

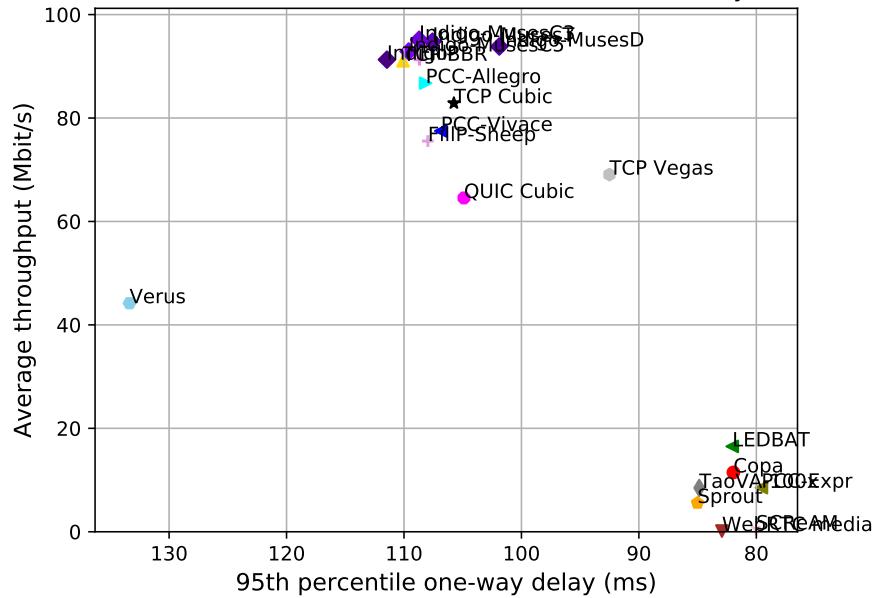
Pantheon Report

Generated at 2019-04-24 02:36:55 (UTC).
Data path: AWS Brazil 2 on `ens5` (*local*) → Colombia on `p4p1` (*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 `gps.ntp.br` and have been applied to correct the timestamps in logs.

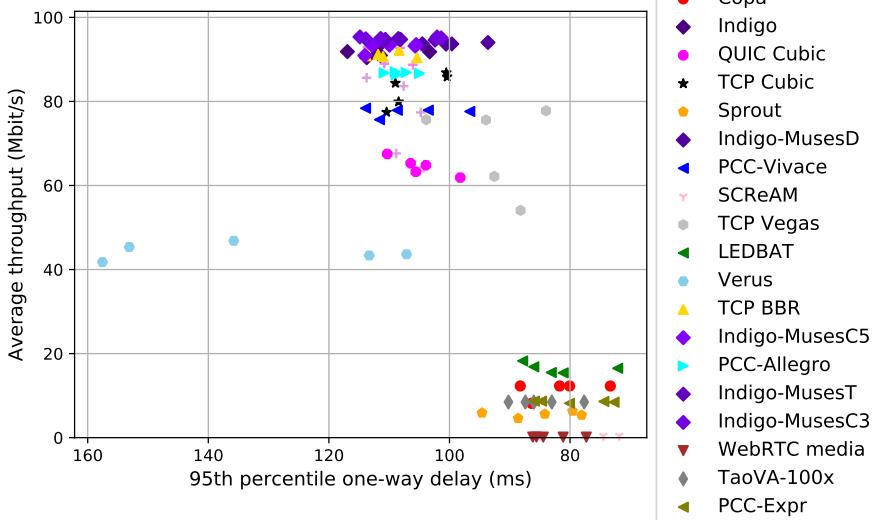
```
System info:  
Linux 4.15.0-1034-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



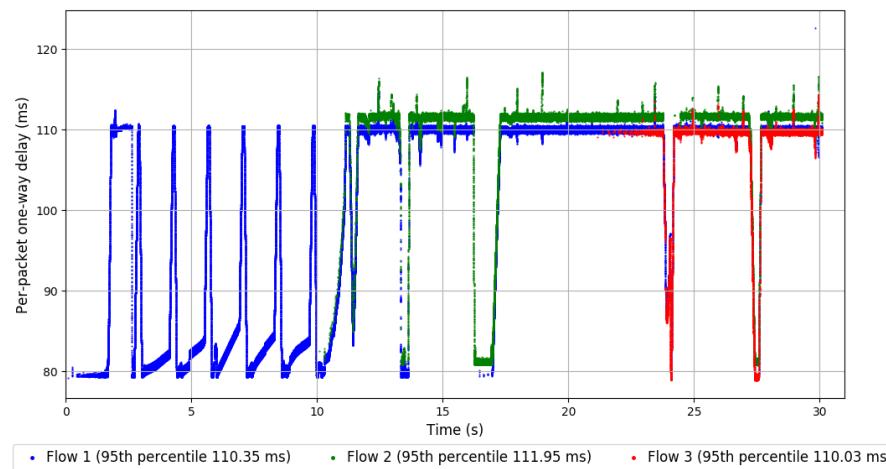
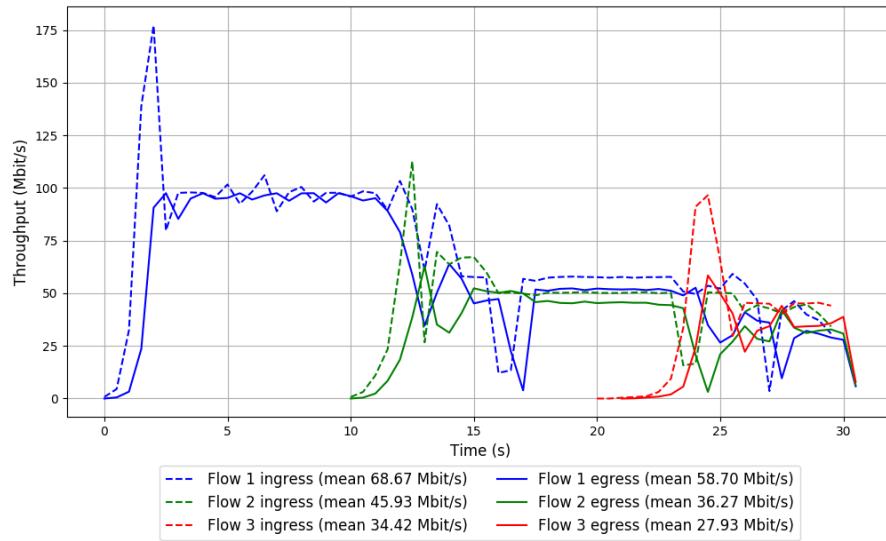
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	55.51	38.97	29.43	108.98	109.56	108.72	12.84	19.62	23.73
Copa	5	6.98	5.81	1.87	82.10	80.73	80.78	79.79	76.47	83.29
TCP Cubic	5	48.70	36.92	28.79	106.01	99.83	97.68	1.63	0.62	0.66
FillP	5	48.32	50.56	28.19	107.05	108.53	109.08	12.38	21.57	21.68
FillP-Sheep	5	17.72	76.33	21.28	106.33	108.21	107.43	13.20	5.67	15.51
Indigo	5	63.28	27.57	30.90	110.60	110.98	110.44	12.41	32.89	69.79
Indigo-MusesC3	5	48.79	53.49	38.55	106.75	109.00	108.39	1.04	1.99	2.44
Indigo-MusesC5	5	63.98	39.16	11.40	109.26	109.69	109.99	2.27	5.28	3.68
Indigo-MusesD	5	61.10	37.60	27.73	100.17	101.34	103.28	0.71	0.43	1.74
Indigo-MusesT	5	56.99	49.09	19.70	106.55	107.34	107.40	3.86	3.69	4.94
LEDBAT	5	10.70	6.92	3.63	82.00	81.96	81.76	0.01	0.01	0.01
PCC-Allegro	5	77.52	9.78	8.22	108.16	107.29	106.98	3.07	5.06	5.08
PCC-Expr	5	0.01	10.24	5.18	78.66	79.12	79.33	85.71	53.96	33.20
QUIC Cubic	5	41.15	28.81	13.10	105.39	103.07	95.86	0.89	0.56	0.38
SCReAM	5	0.22	0.22	0.22	79.45	78.89	79.36	0.00	0.00	0.00
Sprout	5	2.90	2.73	2.58	83.66	85.90	85.41	0.00	0.00	0.00
TaoVA-100x	5	0.00	10.08	5.29	79.05	88.06	78.96	95.92	27.10	21.40
TCP Vegas	5	32.56	41.62	26.34	91.23	91.08	99.54	1.28	0.94	1.86
Verus	5	21.14	28.46	13.56	119.32	127.47	149.15	30.80	51.17	60.38
PCC-Vivace	5	65.68	12.95	9.71	107.18	105.47	106.66	0.32	0.61	0.85
WebRTC media	5	0.05	0.05	0.05	82.49	82.65	82.19	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-04-24 00:18:41
End at: 2019-04-24 00:19:11
Local clock offset: -2.67 ms
Remote clock offset: -3.317 ms

# Below is generated by plot.py at 2019-04-24 02:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 111.833 ms
Loss rate: 17.55%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 110.351 ms
Loss rate: 14.43%
-- Flow 2:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 111.951 ms
Loss rate: 20.93%
-- Flow 3:
Average throughput: 27.93 Mbit/s
95th percentile per-packet one-way delay: 110.034 ms
Loss rate: 27.22%
```

Run 1: Report of TCP BBR — Data Link

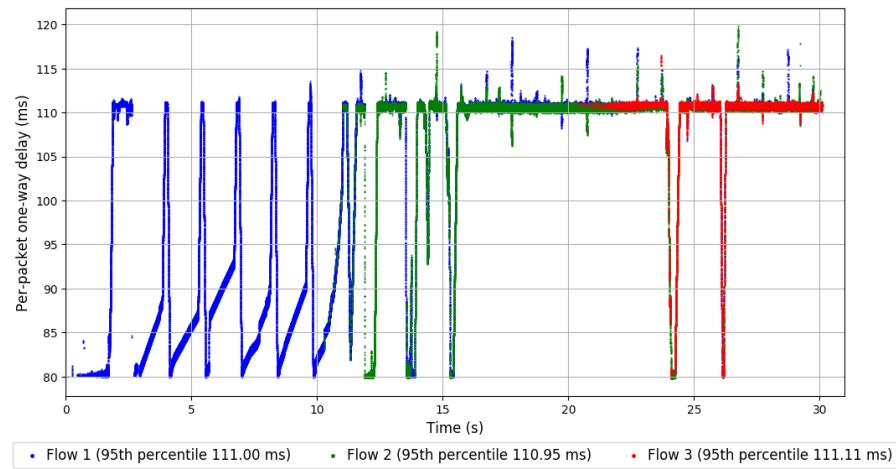
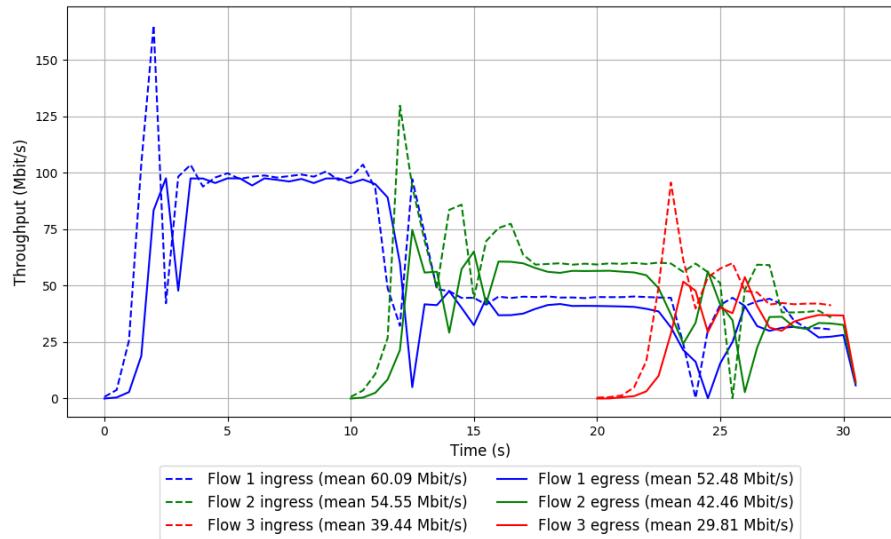


Run 2: Statistics of TCP BBR

```
Start at: 2019-04-24 00:45:37
End at: 2019-04-24 00:46:07
Local clock offset: -3.331 ms
Remote clock offset: 0.258 ms

# Below is generated by plot.py at 2019-04-24 02:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.69 Mbit/s
95th percentile per-packet one-way delay: 111.014 ms
Loss rate: 17.13%
-- Flow 1:
Average throughput: 52.48 Mbit/s
95th percentile per-packet one-way delay: 110.996 ms
Loss rate: 12.57%
-- Flow 2:
Average throughput: 42.46 Mbit/s
95th percentile per-packet one-way delay: 110.954 ms
Loss rate: 22.05%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 111.108 ms
Loss rate: 24.43%
```

Run 2: Report of TCP BBR — Data Link

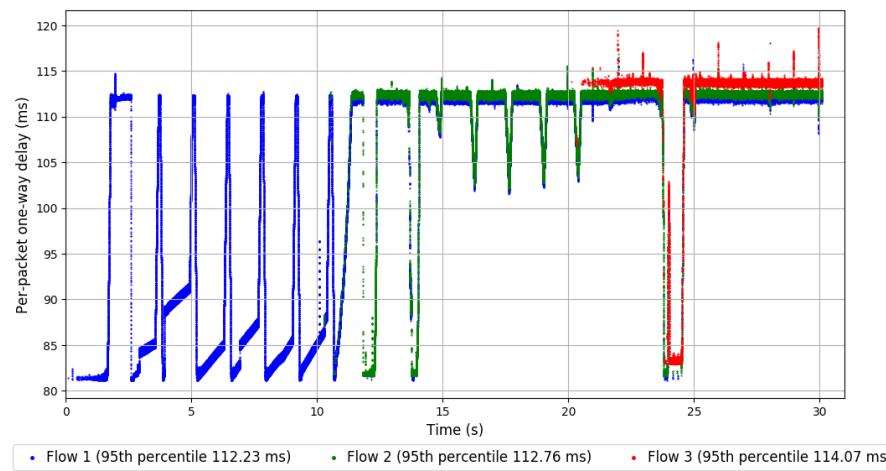
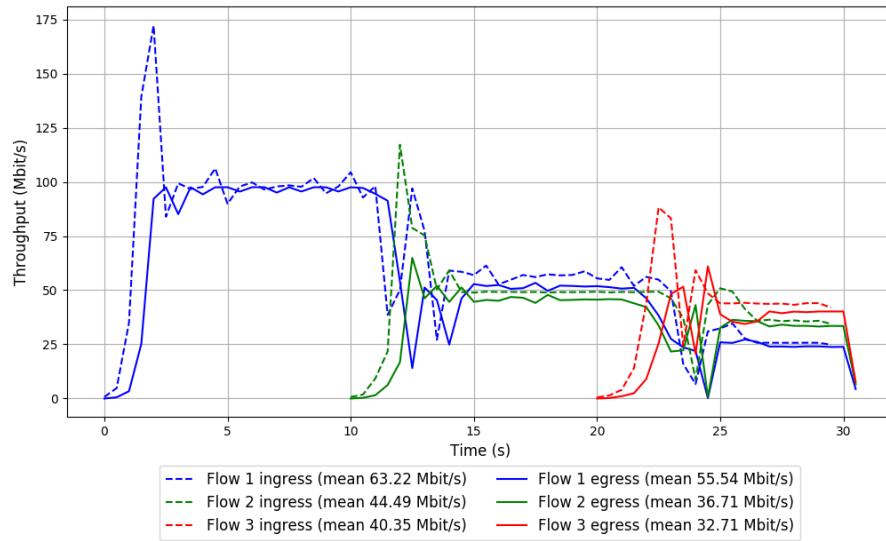


Run 3: Statistics of TCP BBR

```
Start at: 2019-04-24 01:12:33
End at: 2019-04-24 01:13:03
Local clock offset: -4.043 ms
Remote clock offset: 4.454 ms

# Below is generated by plot.py at 2019-04-24 02:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.86 Mbit/s
95th percentile per-packet one-way delay: 113.824 ms
Loss rate: 14.41%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 112.227 ms
Loss rate: 12.06%
-- Flow 2:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 112.758 ms
Loss rate: 17.38%
-- Flow 3:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 114.072 ms
Loss rate: 18.93%
```

Run 3: Report of TCP BBR — Data Link

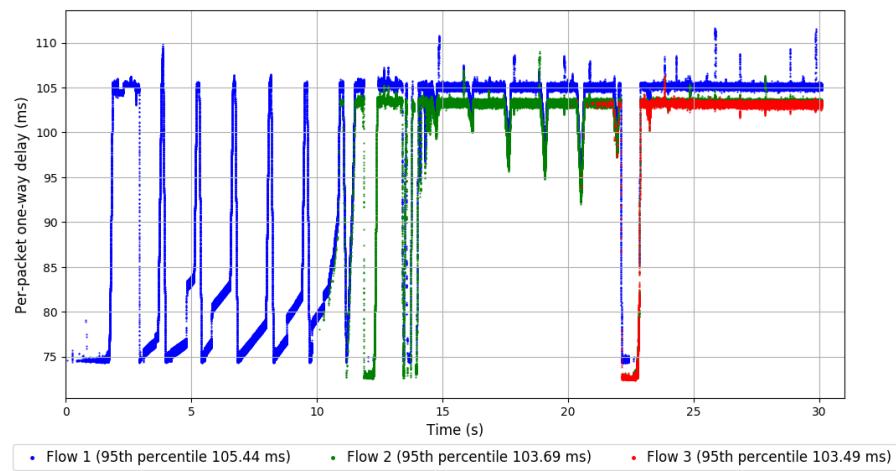
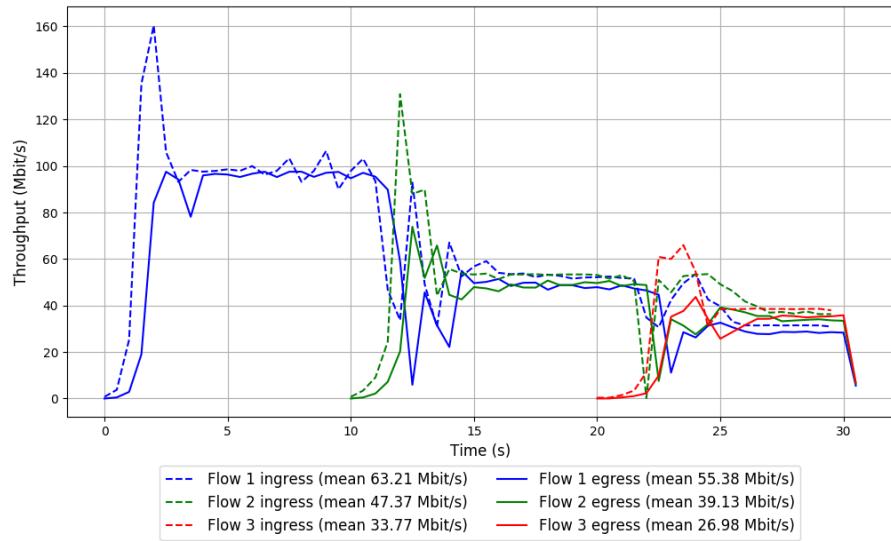


Run 4: Statistics of TCP BBR

```
Start at: 2019-04-24 01:39:39
End at: 2019-04-24 01:40:09
Local clock offset: -3.681 ms
Remote clock offset: -6.063 ms

# Below is generated by plot.py at 2019-04-24 02:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 105.391 ms
Loss rate: 14.62%
-- Flow 1:
Average throughput: 55.38 Mbit/s
95th percentile per-packet one-way delay: 105.442 ms
Loss rate: 12.29%
-- Flow 2:
Average throughput: 39.13 Mbit/s
95th percentile per-packet one-way delay: 103.694 ms
Loss rate: 17.31%
-- Flow 3:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 103.486 ms
Loss rate: 20.12%
```

Run 4: Report of TCP BBR — Data Link

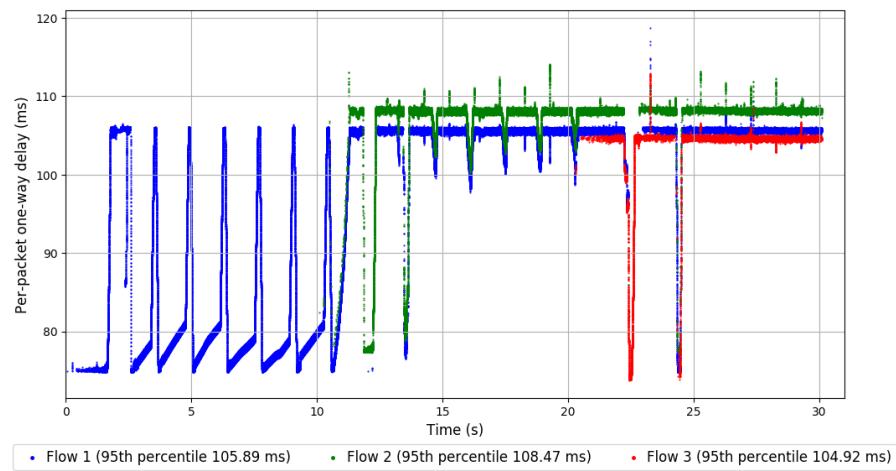
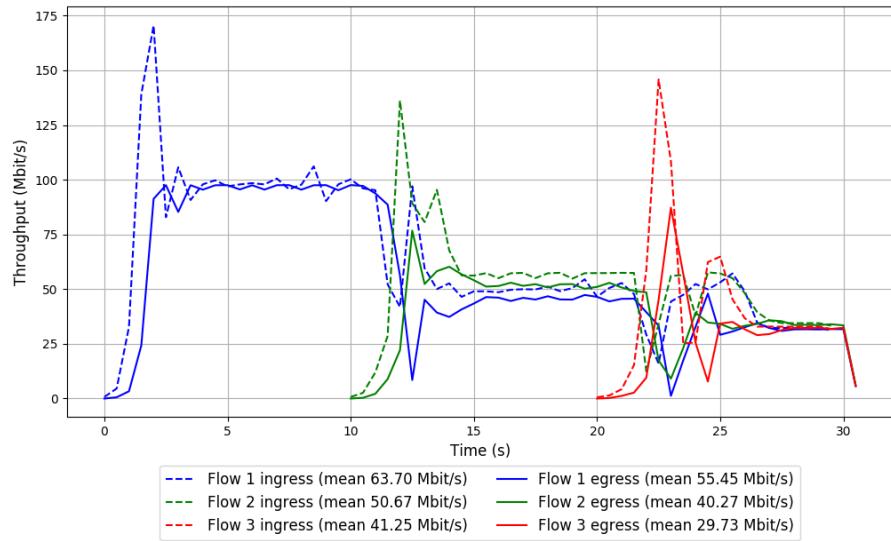


Run 5: Statistics of TCP BBR

```
Start at: 2019-04-24 02:06:25
End at: 2019-04-24 02:06:55
Local clock offset: -2.702 ms
Remote clock offset: -3.254 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 108.345 ms
Loss rate: 17.02%
-- Flow 1:
Average throughput: 55.45 Mbit/s
95th percentile per-packet one-way delay: 105.885 ms
Loss rate: 12.87%
-- Flow 2:
Average throughput: 40.27 Mbit/s
95th percentile per-packet one-way delay: 108.467 ms
Loss rate: 20.42%
-- Flow 3:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 104.921 ms
Loss rate: 27.93%
```

Run 5: Report of TCP BBR — Data Link

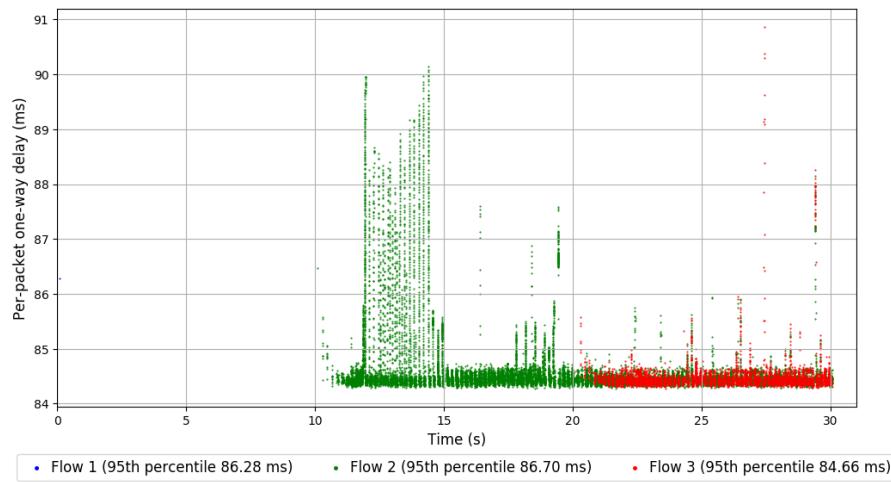
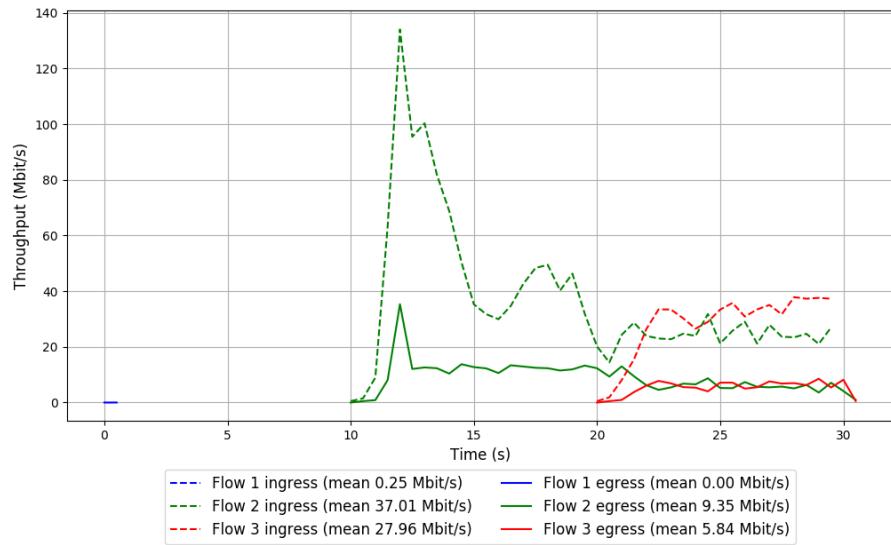


Run 1: Statistics of Copa

```
Start at: 2019-04-24 00:10:56
End at: 2019-04-24 00:11:26
Local clock offset: -2.451 ms
Remote clock offset: 2.945 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 86.386 ms
Loss rate: 75.93%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 86.279 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 86.701 ms
Loss rate: 74.73%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 84.660 ms
Loss rate: 79.12%
```

Run 1: Report of Copa — Data Link

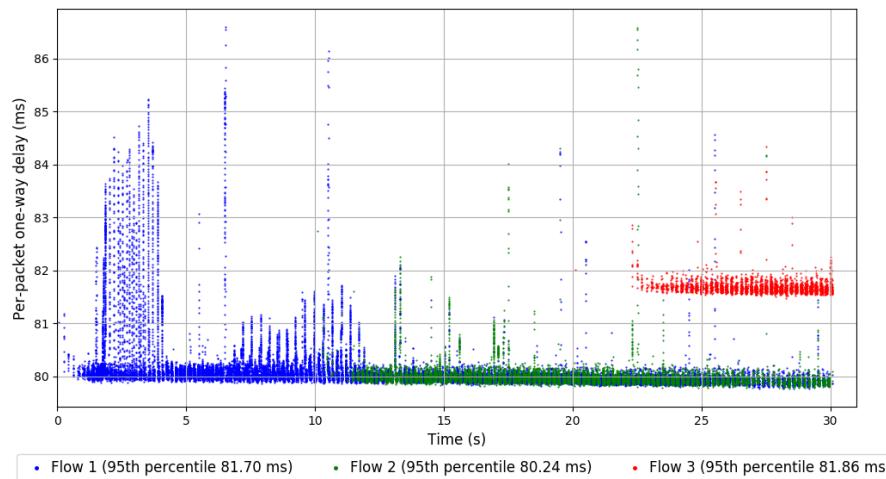
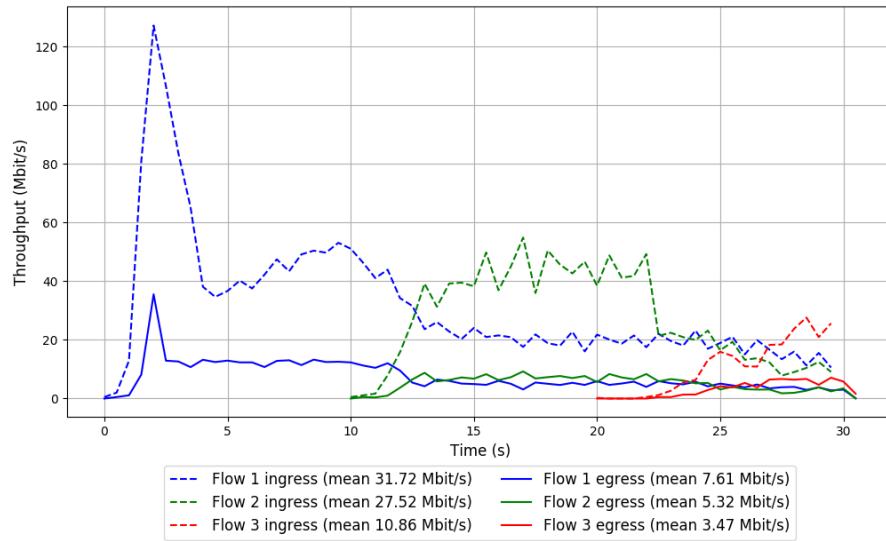


Run 2: Statistics of Copa

```
Start at: 2019-04-24 00:37:43
End at: 2019-04-24 00:38:13
Local clock offset: -4.055 ms
Remote clock offset: -1.259 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 81.734 ms
Loss rate: 77.09%
-- Flow 1:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 81.699 ms
Loss rate: 76.03%
-- Flow 2:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 80.240 ms
Loss rate: 80.69%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 81.863 ms
Loss rate: 68.05%
```

Run 2: Report of Copa — Data Link

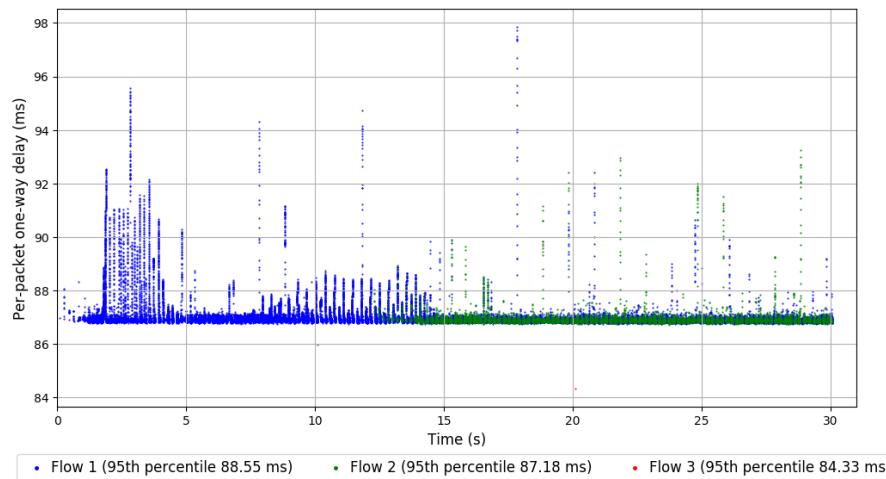
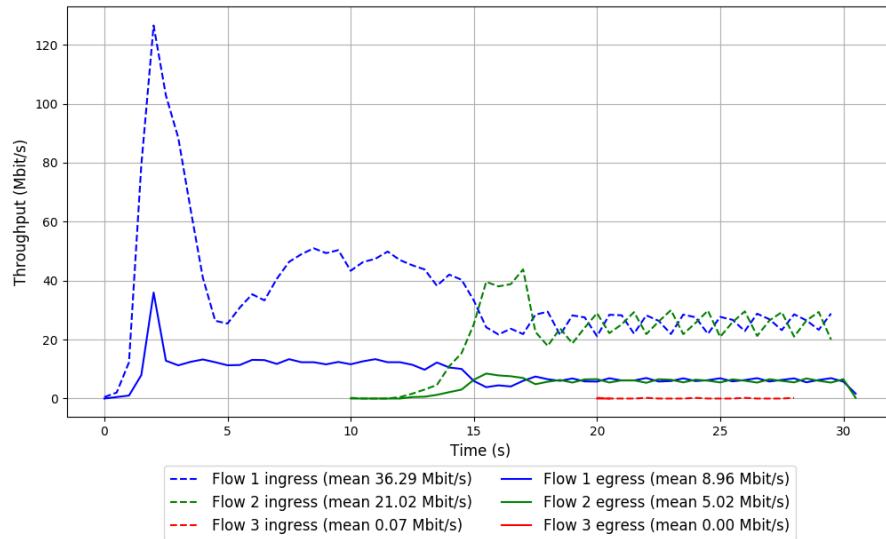


Run 3: Statistics of Copa

```
Start at: 2019-04-24 01:04:38
End at: 2019-04-24 01:05:08
Local clock offset: -4.683 ms
Remote clock offset: 7.142 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 88.257 ms
Loss rate: 75.55%
-- Flow 1:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 88.553 ms
Loss rate: 75.32%
-- Flow 2:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 87.176 ms
Loss rate: 76.11%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 84.330 ms
Loss rate: 99.83%
```

Run 3: Report of Copa — Data Link

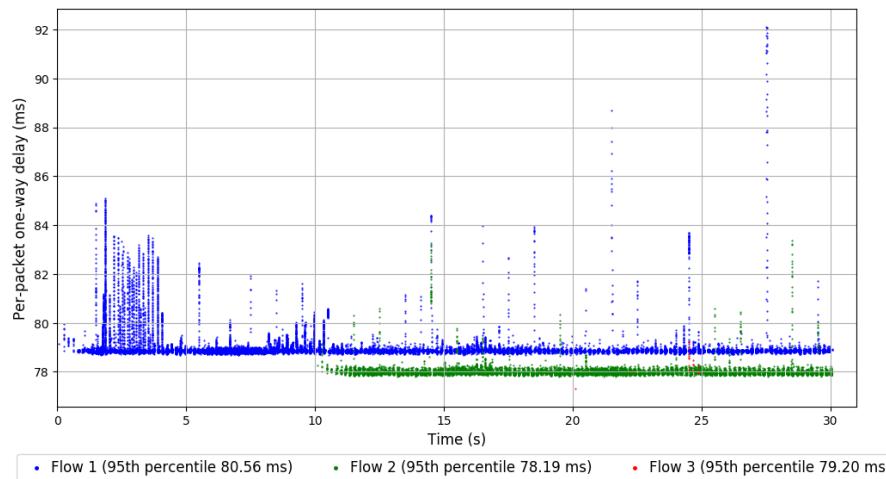
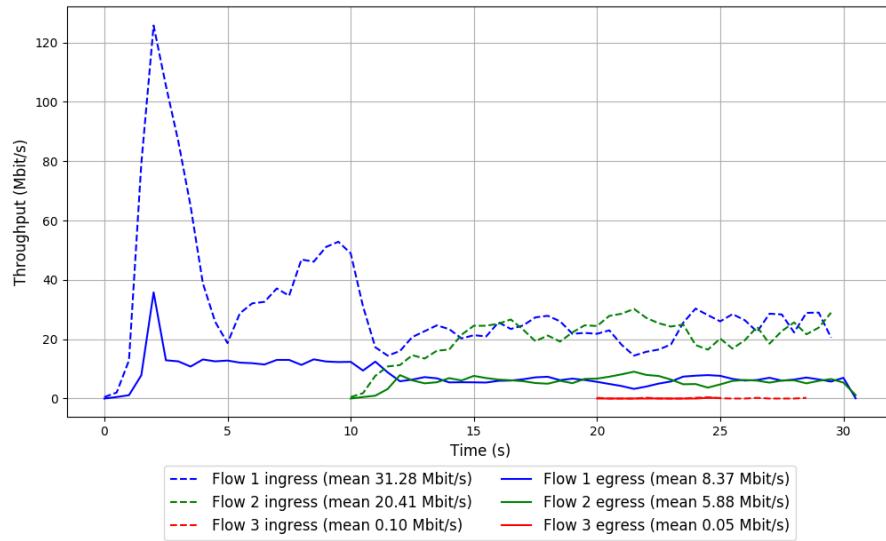


Run 4: Statistics of Copa

```
Start at: 2019-04-24 01:31:54
End at: 2019-04-24 01:32:24
Local clock offset: -3.79 ms
Remote clock offset: -1.274 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 80.071 ms
Loss rate: 72.62%
-- Flow 1:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 80.555 ms
Loss rate: 73.23%
-- Flow 2:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 78.186 ms
Loss rate: 71.20%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 79.204 ms
Loss rate: 74.24%
```

Run 4: Report of Copa — Data Link

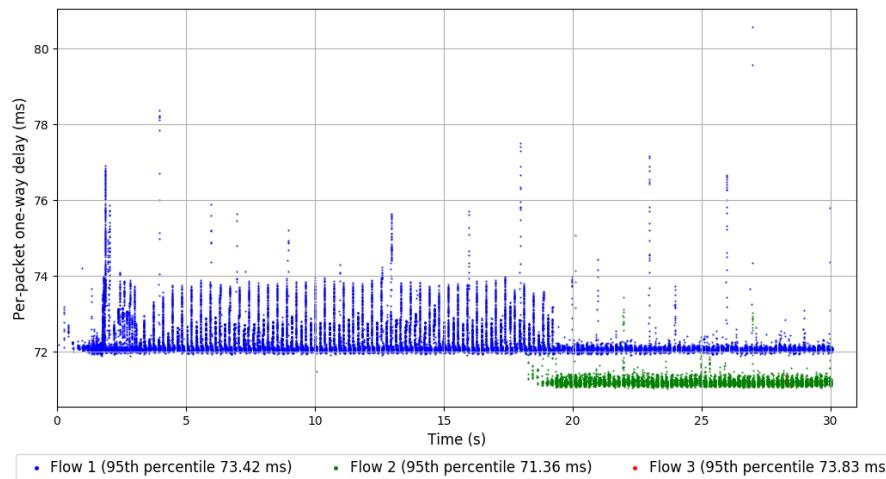
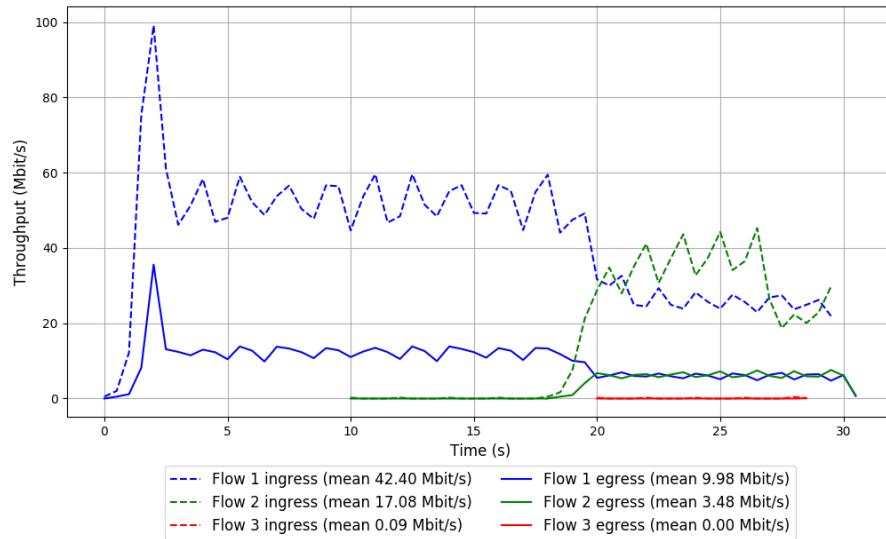


Run 5: Statistics of Copa

```
Start at: 2019-04-24 01:58:41
End at: 2019-04-24 01:59:11
Local clock offset: -2.757 ms
Remote clock offset: -6.885 ms

# Below is generated by plot.py at 2019-04-24 02:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 73.317 ms
Loss rate: 77.14%
-- Flow 1:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 73.416 ms
Loss rate: 76.47%
-- Flow 2:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 71.364 ms
Loss rate: 79.61%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 73.834 ms
Loss rate: 95.19%
```

Run 5: Report of Copa — Data Link

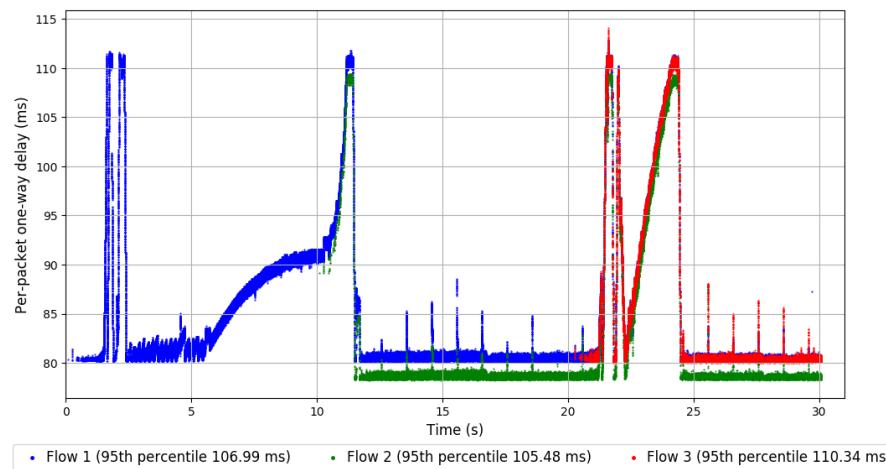
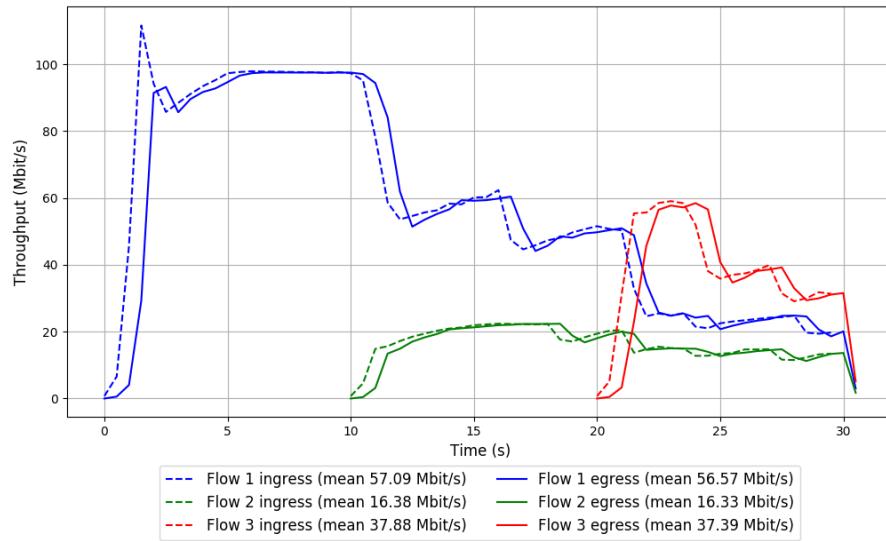


```
Run 1: Statistics of TCP Cubic

Start at: 2019-04-24 00:31:20
End at: 2019-04-24 00:31:50
Local clock offset: -3.145 ms
Remote clock offset: -2.258 ms

# Below is generated by plot.py at 2019-04-24 02:27:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.90 Mbit/s
95th percentile per-packet one-way delay: 108.437 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 106.993 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 16.33 Mbit/s
95th percentile per-packet one-way delay: 105.485 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 110.345 ms
Loss rate: 1.29%
```

