

Pantheon Report

Generated at 2019-03-09 16:23:40 (UTC).

Data path: GCE Sydney on `ens4` (*local*) → GCE London on `ens4` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

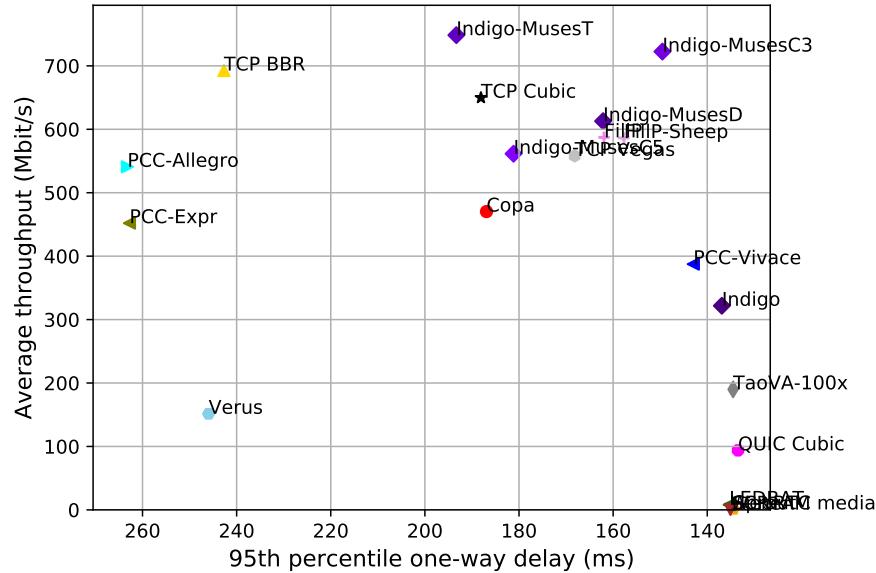
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

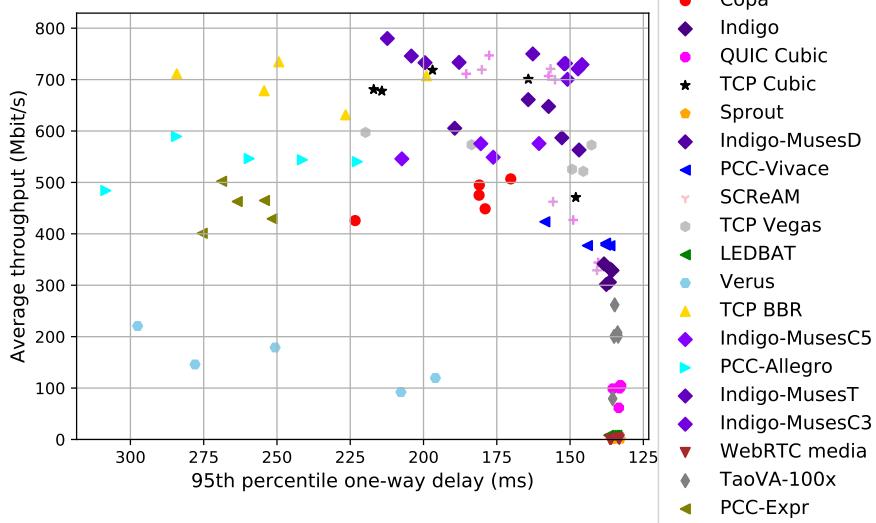
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d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

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

test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows



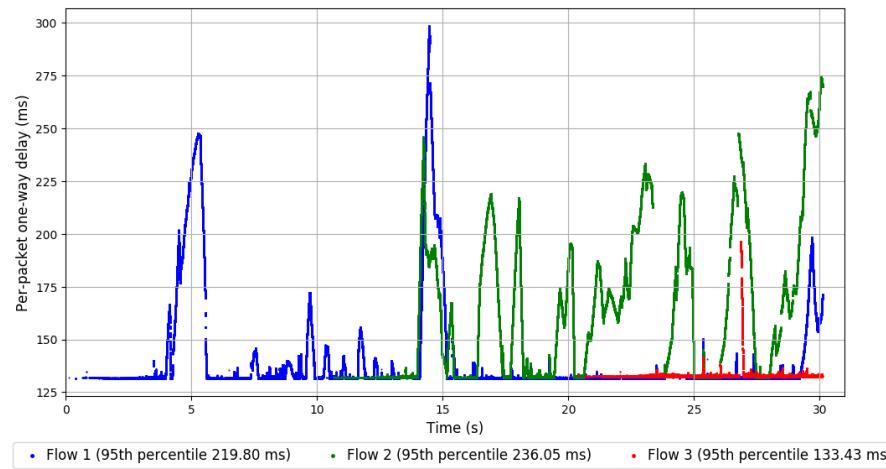
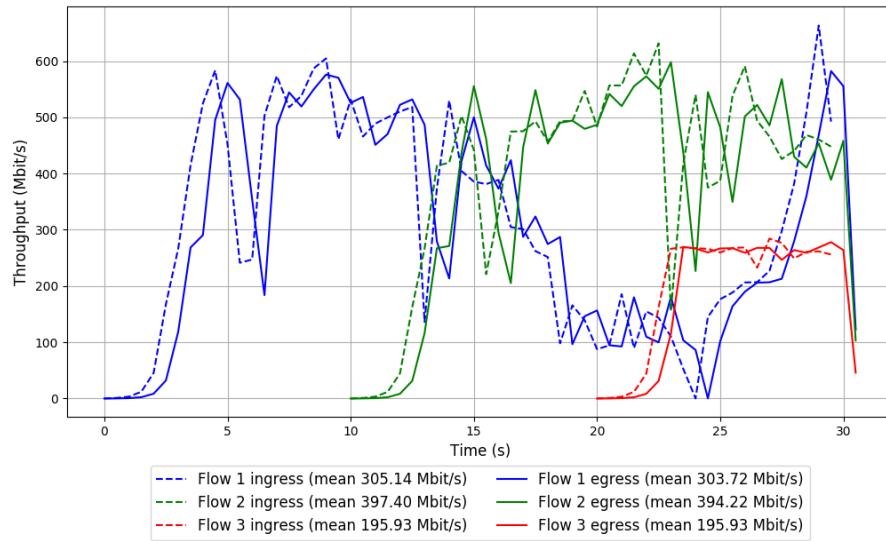
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	378.80	352.28	239.51	213.93	252.78	201.42	0.93	1.02	1.11
Copa	5	258.26	226.02	185.08	184.20	188.29	179.00	0.01	0.02	0.06
TCP Cubic	5	368.77	298.57	247.16	188.43	151.48	181.51	0.07	0.07	0.32
FillP	5	311.90	313.81	200.93	172.01	138.05	135.64	0.57	0.01	0.01
FillP-Sheep	5	311.69	305.80	214.55	164.80	137.73	135.42	0.26	0.01	0.01
Indigo	5	173.76	154.25	143.57	136.11	137.07	140.07	0.00	0.00	0.01
Indigo-MusesC3	5	426.88	352.15	257.62	154.13	143.05	141.46	0.01	0.05	0.02
Indigo-MusesC5	4	332.32	320.03	87.32	194.86	152.84	133.51	0.20	0.02	0.01
Indigo-MusesD	5	385.64	318.46	81.25	165.80	157.75	133.46	0.02	0.00	0.01
Indigo-MusesT	5	473.41	377.34	117.17	198.28	168.45	136.34	0.16	0.04	0.01
LEDBAT	5	5.26	3.45	1.70	134.34	134.75	134.01	0.00	0.00	0.00
PCC-Allegro	5	288.67	266.70	227.96	249.98	255.61	246.66	2.64	2.59	1.32
PCC-Expr	5	282.02	194.45	123.35	265.62	194.30	206.92	4.74	1.70	0.42
QUIC Cubic	5	43.84	53.63	44.72	134.13	132.82	133.47	0.00	0.00	0.00
SCReAM	5	0.19	0.16	0.18	134.91	133.18	133.71	0.02	0.00	0.00
Sprout	5	0.55	0.57	0.53	133.43	132.58	133.82	0.00	0.00	0.00
TaoVA-100x	5	120.64	49.61	109.31	134.42	133.83	133.66	0.00	0.00	0.00
TCP Vegas	5	296.95	277.12	230.83	143.40	163.51	172.52	0.00	0.10	0.01
Verus	5	76.67	90.01	48.55	198.75	225.34	191.63	1.69	0.35	0.01
PCC-Vivace	5	234.80	167.70	124.48	145.39	152.15	143.92	0.00	0.00	0.00
WebRTC media	5	0.42	0.26	0.11	133.85	133.43	134.56	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-09 10:54:36
End at: 2019-03-09 10:55:06
Local clock offset: 0.306 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-03-09 14:29:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.60 Mbit/s
95th percentile per-packet one-way delay: 226.575 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 303.72 Mbit/s
95th percentile per-packet one-way delay: 219.803 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 394.22 Mbit/s
95th percentile per-packet one-way delay: 236.054 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 195.93 Mbit/s
95th percentile per-packet one-way delay: 133.429 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link

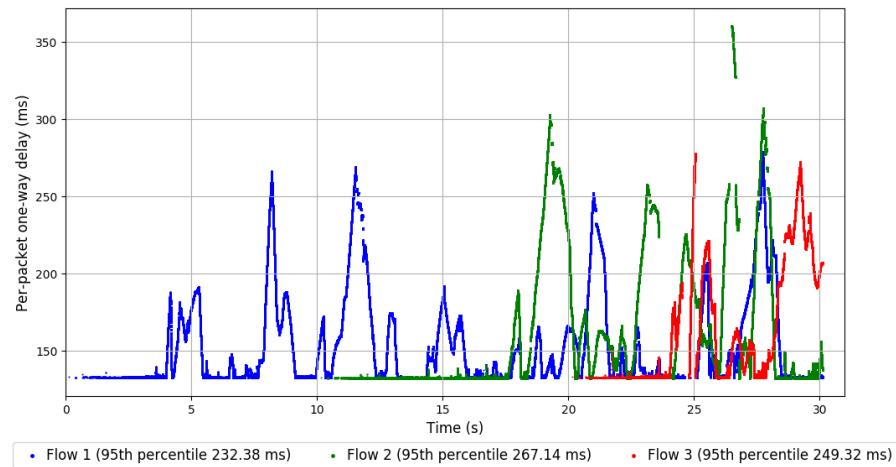
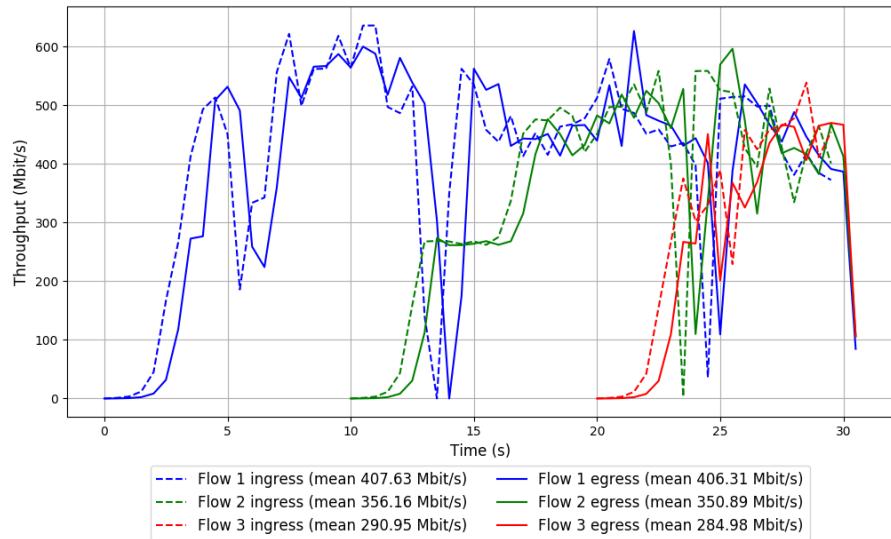


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-09 11:35:38
End at: 2019-03-09 11:36:08
Local clock offset: -0.123 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2019-03-09 14:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 734.65 Mbit/s
95th percentile per-packet one-way delay: 249.378 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 406.31 Mbit/s
95th percentile per-packet one-way delay: 232.380 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 350.89 Mbit/s
95th percentile per-packet one-way delay: 267.141 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 284.98 Mbit/s
95th percentile per-packet one-way delay: 249.321 ms
Loss rate: 2.05%
```

Run 2: Report of TCP BBR — Data Link

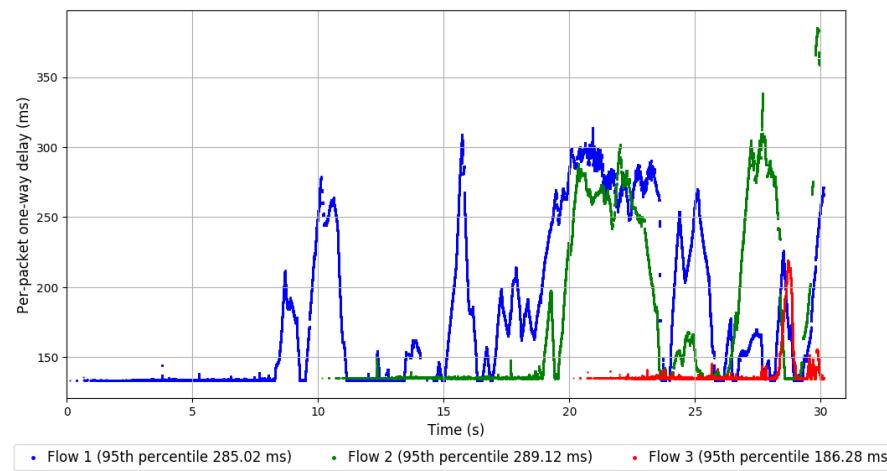
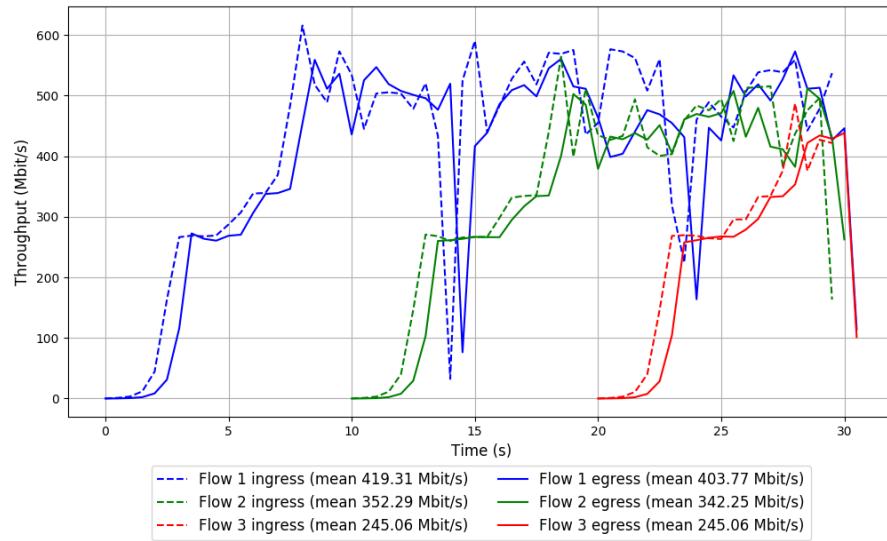


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-09 12:17:56
End at: 2019-03-09 12:18:26
Local clock offset: -0.496 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-03-09 14:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 711.18 Mbit/s
95th percentile per-packet one-way delay: 284.196 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 403.77 Mbit/s
95th percentile per-packet one-way delay: 285.020 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 342.25 Mbit/s
95th percentile per-packet one-way delay: 289.124 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 245.06 Mbit/s
95th percentile per-packet one-way delay: 186.284 ms
Loss rate: 0.00%
```

Run 3: Report of TCP BBR — Data Link

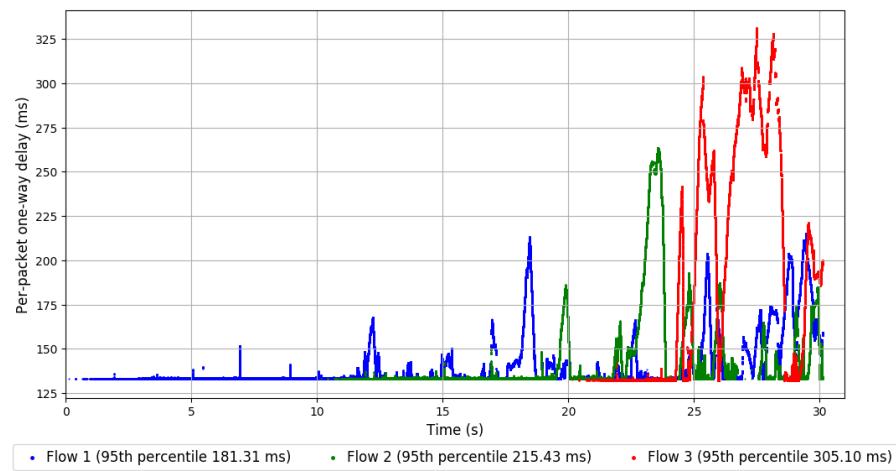
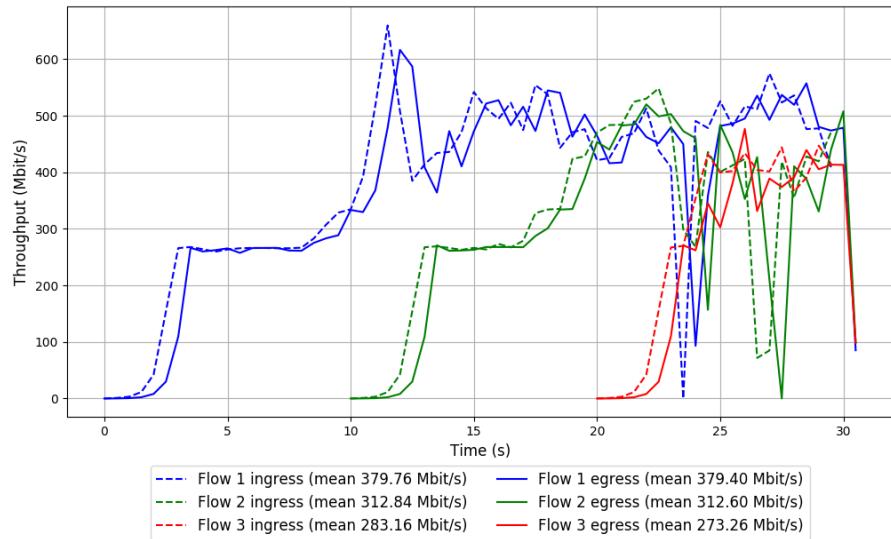


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-09 12:57:35
End at: 2019-03-09 12:58:05
Local clock offset: 0.114 ms
Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2019-03-09 14:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 678.38 Mbit/s
95th percentile per-packet one-way delay: 254.371 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 379.40 Mbit/s
95th percentile per-packet one-way delay: 181.313 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 312.60 Mbit/s
95th percentile per-packet one-way delay: 215.434 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 273.26 Mbit/s
95th percentile per-packet one-way delay: 305.100 ms
Loss rate: 3.48%
```

Run 4: Report of TCP BBR — Data Link

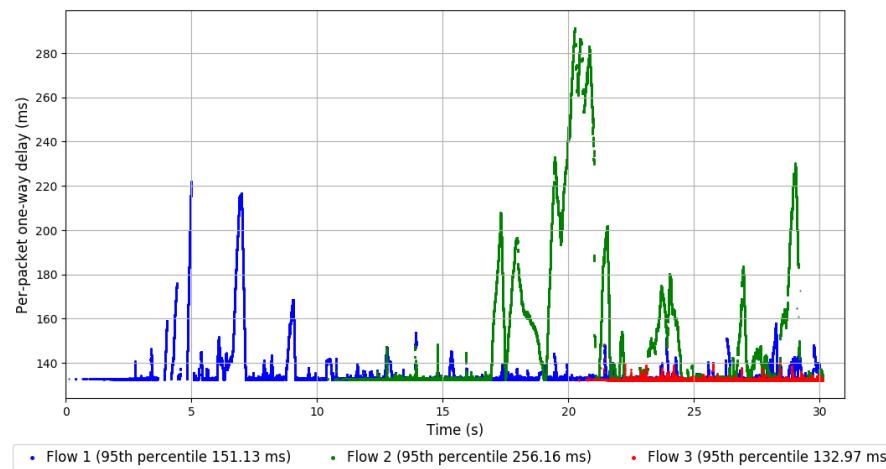
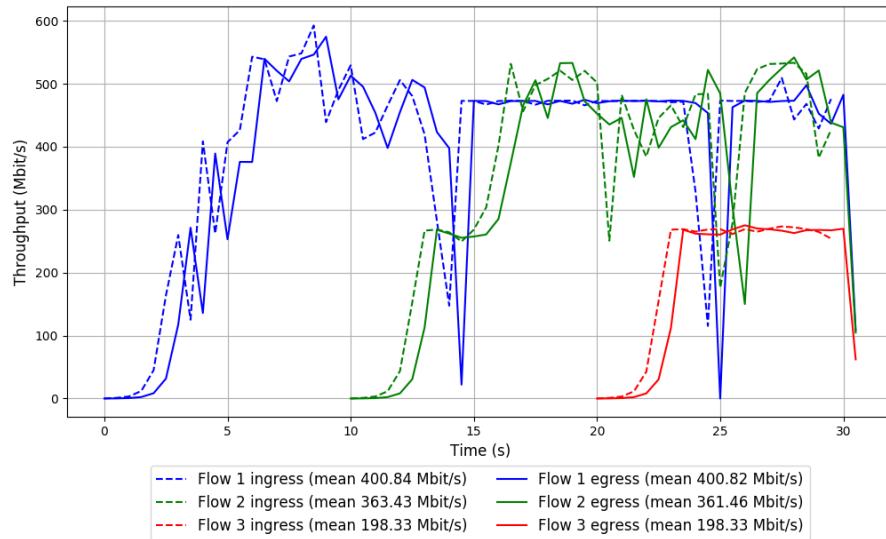


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-09 13:38:41
End at: 2019-03-09 13:39:11
Local clock offset: -0.121 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-03-09 14:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 707.45 Mbit/s
95th percentile per-packet one-way delay: 198.992 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 400.82 Mbit/s
95th percentile per-packet one-way delay: 151.126 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 361.46 Mbit/s
95th percentile per-packet one-way delay: 256.161 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 198.33 Mbit/s
95th percentile per-packet one-way delay: 132.971 ms
Loss rate: 0.00%
```

Run 5: Report of TCP BBR — Data Link

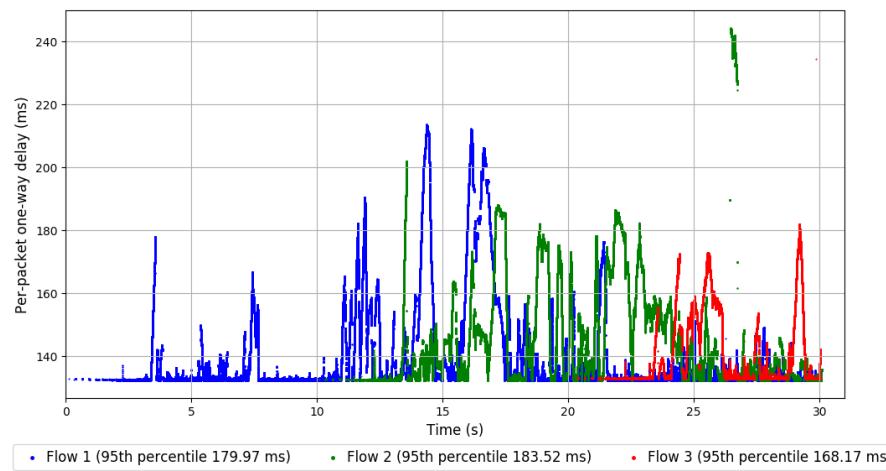
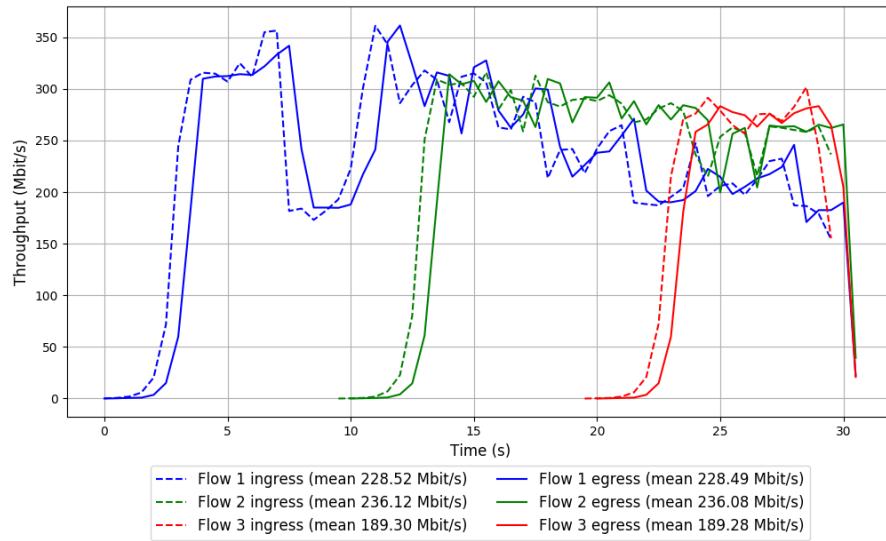


Run 1: Statistics of Copa

```
Start at: 2019-03-09 10:42:51
End at: 2019-03-09 10:43:21
Local clock offset: -0.156 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-03-09 14:34:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.68 Mbit/s
95th percentile per-packet one-way delay: 178.973 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.49 Mbit/s
95th percentile per-packet one-way delay: 179.966 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 236.08 Mbit/s
95th percentile per-packet one-way delay: 183.524 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.28 Mbit/s
95th percentile per-packet one-way delay: 168.169 ms
Loss rate: 0.01%
```

Run 1: Report of Copa — Data Link

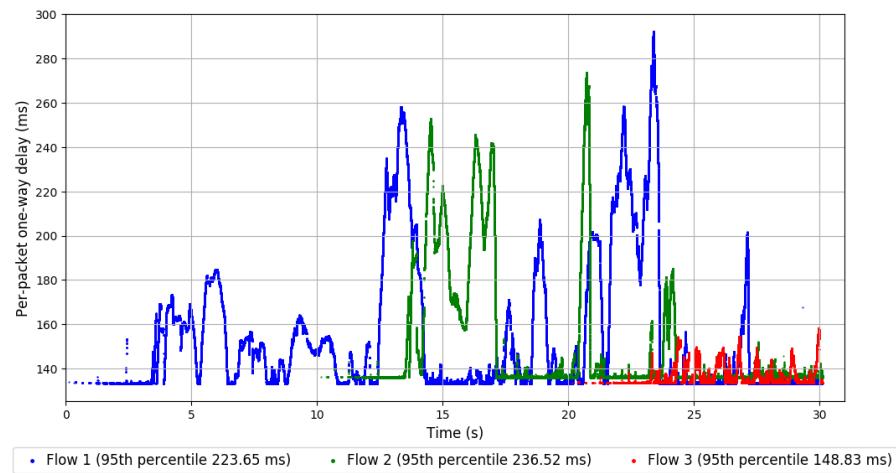
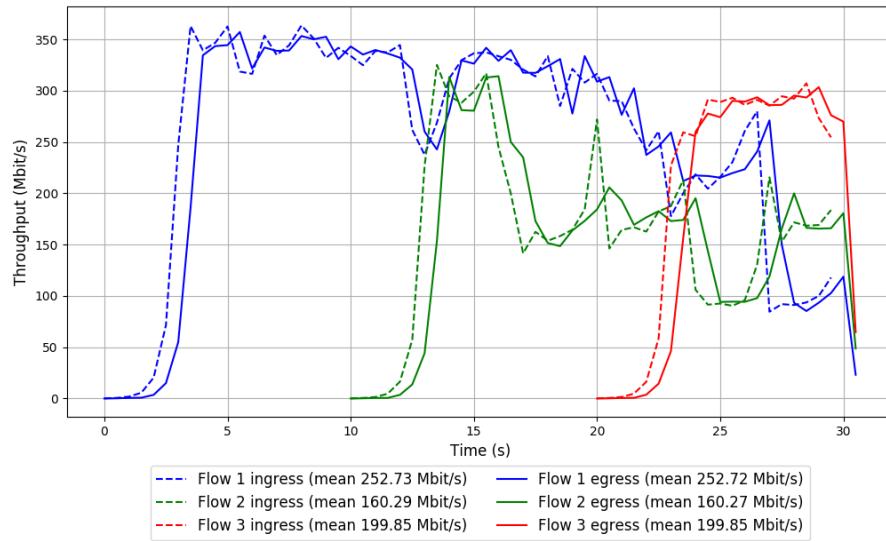


Run 2: Statistics of Copa

```
Start at: 2019-03-09 11:23:32
End at: 2019-03-09 11:24:02
Local clock offset: -0.591 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-03-09 14:34:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.76 Mbit/s
95th percentile per-packet one-way delay: 223.335 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 252.72 Mbit/s
95th percentile per-packet one-way delay: 223.654 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 160.27 Mbit/s
95th percentile per-packet one-way delay: 236.523 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 199.85 Mbit/s
95th percentile per-packet one-way delay: 148.829 ms
Loss rate: 0.00%
```

Run 2: Report of Copa — Data Link

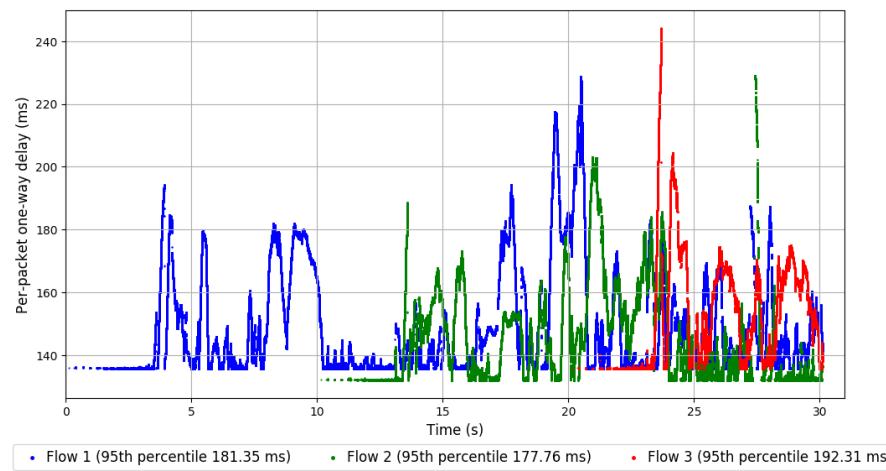
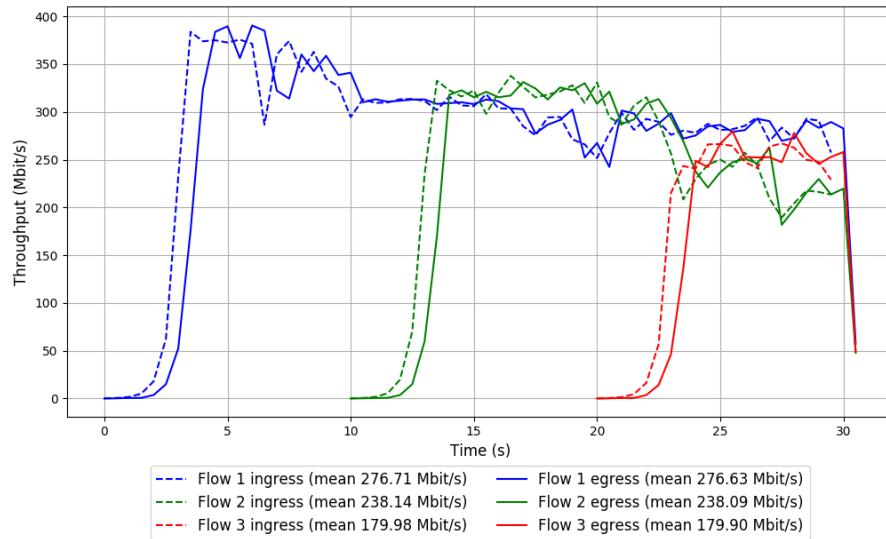


Run 3: Statistics of Copa

```
Start at: 2019-03-09 12:06:13
End at: 2019-03-09 12:06:43
Local clock offset: -0.064 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2019-03-09 14:35:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.96 Mbit/s
95th percentile per-packet one-way delay: 180.966 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 276.63 Mbit/s
95th percentile per-packet one-way delay: 181.351 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 238.09 Mbit/s
95th percentile per-packet one-way delay: 177.759 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.90 Mbit/s
95th percentile per-packet one-way delay: 192.309 ms
Loss rate: 0.03%
```

Run 3: Report of Copa — Data Link

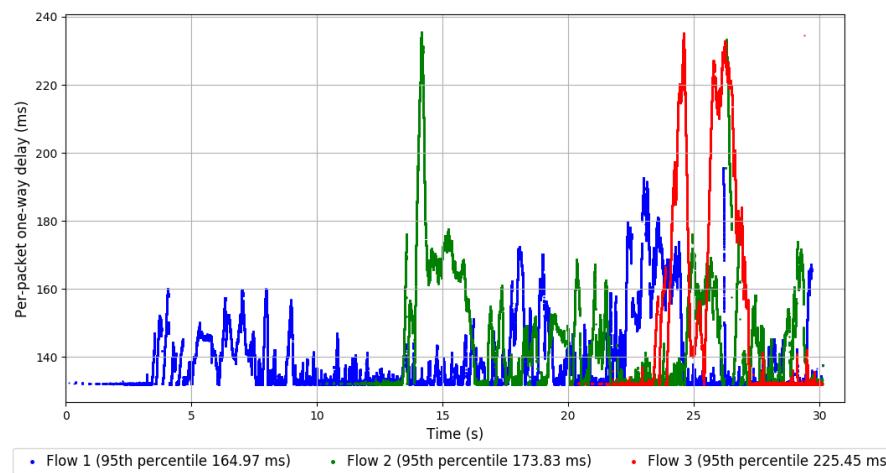
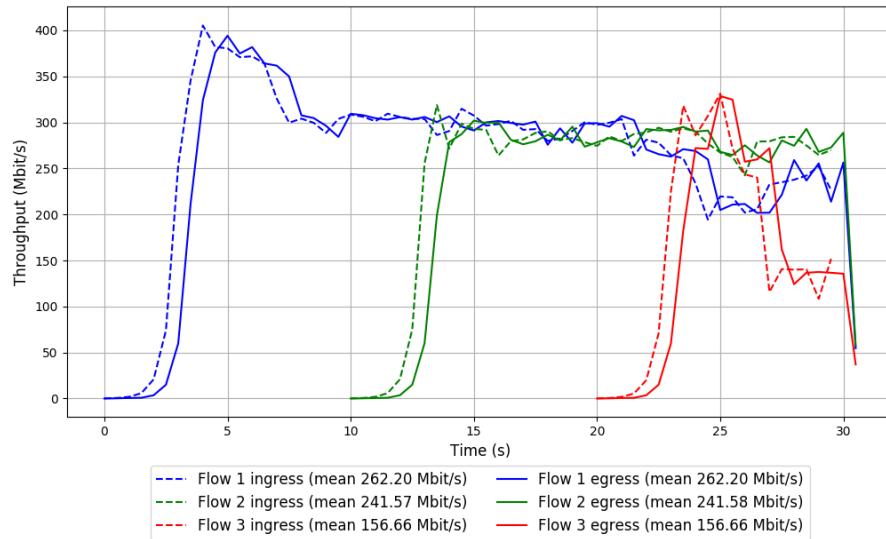


Run 4: Statistics of Copa

```
Start at: 2019-03-09 12:45:53
End at: 2019-03-09 12:46:23
Local clock offset: -0.09 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2019-03-09 14:46:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.13 Mbit/s
95th percentile per-packet one-way delay: 181.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 262.20 Mbit/s
95th percentile per-packet one-way delay: 164.968 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 241.58 Mbit/s
95th percentile per-packet one-way delay: 173.830 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.66 Mbit/s
95th percentile per-packet one-way delay: 225.453 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

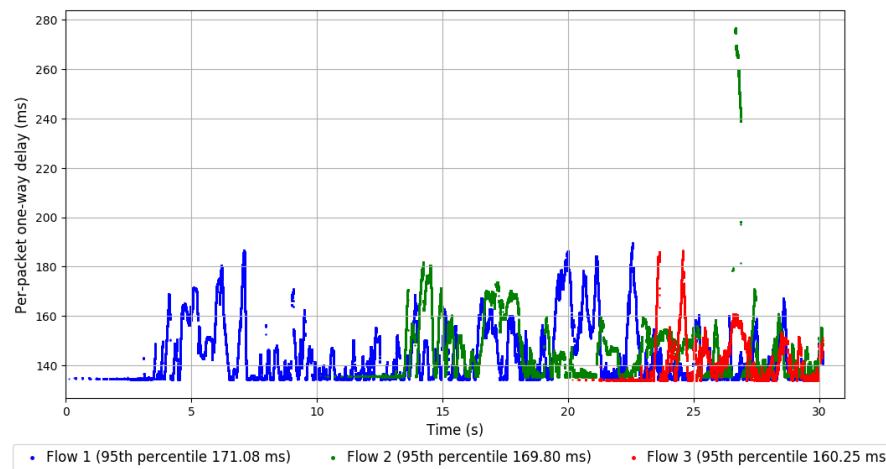
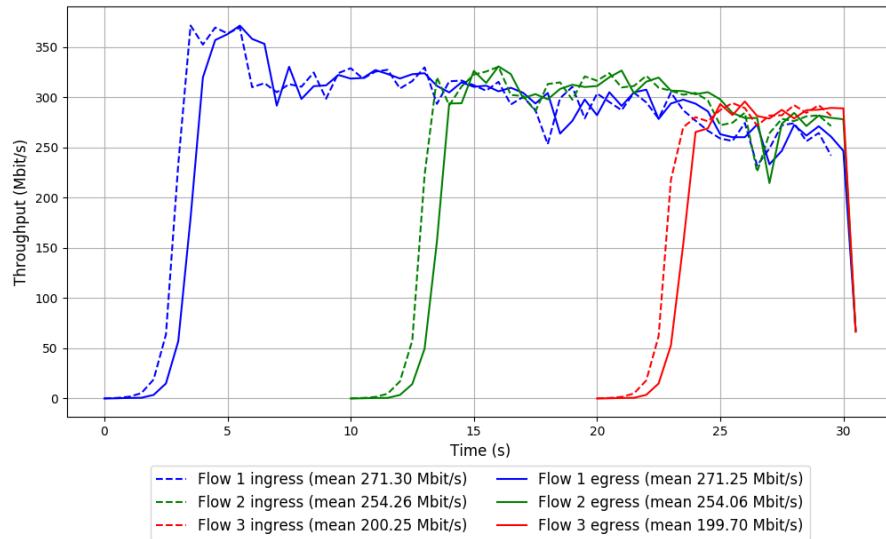


Run 5: Statistics of Copa

```
Start at: 2019-03-09 13:27:02
End at: 2019-03-09 13:27:32
Local clock offset: 0.142 ms
Remote clock offset: -0.189 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 506.83 Mbit/s
95th percentile per-packet one-way delay: 170.235 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 271.25 Mbit/s
95th percentile per-packet one-way delay: 171.079 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 254.06 Mbit/s
95th percentile per-packet one-way delay: 169.802 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 199.70 Mbit/s
95th percentile per-packet one-way delay: 160.251 ms
Loss rate: 0.24%
```

Run 5: Report of Copa — Data Link

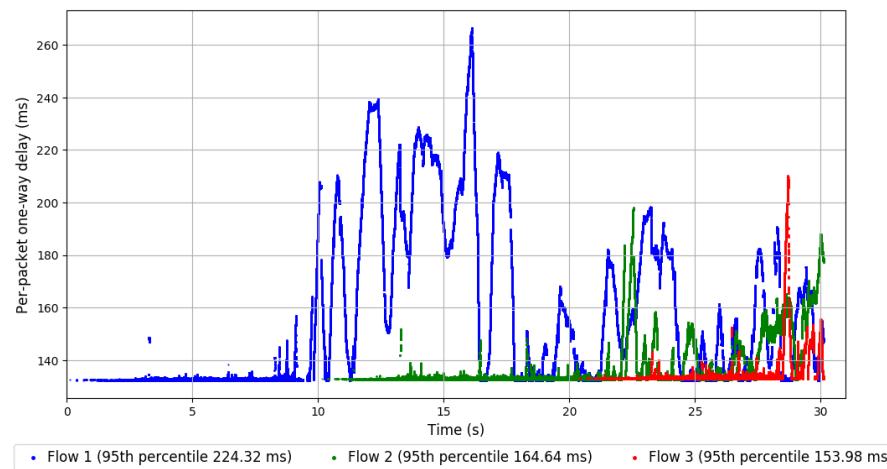
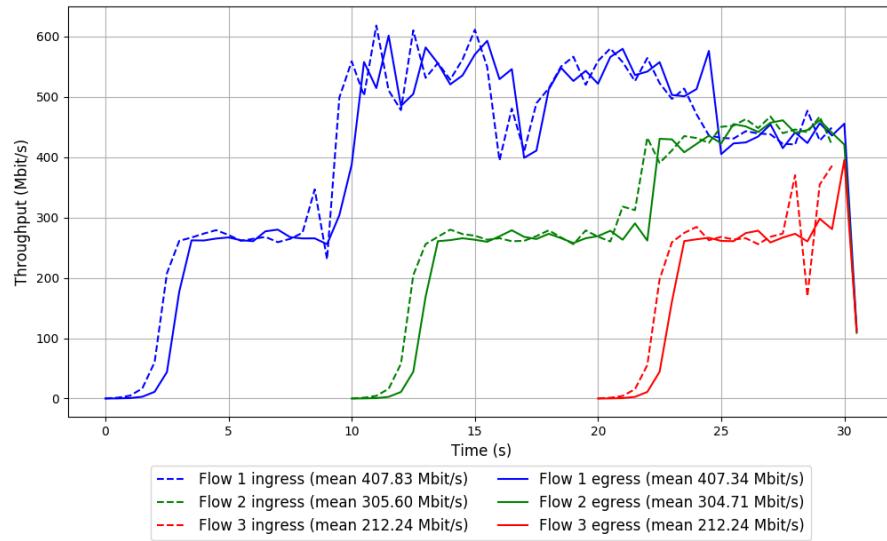


Run 1: Statistics of TCP Cubic

```
Start at: 2019-03-09 11:04:33
End at: 2019-03-09 11:05:03
Local clock offset: -0.05 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.85 Mbit/s
95th percentile per-packet one-way delay: 217.003 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 407.34 Mbit/s
95th percentile per-packet one-way delay: 224.316 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 304.71 Mbit/s
95th percentile per-packet one-way delay: 164.639 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 212.24 Mbit/s
95th percentile per-packet one-way delay: 153.980 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Cubic — Data Link

