

## Pantheon Report

Generated at 2019-02-05 09:42:55 (UTC).  
Data path: AWS India 1 on `ens5 (local)` → India on `em1 (remote)`.  
Repeated the test of 21 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

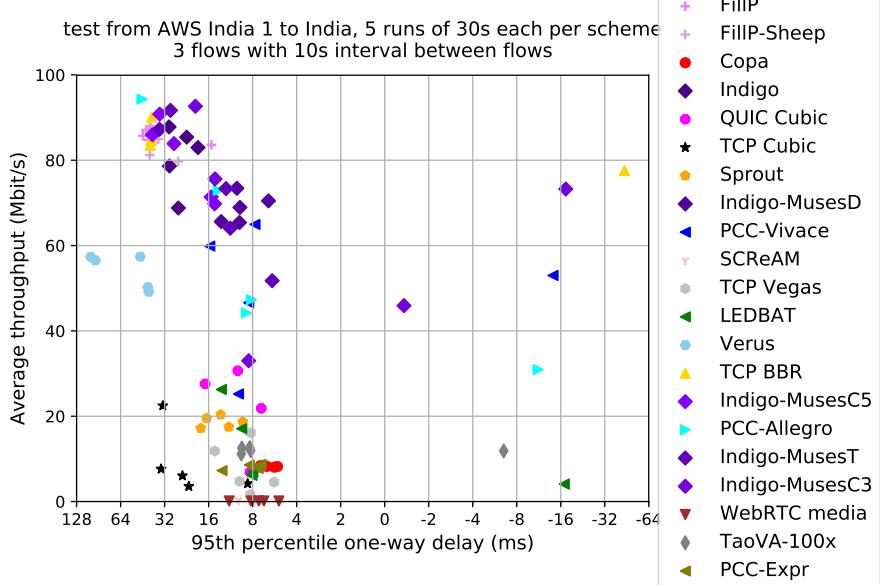
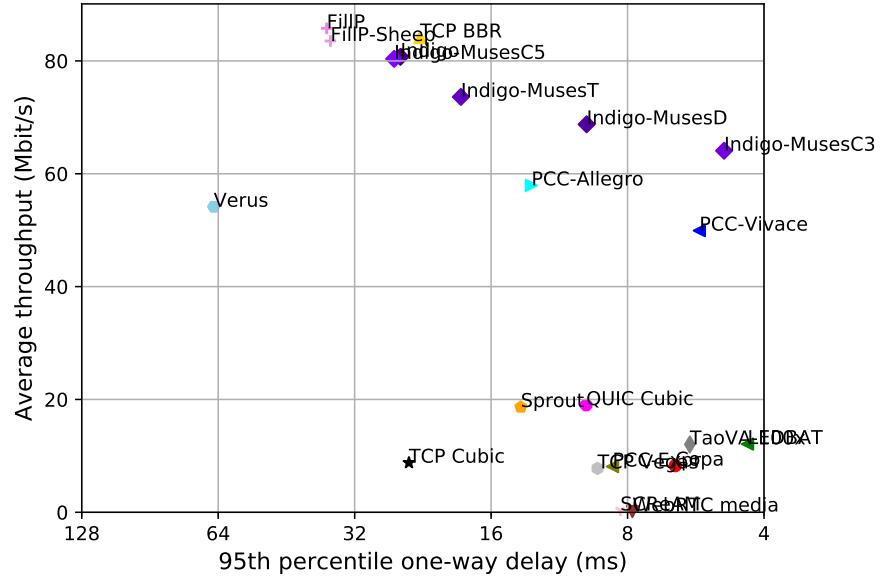
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

test from AWS India 1 to India, 5 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



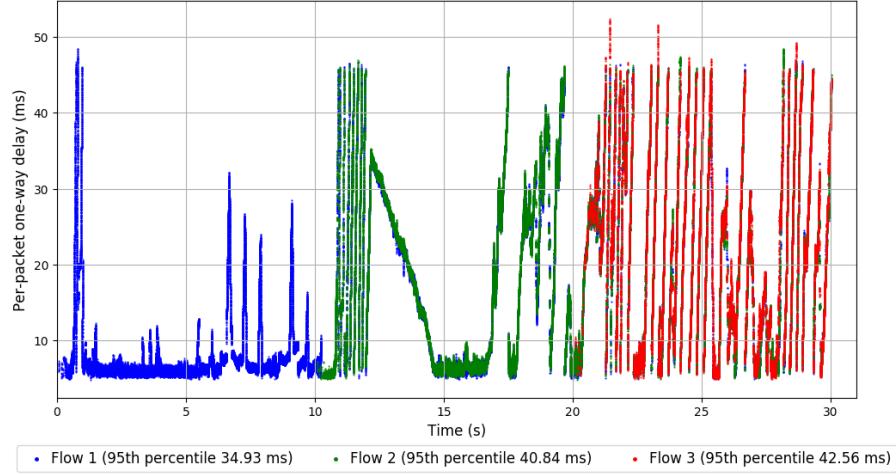
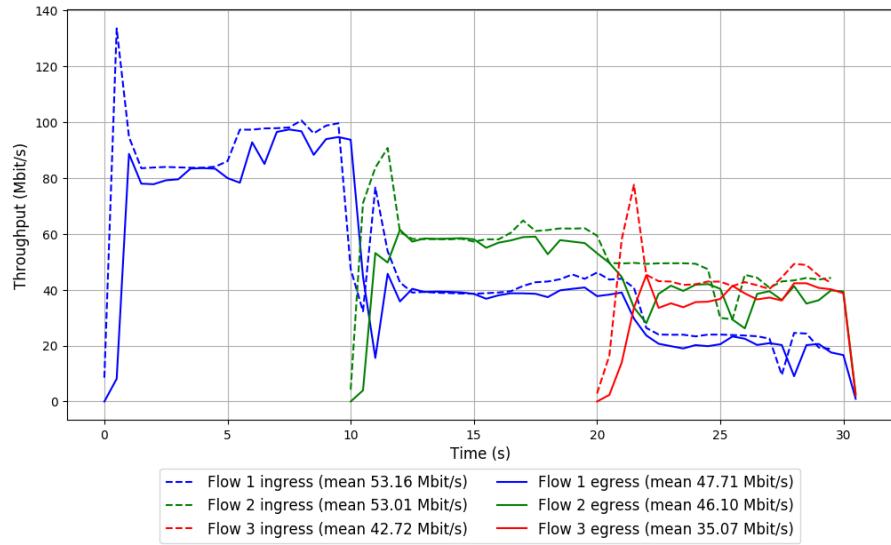
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	49.95	35.45	31.81	20.24	24.05	21.85	14.28	15.90	16.87
Copa	5	0.00	9.60	5.66	5.38	6.43	5.88	98.49	55.08	67.61
TCP Cubic	5	4.82	3.84	4.14	22.77	12.25	12.51	6.31	4.01	4.90
FillP	5	51.91	38.46	25.35	35.66	37.55	38.47	31.00	43.77	49.64
FillP-Sheep	5	48.90	38.90	26.51	34.15	37.44	38.47	16.02	18.26	19.94
Indigo	5	47.64	35.65	29.99	20.92	27.25	30.65	15.52	15.98	16.39
Indigo-MusesC3	5	33.65	29.97	36.50	3.38	4.02	7.85	8.51	8.58	9.97
Indigo-MusesC5	5	61.19	26.46	6.73	24.93	28.18	24.70	13.59	16.05	11.99
Indigo-MusesD	5	37.20	38.69	21.47	9.24	9.91	10.58	10.67	10.46	14.21
Indigo-MusesT	5	53.94	23.32	15.32	18.88	18.55	18.30	13.37	12.69	11.30
LEDBAT	5	6.52	5.93	4.92	4.44	4.23	3.22	1.61	1.41	1.58
PCC-Allegro	5	44.46	15.24	10.16	13.66	9.83	13.65	10.26	10.66	11.49
PCC-Expr	5	0.03	9.37	5.63	10.06	8.63	8.48	85.90	32.19	24.08
QUIC Cubic	5	7.98	11.02	11.22	6.91	9.93	14.14	1.41	2.11	3.52
SCReAM	5	0.16	0.16	0.17	8.44	8.36	7.76	0.98	1.19	1.41
Sprout	5	9.55	9.19	9.05	13.70	13.54	14.36	3.51	3.91	4.26
TaoVA-100x	5	6.58	6.09	4.43	5.79	5.66	6.86	58.81	37.42	57.04
TCP Vegas	5	3.22	4.18	5.34	7.59	10.44	11.11	2.06	2.25	4.08
Verus	5	34.19	25.83	12.71	47.84	74.96	42.15	46.34	56.39	51.64
PCC-Vivace	5	30.37	25.84	7.17	4.81	6.15	6.19	5.19	6.20	5.70
WebRTC media	5	0.05	0.05	0.05	6.52	6.38	8.73	0.67	2.47	2.19

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-05 07:28:07
End at: 2019-02-05 07:28:37
Local clock offset: 1.47 ms
Remote clock offset: -7.682 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 39.248 ms
Loss rate: 12.11%
-- Flow 1:
Average throughput: 47.71 Mbit/s
95th percentile per-packet one-way delay: 34.928 ms
Loss rate: 10.15%
-- Flow 2:
Average throughput: 46.10 Mbit/s
95th percentile per-packet one-way delay: 40.842 ms
Loss rate: 12.86%
-- Flow 3:
Average throughput: 35.07 Mbit/s
95th percentile per-packet one-way delay: 42.562 ms
Loss rate: 17.60%
```

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

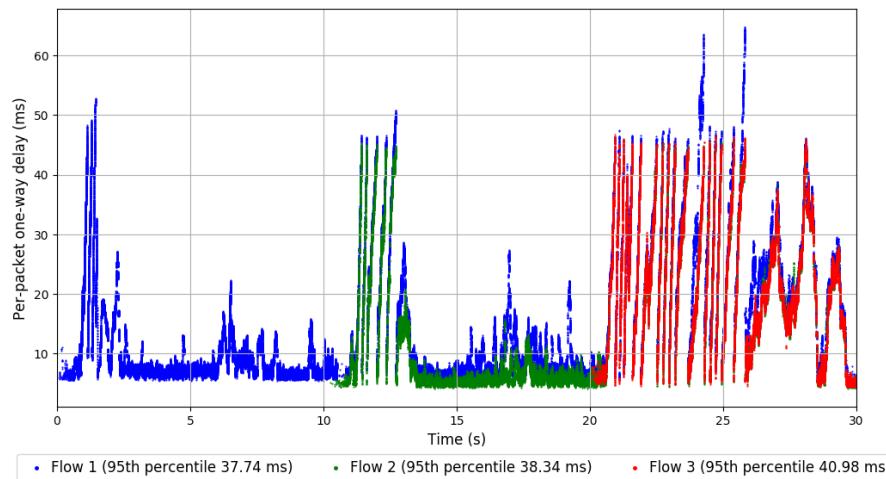
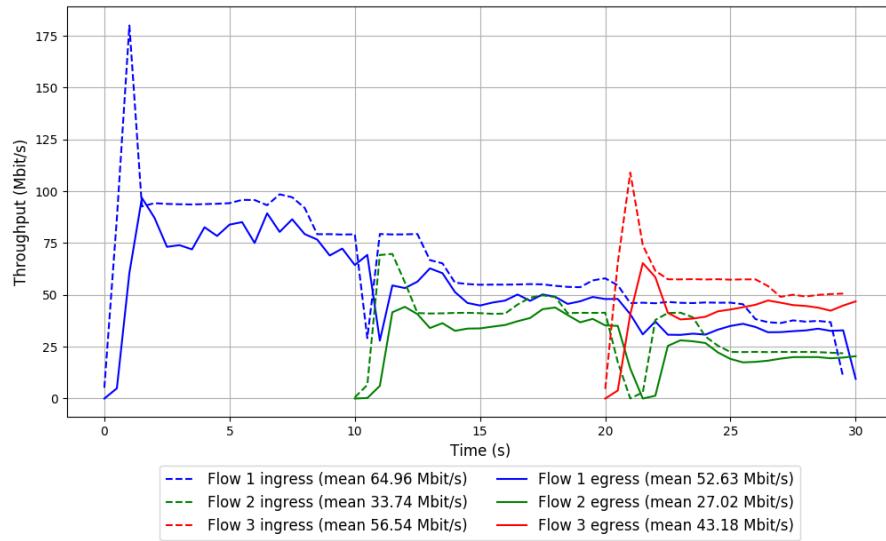


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-05 07:54:53
End at: 2019-02-05 07:55:23
Local clock offset: 0.38 ms
Remote clock offset: -7.457 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 39.124 ms
Loss rate: 20.00%
-- Flow 1:
Average throughput: 52.63 Mbit/s
95th percentile per-packet one-way delay: 37.738 ms
Loss rate: 18.97%
-- Flow 2:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 38.337 ms
Loss rate: 19.92%
-- Flow 3:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 40.977 ms
Loss rate: 23.63%
```

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

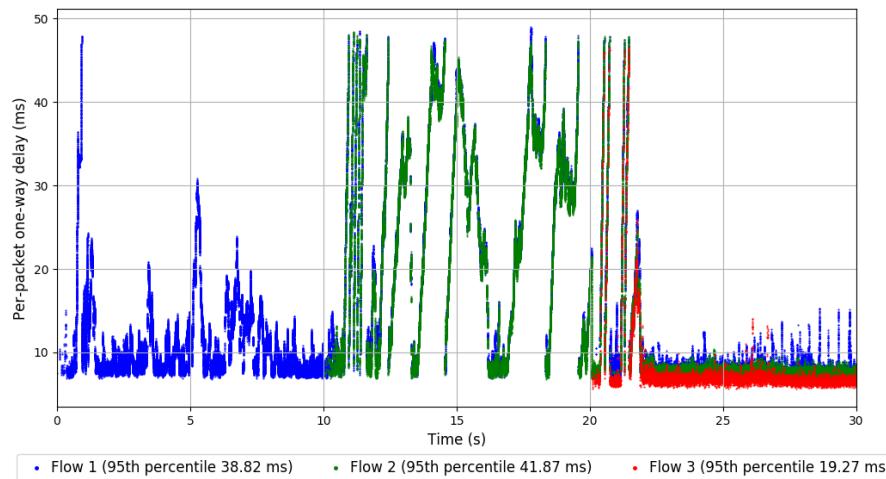
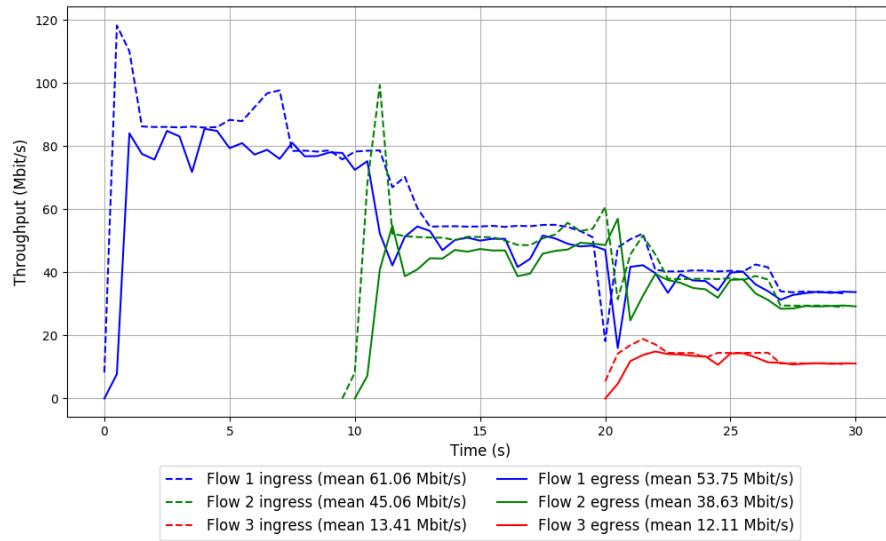


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-05 08:21:24
End at: 2019-02-05 08:21:54
Local clock offset: -0.063 ms
Remote clock offset: -5.36 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.52 Mbit/s
95th percentile per-packet one-way delay: 40.179 ms
Loss rate: 12.60%
-- Flow 1:
Average throughput: 53.75 Mbit/s
95th percentile per-packet one-way delay: 38.820 ms
Loss rate: 11.99%
-- Flow 2:
Average throughput: 38.63 Mbit/s
95th percentile per-packet one-way delay: 41.870 ms
Loss rate: 14.27%
-- Flow 3:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 19.275 ms
Loss rate: 9.82%
```

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

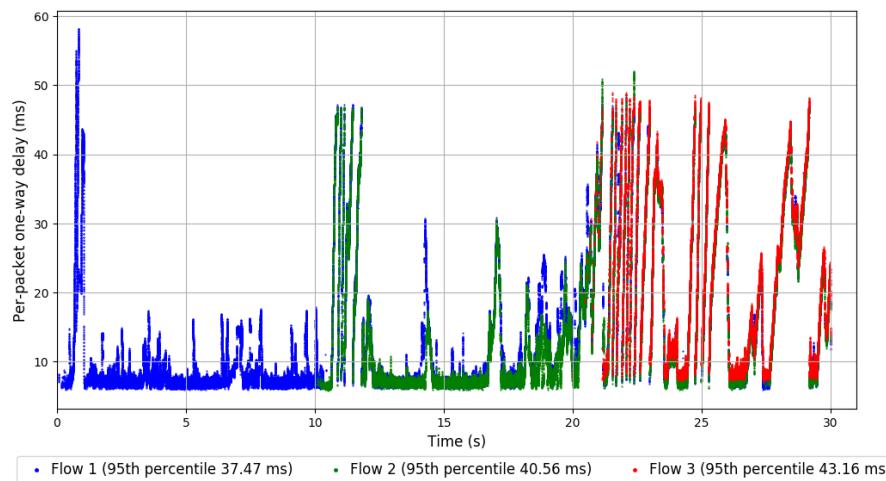
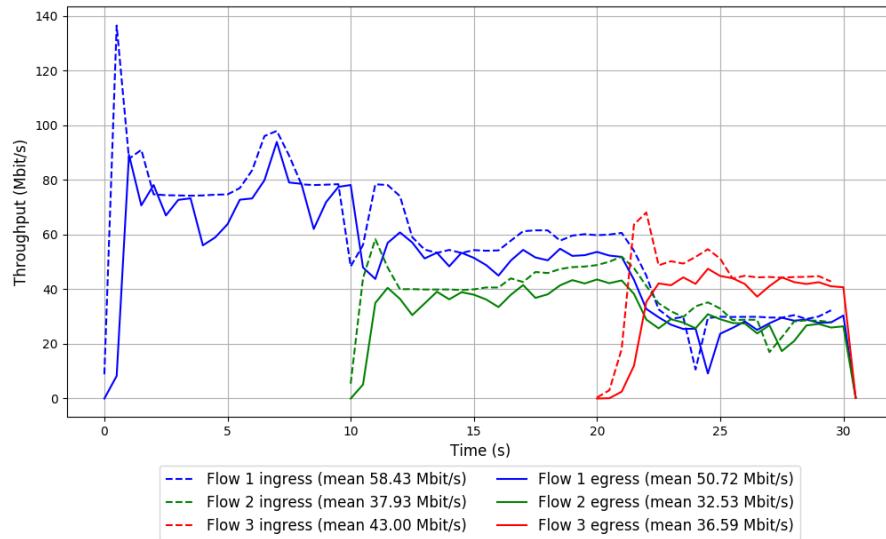


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-05 08:47:46
End at: 2019-02-05 08:48:16
Local clock offset: -0.937 ms
Remote clock offset: -5.191 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 39.968 ms
Loss rate: 13.69%
-- Flow 1:
Average throughput: 50.72 Mbit/s
95th percentile per-packet one-way delay: 37.471 ms
Loss rate: 13.16%
-- Flow 2:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 40.558 ms
Loss rate: 14.21%
-- Flow 3:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 43.165 ms
Loss rate: 14.89%
```

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

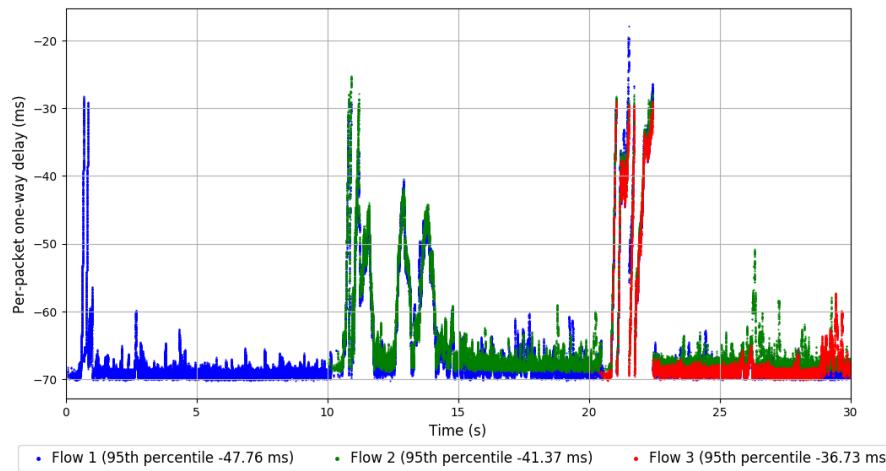
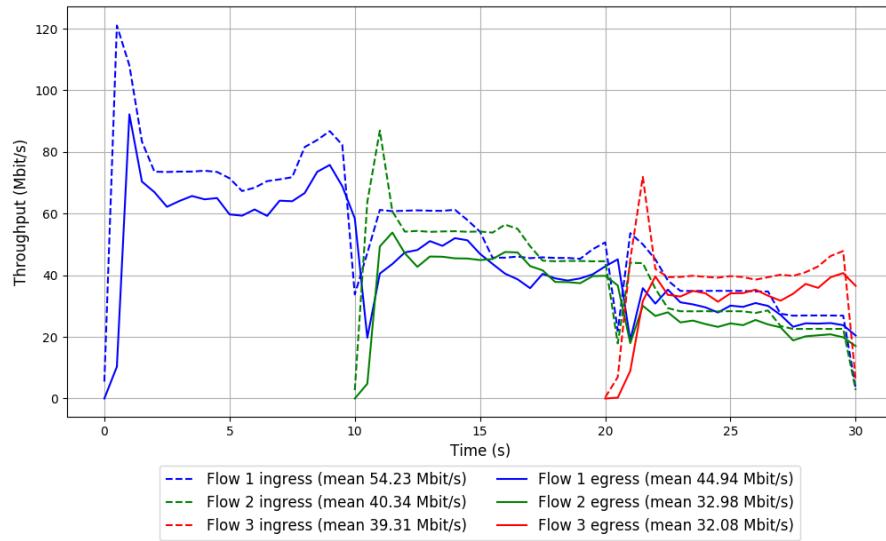


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-05 09:14:06
End at: 2019-02-05 09:14:36
Local clock offset: -0.207 ms
Remote clock offset: -80.201 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.59 Mbit/s
95th percentile per-packet one-way delay: -43.706 ms
Loss rate: 17.62%
-- Flow 1:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: -47.764 ms
Loss rate: 17.13%
-- Flow 2:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: -41.370 ms
Loss rate: 18.24%
-- Flow 3:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: -36.734 ms
Loss rate: 18.42%
```

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

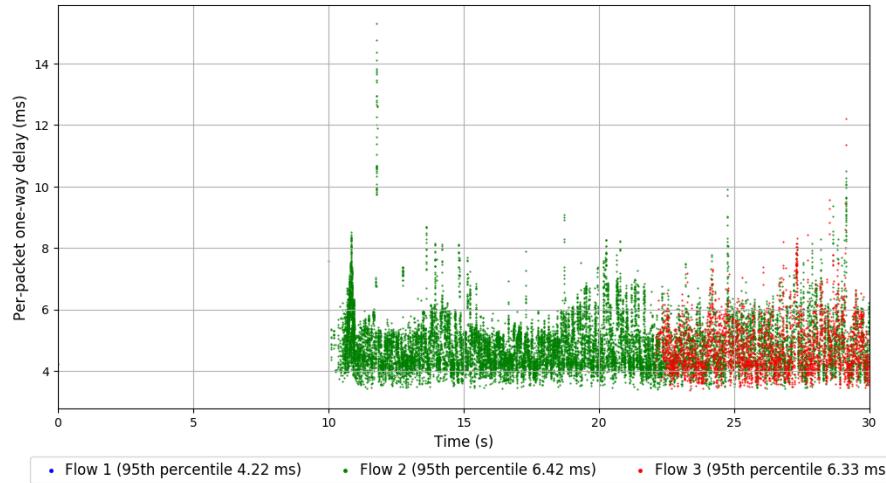
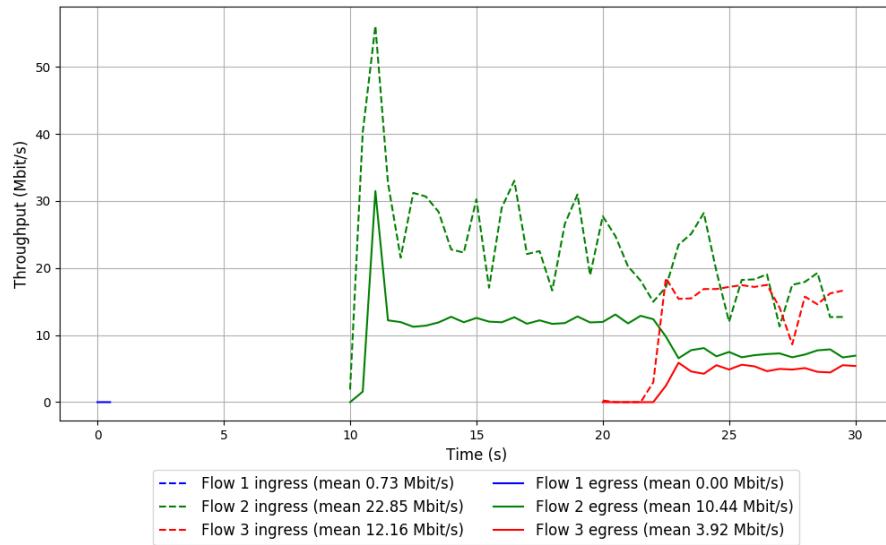


Run 1: Statistics of Copa

```
Start at: 2019-02-05 07:30:36
End at: 2019-02-05 07:31:06
Local clock offset: 0.218 ms
Remote clock offset: -9.136 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 6.406 ms
Loss rate: 57.14%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4.223 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 6.421 ms
Loss rate: 54.32%
-- Flow 3:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 6.327 ms
Loss rate: 67.79%
```

## Run 1: Report of Copa — Data Link

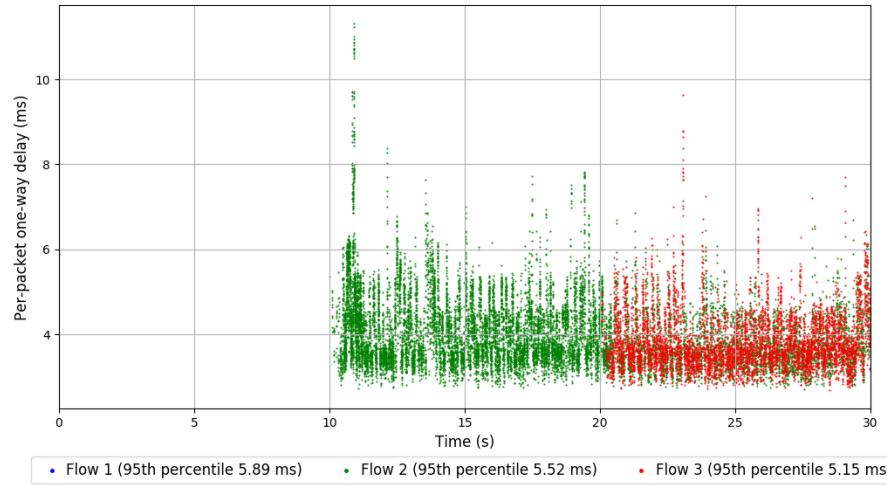
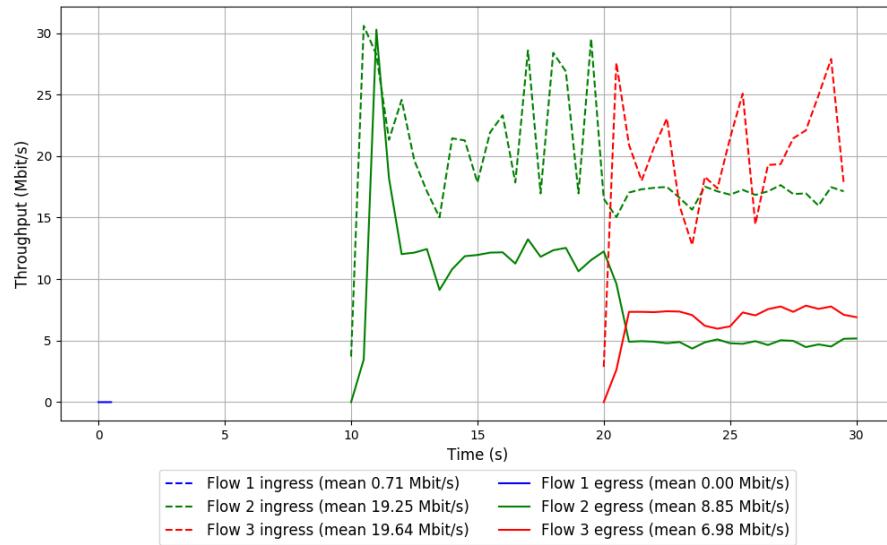


Run 2: Statistics of Copa

```
Start at: 2019-02-05 07:57:28
End at: 2019-02-05 07:57:58
Local clock offset: 1.233 ms
Remote clock offset: -7.93 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 5.411 ms
Loss rate: 57.54%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.890 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 5.521 ms
Loss rate: 54.00%
-- Flow 3:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 5.148 ms
Loss rate: 64.48%
```

## Run 2: Report of Copa — Data Link

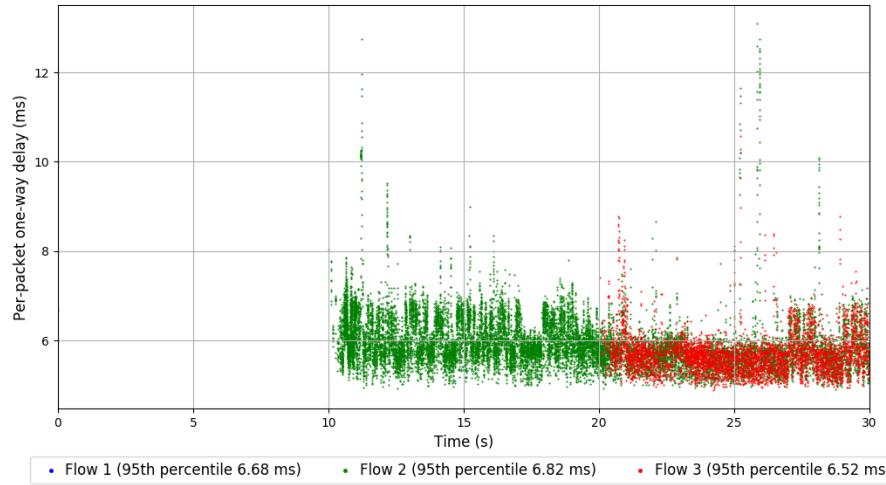
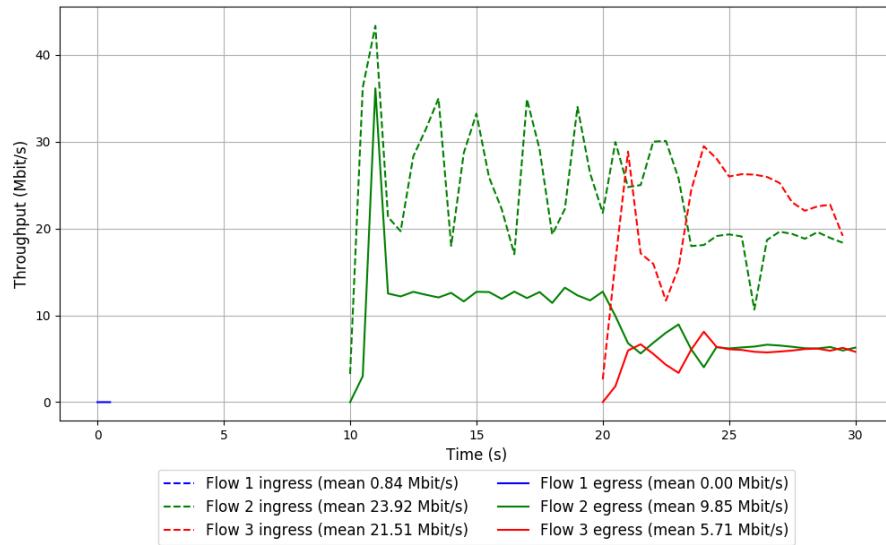


Run 3: Statistics of Copa

```
Start at: 2019-02-05 08:23:57
End at: 2019-02-05 08:24:27
Local clock offset: 0.265 ms
Remote clock offset: -5.502 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 6.783 ms
Loss rate: 63.36%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.682 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 6.815 ms
Loss rate: 58.82%
-- Flow 3:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 6.520 ms
Loss rate: 73.46%
```

### Run 3: Report of Copa — Data Link

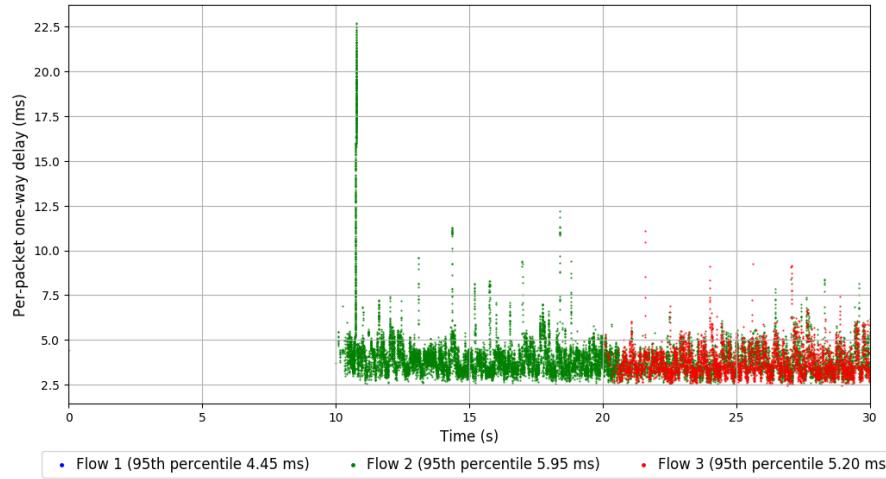
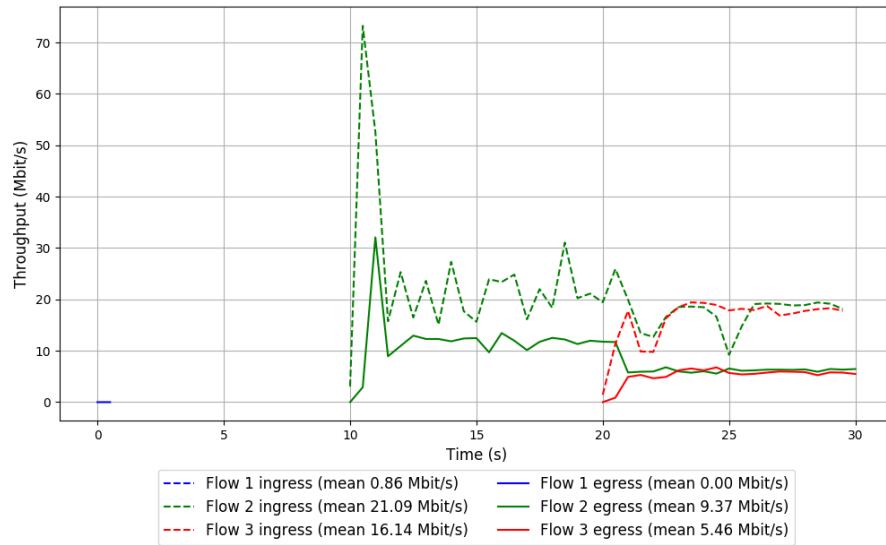


Run 4: Statistics of Copa

```
Start at: 2019-02-05 08:50:21
End at: 2019-02-05 08:50:51
Local clock offset: 1.881 ms
Remote clock offset: -5.663 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 5.682 ms
Loss rate: 58.50%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4.454 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 5.951 ms
Loss rate: 55.56%
-- Flow 3:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 5.195 ms
Loss rate: 66.19%
```

## Run 4: Report of Copa — Data Link

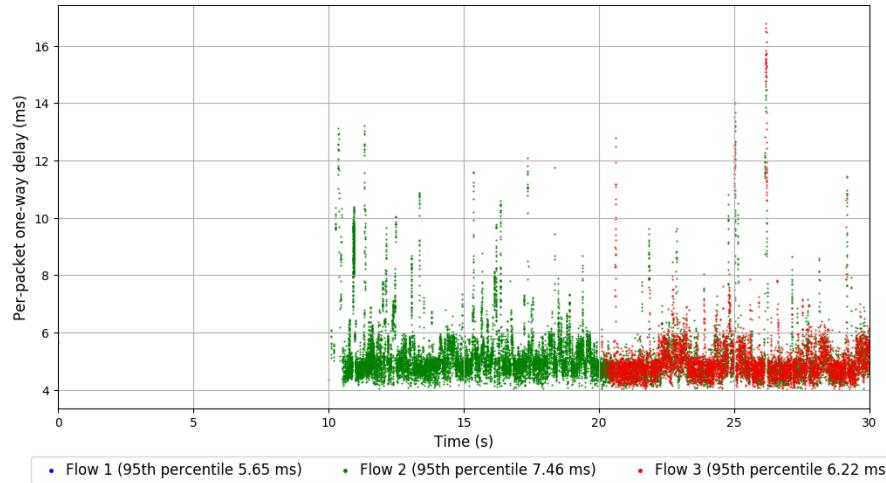
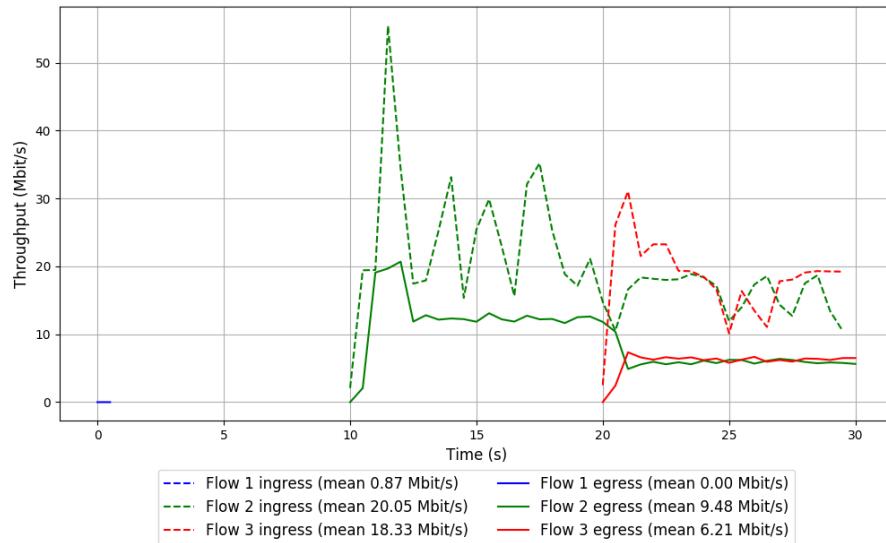


Run 5: Statistics of Copa

```
Start at: 2019-02-05 09:16:43
End at: 2019-02-05 09:17:13
Local clock offset: -0.059 ms
Remote clock offset: -5.583 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 7.098 ms
Loss rate: 56.90%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.653 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 7.455 ms
Loss rate: 52.70%
-- Flow 3:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 6.219 ms
Loss rate: 66.12%
```

Run 5: Report of Copa — Data Link

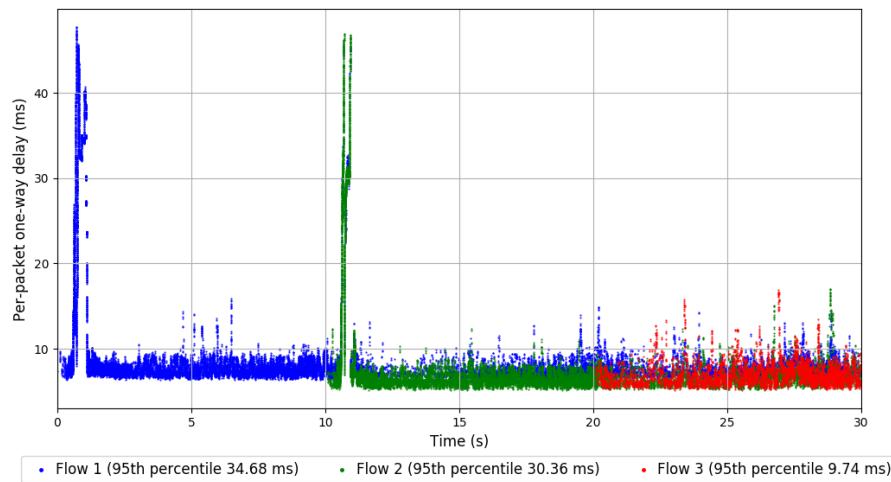
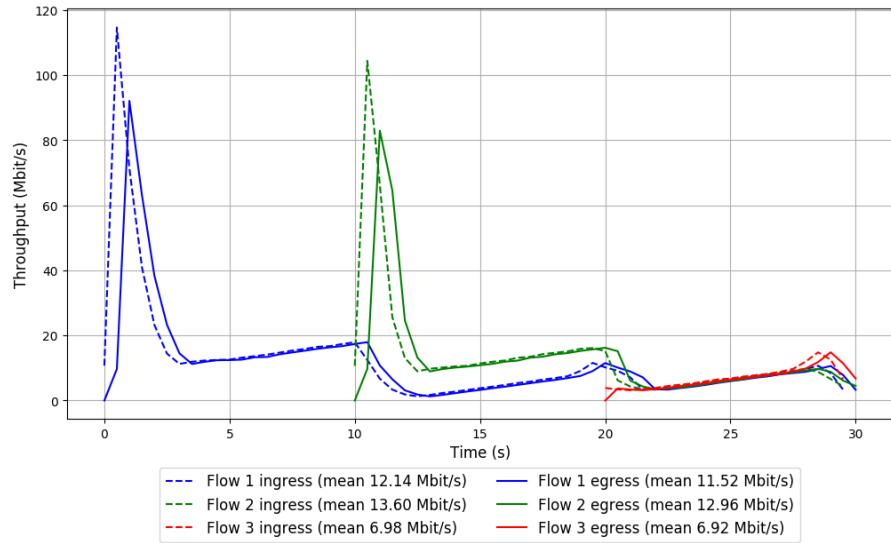


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-02-05 07:36:44
End at: 2019-02-05 07:37:14
Local clock offset: 0.258 ms
Remote clock offset: -7.15 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 32.925 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 34.676 ms
Loss rate: 5.16%
-- Flow 2:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 30.358 ms
Loss rate: 4.73%
-- Flow 3:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 9.743 ms
Loss rate: 0.88%
```

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

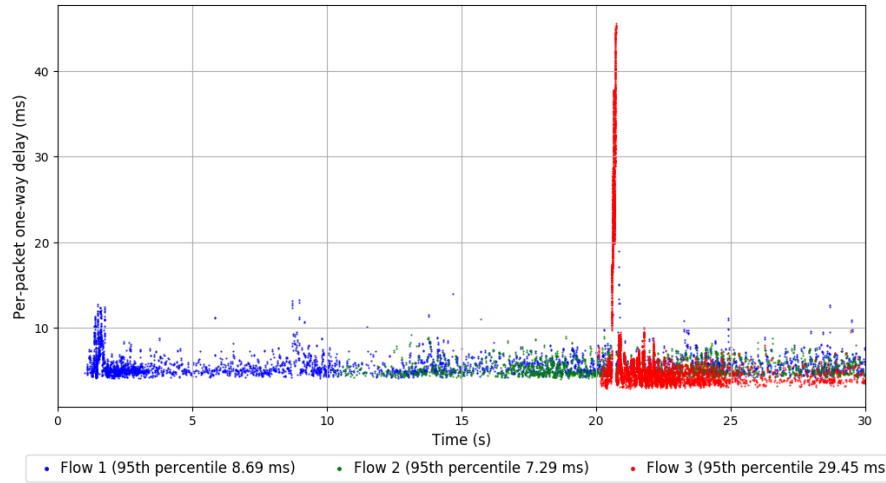
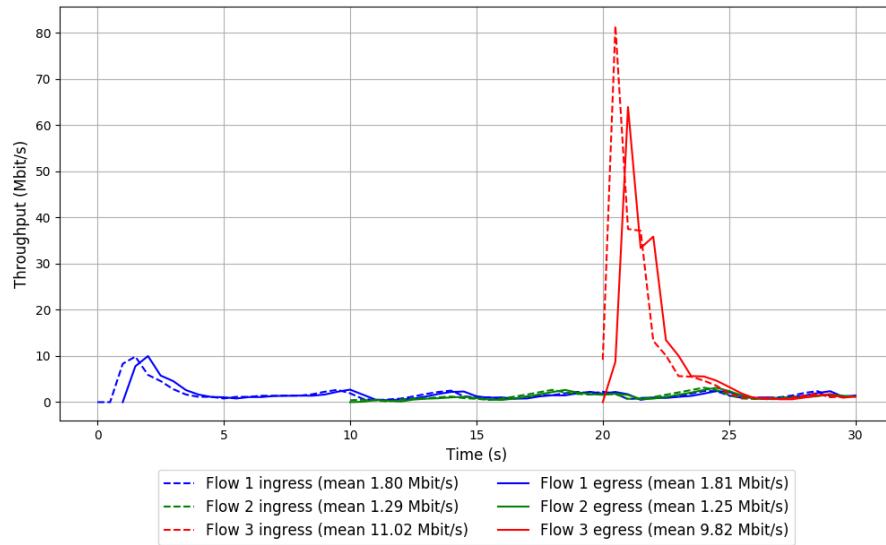