Run 1: Report of TCP Cubic — Data Link

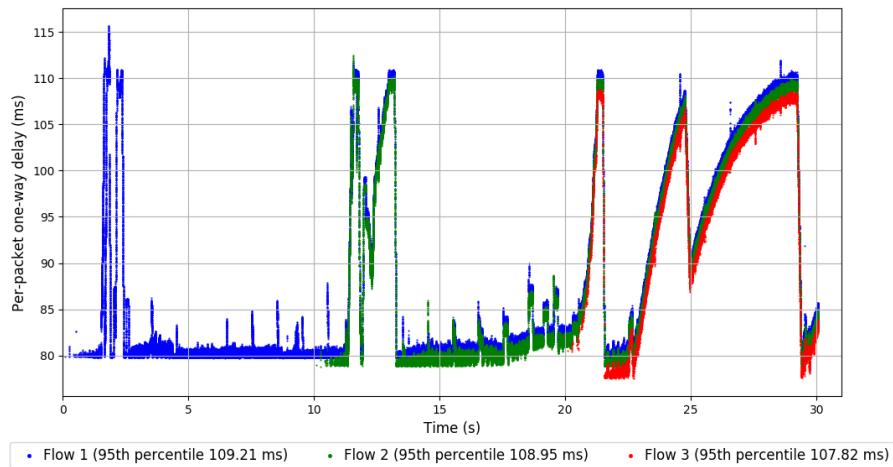
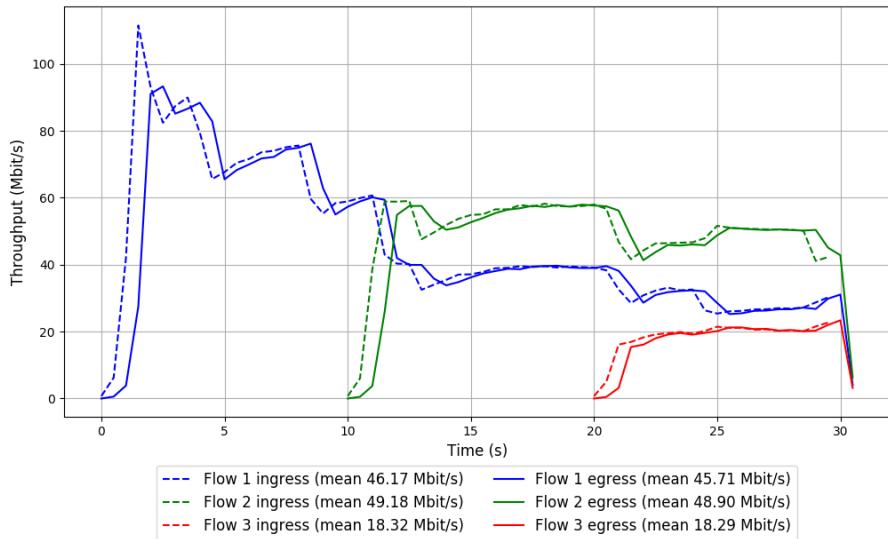


Run 2: Statistics of TCP Cubic

```
Start at: 2019-04-24 00:58:15
End at: 2019-04-24 00:58:45
Local clock offset: -3.78 ms
Remote clock offset: 0.44 ms

# Below is generated by plot.py at 2019-04-24 02:27:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.36 Mbit/s
95th percentile per-packet one-way delay: 108.968 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 45.71 Mbit/s
95th percentile per-packet one-way delay: 109.206 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 48.90 Mbit/s
95th percentile per-packet one-way delay: 108.954 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 18.29 Mbit/s
95th percentile per-packet one-way delay: 107.824 ms
Loss rate: 0.16%
```

Run 2: Report of TCP Cubic — Data Link

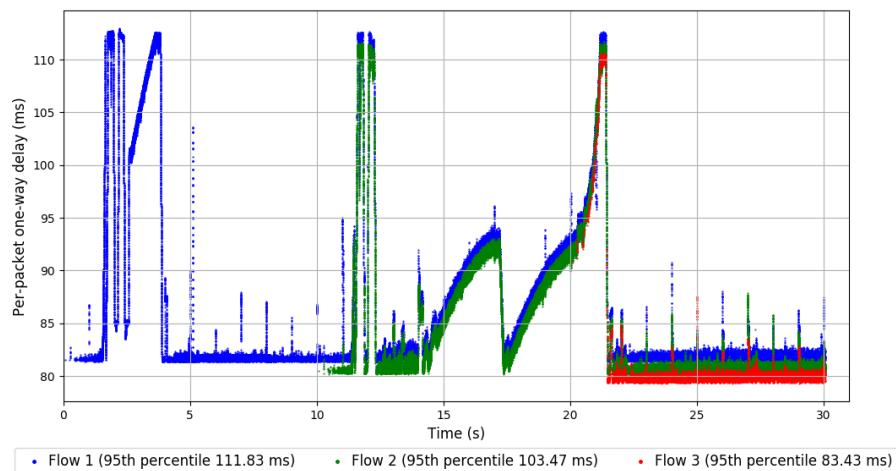
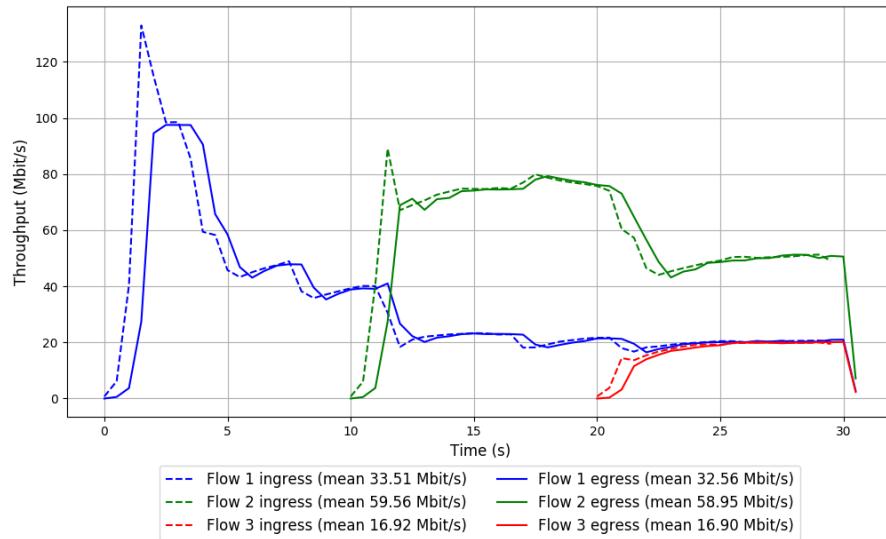


Run 3: Statistics of TCP Cubic

```
Start at: 2019-04-24 01:25:11
End at: 2019-04-24 01:25:41
Local clock offset: -3.247 ms
Remote clock offset: 0.949 ms

# Below is generated by plot.py at 2019-04-24 02:27:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.45 Mbit/s
95th percentile per-packet one-way delay: 110.429 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 111.830 ms
Loss rate: 2.84%
-- Flow 2:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 103.469 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 16.90 Mbit/s
95th percentile per-packet one-way delay: 83.434 ms
Loss rate: 0.21%
```

Run 3: Report of TCP Cubic — Data Link

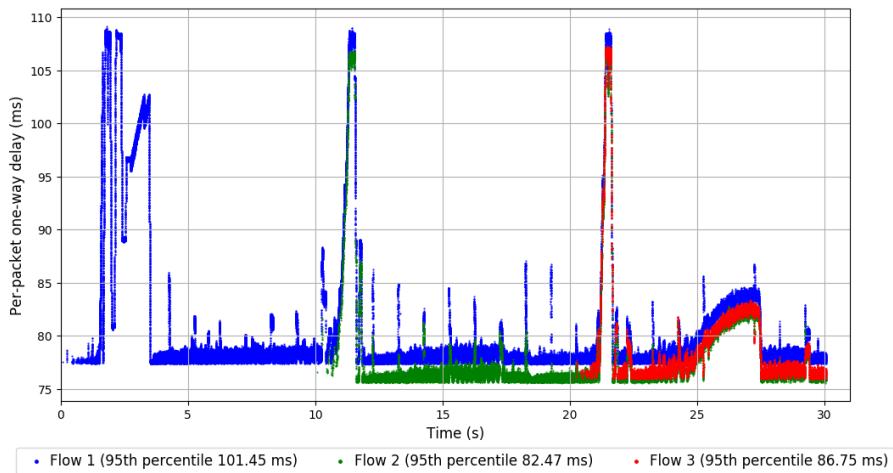
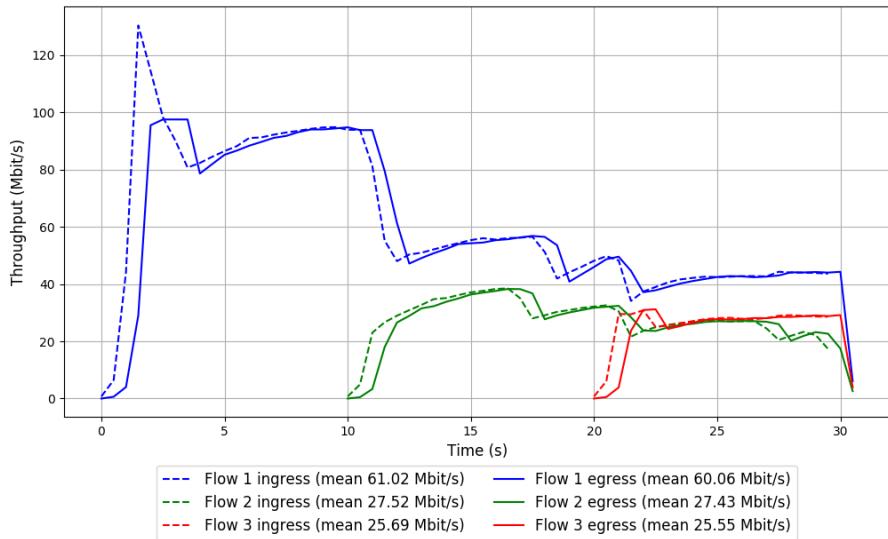


Run 4: Statistics of TCP Cubic

```
Start at: 2019-04-24 01:52:16
End at: 2019-04-24 01:52:46
Local clock offset: -3.568 ms
Remote clock offset: -2.36 ms

# Below is generated by plot.py at 2019-04-24 02:28:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 100.534 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 60.06 Mbit/s
95th percentile per-packet one-way delay: 101.452 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 82.473 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 25.55 Mbit/s
95th percentile per-packet one-way delay: 86.745 ms
Loss rate: 0.54%
```

Run 4: Report of TCP Cubic — Data Link

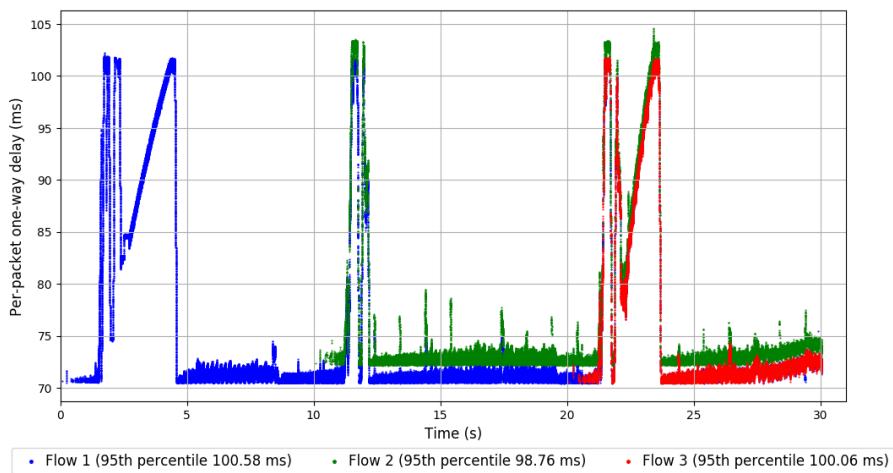
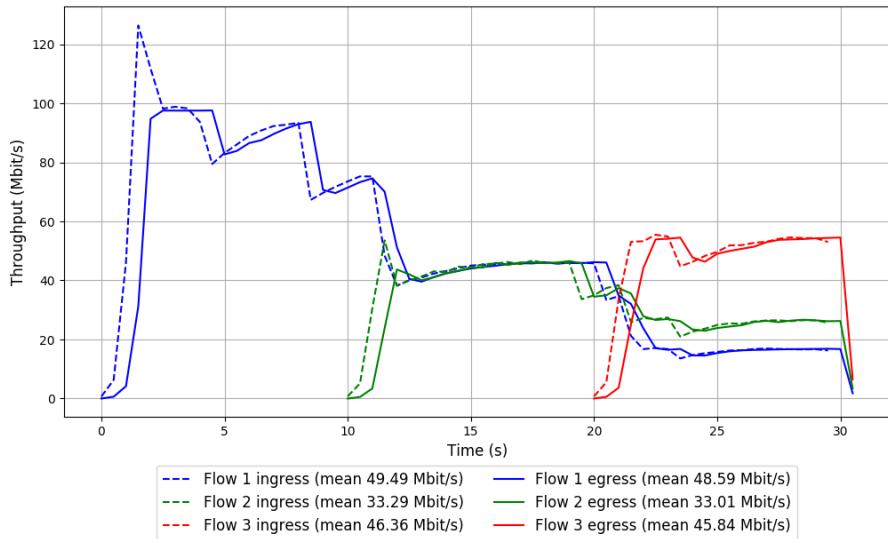


Run 5: Statistics of TCP Cubic

```
Start at: 2019-04-24 02:19:09
End at: 2019-04-24 02:19:39
Local clock offset: -3.731 ms
Remote clock offset: -6.939 ms

# Below is generated by plot.py at 2019-04-24 02:28:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.85 Mbit/s
95th percentile per-packet one-way delay: 100.394 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 48.59 Mbit/s
95th percentile per-packet one-way delay: 100.585 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 33.01 Mbit/s
95th percentile per-packet one-way delay: 98.762 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 45.84 Mbit/s
95th percentile per-packet one-way delay: 100.055 ms
Loss rate: 1.11%
```

Run 5: Report of TCP Cubic — Data Link

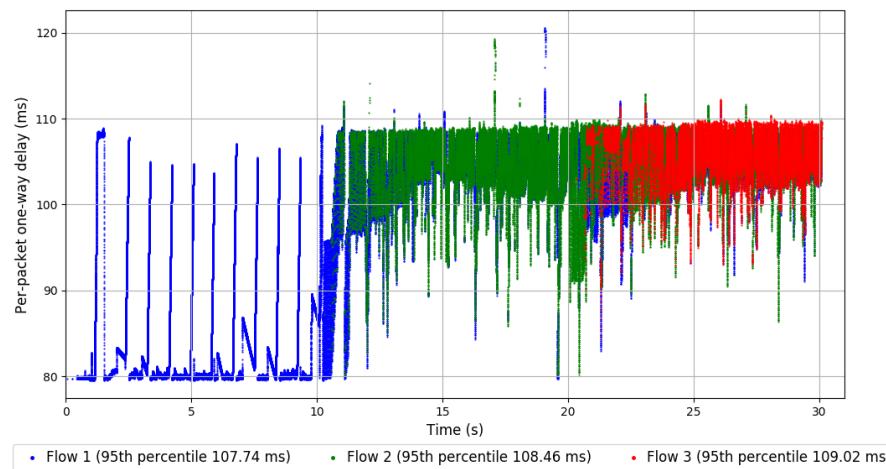
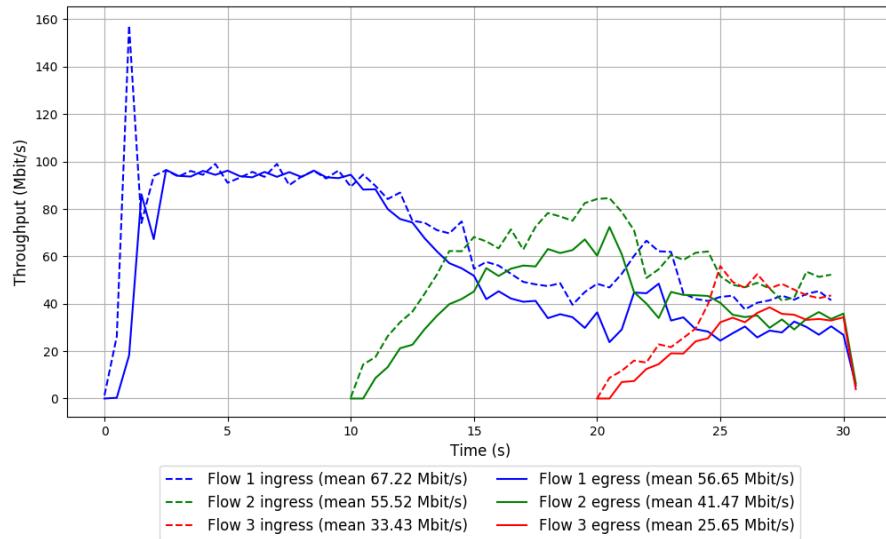


```
Run 1: Statistics of FillP

Start at: 2019-04-24 00:30:02
End at: 2019-04-24 00:30:32
Local clock offset: -3.886 ms
Remote clock offset: -3.4 ms

# Below is generated by plot.py at 2019-04-24 02:29:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 108.180 ms
Loss rate: 19.46%
-- Flow 1:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 107.742 ms
Loss rate: 15.67%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 108.459 ms
Loss rate: 25.23%
-- Flow 3:
Average throughput: 25.65 Mbit/s
95th percentile per-packet one-way delay: 109.017 ms
Loss rate: 23.22%
```

Run 1: Report of FillP — Data Link

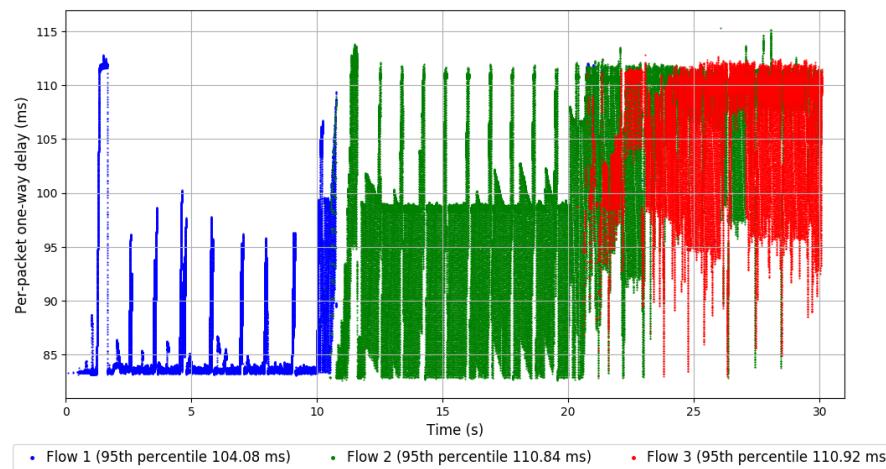
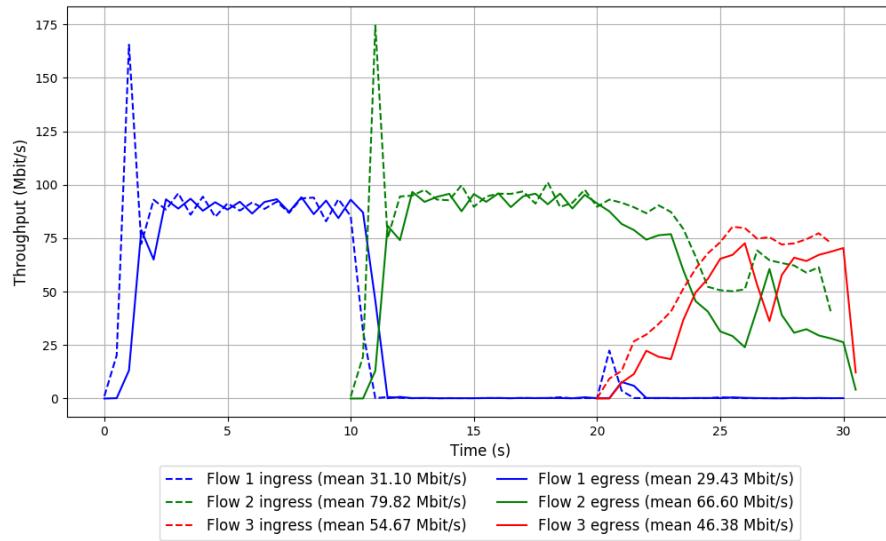


Run 2: Statistics of FillP

```
Start at: 2019-04-24 00:56:58
End at: 2019-04-24 00:57:28
Local clock offset: -3.814 ms
Remote clock offset: 4.242 ms

# Below is generated by plot.py at 2019-04-24 02:29:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.99 Mbit/s
95th percentile per-packet one-way delay: 110.810 ms
Loss rate: 12.86%
-- Flow 1:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 104.079 ms
Loss rate: 5.30%
-- Flow 2:
Average throughput: 66.60 Mbit/s
95th percentile per-packet one-way delay: 110.842 ms
Loss rate: 16.49%
-- Flow 3:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 110.923 ms
Loss rate: 15.13%
```

Run 2: Report of FillP — Data Link

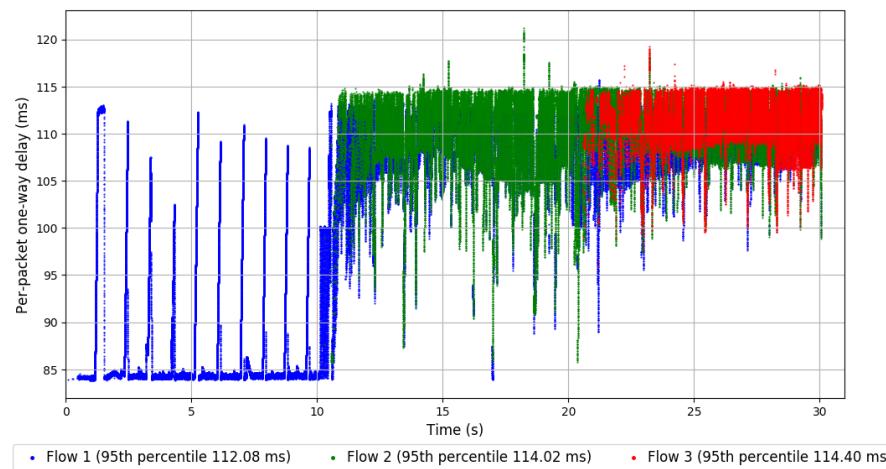
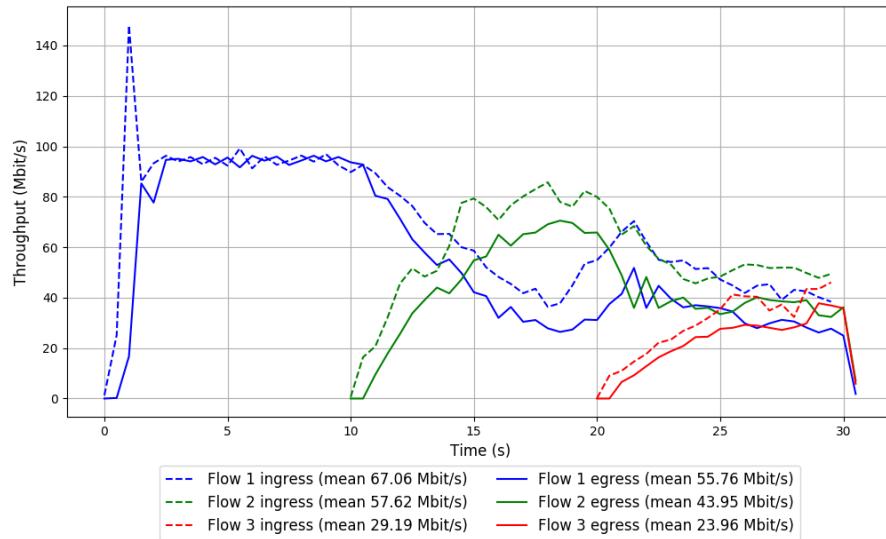


Run 3: Statistics of FillP

```
Start at: 2019-04-24 01:23:52
End at: 2019-04-24 01:24:22
Local clock offset: -4.072 ms
Remote clock offset: 5.836 ms

# Below is generated by plot.py at 2019-04-24 02:29:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 113.609 ms
Loss rate: 19.18%
-- Flow 1:
Average throughput: 55.76 Mbit/s
95th percentile per-packet one-way delay: 112.079 ms
Loss rate: 16.80%
-- Flow 2:
Average throughput: 43.95 Mbit/s
95th percentile per-packet one-way delay: 114.020 ms
Loss rate: 23.65%
-- Flow 3:
Average throughput: 23.96 Mbit/s
95th percentile per-packet one-way delay: 114.396 ms
Loss rate: 17.91%
```

Run 3: Report of FillP — Data Link

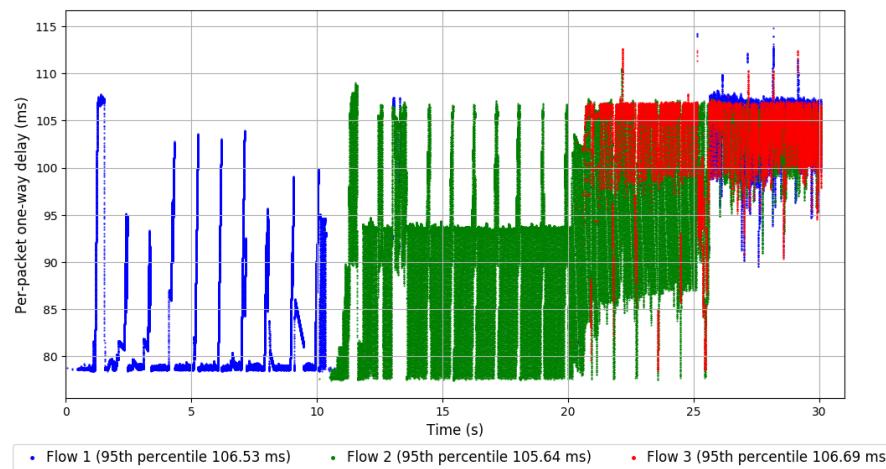
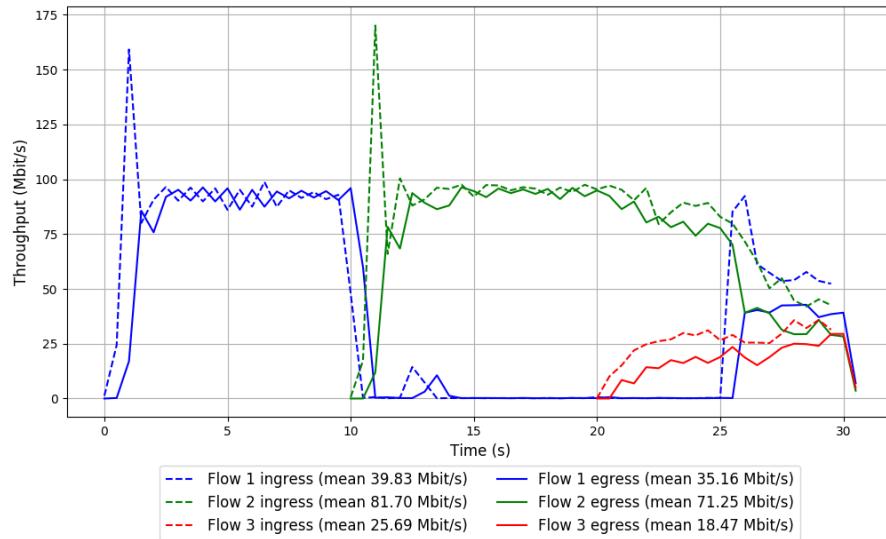


Run 4: Statistics of FillP

```
Start at: 2019-04-24 01:50:58
End at: 2019-04-24 01:51:29
Local clock offset: -3.577 ms
Remote clock offset: -2.344 ms

# Below is generated by plot.py at 2019-04-24 02:29:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.73 Mbit/s
95th percentile per-packet one-way delay: 106.066 ms
Loss rate: 13.54%
-- Flow 1:
Average throughput: 35.16 Mbit/s
95th percentile per-packet one-way delay: 106.531 ms
Loss rate: 11.63%
-- Flow 2:
Average throughput: 71.25 Mbit/s
95th percentile per-packet one-way delay: 105.636 ms
Loss rate: 12.68%
-- Flow 3:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 106.691 ms
Loss rate: 27.98%
```

Run 4: Report of FillP — Data Link

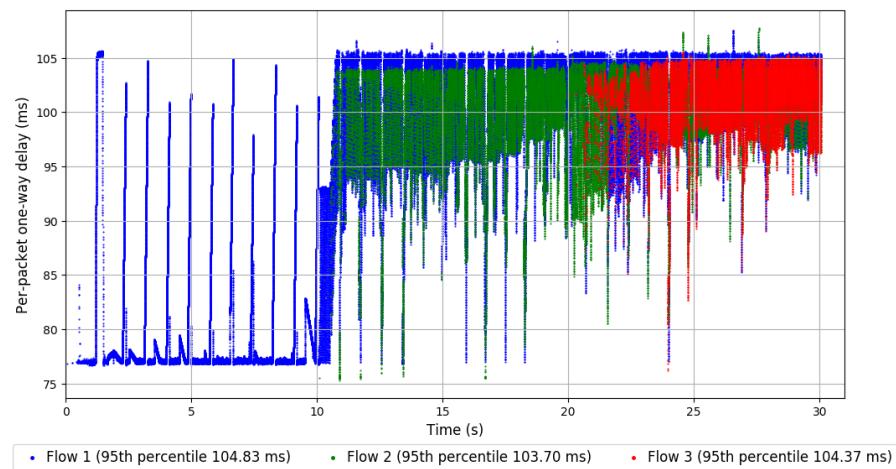
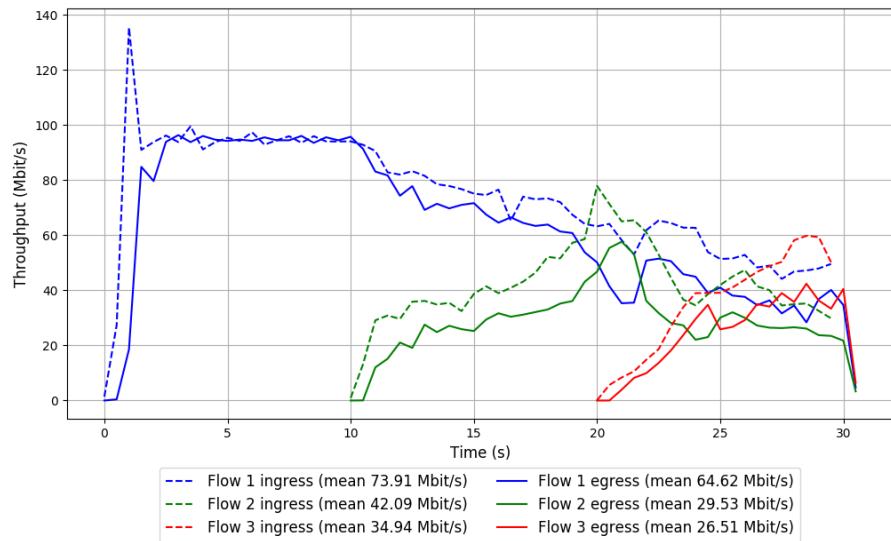


```
Run 5: Statistics of FillP

Start at: 2019-04-24 02:17:51
End at: 2019-04-24 02:18:21
Local clock offset: -3.628 ms
Remote clock offset: -1.9 ms

# Below is generated by plot.py at 2019-04-24 02:29:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.03 Mbit/s
95th percentile per-packet one-way delay: 104.719 ms
Loss rate: 17.95%
-- Flow 1:
Average throughput: 64.62 Mbit/s
95th percentile per-packet one-way delay: 104.835 ms
Loss rate: 12.49%
-- Flow 2:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 103.700 ms
Loss rate: 29.78%
-- Flow 3:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 104.373 ms
Loss rate: 24.14%
```

Run 5: Report of FillP — Data Link

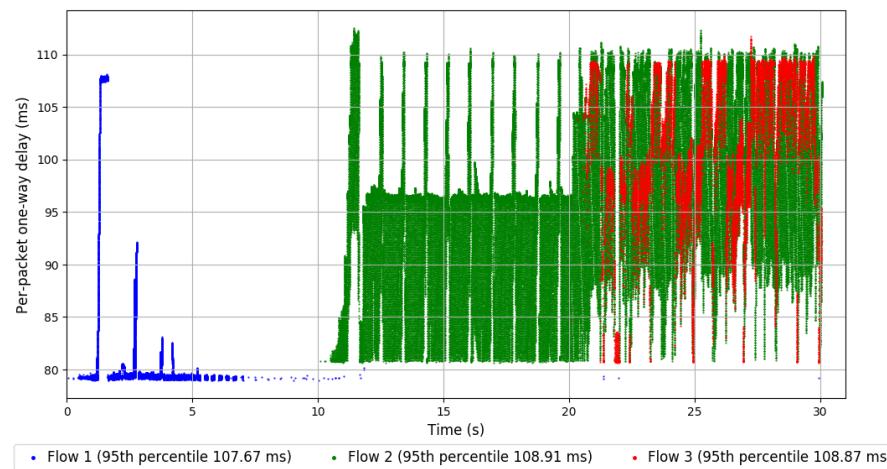
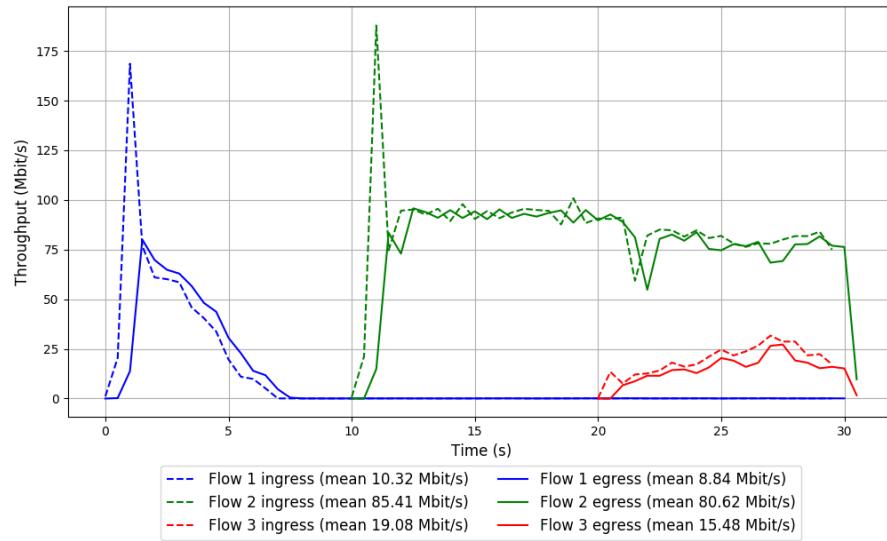


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-04-24 00:24:58
End at: 2019-04-24 00:25:28
Local clock offset: -3.743 ms
Remote clock offset: -2.349 ms

# Below is generated by plot.py at 2019-04-24 02:29:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 108.823 ms
Loss rate: 7.86%
-- Flow 1:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 107.666 ms
Loss rate: 14.31%
-- Flow 2:
Average throughput: 80.62 Mbit/s
95th percentile per-packet one-way delay: 108.912 ms
Loss rate: 5.48%
-- Flow 3:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 108.868 ms
Loss rate: 18.78%
```

Run 1: Report of FillP-Sheep — Data Link

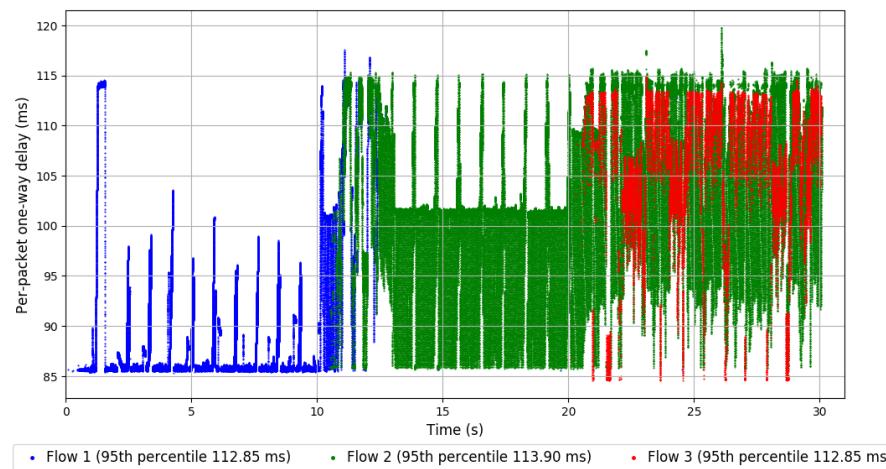
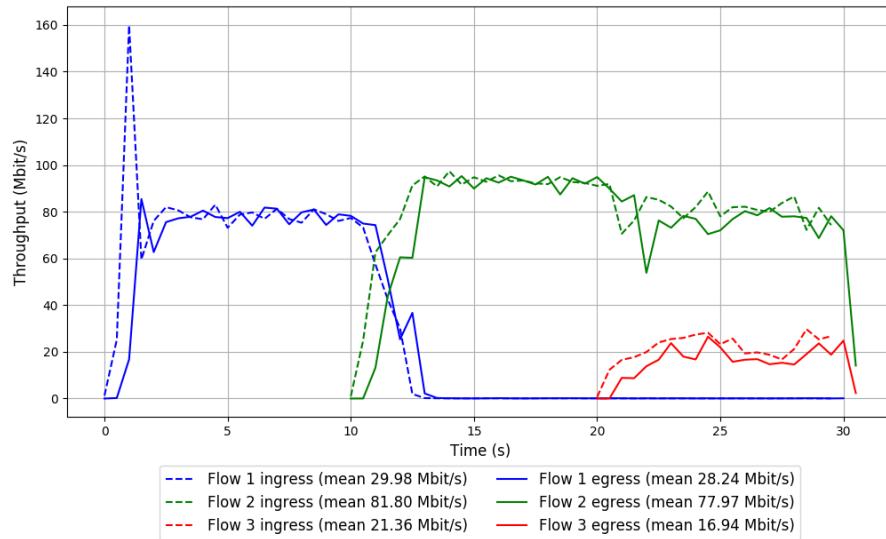


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-04-24 00:51:55
End at: 2019-04-24 00:52:25
Local clock offset: -4.375 ms
Remote clock offset: 4.962 ms

# Below is generated by plot.py at 2019-04-24 02:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.63 Mbit/s
95th percentile per-packet one-way delay: 113.740 ms
Loss rate: 6.20%
-- Flow 1:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 112.849 ms
Loss rate: 5.75%
-- Flow 2:
Average throughput: 77.97 Mbit/s
95th percentile per-packet one-way delay: 113.897 ms
Loss rate: 4.58%
-- Flow 3:
Average throughput: 16.94 Mbit/s
95th percentile per-packet one-way delay: 112.849 ms
Loss rate: 20.57%
```

Run 2: Report of FillP-Sheep — Data Link

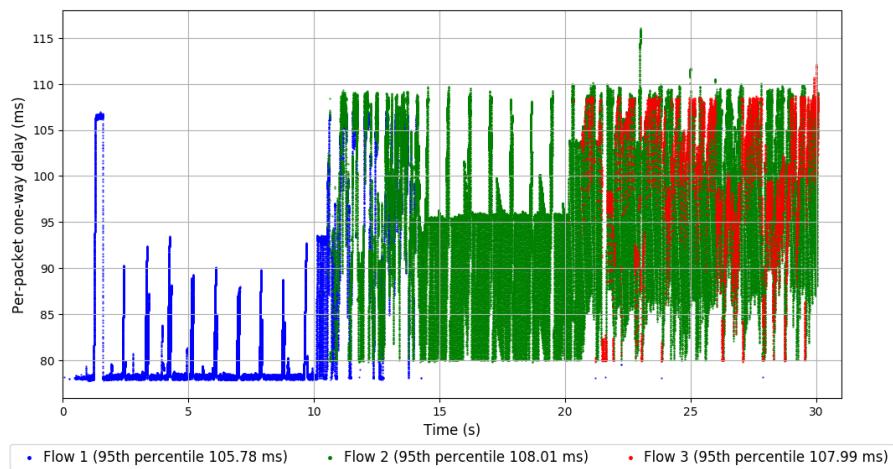
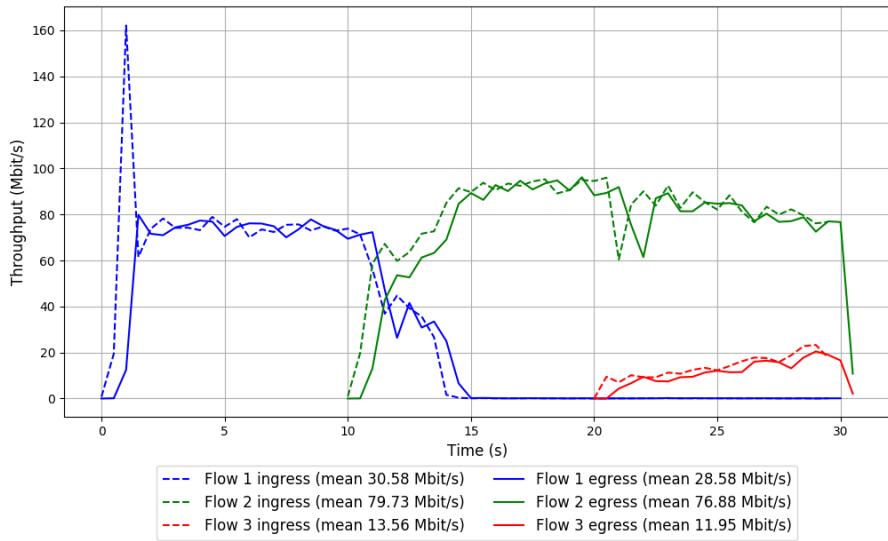


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-04-24 01:18:50
End at: 2019-04-24 01:19:20
Local clock offset: -4.431 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2019-04-24 02:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.64 Mbit/s
95th percentile per-packet one-way delay: 107.608 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 105.782 ms
Loss rate: 6.46%
-- Flow 2:
Average throughput: 76.88 Mbit/s
95th percentile per-packet one-way delay: 108.008 ms
Loss rate: 3.45%
-- Flow 3:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 107.989 ms
Loss rate: 11.78%
```

Run 3: Report of FillP-Sheep — Data Link

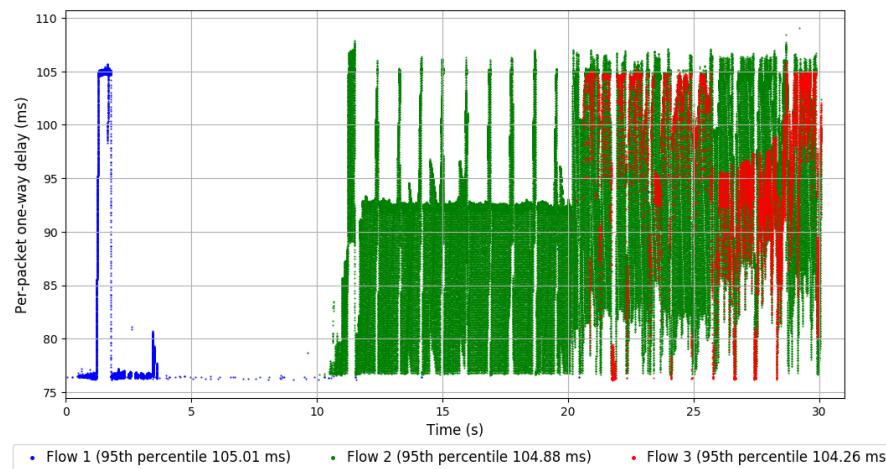
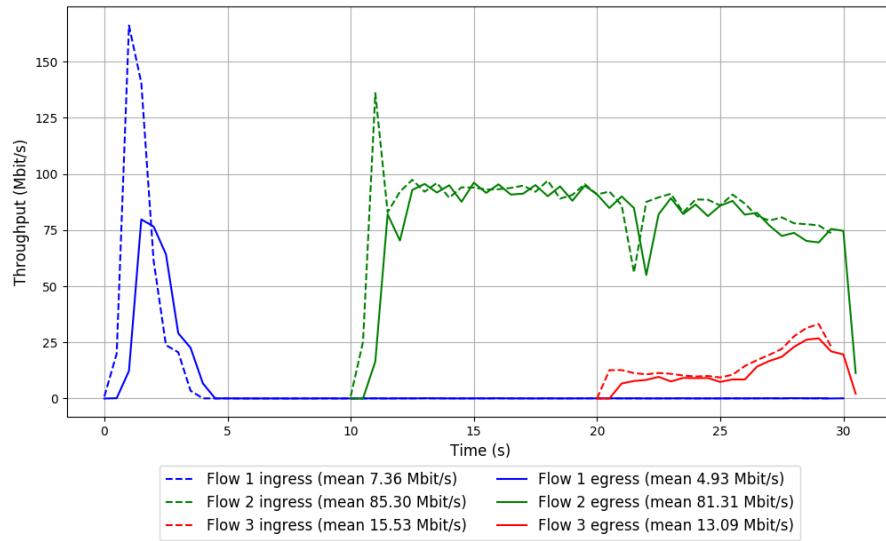


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-04-24 01:45:56
End at: 2019-04-24 01:46:26
Local clock offset: -3.631 ms
Remote clock offset: -3.59 ms

# Below is generated by plot.py at 2019-04-24 02:29:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.41 Mbit/s
95th percentile per-packet one-way delay: 104.918 ms
Loss rate: 8.40%
-- Flow 1:
Average throughput: 4.93 Mbit/s
95th percentile per-packet one-way delay: 105.014 ms
Loss rate: 33.02%
-- Flow 2:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 104.876 ms
Loss rate: 4.56%
-- Flow 3:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 104.263 ms
Loss rate: 15.65%
```

