

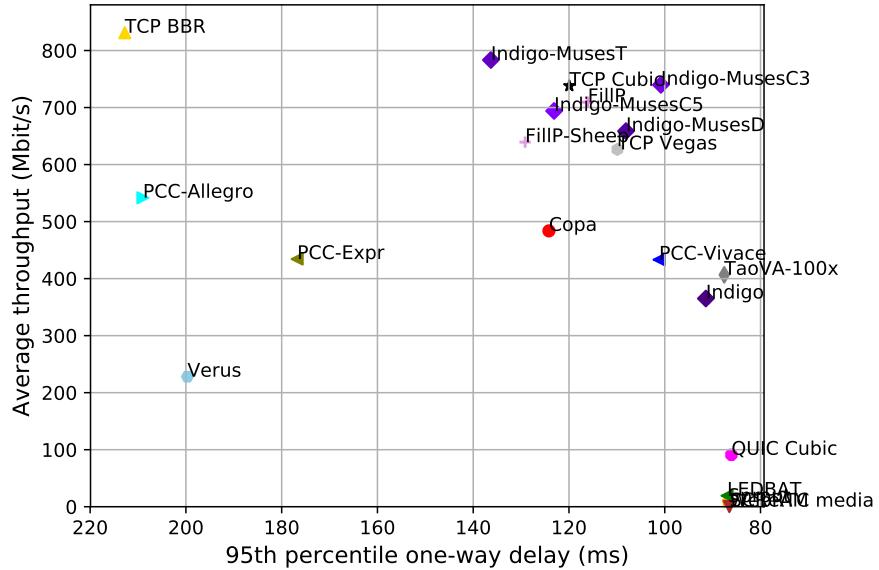
Pantheon Report

Generated at 2019-05-30 04:14:46 (UTC).
Data path: GCE Iowa on `ens4` (*remote*) → GCE Sydney on `ens4` (*local*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

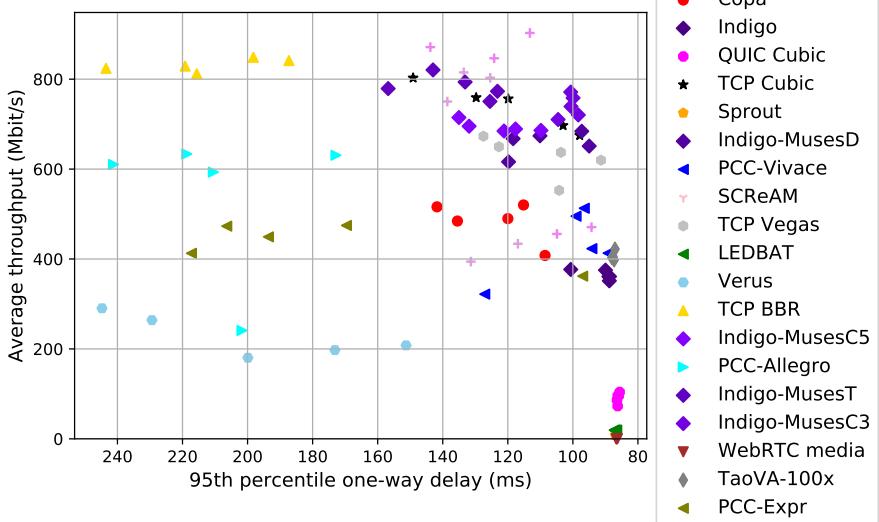
```
System info:  
Linux 4.15.0-1029-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
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 Iowa to GCE Sydney, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



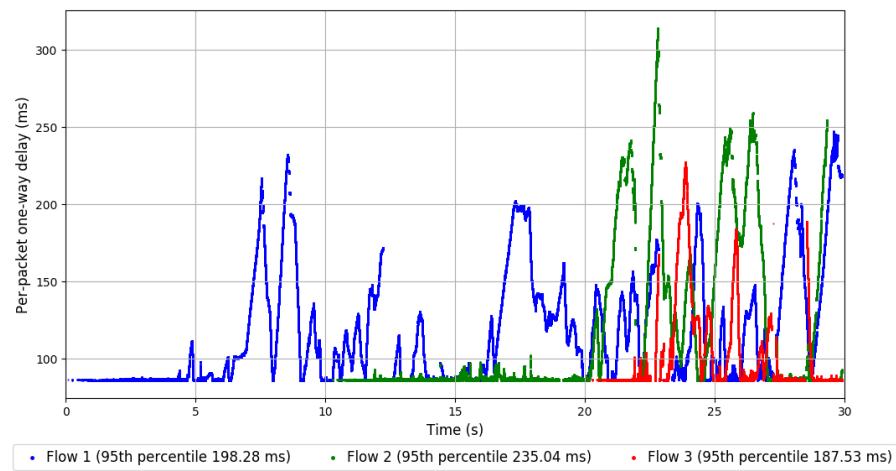
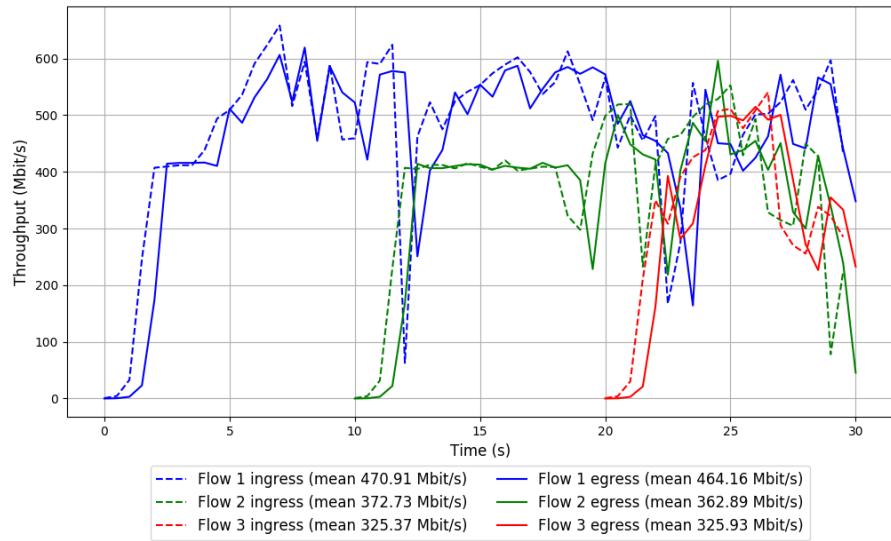
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	454.64	392.12	353.28	205.88	217.38	200.37	2.01	2.99	4.11
Copa		249.47	242.09	223.92	121.99	131.46	115.57	0.67	0.99	2.17
TCP Cubic		378.15	365.21	357.47	106.49	121.14	144.64	0.54	0.78	1.87
FillP		374.26	371.32	271.95	129.38	92.23	91.41	1.42	0.78	2.06
FillP-Sheep		345.09	325.46	239.44	149.32	89.85	89.75	1.52	0.76	1.98
Indigo		195.37	178.16	156.08	90.19	92.89	91.72	0.55	0.80	2.06
Indigo-MusesC3		438.14	358.99	267.47	104.15	97.85	91.20	0.42	0.82	2.64
Indigo-MusesC5		425.53	349.83	168.41	122.98	121.52	89.39	0.50	1.20	3.00
Indigo-MusesD		402.77	297.25	254.31	112.31	95.34	92.24	0.53	0.77	3.24
Indigo-MusesT		471.25	386.33	245.13	151.75	109.24	92.02	0.57	0.75	3.02
LEDBAT		12.49	8.29	4.02	87.09	86.79	86.51	1.15	1.74	3.51
PCC-Allegro		281.75	275.72	237.48	186.14	167.60	181.42	4.19	3.31	3.11
PCC-Expr		243.89	219.77	136.99	173.63	159.79	101.81	2.01	3.80	2.31
QUIC Cubic		54.54	41.48	26.02	86.03	85.90	85.98	0.92	1.56	1.66
SCReAM		0.22	0.22	0.22	86.44	86.23	86.19	0.51	0.91	1.77
Sprout		4.49	4.00	3.07	86.79	86.78	86.53	0.67	1.16	2.84
TaoVA-100x		211.20	198.84	193.16	87.25	87.91	87.92	0.62	0.96	1.95
TCP Vegas		329.44	294.70	308.77	110.57	99.72	113.05	0.44	0.90	1.78
Verus		135.17	112.48	56.12	221.09	168.58	103.09	2.16	1.48	1.76
PCC-Vivace		262.27	190.30	137.36	104.88	98.44	99.03	0.66	1.12	3.24
WebRTC media		0.05	0.05	0.05	86.56	86.43	86.21	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-05-29 22:39:48
End at: 2019-05-29 22:40:18
Local clock offset: 1.204 ms
Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2019-05-30 02:07:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 812.22 Mbit/s
95th percentile per-packet one-way delay: 215.625 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 464.16 Mbit/s
95th percentile per-packet one-way delay: 198.284 ms
Loss rate: 2.00%
-- Flow 2:
Average throughput: 362.89 Mbit/s
95th percentile per-packet one-way delay: 235.041 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 325.93 Mbit/s
95th percentile per-packet one-way delay: 187.530 ms
Loss rate: 1.57%
```

Run 1: Report of TCP BBR — Data Link

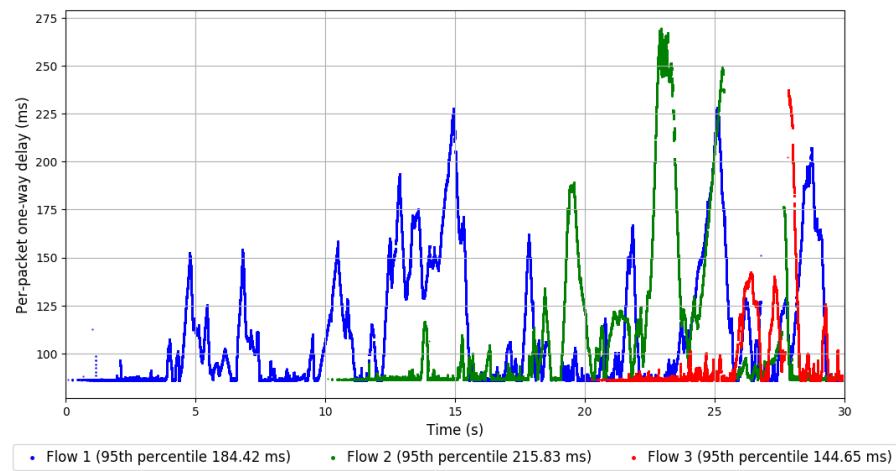
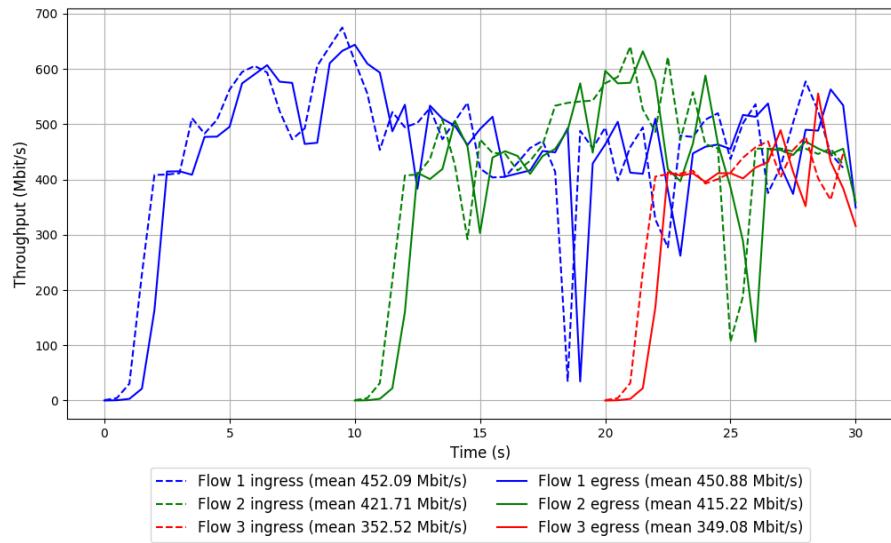


Run 2: Statistics of TCP BBR

```
Start at: 2019-05-29 23:16:14
End at: 2019-05-29 23:16:44
Local clock offset: 0.192 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-05-30 02:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 841.49 Mbit/s
95th percentile per-packet one-way delay: 187.273 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 450.88 Mbit/s
95th percentile per-packet one-way delay: 184.424 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 415.22 Mbit/s
95th percentile per-packet one-way delay: 215.833 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 349.08 Mbit/s
95th percentile per-packet one-way delay: 144.651 ms
Loss rate: 2.69%
```

Run 2: Report of TCP BBR — Data Link

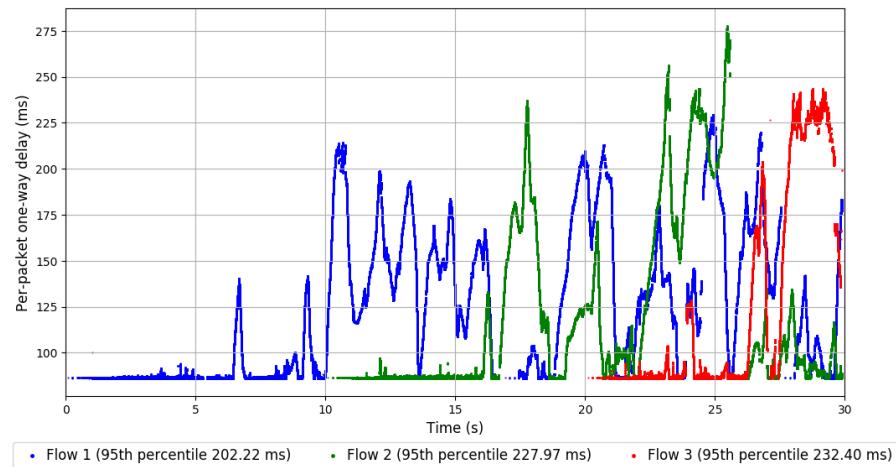
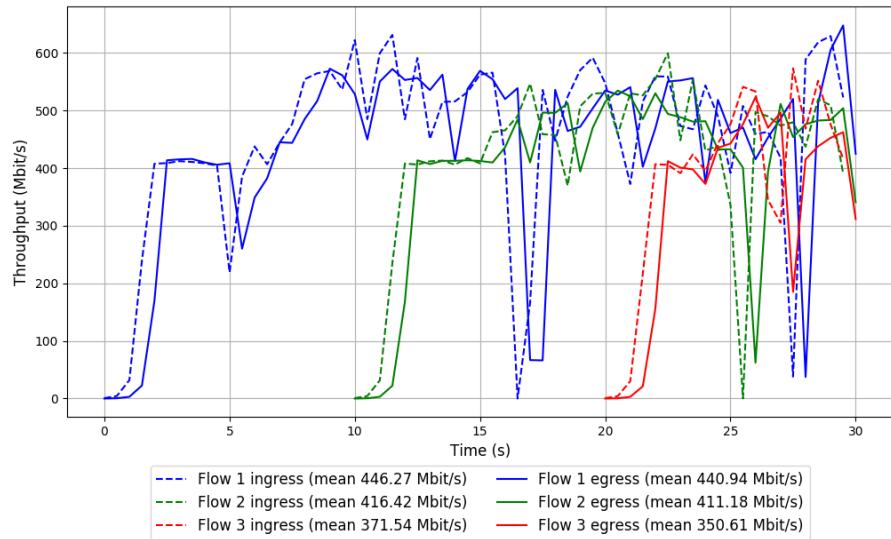


Run 3: Statistics of TCP BBR

```
Start at: 2019-05-29 23:51:51
End at: 2019-05-29 23:52:21
Local clock offset: 0.317 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-05-30 02:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 829.05 Mbit/s
95th percentile per-packet one-way delay: 219.196 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 440.94 Mbit/s
95th percentile per-packet one-way delay: 202.219 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 411.18 Mbit/s
95th percentile per-packet one-way delay: 227.969 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 350.61 Mbit/s
95th percentile per-packet one-way delay: 232.398 ms
Loss rate: 7.18%
```

Run 3: Report of TCP BBR — Data Link

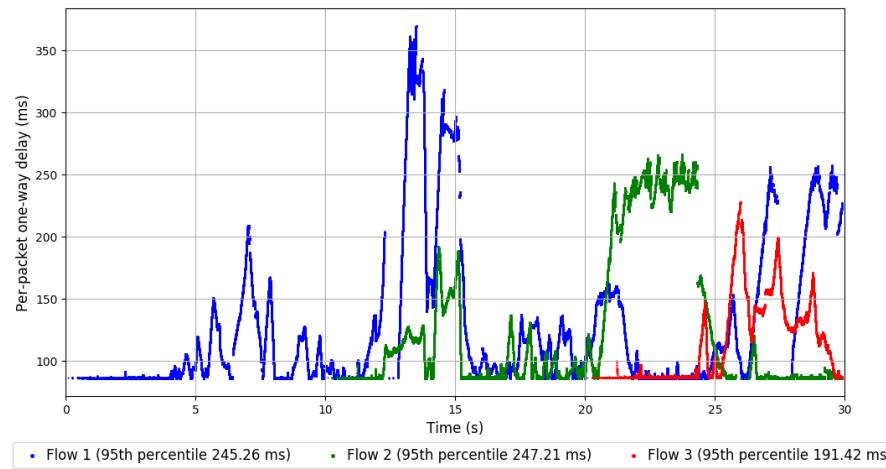
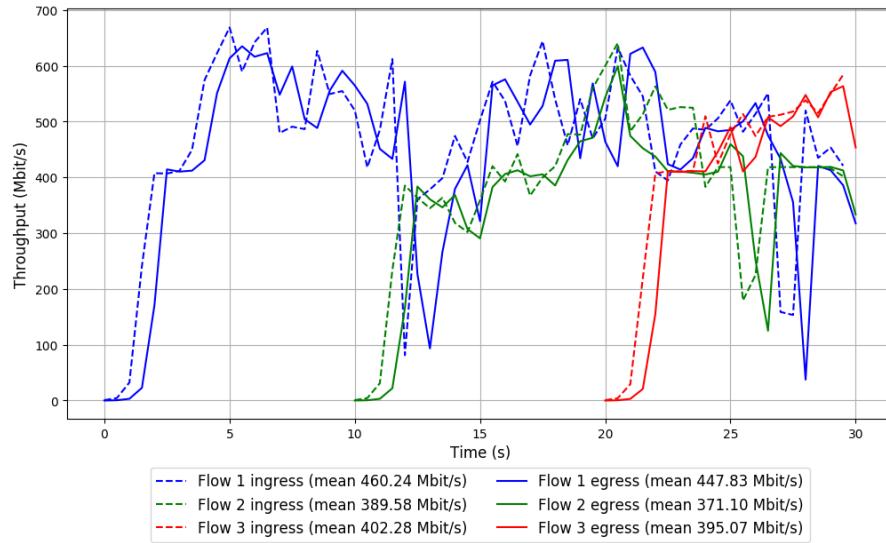


Run 4: Statistics of TCP BBR

```
Start at: 2019-05-30 00:28:39
End at: 2019-05-30 00:29:09
Local clock offset: 0.42 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-05-30 02:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 824.19 Mbit/s
95th percentile per-packet one-way delay: 243.515 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 447.83 Mbit/s
95th percentile per-packet one-way delay: 245.265 ms
Loss rate: 3.26%
-- Flow 2:
Average throughput: 371.10 Mbit/s
95th percentile per-packet one-way delay: 247.211 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 395.07 Mbit/s
95th percentile per-packet one-way delay: 191.417 ms
Loss rate: 3.49%
```

Run 4: Report of TCP BBR — Data Link

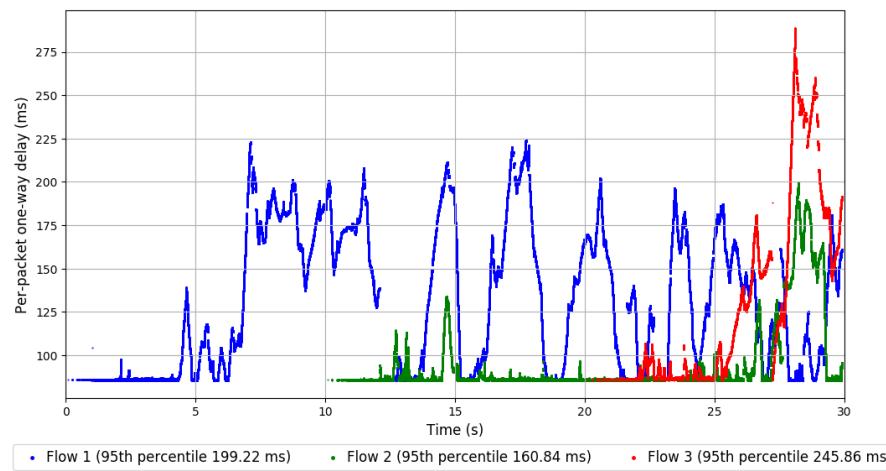
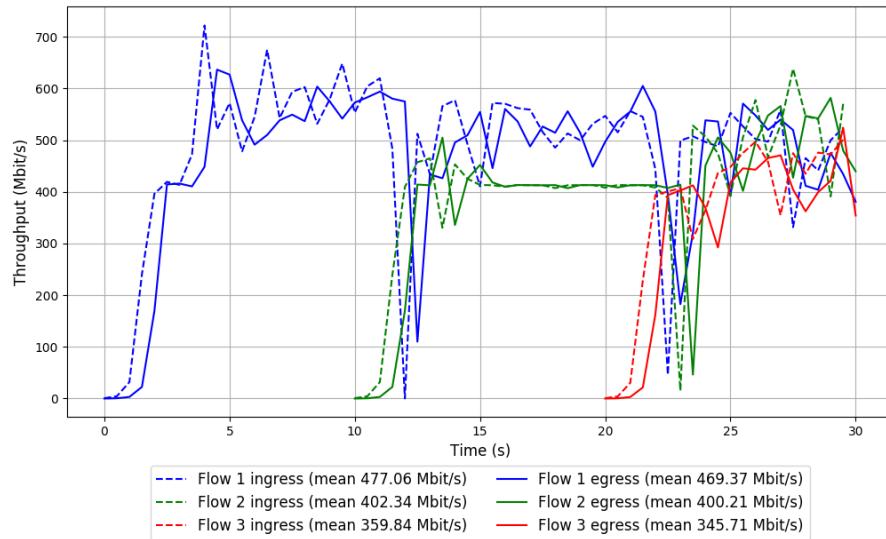


Run 5: Statistics of TCP BBR

```
Start at: 2019-05-30 01:05:23
End at: 2019-05-30 01:05:53
Local clock offset: -0.175 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-05-30 02:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 848.73 Mbit/s
95th percentile per-packet one-way delay: 198.225 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 469.37 Mbit/s
95th percentile per-packet one-way delay: 199.225 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 400.21 Mbit/s
95th percentile per-packet one-way delay: 160.836 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 345.71 Mbit/s
95th percentile per-packet one-way delay: 245.863 ms
Loss rate: 5.60%
```

Run 5: Report of TCP BBR — Data Link

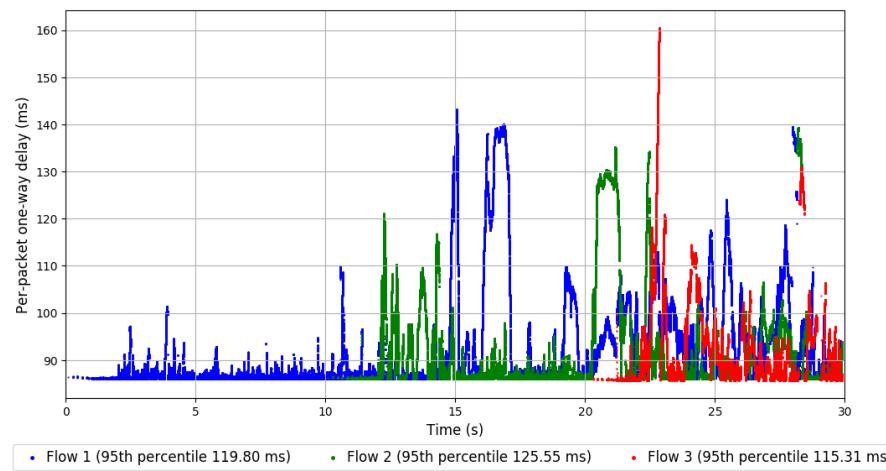
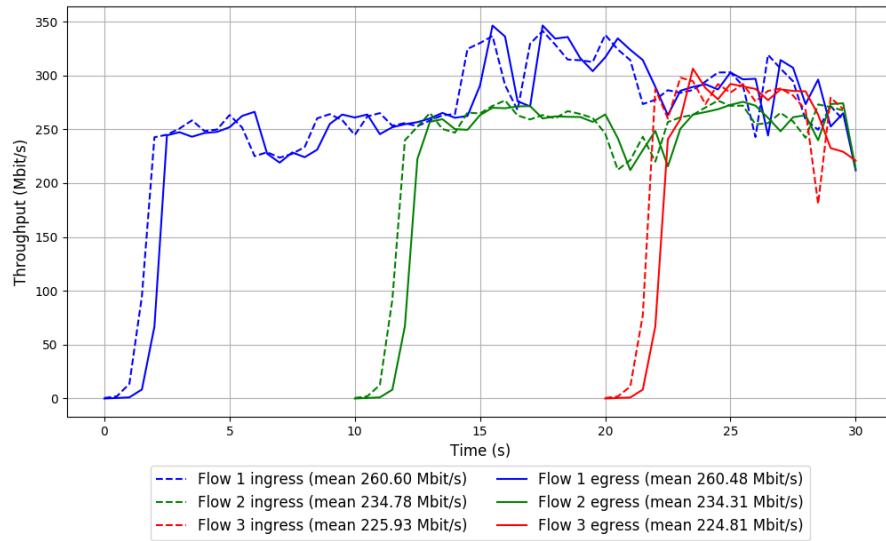


Run 1: Statistics of Copa

```
Start at: 2019-05-29 22:37:43
End at: 2019-05-29 22:38:13
Local clock offset: 0.92 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2019-05-30 02:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.90 Mbit/s
95th percentile per-packet one-way delay: 119.983 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 260.48 Mbit/s
95th percentile per-packet one-way delay: 119.803 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 234.31 Mbit/s
95th percentile per-packet one-way delay: 125.554 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 224.81 Mbit/s
95th percentile per-packet one-way delay: 115.306 ms
Loss rate: 2.22%
```

Run 1: Report of Copa — Data Link

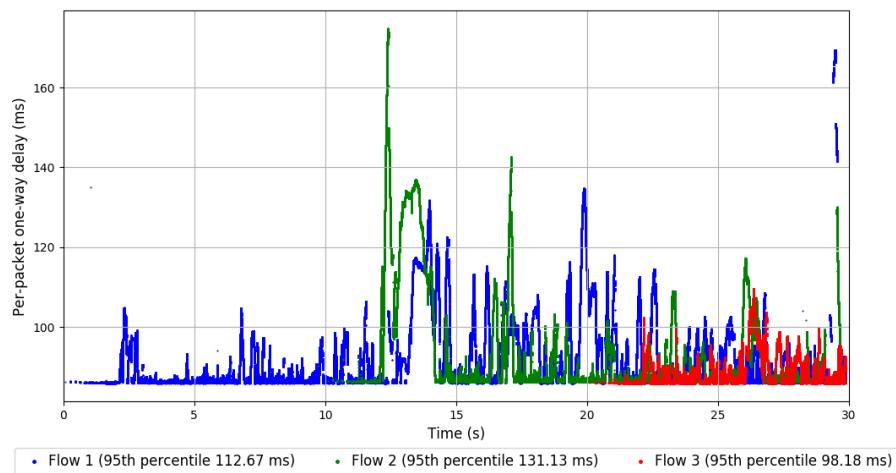
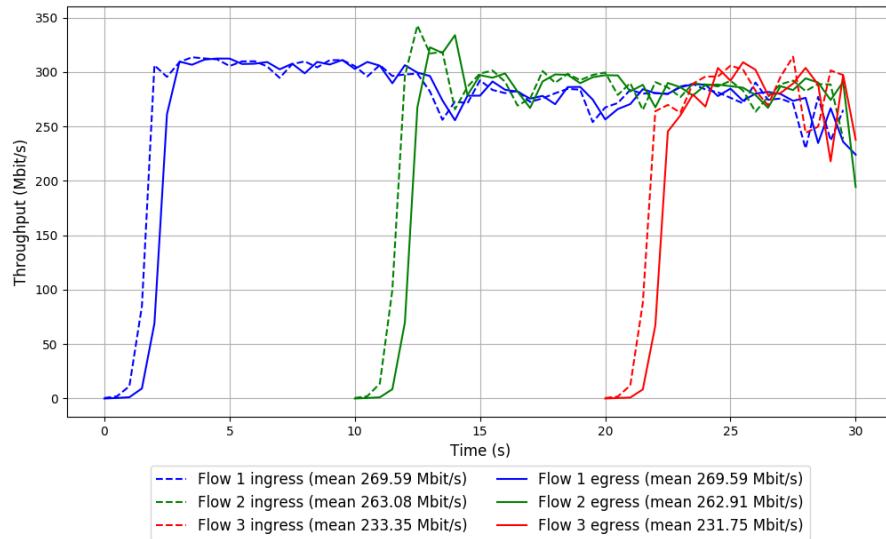


Run 2: Statistics of Copa

```
Start at: 2019-05-29 23:14:07
End at: 2019-05-29 23:14:37
Local clock offset: -0.002 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-05-30 02:10:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 520.22 Mbit/s
95th percentile per-packet one-way delay: 115.171 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 269.59 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 262.91 Mbit/s
95th percentile per-packet one-way delay: 131.134 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 231.75 Mbit/s
95th percentile per-packet one-way delay: 98.178 ms
Loss rate: 2.39%
```

Run 2: Report of Copa — Data Link

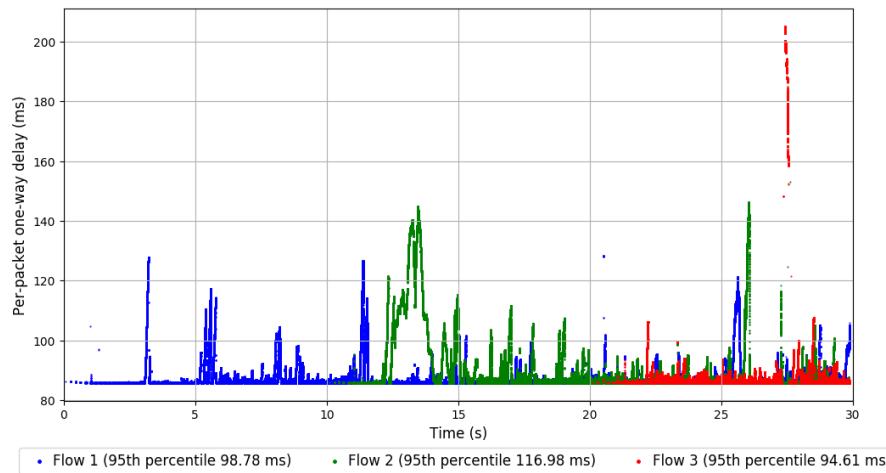
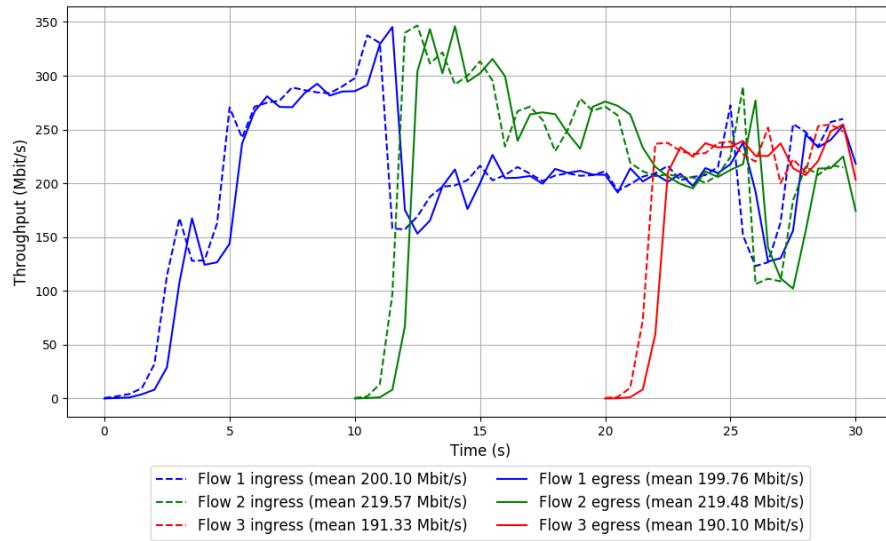


Run 3: Statistics of Copa

```
Start at: 2019-05-29 23:49:54
End at: 2019-05-29 23:50:24
Local clock offset: -0.047 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-05-30 02:10:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.92 Mbit/s
95th percentile per-packet one-way delay: 108.550 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 199.76 Mbit/s
95th percentile per-packet one-way delay: 98.783 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 219.48 Mbit/s
95th percentile per-packet one-way delay: 116.982 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 190.10 Mbit/s
95th percentile per-packet one-way delay: 94.609 ms
Loss rate: 2.36%
```

Run 3: Report of Copa — Data Link

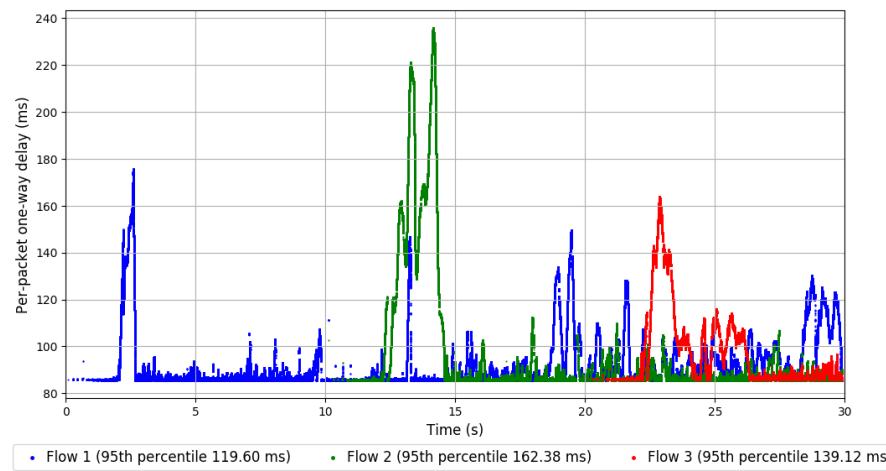
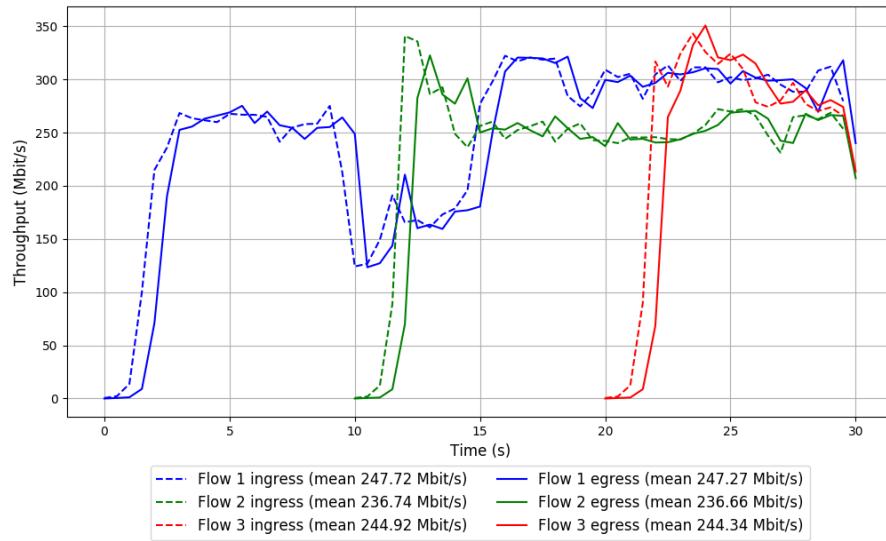


Run 4: Statistics of Copa

```
Start at: 2019-05-30 00:26:35
End at: 2019-05-30 00:27:05
Local clock offset: -0.314 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-05-30 02:23:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.46 Mbit/s
95th percentile per-packet one-way delay: 135.484 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 247.27 Mbit/s
95th percentile per-packet one-way delay: 119.598 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 236.66 Mbit/s
95th percentile per-packet one-way delay: 162.381 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 244.34 Mbit/s
95th percentile per-packet one-way delay: 139.115 ms
Loss rate: 1.97%
```

Run 4: Report of Copa — Data Link

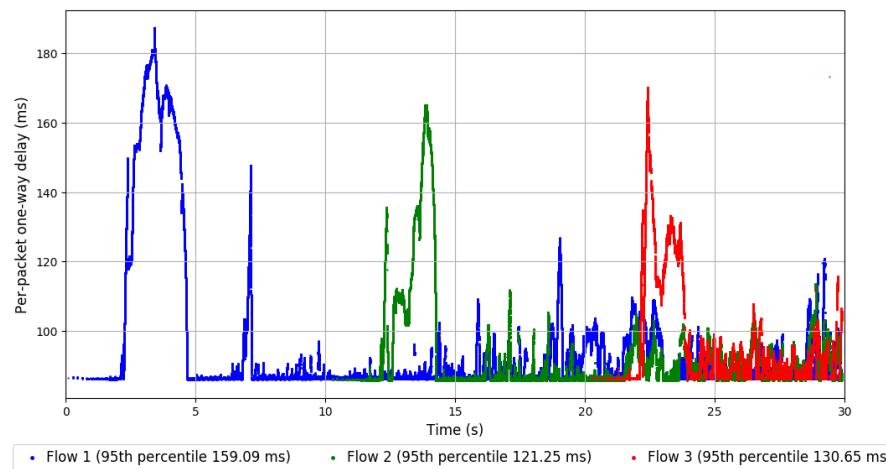
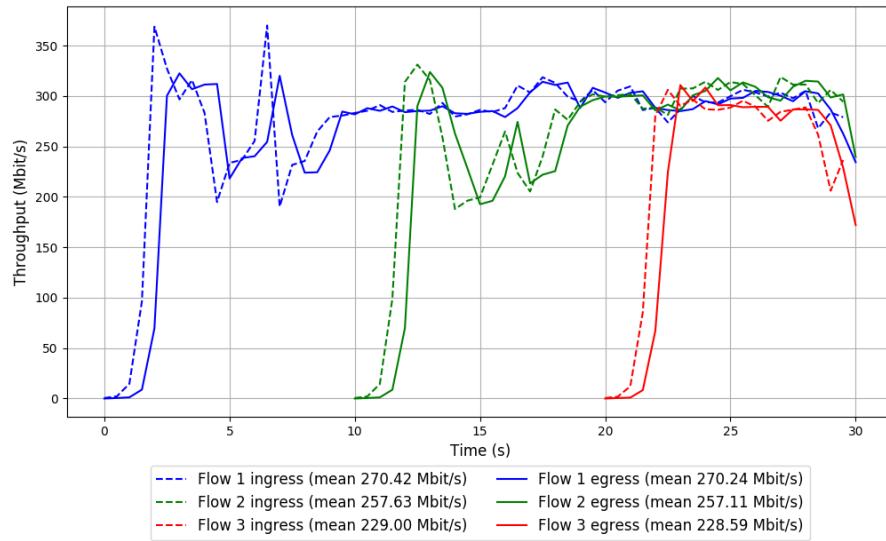


Run 5: Statistics of Copa

```
Start at: 2019-05-30 01:03:16
End at: 2019-05-30 01:03:46
Local clock offset: 0.094 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 516.05 Mbit/s
95th percentile per-packet one-way delay: 141.762 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 270.24 Mbit/s
95th percentile per-packet one-way delay: 159.085 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 257.11 Mbit/s
95th percentile per-packet one-way delay: 121.252 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 228.59 Mbit/s
95th percentile per-packet one-way delay: 130.649 ms
Loss rate: 1.91%
```

Run 5: Report of Copa — Data Link

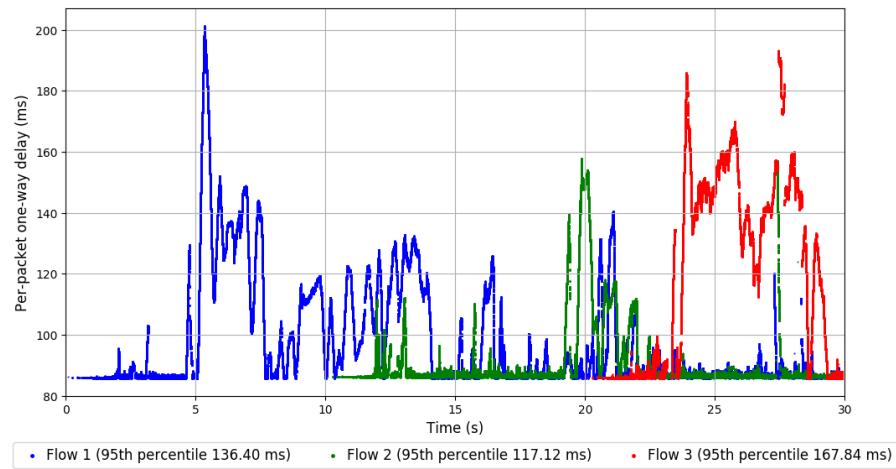
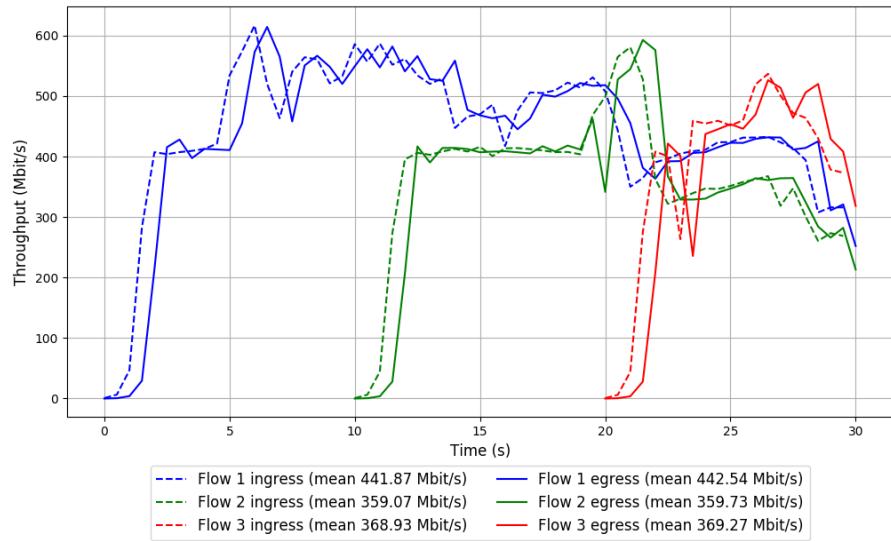


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-05-29 22:41:53
End at: 2019-05-29 22:42:23
Local clock offset: 0.824 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 802.83 Mbit/s
95th percentile per-packet one-way delay: 149.114 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 442.54 Mbit/s
95th percentile per-packet one-way delay: 136.399 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 359.73 Mbit/s
95th percentile per-packet one-way delay: 117.125 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 369.27 Mbit/s
95th percentile per-packet one-way delay: 167.845 ms
Loss rate: 1.64%
```

Run 1: Report of TCP Cubic — Data Link

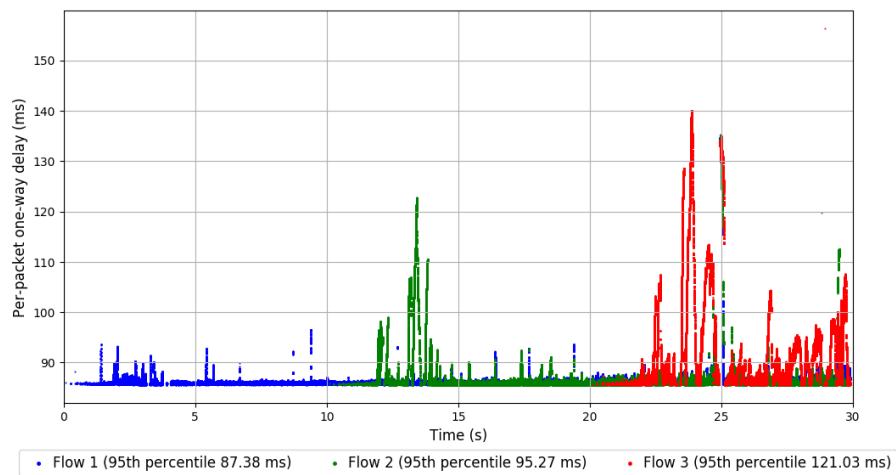
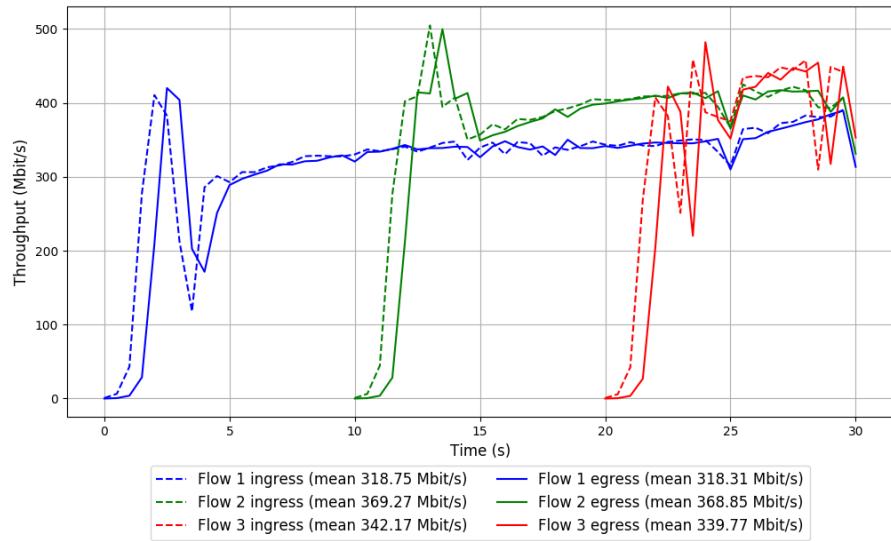


Run 2: Statistics of TCP Cubic

