

Pantheon Report

Generated at 2019-05-30 03:30:10 (UTC).
Data path: AWS India 2 on `ens5` (*local*) → Saudi Arabia on `enp2s0` (*remote*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

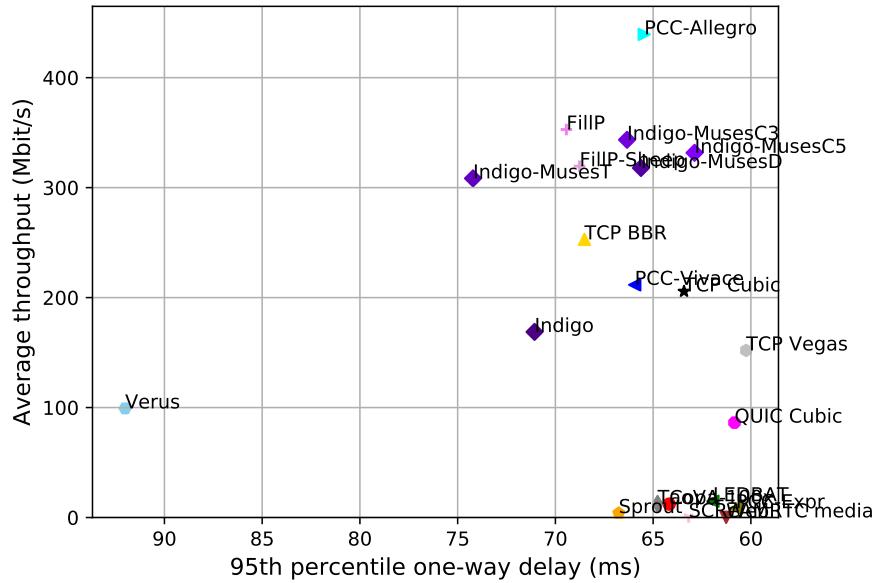
```
Linux 4.15.0-1035-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

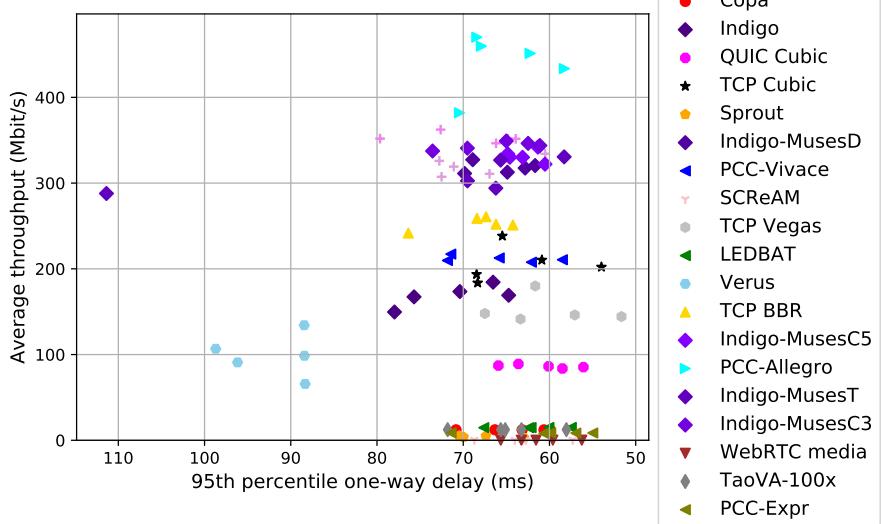
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

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



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



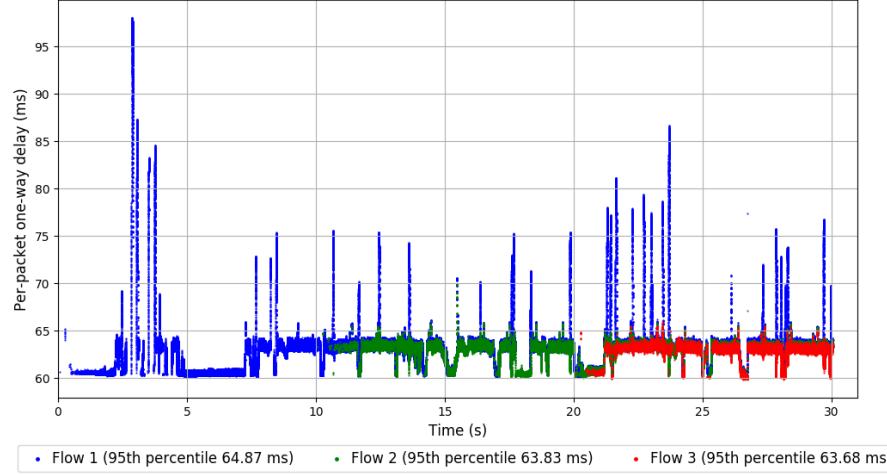
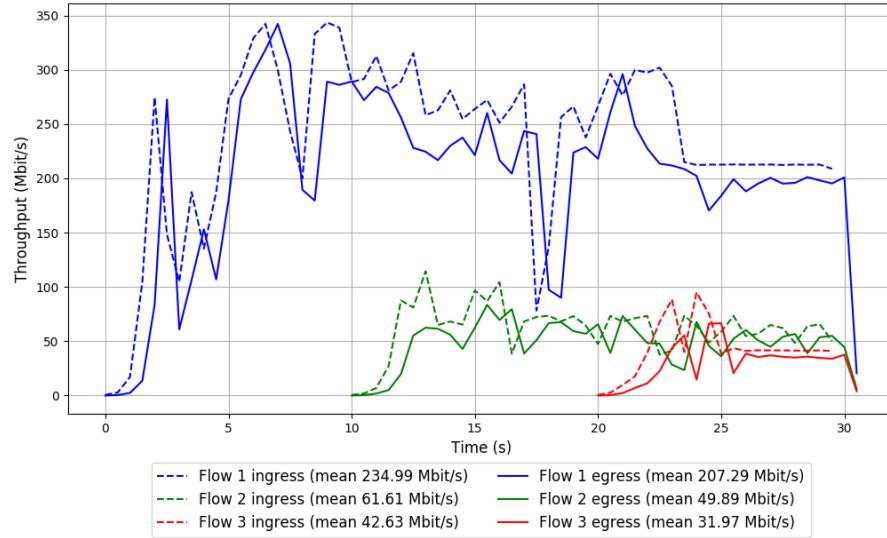
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	211.49	48.53	30.46	69.59	63.14	63.44	13.01	21.58	23.83
Copa	5	8.28	5.55	0.76	64.53	63.63	64.86	67.87	77.56	89.71
TCP Cubic	5	114.60	89.08	95.20	63.13	63.68	63.36	1.66	1.52	1.74
FillP	5	241.31	118.64	98.50	69.42	68.43	68.76	22.62	24.81	25.56
FillP-Sheep	5	230.91	80.31	106.14	68.08	67.90	68.61	14.64	10.86	15.77
Indigo	5	77.98	101.52	74.03	71.01	72.63	66.48	9.35	16.57	27.99
Indigo-MusesC3	5	334.97	8.11	11.67	66.15	65.17	65.69	13.20	9.95	9.27
Indigo-MusesC5	5	330.80	0.90	0.92	62.88	63.09	63.56	26.45	29.80	30.37
Indigo-MusesD	5	287.40	27.70	42.65	65.76	65.24	64.19	12.91	9.86	11.41
Indigo-MusesT	5	274.49	39.56	30.50	74.43	64.84	64.75	11.07	8.36	6.70
LEDBAT	5	9.58	6.37	3.11	62.06	61.31	60.79	0.01	0.00	0.00
PCC-Allegro	5	390.58	45.51	56.22	64.73	65.53	64.53	5.43	2.81	3.57
PCC-Expr	5	0.01	10.37	4.72	58.99	60.76	60.78	82.28	31.54	29.40
QUIC Cubic	5	51.37	38.90	28.05	59.52	60.80	60.80	0.00	0.03	0.00
SCReAM	5	0.22	0.22	0.22	61.69	61.82	62.36	0.00	0.00	0.00
Sprout	5	2.04	2.21	1.69	65.88	66.35	64.81	0.00	0.00	0.00
TaoVA-100x	5	6.67	5.36	7.34	68.52	61.84	61.66	38.15	51.46	89.84
TCP Vegas	5	81.09	80.20	52.42	60.44	59.59	60.71	1.68	1.70	2.83
Verus	5	74.57	25.80	25.13	93.90	76.87	70.68	57.29	32.82	33.51
PCC-Vivace	5	181.22	39.06	13.34	66.01	64.89	65.77	1.96	0.79	0.76
WebRTC media	5	0.05	0.05	0.05	61.64	60.92	61.75	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-05-30 00:38:55
End at: 2019-05-30 00:39:25
Local clock offset: 4.116 ms
Remote clock offset: -36.494 ms

# Below is generated by plot.py at 2019-05-30 03:04:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.16 Mbit/s
95th percentile per-packet one-way delay: 64.240 ms
Loss rate: 13.45%
-- Flow 1:
Average throughput: 207.29 Mbit/s
95th percentile per-packet one-way delay: 64.871 ms
Loss rate: 11.78%
-- Flow 2:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 63.832 ms
Loss rate: 19.03%
-- Flow 3:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 63.682 ms
Loss rate: 24.98%
```

Run 1: Report of TCP BBR — Data Link

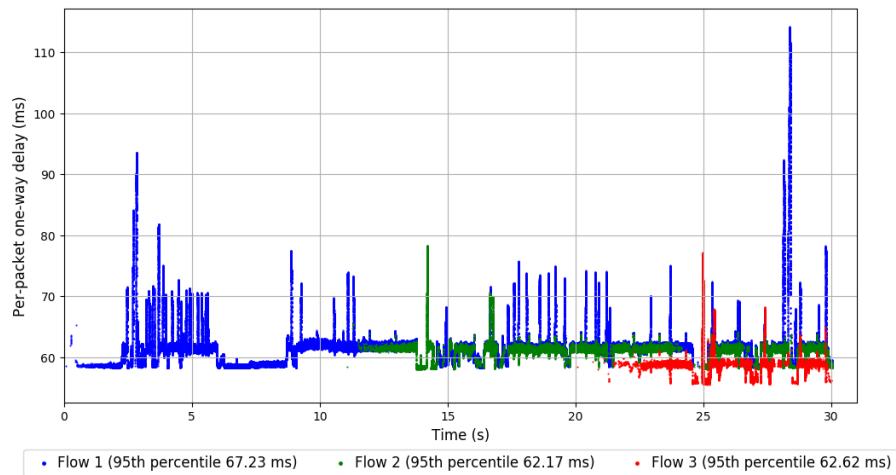
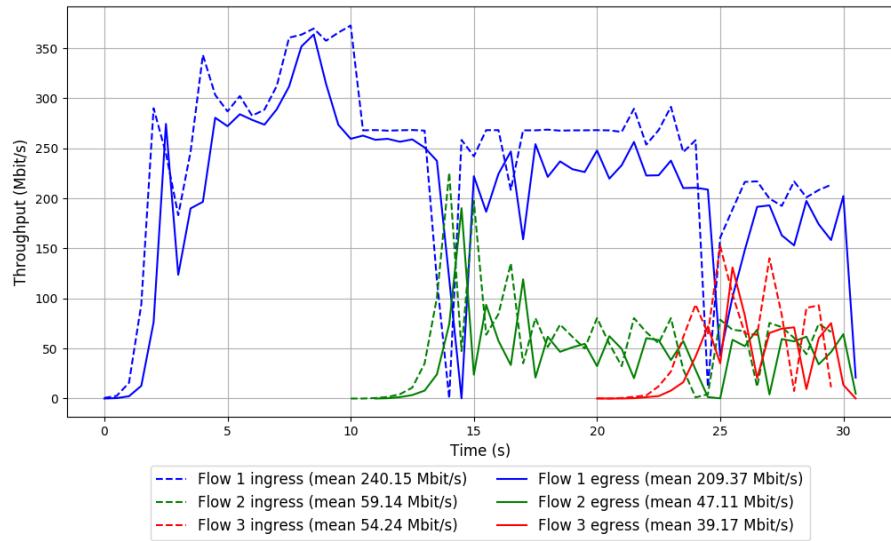


Run 2: Statistics of TCP BBR

```
Start at: 2019-05-30 01:09:25
End at: 2019-05-30 01:09:55
Local clock offset: 1.465 ms
Remote clock offset: -40.454 ms

# Below is generated by plot.py at 2019-05-30 03:04:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.12 Mbit/s
95th percentile per-packet one-way delay: 66.199 ms
Loss rate: 15.26%
-- Flow 1:
Average throughput: 209.37 Mbit/s
95th percentile per-packet one-way delay: 67.235 ms
Loss rate: 12.82%
-- Flow 2:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 62.166 ms
Loss rate: 24.42%
-- Flow 3:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 62.617 ms
Loss rate: 27.80%
```

Run 2: Report of TCP BBR — Data Link

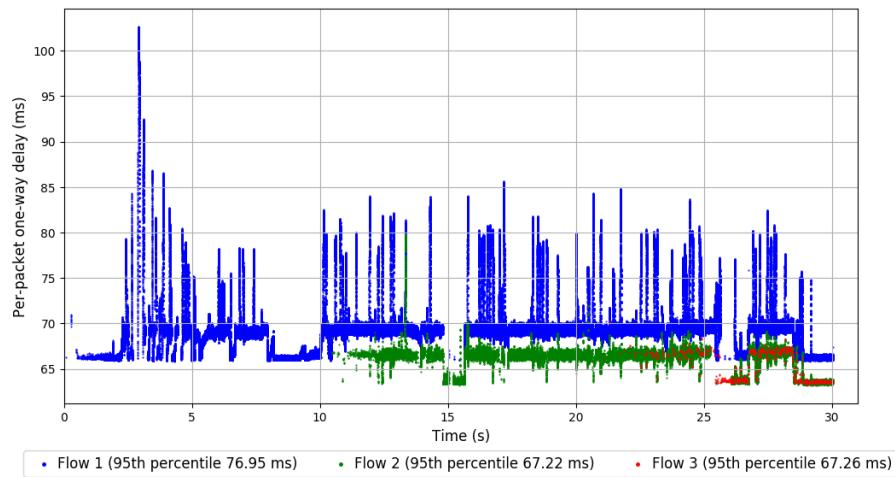
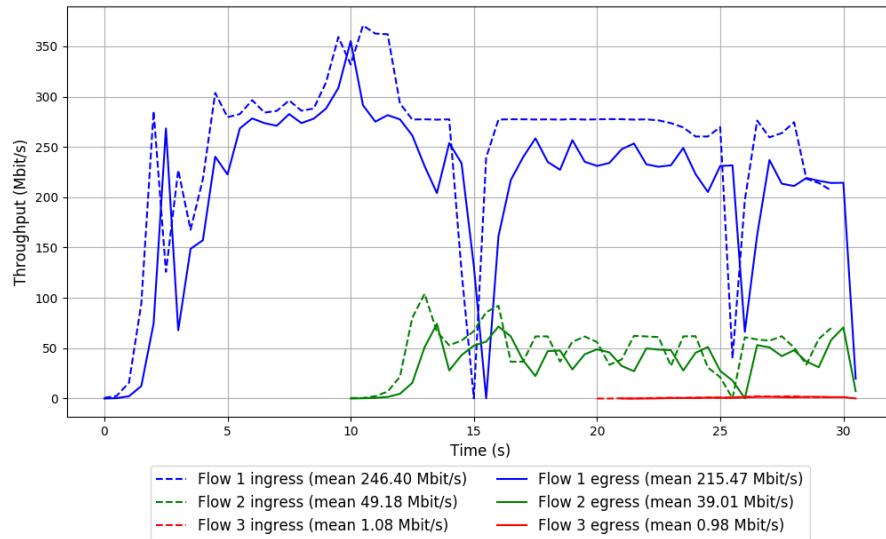


Run 3: Statistics of TCP BBR

```
Start at: 2019-05-30 01:39:55
End at: 2019-05-30 01:40:25
Local clock offset: -1.679 ms
Remote clock offset: -38.281 ms

# Below is generated by plot.py at 2019-05-30 03:04:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.74 Mbit/s
95th percentile per-packet one-way delay: 76.364 ms
Loss rate: 13.52%
-- Flow 1:
Average throughput: 215.47 Mbit/s
95th percentile per-packet one-way delay: 76.948 ms
Loss rate: 12.55%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 67.219 ms
Loss rate: 20.69%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 18.68%
```

Run 3: Report of TCP BBR — Data Link

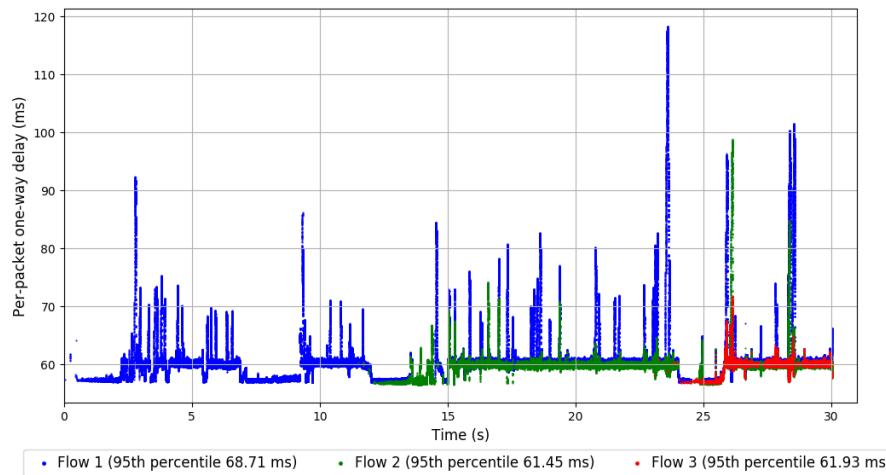
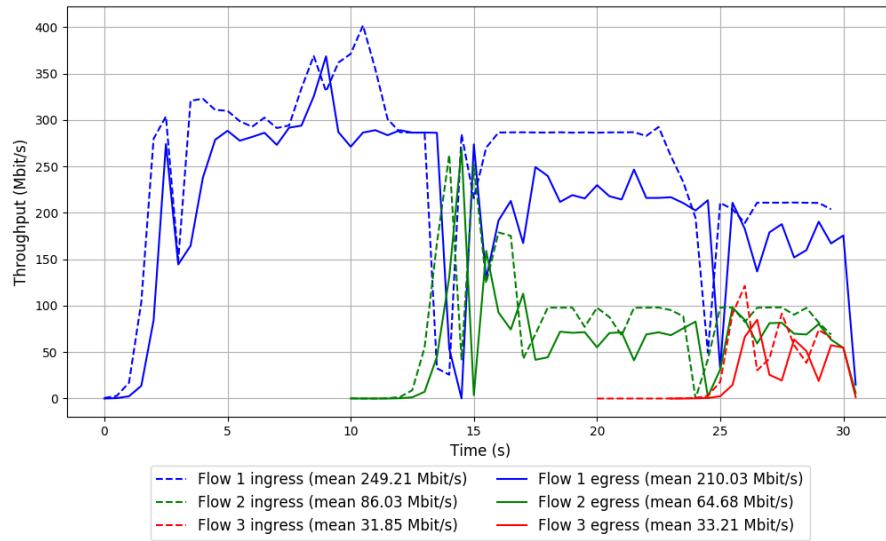


Run 4: Statistics of TCP BBR

```
Start at: 2019-05-30 02:10:19
End at: 2019-05-30 02:10:49
Local clock offset: -1.643 ms
Remote clock offset: -44.446 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.82 Mbit/s
95th percentile per-packet one-way delay: 67.358 ms
Loss rate: 17.75%
-- Flow 1:
Average throughput: 210.03 Mbit/s
95th percentile per-packet one-way delay: 68.709 ms
Loss rate: 15.72%
-- Flow 2:
Average throughput: 64.68 Mbit/s
95th percentile per-packet one-way delay: 61.452 ms
Loss rate: 24.82%
-- Flow 3:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 61.932 ms
Loss rate: 27.31%
```

Run 4: Report of TCP BBR — Data Link

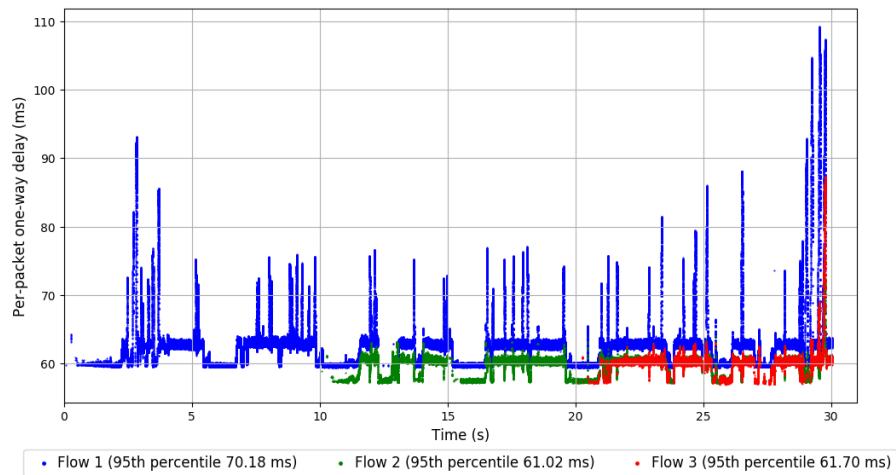
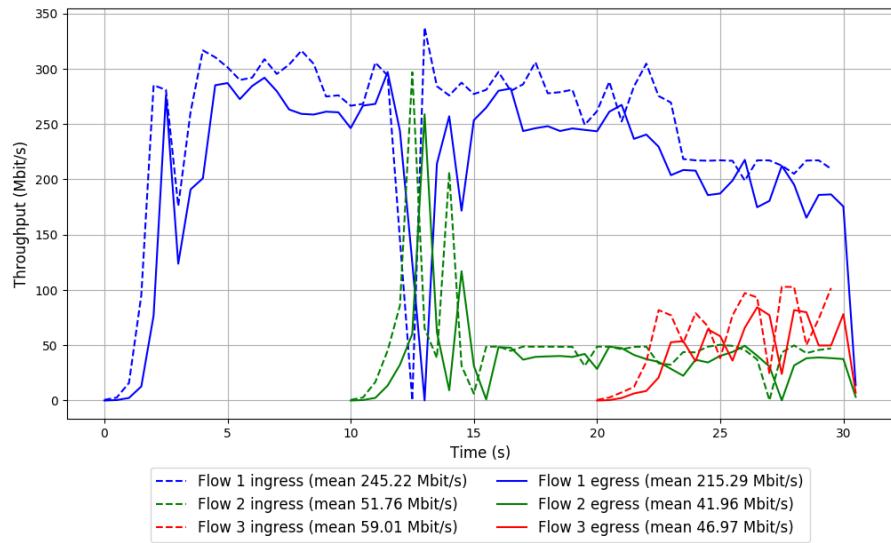


Run 5: Statistics of TCP BBR

```
Start at: 2019-05-30 02:40:43
End at: 2019-05-30 02:41:13
Local clock offset: -1.473 ms
Remote clock offset: -42.803 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.88 Mbit/s
95th percentile per-packet one-way delay: 68.407 ms
Loss rate: 13.51%
-- Flow 1:
Average throughput: 215.29 Mbit/s
95th percentile per-packet one-way delay: 70.179 ms
Loss rate: 12.20%
-- Flow 2:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 61.020 ms
Loss rate: 18.93%
-- Flow 3:
Average throughput: 46.97 Mbit/s
95th percentile per-packet one-way delay: 61.701 ms
Loss rate: 20.37%
```

Run 5: Report of TCP BBR — Data Link

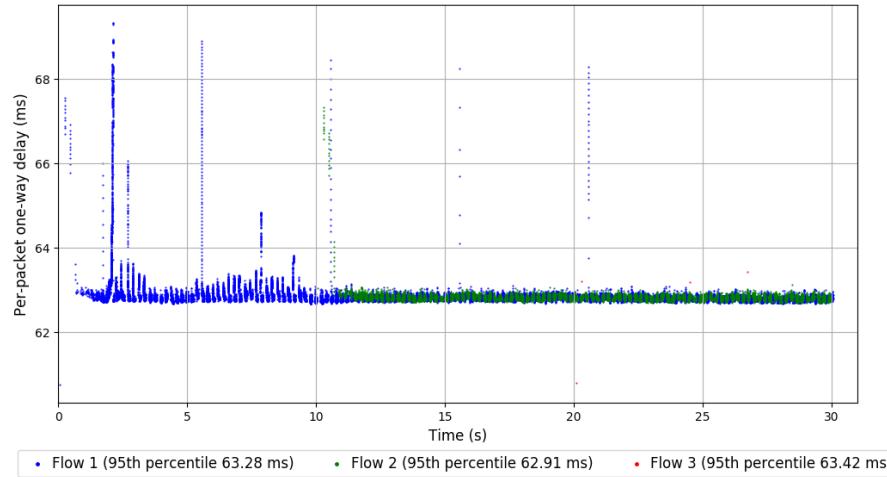
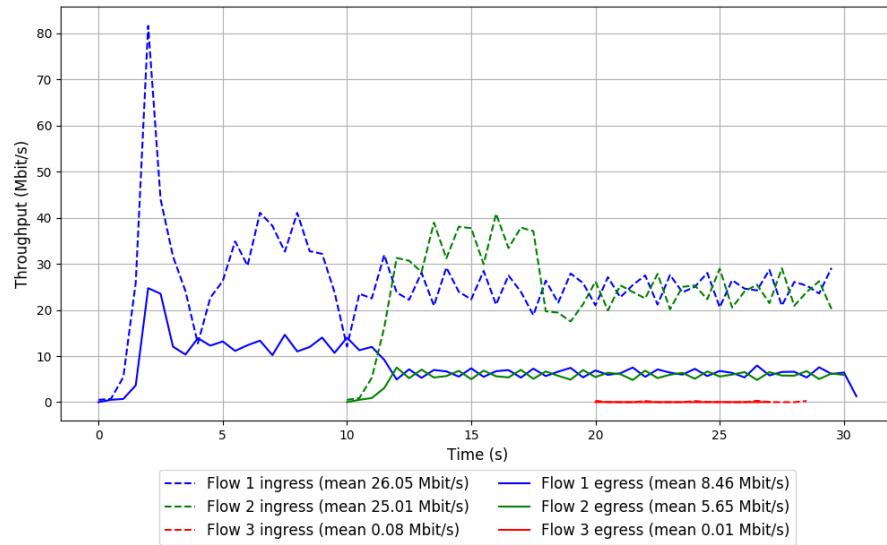


Run 1: Statistics of Copa

```
Start at: 2019-05-30 00:53:05
End at: 2019-05-30 00:53:35
Local clock offset: 1.477 ms
Remote clock offset: -36.069 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 63.172 ms
Loss rate: 71.39%
-- Flow 1:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 63.284 ms
Loss rate: 67.52%
-- Flow 2:
Average throughput: 5.65 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 77.43%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 63.416 ms
Loss rate: 94.50%
```

Run 1: Report of Copa — Data Link

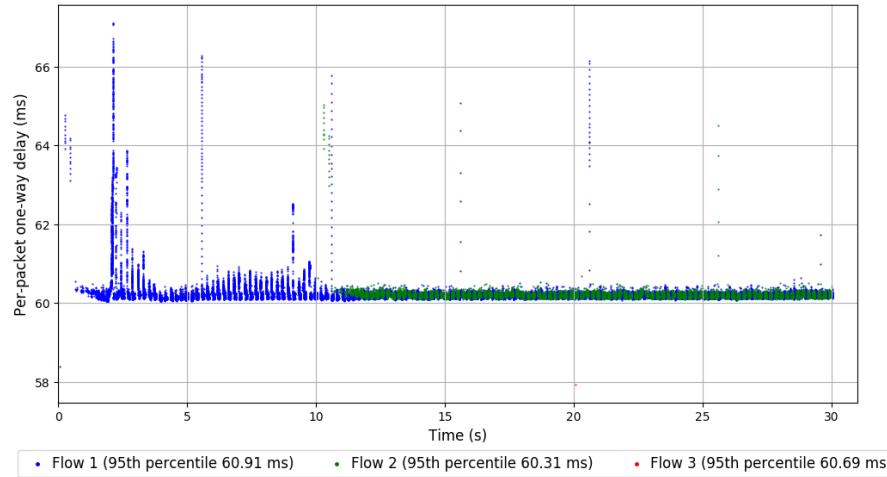
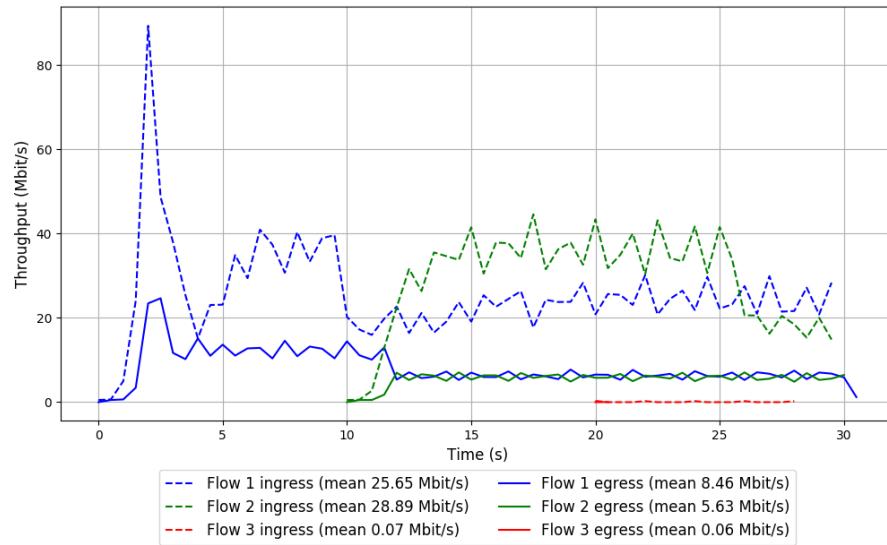


Run 2: Statistics of Copa

```
Start at: 2019-05-30 01:23:33
End at: 2019-05-30 01:24:03
Local clock offset: -1.828 ms
Remote clock offset: -42.861 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 60.641 ms
Loss rate: 72.81%
-- Flow 1:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 60.915 ms
Loss rate: 67.02%
-- Flow 2:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 60.311 ms
Loss rate: 80.53%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 60.685 ms
Loss rate: 97.92%
```

Run 2: Report of Copa — Data Link

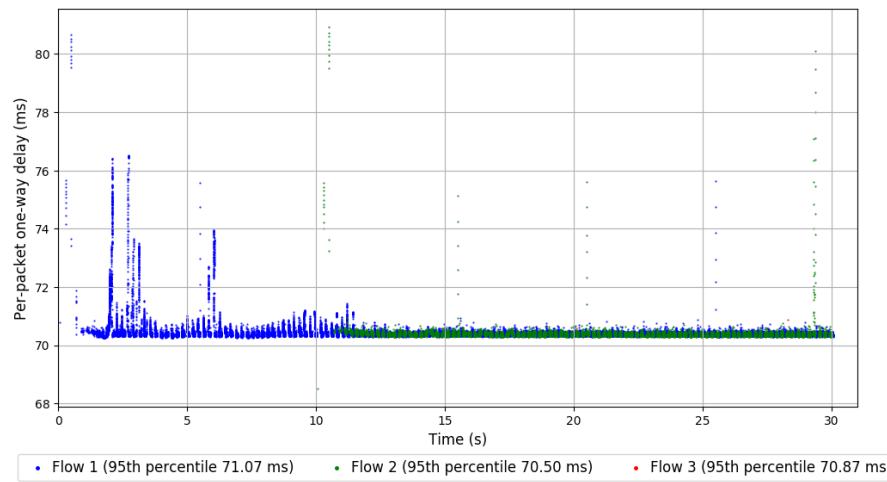
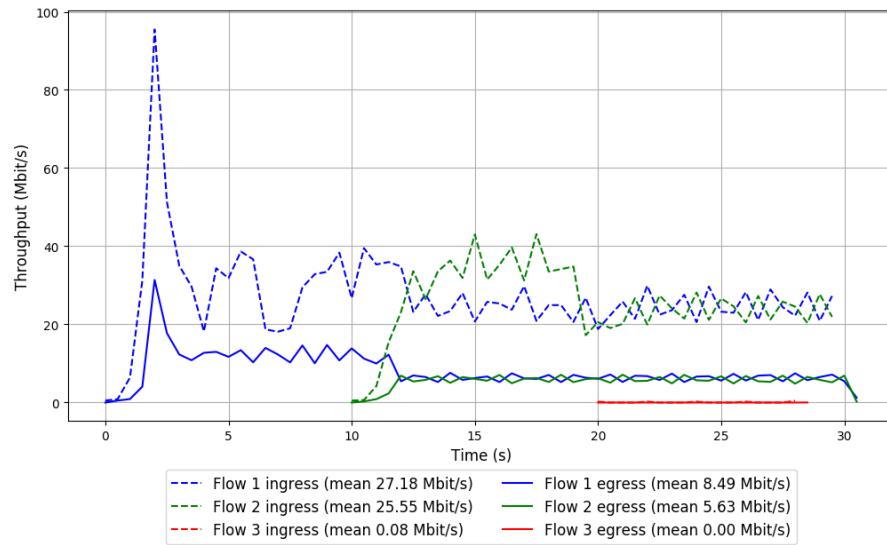


Run 3: Statistics of Copa

```
Start at: 2019-05-30 01:54:00
End at: 2019-05-30 01:54:30
Local clock offset: -2.341 ms
Remote clock offset: -34.64 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 70.837 ms
Loss rate: 72.31%
-- Flow 1:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 71.073 ms
Loss rate: 68.75%
-- Flow 2:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 70.495 ms
Loss rate: 77.98%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 70.867 ms
Loss rate: 98.16%
```

Run 3: Report of Copa — Data Link

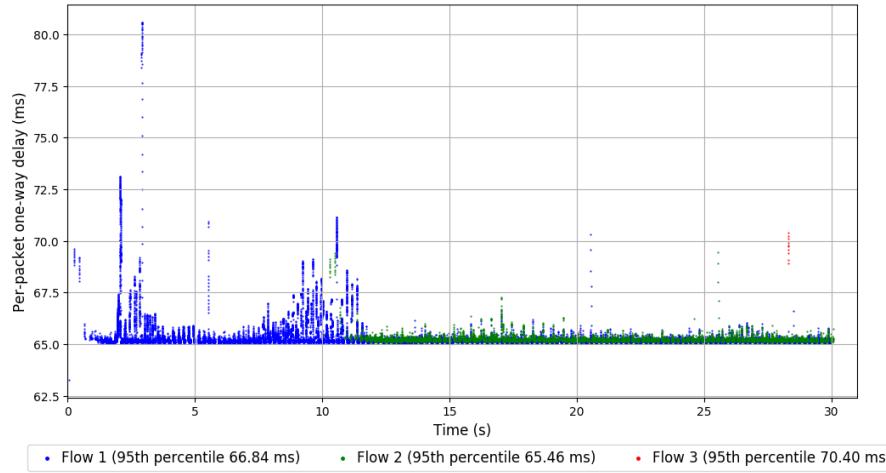
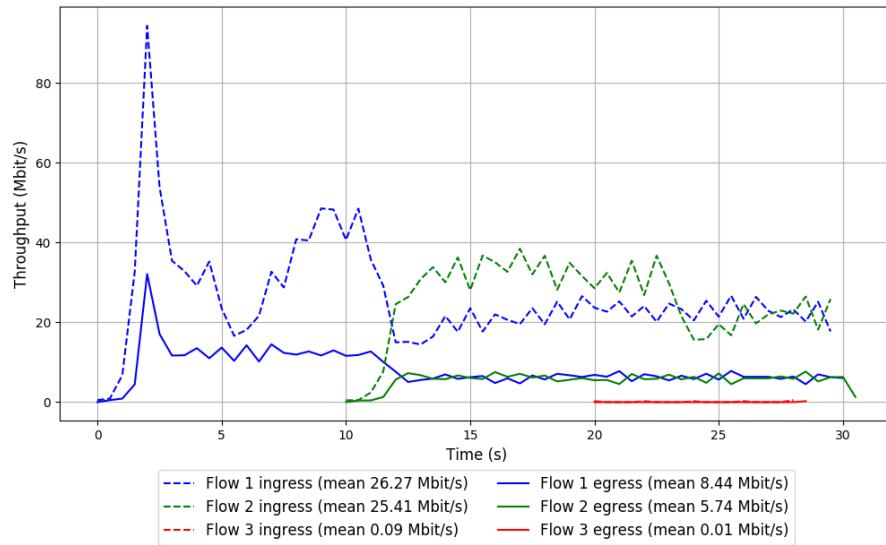


Run 4: Statistics of Copa

```
Start at: 2019-05-30 02:24:25
End at: 2019-05-30 02:24:55
Local clock offset: -1.994 ms
Remote clock offset: -38.726 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 66.324 ms
Loss rate: 71.64%
-- Flow 1:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 66.839 ms
Loss rate: 67.88%
-- Flow 2:
Average throughput: 5.74 Mbit/s
95th percentile per-packet one-way delay: 65.459 ms
Loss rate: 77.43%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 70.397 ms
Loss rate: 83.49%
```

Run 4: Report of Copa — Data Link

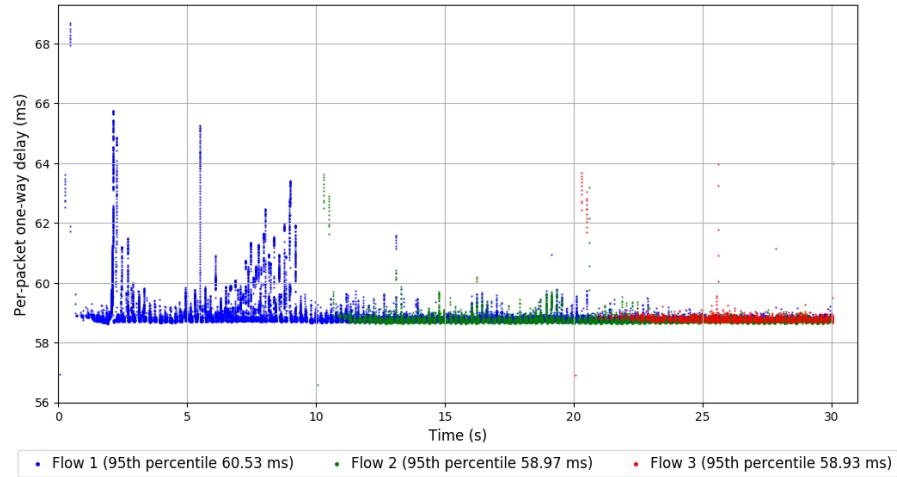
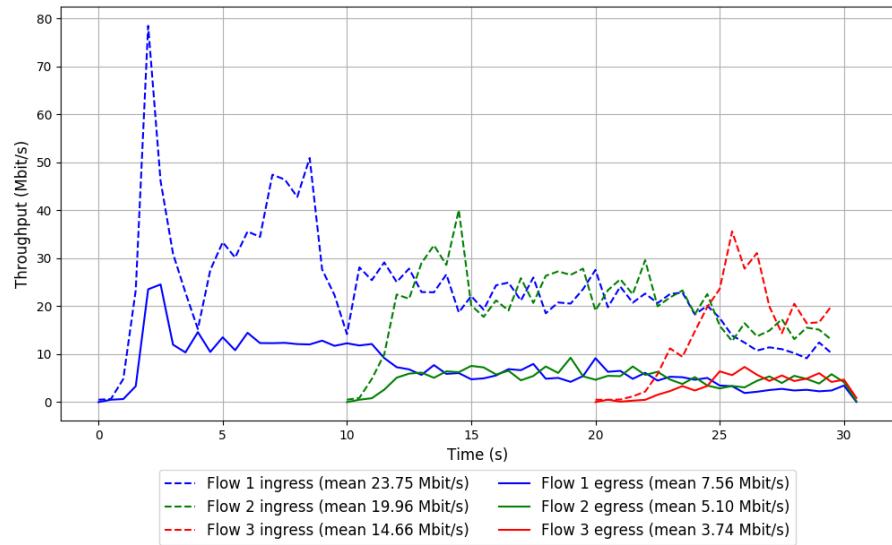


Run 5: Statistics of Copa

```
Start at: 2019-05-30 02:54:50
End at: 2019-05-30 02:55:20
Local clock offset: 1.065 ms
Remote clock offset: -40.075 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 59.914 ms
Loss rate: 70.88%
-- Flow 1:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 60.535 ms
Loss rate: 68.16%
-- Flow 2:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 58.968 ms
Loss rate: 74.43%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 58.927 ms
Loss rate: 74.46%
```

Run 5: Report of Copa — Data Link

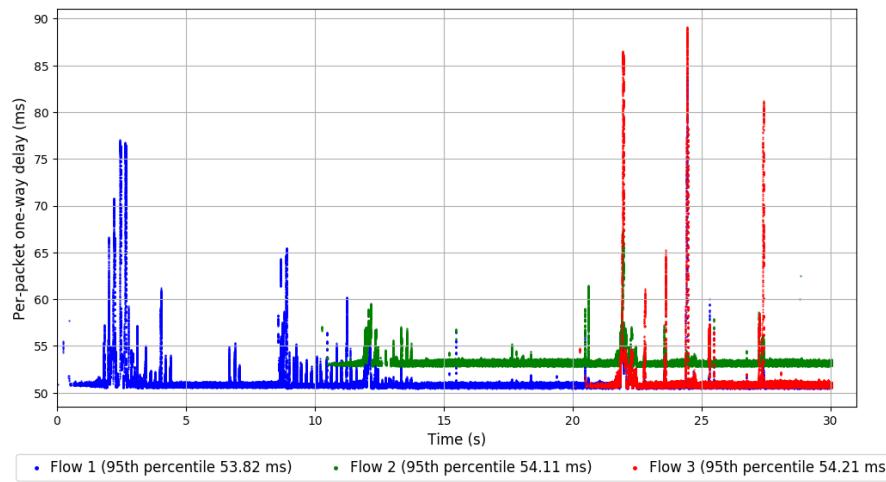
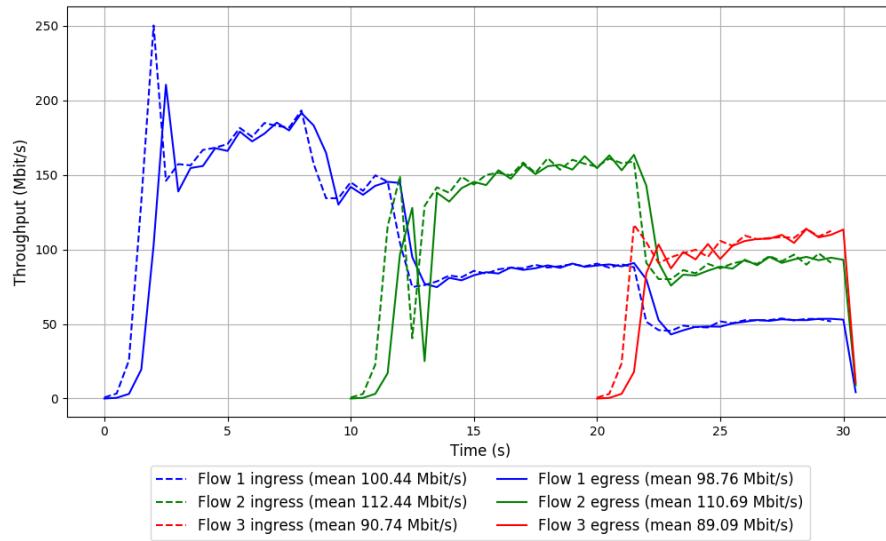


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-05-30 00:46:24
End at: 2019-05-30 00:46:54
Local clock offset: 3.38 ms
Remote clock offset: -44.694 ms

# Below is generated by plot.py at 2019-05-30 03:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.13 Mbit/s
95th percentile per-packet one-way delay: 53.973 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 98.76 Mbit/s
95th percentile per-packet one-way delay: 53.823 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 110.69 Mbit/s
95th percentile per-packet one-way delay: 54.109 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 54.208 ms
Loss rate: 1.82%
```

Run 1: Report of TCP Cubic — Data Link

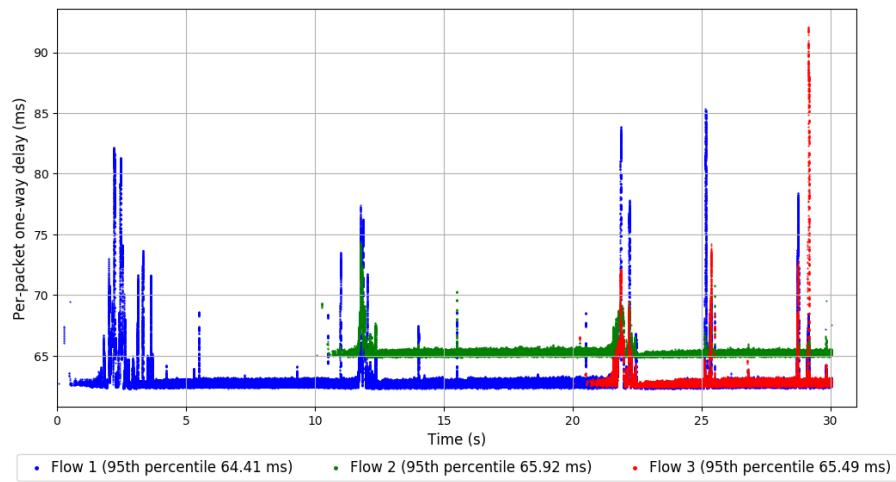
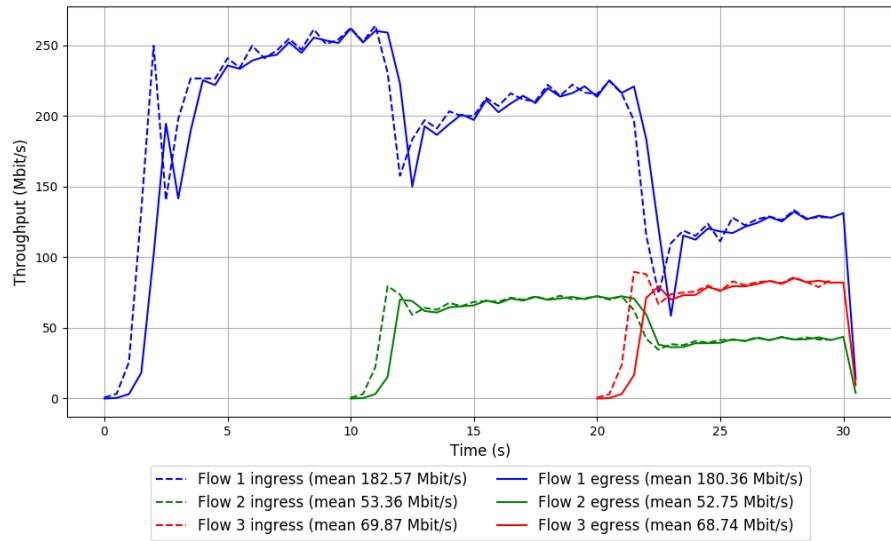


Run 2: Statistics of TCP Cubic

