

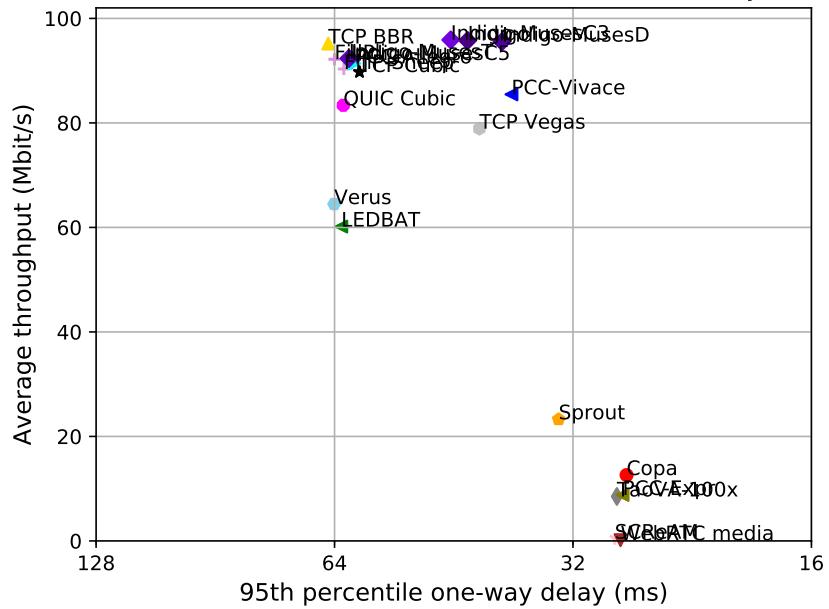
Pantheon Report

Generated at 2019-02-11 19:36:09 (UTC).
Data path: AWS California 2 on `ens5` (*local*) → Mexico on `em1` (*remote*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

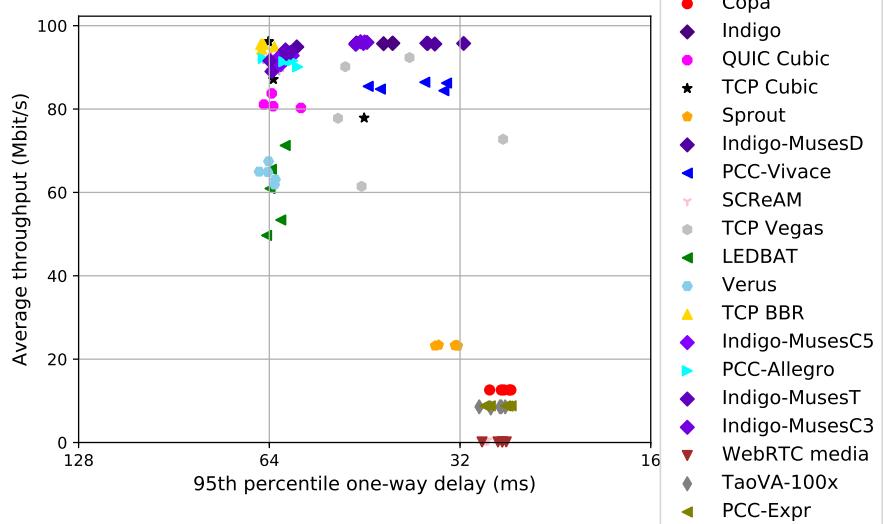
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

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

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



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



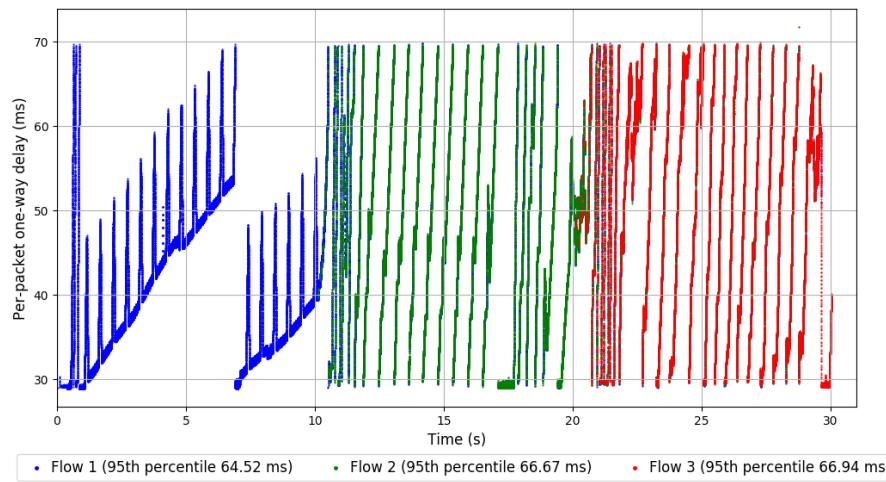
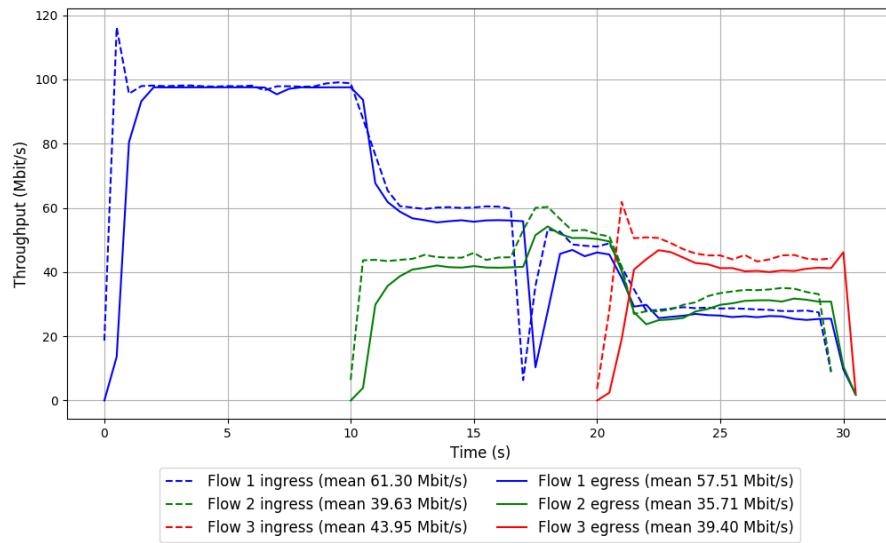
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	60.24	34.34	36.38	64.00	66.20	66.31	6.07	9.49	10.57
Copa	5	8.64	5.96	0.00	27.53	27.20	27.19	71.05	74.88	96.17
TCP Cubic	5	61.49	21.42	42.02	57.98	61.46	59.19	0.83	0.41	0.46
FillP	5	58.02	43.05	17.01	62.57	65.26	64.43	29.19	46.20	51.94
FillP-Sheep	5	58.03	38.76	19.68	60.56	63.96	62.75	9.15	16.91	16.89
Indigo	5	66.07	30.95	28.17	41.39	47.21	45.53	0.04	0.04	0.00
Indigo-MusesC3	5	53.49	49.35	34.22	42.14	45.62	53.30	0.24	0.43	1.51
Indigo-MusesC5	5	58.27	50.58	2.63	59.38	62.39	62.51	11.43	18.38	28.08
Indigo-MusesD	5	54.93	48.50	30.53	34.76	39.73	41.23	0.26	1.67	2.20
Indigo-MusesT	5	52.04	54.66	15.86	57.95	62.87	64.68	11.66	21.53	30.00
LEDBAT	5	39.23	25.32	12.92	61.86	64.07	62.80	0.13	0.38	0.29
PCC-Allegro	5	80.96	12.01	7.40	60.21	61.60	61.63	3.39	3.44	2.95
PCC-Expr	5	0.03	10.32	5.83	27.61	27.70	27.73	85.71	50.02	38.62
QUIC Cubic	5	57.41	28.13	22.10	61.95	62.68	63.36	2.35	0.90	1.15
SCReAM	5	0.21	0.21	0.22	28.32	28.33	28.35	0.00	0.00	0.00
Sprout	5	11.75	11.65	11.46	33.14	33.52	33.57	0.00	0.00	0.00
TaoVA-100x	5	0.00	9.36	6.85	27.26	28.40	27.90	95.92	84.80	46.89
TCP Vegas	5	45.36	31.44	37.87	37.85	42.51	39.59	0.97	1.01	0.57
Verus	5	39.81	27.22	22.87	63.47	64.23	71.60	29.01	39.93	42.26
PCC-Vivace	5	65.43	23.25	13.85	37.68	41.30	41.04	0.03	0.03	0.02
WebRTC media	5	0.05	0.05	0.05	27.77	27.84	27.96	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-02-11 17:17:33
End at: 2019-02-11 17:18:03
Local clock offset: -0.356 ms
Remote clock offset: -5.388 ms

# Below is generated by plot.py at 2019-02-11 19:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.38 Mbit/s
95th percentile per-packet one-way delay: 65.792 ms
Loss rate: 7.74%
-- Flow 1:
Average throughput: 57.51 Mbit/s
95th percentile per-packet one-way delay: 64.520 ms
Loss rate: 6.15%
-- Flow 2:
Average throughput: 35.71 Mbit/s
95th percentile per-packet one-way delay: 66.673 ms
Loss rate: 9.93%
-- Flow 3:
Average throughput: 39.40 Mbit/s
95th percentile per-packet one-way delay: 66.941 ms
Loss rate: 10.47%
```

Run 1: Report of TCP BBR — Data Link

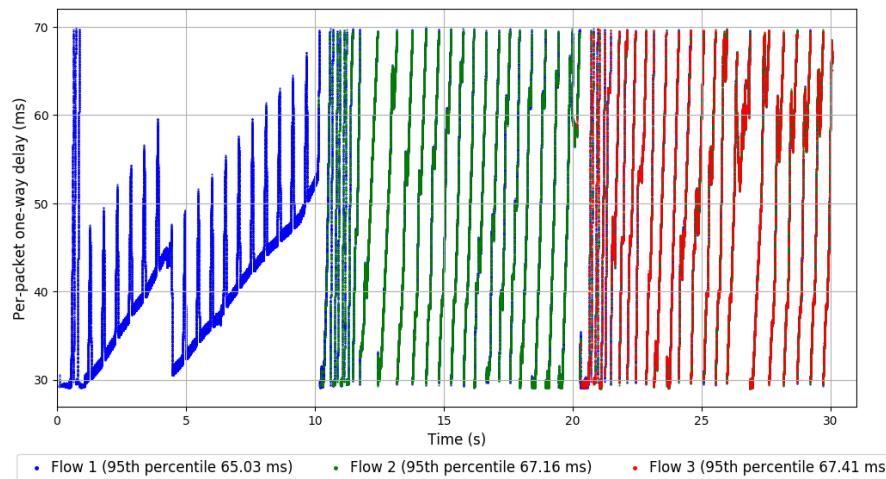
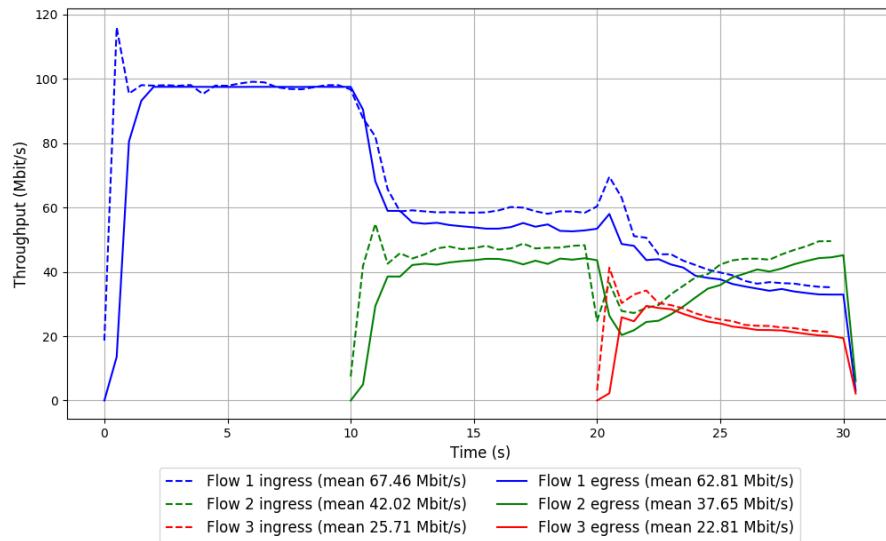


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-11 17:42:54
End at: 2019-02-11 17:43:24
Local clock offset: -1.16 ms
Remote clock offset: -4.349 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 66.043 ms
Loss rate: 8.11%
-- Flow 1:
Average throughput: 62.81 Mbit/s
95th percentile per-packet one-way delay: 65.026 ms
Loss rate: 6.79%
-- Flow 2:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 67.160 ms
Loss rate: 10.35%
-- Flow 3:
Average throughput: 22.81 Mbit/s
95th percentile per-packet one-way delay: 67.406 ms
Loss rate: 11.23%
```

Run 2: Report of TCP BBR — Data Link

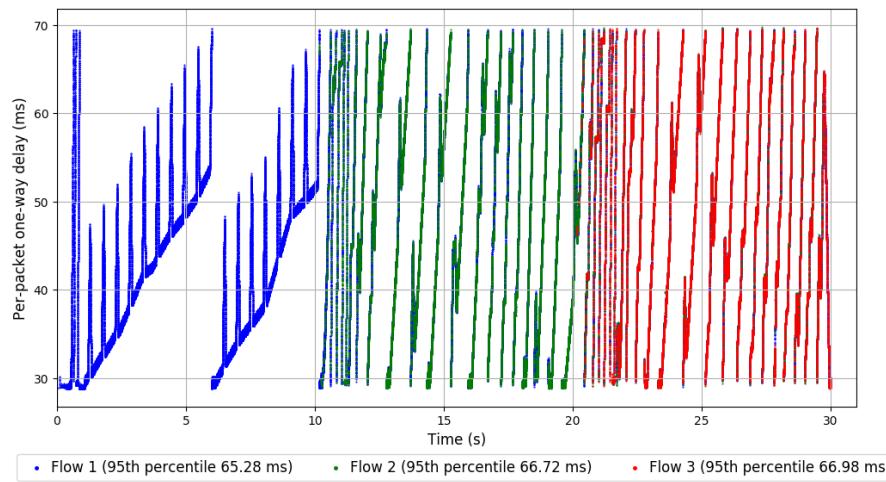
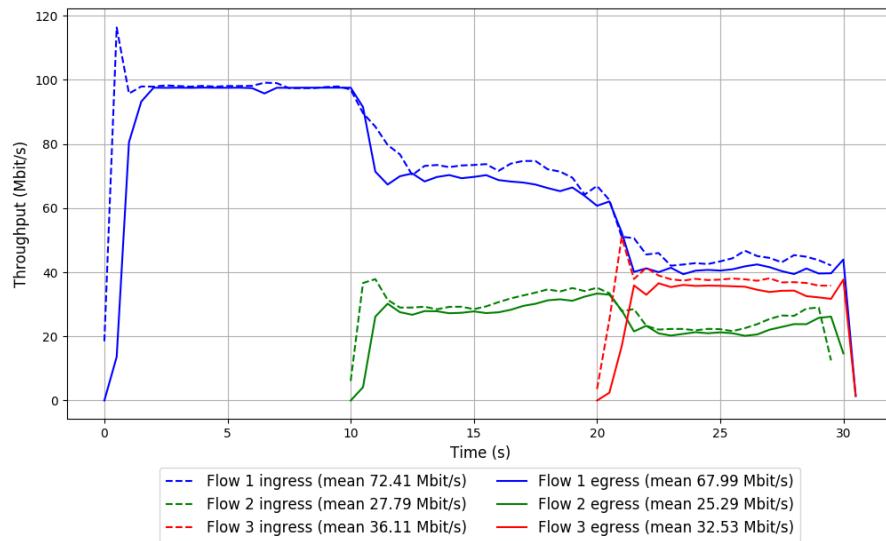


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-11 18:08:10
End at: 2019-02-11 18:08:40
Local clock offset: -1.711 ms
Remote clock offset: -3.987 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 65.822 ms
Loss rate: 7.11%
-- Flow 1:
Average throughput: 67.99 Mbit/s
95th percentile per-packet one-way delay: 65.282 ms
Loss rate: 6.11%
-- Flow 2:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 66.717 ms
Loss rate: 9.10%
-- Flow 3:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 66.985 ms
Loss rate: 10.09%
```

Run 3: Report of TCP BBR — Data Link

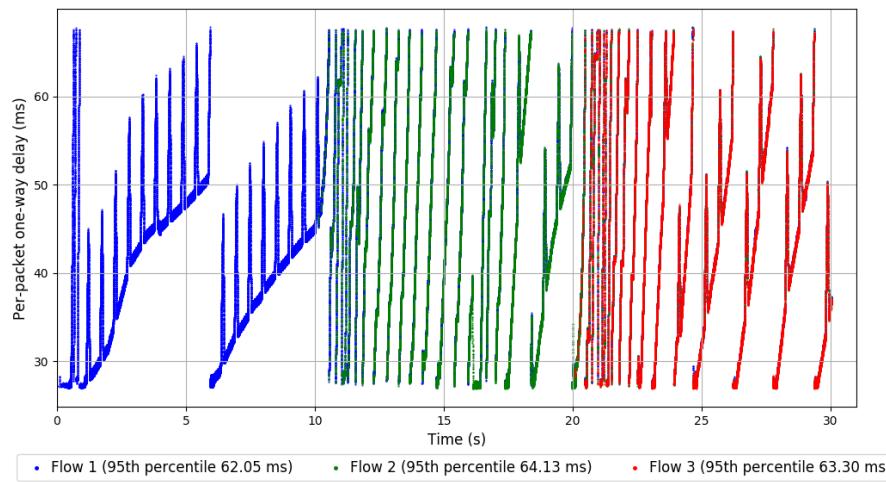
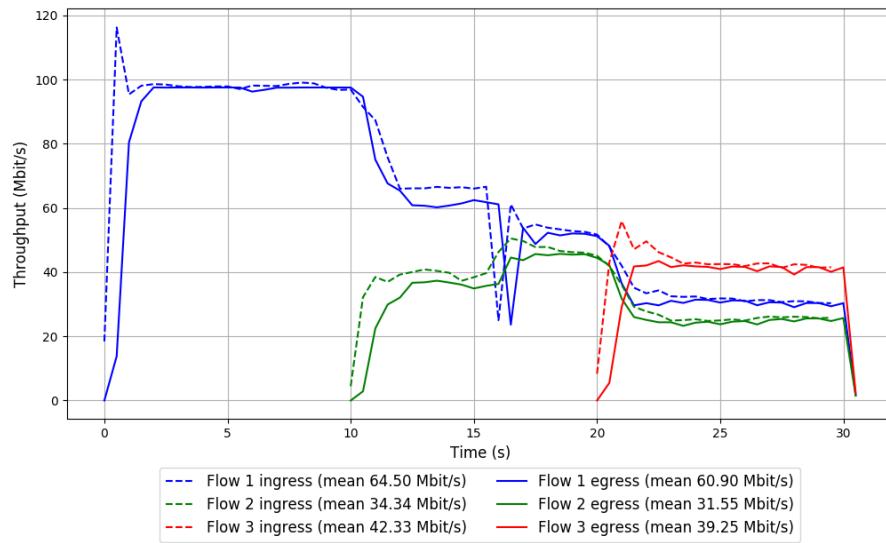


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-11 18:33:25
End at: 2019-02-11 18:33:55
Local clock offset: 0.751 ms
Remote clock offset: -5.055 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 62.837 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 60.90 Mbit/s
95th percentile per-packet one-way delay: 62.046 ms
Loss rate: 5.55%
-- Flow 2:
Average throughput: 31.55 Mbit/s
95th percentile per-packet one-way delay: 64.127 ms
Loss rate: 8.22%
-- Flow 3:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 63.296 ms
Loss rate: 7.19%
```

Run 4: Report of TCP BBR — Data Link

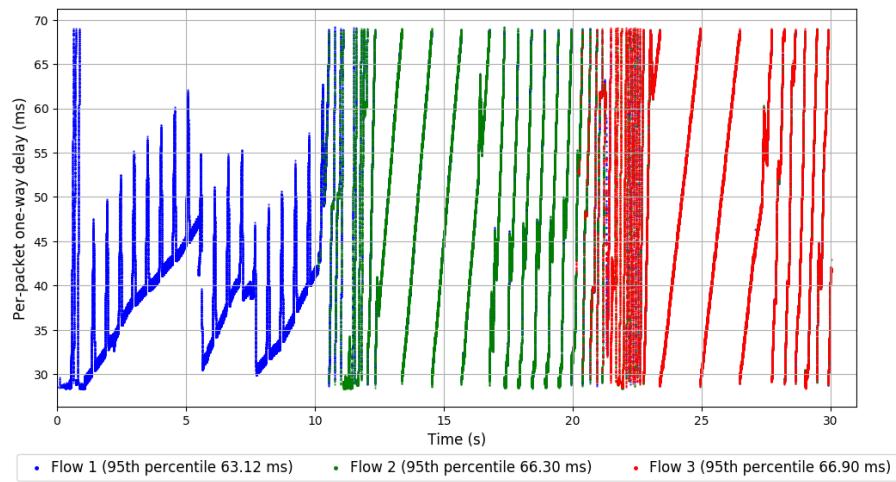
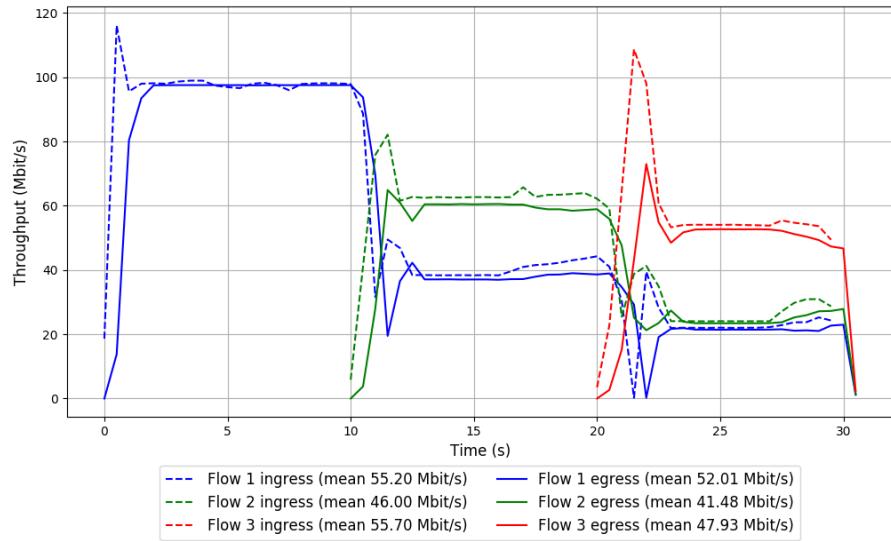


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-11 18:58:47
End at: 2019-02-11 18:59:17
Local clock offset: 0.965 ms
Remote clock offset: -3.023 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 65.391 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 52.01 Mbit/s
95th percentile per-packet one-way delay: 63.125 ms
Loss rate: 5.74%
-- Flow 2:
Average throughput: 41.48 Mbit/s
95th percentile per-packet one-way delay: 66.299 ms
Loss rate: 9.85%
-- Flow 3:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 66.902 ms
Loss rate: 13.87%
```

Run 5: Report of TCP BBR — Data Link

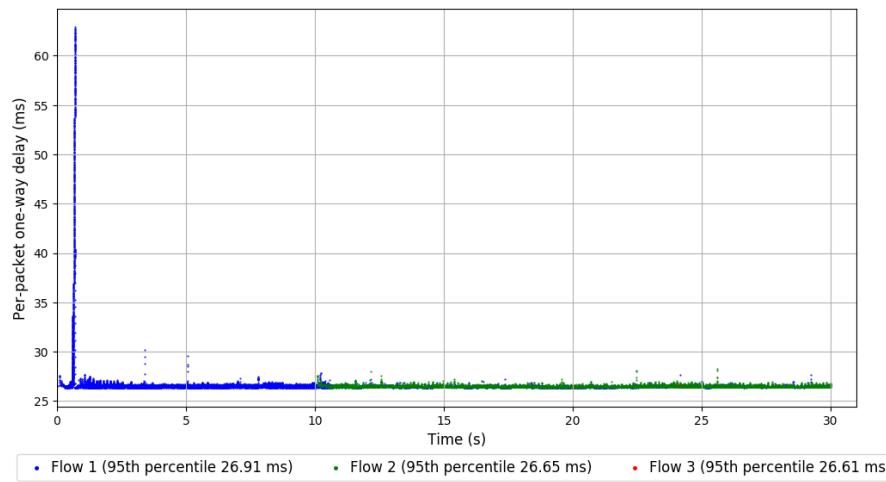
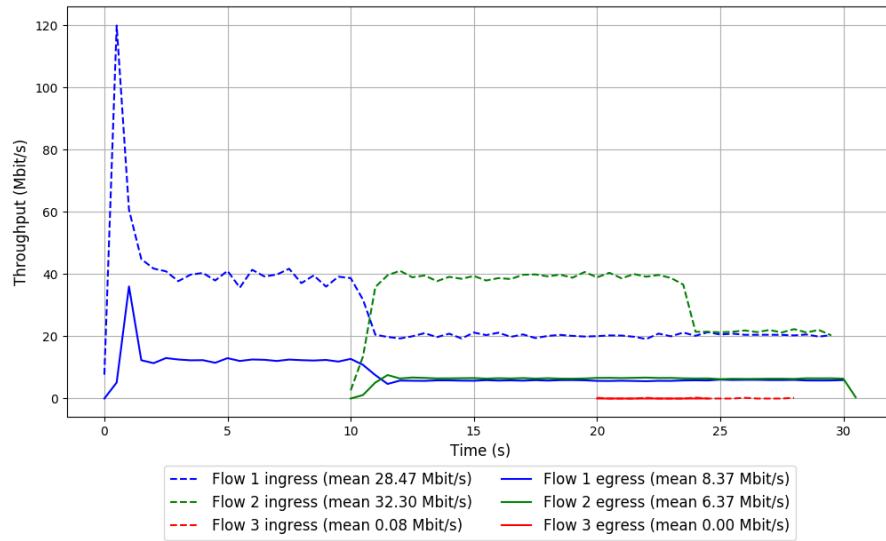


Run 1: Statistics of Copa

```
Start at: 2019-02-11 17:27:14
End at: 2019-02-11 17:27:44
Local clock offset: 1.138 ms
Remote clock offset: -7.707 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 26.761 ms
Loss rate: 74.77%
-- Flow 1:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 26.906 ms
Loss rate: 70.59%
-- Flow 2:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 26.652 ms
Loss rate: 80.28%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.615 ms
Loss rate: 97.92%
```

Run 1: Report of Copa — Data Link

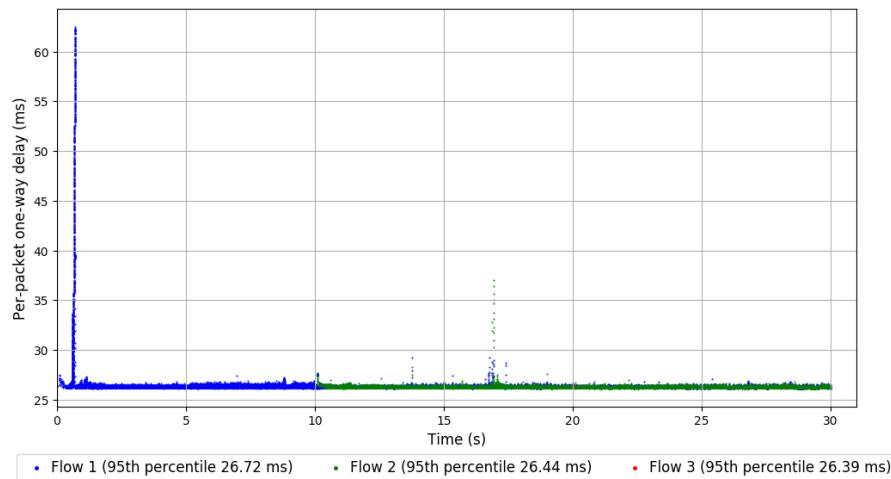
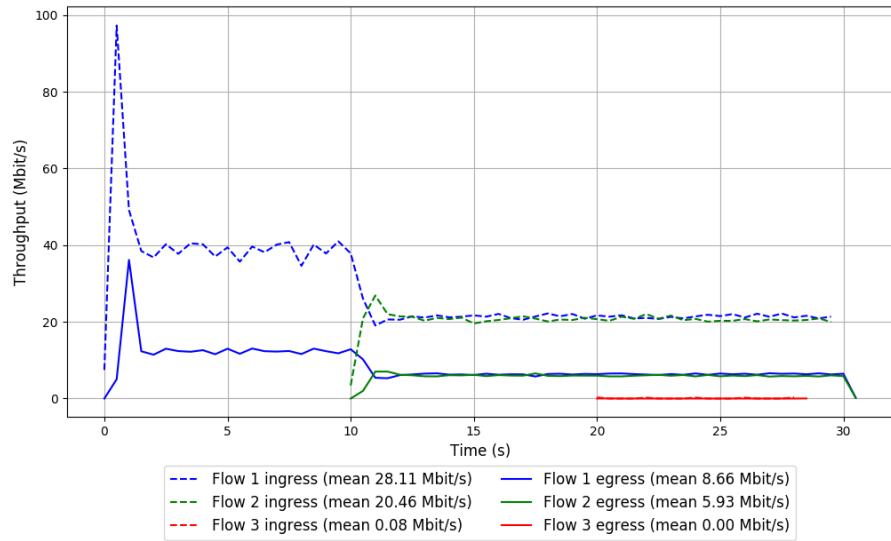


Run 2: Statistics of Copa

```
Start at: 2019-02-11 17:52:37
End at: 2019-02-11 17:53:07
Local clock offset: -2.357 ms
Remote clock offset: -6.971 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 26.601 ms
Loss rate: 69.81%
-- Flow 1:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 26.720 ms
Loss rate: 69.21%
-- Flow 2:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 26.443 ms
Loss rate: 71.01%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.390 ms
Loss rate: 96.14%
```

Run 2: Report of Copa — Data Link

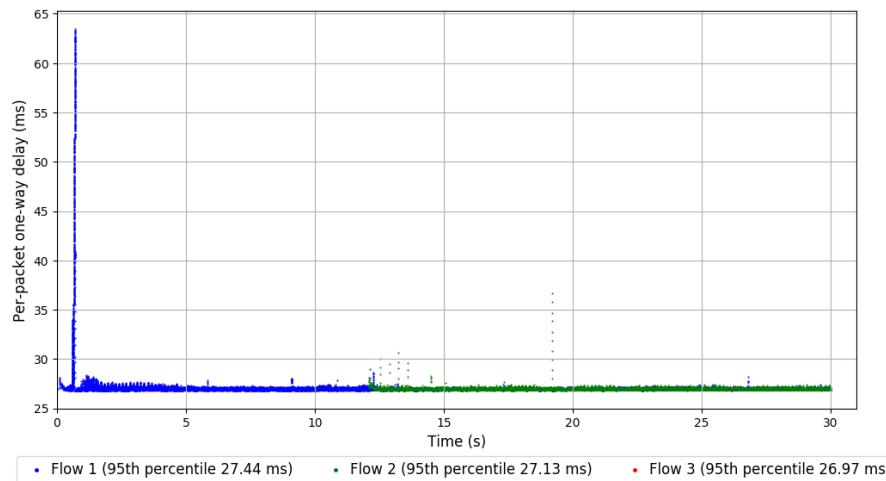
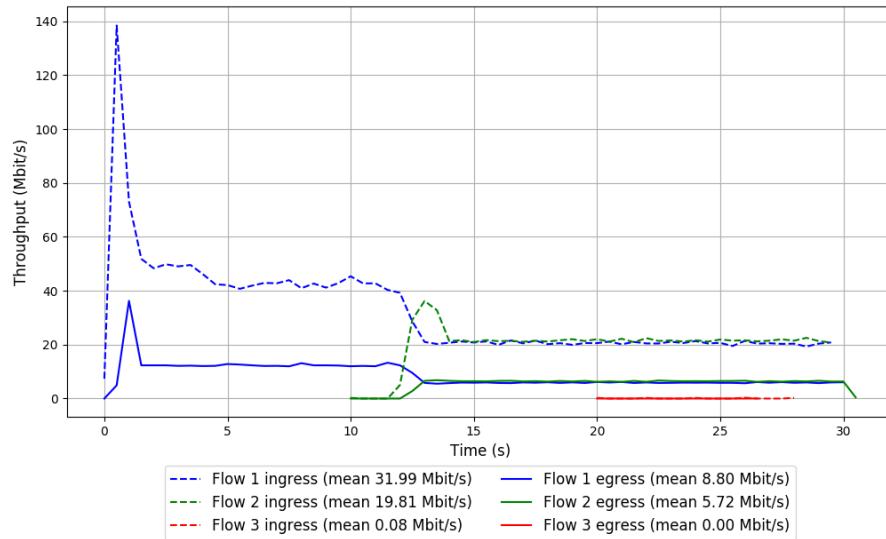


Run 3: Statistics of Copa

```
Start at: 2019-02-11 18:17:53
End at: 2019-02-11 18:18:23
Local clock offset: -0.261 ms
Remote clock offset: -5.662 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 27.277 ms
Loss rate: 72.10%
-- Flow 1:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 27.437 ms
Loss rate: 72.48%
-- Flow 2:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 27.128 ms
Loss rate: 71.13%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.971 ms
Loss rate: 97.96%
```

Run 3: Report of Copa — Data Link

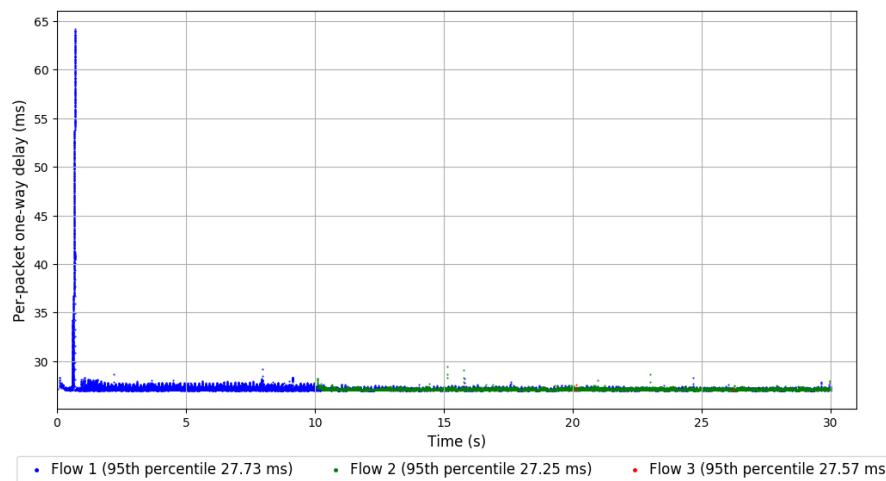
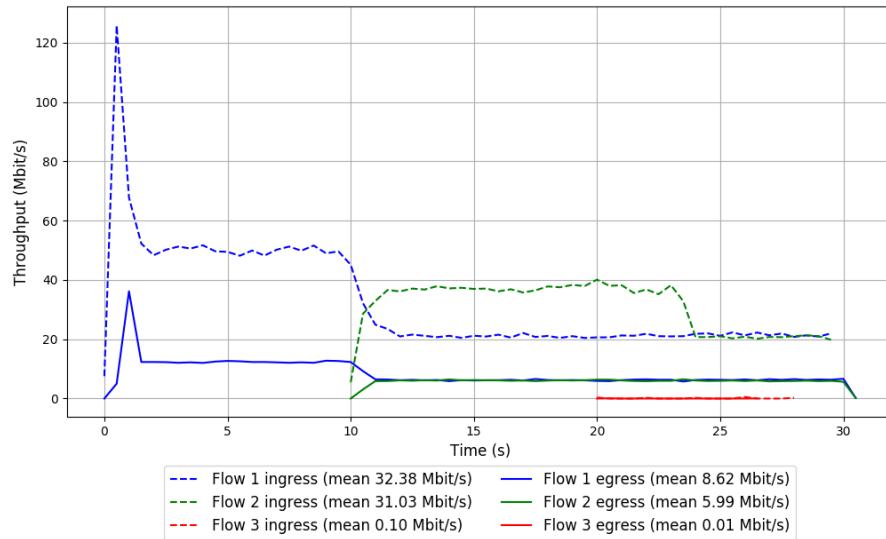


Run 4: Statistics of Copa

```
Start at: 2019-02-11 18:43:10
End at: 2019-02-11 18:43:40
Local clock offset: 0.704 ms
Remote clock offset: -4.597 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 27.549 ms
Loss rate: 76.24%
-- Flow 1:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 27.733 ms
Loss rate: 73.38%
-- Flow 2:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 27.248 ms
Loss rate: 80.70%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 27.565 ms
Loss rate: 92.31%
```

Run 4: Report of Copa — Data Link

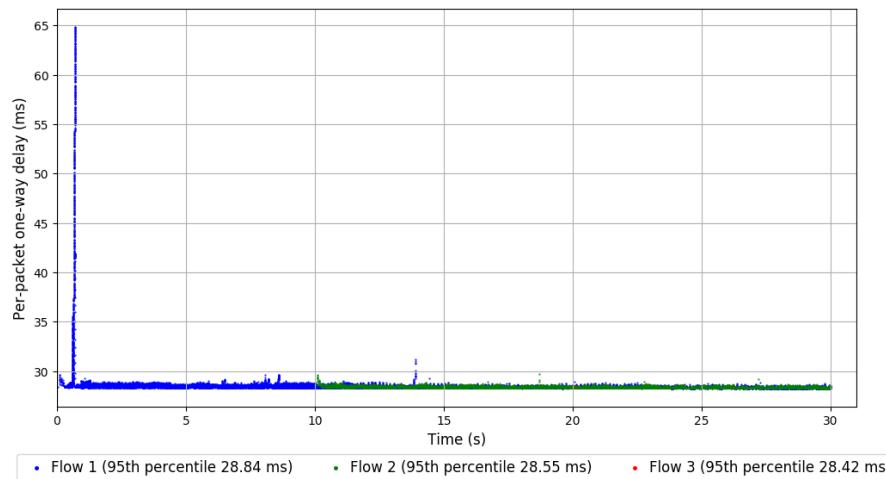
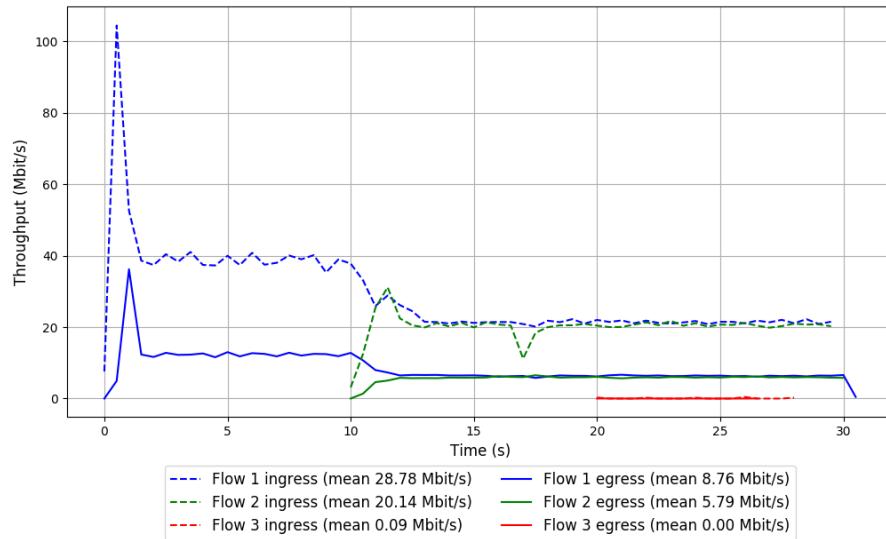


Run 5: Statistics of Copa

```
Start at: 2019-02-11 19:08:30
End at: 2019-02-11 19:09:00
Local clock offset: -0.47 ms
Remote clock offset: -3.021 ms

# Below is generated by plot.py at 2019-02-11 19:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 28.737 ms
Loss rate: 70.13%
-- Flow 1:
Average throughput: 8.76 Mbit/s
95th percentile per-packet one-way delay: 28.837 ms
Loss rate: 69.57%
-- Flow 2:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 28.550 ms
Loss rate: 71.27%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 28.419 ms
Loss rate: 96.53%
```

Run 5: Report of Copa — Data Link

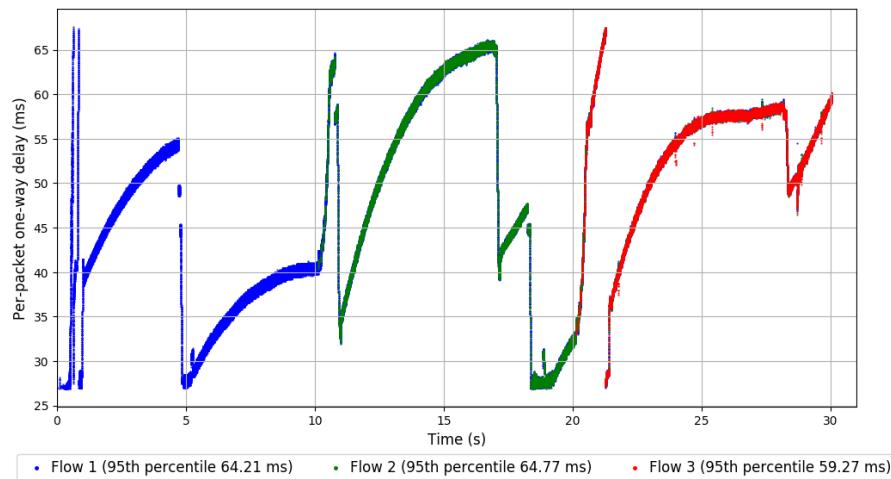
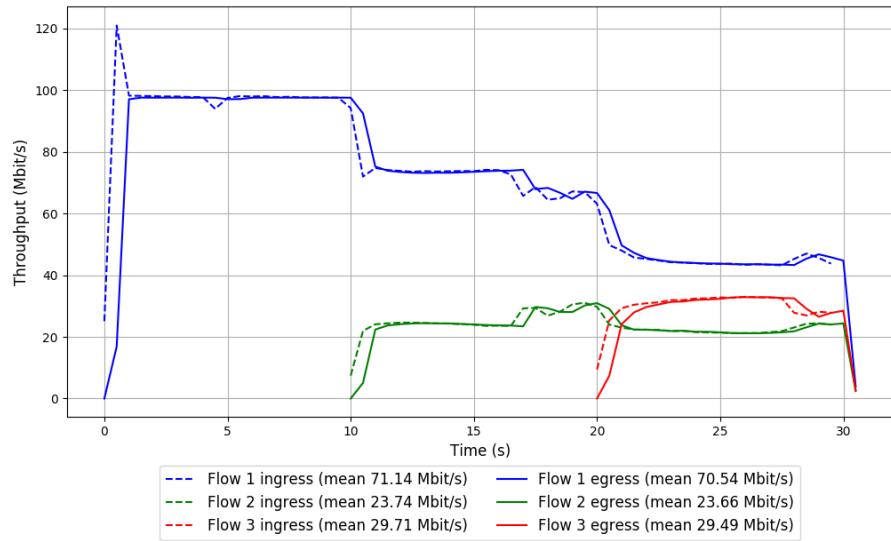


```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-11 17:21:13
End at: 2019-02-11 17:21:43
Local clock offset: 0.329 ms
Remote clock offset: -7.427 ms