```
Start at: 2019-05-29 23:18:20
End at: 2019-05-29 23:18:50
Local clock offset: -0.2 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 674.89 Mbit/s
95th percentile per-packet one-way delay: 97.899 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 318.31 Mbit/s
95th percentile per-packet one-way delay: 87.384 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 368.85 Mbit/s
95th percentile per-packet one-way delay: 95.270 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 339.77 Mbit/s
95th percentile per-packet one-way delay: 121.031 ms
Loss rate: 2.41%
```

Run 2: Report of TCP Cubic — Data Link

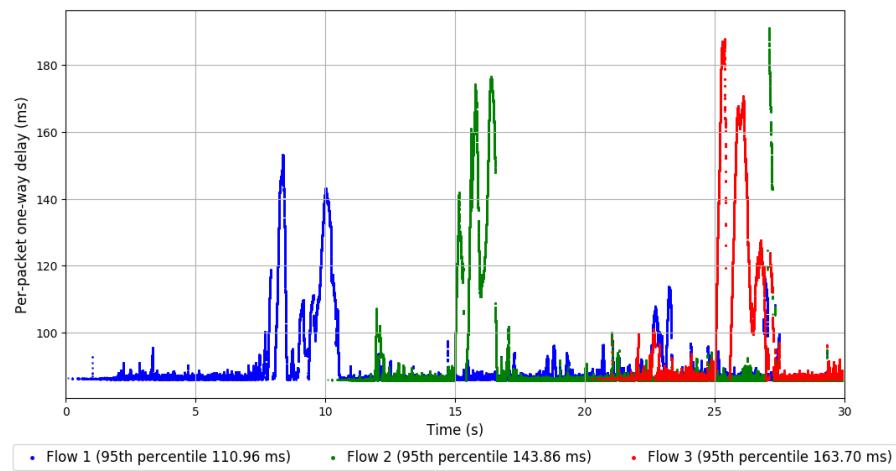
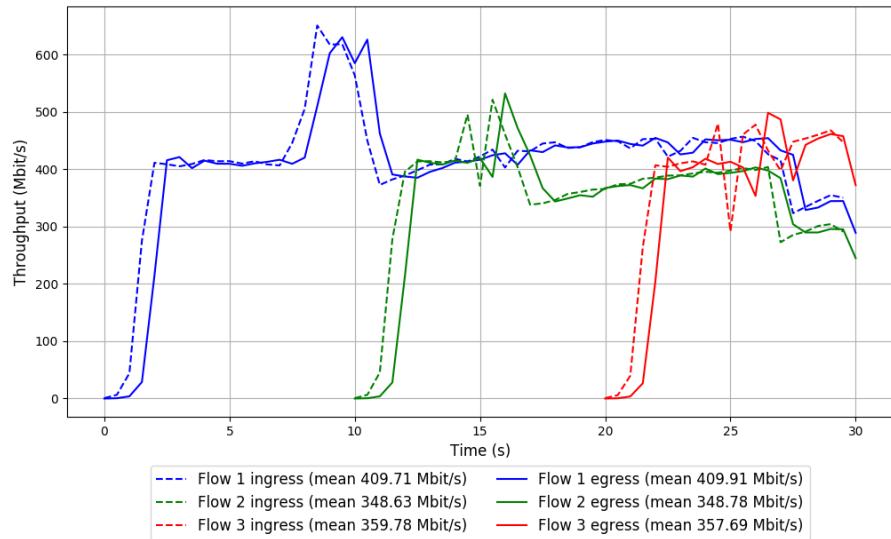


Run 3: Statistics of TCP Cubic

```
Start at: 2019-05-29 23:53:58
End at: 2019-05-29 23:54:28
Local clock offset: 0.031 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.05 Mbit/s
95th percentile per-packet one-way delay: 129.735 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 409.91 Mbit/s
95th percentile per-packet one-way delay: 110.964 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 348.78 Mbit/s
95th percentile per-packet one-way delay: 143.858 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 357.69 Mbit/s
95th percentile per-packet one-way delay: 163.702 ms
Loss rate: 2.30%
```

Run 3: Report of TCP Cubic — Data Link

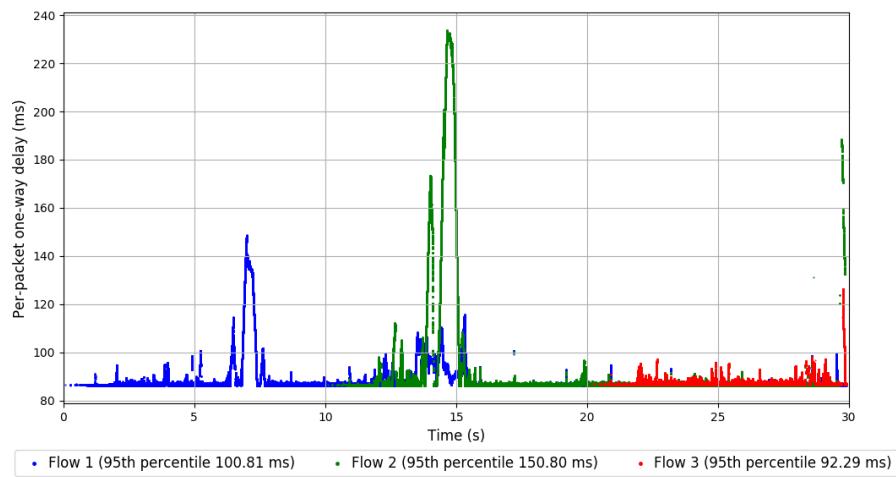
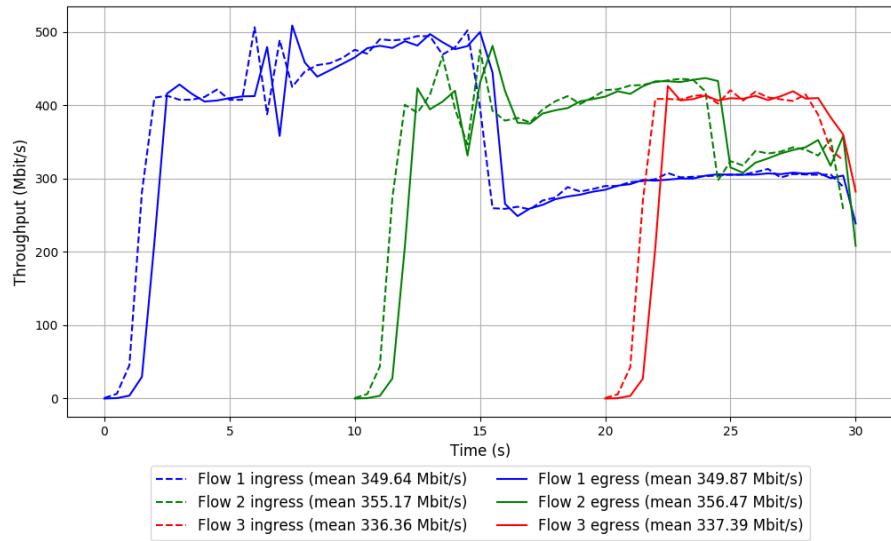


Run 4: Statistics of TCP Cubic

```
Start at: 2019-05-30 00:30:45
End at: 2019-05-30 00:31:15
Local clock offset: 0.387 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 696.89 Mbit/s
95th percentile per-packet one-way delay: 103.021 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 349.87 Mbit/s
95th percentile per-packet one-way delay: 100.812 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 356.47 Mbit/s
95th percentile per-packet one-way delay: 150.804 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 337.39 Mbit/s
95th percentile per-packet one-way delay: 92.287 ms
Loss rate: 1.44%
```

Run 4: Report of TCP Cubic — Data Link

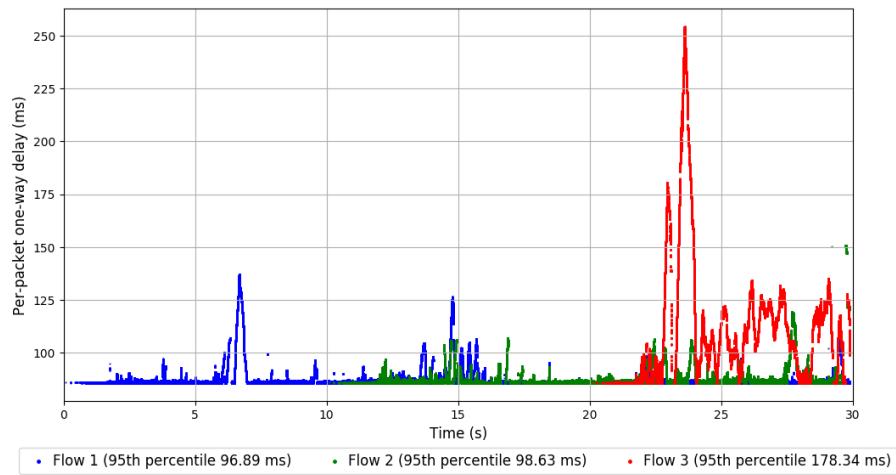
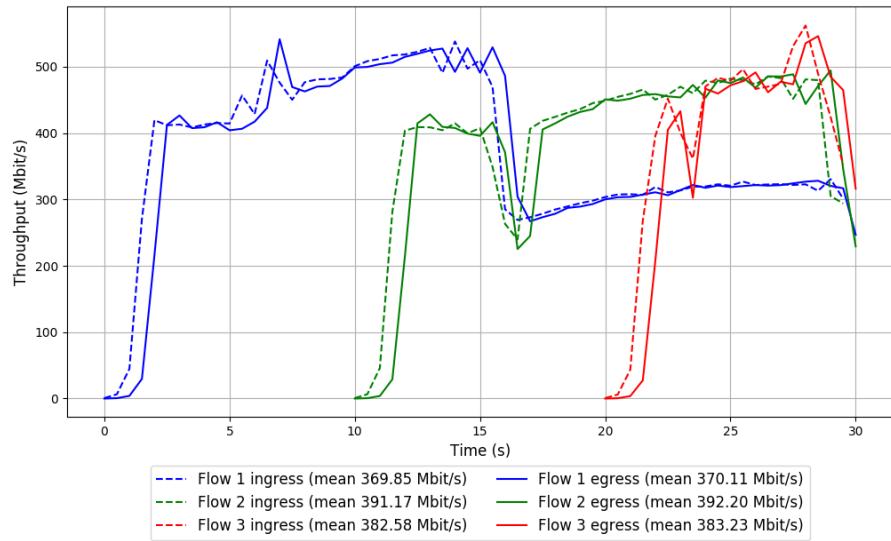


Run 5: Statistics of TCP Cubic

```
Start at: 2019-05-30 01:07:31
End at: 2019-05-30 01:08:01
Local clock offset: -0.201 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-05-30 02:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.37 Mbit/s
95th percentile per-packet one-way delay: 119.851 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 370.11 Mbit/s
95th percentile per-packet one-way delay: 96.885 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 392.20 Mbit/s
95th percentile per-packet one-way delay: 98.629 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 383.23 Mbit/s
95th percentile per-packet one-way delay: 178.343 ms
Loss rate: 1.57%
```

Run 5: Report of TCP Cubic — Data Link

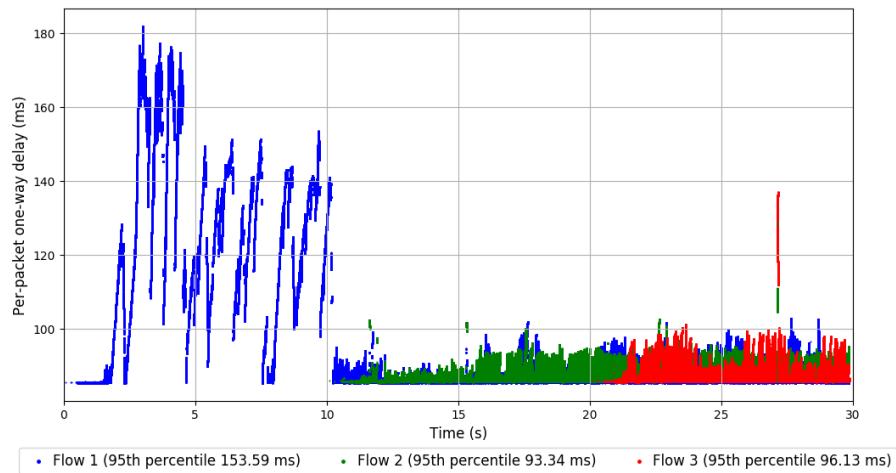
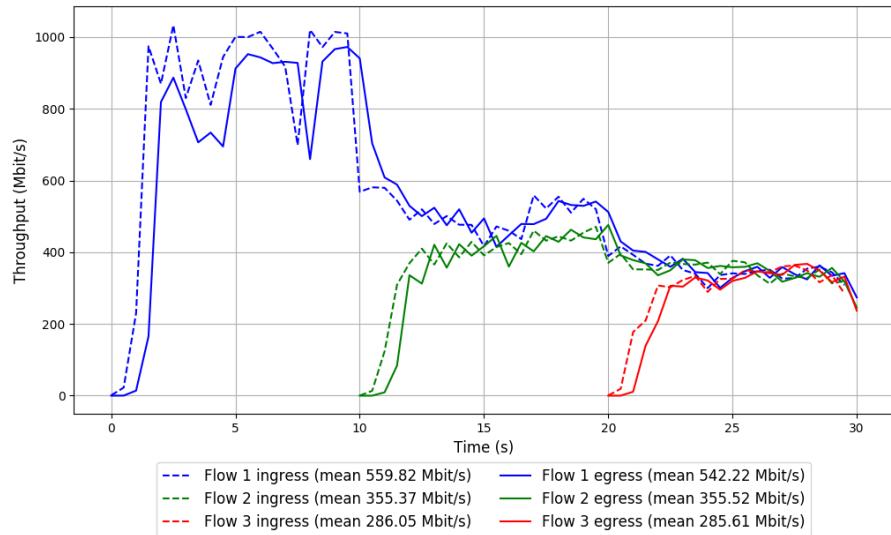


```
Run 1: Statistics of FillP

Start at: 2019-05-29 22:48:48
End at: 2019-05-29 22:49:18
Local clock offset: -0.021 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-05-30 02:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 871.29 Mbit/s
95th percentile per-packet one-way delay: 143.814 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 542.22 Mbit/s
95th percentile per-packet one-way delay: 153.588 ms
Loss rate: 3.68%
-- Flow 2:
Average throughput: 355.52 Mbit/s
95th percentile per-packet one-way delay: 93.336 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 285.61 Mbit/s
95th percentile per-packet one-way delay: 96.126 ms
Loss rate: 1.91%
```

Run 1: Report of FillP — Data Link

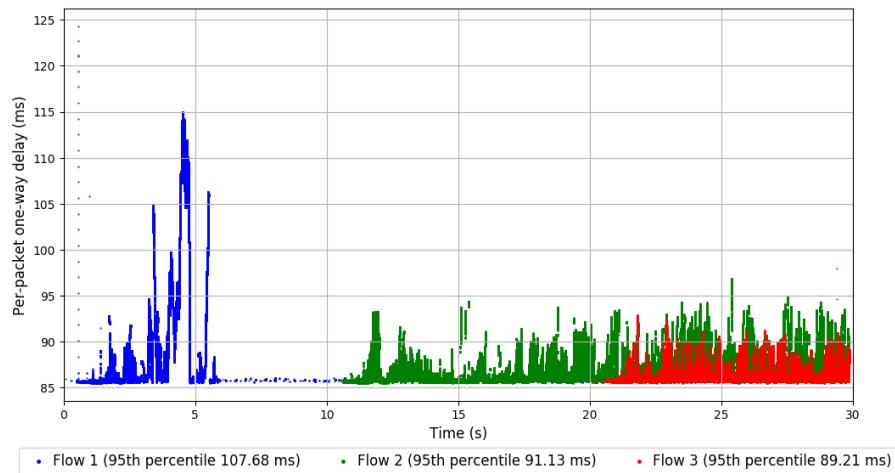
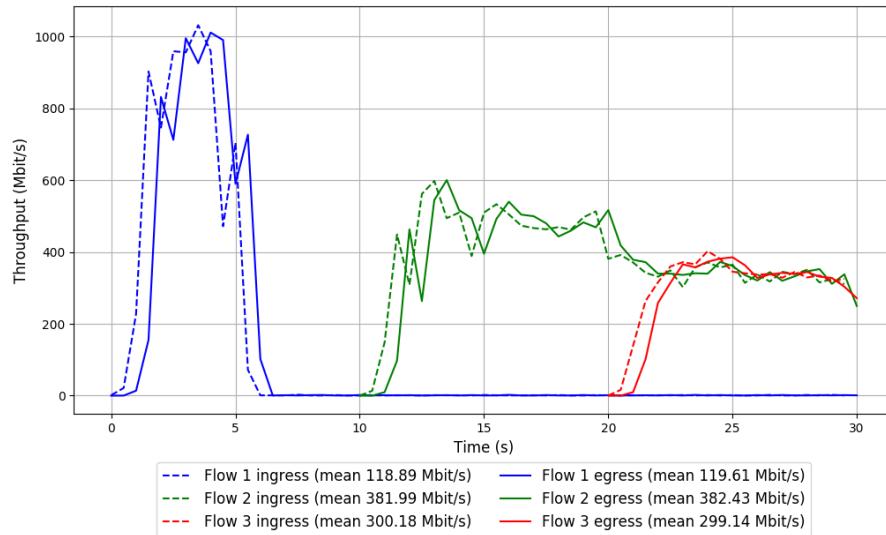


Run 2: Statistics of FillP

```
Start at: 2019-05-29 23:25:14
End at: 2019-05-29 23:25:44
Local clock offset: -0.248 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2019-05-30 02:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.85 Mbit/s
95th percentile per-packet one-way delay: 94.271 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 119.61 Mbit/s
95th percentile per-packet one-way delay: 107.683 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 382.43 Mbit/s
95th percentile per-packet one-way delay: 91.130 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 299.14 Mbit/s
95th percentile per-packet one-way delay: 89.211 ms
Loss rate: 2.08%
```

Run 2: Report of FillP — Data Link

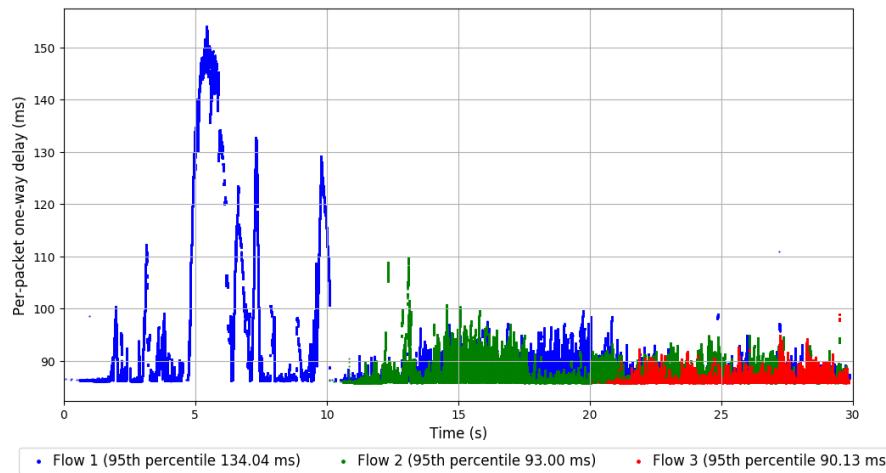
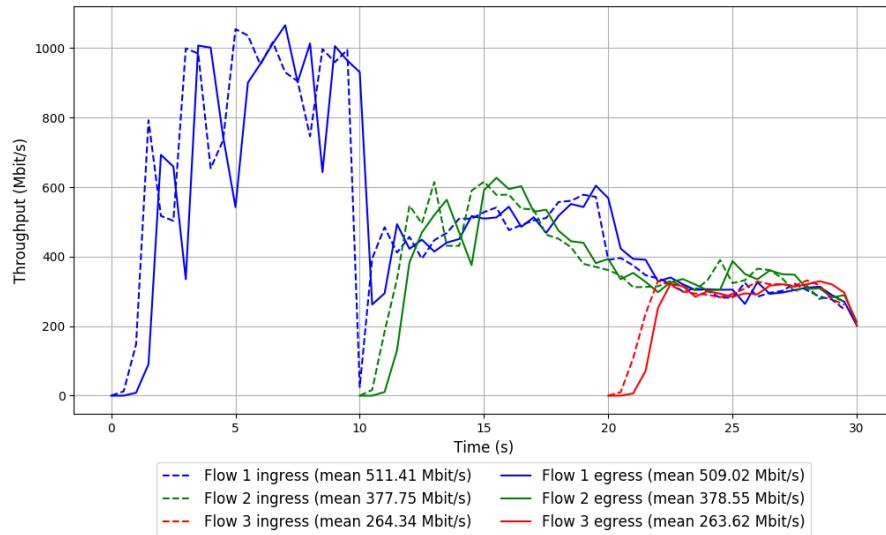


Run 3: Statistics of FillP

```
Start at: 2019-05-30 00:01:03
End at: 2019-05-30 00:01:33
Local clock offset: 0.046 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-05-30 02:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.43 Mbit/s
95th percentile per-packet one-way delay: 124.202 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 509.02 Mbit/s
95th percentile per-packet one-way delay: 134.040 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 378.55 Mbit/s
95th percentile per-packet one-way delay: 92.999 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 263.62 Mbit/s
95th percentile per-packet one-way delay: 90.132 ms
Loss rate: 2.08%
```

Run 3: Report of FillP — Data Link

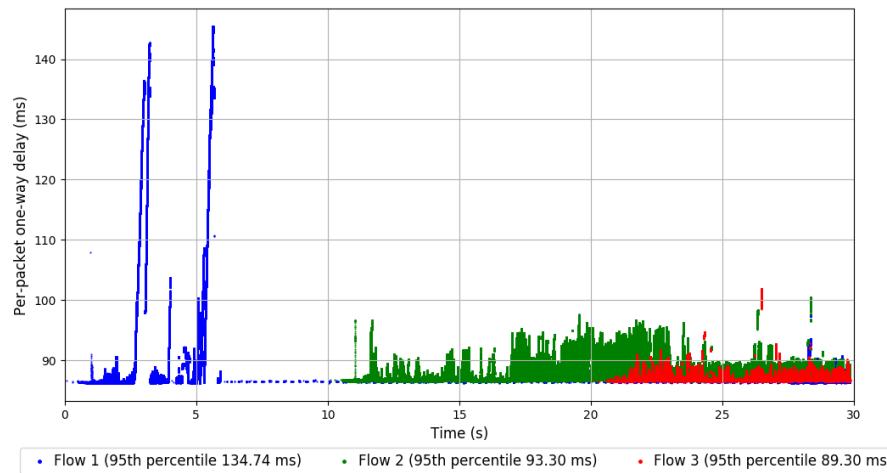
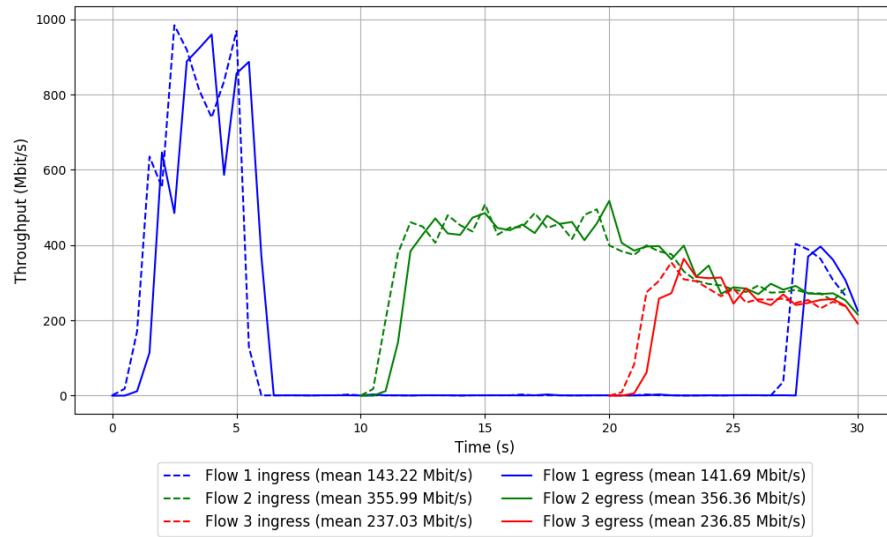


```
Run 4: Statistics of FillP
```

```
Start at: 2019-05-30 00:37:48
End at: 2019-05-30 00:38:18
Local clock offset: 0.353 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2019-05-30 02:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.77 Mbit/s
95th percentile per-packet one-way delay: 104.887 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 141.69 Mbit/s
95th percentile per-packet one-way delay: 134.737 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 356.36 Mbit/s
95th percentile per-packet one-way delay: 93.300 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 236.85 Mbit/s
95th percentile per-packet one-way delay: 89.295 ms
Loss rate: 1.82%
```

Run 4: Report of FillP — Data Link

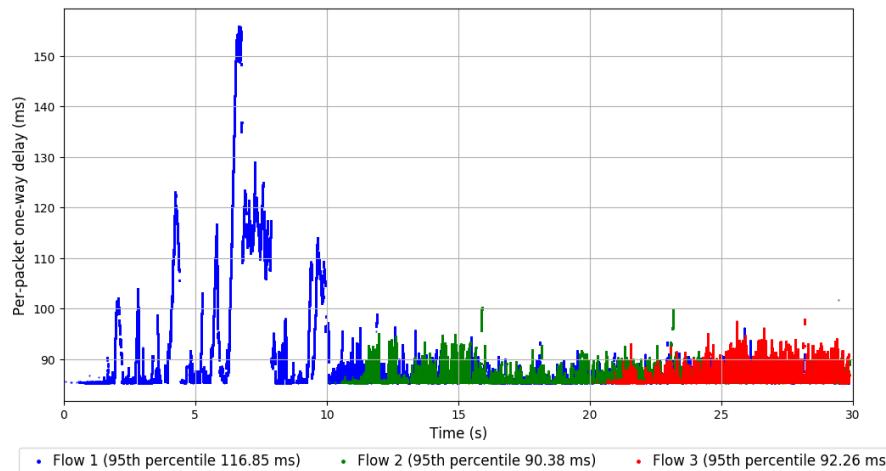
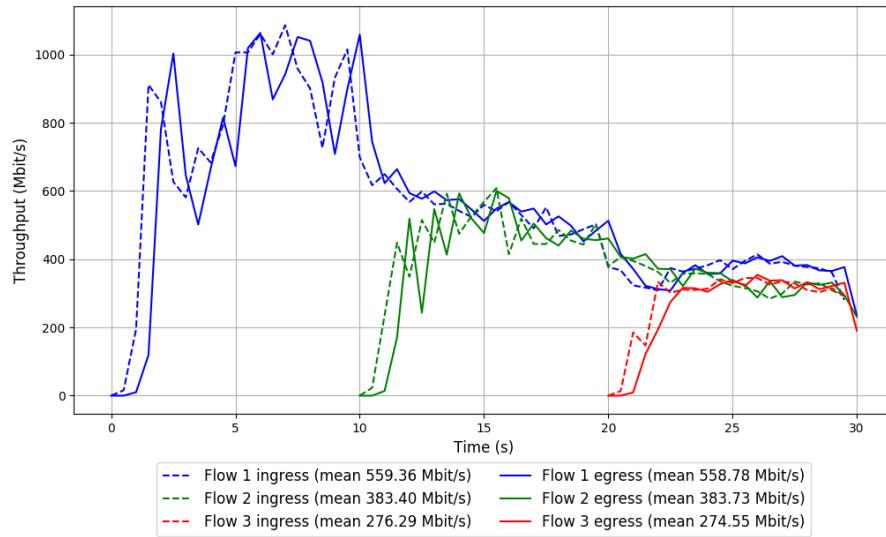


```
Run 5: Statistics of FillP
```

```
Start at: 2019-05-30 01:14:40
End at: 2019-05-30 01:15:10
Local clock offset: -0.36 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 902.80 Mbit/s
95th percentile per-packet one-way delay: 113.218 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 558.78 Mbit/s
95th percentile per-packet one-way delay: 116.853 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 383.73 Mbit/s
95th percentile per-packet one-way delay: 90.376 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 274.55 Mbit/s
95th percentile per-packet one-way delay: 92.263 ms
Loss rate: 2.42%
```

Run 5: Report of FillP — Data Link

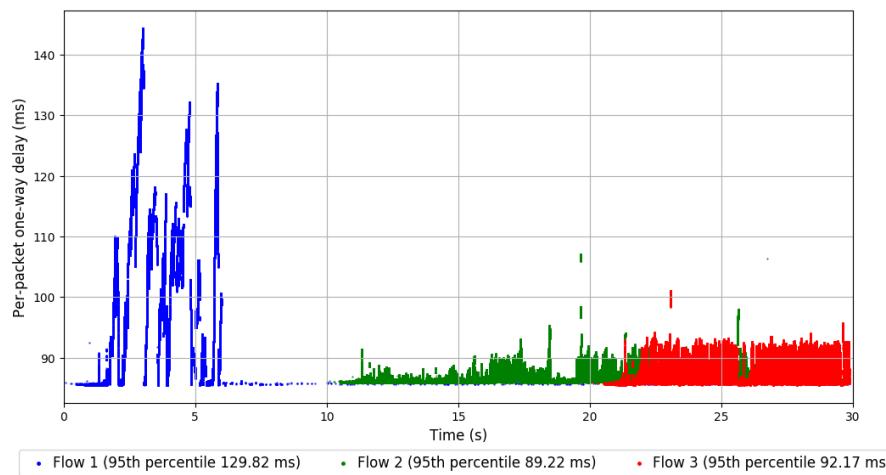
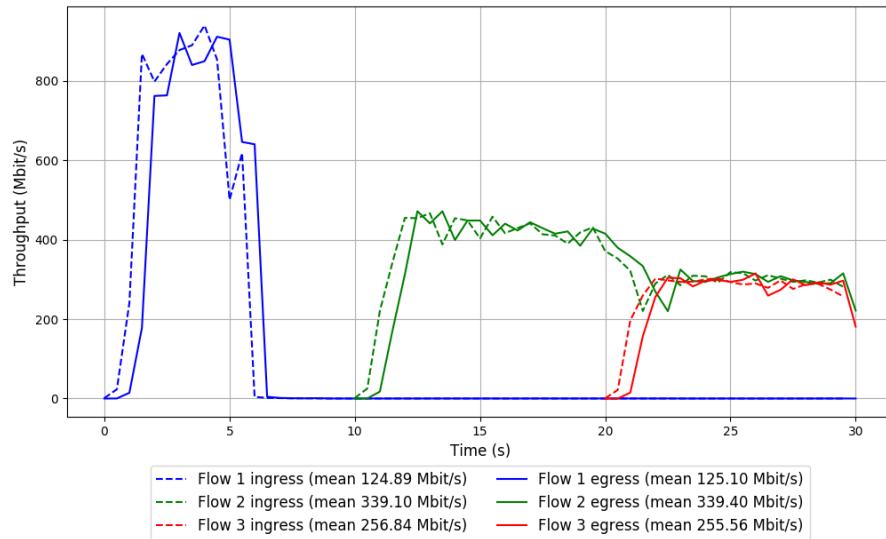


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-05-29 22:36:08
End at: 2019-05-29 22:36:38
Local clock offset: 0.677 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.90 Mbit/s
95th percentile per-packet one-way delay: 116.907 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 125.10 Mbit/s
95th percentile per-packet one-way delay: 129.825 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 339.40 Mbit/s
95th percentile per-packet one-way delay: 89.224 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 255.56 Mbit/s
95th percentile per-packet one-way delay: 92.167 ms
Loss rate: 2.02%
```

Run 1: Report of FillP-Sheep — Data Link

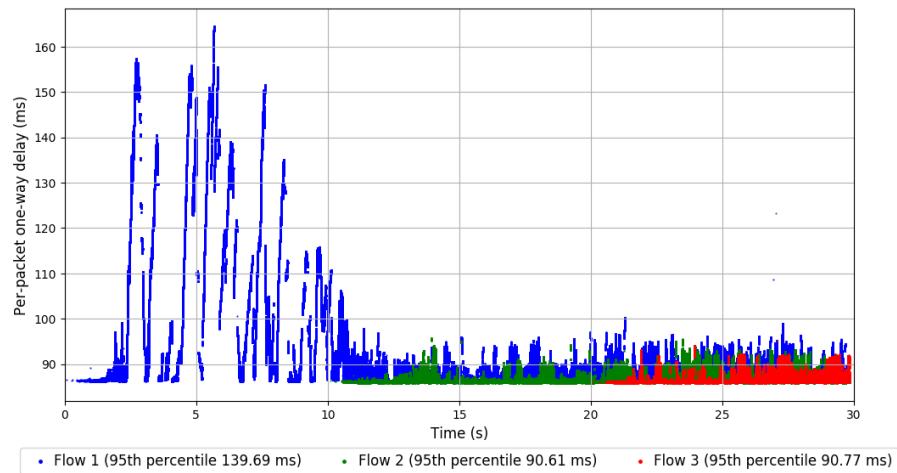
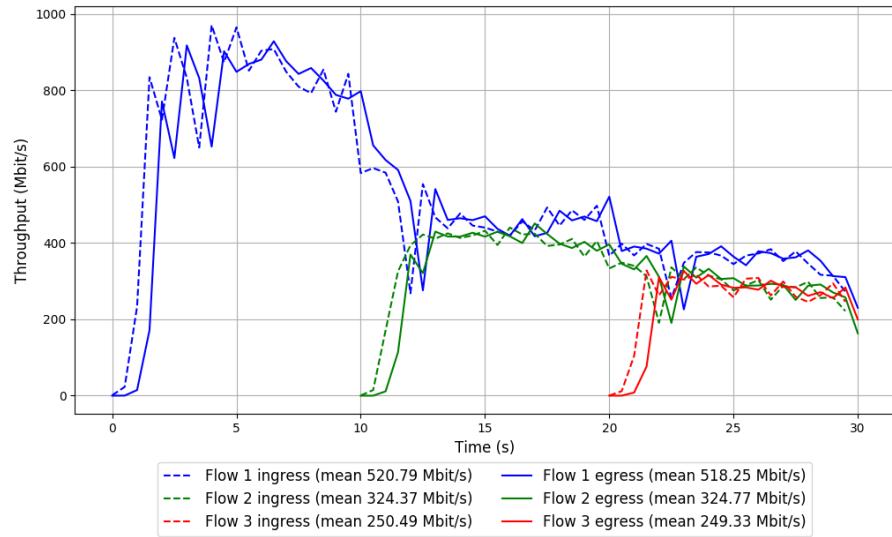


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-05-29 23:12:16
End at: 2019-05-29 23:12:46
Local clock offset: 0.054 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 815.14 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 518.25 Mbit/s
95th percentile per-packet one-way delay: 139.687 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 324.77 Mbit/s
95th percentile per-packet one-way delay: 90.613 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 249.33 Mbit/s
95th percentile per-packet one-way delay: 90.770 ms
Loss rate: 1.98%
```

Run 2: Report of FillP-Sheep — Data Link

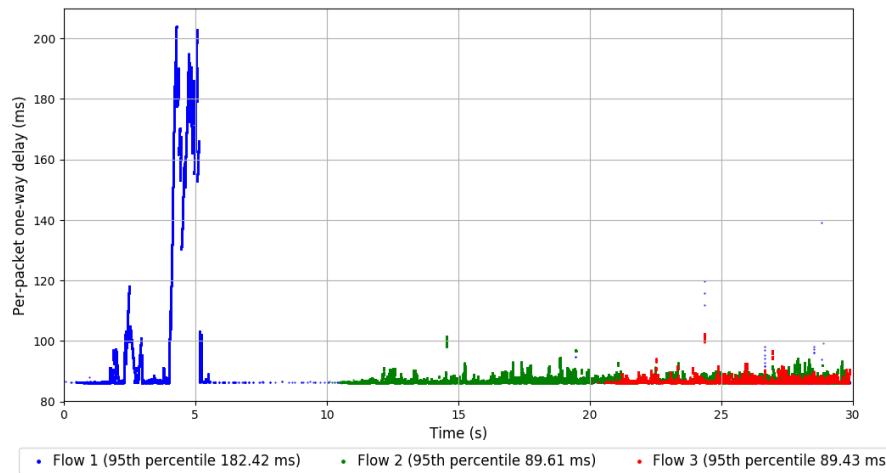
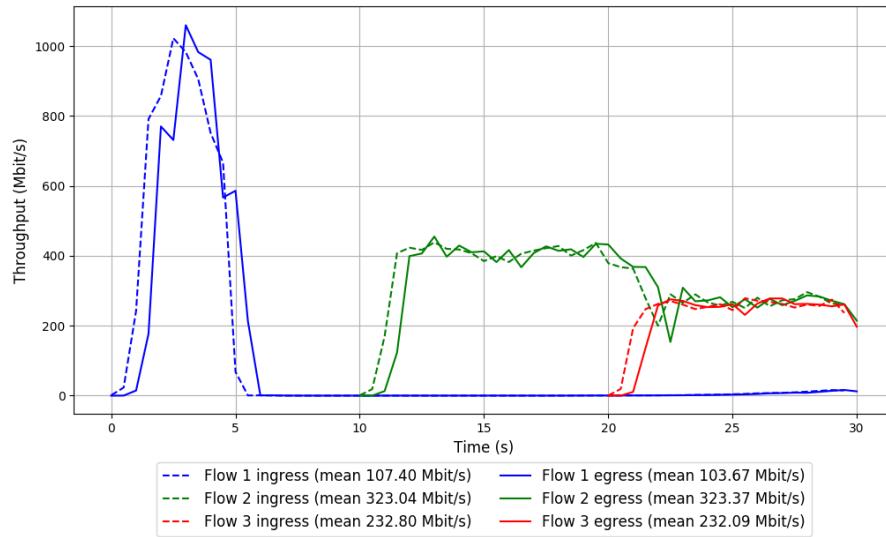


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-05-29 23:48:21
End at: 2019-05-29 23:48:51
Local clock offset: 0.319 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 394.20 Mbit/s
95th percentile per-packet one-way delay: 131.355 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 103.67 Mbit/s
95th percentile per-packet one-way delay: 182.419 ms
Loss rate: 3.96%
-- Flow 2:
Average throughput: 323.37 Mbit/s
95th percentile per-packet one-way delay: 89.609 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 232.09 Mbit/s
95th percentile per-packet one-way delay: 89.433 ms
Loss rate: 2.05%
```

Run 3: Report of FillP-Sheep — Data Link

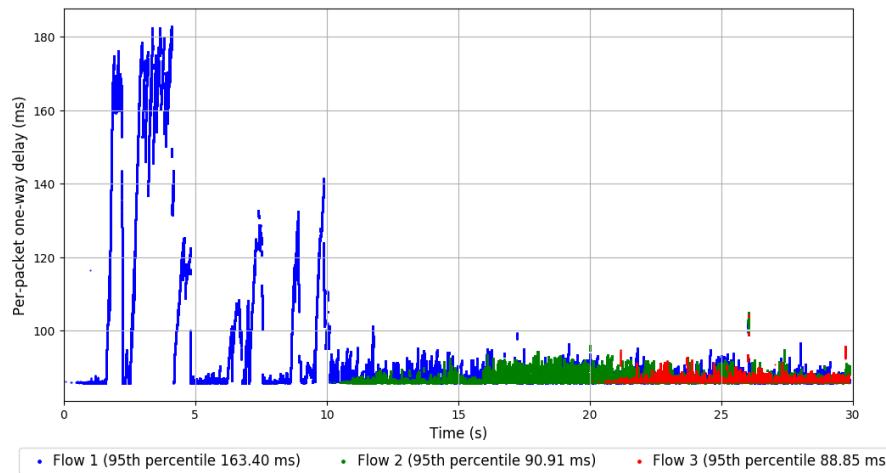
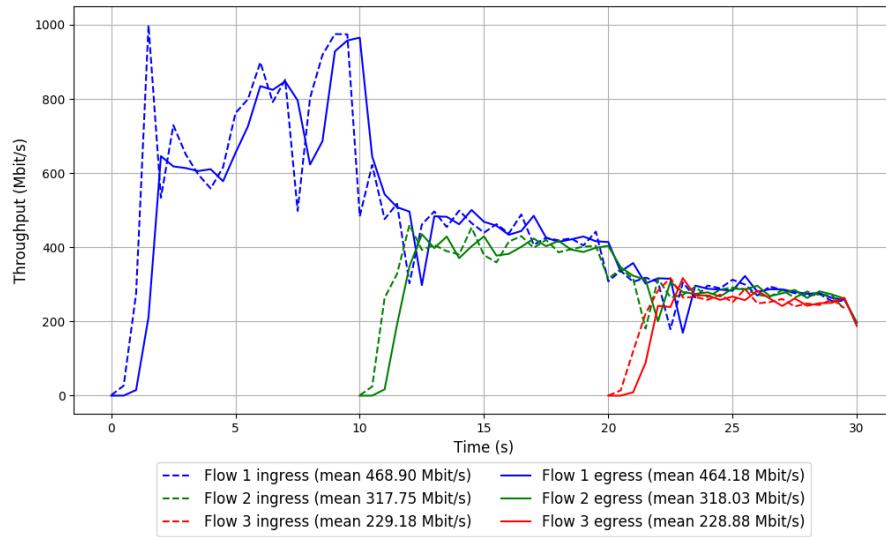