```
Start at: 2019-05-30 01:16:52
End at: 2019-05-30 01:17:22
Local clock offset: -1.43 ms
Remote clock offset: -37.284 ms

# Below is generated by plot.py at 2019-05-30 03:04:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.34 Mbit/s
95th percentile per-packet one-way delay: 65.464 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 180.36 Mbit/s
95th percentile per-packet one-way delay: 64.407 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 65.920 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 68.74 Mbit/s
95th percentile per-packet one-way delay: 65.486 ms
Loss rate: 1.63%
```

Run 2: Report of TCP Cubic — Data Link

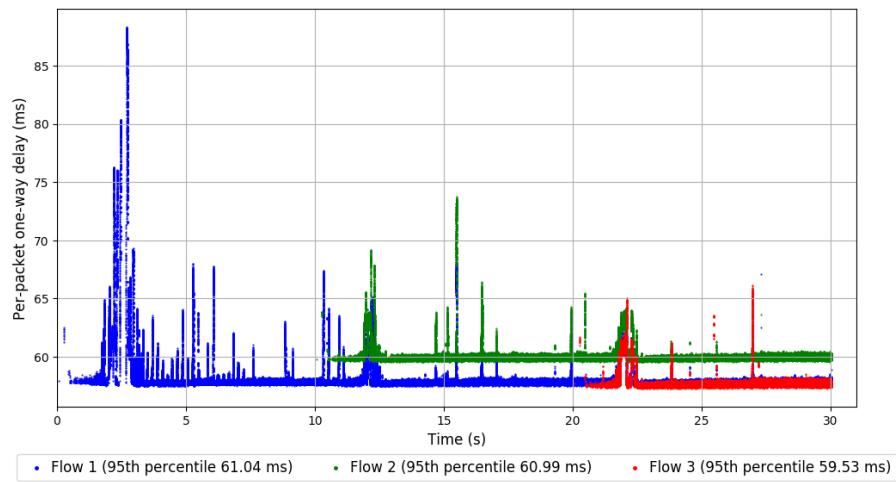
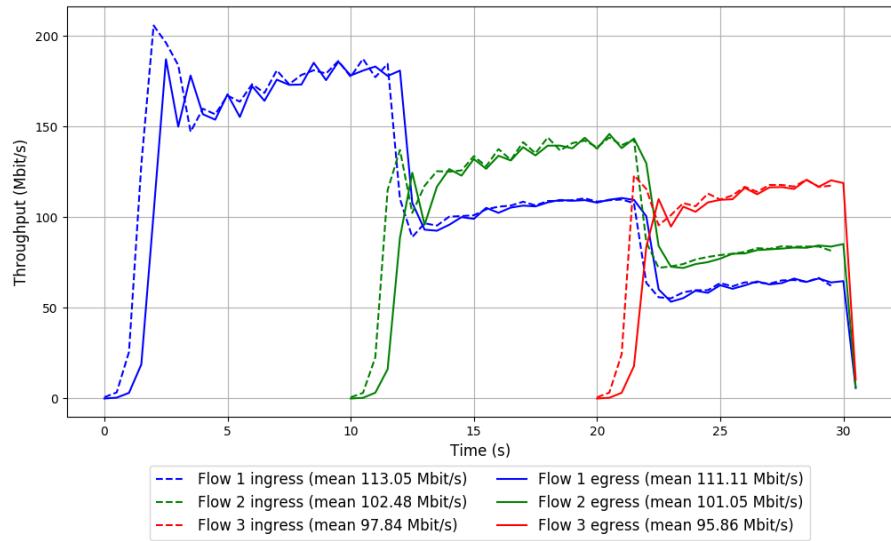


Run 3: Statistics of TCP Cubic

```
Start at: 2019-05-30 01:47:20
End at: 2019-05-30 01:47:50
Local clock offset: 2.973 ms
Remote clock offset: -39.828 ms

# Below is generated by plot.py at 2019-05-30 03:04:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.29 Mbit/s
95th percentile per-packet one-way delay: 60.884 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 111.11 Mbit/s
95th percentile per-packet one-way delay: 61.037 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 101.05 Mbit/s
95th percentile per-packet one-way delay: 60.993 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 59.531 ms
Loss rate: 2.02%
```

Run 3: Report of TCP Cubic — Data Link

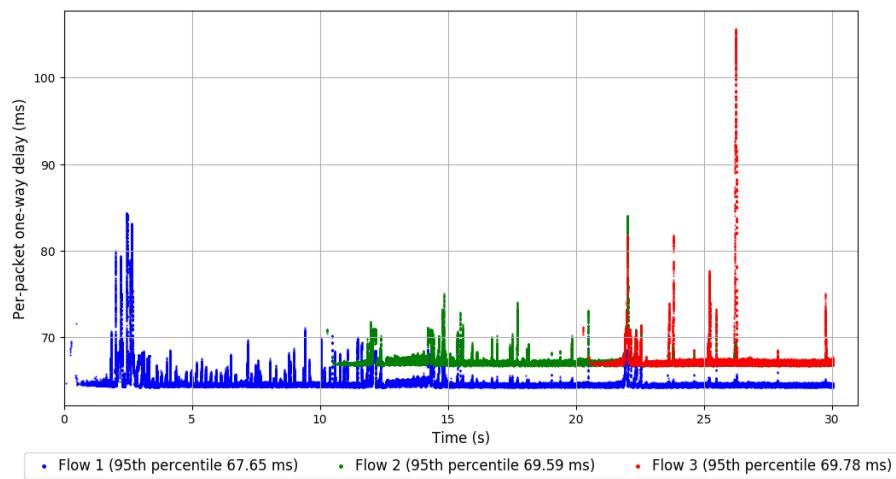
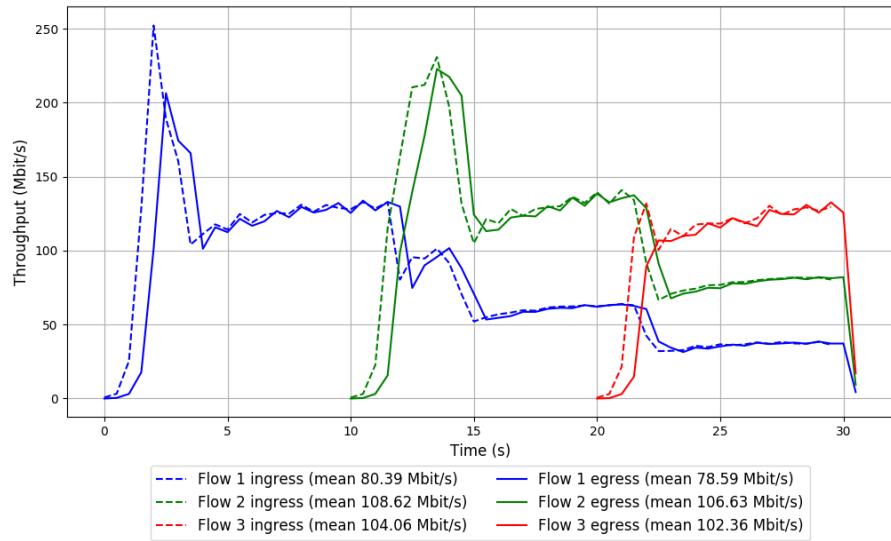


Run 4: Statistics of TCP Cubic

```
Start at: 2019-05-30 02:17:47
End at: 2019-05-30 02:18:17
Local clock offset: -1.522 ms
Remote clock offset: -36.558 ms

# Below is generated by plot.py at 2019-05-30 03:05:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 183.64 Mbit/s
95th percentile per-packet one-way delay: 68.326 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 67.647 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 106.63 Mbit/s
95th percentile per-packet one-way delay: 69.590 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 102.36 Mbit/s
95th percentile per-packet one-way delay: 69.784 ms
Loss rate: 1.64%
```

Run 4: Report of TCP Cubic — Data Link

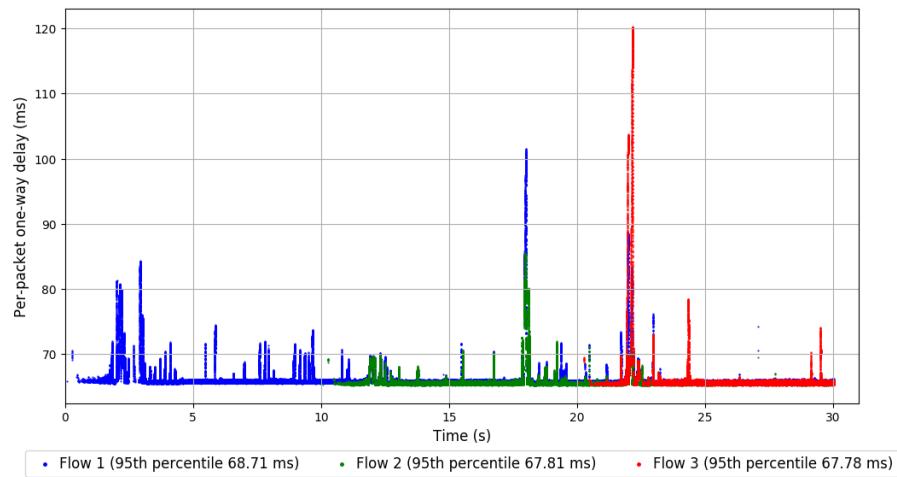
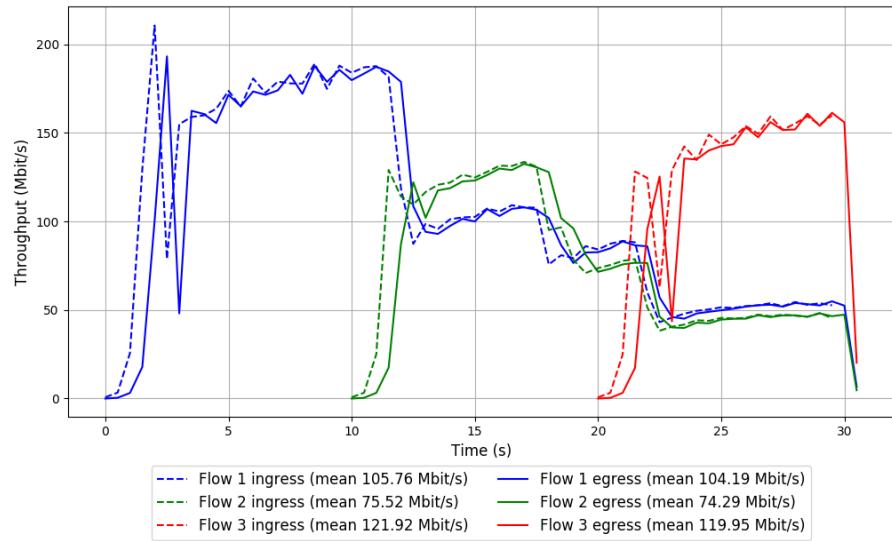


Run 5: Statistics of TCP Cubic

```
Start at: 2019-05-30 02:48:09
End at: 2019-05-30 02:48:39
Local clock offset: -2.23 ms
Remote clock offset: -34.717 ms

# Below is generated by plot.py at 2019-05-30 03:05:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.61 Mbit/s
95th percentile per-packet one-way delay: 68.453 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 104.19 Mbit/s
95th percentile per-packet one-way delay: 68.712 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 74.29 Mbit/s
95th percentile per-packet one-way delay: 67.812 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 119.95 Mbit/s
95th percentile per-packet one-way delay: 67.784 ms
Loss rate: 1.61%
```

Run 5: Report of TCP Cubic — Data Link

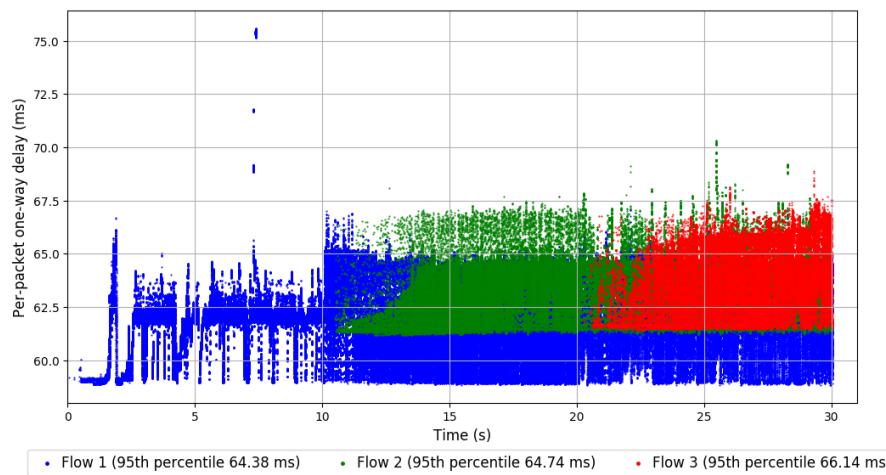
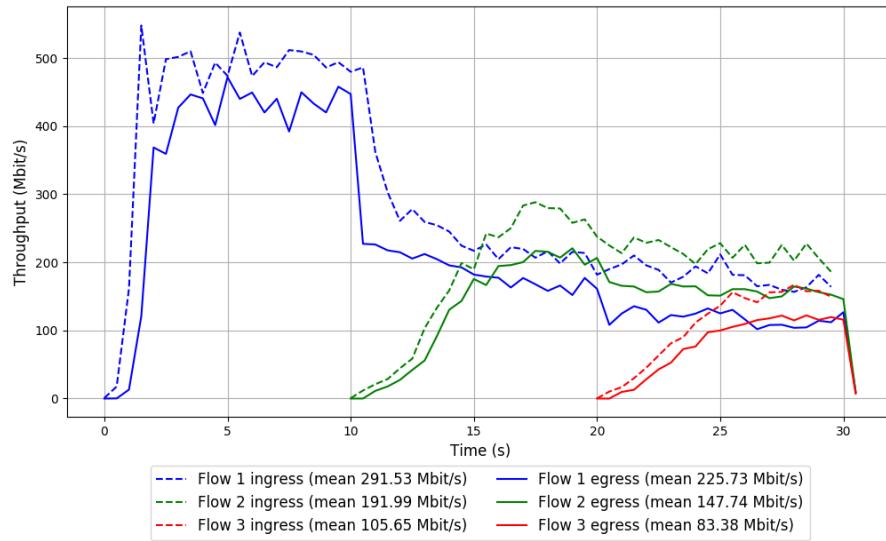


```
Run 1: Statistics of FillP

Start at: 2019-05-30 00:54:25
End at: 2019-05-30 00:54:55
Local clock offset: 2.169 ms
Remote clock offset: -36.47 ms

# Below is generated by plot.py at 2019-05-30 03:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.74 Mbit/s
95th percentile per-packet one-way delay: 64.811 ms
Loss rate: 22.59%
-- Flow 1:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 64.382 ms
Loss rate: 22.57%
-- Flow 2:
Average throughput: 147.74 Mbit/s
95th percentile per-packet one-way delay: 64.744 ms
Loss rate: 23.05%
-- Flow 3:
Average throughput: 83.38 Mbit/s
95th percentile per-packet one-way delay: 66.144 ms
Loss rate: 21.05%
```

Run 1: Report of FillP — Data Link

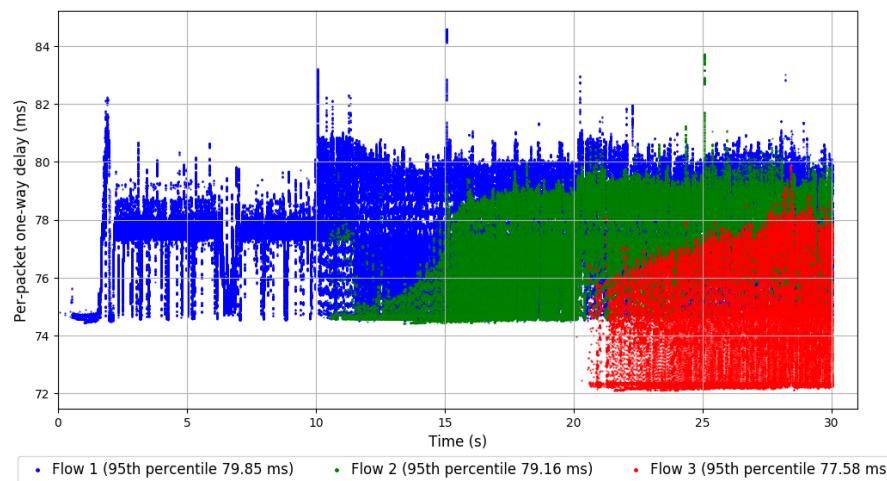
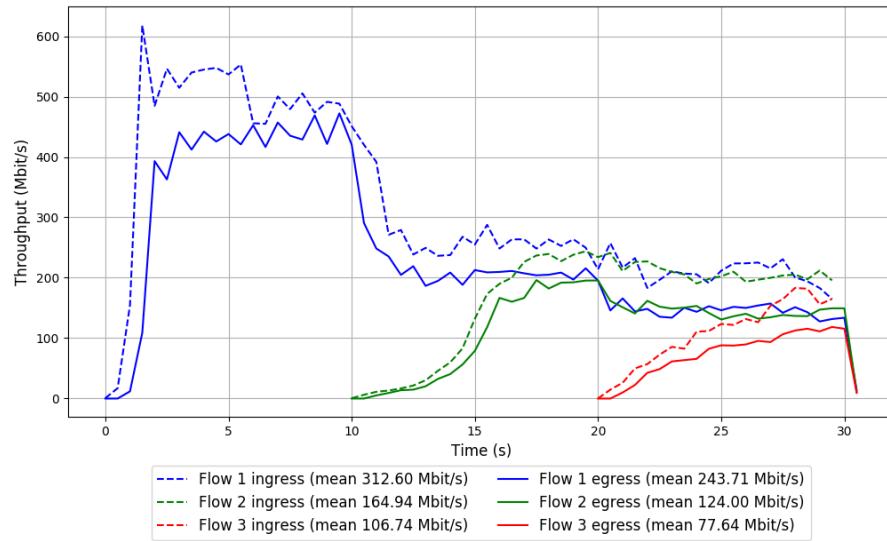


Run 2: Statistics of FillP

```
Start at: 2019-05-30 01:24:53
End at: 2019-05-30 01:25:23
Local clock offset: -8.599 ms
Remote clock offset: -35.062 ms

# Below is generated by plot.py at 2019-05-30 03:09:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.88 Mbit/s
95th percentile per-packet one-way delay: 79.647 ms
Loss rate: 23.11%
-- Flow 1:
Average throughput: 243.71 Mbit/s
95th percentile per-packet one-way delay: 79.847 ms
Loss rate: 22.04%
-- Flow 2:
Average throughput: 124.00 Mbit/s
95th percentile per-packet one-way delay: 79.158 ms
Loss rate: 24.81%
-- Flow 3:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 77.575 ms
Loss rate: 27.27%
```

Run 2: Report of FillP — Data Link

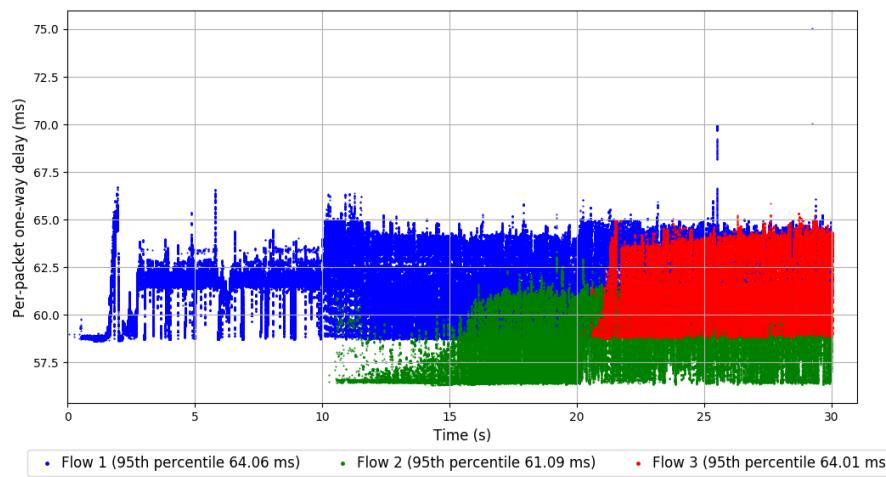
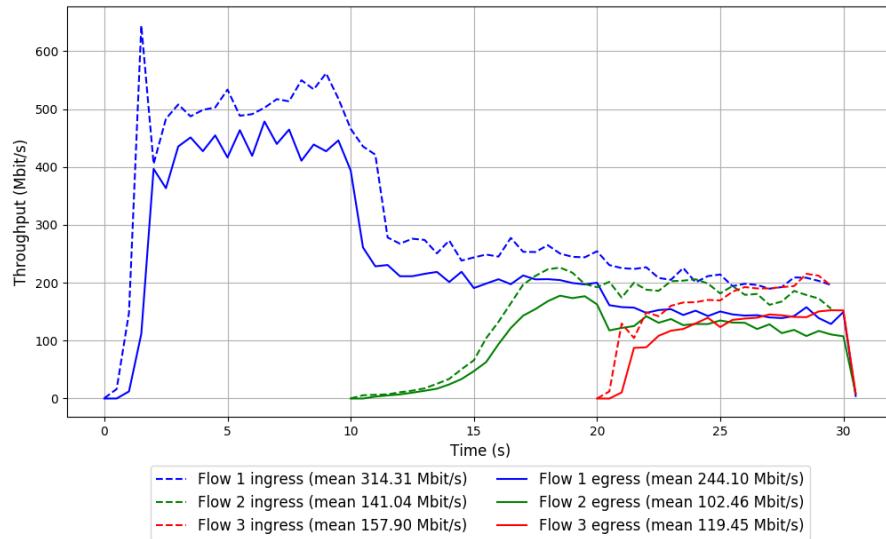


Run 3: Statistics of FillP

```
Start at: 2019-05-30 01:55:19
End at: 2019-05-30 01:55:49
Local clock offset: 3.234 ms
Remote clock offset: -40.365 ms

# Below is generated by plot.py at 2019-05-30 03:09:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.68 Mbit/s
95th percentile per-packet one-way delay: 63.916 ms
Loss rate: 23.59%
-- Flow 1:
Average throughput: 244.10 Mbit/s
95th percentile per-packet one-way delay: 64.065 ms
Loss rate: 22.33%
-- Flow 2:
Average throughput: 102.46 Mbit/s
95th percentile per-packet one-way delay: 61.095 ms
Loss rate: 27.37%
-- Flow 3:
Average throughput: 119.45 Mbit/s
95th percentile per-packet one-way delay: 64.013 ms
Loss rate: 24.34%
```

Run 3: Report of FillP — Data Link

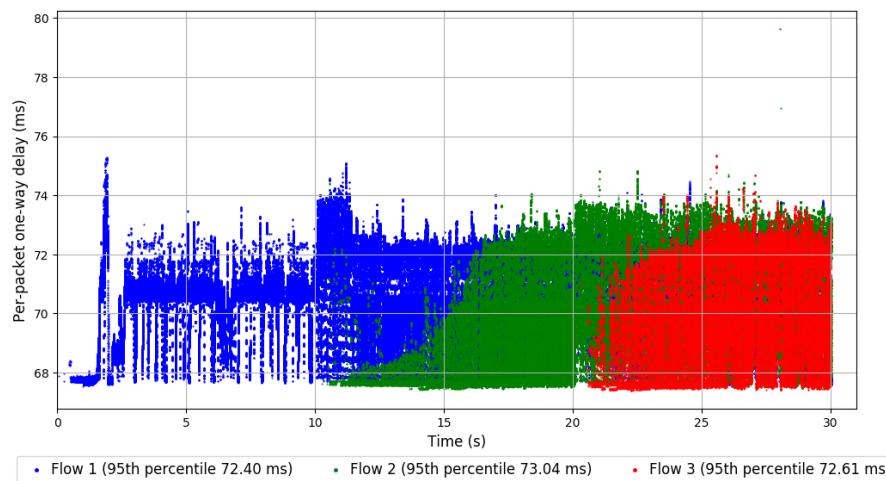
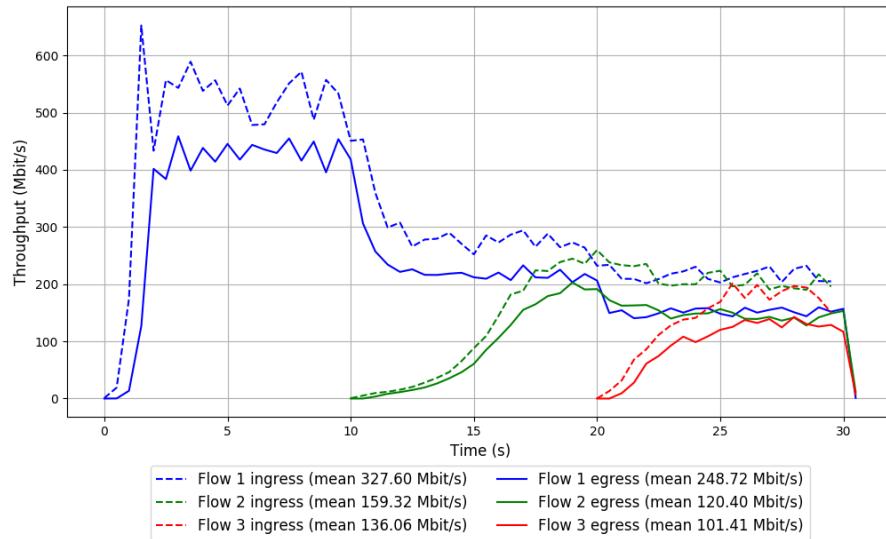


```
Run 4: Statistics of FillP
```

```
Start at: 2019-05-30 02:25:45
End at: 2019-05-30 02:26:15
Local clock offset: -2.117 ms
Remote clock offset: -33.904 ms

# Below is generated by plot.py at 2019-05-30 03:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.39 Mbit/s
95th percentile per-packet one-way delay: 72.620 ms
Loss rate: 24.28%
-- Flow 1:
Average throughput: 248.72 Mbit/s
95th percentile per-packet one-way delay: 72.396 ms
Loss rate: 24.07%
-- Flow 2:
Average throughput: 120.40 Mbit/s
95th percentile per-packet one-way delay: 73.040 ms
Loss rate: 24.44%
-- Flow 3:
Average throughput: 101.41 Mbit/s
95th percentile per-packet one-way delay: 72.614 ms
Loss rate: 25.48%
```

Run 4: Report of FillP — Data Link

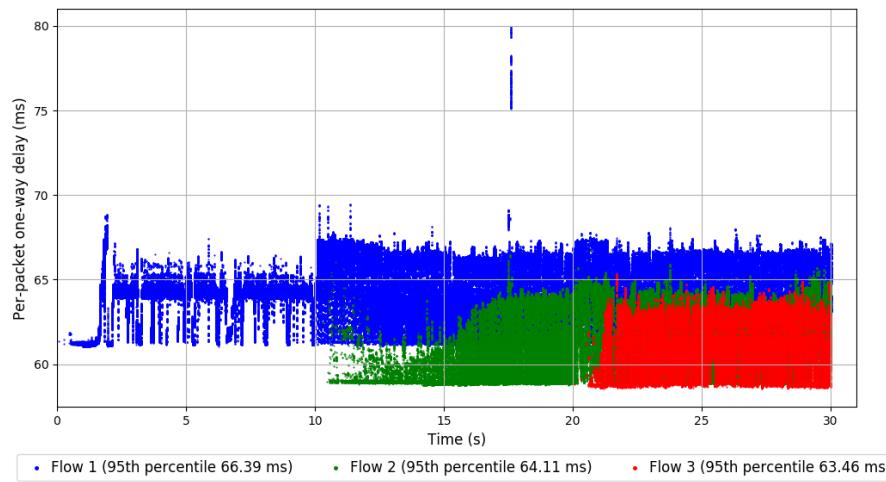
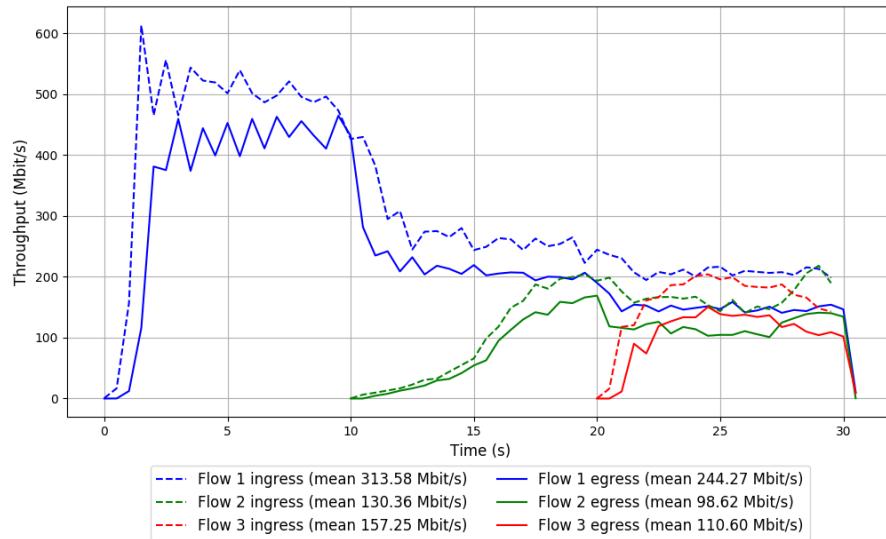


```
Run 5: Statistics of FillP
```

```
Start at: 2019-05-30 02:56:09
End at: 2019-05-30 02:56:39
Local clock offset: 1.274 ms
Remote clock offset: -37.272 ms

# Below is generated by plot.py at 2019-05-30 03:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.48 Mbit/s
95th percentile per-packet one-way delay: 66.190 ms
Loss rate: 23.41%
-- Flow 1:
Average throughput: 244.27 Mbit/s
95th percentile per-packet one-way delay: 66.390 ms
Loss rate: 22.10%
-- Flow 2:
Average throughput: 98.62 Mbit/s
95th percentile per-packet one-way delay: 64.113 ms
Loss rate: 24.36%
-- Flow 3:
Average throughput: 110.60 Mbit/s
95th percentile per-packet one-way delay: 63.462 ms
Loss rate: 29.67%
```

Run 5: Report of FillP — Data Link

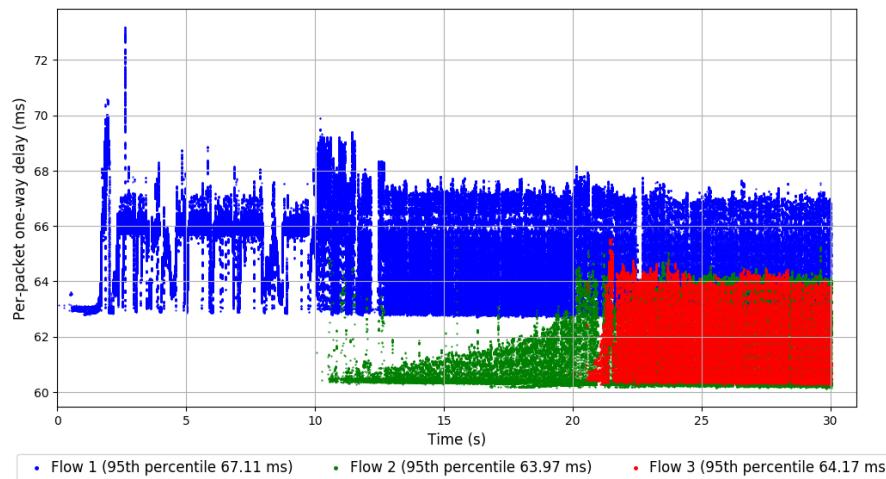
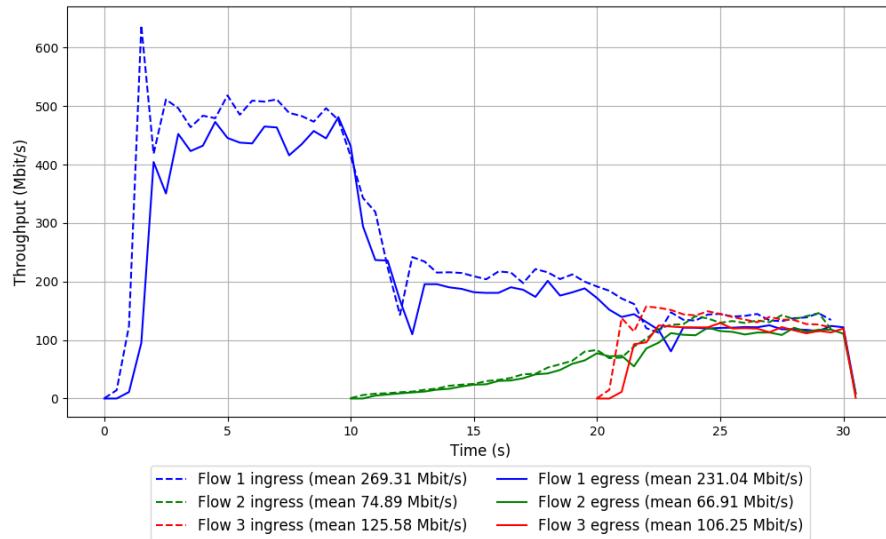


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-05-30 00:37:23
End at: 2019-05-30 00:37:53
Local clock offset: 0.742 ms
Remote clock offset: -40.137 ms

# Below is generated by plot.py at 2019-05-30 03:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.82 Mbit/s
95th percentile per-packet one-way delay: 66.948 ms
Loss rate: 13.85%
-- Flow 1:
Average throughput: 231.04 Mbit/s
95th percentile per-packet one-way delay: 67.115 ms
Loss rate: 14.20%
-- Flow 2:
Average throughput: 66.91 Mbit/s
95th percentile per-packet one-way delay: 63.973 ms
Loss rate: 10.66%
-- Flow 3:
Average throughput: 106.25 Mbit/s
95th percentile per-packet one-way delay: 64.168 ms
Loss rate: 15.38%
```

Run 1: Report of FillP-Sheep — Data Link

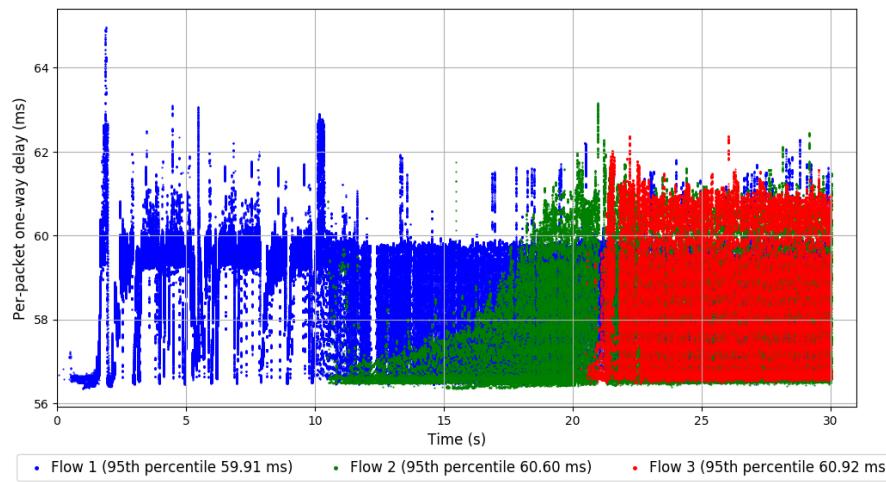
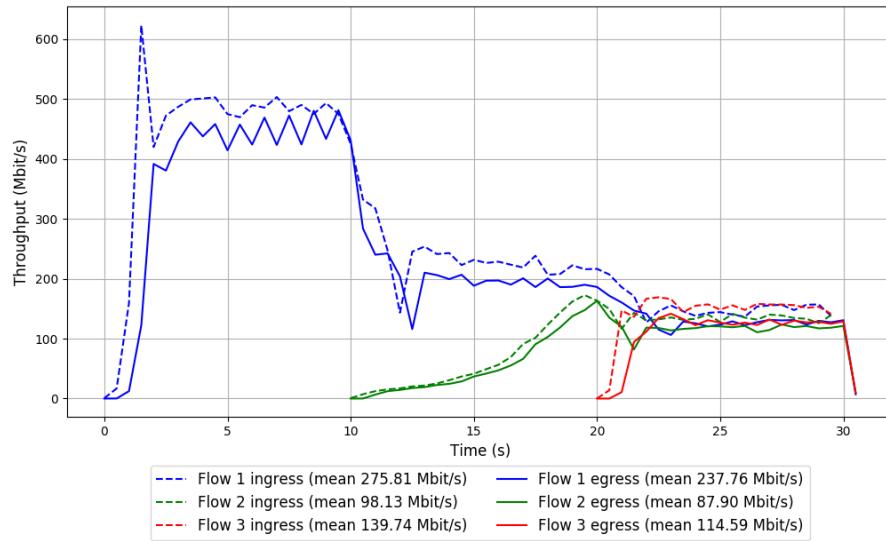


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-05-30 01:07:53
End at: 2019-05-30 01:08:23
Local clock offset: 0.43 ms
Remote clock offset: -40.346 ms

# Below is generated by plot.py at 2019-05-30 03:10:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.14 Mbit/s
95th percentile per-packet one-way delay: 60.493 ms
Loss rate: 13.73%
-- Flow 1:
Average throughput: 237.76 Mbit/s
95th percentile per-packet one-way delay: 59.914 ms
Loss rate: 13.80%
-- Flow 2:
Average throughput: 87.90 Mbit/s
95th percentile per-packet one-way delay: 60.596 ms
Loss rate: 10.44%
-- Flow 3:
Average throughput: 114.59 Mbit/s
95th percentile per-packet one-way delay: 60.925 ms
Loss rate: 18.00%
```

Run 2: Report of FillP-Sheep — Data Link

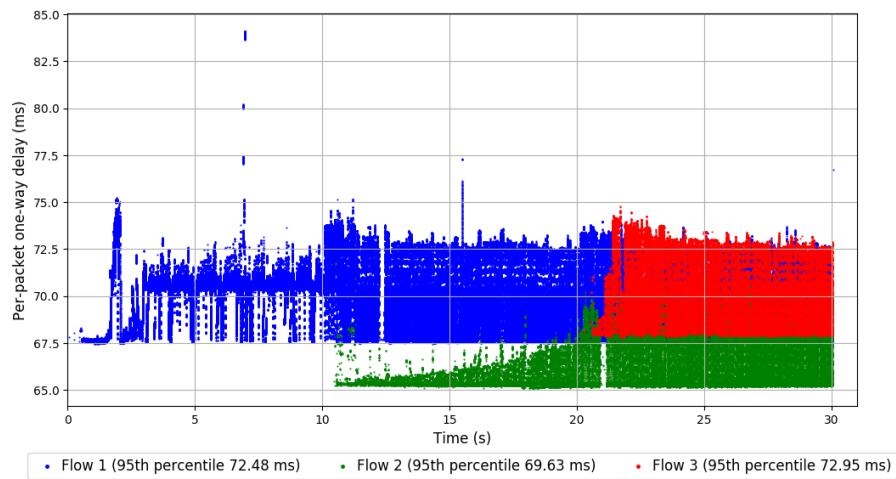
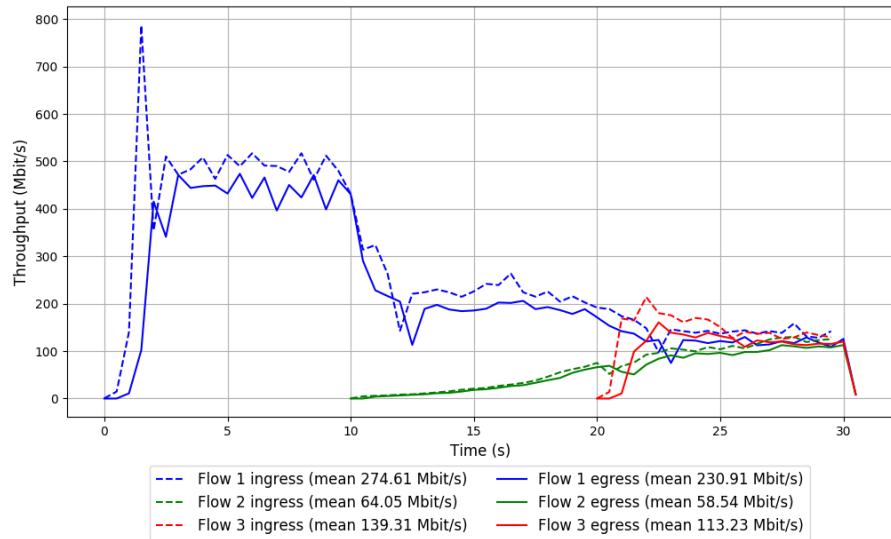


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-05-30 01:38:23
End at: 2019-05-30 01:38:53
Local clock offset: -0.622 ms
Remote clock offset: -35.135 ms

# Below is generated by plot.py at 2019-05-30 03:10:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.36 Mbit/s
95th percentile per-packet one-way delay: 72.514 ms
Loss rate: 15.39%
-- Flow 1:
Average throughput: 230.91 Mbit/s
95th percentile per-packet one-way delay: 72.481 ms
Loss rate: 15.89%
-- Flow 2:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 69.631 ms
Loss rate: 8.61%
-- Flow 3:
Average throughput: 113.23 Mbit/s
95th percentile per-packet one-way delay: 72.950 ms
Loss rate: 18.69%
```

Run 3: Report of FillP-Sheep — Data Link

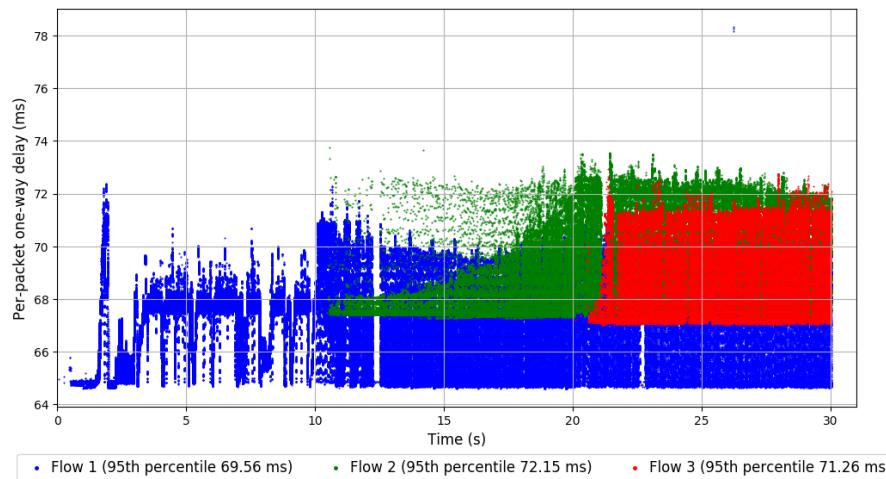
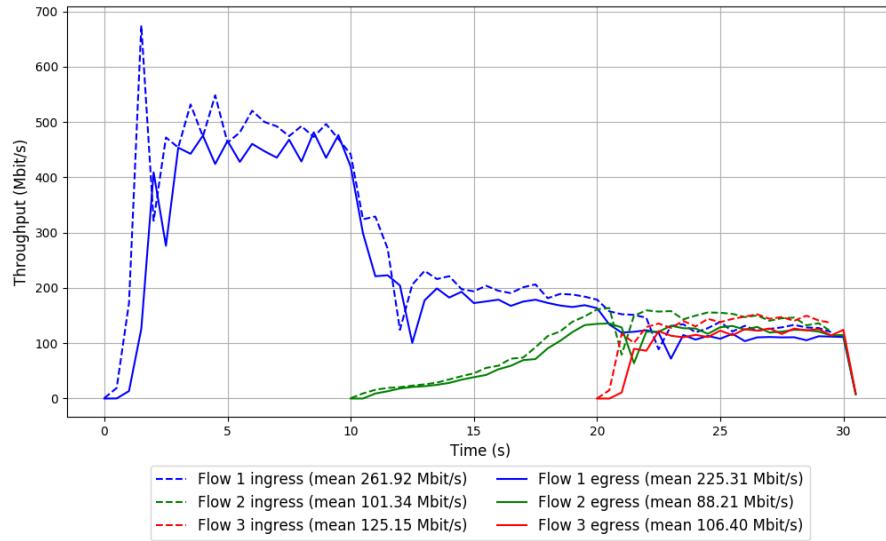


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-05-30 02:08:47
End at: 2019-05-30 02:09:17
Local clock offset: -1.388 ms
Remote clock offset: -36.355 ms