# Below is generated by plot.py at 2019-02-11 19:26:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 64.212 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 70.54 Mbit/s
95th percentile per-packet one-way delay: 64.209 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 64.773 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 59.275 ms
Loss rate: 0.47%
```

Run 1: Report of TCP Cubic — Data Link

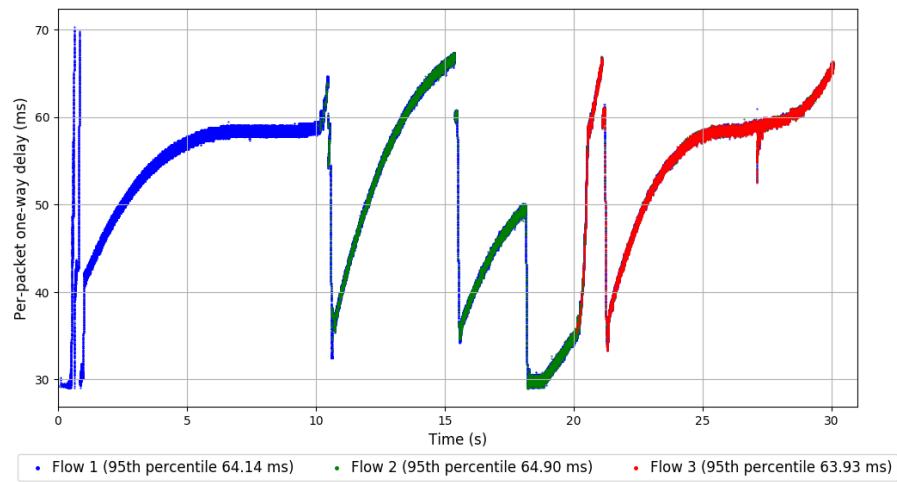
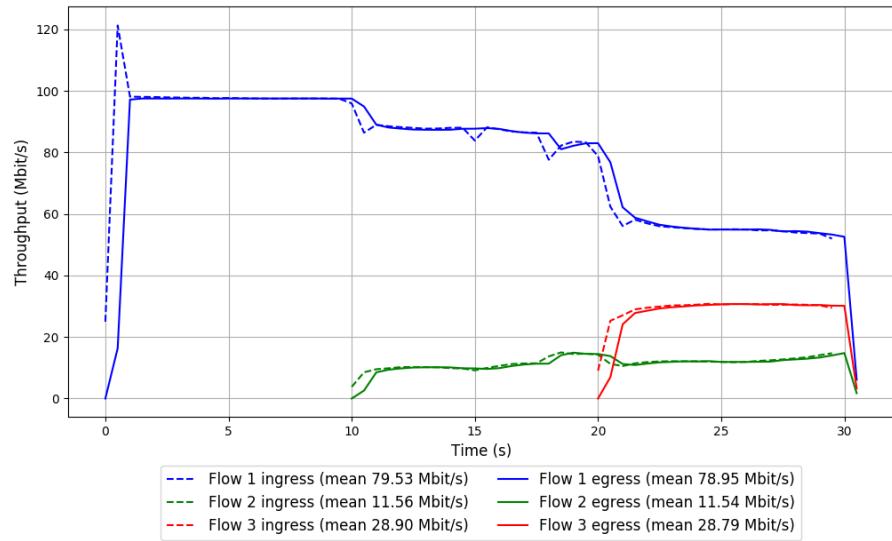


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-11 17:46:34
End at: 2019-02-11 17:47:04
Local clock offset: -1.697 ms
Remote clock offset: -4.279 ms

# Below is generated by plot.py at 2019-02-11 19:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.22 Mbit/s
95th percentile per-packet one-way delay: 64.172 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 78.95 Mbit/s
95th percentile per-packet one-way delay: 64.136 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 64.903 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 28.79 Mbit/s
95th percentile per-packet one-way delay: 63.933 ms
Loss rate: 0.07%
```

Run 2: Report of TCP Cubic — Data Link

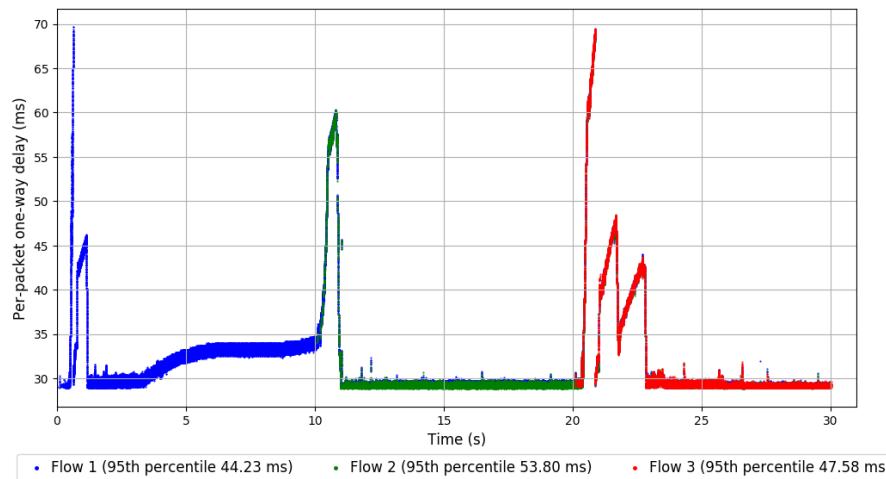
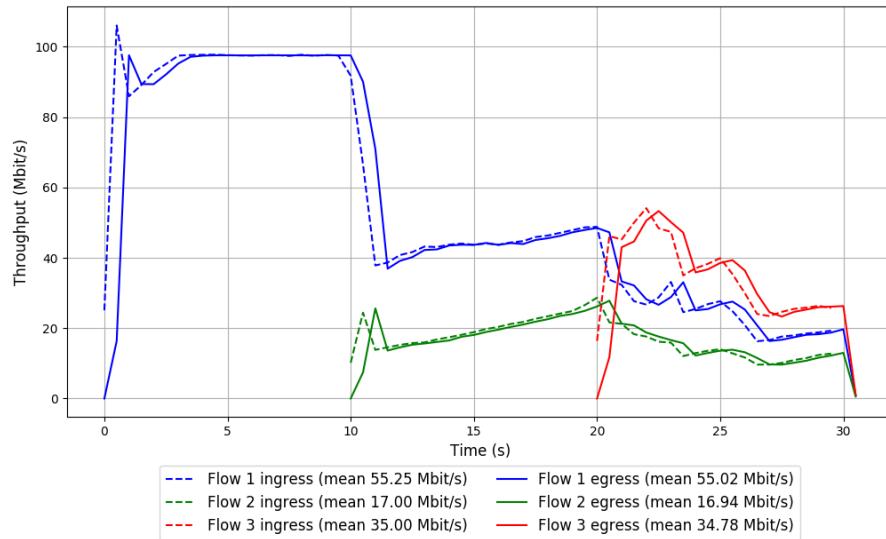


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:11:51
End at: 2019-02-11 18:12:21
Local clock offset: -1.042 ms
Remote clock offset: -3.834 ms

# Below is generated by plot.py at 2019-02-11 19:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 45.335 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 55.02 Mbit/s
95th percentile per-packet one-way delay: 44.234 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 16.94 Mbit/s
95th percentile per-packet one-way delay: 53.803 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 47.583 ms
Loss rate: 0.61%
```

Run 3: Report of TCP Cubic — Data Link

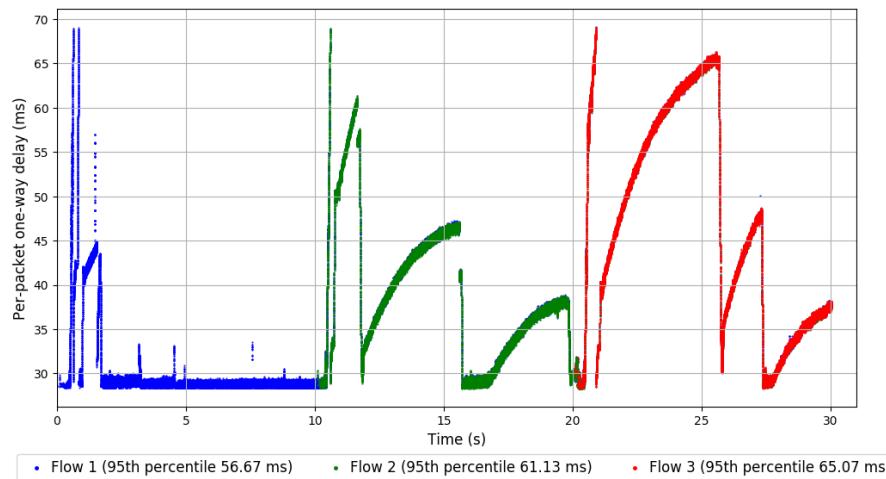
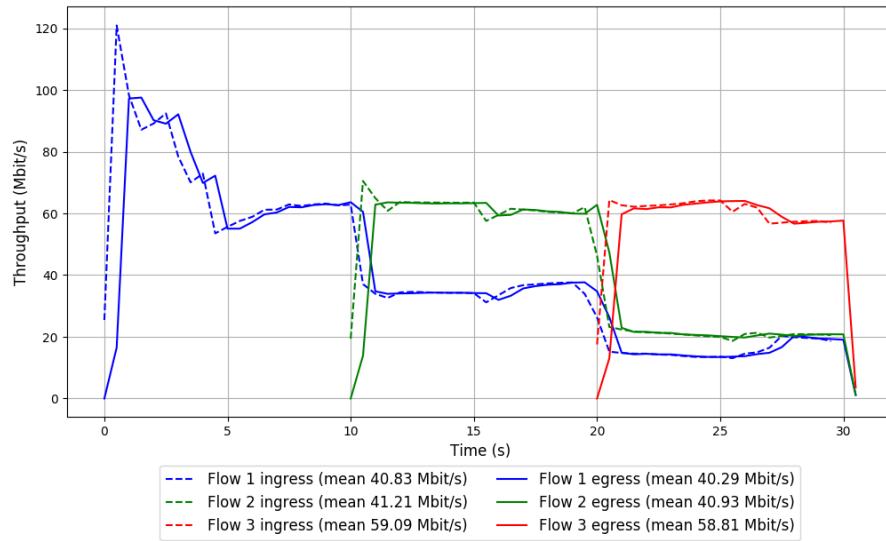


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:37:06
End at: 2019-02-11 18:37:36
Local clock offset: 0.731 ms
Remote clock offset: -3.461 ms

# Below is generated by plot.py at 2019-02-11 19:27:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.13 Mbit/s
95th percentile per-packet one-way delay: 63.054 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 56.670 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 40.93 Mbit/s
95th percentile per-packet one-way delay: 61.135 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 58.81 Mbit/s
95th percentile per-packet one-way delay: 65.067 ms
Loss rate: 0.40%
```

Run 4: Report of TCP Cubic — Data Link

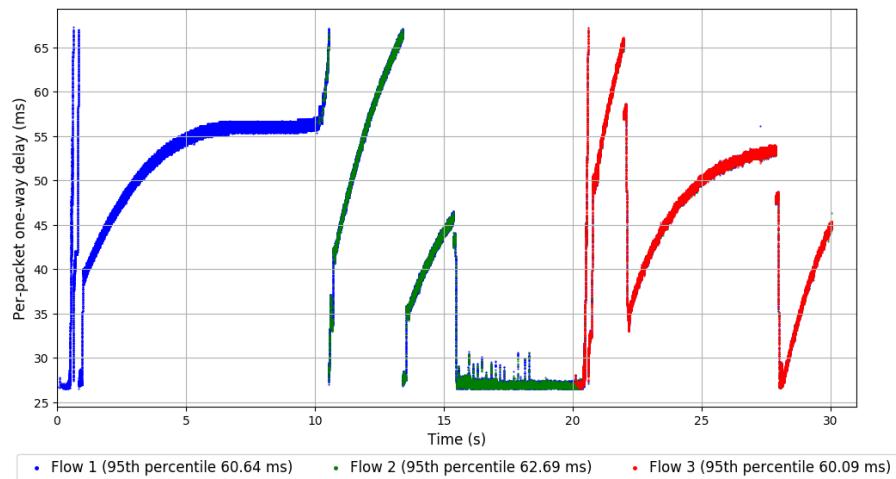
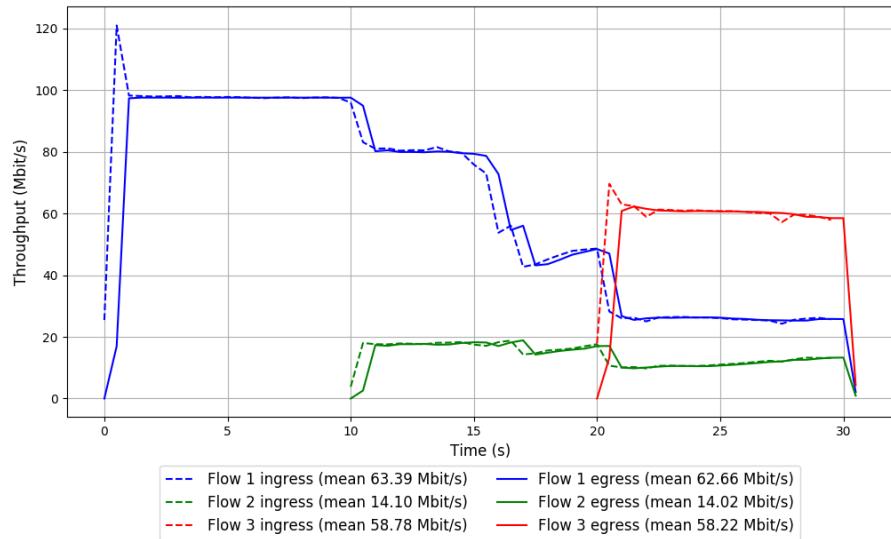


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-11 19:02:28
End at: 2019-02-11 19:02:58
Local clock offset: 1.068 ms
Remote clock offset: -4.874 ms

# Below is generated by plot.py at 2019-02-11 19:27:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.36 Mbit/s
95th percentile per-packet one-way delay: 60.848 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 62.66 Mbit/s
95th percentile per-packet one-way delay: 60.639 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 14.02 Mbit/s
95th percentile per-packet one-way delay: 62.692 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 58.22 Mbit/s
95th percentile per-packet one-way delay: 60.089 ms
Loss rate: 0.76%
```

Run 5: Report of TCP Cubic — Data Link

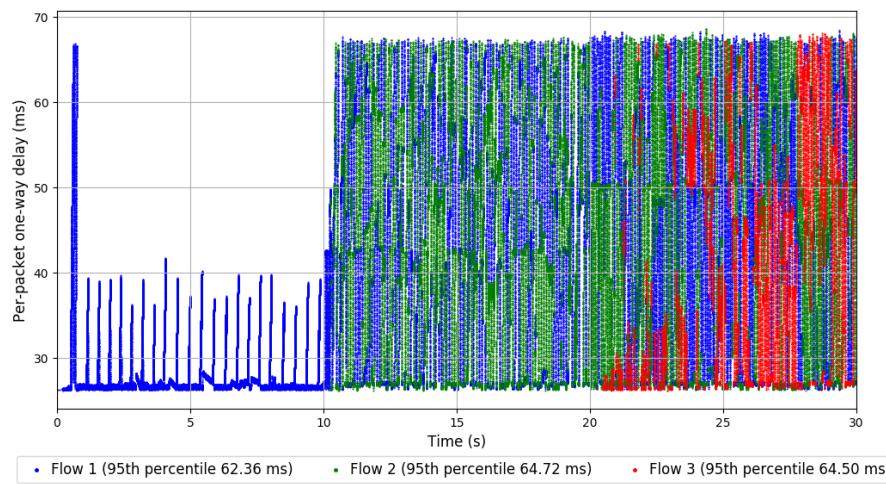
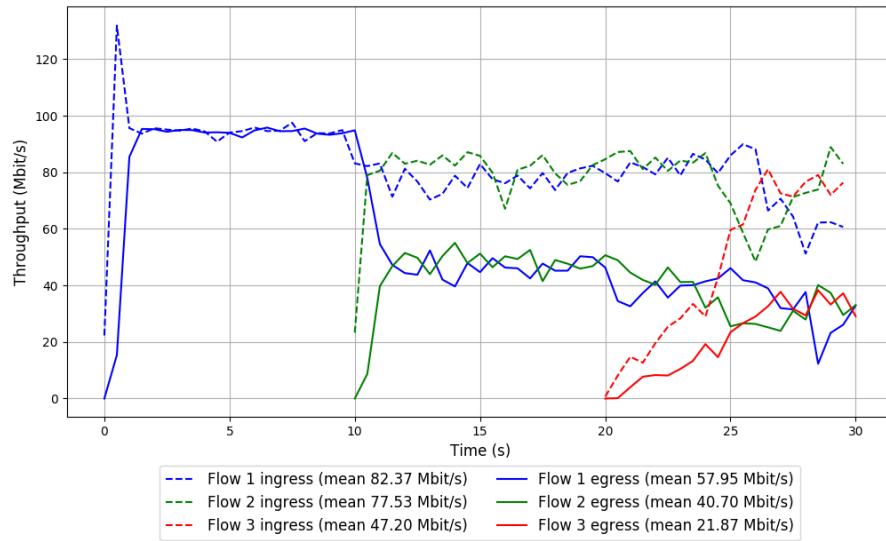


```
Run 1: Statistics of FillP

Start at: 2019-02-11 17:33:18
End at: 2019-02-11 17:33:48
Local clock offset: 1.704 ms
Remote clock offset: -7.602 ms

# Below is generated by plot.py at 2019-02-11 19:27:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 63.690 ms
Loss rate: 38.29%
-- Flow 1:
Average throughput: 57.95 Mbit/s
95th percentile per-packet one-way delay: 62.361 ms
Loss rate: 29.57%
-- Flow 2:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 64.717 ms
Loss rate: 47.51%
-- Flow 3:
Average throughput: 21.87 Mbit/s
95th percentile per-packet one-way delay: 64.496 ms
Loss rate: 53.73%
```

Run 1: Report of FillP — Data Link

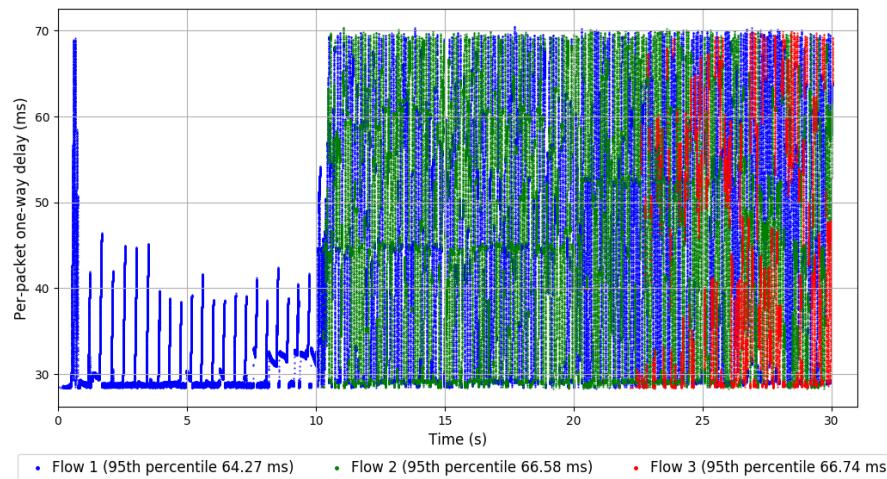
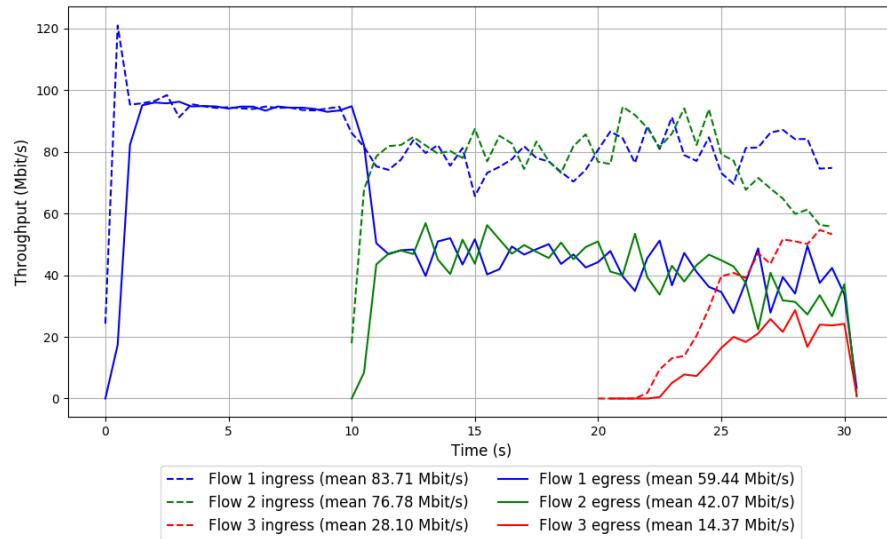


Run 2: Statistics of FillP

```
Start at: 2019-02-11 17:58:35
End at: 2019-02-11 17:59:05
Local clock offset: -2.642 ms
Remote clock offset: -4.455 ms

# Below is generated by plot.py at 2019-02-11 19:27:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 65.399 ms
Loss rate: 36.13%
-- Flow 1:
Average throughput: 59.44 Mbit/s
95th percentile per-packet one-way delay: 64.266 ms
Loss rate: 28.91%
-- Flow 2:
Average throughput: 42.07 Mbit/s
95th percentile per-packet one-way delay: 66.575 ms
Loss rate: 45.22%
-- Flow 3:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 66.739 ms
Loss rate: 51.00%
```

Run 2: Report of FillP — Data Link

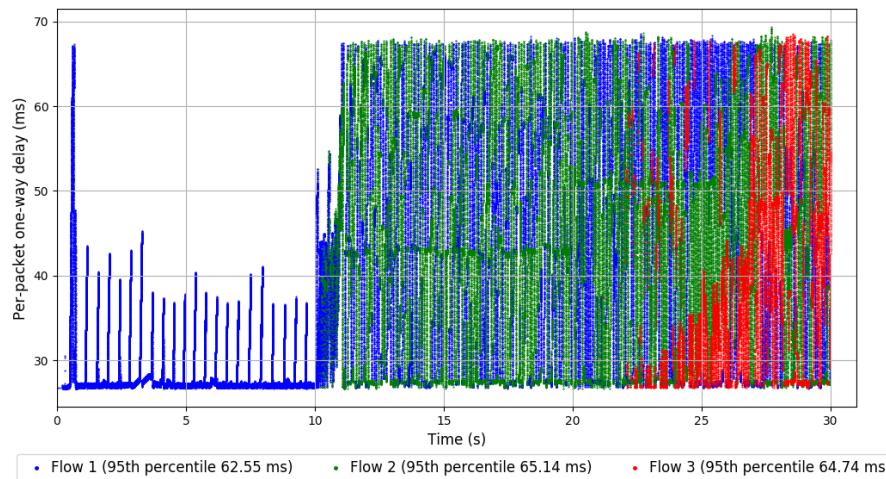
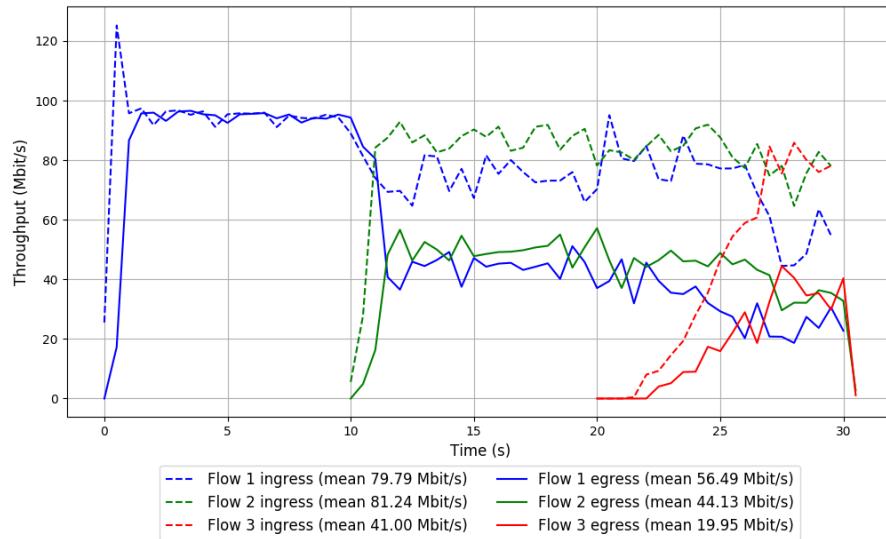


Run 3: Statistics of FillP

```
Start at: 2019-02-11 18:23:51
End at: 2019-02-11 18:24:21
Local clock offset: 0.216 ms
Remote clock offset: -5.557 ms

# Below is generated by plot.py at 2019-02-11 19:27:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 64.014 ms
Loss rate: 37.36%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 62.551 ms
Loss rate: 29.20%
-- Flow 2:
Average throughput: 44.13 Mbit/s
95th percentile per-packet one-way delay: 65.144 ms
Loss rate: 45.61%
-- Flow 3:
Average throughput: 19.95 Mbit/s
95th percentile per-packet one-way delay: 64.743 ms
Loss rate: 52.36%
```

Run 3: Report of FillP — Data Link

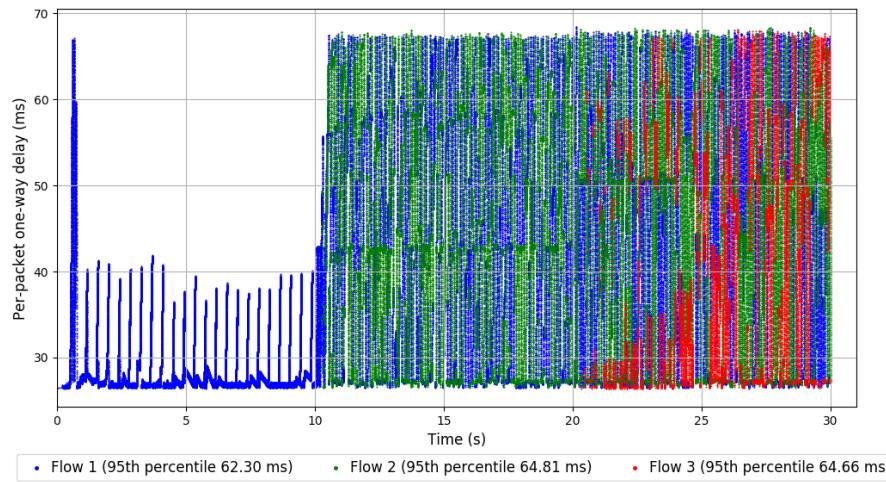
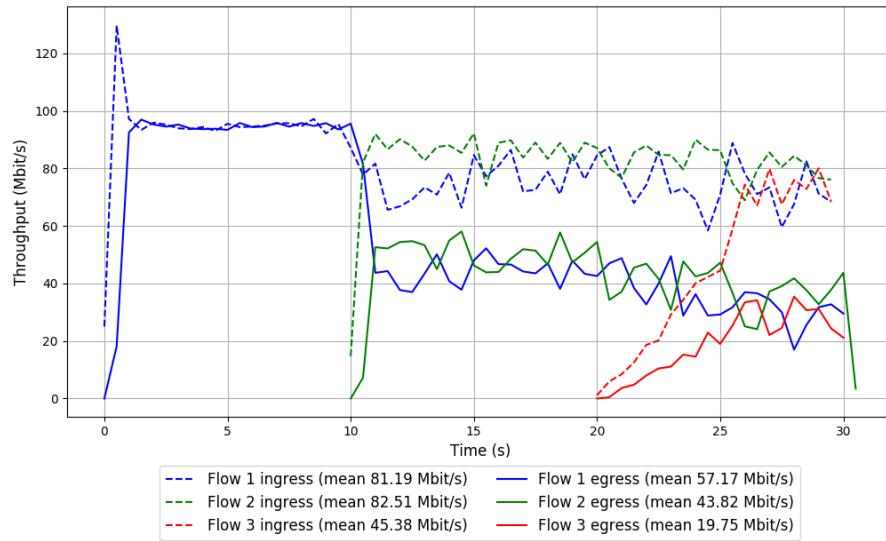


Run 4: Statistics of FillP

```
Start at: 2019-02-11 18:49:11
End at: 2019-02-11 18:49:41
Local clock offset: 0.766 ms
Remote clock offset: -4.853 ms

# Below is generated by plot.py at 2019-02-11 19:27:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 38.58%
-- Flow 1:
Average throughput: 57.17 Mbit/s
95th percentile per-packet one-way delay: 62.299 ms
Loss rate: 29.68%
-- Flow 2:
Average throughput: 43.82 Mbit/s
95th percentile per-packet one-way delay: 64.808 ms
Loss rate: 46.82%
-- Flow 3:
Average throughput: 19.75 Mbit/s
95th percentile per-packet one-way delay: 64.664 ms
Loss rate: 56.48%
```

Run 4: Report of FillP — Data Link

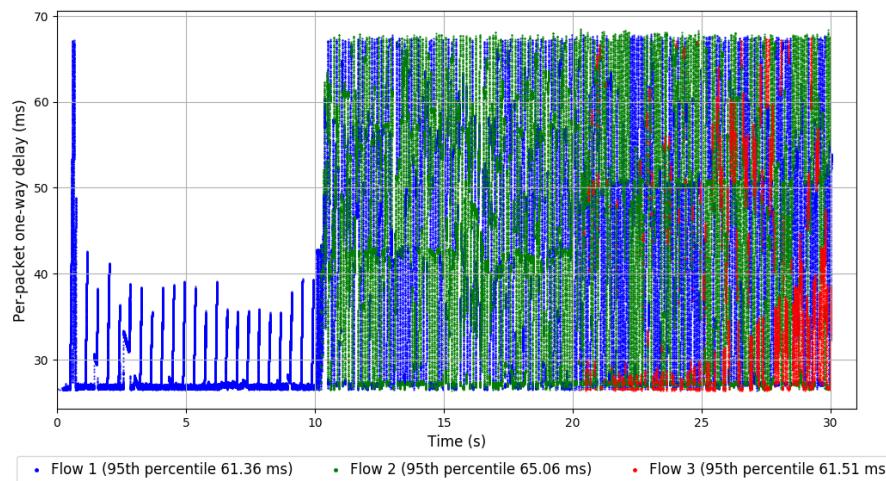
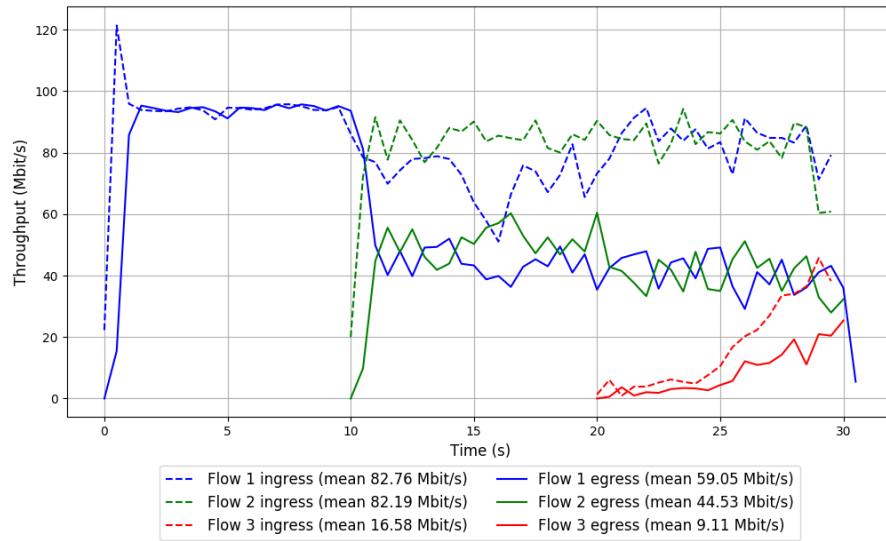


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-11 19:14:29
End at: 2019-02-11 19:14:59
Local clock offset: -1.733 ms
Remote clock offset: -5.052 ms

# Below is generated by plot.py at 2019-02-11 19:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.61 Mbit/s
95th percentile per-packet one-way delay: 63.376 ms
Loss rate: 35.86%
-- Flow 1:
Average throughput: 59.05 Mbit/s
95th percentile per-packet one-way delay: 61.360 ms
Loss rate: 28.59%
-- Flow 2:
Average throughput: 44.53 Mbit/s
95th percentile per-packet one-way delay: 65.061 ms
Loss rate: 45.82%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 61.508 ms
Loss rate: 46.15%
```

Run 5: Report of FillP — Data Link

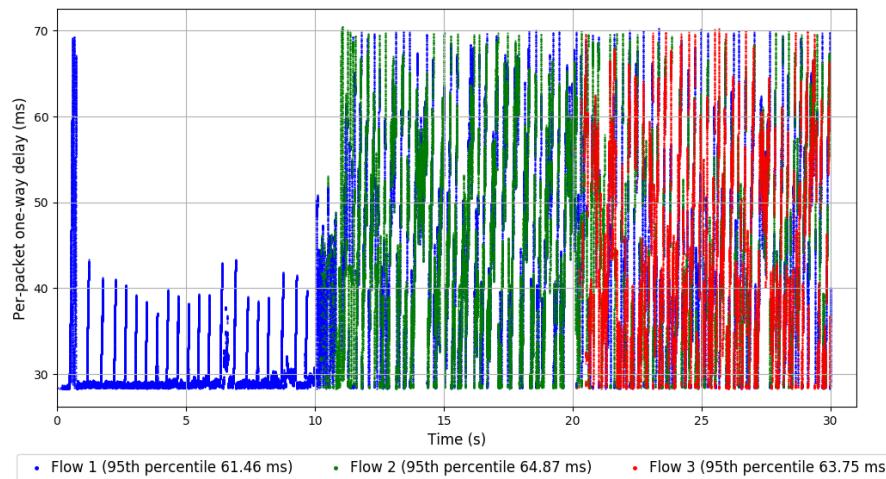
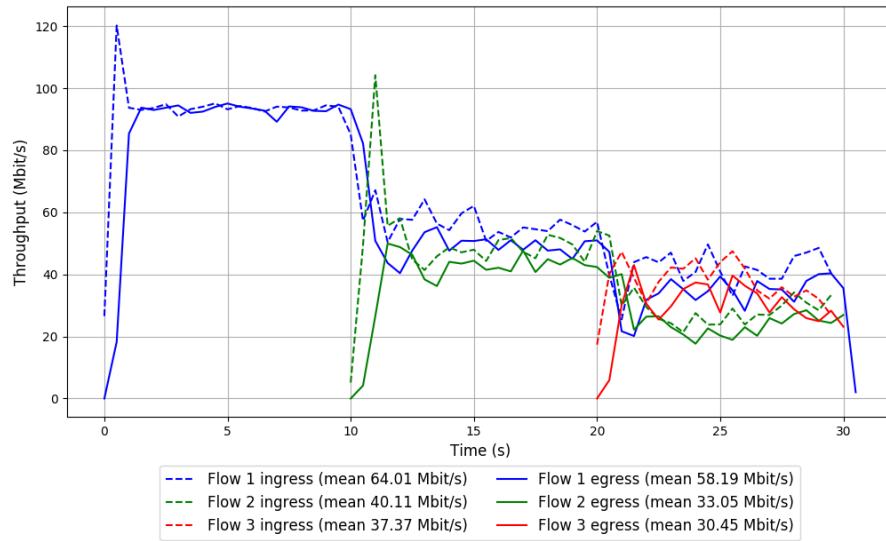


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-11 17:29:37
End at: 2019-02-11 17:30:07
Local clock offset: 1.382 ms
Remote clock offset: -5.541 ms

# Below is generated by plot.py at 2019-02-11 19:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.20 Mbit/s
95th percentile per-packet one-way delay: 63.059 ms
Loss rate: 12.44%
-- Flow 1:
Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 61.461 ms
Loss rate: 9.07%
-- Flow 2:
Average throughput: 33.05 Mbit/s
95th percentile per-packet one-way delay: 64.869 ms
Loss rate: 17.60%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 63.746 ms
Loss rate: 18.75%
```

Run 1: Report of FillP-Sheep — Data Link

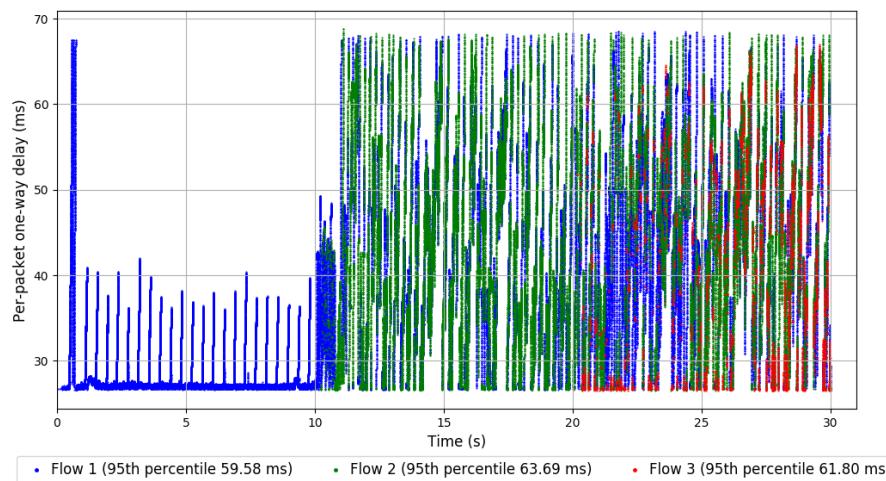
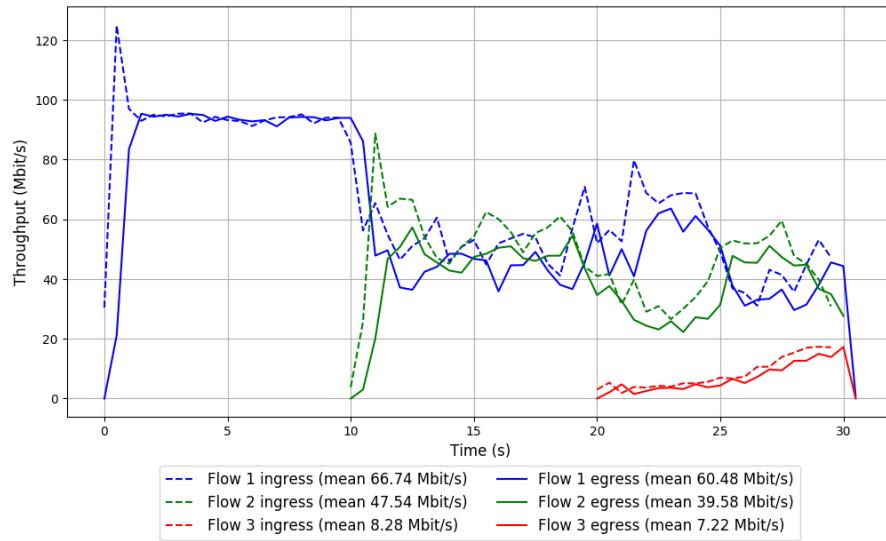


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-11 17:55:00
End at: 2019-02-11 17:55:30
Local clock offset: -2.496 ms
Remote clock offset: -6.434 ms

# Below is generated by plot.py at 2019-02-11 19:28:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 61.745 ms
Loss rate: 11.77%
-- Flow 1:
Average throughput: 60.48 Mbit/s
95th percentile per-packet one-way delay: 59.582 ms
Loss rate: 9.37%
-- Flow 2:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 16.74%
-- Flow 3:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 61.801 ms
Loss rate: 12.80%
```

Run 2: Report of FillP-Sheep — Data Link

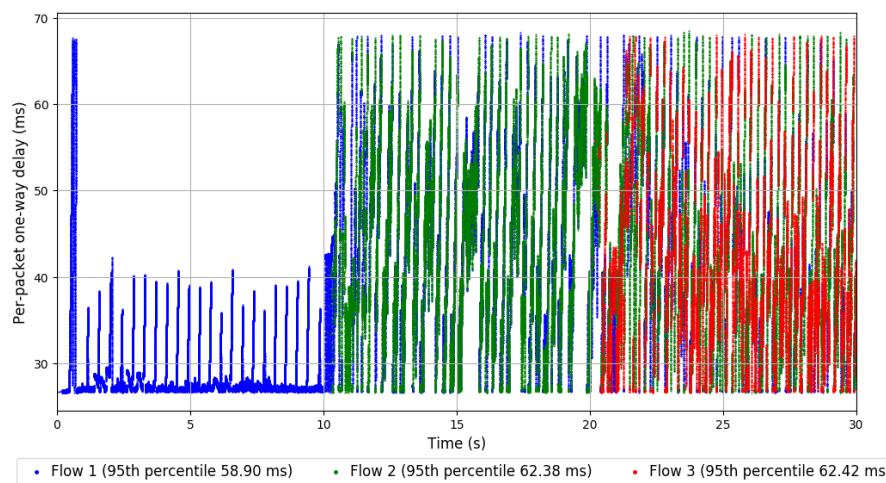
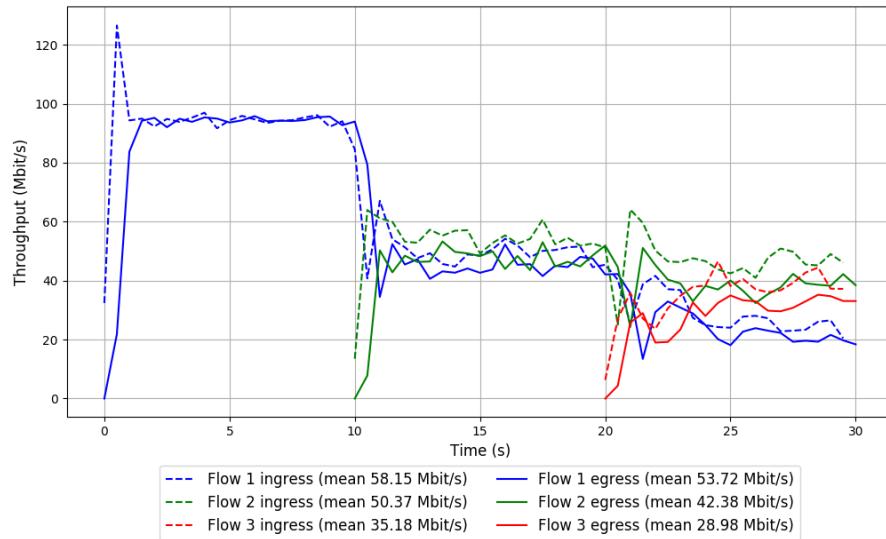


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:20:17
End at: 2019-02-11 18:20:47
Local clock offset: -0.044 ms
Remote clock offset: -5.712 ms

# Below is generated by plot.py at 2019-02-11 19:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.50 Mbit/s
95th percentile per-packet one-way delay: 60.862 ms
Loss rate: 11.42%
-- Flow 1:
Average throughput: 53.72 Mbit/s
95th percentile per-packet one-way delay: 58.903 ms
Loss rate: 7.61%
-- Flow 2:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: 62.376 ms
Loss rate: 15.84%
-- Flow 3:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 62.422 ms
Loss rate: 17.68%
```

Run 3: Report of FillP-Sheep — Data Link

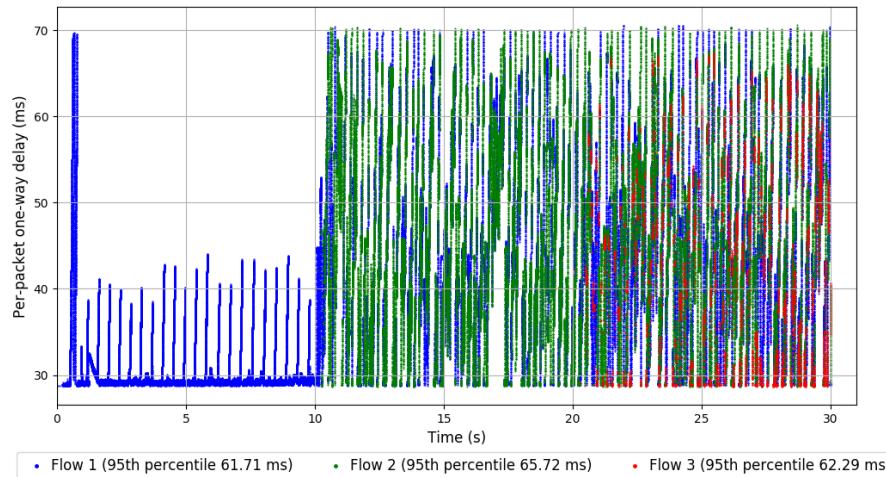
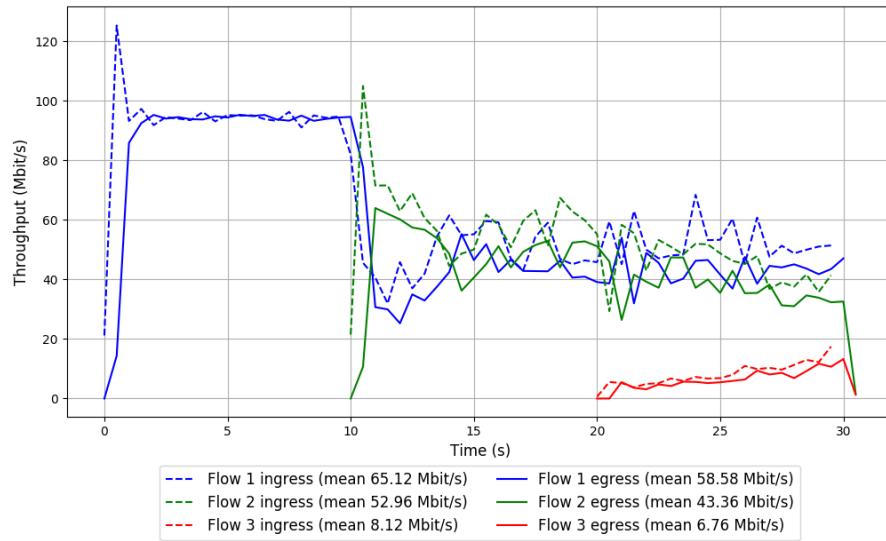


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:45:35
End at: 2019-02-11 18:46:05
Local clock offset: 0.708 ms
Remote clock offset: -2.725 ms

# Below is generated by plot.py at 2019-02-11 19:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 63.658 ms
Loss rate: 12.98%
-- Flow 1:
Average throughput: 58.58 Mbit/s
95th percentile per-packet one-way delay: 61.713 ms
Loss rate: 10.05%
-- Flow 2:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 65.722 ms
Loss rate: 18.10%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 62.288 ms
Loss rate: 16.68%
```