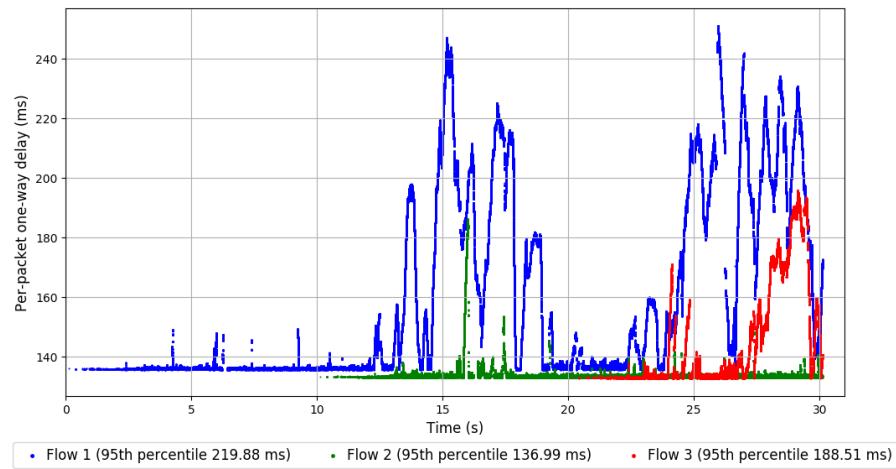
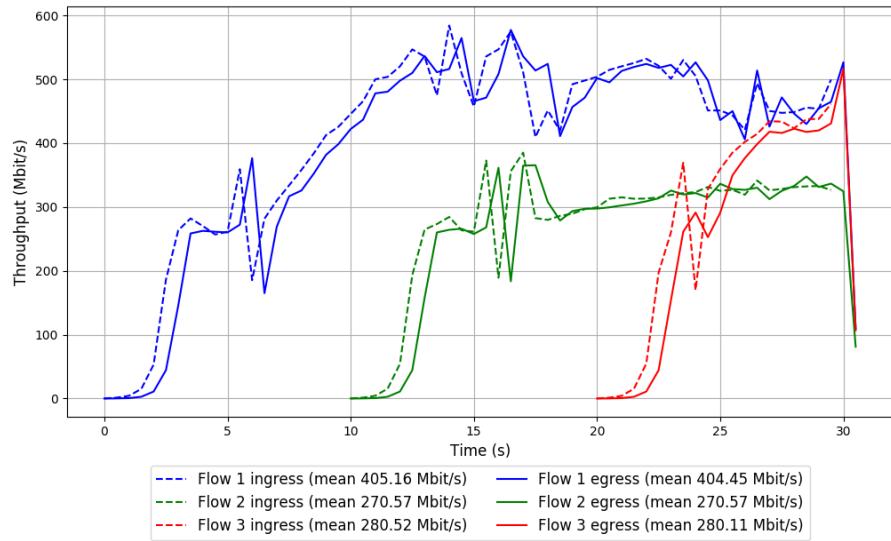


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-09 11:46:47
End at: 2019-03-09 11:47:17
Local clock offset: -0.053 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.77 Mbit/s
95th percentile per-packet one-way delay: 214.228 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 404.45 Mbit/s
95th percentile per-packet one-way delay: 219.882 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 270.57 Mbit/s
95th percentile per-packet one-way delay: 136.990 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 280.11 Mbit/s
95th percentile per-packet one-way delay: 188.510 ms
Loss rate: 0.14%
```

Run 2: Report of TCP Cubic — Data Link

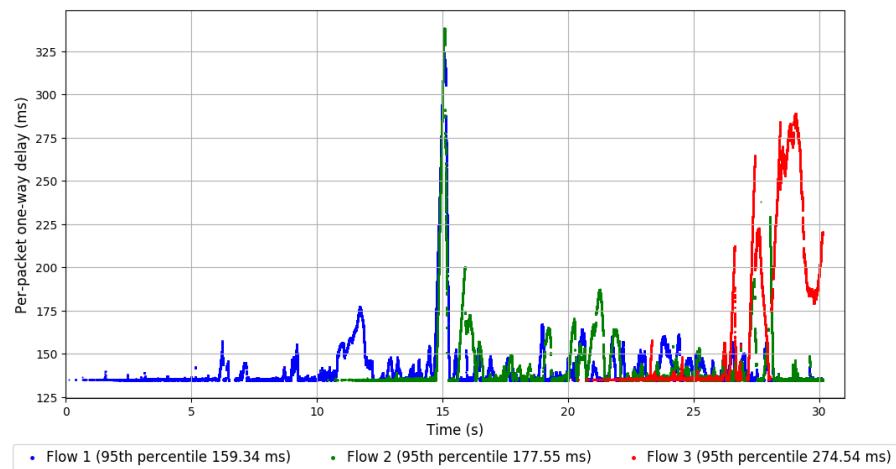
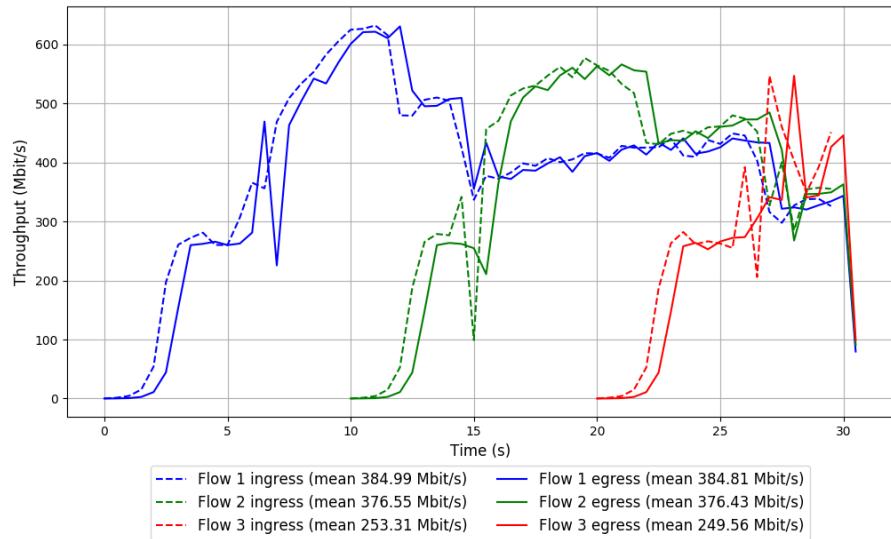


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-09 12:27:45
End at: 2019-03-09 12:28:15
Local clock offset: -0.221 ms
Remote clock offset: 0.288 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 718.48 Mbit/s
95th percentile per-packet one-way delay: 196.930 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 384.81 Mbit/s
95th percentile per-packet one-way delay: 159.337 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 376.43 Mbit/s
95th percentile per-packet one-way delay: 177.547 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 249.56 Mbit/s
95th percentile per-packet one-way delay: 274.535 ms
Loss rate: 1.45%
```

Run 3: Report of TCP Cubic — Data Link

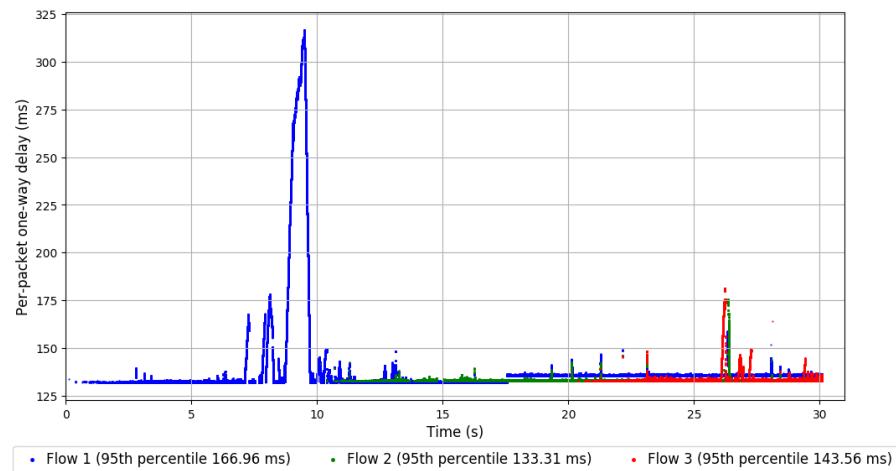
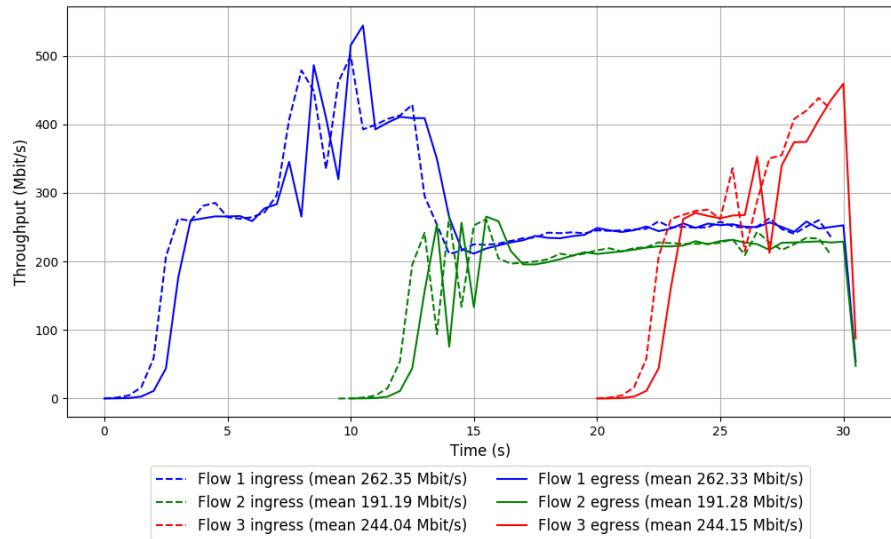


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-09 13:07:53
End at: 2019-03-09 13:08:23
Local clock offset: -0.058 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.88 Mbit/s
95th percentile per-packet one-way delay: 148.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 262.33 Mbit/s
95th percentile per-packet one-way delay: 166.957 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.28 Mbit/s
95th percentile per-packet one-way delay: 133.305 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.15 Mbit/s
95th percentile per-packet one-way delay: 143.563 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Cubic — Data Link

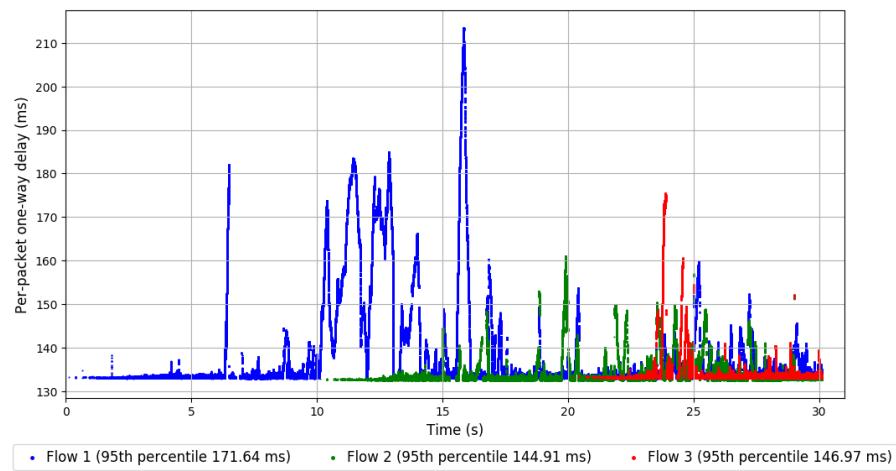
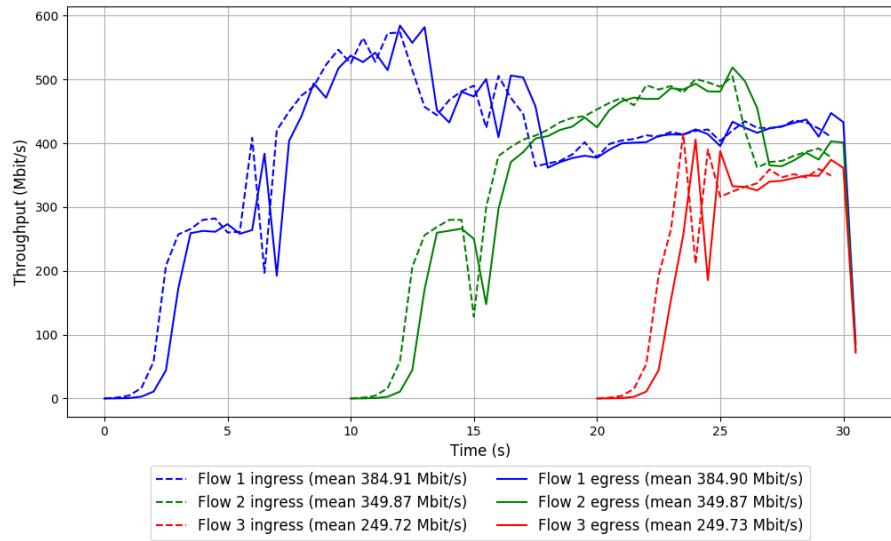


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-09 13:49:35
End at: 2019-03-09 13:50:05
Local clock offset: -0.353 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-03-09 14:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 700.85 Mbit/s
95th percentile per-packet one-way delay: 164.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 384.90 Mbit/s
95th percentile per-packet one-way delay: 171.639 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 349.87 Mbit/s
95th percentile per-packet one-way delay: 144.909 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 249.73 Mbit/s
95th percentile per-packet one-way delay: 146.966 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Cubic — Data Link

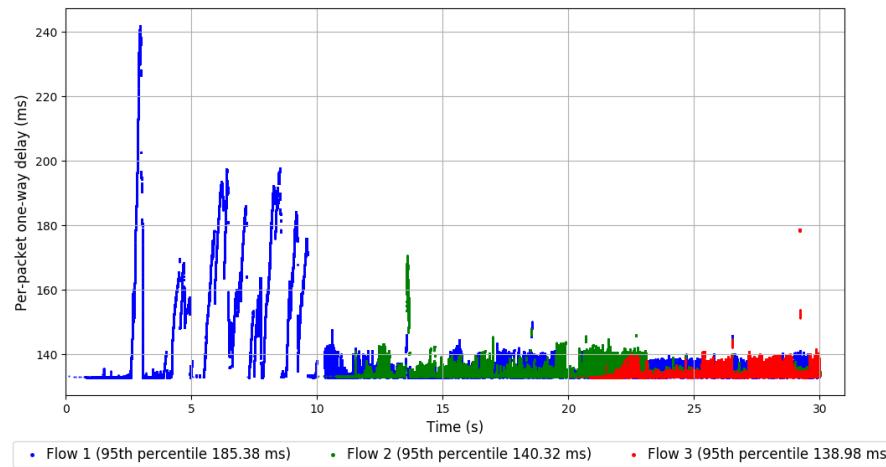
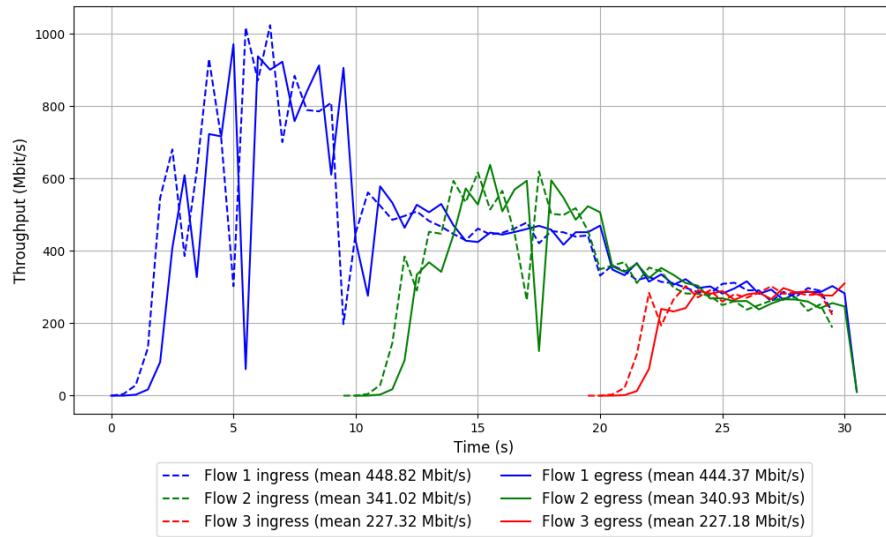


```
Run 1: Statistics of FillP
```

```
Start at: 2019-03-09 10:39:35
End at: 2019-03-09 10:40:05
Local clock offset: -0.393 ms
Remote clock offset: -0.487 ms

# Below is generated by plot.py at 2019-03-09 14:52:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 747.01 Mbit/s
95th percentile per-packet one-way delay: 177.589 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 444.37 Mbit/s
95th percentile per-packet one-way delay: 185.376 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 340.93 Mbit/s
95th percentile per-packet one-way delay: 140.318 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 227.18 Mbit/s
95th percentile per-packet one-way delay: 138.981 ms
Loss rate: 0.01%
```

Run 1: Report of FillP — Data Link

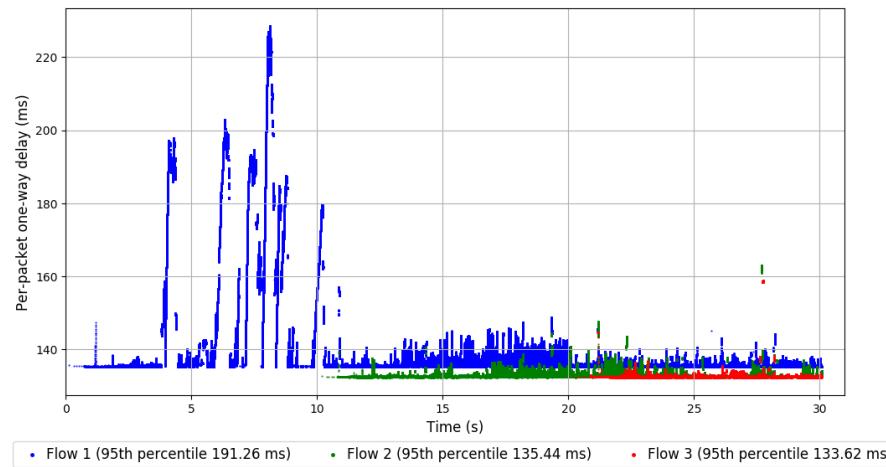
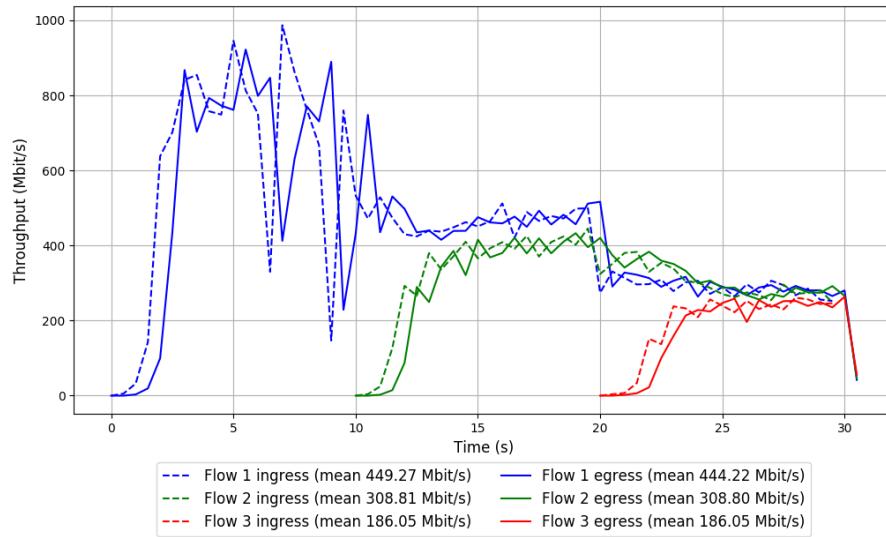


Run 2: Statistics of FillP

```
Start at: 2019-03-09 11:20:15
End at: 2019-03-09 11:20:45
Local clock offset: 0.025 ms
Remote clock offset: -0.305 ms

# Below is generated by plot.py at 2019-03-09 14:57:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 711.24 Mbit/s
95th percentile per-packet one-way delay: 185.431 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 444.22 Mbit/s
95th percentile per-packet one-way delay: 191.257 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 308.80 Mbit/s
95th percentile per-packet one-way delay: 135.436 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.05 Mbit/s
95th percentile per-packet one-way delay: 133.618 ms
Loss rate: 0.00%
```

Run 2: Report of FillP — Data Link

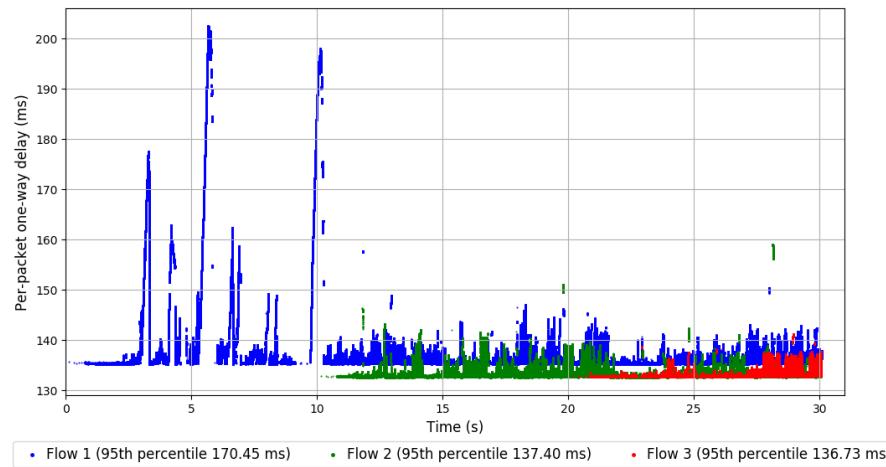
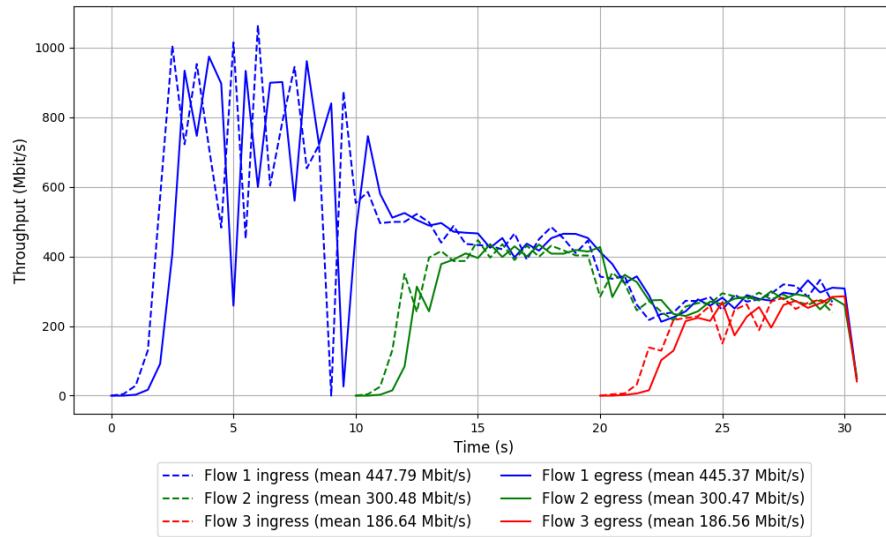


Run 3: Statistics of FillP

```
Start at: 2019-03-09 12:02:27
End at: 2019-03-09 12:02:57
Local clock offset: -0.349 ms
Remote clock offset: -0.476 ms

# Below is generated by plot.py at 2019-03-09 15:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 706.93 Mbit/s
95th percentile per-packet one-way delay: 157.328 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 445.37 Mbit/s
95th percentile per-packet one-way delay: 170.453 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 300.47 Mbit/s
95th percentile per-packet one-way delay: 137.402 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.56 Mbit/s
95th percentile per-packet one-way delay: 136.728 ms
Loss rate: 0.00%
```

Run 3: Report of FillP — Data Link

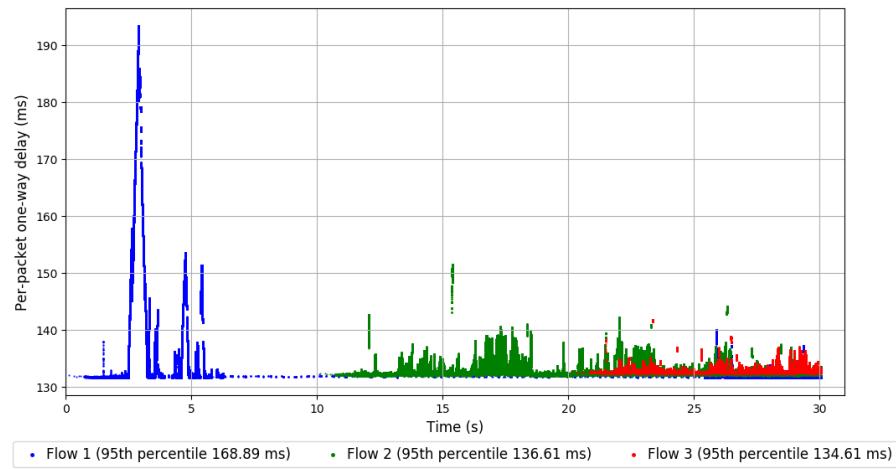
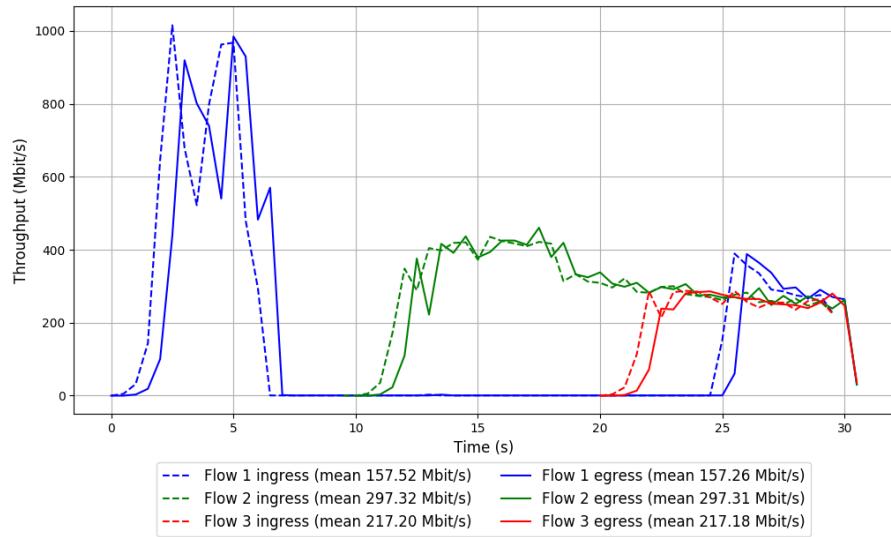


Run 4: Statistics of FillP

```
Start at: 2019-03-09 12:42:48
End at: 2019-03-09 12:43:18
Local clock offset: 0.357 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-03-09 15:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.98 Mbit/s
95th percentile per-packet one-way delay: 148.930 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 157.26 Mbit/s
95th percentile per-packet one-way delay: 168.887 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 297.31 Mbit/s
95th percentile per-packet one-way delay: 136.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 217.18 Mbit/s
95th percentile per-packet one-way delay: 134.609 ms
Loss rate: 0.01%
```

Run 4: Report of FillP — Data Link

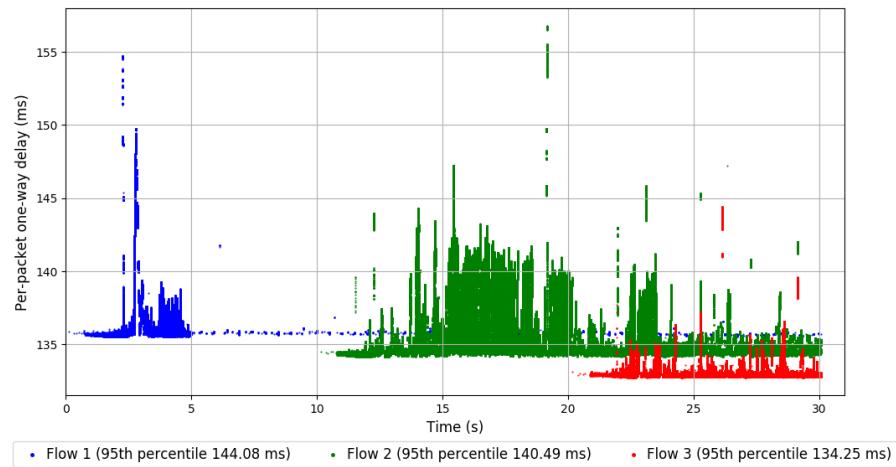
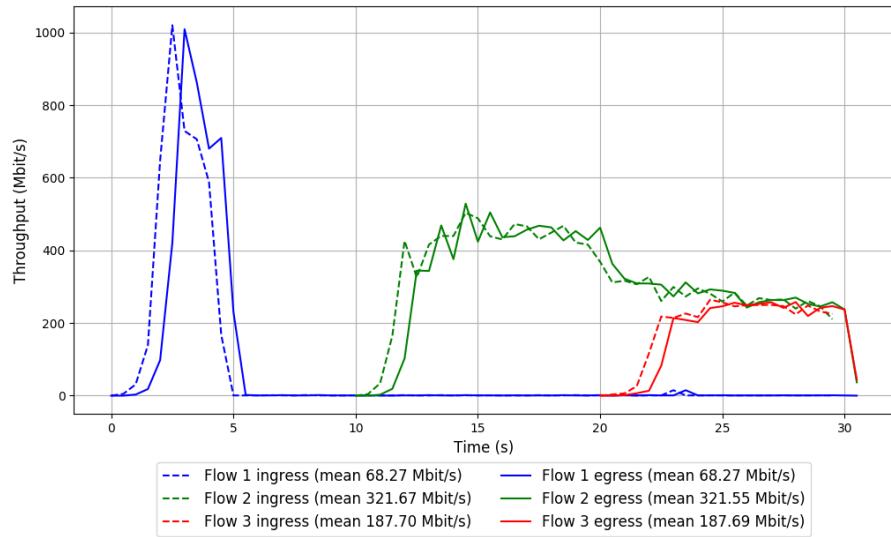


Run 5: Statistics of FillP

```
Start at: 2019-03-09 13:23:57
End at: 2019-03-09 13:24:27
Local clock offset: -0.075 ms
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2019-03-09 15:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.19 Mbit/s
95th percentile per-packet one-way delay: 140.387 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 68.27 Mbit/s
95th percentile per-packet one-way delay: 144.079 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 321.55 Mbit/s
95th percentile per-packet one-way delay: 140.494 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 187.69 Mbit/s
95th percentile per-packet one-way delay: 134.250 ms
Loss rate: 0.01%
```

Run 5: Report of FillP — Data Link

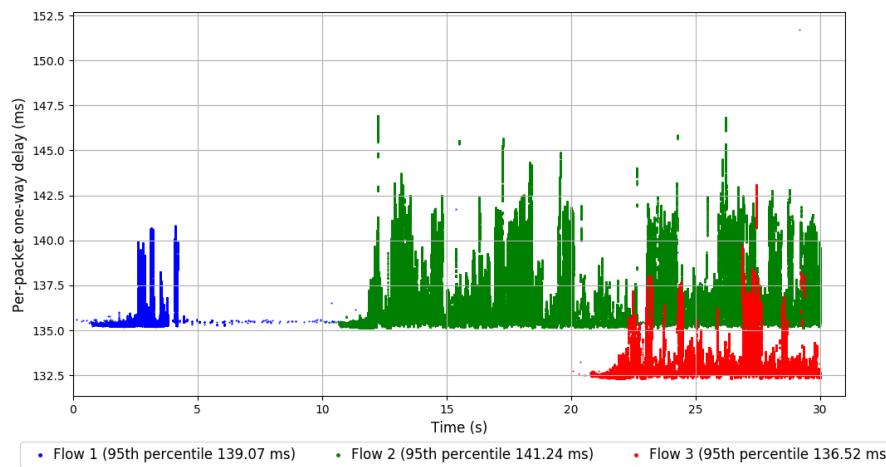
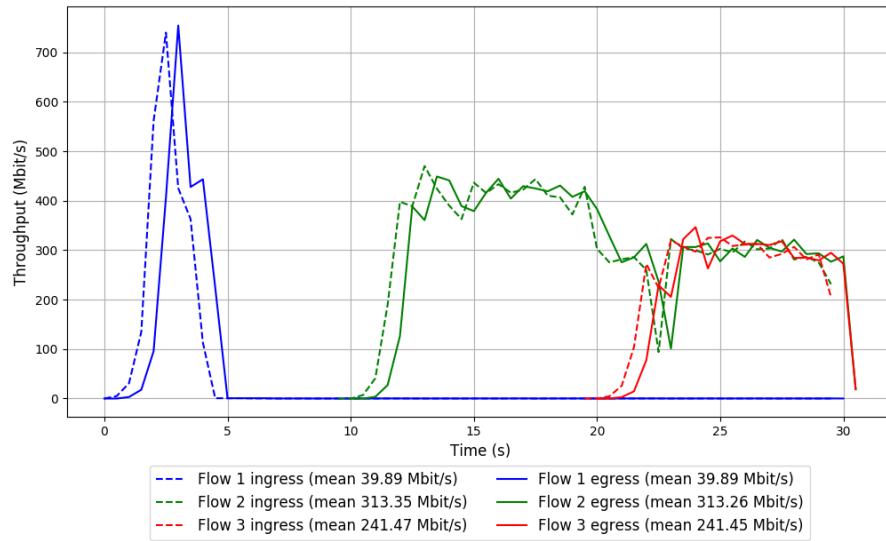


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-03-09 10:58:39
End at: 2019-03-09 10:59:09
Local clock offset: 0.345 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-03-09 15:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.00 Mbit/s
95th percentile per-packet one-way delay: 140.807 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 139.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.26 Mbit/s
95th percentile per-packet one-way delay: 141.240 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 241.45 Mbit/s
95th percentile per-packet one-way delay: 136.519 ms
Loss rate: 0.01%
```

Run 1: Report of FillP-Sheep — Data Link

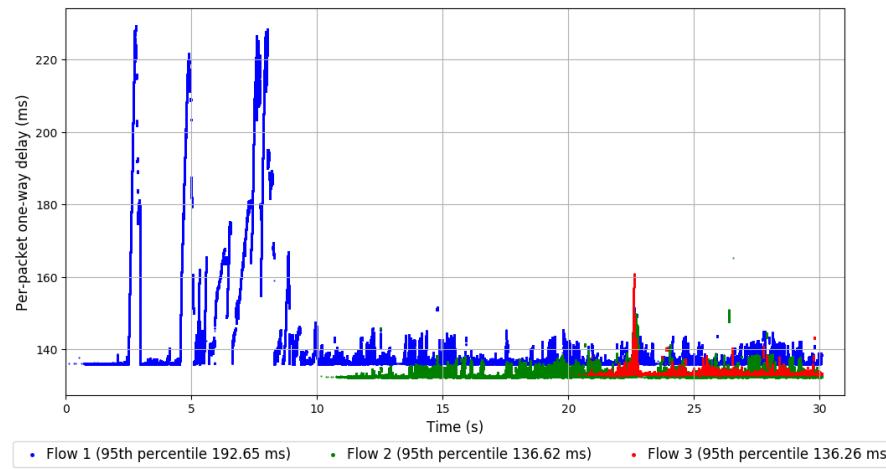
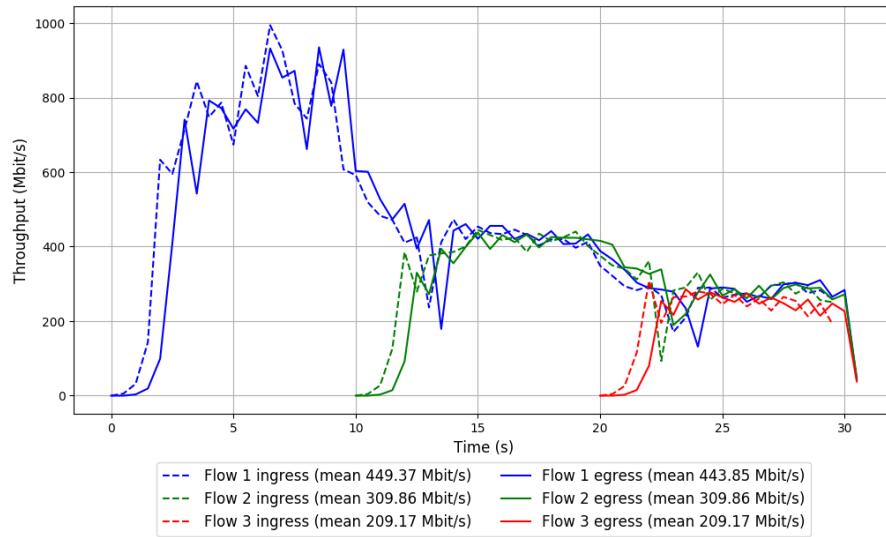


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-09 11:39:34
End at: 2019-03-09 11:40:04
Local clock offset: -0.364 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2019-03-09 15:04:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 719.28 Mbit/s
95th percentile per-packet one-way delay: 180.102 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 443.85 Mbit/s
95th percentile per-packet one-way delay: 192.646 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 309.86 Mbit/s
95th percentile per-packet one-way delay: 136.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 209.17 Mbit/s
95th percentile per-packet one-way delay: 136.260 ms
Loss rate: 0.00%
```

Run 2: Report of FillP-Sheep — Data Link

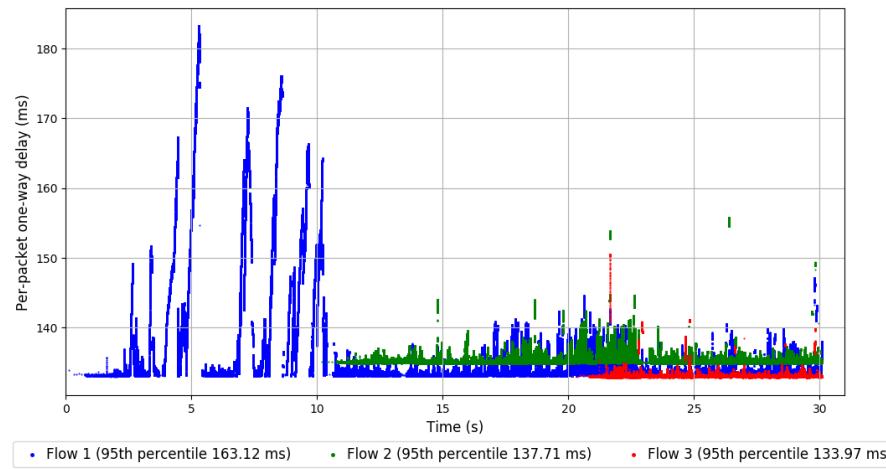
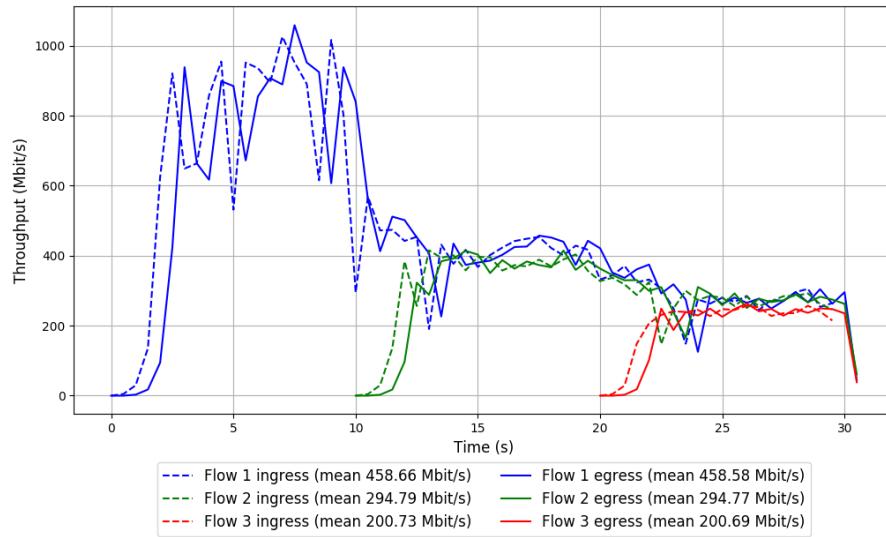


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-09 12:21:35
End at: 2019-03-09 12:22:05
Local clock offset: -0.284 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2019-03-09 15:05:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.87 Mbit/s
95th percentile per-packet one-way delay: 156.667 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 458.58 Mbit/s
95th percentile per-packet one-way delay: 163.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 294.77 Mbit/s
95th percentile per-packet one-way delay: 137.709 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 200.69 Mbit/s
95th percentile per-packet one-way delay: 133.970 ms
Loss rate: 0.02%
```

Run 3: Report of FillP-Sheep — Data Link

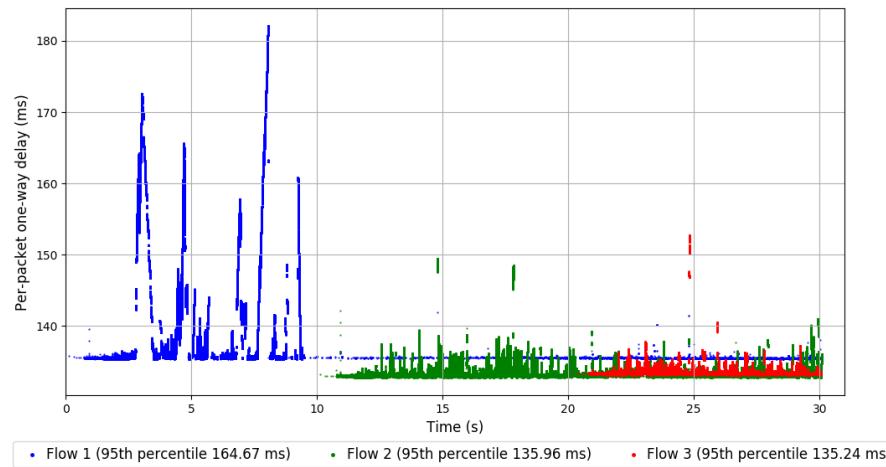
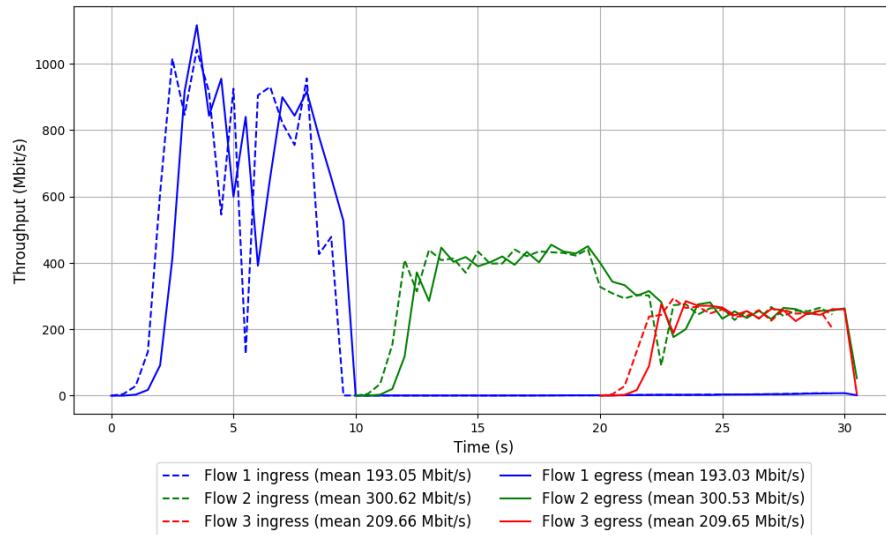


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-09 13:01:39
End at: 2019-03-09 13:02:09
Local clock offset: -0.073 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-03-09 15:05:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.44 Mbit/s
95th percentile per-packet one-way delay: 155.814 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 193.03 Mbit/s
95th percentile per-packet one-way delay: 164.670 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 300.53 Mbit/s
95th percentile per-packet one-way delay: 135.960 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 209.65 Mbit/s
95th percentile per-packet one-way delay: 135.240 ms
Loss rate: 0.01%
```