# Below is generated by plot.py at 2019-05-30 03:13:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.20 Mbit/s
95th percentile per-packet one-way delay: 71.100 ms
Loss rate: 13.90%
-- Flow 1:
Average throughput: 225.31 Mbit/s
95th percentile per-packet one-way delay: 69.559 ms
Loss rate: 13.98%
-- Flow 2:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 72.152 ms
Loss rate: 12.95%
-- Flow 3:
Average throughput: 106.40 Mbit/s
95th percentile per-packet one-way delay: 71.262 ms
Loss rate: 14.94%
```

Run 4: Report of FillP-Sheep — Data Link

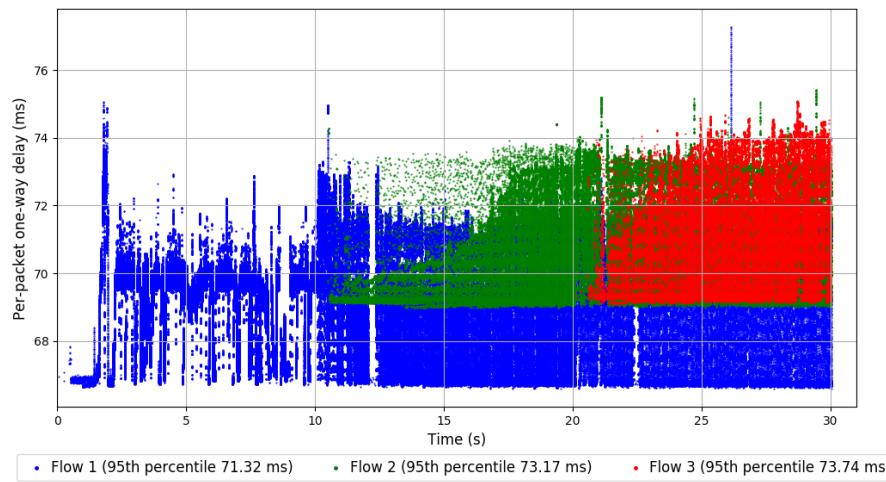
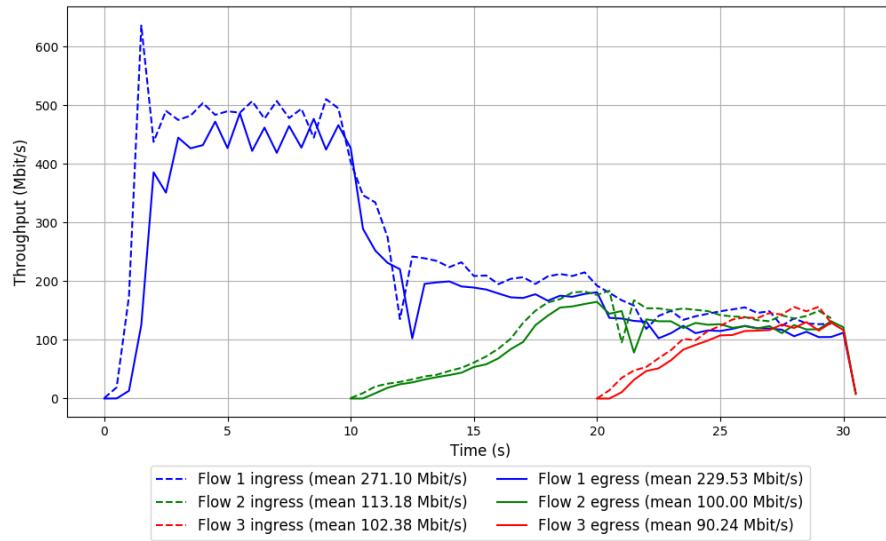


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-05-30 02:39:10
End at: 2019-05-30 02:39:40
Local clock offset: -9.386 ms
Remote clock offset: -41.476 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.92 Mbit/s
95th percentile per-packet one-way delay: 72.774 ms
Loss rate: 14.29%
-- Flow 1:
Average throughput: 229.53 Mbit/s
95th percentile per-packet one-way delay: 71.322 ms
Loss rate: 15.33%
-- Flow 2:
Average throughput: 100.00 Mbit/s
95th percentile per-packet one-way delay: 73.168 ms
Loss rate: 11.64%
-- Flow 3:
Average throughput: 90.24 Mbit/s
95th percentile per-packet one-way delay: 73.744 ms
Loss rate: 11.83%
```

Run 5: Report of FillP-Sheep — Data Link

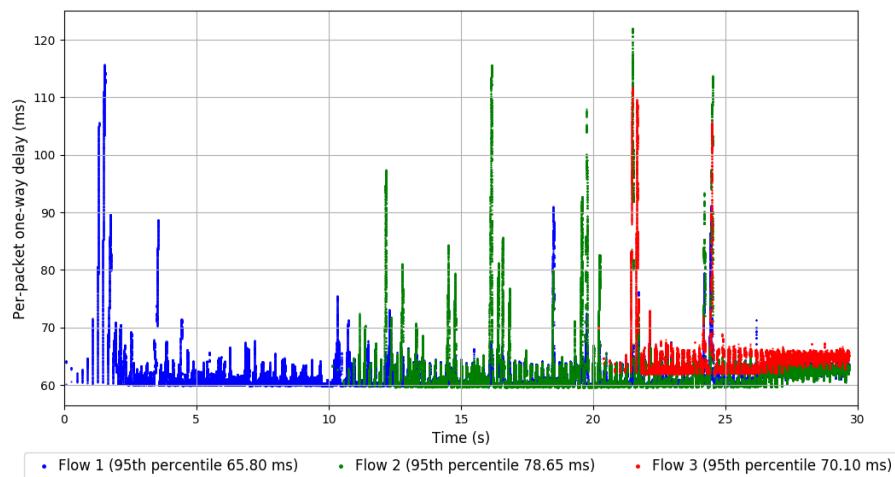
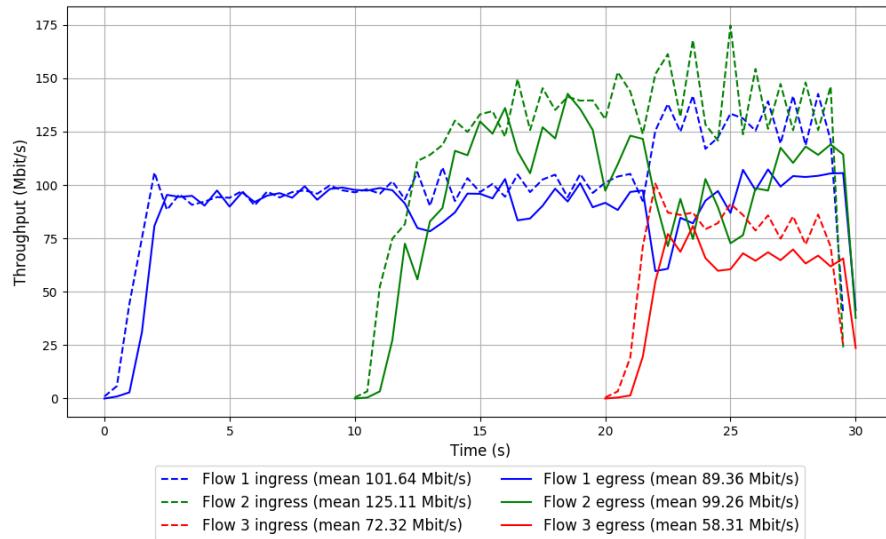


Run 1: Statistics of Indigo

```
Start at: 2019-05-30 00:40:29
End at: 2019-05-30 00:40:59
Local clock offset: -0.463 ms
Remote clock offset: -40.909 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.49 Mbit/s
95th percentile per-packet one-way delay: 70.390 ms
Loss rate: 16.30%
-- Flow 1:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 65.796 ms
Loss rate: 12.07%
-- Flow 2:
Average throughput: 99.26 Mbit/s
95th percentile per-packet one-way delay: 78.650 ms
Loss rate: 20.65%
-- Flow 3:
Average throughput: 58.31 Mbit/s
95th percentile per-packet one-way delay: 70.098 ms
Loss rate: 19.42%
```

Run 1: Report of Indigo — Data Link

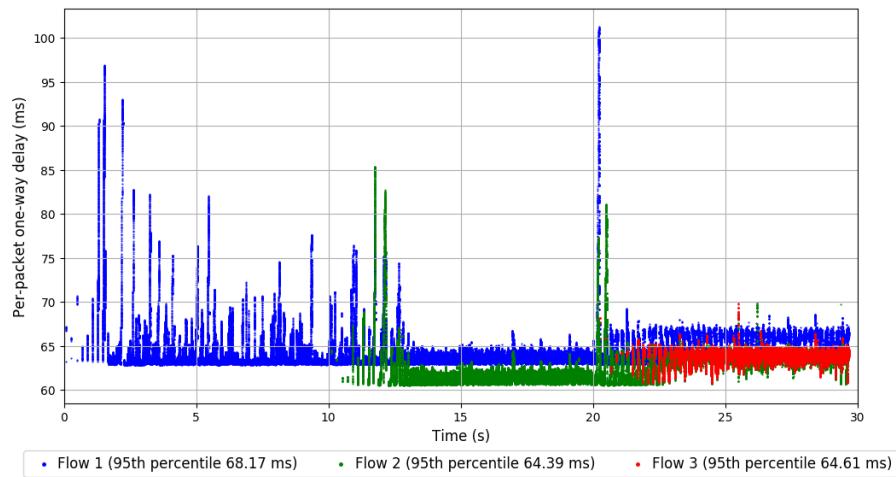
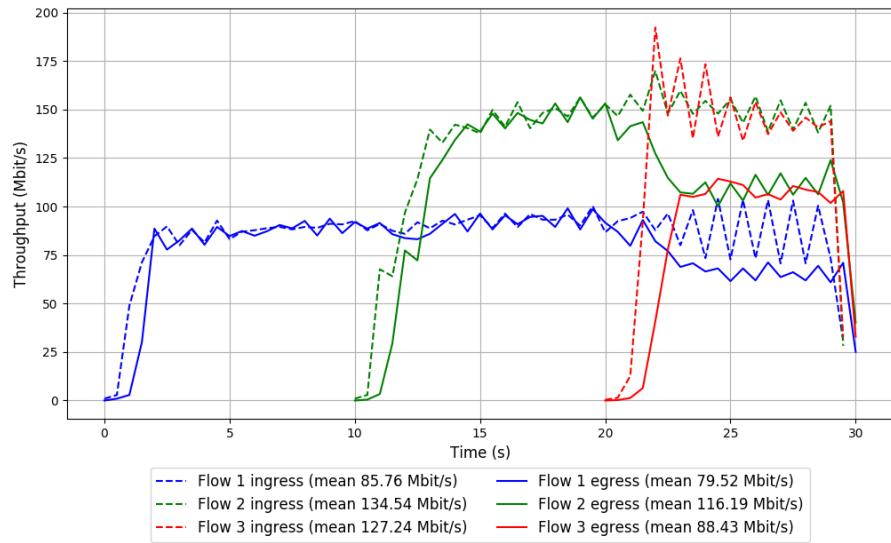


Run 2: Statistics of Indigo

```
Start at: 2019-05-30 01:10:59
End at: 2019-05-30 01:11:29
Local clock offset: -2.762 ms
Remote clock offset: -39.916 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.41 Mbit/s
95th percentile per-packet one-way delay: 66.541 ms
Loss rate: 14.28%
-- Flow 1:
Average throughput: 79.52 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 7.27%
-- Flow 2:
Average throughput: 116.19 Mbit/s
95th percentile per-packet one-way delay: 64.395 ms
Loss rate: 13.64%
-- Flow 3:
Average throughput: 88.43 Mbit/s
95th percentile per-packet one-way delay: 64.607 ms
Loss rate: 30.53%
```

Run 2: Report of Indigo — Data Link

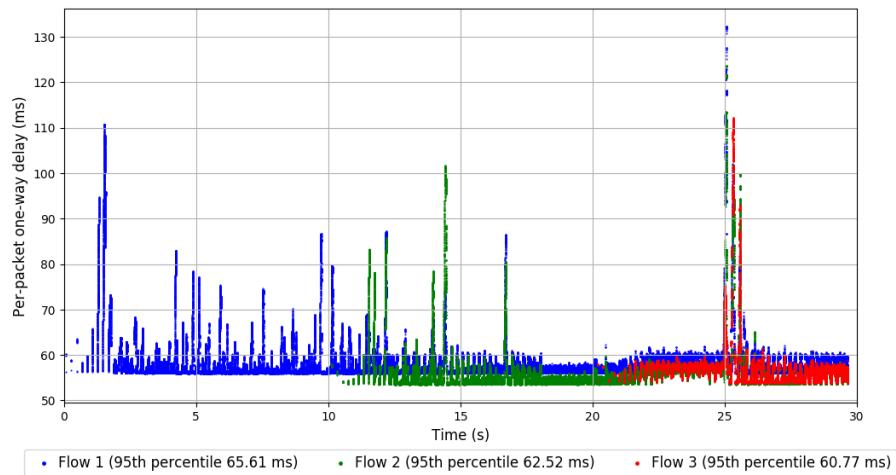
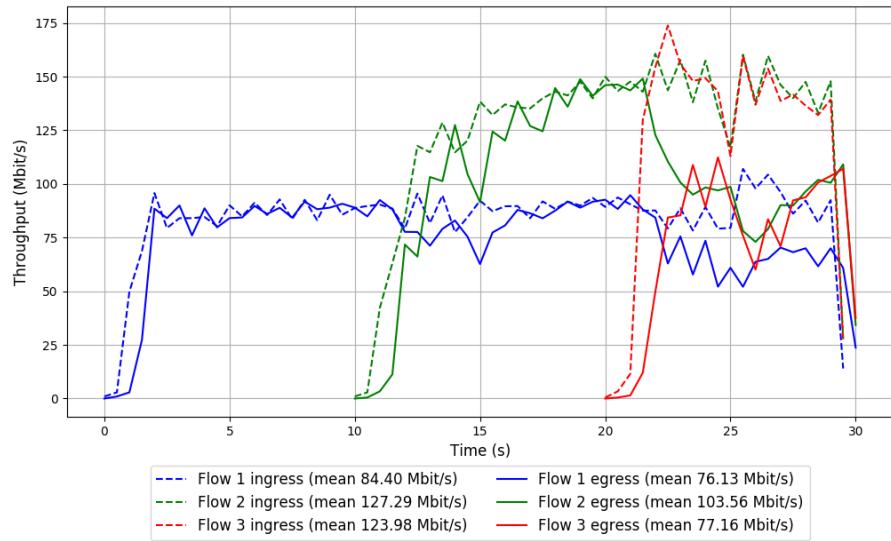


Run 3: Statistics of Indigo

```
Start at: 2019-05-30 01:41:27
End at: 2019-05-30 01:41:57
Local clock offset: -1.316 ms
Remote clock offset: -47.578 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 169.14 Mbit/s
95th percentile per-packet one-way delay: 64.730 ms
Loss rate: 18.69%
-- Flow 1:
Average throughput: 76.13 Mbit/s
95th percentile per-packet one-way delay: 65.614 ms
Loss rate: 9.80%
-- Flow 2:
Average throughput: 103.56 Mbit/s
95th percentile per-packet one-way delay: 62.524 ms
Loss rate: 18.64%
-- Flow 3:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 60.772 ms
Loss rate: 37.73%
```

Run 3: Report of Indigo — Data Link

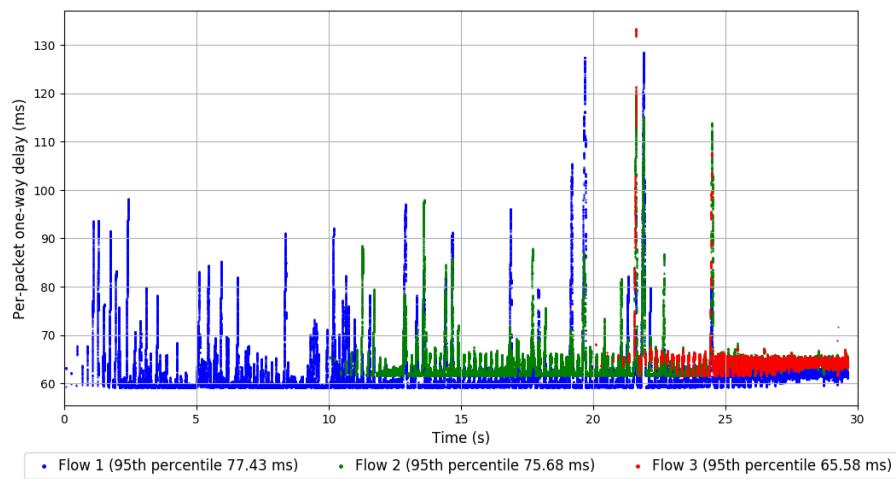
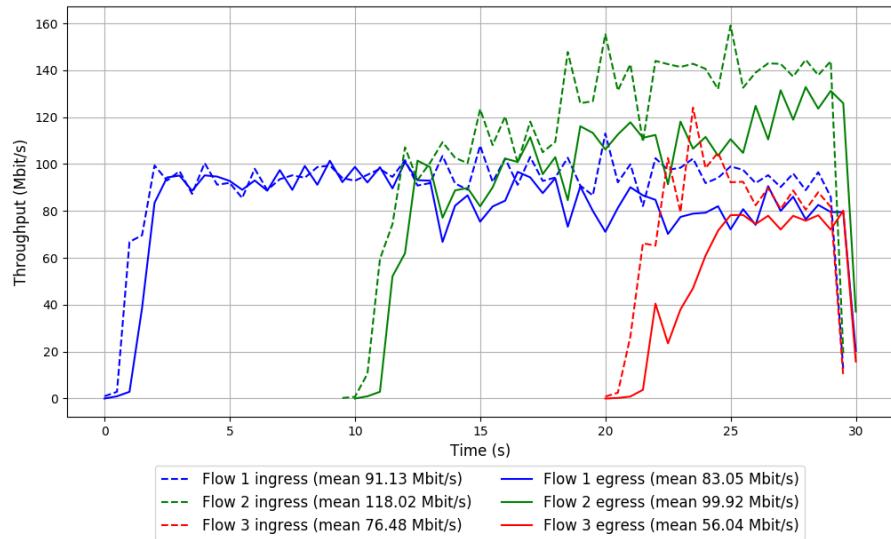


Run 4: Statistics of Indigo

```
Start at: 2019-05-30 02:11:54
End at: 2019-05-30 02:12:24
Local clock offset: 3.289 ms
Remote clock offset: -37.195 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.30 Mbit/s
95th percentile per-packet one-way delay: 75.706 ms
Loss rate: 13.74%
-- Flow 1:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 77.432 ms
Loss rate: 8.86%
-- Flow 2:
Average throughput: 99.92 Mbit/s
95th percentile per-packet one-way delay: 75.679 ms
Loss rate: 15.33%
-- Flow 3:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 65.580 ms
Loss rate: 26.72%
```

Run 4: Report of Indigo — Data Link

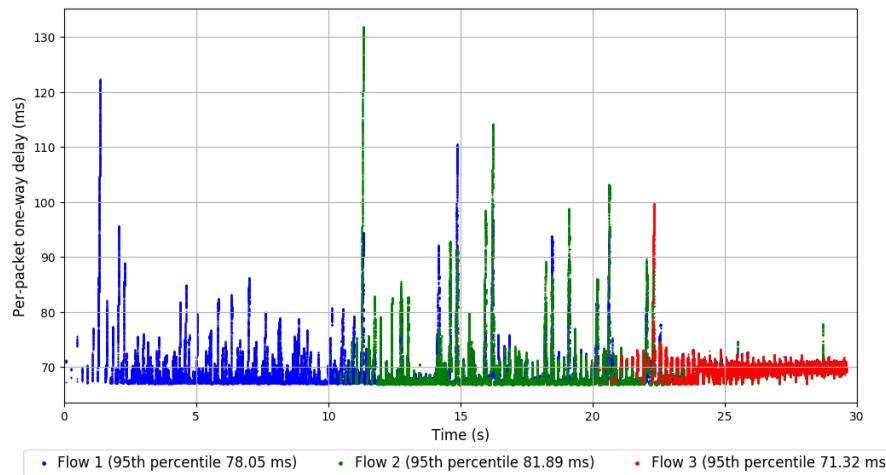
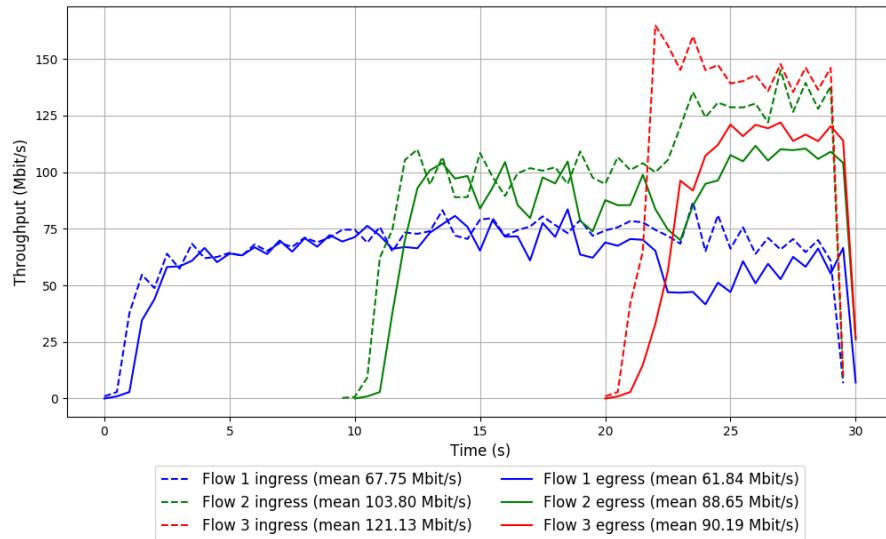


Run 5: Statistics of Indigo

```
Start at: 2019-05-30 02:42:17
End at: 2019-05-30 02:42:47
Local clock offset: -2.067 ms
Remote clock offset: -35.778 ms

# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.64 Mbit/s
95th percentile per-packet one-way delay: 77.970 ms
Loss rate: 14.77%
-- Flow 1:
Average throughput: 61.84 Mbit/s
95th percentile per-packet one-way delay: 78.050 ms
Loss rate: 8.73%
-- Flow 2:
Average throughput: 88.65 Mbit/s
95th percentile per-packet one-way delay: 81.887 ms
Loss rate: 14.61%
-- Flow 3:
Average throughput: 90.19 Mbit/s
95th percentile per-packet one-way delay: 71.320 ms
Loss rate: 25.53%
```

Run 5: Report of Indigo — Data Link

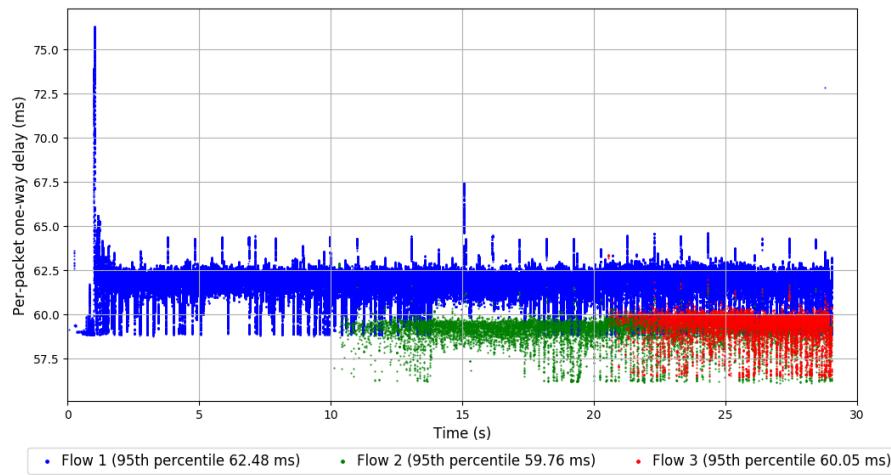
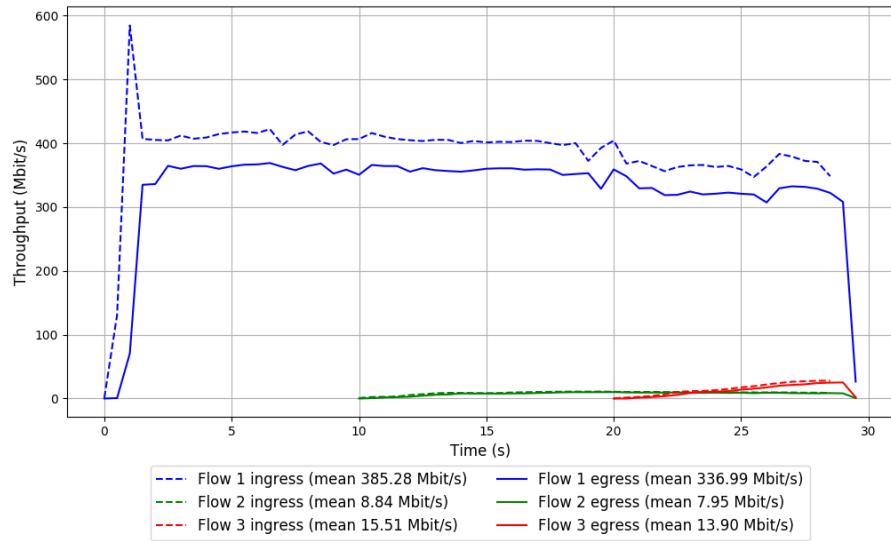


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-05-30 00:35:48
End at: 2019-05-30 00:36:18
Local clock offset: 5.749 ms
Remote clock offset: -39.337 ms

# Below is generated by plot.py at 2019-05-30 03:14:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.35 Mbit/s
95th percentile per-packet one-way delay: 62.476 ms
Loss rate: 12.46%
-- Flow 1:
Average throughput: 336.99 Mbit/s
95th percentile per-packet one-way delay: 62.482 ms
Loss rate: 12.52%
-- Flow 2:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 59.758 ms
Loss rate: 10.03%
-- Flow 3:
Average throughput: 13.90 Mbit/s
95th percentile per-packet one-way delay: 60.052 ms
Loss rate: 10.38%
```

Run 1: Report of Indigo-MusesC3 — Data Link

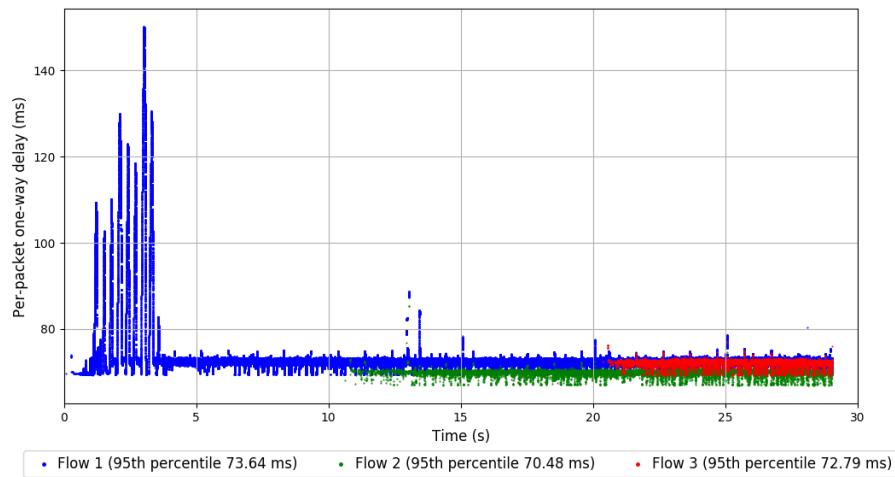
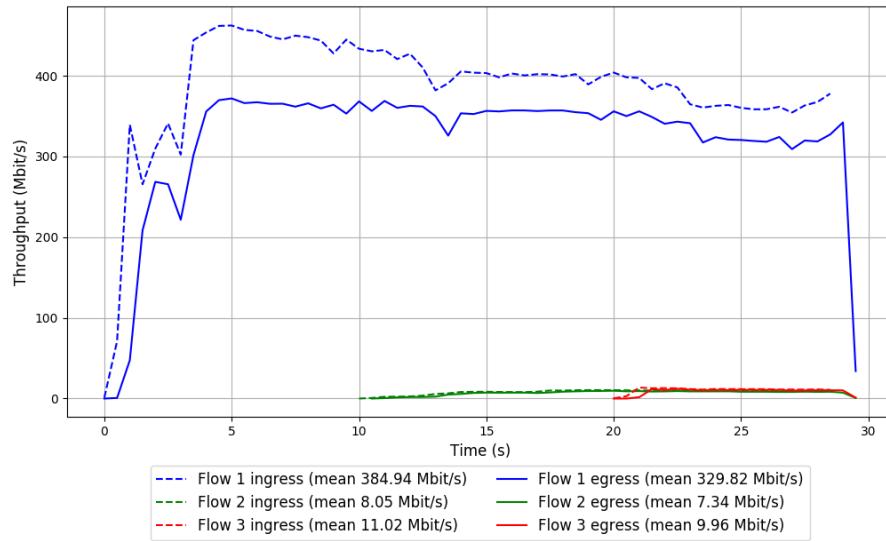


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 01:06:18
End at: 2019-05-30 01:06:48
Local clock offset: -3.874 ms
Remote clock offset: -34.307 ms

# Below is generated by plot.py at 2019-05-30 03:15:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.43 Mbit/s
95th percentile per-packet one-way delay: 73.556 ms
Loss rate: 14.24%
-- Flow 1:
Average throughput: 329.82 Mbit/s
95th percentile per-packet one-way delay: 73.636 ms
Loss rate: 14.32%
-- Flow 2:
Average throughput: 7.34 Mbit/s
95th percentile per-packet one-way delay: 70.485 ms
Loss rate: 11.25%
-- Flow 3:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 72.787 ms
Loss rate: 9.67%
```

Run 2: Report of Indigo-MusesC3 — Data Link

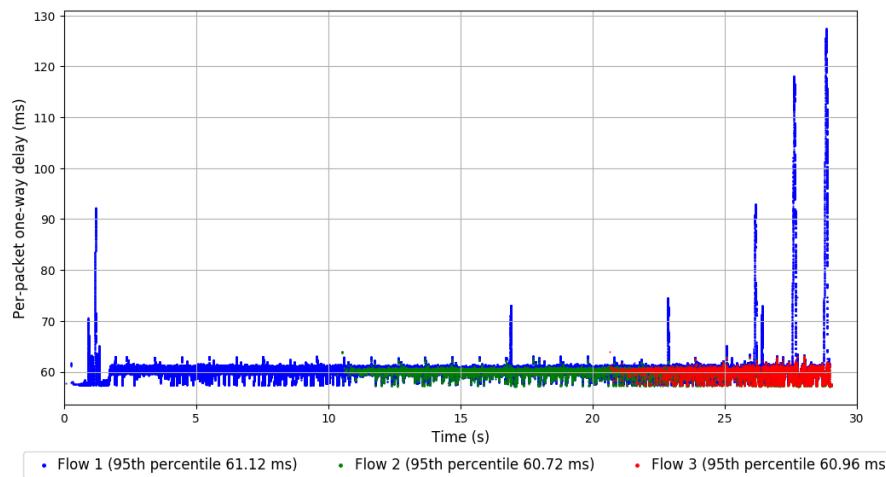
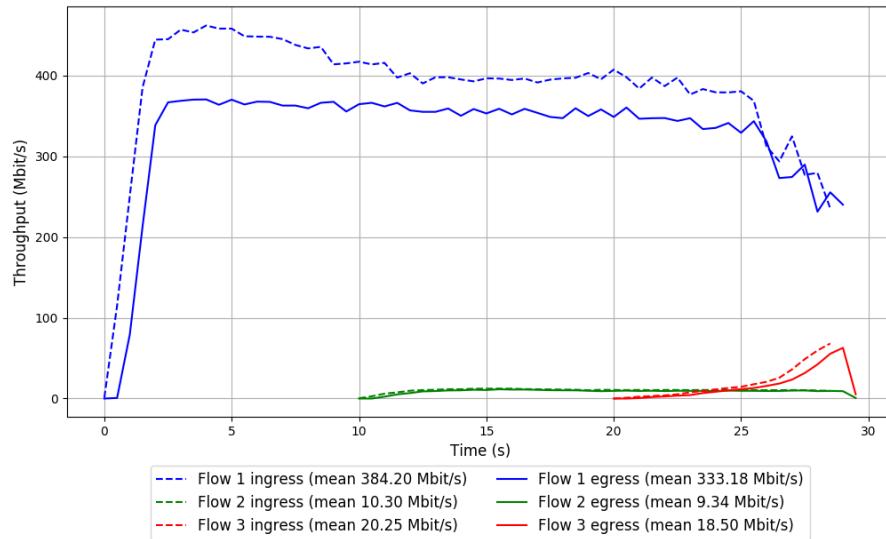


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 01:36:48
End at: 2019-05-30 01:37:18
Local clock offset: -2.13 ms
Remote clock offset: -47.097 ms

# Below is generated by plot.py at 2019-05-30 03:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.84 Mbit/s
95th percentile per-packet one-way delay: 61.112 ms
Loss rate: 13.13%
-- Flow 1:
Average throughput: 333.18 Mbit/s
95th percentile per-packet one-way delay: 61.119 ms
Loss rate: 13.27%
-- Flow 2:
Average throughput: 9.34 Mbit/s
95th percentile per-packet one-way delay: 60.722 ms
Loss rate: 9.26%
-- Flow 3:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 60.964 ms
Loss rate: 8.70%
```

Run 3: Report of Indigo-MusesC3 — Data Link

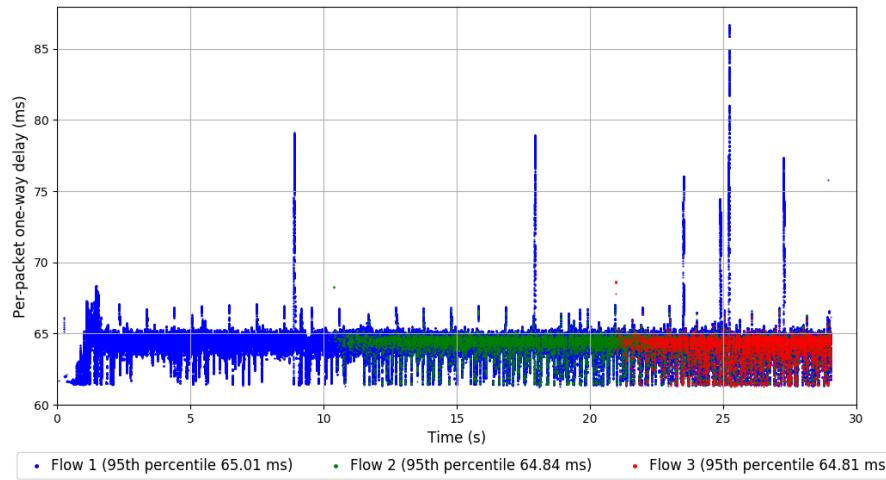
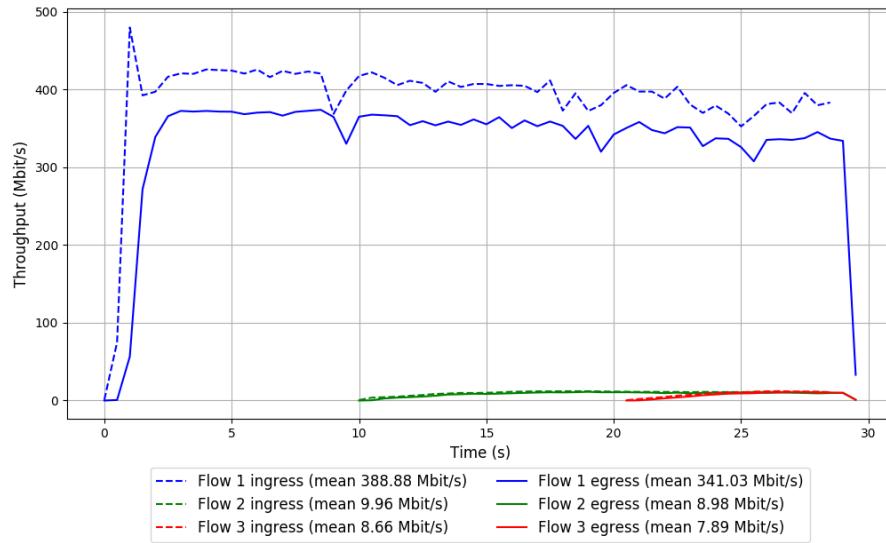


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 02:07:12
End at: 2019-05-30 02:07:42
Local clock offset: 3.391 ms
Remote clock offset: -37.595 ms

# Below is generated by plot.py at 2019-05-30 03:15:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.09 Mbit/s
95th percentile per-packet one-way delay: 65.008 ms
Loss rate: 12.24%
-- Flow 1:
Average throughput: 341.03 Mbit/s
95th percentile per-packet one-way delay: 65.012 ms
Loss rate: 12.31%
-- Flow 2:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 64.845 ms
Loss rate: 9.83%
-- Flow 3:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 64.811 ms
Loss rate: 8.85%
```

Run 4: Report of Indigo-MusesC3 — Data Link

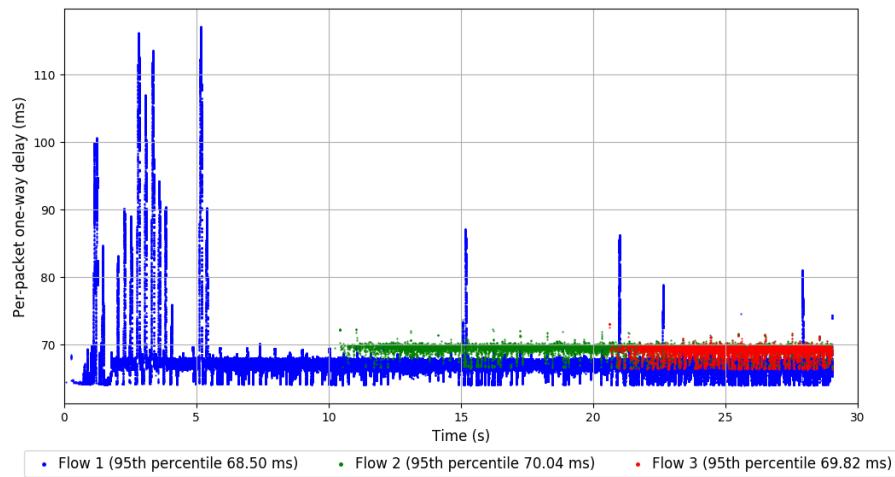
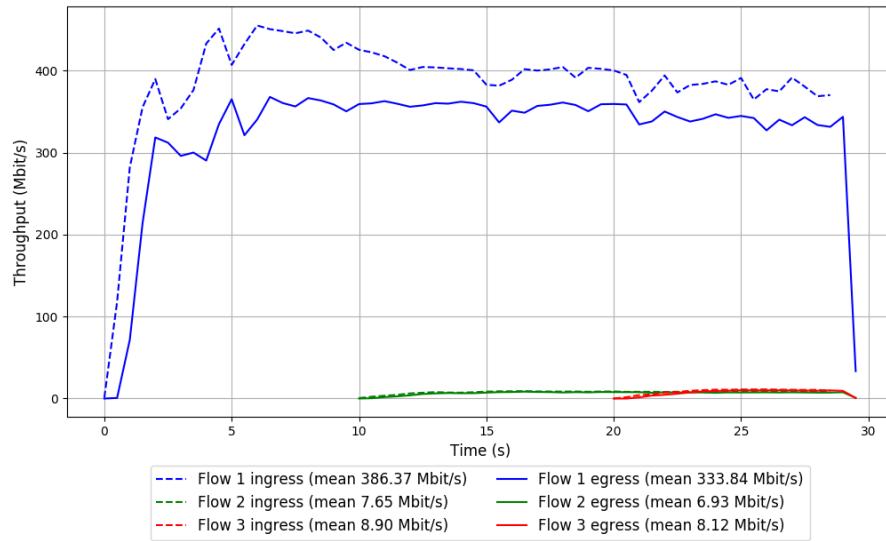


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 02:37:34
End at: 2019-05-30 02:38:04
Local clock offset: -1.76 ms
Remote clock offset: -36.802 ms

# Below is generated by plot.py at 2019-05-30 03:15:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.75 Mbit/s
95th percentile per-packet one-way delay: 69.520 ms
Loss rate: 13.50%
-- Flow 1:
Average throughput: 333.84 Mbit/s
95th percentile per-packet one-way delay: 68.499 ms
Loss rate: 13.59%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 70.044 ms
Loss rate: 9.39%
-- Flow 3:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 69.818 ms
Loss rate: 8.77%
```

Run 5: Report of Indigo-MusesC3 — Data Link

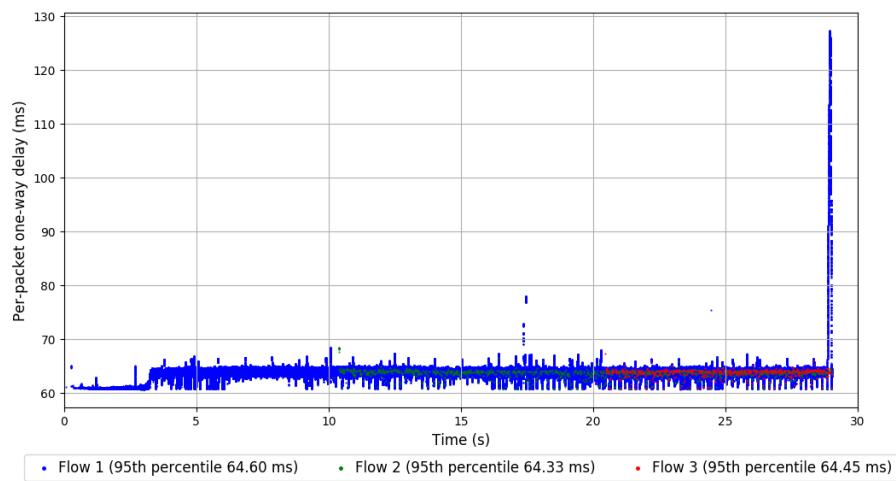
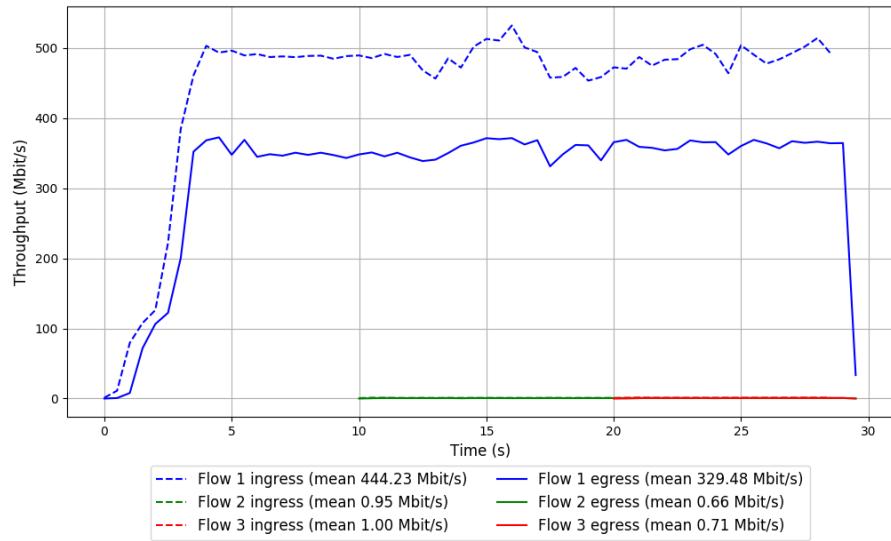


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-05-30 00:34:15
End at: 2019-05-30 00:34:45
Local clock offset: 6.097 ms
Remote clock offset: -34.71 ms

# Below is generated by plot.py at 2019-05-30 03:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.13 Mbit/s
95th percentile per-packet one-way delay: 64.599 ms
Loss rate: 25.83%
-- Flow 1:
Average throughput: 329.48 Mbit/s
95th percentile per-packet one-way delay: 64.599 ms
Loss rate: 25.82%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 64.326 ms
Loss rate: 30.32%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 64.453 ms
Loss rate: 29.71%
```

Run 1: Report of Indigo-MusesC5 — Data Link

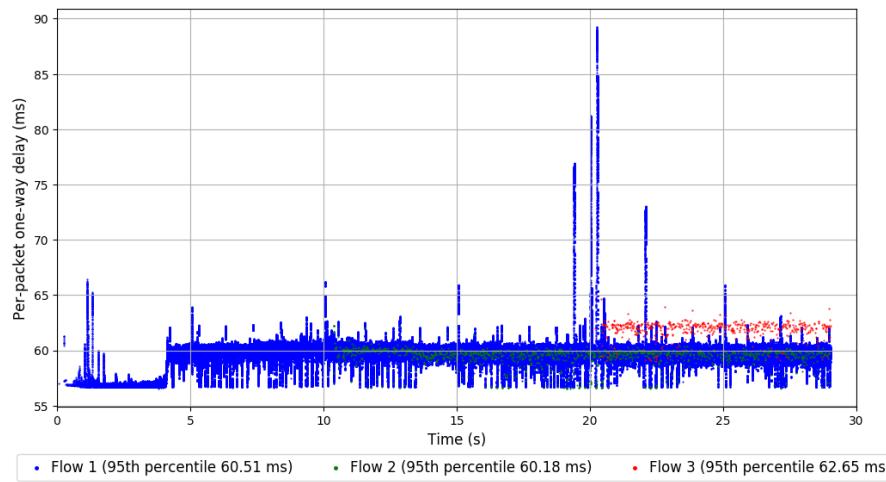
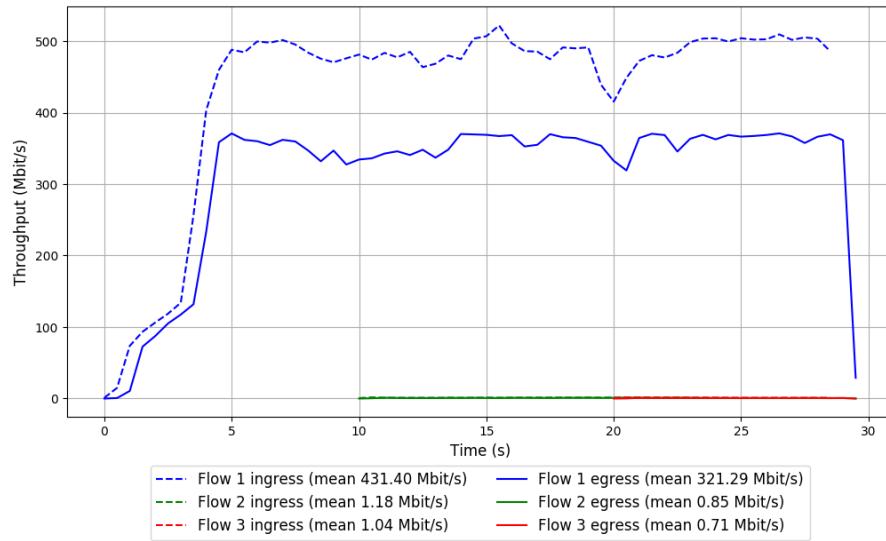