Run 4: Report of FillP-Sheep — Data Link

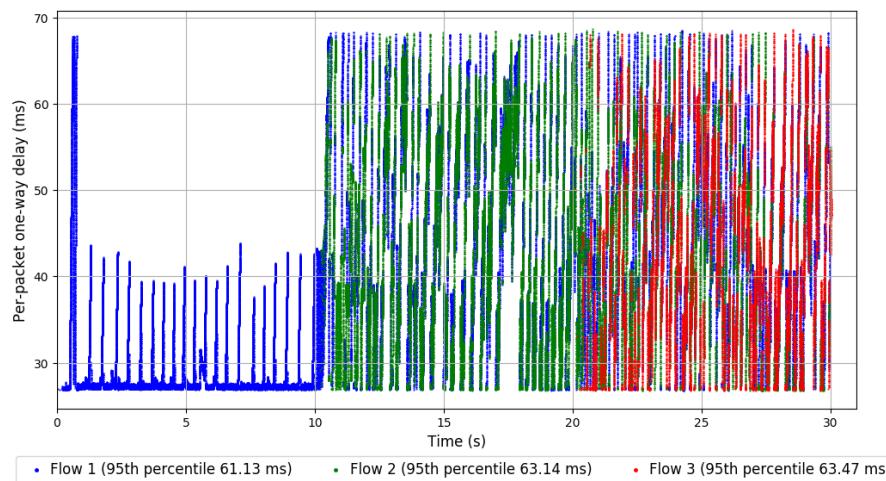
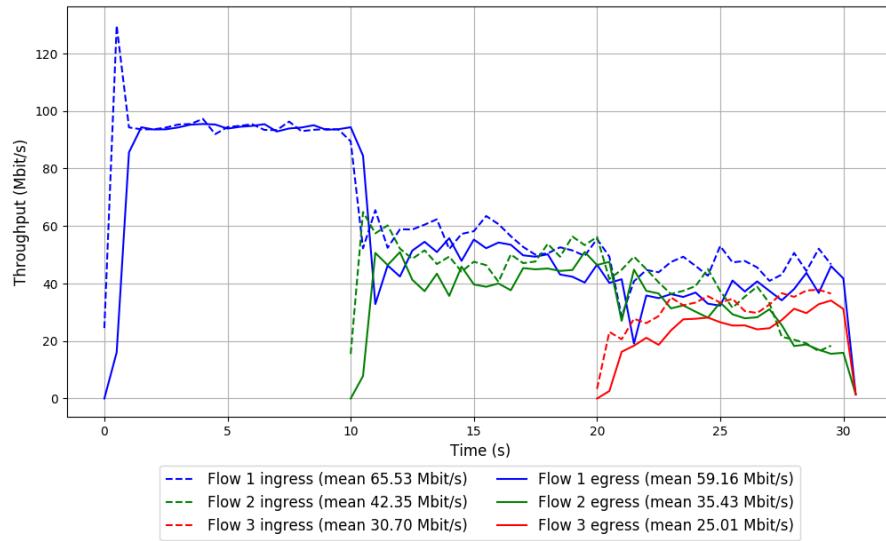


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-11 19:10:55
End at: 2019-02-11 19:11:25
Local clock offset: -1.084 ms
Remote clock offset: -4.574 ms

# Below is generated by plot.py at 2019-02-11 19:29:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.02 Mbit/s
95th percentile per-packet one-way delay: 62.148 ms
Loss rate: 12.33%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 61.135 ms
Loss rate: 9.67%
-- Flow 2:
Average throughput: 35.43 Mbit/s
95th percentile per-packet one-way delay: 63.144 ms
Loss rate: 16.27%
-- Flow 3:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 63.474 ms
Loss rate: 18.55%
```

Run 5: Report of FillP-Sheep — Data Link

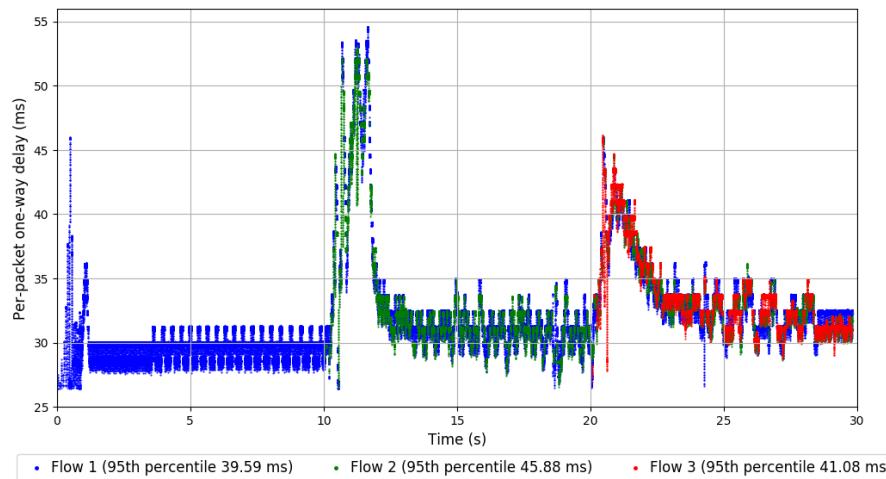
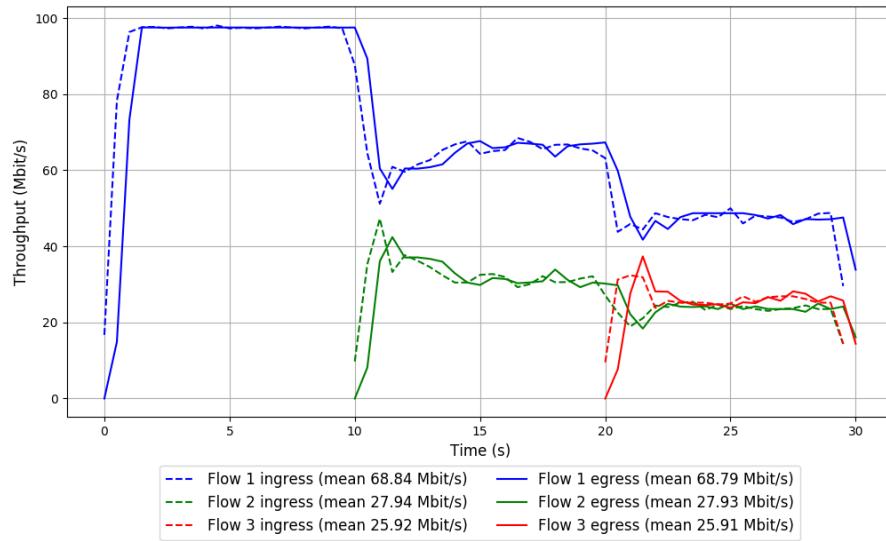


Run 1: Statistics of Indigo

```
Start at: 2019-02-11 17:23:35
End at: 2019-02-11 17:24:05
Local clock offset: 0.654 ms
Remote clock offset: -7.807 ms

# Below is generated by plot.py at 2019-02-11 19:29:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 40.913 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 68.79 Mbit/s
95th percentile per-packet one-way delay: 39.595 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 27.93 Mbit/s
95th percentile per-packet one-way delay: 45.881 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 41.084 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

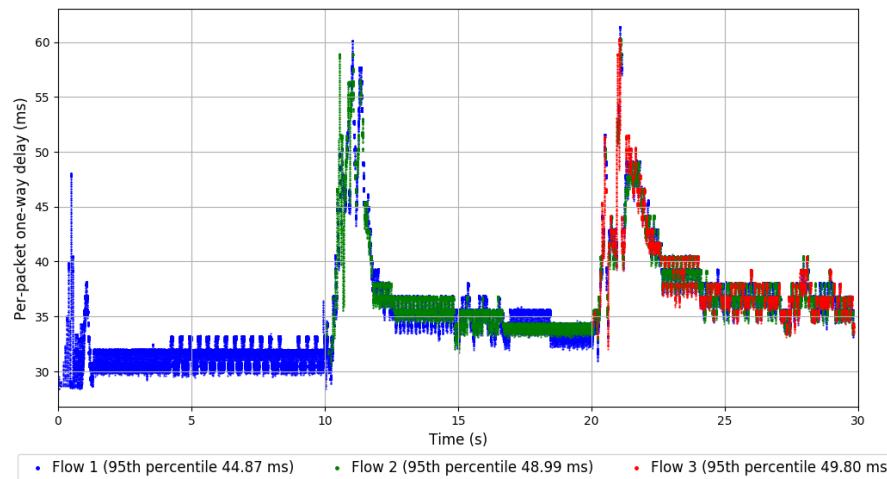
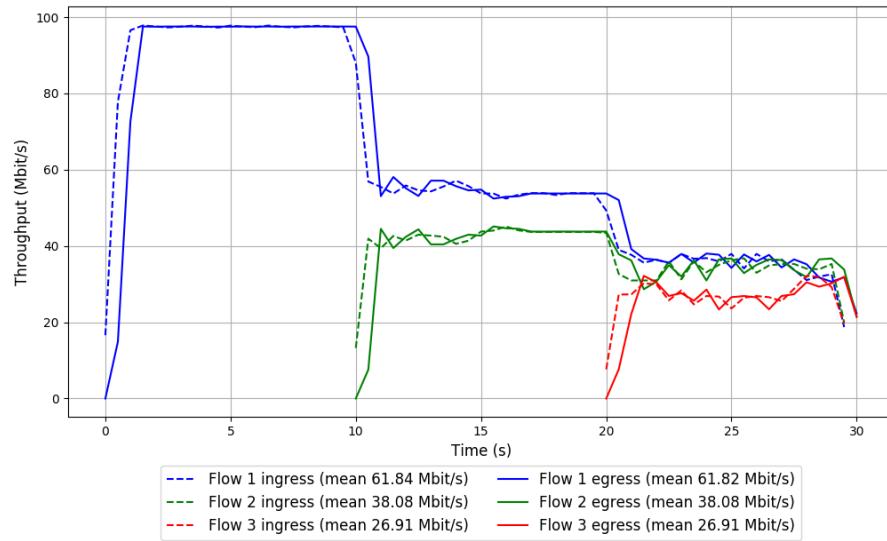


Run 2: Statistics of Indigo

```
Start at: 2019-02-11 17:48:57
End at: 2019-02-11 17:49:27
Local clock offset: -2.05 ms
Remote clock offset: -4.88 ms

# Below is generated by plot.py at 2019-02-11 19:29:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 46.639 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 61.82 Mbit/s
95th percentile per-packet one-way delay: 44.874 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.08 Mbit/s
95th percentile per-packet one-way delay: 48.994 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 49.801 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

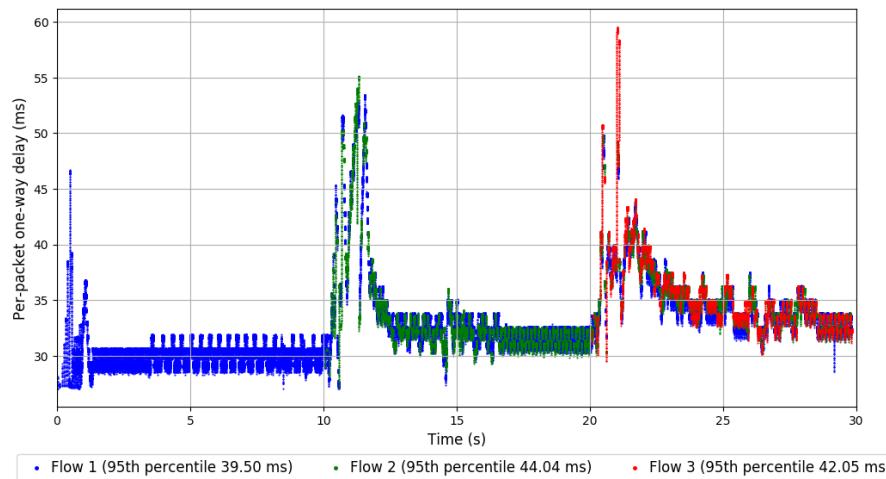
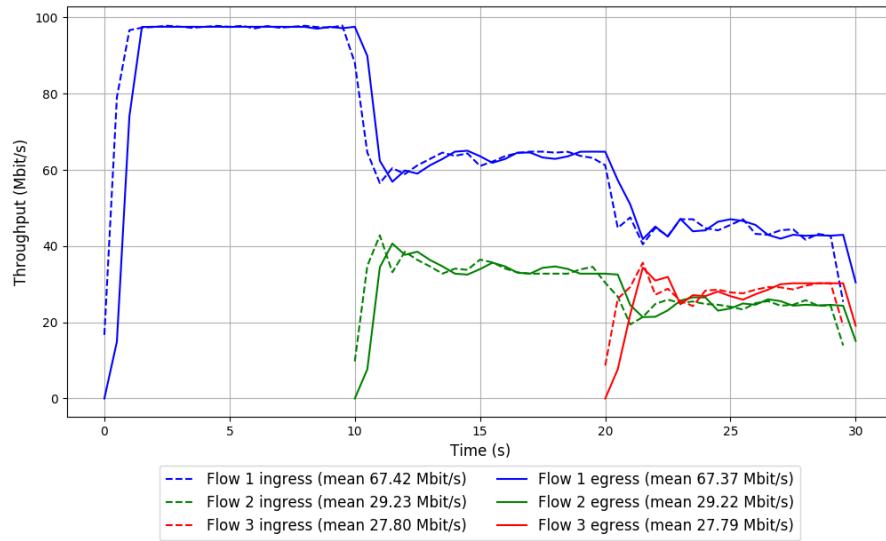


Run 3: Statistics of Indigo

```
Start at: 2019-02-11 18:14:13
End at: 2019-02-11 18:14:43
Local clock offset: -0.691 ms
Remote clock offset: -5.516 ms

# Below is generated by plot.py at 2019-02-11 19:29:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 40.854 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 67.37 Mbit/s
95th percentile per-packet one-way delay: 39.496 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 29.22 Mbit/s
95th percentile per-packet one-way delay: 44.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.79 Mbit/s
95th percentile per-packet one-way delay: 42.050 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

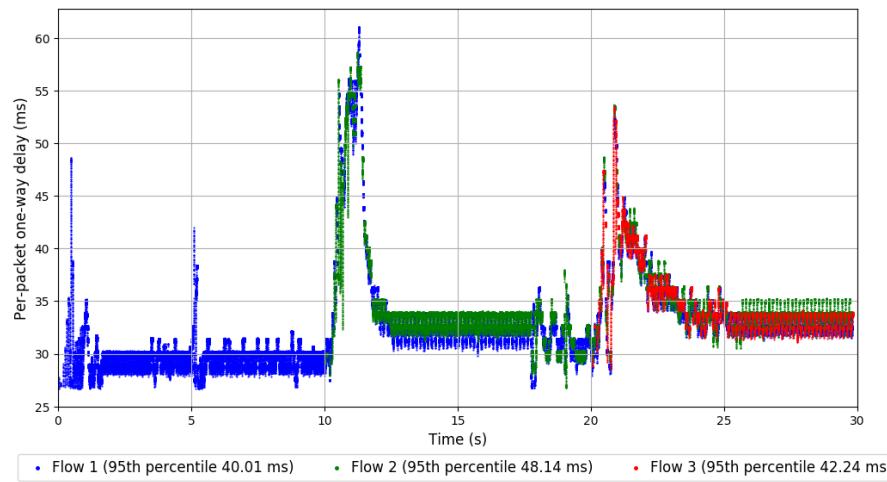
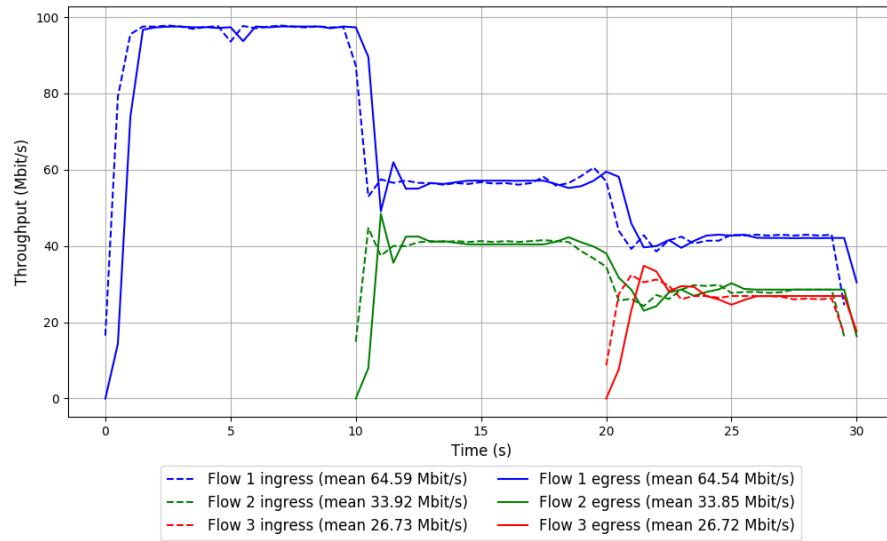


Run 4: Statistics of Indigo

```
Start at: 2019-02-11 18:39:29
End at: 2019-02-11 18:39:59
Local clock offset: 0.701 ms
Remote clock offset: -5.036 ms

# Below is generated by plot.py at 2019-02-11 19:29:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 42.251 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 64.54 Mbit/s
95th percentile per-packet one-way delay: 40.012 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 48.136 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 26.72 Mbit/s
95th percentile per-packet one-way delay: 42.237 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

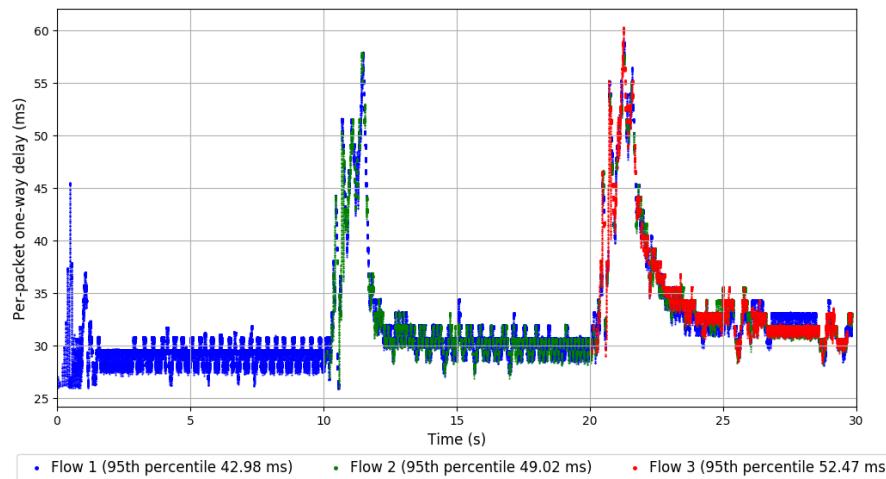
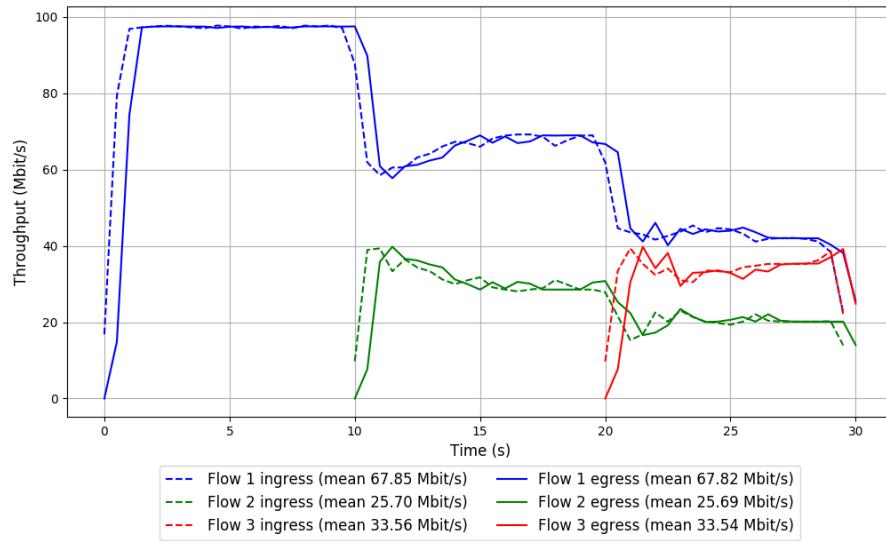


Run 5: Statistics of Indigo

```
Start at: 2019-02-11 19:04:50
End at: 2019-02-11 19:05:20
Local clock offset: 0.906 ms
Remote clock offset: -5.194 ms

# Below is generated by plot.py at 2019-02-11 19:29:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 46.651 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 67.82 Mbit/s
95th percentile per-packet one-way delay: 42.980 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 49.024 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 52.472 ms
Loss rate: 0.02%
```

Run 5: Report of Indigo — Data Link

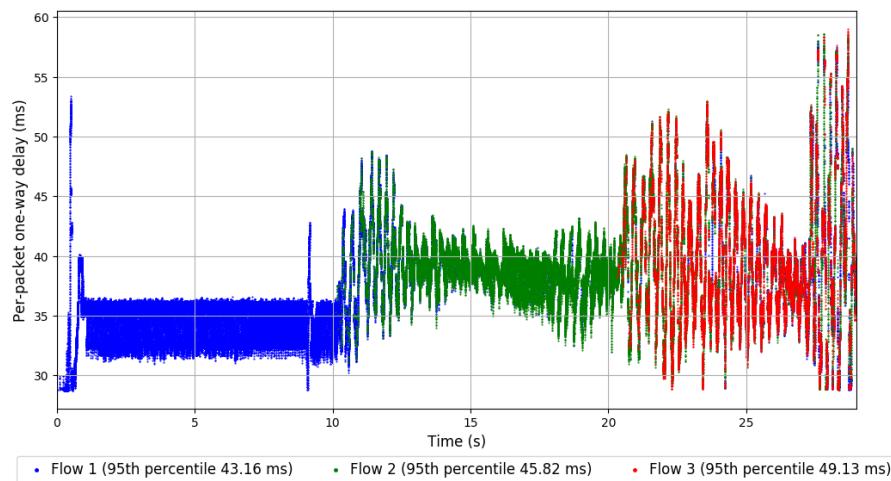
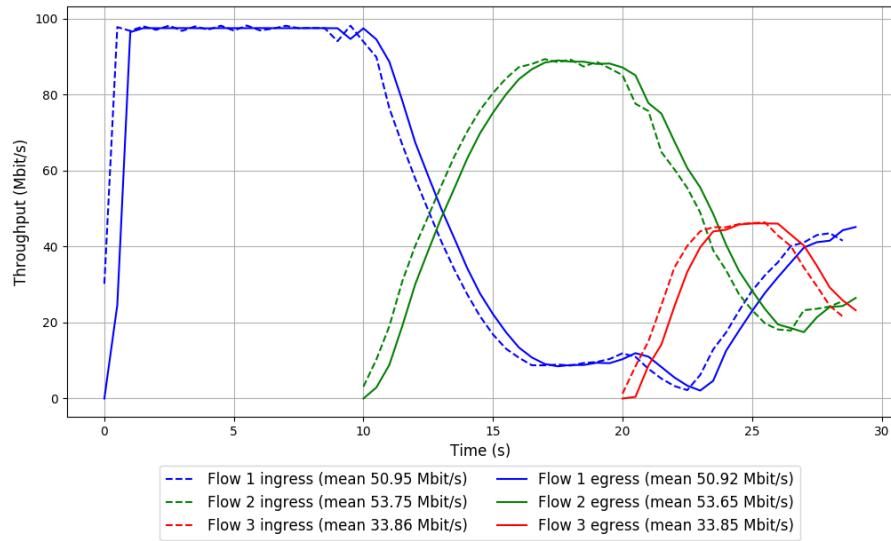


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:18:46
End at: 2019-02-11 17:19:16
Local clock offset: -0.089 ms
Remote clock offset: -5.523 ms

# Below is generated by plot.py at 2019-02-11 19:29:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 45.268 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 50.92 Mbit/s
95th percentile per-packet one-way delay: 43.156 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 53.65 Mbit/s
95th percentile per-packet one-way delay: 45.824 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 49.130 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

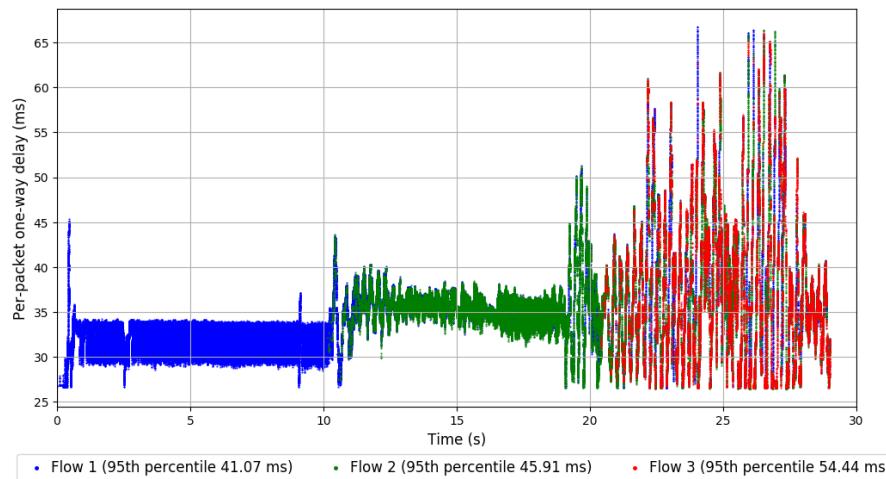
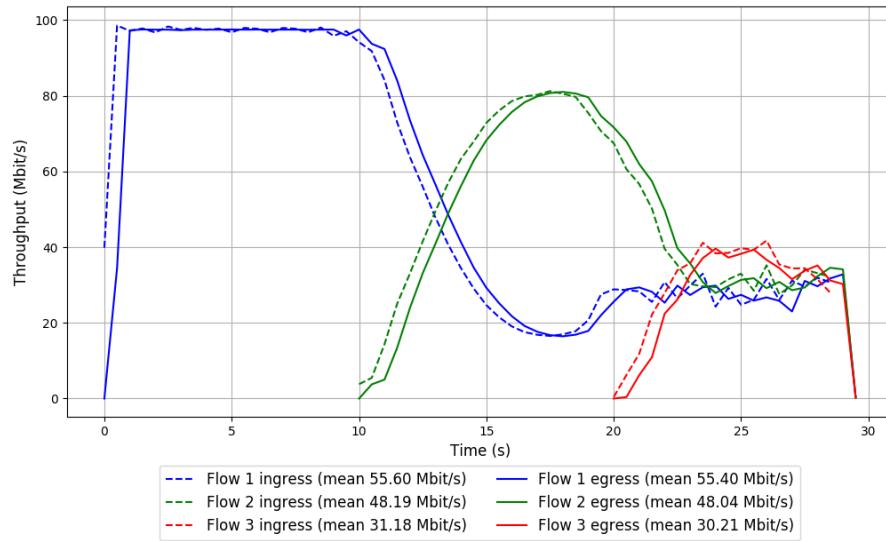


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:44:08
End at: 2019-02-11 17:44:38
Local clock offset: -1.383 ms
Remote clock offset: -6.856 ms

# Below is generated by plot.py at 2019-02-11 19:29:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 45.453 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 41.066 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 48.04 Mbit/s
95th percentile per-packet one-way delay: 45.906 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 54.438 ms
Loss rate: 3.15%
```

Run 2: Report of Indigo-MusesC3 — Data Link

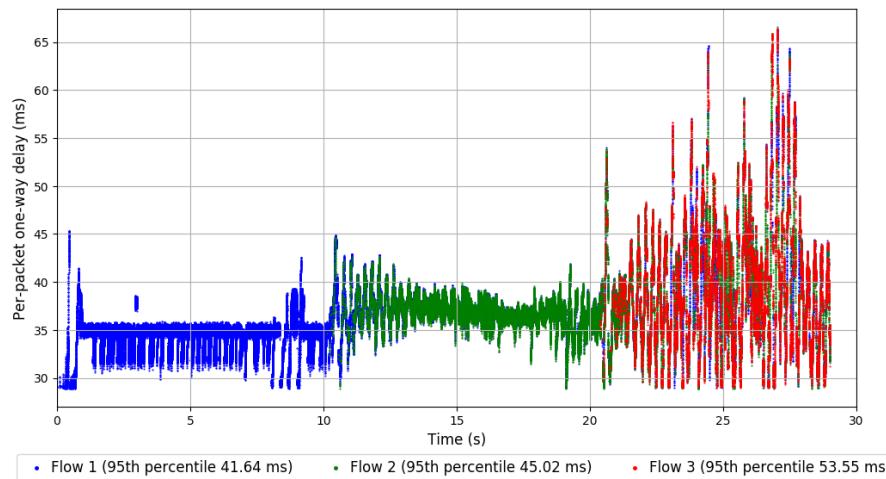
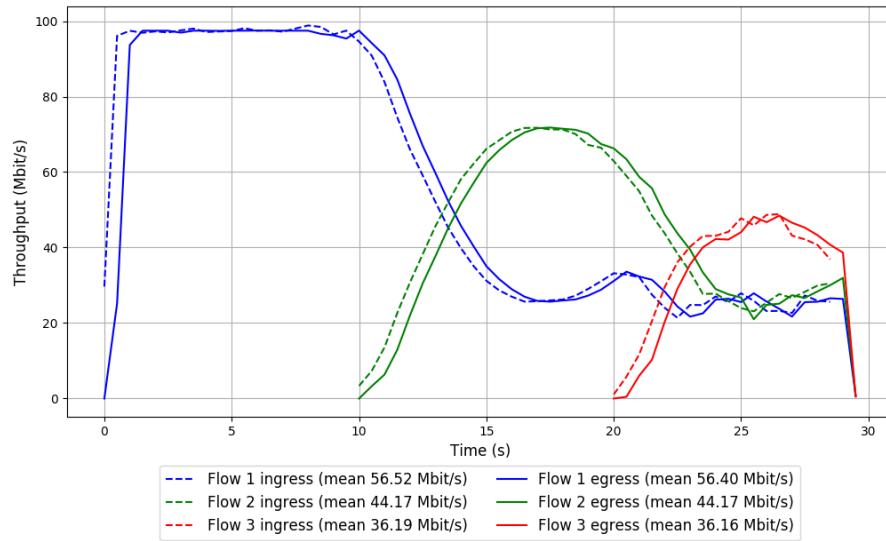


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 18:09:24
End at: 2019-02-11 18:09:54
Local clock offset: -1.458 ms
Remote clock offset: -3.864 ms

# Below is generated by plot.py at 2019-02-11 19:30:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 44.874 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 56.40 Mbit/s
95th percentile per-packet one-way delay: 41.644 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 44.17 Mbit/s
95th percentile per-packet one-way delay: 45.021 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 53.553 ms
Loss rate: 0.12%
```

Run 3: Report of Indigo-MusesC3 — Data Link

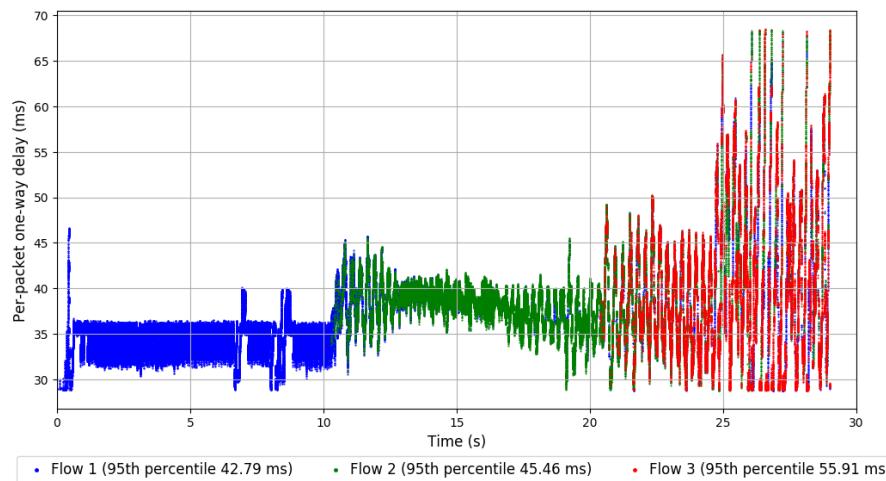
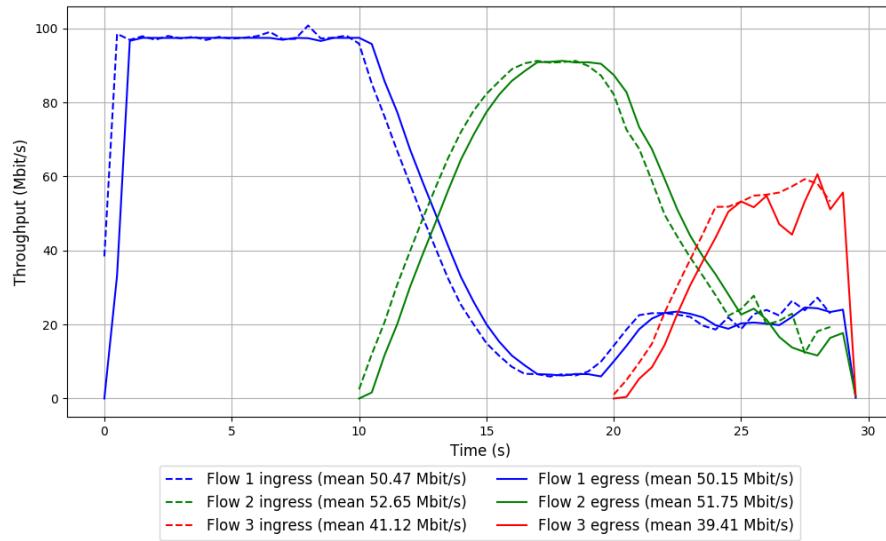


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 18:34:39
End at: 2019-02-11 18:35:09
Local clock offset: 0.793 ms
Remote clock offset: -3.111 ms

# Below is generated by plot.py at 2019-02-11 19:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 46.749 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 50.15 Mbit/s
95th percentile per-packet one-way delay: 42.788 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 45.457 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 55.913 ms
Loss rate: 4.26%
```

Run 4: Report of Indigo-MusesC3 — Data Link

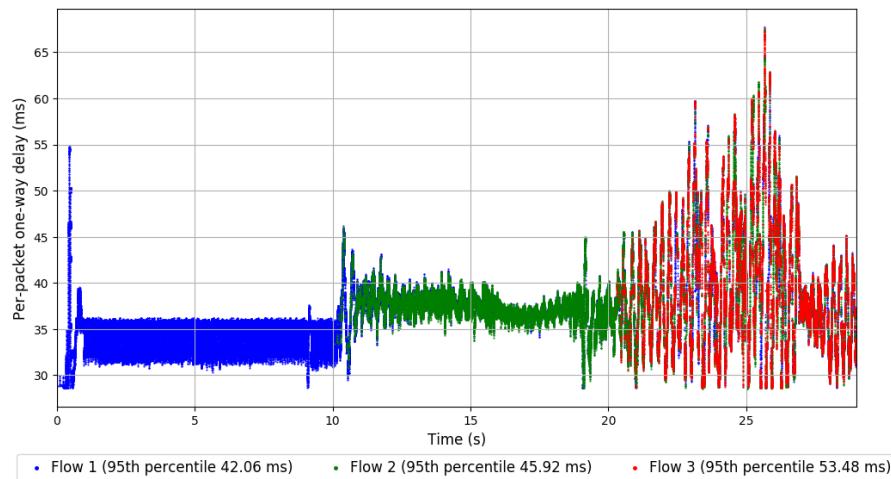
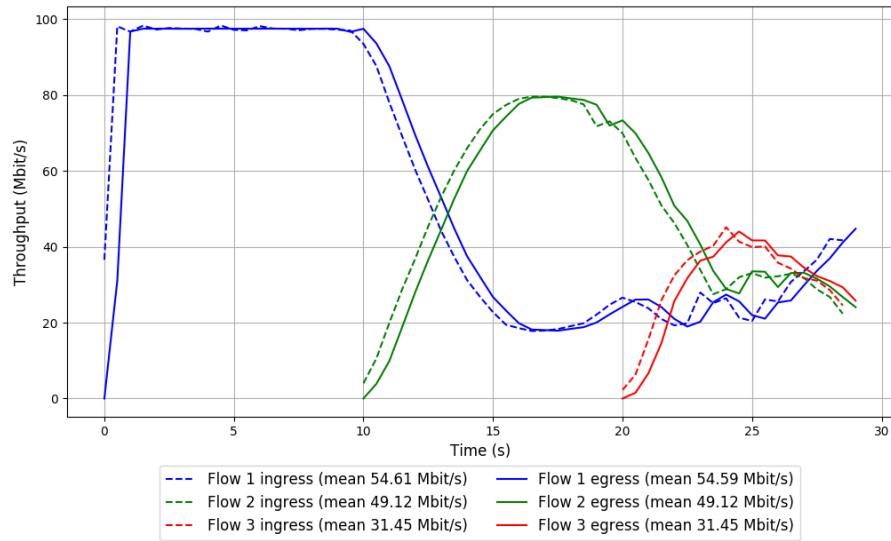


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 19:00:01
End at: 2019-02-11 19:00:31
Local clock offset: 1.012 ms
Remote clock offset: -2.828 ms

# Below is generated by plot.py at 2019-02-11 19:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 45.940 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.59 Mbit/s
95th percentile per-packet one-way delay: 42.056 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 49.12 Mbit/s
95th percentile per-packet one-way delay: 45.917 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 53.484 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

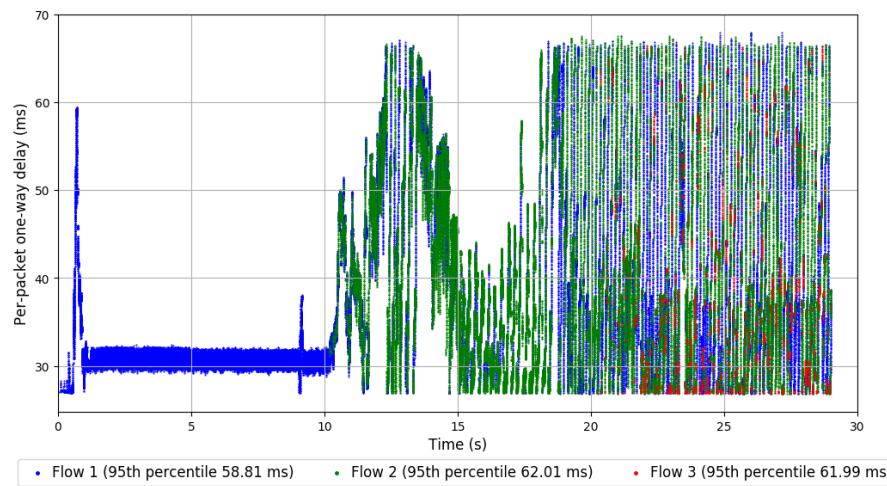
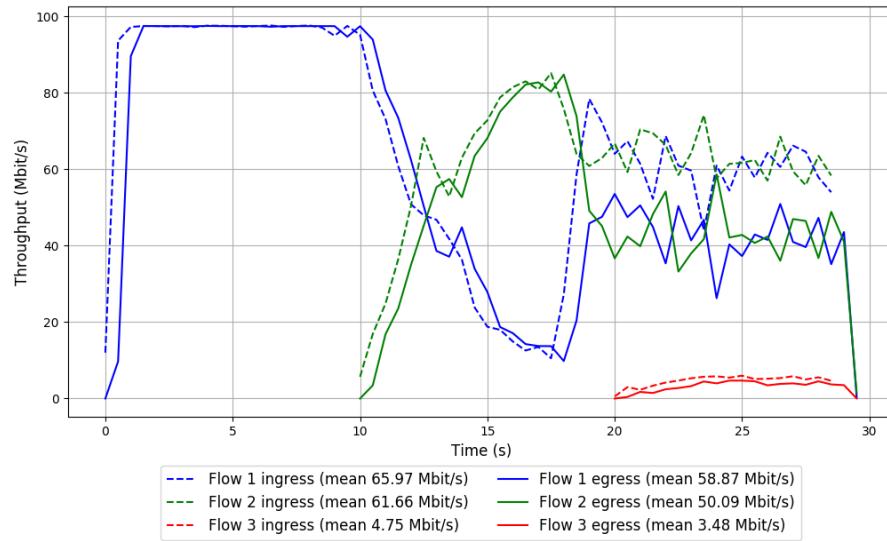


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 17:40:31
End at: 2019-02-11 17:41:01
Local clock offset: -0.53 ms
Remote clock offset: -6.464 ms

# Below is generated by plot.py at 2019-02-11 19:30:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.55 Mbit/s
95th percentile per-packet one-way delay: 60.629 ms
Loss rate: 13.93%
-- Flow 1:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 58.814 ms
Loss rate: 10.73%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 62.010 ms
Loss rate: 18.73%
-- Flow 3:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 61.990 ms
Loss rate: 26.59%
```

Run 1: Report of Indigo-MusesC5 — Data Link

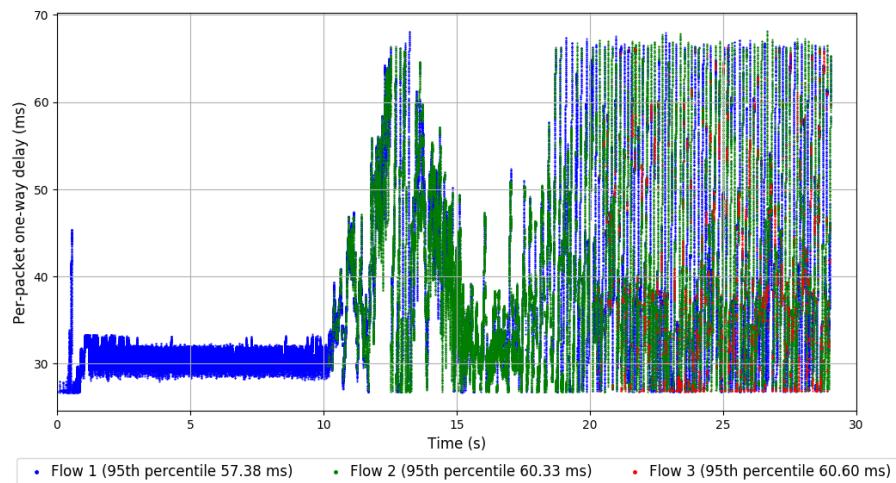
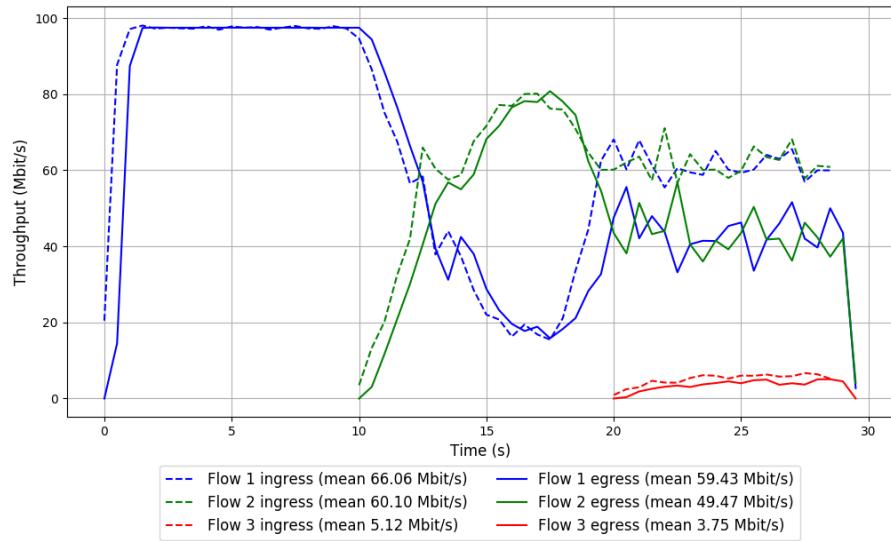


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:05:47
End at: 2019-02-11 18:06:17
Local clock offset: -2.333 ms
Remote clock offset: -6.195 ms

# Below is generated by plot.py at 2019-02-11 19:30:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 58.886 ms
Loss rate: 12.95%
-- Flow 1:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 57.384 ms
Loss rate: 9.91%
-- Flow 2:
Average throughput: 49.47 Mbit/s
95th percentile per-packet one-way delay: 60.330 ms
Loss rate: 17.53%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 60.598 ms
Loss rate: 26.52%
```

