

Pantheon Report

Generated at 2019-01-21 14:48:13 (UTC).
Data path: AWS India 2 on `ens5` (*local*) → Saudi Arabia on `enp2s0` (*remote*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

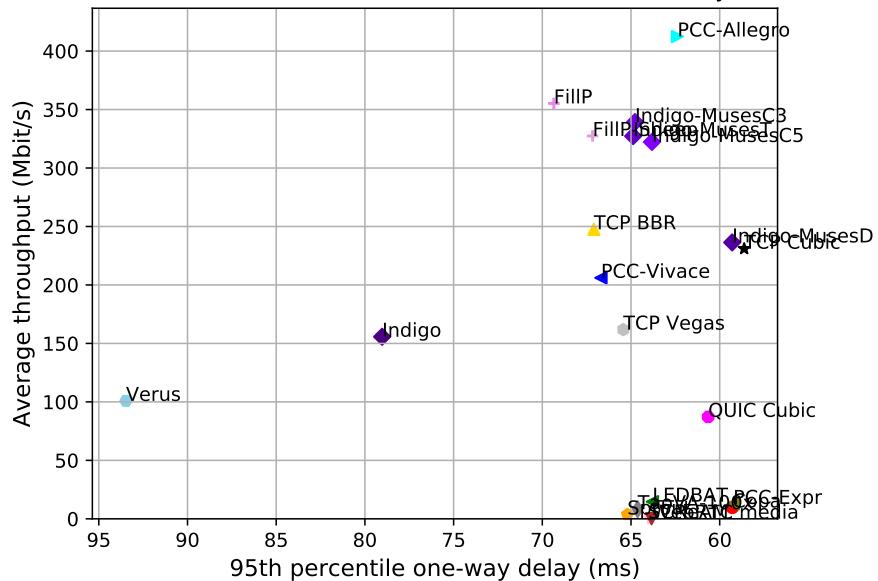
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

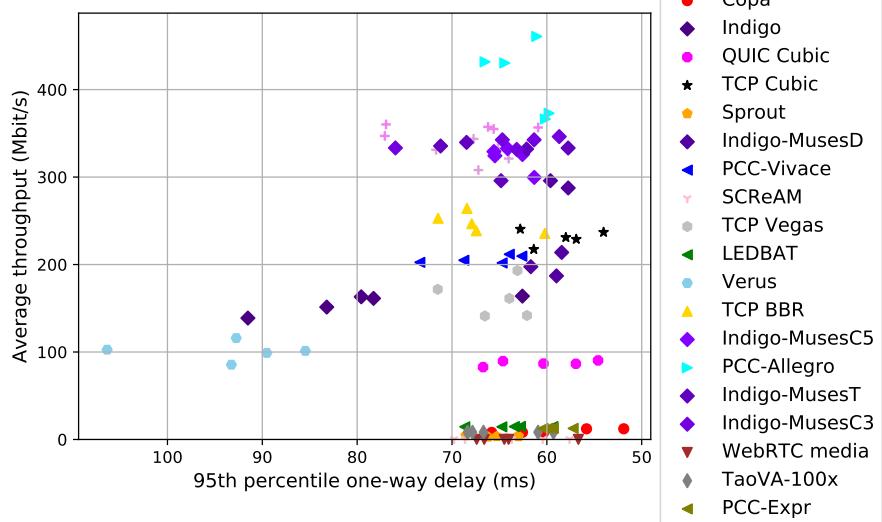
```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

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



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



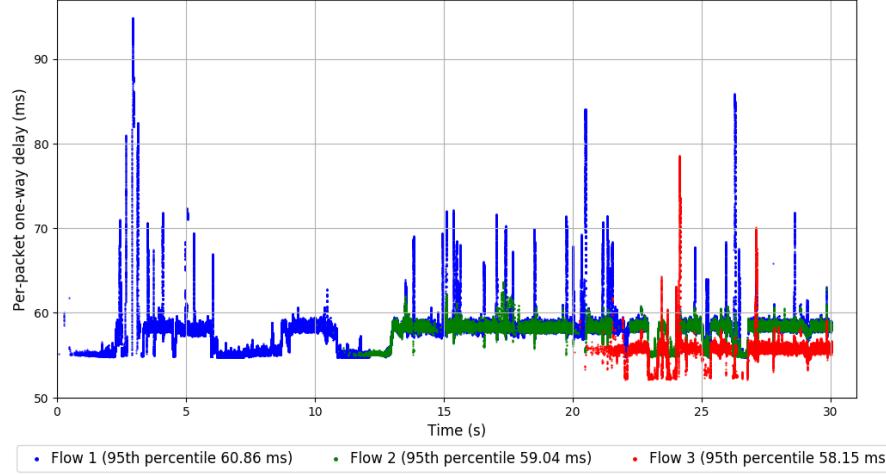
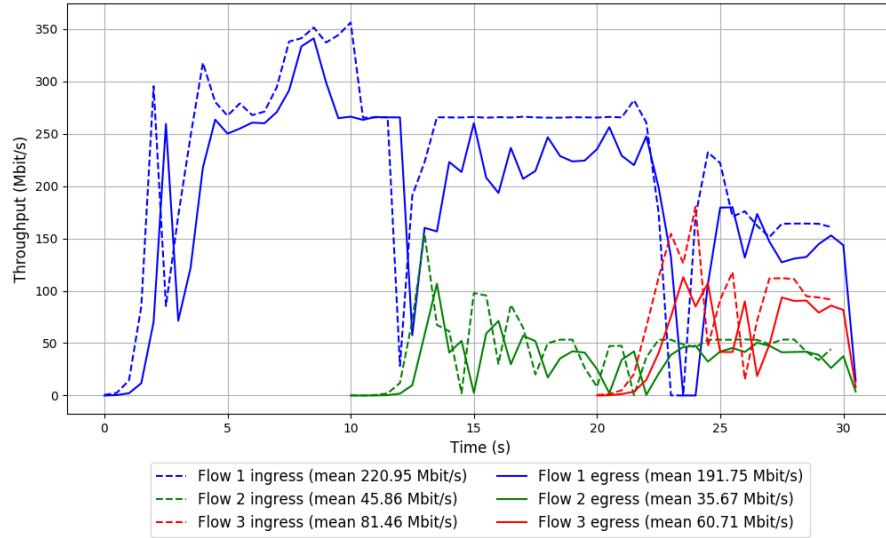
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	207.68	36.56	48.58	67.92	62.77	62.75	13.04	20.85	22.78
Copa		3.40	8.28	2.57	59.25	59.13	58.97	86.11	68.86	81.19
TCP Cubic		166.51	74.54	44.50	58.86	57.14	57.82	1.02	0.85	1.15
FillP		243.55	114.90	106.43	69.00	69.61	68.81	23.41	24.86	25.26
FillP-Sheep		233.68	99.85	82.61	66.84	67.03	66.53	14.49	11.52	10.60
Indigo		82.69	73.62	76.21	76.39	80.24	83.02	9.62	16.03	27.51
Indigo-MusesC3		330.42	9.08	10.24	65.27	60.71	60.42	13.79	9.59	9.36
Indigo-MusesC5		321.32	0.83	1.39	63.83	63.38	62.23	26.54	29.22	28.07
Indigo-MusesD		228.18	11.70	2.08	59.27	60.61	60.06	14.75	13.21	15.64
Indigo-MusesT		281.57	51.96	43.23	63.98	69.17	73.77	10.88	8.84	8.26
LEDBAT		9.44	6.34	3.10	64.01	62.36	62.24	0.01	0.00	0.00
PCC-Allegro		356.64	34.03	100.87	62.23	62.47	61.91	6.43	3.08	5.61
PCC-Expr		8.15	4.85	4.13	59.23	59.25	59.26	33.77	35.75	38.14
QUIC Cubic		51.64	39.00	29.94	58.94	61.33	62.77	0.00	0.00	0.01
SCReAM		0.21	0.21	0.22	62.56	63.24	63.69	0.10	0.05	0.00
Sprout		2.16	1.77	1.17	64.99	65.19	63.86	0.03	0.12	0.00
TaoVA-100x		0.00	9.47	5.92	59.69	66.17	60.24	95.92	29.84	25.34
TCP Vegas		103.40	59.75	55.92	64.83	64.70	68.36	1.46	1.87	3.40
Verus		71.71	33.42	26.25	94.92	81.39	86.90	65.92	46.06	43.76
PCC-Vivace		181.41	30.13	14.10	66.75	65.52	65.93	1.41	0.75	0.75
WebRTC media		0.05	0.05	0.05	64.46	63.61	63.86	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-21 11:10:42
End at: 2019-01-21 11:11:13
Local clock offset: 1.371 ms
Remote clock offset: -45.443 ms

# Below is generated by plot.py at 2019-01-21 14:23:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.70 Mbit/s
95th percentile per-packet one-way delay: 60.213 ms
Loss rate: 15.39%
-- Flow 1:
Average throughput: 191.75 Mbit/s
95th percentile per-packet one-way delay: 60.857 ms
Loss rate: 13.21%
-- Flow 2:
Average throughput: 35.67 Mbit/s
95th percentile per-packet one-way delay: 59.042 ms
Loss rate: 22.22%
-- Flow 3:
Average throughput: 60.71 Mbit/s
95th percentile per-packet one-way delay: 58.152 ms
Loss rate: 25.48%
```

Run 1: Report of TCP BBR — Data Link

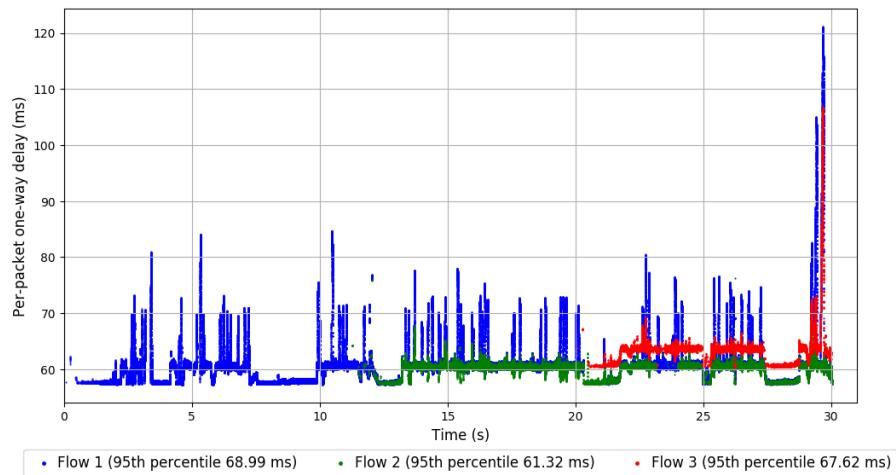
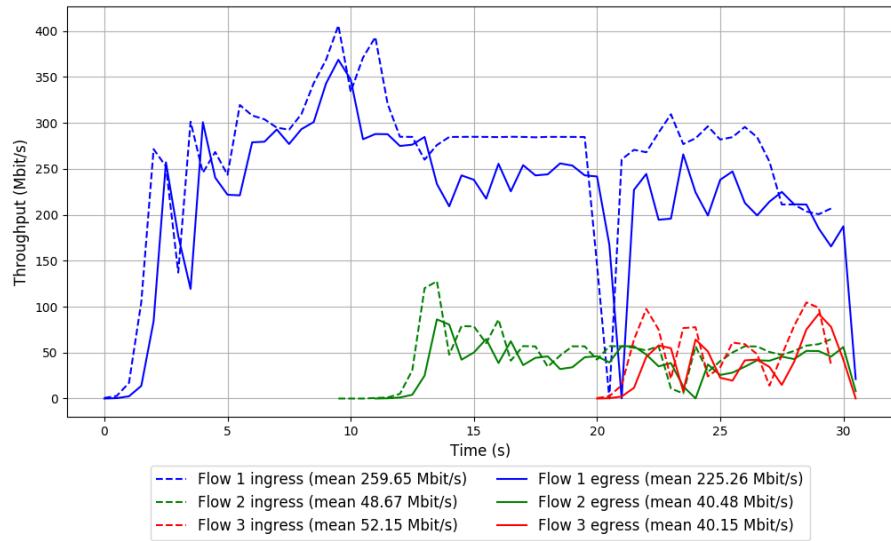


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-21 11:46:34
End at: 2019-01-21 11:47:04
Local clock offset: -0.795 ms
Remote clock offset: -40.135 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.20 Mbit/s
95th percentile per-packet one-way delay: 68.423 ms
Loss rate: 14.60%
-- Flow 1:
Average throughput: 225.26 Mbit/s
95th percentile per-packet one-way delay: 68.990 ms
Loss rate: 13.24%
-- Flow 2:
Average throughput: 40.48 Mbit/s
95th percentile per-packet one-way delay: 61.324 ms
Loss rate: 21.01%
-- Flow 3:
Average throughput: 40.15 Mbit/s
95th percentile per-packet one-way delay: 67.621 ms
Loss rate: 23.02%
```

Run 2: Report of TCP BBR — Data Link

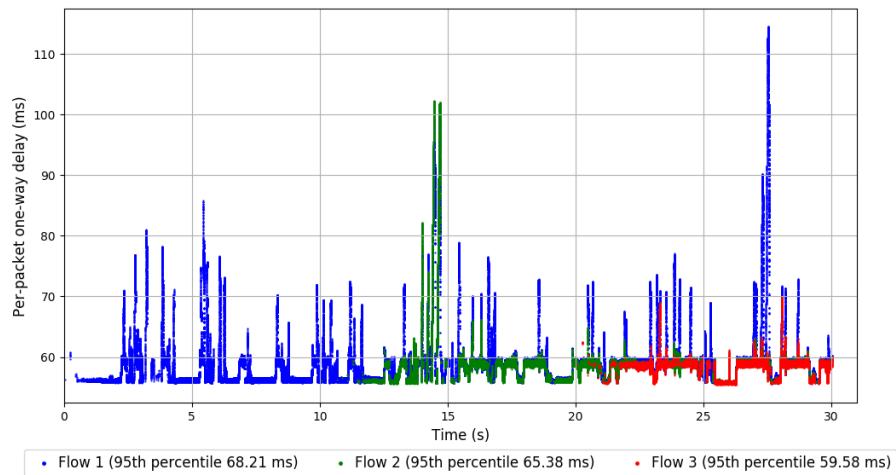
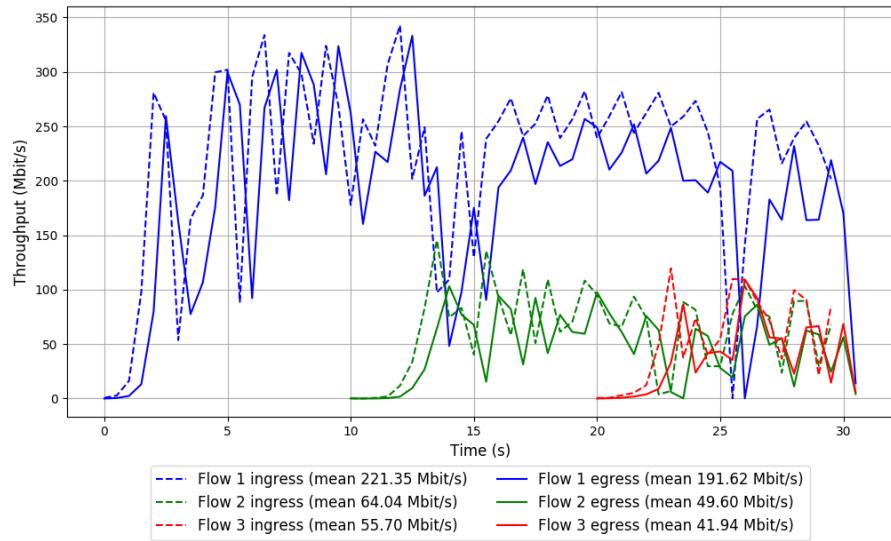


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-21 12:32:39
End at: 2019-01-21 12:33:09
Local clock offset: -1.536 ms
Remote clock offset: -44.362 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.60 Mbit/s
95th percentile per-packet one-way delay: 67.437 ms
Loss rate: 15.54%
-- Flow 1:
Average throughput: 191.62 Mbit/s
95th percentile per-packet one-way delay: 68.212 ms
Loss rate: 13.42%
-- Flow 2:
Average throughput: 49.60 Mbit/s
95th percentile per-packet one-way delay: 65.376 ms
Loss rate: 22.54%
-- Flow 3:
Average throughput: 41.94 Mbit/s
95th percentile per-packet one-way delay: 59.584 ms
Loss rate: 24.70%
```

Run 3: Report of TCP BBR — Data Link

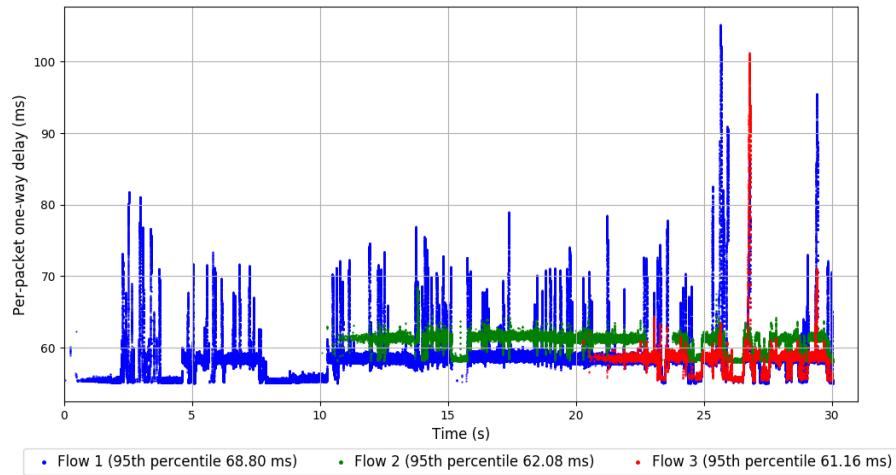
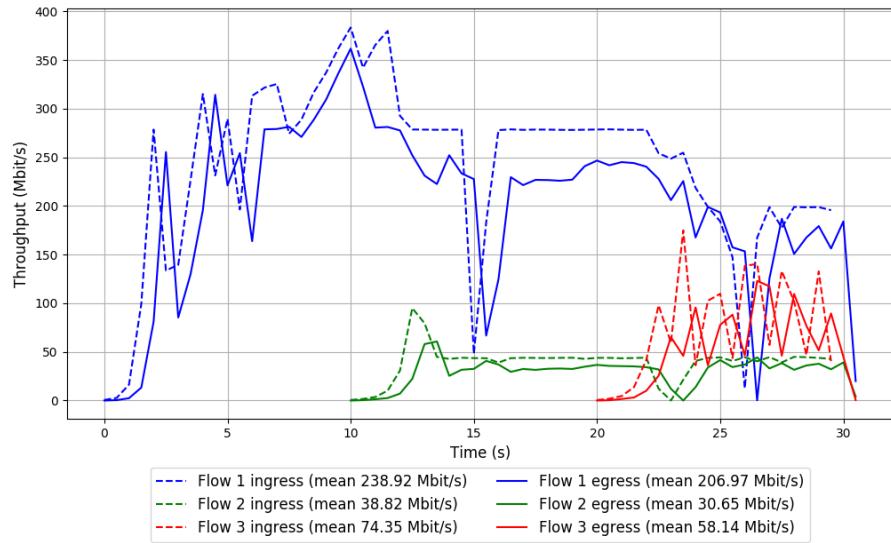


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-21 13:25:35
End at: 2019-01-21 13:26:05
Local clock offset: -2.572 ms
Remote clock offset: -44.667 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.65 Mbit/s
95th percentile per-packet one-way delay: 67.919 ms
Loss rate: 14.78%
-- Flow 1:
Average throughput: 206.97 Mbit/s
95th percentile per-packet one-way delay: 68.796 ms
Loss rate: 13.37%
-- Flow 2:
Average throughput: 30.65 Mbit/s
95th percentile per-packet one-way delay: 62.083 ms
Loss rate: 21.07%
-- Flow 3:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 61.162 ms
Loss rate: 21.83%
```

Run 4: Report of TCP BBR — Data Link

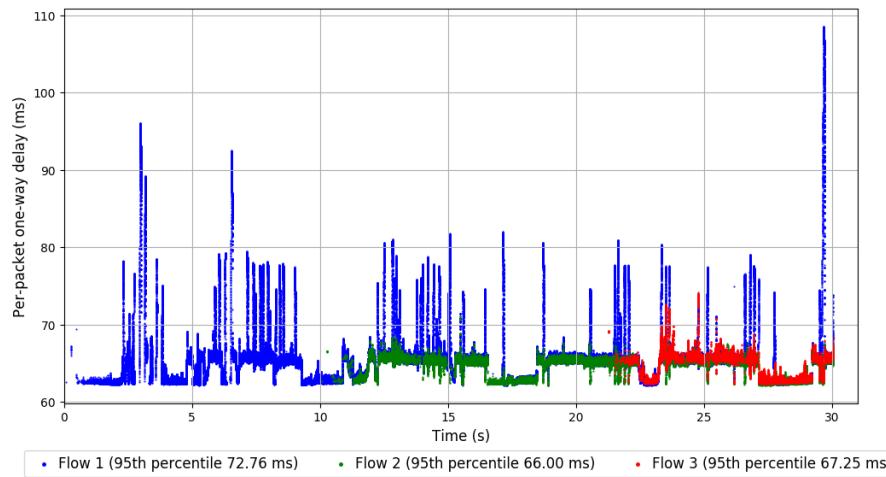
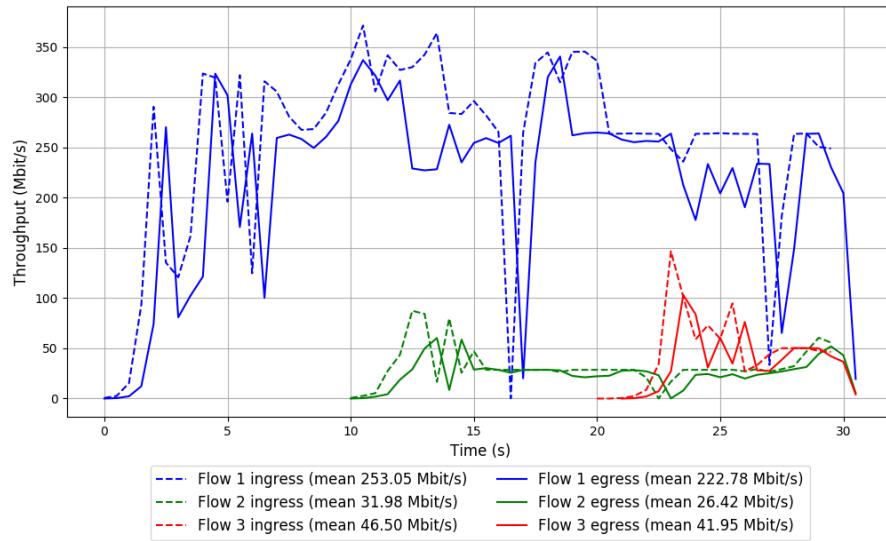


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-21 14:01:37
End at: 2019-01-21 14:02:07
Local clock offset: -4.401 ms
Remote clock offset: -39.63 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.92 Mbit/s
95th percentile per-packet one-way delay: 71.465 ms
Loss rate: 12.72%
-- Flow 1:
Average throughput: 222.78 Mbit/s
95th percentile per-packet one-way delay: 72.756 ms
Loss rate: 11.95%
-- Flow 2:
Average throughput: 26.42 Mbit/s
95th percentile per-packet one-way delay: 66.002 ms
Loss rate: 17.39%
-- Flow 3:
Average throughput: 41.95 Mbit/s
95th percentile per-packet one-way delay: 67.255 ms
Loss rate: 18.89%
```

Run 5: Report of TCP BBR — Data Link

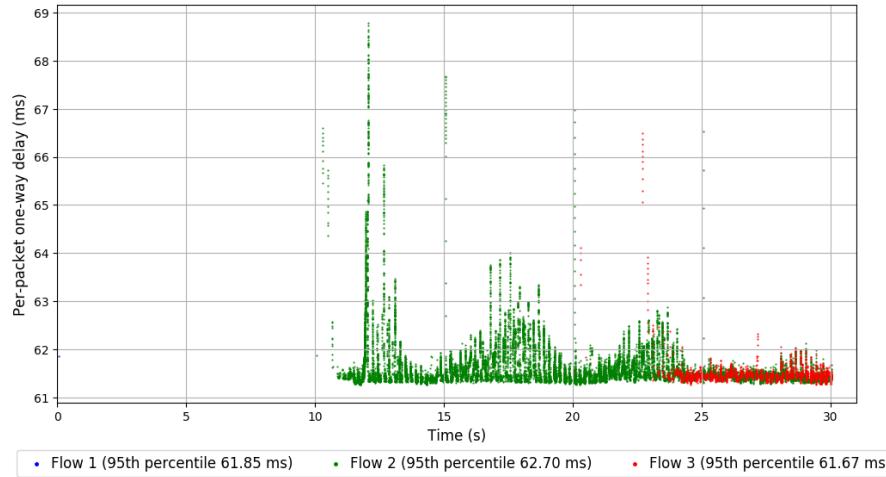
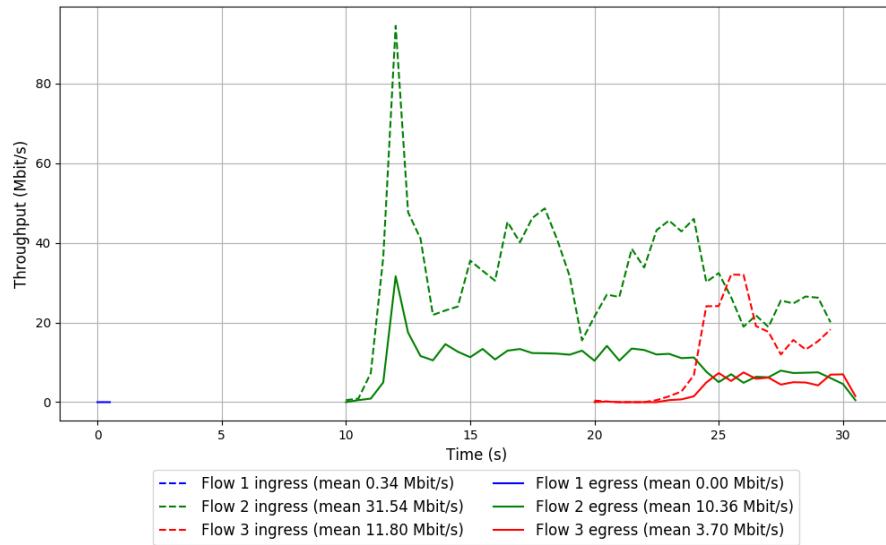


Run 1: Statistics of Copa

```
Start at: 2019-01-21 11:01:01
End at: 2019-01-21 11:01:31
Local clock offset: -1.597 ms
Remote clock offset: -39.729 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 62.572 ms
Loss rate: 67.38%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 61.854 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 62.698 ms
Loss rate: 67.15%
-- Flow 3:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 61.675 ms
Loss rate: 68.61%
```

Run 1: Report of Copa — Data Link

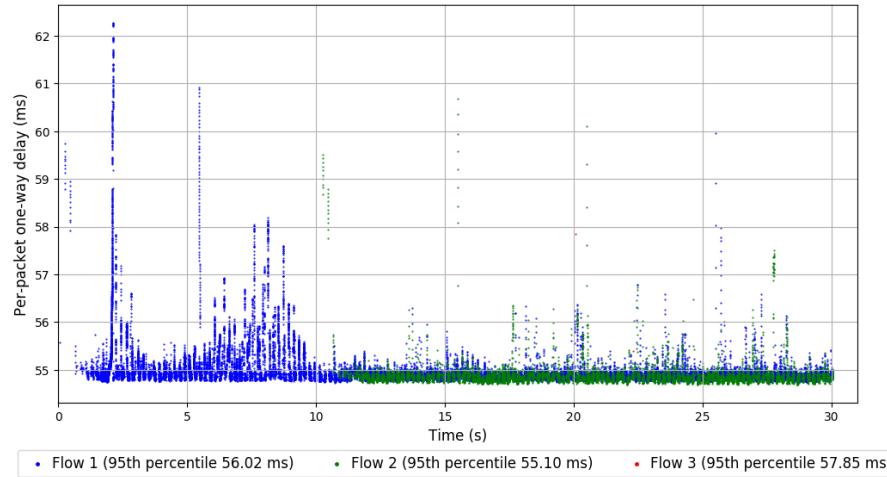
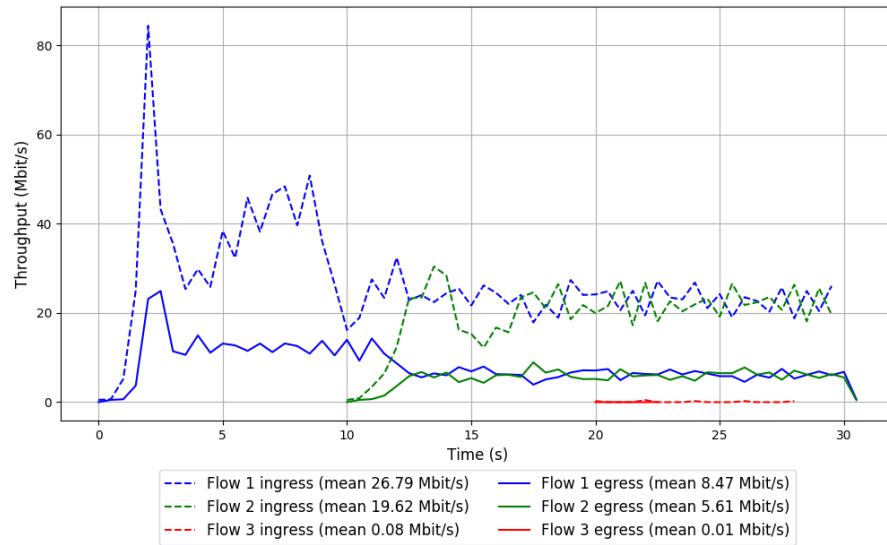


Run 2: Statistics of Copa

```
Start at: 2019-01-21 11:31:24
End at: 2019-01-21 11:31:54
Local clock offset: -2.08 ms
Remote clock offset: -44.459 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 55.818 ms
Loss rate: 69.40%
-- Flow 1:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 56.025 ms
Loss rate: 68.40%
-- Flow 2:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 55.102 ms
Loss rate: 71.41%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 57.855 ms
Loss rate: 98.16%
```

Run 2: Report of Copa — Data Link

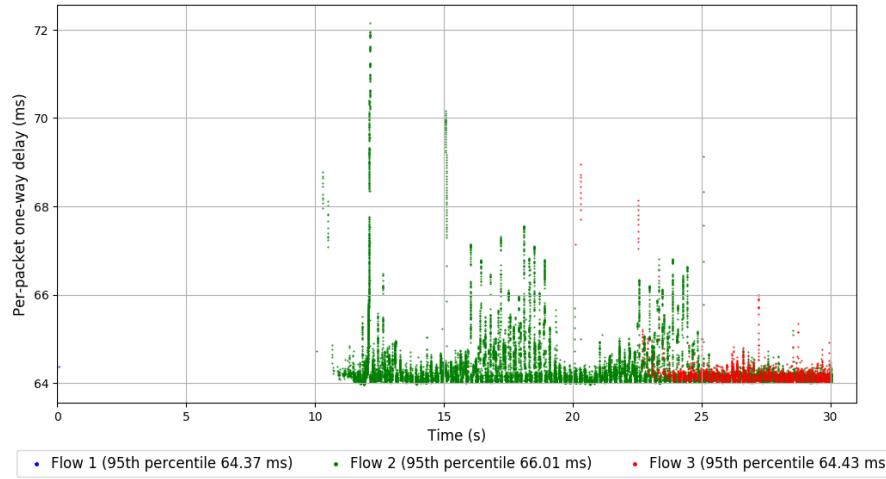
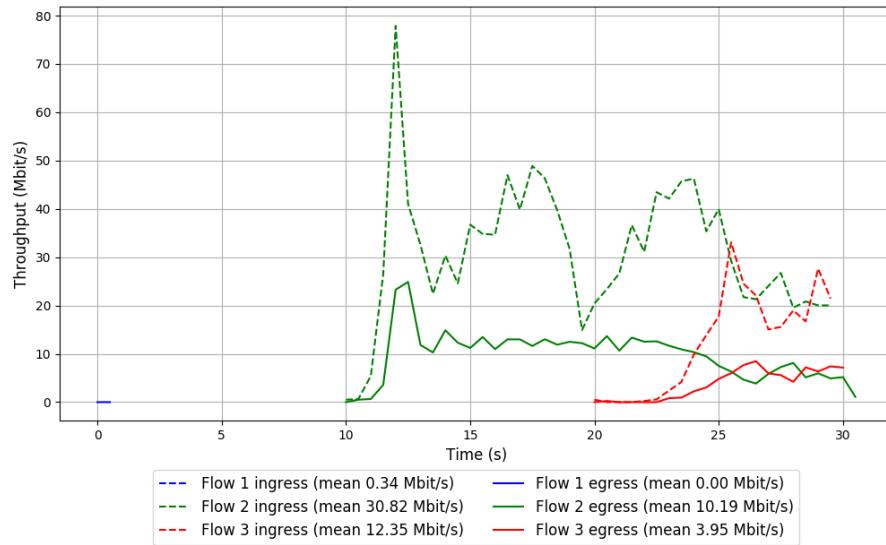


Run 3: Statistics of Copa

```
Start at: 2019-01-21 12:22:56
End at: 2019-01-21 12:23:26
Local clock offset: 1.345 ms
Remote clock offset: -33.277 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 65.820 ms
Loss rate: 67.11%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 64.367 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 66.007 ms
Loss rate: 66.92%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 64.429 ms
Loss rate: 68.05%
```

Run 3: Report of Copa — Data Link

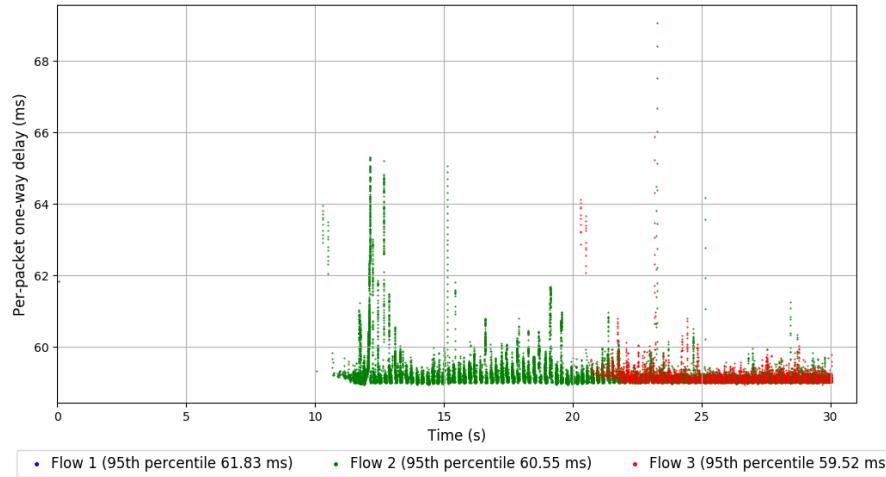
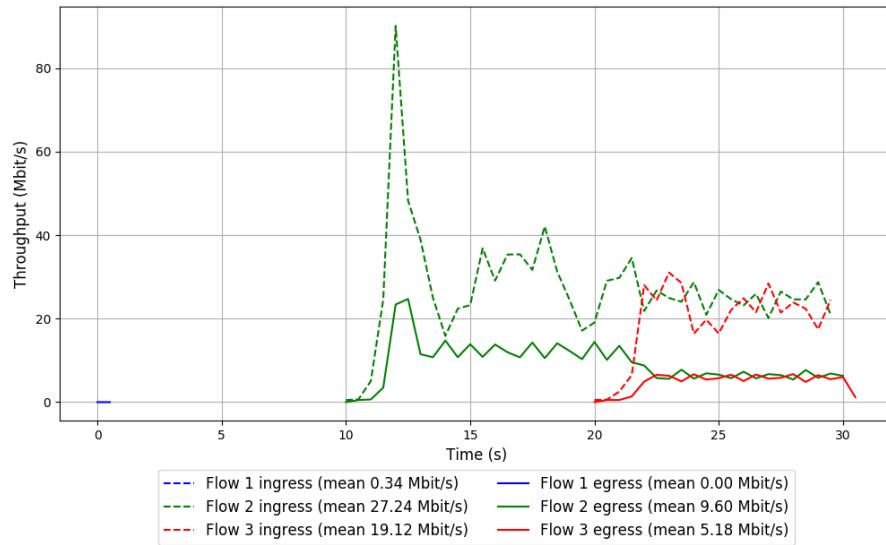


Run 4: Statistics of Copa

```
Start at: 2019-01-21 13:10:19
End at: 2019-01-21 13:10:49
Local clock offset: 0.732 ms
Remote clock offset: -39.652 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 60.335 ms
Loss rate: 66.88%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 61.828 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 60.550 ms
Loss rate: 64.77%
-- Flow 3:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 59.525 ms
Loss rate: 72.89%
```

Run 4: Report of Copa — Data Link

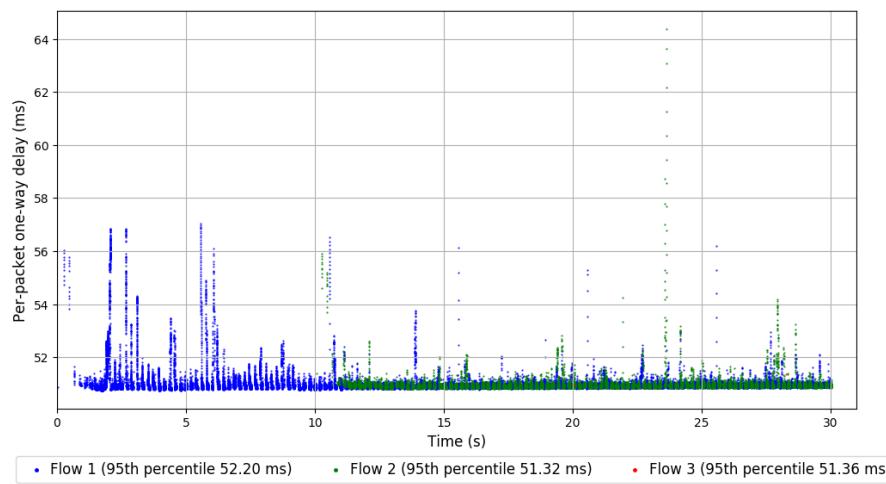
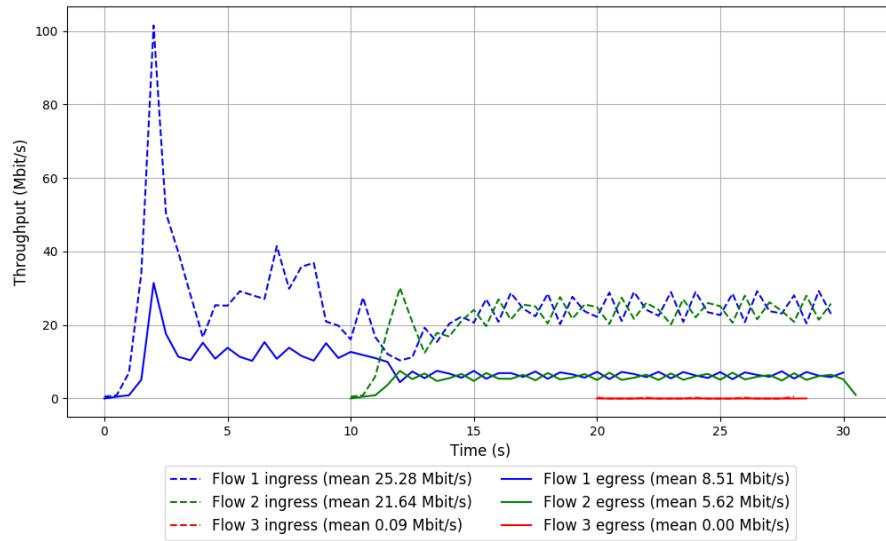


Run 5: Statistics of Copa

```
Start at: 2019-01-21 13:46:17
End at: 2019-01-21 13:46:47
Local clock offset: -0.92 ms
Remote clock offset: -46.615 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 51.895 ms
Loss rate: 69.15%
-- Flow 1:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 52.197 ms
Loss rate: 66.33%
-- Flow 2:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 51.316 ms
Loss rate: 74.03%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 51.360 ms
Loss rate: 98.22%
```

Run 5: Report of Copa — Data Link

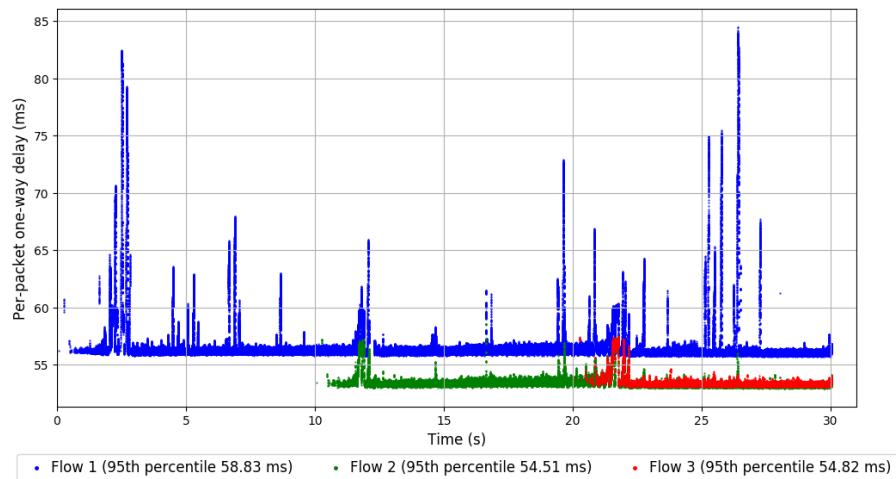
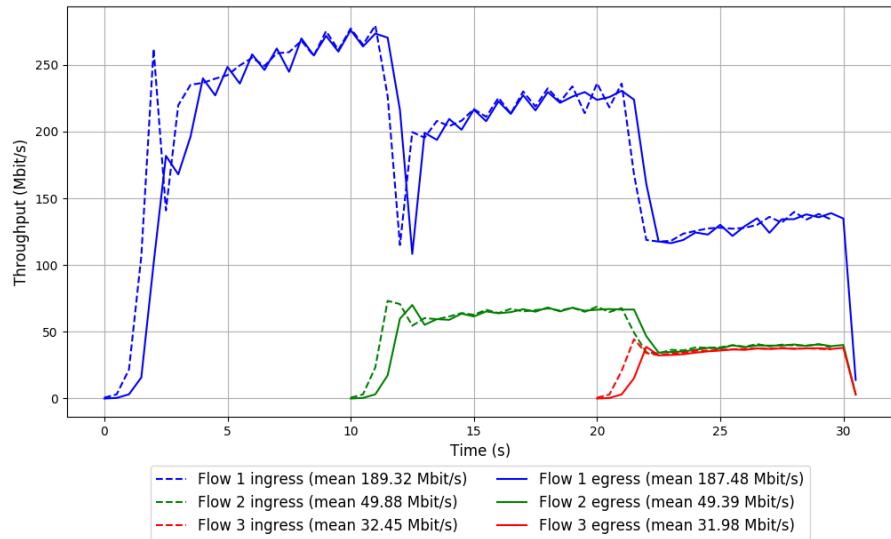


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-21 11:18:14
End at: 2019-01-21 11:18:44
Local clock offset: -0.429 ms
Remote clock offset: -45.701 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.01 Mbit/s
95th percentile per-packet one-way delay: 57.999 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 187.48 Mbit/s
95th percentile per-packet one-way delay: 58.833 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 54.514 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 31.98 Mbit/s
95th percentile per-packet one-way delay: 54.817 ms
Loss rate: 1.46%
```

Run 1: Report of TCP Cubic — Data Link

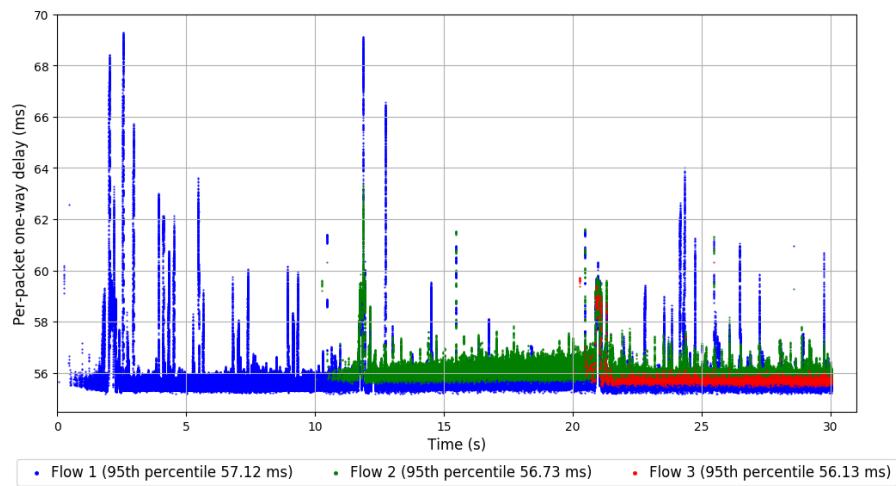
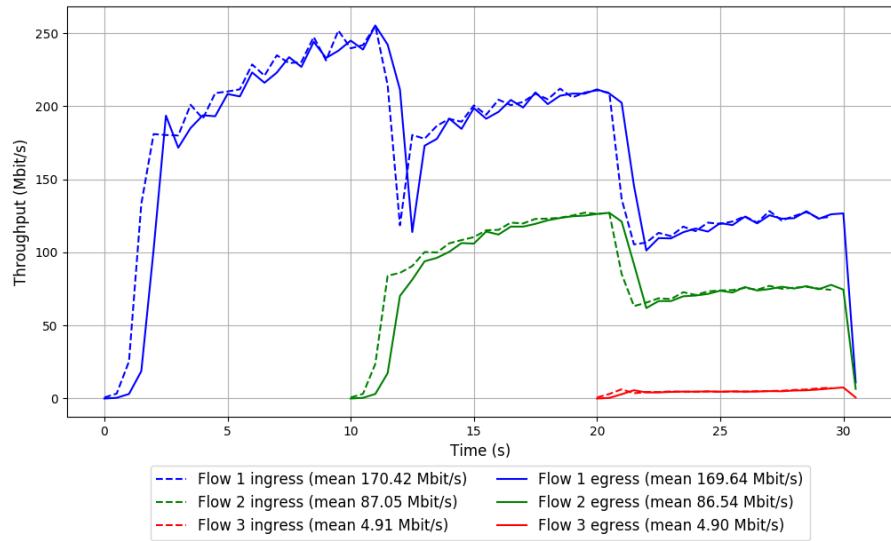


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-21 11:54:08
End at: 2019-01-21 11:54:38
Local clock offset: -3.055 ms
Remote clock offset: -45.283 ms

# Below is generated by plot.py at 2019-01-21 14:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.95 Mbit/s
95th percentile per-packet one-way delay: 56.899 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 169.64 Mbit/s
95th percentile per-packet one-way delay: 57.125 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 86.54 Mbit/s
95th percentile per-packet one-way delay: 56.726 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 56.130 ms
Loss rate: 0.24%
```