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 01:04:44
End at: 2019-05-30 01:05:14
Local clock offset: 1.484 ms
Remote clock offset: -39.175 ms

# Below is generated by plot.py at 2019-05-30 03:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.06 Mbit/s
95th percentile per-packet one-way delay: 60.517 ms
Loss rate: 25.53%
-- Flow 1:
Average throughput: 321.29 Mbit/s
95th percentile per-packet one-way delay: 60.513 ms
Loss rate: 25.52%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 60.180 ms
Loss rate: 28.06%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 62.646 ms
Loss rate: 31.68%
```

Run 2: Report of Indigo-MusesC5 — Data Link

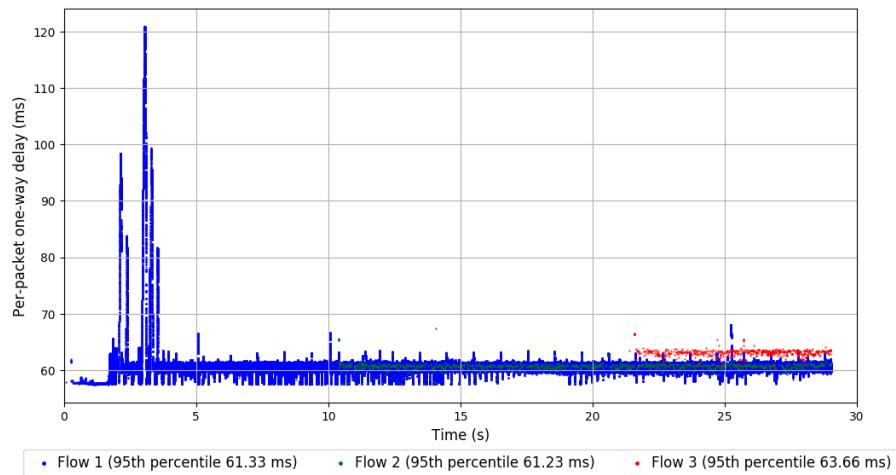
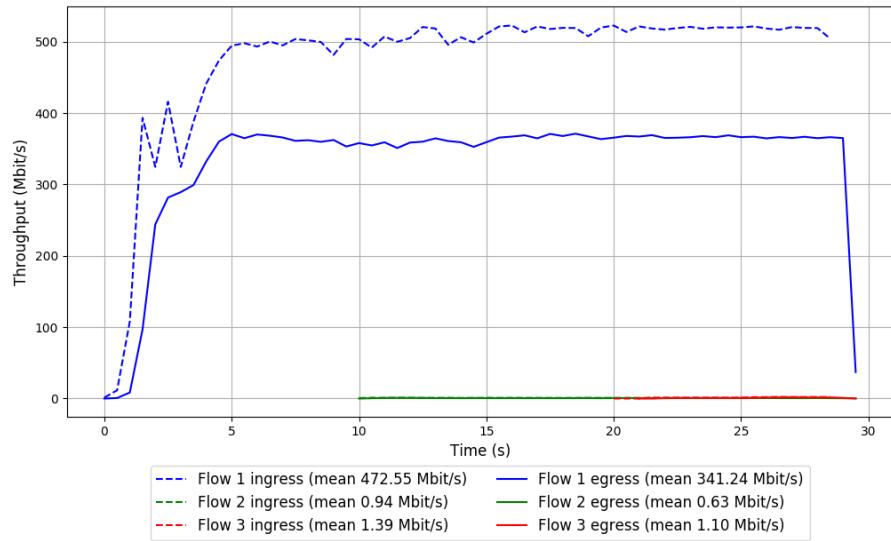


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 01:35:14
End at: 2019-05-30 01:35:44
Local clock offset: -1.776 ms
Remote clock offset: -43.798 ms

# Below is generated by plot.py at 2019-05-30 03:18:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.94 Mbit/s
95th percentile per-packet one-way delay: 61.335 ms
Loss rate: 27.79%
-- Flow 1:
Average throughput: 341.24 Mbit/s
95th percentile per-packet one-way delay: 61.330 ms
Loss rate: 27.78%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 61.228 ms
Loss rate: 32.72%
-- Flow 3:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 63.661 ms
Loss rate: 30.59%
```

Run 3: Report of Indigo-MusesC5 — Data Link

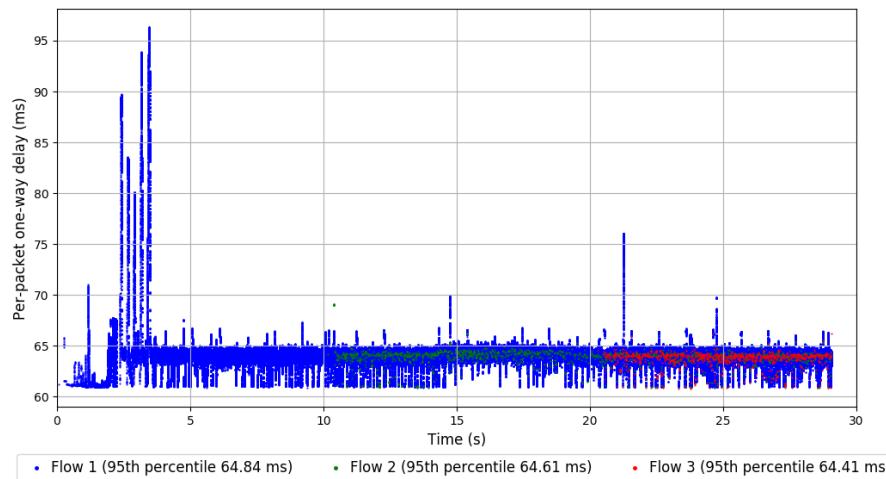
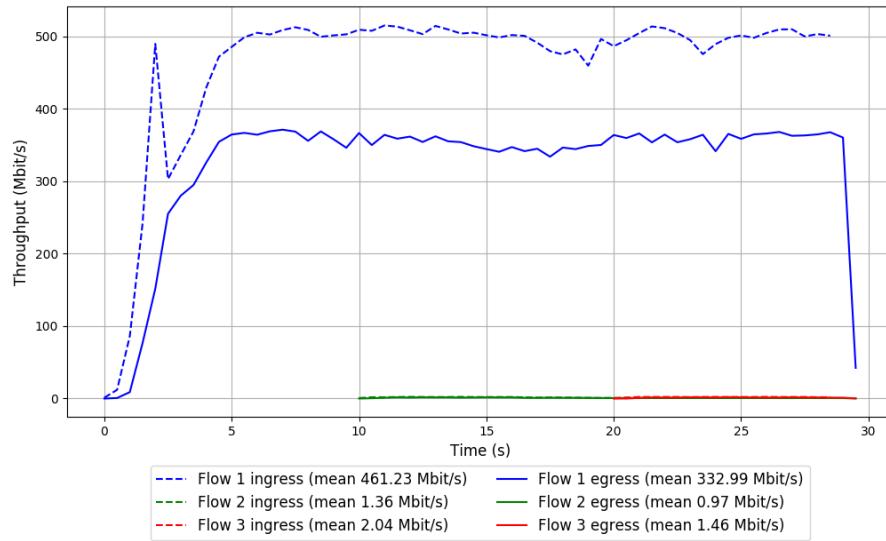


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 02:05:38
End at: 2019-05-30 02:06:08
Local clock offset: -2.357 ms
Remote clock offset: -43.876 ms

# Below is generated by plot.py at 2019-05-30 03:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.02 Mbit/s
95th percentile per-packet one-way delay: 64.835 ms
Loss rate: 27.81%
-- Flow 1:
Average throughput: 332.99 Mbit/s
95th percentile per-packet one-way delay: 64.836 ms
Loss rate: 27.81%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 64.610 ms
Loss rate: 28.95%
-- Flow 3:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 64.413 ms
Loss rate: 28.65%
```

Run 4: Report of Indigo-MusesC5 — Data Link

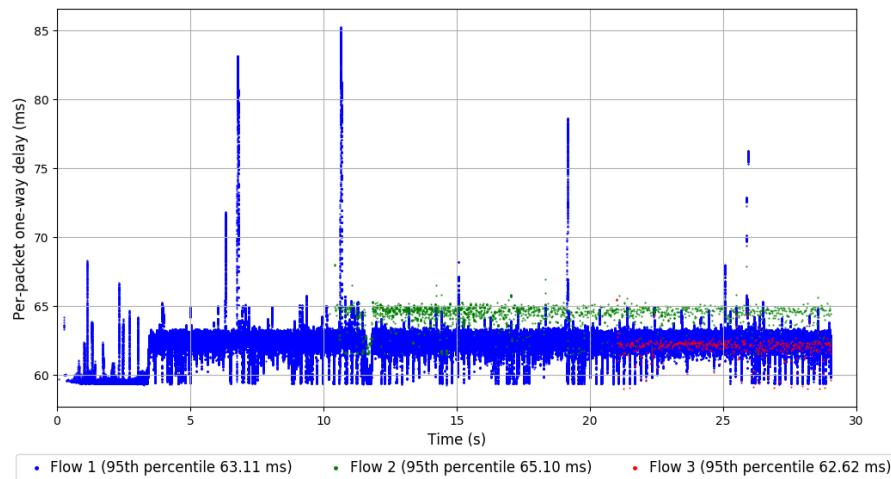
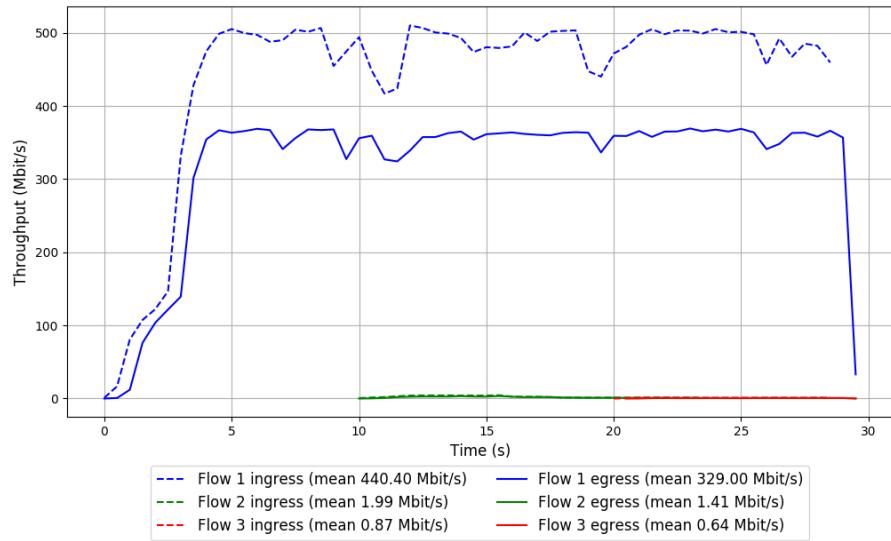


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 02:36:01
End at: 2019-05-30 02:36:31
Local clock offset: 3.689 ms
Remote clock offset: -36.521 ms

# Below is generated by plot.py at 2019-05-30 03:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.09 Mbit/s
95th percentile per-packet one-way delay: 63.121 ms
Loss rate: 25.31%
-- Flow 1:
Average throughput: 329.00 Mbit/s
95th percentile per-packet one-way delay: 63.108 ms
Loss rate: 25.30%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 65.096 ms
Loss rate: 28.95%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 62.623 ms
Loss rate: 31.20%
```

Run 5: Report of Indigo-MusesC5 — Data Link

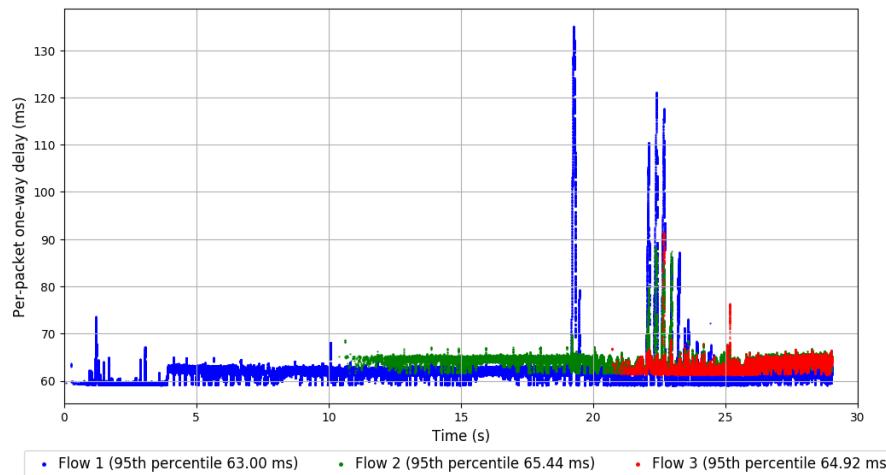
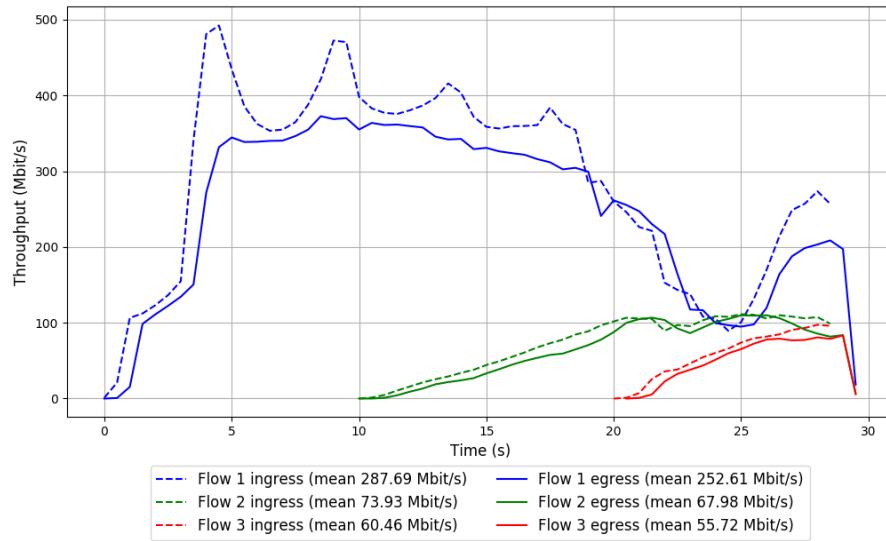


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 00:44:50
End at: 2019-05-30 00:45:20
Local clock offset: 2.734 ms
Remote clock offset: -37.078 ms

# Below is generated by plot.py at 2019-05-30 03:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.72 Mbit/s
95th percentile per-packet one-way delay: 64.884 ms
Loss rate: 11.41%
-- Flow 1:
Average throughput: 252.61 Mbit/s
95th percentile per-packet one-way delay: 62.997 ms
Loss rate: 12.19%
-- Flow 2:
Average throughput: 67.98 Mbit/s
95th percentile per-packet one-way delay: 65.444 ms
Loss rate: 8.06%
-- Flow 3:
Average throughput: 55.72 Mbit/s
95th percentile per-packet one-way delay: 64.922 ms
Loss rate: 7.82%
```

Run 1: Report of Indigo-MusesD — Data Link

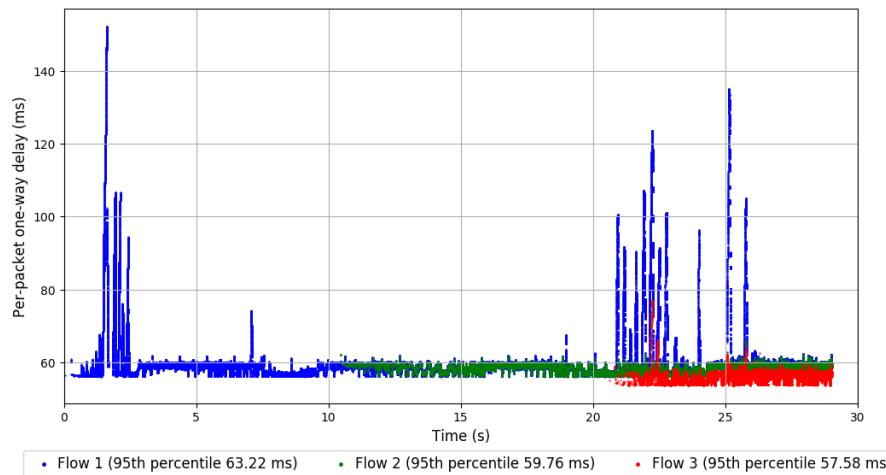
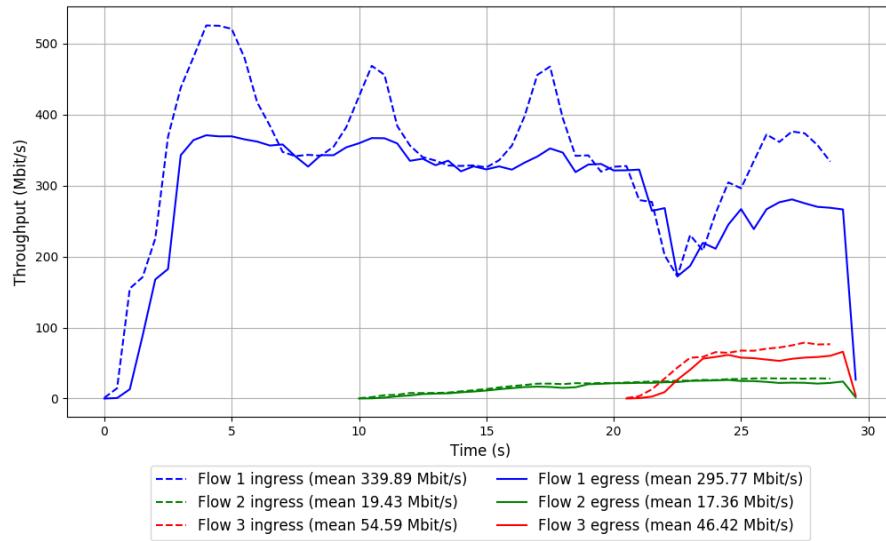


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 01:15:17
End at: 2019-05-30 01:15:47
Local clock offset: 2.578 ms
Remote clock offset: -41.799 ms

# Below is generated by plot.py at 2019-05-30 03:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.48 Mbit/s
95th percentile per-packet one-way delay: 61.665 ms
Loss rate: 12.98%
-- Flow 1:
Average throughput: 295.77 Mbit/s
95th percentile per-packet one-way delay: 63.216 ms
Loss rate: 12.97%
-- Flow 2:
Average throughput: 17.36 Mbit/s
95th percentile per-packet one-way delay: 59.757 ms
Loss rate: 10.64%
-- Flow 3:
Average throughput: 46.42 Mbit/s
95th percentile per-packet one-way delay: 57.576 ms
Loss rate: 14.96%
```

Run 2: Report of Indigo-MusesD — Data Link

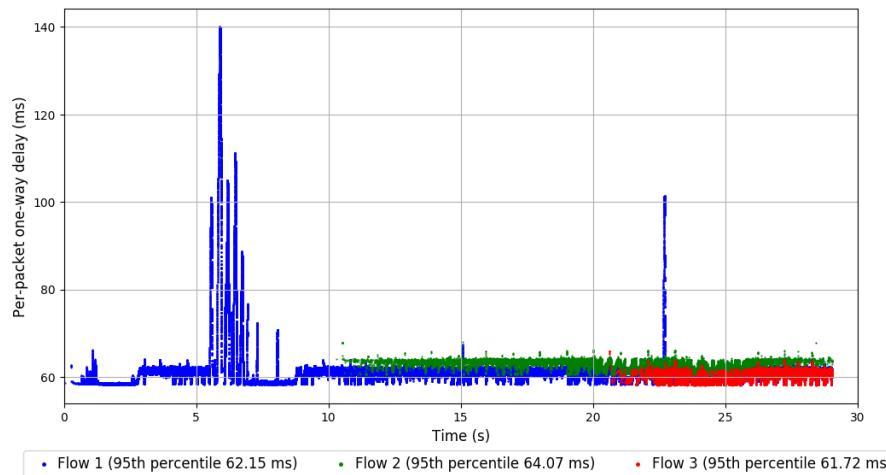
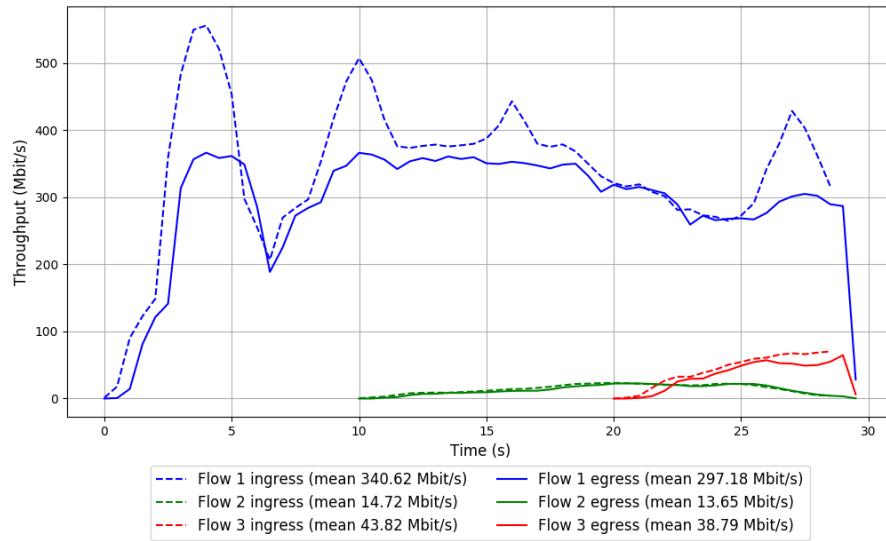


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 01:45:45
End at: 2019-05-30 01:46:15
Local clock offset: -1.633 ms
Remote clock offset: -43.625 ms

# Below is generated by plot.py at 2019-05-30 03:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.55 Mbit/s
95th percentile per-packet one-way delay: 62.824 ms
Loss rate: 12.56%
-- Flow 1:
Average throughput: 297.18 Mbit/s
95th percentile per-packet one-way delay: 62.147 ms
Loss rate: 12.75%
-- Flow 2:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 64.073 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 38.79 Mbit/s
95th percentile per-packet one-way delay: 61.717 ms
Loss rate: 11.47%
```

Run 3: Report of Indigo-MusesD — Data Link

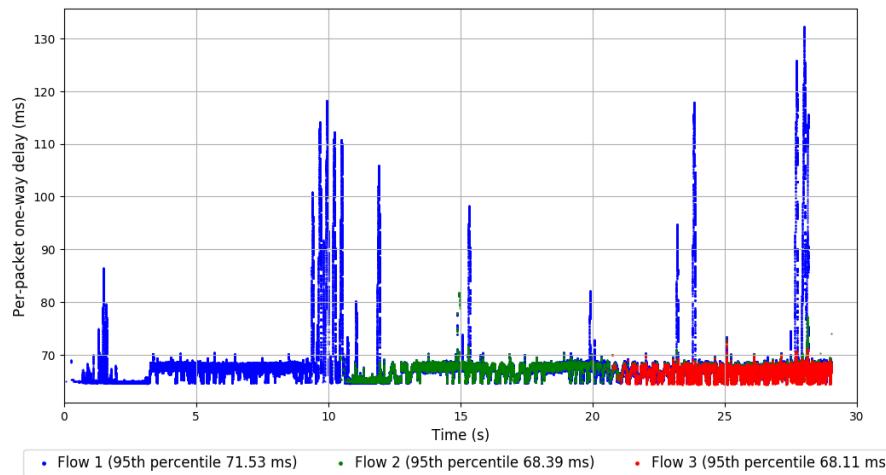
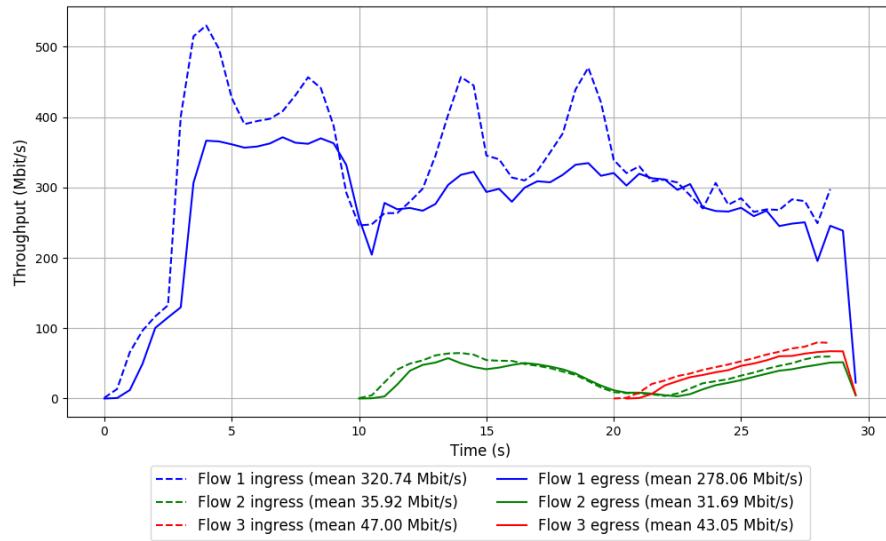


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 02:16:13
End at: 2019-05-30 02:16:43
Local clock offset: 2.361 ms
Remote clock offset: -35.001 ms

# Below is generated by plot.py at 2019-05-30 03:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.20 Mbit/s
95th percentile per-packet one-way delay: 69.842 ms
Loss rate: 13.01%
-- Flow 1:
Average throughput: 278.06 Mbit/s
95th percentile per-packet one-way delay: 71.525 ms
Loss rate: 13.30%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 68.385 ms
Loss rate: 11.77%
-- Flow 3:
Average throughput: 43.05 Mbit/s
95th percentile per-packet one-way delay: 68.113 ms
Loss rate: 8.42%
```

Run 4: Report of Indigo-MusesD — Data Link

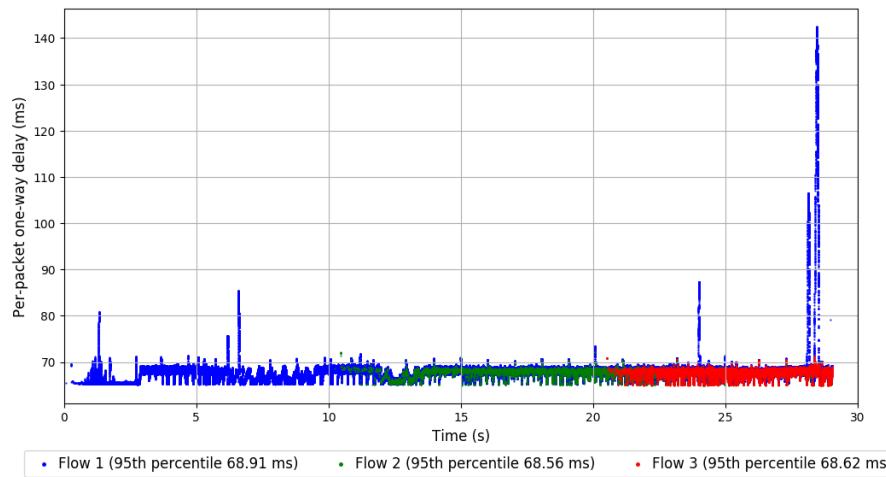
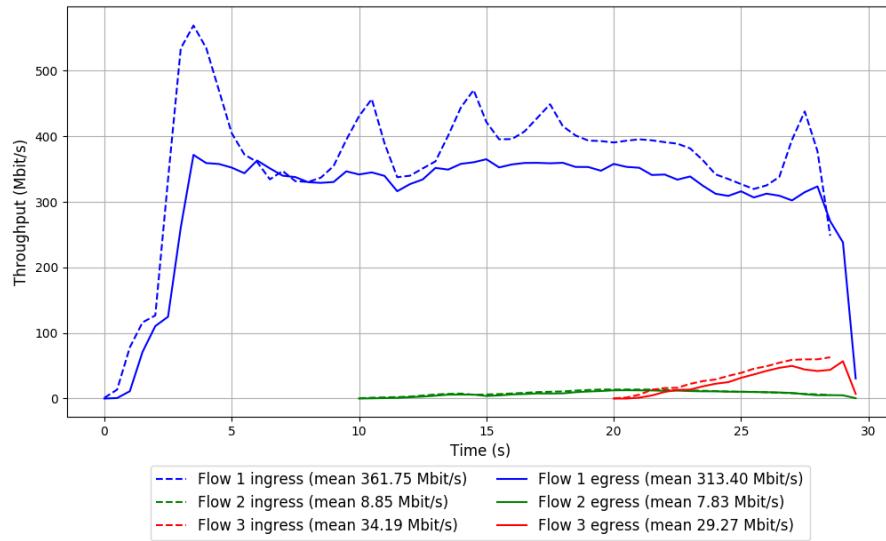


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 02:46:34
End at: 2019-05-30 02:47:04
Local clock offset: -2.674 ms
Remote clock offset: -37.818 ms

# Below is generated by plot.py at 2019-05-30 03:21:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.29 Mbit/s
95th percentile per-packet one-way delay: 68.899 ms
Loss rate: 13.36%
-- Flow 1:
Average throughput: 313.40 Mbit/s
95th percentile per-packet one-way delay: 68.907 ms
Loss rate: 13.36%
-- Flow 2:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 68.560 ms
Loss rate: 11.58%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 68.622 ms
Loss rate: 14.37%
```

Run 5: Report of Indigo-MusesD — Data Link

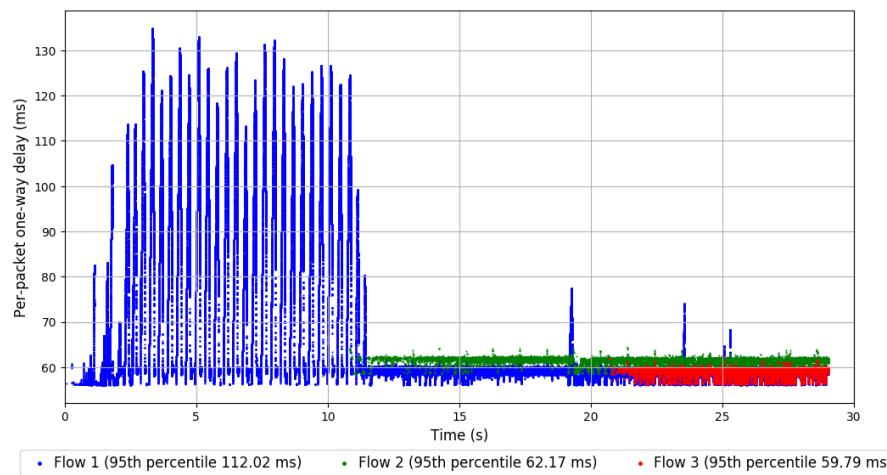
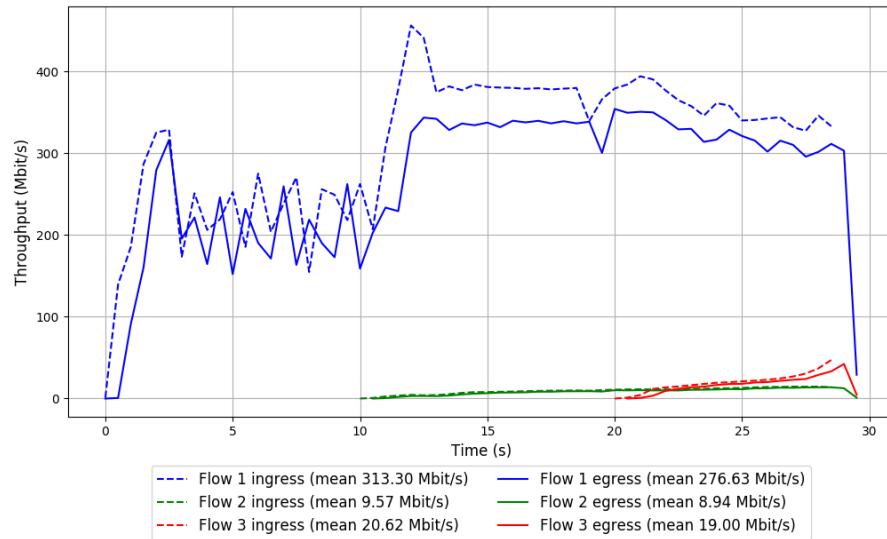


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 00:27:01
End at: 2019-05-30 00:27:31
Local clock offset: 4.119 ms
Remote clock offset: -40.748 ms

# Below is generated by plot.py at 2019-05-30 03:21:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.89 Mbit/s
95th percentile per-packet one-way delay: 111.376 ms
Loss rate: 11.57%
-- Flow 1:
Average throughput: 276.63 Mbit/s
95th percentile per-packet one-way delay: 112.018 ms
Loss rate: 11.70%
-- Flow 2:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 62.170 ms
Loss rate: 9.04%
-- Flow 3:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 59.792 ms
Loss rate: 7.92%
```

Run 1: Report of Indigo-MusesT — Data Link

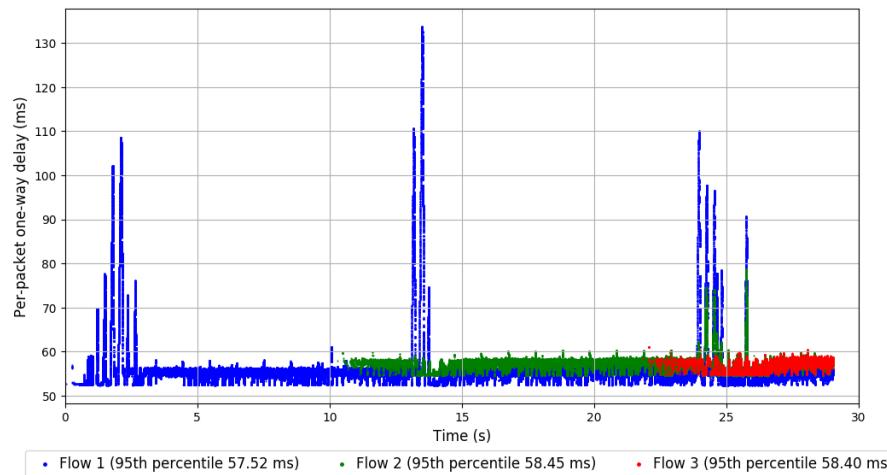
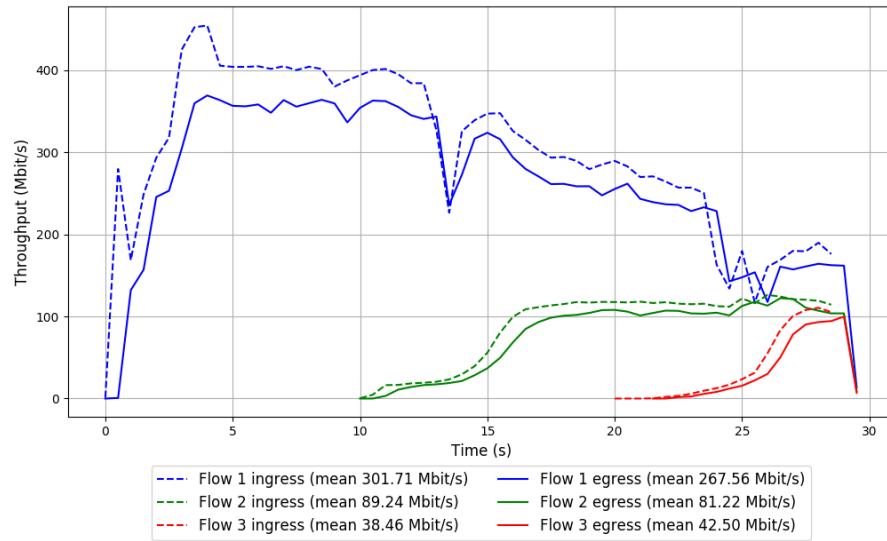


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 00:57:26
End at: 2019-05-30 00:57:56
Local clock offset: 1.347 ms
Remote clock offset: -43.84 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.59 Mbit/s
95th percentile per-packet one-way delay: 58.297 ms
Loss rate: 10.87%
-- Flow 1:
Average throughput: 267.56 Mbit/s
95th percentile per-packet one-way delay: 57.516 ms
Loss rate: 11.31%
-- Flow 2:
Average throughput: 81.22 Mbit/s
95th percentile per-packet one-way delay: 58.454 ms
Loss rate: 8.98%
-- Flow 3:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 58.398 ms
Loss rate: 8.62%
```

Run 2: Report of Indigo-MusesT — Data Link

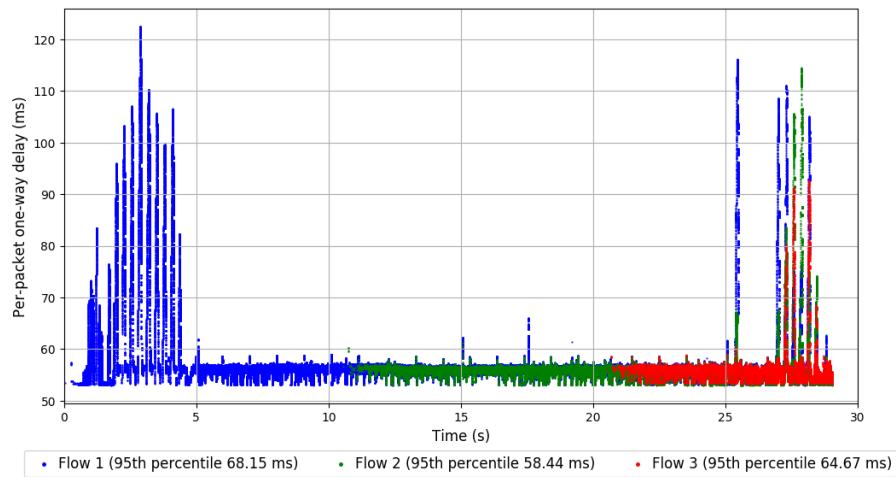
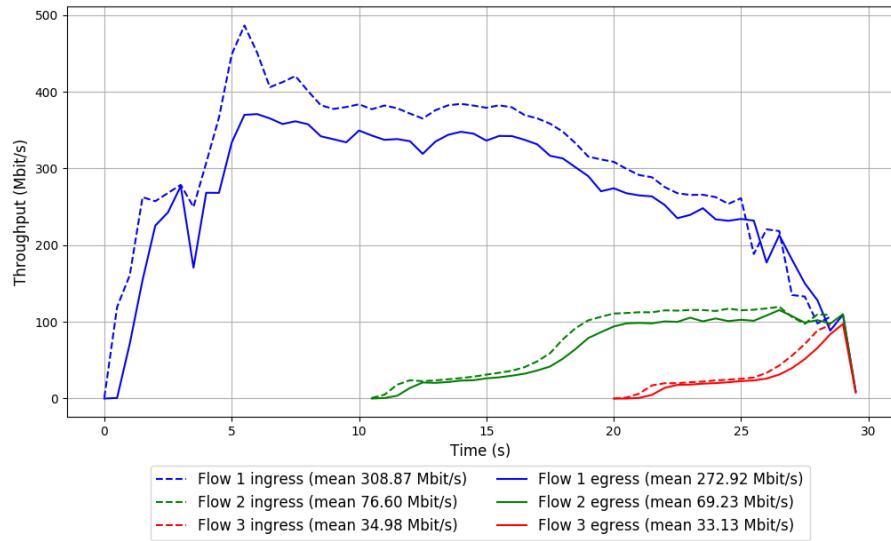


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 01:27:58
End at: 2019-05-30 01:28:28
Local clock offset: 3.322 ms
Remote clock offset: -42.337 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.82 Mbit/s
95th percentile per-packet one-way delay: 65.666 ms
Loss rate: 11.19%
-- Flow 1:
Average throughput: 272.92 Mbit/s
95th percentile per-packet one-way delay: 68.147 ms
Loss rate: 11.63%
-- Flow 2:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 58.443 ms
Loss rate: 9.63%
-- Flow 3:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 64.673 ms
Loss rate: 5.33%
```

Run 3: Report of Indigo-MusesT — Data Link

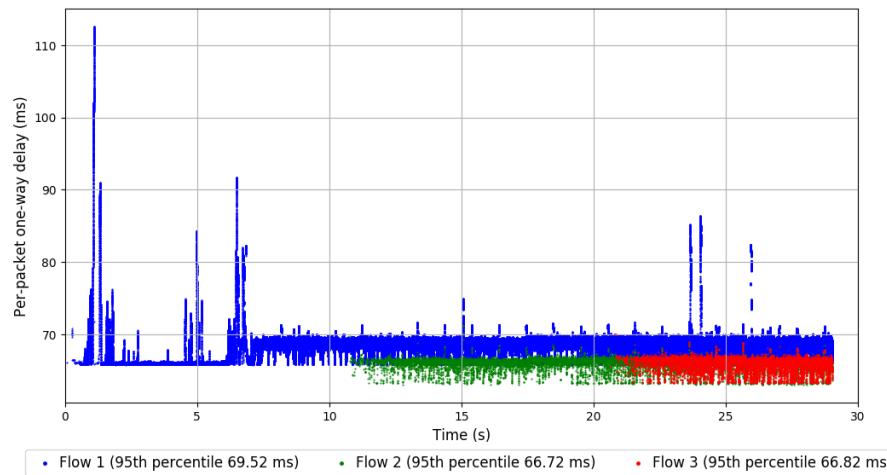
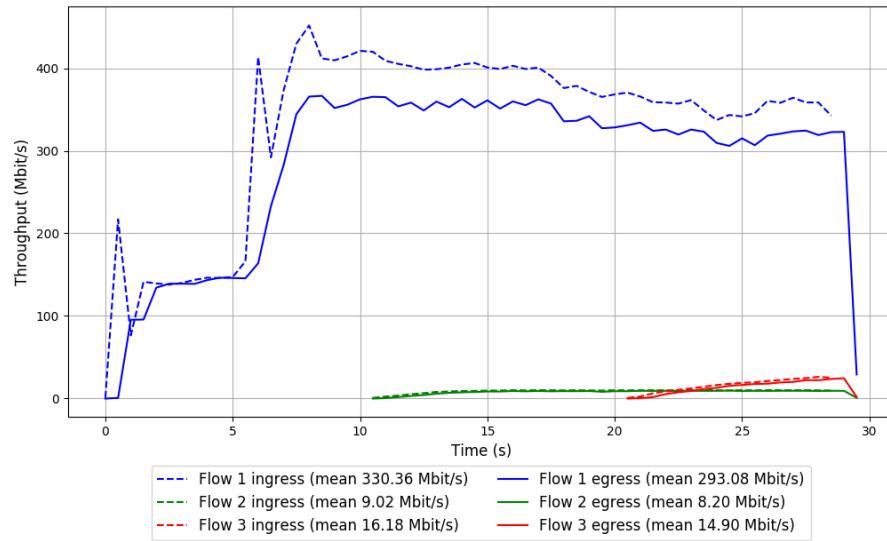


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 01:58:21
End at: 2019-05-30 01:58:51
Local clock offset: -1.551 ms
Remote clock offset: -38.353 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.62 Mbit/s
95th percentile per-packet one-way delay: 69.508 ms
Loss rate: 11.20%
-- Flow 1:
Average throughput: 293.08 Mbit/s
95th percentile per-packet one-way delay: 69.519 ms
Loss rate: 11.29%
-- Flow 2:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 66.715 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 14.90 Mbit/s
95th percentile per-packet one-way delay: 66.819 ms
Loss rate: 7.90%
```

Run 4: Report of Indigo-MusesT — Data Link

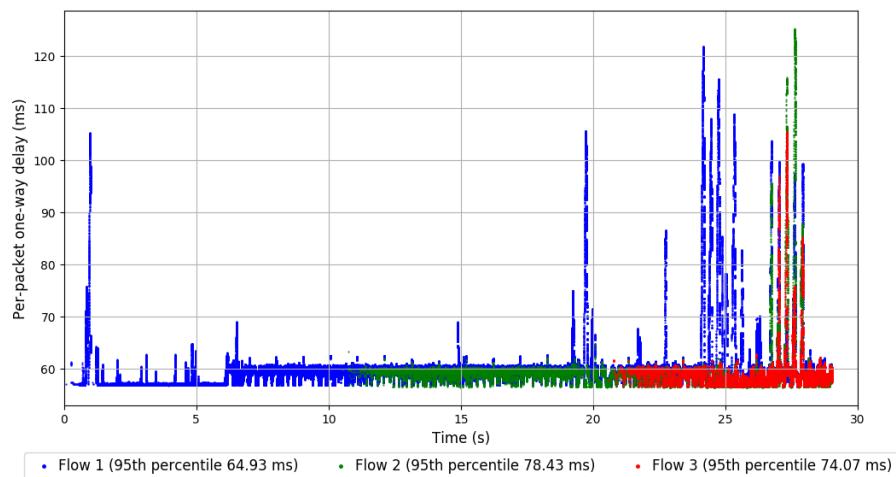
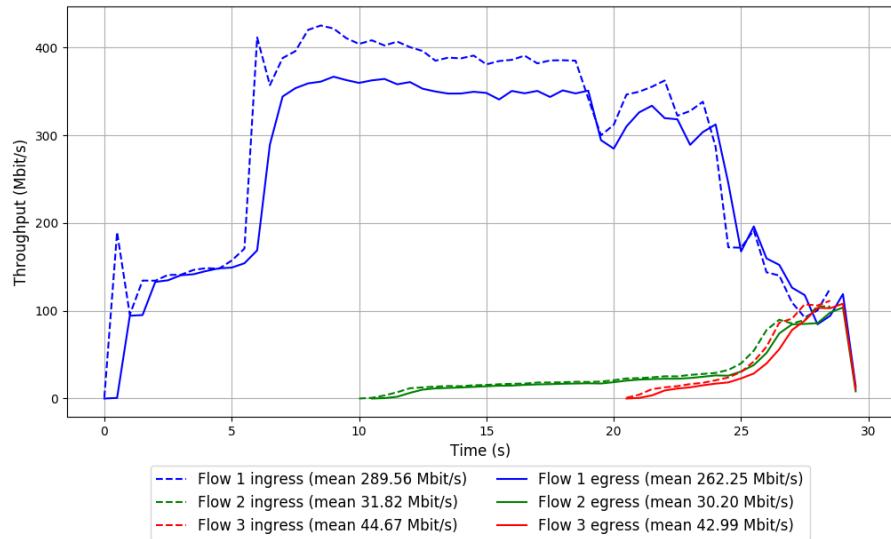


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 02:28:44
End at: 2019-05-30 02:29:14
Local clock offset: -1.501 ms
Remote clock offset: -44.152 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.09 Mbit/s
95th percentile per-packet one-way delay: 66.223 ms
Loss rate: 8.92%
-- Flow 1:
Average throughput: 262.25 Mbit/s
95th percentile per-packet one-way delay: 64.929 ms
Loss rate: 9.43%
-- Flow 2:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: 78.433 ms
Loss rate: 5.07%
-- Flow 3:
Average throughput: 42.99 Mbit/s
95th percentile per-packet one-way delay: 74.072 ms
Loss rate: 3.75%
```