Run 2: Report of Indigo-MusesC5 — Data Link

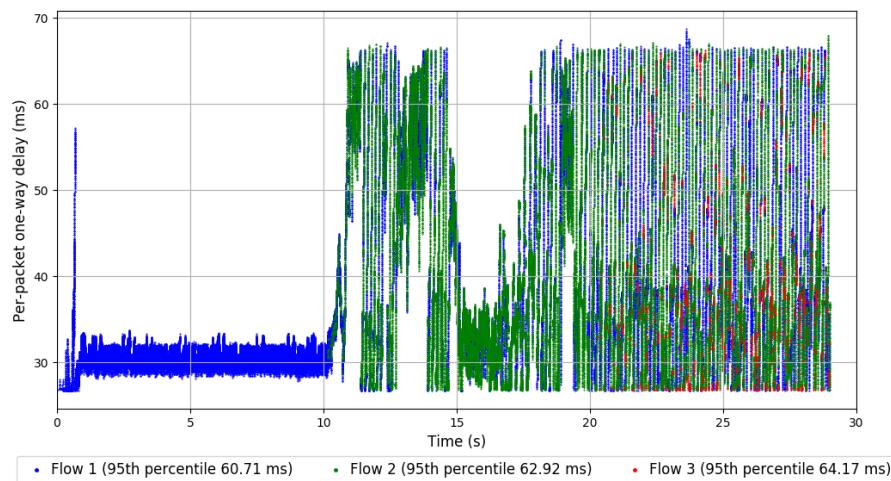
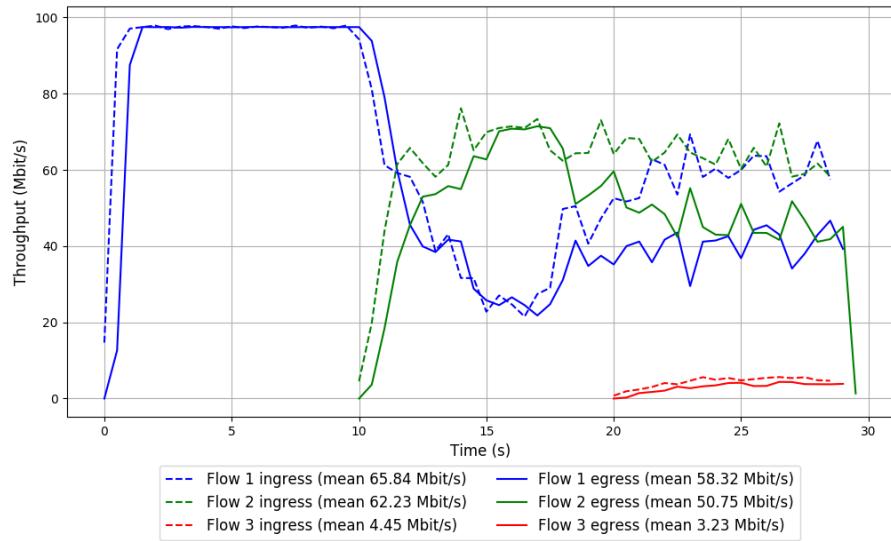


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:31:02
End at: 2019-02-11 18:31:32
Local clock offset: 0.631 ms
Remote clock offset: -5.319 ms

# Below is generated by plot.py at 2019-02-11 19:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 61.816 ms
Loss rate: 14.26%
-- Flow 1:
Average throughput: 58.32 Mbit/s
95th percentile per-packet one-way delay: 60.714 ms
Loss rate: 11.42%
-- Flow 2:
Average throughput: 50.75 Mbit/s
95th percentile per-packet one-way delay: 62.916 ms
Loss rate: 18.42%
-- Flow 3:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 64.170 ms
Loss rate: 27.33%
```

Run 3: Report of Indigo-MusesC5 — Data Link

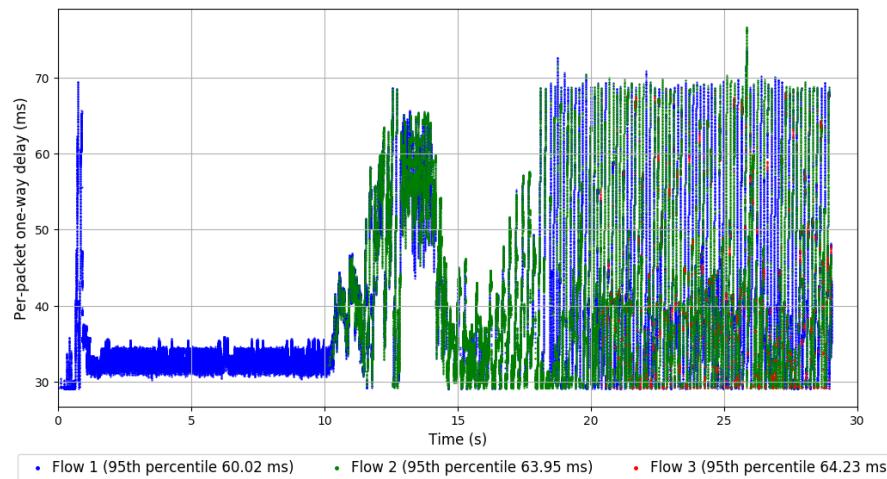
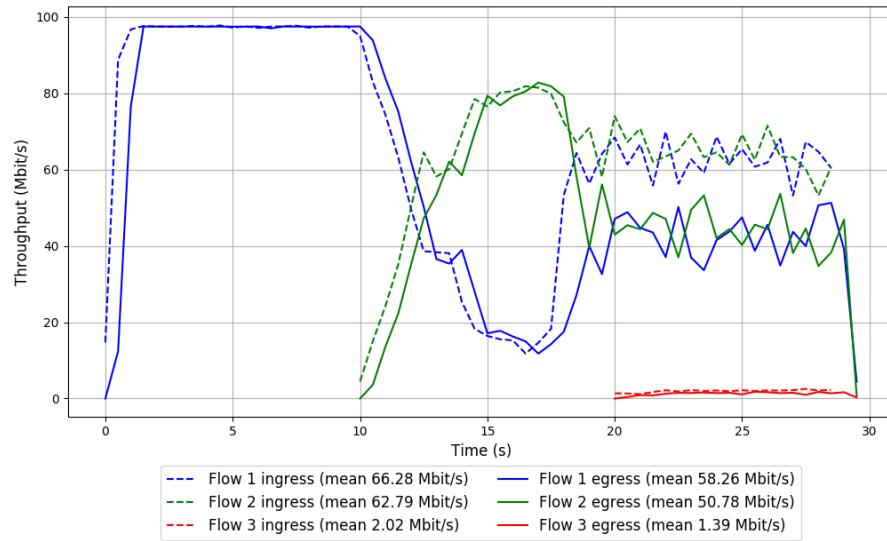


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:56:24
End at: 2019-02-11 18:56:54
Local clock offset: 0.903 ms
Remote clock offset: -2.314 ms

# Below is generated by plot.py at 2019-02-11 19:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.79 Mbit/s
95th percentile per-packet one-way delay: 61.929 ms
Loss rate: 14.83%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 60.019 ms
Loss rate: 12.06%
-- Flow 2:
Average throughput: 50.78 Mbit/s
95th percentile per-packet one-way delay: 63.949 ms
Loss rate: 19.09%
-- Flow 3:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 64.230 ms
Loss rate: 30.86%
```

Run 4: Report of Indigo-MusesC5 — Data Link

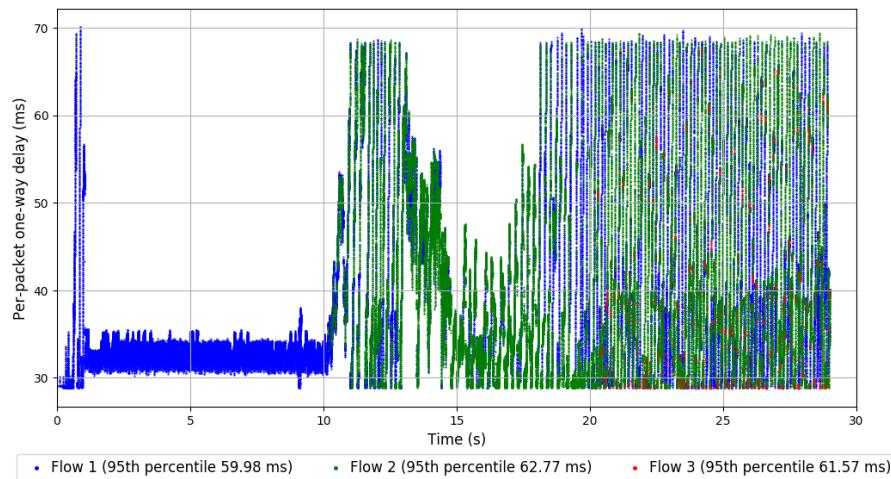
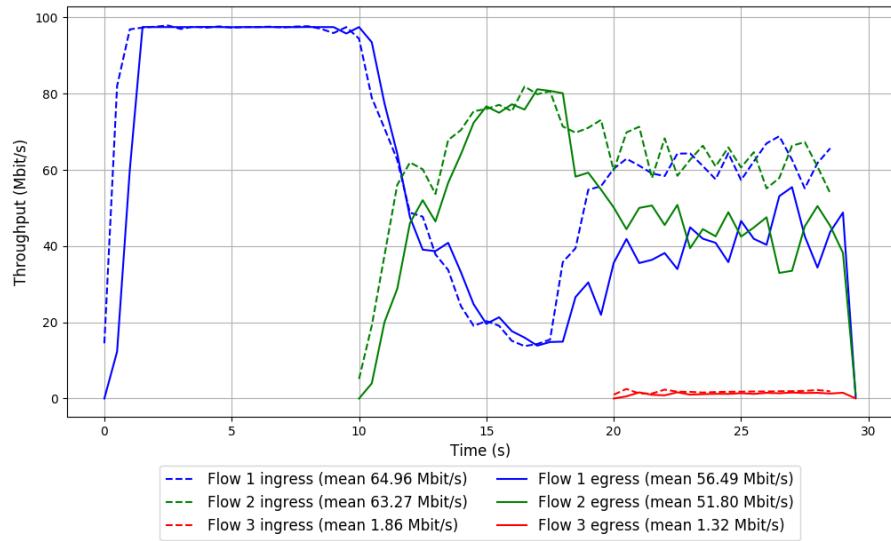


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 19:21:41
End at: 2019-02-11 19:22:11
Local clock offset: -2.584 ms
Remote clock offset: -3.176 ms

# Below is generated by plot.py at 2019-02-11 19:31:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 61.413 ms
Loss rate: 15.08%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 59.976 ms
Loss rate: 13.03%
-- Flow 2:
Average throughput: 51.80 Mbit/s
95th percentile per-packet one-way delay: 62.770 ms
Loss rate: 18.12%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 61.570 ms
Loss rate: 29.08%
```

Run 5: Report of Indigo-MusesC5 — Data Link

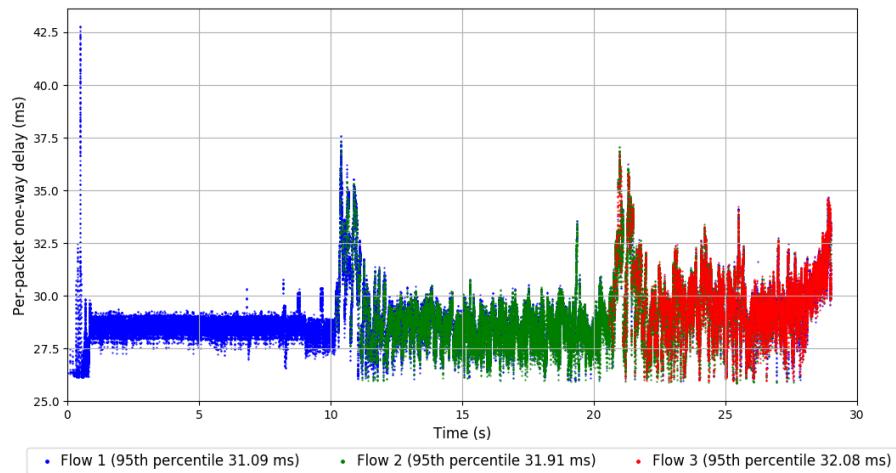
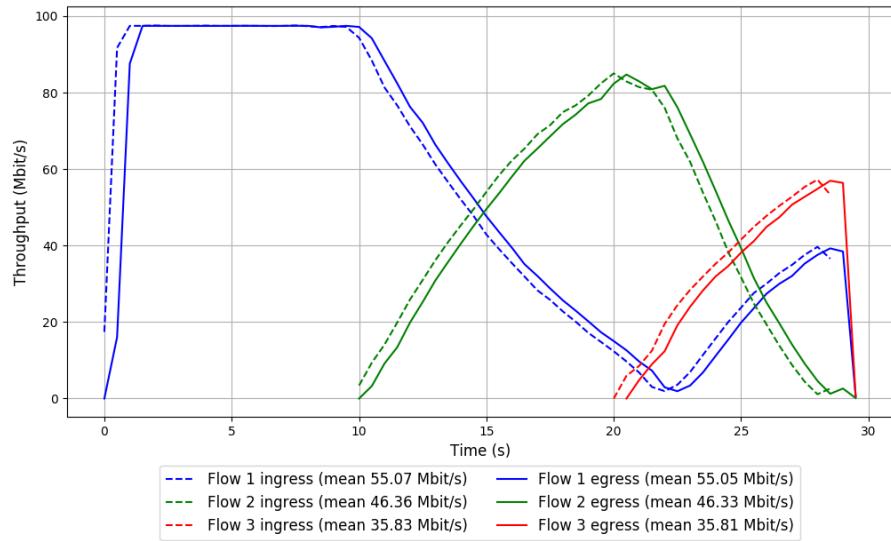


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 17:35:43
End at: 2019-02-11 17:36:13
Local clock offset: 1.229 ms
Remote clock offset: -7.407 ms

# Below is generated by plot.py at 2019-02-11 19:31:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 31.584 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 55.05 Mbit/s
95th percentile per-packet one-way delay: 31.085 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 46.33 Mbit/s
95th percentile per-packet one-way delay: 31.913 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 35.81 Mbit/s
95th percentile per-packet one-way delay: 32.075 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

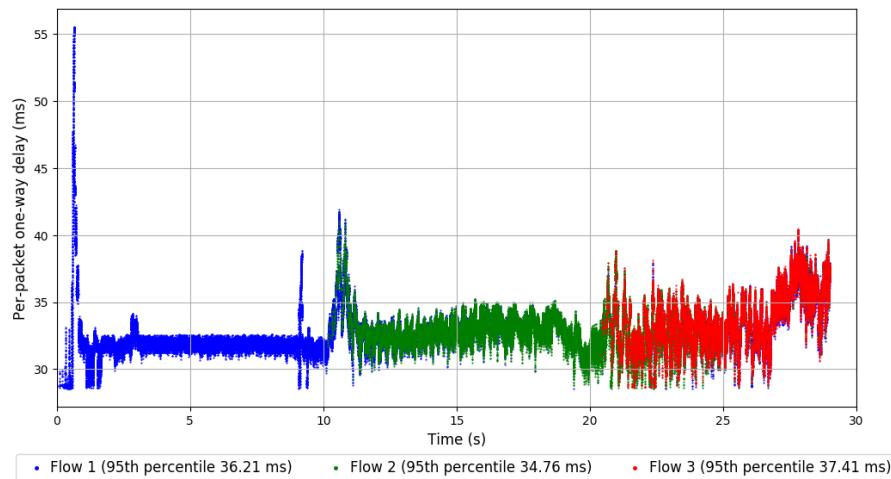
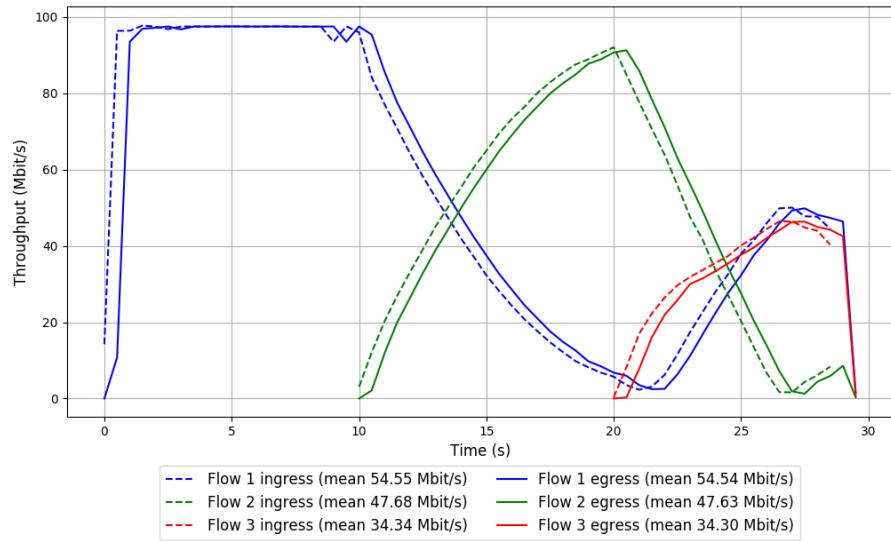


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:00:58
End at: 2019-02-11 18:01:28
Local clock offset: -2.727 ms
Remote clock offset: -4.296 ms

# Below is generated by plot.py at 2019-02-11 19:31:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 36.102 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 54.54 Mbit/s
95th percentile per-packet one-way delay: 36.214 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.63 Mbit/s
95th percentile per-packet one-way delay: 34.763 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 34.30 Mbit/s
95th percentile per-packet one-way delay: 37.408 ms
Loss rate: 0.05%
```

Run 2: Report of Indigo-MusesD — Data Link

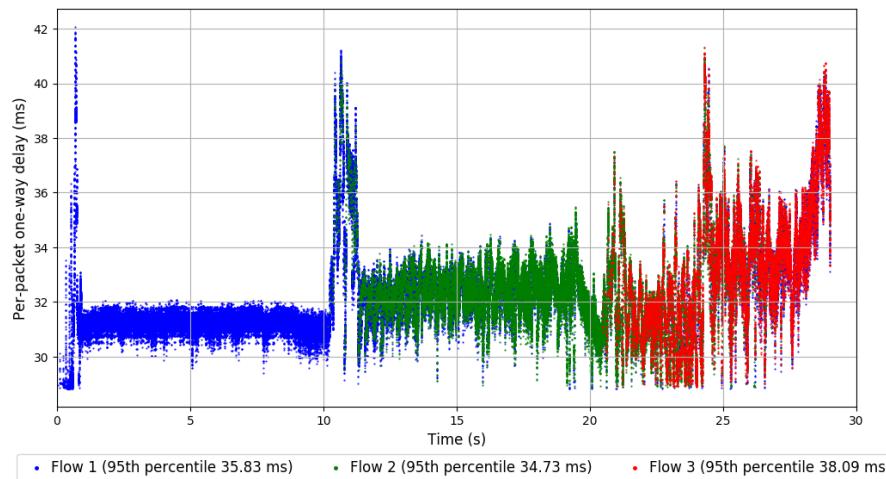
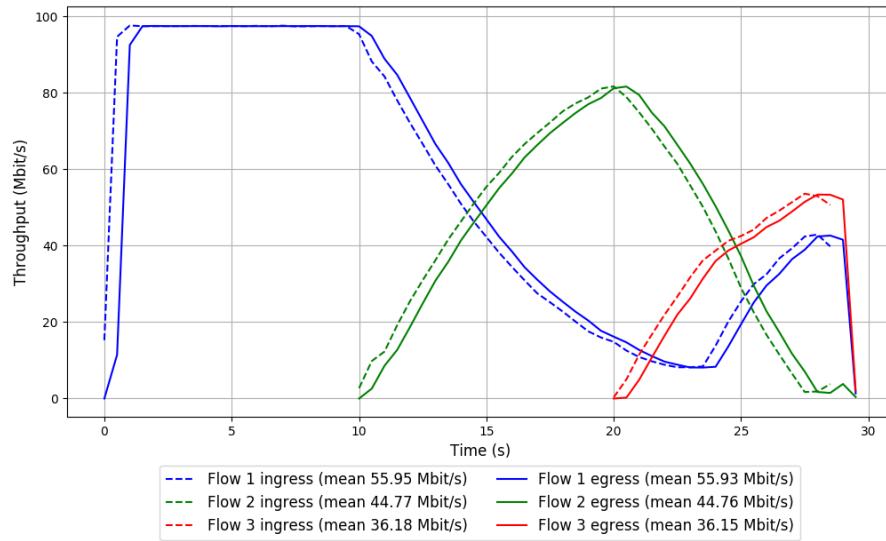


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:26:14
End at: 2019-02-11 18:26:44
Local clock offset: 0.385 ms
Remote clock offset: -3.384 ms

# Below is generated by plot.py at 2019-02-11 19:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 35.983 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.93 Mbit/s
95th percentile per-packet one-way delay: 35.831 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.76 Mbit/s
95th percentile per-packet one-way delay: 34.732 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.15 Mbit/s
95th percentile per-packet one-way delay: 38.094 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

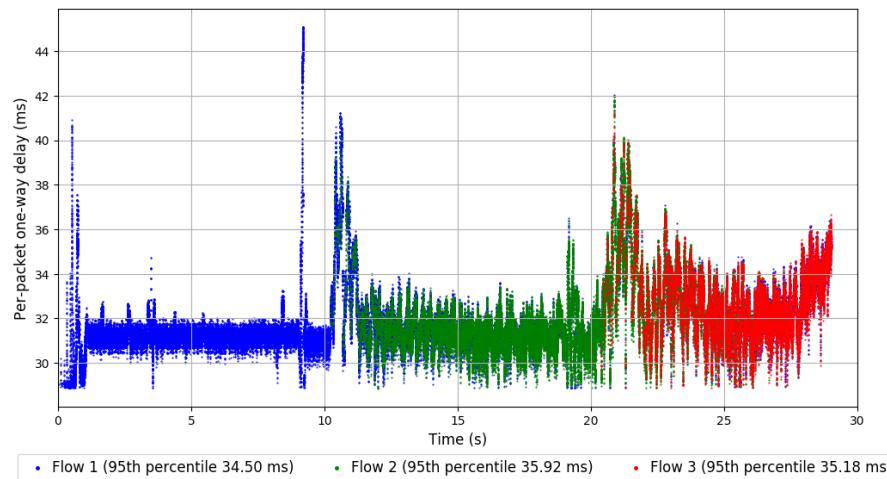
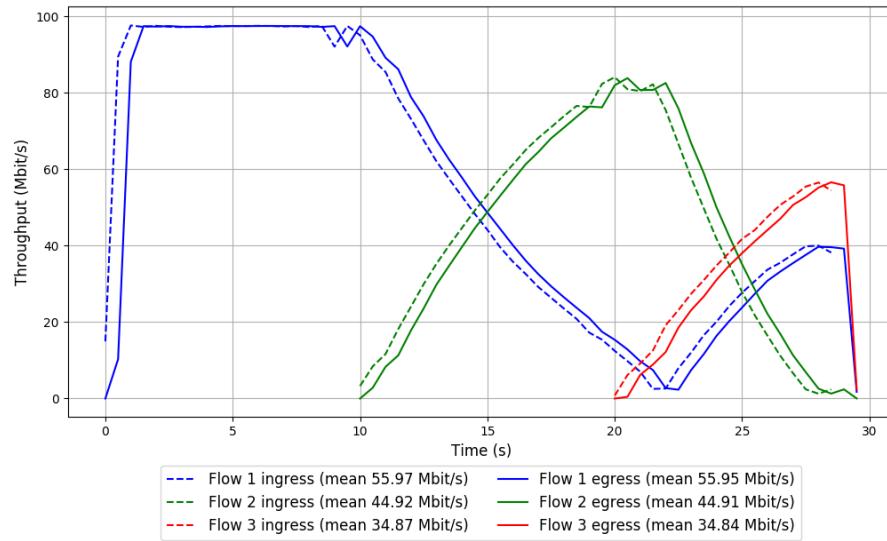


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:51:35
End at: 2019-02-11 18:52:05
Local clock offset: 0.81 ms
Remote clock offset: -2.543 ms

# Below is generated by plot.py at 2019-02-11 19:31:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 35.075 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 34.496 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 44.91 Mbit/s
95th percentile per-packet one-way delay: 35.920 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 35.181 ms
Loss rate: 0.03%
```

Run 4: Report of Indigo-MusesD — Data Link

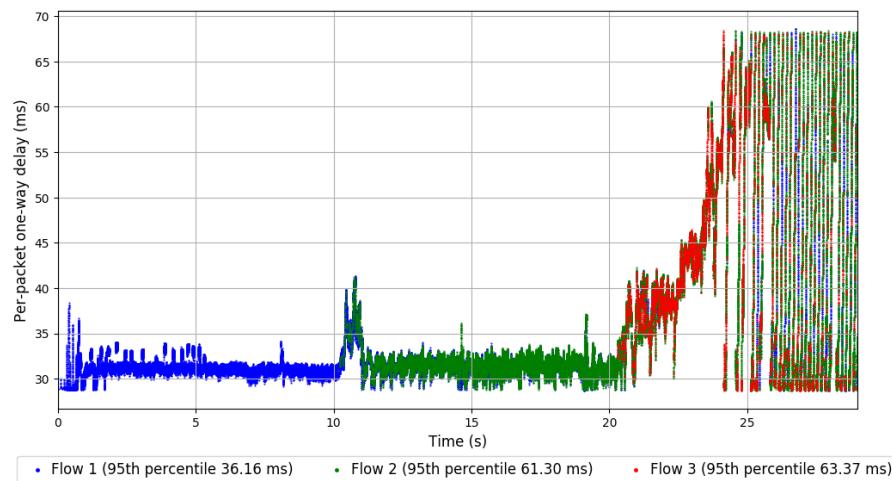
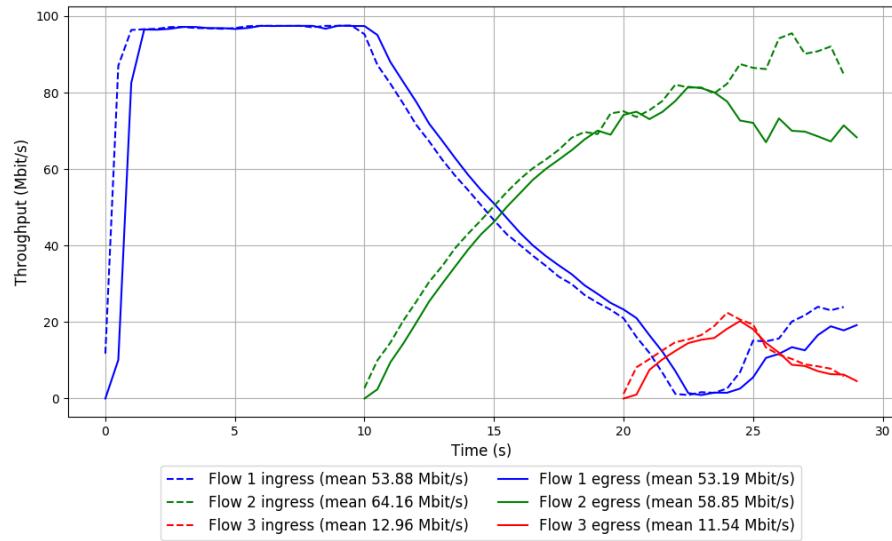


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 19:16:53
End at: 2019-02-11 19:17:23
Local clock offset: -2.088 ms
Remote clock offset: -3.083 ms

# Below is generated by plot.py at 2019-02-11 19:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 57.910 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 53.19 Mbit/s
95th percentile per-packet one-way delay: 36.165 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 58.85 Mbit/s
95th percentile per-packet one-way delay: 61.304 ms
Loss rate: 8.26%
-- Flow 3:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 63.373 ms
Loss rate: 10.94%
```

Run 5: Report of Indigo-MusesD — Data Link

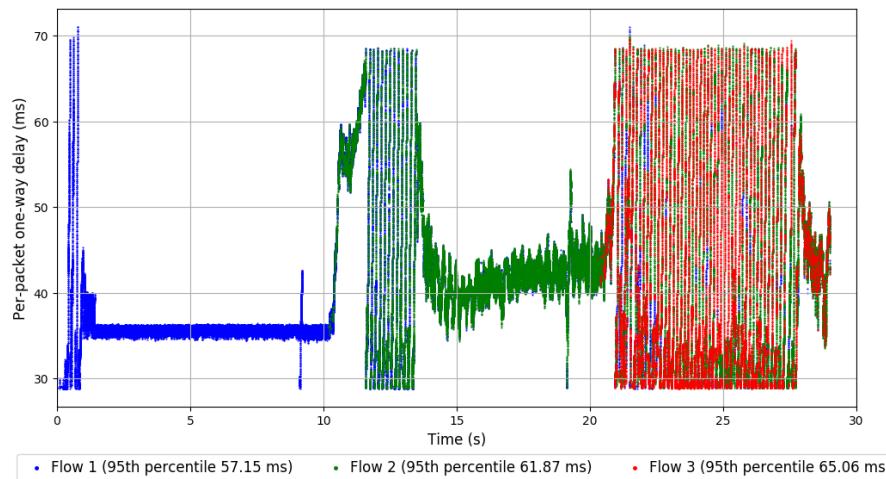
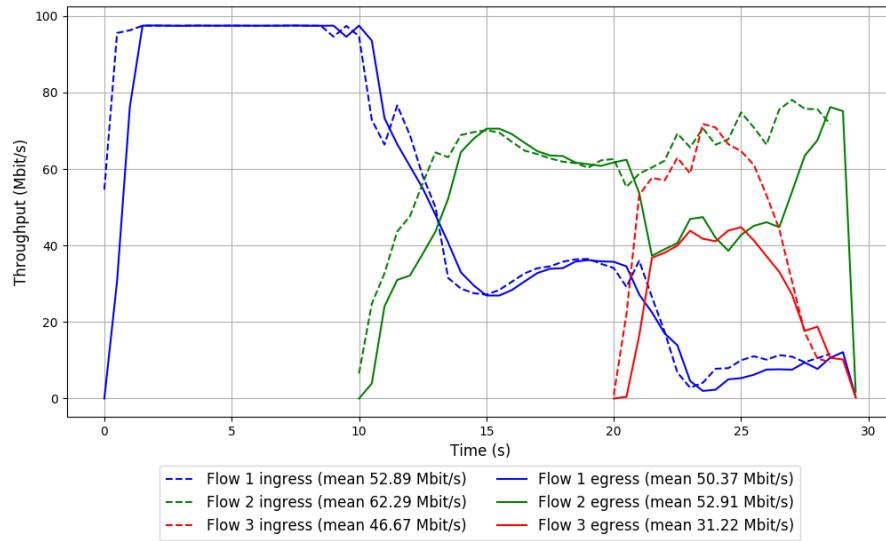


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 17:20:00
End at: 2019-02-11 17:20:30
Local clock offset: 0.096 ms
Remote clock offset: -5.5 ms

# Below is generated by plot.py at 2019-02-11 19:31:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 60.345 ms
Loss rate: 12.33%
-- Flow 1:
Average throughput: 50.37 Mbit/s
95th percentile per-packet one-way delay: 57.154 ms
Loss rate: 4.74%
-- Flow 2:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 61.866 ms
Loss rate: 15.03%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 65.057 ms
Loss rate: 33.11%
```

Run 1: Report of Indigo-MusesT — Data Link

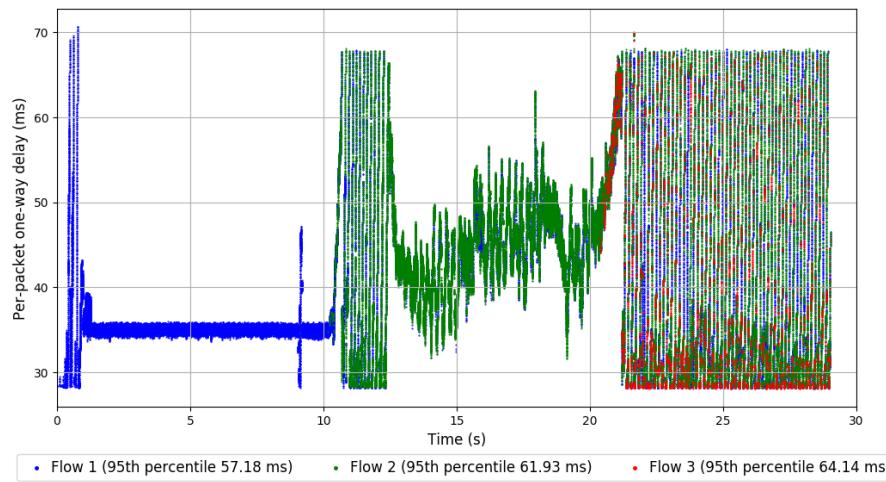
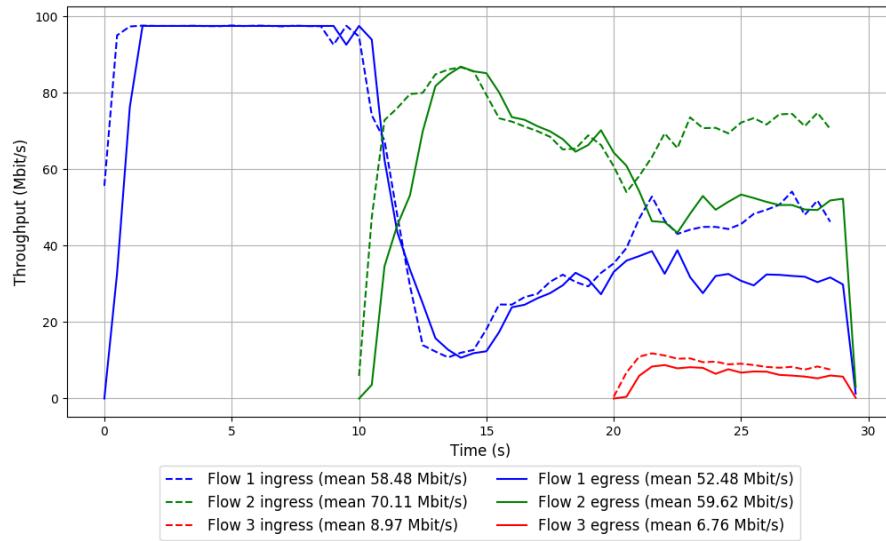


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 17:45:21
End at: 2019-02-11 17:45:51
Local clock offset: -1.558 ms
Remote clock offset: -5.096 ms

# Below is generated by plot.py at 2019-02-11 19:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.30 Mbit/s
95th percentile per-packet one-way delay: 60.146 ms
Loss rate: 12.57%
-- Flow 1:
Average throughput: 52.48 Mbit/s
95th percentile per-packet one-way delay: 57.184 ms
Loss rate: 10.19%
-- Flow 2:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 61.929 ms
Loss rate: 14.91%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 64.140 ms
Loss rate: 24.65%
```

Run 2: Report of Indigo-MusesT — Data Link

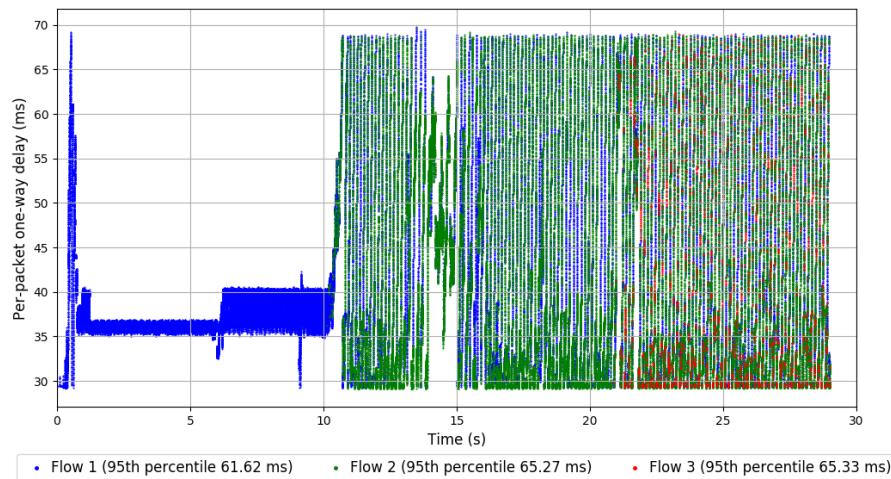
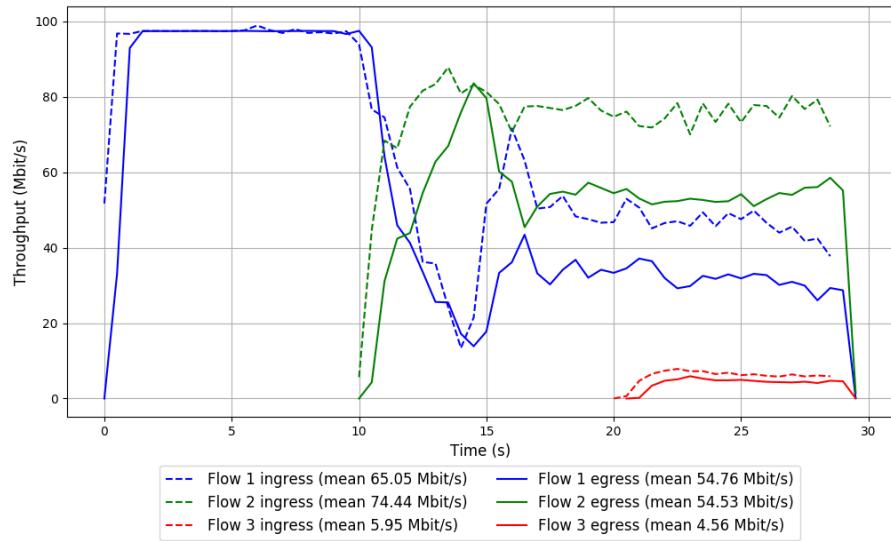


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:10:37
End at: 2019-02-11 18:11:07
Local clock offset: -1.215 ms
Remote clock offset: -3.538 ms

# Below is generated by plot.py at 2019-02-11 19:32:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.57 Mbit/s
95th percentile per-packet one-way delay: 63.840 ms
Loss rate: 20.60%
-- Flow 1:
Average throughput: 54.76 Mbit/s
95th percentile per-packet one-way delay: 61.618 ms
Loss rate: 15.81%
-- Flow 2:
Average throughput: 54.53 Mbit/s
95th percentile per-packet one-way delay: 65.270 ms
Loss rate: 26.76%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 65.335 ms
Loss rate: 27.83%
```

Run 3: Report of Indigo-MusesT — Data Link

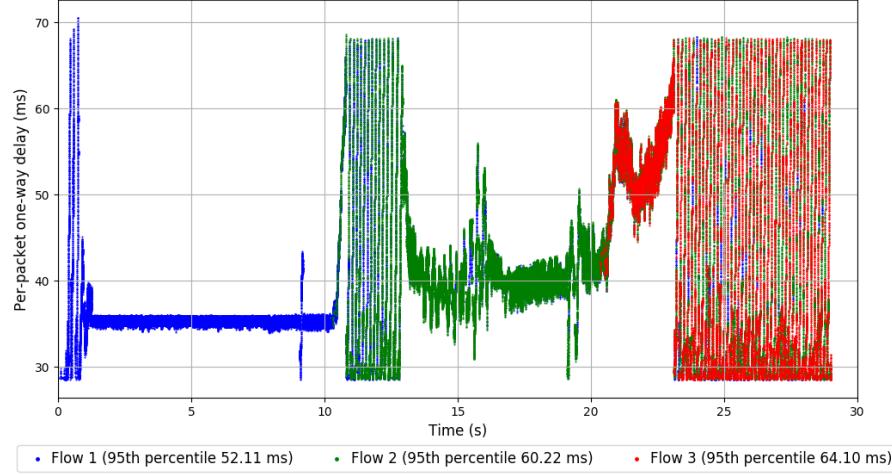
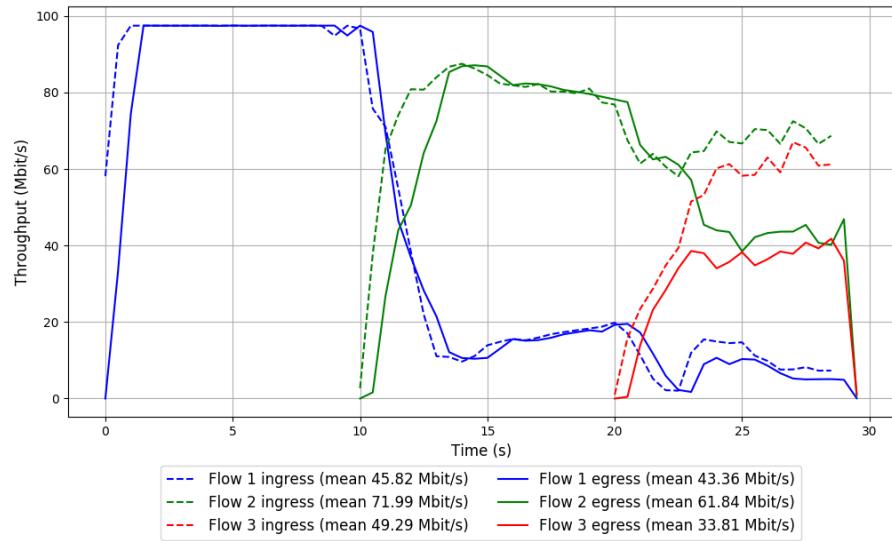


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:35:52
End at: 2019-02-11 18:36:22
Local clock offset: 0.755 ms
Remote clock offset: -3.322 ms

# Below is generated by plot.py at 2019-02-11 19:32:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 59.233 ms
Loss rate: 12.80%
-- Flow 1:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 52.112 ms
Loss rate: 5.38%
-- Flow 2:
Average throughput: 61.84 Mbit/s
95th percentile per-packet one-way delay: 60.215 ms
Loss rate: 14.13%
-- Flow 3:
Average throughput: 33.81 Mbit/s
95th percentile per-packet one-way delay: 64.101 ms
Loss rate: 31.49%
```

Run 4: Report of Indigo-MusesT — Data Link

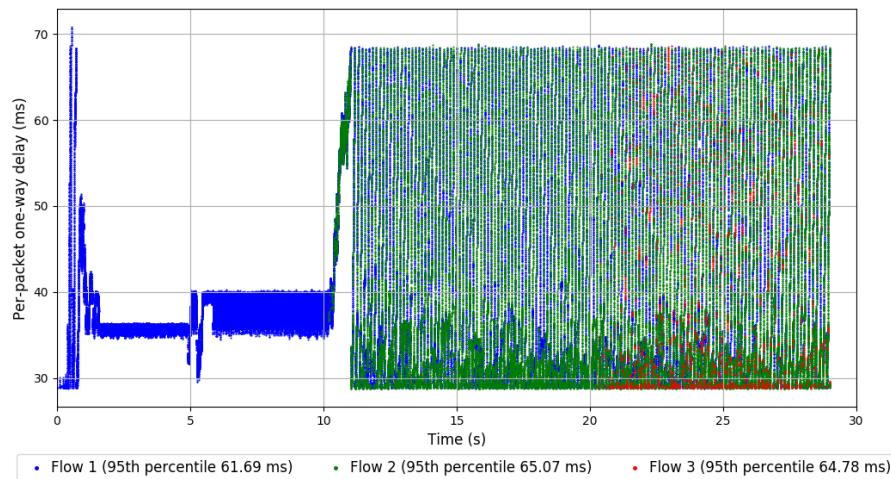
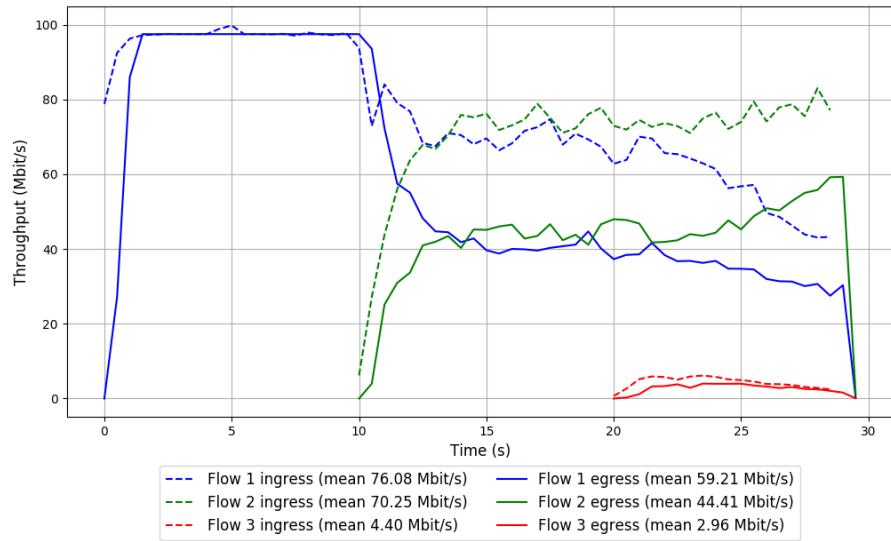


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 19:01:14
End at: 2019-02-11 19:01:44
Local clock offset: 1.016 ms
Remote clock offset: -2.623 ms

