

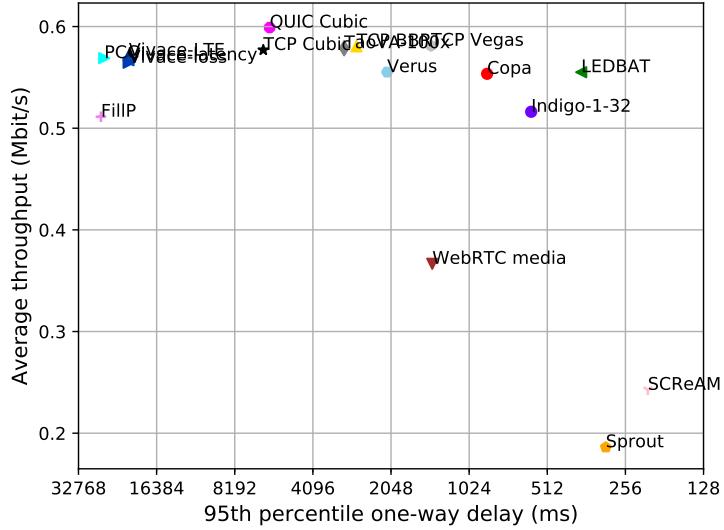
Pantheon Report

Generated at 2018-03-13 00:36:41 (UTC).
Data path: Colombia ppp0 (*remote*) → AWS Brazil 2 Ethernet (*local*).
Repeated the test of 17 congestion control schemes 3 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).
NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

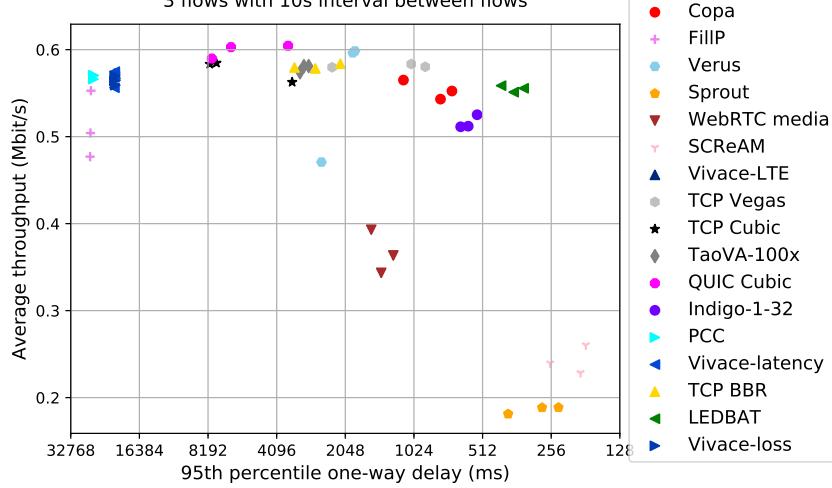
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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 @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Colombia ppp0 to AWS Brazil 2 Ethernet, 3 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia ppp0 to AWS Brazil 2 Ethernet, 3 runs of 30s each per scheme
3 flows with 10s interval between flows