Run 5: Report of Indigo-MusesT — Data Link

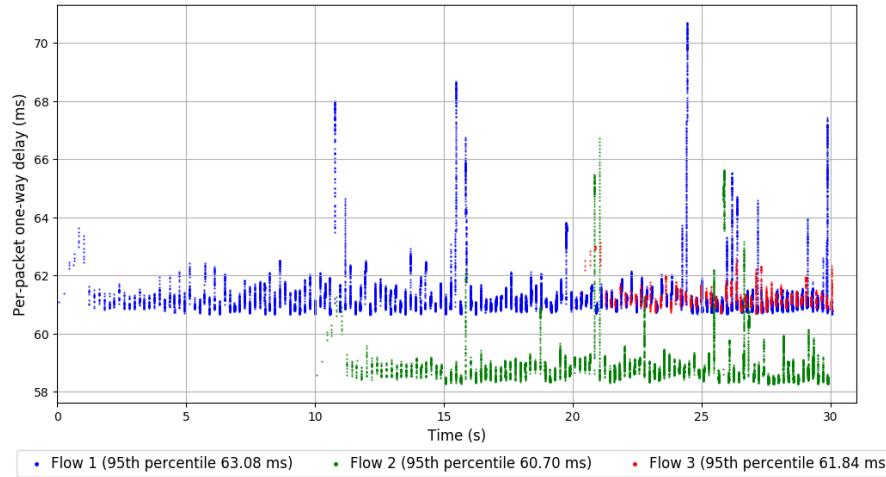
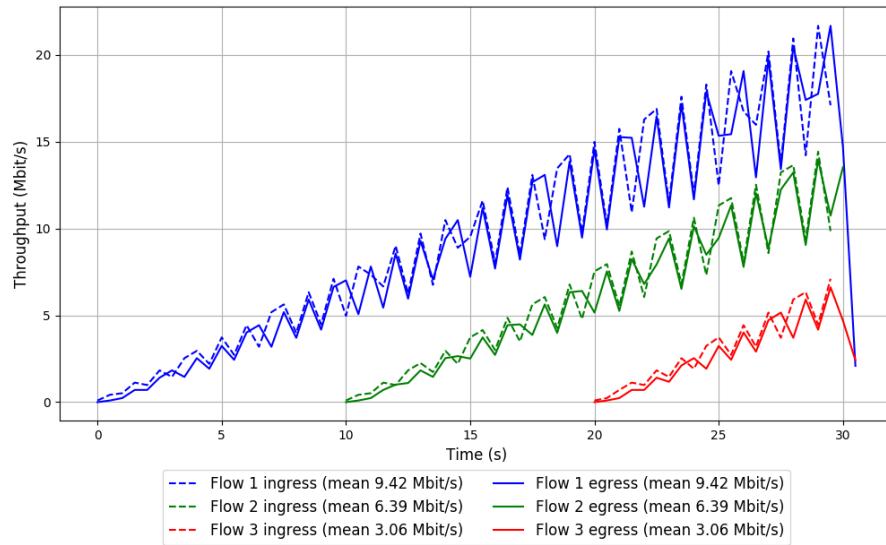


Run 1: Statistics of LEDBAT

```
Start at: 2019-05-30 00:28:34
End at: 2019-05-30 00:29:04
Local clock offset: 4.564 ms
Remote clock offset: -38.233 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 62.411 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 63.082 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 60.698 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 61.845 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

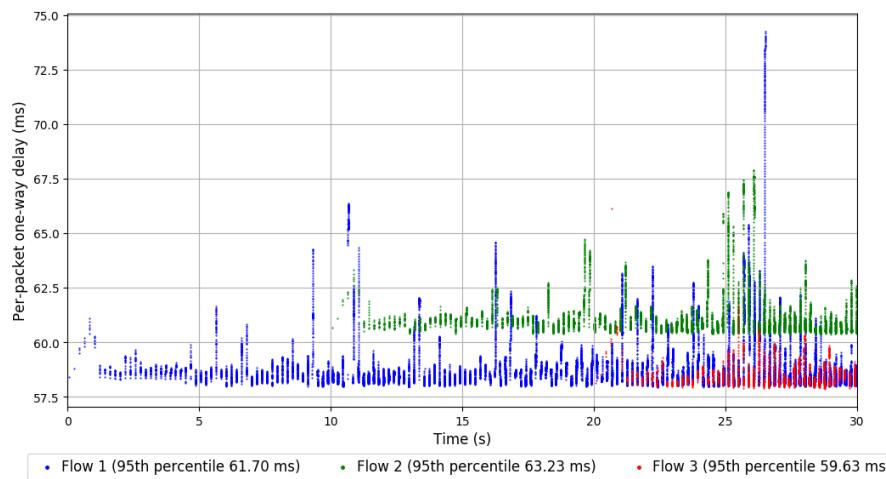
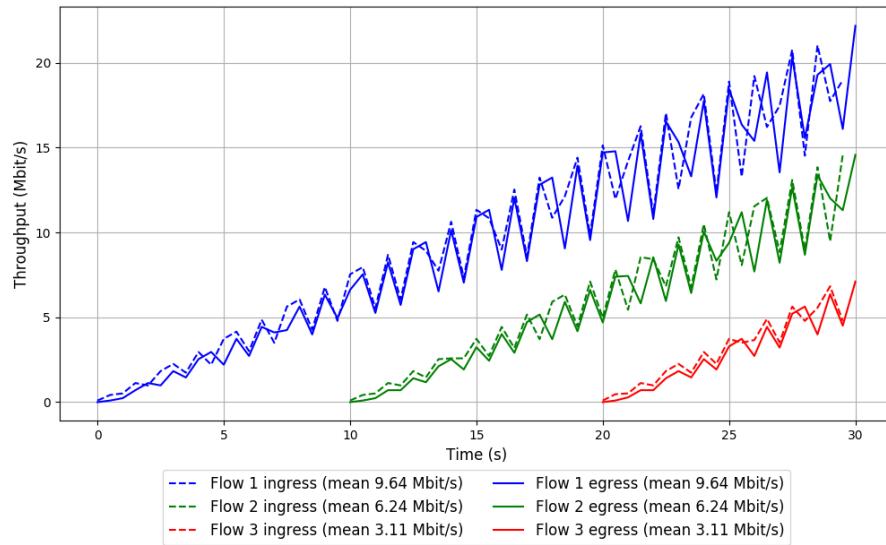


Run 2: Statistics of LEDBAT

```
Start at: 2019-05-30 00:59:01
End at: 2019-05-30 00:59:31
Local clock offset: -2.585 ms
Remote clock offset: -41.997 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 62.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 61.698 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 63.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 59.630 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

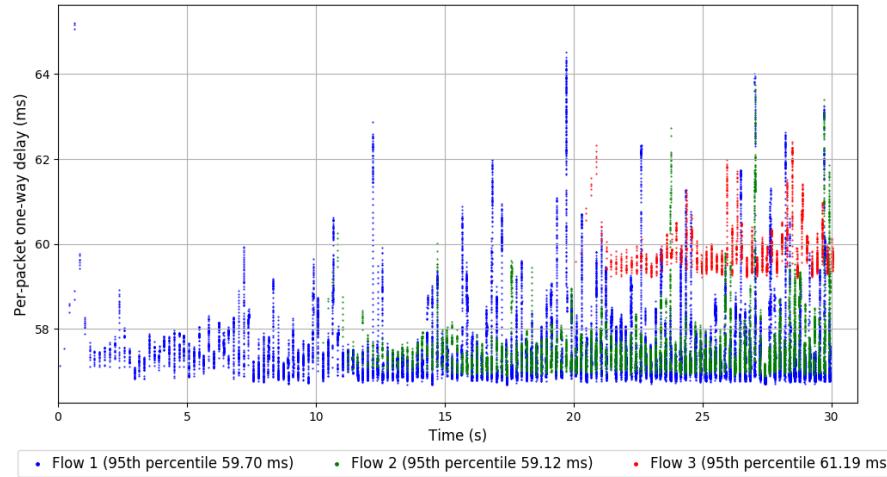
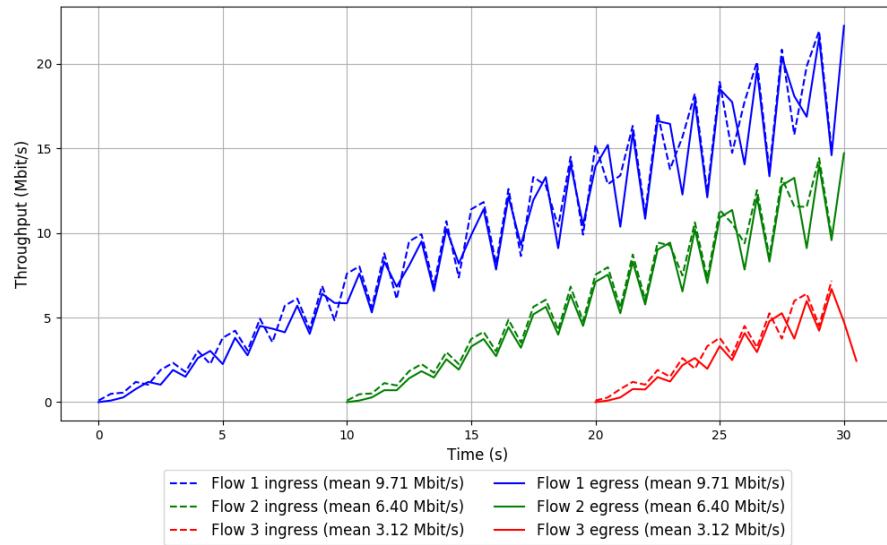


Run 3: Statistics of LEDBAT

```
Start at: 2019-05-30 01:29:32
End at: 2019-05-30 01:30:02
Local clock offset: 2.796 ms
Remote clock offset: -39.17 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.96 Mbit/s
95th percentile per-packet one-way delay: 60.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 59.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 59.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 61.191 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

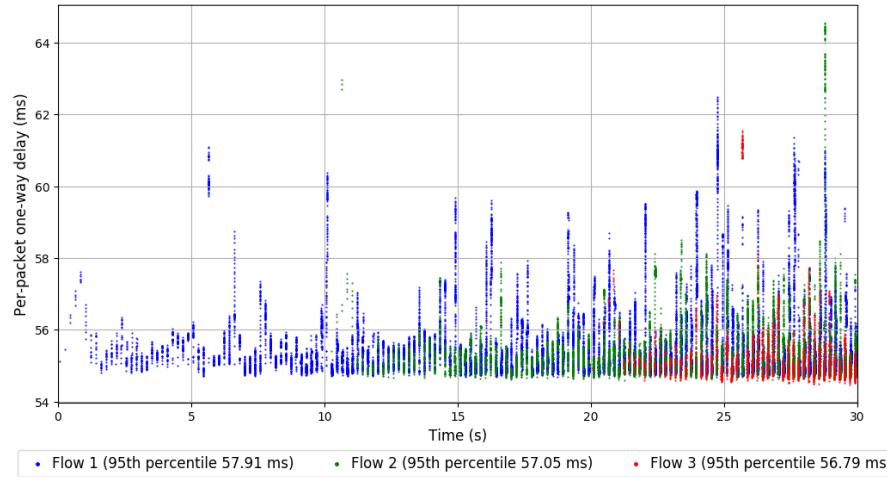
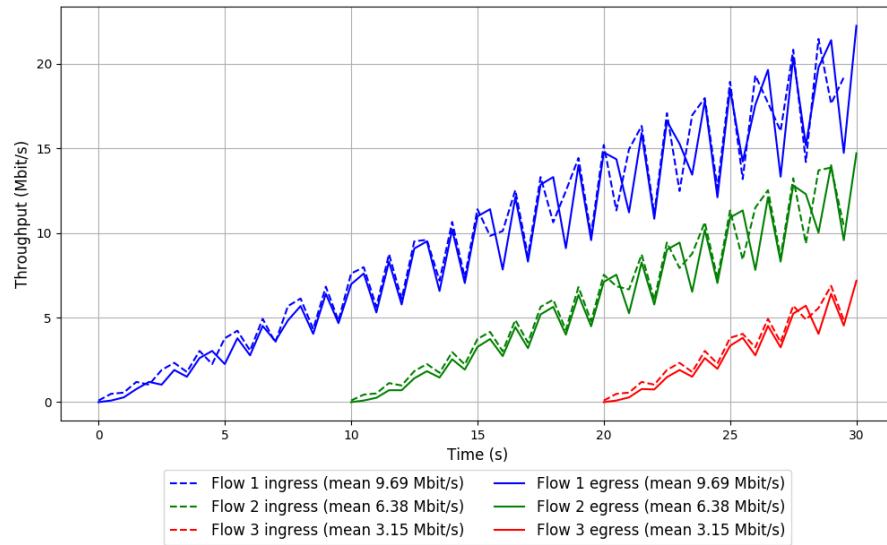


Run 4: Statistics of LEDBAT

```
Start at: 2019-05-30 01:59:55
End at: 2019-05-30 02:00:25
Local clock offset: 3.059 ms
Remote clock offset: -42.367 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.98 Mbit/s
95th percentile per-packet one-way delay: 57.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 57.915 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.38 Mbit/s
95th percentile per-packet one-way delay: 57.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 56.794 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

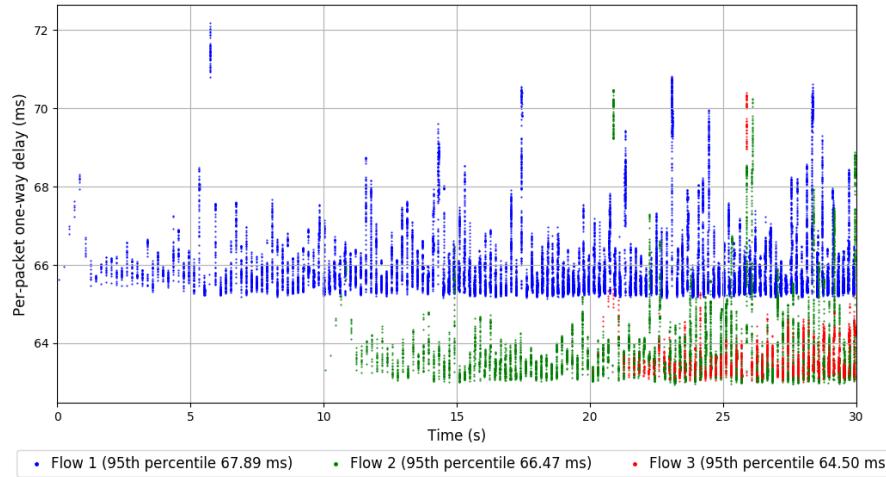
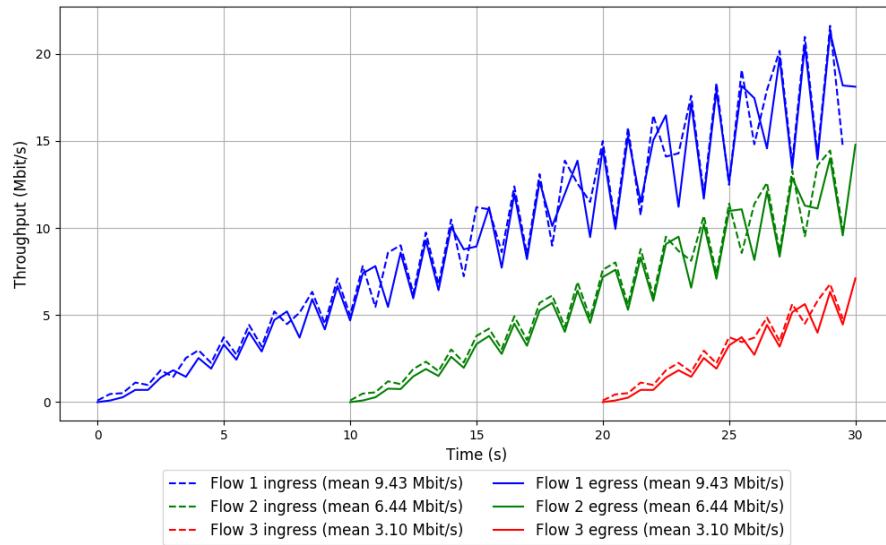


Run 5: Statistics of LEDBAT

```
Start at: 2019-05-30 02:30:18
End at: 2019-05-30 02:30:48
Local clock offset: -1.961 ms
Remote clock offset: -38.303 ms

# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.73 Mbit/s
95th percentile per-packet one-way delay: 67.619 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 67.891 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 66.472 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 64.505 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

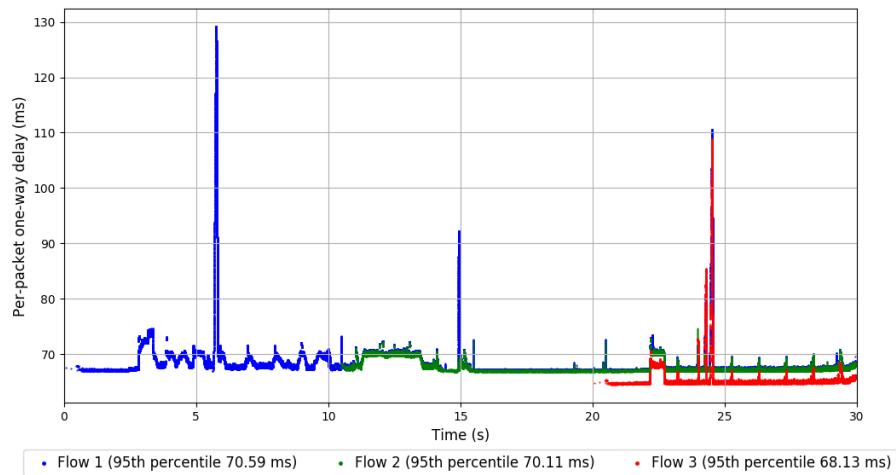
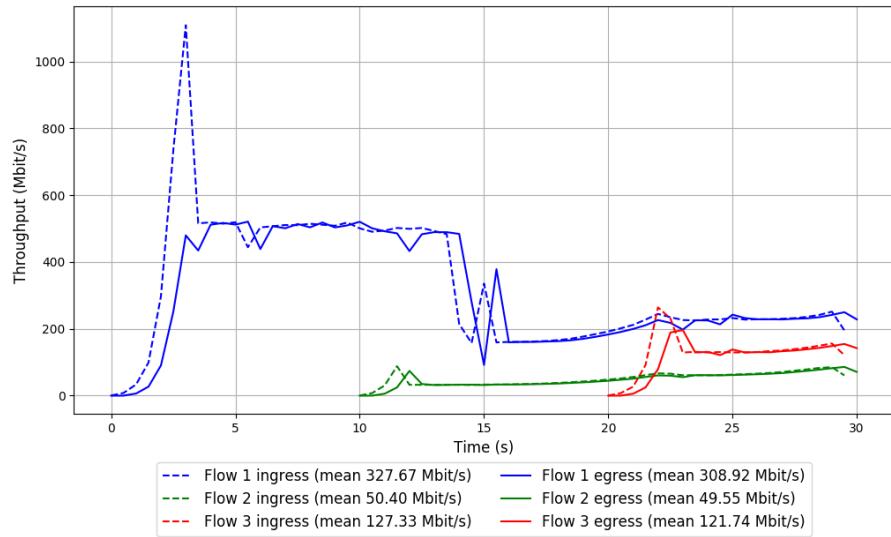


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-05-30 00:32:42
End at: 2019-05-30 00:33:12
Local clock offset: 0.473 ms
Remote clock offset: -36.252 ms

# Below is generated by plot.py at 2019-05-30 03:24:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.03 Mbit/s
95th percentile per-packet one-way delay: 70.440 ms
Loss rate: 5.25%
-- Flow 1:
Average throughput: 308.92 Mbit/s
95th percentile per-packet one-way delay: 70.593 ms
Loss rate: 5.72%
-- Flow 2:
Average throughput: 49.55 Mbit/s
95th percentile per-packet one-way delay: 70.110 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 121.74 Mbit/s
95th percentile per-packet one-way delay: 68.133 ms
Loss rate: 4.38%
```

Run 1: Report of PCC-Allegro — Data Link

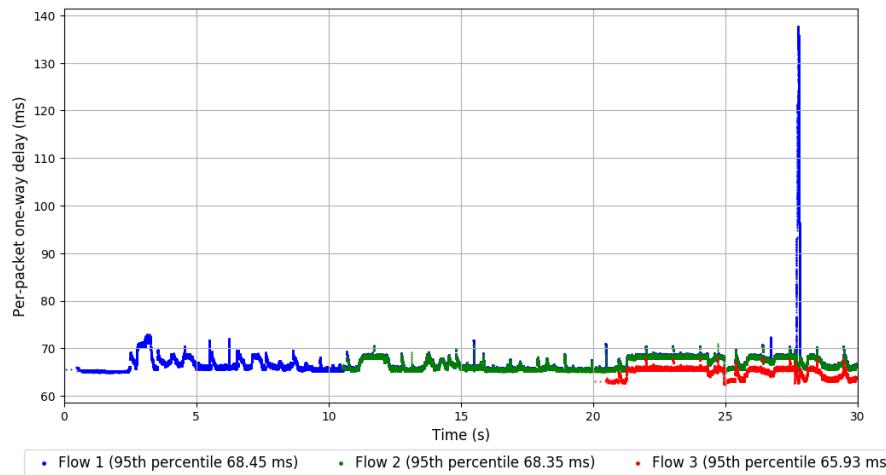
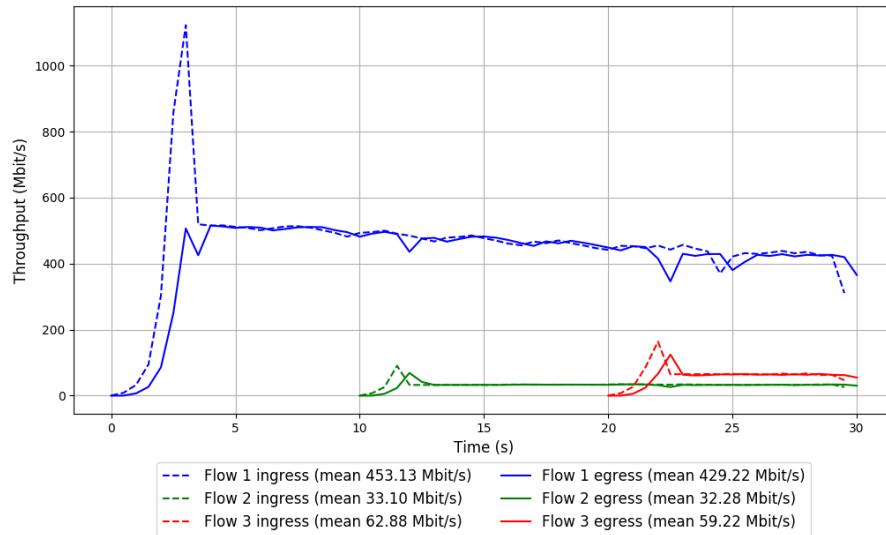


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-05-30 01:03:09
End at: 2019-05-30 01:03:39
Local clock offset: -3.435 ms
Remote clock offset: -37.904 ms

# Below is generated by plot.py at 2019-05-30 03:26:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.20 Mbit/s
95th percentile per-packet one-way delay: 68.427 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 429.22 Mbit/s
95th percentile per-packet one-way delay: 68.446 ms
Loss rate: 5.28%
-- Flow 2:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 68.353 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 65.929 ms
Loss rate: 5.81%
```

Run 2: Report of PCC-Allegro — Data Link

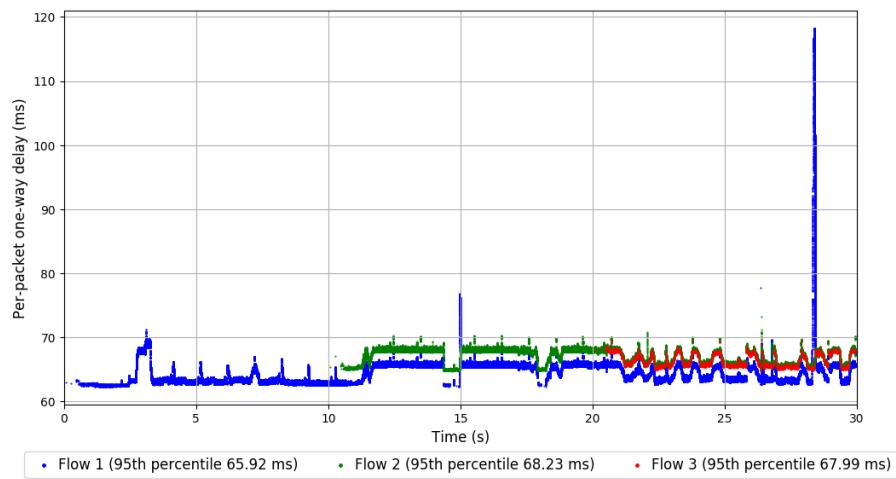
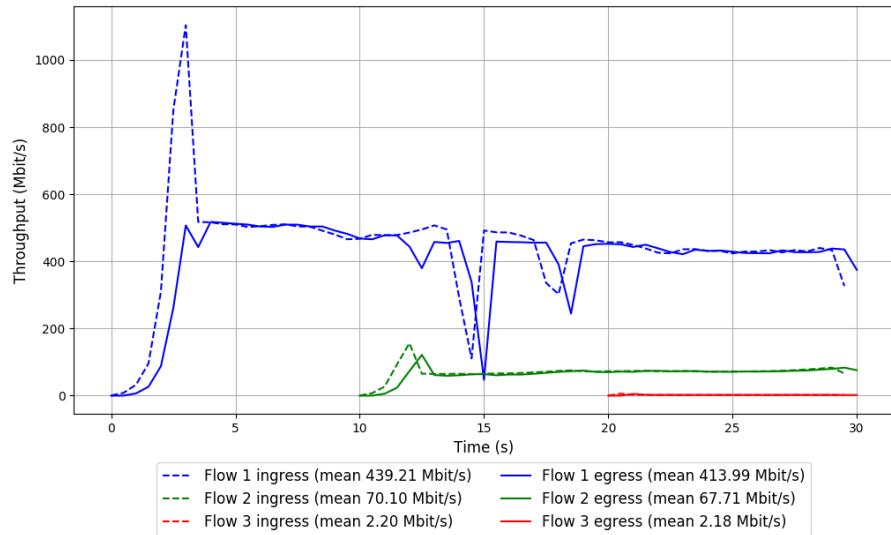


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-05-30 01:33:40
End at: 2019-05-30 01:34:10
Local clock offset: -1.121 ms
Remote clock offset: -38.029 ms

# Below is generated by plot.py at 2019-05-30 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 459.72 Mbit/s
95th percentile per-packet one-way delay: 67.895 ms
Loss rate: 5.50%
-- Flow 1:
Average throughput: 413.99 Mbit/s
95th percentile per-packet one-way delay: 65.922 ms
Loss rate: 5.73%
-- Flow 2:
Average throughput: 67.71 Mbit/s
95th percentile per-packet one-way delay: 68.230 ms
Loss rate: 3.40%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 67.988 ms
Loss rate: 1.33%
```

Run 3: Report of PCC-Allegro — Data Link

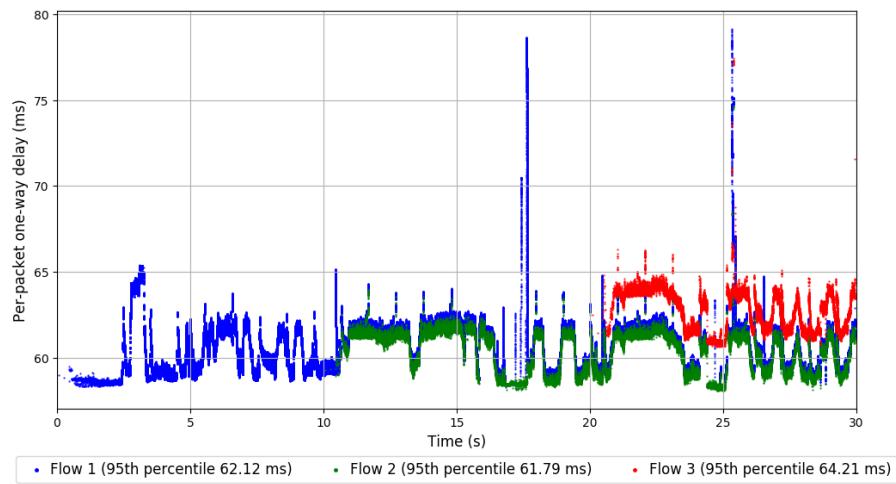
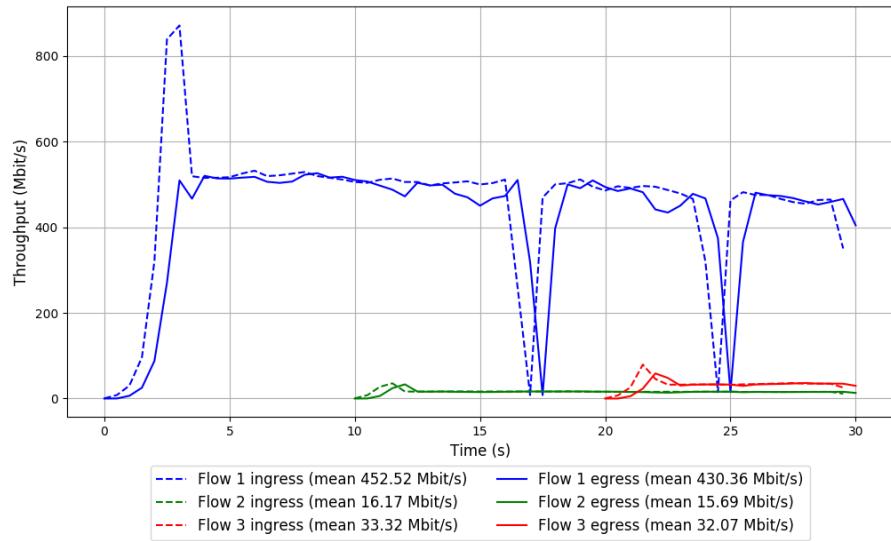


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-05-30 02:04:04
End at: 2019-05-30 02:04:34
Local clock offset: 3.562 ms
Remote clock offset: -38.052 ms

# Below is generated by plot.py at 2019-05-30 03:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.28 Mbit/s
95th percentile per-packet one-way delay: 62.239 ms
Loss rate: 4.81%
-- Flow 1:
Average throughput: 430.36 Mbit/s
95th percentile per-packet one-way delay: 62.117 ms
Loss rate: 4.89%
-- Flow 2:
Average throughput: 15.69 Mbit/s
95th percentile per-packet one-way delay: 61.791 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 64.207 ms
Loss rate: 3.68%
```

Run 4: Report of PCC-Allegro — Data Link

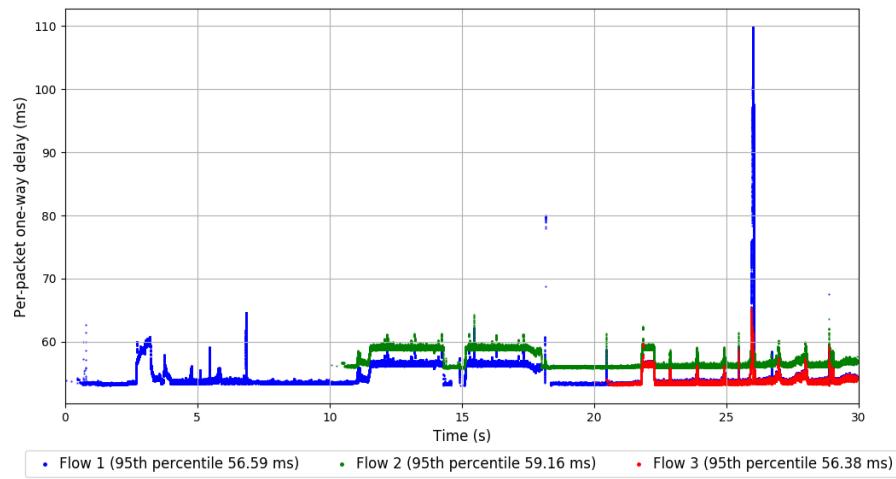
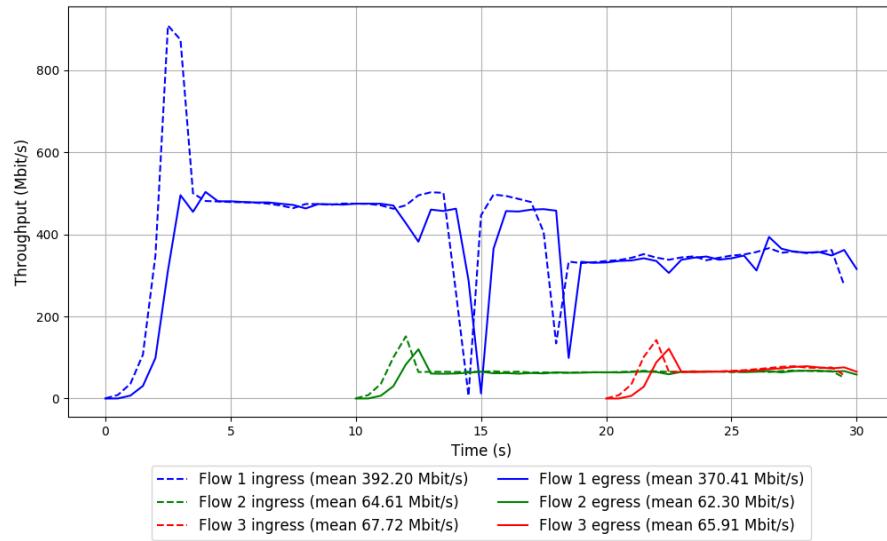


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-05-30 02:34:27
End at: 2019-05-30 02:34:57
Local clock offset: 2.273 ms
Remote clock offset: -43.563 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.55 Mbit/s
95th percentile per-packet one-way delay: 58.270 ms
Loss rate: 5.23%
-- Flow 1:
Average throughput: 370.41 Mbit/s
95th percentile per-packet one-way delay: 56.593 ms
Loss rate: 5.55%
-- Flow 2:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 59.163 ms
Loss rate: 3.58%
-- Flow 3:
Average throughput: 65.91 Mbit/s
95th percentile per-packet one-way delay: 56.375 ms
Loss rate: 2.67%
```

Run 5: Report of PCC-Allegro — Data Link

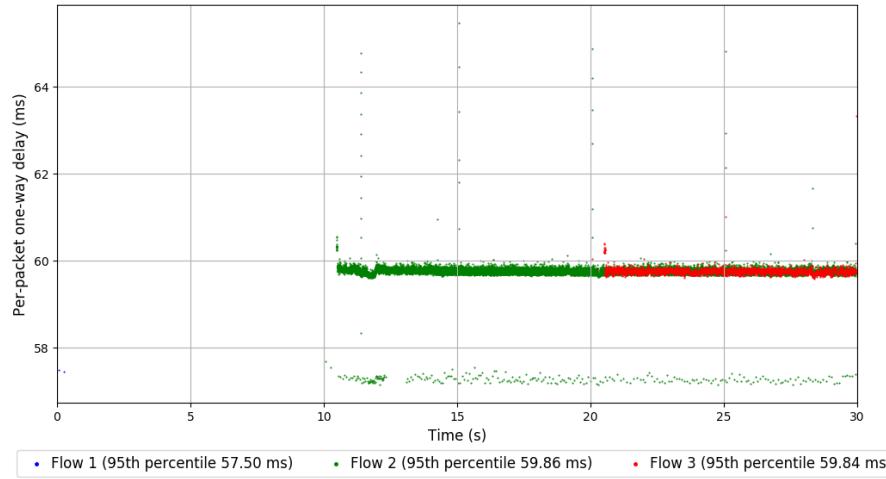
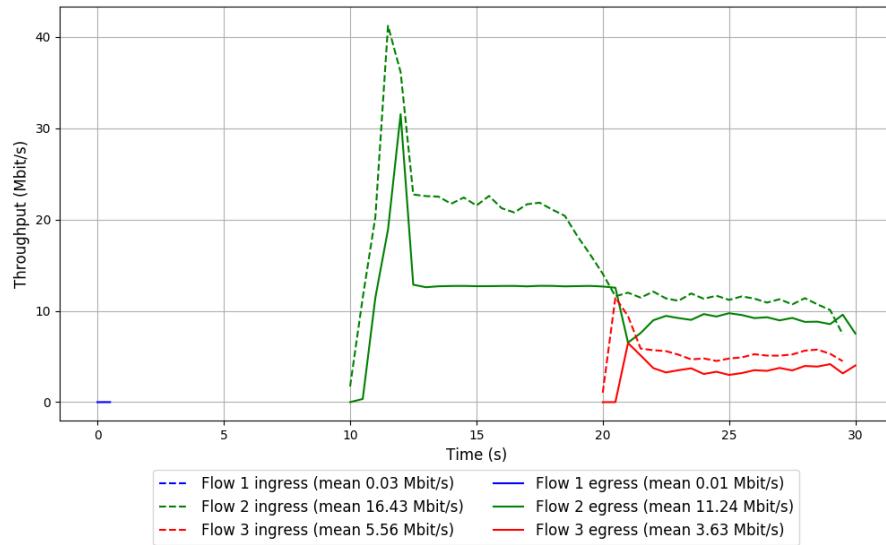


Run 1: Statistics of PCC-Expr

```
Start at: 2019-05-30 00:49:08
End at: 2019-05-30 00:49:38
Local clock offset: -1.832 ms
Remote clock offset: -42.849 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 59.861 ms
Loss rate: 32.02%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 57.496 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 59.863 ms
Loss rate: 31.57%
-- Flow 3:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 59.838 ms
Loss rate: 34.68%
```

Run 1: Report of PCC-Expr — Data Link

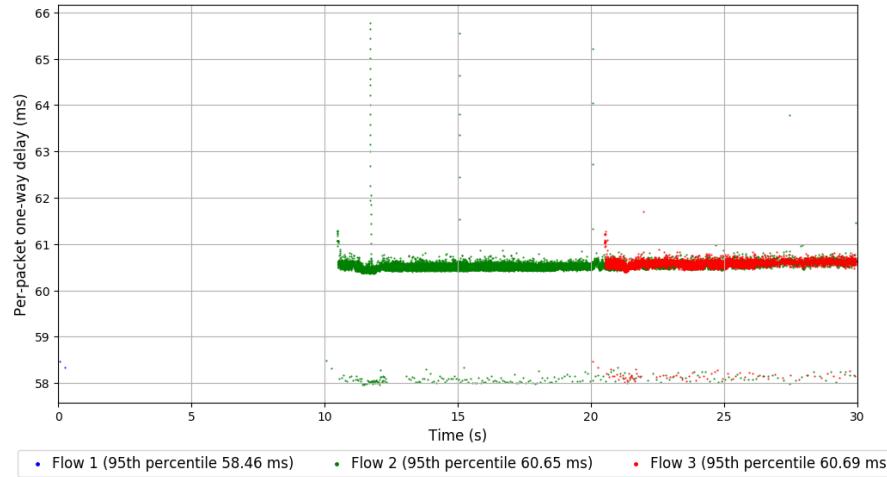
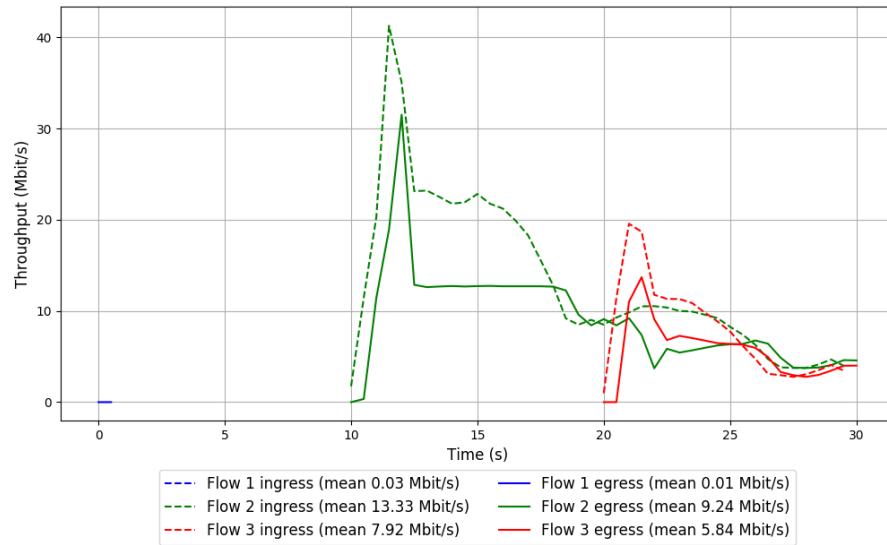


Run 2: Statistics of PCC-Expr

```
Start at: 2019-05-30 01:19:38
End at: 2019-05-30 01:20:08
Local clock offset: -1.199 ms
Remote clock offset: -41.725 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 60.662 ms
Loss rate: 29.68%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 58.461 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: 60.648 ms
Loss rate: 30.69%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 60.690 ms
Loss rate: 26.25%
```

Run 2: Report of PCC-Expr — Data Link

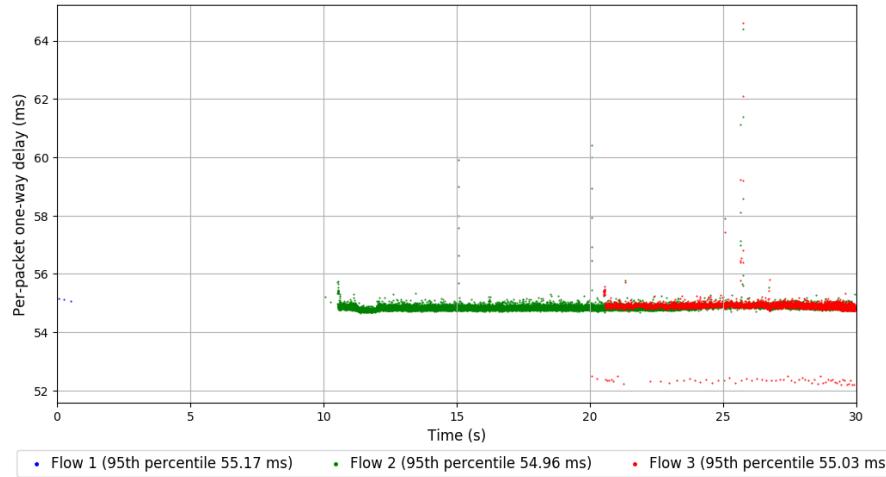
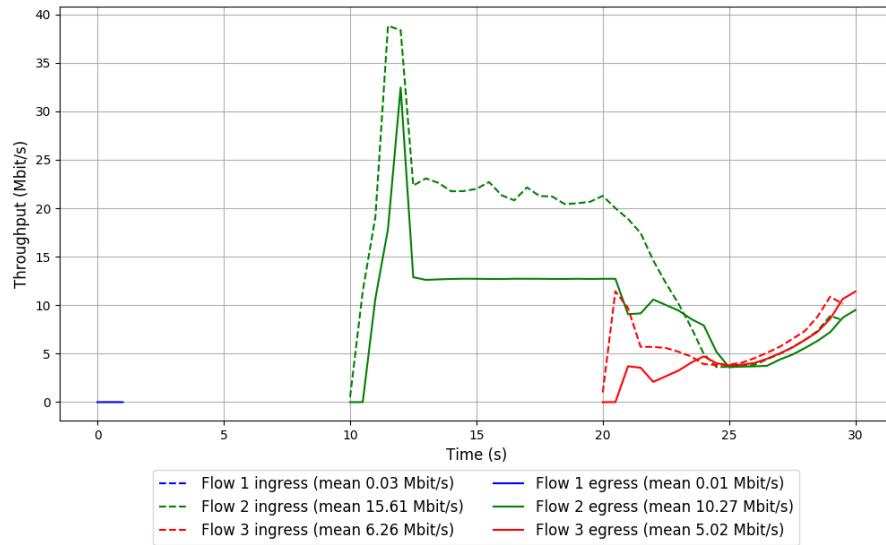


