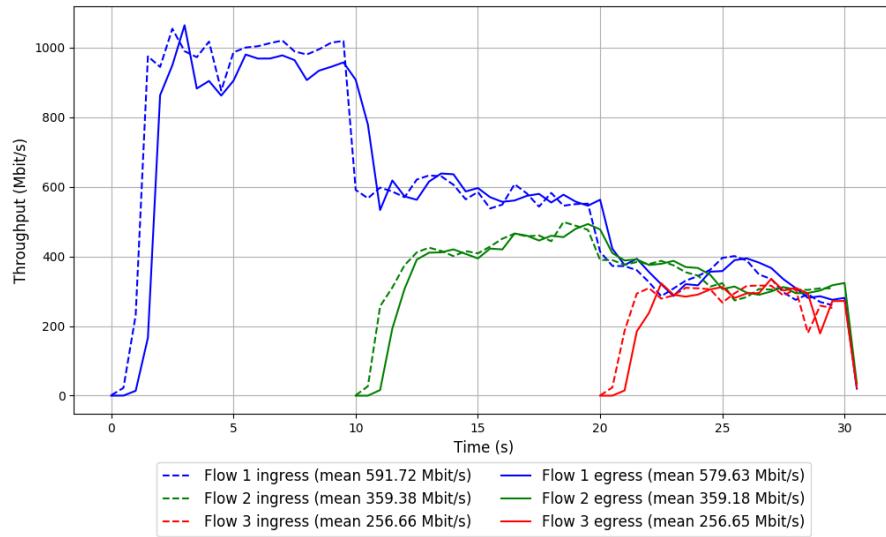


Run 4: Statistics of FillP

```
Start at: 2019-02-05 07:44:54
End at: 2019-02-05 07:45:24
Local clock offset: -0.139 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-02-05 10:09:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 903.69 Mbit/s
95th percentile per-packet one-way delay: 143.064 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 579.63 Mbit/s
95th percentile per-packet one-way delay: 145.259 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 359.18 Mbit/s
95th percentile per-packet one-way delay: 95.022 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 256.65 Mbit/s
95th percentile per-packet one-way delay: 92.452 ms
Loss rate: 0.00%
```

## Run 4: Report of FillP — Data Link

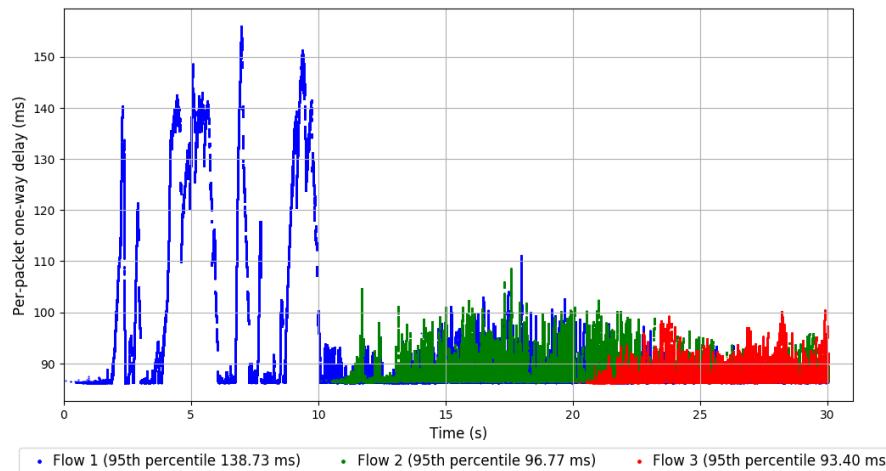
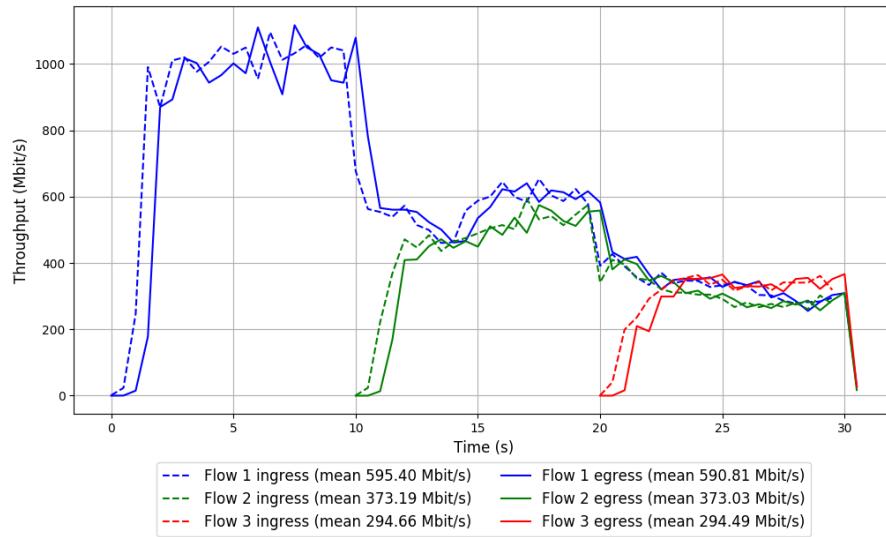


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-05 08:22:27
End at: 2019-02-05 08:22:57
Local clock offset: 0.049 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-02-05 10:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 936.52 Mbit/s
95th percentile per-packet one-way delay: 135.570 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 590.81 Mbit/s
95th percentile per-packet one-way delay: 138.733 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 373.03 Mbit/s
95th percentile per-packet one-way delay: 96.774 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 294.49 Mbit/s
95th percentile per-packet one-way delay: 93.401 ms
Loss rate: 0.00%
```

## Run 5: Report of FillP — Data Link

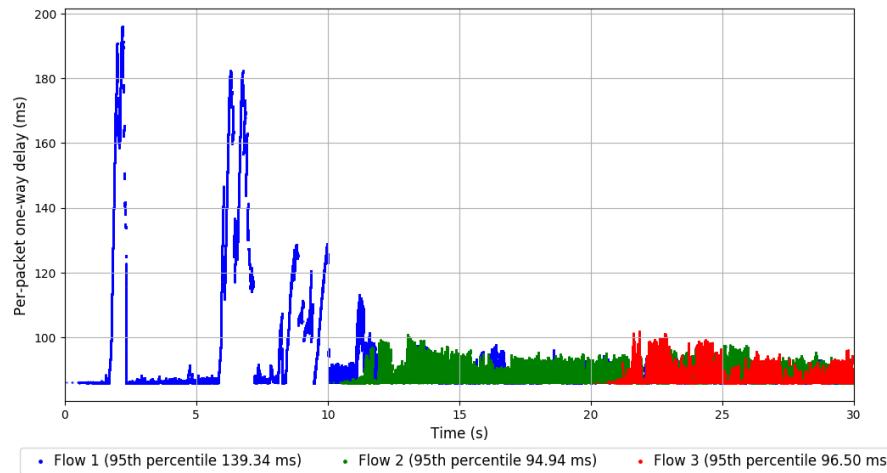
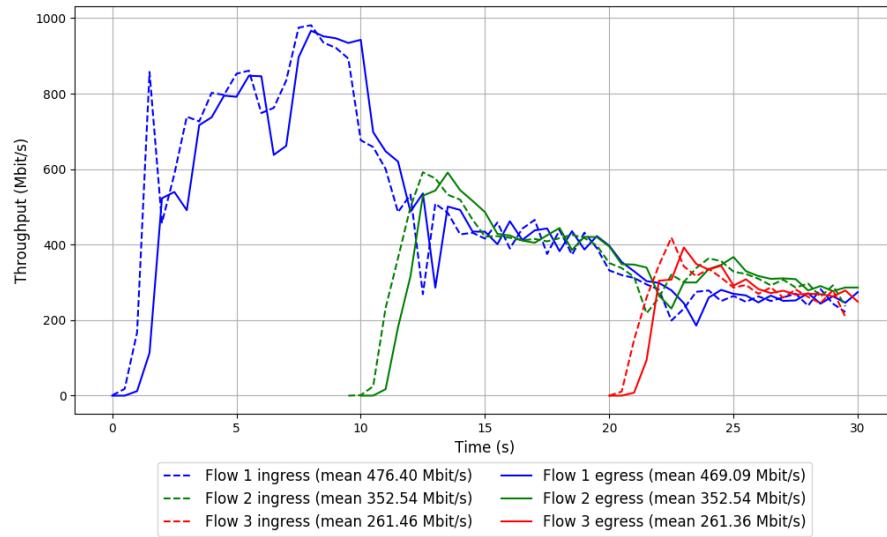


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-05 06:09:11
End at: 2019-02-05 06:09:41
Local clock offset: 0.358 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-02-05 10:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 790.47 Mbit/s
95th percentile per-packet one-way delay: 124.420 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 469.09 Mbit/s
95th percentile per-packet one-way delay: 139.337 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 352.54 Mbit/s
95th percentile per-packet one-way delay: 94.937 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 261.36 Mbit/s
95th percentile per-packet one-way delay: 96.501 ms
Loss rate: 0.00%
```

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

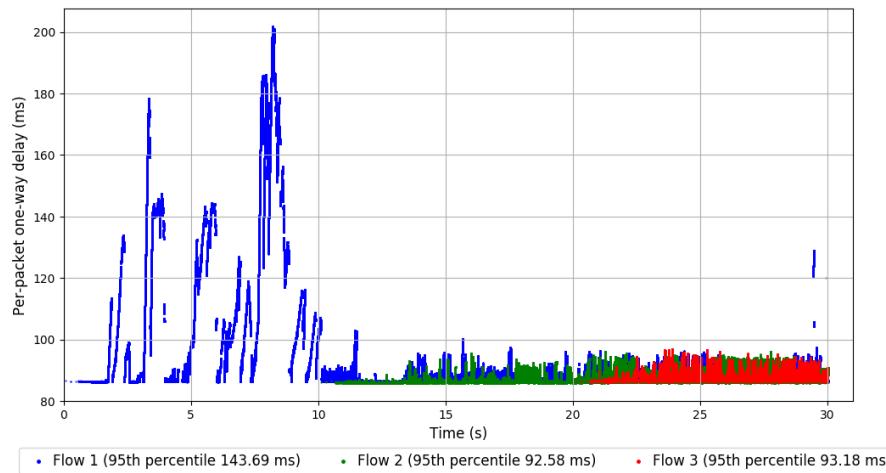
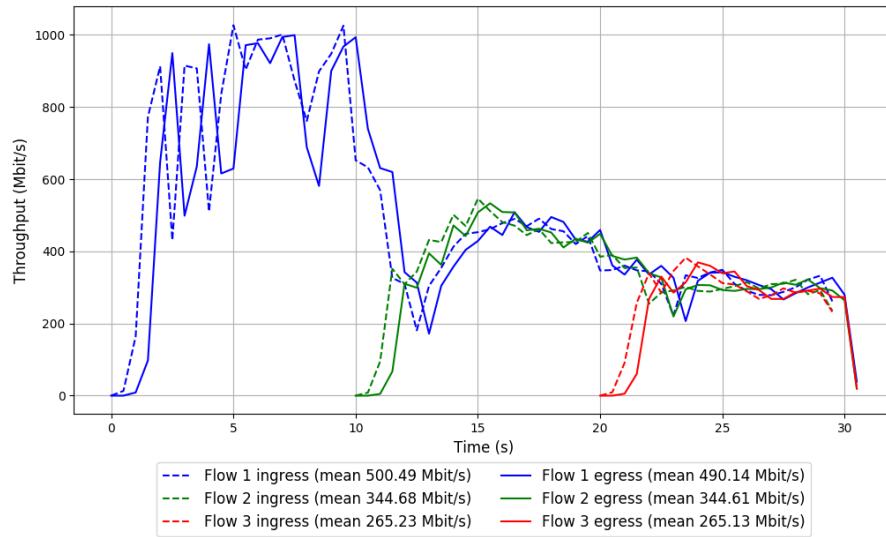


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-05 06:46:24
End at: 2019-02-05 06:46:54
Local clock offset: -0.006 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-02-05 10:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.00 Mbit/s
95th percentile per-packet one-way delay: 140.329 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 490.14 Mbit/s
95th percentile per-packet one-way delay: 143.686 ms
Loss rate: 2.07%
-- Flow 2:
Average throughput: 344.61 Mbit/s
95th percentile per-packet one-way delay: 92.578 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 265.13 Mbit/s
95th percentile per-packet one-way delay: 93.184 ms
Loss rate: 0.00%
```

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

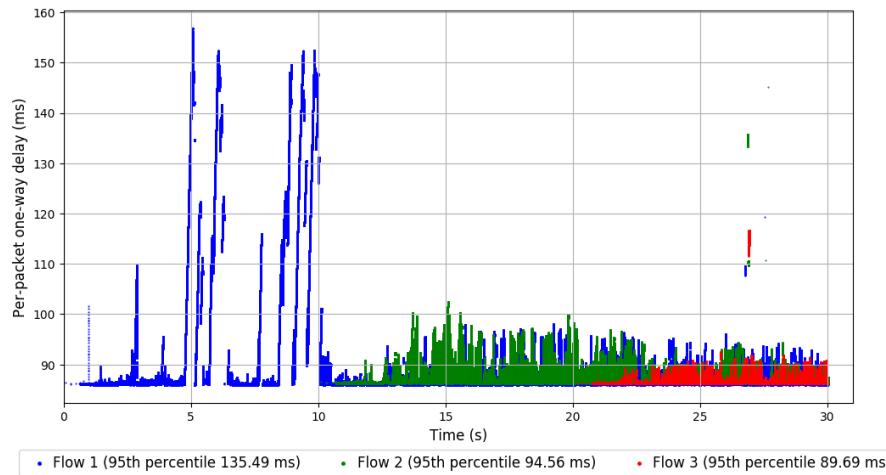
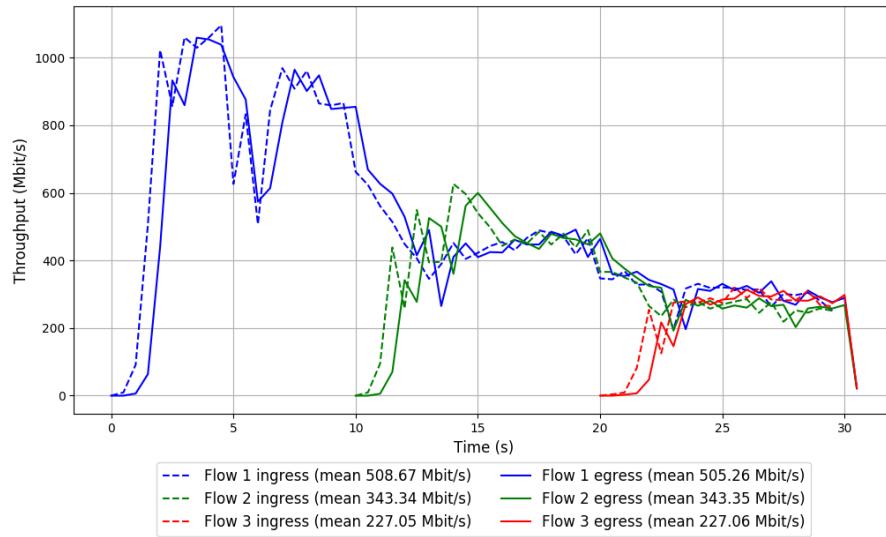


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-05 07:24:22
End at: 2019-02-05 07:24:52
Local clock offset: 0.025 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-02-05 10:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 808.43 Mbit/s
95th percentile per-packet one-way delay: 121.857 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 505.26 Mbit/s
95th percentile per-packet one-way delay: 135.485 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 343.35 Mbit/s
95th percentile per-packet one-way delay: 94.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.06 Mbit/s
95th percentile per-packet one-way delay: 89.695 ms
Loss rate: 0.00%
```

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

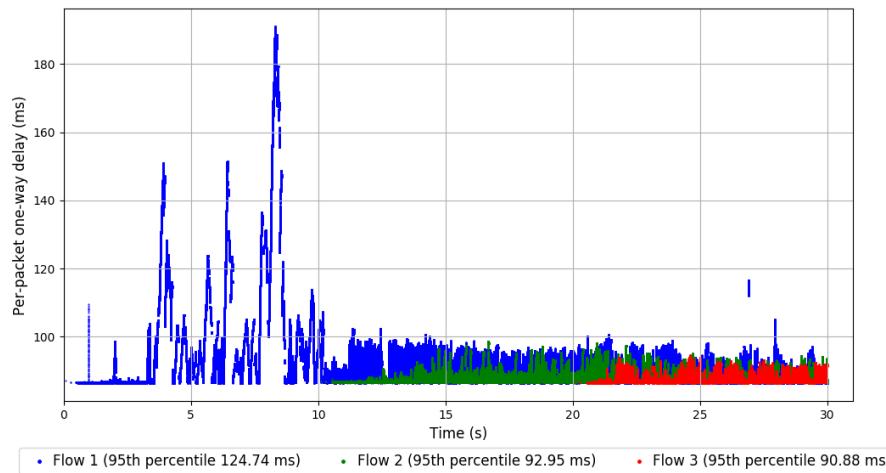
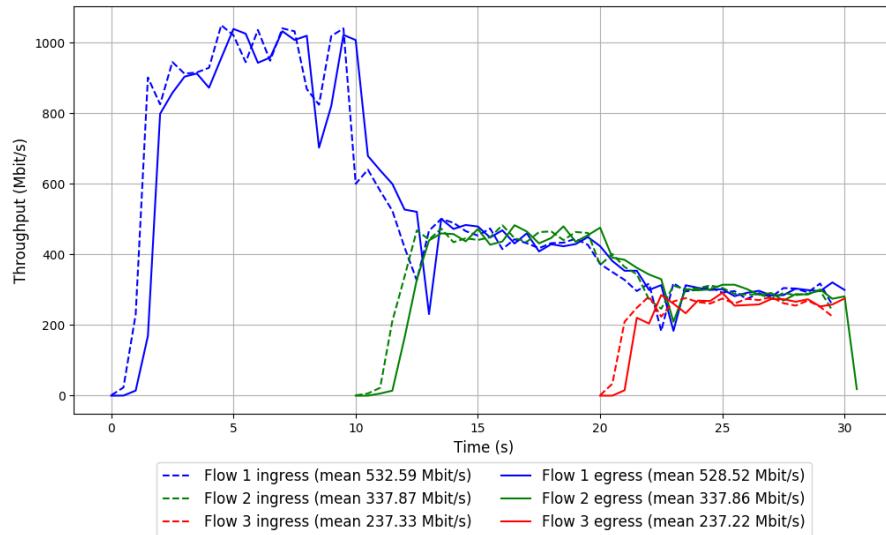


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-05 08:01:44
End at: 2019-02-05 08:02:14
Local clock offset: -0.025 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-02-05 10:12:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 831.56 Mbit/s
95th percentile per-packet one-way delay: 116.195 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 528.52 Mbit/s
95th percentile per-packet one-way delay: 124.742 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 337.86 Mbit/s
95th percentile per-packet one-way delay: 92.953 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 237.22 Mbit/s
95th percentile per-packet one-way delay: 90.875 ms
Loss rate: 0.00%
```

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

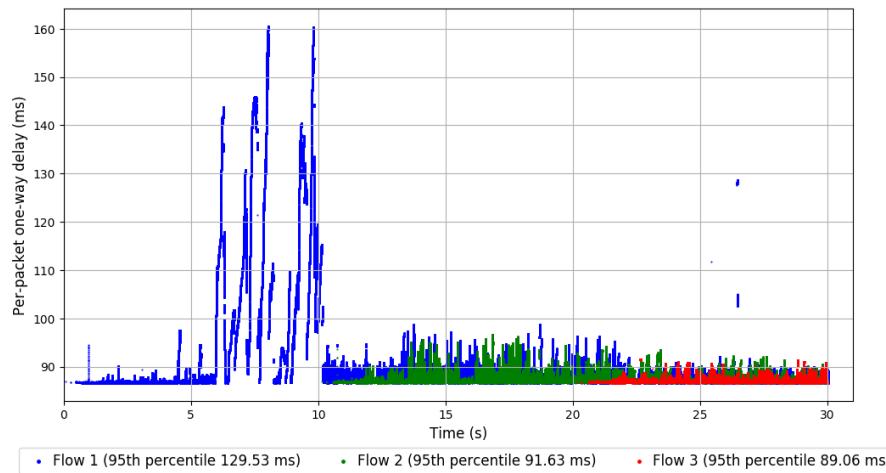
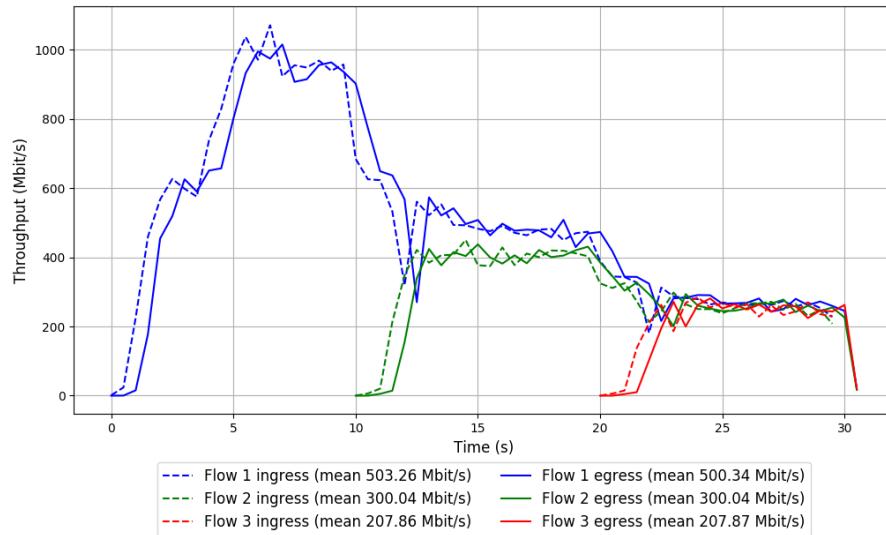


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-05 08:39:18
End at: 2019-02-05 08:39:48
Local clock offset: -0.395 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 768.23 Mbit/s
95th percentile per-packet one-way delay: 115.326 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 500.34 Mbit/s
95th percentile per-packet one-way delay: 129.526 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 300.04 Mbit/s
95th percentile per-packet one-way delay: 91.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.87 Mbit/s
95th percentile per-packet one-way delay: 89.057 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

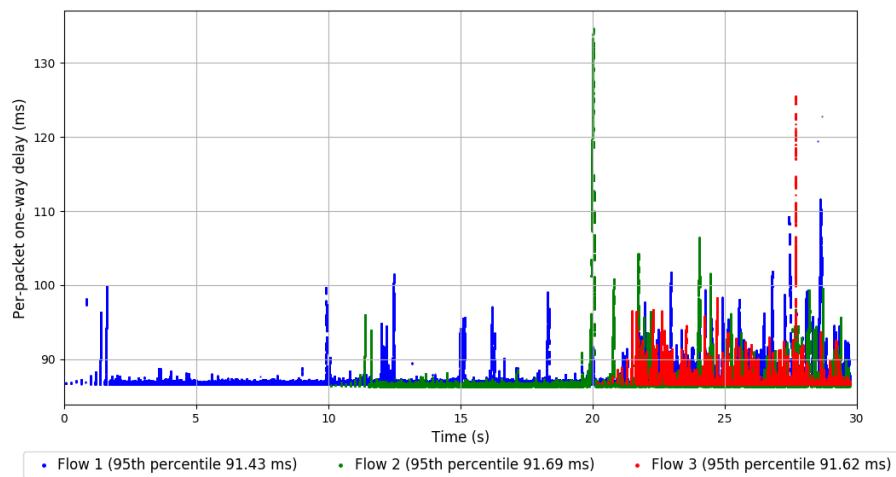
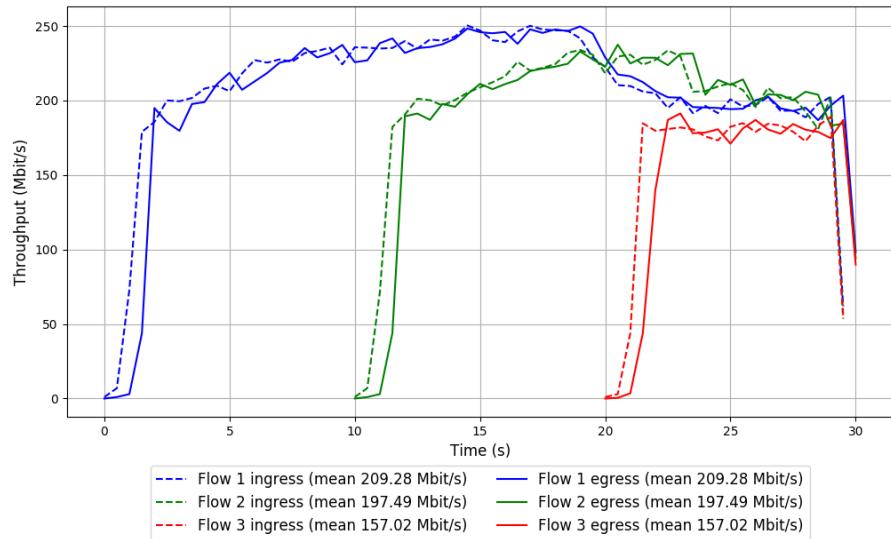


Run 1: Statistics of Indigo

```
Start at: 2019-02-05 06:03:23
End at: 2019-02-05 06:03:53
Local clock offset: -0.412 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.58 Mbit/s
95th percentile per-packet one-way delay: 91.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.28 Mbit/s
95th percentile per-packet one-way delay: 91.426 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 197.49 Mbit/s
95th percentile per-packet one-way delay: 91.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.02 Mbit/s
95th percentile per-packet one-way delay: 91.625 ms
Loss rate: 0.00%
```

## Run 1: Report of Indigo — Data Link

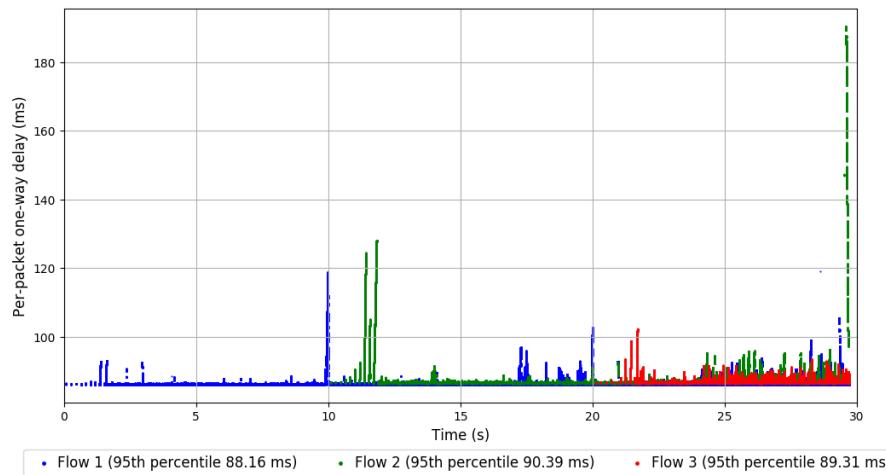
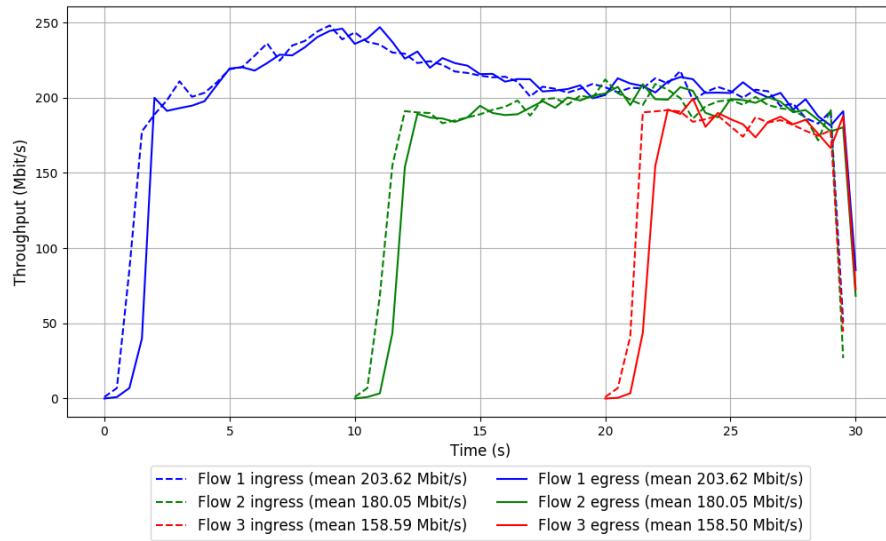


Run 2: Statistics of Indigo

```
Start at: 2019-02-05 06:40:37
End at: 2019-02-05 06:41:07
Local clock offset: -0.128 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 374.10 Mbit/s
95th percentile per-packet one-way delay: 88.897 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 203.62 Mbit/s
95th percentile per-packet one-way delay: 88.157 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.05 Mbit/s
95th percentile per-packet one-way delay: 90.389 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.50 Mbit/s
95th percentile per-packet one-way delay: 89.308 ms
Loss rate: 0.05%
```

## Run 2: Report of Indigo — Data Link

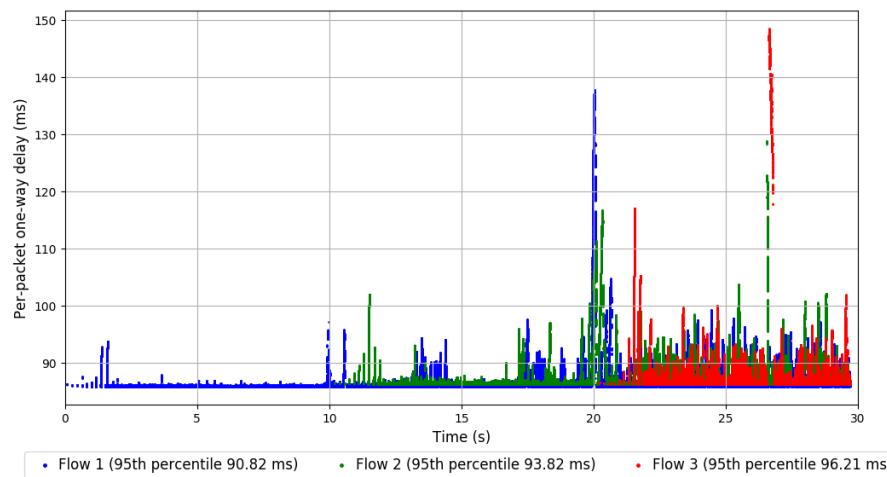
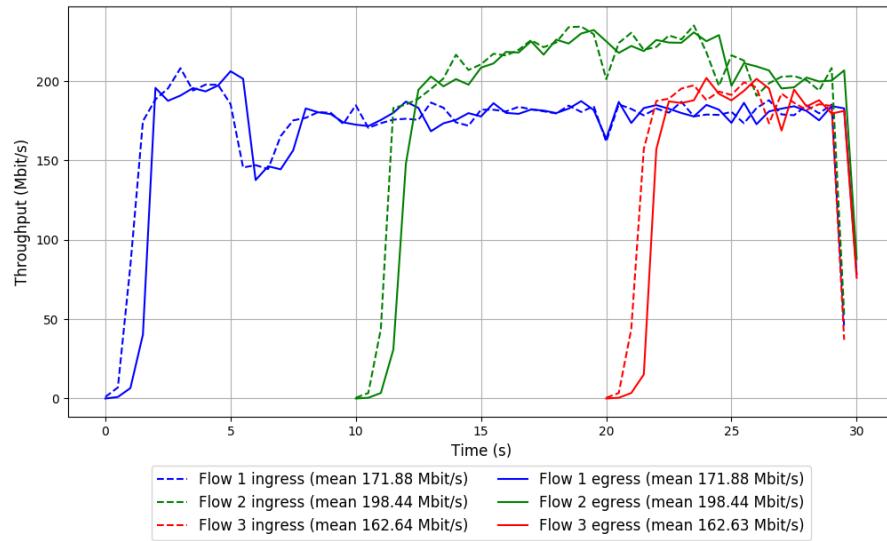


Run 3: Statistics of Indigo

```
Start at: 2019-02-05 07:18:41
End at: 2019-02-05 07:19:11
Local clock offset: -0.02 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.52 Mbit/s
95th percentile per-packet one-way delay: 92.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.88 Mbit/s
95th percentile per-packet one-way delay: 90.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.44 Mbit/s
95th percentile per-packet one-way delay: 93.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.63 Mbit/s
95th percentile per-packet one-way delay: 96.212 ms
Loss rate: 0.00%
```

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

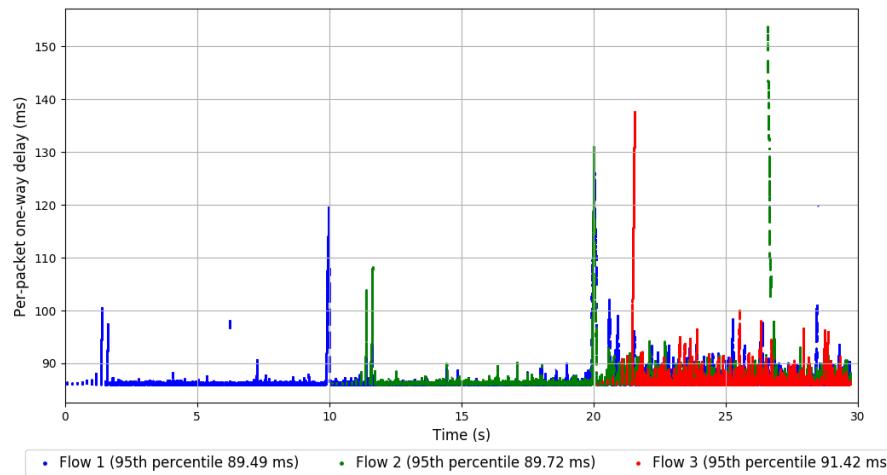
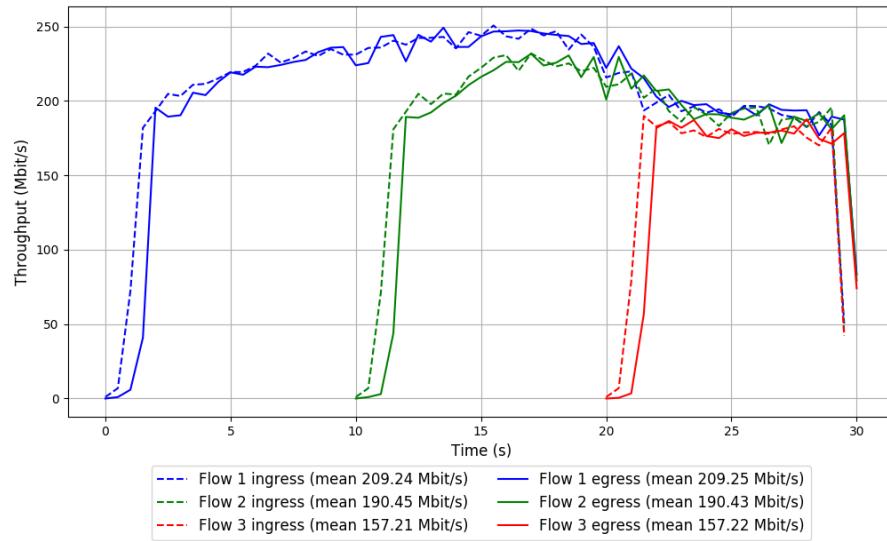


Run 4: Statistics of Indigo