Run 2: Report of TCP Cubic — Data Link

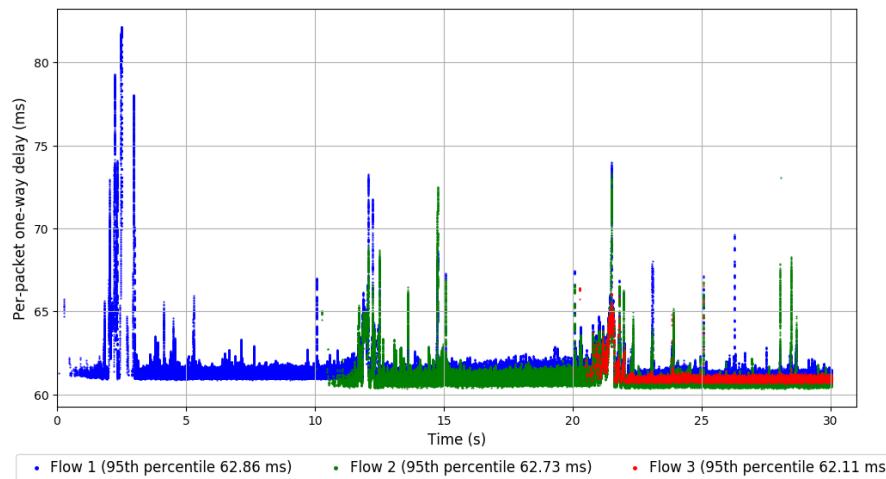
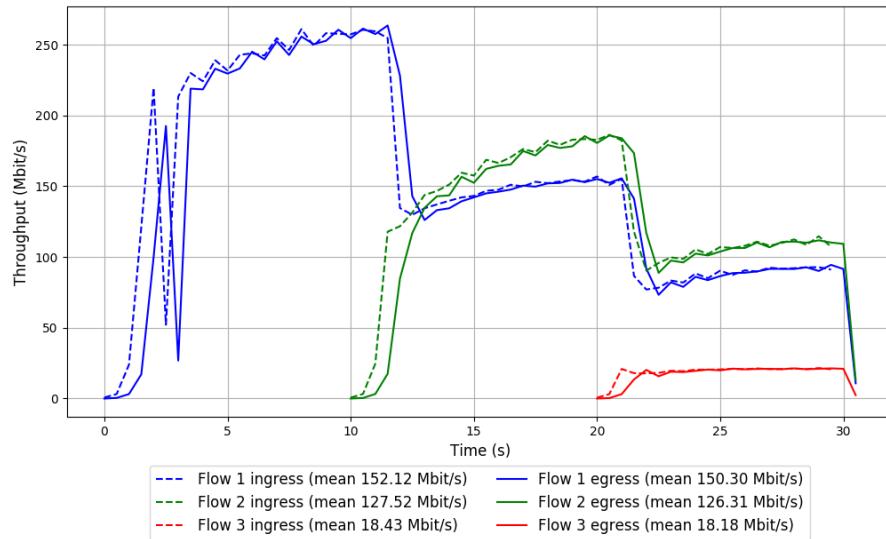


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2019-01-21 12:40:11
End at: 2019-01-21 12:40:41
Local clock offset: 0.728 ms
Remote clock offset: -37.18 ms

# Below is generated by plot.py at 2019-01-21 14:24:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.50 Mbit/s
95th percentile per-packet one-way delay: 62.803 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 150.30 Mbit/s
95th percentile per-packet one-way delay: 62.861 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 126.31 Mbit/s
95th percentile per-packet one-way delay: 62.731 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 18.18 Mbit/s
95th percentile per-packet one-way delay: 62.114 ms
Loss rate: 1.34%
```

Run 3: Report of TCP Cubic — Data Link

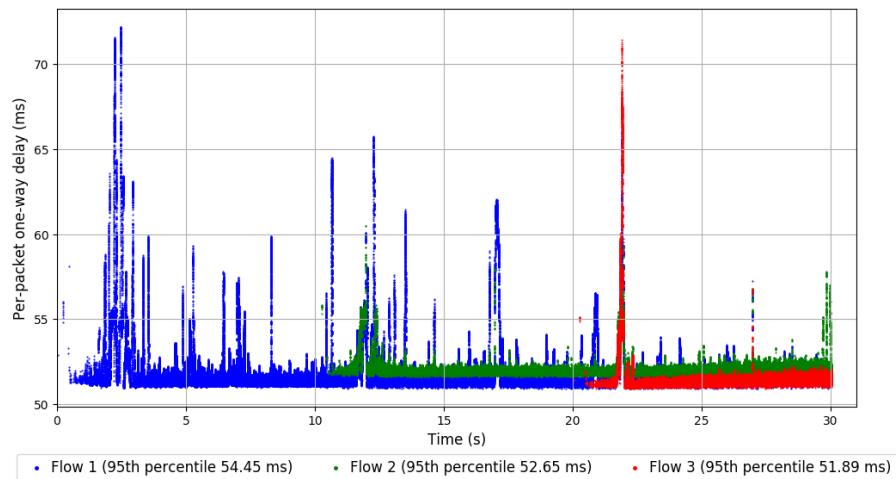
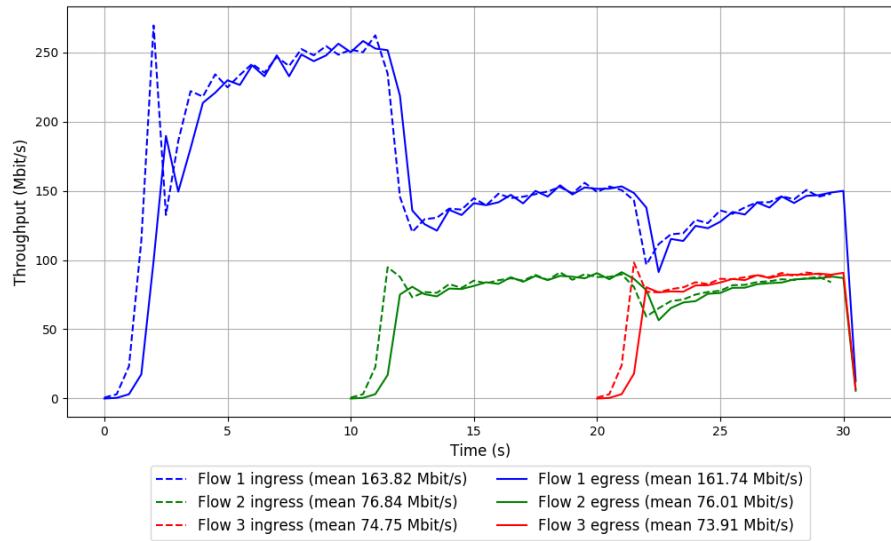


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-21 13:33:08
End at: 2019-01-21 13:38:38
Local clock offset: -1.534 ms
Remote clock offset: -47.376 ms

# Below is generated by plot.py at 2019-01-21 14:25:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.94 Mbit/s
95th percentile per-packet one-way delay: 54.021 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 161.74 Mbit/s
95th percentile per-packet one-way delay: 54.451 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 76.01 Mbit/s
95th percentile per-packet one-way delay: 52.649 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 73.91 Mbit/s
95th percentile per-packet one-way delay: 51.887 ms
Loss rate: 1.12%
```

Run 4: Report of TCP Cubic — Data Link

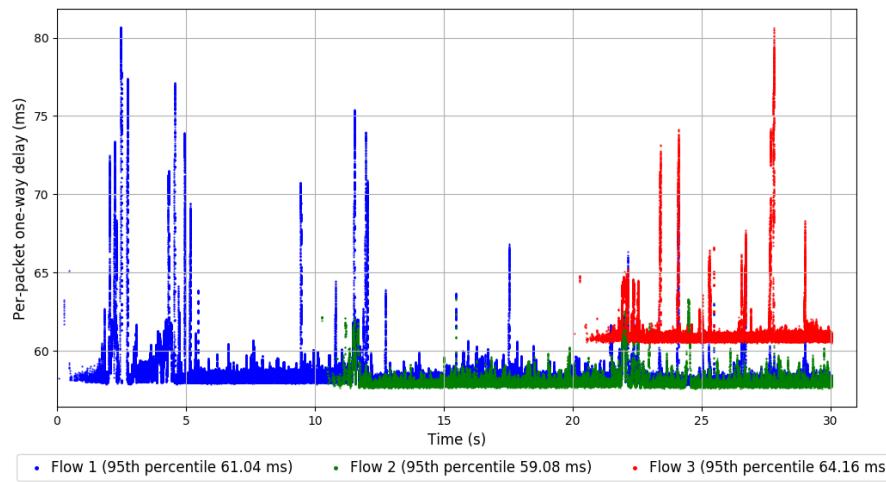
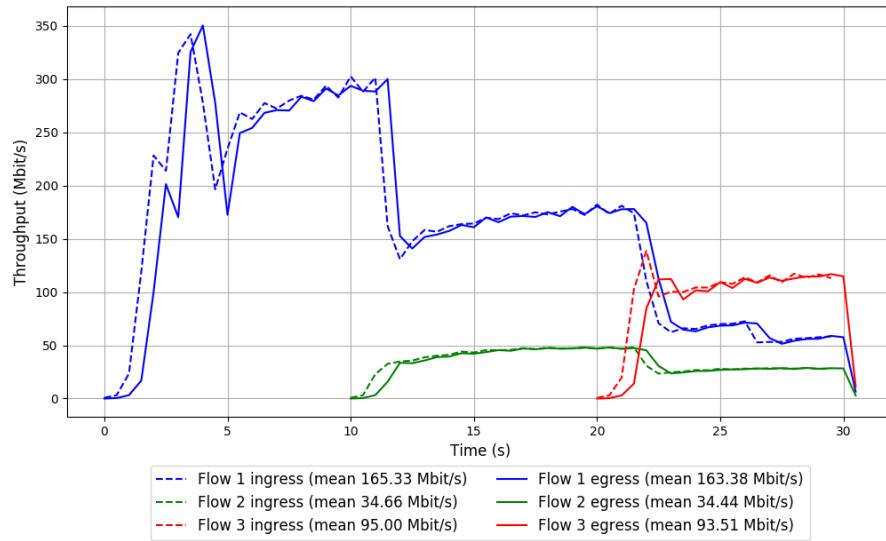


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-21 14:09:12
End at: 2019-01-21 14:09:42
Local clock offset: -2.867 ms
Remote clock offset: -42.109 ms

# Below is generated by plot.py at 2019-01-21 14:25:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.40 Mbit/s
95th percentile per-packet one-way delay: 61.380 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 163.38 Mbit/s
95th percentile per-packet one-way delay: 61.041 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 64.164 ms
Loss rate: 1.58%
```

Run 5: Report of TCP Cubic — Data Link

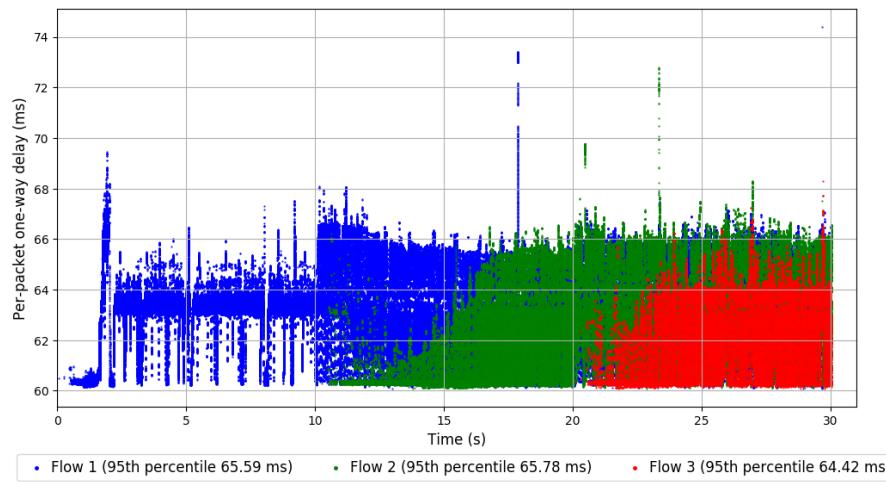
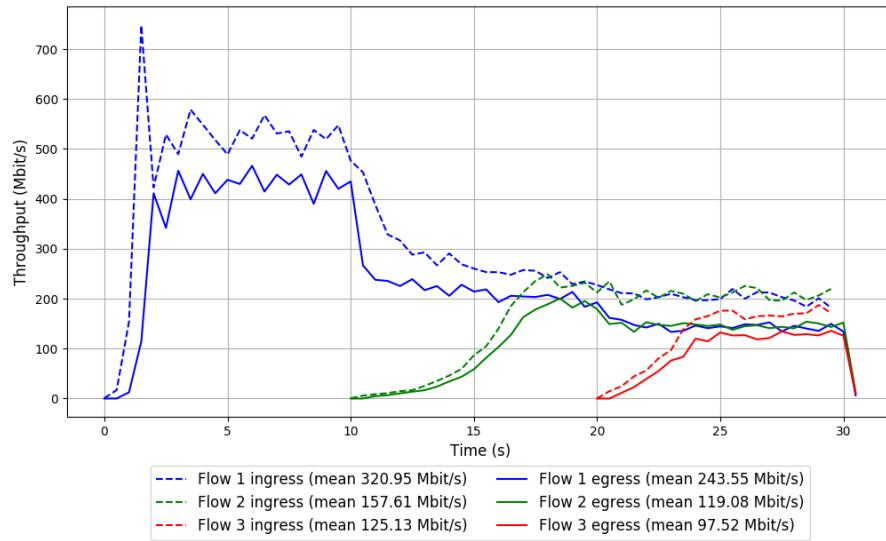


```
Run 1: Statistics of FillP

Start at: 2019-01-21 11:19:44
End at: 2019-01-21 11:20:14
Local clock offset: -3.137 ms
Remote clock offset: -41.037 ms

# Below is generated by plot.py at 2019-01-21 14:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.97 Mbit/s
95th percentile per-packet one-way delay: 65.604 ms
Loss rate: 24.01%
-- Flow 1:
Average throughput: 243.55 Mbit/s
95th percentile per-packet one-way delay: 65.590 ms
Loss rate: 24.11%
-- Flow 2:
Average throughput: 119.08 Mbit/s
95th percentile per-packet one-way delay: 65.778 ms
Loss rate: 24.44%
-- Flow 3:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 64.420 ms
Loss rate: 22.07%
```

Run 1: Report of FillP — Data Link

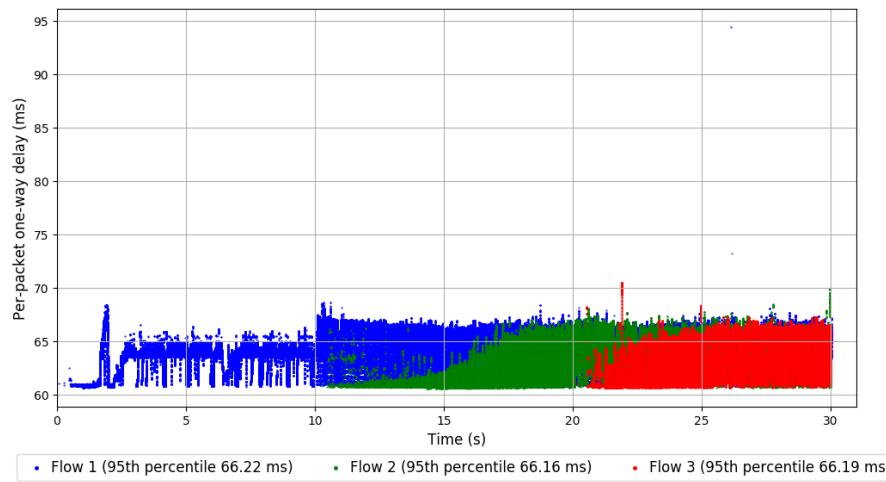
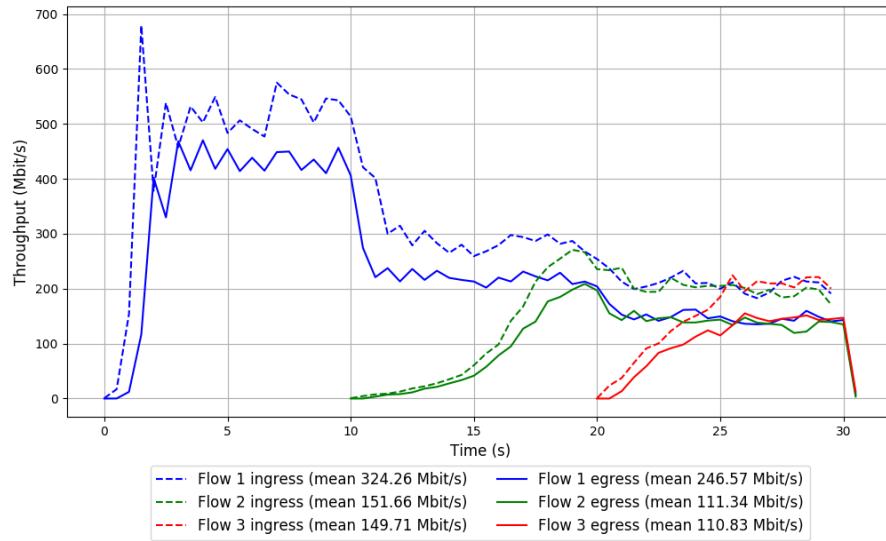


Run 2: Statistics of FillP

```
Start at: 2019-01-21 11:55:38
End at: 2019-01-21 11:56:08
Local clock offset: -1.741 ms
Remote clock offset: -38.779 ms

# Below is generated by plot.py at 2019-01-21 14:28:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.39 Mbit/s
95th percentile per-packet one-way delay: 66.202 ms
Loss rate: 24.72%
-- Flow 1:
Average throughput: 246.57 Mbit/s
95th percentile per-packet one-way delay: 66.220 ms
Loss rate: 23.95%
-- Flow 2:
Average throughput: 111.34 Mbit/s
95th percentile per-packet one-way delay: 66.161 ms
Loss rate: 26.59%
-- Flow 3:
Average throughput: 110.83 Mbit/s
95th percentile per-packet one-way delay: 66.187 ms
Loss rate: 25.96%
```

Run 2: Report of FillP — Data Link

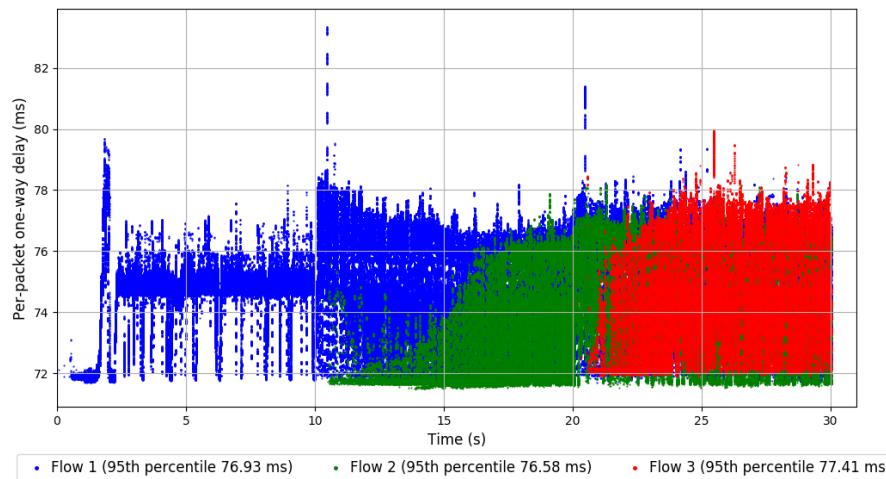
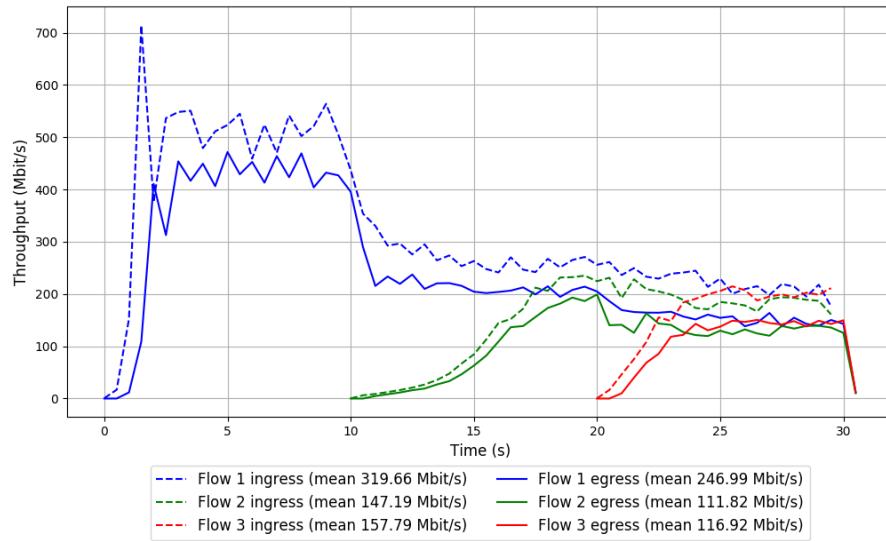


Run 3: Statistics of FillP

```
Start at: 2019-01-21 12:41:41
End at: 2019-01-21 12:42:11
Local clock offset: -1.473 ms
Remote clock offset: -30.962 ms

# Below is generated by plot.py at 2019-01-21 14:28:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.18 Mbit/s
95th percentile per-packet one-way delay: 76.952 ms
Loss rate: 23.36%
-- Flow 1:
Average throughput: 246.99 Mbit/s
95th percentile per-packet one-way delay: 76.932 ms
Loss rate: 22.73%
-- Flow 2:
Average throughput: 111.82 Mbit/s
95th percentile per-packet one-way delay: 76.579 ms
Loss rate: 24.04%
-- Flow 3:
Average throughput: 116.92 Mbit/s
95th percentile per-packet one-way delay: 77.414 ms
Loss rate: 25.91%
```

Run 3: Report of FillP — Data Link

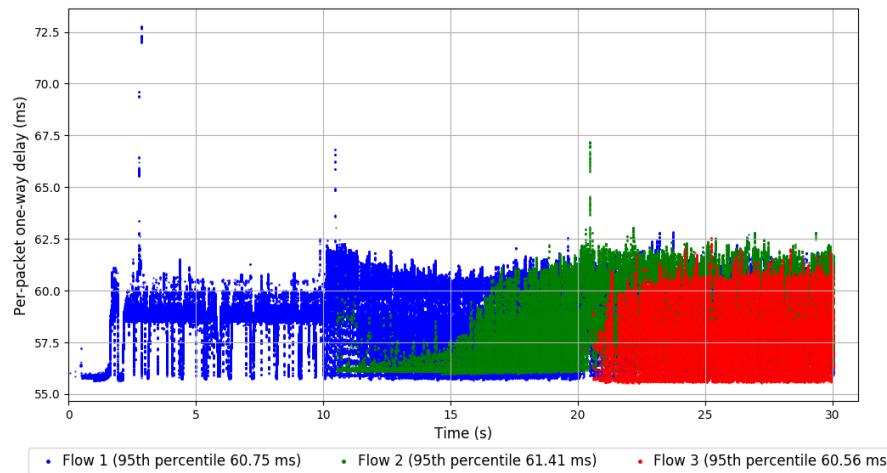
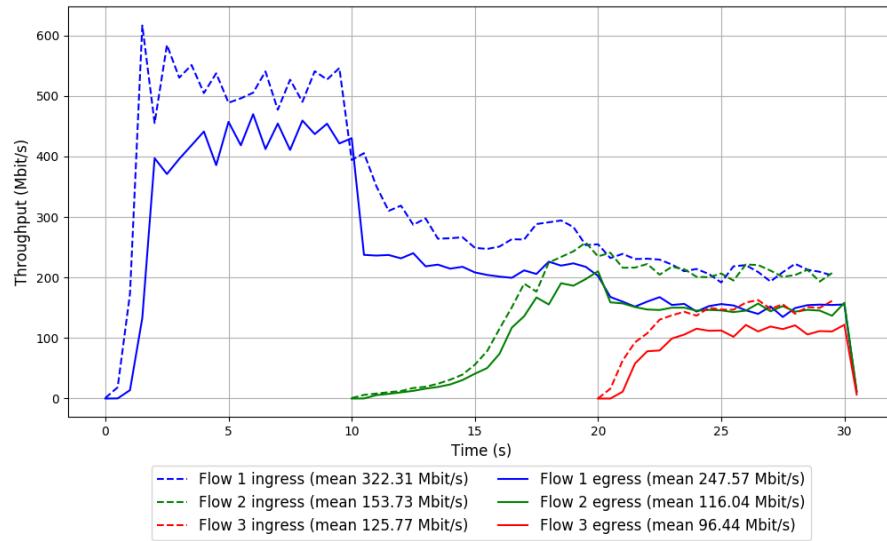


Run 4: Statistics of FillP

```
Start at: 2019-01-21 13:34:38
End at: 2019-01-21 13:35:08
Local clock offset: -0.643 ms
Remote clock offset: -41.67 ms

# Below is generated by plot.py at 2019-01-21 14:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.68 Mbit/s
95th percentile per-packet one-way delay: 60.921 ms
Loss rate: 23.49%
-- Flow 1:
Average throughput: 247.57 Mbit/s
95th percentile per-packet one-way delay: 60.748 ms
Loss rate: 23.19%
-- Flow 2:
Average throughput: 116.04 Mbit/s
95th percentile per-packet one-way delay: 61.406 ms
Loss rate: 24.51%
-- Flow 3:
Average throughput: 96.44 Mbit/s
95th percentile per-packet one-way delay: 60.564 ms
Loss rate: 23.30%
```

Run 4: Report of FillP — Data Link

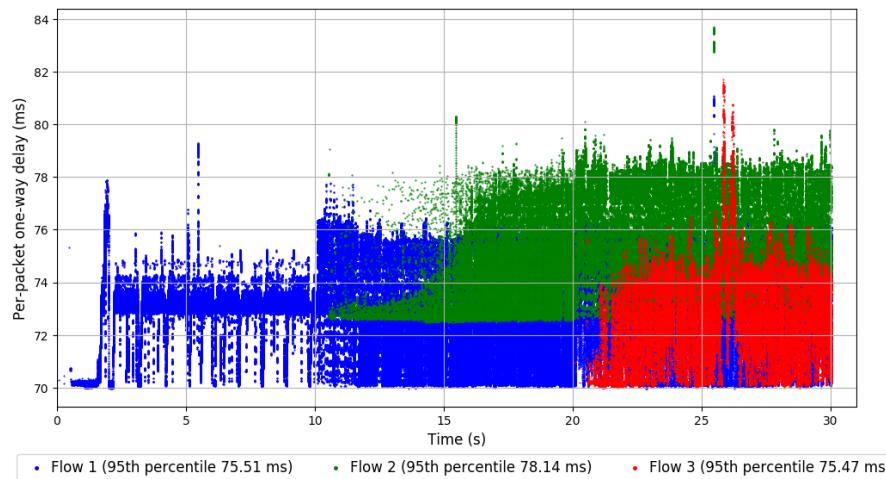
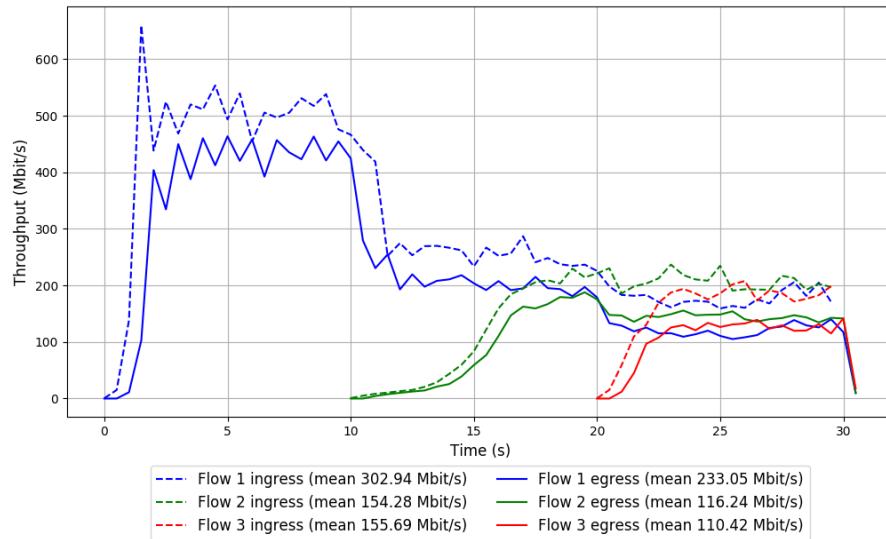


Run 5: Statistics of FillP

```
Start at: 2019-01-21 14:10:41
End at: 2019-01-21 14:11:11
Local clock offset: -8.672 ms
Remote clock offset: -35.809 ms

# Below is generated by plot.py at 2019-01-21 14:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.04 Mbit/s
95th percentile per-packet one-way delay: 77.082 ms
Loss rate: 24.12%
-- Flow 1:
Average throughput: 233.05 Mbit/s
95th percentile per-packet one-way delay: 75.506 ms
Loss rate: 23.07%
-- Flow 2:
Average throughput: 116.24 Mbit/s
95th percentile per-packet one-way delay: 78.145 ms
Loss rate: 24.73%
-- Flow 3:
Average throughput: 110.42 Mbit/s
95th percentile per-packet one-way delay: 75.465 ms
Loss rate: 29.08%
```

Run 5: Report of FillP — Data Link

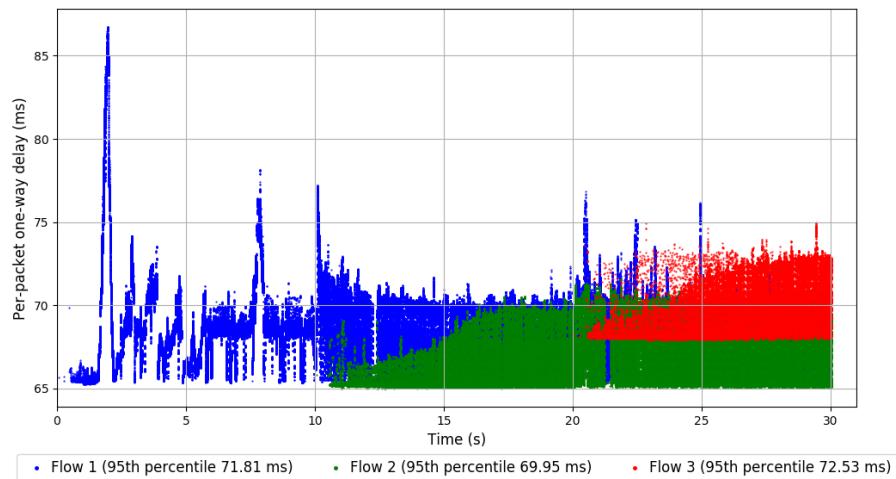
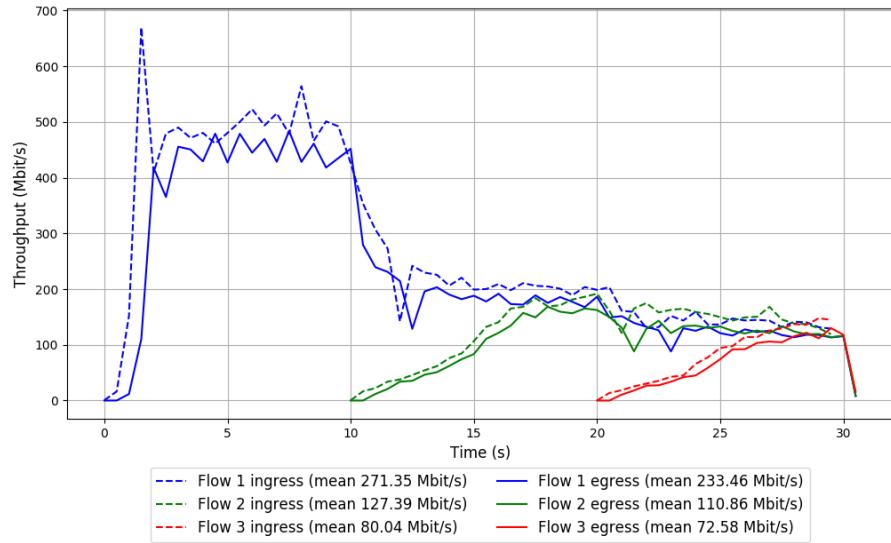


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-21 11:09:10
End at: 2019-01-21 11:09:40
Local clock offset: -0.209 ms
Remote clock offset: -34.141 ms

# Below is generated by plot.py at 2019-01-21 14:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.19 Mbit/s
95th percentile per-packet one-way delay: 71.682 ms
Loss rate: 13.42%
-- Flow 1:
Average throughput: 233.46 Mbit/s
95th percentile per-packet one-way delay: 71.809 ms
Loss rate: 13.96%
-- Flow 2:
Average throughput: 110.86 Mbit/s
95th percentile per-packet one-way delay: 69.954 ms
Loss rate: 12.98%
-- Flow 3:
Average throughput: 72.58 Mbit/s
95th percentile per-packet one-way delay: 72.528 ms
Loss rate: 9.29%
```

Run 1: Report of FillP-Sheep — Data Link

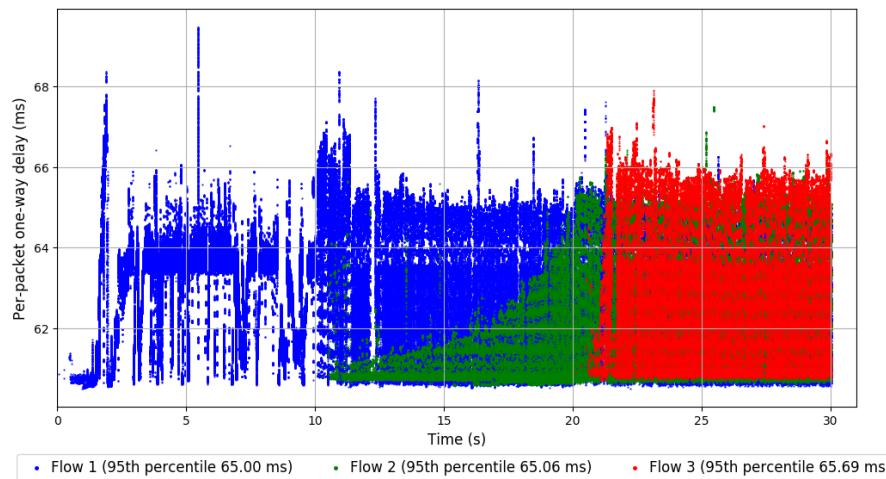
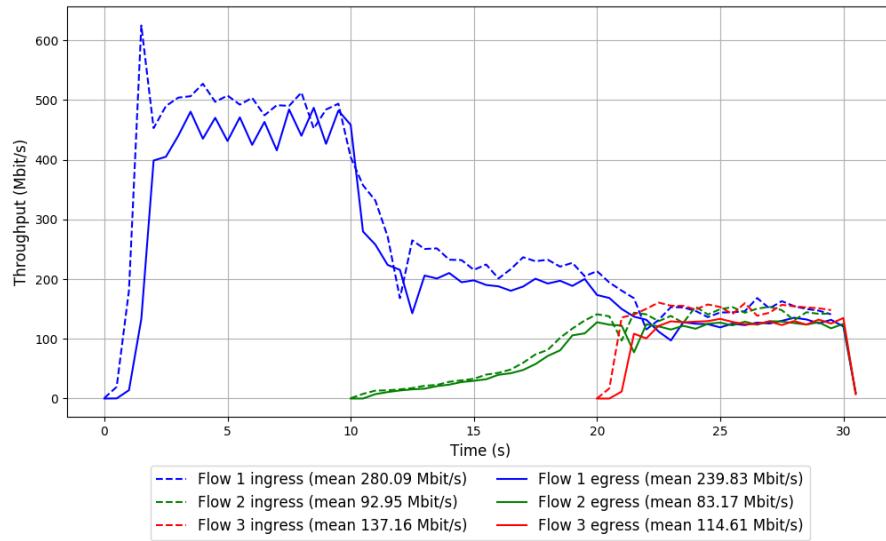


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-21 11:44:52
End at: 2019-01-21 11:45:22
Local clock offset: -4.449 ms
Remote clock offset: -40.54 ms

# Below is generated by plot.py at 2019-01-21 14:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.13 Mbit/s
95th percentile per-packet one-way delay: 65.174 ms
Loss rate: 14.00%
-- Flow 1:
Average throughput: 239.83 Mbit/s
95th percentile per-packet one-way delay: 65.003 ms
Loss rate: 14.37%
-- Flow 2:
Average throughput: 83.17 Mbit/s
95th percentile per-packet one-way delay: 65.063 ms
Loss rate: 10.52%
-- Flow 3:
Average throughput: 114.61 Mbit/s
95th percentile per-packet one-way delay: 65.687 ms
Loss rate: 16.44%
```

Run 2: Report of FillP-Sheep — Data Link

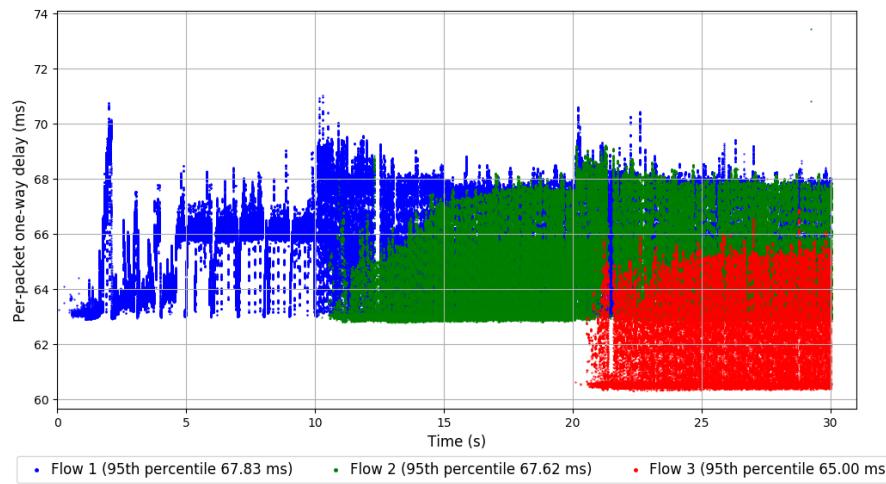
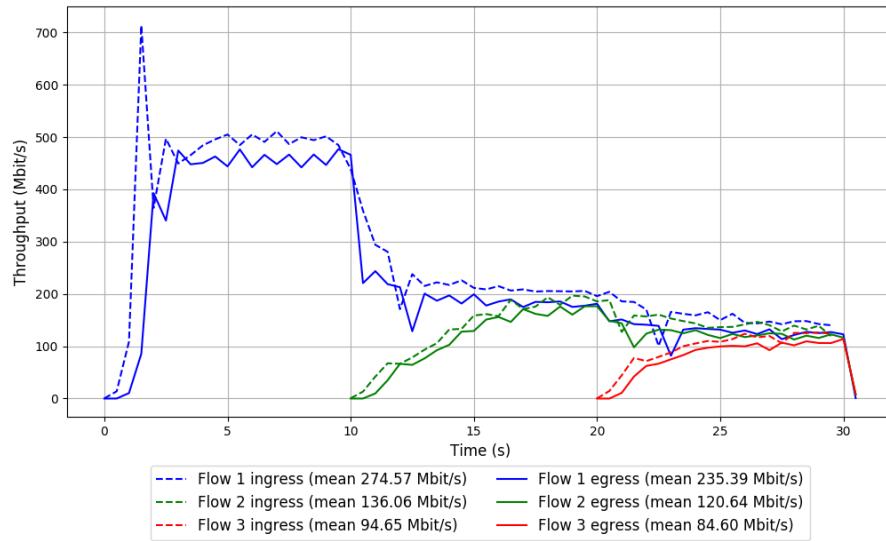


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-21 12:31:05
End at: 2019-01-21 12:31:35
Local clock offset: -1.052 ms
Remote clock offset: -39.373 ms

# Below is generated by plot.py at 2019-01-21 14:31:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.64 Mbit/s
95th percentile per-packet one-way delay: 67.722 ms
Loss rate: 13.35%
-- Flow 1:
Average throughput: 235.39 Mbit/s
95th percentile per-packet one-way delay: 67.832 ms
Loss rate: 14.33%
-- Flow 2:
Average throughput: 120.64 Mbit/s
95th percentile per-packet one-way delay: 67.616 ms
Loss rate: 11.34%
-- Flow 3:
Average throughput: 84.60 Mbit/s
95th percentile per-packet one-way delay: 64.995 ms
Loss rate: 10.61%
```

Run 3: Report of FillP-Sheep — Data Link

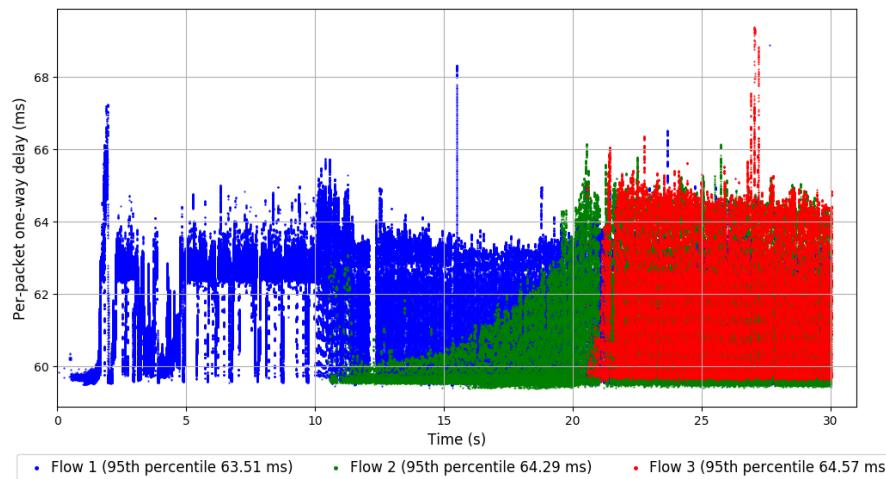
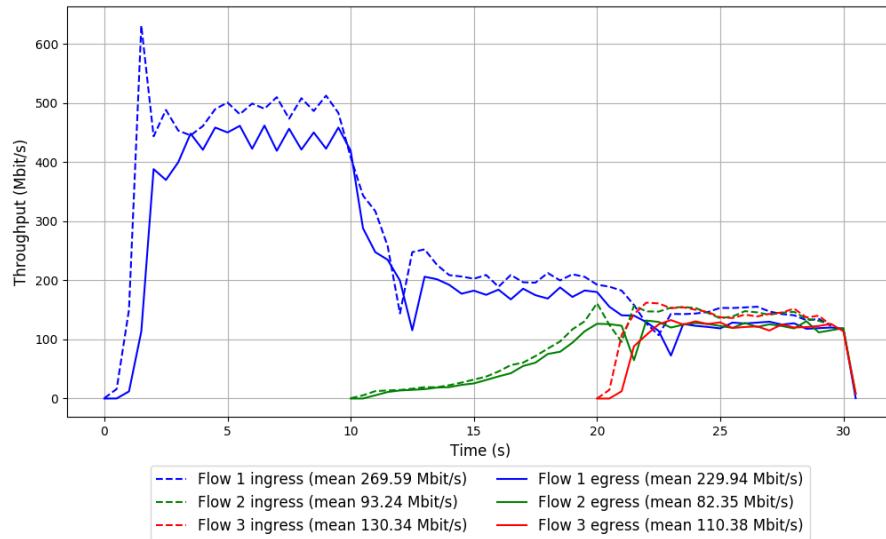


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-21 13:24:01
End at: 2019-01-21 13:24:31
Local clock offset: -1.804 ms
Remote clock offset: -39.916 ms