Run 3: Statistics of PCC-Expr

```
Start at: 2019-05-30 01:50:04
End at: 2019-05-30 01:50:34
Local clock offset: 2.365 ms
Remote clock offset: -45.444 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 54.982 ms
Loss rate: 31.85%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 55.167 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.27 Mbit/s
95th percentile per-packet one-way delay: 54.959 ms
Loss rate: 34.24%
-- Flow 3:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 55.026 ms
Loss rate: 19.81%
```

Run 3: Report of PCC-Expr — Data Link

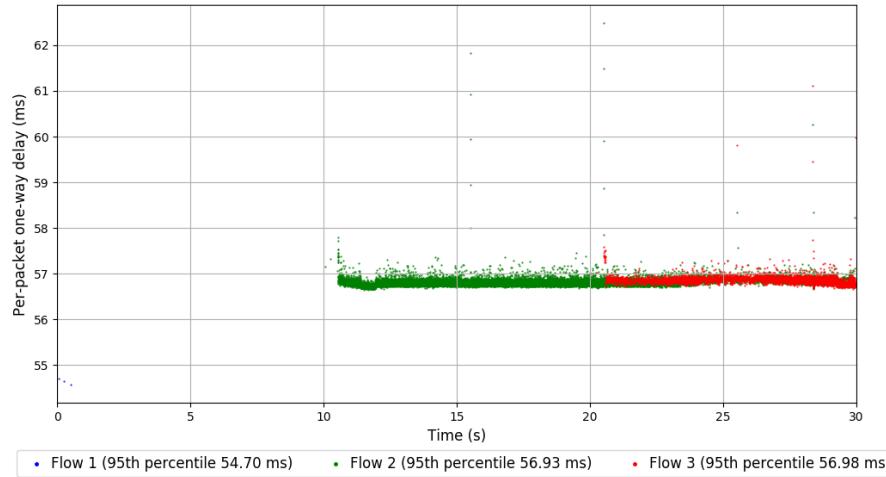
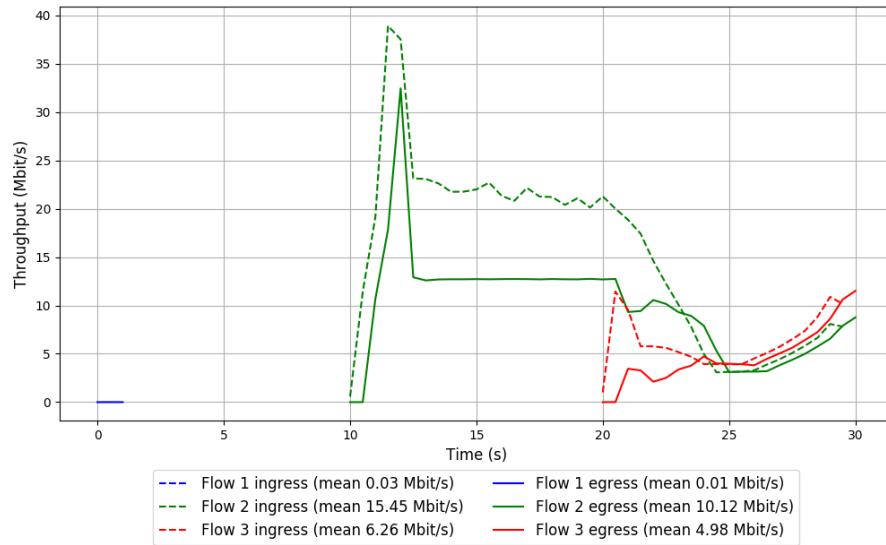


Run 4: Statistics of PCC-Expr

```
Start at: 2019-05-30 02:20:29
End at: 2019-05-30 02:20:59
Local clock offset: -1.619 ms
Remote clock offset: -46.786 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 56.945 ms
Loss rate: 32.11%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 54.705 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 56.931 ms
Loss rate: 34.46%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 56.975 ms
Loss rate: 20.47%
```

Run 4: Report of PCC-Expr — Data Link

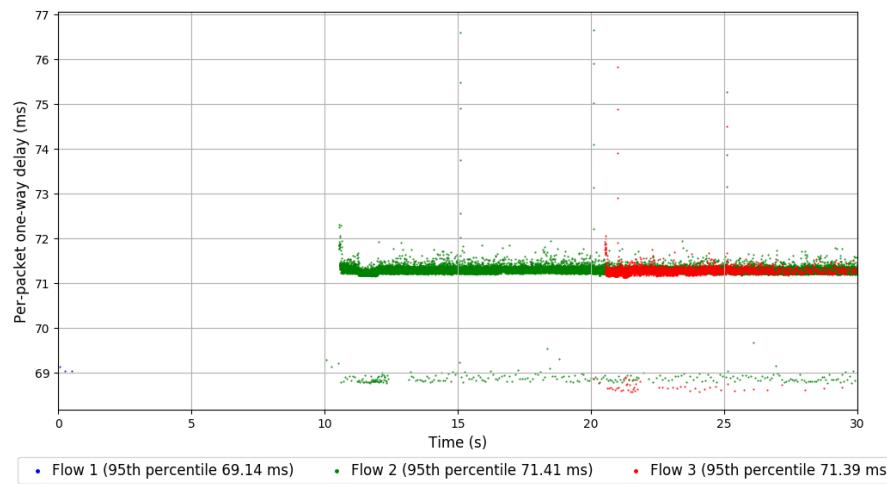
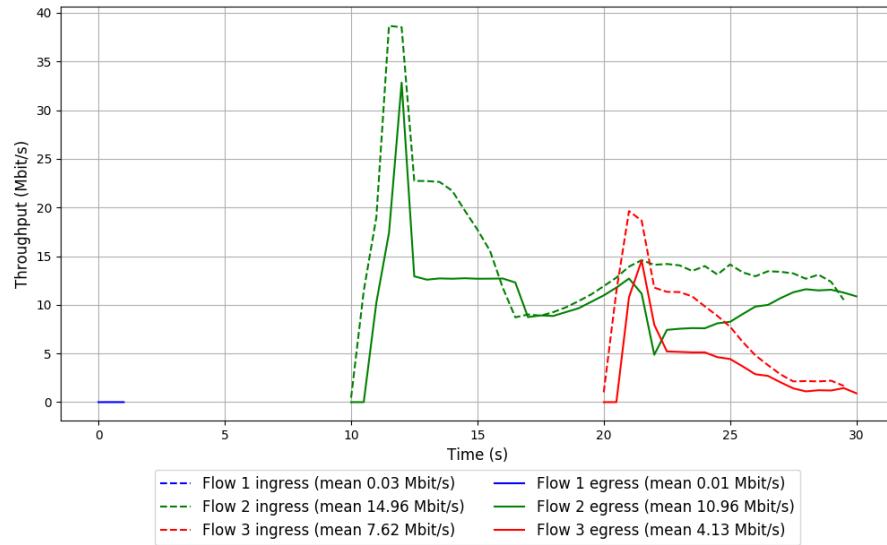


Run 5: Statistics of PCC-Expr

```
Start at: 2019-05-30 02:50:52
End at: 2019-05-30 02:51:22
Local clock offset: -3.419 ms
Remote clock offset: -32.219 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 71.411 ms
Loss rate: 30.60%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 69.143 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.96 Mbit/s
95th percentile per-packet one-way delay: 71.414 ms
Loss rate: 26.76%
-- Flow 3:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 71.391 ms
Loss rate: 45.79%
```

Run 5: Report of PCC-Expr — Data Link

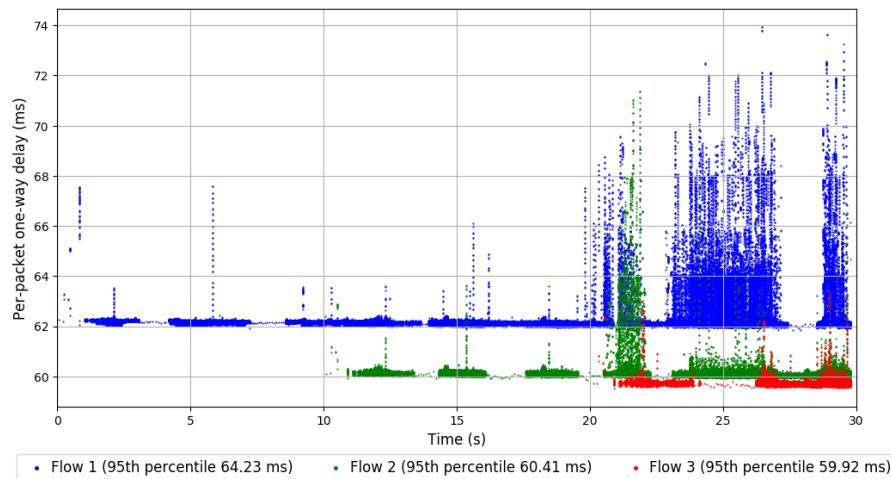
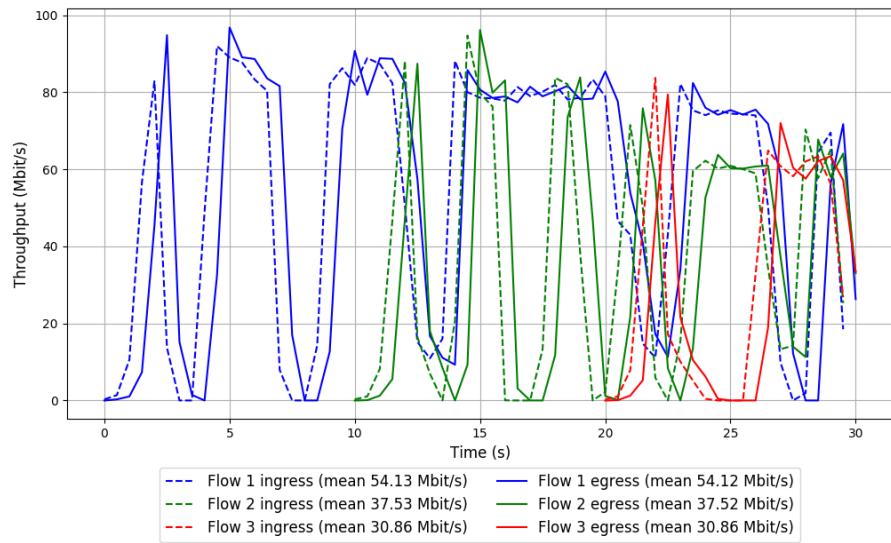


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-05-30 00:41:59
End at: 2019-05-30 00:42:29
Local clock offset: -1.044 ms
Remote clock offset: -40.957 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 63.602 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 64.230 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 60.406 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 59.916 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

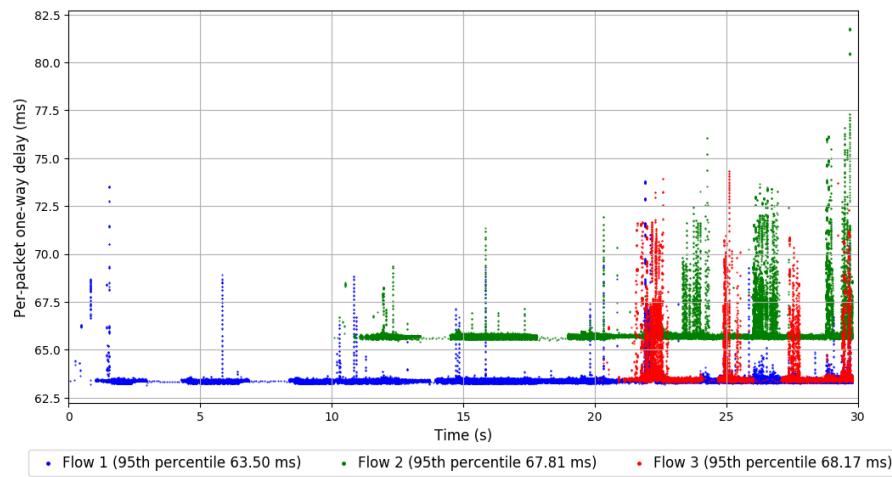
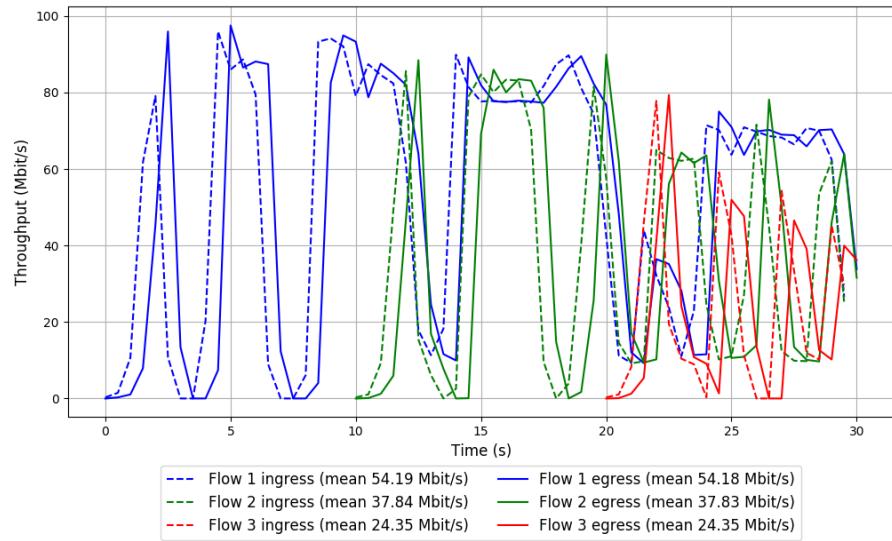


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-05-30 01:12:29
End at: 2019-05-30 01:13:00
Local clock offset: 1.849 ms
Remote clock offset: -32.866 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.17 Mbit/s
95th percentile per-packet one-way delay: 65.922 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 63.501 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 67.815 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.35 Mbit/s
95th percentile per-packet one-way delay: 68.168 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

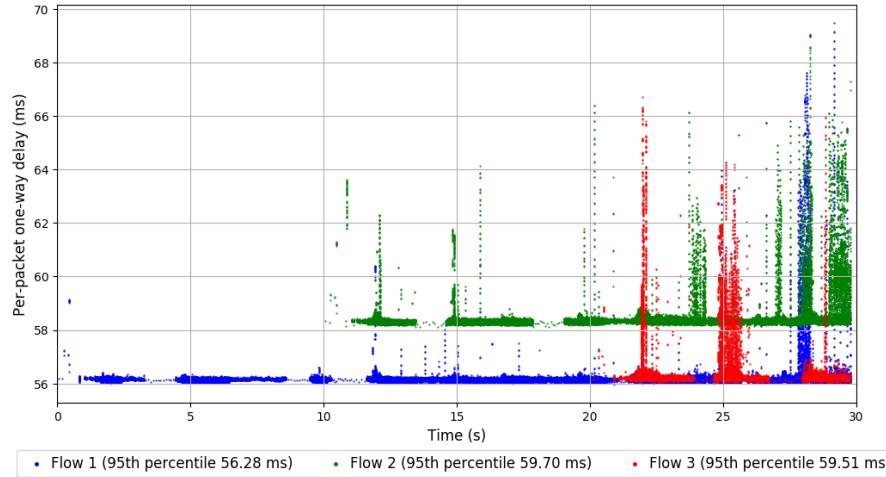
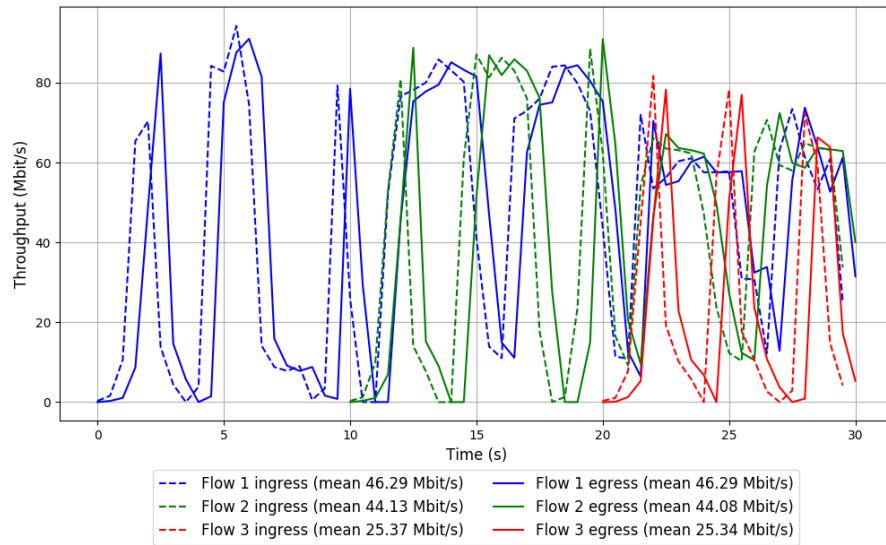


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-05-30 01:42:57
End at: 2019-05-30 01:43:27
Local clock offset: 2.912 ms
Remote clock offset: -41.148 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.74 Mbit/s
95th percentile per-packet one-way delay: 58.497 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 46.29 Mbit/s
95th percentile per-packet one-way delay: 56.278 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.08 Mbit/s
95th percentile per-packet one-way delay: 59.698 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 25.34 Mbit/s
95th percentile per-packet one-way delay: 59.506 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

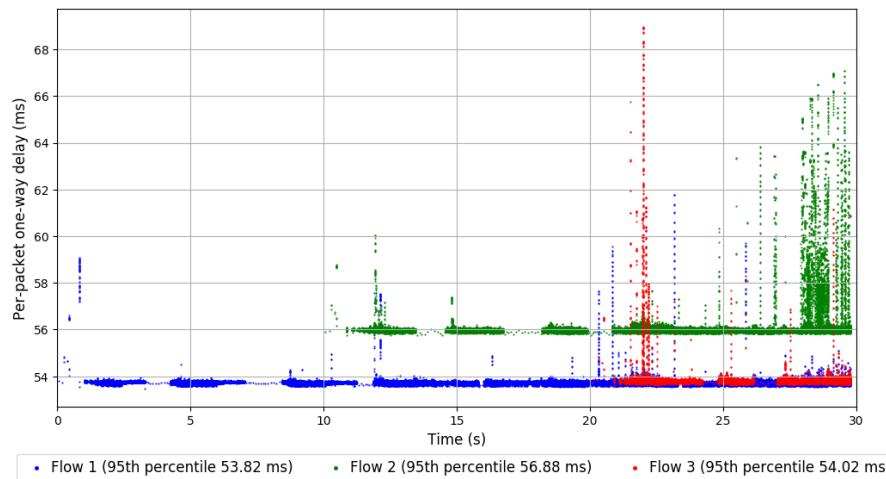
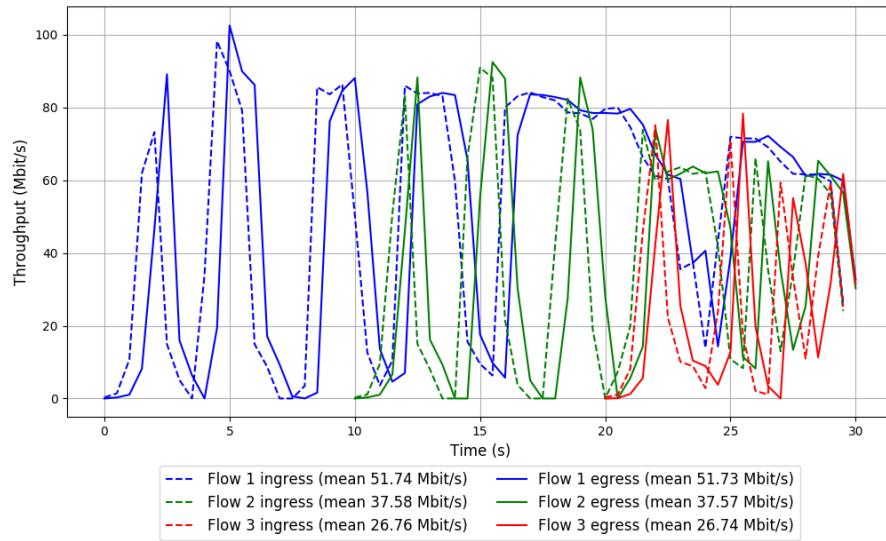


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-05-30 02:13:25
End at: 2019-05-30 02:13:55
Local clock offset: 2.618 ms
Remote clock offset: -43.34 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.32 Mbit/s
95th percentile per-packet one-way delay: 56.062 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.73 Mbit/s
95th percentile per-packet one-way delay: 53.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 56.877 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 26.74 Mbit/s
95th percentile per-packet one-way delay: 54.017 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

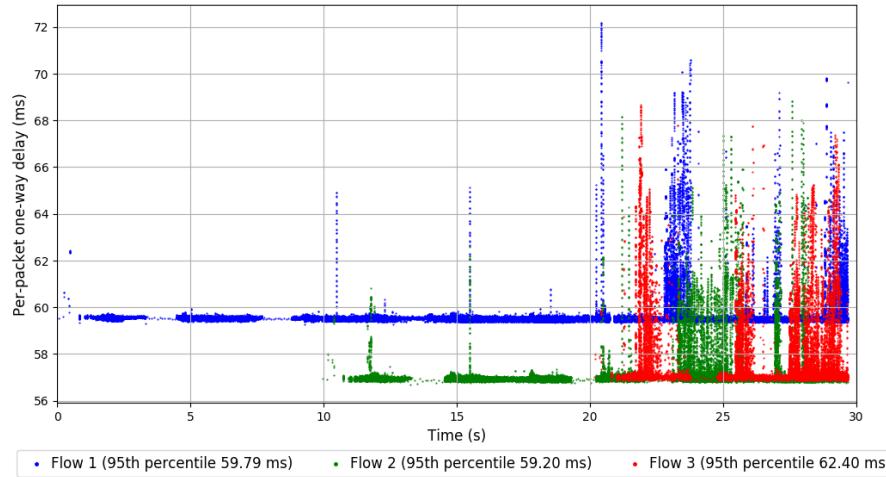
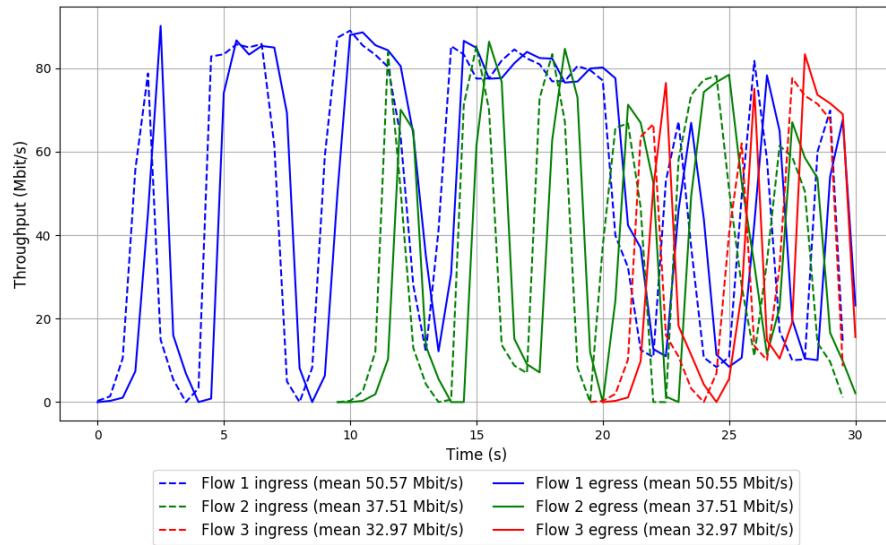


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-05-30 02:43:45
End at: 2019-05-30 02:44:15
Local clock offset: -2.208 ms
Remote clock offset: -43.442 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.25 Mbit/s
95th percentile per-packet one-way delay: 60.107 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.55 Mbit/s
95th percentile per-packet one-way delay: 59.789 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.51 Mbit/s
95th percentile per-packet one-way delay: 59.200 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 62.395 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

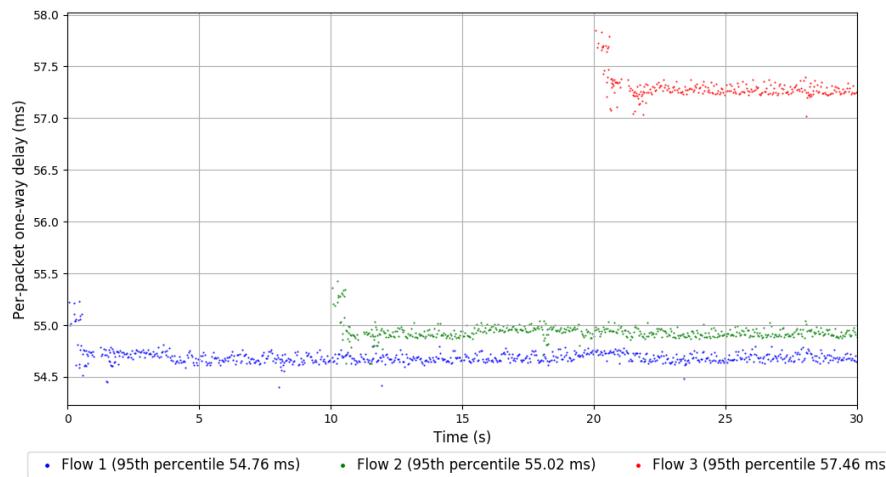
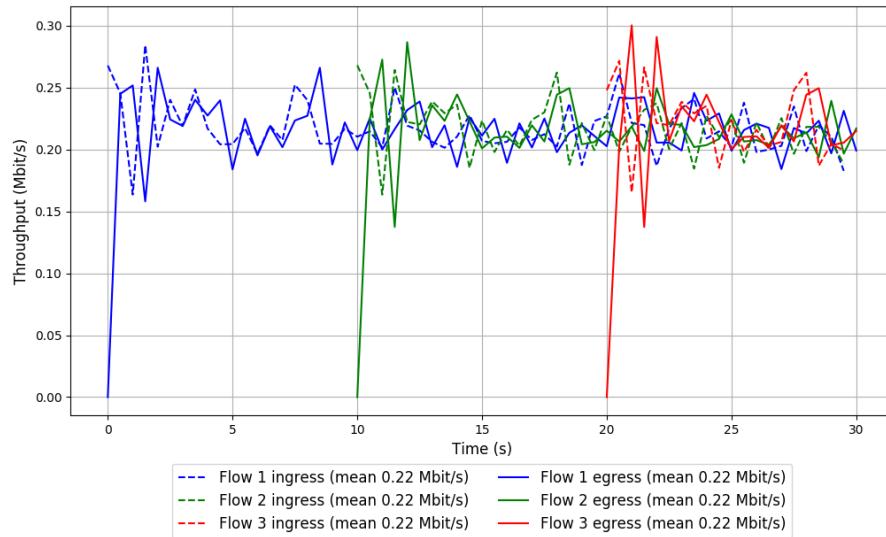


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-05-30 00:31:26
End at: 2019-05-30 00:31:56
Local clock offset: 0.151 ms
Remote clock offset: -46.573 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 57.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.460 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

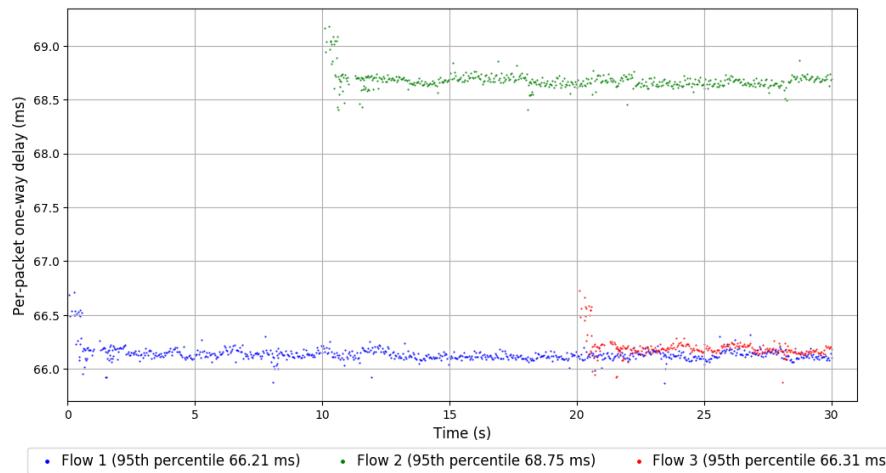
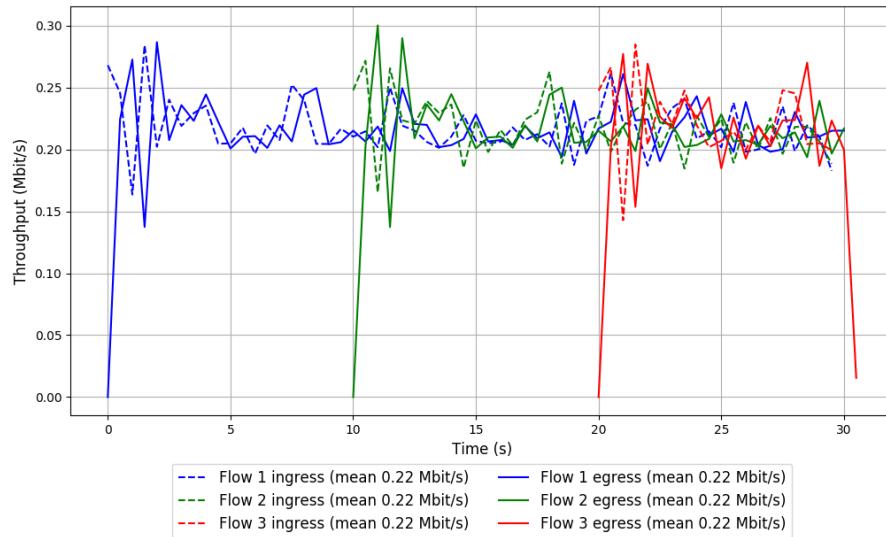


Run 2: Statistics of SCReAM

```
Start at: 2019-05-30 01:01:53
End at: 2019-05-30 01:02:23
Local clock offset: -3.619 ms
Remote clock offset: -34.927 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 68.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.213 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 68.749 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.308 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

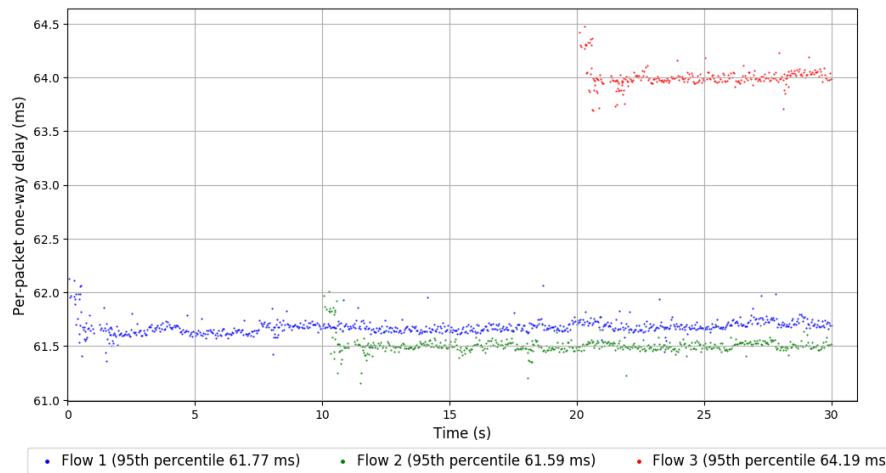
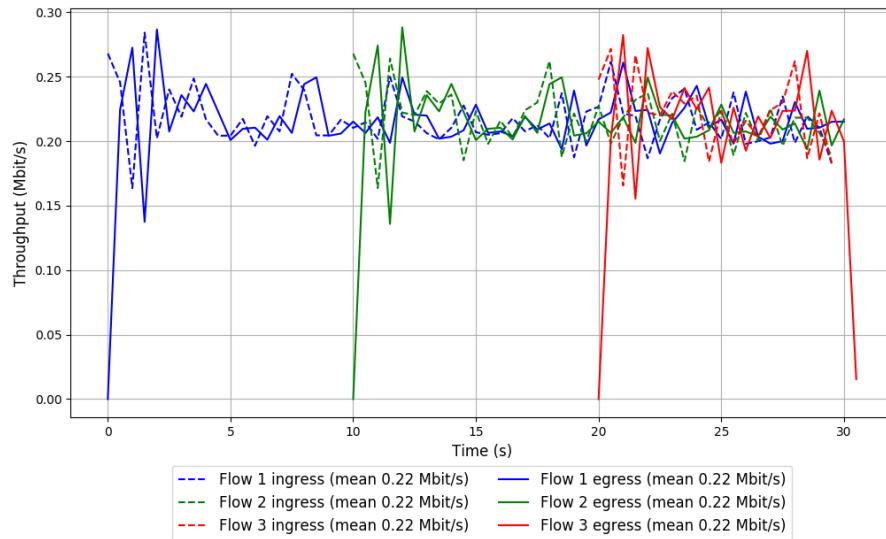


Run 3: Statistics of SCReAM

```
Start at: 2019-05-30 01:32:24
End at: 2019-05-30 01:32:54
Local clock offset: -2.149 ms
Remote clock offset: -39.928 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 64.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.773 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.586 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.190 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

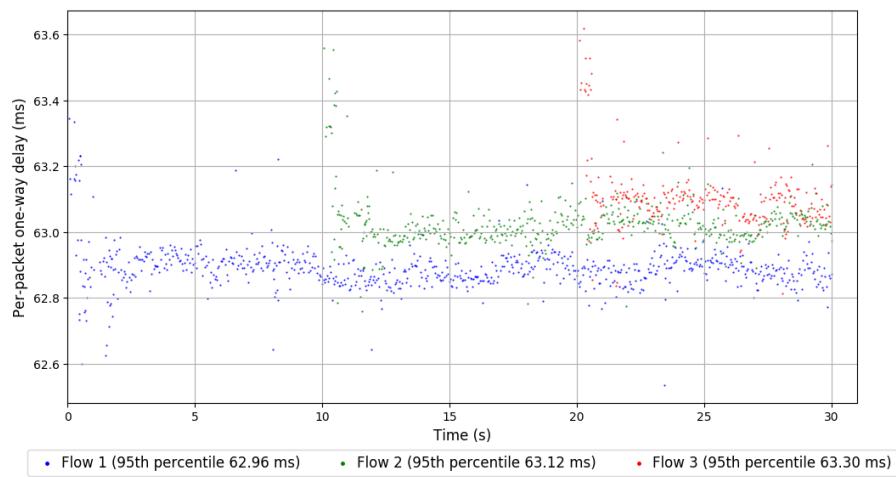
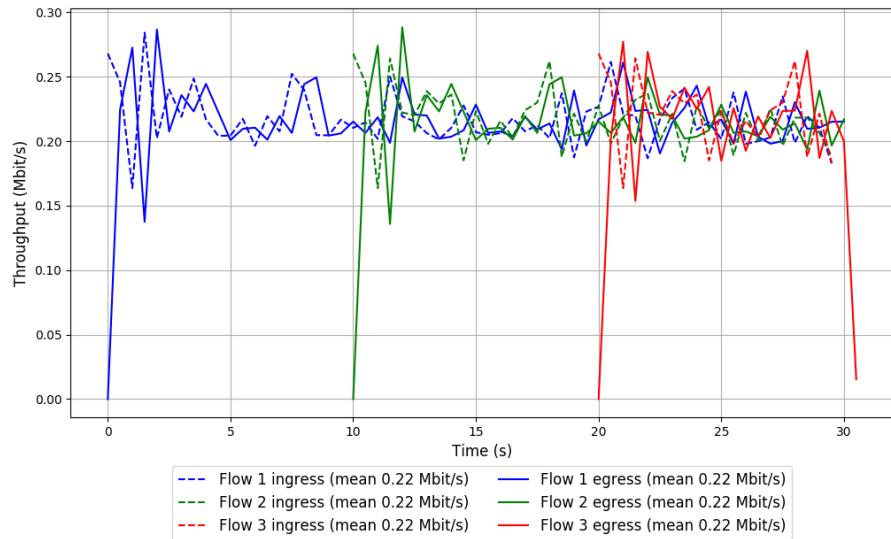


Run 4: Statistics of SCReAM

```
Start at: 2019-05-30 02:02:47
End at: 2019-05-30 02:03:17
Local clock offset: 2.844 ms
Remote clock offset: -34.418 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.295 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

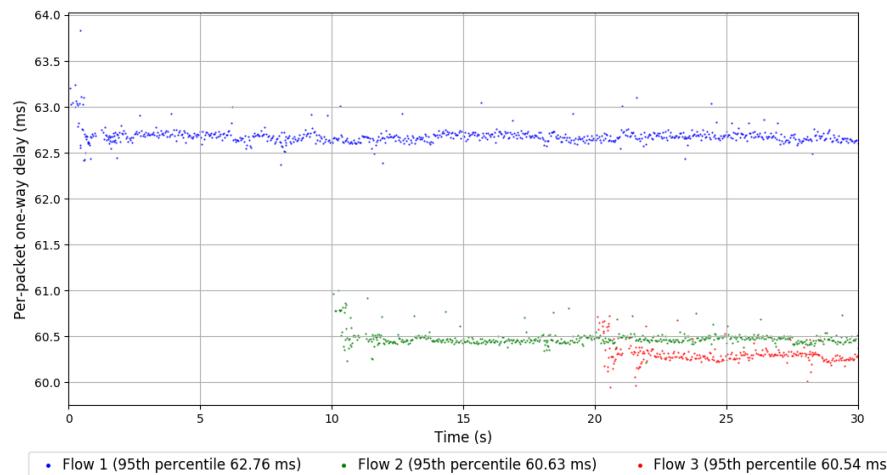
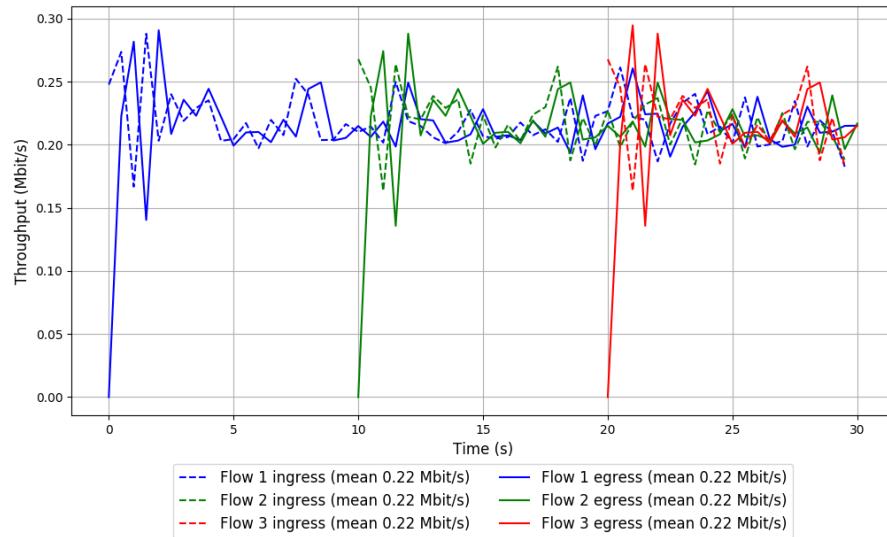


Run 5: Statistics of SCReAM

```
Start at: 2019-05-30 02:33:11
End at: 2019-05-30 02:33:41
Local clock offset: 3.148 ms
Remote clock offset: -36.036 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.729 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.539 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

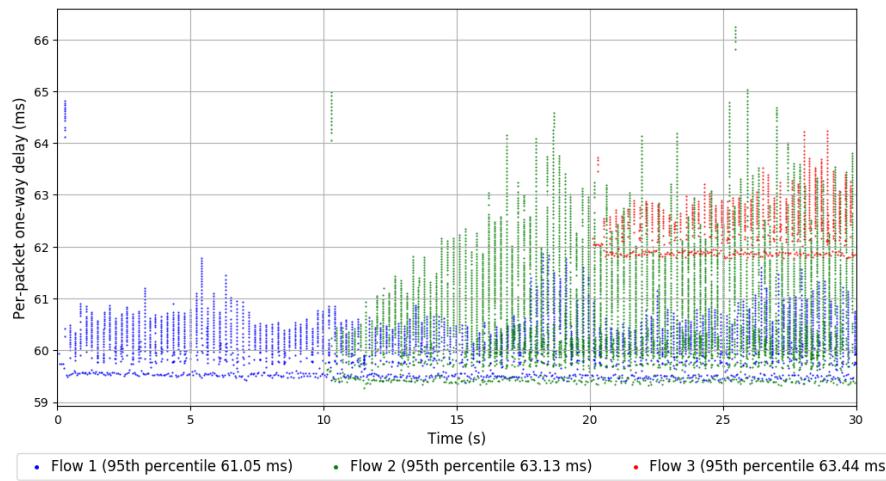
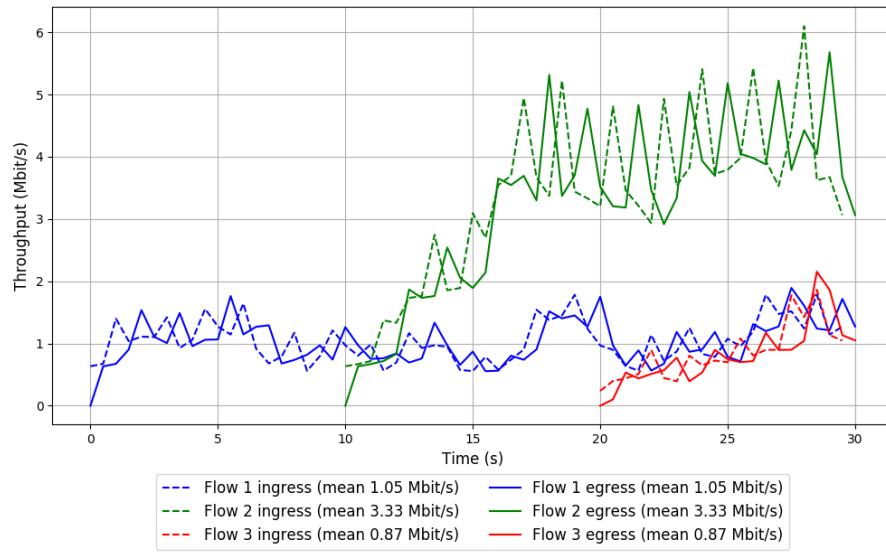


Run 1: Statistics of Sprout

```
Start at: 2019-05-30 00:51:48
End at: 2019-05-30 00:52:18
Local clock offset: -2.22 ms
Remote clock offset: -40.604 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 63.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 61.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 63.134 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 63.440 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

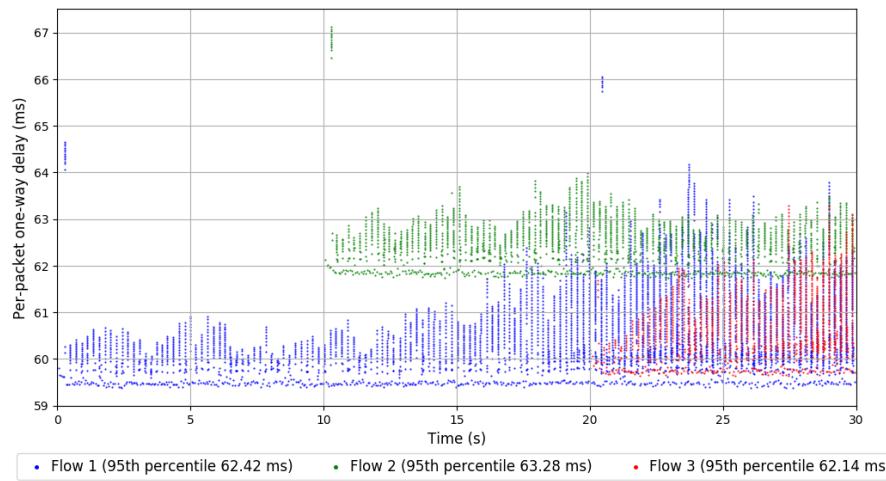
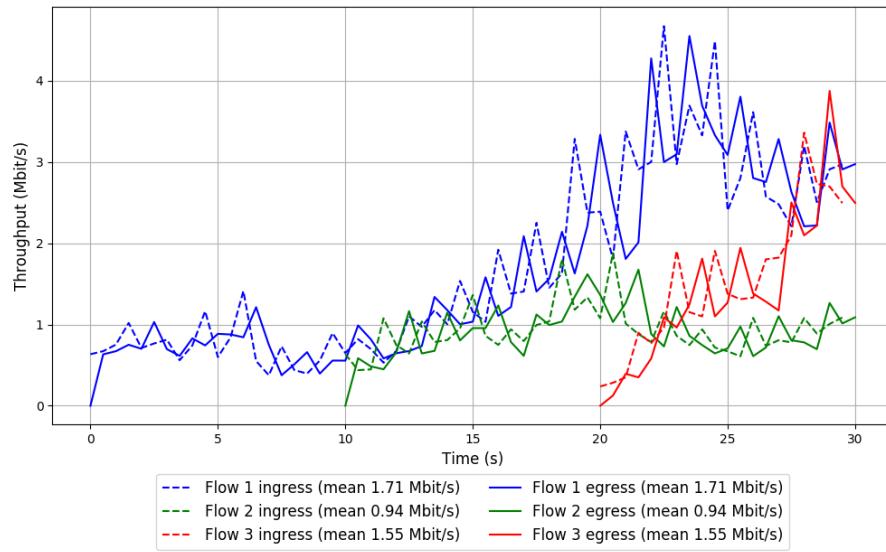


Run 2: Statistics of Sprout

```
Start at: 2019-05-30 01:22:16
End at: 2019-05-30 01:22:46
Local clock offset: -1.54 ms
Remote clock offset: -40.651 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 62.978 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 62.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 63.283 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 62.139 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