```
Start at: 2019-02-05 07:55:37
End at: 2019-02-05 07:56:07
Local clock offset: 0.278 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.08 Mbit/s
95th percentile per-packet one-way delay: 89.836 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.25 Mbit/s
95th percentile per-packet one-way delay: 89.487 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.43 Mbit/s
95th percentile per-packet one-way delay: 89.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.22 Mbit/s
95th percentile per-packet one-way delay: 91.422 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

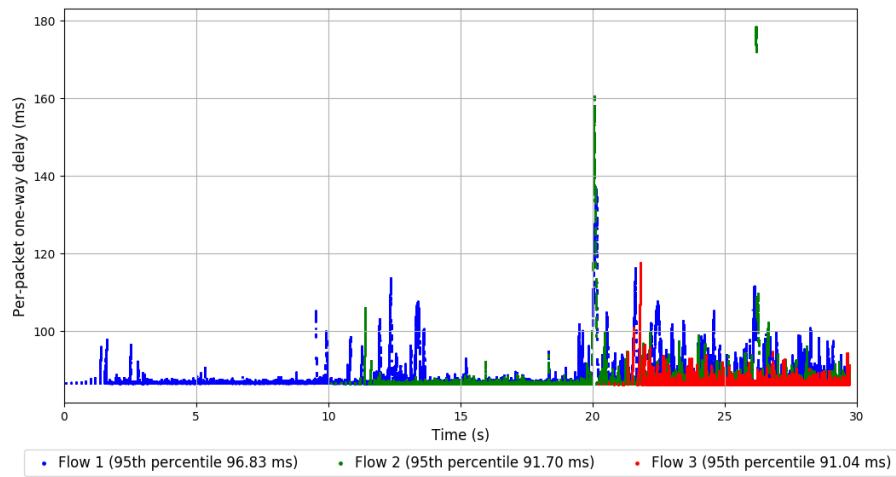
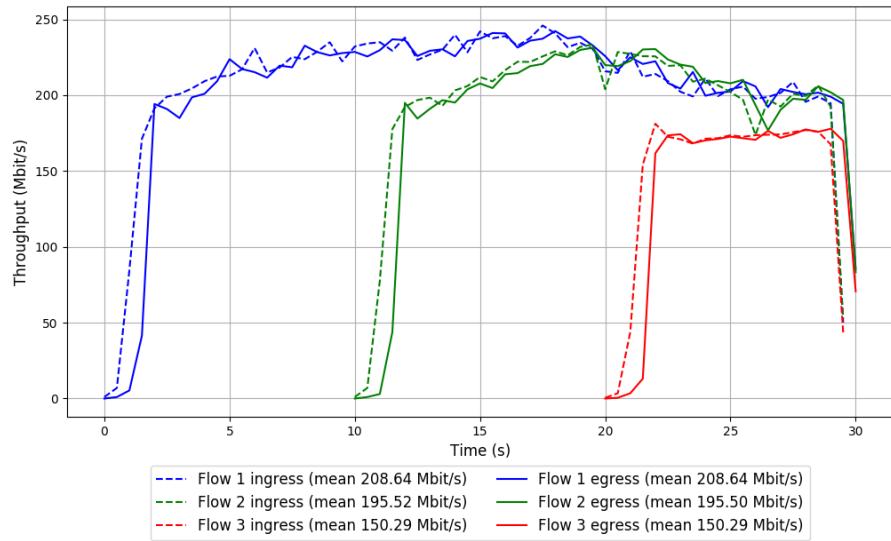


Run 5: Statistics of Indigo

```
Start at: 2019-02-05 08:33:17
End at: 2019-02-05 08:33:47
Local clock offset: 0.027 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-02-05 10:27:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.12 Mbit/s
95th percentile per-packet one-way delay: 94.551 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.64 Mbit/s
95th percentile per-packet one-way delay: 96.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.50 Mbit/s
95th percentile per-packet one-way delay: 91.698 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 150.29 Mbit/s
95th percentile per-packet one-way delay: 91.041 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

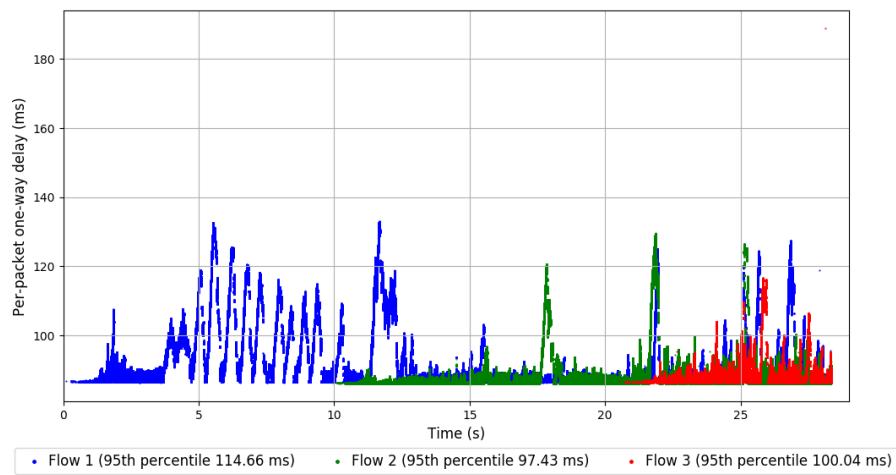
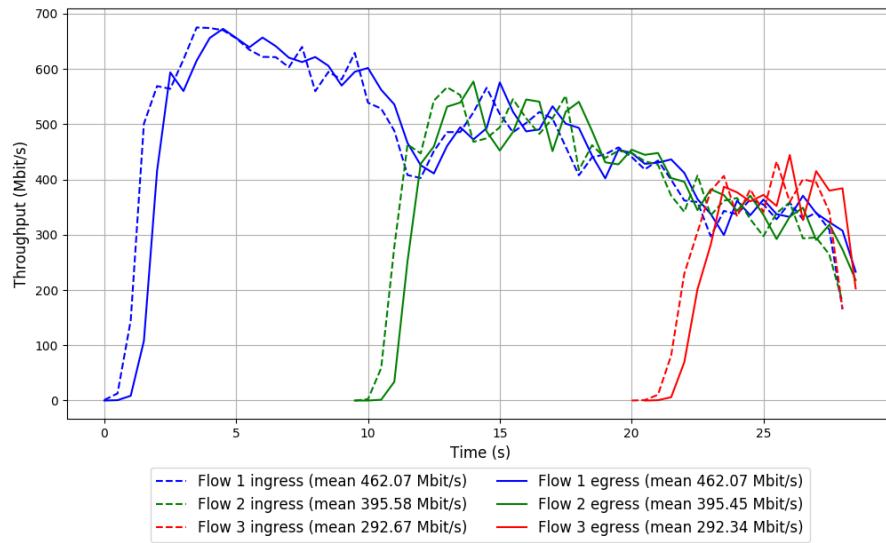


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 06:11:01
End at: 2019-02-05 06:11:31
Local clock offset: -0.32 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-02-05 10:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 800.14 Mbit/s
95th percentile per-packet one-way delay: 111.650 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 462.07 Mbit/s
95th percentile per-packet one-way delay: 114.661 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 395.45 Mbit/s
95th percentile per-packet one-way delay: 97.432 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 292.34 Mbit/s
95th percentile per-packet one-way delay: 100.038 ms
Loss rate: 0.10%
```

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

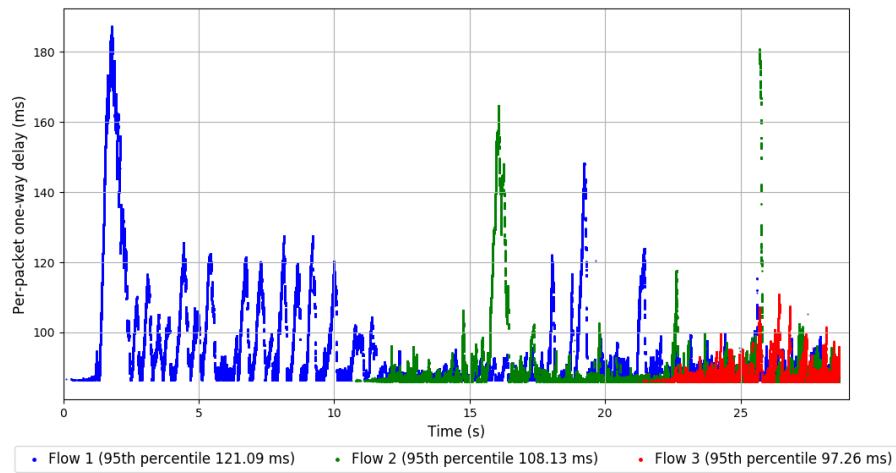
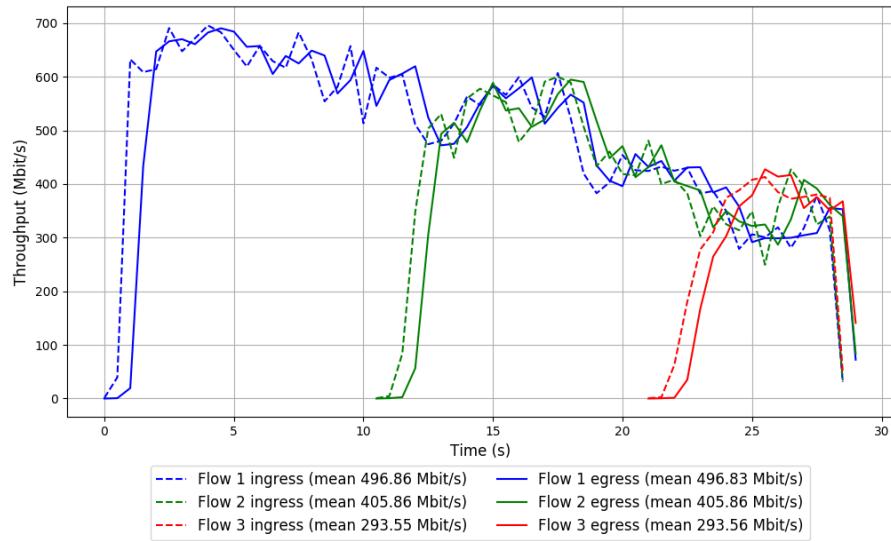


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 06:48:17
End at: 2019-02-05 06:48:47
Local clock offset: -0.007 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-02-05 10:32:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 829.19 Mbit/s
95th percentile per-packet one-way delay: 118.737 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 496.83 Mbit/s
95th percentile per-packet one-way delay: 121.087 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 405.86 Mbit/s
95th percentile per-packet one-way delay: 108.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 293.56 Mbit/s
95th percentile per-packet one-way delay: 97.256 ms
Loss rate: 0.00%
```

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

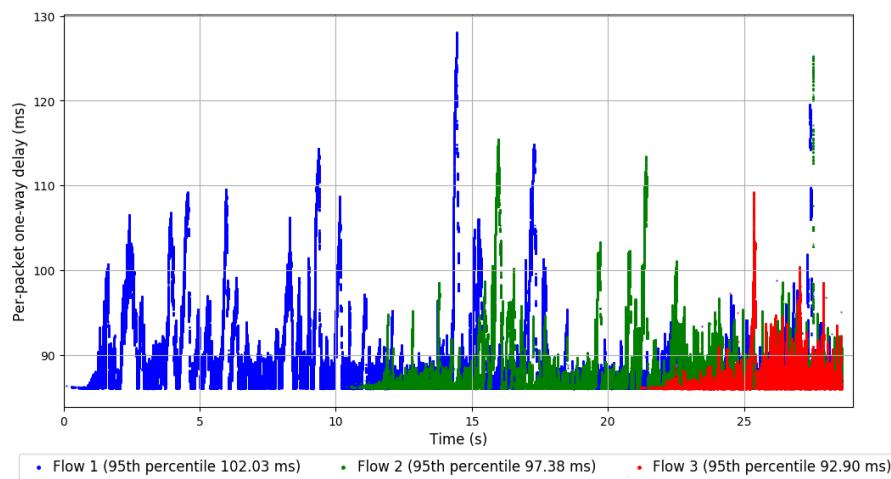
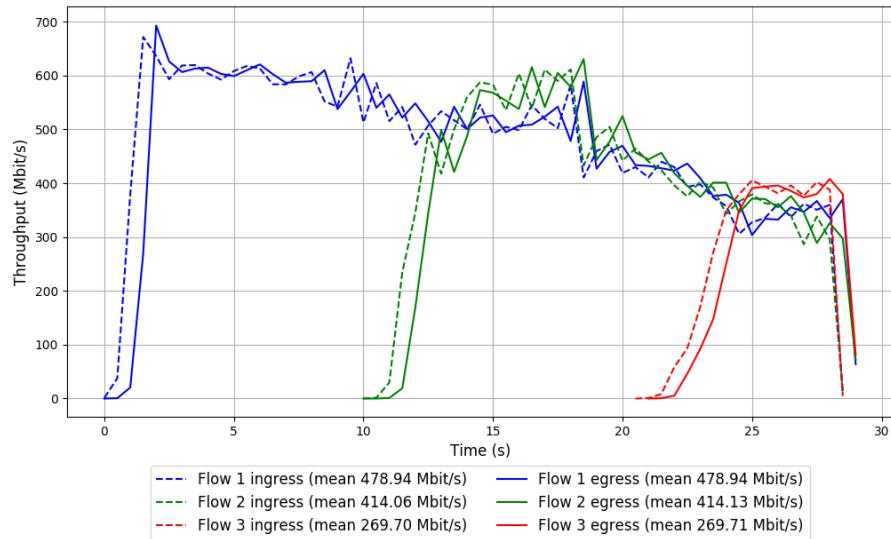


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 07:26:13
End at: 2019-02-05 07:26:43
Local clock offset: 0.244 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-02-05 10:42:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.93 Mbit/s
95th percentile per-packet one-way delay: 100.176 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 478.94 Mbit/s
95th percentile per-packet one-way delay: 102.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 414.13 Mbit/s
95th percentile per-packet one-way delay: 97.375 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 269.71 Mbit/s
95th percentile per-packet one-way delay: 92.901 ms
Loss rate: 0.00%
```

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

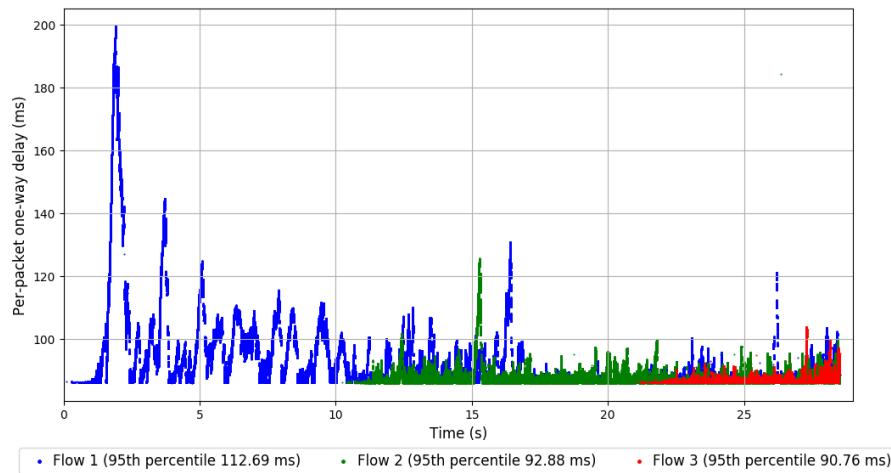
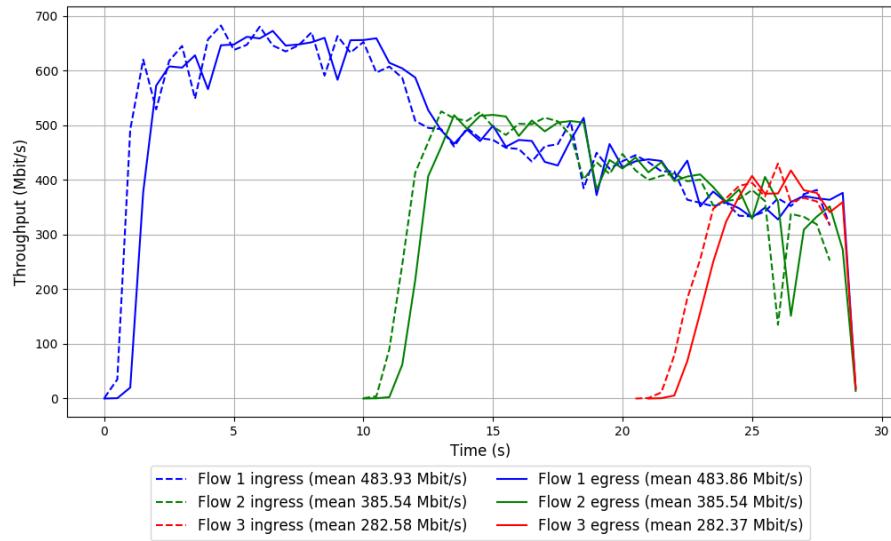


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 08:03:36
End at: 2019-02-05 08:04:06
Local clock offset: 0.118 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2019-02-05 10:43:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 806.02 Mbit/s
95th percentile per-packet one-way delay: 107.811 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 483.86 Mbit/s
95th percentile per-packet one-way delay: 112.689 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 385.54 Mbit/s
95th percentile per-packet one-way delay: 92.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 282.37 Mbit/s
95th percentile per-packet one-way delay: 90.764 ms
Loss rate: 0.13%
```

Run 4: Report of Indigo-MusesC3 — Data Link

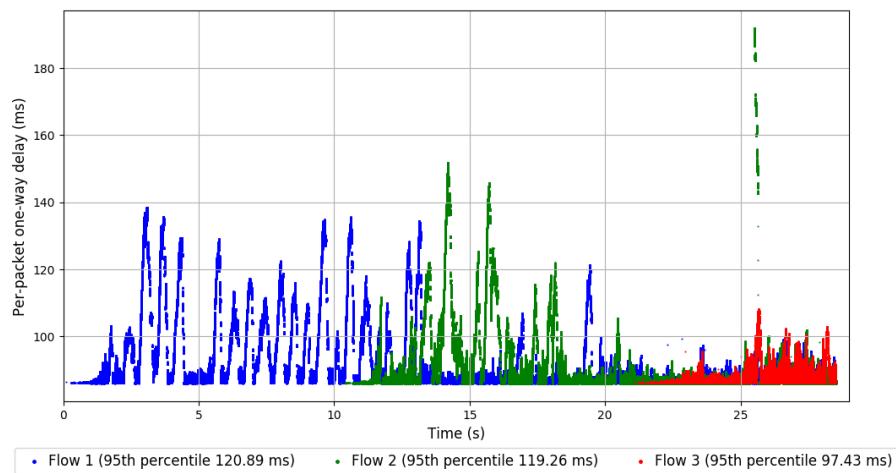
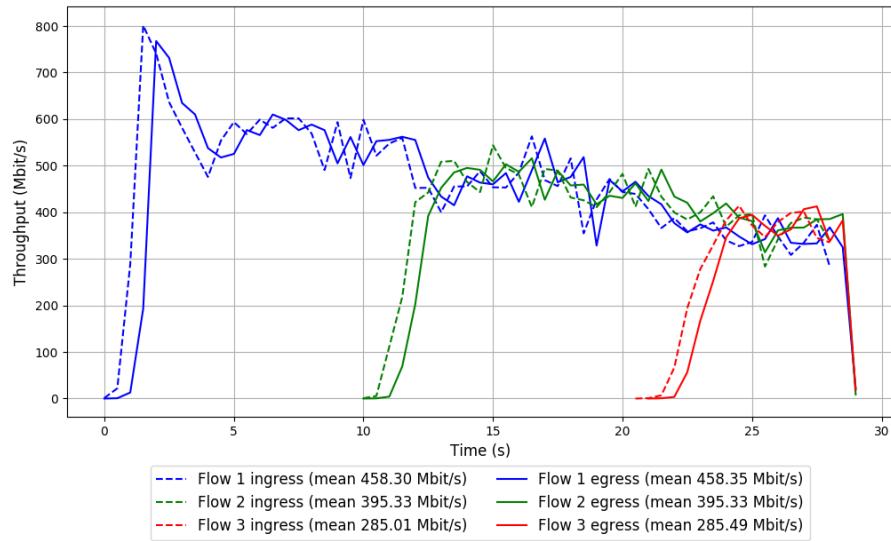


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 08:41:07
End at: 2019-02-05 08:41:37
Local clock offset: 0.255 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-02-05 10:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 787.32 Mbit/s
95th percentile per-packet one-way delay: 118.938 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 458.35 Mbit/s
95th percentile per-packet one-way delay: 120.886 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 395.33 Mbit/s
95th percentile per-packet one-way delay: 119.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 285.49 Mbit/s
95th percentile per-packet one-way delay: 97.432 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

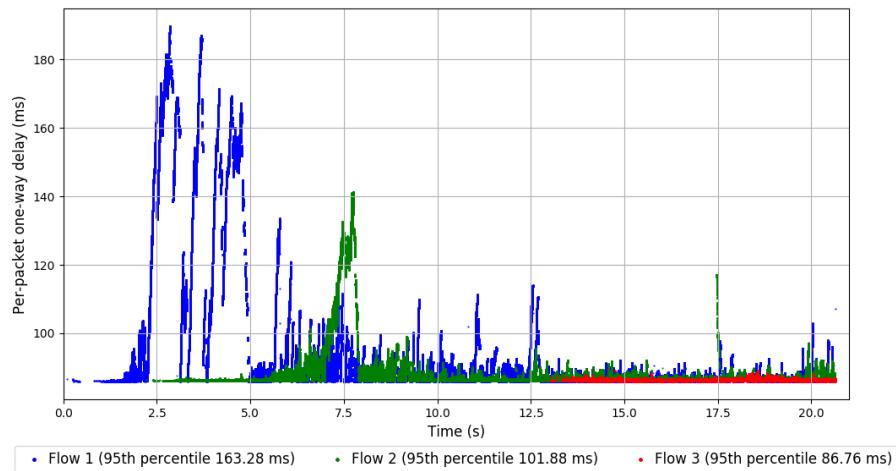
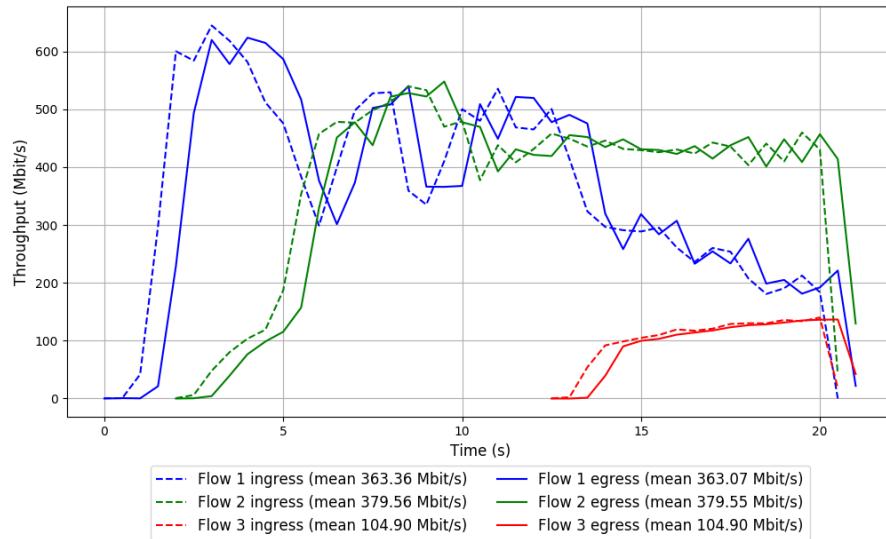
Start at: 2019-02-05 05:44:46

End at: 2019-02-05 05:45:16

Local clock offset: 0.295 ms

Remote clock offset: -0.106 ms

Run 1: Report of Indigo-MusesC5 — Data Link

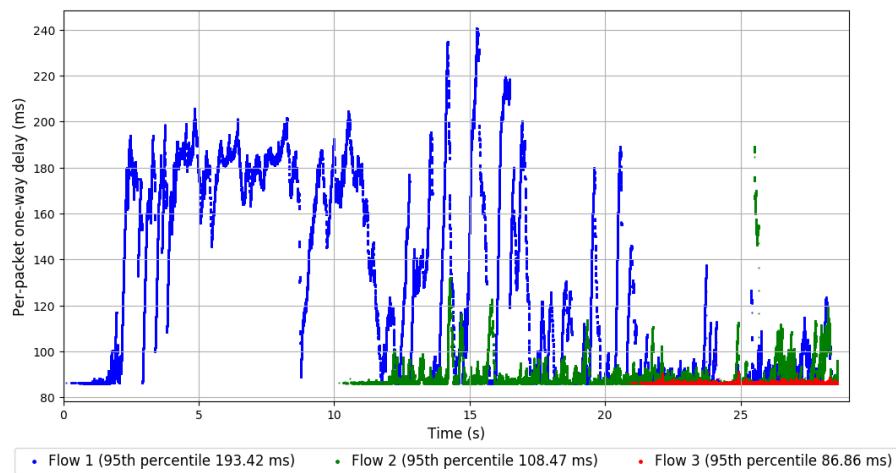
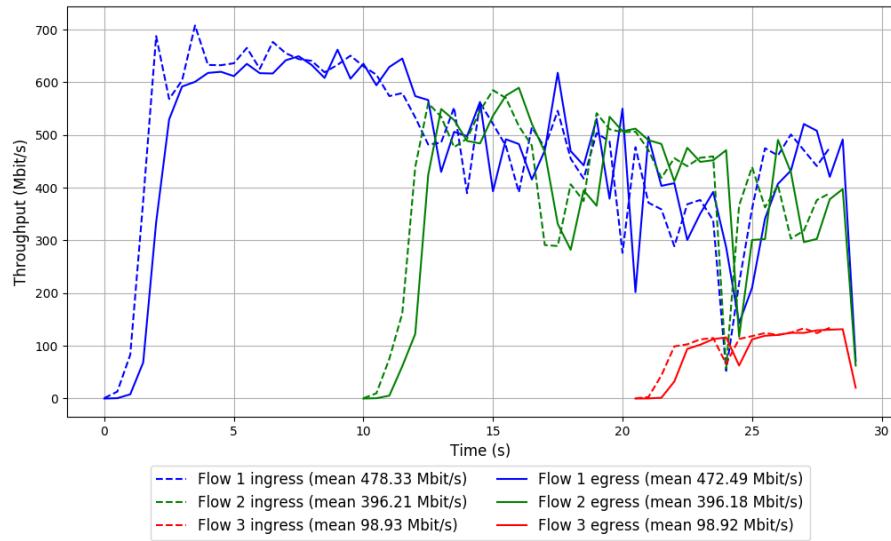


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 06:21:30
End at: 2019-02-05 06:22:00
Local clock offset: 0.083 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-02-05 10:44:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 755.53 Mbit/s
95th percentile per-packet one-way delay: 188.971 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 472.49 Mbit/s
95th percentile per-packet one-way delay: 193.422 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 396.18 Mbit/s
95th percentile per-packet one-way delay: 108.466 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 98.92 Mbit/s
95th percentile per-packet one-way delay: 86.865 ms
Loss rate: 0.01%
```

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

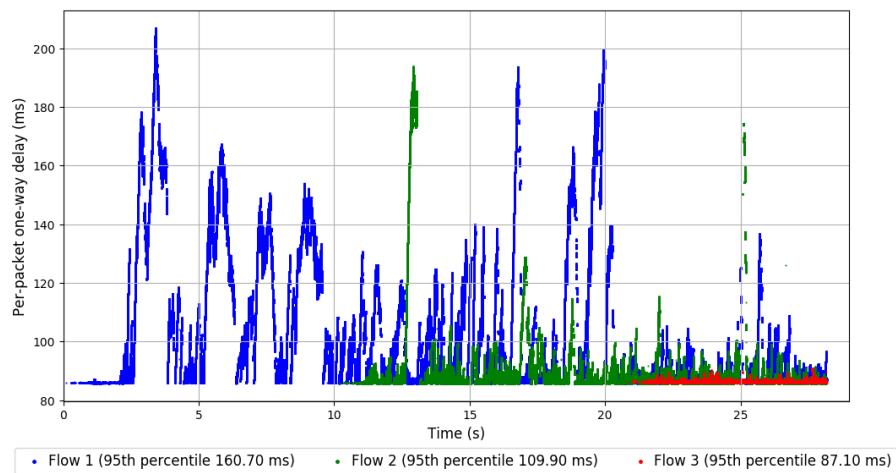
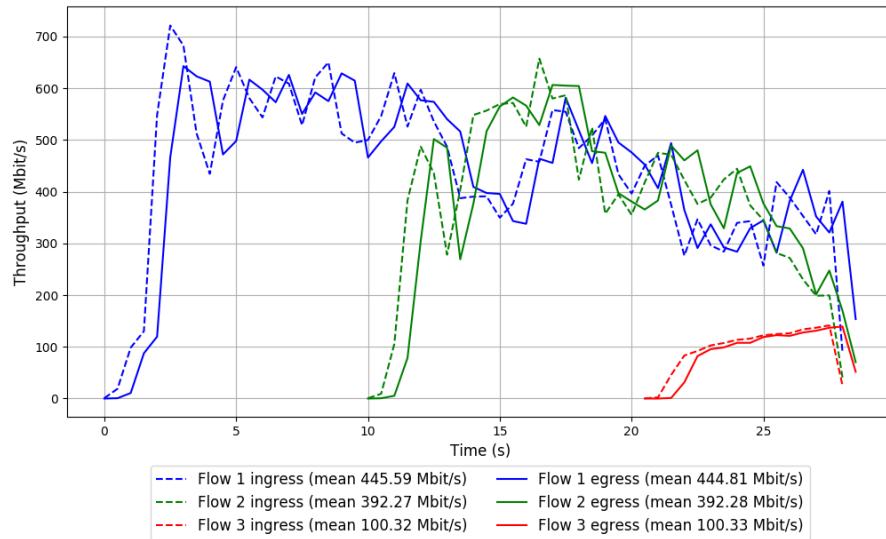


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 06:59:08
End at: 2019-02-05 06:59:38
Local clock offset: 0.43 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-02-05 10:44:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 722.19 Mbit/s
95th percentile per-packet one-way delay: 156.430 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 444.81 Mbit/s
95th percentile per-packet one-way delay: 160.703 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 392.28 Mbit/s
95th percentile per-packet one-way delay: 109.899 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.33 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.00%
```

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

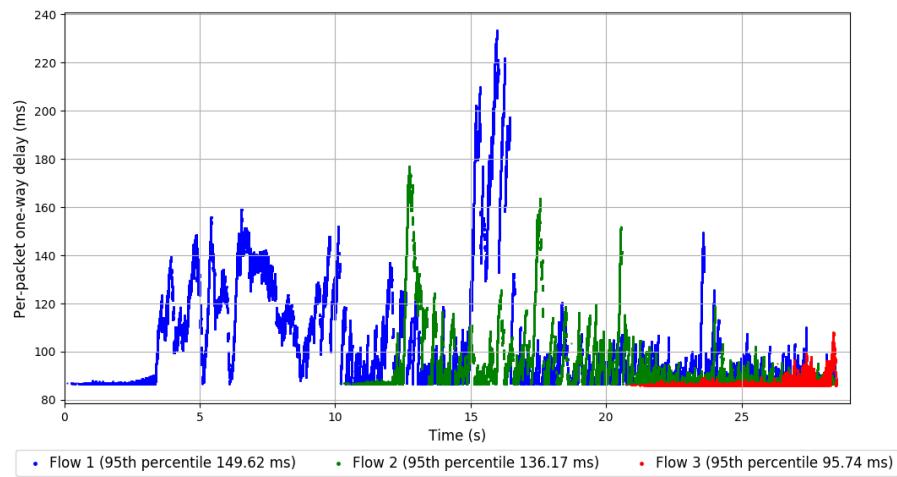
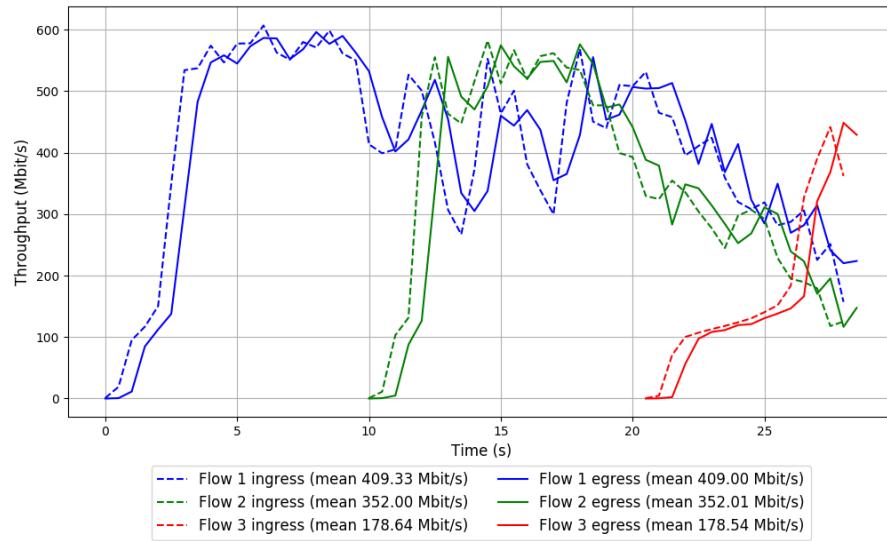


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 07:36:43
End at: 2019-02-05 07:37:13
Local clock offset: -0.028 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-02-05 10:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.68 Mbit/s
95th percentile per-packet one-way delay: 145.025 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 409.00 Mbit/s
95th percentile per-packet one-way delay: 149.618 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 352.01 Mbit/s
95th percentile per-packet one-way delay: 136.169 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 178.54 Mbit/s
95th percentile per-packet one-way delay: 95.742 ms
Loss rate: 0.03%
```