# Below is generated by plot.py at 2019-01-21 14:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.14 Mbit/s
95th percentile per-packet one-way delay: 64.022 ms
Loss rate: 14.28%
-- Flow 1:
Average throughput: 229.94 Mbit/s
95th percentile per-packet one-way delay: 63.505 ms
Loss rate: 14.71%
-- Flow 2:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 64.291 ms
Loss rate: 11.69%
-- Flow 3:
Average throughput: 110.38 Mbit/s
95th percentile per-packet one-way delay: 64.571 ms
Loss rate: 15.30%
```

Run 4: Report of FillP-Sheep — Data Link

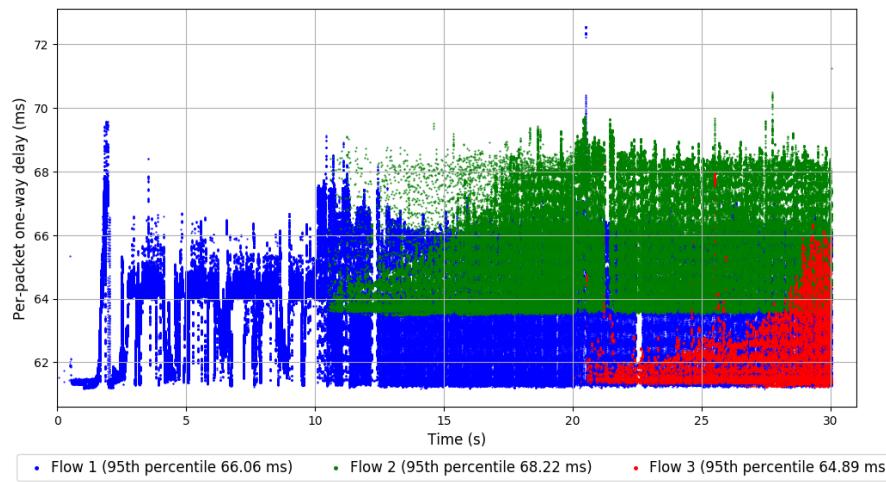
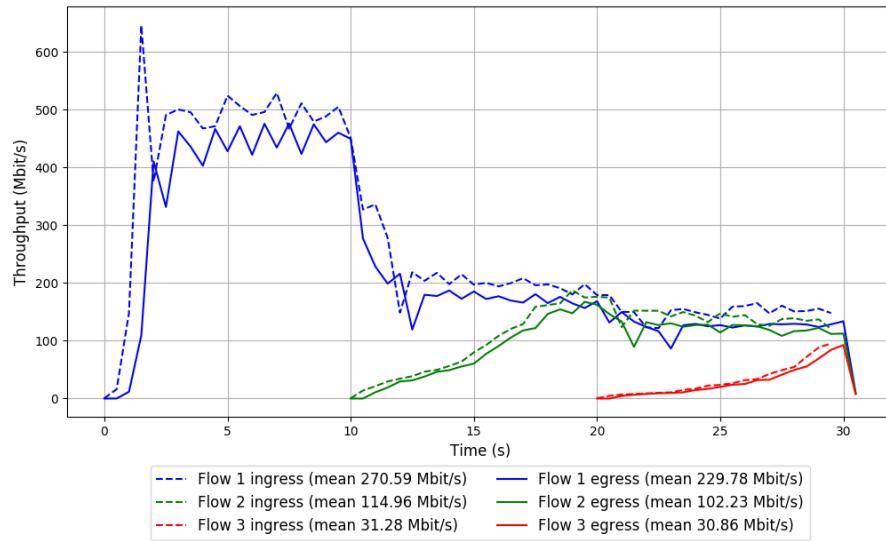


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-21 13:59:56
End at: 2019-01-21 14:00:26
Local clock offset: -2.298 ms
Remote clock offset: -38.576 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.02 Mbit/s
95th percentile per-packet one-way delay: 67.222 ms
Loss rate: 13.82%
-- Flow 1:
Average throughput: 229.78 Mbit/s
95th percentile per-packet one-way delay: 66.060 ms
Loss rate: 15.08%
-- Flow 2:
Average throughput: 102.23 Mbit/s
95th percentile per-packet one-way delay: 68.217 ms
Loss rate: 11.06%
-- Flow 3:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 64.890 ms
Loss rate: 1.34%
```

Run 5: Report of FillP-Sheep — Data Link

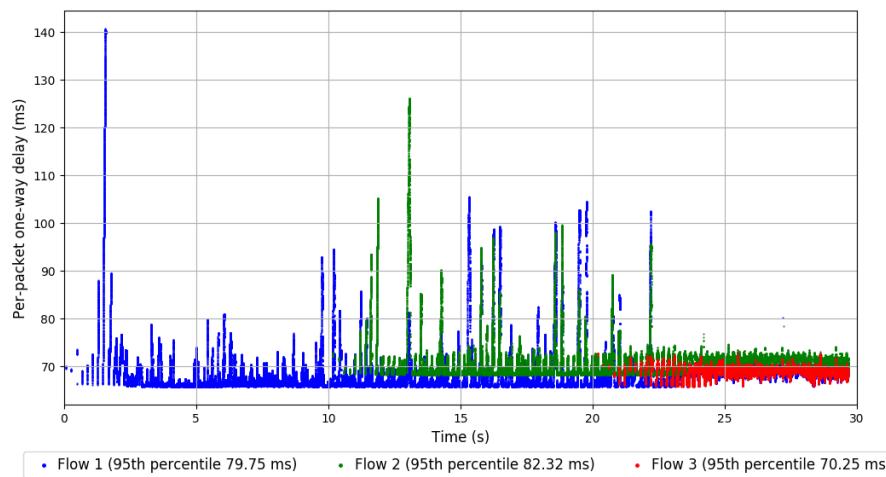
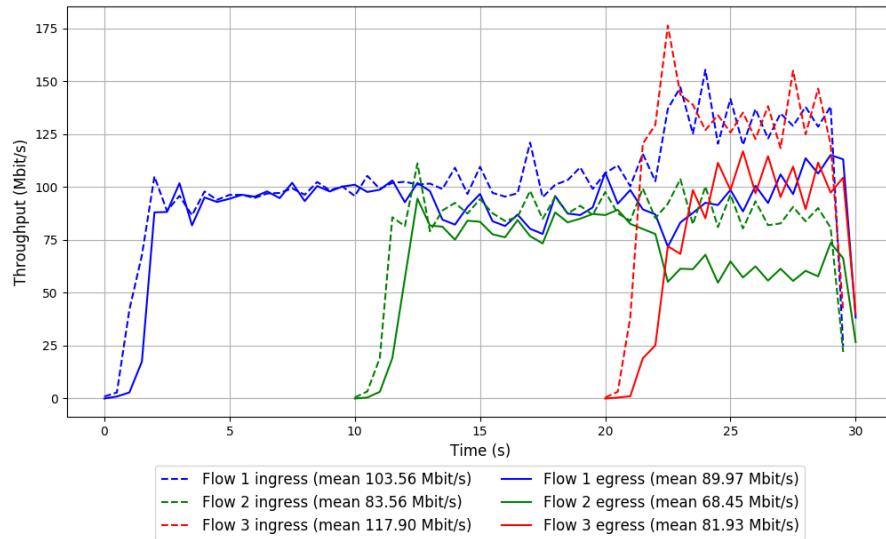


Run 1: Statistics of Indigo

```
Start at: 2019-01-21 11:25:30
End at: 2019-01-21 11:26:00
Local clock offset: -1.349 ms
Remote clock offset: -33.105 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.31 Mbit/s
95th percentile per-packet one-way delay: 78.274 ms
Loss rate: 17.87%
-- Flow 1:
Average throughput: 89.97 Mbit/s
95th percentile per-packet one-way delay: 79.751 ms
Loss rate: 13.13%
-- Flow 2:
Average throughput: 68.45 Mbit/s
95th percentile per-packet one-way delay: 82.319 ms
Loss rate: 18.08%
-- Flow 3:
Average throughput: 81.93 Mbit/s
95th percentile per-packet one-way delay: 70.245 ms
Loss rate: 30.53%
```

Run 1: Report of Indigo — Data Link

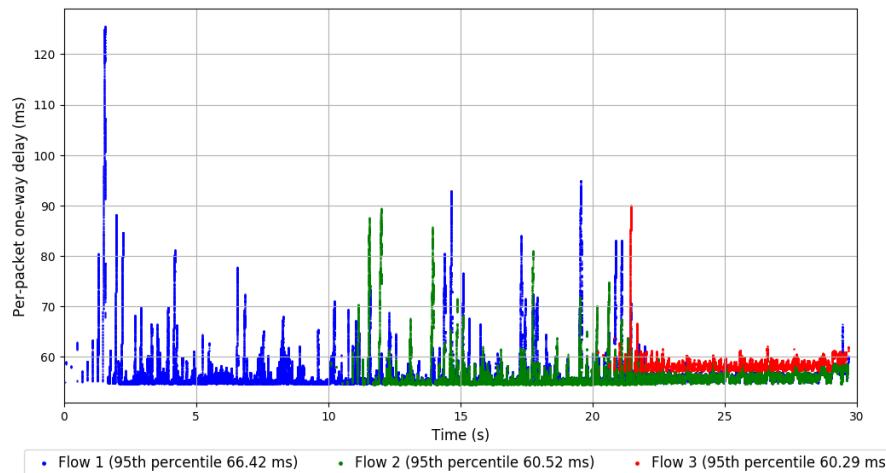
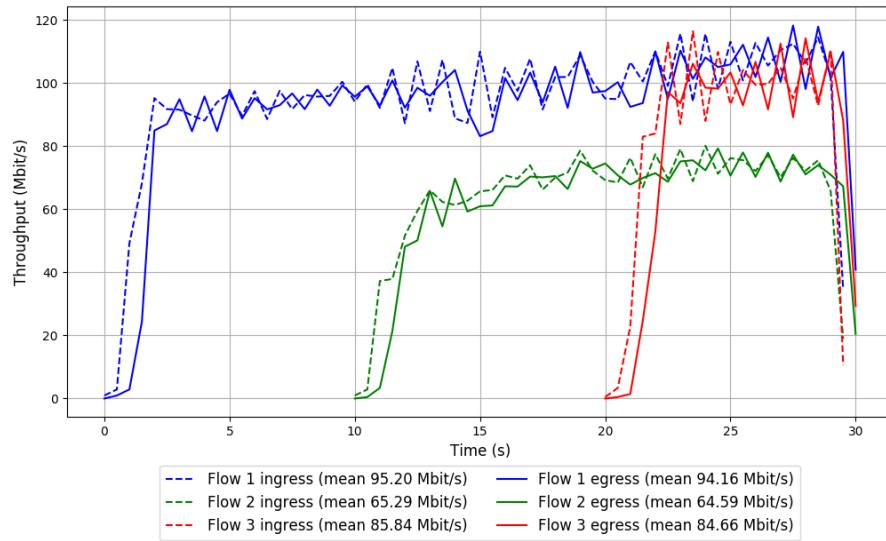


Run 2: Statistics of Indigo

```
Start at: 2019-01-21 12:01:23
End at: 2019-01-21 12:01:53
Local clock offset: -2.766 ms
Remote clock offset: -46.193 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.92 Mbit/s
95th percentile per-packet one-way delay: 62.579 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 66.419 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 64.59 Mbit/s
95th percentile per-packet one-way delay: 60.517 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 84.66 Mbit/s
95th percentile per-packet one-way delay: 60.294 ms
Loss rate: 1.33%
```

Run 2: Report of Indigo — Data Link

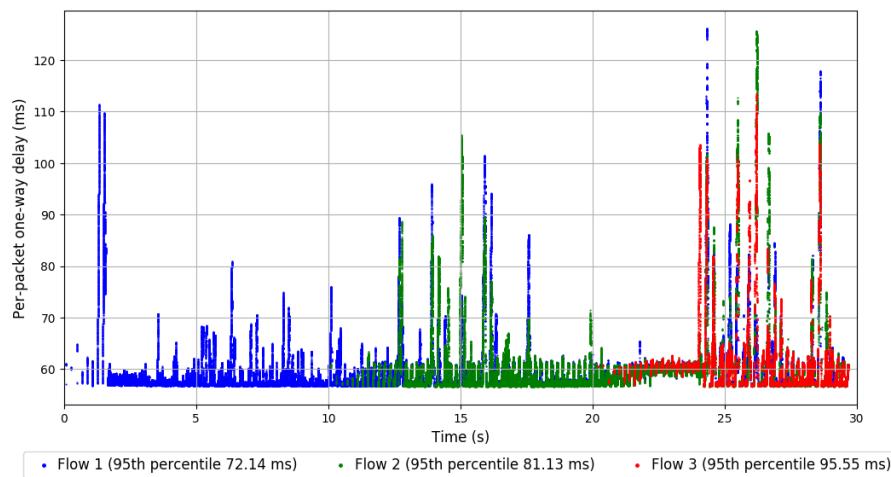
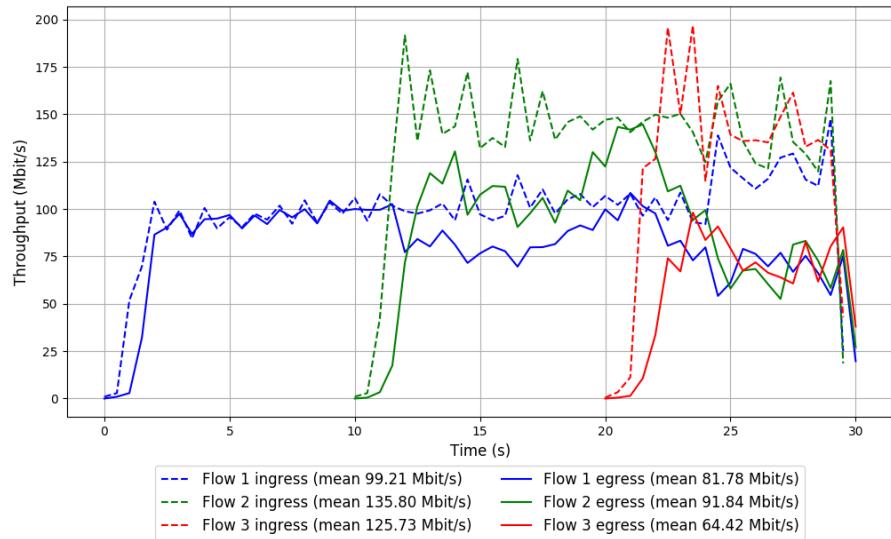


Run 3: Statistics of Indigo

```
Start at: 2019-01-21 12:53:05
End at: 2019-01-21 12:53:35
Local clock offset: 1.191 ms
Remote clock offset: -40.881 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.11 Mbit/s
95th percentile per-packet one-way delay: 79.568 ms
Loss rate: 28.84%
-- Flow 1:
Average throughput: 81.78 Mbit/s
95th percentile per-packet one-way delay: 72.135 ms
Loss rate: 17.56%
-- Flow 2:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 81.130 ms
Loss rate: 32.37%
-- Flow 3:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 95.549 ms
Loss rate: 48.76%
```

Run 3: Report of Indigo — Data Link

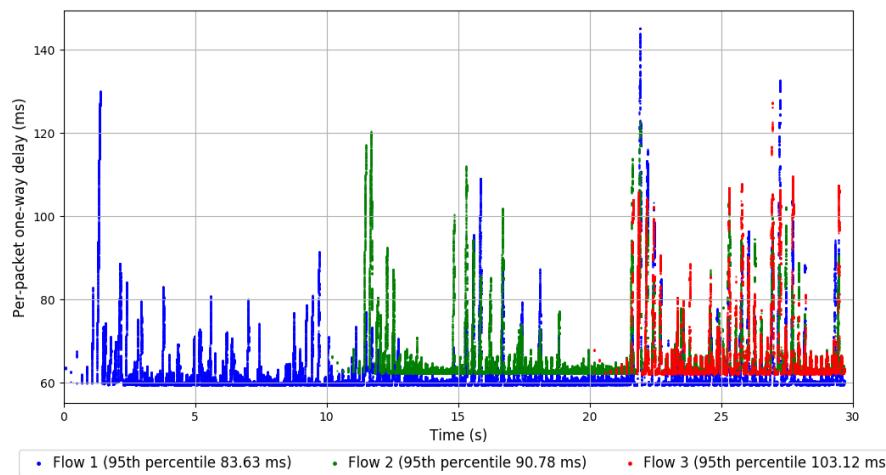
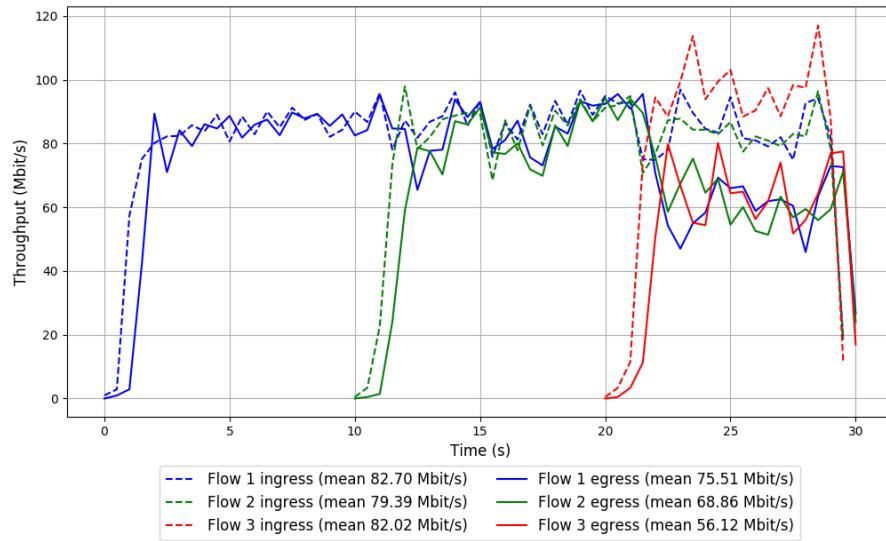


Run 4: Statistics of Indigo

```
Start at: 2019-01-21 13:40:23
End at: 2019-01-21 13:40:53
Local clock offset: -2.731 ms
Remote clock offset: -39.693 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.80 Mbit/s
95th percentile per-packet one-way delay: 91.520 ms
Loss rate: 13.92%
-- Flow 1:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 83.630 ms
Loss rate: 8.70%
-- Flow 2:
Average throughput: 68.86 Mbit/s
95th percentile per-packet one-way delay: 90.779 ms
Loss rate: 13.30%
-- Flow 3:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 103.117 ms
Loss rate: 31.58%
```

Run 4: Report of Indigo — Data Link

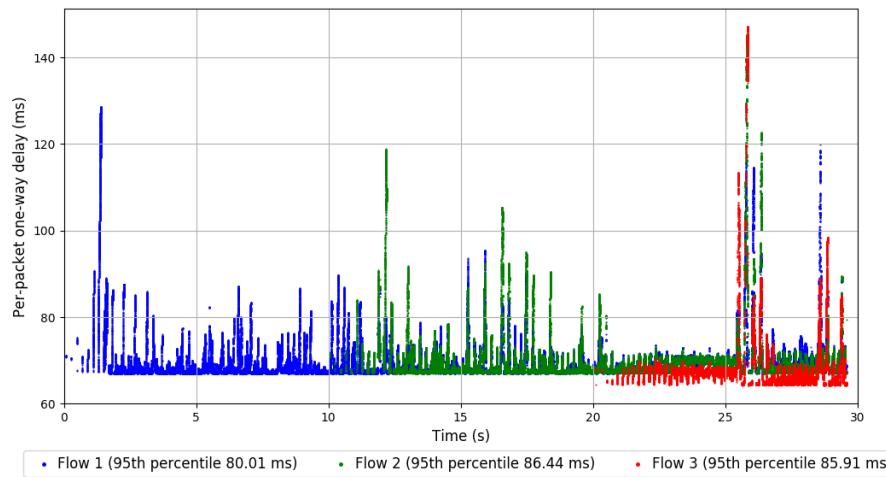
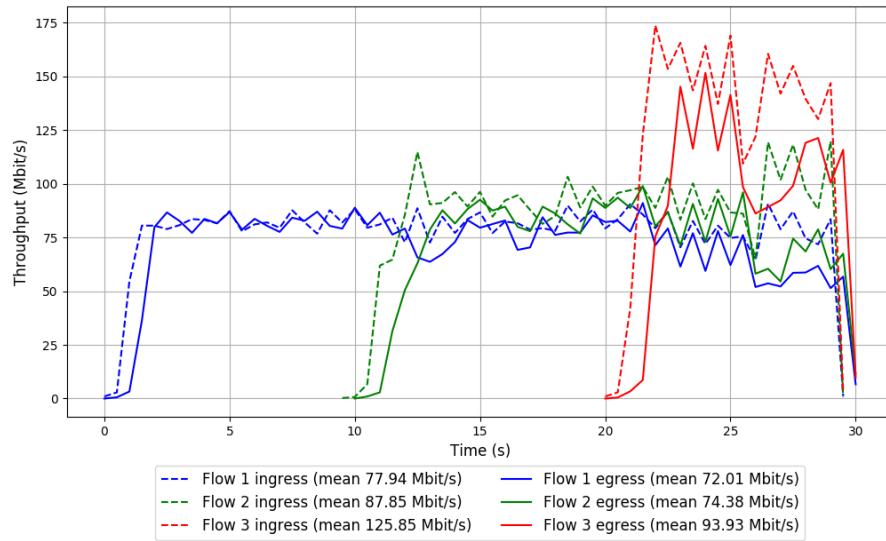


Run 5: Statistics of Indigo

```
Start at: 2019-01-21 14:16:27
End at: 2019-01-21 14:16:57
Local clock offset: -4.635 ms
Remote clock offset: -37.68 ms

# Below is generated by plot.py at 2019-01-21 14:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.36 Mbit/s
95th percentile per-packet one-way delay: 83.207 ms
Loss rate: 14.21%
-- Flow 1:
Average throughput: 72.01 Mbit/s
95th percentile per-packet one-way delay: 80.006 ms
Loss rate: 7.62%
-- Flow 2:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 86.437 ms
Loss rate: 15.31%
-- Flow 3:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 85.910 ms
Loss rate: 25.36%
```

Run 5: Report of Indigo — Data Link

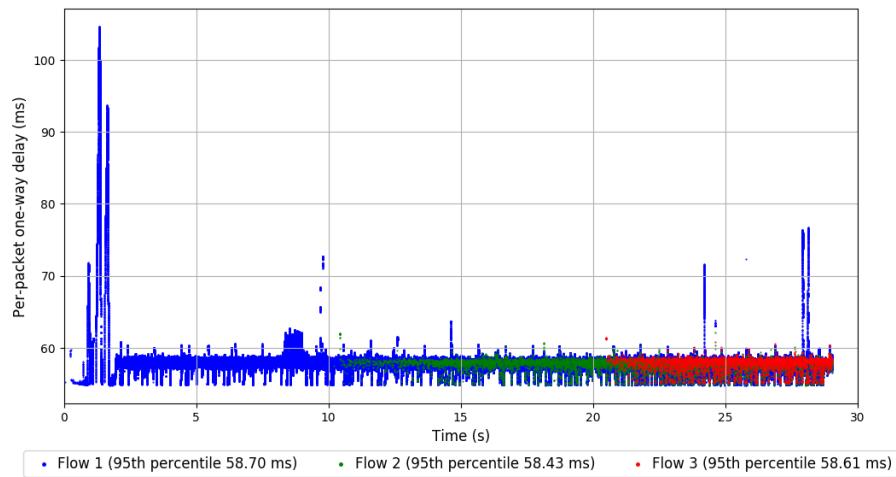
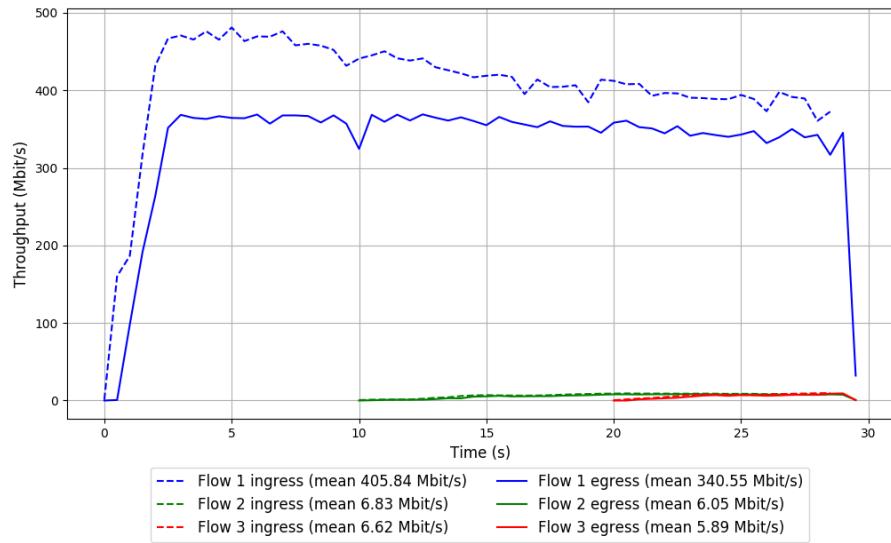


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 11:22:36
End at: 2019-01-21 11:23:06
Local clock offset: -2.153 ms
Remote clock offset: -45.078 ms

# Below is generated by plot.py at 2019-01-21 14:34:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.25 Mbit/s
95th percentile per-packet one-way delay: 58.694 ms
Loss rate: 16.03%
-- Flow 1:
Average throughput: 340.55 Mbit/s
95th percentile per-packet one-way delay: 58.699 ms
Loss rate: 16.10%
-- Flow 2:
Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 58.429 ms
Loss rate: 11.52%
-- Flow 3:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 58.607 ms
Loss rate: 10.88%
```

Run 1: Report of Indigo-MusesC3 — Data Link

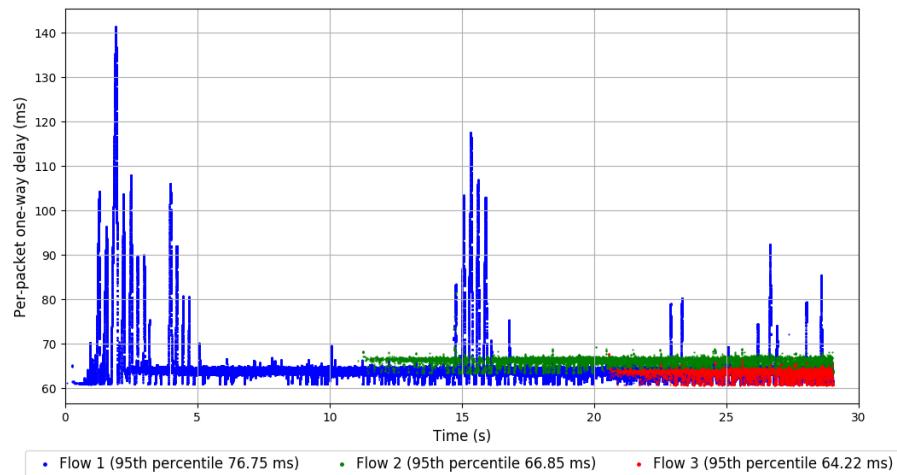
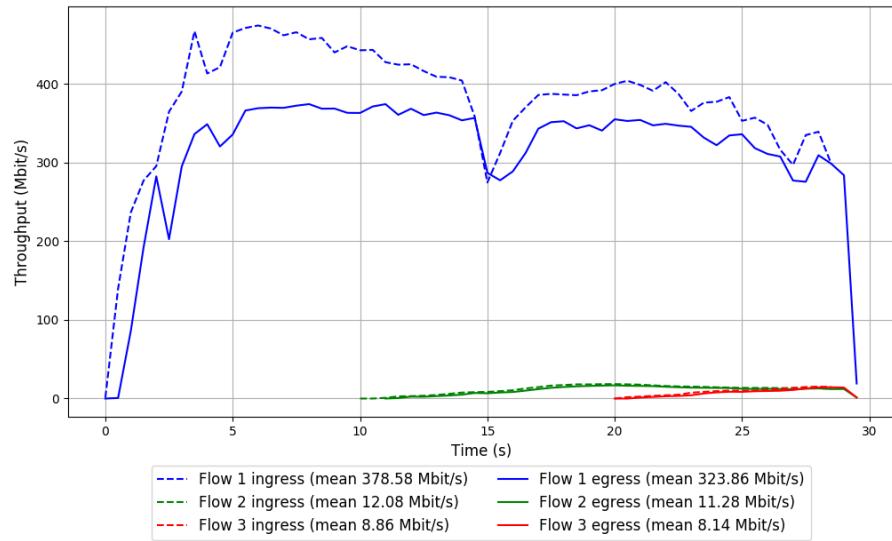


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 11:58:30
End at: 2019-01-21 11:59:00
Local clock offset: -0.98 ms
Remote clock offset: -38.278 ms

# Below is generated by plot.py at 2019-01-21 14:34:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.29 Mbit/s
95th percentile per-packet one-way delay: 75.964 ms
Loss rate: 14.31%
-- Flow 1:
Average throughput: 323.86 Mbit/s
95th percentile per-packet one-way delay: 76.750 ms
Loss rate: 14.45%
-- Flow 2:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 66.851 ms
Loss rate: 9.19%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 64.215 ms
Loss rate: 8.12%
```

Run 2: Report of Indigo-MusesC3 — Data Link

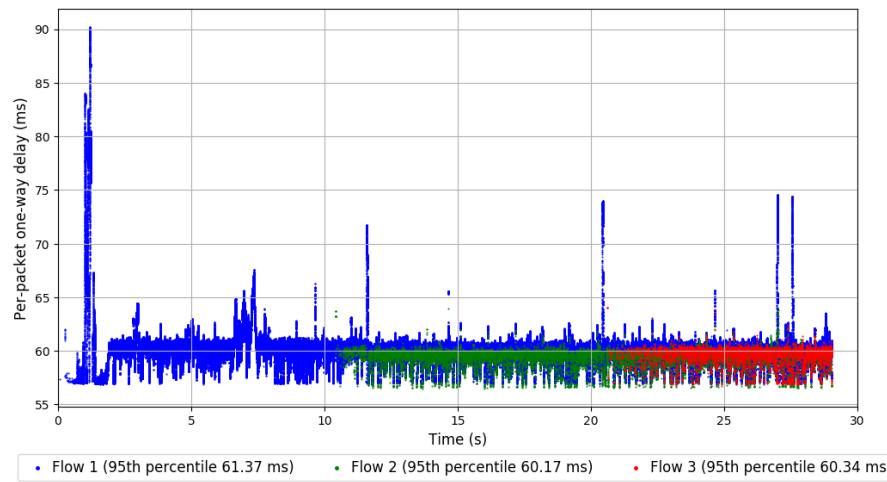
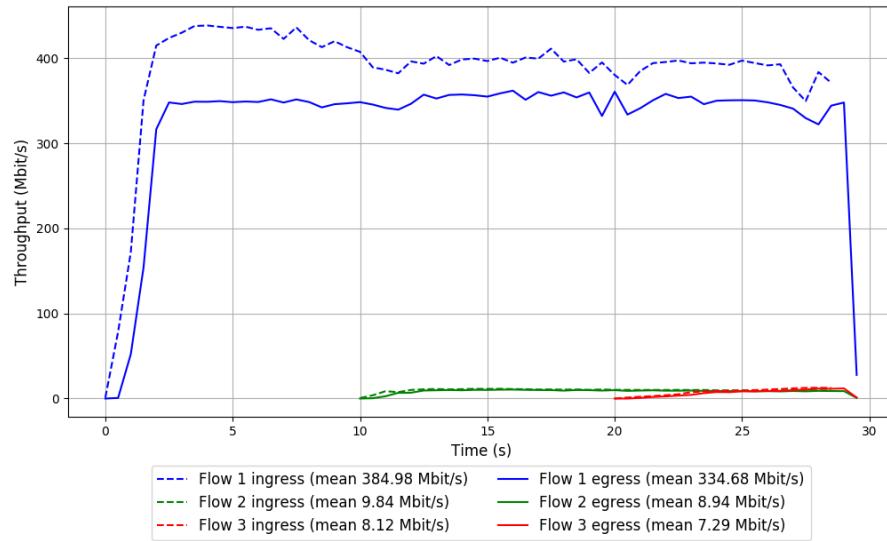


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 12:50:04
End at: 2019-01-21 12:50:34
Local clock offset: 2.786 ms
Remote clock offset: -39.438 ms

# Below is generated by plot.py at 2019-01-21 14:34:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.61 Mbit/s
95th percentile per-packet one-way delay: 61.342 ms
Loss rate: 12.98%
-- Flow 1:
Average throughput: 334.68 Mbit/s
95th percentile per-packet one-way delay: 61.368 ms
Loss rate: 13.06%
-- Flow 2:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 60.175 ms
Loss rate: 9.16%
-- Flow 3:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 60.345 ms
Loss rate: 10.17%
```

Run 3: Report of Indigo-MusesC3 — Data Link

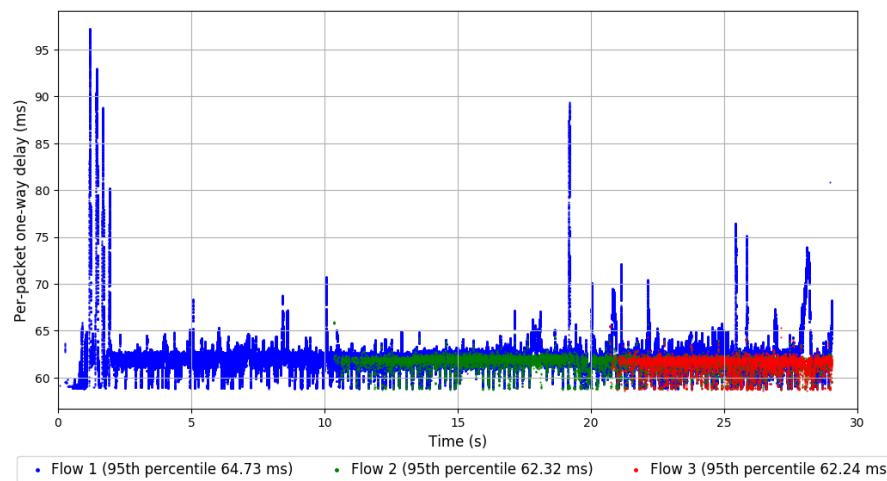
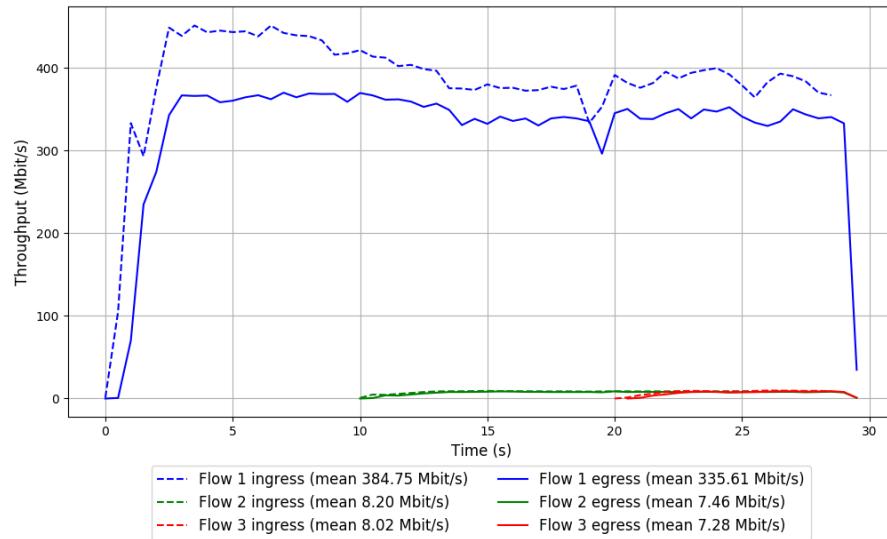


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 13:37:30
End at: 2019-01-21 13:38:00
Local clock offset: -3.8 ms
Remote clock offset: -41.678 ms

# Below is generated by plot.py at 2019-01-21 14:34:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.62 Mbit/s
95th percentile per-packet one-way delay: 64.690 ms
Loss rate: 12.69%
-- Flow 1:
Average throughput: 335.61 Mbit/s
95th percentile per-packet one-way delay: 64.734 ms
Loss rate: 12.77%
-- Flow 2:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 62.323 ms
Loss rate: 8.98%
-- Flow 3:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 62.236 ms
Loss rate: 9.29%
```

Run 4: Report of Indigo-MusesC3 — Data Link

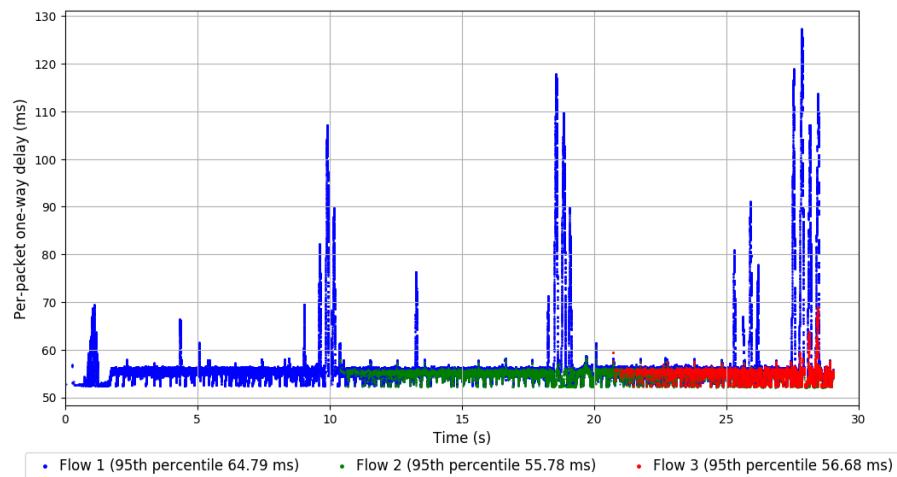
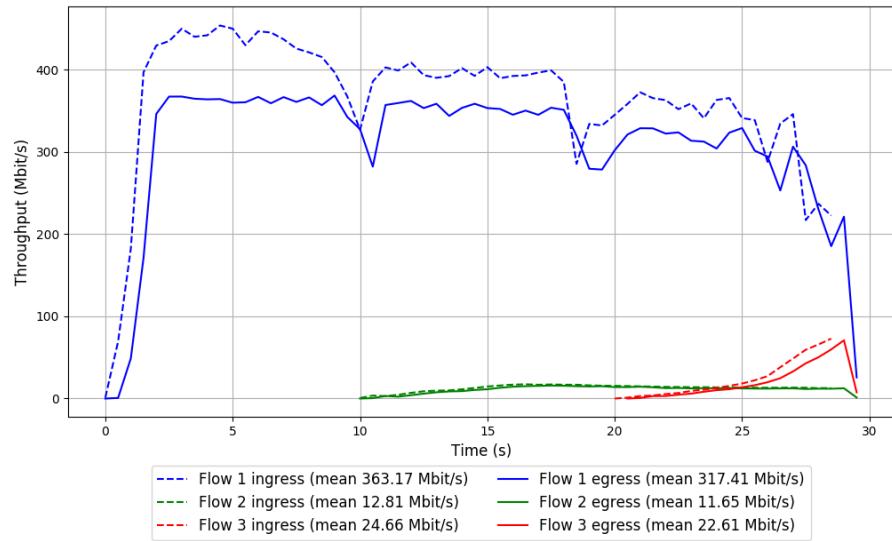


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 14:13:33
End at: 2019-01-21 14:14:03
Local clock offset: -1.469 ms
Remote clock offset: -46.274 ms

# Below is generated by plot.py at 2019-01-21 14:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.65 Mbit/s
95th percentile per-packet one-way delay: 63.178 ms
Loss rate: 12.43%
-- Flow 1:
Average throughput: 317.41 Mbit/s
95th percentile per-packet one-way delay: 64.793 ms
Loss rate: 12.59%
-- Flow 2:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 55.783 ms
Loss rate: 9.08%
-- Flow 3:
Average throughput: 22.61 Mbit/s
95th percentile per-packet one-way delay: 56.681 ms
Loss rate: 8.32%
```

Run 5: Report of Indigo-MusesC3 — Data Link

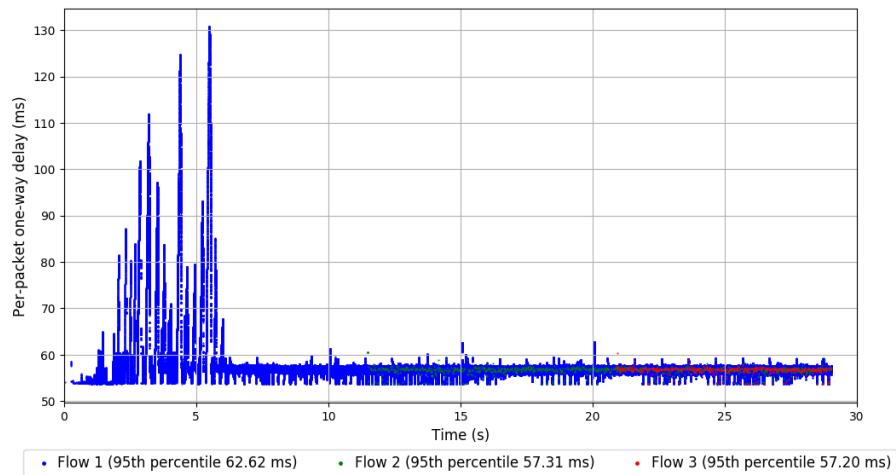
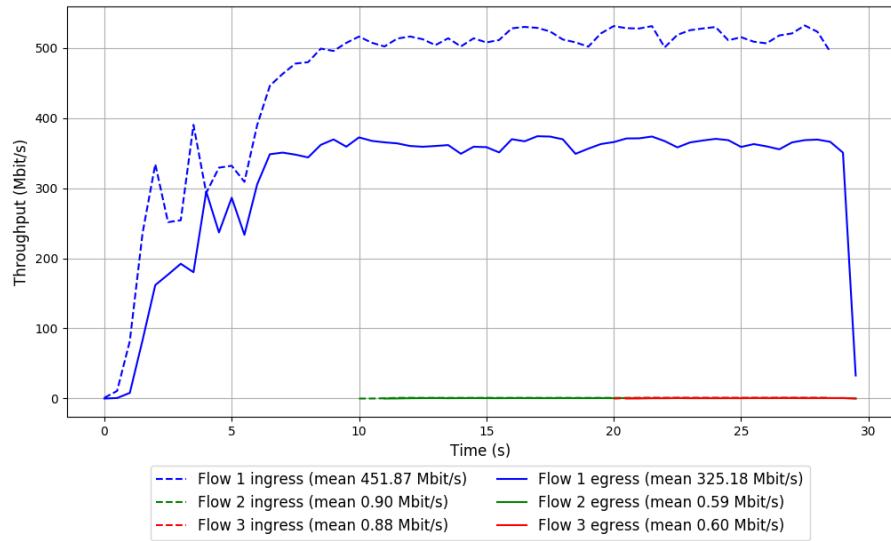


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 11:03:38
End at: 2019-01-21 11:04:08
Local clock offset: 0.033 ms
Remote clock offset: -45.659 ms

# Below is generated by plot.py at 2019-01-21 14:36:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.72 Mbit/s
95th percentile per-packet one-way delay: 62.574 ms
Loss rate: 28.05%
-- Flow 1:
Average throughput: 325.18 Mbit/s
95th percentile per-packet one-way delay: 62.623 ms
Loss rate: 28.03%
-- Flow 2:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 57.313 ms
Loss rate: 37.53%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 57.205 ms
Loss rate: 36.13%
```

Run 1: Report of Indigo-MusesC5 — Data Link

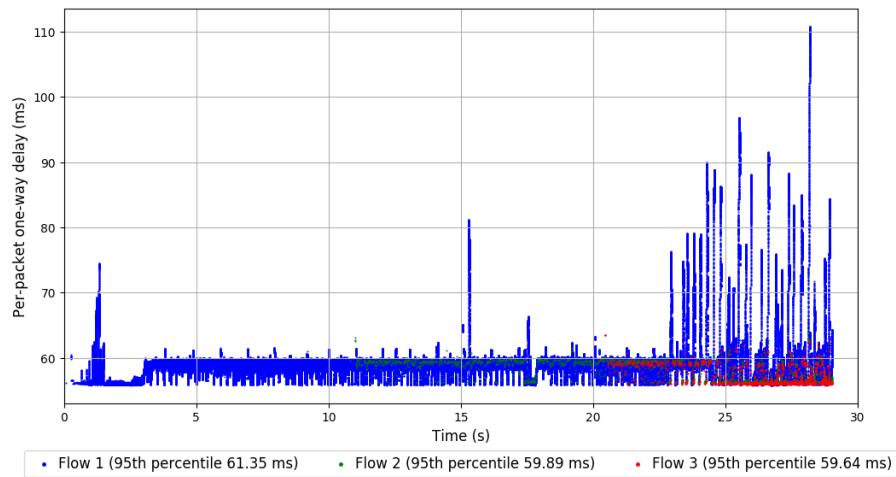
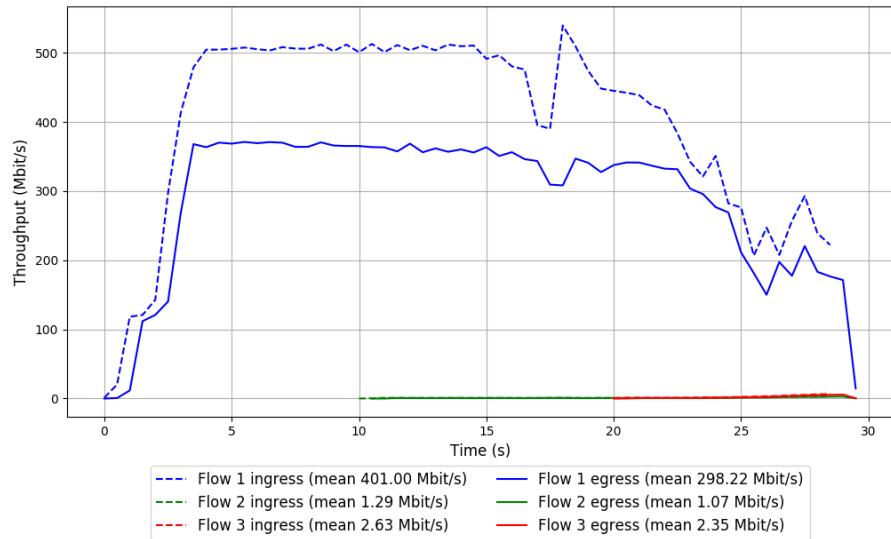