Run 4: Report of FillP-Sheep — Data Link

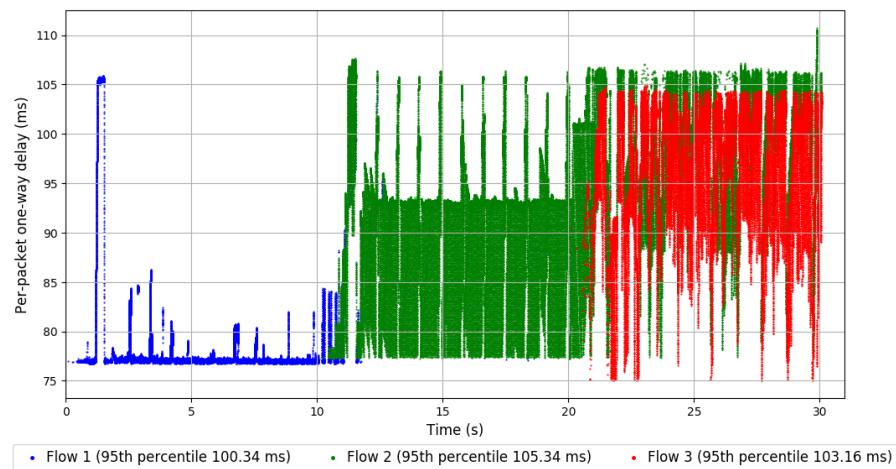
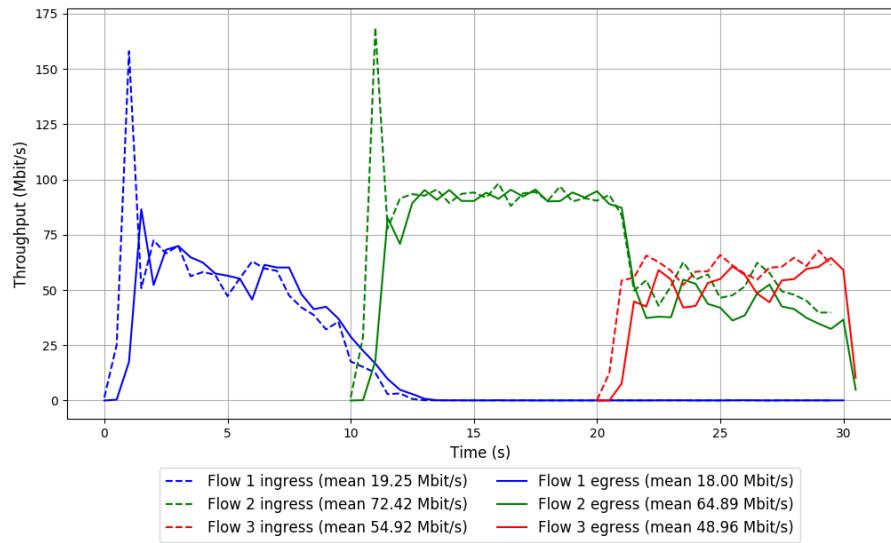


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-04-24 02:12:48
End at: 2019-04-24 02:13:18
Local clock offset: -3.444 ms
Remote clock offset: -2.437 ms

# Below is generated by plot.py at 2019-04-24 02:30:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.39 Mbit/s
95th percentile per-packet one-way delay: 104.754 ms
Loss rate: 9.53%
-- Flow 1:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 100.337 ms
Loss rate: 6.44%
-- Flow 2:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 105.337 ms
Loss rate: 10.29%
-- Flow 3:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 103.161 ms
Loss rate: 10.75%
```

Run 5: Report of FillP-Sheep — Data Link

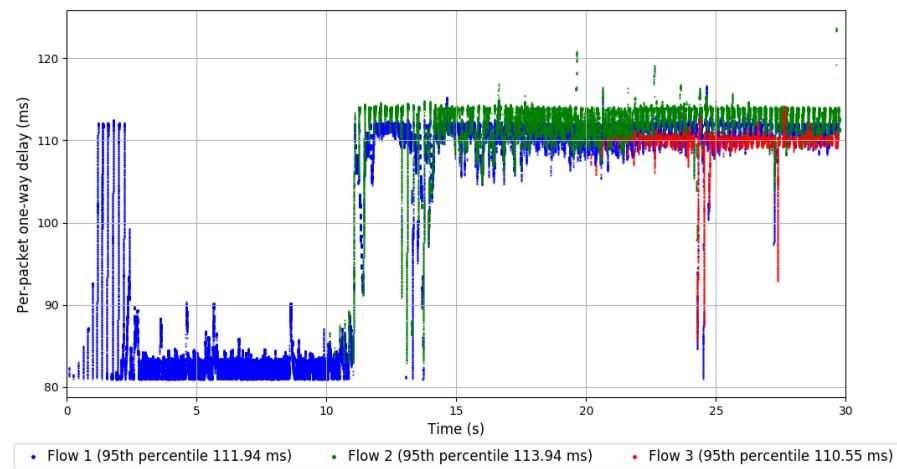
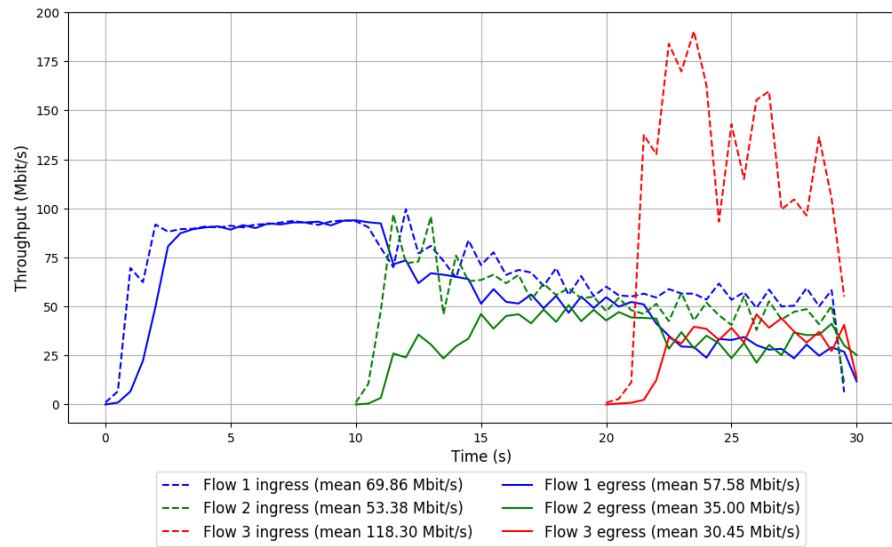


Run 1: Statistics of Indigo

```
Start at: 2019-04-24 00:12:11
End at: 2019-04-24 00:12:41
Local clock offset: -3.212 ms
Remote clock offset: -2.108 ms

# Below is generated by plot.py at 2019-04-24 02:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.40 Mbit/s
95th percentile per-packet one-way delay: 113.730 ms
Loss rate: 36.72%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 111.938 ms
Loss rate: 17.49%
-- Flow 2:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 113.943 ms
Loss rate: 34.35%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 110.549 ms
Loss rate: 74.25%
```

Run 1: Report of Indigo — Data Link

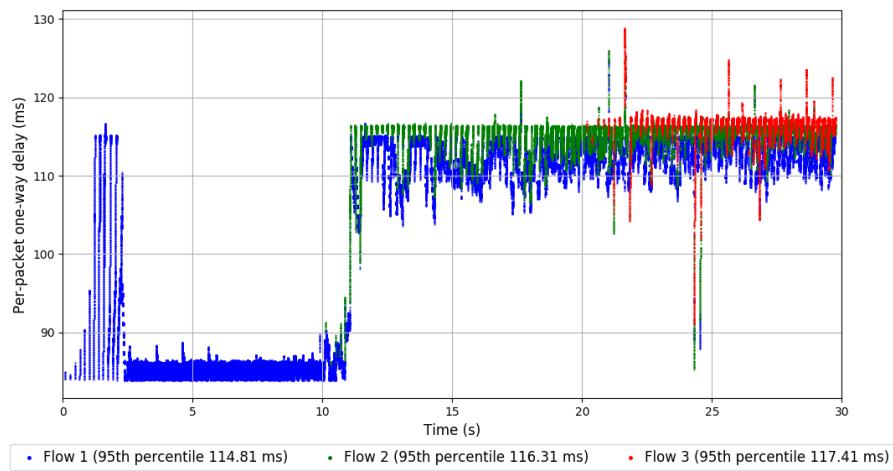
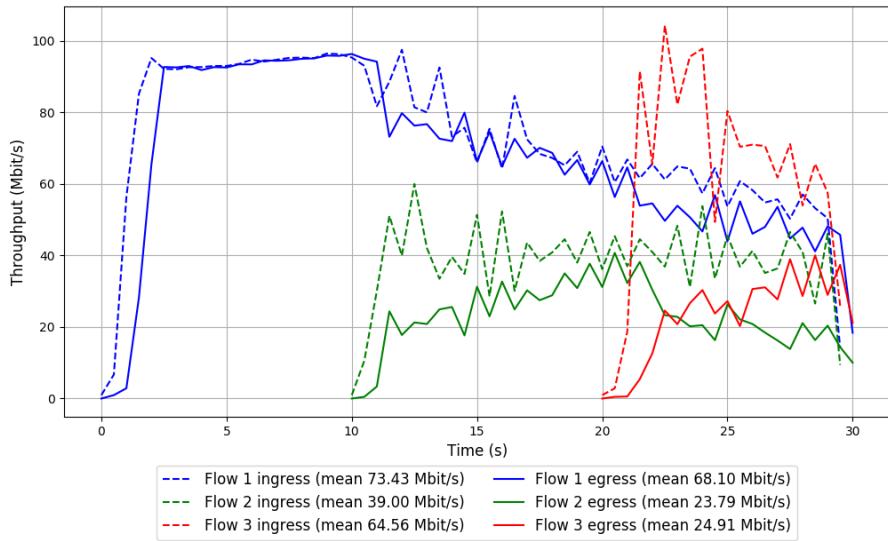


Run 2: Statistics of Indigo

```
Start at: 2019-04-24 00:38:58
End at: 2019-04-24 00:39:28
Local clock offset: -3.241 ms
Remote clock offset: 4.338 ms

# Below is generated by plot.py at 2019-04-24 02:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 116.934 ms
Loss rate: 23.41%
-- Flow 1:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 114.806 ms
Loss rate: 7.17%
-- Flow 2:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 116.315 ms
Loss rate: 38.92%
-- Flow 3:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 117.414 ms
Loss rate: 61.42%
```

Run 2: Report of Indigo — Data Link

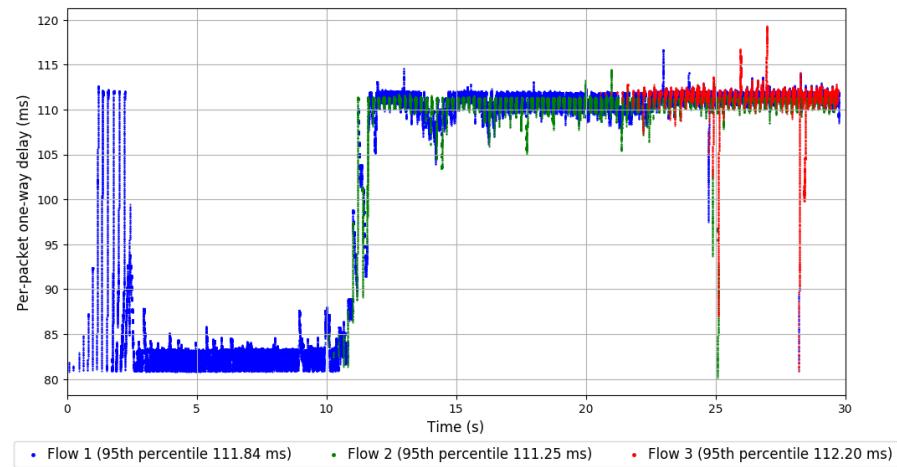
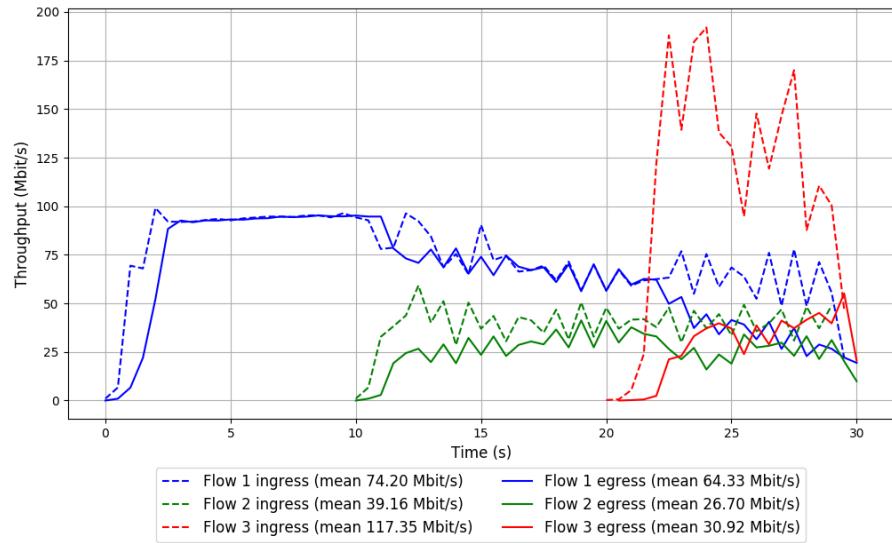


Run 3: Statistics of Indigo

```
Start at: 2019-04-24 01:05:52
End at: 2019-04-24 01:06:22
Local clock offset: -4.719 ms
Remote clock offset: 2.066 ms

# Below is generated by plot.py at 2019-04-24 02:30:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.42 Mbit/s
95th percentile per-packet one-way delay: 111.863 ms
Loss rate: 32.79%
-- Flow 1:
Average throughput: 64.33 Mbit/s
95th percentile per-packet one-way delay: 111.838 ms
Loss rate: 13.21%
-- Flow 2:
Average throughput: 26.70 Mbit/s
95th percentile per-packet one-way delay: 111.246 ms
Loss rate: 31.73%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 112.203 ms
Loss rate: 73.65%
```

Run 3: Report of Indigo — Data Link

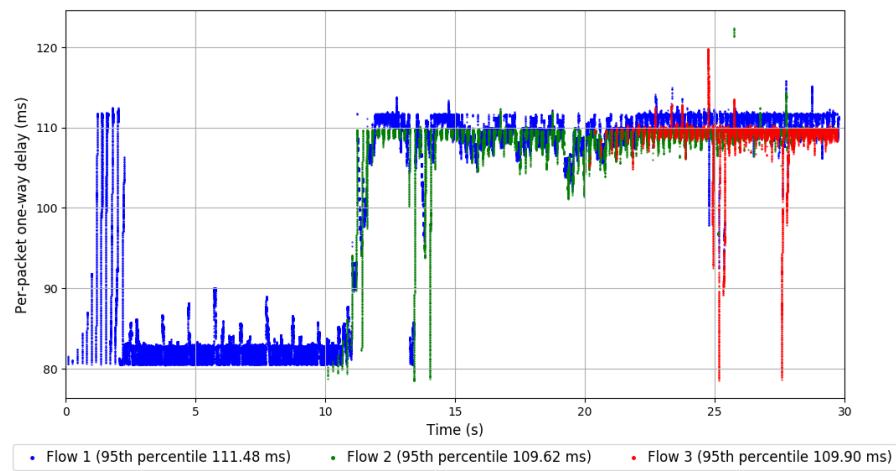
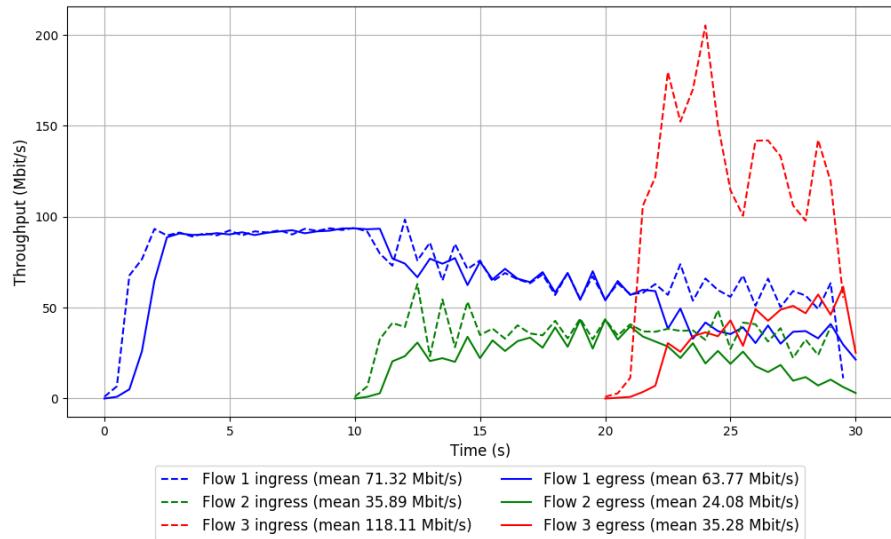


Run 4: Statistics of Indigo

```
Start at: 2019-04-24 01:33:09
End at: 2019-04-24 01:33:39
Local clock offset: -3.838 ms
Remote clock offset: -1.465 ms

# Below is generated by plot.py at 2019-04-24 02:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 111.455 ms
Loss rate: 31.51%
-- Flow 1:
Average throughput: 63.77 Mbit/s
95th percentile per-packet one-way delay: 111.482 ms
Loss rate: 10.50%
-- Flow 2:
Average throughput: 24.08 Mbit/s
95th percentile per-packet one-way delay: 109.618 ms
Loss rate: 32.81%
-- Flow 3:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 109.898 ms
Loss rate: 70.11%
```

Run 4: Report of Indigo — Data Link

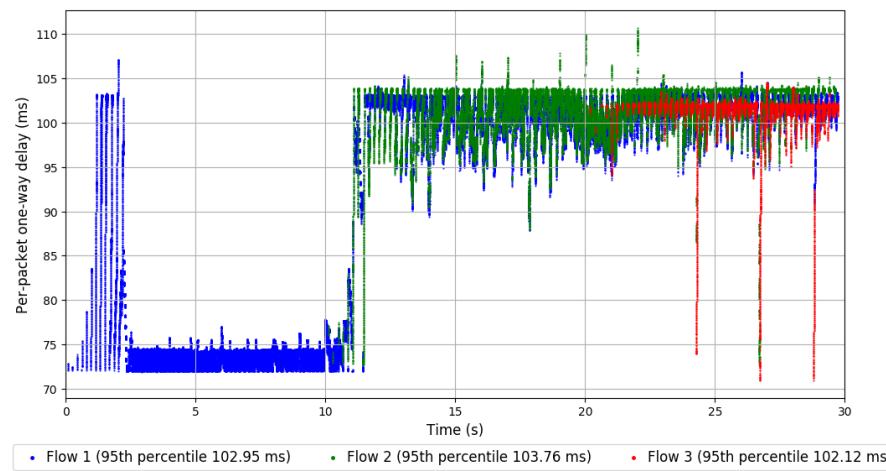
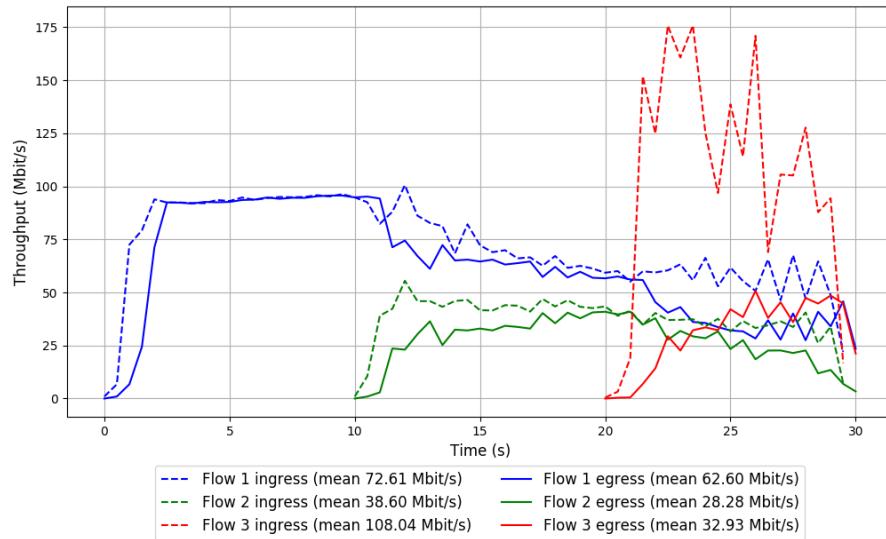


Run 5: Statistics of Indigo

```
Start at: 2019-04-24 01:59:55
End at: 2019-04-24 02:00:25
Local clock offset: -2.731 ms
Remote clock offset: -6.115 ms

# Below is generated by plot.py at 2019-04-24 02:31:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.80 Mbit/s
95th percentile per-packet one-way delay: 103.283 ms
Loss rate: 30.80%
-- Flow 1:
Average throughput: 62.60 Mbit/s
95th percentile per-packet one-way delay: 102.946 ms
Loss rate: 13.69%
-- Flow 2:
Average throughput: 28.28 Mbit/s
95th percentile per-packet one-way delay: 103.763 ms
Loss rate: 26.62%
-- Flow 3:
Average throughput: 32.93 Mbit/s
95th percentile per-packet one-way delay: 102.119 ms
Loss rate: 69.52%
```

Run 5: Report of Indigo — Data Link

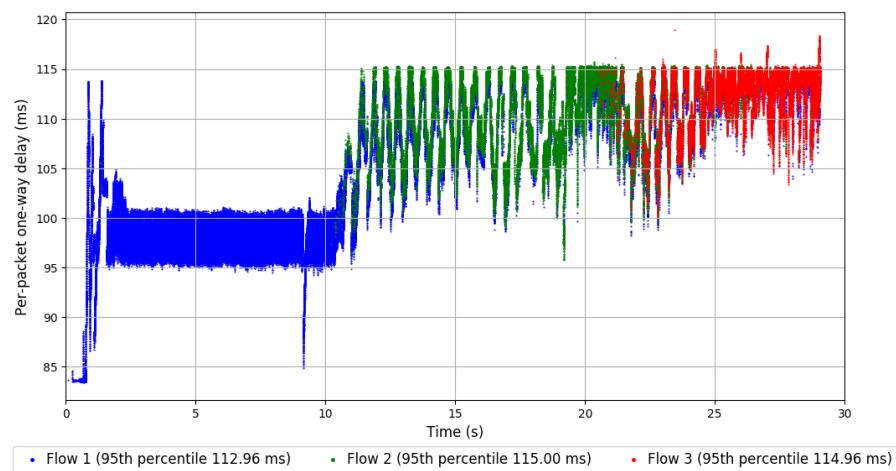
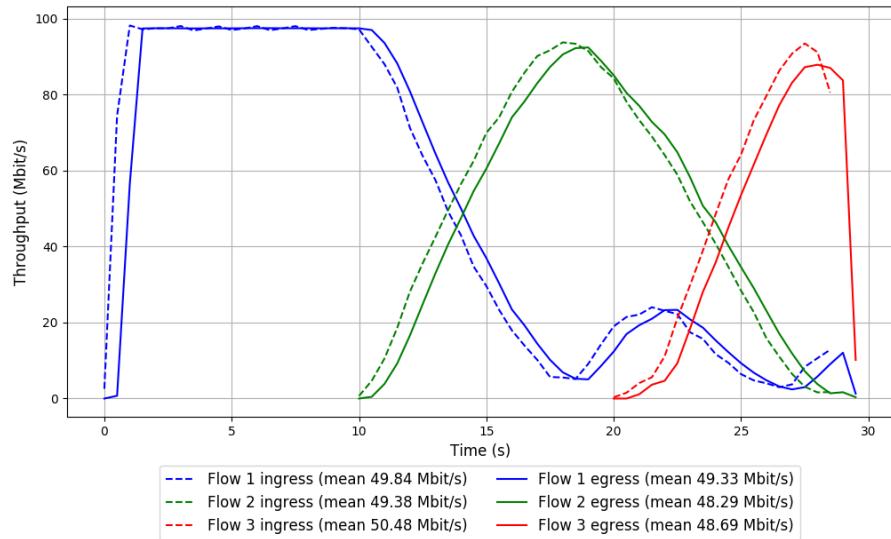


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-04-24 00:13:31
End at: 2019-04-24 00:14:01
Local clock offset: -3.197 ms
Remote clock offset: 1.741 ms

# Below is generated by plot.py at 2019-04-24 02:31:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.36 Mbit/s
95th percentile per-packet one-way delay: 114.845 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 49.33 Mbit/s
95th percentile per-packet one-way delay: 112.961 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 114.997 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 48.69 Mbit/s
95th percentile per-packet one-way delay: 114.959 ms
Loss rate: 3.55%
```

Run 1: Report of Indigo-MusesC3 — Data Link

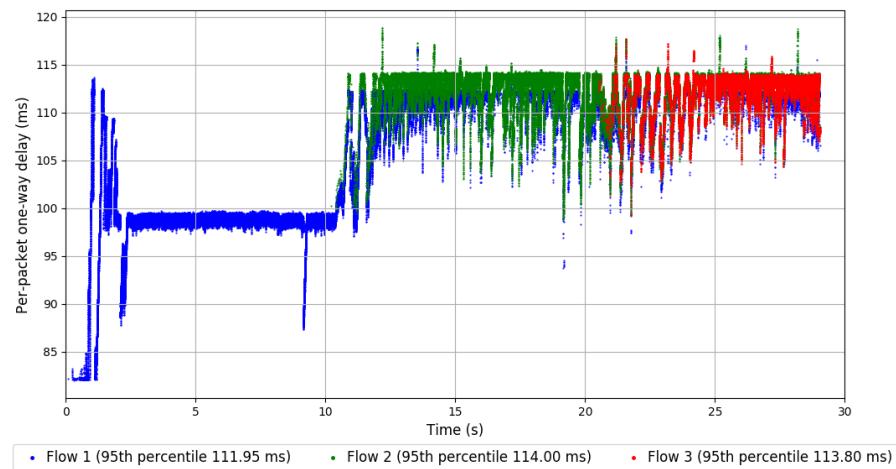
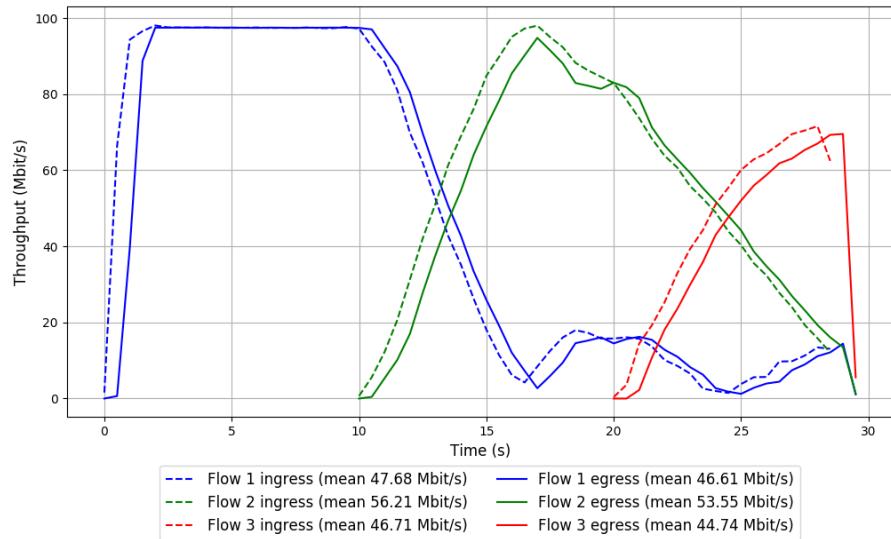


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-04-24 00:40:17
End at: 2019-04-24 00:40:47
Local clock offset: -3.257 ms
Remote clock offset: 3.179 ms

# Below is generated by plot.py at 2019-04-24 02:31:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 113.877 ms
Loss rate: 3.40%
-- Flow 1:
Average throughput: 46.61 Mbit/s
95th percentile per-packet one-way delay: 111.949 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 53.55 Mbit/s
95th percentile per-packet one-way delay: 113.995 ms
Loss rate: 4.69%
-- Flow 3:
Average throughput: 44.74 Mbit/s
95th percentile per-packet one-way delay: 113.799 ms
Loss rate: 4.27%
```

Run 2: Report of Indigo-MusesC3 — Data Link

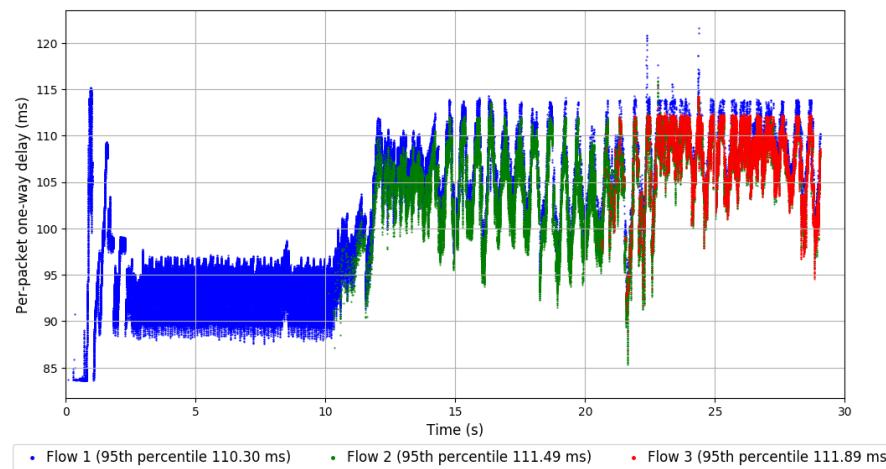
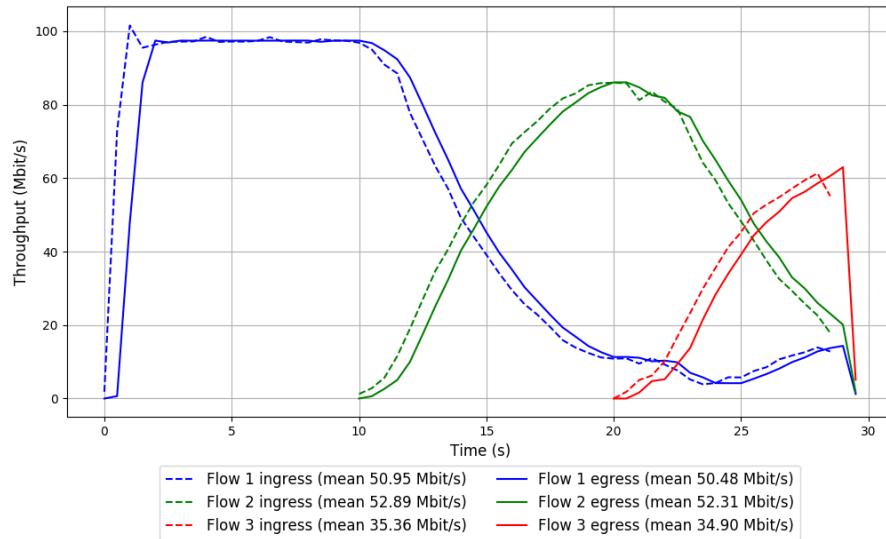


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-04-24 01:07:12
End at: 2019-04-24 01:07:42
Local clock offset: -4.725 ms
Remote clock offset: 4.941 ms

# Below is generated by plot.py at 2019-04-24 02:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 111.408 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 50.48 Mbit/s
95th percentile per-packet one-way delay: 110.301 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 111.488 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 34.90 Mbit/s
95th percentile per-packet one-way delay: 111.889 ms
Loss rate: 1.20%
```

Run 3: Report of Indigo-MusesC3 — Data Link

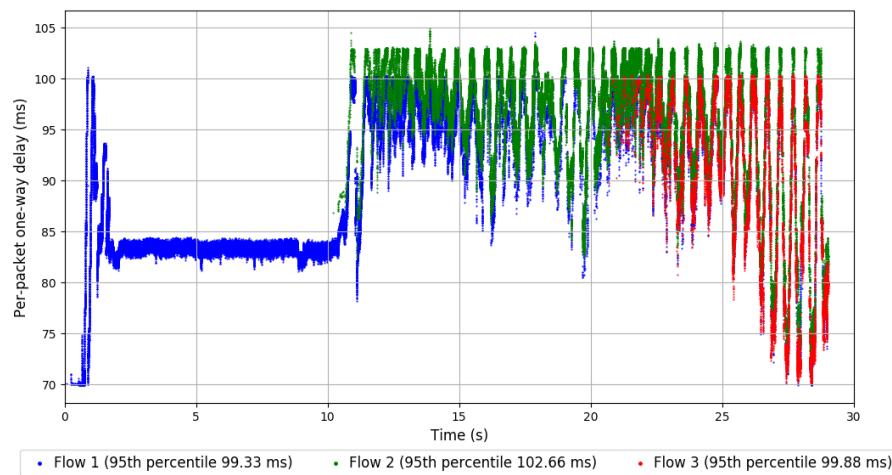
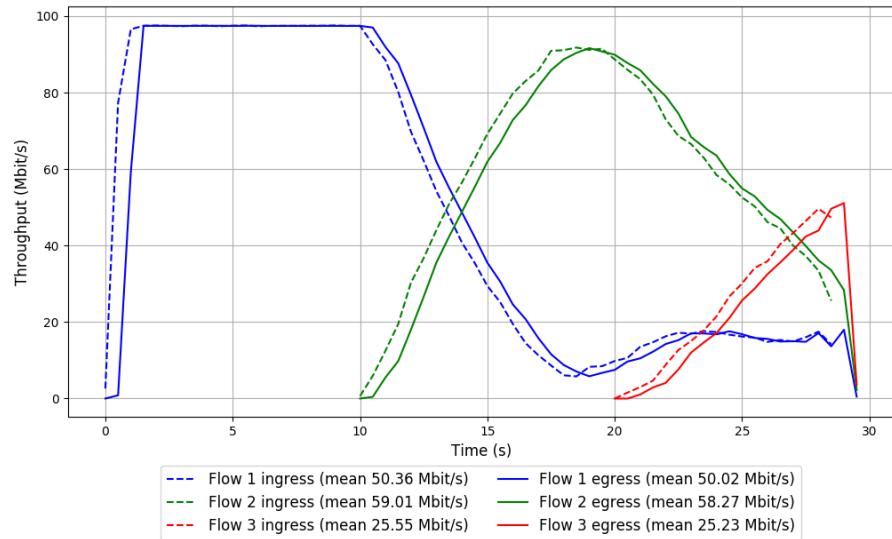


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-04-24 01:34:29
End at: 2019-04-24 01:34:59
Local clock offset: -2.985 ms
Remote clock offset: -7.48 ms

# Below is generated by plot.py at 2019-04-24 02:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 102.053 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 50.02 Mbit/s
95th percentile per-packet one-way delay: 99.334 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 102.655 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 25.23 Mbit/s
95th percentile per-packet one-way delay: 99.883 ms
Loss rate: 1.46%
```

Run 4: Report of Indigo-MusesC3 — Data Link

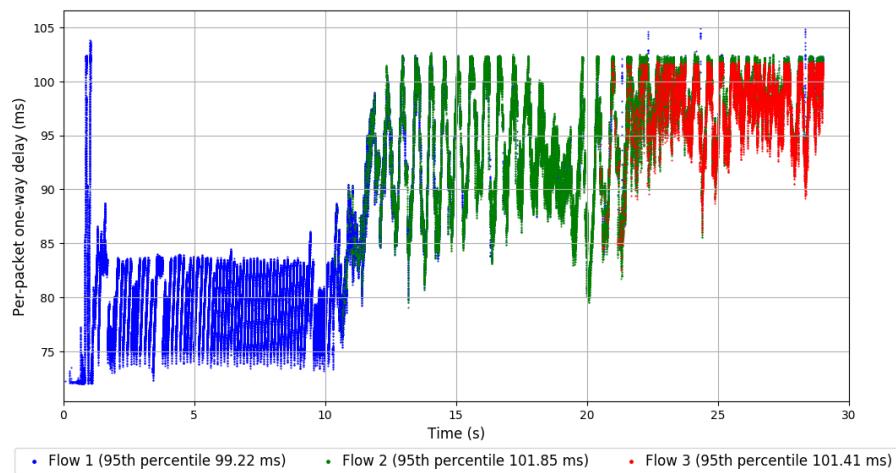
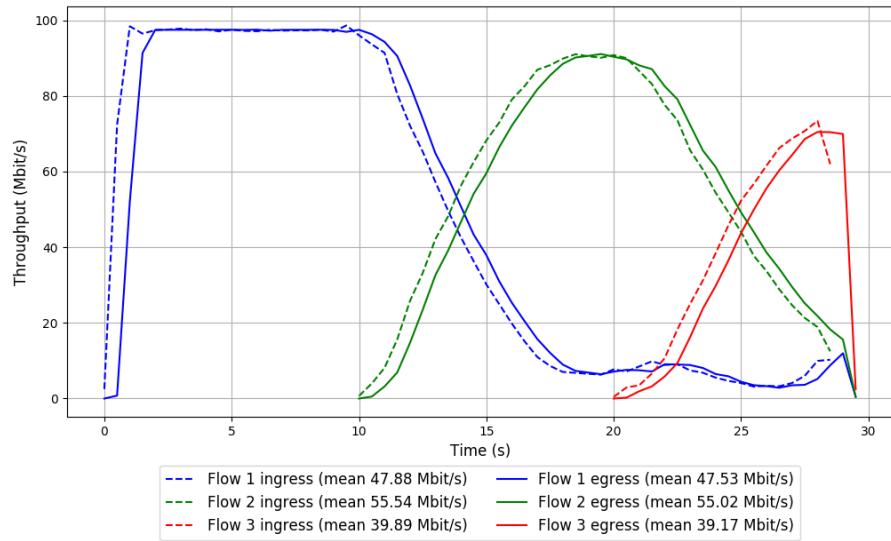


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-04-24 02:01:15
End at: 2019-04-24 02:01:45
Local clock offset: -2.746 ms
Remote clock offset: -6.793 ms

# Below is generated by plot.py at 2019-04-24 02:31:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.11 Mbit/s
95th percentile per-packet one-way delay: 101.369 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: 99.220 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 55.02 Mbit/s
95th percentile per-packet one-way delay: 101.850 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 101.414 ms
Loss rate: 1.70%
```

Run 5: Report of Indigo-MusesC3 — Data Link

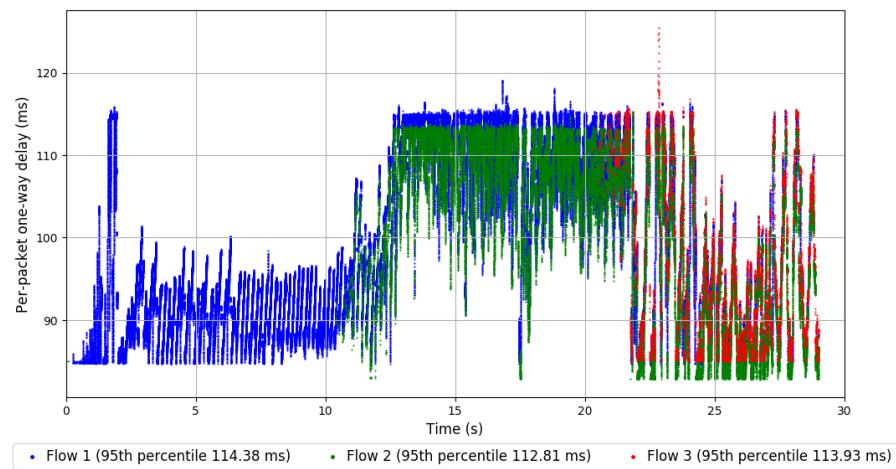
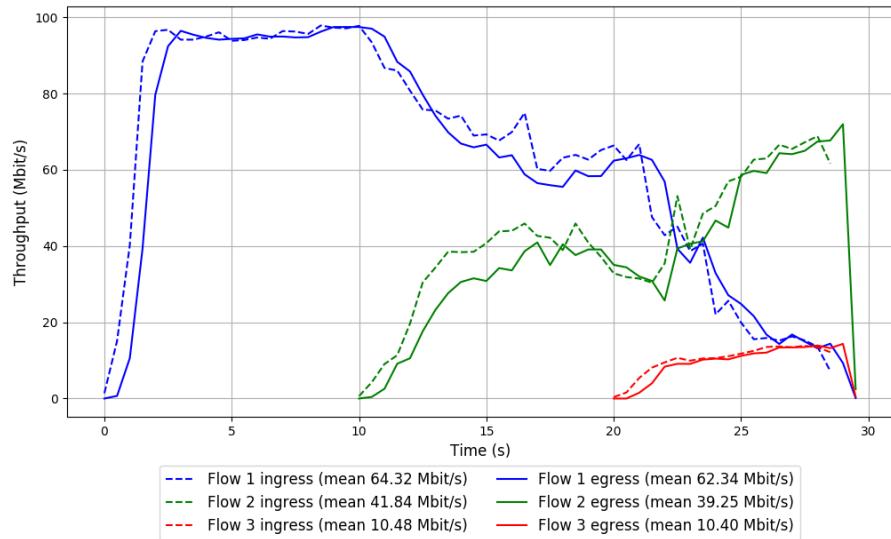


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-04-24 00:35:09
End at: 2019-04-24 00:35:39
Local clock offset: -4.027 ms
Remote clock offset: 1.822 ms

# Below is generated by plot.py at 2019-04-24 02:31:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 114.041 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 62.34 Mbit/s
95th percentile per-packet one-way delay: 114.380 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 112.810 ms
Loss rate: 6.18%
-- Flow 3:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 113.930 ms
Loss rate: 0.97%
```

Run 1: Report of Indigo-MusesC5 — Data Link

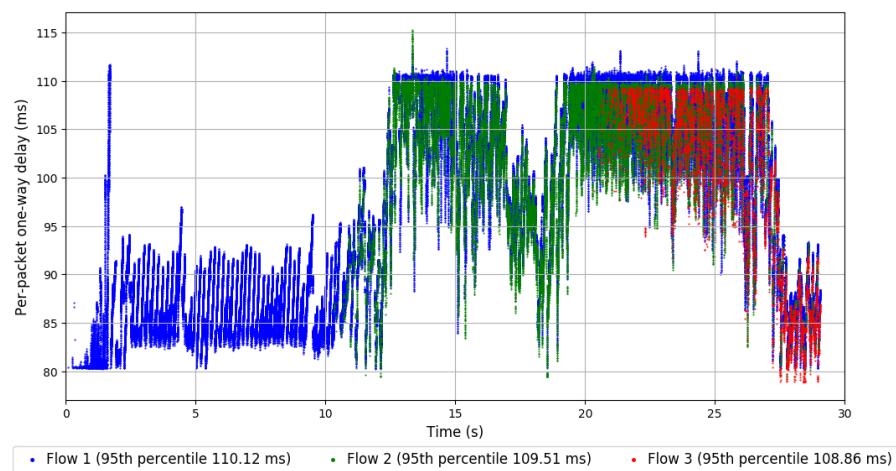
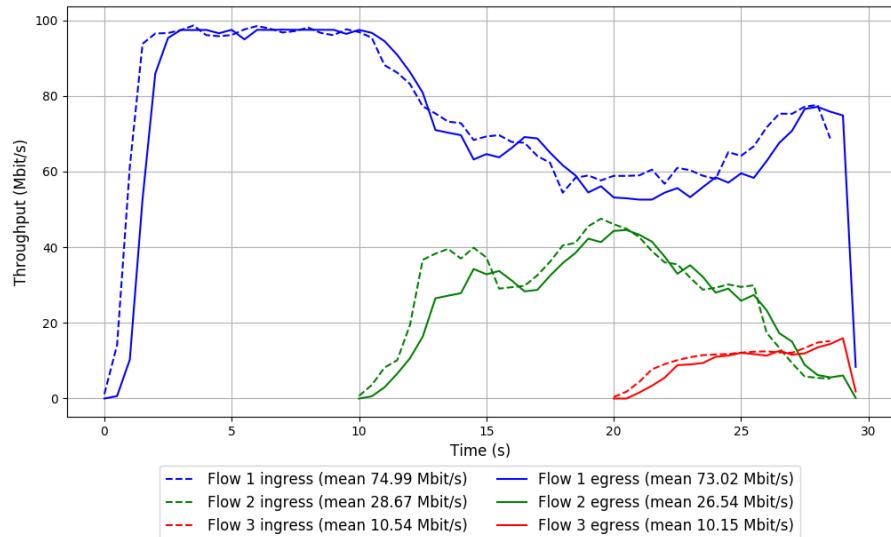


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-04-24 01:02:03
End at: 2019-04-24 01:02:33
Local clock offset: -4.643 ms
Remote clock offset: 0.454 ms

# Below is generated by plot.py at 2019-04-24 02:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 109.951 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 73.02 Mbit/s
95th percentile per-packet one-way delay: 110.125 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 26.54 Mbit/s
95th percentile per-packet one-way delay: 109.511 ms
Loss rate: 7.41%
-- Flow 3:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 108.861 ms
Loss rate: 3.76%
```