Run 4: Report of FillP-Sheep — Data Link

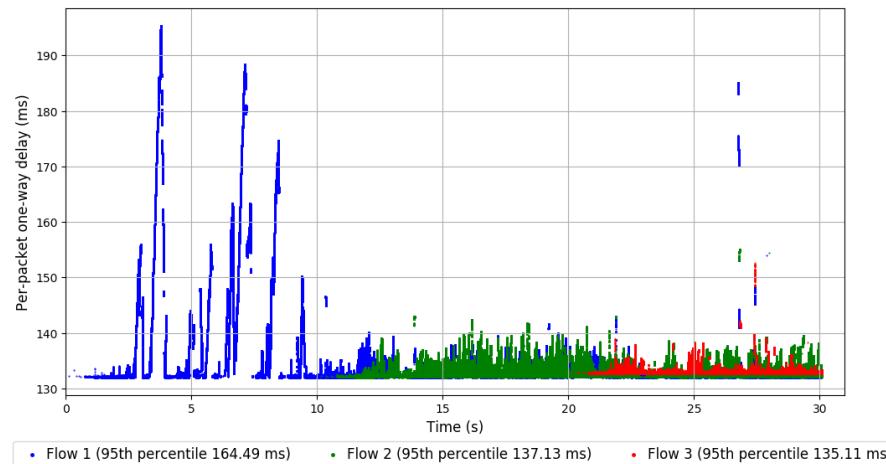
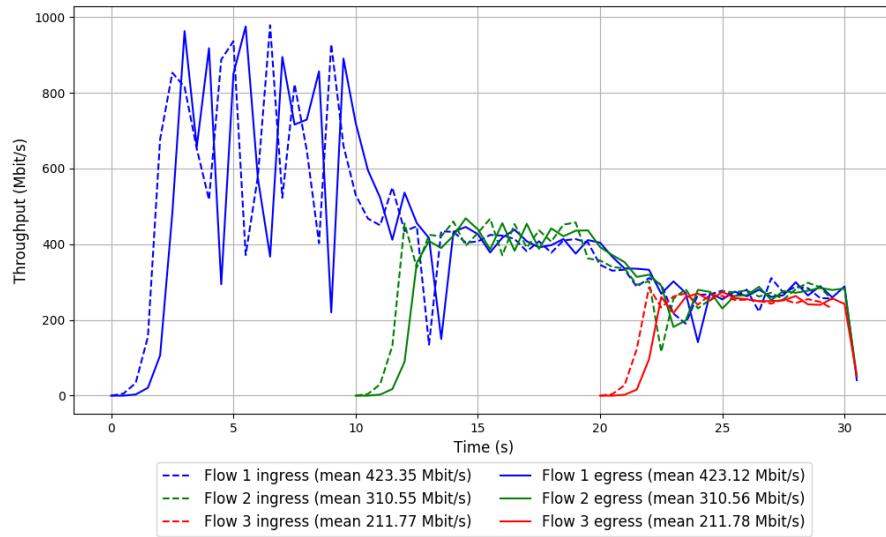


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-09 13:42:34
End at: 2019-03-09 13:43:04
Local clock offset: -0.012 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-03-09 15:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.76 Mbit/s
95th percentile per-packet one-way delay: 155.151 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 423.12 Mbit/s
95th percentile per-packet one-way delay: 164.486 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 310.56 Mbit/s
95th percentile per-packet one-way delay: 137.129 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 211.78 Mbit/s
95th percentile per-packet one-way delay: 135.109 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

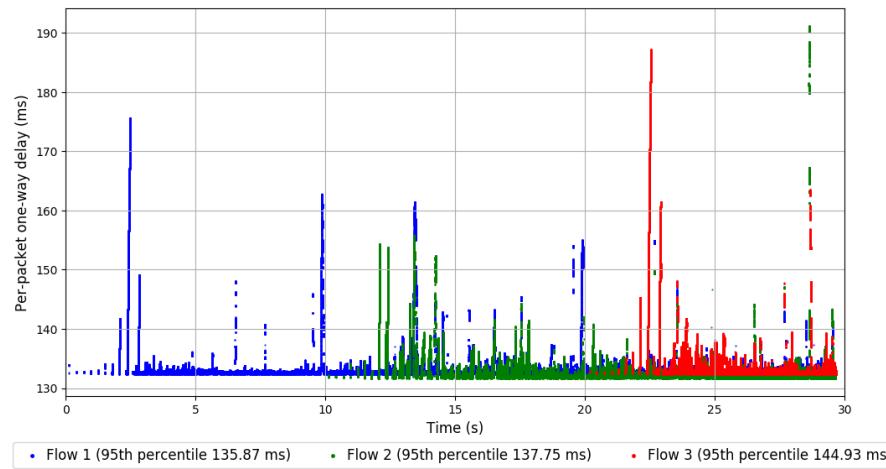
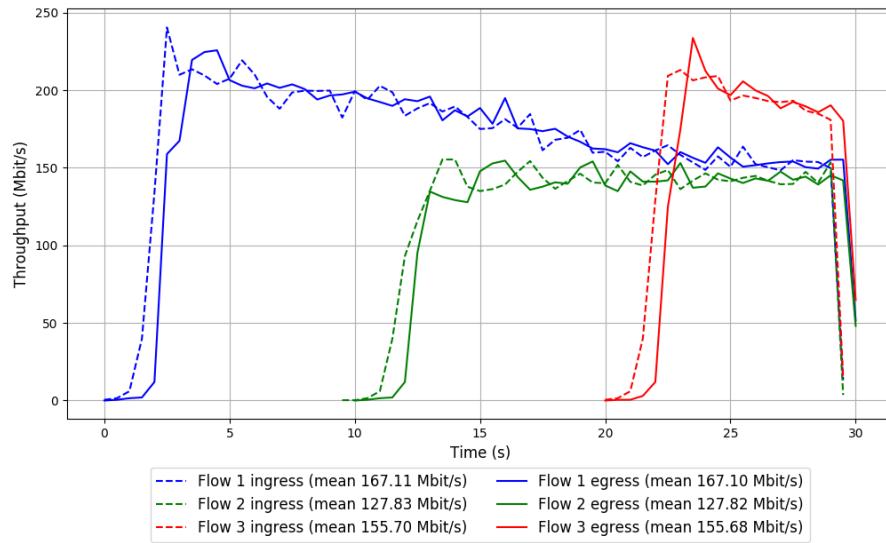


Run 1: Statistics of Indigo

```
Start at: 2019-03-09 11:15:42
End at: 2019-03-09 11:16:12
Local clock offset: 0.239 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2019-03-09 15:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.55 Mbit/s
95th percentile per-packet one-way delay: 137.637 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.10 Mbit/s
95th percentile per-packet one-way delay: 135.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.82 Mbit/s
95th percentile per-packet one-way delay: 137.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.68 Mbit/s
95th percentile per-packet one-way delay: 144.931 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo — Data Link

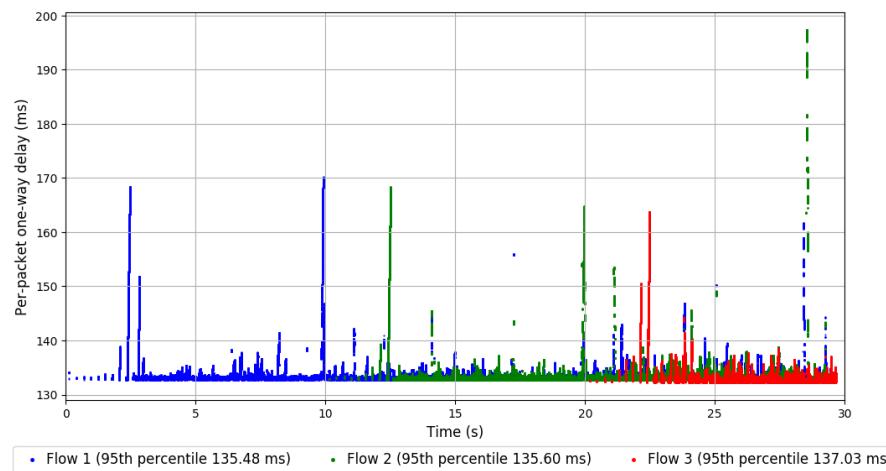
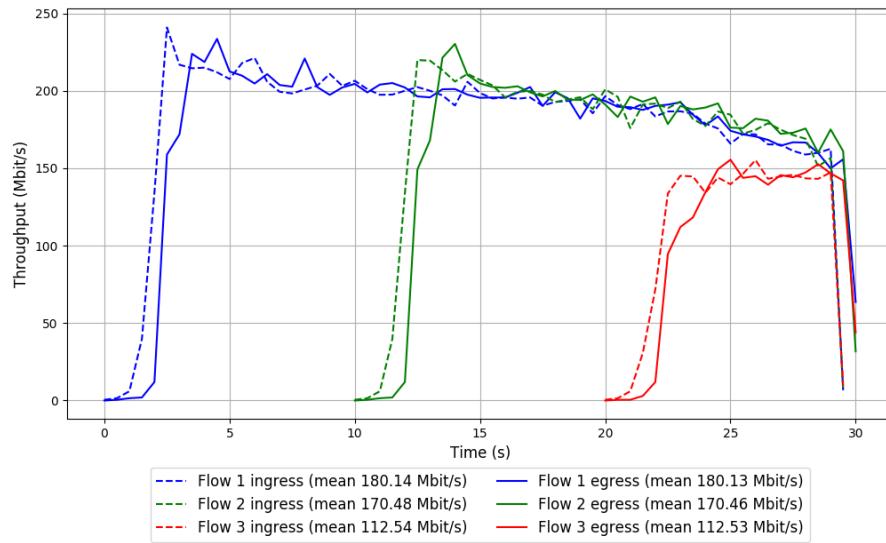


Run 2: Statistics of Indigo

```
Start at: 2019-03-09 11:57:52
End at: 2019-03-09 11:58:22
Local clock offset: -0.087 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2019-03-09 15:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.80 Mbit/s
95th percentile per-packet one-way delay: 135.673 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 180.13 Mbit/s
95th percentile per-packet one-way delay: 135.480 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 170.46 Mbit/s
95th percentile per-packet one-way delay: 135.600 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 112.53 Mbit/s
95th percentile per-packet one-way delay: 137.029 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

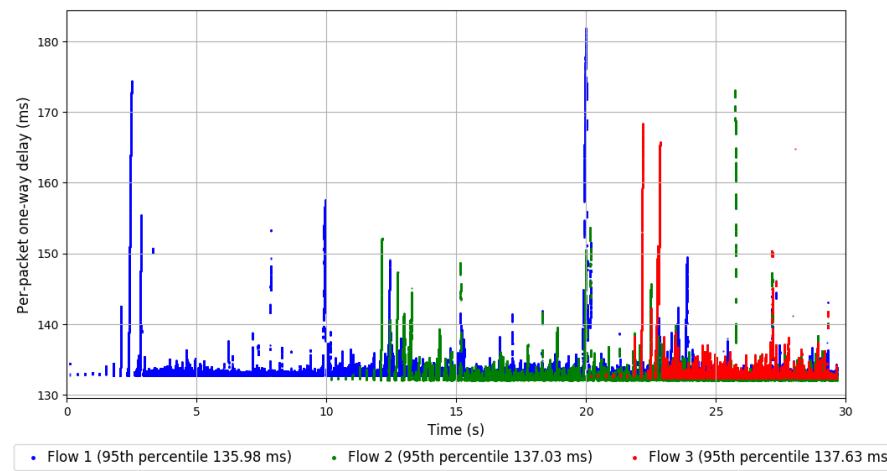
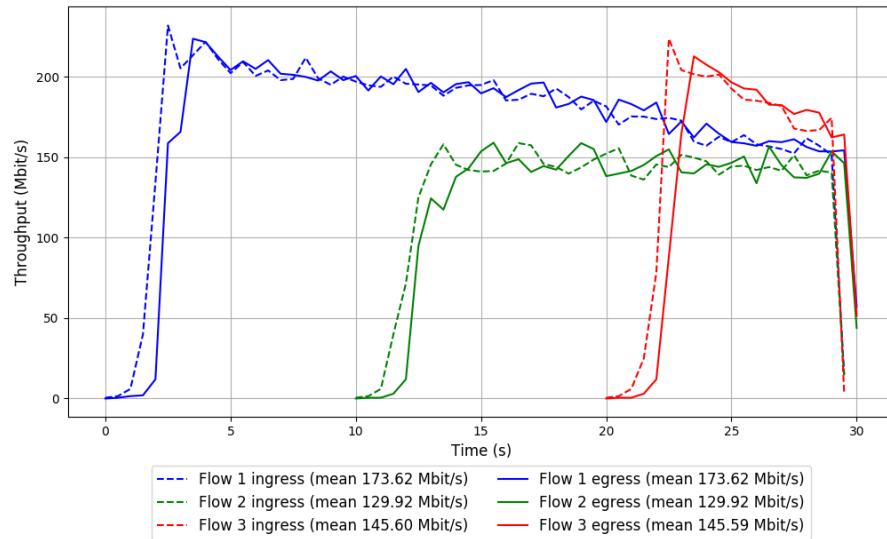


Run 3: Statistics of Indigo

```
Start at: 2019-03-09 12:38:16
End at: 2019-03-09 12:38:46
Local clock offset: -0.076 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-03-09 15:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.97 Mbit/s
95th percentile per-packet one-way delay: 136.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.62 Mbit/s
95th percentile per-packet one-way delay: 135.979 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.92 Mbit/s
95th percentile per-packet one-way delay: 137.032 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.59 Mbit/s
95th percentile per-packet one-way delay: 137.627 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo — Data Link

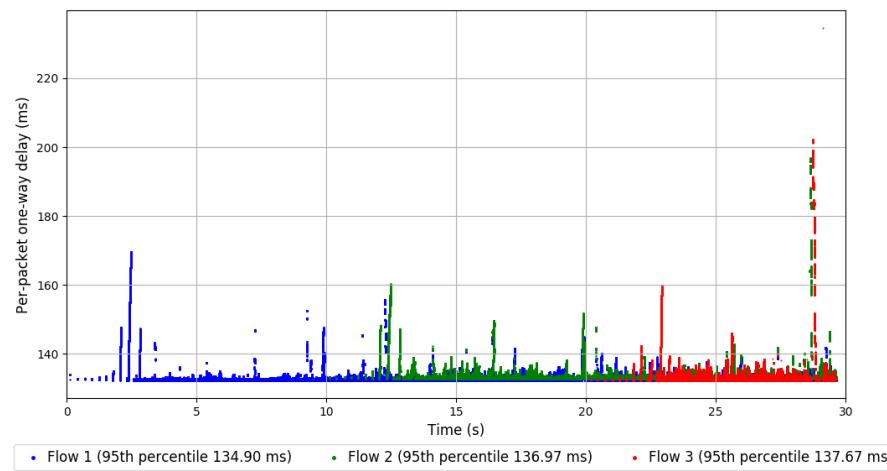
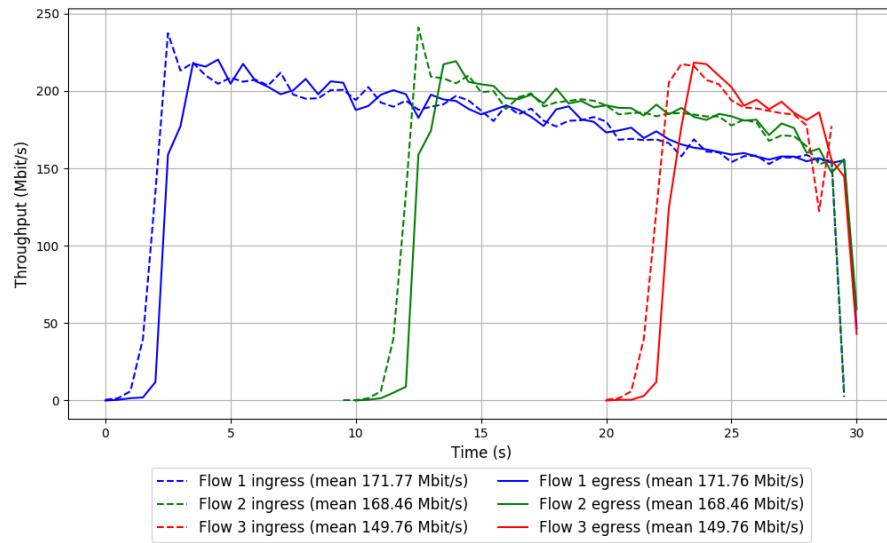


Run 4: Statistics of Indigo

```
Start at: 2019-03-09 13:18:34
End at: 2019-03-09 13:19:04
Local clock offset: -0.358 ms
Remote clock offset: -0.516 ms

# Below is generated by plot.py at 2019-03-09 15:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.14 Mbit/s
95th percentile per-packet one-way delay: 136.212 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.76 Mbit/s
95th percentile per-packet one-way delay: 134.899 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 168.46 Mbit/s
95th percentile per-packet one-way delay: 136.968 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 149.76 Mbit/s
95th percentile per-packet one-way delay: 137.667 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

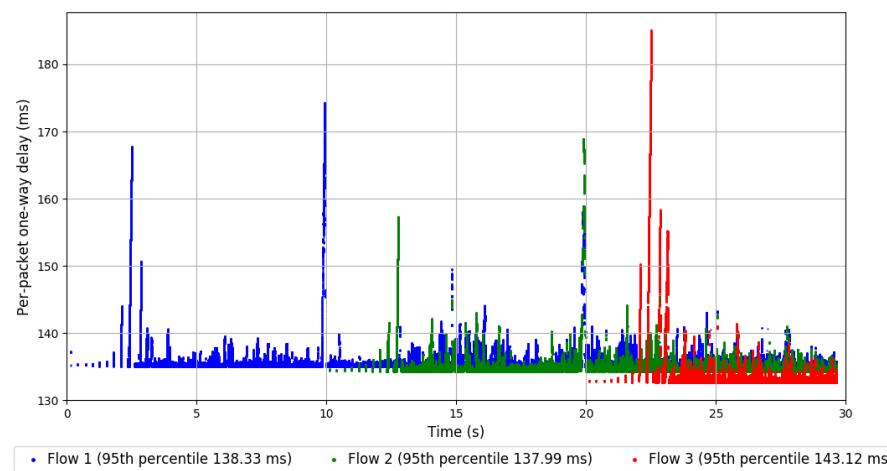
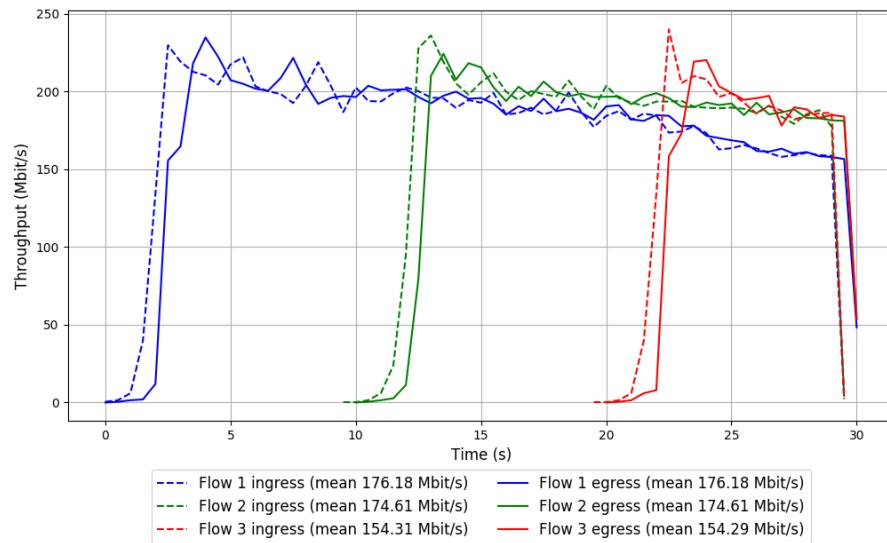


Run 5: Statistics of Indigo

```
Start at: 2019-03-09 14:00:36
End at: 2019-03-09 14:01:06
Local clock offset: -0.097 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-03-09 15:16:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.50 Mbit/s
95th percentile per-packet one-way delay: 138.413 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.18 Mbit/s
95th percentile per-packet one-way delay: 138.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.61 Mbit/s
95th percentile per-packet one-way delay: 137.993 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.29 Mbit/s
95th percentile per-packet one-way delay: 143.117 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo — Data Link

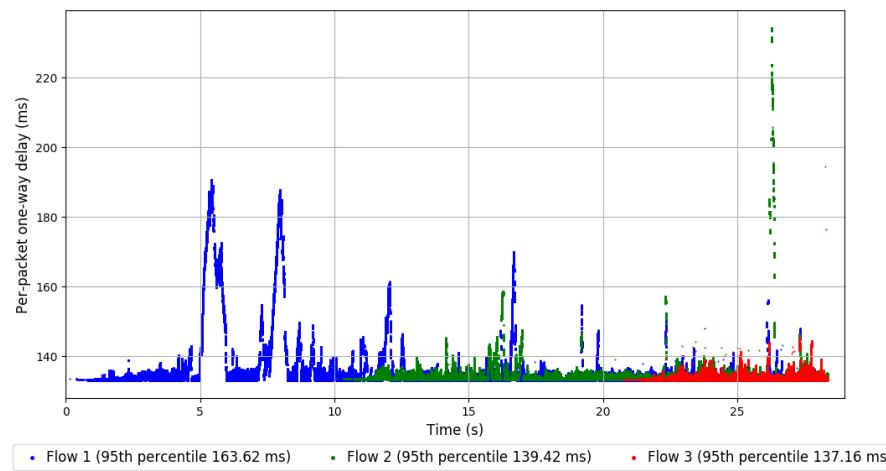
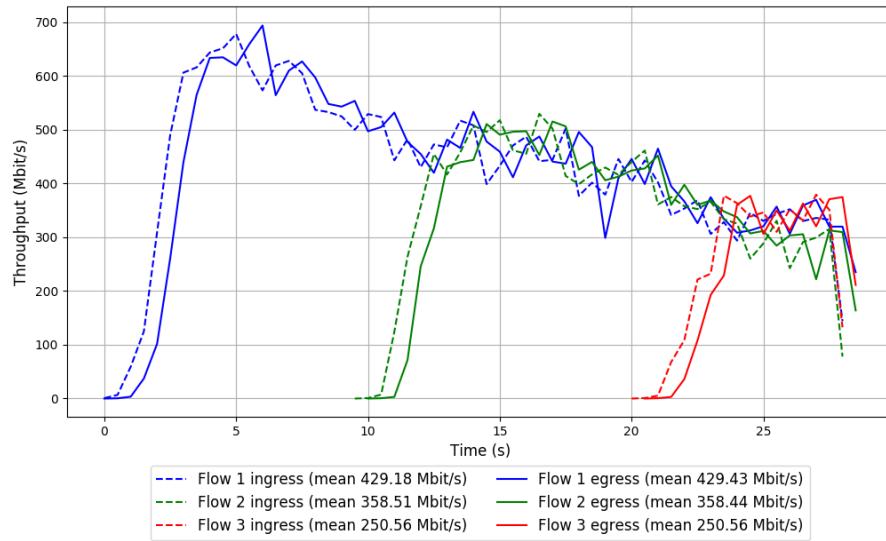


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 10:48:06
End at: 2019-03-09 10:48:36
Local clock offset: -0.528 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-03-09 15:17:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 730.65 Mbit/s
95th percentile per-packet one-way delay: 152.005 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 429.43 Mbit/s
95th percentile per-packet one-way delay: 163.625 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 358.44 Mbit/s
95th percentile per-packet one-way delay: 139.420 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 250.56 Mbit/s
95th percentile per-packet one-way delay: 137.160 ms
Loss rate: 0.08%
```

Run 1: Report of Indigo-MusesC3 — Data Link

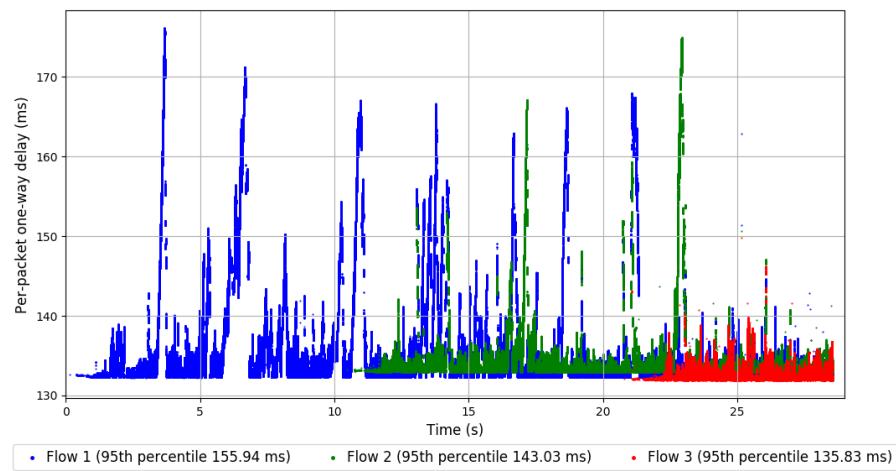
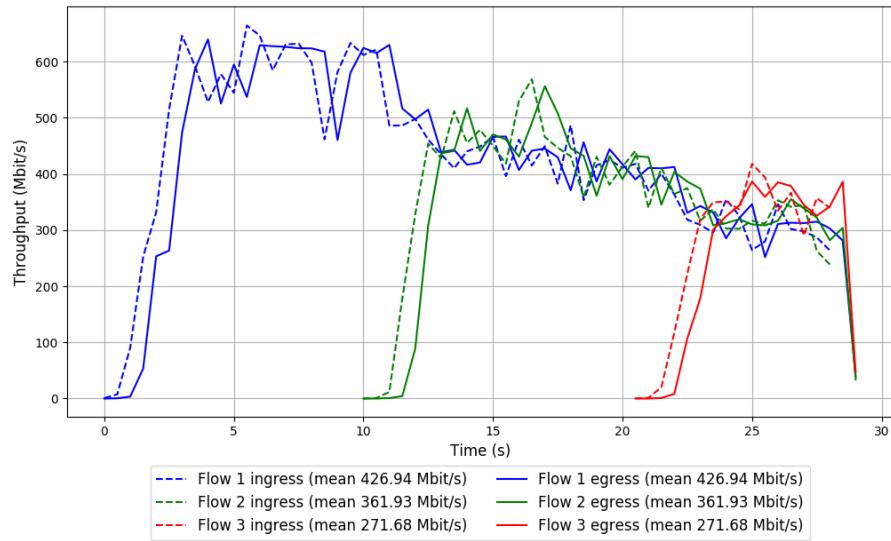


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 11:28:49
End at: 2019-03-09 11:29:19
Local clock offset: 0.036 ms
Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2019-03-09 15:18:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 731.44 Mbit/s
95th percentile per-packet one-way delay: 151.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 426.94 Mbit/s
95th percentile per-packet one-way delay: 155.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 361.93 Mbit/s
95th percentile per-packet one-way delay: 143.035 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 271.68 Mbit/s
95th percentile per-packet one-way delay: 135.827 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

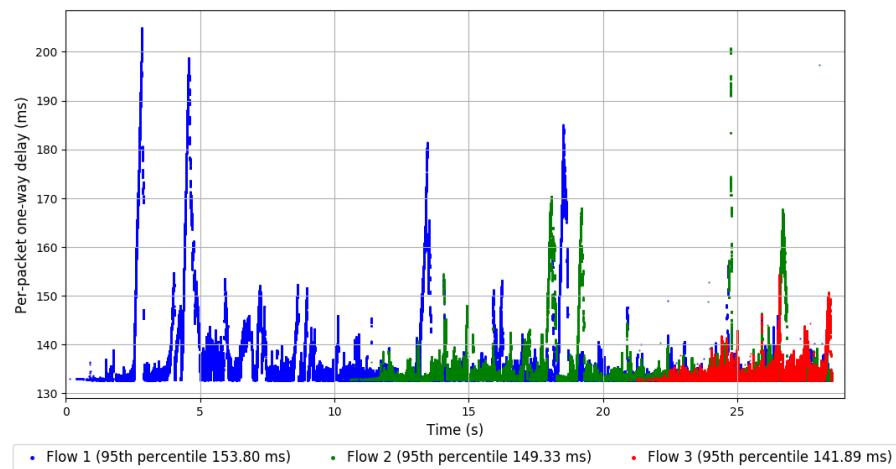
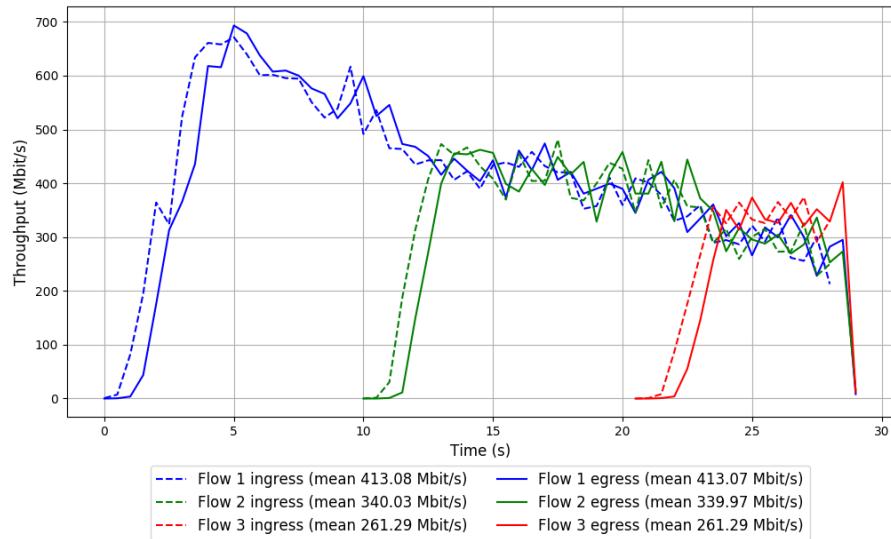


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 12:11:54
End at: 2019-03-09 12:12:24
Local clock offset: 0.089 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-03-09 15:18:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 700.50 Mbit/s
95th percentile per-packet one-way delay: 150.886 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 413.07 Mbit/s
95th percentile per-packet one-way delay: 153.802 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 339.97 Mbit/s
95th percentile per-packet one-way delay: 149.331 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 261.29 Mbit/s
95th percentile per-packet one-way delay: 141.888 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

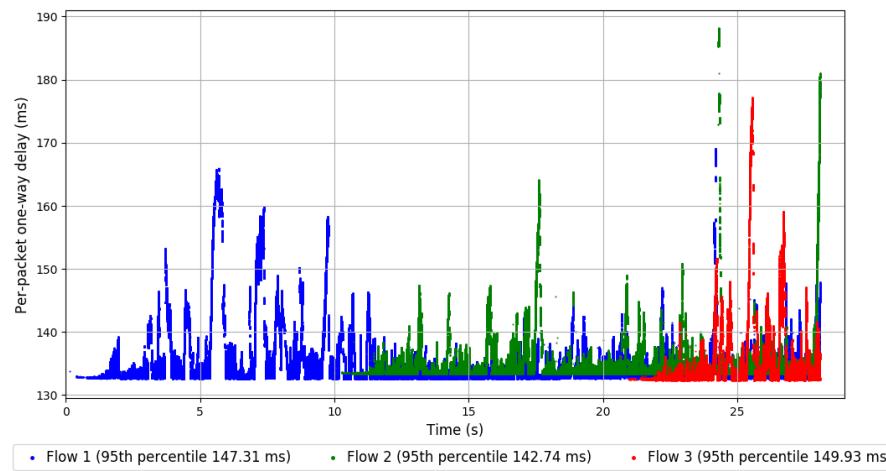
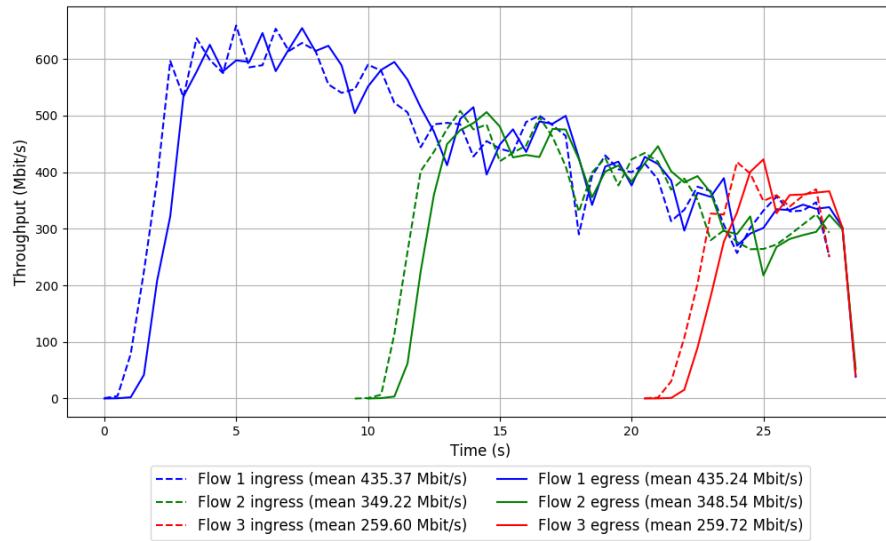


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 12:51:31
End at: 2019-03-09 12:52:01
Local clock offset: -0.246 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-03-09 15:19:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 729.18 Mbit/s
95th percentile per-packet one-way delay: 145.922 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 435.24 Mbit/s
95th percentile per-packet one-way delay: 147.313 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 348.54 Mbit/s
95th percentile per-packet one-way delay: 142.742 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 259.72 Mbit/s
95th percentile per-packet one-way delay: 149.930 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

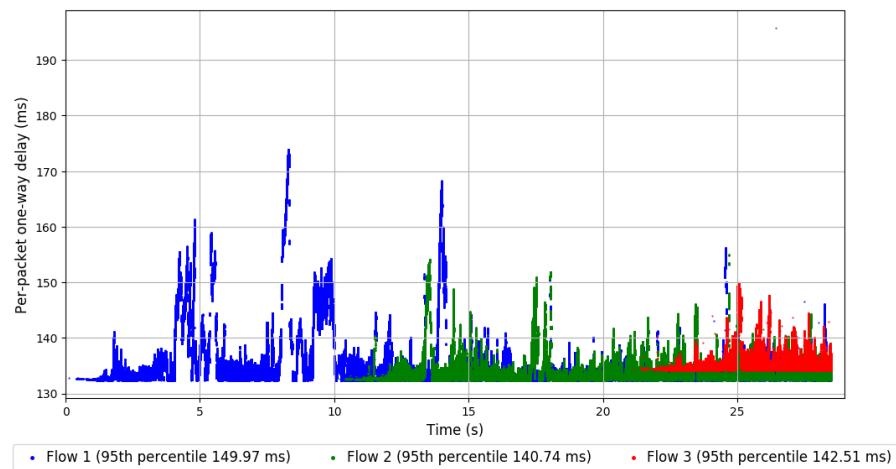
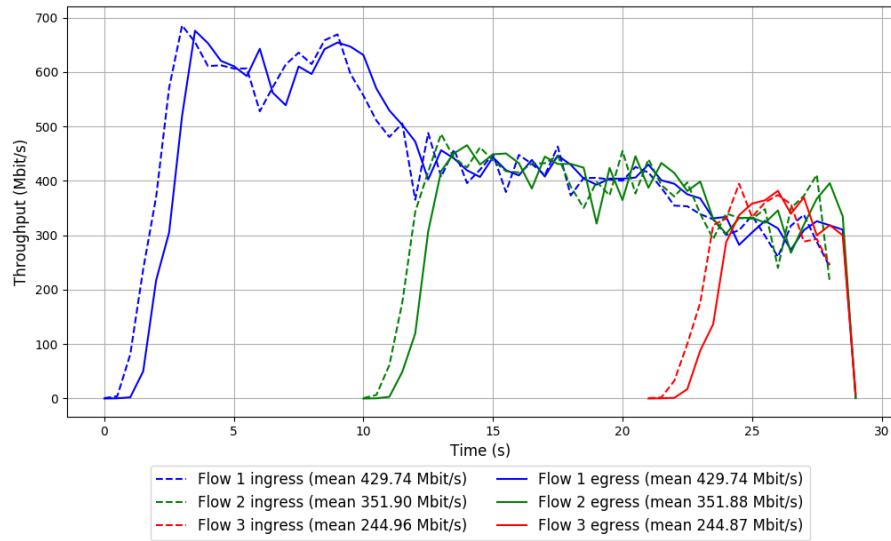


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 13:33:07
End at: 2019-03-09 13:33:37
Local clock offset: -0.069 ms
Remote clock offset: -0.506 ms

# Below is generated by plot.py at 2019-03-09 15:23:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.91 Mbit/s
95th percentile per-packet one-way delay: 147.271 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 429.74 Mbit/s
95th percentile per-packet one-way delay: 149.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.88 Mbit/s
95th percentile per-packet one-way delay: 140.735 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.87 Mbit/s
95th percentile per-packet one-way delay: 142.512 ms
Loss rate: 0.00%
```

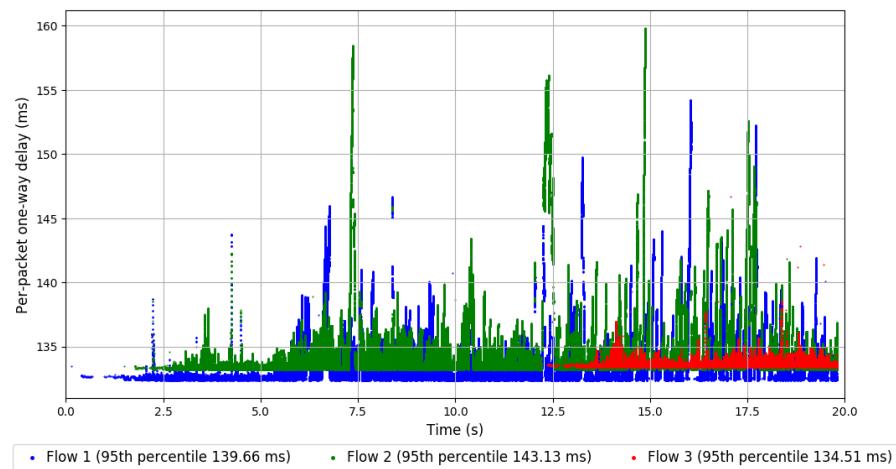
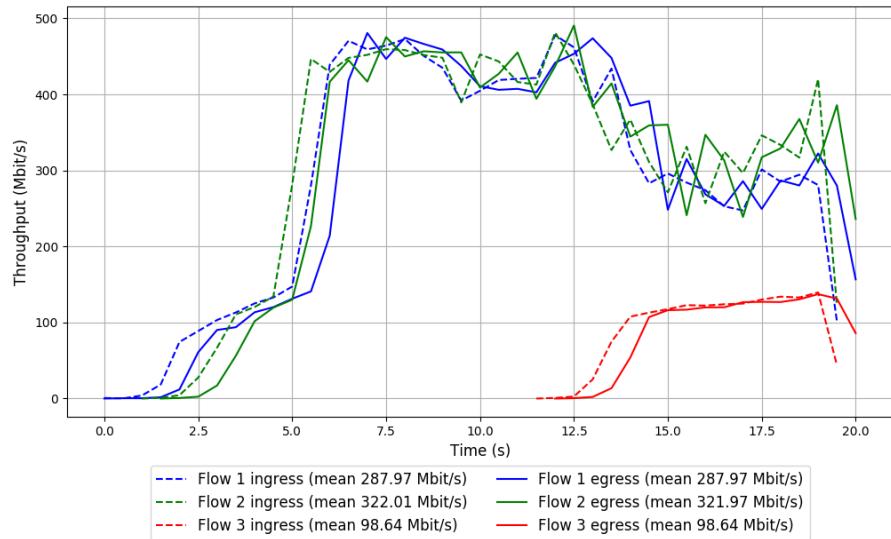
Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-09 10:45:01
End at: 2019-03-09 10:45:31
Local clock offset: -0.548 ms
Remote clock offset: -0.091 ms

Run 1: Report of Indigo-MusesC5 — Data Link

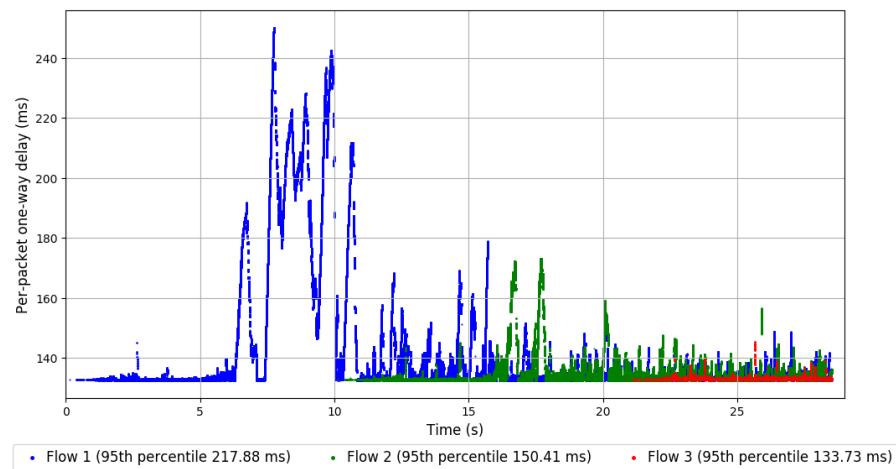
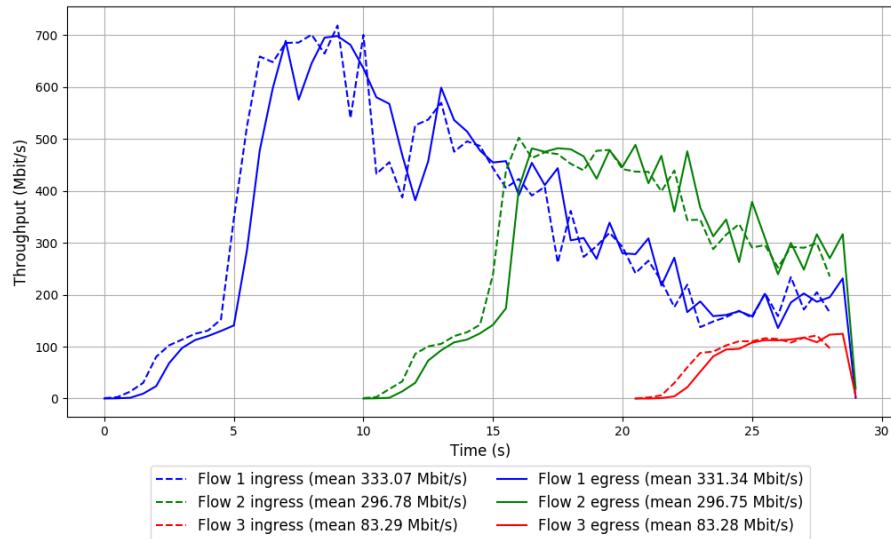


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 11:25:39
End at: 2019-03-09 11:26:09
Local clock offset: 0.036 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-03-09 15:23:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.84 Mbit/s
95th percentile per-packet one-way delay: 207.384 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 331.34 Mbit/s
95th percentile per-packet one-way delay: 217.880 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 296.75 Mbit/s
95th percentile per-packet one-way delay: 150.406 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 83.28 Mbit/s
95th percentile per-packet one-way delay: 133.728 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo-MusesC5 — Data Link

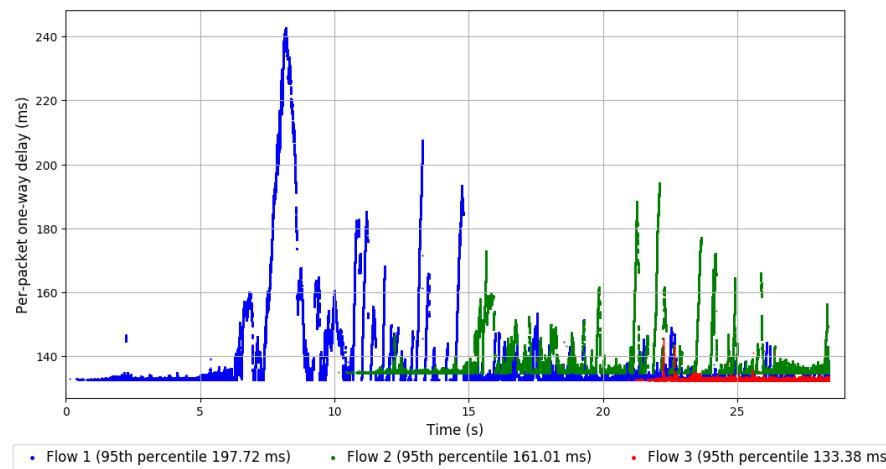
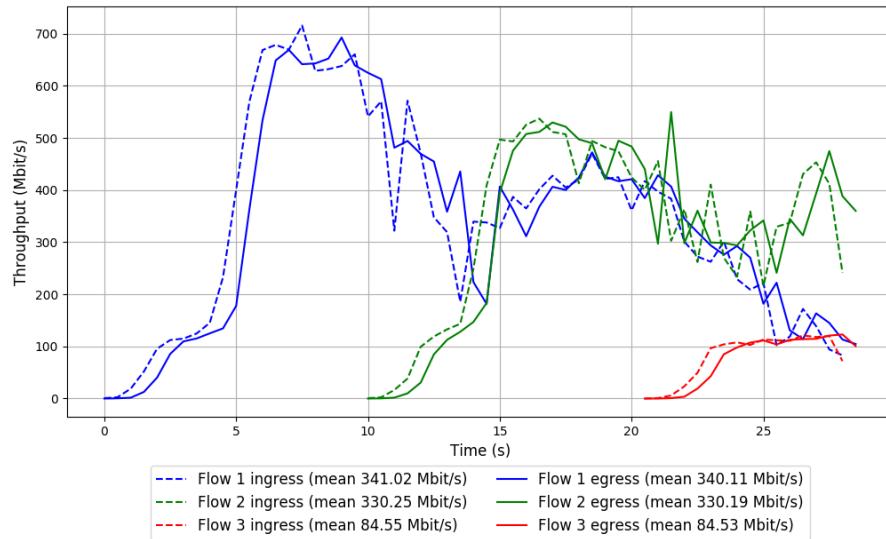


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 12:08:43
End at: 2019-03-09 12:09:13
Local clock offset: 0.182 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2019-03-09 15:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.34 Mbit/s
95th percentile per-packet one-way delay: 180.460 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 340.11 Mbit/s
95th percentile per-packet one-way delay: 197.721 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 330.19 Mbit/s
95th percentile per-packet one-way delay: 161.007 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 84.53 Mbit/s
95th percentile per-packet one-way delay: 133.385 ms
Loss rate: 0.02%
```