# Below is generated by plot.py at 2019-02-11 19:32:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 63.393 ms
Loss rate: 27.73%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 61.687 ms
Loss rate: 22.18%
-- Flow 2:
Average throughput: 44.41 Mbit/s
95th percentile per-packet one-way delay: 65.073 ms
Loss rate: 36.80%
-- Flow 3:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 64.779 ms
Loss rate: 32.92%
```

Run 5: Report of Indigo-MusesT — Data Link

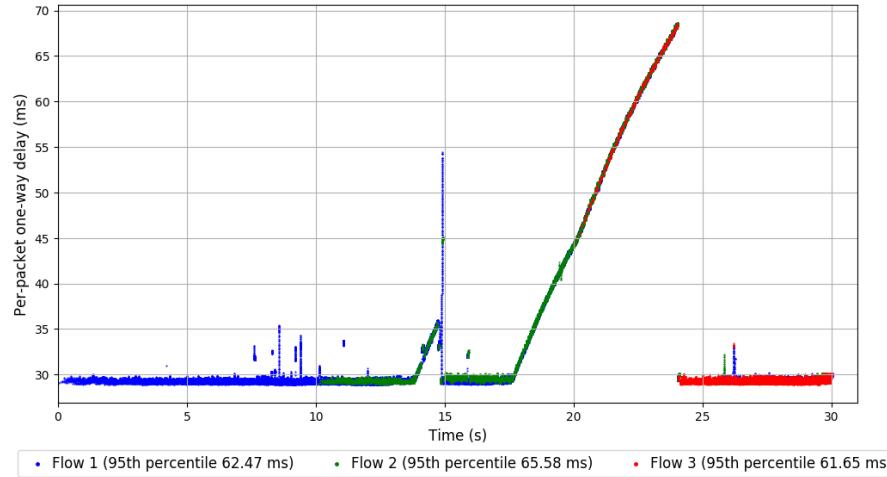
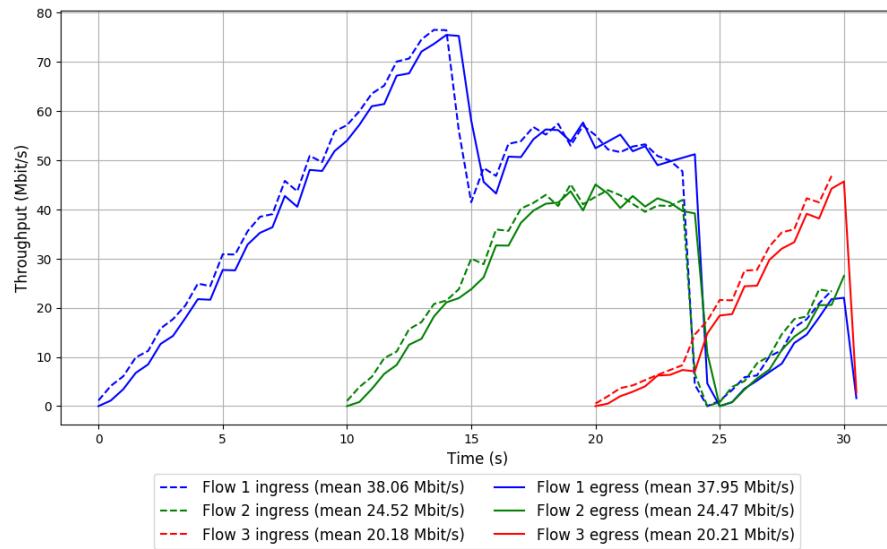


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-11 17:26:02
End at: 2019-02-11 17:26:32
Local clock offset: 0.972 ms
Remote clock offset: -5.273 ms

# Below is generated by plot.py at 2019-02-11 19:32:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.93 Mbit/s
95th percentile per-packet one-way delay: 63.846 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 37.95 Mbit/s
95th percentile per-packet one-way delay: 62.468 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 65.585 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 61.653 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

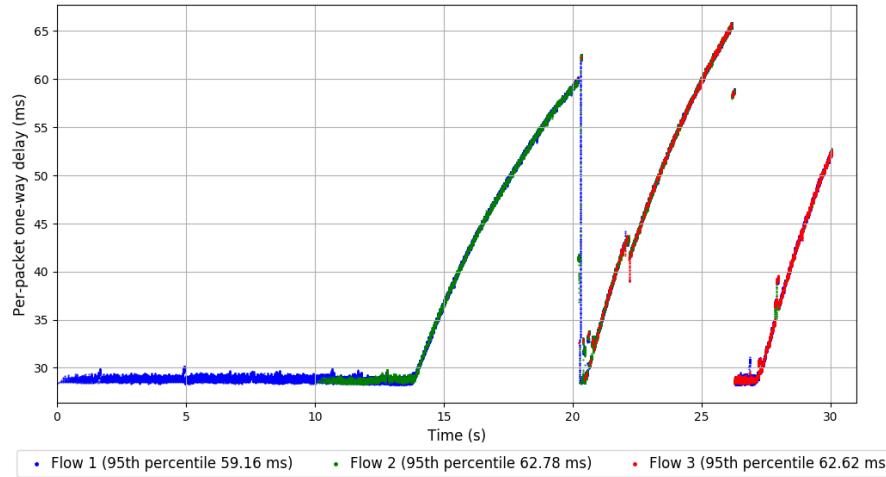
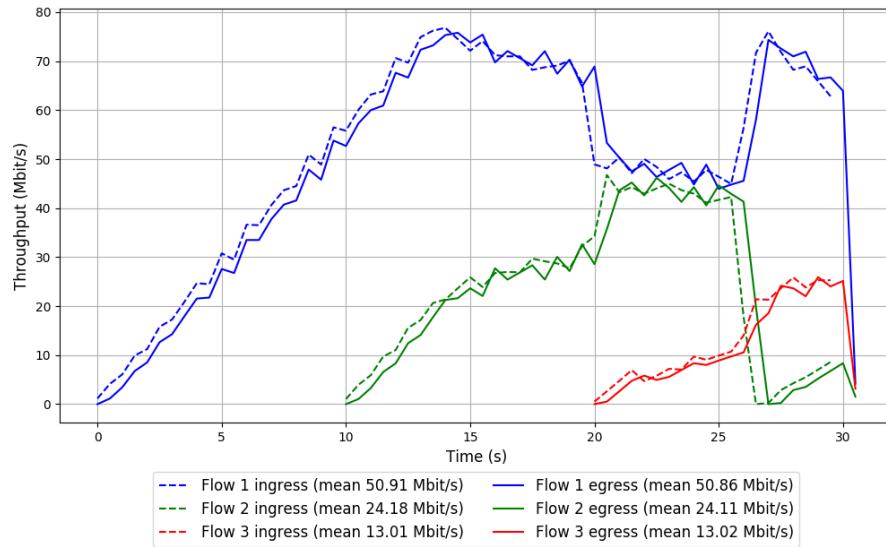


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-11 17:51:24
End at: 2019-02-11 17:51:54
Local clock offset: -2.253 ms
Remote clock offset: -4.843 ms

# Below is generated by plot.py at 2019-02-11 19:32:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.26 Mbit/s
95th percentile per-packet one-way delay: 60.422 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 50.86 Mbit/s
95th percentile per-packet one-way delay: 59.158 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 62.777 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 62.621 ms
Loss rate: 0.02%
```

Run 2: Report of LEDBAT — Data Link

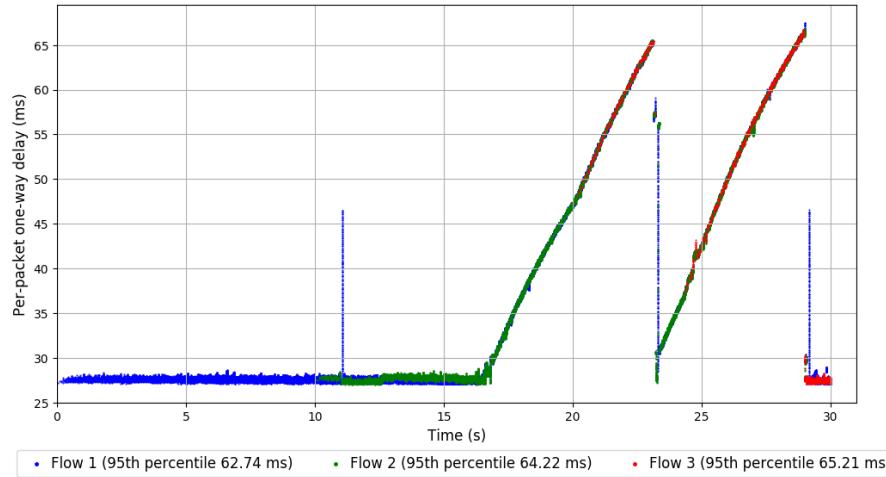
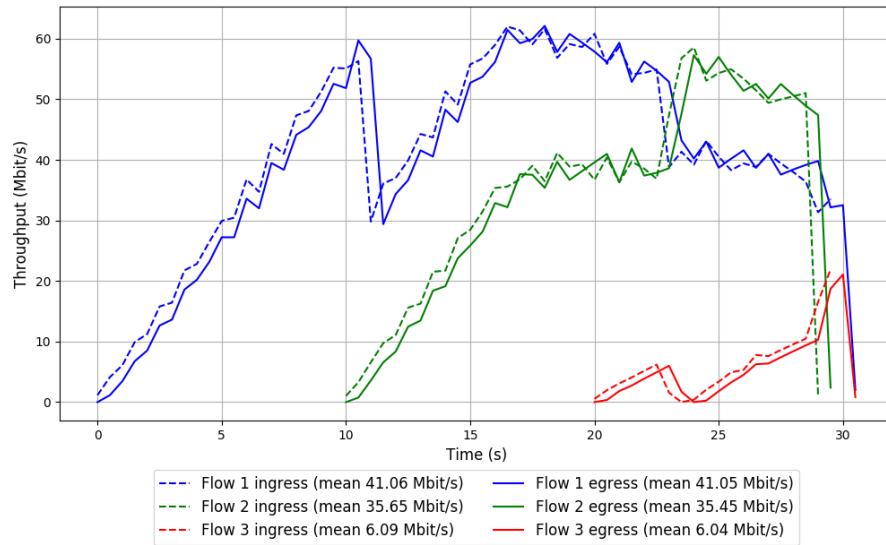


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-11 18:16:41
End at: 2019-02-11 18:17:11
Local clock offset: -0.399 ms
Remote clock offset: -5.454 ms

# Below is generated by plot.py at 2019-02-11 19:32:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.54 Mbit/s
95th percentile per-packet one-way delay: 63.526 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 41.05 Mbit/s
95th percentile per-packet one-way delay: 62.745 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: 64.216 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 65.212 ms
Loss rate: 0.95%
```

Run 3: Report of LEDBAT — Data Link

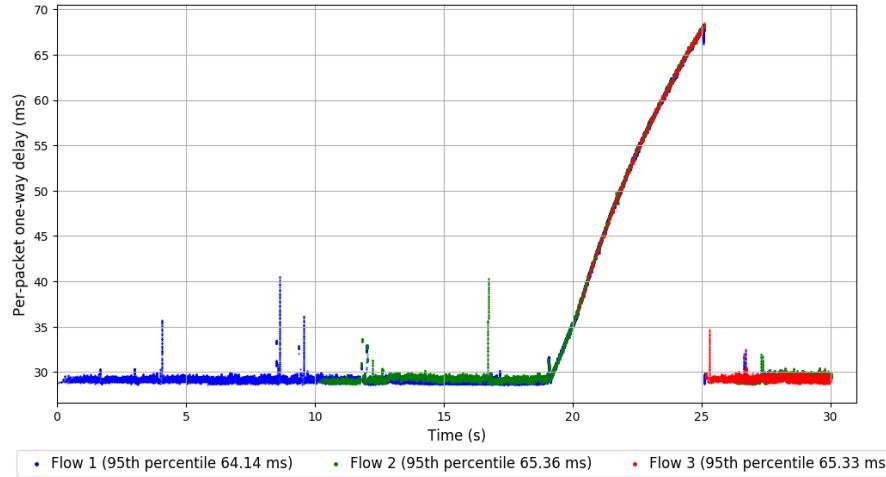
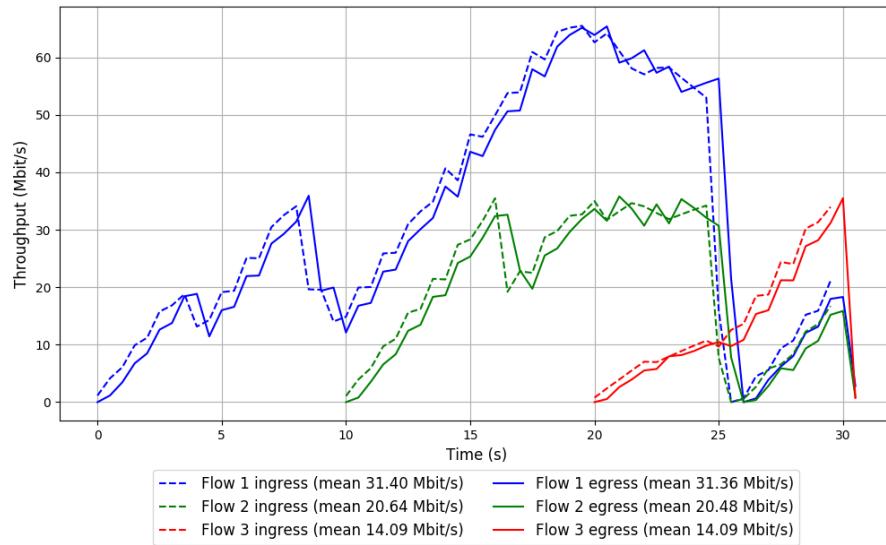


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-11 18:41:58
End at: 2019-02-11 18:42:28
Local clock offset: 0.666 ms
Remote clock offset: -3.013 ms

# Below is generated by plot.py at 2019-02-11 19:32:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.68 Mbit/s
95th percentile per-packet one-way delay: 64.650 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 31.36 Mbit/s
95th percentile per-packet one-way delay: 64.141 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 20.48 Mbit/s
95th percentile per-packet one-way delay: 65.358 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 14.09 Mbit/s
95th percentile per-packet one-way delay: 65.328 ms
Loss rate: 0.06%
```

Run 4: Report of LEDBAT — Data Link

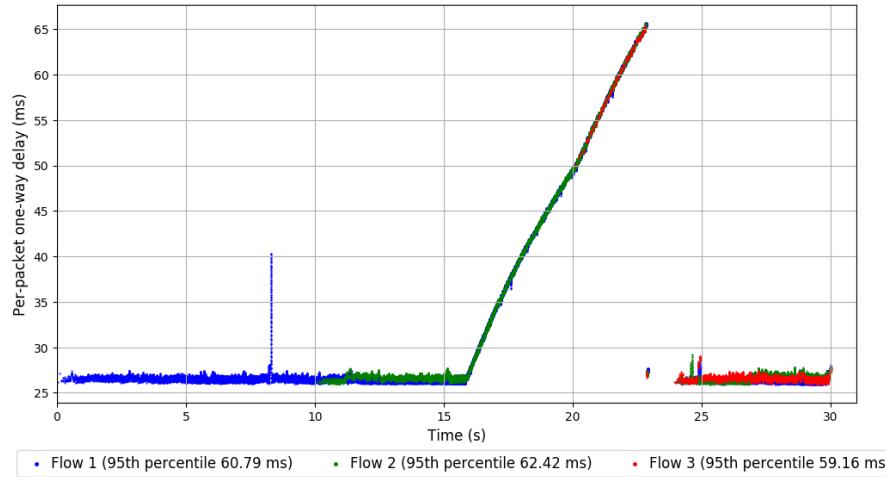
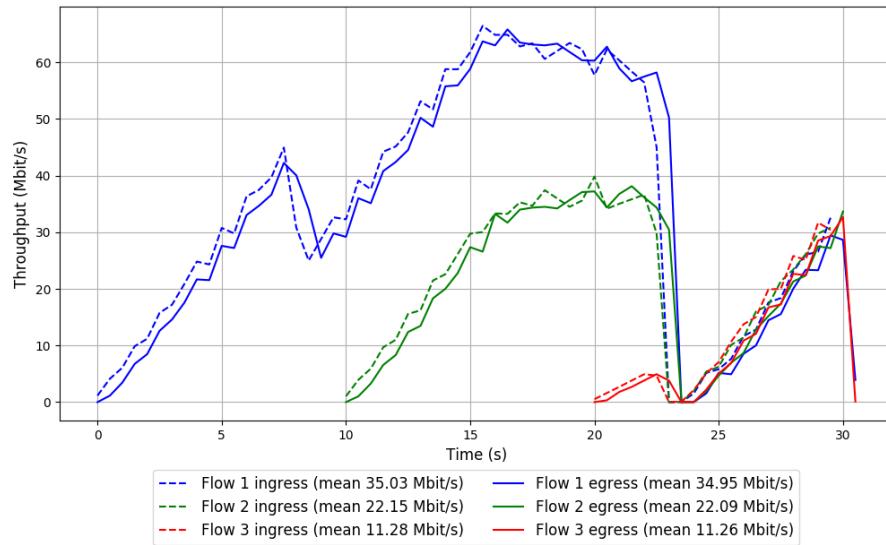


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-11 19:07:18
End at: 2019-02-11 19:07:48
Local clock offset: -0.037 ms
Remote clock offset: -5.199 ms

# Below is generated by plot.py at 2019-02-11 19:32:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.39 Mbit/s
95th percentile per-packet one-way delay: 61.394 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 34.95 Mbit/s
95th percentile per-packet one-way delay: 60.787 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 62.424 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 59.161 ms
Loss rate: 0.40%
```

Run 5: Report of LEDBAT — Data Link

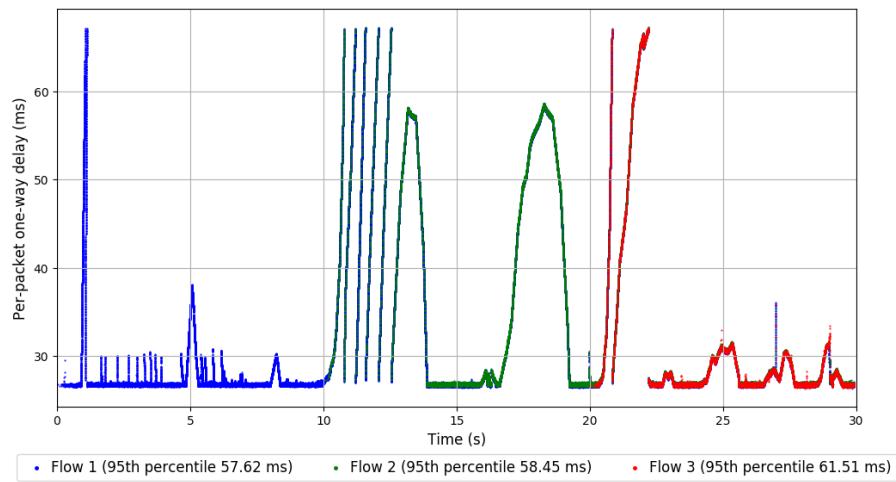
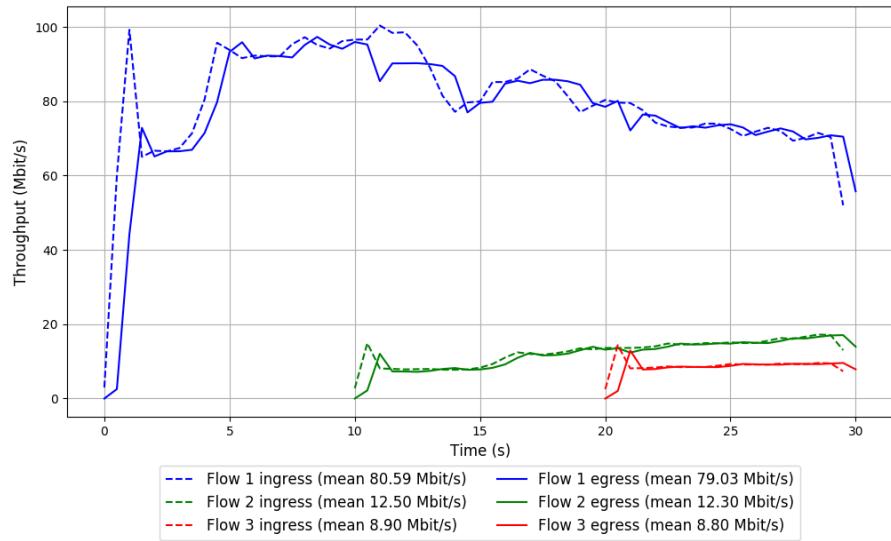


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-11 17:39:19
End at: 2019-02-11 17:39:49
Local clock offset: -0.266 ms
Remote clock offset: -6.869 ms

# Below is generated by plot.py at 2019-02-11 19:33:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 57.733 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 79.03 Mbit/s
95th percentile per-packet one-way delay: 57.620 ms
Loss rate: 1.93%
-- Flow 2:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 58.451 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 61.505 ms
Loss rate: 1.17%
```

Run 1: Report of PCC-Allegro — Data Link

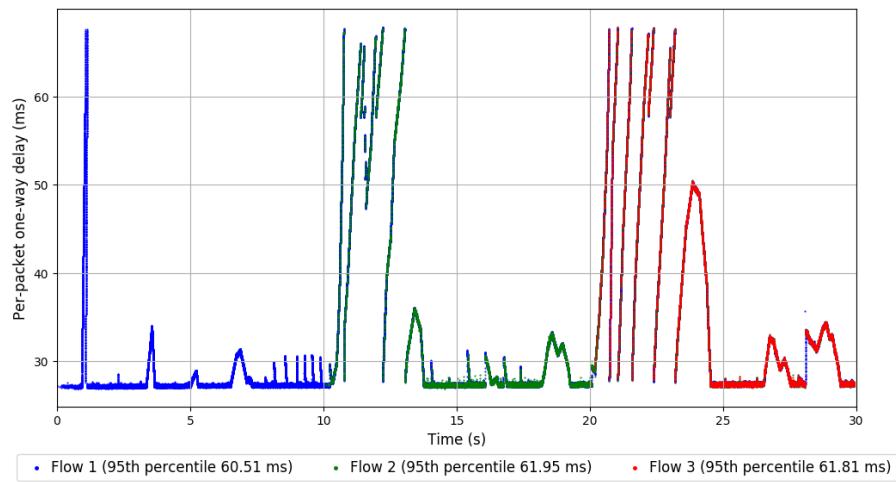
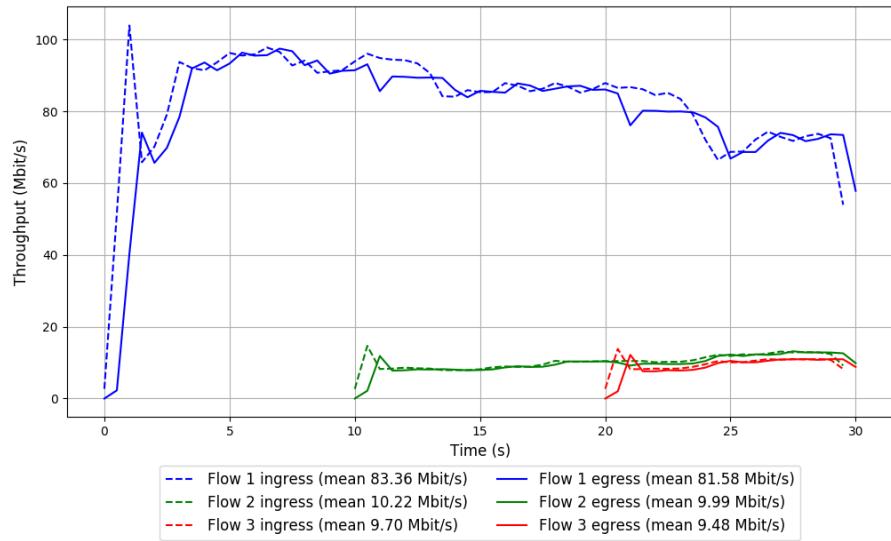


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:04:35
End at: 2019-02-11 18:05:05
Local clock offset: -2.733 ms
Remote clock offset: -5.96 ms

# Below is generated by plot.py at 2019-02-11 19:33:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.36 Mbit/s
95th percentile per-packet one-way delay: 60.719 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 60.514 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 9.99 Mbit/s
95th percentile per-packet one-way delay: 61.955 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 61.808 ms
Loss rate: 2.18%
```

Run 2: Report of PCC-Allegro — Data Link

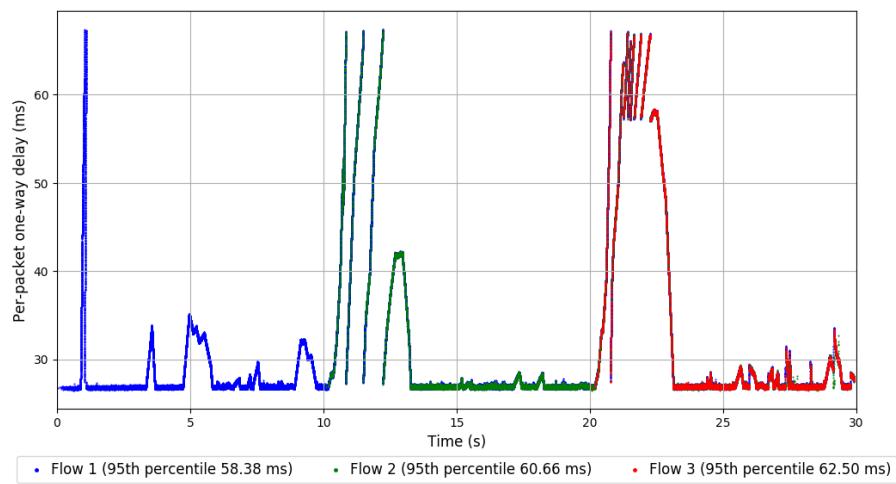
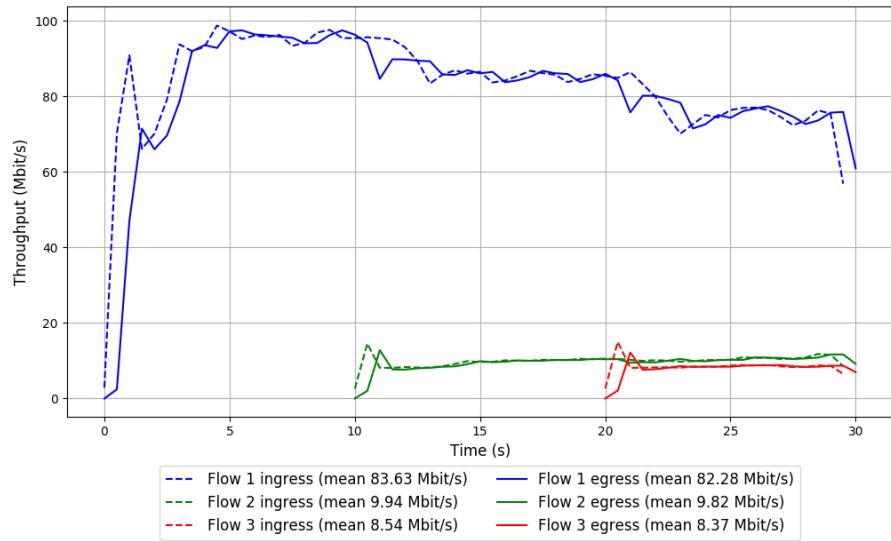


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:29:50
End at: 2019-02-11 18:30:20
Local clock offset: 0.578 ms
Remote clock offset: -5.471 ms

# Below is generated by plot.py at 2019-02-11 19:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.57 Mbit/s
95th percentile per-packet one-way delay: 58.826 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 82.28 Mbit/s
95th percentile per-packet one-way delay: 58.380 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 60.665 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 62.496 ms
Loss rate: 2.06%
```

Run 3: Report of PCC-Allegro — Data Link

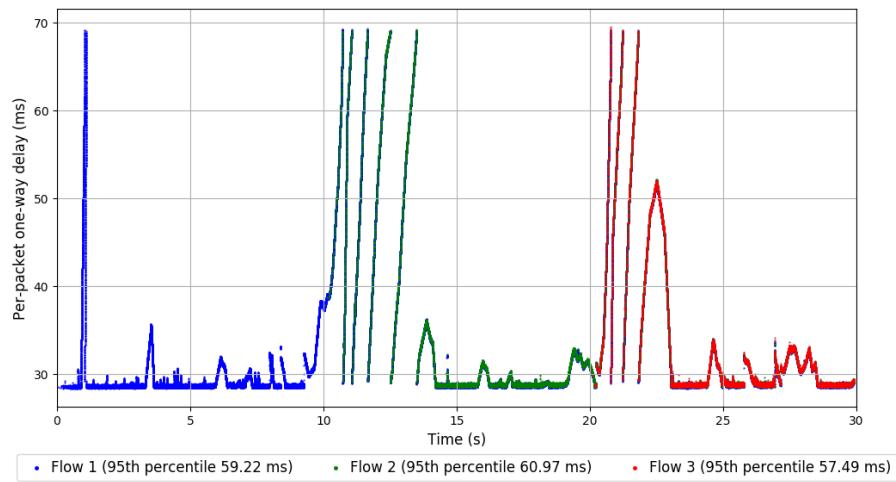
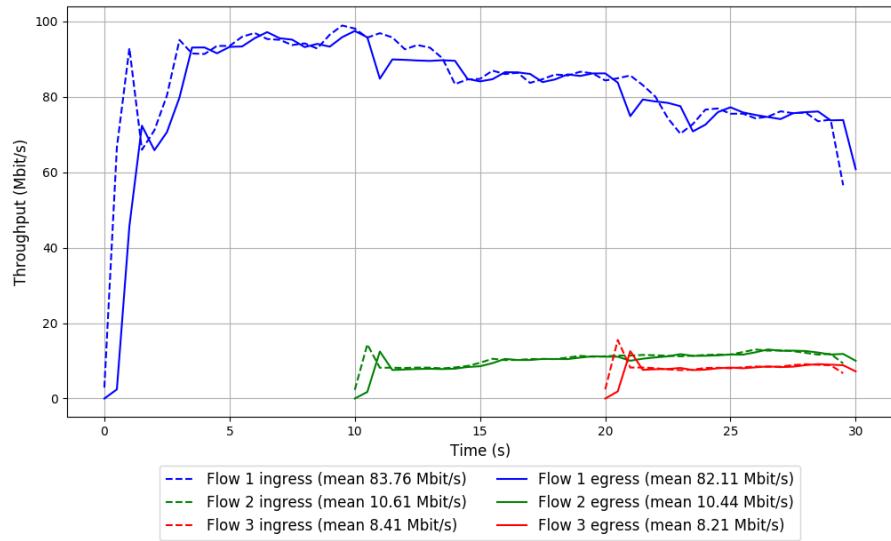


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:55:12
End at: 2019-02-11 18:55:42
Local clock offset: 0.882 ms
Remote clock offset: -2.933 ms

# Below is generated by plot.py at 2019-02-11 19:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 59.328 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 82.11 Mbit/s
95th percentile per-packet one-way delay: 59.215 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 60.969 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 8.21 Mbit/s
95th percentile per-packet one-way delay: 57.495 ms
Loss rate: 2.40%
```

Run 4: Report of PCC-Allegro — Data Link

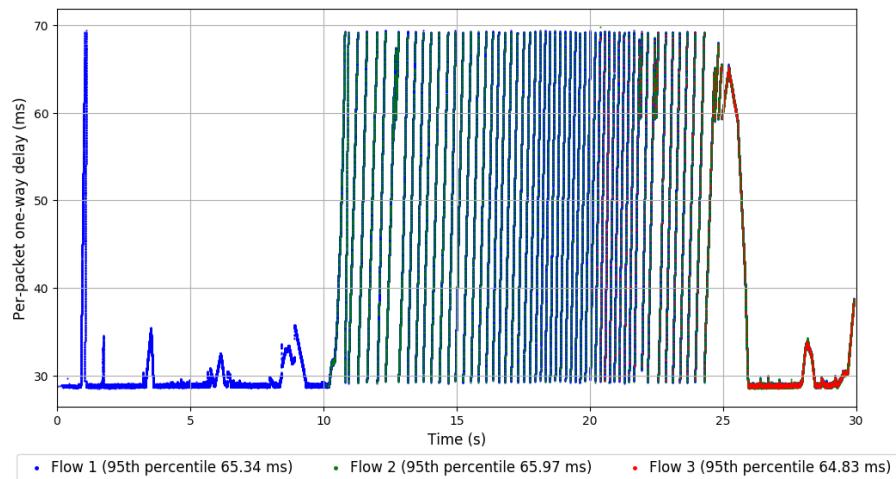
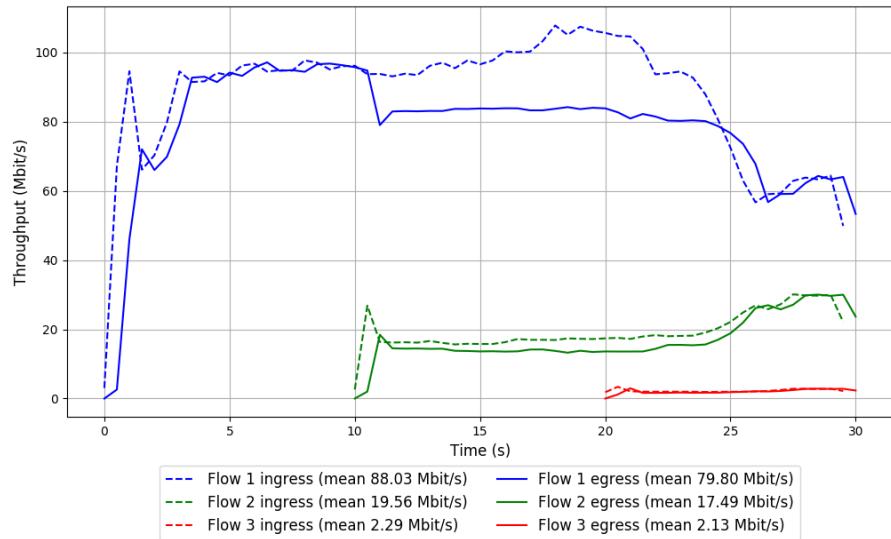


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-11 19:20:29
End at: 2019-02-11 19:20:59
Local clock offset: -2.494 ms
Remote clock offset: -3.294 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.13 Mbit/s
95th percentile per-packet one-way delay: 65.416 ms
Loss rate: 9.48%
-- Flow 1:
Average throughput: 79.80 Mbit/s
95th percentile per-packet one-way delay: 65.338 ms
Loss rate: 9.33%
-- Flow 2:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 65.965 ms
Loss rate: 10.58%
-- Flow 3:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 64.827 ms
Loss rate: 6.94%
```

Run 5: Report of PCC-Allegro — Data Link

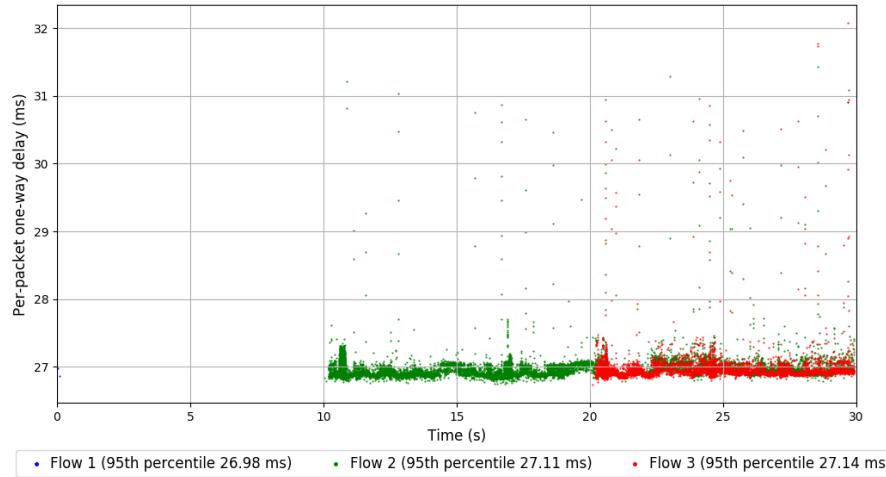
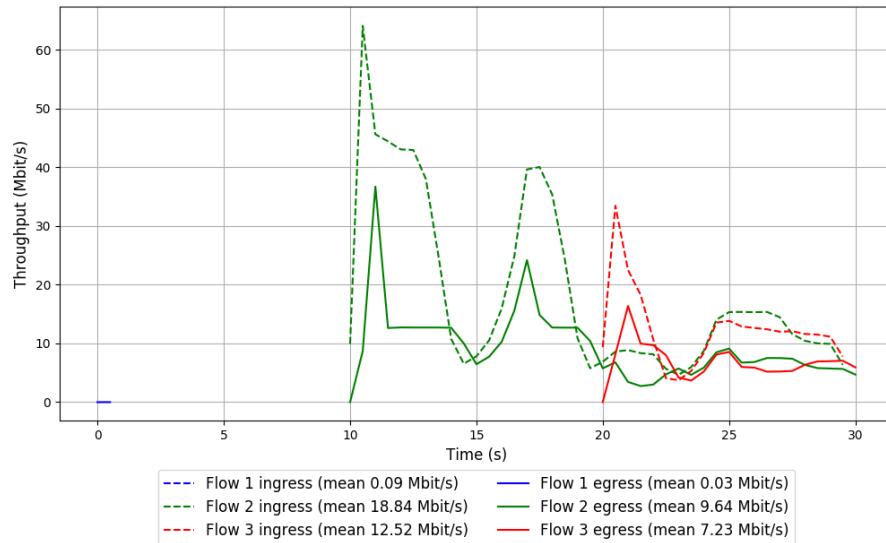


Run 1: Statistics of PCC-Expr

```
Start at: 2019-02-11 17:22:26
End at: 2019-02-11 17:22:56
Local clock offset: 0.488 ms
Remote clock offset: -7.462 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 27.118 ms
Loss rate: 47.18%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 26.978 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 27.112 ms
Loss rate: 48.81%
-- Flow 3:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 27.139 ms
Loss rate: 42.25%
```

Run 1: Report of PCC-Expr — Data Link

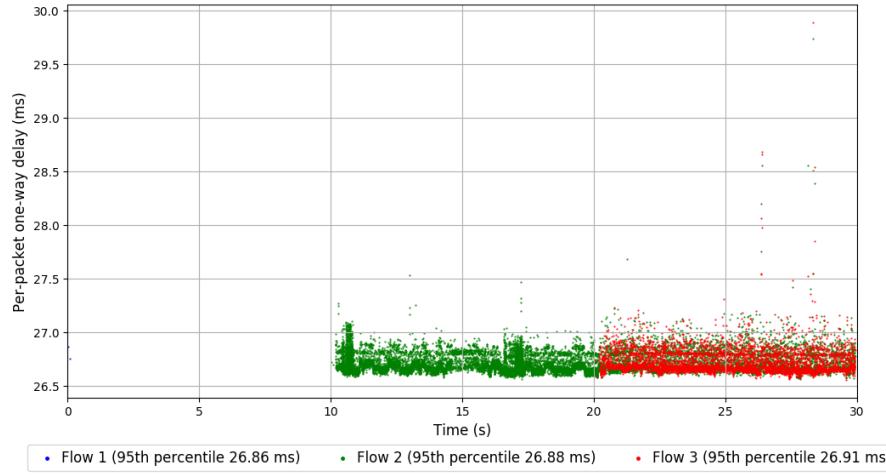
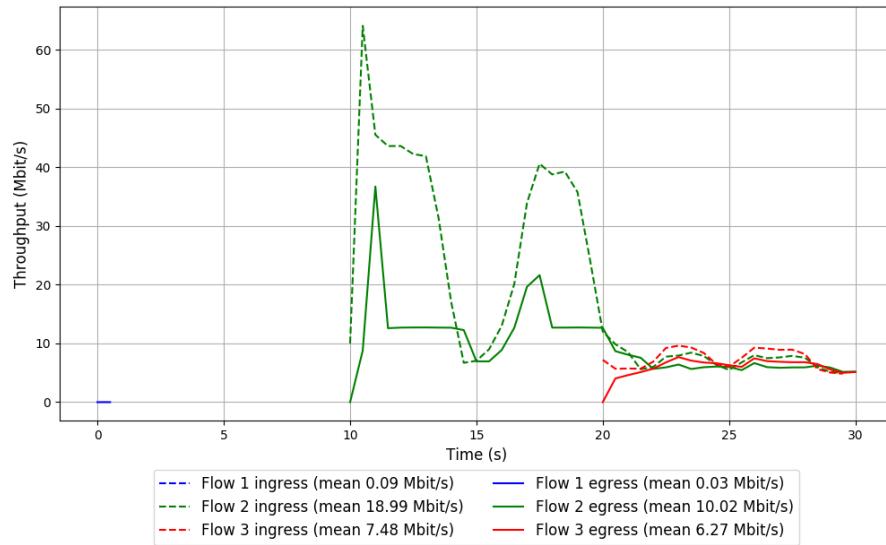


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-11 17:47:47
End at: 2019-02-11 17:48:17
Local clock offset: -1.904 ms
Remote clock offset: -6.65 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 26.891 ms
Loss rate: 42.18%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 26.860 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.02 Mbit/s
95th percentile per-packet one-way delay: 26.884 ms
Loss rate: 47.25%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 26.915 ms
Loss rate: 16.24%
```

Run 2: Report of PCC-Expr — Data Link

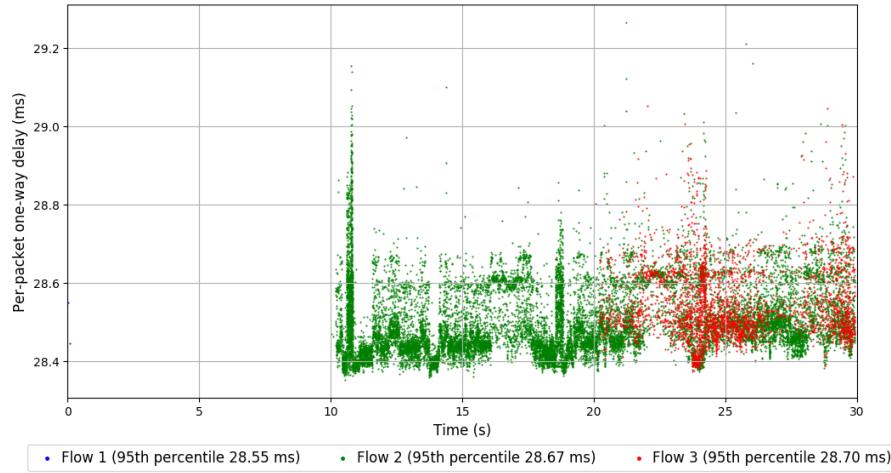
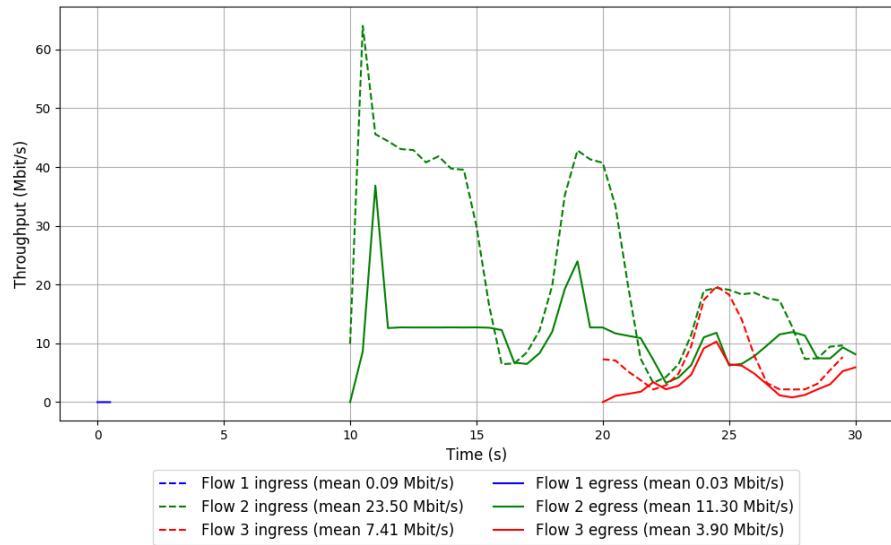


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:13:03
End at: 2019-02-11 18:13:33
Local clock offset: -0.82 ms
Remote clock offset: -4.227 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 28.673 ms
Loss rate: 51.29%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 28.549 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 28.667 ms
Loss rate: 51.90%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 28.698 ms
Loss rate: 47.37%
```