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-05 08:03:50
End at: 2019-02-05 08:04:20
Local clock offset: -0.676 ms
Remote clock offset: -9.642 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 24.165 ms
Loss rate: 7.49%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 8.693 ms
Loss rate: 2.70%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 7.289 ms
Loss rate: 3.21%
-- Flow 3:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 29.446 ms
Loss rate: 10.85%
```

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

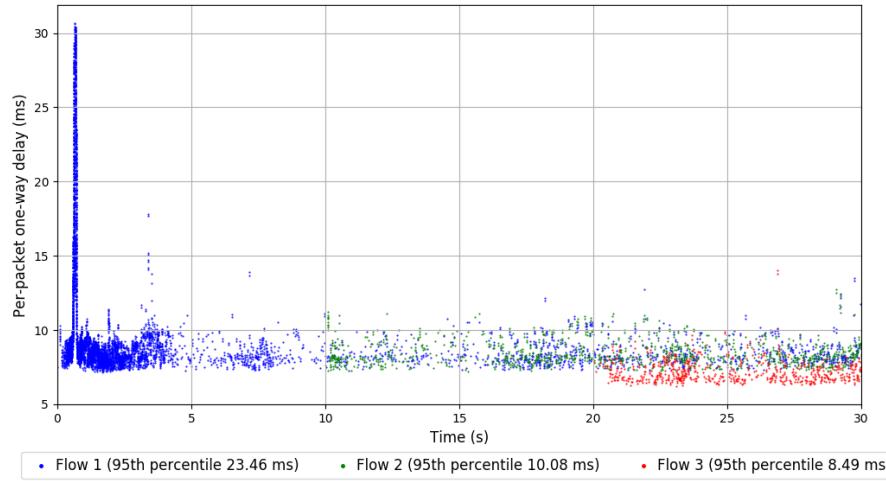
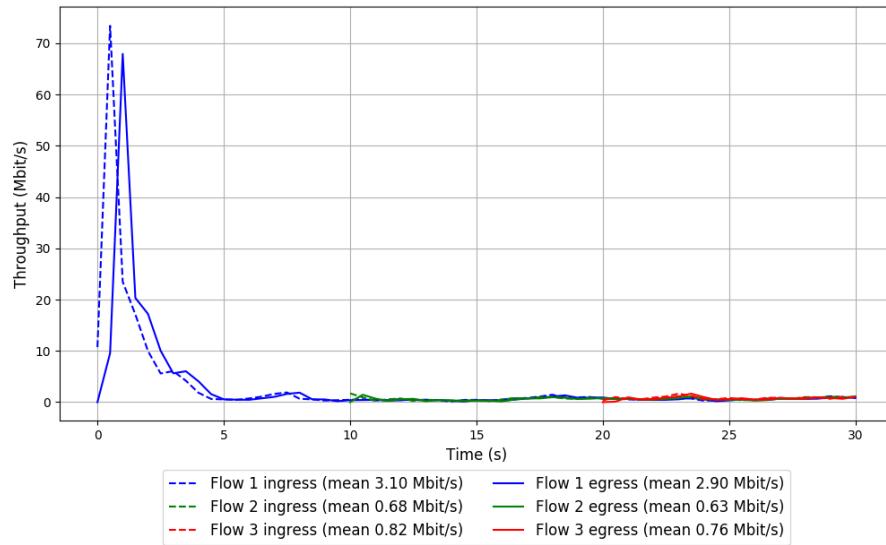


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-05 08:30:05
End at: 2019-02-05 08:30:35
Local clock offset: -1.966 ms
Remote clock offset: -6.512 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 21.866 ms
Loss rate: 6.85%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 23.465 ms
Loss rate: 6.61%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 10.081 ms
Loss rate: 8.43%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 8.494 ms
Loss rate: 6.93%
```

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

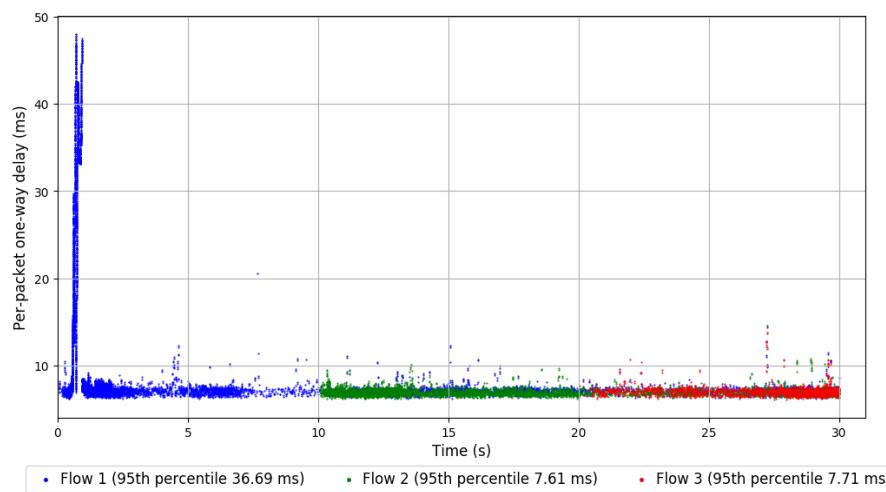
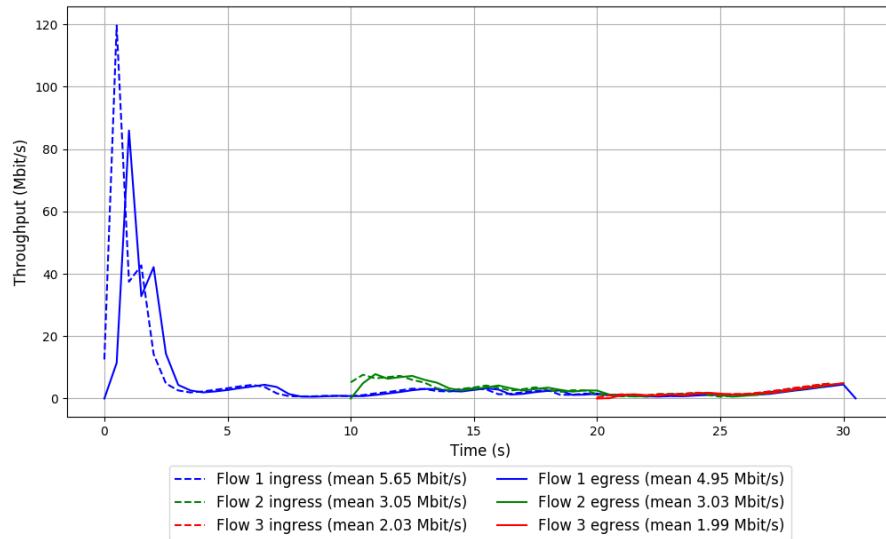


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-05 08:56:26
End at: 2019-02-05 08:56:56
Local clock offset: -1.59 ms
Remote clock offset: -5.446 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 33.817 ms
Loss rate: 8.68%
-- Flow 1:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 36.691 ms
Loss rate: 12.32%
-- Flow 2:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 7.614 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 7.710 ms
Loss rate: 2.13%
```

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

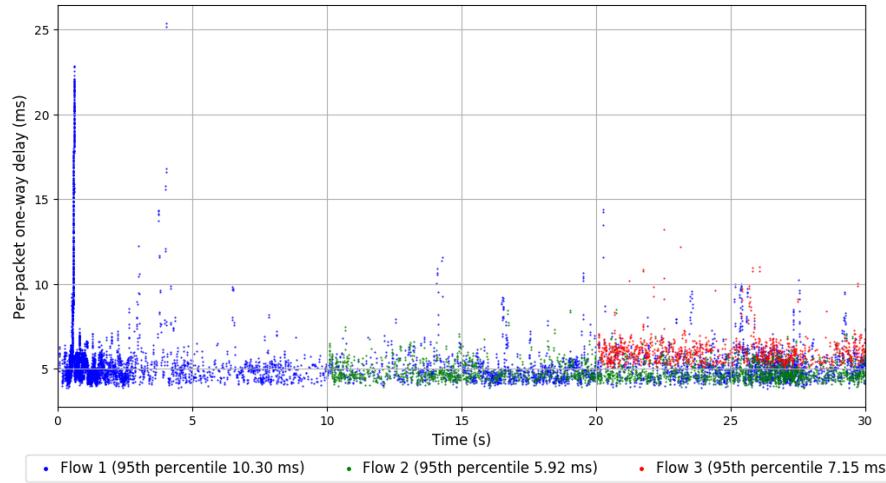
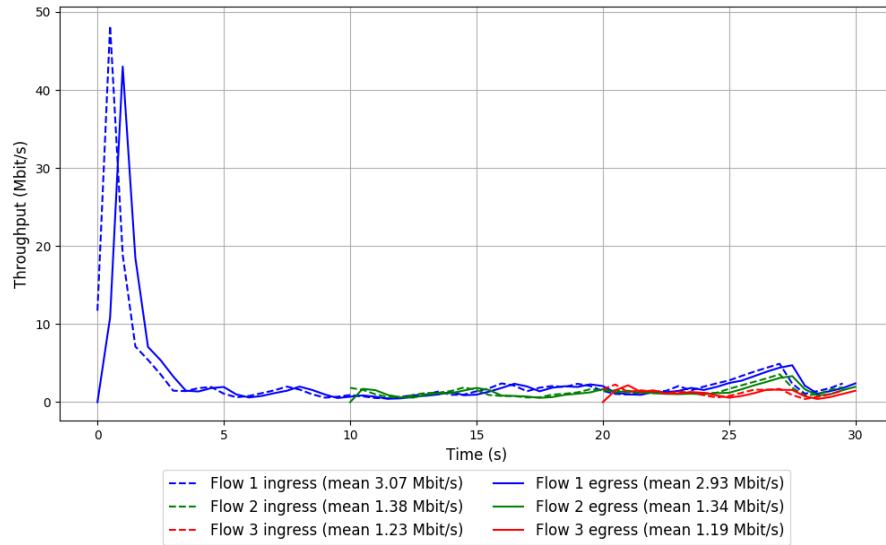


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-05 09:23:08
End at: 2019-02-05 09:23:38
Local clock offset: 0.938 ms
Remote clock offset: -4.591 ms

# Below is generated by plot.py at 2019-02-05 09:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 8.663 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 10.304 ms
Loss rate: 4.76%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.919 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 7.150 ms
Loss rate: 3.70%
```

Run 5: Report of TCP Cubic — Data Link

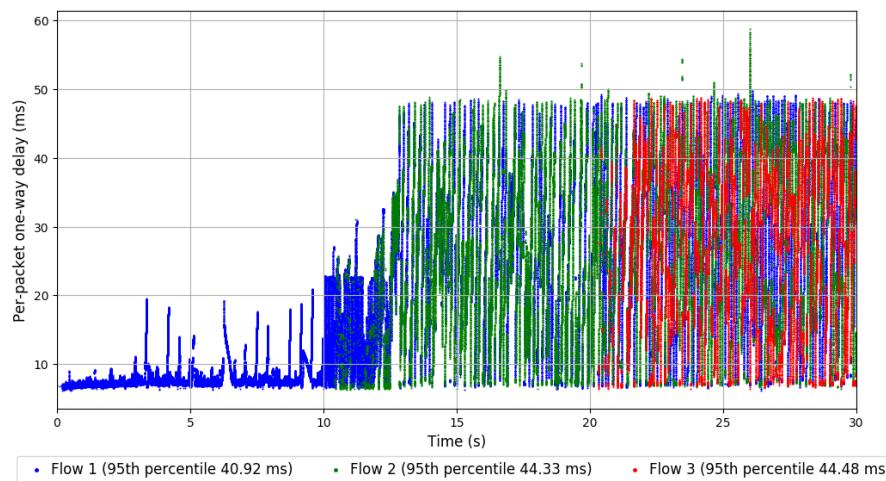
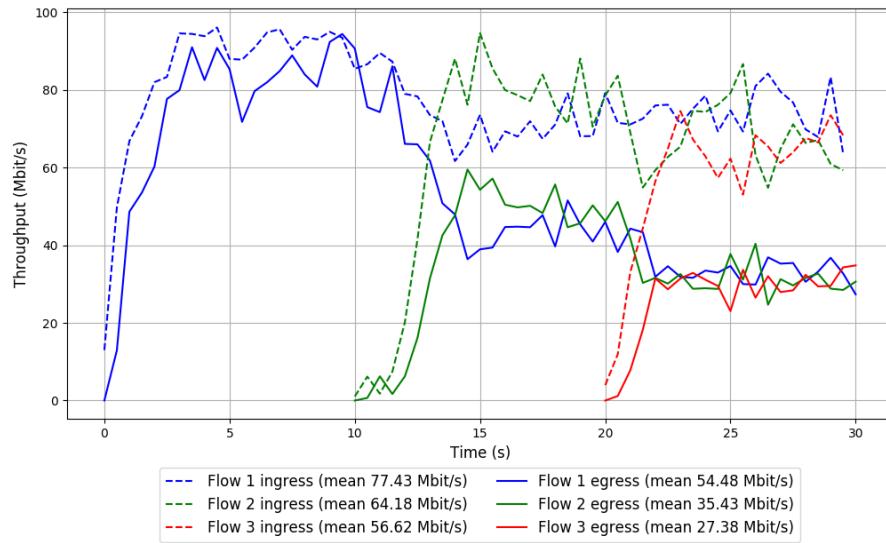


```
Run 1: Statistics of FillP

Start at: 2019-02-05 07:25:38
End at: 2019-02-05 07:26:08
Local clock offset: -1.344 ms
Remote clock offset: -7.893 ms

# Below is generated by plot.py at 2019-02-05 09:36:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 42.858 ms
Loss rate: 37.28%
-- Flow 1:
Average throughput: 54.48 Mbit/s
95th percentile per-packet one-way delay: 40.920 ms
Loss rate: 29.62%
-- Flow 2:
Average throughput: 35.43 Mbit/s
95th percentile per-packet one-way delay: 44.332 ms
Loss rate: 44.79%
-- Flow 3:
Average throughput: 27.38 Mbit/s
95th percentile per-packet one-way delay: 44.475 ms
Loss rate: 51.71%
```

## Run 1: Report of FillP — Data Link

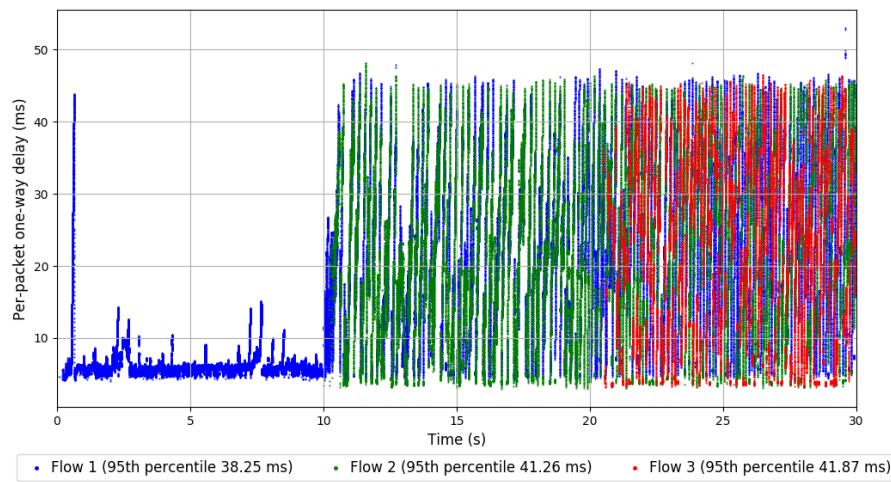
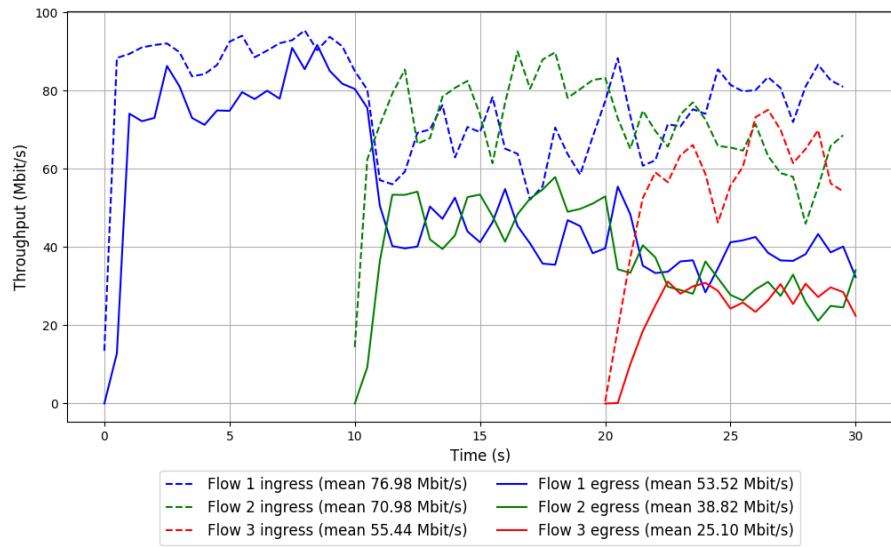


Run 2: Statistics of FillP

```
Start at: 2019-02-05 07:51:57
End at: 2019-02-05 07:52:27
Local clock offset: 1.55 ms
Remote clock offset: -7.529 ms

# Below is generated by plot.py at 2019-02-05 09:36:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 40.032 ms
Loss rate: 38.50%
-- Flow 1:
Average throughput: 53.52 Mbit/s
95th percentile per-packet one-way delay: 38.253 ms
Loss rate: 30.46%
-- Flow 2:
Average throughput: 38.82 Mbit/s
95th percentile per-packet one-way delay: 41.263 ms
Loss rate: 45.23%
-- Flow 3:
Average throughput: 25.10 Mbit/s
95th percentile per-packet one-way delay: 41.869 ms
Loss rate: 54.86%
```

## Run 2: Report of FillP — Data Link

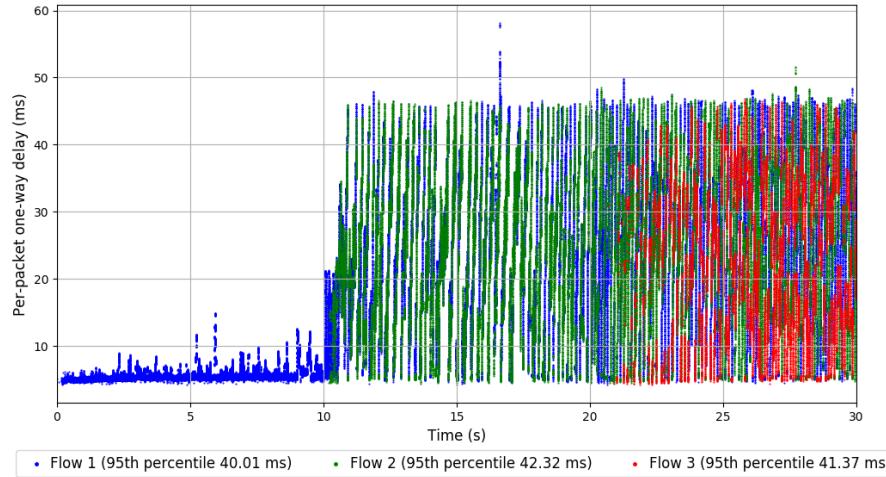
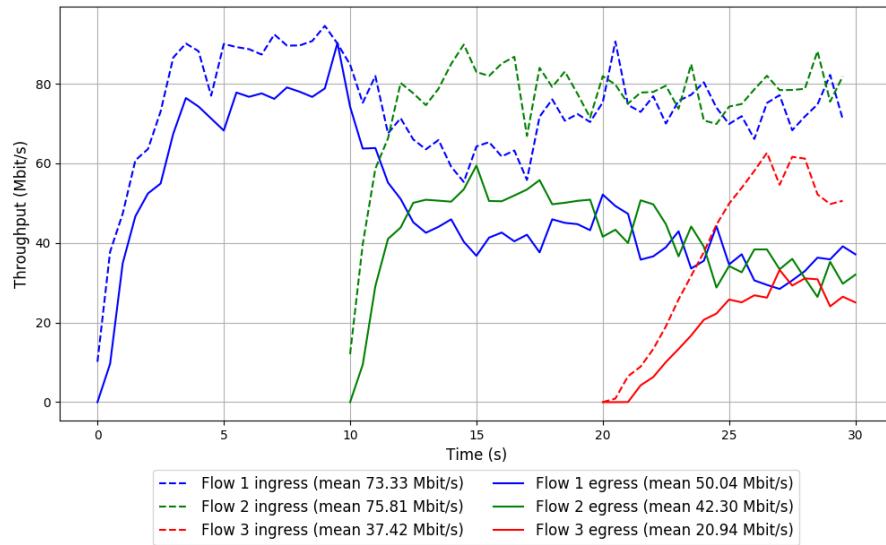


Run 3: Statistics of FillP

```
Start at: 2019-02-05 08:18:51
End at: 2019-02-05 08:19:21
Local clock offset: 0.421 ms
Remote clock offset: -6.265 ms

# Below is generated by plot.py at 2019-02-05 09:36:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 41.197 ms
Loss rate: 37.67%
-- Flow 1:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 40.007 ms
Loss rate: 31.70%
-- Flow 2:
Average throughput: 42.30 Mbit/s
95th percentile per-packet one-way delay: 42.323 ms
Loss rate: 44.18%
-- Flow 3:
Average throughput: 20.94 Mbit/s
95th percentile per-packet one-way delay: 41.373 ms
Loss rate: 46.47%
```

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

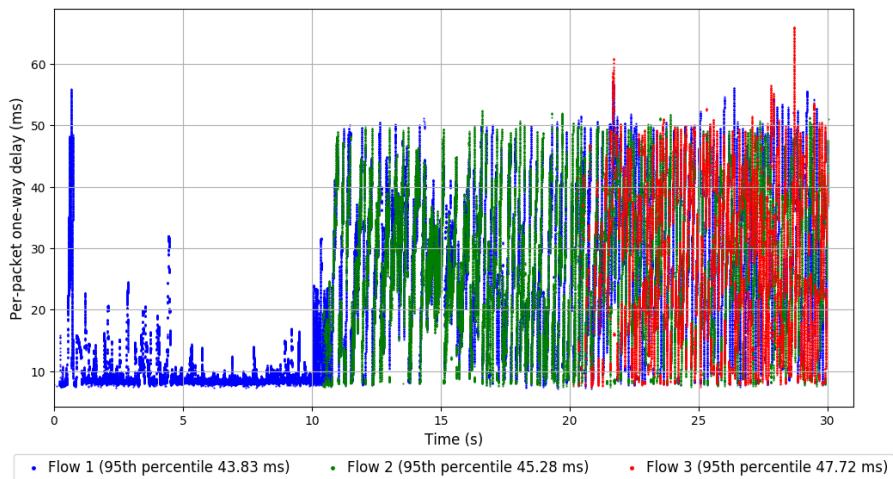
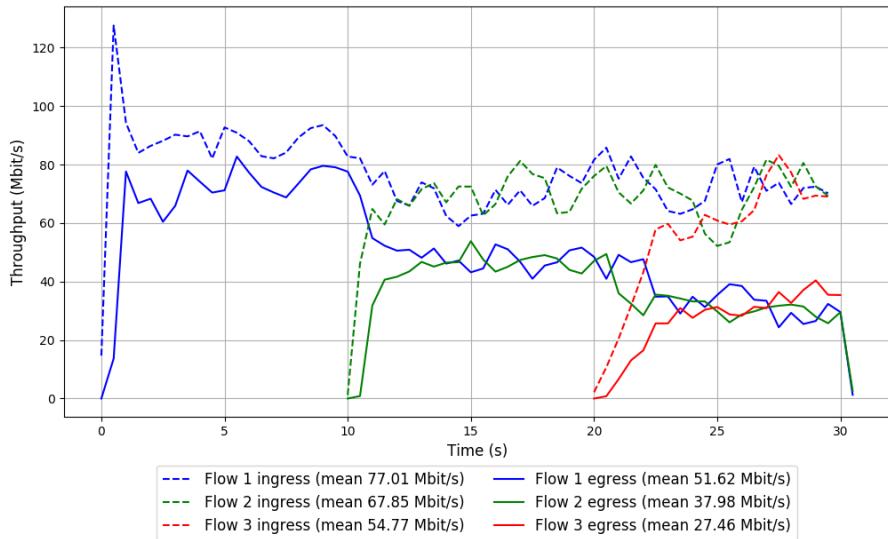


Run 4: Statistics of FillP

```
Start at: 2019-02-05 08:45:11
End at: 2019-02-05 08:45:41
Local clock offset: -1.018 ms
Remote clock offset: -4.93 ms

# Below is generated by plot.py at 2019-02-05 09:37:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.73 Mbit/s
95th percentile per-packet one-way delay: 45.008 ms
Loss rate: 38.81%
-- Flow 1:
Average throughput: 51.62 Mbit/s
95th percentile per-packet one-way delay: 43.828 ms
Loss rate: 32.89%
-- Flow 2:
Average throughput: 37.98 Mbit/s
95th percentile per-packet one-way delay: 45.280 ms
Loss rate: 44.49%
-- Flow 3:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 47.719 ms
Loss rate: 49.83%
```

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

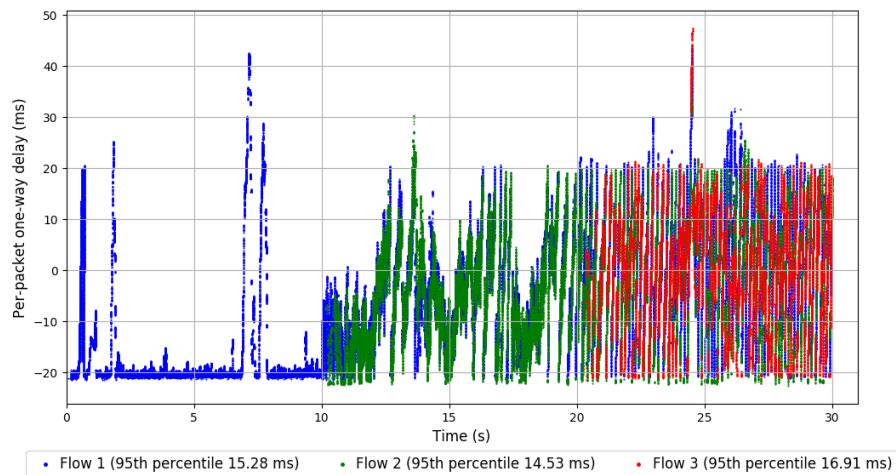
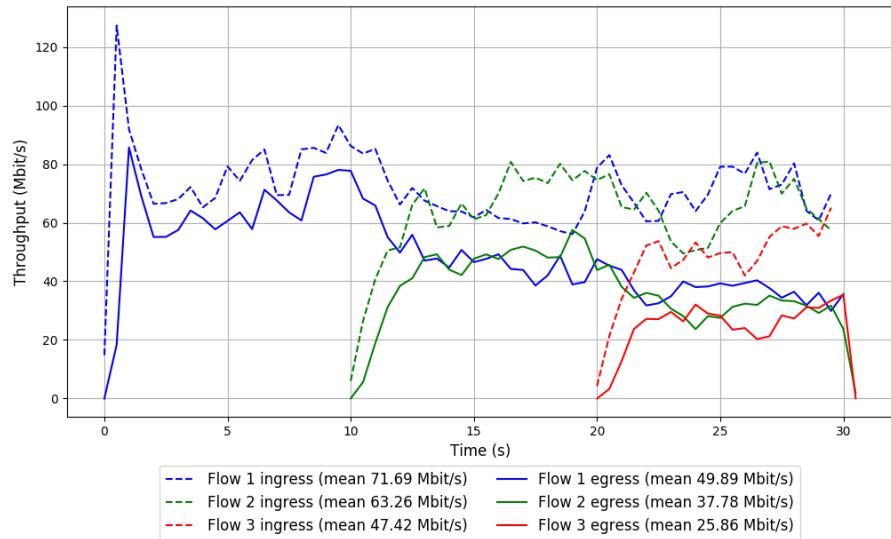


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-05 09:11:39
End at: 2019-02-05 09:12:09
Local clock offset: 1.553 ms
Remote clock offset: -30.796 ms

# Below is generated by plot.py at 2019-02-05 09:37:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.60 Mbit/s
95th percentile per-packet one-way delay: 15.320 ms
Loss rate: 35.37%
-- Flow 1:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 15.276 ms
Loss rate: 30.35%
-- Flow 2:
Average throughput: 37.78 Mbit/s
95th percentile per-packet one-way delay: 14.534 ms
Loss rate: 40.17%
-- Flow 3:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 16.906 ms
Loss rate: 45.35%
```

## Run 5: Report of FillP — Data Link

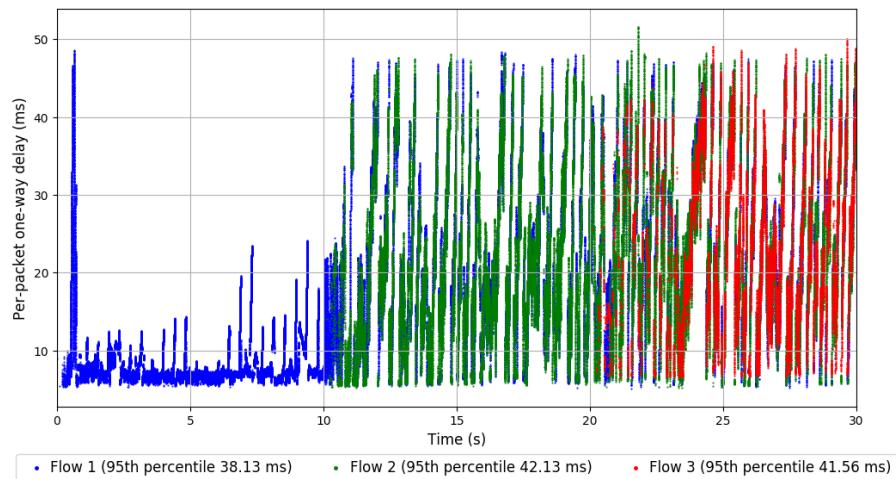
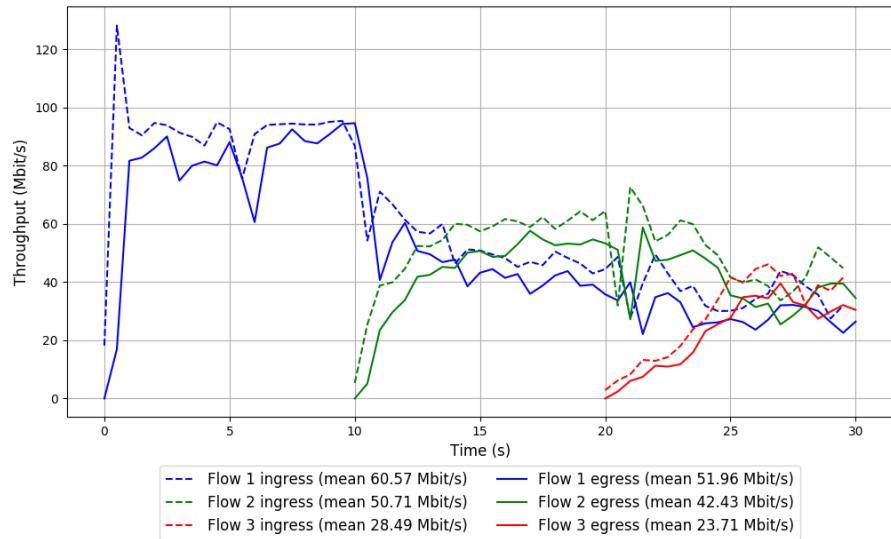


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-05 07:31:45
End at: 2019-02-05 07:32:15
Local clock offset: -0.687 ms
Remote clock offset: -8.253 ms

# Below is generated by plot.py at 2019-02-05 09:37:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.03 Mbit/s
95th percentile per-packet one-way delay: 40.282 ms
Loss rate: 15.19%
-- Flow 1:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 38.128 ms
Loss rate: 14.25%
-- Flow 2:
Average throughput: 42.43 Mbit/s
95th percentile per-packet one-way delay: 42.129 ms
Loss rate: 16.35%
-- Flow 3:
Average throughput: 23.71 Mbit/s
95th percentile per-packet one-way delay: 41.556 ms
Loss rate: 17.03%
```

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

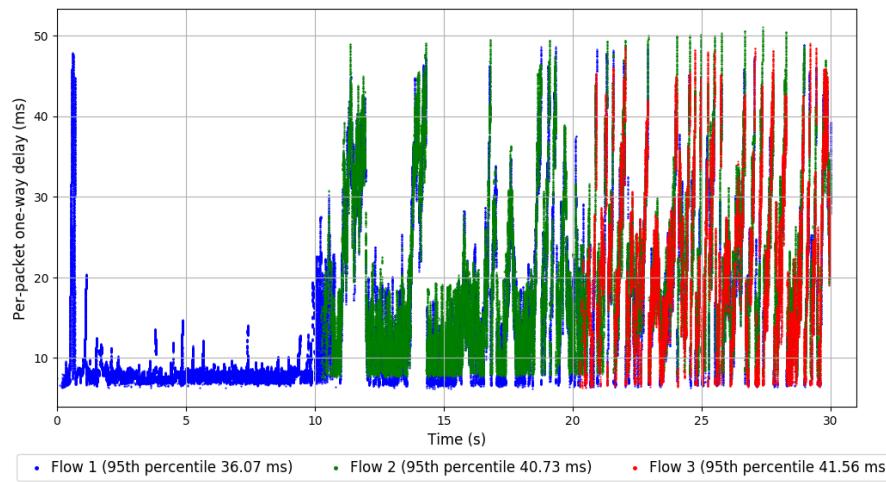
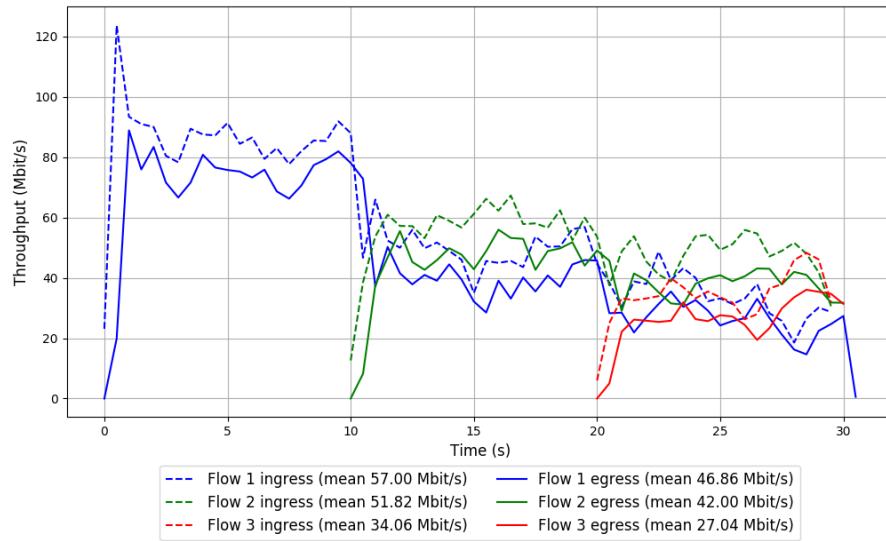


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-05 07:58:39
End at: 2019-02-05 07:59:09
Local clock offset: -0.212 ms
Remote clock offset: -5.839 ms

# Below is generated by plot.py at 2019-02-05 09:37:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.78 Mbit/s
95th percentile per-packet one-way delay: 39.050 ms
Loss rate: 18.39%
-- Flow 1:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 36.069 ms
Loss rate: 17.69%
-- Flow 2:
Average throughput: 42.00 Mbit/s
95th percentile per-packet one-way delay: 40.733 ms
Loss rate: 18.84%
-- Flow 3:
Average throughput: 27.04 Mbit/s
95th percentile per-packet one-way delay: 41.560 ms
Loss rate: 20.51%
```

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

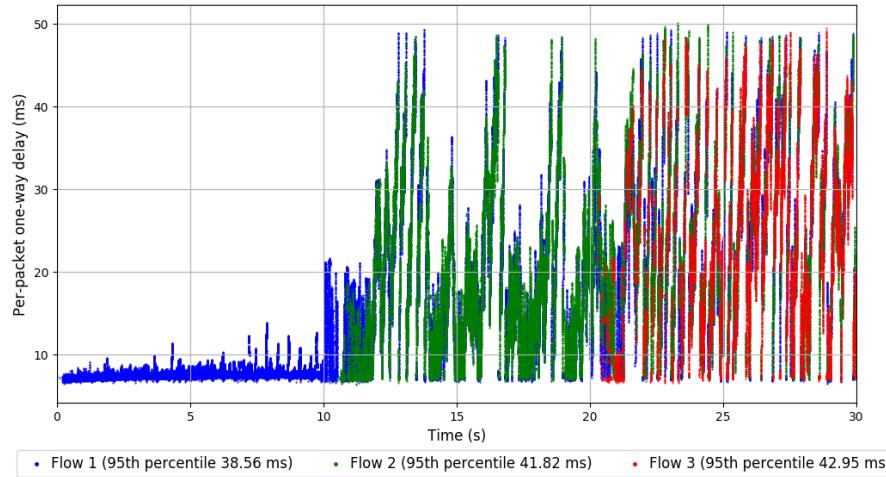
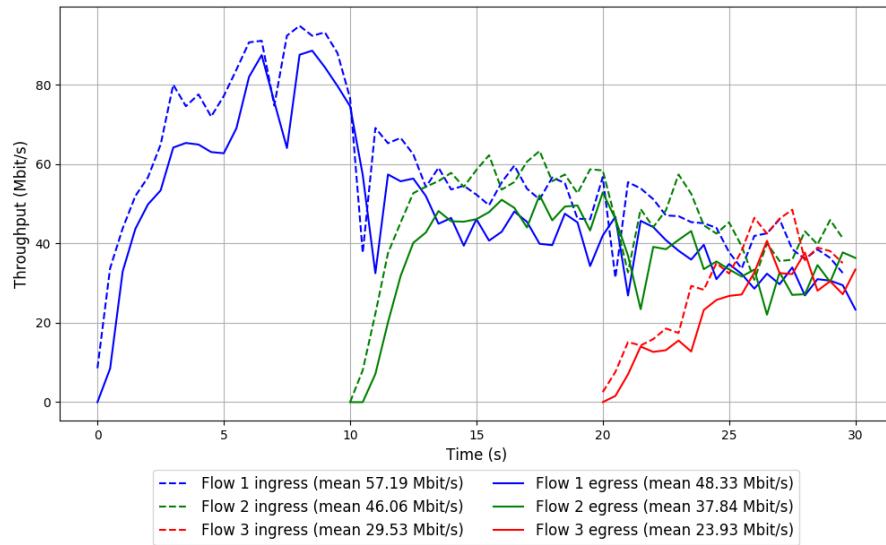


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-05 08:25:06
End at: 2019-02-05 08:25:36
Local clock offset: -0.619 ms
Remote clock offset: -4.687 ms

# Below is generated by plot.py at 2019-02-05 09:37:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.19 Mbit/s
95th percentile per-packet one-way delay: 40.443 ms
Loss rate: 16.82%
-- Flow 1:
Average throughput: 48.33 Mbit/s
95th percentile per-packet one-way delay: 38.557 ms
Loss rate: 15.48%
-- Flow 2:
Average throughput: 37.84 Mbit/s
95th percentile per-packet one-way delay: 41.824 ms
Loss rate: 18.63%
-- Flow 3:
Average throughput: 23.93 Mbit/s
95th percentile per-packet one-way delay: 42.946 ms
Loss rate: 19.05%
```

Run 3: Report of FillP-Sheep — Data Link

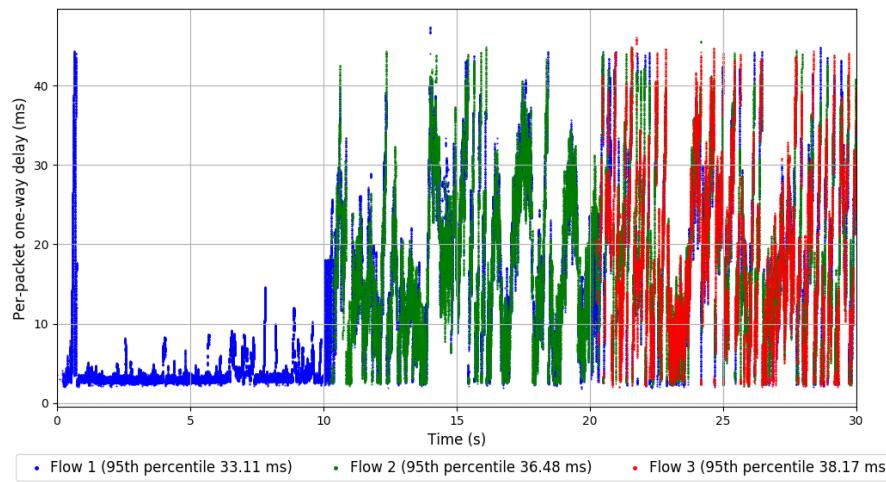
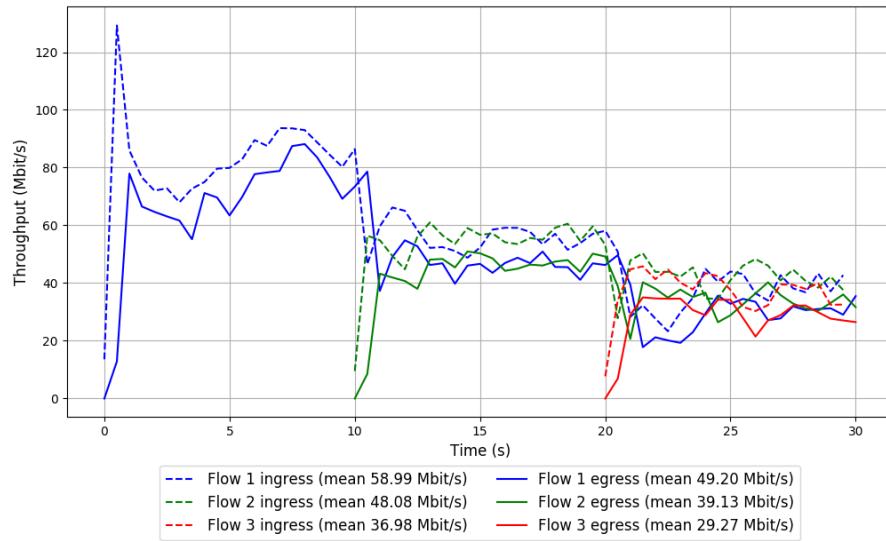


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-05 08:51:31
End at: 2019-02-05 08:52:01
Local clock offset: 2.712 ms
Remote clock offset: -5.406 ms

# Below is generated by plot.py at 2019-02-05 09:38:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 35.327 ms
Loss rate: 17.63%
-- Flow 1:
Average throughput: 49.20 Mbit/s
95th percentile per-packet one-way delay: 33.113 ms
Loss rate: 16.52%
-- Flow 2:
Average throughput: 39.13 Mbit/s
95th percentile per-packet one-way delay: 36.477 ms
Loss rate: 18.49%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 38.166 ms
Loss rate: 20.72%
```

Run 4: Report of FillP-Sheep — Data Link

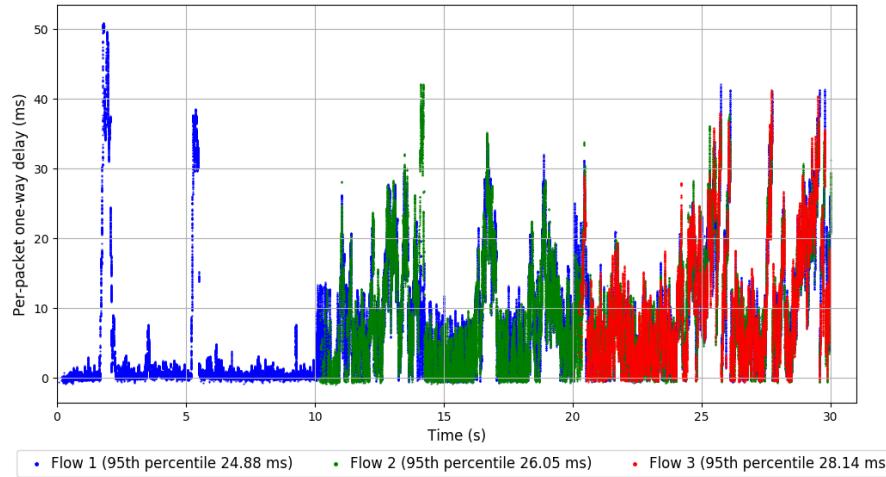
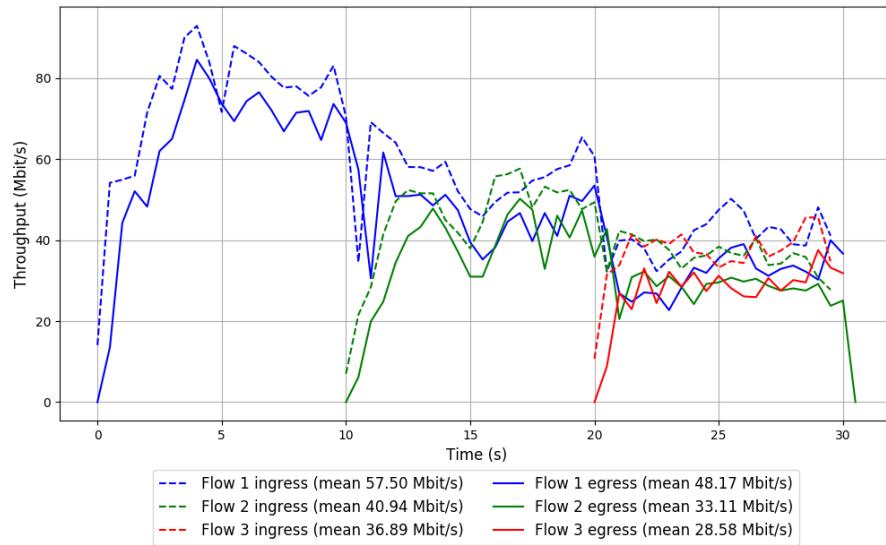


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-05 09:17:54
End at: 2019-02-05 09:18:24
Local clock offset: 1.977 ms
Remote clock offset: -8.346 ms

# Below is generated by plot.py at 2019-02-05 09:38:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.68 Mbit/s
95th percentile per-packet one-way delay: 25.836 ms
Loss rate: 17.74%
-- Flow 1:
Average throughput: 48.17 Mbit/s
95th percentile per-packet one-way delay: 24.882 ms
Loss rate: 16.16%
-- Flow 2:
Average throughput: 33.11 Mbit/s
95th percentile per-packet one-way delay: 26.045 ms
Loss rate: 19.00%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 28.136 ms
Loss rate: 22.40%
```