Run 3: Report of Indigo-MusesC5 — Data Link

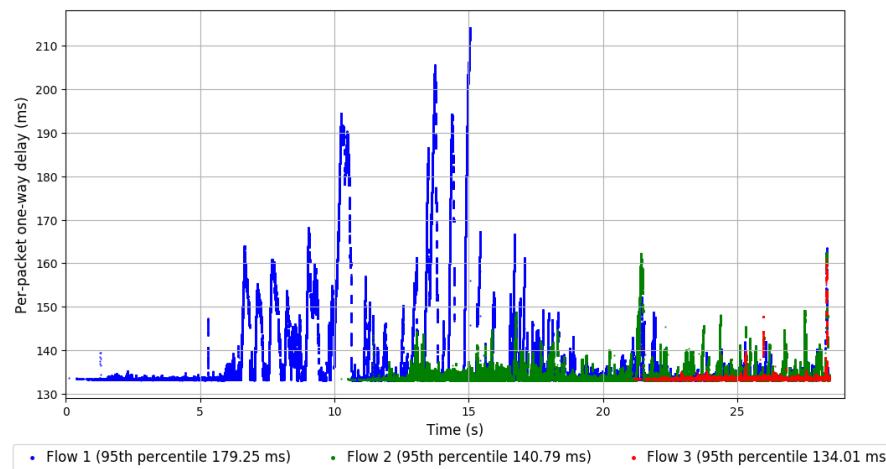
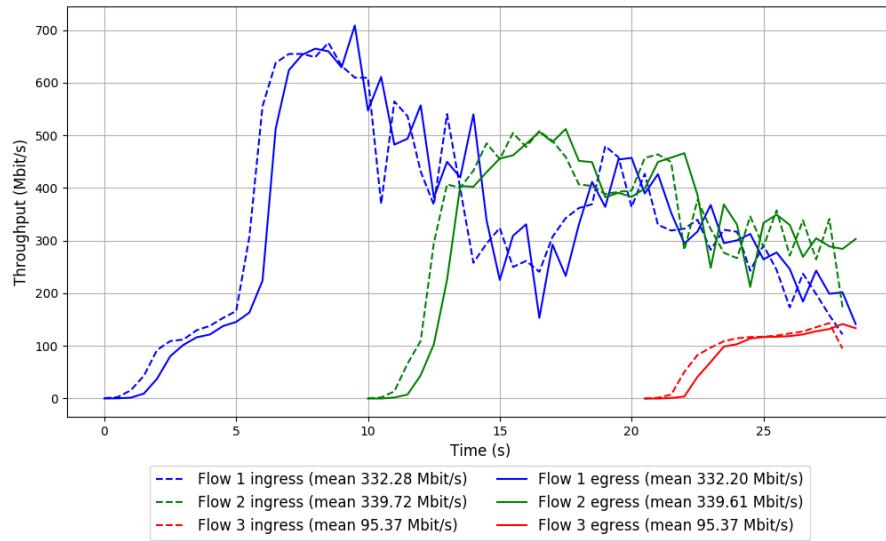


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 12:48:17
End at: 2019-03-09 12:48:47
Local clock offset: -0.461 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-09 15:28:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.61 Mbit/s
95th percentile per-packet one-way delay: 160.597 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 332.20 Mbit/s
95th percentile per-packet one-way delay: 179.250 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 339.61 Mbit/s
95th percentile per-packet one-way delay: 140.789 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 134.007 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

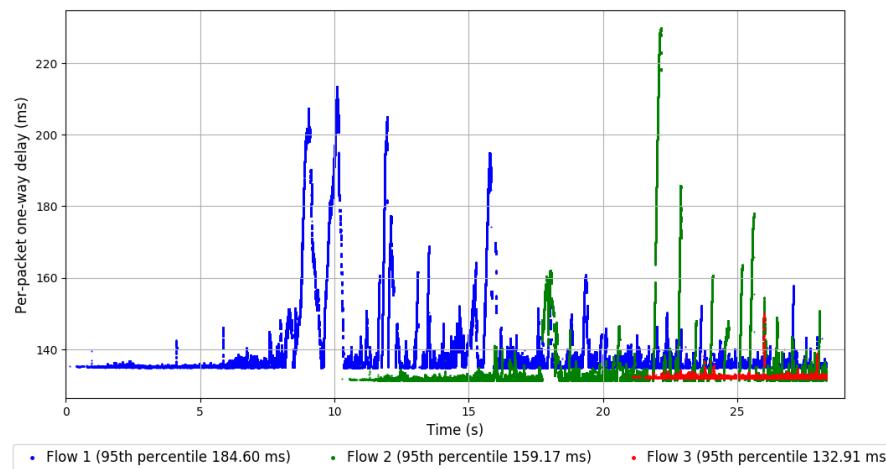
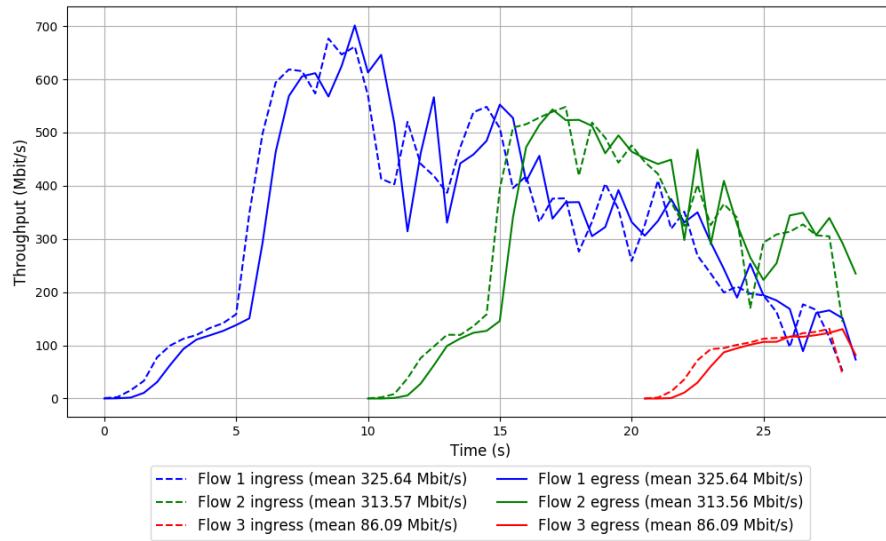


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 13:29:54
End at: 2019-03-09 13:30:24
Local clock offset: 0.313 ms
Remote clock offset: -0.509 ms

# Below is generated by plot.py at 2019-03-09 15:28:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 548.94 Mbit/s
95th percentile per-packet one-way delay: 176.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 325.64 Mbit/s
95th percentile per-packet one-way delay: 184.602 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.56 Mbit/s
95th percentile per-packet one-way delay: 159.168 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 86.09 Mbit/s
95th percentile per-packet one-way delay: 132.907 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

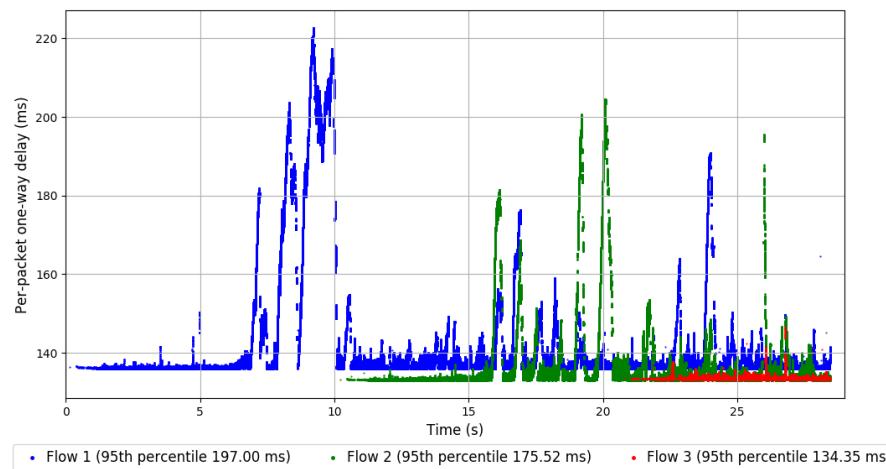
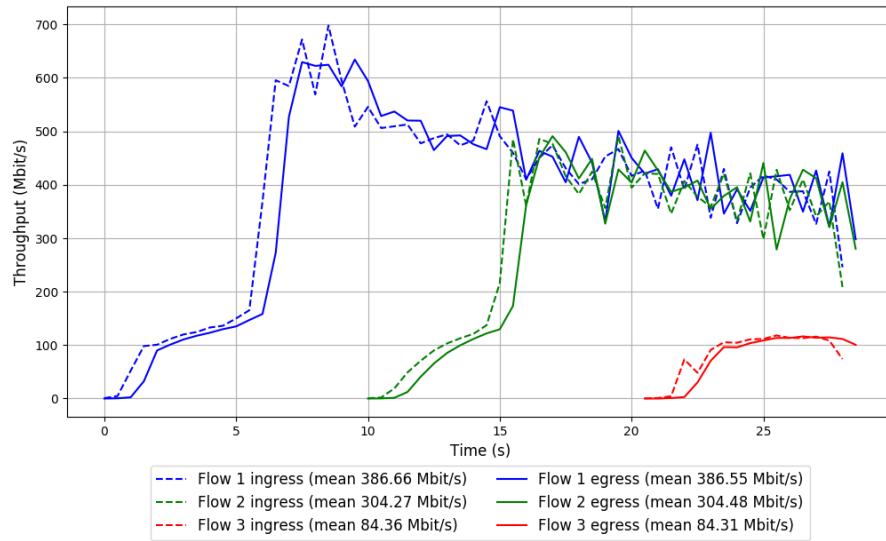


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 11:02:36
End at: 2019-03-09 11:03:06
Local clock offset: -0.375 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-03-09 15:30:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.42 Mbit/s
95th percentile per-packet one-way delay: 189.355 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 386.55 Mbit/s
95th percentile per-packet one-way delay: 196.996 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 304.48 Mbit/s
95th percentile per-packet one-way delay: 175.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 134.350 ms
Loss rate: 0.07%
```

Run 1: Report of Indigo-MusesD — Data Link

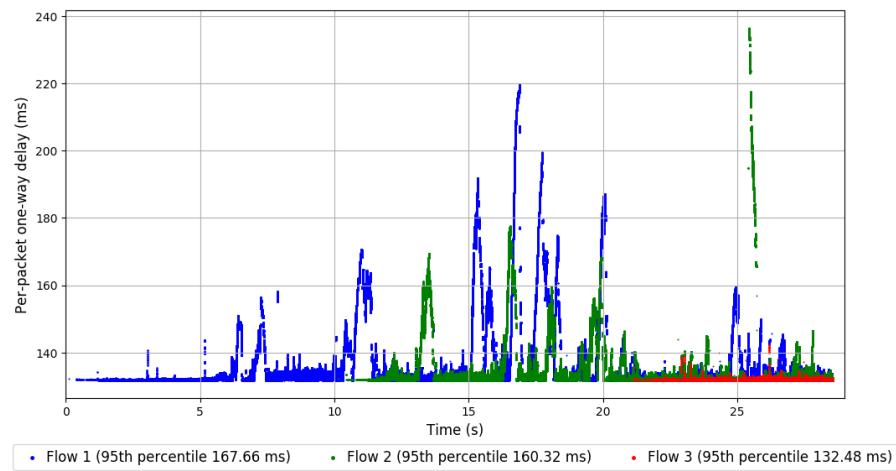
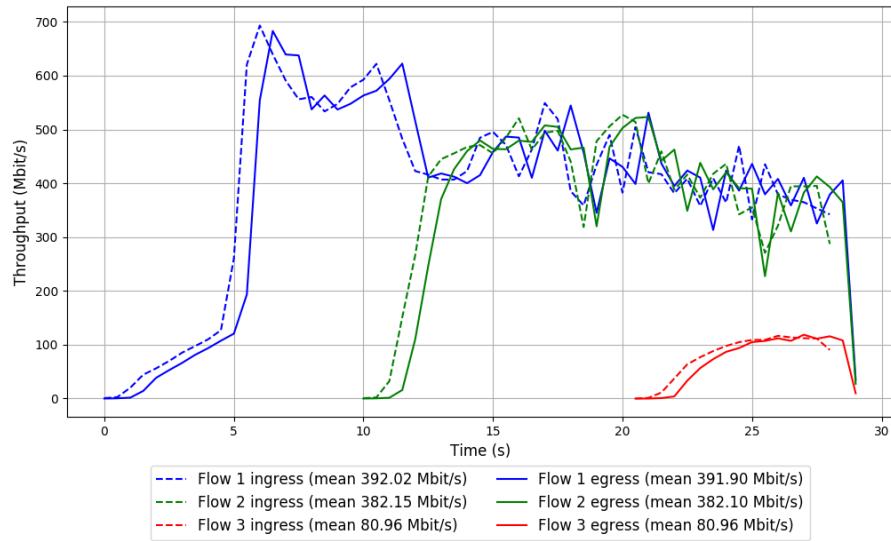


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 11:44:32
End at: 2019-03-09 11:45:02
Local clock offset: 0.11 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-03-09 15:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.05 Mbit/s
95th percentile per-packet one-way delay: 164.270 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 391.90 Mbit/s
95th percentile per-packet one-way delay: 167.665 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 382.10 Mbit/s
95th percentile per-packet one-way delay: 160.325 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 80.96 Mbit/s
95th percentile per-packet one-way delay: 132.484 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

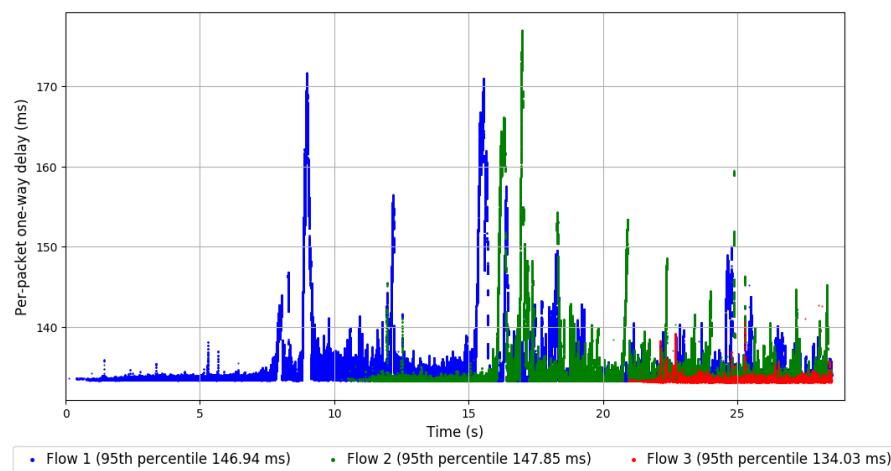
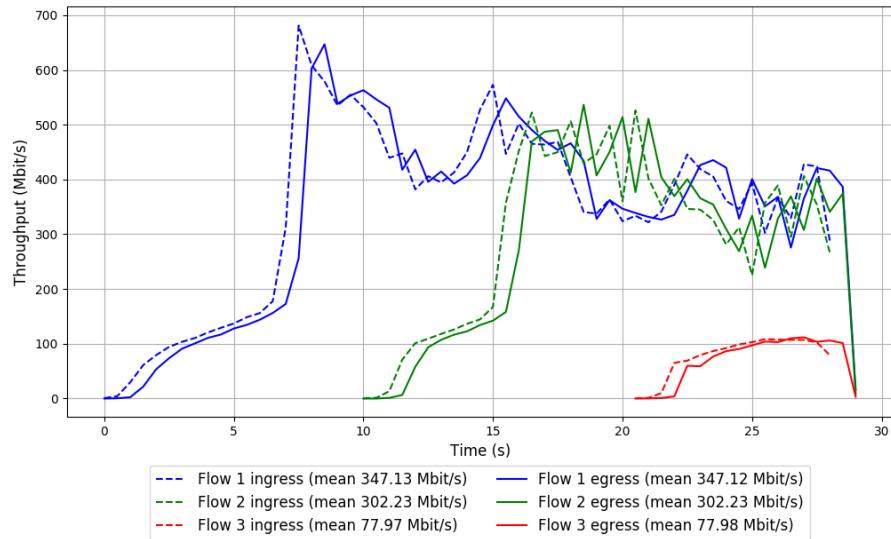


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 12:25:47
End at: 2019-03-09 12:26:17
Local clock offset: -0.464 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-03-09 15:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.11 Mbit/s
95th percentile per-packet one-way delay: 146.931 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 347.12 Mbit/s
95th percentile per-packet one-way delay: 146.945 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 302.23 Mbit/s
95th percentile per-packet one-way delay: 147.846 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 77.98 Mbit/s
95th percentile per-packet one-way delay: 134.028 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

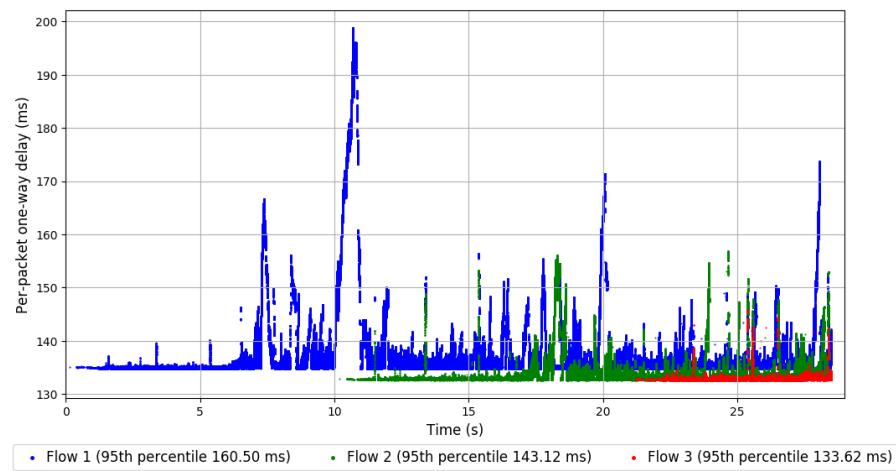
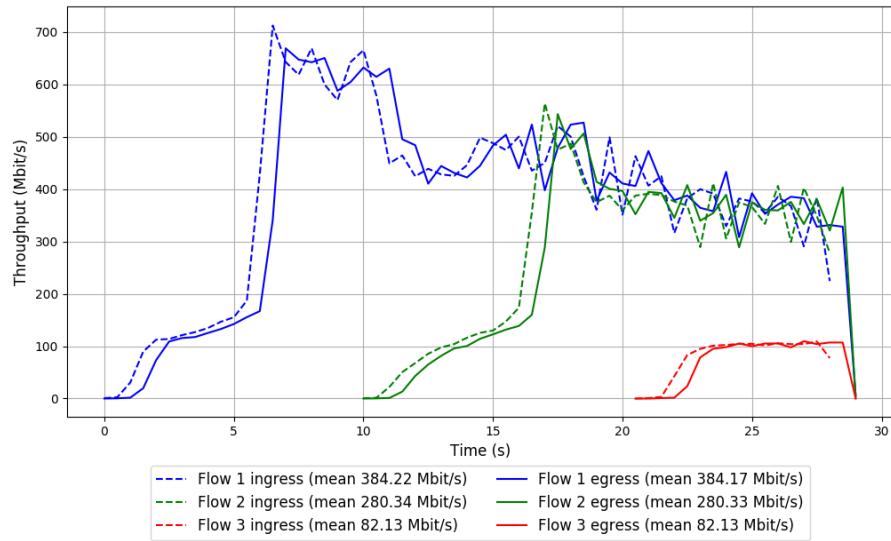


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 13:05:47
End at: 2019-03-09 13:06:17
Local clock offset: -0.292 ms
Remote clock offset: -0.498 ms

# Below is generated by plot.py at 2019-03-09 15:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 586.84 Mbit/s
95th percentile per-packet one-way delay: 152.795 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 384.17 Mbit/s
95th percentile per-packet one-way delay: 160.504 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 280.33 Mbit/s
95th percentile per-packet one-way delay: 143.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.13 Mbit/s
95th percentile per-packet one-way delay: 133.617 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

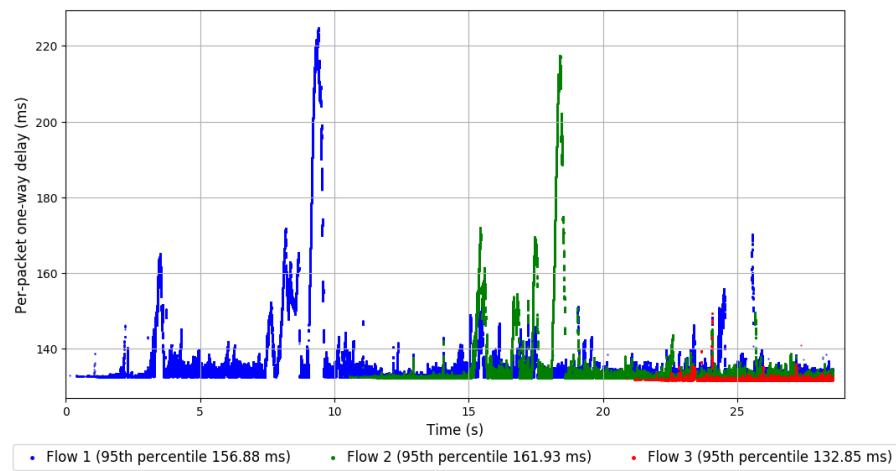
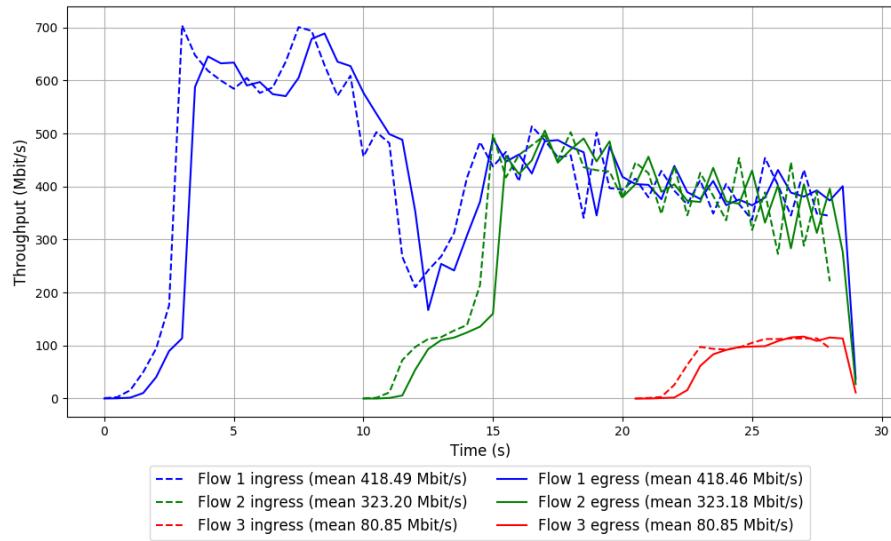


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 13:47:11
End at: 2019-03-09 13:47:41
Local clock offset: 0.074 ms
Remote clock offset: -0.442 ms

# Below is generated by plot.py at 2019-03-09 15:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.73 Mbit/s
95th percentile per-packet one-way delay: 157.321 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 418.46 Mbit/s
95th percentile per-packet one-way delay: 156.880 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 323.18 Mbit/s
95th percentile per-packet one-way delay: 161.932 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 80.85 Mbit/s
95th percentile per-packet one-way delay: 132.846 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

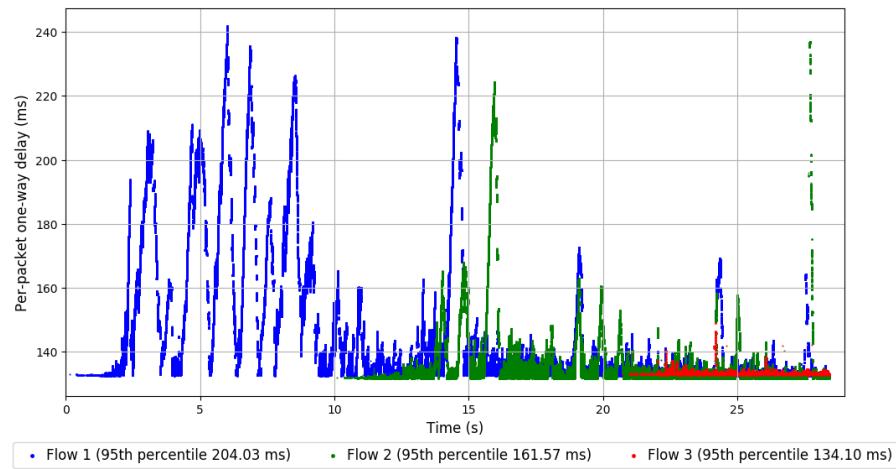
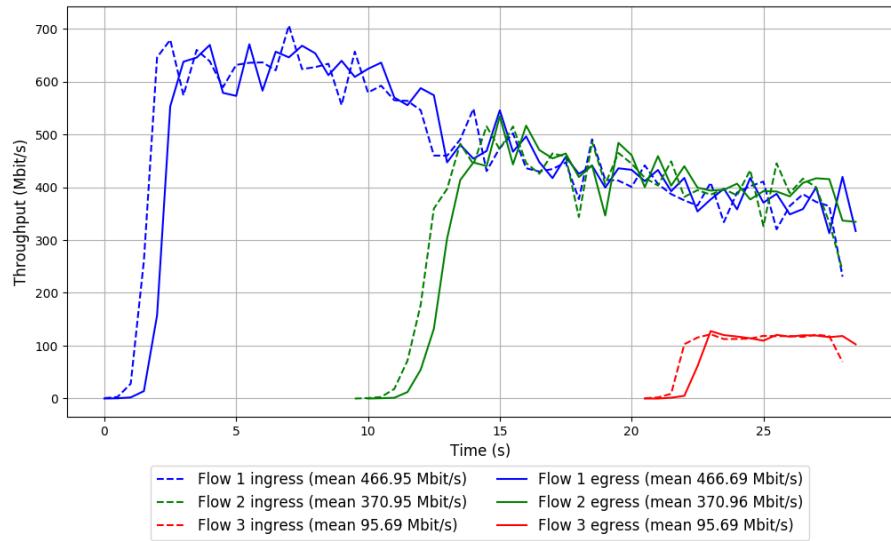


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 11:00:19
End at: 2019-03-09 11:00:49
Local clock offset: 0.064 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-03-09 15:40:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 732.91 Mbit/s
95th percentile per-packet one-way delay: 199.488 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 466.69 Mbit/s
95th percentile per-packet one-way delay: 204.031 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 370.96 Mbit/s
95th percentile per-packet one-way delay: 161.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 134.096 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

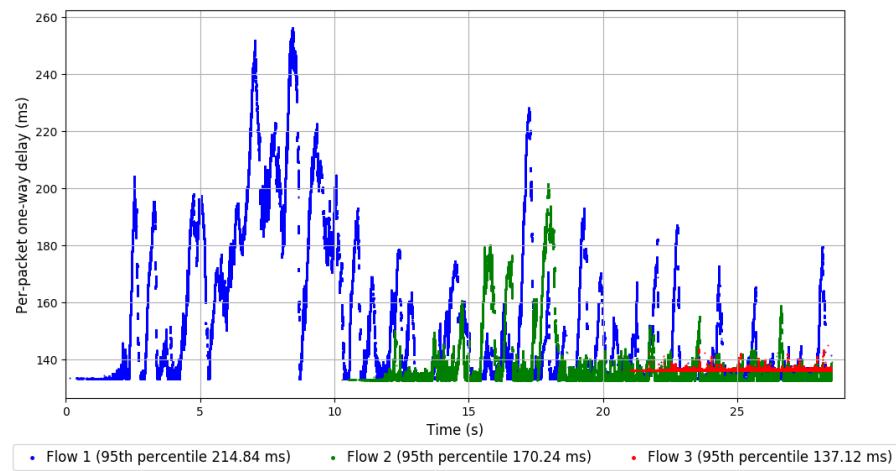
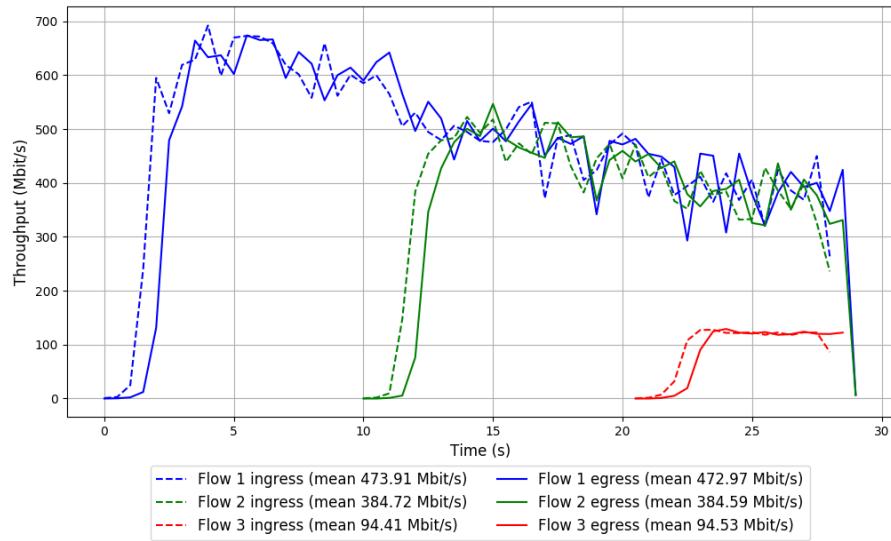


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 11:42:08
End at: 2019-03-09 11:42:38
Local clock offset: -0.549 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2019-03-09 15:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.86 Mbit/s
95th percentile per-packet one-way delay: 204.159 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 472.97 Mbit/s
95th percentile per-packet one-way delay: 214.844 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 384.59 Mbit/s
95th percentile per-packet one-way delay: 170.235 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 137.125 ms
Loss rate: 0.05%
```

Run 2: Report of Indigo-MusesT — Data Link

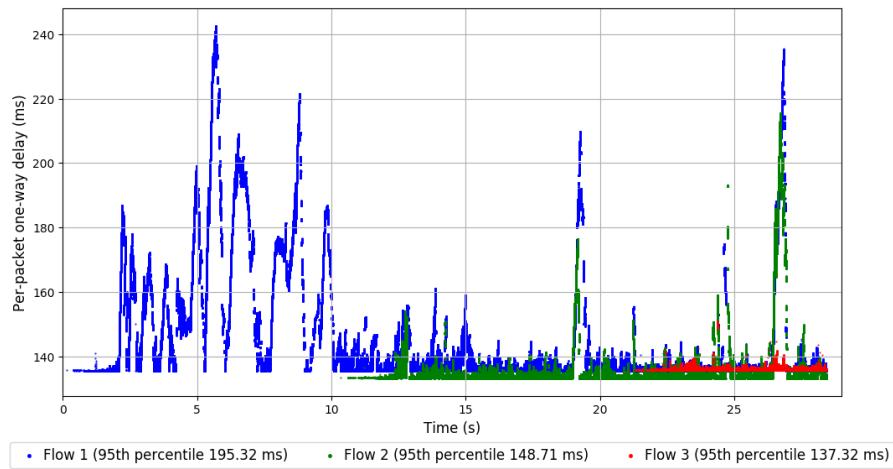
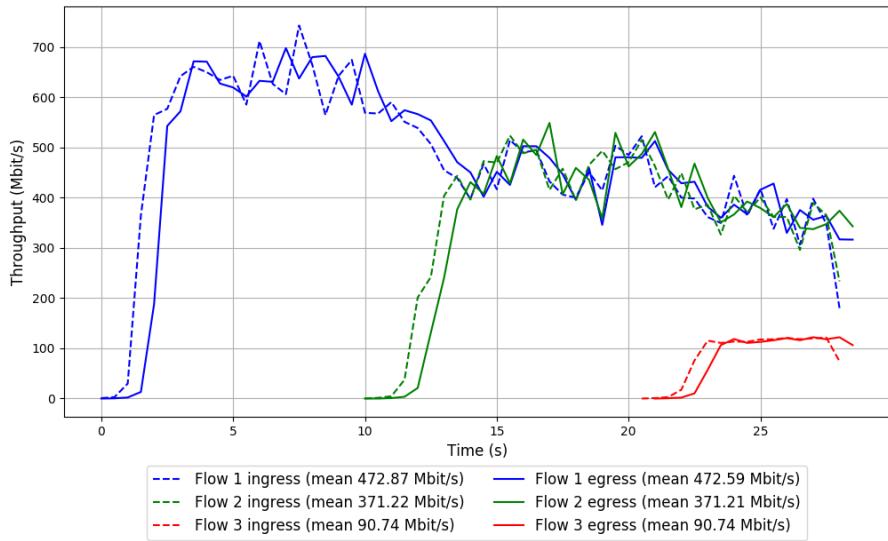


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 12:23:31
End at: 2019-03-09 12:24:01
Local clock offset: -0.463 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2019-03-09 15:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 733.49 Mbit/s
95th percentile per-packet one-way delay: 187.865 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 472.59 Mbit/s
95th percentile per-packet one-way delay: 195.323 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 371.21 Mbit/s
95th percentile per-packet one-way delay: 148.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.74 Mbit/s
95th percentile per-packet one-way delay: 137.325 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesT — Data Link

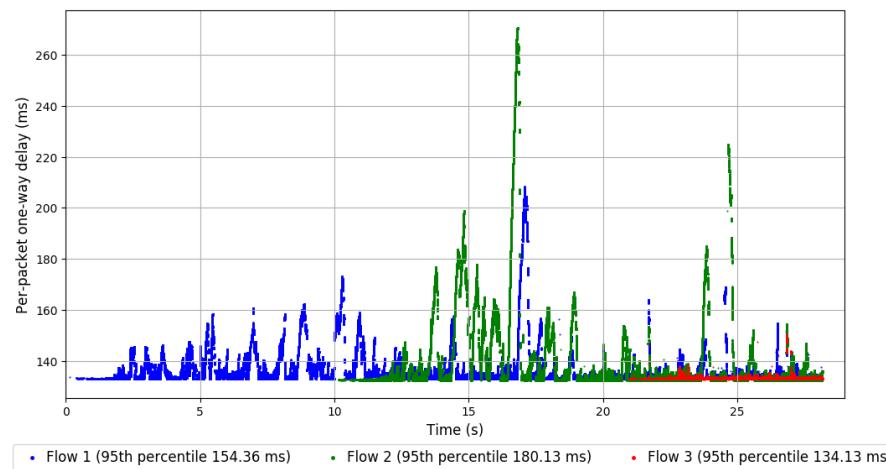
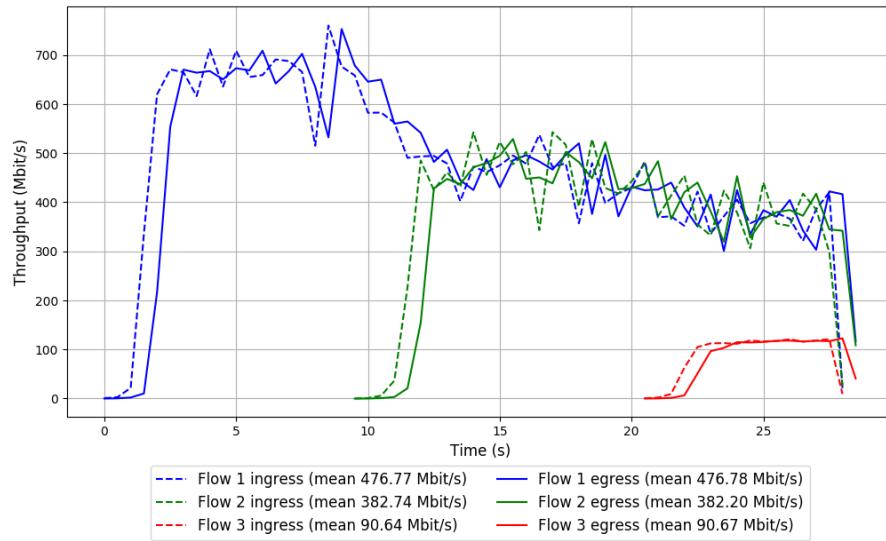


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 13:03:25
End at: 2019-03-09 13:03:55
Local clock offset: -0.115 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2019-03-09 15:43:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 749.94 Mbit/s
95th percentile per-packet one-way delay: 162.717 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 476.78 Mbit/s
95th percentile per-packet one-way delay: 154.362 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 382.20 Mbit/s
95th percentile per-packet one-way delay: 180.135 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 134.129 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

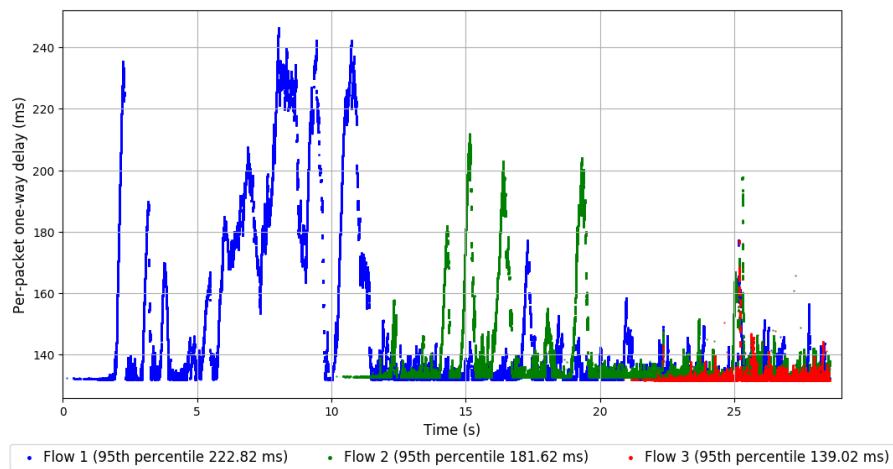
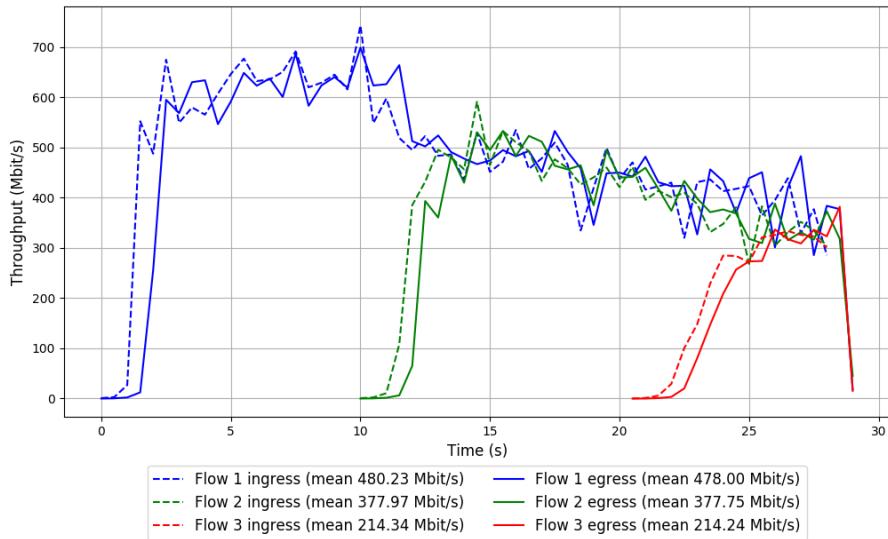


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 13:44:43
End at: 2019-03-09 13:45:13
Local clock offset: 0.283 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.97 Mbit/s
95th percentile per-packet one-way delay: 212.350 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 478.00 Mbit/s
95th percentile per-packet one-way delay: 222.819 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 377.75 Mbit/s
95th percentile per-packet one-way delay: 181.615 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 214.24 Mbit/s
95th percentile per-packet one-way delay: 139.023 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