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

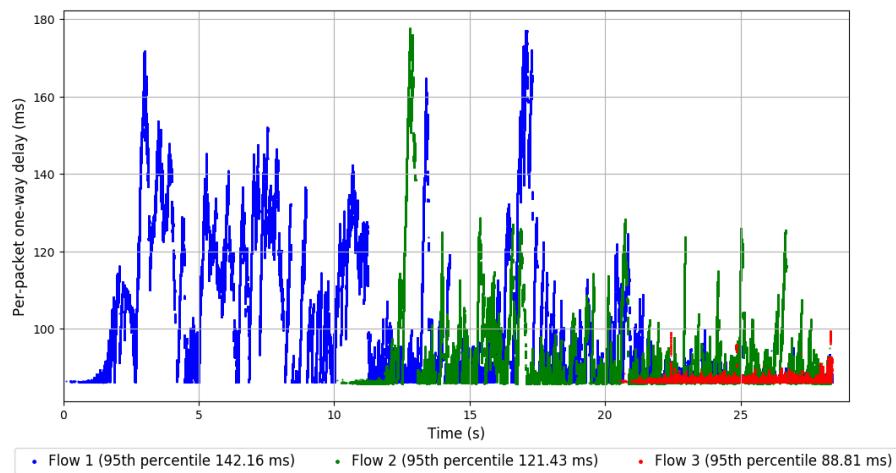
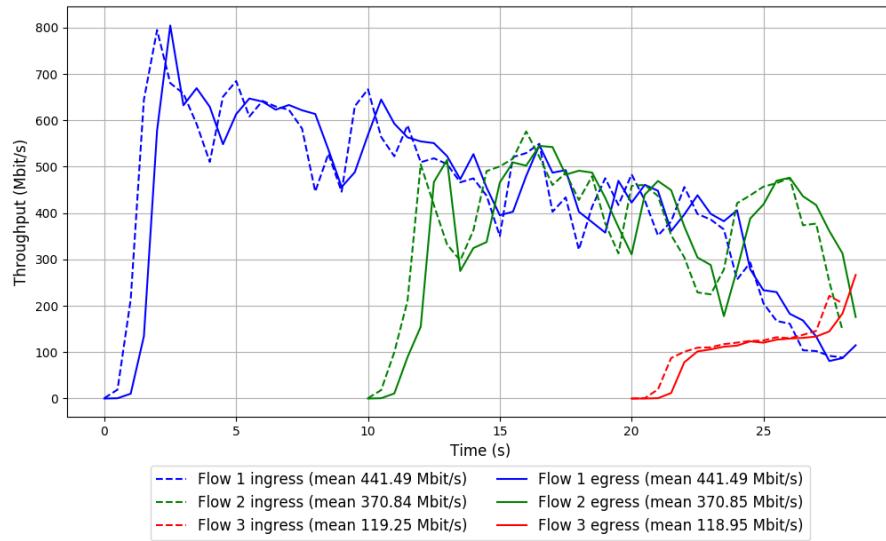


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 08:14:16
End at: 2019-02-05 08:14:46
Local clock offset: 0.037 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-02-05 10:49:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 714.27 Mbit/s
95th percentile per-packet one-way delay: 138.947 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 441.49 Mbit/s
95th percentile per-packet one-way delay: 142.163 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 370.85 Mbit/s
95th percentile per-packet one-way delay: 121.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.95 Mbit/s
95th percentile per-packet one-way delay: 88.814 ms
Loss rate: 0.25%
```

Run 5: Report of Indigo-MusesC5 — Data Link

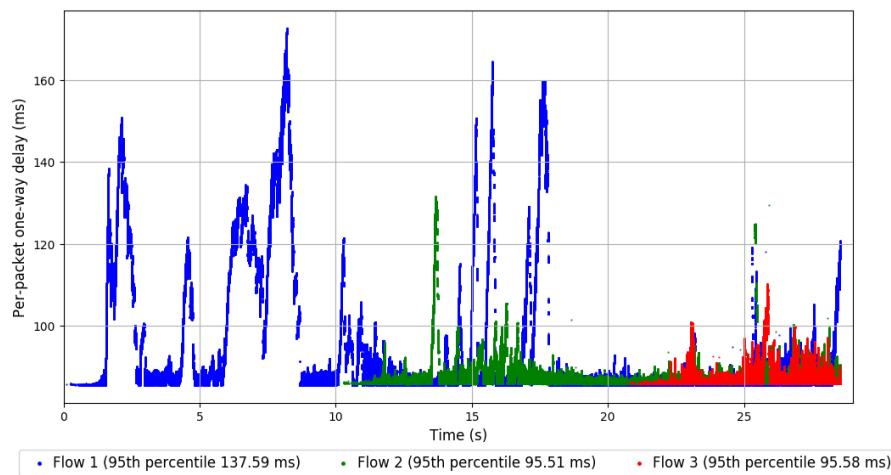
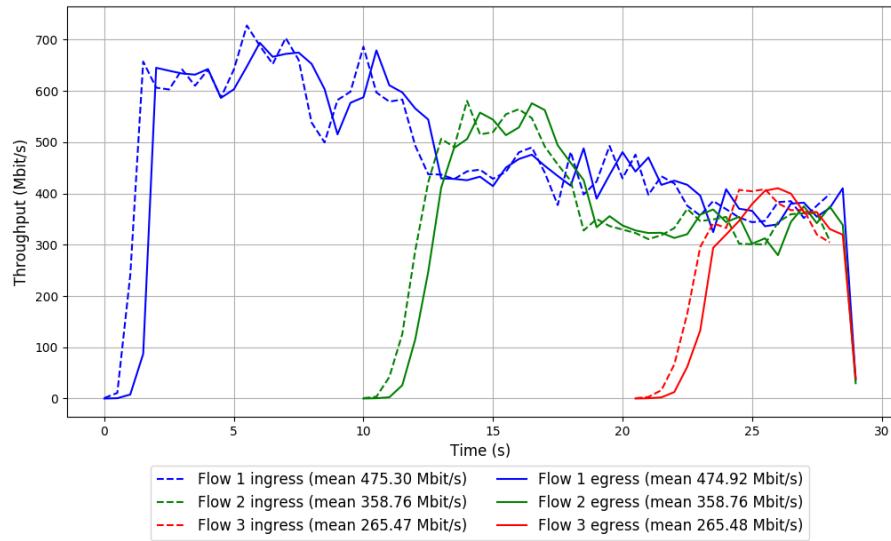


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 05:54:37
End at: 2019-02-05 05:55:07
Local clock offset: 0.377 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-02-05 10:56:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 780.59 Mbit/s
95th percentile per-packet one-way delay: 128.677 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 474.92 Mbit/s
95th percentile per-packet one-way delay: 137.590 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 358.76 Mbit/s
95th percentile per-packet one-way delay: 95.511 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 265.48 Mbit/s
95th percentile per-packet one-way delay: 95.579 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

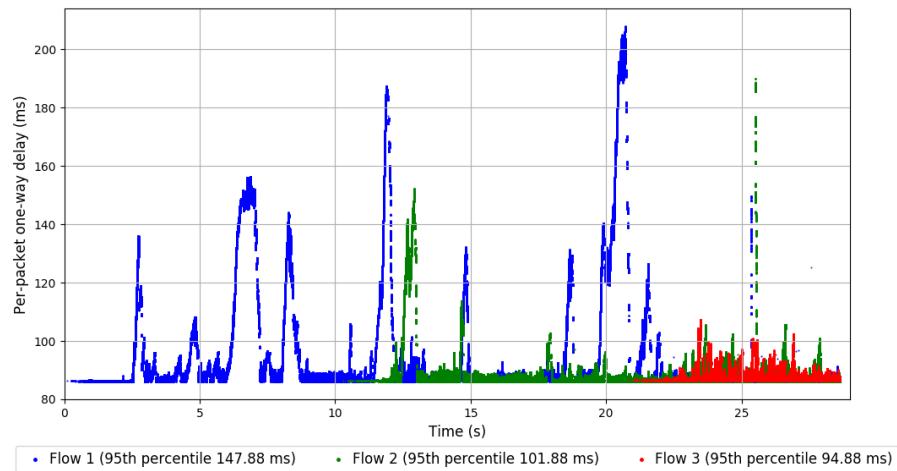
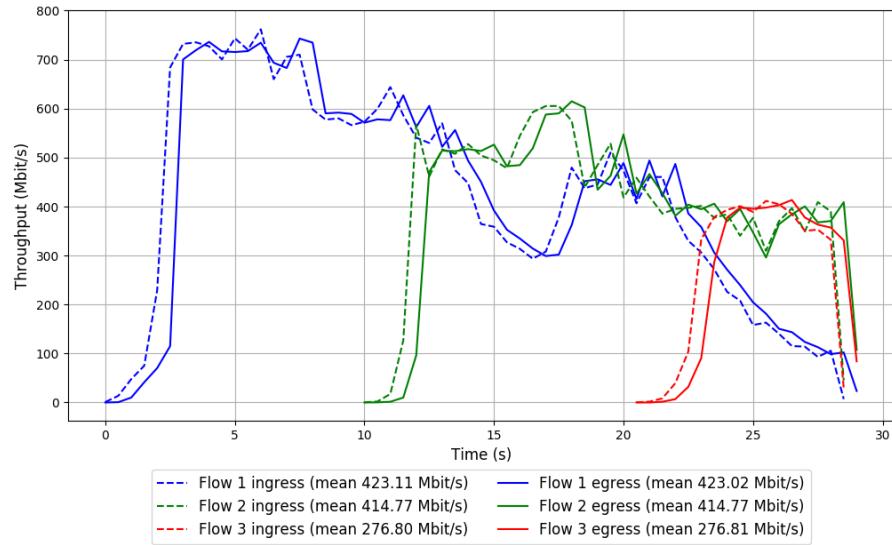


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 06:31:44
End at: 2019-02-05 06:32:14
Local clock offset: 0.159 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-02-05 11:00:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.77 Mbit/s
95th percentile per-packet one-way delay: 135.503 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 423.02 Mbit/s
95th percentile per-packet one-way delay: 147.883 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 414.77 Mbit/s
95th percentile per-packet one-way delay: 101.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 276.81 Mbit/s
95th percentile per-packet one-way delay: 94.883 ms
Loss rate: 0.00%
```

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

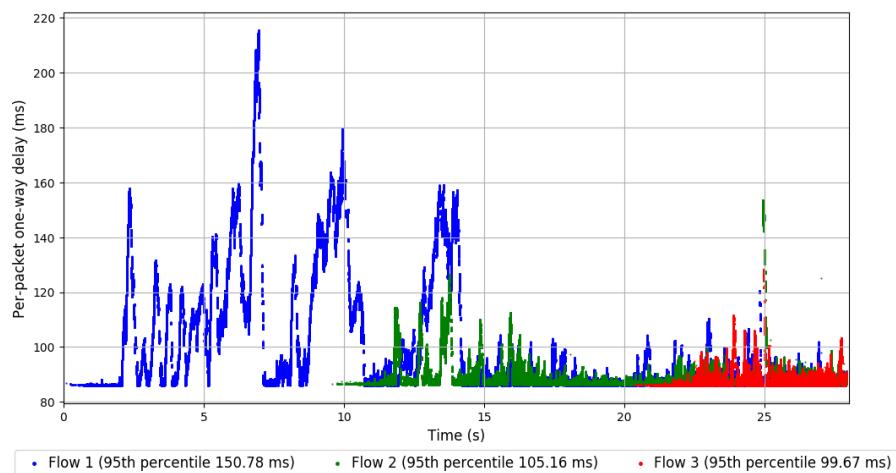
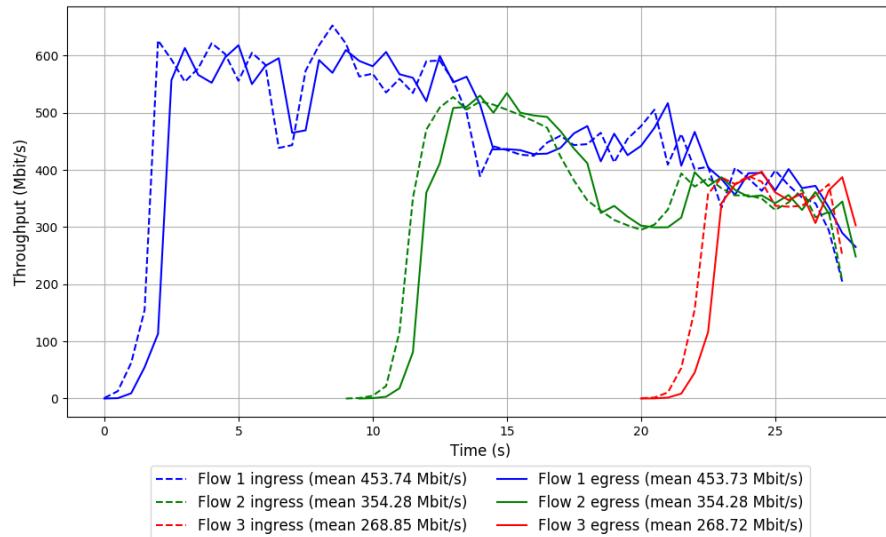


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 07:09:39
End at: 2019-02-05 07:10:09
Local clock offset: -0.15 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-02-05 11:00:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 760.85 Mbit/s
95th percentile per-packet one-way delay: 144.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 453.73 Mbit/s
95th percentile per-packet one-way delay: 150.775 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 354.28 Mbit/s
95th percentile per-packet one-way delay: 105.164 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 268.72 Mbit/s
95th percentile per-packet one-way delay: 99.665 ms
Loss rate: 0.02%
```

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

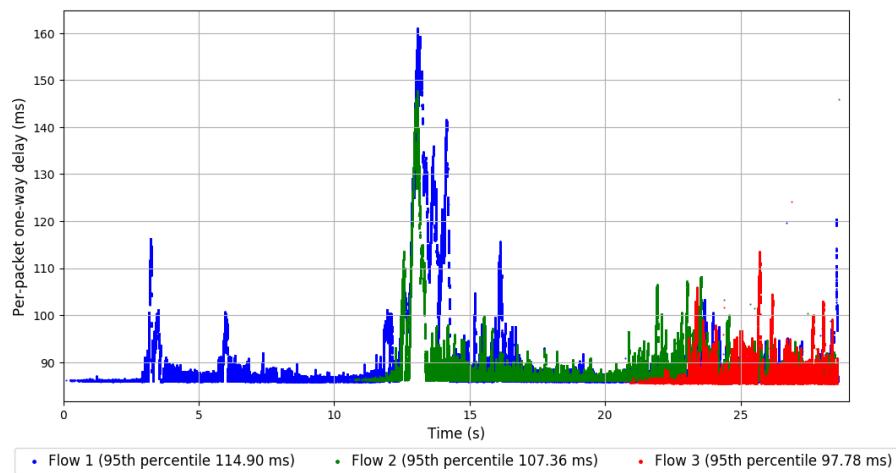
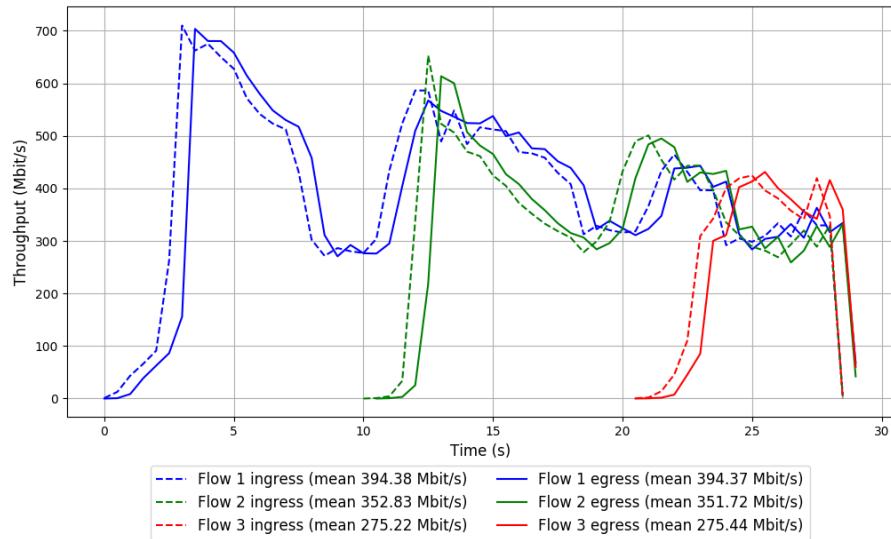


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 07:46:49
End at: 2019-02-05 07:47:19
Local clock offset: 0.378 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-02-05 11:00:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 691.75 Mbit/s
95th percentile per-packet one-way delay: 110.833 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 394.37 Mbit/s
95th percentile per-packet one-way delay: 114.897 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.72 Mbit/s
95th percentile per-packet one-way delay: 107.364 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 275.44 Mbit/s
95th percentile per-packet one-way delay: 97.783 ms
Loss rate: 0.00%
```

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

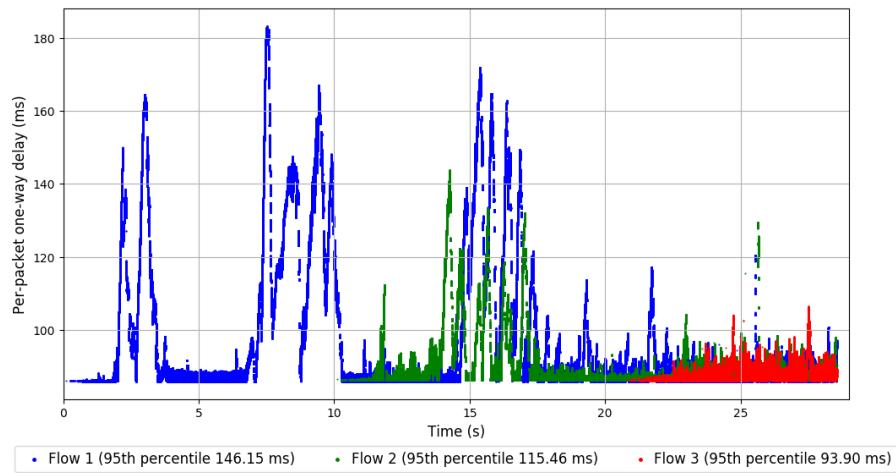
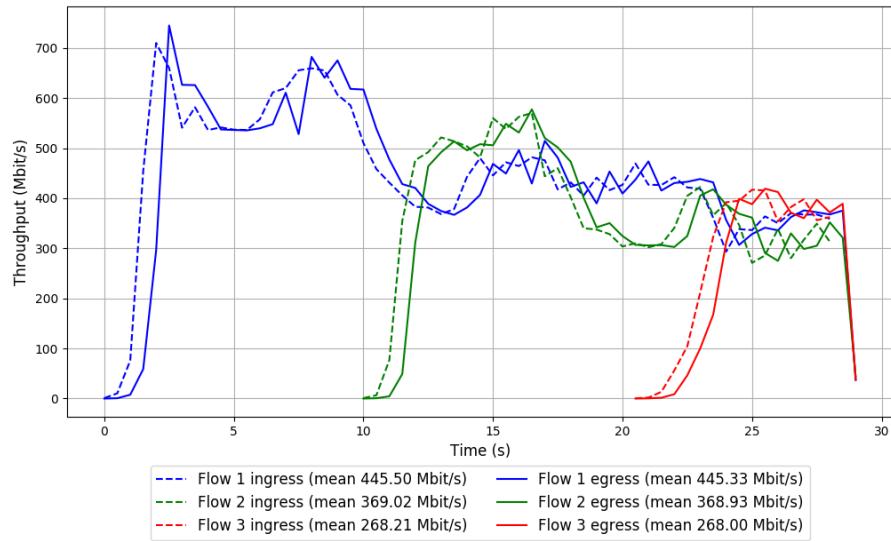


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 08:24:25
End at: 2019-02-05 08:24:55
Local clock offset: 0.154 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-02-05 11:01:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 757.83 Mbit/s
95th percentile per-packet one-way delay: 139.964 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 445.33 Mbit/s
95th percentile per-packet one-way delay: 146.151 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 368.93 Mbit/s
95th percentile per-packet one-way delay: 115.457 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 268.00 Mbit/s
95th percentile per-packet one-way delay: 93.901 ms
Loss rate: 0.08%
```

Run 5: Report of Indigo-MusesD — Data Link

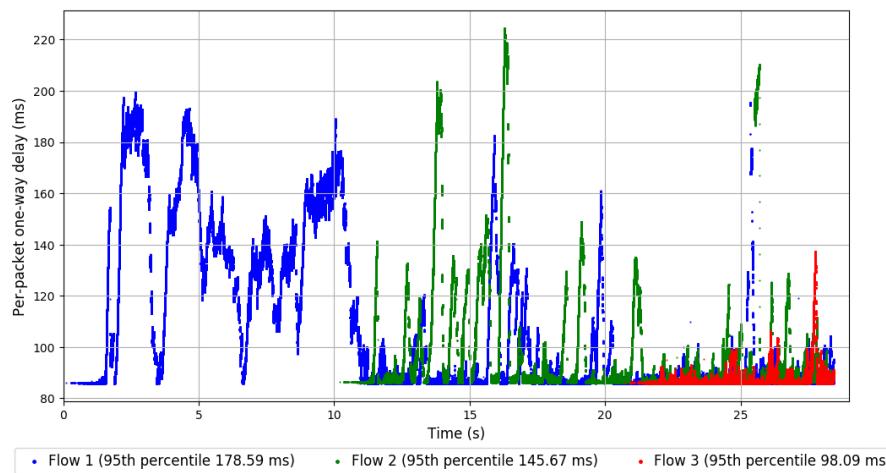
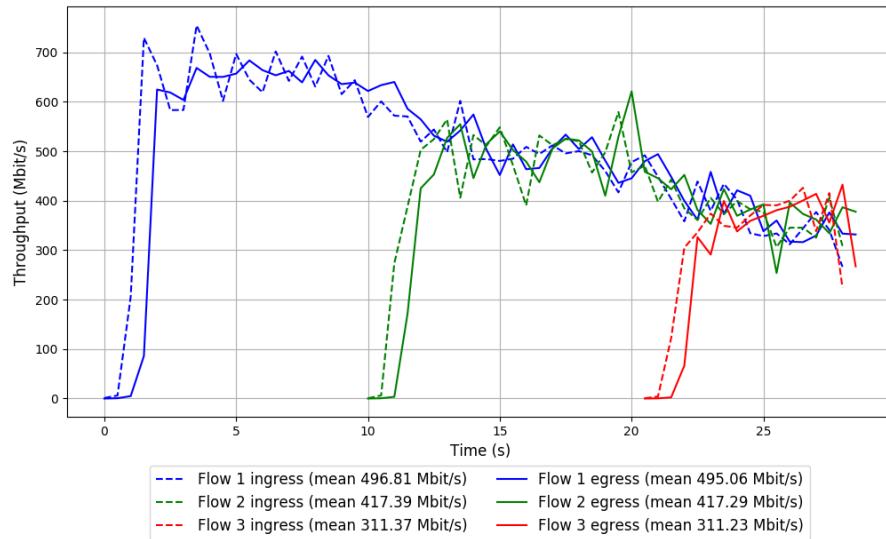


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 06:05:18
End at: 2019-02-05 06:05:48
Local clock offset: 0.003 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-02-05 11:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 848.08 Mbit/s
95th percentile per-packet one-way delay: 173.975 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 495.06 Mbit/s
95th percentile per-packet one-way delay: 178.587 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 417.29 Mbit/s
95th percentile per-packet one-way delay: 145.674 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 311.23 Mbit/s
95th percentile per-packet one-way delay: 98.089 ms
Loss rate: 0.03%
```

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

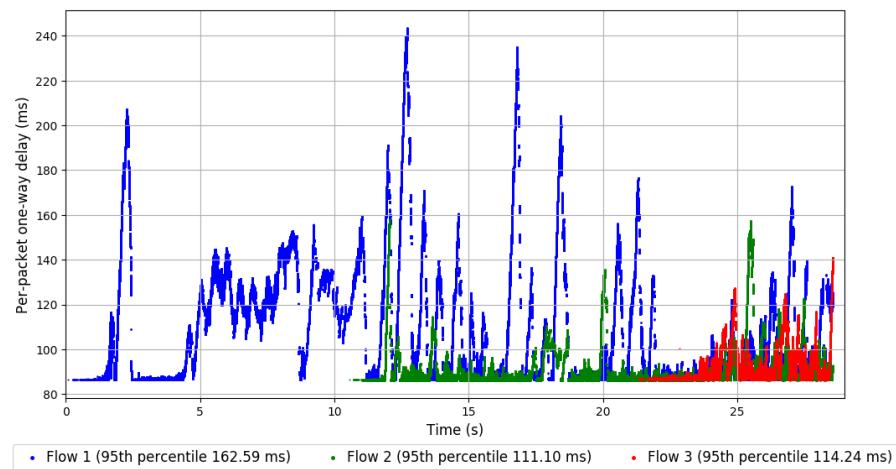
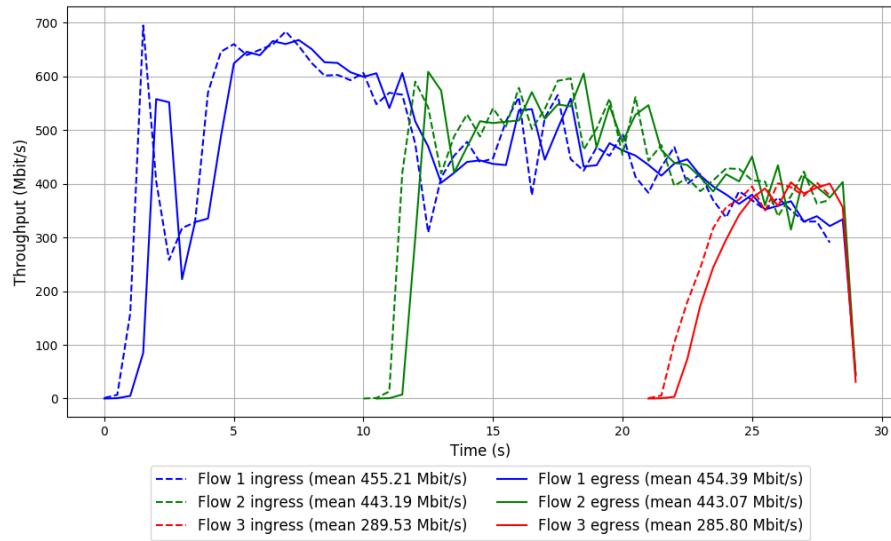


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 06:42:30
End at: 2019-02-05 06:43:00
Local clock offset: -0.022 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-02-05 11:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 808.71 Mbit/s
95th percentile per-packet one-way delay: 147.999 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 454.39 Mbit/s
95th percentile per-packet one-way delay: 162.588 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 443.07 Mbit/s
95th percentile per-packet one-way delay: 111.096 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 285.80 Mbit/s
95th percentile per-packet one-way delay: 114.239 ms
Loss rate: 1.24%
```

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

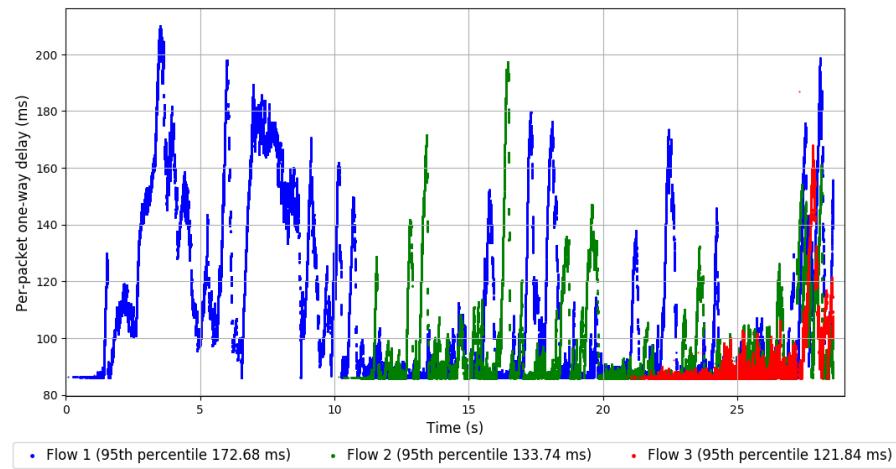
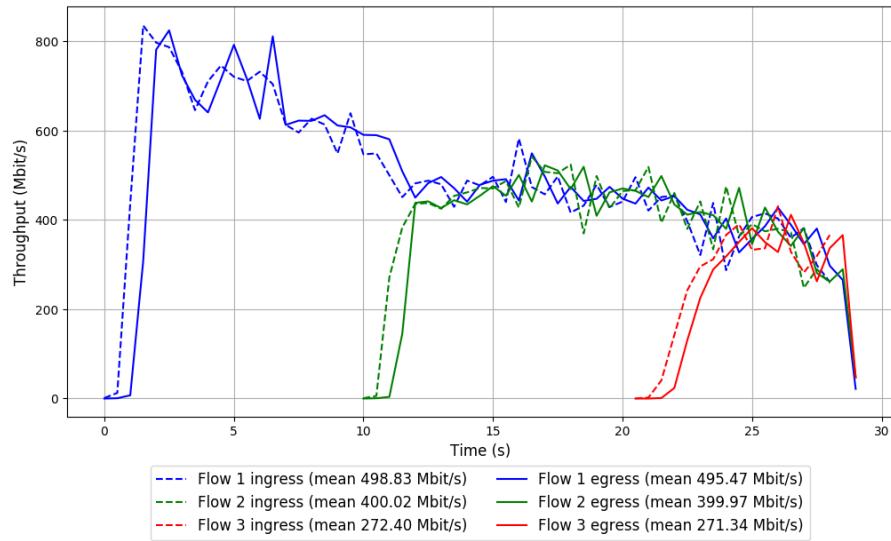


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 07:20:32
End at: 2019-02-05 07:21:02
Local clock offset: 0.37 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-02-05 11:08:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 827.18 Mbit/s
95th percentile per-packet one-way delay: 168.125 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 495.47 Mbit/s
95th percentile per-packet one-way delay: 172.678 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 399.97 Mbit/s
95th percentile per-packet one-way delay: 133.743 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 271.34 Mbit/s
95th percentile per-packet one-way delay: 121.842 ms
Loss rate: 0.40%
```

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

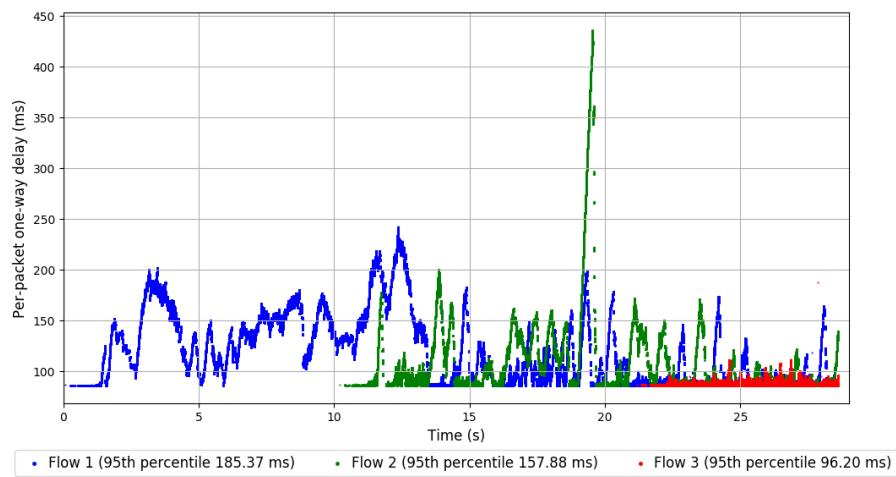
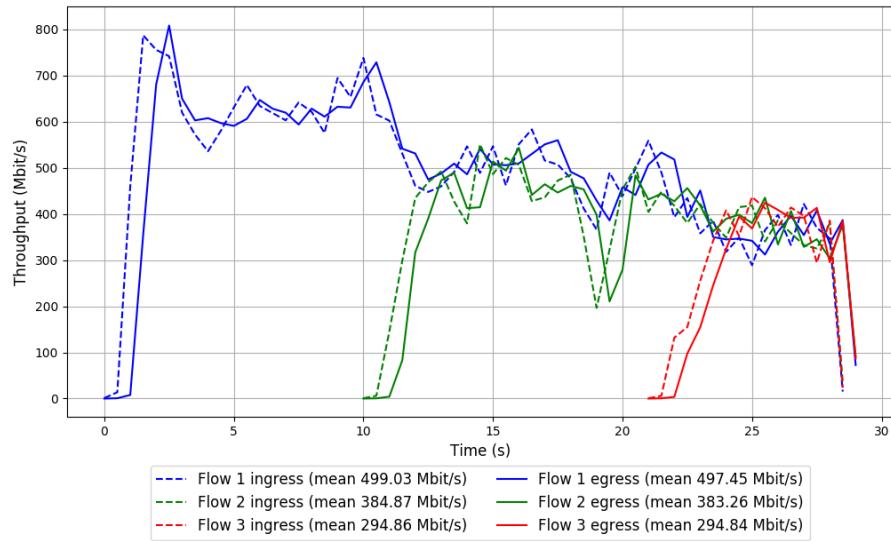


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 07:57:31
End at: 2019-02-05 07:58:01
Local clock offset: 0.448 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-02-05 11:14:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 821.40 Mbit/s
95th percentile per-packet one-way delay: 178.059 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 497.45 Mbit/s
95th percentile per-packet one-way delay: 185.367 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 383.26 Mbit/s
95th percentile per-packet one-way delay: 157.885 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 294.84 Mbit/s
95th percentile per-packet one-way delay: 96.203 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

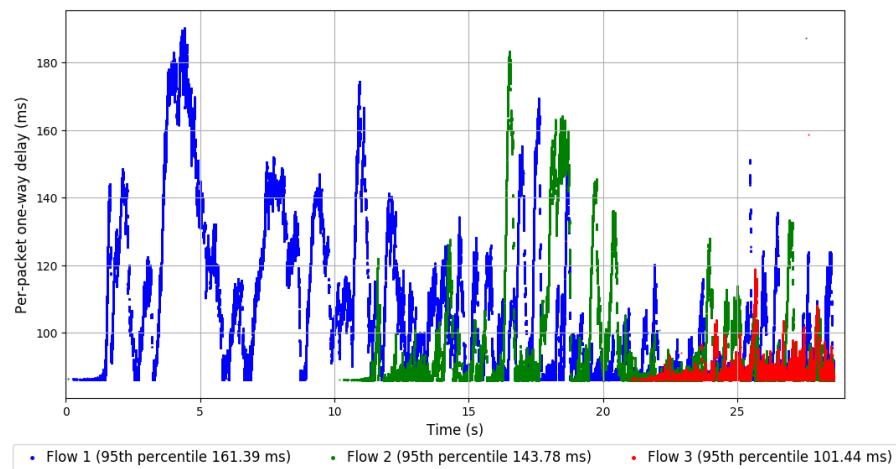
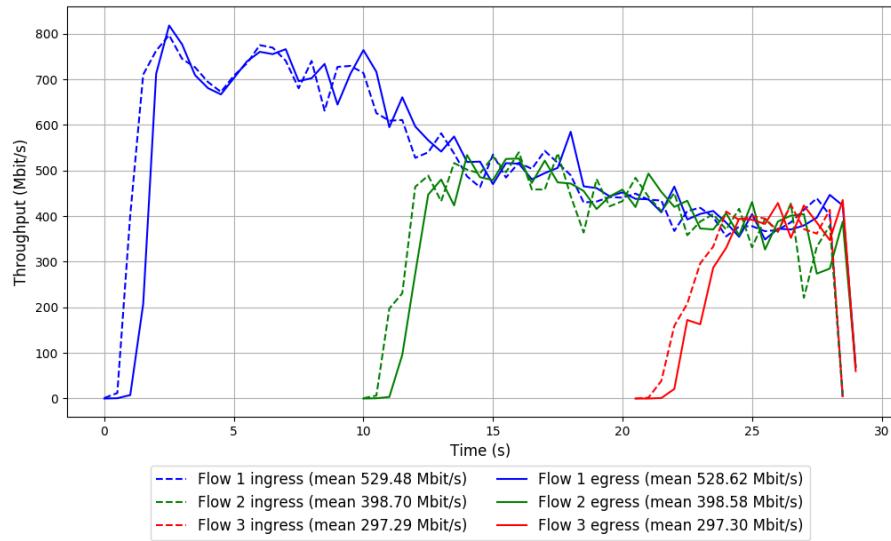


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 08:35:20
End at: 2019-02-05 08:35:50
Local clock offset: 0.227 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 866.30 Mbit/s
95th percentile per-packet one-way delay: 151.569 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 528.62 Mbit/s
95th percentile per-packet one-way delay: 161.387 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 398.58 Mbit/s
95th percentile per-packet one-way delay: 143.784 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 297.30 Mbit/s
95th percentile per-packet one-way delay: 101.445 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