Run 2: Report of Indigo-MusesC5 — Data Link

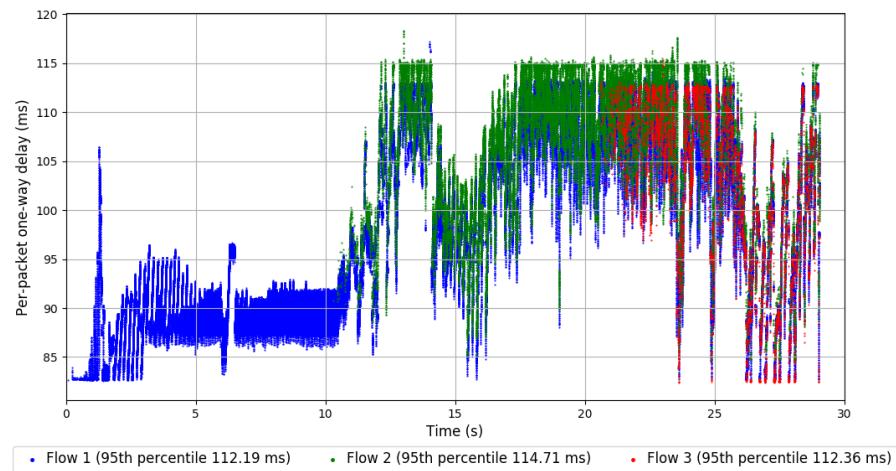
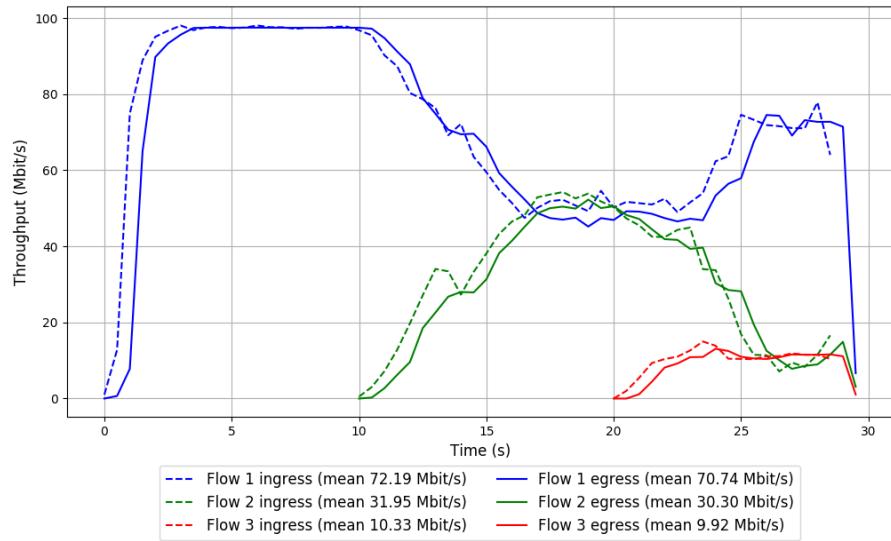


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-04-24 01:28:59
End at: 2019-04-24 01:29:29
Local clock offset: -3.103 ms
Remote clock offset: 4.946 ms

# Below is generated by plot.py at 2019-04-24 02:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.32 Mbit/s
95th percentile per-packet one-way delay: 112.816 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 112.188 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 114.714 ms
Loss rate: 5.07%
-- Flow 3:
Average throughput: 9.92 Mbit/s
95th percentile per-packet one-way delay: 112.359 ms
Loss rate: 3.98%
```

Run 3: Report of Indigo-MusesC5 — Data Link

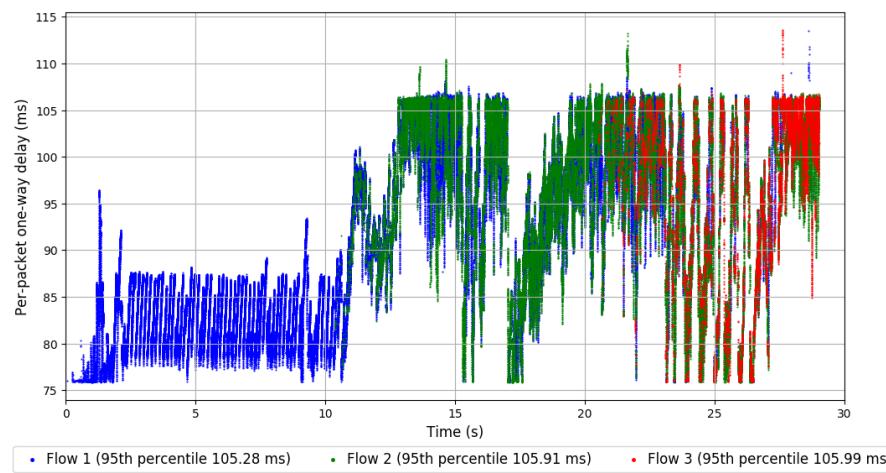
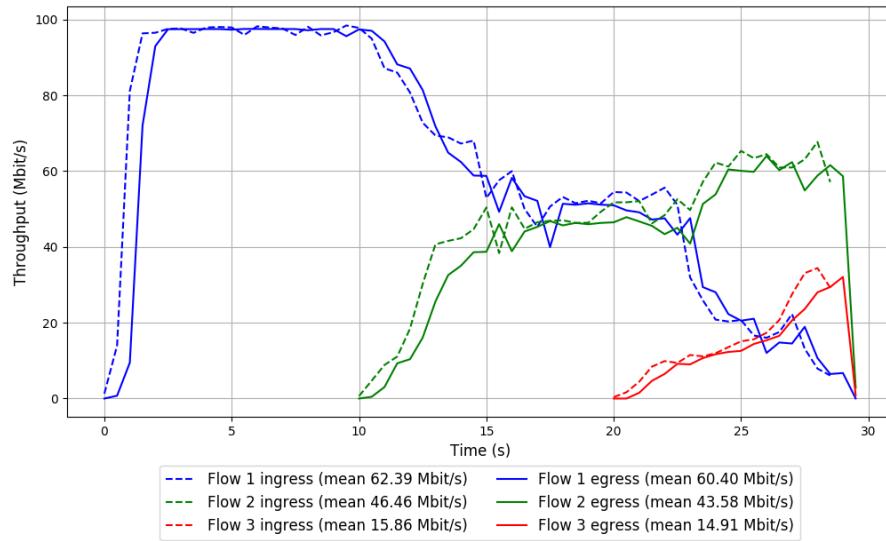


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-04-24 01:56:05
End at: 2019-04-24 01:56:35
Local clock offset: -2.763 ms
Remote clock offset: -3.023 ms

# Below is generated by plot.py at 2019-04-24 02:32:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.17 Mbit/s
95th percentile per-packet one-way delay: 105.700 ms
Loss rate: 4.16%
-- Flow 1:
Average throughput: 60.40 Mbit/s
95th percentile per-packet one-way delay: 105.283 ms
Loss rate: 3.11%
-- Flow 2:
Average throughput: 43.58 Mbit/s
95th percentile per-packet one-way delay: 105.910 ms
Loss rate: 6.06%
-- Flow 3:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 105.989 ms
Loss rate: 5.93%
```

Run 4: Report of Indigo-MusesC5 — Data Link

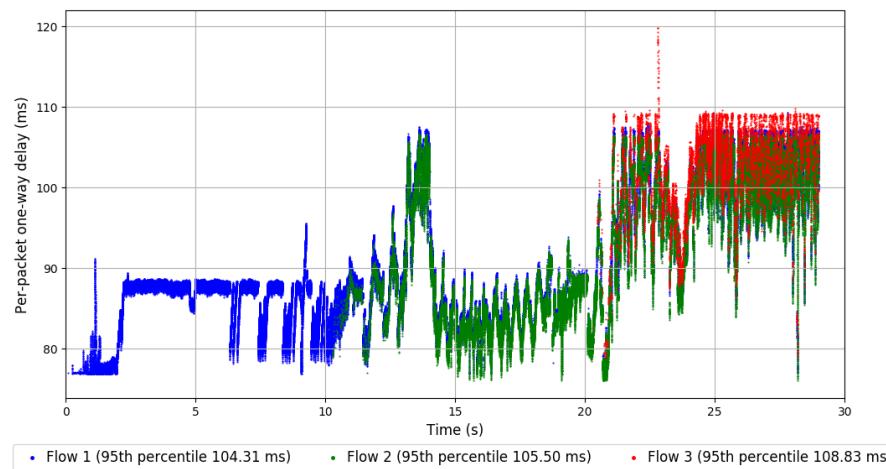
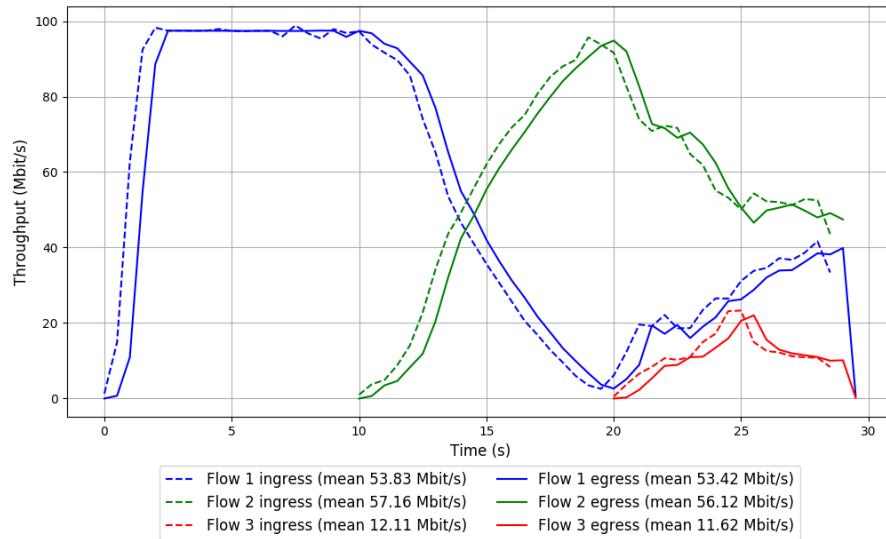


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-04-24 02:22:58
End at: 2019-04-24 02:23:28
Local clock offset: -3.891 ms
Remote clock offset: -1.374 ms

# Below is generated by plot.py at 2019-04-24 02:32:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 105.509 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 53.42 Mbit/s
95th percentile per-packet one-way delay: 104.306 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 105.505 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 108.825 ms
Loss rate: 3.78%
```

Run 5: Report of Indigo-MusesC5 — Data Link

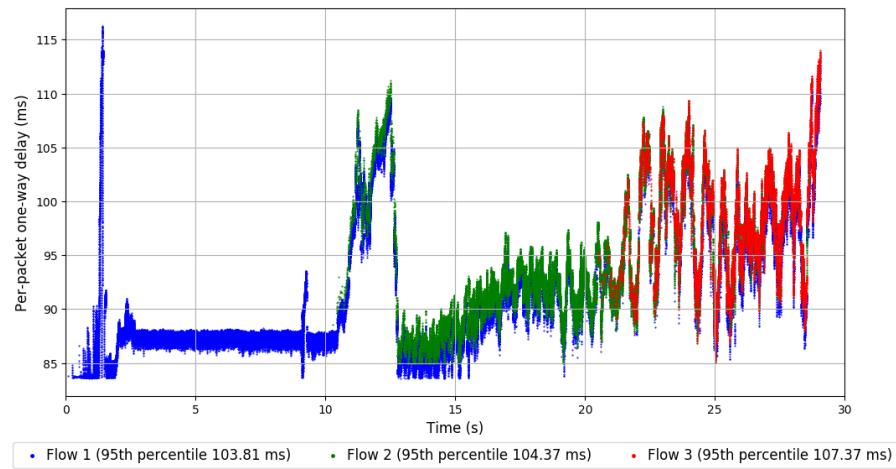
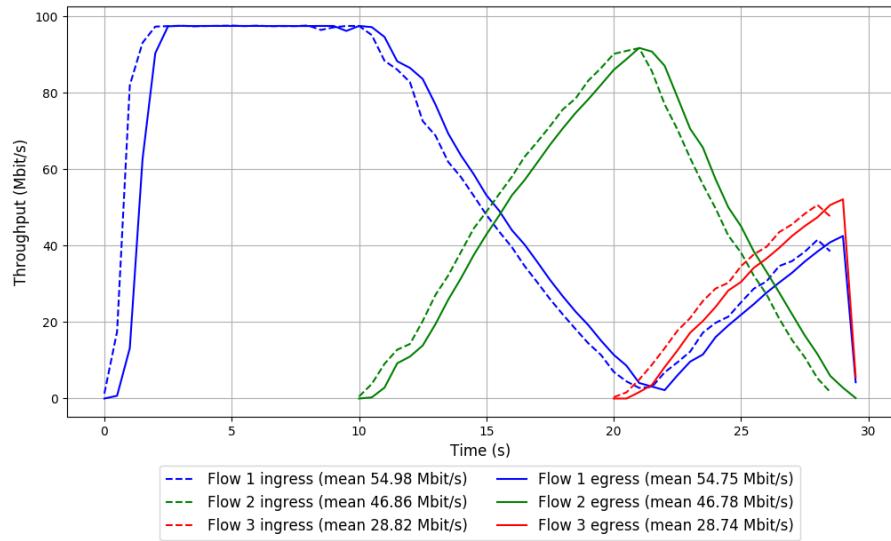


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-04-24 00:21:13
End at: 2019-04-24 00:21:43
Local clock offset: -2.815 ms
Remote clock offset: 2.753 ms

# Below is generated by plot.py at 2019-04-24 02:32:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.70 Mbit/s
95th percentile per-packet one-way delay: 104.493 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 103.805 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 46.78 Mbit/s
95th percentile per-packet one-way delay: 104.369 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 107.370 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-MusesD — Data Link

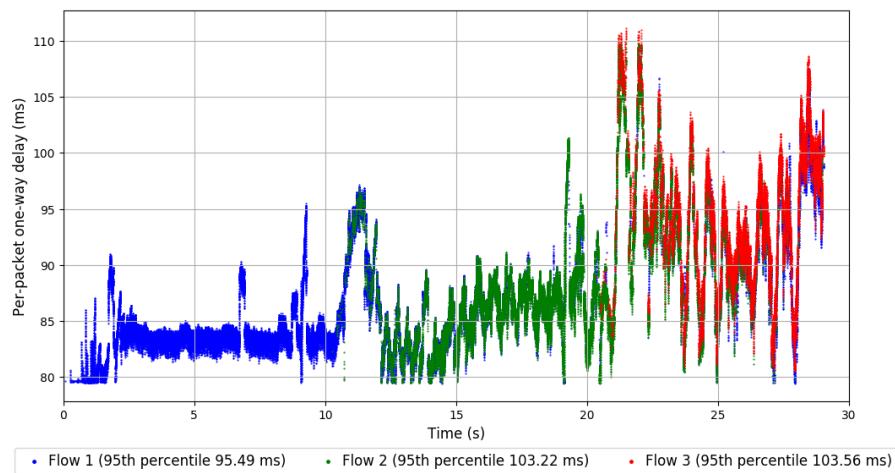
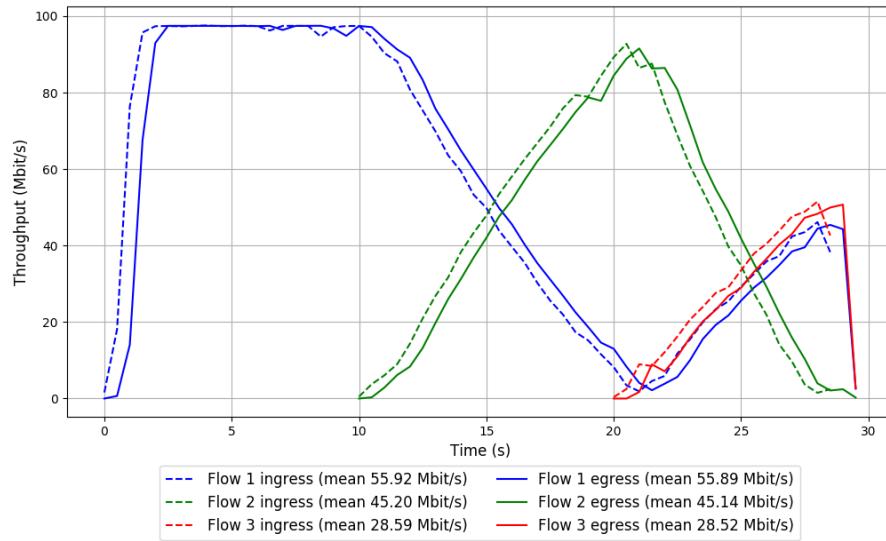


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-04-24 00:48:09
End at: 2019-04-24 00:48:39
Local clock offset: -4.313 ms
Remote clock offset: -0.692 ms

# Below is generated by plot.py at 2019-04-24 02:32:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 99.614 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 55.89 Mbit/s
95th percentile per-packet one-way delay: 95.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.14 Mbit/s
95th percentile per-packet one-way delay: 103.223 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.52 Mbit/s
95th percentile per-packet one-way delay: 103.557 ms
Loss rate: 0.13%
```

Run 2: Report of Indigo-MusesD — Data Link

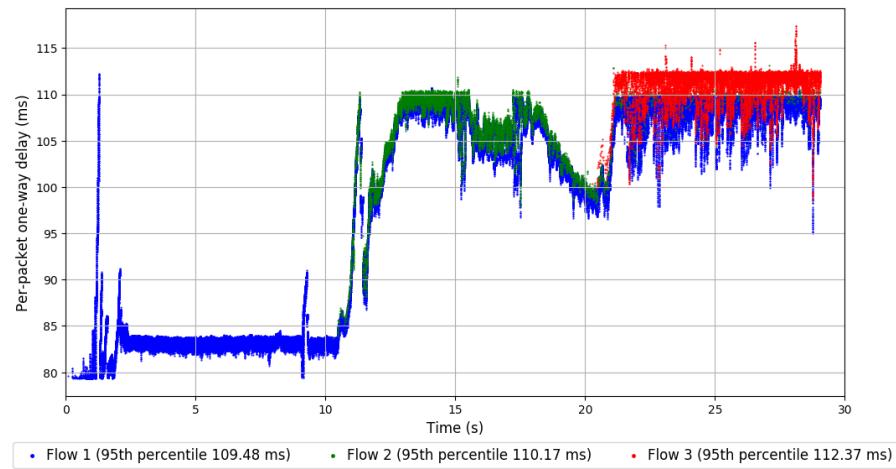
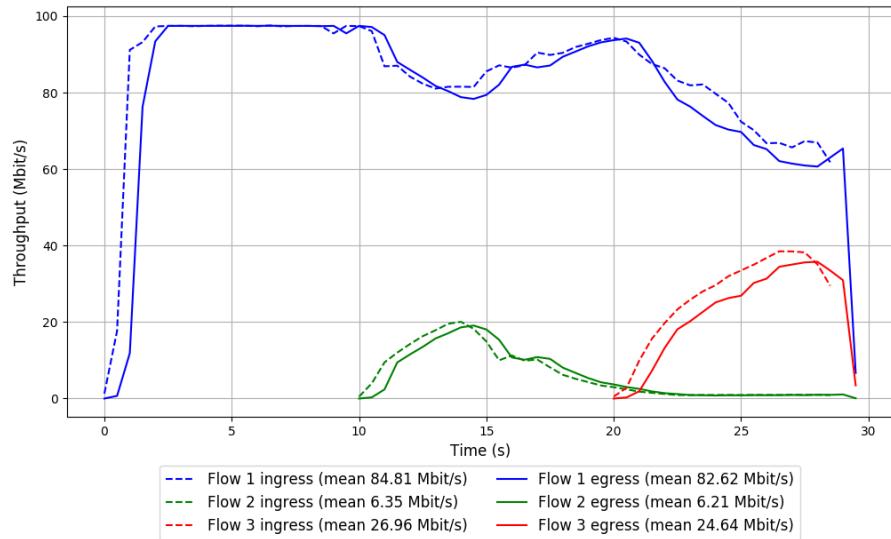


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-04-24 01:15:05
End at: 2019-04-24 01:15:35
Local clock offset: -4.834 ms
Remote clock offset: 1.339 ms

# Below is generated by plot.py at 2019-04-24 02:32:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 111.133 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 82.62 Mbit/s
95th percentile per-packet one-way delay: 109.482 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 110.172 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 112.369 ms
Loss rate: 8.50%
```

Run 3: Report of Indigo-MusesD — Data Link

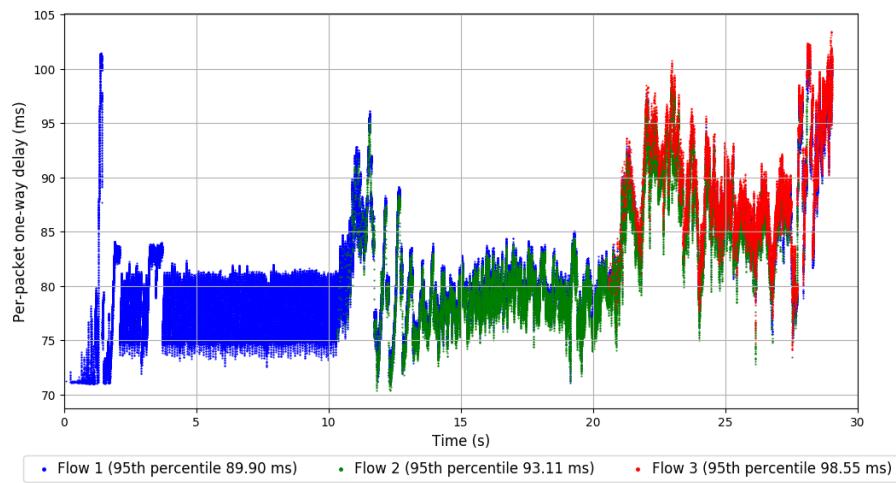
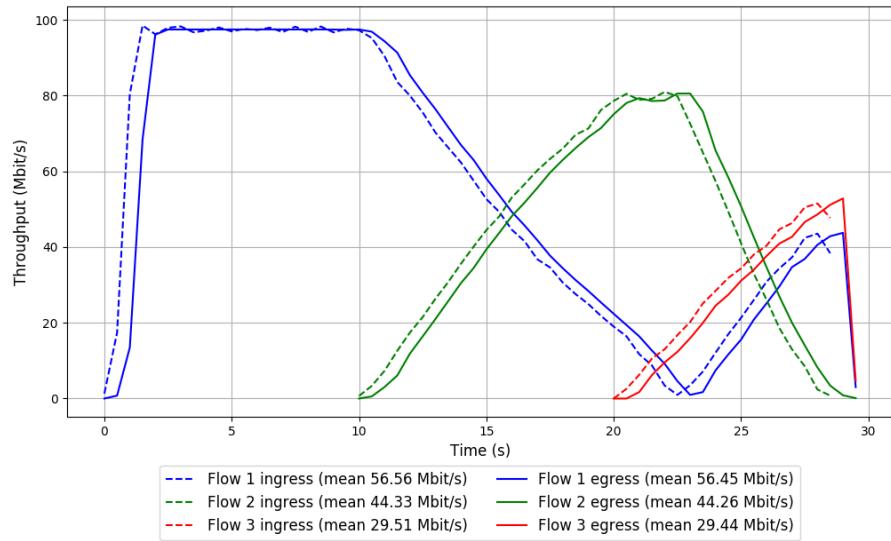


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-04-24 01:42:11
End at: 2019-04-24 01:42:41
Local clock offset: -2.934 ms
Remote clock offset: -7.324 ms

# Below is generated by plot.py at 2019-04-24 02:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 93.617 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 89.902 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 44.26 Mbit/s
95th percentile per-packet one-way delay: 93.112 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 98.547 ms
Loss rate: 0.07%
```

Run 4: Report of Indigo-MusesD — Data Link

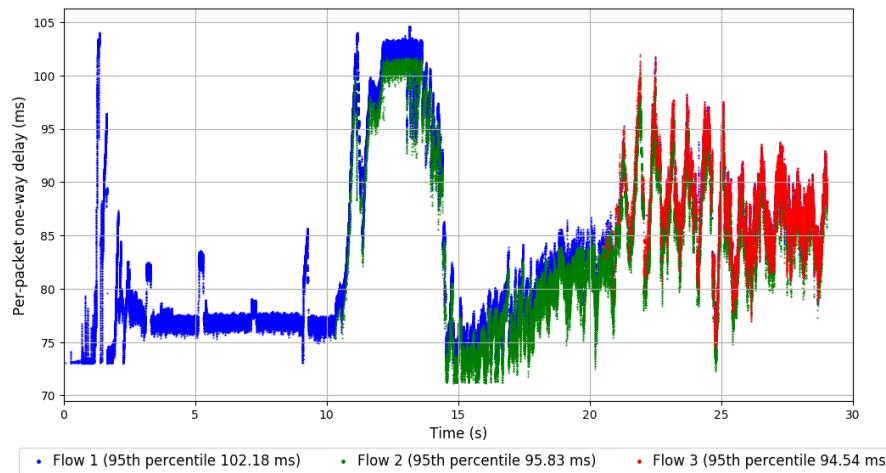
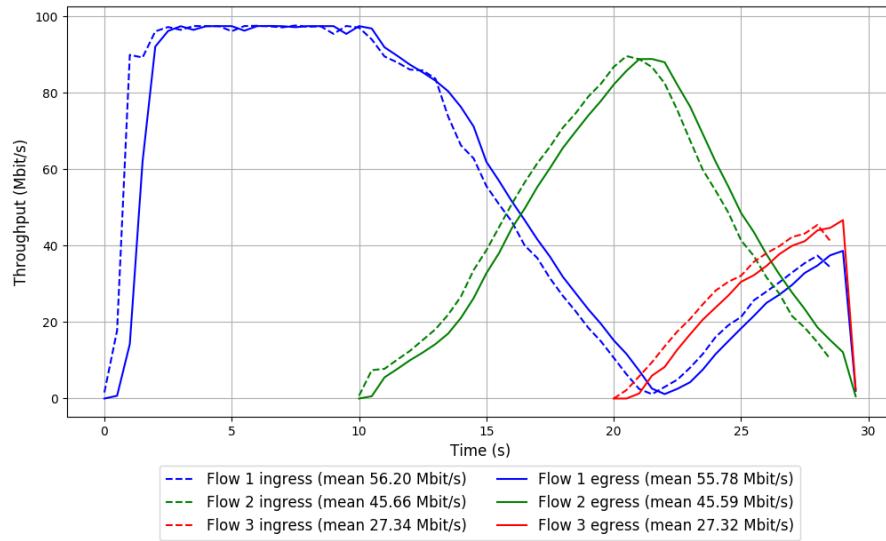


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-04-24 02:08:57
End at: 2019-04-24 02:09:27
Local clock offset: -2.698 ms
Remote clock offset: -6.738 ms

# Below is generated by plot.py at 2019-04-24 02:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.64 Mbit/s
95th percentile per-packet one-way delay: 100.561 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 102.180 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 45.59 Mbit/s
95th percentile per-packet one-way delay: 95.827 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 94.544 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

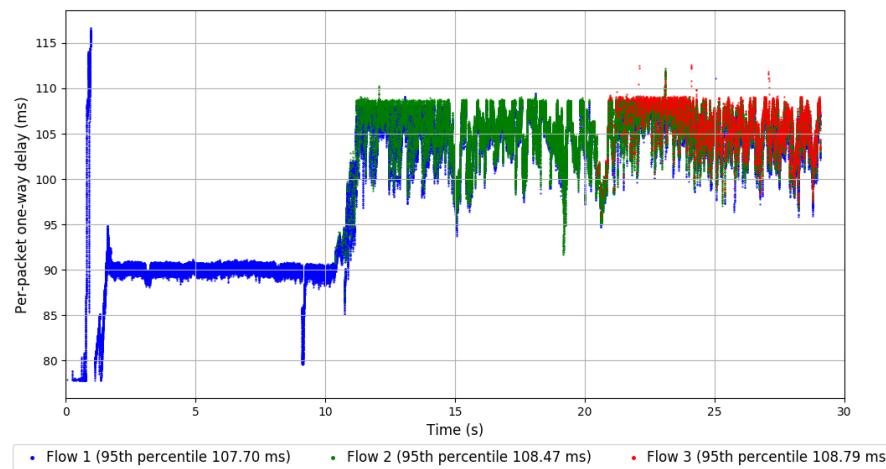
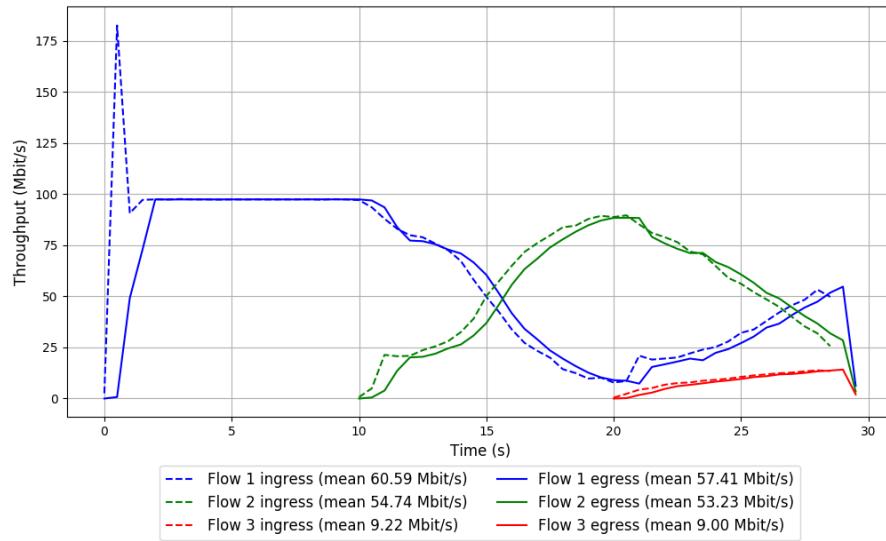


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-04-24 00:17:23
End at: 2019-04-24 00:17:53
Local clock offset: -2.594 ms
Remote clock offset: -3.391 ms

# Below is generated by plot.py at 2019-04-24 02:33:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 108.240 ms
Loss rate: 4.20%
-- Flow 1:
Average throughput: 57.41 Mbit/s
95th percentile per-packet one-way delay: 107.698 ms
Loss rate: 5.16%
-- Flow 2:
Average throughput: 53.23 Mbit/s
95th percentile per-packet one-way delay: 108.470 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 9.00 Mbit/s
95th percentile per-packet one-way delay: 108.792 ms
Loss rate: 2.50%
```

Run 1: Report of Indigo-MusesT — Data Link

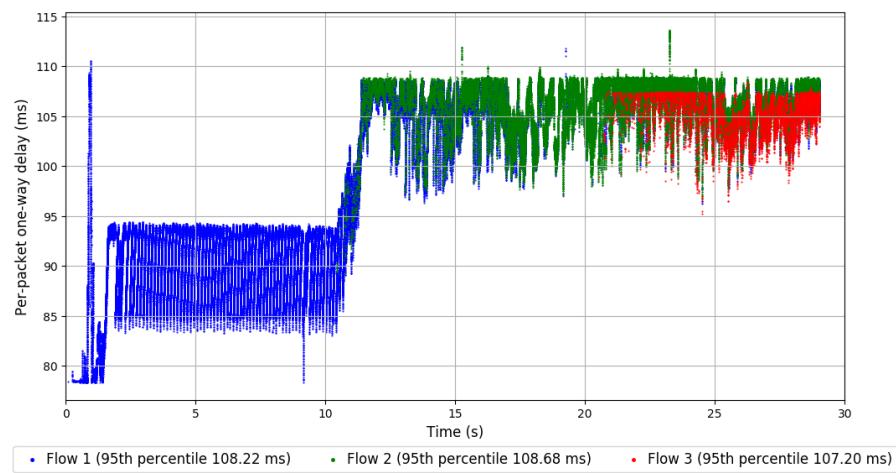
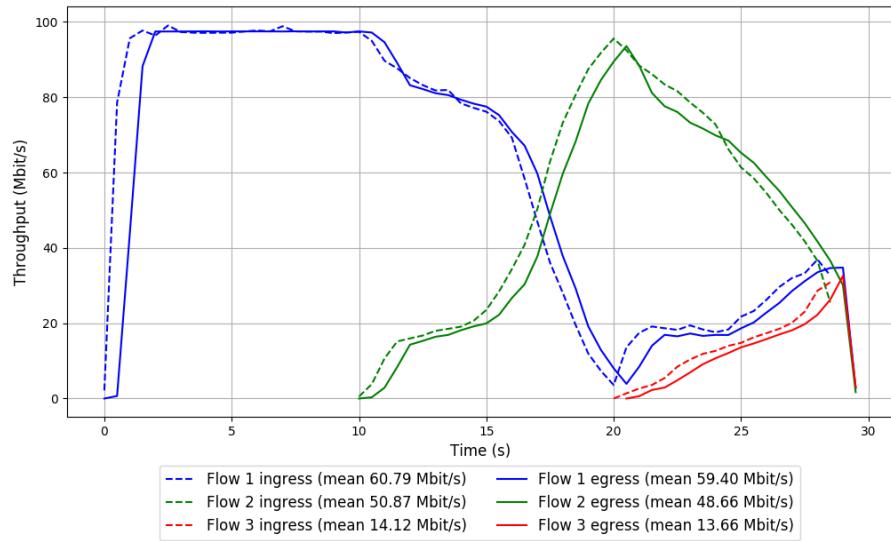


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-04-24 00:44:18
End at: 2019-04-24 00:44:48
Local clock offset: -3.296 ms
Remote clock offset: -0.928 ms

# Below is generated by plot.py at 2019-04-24 02:33:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 108.493 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 59.40 Mbit/s
95th percentile per-packet one-way delay: 108.217 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 48.66 Mbit/s
95th percentile per-packet one-way delay: 108.677 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 107.204 ms
Loss rate: 3.13%
```

Run 2: Report of Indigo-MusesT — Data Link

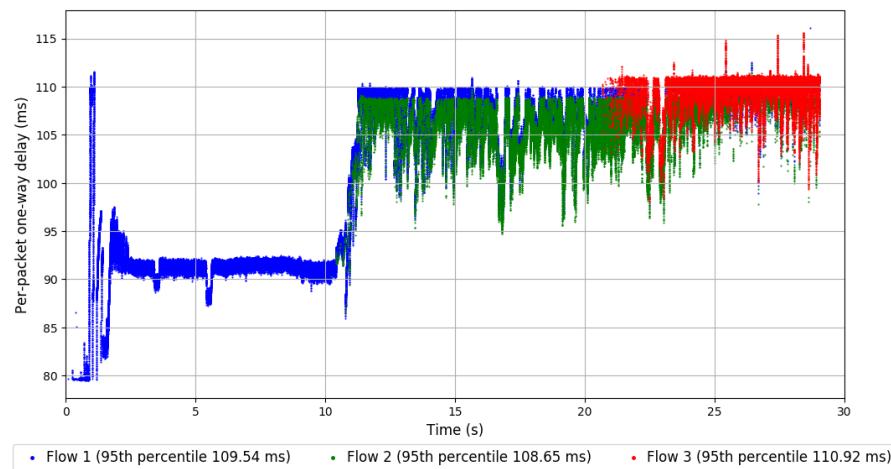
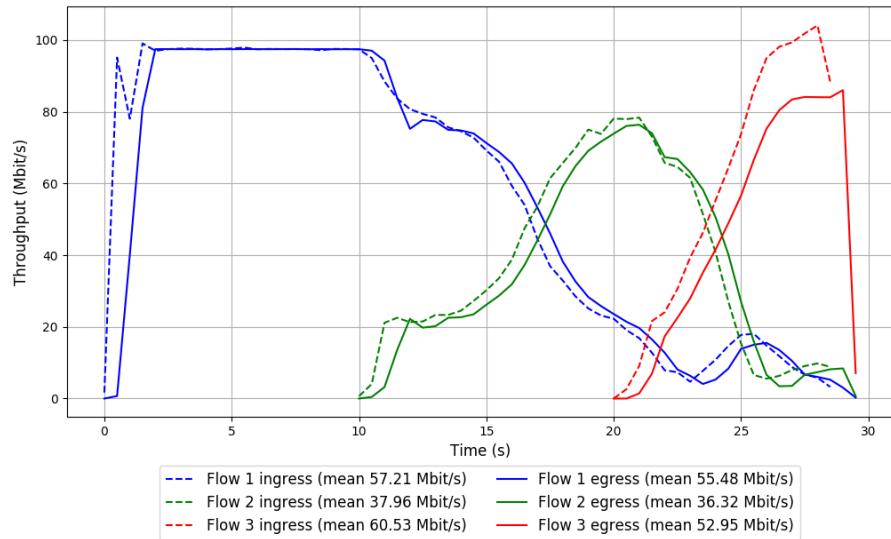


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-04-24 01:11:14
End at: 2019-04-24 01:11:44
Local clock offset: -4.021 ms
Remote clock offset: 1.869 ms

# Below is generated by plot.py at 2019-04-24 02:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 110.652 ms
Loss rate: 4.97%
-- Flow 1:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 109.539 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 36.32 Mbit/s
95th percentile per-packet one-way delay: 108.646 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 52.95 Mbit/s
95th percentile per-packet one-way delay: 110.920 ms
Loss rate: 12.53%
```

Run 3: Report of Indigo-MusesT — Data Link

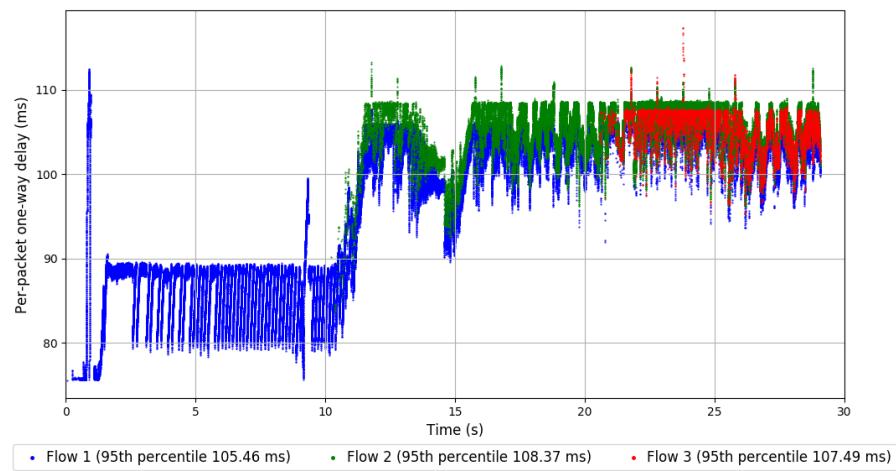
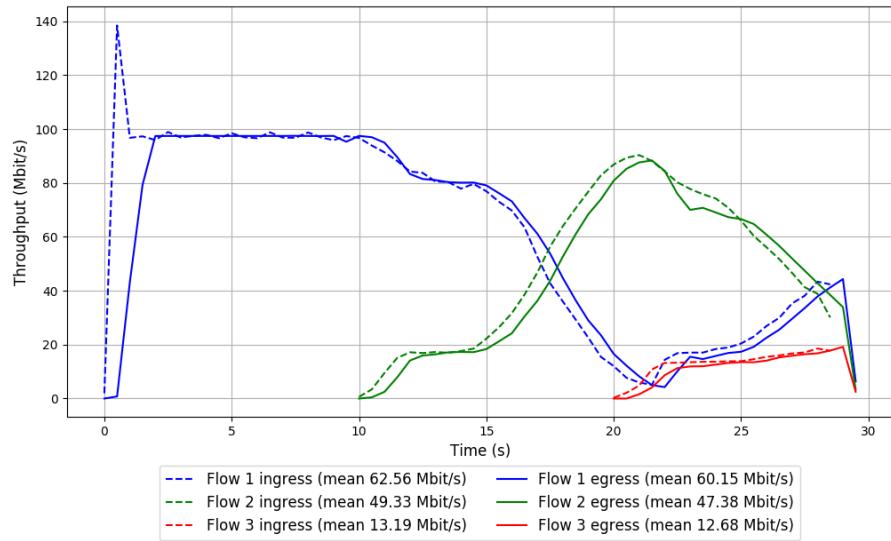


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-04-24 01:38:21
End at: 2019-04-24 01:38:51
Local clock offset: -3.755 ms
Remote clock offset: -2.717 ms

# Below is generated by plot.py at 2019-04-24 02:33:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 108.104 ms
Loss rate: 3.82%
-- Flow 1:
Average throughput: 60.15 Mbit/s
95th percentile per-packet one-way delay: 105.457 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 47.38 Mbit/s
95th percentile per-packet one-way delay: 108.366 ms
Loss rate: 3.91%
-- Flow 3:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 107.488 ms
Loss rate: 3.89%
```

Run 4: Report of Indigo-MusesT — Data Link

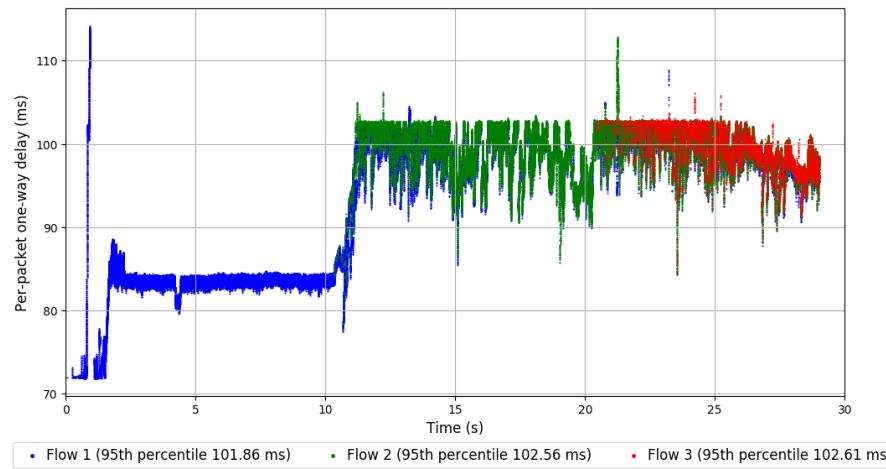
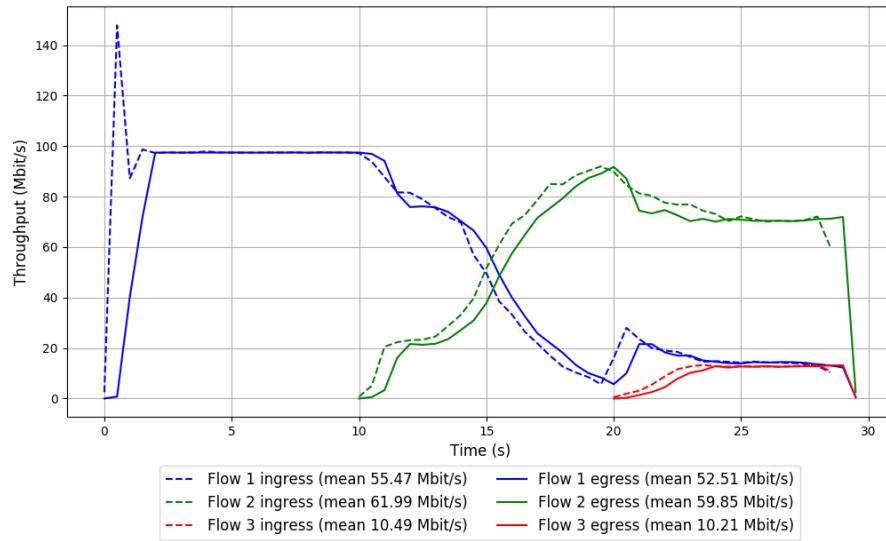