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-05-30 00:24:46
End at: 2019-05-30 00:25:16
Local clock offset: -0.034 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-05-30 02:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.21 Mbit/s
95th percentile per-packet one-way delay: 138.586 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 464.18 Mbit/s
95th percentile per-packet one-way delay: 163.404 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 318.03 Mbit/s
95th percentile per-packet one-way delay: 90.911 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 228.88 Mbit/s
95th percentile per-packet one-way delay: 88.850 ms
Loss rate: 1.88%
```

Run 4: Report of FillP-Sheep — Data Link

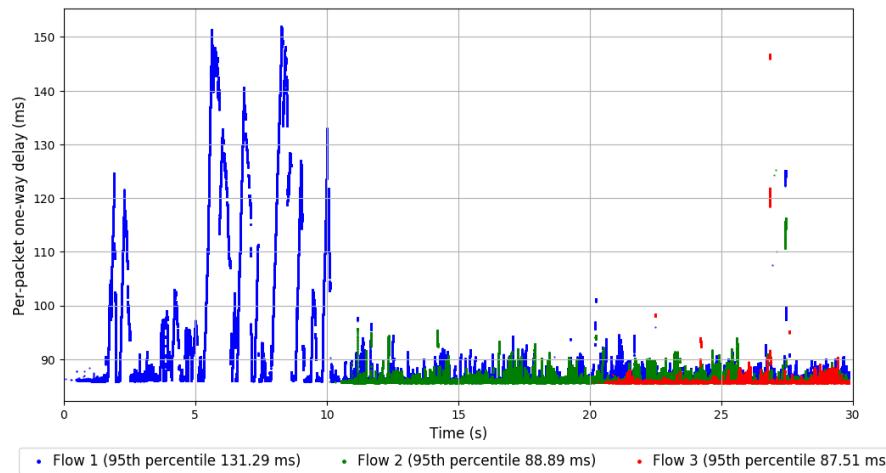
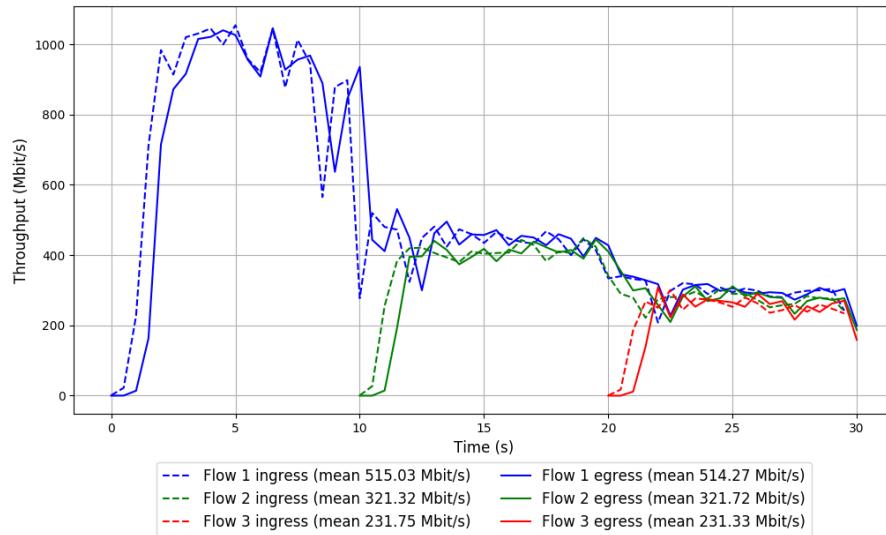


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-05-30 01:01:25
End at: 2019-05-30 01:01:55
Local clock offset: -0.194 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2019-05-30 02:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 803.18 Mbit/s
95th percentile per-packet one-way delay: 125.401 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 514.27 Mbit/s
95th percentile per-packet one-way delay: 131.290 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 321.72 Mbit/s
95th percentile per-packet one-way delay: 88.894 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 231.33 Mbit/s
95th percentile per-packet one-way delay: 87.512 ms
Loss rate: 1.96%
```

Run 5: Report of FillP-Sheep — Data Link

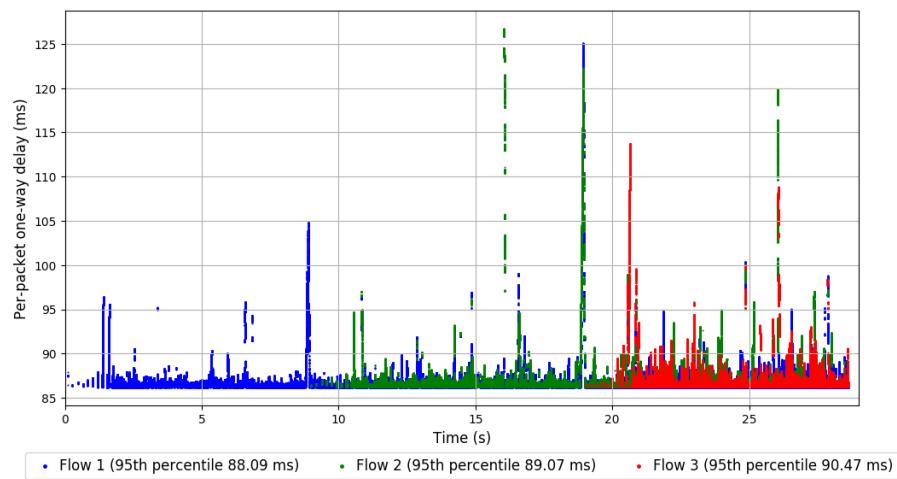
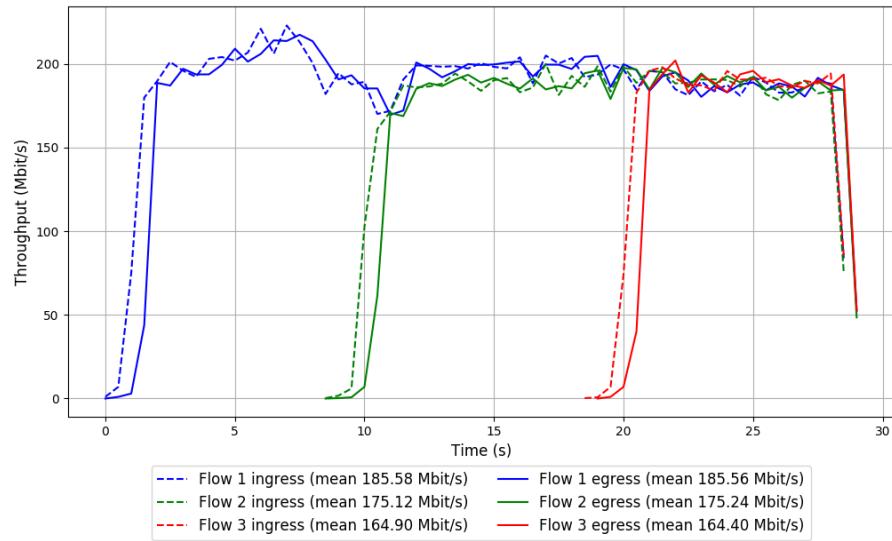


Run 1: Statistics of Indigo

```
Start at: 2019-05-29 22:46:58
End at: 2019-05-29 22:47:28
Local clock offset: 0.88 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-05-30 02:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.16 Mbit/s
95th percentile per-packet one-way delay: 88.745 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 185.56 Mbit/s
95th percentile per-packet one-way delay: 88.086 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 175.24 Mbit/s
95th percentile per-packet one-way delay: 89.066 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 164.40 Mbit/s
95th percentile per-packet one-way delay: 90.473 ms
Loss rate: 2.07%
```

Run 1: Report of Indigo — Data Link

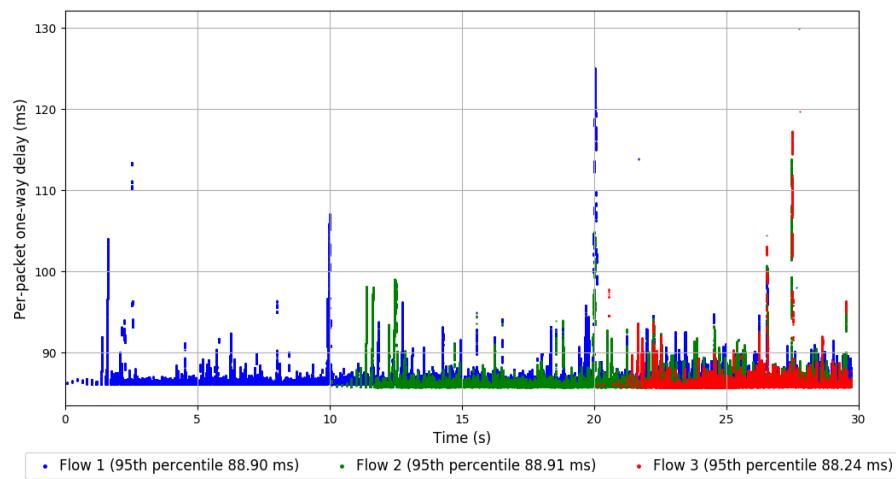
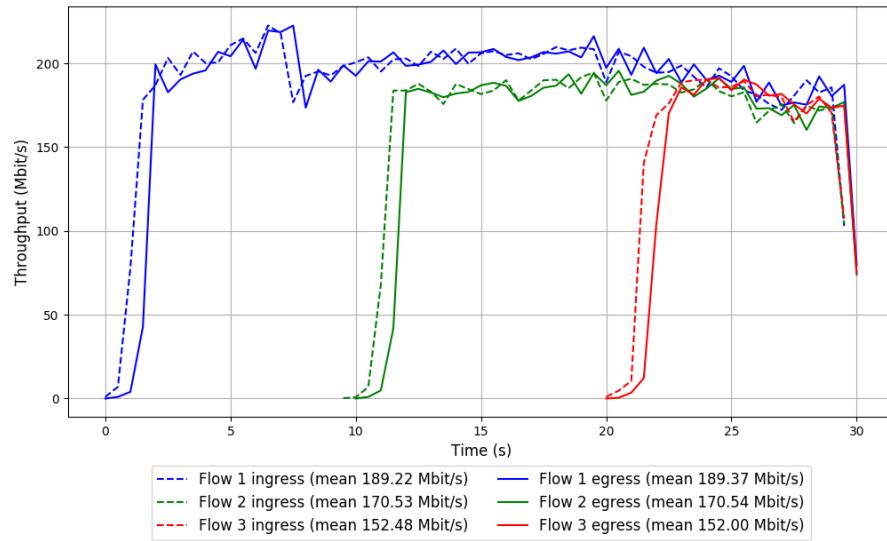


Run 2: Statistics of Indigo

```
Start at: 2019-05-29 23:23:23
End at: 2019-05-29 23:23:53
Local clock offset: -0.015 ms
Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2019-05-30 02:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.44 Mbit/s
95th percentile per-packet one-way delay: 88.795 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 189.37 Mbit/s
95th percentile per-packet one-way delay: 88.898 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 170.54 Mbit/s
95th percentile per-packet one-way delay: 88.906 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 152.00 Mbit/s
95th percentile per-packet one-way delay: 88.236 ms
Loss rate: 2.06%
```

Run 2: Report of Indigo — Data Link

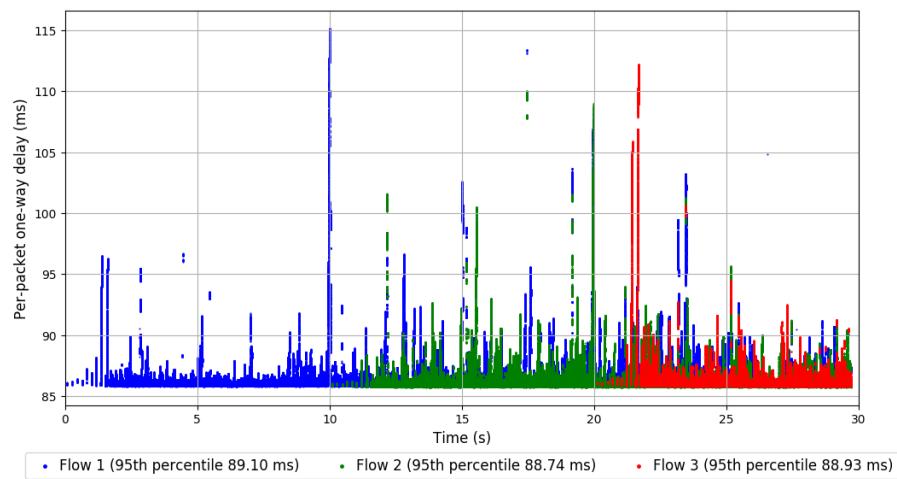
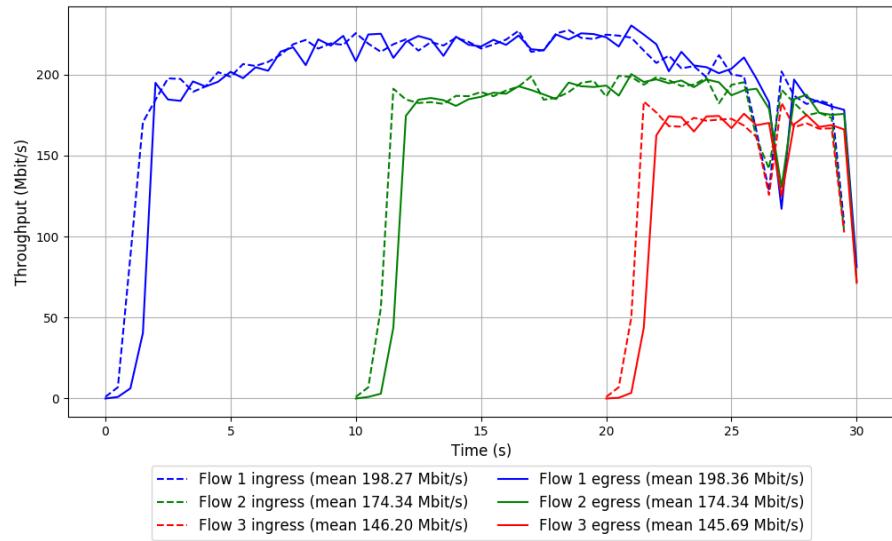


Run 3: Statistics of Indigo

```
Start at: 2019-05-29 23:59:10
End at: 2019-05-29 23:59:40
Local clock offset: 0.001 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-05-30 02:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.93 Mbit/s
95th percentile per-packet one-way delay: 88.927 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 198.36 Mbit/s
95th percentile per-packet one-way delay: 89.102 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 174.34 Mbit/s
95th percentile per-packet one-way delay: 88.738 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 145.69 Mbit/s
95th percentile per-packet one-way delay: 88.927 ms
Loss rate: 2.06%
```

Run 3: Report of Indigo — Data Link

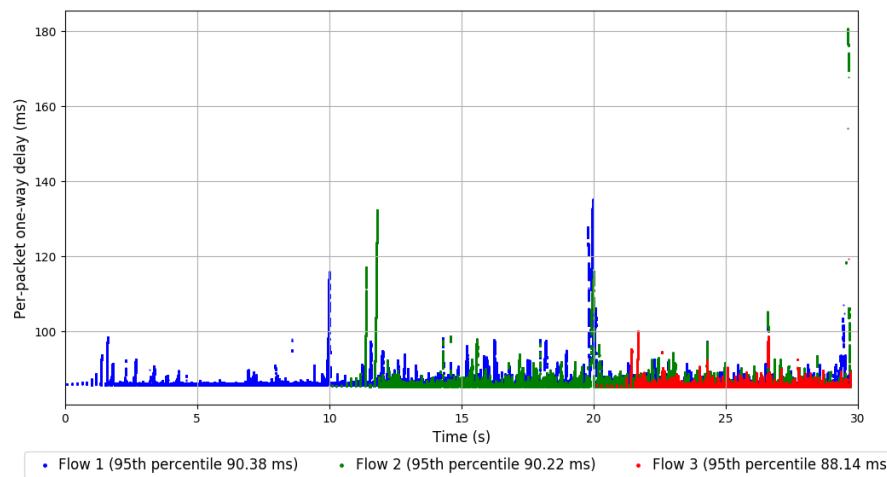
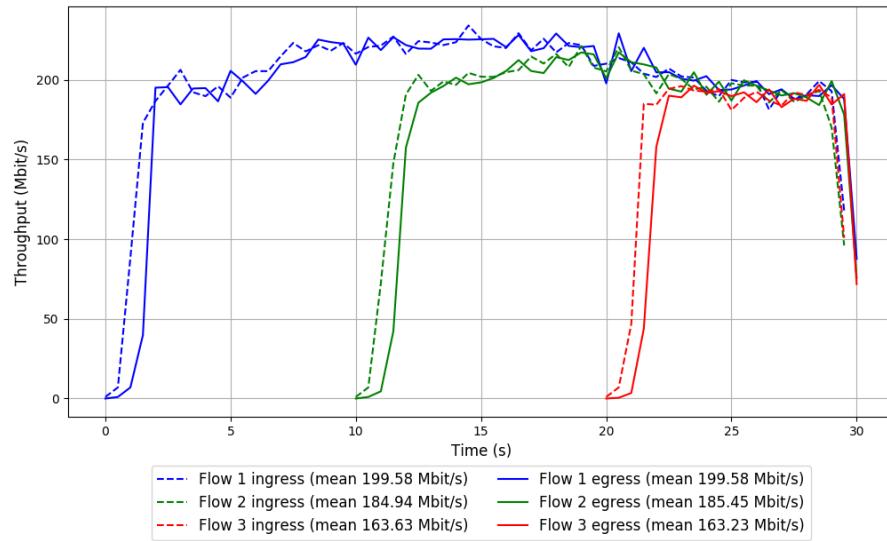


Run 4: Statistics of Indigo

```
Start at: 2019-05-30 00:35:55
End at: 2019-05-30 00:36:25
Local clock offset: -0.484 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-05-30 02:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.26 Mbit/s
95th percentile per-packet one-way delay: 89.976 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 199.58 Mbit/s
95th percentile per-packet one-way delay: 90.376 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 185.45 Mbit/s
95th percentile per-packet one-way delay: 90.215 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 163.23 Mbit/s
95th percentile per-packet one-way delay: 88.135 ms
Loss rate: 2.00%
```

Run 4: Report of Indigo — Data Link

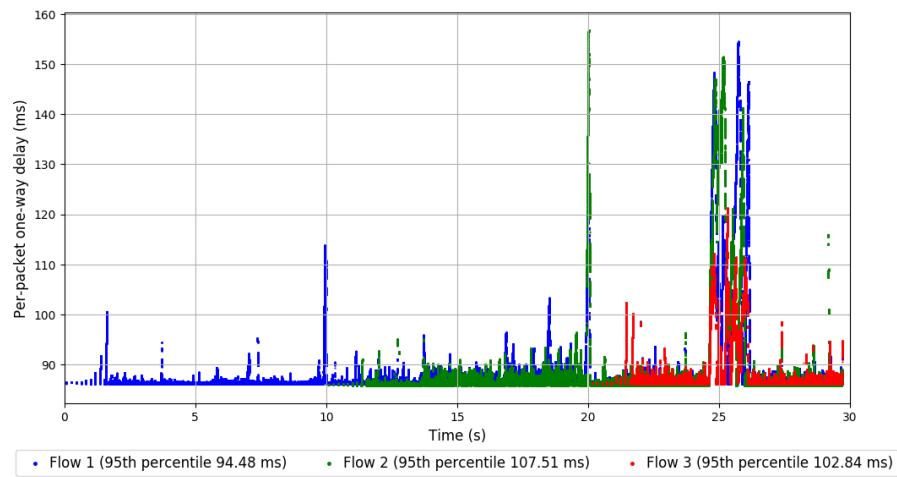
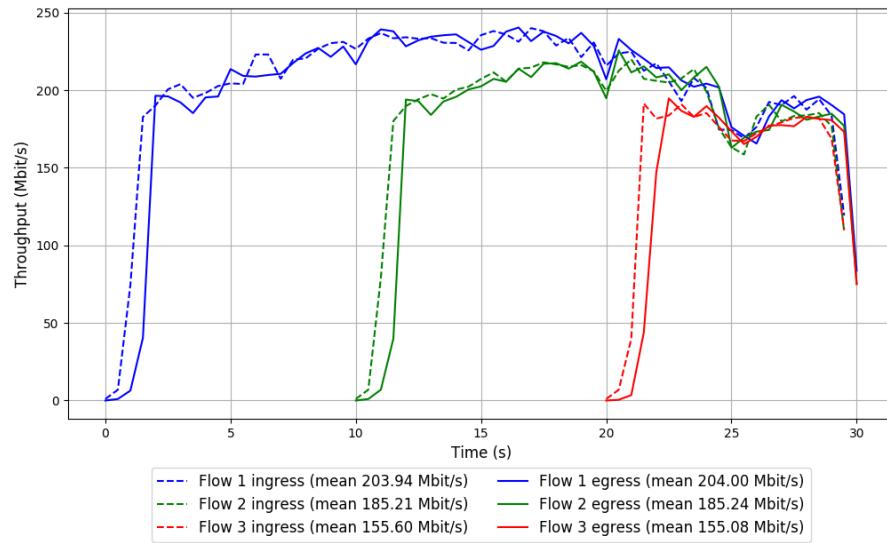


Run 5: Statistics of Indigo

```
Start at: 2019-05-30 01:12:46
End at: 2019-05-30 01:13:16
Local clock offset: 0.036 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-05-30 02:55:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.75 Mbit/s
95th percentile per-packet one-way delay: 100.650 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 204.00 Mbit/s
95th percentile per-packet one-way delay: 94.483 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 185.24 Mbit/s
95th percentile per-packet one-way delay: 107.507 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 155.08 Mbit/s
95th percentile per-packet one-way delay: 102.840 ms
Loss rate: 2.10%
```

Run 5: Report of Indigo — Data Link

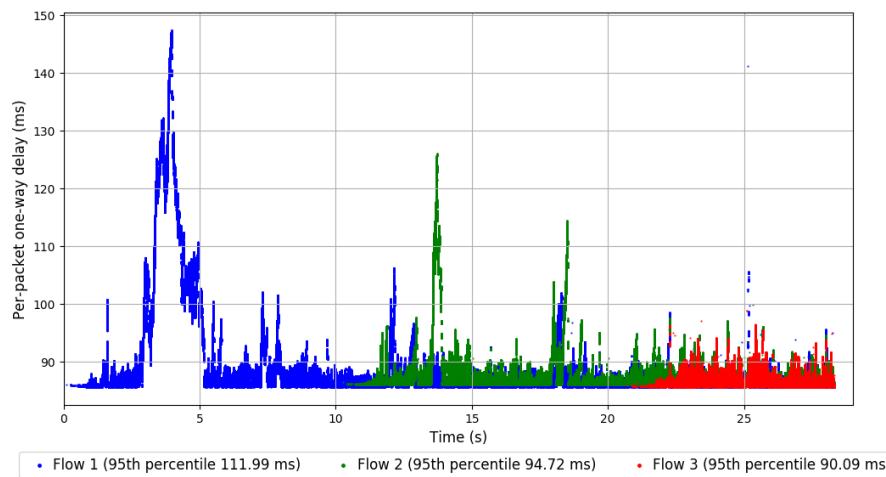
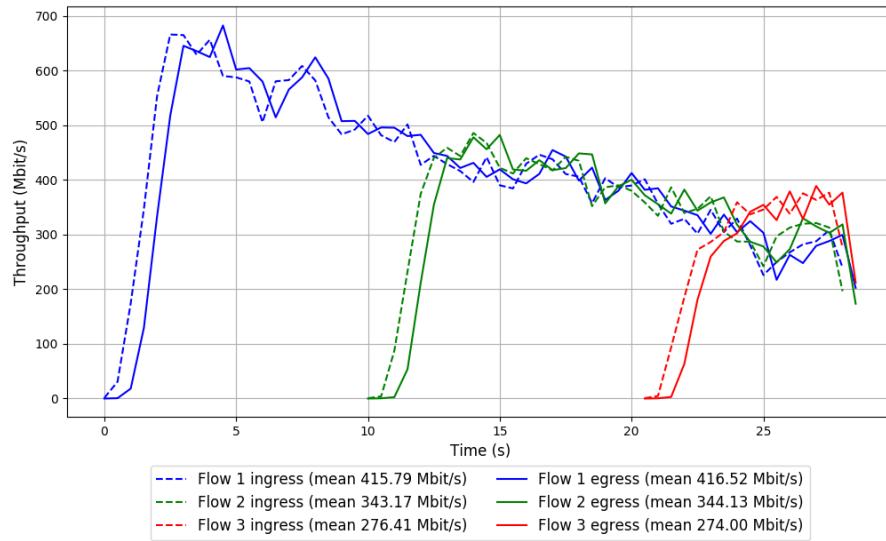


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-05-29 22:59:18
End at: 2019-05-29 22:59:48
Local clock offset: -0.092 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-05-30 02:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.27 Mbit/s
95th percentile per-packet one-way delay: 104.539 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 416.52 Mbit/s
95th percentile per-packet one-way delay: 111.992 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 344.13 Mbit/s
95th percentile per-packet one-way delay: 94.723 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 274.00 Mbit/s
95th percentile per-packet one-way delay: 90.094 ms
Loss rate: 3.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

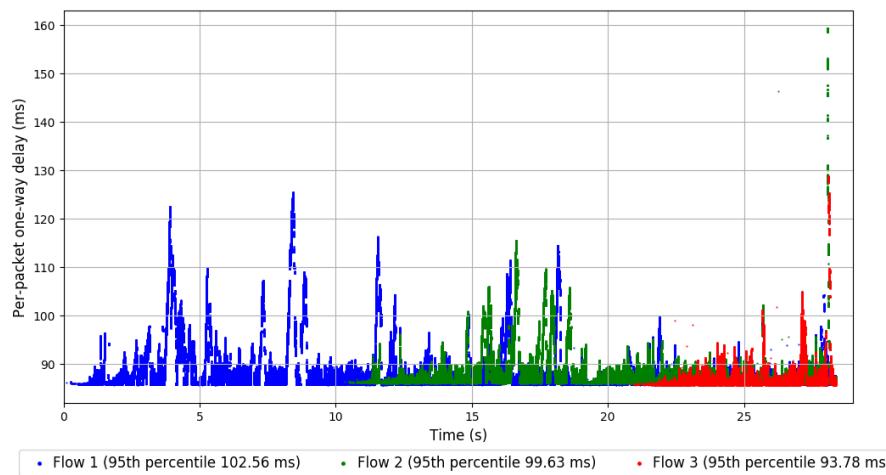
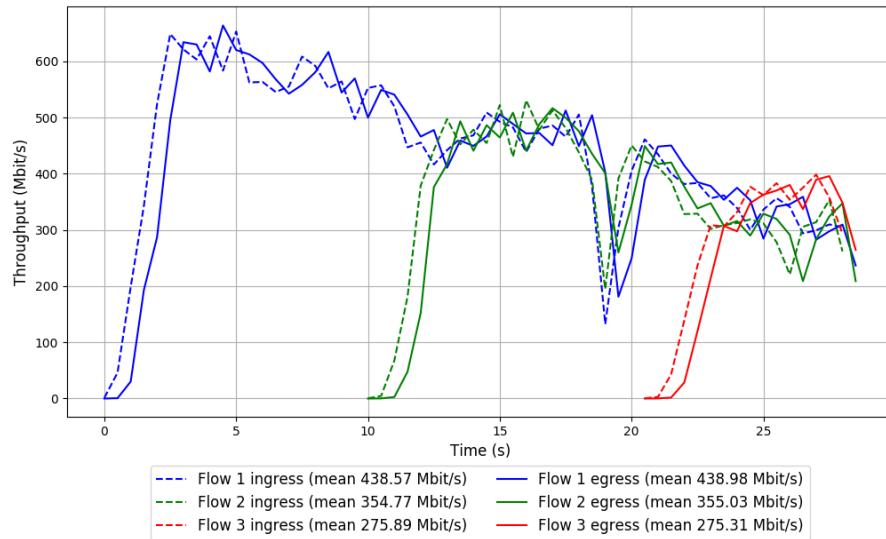


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-05-29 23:35:13
End at: 2019-05-29 23:35:43
Local clock offset: -0.016 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-05-30 02:59:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 739.23 Mbit/s
95th percentile per-packet one-way delay: 100.562 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 438.98 Mbit/s
95th percentile per-packet one-way delay: 102.555 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 355.03 Mbit/s
95th percentile per-packet one-way delay: 99.626 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 275.31 Mbit/s
95th percentile per-packet one-way delay: 93.782 ms
Loss rate: 2.43%
```

Run 2: Report of Indigo-MusesC3 — Data Link

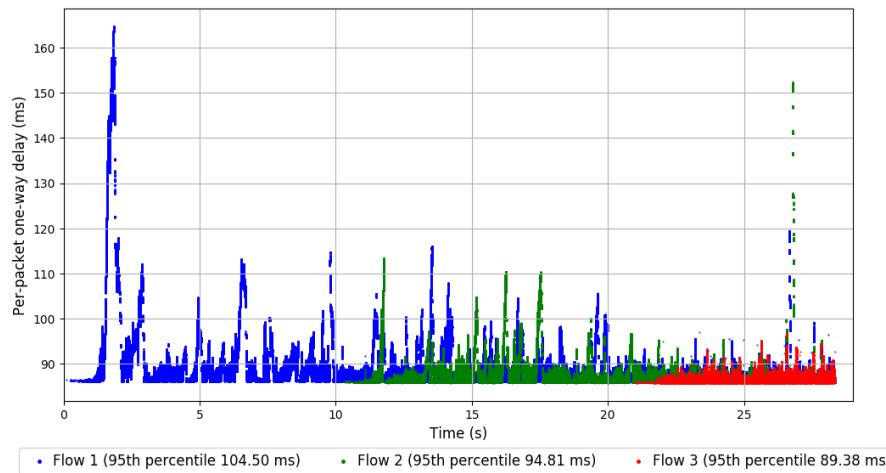
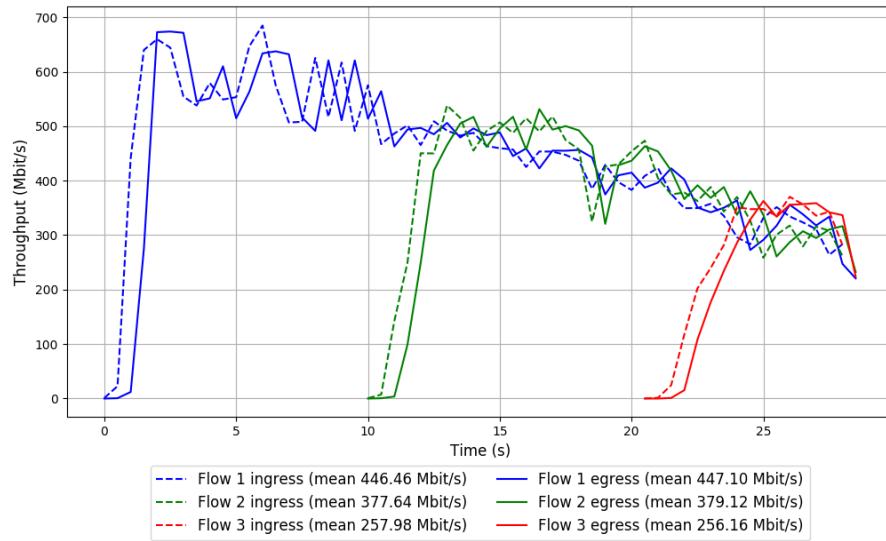


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 00:11:41
End at: 2019-05-30 00:12:11
Local clock offset: 0.036 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-05-30 03:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 758.26 Mbit/s
95th percentile per-packet one-way delay: 99.936 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 447.10 Mbit/s
95th percentile per-packet one-way delay: 104.497 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 379.12 Mbit/s
95th percentile per-packet one-way delay: 94.814 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 256.16 Mbit/s
95th percentile per-packet one-way delay: 89.381 ms
Loss rate: 2.95%
```

Run 3: Report of Indigo-MusesC3 — Data Link

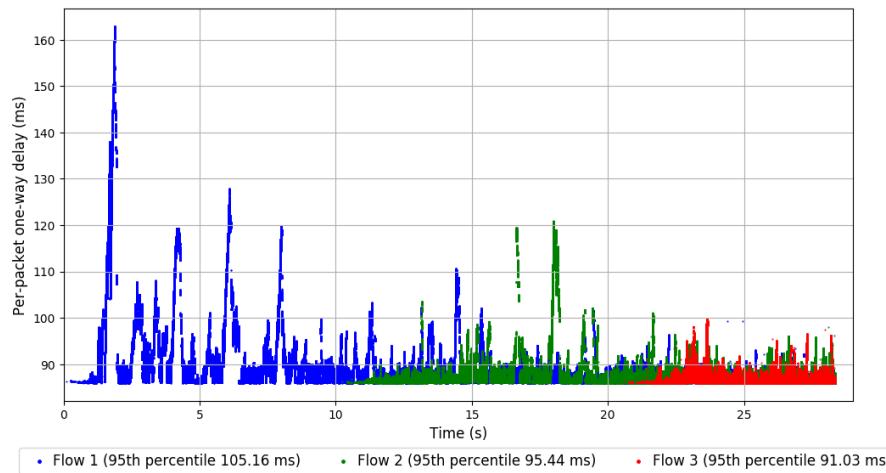
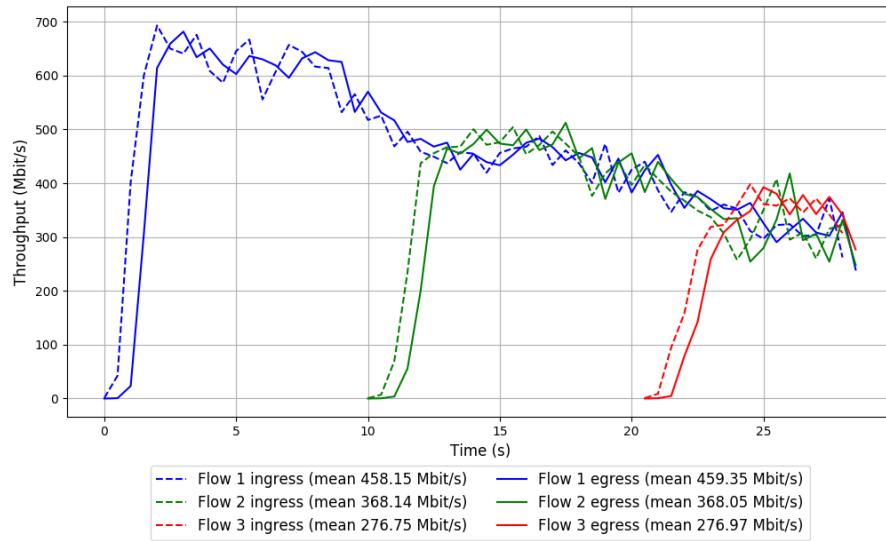


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 00:48:15
End at: 2019-05-30 00:48:45
Local clock offset: 0.121 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2019-05-30 03:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 771.28 Mbit/s
95th percentile per-packet one-way delay: 100.658 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 459.35 Mbit/s
95th percentile per-packet one-way delay: 105.162 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 368.05 Mbit/s
95th percentile per-packet one-way delay: 95.443 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 276.97 Mbit/s
95th percentile per-packet one-way delay: 91.034 ms
Loss rate: 2.09%
```

Run 4: Report of Indigo-MusesC3 — Data Link

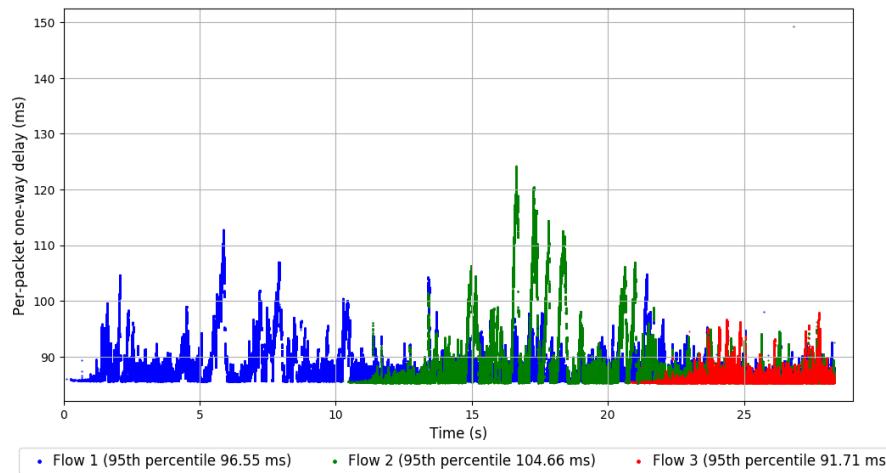
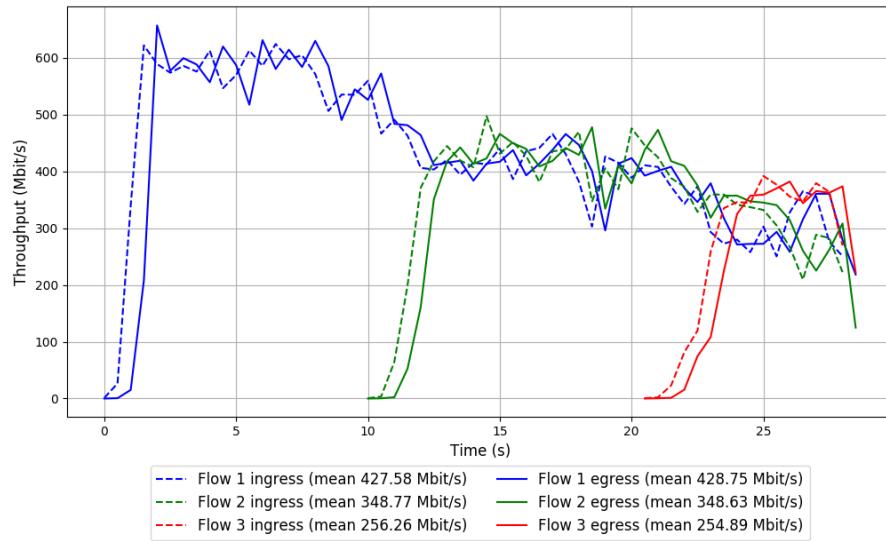


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-05-30 01:25:27
End at: 2019-05-30 01:25:57
Local clock offset: -0.356 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-05-30 03:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.43 Mbit/s
95th percentile per-packet one-way delay: 98.329 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 428.75 Mbit/s
95th percentile per-packet one-way delay: 96.549 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 348.63 Mbit/s
95th percentile per-packet one-way delay: 104.664 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 254.89 Mbit/s
95th percentile per-packet one-way delay: 91.714 ms
Loss rate: 2.75%
```

Run 5: Report of Indigo-MusesC3 — Data Link

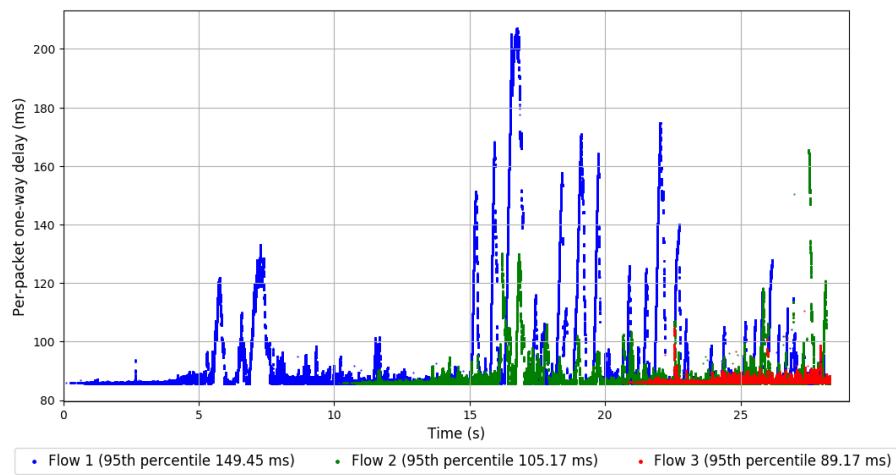
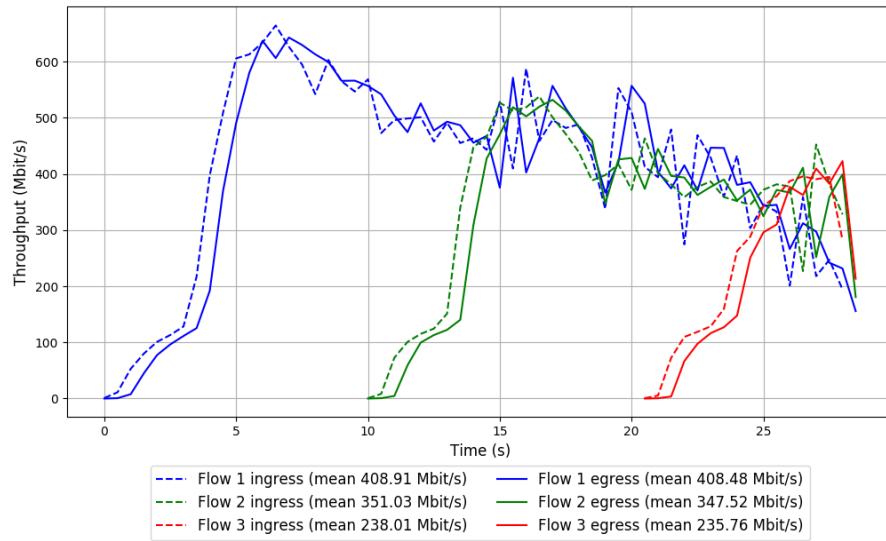


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-05-29 22:57:27
End at: 2019-05-29 22:57:57
Local clock offset: 0.127 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2019-05-30 03:02:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 695.39 Mbit/s
95th percentile per-packet one-way delay: 131.898 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 408.48 Mbit/s
95th percentile per-packet one-way delay: 149.447 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 347.52 Mbit/s
95th percentile per-packet one-way delay: 105.171 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 235.76 Mbit/s
95th percentile per-packet one-way delay: 89.172 ms
Loss rate: 3.15%
```

Run 1: Report of Indigo-MusesC5 — Data Link

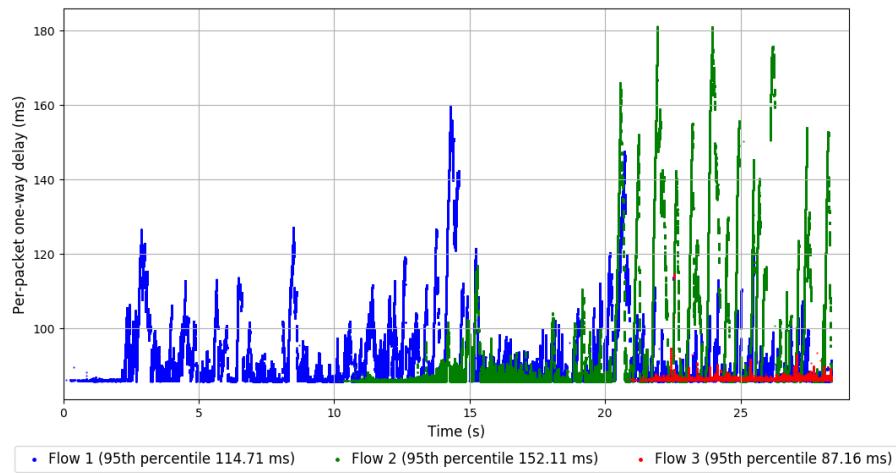
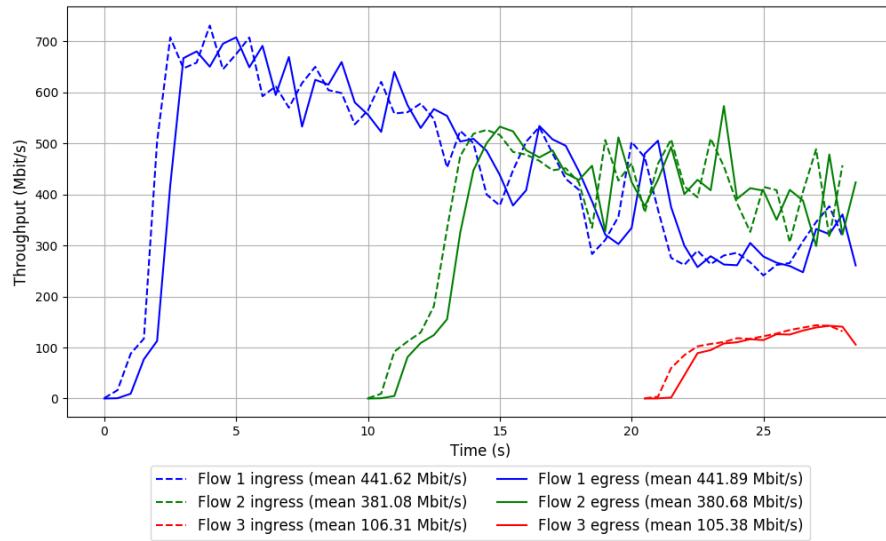


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-05-29 23:33:21
End at: 2019-05-29 23:33:51
Local clock offset: -0.02 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2019-05-30 03:07:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 714.70 Mbit/s
95th percentile per-packet one-way delay: 135.028 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 441.89 Mbit/s
95th percentile per-packet one-way delay: 114.712 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 380.68 Mbit/s
95th percentile per-packet one-way delay: 152.109 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 105.38 Mbit/s
95th percentile per-packet one-way delay: 87.158 ms
Loss rate: 3.12%
```