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 11:34:03
End at: 2019-01-21 11:34:33
Local clock offset: -3.421 ms
Remote clock offset: -44.509 ms

# Below is generated by plot.py at 2019-01-21 14:36:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.61 Mbit/s
95th percentile per-packet one-way delay: 61.326 ms
Loss rate: 25.58%
-- Flow 1:
Average throughput: 298.22 Mbit/s
95th percentile per-packet one-way delay: 61.348 ms
Loss rate: 25.62%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 59.891 ms
Loss rate: 18.99%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 59.636 ms
Loss rate: 10.71%
```

Run 2: Report of Indigo-MusesC5 — Data Link

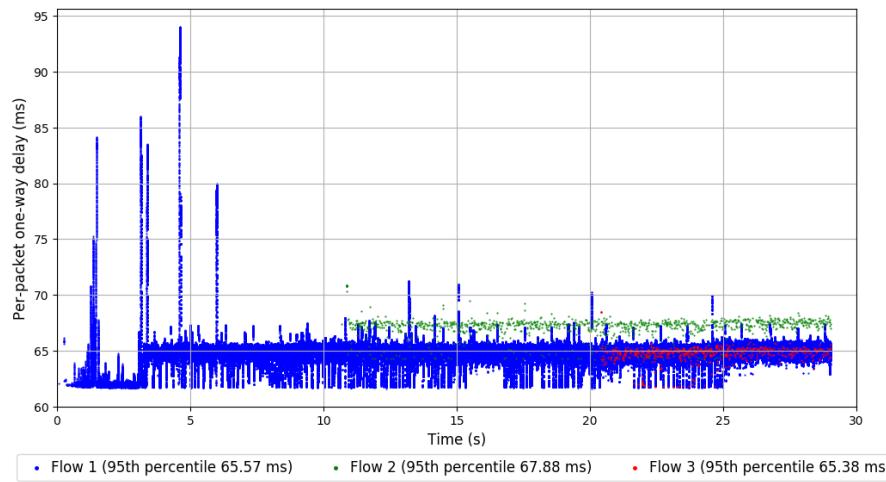
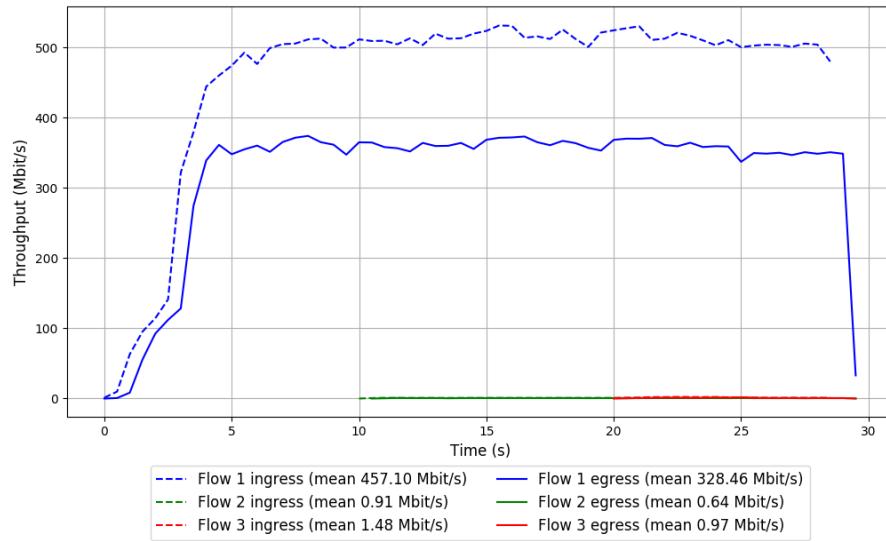


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 12:25:34
End at: 2019-01-21 12:26:04
Local clock offset: -1.346 ms
Remote clock offset: -38.46 ms

# Below is generated by plot.py at 2019-01-21 14:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.16 Mbit/s
95th percentile per-packet one-way delay: 65.580 ms
Loss rate: 28.15%
-- Flow 1:
Average throughput: 328.46 Mbit/s
95th percentile per-packet one-way delay: 65.572 ms
Loss rate: 28.14%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 67.884 ms
Loss rate: 31.30%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 65.376 ms
Loss rate: 34.58%
```

Run 3: Report of Indigo-MusesC5 — Data Link

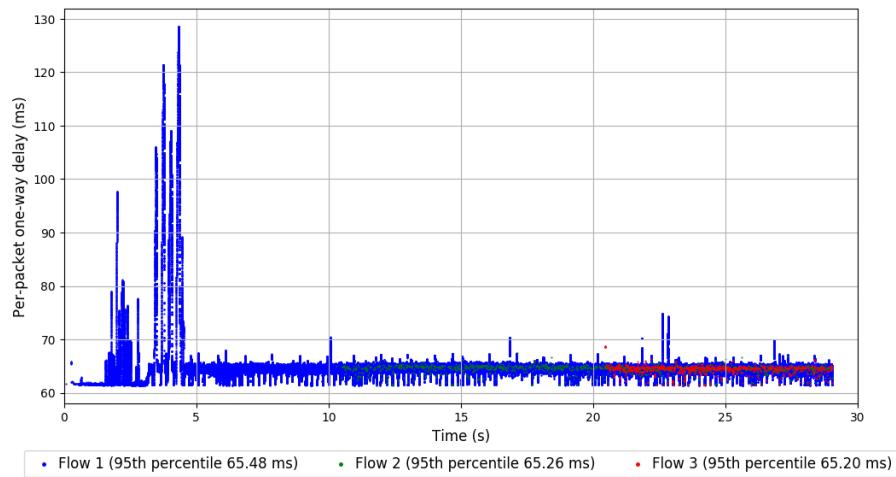
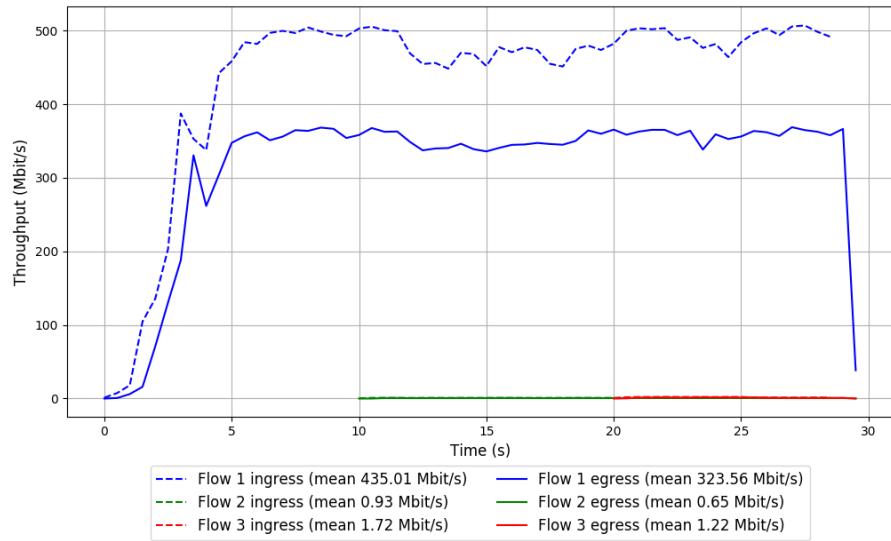


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 13:12:57
End at: 2019-01-21 13:13:27
Local clock offset: -0.386 ms
Remote clock offset: -38.274 ms

# Below is generated by plot.py at 2019-01-21 14:38:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.34 Mbit/s
95th percentile per-packet one-way delay: 65.477 ms
Loss rate: 25.63%
-- Flow 1:
Average throughput: 323.56 Mbit/s
95th percentile per-packet one-way delay: 65.478 ms
Loss rate: 25.62%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 65.257 ms
Loss rate: 30.50%
-- Flow 3:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 65.205 ms
Loss rate: 28.84%
```

Run 4: Report of Indigo-MusesC5 — Data Link

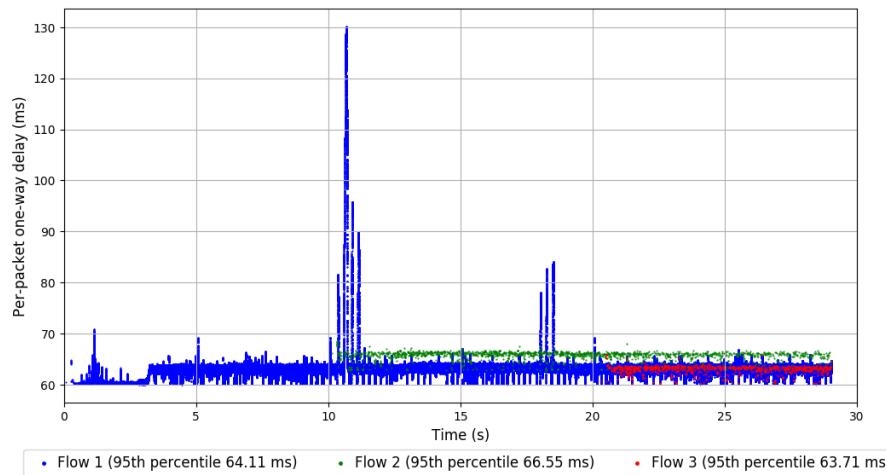
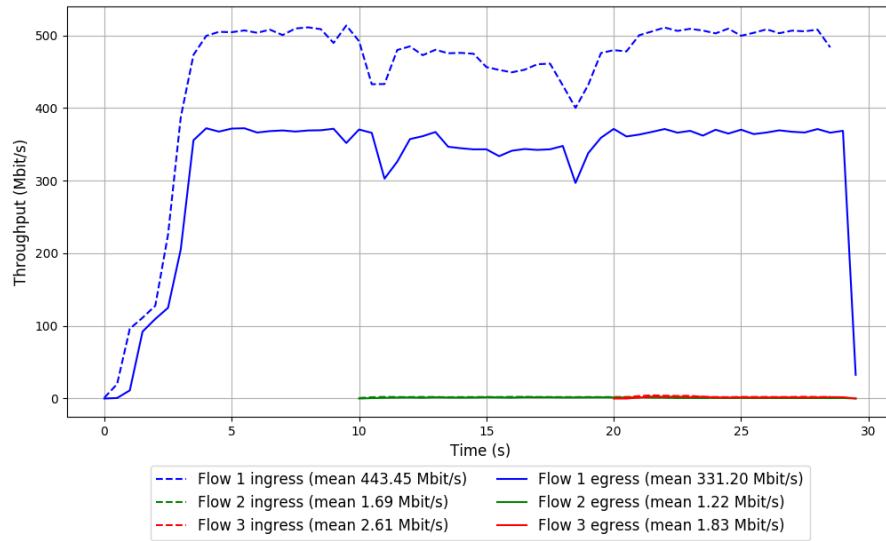


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 13:48:56
End at: 2019-01-21 13:49:26
Local clock offset: -3.029 ms
Remote clock offset: -39.616 ms

# Below is generated by plot.py at 2019-01-21 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.53 Mbit/s
95th percentile per-packet one-way delay: 64.140 ms
Loss rate: 25.32%
-- Flow 1:
Average throughput: 331.20 Mbit/s
95th percentile per-packet one-way delay: 64.108 ms
Loss rate: 25.31%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 66.546 ms
Loss rate: 27.76%
-- Flow 3:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 63.714 ms
Loss rate: 30.09%
```

Run 5: Report of Indigo-MusesC5 — Data Link

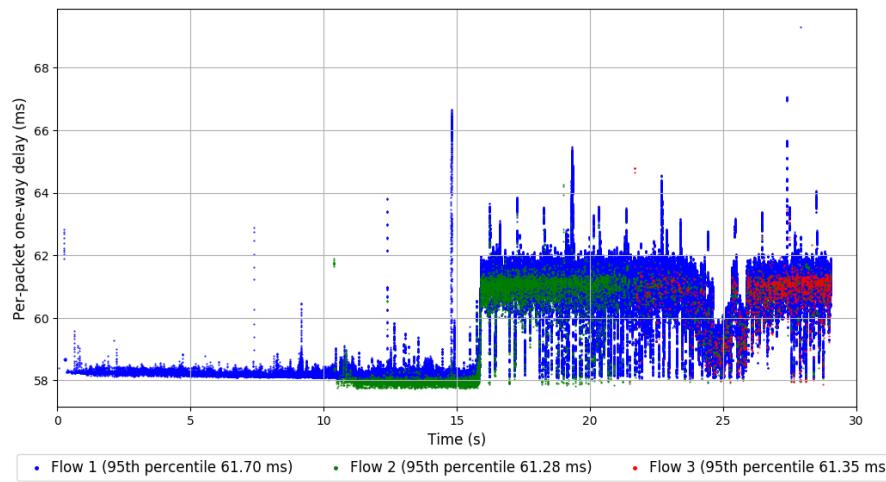
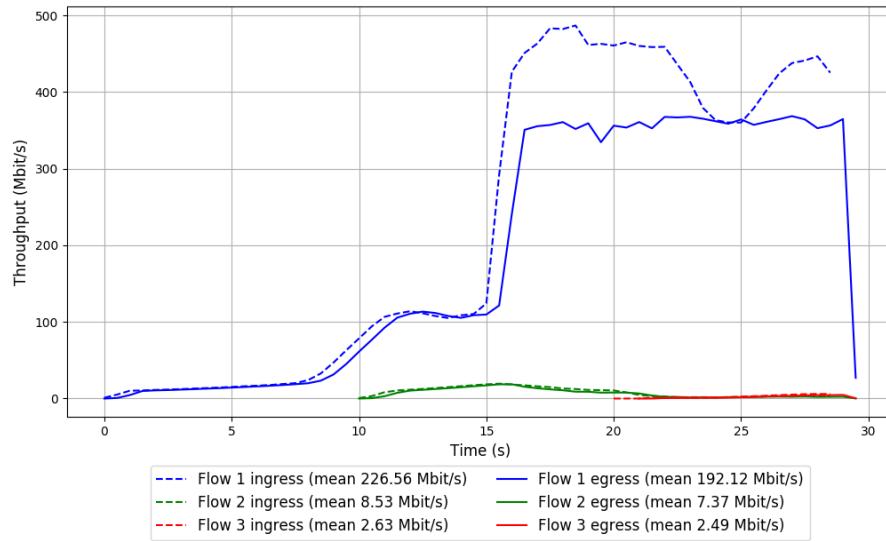


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 10:58:07
End at: 2019-01-21 10:58:37
Local clock offset: -0.306 ms
Remote clock offset: -41.858 ms

# Below is generated by plot.py at 2019-01-21 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.56 Mbit/s
95th percentile per-packet one-way delay: 61.691 ms
Loss rate: 15.16%
-- Flow 1:
Average throughput: 192.12 Mbit/s
95th percentile per-packet one-way delay: 61.697 ms
Loss rate: 15.20%
-- Flow 2:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 61.279 ms
Loss rate: 13.55%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 61.348 ms
Loss rate: 16.21%
```

Run 1: Report of Indigo-MusesD — Data Link

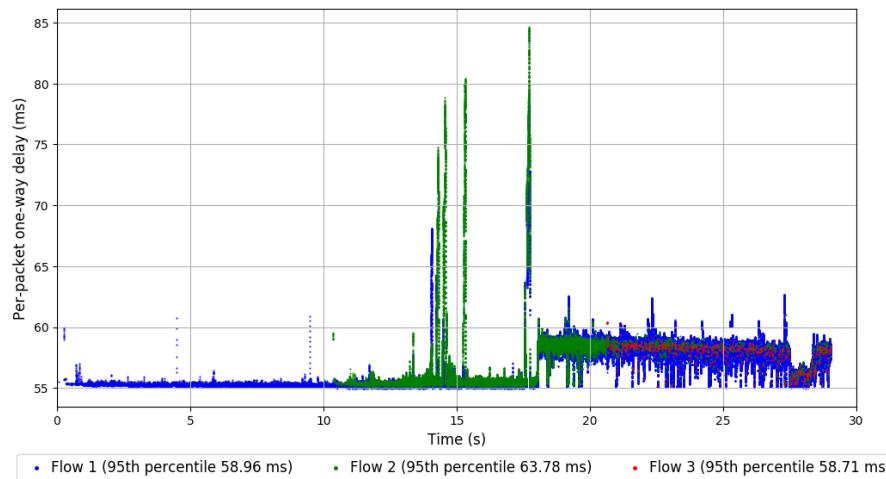
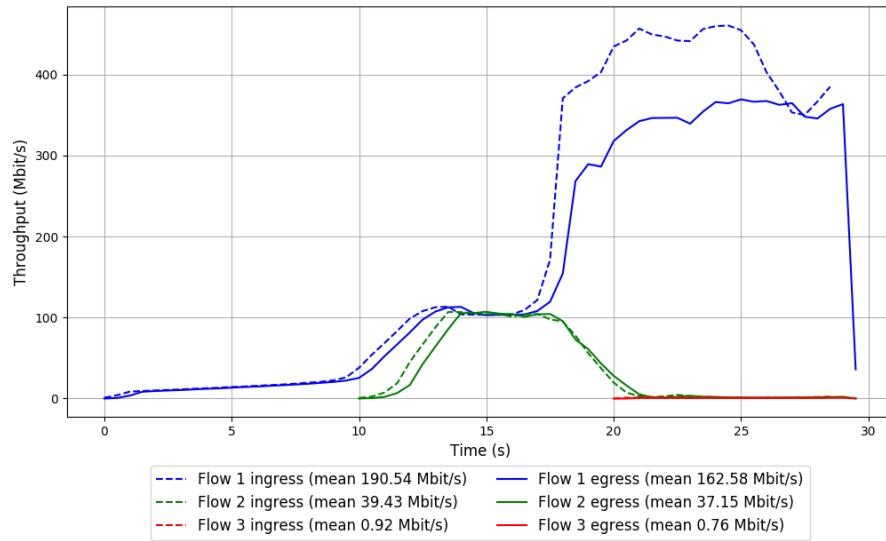


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 11:28:28
End at: 2019-01-21 11:28:58
Local clock offset: -2.353 ms
Remote clock offset: -44.52 ms

# Below is generated by plot.py at 2019-01-21 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.02 Mbit/s
95th percentile per-packet one-way delay: 58.987 ms
Loss rate: 13.61%
-- Flow 1:
Average throughput: 162.58 Mbit/s
95th percentile per-packet one-way delay: 58.958 ms
Loss rate: 14.66%
-- Flow 2:
Average throughput: 37.15 Mbit/s
95th percentile per-packet one-way delay: 63.784 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 58.712 ms
Loss rate: 16.86%
```

Run 2: Report of Indigo-MusesD — Data Link

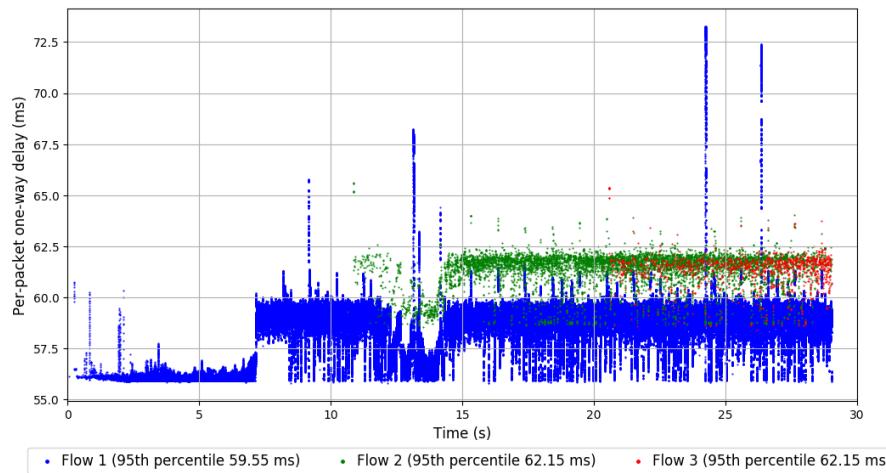
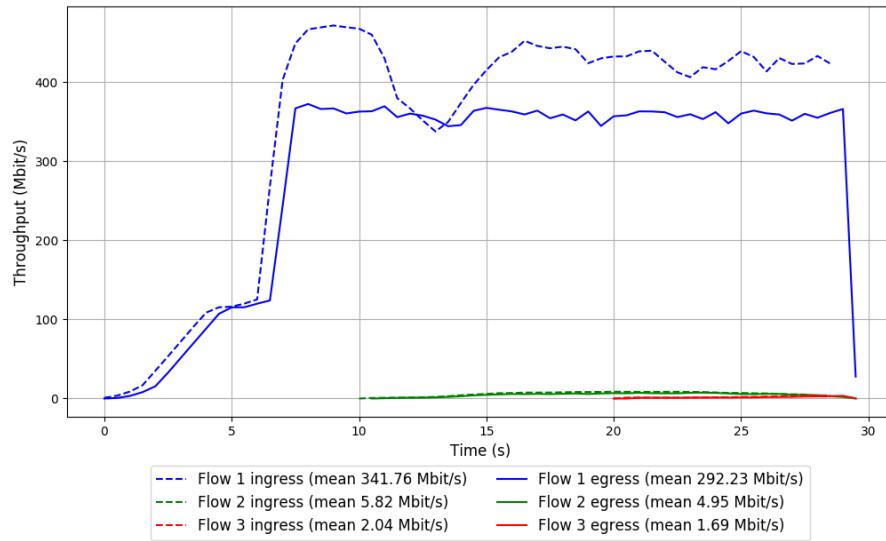


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 12:19:58
End at: 2019-01-21 12:20:28
Local clock offset: -2.334 ms
Remote clock offset: -44.895 ms

# Below is generated by plot.py at 2019-01-21 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 295.87 Mbit/s
95th percentile per-packet one-way delay: 59.621 ms
Loss rate: 14.53%
-- Flow 1:
Average throughput: 292.23 Mbit/s
95th percentile per-packet one-way delay: 59.553 ms
Loss rate: 14.49%
-- Flow 2:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 62.147 ms
Loss rate: 17.27%
-- Flow 3:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 62.148 ms
Loss rate: 16.89%
```

Run 3: Report of Indigo-MusesD — Data Link

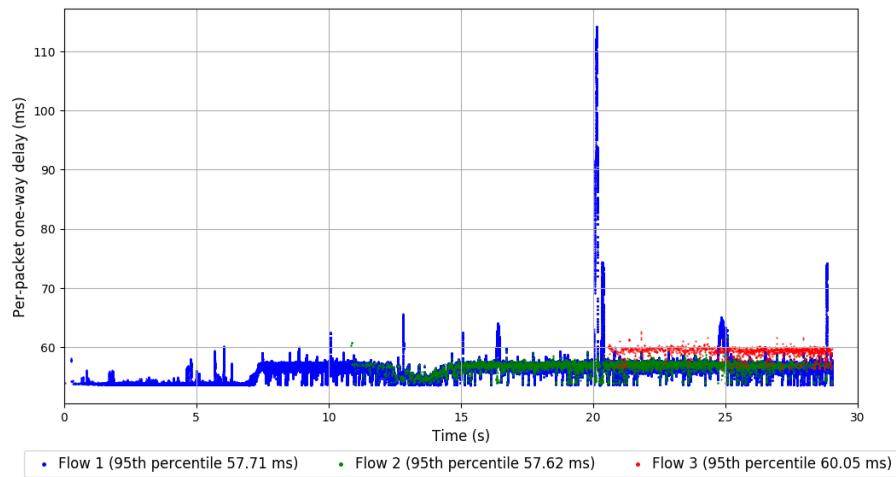
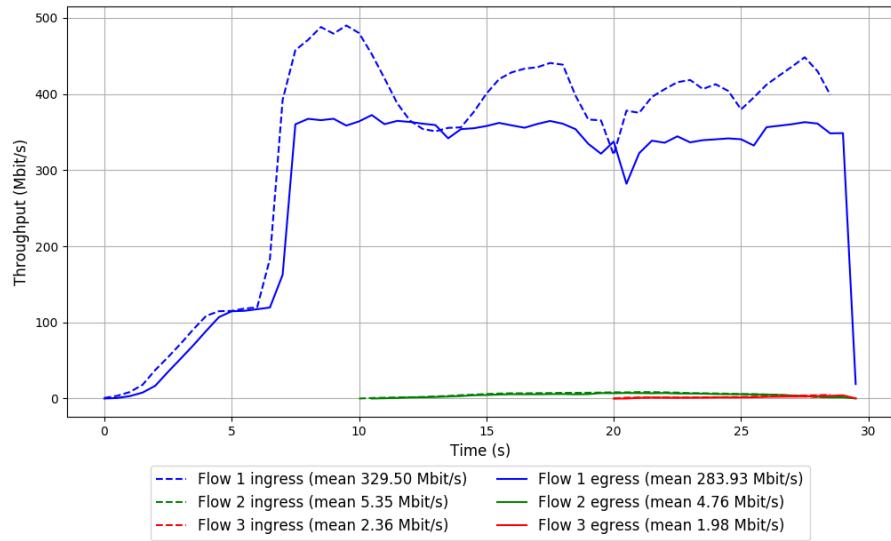


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 13:01:36
End at: 2019-01-21 13:02:06
Local clock offset: 0.36 ms
Remote clock offset: -45.135 ms

# Below is generated by plot.py at 2019-01-21 14:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.54 Mbit/s
95th percentile per-packet one-way delay: 57.750 ms
Loss rate: 13.83%
-- Flow 1:
Average throughput: 283.93 Mbit/s
95th percentile per-packet one-way delay: 57.708 ms
Loss rate: 13.83%
-- Flow 2:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 57.625 ms
Loss rate: 13.48%
-- Flow 3:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 60.052 ms
Loss rate: 16.09%
```

Run 4: Report of Indigo-MusesD — Data Link

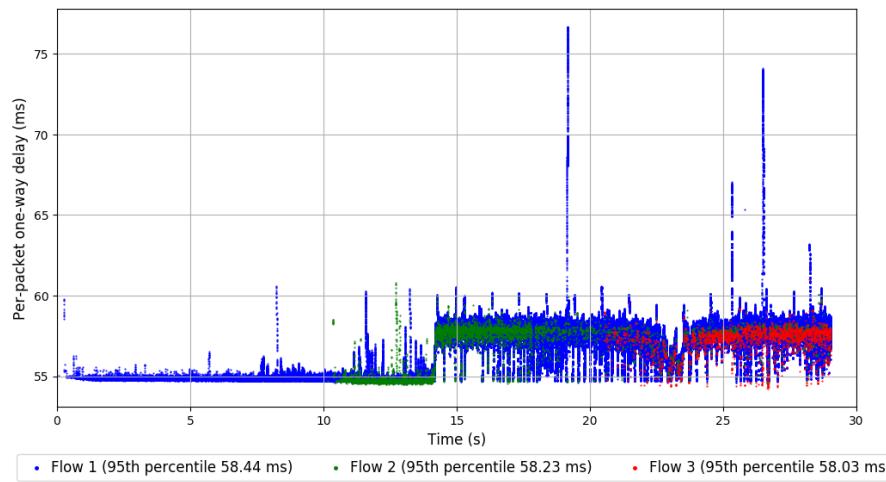
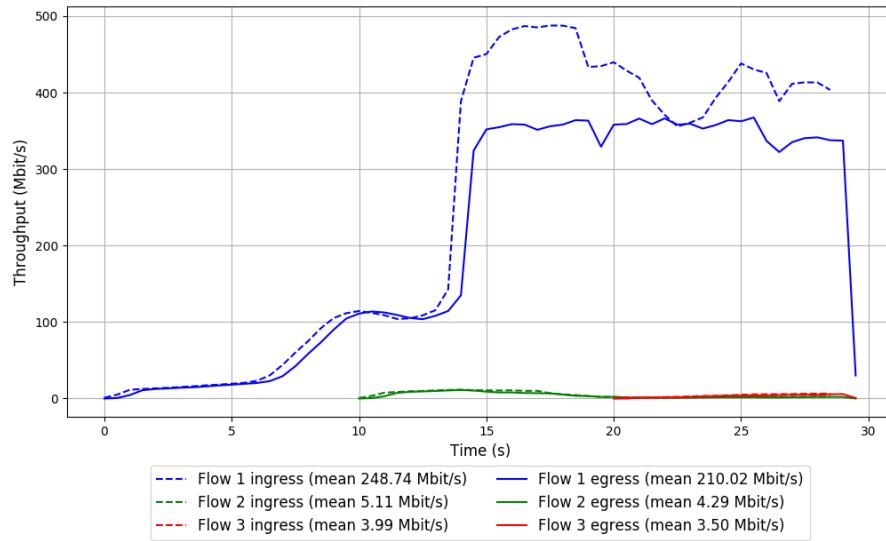


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 13:43:21
End at: 2019-01-21 13:43:51
Local clock offset: -3.074 ms
Remote clock offset: -44.867 ms

# Below is generated by plot.py at 2019-01-21 14:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.86 Mbit/s
95th percentile per-packet one-way delay: 58.436 ms
Loss rate: 15.55%
-- Flow 1:
Average throughput: 210.02 Mbit/s
95th percentile per-packet one-way delay: 58.438 ms
Loss rate: 15.56%
-- Flow 2:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 58.231 ms
Loss rate: 15.95%
-- Flow 3:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 58.032 ms
Loss rate: 12.16%
```

Run 5: Report of Indigo-MusesD — Data Link

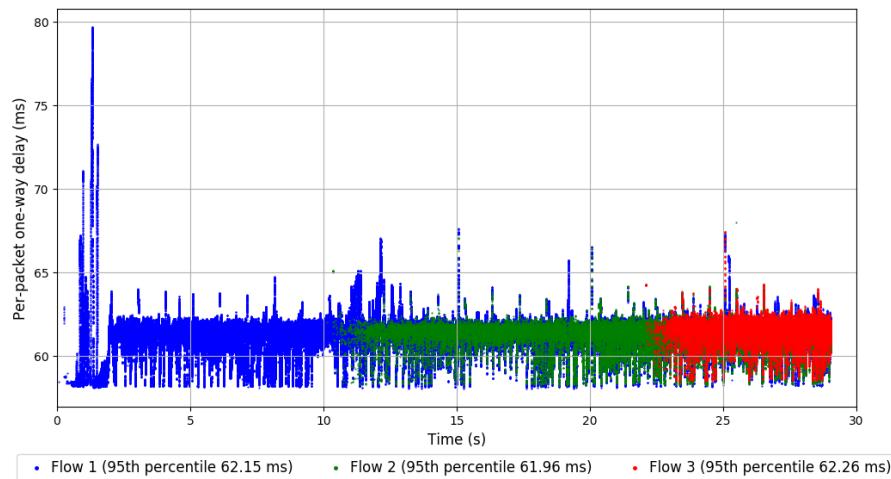
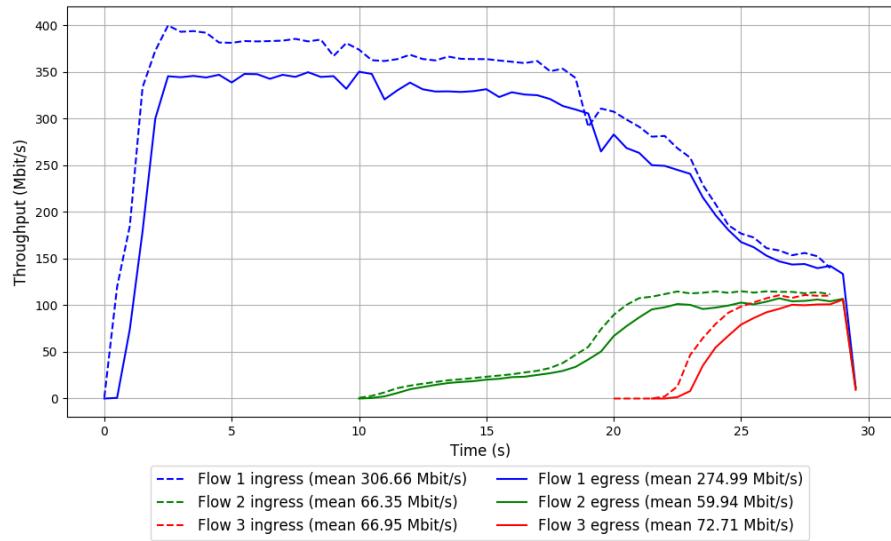


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 11:12:17
End at: 2019-01-21 11:12:47
Local clock offset: 0.735 ms
Remote clock offset: -40.137 ms

# Below is generated by plot.py at 2019-01-21 14:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.00 Mbit/s
95th percentile per-packet one-way delay: 62.137 ms
Loss rate: 10.24%
-- Flow 1:
Average throughput: 274.99 Mbit/s
95th percentile per-packet one-way delay: 62.154 ms
Loss rate: 10.32%
-- Flow 2:
Average throughput: 59.94 Mbit/s
95th percentile per-packet one-way delay: 61.964 ms
Loss rate: 9.66%
-- Flow 3:
Average throughput: 72.71 Mbit/s
95th percentile per-packet one-way delay: 62.257 ms
Loss rate: 10.25%
```

Run 1: Report of Indigo-MusesT — Data Link

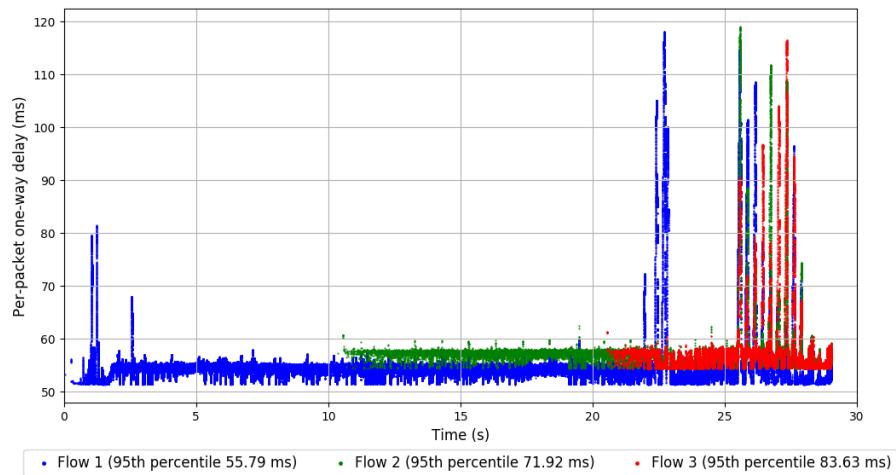
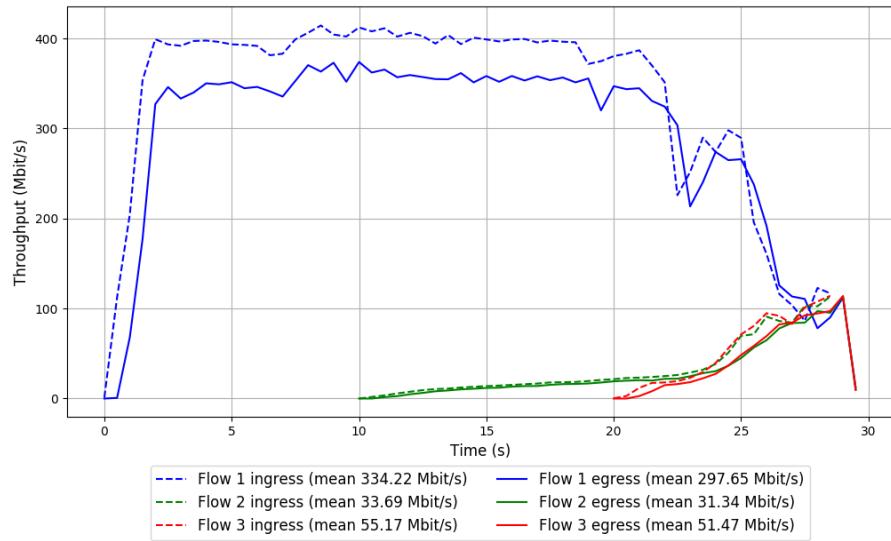


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 11:48:09
End at: 2019-01-21 11:48:39
Local clock offset: 0.288 ms
Remote clock offset: -45.164 ms

# Below is generated by plot.py at 2019-01-21 14:40:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.23 Mbit/s
95th percentile per-packet one-way delay: 57.757 ms
Loss rate: 10.52%
-- Flow 1:
Average throughput: 297.65 Mbit/s
95th percentile per-packet one-way delay: 55.786 ms
Loss rate: 10.94%
-- Flow 2:
Average throughput: 31.34 Mbit/s
95th percentile per-packet one-way delay: 71.923 ms
Loss rate: 6.96%
-- Flow 3:
Average throughput: 51.47 Mbit/s
95th percentile per-packet one-way delay: 83.628 ms
Loss rate: 6.72%
```

Run 2: Report of Indigo-MusesT — Data Link

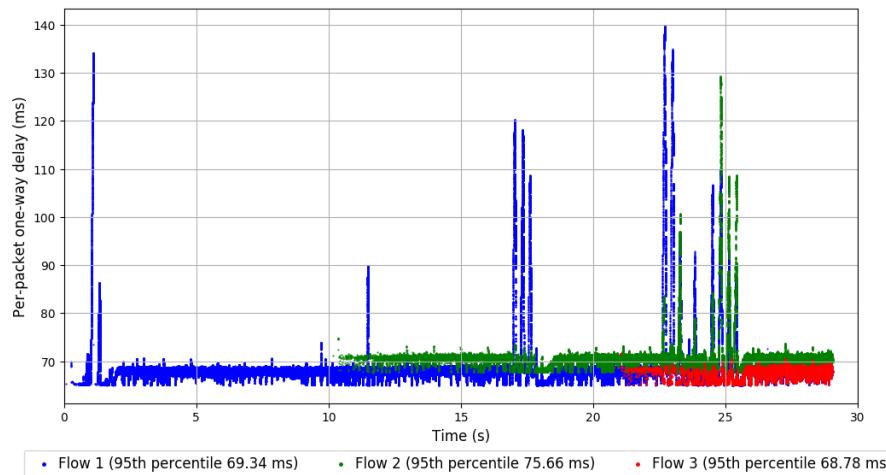
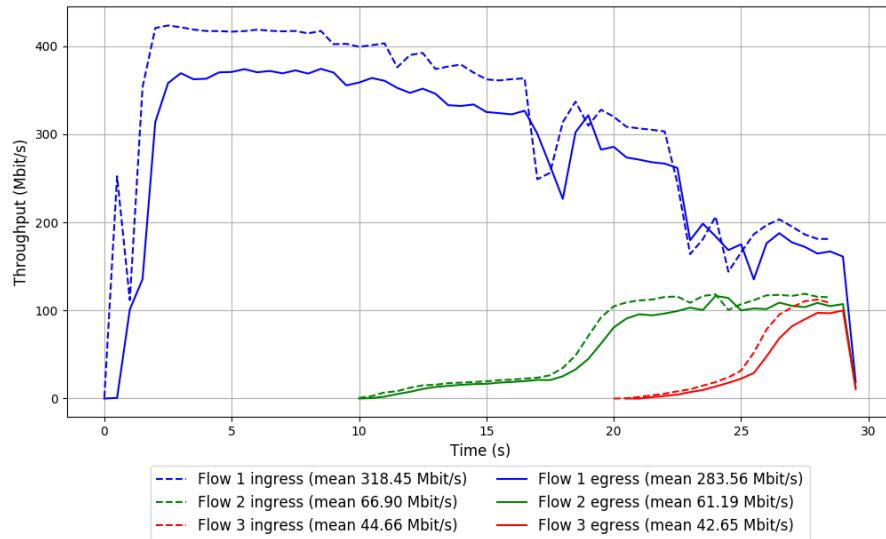


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 12:34:12
End at: 2019-01-21 12:34:42
Local clock offset: -0.655 ms
Remote clock offset: -34.302 ms

# Below is generated by plot.py at 2019-01-21 14:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.54 Mbit/s
95th percentile per-packet one-way delay: 71.203 ms
Loss rate: 10.63%
-- Flow 1:
Average throughput: 283.56 Mbit/s
95th percentile per-packet one-way delay: 69.339 ms
Loss rate: 10.95%
-- Flow 2:
Average throughput: 61.19 Mbit/s
95th percentile per-packet one-way delay: 75.657 ms
Loss rate: 8.54%
-- Flow 3:
Average throughput: 42.65 Mbit/s
95th percentile per-packet one-way delay: 68.778 ms
Loss rate: 9.98%
```

Run 3: Report of Indigo-MusesT — Data Link

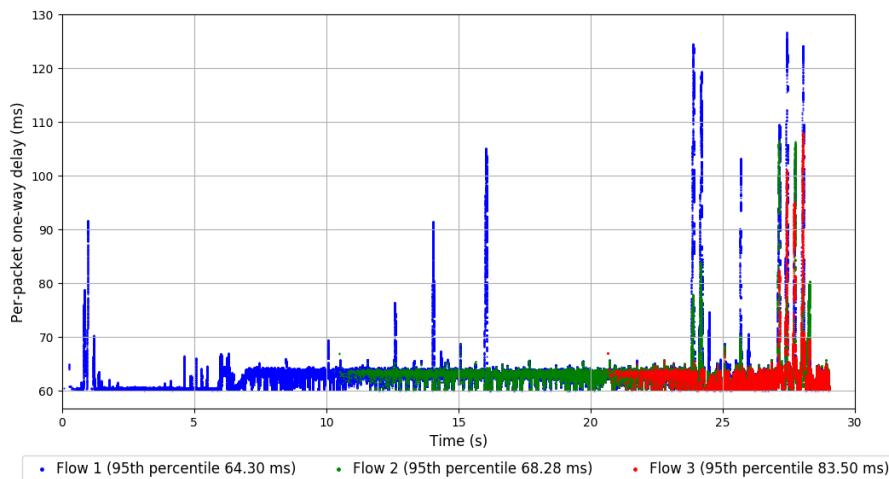
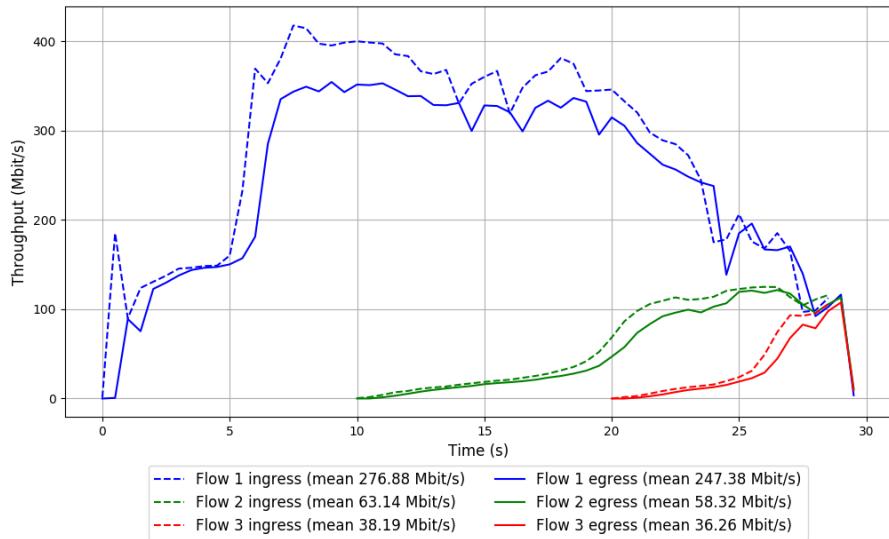


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 13:27:09
End at: 2019-01-21 13:27:39
Local clock offset: -0.899 ms
Remote clock offset: -38.086 ms

# Below is generated by plot.py at 2019-01-21 14:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 295.87 Mbit/s
95th percentile per-packet one-way delay: 64.833 ms
Loss rate: 10.09%
-- Flow 1:
Average throughput: 247.38 Mbit/s
95th percentile per-packet one-way delay: 64.298 ms
Loss rate: 10.65%
-- Flow 2:
Average throughput: 58.32 Mbit/s
95th percentile per-packet one-way delay: 68.284 ms
Loss rate: 7.66%
-- Flow 3:
Average throughput: 36.26 Mbit/s
95th percentile per-packet one-way delay: 83.501 ms
Loss rate: 5.11%
```

Run 4: Report of Indigo-MusesT — Data Link

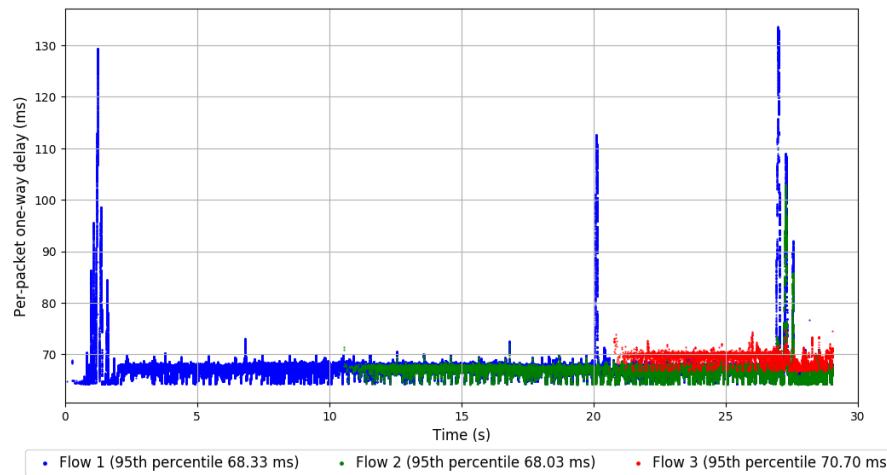
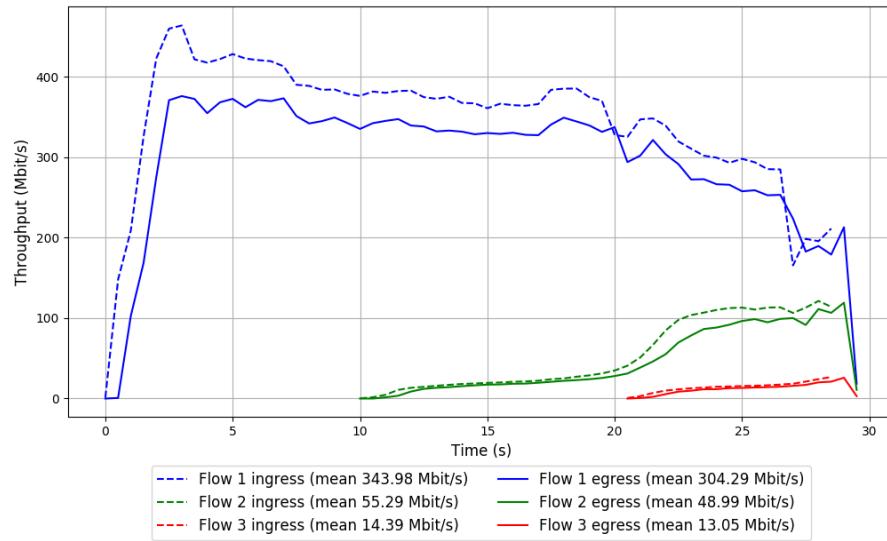


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 14:03:12
End at: 2019-01-21 14:03:42
Local clock offset: -1.504 ms
Remote clock offset: -34.636 ms

# Below is generated by plot.py at 2019-01-21 14:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.65 Mbit/s
95th percentile per-packet one-way delay: 68.465 ms
Loss rate: 11.49%
-- Flow 1:
Average throughput: 304.29 Mbit/s
95th percentile per-packet one-way delay: 68.326 ms
Loss rate: 11.53%
-- Flow 2:
Average throughput: 48.99 Mbit/s
95th percentile per-packet one-way delay: 68.034 ms
Loss rate: 11.38%
-- Flow 3:
Average throughput: 13.05 Mbit/s
95th percentile per-packet one-way delay: 70.702 ms
Loss rate: 9.23%
```