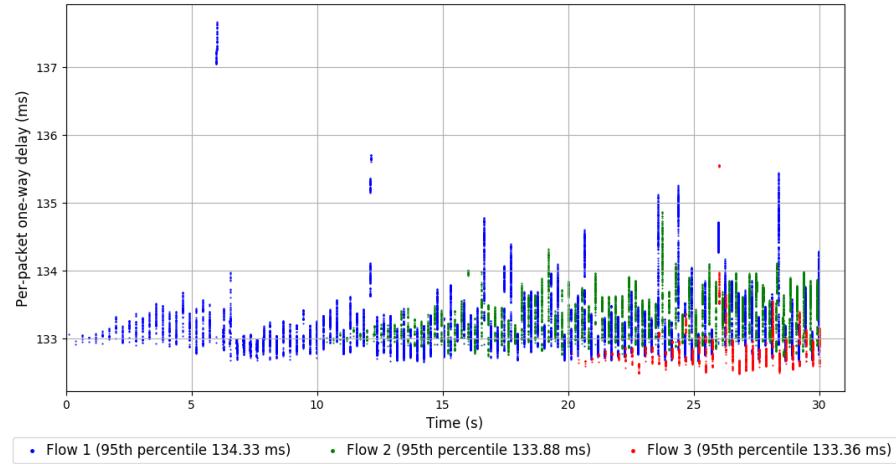
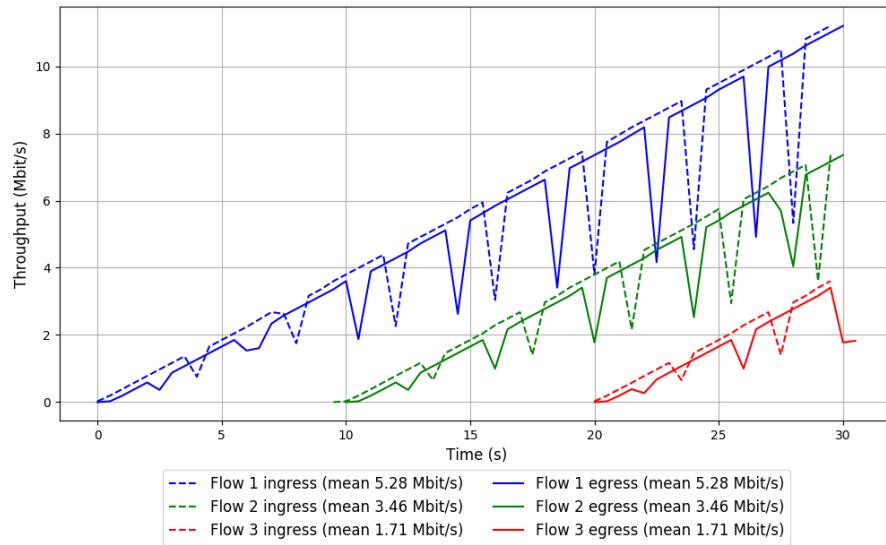


```
Run 1: Statistics of LEDBAT

Start at: 2019-03-09 11:11:28
End at: 2019-03-09 11:11:58
Local clock offset: 0.322 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 134.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 134.331 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 133.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.362 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

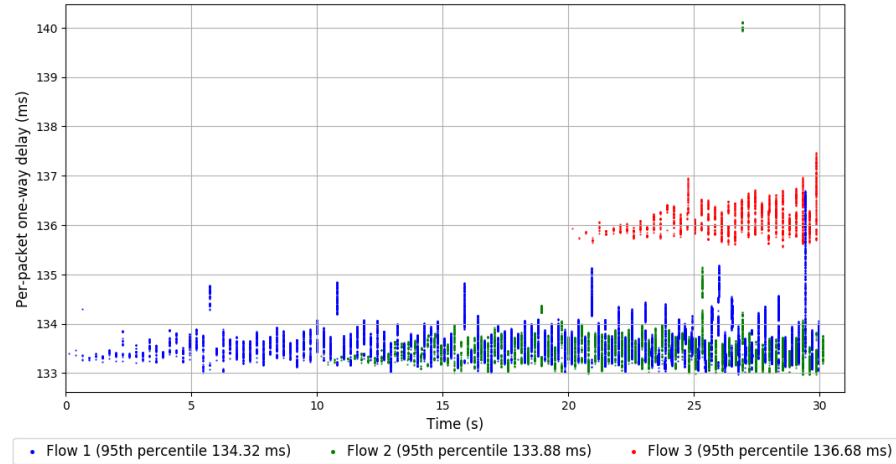
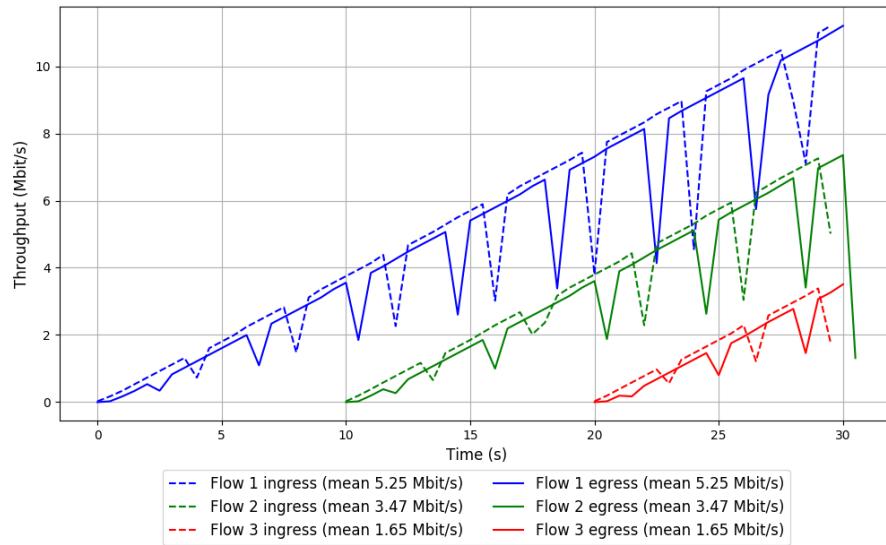


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-09 11:53:20
End at: 2019-03-09 11:53:50
Local clock offset: -0.296 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 135.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 134.319 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.882 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 136.683 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

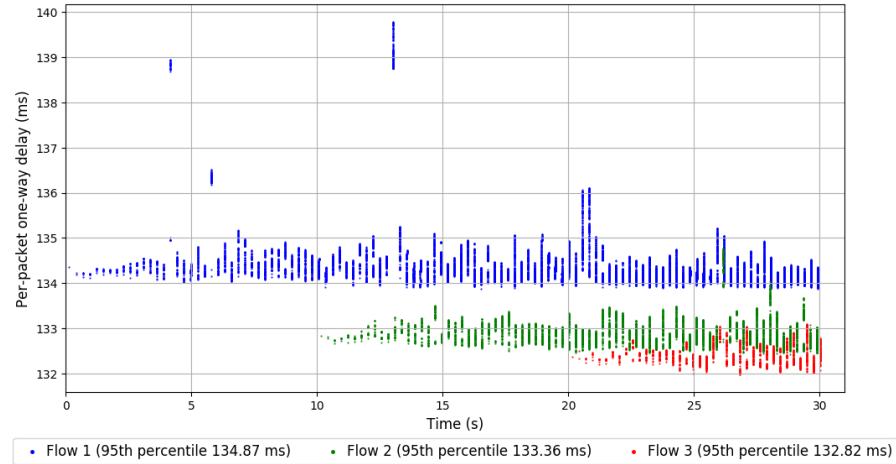
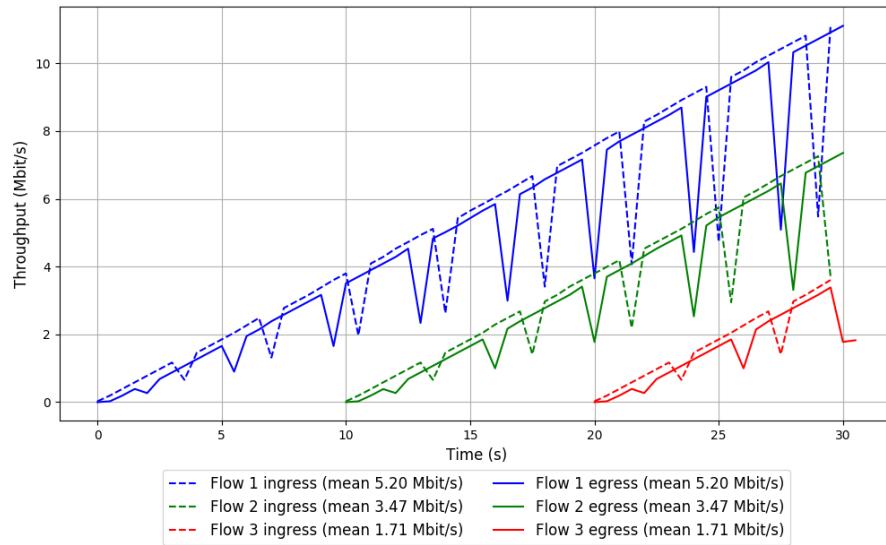


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-09 12:33:56
End at: 2019-03-09 12:34:26
Local clock offset: 0.324 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 134.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.20 Mbit/s
95th percentile per-packet one-way delay: 134.866 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 132.825 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

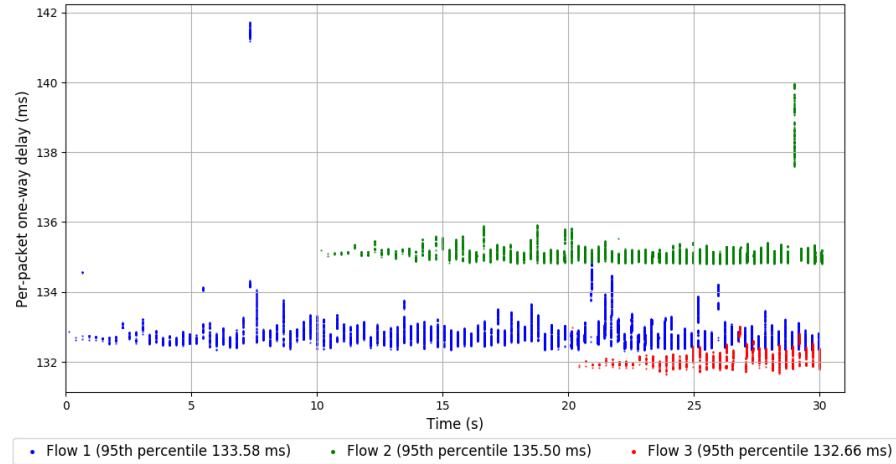
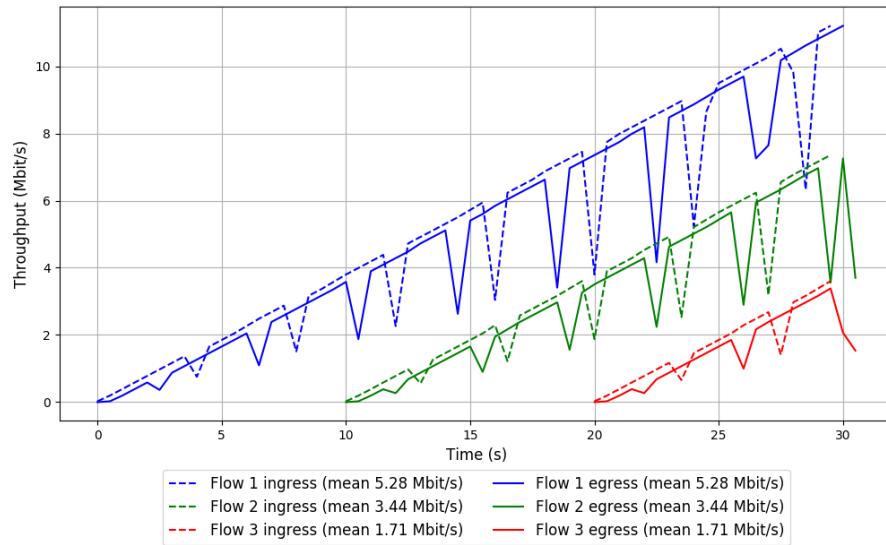


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-09 13:13:59
End at: 2019-03-09 13:14:29
Local clock offset: 0.33 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 135.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 133.580 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 135.505 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 132.659 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

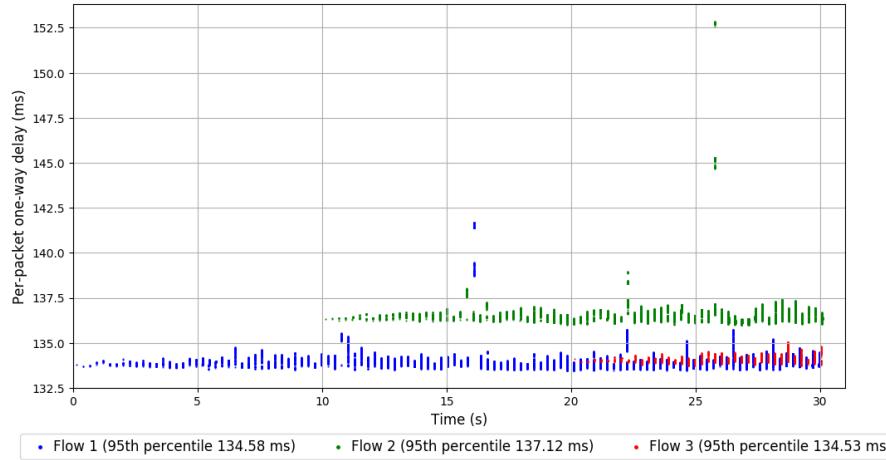
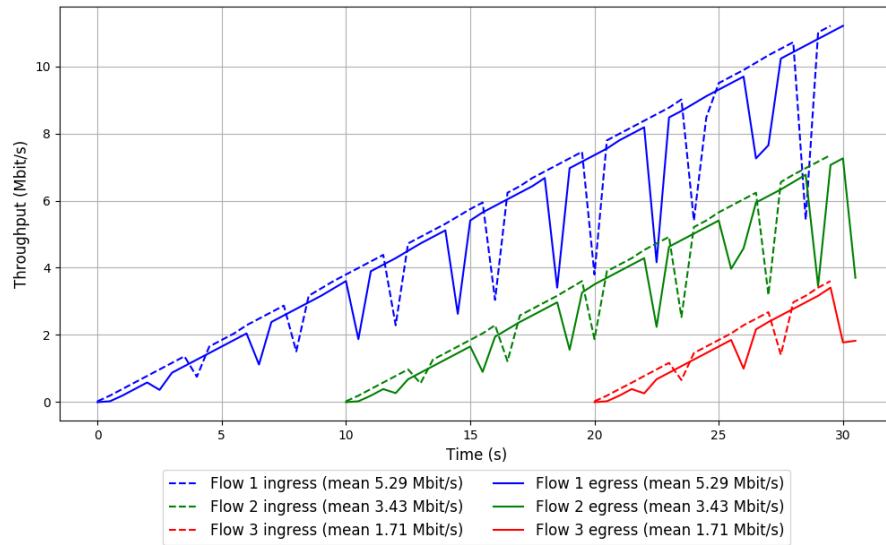


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-09 13:55:52
End at: 2019-03-09 13:56:22
Local clock offset: -0.426 ms
Remote clock offset: 0.244 ms

# Below is generated by plot.py at 2019-03-09 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 136.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 134.581 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 137.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 134.528 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

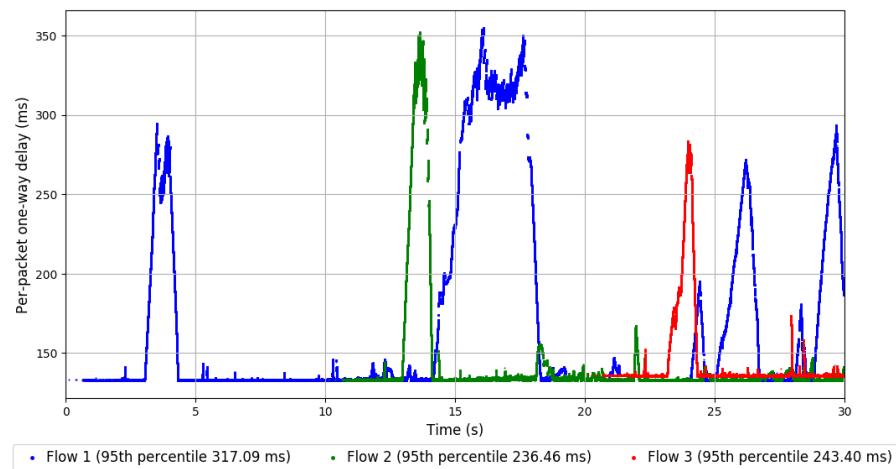
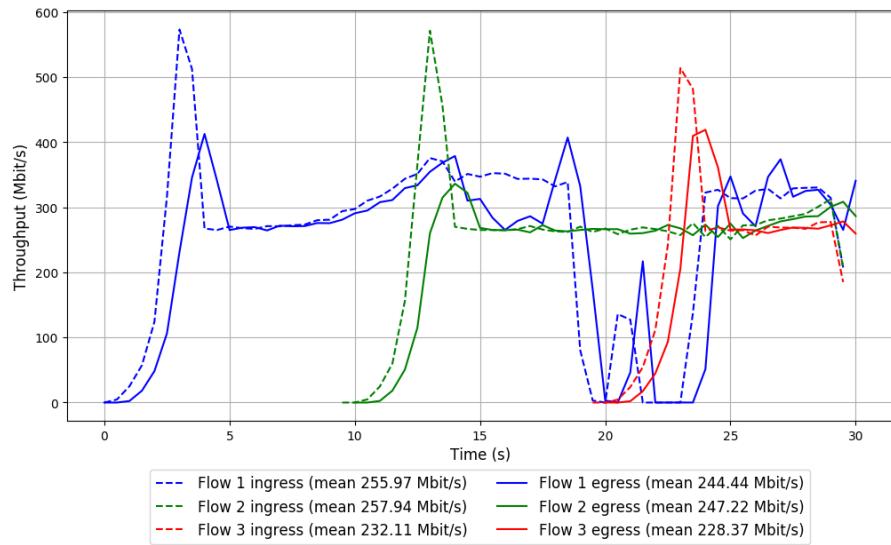


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-03-09 11:18:01
End at: 2019-03-09 11:18:31
Local clock offset: -0.181 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-03-09 15:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.12 Mbit/s
95th percentile per-packet one-way delay: 308.387 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 244.44 Mbit/s
95th percentile per-packet one-way delay: 317.093 ms
Loss rate: 4.50%
-- Flow 2:
Average throughput: 247.22 Mbit/s
95th percentile per-packet one-way delay: 236.464 ms
Loss rate: 4.15%
-- Flow 3:
Average throughput: 228.37 Mbit/s
95th percentile per-packet one-way delay: 243.403 ms
Loss rate: 1.63%
```

Run 1: Report of PCC-Allegro — Data Link

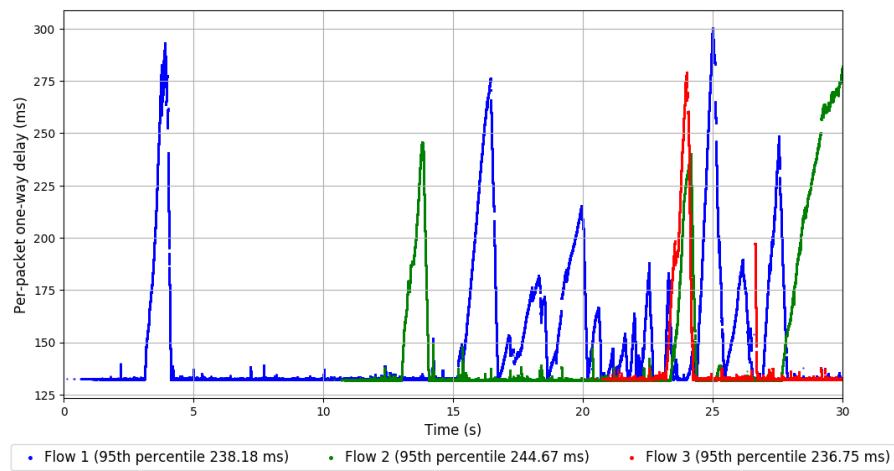
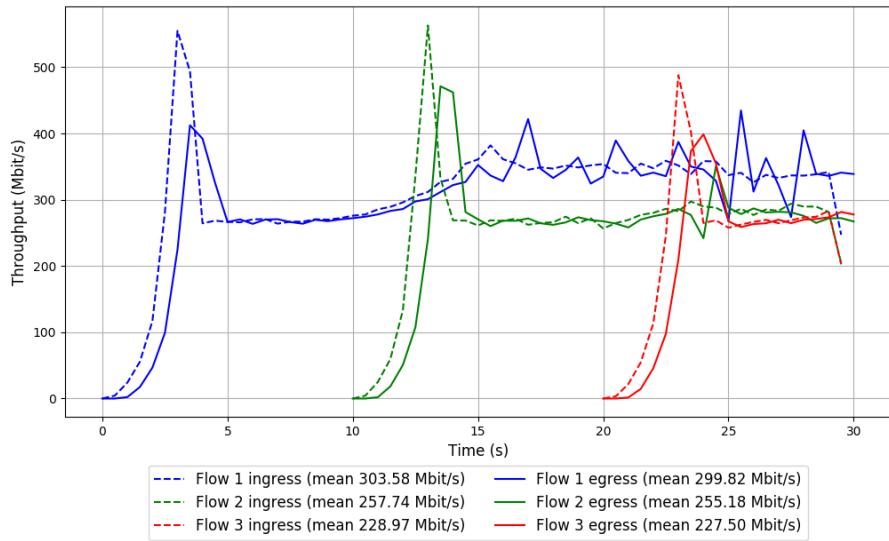


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-09 12:00:09
End at: 2019-03-09 12:00:39
Local clock offset: 0.312 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2019-03-09 15:52:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.99 Mbit/s
95th percentile per-packet one-way delay: 241.336 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 299.82 Mbit/s
95th percentile per-packet one-way delay: 238.175 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 255.18 Mbit/s
95th percentile per-packet one-way delay: 244.670 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 227.50 Mbit/s
95th percentile per-packet one-way delay: 236.751 ms
Loss rate: 0.64%
```

Run 2: Report of PCC-Allegro — Data Link

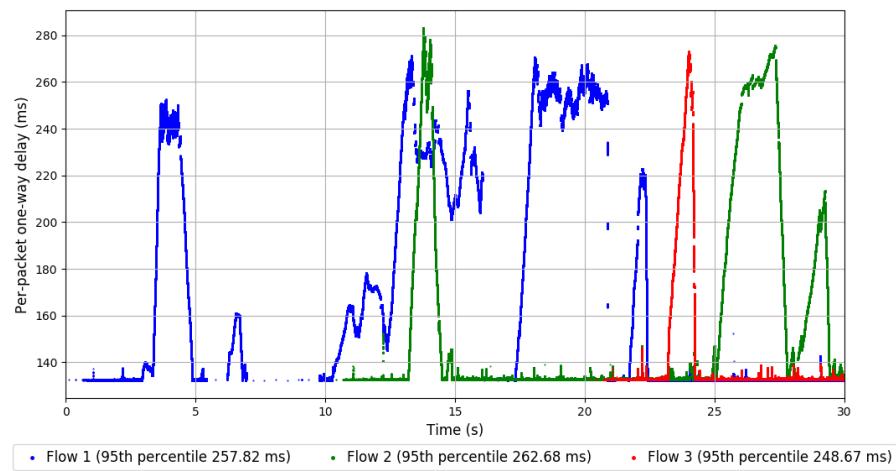
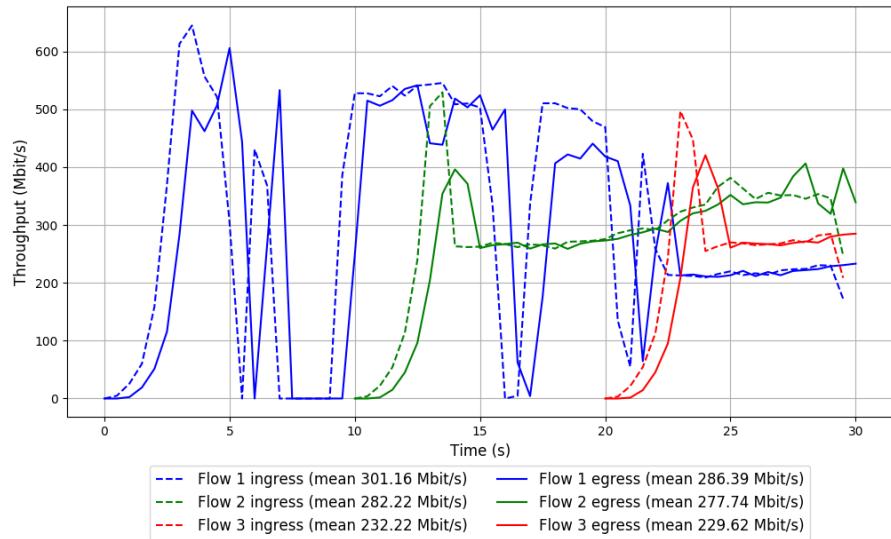


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-09 12:40:32
End at: 2019-03-09 12:41:02
Local clock offset: -0.111 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-03-09 15:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.35 Mbit/s
95th percentile per-packet one-way delay: 259.465 ms
Loss rate: 3.29%
-- Flow 1:
Average throughput: 286.39 Mbit/s
95th percentile per-packet one-way delay: 257.816 ms
Loss rate: 4.90%
-- Flow 2:
Average throughput: 277.74 Mbit/s
95th percentile per-packet one-way delay: 262.679 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 229.62 Mbit/s
95th percentile per-packet one-way delay: 248.671 ms
Loss rate: 1.13%
```

Run 3: Report of PCC-Allegro — Data Link

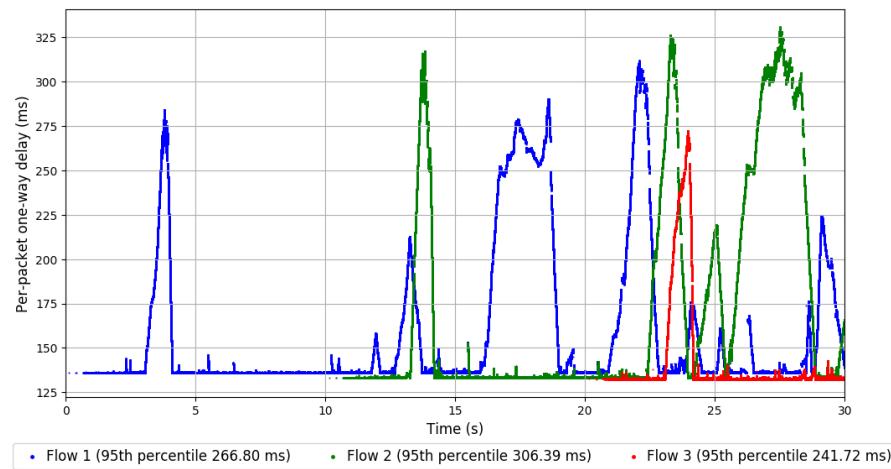
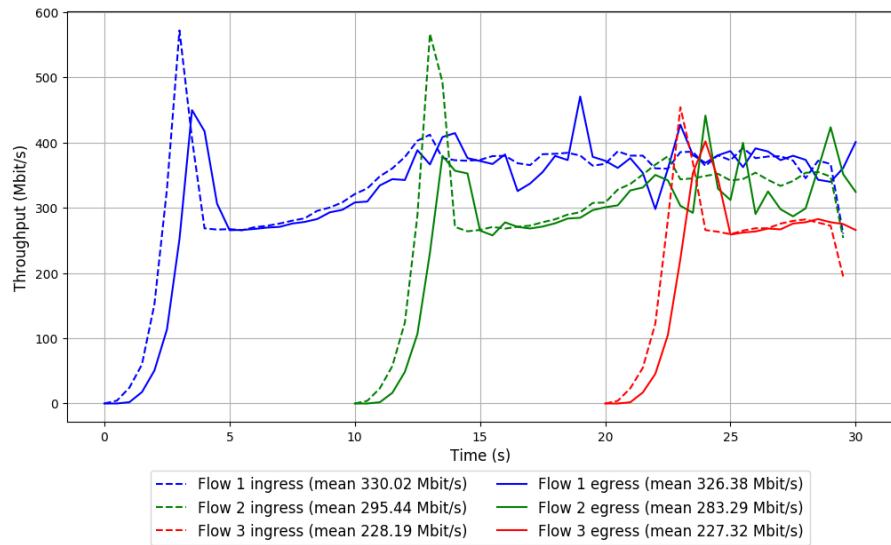


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-09 13:21:09
End at: 2019-03-09 13:21:39
Local clock offset: -0.352 ms
Remote clock offset: -0.221 ms

# Below is generated by plot.py at 2019-03-09 16:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.39 Mbit/s
95th percentile per-packet one-way delay: 284.265 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 326.38 Mbit/s
95th percentile per-packet one-way delay: 266.795 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 283.29 Mbit/s
95th percentile per-packet one-way delay: 306.393 ms
Loss rate: 4.10%
-- Flow 3:
Average throughput: 227.32 Mbit/s
95th percentile per-packet one-way delay: 241.720 ms
Loss rate: 0.38%
```

Run 4: Report of PCC-Allegro — Data Link

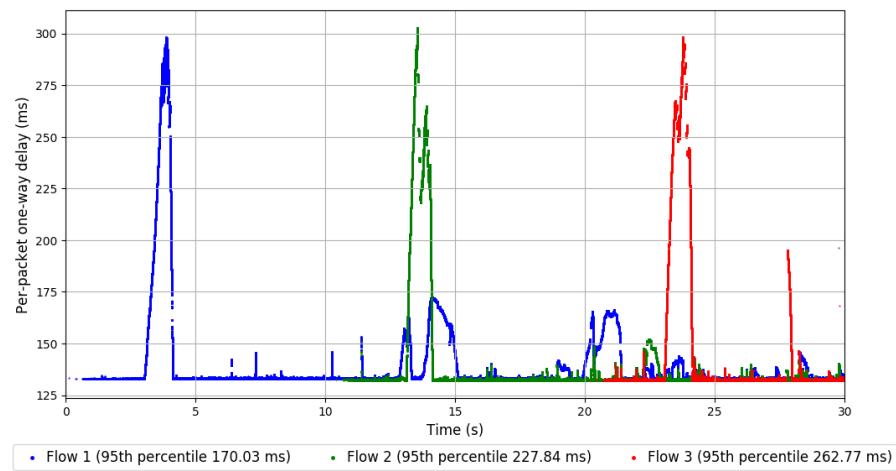
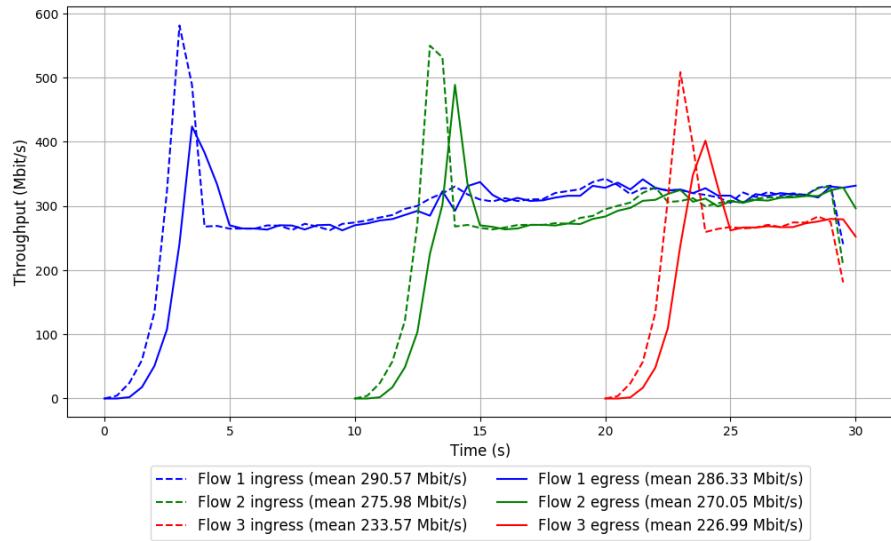


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-09 14:02:43
End at: 2019-03-09 14:03:13
Local clock offset: -0.117 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-03-09 16:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 540.35 Mbit/s
95th percentile per-packet one-way delay: 222.585 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 286.33 Mbit/s
95th percentile per-packet one-way delay: 170.027 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 270.05 Mbit/s
95th percentile per-packet one-way delay: 227.839 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 226.99 Mbit/s
95th percentile per-packet one-way delay: 262.770 ms
Loss rate: 2.82%
```

Run 5: Report of PCC-Allegro — Data Link

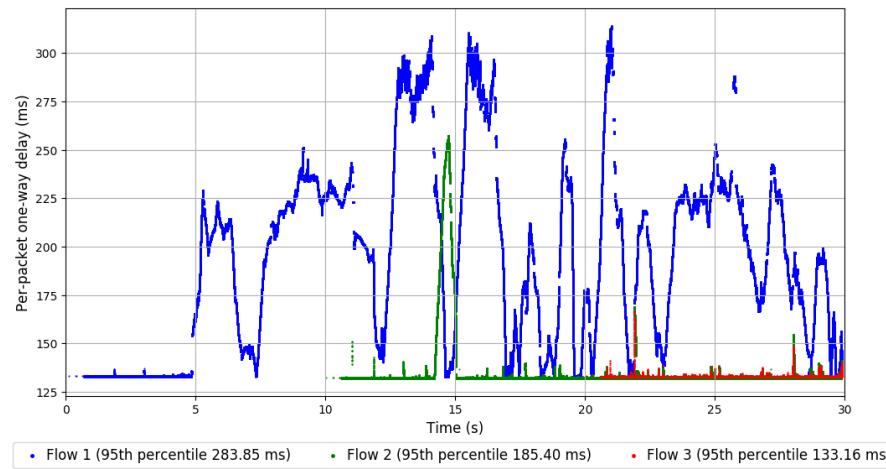
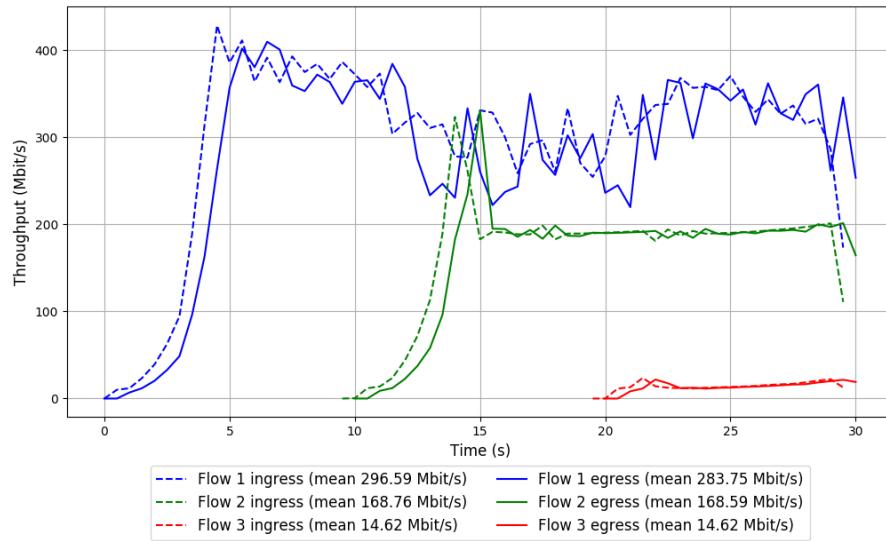


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-03-09 10:50:42
End at: 2019-03-09 10:51:12
Local clock offset: -0.284 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-03-09 16:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.10 Mbit/s
95th percentile per-packet one-way delay: 275.518 ms
Loss rate: 3.12%
-- Flow 1:
Average throughput: 283.75 Mbit/s
95th percentile per-packet one-way delay: 283.852 ms
Loss rate: 4.32%
-- Flow 2:
Average throughput: 168.59 Mbit/s
95th percentile per-packet one-way delay: 185.399 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 14.62 Mbit/s
95th percentile per-packet one-way delay: 133.163 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

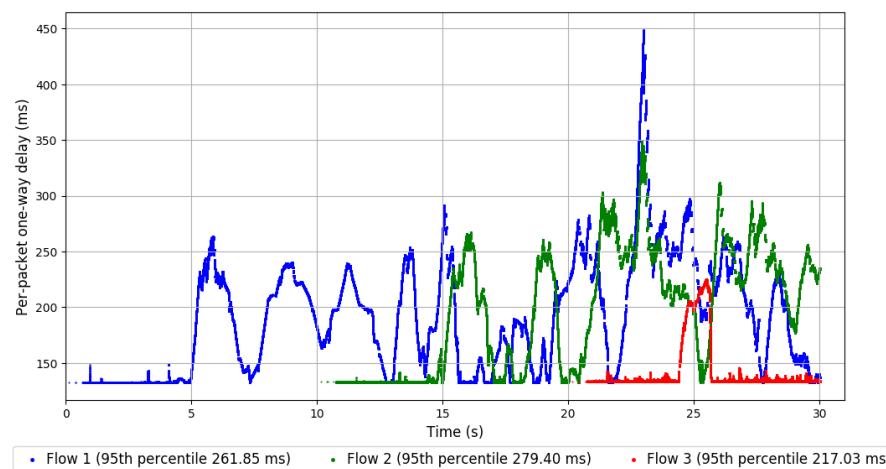
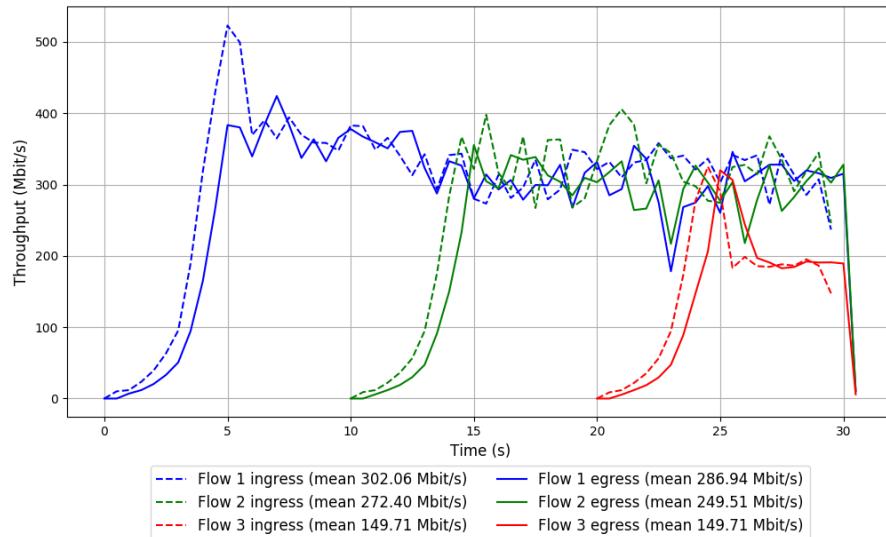


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-09 11:31:33
End at: 2019-03-09 11:32:03
Local clock offset: -0.519 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-03-09 16:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.19 Mbit/s
95th percentile per-packet one-way delay: 268.891 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 286.94 Mbit/s
95th percentile per-packet one-way delay: 261.845 ms
Loss rate: 5.00%
-- Flow 2:
Average throughput: 249.51 Mbit/s
95th percentile per-packet one-way delay: 279.399 ms
Loss rate: 8.39%
-- Flow 3:
Average throughput: 149.71 Mbit/s
95th percentile per-packet one-way delay: 217.026 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

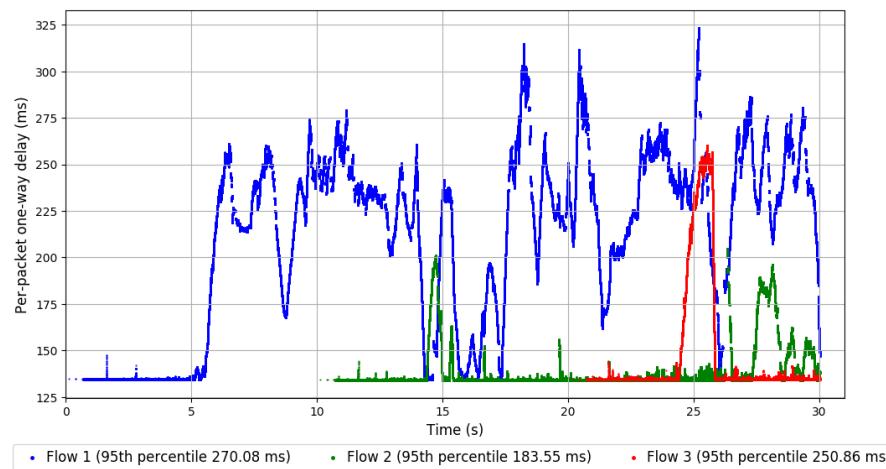
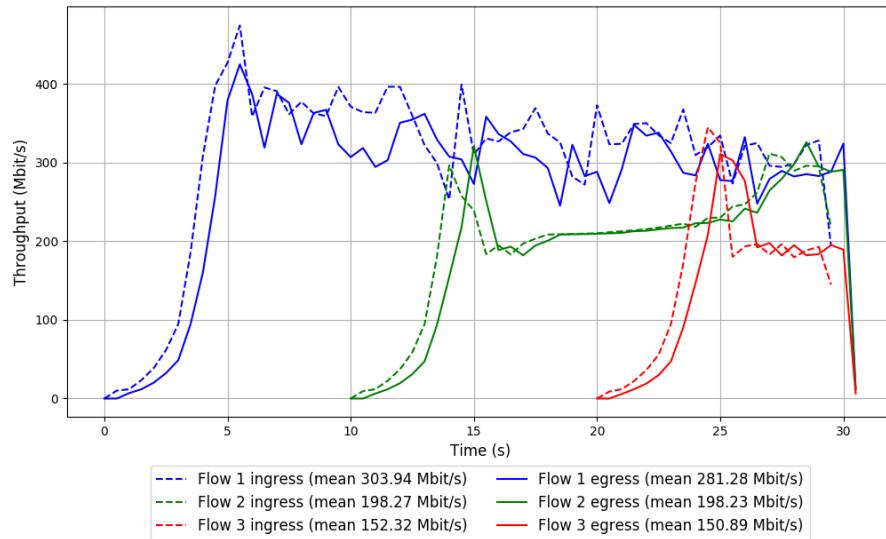