Run 2: Report of Indigo-MusesC5 — Data Link

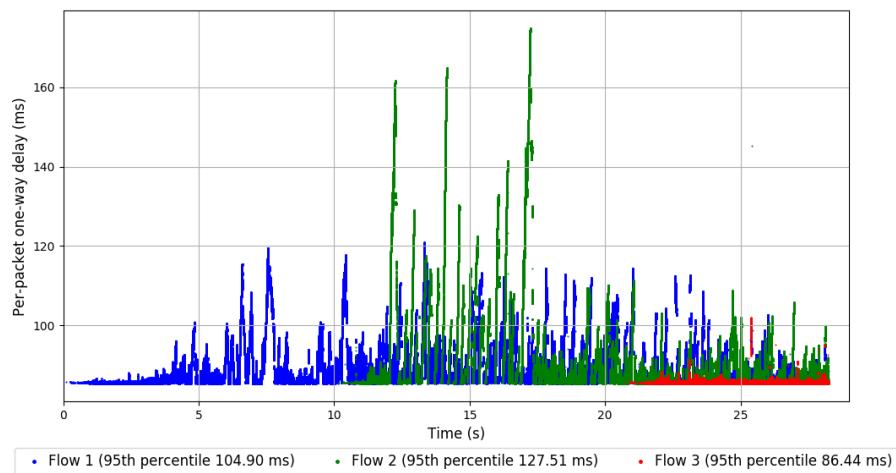
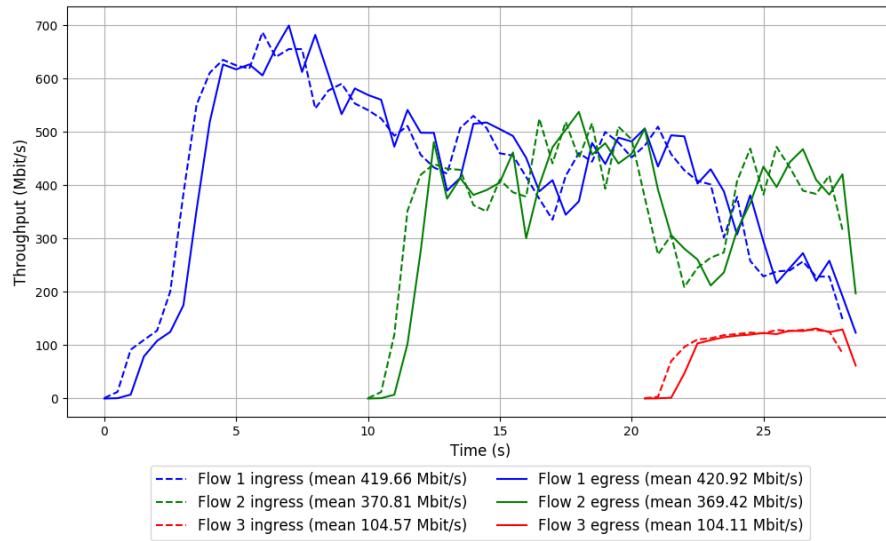


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 00:09:51
End at: 2019-05-30 00:10:21
Local clock offset: -0.374 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-05-30 03:08:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.08 Mbit/s
95th percentile per-packet one-way delay: 109.812 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 420.92 Mbit/s
95th percentile per-packet one-way delay: 104.903 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 369.42 Mbit/s
95th percentile per-packet one-way delay: 127.512 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 104.11 Mbit/s
95th percentile per-packet one-way delay: 86.441 ms
Loss rate: 2.74%
```

Run 3: Report of Indigo-MusesC5 — Data Link

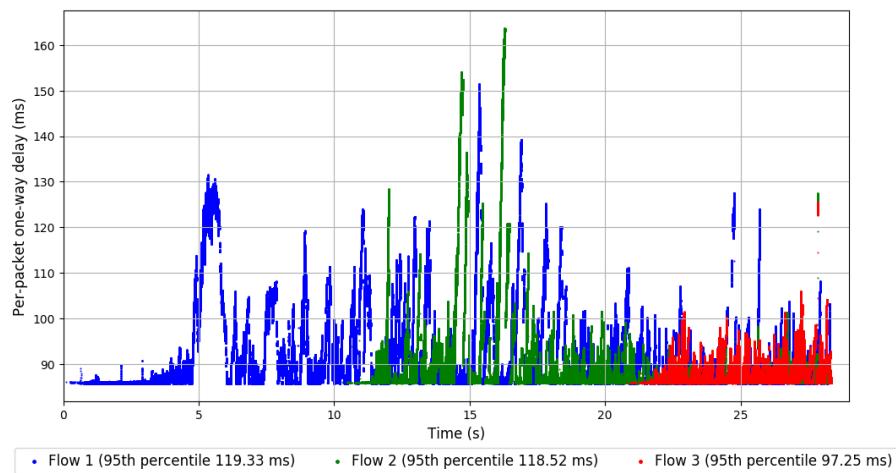
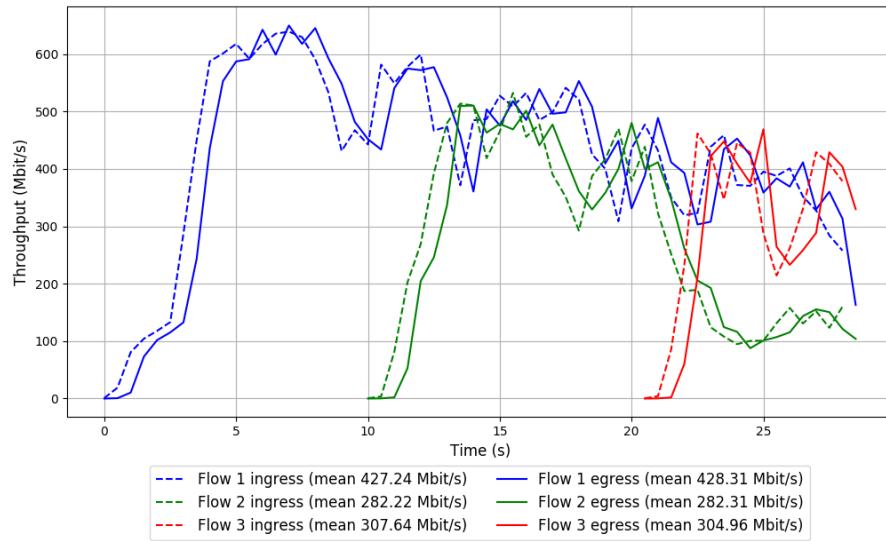


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 00:46:23
End at: 2019-05-30 00:46:53
Local clock offset: -0.101 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-05-30 03:09:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 689.22 Mbit/s
95th percentile per-packet one-way delay: 117.634 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 428.31 Mbit/s
95th percentile per-packet one-way delay: 119.335 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 282.31 Mbit/s
95th percentile per-packet one-way delay: 118.517 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 304.96 Mbit/s
95th percentile per-packet one-way delay: 97.250 ms
Loss rate: 2.92%
```

Run 4: Report of Indigo-MusesC5 — Data Link

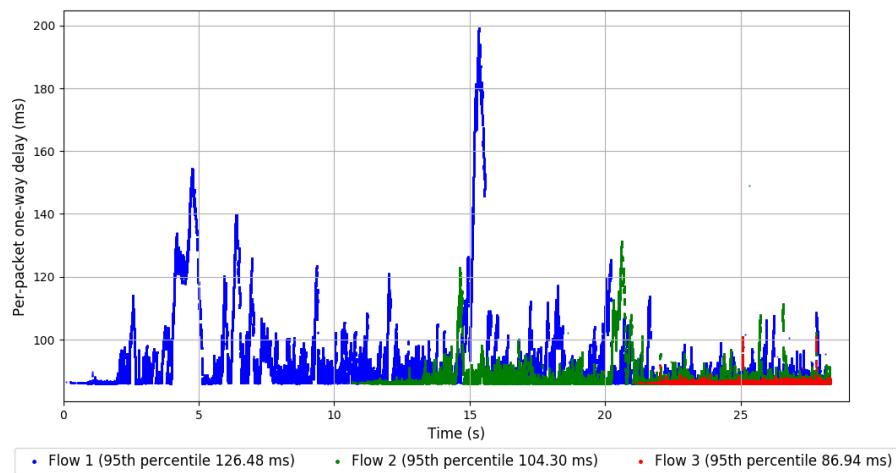
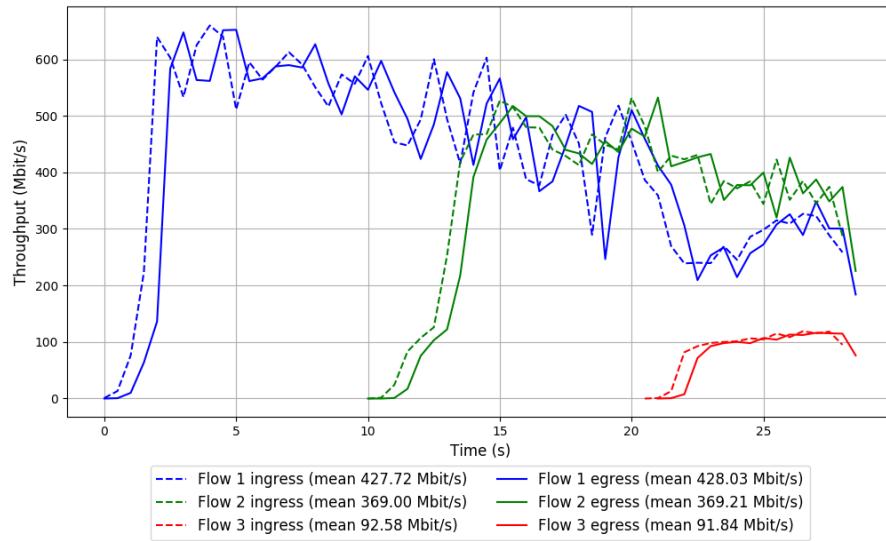


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-05-30 01:23:35
End at: 2019-05-30 01:24:05
Local clock offset: 0.359 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-05-30 03:12:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.71 Mbit/s
95th percentile per-packet one-way delay: 121.168 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 428.03 Mbit/s
95th percentile per-packet one-way delay: 126.480 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 369.21 Mbit/s
95th percentile per-packet one-way delay: 104.298 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 86.942 ms
Loss rate: 3.09%
```

Run 5: Report of Indigo-MusesC5 — Data Link

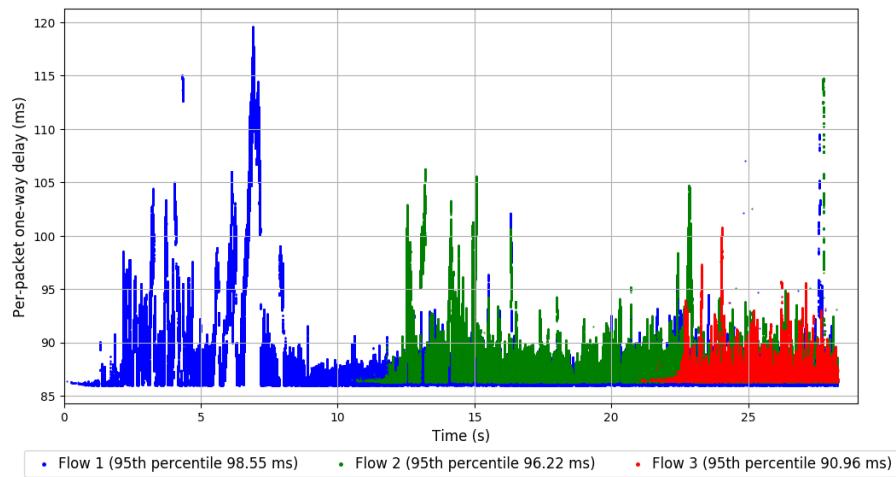
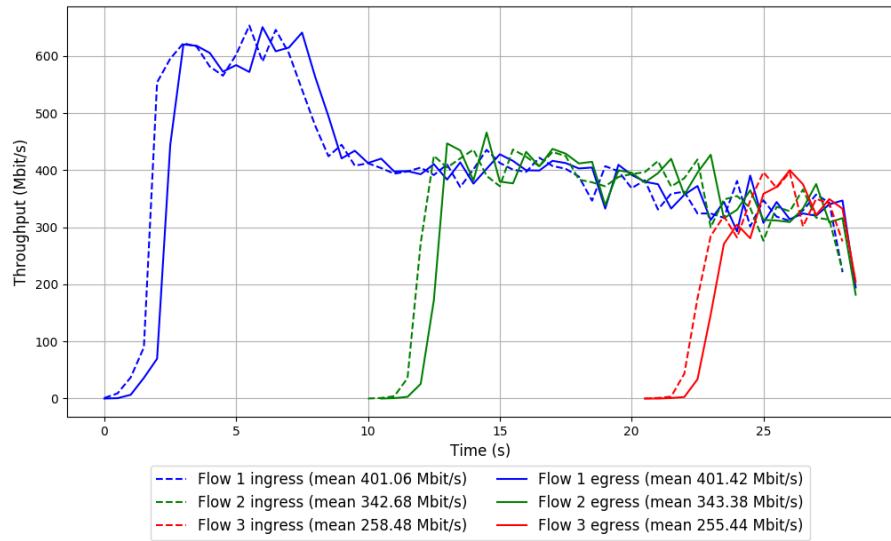


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-05-29 23:04:20
End at: 2019-05-29 23:04:50
Local clock offset: 0.276 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-05-30 03:12:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.14 Mbit/s
95th percentile per-packet one-way delay: 97.267 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 401.42 Mbit/s
95th percentile per-packet one-way delay: 98.546 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 343.38 Mbit/s
95th percentile per-packet one-way delay: 96.218 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 255.44 Mbit/s
95th percentile per-packet one-way delay: 90.957 ms
Loss rate: 3.43%
```

Run 1: Report of Indigo-MusesD — Data Link

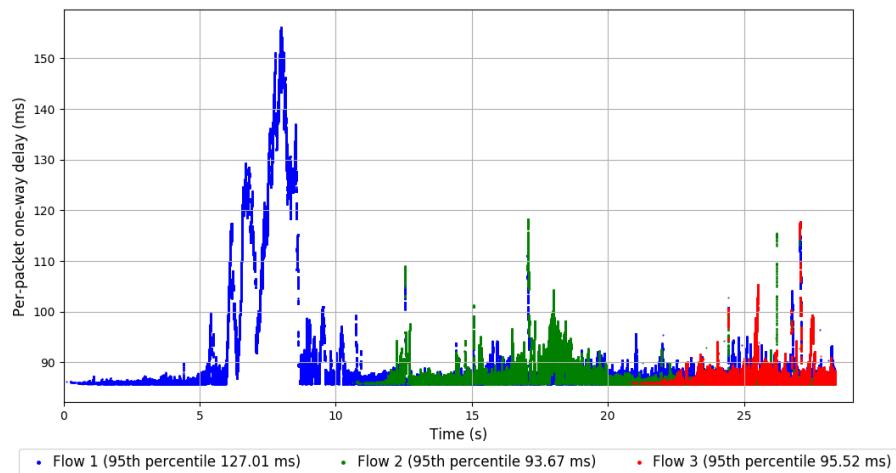
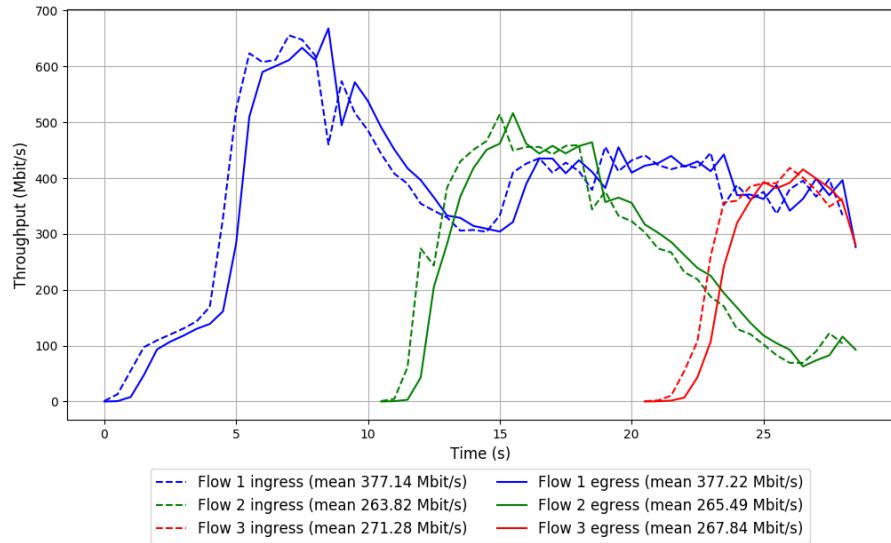


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-05-29 23:40:17
End at: 2019-05-29 23:40:47
Local clock offset: -0.071 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2019-05-30 03:13:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 616.18 Mbit/s
95th percentile per-packet one-way delay: 119.764 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 377.22 Mbit/s
95th percentile per-packet one-way delay: 127.008 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 265.49 Mbit/s
95th percentile per-packet one-way delay: 93.674 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 267.84 Mbit/s
95th percentile per-packet one-way delay: 95.516 ms
Loss rate: 3.45%
```

Run 2: Report of Indigo-MusesD — Data Link

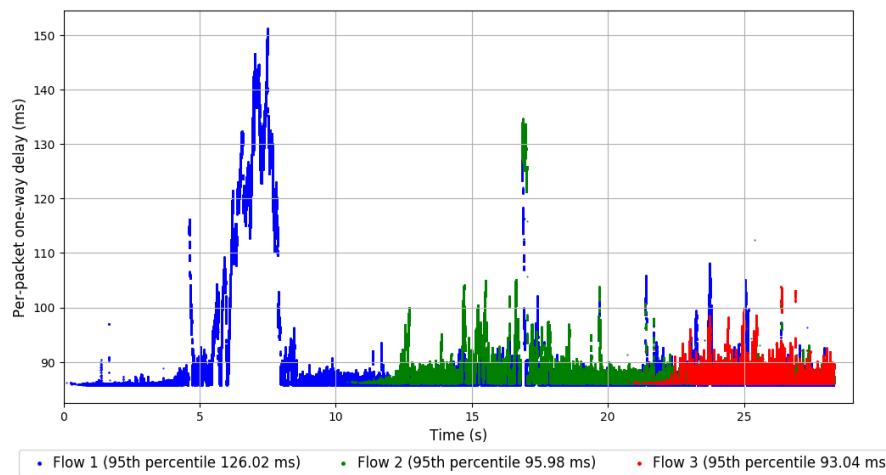
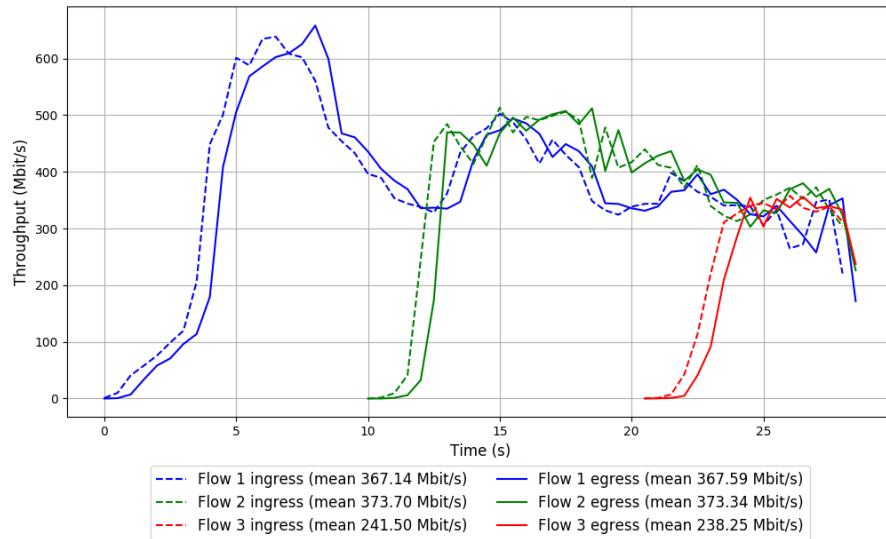


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 00:16:47
End at: 2019-05-30 00:17:17
Local clock offset: -0.042 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-05-30 03:14:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.68 Mbit/s
95th percentile per-packet one-way delay: 118.364 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 367.59 Mbit/s
95th percentile per-packet one-way delay: 126.021 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 373.34 Mbit/s
95th percentile per-packet one-way delay: 95.980 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 238.25 Mbit/s
95th percentile per-packet one-way delay: 93.036 ms
Loss rate: 3.59%
```

Run 3: Report of Indigo-MusesD — Data Link

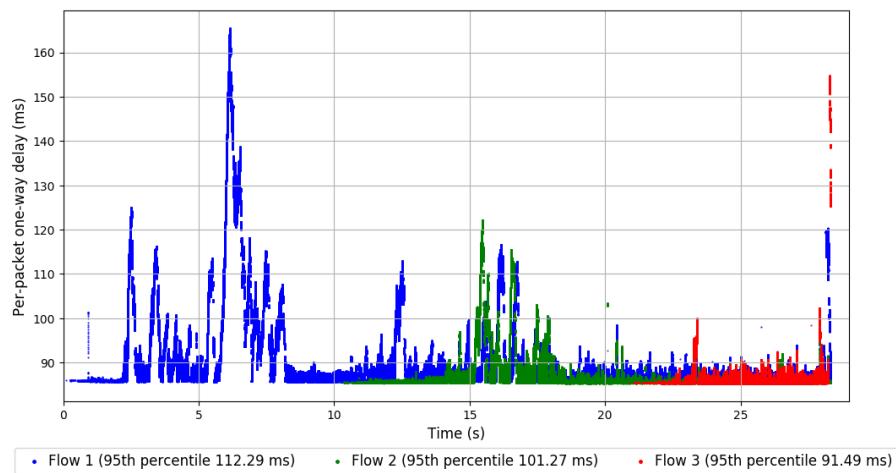
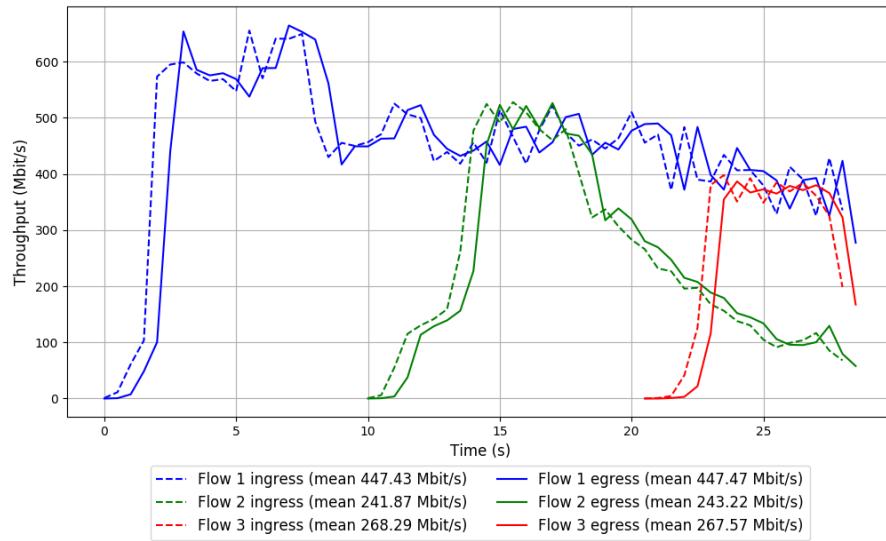


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 00:53:23
End at: 2019-05-30 00:53:53
Local clock offset: -0.496 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2019-05-30 03:15:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 674.00 Mbit/s
95th percentile per-packet one-way delay: 110.110 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 447.47 Mbit/s
95th percentile per-packet one-way delay: 112.292 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 243.22 Mbit/s
95th percentile per-packet one-way delay: 101.270 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 267.57 Mbit/s
95th percentile per-packet one-way delay: 91.489 ms
Loss rate: 2.27%
```

Run 4: Report of Indigo-MusesD — Data Link

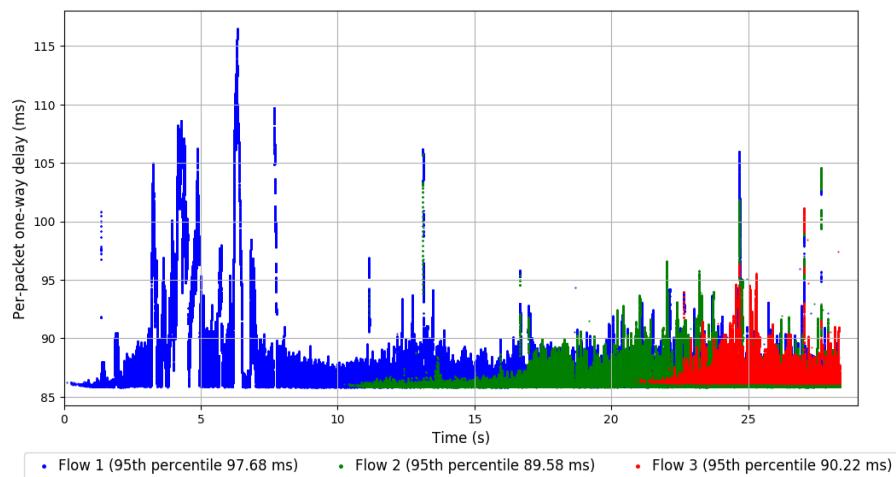
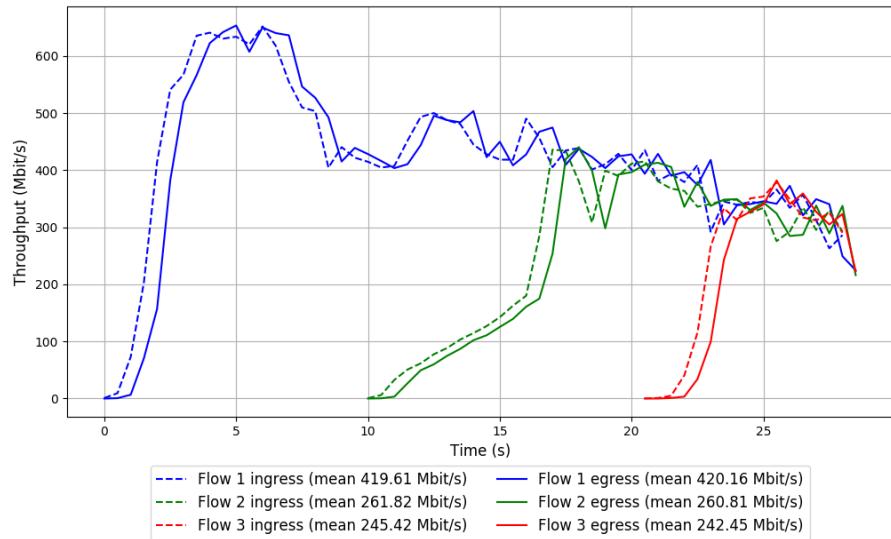


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-05-30 01:30:30
End at: 2019-05-30 01:31:00
Local clock offset: 0.141 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-05-30 03:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 651.17 Mbit/s
95th percentile per-packet one-way delay: 94.979 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 420.16 Mbit/s
95th percentile per-packet one-way delay: 97.682 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 260.81 Mbit/s
95th percentile per-packet one-way delay: 89.578 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 242.45 Mbit/s
95th percentile per-packet one-way delay: 90.216 ms
Loss rate: 3.45%
```

Run 5: Report of Indigo-MusesD — Data Link

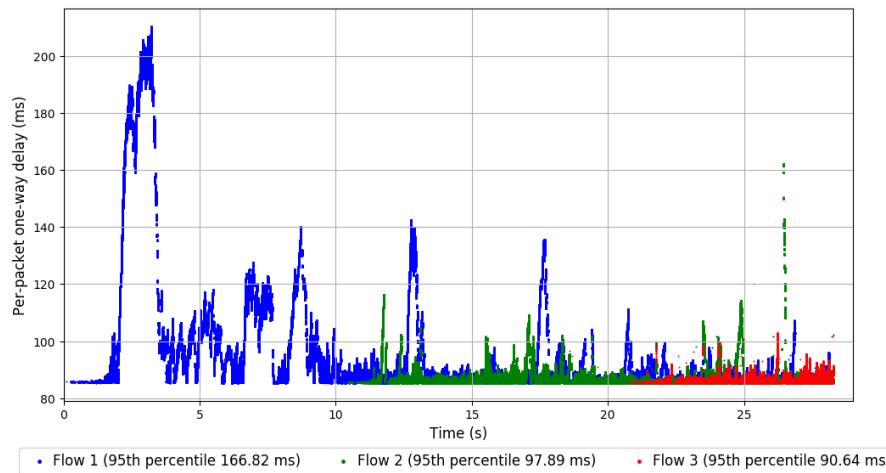
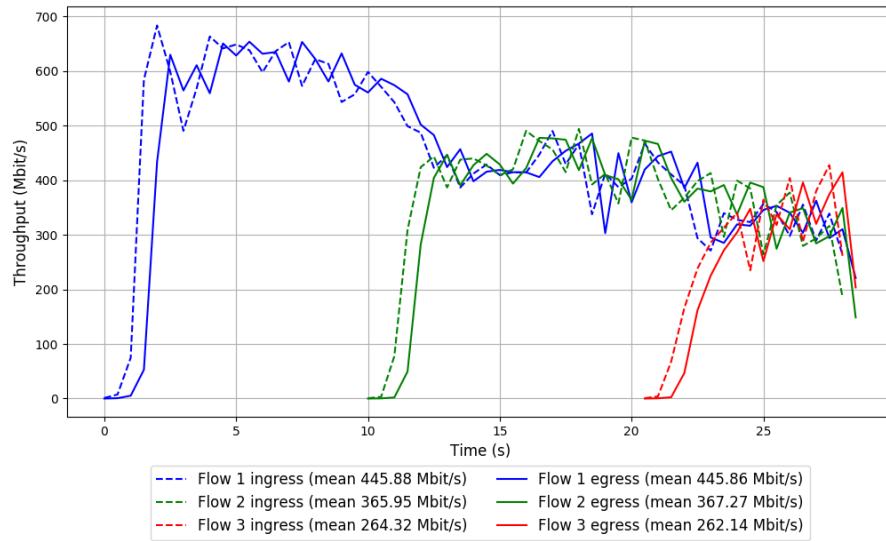


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-05-29 23:06:10
End at: 2019-05-29 23:06:40
Local clock offset: -0.36 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2019-05-30 03:22:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.53 Mbit/s
95th percentile per-packet one-way delay: 125.487 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 445.86 Mbit/s
95th percentile per-packet one-way delay: 166.819 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 367.27 Mbit/s
95th percentile per-packet one-way delay: 97.890 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 262.14 Mbit/s
95th percentile per-packet one-way delay: 90.644 ms
Loss rate: 3.06%
```

Run 1: Report of Indigo-MusesT — Data Link

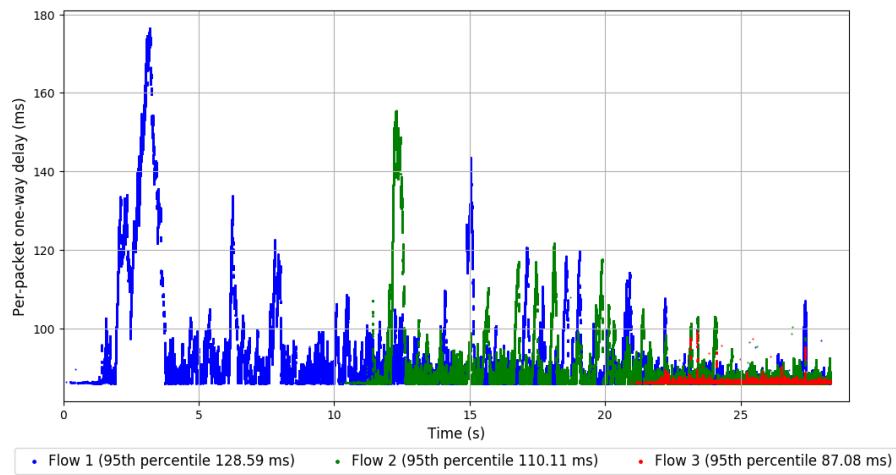
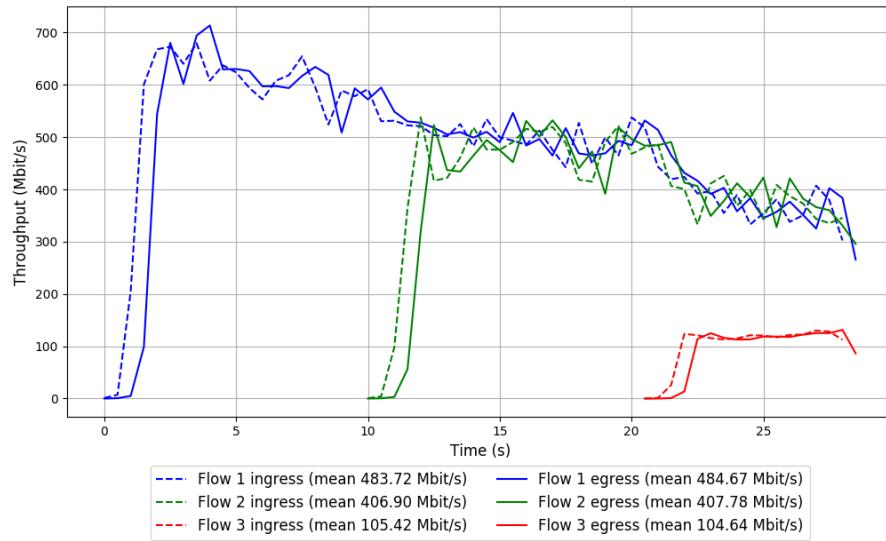


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-05-29 23:42:05
End at: 2019-05-29 23:42:35
Local clock offset: 0.162 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2019-05-30 03:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.07 Mbit/s
95th percentile per-packet one-way delay: 123.177 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 484.67 Mbit/s
95th percentile per-packet one-way delay: 128.594 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 407.78 Mbit/s
95th percentile per-packet one-way delay: 110.107 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 104.64 Mbit/s
95th percentile per-packet one-way delay: 87.083 ms
Loss rate: 3.01%
```

Run 2: Report of Indigo-MusesT — Data Link

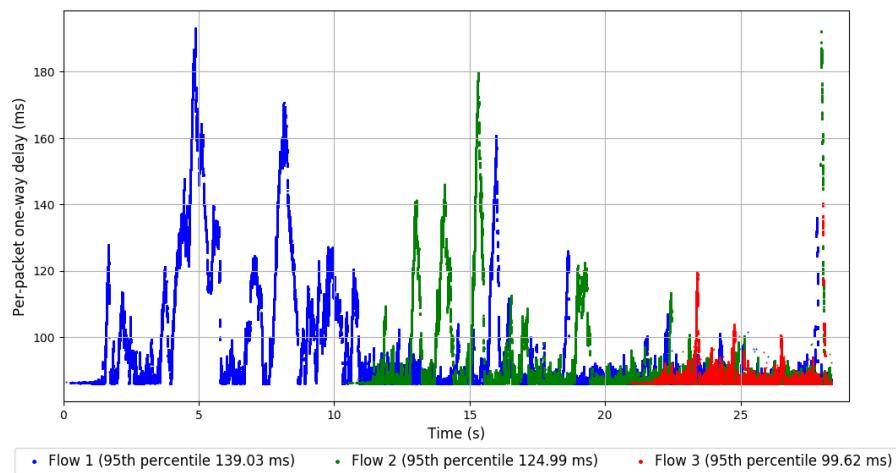
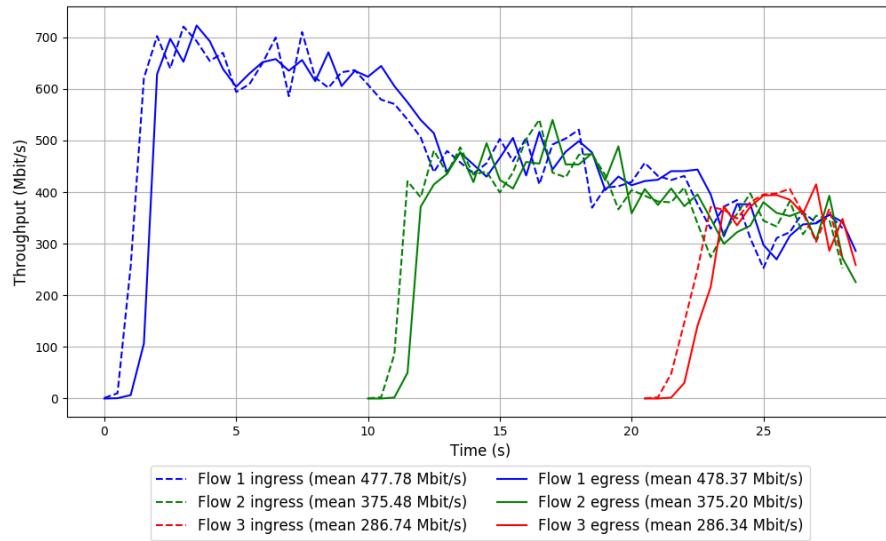


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 00:18:37
End at: 2019-05-30 00:19:07
Local clock offset: -0.042 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-05-30 03:26:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.66 Mbit/s
95th percentile per-packet one-way delay: 133.127 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 478.37 Mbit/s
95th percentile per-packet one-way delay: 139.034 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 375.20 Mbit/s
95th percentile per-packet one-way delay: 124.990 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 286.34 Mbit/s
95th percentile per-packet one-way delay: 99.624 ms
Loss rate: 2.35%
```

Run 3: Report of Indigo-MusesT — Data Link

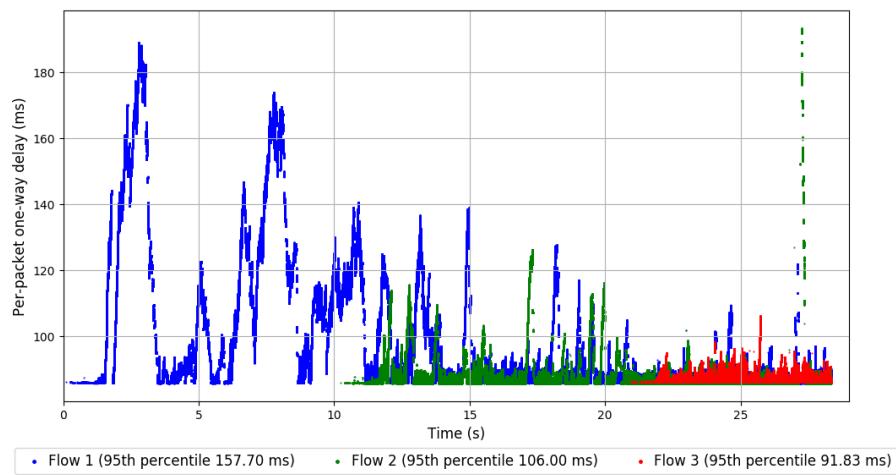
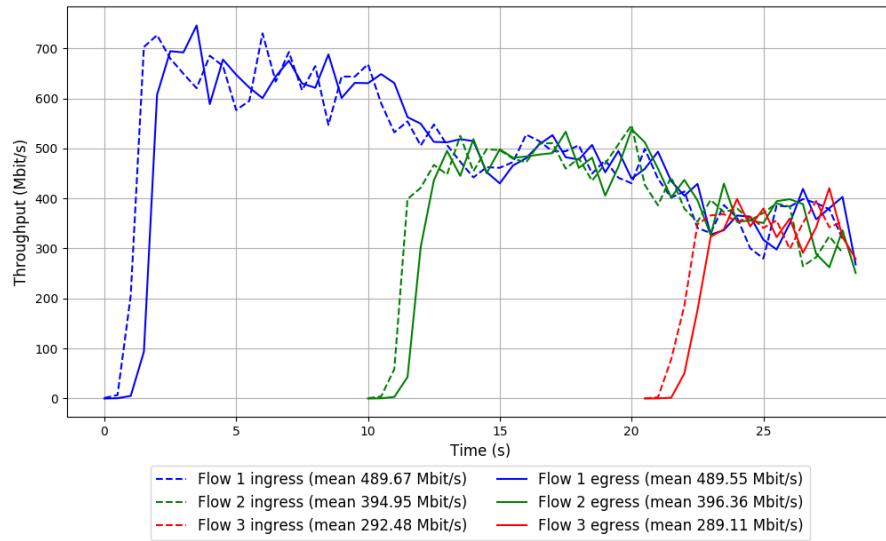


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 00:55:13
End at: 2019-05-30 00:55:43
Local clock offset: -0.189 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 820.57 Mbit/s
95th percentile per-packet one-way delay: 142.989 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 489.55 Mbit/s
95th percentile per-packet one-way delay: 157.702 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 396.36 Mbit/s
95th percentile per-packet one-way delay: 106.001 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 289.11 Mbit/s
95th percentile per-packet one-way delay: 91.832 ms
Loss rate: 3.37%
```

Run 4: Report of Indigo-MusesT — Data Link

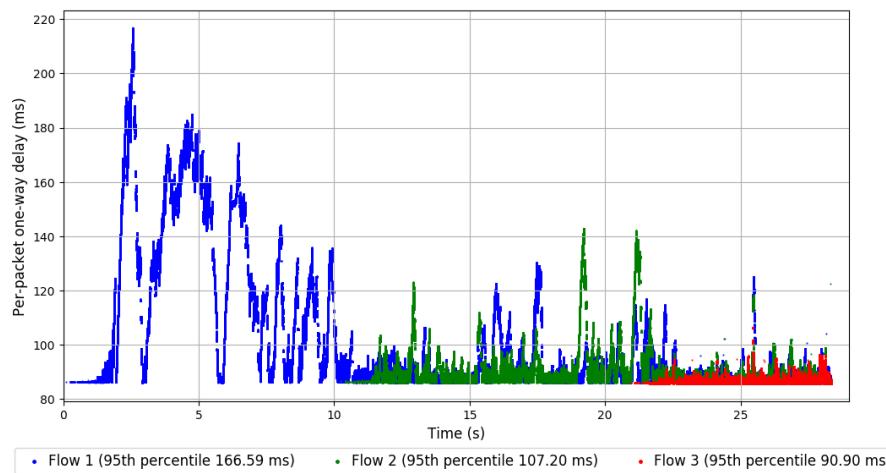
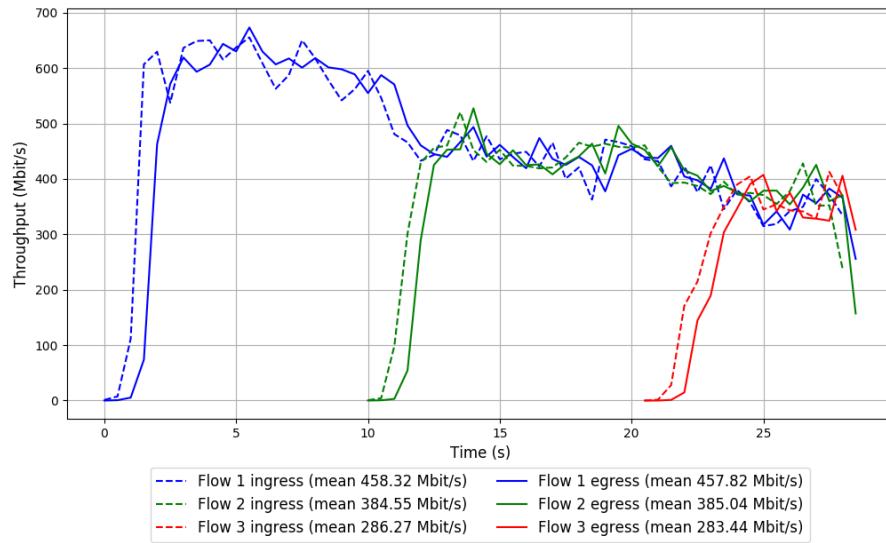


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-05-30 01:32:20
End at: 2019-05-30 01:32:50
Local clock offset: 0.098 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.10 Mbit/s
95th percentile per-packet one-way delay: 156.781 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 457.82 Mbit/s
95th percentile per-packet one-way delay: 166.586 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 385.04 Mbit/s
95th percentile per-packet one-way delay: 107.199 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 283.44 Mbit/s
95th percentile per-packet one-way delay: 90.900 ms
Loss rate: 3.29%
```

Run 5: Report of Indigo-MusesT — Data Link

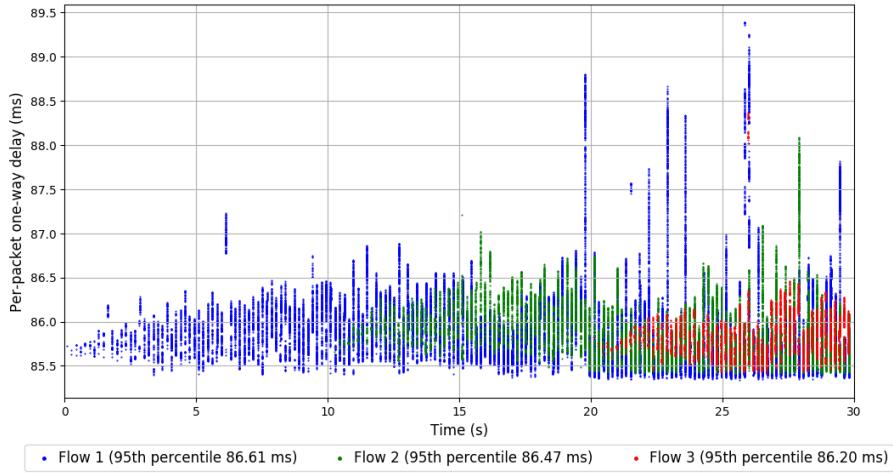
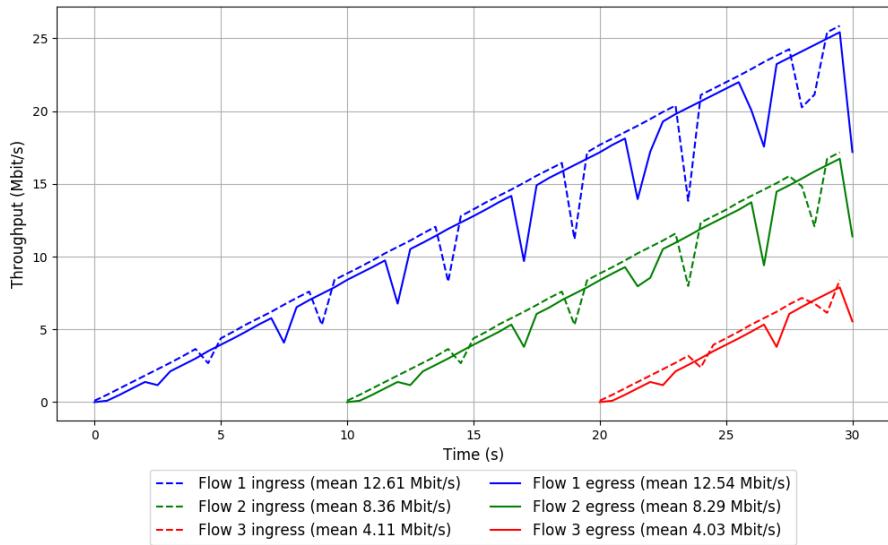


Run 1: Statistics of LEDBAT