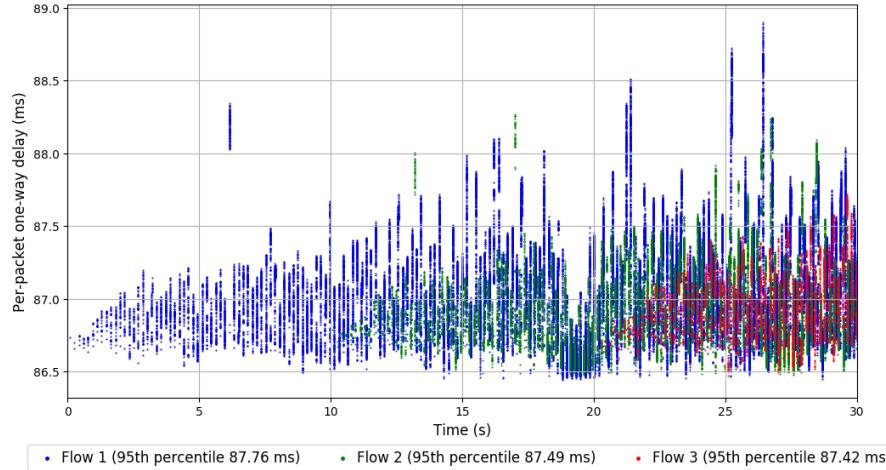
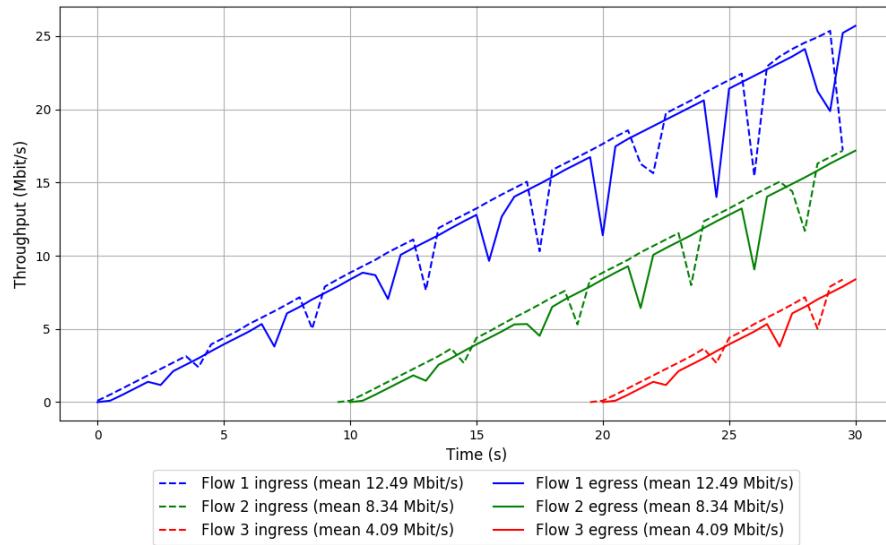


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-05 05:58:06
End at: 2019-02-05 05:58:36
Local clock offset: -0.268 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.35 Mbit/s
95th percentile per-packet one-way delay: 87.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.49 Mbit/s
95th percentile per-packet one-way delay: 87.759 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 87.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 87.424 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

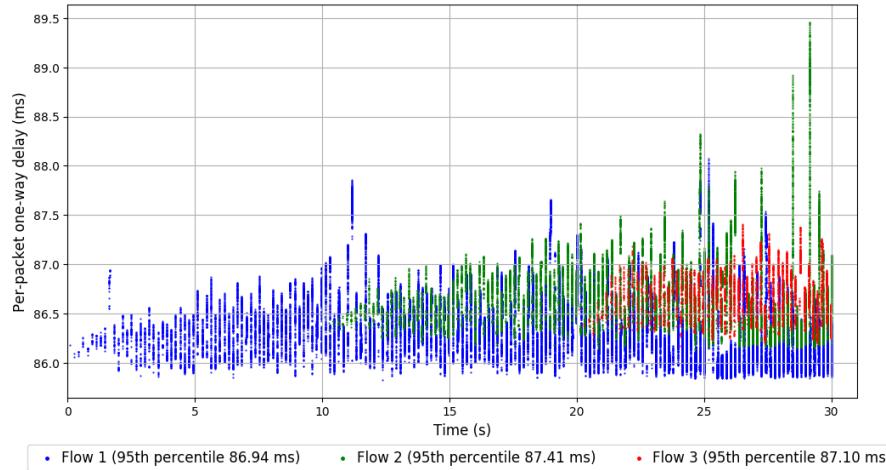
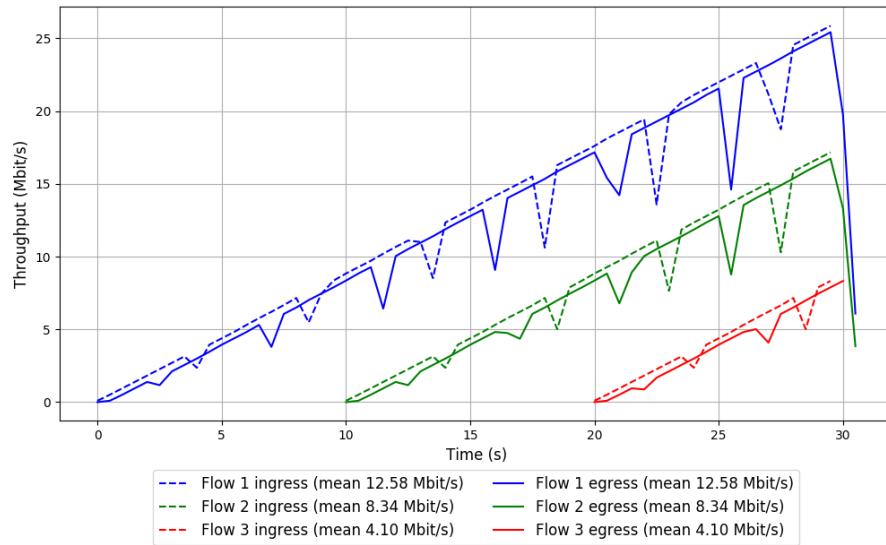


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-05 06:35:19
End at: 2019-02-05 06:35:49
Local clock offset: 0.048 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 87.129 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 86.935 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 87.413 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 87.100 ms
Loss rate: 0.00%
```

## Run 2: Report of LEDBAT — Data Link

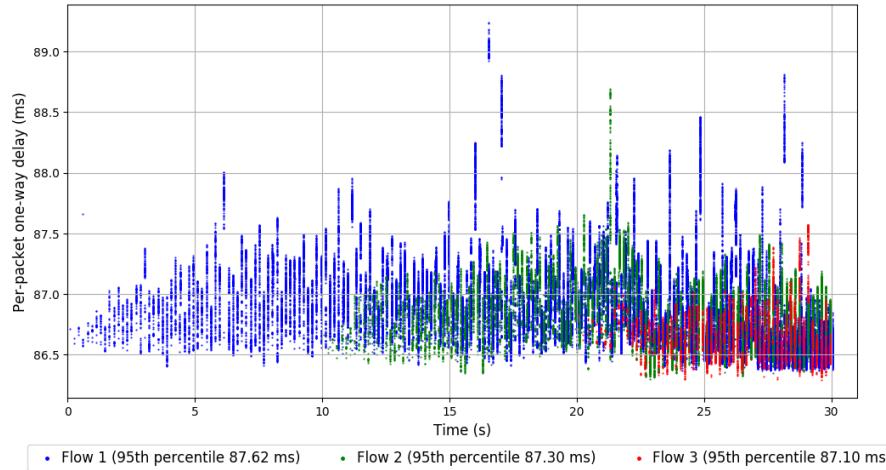
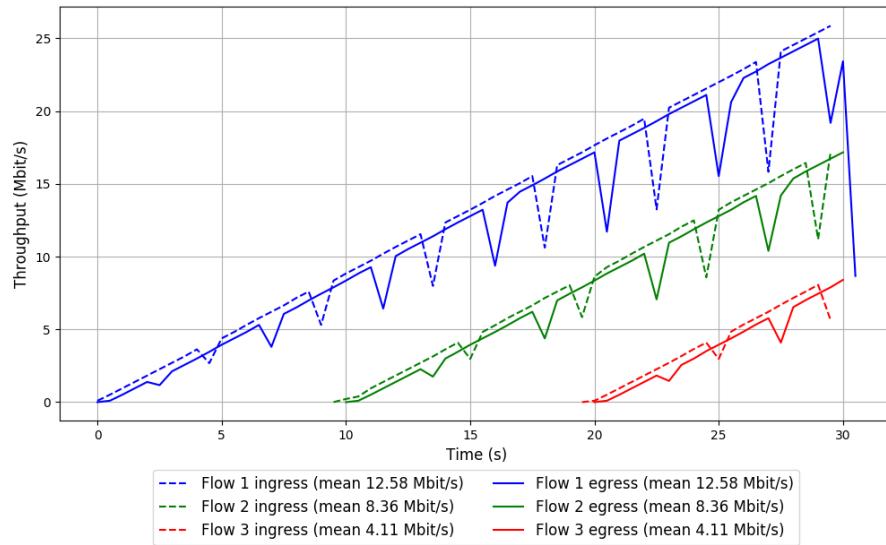


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-05 07:13:14
End at: 2019-02-05 07:13:44
Local clock offset: -0.126 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 87.482 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 87.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 87.296 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 87.097 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

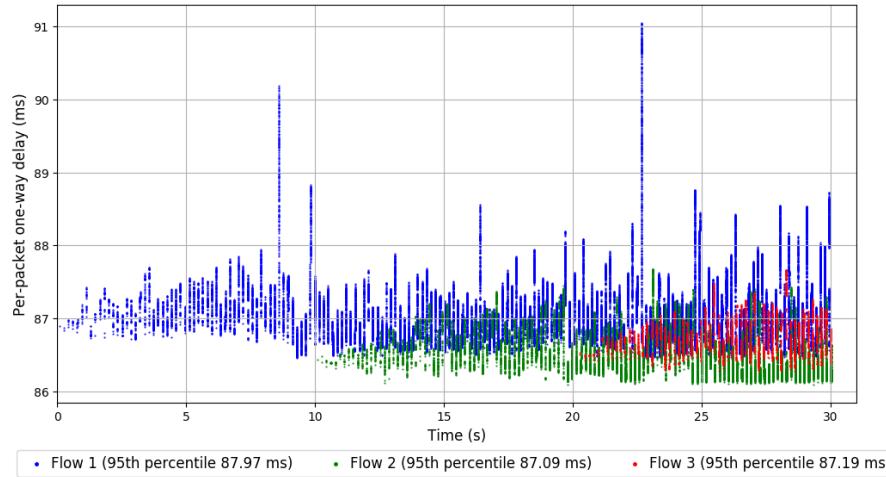
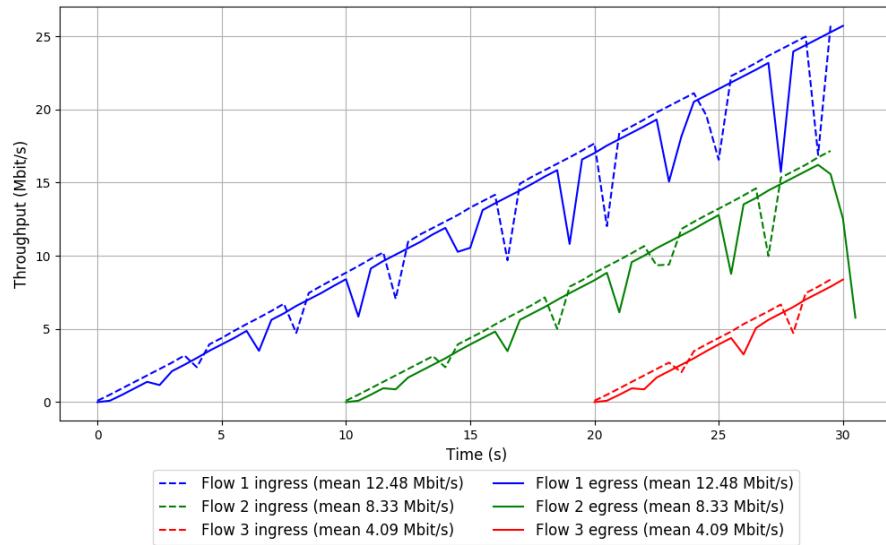


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-05 07:50:14
End at: 2019-02-05 07:50:44
Local clock offset: 0.003 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.35 Mbit/s
95th percentile per-packet one-way delay: 87.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 87.968 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 87.086 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 87.187 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

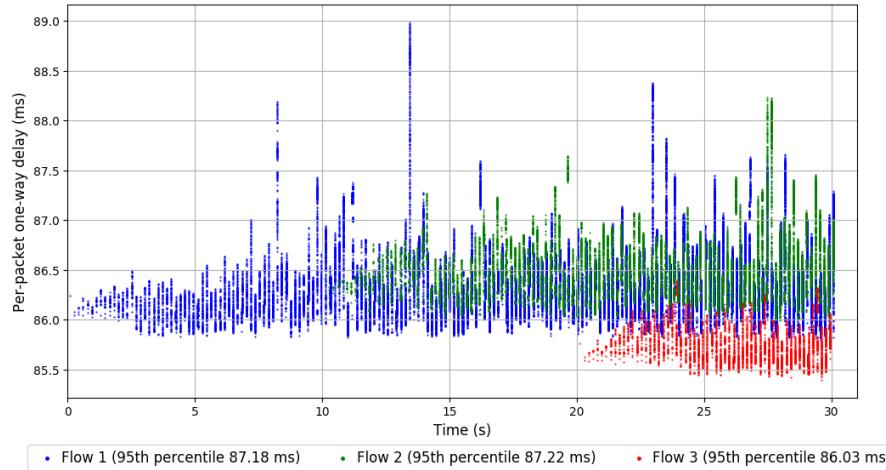
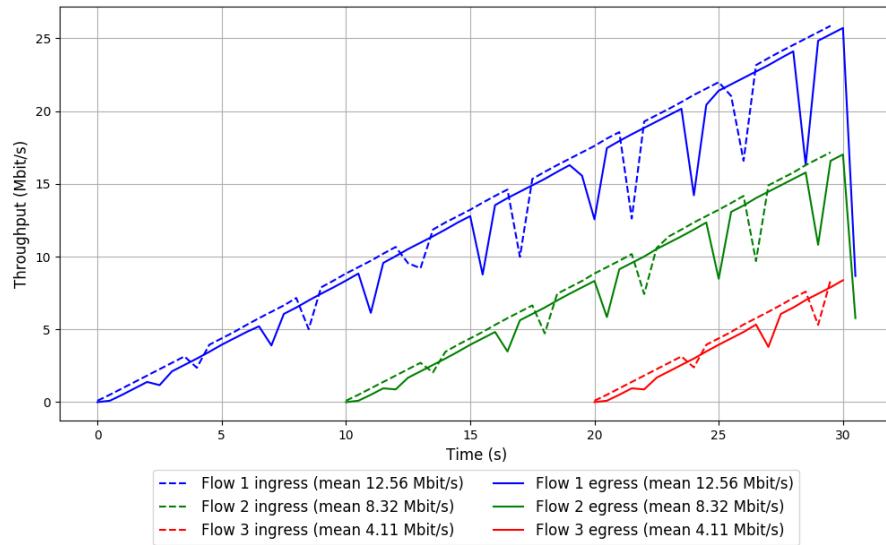


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-05 08:27:57
End at: 2019-02-05 08:28:27
Local clock offset: 0.437 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2019-02-05 11:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.44 Mbit/s
95th percentile per-packet one-way delay: 87.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 87.178 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 87.219 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 86.033 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

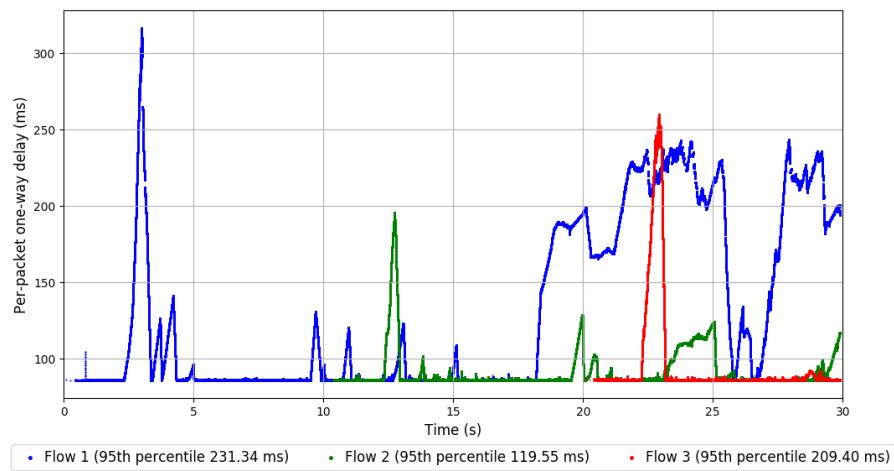
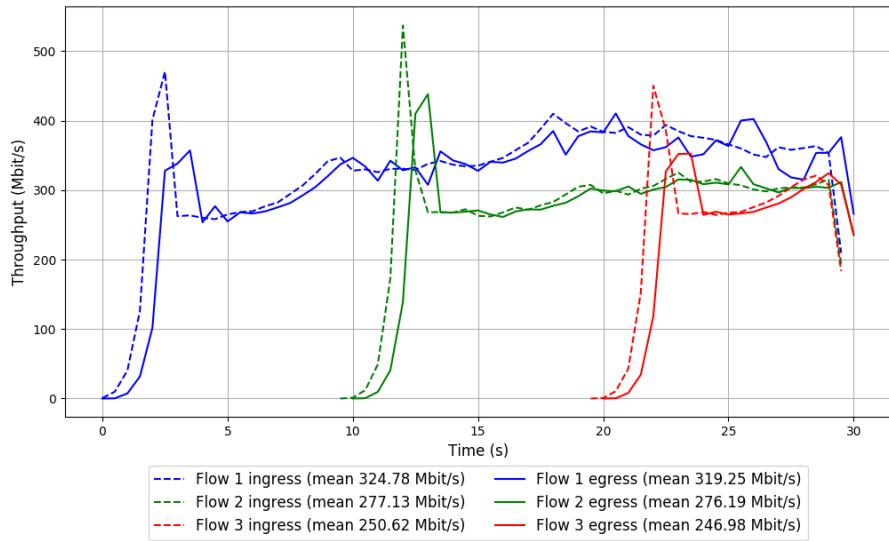


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-05 06:16:05
End at: 2019-02-05 06:16:35
Local clock offset: 0.235 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-02-05 11:28:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.64 Mbit/s
95th percentile per-packet one-way delay: 226.575 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 319.25 Mbit/s
95th percentile per-packet one-way delay: 231.343 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 276.19 Mbit/s
95th percentile per-packet one-way delay: 119.551 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 246.98 Mbit/s
95th percentile per-packet one-way delay: 209.400 ms
Loss rate: 1.46%
```

Run 1: Report of PCC-Allegro — Data Link

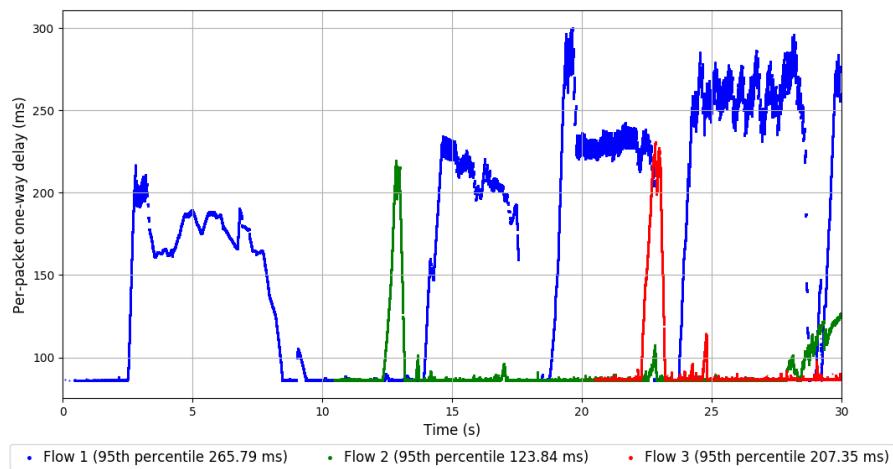
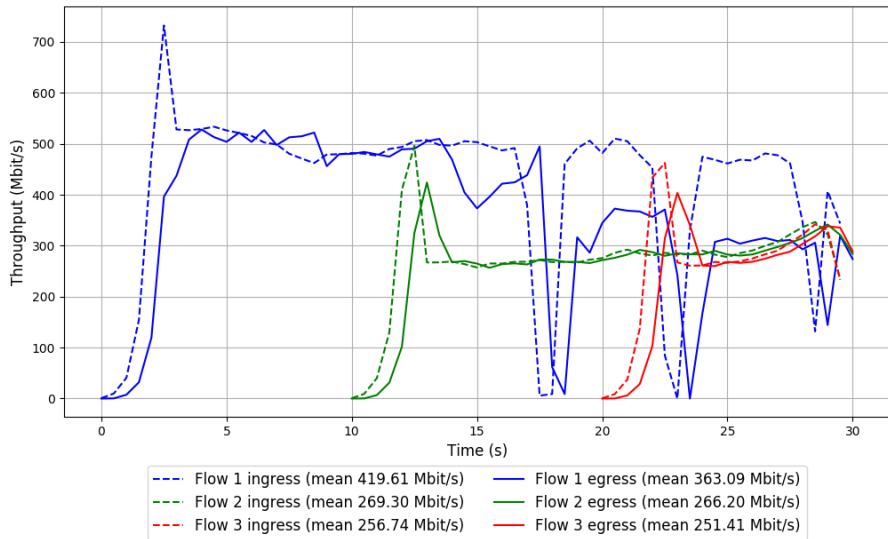


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-05 06:53:40
End at: 2019-02-05 06:54:10
Local clock offset: 0.121 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2019-02-05 11:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 622.88 Mbit/s
95th percentile per-packet one-way delay: 257.076 ms
Loss rate: 8.83%
-- Flow 1:
Average throughput: 363.09 Mbit/s
95th percentile per-packet one-way delay: 265.788 ms
Loss rate: 13.47%
-- Flow 2:
Average throughput: 266.20 Mbit/s
95th percentile per-packet one-way delay: 123.842 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 251.41 Mbit/s
95th percentile per-packet one-way delay: 207.352 ms
Loss rate: 2.08%
```

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

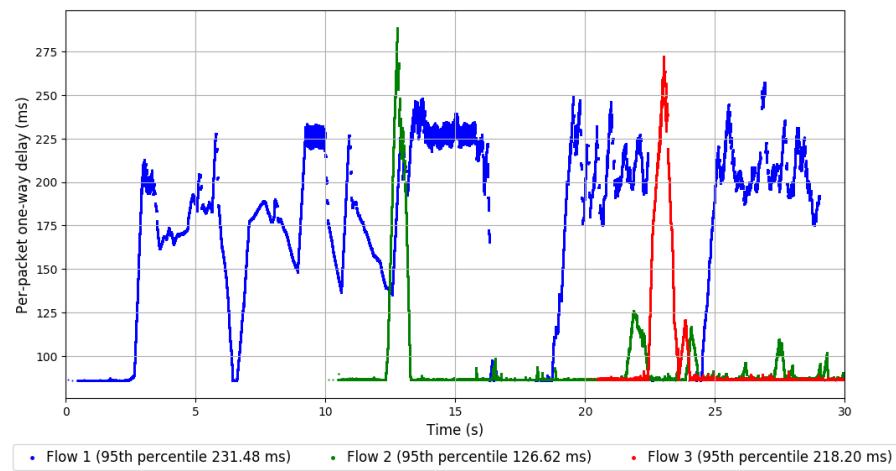
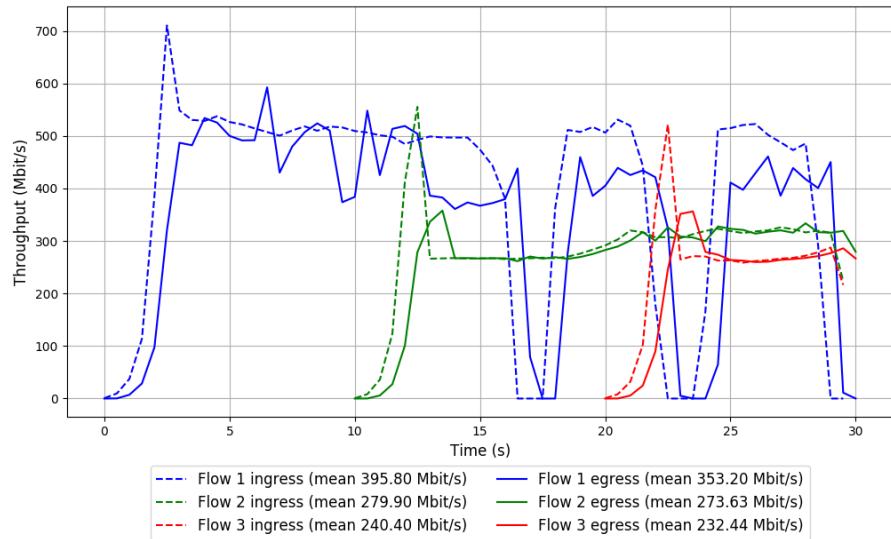


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-05 07:31:26
End at: 2019-02-05 07:31:56
Local clock offset: -0.022 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-02-05 11:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 607.64 Mbit/s
95th percentile per-packet one-way delay: 229.743 ms
Loss rate: 7.45%
-- Flow 1:
Average throughput: 353.20 Mbit/s
95th percentile per-packet one-way delay: 231.476 ms
Loss rate: 10.76%
-- Flow 2:
Average throughput: 273.63 Mbit/s
95th percentile per-packet one-way delay: 126.617 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 232.44 Mbit/s
95th percentile per-packet one-way delay: 218.201 ms
Loss rate: 3.31%
```

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

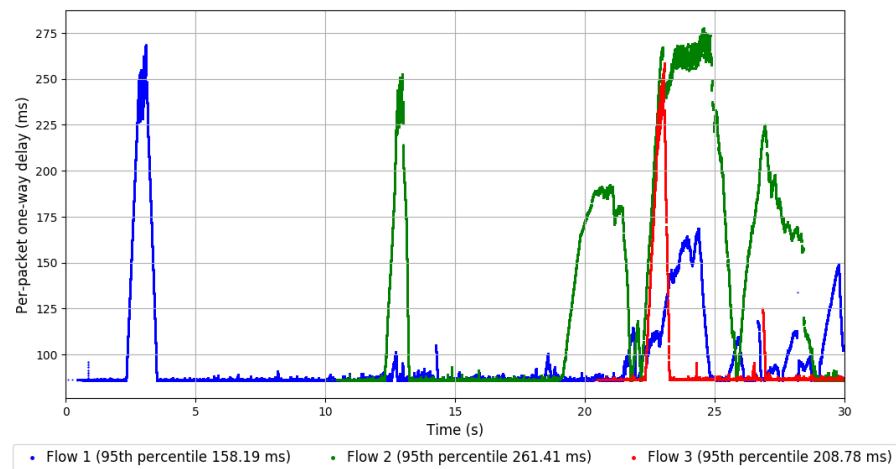
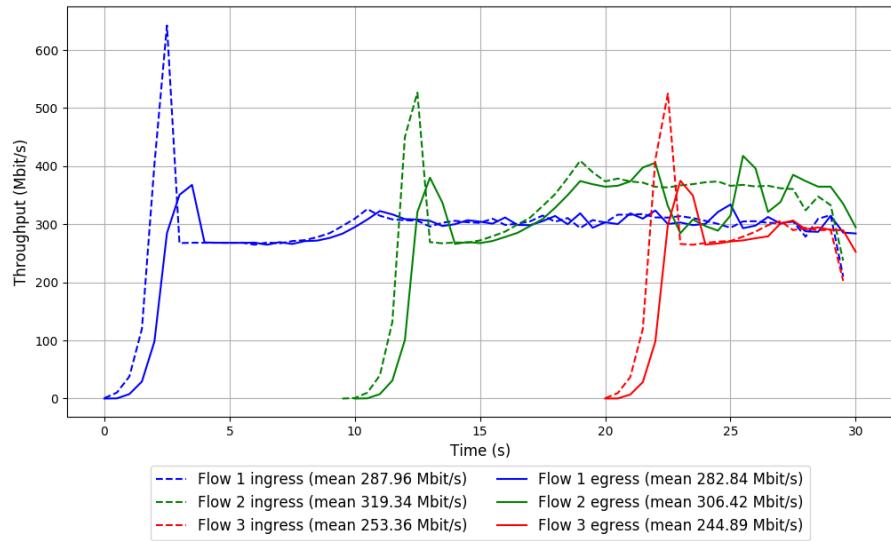


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-05 08:08:51
End at: 2019-02-05 08:09:21
Local clock offset: 0.268 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-02-05 11:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.33 Mbit/s
95th percentile per-packet one-way delay: 234.974 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 282.84 Mbit/s
95th percentile per-packet one-way delay: 158.192 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 306.42 Mbit/s
95th percentile per-packet one-way delay: 261.410 ms
Loss rate: 4.05%
-- Flow 3:
Average throughput: 244.89 Mbit/s
95th percentile per-packet one-way delay: 208.781 ms
Loss rate: 3.35%
```

Run 4: Report of PCC-Allegro — Data Link

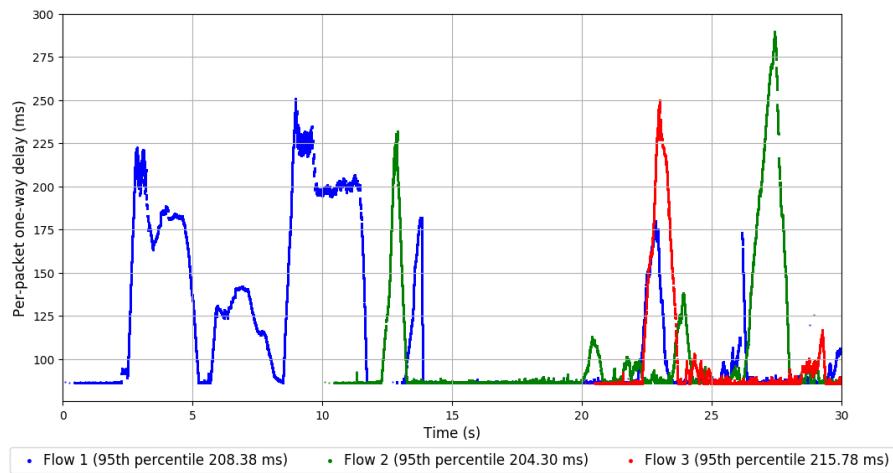
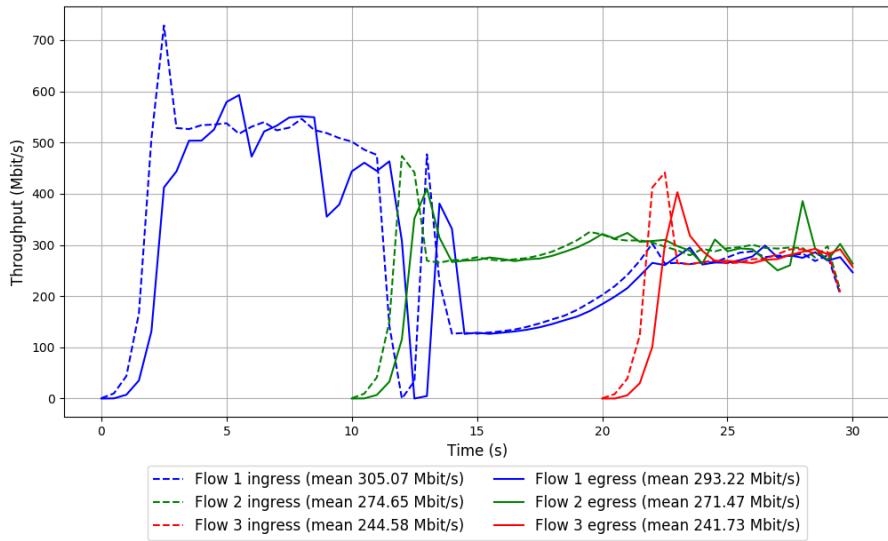


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-05 08:46:30
End at: 2019-02-05 08:47:00
Local clock offset: -0.007 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-02-05 11:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 553.22 Mbit/s
95th percentile per-packet one-way delay: 208.523 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 293.22 Mbit/s
95th percentile per-packet one-way delay: 208.382 ms
Loss rate: 3.88%
-- Flow 2:
Average throughput: 271.47 Mbit/s
95th percentile per-packet one-way delay: 204.301 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 241.73 Mbit/s
95th percentile per-packet one-way delay: 215.783 ms
Loss rate: 1.17%
```

Run 5: Report of PCC-Allegro — Data Link

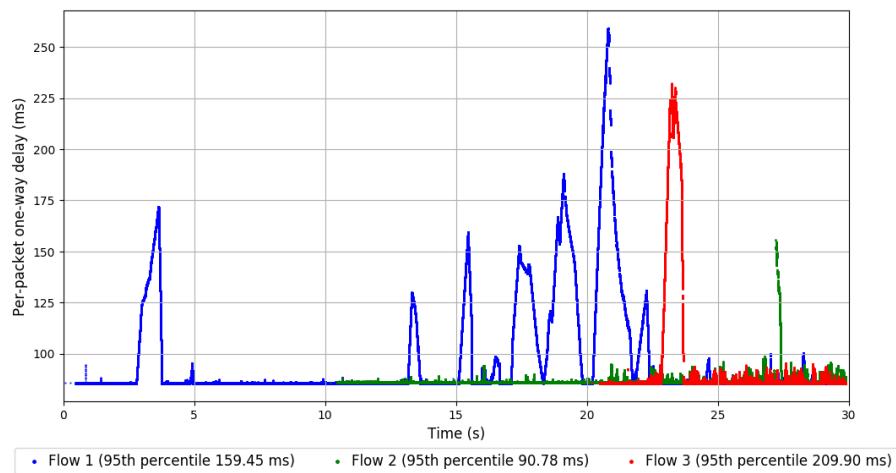
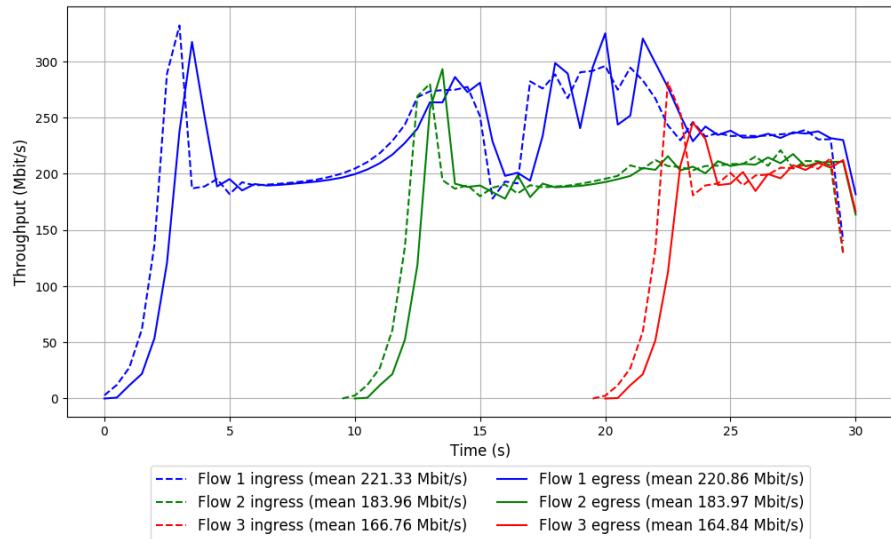