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-09 12:14:02
End at: 2019-03-09 12:14:32
Local clock offset: 0.186 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2019-03-09 16:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.83 Mbit/s
95th percentile per-packet one-way delay: 263.565 ms
Loss rate: 4.76%
-- Flow 1:
Average throughput: 281.28 Mbit/s
95th percentile per-packet one-way delay: 270.080 ms
Loss rate: 7.45%
-- Flow 2:
Average throughput: 198.23 Mbit/s
95th percentile per-packet one-way delay: 183.554 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 150.89 Mbit/s
95th percentile per-packet one-way delay: 250.858 ms
Loss rate: 0.93%
```

Run 3: Report of PCC-Expr — Data Link

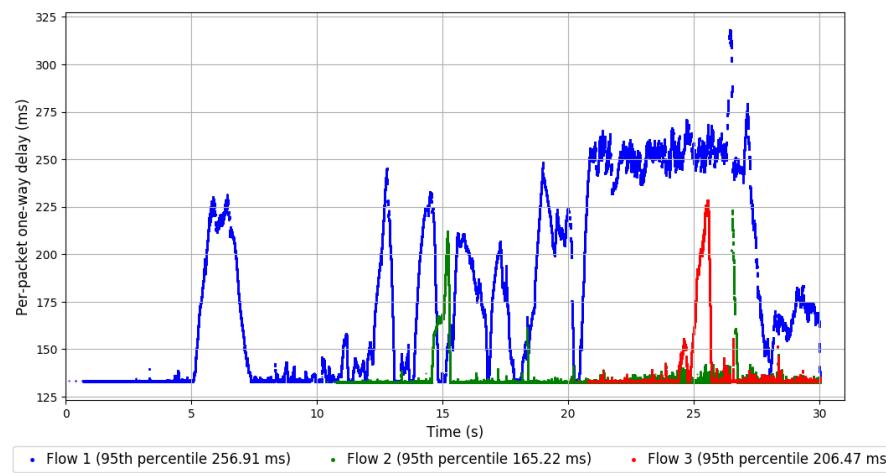
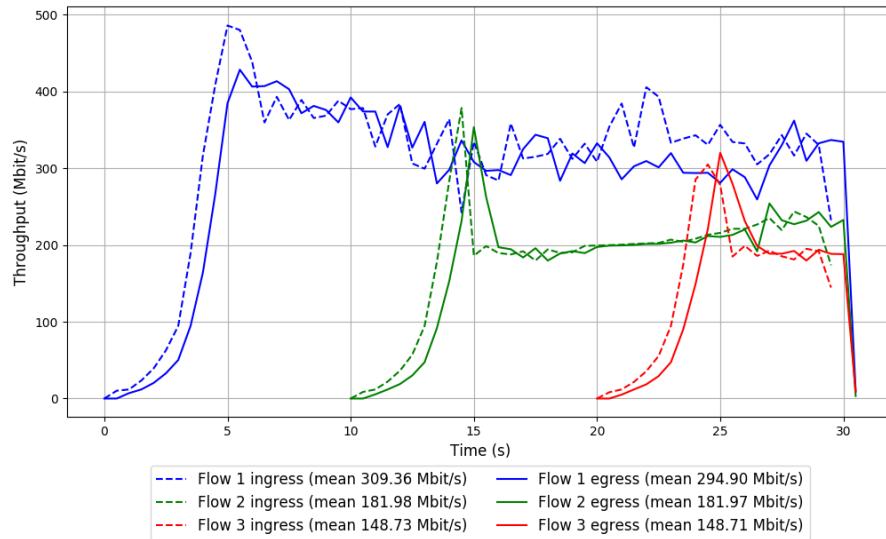


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-09 12:53:56
End at: 2019-03-09 12:54:26
Local clock offset: -0.233 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-03-09 16:08:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.87 Mbit/s
95th percentile per-packet one-way delay: 254.267 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 294.90 Mbit/s
95th percentile per-packet one-way delay: 256.907 ms
Loss rate: 4.67%
-- Flow 2:
Average throughput: 181.97 Mbit/s
95th percentile per-packet one-way delay: 165.219 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 148.71 Mbit/s
95th percentile per-packet one-way delay: 206.475 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

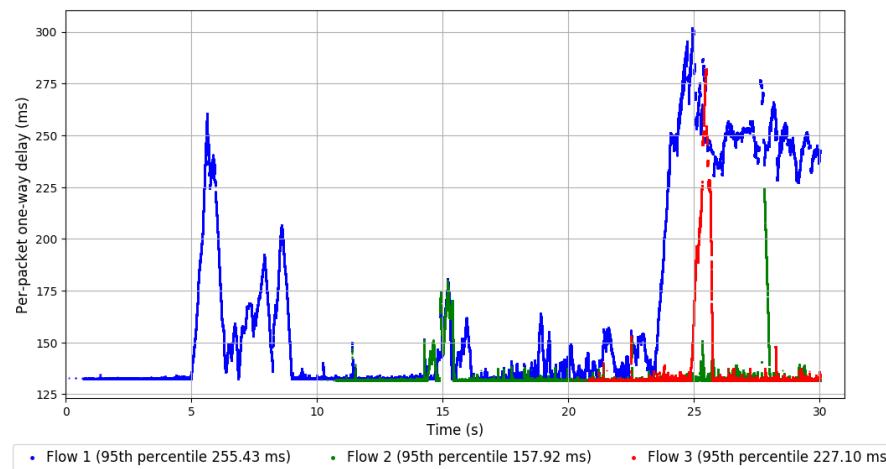
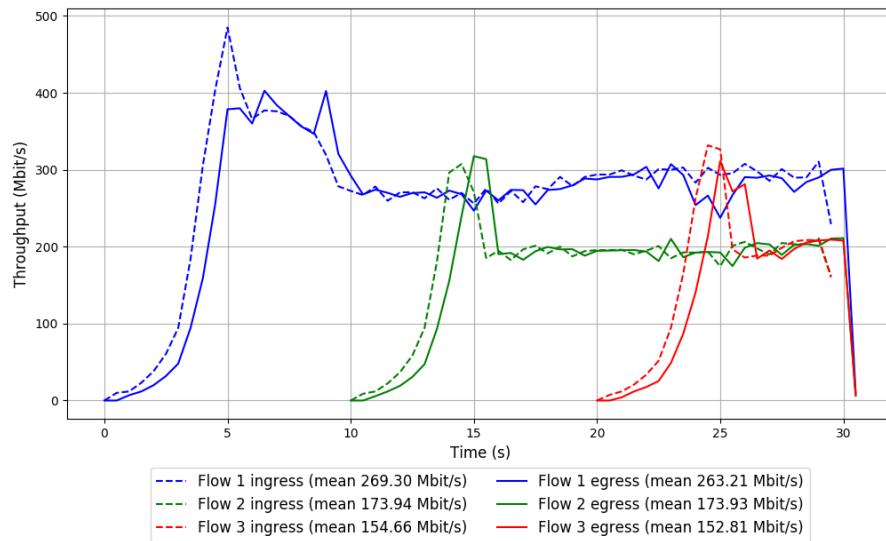


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-09 13:35:08
End at: 2019-03-09 13:35:38
Local clock offset: 0.153 ms
Remote clock offset: -0.448 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.24 Mbit/s
95th percentile per-packet one-way delay: 251.652 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 263.21 Mbit/s
95th percentile per-packet one-way delay: 255.429 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 173.93 Mbit/s
95th percentile per-packet one-way delay: 157.923 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 152.81 Mbit/s
95th percentile per-packet one-way delay: 227.101 ms
Loss rate: 1.19%
```

Run 5: Report of PCC-Expr — Data Link

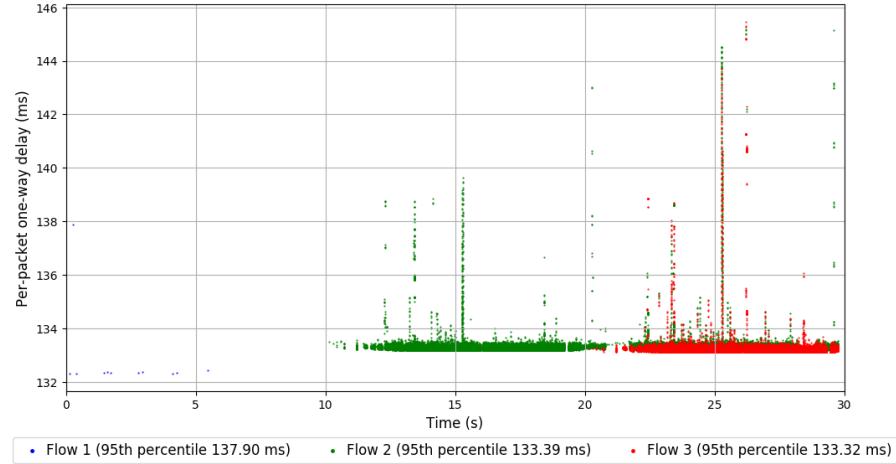
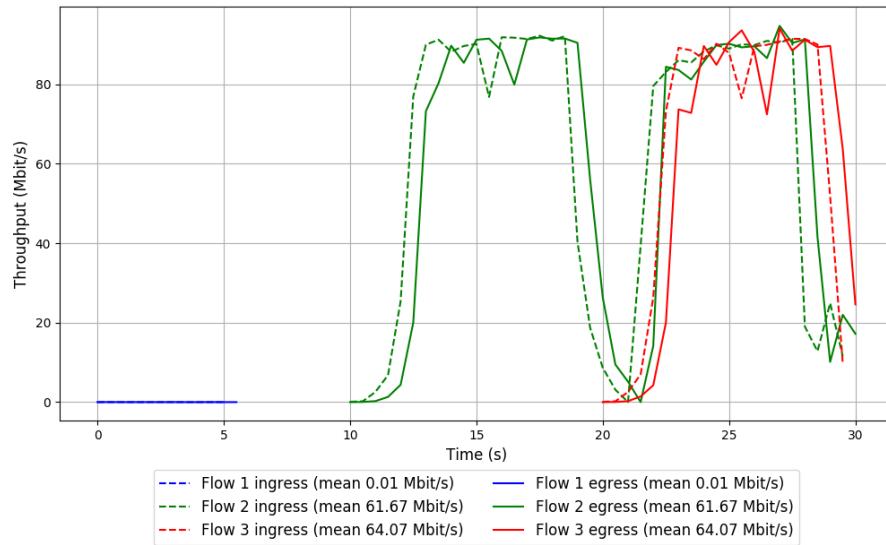


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-09 10:53:11
End at: 2019-03-09 10:53:41
Local clock offset: -0.327 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 133.377 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 137.899 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 133.390 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.07 Mbit/s
95th percentile per-packet one-way delay: 133.320 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

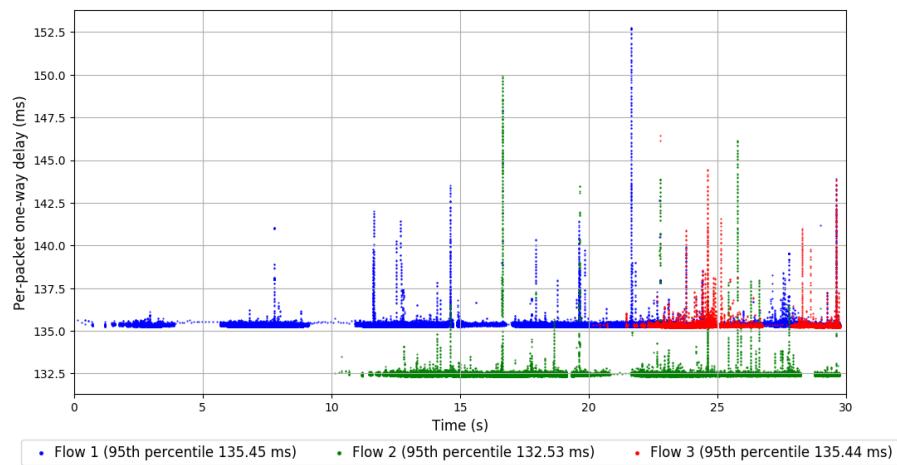
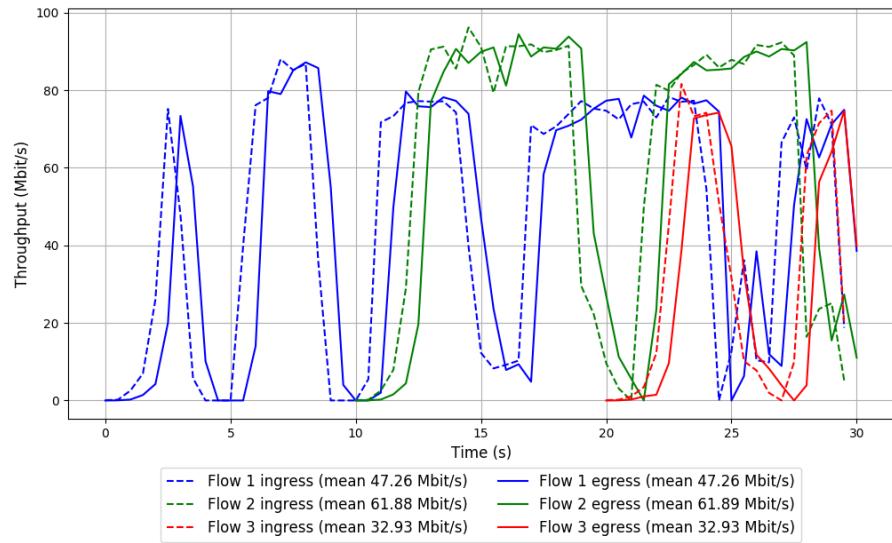


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-09 11:34:12
End at: 2019-03-09 11:34:42
Local clock offset: 0.258 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.93 Mbit/s
95th percentile per-packet one-way delay: 135.418 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.26 Mbit/s
95th percentile per-packet one-way delay: 135.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 132.529 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.93 Mbit/s
95th percentile per-packet one-way delay: 135.444 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

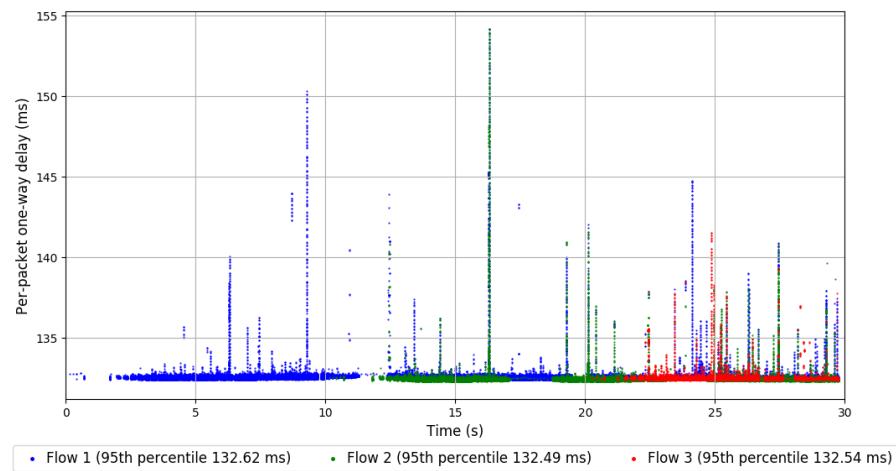
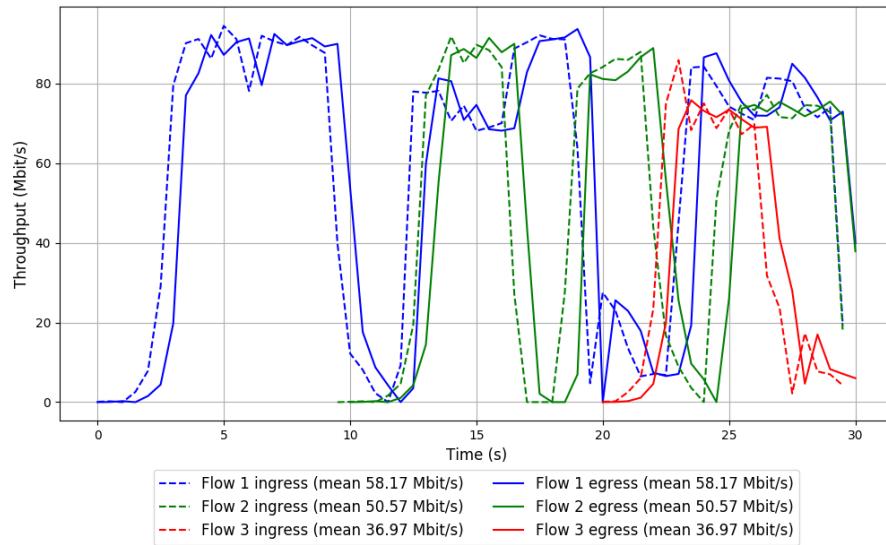


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-09 12:16:27
End at: 2019-03-09 12:16:57
Local clock offset: 0.372 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.64 Mbit/s
95th percentile per-packet one-way delay: 132.603 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 132.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.57 Mbit/s
95th percentile per-packet one-way delay: 132.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 132.541 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

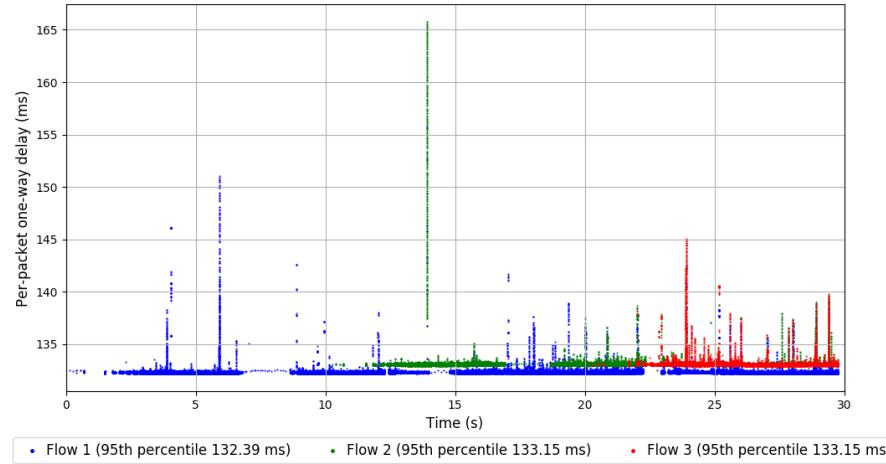
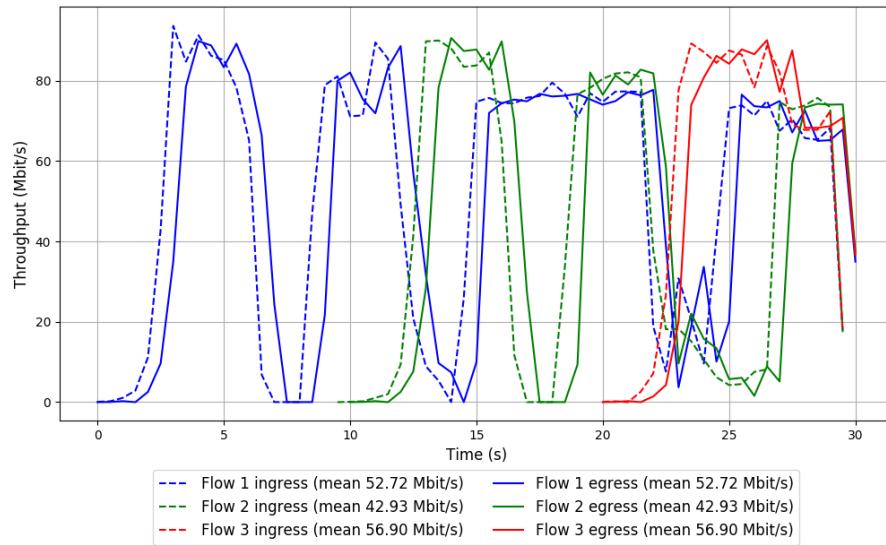


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-09 12:56:07
End at: 2019-03-09 12:56:37
Local clock offset: -0.217 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.61 Mbit/s
95th percentile per-packet one-way delay: 133.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 132.393 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 133.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.90 Mbit/s
95th percentile per-packet one-way delay: 133.145 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

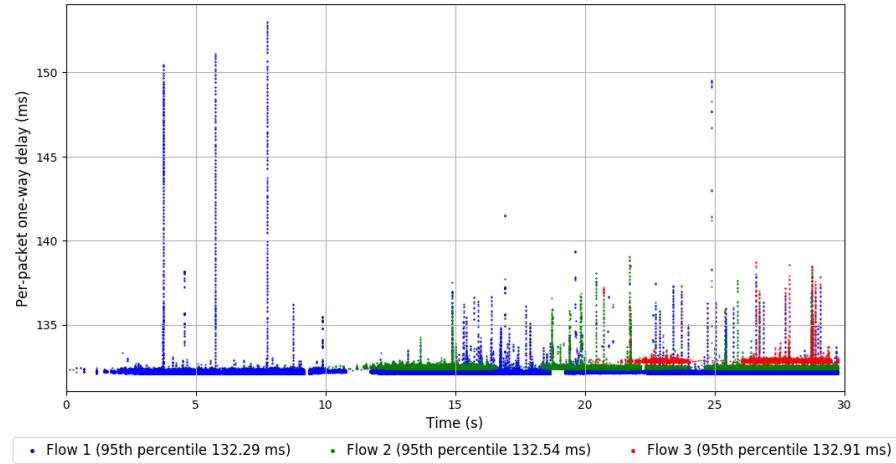
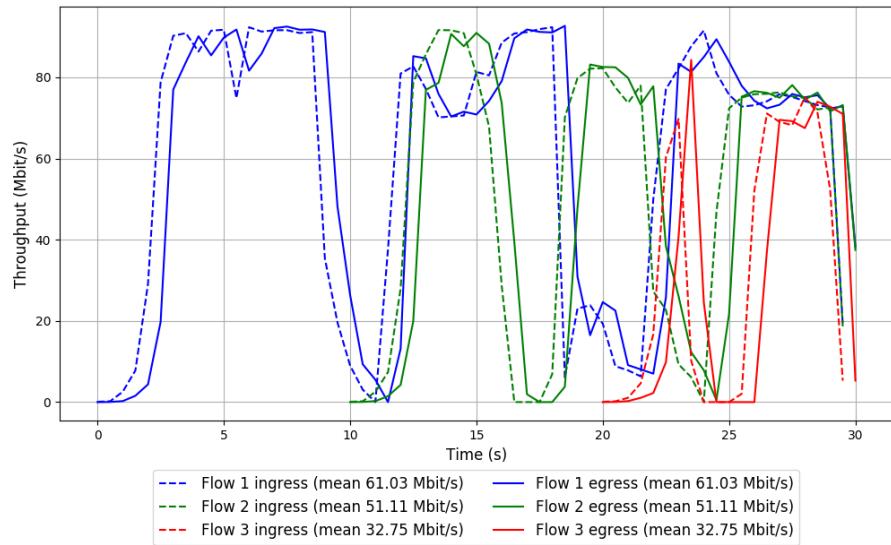


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-09 13:37:14
End at: 2019-03-09 13:37:44
Local clock offset: -0.077 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.49 Mbit/s
95th percentile per-packet one-way delay: 132.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.03 Mbit/s
95th percentile per-packet one-way delay: 132.290 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 132.539 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 132.912 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

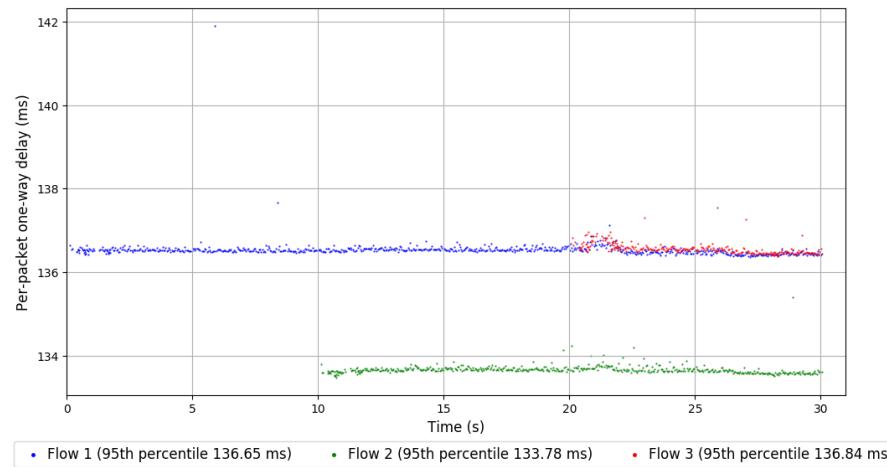
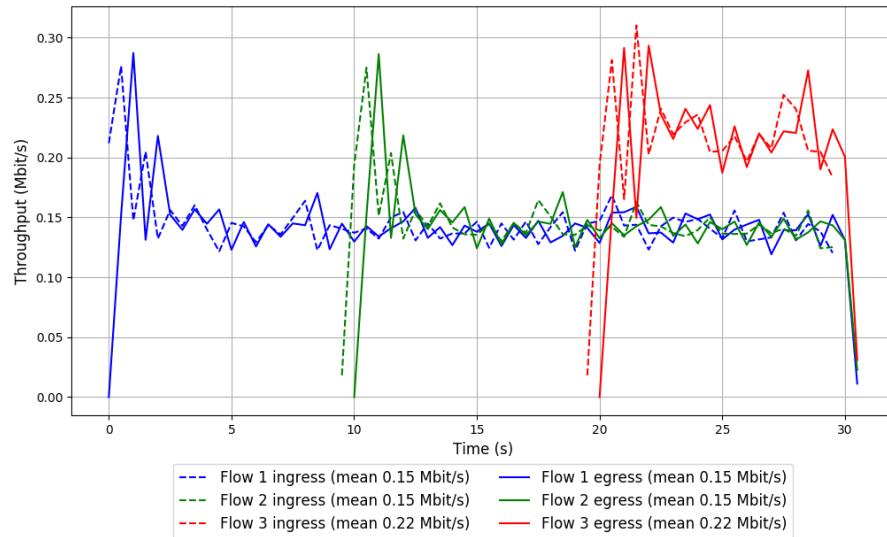


```
Run 1: Statistics of SCReAM

Start at: 2019-03-09 11:12:48
End at: 2019-03-09 11:13:18
Local clock offset: -0.37 ms
Remote clock offset: 0.371 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 136.656 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 136.647 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.785 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.836 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

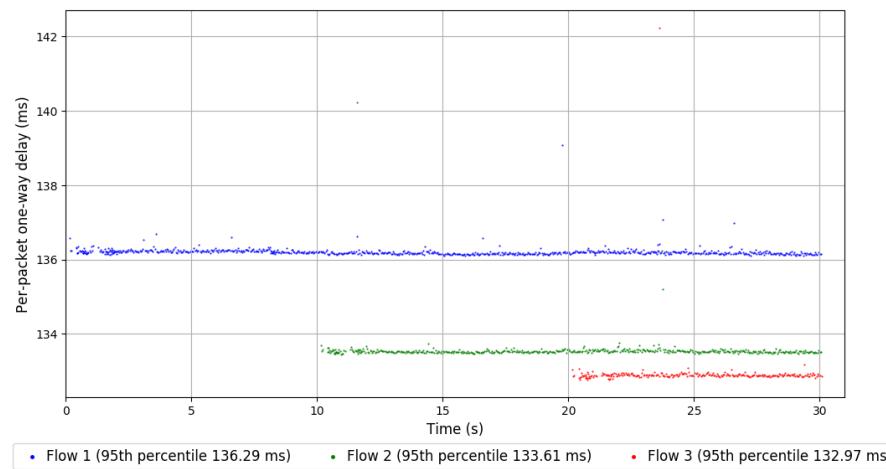
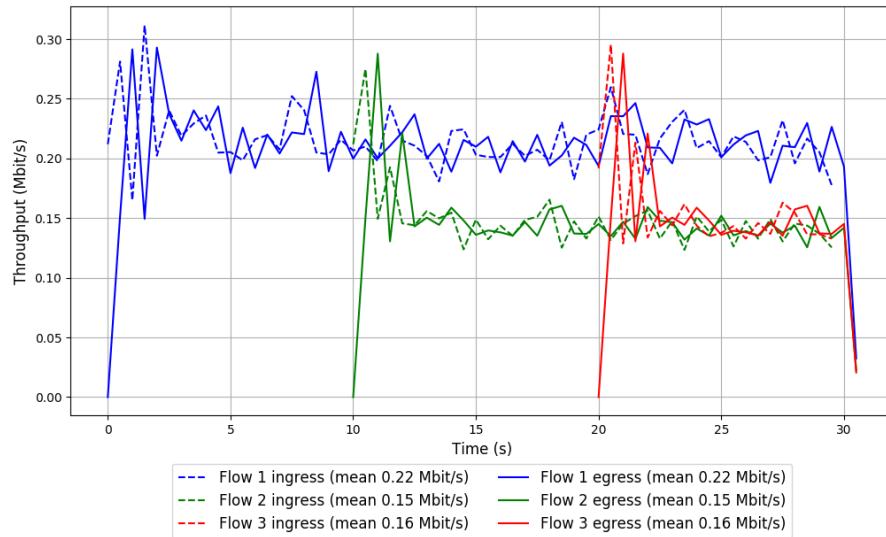


Run 2: Statistics of SCReAM

```
Start at: 2019-03-09 11:54:40
End at: 2019-03-09 11:55:10
Local clock offset: -0.326 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 136.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.290 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.609 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.965 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

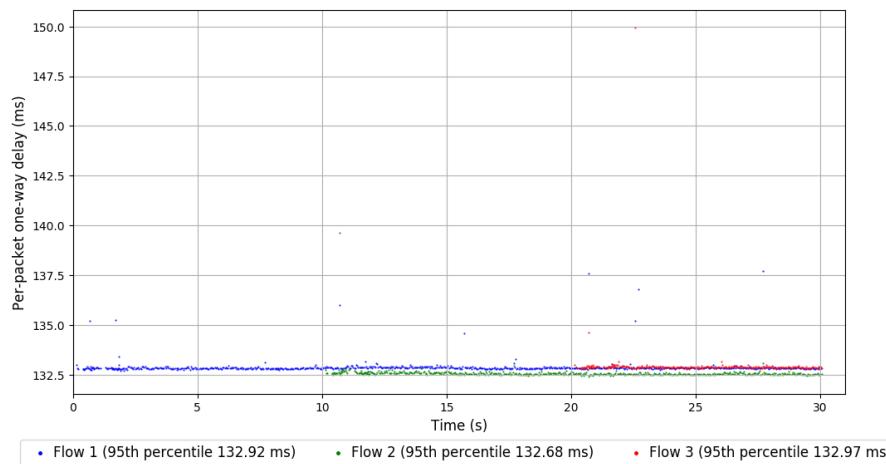
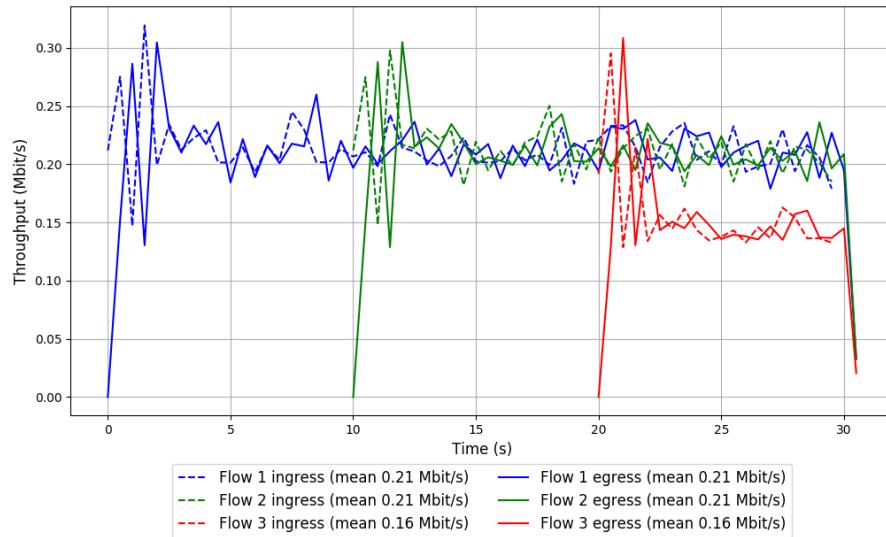


Run 3: Statistics of SCReAM

```
Start at: 2019-03-09 12:35:16
End at: 2019-03-09 12:35:46
Local clock offset: 0.321 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 132.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 132.920 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 132.683 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.973 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

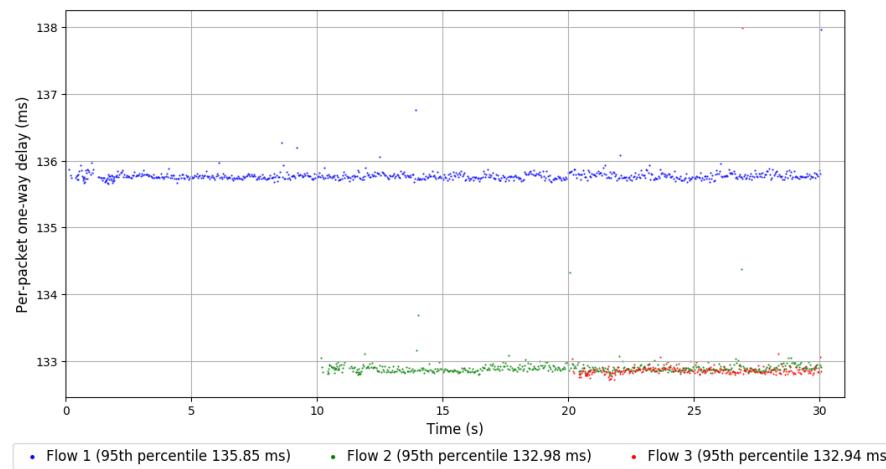
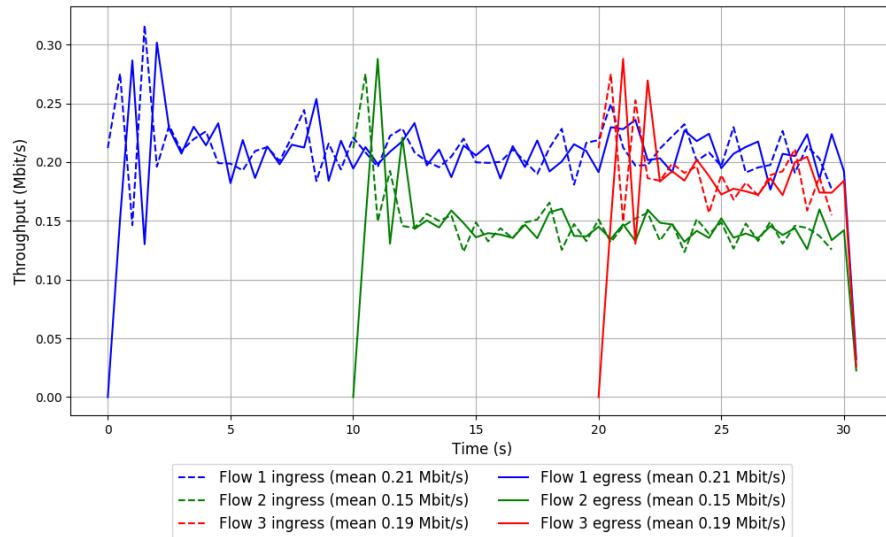


Run 4: Statistics of SCReAM

```
Start at: 2019-03-09 13:15:20
End at: 2019-03-09 13:15:50
Local clock offset: -0.306 ms
Remote clock offset: 0.19 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 135.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 135.853 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.980 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

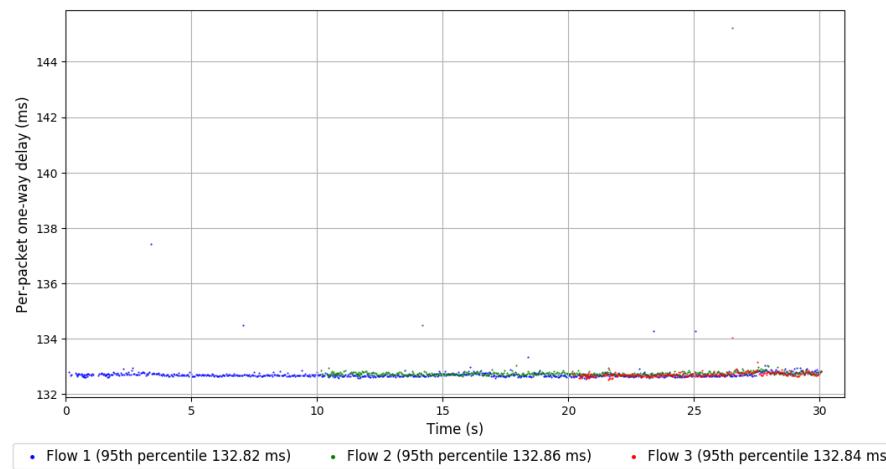
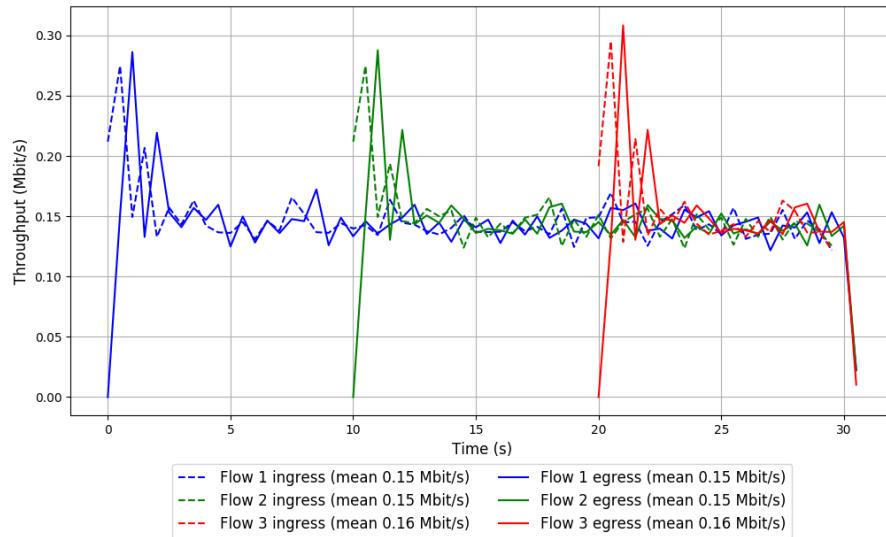


Run 5: Statistics of SCReAM

```
Start at: 2019-03-09 13:57:13
End at: 2019-03-09 13:57:43
Local clock offset: -0.102 ms
Remote clock offset: -0.44 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 132.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.836 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

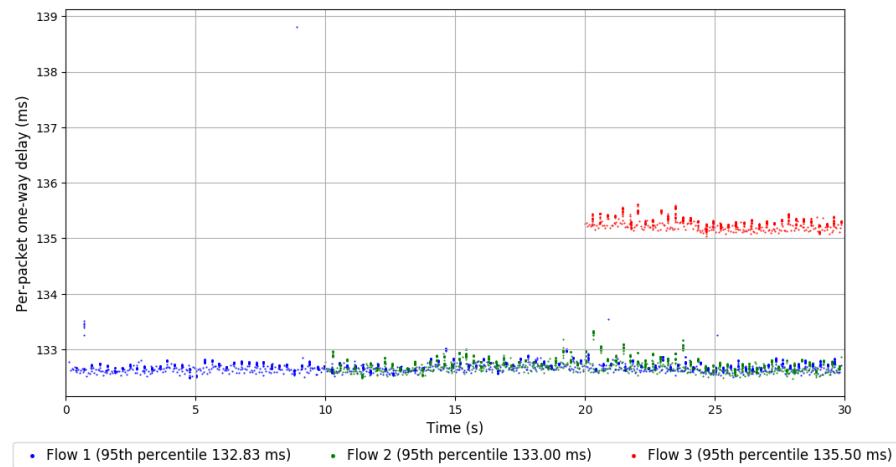
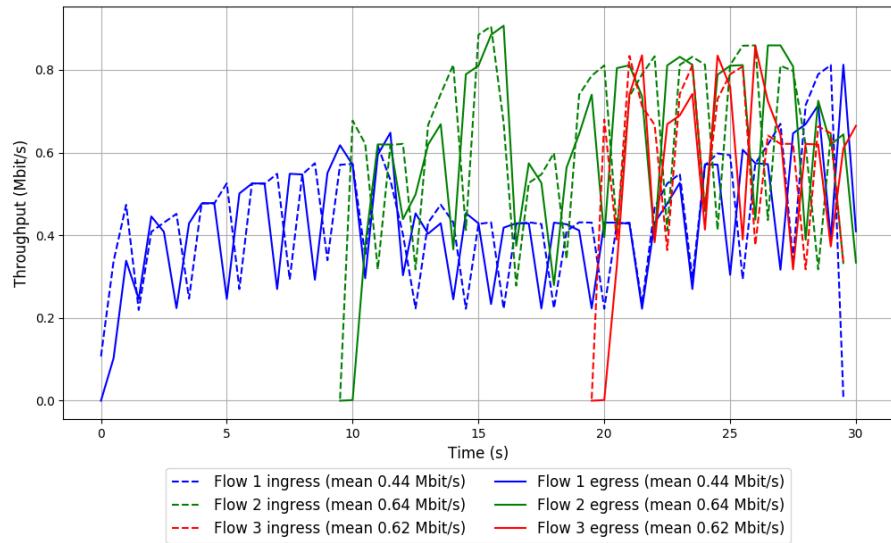


Run 1: Statistics of Sprout

```
Start at: 2019-03-09 10:41:32
End at: 2019-03-09 10:42:02
Local clock offset: -0.125 ms
Remote clock offset: -0.474 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 135.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 132.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 133.002 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 135.499 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

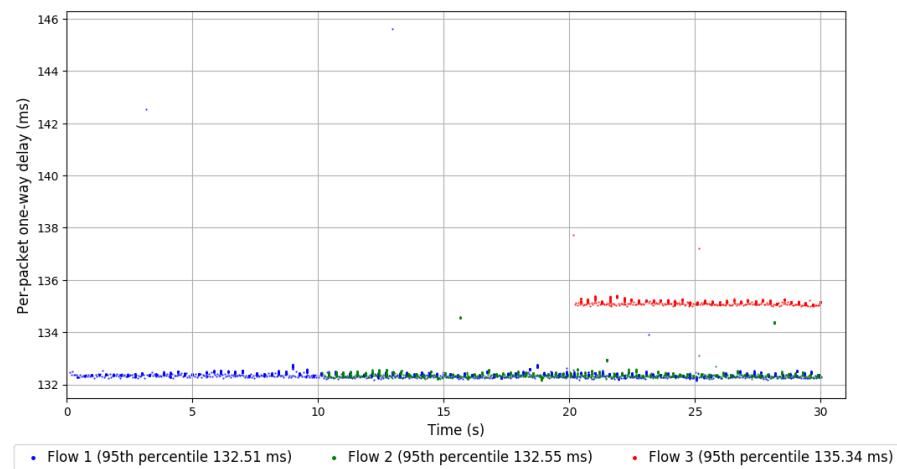
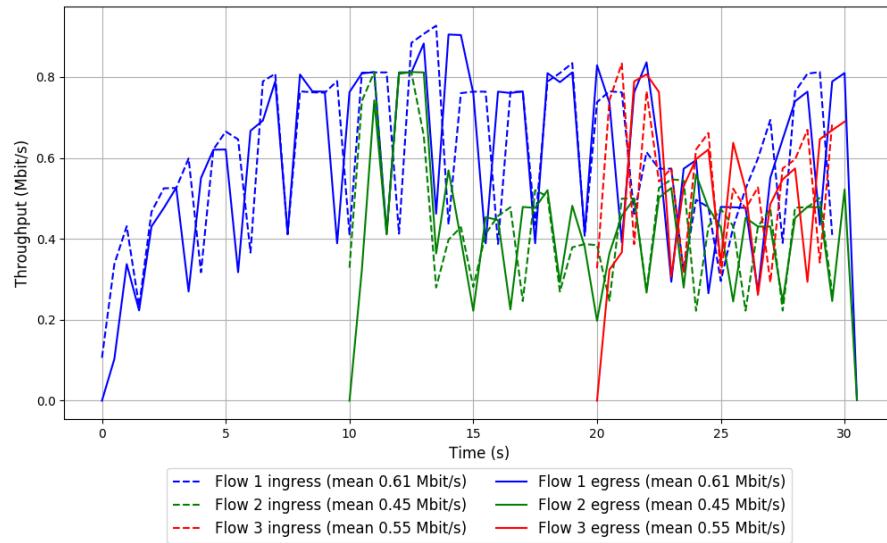