```
Start at: 2019-05-29 22:54:19
End at: 2019-05-29 22:54:49
Local clock offset: -0.16 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.35 Mbit/s
95th percentile per-packet one-way delay: 86.525 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.54 Mbit/s
95th percentile per-packet one-way delay: 86.605 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 86.469 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.198 ms
Loss rate: 3.52%
```

Run 1: Report of LEDBAT — Data Link

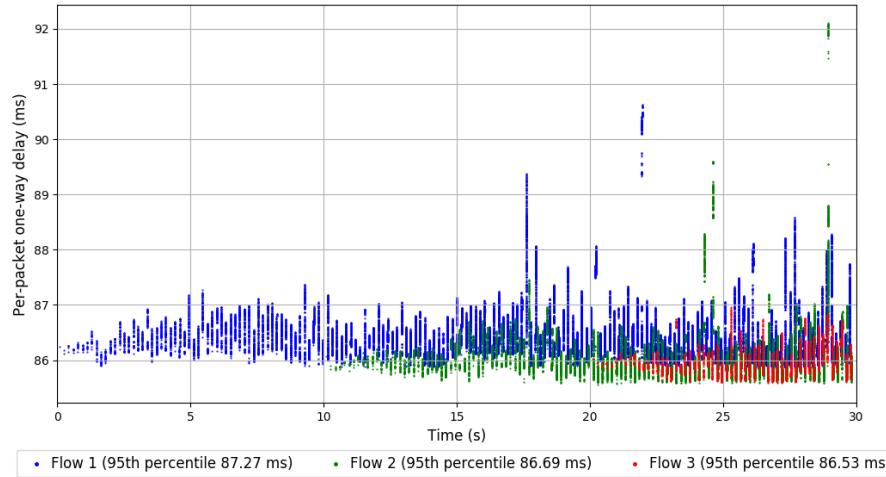
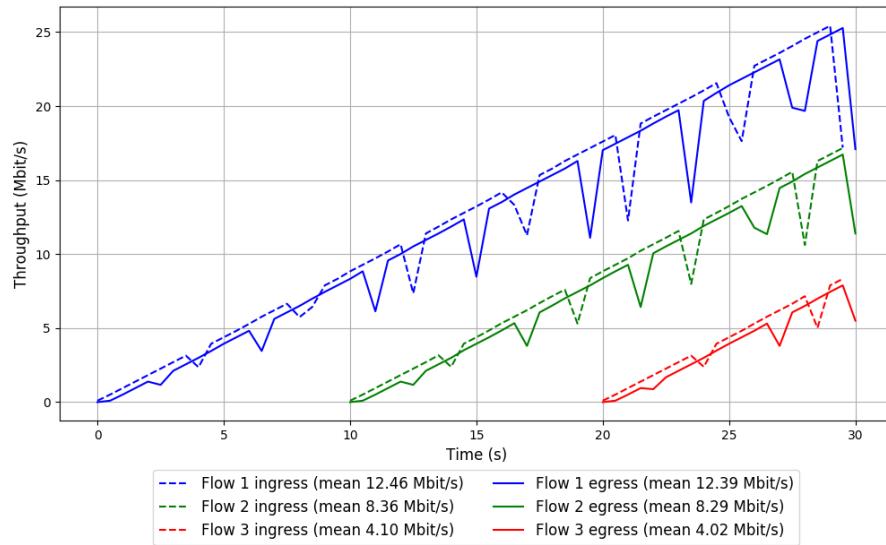


Run 2: Statistics of LEDBAT

```
Start at: 2019-05-29 23:30:19
End at: 2019-05-29 23:30:49
Local clock offset: -0.194 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.18 Mbit/s
95th percentile per-packet one-way delay: 87.105 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 87.270 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 86.688 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.527 ms
Loss rate: 3.50%
```

Run 2: Report of LEDBAT — Data Link

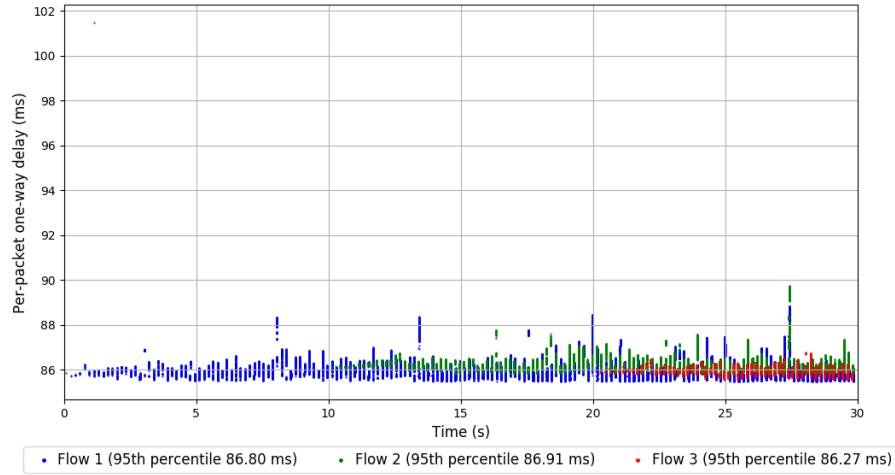
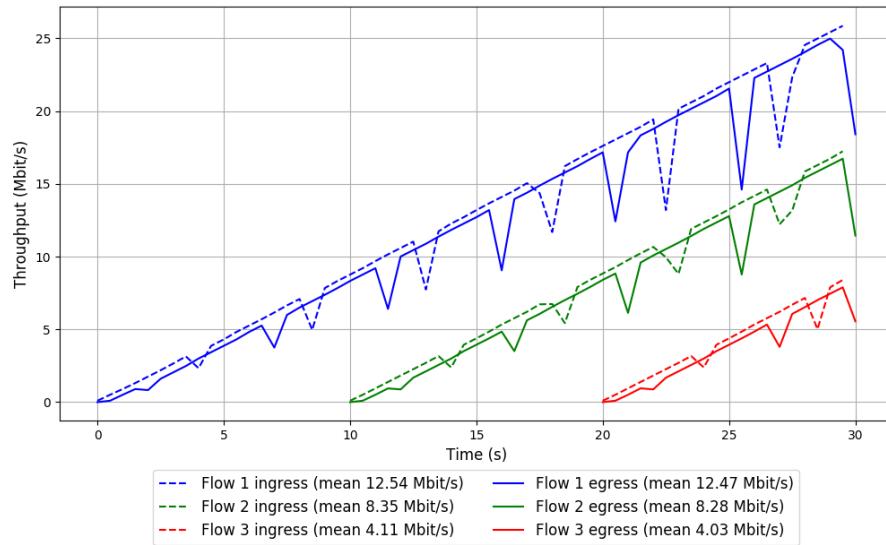


Run 3: Statistics of LEDBAT

```
Start at: 2019-05-30 00:06:41
End at: 2019-05-30 00:07:11
Local clock offset: -0.287 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 86.908 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.270 ms
Loss rate: 3.52%
```

Run 3: Report of LEDBAT — Data Link

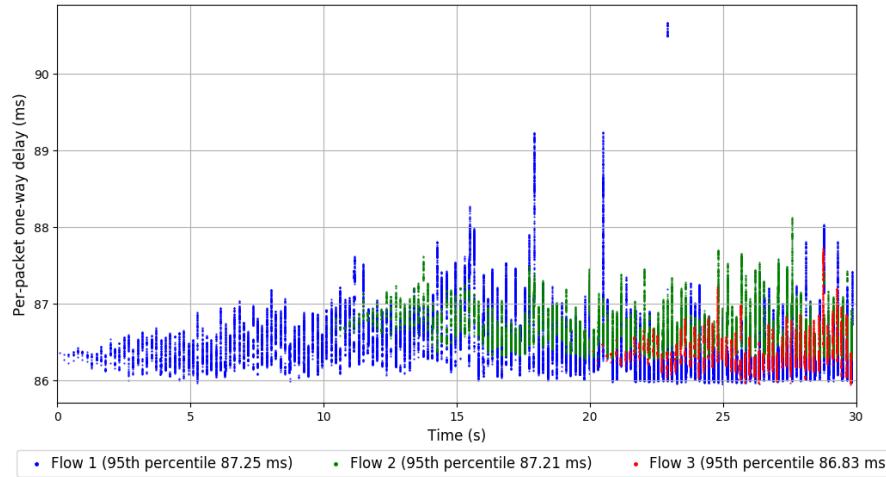
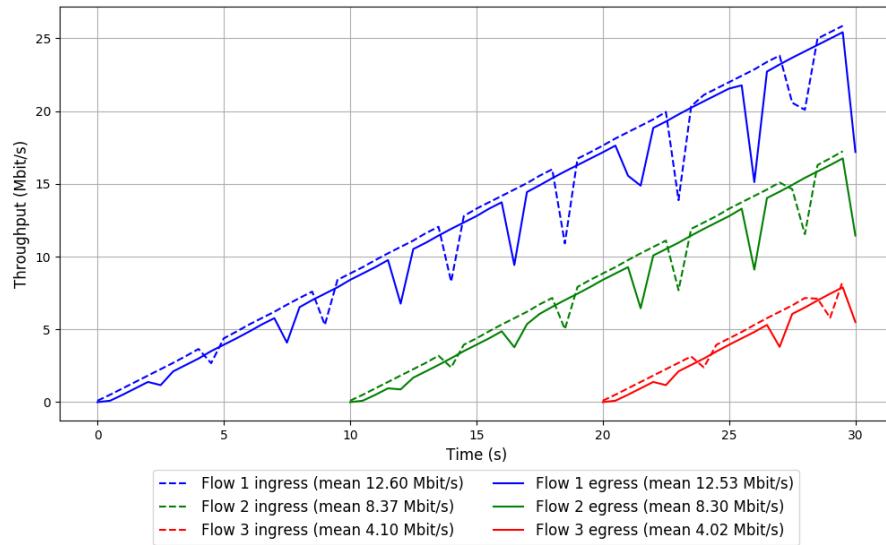


Run 4: Statistics of LEDBAT

```
Start at: 2019-05-30 00:43:13
End at: 2019-05-30 00:43:43
Local clock offset: 0.114 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-05-30 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 87.217 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 87.247 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 87.210 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.825 ms
Loss rate: 3.50%
```

Run 4: Report of LEDBAT — Data Link

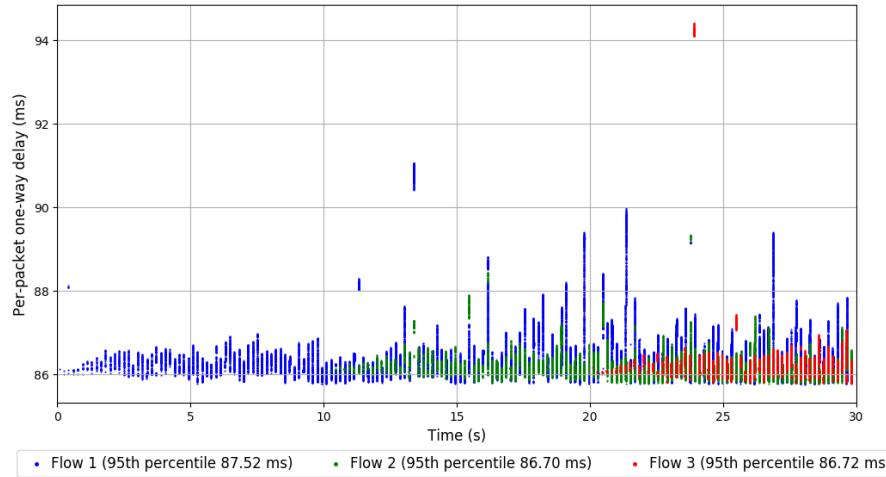
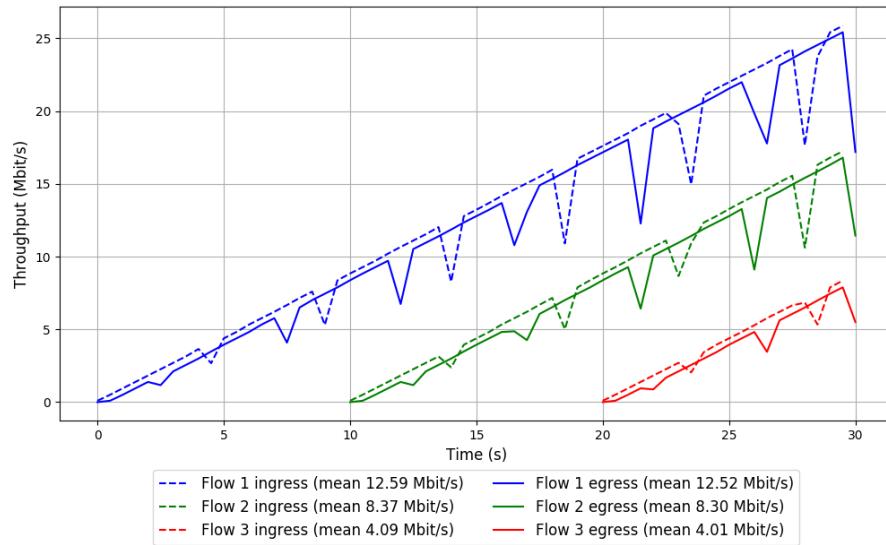


Run 5: Statistics of LEDBAT

```
Start at: 2019-05-30 01:20:29
End at: 2019-05-30 01:20:59
Local clock offset: 0.082 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-05-30 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.33 Mbit/s
95th percentile per-packet one-way delay: 87.289 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.520 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 86.700 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 86.718 ms
Loss rate: 3.53%
```

Run 5: Report of LEDBAT — Data Link

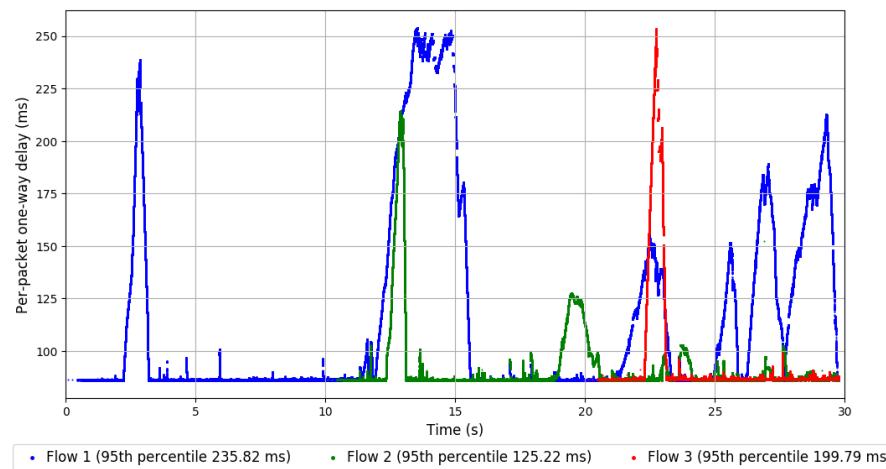
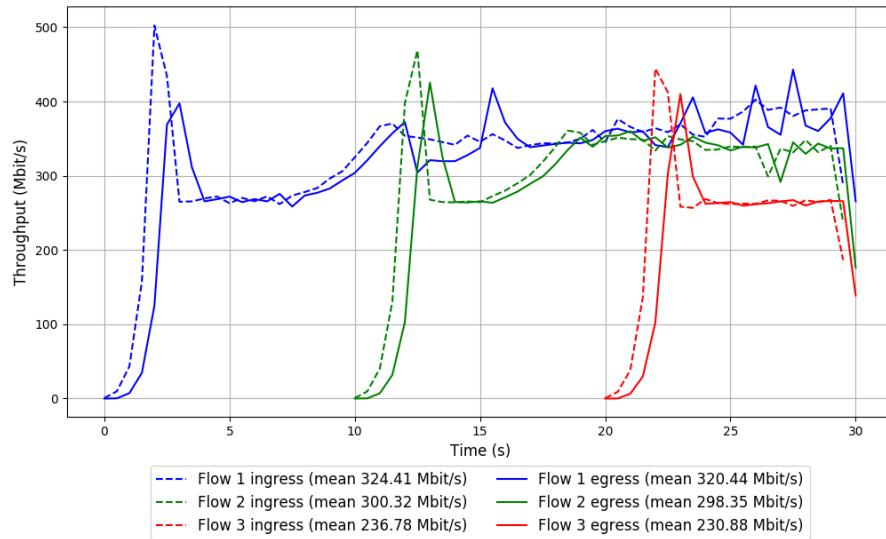


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-05-29 22:50:42
End at: 2019-05-29 22:51:12
Local clock offset: 0.568 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-05-30 03:38:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 593.28 Mbit/s
95th percentile per-packet one-way delay: 210.502 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 320.44 Mbit/s
95th percentile per-packet one-way delay: 235.823 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 298.35 Mbit/s
95th percentile per-packet one-way delay: 125.217 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 230.88 Mbit/s
95th percentile per-packet one-way delay: 199.790 ms
Loss rate: 4.28%
```

Run 1: Report of PCC-Allegro — Data Link

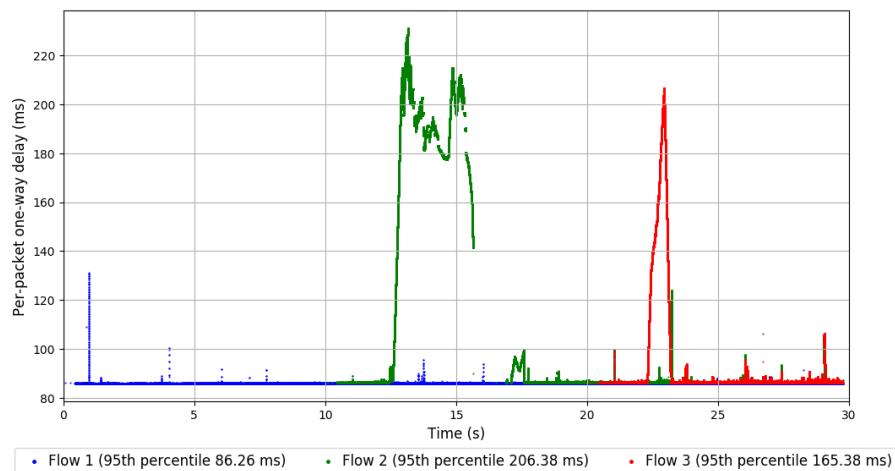
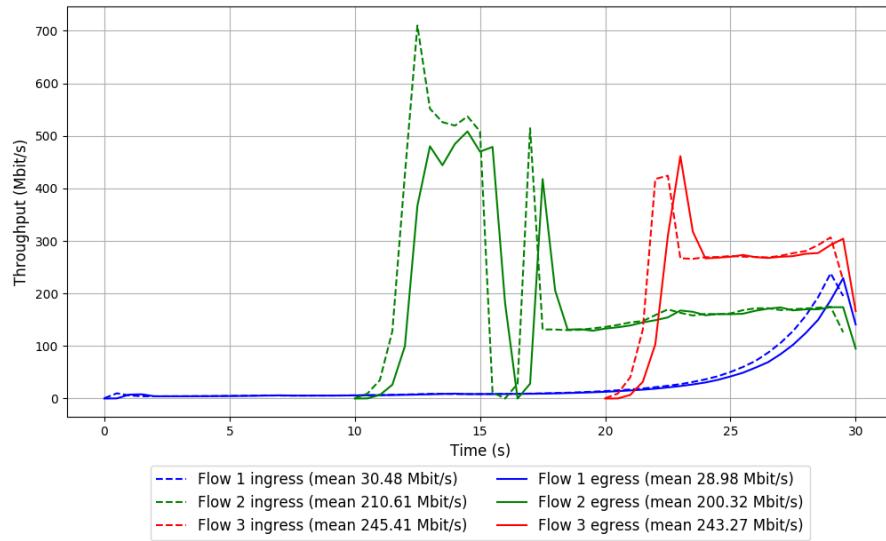


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-05-29 23:26:52
End at: 2019-05-29 23:27:22
Local clock offset: 0.135 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-05-30 03:38:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.96 Mbit/s
95th percentile per-packet one-way delay: 201.699 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 5.46%
-- Flow 2:
Average throughput: 200.32 Mbit/s
95th percentile per-packet one-way delay: 206.378 ms
Loss rate: 5.71%
-- Flow 3:
Average throughput: 243.27 Mbit/s
95th percentile per-packet one-way delay: 165.384 ms
Loss rate: 2.62%
```

Run 2: Report of PCC-Allegro — Data Link

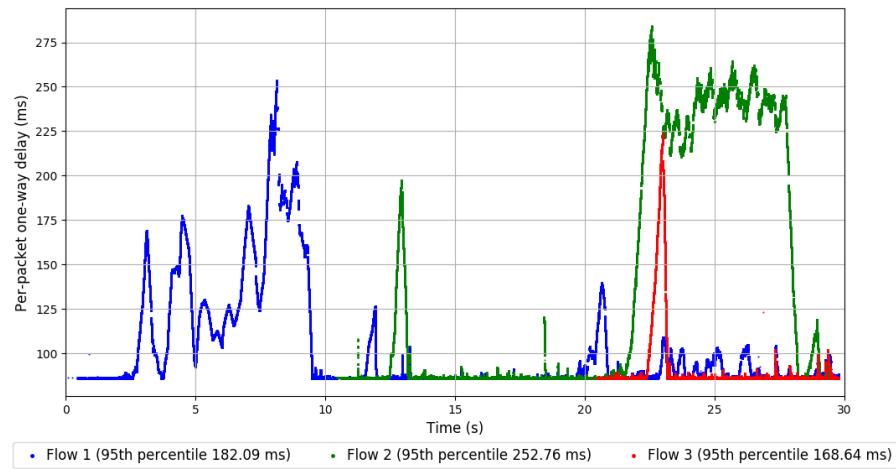
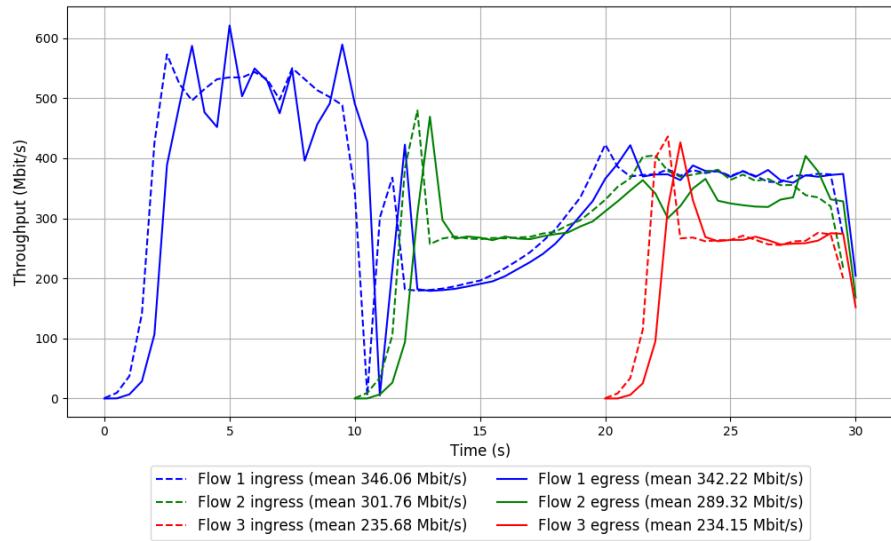


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-05-30 00:02:56
End at: 2019-05-30 00:03:26
Local clock offset: -0.019 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2019-05-30 03:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 610.28 Mbit/s
95th percentile per-packet one-way delay: 241.204 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 342.22 Mbit/s
95th percentile per-packet one-way delay: 182.088 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 289.32 Mbit/s
95th percentile per-packet one-way delay: 252.764 ms
Loss rate: 4.95%
-- Flow 3:
Average throughput: 234.15 Mbit/s
95th percentile per-packet one-way delay: 168.643 ms
Loss rate: 2.37%
```

Run 3: Report of PCC-Allegro — Data Link

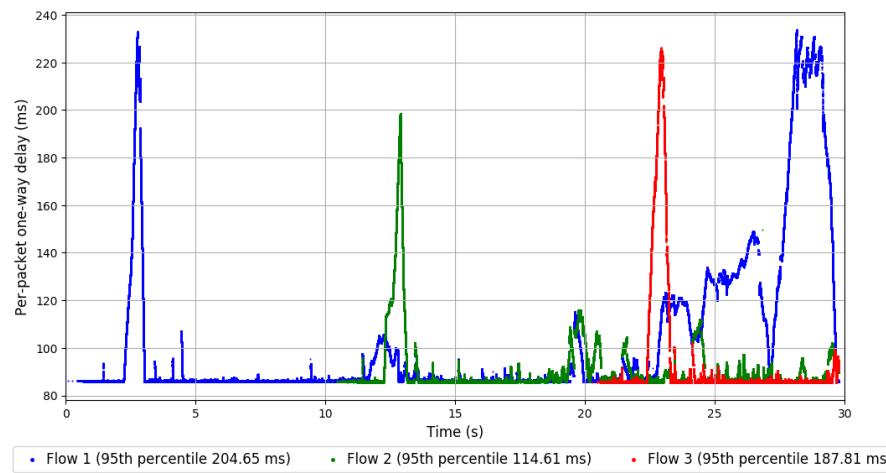
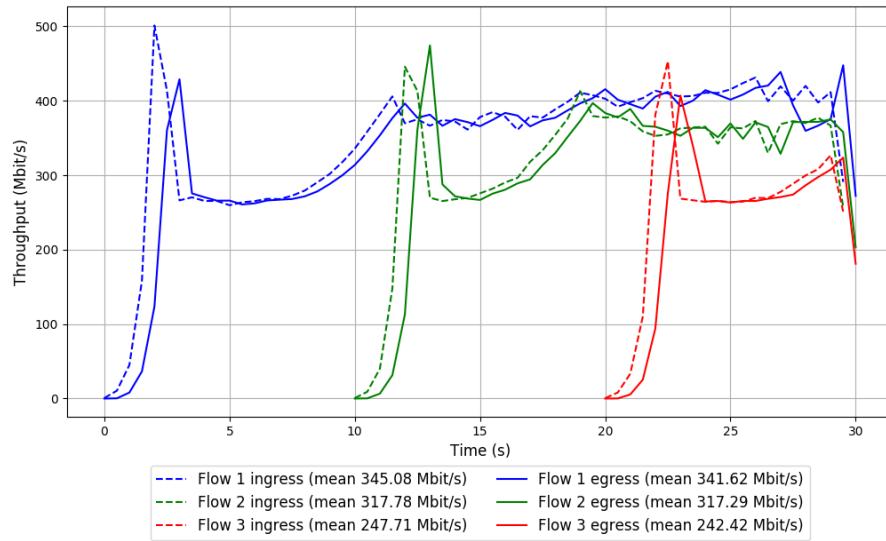


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-05-30 00:39:25
End at: 2019-05-30 00:39:55
Local clock offset: -0.243 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-05-30 03:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 630.77 Mbit/s
95th percentile per-packet one-way delay: 172.815 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 341.62 Mbit/s
95th percentile per-packet one-way delay: 204.646 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 317.29 Mbit/s
95th percentile per-packet one-way delay: 114.610 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 242.42 Mbit/s
95th percentile per-packet one-way delay: 187.808 ms
Loss rate: 3.89%
```

Run 4: Report of PCC-Allegro — Data Link

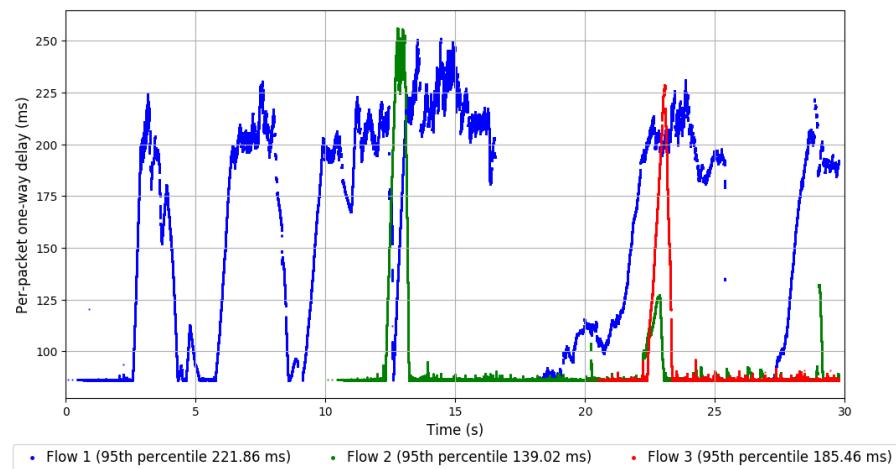
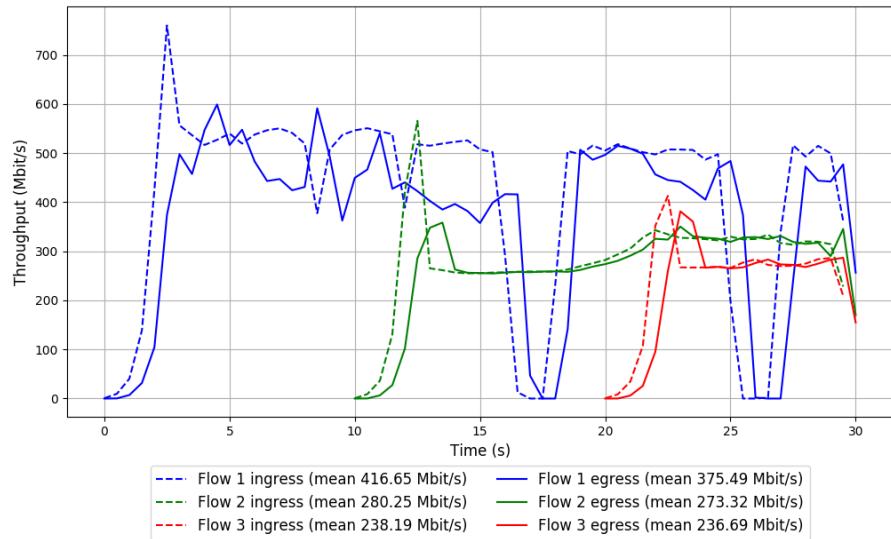


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-05-30 01:16:35
End at: 2019-05-30 01:17:05
Local clock offset: 0.063 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 633.60 Mbit/s
95th percentile per-packet one-way delay: 218.669 ms
Loss rate: 7.54%
-- Flow 1:
Average throughput: 375.49 Mbit/s
95th percentile per-packet one-way delay: 221.863 ms
Loss rate: 10.40%
-- Flow 2:
Average throughput: 273.32 Mbit/s
95th percentile per-packet one-way delay: 139.018 ms
Loss rate: 3.32%
-- Flow 3:
Average throughput: 236.69 Mbit/s
95th percentile per-packet one-way delay: 185.456 ms
Loss rate: 2.37%
```

Run 5: Report of PCC-Allegro — Data Link

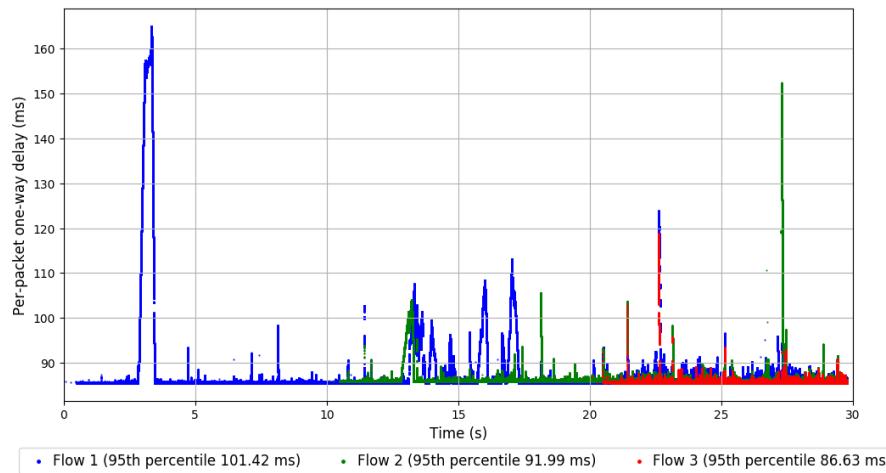
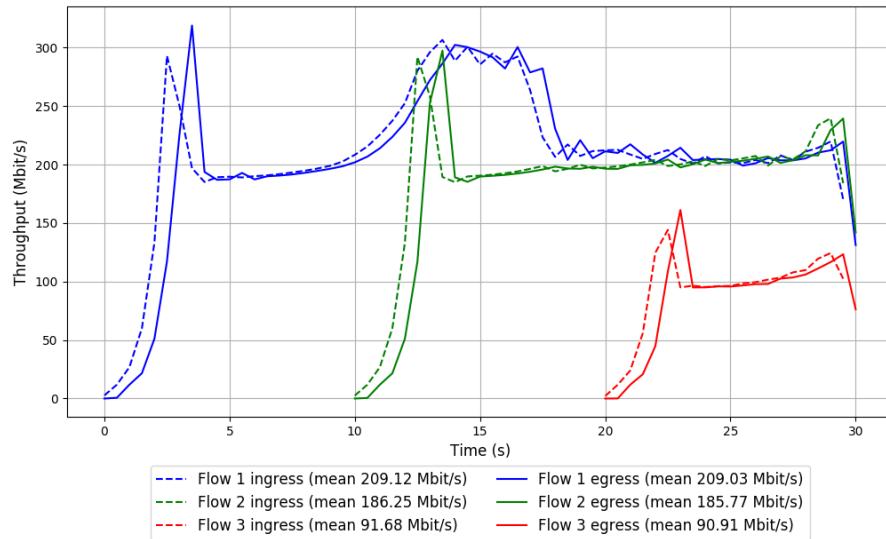


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-05-29 22:43:52
End at: 2019-05-29 22:44:22
Local clock offset: 0.412 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.86 Mbit/s
95th percentile per-packet one-way delay: 96.994 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 209.03 Mbit/s
95th percentile per-packet one-way delay: 101.424 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 185.77 Mbit/s
95th percentile per-packet one-way delay: 91.991 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 90.91 Mbit/s
95th percentile per-packet one-way delay: 86.630 ms
Loss rate: 2.65%
```

Run 1: Report of PCC-Expr — Data Link

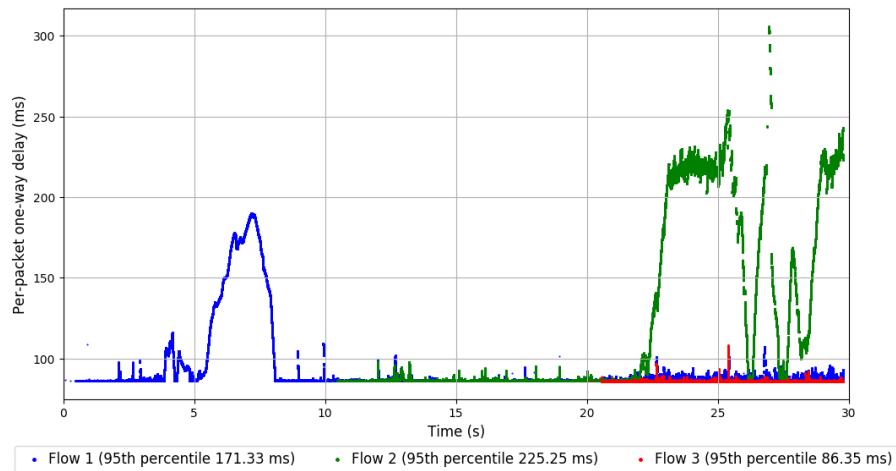
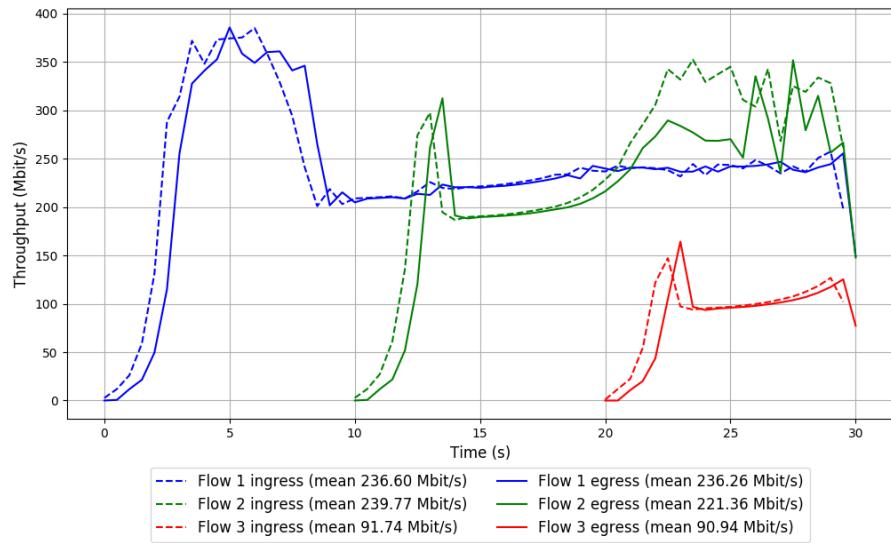


Run 2: Statistics of PCC-Expr

```
Start at: 2019-05-29 23:20:13
End at: 2019-05-29 23:20:43
Local clock offset: -0.029 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.75 Mbit/s
95th percentile per-packet one-way delay: 217.266 ms
Loss rate: 3.76%
-- Flow 1:
Average throughput: 236.26 Mbit/s
95th percentile per-packet one-way delay: 171.329 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 221.36 Mbit/s
95th percentile per-packet one-way delay: 225.247 ms
Loss rate: 8.48%
-- Flow 3:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 86.349 ms
Loss rate: 2.60%
```

Run 2: Report of PCC-Expr — Data Link

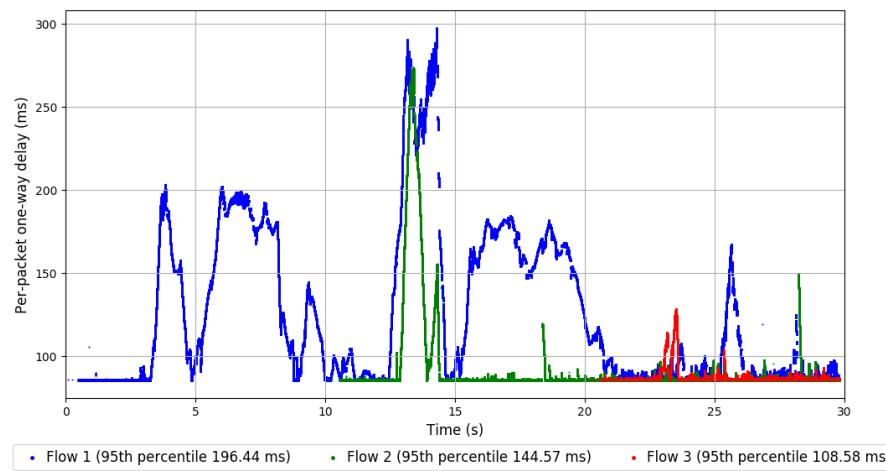
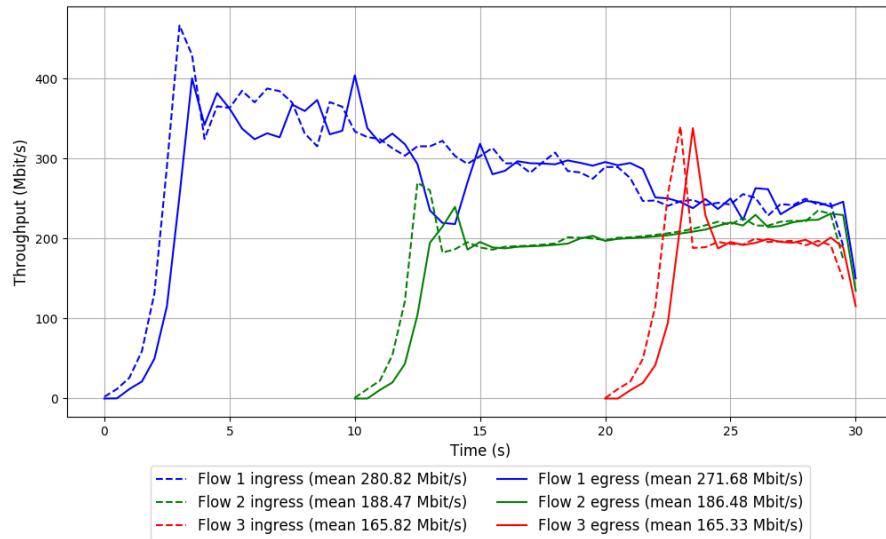


Run 3: Statistics of PCC-Expr

```
Start at: 2019-05-29 23:55:57
End at: 2019-05-29 23:56:27
Local clock offset: -0.343 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.23 Mbit/s
95th percentile per-packet one-way delay: 193.585 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 271.68 Mbit/s
95th percentile per-packet one-way delay: 196.443 ms
Loss rate: 3.81%
-- Flow 2:
Average throughput: 186.48 Mbit/s
95th percentile per-packet one-way delay: 144.568 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 165.33 Mbit/s
95th percentile per-packet one-way delay: 108.579 ms
Loss rate: 2.05%
```

Run 3: Report of PCC-Expr — Data Link

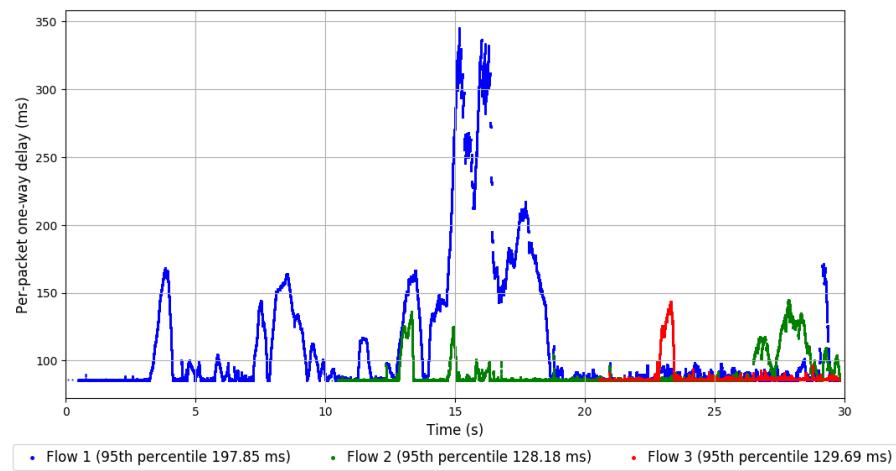
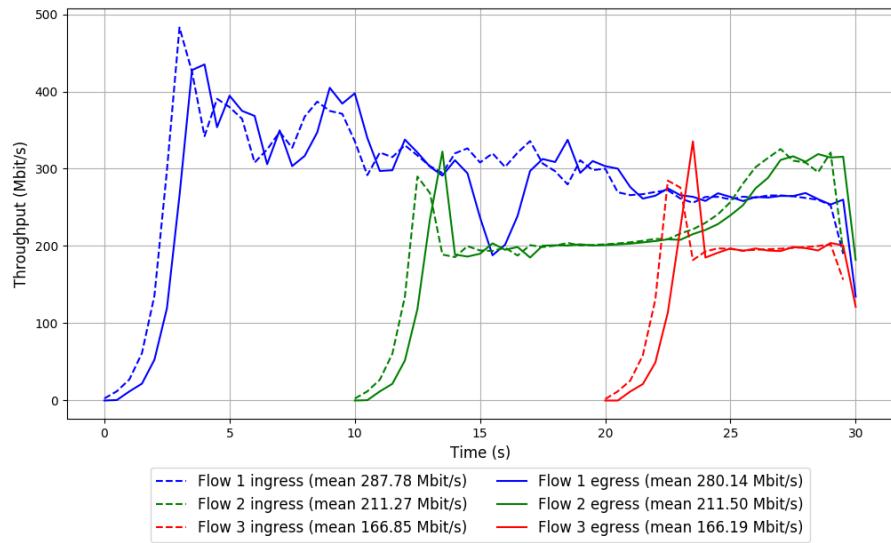


Run 4: Statistics of PCC-Expr