Run 1: Statistics of PCC-Expr

```
Start at: 2019-02-05 06:14:12
End at: 2019-02-05 06:14:42
Local clock offset: 0.45 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-02-05 11:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.01 Mbit/s
95th percentile per-packet one-way delay: 152.977 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 220.86 Mbit/s
95th percentile per-packet one-way delay: 159.454 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 183.97 Mbit/s
95th percentile per-packet one-way delay: 90.782 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.84 Mbit/s
95th percentile per-packet one-way delay: 209.902 ms
Loss rate: 1.15%
```

Run 1: Report of PCC-Expr — Data Link

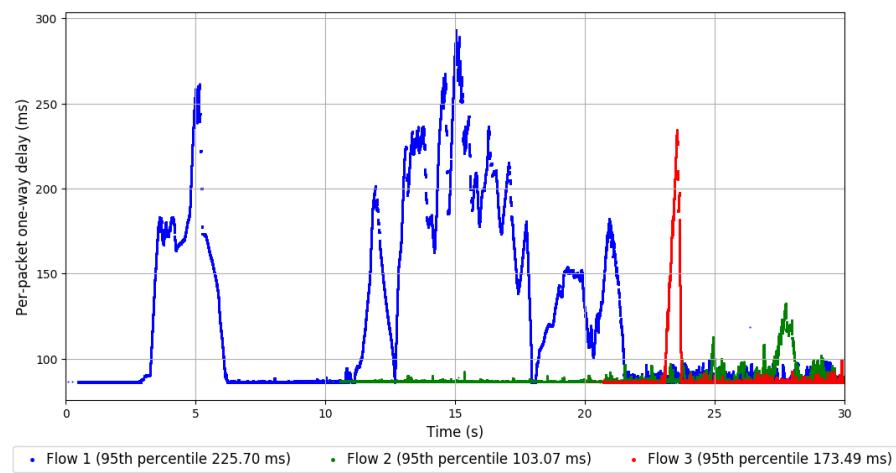
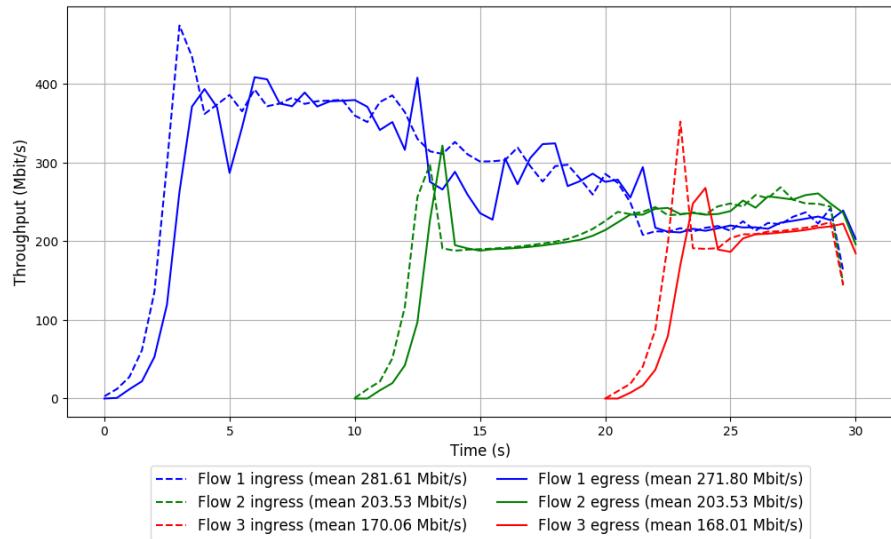


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-05 06:51:39
End at: 2019-02-05 06:52:09
Local clock offset: 0.019 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2019-02-05 11:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.39 Mbit/s
95th percentile per-packet one-way delay: 208.928 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 271.80 Mbit/s
95th percentile per-packet one-way delay: 225.703 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 203.53 Mbit/s
95th percentile per-packet one-way delay: 103.070 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.01 Mbit/s
95th percentile per-packet one-way delay: 173.489 ms
Loss rate: 1.21%
```

Run 2: Report of PCC-Expr — Data Link

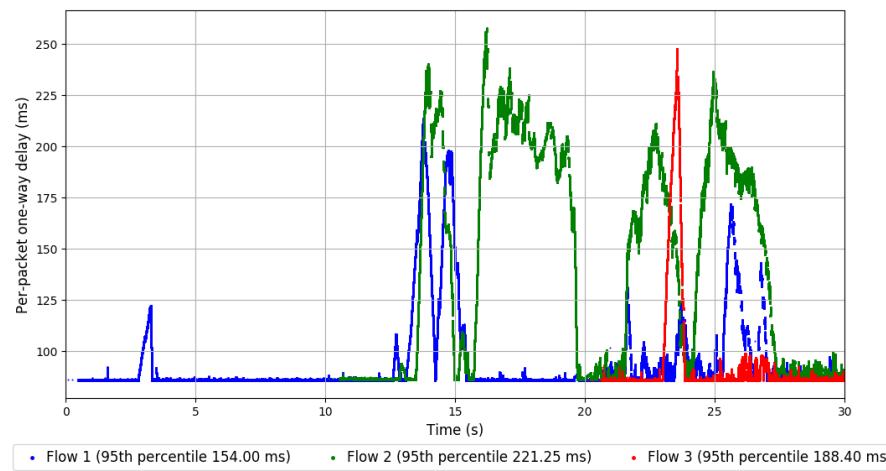
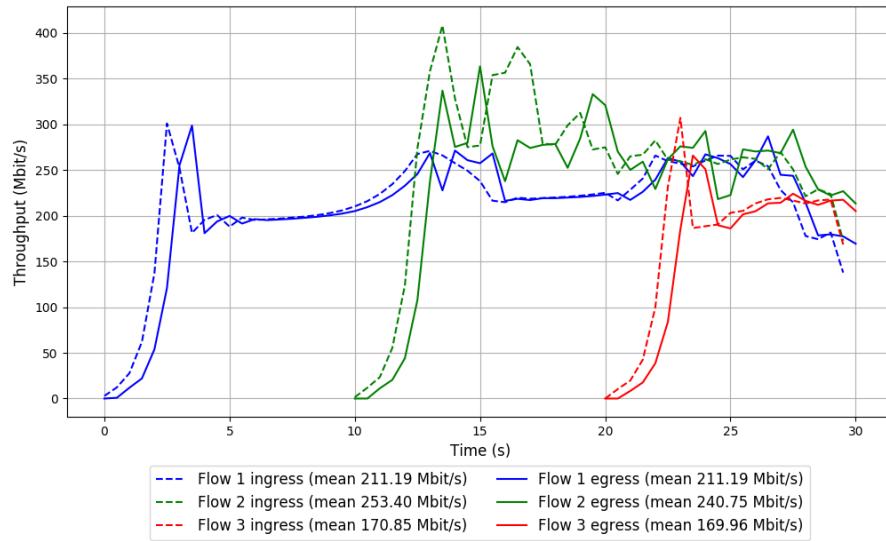


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-05 07:29:28
End at: 2019-02-05 07:29:58
Local clock offset: -0.002 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-02-05 11:38:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.23 Mbit/s
95th percentile per-packet one-way delay: 210.661 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 211.19 Mbit/s
95th percentile per-packet one-way delay: 153.999 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 240.75 Mbit/s
95th percentile per-packet one-way delay: 221.249 ms
Loss rate: 4.99%
-- Flow 3:
Average throughput: 169.96 Mbit/s
95th percentile per-packet one-way delay: 188.396 ms
Loss rate: 0.52%
```

Run 3: Report of PCC-Expr — Data Link

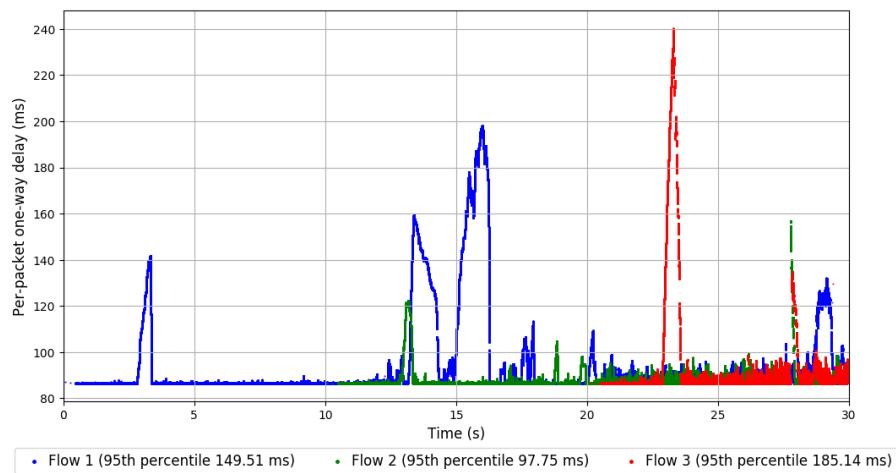
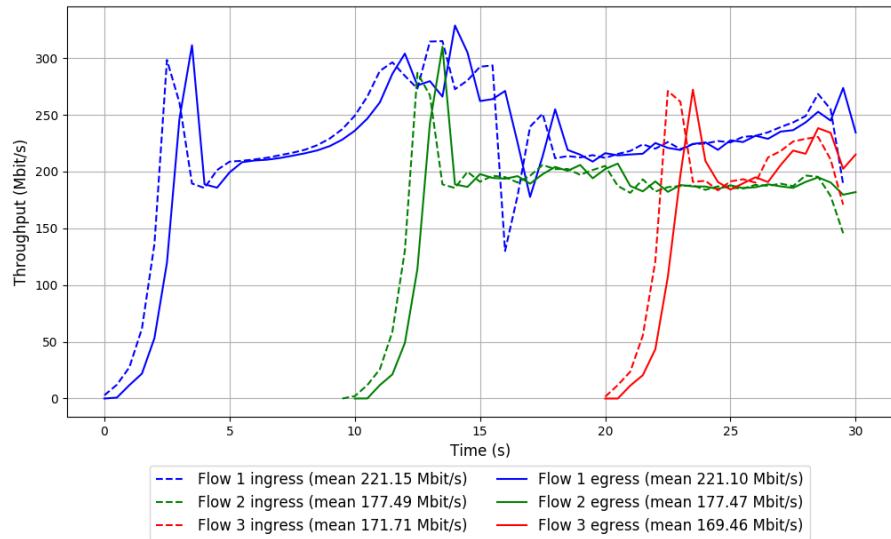


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-05 08:06:51
End at: 2019-02-05 08:07:21
Local clock offset: -0.212 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-02-05 11:43:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.12 Mbit/s
95th percentile per-packet one-way delay: 140.646 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 221.10 Mbit/s
95th percentile per-packet one-way delay: 149.515 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 177.47 Mbit/s
95th percentile per-packet one-way delay: 97.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.46 Mbit/s
95th percentile per-packet one-way delay: 185.136 ms
Loss rate: 1.30%
```

Run 4: Report of PCC-Expr — Data Link

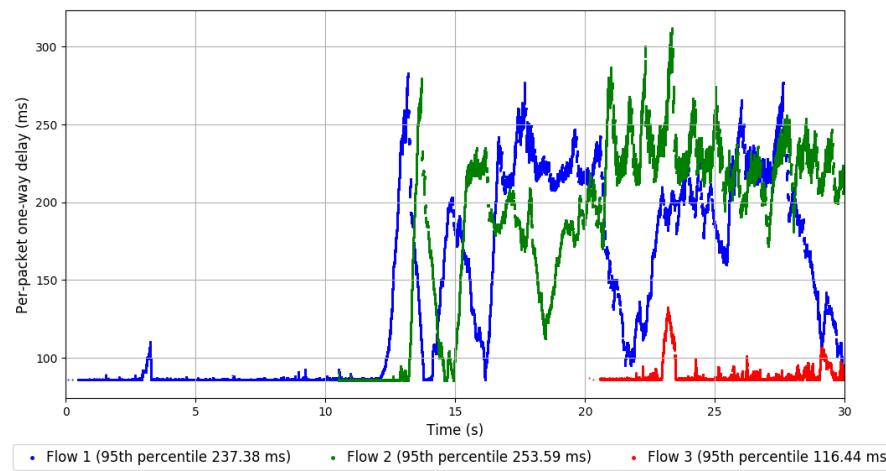
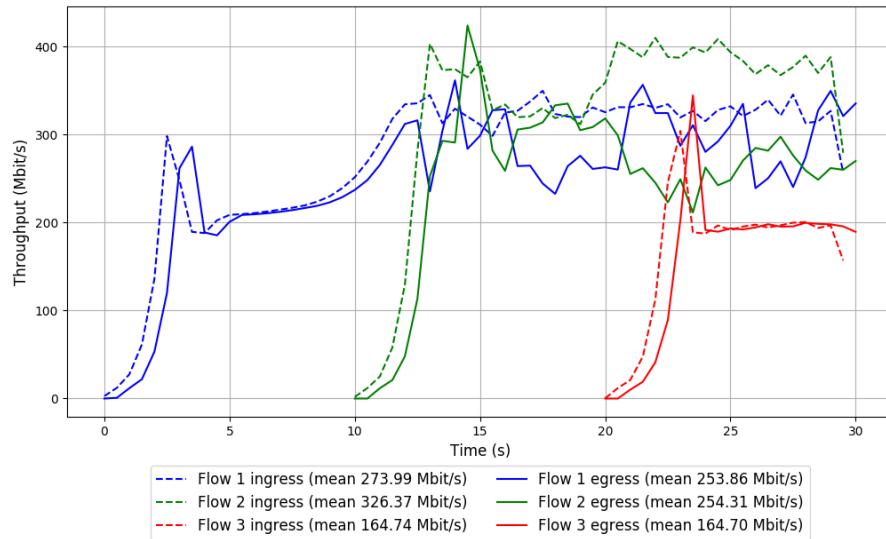


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-05 08:44:18
End at: 2019-02-05 08:44:48
Local clock offset: 0.431 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.09 Mbit/s
95th percentile per-packet one-way delay: 242.401 ms
Loss rate: 12.49%
-- Flow 1:
Average throughput: 253.86 Mbit/s
95th percentile per-packet one-way delay: 237.385 ms
Loss rate: 7.35%
-- Flow 2:
Average throughput: 254.31 Mbit/s
95th percentile per-packet one-way delay: 253.595 ms
Loss rate: 22.08%
-- Flow 3:
Average throughput: 164.70 Mbit/s
95th percentile per-packet one-way delay: 116.438 ms
Loss rate: 0.05%
```

Run 5: Report of PCC-Expr — Data Link

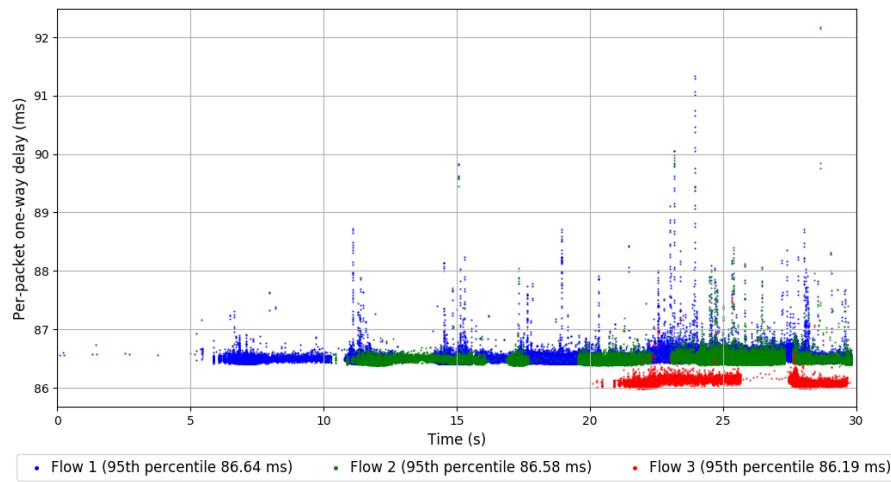
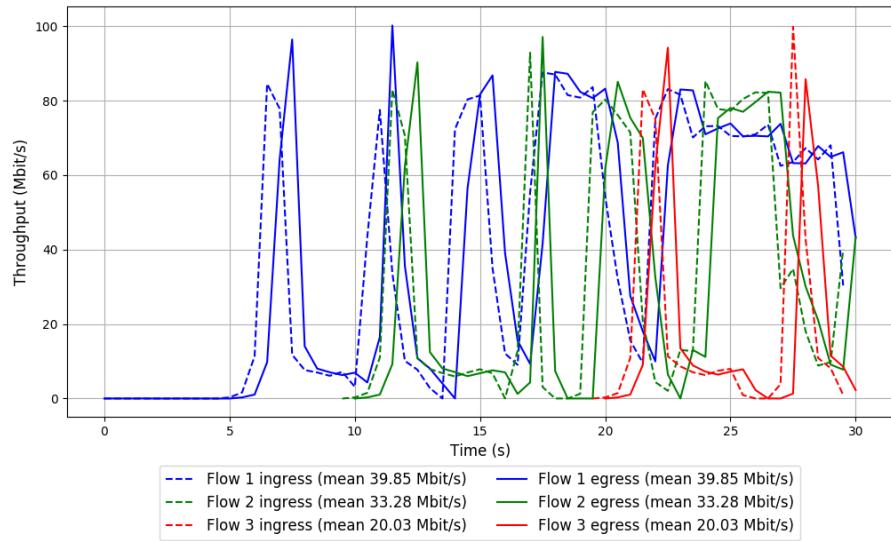


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-02-05 05:46:29
End at: 2019-02-05 05:46:59
Local clock offset: -0.185 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.46 Mbit/s
95th percentile per-packet one-way delay: 86.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 86.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 86.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 86.189 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

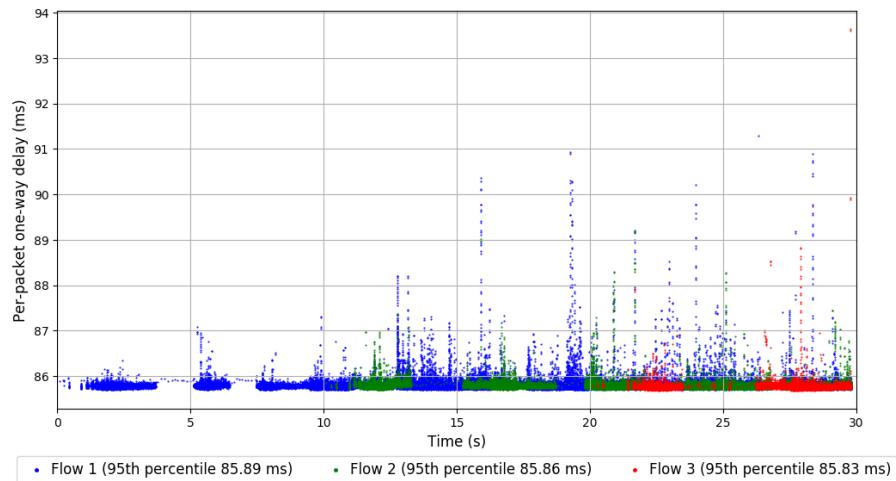
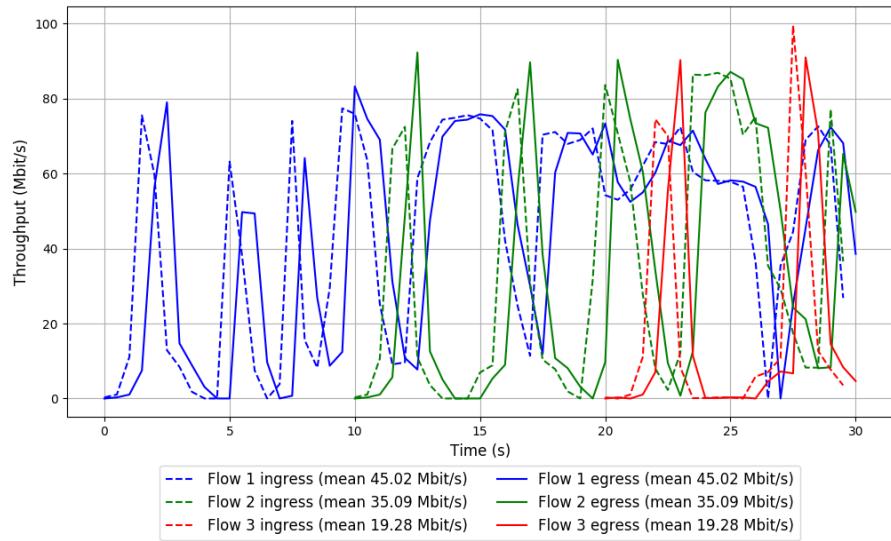


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-05 06:23:24
End at: 2019-02-05 06:23:54
Local clock offset: 0.529 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.58 Mbit/s
95th percentile per-packet one-way delay: 85.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.02 Mbit/s
95th percentile per-packet one-way delay: 85.892 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.09 Mbit/s
95th percentile per-packet one-way delay: 85.856 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 85.831 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

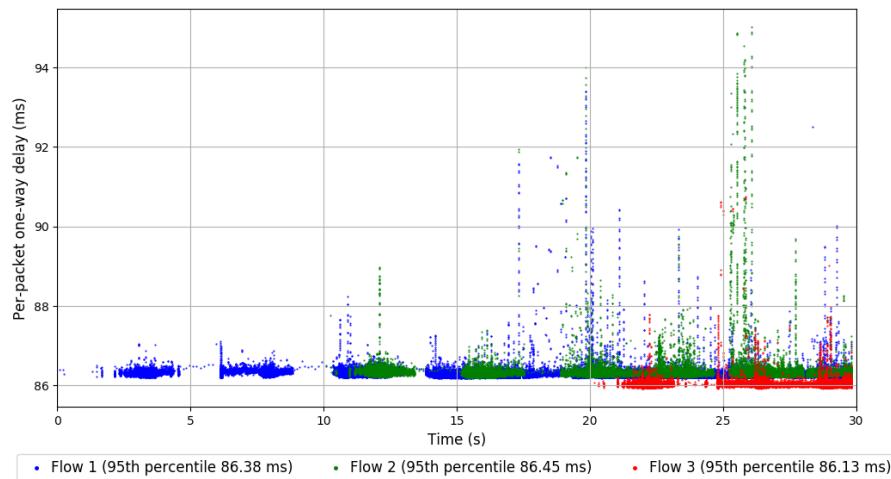
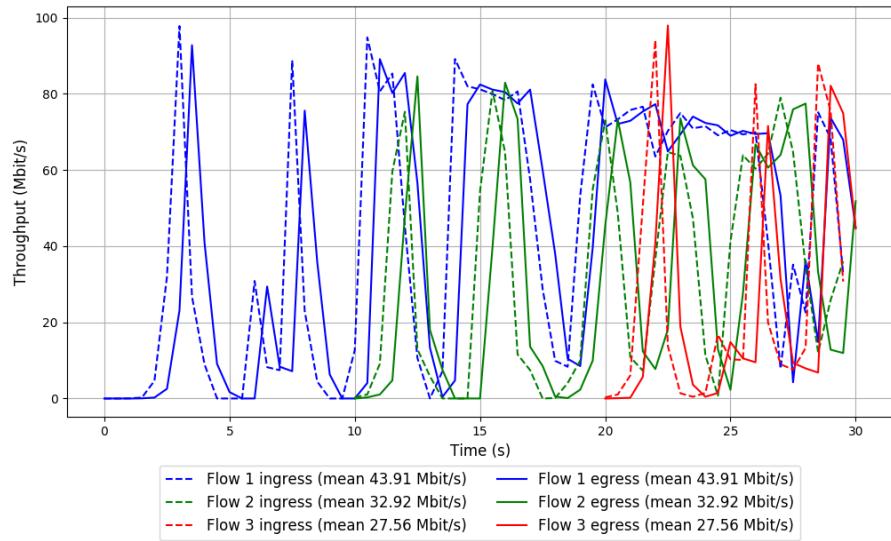


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-05 07:01:07
End at: 2019-02-05 07:01:37
Local clock offset: 0.261 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 86.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 86.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.92 Mbit/s
95th percentile per-packet one-way delay: 86.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.56 Mbit/s
95th percentile per-packet one-way delay: 86.130 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

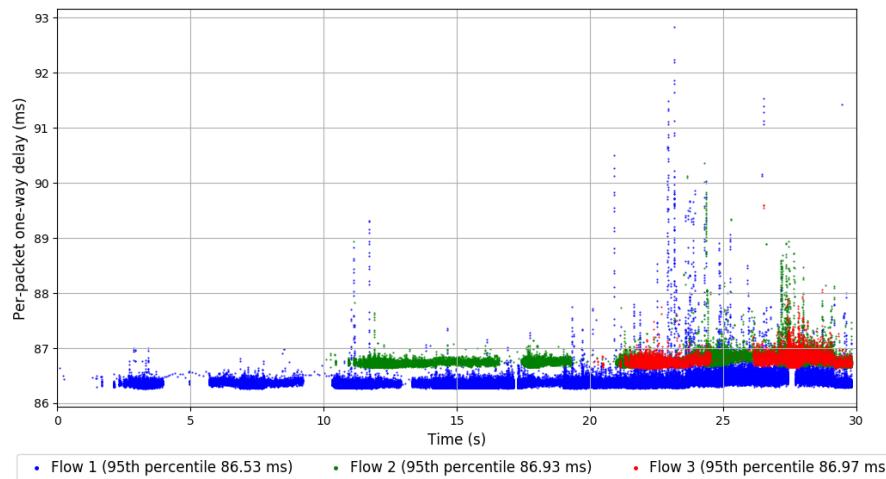
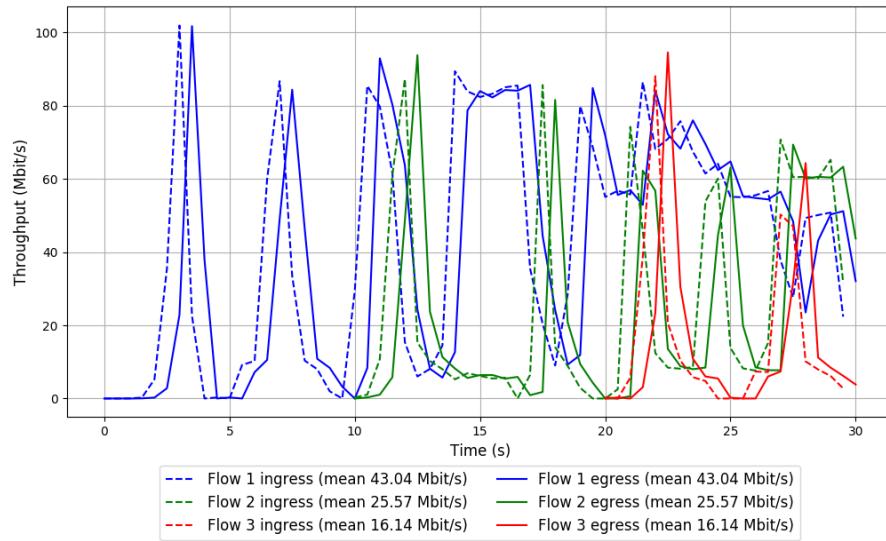


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-05 07:38:35
End at: 2019-02-05 07:39:05
Local clock offset: -0.412 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.27 Mbit/s
95th percentile per-packet one-way delay: 86.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.04 Mbit/s
95th percentile per-packet one-way delay: 86.535 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.57 Mbit/s
95th percentile per-packet one-way delay: 86.929 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 86.966 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

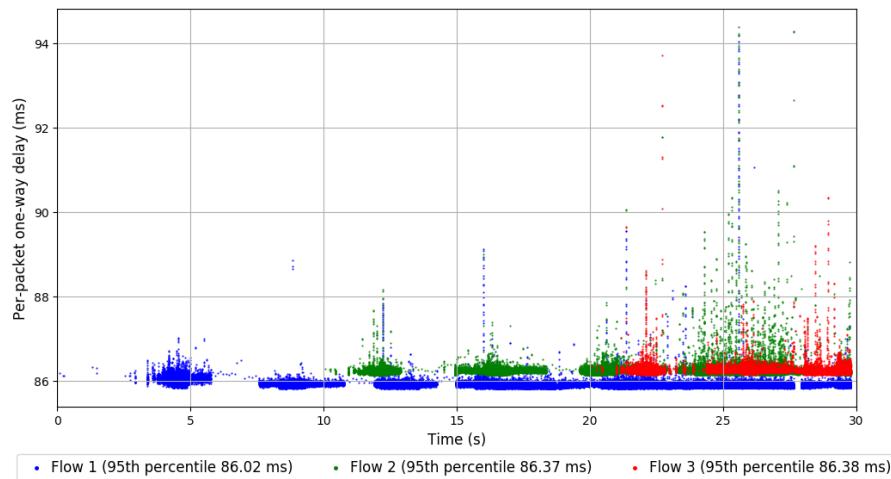
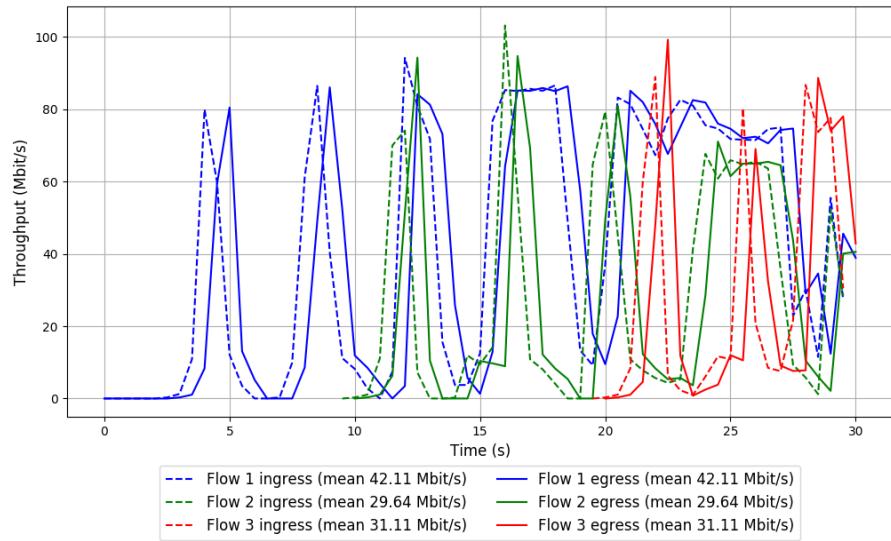


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-05 08:16:08
End at: 2019-02-05 08:16:38
Local clock offset: 0.082 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.95 Mbit/s
95th percentile per-packet one-way delay: 86.306 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.11 Mbit/s
95th percentile per-packet one-way delay: 86.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.64 Mbit/s
95th percentile per-packet one-way delay: 86.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 86.382 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

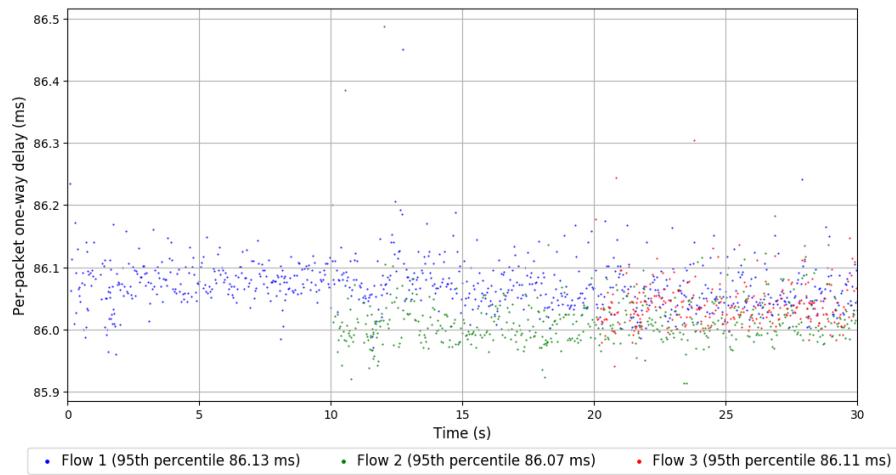
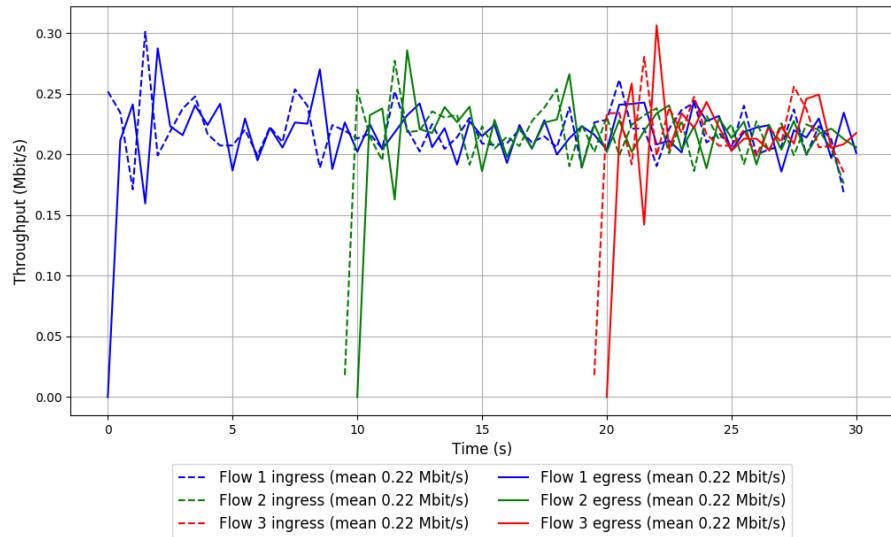


```
Run 1: Statistics of SCReAM

Start at: 2019-02-05 06:18:02
End at: 2019-02-05 06:18:32
Local clock offset: 0.372 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.119 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.073 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.109 ms
Loss rate: 0.00%
```