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-04-24 02:05:07
End at: 2019-04-24 02:05:37
Local clock offset: -3.488 ms
Remote clock offset: -6.978 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 102.393 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 101.863 ms
Loss rate: 5.27%
-- Flow 2:
Average throughput: 59.85 Mbit/s
95th percentile per-packet one-way delay: 102.558 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 102.609 ms
Loss rate: 2.66%
```

Run 5: Report of Indigo-MusesT — Data Link

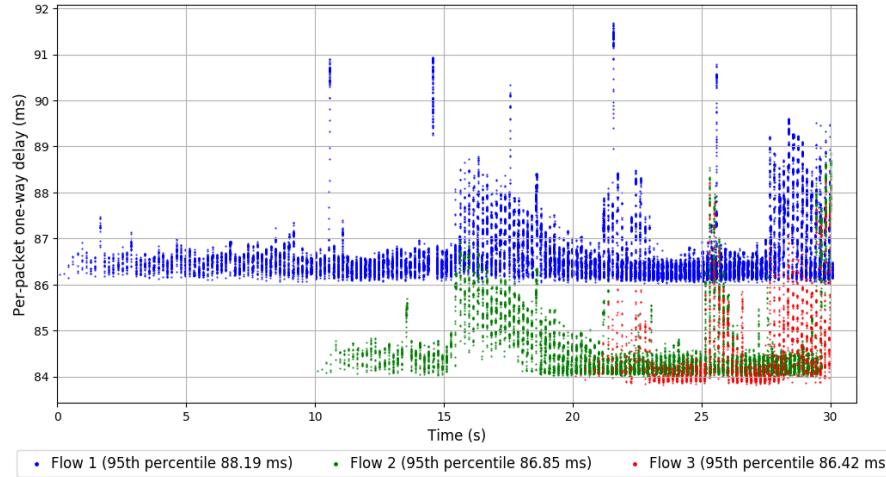
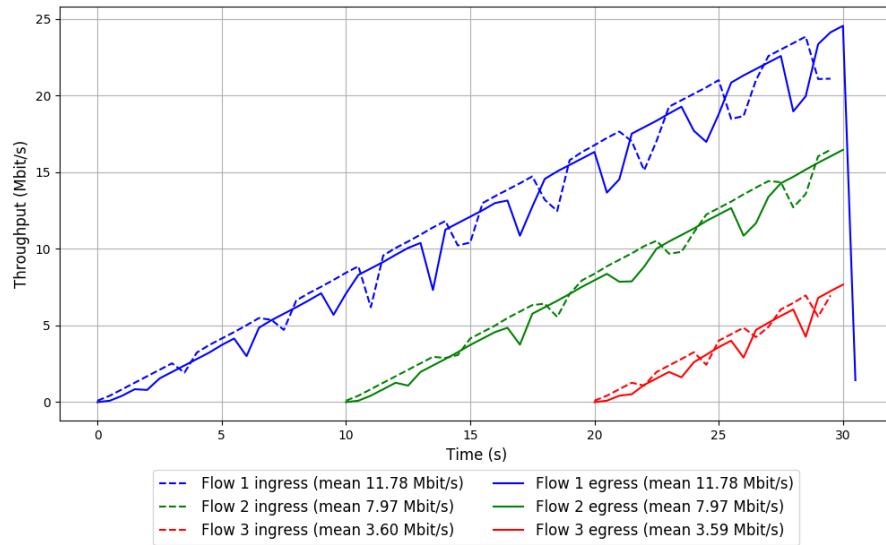


Run 1: Statistics of LEDBAT

```
Start at: 2019-04-24 00:28:47
End at: 2019-04-24 00:29:17
Local clock offset: -3.855 ms
Remote clock offset: 2.537 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.25 Mbit/s
95th percentile per-packet one-way delay: 87.867 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 88.186 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 86.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 86.420 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

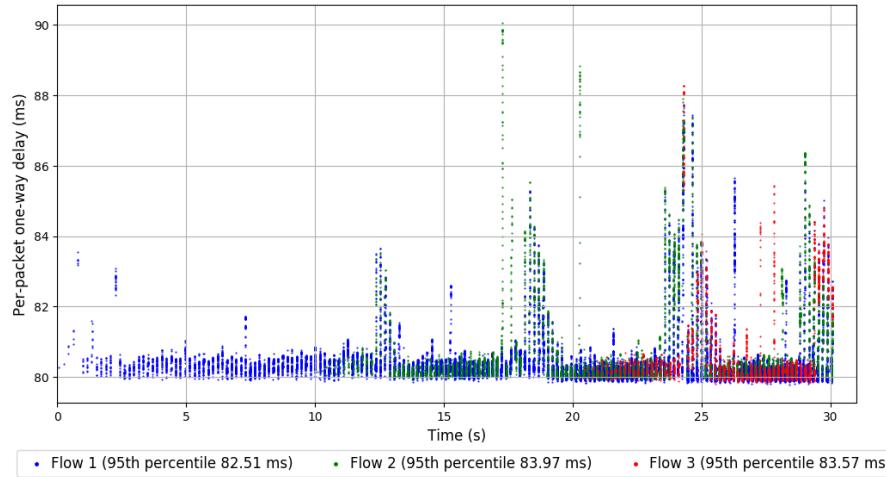
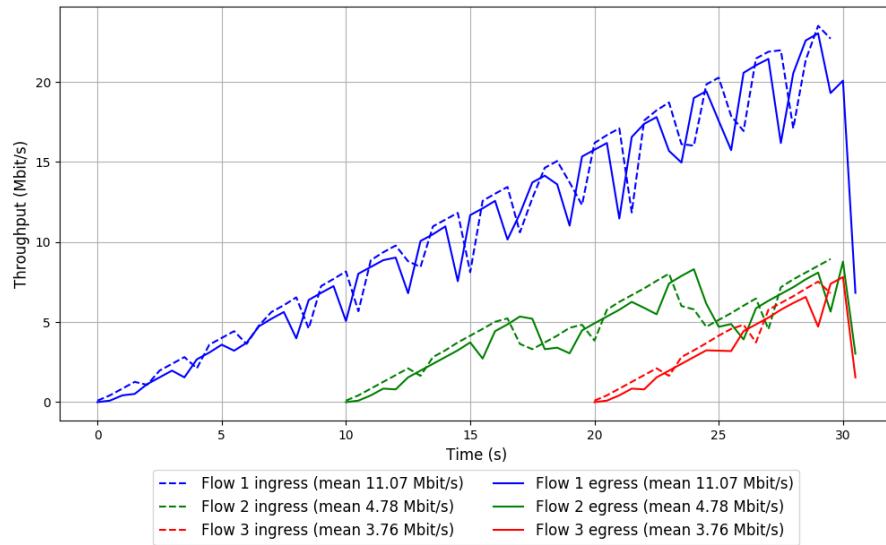


Run 2: Statistics of LEDBAT

```
Start at: 2019-04-24 00:55:43
End at: 2019-04-24 00:56:13
Local clock offset: -3.707 ms
Remote clock offset: 1.304 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 83.120 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.07 Mbit/s
95th percentile per-packet one-way delay: 82.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 83.973 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 83.567 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

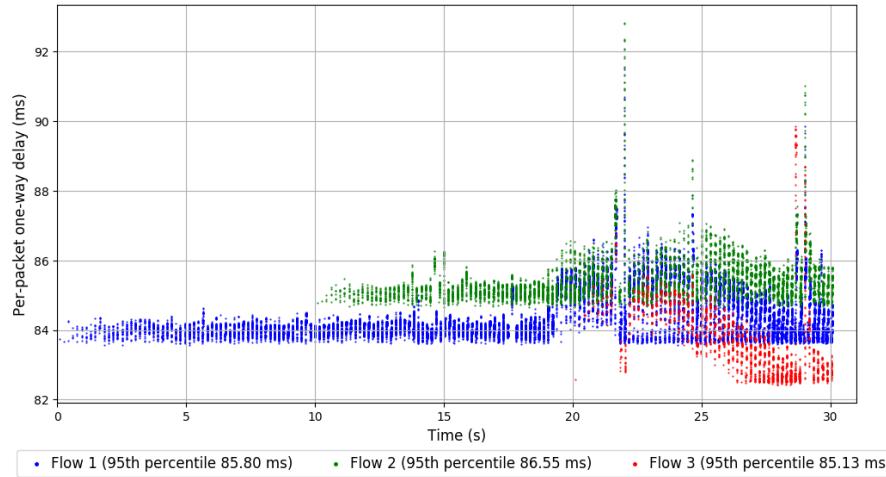
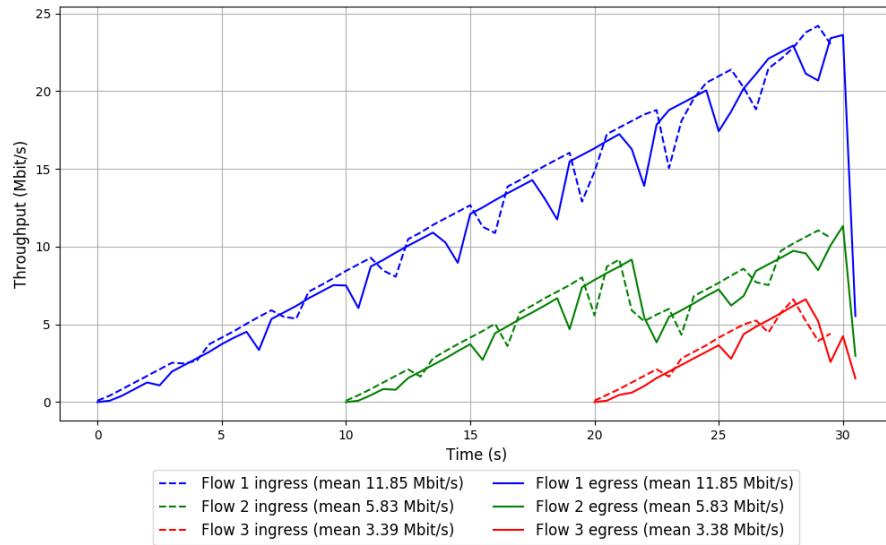


Run 3: Statistics of LEDBAT

```
Start at: 2019-04-24 01:22:38
End at: 2019-04-24 01:23:08
Local clock offset: -3.373 ms
Remote clock offset: 5.048 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.86 Mbit/s
95th percentile per-packet one-way delay: 86.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 85.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 86.545 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 85.131 ms
Loss rate: 0.03%
```

Run 3: Report of LEDBAT — Data Link

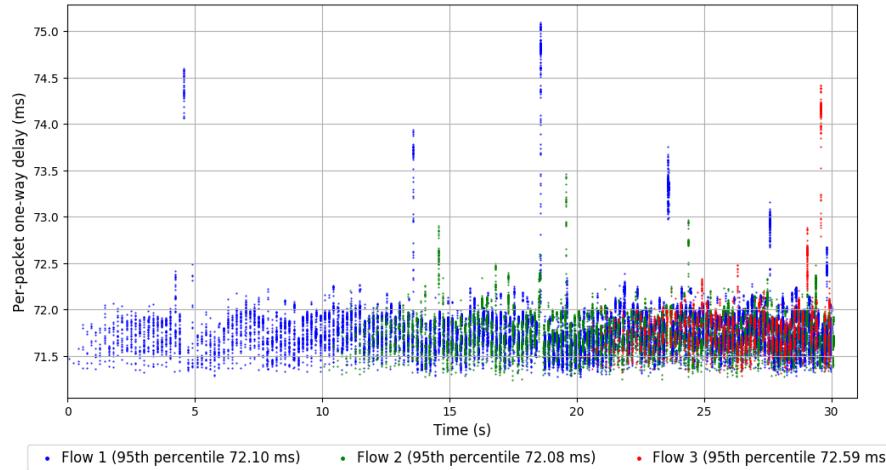
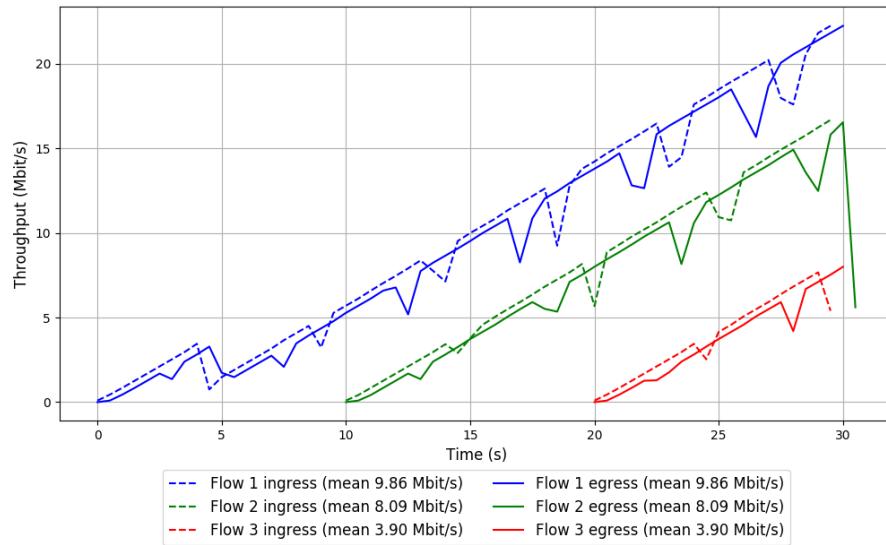


Run 4: Statistics of LEDBAT

```
Start at: 2019-04-24 01:49:44
End at: 2019-04-24 01:50:14
Local clock offset: -2.819 ms
Remote clock offset: -5.914 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.50 Mbit/s
95th percentile per-packet one-way delay: 72.105 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 72.104 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 72.077 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 72.590 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

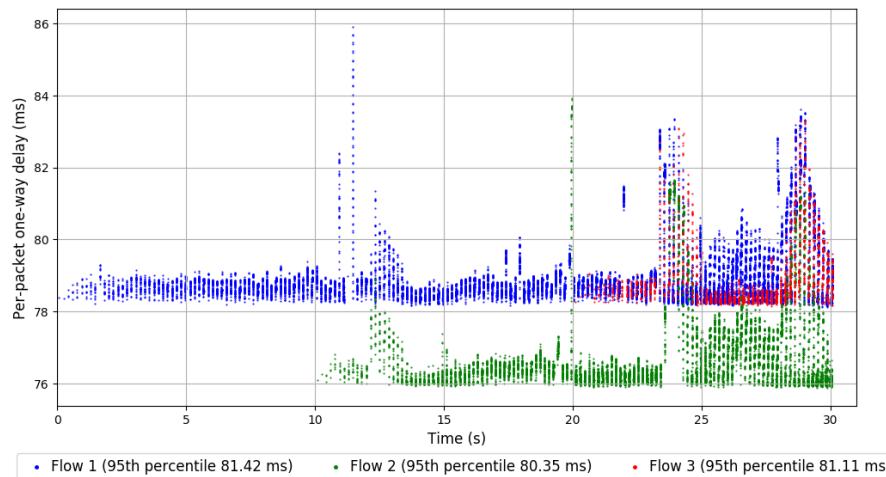
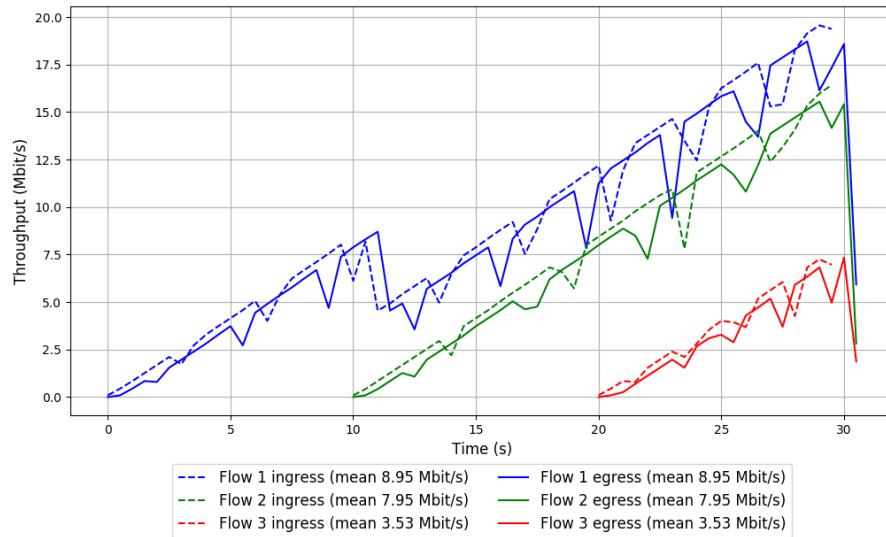


Run 5: Statistics of LEDBAT

```
Start at: 2019-04-24 02:16:37
End at: 2019-04-24 02:17:07
Local clock offset: -3.544 ms
Remote clock offset: -1.488 ms

# Below is generated by plot.py at 2019-04-24 02:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.41 Mbit/s
95th percentile per-packet one-way delay: 81.142 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 8.95 Mbit/s
95th percentile per-packet one-way delay: 81.421 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 80.351 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 81.108 ms
Loss rate: 0.03%
```

Run 5: Report of LEDBAT — Data Link

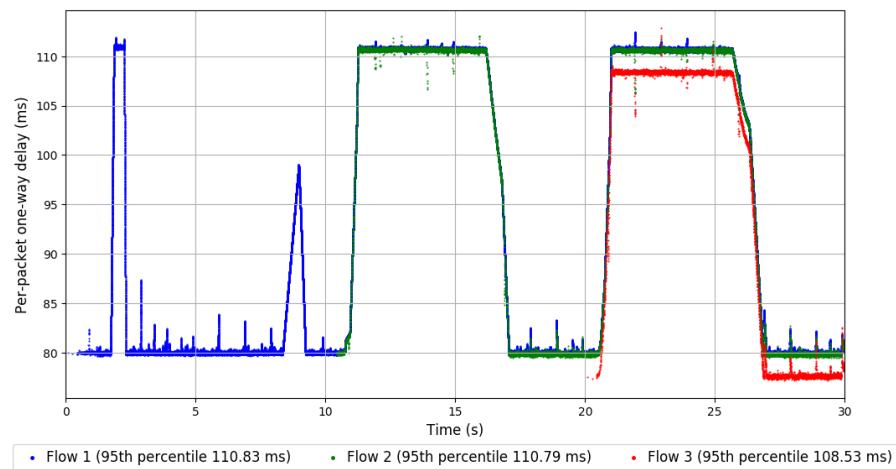
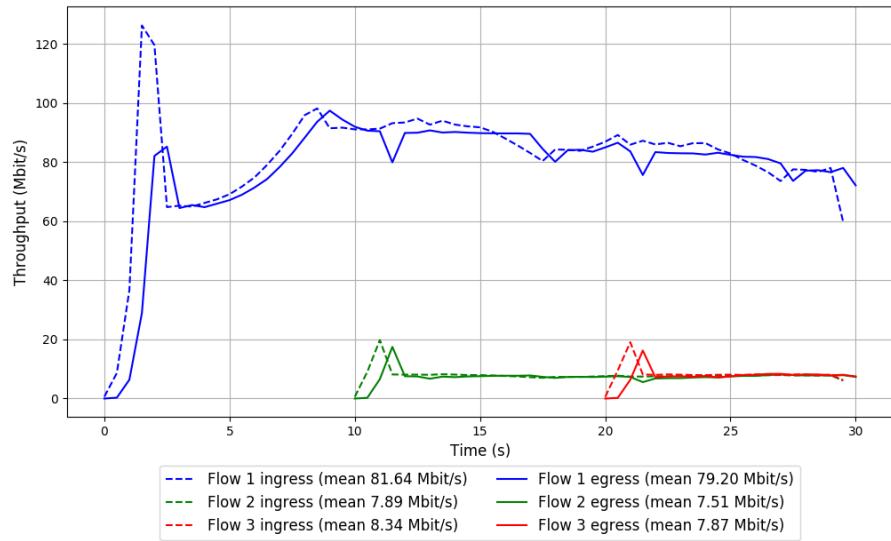


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-04-24 00:36:27
End at: 2019-04-24 00:36:57
Local clock offset: -4.039 ms
Remote clock offset: -3.054 ms

# Below is generated by plot.py at 2019-04-24 02:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.79 Mbit/s
95th percentile per-packet one-way delay: 110.825 ms
Loss rate: 3.17%
-- Flow 1:
Average throughput: 79.20 Mbit/s
95th percentile per-packet one-way delay: 110.830 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 110.789 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 108.532 ms
Loss rate: 5.58%
```

Run 1: Report of PCC-Allegro — Data Link

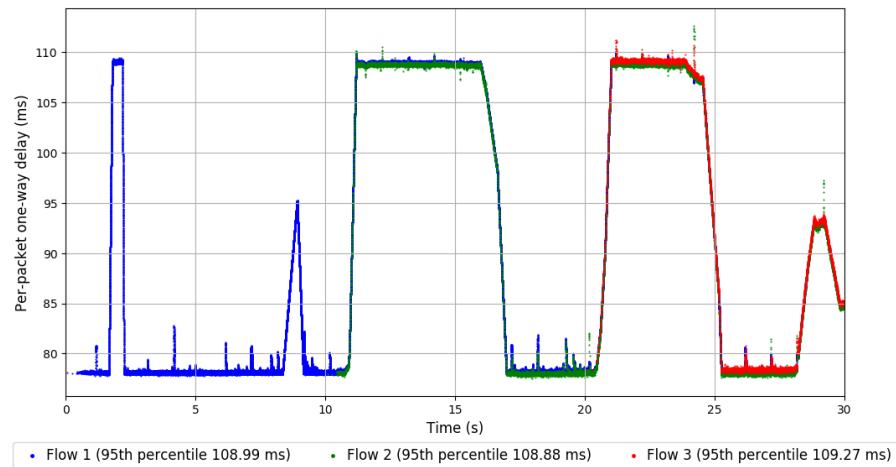
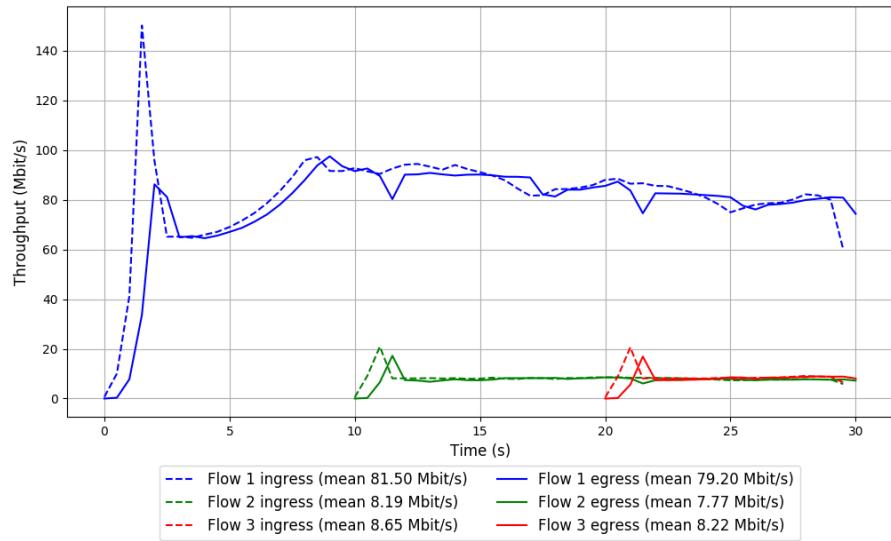


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-04-24 01:03:21
End at: 2019-04-24 01:03:51
Local clock offset: -3.882 ms
Remote clock offset: 0.793 ms

# Below is generated by plot.py at 2019-04-24 02:34:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 109.001 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 79.20 Mbit/s
95th percentile per-packet one-way delay: 108.993 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 108.878 ms
Loss rate: 5.07%
-- Flow 3:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 109.272 ms
Loss rate: 4.83%
```

Run 2: Report of PCC-Allegro — Data Link

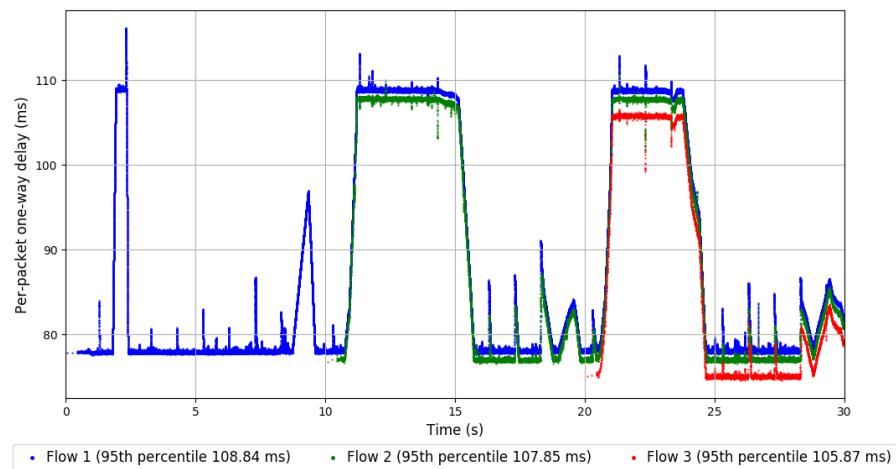
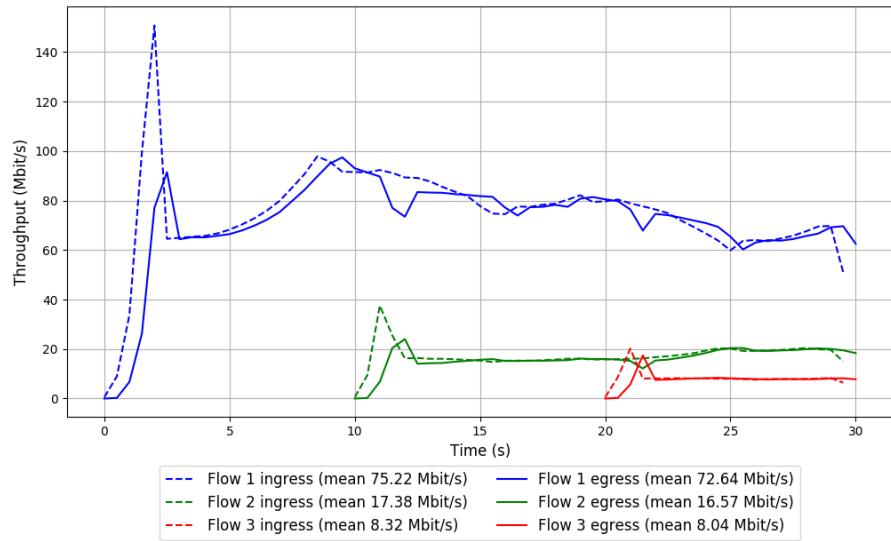


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-04-24 01:30:37
End at: 2019-04-24 01:31:07
Local clock offset: -3.062 ms
Remote clock offset: -2.63 ms

# Below is generated by plot.py at 2019-04-24 02:34:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 108.828 ms
Loss rate: 3.57%
-- Flow 1:
Average throughput: 72.64 Mbit/s
95th percentile per-packet one-way delay: 108.845 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 16.57 Mbit/s
95th percentile per-packet one-way delay: 107.847 ms
Loss rate: 4.63%
-- Flow 3:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 105.869 ms
Loss rate: 3.43%
```

Run 3: Report of PCC-Allegro — Data Link

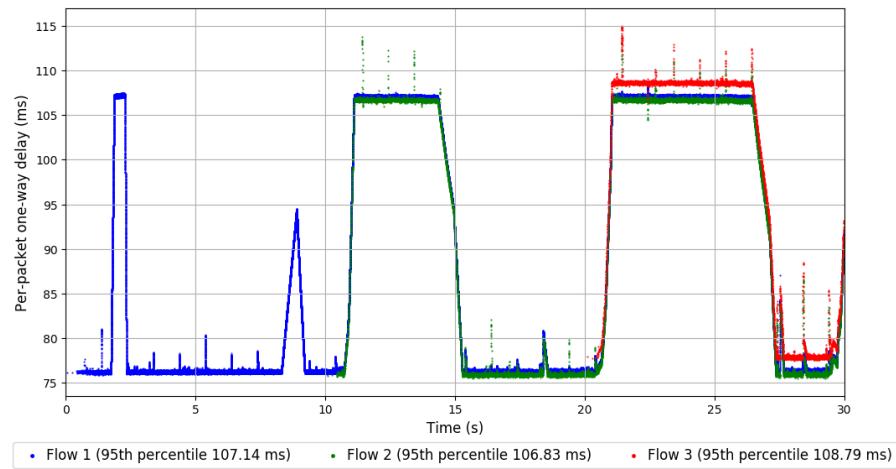
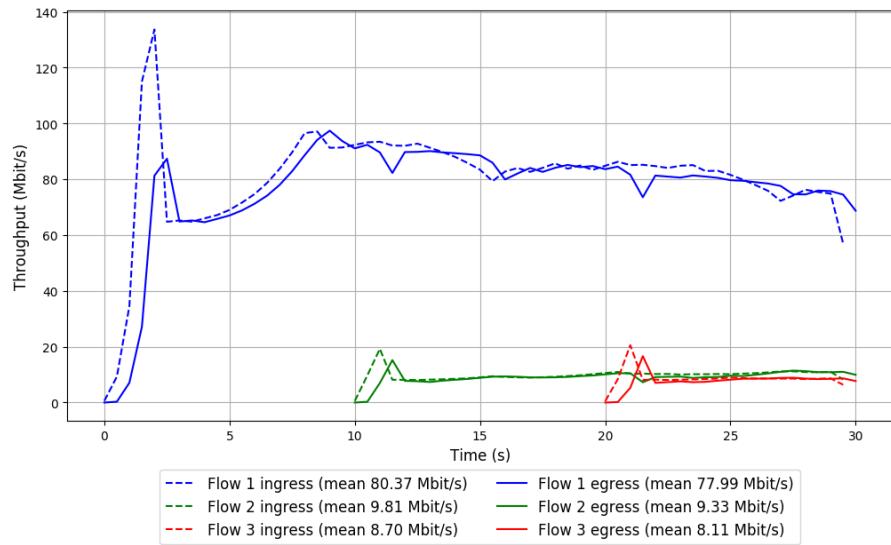


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-04-24 01:57:23
End at: 2019-04-24 01:57:53
Local clock offset: -2.791 ms
Remote clock offset: -3.138 ms

# Below is generated by plot.py at 2019-04-24 02:34:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 107.165 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 77.99 Mbit/s
95th percentile per-packet one-way delay: 107.143 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 106.834 ms
Loss rate: 4.82%
-- Flow 3:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 108.789 ms
Loss rate: 6.62%
```

Run 4: Report of PCC-Allegro — Data Link

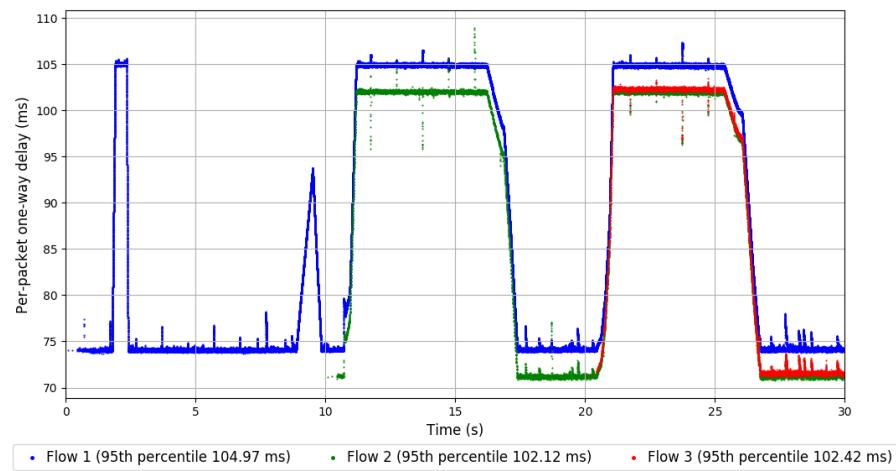
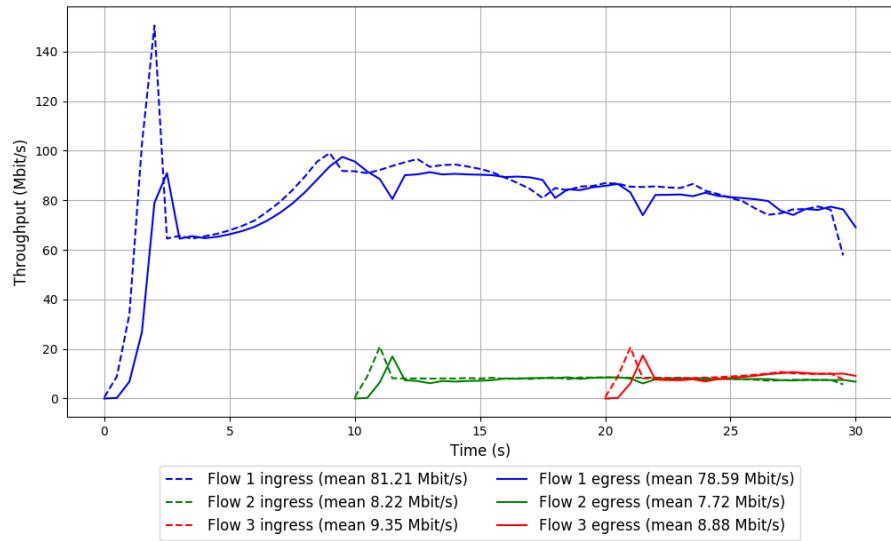


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-04-24 02:24:16
End at: 2019-04-24 02:24:46
Local clock offset: -3.175 ms
Remote clock offset: -5.517 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 104.962 ms
Loss rate: 3.45%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 104.968 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 102.116 ms
Loss rate: 6.03%
-- Flow 3:
Average throughput: 8.88 Mbit/s
95th percentile per-packet one-way delay: 102.417 ms
Loss rate: 4.96%
```

Run 5: Report of PCC-Allegro — Data Link

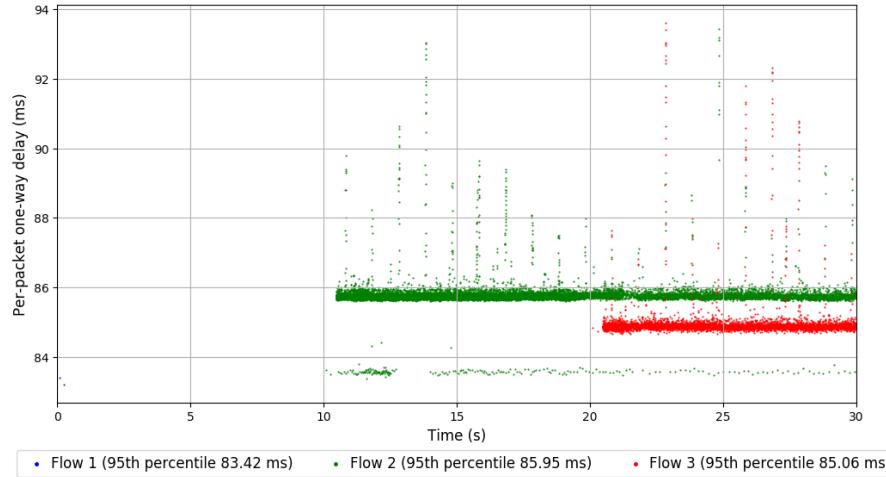
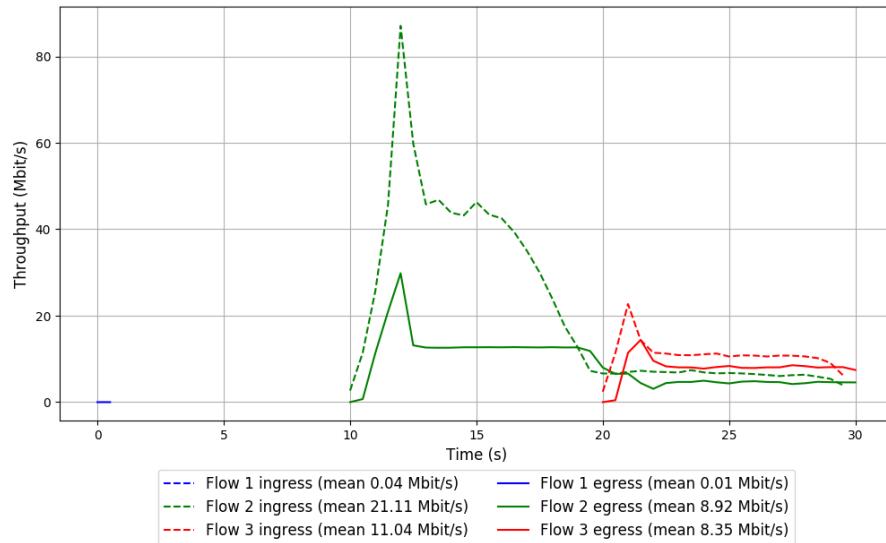


Run 1: Statistics of PCC-Expr

```
Start at: 2019-04-24 00:33:55
End at: 2019-04-24 00:34:25
Local clock offset: -3.95 ms
Remote clock offset: 1.707 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 85.928 ms
Loss rate: 50.85%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 83.419 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 8.92 Mbit/s
95th percentile per-packet one-way delay: 85.954 ms
Loss rate: 57.73%
-- Flow 3:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 85.063 ms
Loss rate: 24.34%
```

Run 1: Report of PCC-Expr — Data Link

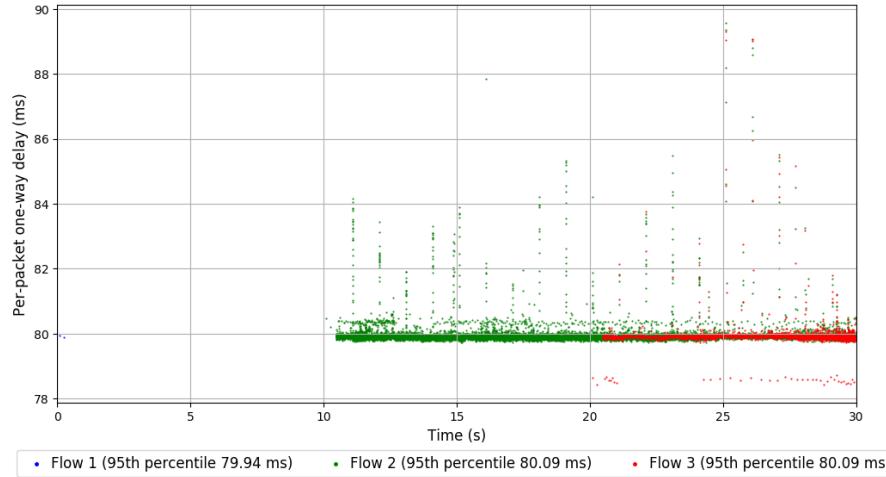
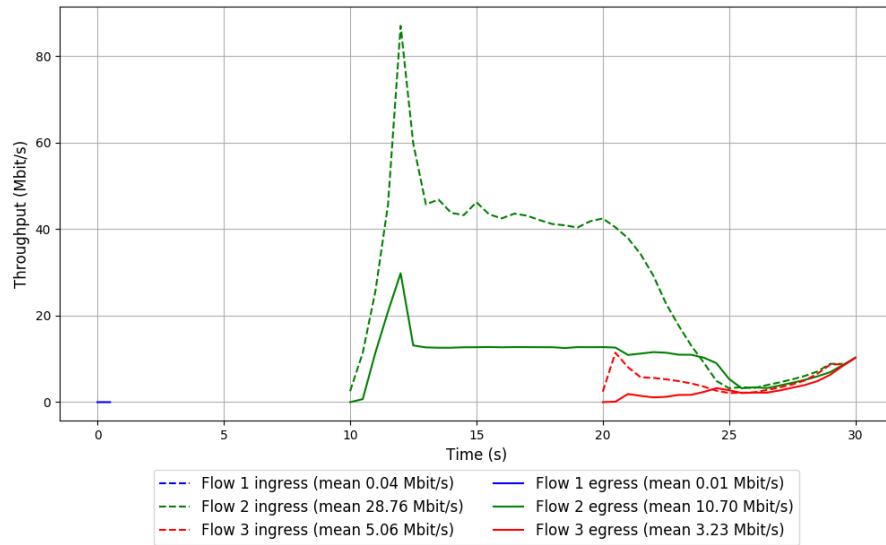


Run 2: Statistics of PCC-Expr

```
Start at: 2019-04-24 01:00:49
End at: 2019-04-24 01:01:19
Local clock offset: -3.841 ms
Remote clock offset: 1.544 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 80.093 ms
Loss rate: 60.64%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 79.937 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.70 Mbit/s
95th percentile per-packet one-way delay: 80.095 ms
Loss rate: 62.78%
-- Flow 3:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 80.088 ms
Loss rate: 36.16%
```

Run 2: Report of PCC-Expr — Data Link

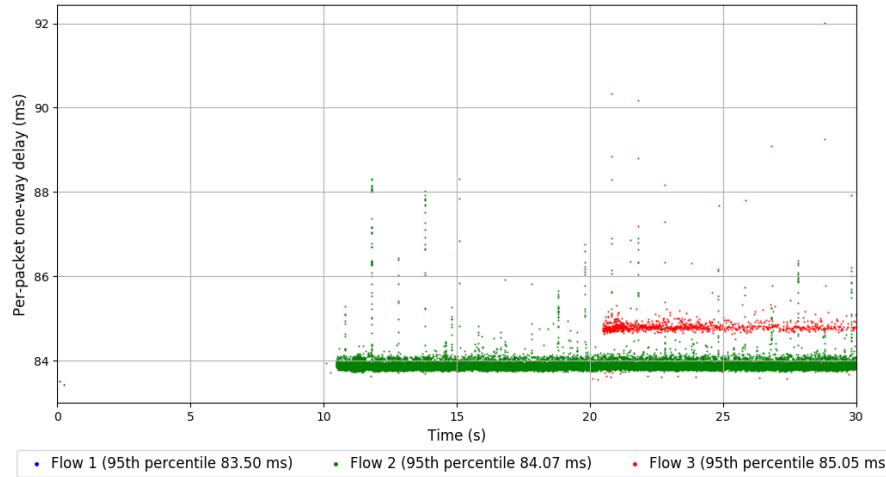
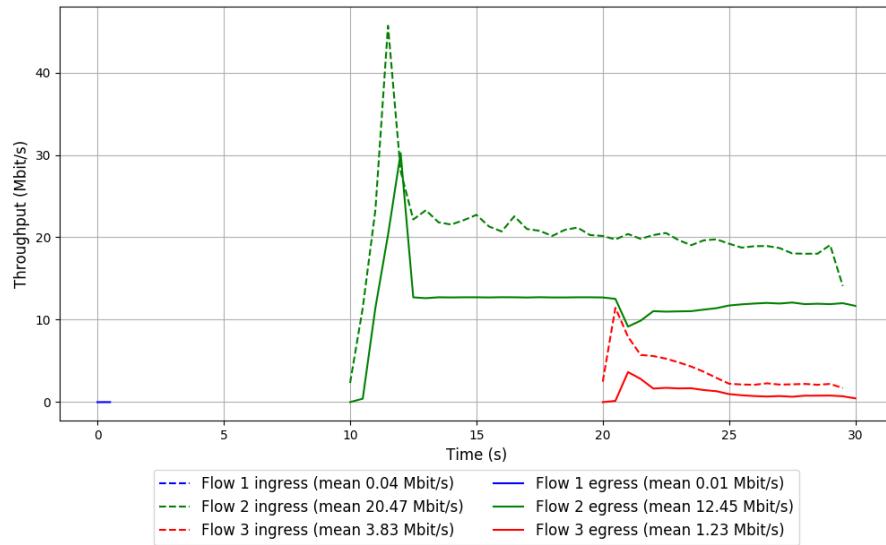


Run 3: Statistics of PCC-Expr

```
Start at: 2019-04-24 01:27:45
End at: 2019-04-24 01:28:15
Local clock offset: -3.972 ms
Remote clock offset: 4.549 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 84.730 ms
Loss rate: 41.62%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 83.502 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 84.072 ms
Loss rate: 39.19%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 85.045 ms
Loss rate: 67.80%
```

Run 3: Report of PCC-Expr — Data Link

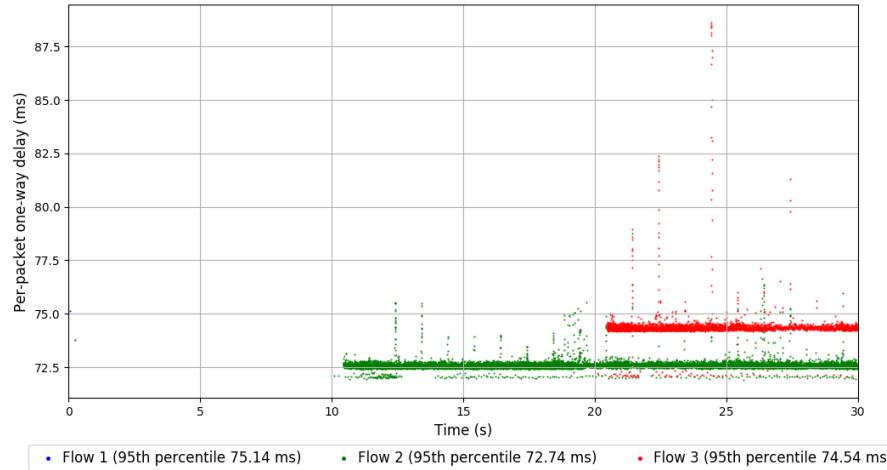
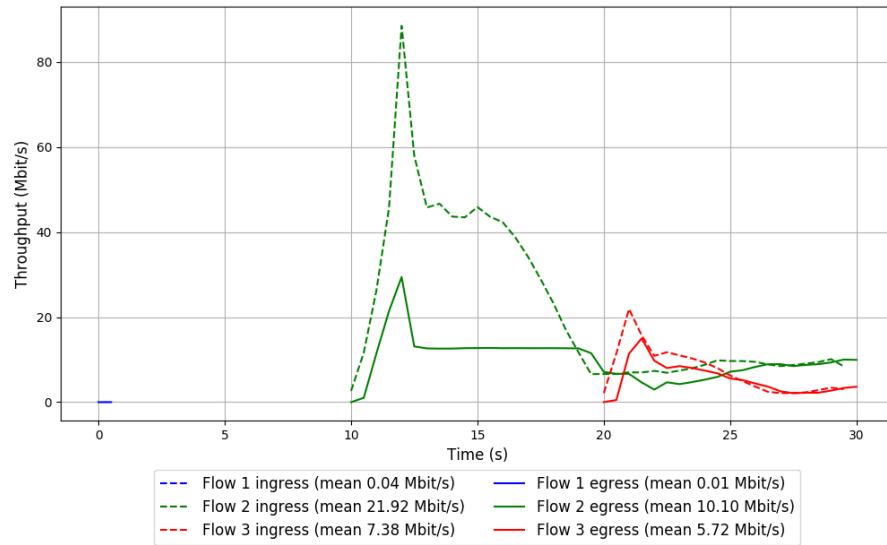


Run 4: Statistics of PCC-Expr

