

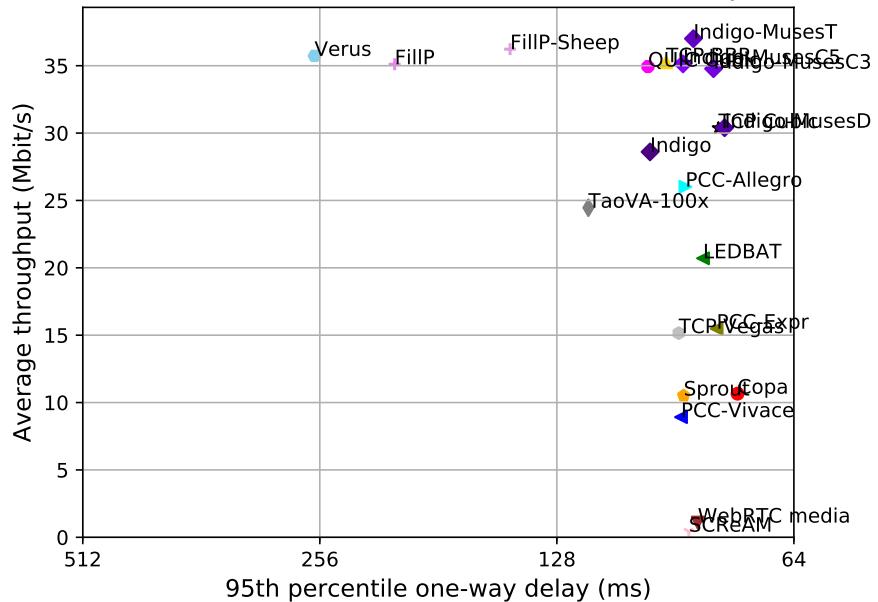
Pantheon Report

Generated at 2019-03-19 16:33:11 (UTC).
Data path: China on `eno1` (*remote*) → AWS Korea on `ens5` (*local*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

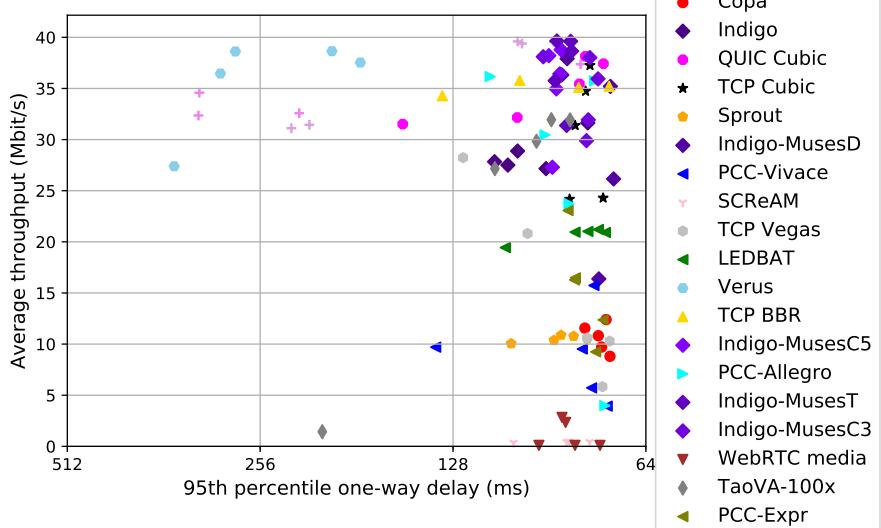
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
 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

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

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



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



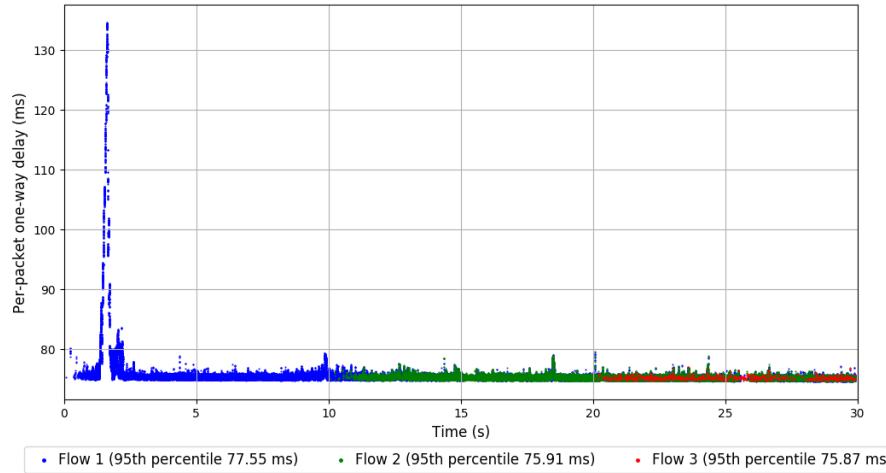
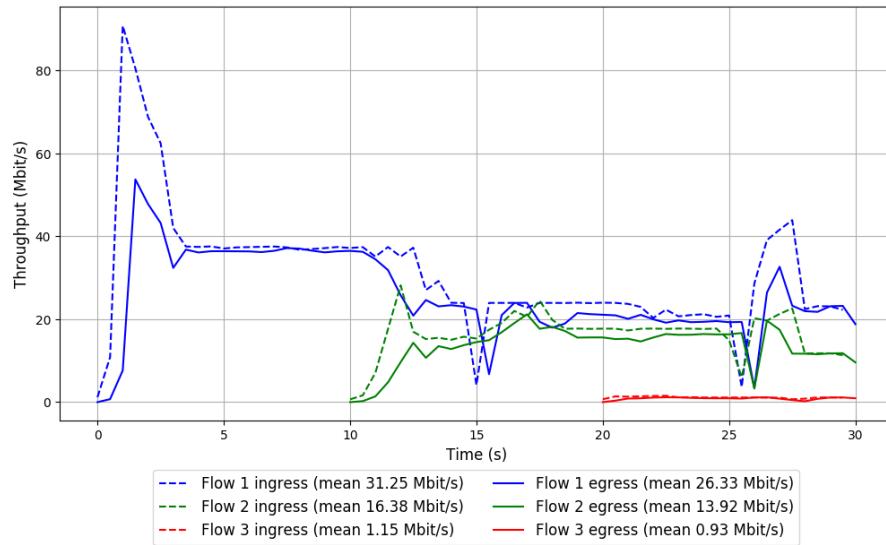
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	22.89	12.95	11.39	93.84	90.72	89.86	16.84	16.46	23.62
Copa	5	5.01	5.92	5.24	75.82	74.79	74.85	0.60	0.85	1.56
TCP Cubic	5	11.90	19.76	16.34	77.99	80.80	79.70	41.92	3.63	4.83
FillP	5	16.51	22.85	10.41	248.78	83.13	79.15	42.53	31.05	35.30
FillP-Sheep	5	20.79	18.67	9.30	226.52	86.43	84.34	26.62	16.15	17.80
Indigo	5	18.69	11.87	6.27	97.35	96.22	96.14	55.29	66.29	70.73
Indigo-MusesC3	5	22.75	13.75	12.44	80.60	81.02	81.18	5.83	3.74	4.78
Indigo-MusesC5	5	18.30	22.48	9.08	86.78	87.20	71.67	7.53	9.81	11.72
Indigo-MusesD	5	17.08	15.29	13.59	77.23	80.02	78.21	2.70	3.21	2.77
Indigo-MusesT	5	27.74	7.69	15.57	85.25	83.12	85.11	9.27	6.18	10.08
LEDBAT	5	13.84	8.38	4.09	83.68	83.14	82.86	0.50	1.10	2.94
PCC-Allegro	5	14.61	14.19	6.16	86.21	88.10	87.50	43.74	33.57	19.73
PCC-Expr	5	3.82	13.32	8.62	81.15	79.83	78.42	51.20	6.96	9.35
QUIC Cubic	5	20.92	16.01	10.43	98.89	96.23	95.45	3.30	4.36	5.19
SCReAM	5	0.21	0.22	0.21	86.73	87.11	87.55	0.46	0.74	1.27
Sprout	5	5.31	5.33	5.08	89.05	85.57	79.22	0.59	0.92	1.52
TaoVA-100x	5	13.64	8.39	15.99	111.25	113.80	116.48	25.54	21.70	24.04
TCP Vegas	5	3.08	11.72	13.04	84.19	88.37	91.97	57.97	0.76	1.59
Verus	5	28.93	8.98	2.68	277.65	206.09	134.68	40.07	41.06	30.95
PCC-Vivace	5	3.30	7.57	1.86	89.40	88.67	91.07	1.00	1.04	1.57
WebRTC media	5	0.80	0.25	0.05	81.26	78.48	82.57	54.99	0.20	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-19 14:17:41
End at: 2019-03-19 14:18:11
Local clock offset: -6.92 ms
Remote clock offset: -30.316 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.89 Mbit/s
95th percentile per-packet one-way delay: 76.731 ms
Loss rate: 16.08%
-- Flow 1:
Average throughput: 26.33 Mbit/s
95th percentile per-packet one-way delay: 77.550 ms
Loss rate: 16.16%
-- Flow 2:
Average throughput: 13.92 Mbit/s
95th percentile per-packet one-way delay: 75.914 ms
Loss rate: 15.67%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 75.871 ms
Loss rate: 20.73%
```

Run 1: Report of TCP BBR — Data Link

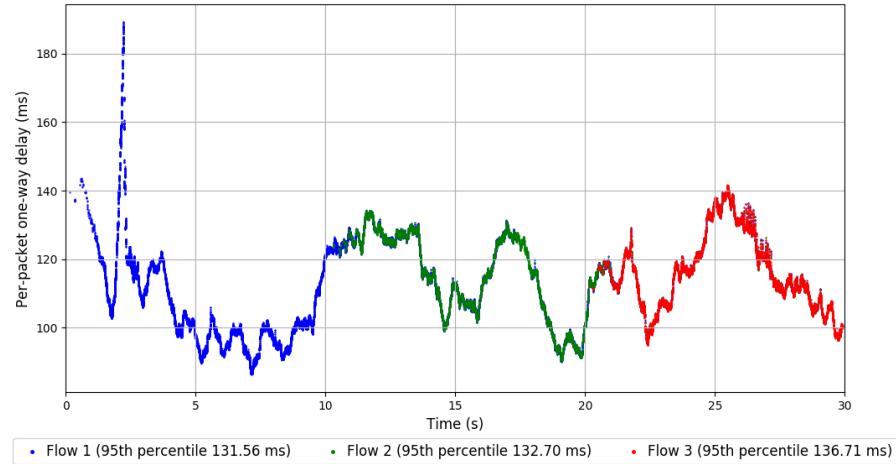
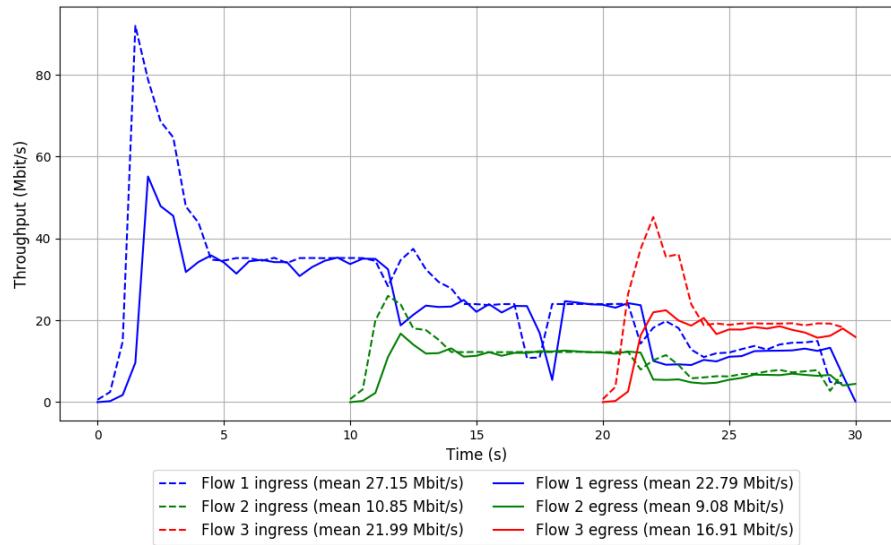


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-19 14:45:38
End at: 2019-03-19 14:46:08
Local clock offset: -0.491 ms
Remote clock offset: 68.381 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 132.996 ms
Loss rate: 18.31%
-- Flow 1:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 131.563 ms
Loss rate: 16.97%
-- Flow 2:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 132.697 ms
Loss rate: 17.09%
-- Flow 3:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 136.706 ms
Loss rate: 24.51%
```

Run 2: Report of TCP BBR — Data Link

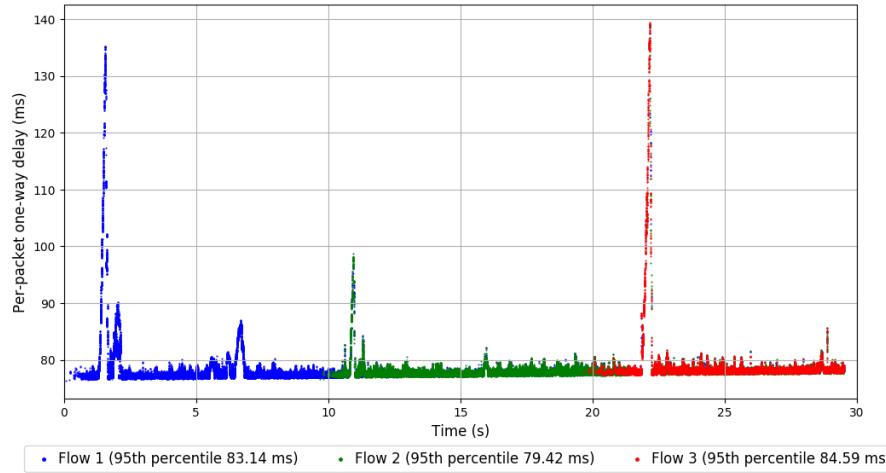
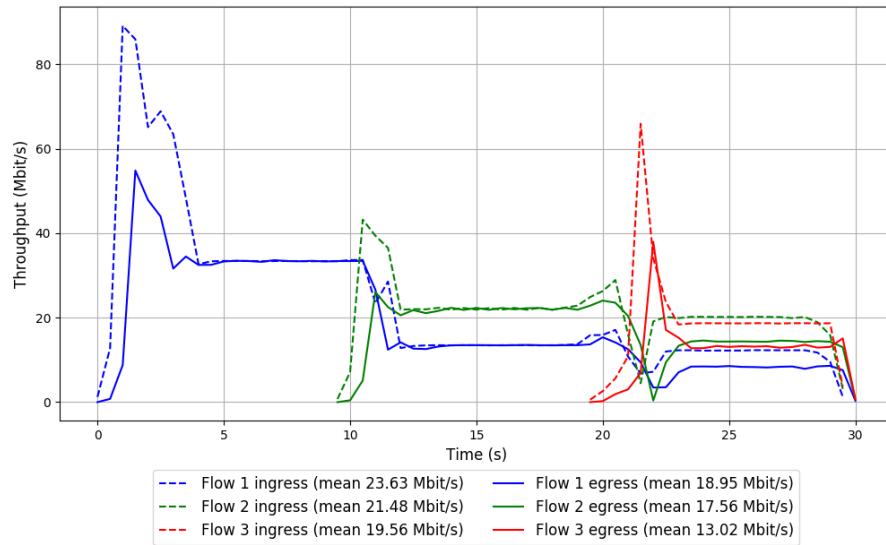


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-19 15:13:39
End at: 2019-03-19 15:14:09
Local clock offset: 1.496 ms
Remote clock offset: 156.416 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.10 Mbit/s
95th percentile per-packet one-way delay: 81.471 ms
Loss rate: 21.89%
-- Flow 1:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 83.136 ms
Loss rate: 20.24%
-- Flow 2:
Average throughput: 17.56 Mbit/s
95th percentile per-packet one-way delay: 79.421 ms
Loss rate: 18.88%
-- Flow 3:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 84.590 ms
Loss rate: 34.44%
```

Run 3: Report of TCP BBR — Data Link

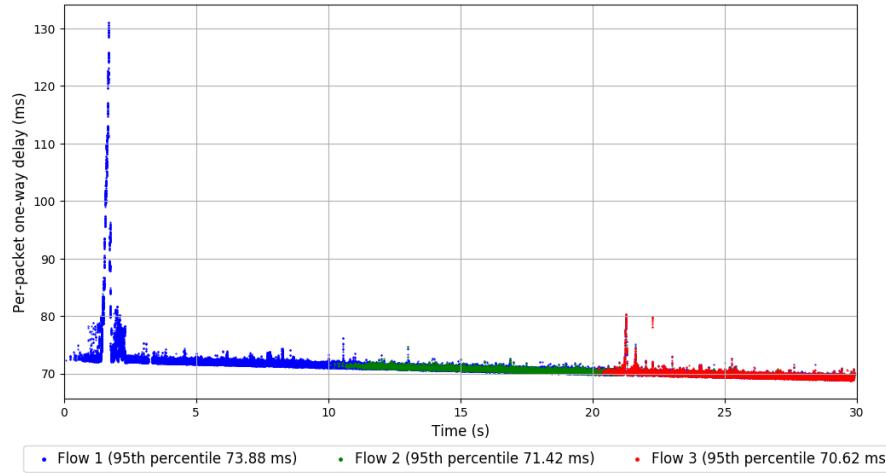
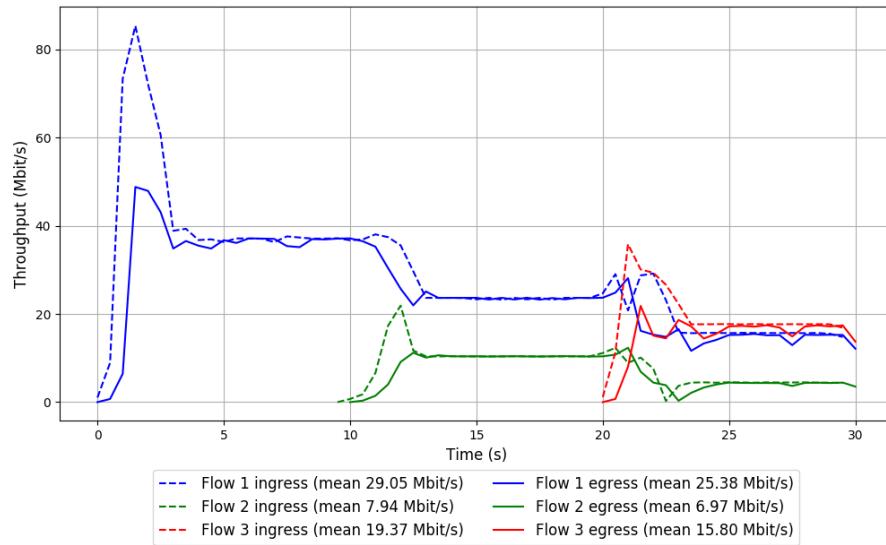


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-19 15:41:02
End at: 2019-03-19 15:41:32
Local clock offset: 3.219 ms
Remote clock offset: -12.371 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 73.032 ms
Loss rate: 14.11%
-- Flow 1:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 73.876 ms
Loss rate: 13.11%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 71.423 ms
Loss rate: 12.86%
-- Flow 3:
Average throughput: 15.80 Mbit/s
95th percentile per-packet one-way delay: 70.624 ms
Loss rate: 19.67%
```

Run 4: Report of TCP BBR — Data Link

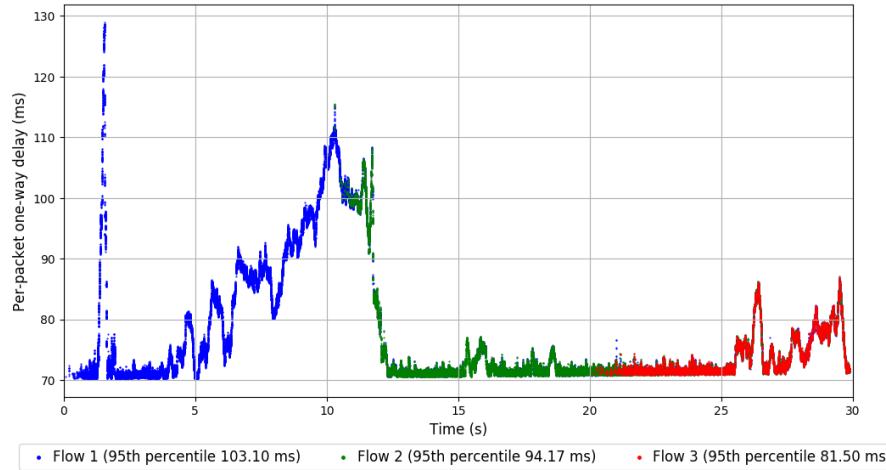
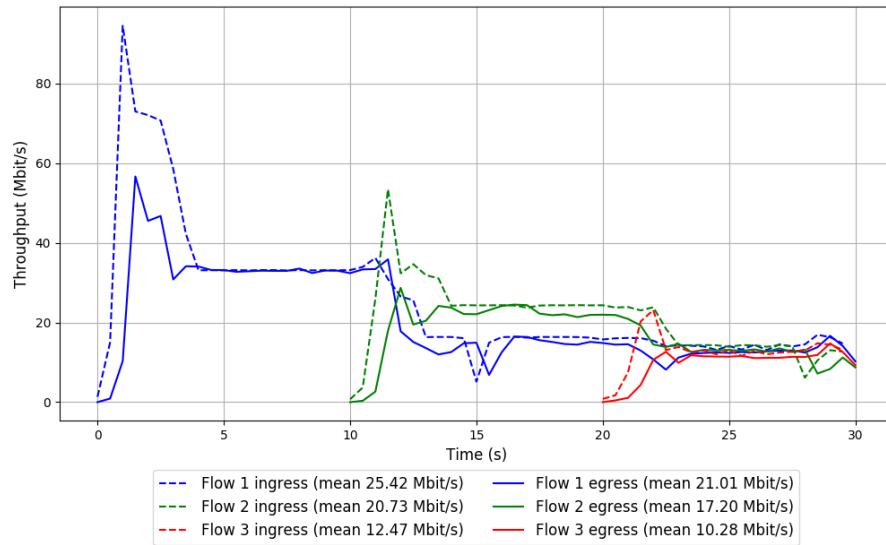


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-19 16:08:04
End at: 2019-03-19 16:08:34
Local clock offset: 2.889 ms
Remote clock offset: -49.606 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 100.721 ms
Loss rate: 17.84%
-- Flow 1:
Average throughput: 21.01 Mbit/s
95th percentile per-packet one-way delay: 103.097 ms
Loss rate: 17.72%
-- Flow 2:
Average throughput: 17.20 Mbit/s
95th percentile per-packet one-way delay: 94.169 ms
Loss rate: 17.79%
-- Flow 3:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 81.502 ms
Loss rate: 18.73%
```

Run 5: Report of TCP BBR — Data Link

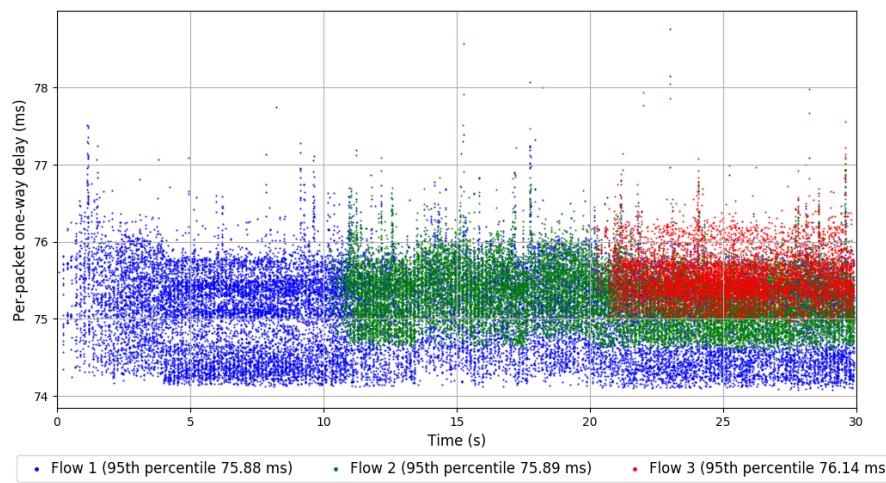
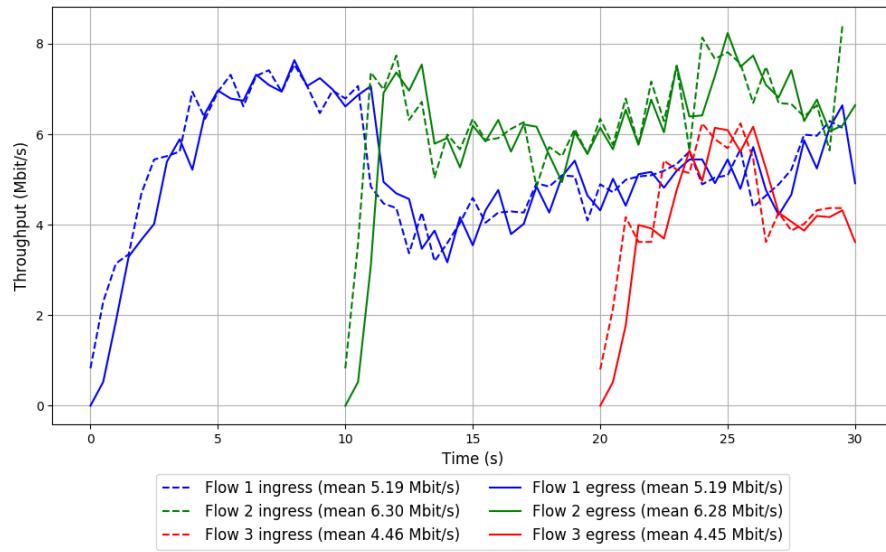


Run 1: Statistics of Copa

```
Start at: 2019-03-19 14:31:57
End at: 2019-03-19 14:32:27
Local clock offset: -2.013 ms
Remote clock offset: -29.61 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 75.935 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 5.19 Mbit/s
95th percentile per-packet one-way delay: 75.876 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 75.886 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 76.142 ms
Loss rate: 1.64%
```

Run 1: Report of Copa — Data Link

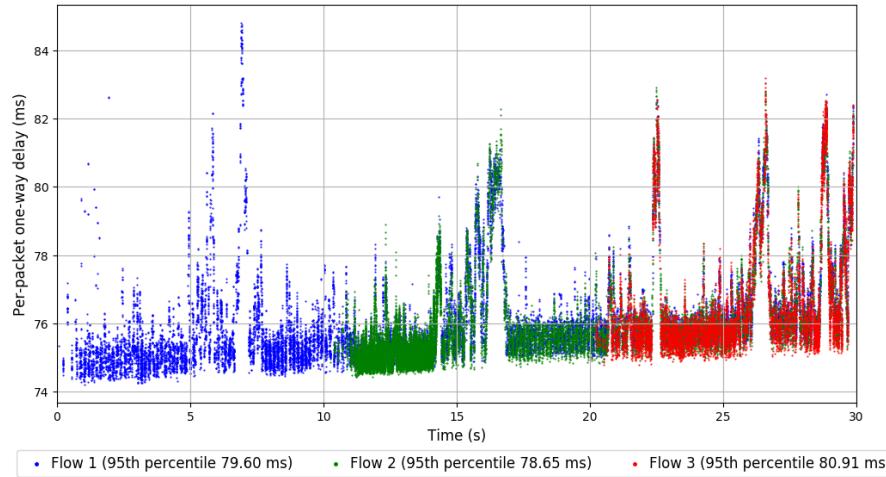
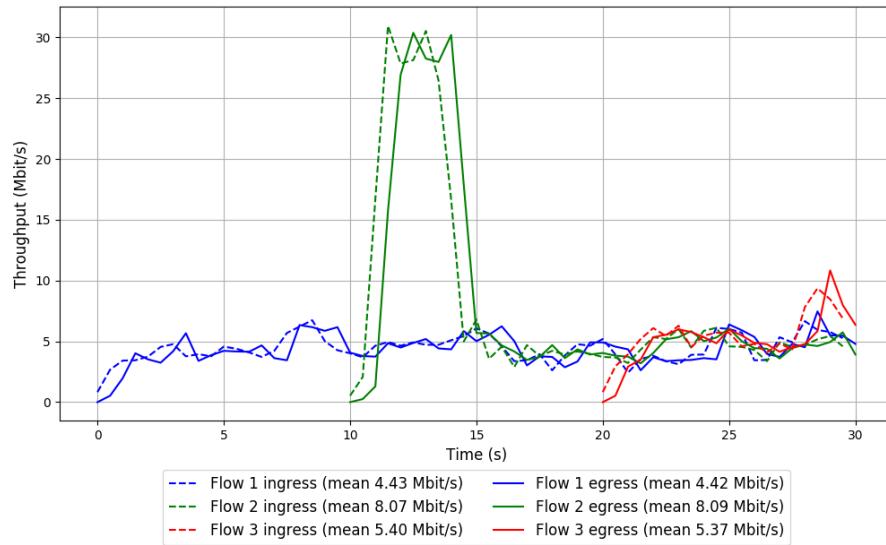


Run 2: Statistics of Copa

```
Start at: 2019-03-19 15:00:18
End at: 2019-03-19 15:00:48
Local clock offset: 0.686 ms
Remote clock offset: 125.939 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 79.695 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 79.598 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 78.647 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: 80.912 ms
Loss rate: 1.86%
```

Run 2: Report of Copa — Data Link

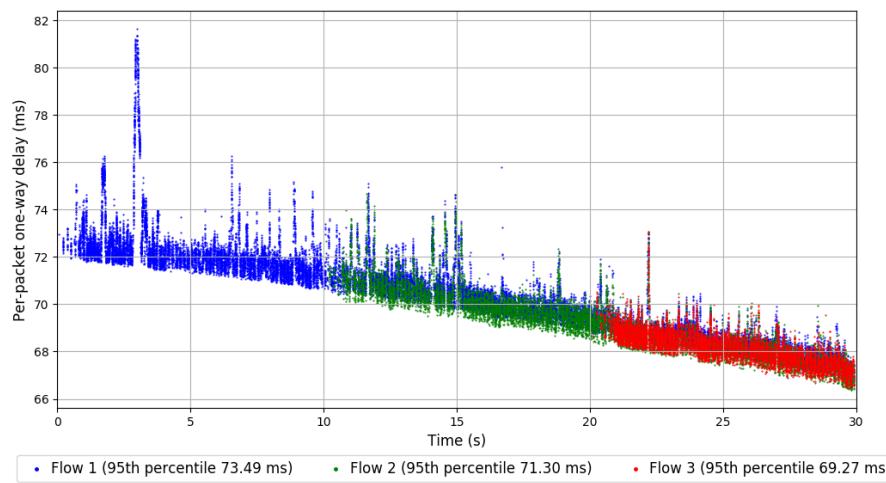
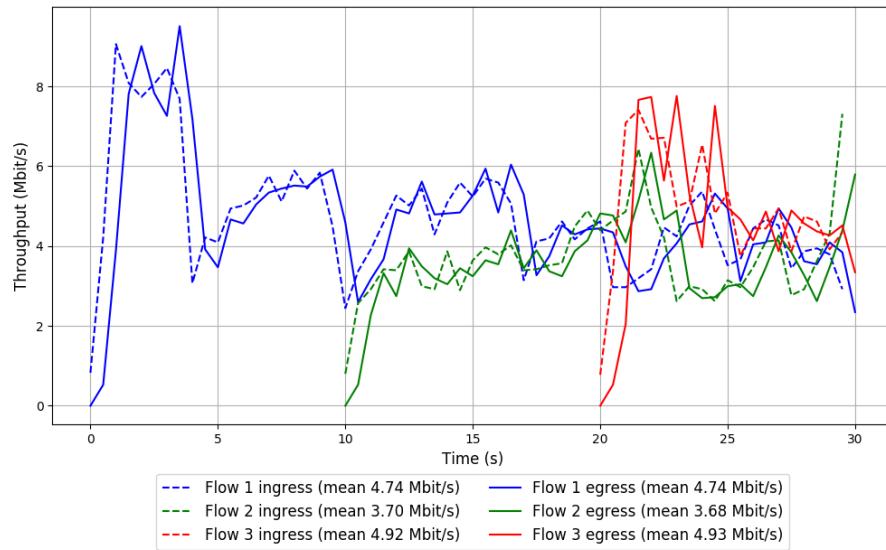


Run 3: Statistics of Copa

```
Start at: 2019-03-19 15:28:05
End at: 2019-03-19 15:28:35
Local clock offset: 2.398 ms
Remote clock offset: -46.358 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 72.817 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 73.490 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 71.297 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 4.93 Mbit/s
95th percentile per-packet one-way delay: 69.271 ms
Loss rate: 1.33%
```

Run 3: Report of Copa — Data Link

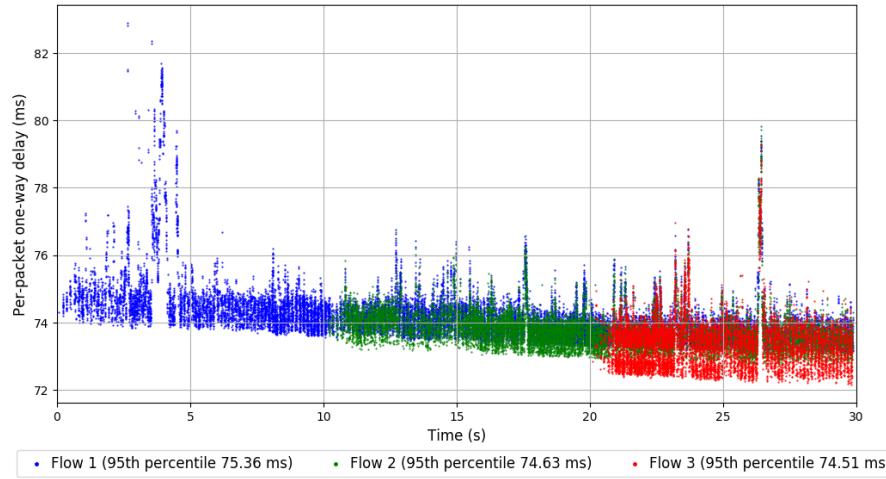
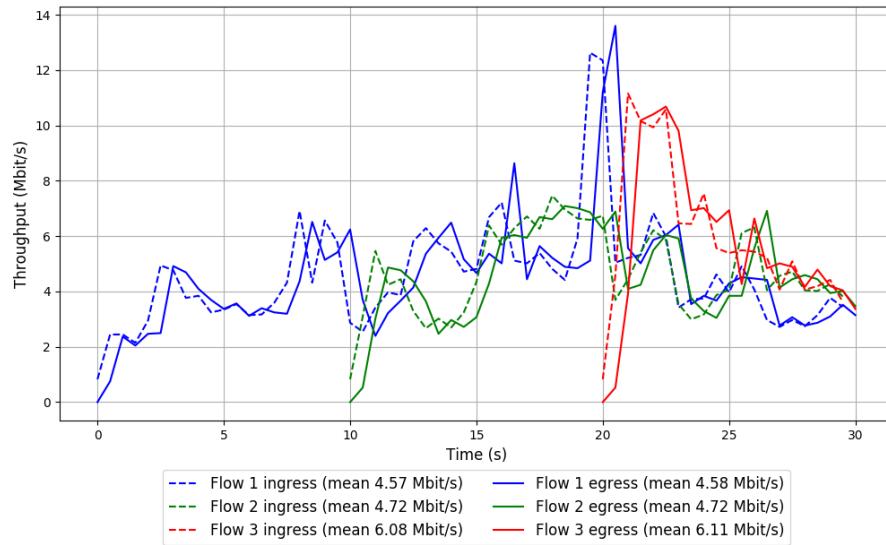


Run 4: Statistics of Copa

```
Start at: 2019-03-19 15:55:16
End at: 2019-03-19 15:55:46
Local clock offset: 2.937 ms
Remote clock offset: -47.096 ms

# Below is generated by plot.py at 2019-03-19 16:28:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 75.024 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 75.365 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 74.633 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 74.506 ms
Loss rate: 0.91%
```

Run 4: Report of Copa — Data Link

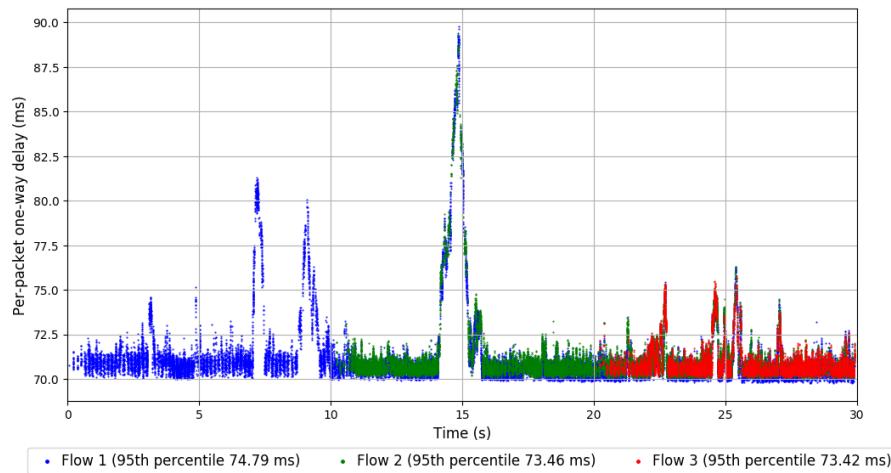
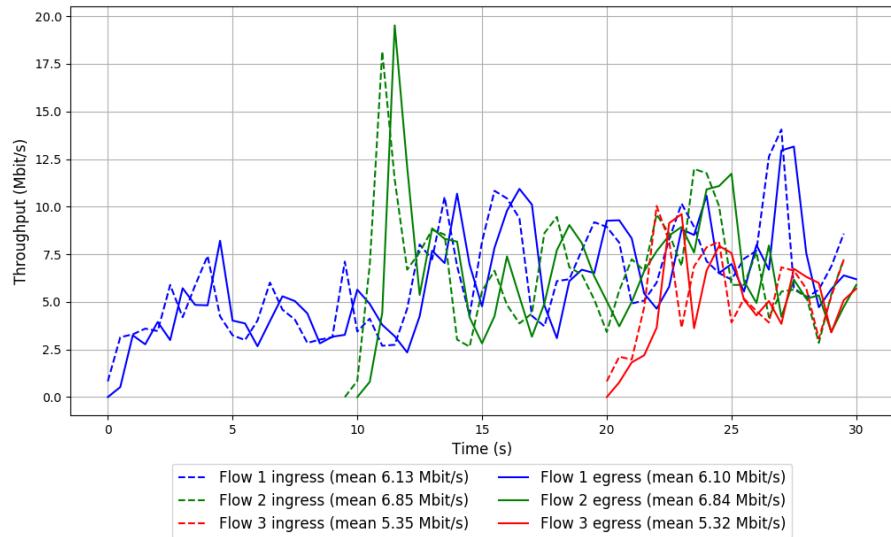


Run 5: Statistics of Copa

```
Start at: 2019-03-19 16:22:17
End at: 2019-03-19 16:22:47
Local clock offset: 0.31 ms
Remote clock offset: -46.796 ms

# Below is generated by plot.py at 2019-03-19 16:28:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 73.843 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 74.792 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 73.463 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 73.422 ms
Loss rate: 2.04%
```

Run 5: Report of Copa — Data Link

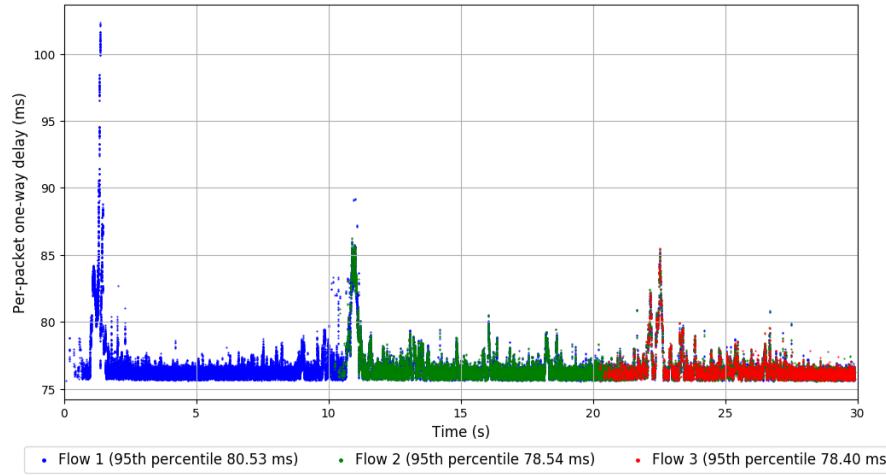
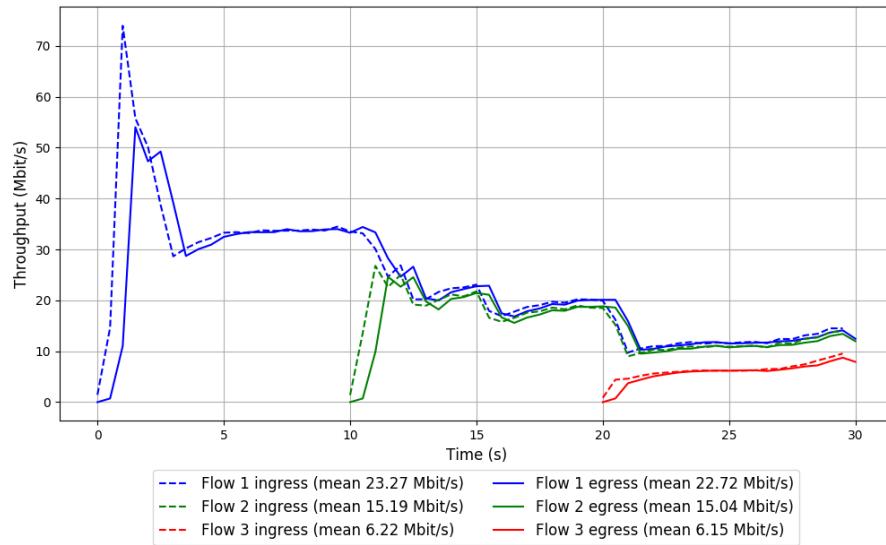


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-03-19 14:25:31
End at: 2019-03-19 14:26:01
Local clock offset: -3.472 ms
Remote clock offset: -30.601 ms

# Below is generated by plot.py at 2019-03-19 16:28:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.73 Mbit/s
95th percentile per-packet one-way delay: 79.490 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 22.72 Mbit/s
95th percentile per-packet one-way delay: 80.534 ms
Loss rate: 2.82%
-- Flow 2:
Average throughput: 15.04 Mbit/s
95th percentile per-packet one-way delay: 78.537 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 78.396 ms
Loss rate: 2.74%
```

Run 1: Report of TCP Cubic — Data Link

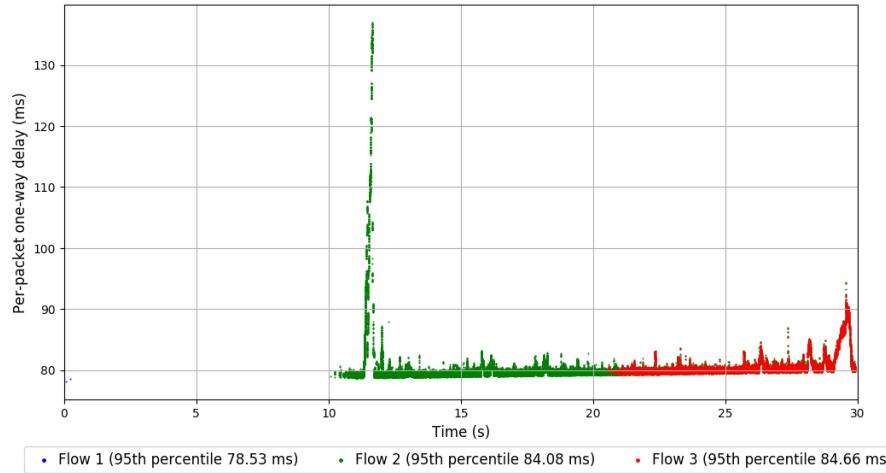
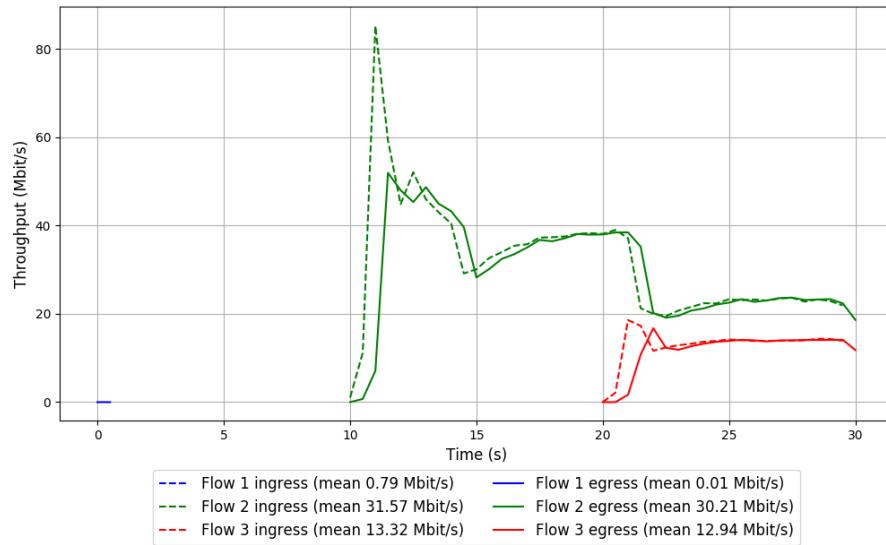