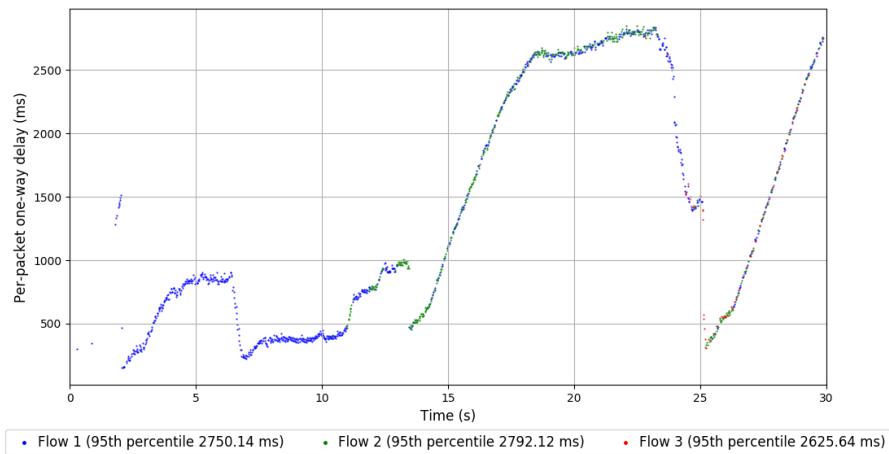
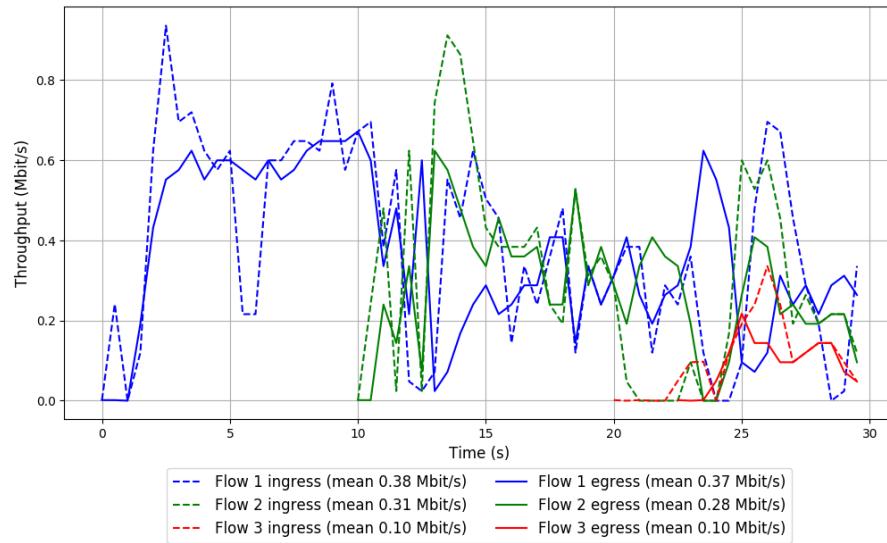
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	0.37	0.29	0.09	2766.31	2800.35	2586.71	3.50	6.49	32.57
TCP Cubic	3	0.53	0.10	0.01	6229.77	5762.49	6454.79	18.08	46.34	82.71
LEDBAT	3	0.29	0.29	0.24	349.21	382.60	378.44	0.41	1.44	5.36
PCC	3	0.57	0.00	N/A	26065.57	N/A	N/A	98.53	N/A	N/A
QUIC Cubic	3	0.53	0.11	0.01	6019.77	5328.49	6205.59	19.95	21.80	42.37
SCReAM	3	0.08	0.16	0.15	202.91	205.03	272.48	1.01	0.89	1.98
WebRTC media	3	0.18	0.13	0.07	1357.10	1446.04	1439.56	1.89	3.79	17.81
Sprout	3	0.09	0.09	0.10	391.29	259.06	295.21	1.20	2.83	4.35
TaoVA-100x	3	0.36	0.27	0.22	2574.39	3282.39	3251.56	5.00	11.51	23.35
TCP Vegas	3	0.31	0.27	0.31	1306.10	1192.08	1493.18	2.11	3.16	13.99
Verus	3	0.54	0.01	0.01	2115.29	2175.37	2416.00	4.80	9.60	15.76
Copa	3	0.37	0.19	0.20	838.95	861.80	928.80	4.58	8.84	17.42
FillP	3	0.51	0.00	N/A	26849.77	N/A	N/A	99.10	N/A	N/A
Indigo-1-32	3	0.29	0.25	0.19	515.23	514.31	759.64	1.34	3.65	6.09
Vivace-latency	3	0.57	0.00	N/A	21026.51	N/A	N/A	70.78	N/A	N/A
Vivace-loss	3	0.56	0.00	N/A	21000.99	N/A	N/A	89.19	N/A	N/A
Vivace-LTE	3	0.57	0.00	N/A	20965.10	N/A	N/A	70.57	N/A	N/A

Run 1: Statistics of TCP BBR

```
Start at: 2018-03-12 22:31:32
End at: 2018-03-12 22:32:02
Local clock offset: -7.351 ms
Remote clock offset: -6.94 ms

# Below is generated by plot.py at 2018-03-13 00:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2772.027 ms
Loss rate: 7.70%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 2750.142 ms
Loss rate: 4.83%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 2792.122 ms
Loss rate: 9.25%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 2625.639 ms
Loss rate: 30.86%
```