Run 3: Report of PCC-Expr — Data Link

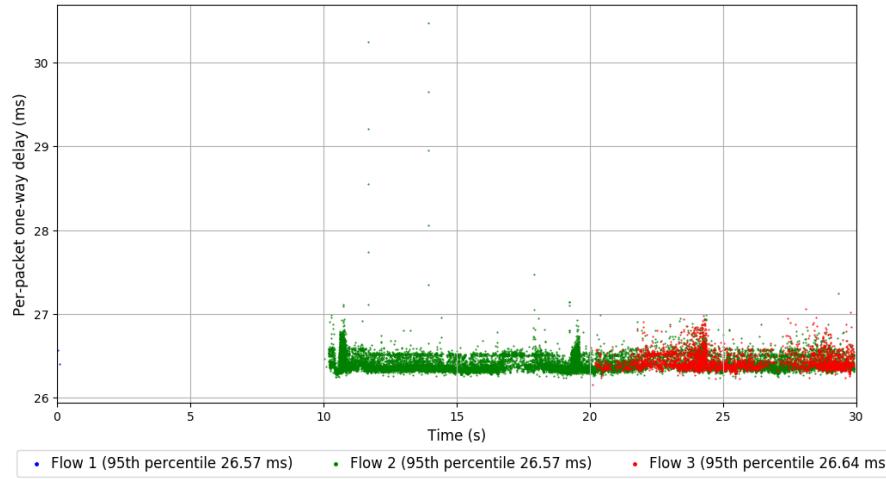
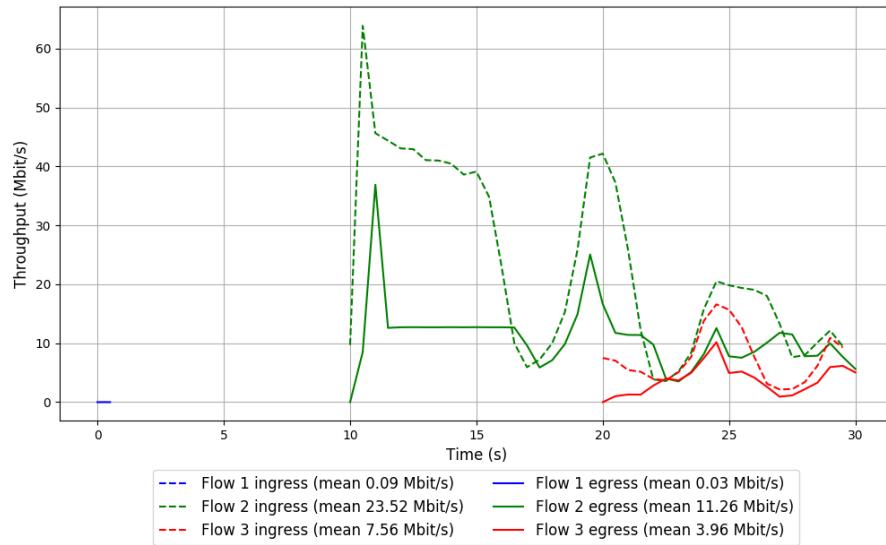


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:38:20
End at: 2019-02-11 18:38:50
Local clock offset: 0.712 ms
Remote clock offset: -5.465 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 26.581 ms
Loss rate: 51.48%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 26.565 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 26.572 ms
Loss rate: 52.10%
-- Flow 3:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 26.645 ms
Loss rate: 47.55%
```

Run 4: Report of PCC-Expr — Data Link

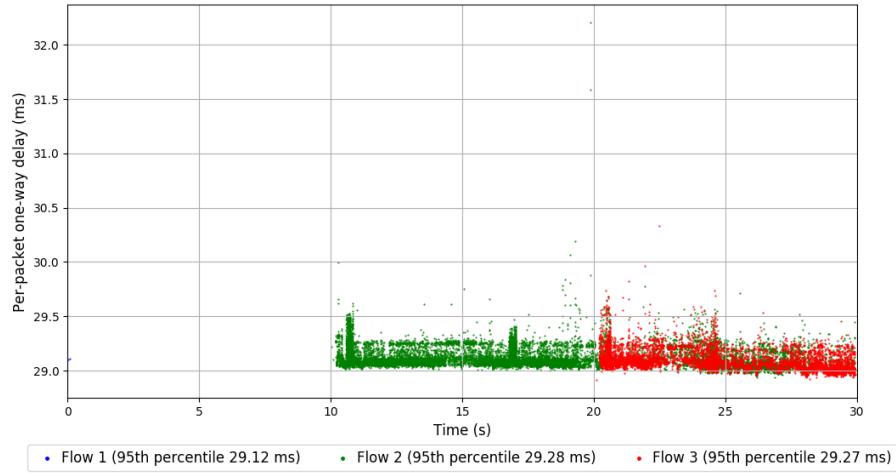
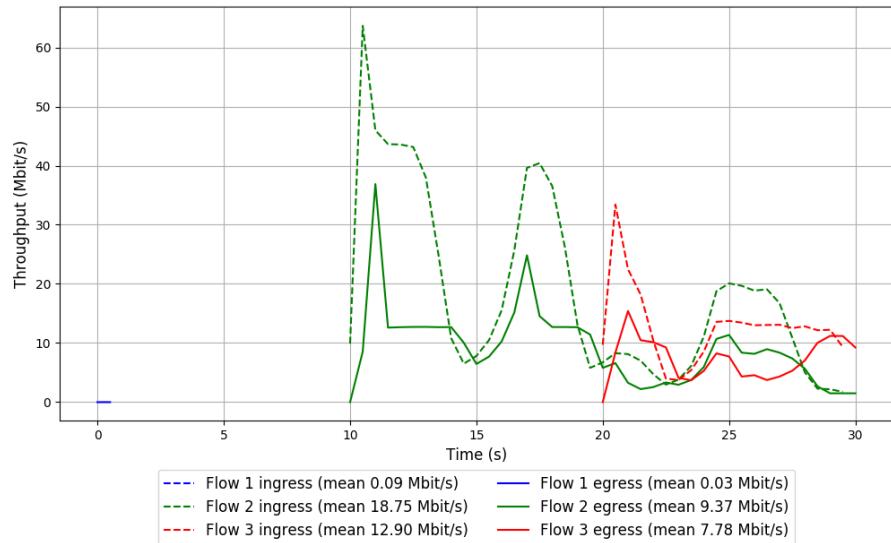


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-11 19:03:41
End at: 2019-02-11 19:04:11
Local clock offset: 1.099 ms
Remote clock offset: -2.381 ms

# Below is generated by plot.py at 2019-02-11 19:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 29.279 ms
Loss rate: 47.39%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 29.116 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 29.281 ms
Loss rate: 50.02%
-- Flow 3:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 29.274 ms
Loss rate: 39.69%
```

Run 5: Report of PCC-Expr — Data Link

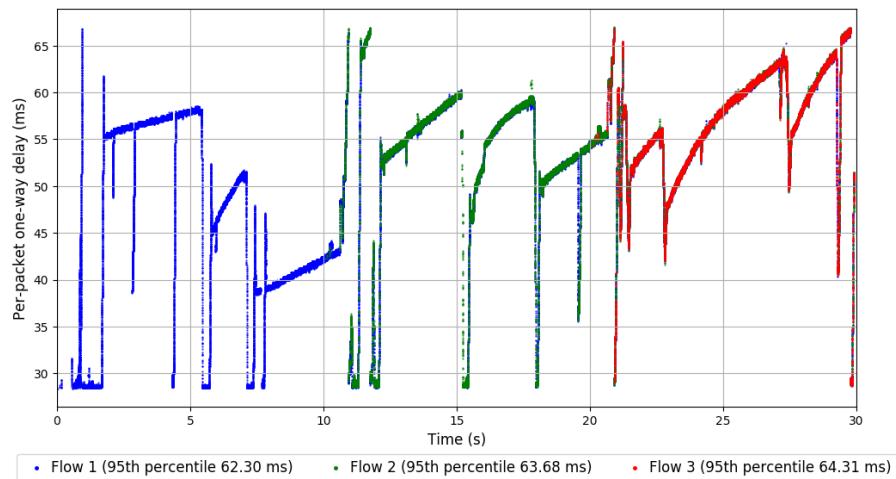
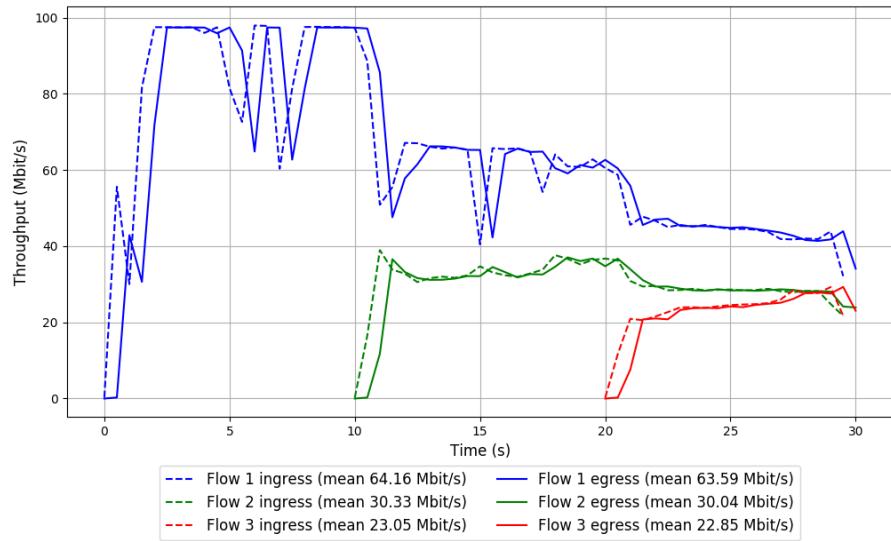


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-02-11 17:32:01
End at: 2019-02-11 17:32:31
Local clock offset: 1.605 ms
Remote clock offset: -5.466 ms

# Below is generated by plot.py at 2019-02-11 19:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.07 Mbit/s
95th percentile per-packet one-way delay: 63.097 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 63.59 Mbit/s
95th percentile per-packet one-way delay: 62.304 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 63.677 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 22.85 Mbit/s
95th percentile per-packet one-way delay: 64.307 ms
Loss rate: 0.90%
```

Run 1: Report of QUIC Cubic — Data Link

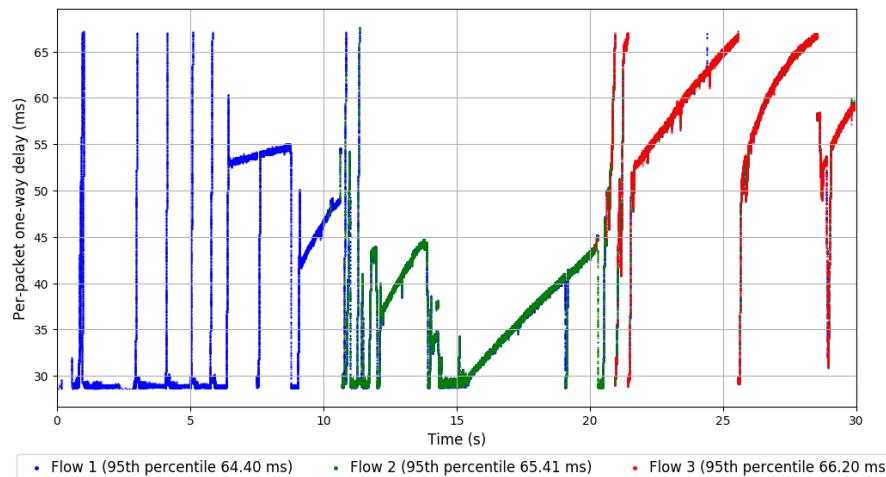
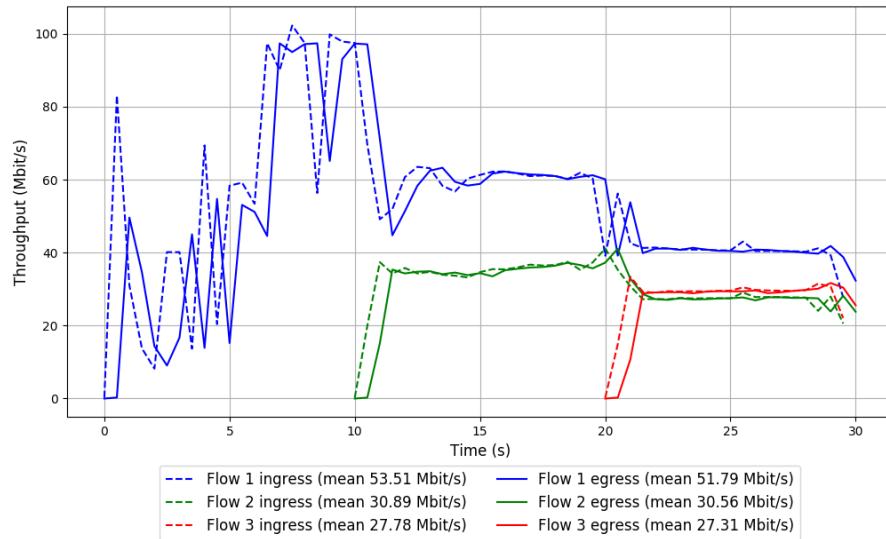


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-11 17:57:21
End at: 2019-02-11 17:57:51
Local clock offset: -2.601 ms
Remote clock offset: -4.316 ms

# Below is generated by plot.py at 2019-02-11 19:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 65.256 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 51.79 Mbit/s
95th percentile per-packet one-way delay: 64.404 ms
Loss rate: 3.10%
-- Flow 2:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 65.409 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 66.203 ms
Loss rate: 1.51%
```

Run 2: Report of QUIC Cubic — Data Link

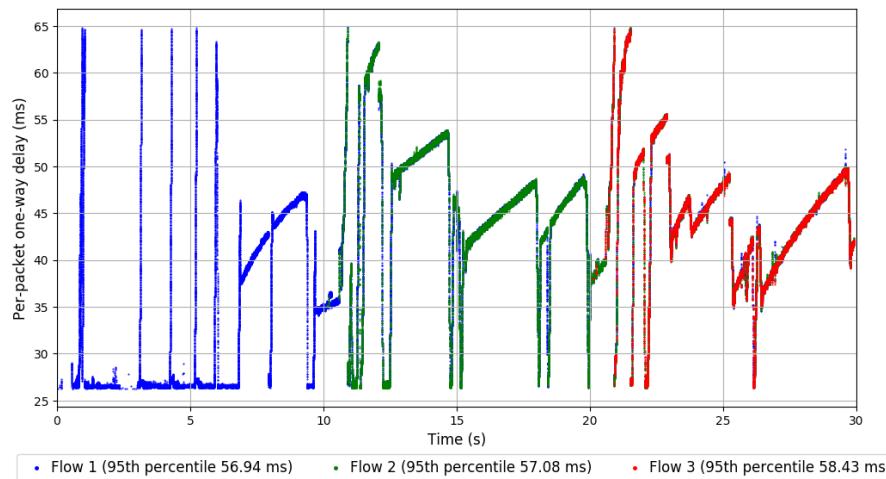
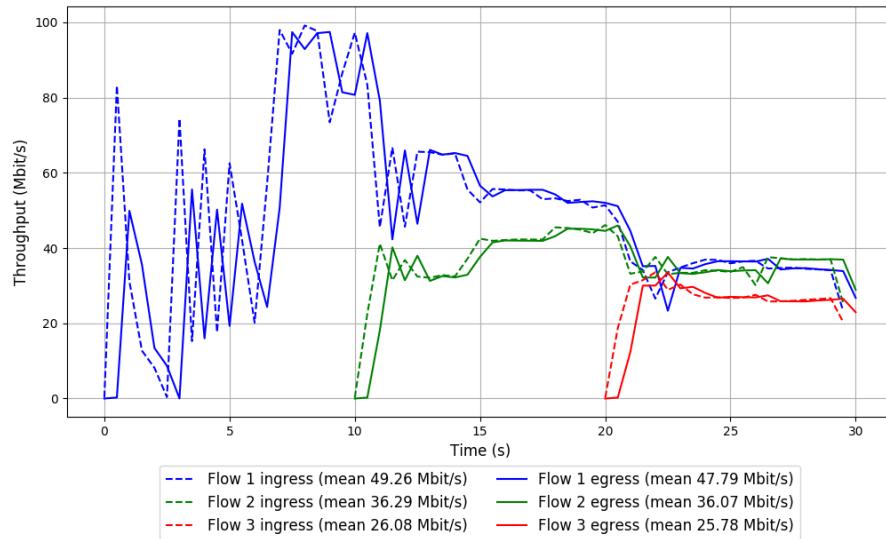


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-11 18:22:38
End at: 2019-02-11 18:23:08
Local clock offset: 0.133 ms
Remote clock offset: -6.008 ms

# Below is generated by plot.py at 2019-02-11 19:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.26 Mbit/s
95th percentile per-packet one-way delay: 57.050 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 47.79 Mbit/s
95th percentile per-packet one-way delay: 56.944 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 36.07 Mbit/s
95th percentile per-packet one-way delay: 57.081 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 25.78 Mbit/s
95th percentile per-packet one-way delay: 58.428 ms
Loss rate: 1.13%
```

Run 3: Report of QUIC Cubic — Data Link

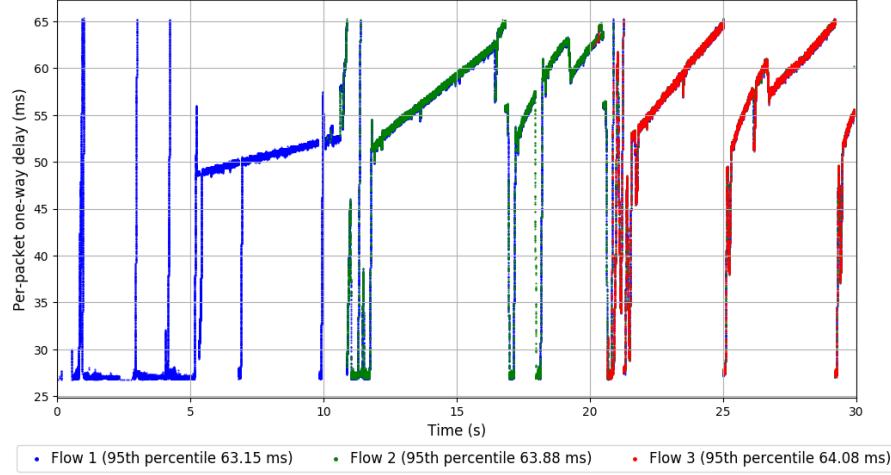
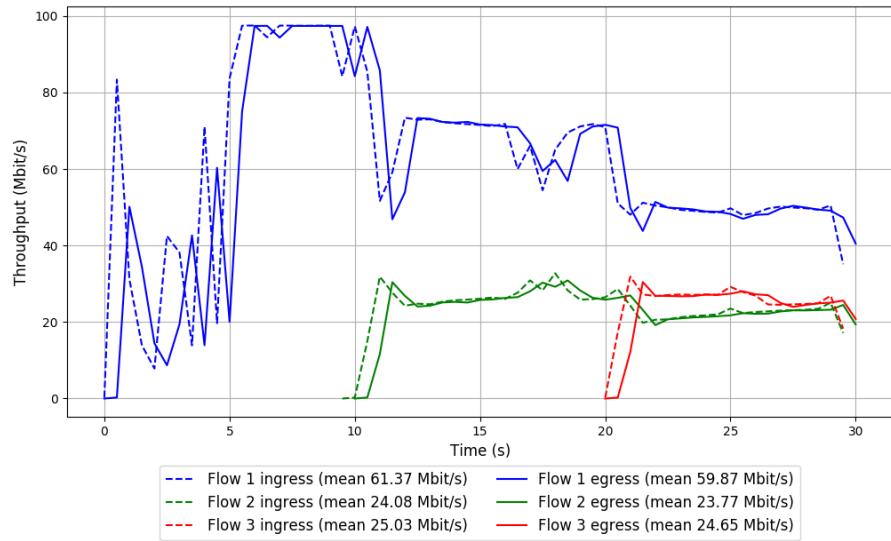


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-11 18:47:57
End at: 2019-02-11 18:48:27
Local clock offset: 0.748 ms
Remote clock offset: -4.538 ms

# Below is generated by plot.py at 2019-02-11 19:34:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 63.442 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 59.87 Mbit/s
95th percentile per-packet one-way delay: 63.150 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 23.77 Mbit/s
95th percentile per-packet one-way delay: 63.877 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 64.082 ms
Loss rate: 1.57%
```

Run 4: Report of QUIC Cubic — Data Link

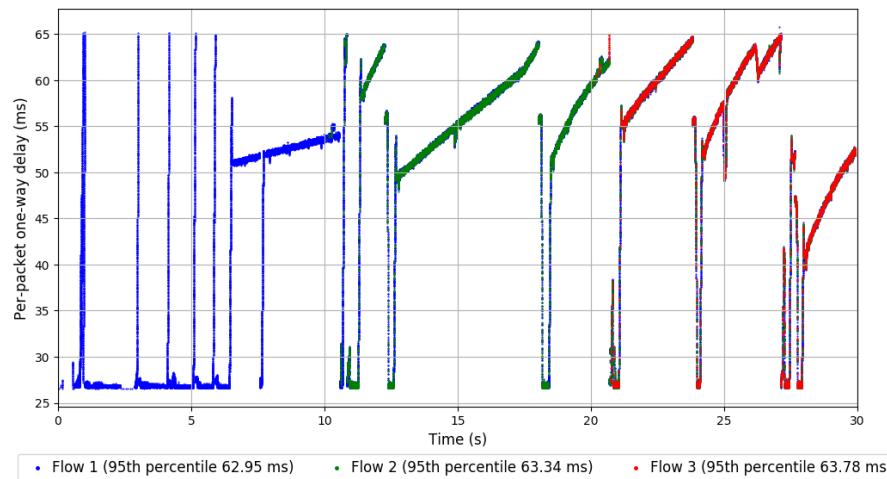
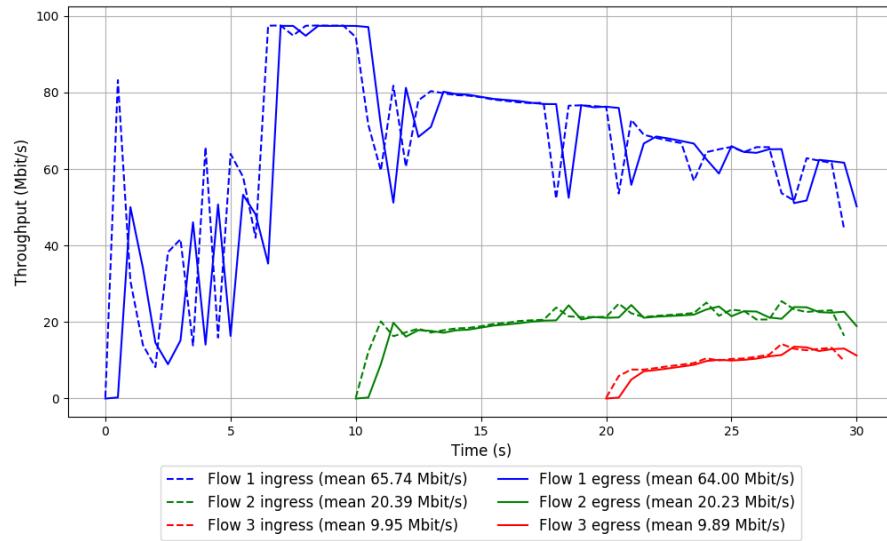


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-11 19:13:16
End at: 2019-02-11 19:13:46
Local clock offset: -1.573 ms
Remote clock offset: -5.046 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.68 Mbit/s
95th percentile per-packet one-way delay: 63.100 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 64.00 Mbit/s
95th percentile per-packet one-way delay: 62.946 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 20.23 Mbit/s
95th percentile per-packet one-way delay: 63.341 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 9.89 Mbit/s
95th percentile per-packet one-way delay: 63.785 ms
Loss rate: 0.66%
```

Run 5: Report of QUIC Cubic — Data Link

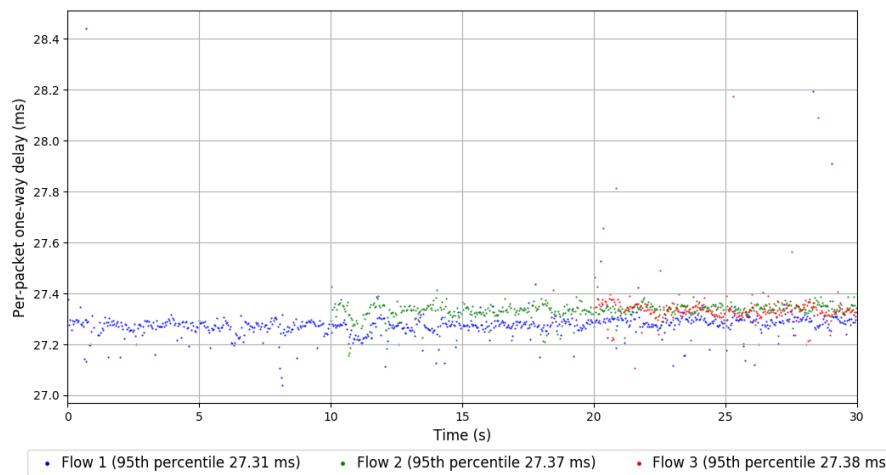
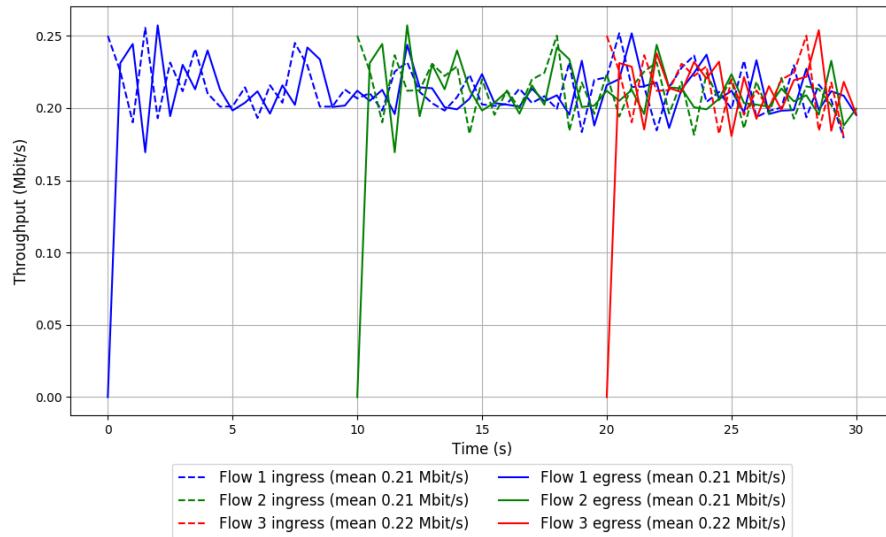


```
Run 1: Statistics of SCReAM

Start at: 2019-02-11 17:30:52
End at: 2019-02-11 17:31:22
Local clock offset: 1.475 ms
Remote clock offset: -6.903 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 27.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 27.313 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 27.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.379 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

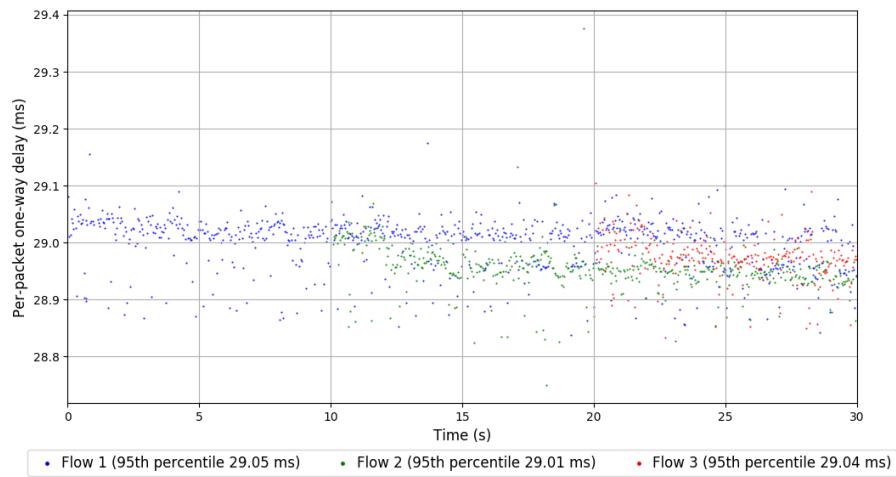
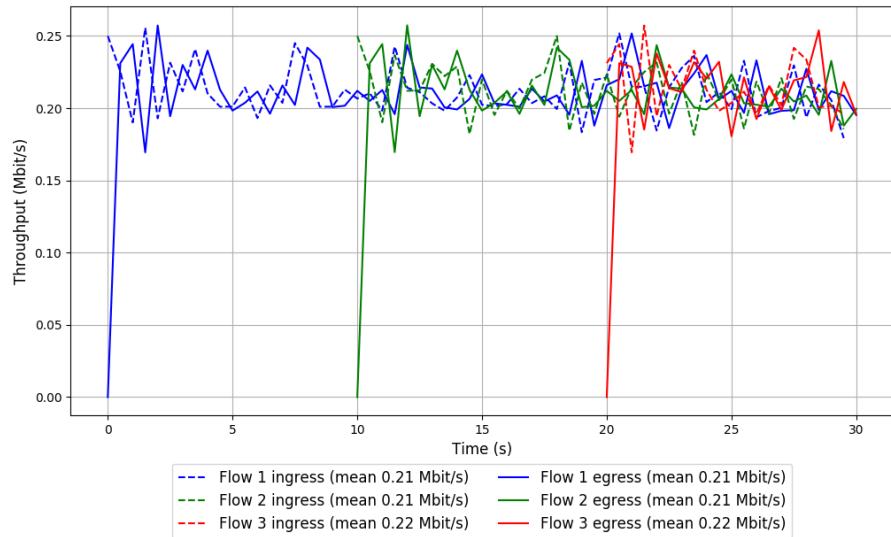


Run 2: Statistics of SCReAM

```
Start at: 2019-02-11 17:56:13
End at: 2019-02-11 17:56:43
Local clock offset: -2.573 ms
Remote clock offset: -4.302 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 29.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.051 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.012 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.035 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

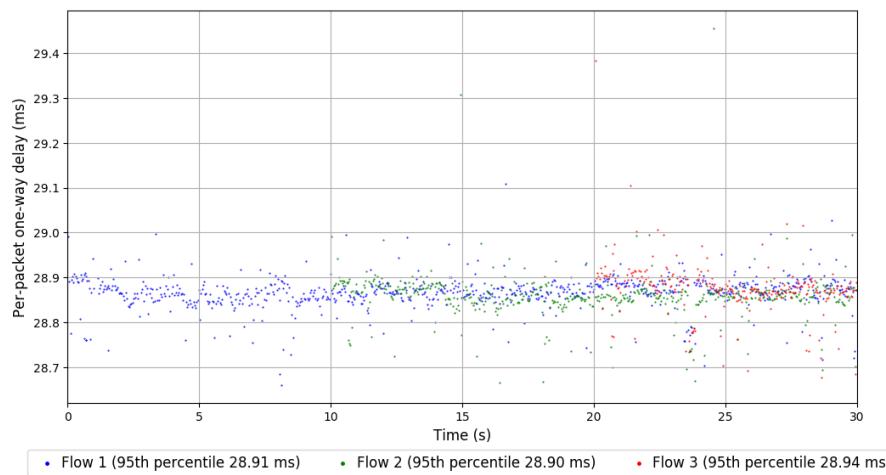
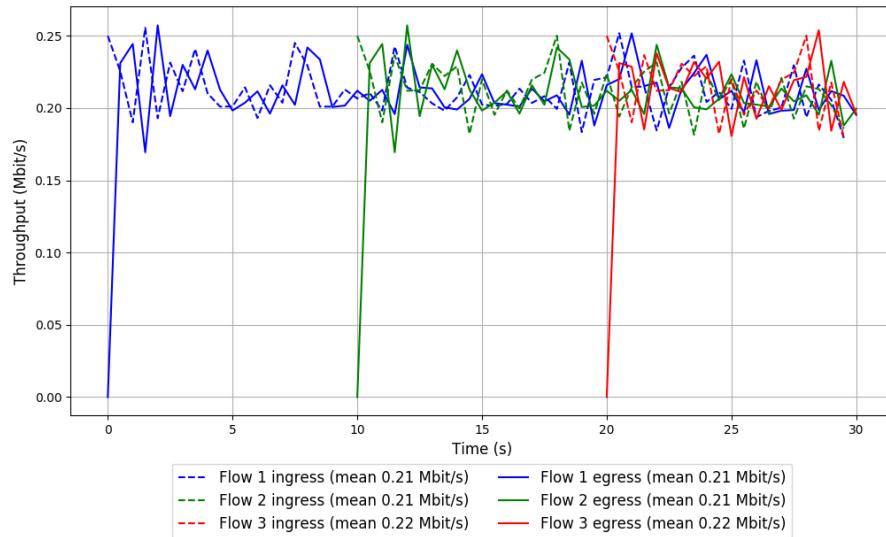


Run 3: Statistics of SCReAM

```
Start at: 2019-02-11 18:21:29
End at: 2019-02-11 18:21:59
Local clock offset: 0.056 ms
Remote clock offset: -3.751 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 28.915 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 28.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 28.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.944 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

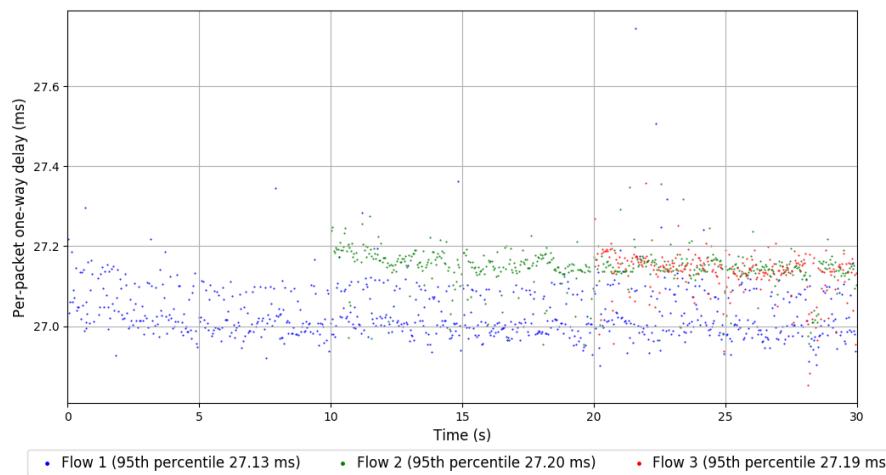
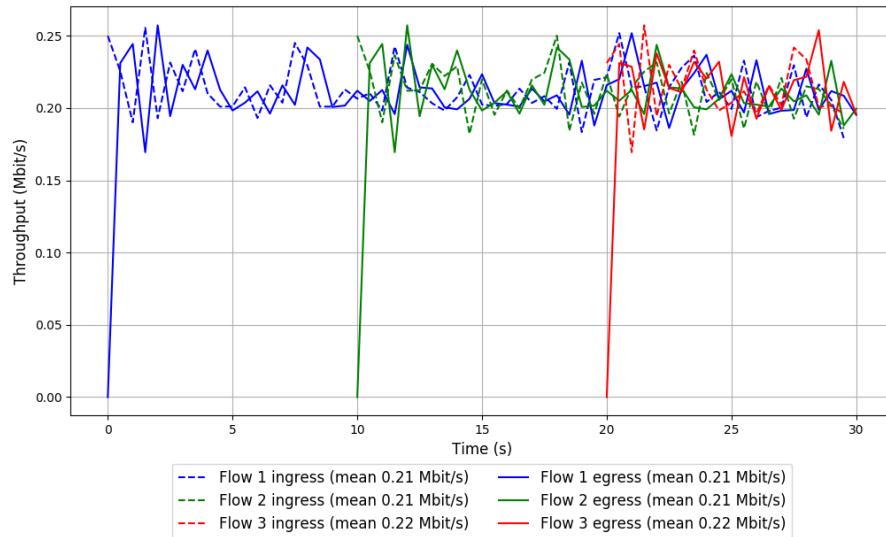


Run 4: Statistics of SCReAM

```
Start at: 2019-02-11 18:46:48
End at: 2019-02-11 18:47:18
Local clock offset: 0.722 ms
Remote clock offset: -4.59 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 27.191 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 27.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 27.205 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.192 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

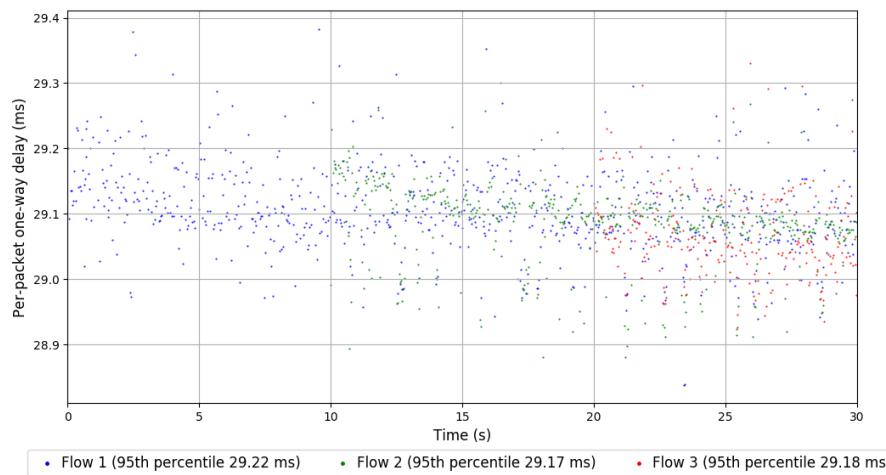
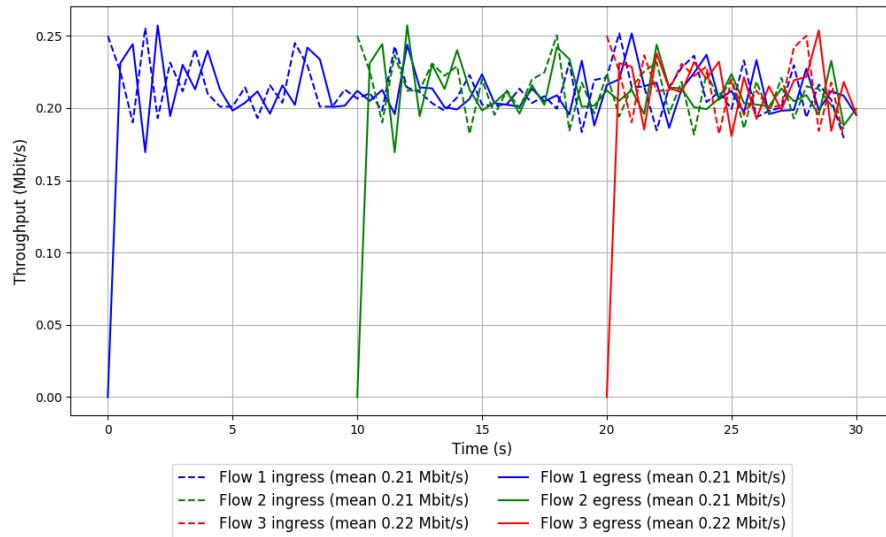


Run 5: Statistics of SCReAM

```
Start at: 2019-02-11 19:12:08
End at: 2019-02-11 19:12:38
Local clock offset: -1.293 ms
Remote clock offset: -2.593 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 29.198 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.185 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

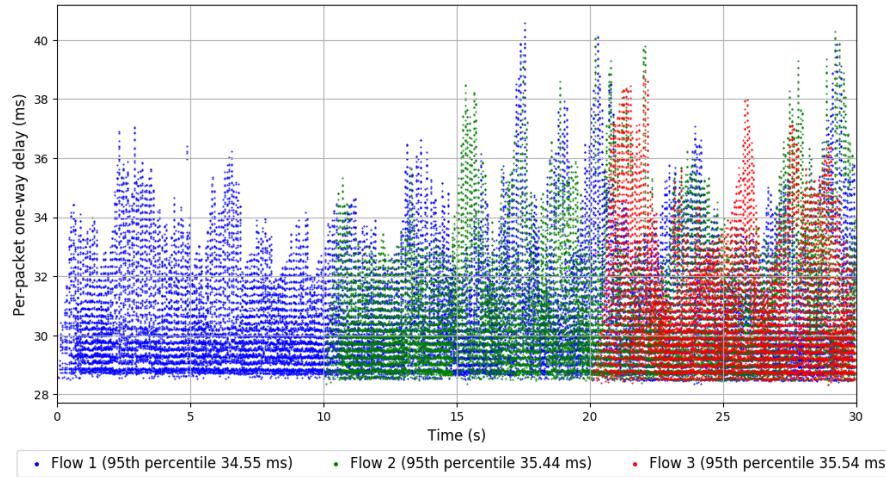
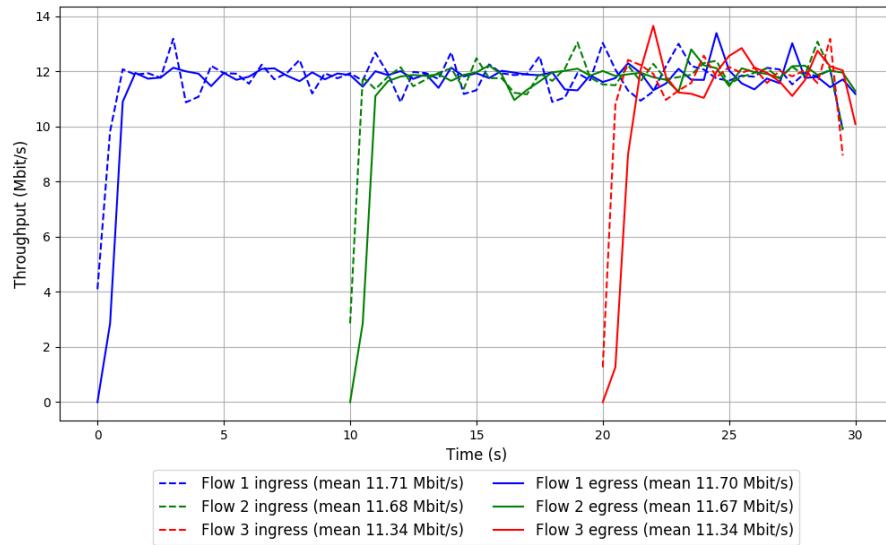


Run 1: Statistics of Sprout

```
Start at: 2019-02-11 17:41:44
End at: 2019-02-11 17:42:14
Local clock offset: -0.888 ms
Remote clock offset: -4.878 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.21 Mbit/s
95th percentile per-packet one-way delay: 35.028 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.70 Mbit/s
95th percentile per-packet one-way delay: 34.553 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.67 Mbit/s
95th percentile per-packet one-way delay: 35.439 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 35.538 ms
Loss rate: 0.02%
```

Run 1: Report of Sprout — Data Link

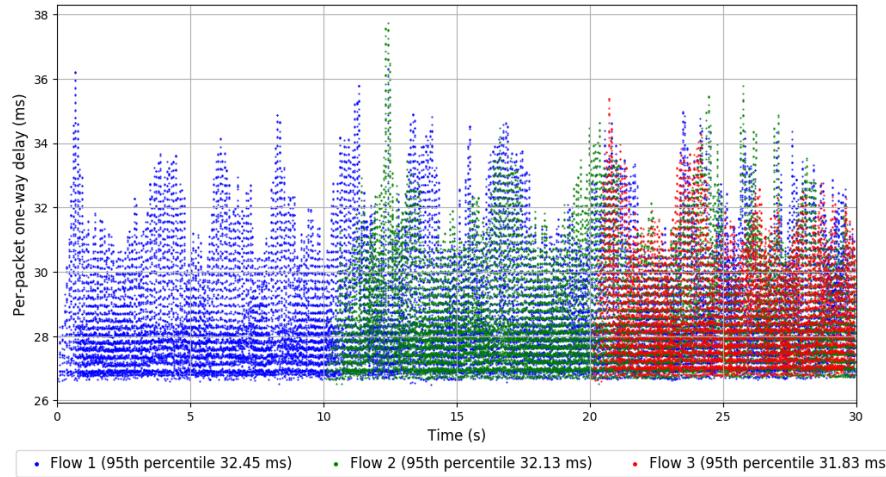
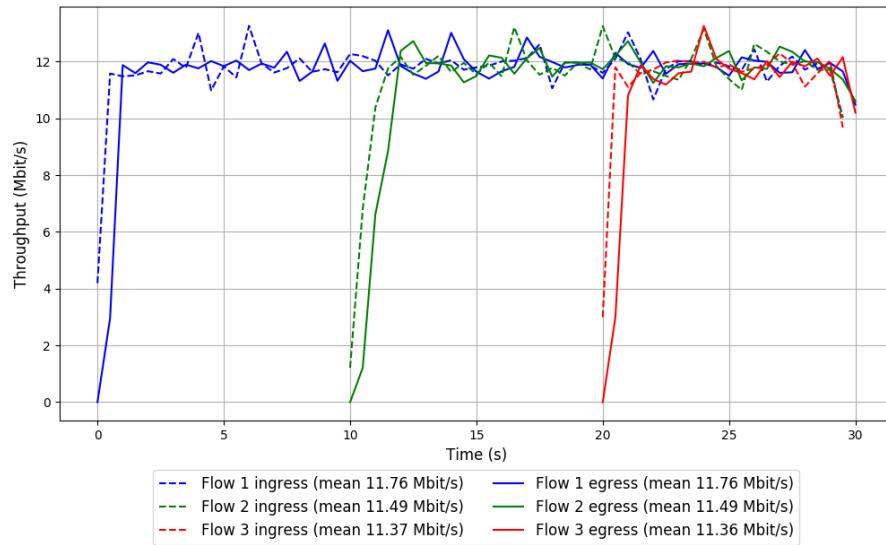