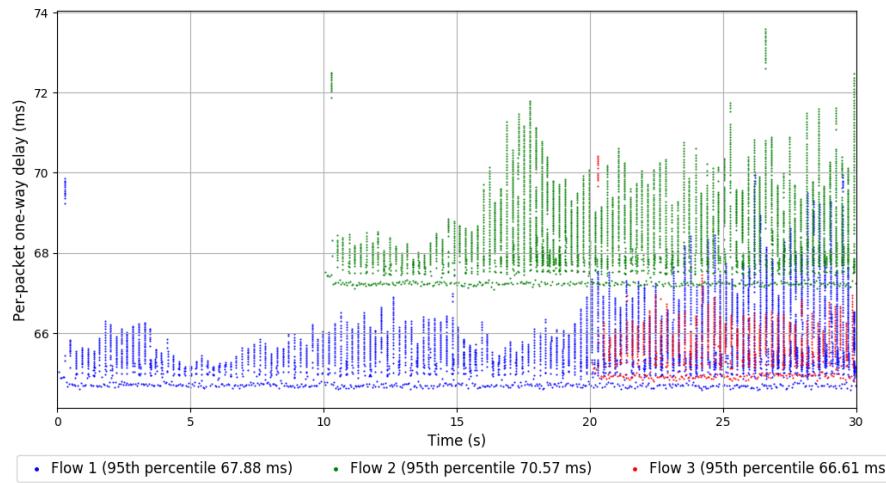
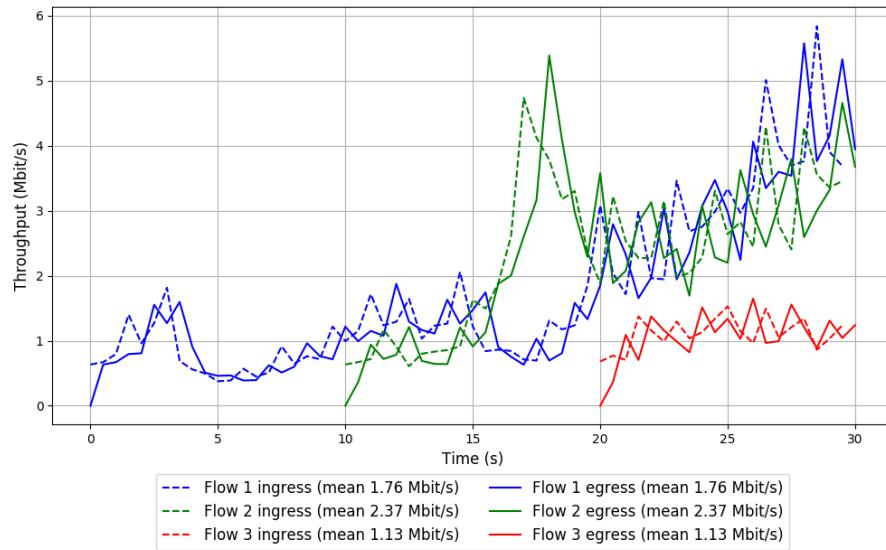


Run 3: Statistics of Sprout

```
Start at: 2019-05-30 01:52:43
End at: 2019-05-30 01:53:13
Local clock offset: -1.383 ms
Remote clock offset: -36.587 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 69.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 67.884 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 70.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 66.607 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

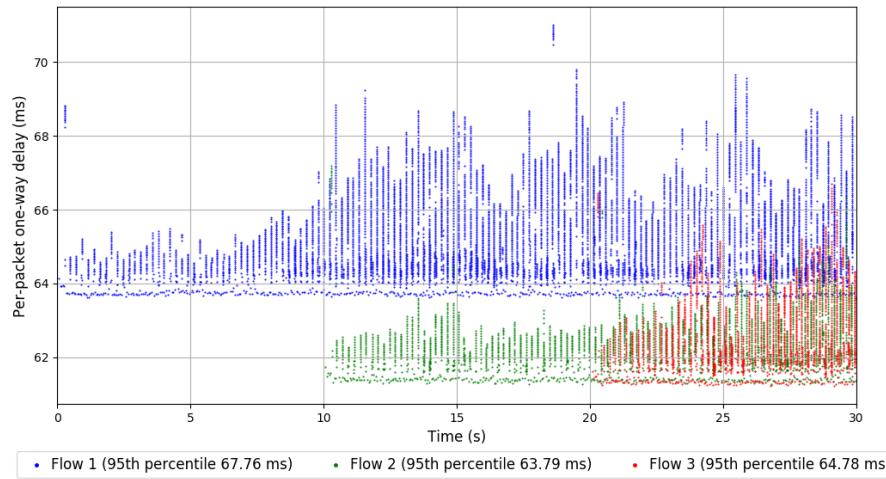
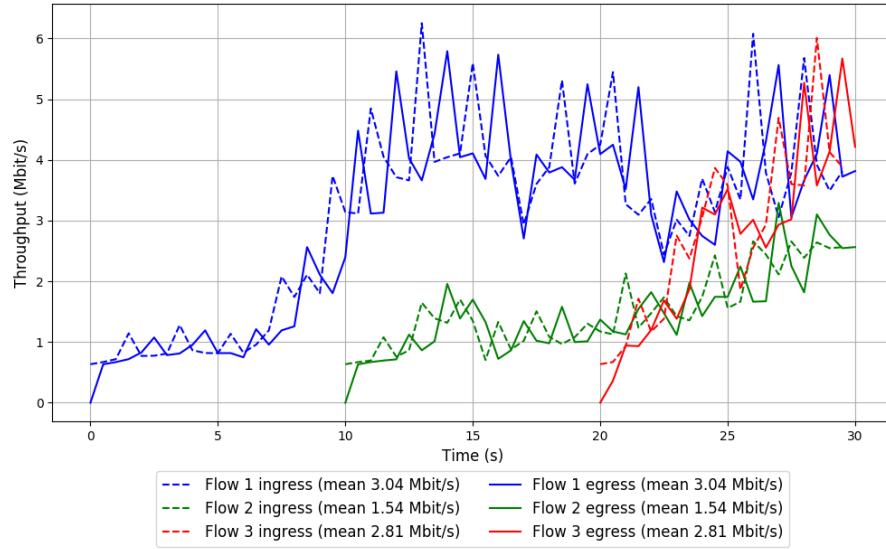


Run 4: Statistics of Sprout

```
Start at: 2019-05-30 02:23:08
End at: 2019-05-30 02:23:38
Local clock offset: 2.827 ms
Remote clock offset: -35.317 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 67.371 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 67.756 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 64.781 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

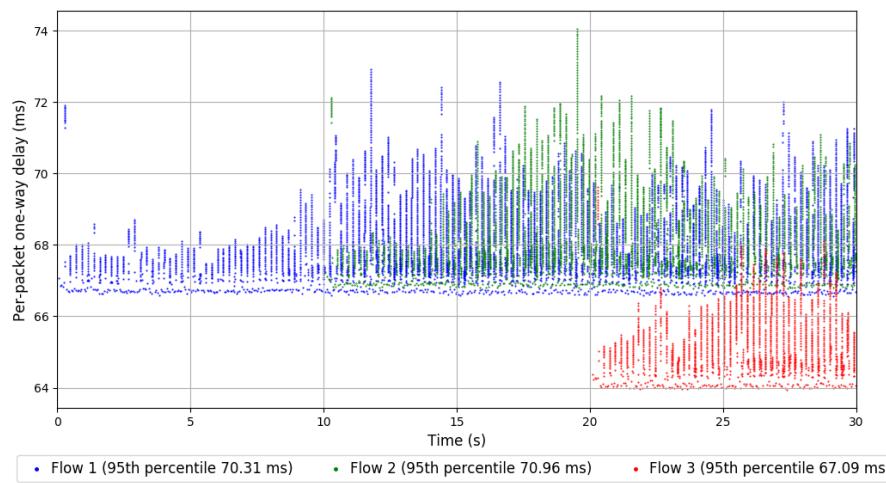
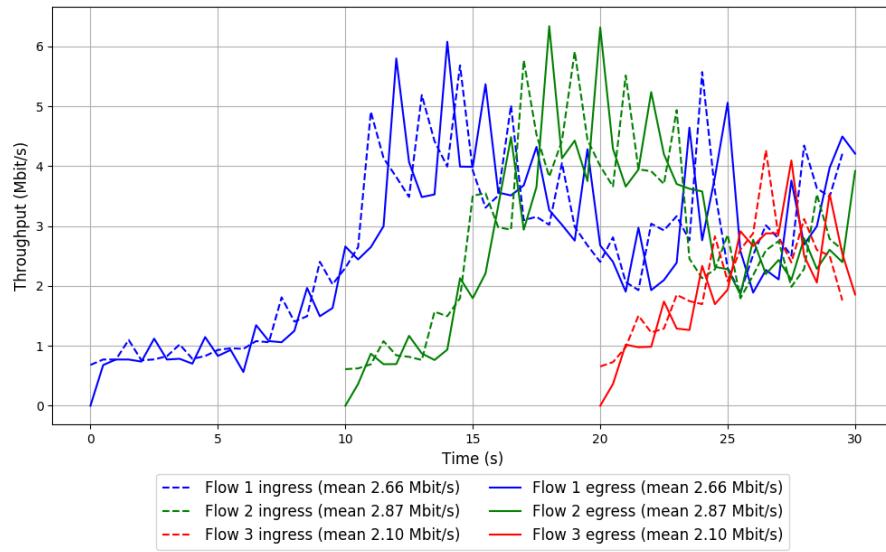


Run 5: Statistics of Sprout

```
Start at: 2019-05-30 02:53:32
End at: 2019-05-30 02:54:02
Local clock offset: -2.981 ms
Remote clock offset: -36.082 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 70.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 70.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 70.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 67.095 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

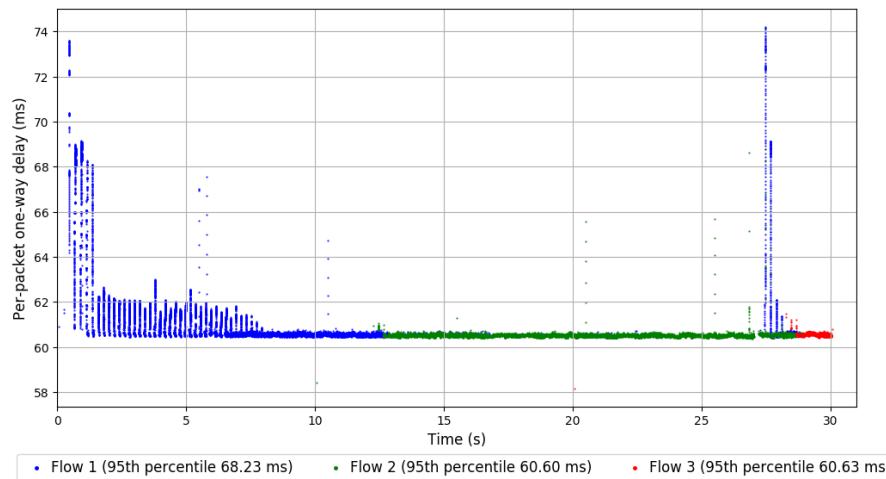
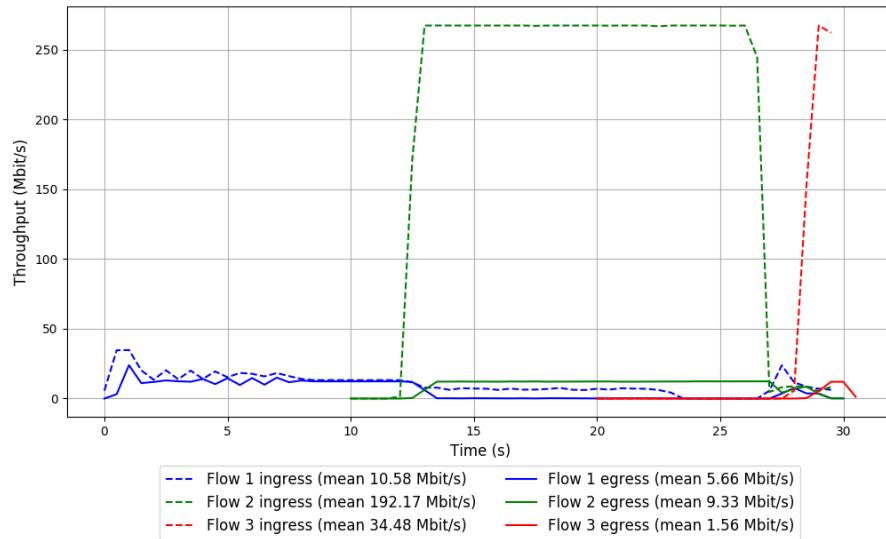


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-05-30 00:50:26
End at: 2019-05-30 00:50:56
Local clock offset: -1.48 ms
Remote clock offset: -41.55 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.36 Mbit/s
95th percentile per-packet one-way delay: 63.243 ms
Loss rate: 91.76%
-- Flow 1:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 68.228 ms
Loss rate: 46.56%
-- Flow 2:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 60.597 ms
Loss rate: 95.16%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 60.634 ms
Loss rate: 95.49%
```

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

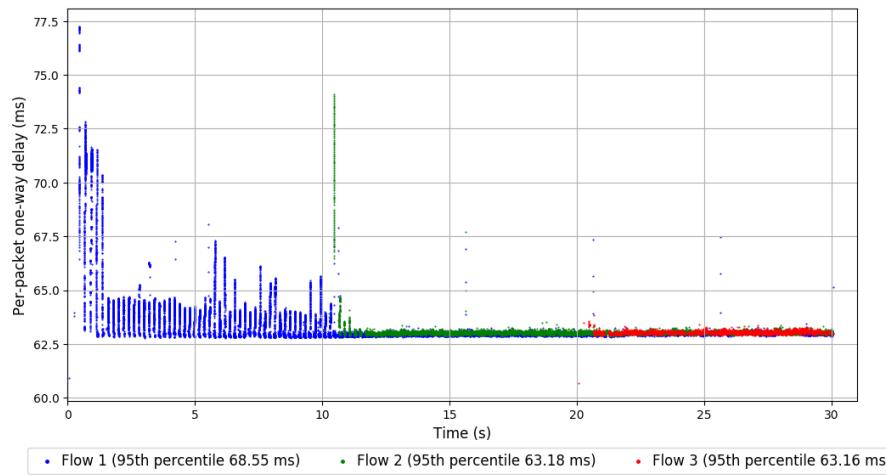
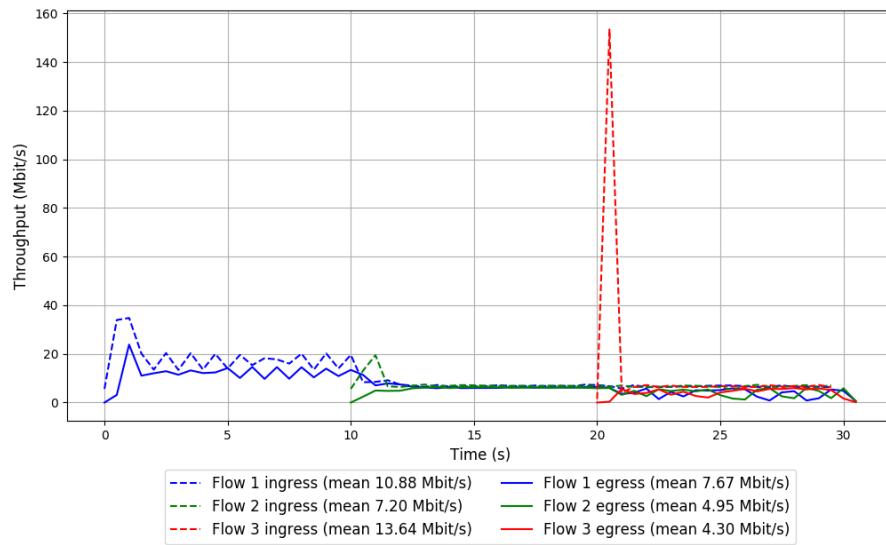


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-05-30 01:20:57
End at: 2019-05-30 01:21:27
Local clock offset: -1.464 ms
Remote clock offset: -39.608 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 65.649 ms
Loss rate: 38.64%
-- Flow 1:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 68.554 ms
Loss rate: 29.48%
-- Flow 2:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 63.179 ms
Loss rate: 31.20%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 63.157 ms
Loss rate: 68.49%
```

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

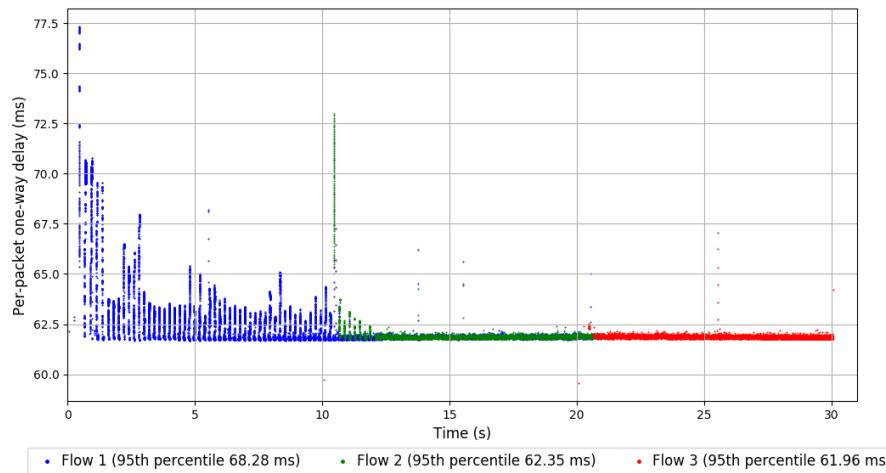
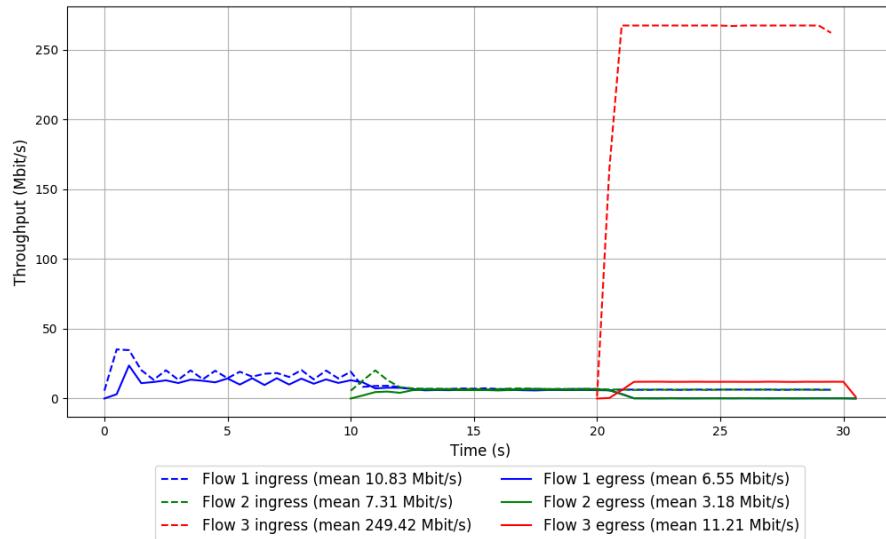


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-05-30 01:51:22
End at: 2019-05-30 01:51:52
Local clock offset: 2.945 ms
Remote clock offset: -37.866 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 65.133 ms
Loss rate: 87.44%
-- Flow 1:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 68.281 ms
Loss rate: 39.59%
-- Flow 2:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 62.348 ms
Loss rate: 56.49%
-- Flow 3:
Average throughput: 11.21 Mbit/s
95th percentile per-packet one-way delay: 61.964 ms
Loss rate: 95.50%
```

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

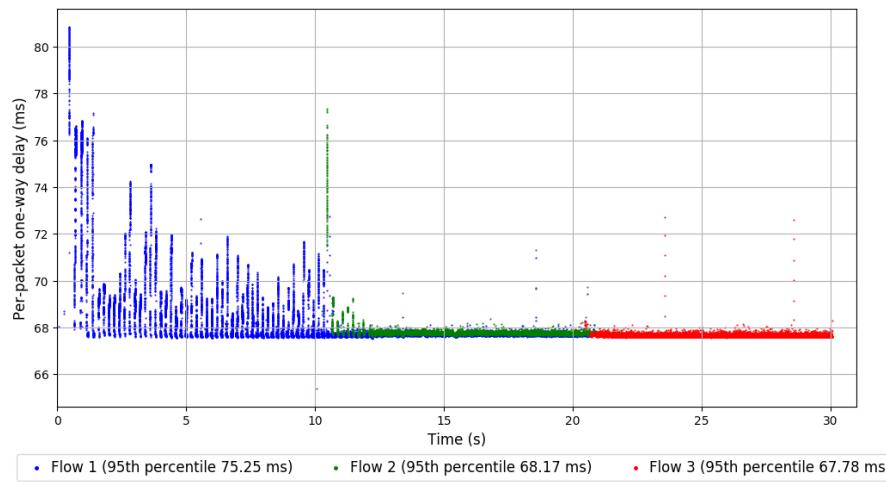
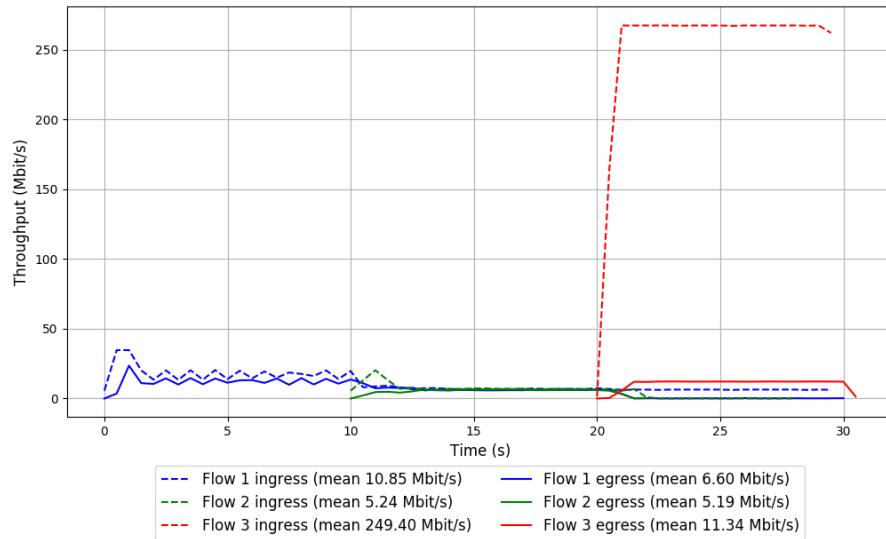


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-05-30 02:21:47
End at: 2019-05-30 02:22:17
Local clock offset: -2.191 ms
Remote clock offset: -36.417 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 71.811 ms
Loss rate: 87.21%
-- Flow 1:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 75.252 ms
Loss rate: 39.38%
-- Flow 2:
Average throughput: 5.19 Mbit/s
95th percentile per-packet one-way delay: 68.169 ms
Loss rate: 34.97%
-- Flow 3:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 67.778 ms
Loss rate: 95.46%
```

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

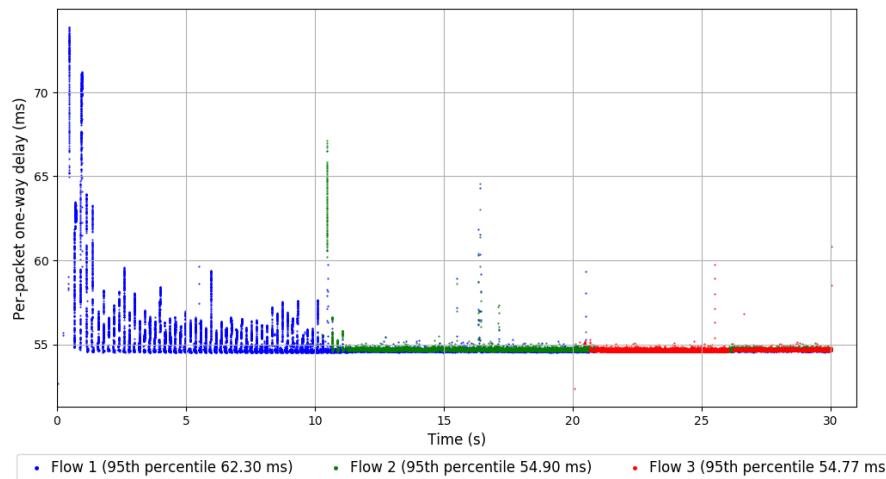
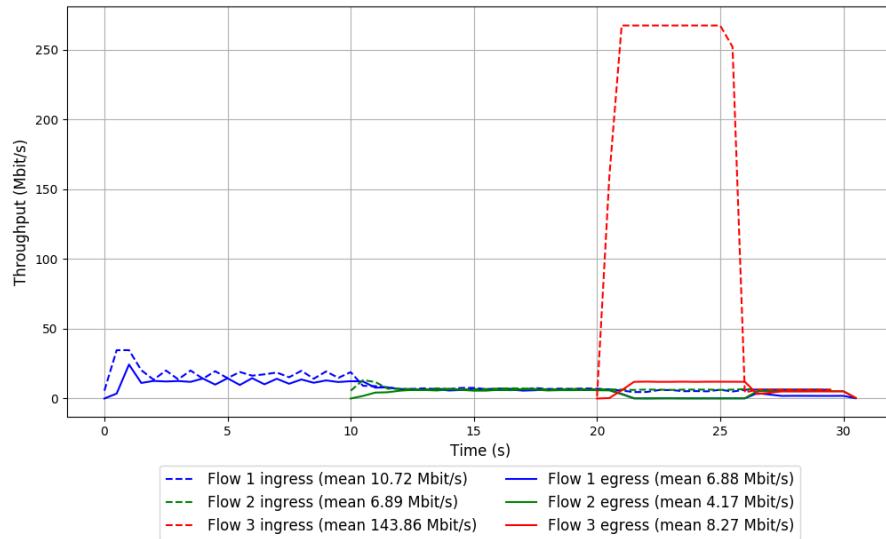


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-05-30 02:52:11
End at: 2019-05-30 02:52:41
Local clock offset: 1.886 ms
Remote clock offset: -43.486 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 58.035 ms
Loss rate: 80.34%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 62.298 ms
Loss rate: 35.76%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 54.895 ms
Loss rate: 39.47%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 54.773 ms
Loss rate: 94.25%
```

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

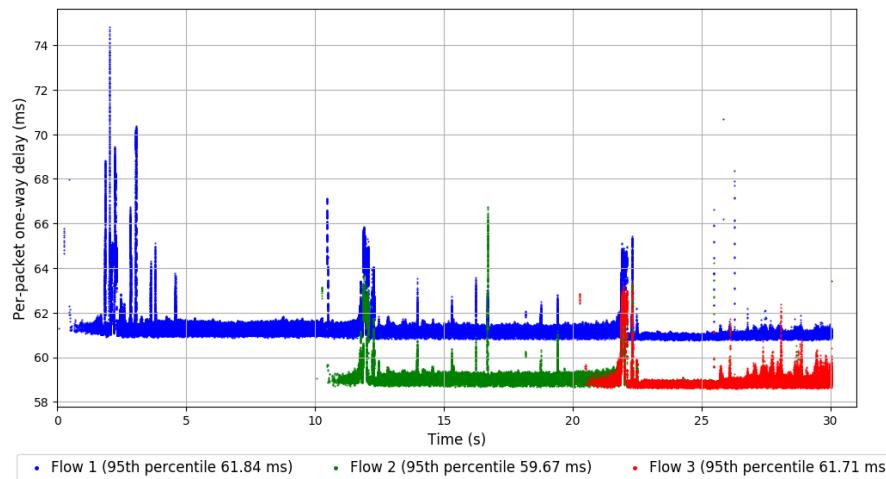
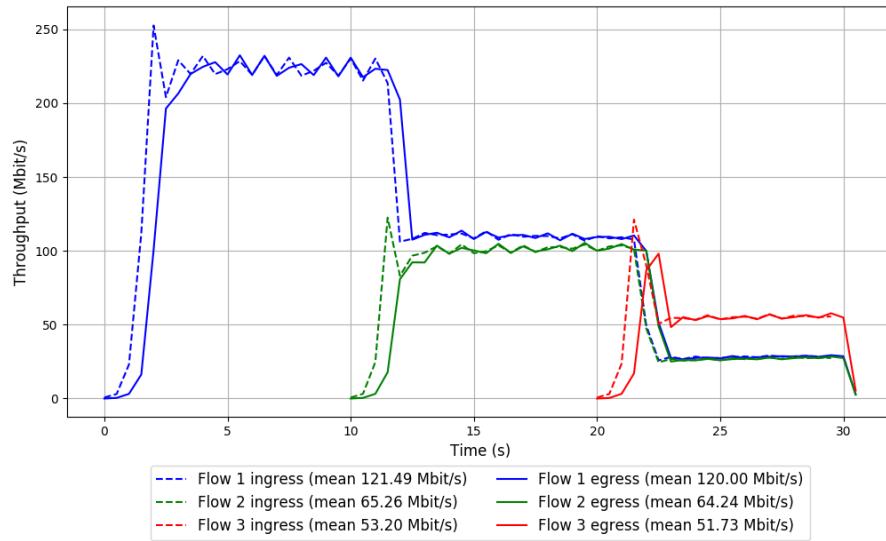


Run 1: Statistics of TCP Vegas

```
Start at: 2019-05-30 00:43:22
End at: 2019-05-30 00:43:52
Local clock offset: -1.764 ms
Remote clock offset: -42.379 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.98 Mbit/s
95th percentile per-packet one-way delay: 61.650 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 120.00 Mbit/s
95th percentile per-packet one-way delay: 61.839 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 64.24 Mbit/s
95th percentile per-packet one-way delay: 59.668 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 51.73 Mbit/s
95th percentile per-packet one-way delay: 61.706 ms
Loss rate: 2.75%
```

Run 1: Report of TCP Vegas — Data Link

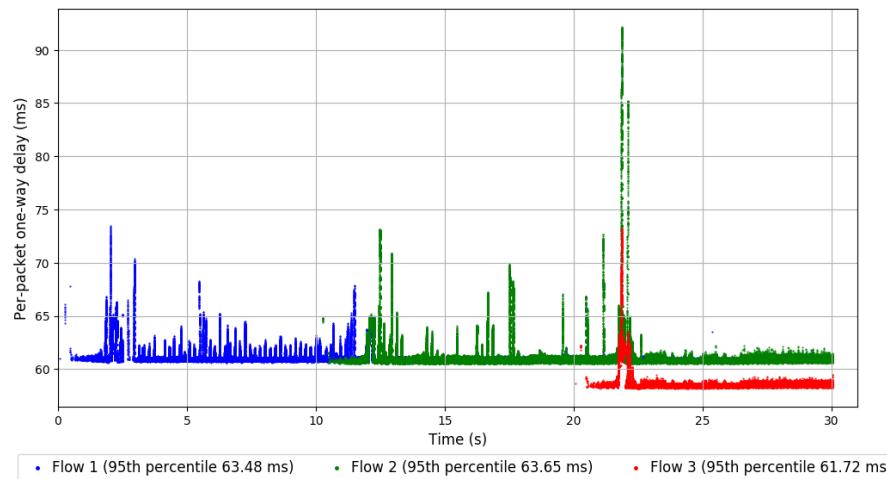
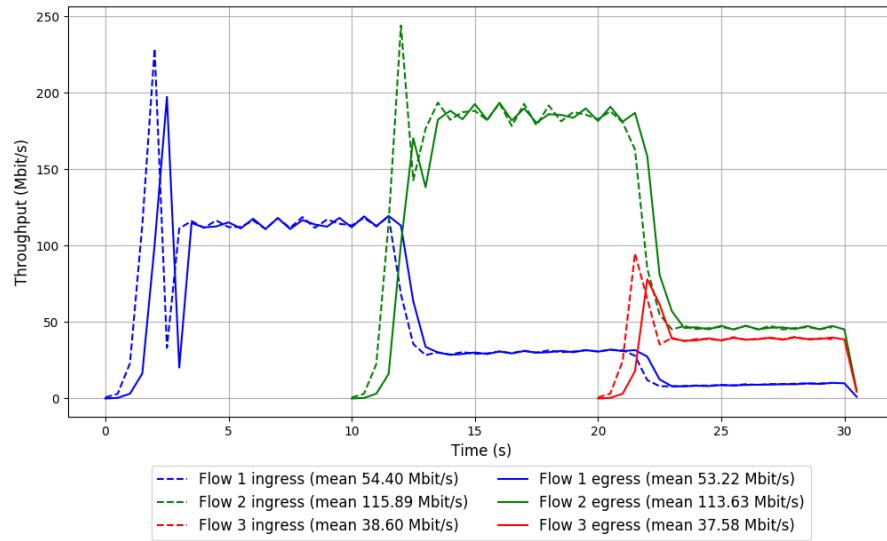


Run 2: Statistics of TCP Vegas

```
Start at: 2019-05-30 01:13:52
End at: 2019-05-30 01:14:22
Local clock offset: 1.849 ms
Remote clock offset: -38.003 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.43 Mbit/s
95th percentile per-packet one-way delay: 63.357 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 53.22 Mbit/s
95th percentile per-packet one-way delay: 63.480 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 113.63 Mbit/s
95th percentile per-packet one-way delay: 63.650 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 37.58 Mbit/s
95th percentile per-packet one-way delay: 61.723 ms
Loss rate: 2.64%
```

Run 2: Report of TCP Vegas — Data Link

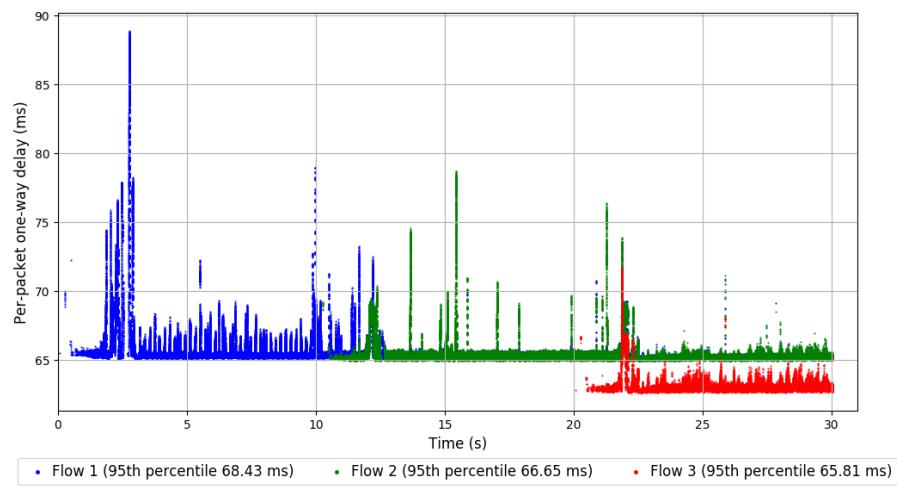
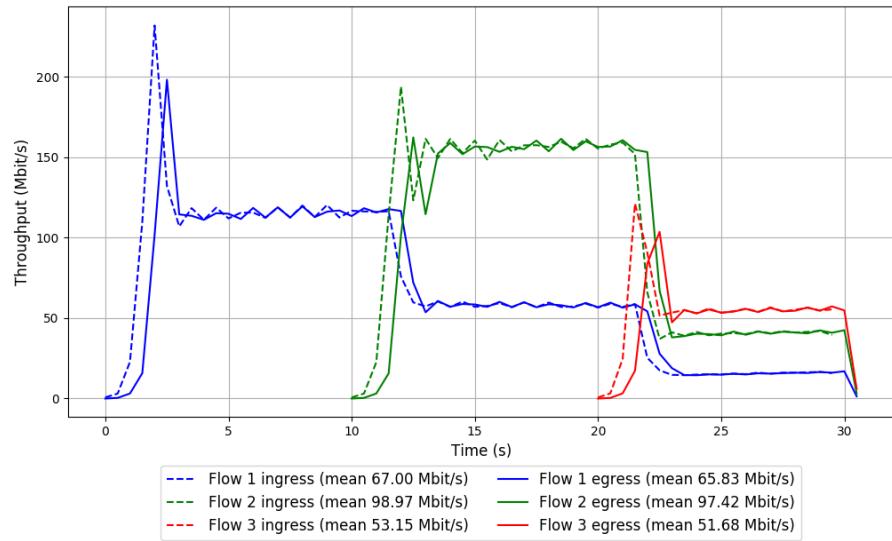


Run 3: Statistics of TCP Vegas

```
Start at: 2019-05-30 01:44:20
End at: 2019-05-30 01:44:50
Local clock offset: 3.138 ms
Remote clock offset: -34.205 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.90 Mbit/s
95th percentile per-packet one-way delay: 67.491 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 65.83 Mbit/s
95th percentile per-packet one-way delay: 68.428 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 66.646 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 65.806 ms
Loss rate: 2.75%
```

Run 3: Report of TCP Vegas — Data Link

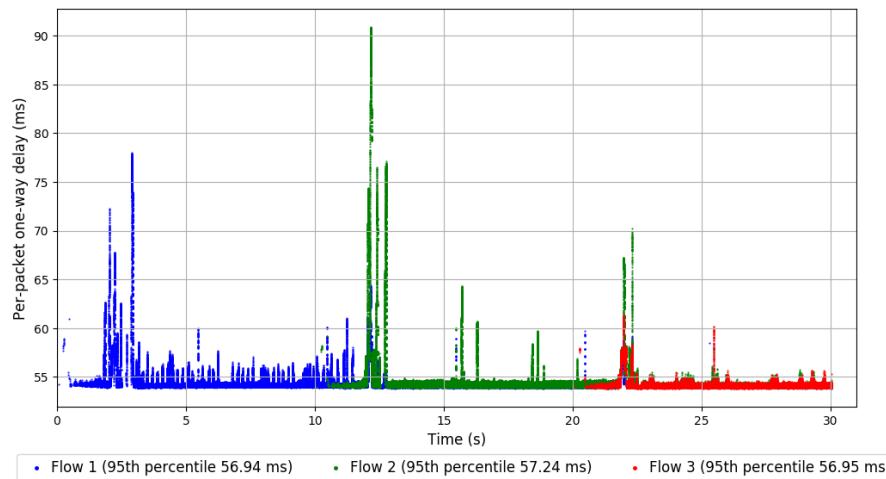
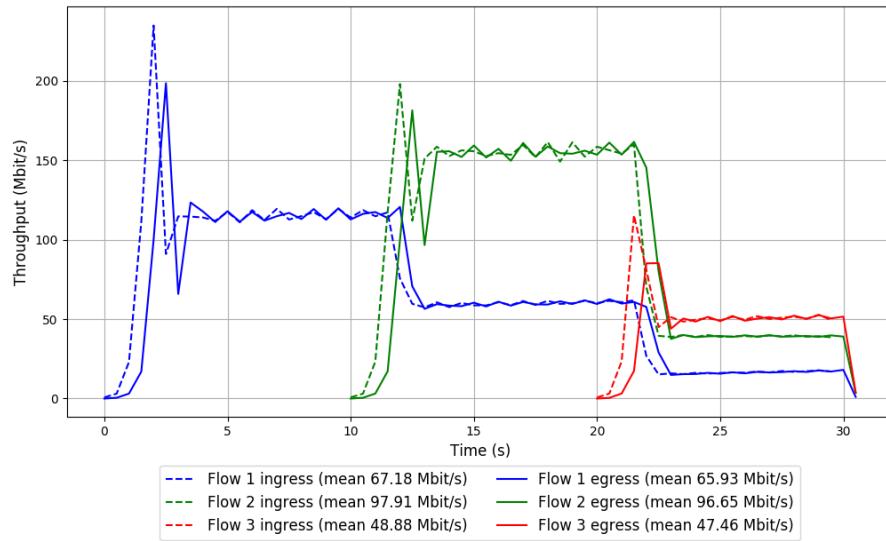


Run 4: Statistics of TCP Vegas

```
Start at: 2019-05-30 02:14:47
End at: 2019-05-30 02:15:17
Local clock offset: 2.922 ms
Remote clock offset: -45.058 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.15 Mbit/s
95th percentile per-packet one-way delay: 57.066 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 65.93 Mbit/s
95th percentile per-packet one-way delay: 56.939 ms
Loss rate: 1.86%
-- Flow 2:
Average throughput: 96.65 Mbit/s
95th percentile per-packet one-way delay: 57.242 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 56.952 ms
Loss rate: 2.91%
```

Run 4: Report of TCP Vegas — Data Link

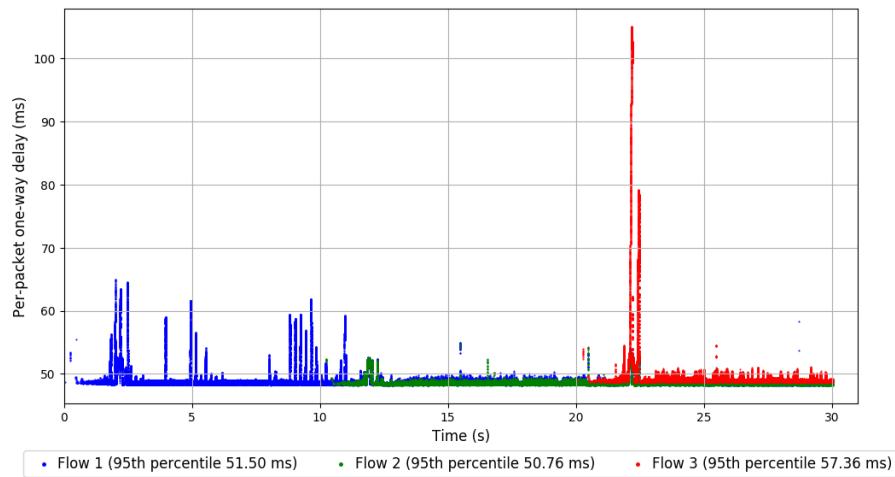
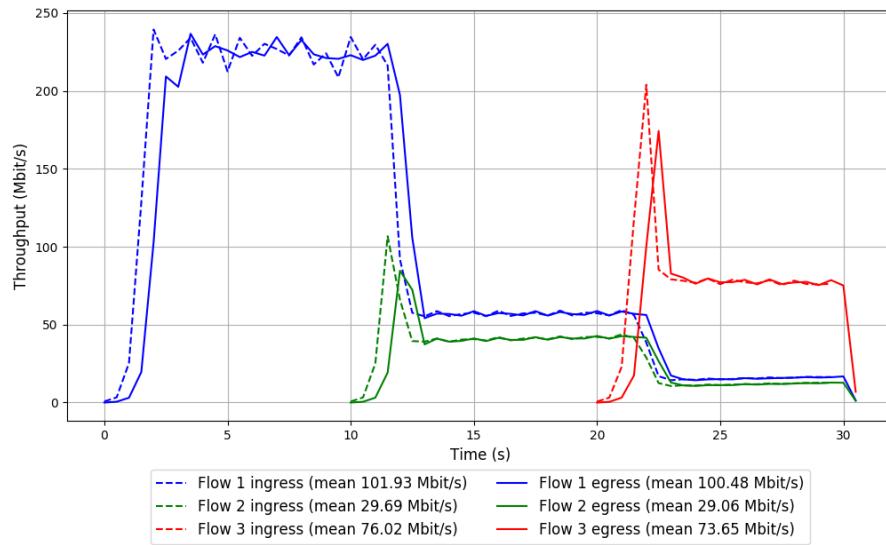


Run 5: Statistics of TCP Vegas

```
Start at: 2019-05-30 02:45:08
End at: 2019-05-30 02:45:38
Local clock offset: 1.806 ms
Remote clock offset: -47.745 ms

# Below is generated by plot.py at 2019-05-30 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.32 Mbit/s
95th percentile per-packet one-way delay: 51.650 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 100.48 Mbit/s
95th percentile per-packet one-way delay: 51.497 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 29.06 Mbit/s
95th percentile per-packet one-way delay: 50.759 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 73.65 Mbit/s
95th percentile per-packet one-way delay: 57.361 ms
Loss rate: 3.11%
```

Run 5: Report of TCP Vegas — Data Link

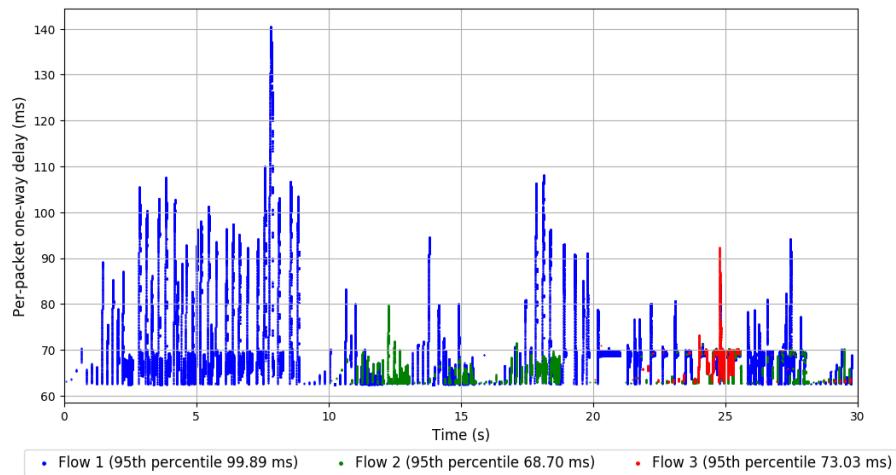
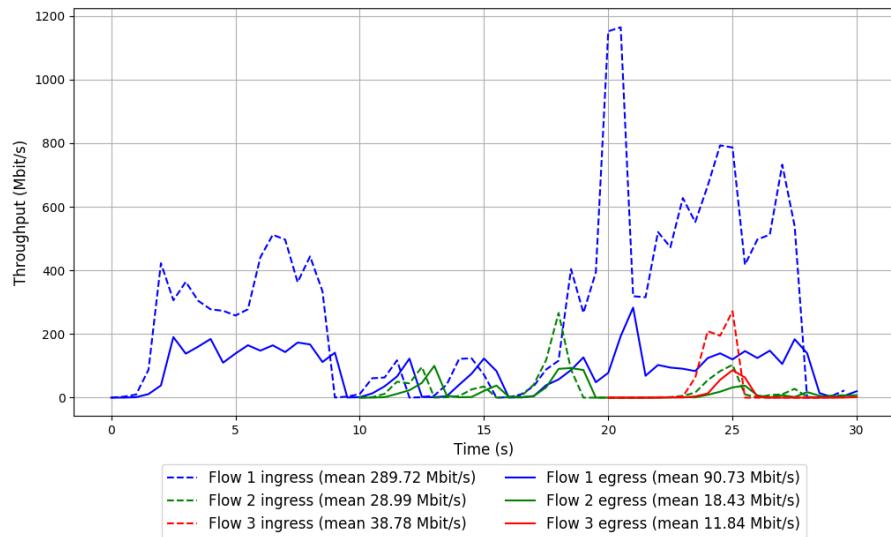