```
Start at: 2019-04-24 01:54:51
End at: 2019-04-24 01:55:21
Local clock offset: -3.628 ms
Remote clock offset: -6.439 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 74.395 ms
Loss rate: 49.42%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 75.135 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 72.744 ms
Loss rate: 53.91%
-- Flow 3:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 74.539 ms
Loss rate: 22.48%
```

Run 4: Report of PCC-Expr — Data Link

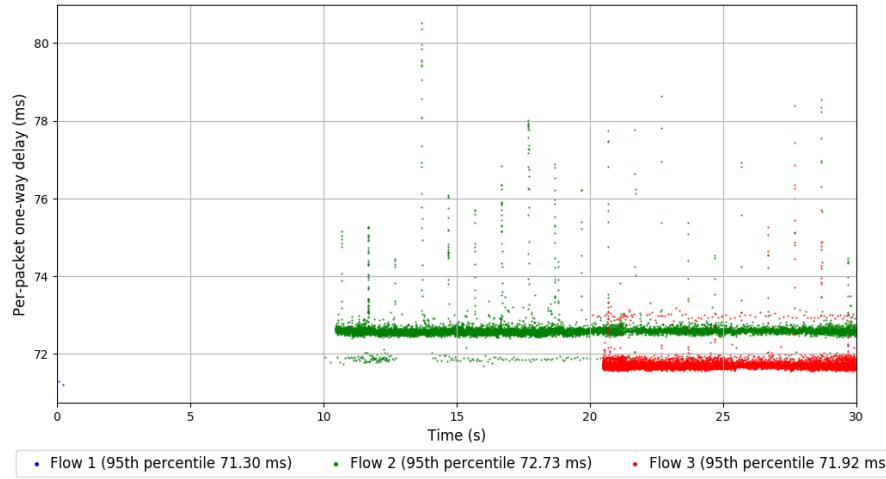
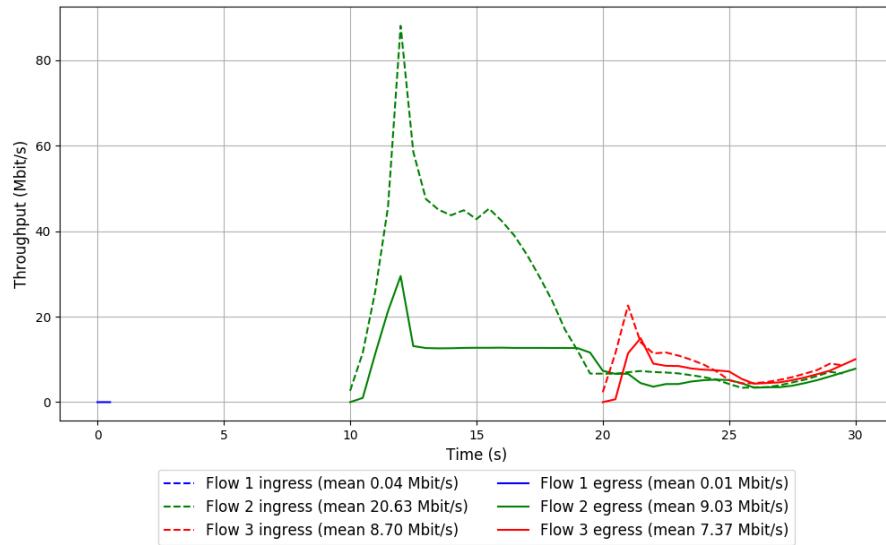


Run 5: Statistics of PCC-Expr

```
Start at: 2019-04-24 02:21:44
End at: 2019-04-24 02:22:14
Local clock offset: -3.913 ms
Remote clock offset: -6.759 ms

# Below is generated by plot.py at 2019-04-24 02:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 72.703 ms
Loss rate: 49.12%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 71.304 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 72.727 ms
Loss rate: 56.21%
-- Flow 3:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 71.916 ms
Loss rate: 15.24%
```

Run 5: Report of PCC-Expr — Data Link

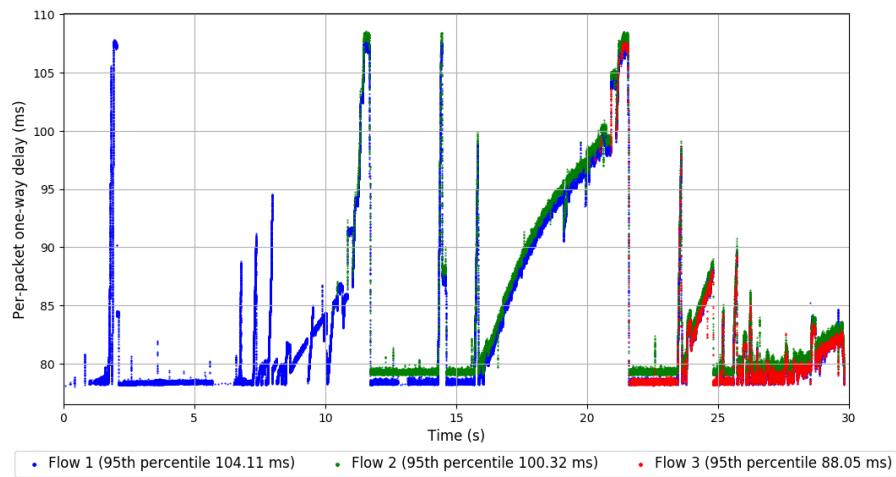
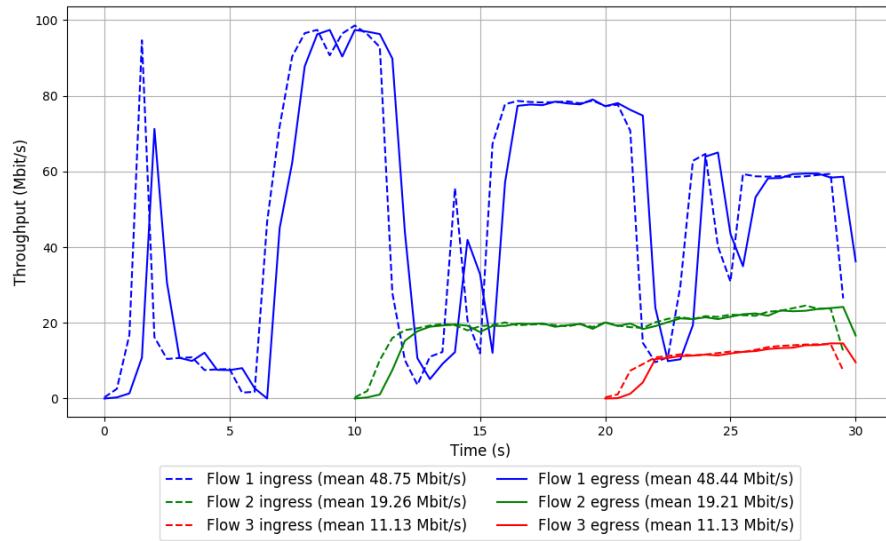


Run 1: Statistics of QUIC Cubic

```
Start at: 2019-04-24 00:32:38
End at: 2019-04-24 00:33:08
Local clock offset: -3.137 ms
Remote clock offset: -2.284 ms

# Below is generated by plot.py at 2019-04-24 02:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.81 Mbit/s
95th percentile per-packet one-way delay: 103.907 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 48.44 Mbit/s
95th percentile per-packet one-way delay: 104.108 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 19.21 Mbit/s
95th percentile per-packet one-way delay: 100.317 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 88.050 ms
Loss rate: 0.20%
```

Run 1: Report of QUIC Cubic — Data Link

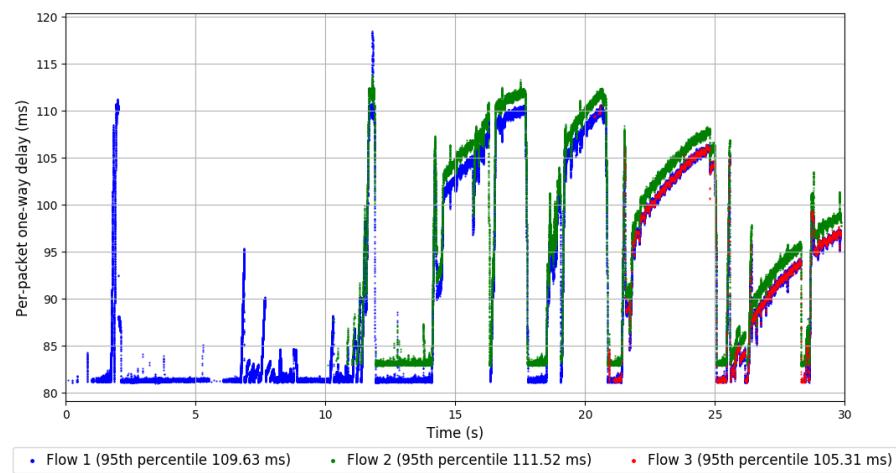
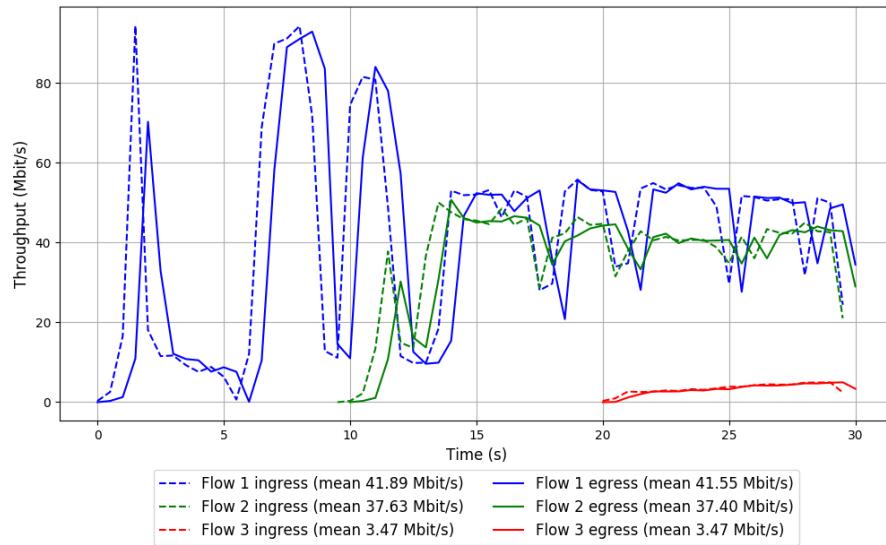


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-04-24 00:59:33
End at: 2019-04-24 01:00:03
Local clock offset: -3.813 ms
Remote clock offset: 4.668 ms

# Below is generated by plot.py at 2019-04-24 02:35:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.51 Mbit/s
95th percentile per-packet one-way delay: 110.330 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 109.629 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 111.520 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 105.313 ms
Loss rate: 0.07%
```

Run 2: Report of QUIC Cubic — Data Link

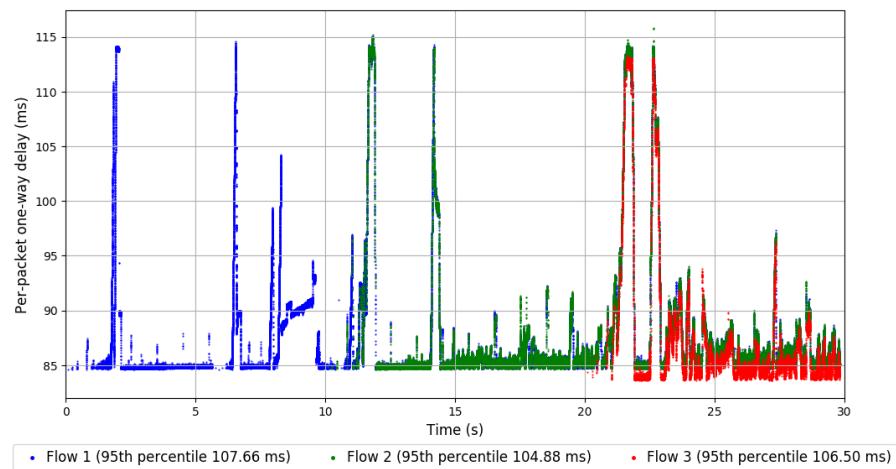
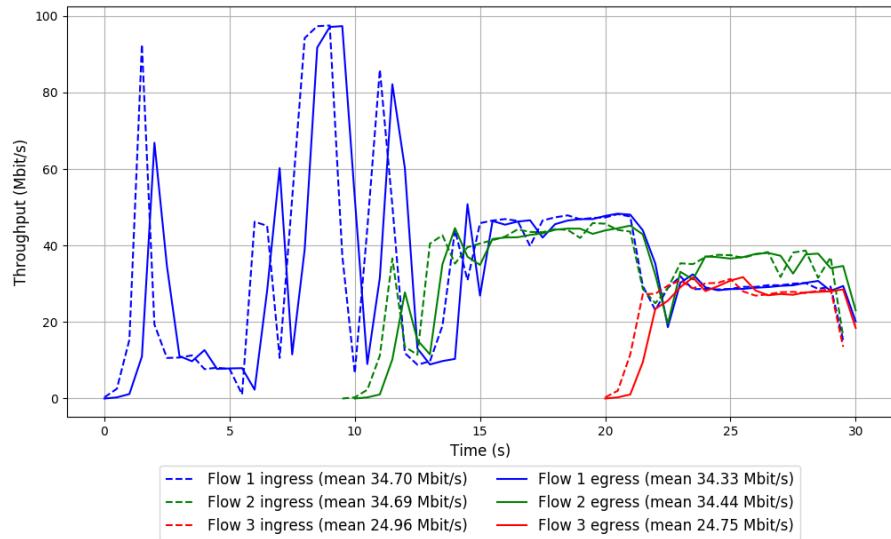


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-04-24 01:26:28
End at: 2019-04-24 01:26:58
Local clock offset: -3.968 ms
Remote clock offset: 4.66 ms

# Below is generated by plot.py at 2019-04-24 02:35:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.28 Mbit/s
95th percentile per-packet one-way delay: 106.440 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 34.33 Mbit/s
95th percentile per-packet one-way delay: 107.655 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 104.883 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 106.500 ms
Loss rate: 0.85%
```

Run 3: Report of QUIC Cubic — Data Link

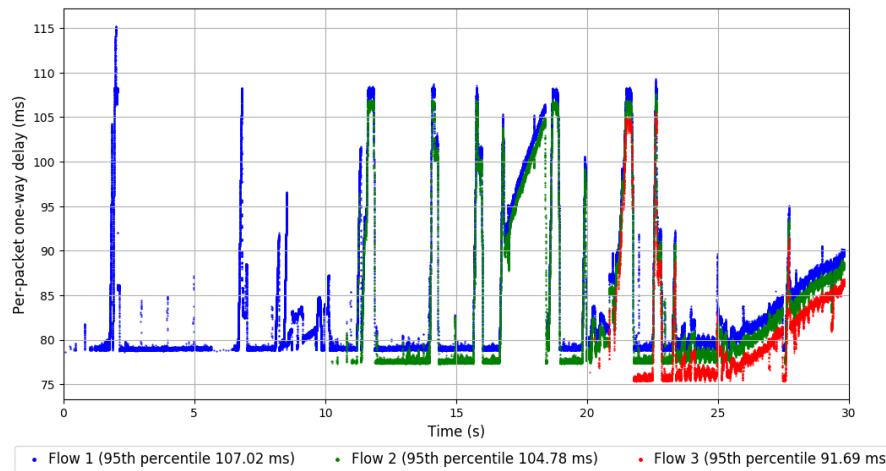
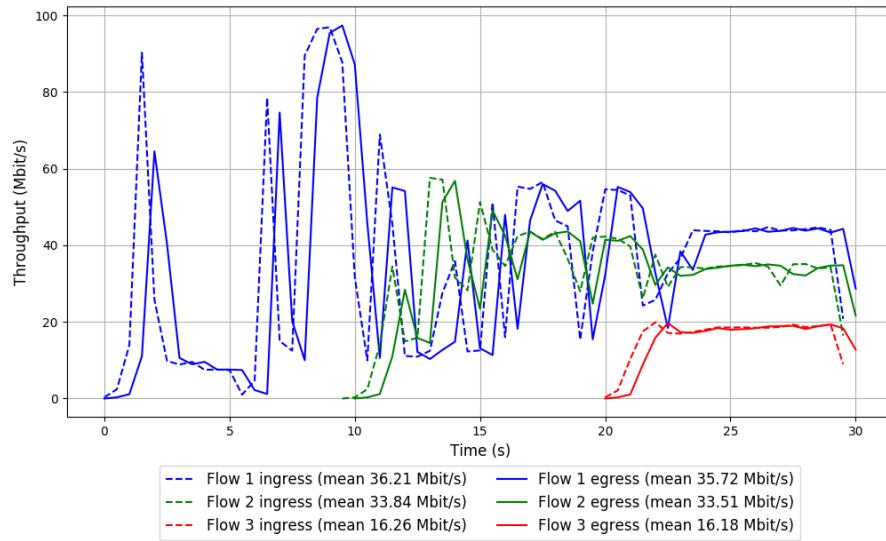


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-04-24 01:53:34
End at: 2019-04-24 01:54:04
Local clock offset: -2.867 ms
Remote clock offset: -2.094 ms

# Below is generated by plot.py at 2019-04-24 02:35:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.25 Mbit/s
95th percentile per-packet one-way delay: 105.596 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 35.72 Mbit/s
95th percentile per-packet one-way delay: 107.022 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 33.51 Mbit/s
95th percentile per-packet one-way delay: 104.781 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 91.693 ms
Loss rate: 0.38%
```

Run 4: Report of QUIC Cubic — Data Link

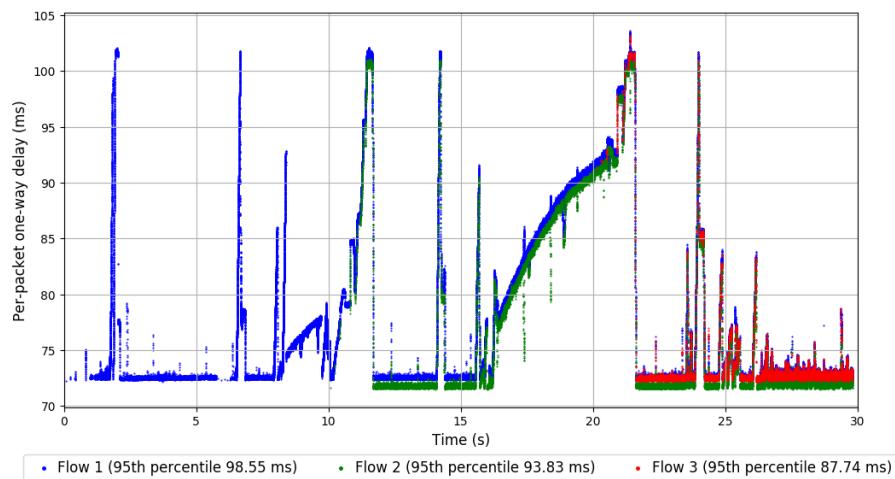
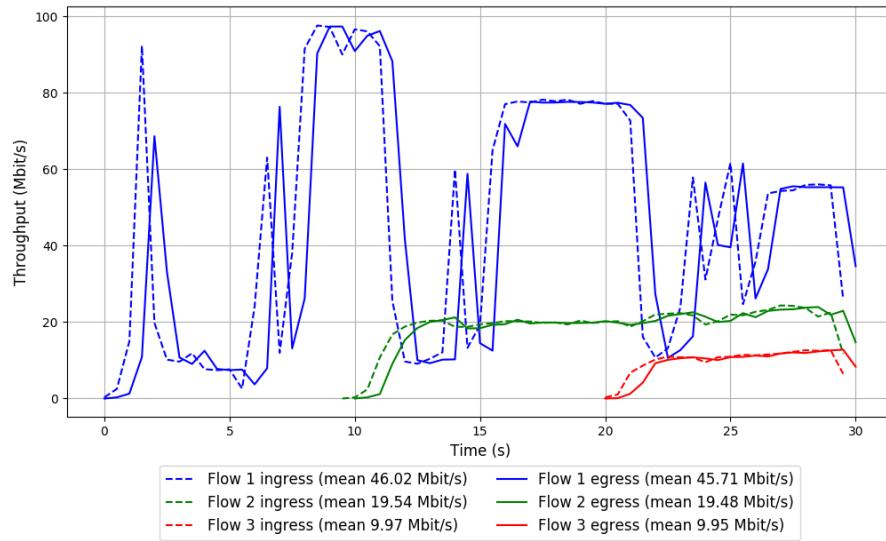


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-04-24 02:20:27
End at: 2019-04-24 02:20:57
Local clock offset: -3.791 ms
Remote clock offset: -6.894 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 98.199 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 45.71 Mbit/s
95th percentile per-packet one-way delay: 98.552 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 93.831 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 87.740 ms
Loss rate: 0.39%
```

Run 5: Report of QUIC Cubic — Data Link

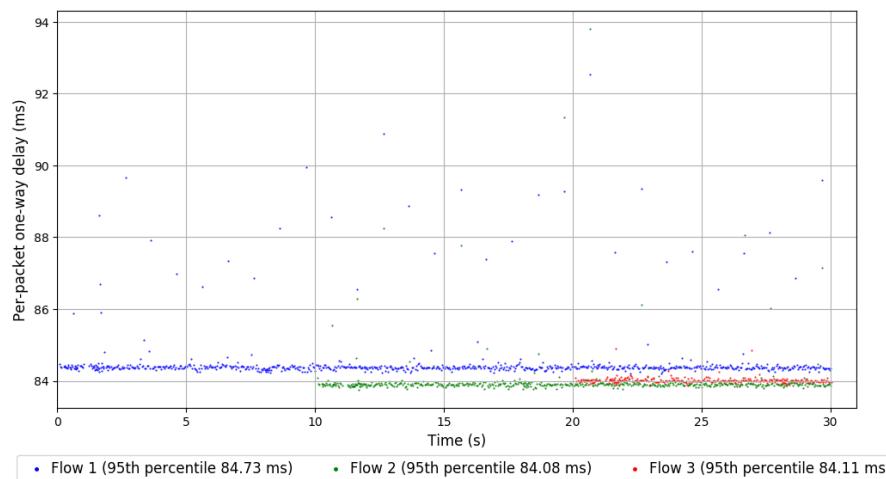
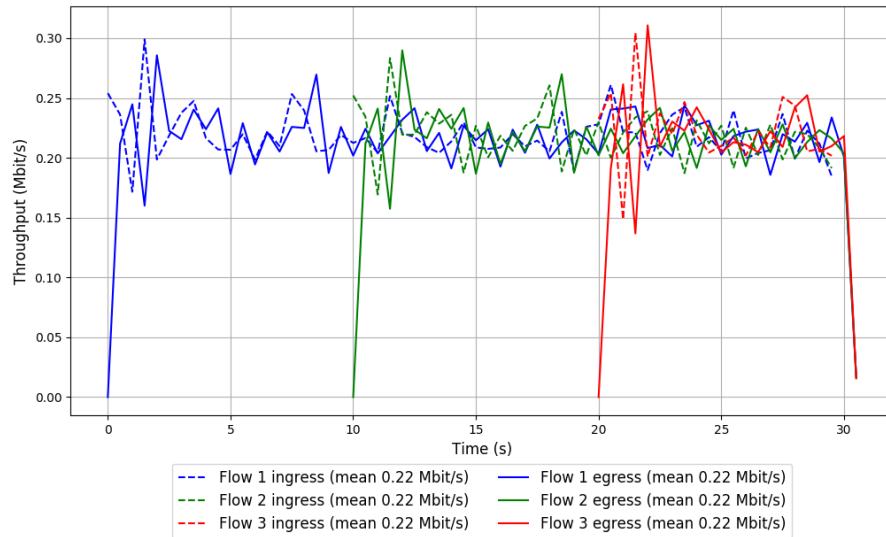


Run 1: Statistics of SCReAM

```
Start at: 2019-04-24 00:26:15
End at: 2019-04-24 00:26:45
Local clock offset: -2.993 ms
Remote clock offset: 1.517 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.728 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.078 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.107 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

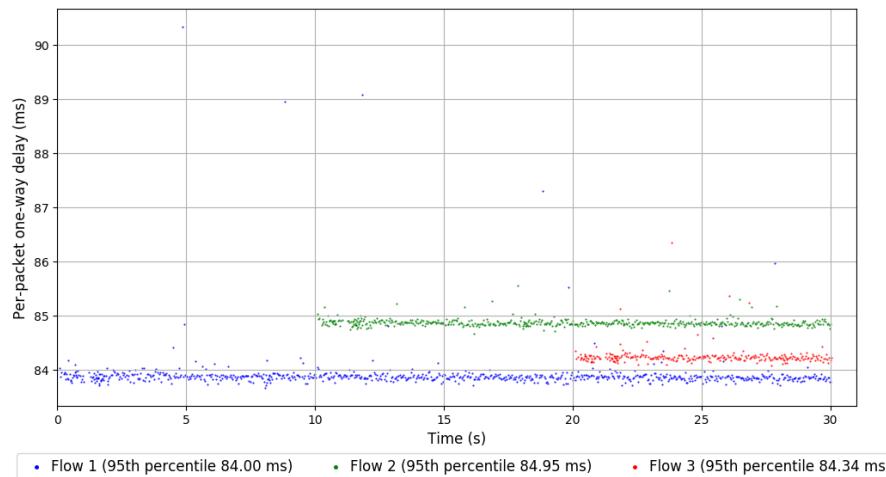
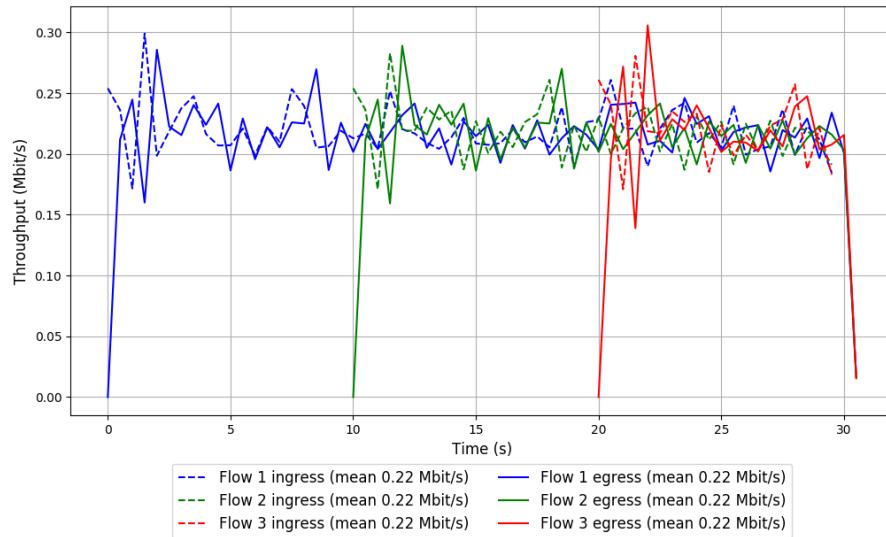


Run 2: Statistics of SCReAM

```
Start at: 2019-04-24 00:53:12
End at: 2019-04-24 00:53:42
Local clock offset: -3.648 ms
Remote clock offset: 4.852 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.918 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.001 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.949 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.345 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

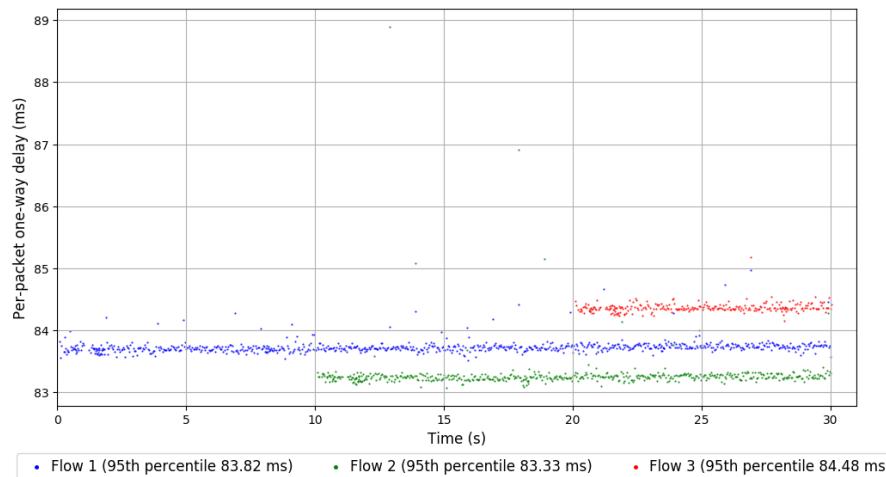
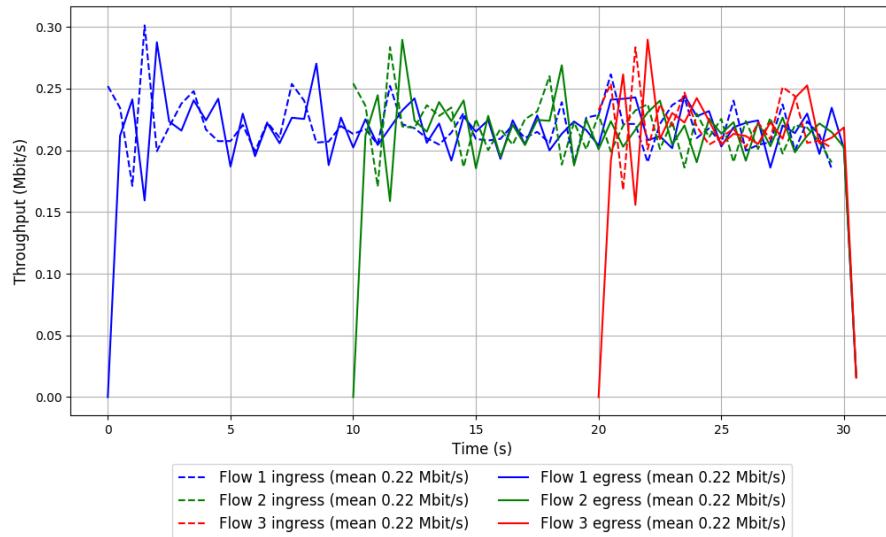


```
Run 3: Statistics of SCReAM

Start at: 2019-04-24 01:20:07
End at: 2019-04-24 01:20:37
Local clock offset: -4.394 ms
Remote clock offset: 4.907 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.335 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.478 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

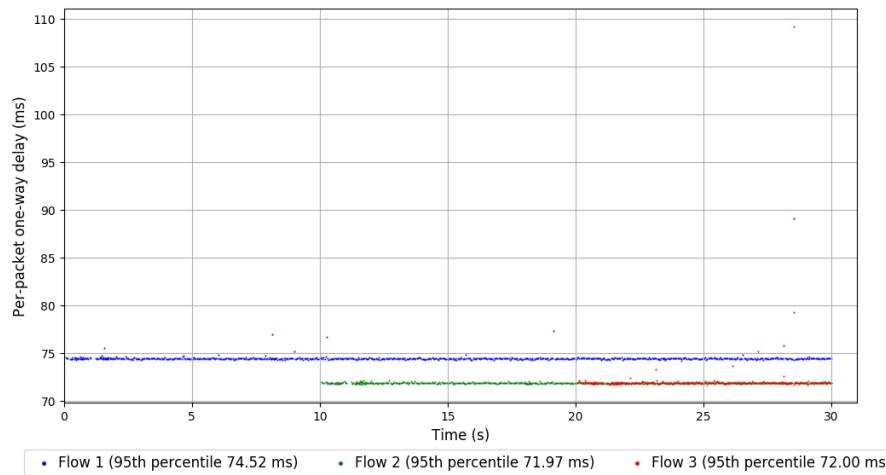
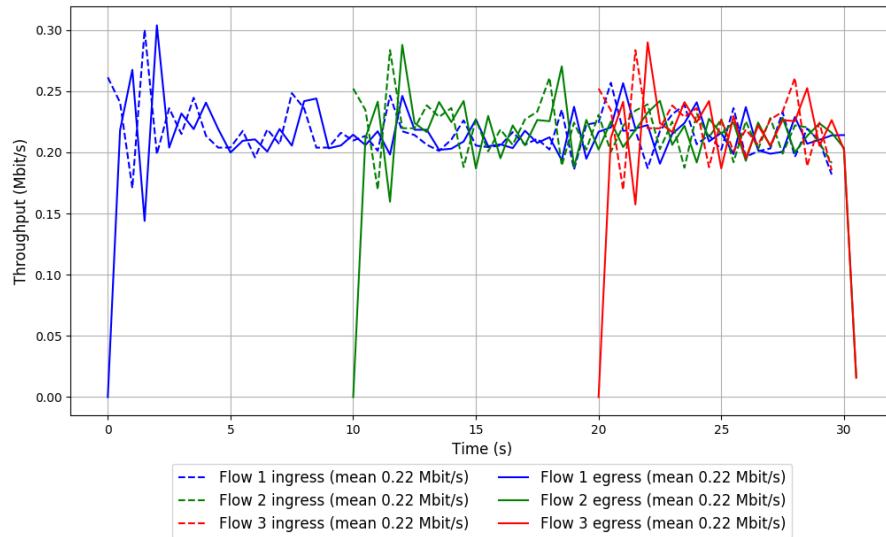


Run 4: Statistics of SCReAM

```
Start at: 2019-04-24 01:47:12
End at: 2019-04-24 01:47:42
Local clock offset: -3.601 ms
Remote clock offset: -7.458 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 74.481 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 74.518 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.970 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.002 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

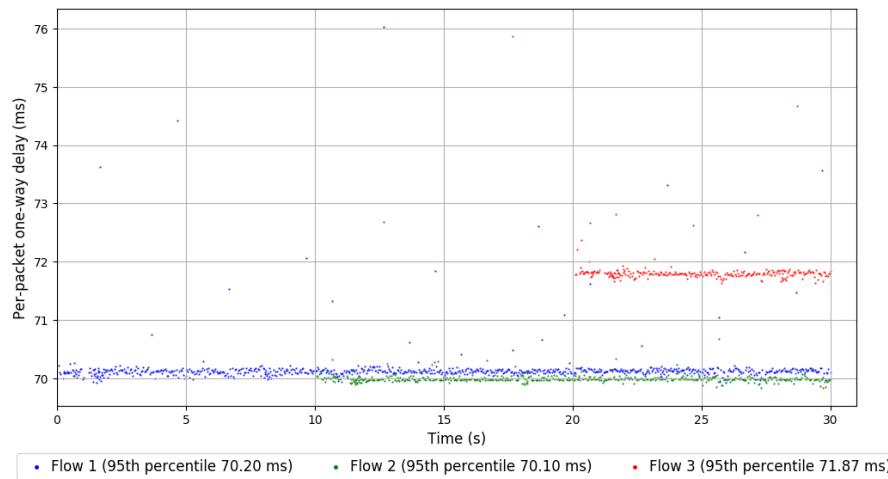
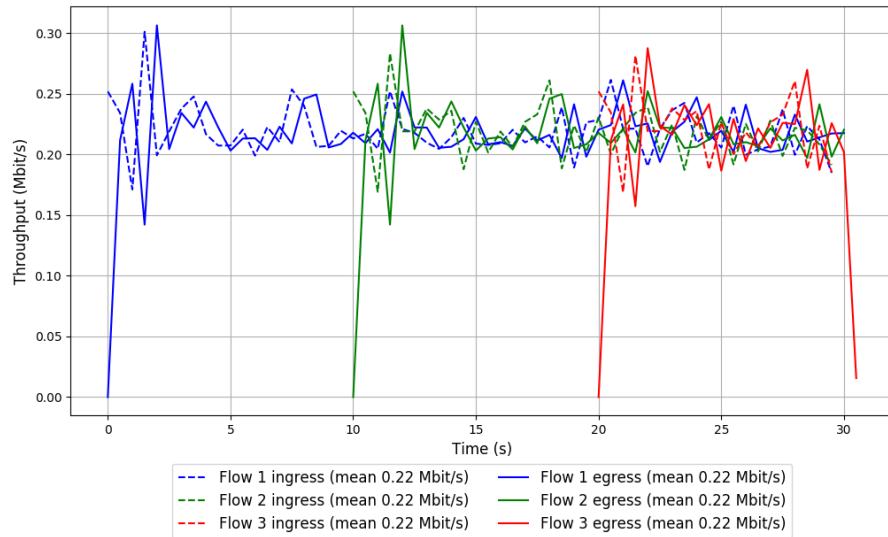


Run 5: Statistics of SCReAM

```
Start at: 2019-04-24 02:14:05
End at: 2019-04-24 02:14:35
Local clock offset: -2.674 ms
Remote clock offset: -6.968 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 71.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.200 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.097 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.870 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

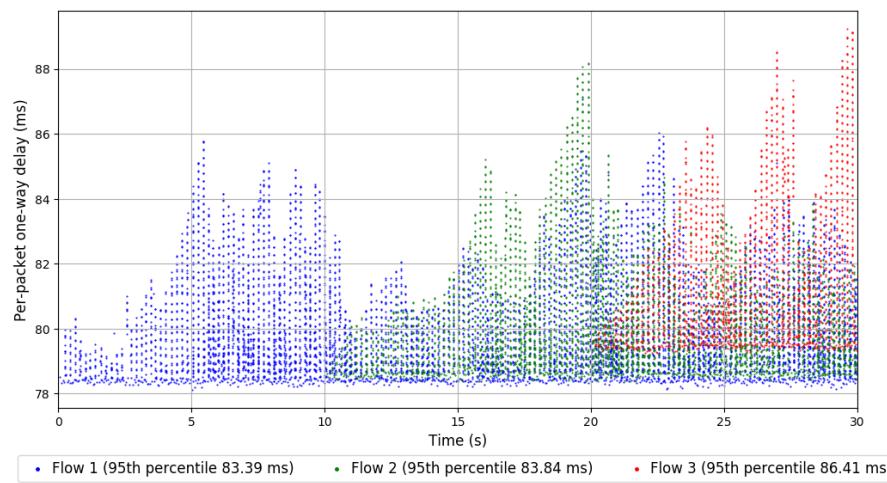
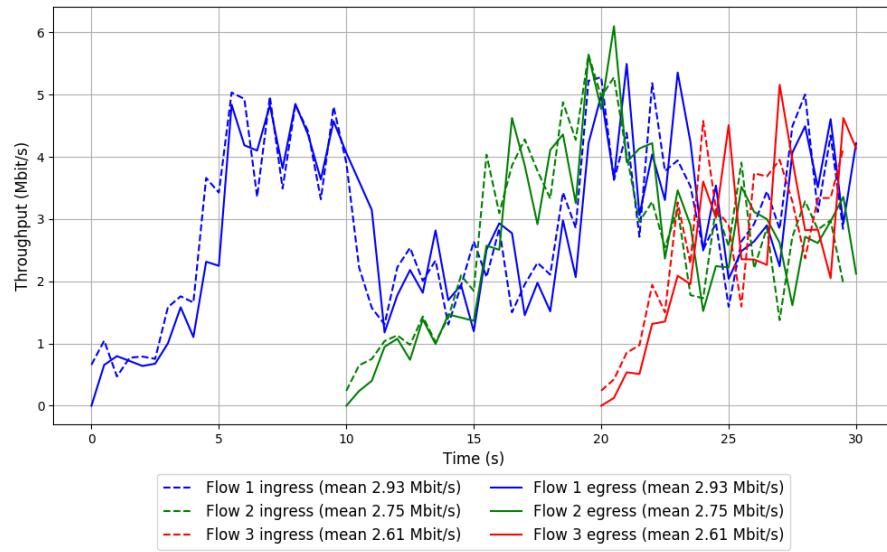


Run 1: Statistics of Sprout

```
Start at: 2019-04-24 00:23:45
End at: 2019-04-24 00:24:15
Local clock offset: -2.922 ms
Remote clock offset: -2.234 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 84.186 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 83.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 83.844 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

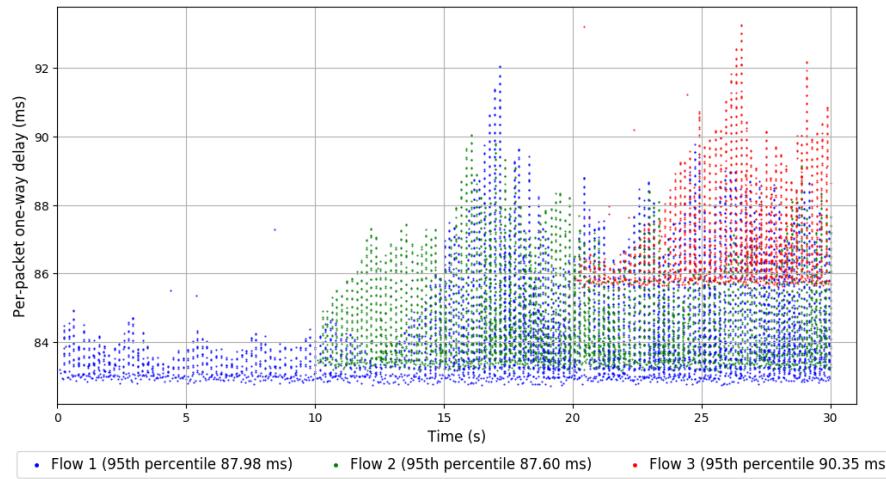
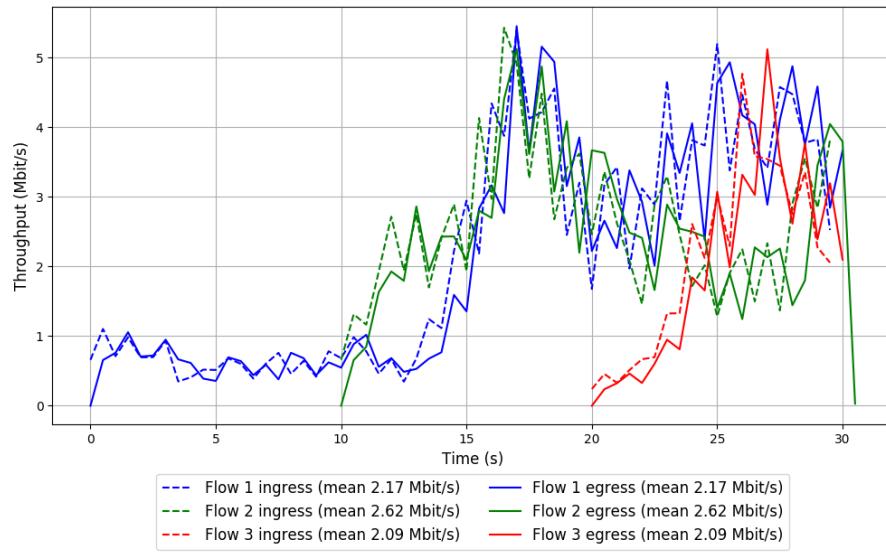


Run 2: Statistics of Sprout

```
Start at: 2019-04-24 00:50:41
End at: 2019-04-24 00:51:11
Local clock offset: -4.334 ms
Remote clock offset: 4.882 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 88.610 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 87.978 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 87.600 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 90.354 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