## Run 1: Report of SCReAM — Data Link

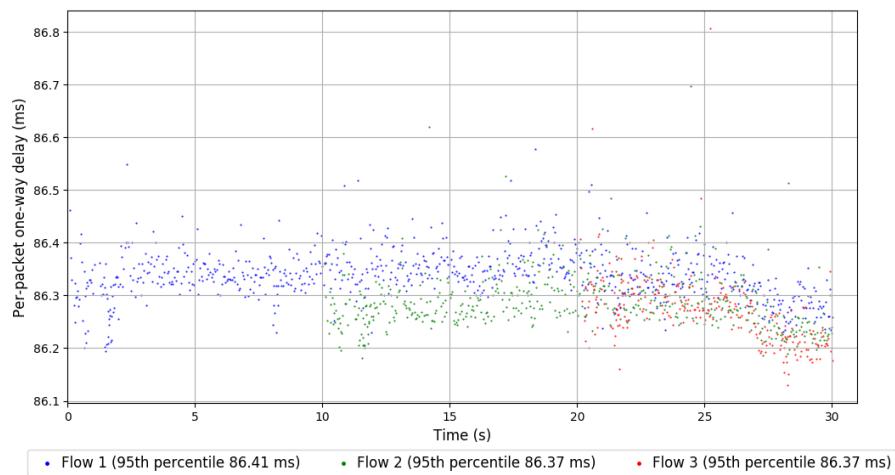
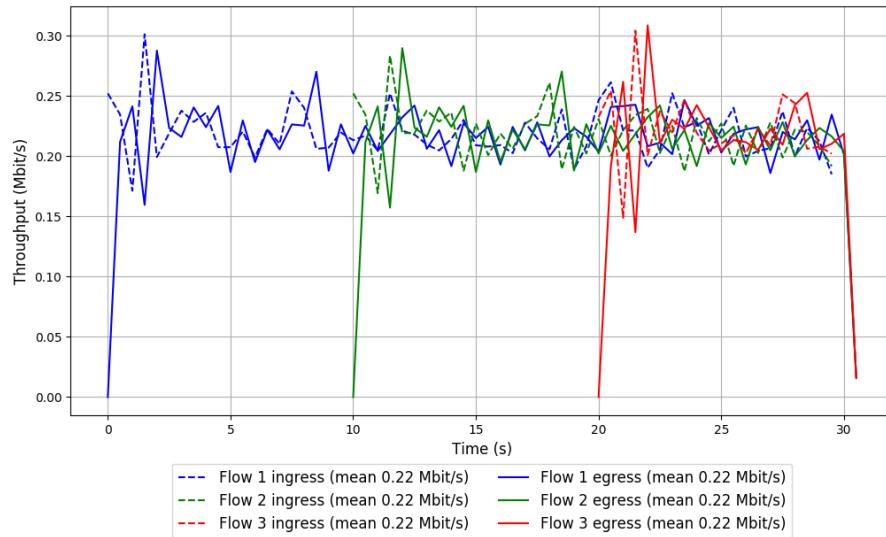


Run 2: Statistics of SCReAM

```
Start at: 2019-02-05 06:55:43
End at: 2019-02-05 06:56:13
Local clock offset: 0.099 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.401 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.374 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.370 ms
Loss rate: 0.00%
```

## Run 2: Report of SCReAM — Data Link

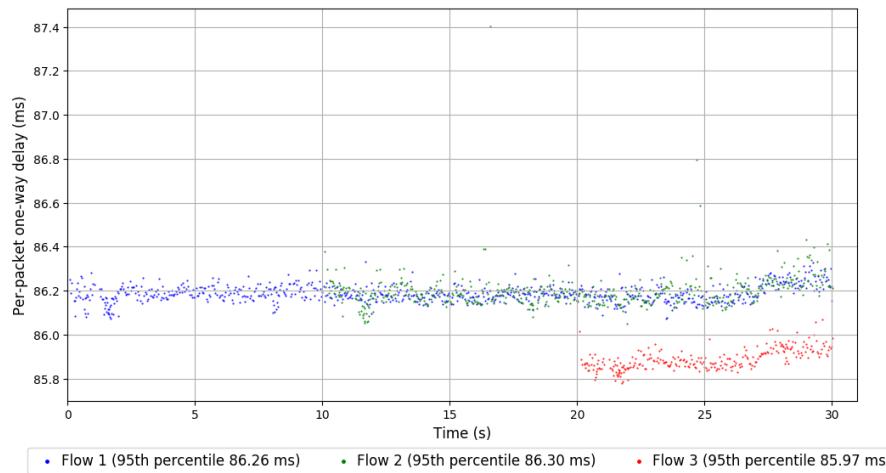
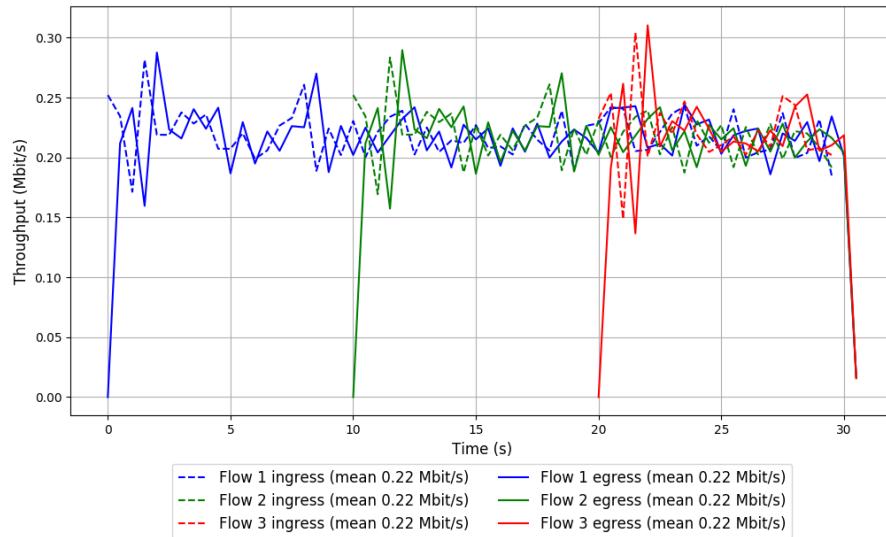


Run 3: Statistics of SCReAM

```
Start at: 2019-02-05 07:33:26
End at: 2019-02-05 07:33:56
Local clock offset: 0.168 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.303 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.970 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

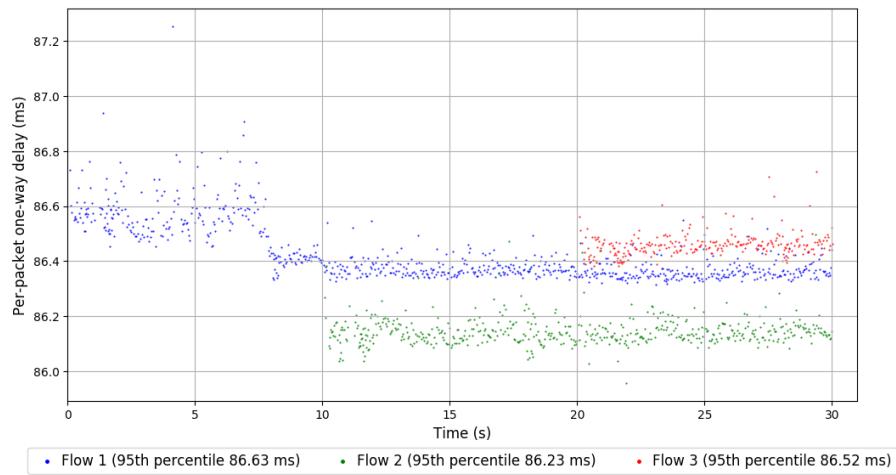
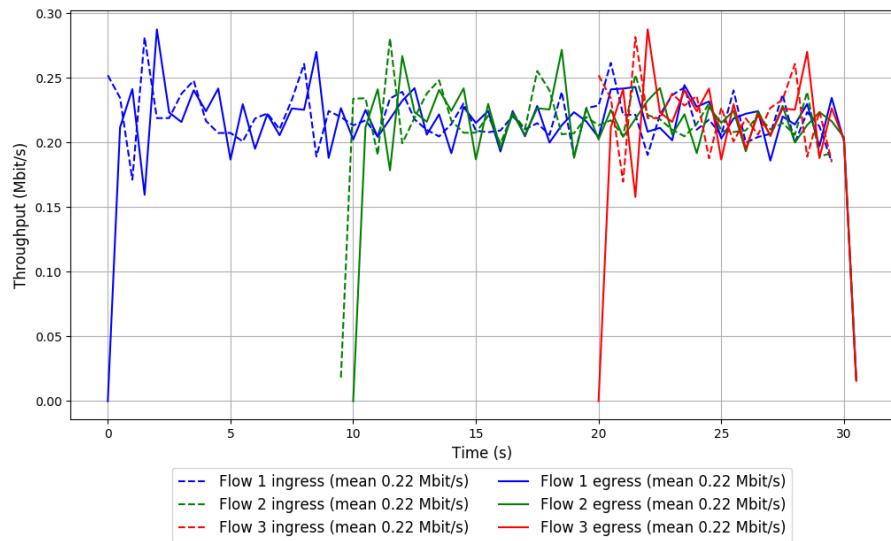


Run 4: Statistics of SCReAM

```
Start at: 2019-02-05 08:10:57
End at: 2019-02-05 08:11:27
Local clock offset: 0.012 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.632 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.226 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.521 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

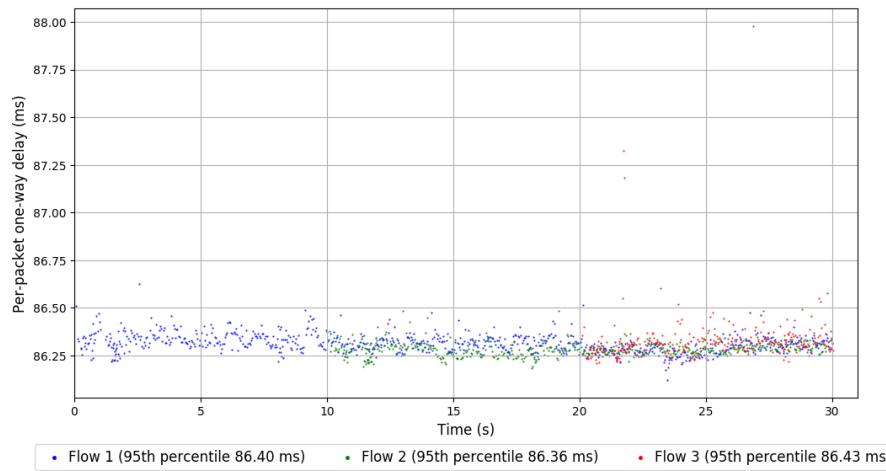
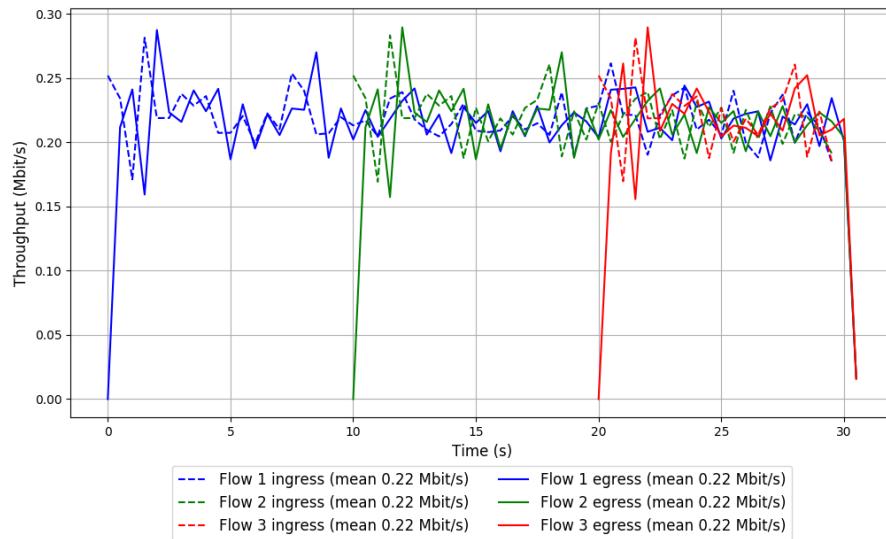


Run 5: Statistics of SCReAM

```
Start at: 2019-02-05 08:48:33
End at: 2019-02-05 08:49:03
Local clock offset: 0.16 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.355 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.433 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

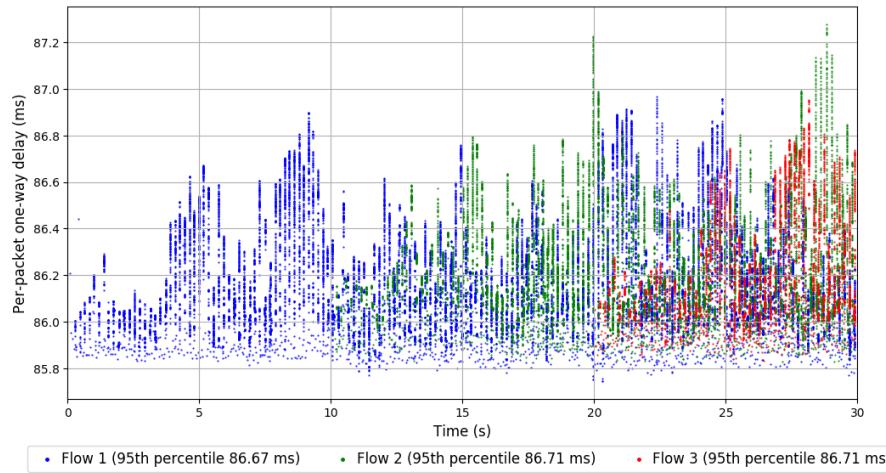
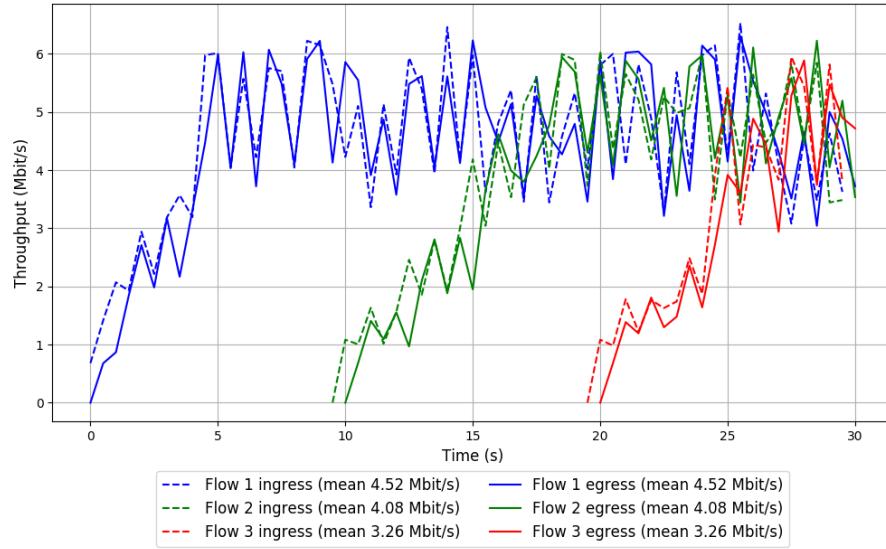


Run 1: Statistics of Sprout

```
Start at: 2019-02-05 06:12:56
End at: 2019-02-05 06:13:26
Local clock offset: 0.467 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 86.688 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 86.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 86.709 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 86.710 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

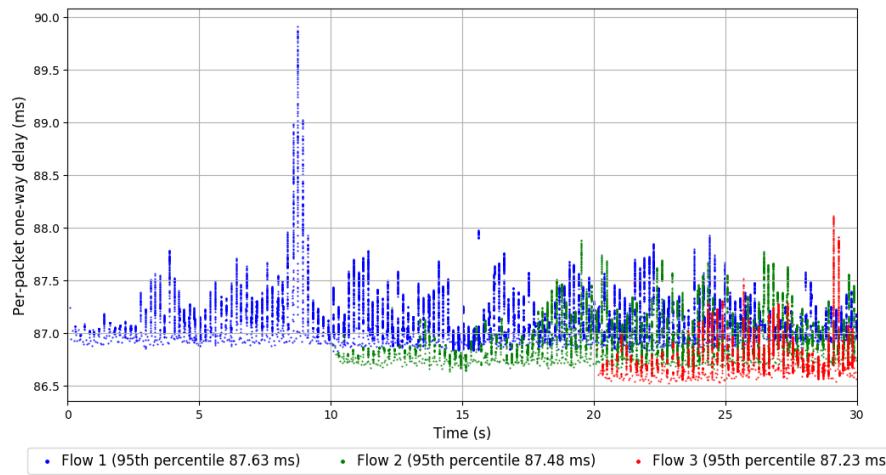
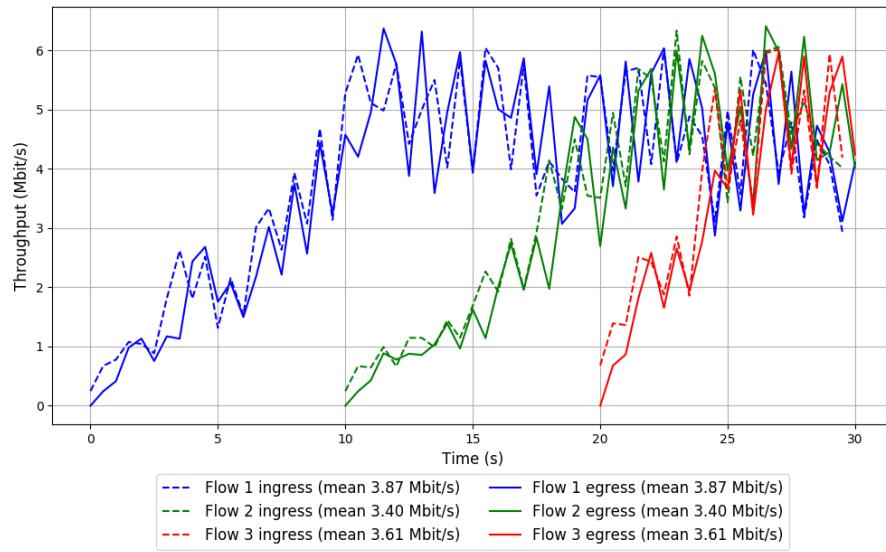


Run 2: Statistics of Sprout

```
Start at: 2019-02-05 06:50:23
End at: 2019-02-05 06:50:53
Local clock offset: -0.34 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 87.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 87.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 87.484 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 87.228 ms
Loss rate: 0.00%
```

## Run 2: Report of Sprout — Data Link

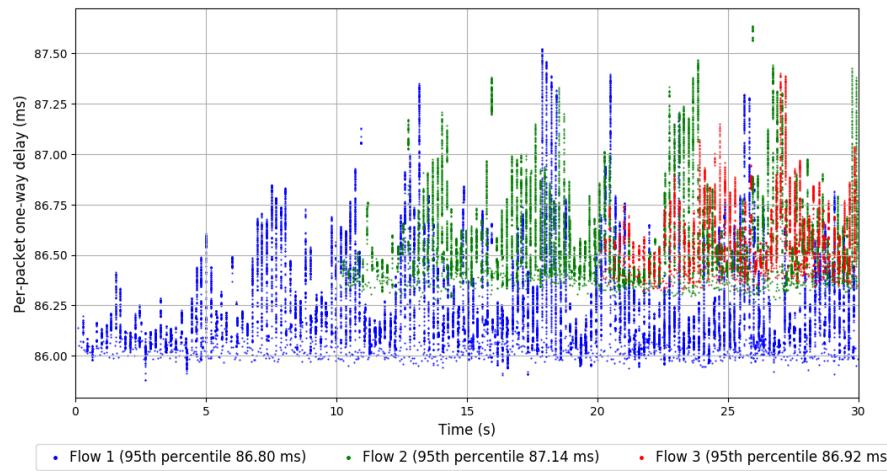
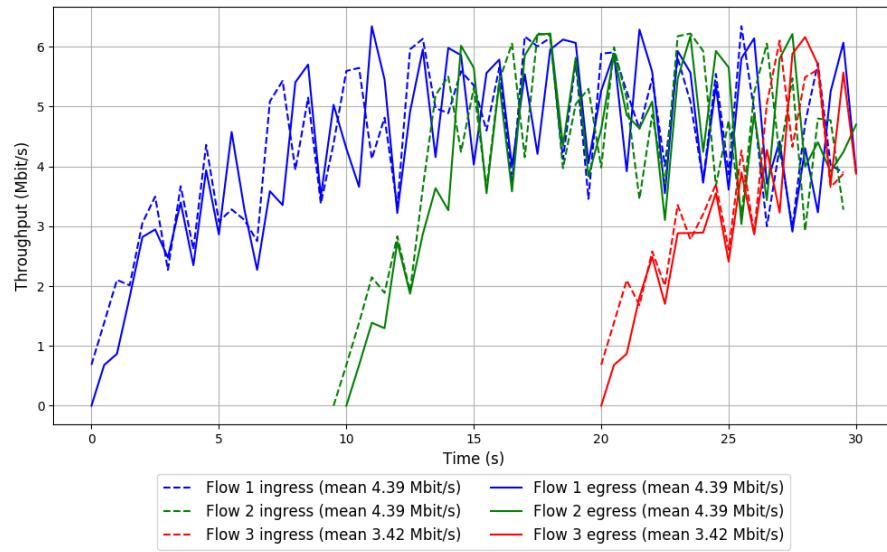


Run 3: Statistics of Sprout

```
Start at: 2019-02-05 07:28:12
End at: 2019-02-05 07:28:42
Local clock offset: -0.029 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 86.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 87.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 86.915 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

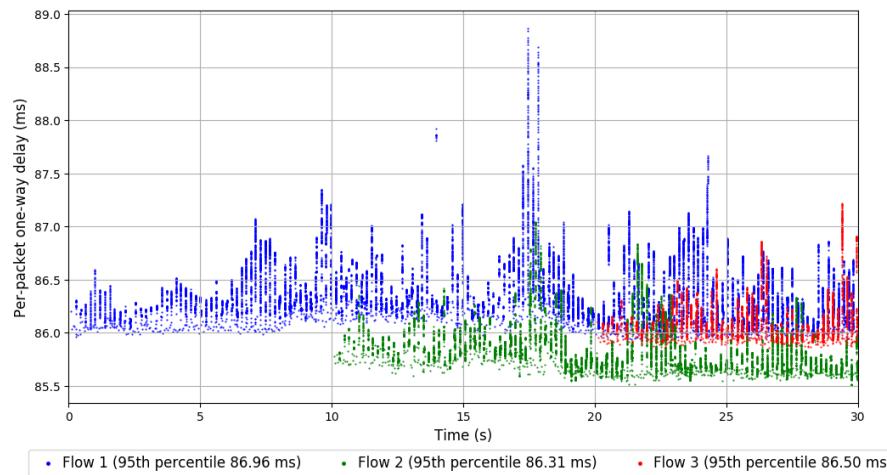
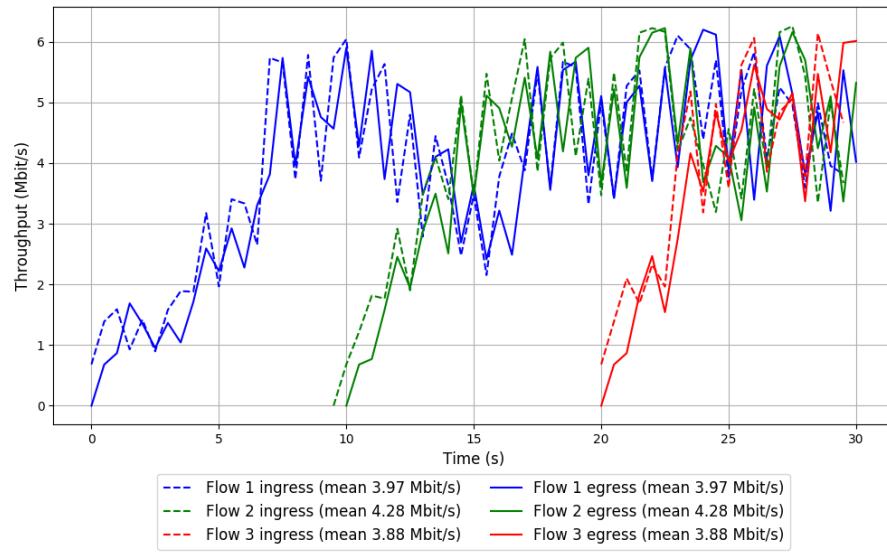


Run 4: Statistics of Sprout

```
Start at: 2019-02-05 08:05:36
End at: 2019-02-05 08:06:06
Local clock offset: 0.433 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.10 Mbit/s
95th percentile per-packet one-way delay: 86.816 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 86.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 86.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 86.501 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

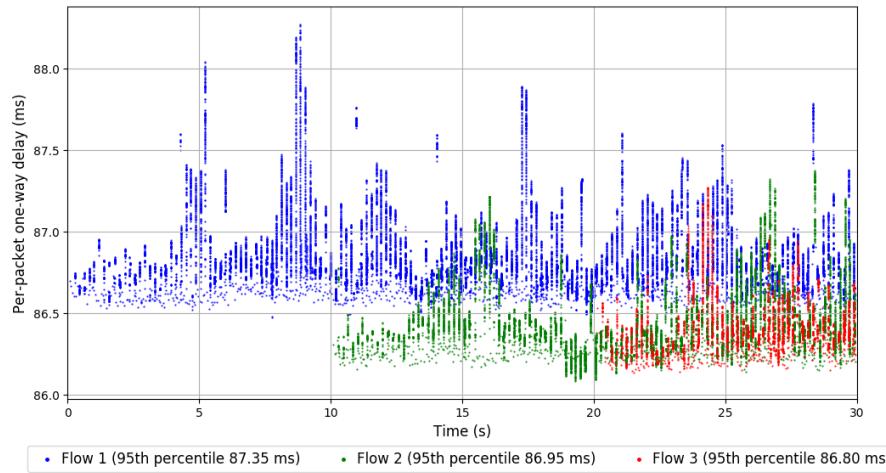
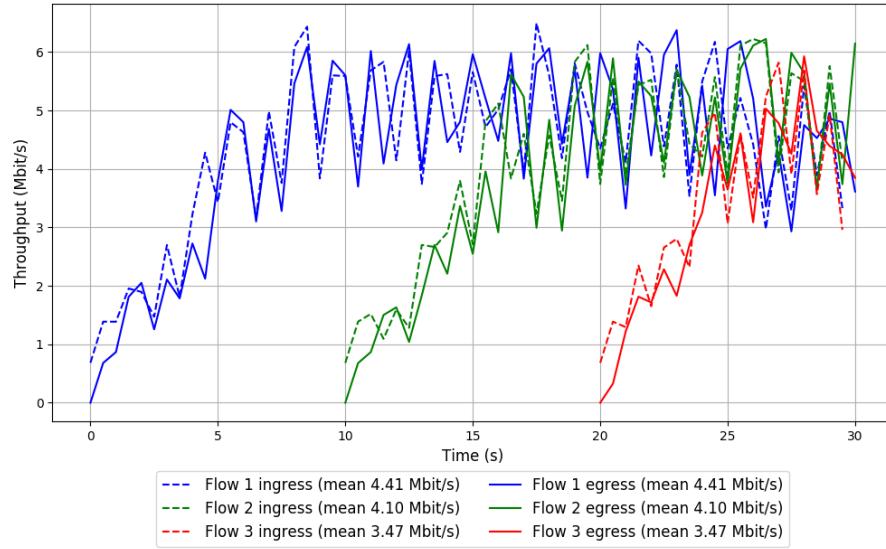


Run 5: Statistics of Sprout

```
Start at: 2019-02-05 08:43:02
End at: 2019-02-05 08:43:32
Local clock offset: -0.148 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 87.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 87.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.949 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 86.797 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

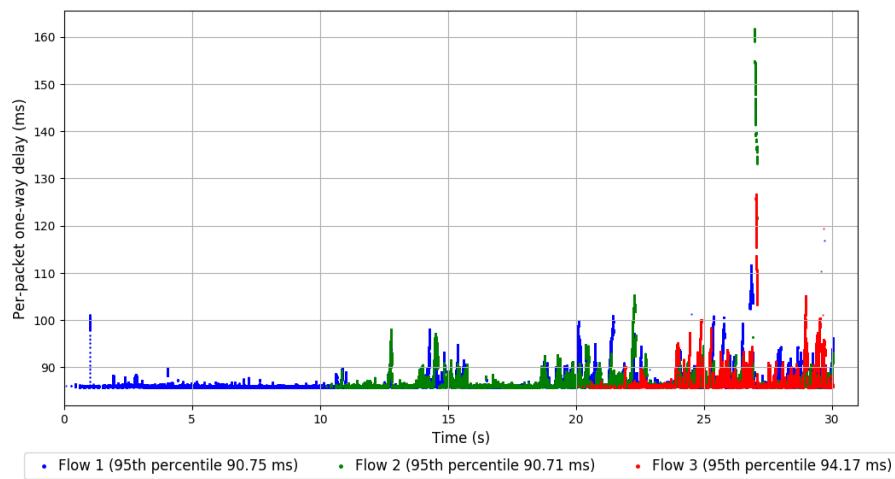
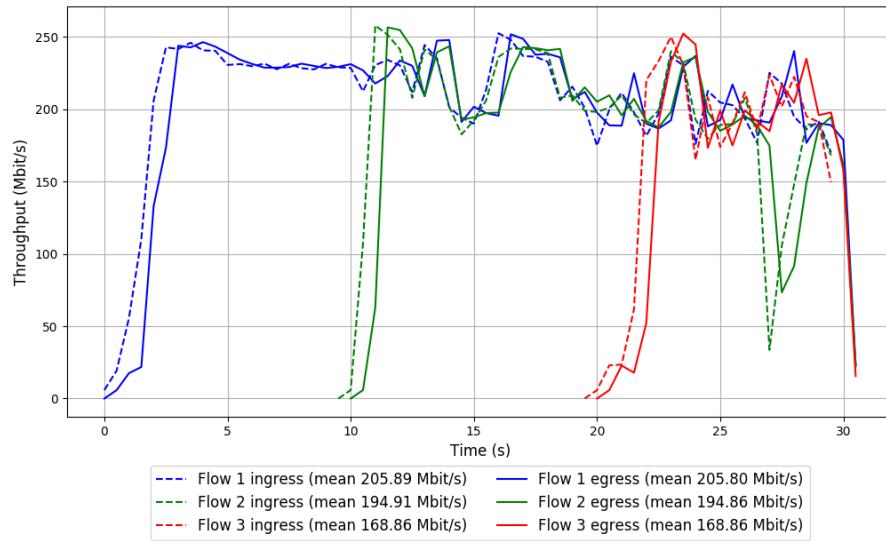


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-05 06:07:17
End at: 2019-02-05 06:07:47
Local clock offset: 0.394 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-02-05 11:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.84 Mbit/s
95th percentile per-packet one-way delay: 91.476 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 205.80 Mbit/s
95th percentile per-packet one-way delay: 90.746 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 194.86 Mbit/s
95th percentile per-packet one-way delay: 90.711 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 168.86 Mbit/s
95th percentile per-packet one-way delay: 94.165 ms
Loss rate: 0.00%
```

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

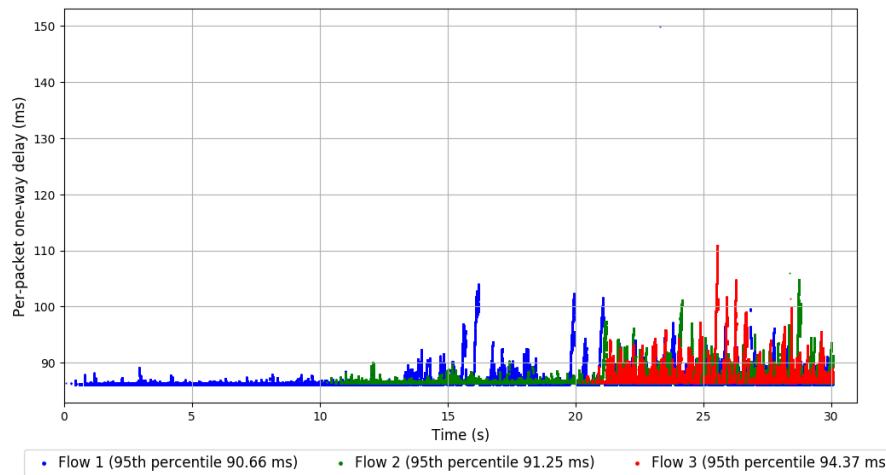
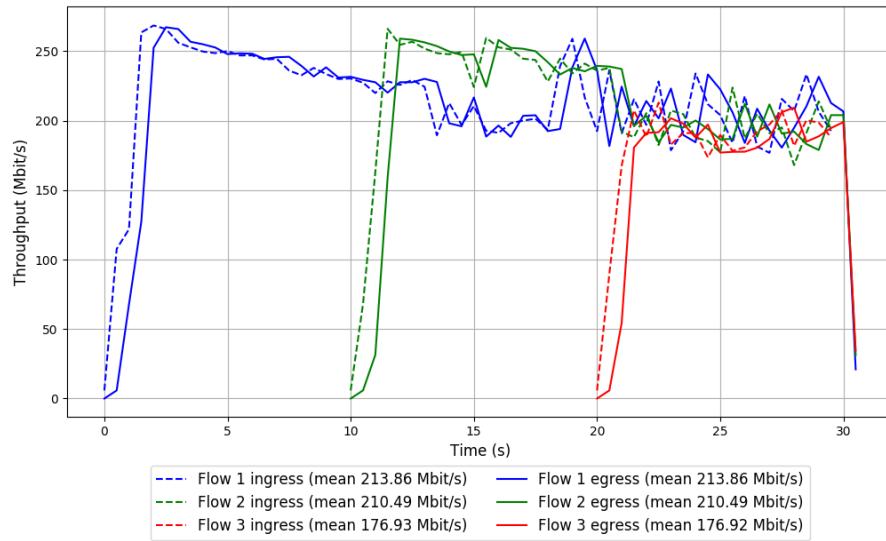


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-05 06:44:26
End at: 2019-02-05 06:44:56
Local clock offset: -0.224 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-02-05 11:52:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.84 Mbit/s
95th percentile per-packet one-way delay: 91.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.86 Mbit/s
95th percentile per-packet one-way delay: 90.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 210.49 Mbit/s
95th percentile per-packet one-way delay: 91.255 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.92 Mbit/s
95th percentile per-packet one-way delay: 94.373 ms
Loss rate: 0.00%
```

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

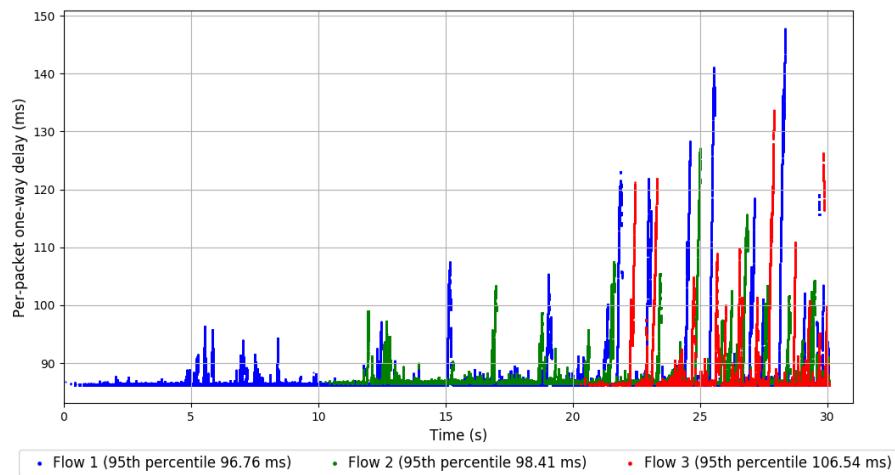
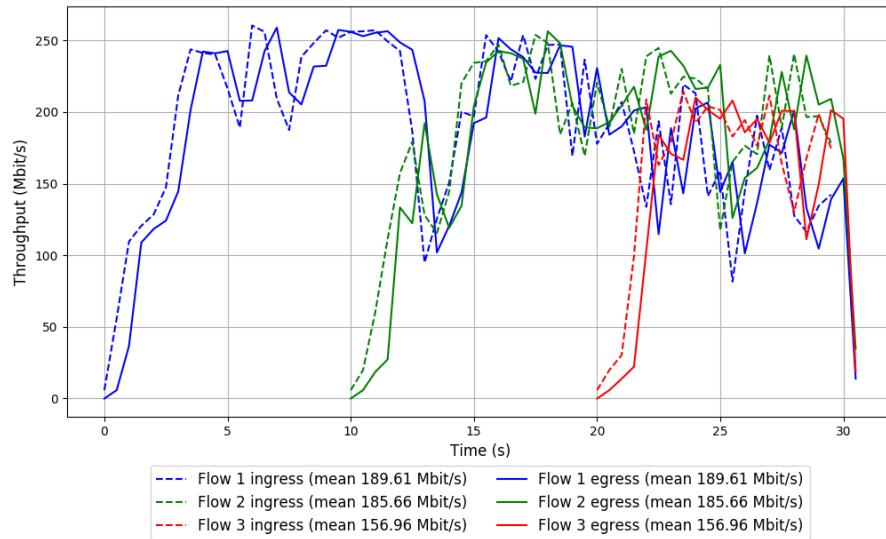


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-05 07:22:30
End at: 2019-02-05 07:23:00
Local clock offset: 0.001 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-02-05 11:52:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.29 Mbit/s
95th percentile per-packet one-way delay: 99.698 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.61 Mbit/s
95th percentile per-packet one-way delay: 96.758 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.66 Mbit/s
95th percentile per-packet one-way delay: 98.406 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.96 Mbit/s
95th percentile per-packet one-way delay: 106.537 ms
Loss rate: 0.00%
```