Run 2: Statistics of Sprout

```
Start at: 2019-02-11 18:07:00
End at: 2019-02-11 18:07:30
Local clock offset: -2.016 ms
Remote clock offset: -6.219 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 32.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 32.445 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 32.132 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 11.36 Mbit/s
95th percentile per-packet one-way delay: 31.829 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

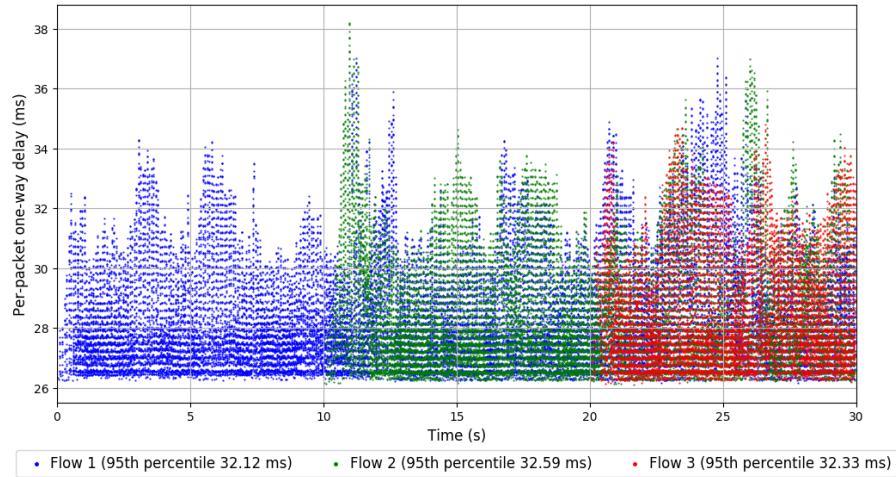
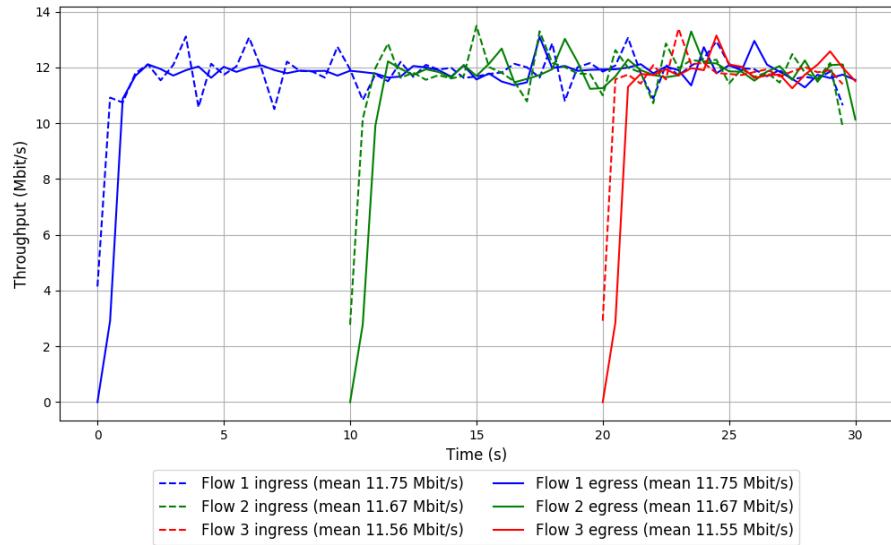


Run 3: Statistics of Sprout

```
Start at: 2019-02-11 18:32:16
End at: 2019-02-11 18:32:46
Local clock offset: 0.731 ms
Remote clock offset: -5.741 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 32.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 32.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.67 Mbit/s
95th percentile per-packet one-way delay: 32.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 32.326 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

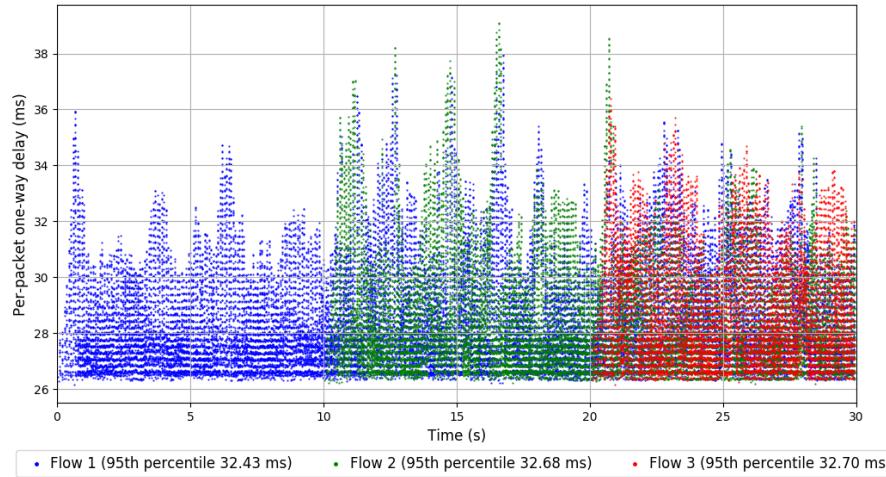
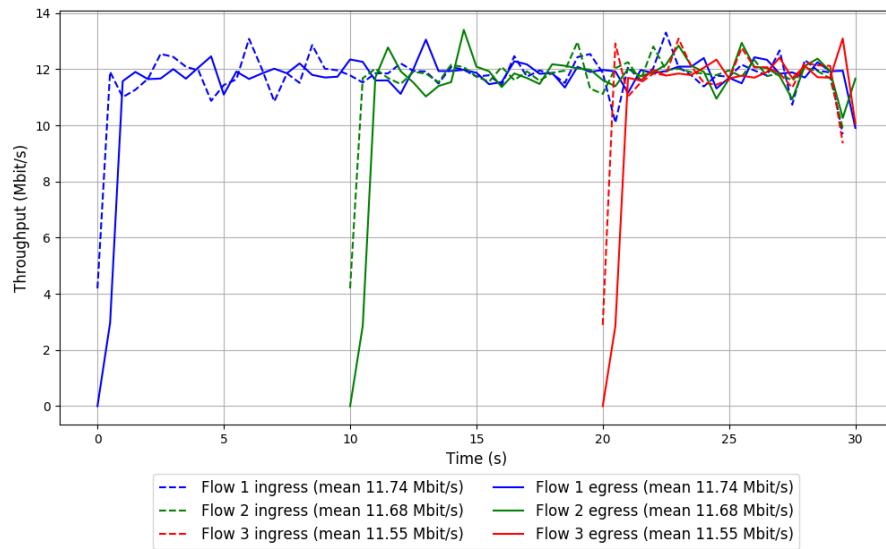


Run 4: Statistics of Sprout

```
Start at: 2019-02-11 18:57:37
End at: 2019-02-11 18:58:07
Local clock offset: 0.966 ms
Remote clock offset: -5.114 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.31 Mbit/s
95th percentile per-packet one-way delay: 32.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 32.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 32.683 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 32.705 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

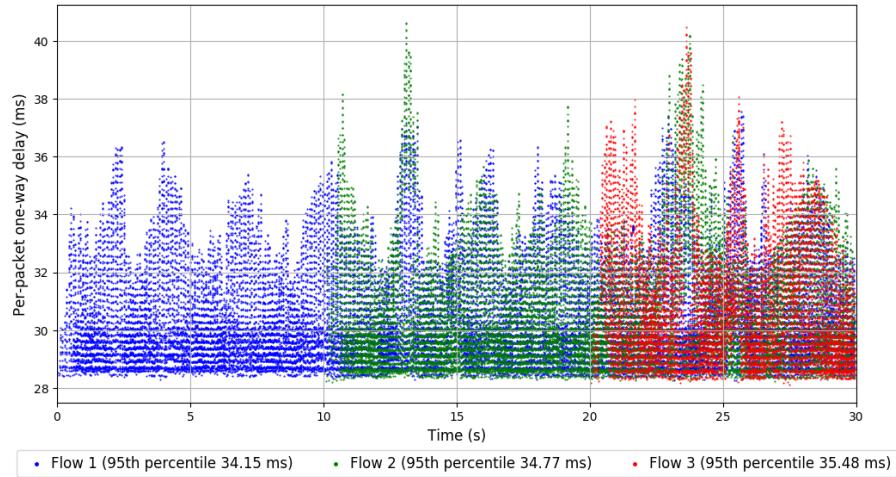
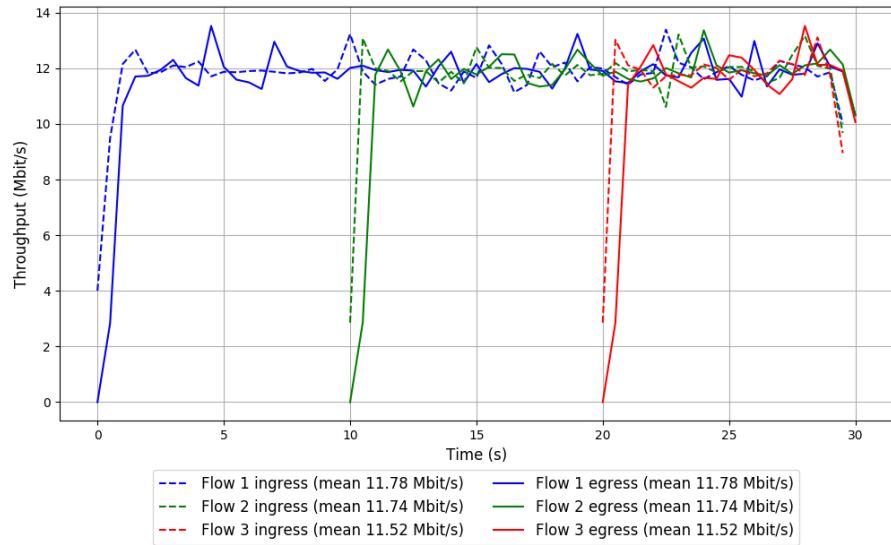


Run 5: Statistics of Sprout

```
Start at: 2019-02-11 19:22:54
End at: 2019-02-11 19:23:24
Local clock offset: -2.709 ms
Remote clock offset: -3.689 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 34.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 34.148 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 34.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 35.476 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

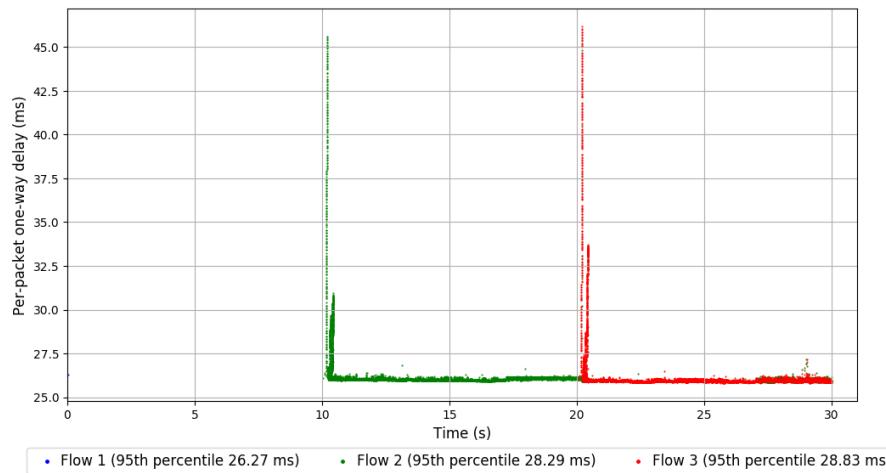
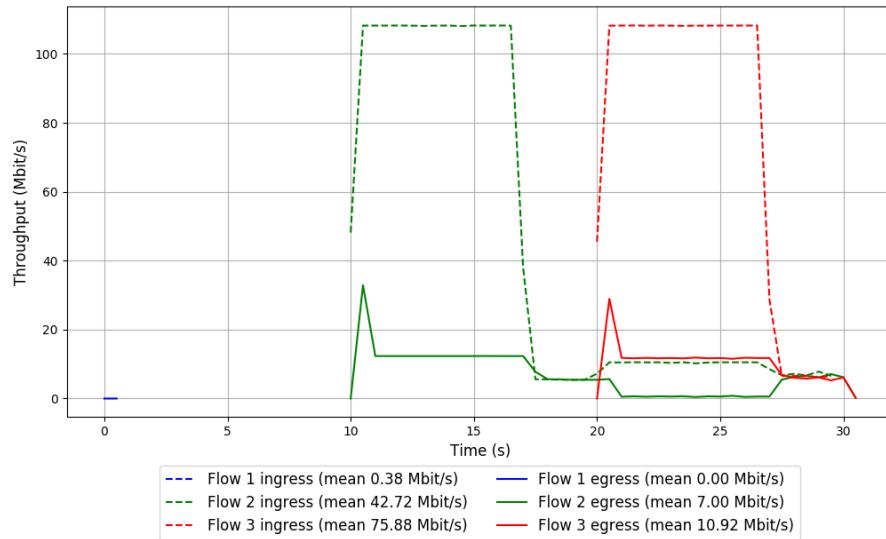


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-11 17:34:33
End at: 2019-02-11 17:35:03
Local clock offset: 1.726 ms
Remote clock offset: -7.55 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 28.620 ms
Loss rate: 84.55%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.270 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 28.294 ms
Loss rate: 83.62%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 28.830 ms
Loss rate: 85.61%
```

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

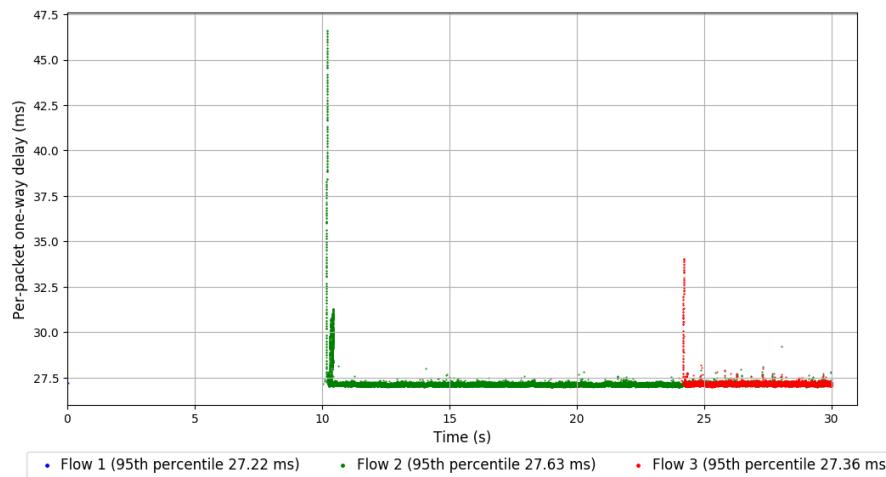
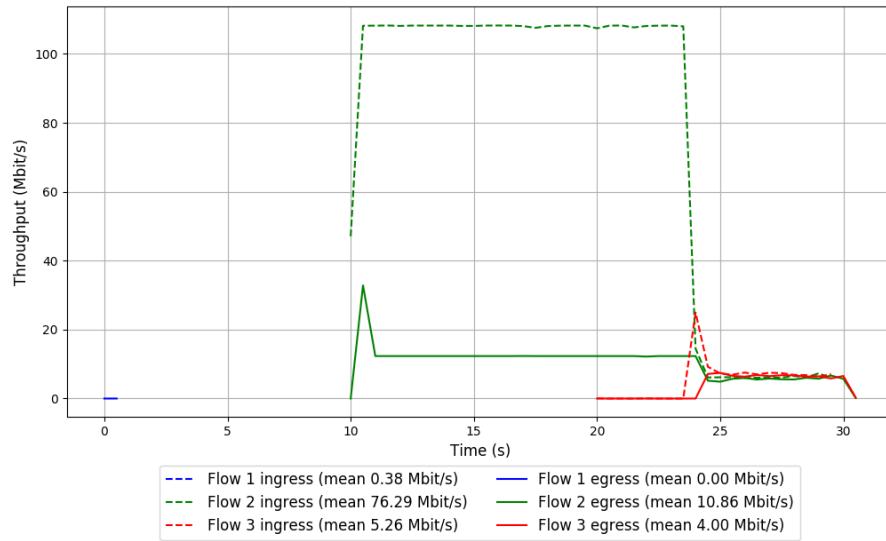


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-11 17:59:48
End at: 2019-02-11 18:00:18
Local clock offset: -2.704 ms
Remote clock offset: -5.969 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 27.535 ms
Loss rate: 83.71%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 27.223 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.86 Mbit/s
95th percentile per-packet one-way delay: 27.632 ms
Loss rate: 85.77%
-- Flow 3:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 27.357 ms
Loss rate: 23.99%
```

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

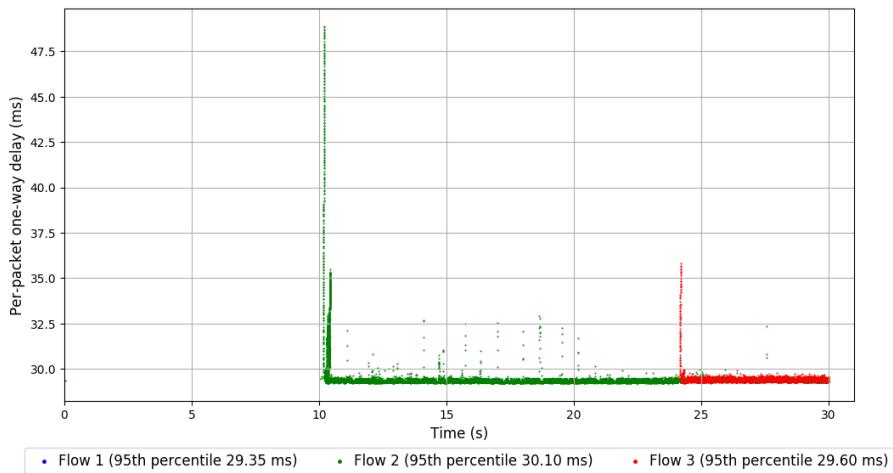
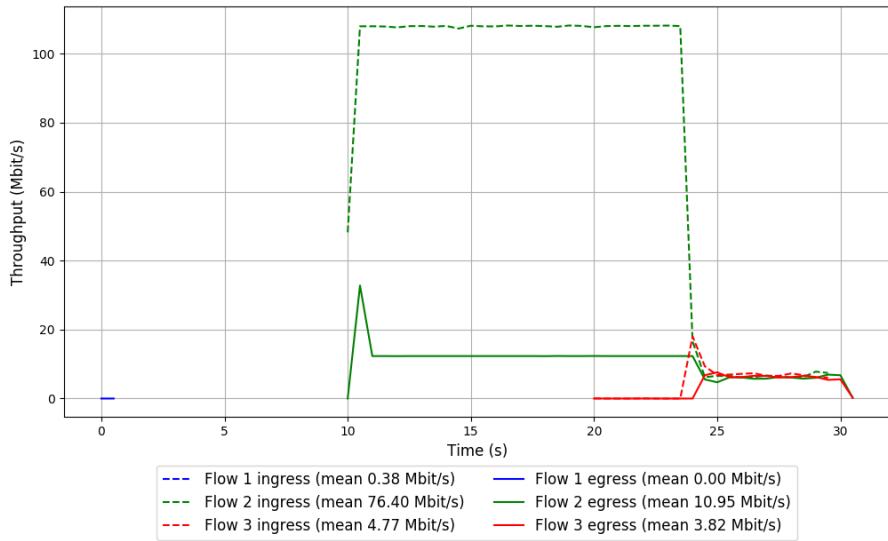


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:25:04
End at: 2019-02-11 18:25:34
Local clock offset: 0.299 ms
Remote clock offset: -3.084 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 29.843 ms
Loss rate: 83.68%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 29.349 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.95 Mbit/s
95th percentile per-packet one-way delay: 30.096 ms
Loss rate: 85.67%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 29.603 ms
Loss rate: 19.81%
```

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

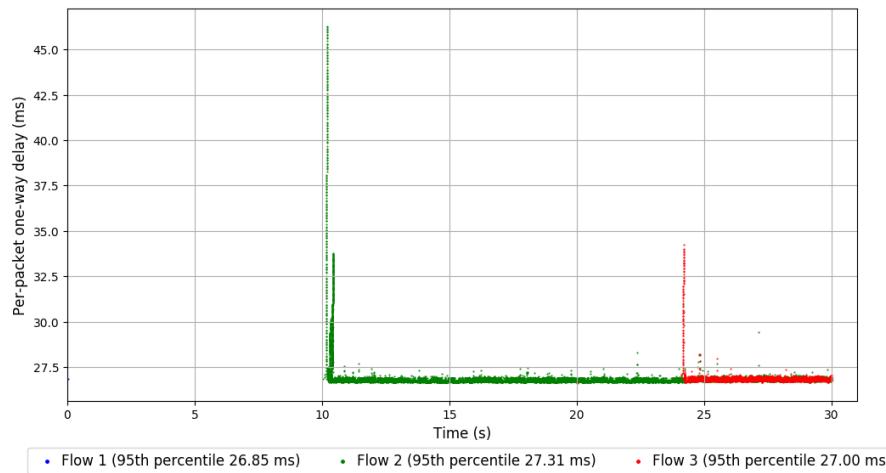
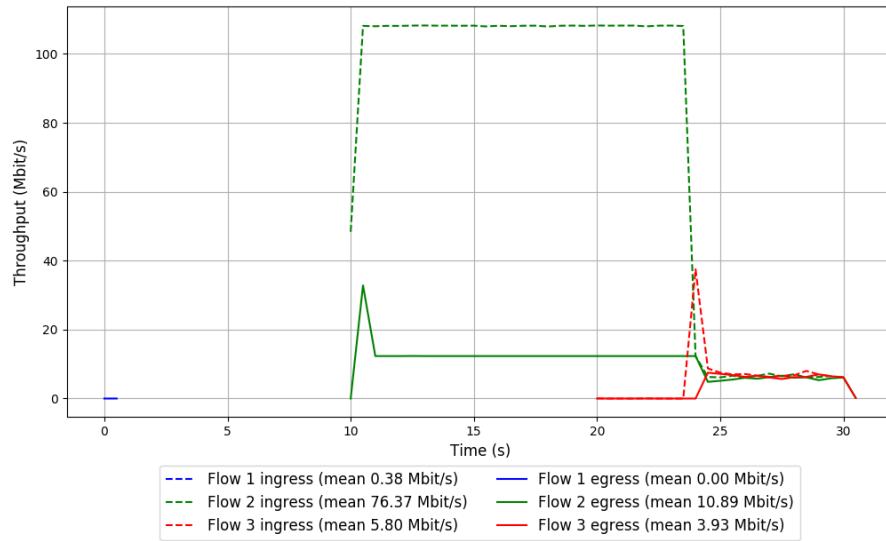


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:50:25
End at: 2019-02-11 18:50:55
Local clock offset: 0.78 ms
Remote clock offset: -4.706 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 27.154 ms
Loss rate: 83.78%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.854 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 27.308 ms
Loss rate: 85.73%
-- Flow 3:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 26.996 ms
Loss rate: 32.20%
```

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

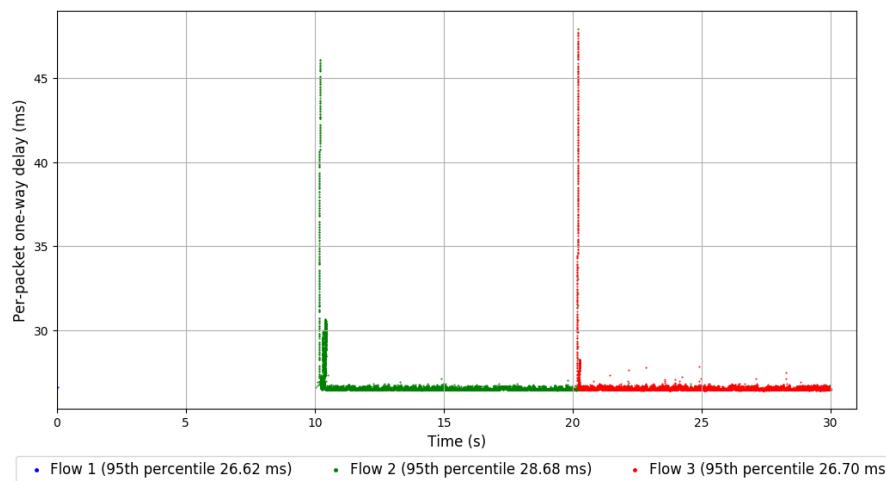
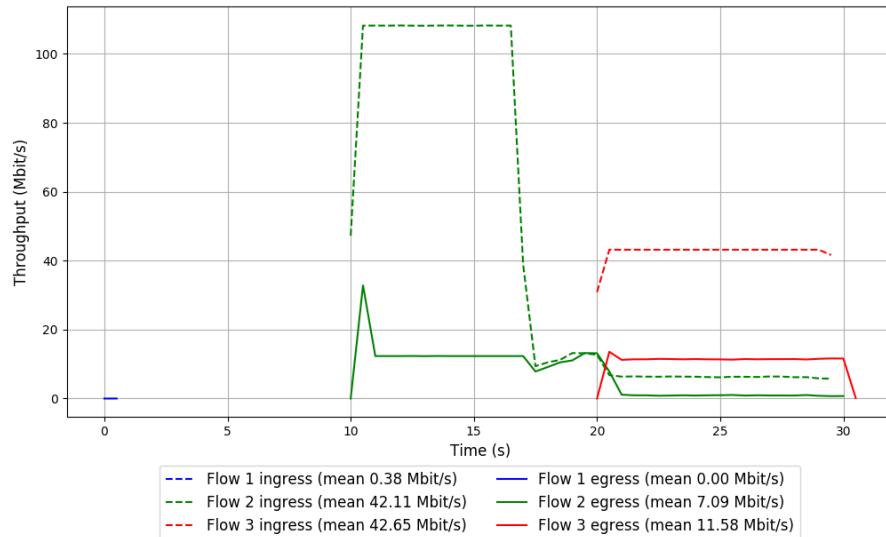


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-11 19:15:43
End at: 2019-02-11 19:16:13
Local clock offset: -1.954 ms
Remote clock offset: -5.326 ms

# Below is generated by plot.py at 2019-02-11 19:34:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 27.684 ms
Loss rate: 79.71%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 26.625 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 28.685 ms
Loss rate: 83.19%
-- Flow 3:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 26.700 ms
Loss rate: 72.84%
```

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

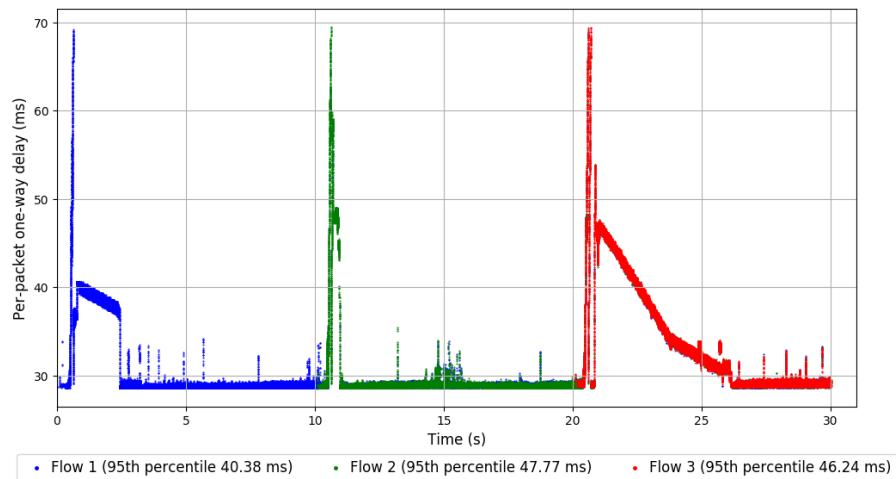
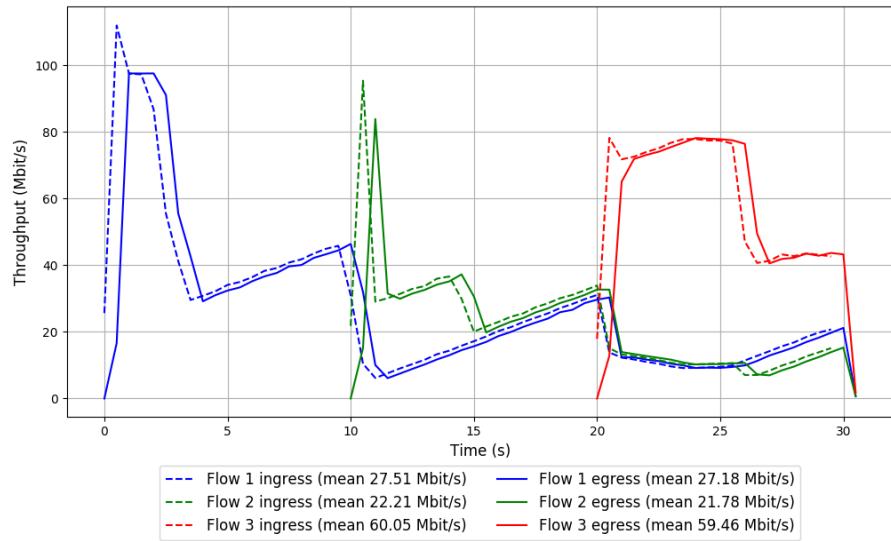


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:24:50
End at: 2019-02-11 17:25:20
Local clock offset: 0.798 ms
Remote clock offset: -5.59 ms

# Below is generated by plot.py at 2019-02-11 19:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.46 Mbit/s
95th percentile per-packet one-way delay: 45.766 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 40.375 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 47.766 ms
Loss rate: 1.92%
-- Flow 3:
Average throughput: 59.46 Mbit/s
95th percentile per-packet one-way delay: 46.242 ms
Loss rate: 0.97%
```

Run 1: Report of TCP Vegas — Data Link

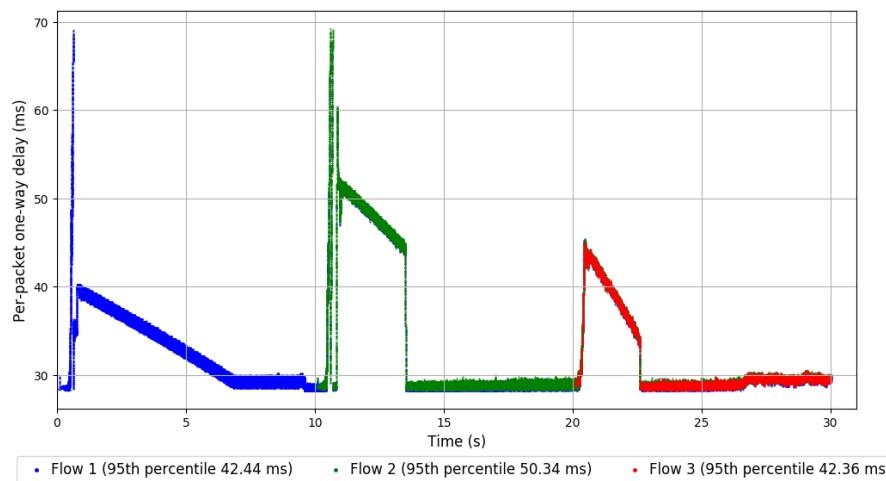
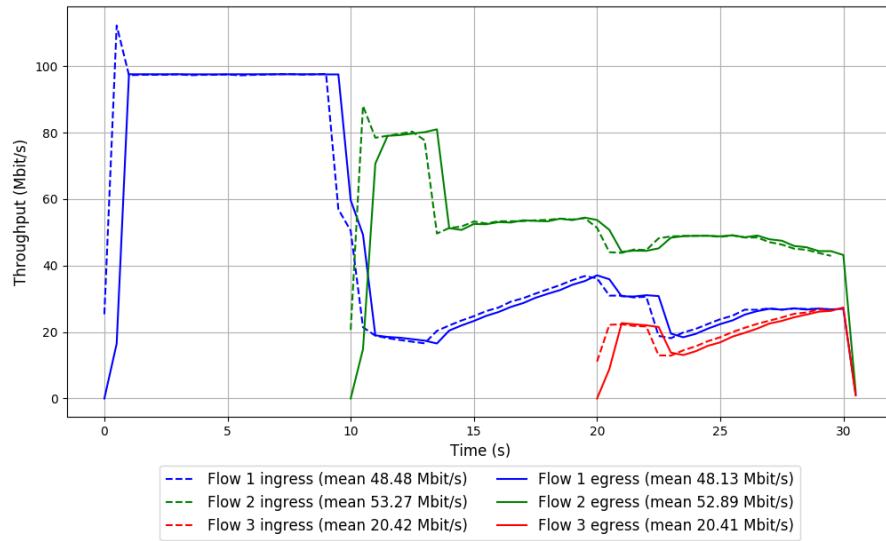


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:50:11
End at: 2019-02-11 17:50:41
Local clock offset: -2.142 ms
Remote clock offset: -4.872 ms

# Below is generated by plot.py at 2019-02-11 19:35:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.16 Mbit/s
95th percentile per-packet one-way delay: 48.558 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 48.13 Mbit/s
95th percentile per-packet one-way delay: 42.438 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 20.41 Mbit/s
95th percentile per-packet one-way delay: 42.357 ms
Loss rate: 0.01%
```

Run 2: Report of TCP Vegas — Data Link

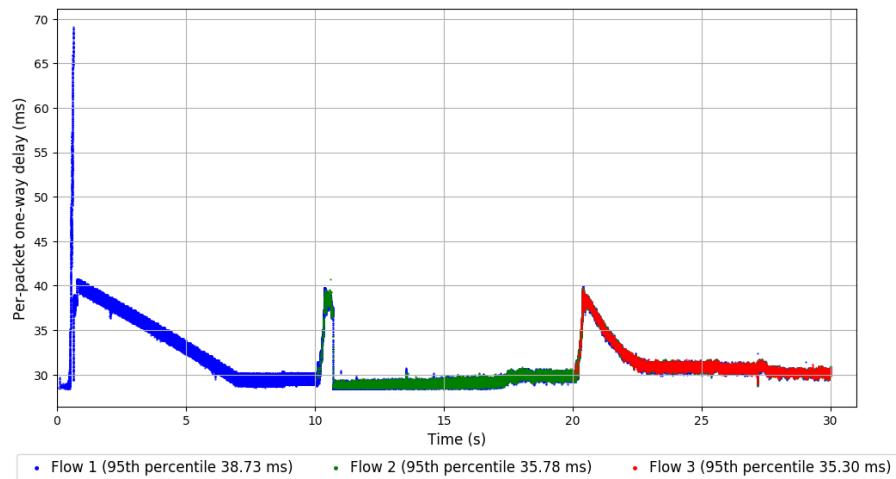
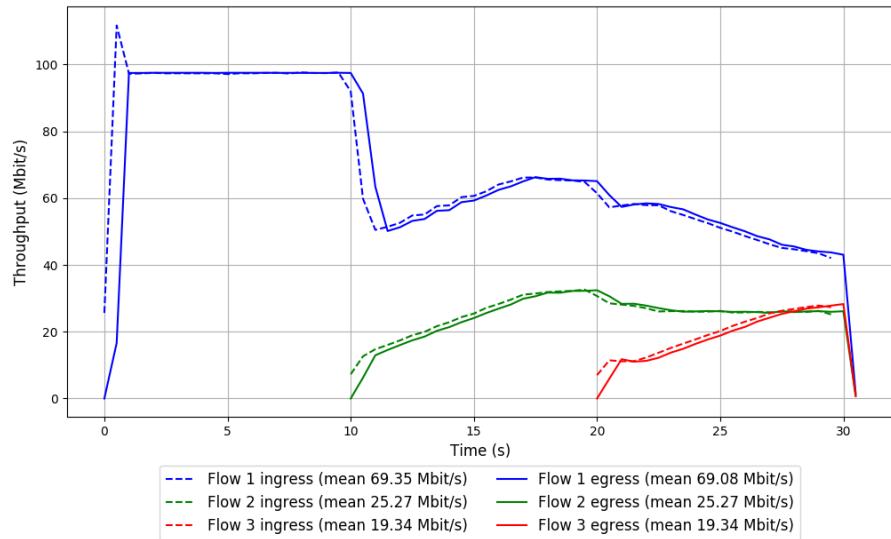


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:15:28
End at: 2019-02-11 18:15:58
Local clock offset: -0.559 ms
Remote clock offset: -4.093 ms

# Below is generated by plot.py at 2019-02-11 19:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 38.452 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 69.08 Mbit/s
95th percentile per-packet one-way delay: 38.729 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 25.27 Mbit/s
95th percentile per-packet one-way delay: 35.784 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 35.300 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

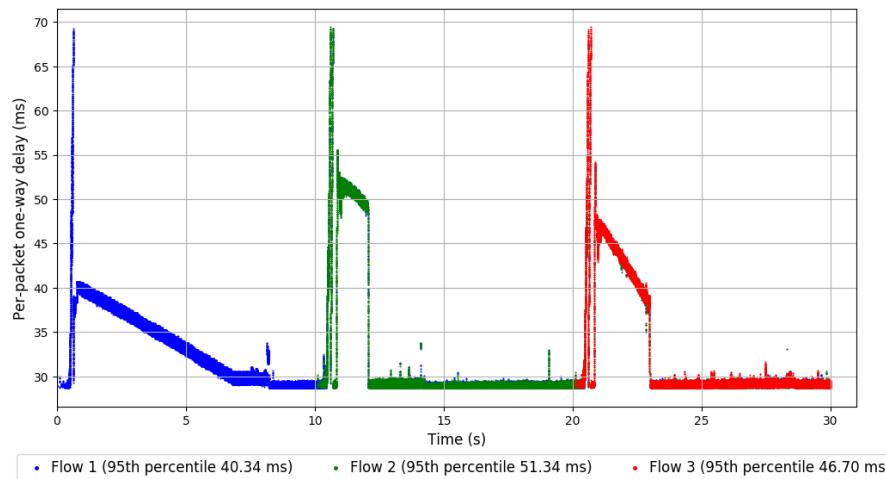
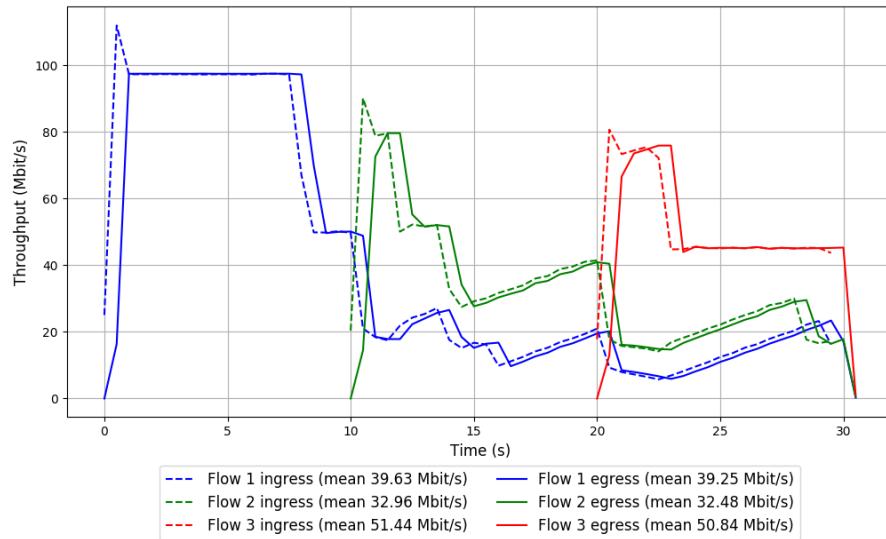


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:40:45
End at: 2019-02-11 18:41:15
Local clock offset: 0.695 ms
Remote clock offset: -3.031 ms

# Below is generated by plot.py at 2019-02-11 19:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.78 Mbit/s
95th percentile per-packet one-way delay: 49.868 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 40.342 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 51.339 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 50.84 Mbit/s
95th percentile per-packet one-way delay: 46.705 ms
Loss rate: 1.16%
```

Run 4: Report of TCP Vegas — Data Link

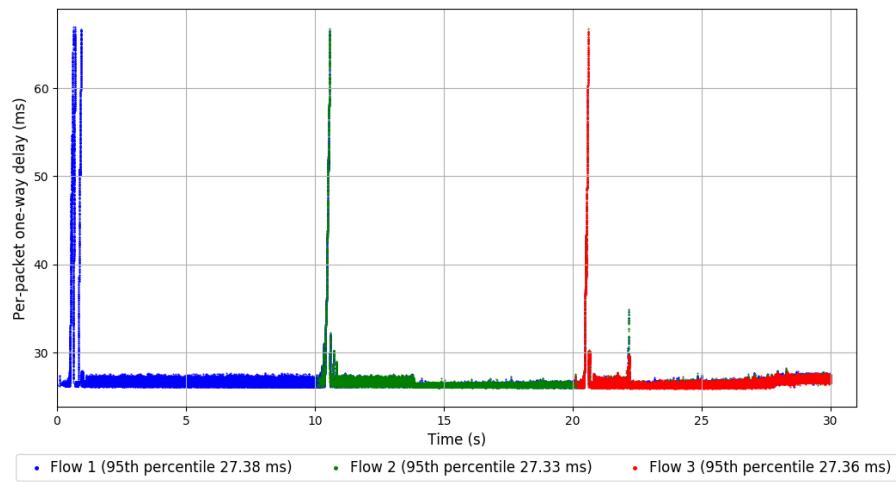
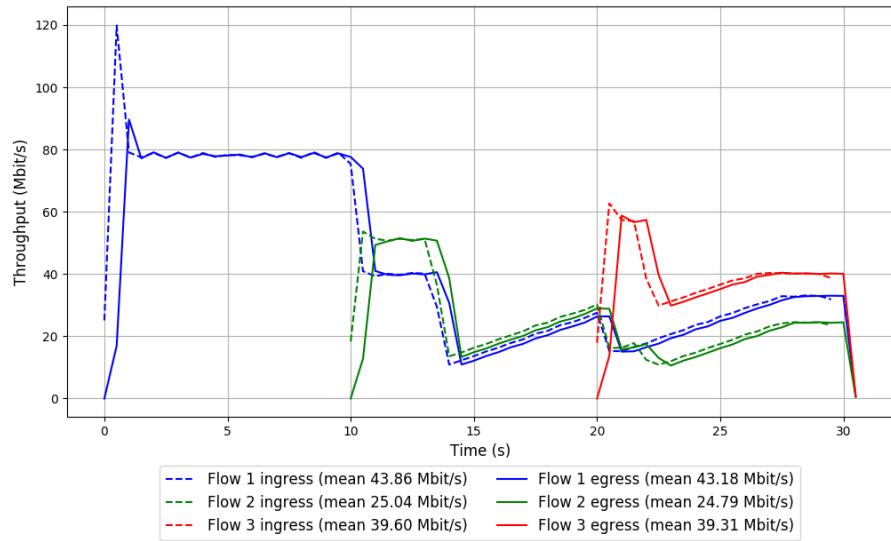


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-11 19:06:06
End at: 2019-02-11 19:06:36
Local clock offset: 0.381 ms
Remote clock offset: -5.167 ms

# Below is generated by plot.py at 2019-02-11 19:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 27.365 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 27.381 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 27.328 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 39.31 Mbit/s
95th percentile per-packet one-way delay: 27.364 ms
Loss rate: 0.72%
```

Run 5: Report of TCP Vegas — Data Link

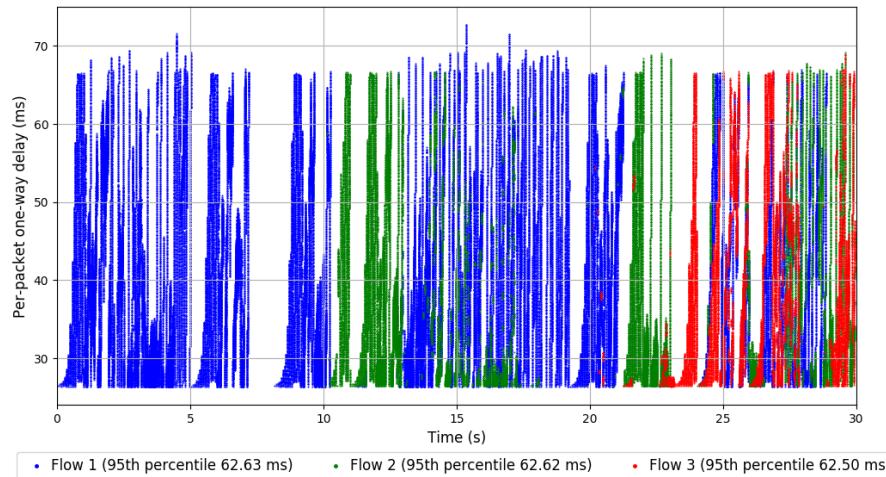
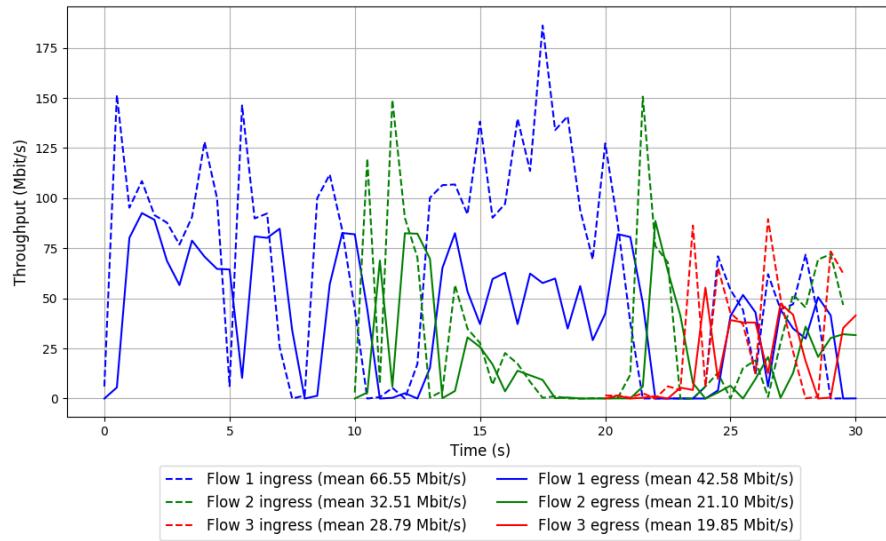


Run 1: Statistics of Verus