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-19 14:53:37
End at: 2019-03-19 14:54:07
Local clock offset: 0.221 ms
Remote clock offset: 102.277 ms

# Below is generated by plot.py at 2019-03-19 16:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 84.205 ms
Loss rate: 4.93%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 78.525 ms
Loss rate: 98.79%
-- Flow 2:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 84.079 ms
Loss rate: 5.02%
-- Flow 3:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 84.656 ms
Loss rate: 4.41%
```

Run 2: Report of TCP Cubic — Data Link

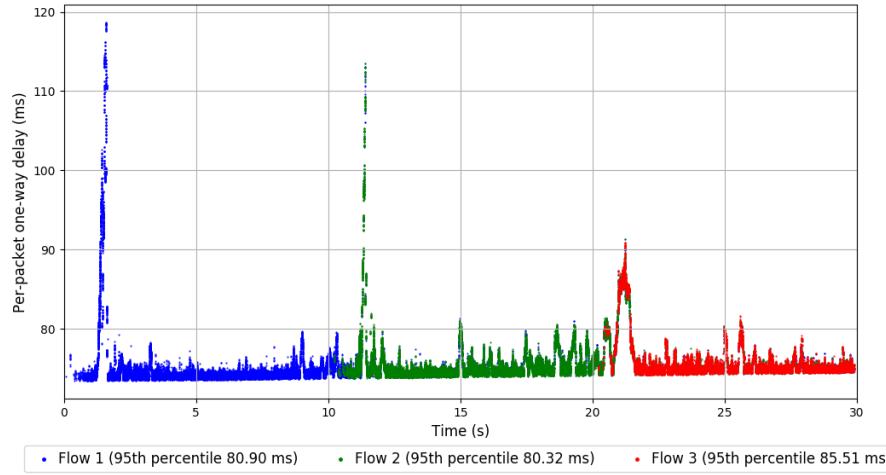
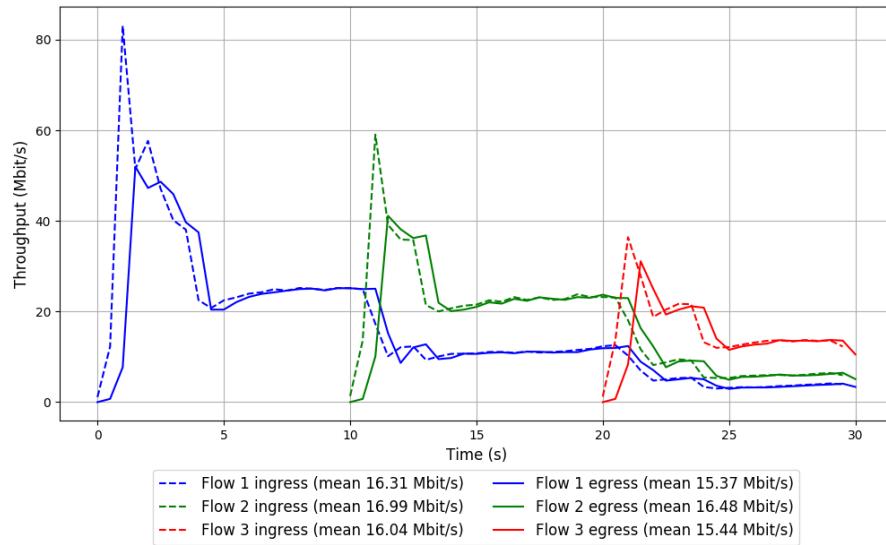


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2019-03-19 15:21:38
End at: 2019-03-19 15:22:08
Local clock offset: 2.195 ms
Remote clock offset: 177.773 ms

# Below is generated by plot.py at 2019-03-19 16:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.38 Mbit/s
95th percentile per-packet one-way delay: 82.526 ms
Loss rate: 5.15%
-- Flow 1:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 80.896 ms
Loss rate: 6.21%
-- Flow 2:
Average throughput: 16.48 Mbit/s
95th percentile per-packet one-way delay: 80.316 ms
Loss rate: 3.64%
-- Flow 3:
Average throughput: 15.44 Mbit/s
95th percentile per-packet one-way delay: 85.510 ms
Loss rate: 5.11%
```

Run 3: Report of TCP Cubic — Data Link

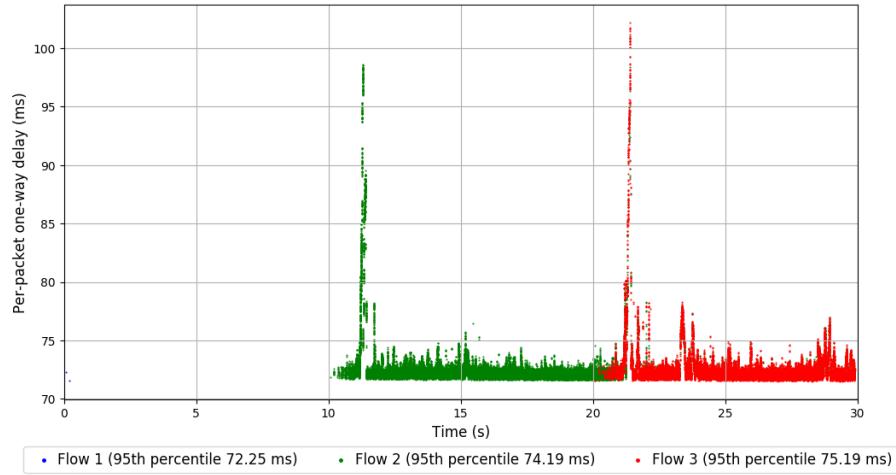
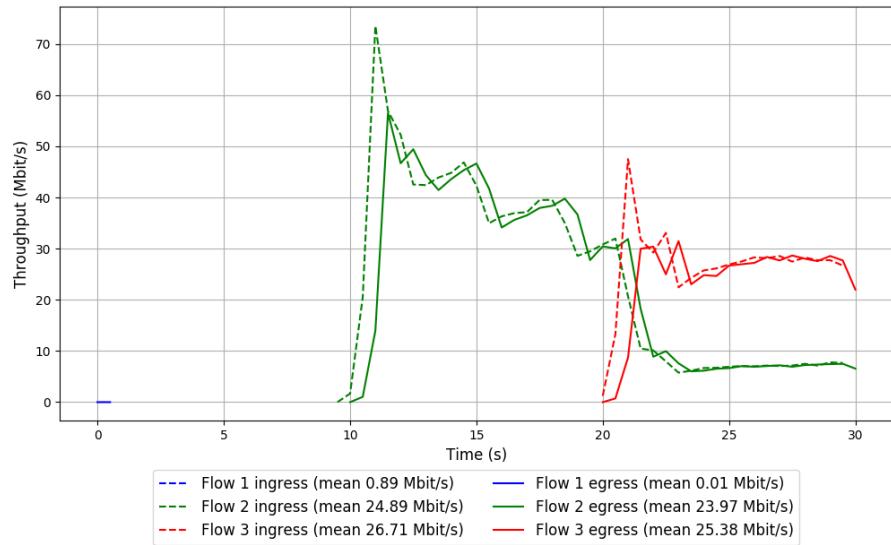


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-19 15:48:51
End at: 2019-03-19 15:49:21
Local clock offset: 3.16 ms
Remote clock offset: -36.655 ms

# Below is generated by plot.py at 2019-03-19 16:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 74.633 ms
Loss rate: 5.10%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 72.253 ms
Loss rate: 98.79%
-- Flow 2:
Average throughput: 23.97 Mbit/s
95th percentile per-packet one-way delay: 74.195 ms
Loss rate: 4.40%
-- Flow 3:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 75.195 ms
Loss rate: 6.37%
```

Run 4: Report of TCP Cubic — Data Link

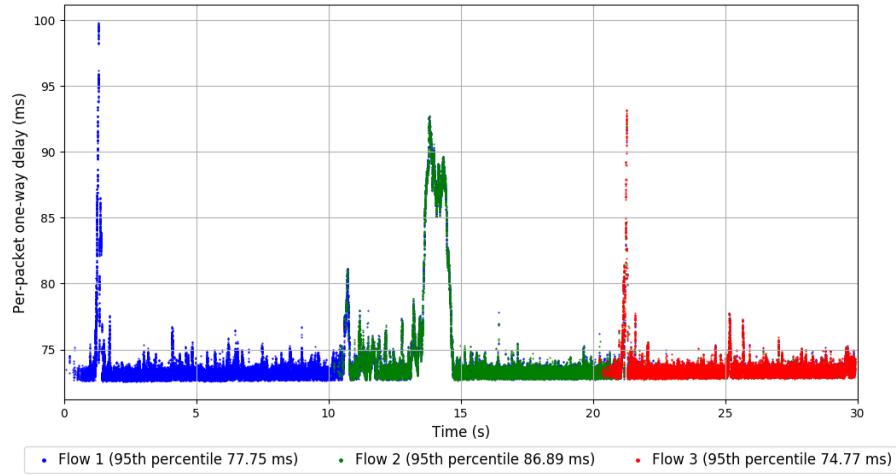
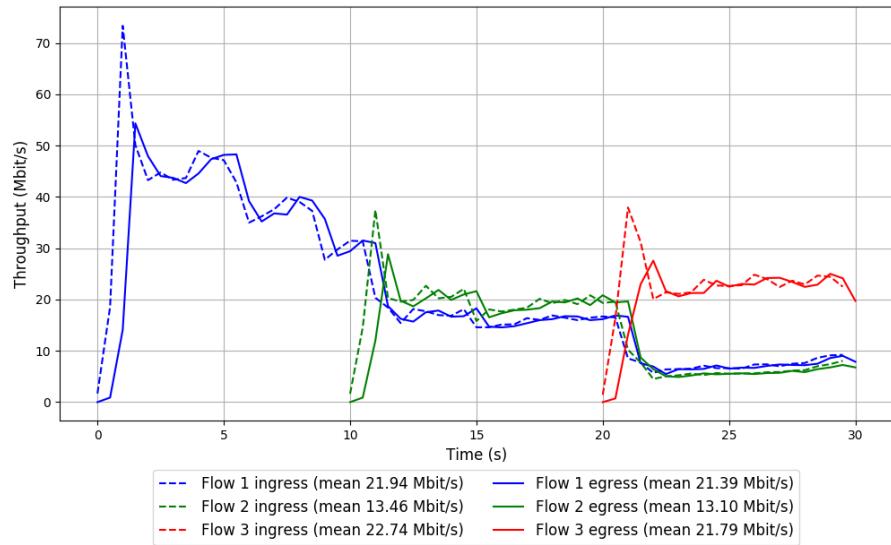


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-19 16:15:54
End at: 2019-03-19 16:16:24
Local clock offset: 3.18 ms
Remote clock offset: -45.795 ms

# Below is generated by plot.py at 2019-03-19 16:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.26 Mbit/s
95th percentile per-packet one-way delay: 78.242 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 21.39 Mbit/s
95th percentile per-packet one-way delay: 77.754 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 86.885 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 21.79 Mbit/s
95th percentile per-packet one-way delay: 74.765 ms
Loss rate: 5.52%
```

Run 5: Report of TCP Cubic — Data Link

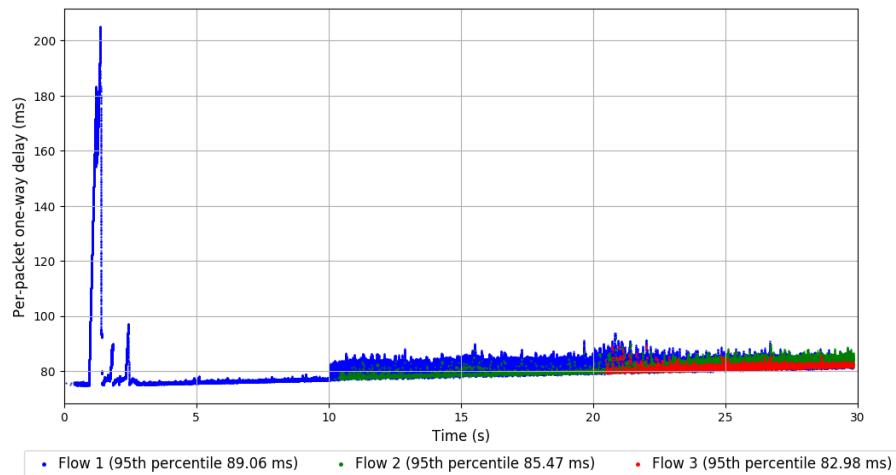
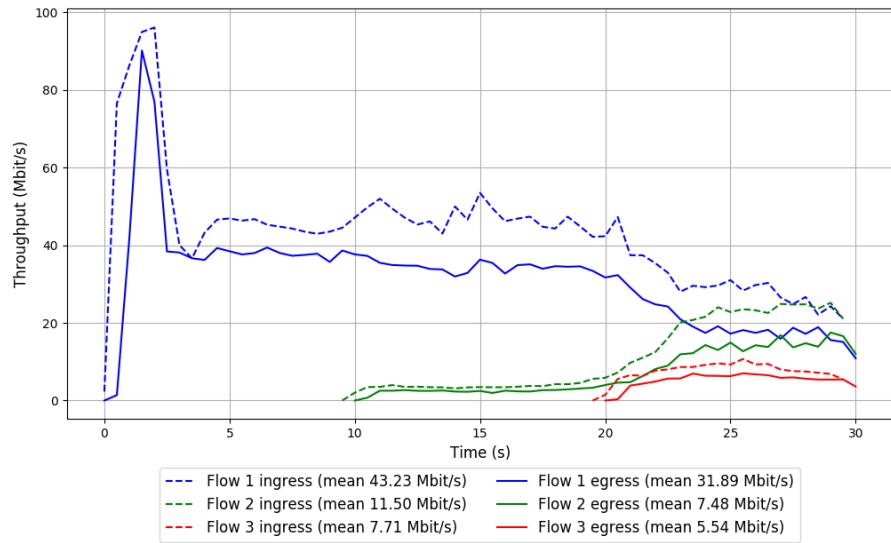


```
Run 1: Statistics of FillP

Start at: 2019-03-19 14:33:19
End at: 2019-03-19 14:33:49
Local clock offset: -1.931 ms
Remote clock offset: -29.694 ms

# Below is generated by plot.py at 2019-03-19 16:28:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 86.987 ms
Loss rate: 28.04%
-- Flow 1:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 89.061 ms
Loss rate: 26.66%
-- Flow 2:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 85.472 ms
Loss rate: 35.44%
-- Flow 3:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 82.985 ms
Loss rate: 29.14%
```

Run 1: Report of FillP — Data Link

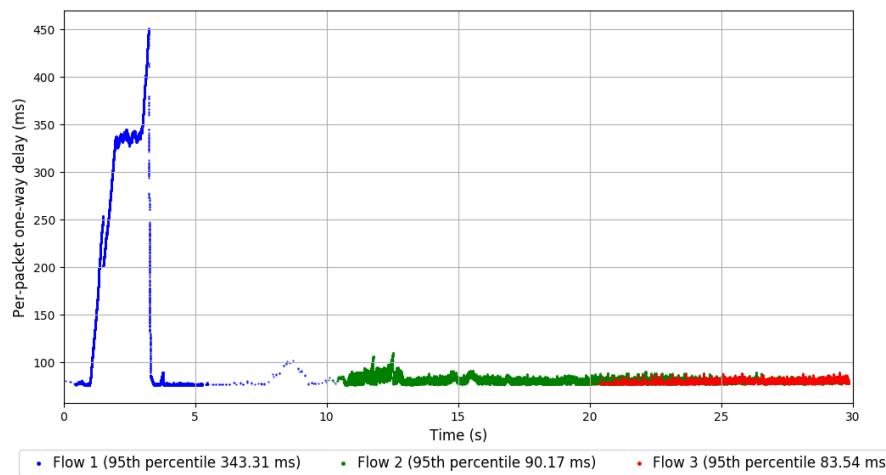
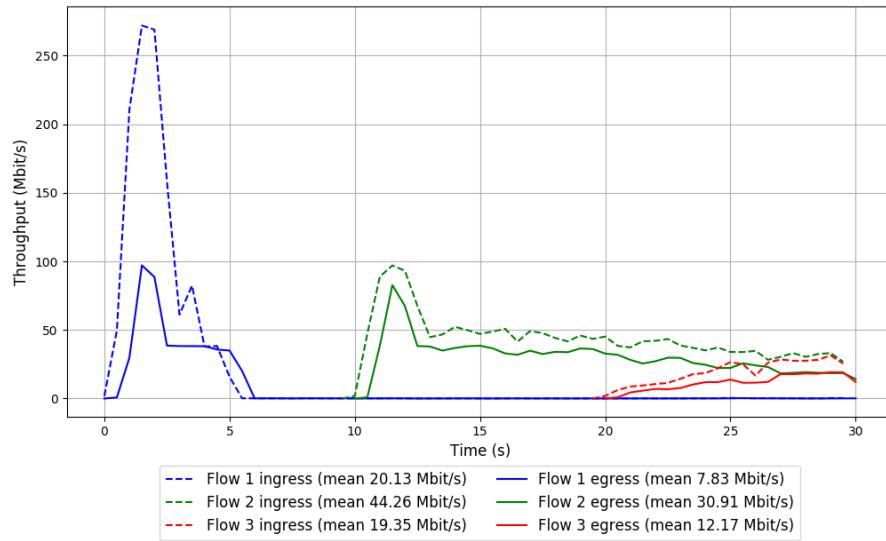


Run 2: Statistics of FillP

```
Start at: 2019-03-19 15:01:36
End at: 2019-03-19 15:02:06
Local clock offset: 0.806 ms
Remote clock offset: 128.14 ms

# Below is generated by plot.py at 2019-03-19 16:28:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 319.548 ms
Loss rate: 42.53%
-- Flow 1:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 343.307 ms
Loss rate: 61.35%
-- Flow 2:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 90.172 ms
Loss rate: 30.64%
-- Flow 3:
Average throughput: 12.17 Mbit/s
95th percentile per-packet one-way delay: 83.536 ms
Loss rate: 38.06%
```

Run 2: Report of FillP — Data Link

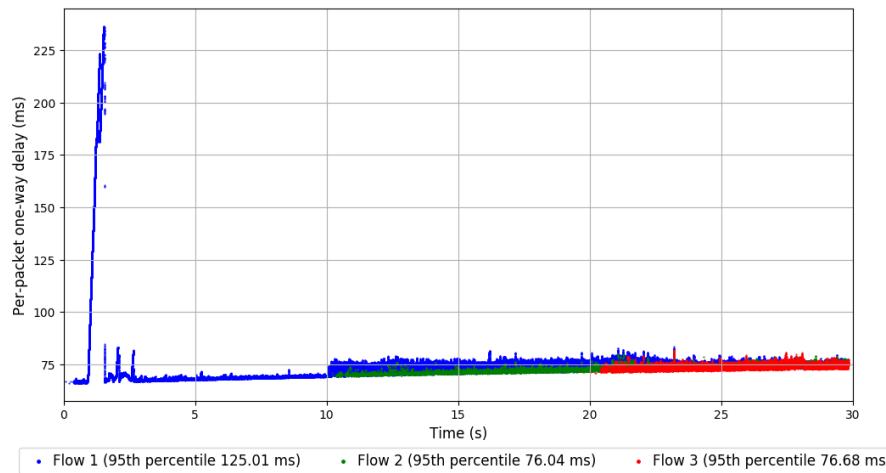
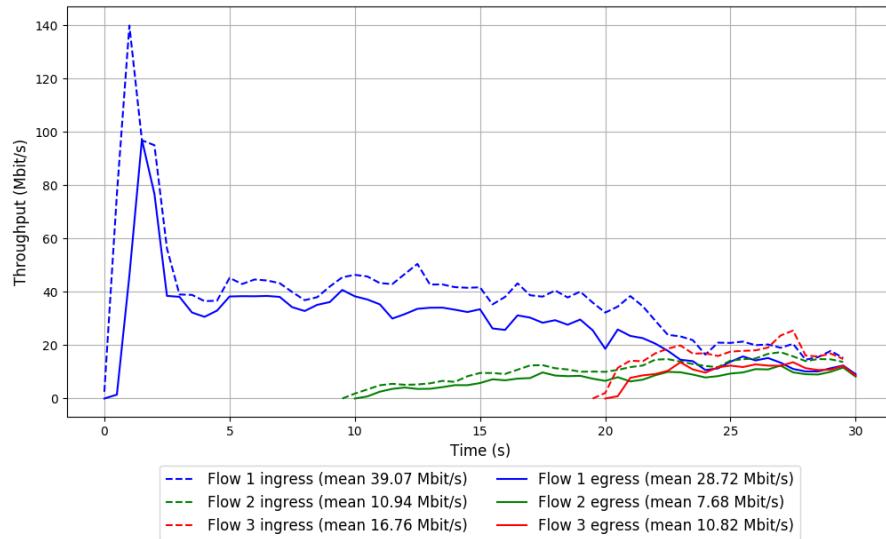


Run 3: Statistics of FillP

```
Start at: 2019-03-19 15:29:26
End at: 2019-03-19 15:29:56
Local clock offset: 2.568 ms
Remote clock offset: -57.23 ms

# Below is generated by plot.py at 2019-03-19 16:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.37 Mbit/s
95th percentile per-packet one-way delay: 80.912 ms
Loss rate: 28.34%
-- Flow 1:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 125.011 ms
Loss rate: 26.83%
-- Flow 2:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 76.043 ms
Loss rate: 30.34%
-- Flow 3:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 76.684 ms
Loss rate: 36.30%
```

Run 3: Report of FillP — Data Link

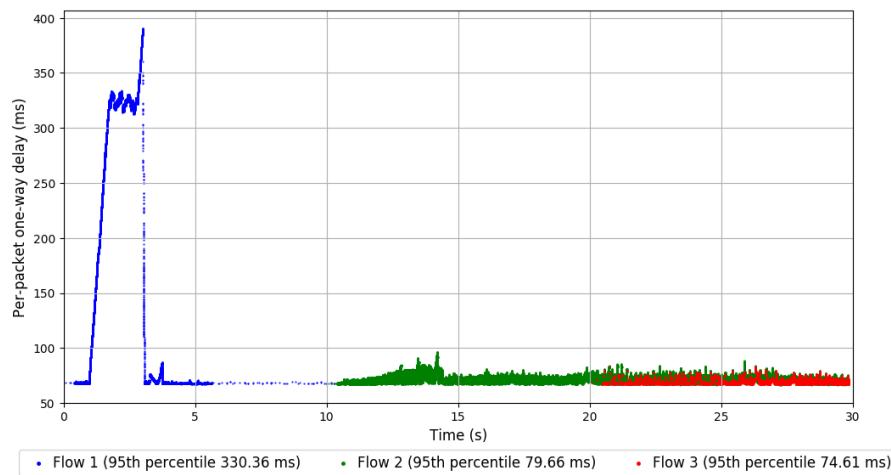
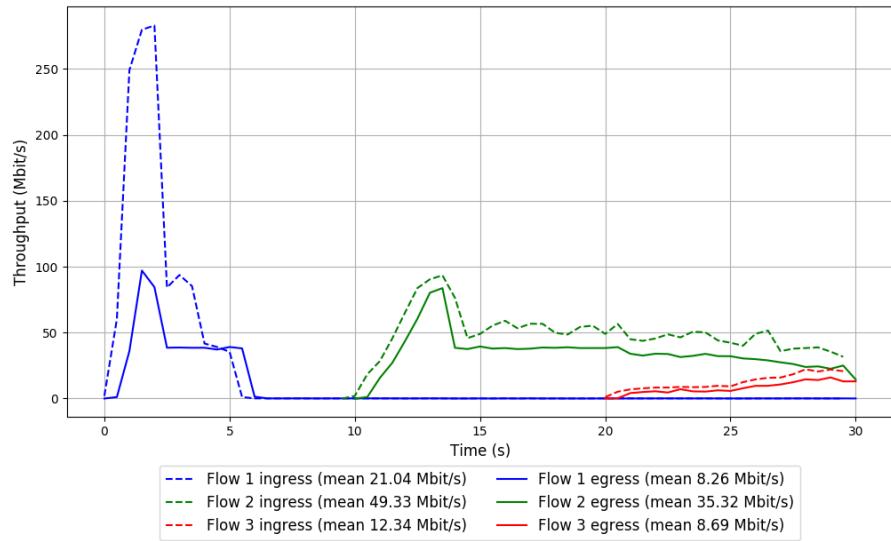


Run 4: Statistics of FillP

```
Start at: 2019-03-19 15:56:32
End at: 2019-03-19 15:57:02
Local clock offset: 2.888 ms
Remote clock offset: -43.389 ms

# Below is generated by plot.py at 2019-03-19 16:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 318.533 ms
Loss rate: 40.67%
-- Flow 1:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 330.364 ms
Loss rate: 60.91%
-- Flow 2:
Average throughput: 35.32 Mbit/s
95th percentile per-packet one-way delay: 79.664 ms
Loss rate: 28.96%
-- Flow 3:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 74.610 ms
Loss rate: 30.72%
```

Run 4: Report of FillP — Data Link

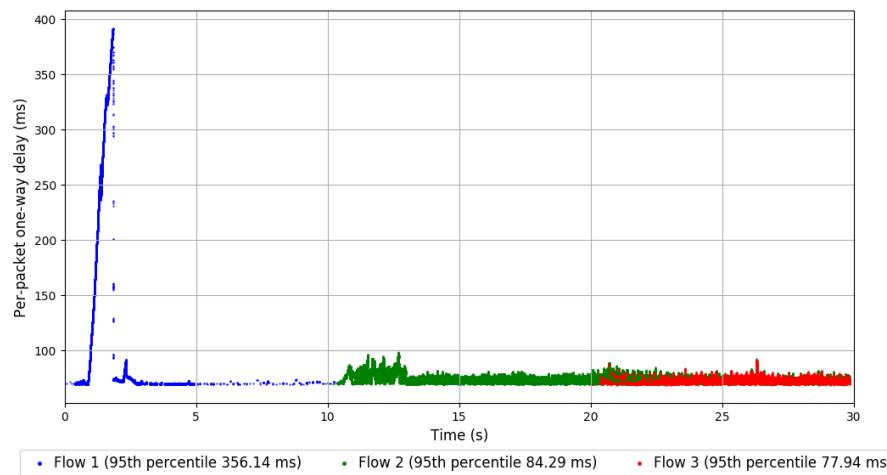
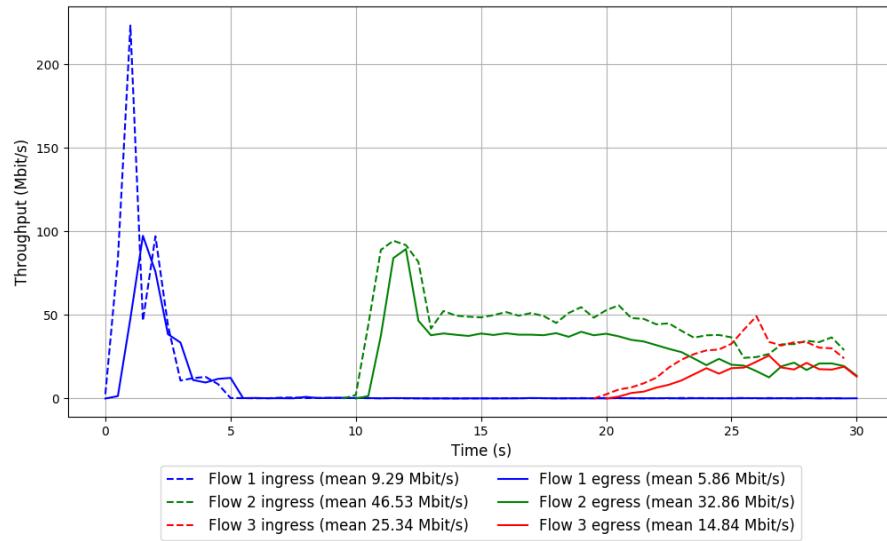


```
Run 5: Statistics of FillP
```

```
Start at: 2019-03-19 16:23:33
End at: 2019-03-19 16:24:03
Local clock offset: -0.265 ms
Remote clock offset: -47.019 ms

# Below is generated by plot.py at 2019-03-19 16:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.58 Mbit/s
95th percentile per-packet one-way delay: 222.432 ms
Loss rate: 33.36%
-- Flow 1:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 356.145 ms
Loss rate: 36.91%
-- Flow 2:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 84.287 ms
Loss rate: 29.88%
-- Flow 3:
Average throughput: 14.84 Mbit/s
95th percentile per-packet one-way delay: 77.936 ms
Loss rate: 42.29%
```

Run 5: Report of FillP — Data Link

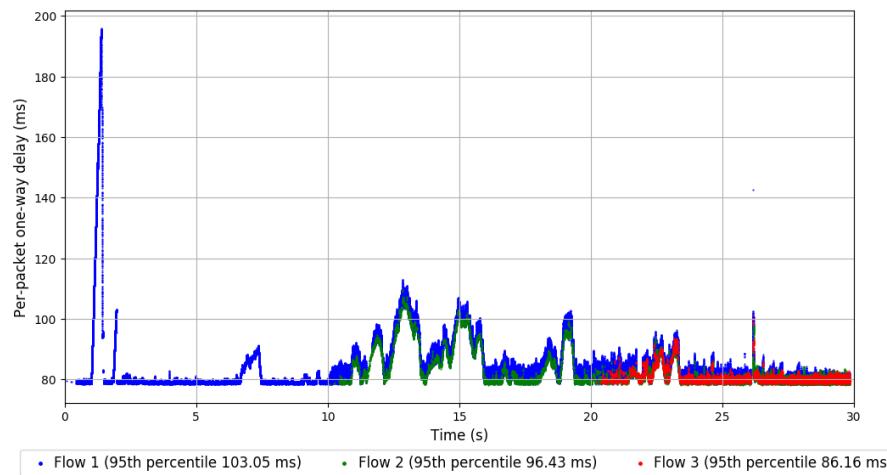
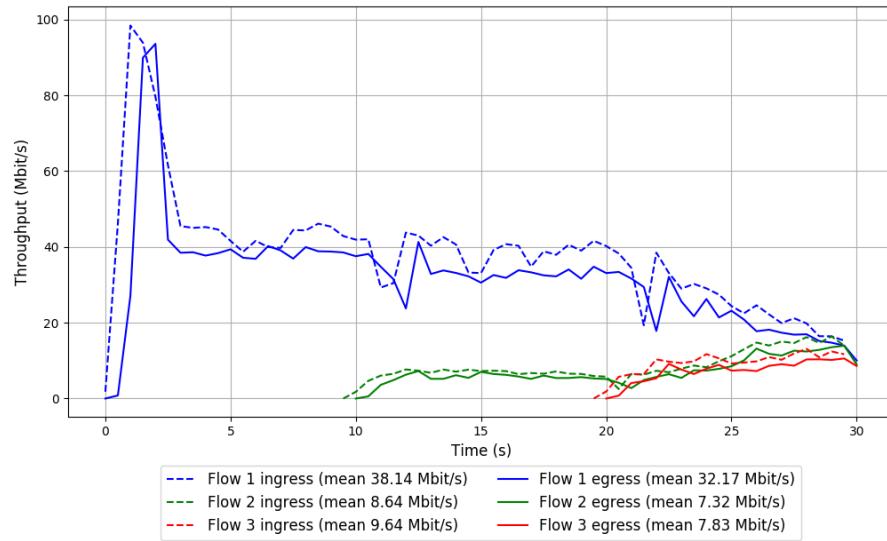


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-03-19 14:24:14
End at: 2019-03-19 14:24:44
Local clock offset: -3.816 ms
Remote clock offset: -33.753 ms

# Below is generated by plot.py at 2019-03-19 16:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 101.466 ms
Loss rate: 16.31%
-- Flow 1:
Average throughput: 32.17 Mbit/s
95th percentile per-packet one-way delay: 103.050 ms
Loss rate: 16.05%
-- Flow 2:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 96.432 ms
Loss rate: 15.98%
-- Flow 3:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 86.161 ms
Loss rate: 20.01%
```

Run 1: Report of FillP-Sheep — Data Link

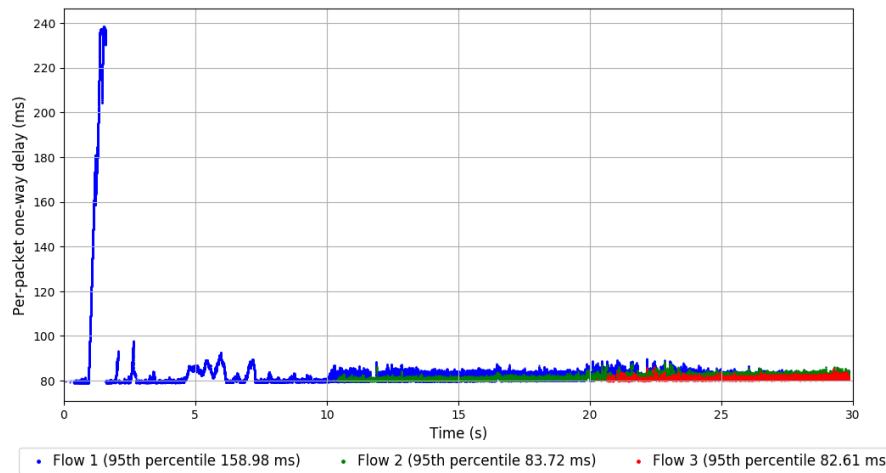
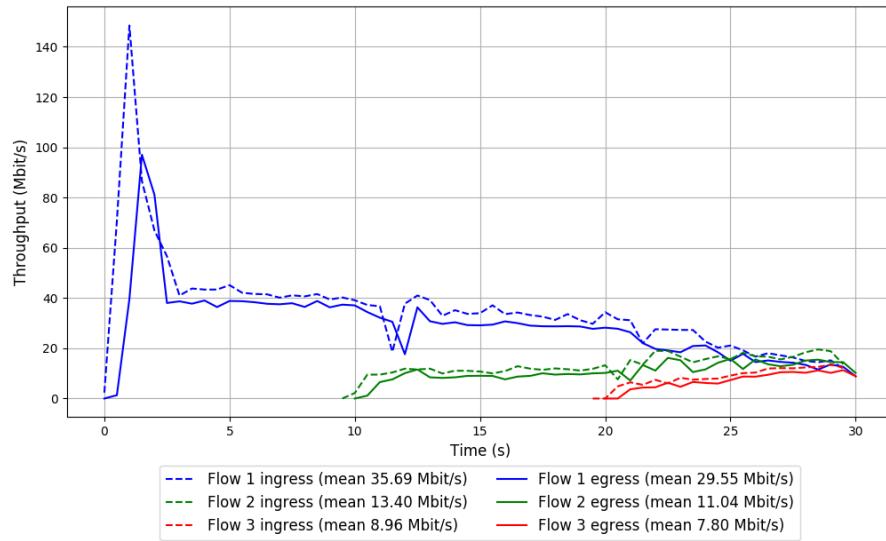


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-19 14:52:16
End at: 2019-03-19 14:52:46
Local clock offset: 0.112 ms
Remote clock offset: 96.653 ms

# Below is generated by plot.py at 2019-03-19 16:29:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 99.886 ms
Loss rate: 17.62%
-- Flow 1:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 158.977 ms
Loss rate: 17.59%
-- Flow 2:
Average throughput: 11.04 Mbit/s
95th percentile per-packet one-way delay: 83.724 ms
Loss rate: 18.28%
-- Flow 3:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 82.615 ms
Loss rate: 16.11%
```

Run 2: Report of FillP-Sheep — Data Link

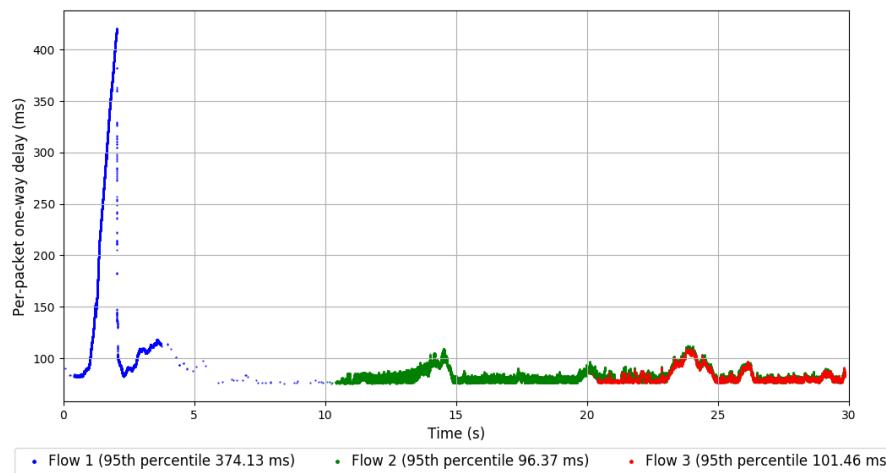
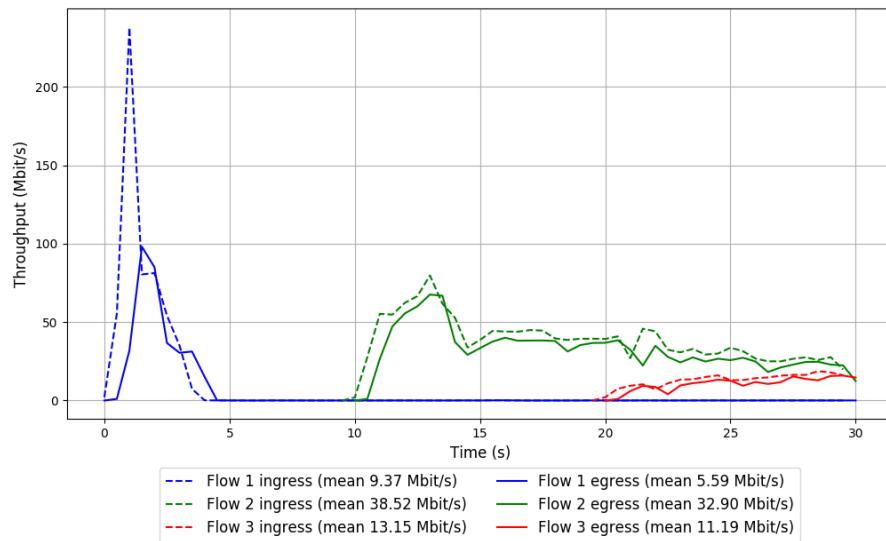


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-19 15:20:19
End at: 2019-03-19 15:20:49
Local clock offset: 2.022 ms
Remote clock offset: 172.095 ms

# Below is generated by plot.py at 2019-03-19 16:29:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 228.855 ms
Loss rate: 21.29%
-- Flow 1:
Average throughput: 5.59 Mbit/s
95th percentile per-packet one-way delay: 374.135 ms
Loss rate: 40.31%
-- Flow 2:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 96.366 ms
Loss rate: 15.27%
-- Flow 3:
Average throughput: 11.19 Mbit/s
95th percentile per-packet one-way delay: 101.457 ms
Loss rate: 16.18%
```

Run 3: Report of FillP-Sheep — Data Link

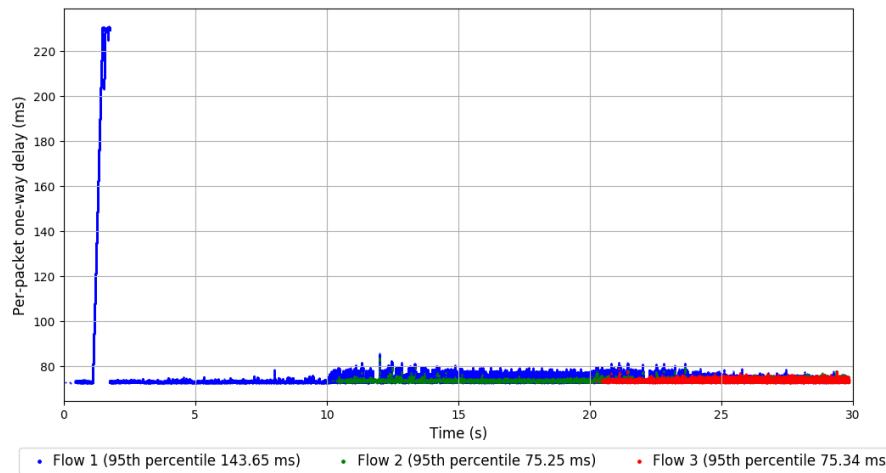
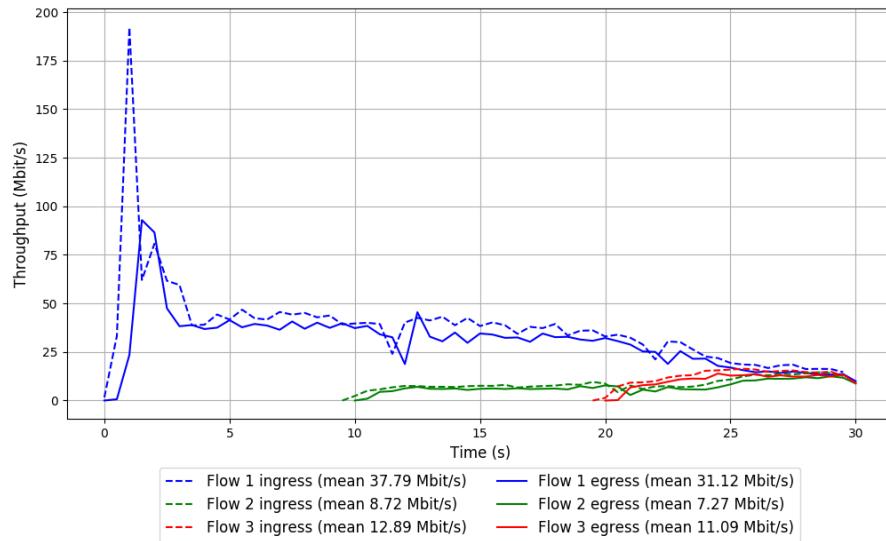


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-19 15:47:25
End at: 2019-03-19 15:47:55
Local clock offset: 3.567 ms
Remote clock offset: -37.215 ms

# Below is generated by plot.py at 2019-03-19 16:29:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 89.080 ms
Loss rate: 17.71%
-- Flow 1:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 143.647 ms
Loss rate: 18.06%
-- Flow 2:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 75.253 ms
Loss rate: 17.24%
-- Flow 3:
Average throughput: 11.09 Mbit/s
95th percentile per-packet one-way delay: 75.336 ms
Loss rate: 15.20%
```

Run 4: Report of FillP-Sheep — Data Link

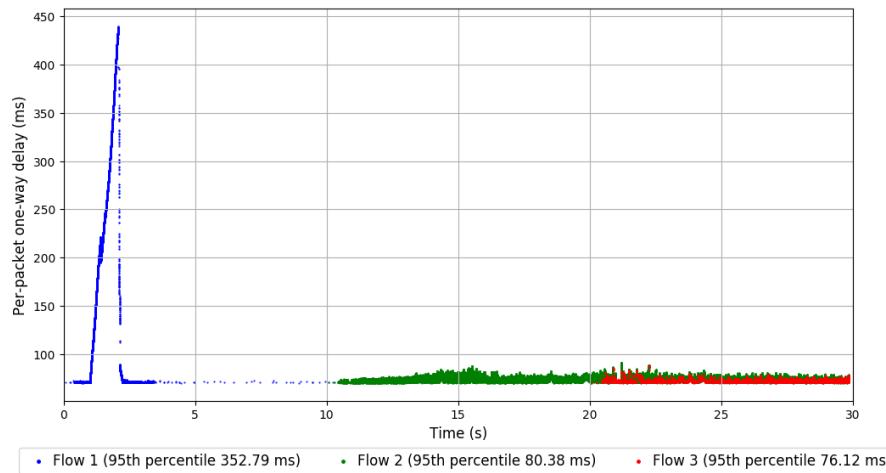
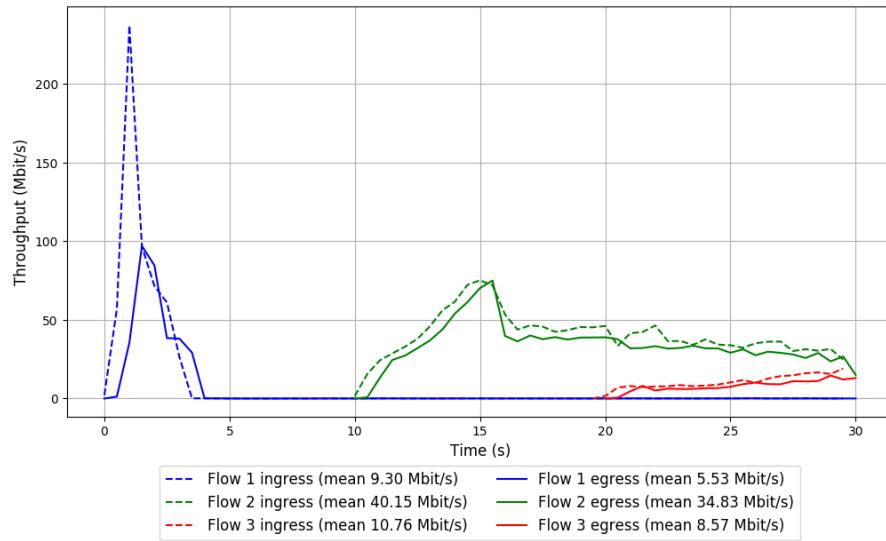