Run 5: Report of FillP-Sheep — Data Link

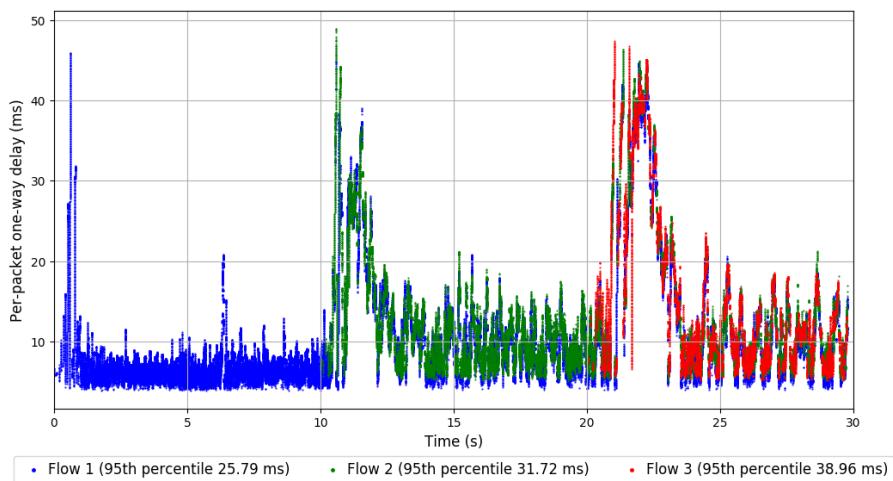
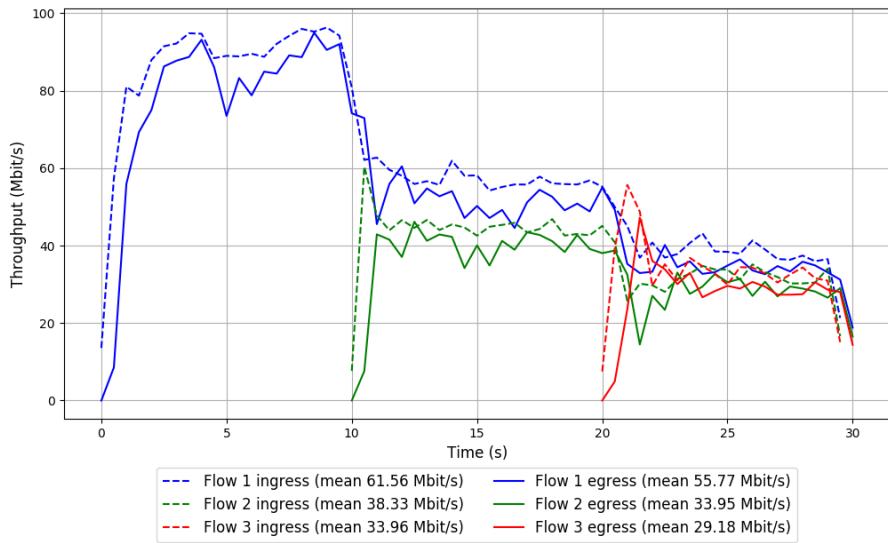


Run 1: Statistics of Indigo

```
Start at: 2019-02-05 07:45:28
End at: 2019-02-05 07:45:58
Local clock offset: 0.526 ms
Remote clock offset: -7.823 ms

# Below is generated by plot.py at 2019-02-05 09:38:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.80 Mbit/s
95th percentile per-packet one-way delay: 29.829 ms
Loss rate: 10.42%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 25.790 ms
Loss rate: 9.39%
-- Flow 2:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 31.721 ms
Loss rate: 11.37%
-- Flow 3:
Average throughput: 29.18 Mbit/s
95th percentile per-packet one-way delay: 38.958 ms
Loss rate: 14.01%
```

## Run 1: Report of Indigo — Data Link

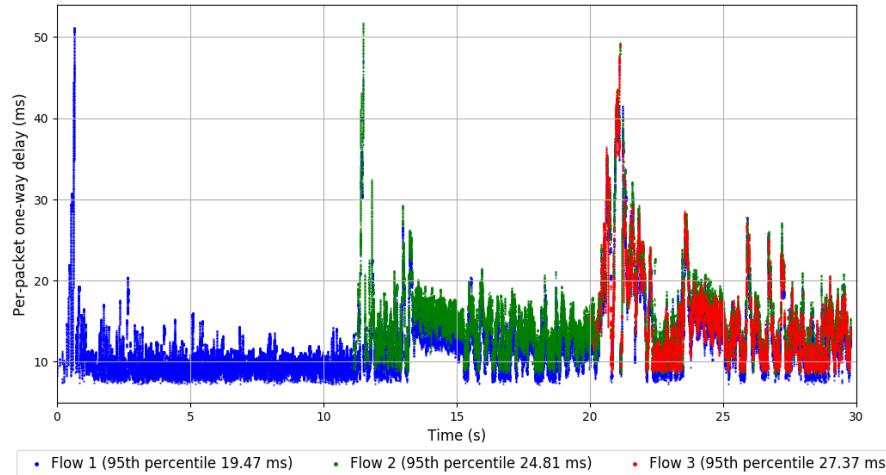
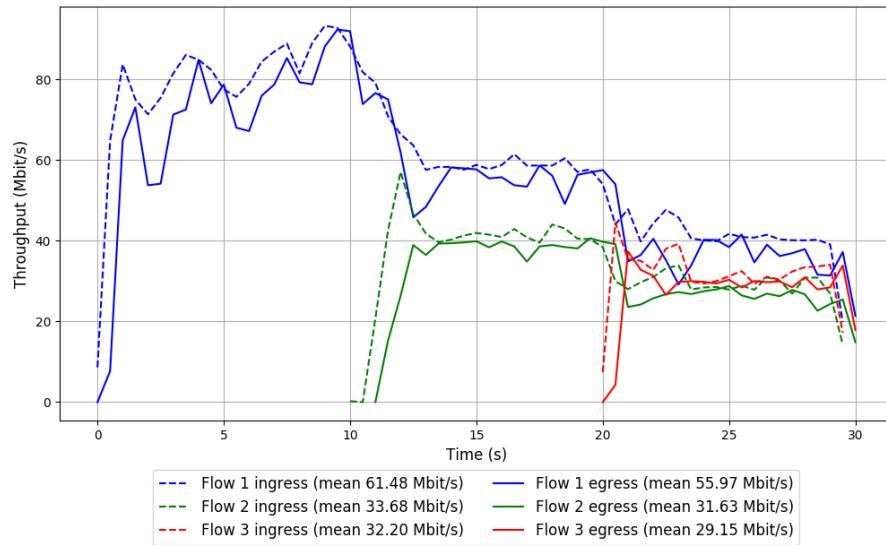


Run 2: Statistics of Indigo

```
Start at: 2019-02-05 08:12:28
End at: 2019-02-05 08:12:58
Local clock offset: -1.754 ms
Remote clock offset: -5.963 ms

# Below is generated by plot.py at 2019-02-05 09:38:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.41 Mbit/s
95th percentile per-packet one-way delay: 22.607 ms
Loss rate: 9.46%
-- Flow 1:
Average throughput: 55.97 Mbit/s
95th percentile per-packet one-way delay: 19.469 ms
Loss rate: 8.95%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 24.812 ms
Loss rate: 10.84%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 27.368 ms
Loss rate: 9.50%
```

## Run 2: Report of Indigo — Data Link

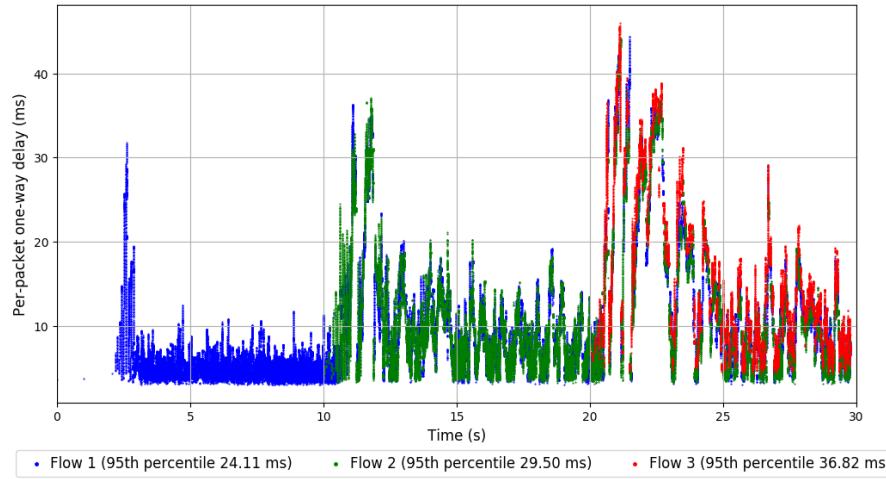
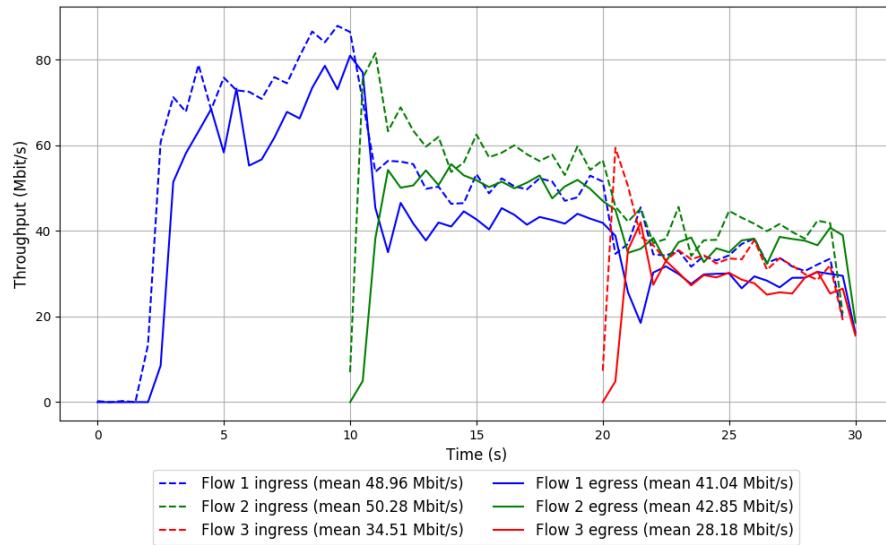


Run 3: Statistics of Indigo

```
Start at: 2019-02-05 08:38:30
End at: 2019-02-05 08:39:00
Local clock offset: 1.547 ms
Remote clock offset: -5.81 ms

# Below is generated by plot.py at 2019-02-05 09:38:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.64 Mbit/s
95th percentile per-packet one-way delay: 29.675 ms
Loss rate: 15.93%
-- Flow 1:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 24.107 ms
Loss rate: 16.17%
-- Flow 2:
Average throughput: 42.85 Mbit/s
95th percentile per-packet one-way delay: 29.500 ms
Loss rate: 14.75%
-- Flow 3:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 36.816 ms
Loss rate: 18.33%
```

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

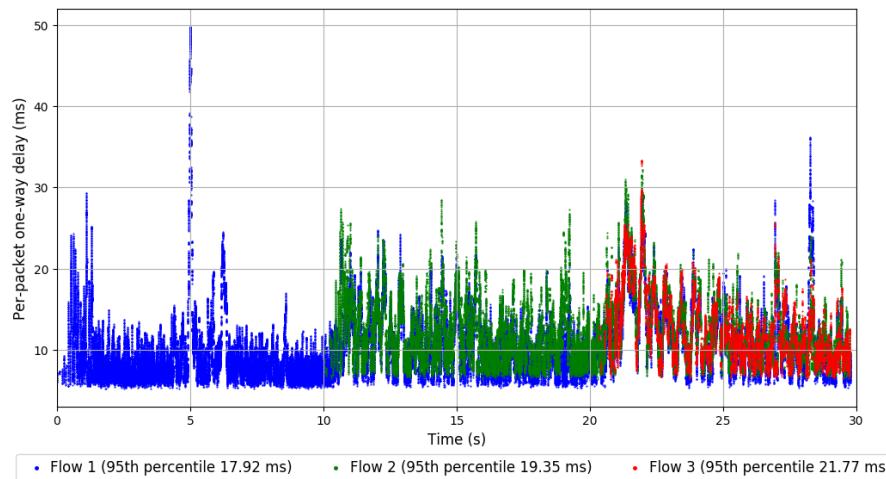
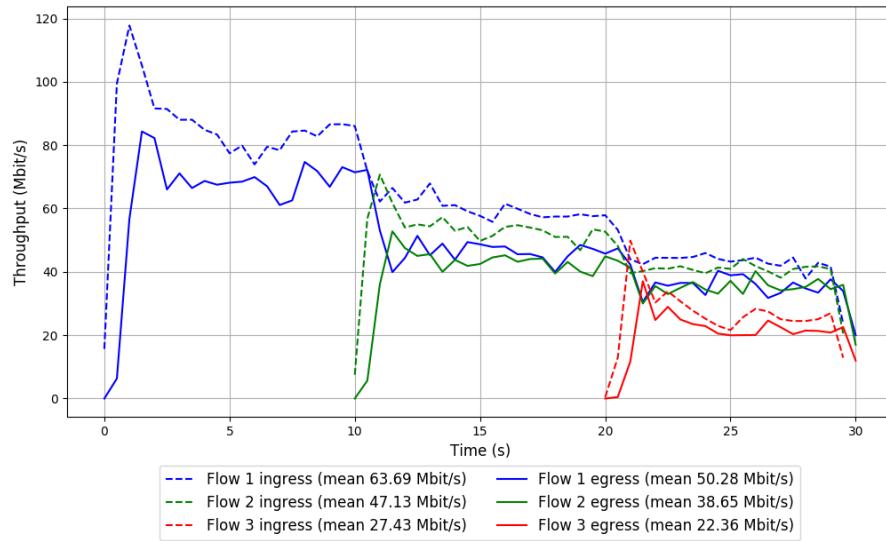


Run 4: Statistics of Indigo

```
Start at: 2019-02-05 09:04:59
End at: 2019-02-05 09:05:29
Local clock offset: 0.941 ms
Remote clock offset: -3.738 ms

# Below is generated by plot.py at 2019-02-05 09:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 18.916 ms
Loss rate: 19.92%
-- Flow 1:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 17.916 ms
Loss rate: 21.06%
-- Flow 2:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 19.354 ms
Loss rate: 18.00%
-- Flow 3:
Average throughput: 22.36 Mbit/s
95th percentile per-packet one-way delay: 21.775 ms
Loss rate: 18.52%
```

## Run 4: Report of Indigo — Data Link

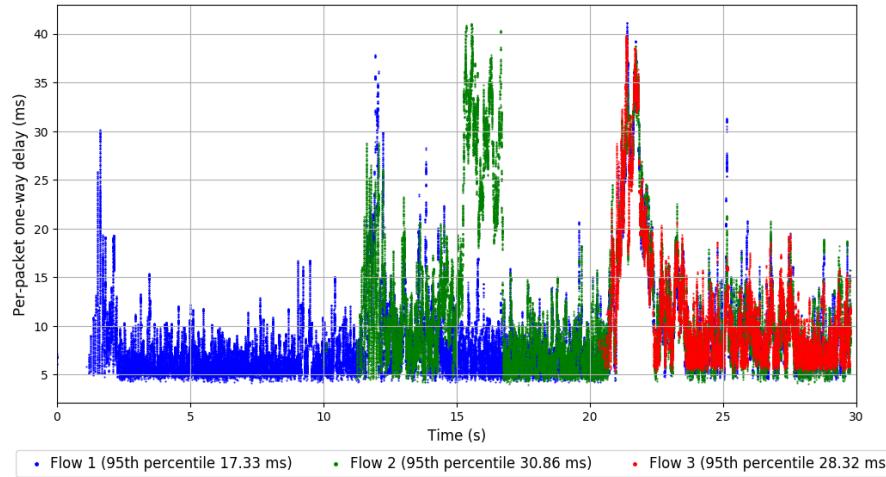
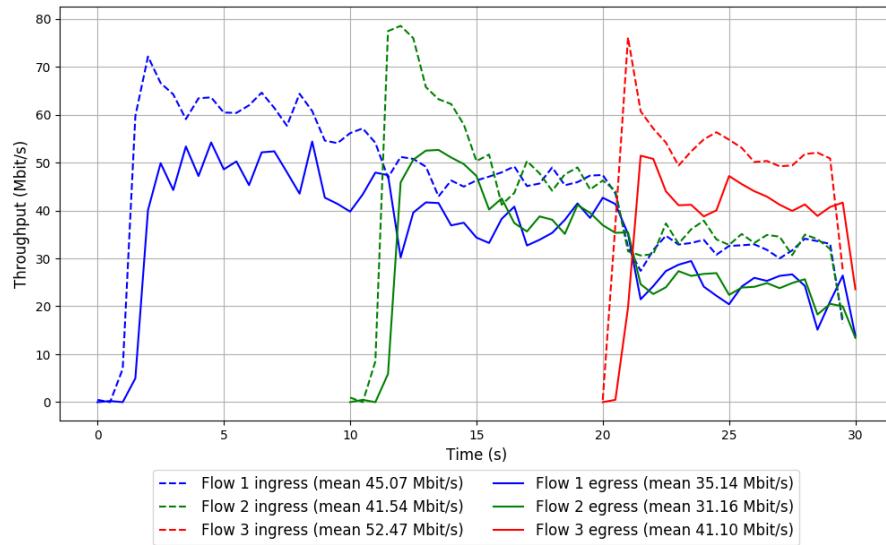


Run 5: Statistics of Indigo

```
Start at: 2019-02-05 09:31:45
End at: 2019-02-05 09:32:15
Local clock offset: 0.891 ms
Remote clock offset: -4.122 ms

# Below is generated by plot.py at 2019-02-05 09:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.80 Mbit/s
95th percentile per-packet one-way delay: 25.754 ms
Loss rate: 22.85%
-- Flow 1:
Average throughput: 35.14 Mbit/s
95th percentile per-packet one-way delay: 17.331 ms
Loss rate: 22.02%
-- Flow 2:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 30.860 ms
Loss rate: 24.94%
-- Flow 3:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 28.321 ms
Loss rate: 21.61%
```

## Run 5: Report of Indigo — Data Link

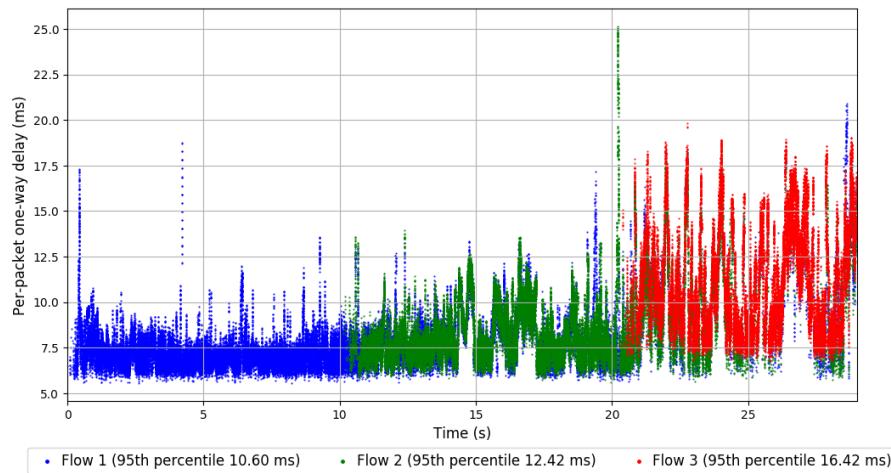
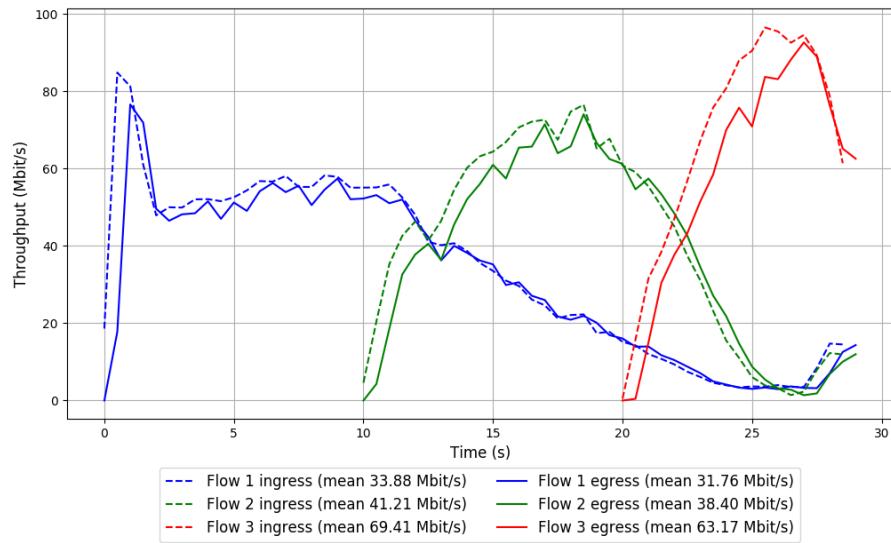


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-02-05 07:35:24
End at: 2019-02-05 07:35:54
Local clock offset: -0.665 ms
Remote clock offset: -7.664 ms

# Below is generated by plot.py at 2019-02-05 09:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 14.471 ms
Loss rate: 7.10%
-- Flow 1:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 10.602 ms
Loss rate: 6.25%
-- Flow 2:
Average throughput: 38.40 Mbit/s
95th percentile per-packet one-way delay: 12.416 ms
Loss rate: 6.78%
-- Flow 3:
Average throughput: 63.17 Mbit/s
95th percentile per-packet one-way delay: 16.423 ms
Loss rate: 8.89%
```

Run 1: Report of Indigo-MusesC3 — Data Link

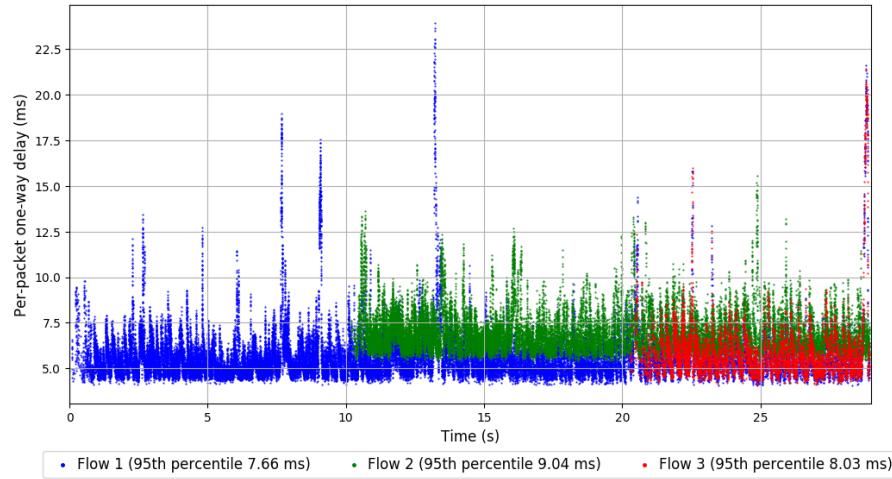
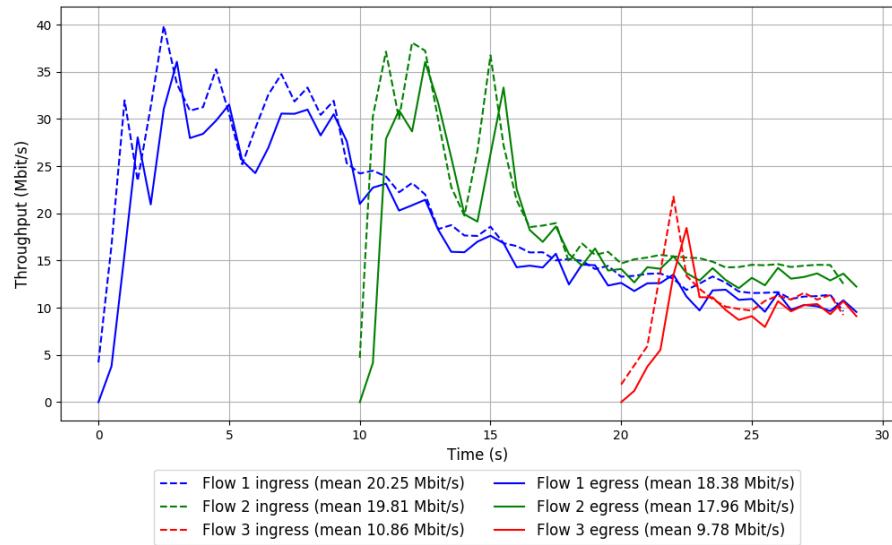


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 08:02:35
End at: 2019-02-05 08:03:05
Local clock offset: 1.594 ms
Remote clock offset: -6.036 ms

# Below is generated by plot.py at 2019-02-05 09:38:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 8.513 ms
Loss rate: 9.35%
-- Flow 1:
Average throughput: 18.38 Mbit/s
95th percentile per-packet one-way delay: 7.663 ms
Loss rate: 9.24%
-- Flow 2:
Average throughput: 17.96 Mbit/s
95th percentile per-packet one-way delay: 9.044 ms
Loss rate: 9.38%
-- Flow 3:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 8.028 ms
Loss rate: 9.95%
```

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

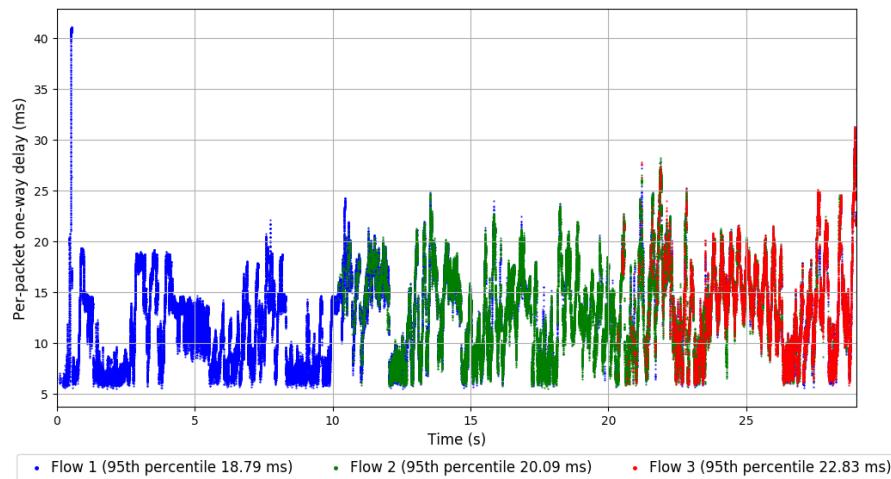
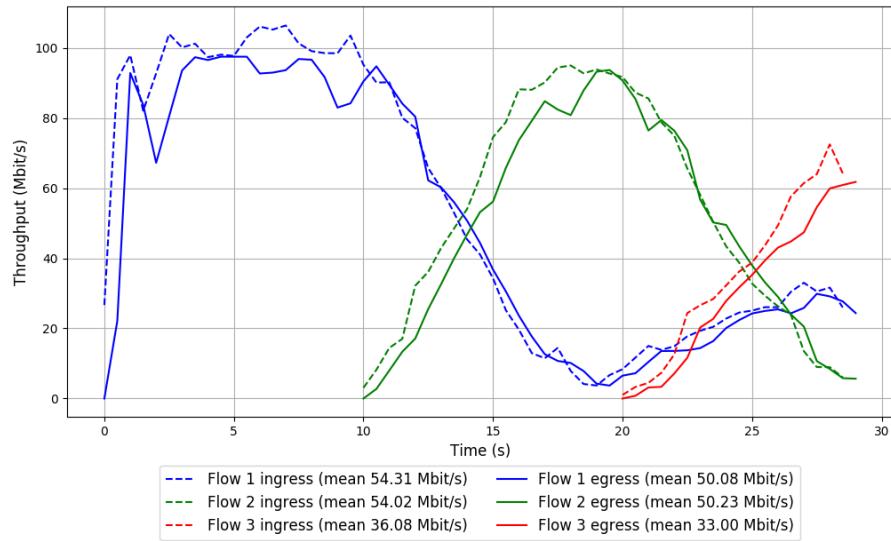


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 08:28:47
End at: 2019-02-05 08:29:17
Local clock offset: 0.509 ms
Remote clock offset: -4.522 ms

# Below is generated by plot.py at 2019-02-05 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 19.706 ms
Loss rate: 7.53%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 18.790 ms
Loss rate: 7.74%
-- Flow 2:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 20.086 ms
Loss rate: 6.95%
-- Flow 3:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 22.833 ms
Loss rate: 8.37%
```

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

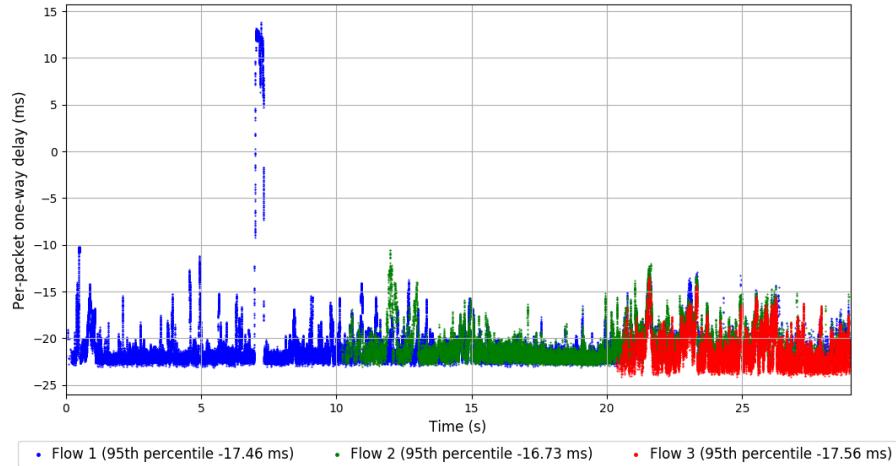
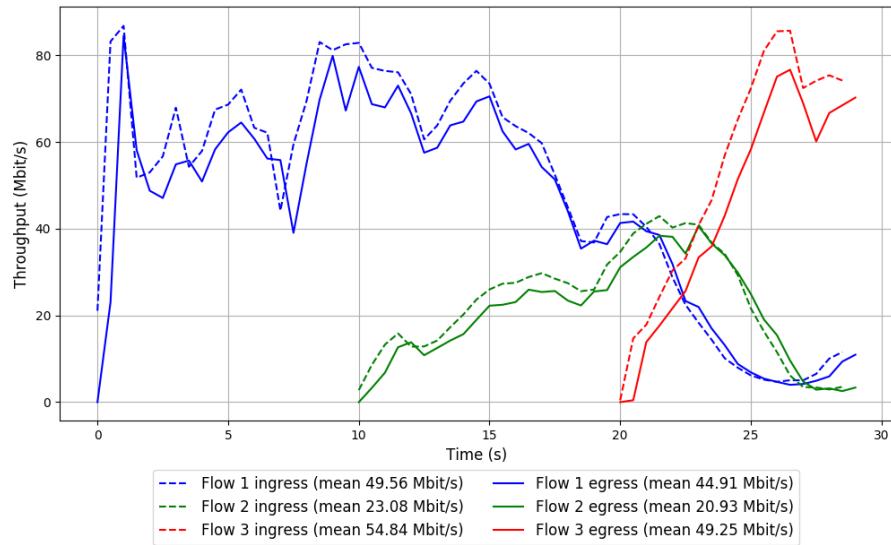


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 08:55:13
End at: 2019-02-05 08:55:43
Local clock offset: -1.008 ms
Remote clock offset: -35.281 ms

# Below is generated by plot.py at 2019-02-05 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.24 Mbit/s
95th percentile per-packet one-way delay: -17.317 ms
Loss rate: 9.54%
-- Flow 1:
Average throughput: 44.91 Mbit/s
95th percentile per-packet one-way delay: -17.464 ms
Loss rate: 9.39%
-- Flow 2:
Average throughput: 20.93 Mbit/s
95th percentile per-packet one-way delay: -16.734 ms
Loss rate: 9.33%
-- Flow 3:
Average throughput: 49.25 Mbit/s
95th percentile per-packet one-way delay: -17.560 ms
Loss rate: 10.17%
```

Run 4: Report of Indigo-MusesC3 — Data Link

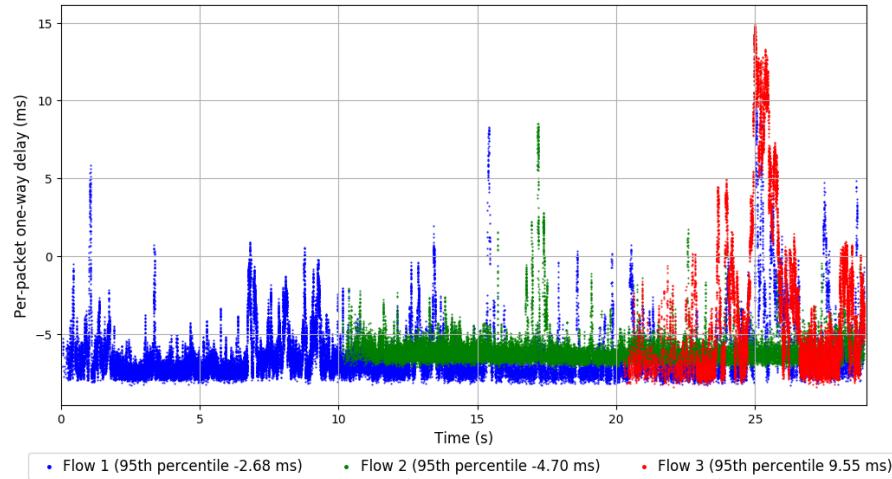
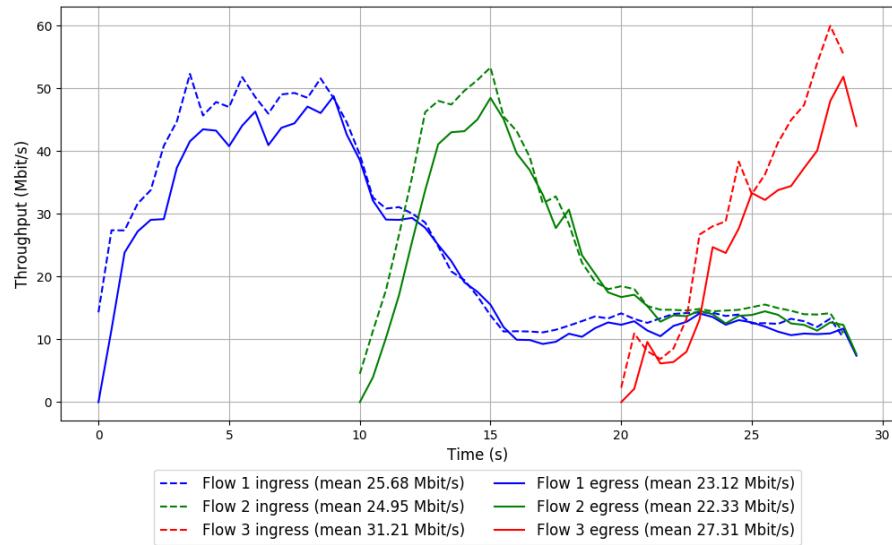


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 09:21:52
End at: 2019-02-05 09:22:22
Local clock offset: -1.473 ms
Remote clock offset: -19.196 ms

# Below is generated by plot.py at 2019-02-05 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.92 Mbit/s
95th percentile per-packet one-way delay: -0.875 ms
Loss rate: 10.58%
-- Flow 1:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: -2.682 ms
Loss rate: 9.95%
-- Flow 2:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: -4.698 ms
Loss rate: 10.48%
-- Flow 3:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 9.547 ms
Loss rate: 12.46%
```

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

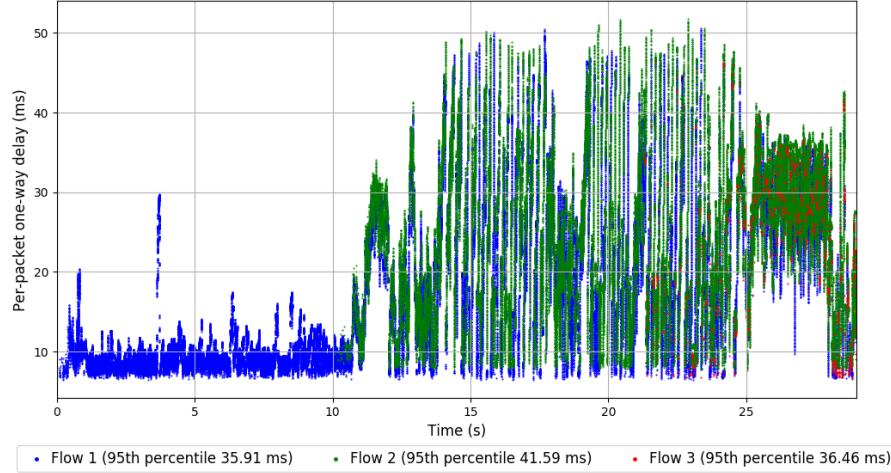
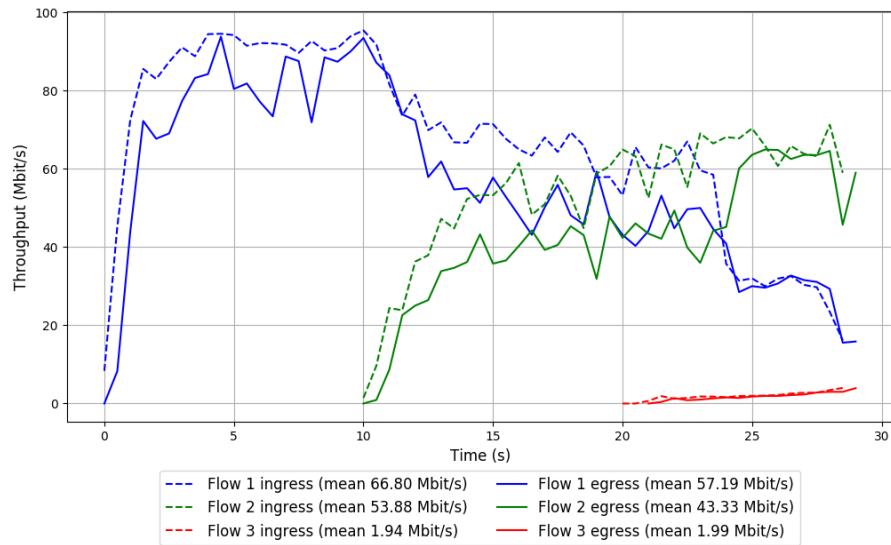


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-02-05 07:39:05
End at: 2019-02-05 07:39:35
Local clock offset: -1.936 ms
Remote clock offset: -7.867 ms

# Below is generated by plot.py at 2019-02-05 09:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.98 Mbit/s
95th percentile per-packet one-way delay: 38.768 ms
Loss rate: 16.13%
-- Flow 1:
Average throughput: 57.19 Mbit/s
95th percentile per-packet one-way delay: 35.914 ms
Loss rate: 14.36%
-- Flow 2:
Average throughput: 43.33 Mbit/s
95th percentile per-packet one-way delay: 41.595 ms
Loss rate: 19.59%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 36.464 ms
Loss rate: 9.50%
```

## Run 1: Report of Indigo-MusesC5 — Data Link

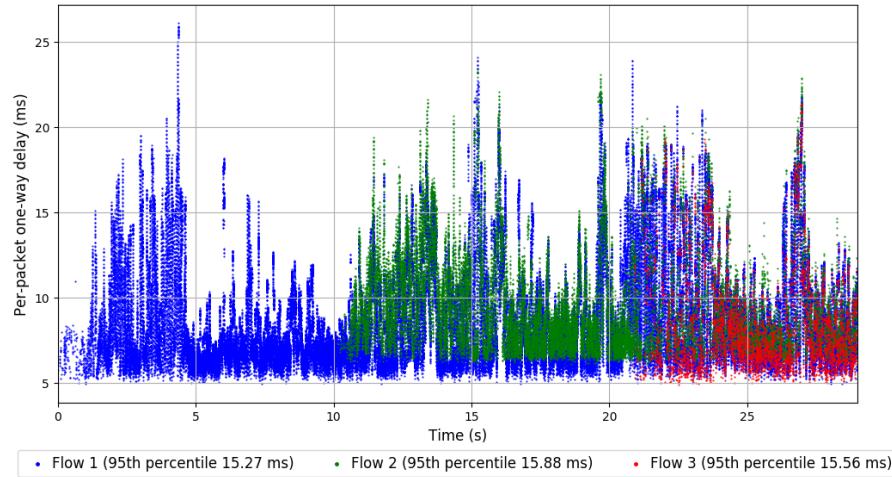
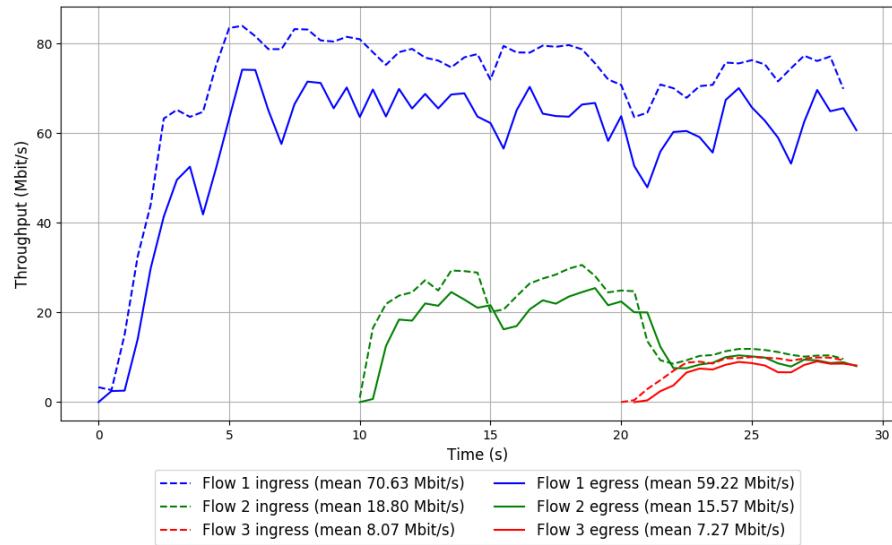


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 08:06:15
End at: 2019-02-05 08:06:45
Local clock offset: -0.026 ms
Remote clock offset: -6.789 ms