Run 2: Statistics of Sprout

```
Start at: 2019-03-09 11:22:13
End at: 2019-03-09 11:22:43
Local clock offset: 0.228 ms
Remote clock offset: -0.325 ms

# Below is generated by plot.py at 2019-03-09 16:09:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 135.211 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 132.514 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 132.554 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 135.335 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

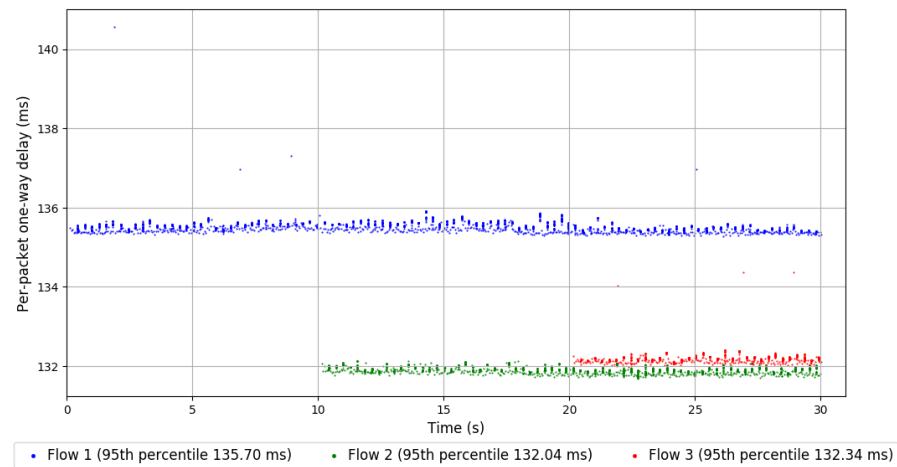
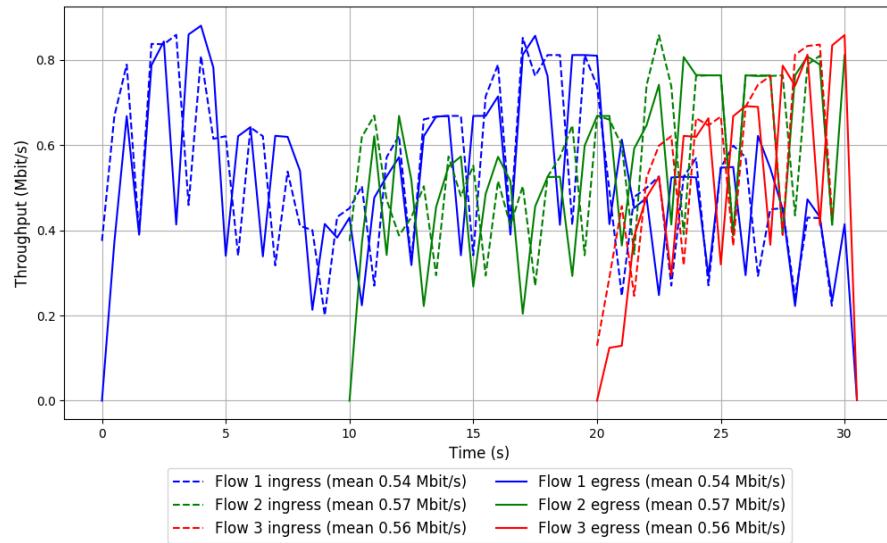


Run 3: Statistics of Sprout

```
Start at: 2019-03-09 12:04:55
End at: 2019-03-09 12:05:25
Local clock offset: 0.318 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2019-03-09 16:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 135.659 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 135.700 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 132.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 132.339 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

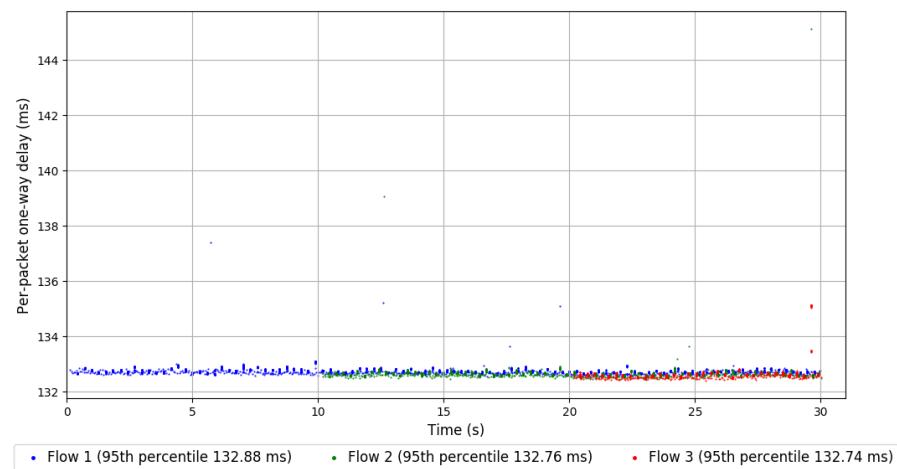
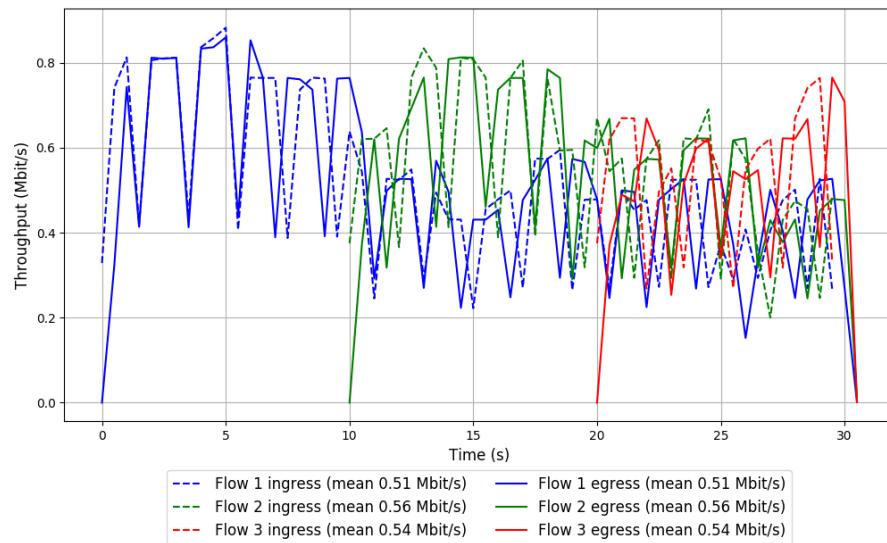


Run 4: Statistics of Sprout

```
Start at: 2019-03-09 12:44:34
End at: 2019-03-09 12:45:04
Local clock offset: 0.334 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-09 16:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 132.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 132.885 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 132.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 132.736 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

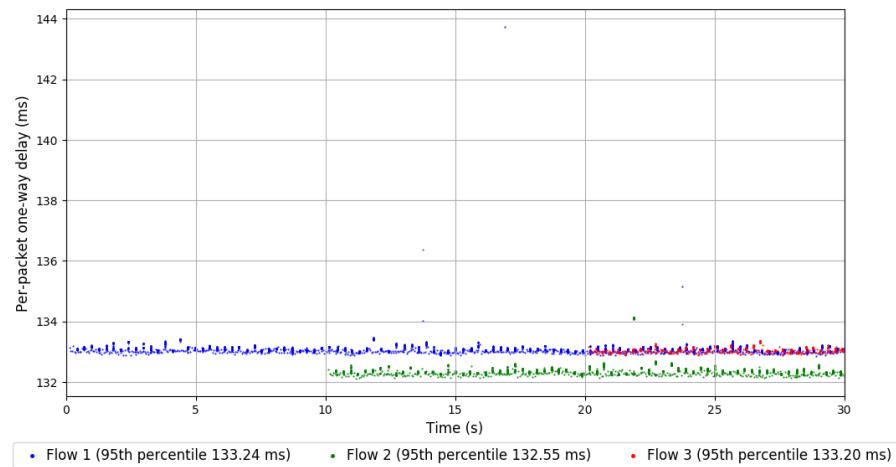
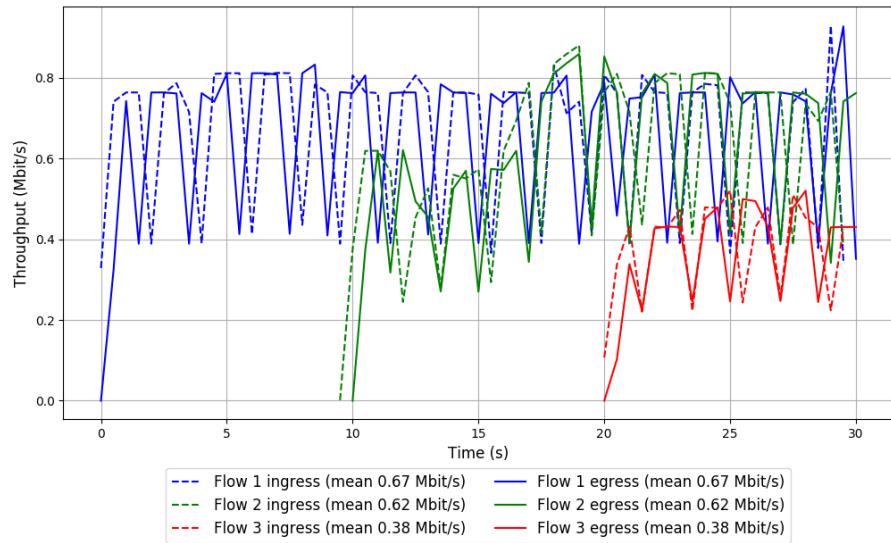


Run 5: Statistics of Sprout

```
Start at: 2019-03-09 13:25:43
End at: 2019-03-09 13:26:13
Local clock offset: -0.075 ms
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2019-03-09 16:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 133.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 133.235 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 132.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 133.199 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

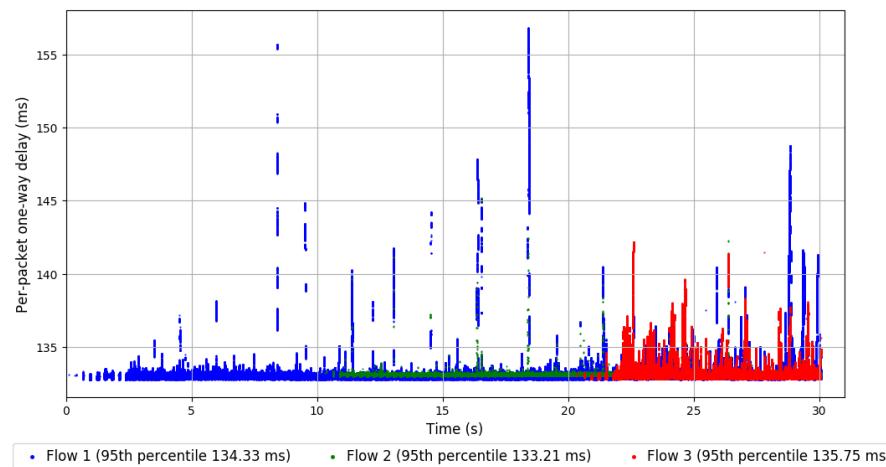
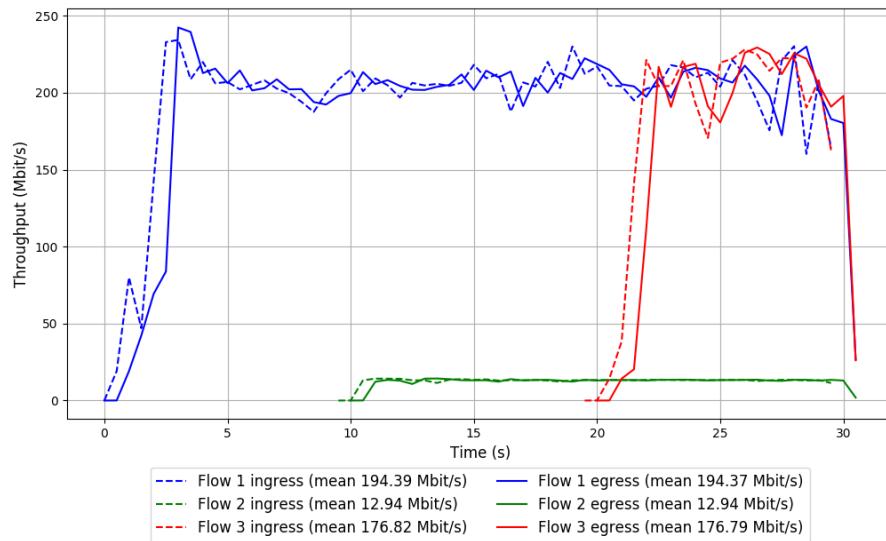


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-09 10:56:45
End at: 2019-03-09 10:57:15
Local clock offset: -0.094 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-03-09 16:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.81 Mbit/s
95th percentile per-packet one-way delay: 134.775 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 194.37 Mbit/s
95th percentile per-packet one-way delay: 134.334 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 133.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.79 Mbit/s
95th percentile per-packet one-way delay: 135.747 ms
Loss rate: 0.01%
```

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

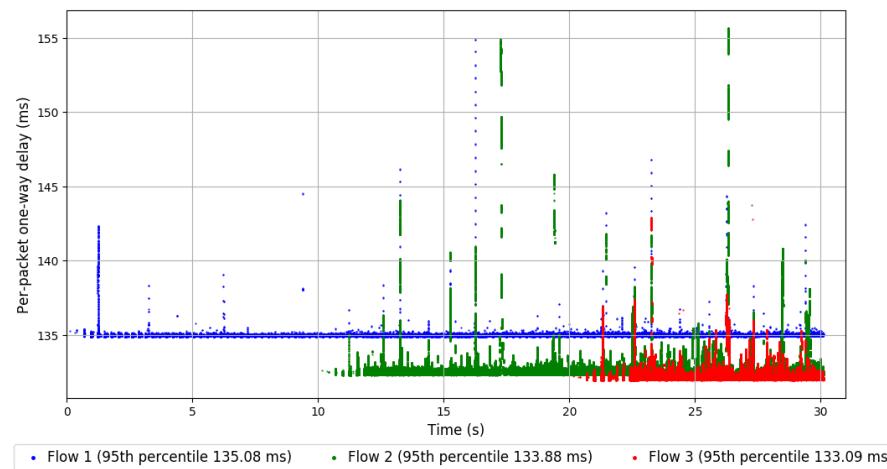
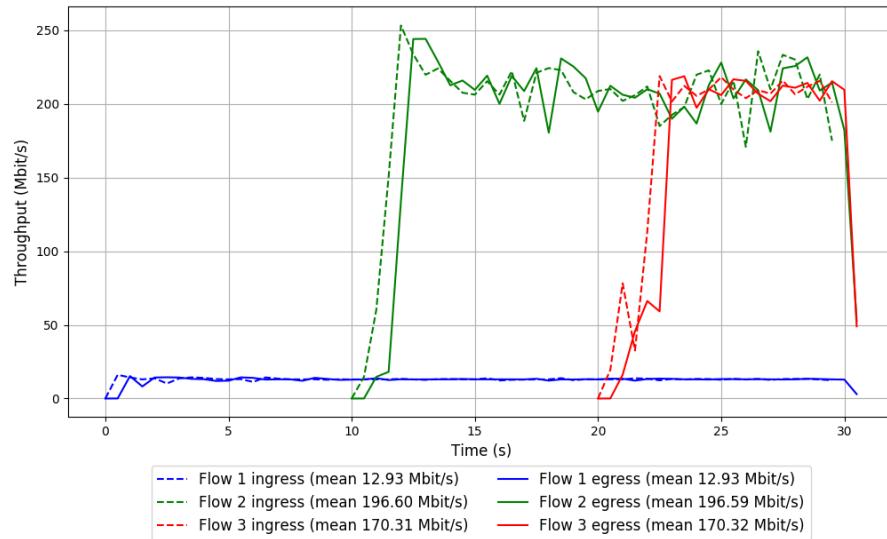


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-09 11:37:50
End at: 2019-03-09 11:38:20
Local clock offset: 0.287 ms
Remote clock offset: -0.298 ms

# Below is generated by plot.py at 2019-03-09 16:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 200.46 Mbit/s
95th percentile per-packet one-way delay: 134.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 135.078 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 196.59 Mbit/s
95th percentile per-packet one-way delay: 133.882 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 170.32 Mbit/s
95th percentile per-packet one-way delay: 133.089 ms
Loss rate: 0.00%
```

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

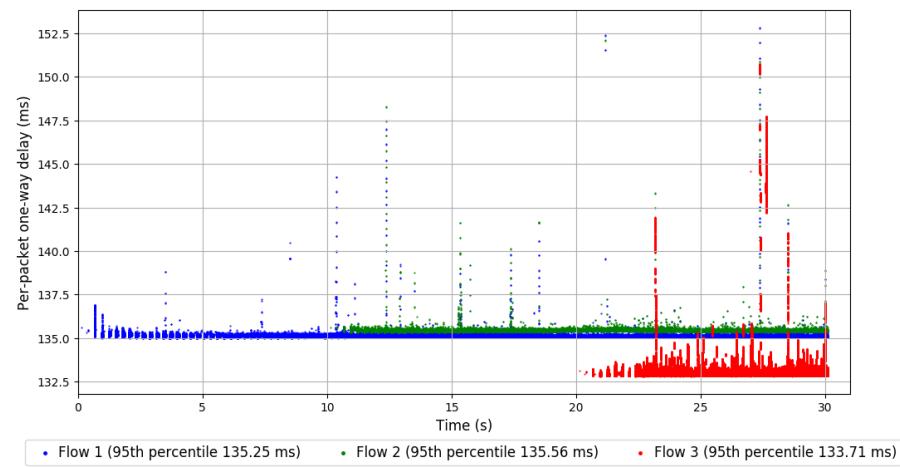
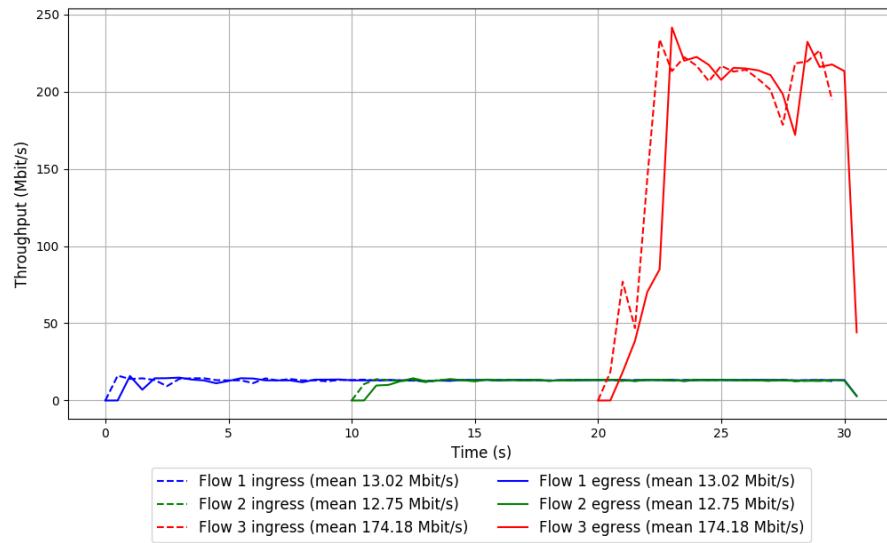


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-09 12:20:06
End at: 2019-03-09 12:20:36
Local clock offset: -0.075 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-03-09 16:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.38 Mbit/s
95th percentile per-packet one-way delay: 135.460 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 135.251 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 135.557 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.18 Mbit/s
95th percentile per-packet one-way delay: 133.708 ms
Loss rate: 0.00%
```

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

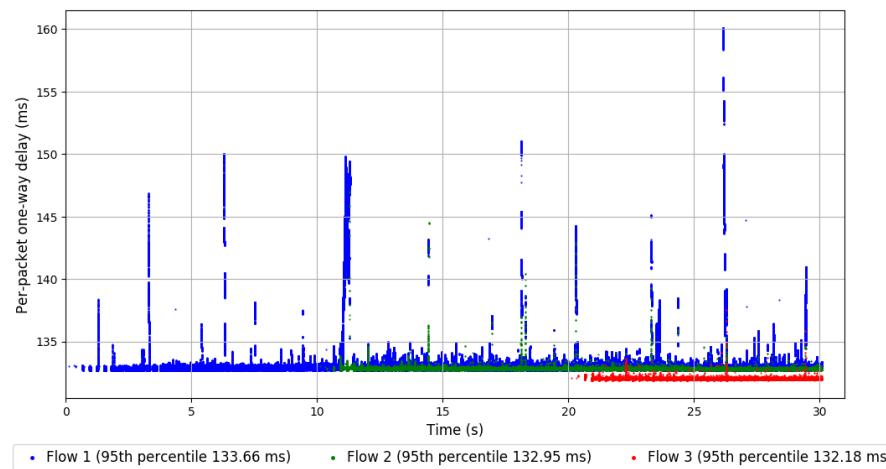
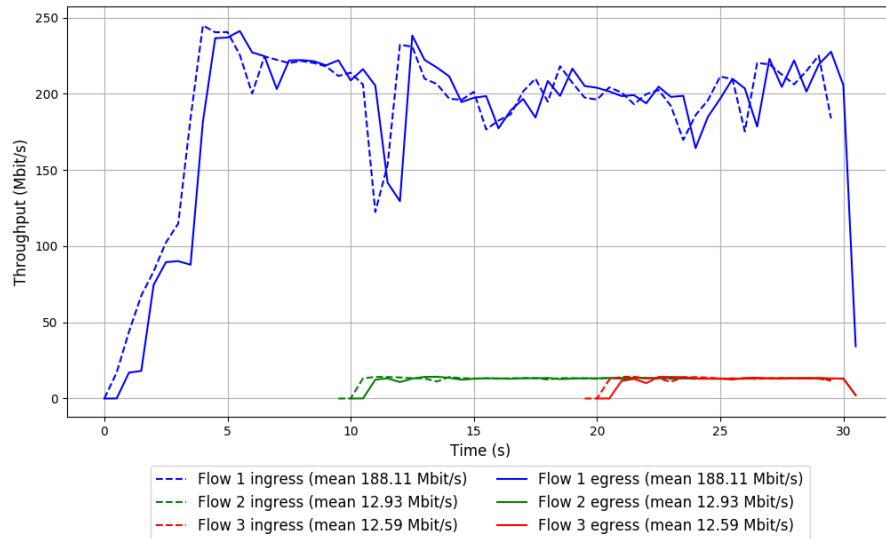


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-09 12:59:50
End at: 2019-03-09 13:00:20
Local clock offset: -0.325 ms
Remote clock offset: -0.485 ms

# Below is generated by plot.py at 2019-03-09 16:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 200.91 Mbit/s
95th percentile per-packet one-way delay: 133.603 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.11 Mbit/s
95th percentile per-packet one-way delay: 133.655 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 132.947 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 132.182 ms
Loss rate: 0.00%
```

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

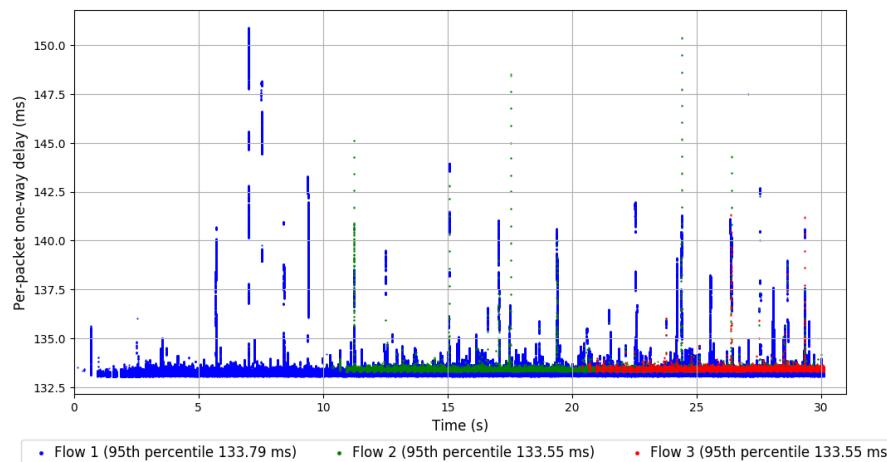
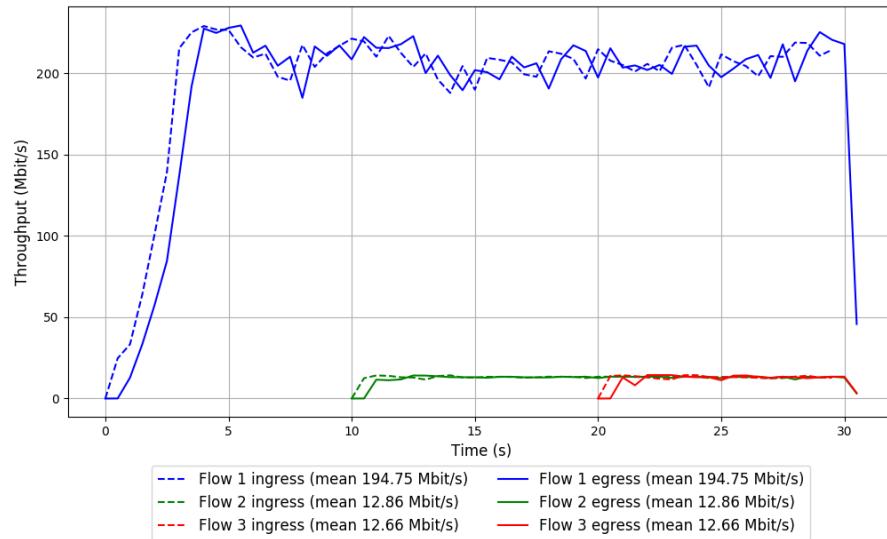


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-09 13:40:47
End at: 2019-03-09 13:41:17
Local clock offset: -0.339 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-03-09 16:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 207.52 Mbit/s
95th percentile per-packet one-way delay: 133.763 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.75 Mbit/s
95th percentile per-packet one-way delay: 133.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 133.553 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 0.00%
```

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

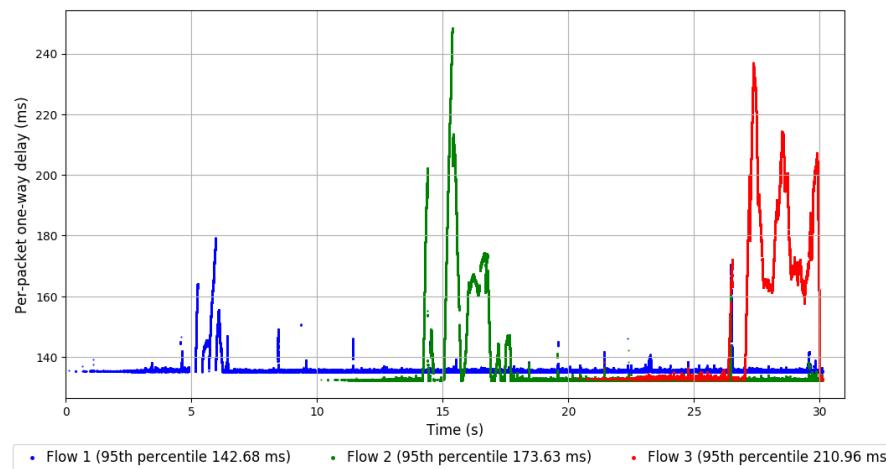
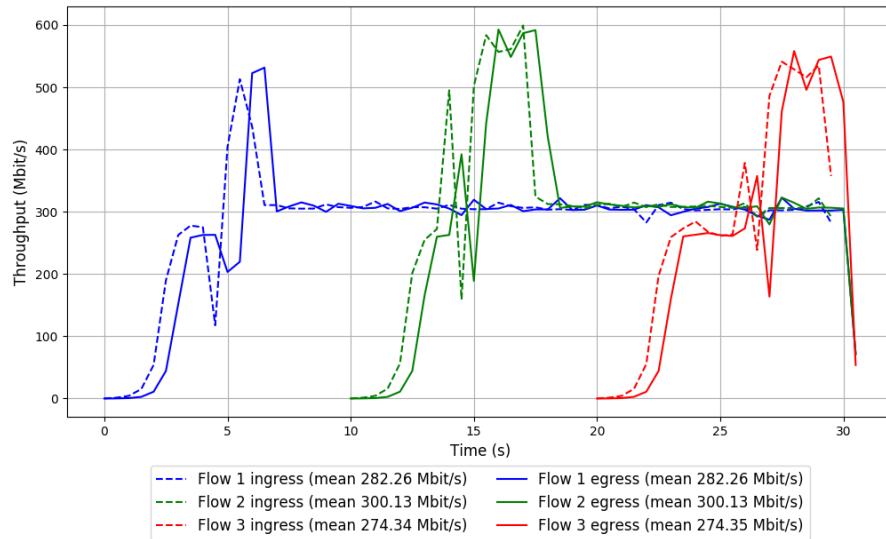


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-09 11:09:25
End at: 2019-03-09 11:09:55
Local clock offset: 0.276 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-03-09 16:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.35 Mbit/s
95th percentile per-packet one-way delay: 183.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 282.26 Mbit/s
95th percentile per-packet one-way delay: 142.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.13 Mbit/s
95th percentile per-packet one-way delay: 173.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 274.35 Mbit/s
95th percentile per-packet one-way delay: 210.956 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

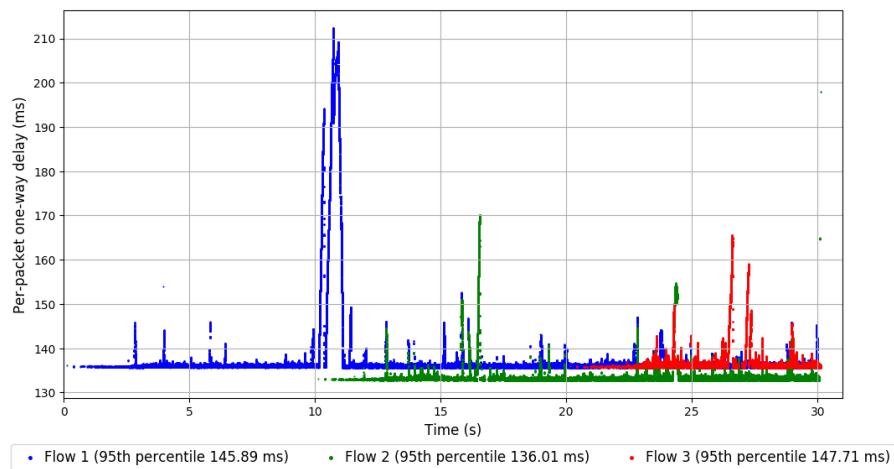
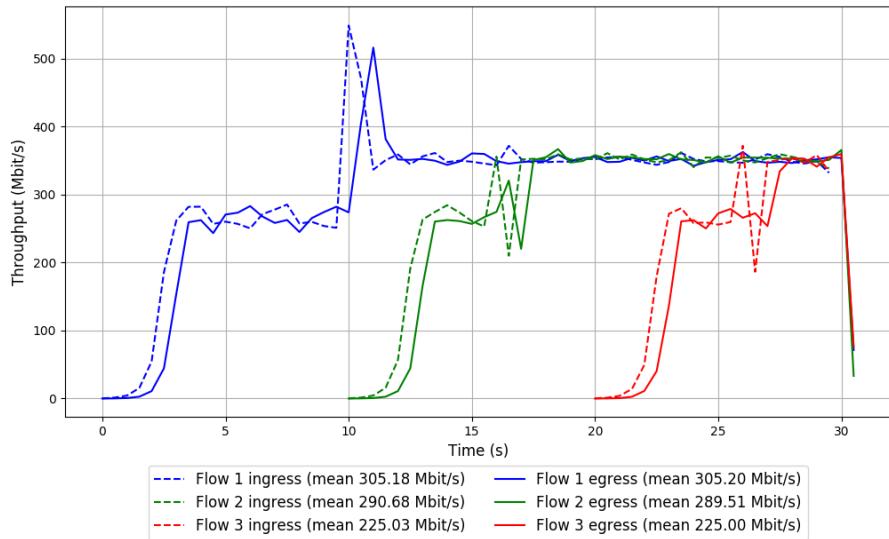


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-09 11:51:11
End at: 2019-03-09 11:51:41
Local clock offset: -0.123 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-03-09 16:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 572.69 Mbit/s
95th percentile per-packet one-way delay: 142.684 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 305.20 Mbit/s
95th percentile per-packet one-way delay: 145.889 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 289.51 Mbit/s
95th percentile per-packet one-way delay: 136.013 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 225.00 Mbit/s
95th percentile per-packet one-way delay: 147.705 ms
Loss rate: 0.04%
```

Run 2: Report of TCP Vegas — Data Link

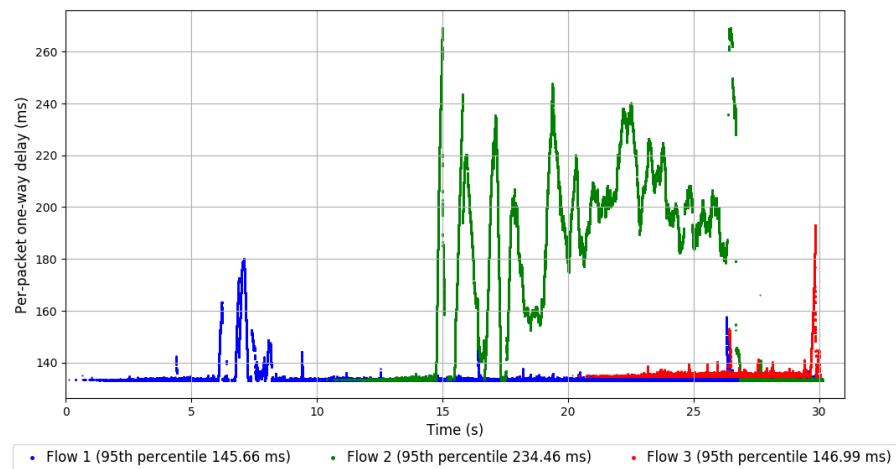
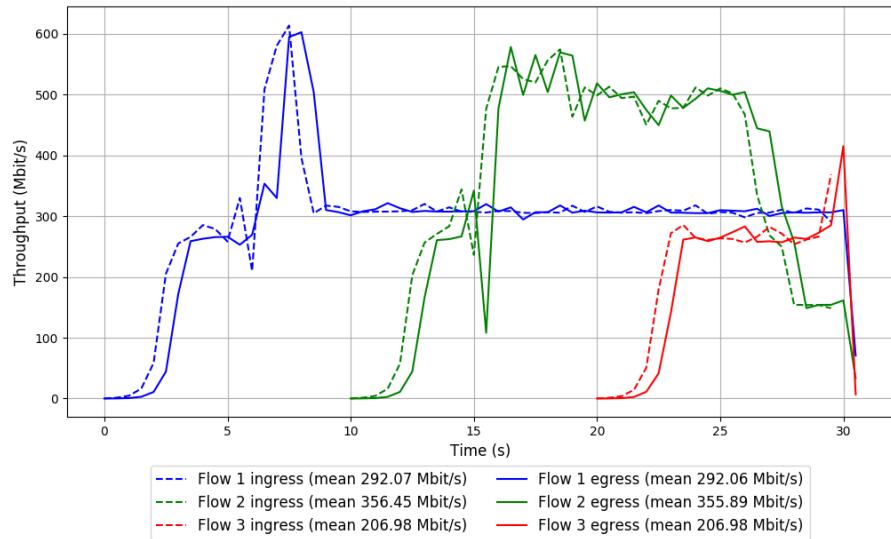


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-09 12:31:57
End at: 2019-03-09 12:32:27
Local clock offset: -0.066 ms
Remote clock offset: 0.294 ms

# Below is generated by plot.py at 2019-03-09 16:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.22 Mbit/s
95th percentile per-packet one-way delay: 219.792 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 292.06 Mbit/s
95th percentile per-packet one-way delay: 145.665 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 355.89 Mbit/s
95th percentile per-packet one-way delay: 234.458 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 146.986 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

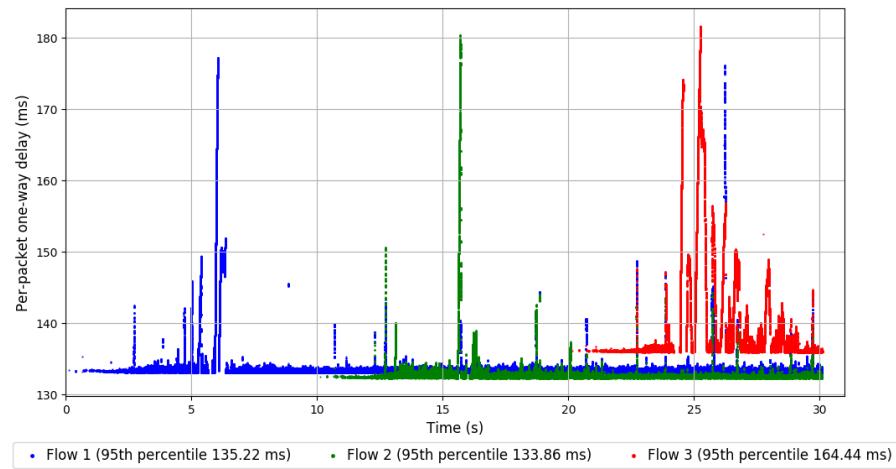
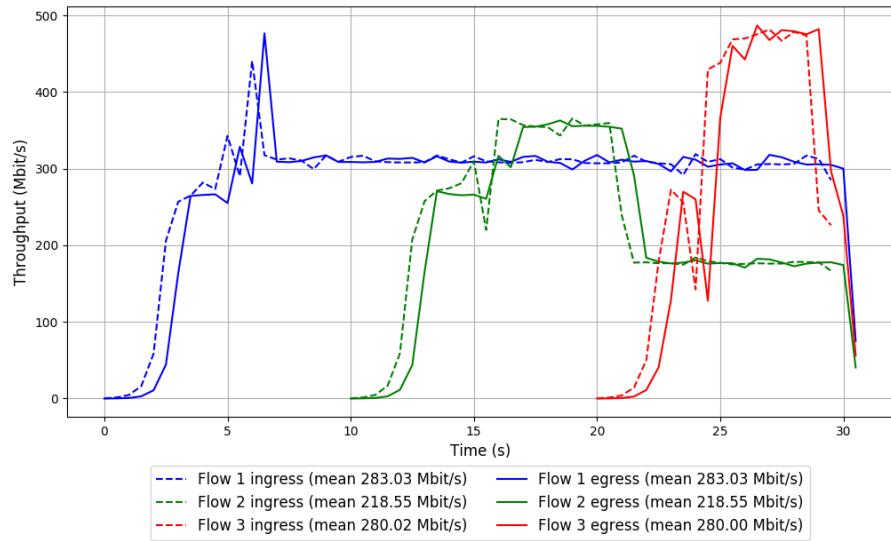


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-09 13:12:01
End at: 2019-03-09 13:12:31
Local clock offset: -0.307 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-03-09 16:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.56 Mbit/s
95th percentile per-packet one-way delay: 145.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 283.03 Mbit/s
95th percentile per-packet one-way delay: 135.220 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.55 Mbit/s
95th percentile per-packet one-way delay: 133.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 280.00 Mbit/s
95th percentile per-packet one-way delay: 164.442 ms
Loss rate: 0.01%
```

Run 4: Report of TCP Vegas — Data Link

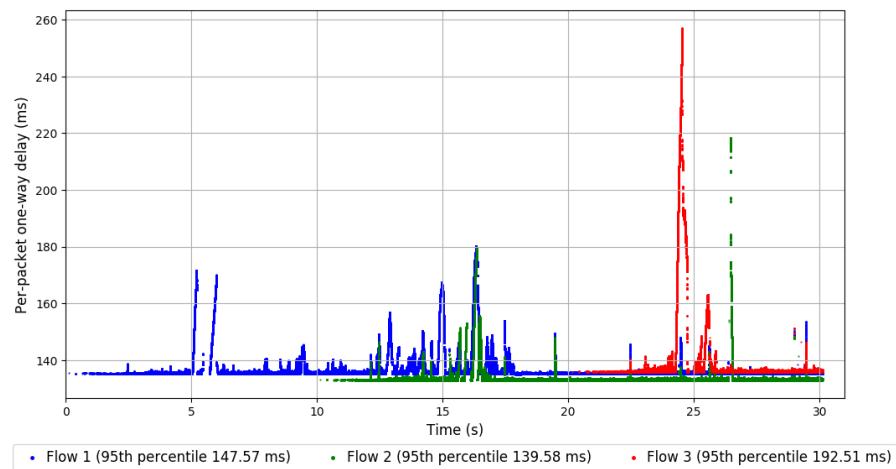
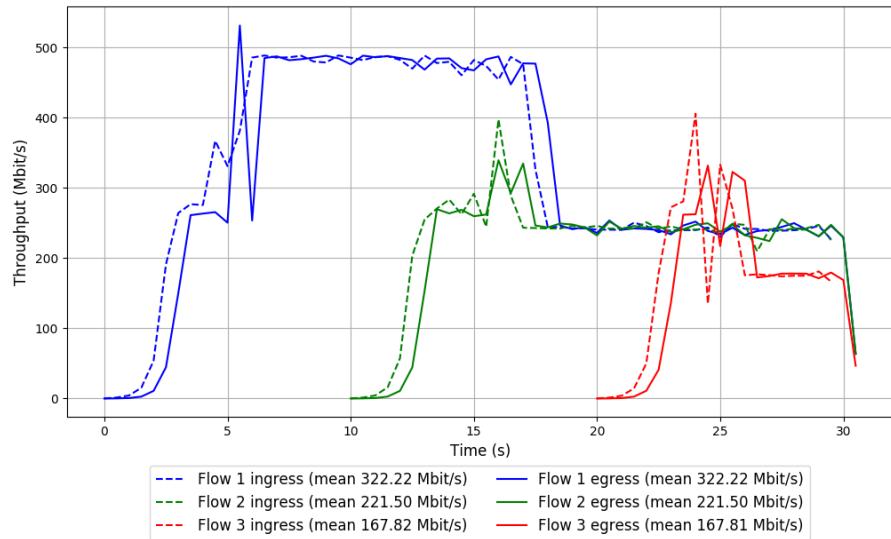


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-09 13:53:54
End at: 2019-03-09 13:54:24
Local clock offset: -0.126 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-03-09 16:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.53 Mbit/s
95th percentile per-packet one-way delay: 149.321 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 322.22 Mbit/s
95th percentile per-packet one-way delay: 147.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 221.50 Mbit/s
95th percentile per-packet one-way delay: 139.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.81 Mbit/s
95th percentile per-packet one-way delay: 192.508 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

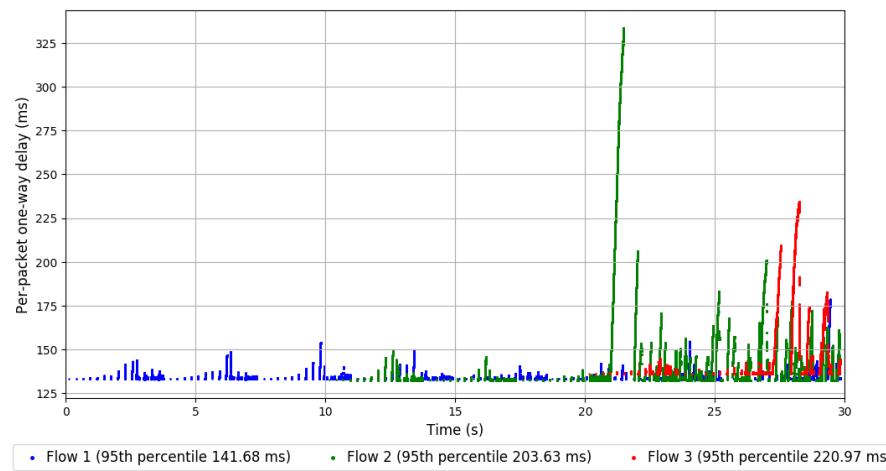
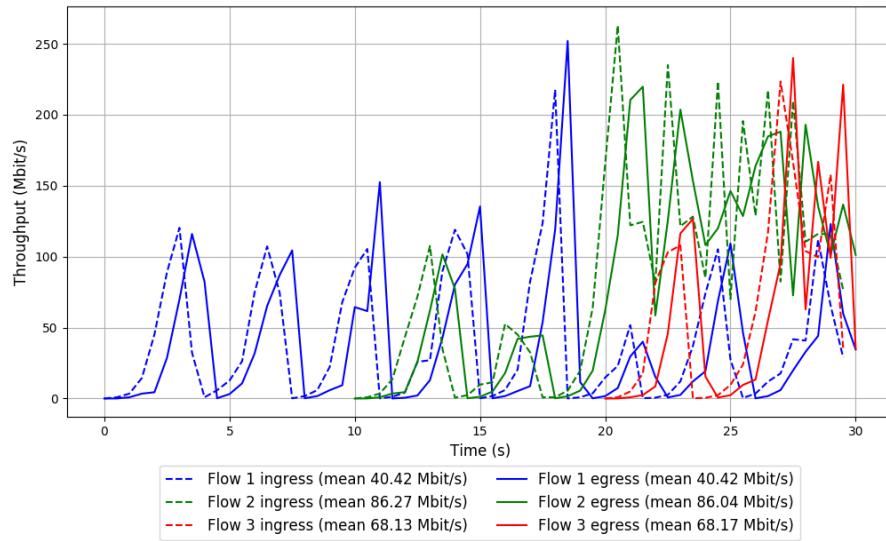


Run 1: Statistics of Verus