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-19 16:14:28
End at: 2019-03-19 16:14:58
Local clock offset: 3.188 ms
Remote clock offset: -43.77 ms

# Below is generated by plot.py at 2019-03-19 16:29:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 214.511 ms
Loss rate: 20.99%
-- Flow 1:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 352.785 ms
Loss rate: 41.08%
-- Flow 2:
Average throughput: 34.83 Mbit/s
95th percentile per-packet one-way delay: 80.378 ms
Loss rate: 13.96%
-- Flow 3:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 76.119 ms
Loss rate: 21.49%
```

Run 5: Report of FillP-Sheep — Data Link

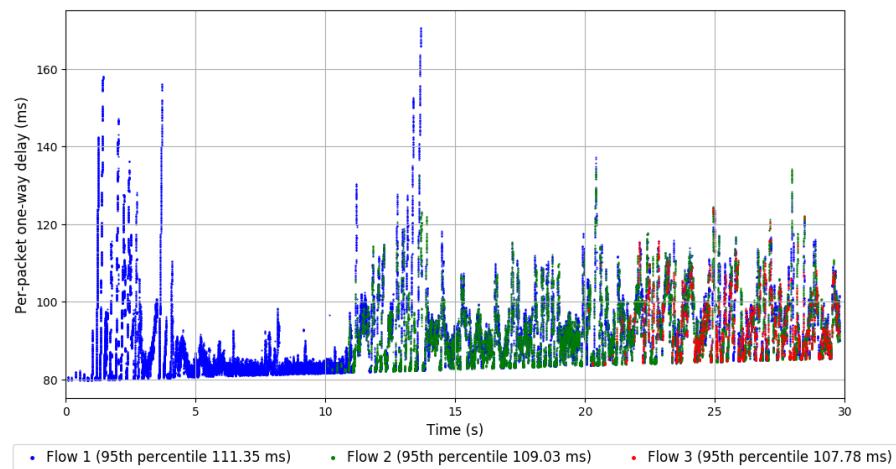
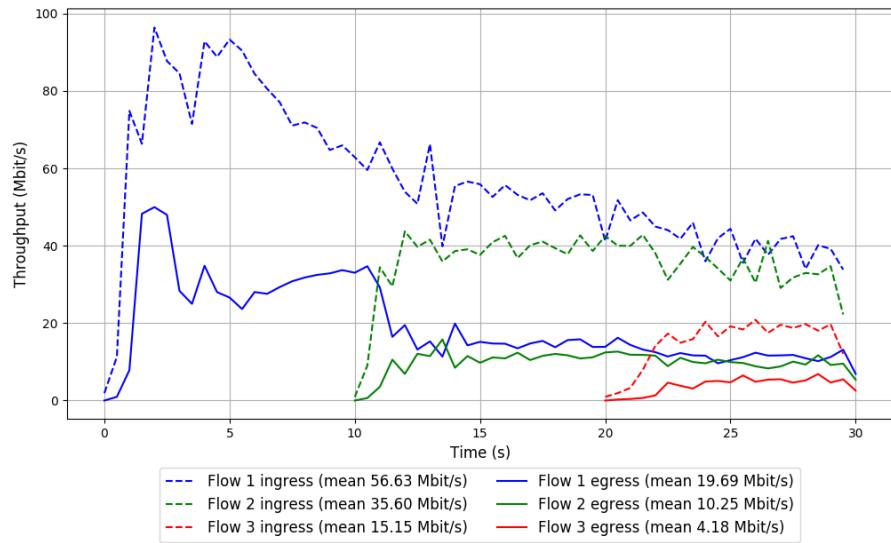


Run 1: Statistics of Indigo

```
Start at: 2019-03-19 14:34:50
End at: 2019-03-19 14:35:20
Local clock offset: -1.437 ms
Remote clock offset: -14.842 ms

# Below is generated by plot.py at 2019-03-19 16:29:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 110.262 ms
Loss rate: 67.51%
-- Flow 1:
Average throughput: 19.69 Mbit/s
95th percentile per-packet one-way delay: 111.353 ms
Loss rate: 65.39%
-- Flow 2:
Average throughput: 10.25 Mbit/s
95th percentile per-packet one-way delay: 109.027 ms
Loss rate: 71.43%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 107.778 ms
Loss rate: 72.90%
```

Run 1: Report of Indigo — Data Link

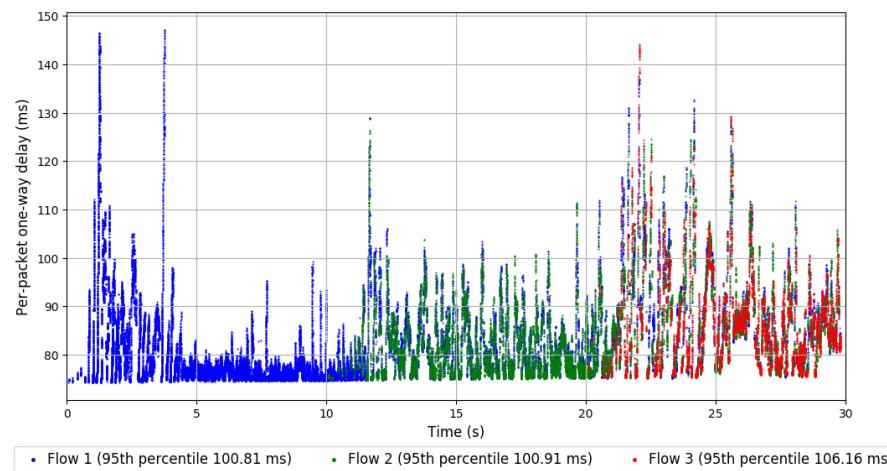
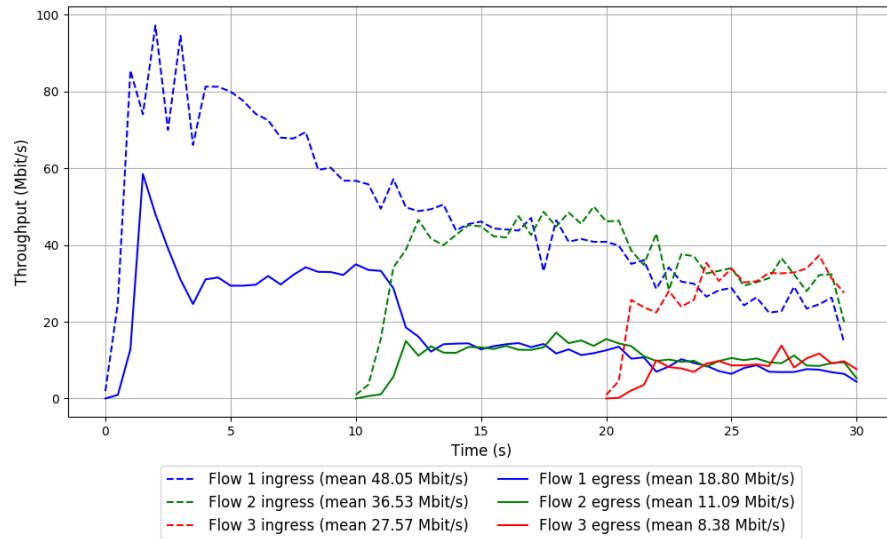


Run 2: Statistics of Indigo

```
Start at: 2019-03-19 15:02:55
End at: 2019-03-19 15:03:25
Local clock offset: 0.868 ms
Remote clock offset: 132.864 ms

# Below is generated by plot.py at 2019-03-19 16:29:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 101.494 ms
Loss rate: 64.69%
-- Flow 1:
Average throughput: 18.80 Mbit/s
95th percentile per-packet one-way delay: 100.809 ms
Loss rate: 61.07%
-- Flow 2:
Average throughput: 11.09 Mbit/s
95th percentile per-packet one-way delay: 100.905 ms
Loss rate: 69.83%
-- Flow 3:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 106.159 ms
Loss rate: 70.06%
```

Run 2: Report of Indigo — Data Link

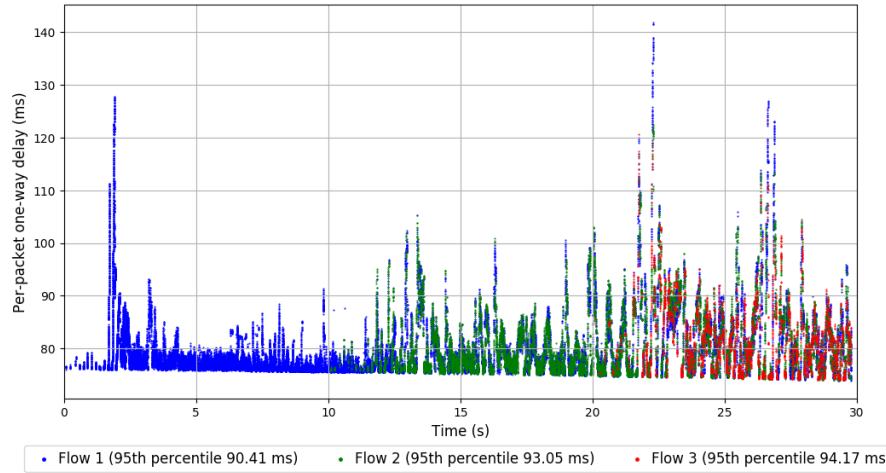
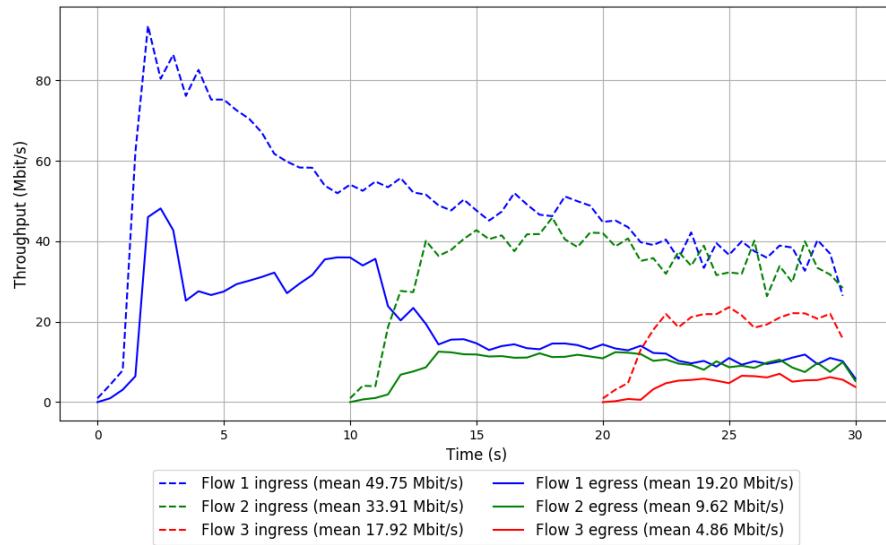


Run 3: Statistics of Indigo

```
Start at: 2019-03-19 15:30:46
End at: 2019-03-19 15:31:16
Local clock offset: 2.667 ms
Remote clock offset: -57.601 ms

# Below is generated by plot.py at 2019-03-19 16:29:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.16 Mbit/s
95th percentile per-packet one-way delay: 91.644 ms
Loss rate: 65.42%
-- Flow 1:
Average throughput: 19.20 Mbit/s
95th percentile per-packet one-way delay: 90.412 ms
Loss rate: 61.59%
-- Flow 2:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 93.053 ms
Loss rate: 71.82%
-- Flow 3:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 94.173 ms
Loss rate: 73.27%
```

Run 3: Report of Indigo — Data Link

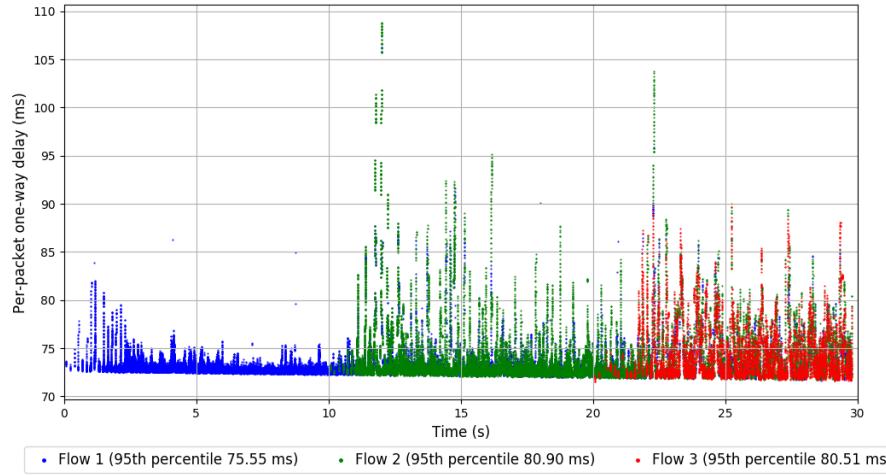
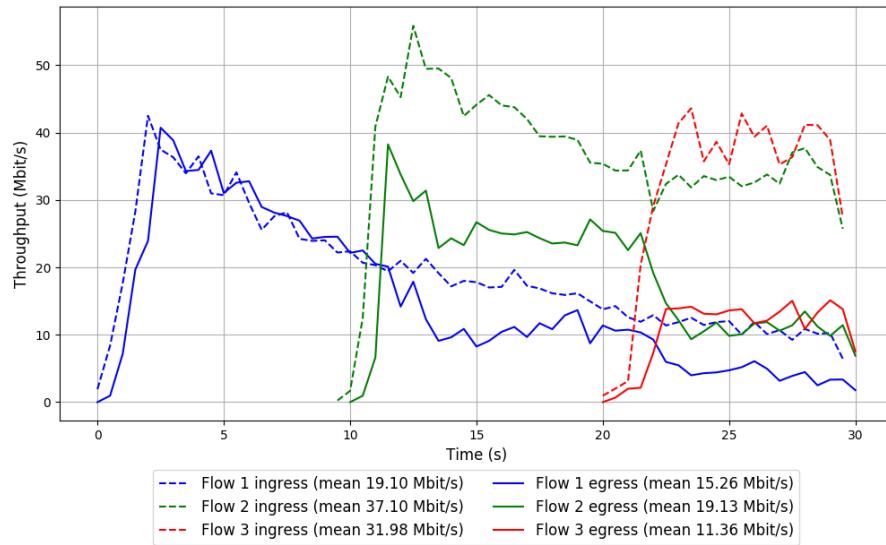


Run 4: Statistics of Indigo

```
Start at: 2019-03-19 15:57:51
End at: 2019-03-19 15:58:21
Local clock offset: 2.806 ms
Remote clock offset: -50.716 ms

# Below is generated by plot.py at 2019-03-19 16:29:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 78.872 ms
Loss rate: 42.00%
-- Flow 1:
Average throughput: 15.26 Mbit/s
95th percentile per-packet one-way delay: 75.545 ms
Loss rate: 20.52%
-- Flow 2:
Average throughput: 19.13 Mbit/s
95th percentile per-packet one-way delay: 80.900 ms
Loss rate: 48.80%
-- Flow 3:
Average throughput: 11.36 Mbit/s
95th percentile per-packet one-way delay: 80.510 ms
Loss rate: 64.95%
```

Run 4: Report of Indigo — Data Link

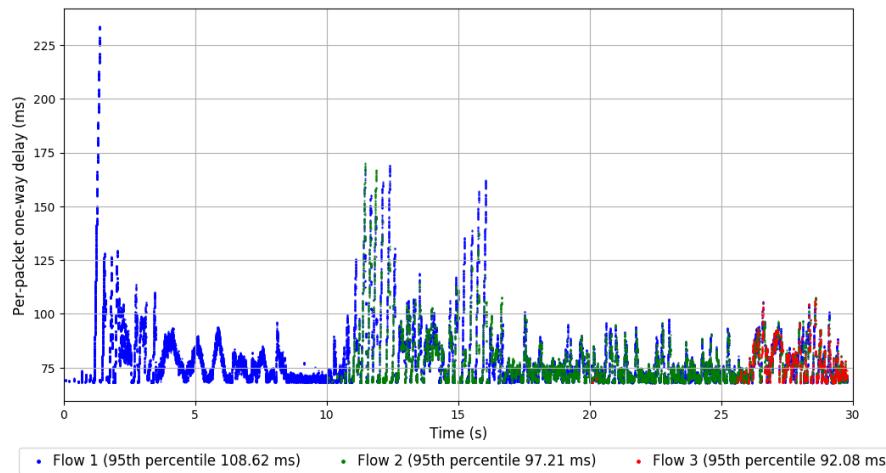
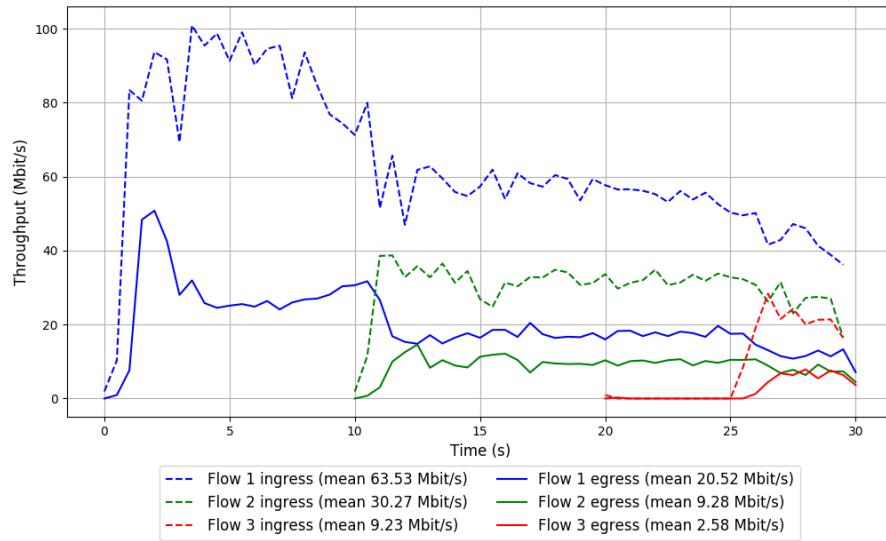


Run 5: Statistics of Indigo

```
Start at: 2019-03-19 16:24:51
End at: 2019-03-19 16:25:21
Local clock offset: -0.543 ms
Remote clock offset: -46.978 ms

# Below is generated by plot.py at 2019-03-19 16:29:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.51 Mbit/s
95th percentile per-packet one-way delay: 105.101 ms
Loss rate: 68.43%
-- Flow 1:
Average throughput: 20.52 Mbit/s
95th percentile per-packet one-way delay: 108.617 ms
Loss rate: 67.87%
-- Flow 2:
Average throughput: 9.28 Mbit/s
95th percentile per-packet one-way delay: 97.212 ms
Loss rate: 69.58%
-- Flow 3:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 92.084 ms
Loss rate: 72.47%
```

Run 5: Report of Indigo — Data Link

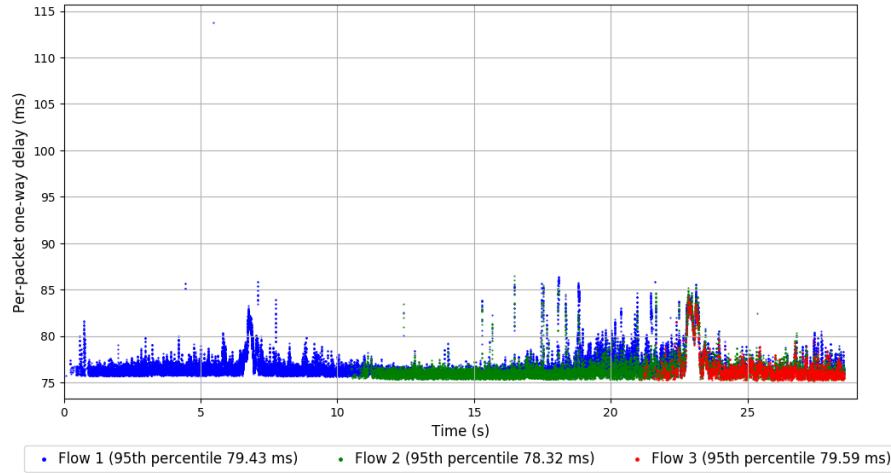
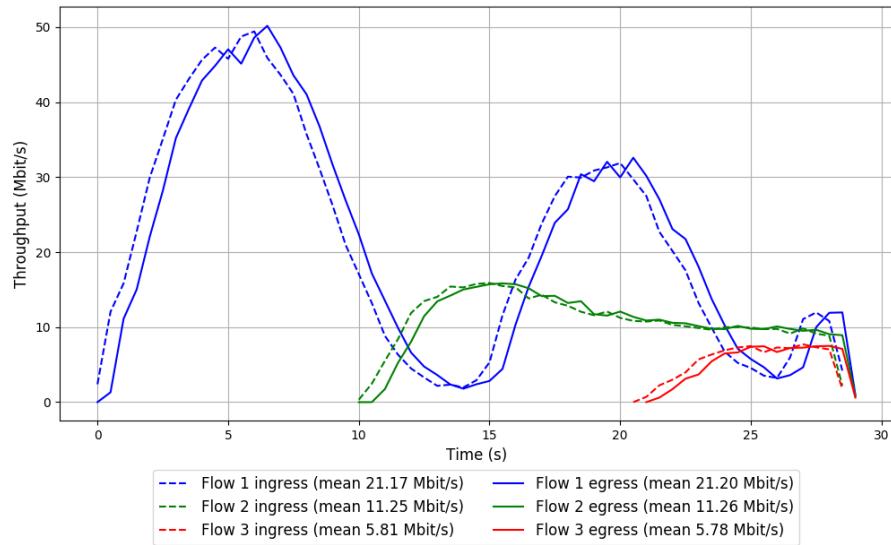


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 14:21:38
End at: 2019-03-19 14:22:08
Local clock offset: -4.801 ms
Remote clock offset: -30.704 ms

# Below is generated by plot.py at 2019-03-19 16:29:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.90 Mbit/s
95th percentile per-packet one-way delay: 79.236 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 21.20 Mbit/s
95th percentile per-packet one-way delay: 79.428 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 78.321 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 79.586 ms
Loss rate: 2.50%
```

Run 1: Report of Indigo-MusesC3 — Data Link

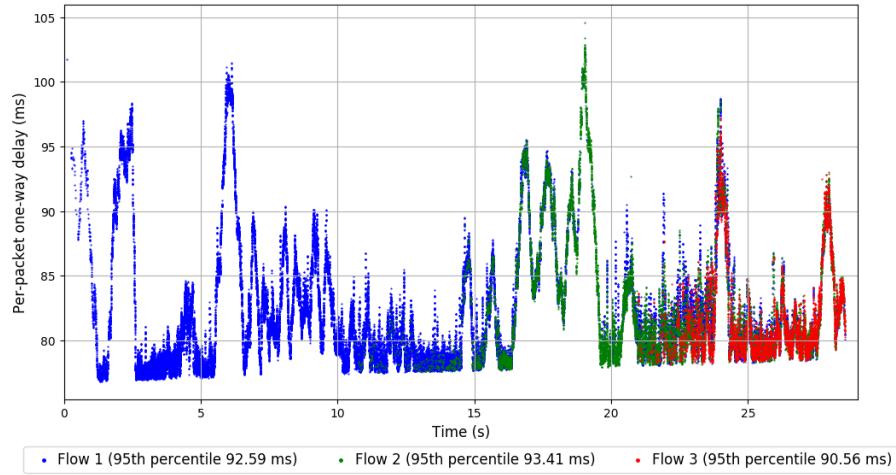
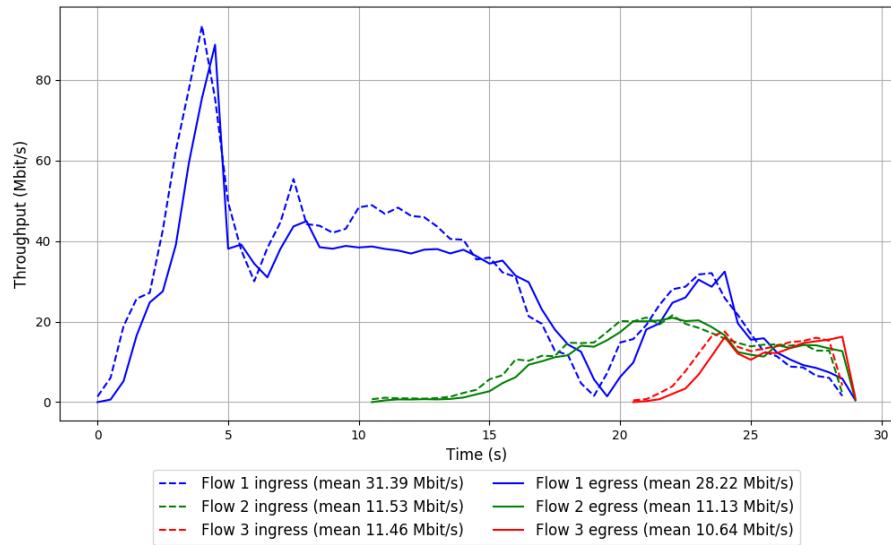


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 14:49:35
End at: 2019-03-19 14:50:05
Local clock offset: -0.216 ms
Remote clock offset: 89.016 ms

# Below is generated by plot.py at 2019-03-19 16:29:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 92.557 ms
Loss rate: 9.41%
-- Flow 1:
Average throughput: 28.22 Mbit/s
95th percentile per-packet one-way delay: 92.587 ms
Loss rate: 10.63%
-- Flow 2:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 93.412 ms
Loss rate: 4.31%
-- Flow 3:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 90.556 ms
Loss rate: 9.02%
```

Run 2: Report of Indigo-MusesC3 — Data Link

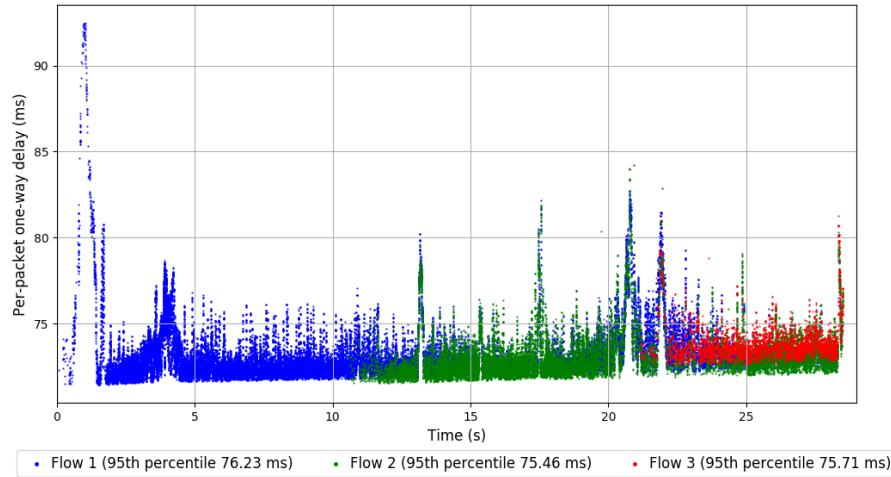
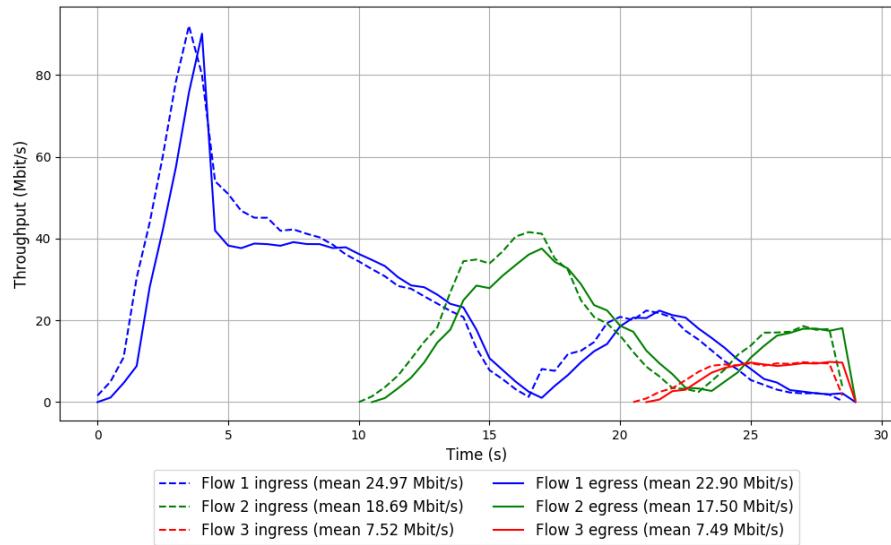


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 15:17:34
End at: 2019-03-19 15:18:04
Local clock offset: 1.832 ms
Remote clock offset: 170.407 ms

# Below is generated by plot.py at 2019-03-19 16:29:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.94 Mbit/s
95th percentile per-packet one-way delay: 76.009 ms
Loss rate: 7.92%
-- Flow 1:
Average throughput: 22.90 Mbit/s
95th percentile per-packet one-way delay: 76.233 ms
Loss rate: 8.76%
-- Flow 2:
Average throughput: 17.50 Mbit/s
95th percentile per-packet one-way delay: 75.462 ms
Loss rate: 7.07%
-- Flow 3:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 75.706 ms
Loss rate: 2.47%
```

Run 3: Report of Indigo-MusesC3 — Data Link

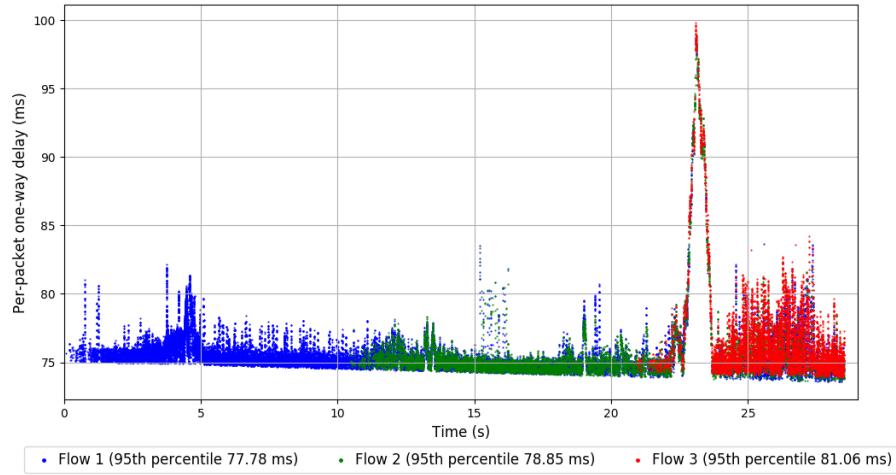
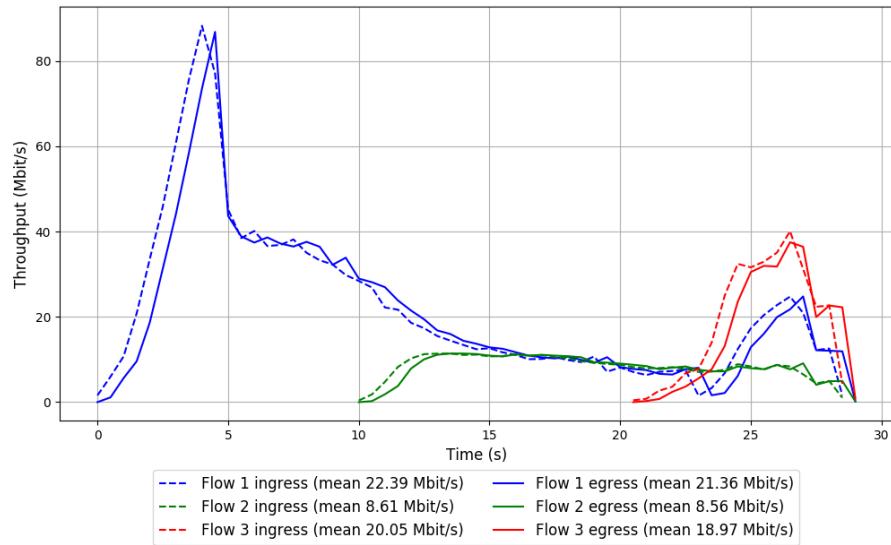


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 15:44:51
End at: 2019-03-19 15:45:21
Local clock offset: 3.403 ms
Remote clock offset: -33.608 ms

# Below is generated by plot.py at 2019-03-19 16:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 78.720 ms
Loss rate: 4.84%
-- Flow 1:
Average throughput: 21.36 Mbit/s
95th percentile per-packet one-way delay: 77.785 ms
Loss rate: 5.14%
-- Flow 2:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 78.846 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 18.97 Mbit/s
95th percentile per-packet one-way delay: 81.060 ms
Loss rate: 7.25%
```

Run 4: Report of Indigo-MusesC3 — Data Link

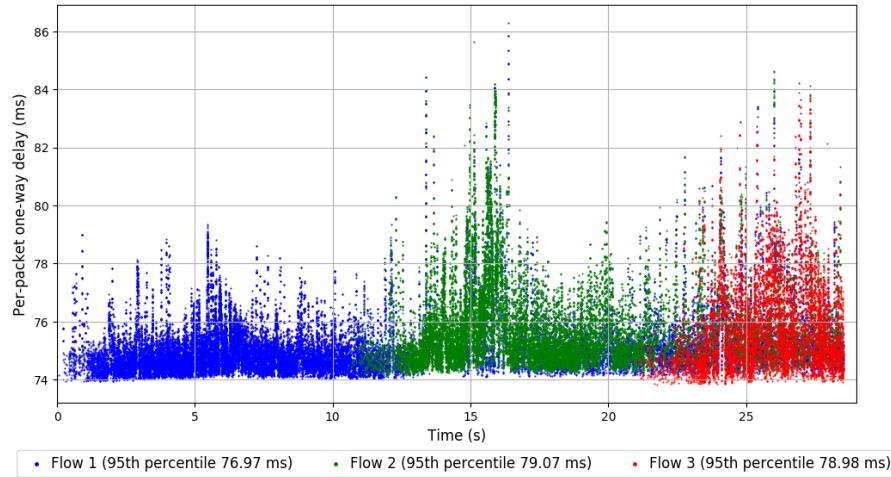
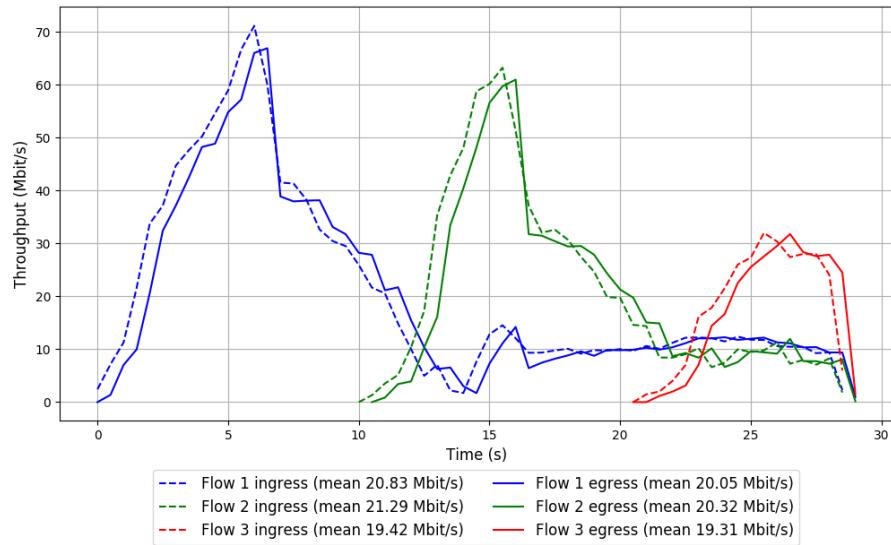


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 16:11:53
End at: 2019-03-19 16:12:23
Local clock offset: 3.091 ms
Remote clock offset: -48.295 ms

# Below is generated by plot.py at 2019-03-19 16:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.01 Mbit/s
95th percentile per-packet one-way delay: 78.281 ms
Loss rate: 4.43%
-- Flow 1:
Average throughput: 20.05 Mbit/s
95th percentile per-packet one-way delay: 76.969 ms
Loss rate: 4.24%
-- Flow 2:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: 79.068 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 78.979 ms
Loss rate: 2.65%
```

Run 5: Report of Indigo-MusesC3 — Data Link

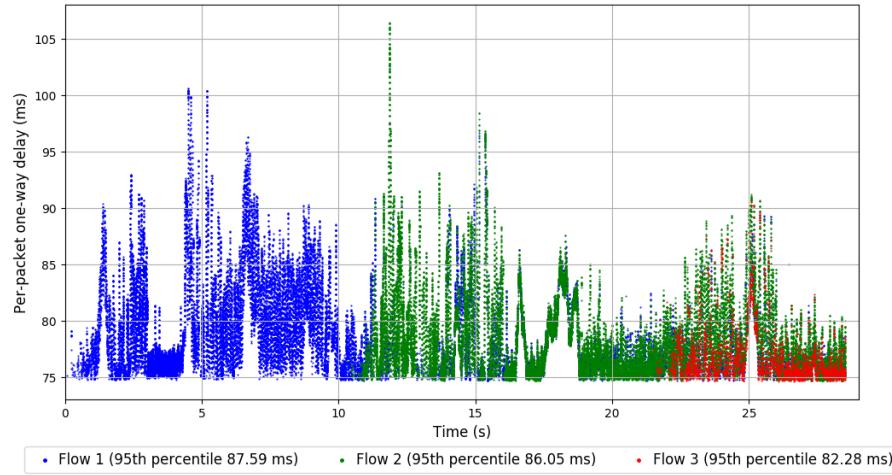
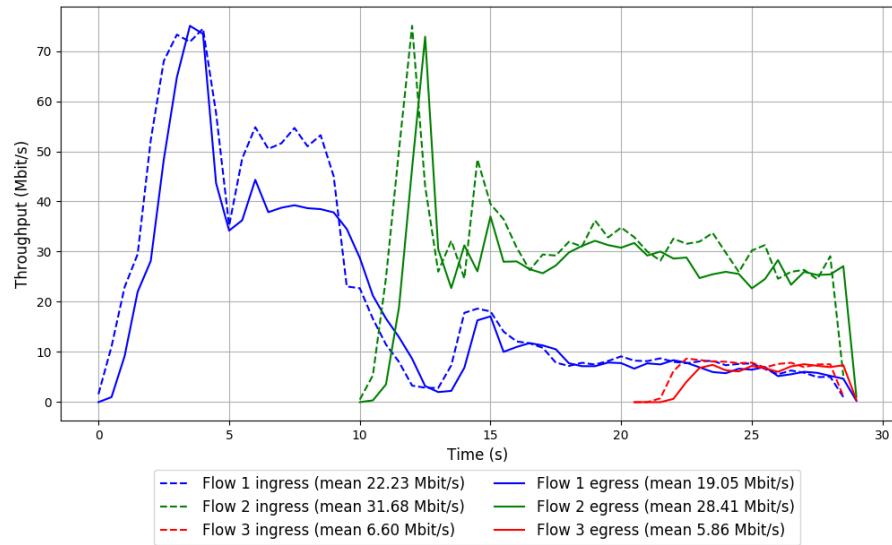


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 14:28:07
End at: 2019-03-19 14:28:37
Local clock offset: -2.719 ms
Remote clock offset: -29.62 ms

# Below is generated by plot.py at 2019-03-19 16:30:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 86.800 ms
Loss rate: 12.99%
-- Flow 1:
Average throughput: 19.05 Mbit/s
95th percentile per-packet one-way delay: 87.591 ms
Loss rate: 14.78%
-- Flow 2:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 86.050 ms
Loss rate: 11.03%
-- Flow 3:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 82.275 ms
Loss rate: 13.06%
```

Run 1: Report of Indigo-MusesC5 — Data Link

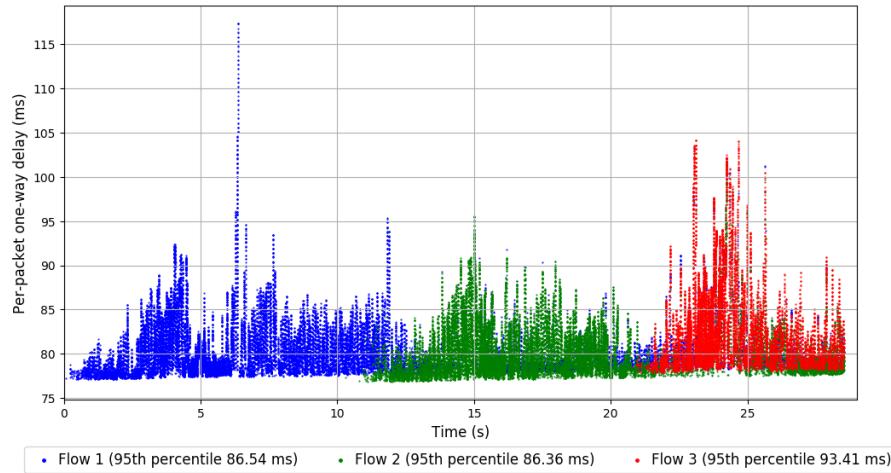
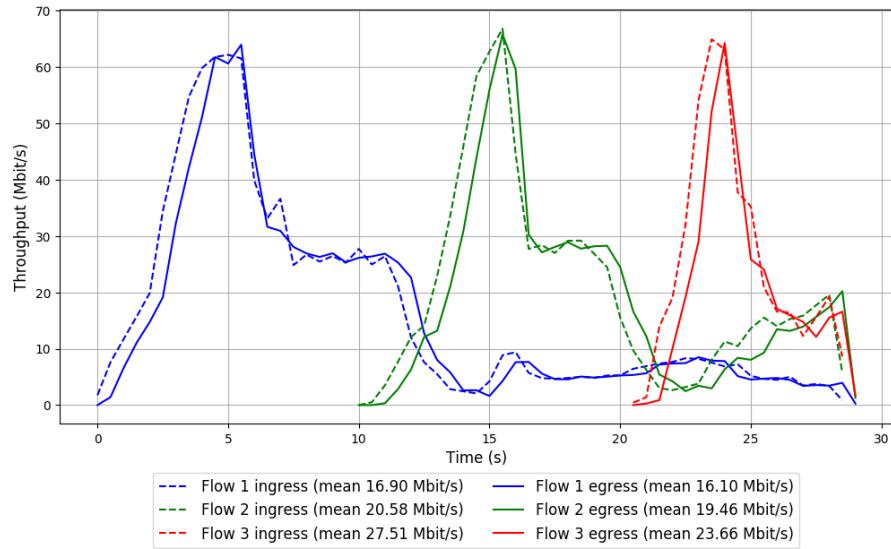


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 14:56:27
End at: 2019-03-19 14:56:57
Local clock offset: 0.172 ms
Remote clock offset: 112.143 ms

# Below is generated by plot.py at 2019-03-19 16:30:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 88.294 ms
Loss rate: 7.69%
-- Flow 1:
Average throughput: 16.10 Mbit/s
95th percentile per-packet one-way delay: 86.537 ms
Loss rate: 5.24%
-- Flow 2:
Average throughput: 19.46 Mbit/s
95th percentile per-packet one-way delay: 86.360 ms
Loss rate: 6.30%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 93.414 ms
Loss rate: 15.61%
```