# Below is generated by plot.py at 2019-02-05 09:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.38 Mbit/s
95th percentile per-packet one-way delay: 15.367 ms
Loss rate: 16.27%
-- Flow 1:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 15.271 ms
Loss rate: 16.15%
-- Flow 2:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 15.882 ms
Loss rate: 17.19%
-- Flow 3:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 15.565 ms
Loss rate: 15.12%
```

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

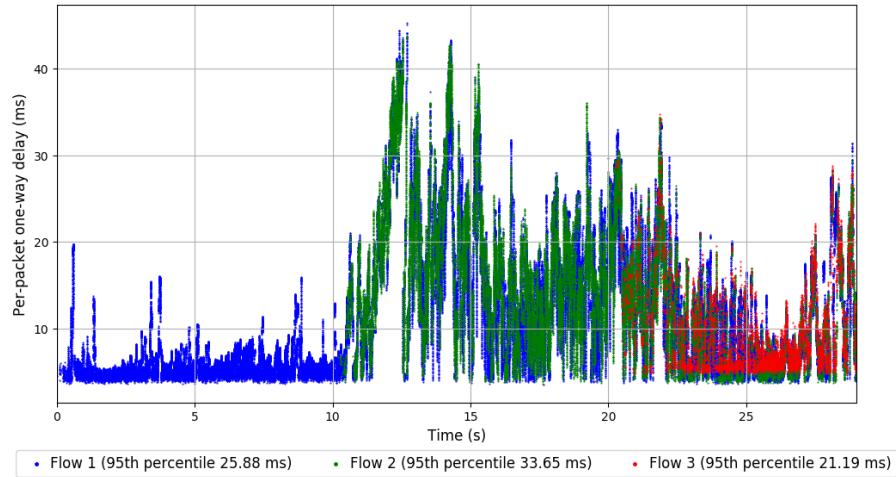
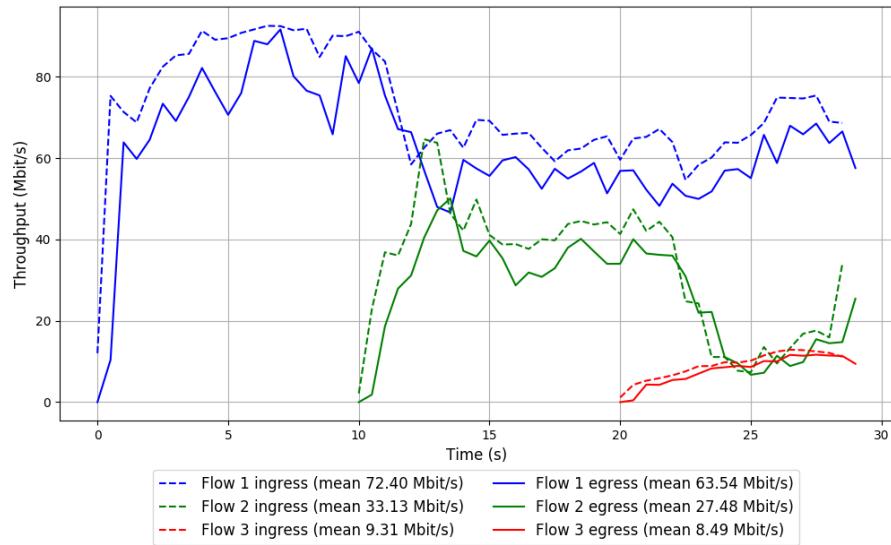


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 08:32:26
End at: 2019-02-05 08:32:56
Local clock offset: 1.785 ms
Remote clock offset: -5.135 ms

# Below is generated by plot.py at 2019-02-05 09:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.89 Mbit/s
95th percentile per-packet one-way delay: 27.610 ms
Loss rate: 13.21%
-- Flow 1:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 25.875 ms
Loss rate: 12.24%
-- Flow 2:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 33.650 ms
Loss rate: 17.05%
-- Flow 3:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 21.191 ms
Loss rate: 9.09%
```

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

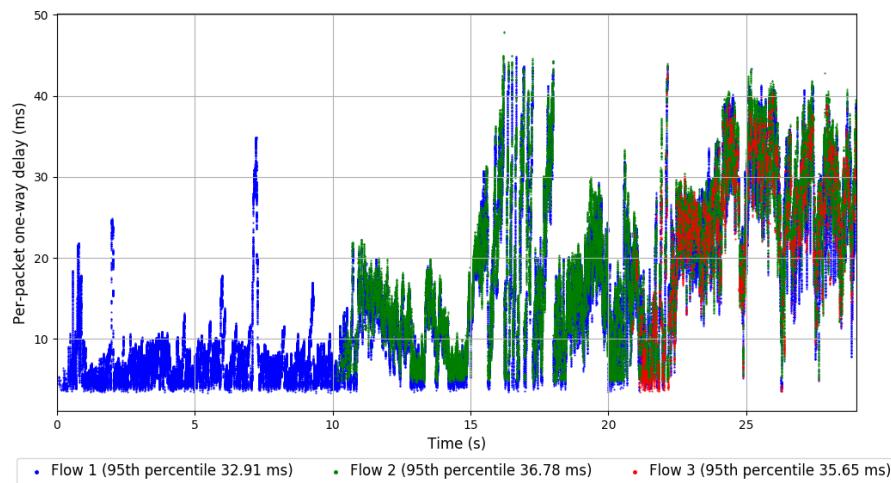
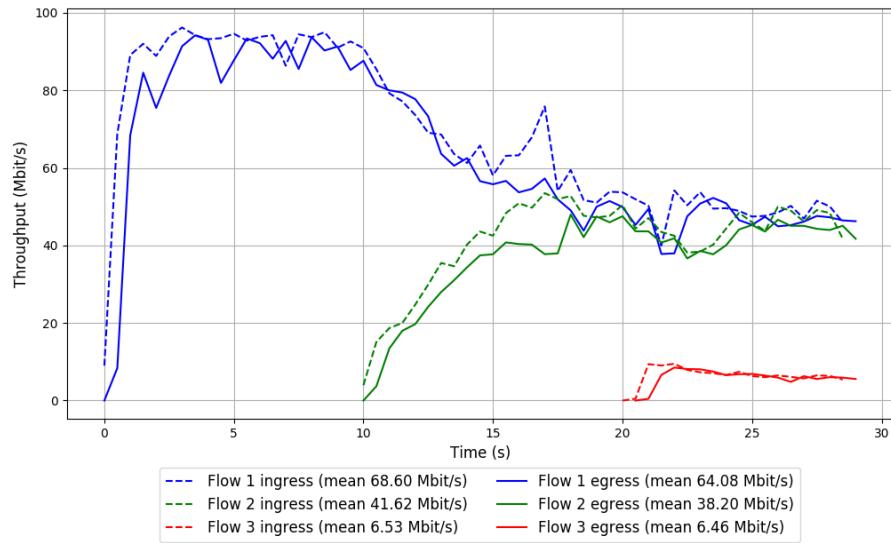


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 08:58:46
End at: 2019-02-05 08:59:16
Local clock offset: 1.04 ms
Remote clock offset: -5.668 ms

# Below is generated by plot.py at 2019-02-05 09:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.81 Mbit/s
95th percentile per-packet one-way delay: 34.596 ms
Loss rate: 6.92%
-- Flow 1:
Average throughput: 64.08 Mbit/s
95th percentile per-packet one-way delay: 32.907 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 36.776 ms
Loss rate: 8.05%
-- Flow 3:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 35.645 ms
Loss rate: 6.65%
```

Run 4: Report of Indigo-MusesC5 — Data Link

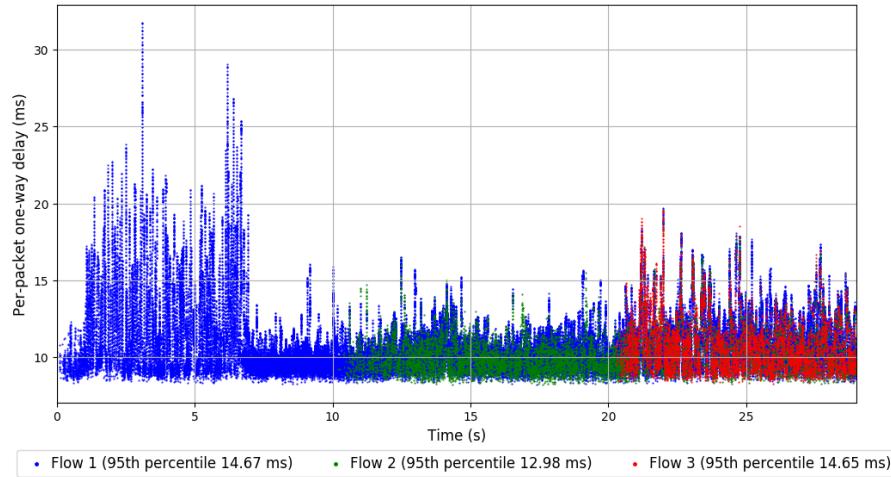
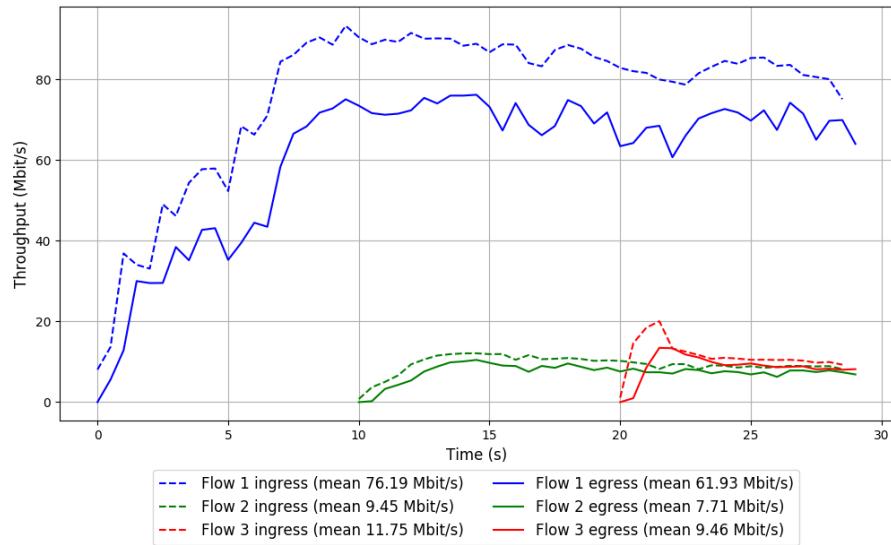


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 09:25:30
End at: 2019-02-05 09:26:00
Local clock offset: -0.338 ms
Remote clock offset: -1.346 ms

# Below is generated by plot.py at 2019-02-05 09:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.78 Mbit/s
95th percentile per-packet one-way delay: 14.554 ms
Loss rate: 18.73%
-- Flow 1:
Average throughput: 61.93 Mbit/s
95th percentile per-packet one-way delay: 14.670 ms
Loss rate: 18.72%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 12.983 ms
Loss rate: 18.39%
-- Flow 3:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 14.653 ms
Loss rate: 19.58%
```

Run 5: Report of Indigo-MusesC5 — Data Link

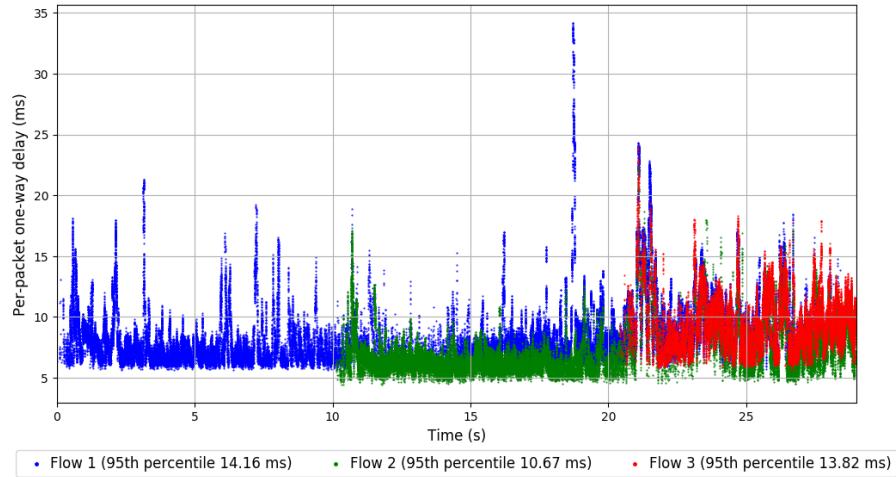
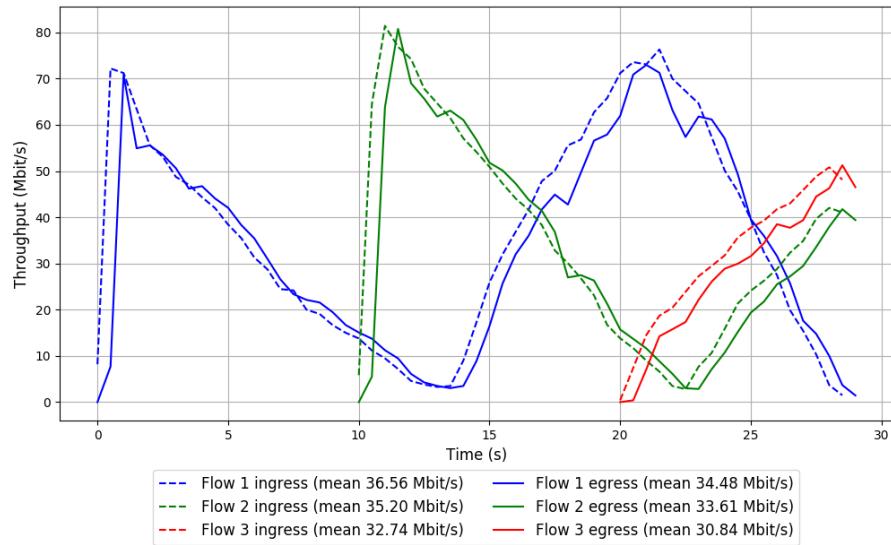


```
Run 1: Statistics of Indigo-MusesD
```

```
Start at: 2019-02-05 07:41:36
End at: 2019-02-05 07:42:06
Local clock offset: -0.642 ms
Remote clock offset: -8.508 ms

# Below is generated by plot.py at 2019-02-05 09:39:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.61 Mbit/s
95th percentile per-packet one-way delay: 13.127 ms
Loss rate: 5.31%
-- Flow 1:
Average throughput: 34.48 Mbit/s
95th percentile per-packet one-way delay: 14.158 ms
Loss rate: 5.68%
-- Flow 2:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 10.673 ms
Loss rate: 4.51%
-- Flow 3:
Average throughput: 30.84 Mbit/s
95th percentile per-packet one-way delay: 13.825 ms
Loss rate: 5.81%
```

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

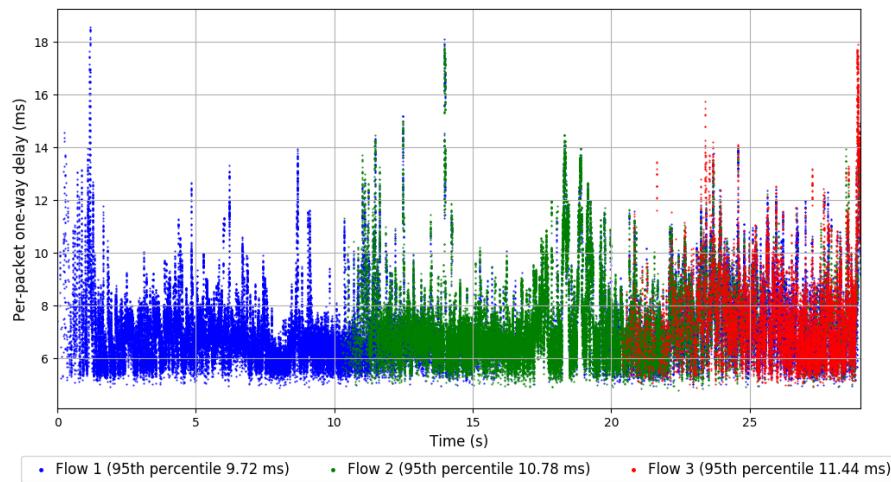
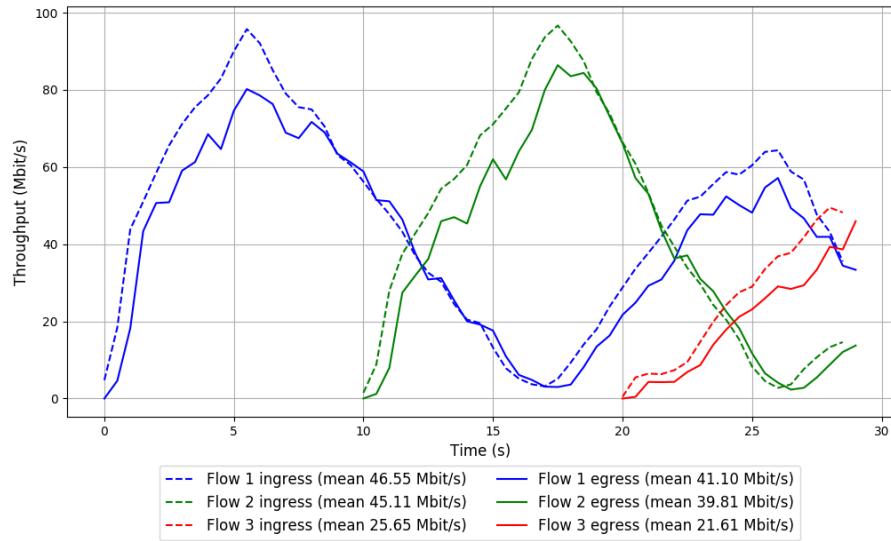


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 08:08:48
End at: 2019-02-05 08:09:18
Local clock offset: 0.12 ms
Remote clock offset: -6.606 ms

# Below is generated by plot.py at 2019-02-05 09:39:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 10.257 ms
Loss rate: 12.06%
-- Flow 1:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 9.723 ms
Loss rate: 11.68%
-- Flow 2:
Average throughput: 39.81 Mbit/s
95th percentile per-packet one-way delay: 10.776 ms
Loss rate: 11.72%
-- Flow 3:
Average throughput: 21.61 Mbit/s
95th percentile per-packet one-way delay: 11.435 ms
Loss rate: 15.70%
```

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

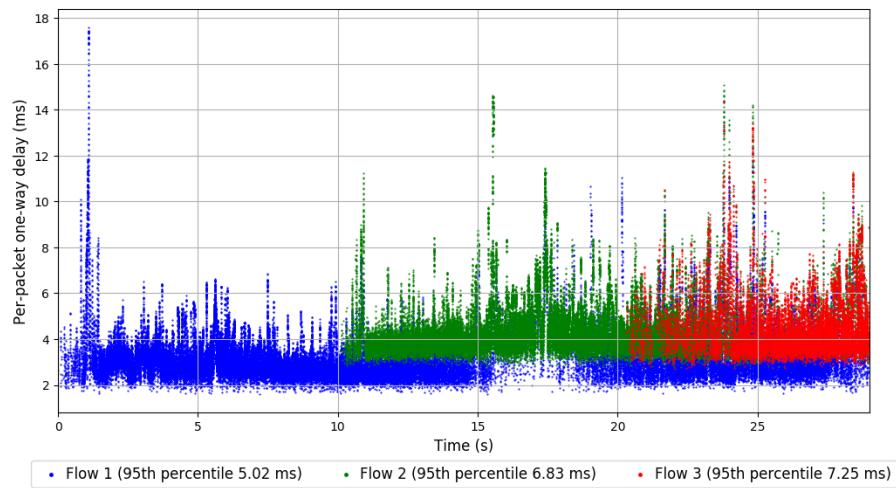
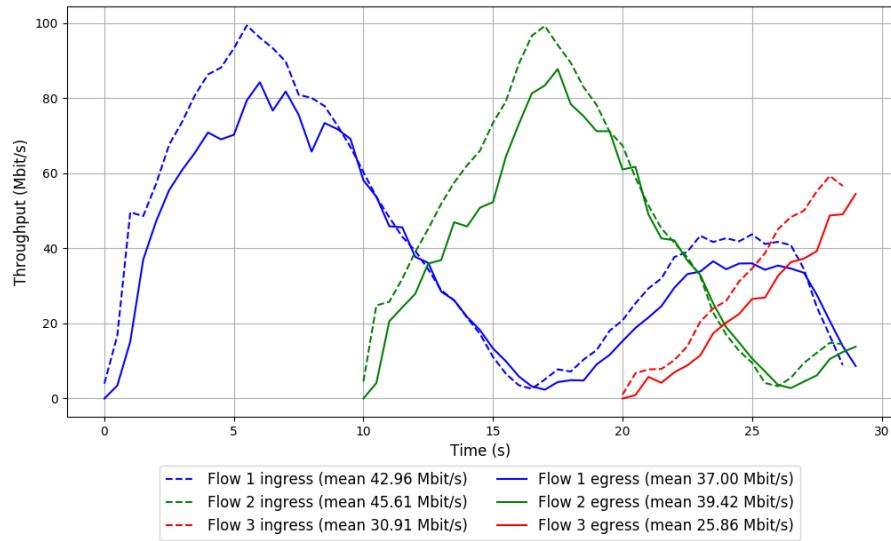


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 08:34:55
End at: 2019-02-05 08:35:25
Local clock offset: 2.239 ms
Remote clock offset: -6.527 ms

# Below is generated by plot.py at 2019-02-05 09:40:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.47 Mbit/s
95th percentile per-packet one-way delay: 6.233 ms
Loss rate: 14.03%
-- Flow 1:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 5.019 ms
Loss rate: 13.85%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 6.826 ms
Loss rate: 13.57%
-- Flow 3:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 7.252 ms
Loss rate: 16.30%
```

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

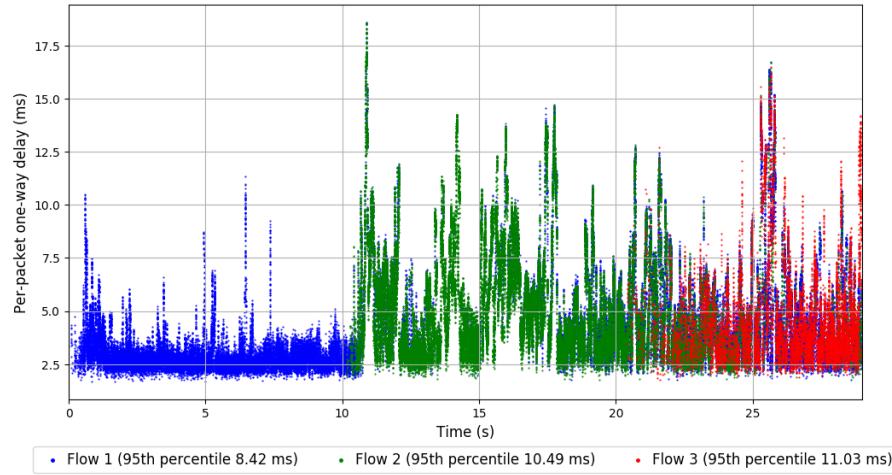
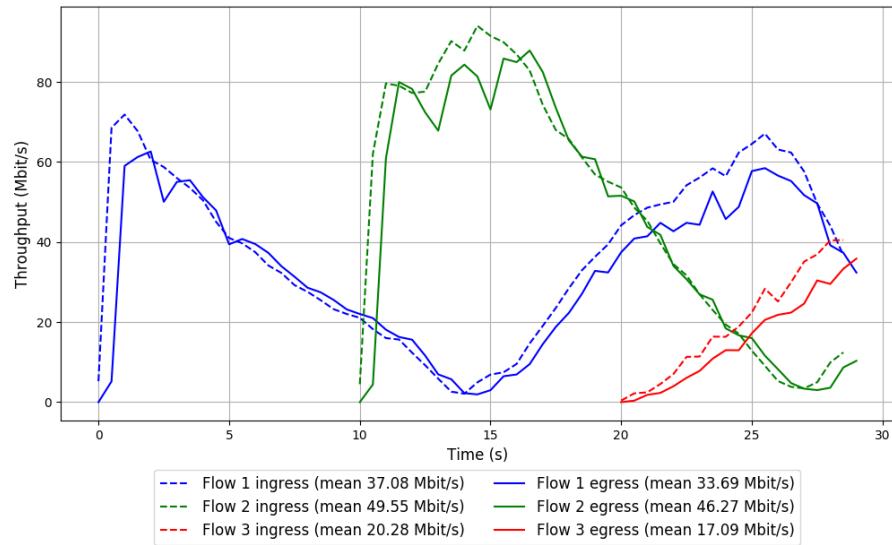


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 09:01:16
End at: 2019-02-05 09:01:46
Local clock offset: 2.06 ms
Remote clock offset: -6.17 ms

# Below is generated by plot.py at 2019-02-05 09:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.93 Mbit/s
95th percentile per-packet one-way delay: 9.777 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 8.419 ms
Loss rate: 9.12%
-- Flow 2:
Average throughput: 46.27 Mbit/s
95th percentile per-packet one-way delay: 10.486 ms
Loss rate: 6.61%
-- Flow 3:
Average throughput: 17.09 Mbit/s
95th percentile per-packet one-way delay: 11.027 ms
Loss rate: 15.69%
```

Run 4: Report of Indigo-MusesD — Data Link

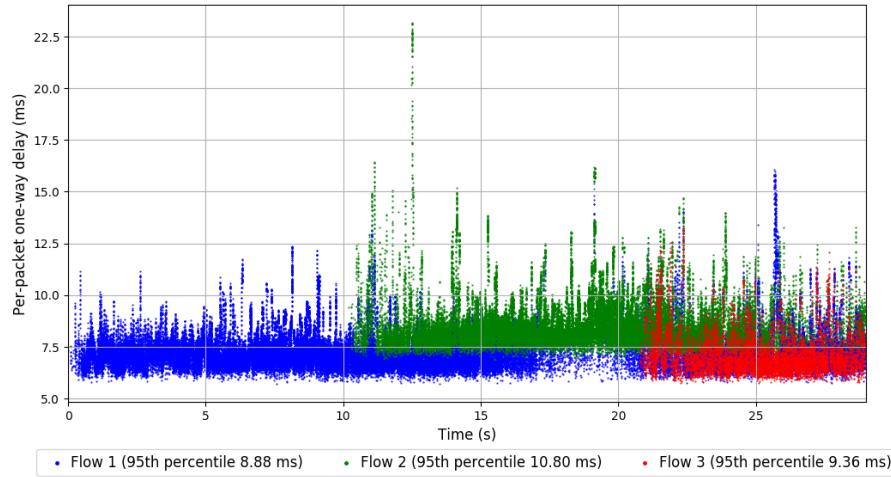
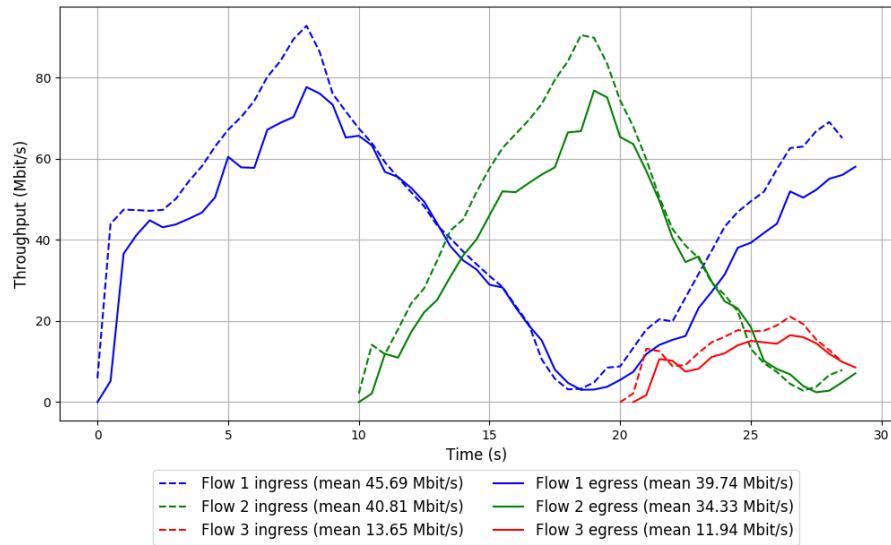


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 09:28:02
End at: 2019-02-05 09:28:32
Local clock offset: 0.118 ms
Remote clock offset: -3.396 ms

# Below is generated by plot.py at 2019-02-05 09:40:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 9.844 ms
Loss rate: 14.27%
-- Flow 1:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 8.880 ms
Loss rate: 13.04%
-- Flow 2:
Average throughput: 34.33 Mbit/s
95th percentile per-packet one-way delay: 10.803 ms
Loss rate: 15.89%
-- Flow 3:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 9.355 ms
Loss rate: 17.55%
```

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

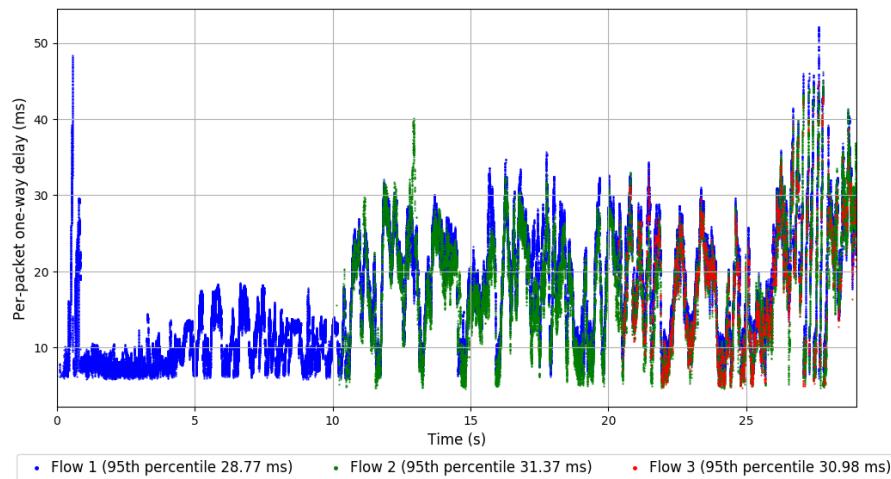
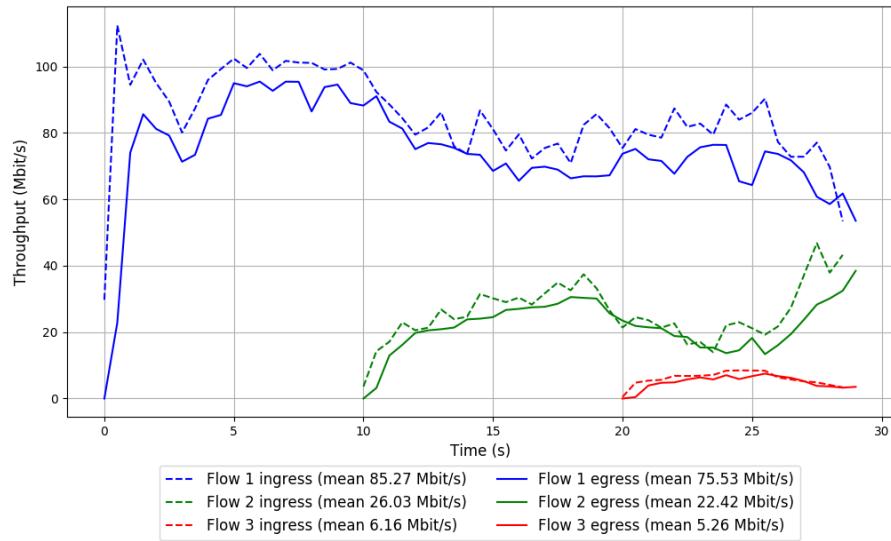


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 07:21:34
End at: 2019-02-05 07:22:04
Local clock offset: 0.046 ms
Remote clock offset: -8.298 ms

# Below is generated by plot.py at 2019-02-05 09:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.68 Mbit/s
95th percentile per-packet one-way delay: 29.187 ms
Loss rate: 11.83%
-- Flow 1:
Average throughput: 75.53 Mbit/s
95th percentile per-packet one-way delay: 28.772 ms
Loss rate: 11.37%
-- Flow 2:
Average throughput: 22.42 Mbit/s
95th percentile per-packet one-way delay: 31.372 ms
Loss rate: 13.82%
-- Flow 3:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 30.979 ms
Loss rate: 14.69%
```

Run 1: Report of Indigo-MusesT — Data Link

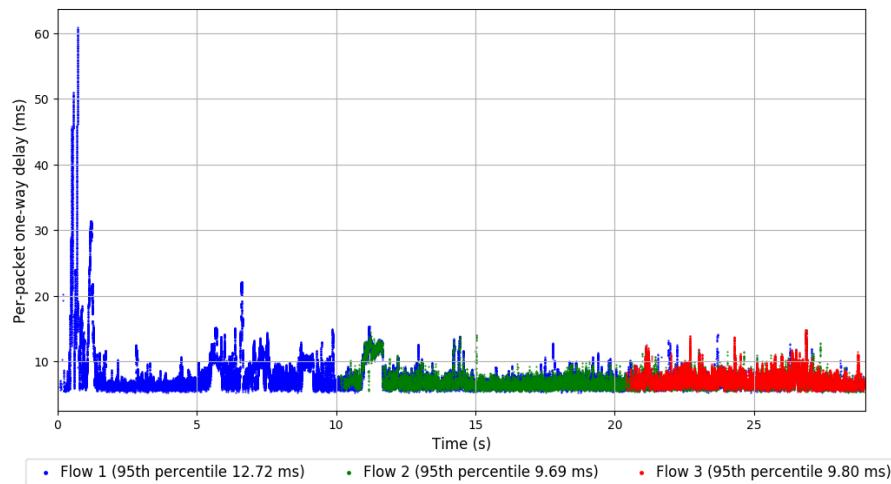
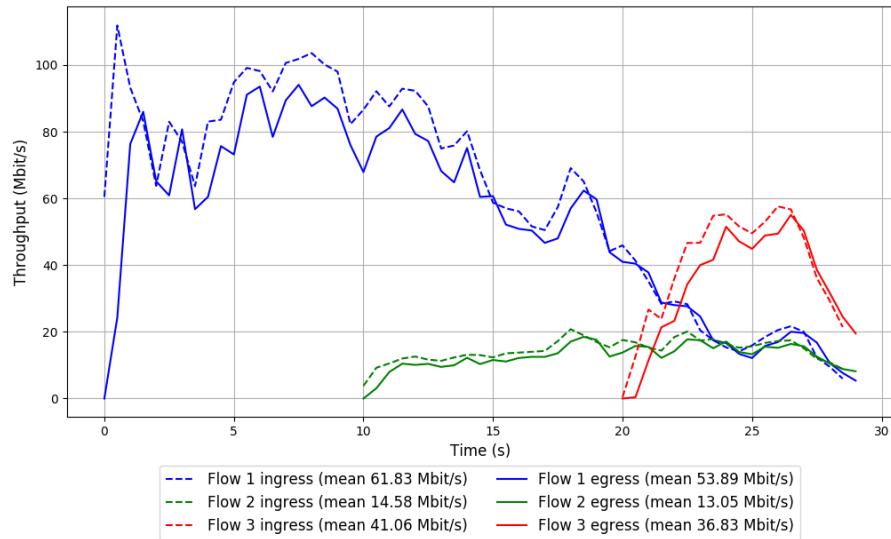


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 07:48:04
End at: 2019-02-05 07:48:34
Local clock offset: -0.47 ms
Remote clock offset: -7.353 ms

# Below is generated by plot.py at 2019-02-05 09:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.34 Mbit/s
95th percentile per-packet one-way delay: 12.175 ms
Loss rate: 12.19%
-- Flow 1:
Average throughput: 53.89 Mbit/s
95th percentile per-packet one-way delay: 12.724 ms
Loss rate: 12.83%
-- Flow 2:
Average throughput: 13.05 Mbit/s
95th percentile per-packet one-way delay: 9.688 ms
Loss rate: 10.51%
-- Flow 3:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 9.805 ms
Loss rate: 10.29%
```

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

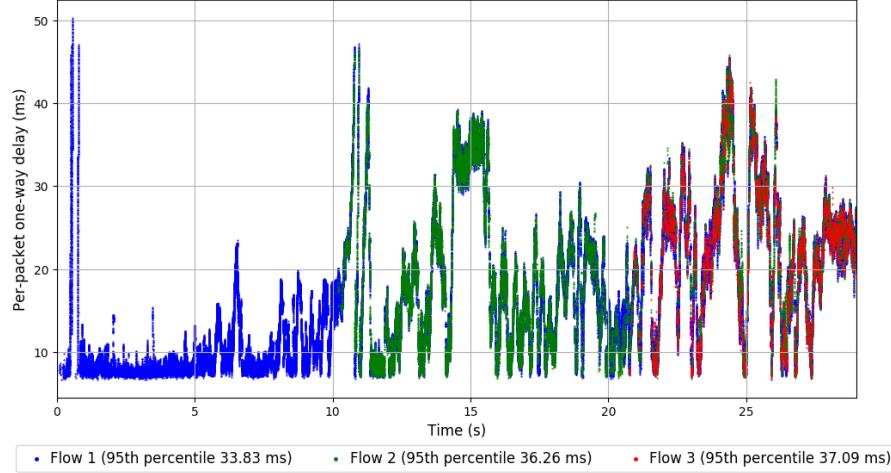
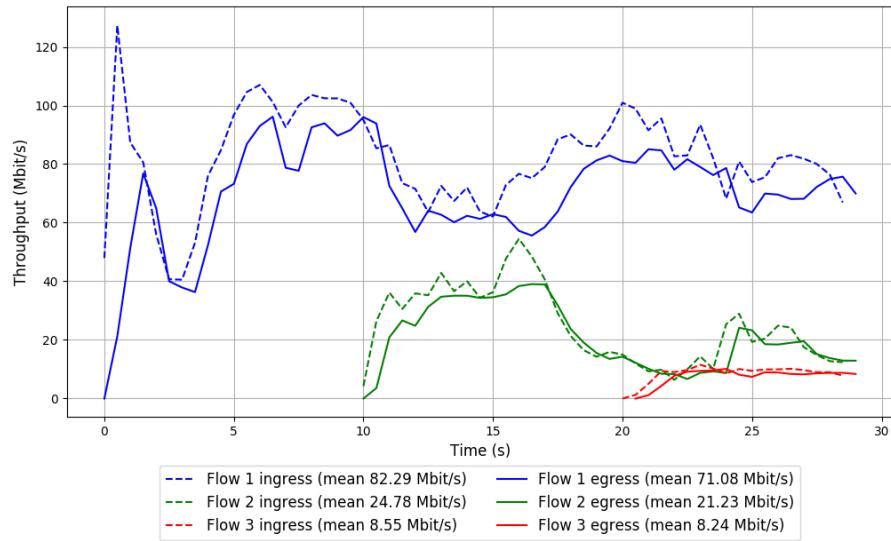


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 08:14:59
End at: 2019-02-05 08:15:29
Local clock offset: -1.022 ms
Remote clock offset: -5.734 ms

# Below is generated by plot.py at 2019-02-05 09:40:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.26 Mbit/s
95th percentile per-packet one-way delay: 34.657 ms
Loss rate: 13.57%
-- Flow 1:
Average throughput: 71.08 Mbit/s
95th percentile per-packet one-way delay: 33.825 ms
Loss rate: 13.57%
-- Flow 2:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 36.258 ms
Loss rate: 14.28%
-- Flow 3:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 37.089 ms
Loss rate: 9.13%
```

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

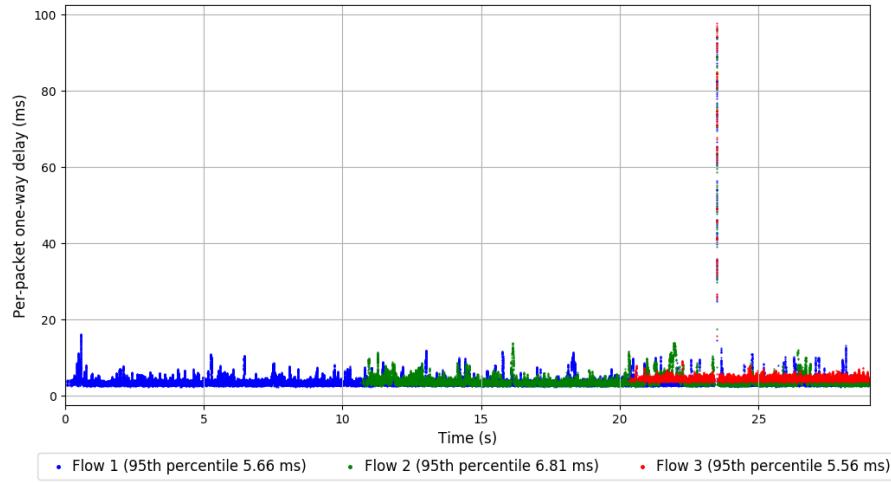
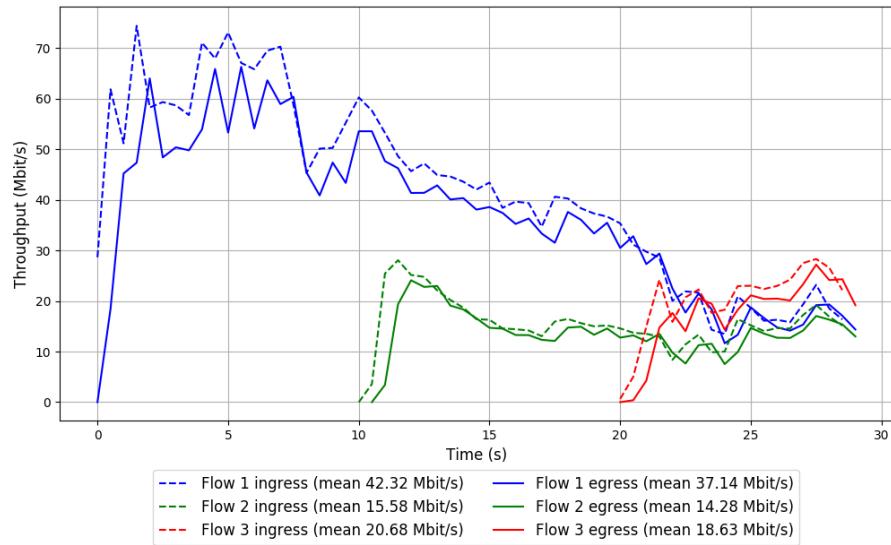


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 08:41:03
End at: 2019-02-05 08:41:33
Local clock offset: 2.108 ms
Remote clock offset: -5.744 ms

# Below is generated by plot.py at 2019-02-05 09:40:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.76 Mbit/s
95th percentile per-packet one-way delay: 5.881 ms
Loss rate: 11.74%
-- Flow 1:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 5.660 ms
Loss rate: 12.24%
-- Flow 2:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 6.807 ms
Loss rate: 10.76%
-- Flow 3:
Average throughput: 18.63 Mbit/s
95th percentile per-packet one-way delay: 5.561 ms
Loss rate: 9.95%
```

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

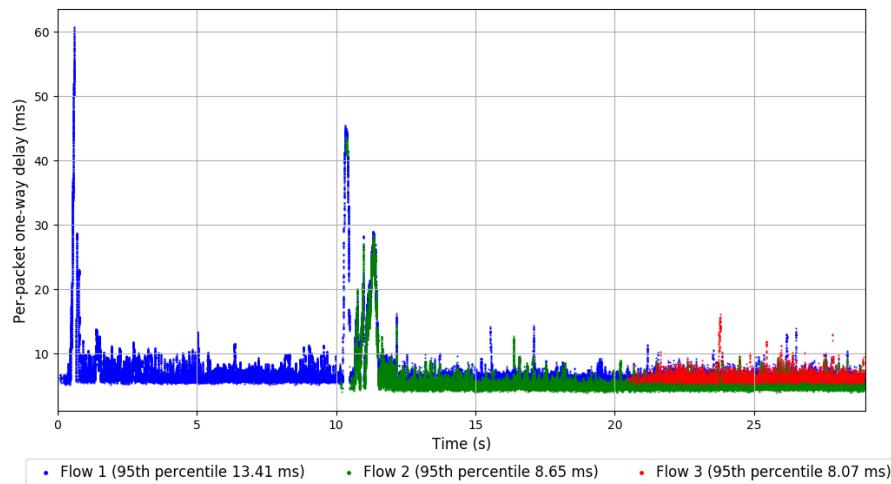
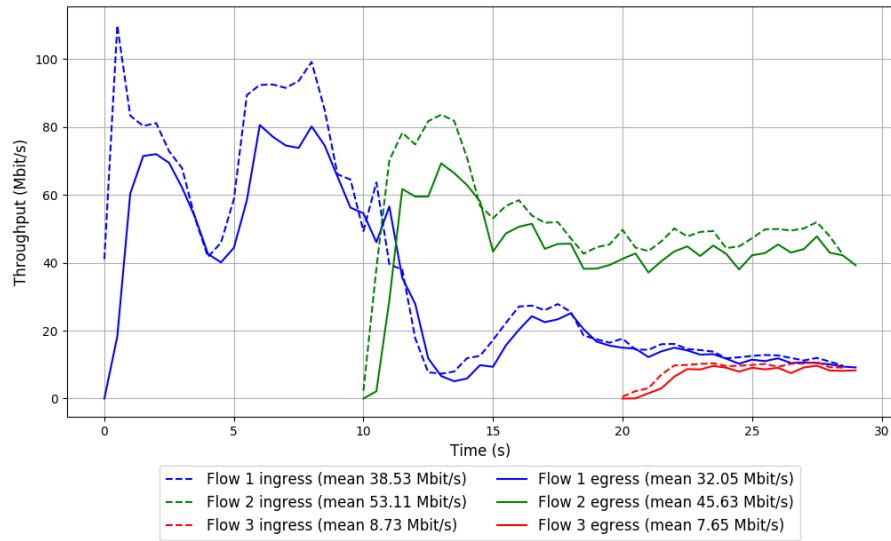