```
Start at: 2019-05-30 00:32:39
End at: 2019-05-30 00:33:09
Local clock offset: -0.266 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.63 Mbit/s
95th percentile per-packet one-way delay: 169.619 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 280.14 Mbit/s
95th percentile per-packet one-way delay: 197.853 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 211.50 Mbit/s
95th percentile per-packet one-way delay: 128.175 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 166.19 Mbit/s
95th percentile per-packet one-way delay: 129.688 ms
Loss rate: 2.15%
```

Run 4: Report of PCC-Expr — Data Link

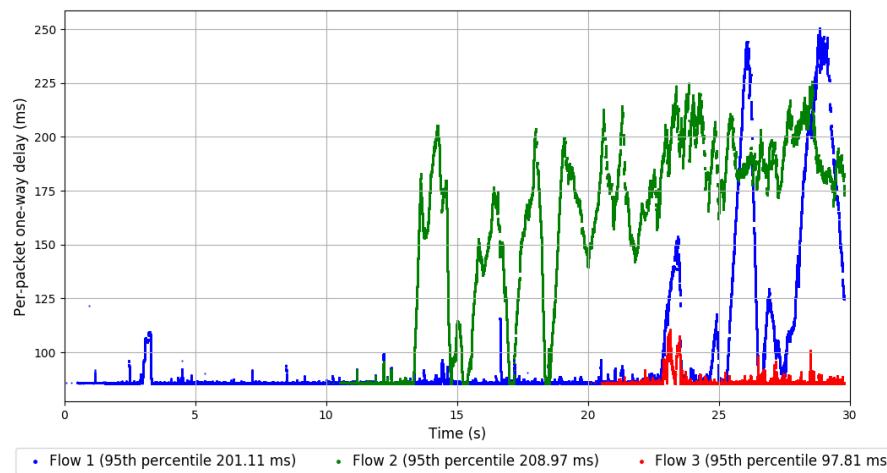
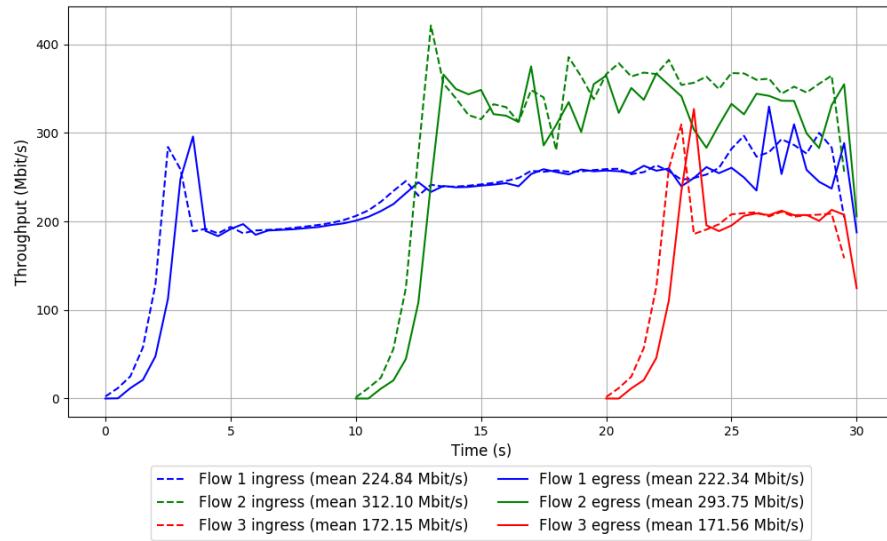


Run 5: Statistics of PCC-Expr

```
Start at: 2019-05-30 01:09:28
End at: 2019-05-30 01:09:58
Local clock offset: -0.149 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.05 Mbit/s
95th percentile per-packet one-way delay: 206.406 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 222.34 Mbit/s
95th percentile per-packet one-way delay: 201.111 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 293.75 Mbit/s
95th percentile per-packet one-way delay: 208.970 ms
Loss rate: 6.70%
-- Flow 3:
Average throughput: 171.56 Mbit/s
95th percentile per-packet one-way delay: 97.812 ms
Loss rate: 2.09%
```

Run 5: Report of PCC-Expr — Data Link

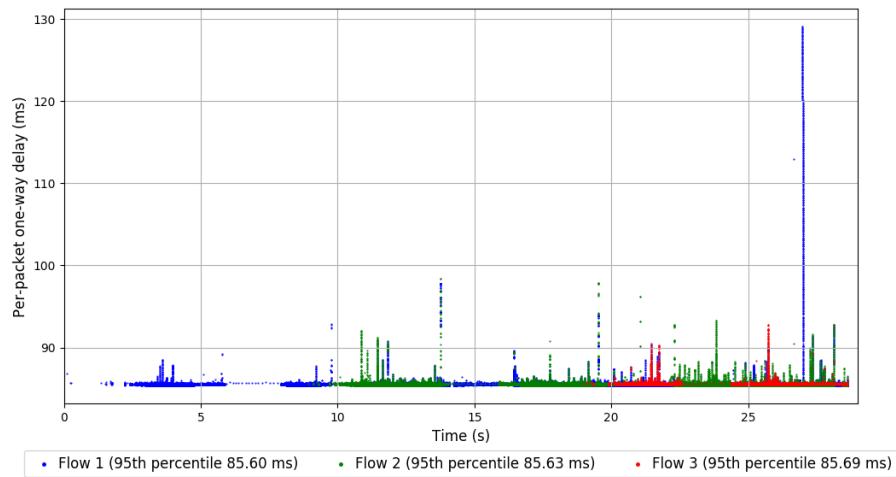
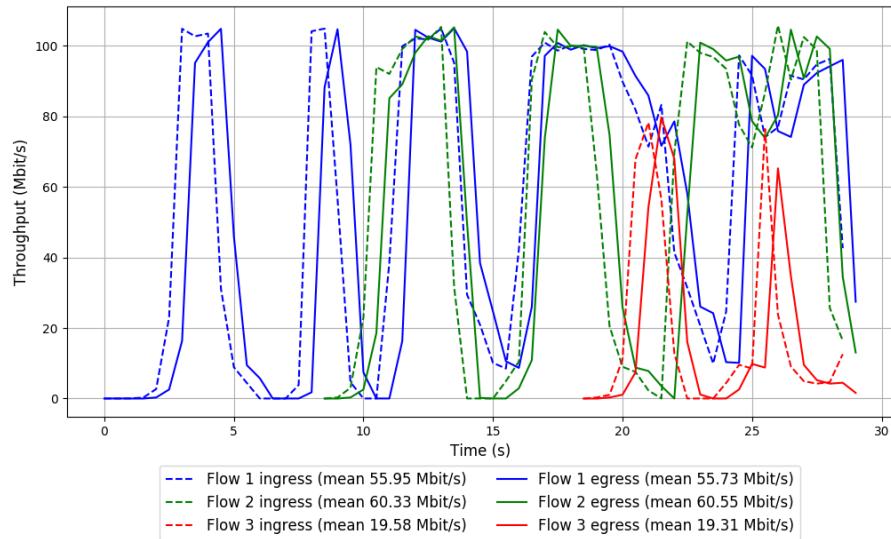


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-05-29 22:34:47
End at: 2019-05-29 22:35:17
Local clock offset: 0.553 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.10 Mbit/s
95th percentile per-packet one-way delay: 85.622 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 55.73 Mbit/s
95th percentile per-packet one-way delay: 85.604 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 60.55 Mbit/s
95th percentile per-packet one-way delay: 85.627 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 85.685 ms
Loss rate: 3.09%
```

Run 1: Report of QUIC Cubic — Data Link

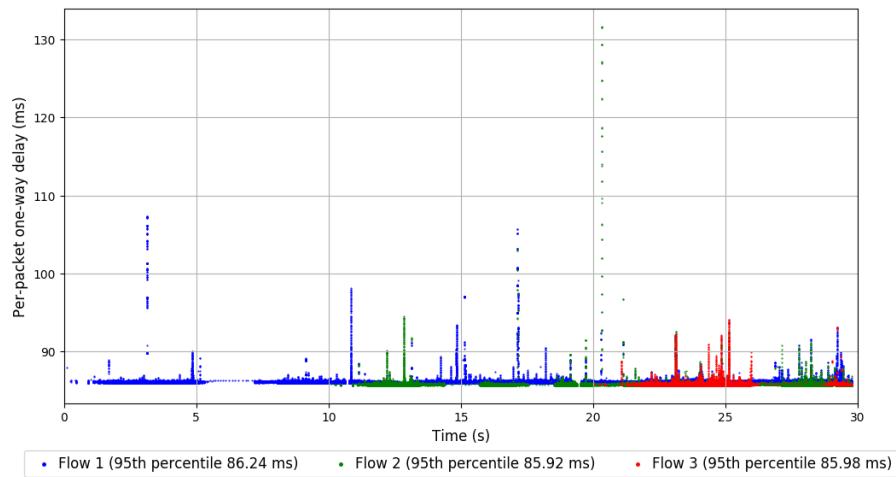
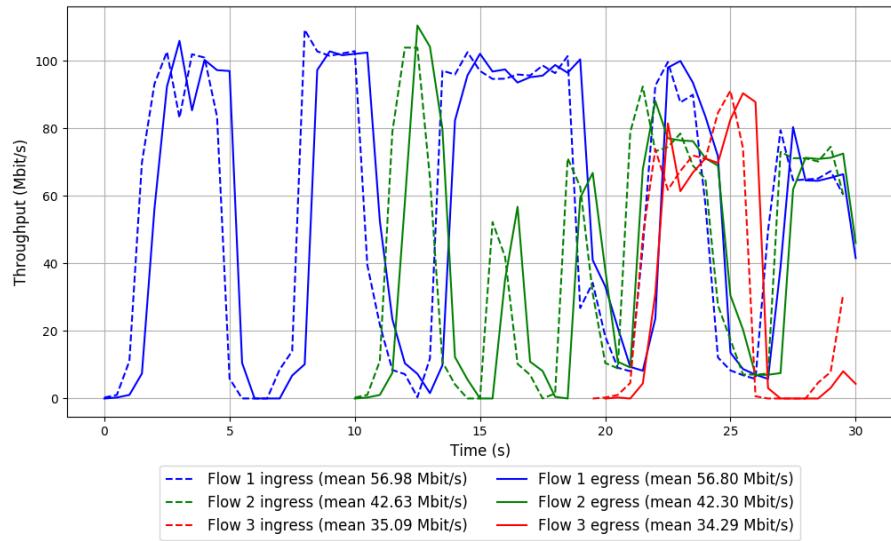


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-05-29 23:10:55
End at: 2019-05-29 23:11:25
Local clock offset: -0.002 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 86.214 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 86.243 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 42.30 Mbit/s
95th percentile per-packet one-way delay: 85.921 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 85.984 ms
Loss rate: 4.01%
```

Run 2: Report of QUIC Cubic — Data Link

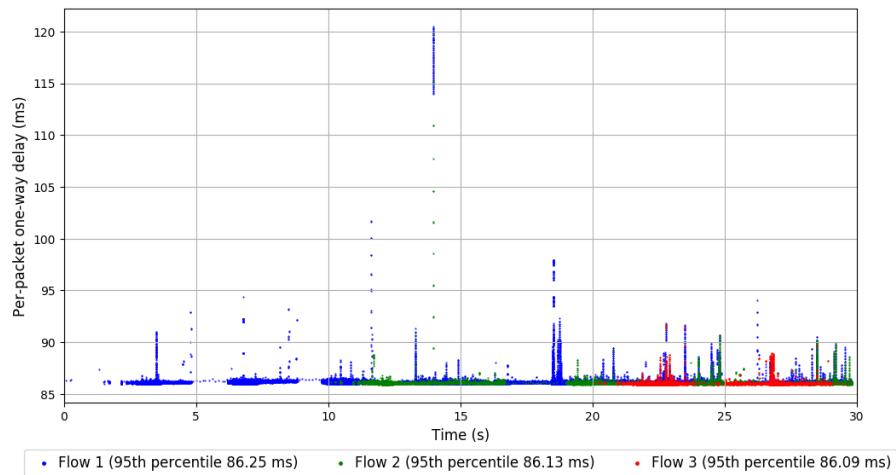
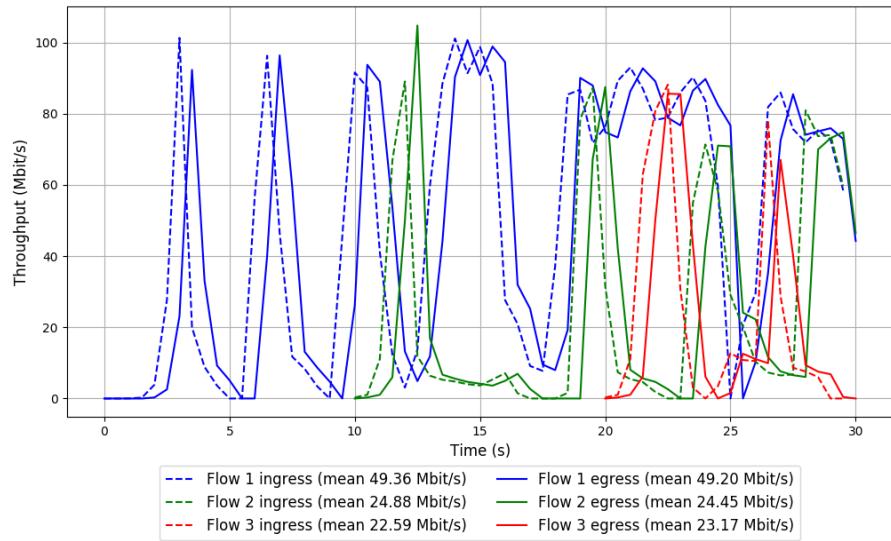


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-05-29 23:47:01
End at: 2019-05-29 23:47:31
Local clock offset: 0.196 ms
Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.89 Mbit/s
95th percentile per-packet one-way delay: 86.228 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 49.20 Mbit/s
95th percentile per-packet one-way delay: 86.250 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 86.132 ms
Loss rate: 2.60%
-- Flow 3:
Average throughput: 23.17 Mbit/s
95th percentile per-packet one-way delay: 86.089 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

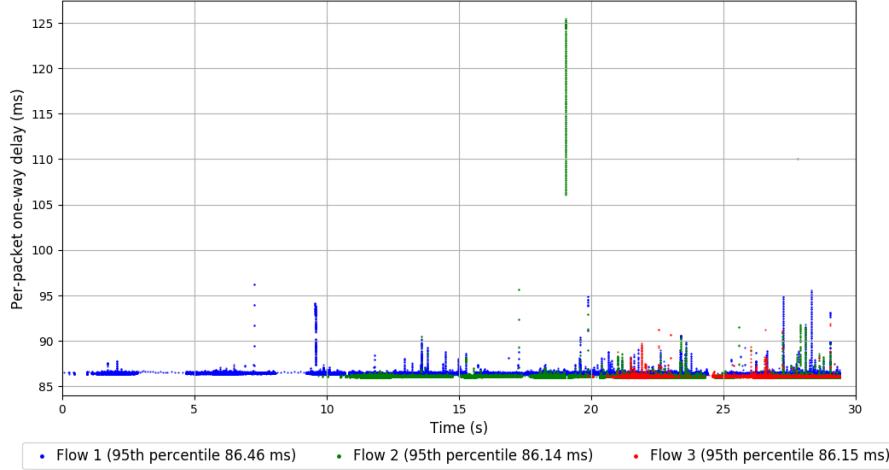
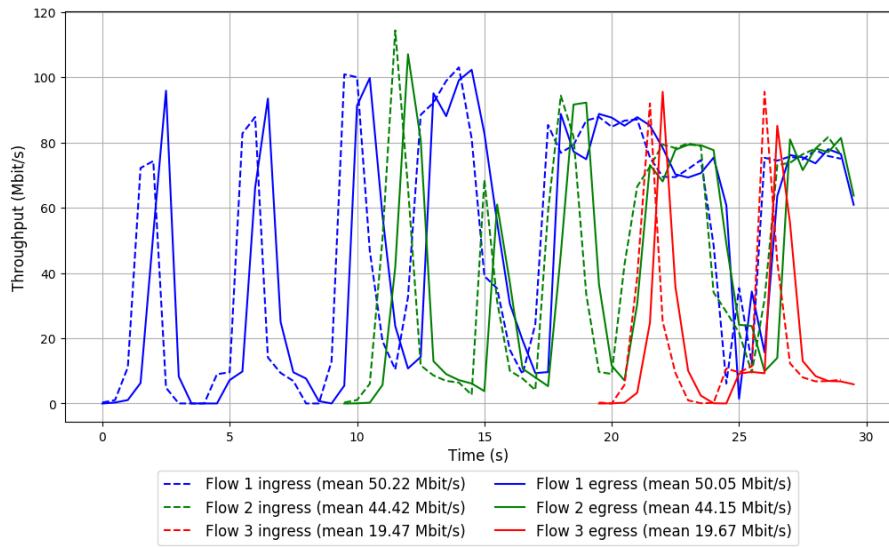


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-05-30 00:23:25
End at: 2019-05-30 00:23:55
Local clock offset: 0.162 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 86.431 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 50.05 Mbit/s
95th percentile per-packet one-way delay: 86.458 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 19.67 Mbit/s
95th percentile per-packet one-way delay: 86.148 ms
Loss rate: 0.68%
```

Run 4: Report of QUIC Cubic — Data Link

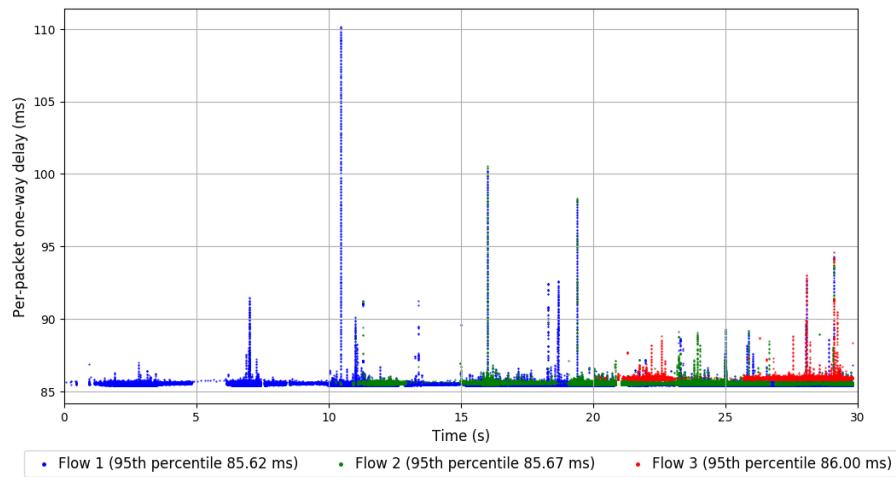
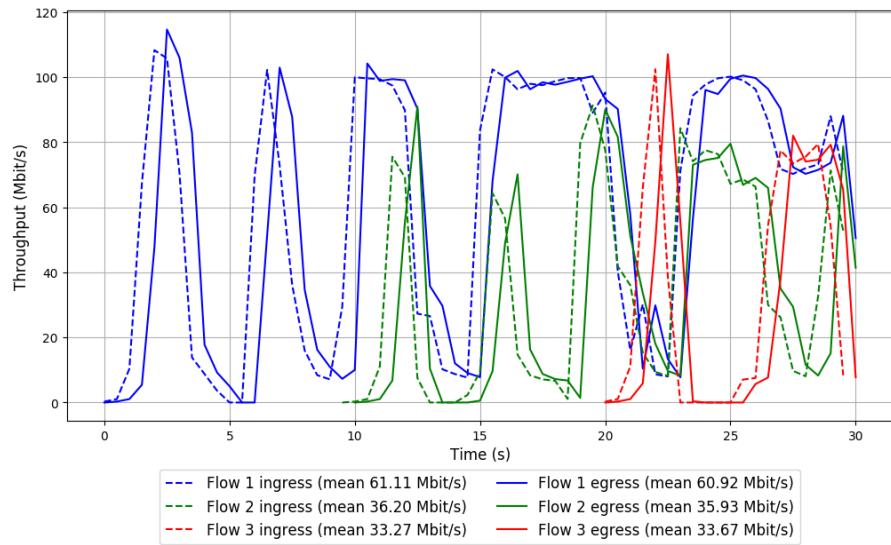


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-05-30 01:00:04
End at: 2019-05-30 01:00:34
Local clock offset: -0.332 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 85.902 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 60.92 Mbit/s
95th percentile per-packet one-way delay: 85.619 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 85.674 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 85.998 ms
Loss rate: 0.50%
```

Run 5: Report of QUIC Cubic — Data Link

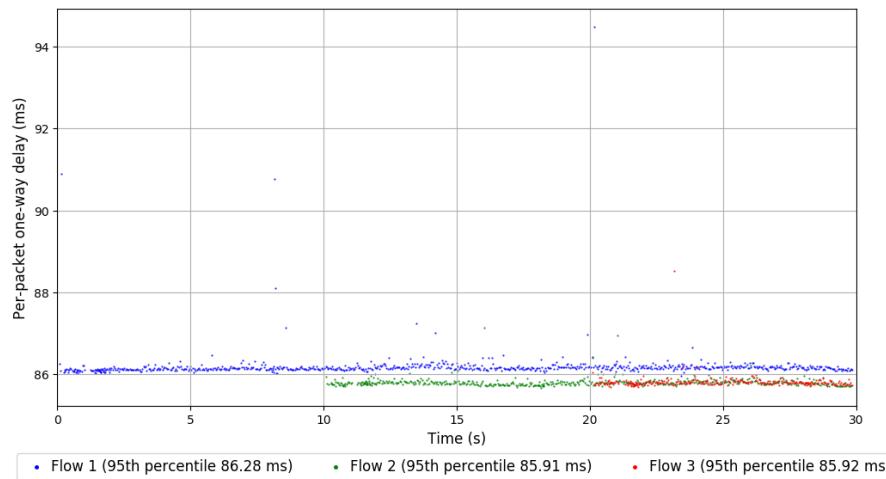
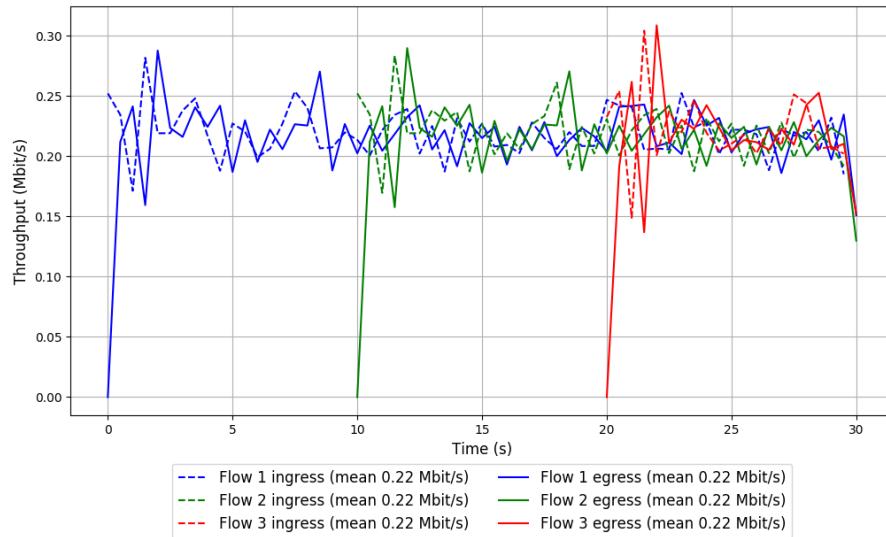


```
Run 1: Statistics of SCReAM

Start at: 2019-05-29 23:03:06
End at: 2019-05-29 23:03:36
Local clock offset: -0.162 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.241 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.282 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.906 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.920 ms
Loss rate: 1.85%
```

Run 1: Report of SCReAM — Data Link

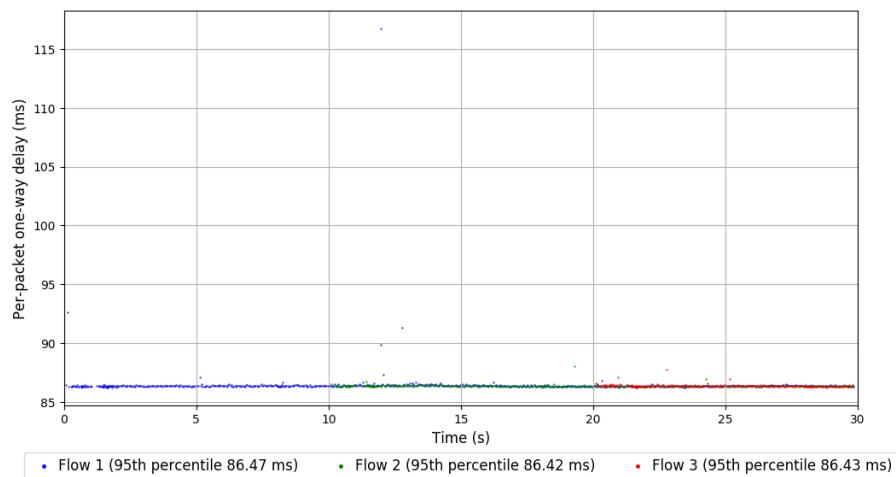
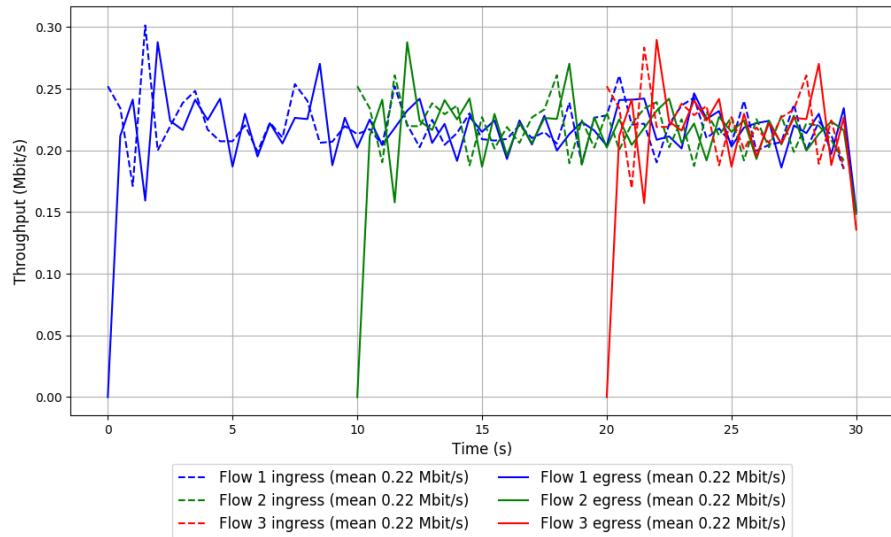


Run 2: Statistics of SCReAM

```
Start at: 2019-05-29 23:39:03
End at: 2019-05-29 23:39:33
Local clock offset: 0.365 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.449 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.467 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.422 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 1.85%
```

Run 2: Report of SCReAM — Data Link

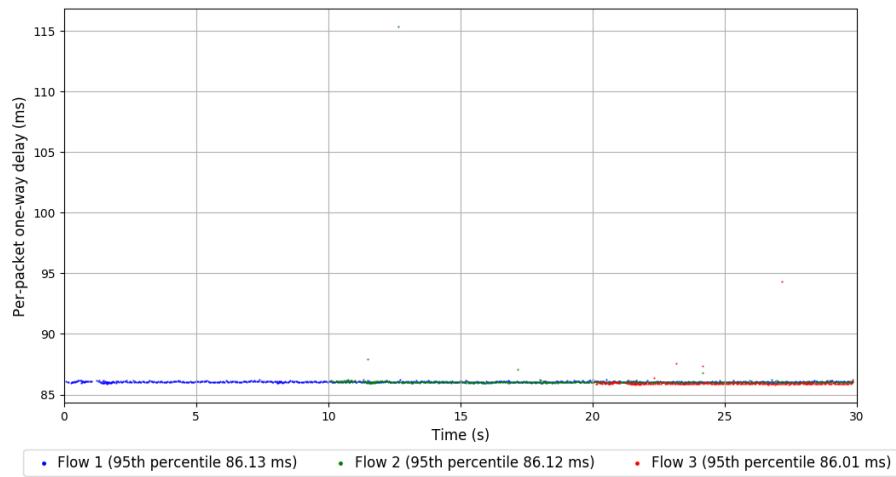
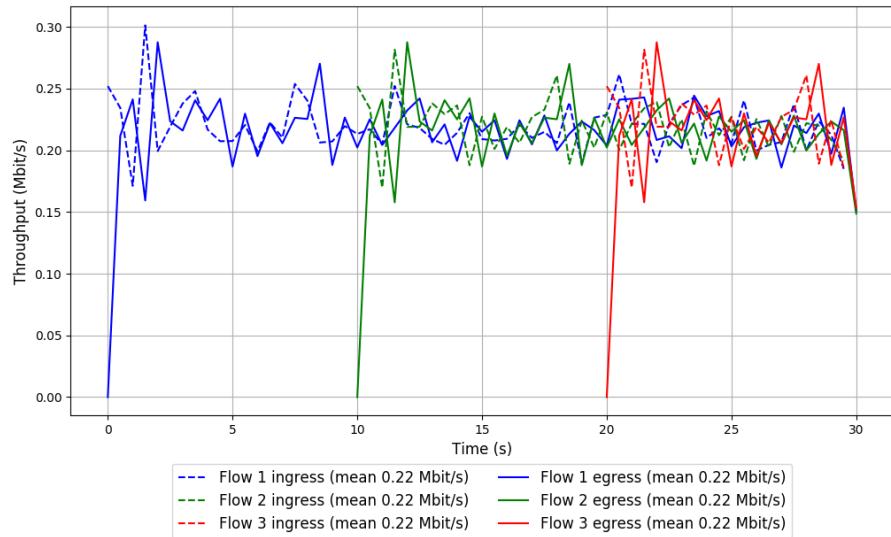


Run 3: Statistics of SCReAM

```
Start at: 2019-05-30 00:15:32
End at: 2019-05-30 00:16:02
Local clock offset: -0.049 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.121 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.129 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.118 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.011 ms
Loss rate: 1.46%
```

Run 3: Report of SCReAM — Data Link

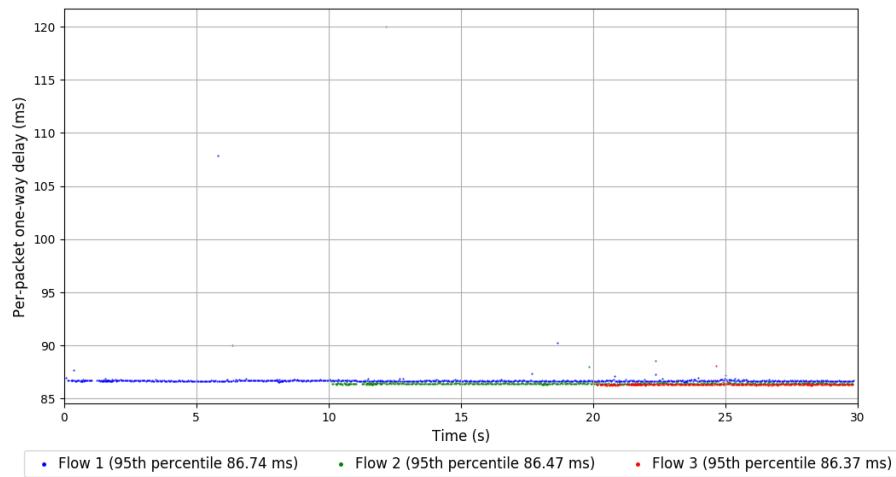
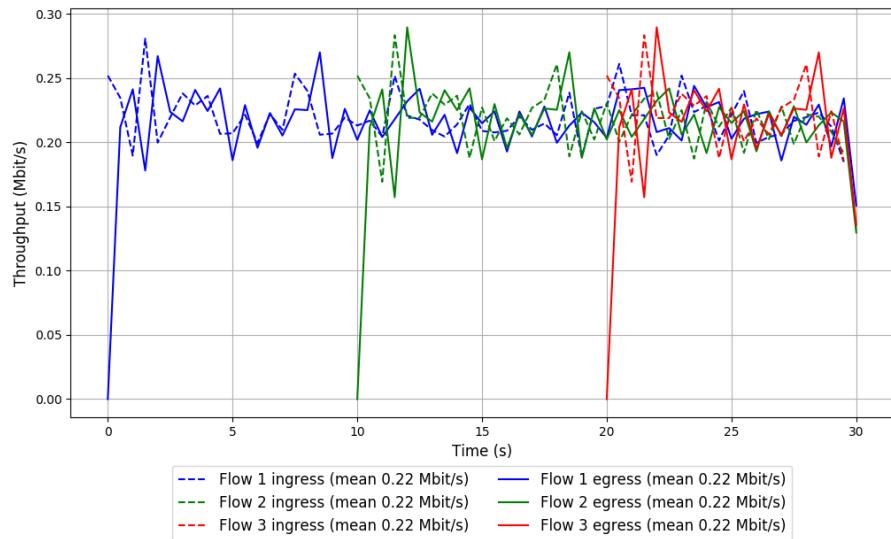


Run 4: Statistics of SCReAM

```
Start at: 2019-05-30 00:52:09
End at: 2019-05-30 00:52:39
Local clock offset: 0.248 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.472 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.374 ms
Loss rate: 1.85%
```

Run 4: Report of SCReAM — Data Link

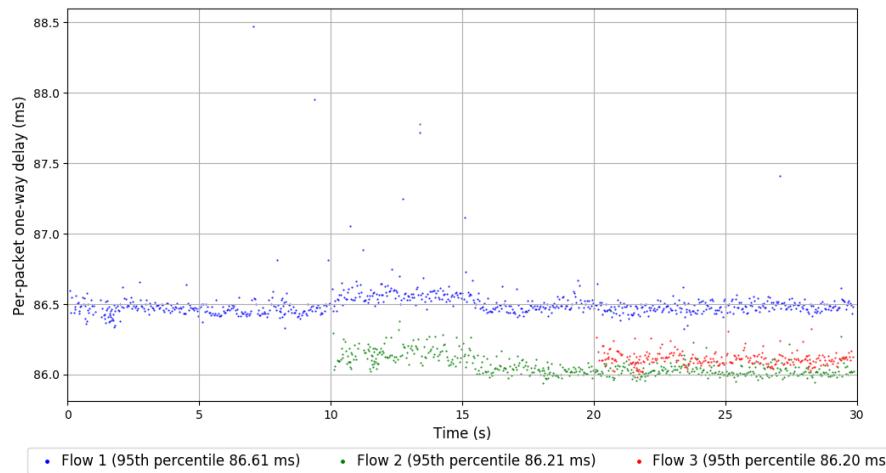
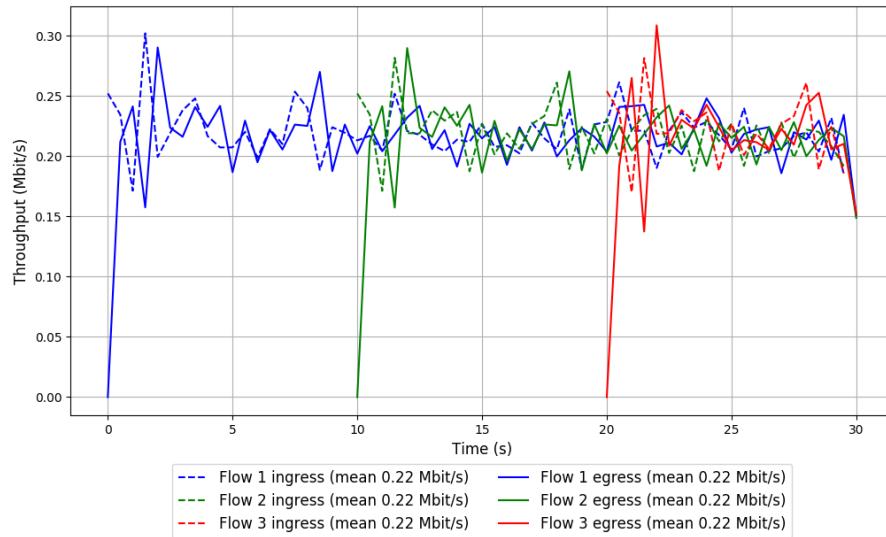


Run 5: Statistics of SCReAM

```
Start at: 2019-05-30 01:29:16
End at: 2019-05-30 01:29:46
Local clock offset: 0.247 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.572 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.609 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.211 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.202 ms
Loss rate: 1.85%
```

Run 5: Report of SCReAM — Data Link

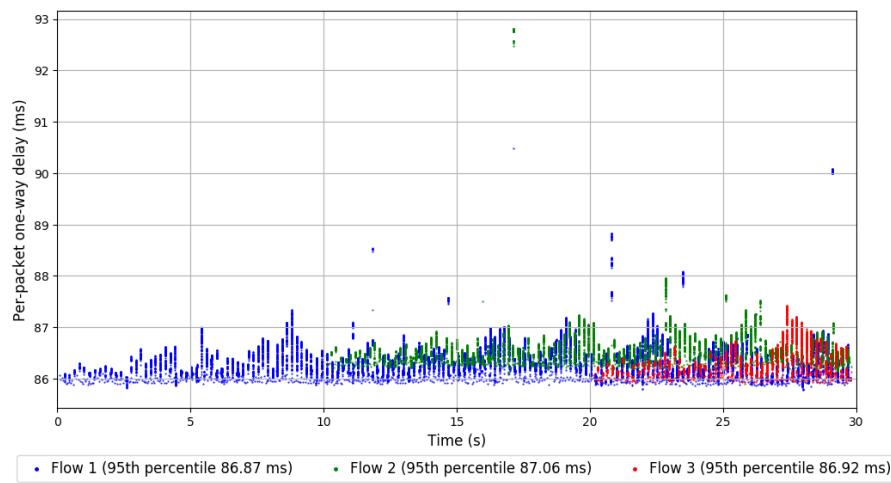
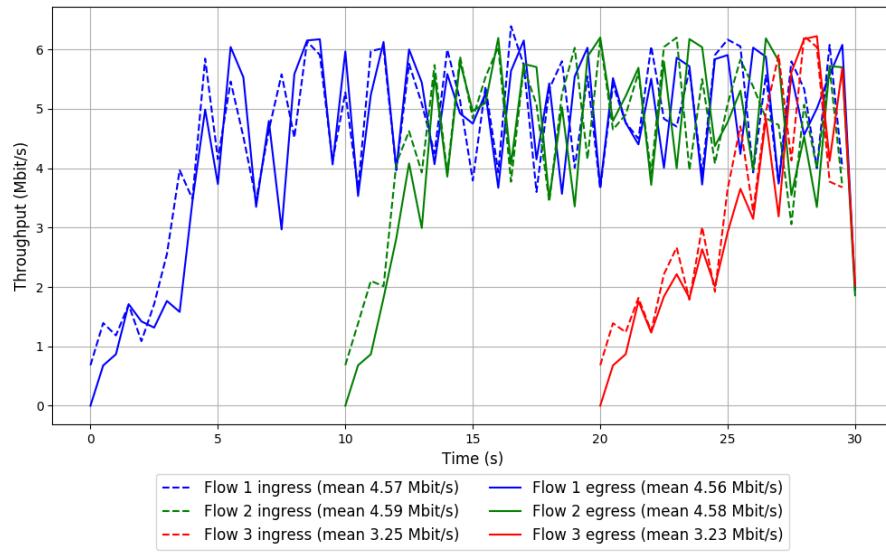


Run 1: Statistics of Sprout

```
Start at: 2019-05-29 23:09:39
End at: 2019-05-29 23:10:09
Local clock offset: -0.018 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 86.972 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 86.866 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 87.057 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 86.920 ms
Loss rate: 2.56%
```

Run 1: Report of Sprout — Data Link

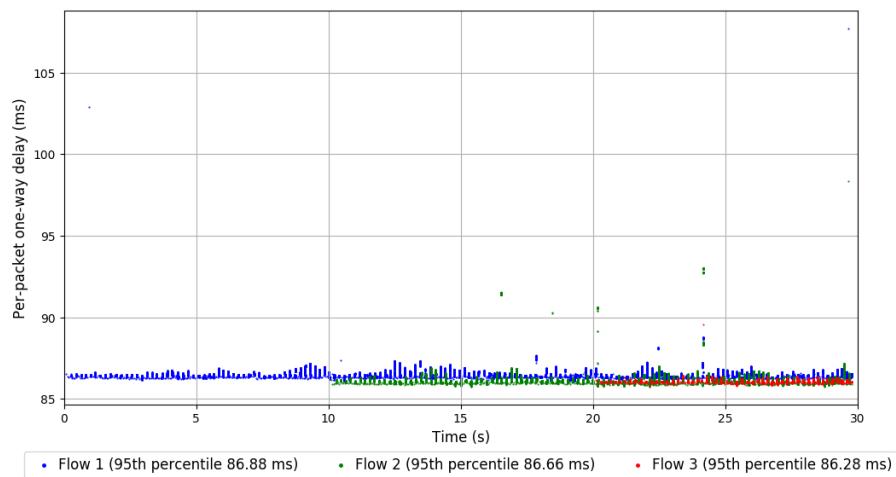
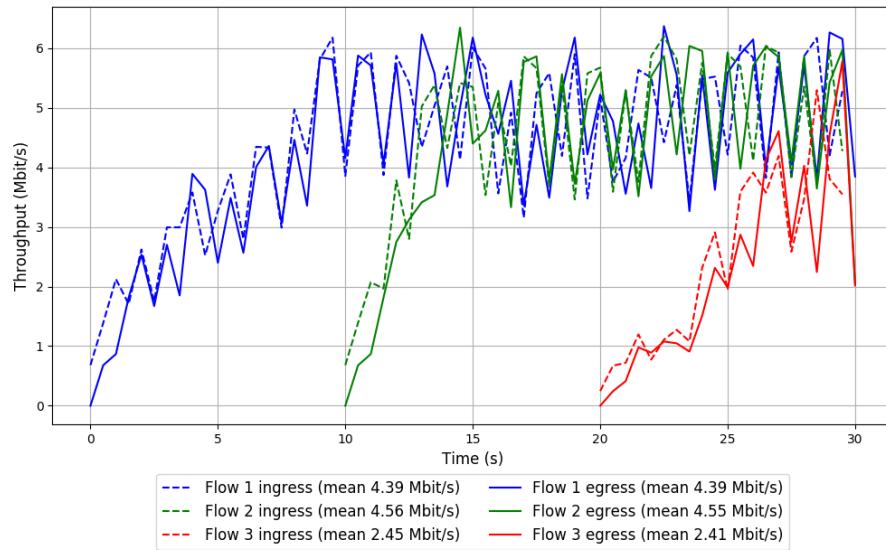


Run 2: Statistics of Sprout