```
Start at: 2019-03-09 11:14:06
End at: 2019-03-09 11:14:36
Local clock offset: -0.113 ms
Remote clock offset: 0.365 ms

# Below is generated by plot.py at 2019-03-09 16:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.62 Mbit/s
95th percentile per-packet one-way delay: 195.946 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 40.42 Mbit/s
95th percentile per-packet one-way delay: 141.684 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 86.04 Mbit/s
95th percentile per-packet one-way delay: 203.628 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 68.17 Mbit/s
95th percentile per-packet one-way delay: 220.971 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link

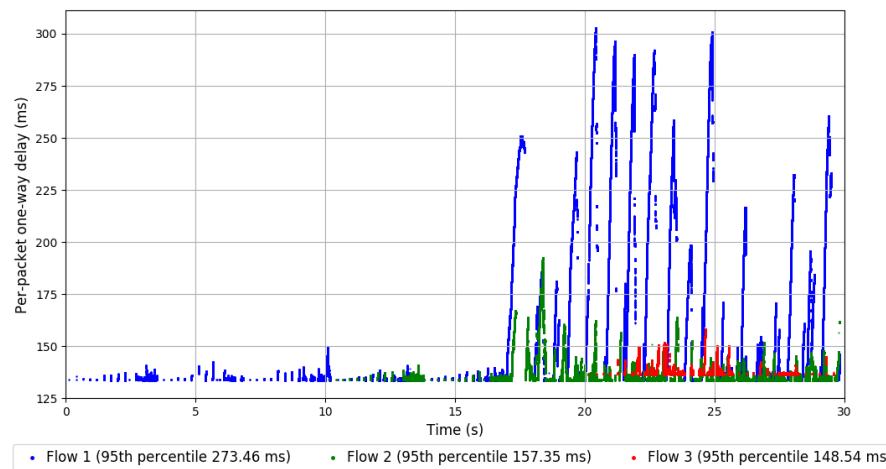
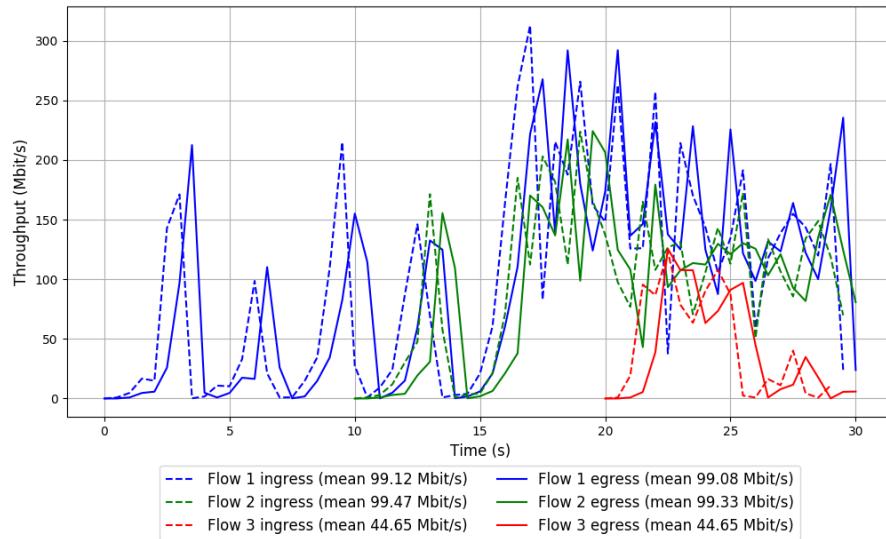


Run 2: Statistics of Verus

```
Start at: 2019-03-09 11:55:58
End at: 2019-03-09 11:56:28
Local clock offset: -0.517 ms
Remote clock offset: 0.307 ms

# Below is generated by plot.py at 2019-03-09 16:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.99 Mbit/s
95th percentile per-packet one-way delay: 250.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.08 Mbit/s
95th percentile per-packet one-way delay: 273.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.33 Mbit/s
95th percentile per-packet one-way delay: 157.354 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.65 Mbit/s
95th percentile per-packet one-way delay: 148.537 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

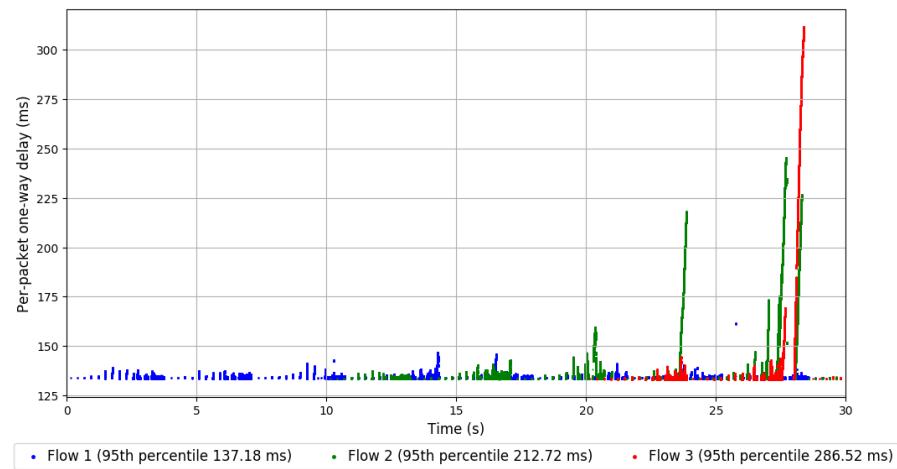
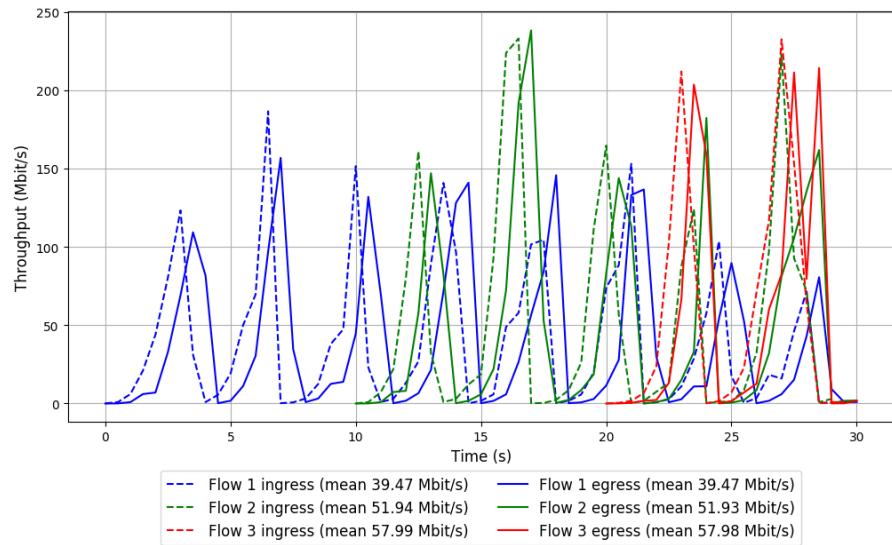


Run 3: Statistics of Verus

```
Start at: 2019-03-09 12:36:34
End at: 2019-03-09 12:37:04
Local clock offset: -0.262 ms
Remote clock offset: 0.297 ms

# Below is generated by plot.py at 2019-03-09 16:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.24 Mbit/s
95th percentile per-packet one-way delay: 207.709 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 137.180 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.93 Mbit/s
95th percentile per-packet one-way delay: 212.722 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 57.98 Mbit/s
95th percentile per-packet one-way delay: 286.525 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

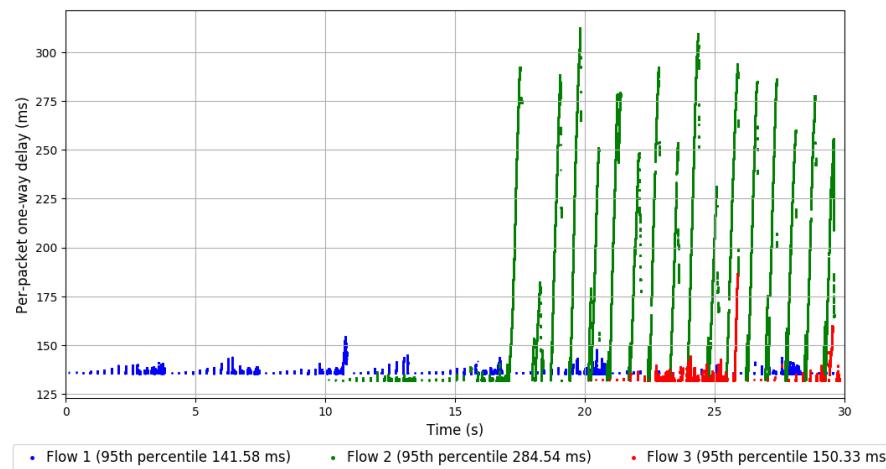
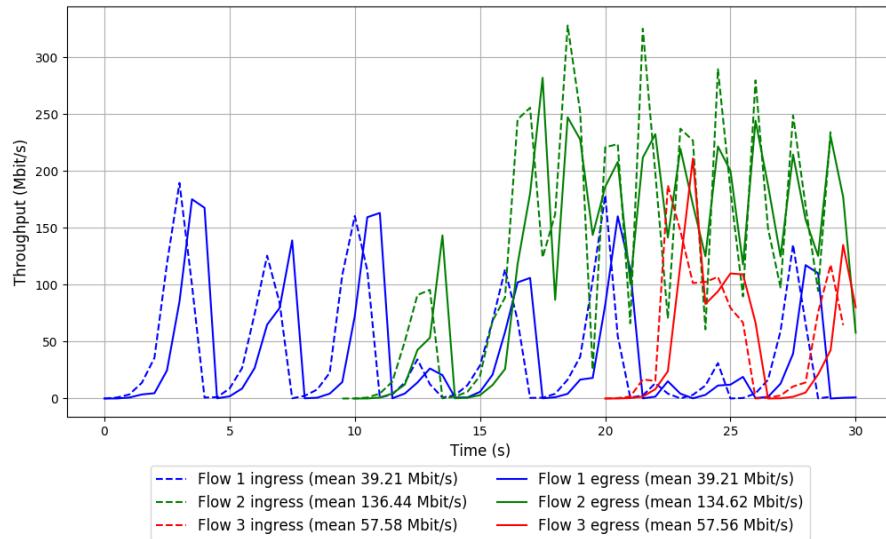


Run 4: Statistics of Verus

```
Start at: 2019-03-09 13:16:38
End at: 2019-03-09 13:17:08
Local clock offset: 0.097 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2019-03-09 16:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.91 Mbit/s
95th percentile per-packet one-way delay: 277.955 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 141.584 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 134.62 Mbit/s
95th percentile per-packet one-way delay: 284.535 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 57.56 Mbit/s
95th percentile per-packet one-way delay: 150.331 ms
Loss rate: 0.03%
```

Run 4: Report of Verus — Data Link

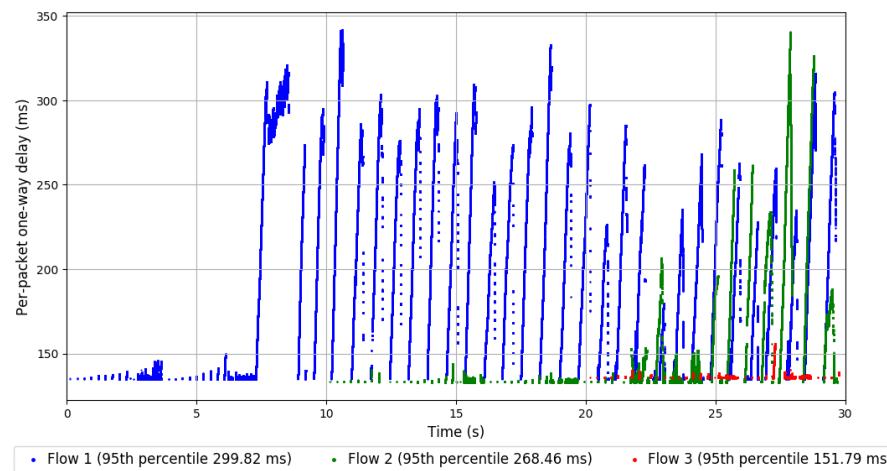
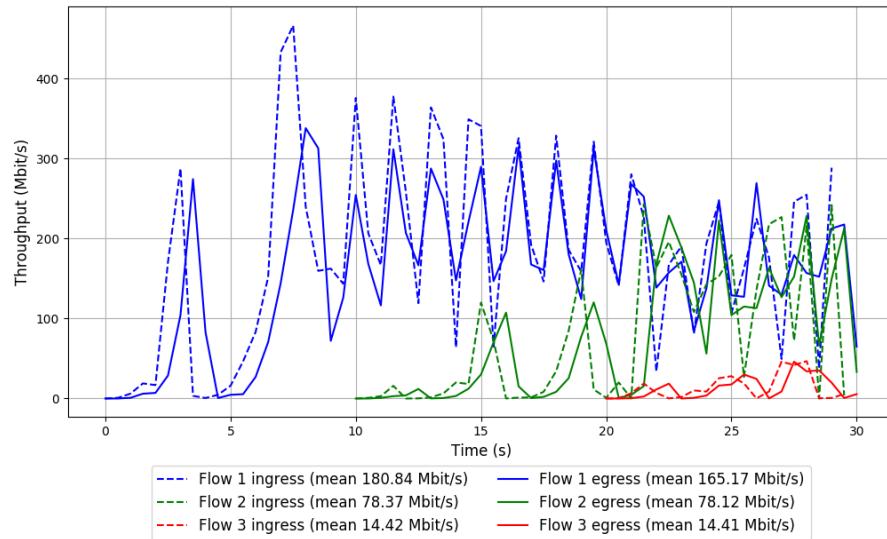


Run 5: Statistics of Verus

```
Start at: 2019-03-09 13:58:32
End at: 2019-03-09 13:59:02
Local clock offset: -0.259 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-03-09 16:22:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.68 Mbit/s
95th percentile per-packet one-way delay: 297.553 ms
Loss rate: 6.47%
-- Flow 1:
Average throughput: 165.17 Mbit/s
95th percentile per-packet one-way delay: 299.825 ms
Loss rate: 8.41%
-- Flow 2:
Average throughput: 78.12 Mbit/s
95th percentile per-packet one-way delay: 268.465 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 14.41 Mbit/s
95th percentile per-packet one-way delay: 151.791 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link

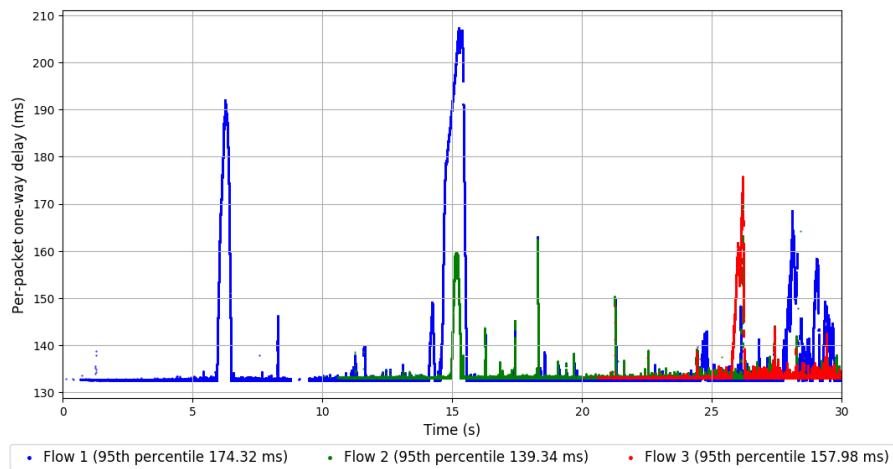
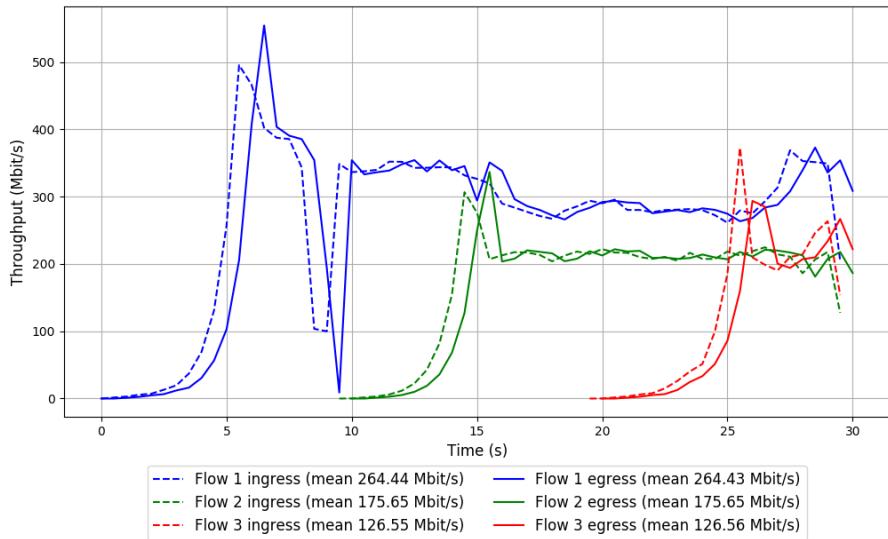


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-03-09 11:07:05
End at: 2019-03-09 11:07:35
Local clock offset: -0.406 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-03-09 16:22:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.45 Mbit/s
95th percentile per-packet one-way delay: 158.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 264.43 Mbit/s
95th percentile per-packet one-way delay: 174.320 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.65 Mbit/s
95th percentile per-packet one-way delay: 139.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.56 Mbit/s
95th percentile per-packet one-way delay: 157.977 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

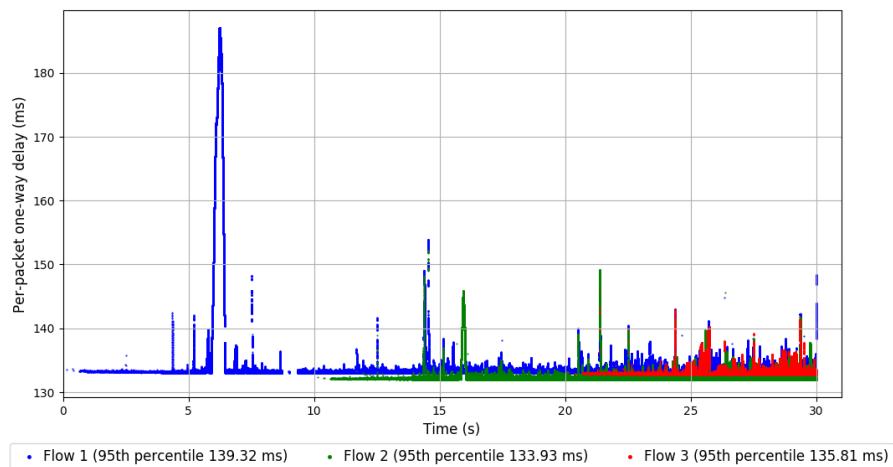
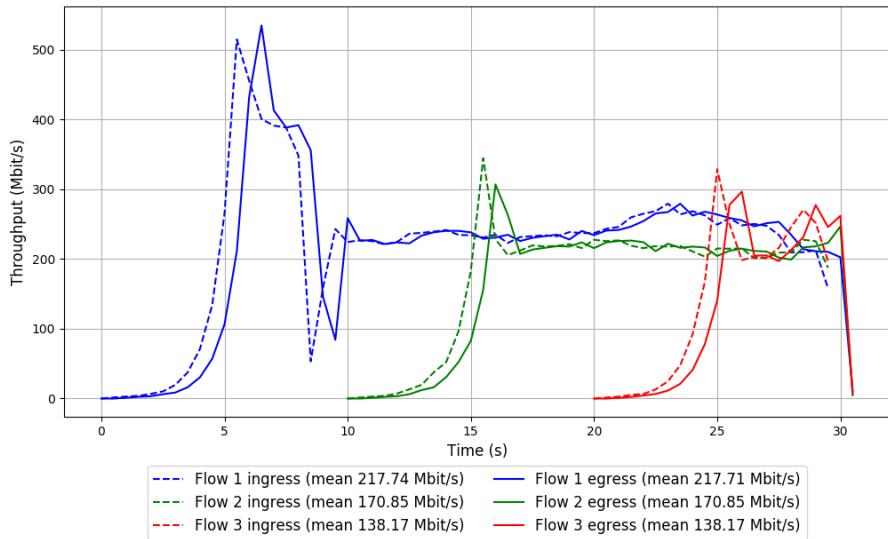


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-09 11:49:12
End at: 2019-03-09 11:49:42
Local clock offset: -0.105 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-03-09 16:22:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.87 Mbit/s
95th percentile per-packet one-way delay: 136.404 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 139.319 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 170.85 Mbit/s
95th percentile per-packet one-way delay: 133.930 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 138.17 Mbit/s
95th percentile per-packet one-way delay: 135.807 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

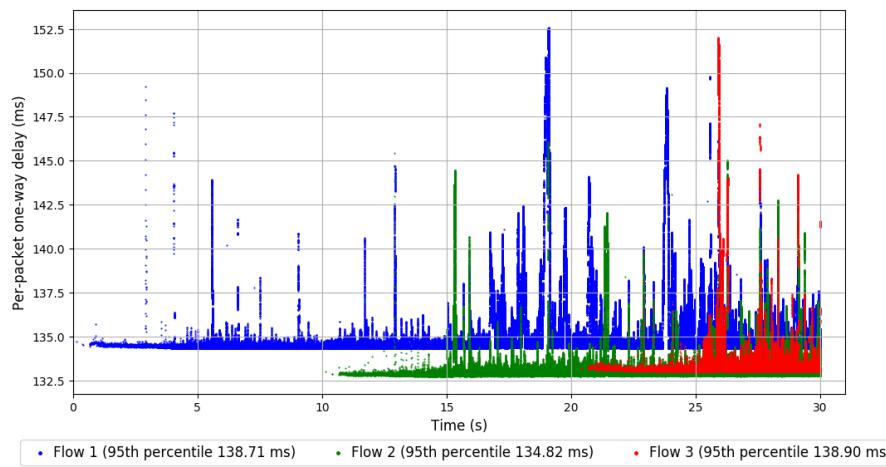
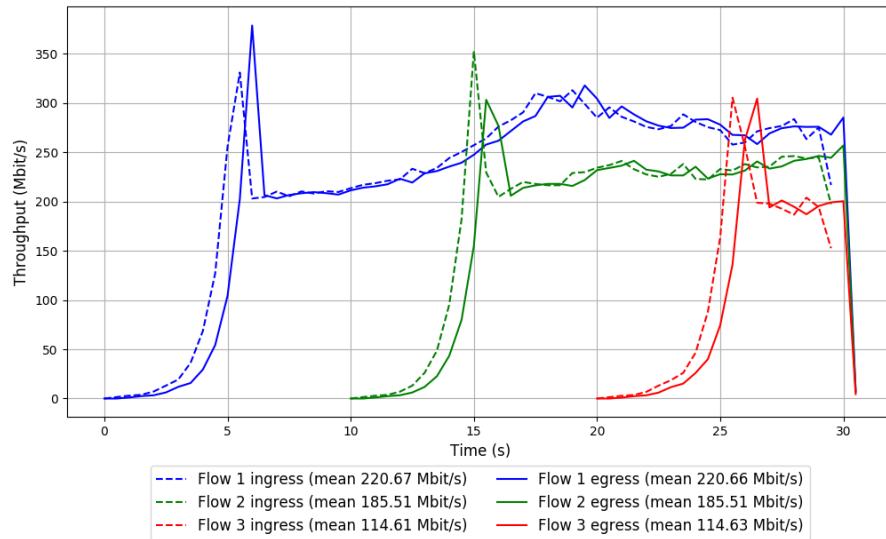


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-09 12:30:01
End at: 2019-03-09 12:30:31
Local clock offset: -0.082 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-03-09 16:22:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 381.82 Mbit/s
95th percentile per-packet one-way delay: 137.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.66 Mbit/s
95th percentile per-packet one-way delay: 138.711 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.51 Mbit/s
95th percentile per-packet one-way delay: 134.816 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 114.63 Mbit/s
95th percentile per-packet one-way delay: 138.899 ms
Loss rate: 0.01%
```

Run 3: Report of PCC-Vivace — Data Link

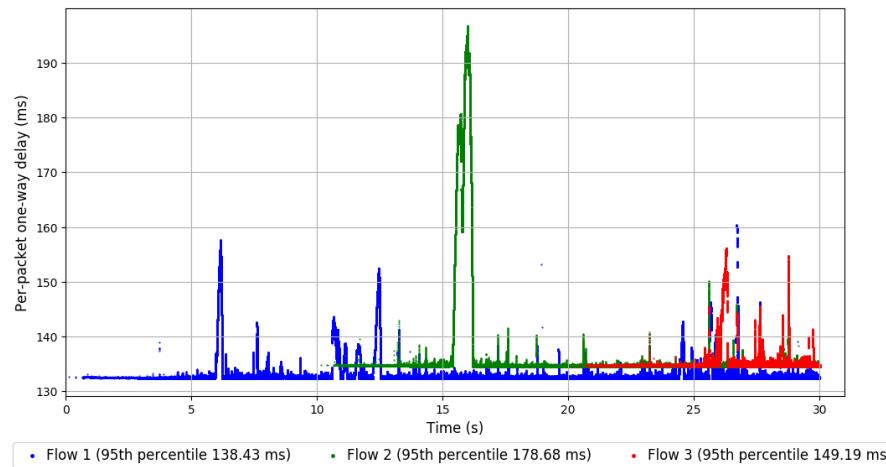
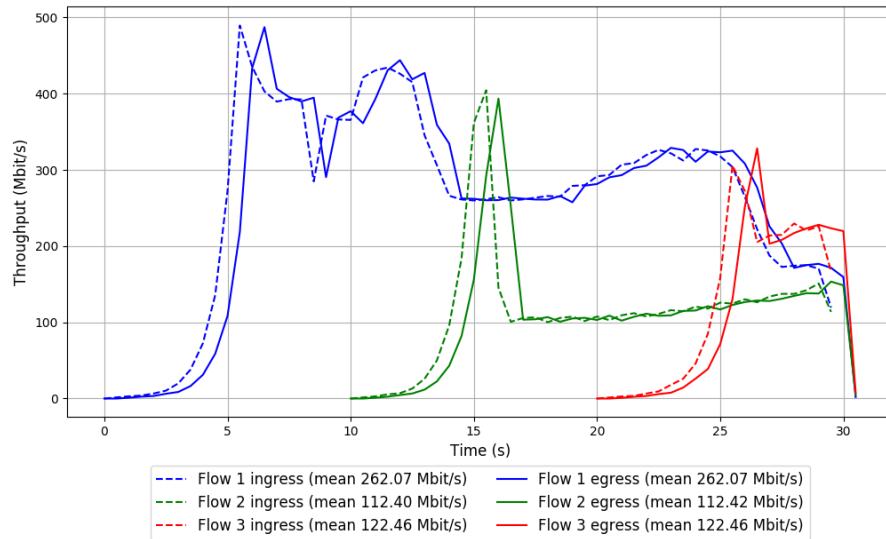


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-09 13:09:56
End at: 2019-03-09 13:10:26
Local clock offset: -0.113 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2019-03-09 16:23:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.14 Mbit/s
95th percentile per-packet one-way delay: 144.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 262.07 Mbit/s
95th percentile per-packet one-way delay: 138.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.42 Mbit/s
95th percentile per-packet one-way delay: 178.684 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.46 Mbit/s
95th percentile per-packet one-way delay: 149.193 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

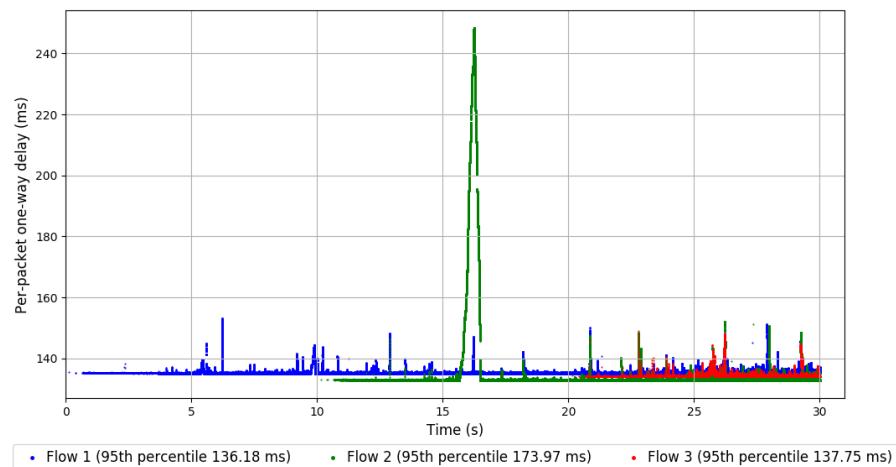
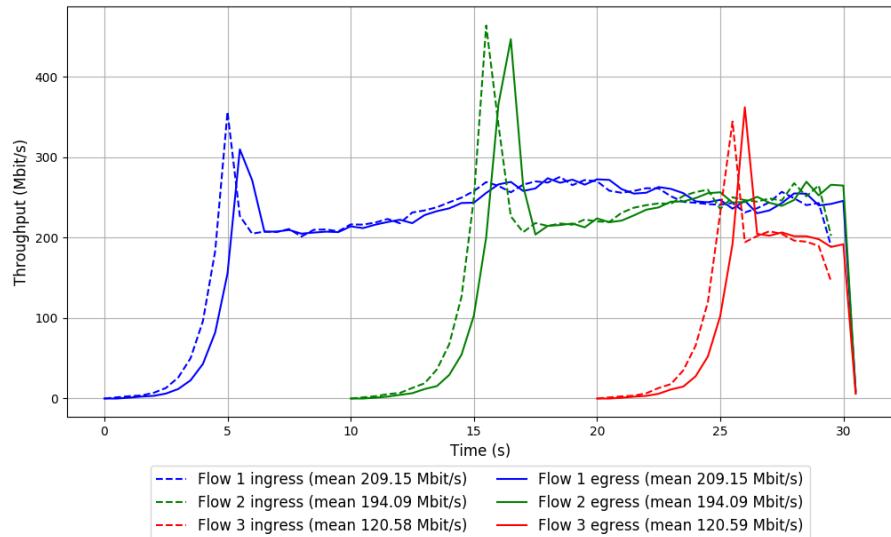


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-09 13:51:57
End at: 2019-03-09 13:52:27
Local clock offset: 0.18 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.96 Mbit/s
95th percentile per-packet one-way delay: 137.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.15 Mbit/s
95th percentile per-packet one-way delay: 136.183 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.09 Mbit/s
95th percentile per-packet one-way delay: 173.969 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 120.59 Mbit/s
95th percentile per-packet one-way delay: 137.746 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

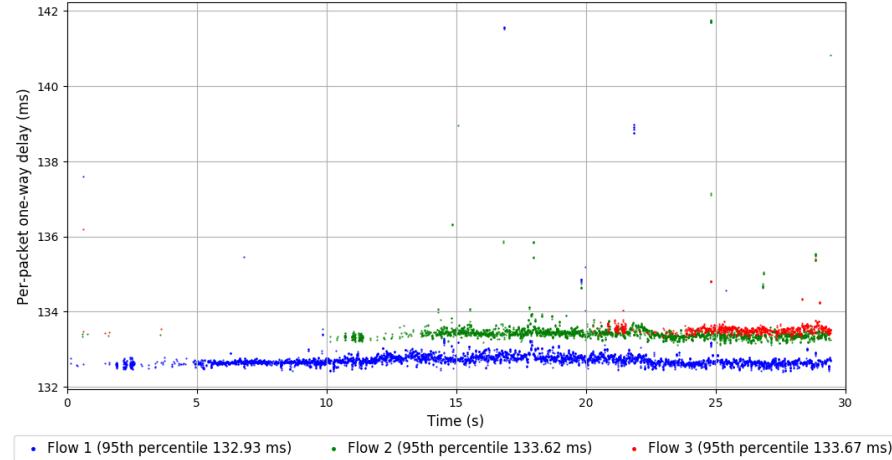
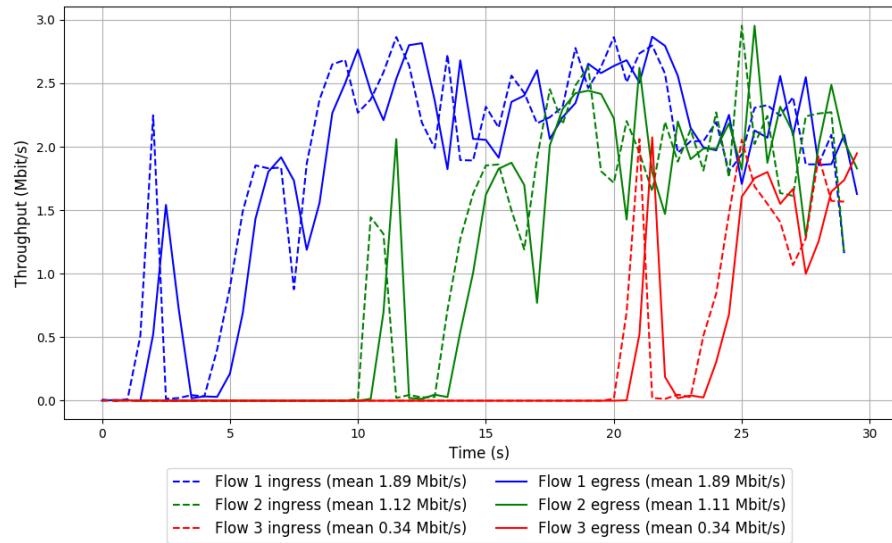


Run 1: Statistics of WebRTC media

```
Start at: 2019-03-09 10:46:46
End at: 2019-03-09 10:47:16
Local clock offset: -0.586 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 133.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 132.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 133.621 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 133.671 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

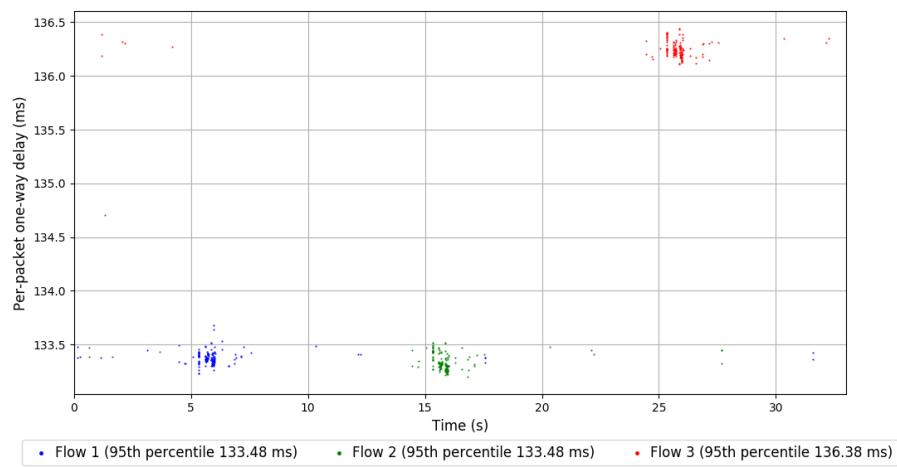
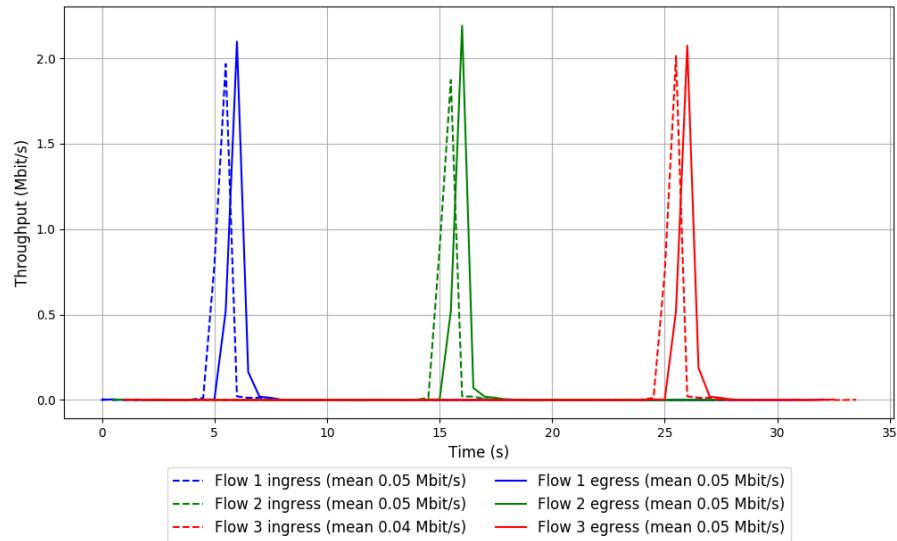


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-09 11:27:31
End at: 2019-03-09 11:28:01
Local clock offset: -0.536 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.317 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.483 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.482 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 136.382 ms
Loss rate: 0.05%
```

Run 2: Report of WebRTC media — Data Link

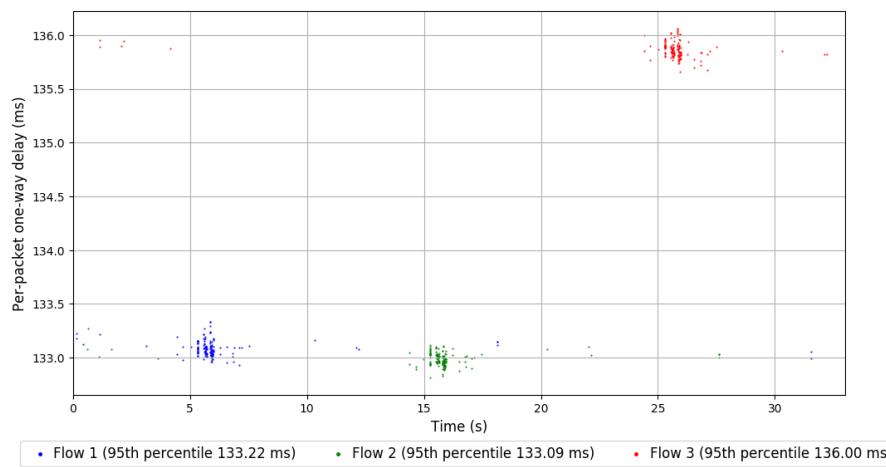
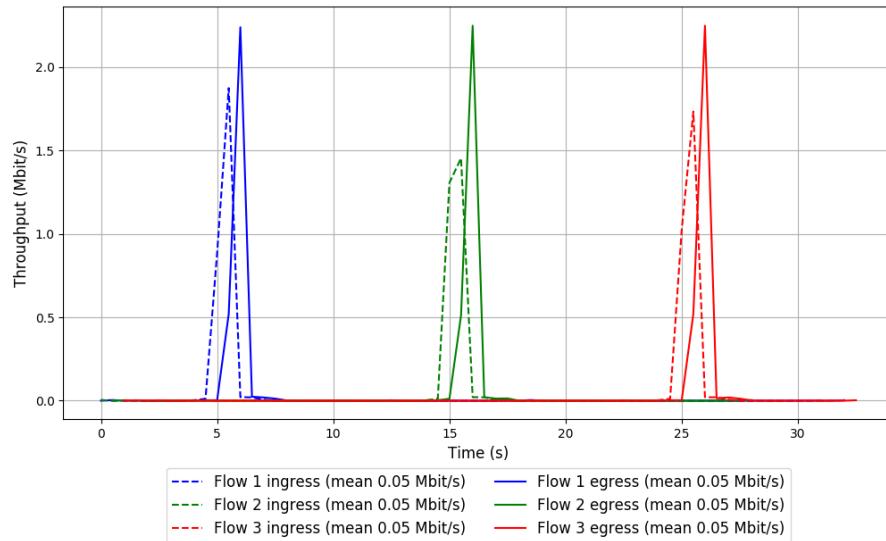


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-09 12:10:36
End at: 2019-03-09 12:11:06
Local clock offset: -0.084 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 135.943 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.220 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.094 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 136.005 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

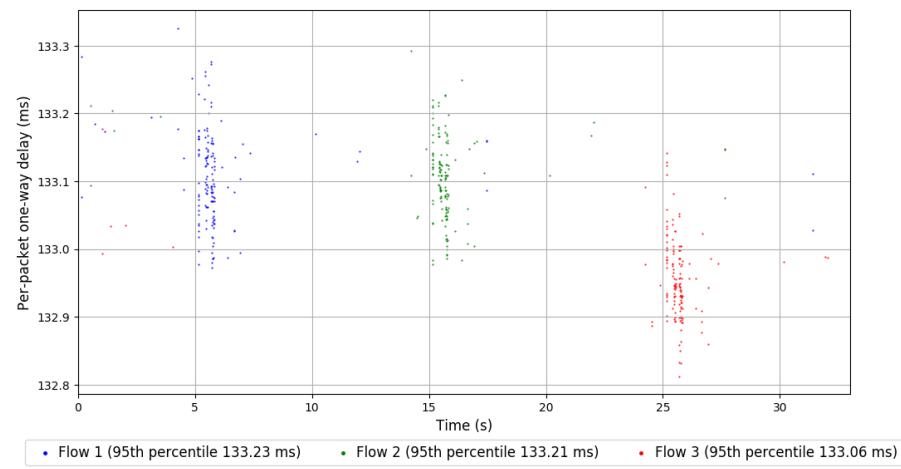
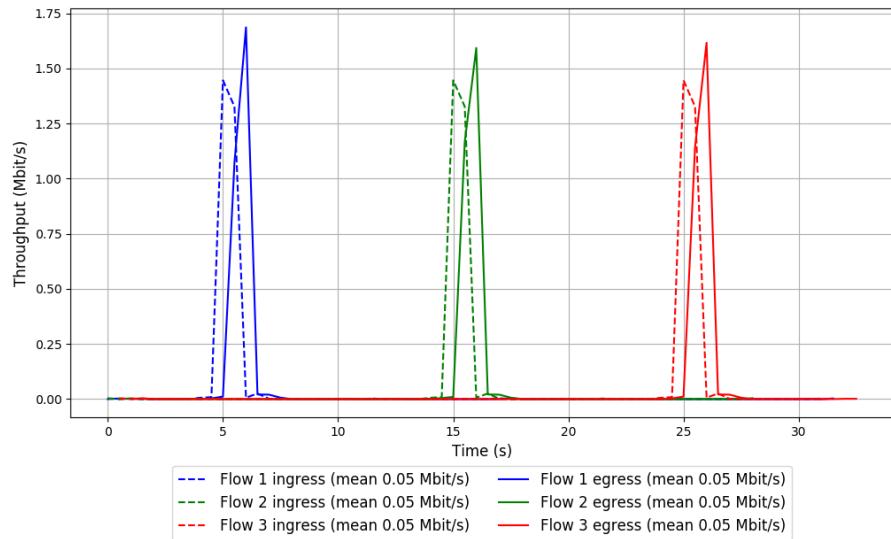


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-09 12:50:13
End at: 2019-03-09 12:50:43
Local clock offset: -0.469 ms
Remote clock offset: -0.389 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.204 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.229 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.058 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-09 13:31:49
End at: 2019-03-09 13:32:19
Local clock offset: -0.503 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2019-03-09 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 136.406 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.704 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