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 09:07:36
End at: 2019-02-05 09:08:06
Local clock offset: 1.74 ms
Remote clock offset: -4.198 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.06 Mbit/s
95th percentile per-packet one-way delay: 11.377 ms
Loss rate: 15.42%
-- Flow 1:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 13.413 ms
Loss rate: 16.82%
-- Flow 2:
Average throughput: 45.63 Mbit/s
95th percentile per-packet one-way delay: 8.646 ms
Loss rate: 14.09%
-- Flow 3:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 8.074 ms
Loss rate: 12.42%
```

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

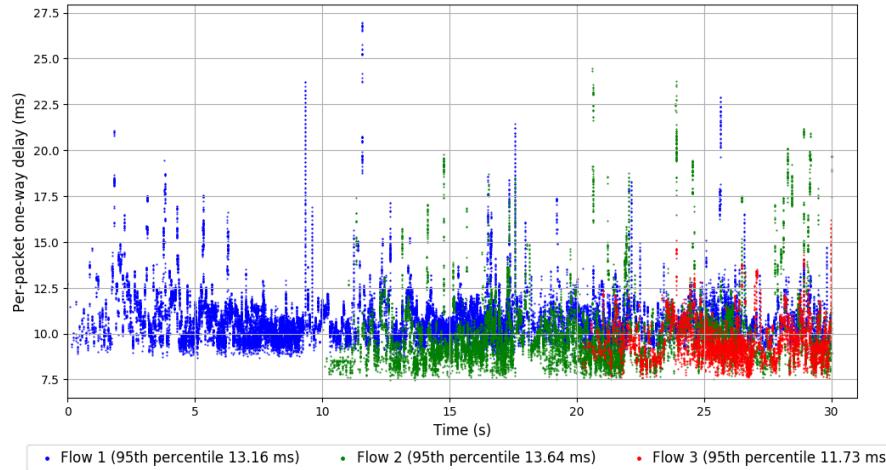
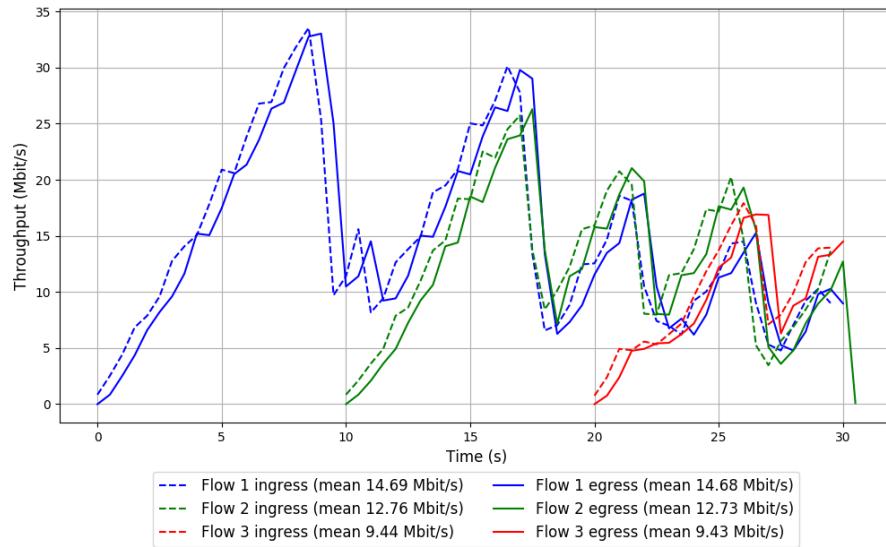


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-05 07:40:22
End at: 2019-02-05 07:40:52
Local clock offset: -1.777 ms
Remote clock offset: -6.667 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.26 Mbit/s
95th percentile per-packet one-way delay: 13.096 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 14.68 Mbit/s
95th percentile per-packet one-way delay: 13.165 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 13.640 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 11.734 ms
Loss rate: 0.09%
```

Run 1: Report of LEDBAT — Data Link

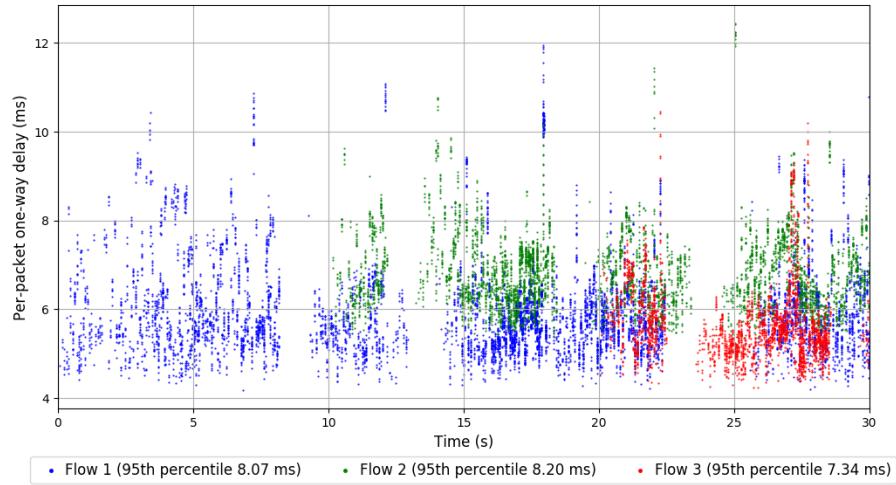
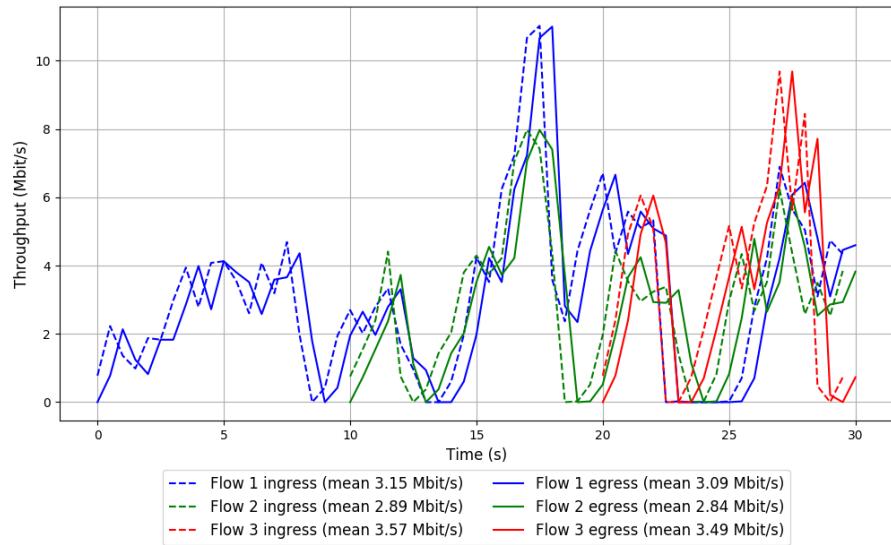


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-05 08:07:37
End at: 2019-02-05 08:08:07
Local clock offset: 1.343 ms
Remote clock offset: -6.082 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 8.085 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 8.071 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 8.198 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 7.341 ms
Loss rate: 2.19%
```

Run 2: Report of LEDBAT — Data Link

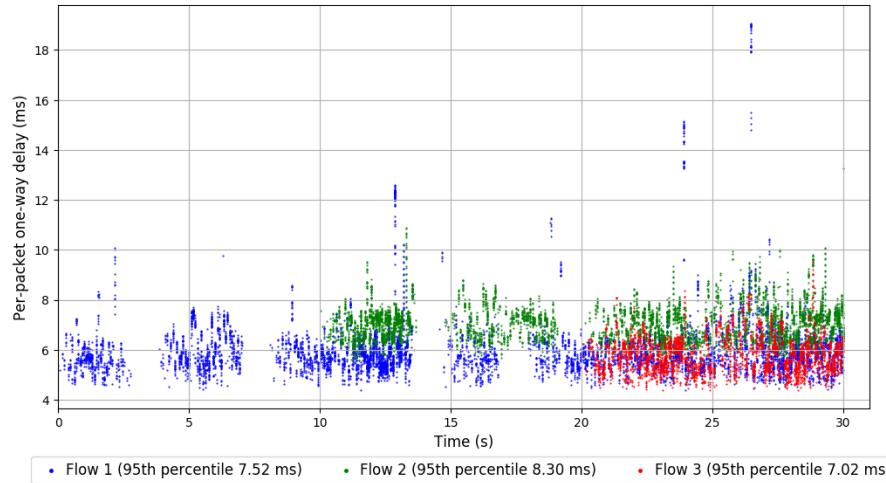
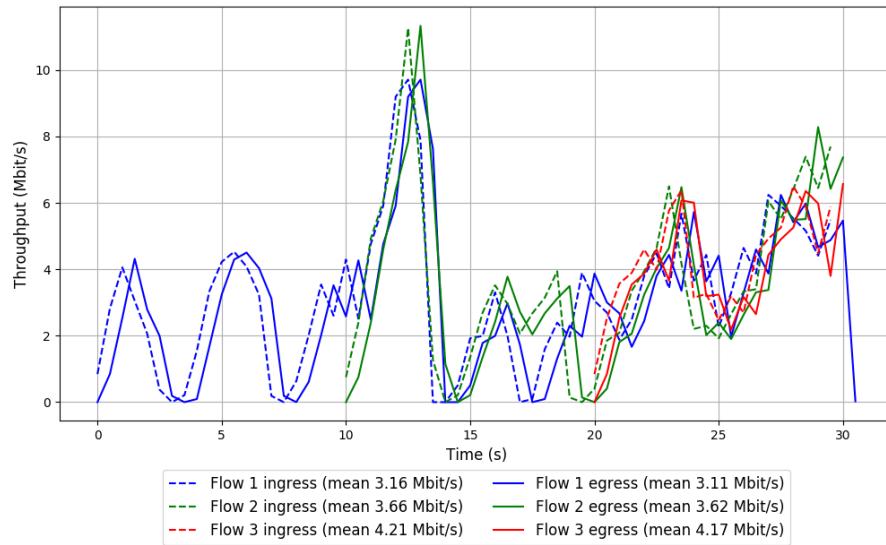


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-05 08:33:45
End at: 2019-02-05 08:34:15
Local clock offset: 0.455 ms
Remote clock offset: -5.631 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 7.977 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 7.518 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 8.302 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 7.020 ms
Loss rate: 1.01%
```

Run 3: Report of LEDBAT — Data Link

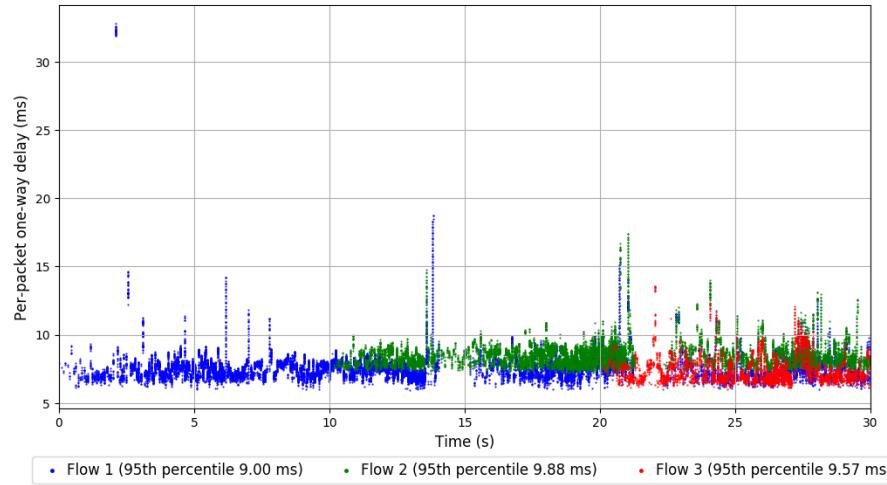
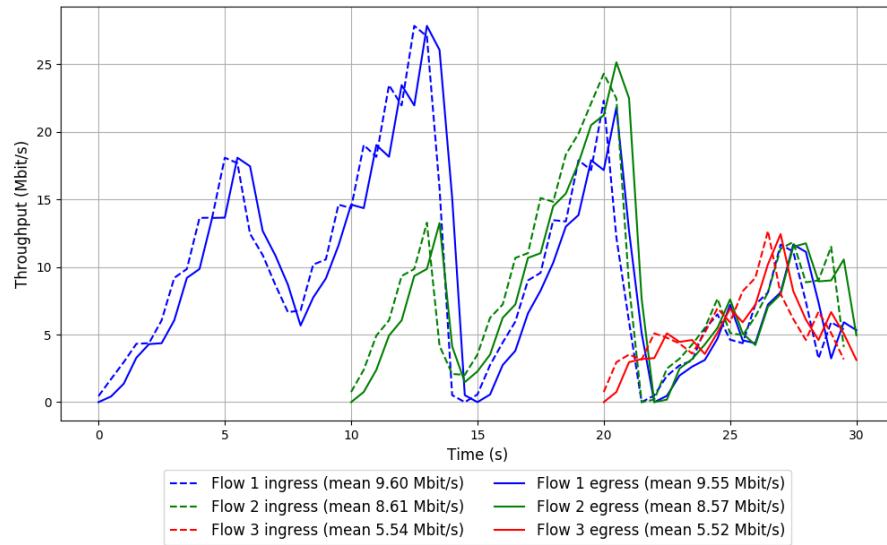


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-05 09:00:03
End at: 2019-02-05 09:00:33
Local clock offset: -0.299 ms
Remote clock offset: -4.435 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.08 Mbit/s
95th percentile per-packet one-way delay: 9.505 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 8.996 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 9.880 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 9.575 ms
Loss rate: 0.45%
```

Run 4: Report of LEDBAT — Data Link

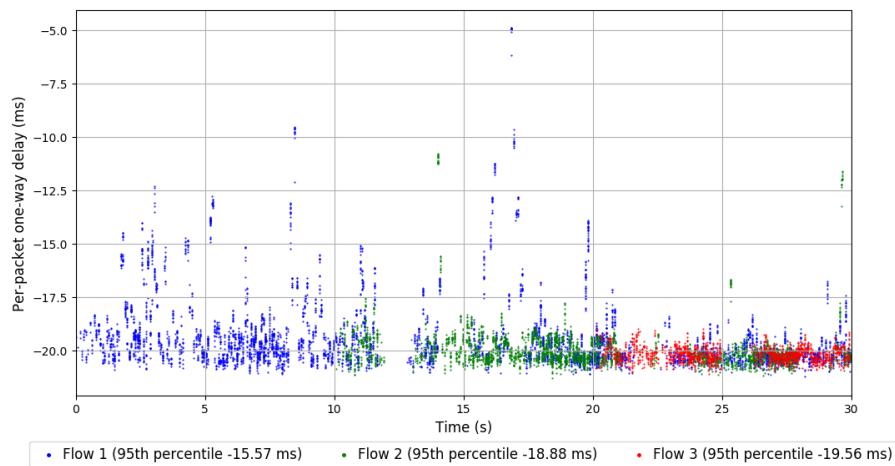
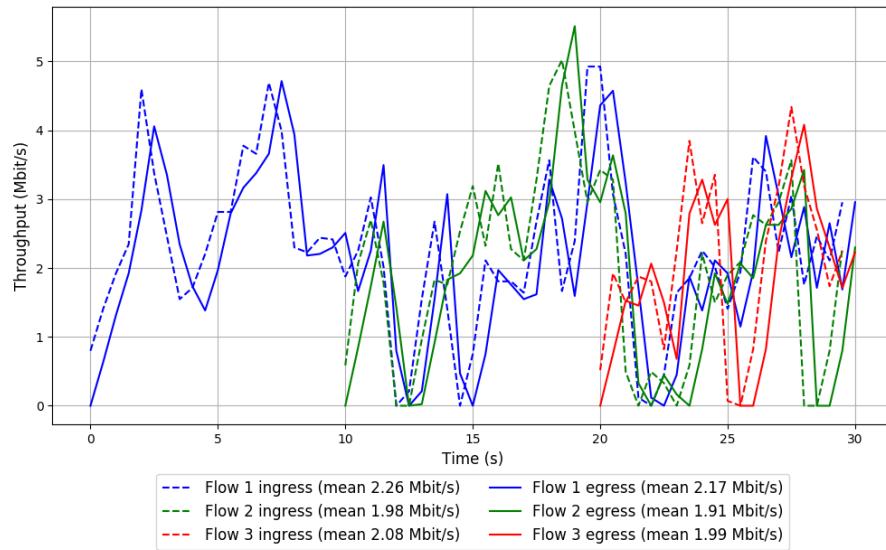


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-05 09:26:52
End at: 2019-02-05 09:27:22
Local clock offset: 0.583 ms
Remote clock offset: -29.856 ms

# Below is generated by plot.py at 2019-02-05 09:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: -16.915 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: -15.568 ms
Loss rate: 3.95%
-- Flow 2:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: -18.877 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: -19.557 ms
Loss rate: 4.17%
```

Run 5: Report of LEDBAT — Data Link

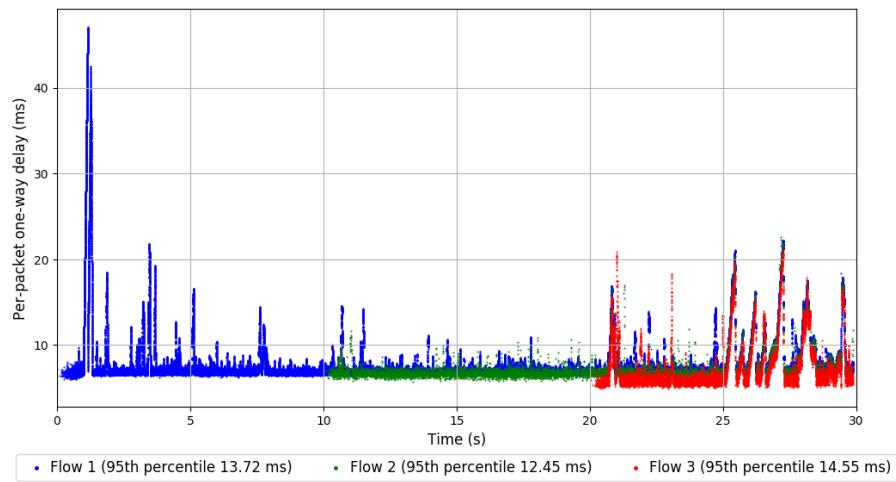
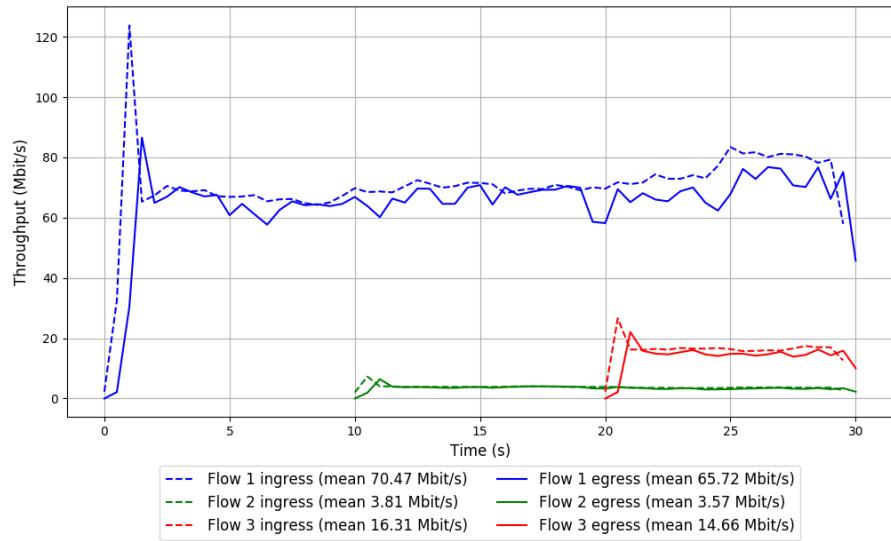


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-05 07:24:22
End at: 2019-02-05 07:24:52
Local clock offset: 0.308 ms
Remote clock offset: -7.78 ms

# Below is generated by plot.py at 2019-02-05 09:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 13.760 ms
Loss rate: 6.96%
-- Flow 1:
Average throughput: 65.72 Mbit/s
95th percentile per-packet one-way delay: 13.721 ms
Loss rate: 6.74%
-- Flow 2:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 12.449 ms
Loss rate: 6.26%
-- Flow 3:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 14.551 ms
Loss rate: 10.07%
```

Run 1: Report of PCC-Allegro — Data Link

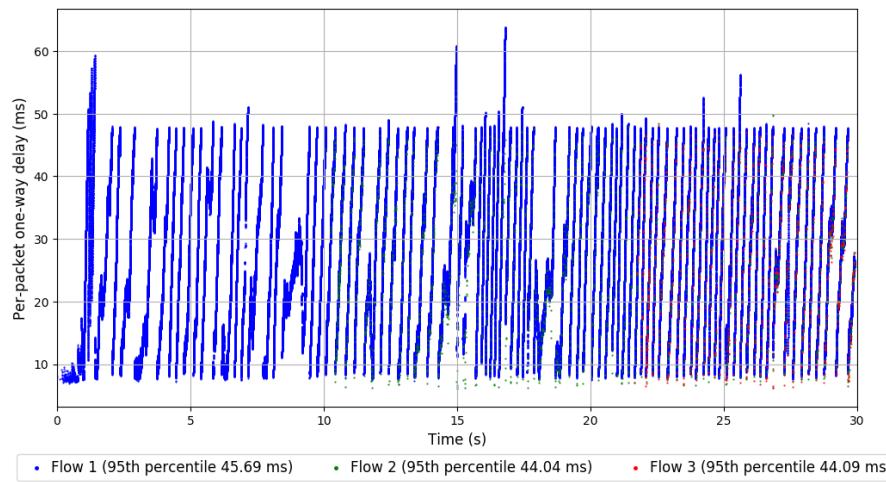
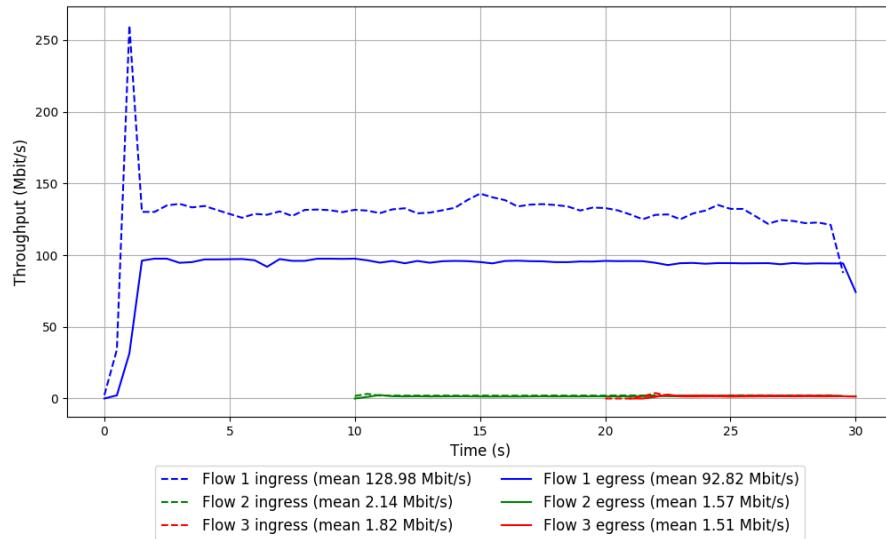


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-05 07:50:36
End at: 2019-02-05 07:51:06
Local clock offset: -0.632 ms
Remote clock offset: -6.968 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 45.658 ms
Loss rate: 27.97%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 45.686 ms
Loss rate: 28.00%
-- Flow 2:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 44.036 ms
Loss rate: 26.75%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 44.092 ms
Loss rate: 25.77%
```

Run 2: Report of PCC-Allegro — Data Link

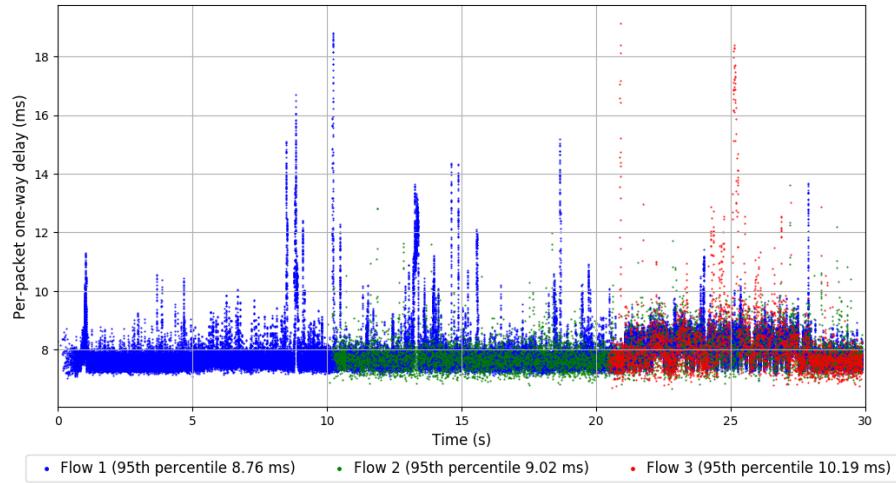
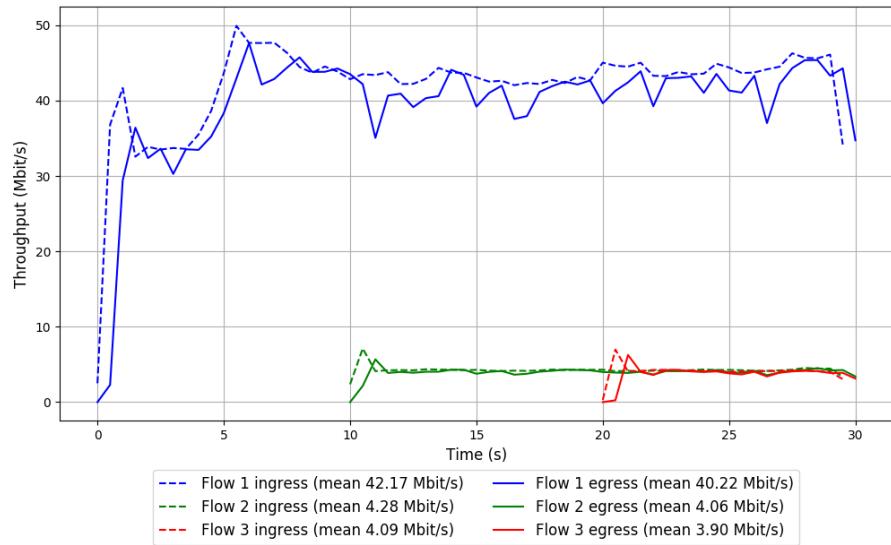


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-05 08:17:35
End at: 2019-02-05 08:18:05
Local clock offset: -1.227 ms
Remote clock offset: -5.418 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 8.825 ms
Loss rate: 4.67%
-- Flow 1:
Average throughput: 40.22 Mbit/s
95th percentile per-packet one-way delay: 8.763 ms
Loss rate: 4.63%
-- Flow 2:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 9.018 ms
Loss rate: 5.25%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 10.189 ms
Loss rate: 4.65%
```

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

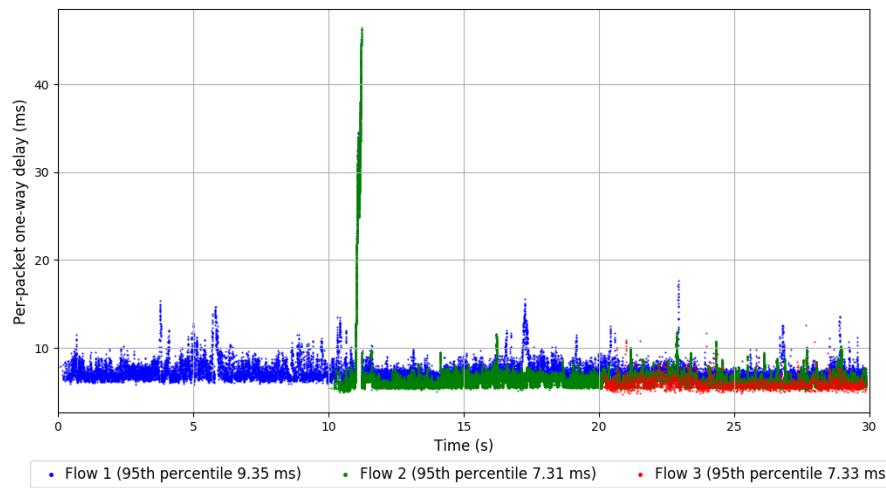
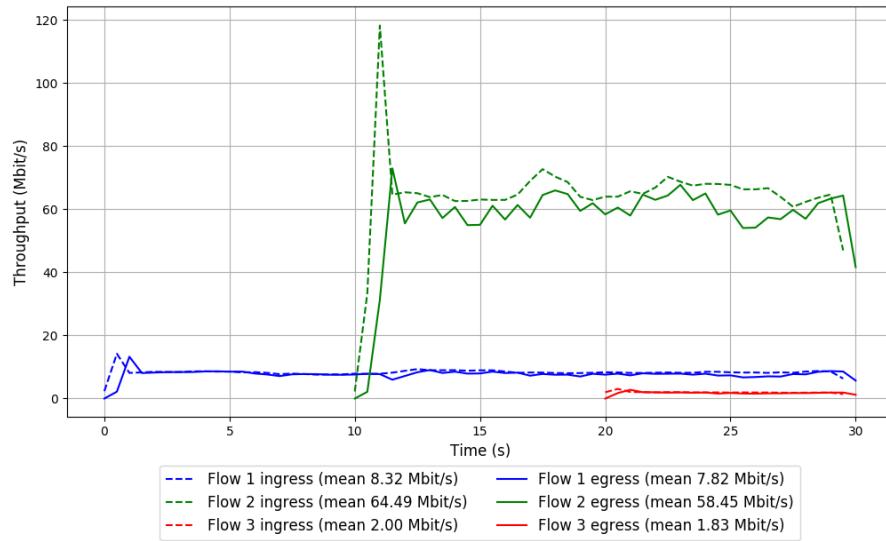


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-05 08:43:56
End at: 2019-02-05 08:44:26
Local clock offset: 1.004 ms
Remote clock offset: -4.316 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.29 Mbit/s
95th percentile per-packet one-way delay: 8.153 ms
Loss rate: 8.81%
-- Flow 1:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 9.349 ms
Loss rate: 6.02%
-- Flow 2:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 7.313 ms
Loss rate: 9.36%
-- Flow 3:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 7.326 ms
Loss rate: 8.32%
```

Run 4: Report of PCC-Allegro — Data Link

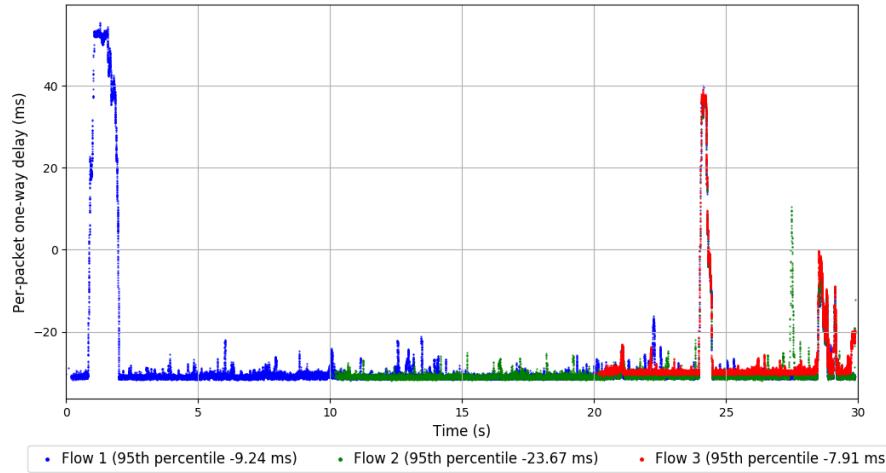
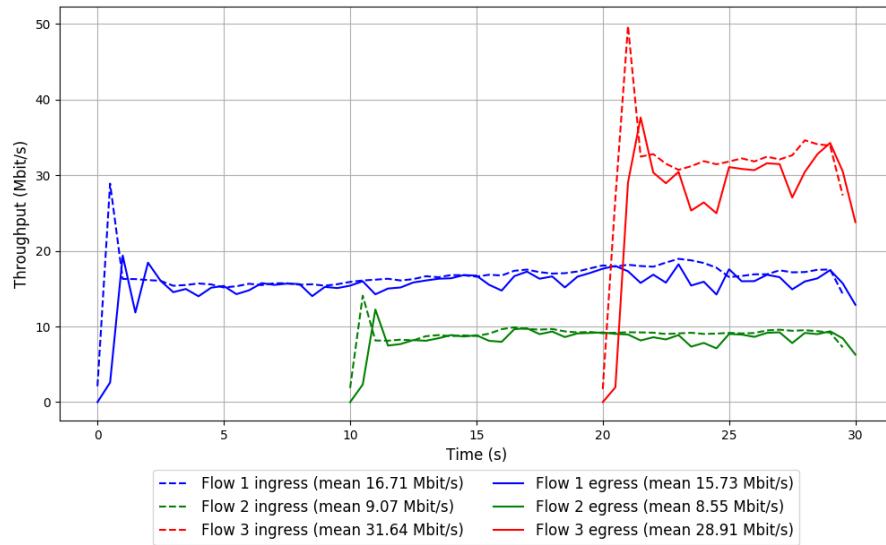


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-05 09:10:18
End at: 2019-02-05 09:10:48
Local clock offset: 0.656 ms
Remote clock offset: -40.92 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.95 Mbit/s
95th percentile per-packet one-way delay: -11.212 ms
Loss rate: 6.72%
-- Flow 1:
Average throughput: 15.73 Mbit/s
95th percentile per-packet one-way delay: -9.238 ms
Loss rate: 5.90%
-- Flow 2:
Average throughput: 8.55 Mbit/s
95th percentile per-packet one-way delay: -23.674 ms
Loss rate: 5.68%
-- Flow 3:
Average throughput: 28.91 Mbit/s
95th percentile per-packet one-way delay: -7.913 ms
Loss rate: 8.63%
```

Run 5: Report of PCC-Allegro — Data Link

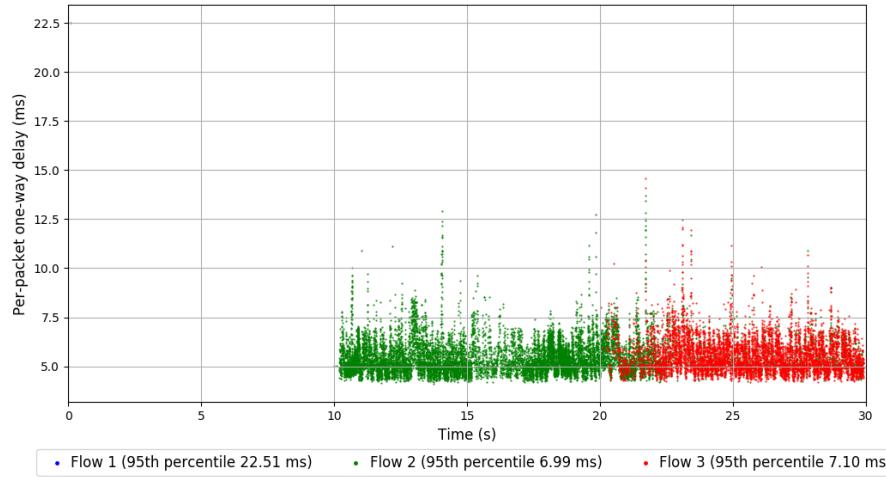
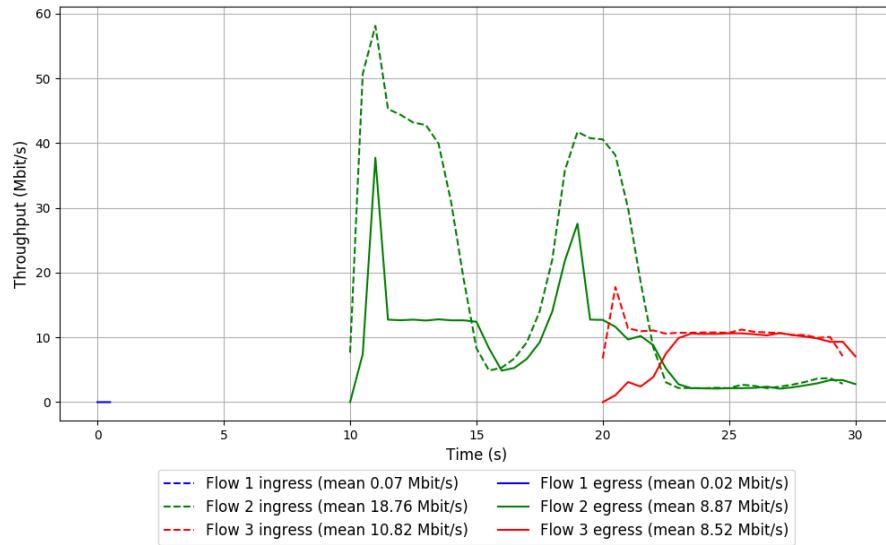


Run 1: Statistics of PCC-Expr

```
Start at: 2019-02-05 07:43:03
End at: 2019-02-05 07:43:33
Local clock offset: 0.616 ms
Remote clock offset: -7.397 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 7.026 ms
Loss rate: 45.72%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 22.506 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 8.87 Mbit/s
95th percentile per-packet one-way delay: 6.989 ms
Loss rate: 52.74%
-- Flow 3:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 7.097 ms
Loss rate: 21.22%
```

## Run 1: Report of PCC-Expr — Data Link

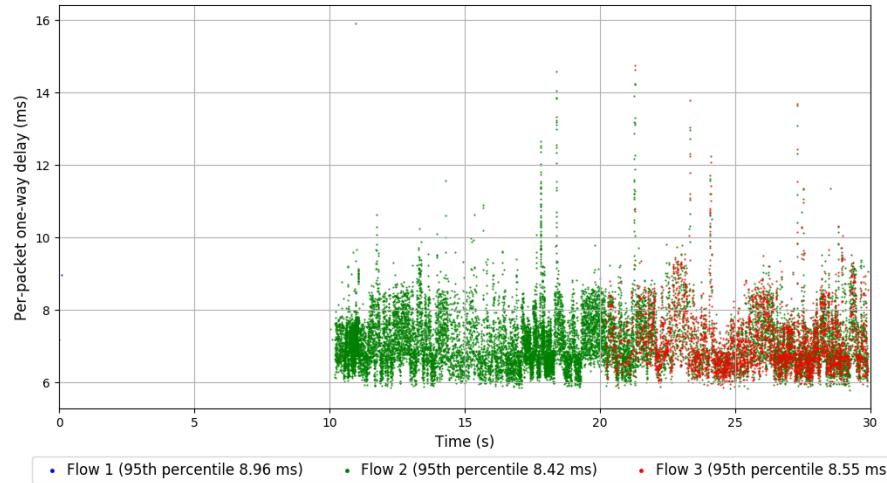
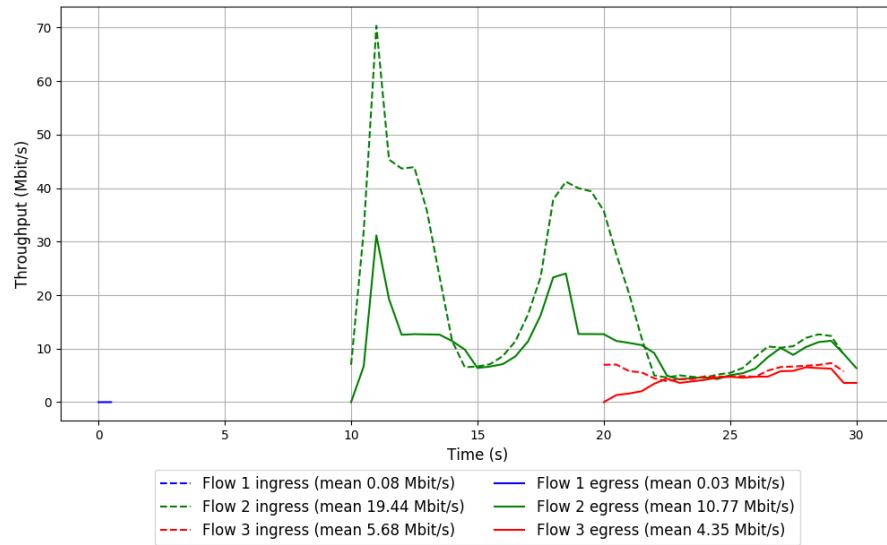


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-05 08:10:07
End at: 2019-02-05 08:10:37
Local clock offset: -0.559 ms
Remote clock offset: -6.18 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 8.441 ms
Loss rate: 41.96%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 8.962 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.77 Mbit/s
95th percentile per-packet one-way delay: 8.418 ms
Loss rate: 44.63%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 8.553 ms
Loss rate: 23.53%
```

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

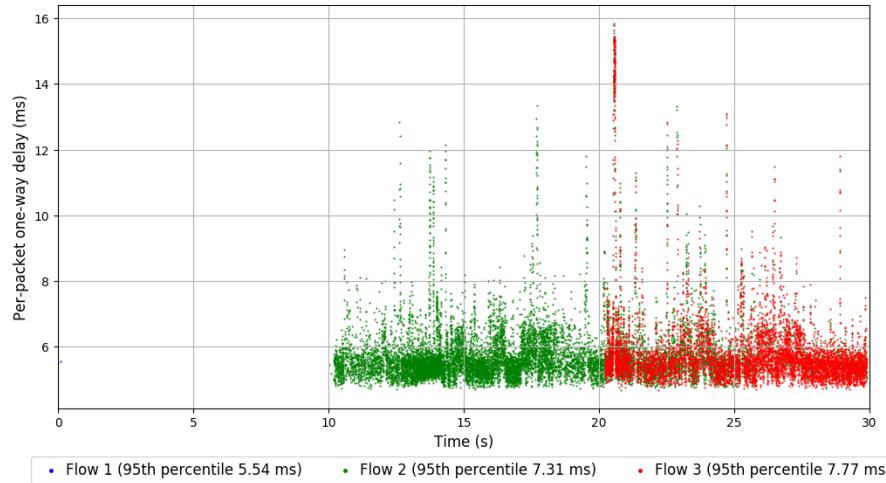
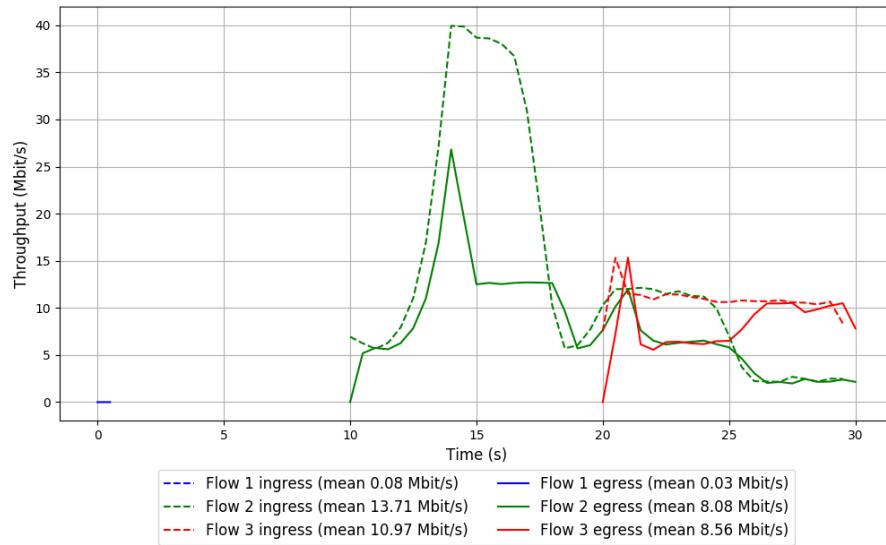


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-05 08:36:10
End at: 2019-02-05 08:36:40
Local clock offset: -0.477 ms
Remote clock offset: -6.044 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 7.406 ms
Loss rate: 35.65%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 5.543 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 7.308 ms
Loss rate: 41.08%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 7.769 ms
Loss rate: 21.98%
```

Run 3: Report of PCC-Expr — Data Link

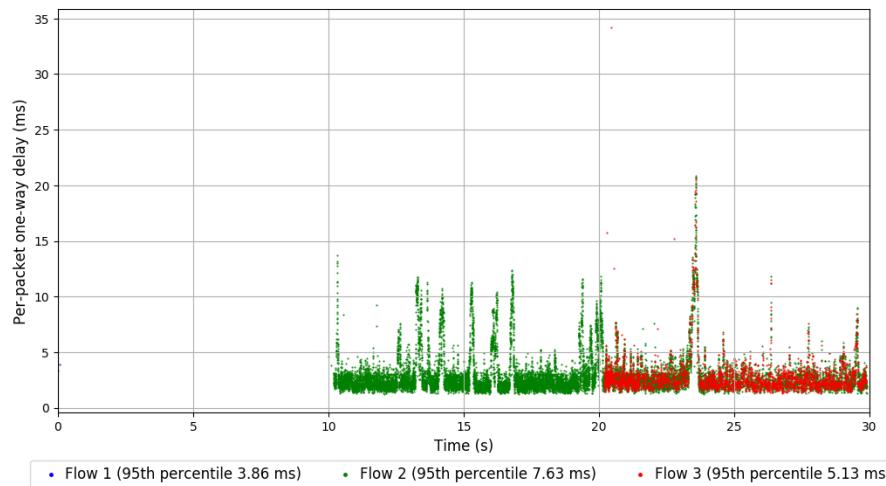
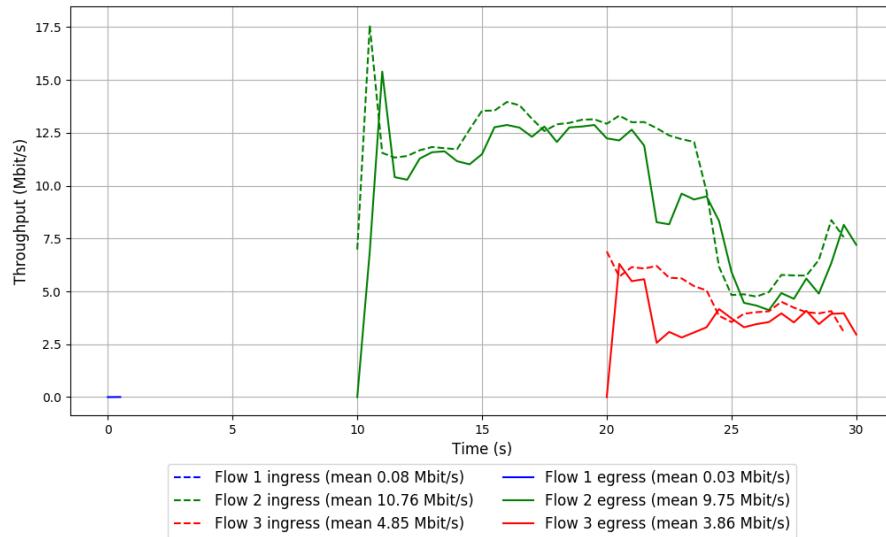


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-05 09:02:39
End at: 2019-02-05 09:03:09
Local clock offset: 3.214 ms
Remote clock offset: -5.449 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 7.339 ms
Loss rate: 11.39%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 3.856 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 7.629 ms
Loss rate: 9.36%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 5.129 ms
Loss rate: 20.43%
```