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

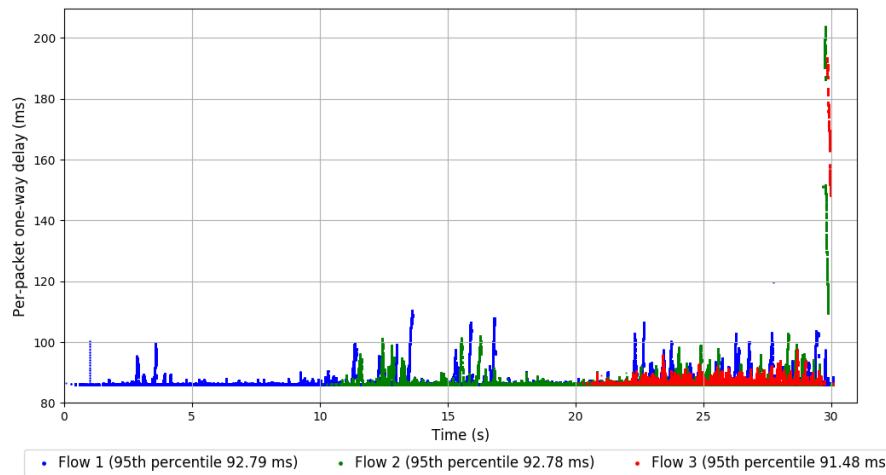
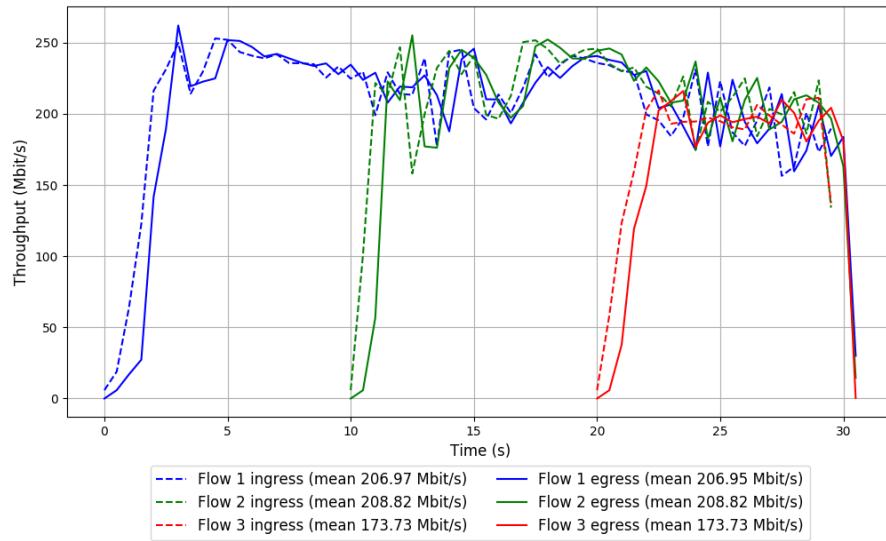


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-05 07:59:48
End at: 2019-02-05 08:00:18
Local clock offset: 0.255 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-02-05 11:52:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.78 Mbit/s
95th percentile per-packet one-way delay: 92.567 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.95 Mbit/s
95th percentile per-packet one-way delay: 92.786 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 208.82 Mbit/s
95th percentile per-packet one-way delay: 92.778 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 173.73 Mbit/s
95th percentile per-packet one-way delay: 91.482 ms
Loss rate: 0.00%
```

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

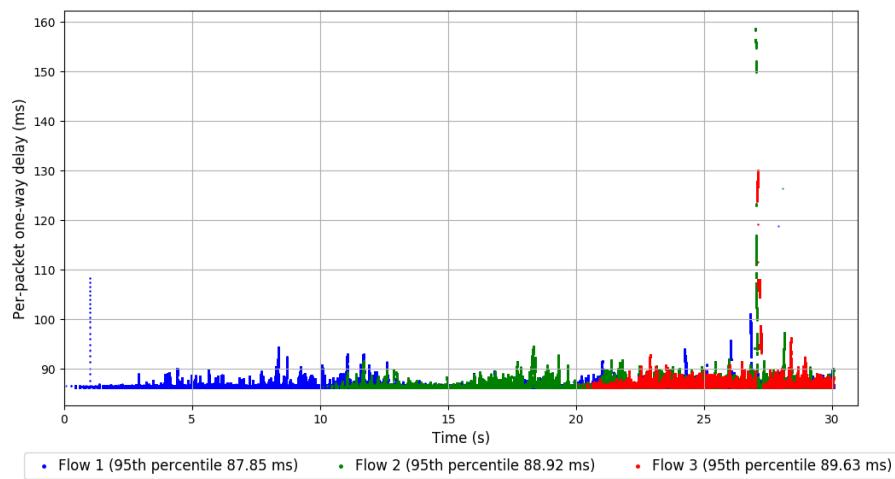
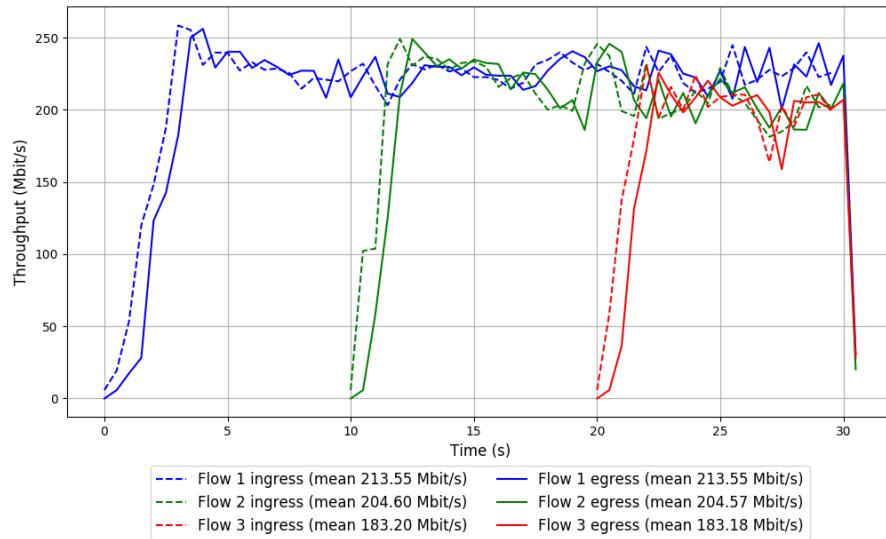


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-05 08:37:21
End at: 2019-02-05 08:37:51
Local clock offset: 0.045 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2019-02-05 11:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.59 Mbit/s
95th percentile per-packet one-way delay: 88.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.55 Mbit/s
95th percentile per-packet one-way delay: 87.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.57 Mbit/s
95th percentile per-packet one-way delay: 88.918 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 183.18 Mbit/s
95th percentile per-packet one-way delay: 89.633 ms
Loss rate: 0.00%
```

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

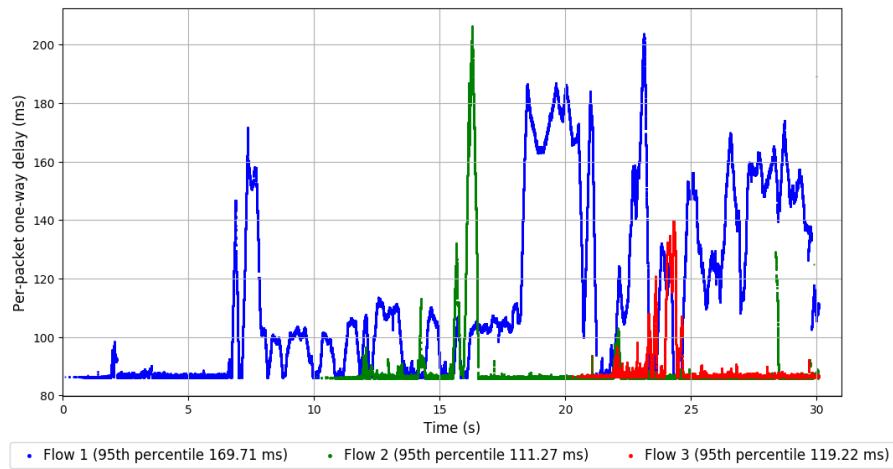
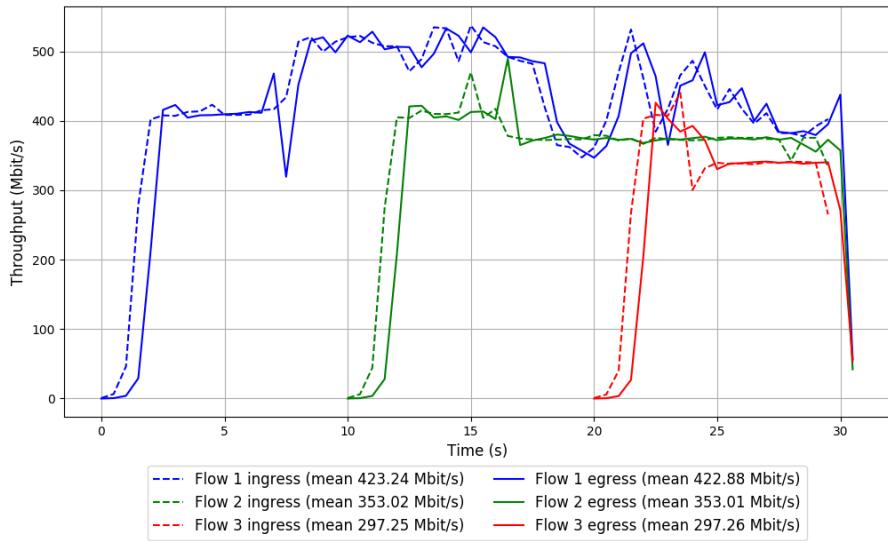


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-05 05:49:03
End at: 2019-02-05 05:49:33
Local clock offset: 0.012 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-02-05 11:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.82 Mbit/s
95th percentile per-packet one-way delay: 163.891 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 422.88 Mbit/s
95th percentile per-packet one-way delay: 169.707 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 353.01 Mbit/s
95th percentile per-packet one-way delay: 111.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 297.26 Mbit/s
95th percentile per-packet one-way delay: 119.222 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

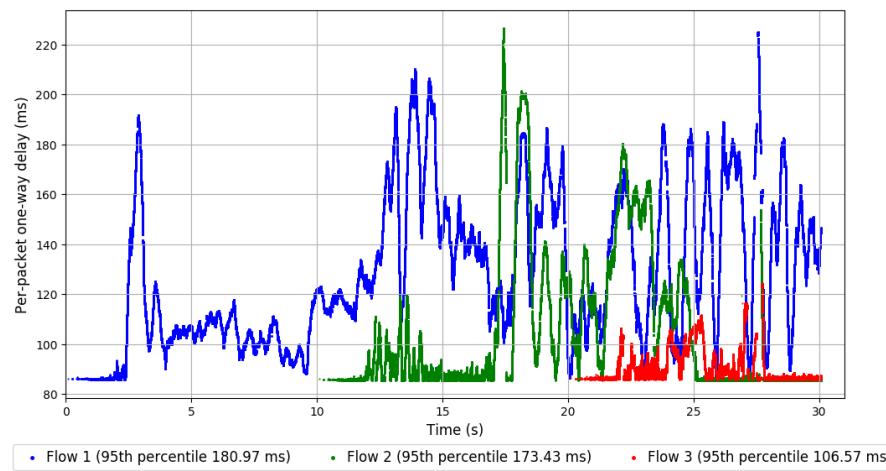
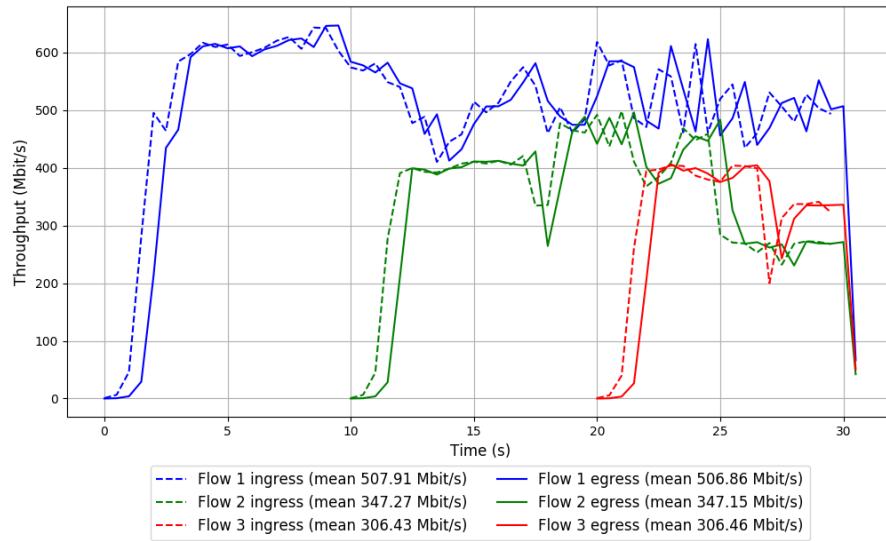


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-05 06:25:58
End at: 2019-02-05 06:26:28
Local clock offset: 0.234 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-02-05 12:05:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 839.91 Mbit/s
95th percentile per-packet one-way delay: 178.066 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 506.86 Mbit/s
95th percentile per-packet one-way delay: 180.969 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 347.15 Mbit/s
95th percentile per-packet one-way delay: 173.428 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 306.46 Mbit/s
95th percentile per-packet one-way delay: 106.573 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link

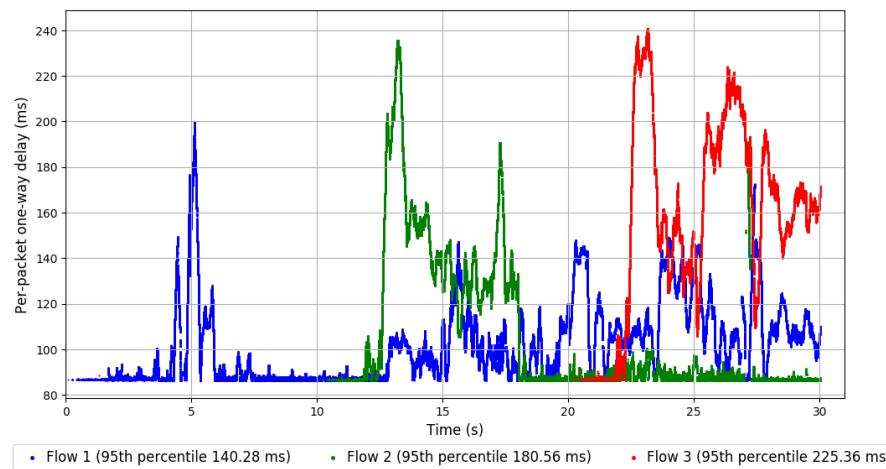
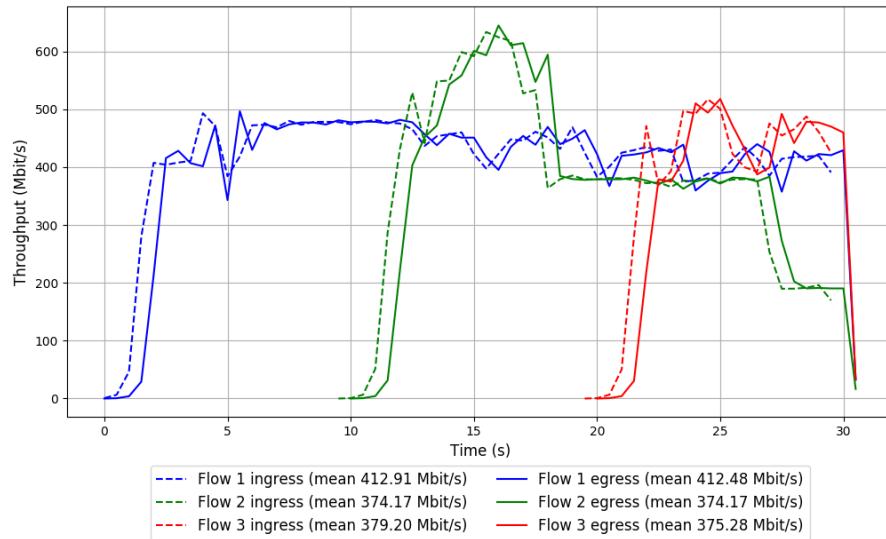


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-05 07:03:42
End at: 2019-02-05 07:04:12
Local clock offset: -0.215 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-02-05 12:09:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 786.83 Mbit/s
95th percentile per-packet one-way delay: 190.387 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 412.48 Mbit/s
95th percentile per-packet one-way delay: 140.279 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 374.17 Mbit/s
95th percentile per-packet one-way delay: 180.558 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 375.28 Mbit/s
95th percentile per-packet one-way delay: 225.358 ms
Loss rate: 1.03%
```

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

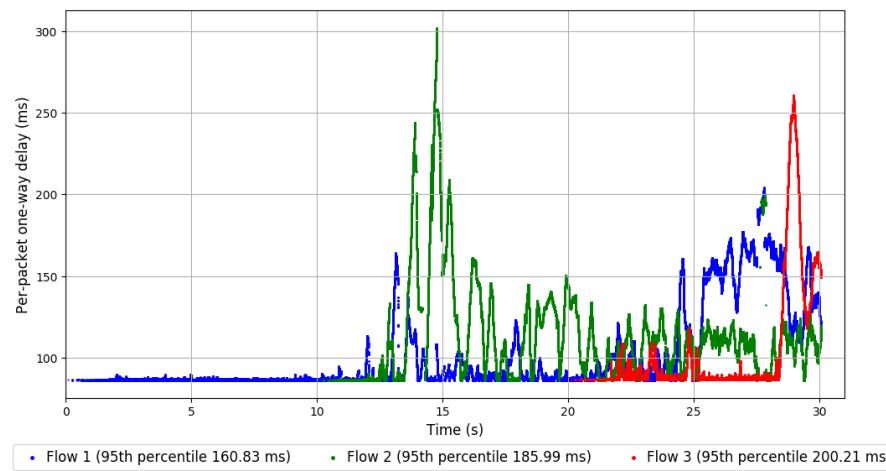
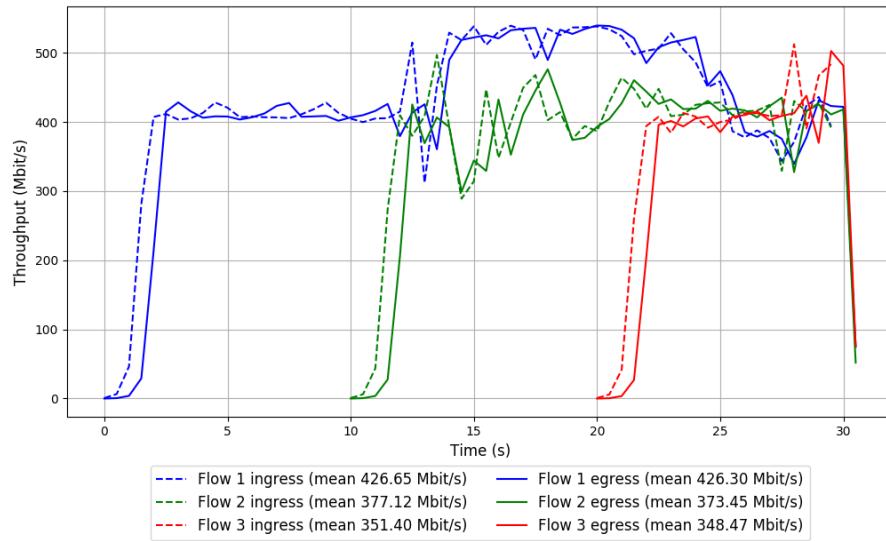


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-05 07:41:08
End at: 2019-02-05 07:41:38
Local clock offset: 0.077 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 790.91 Mbit/s
95th percentile per-packet one-way delay: 164.281 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 426.30 Mbit/s
95th percentile per-packet one-way delay: 160.829 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 373.45 Mbit/s
95th percentile per-packet one-way delay: 185.994 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 348.47 Mbit/s
95th percentile per-packet one-way delay: 200.209 ms
Loss rate: 0.83%
```

Run 4: Report of TCP Vegas — Data Link

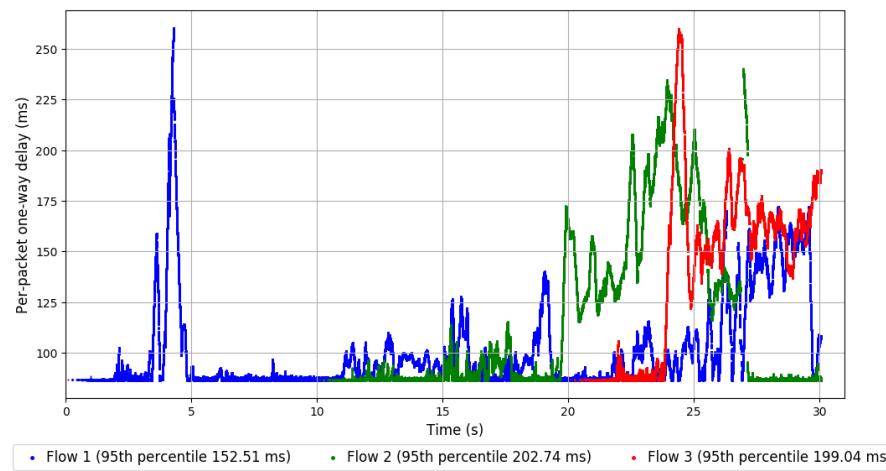
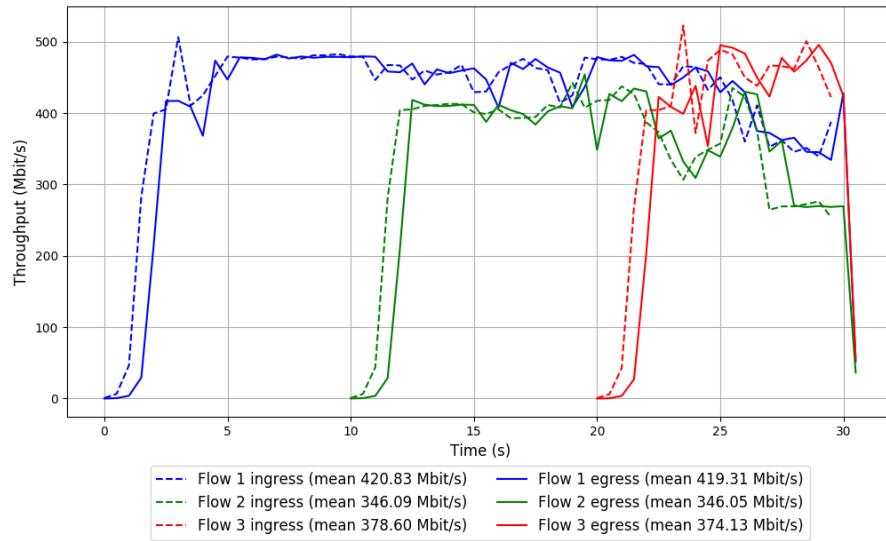


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-05 08:18:42
End at: 2019-02-05 08:19:12
Local clock offset: -0.218 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 774.17 Mbit/s
95th percentile per-packet one-way delay: 186.677 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 419.31 Mbit/s
95th percentile per-packet one-way delay: 152.515 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 346.05 Mbit/s
95th percentile per-packet one-way delay: 202.742 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 374.13 Mbit/s
95th percentile per-packet one-way delay: 199.036 ms
Loss rate: 1.18%
```

Run 5: Report of TCP Vegas — Data Link

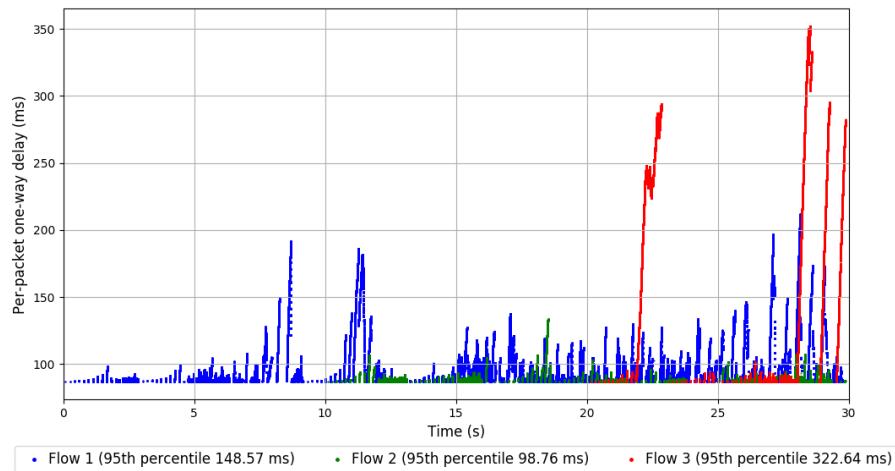
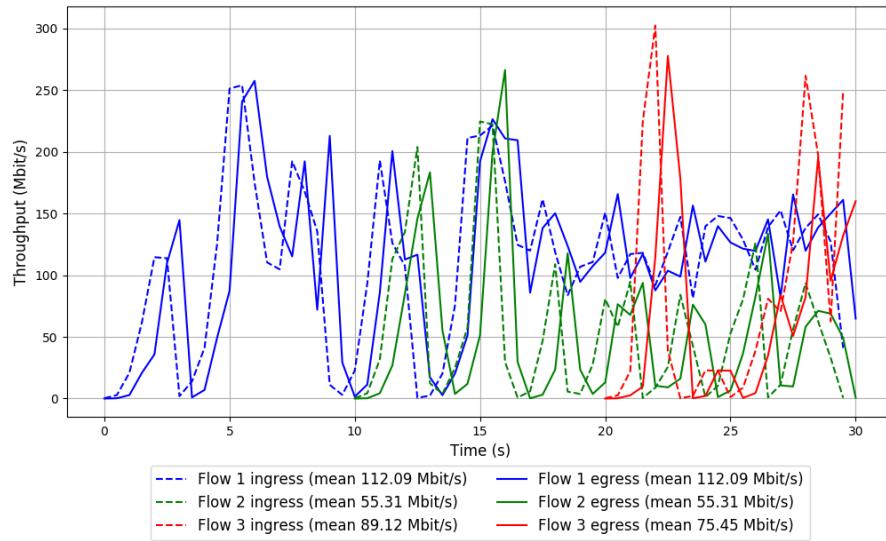


Run 1: Statistics of Verus

```
Start at: 2019-02-05 05:56:33
End at: 2019-02-05 05:57:03
Local clock offset: -0.403 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.01 Mbit/s
95th percentile per-packet one-way delay: 235.147 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 112.09 Mbit/s
95th percentile per-packet one-way delay: 148.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 98.757 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.45 Mbit/s
95th percentile per-packet one-way delay: 322.643 ms
Loss rate: 15.33%
```

Run 1: Report of Verus — Data Link

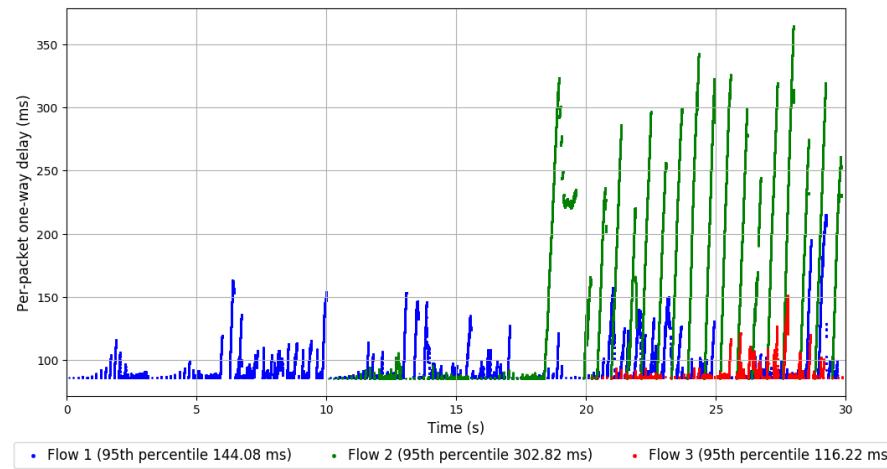
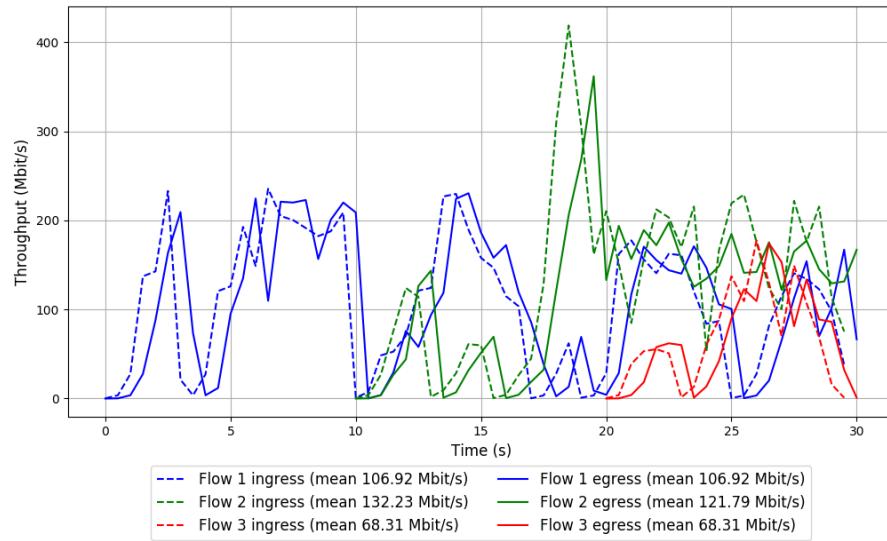


Run 2: Statistics of Verus

```
Start at: 2019-02-05 06:33:41
End at: 2019-02-05 06:34:11
Local clock offset: 0.141 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.42 Mbit/s
95th percentile per-packet one-way delay: 271.292 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 106.92 Mbit/s
95th percentile per-packet one-way delay: 144.084 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 121.79 Mbit/s
95th percentile per-packet one-way delay: 302.817 ms
Loss rate: 7.21%
-- Flow 3:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 116.222 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

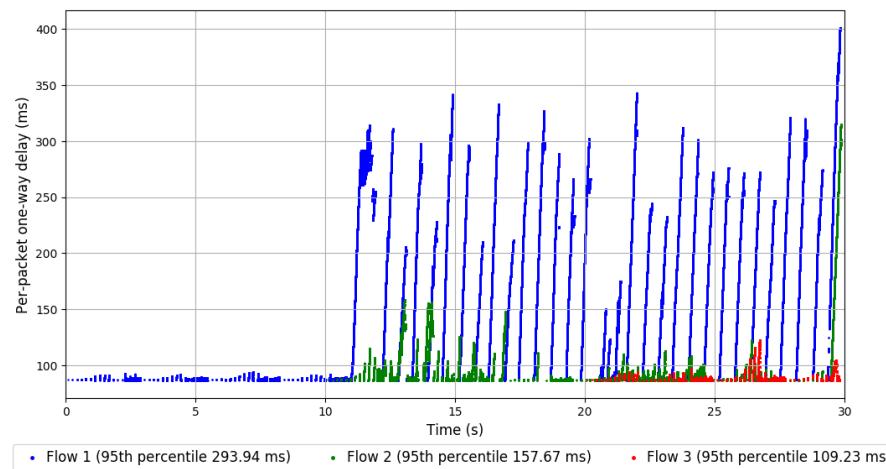
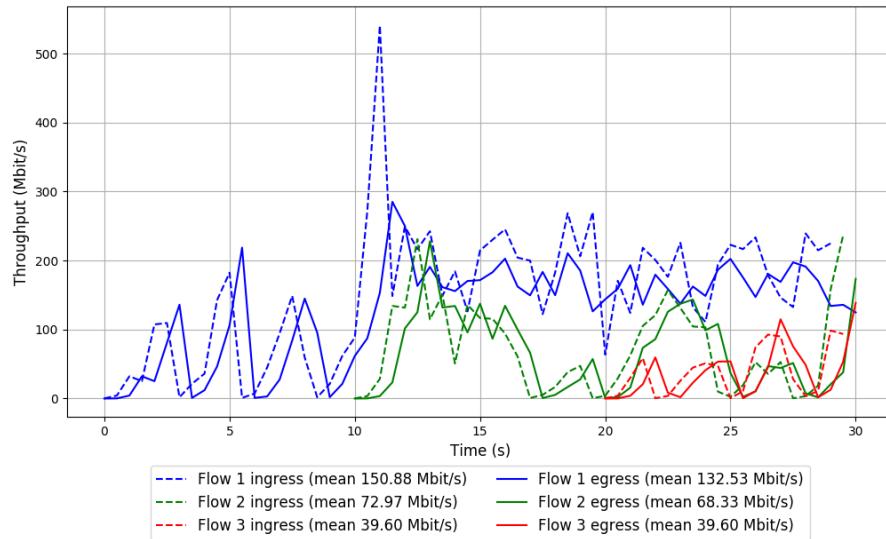