Run 2: Report of Indigo-MusesC5 — Data Link

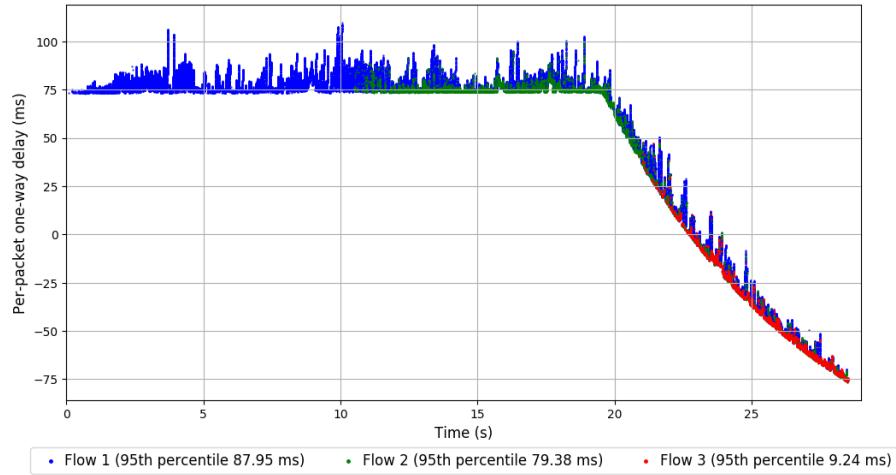
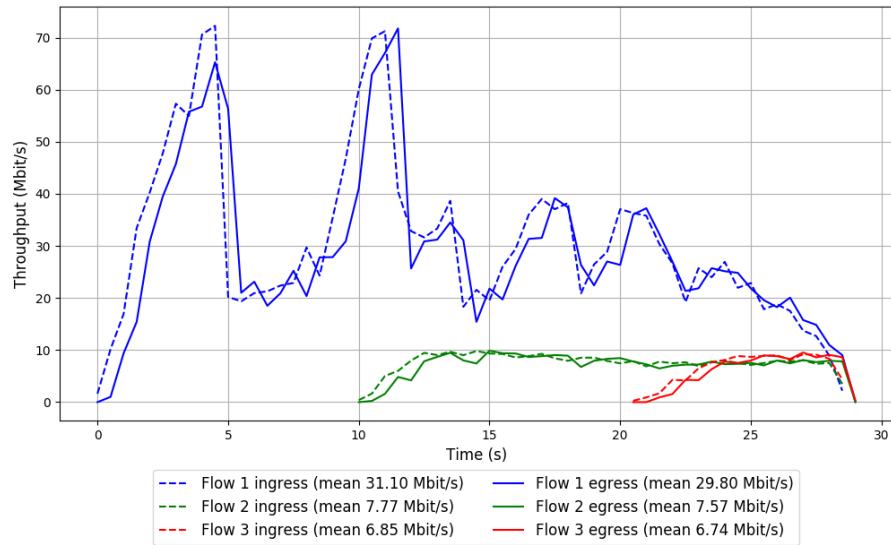


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 15:24:14
End at: 2019-03-19 15:24:44
Local clock offset: 2.242 ms
Remote clock offset: 184.01 ms

# Below is generated by plot.py at 2019-03-19 16:30:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 87.216 ms
Loss rate: 5.02%
-- Flow 1:
Average throughput: 29.80 Mbit/s
95th percentile per-packet one-way delay: 87.954 ms
Loss rate: 5.17%
-- Flow 2:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 79.375 ms
Loss rate: 4.15%
-- Flow 3:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 9.240 ms
Loss rate: 4.82%
```

Run 3: Report of Indigo-MusesC5 — Data Link

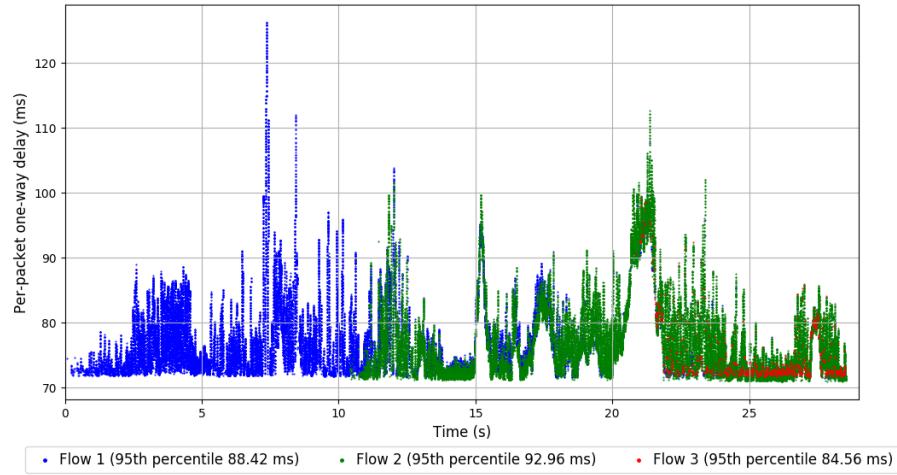
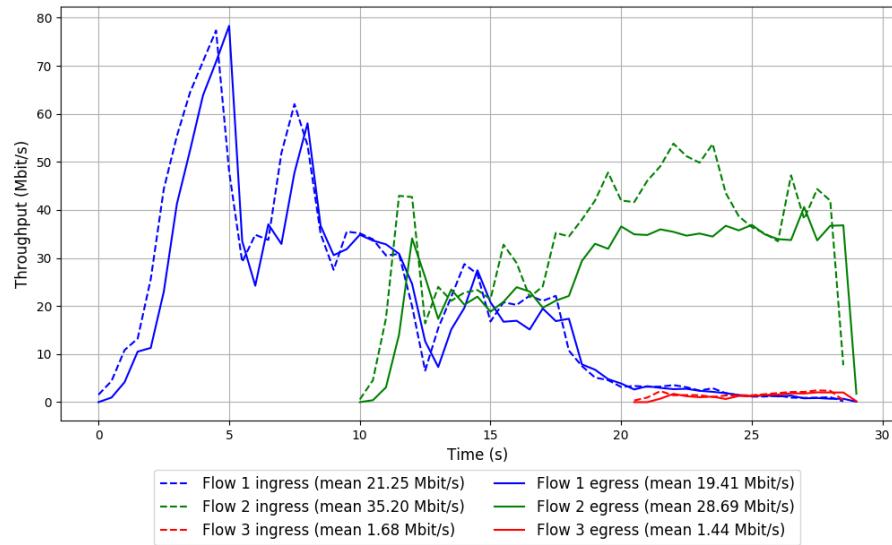


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 15:51:26
End at: 2019-03-19 15:51:56
Local clock offset: 3.089 ms
Remote clock offset: -39.136 ms

# Below is generated by plot.py at 2019-03-19 16:30:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 90.707 ms
Loss rate: 14.31%
-- Flow 1:
Average throughput: 19.41 Mbit/s
95th percentile per-packet one-way delay: 88.419 ms
Loss rate: 9.09%
-- Flow 2:
Average throughput: 28.69 Mbit/s
95th percentile per-packet one-way delay: 92.960 ms
Loss rate: 19.17%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 84.556 ms
Loss rate: 16.27%
```

Run 4: Report of Indigo-MusesC5 — Data Link

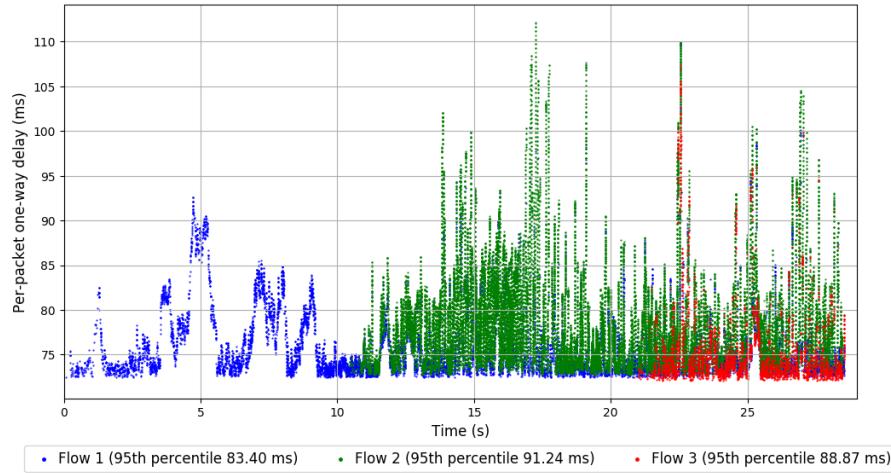
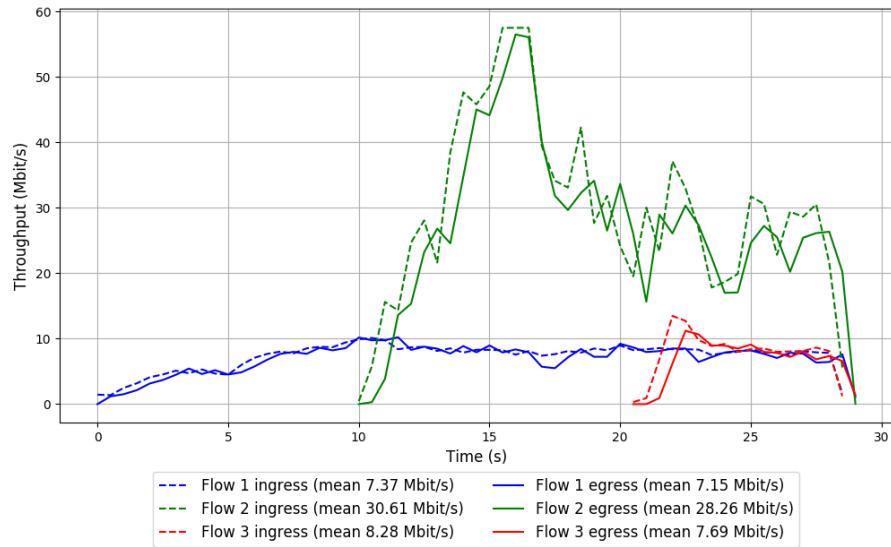


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 16:18:30
End at: 2019-03-19 16:19:00
Local clock offset: 1.798 ms
Remote clock offset: -46.191 ms

# Below is generated by plot.py at 2019-03-19 16:30:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.30 Mbit/s
95th percentile per-packet one-way delay: 89.552 ms
Loss rate: 7.17%
-- Flow 1:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 83.400 ms
Loss rate: 3.39%
-- Flow 2:
Average throughput: 28.26 Mbit/s
95th percentile per-packet one-way delay: 91.237 ms
Loss rate: 8.40%
-- Flow 3:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 88.869 ms
Loss rate: 8.84%
```

Run 5: Report of Indigo-MusesC5 — Data Link

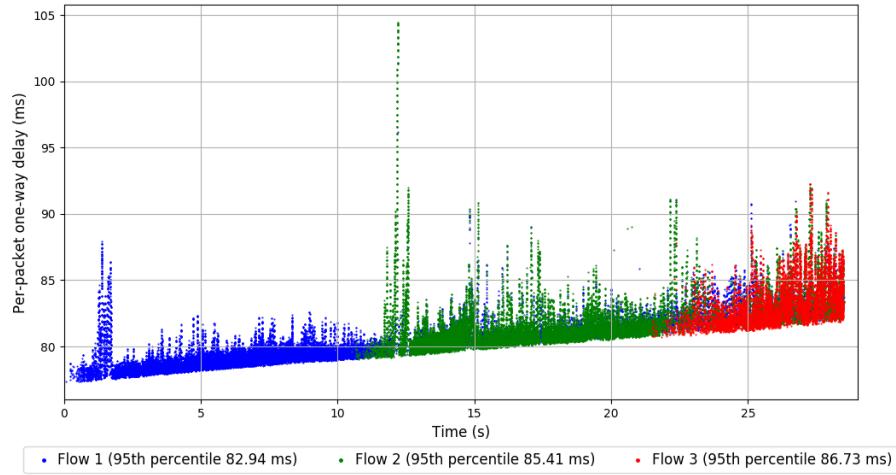
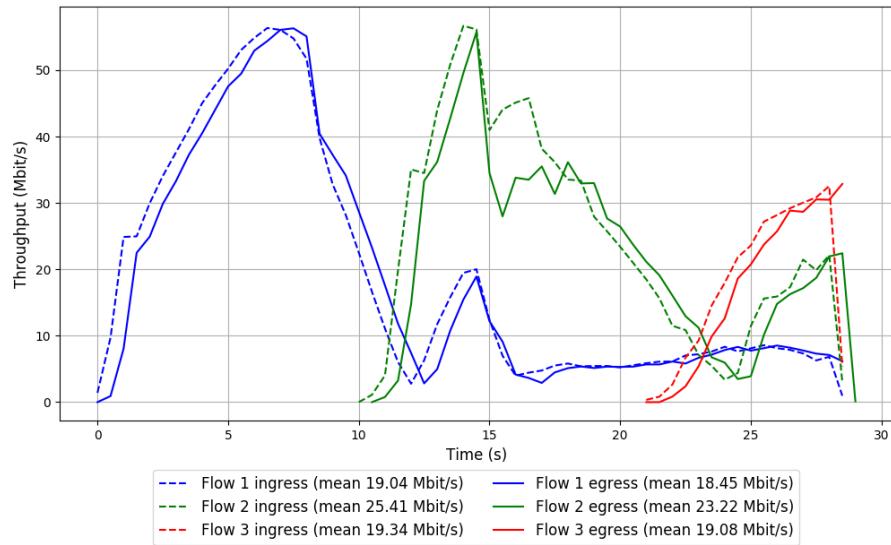


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 14:36:10
End at: 2019-03-19 14:36:40
Local clock offset: -1.465 ms
Remote clock offset: 2.695 ms

# Below is generated by plot.py at 2019-03-19 16:30:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: 84.951 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 18.45 Mbit/s
95th percentile per-packet one-way delay: 82.945 ms
Loss rate: 3.55%
-- Flow 2:
Average throughput: 23.22 Mbit/s
95th percentile per-packet one-way delay: 85.414 ms
Loss rate: 9.34%
-- Flow 3:
Average throughput: 19.08 Mbit/s
95th percentile per-packet one-way delay: 86.733 ms
Loss rate: 3.48%
```

Run 1: Report of Indigo-MusesD — Data Link

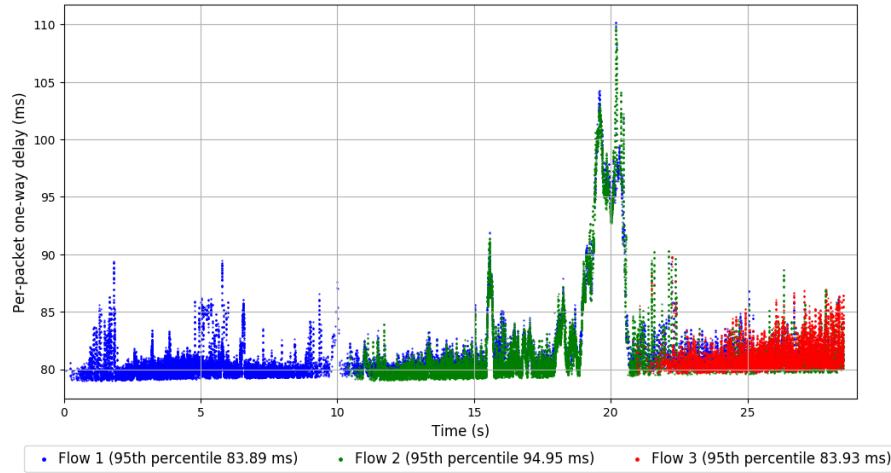
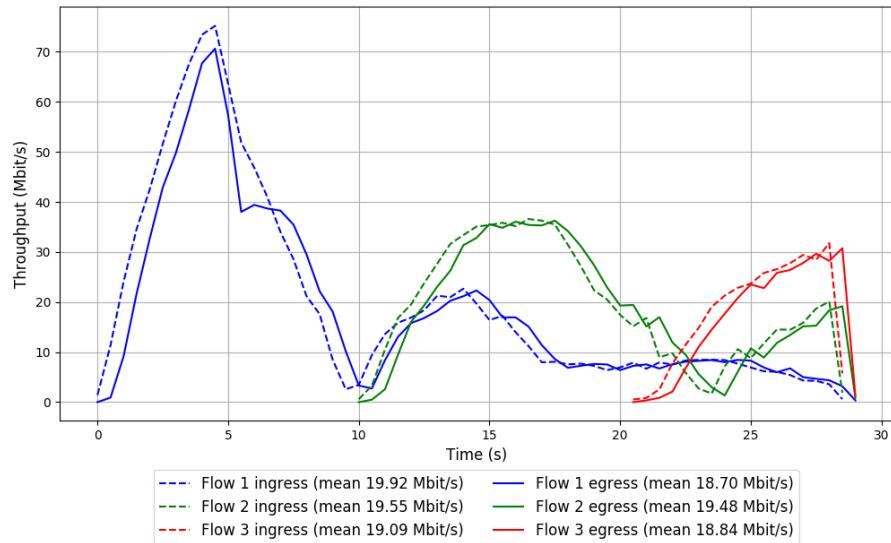


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 15:04:17
End at: 2019-03-19 15:04:47
Local clock offset: 0.876 ms
Remote clock offset: 131.744 ms

# Below is generated by plot.py at 2019-03-19 16:30:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 86.580 ms
Loss rate: 4.33%
-- Flow 1:
Average throughput: 18.70 Mbit/s
95th percentile per-packet one-way delay: 83.892 ms
Loss rate: 6.60%
-- Flow 2:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 94.953 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 83.926 ms
Loss rate: 3.37%
```

Run 2: Report of Indigo-MusesD — Data Link

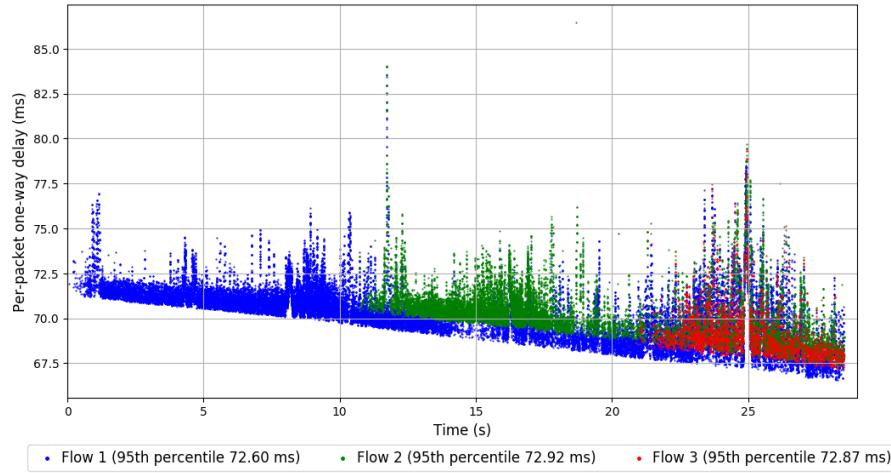
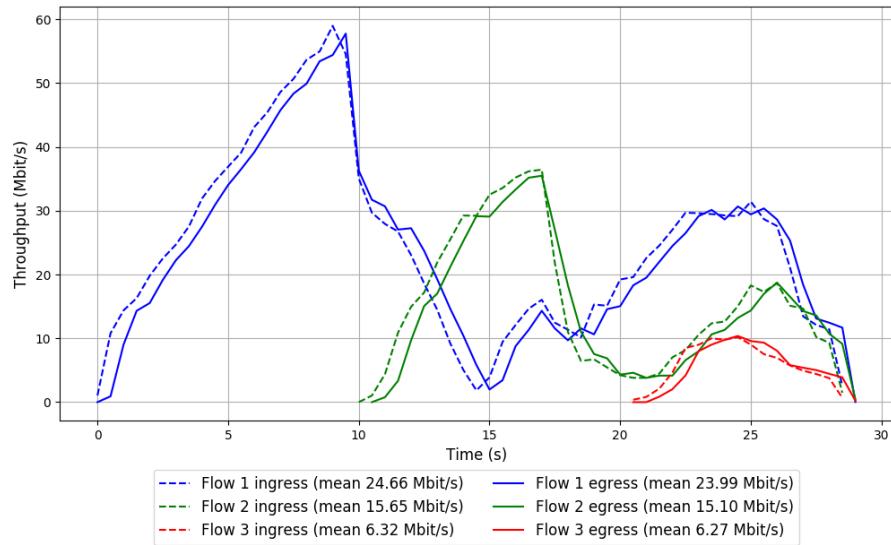


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 15:32:06
End at: 2019-03-19 15:32:36
Local clock offset: 2.762 ms
Remote clock offset: -62.778 ms

# Below is generated by plot.py at 2019-03-19 16:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.20 Mbit/s
95th percentile per-packet one-way delay: 72.705 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 23.99 Mbit/s
95th percentile per-packet one-way delay: 72.604 ms
Loss rate: 3.26%
-- Flow 2:
Average throughput: 15.10 Mbit/s
95th percentile per-packet one-way delay: 72.916 ms
Loss rate: 4.32%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 72.869 ms
Loss rate: 2.54%
```

Run 3: Report of Indigo-MusesD — Data Link

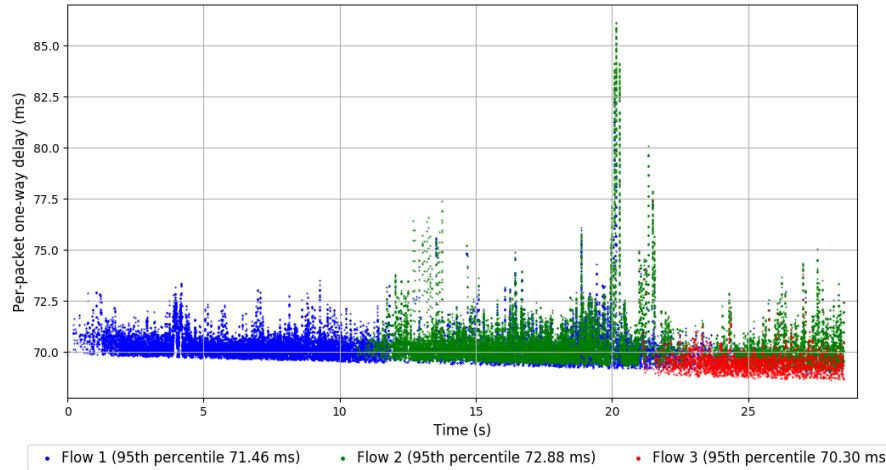
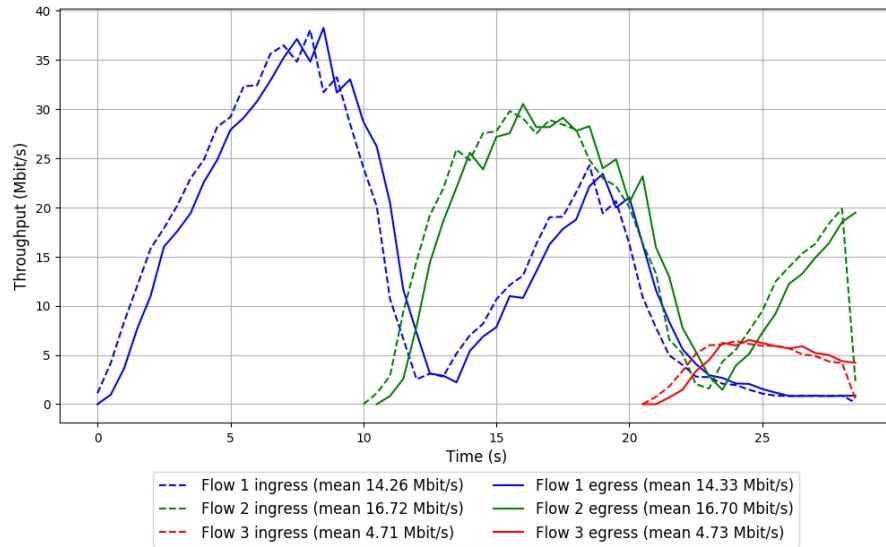


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 15:59:09
End at: 2019-03-19 15:59:39
Local clock offset: 2.863 ms
Remote clock offset: -50.789 ms

# Below is generated by plot.py at 2019-03-19 16:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.15 Mbit/s
95th percentile per-packet one-way delay: 71.876 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 71.460 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 16.70 Mbit/s
95th percentile per-packet one-way delay: 72.877 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 70.304 ms
Loss rate: 1.52%
```

Run 4: Report of Indigo-MusesD — Data Link

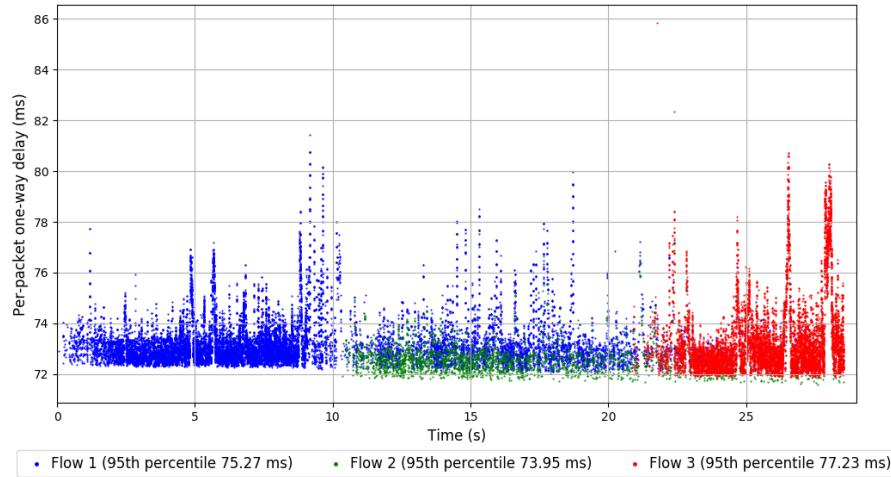
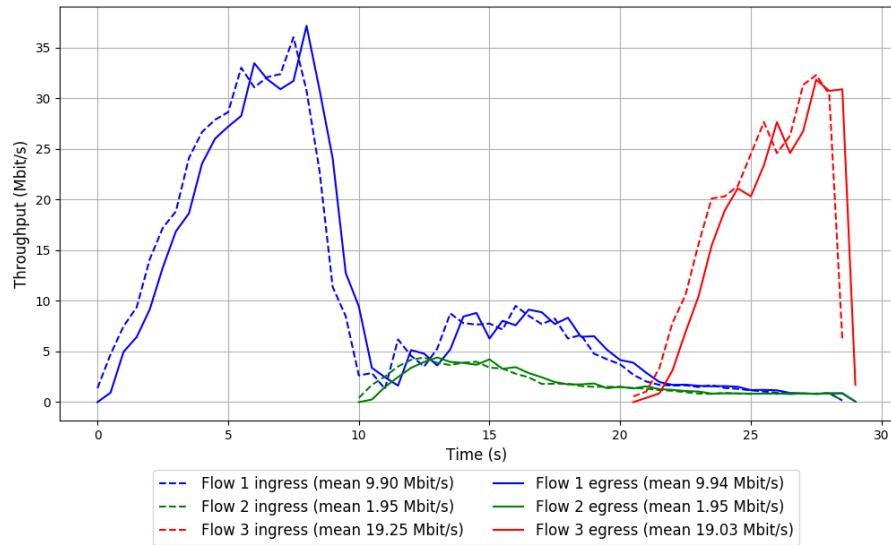


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 16:26:21
End at: 2019-03-19 16:26:51
Local clock offset: -1.029 ms
Remote clock offset: -52.815 ms

# Below is generated by plot.py at 2019-03-19 16:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.38 Mbit/s
95th percentile per-packet one-way delay: 75.798 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 9.94 Mbit/s
95th percentile per-packet one-way delay: 75.267 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 73.948 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 19.03 Mbit/s
95th percentile per-packet one-way delay: 77.231 ms
Loss rate: 2.93%
```

Run 5: Report of Indigo-MusesD — Data Link

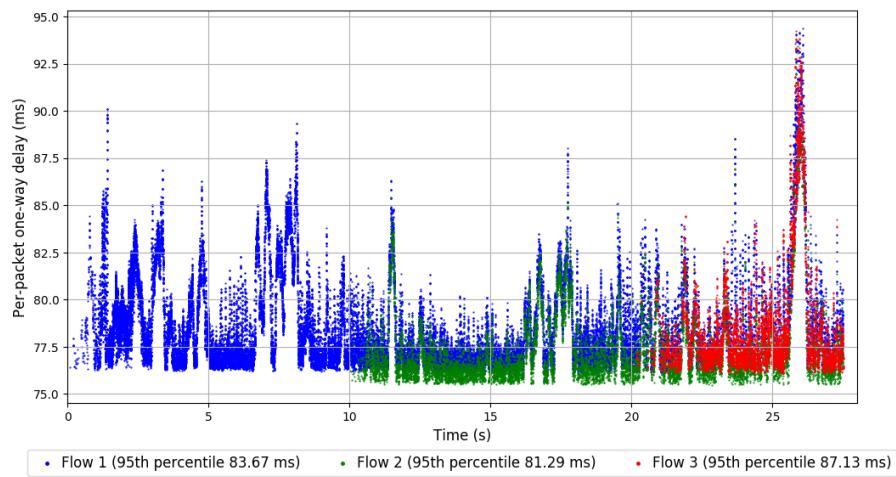
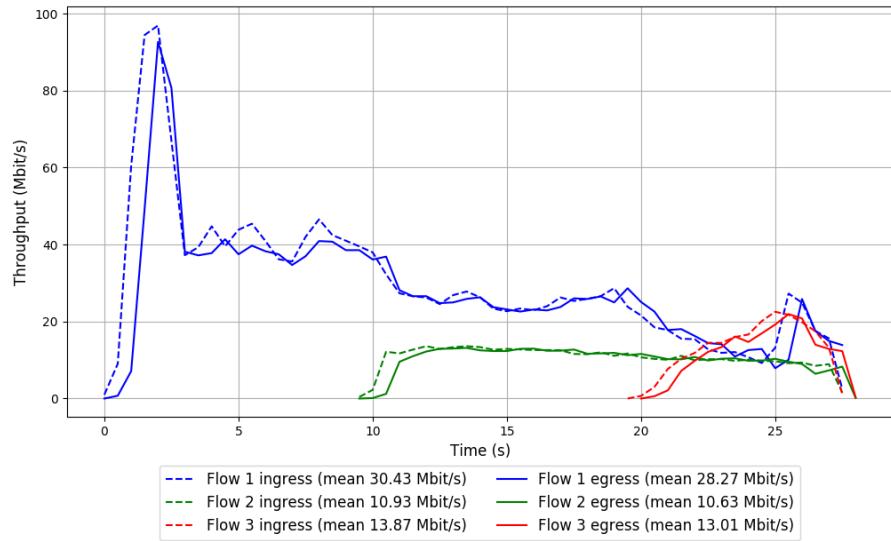


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 14:26:49
End at: 2019-03-19 14:27:19
Local clock offset: -3.068 ms
Remote clock offset: -30.787 ms

# Below is generated by plot.py at 2019-03-19 16:30:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 83.567 ms
Loss rate: 6.96%
-- Flow 1:
Average throughput: 28.27 Mbit/s
95th percentile per-packet one-way delay: 83.668 ms
Loss rate: 7.61%
-- Flow 2:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 81.292 ms
Loss rate: 3.61%
-- Flow 3:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 87.126 ms
Loss rate: 7.98%
```

Run 1: Report of Indigo-MusesT — Data Link

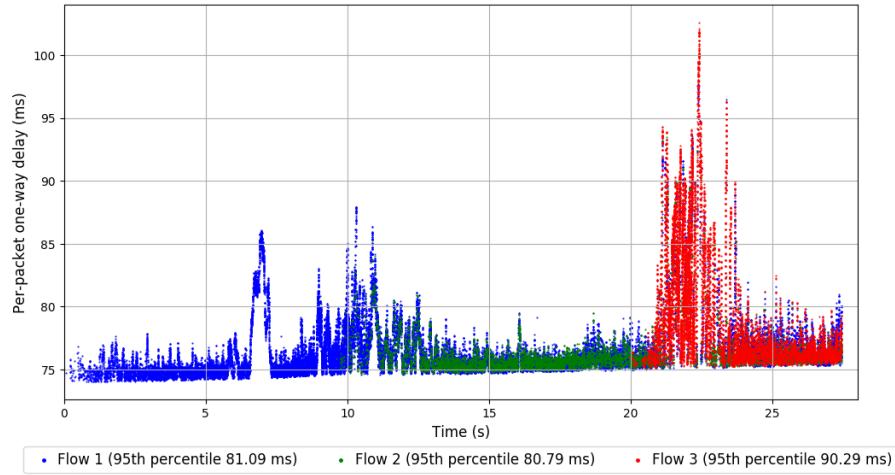
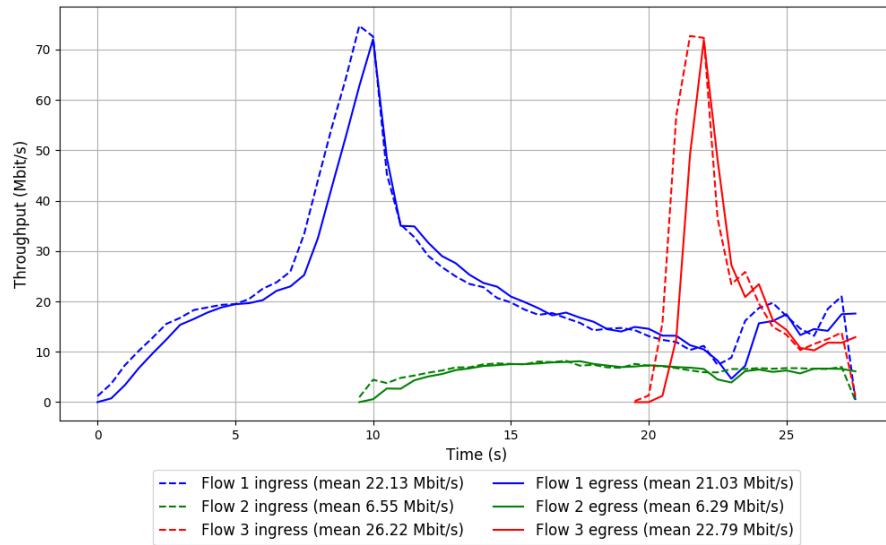


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 14:55:03
End at: 2019-03-19 14:55:33
Local clock offset: 0.217 ms
Remote clock offset: 111.191 ms

# Below is generated by plot.py at 2019-03-19 16:30:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.38 Mbit/s
95th percentile per-packet one-way delay: 85.096 ms
Loss rate: 7.40%
-- Flow 1:
Average throughput: 21.03 Mbit/s
95th percentile per-packet one-way delay: 81.088 ms
Loss rate: 5.46%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 80.791 ms
Loss rate: 4.79%
-- Flow 3:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 90.291 ms
Loss rate: 14.81%
```

Run 2: Report of Indigo-MusesT — Data Link

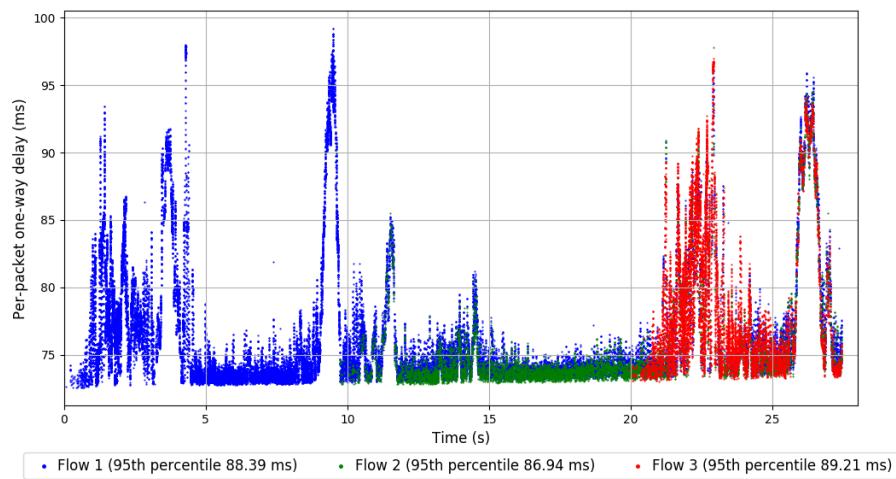
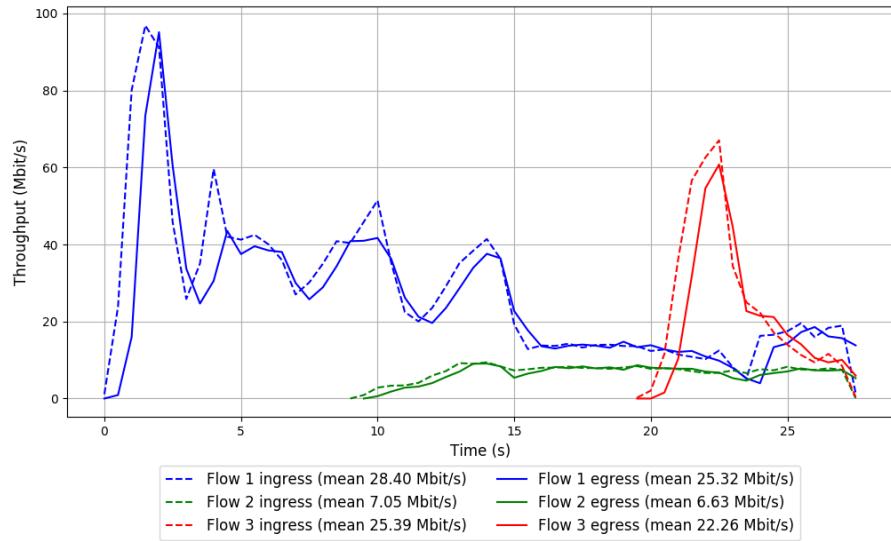


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 15:22:56
End at: 2019-03-19 15:23:26
Local clock offset: 2.05 ms
Remote clock offset: 181.564 ms

# Below is generated by plot.py at 2019-03-19 16:30:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 88.679 ms
Loss rate: 11.32%
-- Flow 1:
Average throughput: 25.32 Mbit/s
95th percentile per-packet one-way delay: 88.385 ms
Loss rate: 11.39%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 86.936 ms
Loss rate: 6.73%
-- Flow 3:
Average throughput: 22.26 Mbit/s
95th percentile per-packet one-way delay: 89.211 ms
Loss rate: 14.04%
```

Run 3: Report of Indigo-MusesT — Data Link

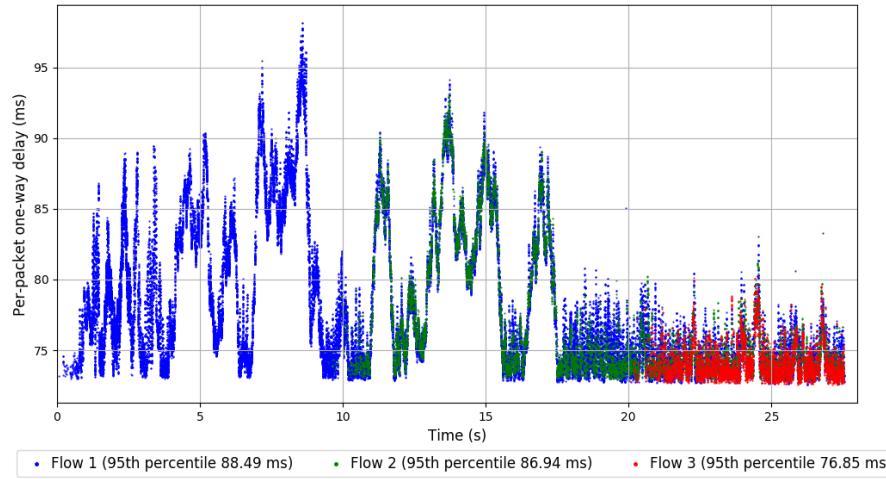
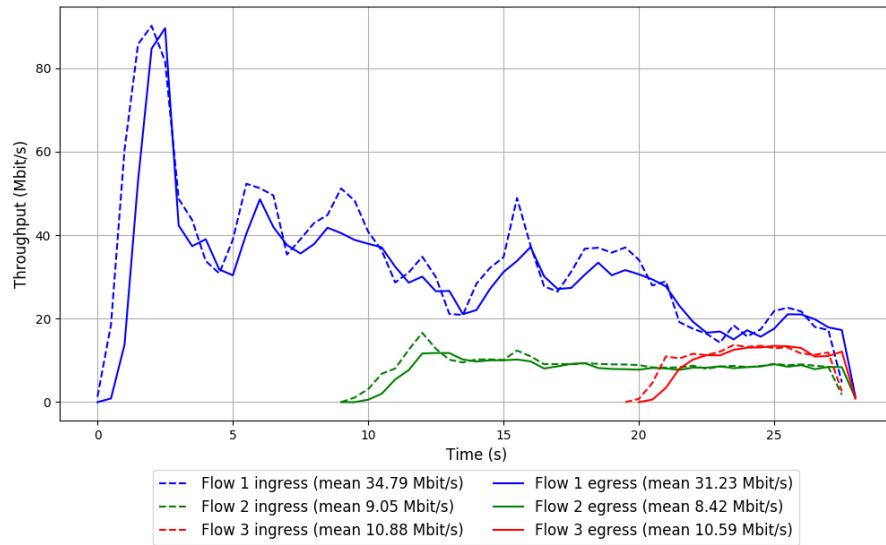


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 15:50:08
End at: 2019-03-19 15:50:38
Local clock offset: 3.184 ms
Remote clock offset: -38.764 ms

# Below is generated by plot.py at 2019-03-19 16:30:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 88.132 ms
Loss rate: 9.89%
-- Flow 1:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 88.493 ms
Loss rate: 10.73%
-- Flow 2:
Average throughput: 8.42 Mbit/s
95th percentile per-packet one-way delay: 86.936 ms
Loss rate: 7.67%
-- Flow 3:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 76.853 ms
Loss rate: 4.57%
```

Run 4: Report of Indigo-MusesT — Data Link

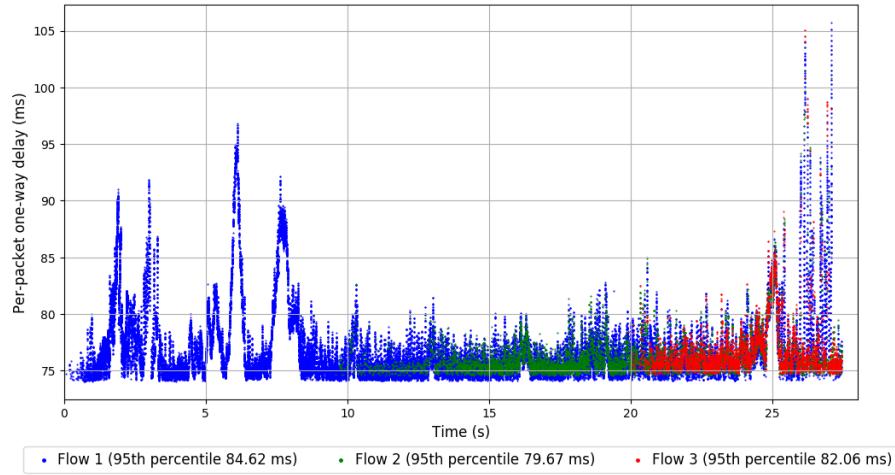
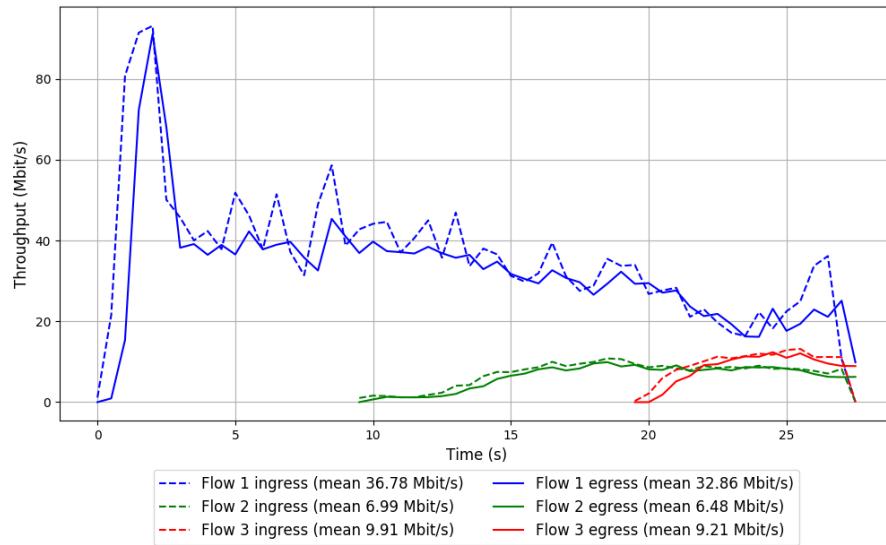


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 16:17:12
End at: 2019-03-19 16:17:42
Local clock offset: 2.597 ms
Remote clock offset: -47.703 ms