Run 4: Report of PCC-Expr — Data Link

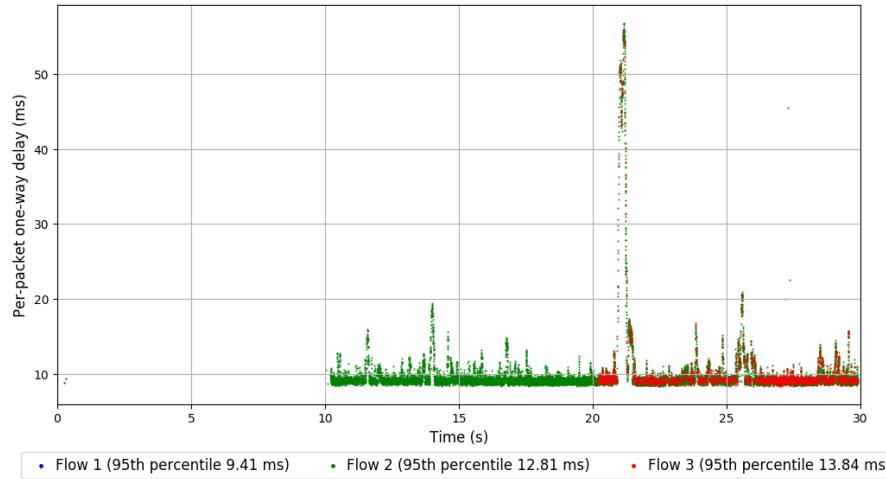
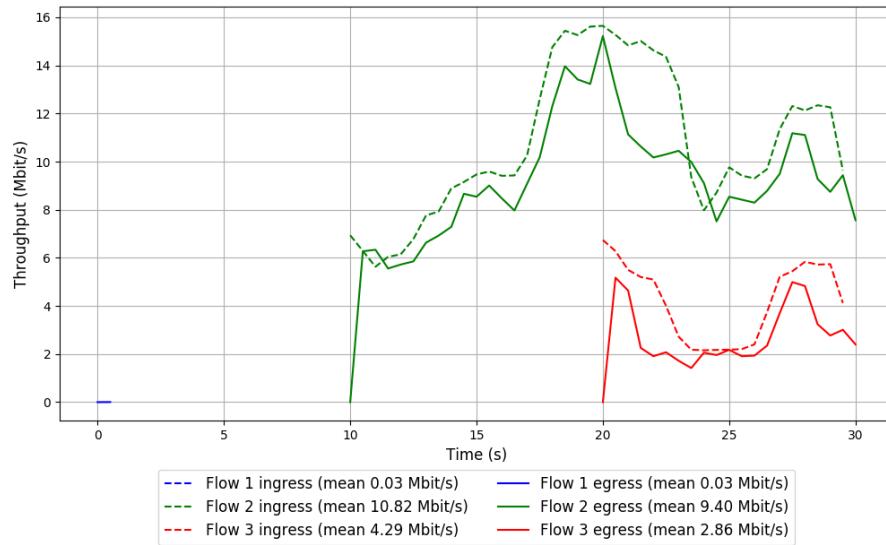


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-05 09:29:20
End at: 2019-02-05 09:29:50
Local clock offset: -1.57 ms
Remote clock offset: -2.35 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 12.957 ms
Loss rate: 16.46%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 9.409 ms
Loss rate: 86.67%
-- Flow 2:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 12.807 ms
Loss rate: 13.15%
-- Flow 3:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 13.836 ms
Loss rate: 33.25%
```

Run 5: Report of PCC-Expr — Data Link

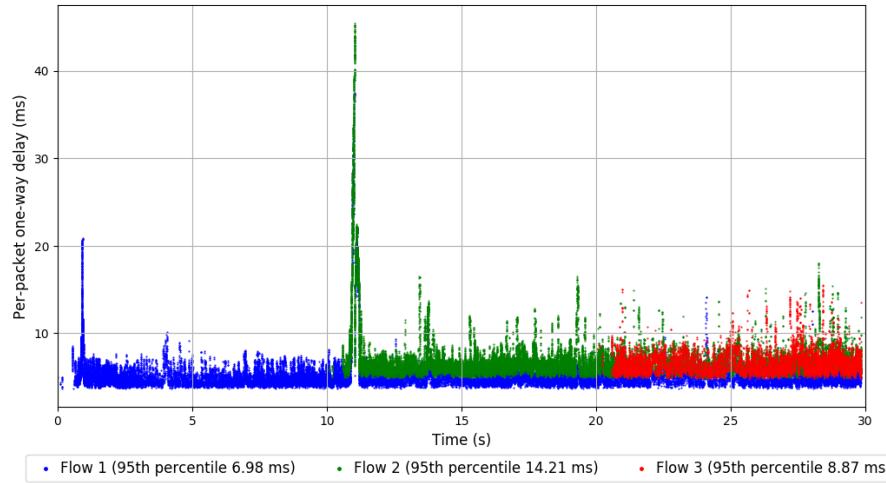
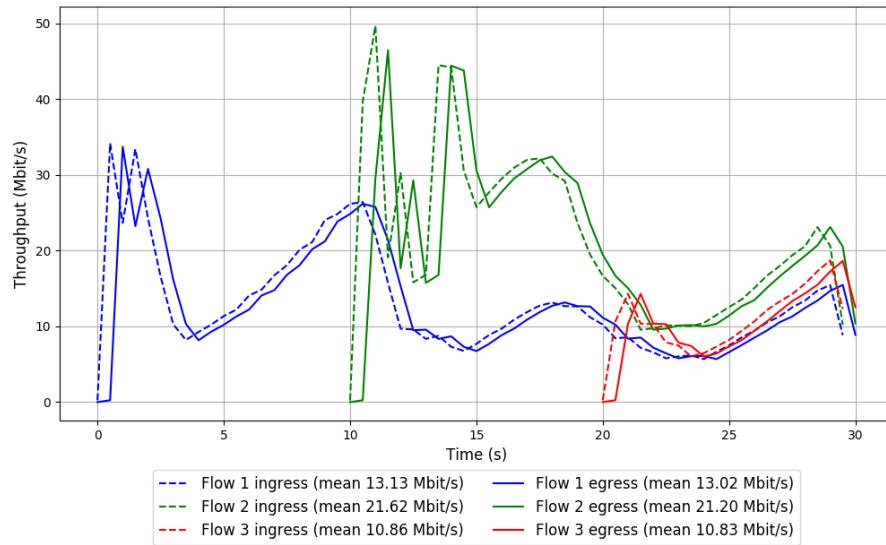


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-02-05 07:34:12
End at: 2019-02-05 07:34:42
Local clock offset: 0.534 ms
Remote clock offset: -8.392 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 10.115 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 6.981 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 21.20 Mbit/s
95th percentile per-packet one-way delay: 14.207 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 8.866 ms
Loss rate: 0.22%
```

Run 1: Report of QUIC Cubic — Data Link

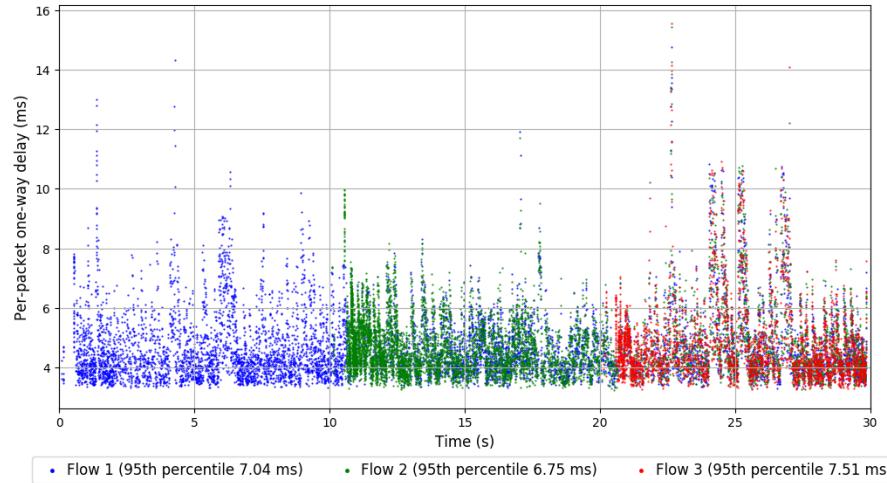
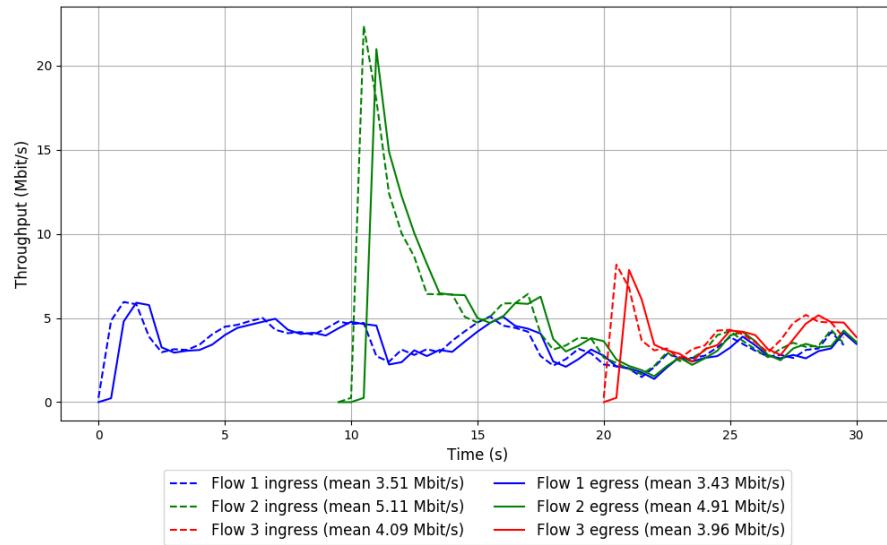


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-05 08:01:24
End at: 2019-02-05 08:01:54
Local clock offset: 0.79 ms
Remote clock offset: -7.644 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 7.006 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 7.039 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 6.745 ms
Loss rate: 3.79%
-- Flow 3:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 7.514 ms
Loss rate: 3.07%
```

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

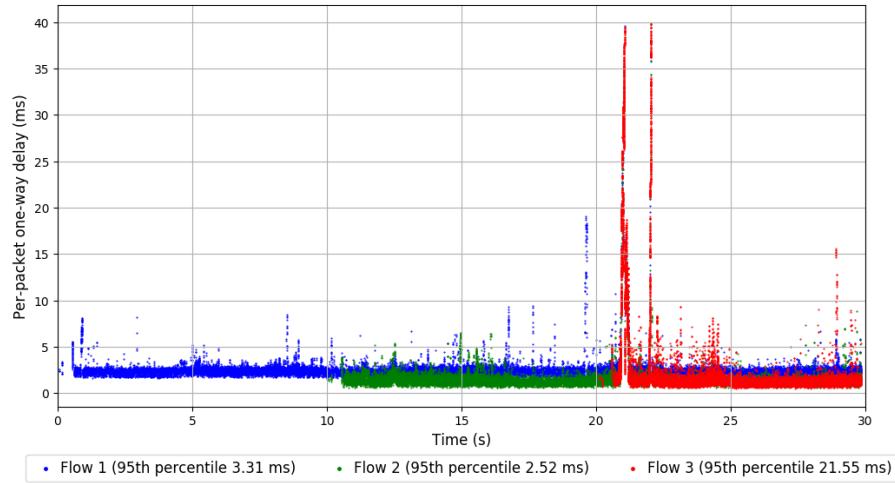
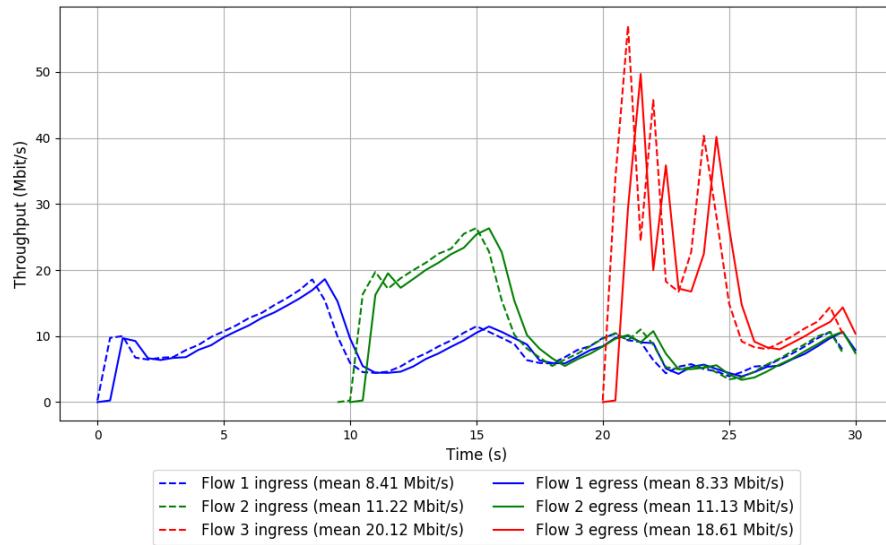


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-05 08:27:36
End at: 2019-02-05 08:28:06
Local clock offset: 3.09 ms
Remote clock offset: -6.845 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.84 Mbit/s
95th percentile per-packet one-way delay: 6.980 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 3.310 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 2.516 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 18.61 Mbit/s
95th percentile per-packet one-way delay: 21.546 ms
Loss rate: 7.49%
```

Run 3: Report of QUIC Cubic — Data Link

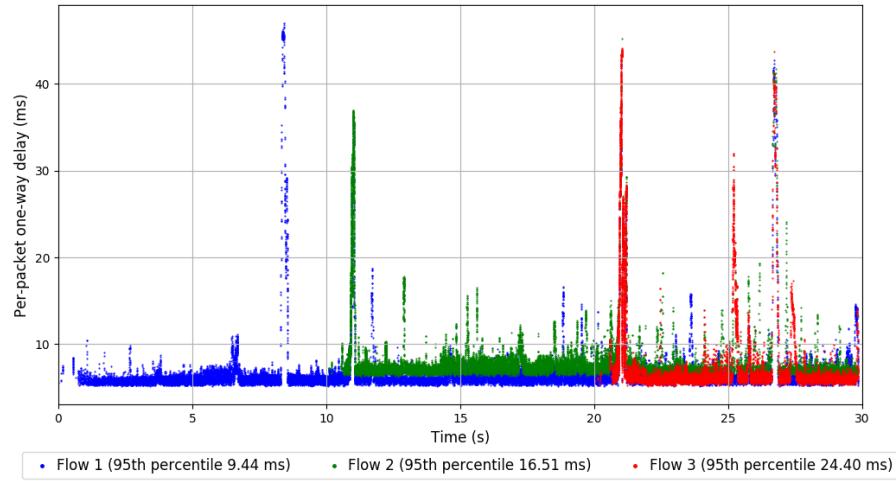
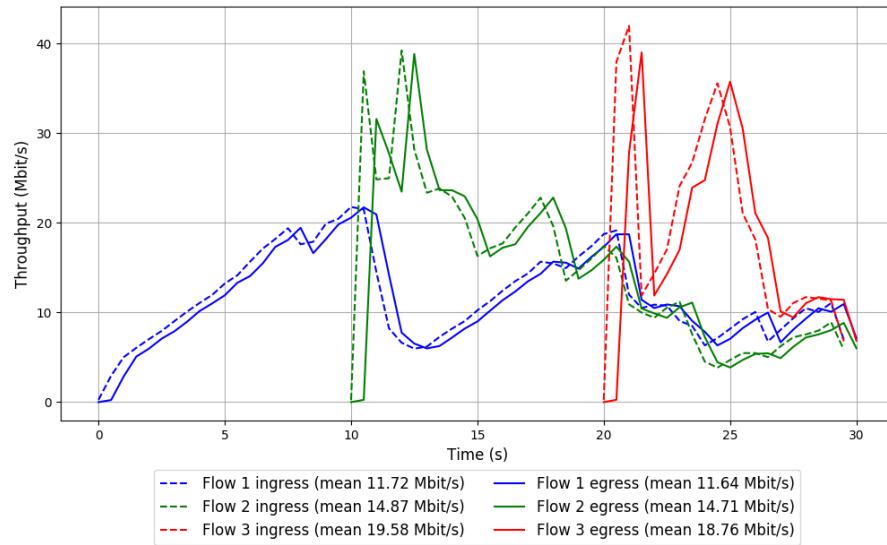


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-05 08:53:57
End at: 2019-02-05 08:54:27
Local clock offset: -1.272 ms
Remote clock offset: -6.122 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 16.907 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 9.435 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 16.506 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 18.76 Mbit/s
95th percentile per-packet one-way delay: 24.404 ms
Loss rate: 4.17%
```

Run 4: Report of QUIC Cubic — Data Link

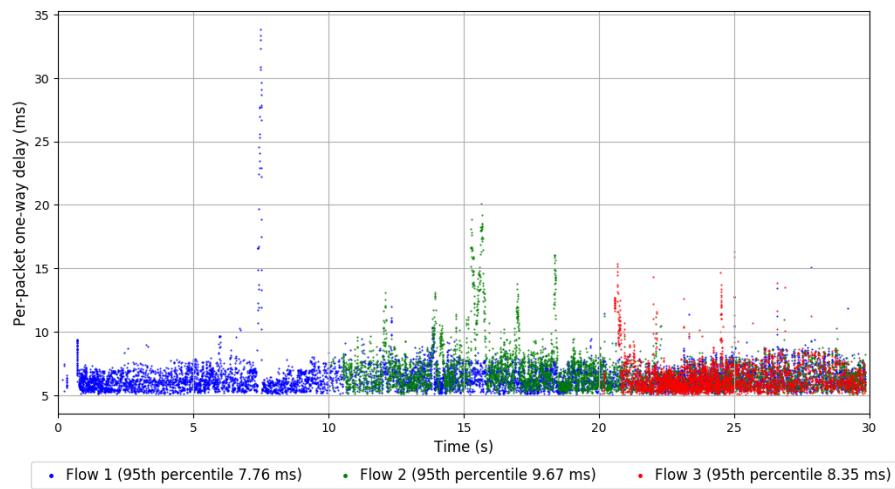
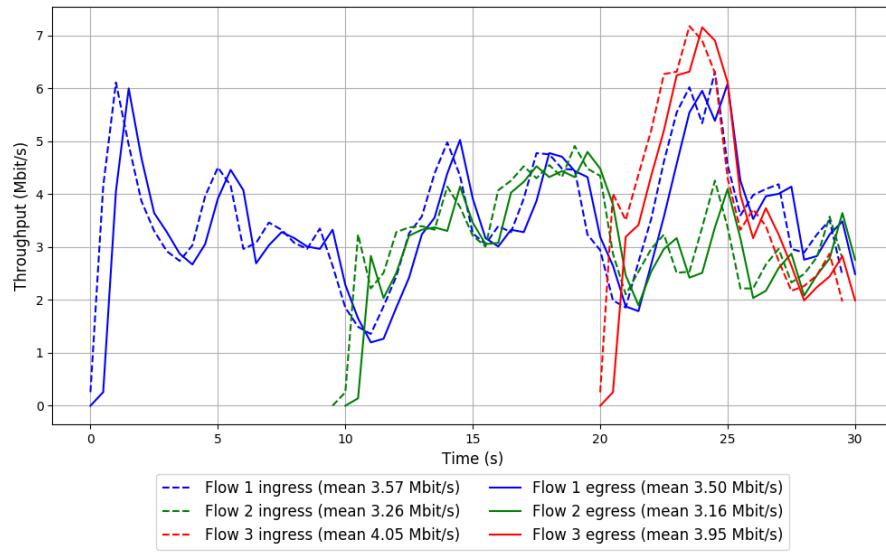


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-05 09:20:40
End at: 2019-02-05 09:21:10
Local clock offset: 0.31 ms
Remote clock offset: -4.003 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 8.342 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 7.763 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 9.673 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 8.350 ms
Loss rate: 2.65%
```

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

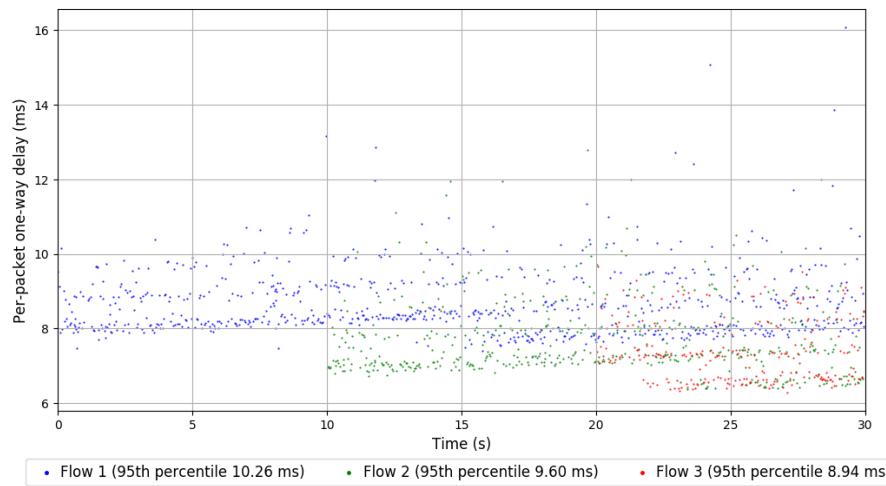
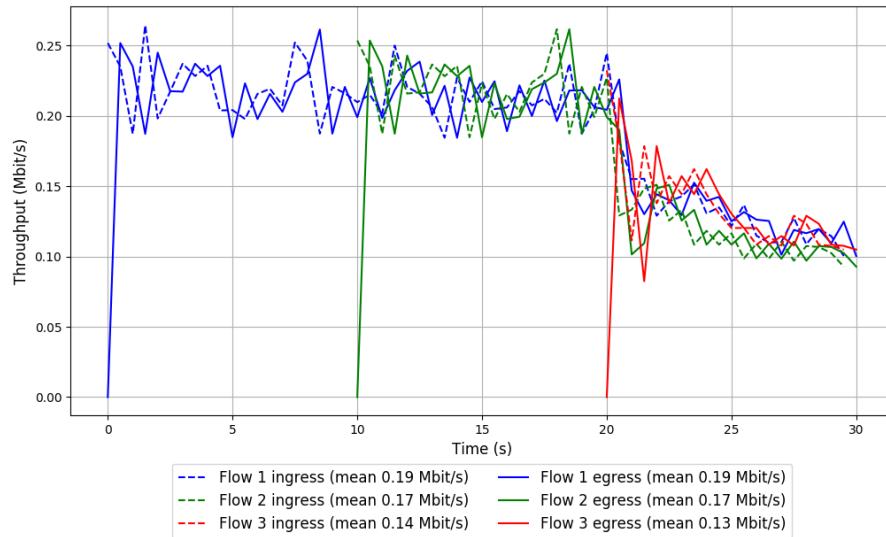


```
Run 1: Statistics of SCReAM

Start at: 2019-02-05 07:29:27
End at: 2019-02-05 07:29:57
Local clock offset: -1.573 ms
Remote clock offset: -8.104 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 9.996 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 10.258 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 9.603 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 8.941 ms
Loss rate: 2.34%
```

Run 1: Report of SCReAM — Data Link

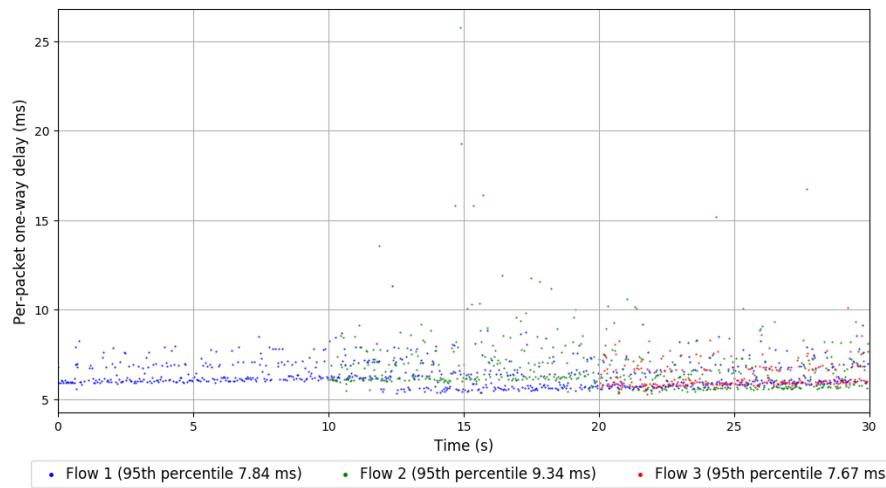
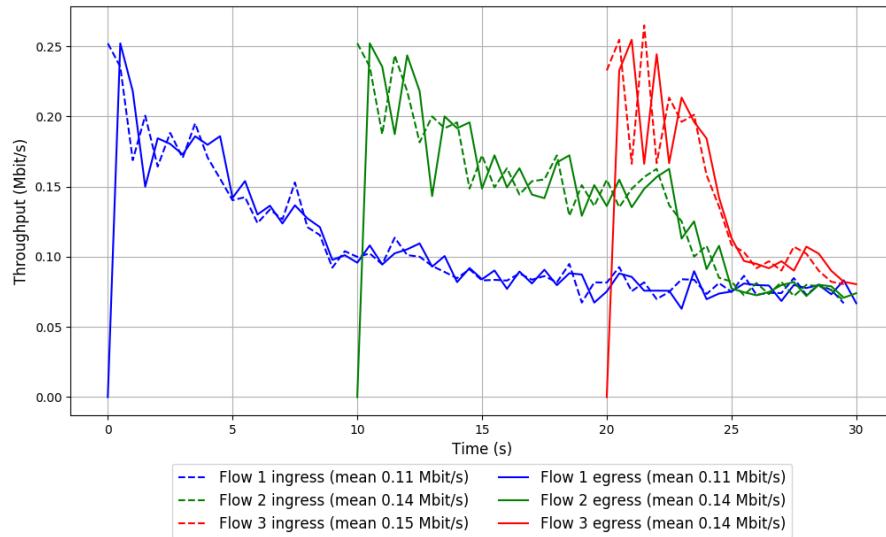


Run 2: Statistics of SCReAM

```
Start at: 2019-02-05 07:56:20
End at: 2019-02-05 07:56:50
Local clock offset: 0.309 ms
Remote clock offset: -6.26 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 8.232 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 7.840 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 9.340 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 7.669 ms
Loss rate: 3.26%
```

Run 2: Report of SCReAM — Data Link

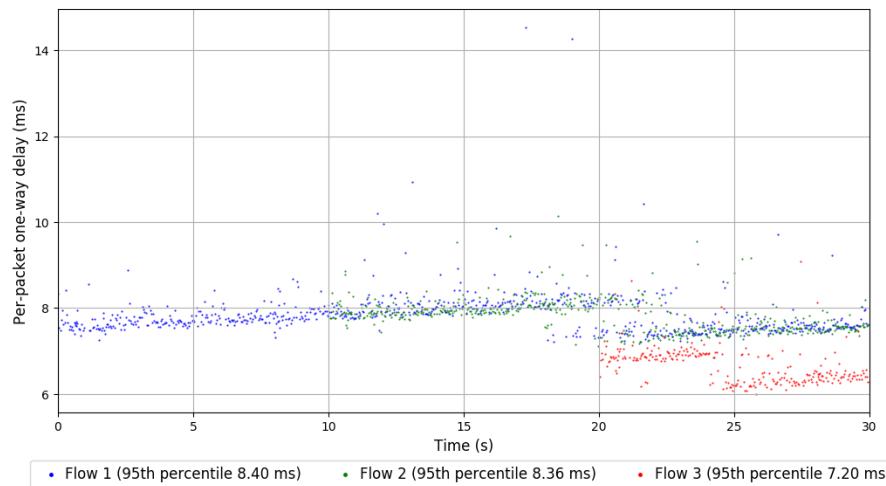
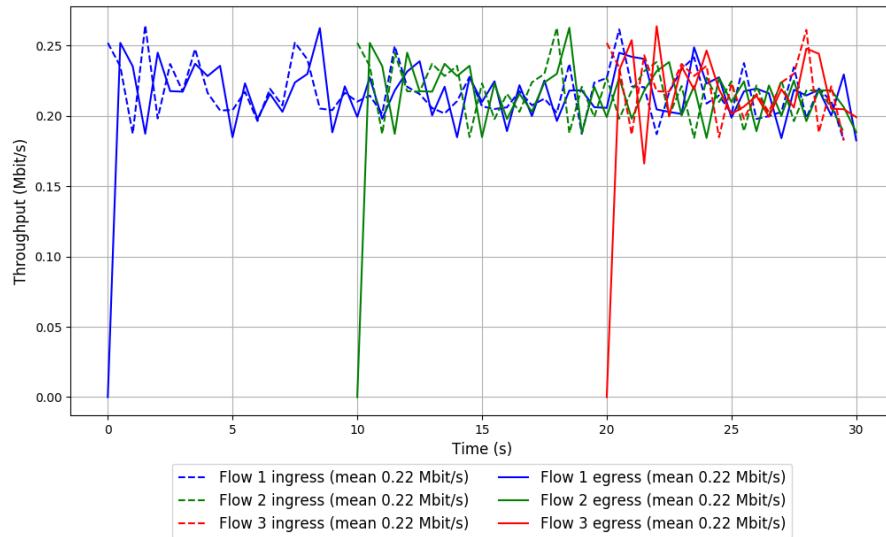


Run 3: Statistics of SCReAM

```
Start at: 2019-02-05 08:22:48
End at: 2019-02-05 08:23:18
Local clock offset: -0.155 ms
Remote clock offset: -4.979 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 8.356 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 8.404 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 8.357 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.201 ms
Loss rate: 0.00%
```

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

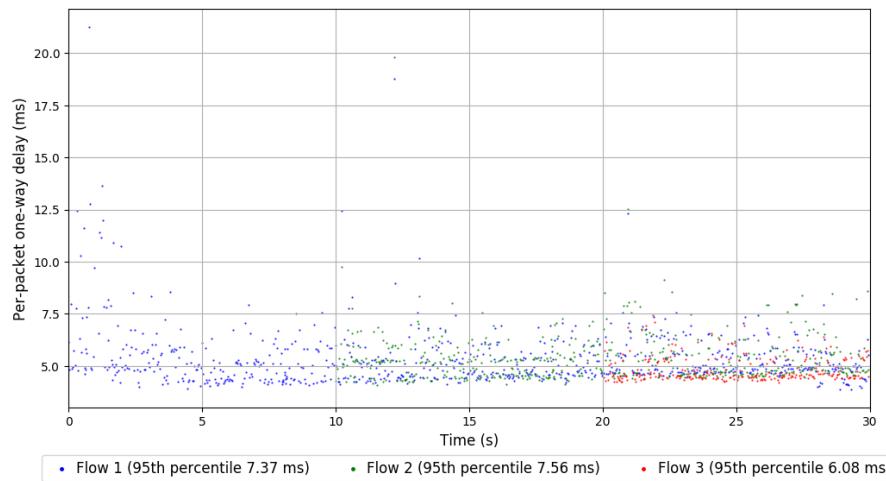
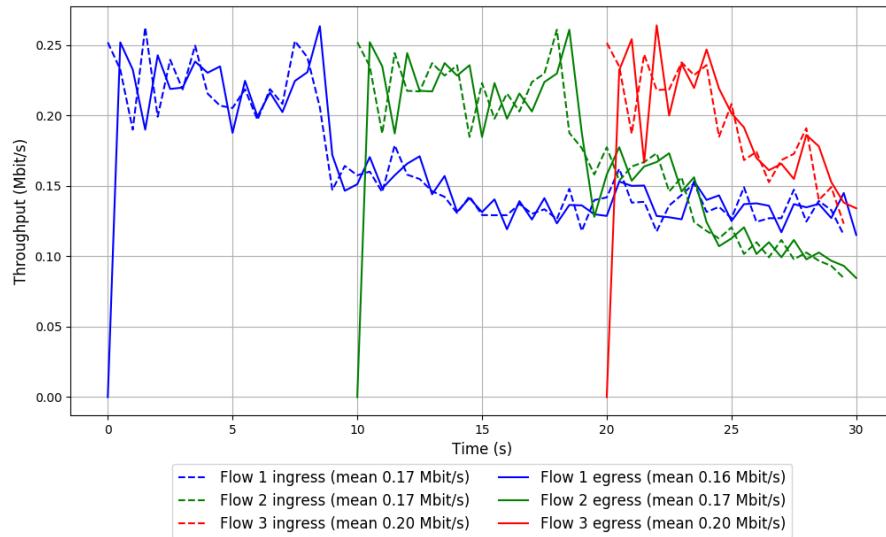


Run 4: Statistics of SCReAM

```
Start at: 2019-02-05 08:49:07
End at: 2019-02-05 08:49:37
Local clock offset: 2.424 ms
Remote clock offset: -4.95 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 7.129 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 7.366 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 7.561 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 6.085 ms
Loss rate: 0.39%
```

Run 4: Report of SCReAM — Data Link

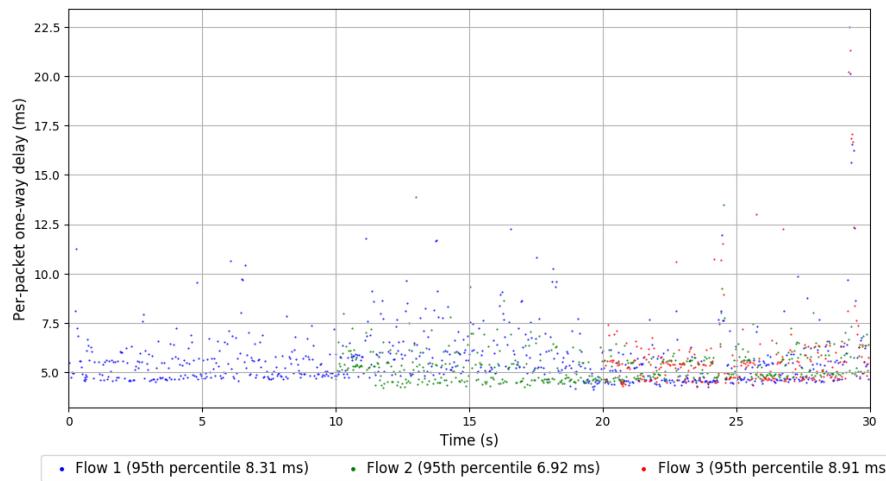
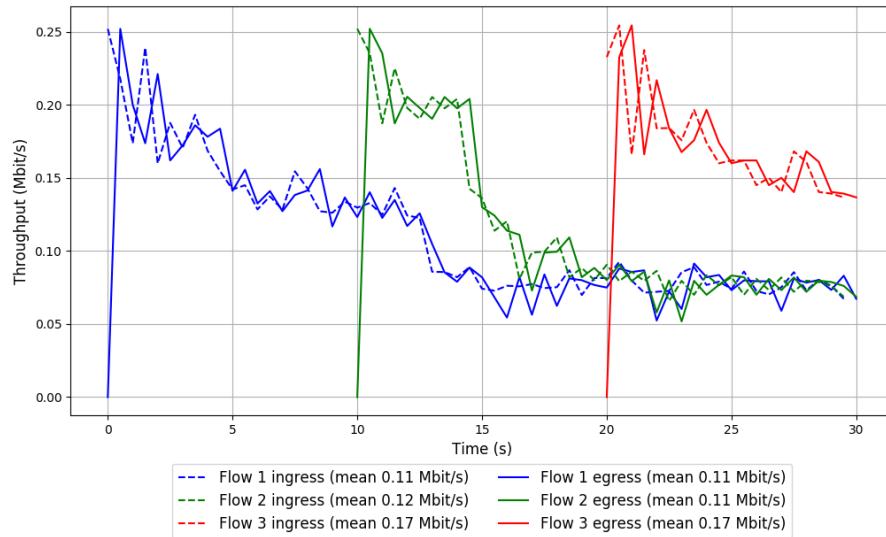


Run 5: Statistics of SCReAM

```
Start at: 2019-02-05 09:15:34
End at: 2019-02-05 09:16:04
Local clock offset: 1.484 ms
Remote clock offset: -3.959 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 7.787 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 8.311 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 6.920 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 8.915 ms
Loss rate: 1.07%
```

Run 5: Report of SCReAM — Data Link

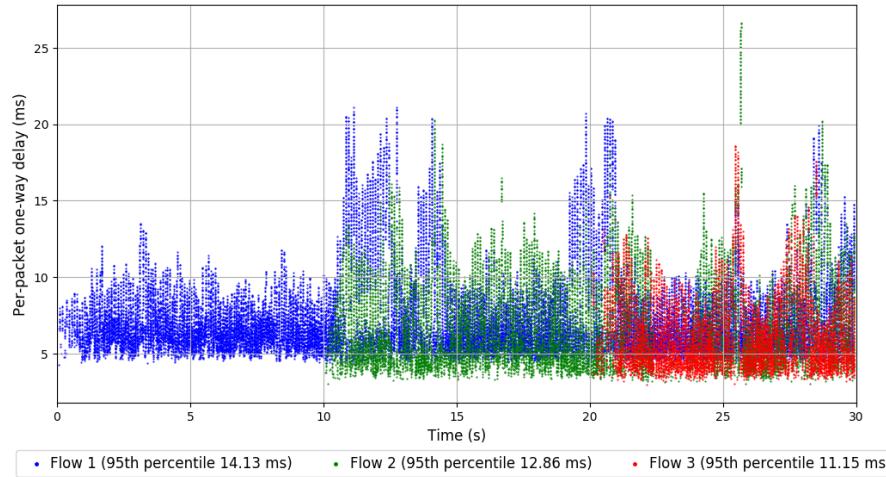
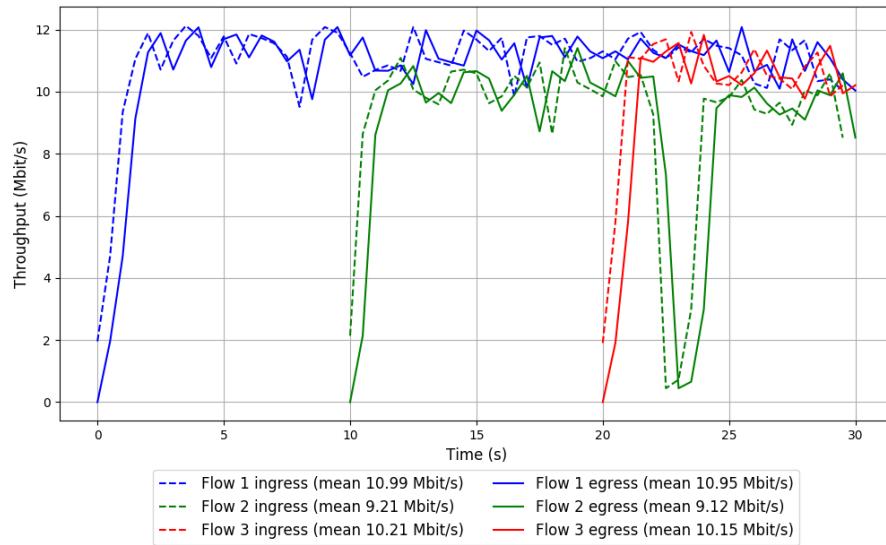


Run 1: Statistics of Sprout

```
Start at: 2019-02-05 07:46:53
End at: 2019-02-05 07:47:23
Local clock offset: 0.872 ms
Remote clock offset: -8.108 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 13.234 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 10.95 Mbit/s
95th percentile per-packet one-way delay: 14.135 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 12.860 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 11.150 ms
Loss rate: 0.50%
```

Run 1: Report of Sprout — Data Link

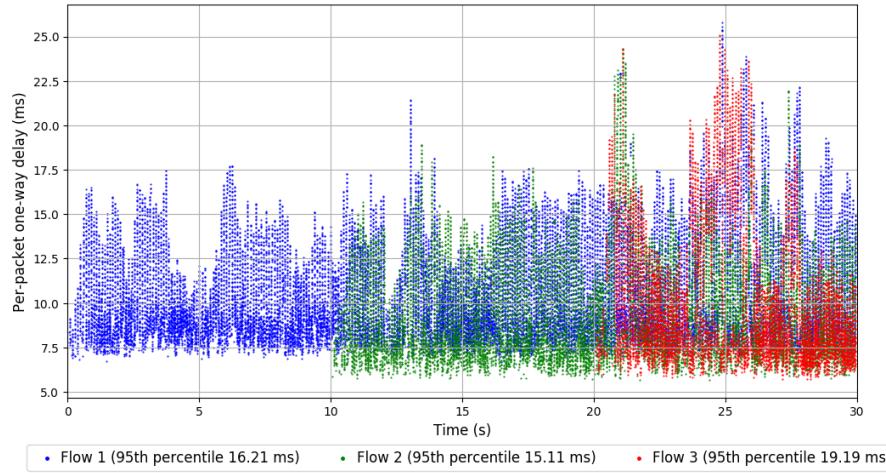
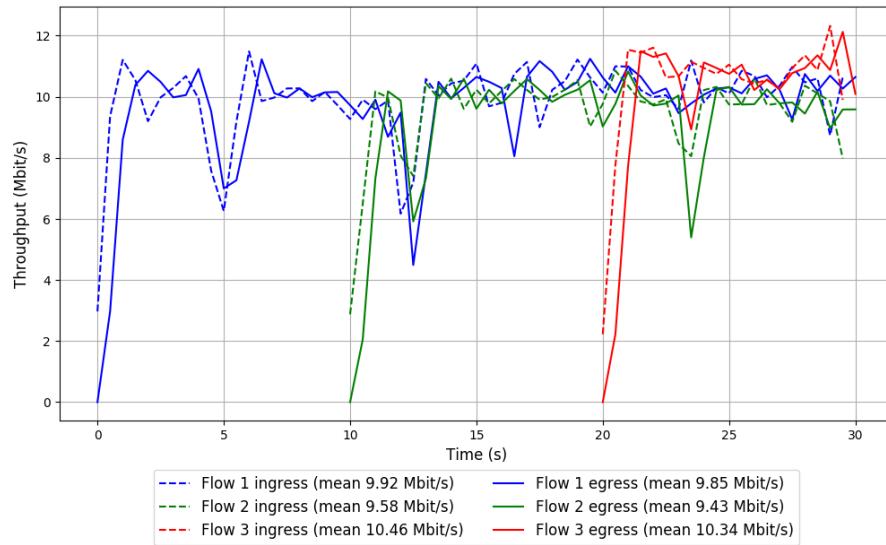


Run 2: Statistics of Sprout

```
Start at: 2019-02-05 08:13:49
End at: 2019-02-05 08:14:19
Local clock offset: 0.809 ms
Remote clock offset: -4.928 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 16.493 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 16.208 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 15.110 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 10.34 Mbit/s
95th percentile per-packet one-way delay: 19.191 ms
Loss rate: 1.04%
```