```
Start at: 2019-05-29 23:45:45
End at: 2019-05-29 23:46:15
Local clock offset: -0.069 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 86.816 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 86.881 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 86.663 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 86.275 ms
Loss rate: 3.18%
```

Run 2: Report of Sprout — Data Link

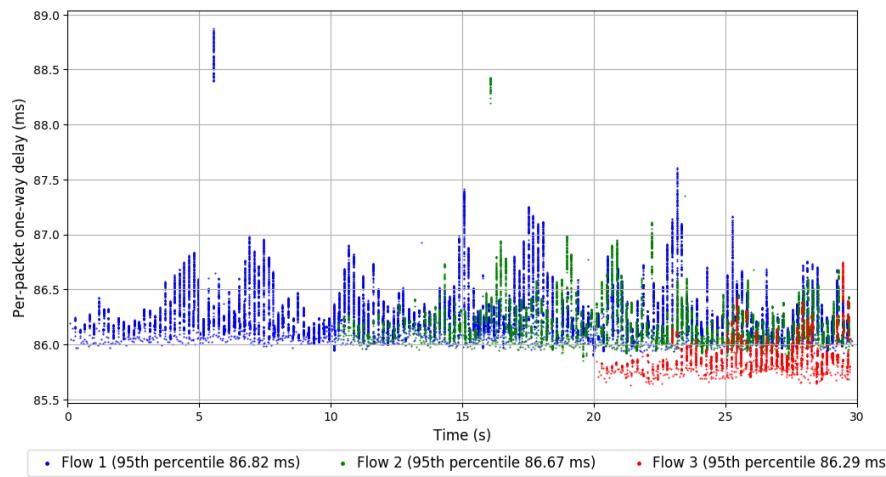
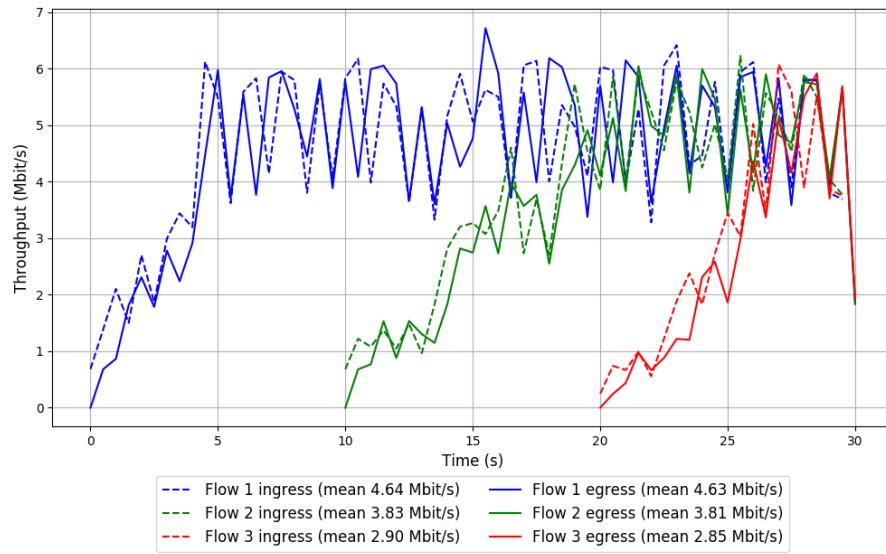


Run 3: Statistics of Sprout

```
Start at: 2019-05-30 00:22:10
End at: 2019-05-30 00:22:40
Local clock offset: -0.254 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 86.745 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 86.823 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 86.666 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 86.293 ms
Loss rate: 3.20%
```

Run 3: Report of Sprout — Data Link

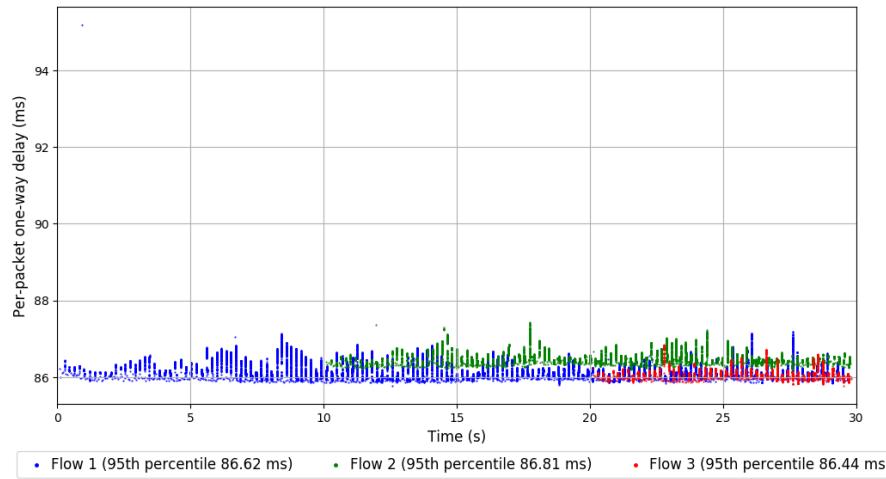
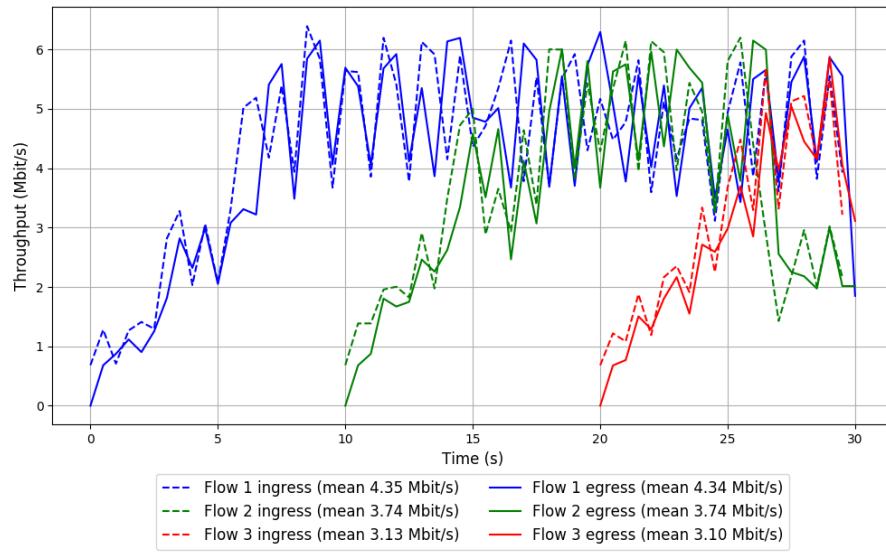


Run 4: Statistics of Sprout

```
Start at: 2019-05-30 00:58:49
End at: 2019-05-30 00:59:19
Local clock offset: 0.016 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 86.621 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 86.810 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 86.445 ms
Loss rate: 2.50%
```

Run 4: Report of Sprout — Data Link

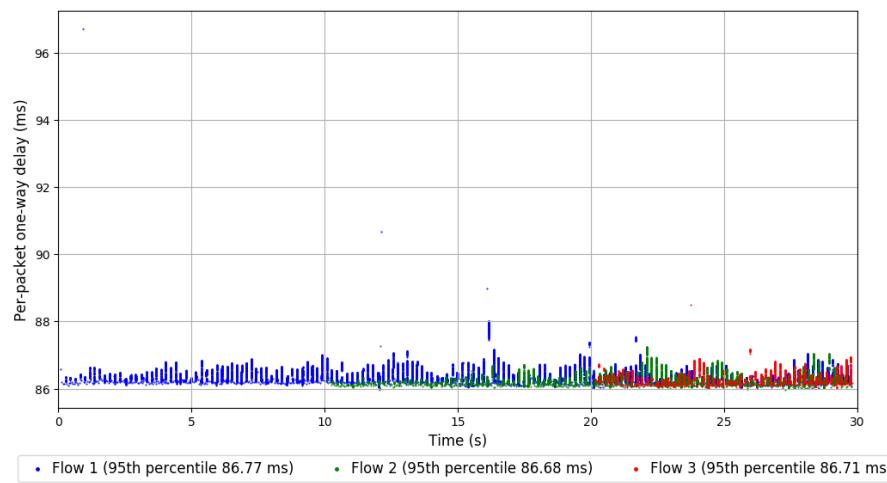
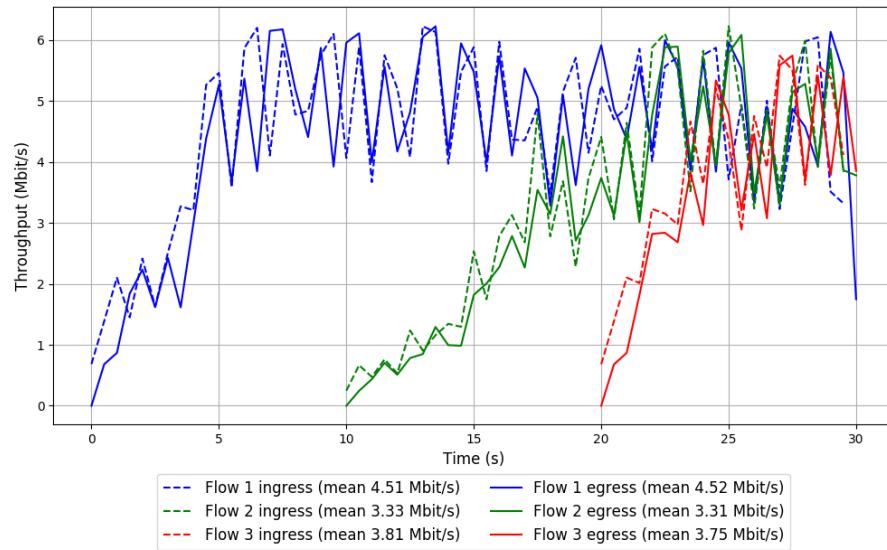


Run 5: Statistics of Sprout

```
Start at: 2019-05-30 01:35:59
End at: 2019-05-30 01:36:29
Local clock offset: 0.234 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 86.745 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 86.774 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 86.712 ms
Loss rate: 2.76%
```

Run 5: Report of Sprout — Data Link

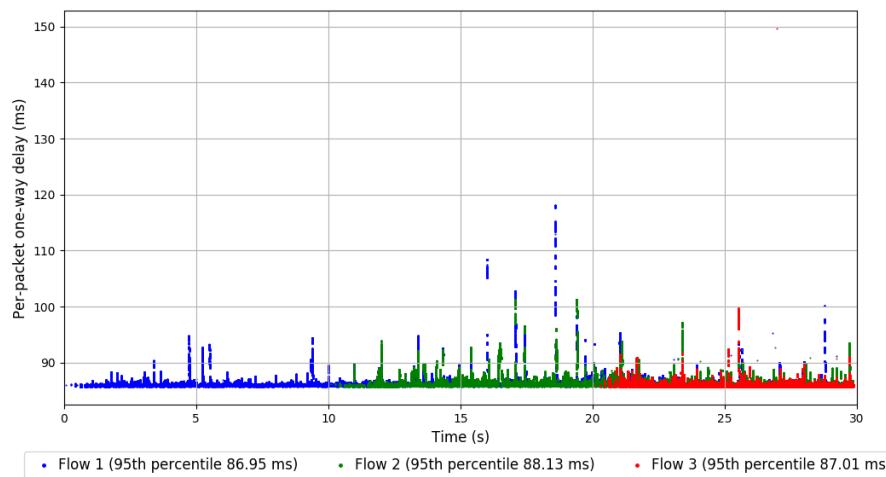
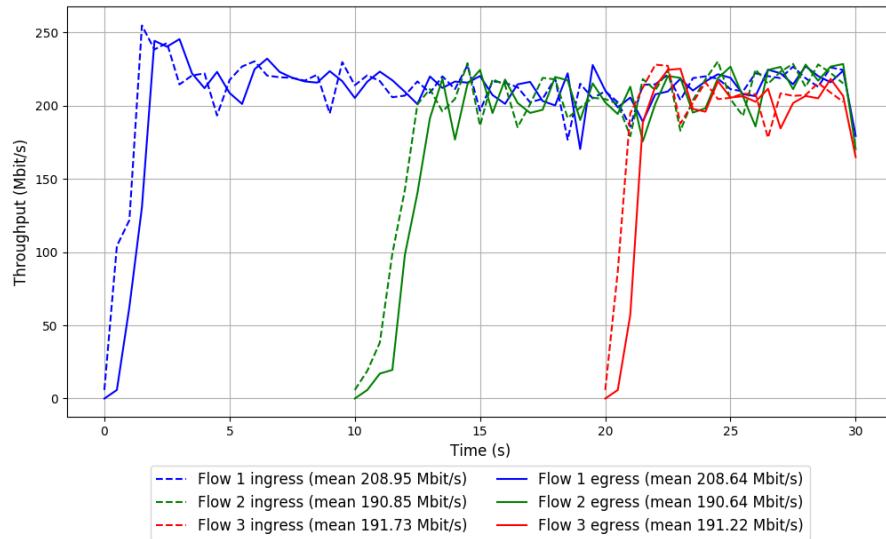


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-05-29 23:01:10
End at: 2019-05-29 23:01:40
Local clock offset: 0.028 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-05-30 03:58:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.94 Mbit/s
95th percentile per-packet one-way delay: 87.321 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 208.64 Mbit/s
95th percentile per-packet one-way delay: 86.951 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 190.64 Mbit/s
95th percentile per-packet one-way delay: 88.131 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 191.22 Mbit/s
95th percentile per-packet one-way delay: 87.008 ms
Loss rate: 1.97%
```

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

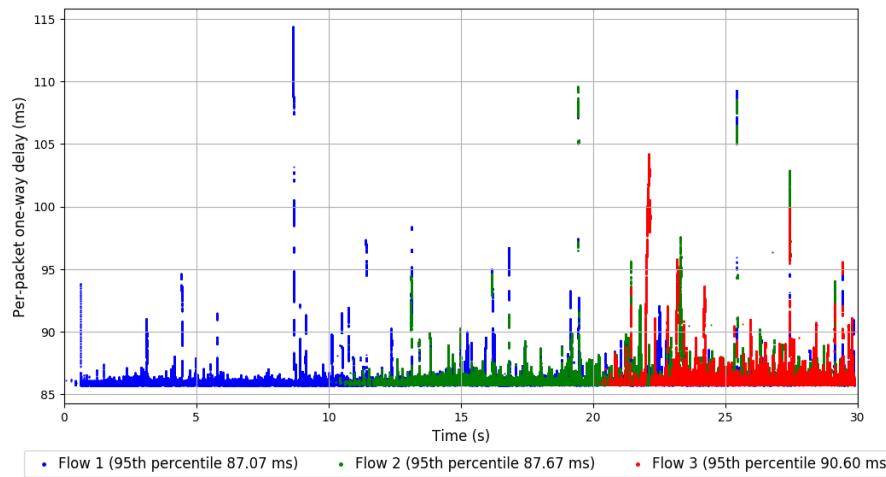
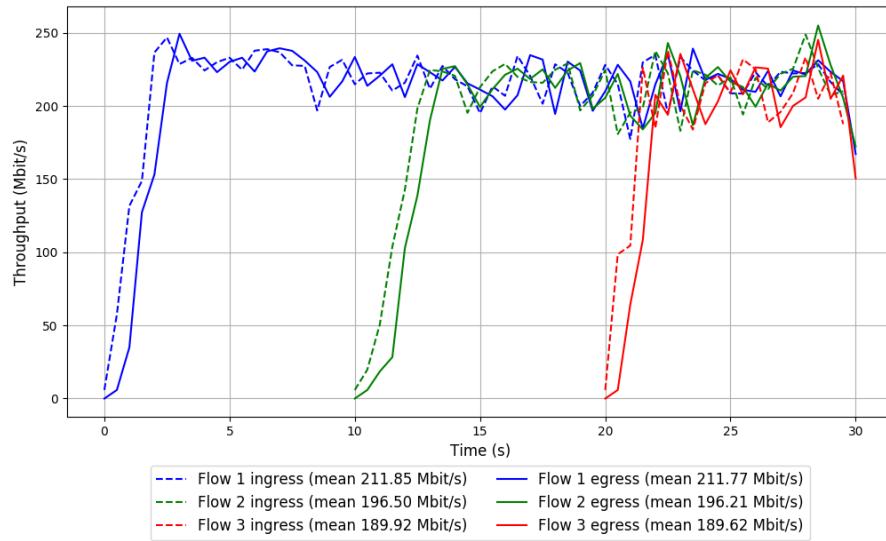


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-05-29 23:37:06
End at: 2019-05-29 23:37:36
Local clock offset: -0.02 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2019-05-30 03:59:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.46 Mbit/s
95th percentile per-packet one-way delay: 87.779 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 211.77 Mbit/s
95th percentile per-packet one-way delay: 87.073 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 196.21 Mbit/s
95th percentile per-packet one-way delay: 87.672 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 189.62 Mbit/s
95th percentile per-packet one-way delay: 90.601 ms
Loss rate: 1.90%
```

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

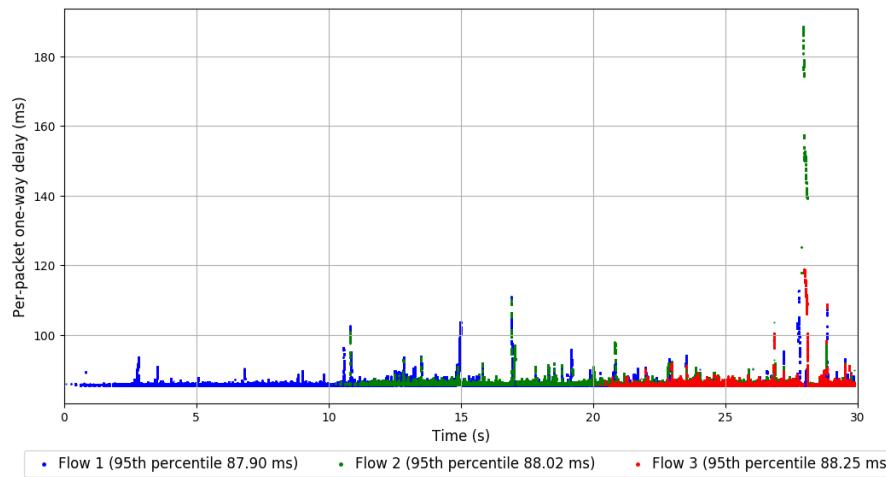
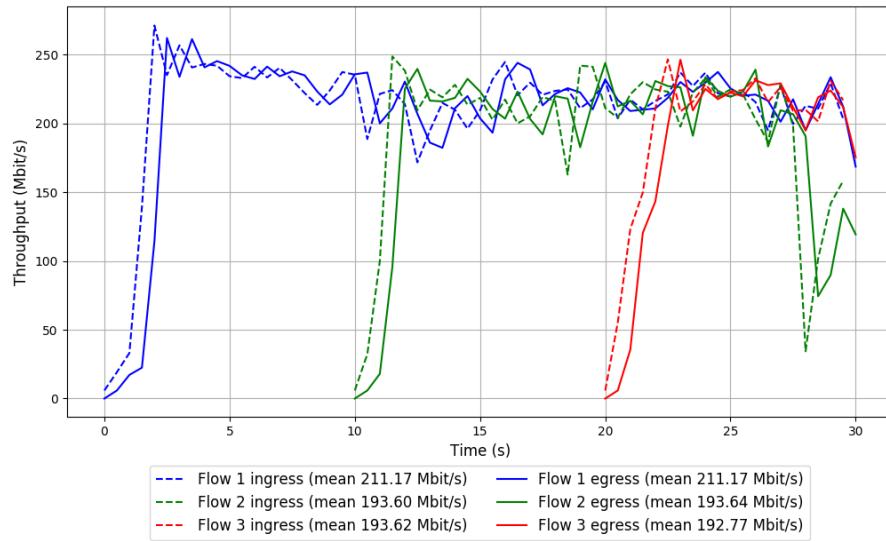


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-05-30 00:13:36
End at: 2019-05-30 00:14:06
Local clock offset: -0.258 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-05-30 03:59:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.00 Mbit/s
95th percentile per-packet one-way delay: 88.000 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 211.17 Mbit/s
95th percentile per-packet one-way delay: 87.897 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 88.015 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 192.77 Mbit/s
95th percentile per-packet one-way delay: 88.248 ms
Loss rate: 2.16%
```

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

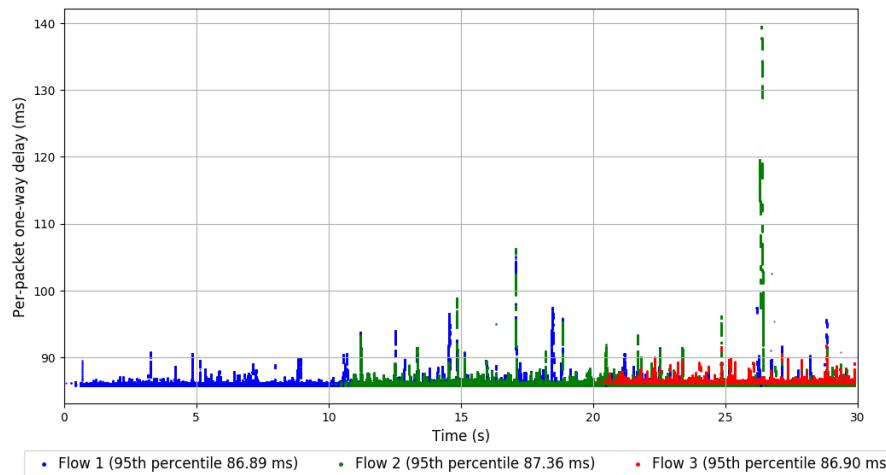
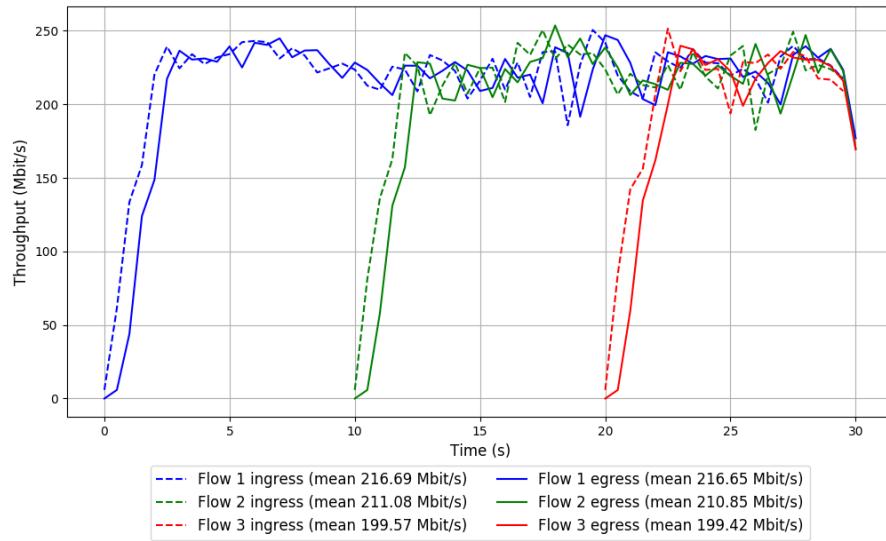


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-05-30 00:50:11
End at: 2019-05-30 00:50:41
Local clock offset: -0.09 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2019-05-30 04:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.12 Mbit/s
95th percentile per-packet one-way delay: 87.054 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 216.65 Mbit/s
95th percentile per-packet one-way delay: 86.892 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 210.85 Mbit/s
95th percentile per-packet one-way delay: 87.362 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 199.42 Mbit/s
95th percentile per-packet one-way delay: 86.904 ms
Loss rate: 1.81%
```

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

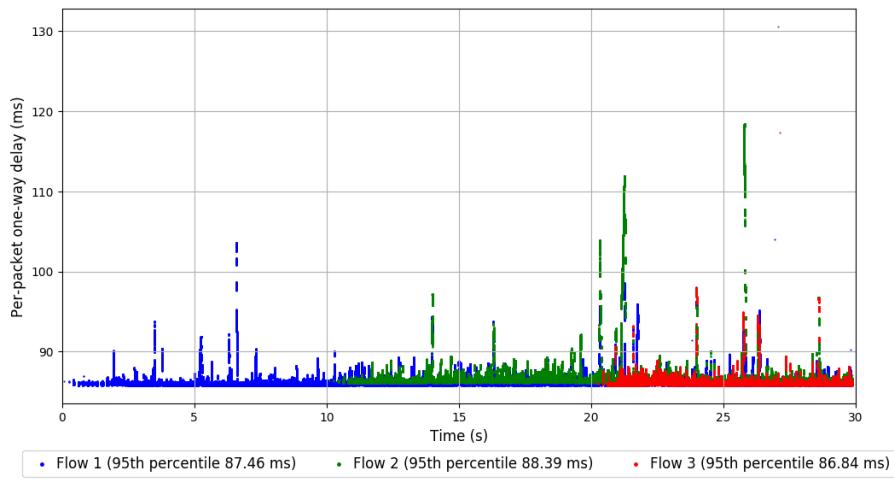
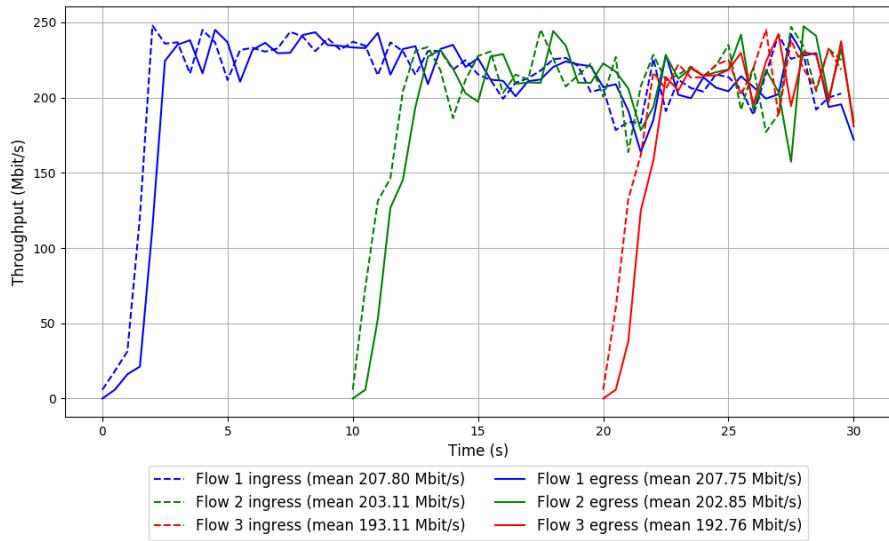


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-05-30 01:27:19
End at: 2019-05-30 01:27:49
Local clock offset: 0.096 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-05-30 04:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.75 Mbit/s
95th percentile per-packet one-way delay: 87.716 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 207.75 Mbit/s
95th percentile per-packet one-way delay: 87.456 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 202.85 Mbit/s
95th percentile per-packet one-way delay: 88.394 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 192.76 Mbit/s
95th percentile per-packet one-way delay: 86.838 ms
Loss rate: 1.93%
```

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

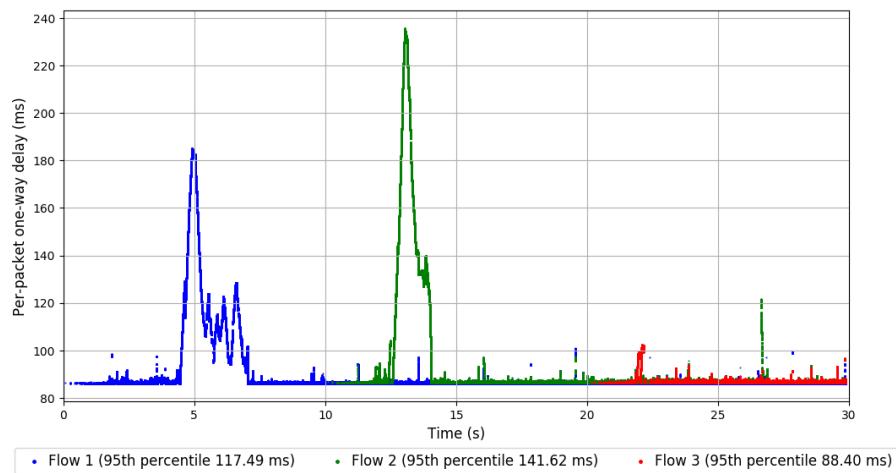
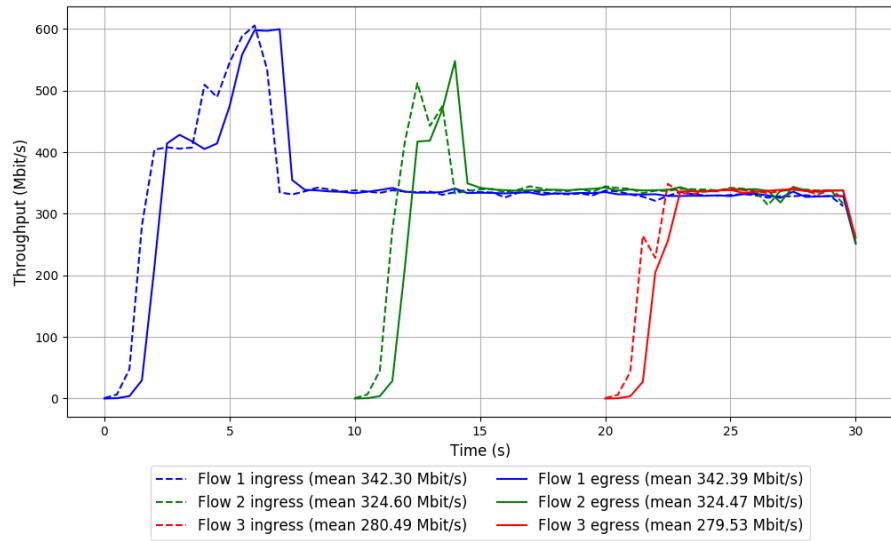


Run 1: Statistics of TCP Vegas

```
Start at: 2019-05-29 22:55:36
End at: 2019-05-29 22:56:06
Local clock offset: 0.318 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-05-30 04:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 649.74 Mbit/s
95th percentile per-packet one-way delay: 122.739 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 342.39 Mbit/s
95th percentile per-packet one-way delay: 117.492 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 324.47 Mbit/s
95th percentile per-packet one-way delay: 141.620 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 279.53 Mbit/s
95th percentile per-packet one-way delay: 88.396 ms
Loss rate: 2.09%
```

Run 1: Report of TCP Vegas — Data Link

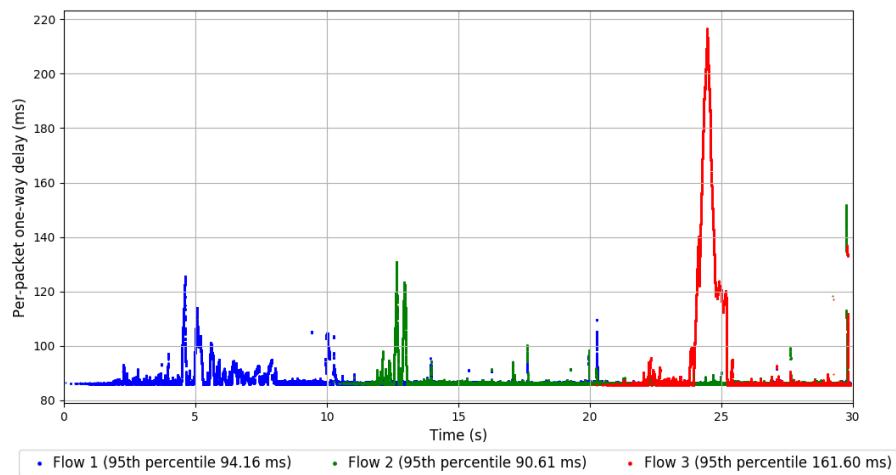
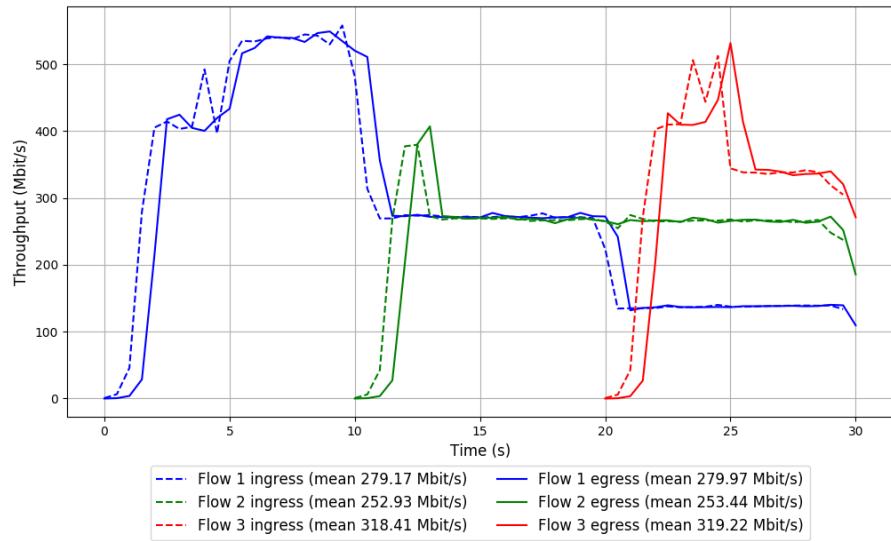


Run 2: Statistics of TCP Vegas

```
Start at: 2019-05-29 23:31:36
End at: 2019-05-29 23:32:06
Local clock offset: -0.224 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2019-05-30 04:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 552.74 Mbit/s
95th percentile per-packet one-way delay: 104.206 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 279.97 Mbit/s
95th percentile per-packet one-way delay: 94.160 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 253.44 Mbit/s
95th percentile per-packet one-way delay: 90.612 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 319.22 Mbit/s
95th percentile per-packet one-way delay: 161.598 ms
Loss rate: 1.48%
```

Run 2: Report of TCP Vegas — Data Link

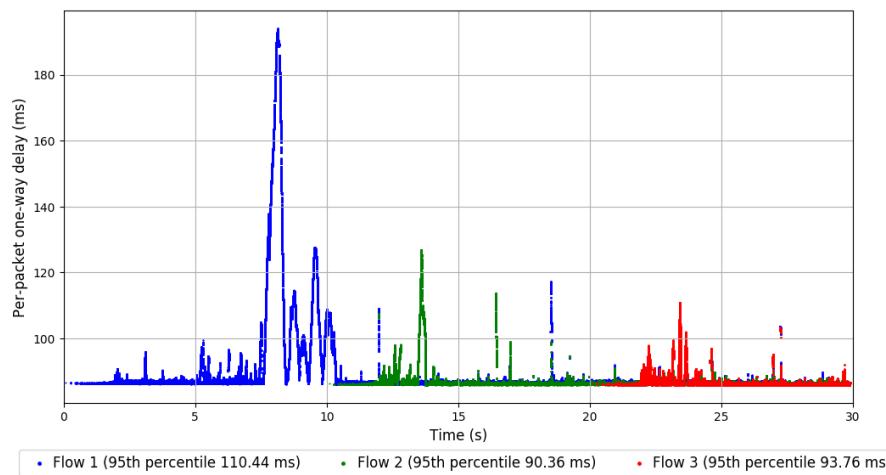
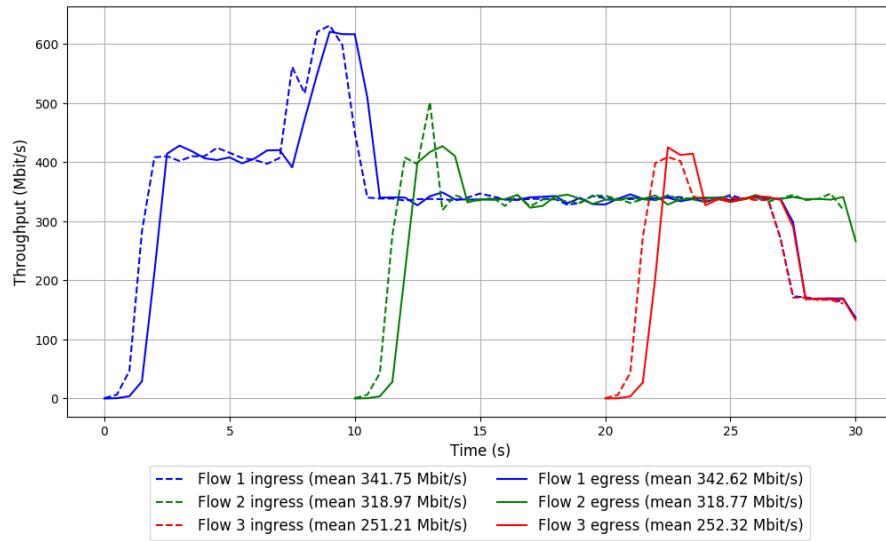


Run 3: Statistics of TCP Vegas

```
Start at: 2019-05-30 00:07:59
End at: 2019-05-30 00:08:29
Local clock offset: 0.117 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-05-30 04:09:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 637.25 Mbit/s
95th percentile per-packet one-way delay: 103.681 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 342.62 Mbit/s
95th percentile per-packet one-way delay: 110.435 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 318.77 Mbit/s
95th percentile per-packet one-way delay: 90.364 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 252.32 Mbit/s
95th percentile per-packet one-way delay: 93.764 ms
Loss rate: 1.29%
```

Run 3: Report of TCP Vegas — Data Link

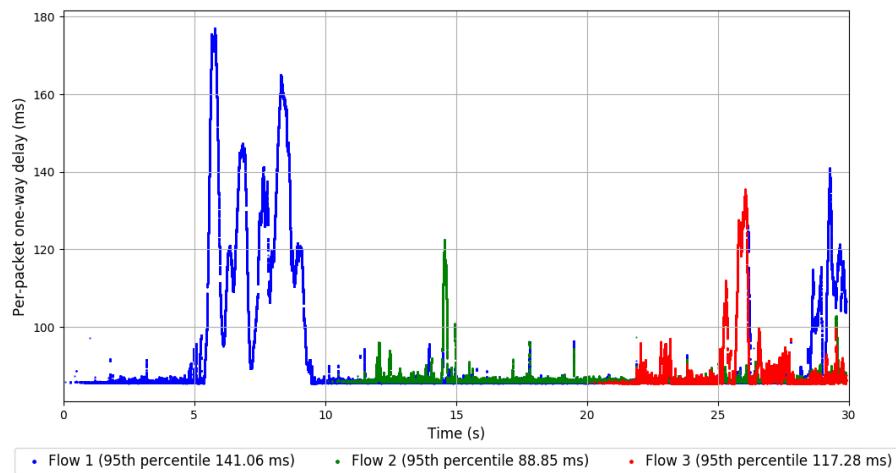
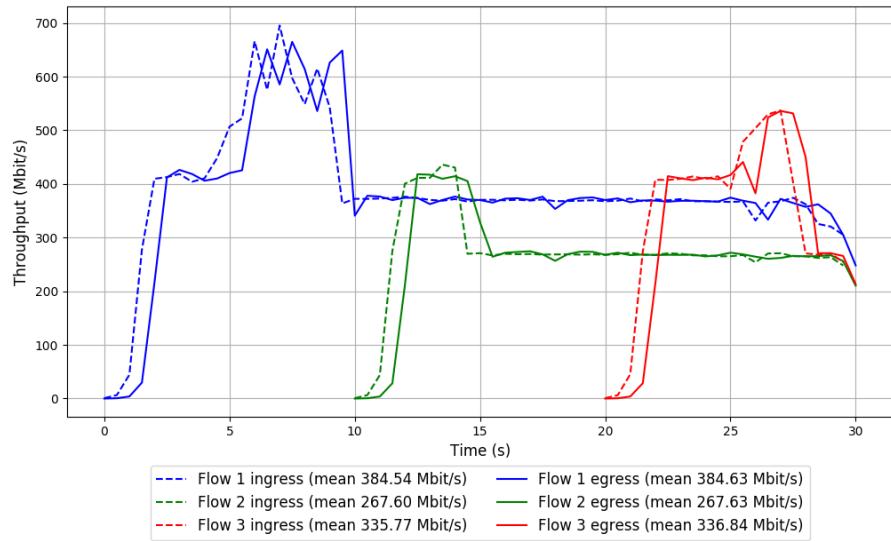


Run 4: Statistics of TCP Vegas

```
Start at: 2019-05-30 00:44:30
End at: 2019-05-30 00:45:00
Local clock offset: -0.362 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 673.12 Mbit/s
95th percentile per-packet one-way delay: 127.502 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 384.63 Mbit/s
95th percentile per-packet one-way delay: 141.056 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 267.63 Mbit/s
95th percentile per-packet one-way delay: 88.853 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 336.84 Mbit/s
95th percentile per-packet one-way delay: 117.283 ms
Loss rate: 1.40%
```

Run 4: Report of TCP Vegas — Data Link

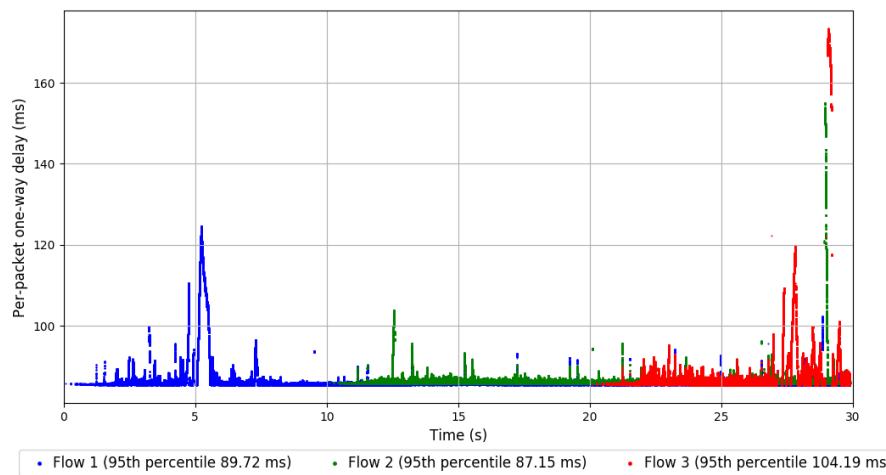
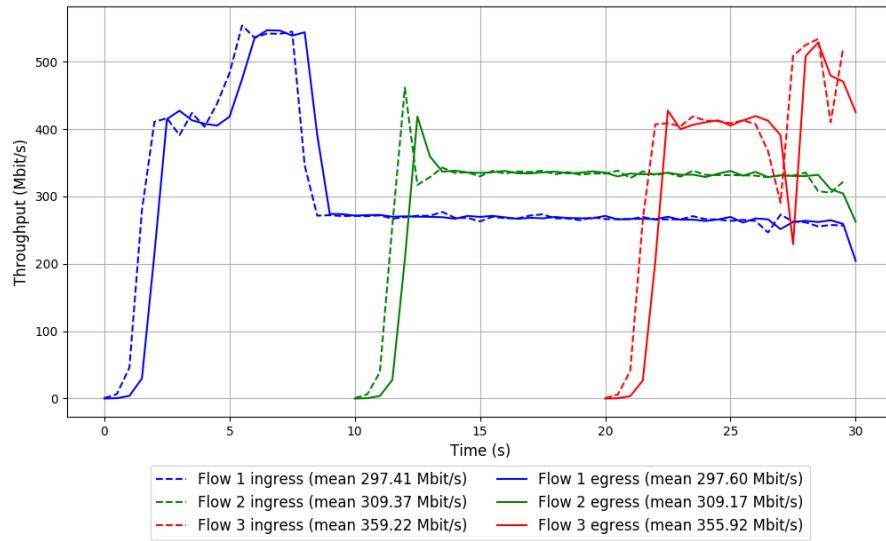


Run 5: Statistics of TCP Vegas

```
Start at: 2019-05-30 01:21:46
End at: 2019-05-30 01:22:16
Local clock offset: -0.408 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.86 Mbit/s
95th percentile per-packet one-way delay: 91.355 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 297.60 Mbit/s
95th percentile per-packet one-way delay: 89.722 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 309.17 Mbit/s
95th percentile per-packet one-way delay: 87.146 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 355.92 Mbit/s
95th percentile per-packet one-way delay: 104.194 ms
Loss rate: 2.62%
```

Run 5: Report of TCP Vegas — Data Link

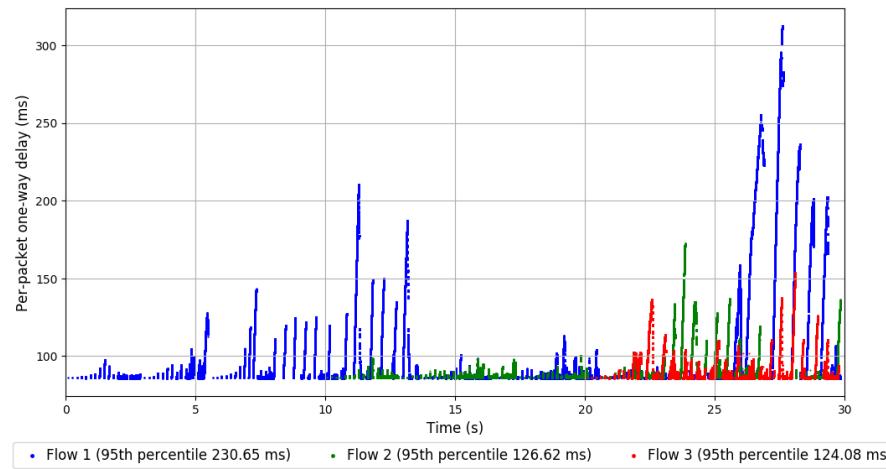
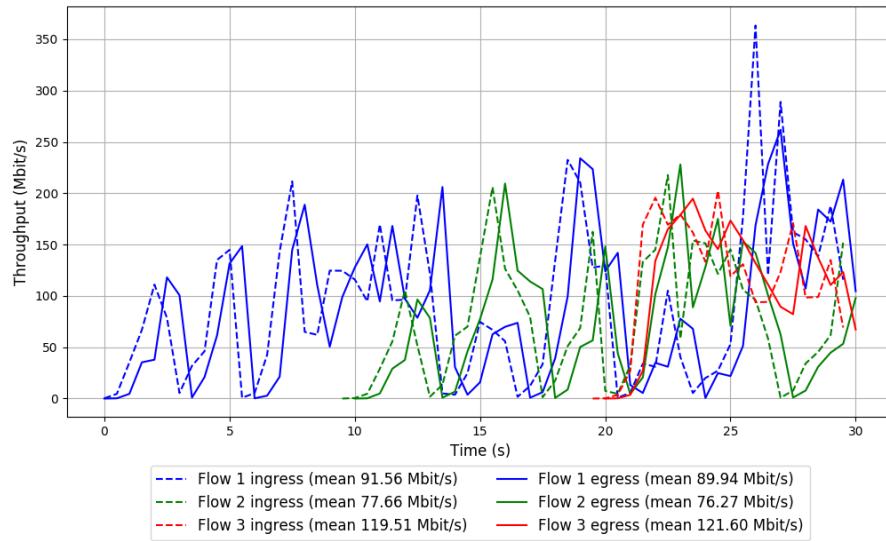