# Below is generated by plot.py at 2019-03-19 16:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.61 Mbit/s
95th percentile per-packet one-way delay: 83.872 ms
Loss rate: 10.70%
-- Flow 1:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 84.624 ms
Loss rate: 11.15%
-- Flow 2:
Average throughput: 6.48 Mbit/s
95th percentile per-packet one-way delay: 79.666 ms
Loss rate: 8.11%
-- Flow 3:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 82.062 ms
Loss rate: 9.02%
```

Run 5: Report of Indigo-MusesT — Data Link

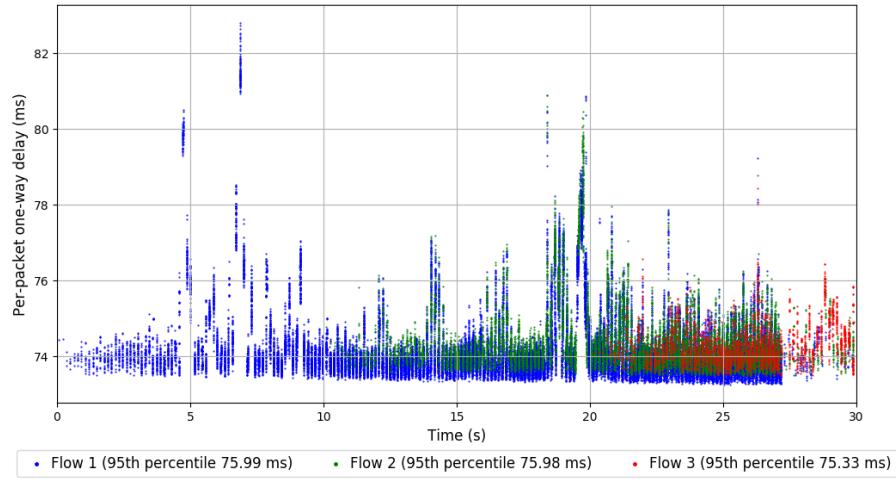
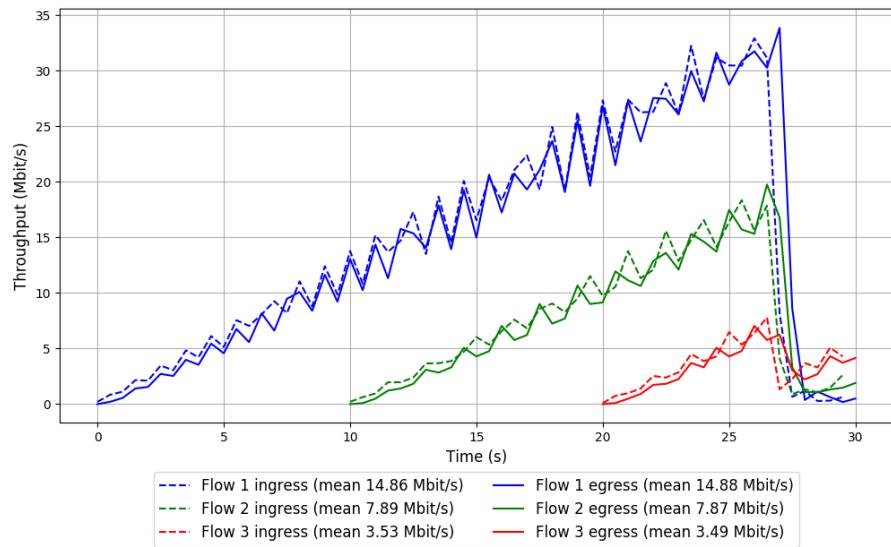


Run 1: Statistics of LEDBAT

```
Start at: 2019-03-19 14:19:05
End at: 2019-03-19 14:19:35
Local clock offset: -6.129 ms
Remote clock offset: -28.728 ms

# Below is generated by plot.py at 2019-03-19 16:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 75.938 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 14.88 Mbit/s
95th percentile per-packet one-way delay: 75.992 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 75.985 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 75.331 ms
Loss rate: 2.80%
```

Run 1: Report of LEDBAT — Data Link

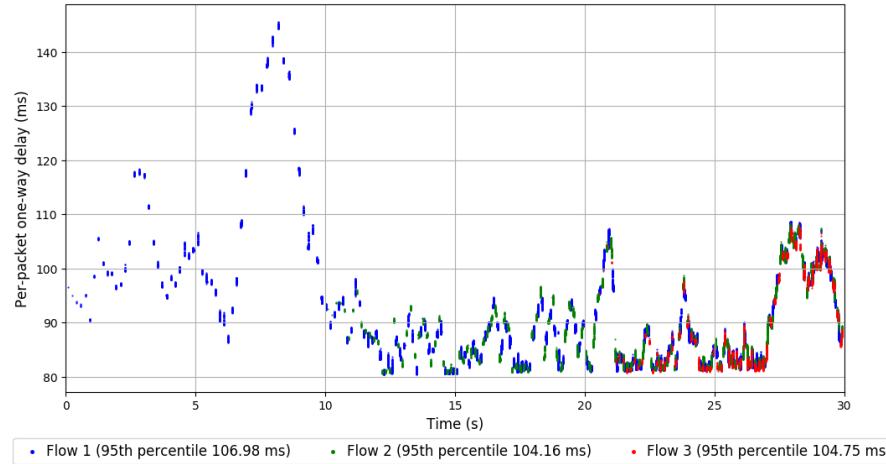
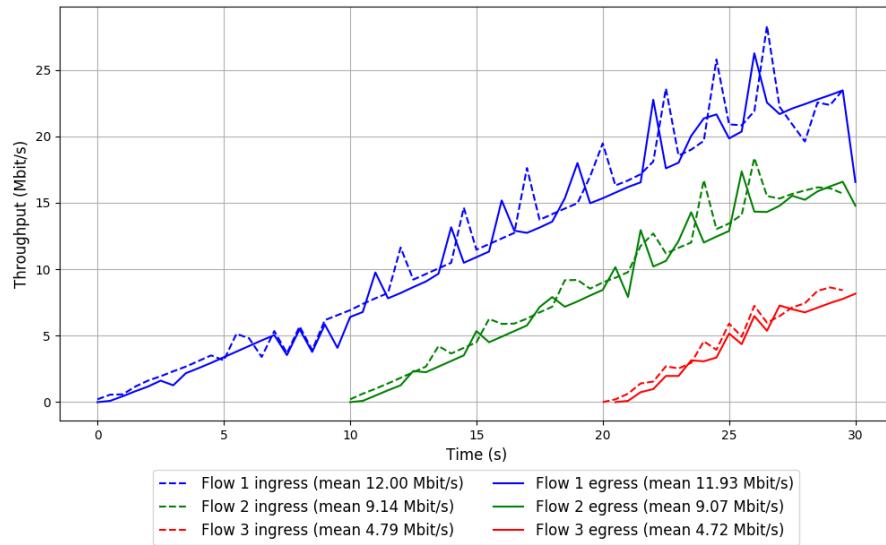


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-19 14:46:58
End at: 2019-03-19 14:47:28
Local clock offset: -0.417 ms
Remote clock offset: 75.362 ms

# Below is generated by plot.py at 2019-03-19 16:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.44 Mbit/s
95th percentile per-packet one-way delay: 106.074 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 106.985 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 104.155 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 104.746 ms
Loss rate: 3.09%
```

Run 2: Report of LEDBAT — Data Link

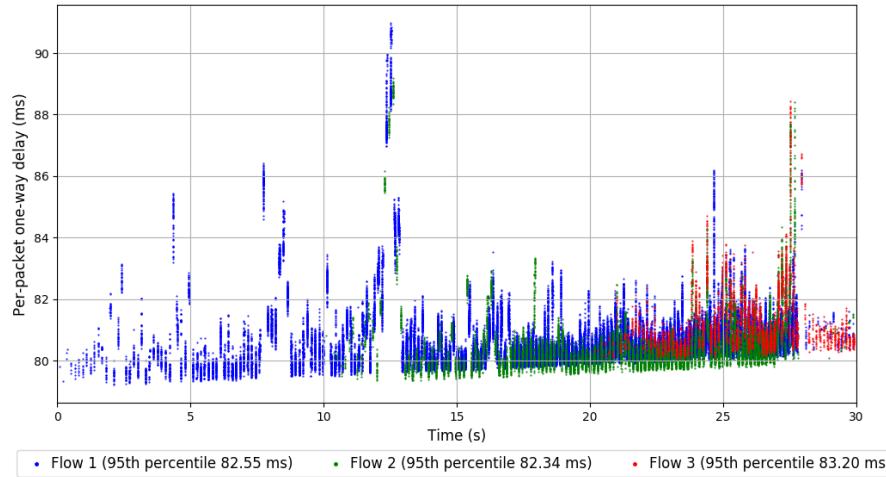
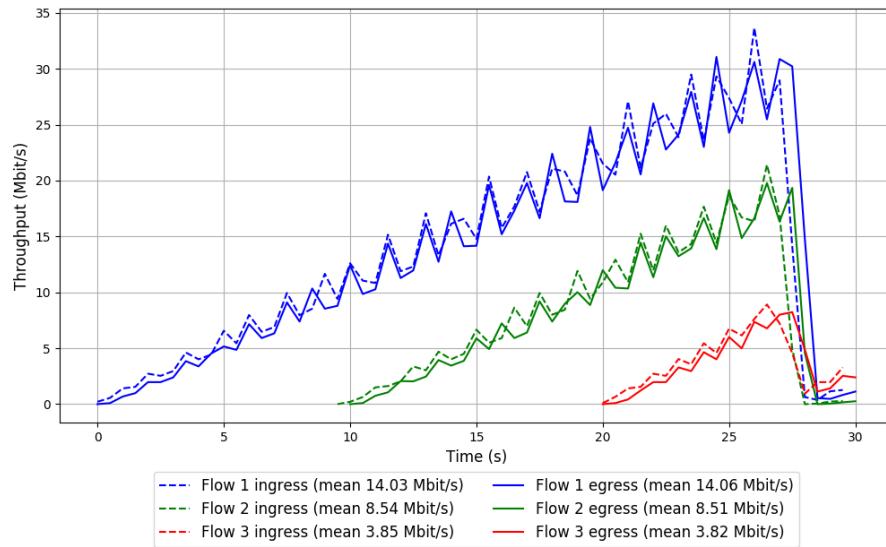


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-19 15:14:58
End at: 2019-03-19 15:15:28
Local clock offset: 1.677 ms
Remote clock offset: 157.112 ms

# Below is generated by plot.py at 2019-03-19 16:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.95 Mbit/s
95th percentile per-packet one-way delay: 82.563 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 14.06 Mbit/s
95th percentile per-packet one-way delay: 82.550 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 82.341 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 83.196 ms
Loss rate: 2.22%
```

Run 3: Report of LEDBAT — Data Link

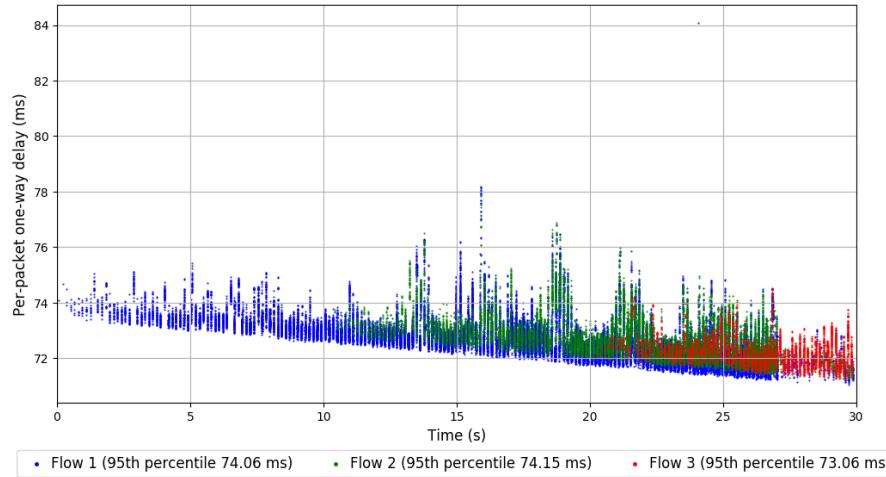
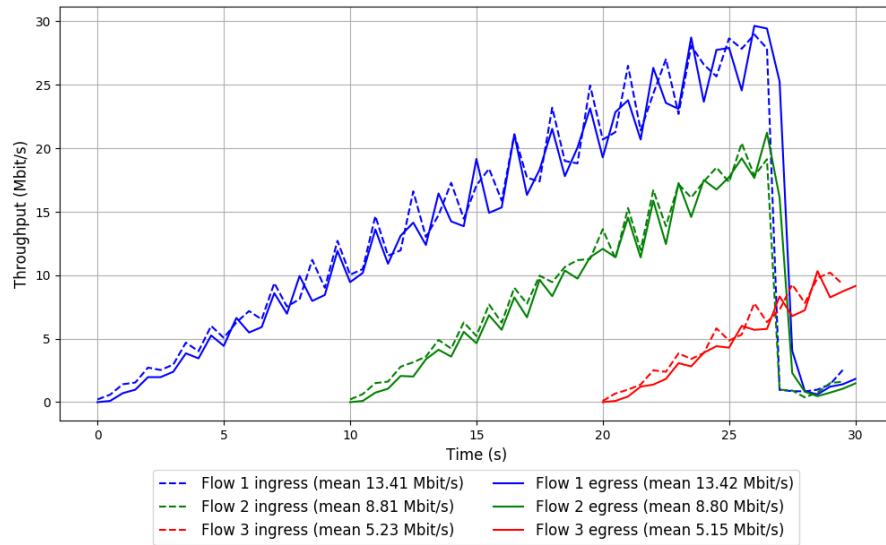


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-19 15:42:19
End at: 2019-03-19 15:42:49
Local clock offset: 3.26 ms
Remote clock offset: -21.431 ms

# Below is generated by plot.py at 2019-03-19 16:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.92 Mbit/s
95th percentile per-packet one-way delay: 74.034 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 74.058 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 74.154 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 73.059 ms
Loss rate: 3.06%
```

Run 4: Report of LEDBAT — Data Link

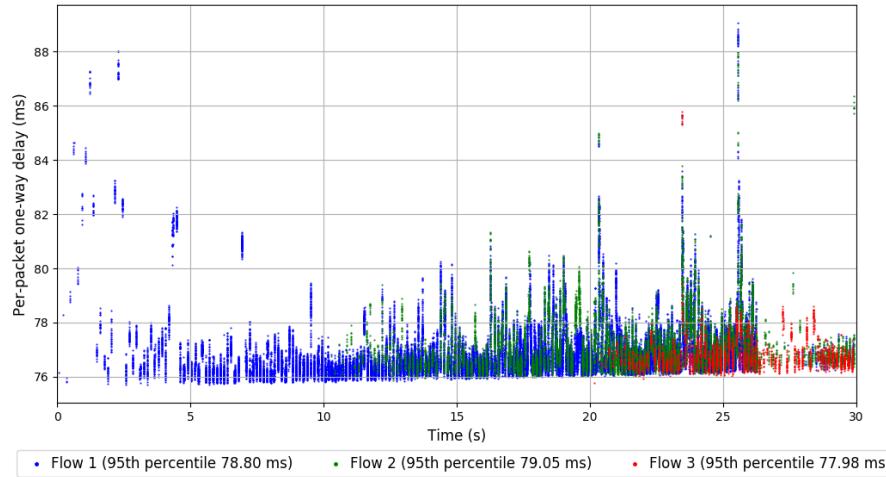
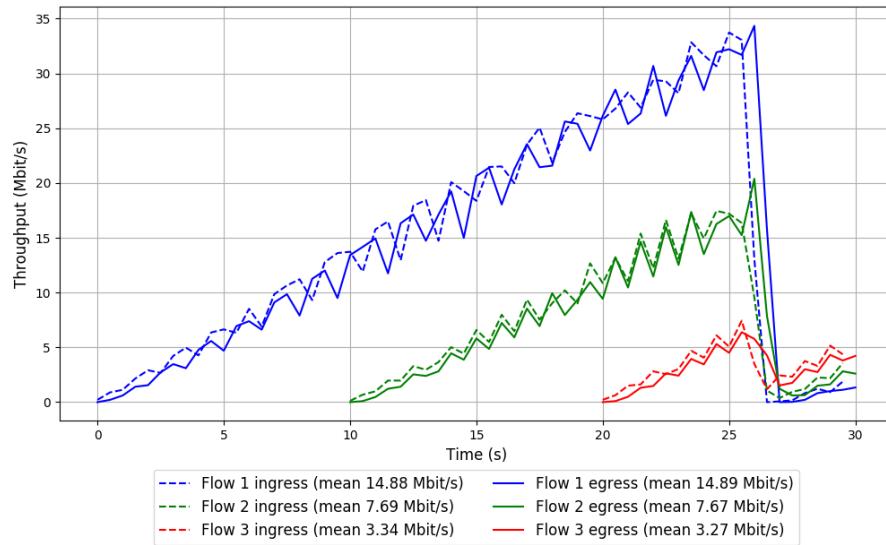


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-19 16:09:21
End at: 2019-03-19 16:09:51
Local clock offset: 2.937 ms
Remote clock offset: -52.826 ms

# Below is generated by plot.py at 2019-03-19 16:31:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.02 Mbit/s
95th percentile per-packet one-way delay: 78.838 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 14.89 Mbit/s
95th percentile per-packet one-way delay: 78.802 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 79.050 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 77.984 ms
Loss rate: 3.53%
```

Run 5: Report of LEDBAT — Data Link

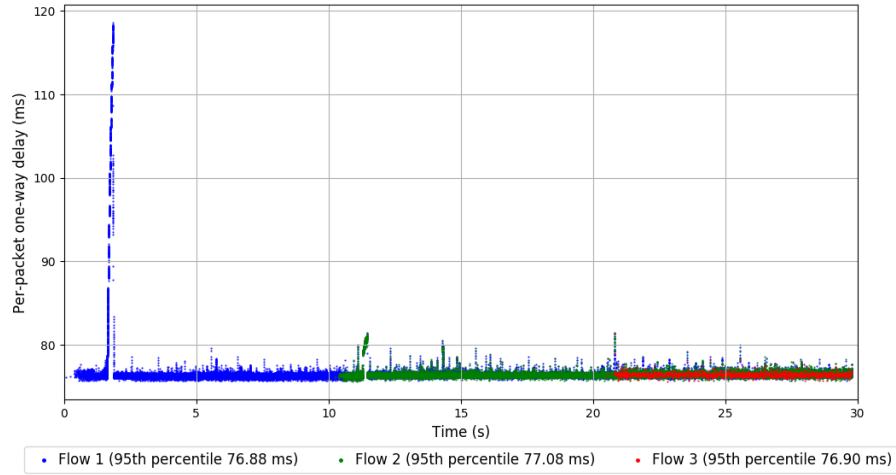
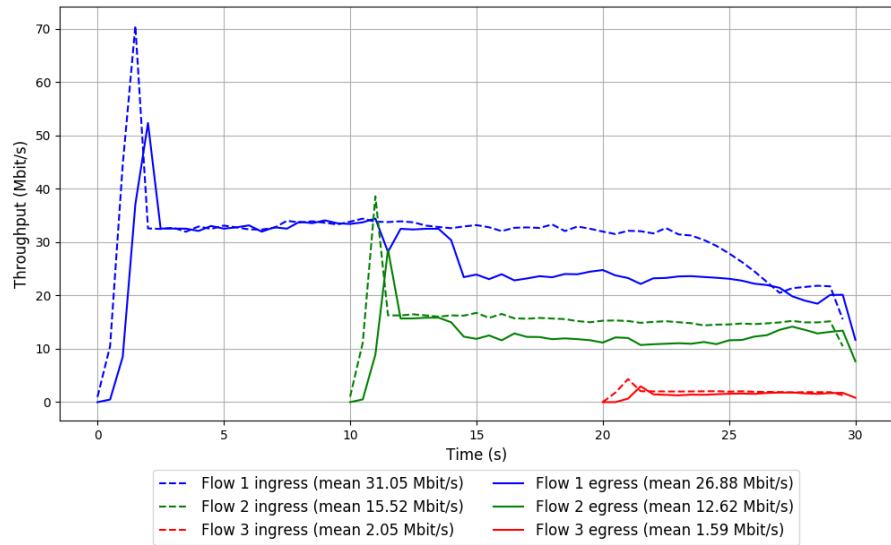


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-03-19 14:13:40
End at: 2019-03-19 14:14:10
Local clock offset: -7.755 ms
Remote clock offset: -31.2 ms

# Below is generated by plot.py at 2019-03-19 16:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 76.952 ms
Loss rate: 15.34%
-- Flow 1:
Average throughput: 26.88 Mbit/s
95th percentile per-packet one-way delay: 76.882 ms
Loss rate: 13.84%
-- Flow 2:
Average throughput: 12.62 Mbit/s
95th percentile per-packet one-way delay: 77.077 ms
Loss rate: 19.29%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 76.900 ms
Loss rate: 23.86%
```

Run 1: Report of PCC-Allegro — Data Link

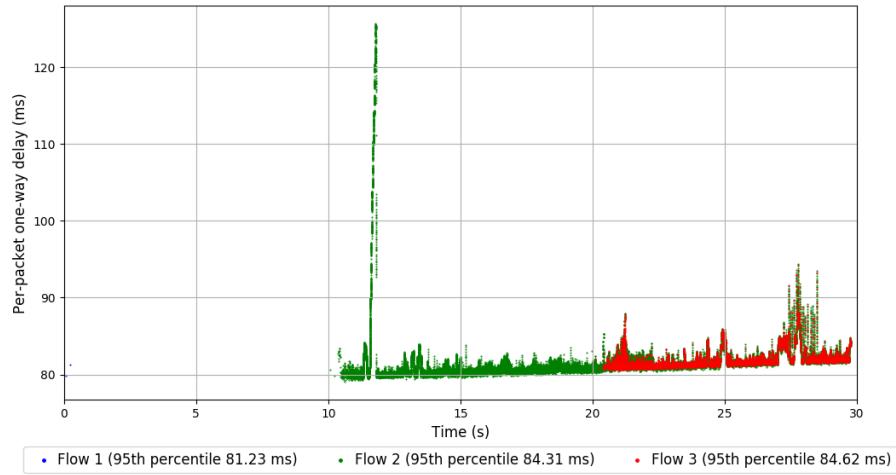
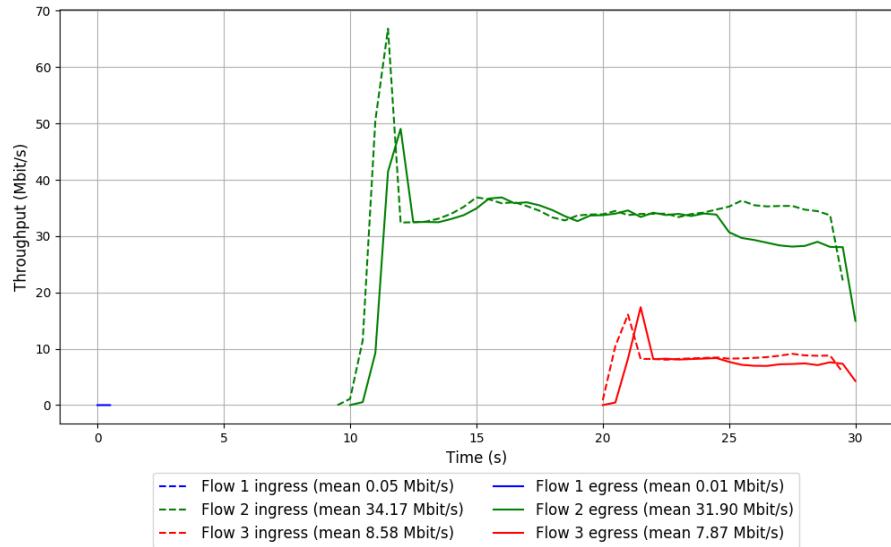


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-19 14:41:32
End at: 2019-03-19 14:42:02
Local clock offset: -0.941 ms
Remote clock offset: 46.36 ms

# Below is generated by plot.py at 2019-03-19 16:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 84.369 ms
Loss rate: 7.60%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 81.234 ms
Loss rate: 85.42%
-- Flow 2:
Average throughput: 31.90 Mbit/s
95th percentile per-packet one-way delay: 84.314 ms
Loss rate: 7.34%
-- Flow 3:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 84.623 ms
Loss rate: 9.68%
```

Run 2: Report of PCC-Allegro — Data Link

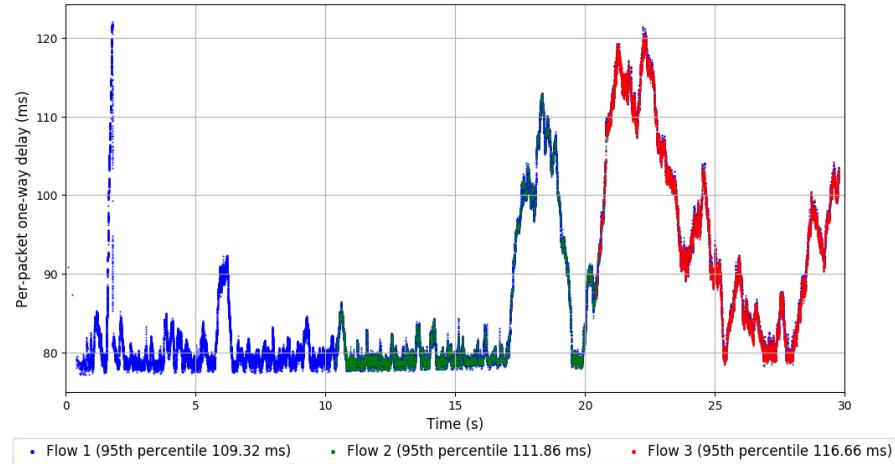
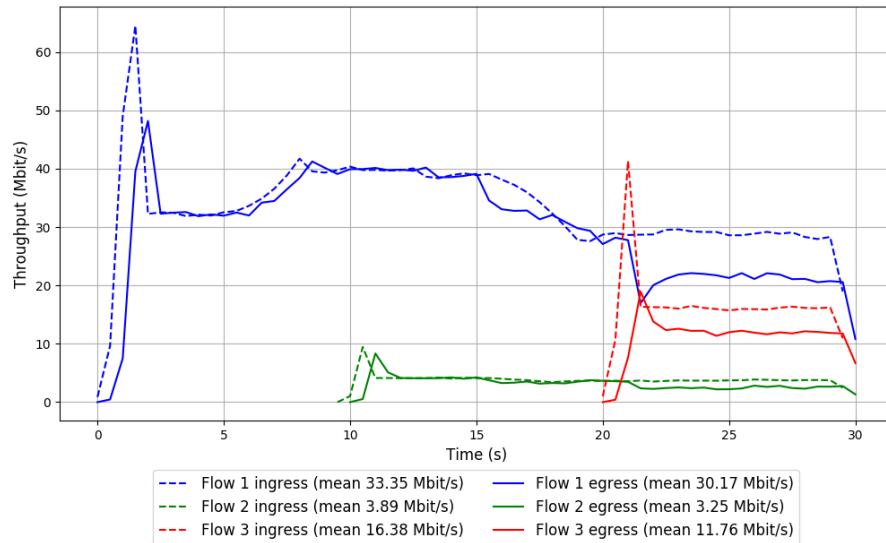


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-19 15:09:22
End at: 2019-03-19 15:09:52
Local clock offset: 1.147 ms
Remote clock offset: 145.051 ms

# Below is generated by plot.py at 2019-03-19 16:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 111.992 ms
Loss rate: 12.97%
-- Flow 1:
Average throughput: 30.17 Mbit/s
95th percentile per-packet one-way delay: 109.324 ms
Loss rate: 10.01%
-- Flow 2:
Average throughput: 3.25 Mbit/s
95th percentile per-packet one-way delay: 111.860 ms
Loss rate: 17.03%
-- Flow 3:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 116.664 ms
Loss rate: 29.34%
```

Run 3: Report of PCC-Allegro — Data Link

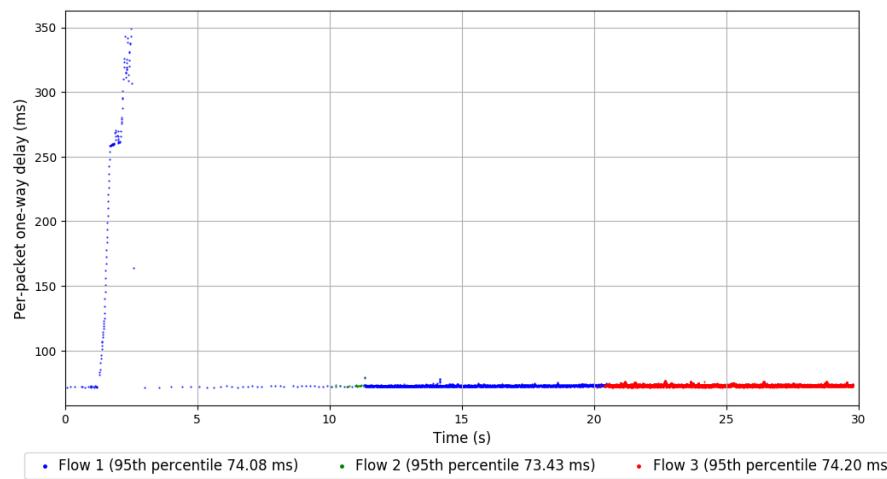
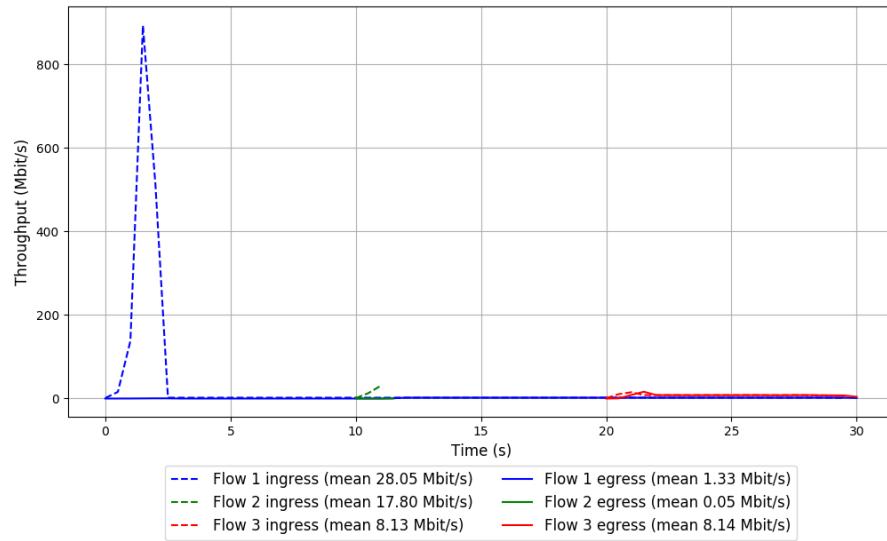


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-19 15:37:11
End at: 2019-03-19 15:37:41
Local clock offset: 3.189 ms
Remote clock offset: 16.293 ms

# Below is generated by plot.py at 2019-03-19 16:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 74.166 ms
Loss rate: 87.40%
-- Flow 1:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 74.078 ms
Loss rate: 95.29%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 73.427 ms
Loss rate: 99.71%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 74.200 ms
Loss rate: 1.38%
```

Run 4: Report of PCC-Allegro — Data Link

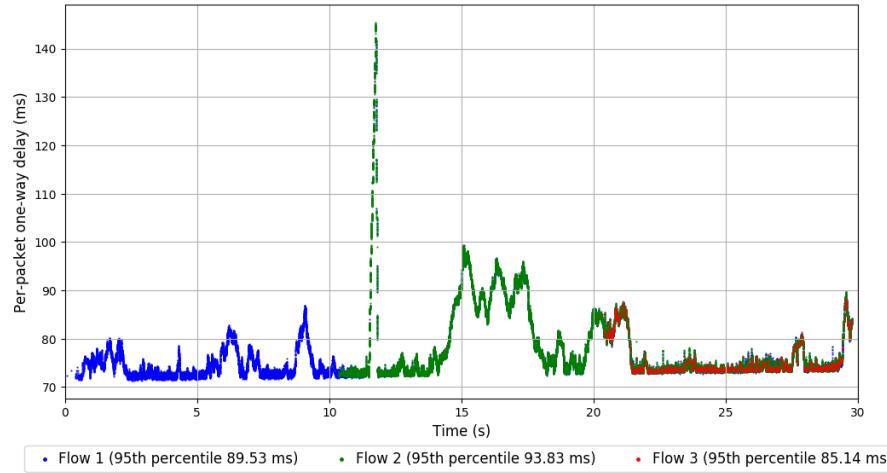
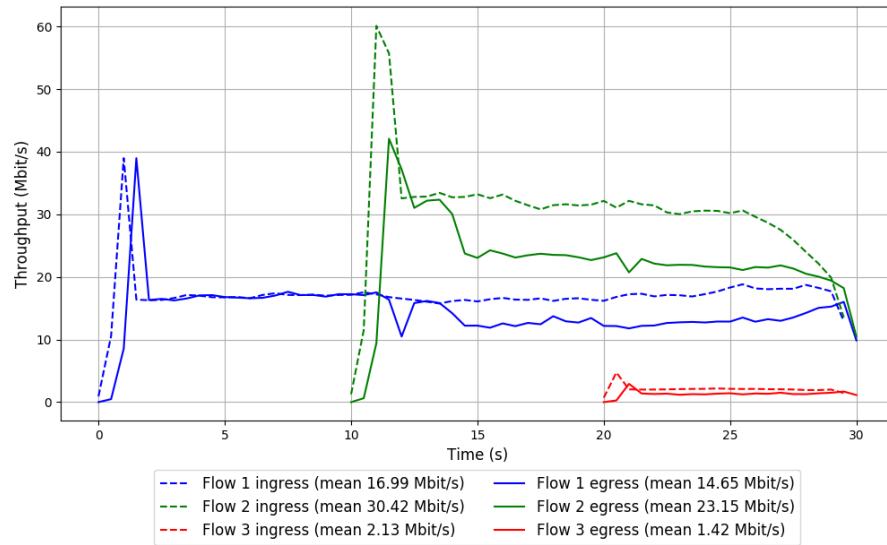


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-19 16:04:14
End at: 2019-03-19 16:04:44
Local clock offset: 2.775 ms
Remote clock offset: -62.181 ms

# Below is generated by plot.py at 2019-03-19 16:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 91.980 ms
Loss rate: 20.04%
-- Flow 1:
Average throughput: 14.65 Mbit/s
95th percentile per-packet one-way delay: 89.527 ms
Loss rate: 14.16%
-- Flow 2:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 93.827 ms
Loss rate: 24.48%
-- Flow 3:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 85.137 ms
Loss rate: 34.40%
```

Run 5: Report of PCC-Allegro — Data Link

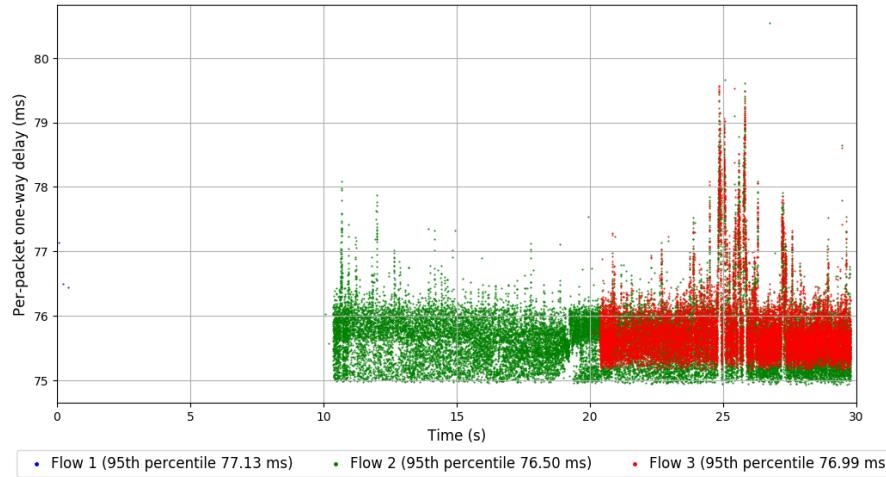
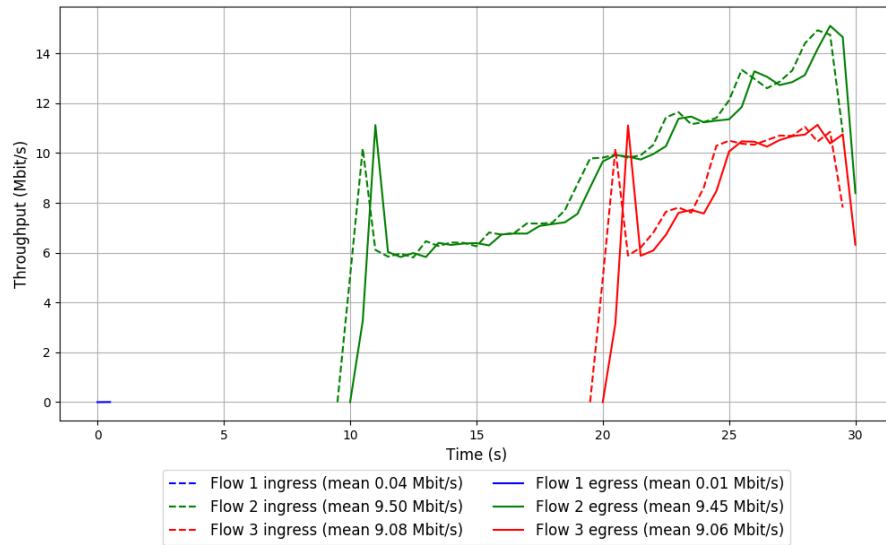


Run 1: Statistics of PCC-Expr

```
Start at: 2019-03-19 14:30:41
End at: 2019-03-19 14:31:11
Local clock offset: -2.073 ms
Remote clock offset: -29.827 ms

# Below is generated by plot.py at 2019-03-19 16:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: 76.663 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 77.133 ms
Loss rate: 80.95%
-- Flow 2:
Average throughput: 9.45 Mbit/s
95th percentile per-packet one-way delay: 76.498 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 9.06 Mbit/s
95th percentile per-packet one-way delay: 76.990 ms
Loss rate: 1.80%
```

Run 1: Report of PCC-Expr — Data Link

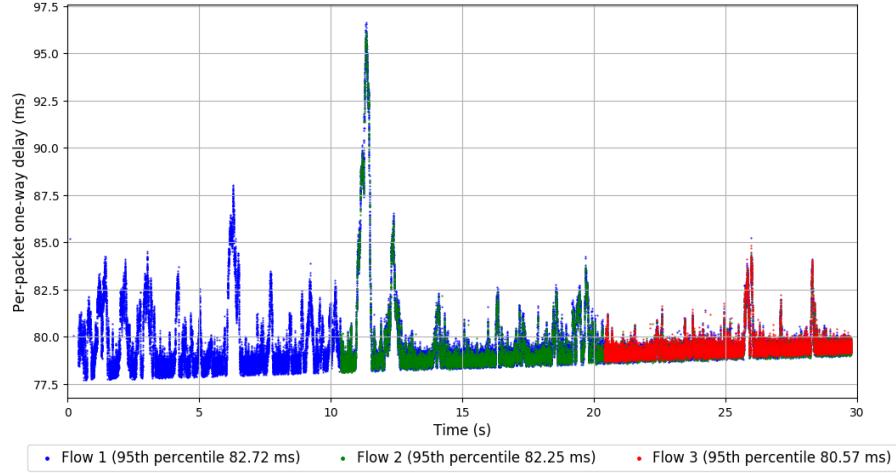
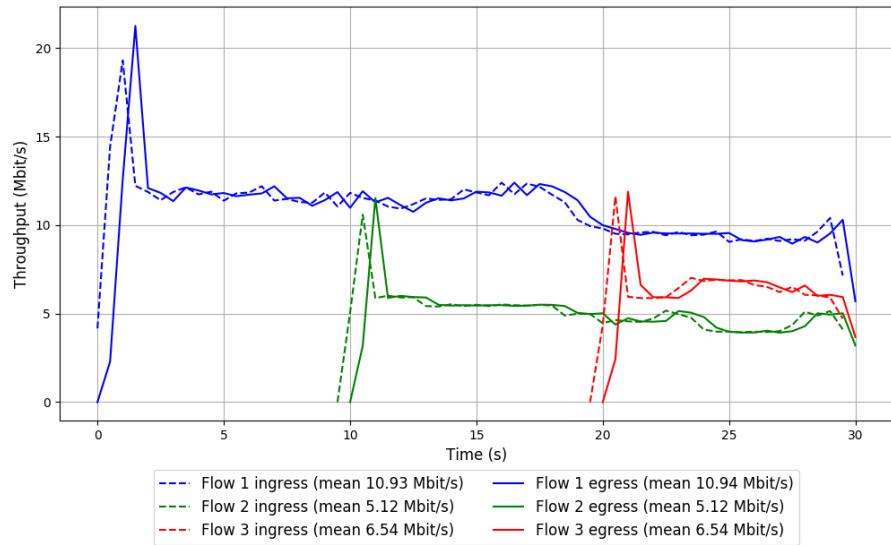


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-19 14:59:01
End at: 2019-03-19 14:59:31
Local clock offset: 0.589 ms
Remote clock offset: 118.874 ms

# Below is generated by plot.py at 2019-03-19 16:31:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.48 Mbit/s
95th percentile per-packet one-way delay: 82.482 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 10.94 Mbit/s
95th percentile per-packet one-way delay: 82.716 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 82.248 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 80.570 ms
Loss rate: 1.54%
```

Run 2: Report of PCC-Expr — Data Link

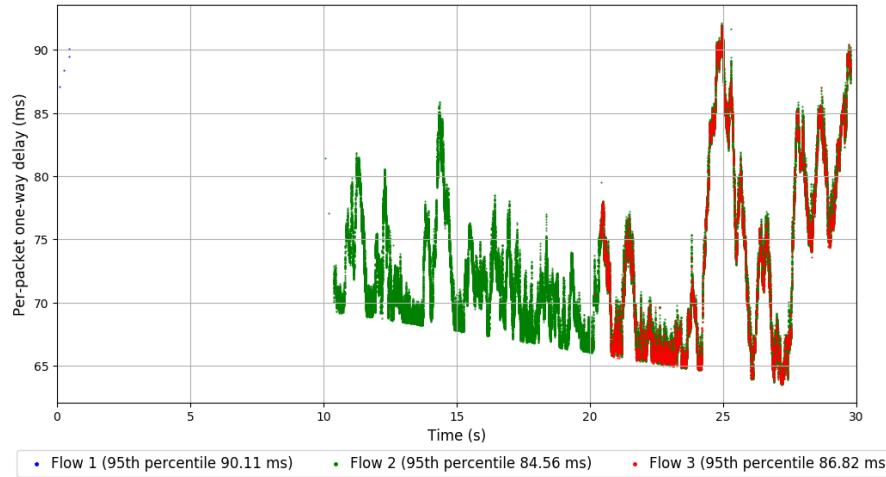
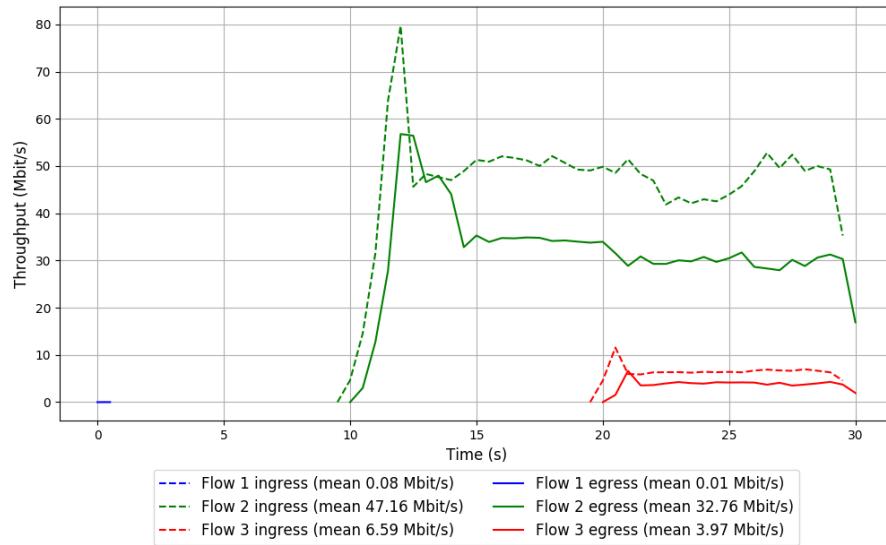


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-19 15:26:47
End at: 2019-03-19 15:27:17
Local clock offset: 2.313 ms
Remote clock offset: -42.666 ms

# Below is generated by plot.py at 2019-03-19 16:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.06 Mbit/s
95th percentile per-packet one-way delay: 84.673 ms
Loss rate: 31.72%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 90.106 ms
Loss rate: 86.98%
-- Flow 2:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 84.563 ms
Loss rate: 31.10%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 40.72%
```