## Run 2: Report of Sprout — Data Link

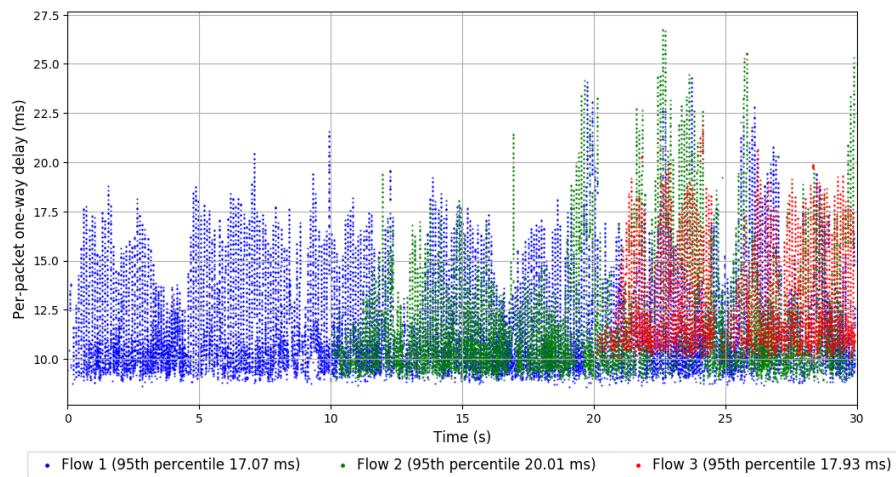
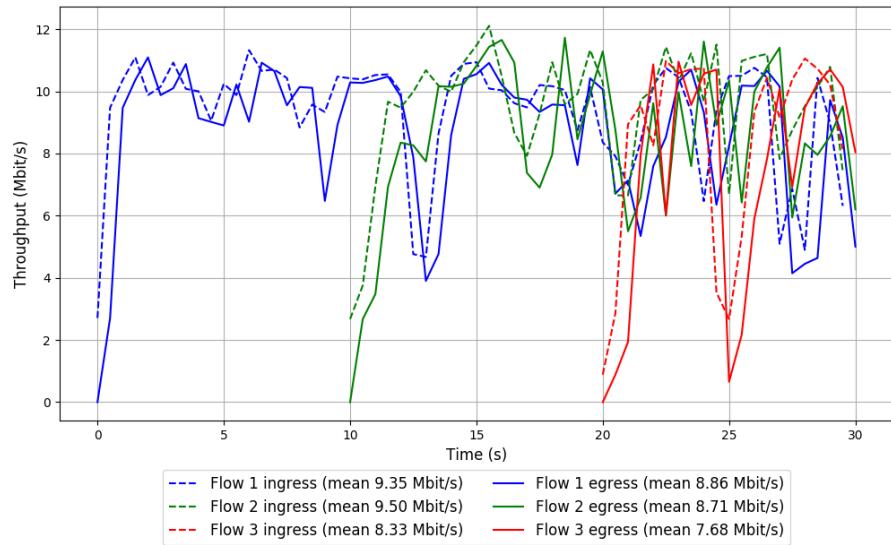


Run 3: Statistics of Sprout

```
Start at: 2019-02-05 08:39:52
End at: 2019-02-05 08:40:22
Local clock offset: -2.514 ms
Remote clock offset: -4.087 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 18.094 ms
Loss rate: 6.67%
-- Flow 1:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 17.071 ms
Loss rate: 5.18%
-- Flow 2:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 20.014 ms
Loss rate: 8.36%
-- Flow 3:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 17.928 ms
Loss rate: 7.81%
```

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

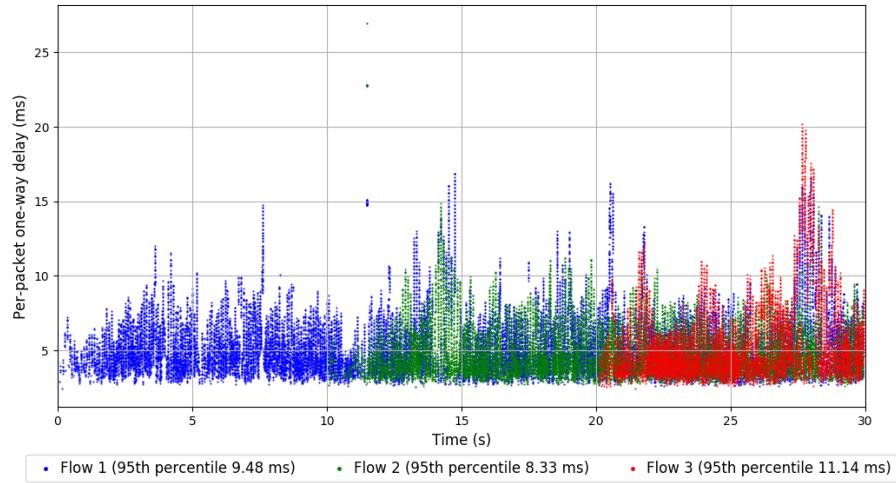
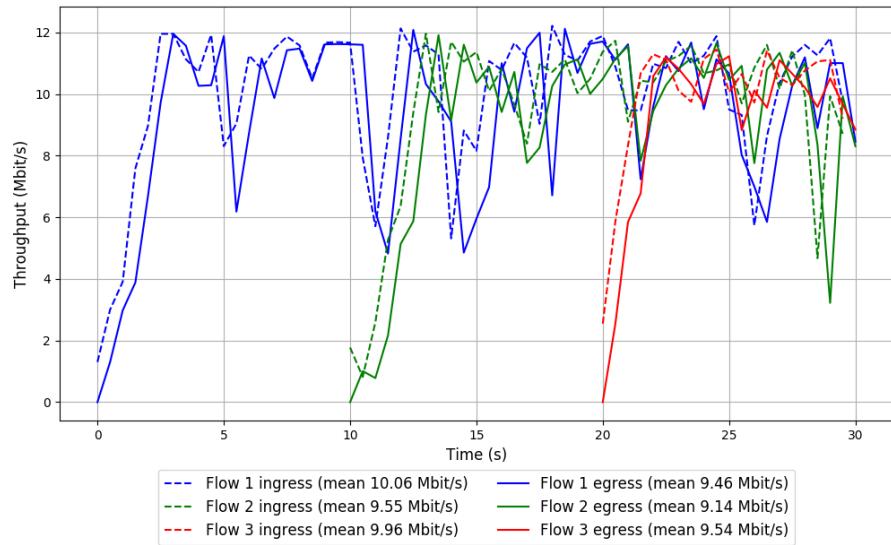


Run 4: Statistics of Sprout

```
Start at: 2019-02-05 09:06:25
End at: 2019-02-05 09:06:55
Local clock offset: 2.04 ms
Remote clock offset: -5.203 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.70 Mbit/s
95th percentile per-packet one-way delay: 9.341 ms
Loss rate: 5.06%
-- Flow 1:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 9.485 ms
Loss rate: 5.88%
-- Flow 2:
Average throughput: 9.14 Mbit/s
95th percentile per-packet one-way delay: 8.334 ms
Loss rate: 4.28%
-- Flow 3:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 11.145 ms
Loss rate: 4.08%
```

Run 4: Report of Sprout — Data Link

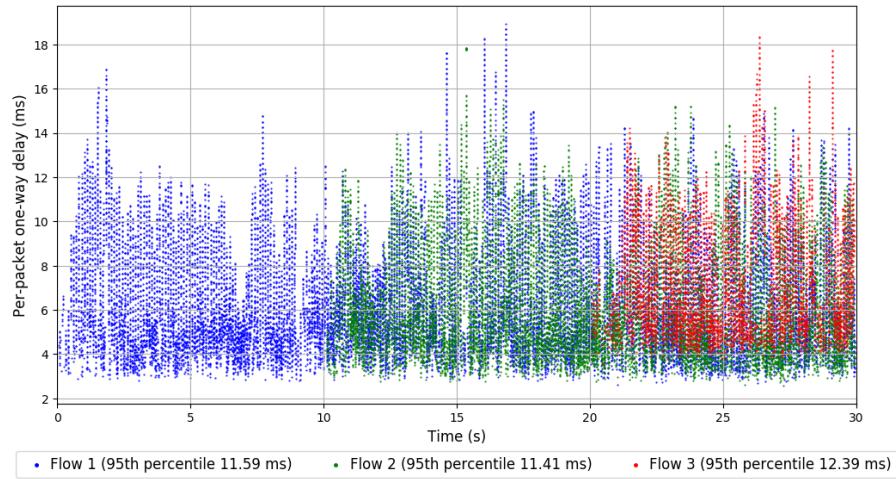
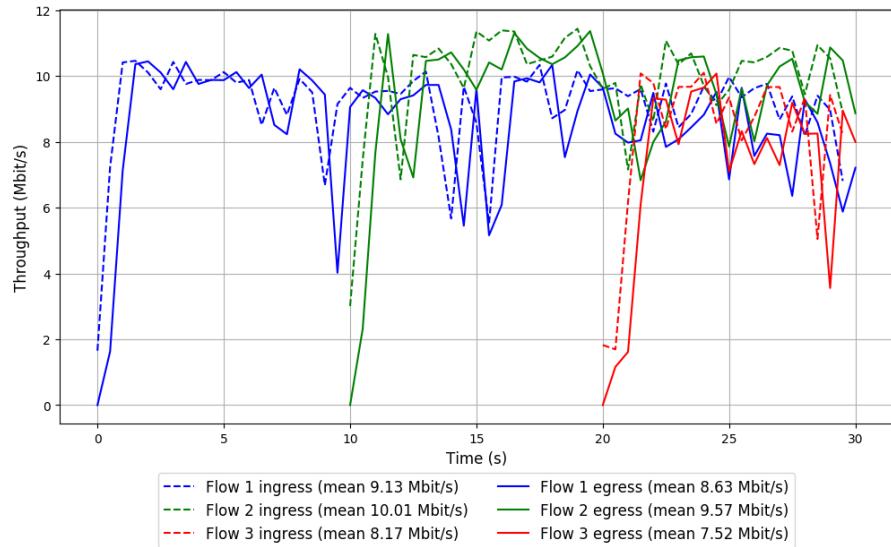


Run 5: Statistics of Sprout

```
Start at: 2019-02-05 09:33:08
End at: 2019-02-05 09:33:38
Local clock offset: 1.649 ms
Remote clock offset: -4.762 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 11.642 ms
Loss rate: 5.45%
-- Flow 1:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 11.594 ms
Loss rate: 5.48%
-- Flow 2:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 11.407 ms
Loss rate: 4.44%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 12.389 ms
Loss rate: 7.88%
```

Run 5: Report of Sprout — Data Link

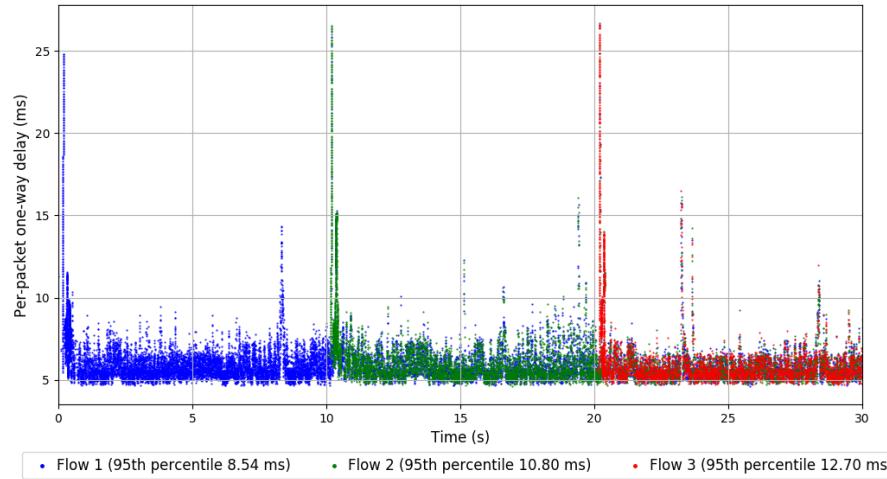
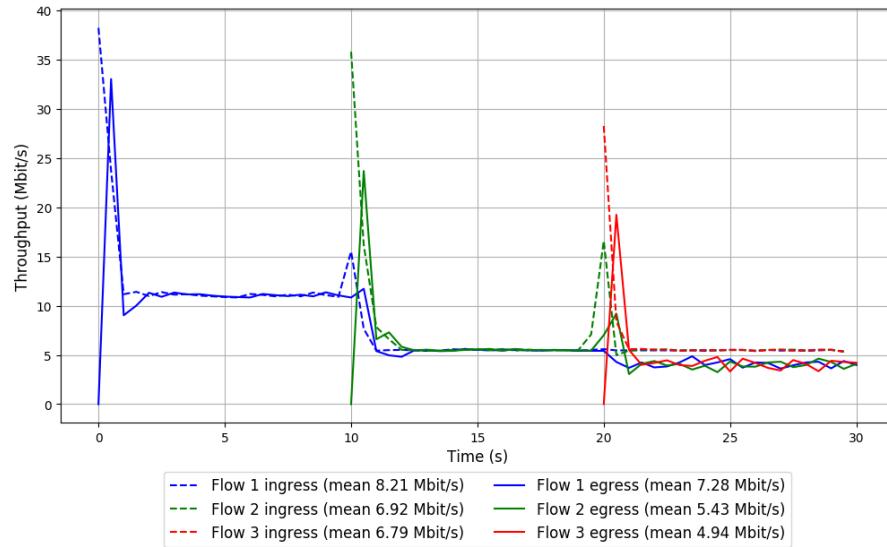


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-05 07:37:55
End at: 2019-02-05 07:38:25
Local clock offset: 0.017 ms
Remote clock offset: -7.768 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 9.479 ms
Loss rate: 16.87%
-- Flow 1:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 8.541 ms
Loss rate: 11.40%
-- Flow 2:
Average throughput: 5.43 Mbit/s
95th percentile per-packet one-way delay: 10.801 ms
Loss rate: 21.48%
-- Flow 3:
Average throughput: 4.94 Mbit/s
95th percentile per-packet one-way delay: 12.702 ms
Loss rate: 27.34%
```

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

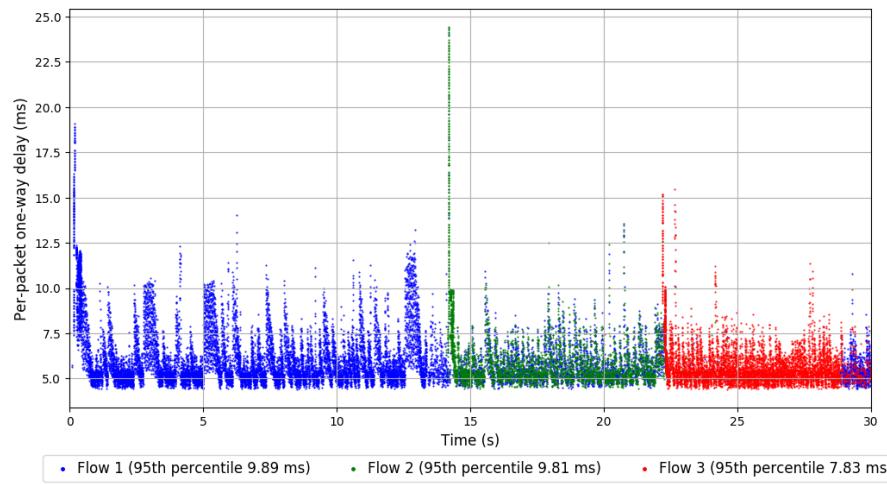
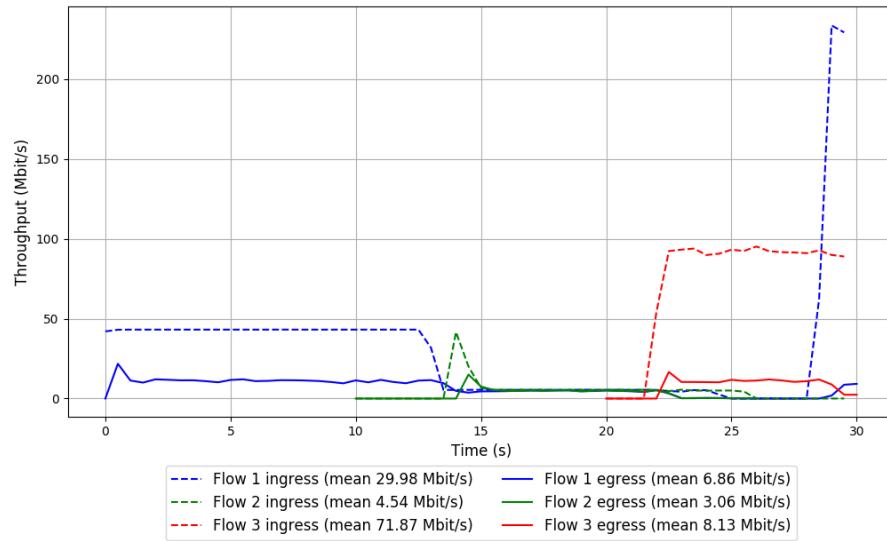


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-05 08:05:00
End at: 2019-02-05 08:05:30
Local clock offset: 0.259 ms
Remote clock offset: -6.967 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.17 Mbit/s
95th percentile per-packet one-way delay: 9.561 ms
Loss rate: 80.37%
-- Flow 1:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: 9.891 ms
Loss rate: 77.12%
-- Flow 2:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 9.810 ms
Loss rate: 46.38%
-- Flow 3:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 7.827 ms
Loss rate: 88.70%
```

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

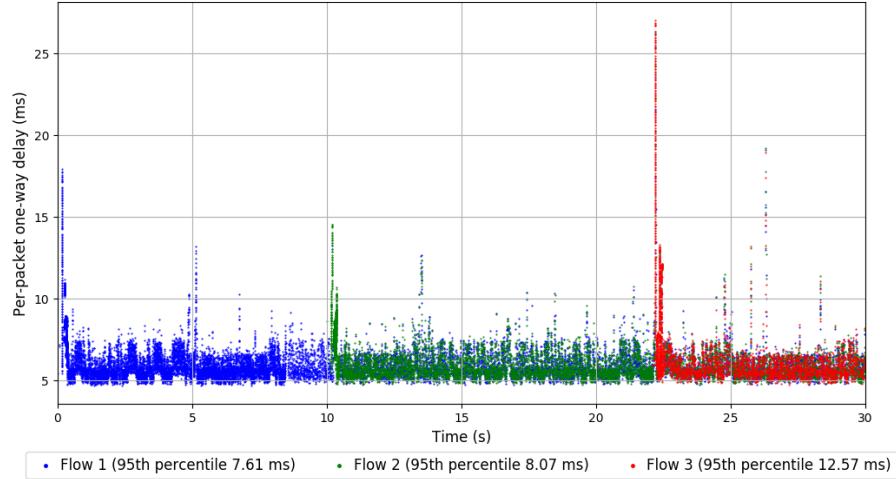
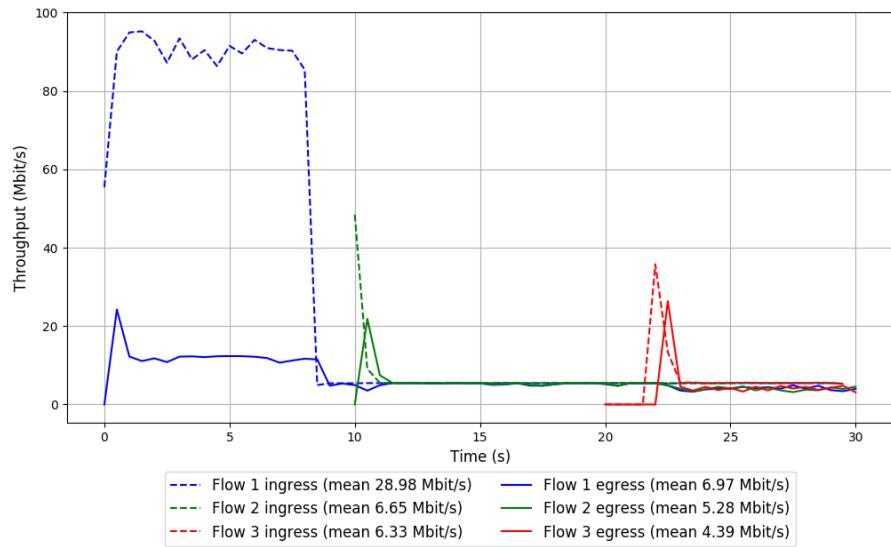


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-05 08:31:14
End at: 2019-02-05 08:31:44
Local clock offset: -0.111 ms
Remote clock offset: -5.849 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 8.248 ms
Loss rate: 66.38%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 7.607 ms
Loss rate: 75.96%
-- Flow 2:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 8.067 ms
Loss rate: 20.63%
-- Flow 3:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 12.566 ms
Loss rate: 30.76%
```

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

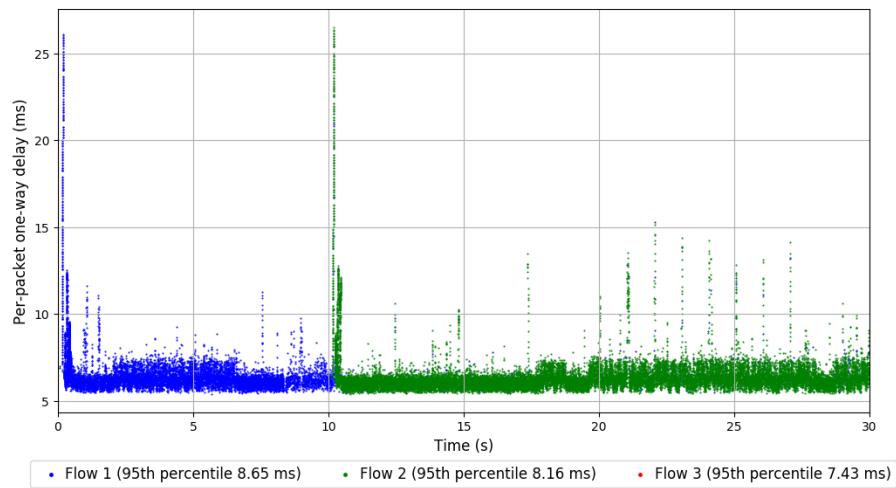
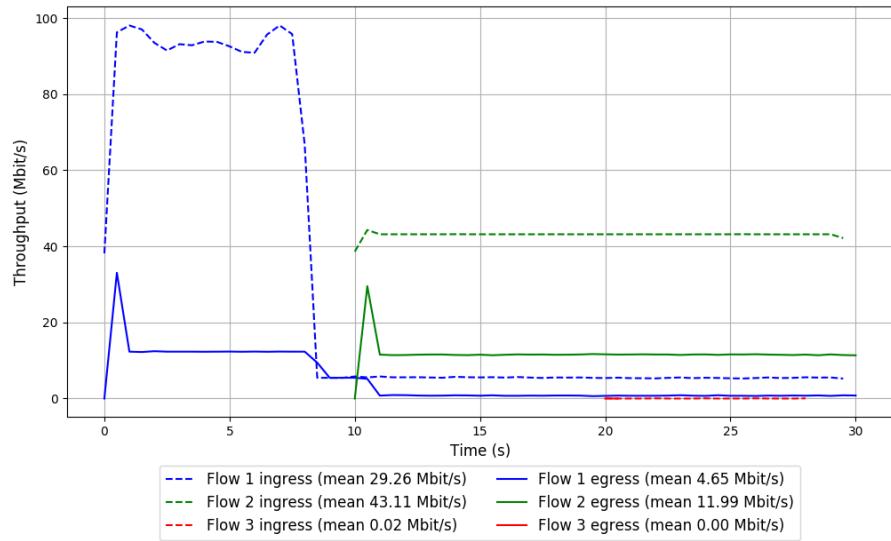


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-05 08:57:35
End at: 2019-02-05 08:58:05
Local clock offset: -1.84 ms
Remote clock offset: -6.393 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 8.378 ms
Loss rate: 78.20%
-- Flow 1:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 8.648 ms
Loss rate: 84.11%
-- Flow 2:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 8.164 ms
Loss rate: 72.18%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7.432 ms
Loss rate: 99.16%
```

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

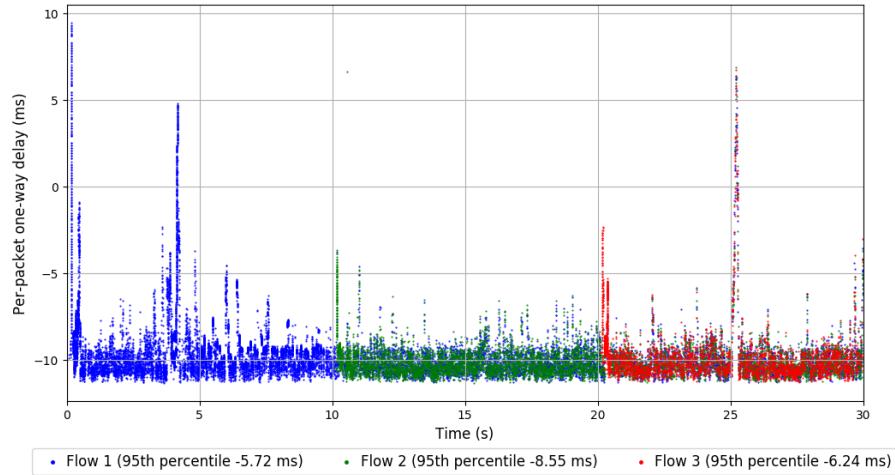
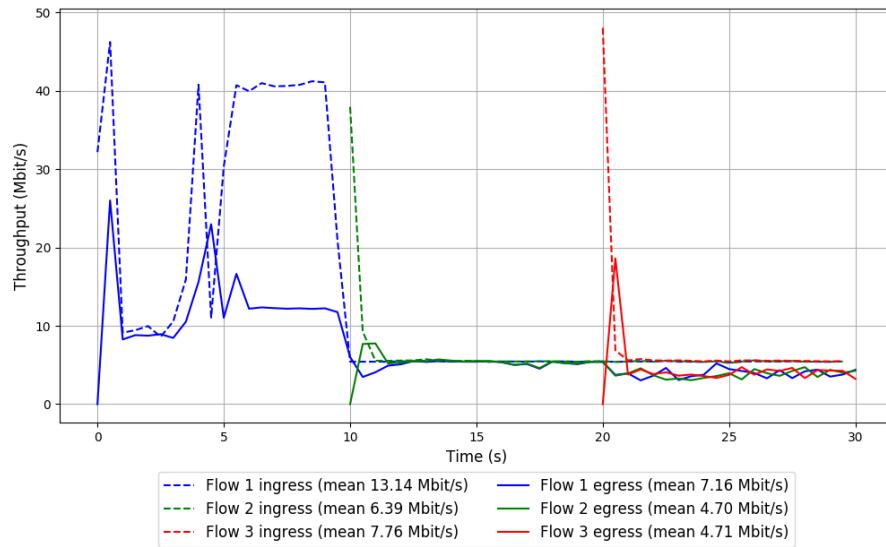


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-05 09:24:18
End at: 2019-02-05 09:24:48
Local clock offset: -1.566 ms
Remote clock offset: -22.095 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: -6.513 ms
Loss rate: 40.61%
-- Flow 1:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: -5.721 ms
Loss rate: 45.47%
-- Flow 2:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: -8.548 ms
Loss rate: 26.44%
-- Flow 3:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: -6.235 ms
Loss rate: 39.25%
```

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

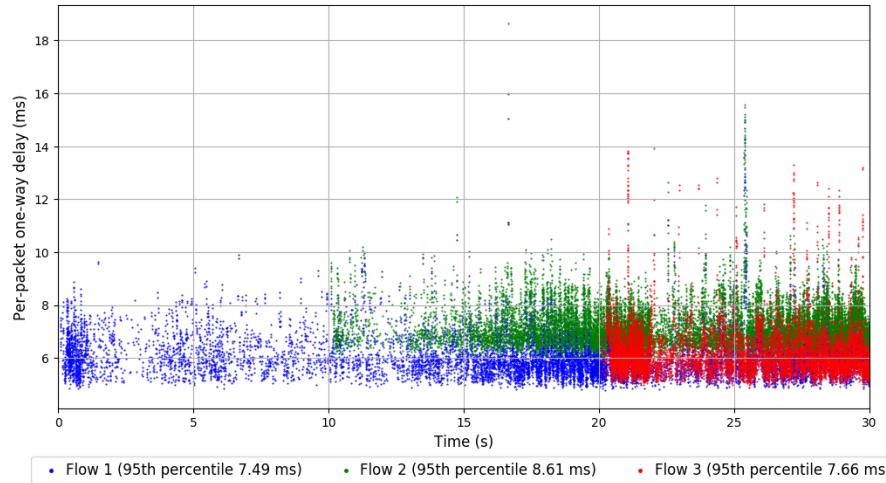
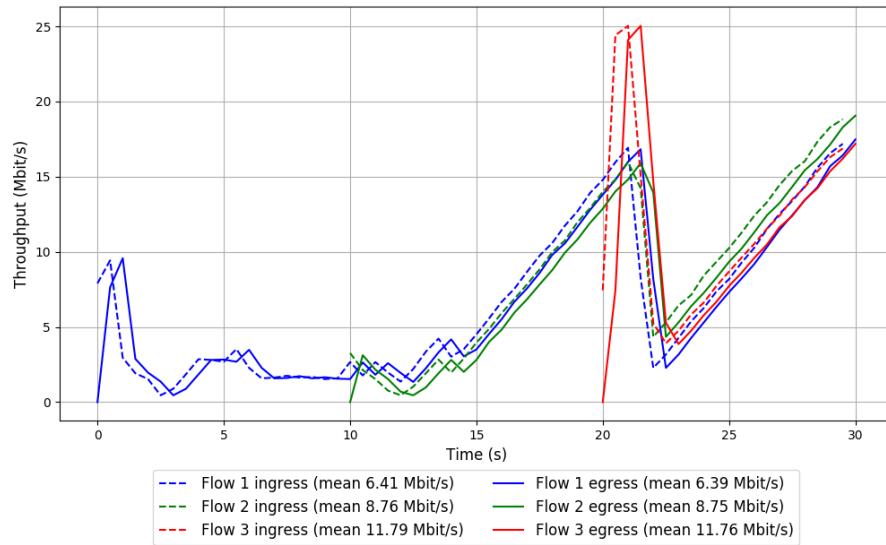


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-05 07:44:17
End at: 2019-02-05 07:44:47
Local clock offset: 0.224 ms
Remote clock offset: -7.121 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.13 Mbit/s
95th percentile per-packet one-way delay: 8.244 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 7.487 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 8.610 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 7.659 ms
Loss rate: 0.30%
```

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

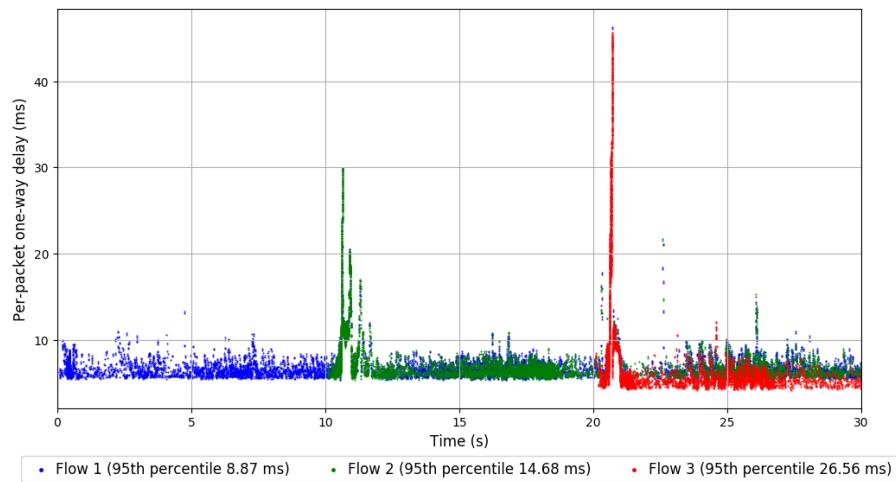
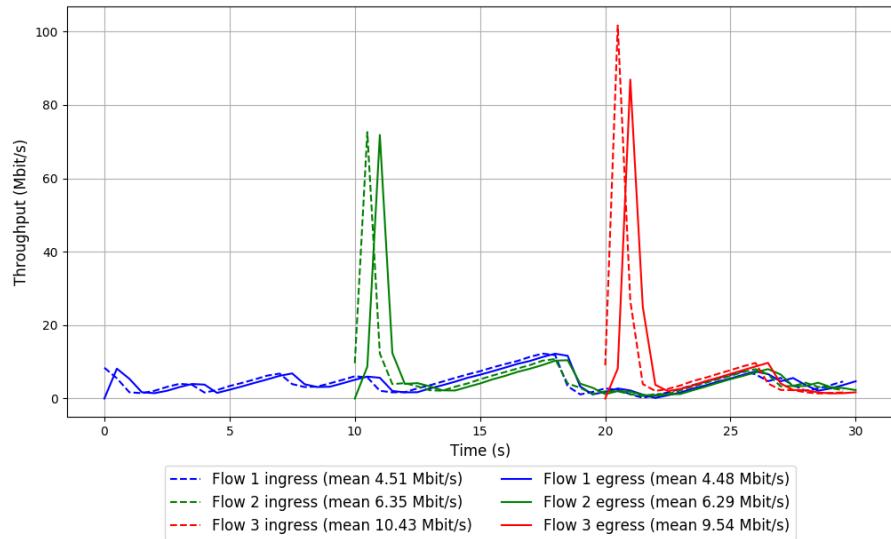


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-05 08:11:18
End at: 2019-02-05 08:11:48
Local clock offset: 1.058 ms
Remote clock offset: -6.255 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 14.515 ms
Loss rate: 2.98%
-- Flow 1:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 8.873 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 14.683 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 26.564 ms
Loss rate: 8.50%
```

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

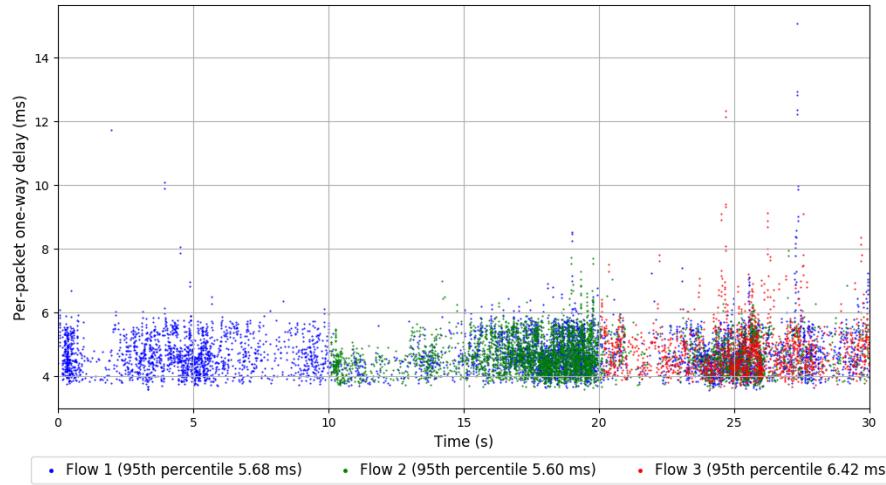
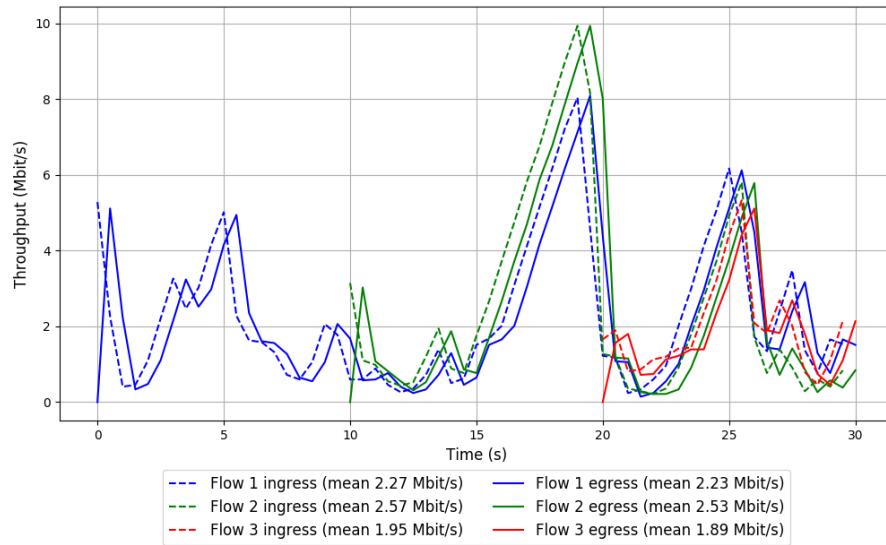


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-05 08:37:20
End at: 2019-02-05 08:37:50
Local clock offset: 0.736 ms
Remote clock offset: -5.948 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 5.701 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 5.679 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 5.602 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 6.416 ms
Loss rate: 2.90%
```

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

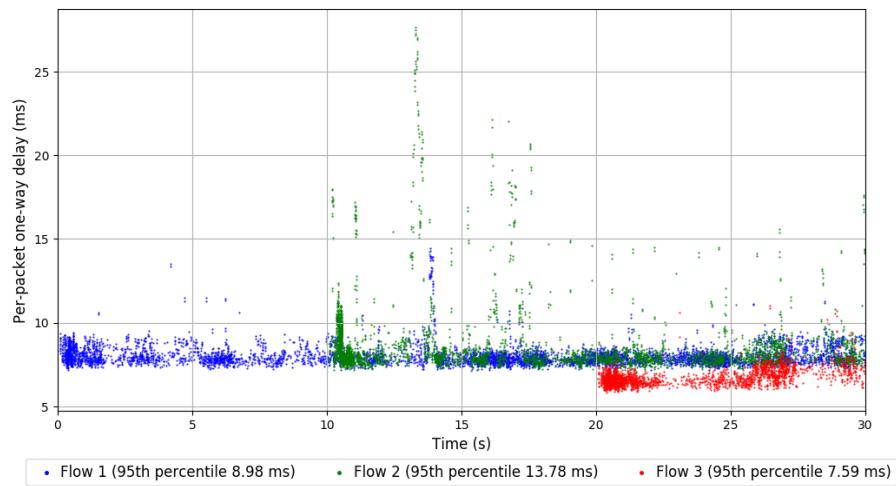
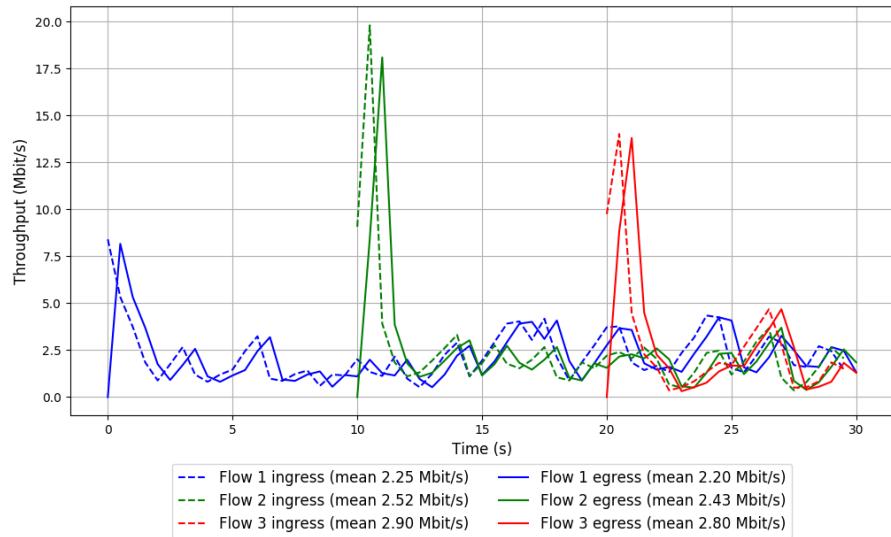


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-05 09:03:50
End at: 2019-02-05 09:04:20
Local clock offset: -1.354 ms
Remote clock offset: -5.385 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 9.832 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 8.979 ms
Loss rate: 2.23%
-- Flow 2:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 13.784 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 7.586 ms
Loss rate: 3.41%
```

Run 4: Report of TCP Vegas — Data Link

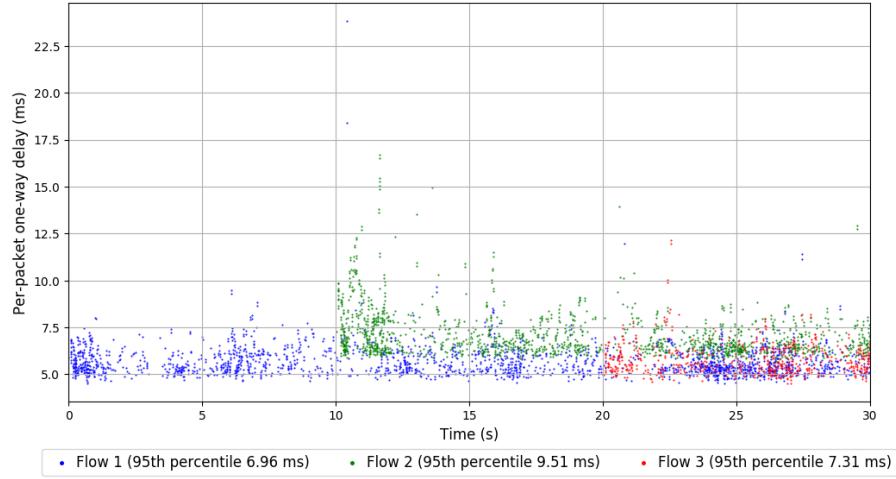
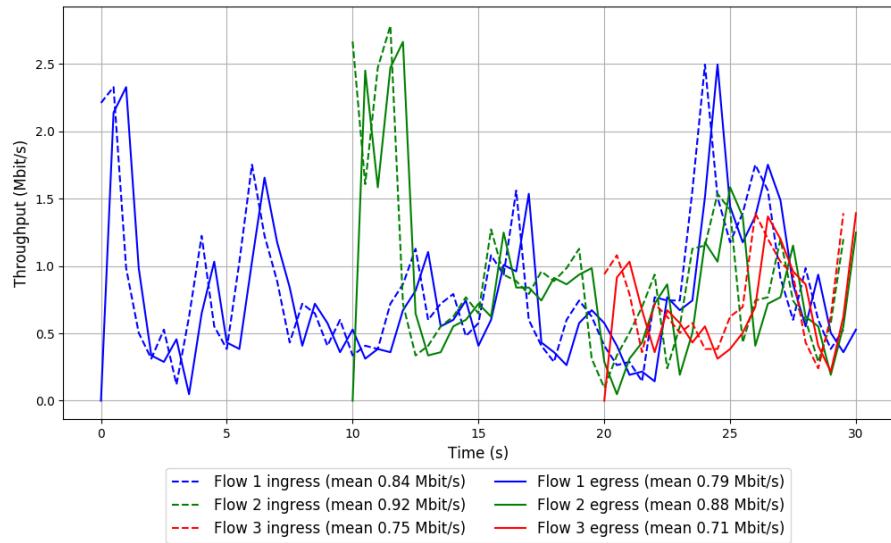


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-05 09:30:31
End at: 2019-02-05 09:31:01
Local clock offset: 2.138 ms
Remote clock offset: -2.568 ms

# Below is generated by plot.py at 2019-02-05 09:41:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 8.305 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 6.955 ms
Loss rate: 5.41%
-- Flow 2:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 9.508 ms
Loss rate: 4.81%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 7.309 ms
Loss rate: 5.30%
```

Run 5: Report of TCP Vegas — Data Link

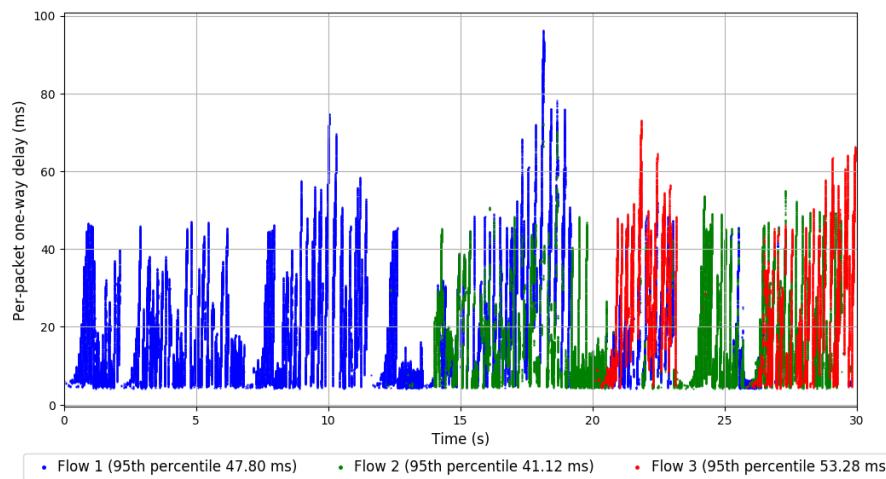
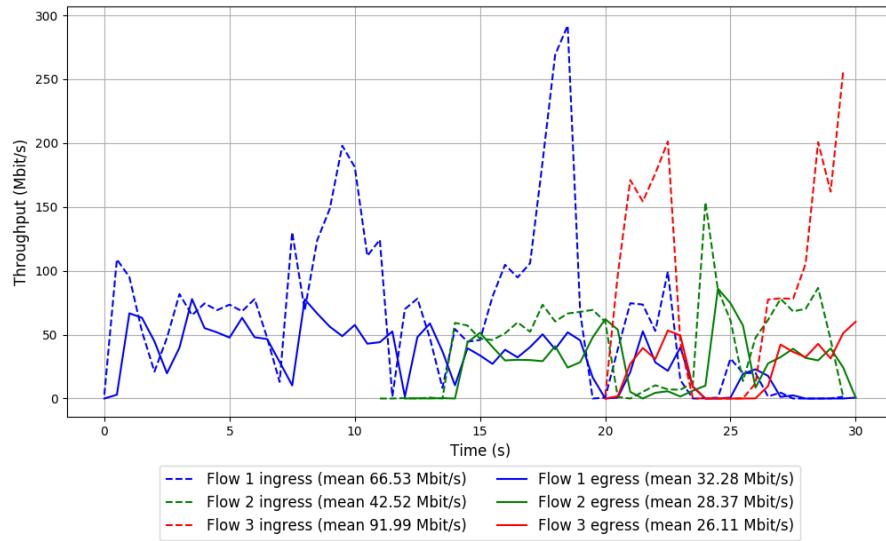