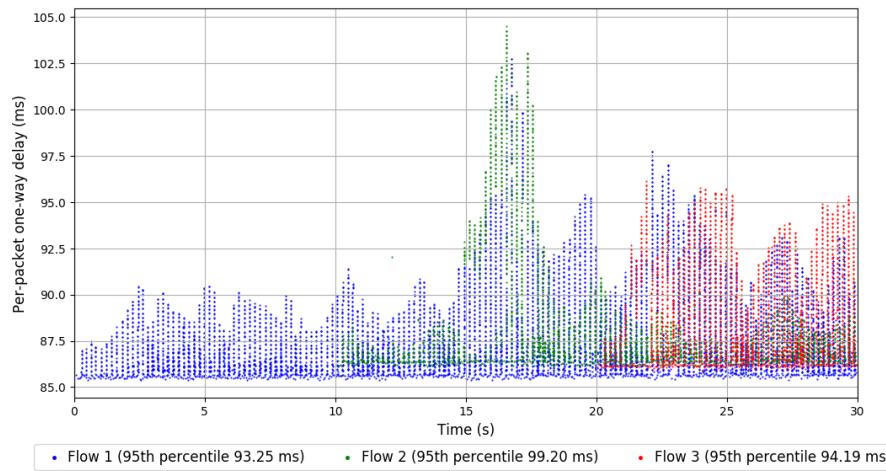
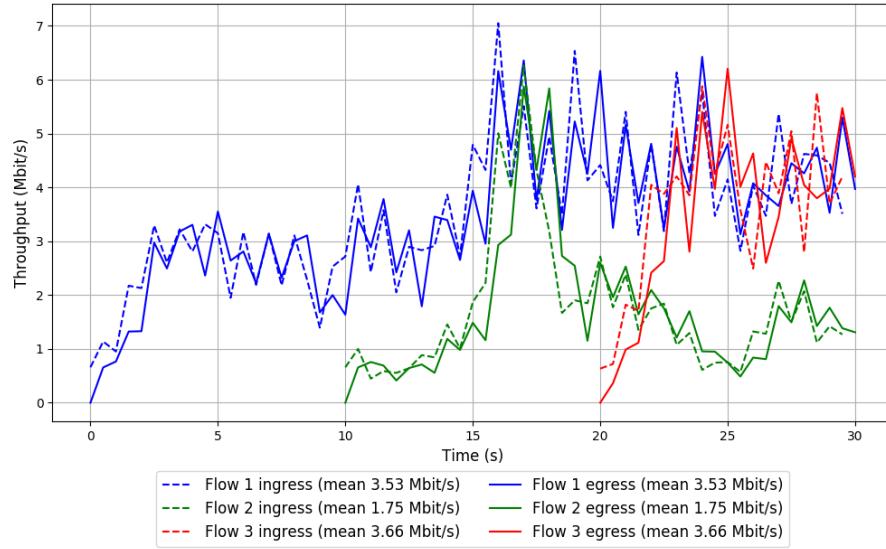


Run 3: Statistics of Sprout

```
Start at: 2019-04-24 01:17:36
End at: 2019-04-24 01:18:06
Local clock offset: -3.786 ms
Remote clock offset: 6.192 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 94.605 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 93.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 99.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 94.187 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

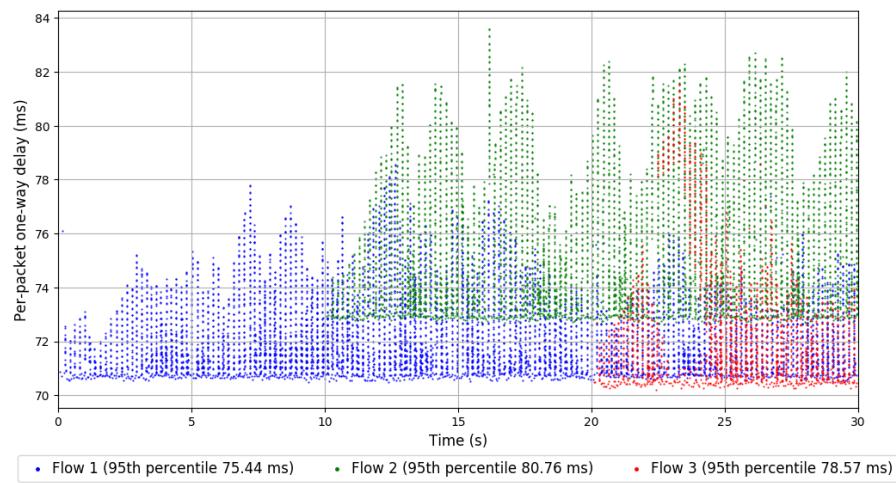
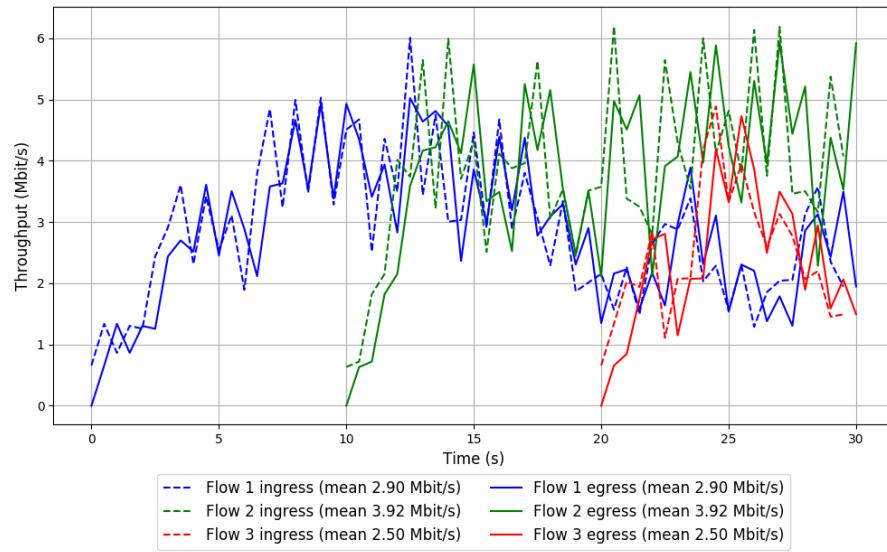


Run 4: Statistics of Sprout

```
Start at: 2019-04-24 01:44:42
End at: 2019-04-24 01:45:12
Local clock offset: -2.854 ms
Remote clock offset: -7.135 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 79.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 75.437 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 80.757 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 78.566 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

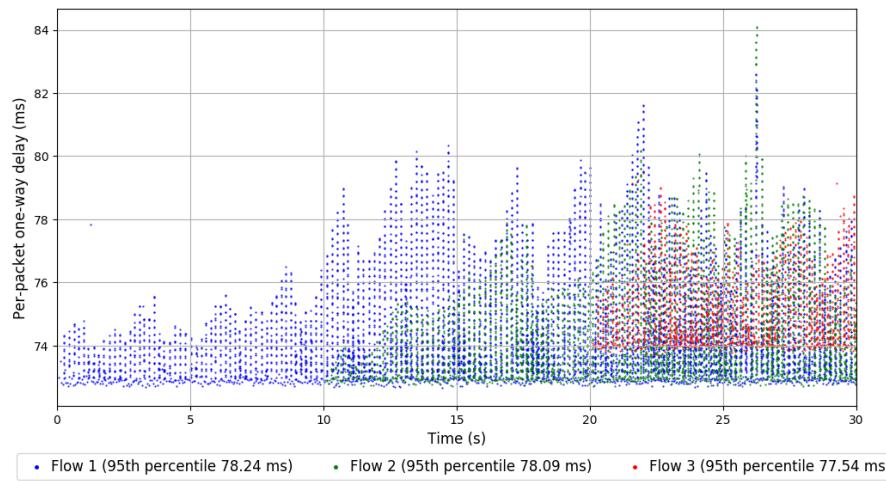
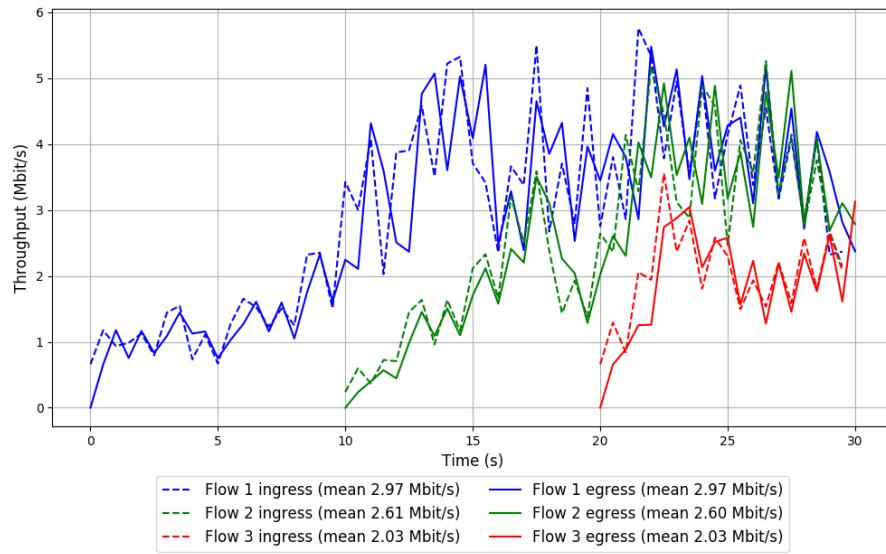


Run 5: Statistics of Sprout

```
Start at: 2019-04-24 02:11:34
End at: 2019-04-24 02:12:04
Local clock offset: -3.511 ms
Remote clock offset: -6.663 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: 78.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 78.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 78.093 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 77.540 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

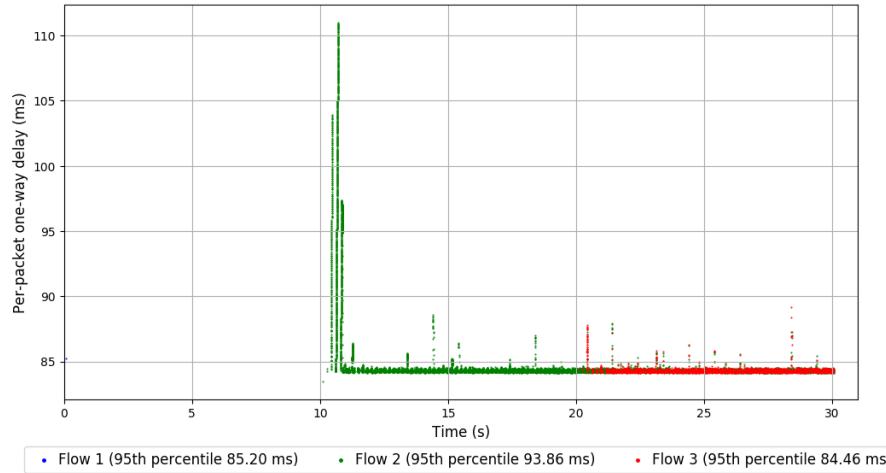
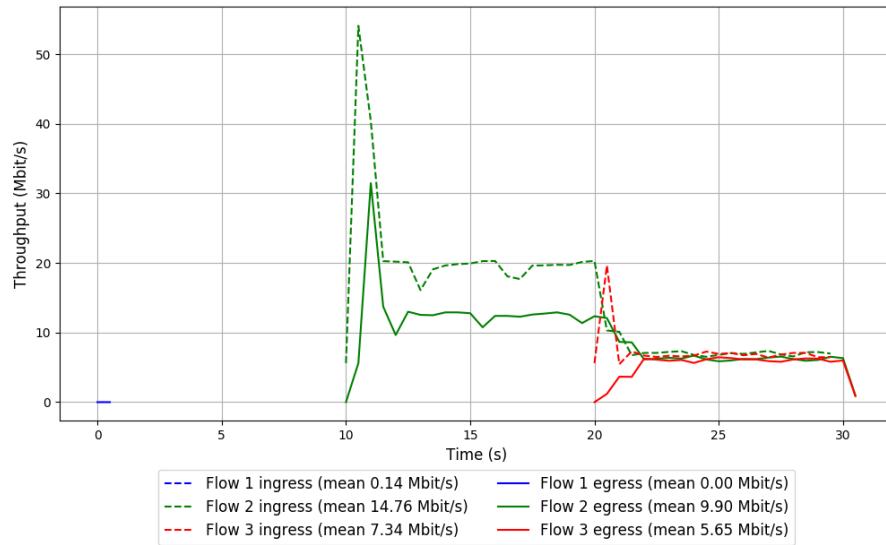


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-04-24 00:22:31
End at: 2019-04-24 00:23:01
Local clock offset: -3.718 ms
Remote clock offset: 1.913 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 90.217 ms
Loss rate: 30.94%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 85.202 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 93.860 ms
Loss rate: 32.91%
-- Flow 3:
Average throughput: 5.65 Mbit/s
95th percentile per-packet one-way delay: 84.456 ms
Loss rate: 22.97%
```

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

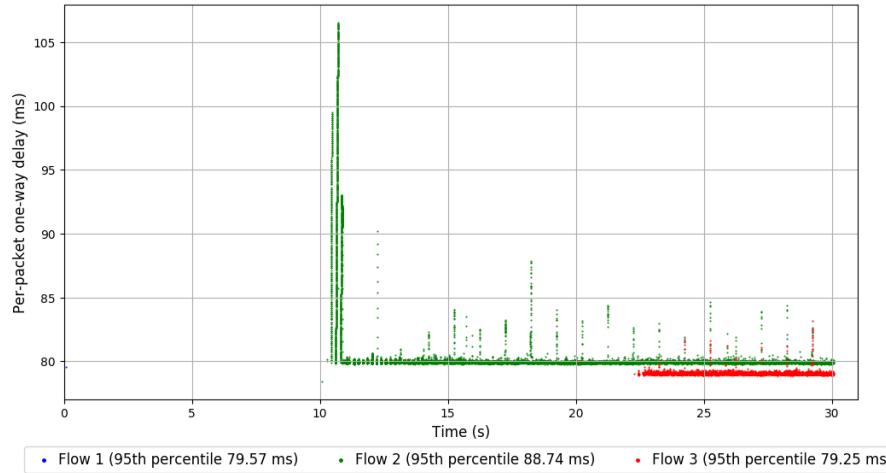
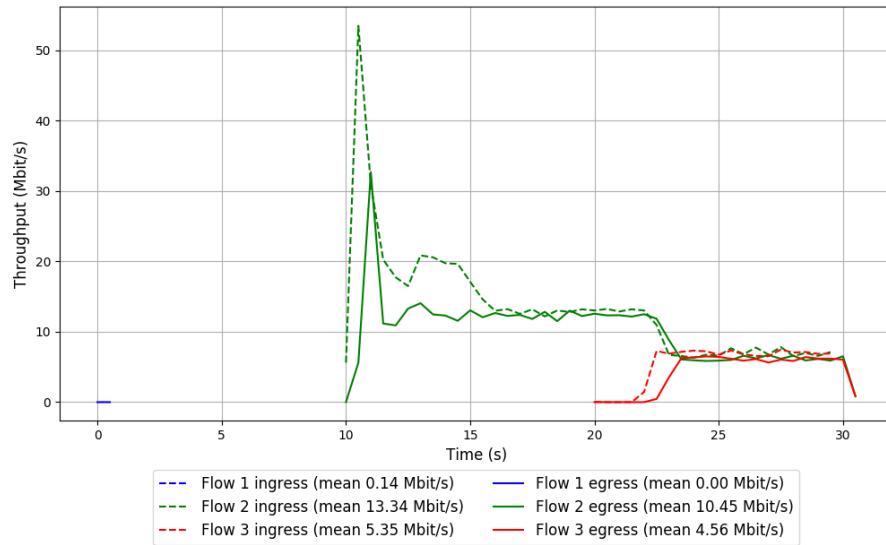


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-04-24 00:49:27
End at: 2019-04-24 00:49:57
Local clock offset: -3.544 ms
Remote clock offset: 0.634 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 86.014 ms
Loss rate: 20.54%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 79.567 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 88.739 ms
Loss rate: 21.67%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 79.255 ms
Loss rate: 14.86%
```

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

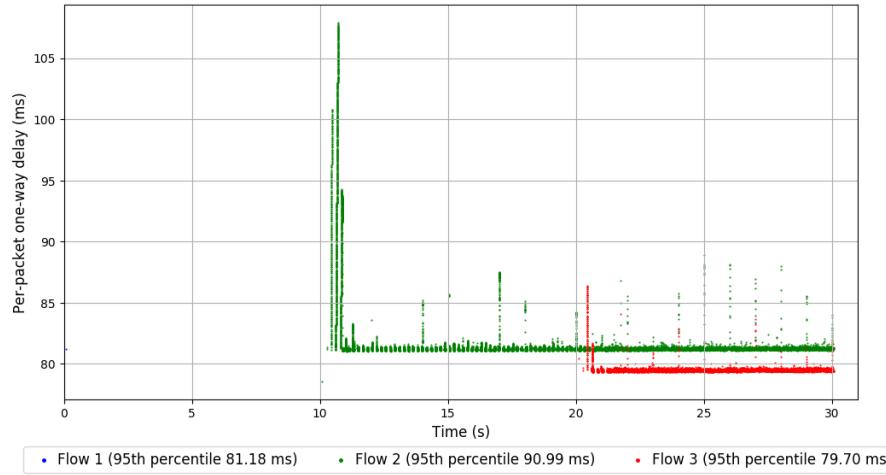
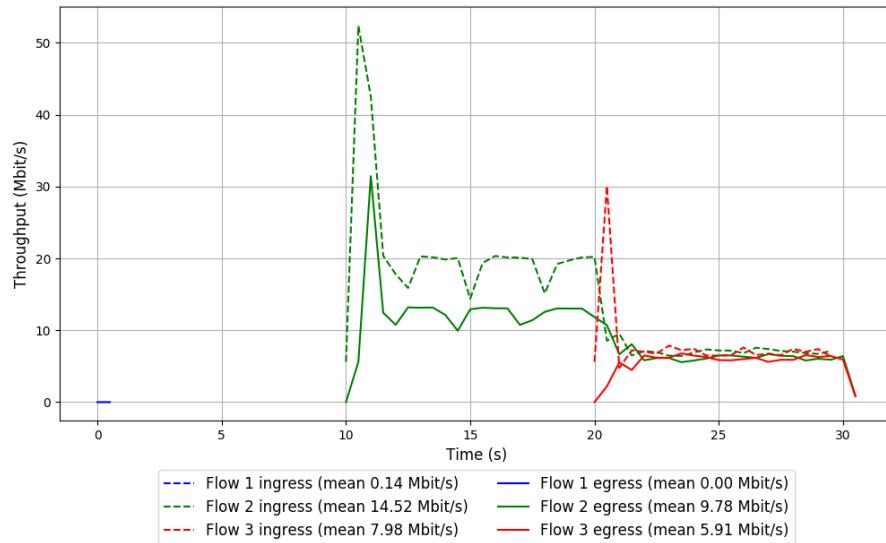


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-04-24 01:16:23
End at: 2019-04-24 01:16:53
Local clock offset: -3.933 ms
Remote clock offset: 1.223 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 31.23%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 81.181 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 90.987 ms
Loss rate: 32.68%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 79.703 ms
Loss rate: 25.92%
```

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

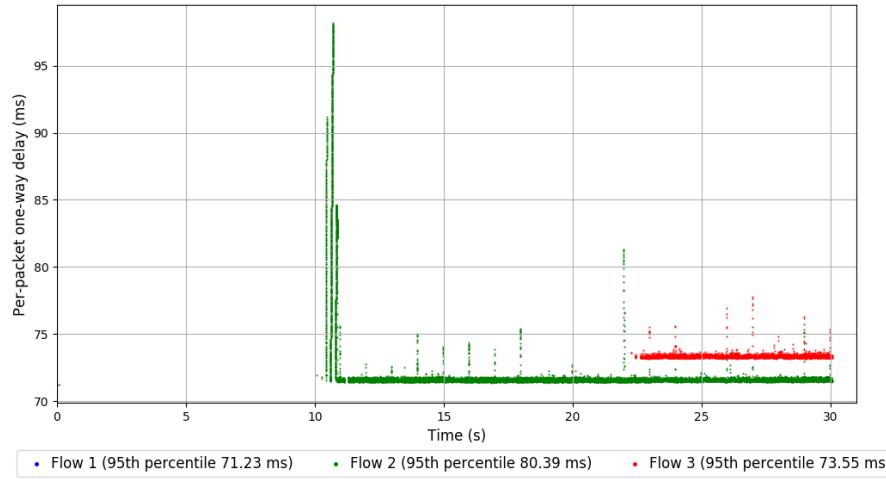
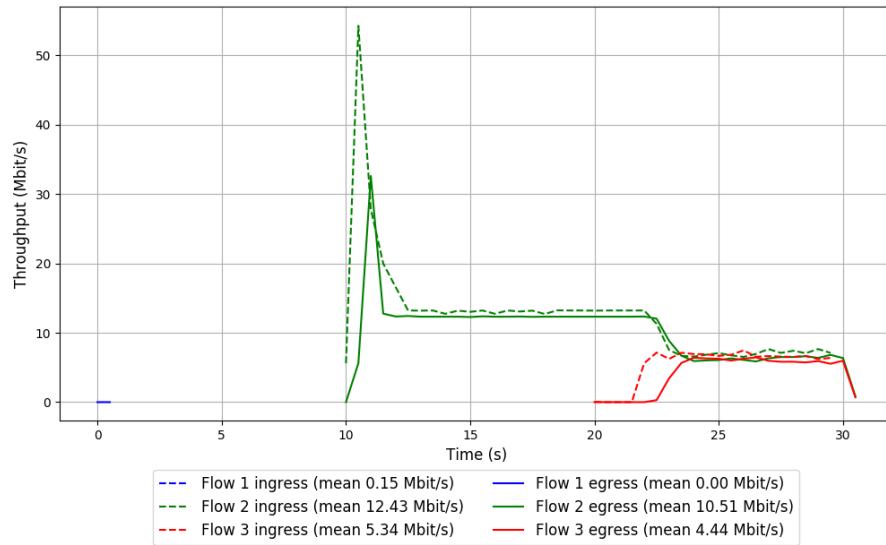


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-04-24 01:43:29
End at: 2019-04-24 01:43:59
Local clock offset: -3.642 ms
Remote clock offset: -7.572 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 77.648 ms
Loss rate: 15.71%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 71.234 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 80.387 ms
Loss rate: 15.44%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 73.549 ms
Loss rate: 16.90%
```

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

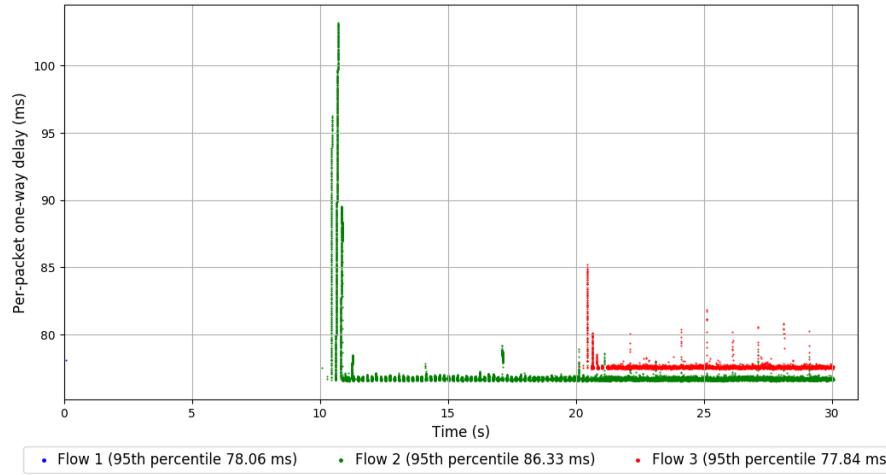
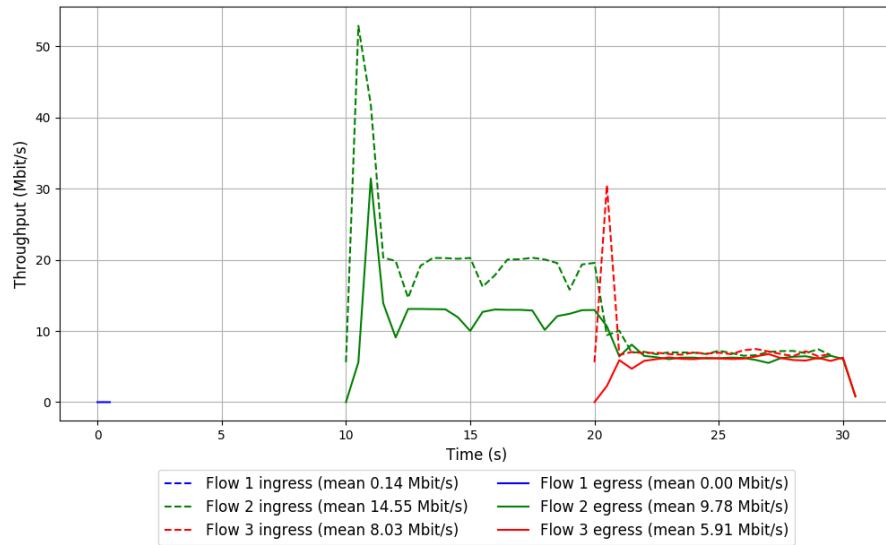


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-04-24 02:10:15
End at: 2019-04-24 02:10:46
Local clock offset: -3.472 ms
Remote clock offset: -1.994 ms

# Below is generated by plot.py at 2019-04-24 02:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 83.023 ms
Loss rate: 31.43%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 78.055 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 86.330 ms
Loss rate: 32.82%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 77.838 ms
Loss rate: 26.35%
```

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

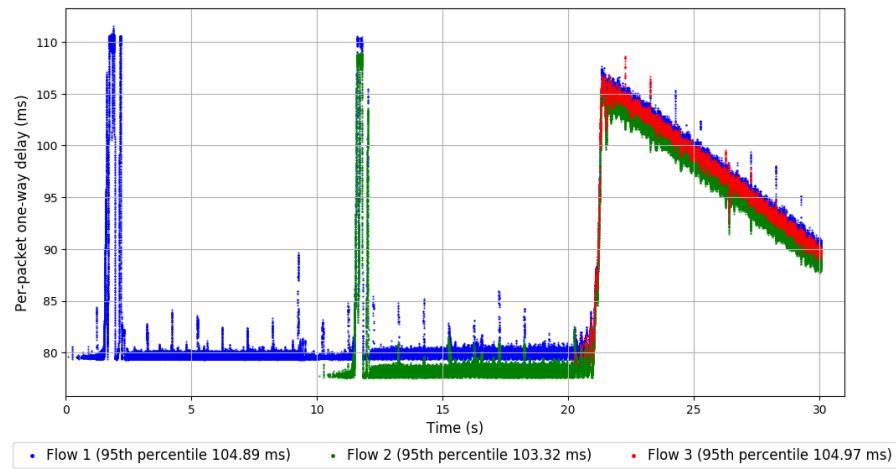
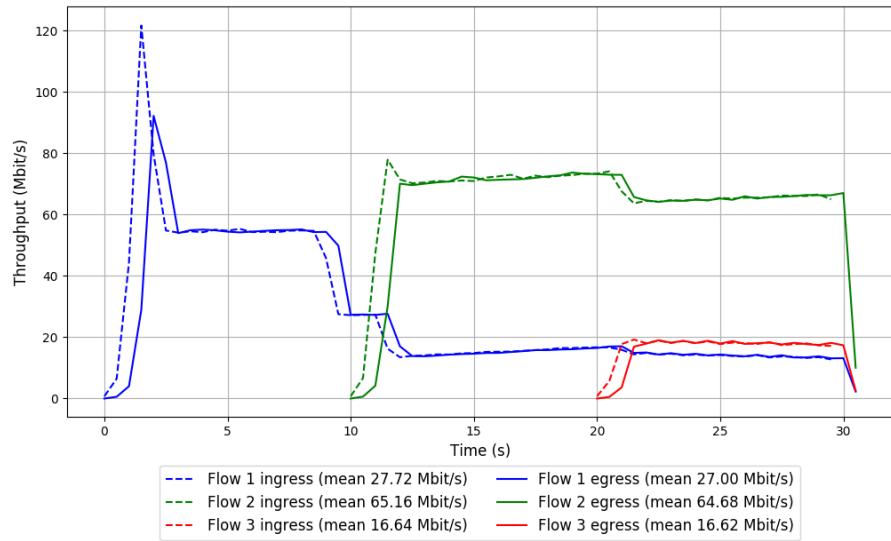


Run 1: Statistics of TCP Vegas

```
Start at: 2019-04-24 00:16:05
End at: 2019-04-24 00:16:35
Local clock offset: -2.487 ms
Remote clock offset: -3.343 ms

# Below is generated by plot.py at 2019-04-24 02:35:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.65 Mbit/s
95th percentile per-packet one-way delay: 103.858 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 27.00 Mbit/s
95th percentile per-packet one-way delay: 104.886 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 64.68 Mbit/s
95th percentile per-packet one-way delay: 103.318 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 16.62 Mbit/s
95th percentile per-packet one-way delay: 104.972 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

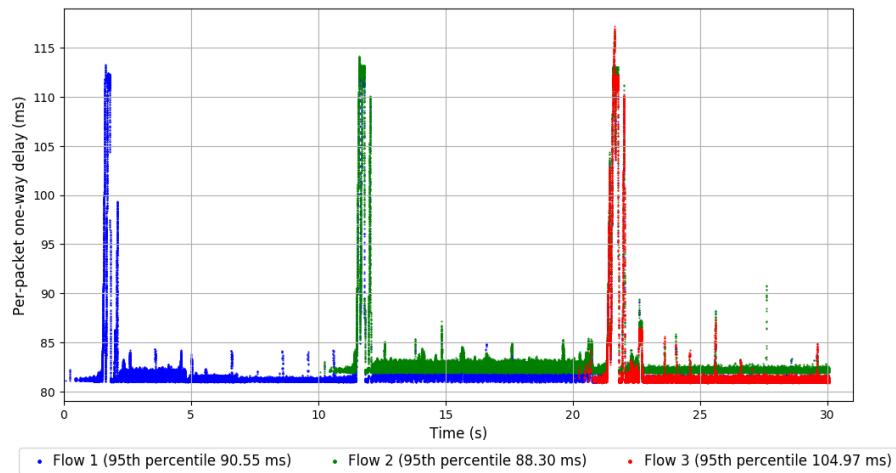
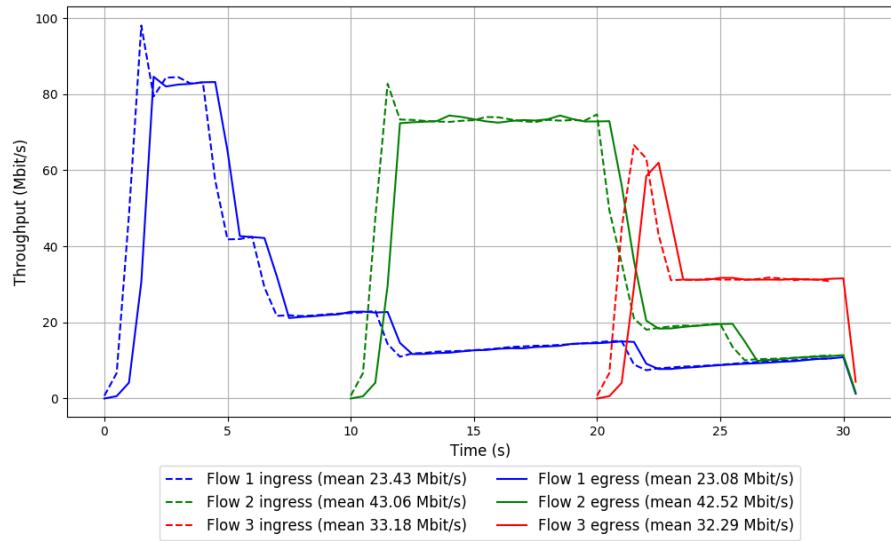


Run 2: Statistics of TCP Vegas

```
Start at: 2019-04-24 00:43:01
End at: 2019-04-24 00:43:31
Local clock offset: -3.297 ms
Remote clock offset: 2.727 ms

# Below is generated by plot.py at 2019-04-24 02:35:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.17 Mbit/s
95th percentile per-packet one-way delay: 92.554 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 90.548 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 88.298 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 104.970 ms
Loss rate: 2.68%
```

Run 2: Report of TCP Vegas — Data Link

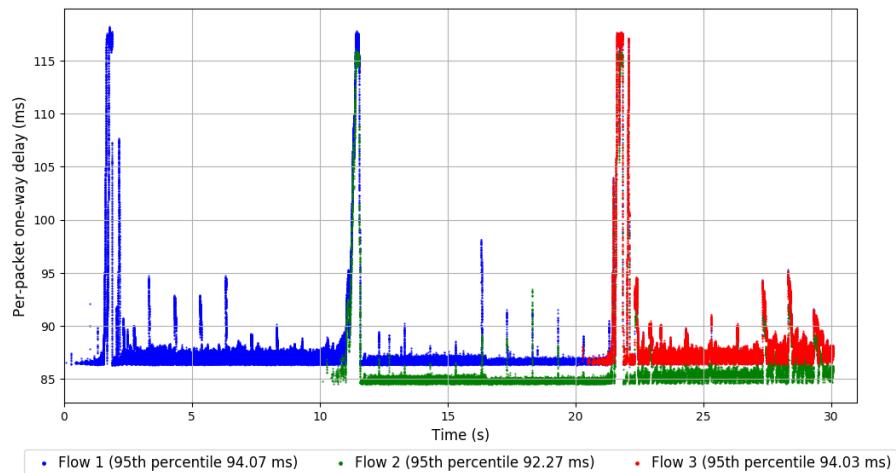
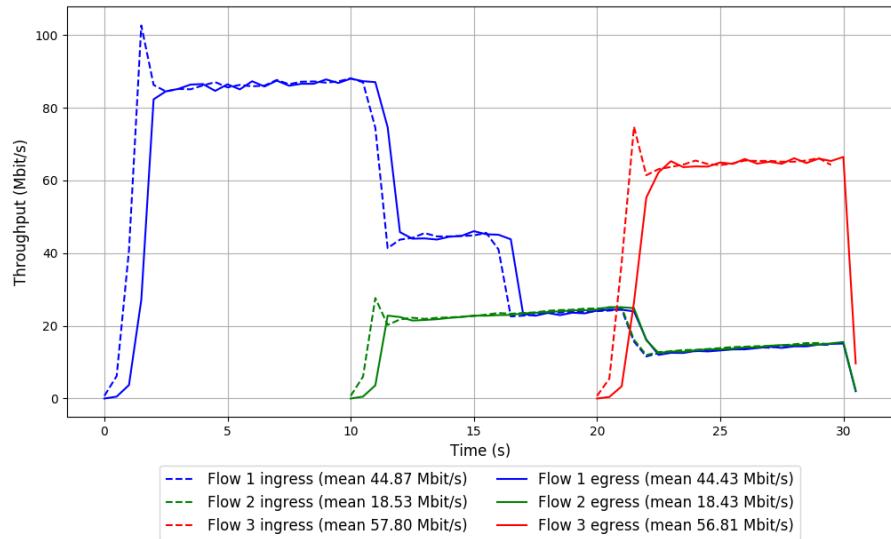


Run 3: Statistics of TCP Vegas

```
Start at: 2019-04-24 01:09:56
End at: 2019-04-24 01:10:26
Local clock offset: -3.991 ms
Remote clock offset: 7.148 ms

# Below is generated by plot.py at 2019-04-24 02:35:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.59 Mbit/s
95th percentile per-packet one-way delay: 93.937 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 44.43 Mbit/s
95th percentile per-packet one-way delay: 94.069 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 92.270 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 56.81 Mbit/s
95th percentile per-packet one-way delay: 94.028 ms
Loss rate: 1.71%
```

Run 3: Report of TCP Vegas — Data Link

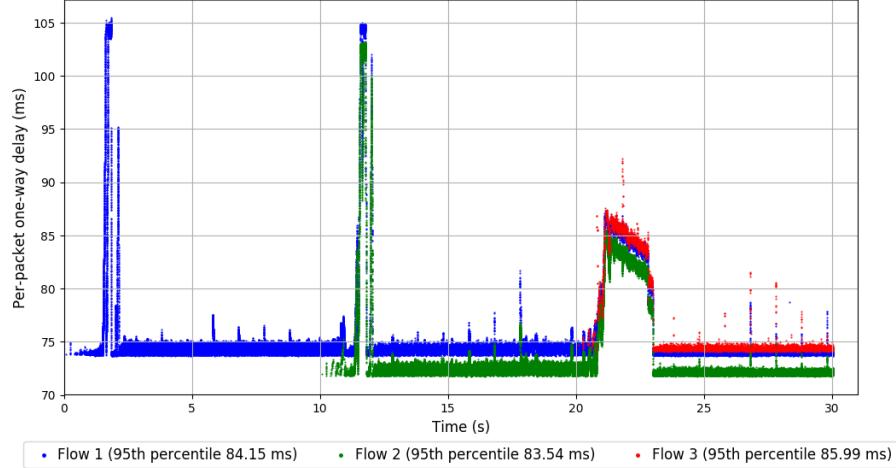
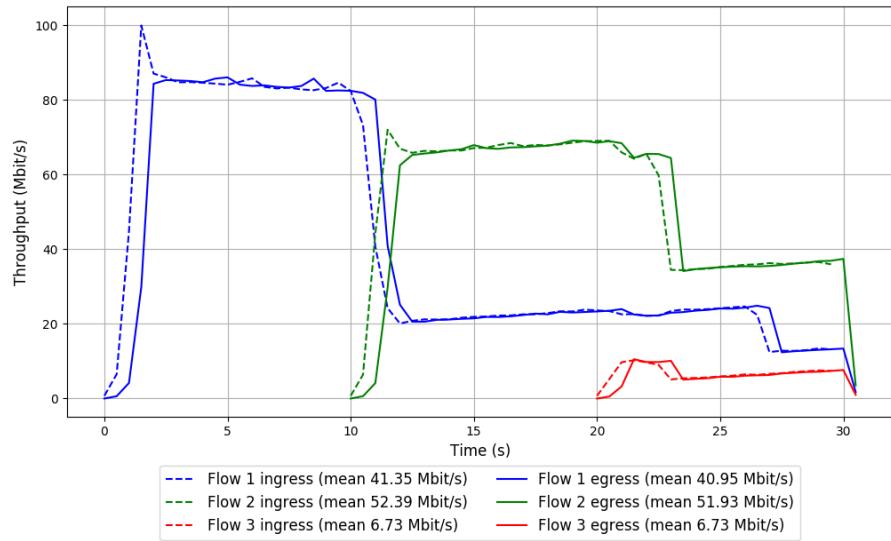


Run 4: Statistics of TCP Vegas

```
Start at: 2019-04-24 01:37:04
End at: 2019-04-24 01:37:34
Local clock offset: -3.708 ms
Remote clock offset: -6.382 ms

# Below is generated by plot.py at 2019-04-24 02:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.78 Mbit/s
95th percentile per-packet one-way delay: 83.983 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 84.153 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 51.93 Mbit/s
95th percentile per-packet one-way delay: 83.541 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 85.992 ms
Loss rate: 0.02%
```

Run 4: Report of TCP Vegas — Data Link

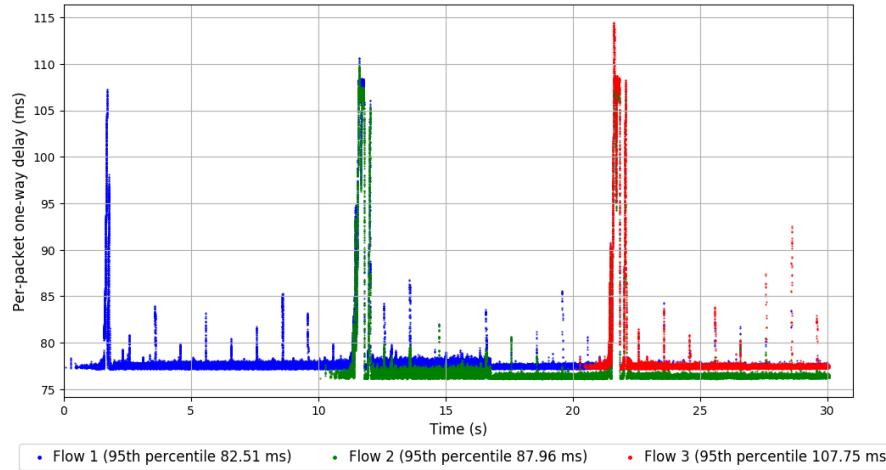
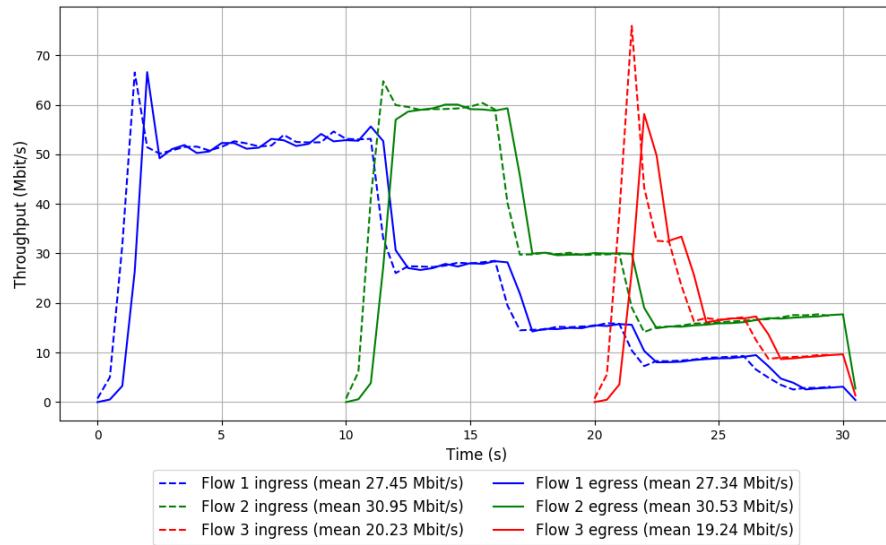


Run 5: Statistics of TCP Vegas

```
Start at: 2019-04-24 02:03:51
End at: 2019-04-24 02:04:21
Local clock offset: -3.498 ms
Remote clock offset: -3.456 ms

# Below is generated by plot.py at 2019-04-24 02:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.08 Mbit/s
95th percentile per-packet one-way delay: 88.209 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 27.34 Mbit/s
95th percentile per-packet one-way delay: 82.513 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 87.963 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 19.24 Mbit/s
95th percentile per-packet one-way delay: 107.755 ms
Loss rate: 4.91%
```

Run 5: Report of TCP Vegas — Data Link

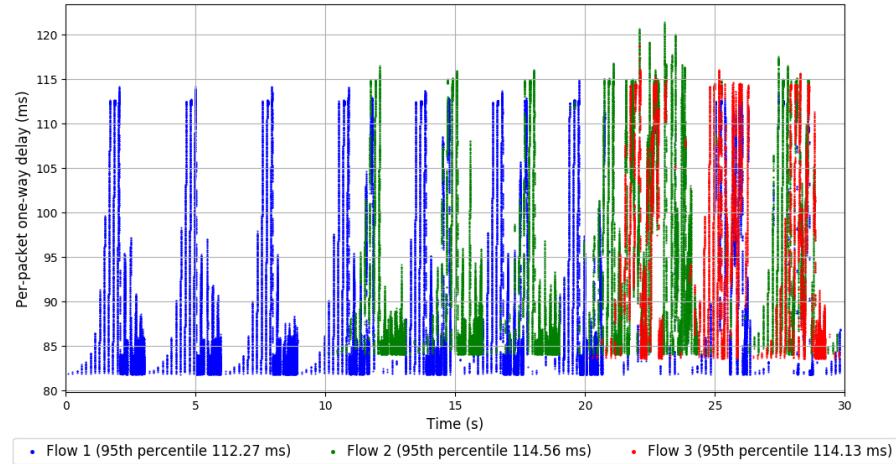
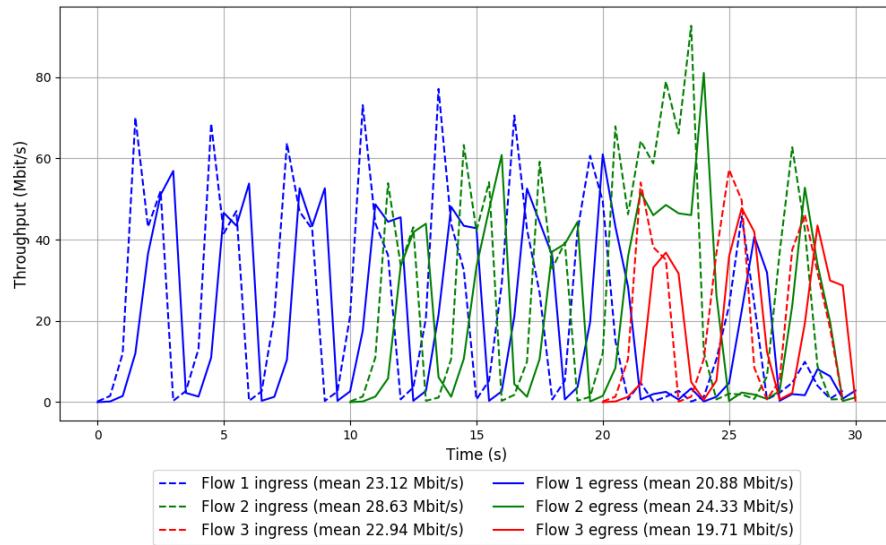


Run 1: Statistics of Verus