Run 1: Report of TCP BBR — Data Link

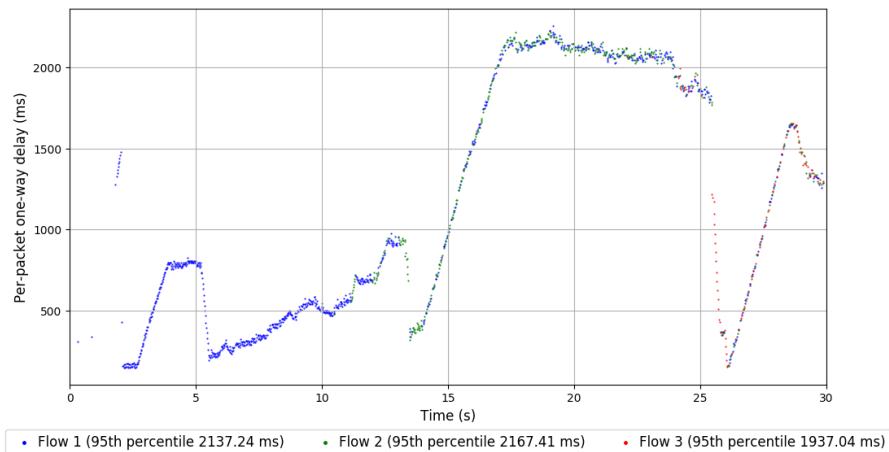
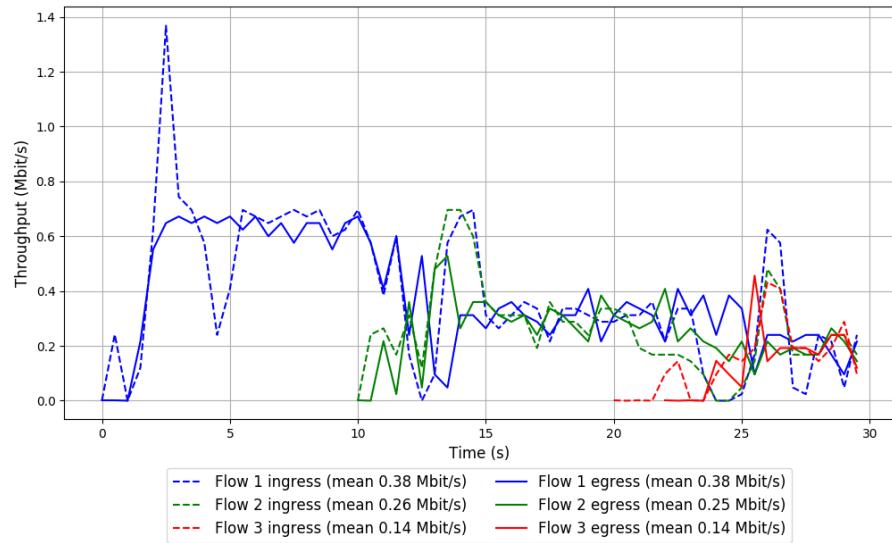


Run 2: Statistics of TCP BBR

```
Start at: 2018-03-12 22:54:03
End at: 2018-03-12 22:54:33
Local clock offset: -4.046 ms
Remote clock offset: -6.928 ms

# Below is generated by plot.py at 2018-03-13 00:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2152.753 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 2137.238 ms
Loss rate: 1.98%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 2167.405 ms
Loss rate: 6.23%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 1937.040 ms
Loss rate: 19.79%
```