Run 1: Statistics of Verus

```
Start at: 2019-05-29 23:08:04
End at: 2019-05-29 23:08:34
Local clock offset: 0.018 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 180.32 Mbit/s
95th percentile per-packet one-way delay: 199.905 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 230.647 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 76.27 Mbit/s
95th percentile per-packet one-way delay: 126.624 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 121.60 Mbit/s
95th percentile per-packet one-way delay: 124.082 ms
Loss rate: 0.58%
```

Run 1: Report of Verus — Data Link

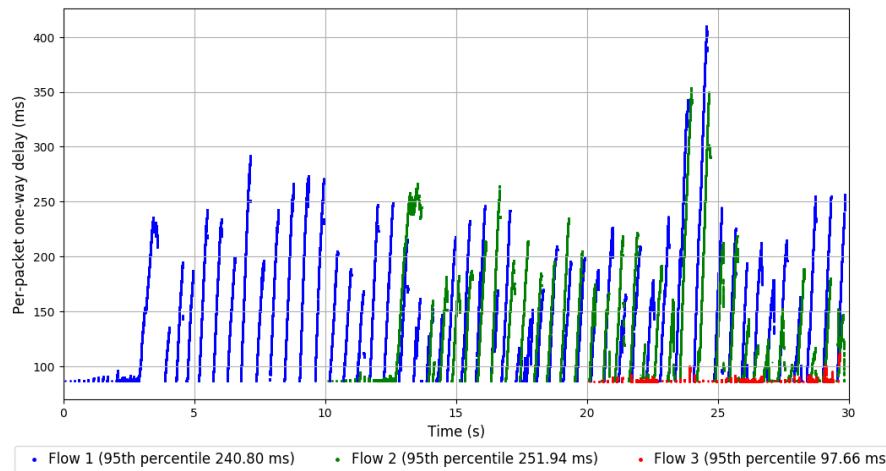
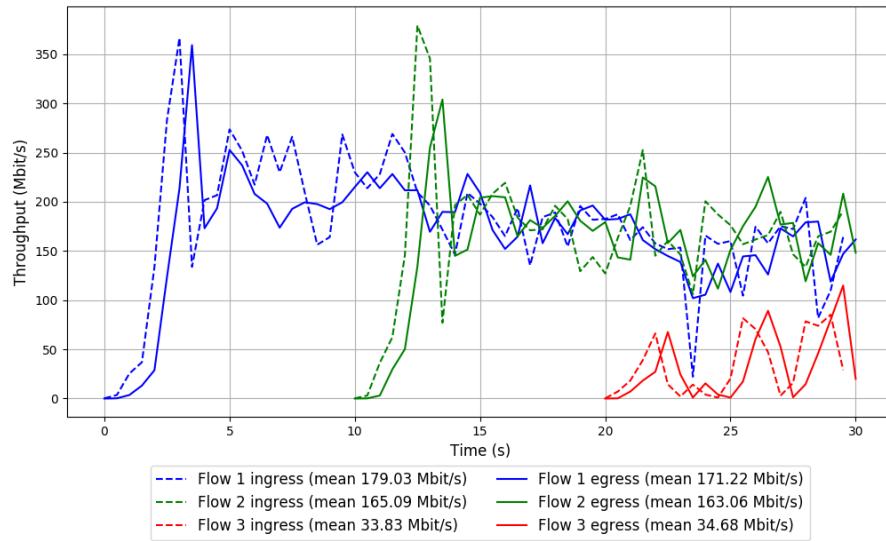


Run 2: Statistics of Verus

```
Start at: 2019-05-29 23:44:00
End at: 2019-05-29 23:44:30
Local clock offset: 0.393 ms
Remote clock offset: 0.136 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.41 Mbit/s
95th percentile per-packet one-way delay: 244.748 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 171.22 Mbit/s
95th percentile per-packet one-way delay: 240.801 ms
Loss rate: 3.97%
-- Flow 2:
Average throughput: 163.06 Mbit/s
95th percentile per-packet one-way delay: 251.944 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 97.661 ms
Loss rate: 1.35%
```

Run 2: Report of Verus — Data Link

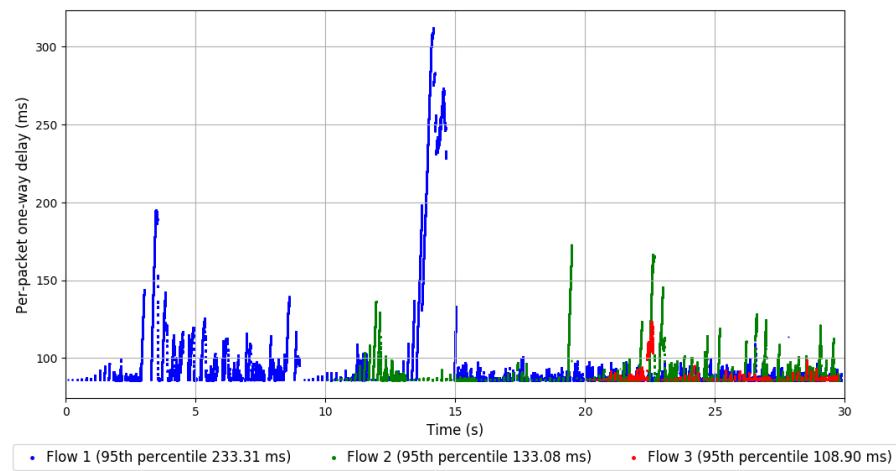
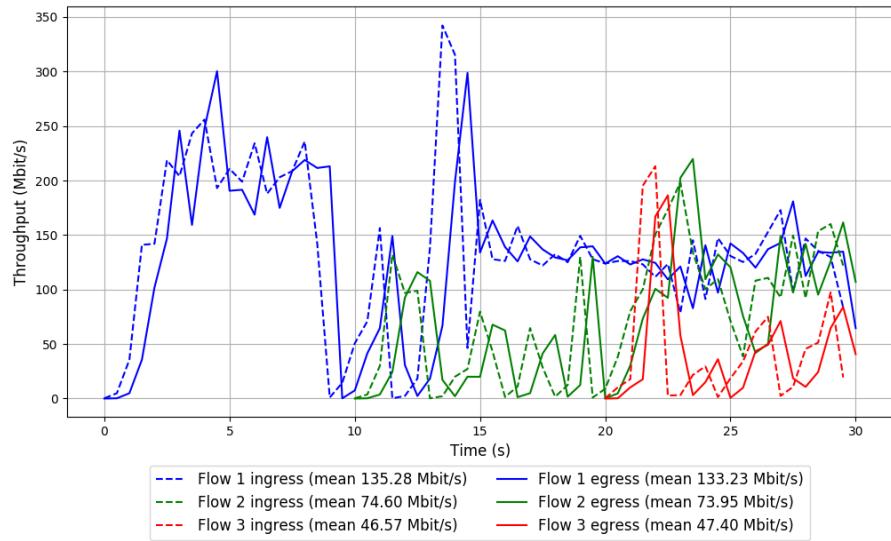


Run 3: Statistics of Verus

```
Start at: 2019-05-30 00:20:33
End at: 2019-05-30 00:21:03
Local clock offset: 0.012 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.45 Mbit/s
95th percentile per-packet one-way delay: 173.150 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 133.23 Mbit/s
95th percentile per-packet one-way delay: 233.310 ms
Loss rate: 2.00%
-- Flow 2:
Average throughput: 73.95 Mbit/s
95th percentile per-packet one-way delay: 133.083 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 47.40 Mbit/s
95th percentile per-packet one-way delay: 108.902 ms
Loss rate: 0.01%
```

Run 3: Report of Verus — Data Link

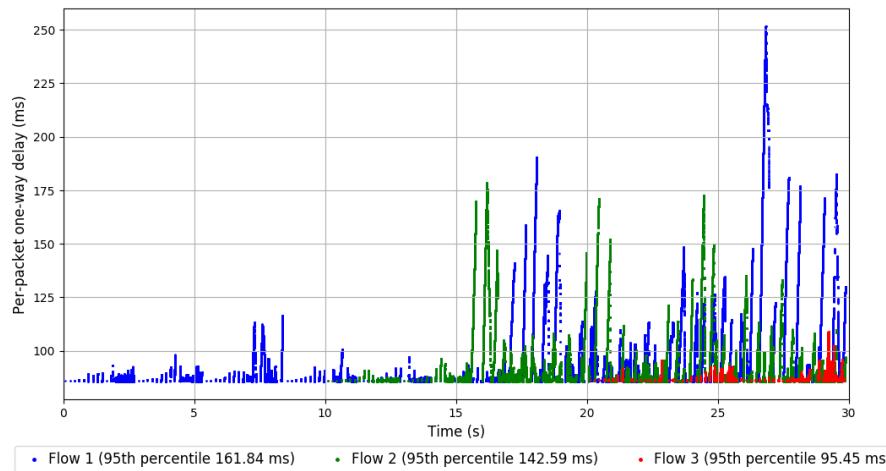
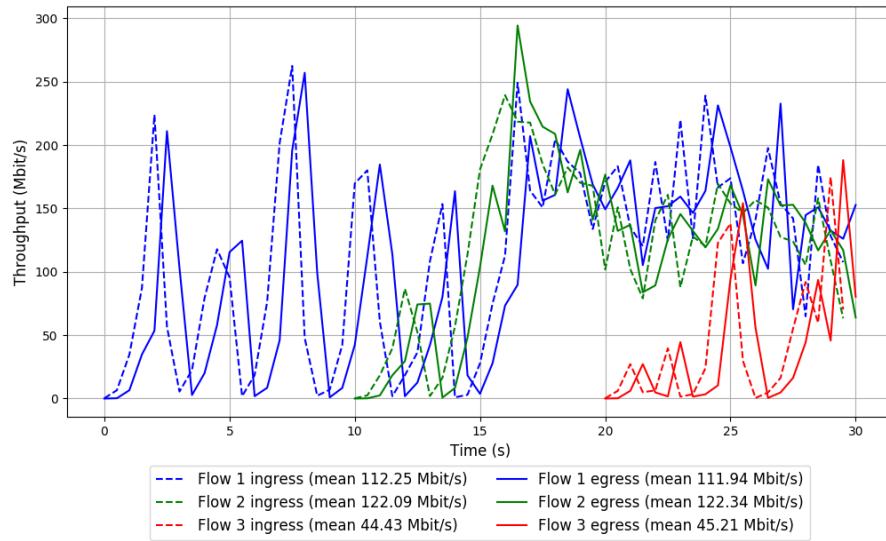


Run 4: Statistics of Verus

```
Start at: 2019-05-30 00:57:11
End at: 2019-05-30 00:57:41
Local clock offset: -0.104 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 207.89 Mbit/s
95th percentile per-packet one-way delay: 151.268 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 111.94 Mbit/s
95th percentile per-packet one-way delay: 161.844 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 122.34 Mbit/s
95th percentile per-packet one-way delay: 142.588 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 45.21 Mbit/s
95th percentile per-packet one-way delay: 95.455 ms
Loss rate: 0.01%
```

Run 4: Report of Verus — Data Link

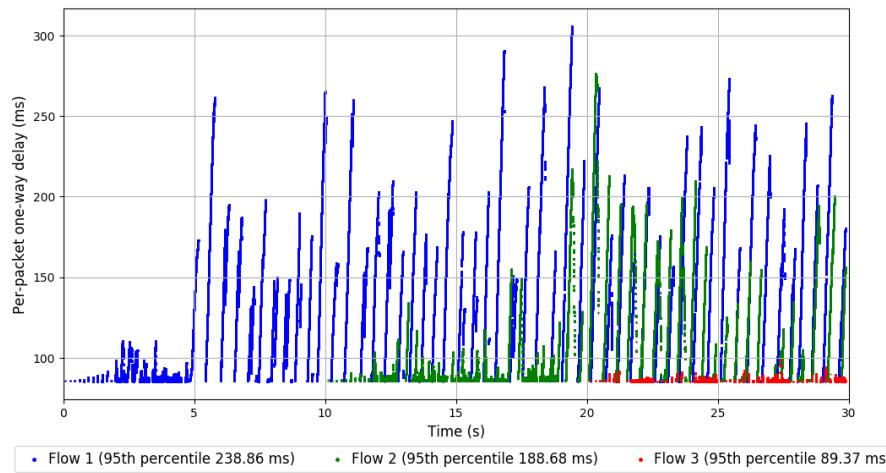
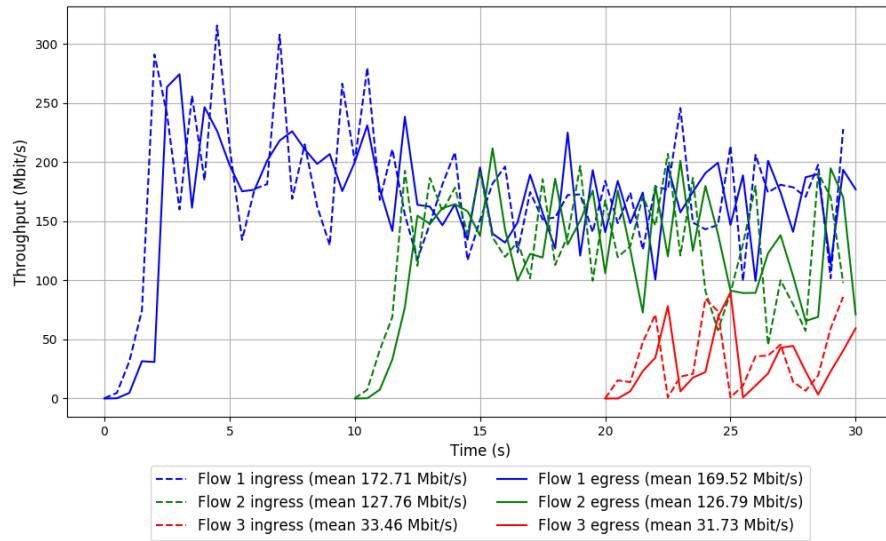


Run 5: Statistics of Verus

```
Start at: 2019-05-30 01:34:16
End at: 2019-05-30 01:34:46
Local clock offset: -0.347 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-05-30 04:11:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.04 Mbit/s
95th percentile per-packet one-way delay: 229.391 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 169.52 Mbit/s
95th percentile per-packet one-way delay: 238.856 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 126.79 Mbit/s
95th percentile per-packet one-way delay: 188.684 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 89.374 ms
Loss rate: 6.85%
```

Run 5: Report of Verus — Data Link

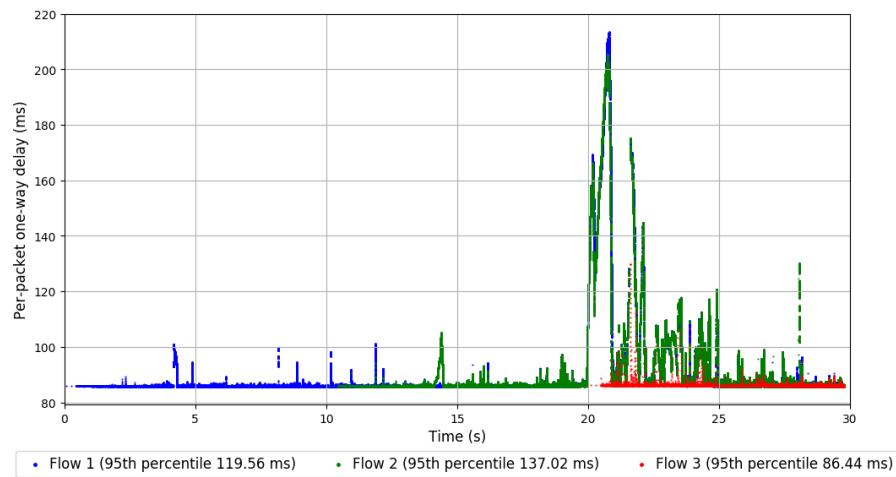
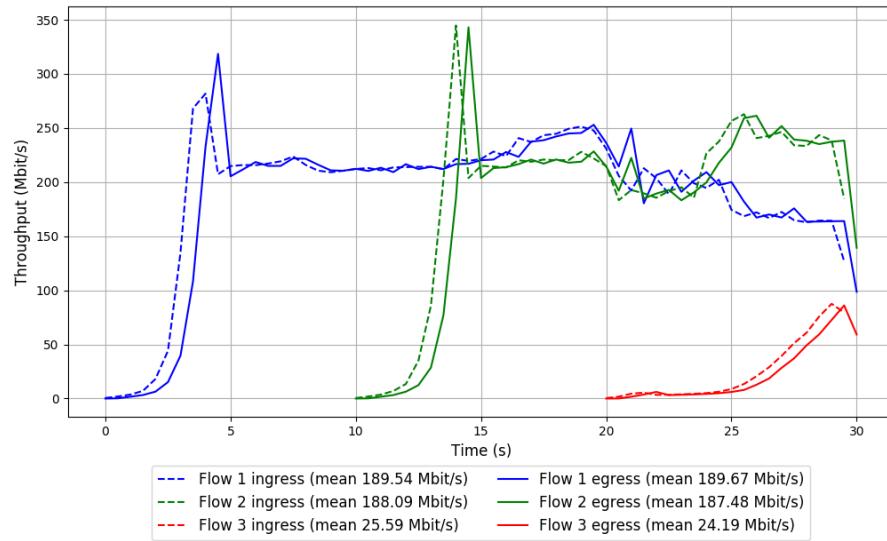


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-05-29 22:52:40
End at: 2019-05-29 22:53:10
Local clock offset: 0.246 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-05-30 04:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.87 Mbit/s
95th percentile per-packet one-way delay: 127.095 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 189.67 Mbit/s
95th percentile per-packet one-way delay: 119.557 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 187.48 Mbit/s
95th percentile per-packet one-way delay: 137.020 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 86.438 ms
Loss rate: 7.16%
```

Run 1: Report of PCC-Vivace — Data Link

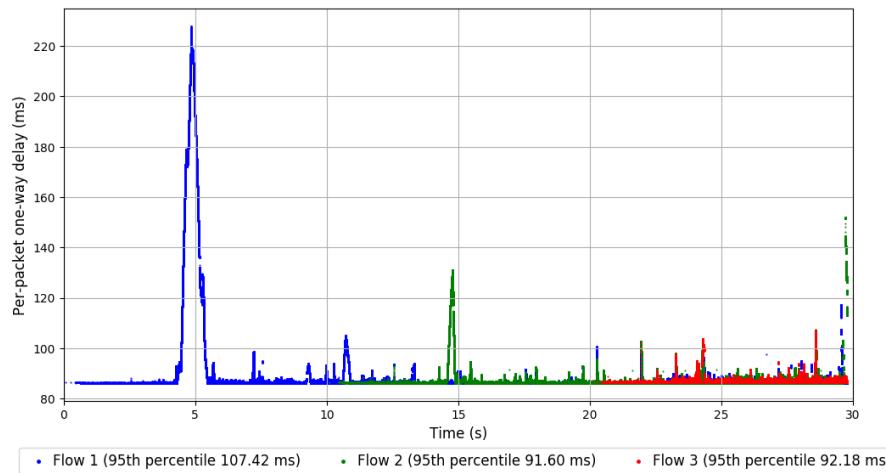
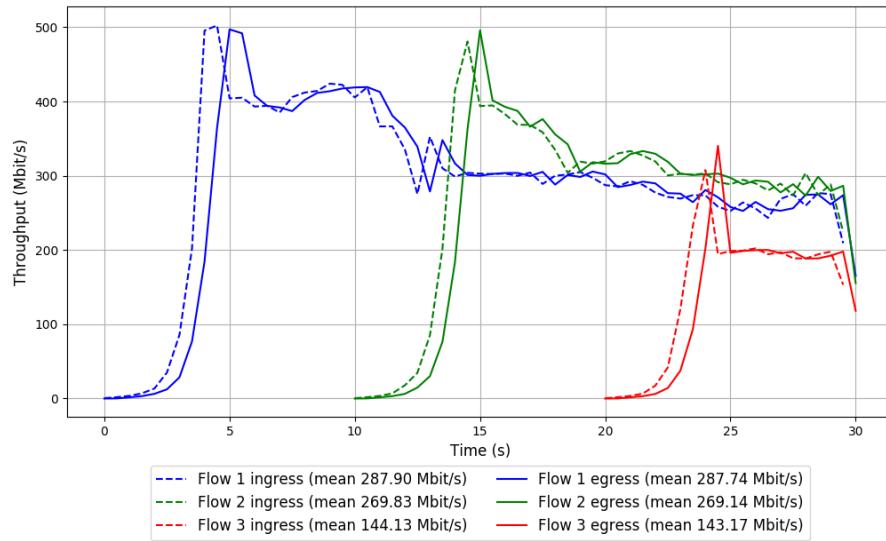


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-05-29 23:28:25
End at: 2019-05-29 23:28:55
Local clock offset: 0.4 ms
Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2019-05-30 04:14:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.88 Mbit/s
95th percentile per-packet one-way delay: 96.504 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 287.74 Mbit/s
95th percentile per-packet one-way delay: 107.418 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 269.14 Mbit/s
95th percentile per-packet one-way delay: 91.597 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 143.17 Mbit/s
95th percentile per-packet one-way delay: 92.177 ms
Loss rate: 2.41%
```

Run 2: Report of PCC-Vivace — Data Link

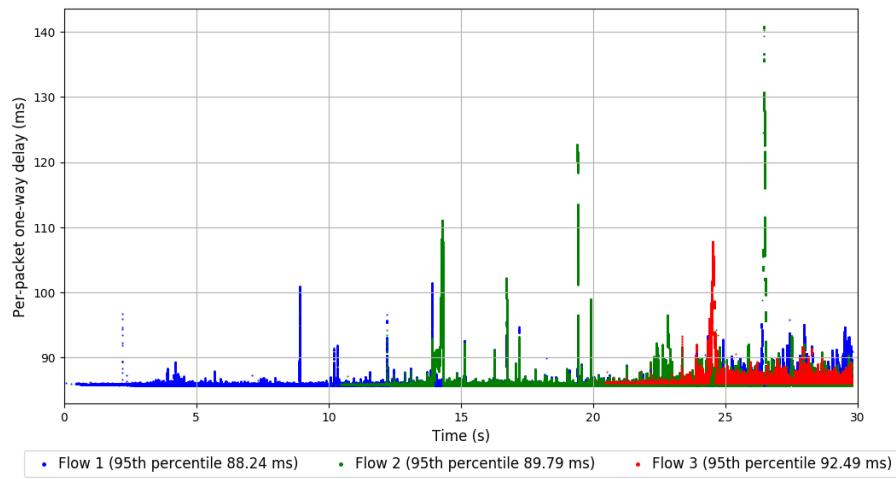
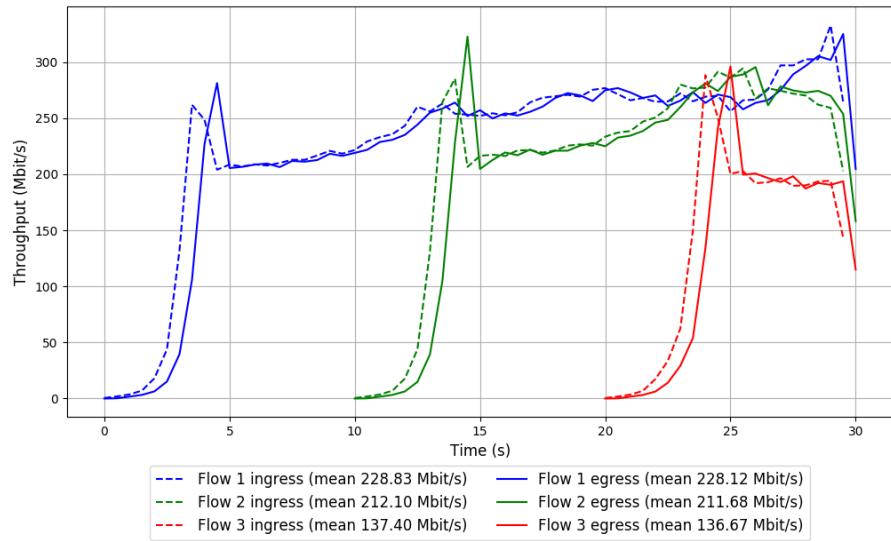


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-05-30 00:04:55
End at: 2019-05-30 00:05:25
Local clock offset: -0.04 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-05-30 04:14:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.02 Mbit/s
95th percentile per-packet one-way delay: 89.163 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 228.12 Mbit/s
95th percentile per-packet one-way delay: 88.239 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 211.68 Mbit/s
95th percentile per-packet one-way delay: 89.790 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 136.67 Mbit/s
95th percentile per-packet one-way delay: 92.491 ms
Loss rate: 2.31%
```

Run 3: Report of PCC-Vivace — Data Link

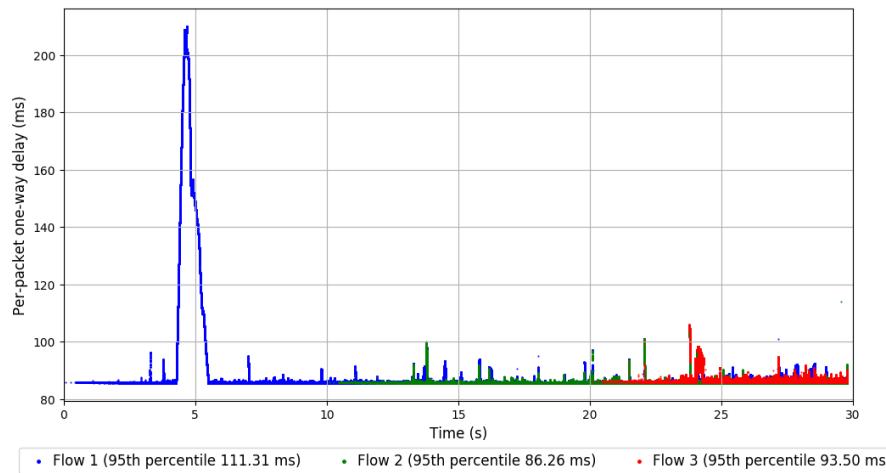
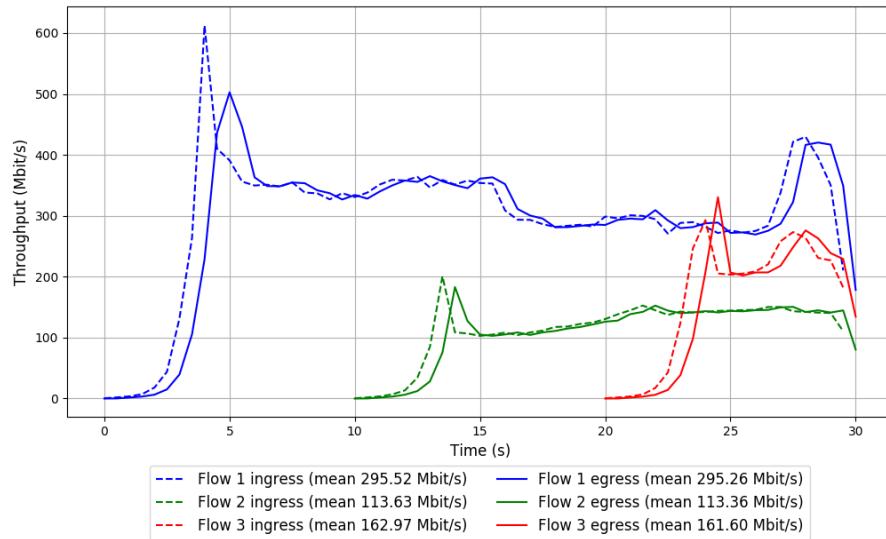


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-05-30 00:41:26
End at: 2019-05-30 00:41:56
Local clock offset: -0.121 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-05-30 04:14:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.08 Mbit/s
95th percentile per-packet one-way delay: 94.163 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 295.26 Mbit/s
95th percentile per-packet one-way delay: 111.311 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 113.36 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 161.60 Mbit/s
95th percentile per-packet one-way delay: 93.501 ms
Loss rate: 2.63%
```

Run 4: Report of PCC-Vivace — Data Link

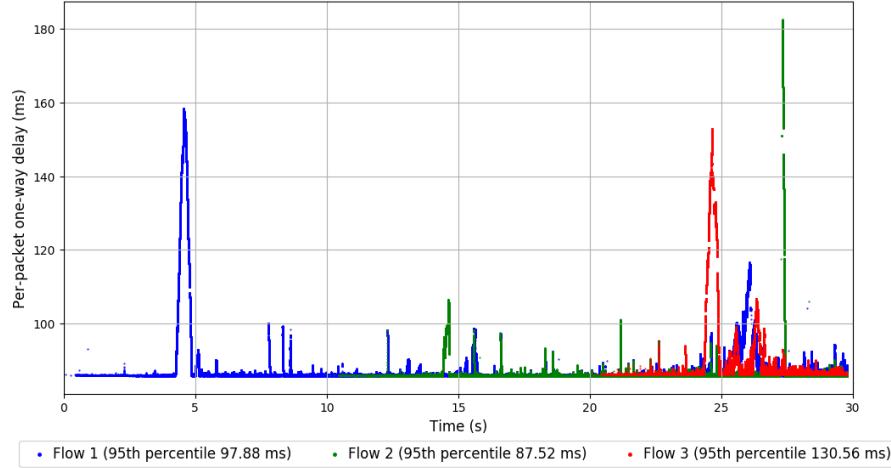
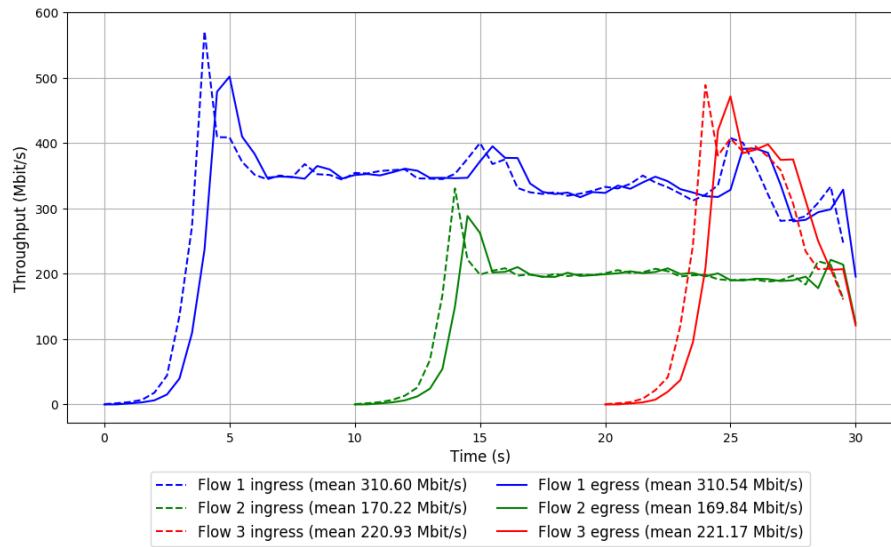


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-05-30 01:18:37
End at: 2019-05-30 01:19:07
Local clock offset: 0.06 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.22 Mbit/s
95th percentile per-packet one-way delay: 99.030 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 310.54 Mbit/s
95th percentile per-packet one-way delay: 97.877 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 169.84 Mbit/s
95th percentile per-packet one-way delay: 87.522 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 221.17 Mbit/s
95th percentile per-packet one-way delay: 130.562 ms
Loss rate: 1.71%
```

Run 5: Report of PCC-Vivace — Data Link

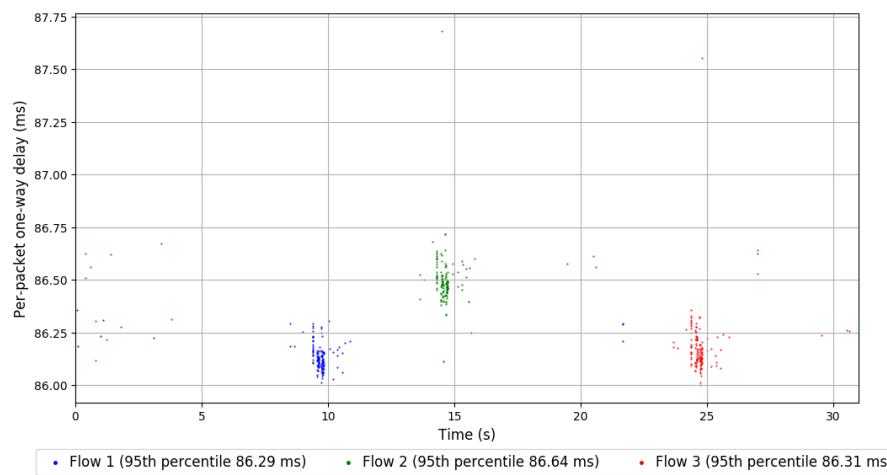
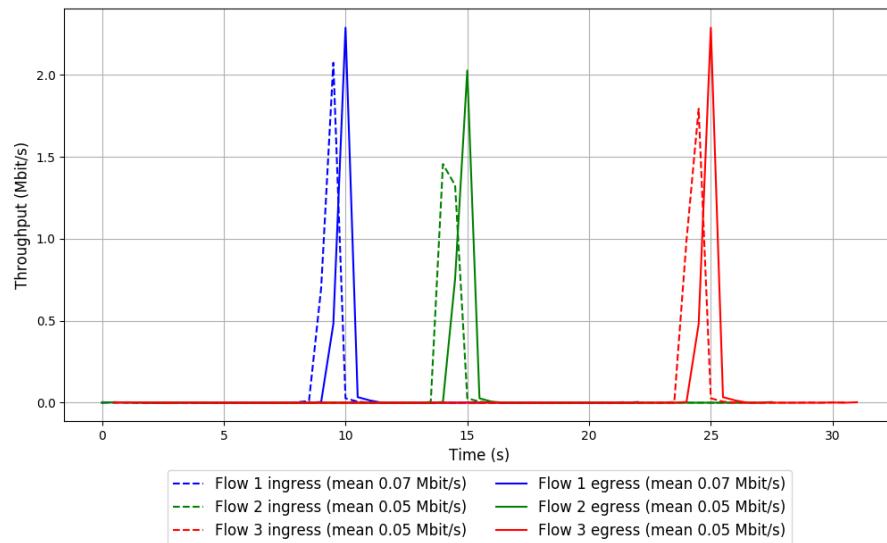


Run 1: Statistics of WebRTC media

```
Start at: 2019-05-29 22:45:43
End at: 2019-05-29 22:46:13
Local clock offset: 0.723 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.590 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 86.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.639 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.311 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

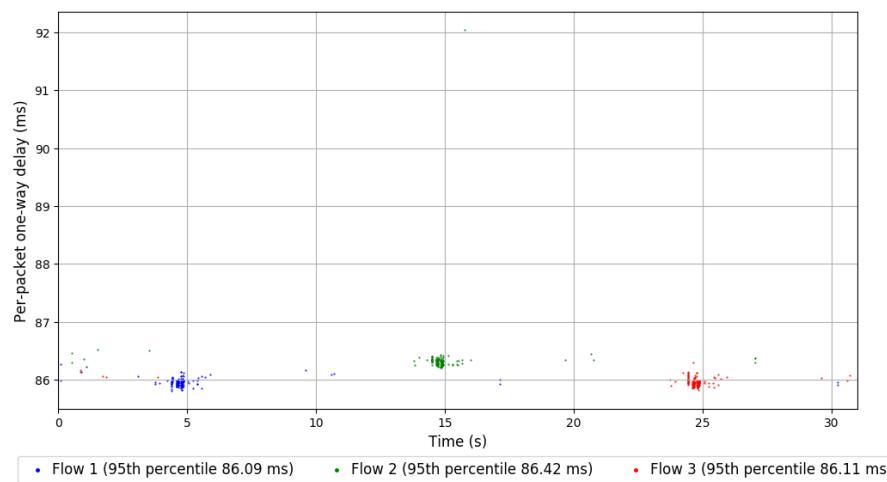
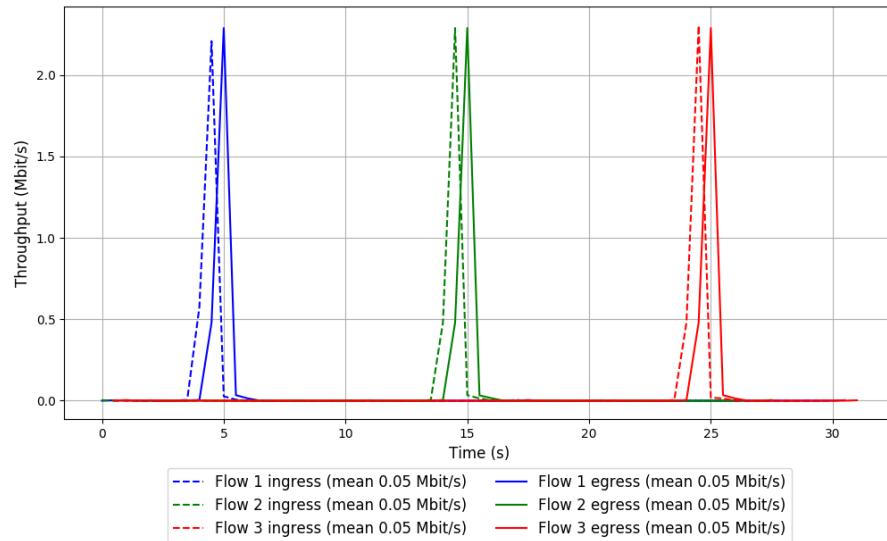


Run 2: Statistics of WebRTC media

```
Start at: 2019-05-29 23:22:09
End at: 2019-05-29 23:22:39
Local clock offset: -0.027 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.092 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.114 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

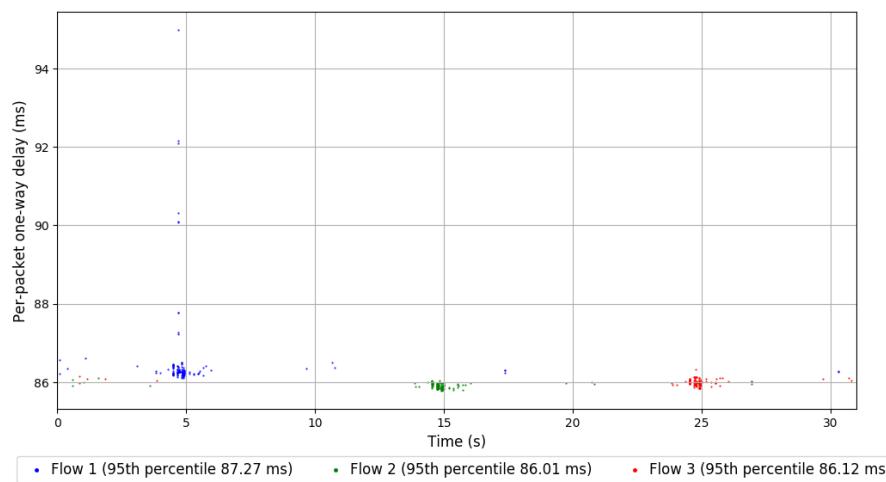
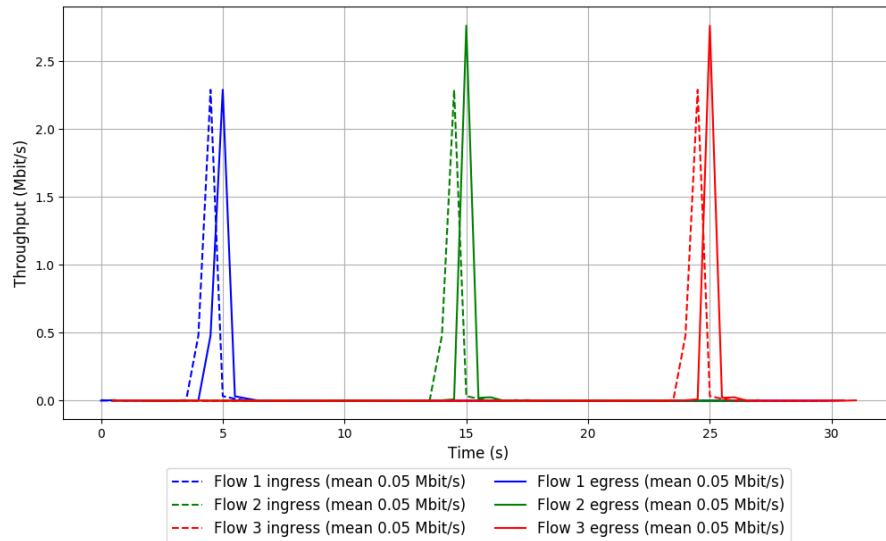


```
Run 3: Statistics of WebRTC media

Start at: 2019-05-29 23:57:56
End at: 2019-05-29 23:58:26
Local clock offset: -0.039 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.421 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.012 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.118 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

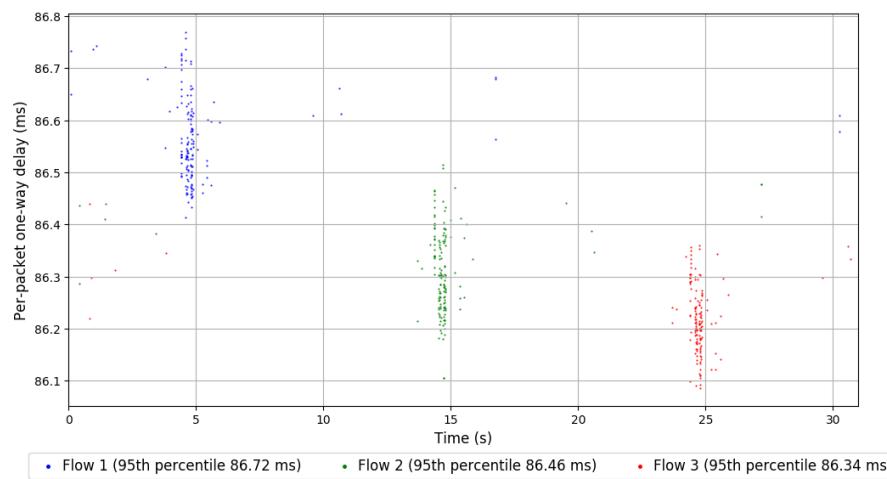
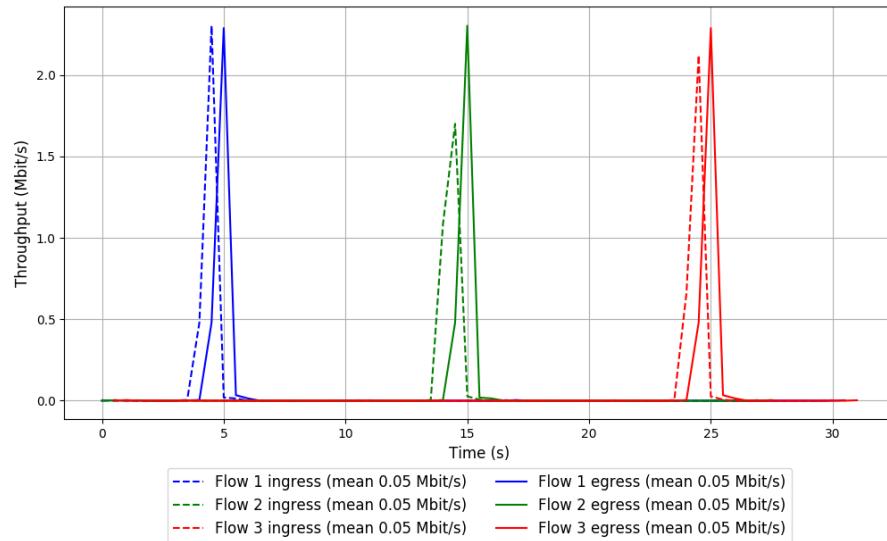


Run 4: Statistics of WebRTC media

```
Start at: 2019-05-30 00:34:41
End at: 2019-05-30 00:35:11
Local clock offset: 0.208 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.344 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-05-30 01:11:32
End at: 2019-05-30 01:12:02
Local clock offset: 0.061 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-05-30 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.142 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