```
Start at: 2019-04-24 00:14:49
End at: 2019-04-24 00:15:19
Local clock offset: -3.195 ms
Remote clock offset: 0.582 ms

# Below is generated by plot.py at 2019-04-24 02:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.34 Mbit/s
95th percentile per-packet one-way delay: 113.309 ms
Loss rate: 12.37%
-- Flow 1:
Average throughput: 20.88 Mbit/s
95th percentile per-packet one-way delay: 112.270 ms
Loss rate: 9.65%
-- Flow 2:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 114.558 ms
Loss rate: 15.04%
-- Flow 3:
Average throughput: 19.71 Mbit/s
95th percentile per-packet one-way delay: 114.126 ms
Loss rate: 14.05%
```

Run 1: Report of Verus — Data Link

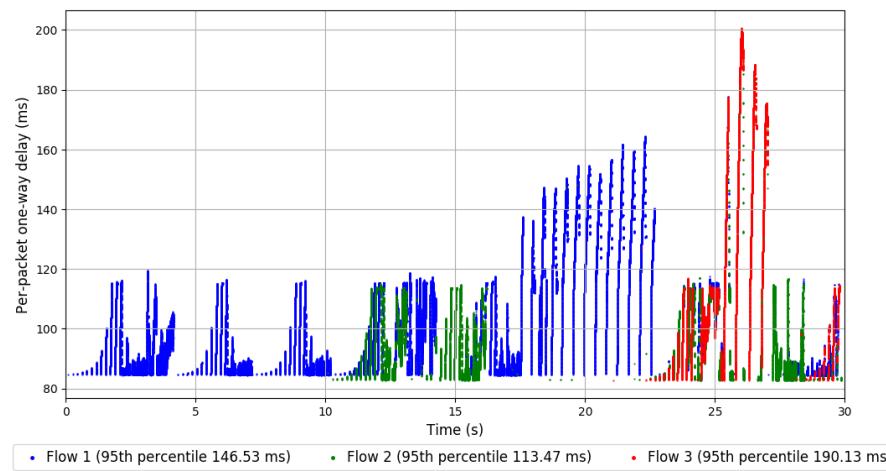
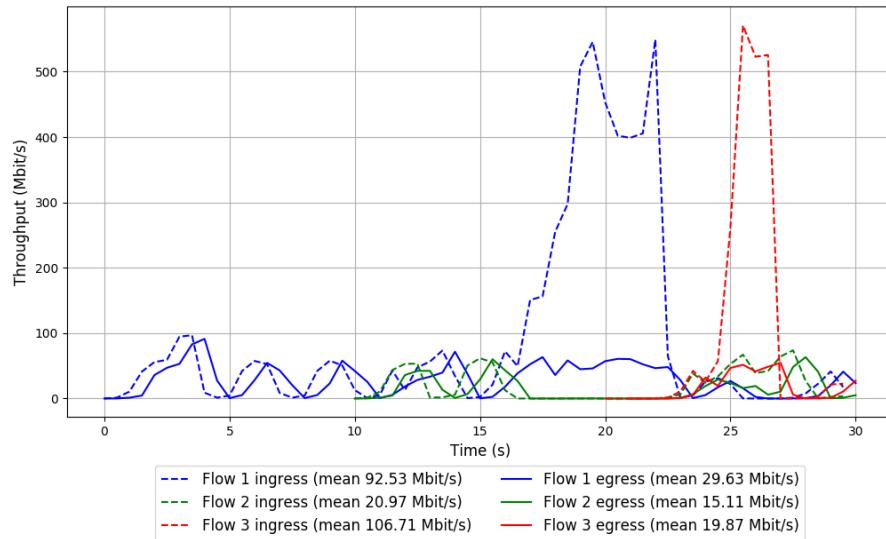


Run 2: Statistics of Verus

```
Start at: 2019-04-24 00:41:36
End at: 2019-04-24 00:42:06
Local clock offset: -4.032 ms
Remote clock offset: 3.326 ms

# Below is generated by plot.py at 2019-04-24 02:36:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.36 Mbit/s
95th percentile per-packet one-way delay: 153.102 ms
Loss rate: 67.77%
-- Flow 1:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 146.528 ms
Loss rate: 67.95%
-- Flow 2:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 113.474 ms
Loss rate: 27.96%
-- Flow 3:
Average throughput: 19.87 Mbit/s
95th percentile per-packet one-way delay: 190.130 ms
Loss rate: 83.25%
```

Run 2: Report of Verus — Data Link

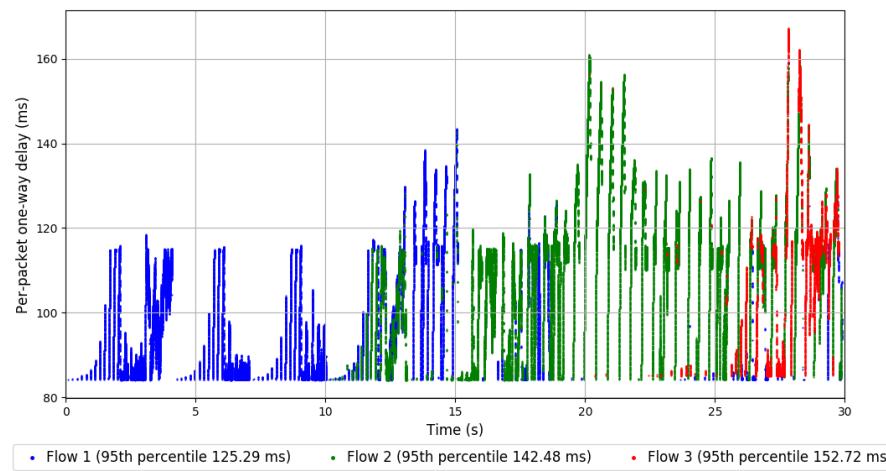
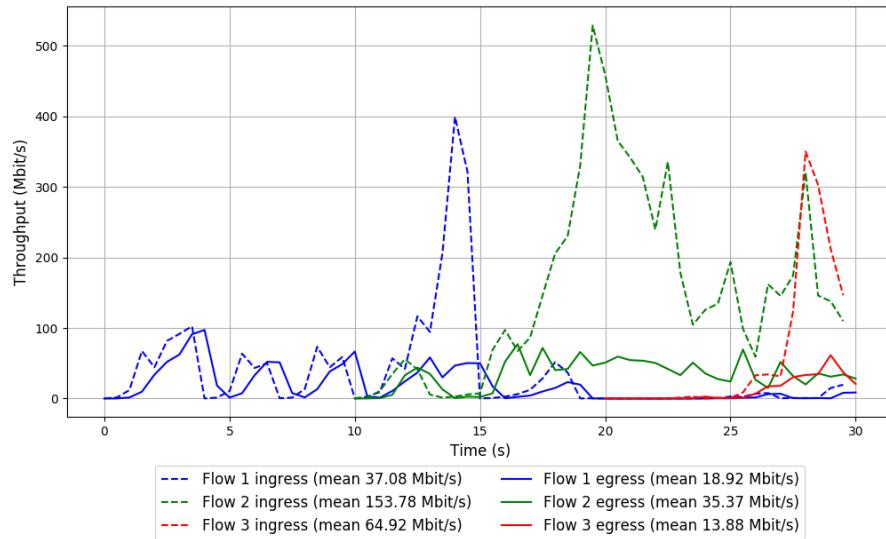


Run 3: Statistics of Verus

```
Start at: 2019-04-24 01:08:31
End at: 2019-04-24 01:09:01
Local clock offset: -4.045 ms
Remote clock offset: 6.307 ms

# Below is generated by plot.py at 2019-04-24 02:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 135.779 ms
Loss rate: 70.71%
-- Flow 1:
Average throughput: 18.92 Mbit/s
95th percentile per-packet one-way delay: 125.287 ms
Loss rate: 48.95%
-- Flow 2:
Average throughput: 35.37 Mbit/s
95th percentile per-packet one-way delay: 142.477 ms
Loss rate: 76.97%
-- Flow 3:
Average throughput: 13.88 Mbit/s
95th percentile per-packet one-way delay: 152.717 ms
Loss rate: 78.71%
```

Run 3: Report of Verus — Data Link

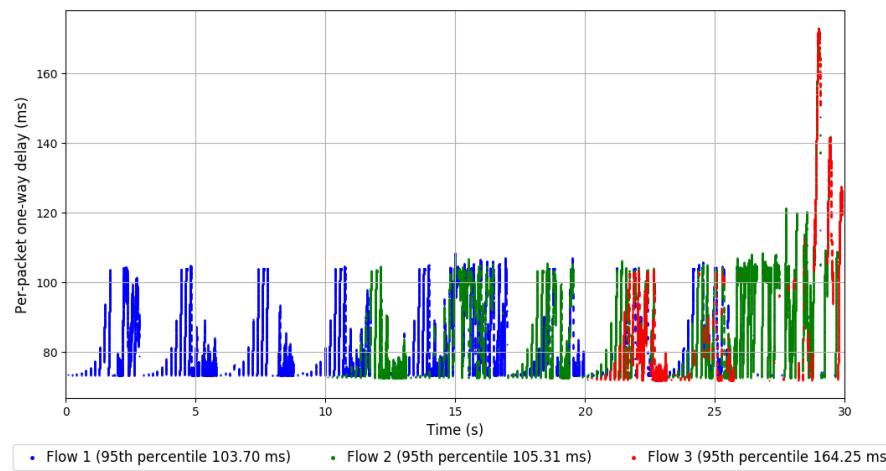
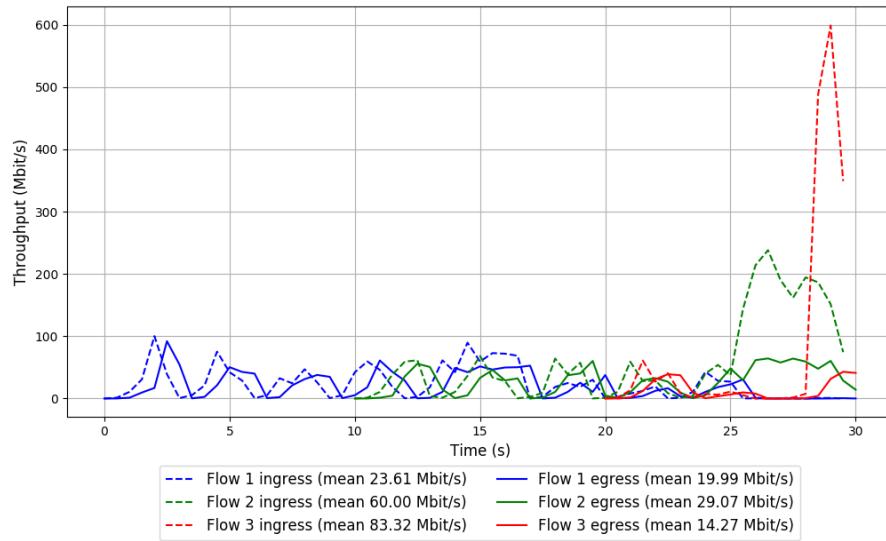


Run 4: Statistics of Verus

```
Start at: 2019-04-24 01:35:47
End at: 2019-04-24 01:36:17
Local clock offset: -2.993 ms
Remote clock offset: -6.057 ms

# Below is generated by plot.py at 2019-04-24 02:36:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 107.119 ms
Loss rate: 51.68%
-- Flow 1:
Average throughput: 19.99 Mbit/s
95th percentile per-packet one-way delay: 103.698 ms
Loss rate: 15.81%
-- Flow 2:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 105.315 ms
Loss rate: 51.54%
-- Flow 3:
Average throughput: 14.27 Mbit/s
95th percentile per-packet one-way delay: 164.254 ms
Loss rate: 82.79%
```

Run 4: Report of Verus — Data Link

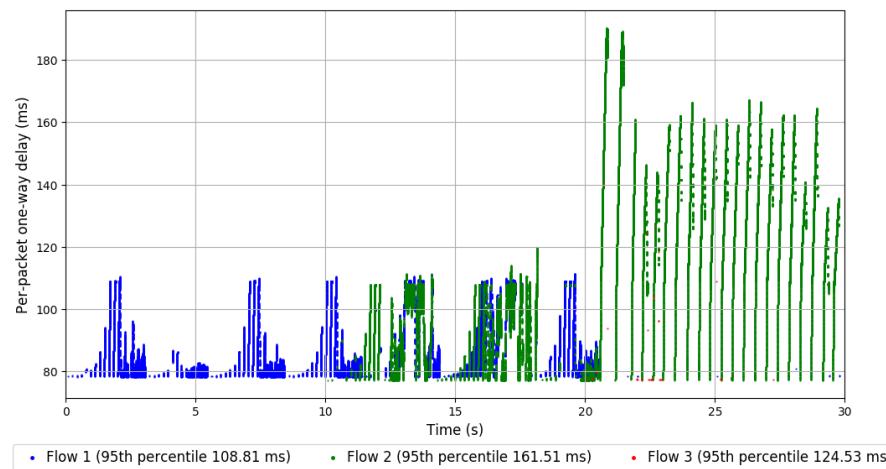
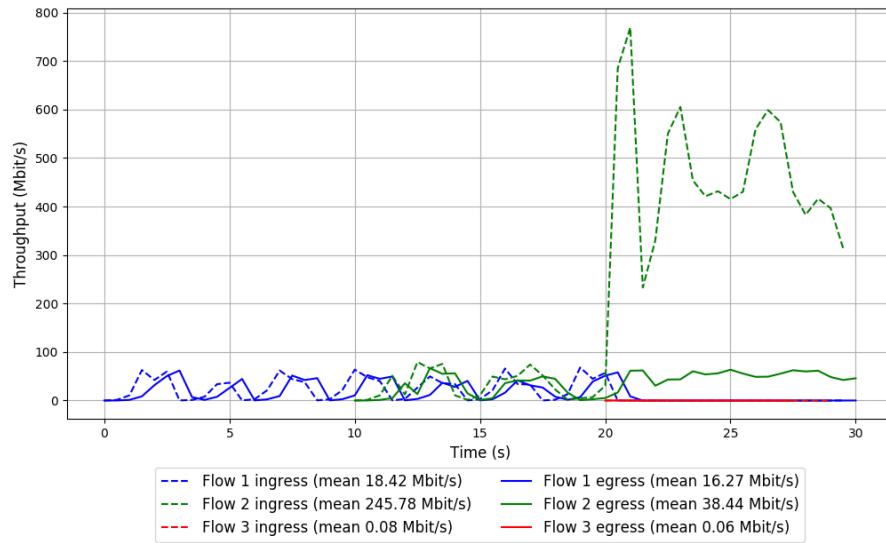


Run 5: Statistics of Verus

```
Start at: 2019-04-24 02:02:33
End at: 2019-04-24 02:03:03
Local clock offset: -2.734 ms
Remote clock offset: -1.602 ms

# Below is generated by plot.py at 2019-04-24 02:36:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.76 Mbit/s
95th percentile per-packet one-way delay: 157.558 ms
Loss rate: 76.92%
-- Flow 1:
Average throughput: 16.27 Mbit/s
95th percentile per-packet one-way delay: 108.808 ms
Loss rate: 11.63%
-- Flow 2:
Average throughput: 38.44 Mbit/s
95th percentile per-packet one-way delay: 161.506 ms
Loss rate: 84.32%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 124.525 ms
Loss rate: 43.08%
```

Run 5: Report of Verus — Data Link

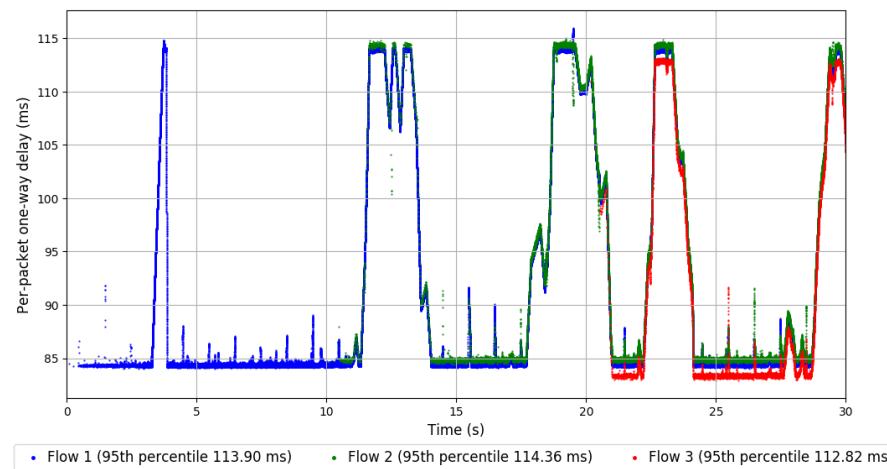
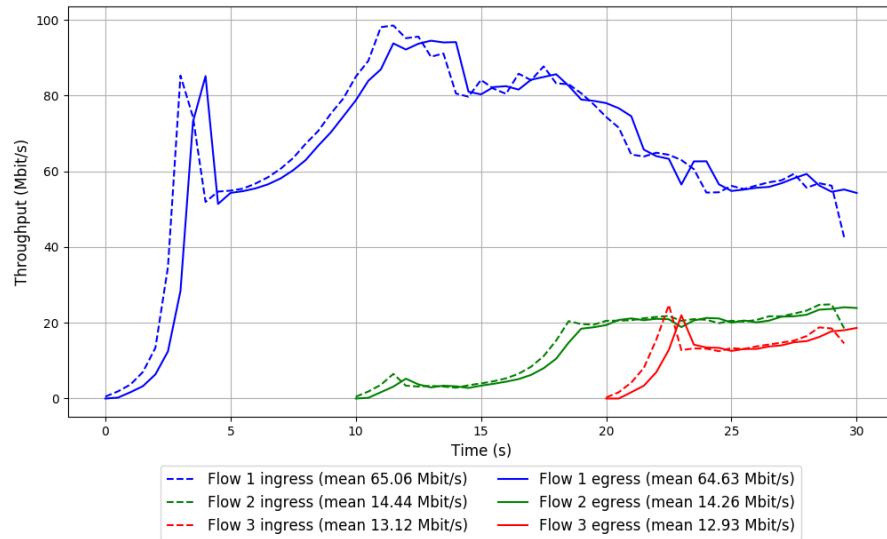


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-04-24 00:27:28
End at: 2019-04-24 00:27:58
Local clock offset: -3.044 ms
Remote clock offset: 1.93 ms

# Below is generated by plot.py at 2019-04-24 02:36:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.39 Mbit/s
95th percentile per-packet one-way delay: 113.922 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 64.63 Mbit/s
95th percentile per-packet one-way delay: 113.904 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 14.26 Mbit/s
95th percentile per-packet one-way delay: 114.356 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 112.818 ms
Loss rate: 1.48%
```

Run 1: Report of PCC-Vivace — Data Link

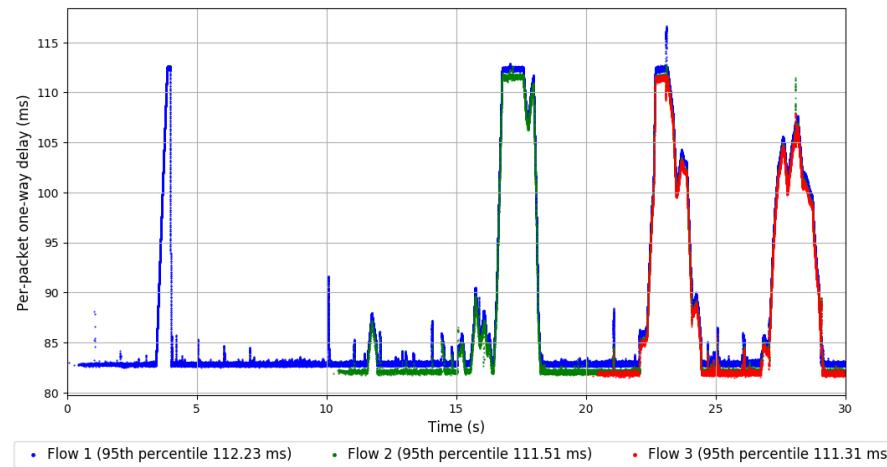
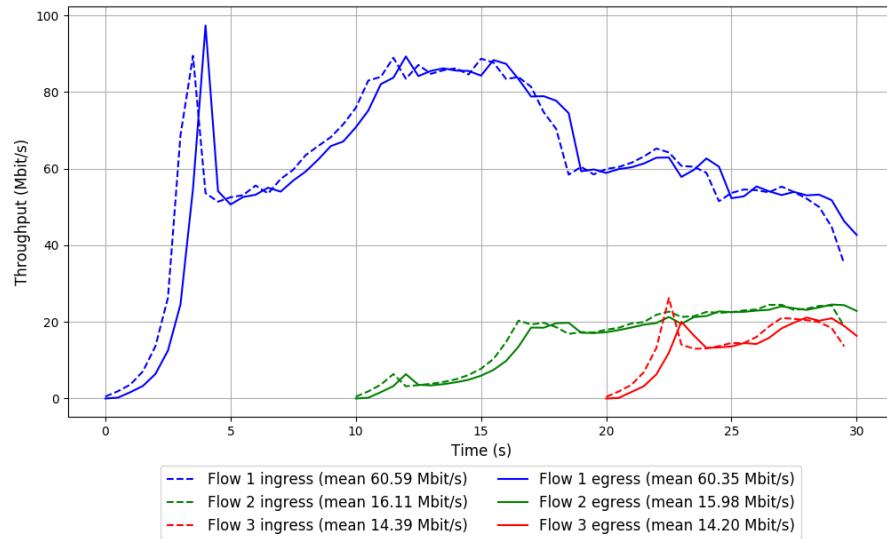


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-04-24 00:54:24
End at: 2019-04-24 00:54:54
Local clock offset: -4.444 ms
Remote clock offset: 4.124 ms

# Below is generated by plot.py at 2019-04-24 02:36:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.67 Mbit/s
95th percentile per-packet one-way delay: 111.608 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 60.35 Mbit/s
95th percentile per-packet one-way delay: 112.229 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 111.506 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 14.20 Mbit/s
95th percentile per-packet one-way delay: 111.310 ms
Loss rate: 1.32%
```

Run 2: Report of PCC-Vivace — Data Link

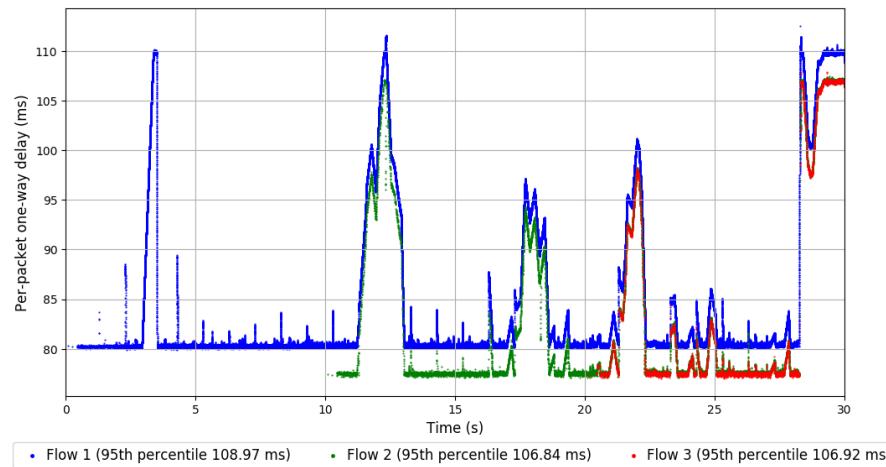
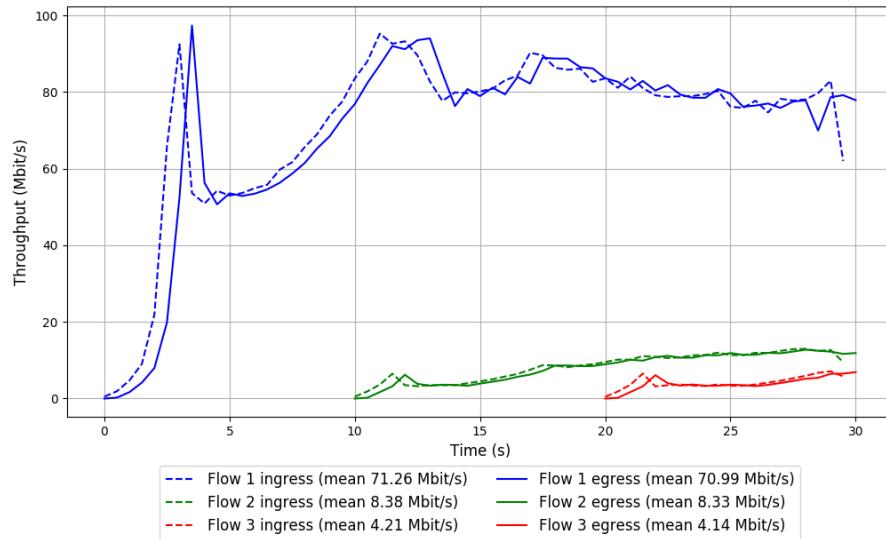


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-04-24 01:21:19
End at: 2019-04-24 01:21:49
Local clock offset: -3.465 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2019-04-24 02:36:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.90 Mbit/s
95th percentile per-packet one-way delay: 108.654 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 108.969 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 106.843 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 106.916 ms
Loss rate: 1.38%
```

Run 3: Report of PCC-Vivace — Data Link

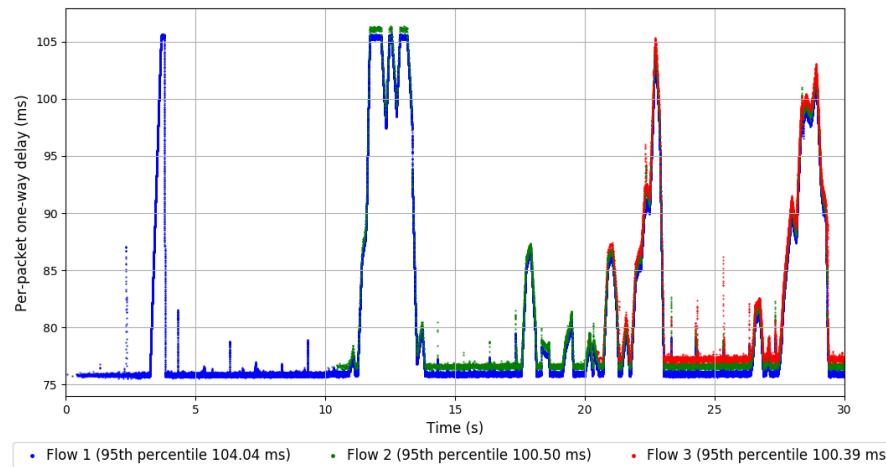
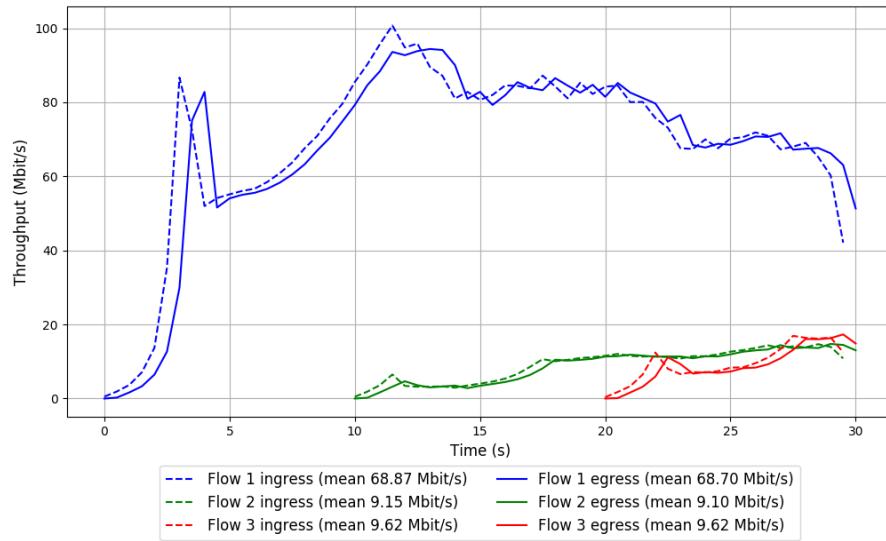


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-04-24 01:48:25
End at: 2019-04-24 01:48:55
Local clock offset: -2.837 ms
Remote clock offset: -2.032 ms

# Below is generated by plot.py at 2019-04-24 02:36:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 103.514 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 68.70 Mbit/s
95th percentile per-packet one-way delay: 104.042 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 9.10 Mbit/s
95th percentile per-packet one-way delay: 100.496 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 100.387 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

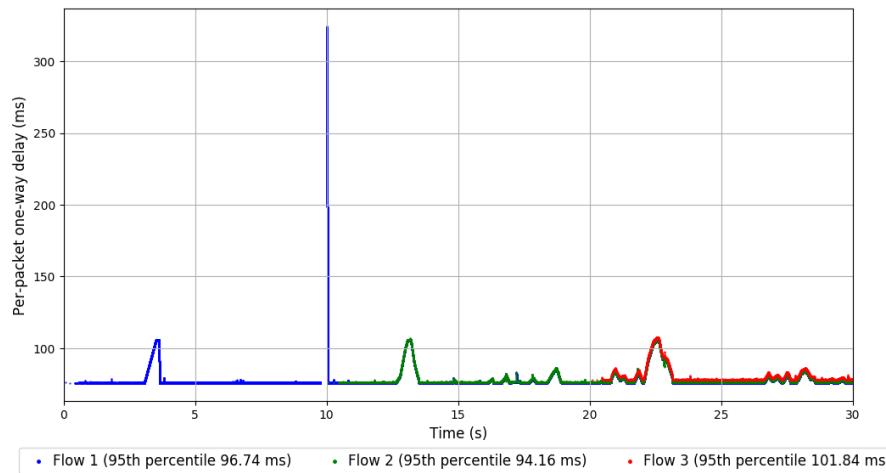
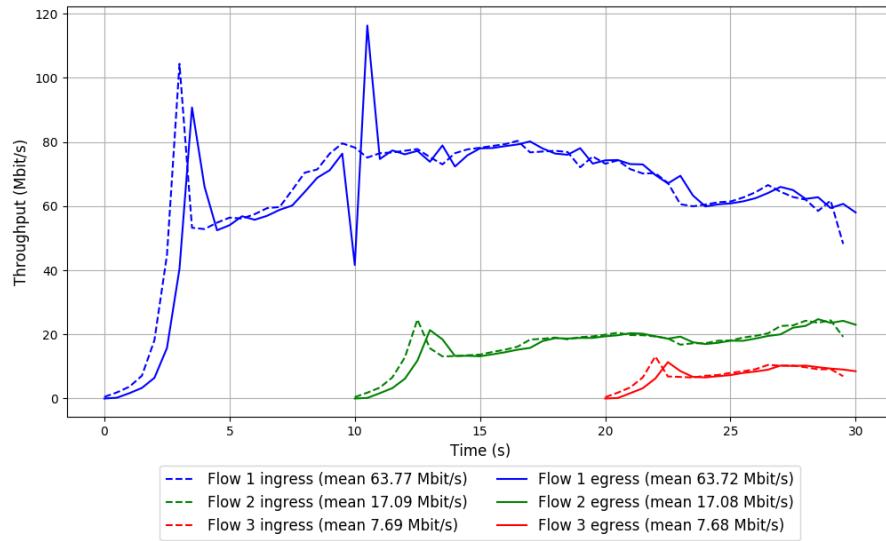


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-04-24 02:15:18
End at: 2019-04-24 02:15:48
Local clock offset: -2.685 ms
Remote clock offset: -0.881 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.61 Mbit/s
95th percentile per-packet one-way delay: 96.637 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 63.72 Mbit/s
95th percentile per-packet one-way delay: 96.742 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 17.08 Mbit/s
95th percentile per-packet one-way delay: 94.162 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 101.844 ms
Loss rate: 0.06%
```

Run 5: Report of PCC-Vivace — Data Link

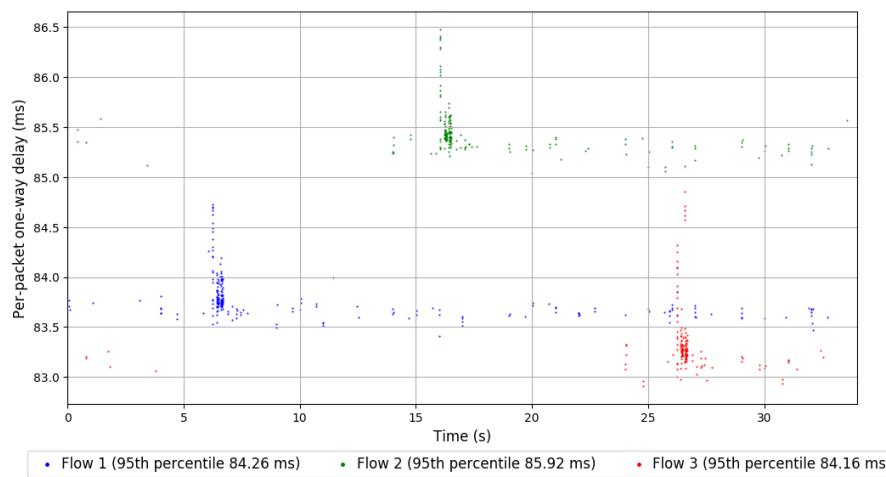
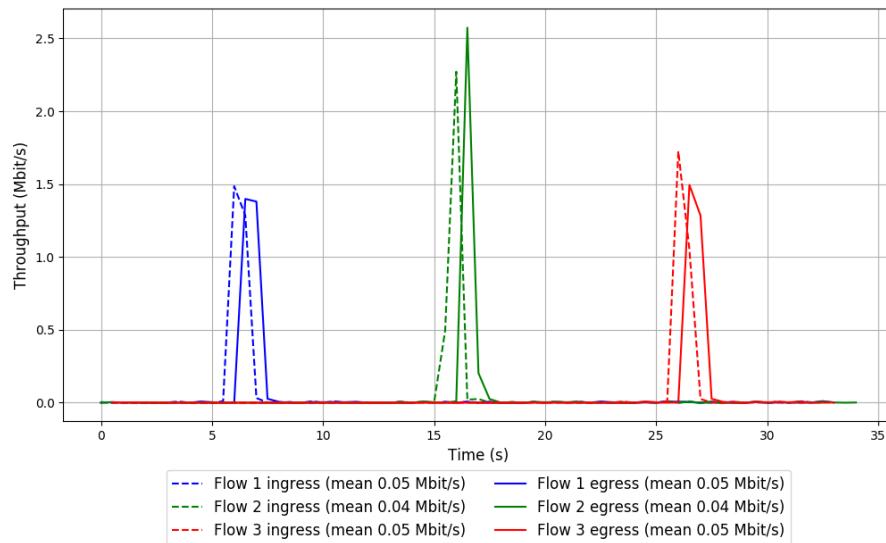


```
Run 1: Statistics of WebRTC media

Start at: 2019-04-24 00:20:01
End at: 2019-04-24 00:20:31
Local clock offset: -3.524 ms
Remote clock offset: 1.855 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 85.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.262 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 85.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.162 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

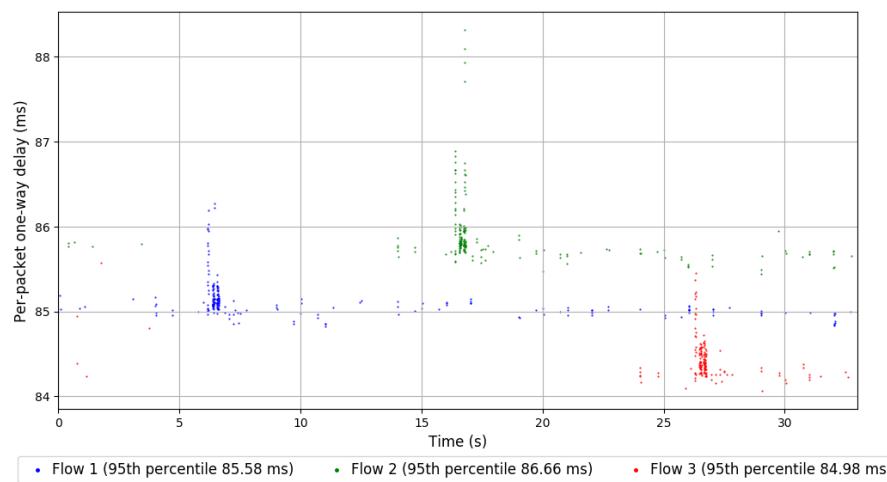
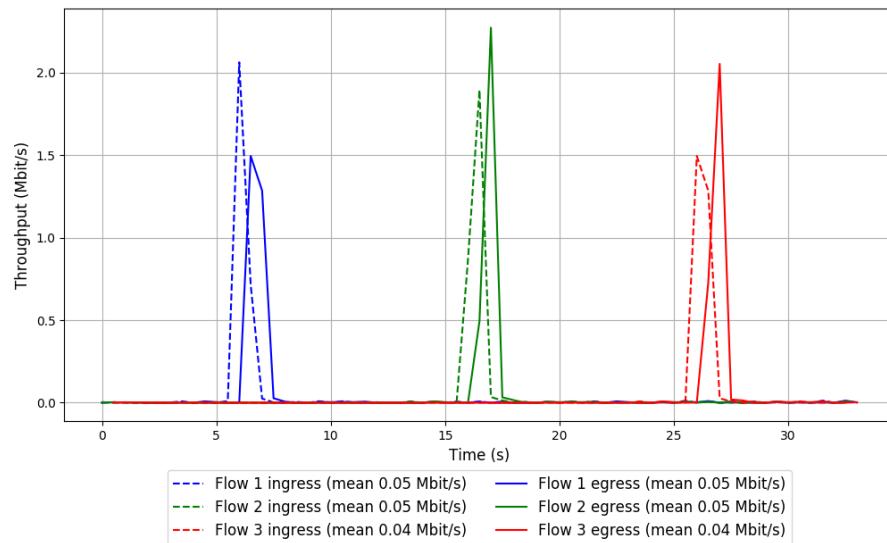


Run 2: Statistics of WebRTC media

```
Start at: 2019-04-24 00:46:56
End at: 2019-04-24 00:47:26
Local clock offset: -4.169 ms
Remote clock offset: 5.342 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 86.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.579 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.661 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 84.979 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

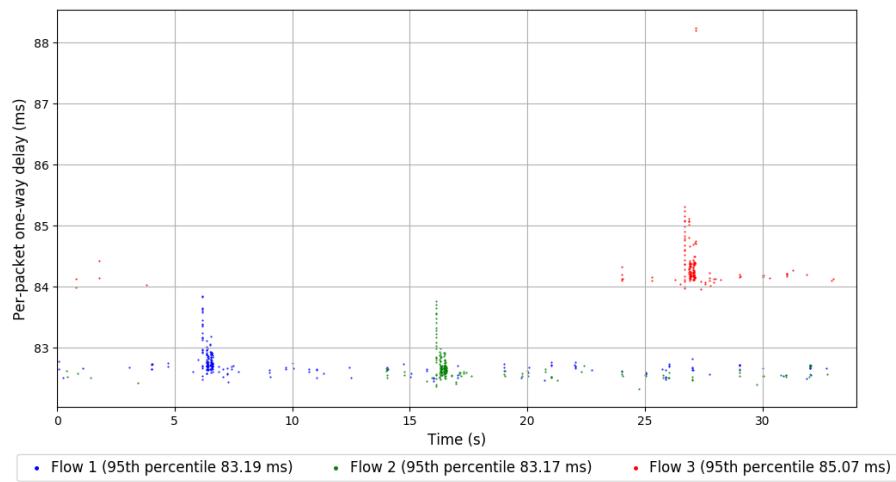
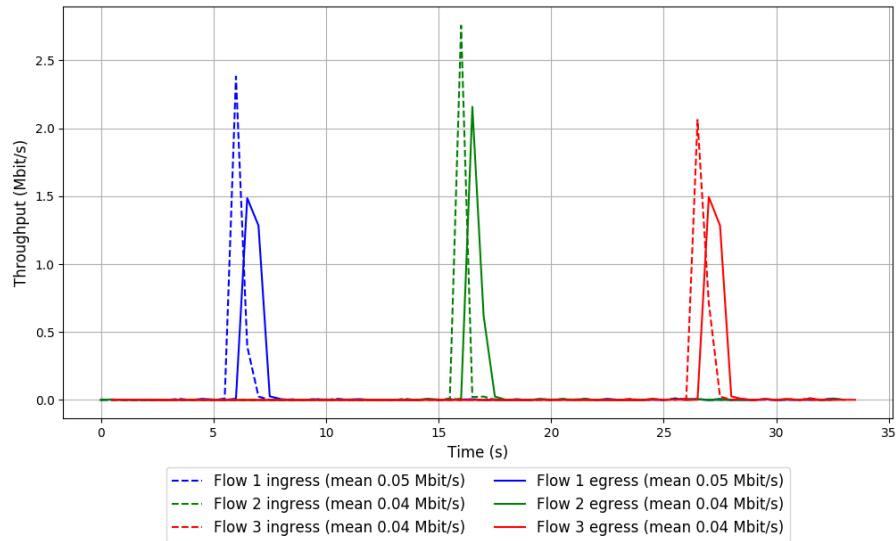


Run 3: Statistics of WebRTC media

```
Start at: 2019-04-24 01:13:52
End at: 2019-04-24 01:14:22
Local clock offset: -4.07 ms
Remote clock offset: 5.494 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 84.435 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 83.185 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 83.175 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 85.074 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

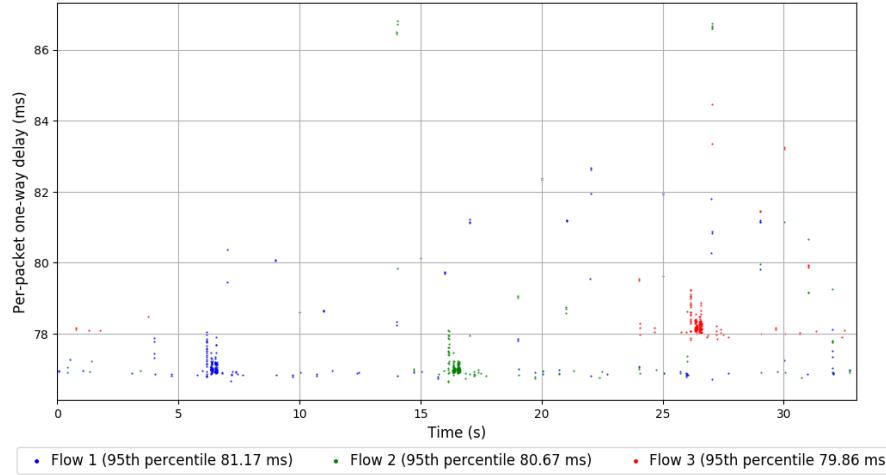
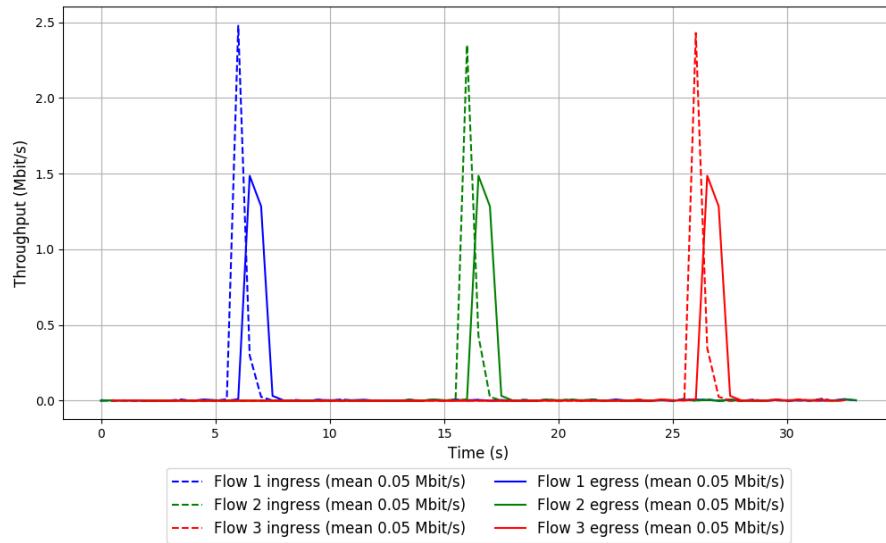


Run 4: Statistics of WebRTC media

```
Start at: 2019-04-24 01:40:58
End at: 2019-04-24 01:41:28
Local clock offset: -2.953 ms
Remote clock offset: -2.39 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 81.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.675 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 79.856 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-04-24 02:07:45
End at: 2019-04-24 02:08:15
Local clock offset: -2.759 ms
Remote clock offset: -3.006 ms

# Below is generated by plot.py at 2019-04-24 02:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 77.300 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 78.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.883 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