Run 5: Report of Indigo-MusesT — Data Link

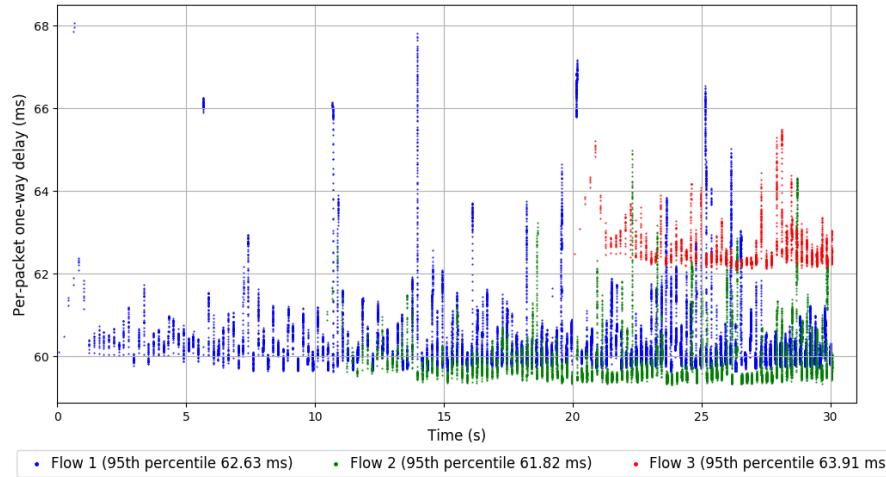
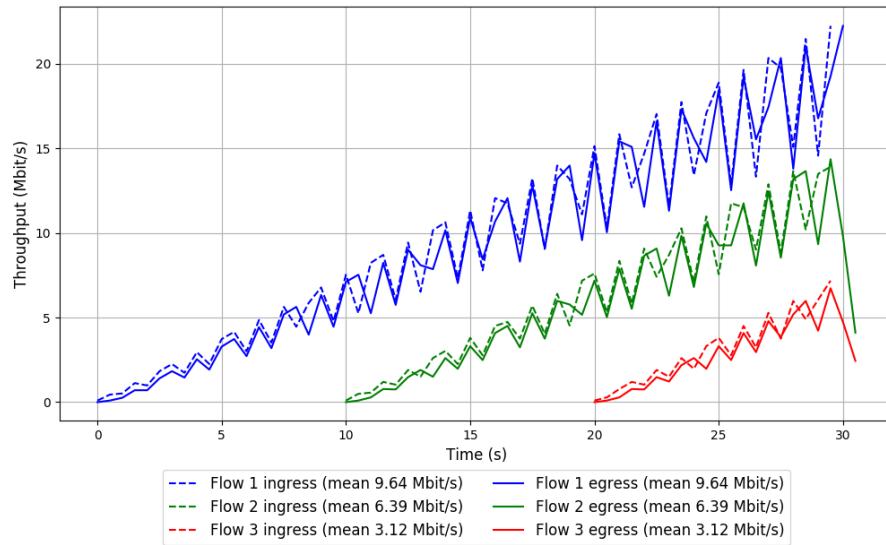


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-21 11:05:12
End at: 2019-01-21 11:05:42
Local clock offset: 0.675 ms
Remote clock offset: -39.054 ms

# Below is generated by plot.py at 2019-01-21 14:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.92 Mbit/s
95th percentile per-packet one-way delay: 62.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 62.627 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 61.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 63.905 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

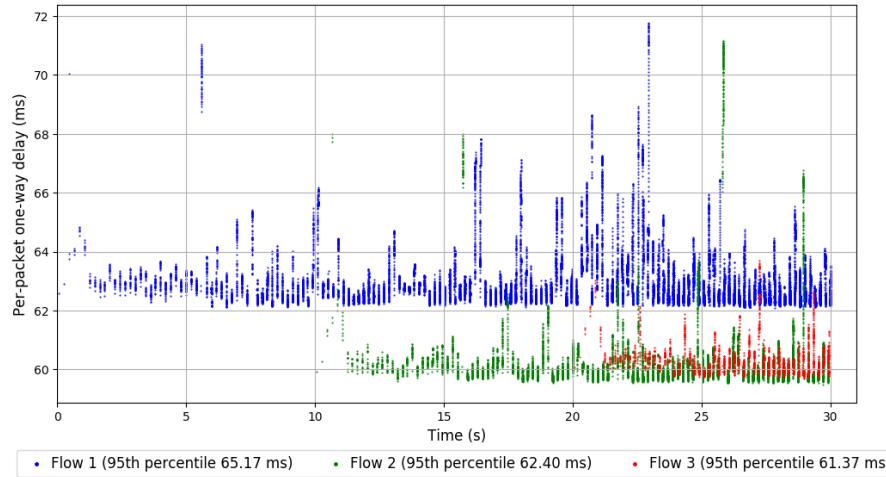
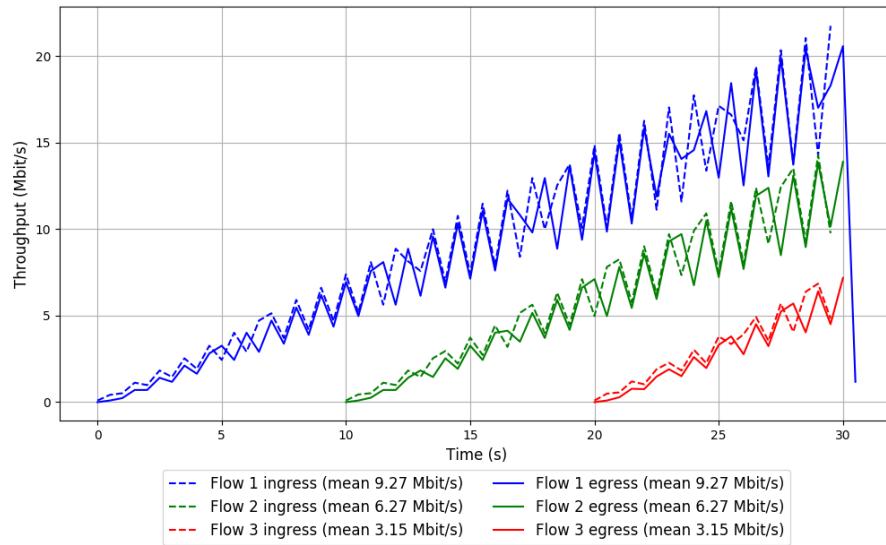


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-21 11:35:36
End at: 2019-01-21 11:36:06
Local clock offset: -0.629 ms
Remote clock offset: -37.833 ms

# Below is generated by plot.py at 2019-01-21 14:41:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.45 Mbit/s
95th percentile per-packet one-way delay: 64.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 65.170 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 62.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 61.374 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

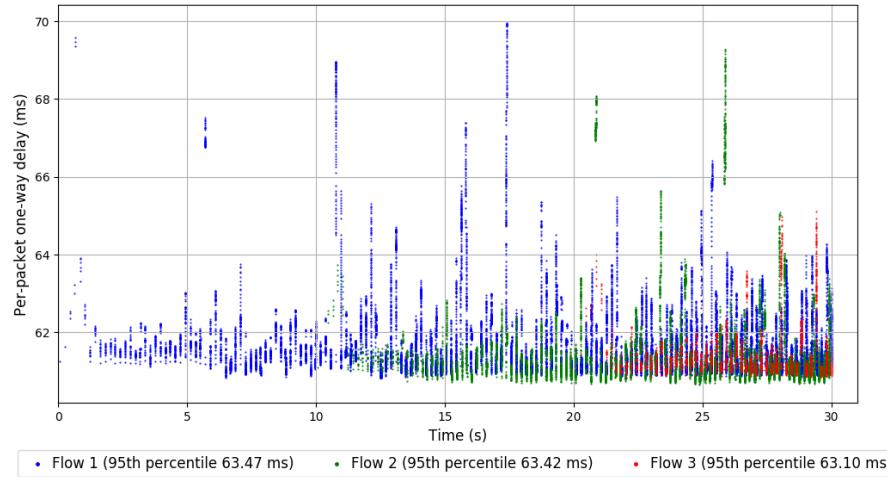
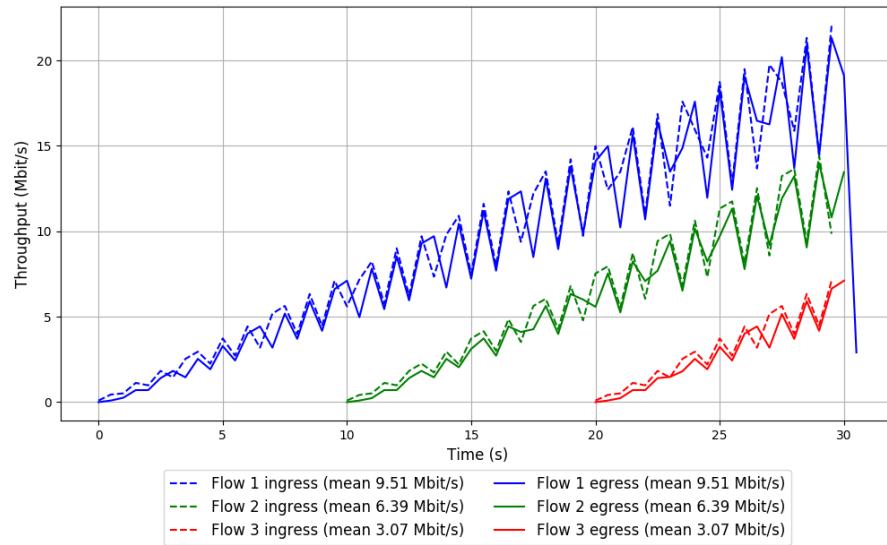


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-21 12:27:08
End at: 2019-01-21 12:27:38
Local clock offset: 0.125 ms
Remote clock offset: -37.579 ms

# Below is generated by plot.py at 2019-01-21 14:41:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.76 Mbit/s
95th percentile per-packet one-way delay: 63.430 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.51 Mbit/s
95th percentile per-packet one-way delay: 63.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 63.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 63.105 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

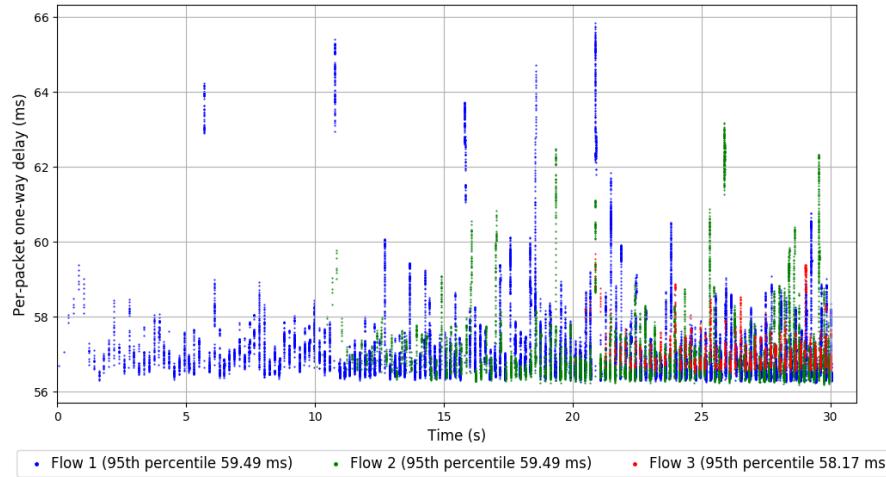
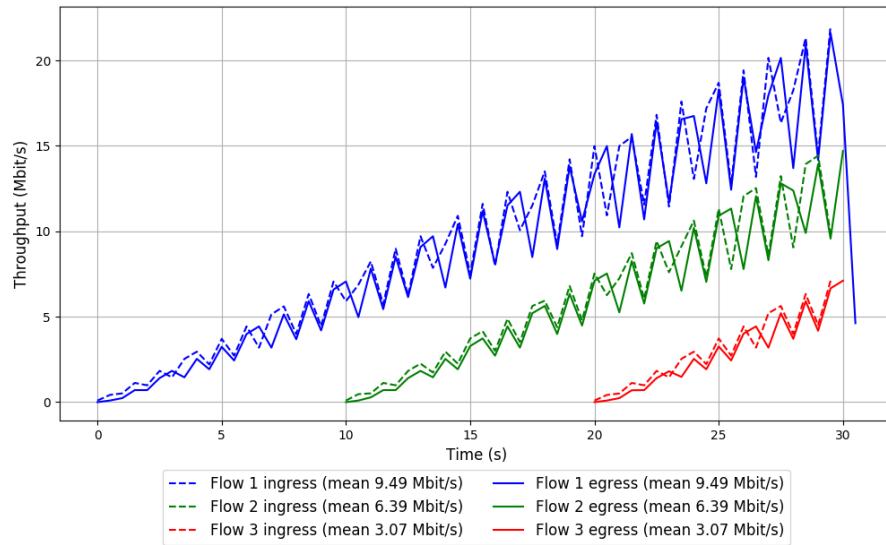


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-21 13:19:58
End at: 2019-01-21 13:20:28
Local clock offset: 0.421 ms
Remote clock offset: -41.556 ms

# Below is generated by plot.py at 2019-01-21 14:41:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.74 Mbit/s
95th percentile per-packet one-way delay: 59.365 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 59.491 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 59.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 58.175 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

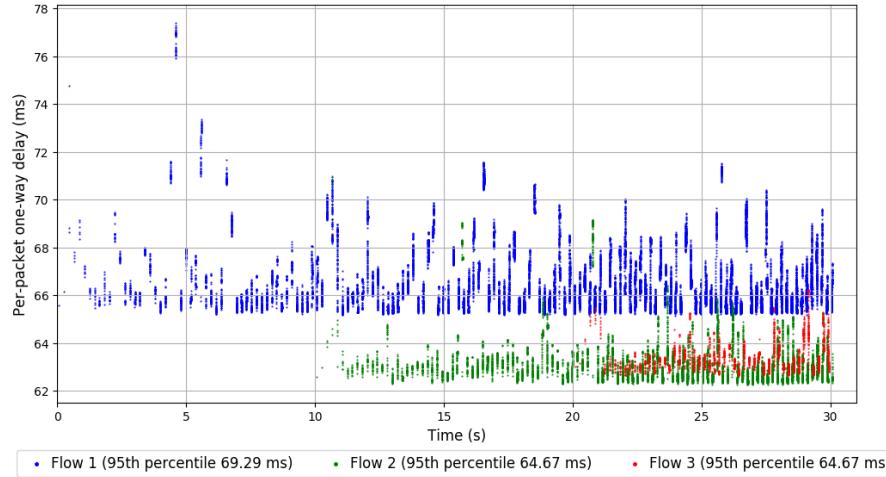
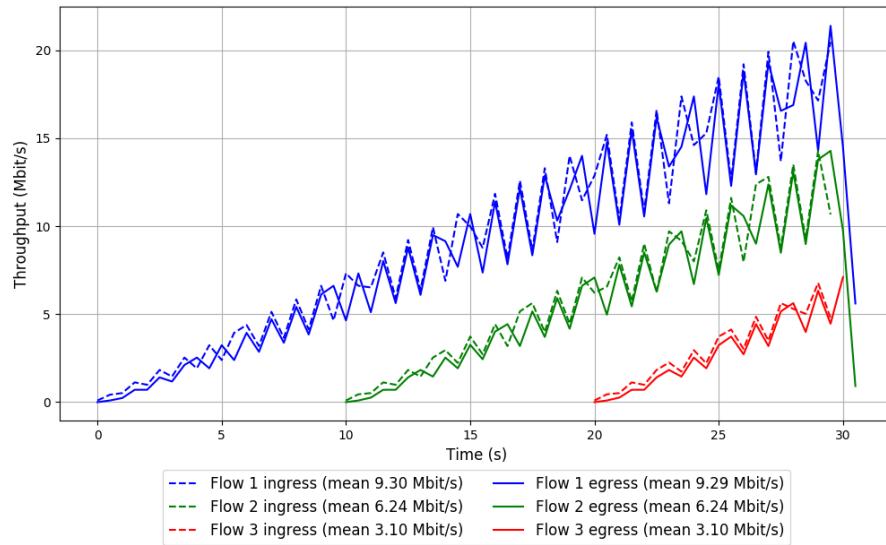


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-21 13:50:31
End at: 2019-01-21 13:51:01
Local clock offset: -4.679 ms
Remote clock offset: -38.931 ms

# Below is generated by plot.py at 2019-01-21 14:41:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.47 Mbit/s
95th percentile per-packet one-way delay: 68.653 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 69.290 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 64.675 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 64.666 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

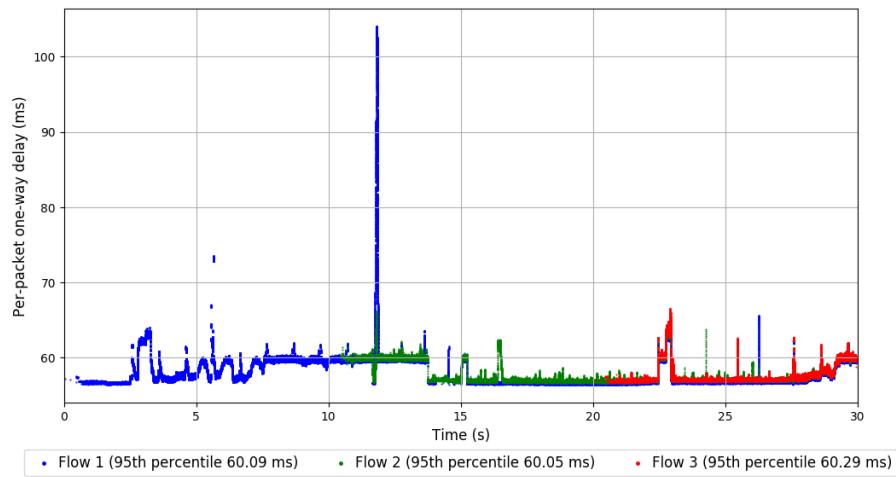
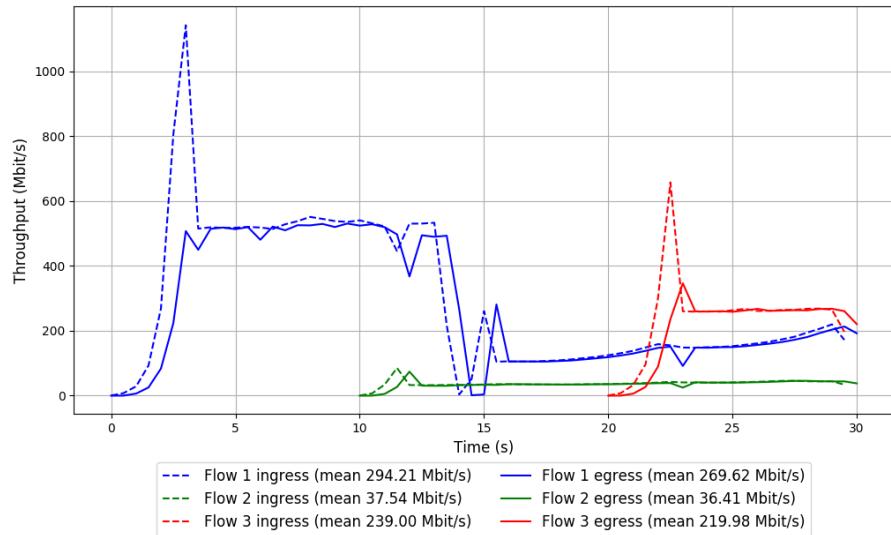


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-21 11:16:42
End at: 2019-01-21 11:17:12
Local clock offset: -2.87 ms
Remote clock offset: -44.981 ms

# Below is generated by plot.py at 2019-01-21 14:43:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.41 Mbit/s
95th percentile per-packet one-way delay: 60.150 ms
Loss rate: 7.94%
-- Flow 1:
Average throughput: 269.62 Mbit/s
95th percentile per-packet one-way delay: 60.093 ms
Loss rate: 8.35%
-- Flow 2:
Average throughput: 36.41 Mbit/s
95th percentile per-packet one-way delay: 60.049 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 219.98 Mbit/s
95th percentile per-packet one-way delay: 60.290 ms
Loss rate: 7.94%
```

Run 1: Report of PCC-Allegro — Data Link

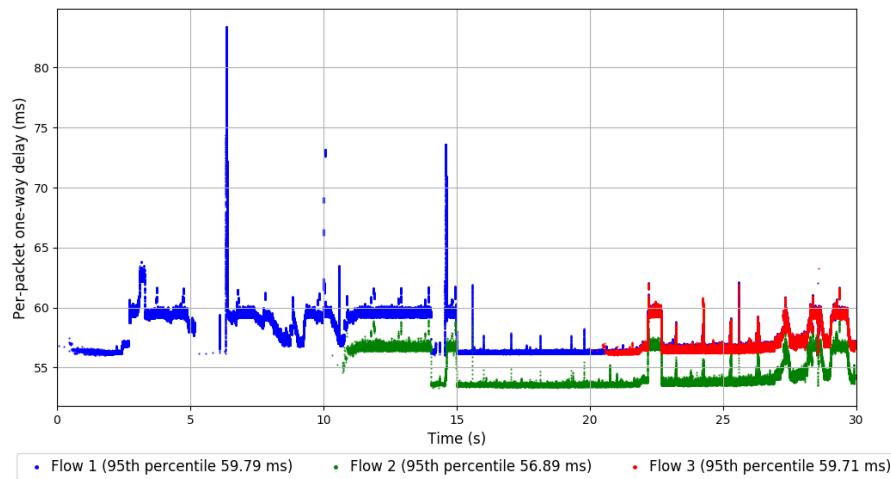
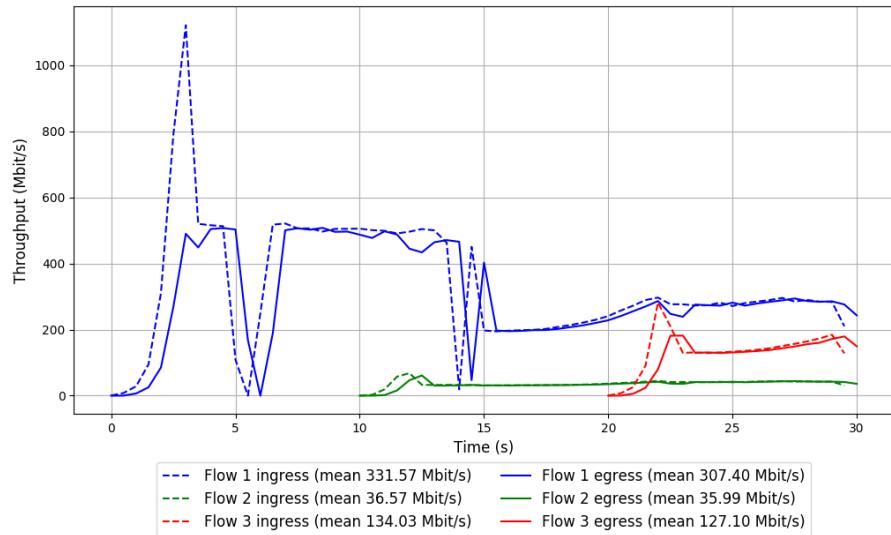


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-21 11:52:36
End at: 2019-01-21 11:53:06
Local clock offset: -0.532 ms
Remote clock offset: -44.646 ms

# Below is generated by plot.py at 2019-01-21 14:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.97 Mbit/s
95th percentile per-packet one-way delay: 59.758 ms
Loss rate: 6.79%
-- Flow 1:
Average throughput: 307.40 Mbit/s
95th percentile per-packet one-way delay: 59.794 ms
Loss rate: 7.29%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 56.889 ms
Loss rate: 2.84%
-- Flow 3:
Average throughput: 127.10 Mbit/s
95th percentile per-packet one-way delay: 59.708 ms
Loss rate: 5.17%
```

Run 2: Report of PCC-Allegro — Data Link

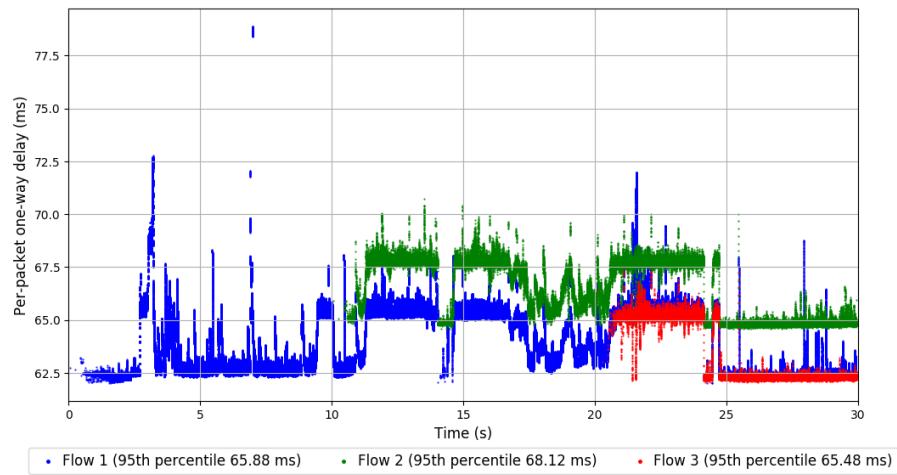
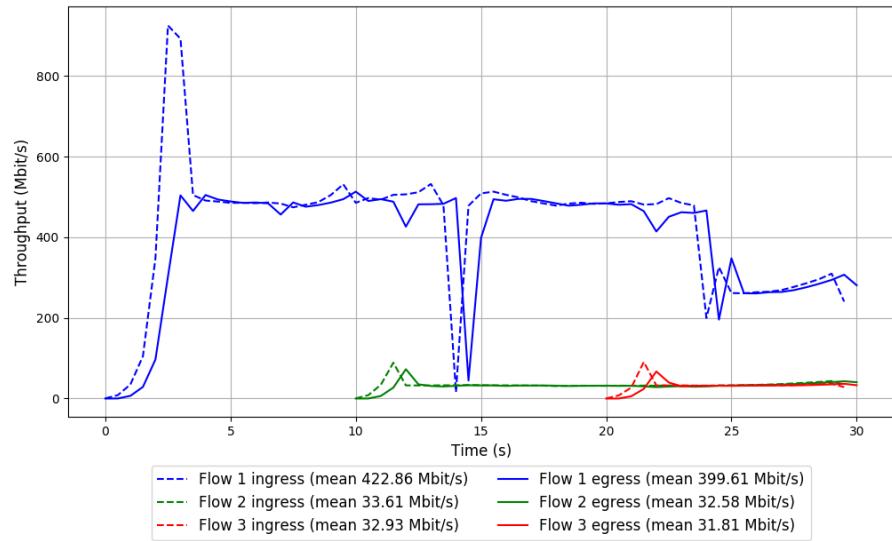


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-21 12:38:37
End at: 2019-01-21 12:39:07
Local clock offset: -2.221 ms
Remote clock offset: -38.737 ms

# Below is generated by plot.py at 2019-01-21 14:44:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.74 Mbit/s
95th percentile per-packet one-way delay: 66.513 ms
Loss rate: 5.33%
-- Flow 1:
Average throughput: 399.61 Mbit/s
95th percentile per-packet one-way delay: 65.880 ms
Loss rate: 5.50%
-- Flow 2:
Average throughput: 32.58 Mbit/s
95th percentile per-packet one-way delay: 68.125 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 65.483 ms
Loss rate: 3.44%
```

Run 3: Report of PCC-Allegro — Data Link

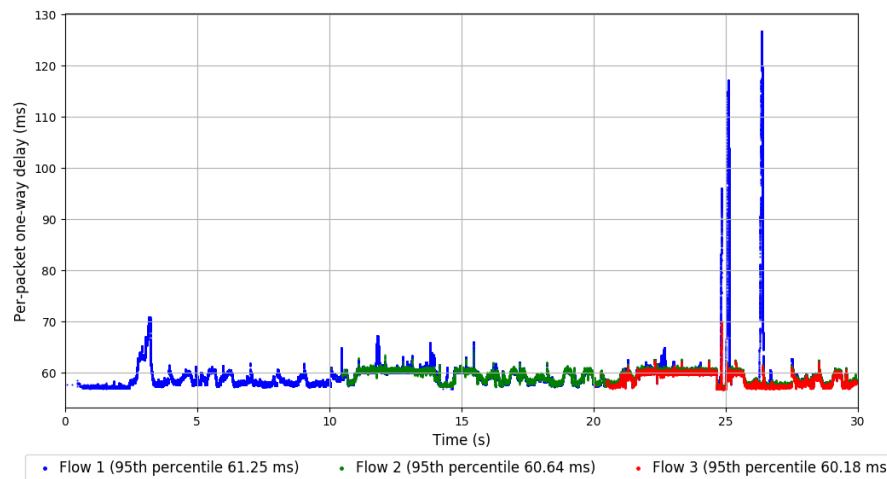
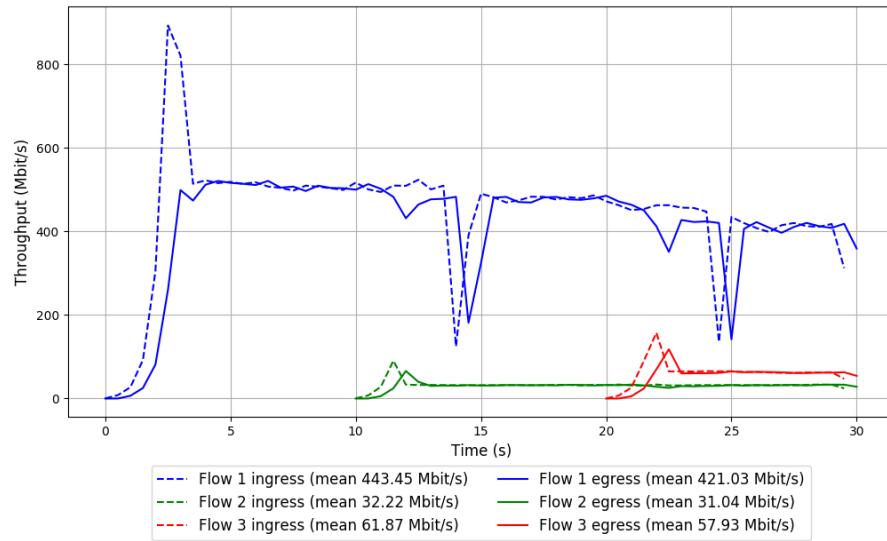


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-21 13:31:33
End at: 2019-01-21 13:32:03
Local clock offset: -4.314 ms
Remote clock offset: -44.403 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.77 Mbit/s
95th percentile per-packet one-way delay: 61.060 ms
Loss rate: 5.05%
-- Flow 1:
Average throughput: 421.03 Mbit/s
95th percentile per-packet one-way delay: 61.247 ms
Loss rate: 5.06%
-- Flow 2:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 60.641 ms
Loss rate: 3.67%
-- Flow 3:
Average throughput: 57.93 Mbit/s
95th percentile per-packet one-way delay: 60.181 ms
Loss rate: 6.36%
```

Run 4: Report of PCC-Allegro — Data Link

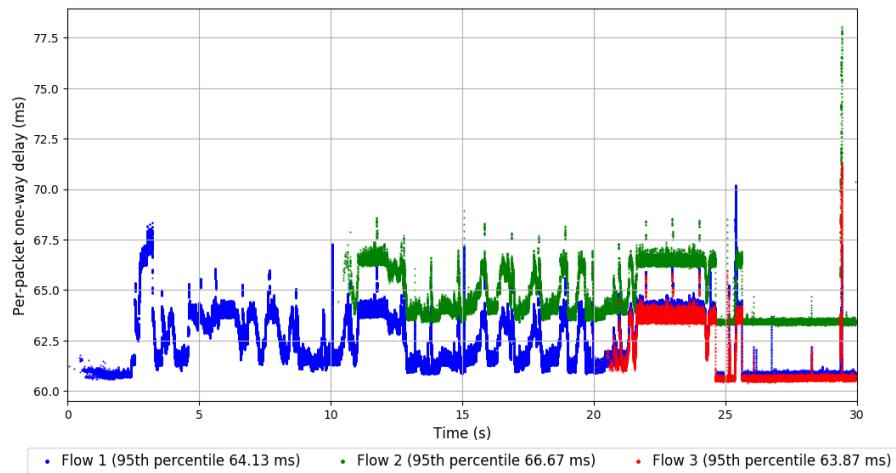
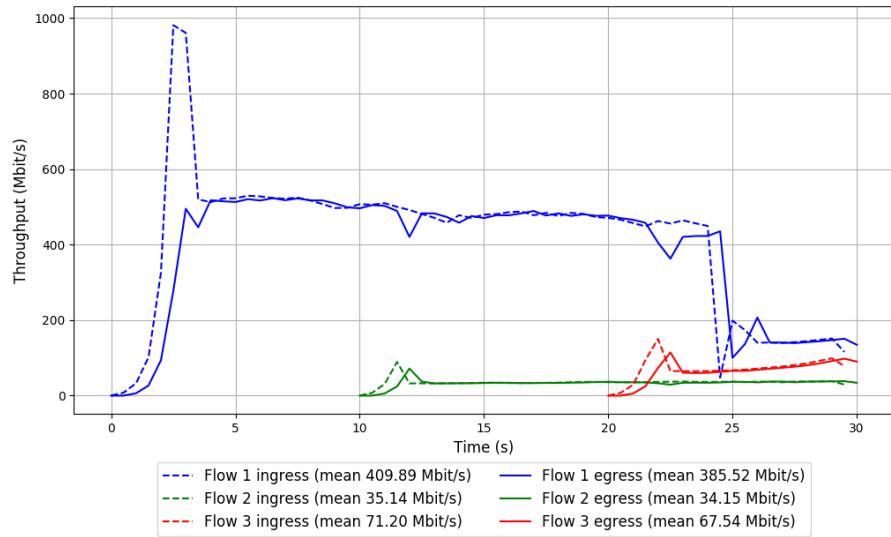


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-21 14:07:38
End at: 2019-01-21 14:08:08
Local clock offset: -1.753 ms
Remote clock offset: -38.244 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.40 Mbit/s
95th percentile per-packet one-way delay: 64.431 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 385.52 Mbit/s
95th percentile per-packet one-way delay: 64.127 ms
Loss rate: 5.95%
-- Flow 2:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 66.670 ms
Loss rate: 2.82%
-- Flow 3:
Average throughput: 67.54 Mbit/s
95th percentile per-packet one-way delay: 63.874 ms
Loss rate: 5.14%
```

Run 5: Report of PCC-Allegro — Data Link

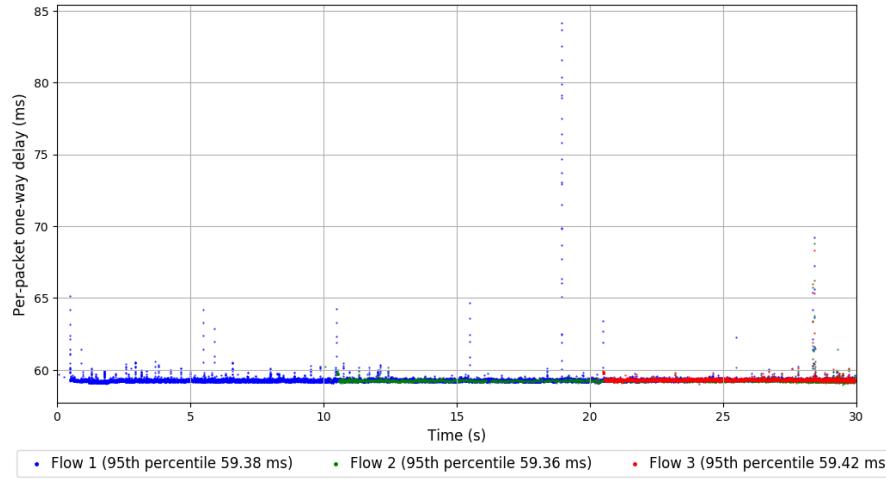
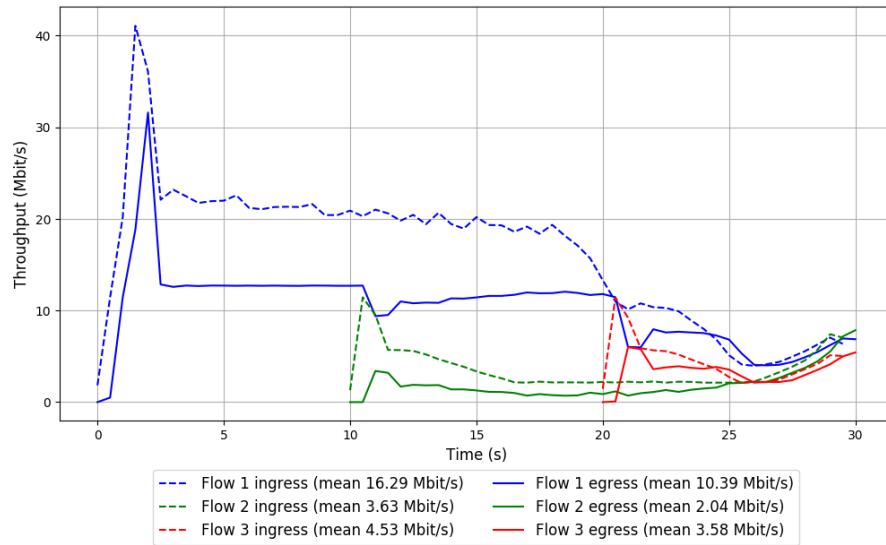


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-21 11:02:19
End at: 2019-01-21 11:02:49
Local clock offset: 1.198 ms
Remote clock offset: -39.065 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 59.378 ms
Loss rate: 35.98%
-- Flow 1:
Average throughput: 10.39 Mbit/s
95th percentile per-packet one-way delay: 59.375 ms
Loss rate: 36.19%
-- Flow 2:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 59.363 ms
Loss rate: 43.91%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 59.417 ms
Loss rate: 20.95%
```

Run 1: Report of PCC-Expr — Data Link

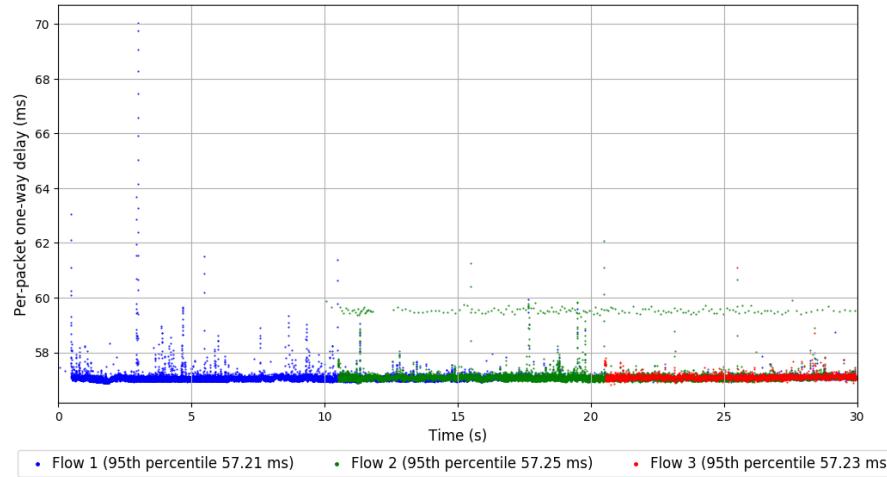
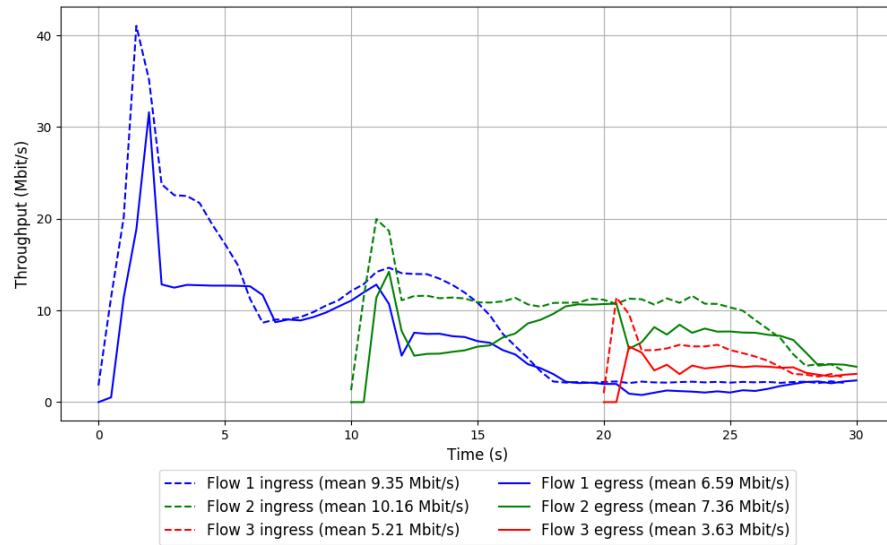


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-21 11:32:43
End at: 2019-01-21 11:33:13
Local clock offset: -1.245 ms
Remote clock offset: -41.379 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 57.230 ms
Loss rate: 28.83%
-- Flow 1:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 57.213 ms
Loss rate: 29.50%
-- Flow 2:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 57.250 ms
Loss rate: 27.55%
-- Flow 3:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 57.227 ms
Loss rate: 30.20%
```

Run 2: Report of PCC-Expr — Data Link

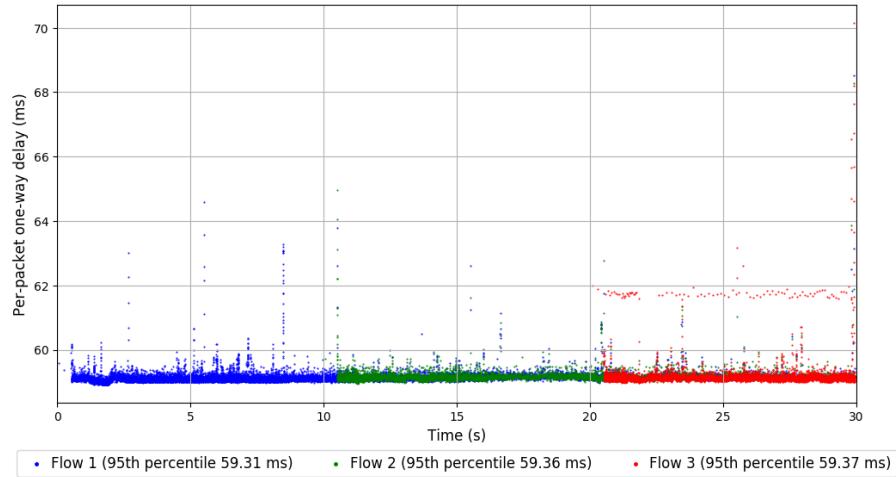
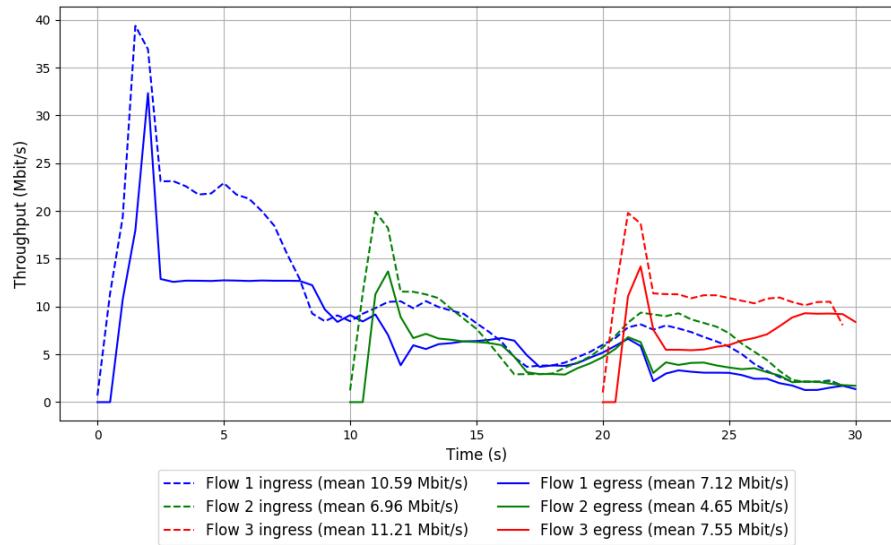


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-21 12:24:14
End at: 2019-01-21 12:24:44
Local clock offset: 0.473 ms
Remote clock offset: -39.22 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 59.333 ms
Loss rate: 32.85%
-- Flow 1:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 59.314 ms
Loss rate: 32.76%
-- Flow 2:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 59.363 ms
Loss rate: 33.19%
-- Flow 3:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 59.367 ms
Loss rate: 32.68%
```