Run 1: Statistics of Verus

```
Start at: 2019-05-30 00:25:33
End at: 2019-05-30 00:26:03
Local clock offset: 4.1 ms
Remote clock offset: -34.303 ms

# Below is generated by plot.py at 2019-05-30 03:28:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.72 Mbit/s
95th percentile per-packet one-way delay: 98.705 ms
Loss rate: 66.79%
-- Flow 1:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 99.890 ms
Loss rate: 68.68%
-- Flow 2:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 68.703 ms
Loss rate: 36.40%
-- Flow 3:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 73.029 ms
Loss rate: 69.45%
```

Run 1: Report of Verus — Data Link

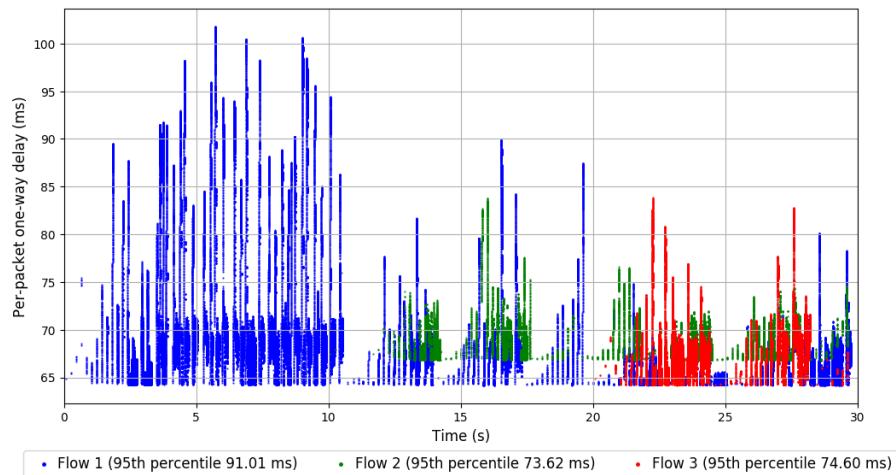
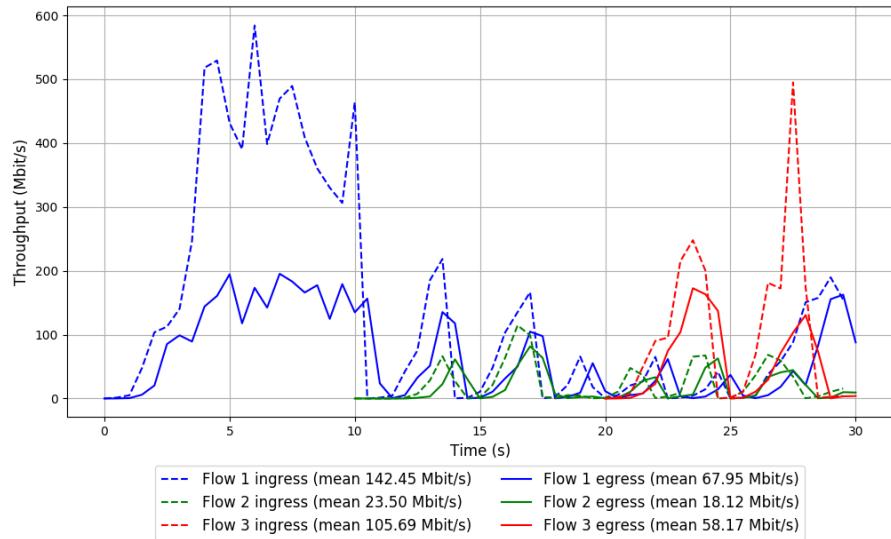


Run 2: Statistics of Verus

```
Start at: 2019-05-30 00:55:59
End at: 2019-05-30 00:56:29
Local clock offset: 1.684 ms
Remote clock offset: -31.514 ms

# Below is generated by plot.py at 2019-05-30 03:28:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.59 Mbit/s
95th percentile per-packet one-way delay: 88.416 ms
Loss rate: 48.67%
-- Flow 1:
Average throughput: 67.95 Mbit/s
95th percentile per-packet one-way delay: 91.013 ms
Loss rate: 52.30%
-- Flow 2:
Average throughput: 18.12 Mbit/s
95th percentile per-packet one-way delay: 73.616 ms
Loss rate: 23.68%
-- Flow 3:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 74.602 ms
Loss rate: 44.94%
```

Run 2: Report of Verus — Data Link

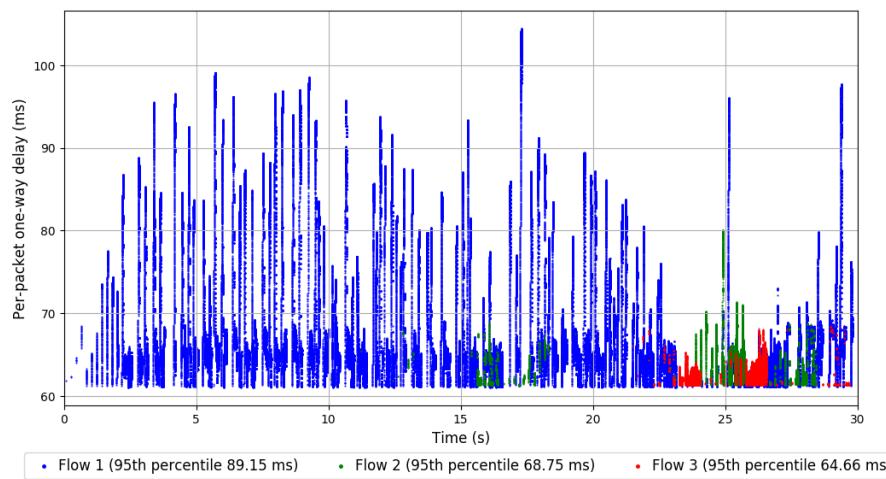
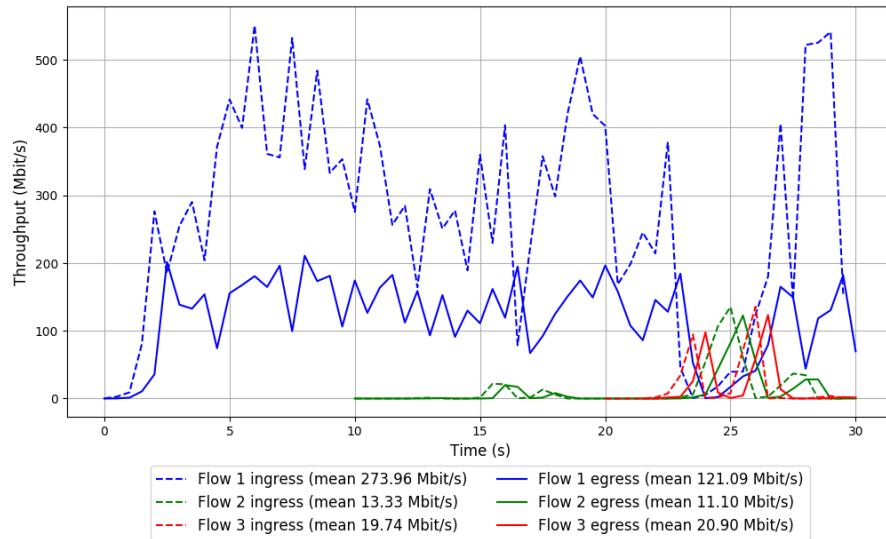


Run 3: Statistics of Verus

```
Start at: 2019-05-30 01:26:27
End at: 2019-05-30 01:26:57
Local clock offset: -1.632 ms
Remote clock offset: -39.153 ms

# Below is generated by plot.py at 2019-05-30 03:29:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.20 Mbit/s
95th percentile per-packet one-way delay: 88.443 ms
Loss rate: 53.54%
-- Flow 1:
Average throughput: 121.09 Mbit/s
95th percentile per-packet one-way delay: 89.146 ms
Loss rate: 55.79%
-- Flow 2:
Average throughput: 11.10 Mbit/s
95th percentile per-packet one-way delay: 68.753 ms
Loss rate: 16.72%
-- Flow 3:
Average throughput: 20.90 Mbit/s
95th percentile per-packet one-way delay: 64.660 ms
Loss rate: 5.66%
```

Run 3: Report of Verus — Data Link

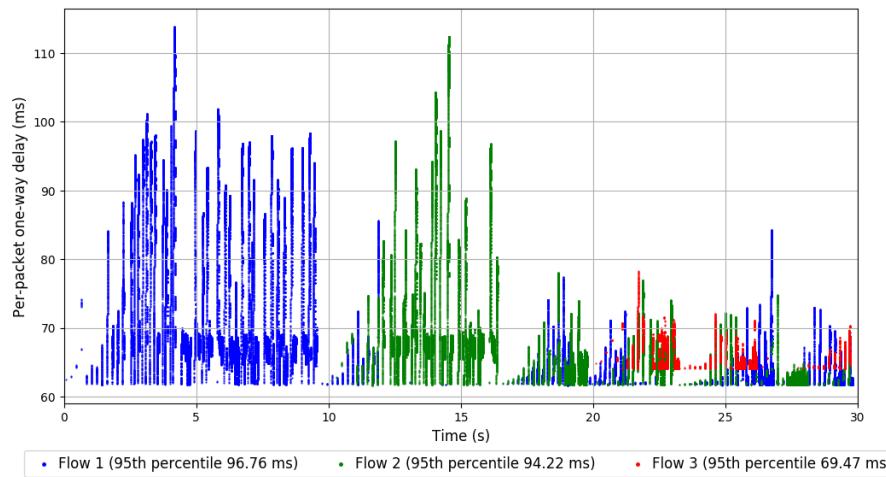
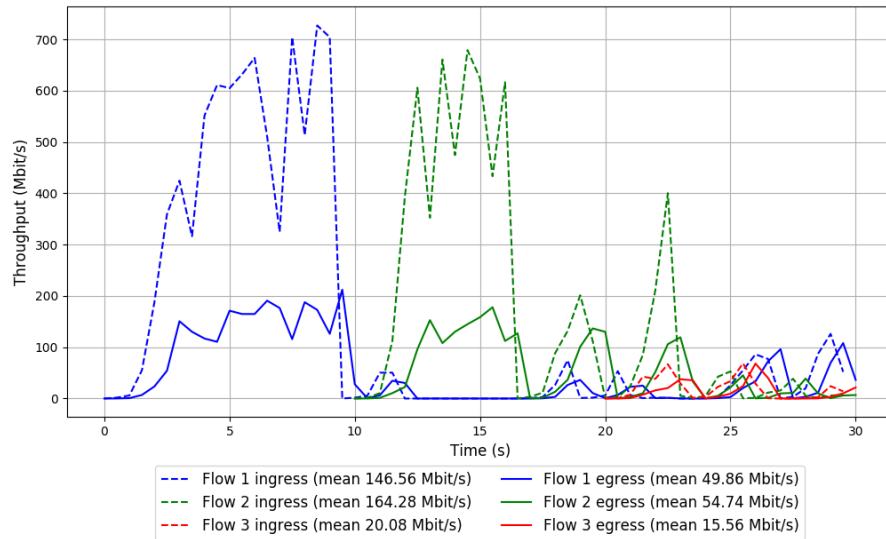


Run 4: Statistics of Verus

```
Start at: 2019-05-30 01:56:55
End at: 2019-05-30 01:57:25
Local clock offset: 2.989 ms
Remote clock offset: -35.554 ms

# Below is generated by plot.py at 2019-05-30 03:29:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.90 Mbit/s
95th percentile per-packet one-way delay: 96.168 ms
Loss rate: 65.18%
-- Flow 1:
Average throughput: 49.86 Mbit/s
95th percentile per-packet one-way delay: 96.763 ms
Loss rate: 65.98%
-- Flow 2:
Average throughput: 54.74 Mbit/s
95th percentile per-packet one-way delay: 94.222 ms
Loss rate: 66.67%
-- Flow 3:
Average throughput: 15.56 Mbit/s
95th percentile per-packet one-way delay: 69.473 ms
Loss rate: 22.52%
```

Run 4: Report of Verus — Data Link

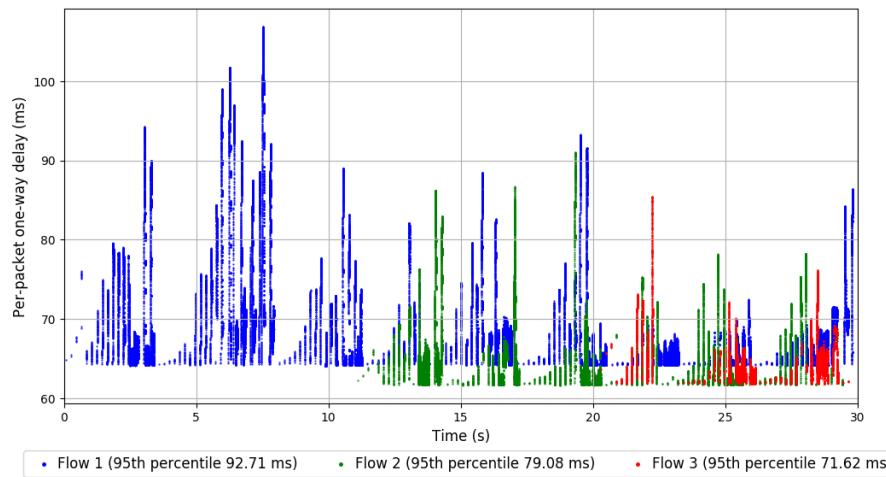
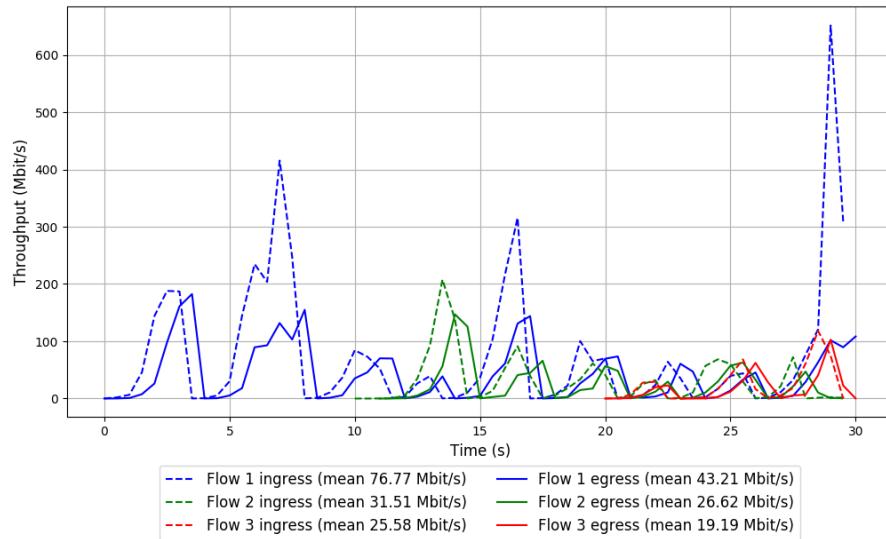


Run 5: Statistics of Verus

```
Start at: 2019-05-30 02:27:21
End at: 2019-05-30 02:27:51
Local clock offset: 3.379 ms
Remote clock offset: -34.176 ms

# Below is generated by plot.py at 2019-05-30 03:29:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.74 Mbit/s
95th percentile per-packet one-way delay: 88.332 ms
Loss rate: 37.75%
-- Flow 1:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 92.708 ms
Loss rate: 43.71%
-- Flow 2:
Average throughput: 26.62 Mbit/s
95th percentile per-packet one-way delay: 79.076 ms
Loss rate: 20.65%
-- Flow 3:
Average throughput: 19.19 Mbit/s
95th percentile per-packet one-way delay: 71.625 ms
Loss rate: 24.99%
```

Run 5: Report of Verus — Data Link

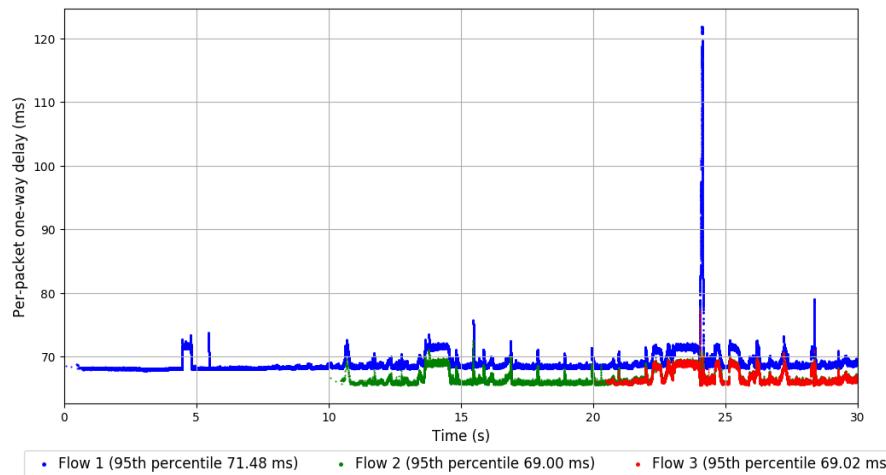
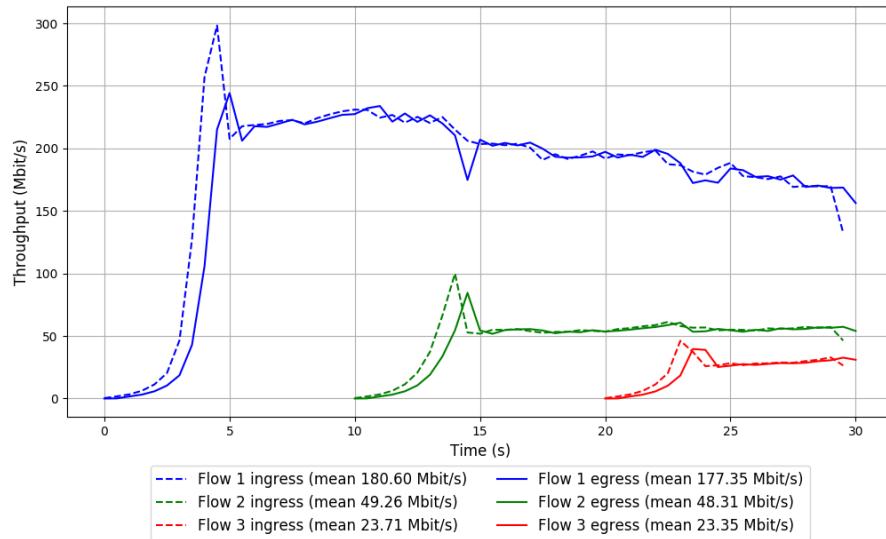


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-05-30 00:29:53
End at: 2019-05-30 00:30:23
Local clock offset: 0.545 ms
Remote clock offset: -35.093 ms

# Below is generated by plot.py at 2019-05-30 03:29:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.18 Mbit/s
95th percentile per-packet one-way delay: 71.445 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 177.35 Mbit/s
95th percentile per-packet one-way delay: 71.484 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 69.004 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 23.35 Mbit/s
95th percentile per-packet one-way delay: 69.017 ms
Loss rate: 1.51%
```

Run 1: Report of PCC-Vivace — Data Link

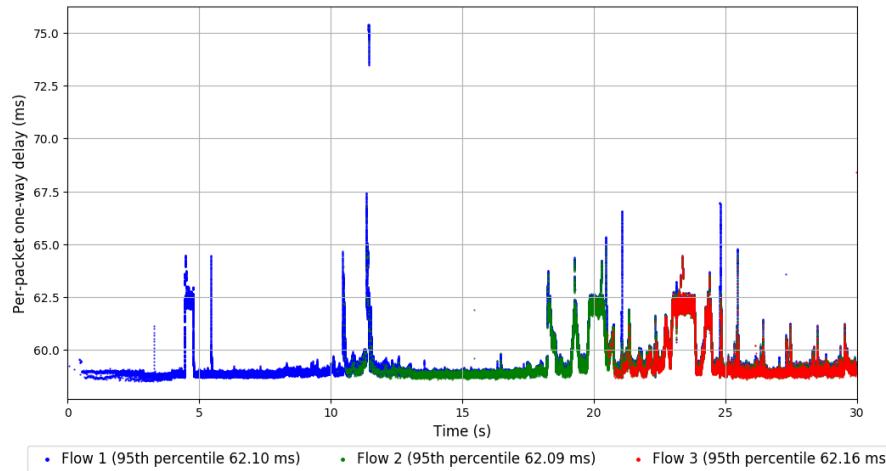
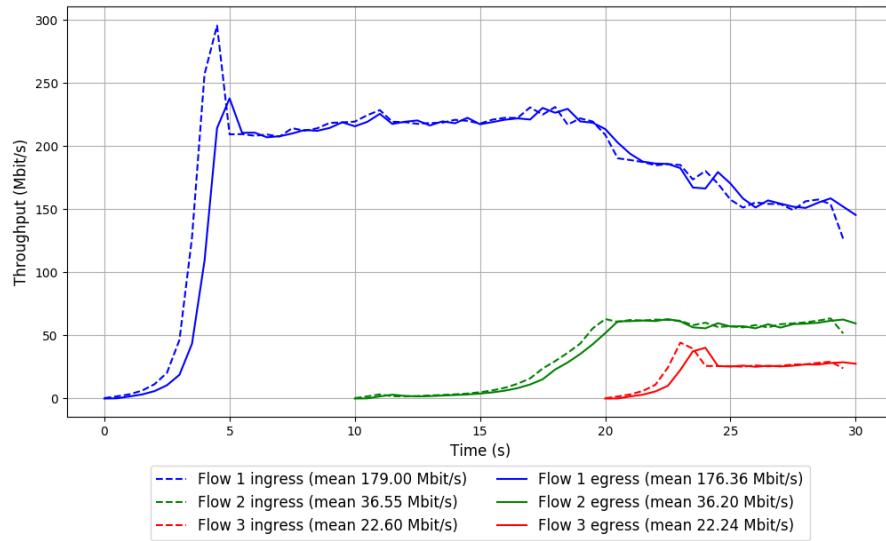


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-05-30 01:00:20
End at: 2019-05-30 01:00:50
Local clock offset: 0.984 ms
Remote clock offset: -40.006 ms

# Below is generated by plot.py at 2019-05-30 03:29:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 207.72 Mbit/s
95th percentile per-packet one-way delay: 62.099 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 176.36 Mbit/s
95th percentile per-packet one-way delay: 62.096 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 36.20 Mbit/s
95th percentile per-packet one-way delay: 62.094 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 22.24 Mbit/s
95th percentile per-packet one-way delay: 62.155 ms
Loss rate: 1.55%
```

Run 2: Report of PCC-Vivace — Data Link

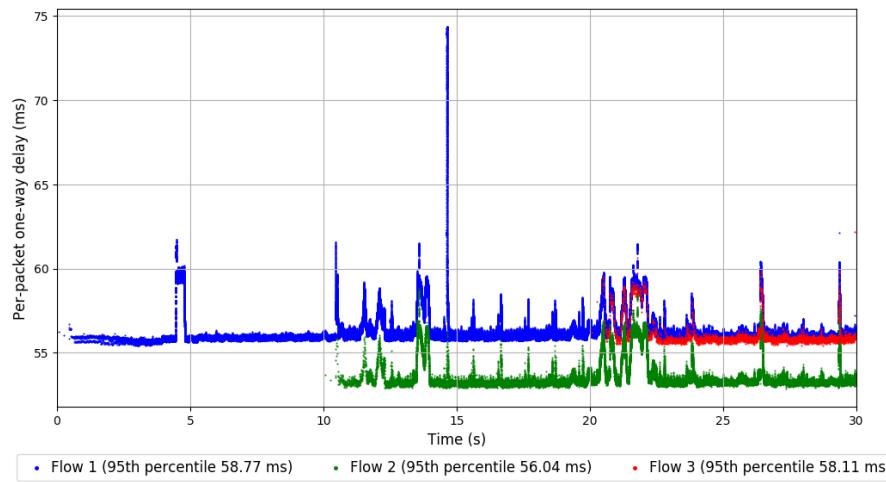
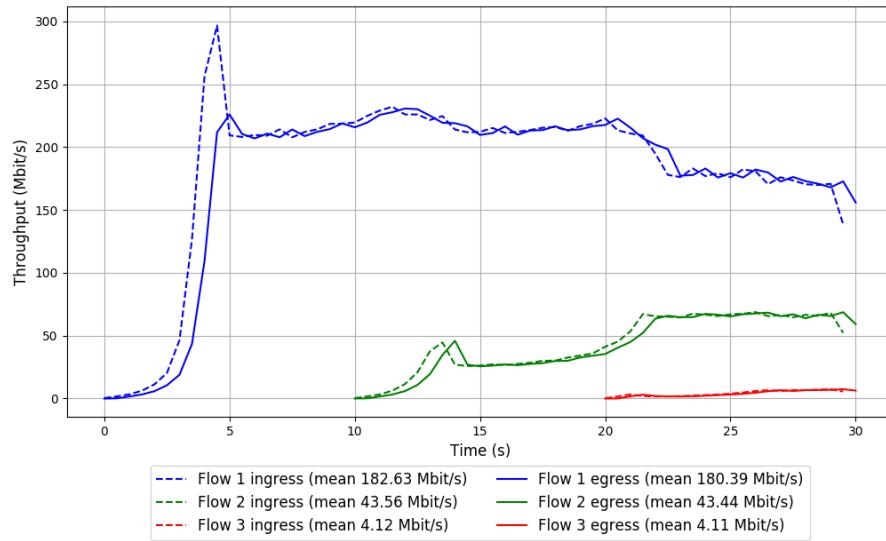


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-05-30 01:30:52
End at: 2019-05-30 01:31:22
Local clock offset: -0.704 ms
Remote clock offset: -46.447 ms

# Below is generated by plot.py at 2019-05-30 03:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.60 Mbit/s
95th percentile per-packet one-way delay: 58.506 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 180.39 Mbit/s
95th percentile per-packet one-way delay: 58.765 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 56.042 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 58.114 ms
Loss rate: 0.24%
```

Run 3: Report of PCC-Vivace — Data Link

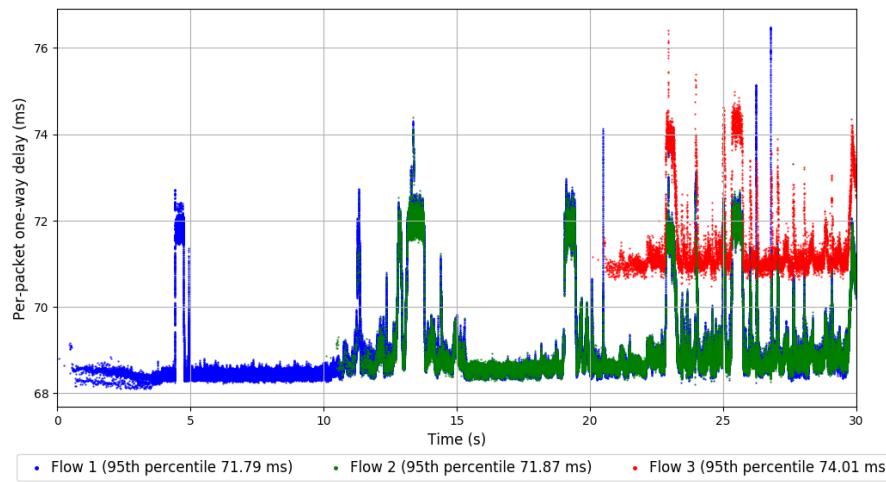
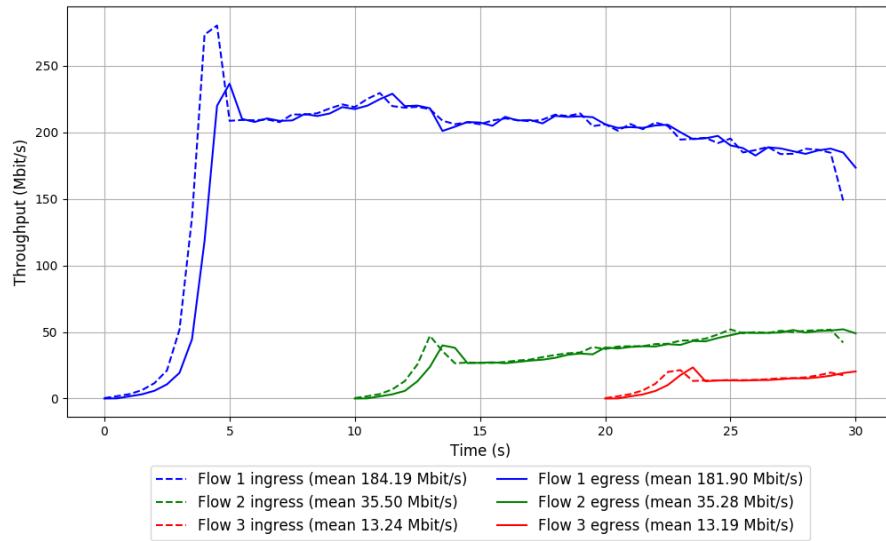


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-05-30 02:01:15
End at: 2019-05-30 02:01:45
Local clock offset: -2.274 ms
Remote clock offset: -34.097 ms

# Below is generated by plot.py at 2019-05-30 03:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.72 Mbit/s
95th percentile per-packet one-way delay: 71.835 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 181.90 Mbit/s
95th percentile per-packet one-way delay: 71.788 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 71.874 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 74.013 ms
Loss rate: 0.39%
```

Run 4: Report of PCC-Vivace — Data Link

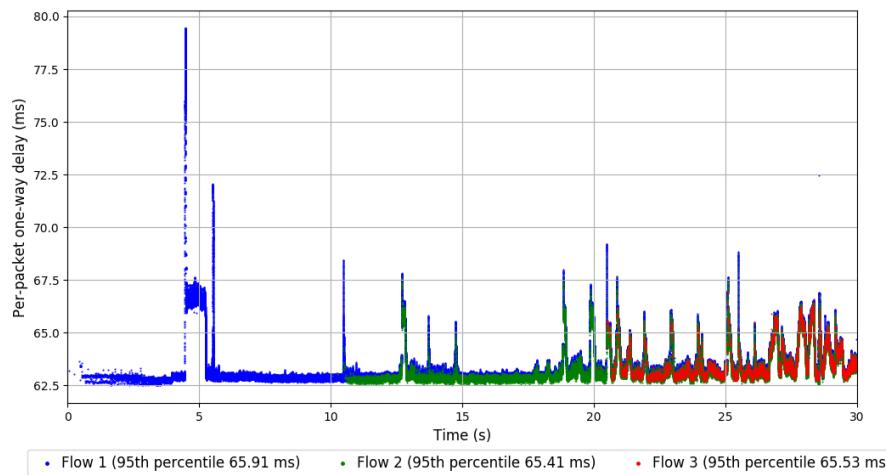
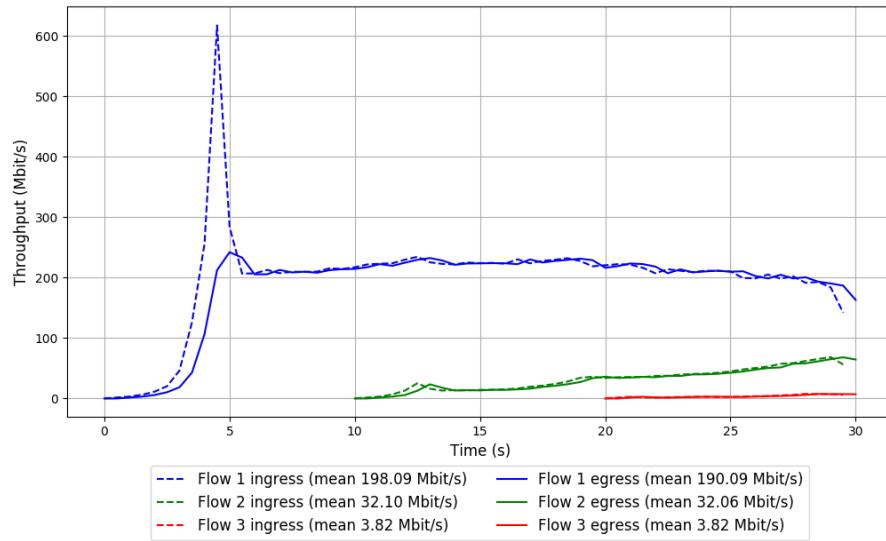


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-05-30 02:31:38
End at: 2019-05-30 02:32:08
Local clock offset: -2.379 ms
Remote clock offset: -41.365 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 212.67 Mbit/s
95th percentile per-packet one-way delay: 65.830 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 190.09 Mbit/s
95th percentile per-packet one-way delay: 65.910 ms
Loss rate: 4.04%
-- Flow 2:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 65.413 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 65.529 ms
Loss rate: 0.12%
```

Run 5: Report of PCC-Vivace — Data Link

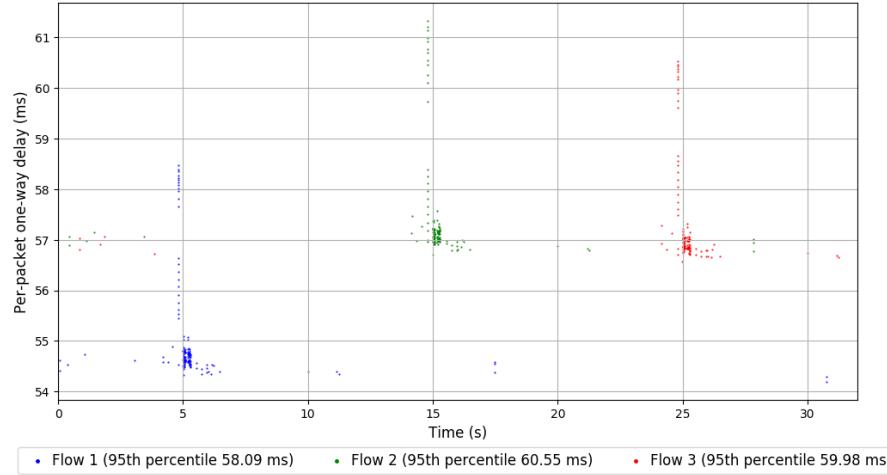
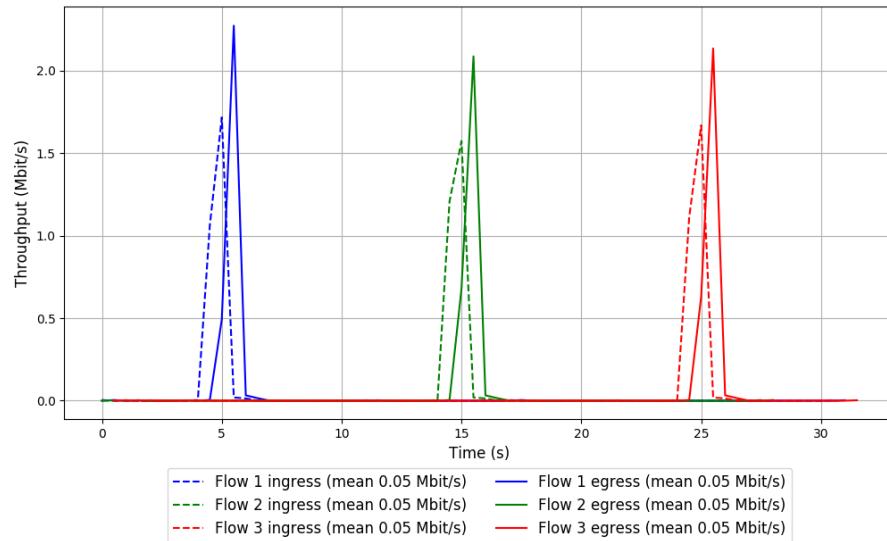


Run 1: Statistics of WebRTC media

```
Start at: 2019-05-30 00:47:53
End at: 2019-05-30 00:48:23
Local clock offset: 2.569 ms
Remote clock offset: -41.473 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 59.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.090 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 59.976 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

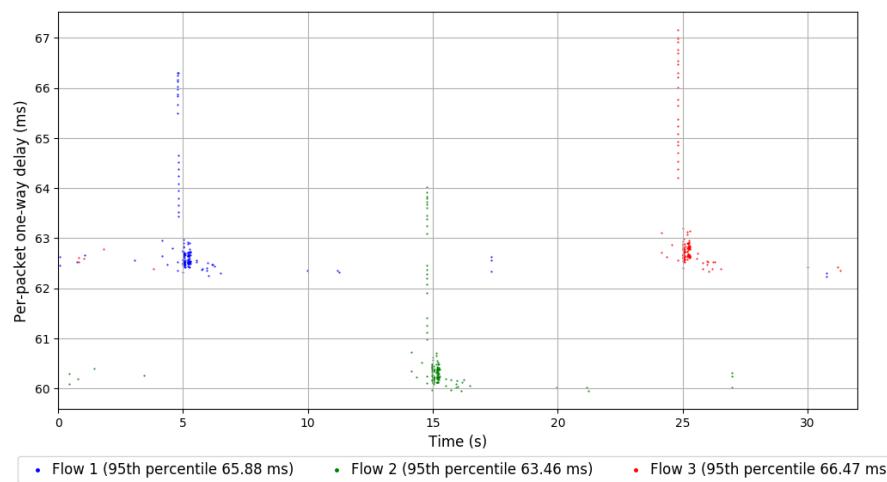
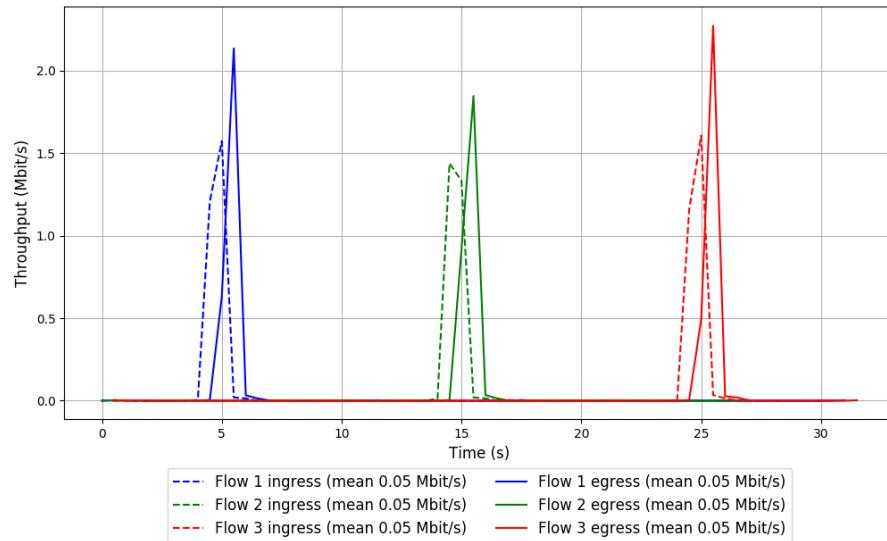


Run 2: Statistics of WebRTC media

```
Start at: 2019-05-30 01:18:22
End at: 2019-05-30 01:18:52
Local clock offset: -1.492 ms
Remote clock offset: -39.943 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 65.644 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.877 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.456 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.468 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

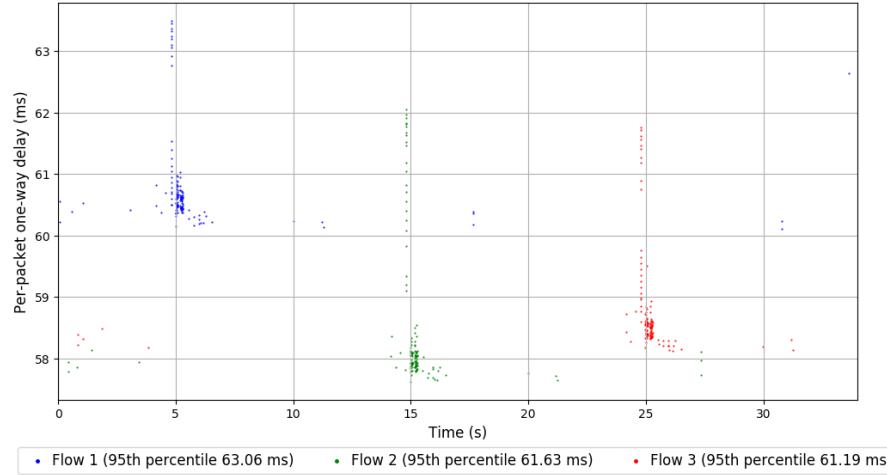
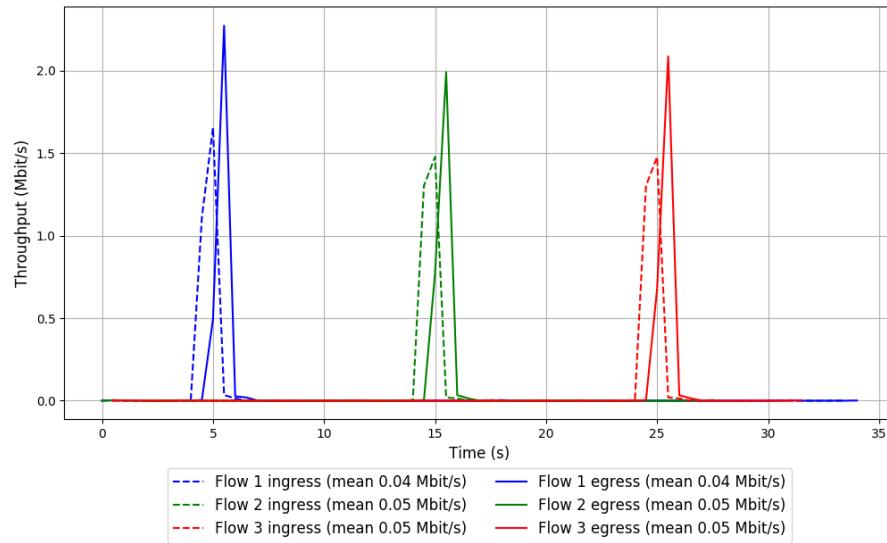


Run 3: Statistics of WebRTC media

```
Start at: 2019-05-30 01:48:48
End at: 2019-05-30 01:49:18
Local clock offset: 2.214 ms
Remote clock offset: -40.03 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 61.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 63.060 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.193 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

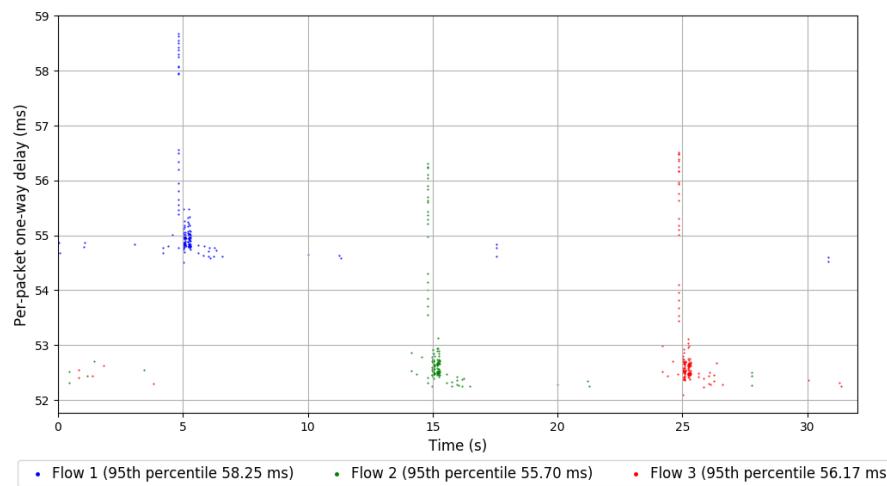
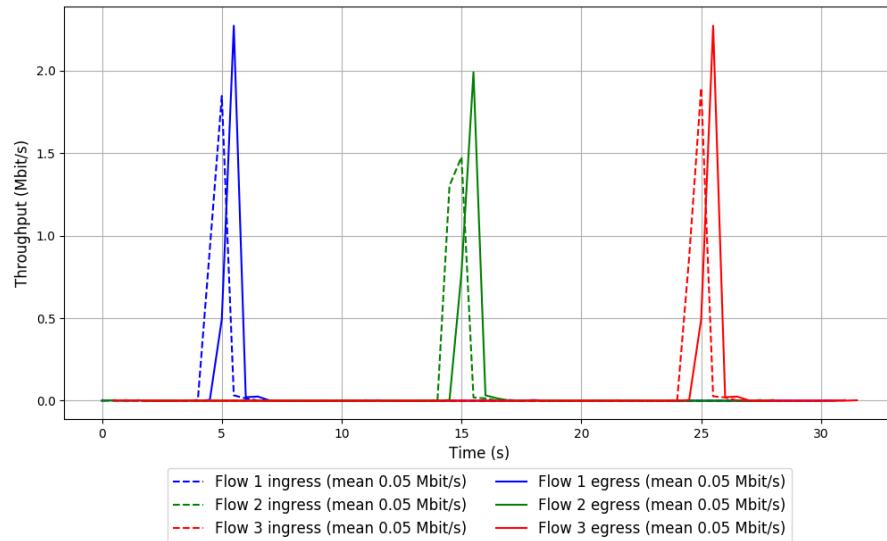


Run 4: Statistics of WebRTC media

```
Start at: 2019-05-30 02:19:13
End at: 2019-05-30 02:19:44
Local clock offset: 2.996 ms
Remote clock offset: -44.211 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 56.249 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.696 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.171 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-05-30 02:49:37
End at: 2019-05-30 02:50:07
Local clock offset: 1.688 ms
Remote clock offset: -36.753 ms

# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.258 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.933 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.937 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