Run 3: Report of PCC-Expr — Data Link

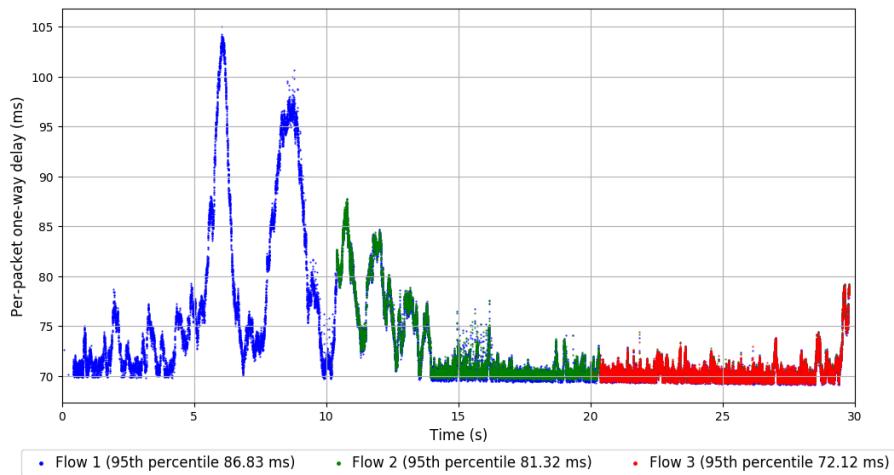
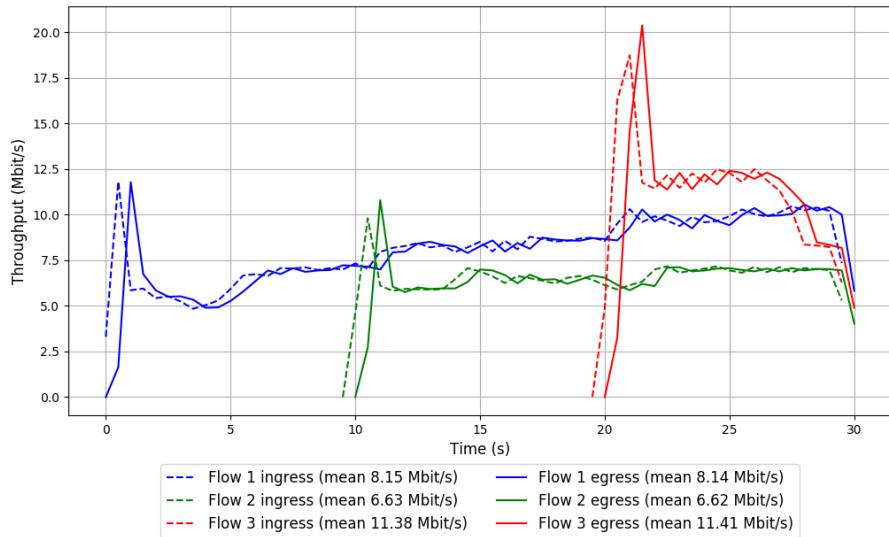


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-19 15:53:59
End at: 2019-03-19 15:54:29
Local clock offset: 3.101 ms
Remote clock offset: -41.148 ms

# Below is generated by plot.py at 2019-03-19 16:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.27 Mbit/s
95th percentile per-packet one-way delay: 82.717 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 86.829 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 81.322 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 11.41 Mbit/s
95th percentile per-packet one-way delay: 72.123 ms
Loss rate: 1.19%
```

Run 4: Report of PCC-Expr — Data Link

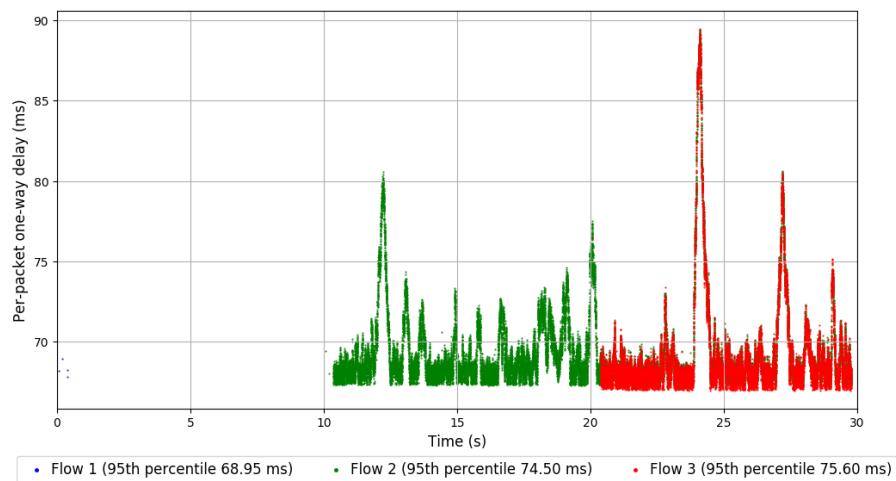
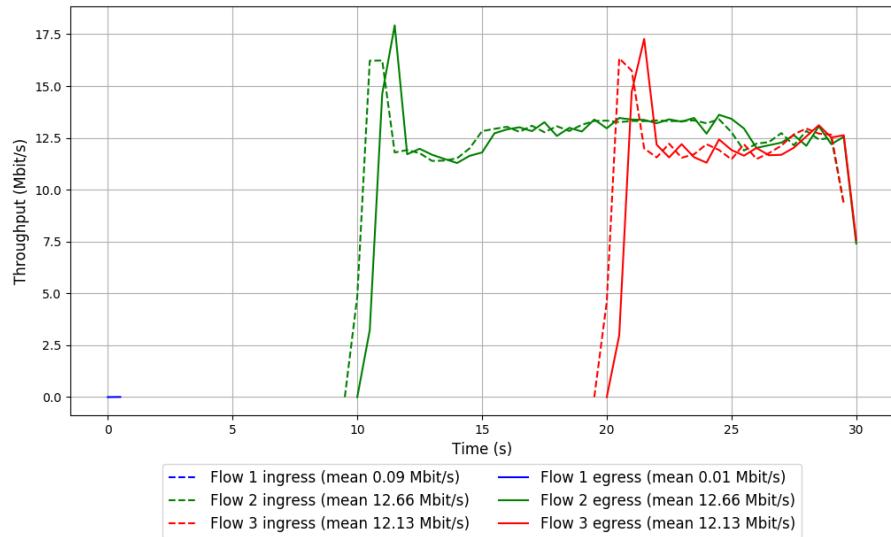


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-19 16:21:01
End at: 2019-03-19 16:21:31
Local clock offset: 0.676 ms
Remote clock offset: -43.293 ms

# Below is generated by plot.py at 2019-03-19 16:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 74.677 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 68.946 ms
Loss rate: 86.98%
-- Flow 2:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 74.502 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 12.13 Mbit/s
95th percentile per-packet one-way delay: 75.600 ms
Loss rate: 1.51%
```

Run 5: Report of PCC-Expr — Data Link

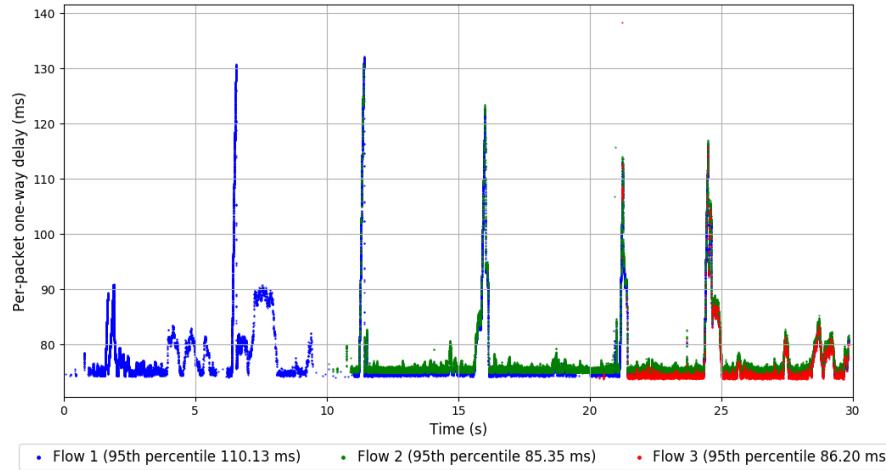
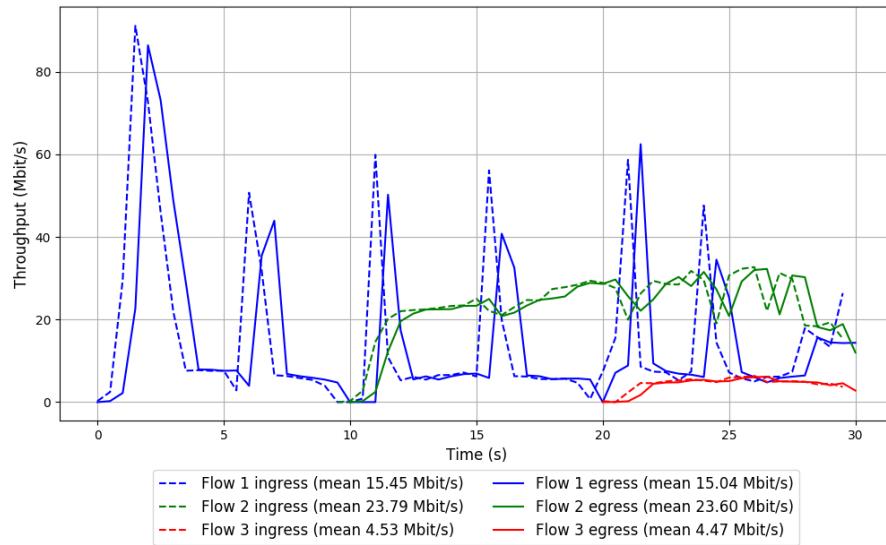


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-19 14:22:56
End at: 2019-03-19 14:23:26
Local clock offset: -4.368 ms
Remote clock offset: -29.633 ms

# Below is generated by plot.py at 2019-03-19 16:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 101.607 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 15.04 Mbit/s
95th percentile per-packet one-way delay: 110.133 ms
Loss rate: 3.13%
-- Flow 2:
Average throughput: 23.60 Mbit/s
95th percentile per-packet one-way delay: 85.349 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 86.199 ms
Loss rate: 2.94%
```

Run 1: Report of QUIC Cubic — Data Link

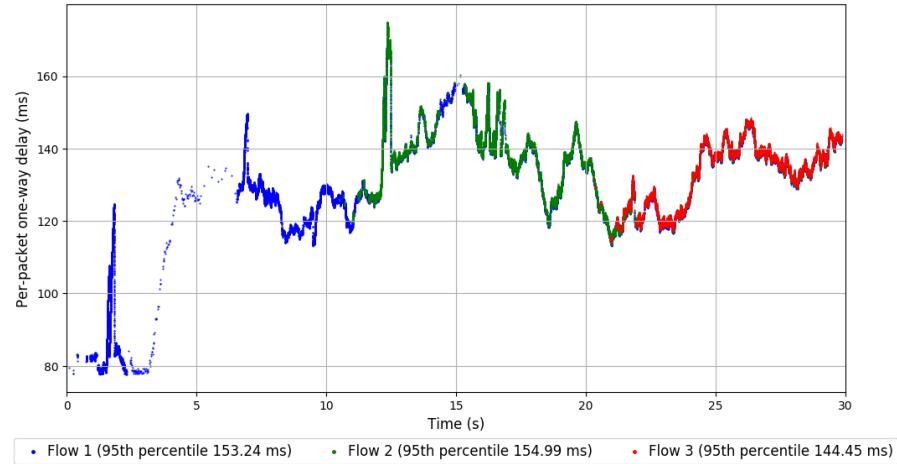
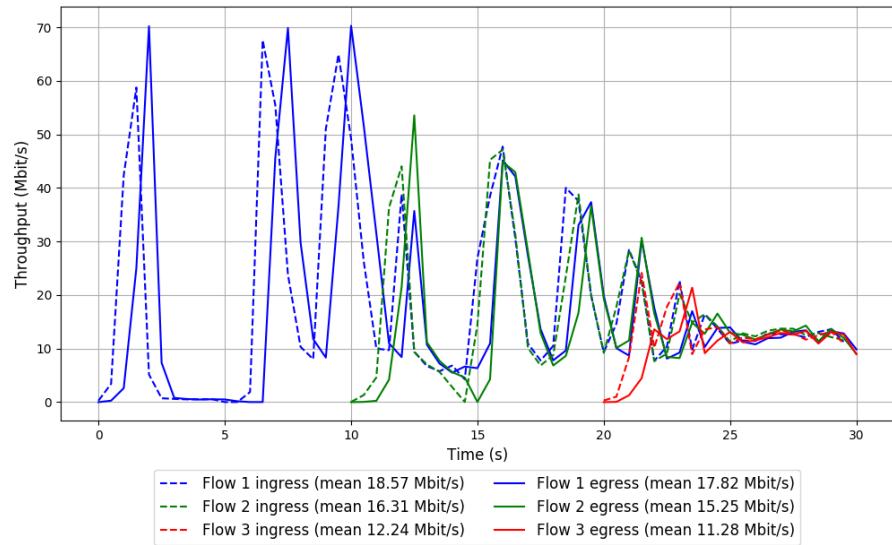


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-19 14:50:53
End at: 2019-03-19 14:51:23
Local clock offset: -0.134 ms
Remote clock offset: 92.728 ms

# Below is generated by plot.py at 2019-03-19 16:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.51 Mbit/s
95th percentile per-packet one-way delay: 153.370 ms
Loss rate: 6.07%
-- Flow 1:
Average throughput: 17.82 Mbit/s
95th percentile per-packet one-way delay: 153.236 ms
Loss rate: 4.52%
-- Flow 2:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 154.991 ms
Loss rate: 7.34%
-- Flow 3:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 144.454 ms
Loss rate: 9.77%
```

Run 2: Report of QUIC Cubic — Data Link

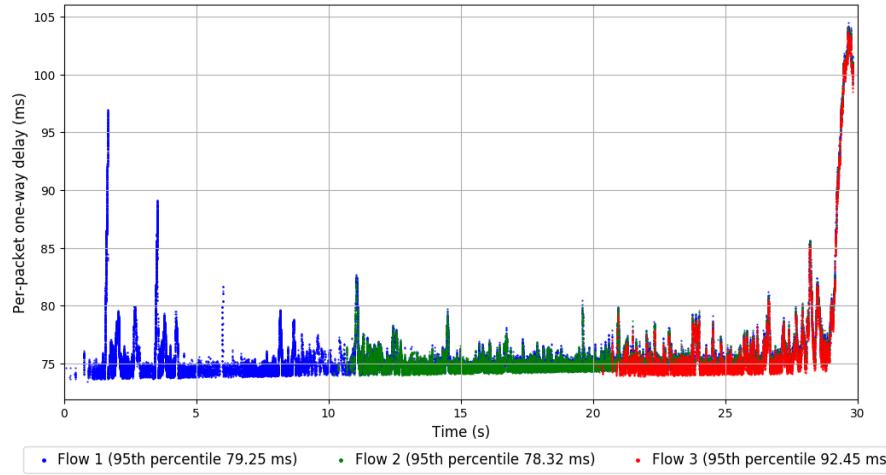
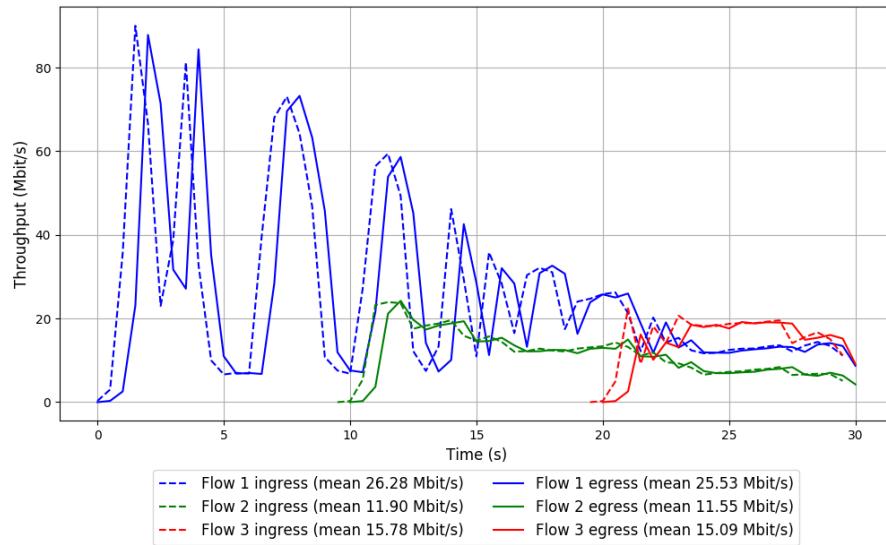


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-19 15:19:00
End at: 2019-03-19 15:19:30
Local clock offset: 1.775 ms
Remote clock offset: 171.264 ms

# Below is generated by plot.py at 2019-03-19 16:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 79.540 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 25.53 Mbit/s
95th percentile per-packet one-way delay: 79.251 ms
Loss rate: 3.34%
-- Flow 2:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 78.318 ms
Loss rate: 3.65%
-- Flow 3:
Average throughput: 15.09 Mbit/s
95th percentile per-packet one-way delay: 92.447 ms
Loss rate: 5.75%
```

Run 3: Report of QUIC Cubic — Data Link

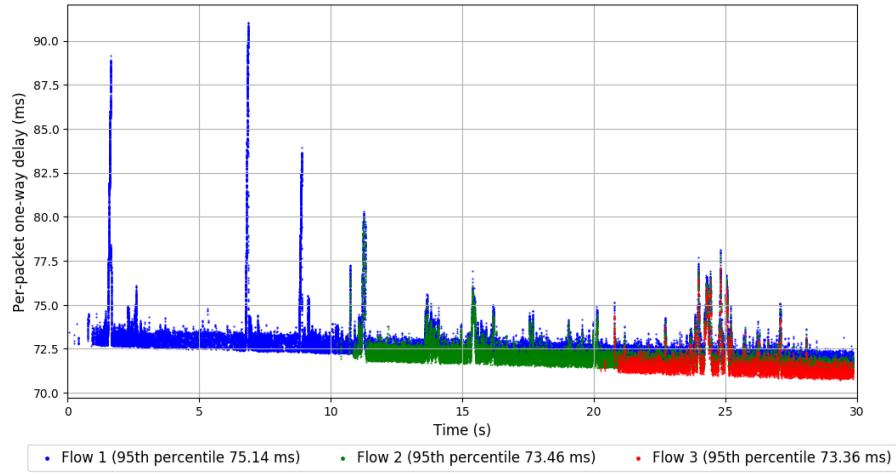
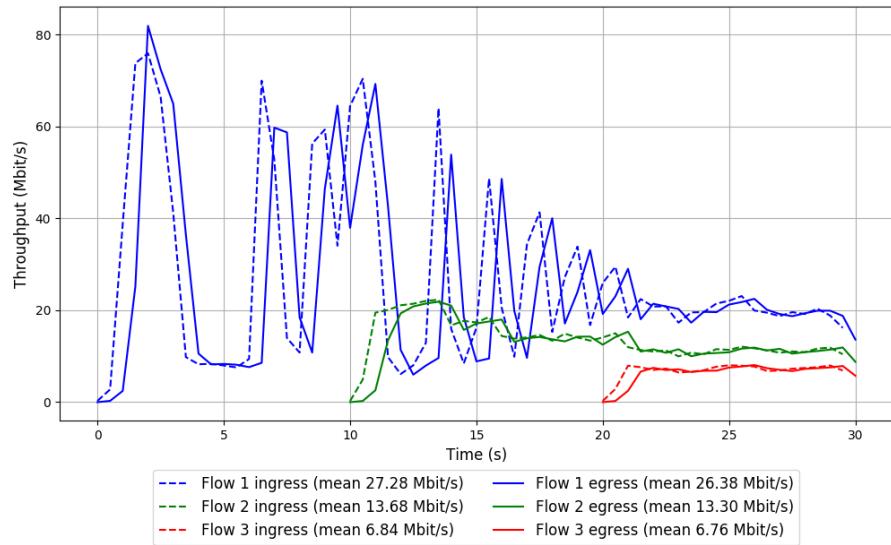


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-19 15:46:08
End at: 2019-03-19 15:46:38
Local clock offset: 3.749 ms
Remote clock offset: -34.41 ms

# Below is generated by plot.py at 2019-03-19 16:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 74.540 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 26.38 Mbit/s
95th percentile per-packet one-way delay: 75.139 ms
Loss rate: 3.83%
-- Flow 2:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 73.460 ms
Loss rate: 3.52%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 73.360 ms
Loss rate: 2.76%
```

Run 4: Report of QUIC Cubic — Data Link

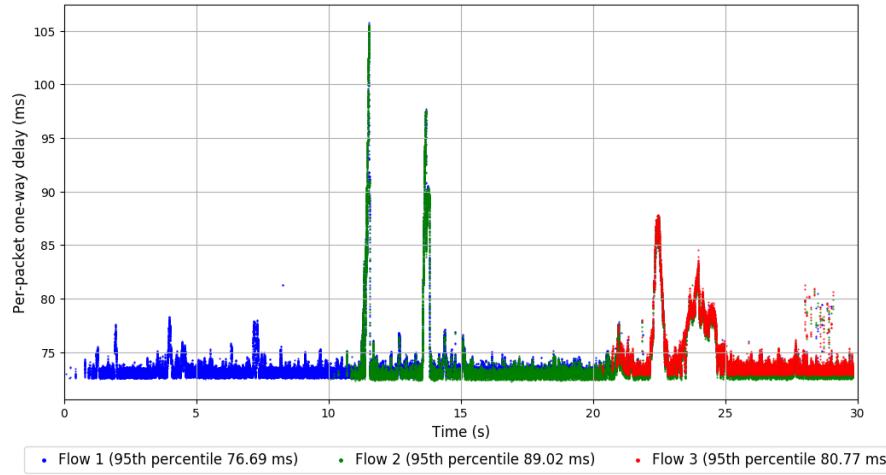
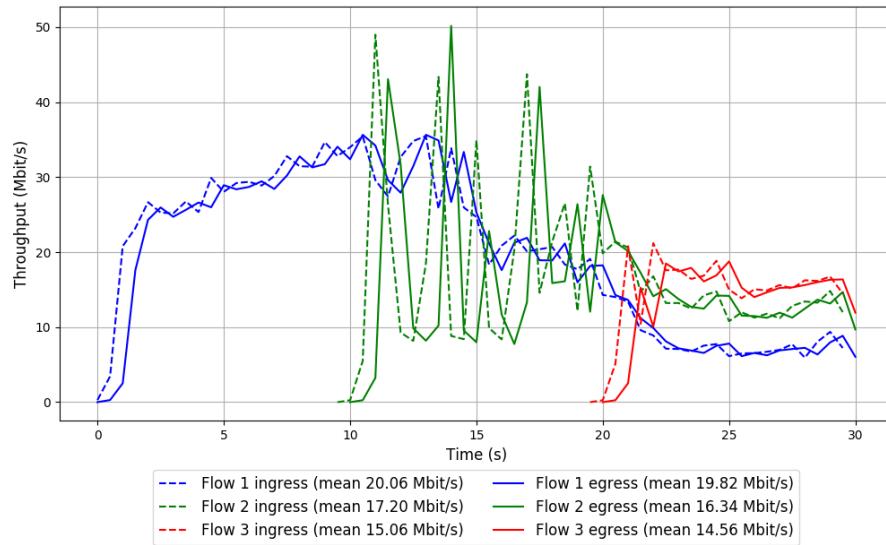


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-19 16:13:11
End at: 2019-03-19 16:13:41
Local clock offset: 3.078 ms
Remote clock offset: -46.493 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: 81.277 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 19.82 Mbit/s
95th percentile per-packet one-way delay: 76.690 ms
Loss rate: 1.69%
-- Flow 2:
Average throughput: 16.34 Mbit/s
95th percentile per-packet one-way delay: 89.022 ms
Loss rate: 5.73%
-- Flow 3:
Average throughput: 14.56 Mbit/s
95th percentile per-packet one-way delay: 80.768 ms
Loss rate: 4.72%
```

Run 5: Report of QUIC Cubic — Data Link

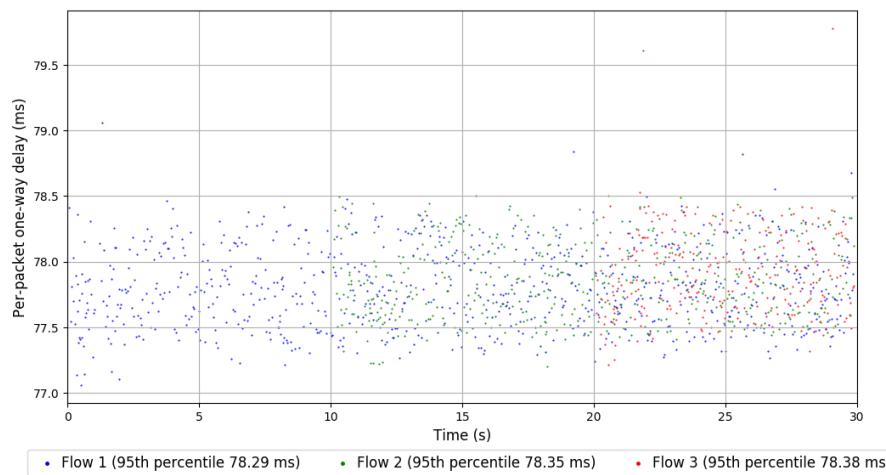
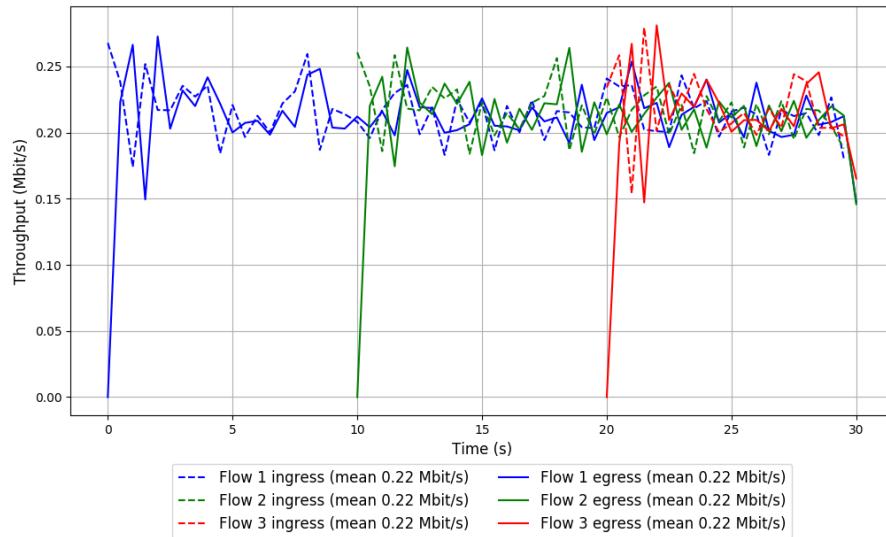


Run 1: Statistics of SCReAM

```
Start at: 2019-03-19 14:12:25
End at: 2019-03-19 14:12:55
Local clock offset: -7.661 ms
Remote clock offset: -32.225 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 78.346 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.291 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.348 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.381 ms
Loss rate: 1.45%
```

Run 1: Report of SCReAM — Data Link

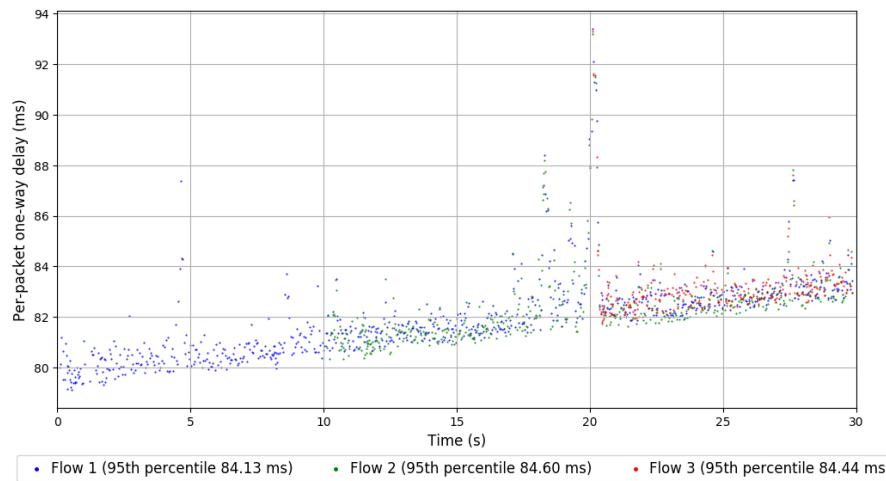
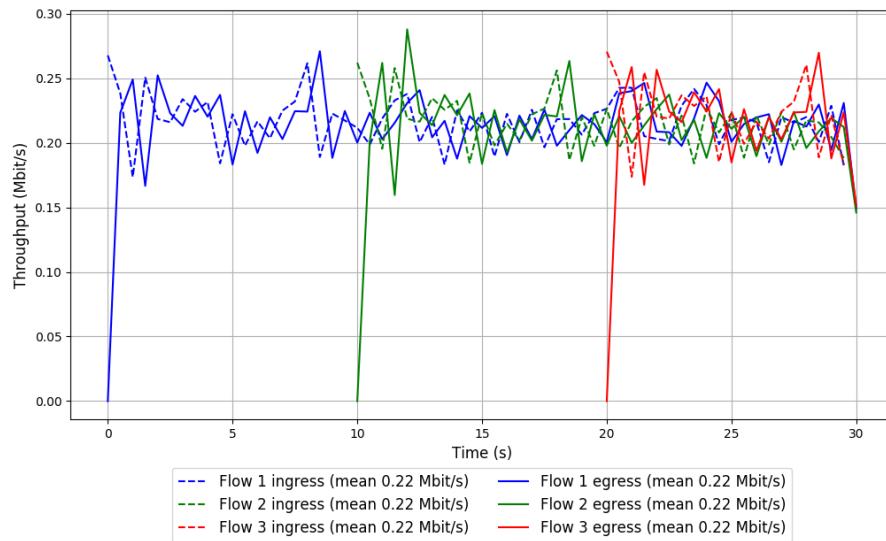


Run 2: Statistics of SCReAM

```
Start at: 2019-03-19 14:40:17
End at: 2019-03-19 14:40:47
Local clock offset: -1.042 ms
Remote clock offset: 36.899 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 84.300 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.127 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.603 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.441 ms
Loss rate: 1.45%
```

Run 2: Report of SCReAM — Data Link

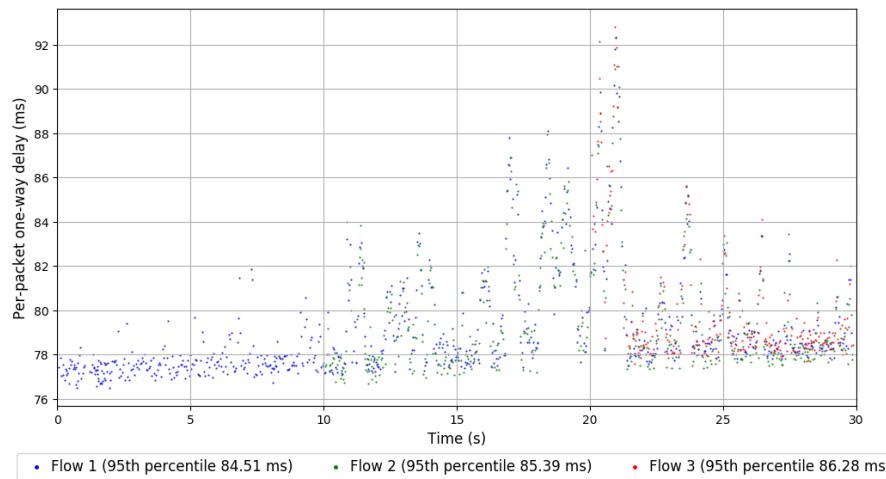
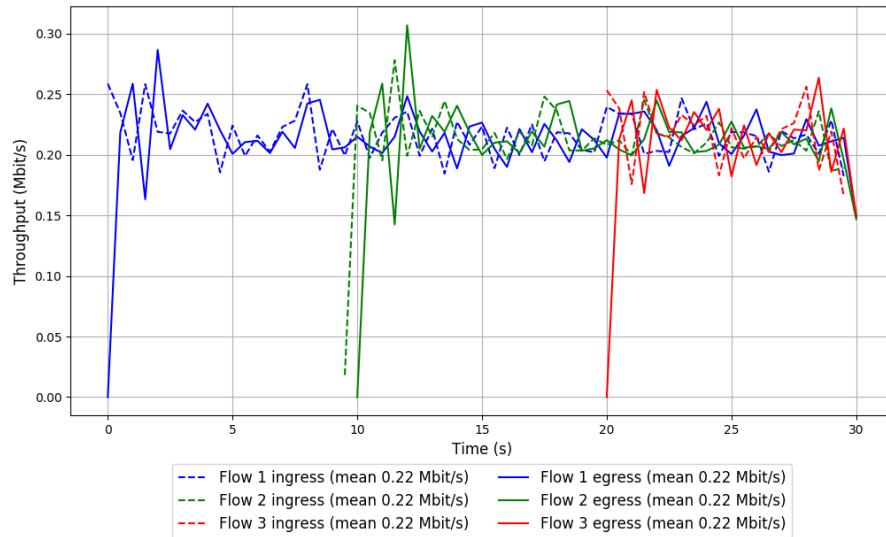


Run 3: Statistics of SCReAM

```
Start at: 2019-03-19 15:08:08
End at: 2019-03-19 15:08:38
Local clock offset: 1.229 ms
Remote clock offset: 143.108 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.124 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.513 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.393 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.281 ms
Loss rate: 1.11%
```

Run 3: Report of SCReAM — Data Link

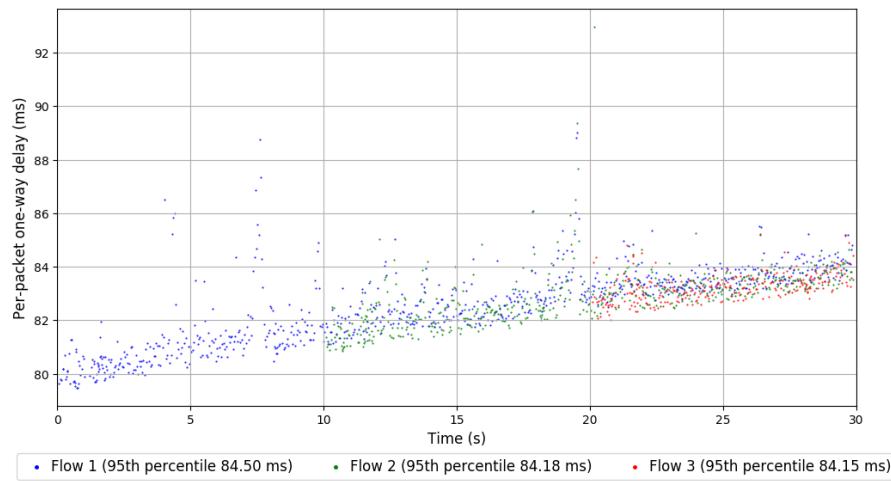
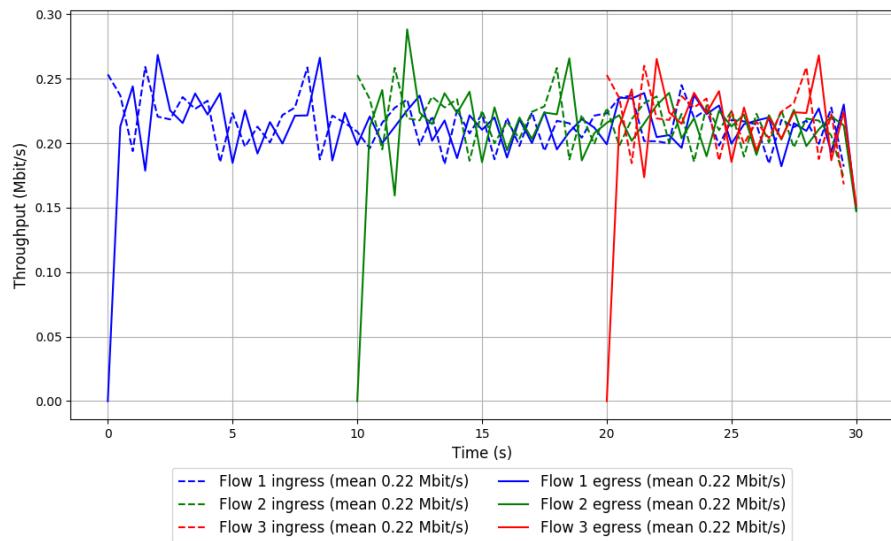


Run 4: Statistics of SCReAM

```
Start at: 2019-03-19 15:35:57
End at: 2019-03-19 15:36:27
Local clock offset: 2.907 ms
Remote clock offset: 0.983 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 84.367 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.504 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.183 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.154 ms
Loss rate: 1.11%
```

Run 4: Report of SCReAM — Data Link

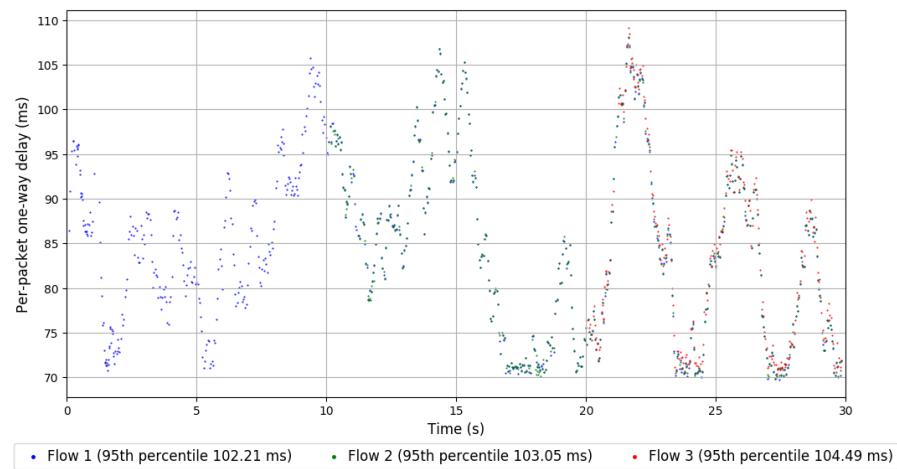
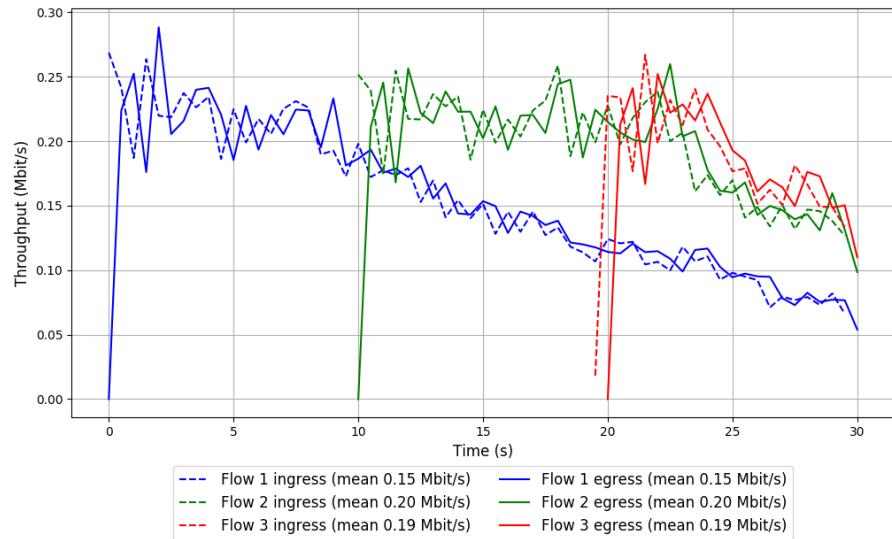


Run 5: Statistics of SCReAM

```
Start at: 2019-03-19 16:03:00
End at: 2019-03-19 16:03:30
Local clock offset: 2.796 ms
Remote clock offset: -59.85 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 102.979 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 102.209 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 103.048 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 104.493 ms
Loss rate: 1.22%
```

Run 5: Report of SCReAM — Data Link

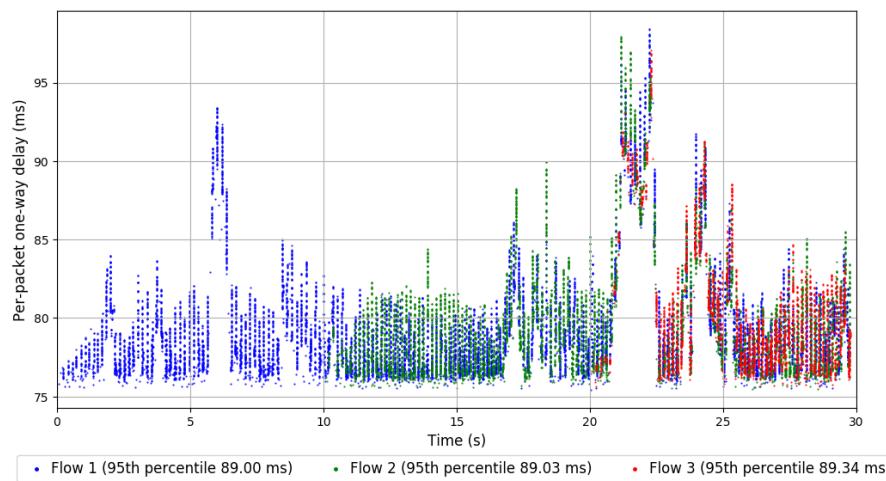
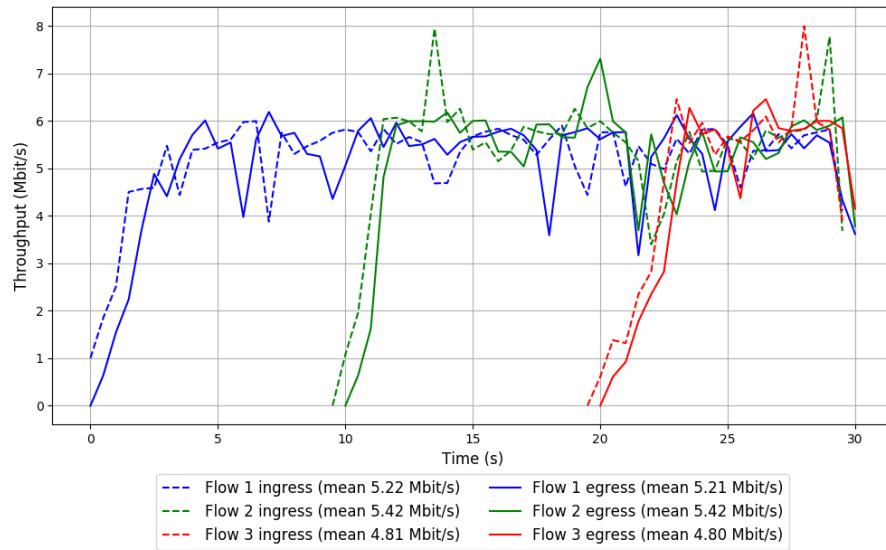


Run 1: Statistics of Sprout

```
Start at: 2019-03-19 14:29:25
End at: 2019-03-19 14:29:55
Local clock offset: -2.481 ms
Remote clock offset: -30.648 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.37 Mbit/s
95th percentile per-packet one-way delay: 89.059 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 89.000 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 89.035 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 89.345 ms
Loss rate: 1.79%
```

Run 1: Report of Sprout — Data Link

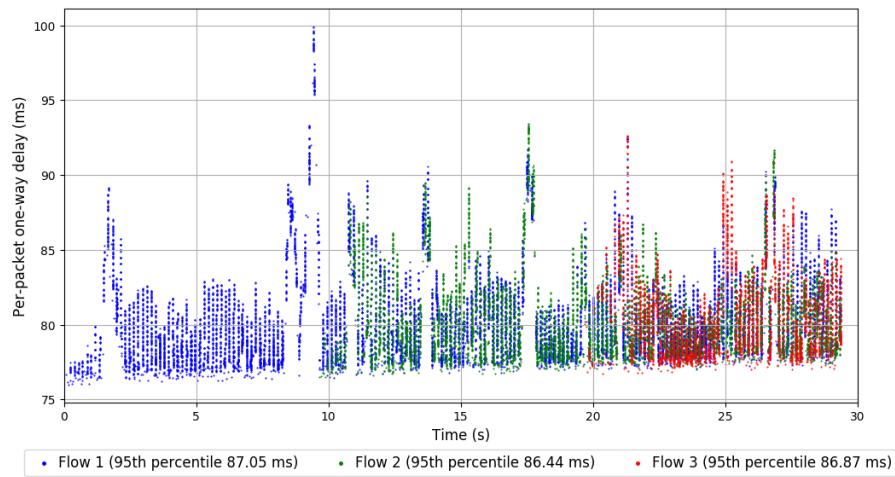
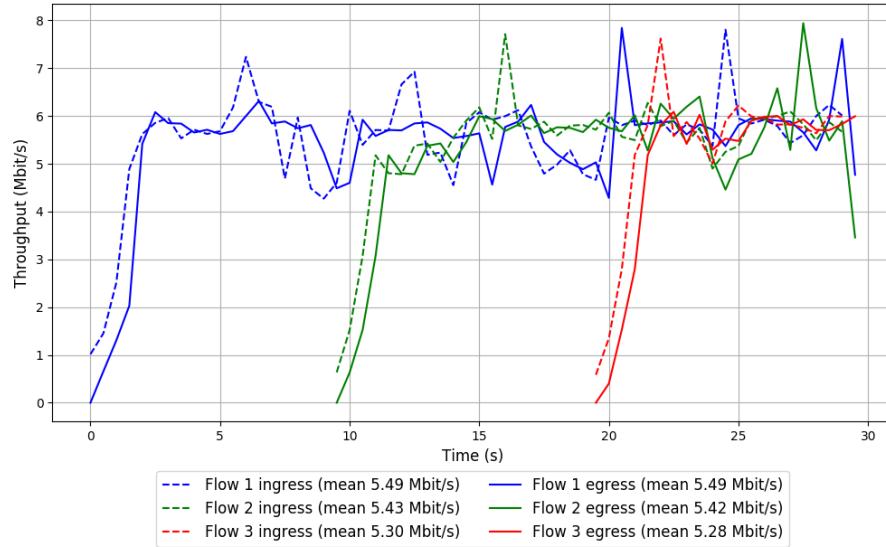


Run 2: Statistics of Sprout