Run 3: Statistics of Verus

```
Start at: 2019-02-05 07:11:36
End at: 2019-02-05 07:12:06
Local clock offset: -0.421 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.58 Mbit/s
95th percentile per-packet one-way delay: 287.542 ms
Loss rate: 9.53%
-- Flow 1:
Average throughput: 132.53 Mbit/s
95th percentile per-packet one-way delay: 293.945 ms
Loss rate: 11.38%
-- Flow 2:
Average throughput: 68.33 Mbit/s
95th percentile per-packet one-way delay: 157.671 ms
Loss rate: 6.36%
-- Flow 3:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 109.232 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

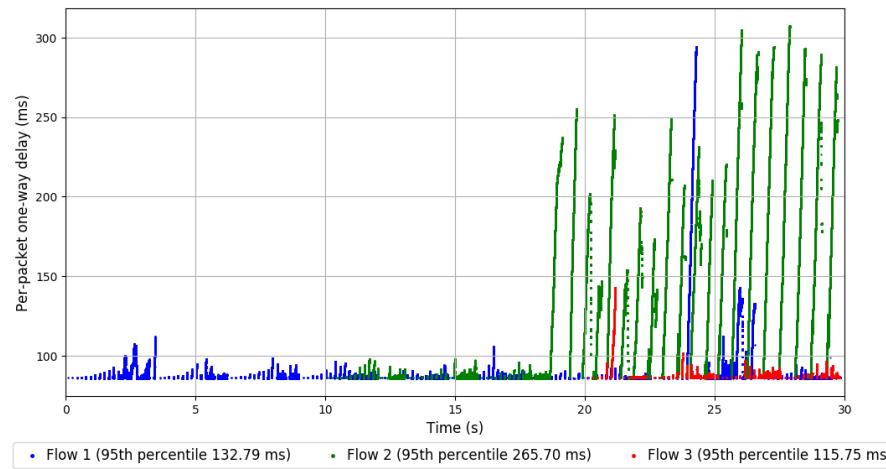
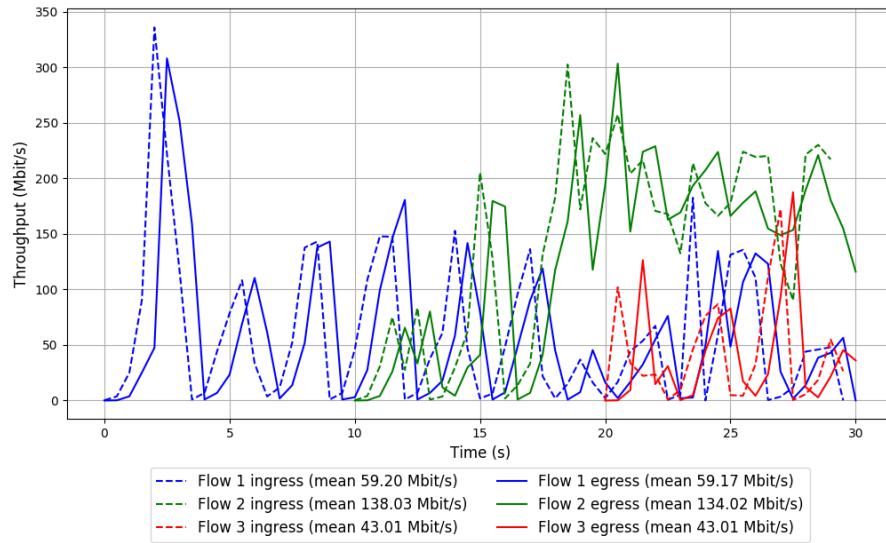


Run 4: Statistics of Verus

```
Start at: 2019-02-05 07:48:41
End at: 2019-02-05 07:49:11
Local clock offset: 0.417 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.59 Mbit/s
95th percentile per-packet one-way delay: 246.240 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 132.789 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 134.02 Mbit/s
95th percentile per-packet one-way delay: 265.699 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 43.01 Mbit/s
95th percentile per-packet one-way delay: 115.746 ms
Loss rate: 0.00%
```

## Run 4: Report of Verus — Data Link

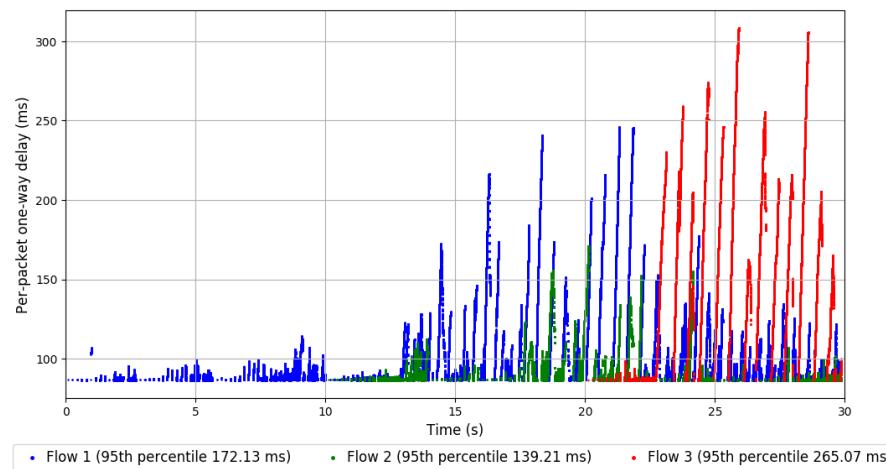
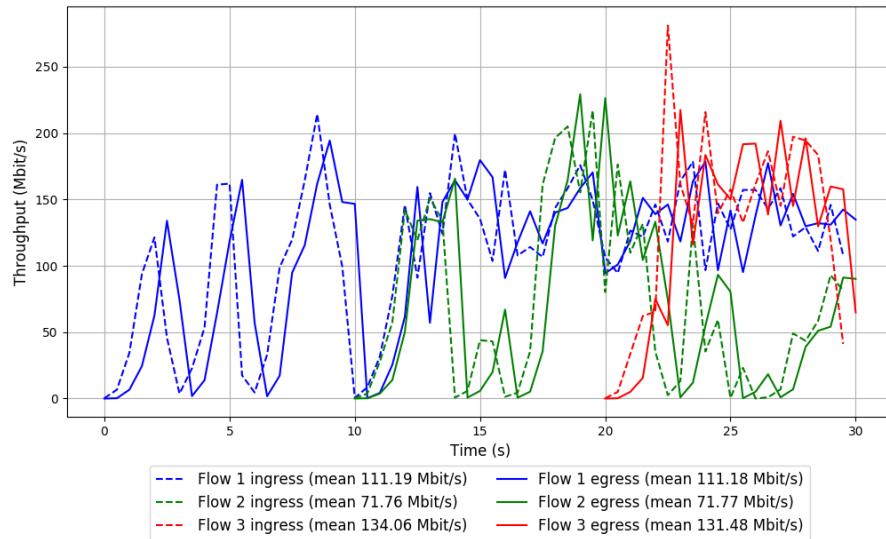


Run 5: Statistics of Verus

```
Start at: 2019-02-05 08:26:20
End at: 2019-02-05 08:26:50
Local clock offset: -0.133 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-02-05 12:10:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.69 Mbit/s
95th percentile per-packet one-way delay: 211.660 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 111.18 Mbit/s
95th percentile per-packet one-way delay: 172.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.77 Mbit/s
95th percentile per-packet one-way delay: 139.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.48 Mbit/s
95th percentile per-packet one-way delay: 265.070 ms
Loss rate: 1.94%
```

Run 5: Report of Verus — Data Link

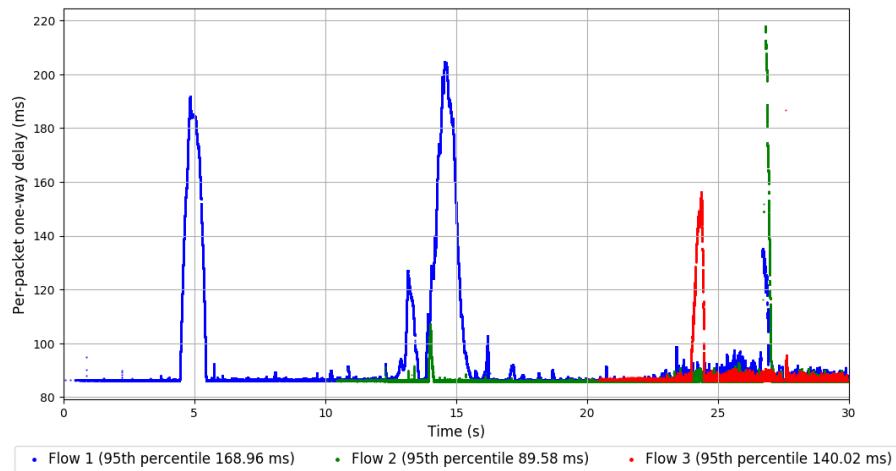
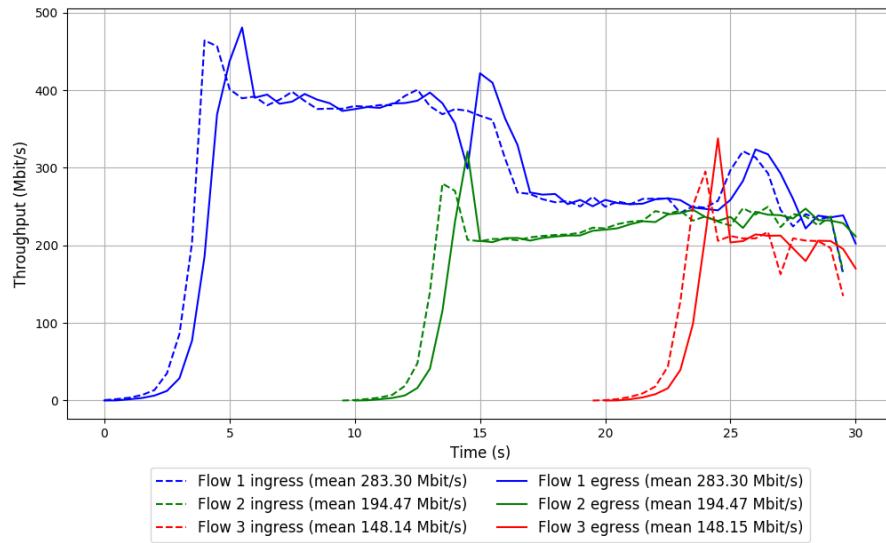


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-02-05 05:50:59
End at: 2019-02-05 05:51:29
Local clock offset: 0.019 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-02-05 12:12:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.69 Mbit/s
95th percentile per-packet one-way delay: 145.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 283.30 Mbit/s
95th percentile per-packet one-way delay: 168.956 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.47 Mbit/s
95th percentile per-packet one-way delay: 89.579 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.15 Mbit/s
95th percentile per-packet one-way delay: 140.019 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

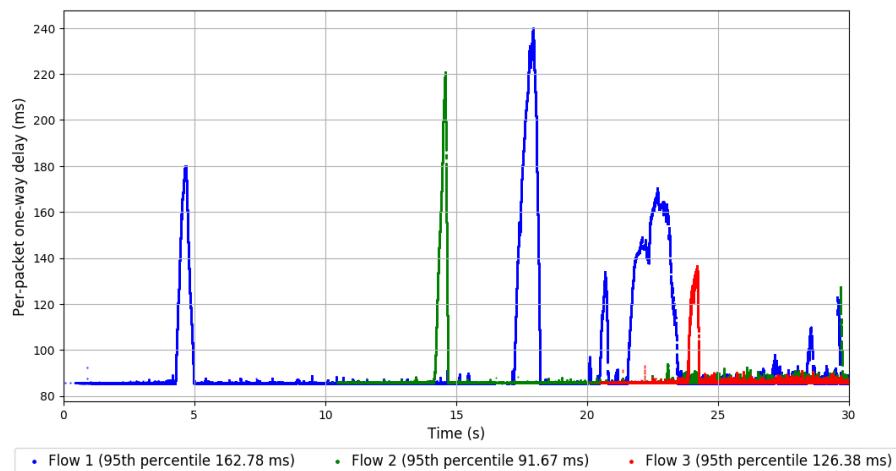
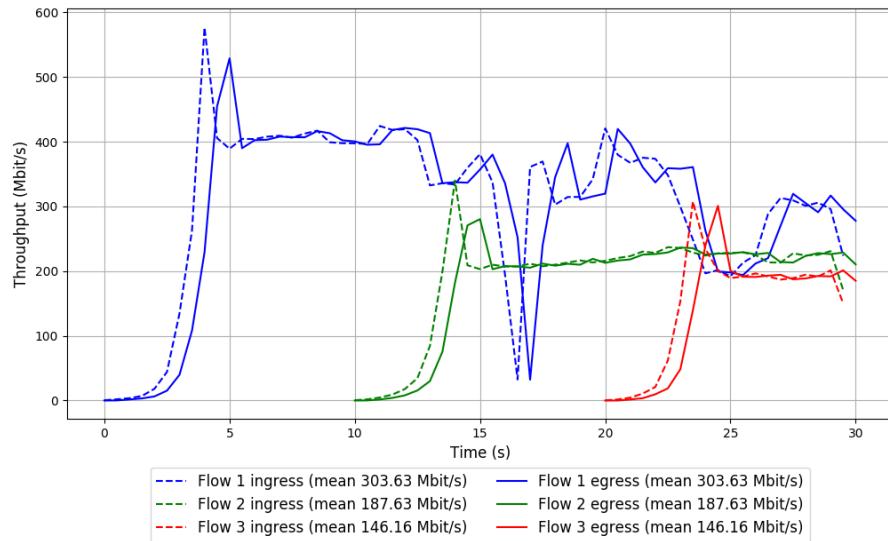


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-05 06:27:59
End at: 2019-02-05 06:28:29
Local clock offset: 0.469 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-02-05 12:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 476.56 Mbit/s
95th percentile per-packet one-way delay: 155.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 303.63 Mbit/s
95th percentile per-packet one-way delay: 162.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.63 Mbit/s
95th percentile per-packet one-way delay: 91.665 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.16 Mbit/s
95th percentile per-packet one-way delay: 126.378 ms
Loss rate: 0.00%
```

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

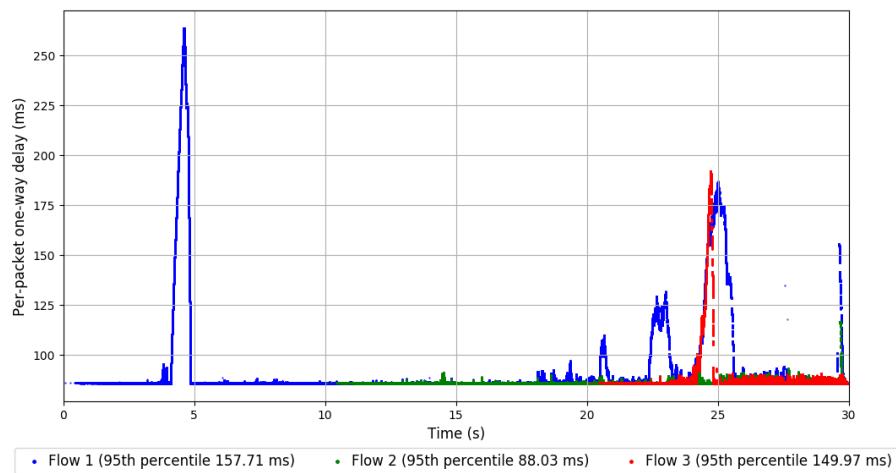
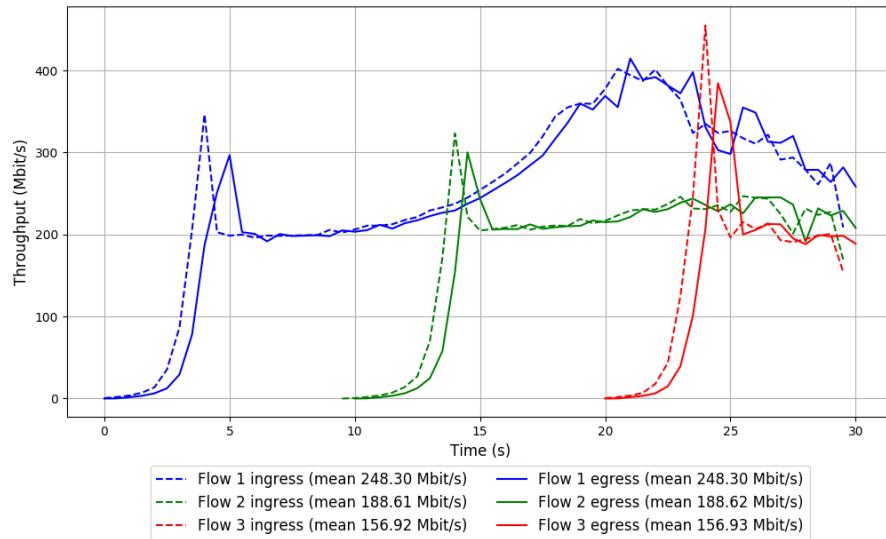


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-05 07:05:42
End at: 2019-02-05 07:06:12
Local clock offset: -0.003 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2019-02-05 12:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.61 Mbit/s
95th percentile per-packet one-way delay: 132.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 248.30 Mbit/s
95th percentile per-packet one-way delay: 157.708 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 188.62 Mbit/s
95th percentile per-packet one-way delay: 88.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.93 Mbit/s
95th percentile per-packet one-way delay: 149.971 ms
Loss rate: 0.00%
```

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

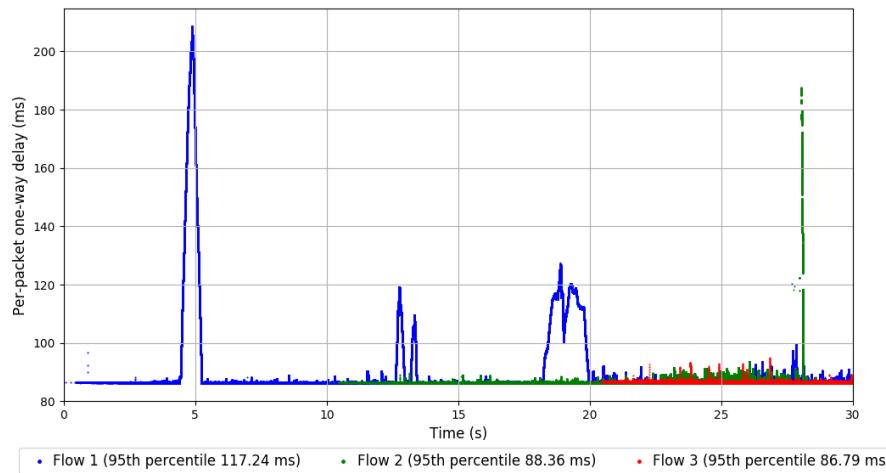
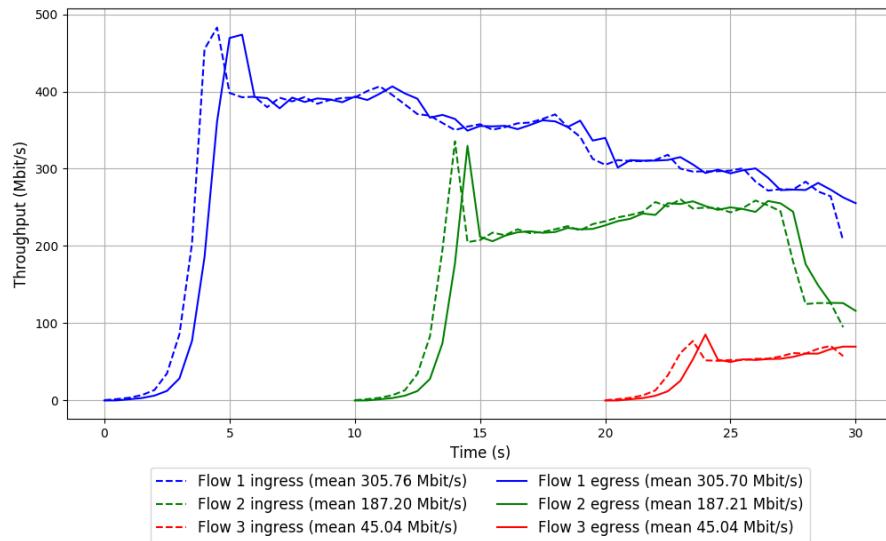


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-05 07:43:06
End at: 2019-02-05 07:43:36
Local clock offset: 0.016 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2019-02-05 12:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.05 Mbit/s
95th percentile per-packet one-way delay: 112.771 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 305.70 Mbit/s
95th percentile per-packet one-way delay: 117.242 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 187.21 Mbit/s
95th percentile per-packet one-way delay: 88.359 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 86.787 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

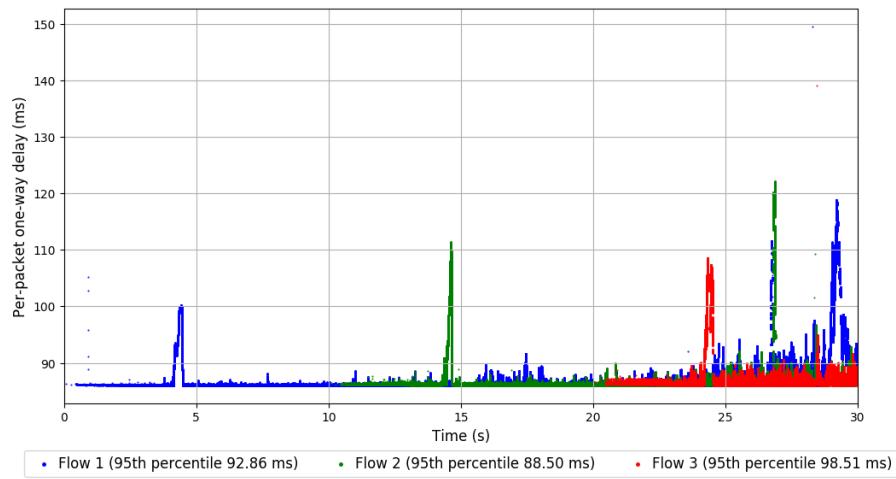
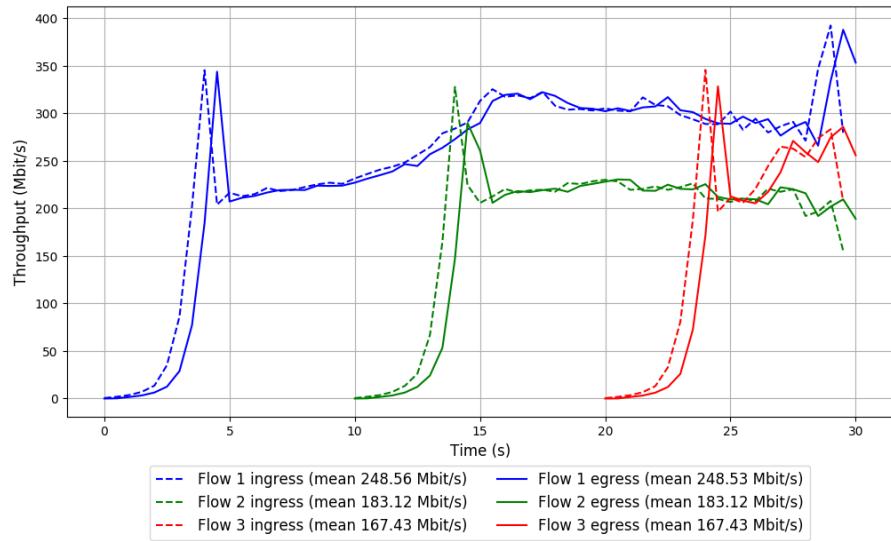


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-05 08:20:40
End at: 2019-02-05 08:21:10
Local clock offset: 0.207 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.51 Mbit/s
95th percentile per-packet one-way delay: 92.325 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 248.53 Mbit/s
95th percentile per-packet one-way delay: 92.855 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 183.12 Mbit/s
95th percentile per-packet one-way delay: 88.496 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.43 Mbit/s
95th percentile per-packet one-way delay: 98.513 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

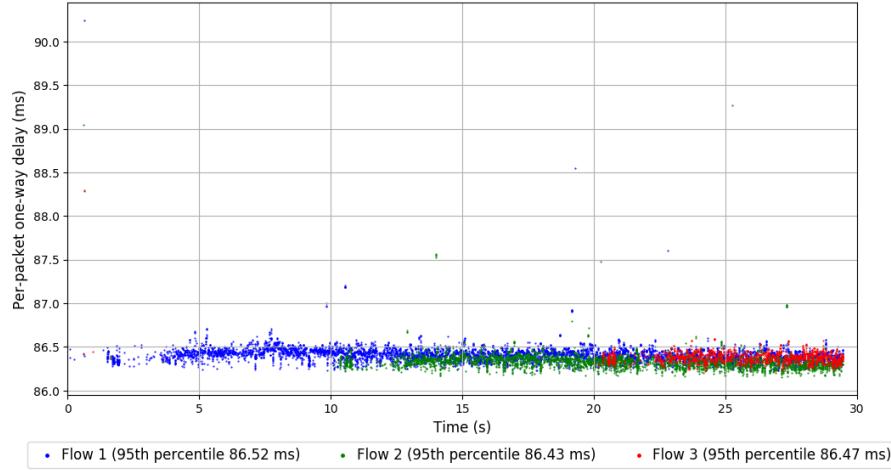
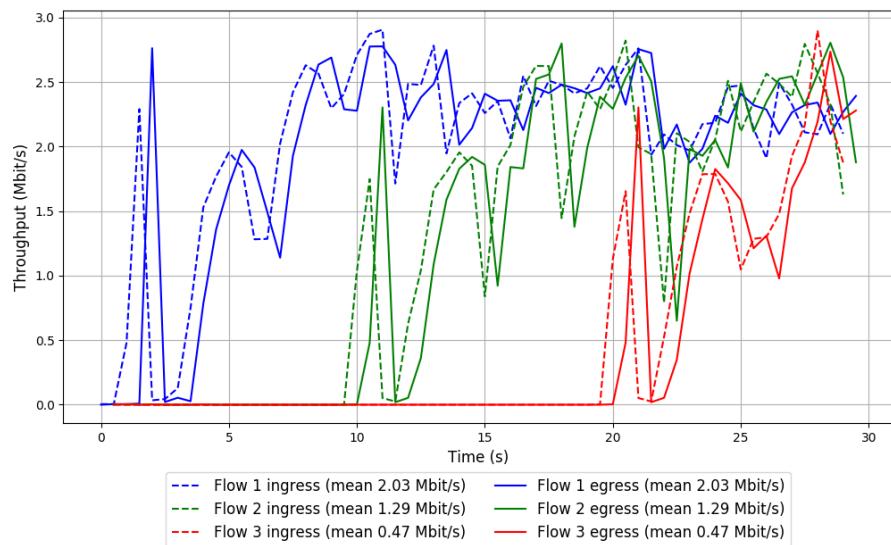


Run 1: Statistics of WebRTC media

```
Start at: 2019-02-05 05:47:48
End at: 2019-02-05 05:48:18
Local clock offset: -0.001 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 86.500 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 86.518 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 86.432 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 86.470 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

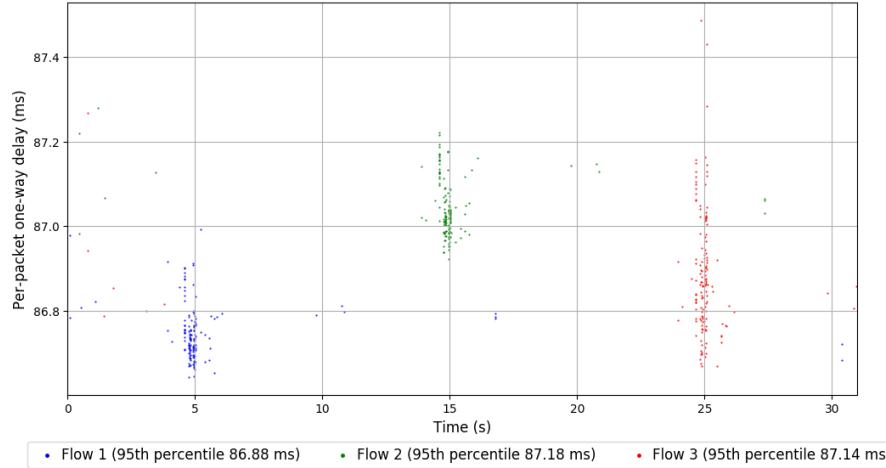
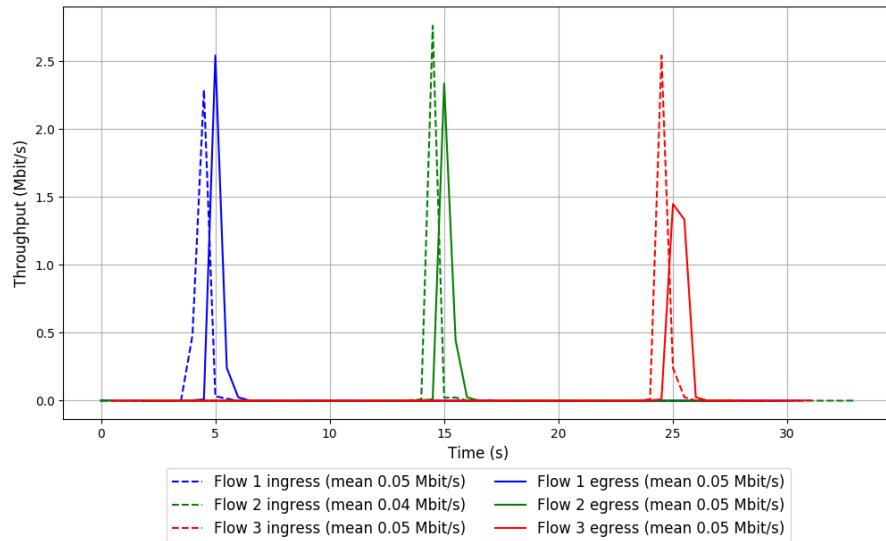


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-05 06:24:44
End at: 2019-02-05 06:25:14
Local clock offset: -0.453 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 87.150 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.883 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.176 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.145 ms
Loss rate: 0.00%
```

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

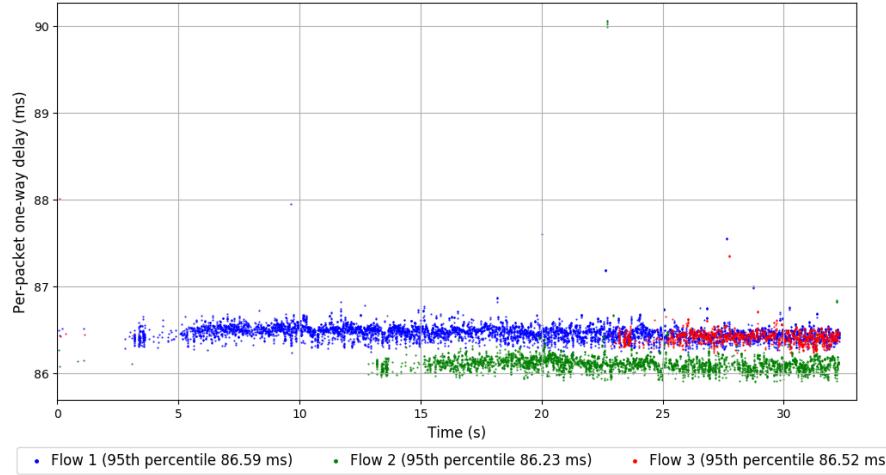
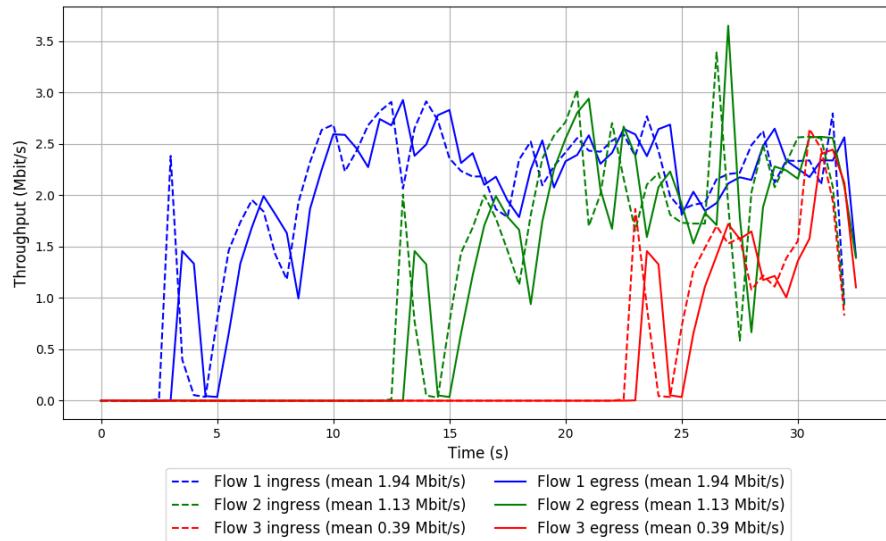


```
Run 3: Statistics of WebRTC media

Start at: 2019-02-05 07:02:27
End at: 2019-02-05 07:02:57
Local clock offset: -0.012 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 86.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 86.228 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 86.520 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

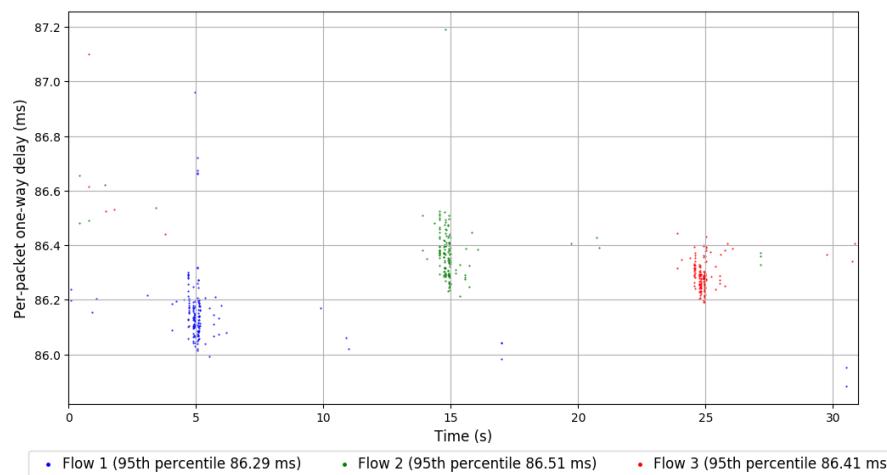
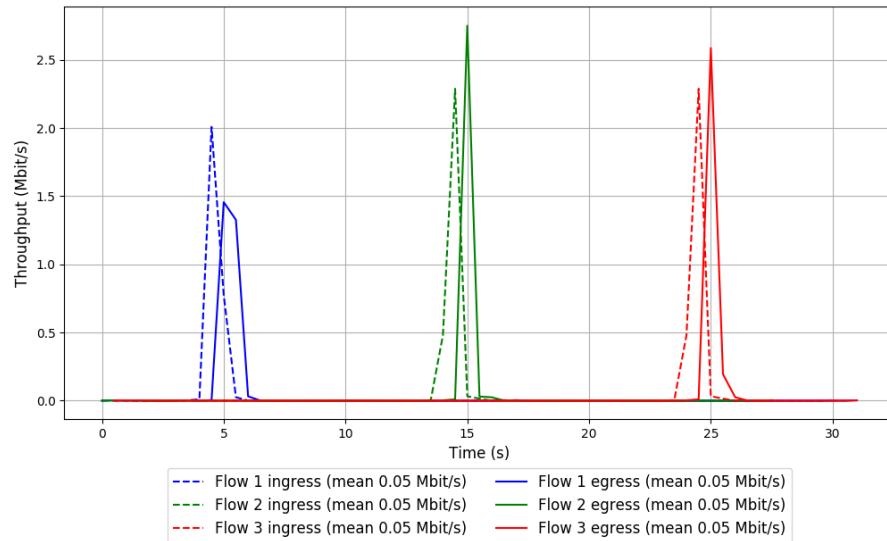


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-05 07:39:54
End at: 2019-02-05 07:40:24
Local clock offset: 0.072 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.294 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.406 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-02-05 08:17:28
End at: 2019-02-05 08:17:58
Local clock offset: -0.208 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-02-05 12:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.729 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