Run 3: Report of PCC-Expr — Data Link

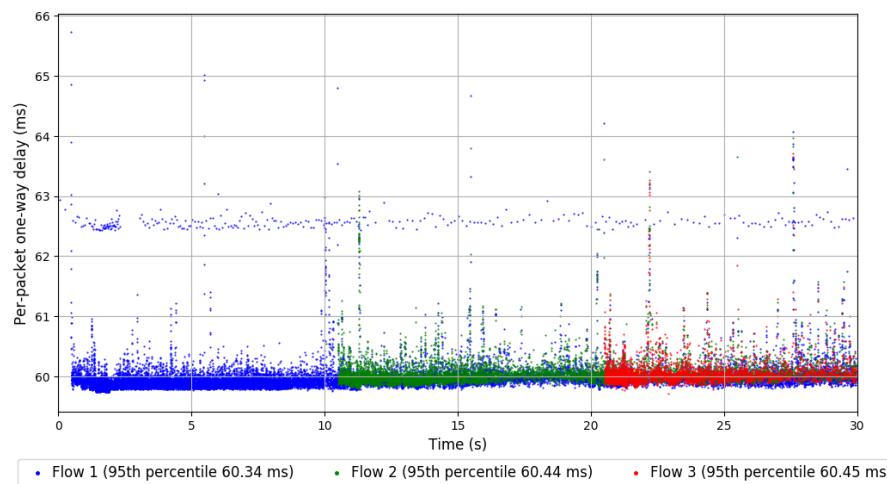
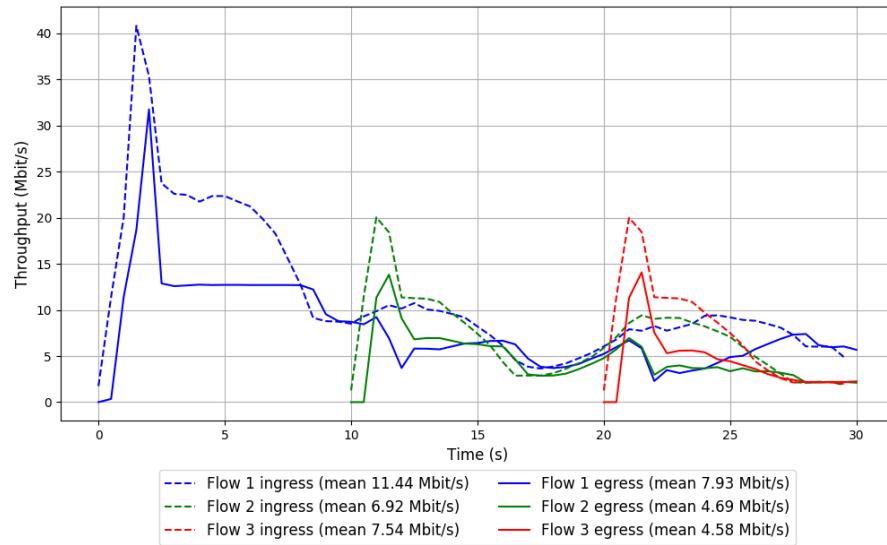


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-21 13:11:38
End at: 2019-01-21 13:12:08
Local clock offset: -0.318 ms
Remote clock offset: -39.865 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 60.392 ms
Loss rate: 32.18%
-- Flow 1:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 60.345 ms
Loss rate: 30.66%
-- Flow 2:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 60.437 ms
Loss rate: 32.16%
-- Flow 3:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 60.451 ms
Loss rate: 39.23%
```

Run 4: Report of PCC-Expr — Data Link

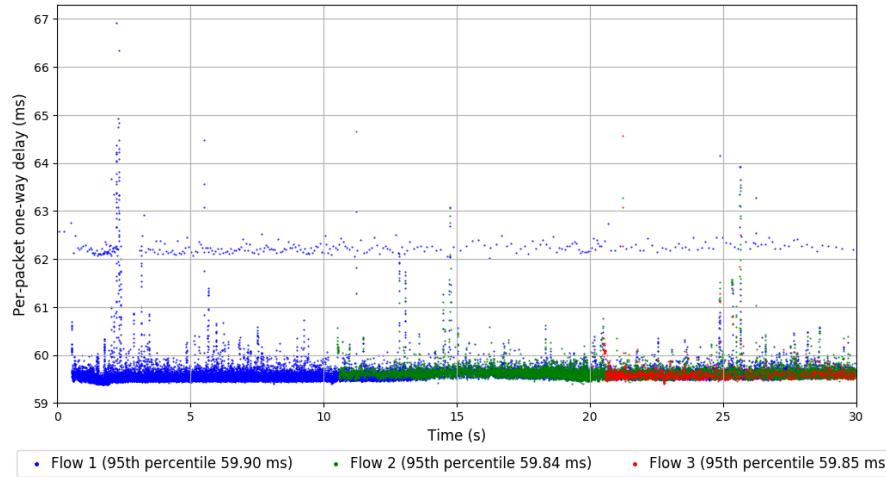
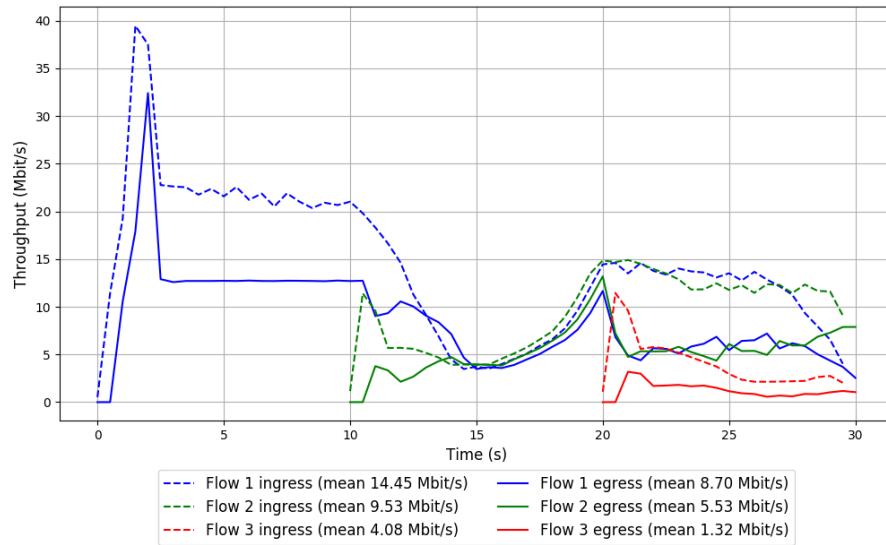


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-21 13:47:37
End at: 2019-01-21 13:48:07
Local clock offset: -1.596 ms
Remote clock offset: -38.825 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 59.879 ms
Loss rate: 42.08%
-- Flow 1:
Average throughput: 8.70 Mbit/s
95th percentile per-packet one-way delay: 59.904 ms
Loss rate: 39.76%
-- Flow 2:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 59.838 ms
Loss rate: 41.96%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 59.846 ms
Loss rate: 67.63%
```

Run 5: Report of PCC-Expr — Data Link

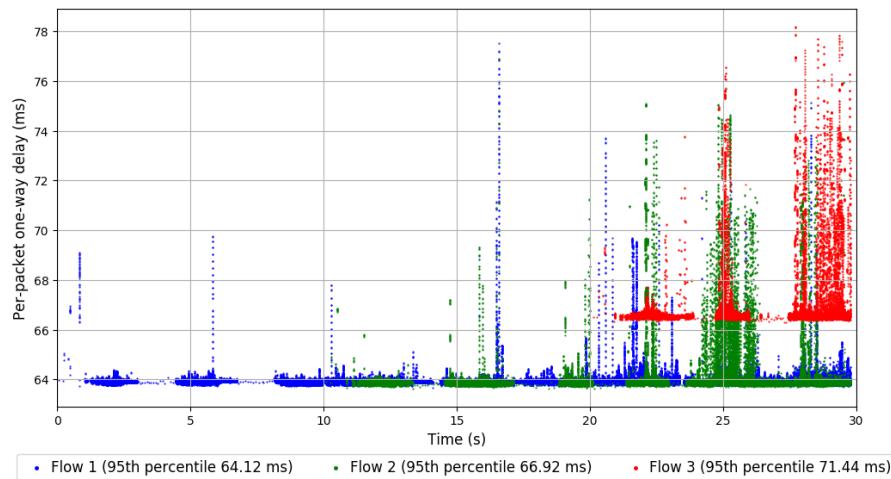
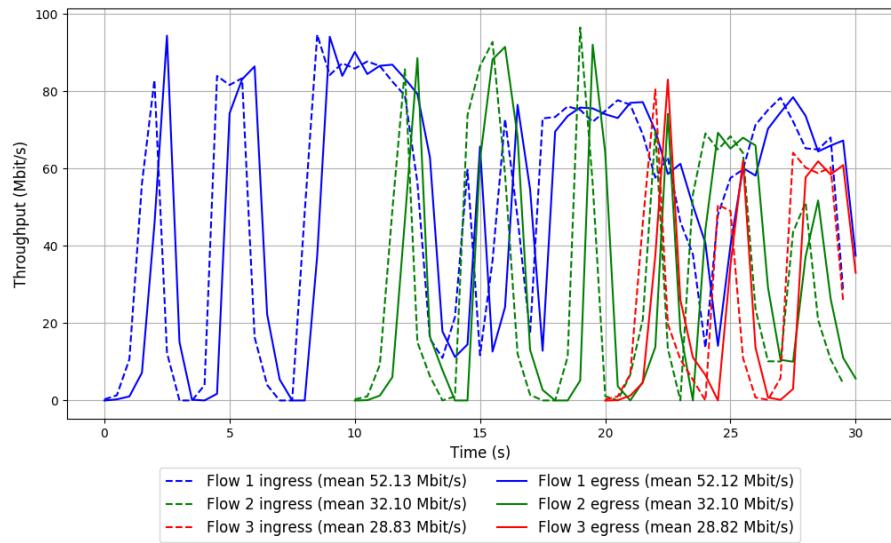


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 11:06:31
End at: 2019-01-21 11:07:01
Local clock offset: -1.07 ms
Remote clock offset: -36.376 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.74 Mbit/s
95th percentile per-packet one-way delay: 66.725 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.12 Mbit/s
95th percentile per-packet one-way delay: 64.119 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 32.10 Mbit/s
95th percentile per-packet one-way delay: 66.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.82 Mbit/s
95th percentile per-packet one-way delay: 71.441 ms
Loss rate: 0.01%
```

Run 1: Report of QUIC Cubic — Data Link

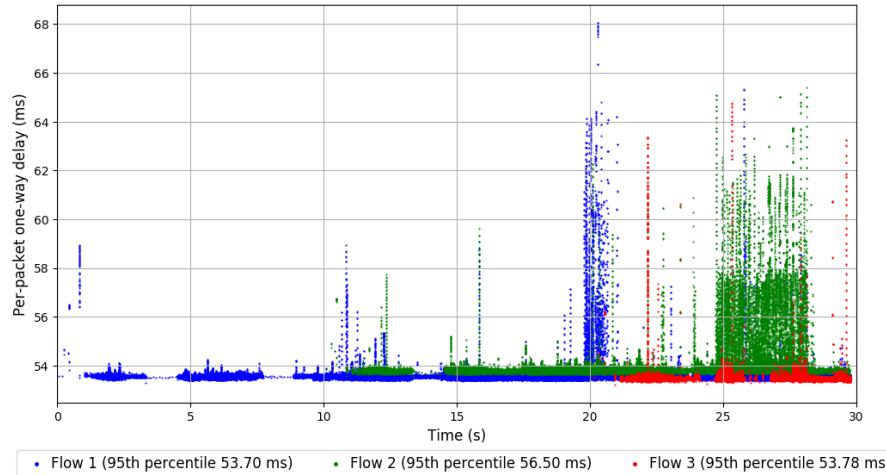
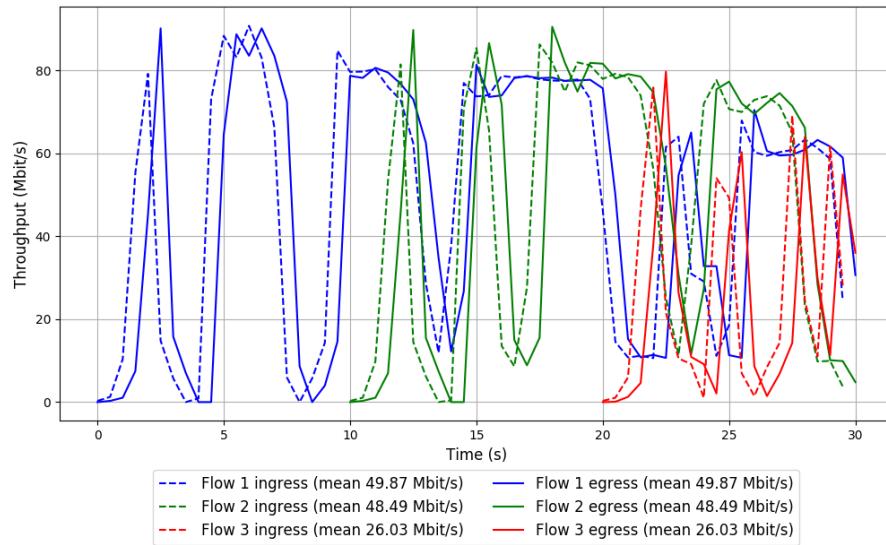


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-21 11:36:55
End at: 2019-01-21 11:37:25
Local clock offset: -0.155 ms
Remote clock offset: -43.453 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 54.601 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.87 Mbit/s
95th percentile per-packet one-way delay: 53.704 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.49 Mbit/s
95th percentile per-packet one-way delay: 56.499 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.03 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

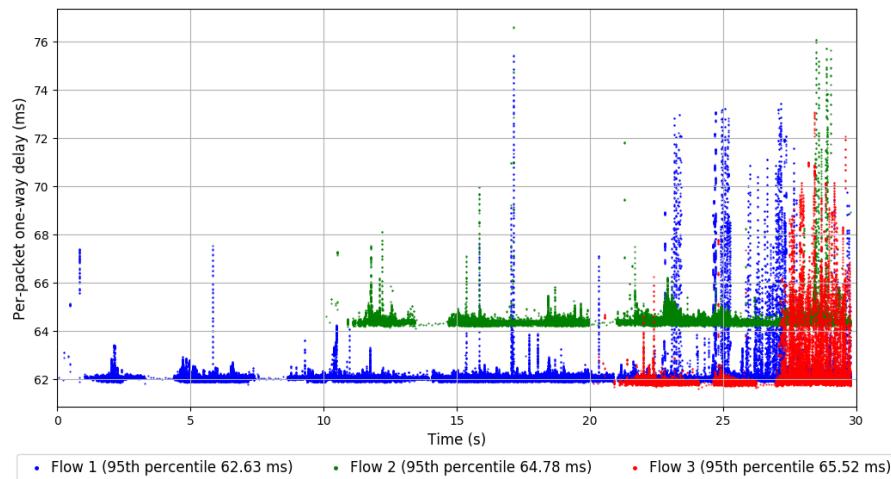
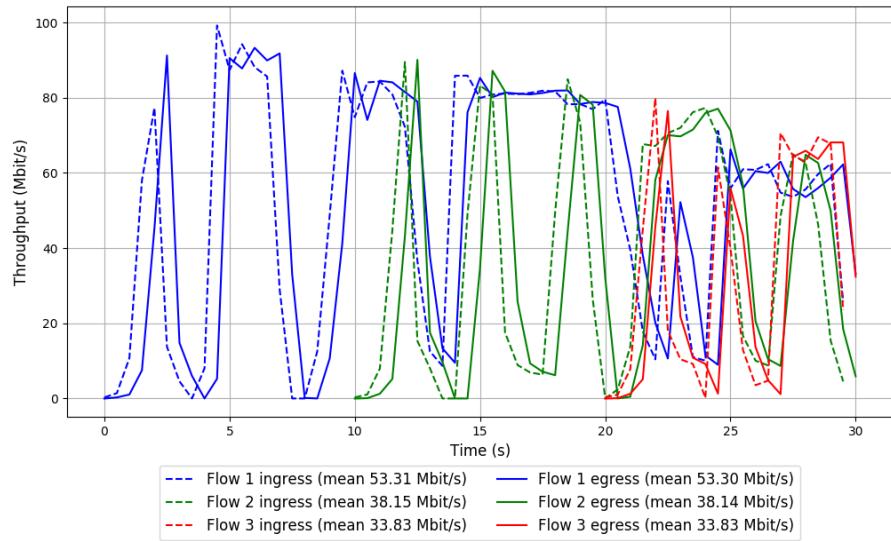


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-21 12:28:27
End at: 2019-01-21 12:28:57
Local clock offset: -1.064 ms
Remote clock offset: -37.883 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.55 Mbit/s
95th percentile per-packet one-way delay: 64.627 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.30 Mbit/s
95th percentile per-packet one-way delay: 62.634 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 64.777 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.83 Mbit/s
95th percentile per-packet one-way delay: 65.521 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

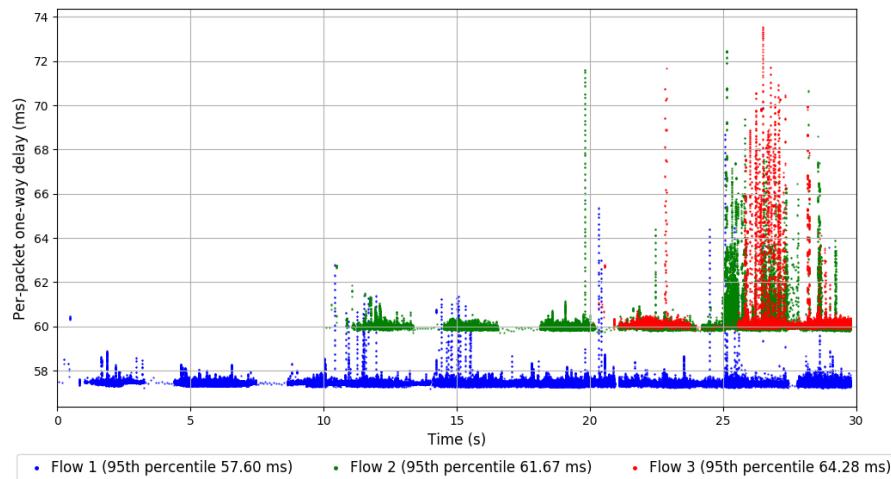
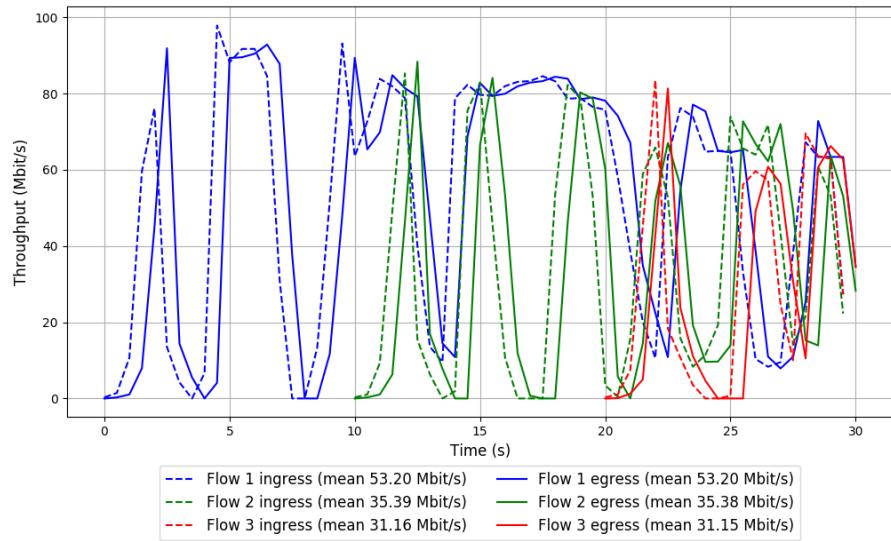


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-21 13:21:21
End at: 2019-01-21 13:21:51
Local clock offset: 0.552 ms
Remote clock offset: -40.313 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.77 Mbit/s
95th percentile per-packet one-way delay: 60.355 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.20 Mbit/s
95th percentile per-packet one-way delay: 57.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 61.669 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 64.282 ms
Loss rate: 0.06%
```

Run 4: Report of QUIC Cubic — Data Link

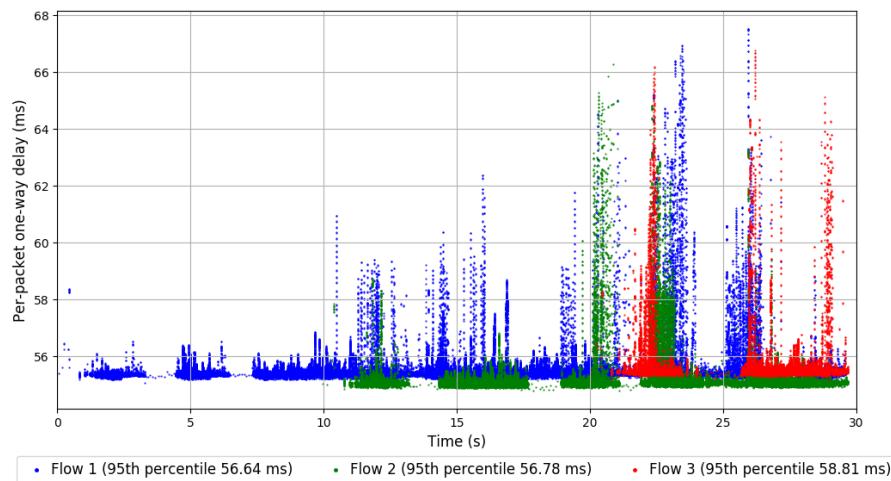
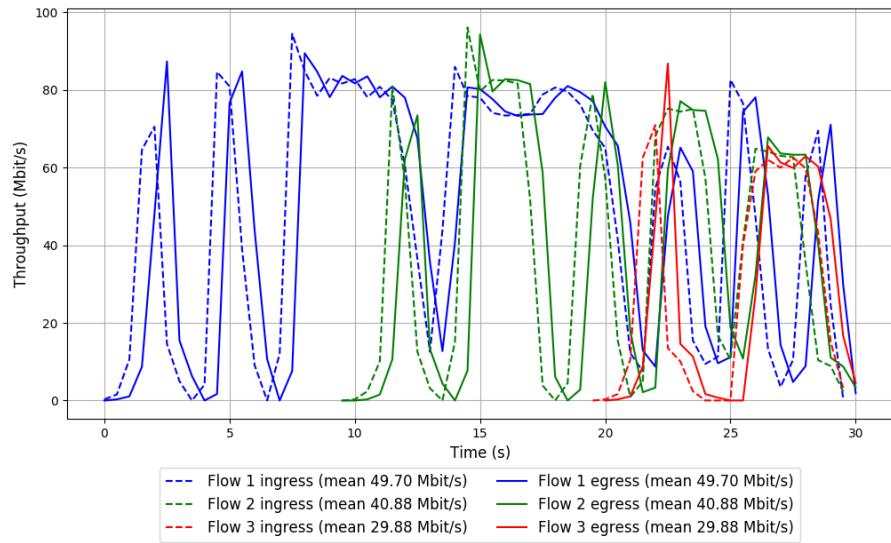


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-21 13:51:50
End at: 2019-01-21 13:52:20
Local clock offset: -3.726 ms
Remote clock offset: -45.415 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.52 Mbit/s
95th percentile per-packet one-way delay: 56.941 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 56.639 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 56.778 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 58.808 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

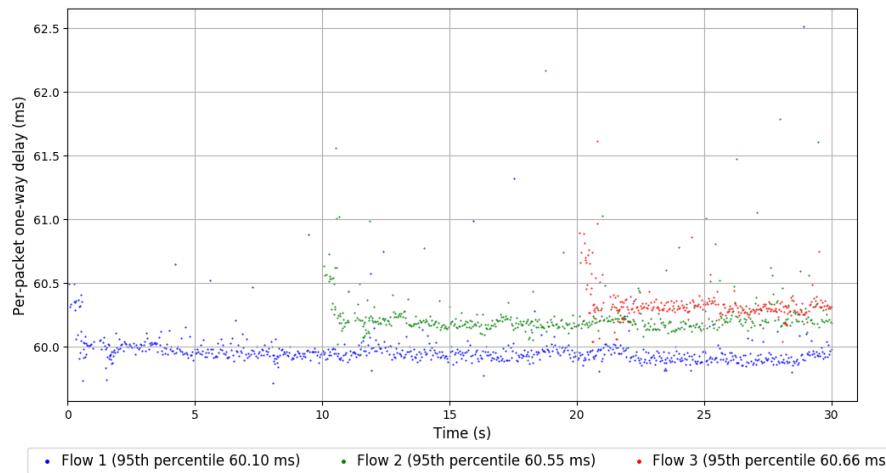
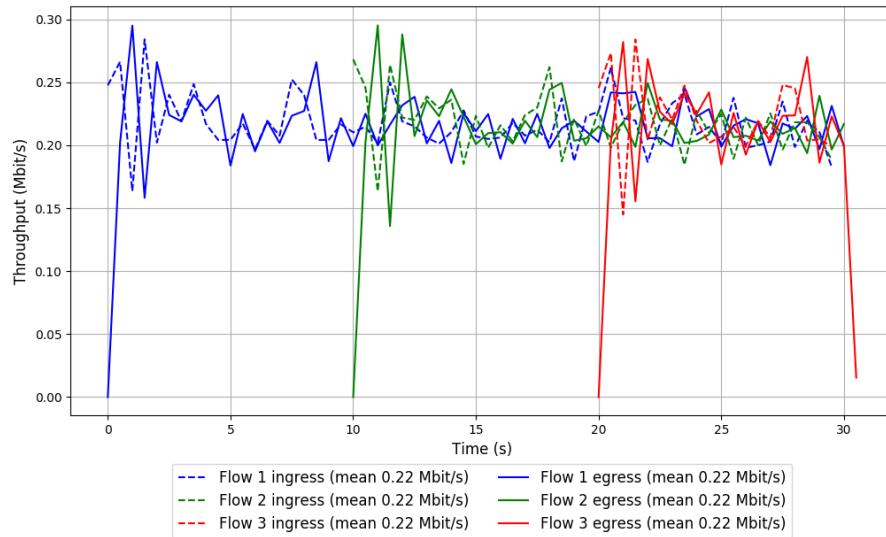


```
Run 1: Statistics of SCReAM

Start at: 2019-01-21 11:21:20
End at: 2019-01-21 11:21:50
Local clock offset: -0.275 ms
Remote clock offset: -38.534 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.435 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.099 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.553 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.658 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

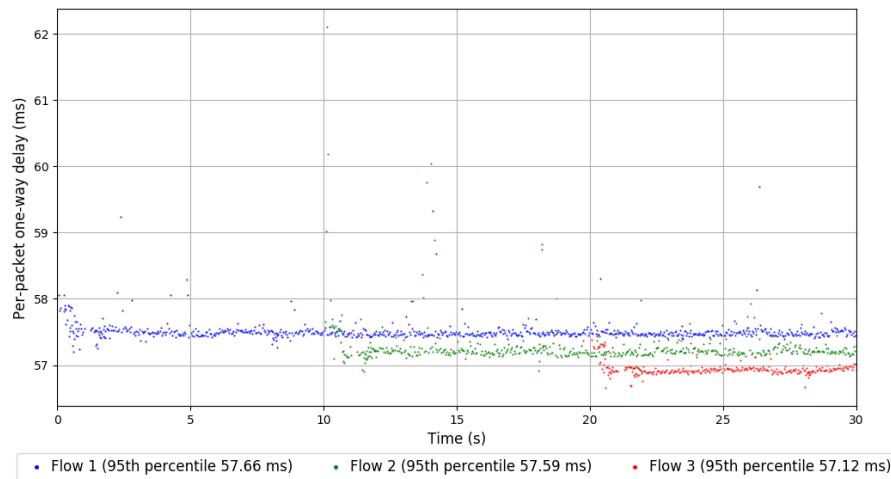
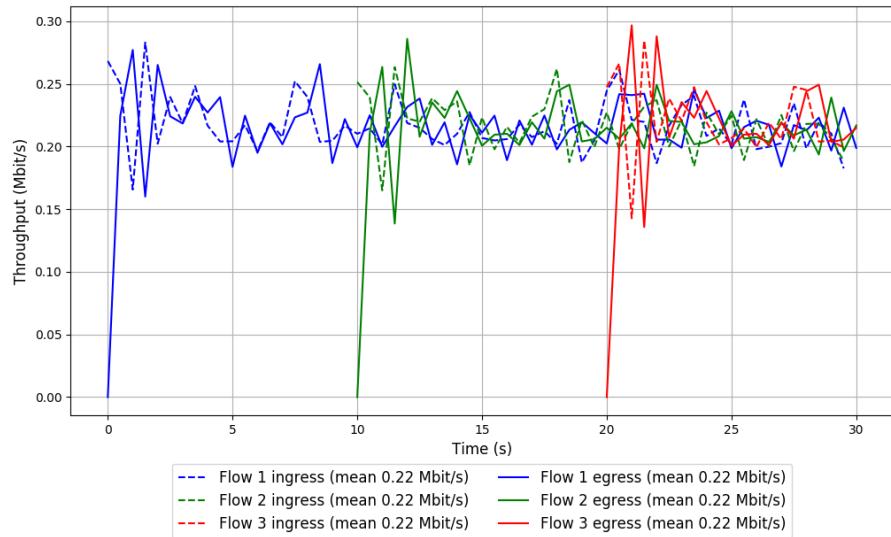


Run 2: Statistics of SCReAM

```
Start at: 2019-01-21 11:57:13
End at: 2019-01-21 11:57:43
Local clock offset: -3.129 ms
Remote clock offset: -44.089 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 57.610 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.586 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.119 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

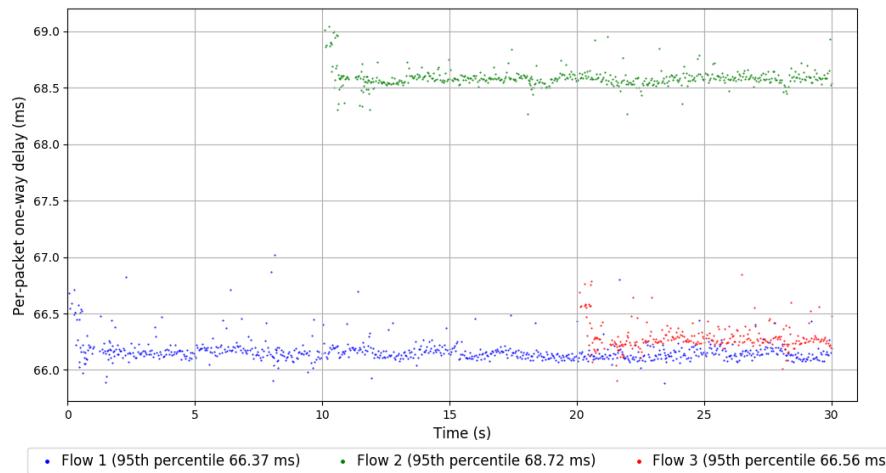
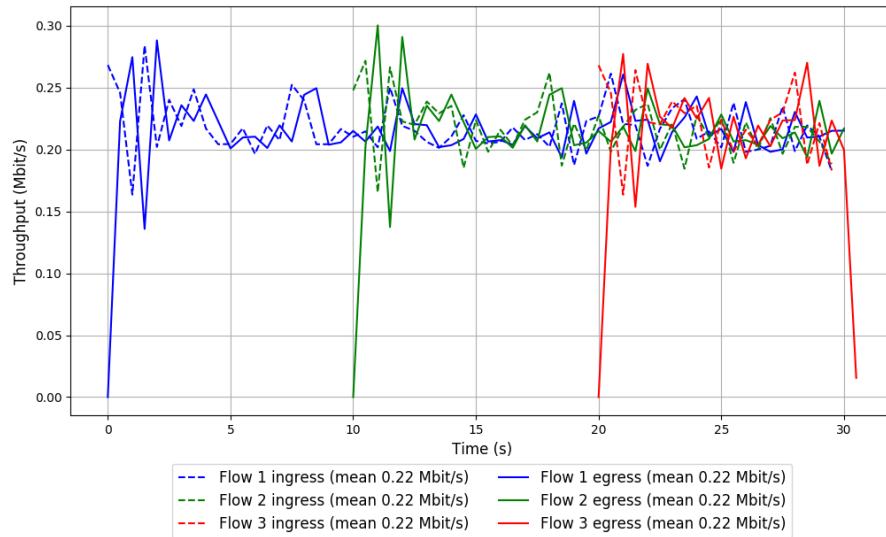


Run 3: Statistics of SCReAM

```
Start at: 2019-01-21 12:43:16
End at: 2019-01-21 12:43:46
Local clock offset: 1.438 ms
Remote clock offset: -31.354 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 68.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.373 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 68.718 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.564 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

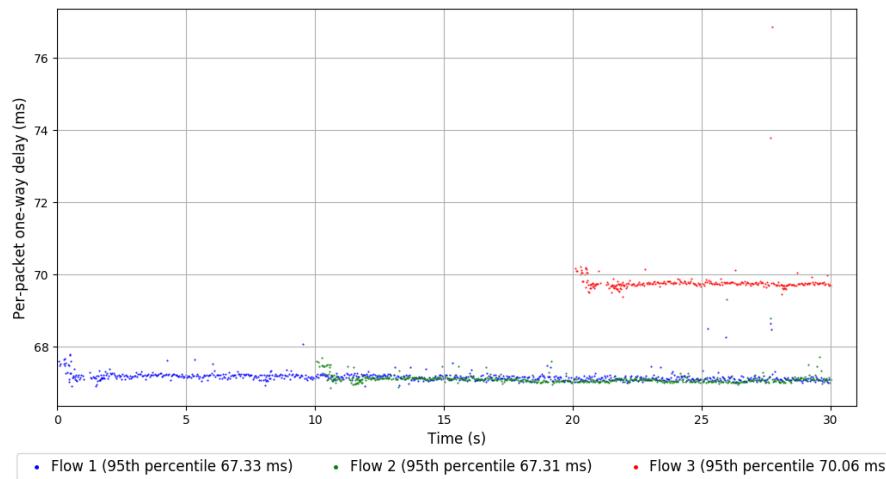
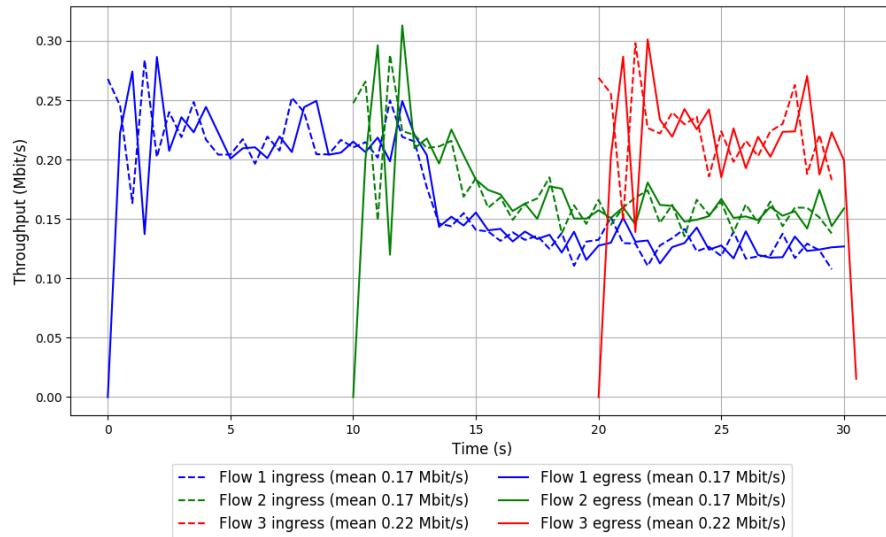


Run 4: Statistics of SCReAM

```
Start at: 2019-01-21 13:36:13
End at: 2019-01-21 13:36:43
Local clock offset: -3.215 ms
Remote clock offset: -32.987 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 69.780 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 67.329 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 67.310 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.059 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

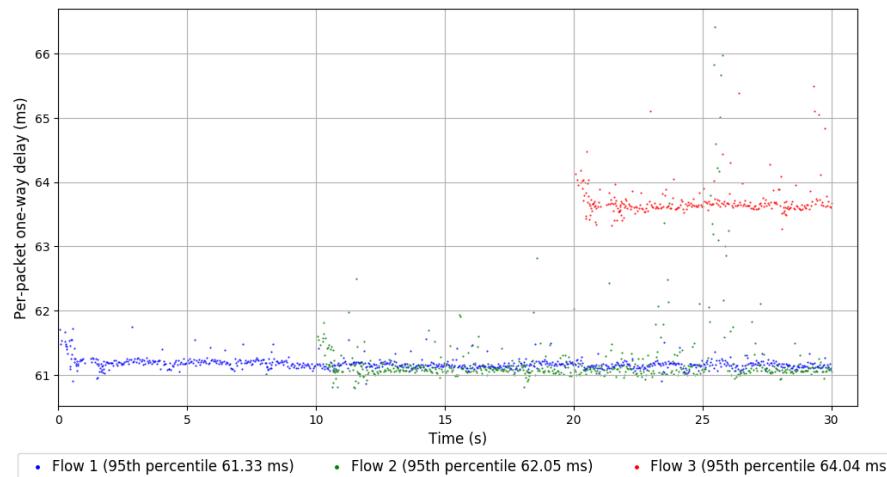
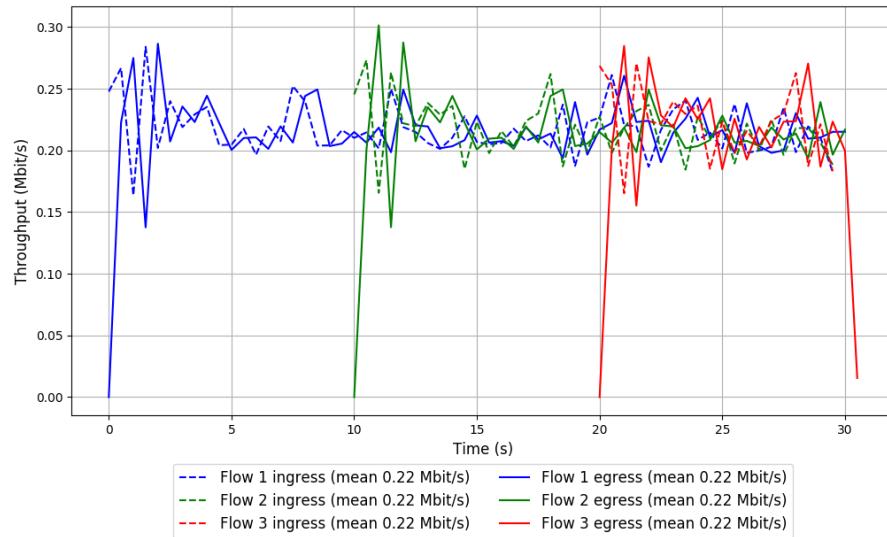


Run 5: Statistics of SCReAM

```
Start at: 2019-01-21 14:12:17
End at: 2019-01-21 14:12:47
Local clock offset: -1.315 ms
Remote clock offset: -37.658 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.333 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.041 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

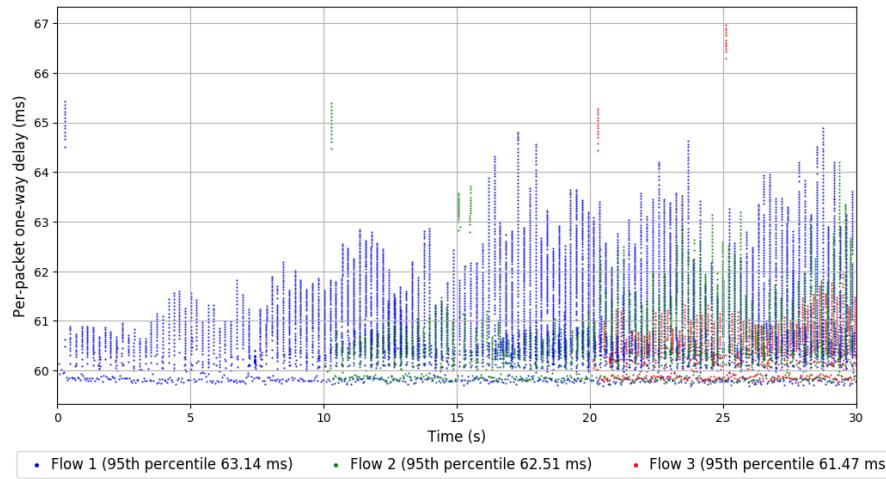
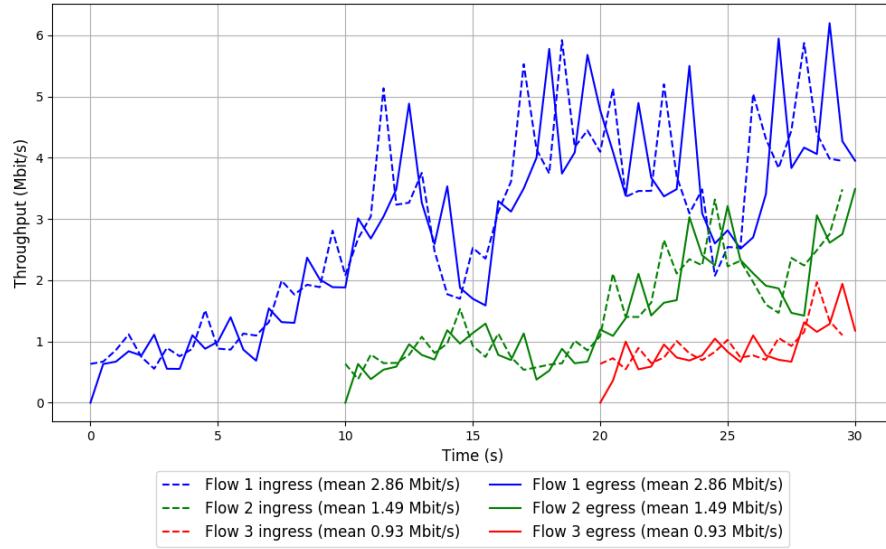


Run 1: Statistics of Sprout

```
Start at: 2019-01-21 11:13:52
End at: 2019-01-21 11:14:22
Local clock offset: -0.474 ms
Remote clock offset: -39.662 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 63.020 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 63.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 62.510 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 61.471 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

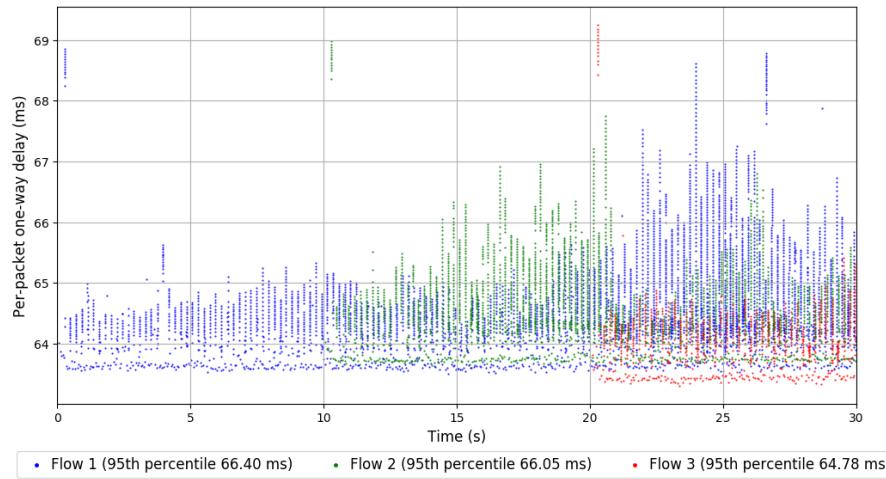
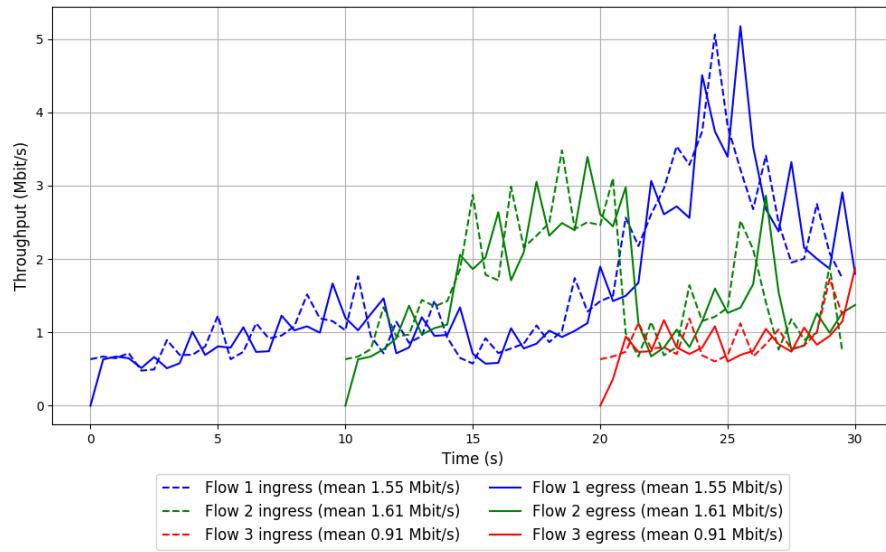