```
Start at: 2019-03-19 14:57:45
End at: 2019-03-19 14:58:15
Local clock offset: 0.512 ms
Remote clock offset: 117.07 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 86.812 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 87.050 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 86.441 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 86.869 ms
Loss rate: 1.91%
```

Run 2: Report of Sprout — Data Link

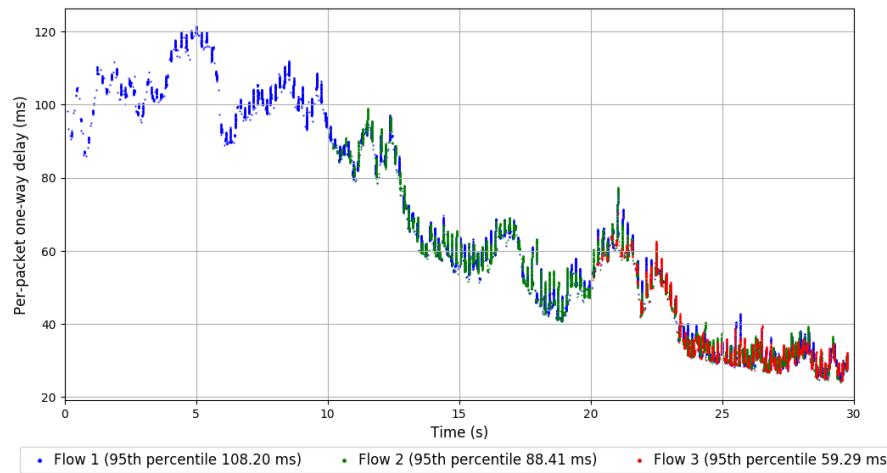
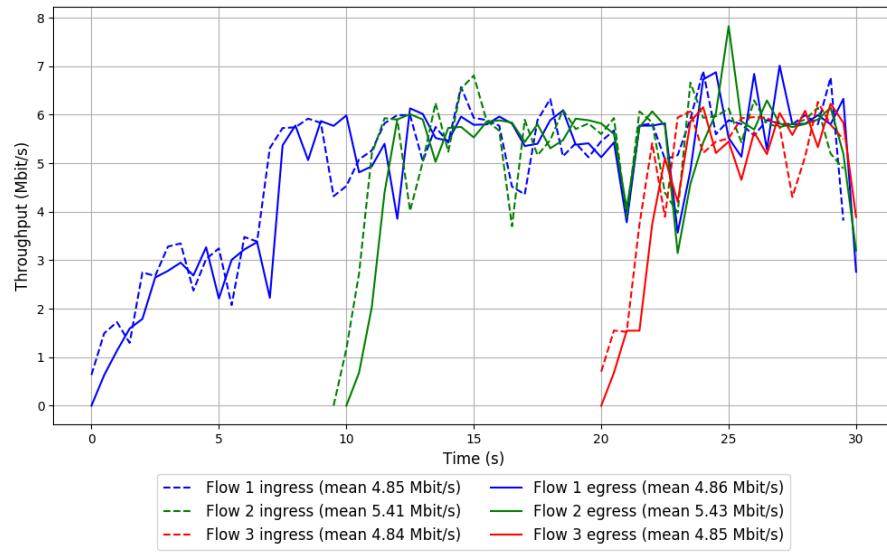


Run 3: Statistics of Sprout

```
Start at: 2019-03-19 15:25:31
End at: 2019-03-19 15:26:01
Local clock offset: 2.384 ms
Remote clock offset: 15.262 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 103.857 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 108.203 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 5.43 Mbit/s
95th percentile per-packet one-way delay: 88.409 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 59.289 ms
Loss rate: 1.68%
```

Run 3: Report of Sprout — Data Link

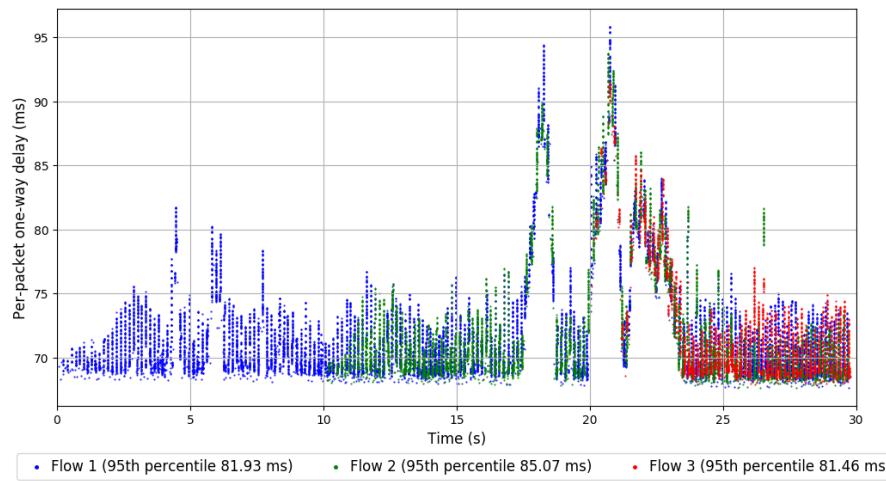
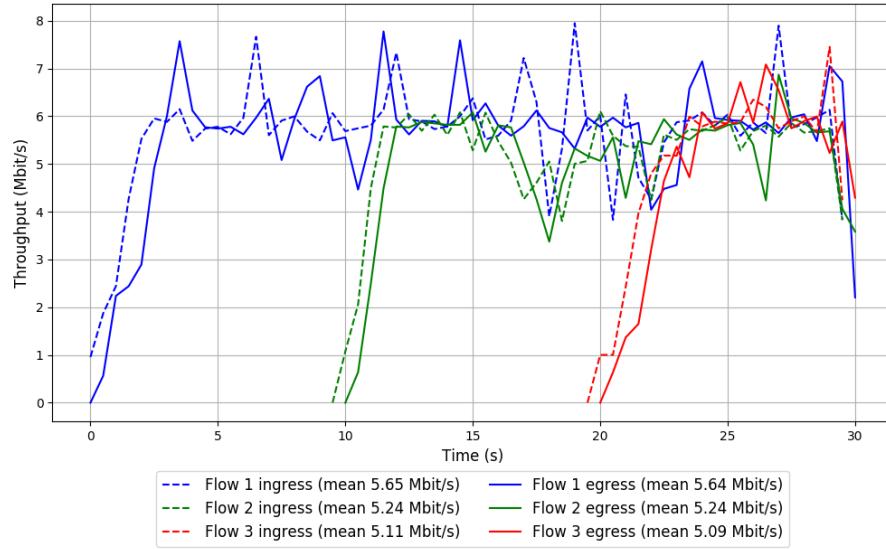


Run 4: Statistics of Sprout

```
Start at: 2019-03-19 15:52:43
End at: 2019-03-19 15:53:13
Local clock offset: 2.924 ms
Remote clock offset: -37.887 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.77 Mbit/s
95th percentile per-packet one-way delay: 82.987 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 81.928 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 85.068 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 81.459 ms
Loss rate: 1.93%
```

Run 4: Report of Sprout — Data Link

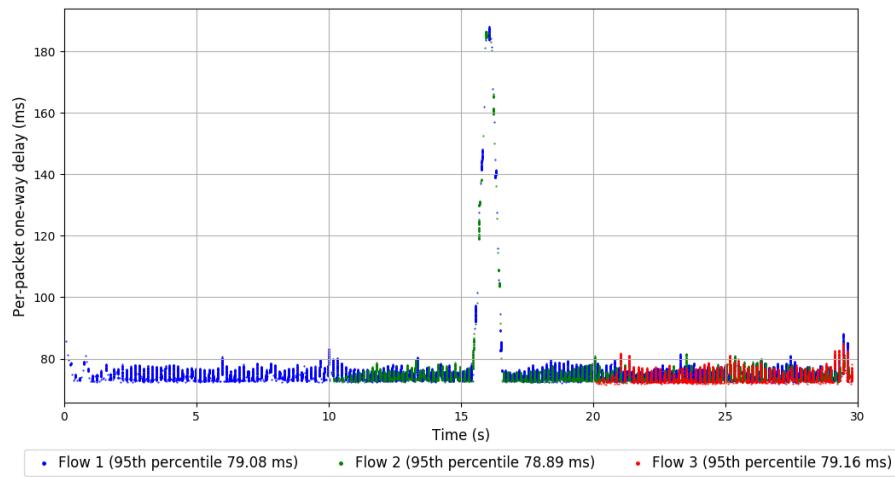
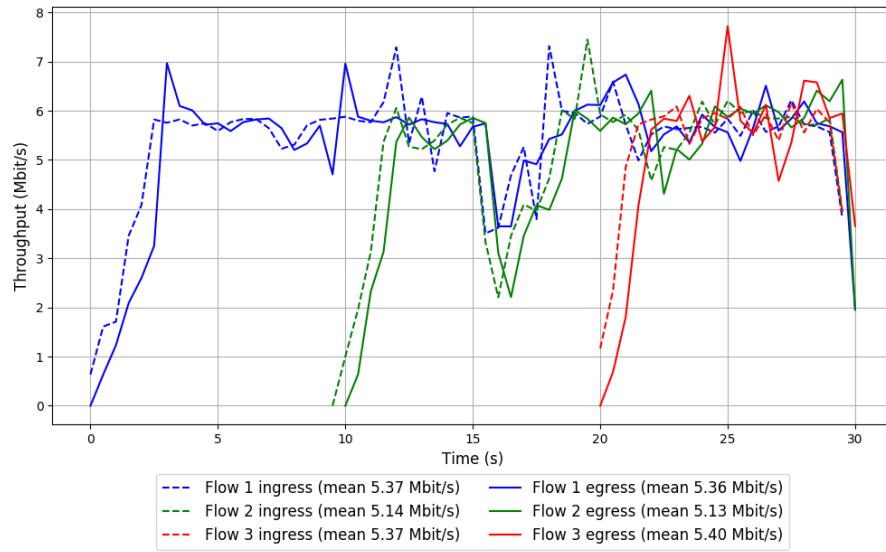


Run 5: Statistics of Sprout

```
Start at: 2019-03-19 16:19:46
End at: 2019-03-19 16:20:16
Local clock offset: 1.112 ms
Remote clock offset: -47.043 ms

# Below is generated by plot.py at 2019-03-19 16:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 79.042 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 79.081 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 78.887 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 79.161 ms
Loss rate: 0.28%
```

Run 5: Report of Sprout — Data Link

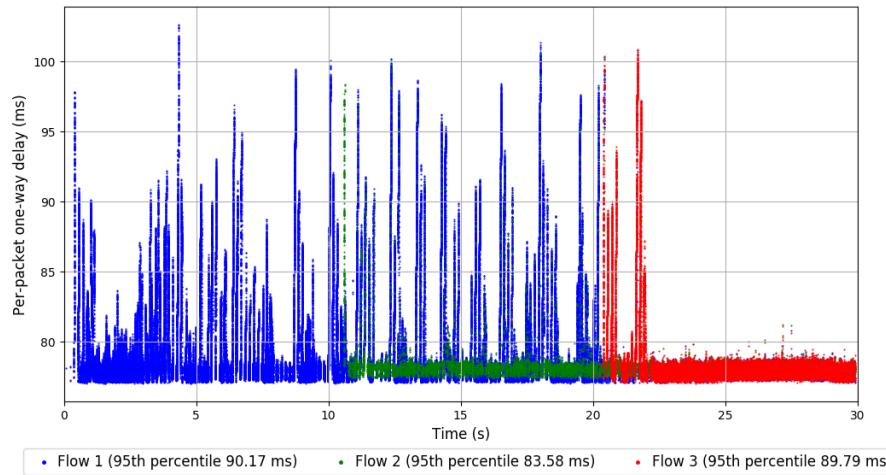
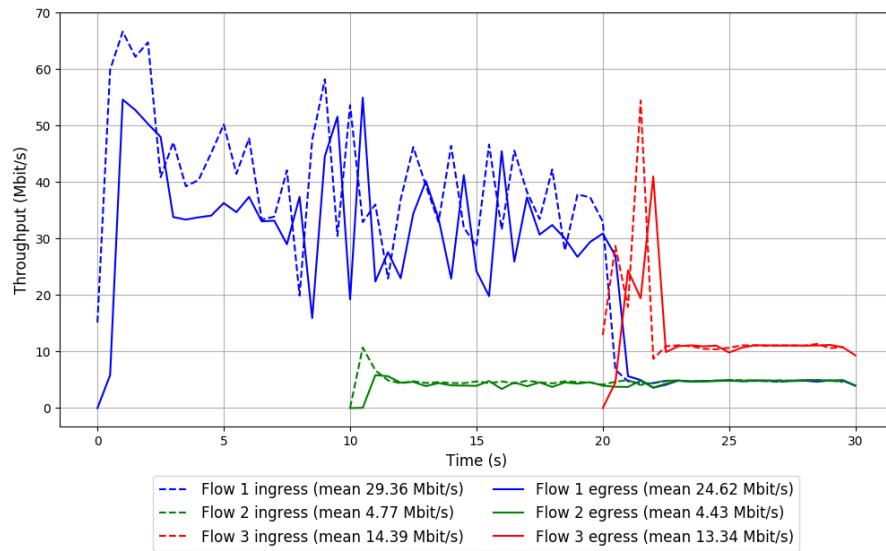


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-19 14:14:58
End at: 2019-03-19 14:15:28
Local clock offset: -8.003 ms
Remote clock offset: -32.99 ms

# Below is generated by plot.py at 2019-03-19 16:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 89.897 ms
Loss rate: 14.81%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 90.170 ms
Loss rate: 16.57%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 83.579 ms
Loss rate: 7.80%
-- Flow 3:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 89.788 ms
Loss rate: 8.68%
```

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

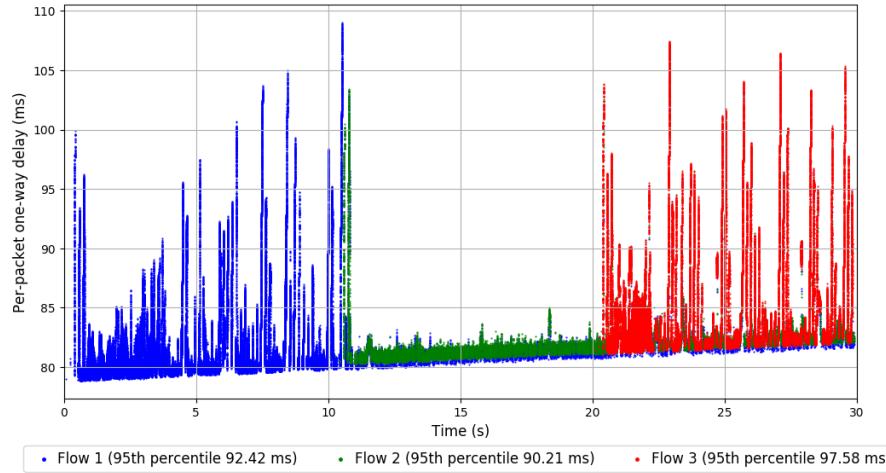
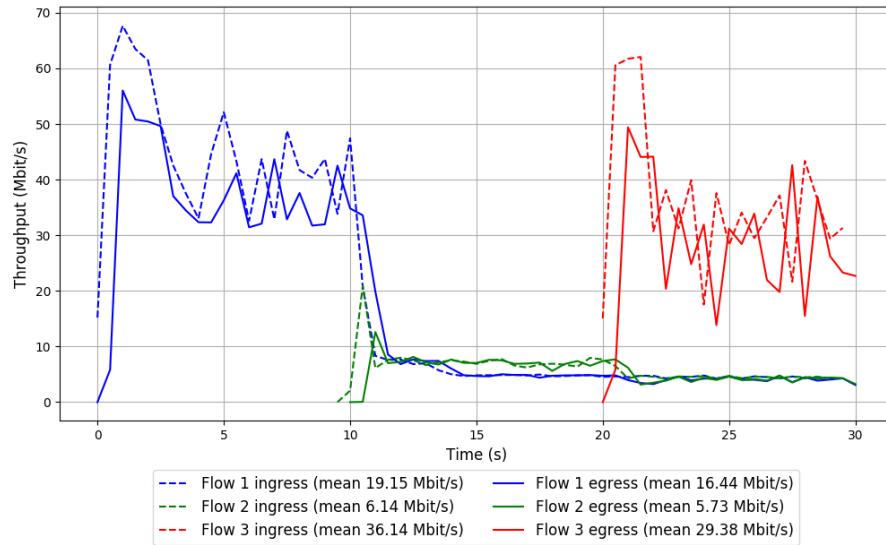


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-19 14:42:53
End at: 2019-03-19 14:43:23
Local clock offset: -0.588 ms
Remote clock offset: 54.423 ms

# Below is generated by plot.py at 2019-03-19 16:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 94.824 ms
Loss rate: 15.74%
-- Flow 1:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 92.419 ms
Loss rate: 14.58%
-- Flow 2:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 90.210 ms
Loss rate: 7.38%
-- Flow 3:
Average throughput: 29.38 Mbit/s
95th percentile per-packet one-way delay: 97.577 ms
Loss rate: 20.45%
```

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

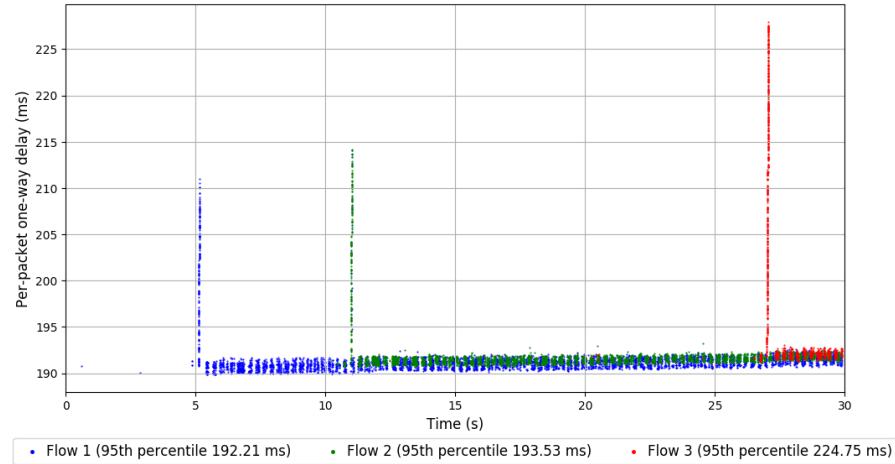
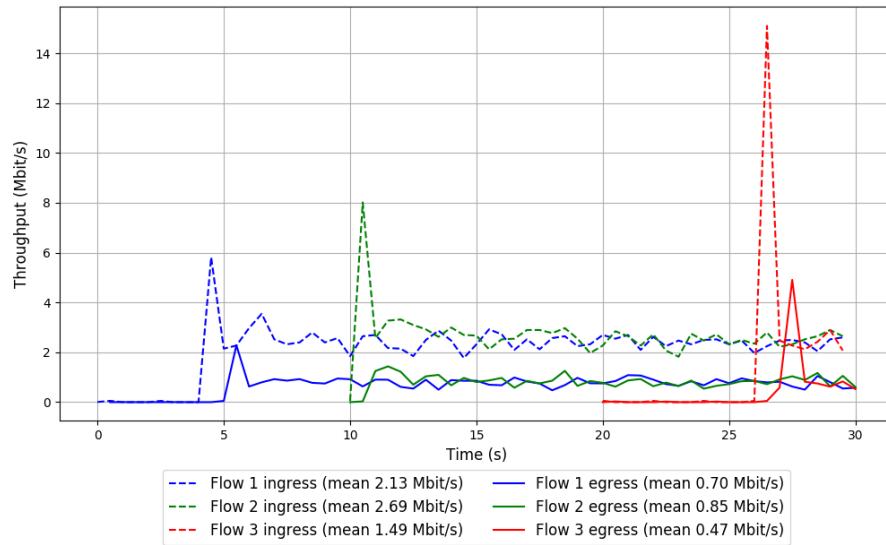


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-19 15:10:48
End at: 2019-03-19 15:11:18
Local clock offset: 1.382 ms
Remote clock offset: 150.939 ms

# Below is generated by plot.py at 2019-03-19 16:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 204.777 ms
Loss rate: 68.29%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 192.214 ms
Loss rate: 67.83%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 193.528 ms
Loss rate: 68.64%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 224.747 ms
Loss rate: 69.02%
```

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

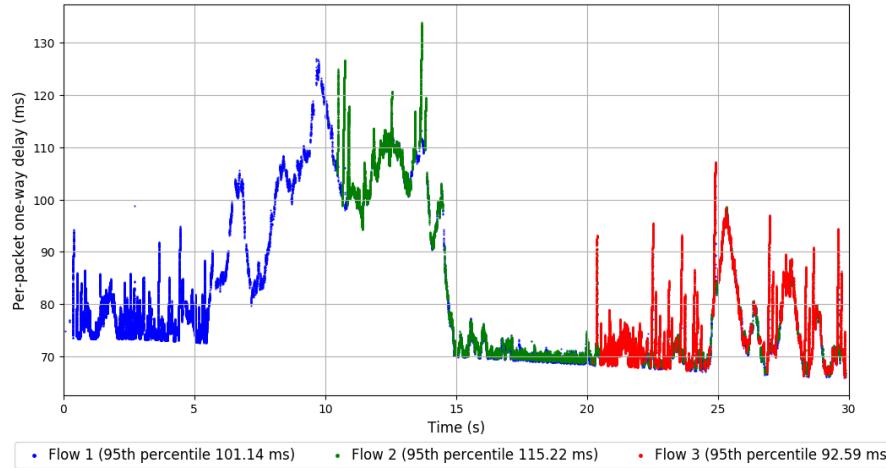
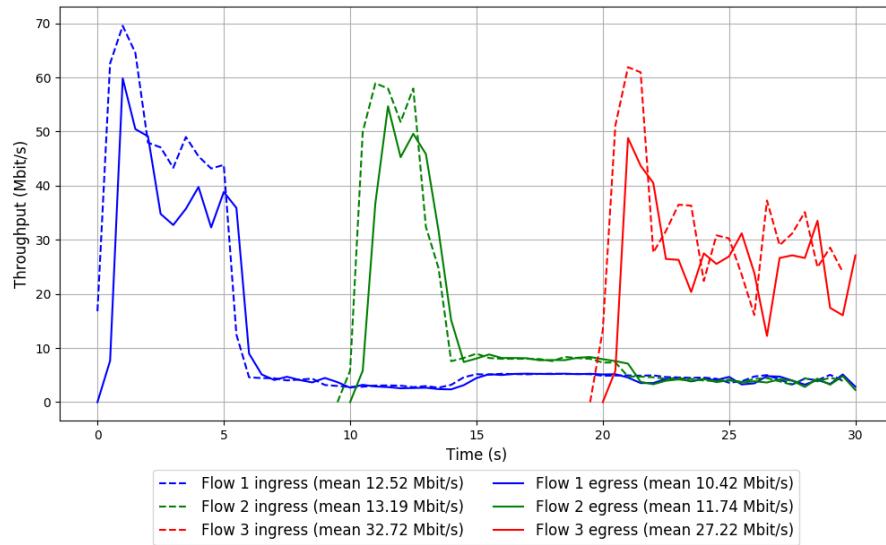


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-19 15:38:28
End at: 2019-03-19 15:38:58
Local clock offset: 3.154 ms
Remote clock offset: 15.903 ms

# Below is generated by plot.py at 2019-03-19 16:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.16 Mbit/s
95th percentile per-packet one-way delay: 110.130 ms
Loss rate: 16.10%
-- Flow 1:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 101.143 ms
Loss rate: 17.22%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 115.217 ms
Loss rate: 11.90%
-- Flow 3:
Average throughput: 27.22 Mbit/s
95th percentile per-packet one-way delay: 92.586 ms
Loss rate: 18.21%
```

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

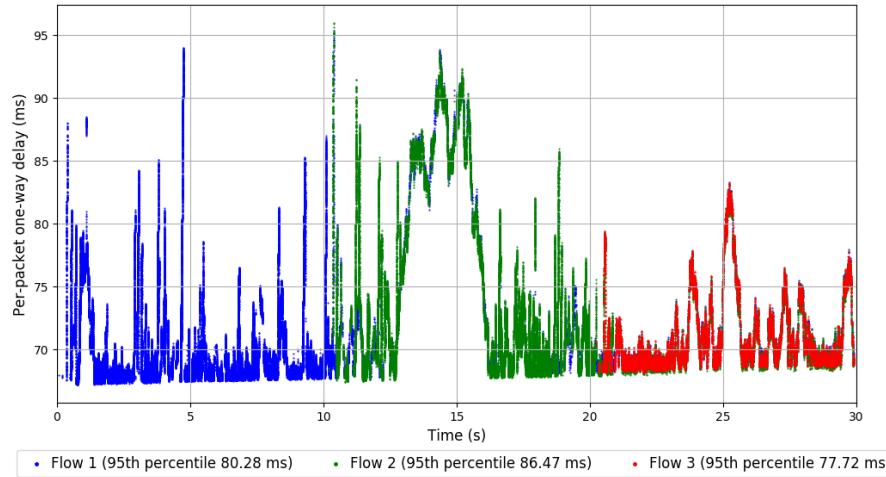
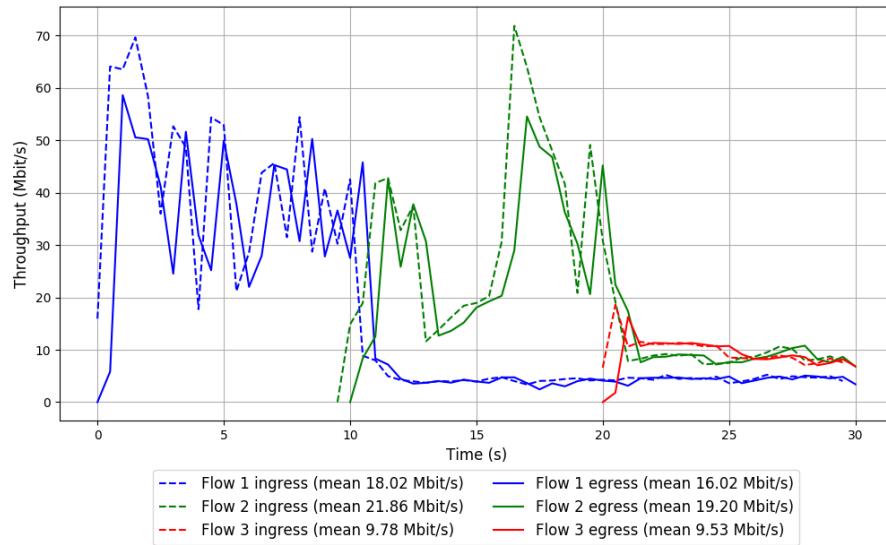


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-19 16:05:31
End at: 2019-03-19 16:06:01
Local clock offset: 2.825 ms
Remote clock offset: -53.254 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 84.062 ms
Loss rate: 11.32%
-- Flow 1:
Average throughput: 16.02 Mbit/s
95th percentile per-packet one-way delay: 80.285 ms
Loss rate: 11.49%
-- Flow 2:
Average throughput: 19.20 Mbit/s
95th percentile per-packet one-way delay: 86.473 ms
Loss rate: 12.78%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 77.716 ms
Loss rate: 3.82%
```

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

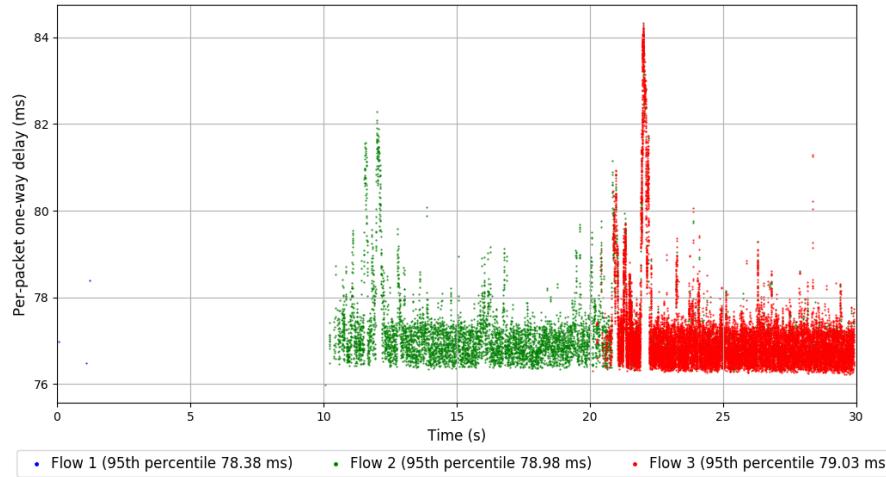
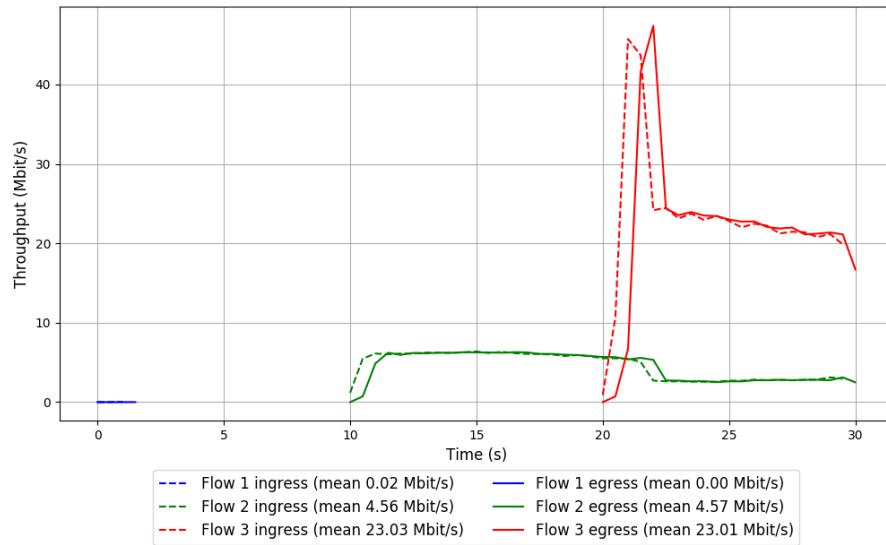


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-19 14:20:22
End at: 2019-03-19 14:20:52
Local clock offset: -5.198 ms
Remote clock offset: -31.423 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 79.012 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 78.384 ms
Loss rate: 91.46%
-- Flow 2:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 78.976 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 79.035 ms
Loss rate: 1.58%
```

Run 1: Report of TCP Vegas — Data Link

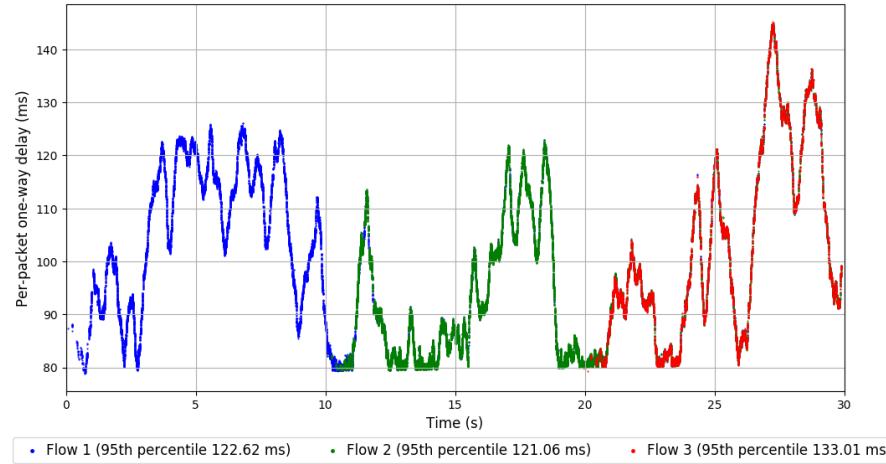
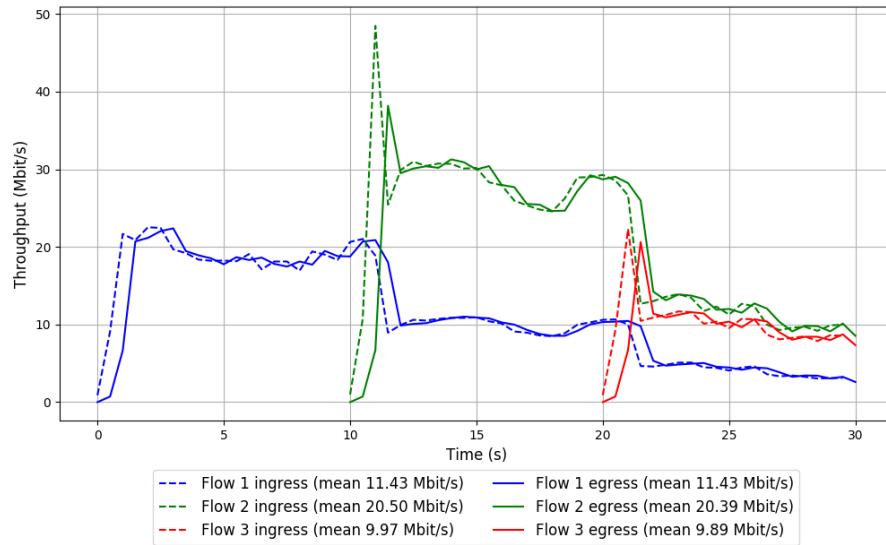


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-19 14:48:17
End at: 2019-03-19 14:48:47
Local clock offset: -0.312 ms
Remote clock offset: 81.876 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 123.452 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 11.43 Mbit/s
95th percentile per-packet one-way delay: 122.621 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 20.39 Mbit/s
95th percentile per-packet one-way delay: 121.065 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 9.89 Mbit/s
95th percentile per-packet one-way delay: 133.008 ms
Loss rate: 2.30%
```

Run 2: Report of TCP Vegas — Data Link

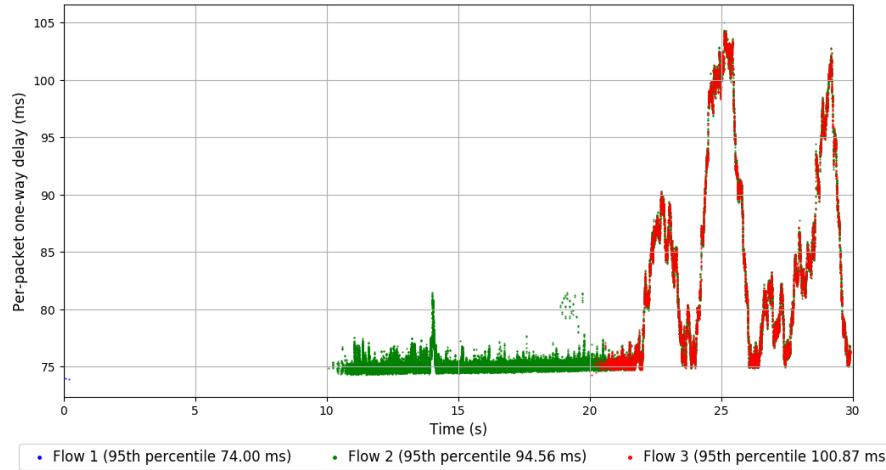
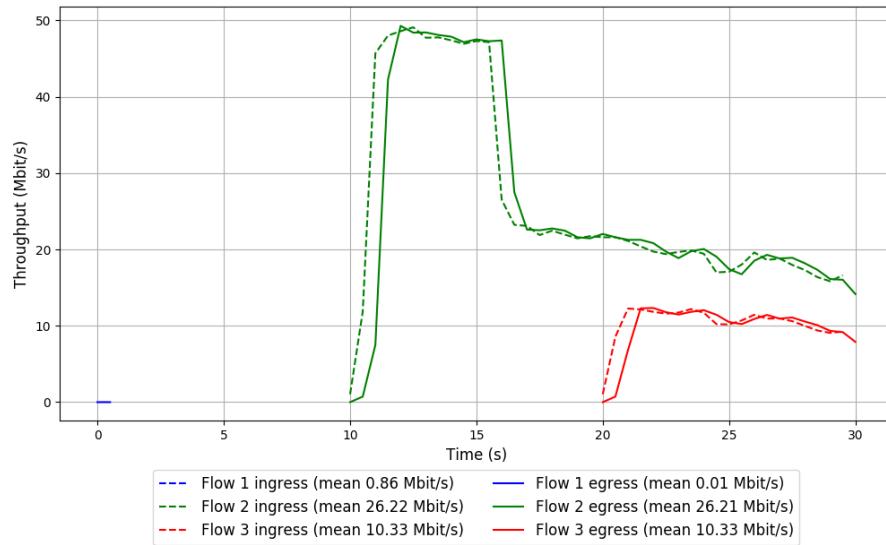


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-19 15:16:18
End at: 2019-03-19 15:16:48
Local clock offset: 1.73 ms
Remote clock offset: 165.104 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.82 Mbit/s
95th percentile per-packet one-way delay: 97.931 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 73.996 ms
Loss rate: 98.79%
-- Flow 2:
Average throughput: 26.21 Mbit/s
95th percentile per-packet one-way delay: 94.557 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 100.872 ms
Loss rate: 1.43%
```

Run 3: Report of TCP Vegas — Data Link

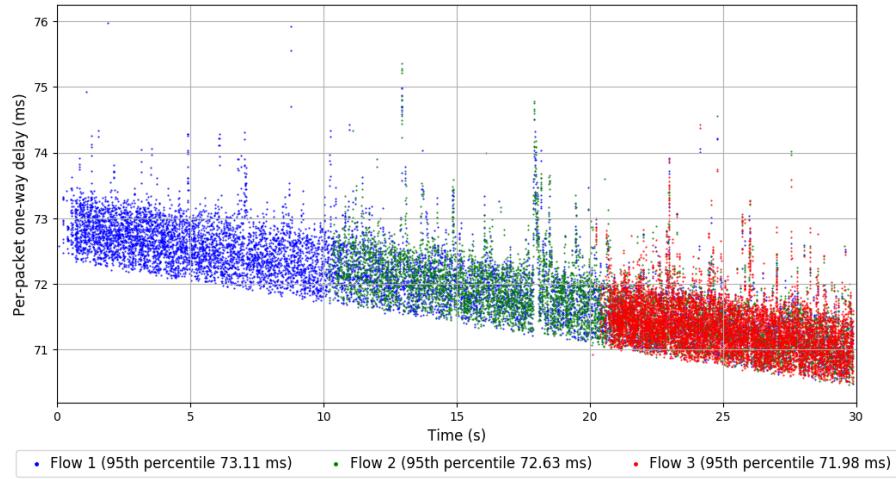
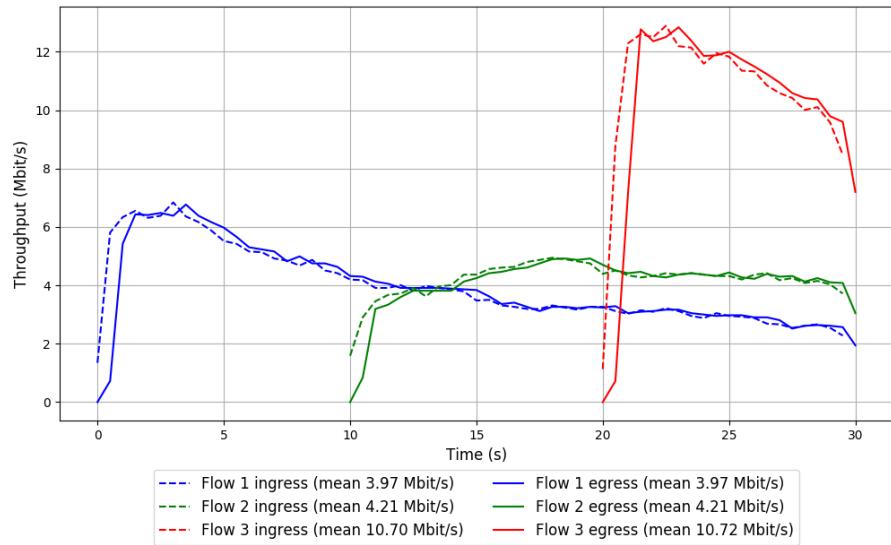


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-19 15:43:36
End at: 2019-03-19 15:44:06
Local clock offset: 3.514 ms
Remote clock offset: -25.924 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.29 Mbit/s
95th percentile per-packet one-way delay: 72.928 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 73.112 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 72.626 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 71.983 ms
Loss rate: 1.30%
```

Run 4: Report of TCP Vegas — Data Link

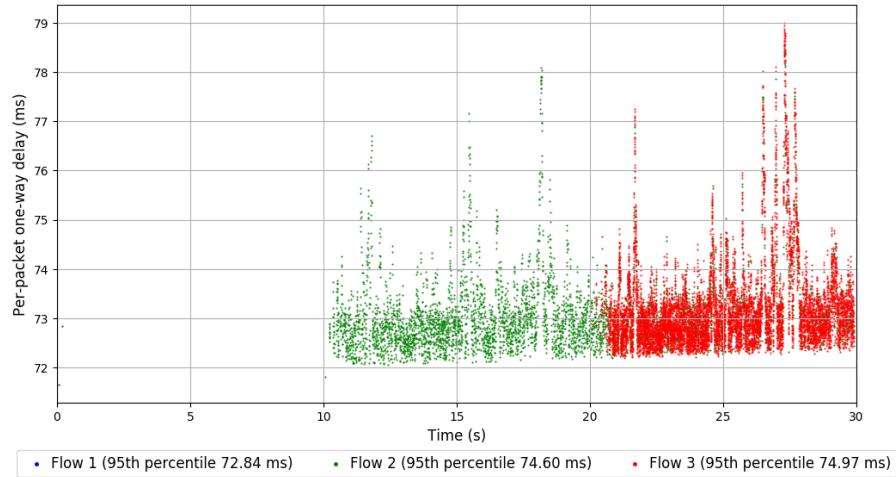
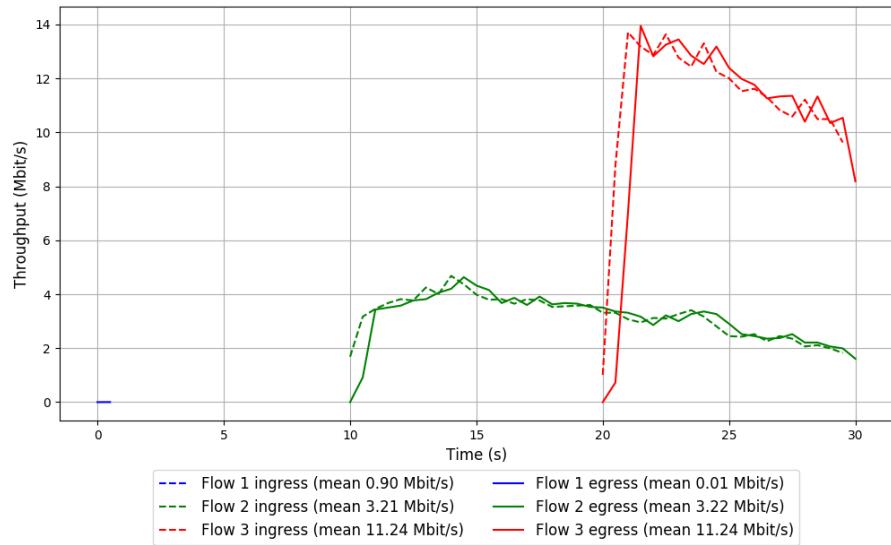


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-19 16:10:38
End at: 2019-03-19 16:11:08
Local clock offset: 2.915 ms
Remote clock offset: -47.557 ms