```
Start at: 2019-02-11 17:28:24
End at: 2019-02-11 17:28:54
Local clock offset: 1.22 ms
Remote clock offset: -7.691 ms

# Below is generated by plot.py at 2019-02-11 19:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 62.618 ms
Loss rate: 35.32%
-- Flow 1:
Average throughput: 42.58 Mbit/s
95th percentile per-packet one-way delay: 62.630 ms
Loss rate: 36.00%
-- Flow 2:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 62.625 ms
Loss rate: 35.08%
-- Flow 3:
Average throughput: 19.85 Mbit/s
95th percentile per-packet one-way delay: 62.502 ms
Loss rate: 31.06%
```

Run 1: Report of Verus — Data Link

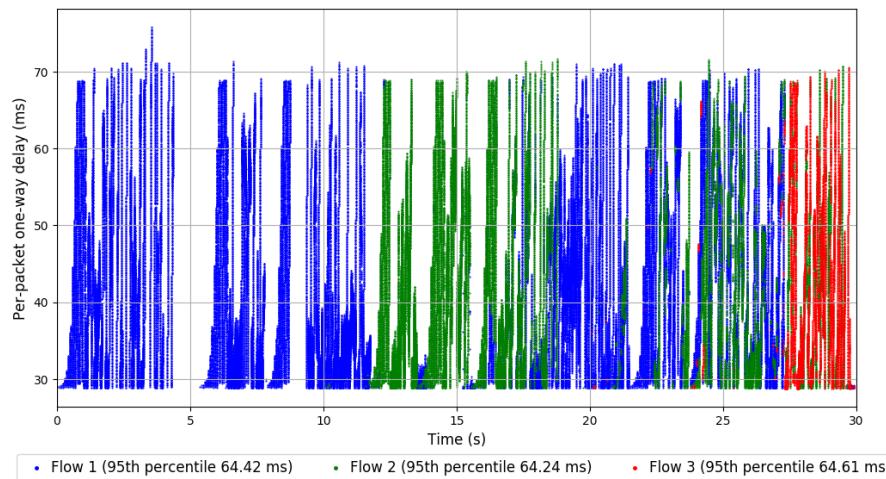
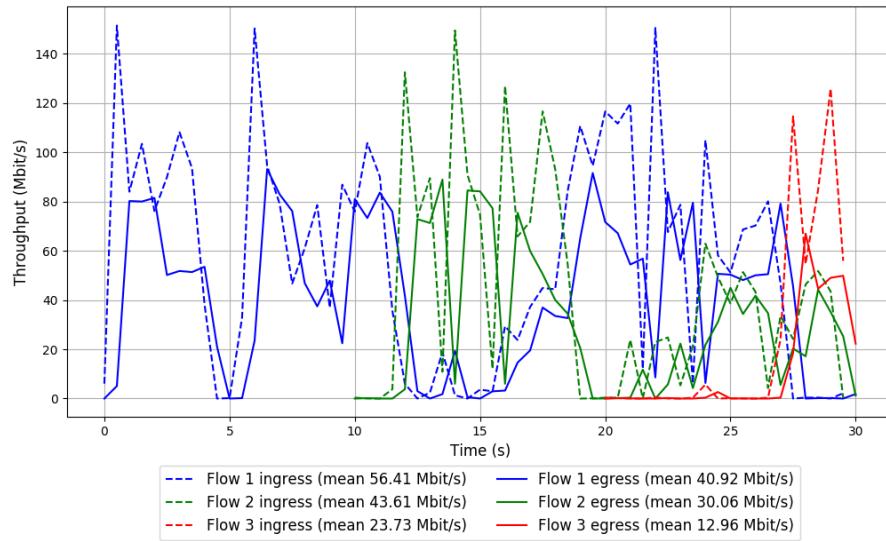


Run 2: Statistics of Verus

```
Start at: 2019-02-11 17:53:47
End at: 2019-02-11 17:54:17
Local clock offset: -2.424 ms
Remote clock offset: -4.323 ms

# Below is generated by plot.py at 2019-02-11 19:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.88 Mbit/s
95th percentile per-packet one-way delay: 64.376 ms
Loss rate: 30.17%
-- Flow 1:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 64.416 ms
Loss rate: 27.47%
-- Flow 2:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 64.243 ms
Loss rate: 31.33%
-- Flow 3:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 64.607 ms
Loss rate: 45.44%
```

Run 2: Report of Verus — Data Link

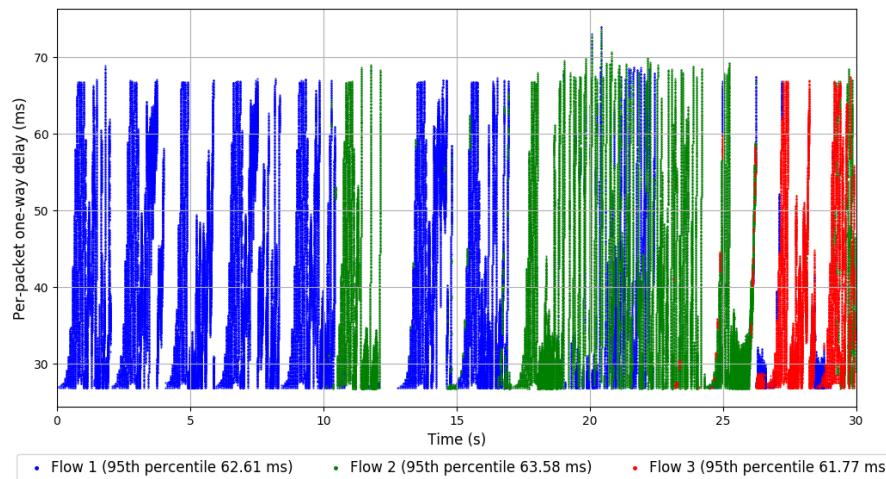
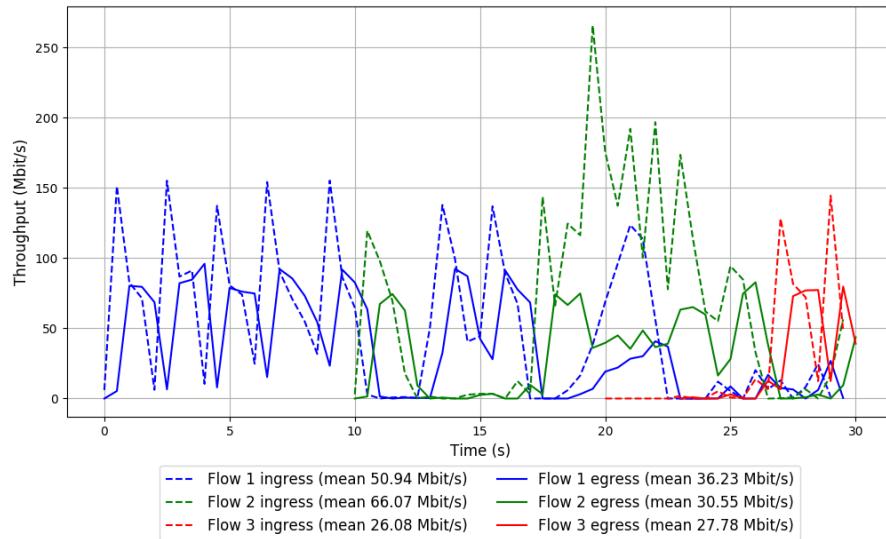


Run 3: Statistics of Verus

```
Start at: 2019-02-11 18:19:03
End at: 2019-02-11 18:19:33
Local clock offset: -0.168 ms
Remote clock offset: -5.684 ms

# Below is generated by plot.py at 2019-02-11 19:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 62.807 ms
Loss rate: 39.40%
-- Flow 1:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 62.608 ms
Loss rate: 29.04%
-- Flow 2:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 63.584 ms
Loss rate: 53.72%
-- Flow 3:
Average throughput: 27.78 Mbit/s
95th percentile per-packet one-way delay: 61.767 ms
Loss rate: 25.99%
```

Run 3: Report of Verus — Data Link

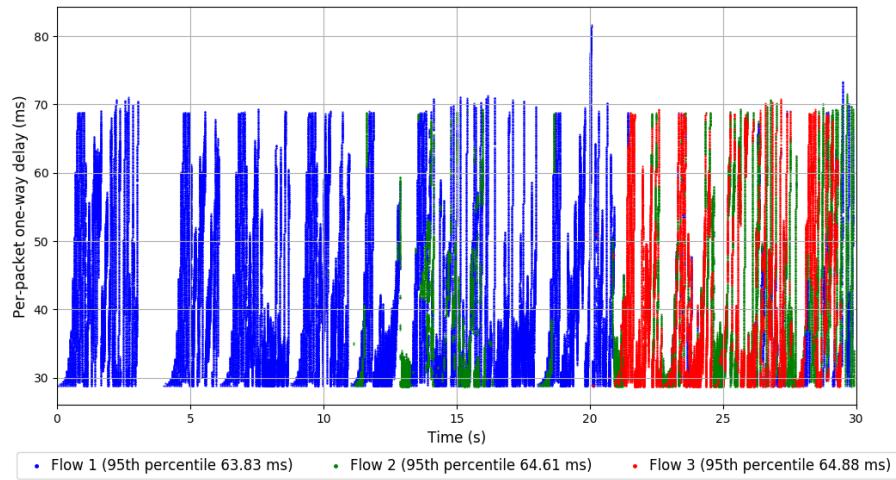
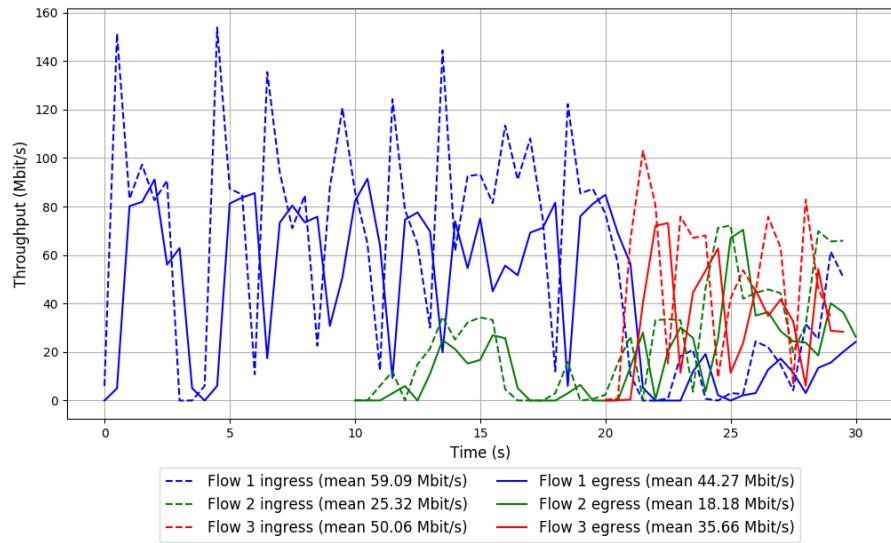


Run 4: Statistics of Verus

```
Start at: 2019-02-11 18:44:21
End at: 2019-02-11 18:44:51
Local clock offset: 0.693 ms
Remote clock offset: -2.88 ms

# Below is generated by plot.py at 2019-02-11 19:35:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.46 Mbit/s
95th percentile per-packet one-way delay: 64.170 ms
Loss rate: 26.29%
-- Flow 1:
Average throughput: 44.27 Mbit/s
95th percentile per-packet one-way delay: 63.832 ms
Loss rate: 25.01%
-- Flow 2:
Average throughput: 18.18 Mbit/s
95th percentile per-packet one-way delay: 64.615 ms
Loss rate: 28.30%
-- Flow 3:
Average throughput: 35.66 Mbit/s
95th percentile per-packet one-way delay: 64.884 ms
Loss rate: 28.96%
```

Run 4: Report of Verus — Data Link

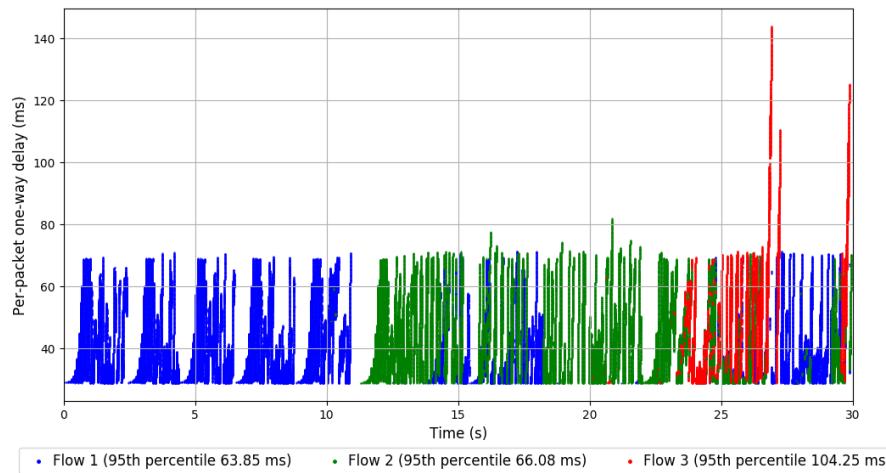
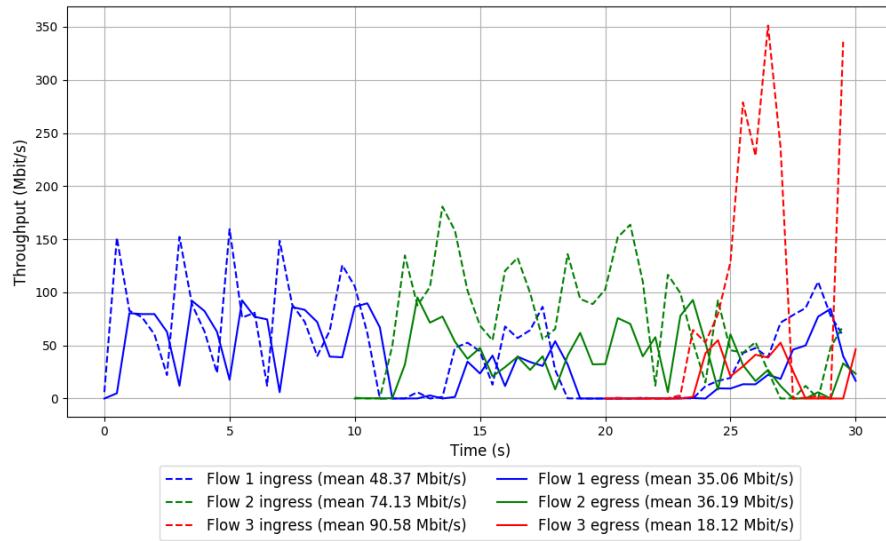


Run 5: Statistics of Verus

```
Start at: 2019-02-11 19:09:41
End at: 2019-02-11 19:10:11
Local clock offset: -0.735 ms
Remote clock offset: -2.43 ms

# Below is generated by plot.py at 2019-02-11 19:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.99 Mbit/s
95th percentile per-packet one-way delay: 66.399 ms
Loss rate: 48.85%
-- Flow 1:
Average throughput: 35.06 Mbit/s
95th percentile per-packet one-way delay: 63.855 ms
Loss rate: 27.54%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 66.085 ms
Loss rate: 51.22%
-- Flow 3:
Average throughput: 18.12 Mbit/s
95th percentile per-packet one-way delay: 104.246 ms
Loss rate: 79.84%
```

Run 5: Report of Verus — Data Link

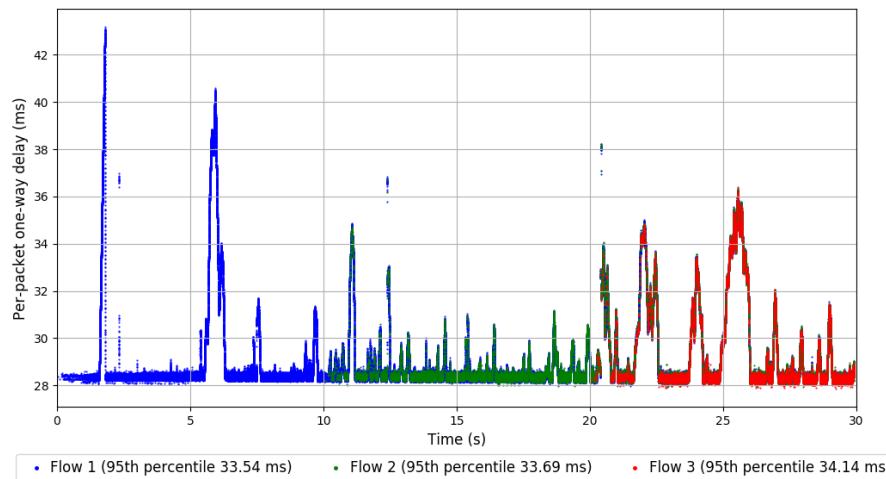
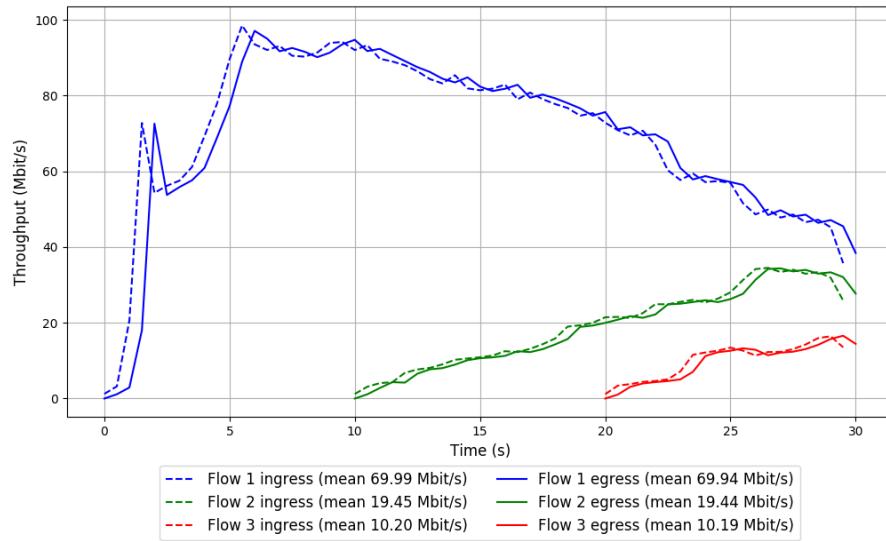


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-02-11 17:36:56
End at: 2019-02-11 17:37:26
Local clock offset: 0.607 ms
Remote clock offset: -5.343 ms

# Below is generated by plot.py at 2019-02-11 19:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 33.612 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 69.94 Mbit/s
95th percentile per-packet one-way delay: 33.544 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 19.44 Mbit/s
95th percentile per-packet one-way delay: 33.691 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 34.144 ms
Loss rate: 0.01%
```

Run 1: Report of PCC-Vivace — Data Link

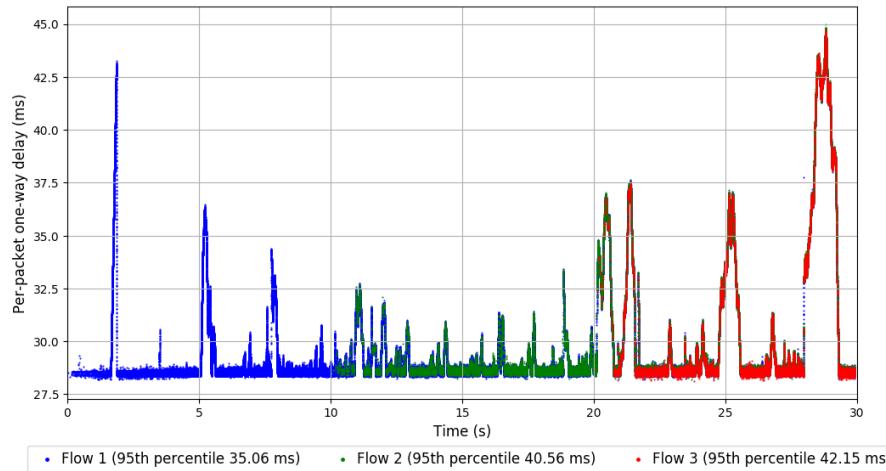
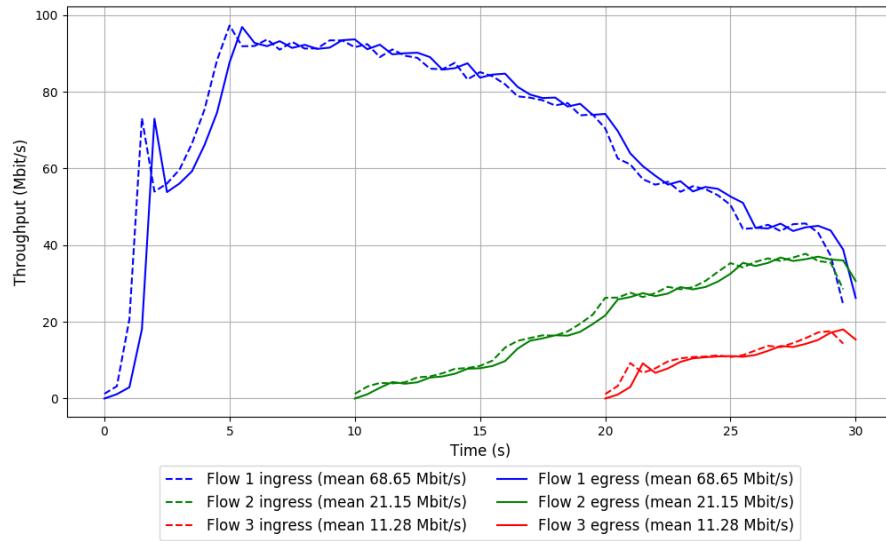


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:02:11
End at: 2019-02-11 18:02:42
Local clock offset: -2.746 ms
Remote clock offset: -4.544 ms

# Below is generated by plot.py at 2019-02-11 19:36:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.44 Mbit/s
95th percentile per-packet one-way delay: 36.377 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.65 Mbit/s
95th percentile per-packet one-way delay: 35.064 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 21.15 Mbit/s
95th percentile per-packet one-way delay: 40.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 42.153 ms
Loss rate: 0.01%
```

Run 2: Report of PCC-Vivace — Data Link

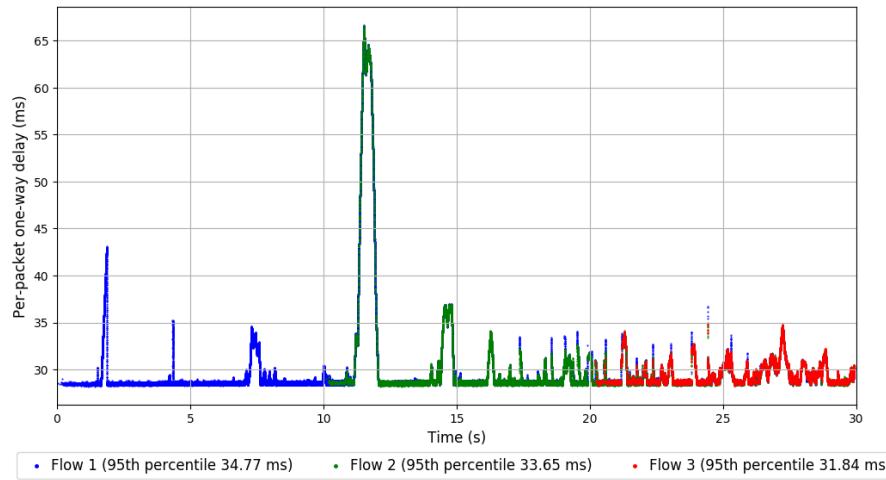
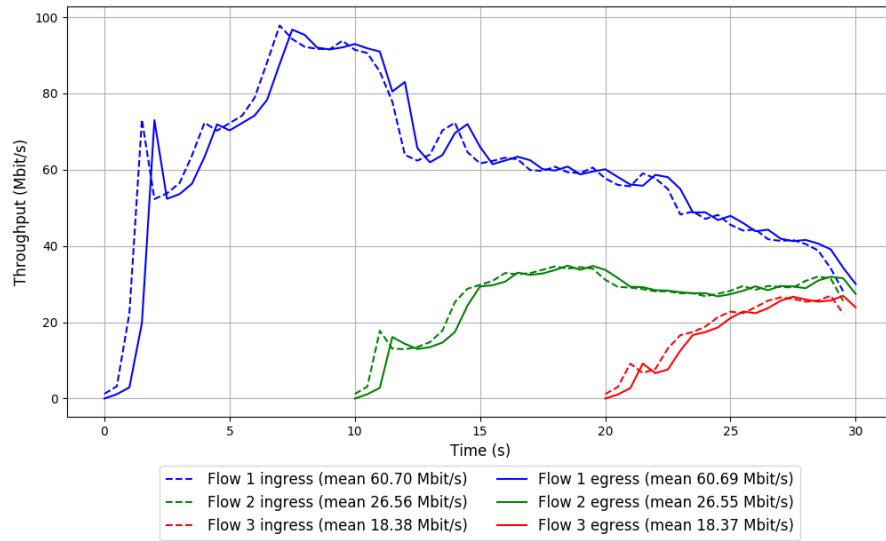


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:27:27
End at: 2019-02-11 18:27:57
Local clock offset: 0.45 ms
Remote clock offset: -3.821 ms

# Below is generated by plot.py at 2019-02-11 19:36:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 33.939 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 60.69 Mbit/s
95th percentile per-packet one-way delay: 34.773 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 26.55 Mbit/s
95th percentile per-packet one-way delay: 33.652 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 31.845 ms
Loss rate: 0.05%
```

Run 3: Report of PCC-Vivace — Data Link

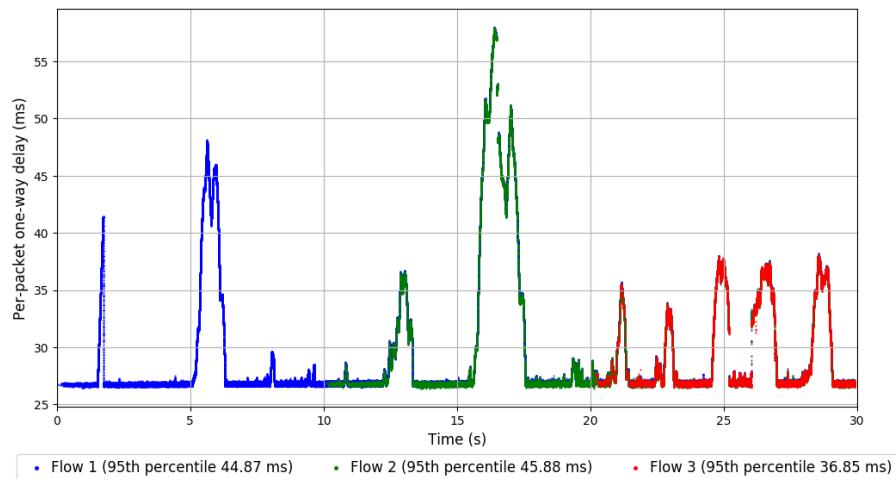
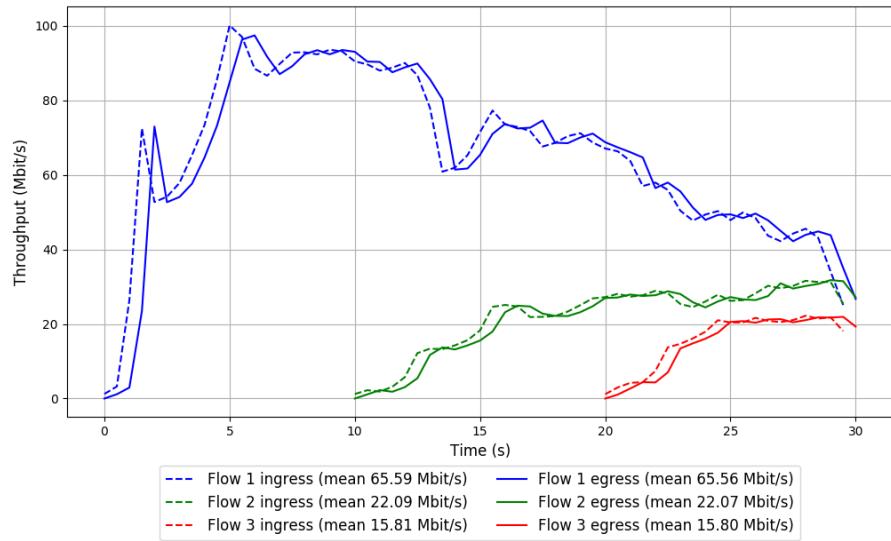


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:52:48
End at: 2019-02-11 18:53:18
Local clock offset: 0.829 ms
Remote clock offset: -4.778 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 44.682 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 65.56 Mbit/s
95th percentile per-packet one-way delay: 44.874 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 45.879 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 15.80 Mbit/s
95th percentile per-packet one-way delay: 36.854 ms
Loss rate: 0.05%
```

Run 4: Report of PCC-Vivace — Data Link

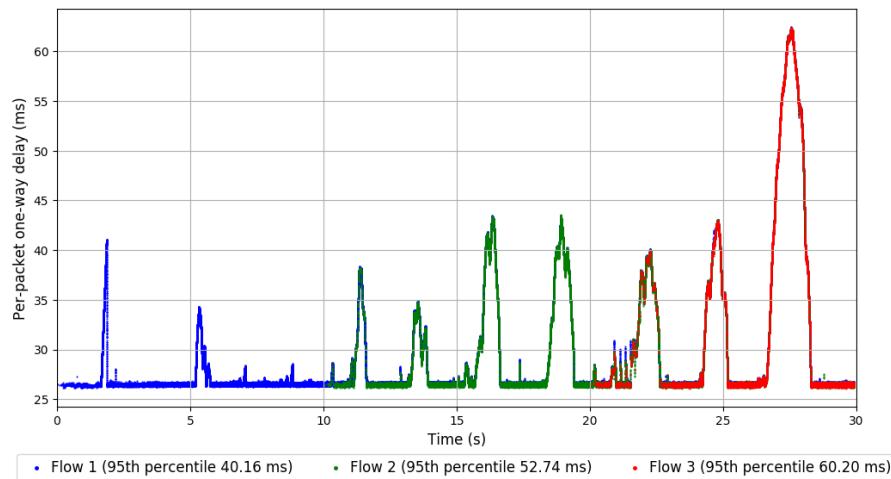
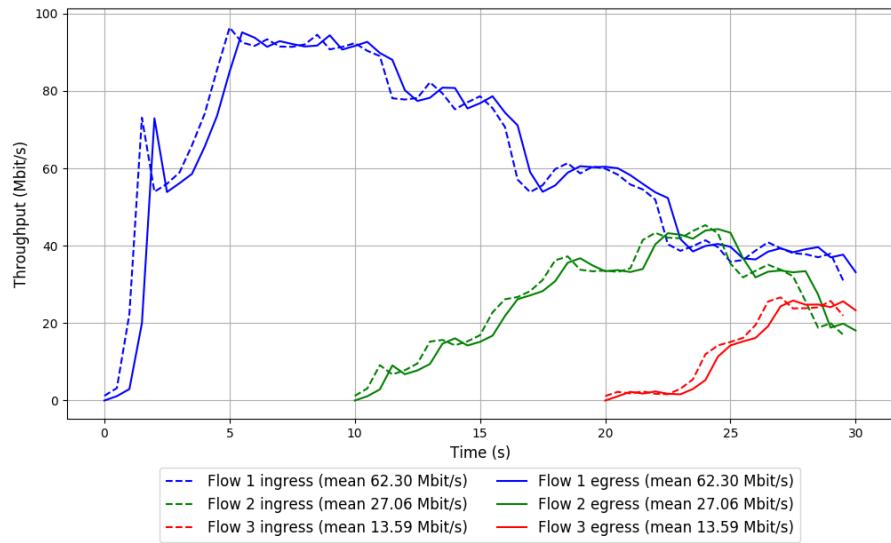


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-11 19:18:06
End at: 2019-02-11 19:18:36
Local clock offset: -2.262 ms
Remote clock offset: -5.579 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.79 Mbit/s
95th percentile per-packet one-way delay: 42.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 40.155 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.06 Mbit/s
95th percentile per-packet one-way delay: 52.737 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 60.201 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

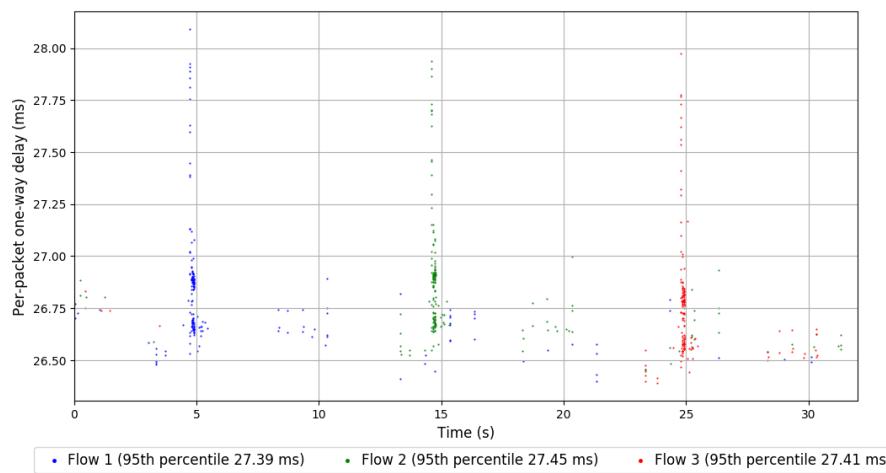
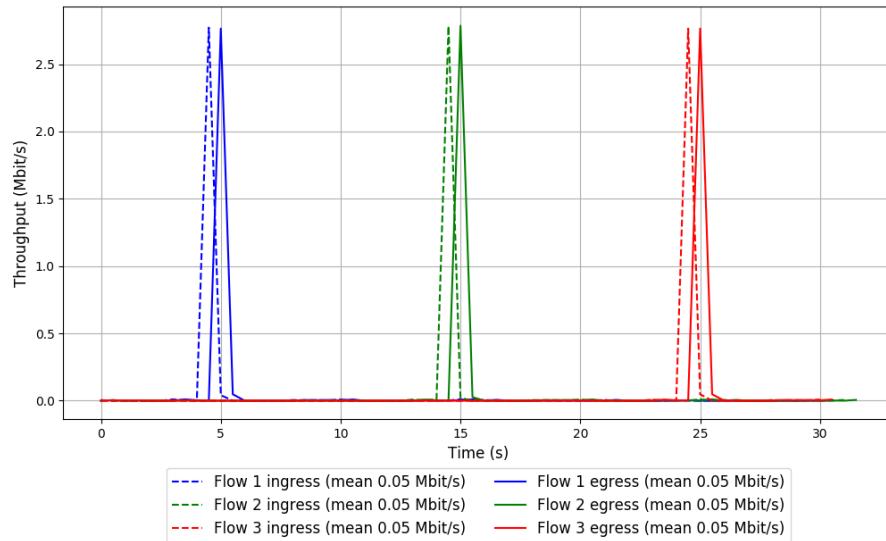


```
Run 1: Statistics of WebRTC media

Start at: 2019-02-11 17:38:10
End at: 2019-02-11 17:38:40
Local clock offset: 0.164 ms
Remote clock offset: -6.837 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 27.446 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.390 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.411 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

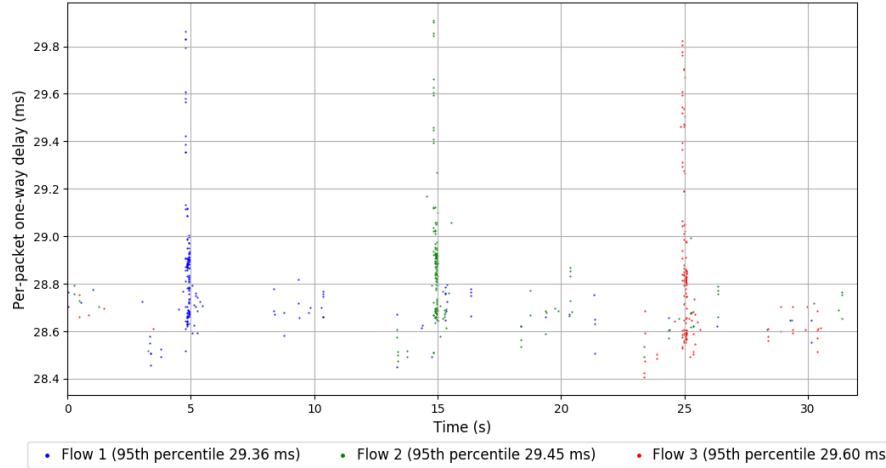
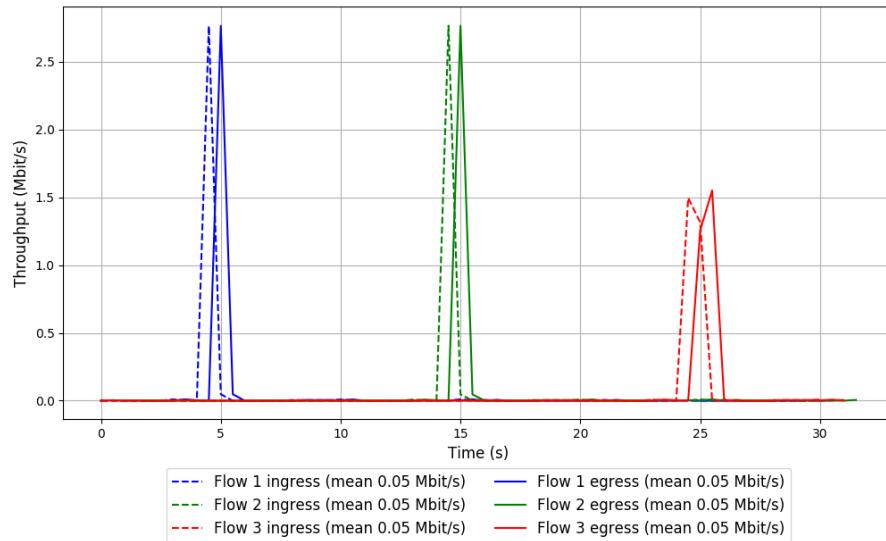


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-11 18:03:26
End at: 2019-02-11 18:03:56
Local clock offset: -2.793 ms
Remote clock offset: -4.236 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 29.537 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 29.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 29.448 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 29.600 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

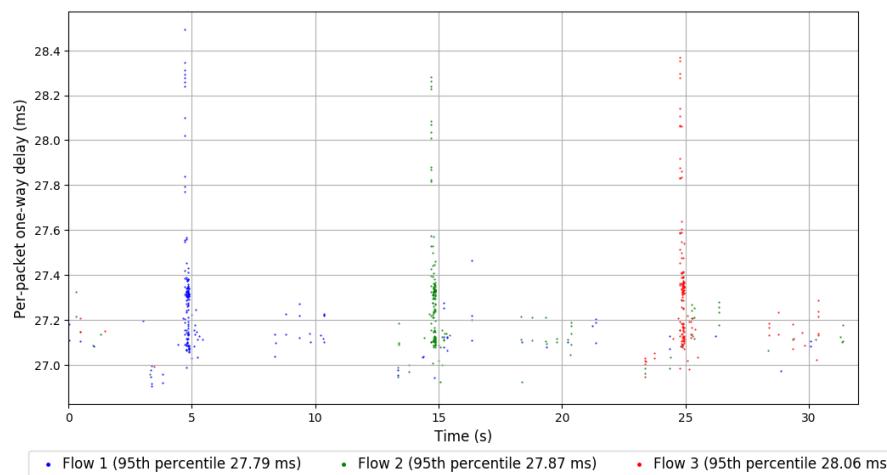
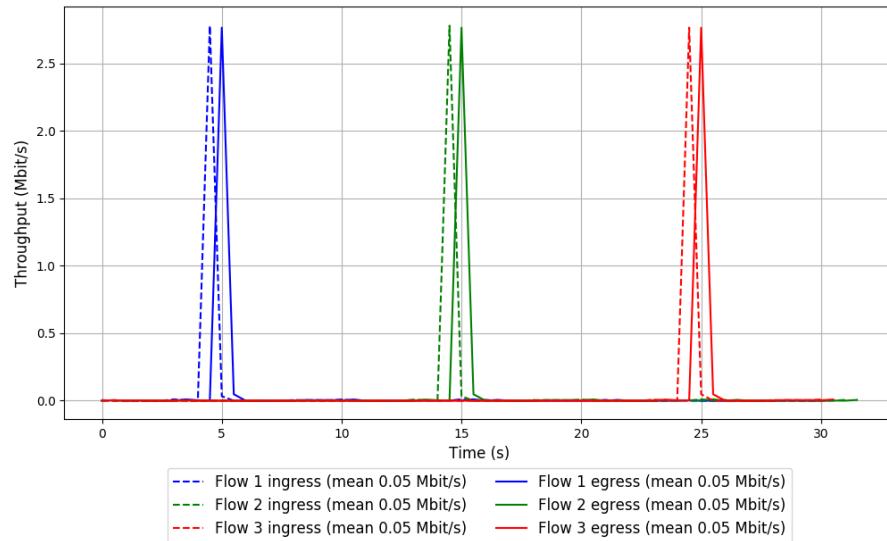


Run 3: Statistics of WebRTC media

```
Start at: 2019-02-11 18:28:42
End at: 2019-02-11 18:29:12
Local clock offset: 0.533 ms
Remote clock offset: -5.066 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 27.880 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.794 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.869 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 28.062 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

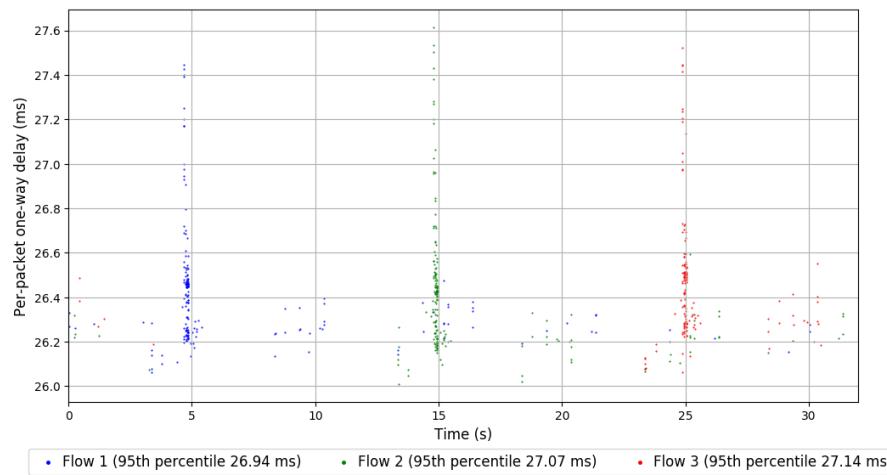
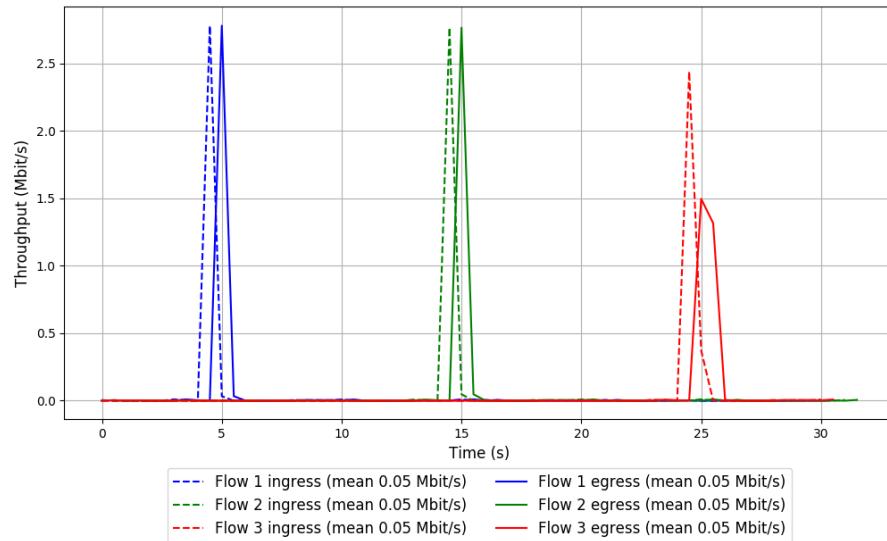


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-11 18:54:03
End at: 2019-02-11 18:54:33
Local clock offset: 0.914 ms
Remote clock offset: -5.138 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 27.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 26.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.137 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-11 19:19:20
End at: 2019-02-11 19:19:50
Local clock offset: -2.379 ms
Remote clock offset: -5.291 ms

# Below is generated by plot.py at 2019-02-11 19:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 27.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.362 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 27.593 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