Run 2: Statistics of Sprout

```
Start at: 2019-01-21 11:49:45
End at: 2019-01-21 11:50:15
Local clock offset: -4.368 ms
Remote clock offset: -38.339 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 66.197 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 66.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 66.054 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 64.784 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

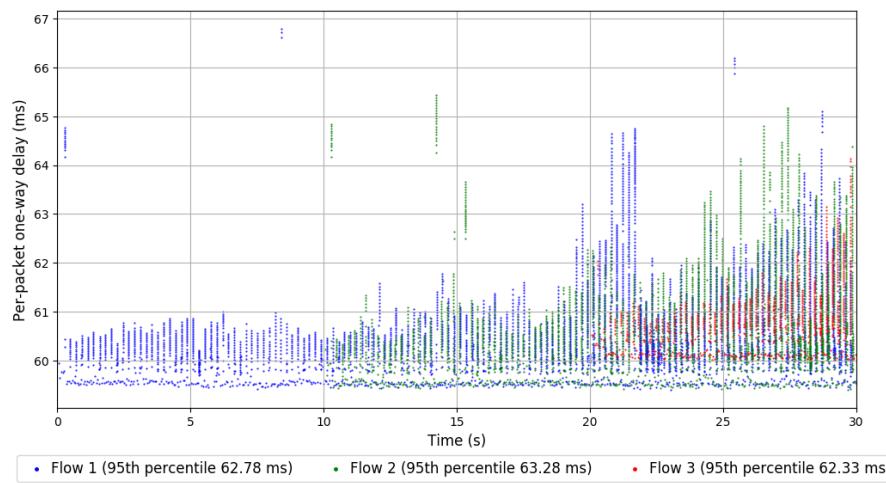
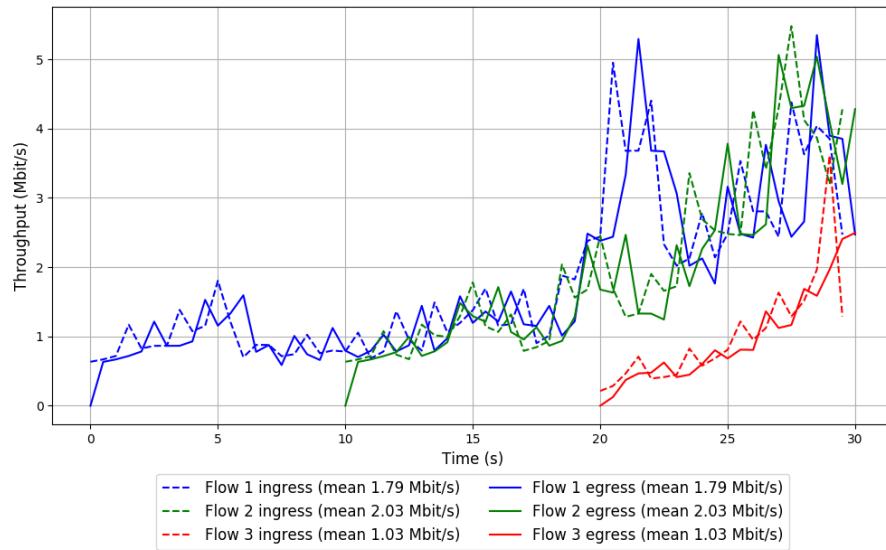


Run 3: Statistics of Sprout

```
Start at: 2019-01-21 12:35:47
End at: 2019-01-21 12:36:17
Local clock offset: 1.564 ms
Remote clock offset: -37.317 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 62.982 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 62.785 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 63.280 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 62.332 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

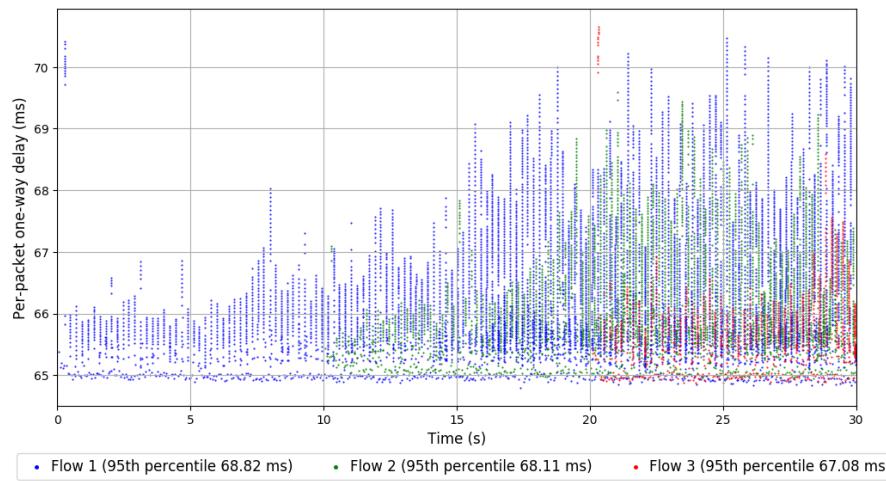
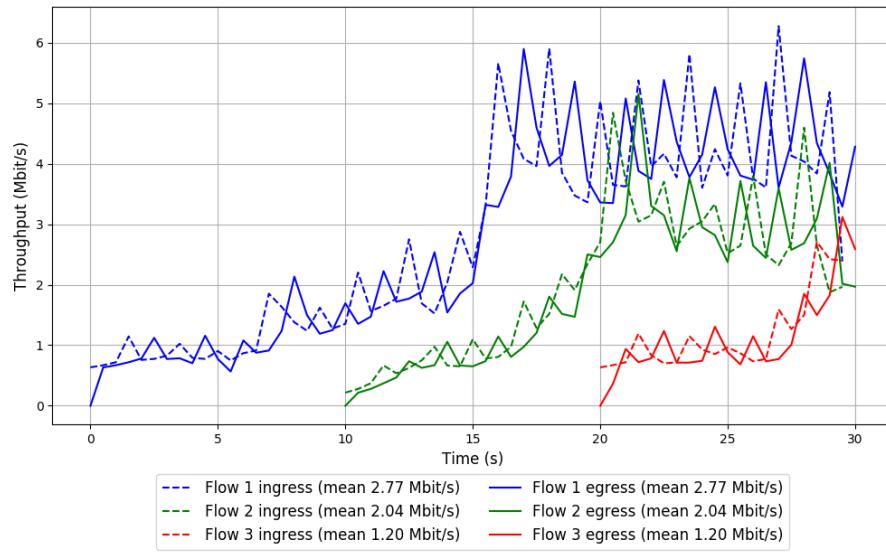


Run 4: Statistics of Sprout

```
Start at: 2019-01-21 13:28:42
End at: 2019-01-21 13:29:12
Local clock offset: -1.805 ms
Remote clock offset: -33.963 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 68.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 68.820 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 68.105 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 67.075 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

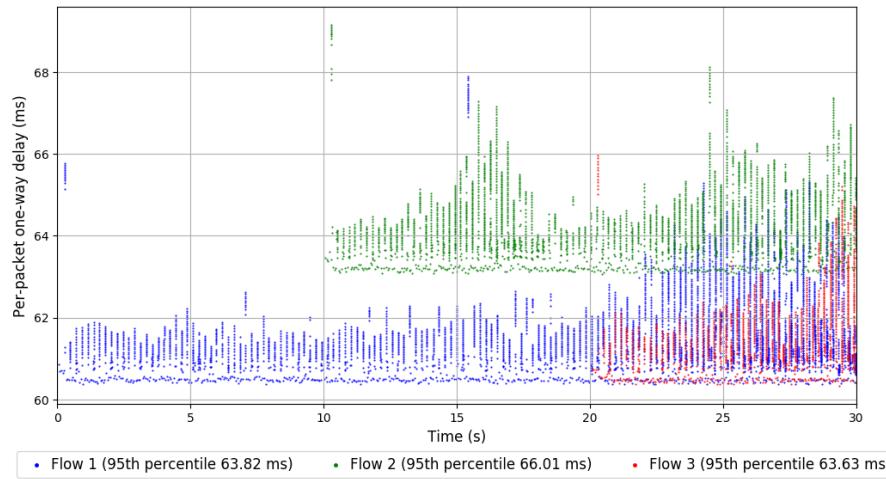
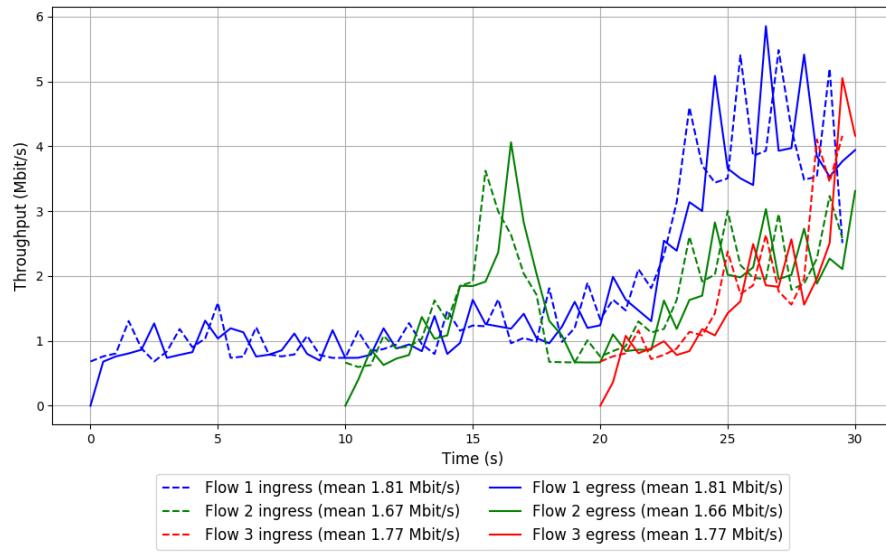


Run 5: Statistics of Sprout

```
Start at: 2019-01-21 14:04:47
End at: 2019-01-21 14:05:17
Local clock offset: -0.922 ms
Remote clock offset: -37.664 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 65.281 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 63.817 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 66.014 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 63.630 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

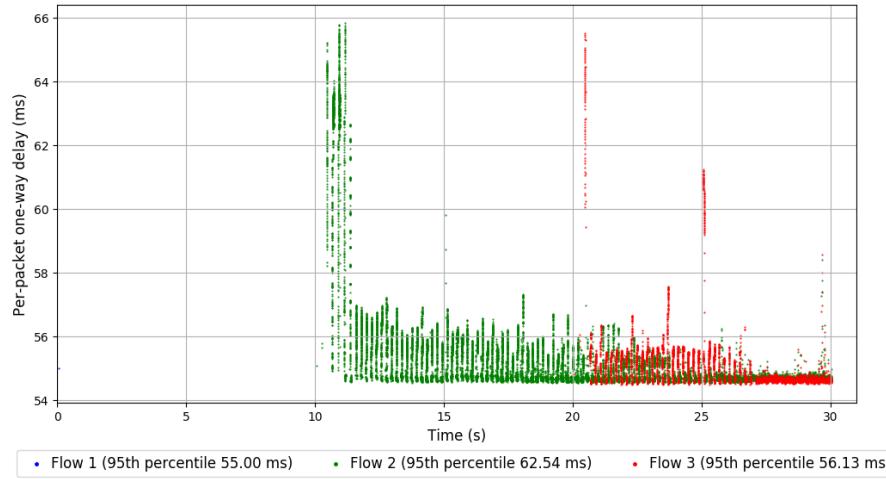
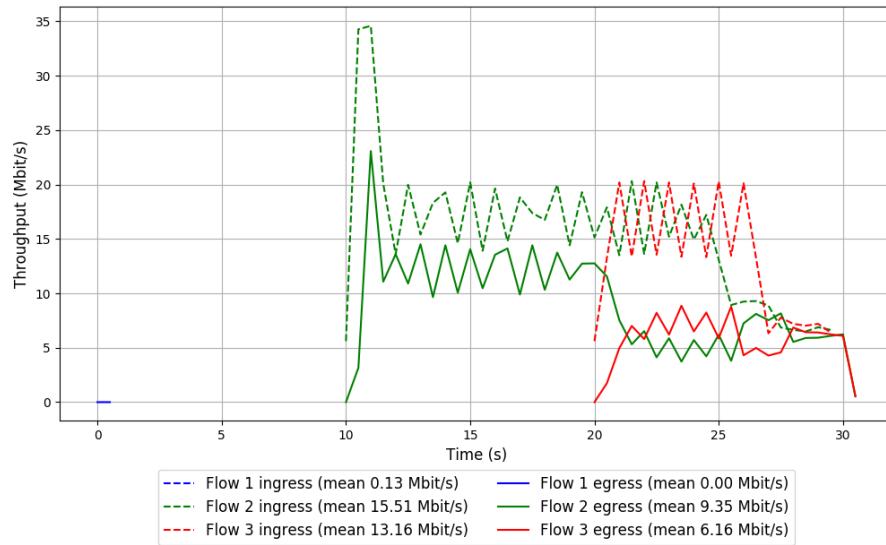


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-21 11:24:11
End at: 2019-01-21 11:24:41
Local clock offset: 1.448 ms
Remote clock offset: -41.721 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 60.931 ms
Loss rate: 43.74%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 54.999 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 62.538 ms
Loss rate: 39.75%
-- Flow 3:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 56.126 ms
Loss rate: 53.17%
```

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

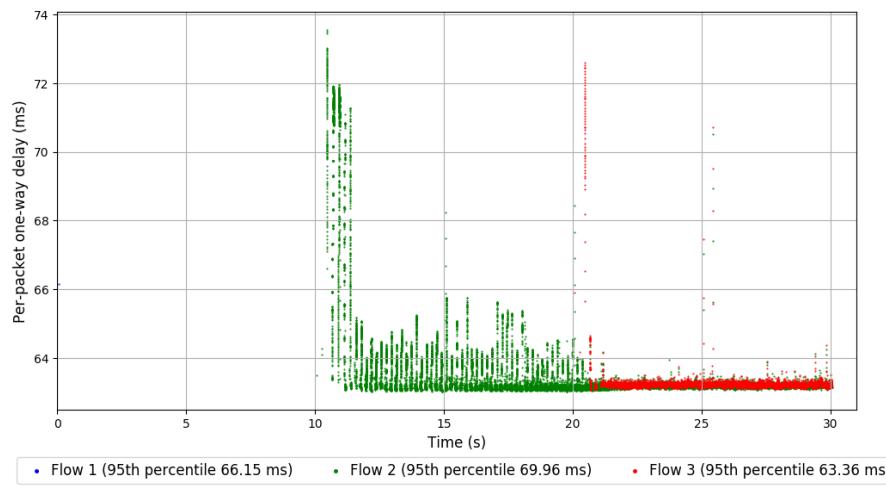
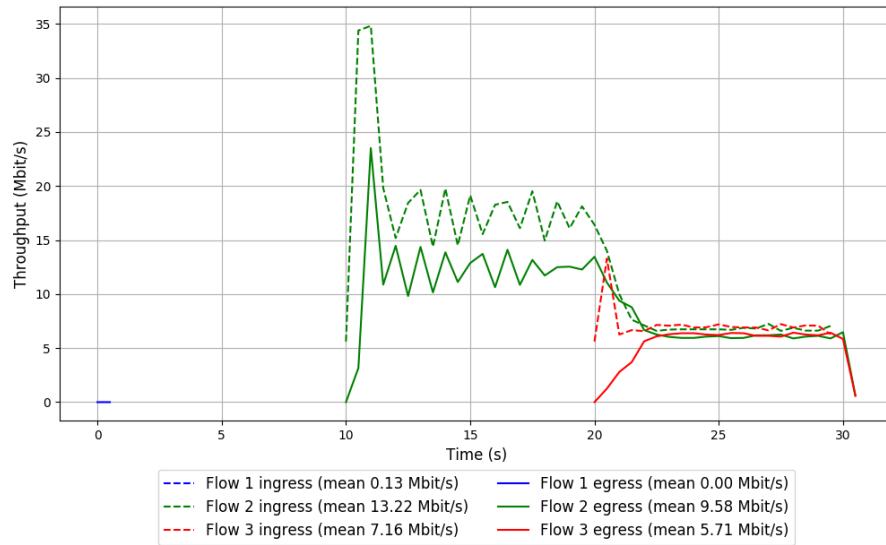


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-21 12:00:05
End at: 2019-01-21 12:00:35
Local clock offset: -2.475 ms
Remote clock offset: -37.51 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 68.370 ms
Loss rate: 25.96%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 66.146 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 69.961 ms
Loss rate: 27.48%
-- Flow 3:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 63.363 ms
Loss rate: 20.31%
```

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

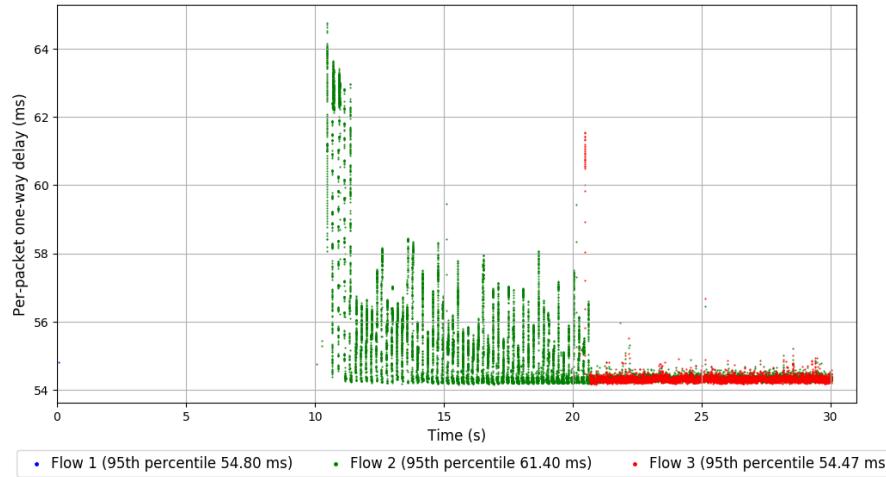
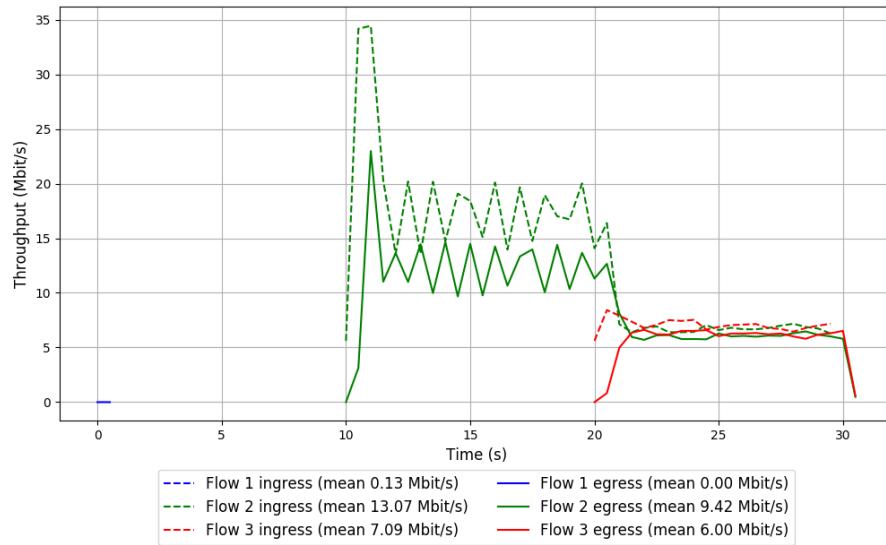


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-21 12:51:46
End at: 2019-01-21 12:52:16
Local clock offset: 1.561 ms
Remote clock offset: -43.091 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 59.304 ms
Loss rate: 25.22%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 54.802 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 61.403 ms
Loss rate: 27.88%
-- Flow 3:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 54.470 ms
Loss rate: 15.37%
```

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

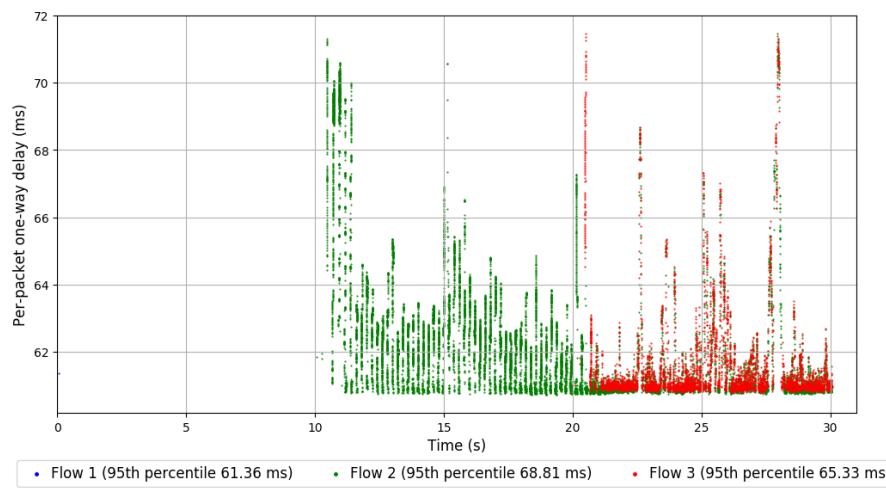
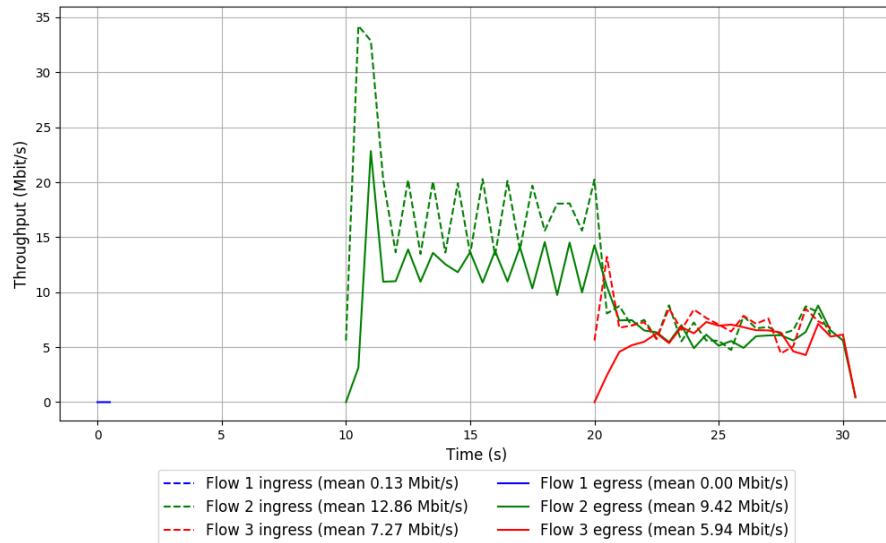


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-21 13:39:05
End at: 2019-01-21 13:39:35
Local clock offset: -2.391 ms
Remote clock offset: -38.236 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 67.841 ms
Loss rate: 24.88%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 61.361 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 68.811 ms
Loss rate: 26.74%
-- Flow 3:
Average throughput: 5.94 Mbit/s
95th percentile per-packet one-way delay: 65.331 ms
Loss rate: 18.27%
```

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

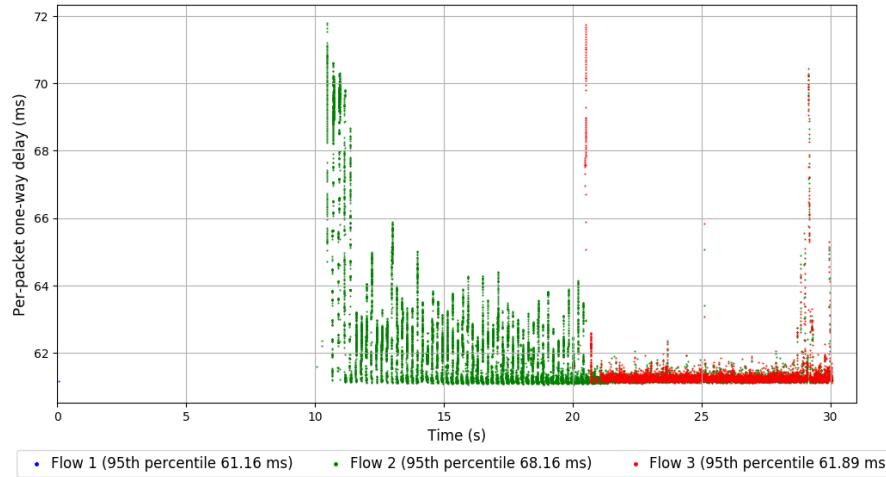
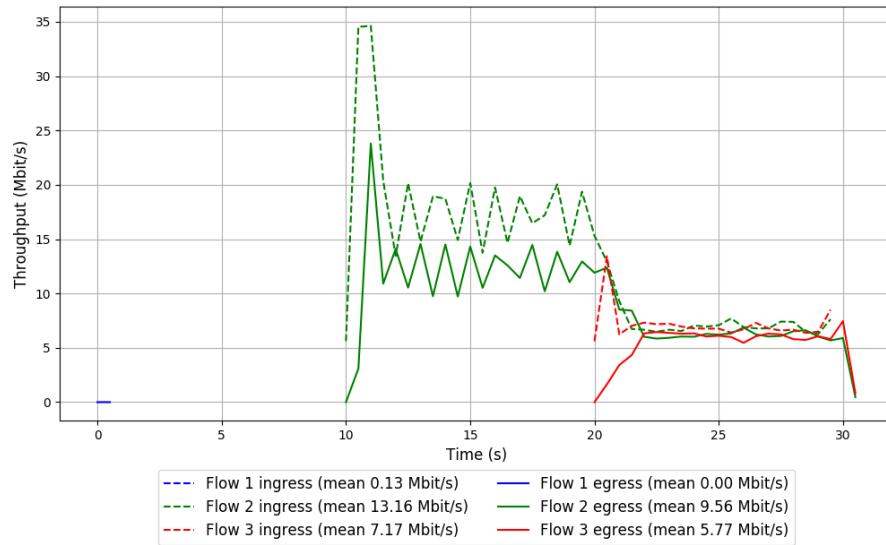


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-21 14:15:09
End at: 2019-01-21 14:15:39
Local clock offset: -4.472 ms
Remote clock offset: -40.53 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 66.680 ms
Loss rate: 25.69%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 61.160 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 68.161 ms
Loss rate: 27.34%
-- Flow 3:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 61.892 ms
Loss rate: 19.58%
```

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

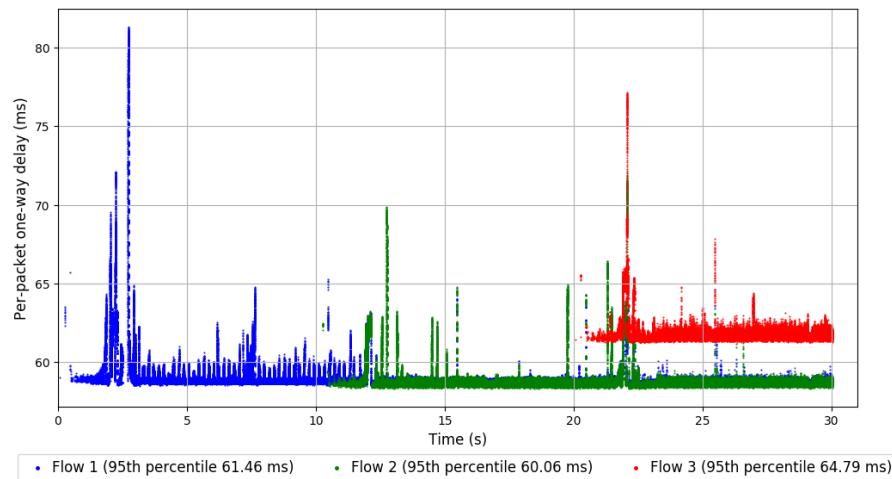
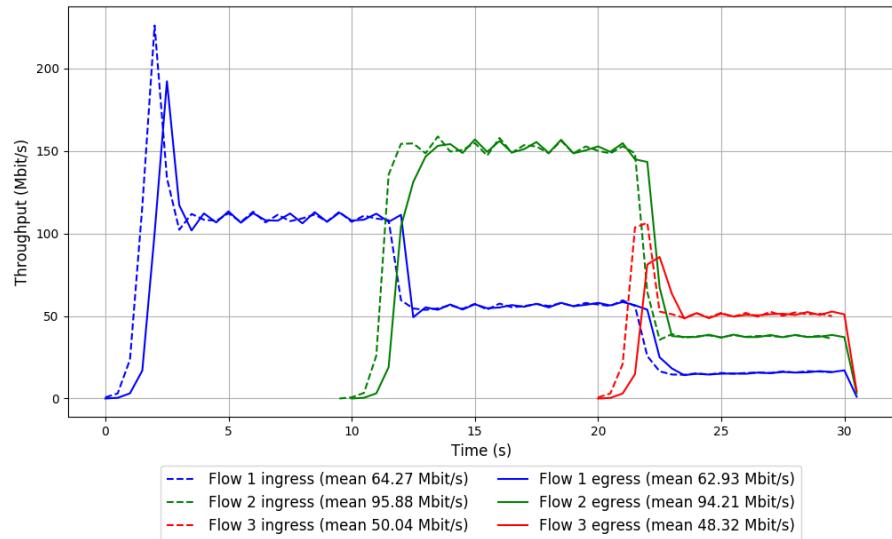


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-21 10:59:35
End at: 2019-01-21 11:00:05
Local clock offset: -0.428 ms
Remote clock offset: -41.469 ms

# Below is generated by plot.py at 2019-01-21 14:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.77 Mbit/s
95th percentile per-packet one-way delay: 62.094 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 62.93 Mbit/s
95th percentile per-packet one-way delay: 61.463 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 94.21 Mbit/s
95th percentile per-packet one-way delay: 60.056 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 48.32 Mbit/s
95th percentile per-packet one-way delay: 64.787 ms
Loss rate: 3.44%
```

Run 1: Report of TCP Vegas — Data Link

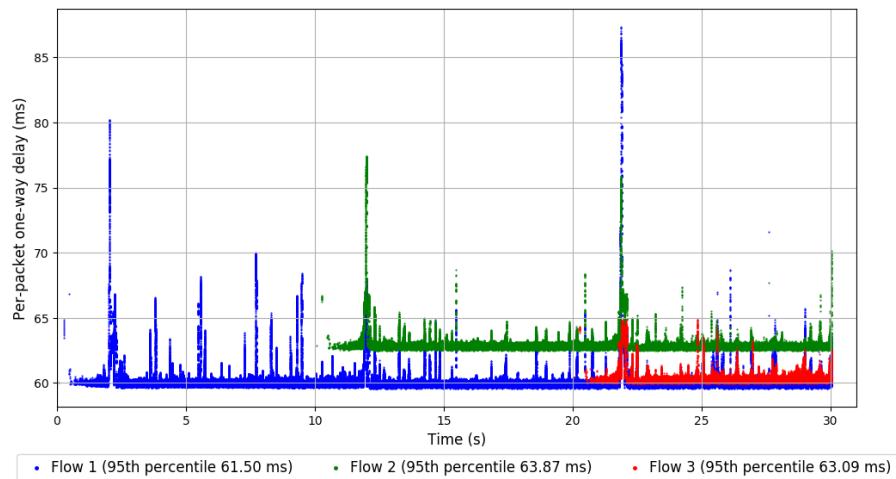
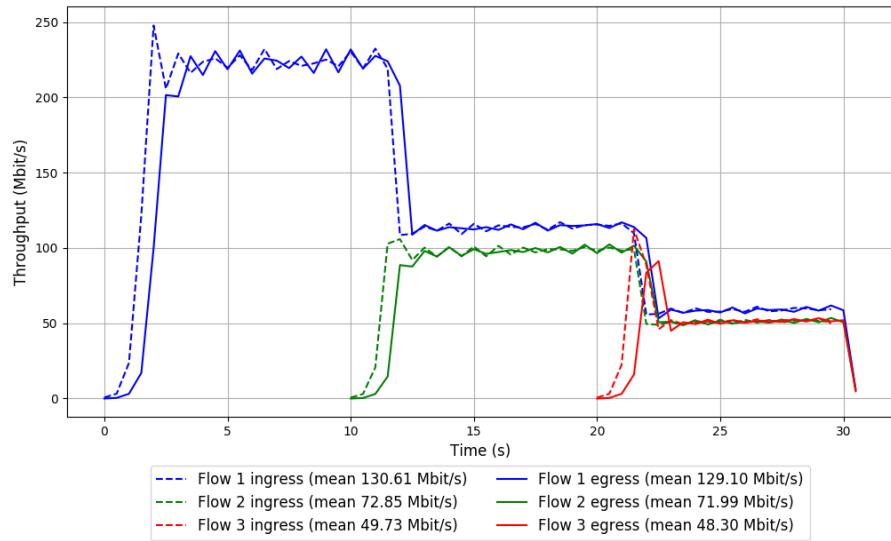


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-21 11:29:56
End at: 2019-01-21 11:30:26
Local clock offset: -1.226 ms
Remote clock offset: -38.553 ms

# Below is generated by plot.py at 2019-01-21 14:45:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.10 Mbit/s
95th percentile per-packet one-way delay: 63.099 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 129.10 Mbit/s
95th percentile per-packet one-way delay: 61.503 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 71.99 Mbit/s
95th percentile per-packet one-way delay: 63.865 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 48.30 Mbit/s
95th percentile per-packet one-way delay: 63.086 ms
Loss rate: 2.86%
```

Run 2: Report of TCP Vegas — Data Link

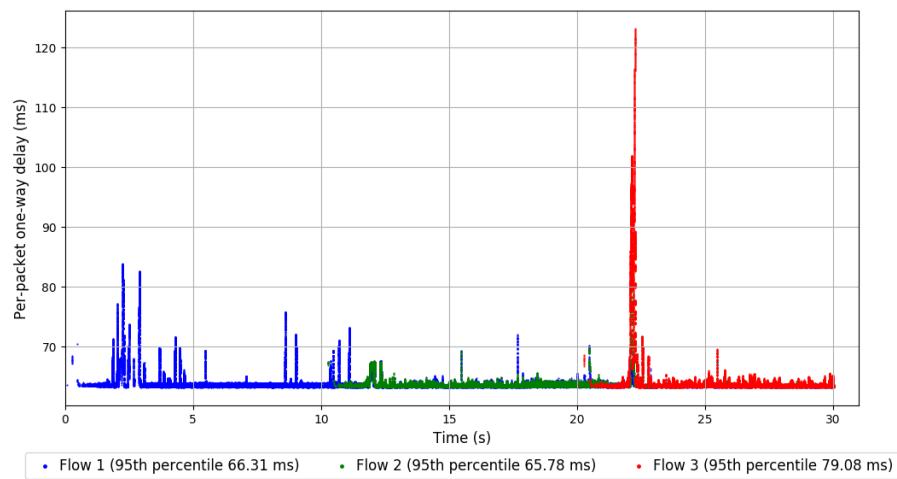
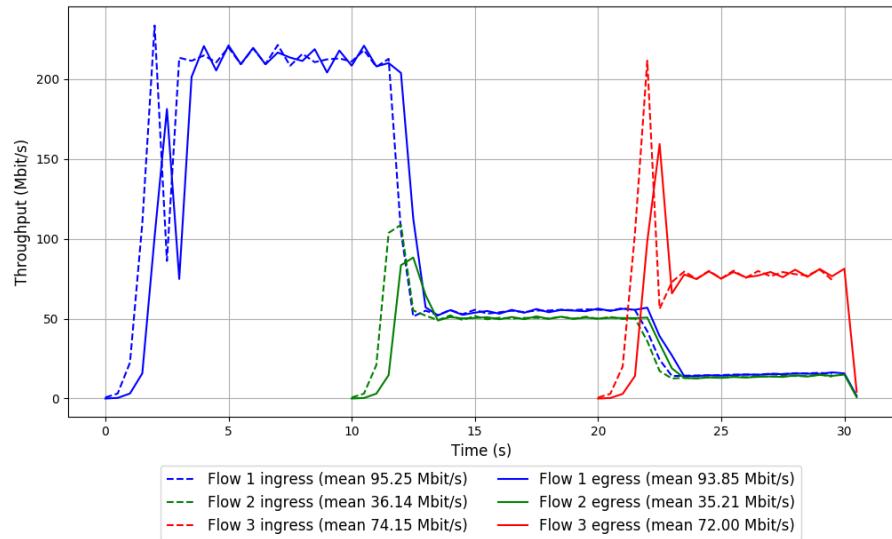


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-21 12:21:31
End at: 2019-01-21 12:22:01
Local clock offset: -0.081 ms
Remote clock offset: -38.003 ms

# Below is generated by plot.py at 2019-01-21 14:45:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.23 Mbit/s
95th percentile per-packet one-way delay: 66.536 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 66.311 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 65.775 ms
Loss rate: 2.61%
-- Flow 3:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 79.081 ms
Loss rate: 2.91%
```

Run 3: Report of TCP Vegas — Data Link

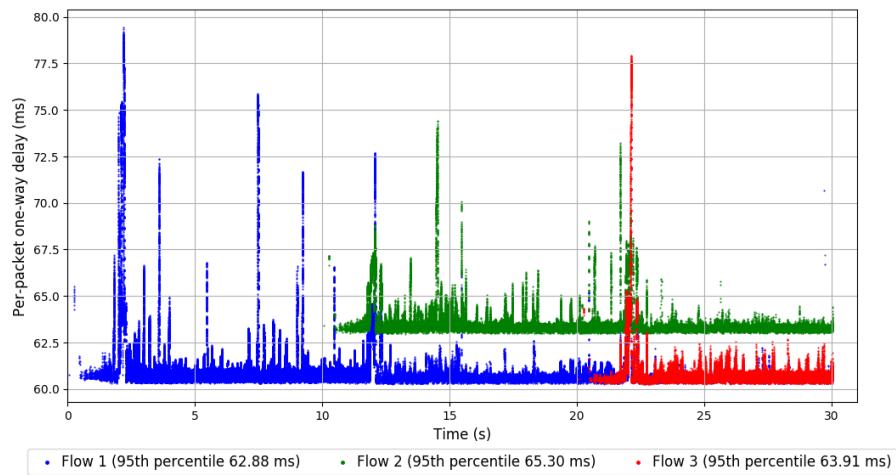
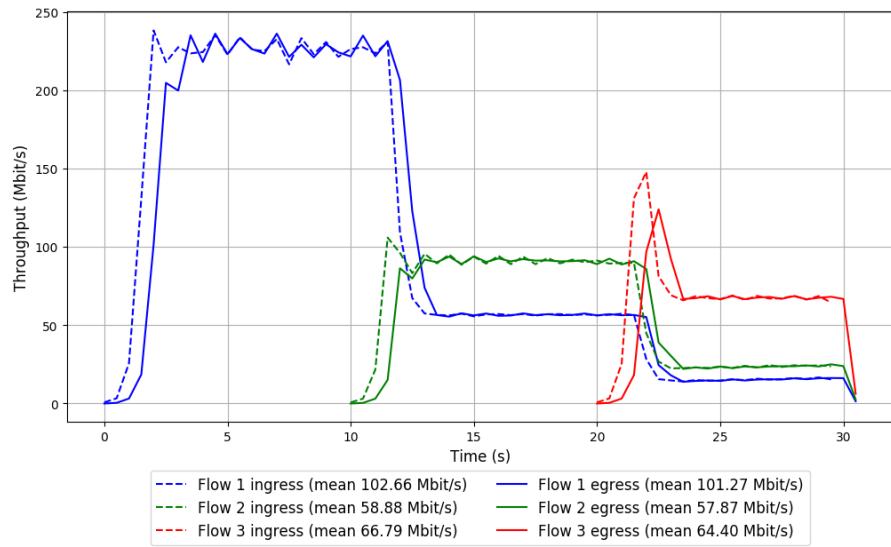


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-21 13:03:08
End at: 2019-01-21 13:03:38
Local clock offset: -2.33 ms
Remote clock offset: -41.122 ms

# Below is generated by plot.py at 2019-01-21 14:45:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.26 Mbit/s
95th percentile per-packet one-way delay: 63.951 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 101.27 Mbit/s
95th percentile per-packet one-way delay: 62.885 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 57.87 Mbit/s
95th percentile per-packet one-way delay: 65.301 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 63.905 ms
Loss rate: 3.57%
```

Run 4: Report of TCP Vegas — Data Link

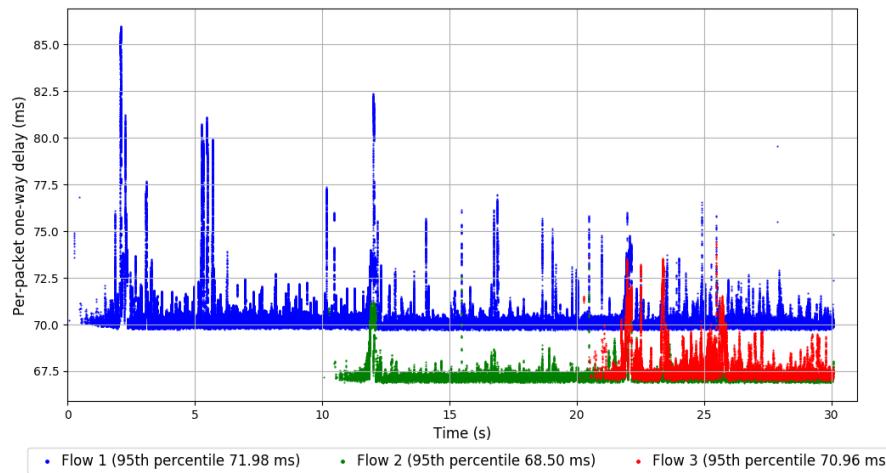
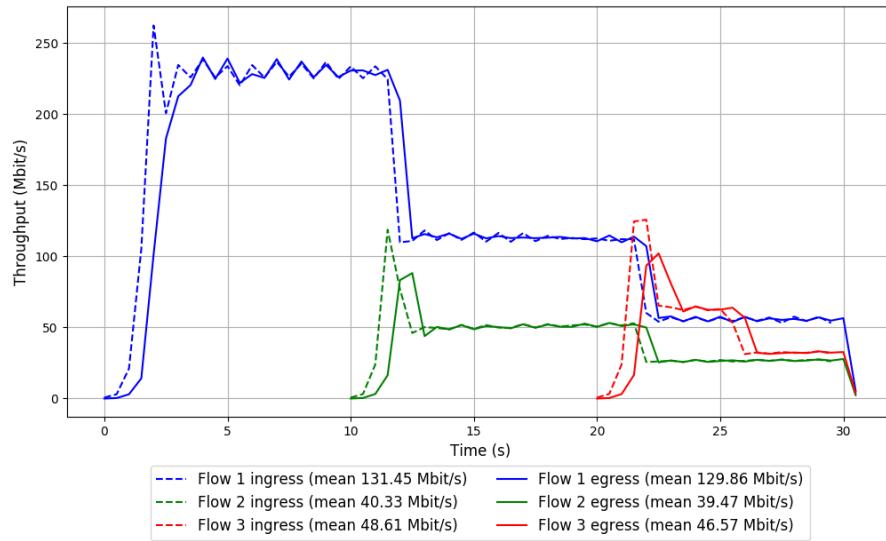


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-21 13:44:50
End at: 2019-01-21 13:45:20
Local clock offset: -3.732 ms
Remote clock offset: -32.864 ms

# Below is generated by plot.py at 2019-01-21 14:45:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.64 Mbit/s
95th percentile per-packet one-way delay: 71.502 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 129.86 Mbit/s
95th percentile per-packet one-way delay: 71.982 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 68.498 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 70.957 ms
Loss rate: 4.20%
```

Run 5: Report of TCP Vegas — Data Link

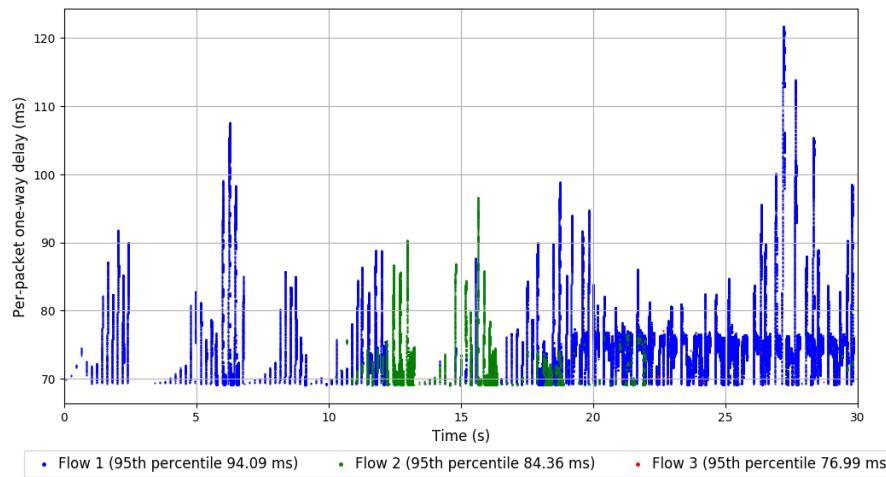
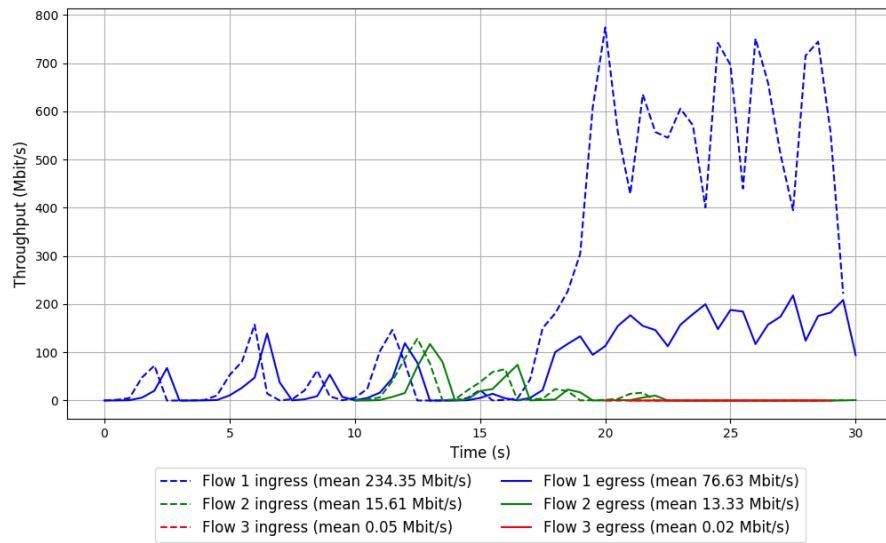