# Below is generated by plot.py at 2019-03-19 16:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 74.833 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 72.841 ms
Loss rate: 98.79%
-- Flow 2:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 74.603 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 74.975 ms
Loss rate: 1.32%
```

Run 5: Report of TCP Vegas — Data Link

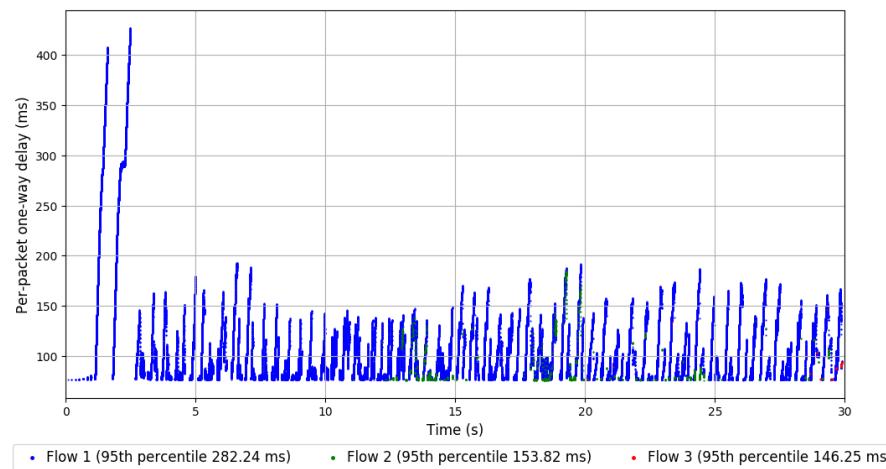
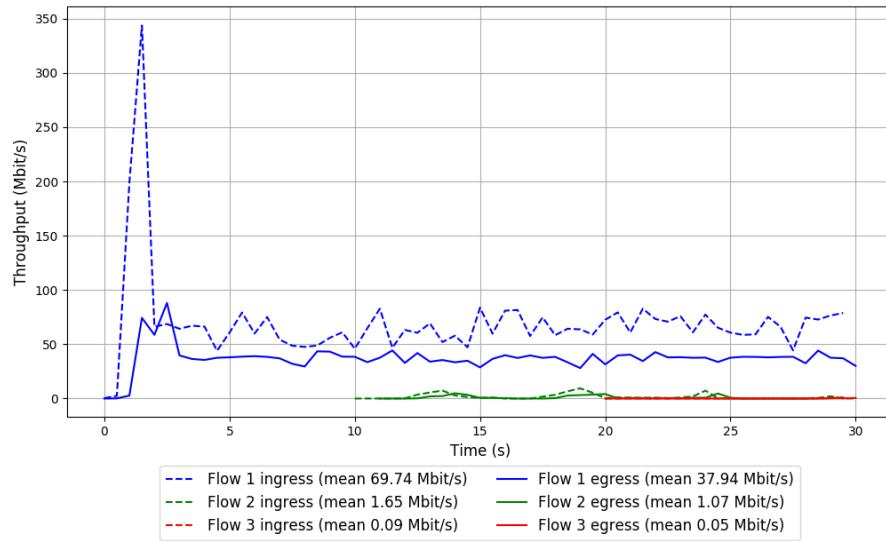


Run 1: Statistics of Verus

```
Start at: 2019-03-19 14:10:58
End at: 2019-03-19 14:11:28
Local clock offset: -7.724 ms
Remote clock offset: -31.876 ms

# Below is generated by plot.py at 2019-03-19 16:32:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 279.854 ms
Loss rate: 45.72%
-- Flow 1:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 282.242 ms
Loss rate: 45.79%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 153.825 ms
Loss rate: 41.28%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 146.253 ms
Loss rate: 46.84%
```

Run 1: Report of Verus — Data Link

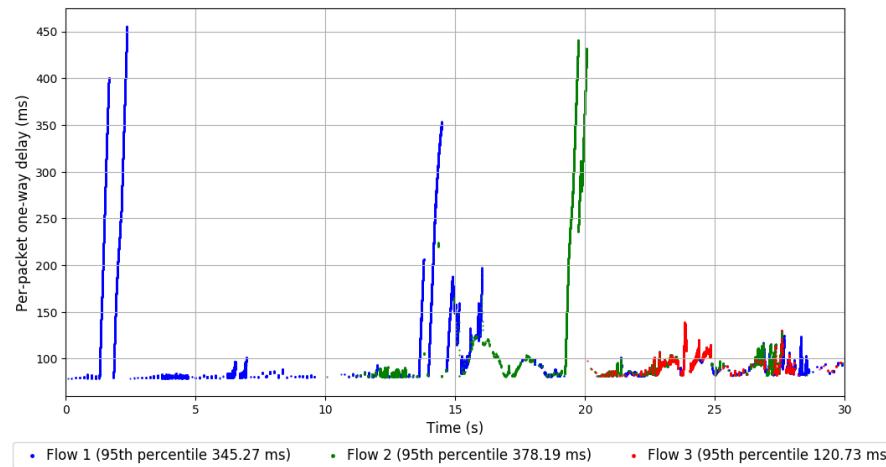
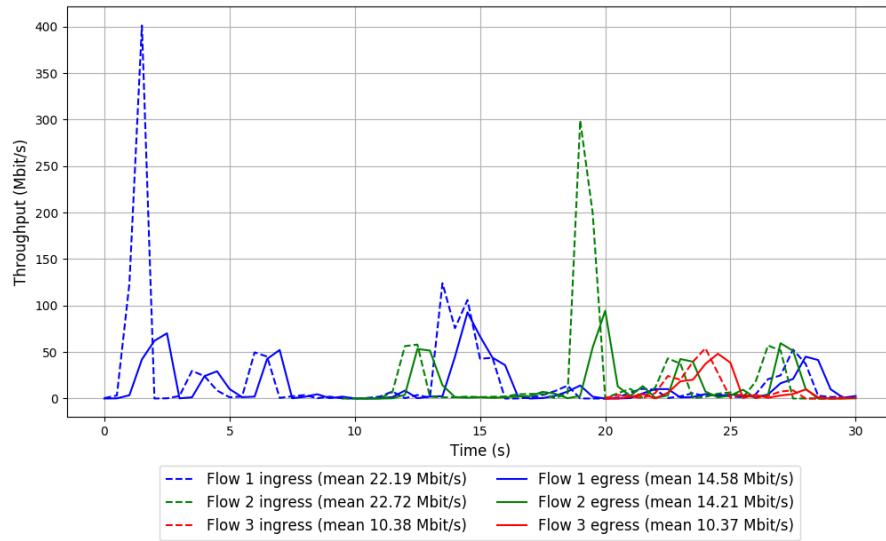


Run 2: Statistics of Verus

```
Start at: 2019-03-19 14:38:50
End at: 2019-03-19 14:39:20
Local clock offset: -1.054 ms
Remote clock offset: 26.417 ms

# Below is generated by plot.py at 2019-03-19 16:32:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 348.713 ms
Loss rate: 33.08%
-- Flow 1:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 345.273 ms
Loss rate: 34.64%
-- Flow 2:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 378.186 ms
Loss rate: 37.89%
-- Flow 3:
Average throughput: 10.37 Mbit/s
95th percentile per-packet one-way delay: 120.731 ms
Loss rate: 1.75%
```

Run 2: Report of Verus — Data Link

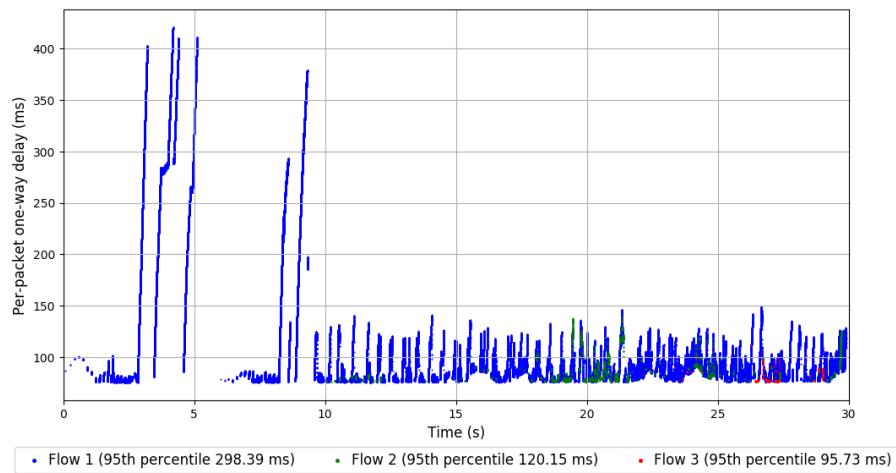
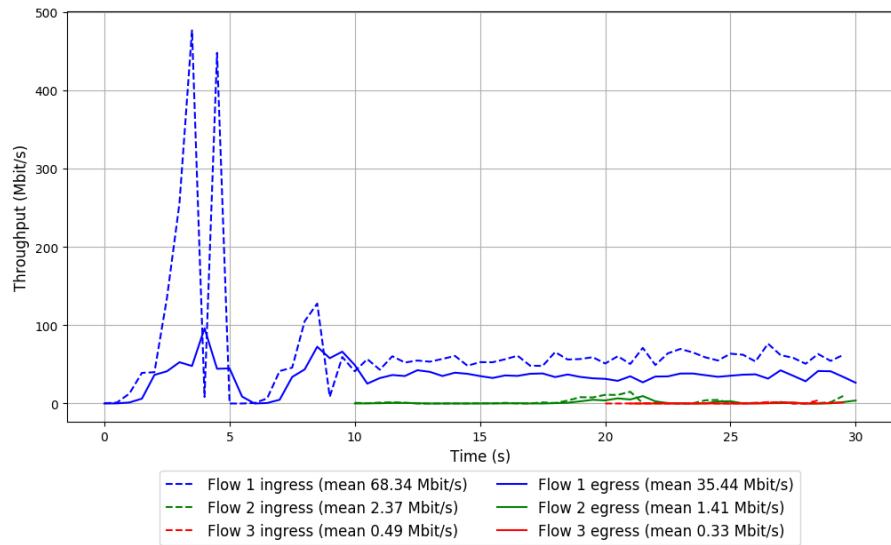


Run 3: Statistics of Verus

```
Start at: 2019-03-19 15:06:49
End at: 2019-03-19 15:07:19
Local clock offset: 0.991 ms
Remote clock offset: 141.522 ms

# Below is generated by plot.py at 2019-03-19 16:33:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 295.310 ms
Loss rate: 48.22%
-- Flow 1:
Average throughput: 35.44 Mbit/s
95th percentile per-packet one-way delay: 298.389 ms
Loss rate: 48.41%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 120.152 ms
Loss rate: 40.48%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 95.734 ms
Loss rate: 39.95%
```

Run 3: Report of Verus — Data Link

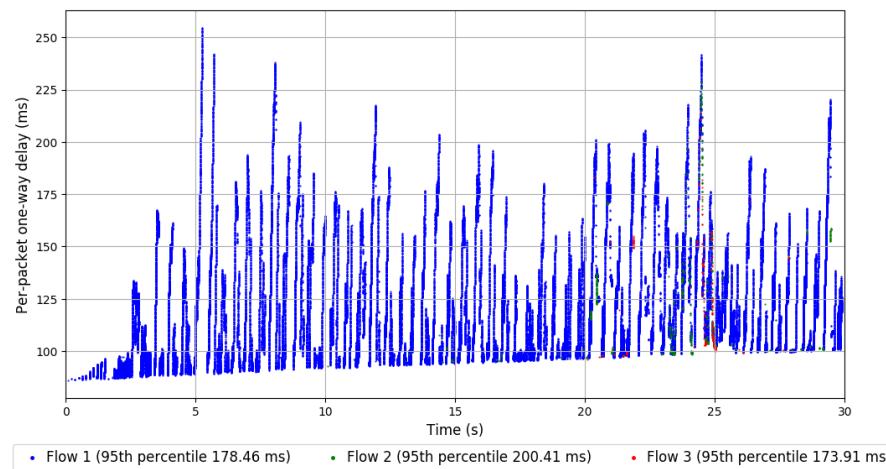
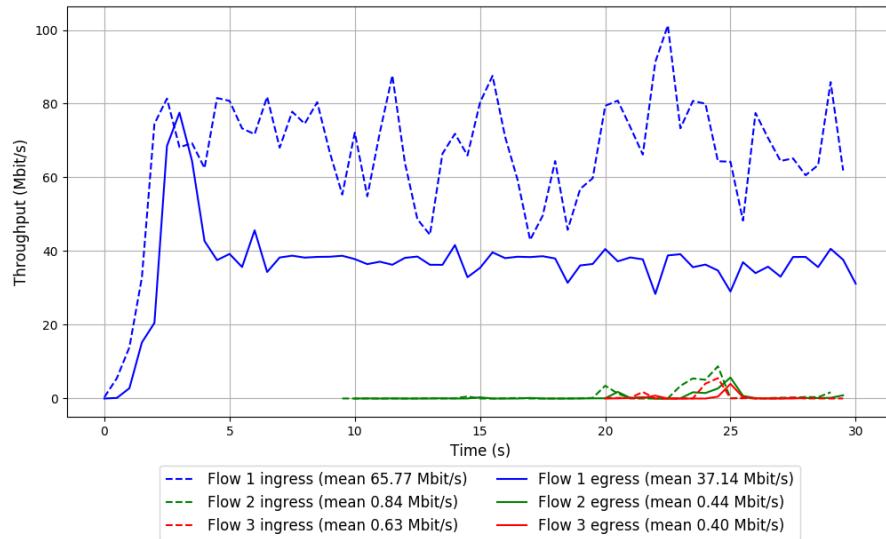


Run 4: Statistics of Verus

```
Start at: 2019-03-19 15:34:39
End at: 2019-03-19 15:35:09
Local clock offset: 2.914 ms
Remote clock offset: -33.665 ms

# Below is generated by plot.py at 2019-03-19 16:33:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.53 Mbit/s
95th percentile per-packet one-way delay: 178.594 ms
Loss rate: 43.81%
-- Flow 1:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 178.462 ms
Loss rate: 43.77%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 200.411 ms
Loss rate: 46.81%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 173.915 ms
Loss rate: 50.09%
```

Run 4: Report of Verus — Data Link

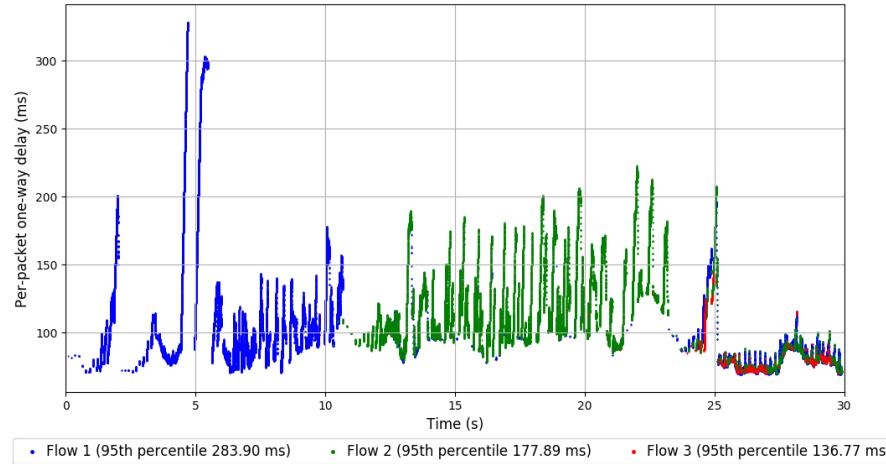
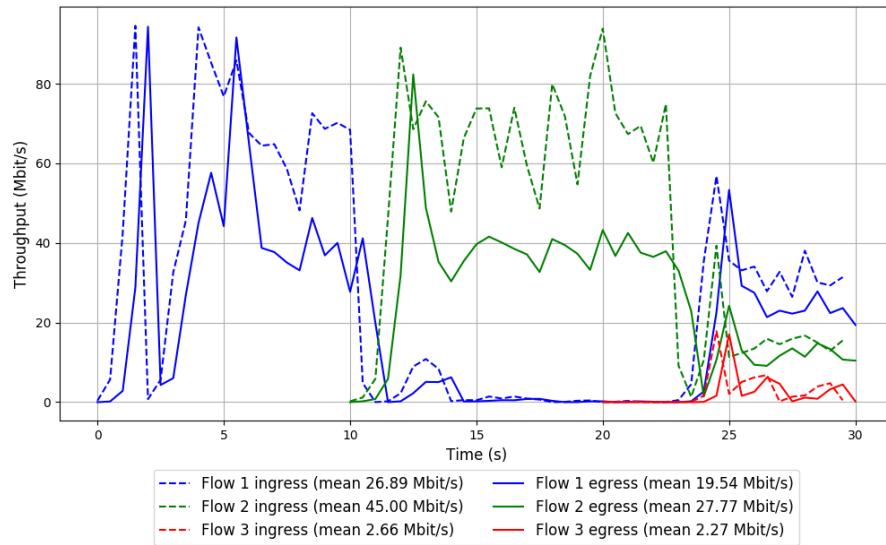


Run 5: Statistics of Verus

```
Start at: 2019-03-19 16:01:41
End at: 2019-03-19 16:02:11
Local clock offset: 2.724 ms
Remote clock offset: -56.359 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 197.793 ms
Loss rate: 33.34%
-- Flow 1:
Average throughput: 19.54 Mbit/s
95th percentile per-packet one-way delay: 283.904 ms
Loss rate: 27.76%
-- Flow 2:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 177.894 ms
Loss rate: 38.86%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 136.772 ms
Loss rate: 16.12%
```

Run 5: Report of Verus — Data Link

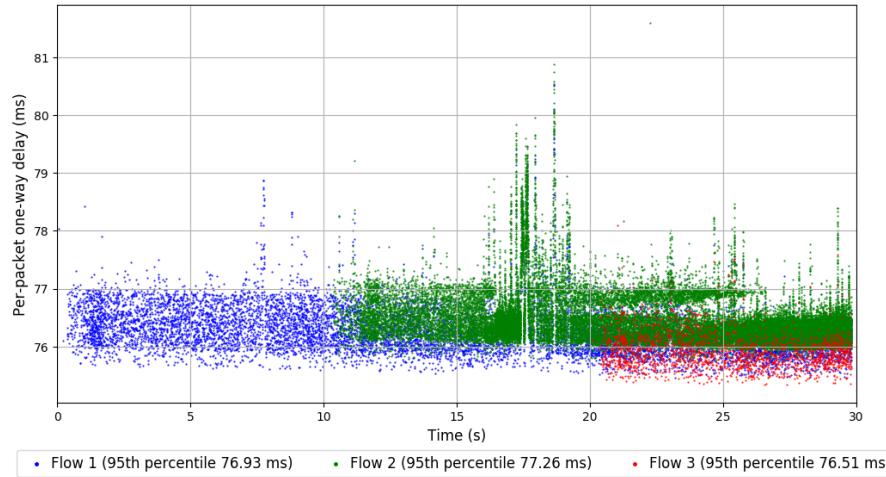
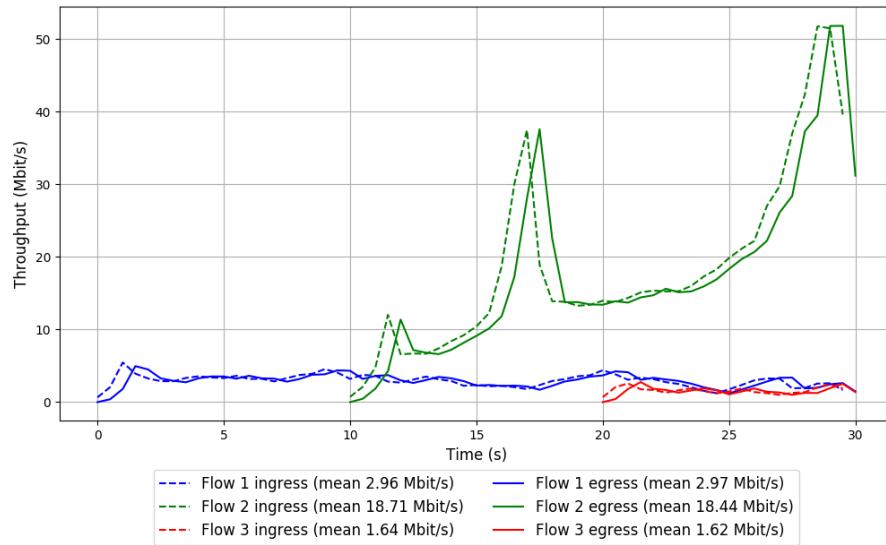


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-03-19 14:16:25
End at: 2019-03-19 14:16:55
Local clock offset: -7.72 ms
Remote clock offset: -31.432 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.73 Mbit/s
95th percentile per-packet one-way delay: 77.145 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 76.928 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 18.44 Mbit/s
95th percentile per-packet one-way delay: 77.256 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 76.509 ms
Loss rate: 2.47%
```

Run 1: Report of PCC-Vivace — Data Link

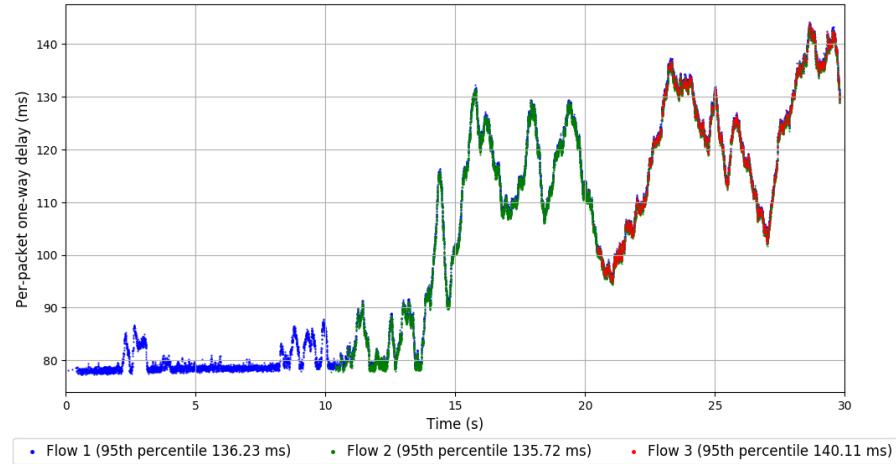
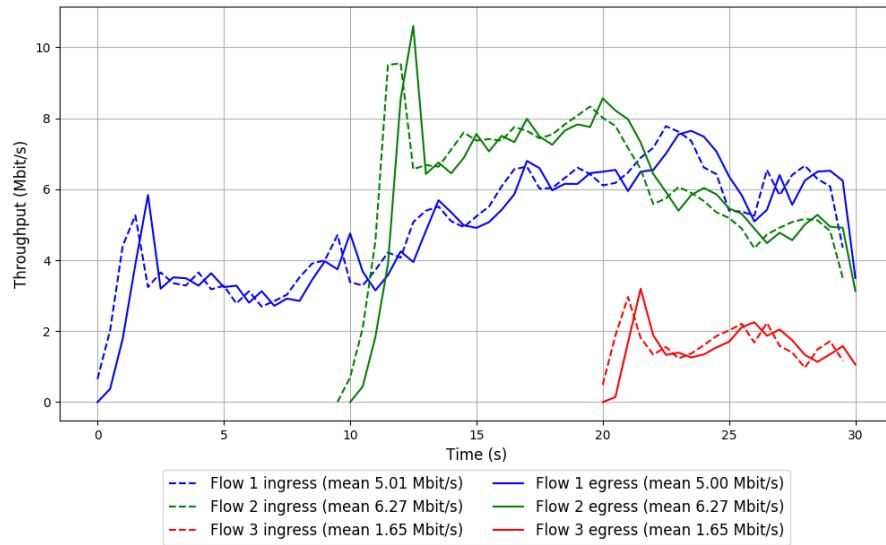


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-19 14:44:14
End at: 2019-03-19 14:44:44
Local clock offset: -0.459 ms
Remote clock offset: 64.013 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.70 Mbit/s
95th percentile per-packet one-way delay: 136.250 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 5.00 Mbit/s
95th percentile per-packet one-way delay: 136.229 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 135.716 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 140.114 ms
Loss rate: 1.90%
```

Run 2: Report of PCC-Vivace — Data Link

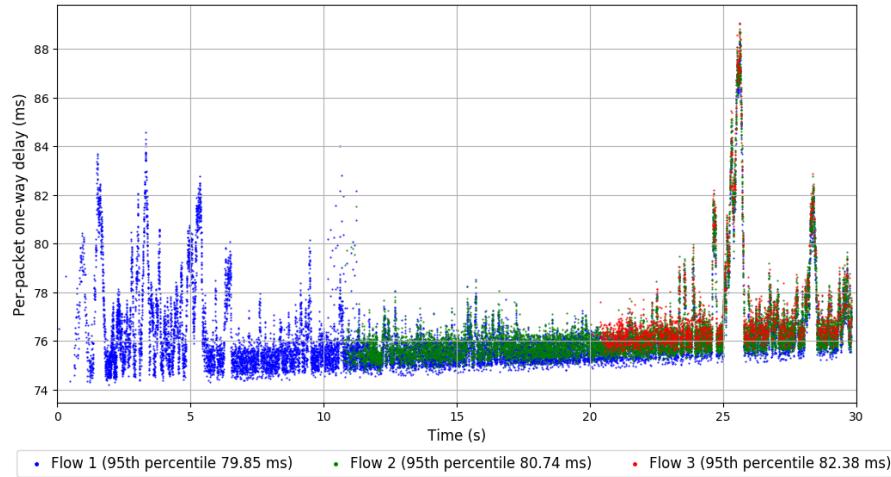
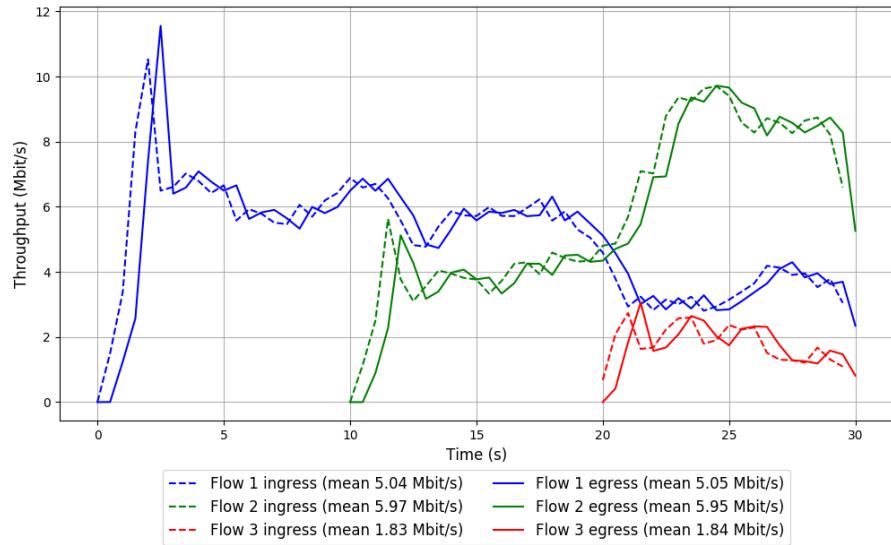


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-19 15:12:22
End at: 2019-03-19 15:12:52
Local clock offset: 1.624 ms
Remote clock offset: 155.142 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 80.449 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 79.848 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 80.744 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 82.379 ms
Loss rate: 1.12%
```

Run 3: Report of PCC-Vivace — Data Link

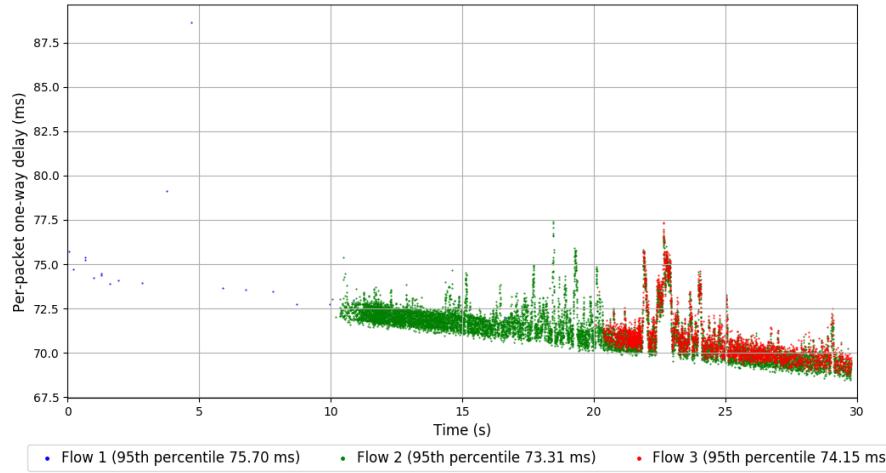
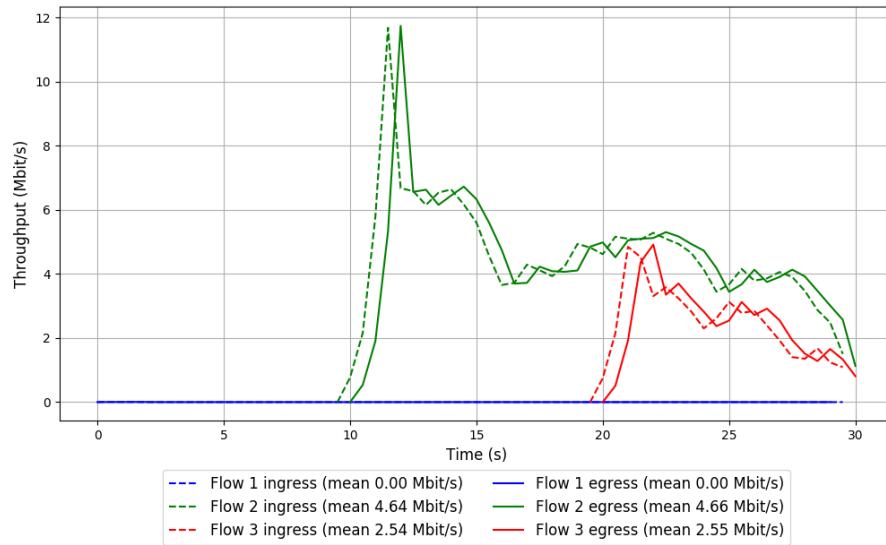


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-19 15:39:47
End at: 2019-03-19 15:40:17
Local clock offset: 3.268 ms
Remote clock offset: -2.629 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 73.561 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 75.698 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 73.306 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 74.146 ms
Loss rate: 0.81%
```

Run 4: Report of PCC-Vivace — Data Link

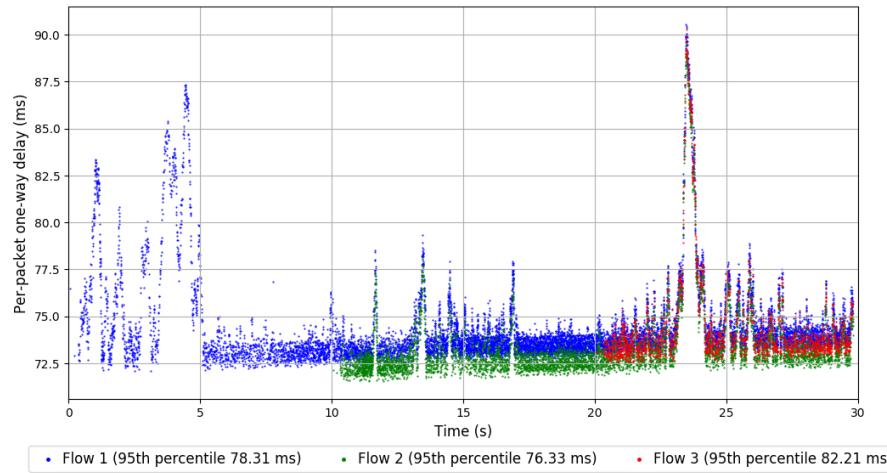
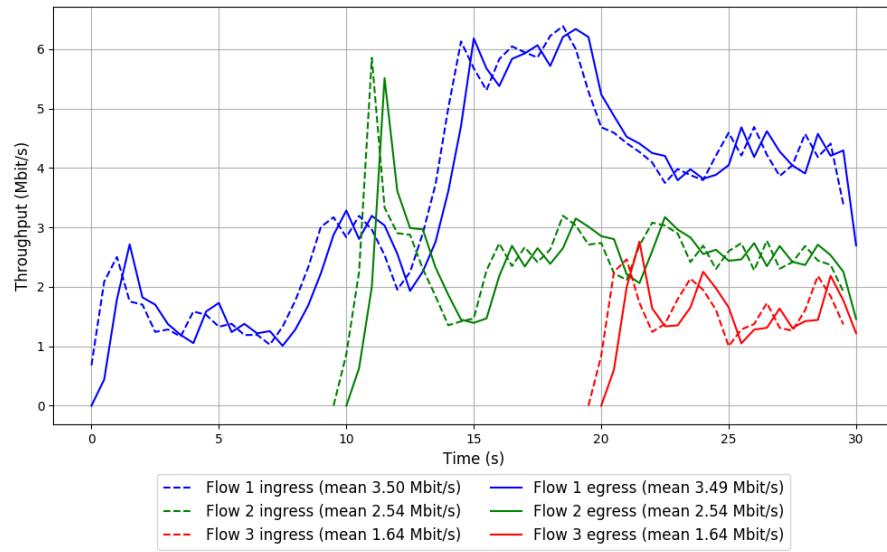


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-19 16:06:49
End at: 2019-03-19 16:07:19
Local clock offset: 2.938 ms
Remote clock offset: -54.023 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 77.794 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 78.312 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 76.326 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 82.214 ms
Loss rate: 1.54%
```

Run 5: Report of PCC-Vivace — Data Link

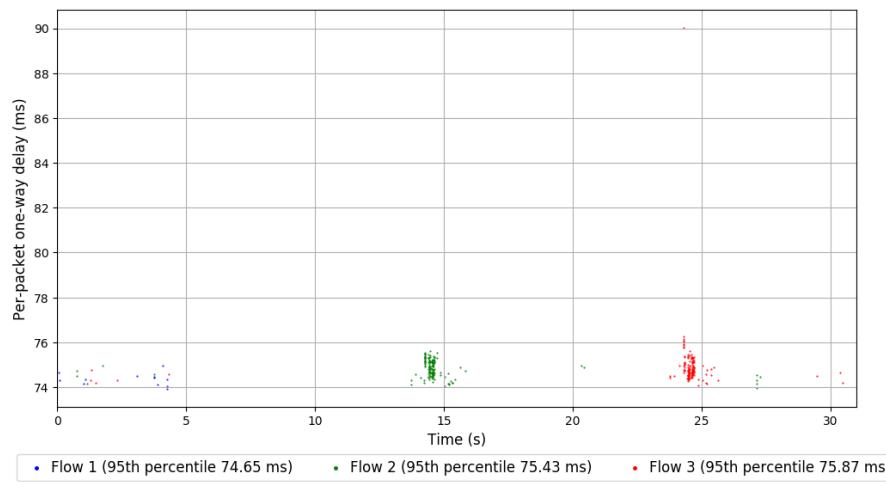
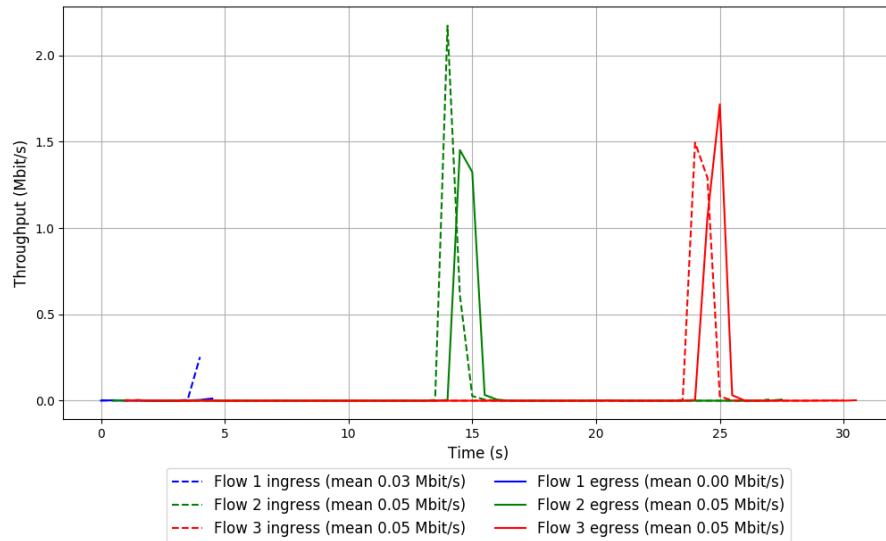


Run 1: Statistics of WebRTC media

```
Start at: 2019-03-19 14:09:43
End at: 2019-03-19 14:10:13
Local clock offset: -7.431 ms
Remote clock offset: -29.435 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 75.475 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 74.652 ms
Loss rate: 90.59%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 75.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 75.869 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

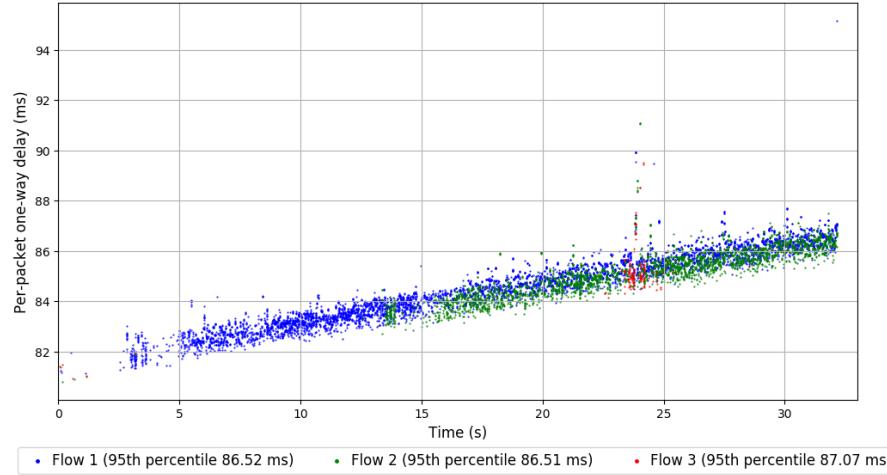
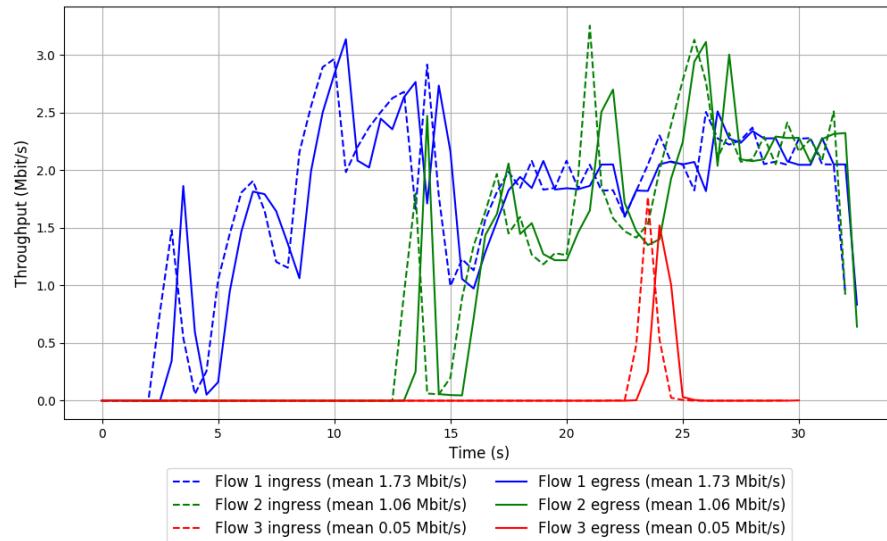


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-19 14:37:33
End at: 2019-03-19 14:38:03
Local clock offset: -1.248 ms
Remote clock offset: 12.274 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 86.518 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 86.516 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 86.513 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.074 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

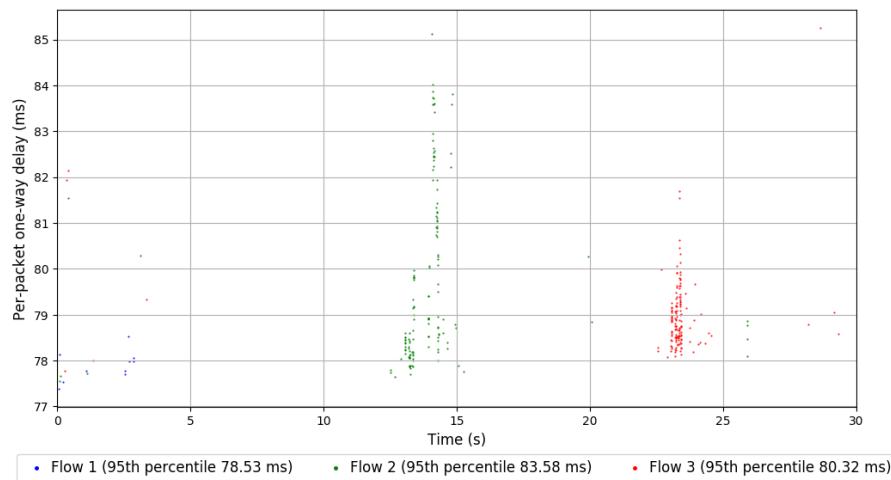
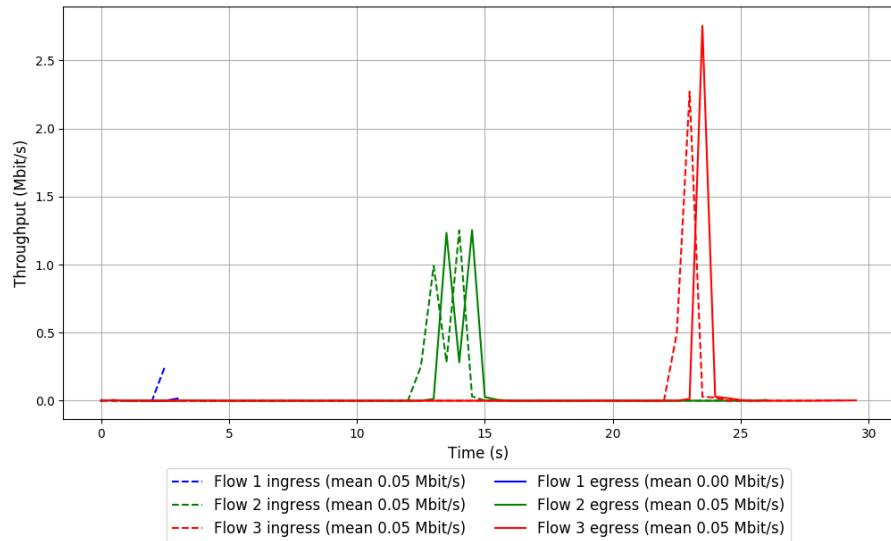


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-19 15:05:34
End at: 2019-03-19 15:06:04
Local clock offset: 1.049 ms
Remote clock offset: 136.591 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 82.573 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 78.534 ms
Loss rate: 91.65%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 83.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.323 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

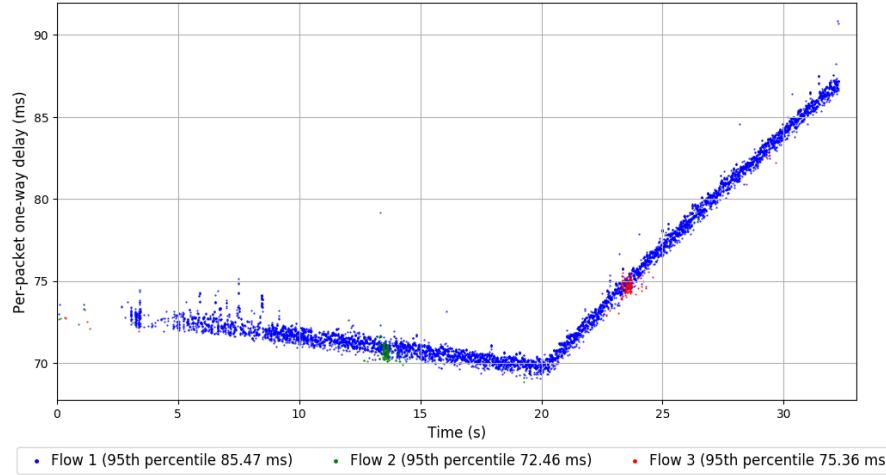
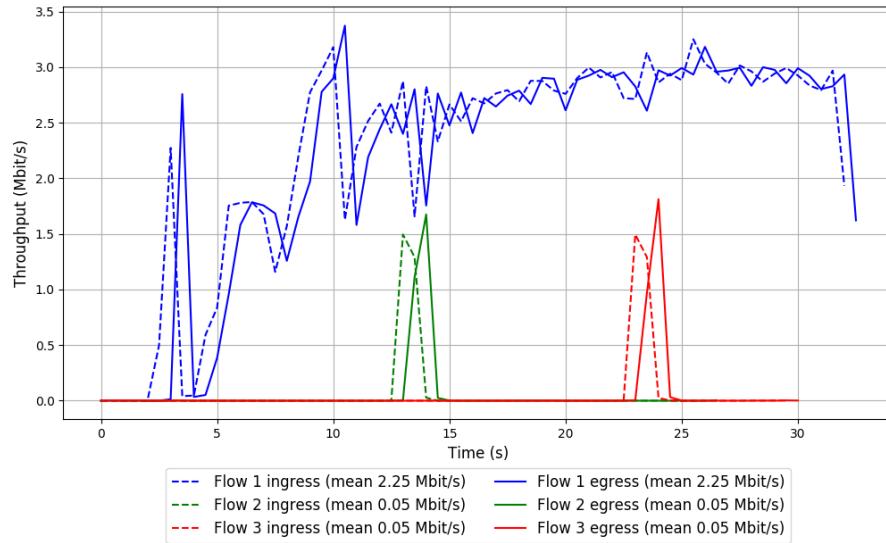


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-19 15:33:24
End at: 2019-03-19 15:33:54
Local clock offset: 2.727 ms
Remote clock offset: -76.772 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 85.413 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 85.469 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 72.464 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 75.362 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-19 16:00:26
End at: 2019-03-19 16:00:56
Local clock offset: 2.731 ms
Remote clock offset: -51.517 ms

# Below is generated by plot.py at 2019-03-19 16:33:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 94.002 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 81.137 ms
Loss rate: 91.65%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 74.402 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 94.222 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