Run 1: Statistics of Verus

```
Start at: 2019-02-05 07:22:55
End at: 2019-02-05 07:23:25
Local clock offset: 0.457 ms
Remote clock offset: -8.326 ms

# Below is generated by plot.py at 2019-02-05 09:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.42 Mbit/s
95th percentile per-packet one-way delay: 46.946 ms
Loss rate: 53.38%
-- Flow 1:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 47.799 ms
Loss rate: 51.60%
-- Flow 2:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 41.125 ms
Loss rate: 37.12%
-- Flow 3:
Average throughput: 26.11 Mbit/s
95th percentile per-packet one-way delay: 53.276 ms
Loss rate: 71.48%
```

## Run 1: Report of Verus — Data Link

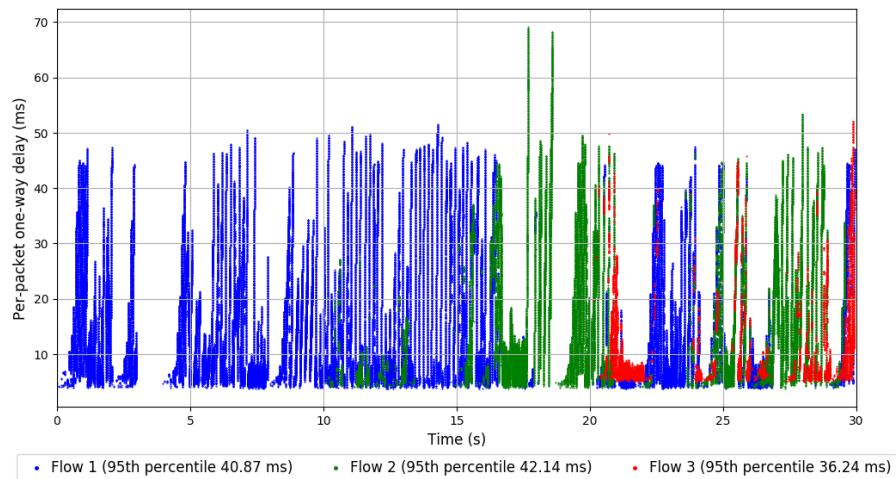
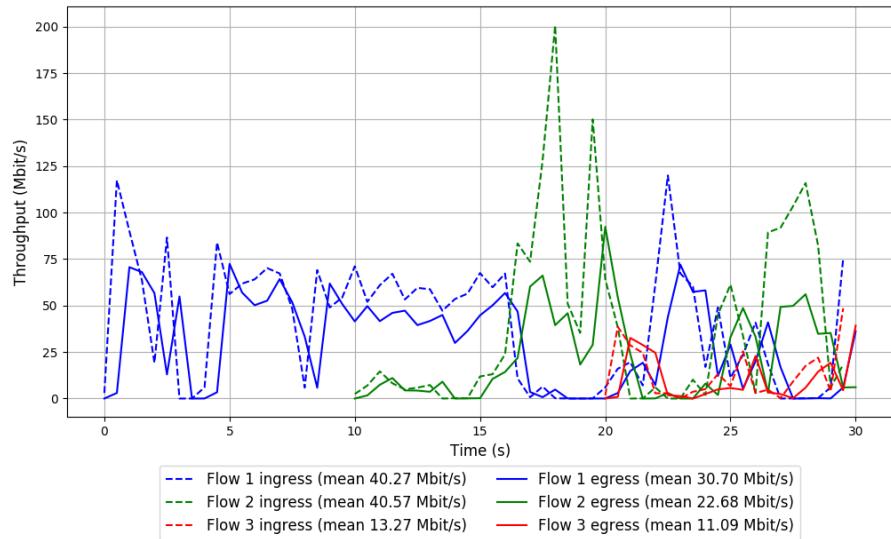


Run 2: Statistics of Verus

```
Start at: 2019-02-05 07:49:21
End at: 2019-02-05 07:49:51
Local clock offset: 0.958 ms
Remote clock offset: -7.346 ms

# Below is generated by plot.py at 2019-02-05 09:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 41.029 ms
Loss rate: 30.94%
-- Flow 1:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 40.867 ms
Loss rate: 23.67%
-- Flow 2:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 42.136 ms
Loss rate: 44.34%
-- Flow 3:
Average throughput: 11.09 Mbit/s
95th percentile per-packet one-way delay: 36.238 ms
Loss rate: 16.23%
```

## Run 2: Report of Verus — Data Link

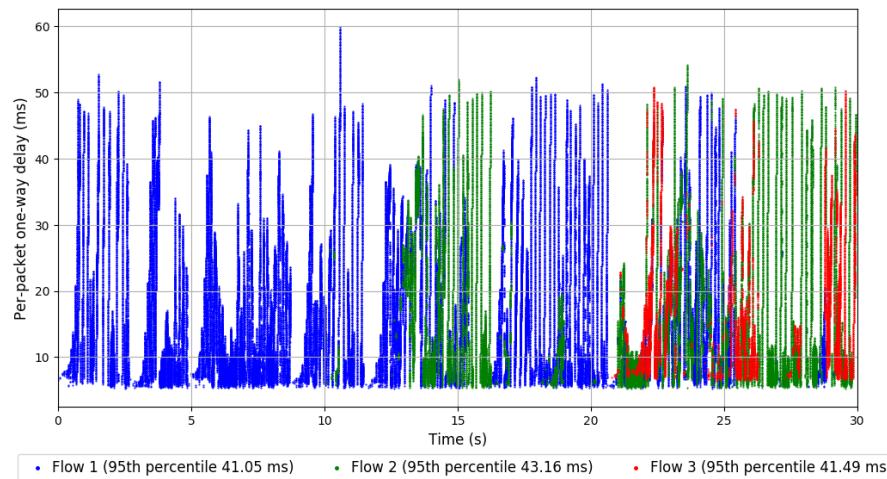
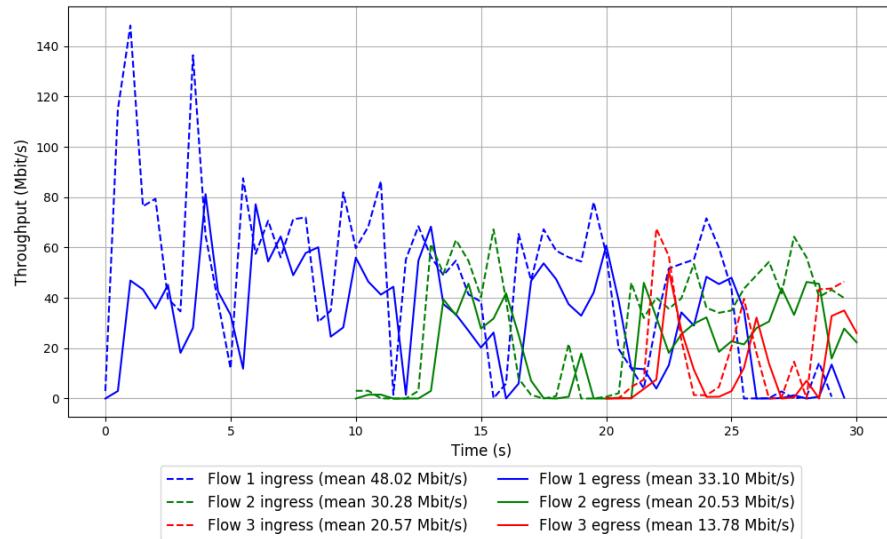


Run 3: Statistics of Verus

```
Start at: 2019-02-05 08:16:18
End at: 2019-02-05 08:16:48
Local clock offset: -0.833 ms
Remote clock offset: -6.761 ms

# Below is generated by plot.py at 2019-02-05 09:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 41.690 ms
Loss rate: 31.62%
-- Flow 1:
Average throughput: 33.10 Mbit/s
95th percentile per-packet one-way delay: 41.055 ms
Loss rate: 31.25%
-- Flow 2:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 43.156 ms
Loss rate: 32.10%
-- Flow 3:
Average throughput: 13.78 Mbit/s
95th percentile per-packet one-way delay: 41.494 ms
Loss rate: 32.78%
```

Run 3: Report of Verus — Data Link

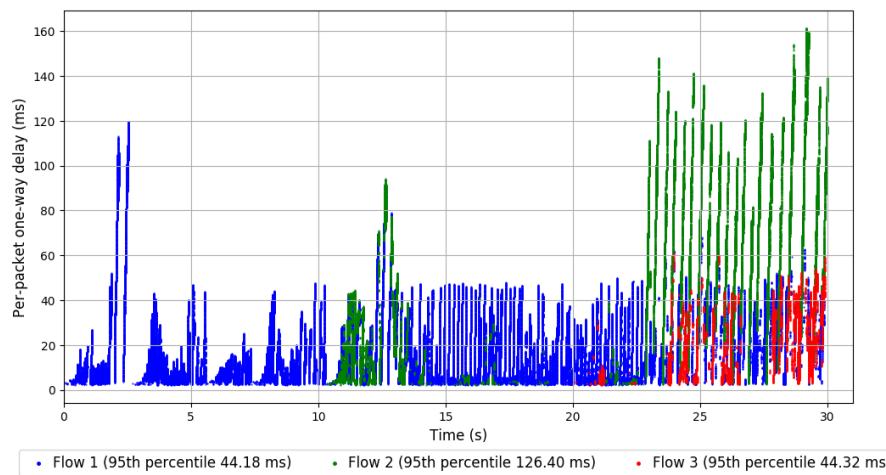
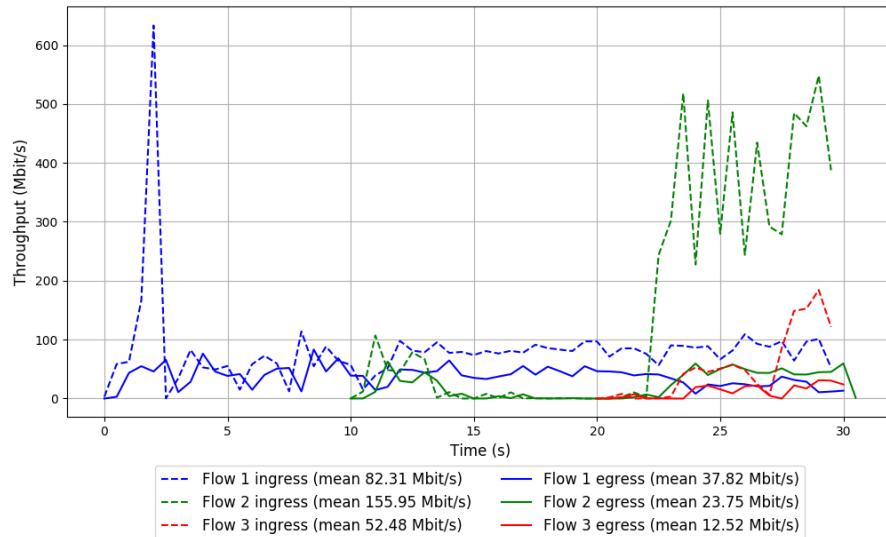


Run 4: Statistics of Verus

```
Start at: 2019-02-05 08:42:19
End at: 2019-02-05 08:42:49
Local clock offset: 1.986 ms
Remote clock offset: -6.046 ms

# Below is generated by plot.py at 2019-02-05 09:42:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 102.507 ms
Loss rate: 71.43%
-- Flow 1:
Average throughput: 37.82 Mbit/s
95th percentile per-packet one-way delay: 44.180 ms
Loss rate: 54.00%
-- Flow 2:
Average throughput: 23.75 Mbit/s
95th percentile per-packet one-way delay: 126.403 ms
Loss rate: 84.68%
-- Flow 3:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 44.324 ms
Loss rate: 76.03%
```

## Run 4: Report of Verus — Data Link

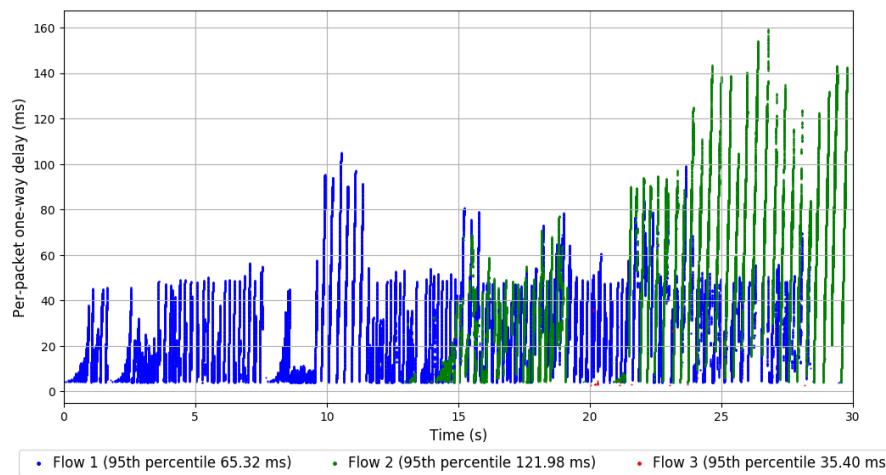
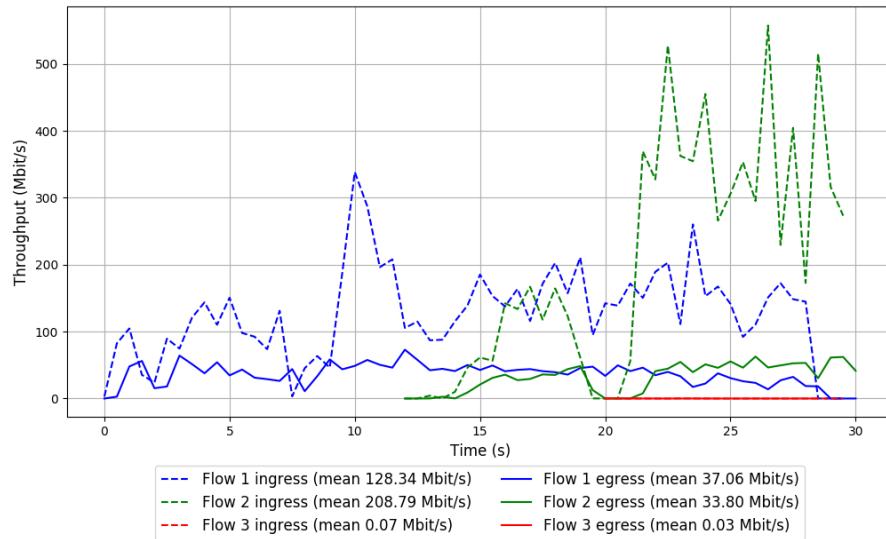


Run 5: Statistics of Verus

```
Start at: 2019-02-05 09:08:56
End at: 2019-02-05 09:09:26
Local clock offset: 2.281 ms
Remote clock offset: -4.963 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.55 Mbit/s
95th percentile per-packet one-way delay: 95.273 ms
Loss rate: 77.29%
-- Flow 1:
Average throughput: 37.06 Mbit/s
95th percentile per-packet one-way delay: 65.316 ms
Loss rate: 71.20%
-- Flow 2:
Average throughput: 33.80 Mbit/s
95th percentile per-packet one-way delay: 121.977 ms
Loss rate: 83.70%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 35.400 ms
Loss rate: 61.67%
```

Run 5: Report of Verus — Data Link

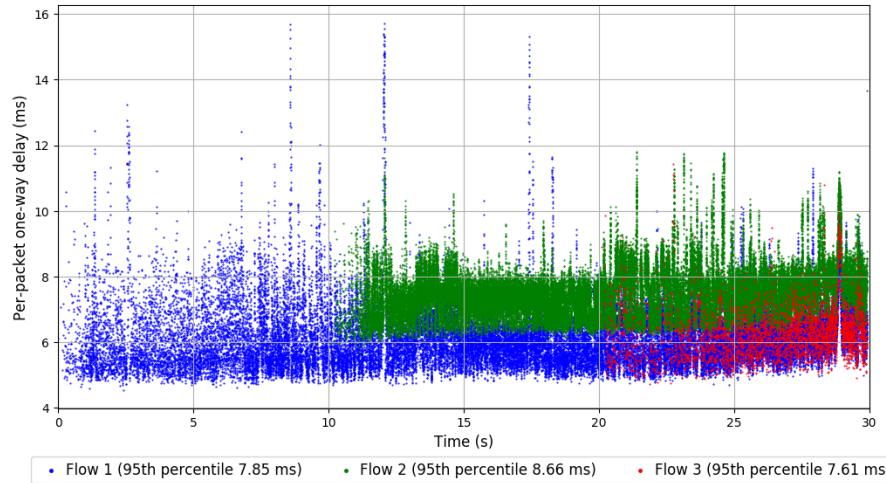
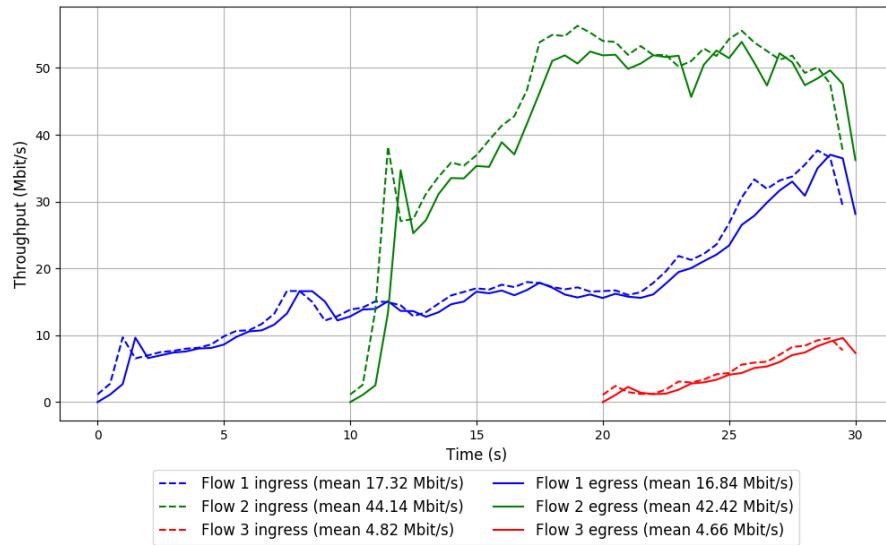


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-02-05 07:32:59
End at: 2019-02-05 07:33:29
Local clock offset: -0.449 ms
Remote clock offset: -8.418 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 8.512 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 7.846 ms
Loss rate: 2.78%
-- Flow 2:
Average throughput: 42.42 Mbit/s
95th percentile per-packet one-way delay: 8.664 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 7.613 ms
Loss rate: 3.42%
```

Run 1: Report of PCC-Vivace — Data Link

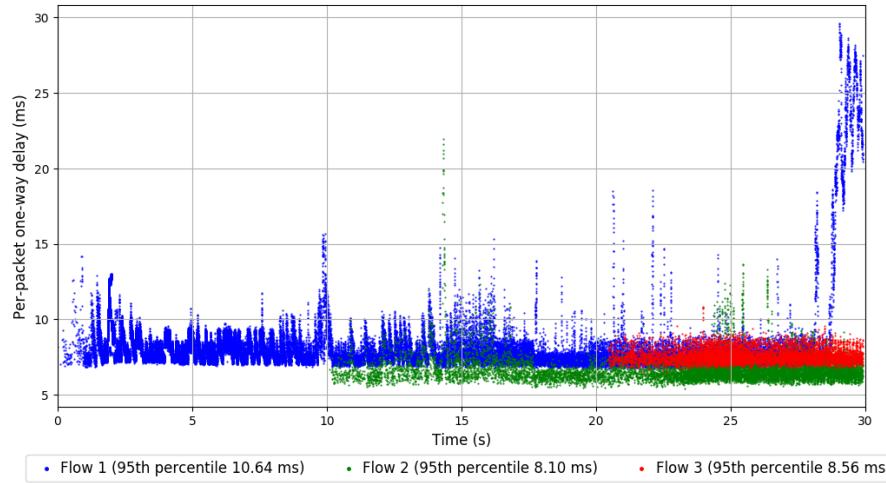
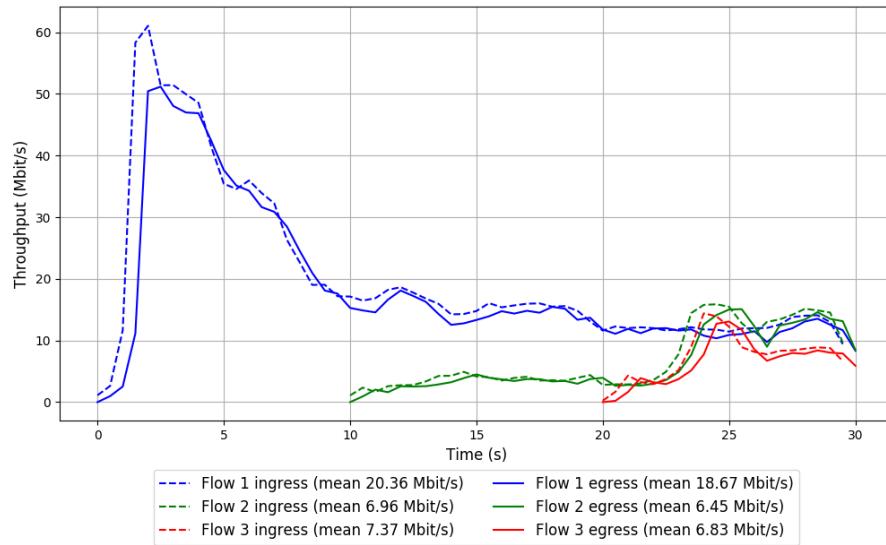


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-05 08:00:02
End at: 2019-02-05 08:00:32
Local clock offset: 0.273 ms
Remote clock offset: -5.916 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 10.006 ms
Loss rate: 8.03%
-- Flow 1:
Average throughput: 18.67 Mbit/s
95th percentile per-packet one-way delay: 10.638 ms
Loss rate: 8.27%
-- Flow 2:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 8.102 ms
Loss rate: 7.32%
-- Flow 3:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 8.565 ms
Loss rate: 7.31%
```

Run 2: Report of PCC-Vivace — Data Link

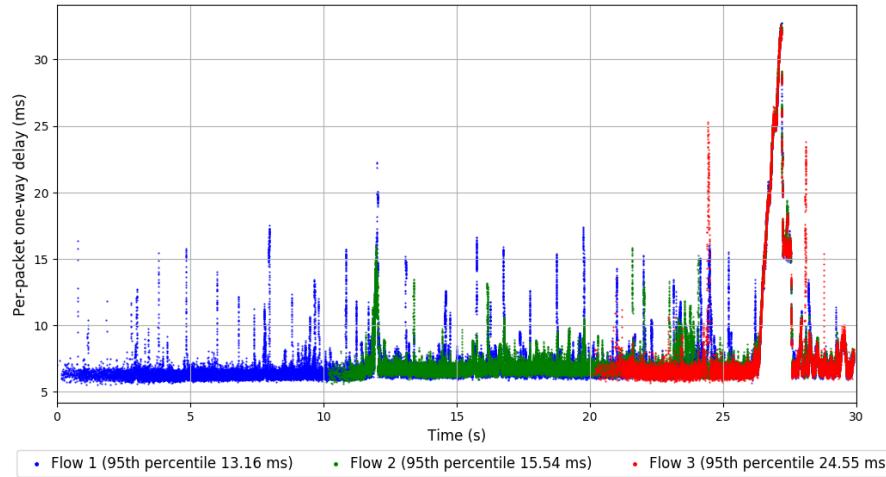
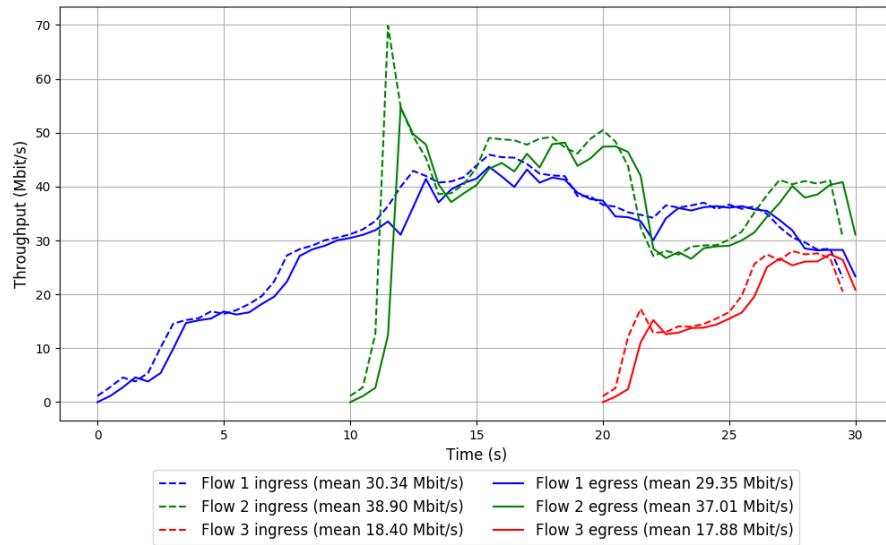


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-05 08:26:20
End at: 2019-02-05 08:26:50
Local clock offset: -1.352 ms
Remote clock offset: -6.287 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.87 Mbit/s
95th percentile per-packet one-way delay: 15.715 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 13.157 ms
Loss rate: 3.25%
-- Flow 2:
Average throughput: 37.01 Mbit/s
95th percentile per-packet one-way delay: 15.540 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 24.555 ms
Loss rate: 2.82%
```

Run 3: Report of PCC-Vivace — Data Link

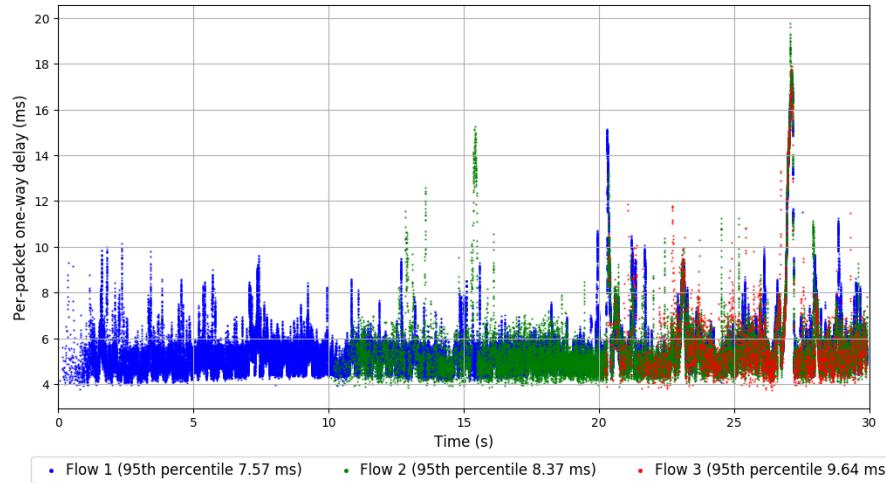
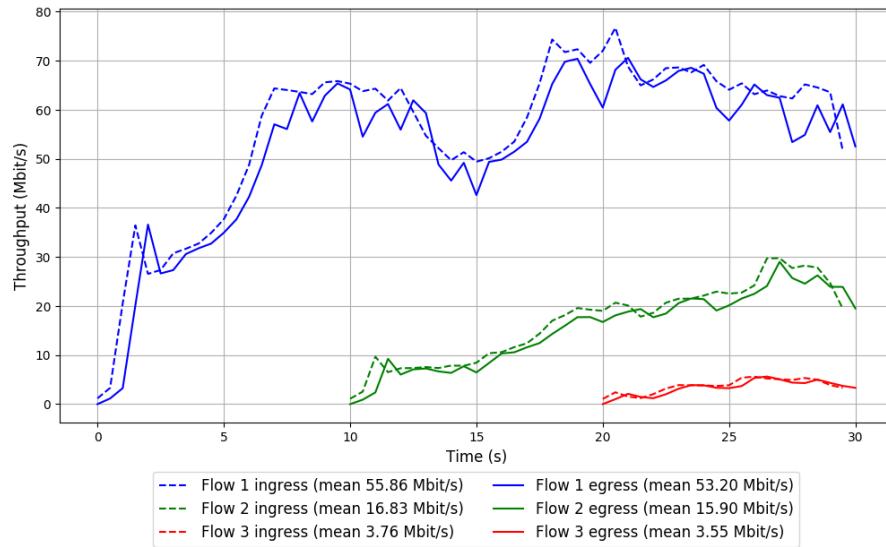


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-05 08:52:44
End at: 2019-02-05 08:53:14
Local clock offset: 1.368 ms
Remote clock offset: -4.962 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.95 Mbit/s
95th percentile per-packet one-way delay: 7.711 ms
Loss rate: 4.89%
-- Flow 1:
Average throughput: 53.20 Mbit/s
95th percentile per-packet one-way delay: 7.573 ms
Loss rate: 4.75%
-- Flow 2:
Average throughput: 15.90 Mbit/s
95th percentile per-packet one-way delay: 8.372 ms
Loss rate: 5.48%
-- Flow 3:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 9.643 ms
Loss rate: 5.70%
```

Run 4: Report of PCC-Vivace — Data Link

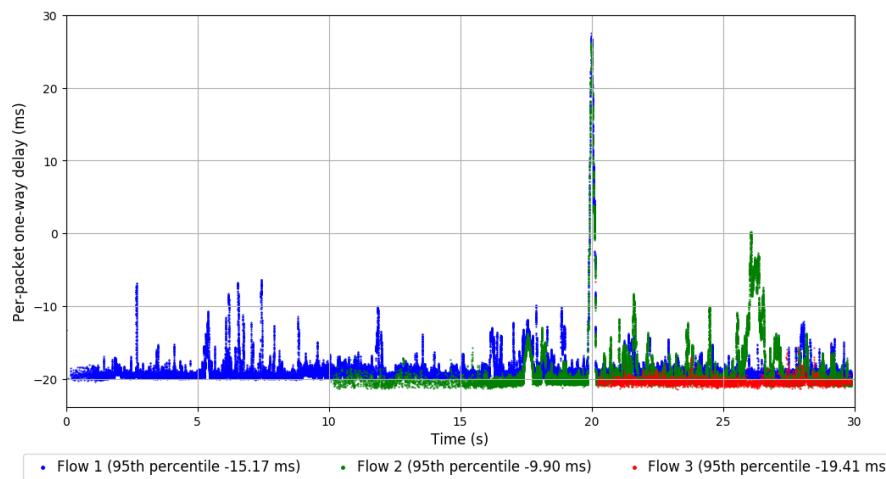
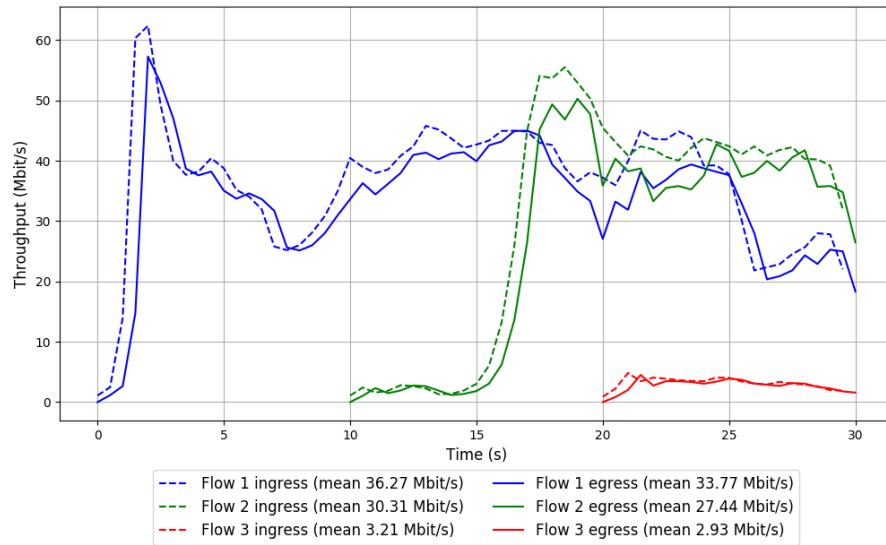


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-05 09:19:16
End at: 2019-02-05 09:19:46
Local clock offset: -0.322 ms
Remote clock offset: -31.14 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.99 Mbit/s
95th percentile per-packet one-way delay: -14.165 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: -15.167 ms
Loss rate: 6.92%
-- Flow 2:
Average throughput: 27.44 Mbit/s
95th percentile per-packet one-way delay: -9.903 ms
Loss rate: 9.46%
-- Flow 3:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: -19.406 ms
Loss rate: 9.27%
```

Run 5: Report of PCC-Vivace — Data Link

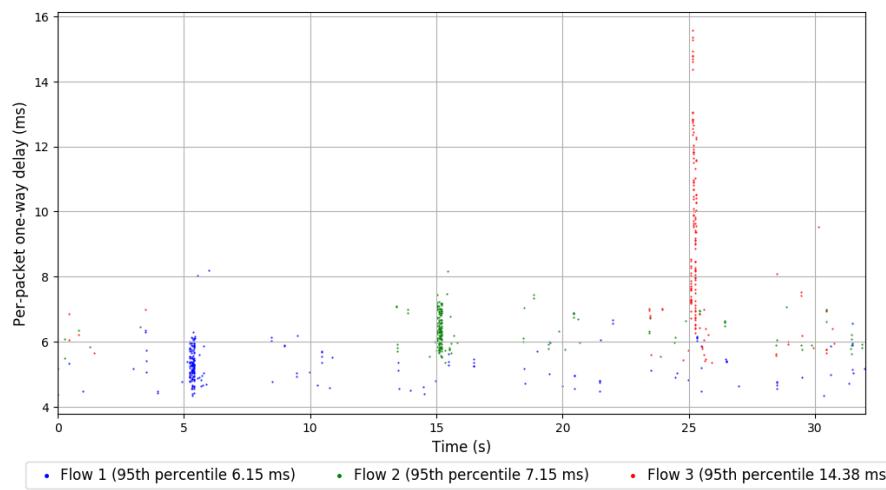
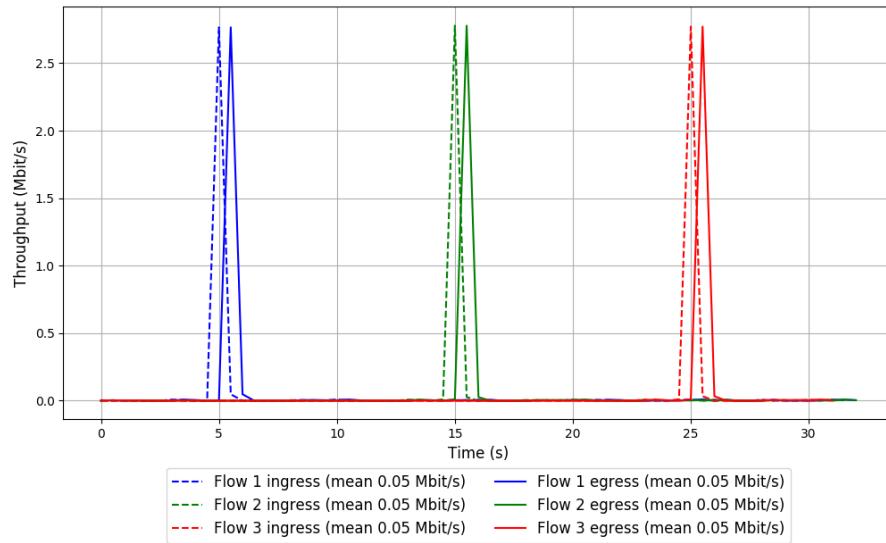


```
Run 1: Statistics of WebRTC media

Start at: 2019-02-05 07:26:58
End at: 2019-02-05 07:27:28
Local clock offset: 1.643 ms
Remote clock offset: -6.994 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 11.575 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.150 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.379 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

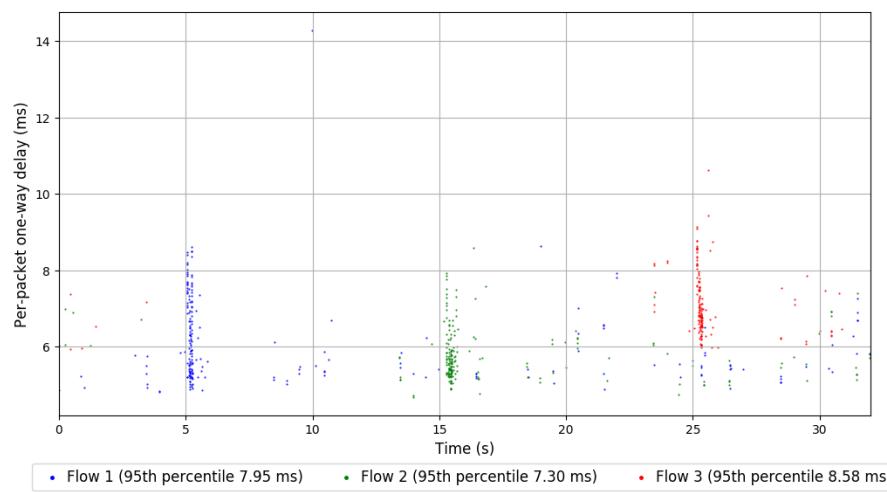
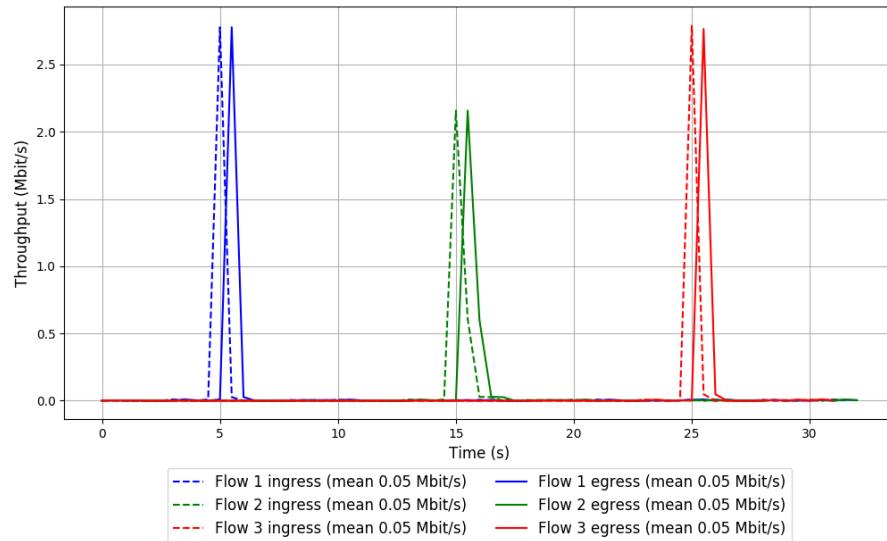


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-05 07:53:44
End at: 2019-02-05 07:54:14
Local clock offset: 0.228 ms
Remote clock offset: -7.085 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 8.197 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.947 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.298 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.580 ms
Loss rate: 0.83%
```

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

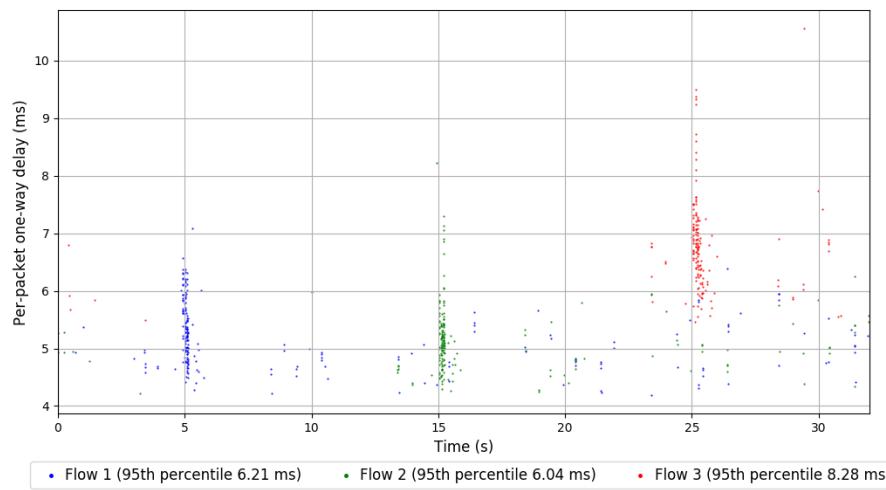
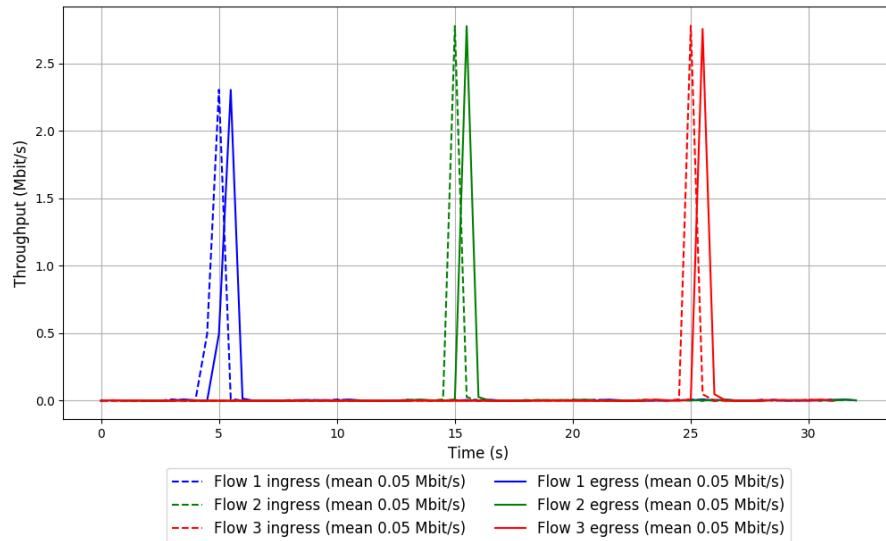


```
Run 3: Statistics of WebRTC media

Start at: 2019-02-05 08:20:16
End at: 2019-02-05 08:20:46
Local clock offset: 1.337 ms
Remote clock offset: -5.396 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 7.262 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.278 ms
Loss rate: 0.83%
```

### Run 3: Report of WebRTC media — Data Link

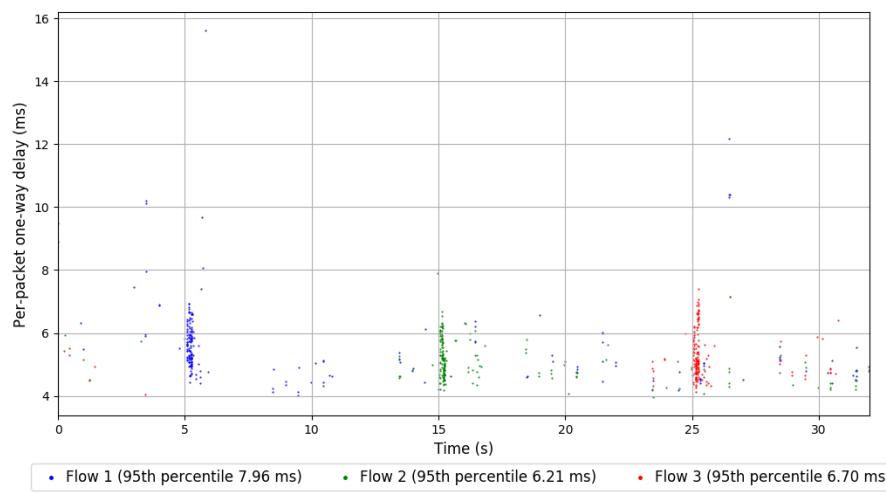
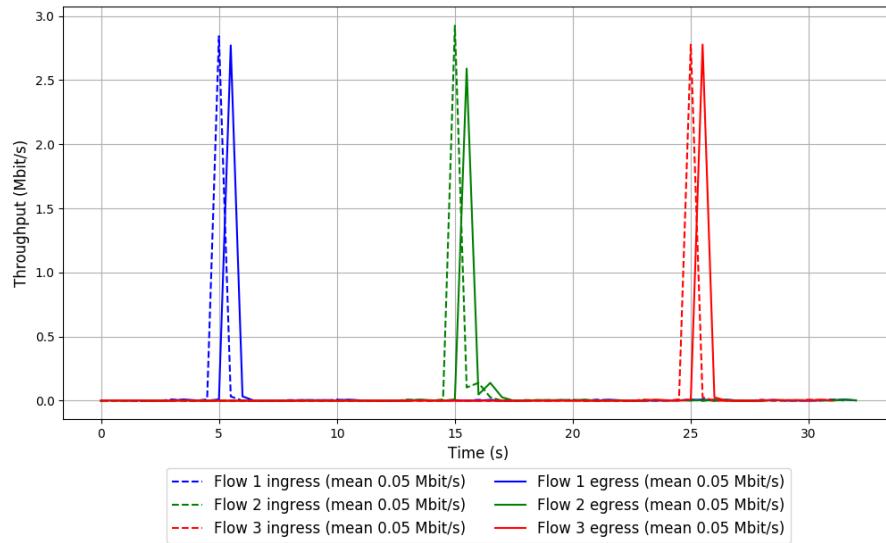


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-05 08:46:37
End at: 2019-02-05 08:47:07
Local clock offset: -0.373 ms
Remote clock offset: -6.369 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.707 ms
Loss rate: 5.06%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.963 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.213 ms
Loss rate: 11.80%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.697 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-05 09:12:56
End at: 2019-02-05 09:13:26
Local clock offset: 0.92 ms
Remote clock offset: -6.677 ms

# Below is generated by plot.py at 2019-02-05 09:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 5.290 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.346 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.176 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.736 ms
Loss rate: 9.29%
```

Run 5: Report of WebRTC media — Data Link