Run 1: Statistics of Verus

```
Start at: 2019-01-21 10:56:34
End at: 2019-01-21 10:57:04
Local clock offset: -2.085 ms
Remote clock offset: -32.636 ms

# Below is generated by plot.py at 2019-01-21 14:46:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 93.262 ms
Loss rate: 65.06%
-- Flow 1:
Average throughput: 76.63 Mbit/s
95th percentile per-packet one-way delay: 94.092 ms
Loss rate: 67.29%
-- Flow 2:
Average throughput: 13.33 Mbit/s
95th percentile per-packet one-way delay: 84.357 ms
Loss rate: 14.56%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 76.994 ms
Loss rate: 63.41%
```

Run 1: Report of Verus — Data Link

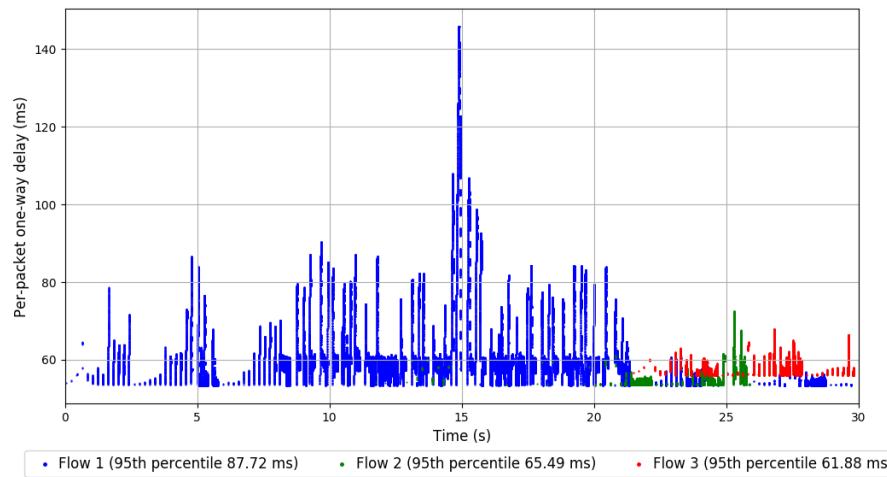
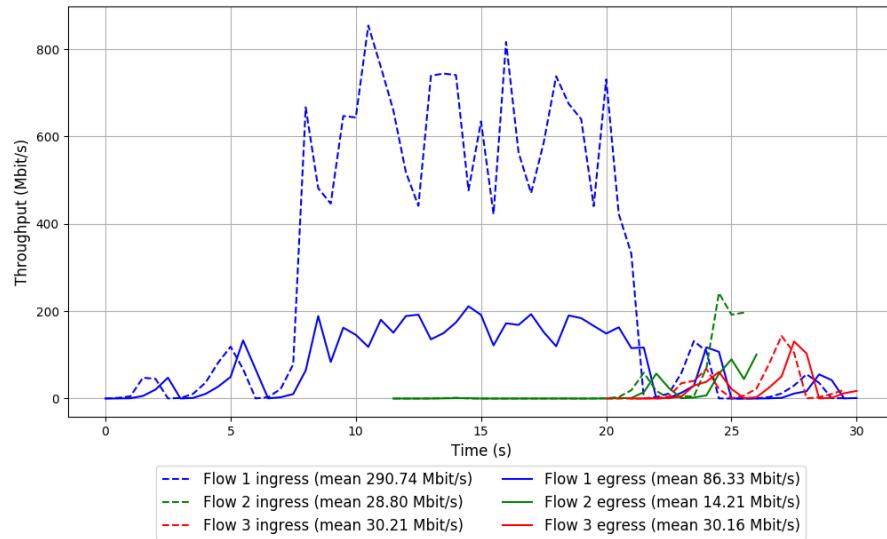


Run 2: Statistics of Verus

```
Start at: 2019-01-21 11:26:59
End at: 2019-01-21 11:27:29
Local clock offset: -0.851 ms
Remote clock offset: -45.012 ms

# Below is generated by plot.py at 2019-01-21 14:47:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.27 Mbit/s
95th percentile per-packet one-way delay: 85.460 ms
Loss rate: 67.65%
-- Flow 1:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 87.723 ms
Loss rate: 70.31%
-- Flow 2:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 65.488 ms
Loss rate: 50.65%
-- Flow 3:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 61.876 ms
Loss rate: 10.90%
```

Run 2: Report of Verus — Data Link

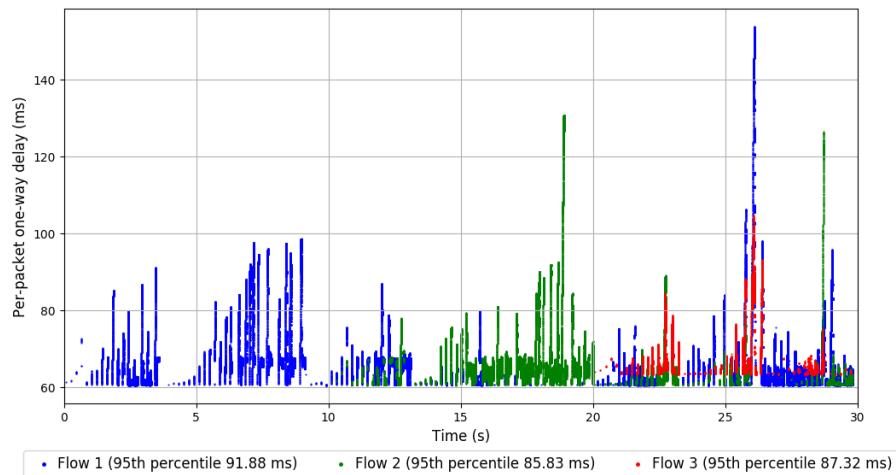
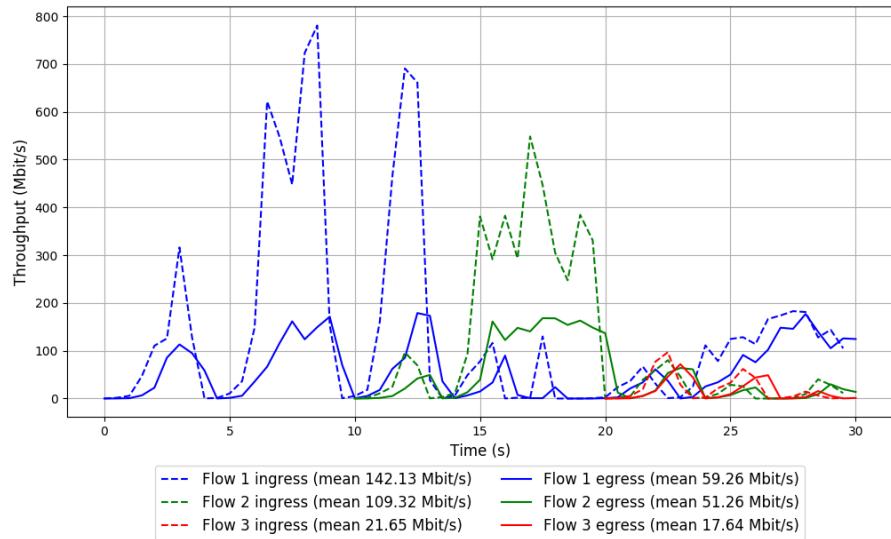


Run 3: Statistics of Verus

```
Start at: 2019-01-21 12:02:53
End at: 2019-01-21 12:03:23
Local clock offset: -0.526 ms
Remote clock offset: -38.016 ms

# Below is generated by plot.py at 2019-01-21 14:47:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.97 Mbit/s
95th percentile per-packet one-way delay: 89.520 ms
Loss rate: 55.34%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 91.883 ms
Loss rate: 58.30%
-- Flow 2:
Average throughput: 51.26 Mbit/s
95th percentile per-packet one-way delay: 85.832 ms
Loss rate: 53.11%
-- Flow 3:
Average throughput: 17.64 Mbit/s
95th percentile per-packet one-way delay: 87.321 ms
Loss rate: 18.49%
```

Run 3: Report of Verus — Data Link

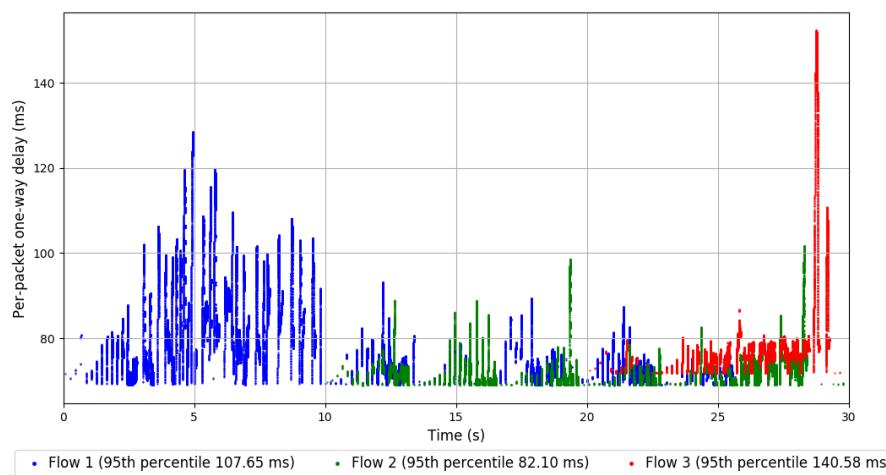
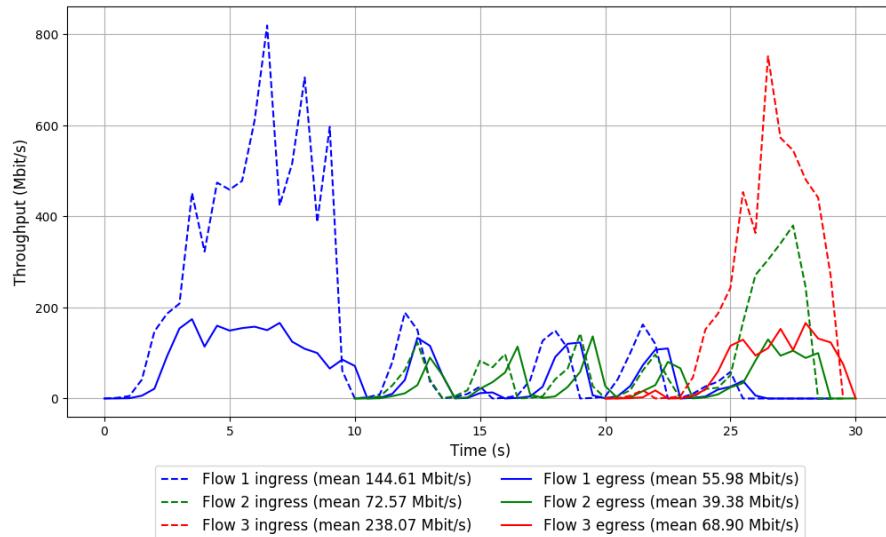


Run 4: Statistics of Verus

```
Start at: 2019-01-21 13:00:08
End at: 2019-01-21 13:00:38
Local clock offset: -1.667 ms
Remote clock offset: -31.863 ms

# Below is generated by plot.py at 2019-01-21 14:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.65 Mbit/s
95th percentile per-packet one-way delay: 106.361 ms
Loss rate: 61.42%
-- Flow 1:
Average throughput: 55.98 Mbit/s
95th percentile per-packet one-way delay: 107.651 ms
Loss rate: 61.55%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 82.097 ms
Loss rate: 45.74%
-- Flow 3:
Average throughput: 68.90 Mbit/s
95th percentile per-packet one-way delay: 140.579 ms
Loss rate: 71.06%
```

Run 4: Report of Verus — Data Link

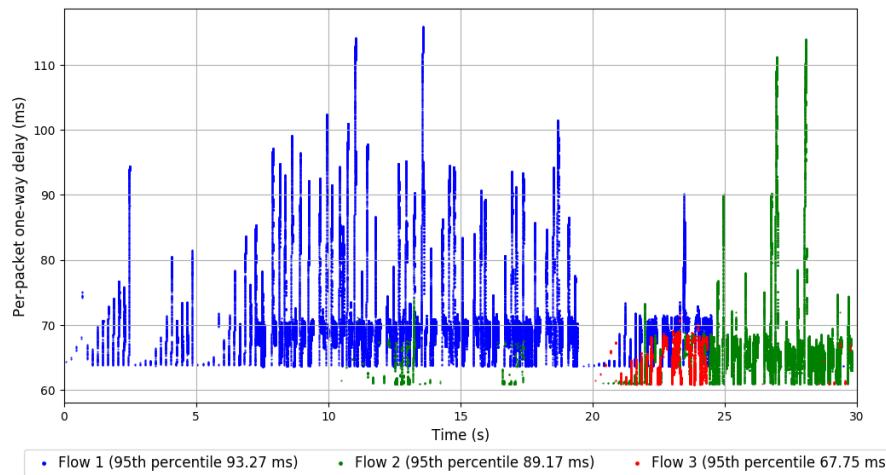
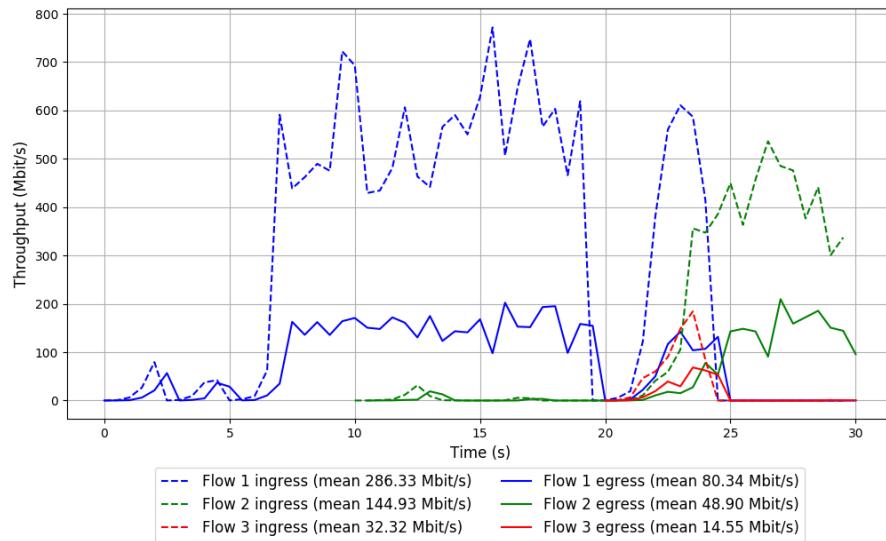


Run 5: Statistics of Verus

```
Start at: 2019-01-21 13:41:51
End at: 2019-01-21 13:42:21
Local clock offset: -3.393 ms
Remote clock offset: -38.97 ms

# Below is generated by plot.py at 2019-01-21 14:47:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.94 Mbit/s
95th percentile per-packet one-way delay: 92.752 ms
Loss rate: 70.25%
-- Flow 1:
Average throughput: 80.34 Mbit/s
95th percentile per-packet one-way delay: 93.274 ms
Loss rate: 72.13%
-- Flow 2:
Average throughput: 48.90 Mbit/s
95th percentile per-packet one-way delay: 89.166 ms
Loss rate: 66.25%
-- Flow 3:
Average throughput: 14.55 Mbit/s
95th percentile per-packet one-way delay: 67.752 ms
Loss rate: 54.95%
```

Run 5: Report of Verus — Data Link

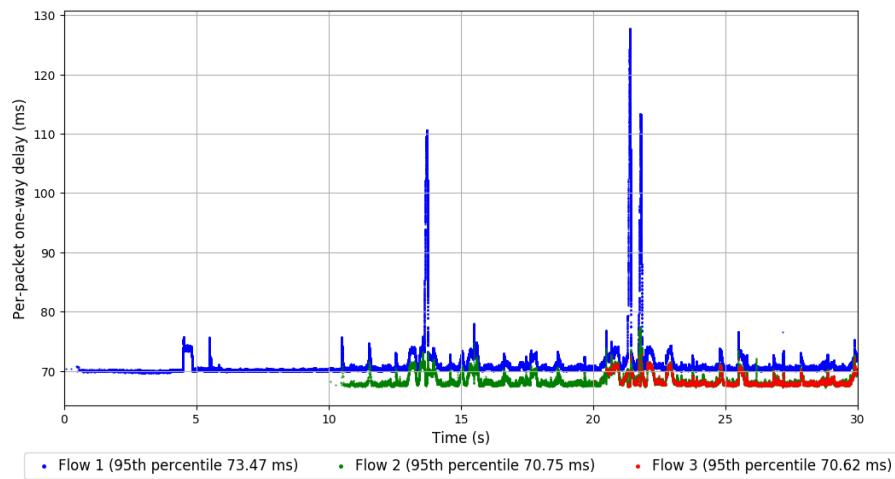
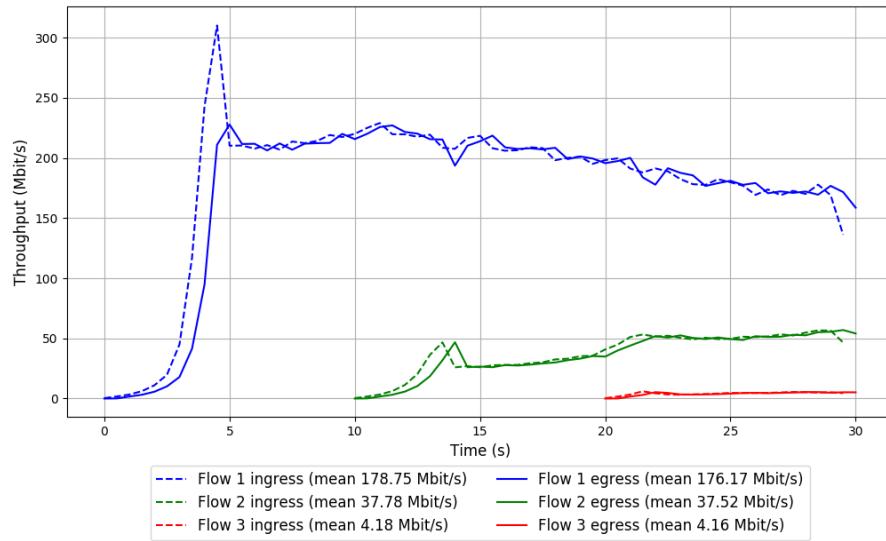


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-21 11:15:10
End at: 2019-01-21 11:15:40
Local clock offset: -2.182 ms
Remote clock offset: -33.775 ms

# Below is generated by plot.py at 2019-01-21 14:47:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.50 Mbit/s
95th percentile per-packet one-way delay: 73.395 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 73.469 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 70.751 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 70.617 ms
Loss rate: 0.56%
```

Run 1: Report of PCC-Vivace — Data Link

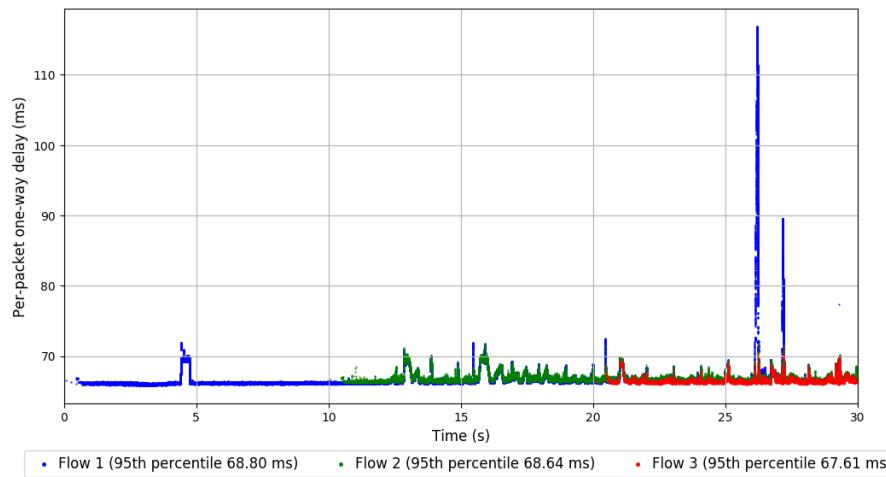
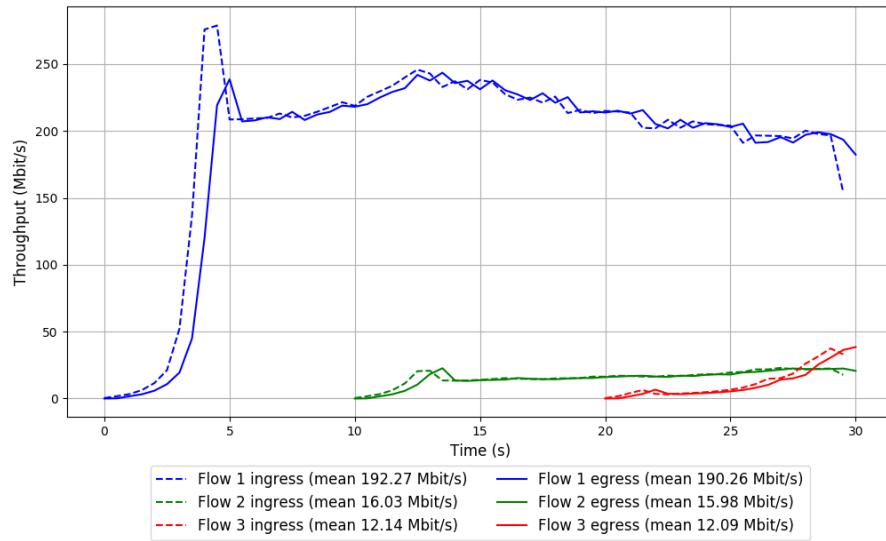


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-21 11:51:02
End at: 2019-01-21 11:51:32
Local clock offset: -2.346 ms
Remote clock offset: -33.991 ms

# Below is generated by plot.py at 2019-01-21 14:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.88 Mbit/s
95th percentile per-packet one-way delay: 68.751 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 190.26 Mbit/s
95th percentile per-packet one-way delay: 68.802 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 68.635 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 67.609 ms
Loss rate: 0.34%
```

Run 2: Report of PCC-Vivace — Data Link

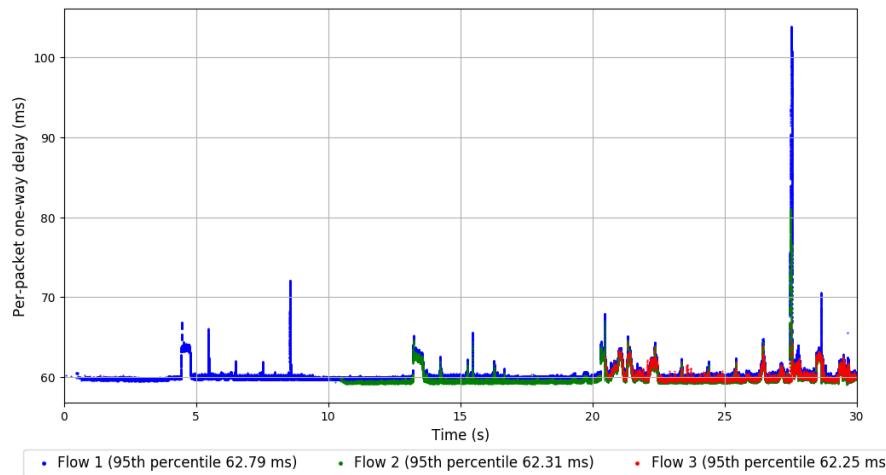
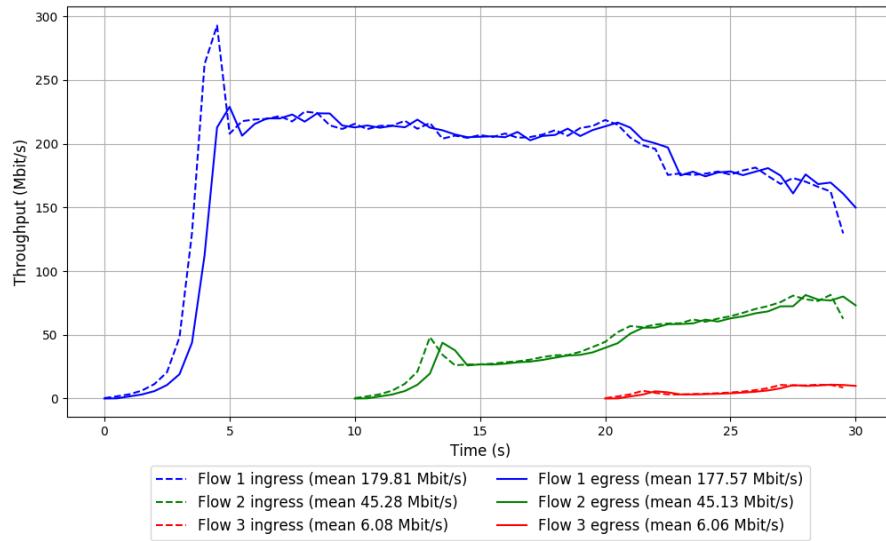


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-21 12:37:04
End at: 2019-01-21 12:37:34
Local clock offset: 0.936 ms
Remote clock offset: -38.242 ms

# Below is generated by plot.py at 2019-01-21 14:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.59 Mbit/s
95th percentile per-packet one-way delay: 62.641 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 177.57 Mbit/s
95th percentile per-packet one-way delay: 62.790 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 45.13 Mbit/s
95th percentile per-packet one-way delay: 62.314 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 62.246 ms
Loss rate: 0.39%
```

Run 3: Report of PCC-Vivace — Data Link

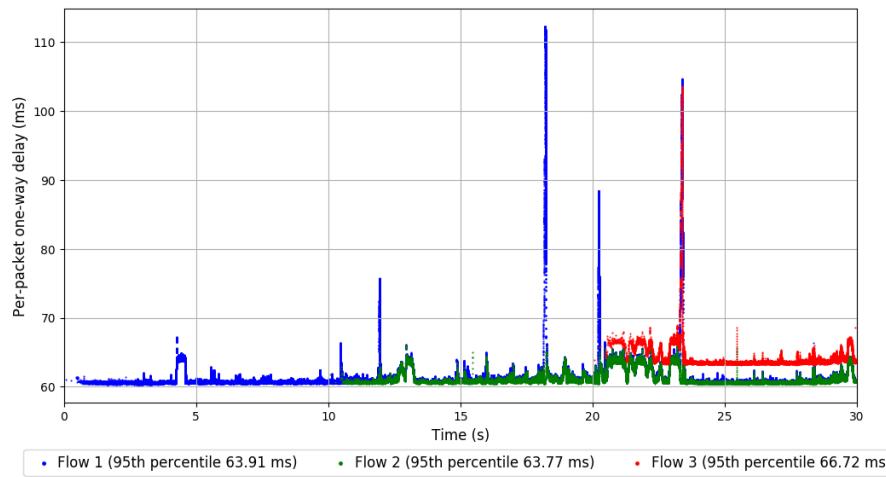
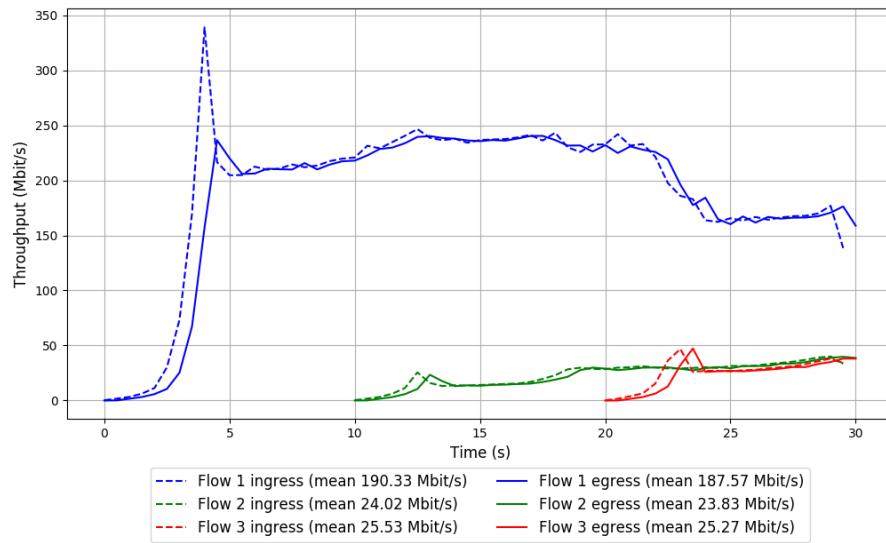


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-21 13:30:00
End at: 2019-01-21 13:30:30
Local clock offset: -2.969 ms
Remote clock offset: -39.586 ms

# Below is generated by plot.py at 2019-01-21 14:48:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.73 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 187.57 Mbit/s
95th percentile per-packet one-way delay: 63.913 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 23.83 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 25.27 Mbit/s
95th percentile per-packet one-way delay: 66.724 ms
Loss rate: 0.97%
```

Run 4: Report of PCC-Vivace — Data Link

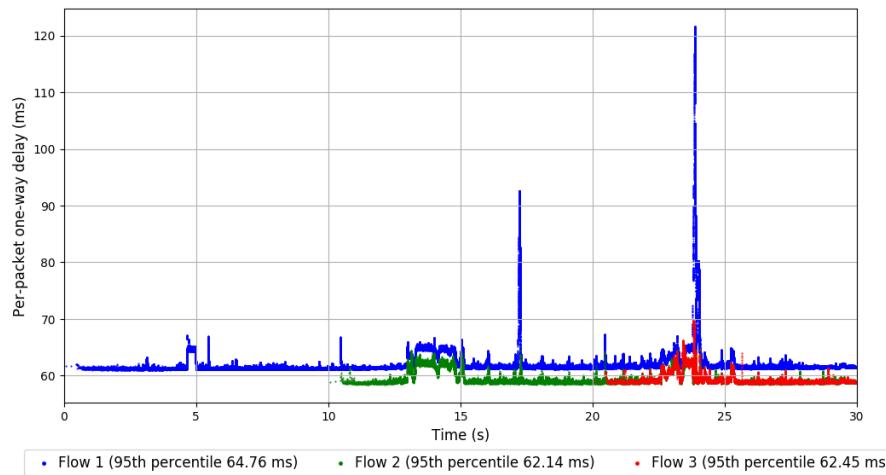
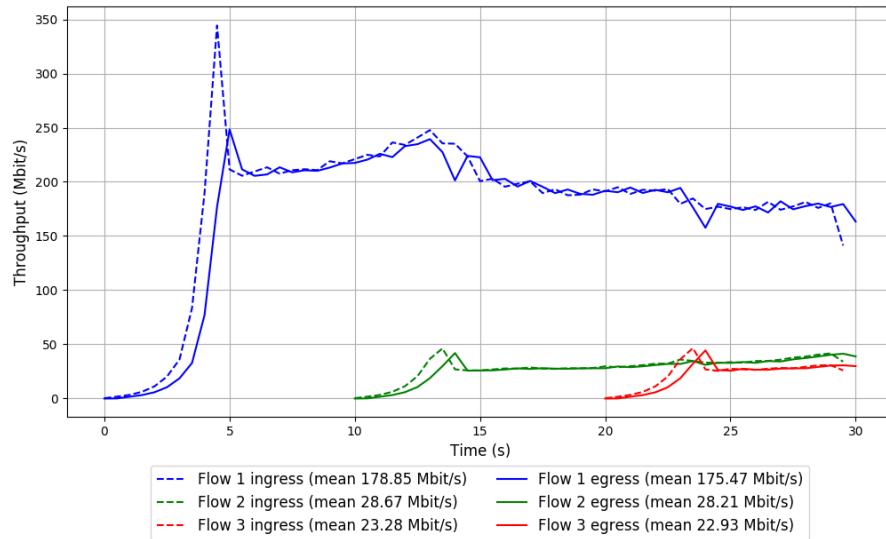


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-21 14:06:05
End at: 2019-01-21 14:06:35
Local clock offset: -3.394 ms
Remote clock offset: -42.113 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.81 Mbit/s
95th percentile per-packet one-way delay: 64.720 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 175.47 Mbit/s
95th percentile per-packet one-way delay: 64.762 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 28.21 Mbit/s
95th percentile per-packet one-way delay: 62.142 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 22.93 Mbit/s
95th percentile per-packet one-way delay: 62.447 ms
Loss rate: 1.50%
```

Run 5: Report of PCC-Vivace — Data Link

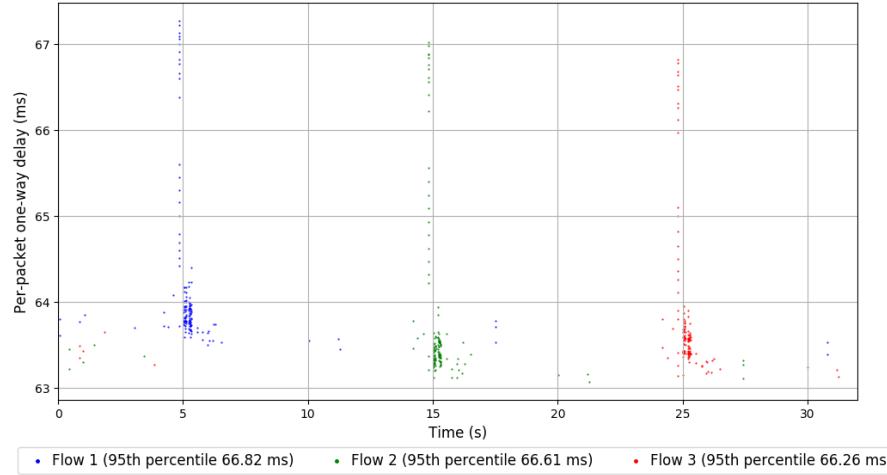
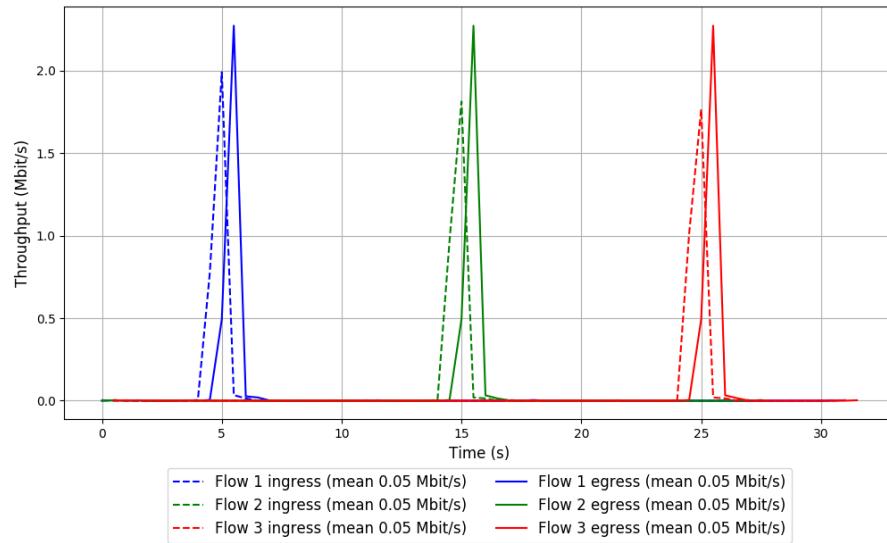


```
Run 1: Statistics of WebRTC media
```

```
Start at: 2019-01-21 11:07:54
End at: 2019-01-21 11:08:24
Local clock offset: -2.615 ms
Remote clock offset: -38.577 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 66.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.605 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.261 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

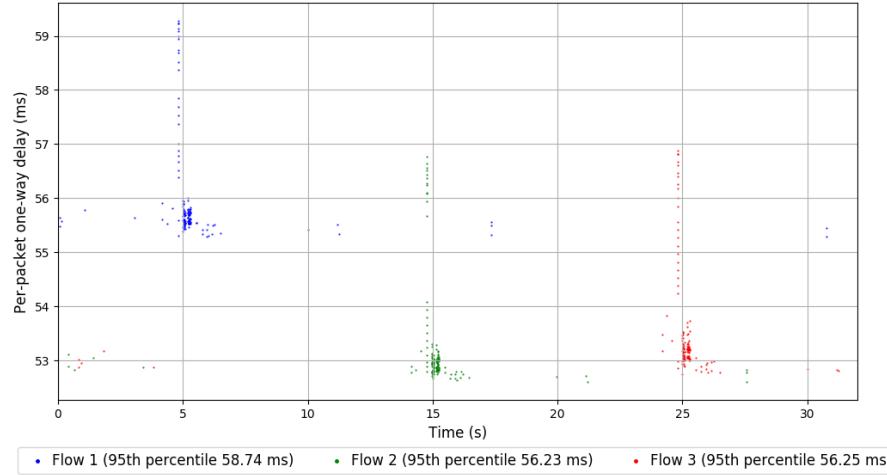
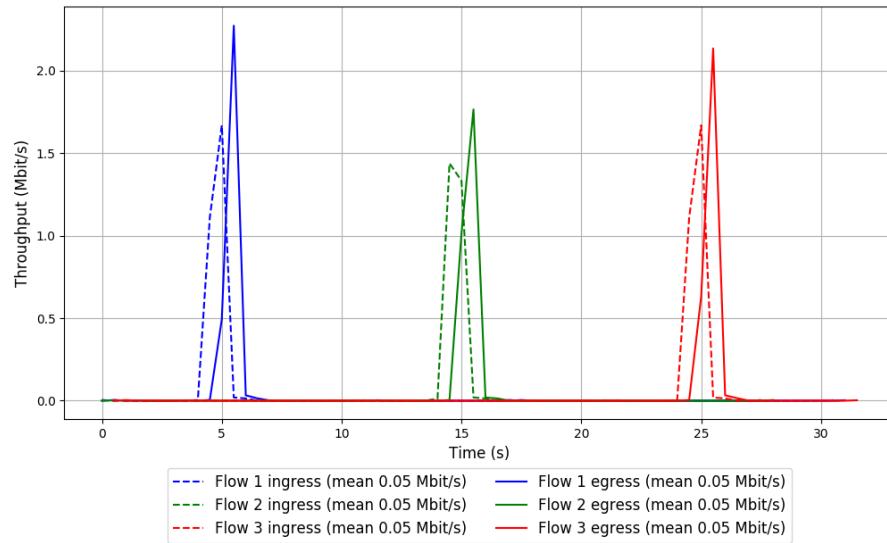


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-21 11:38:19
End at: 2019-01-21 11:38:49
Local clock offset: -1.945 ms
Remote clock offset: -46.076 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 56.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.745 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.233 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.252 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

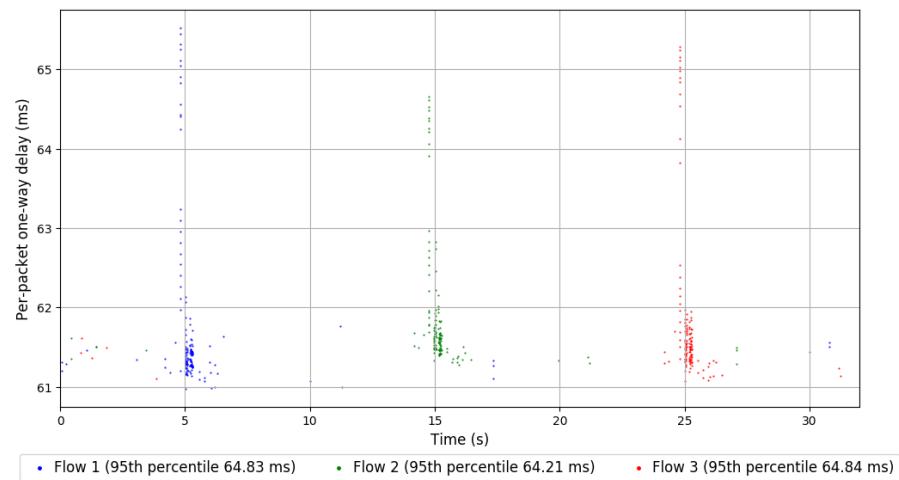
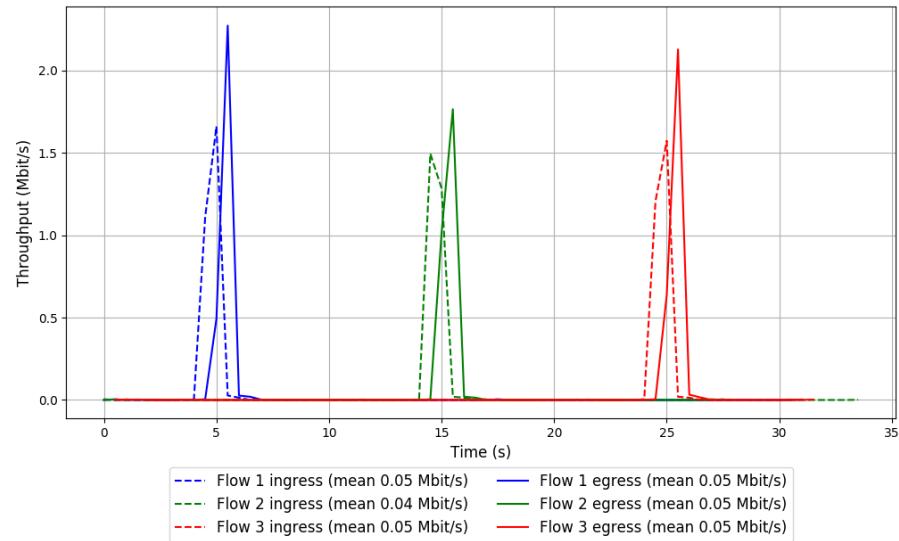


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-21 12:29:49
End at: 2019-01-21 12:30:19
Local clock offset: -0.002 ms
Remote clock offset: -37.712 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 64.482 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.845 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

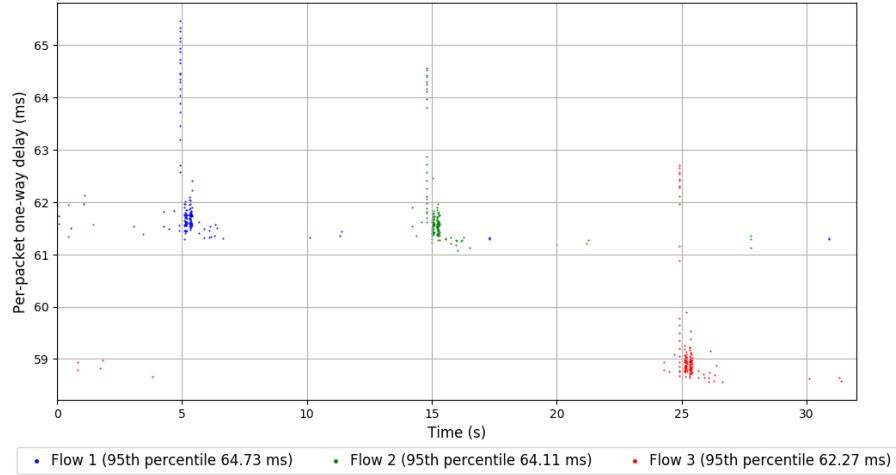
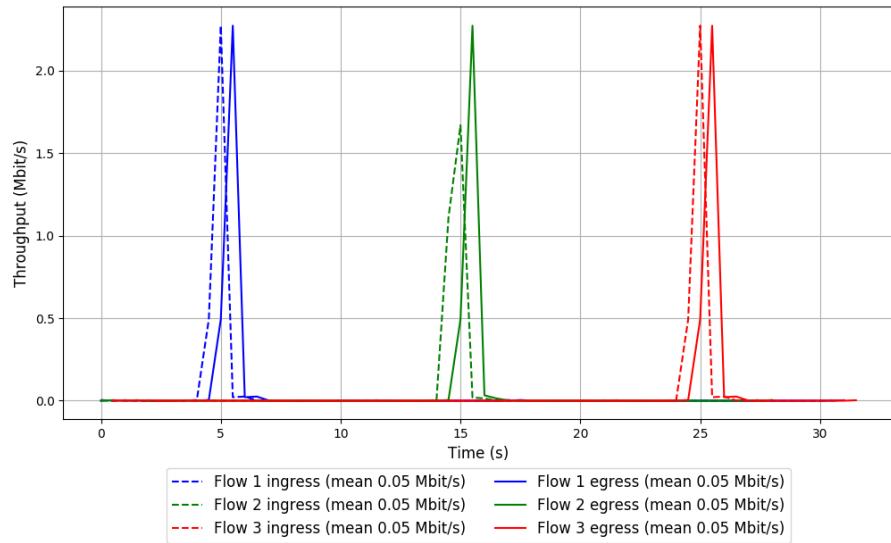


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-21 13:22:46
End at: 2019-01-21 13:23:16
Local clock offset: -0.885 ms
Remote clock offset: -40.285 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 64.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.114 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.269 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-21 13:53:12
End at: 2019-01-21 13:53:42
Local clock offset: -4.396 ms
Remote clock offset: -38.482 ms

# Below is generated by plot.py at 2019-01-21 14:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 67.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.202 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 66.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.662 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