Run 2: Report of TCP BBR — Data Link

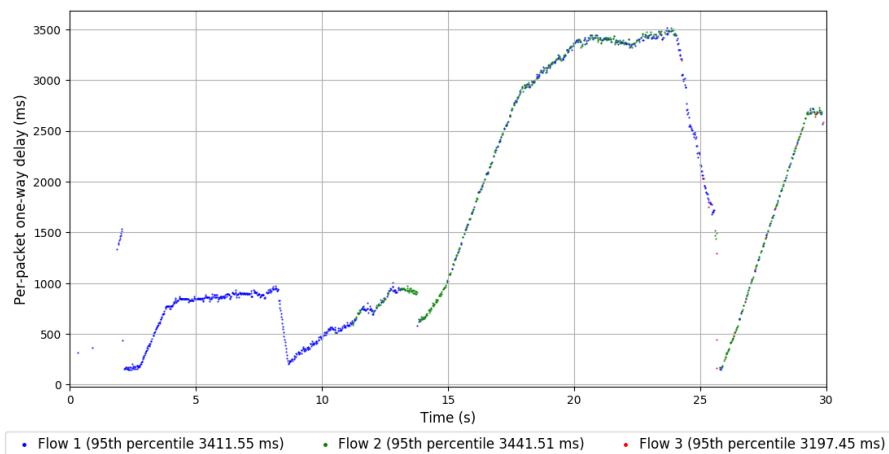
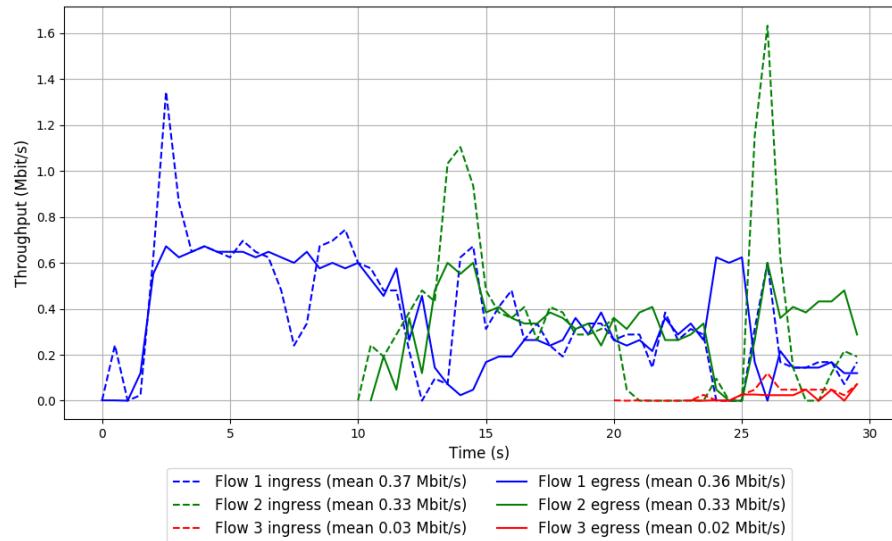


Run 3: Statistics of TCP BBR

```
Start at: 2018-03-12 23:16:34
End at: 2018-03-12 23:17:04
Local clock offset: -1.016 ms
Remote clock offset: -6.485 ms

# Below is generated by plot.py at 2018-03-13 00:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3421.805 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 3411.555 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 3441.512 ms
Loss rate: 3.98%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3197.450 ms
Loss rate: 47.07%
```

Run 3: Report of TCP BBR — Data Link

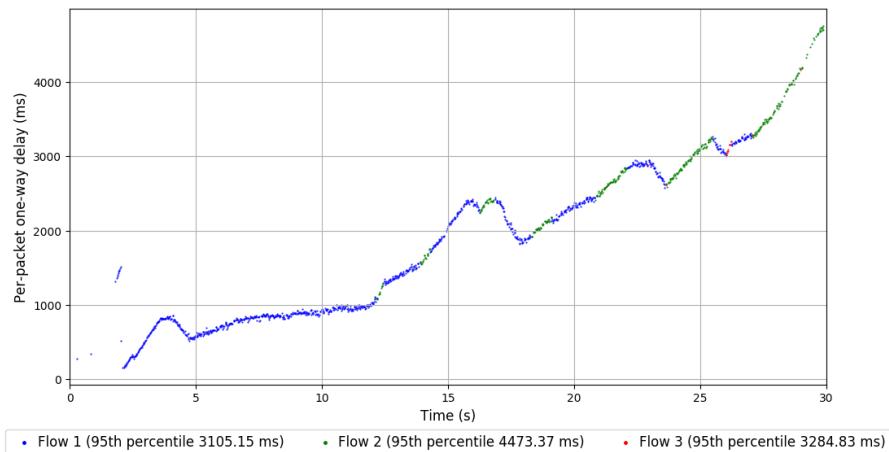
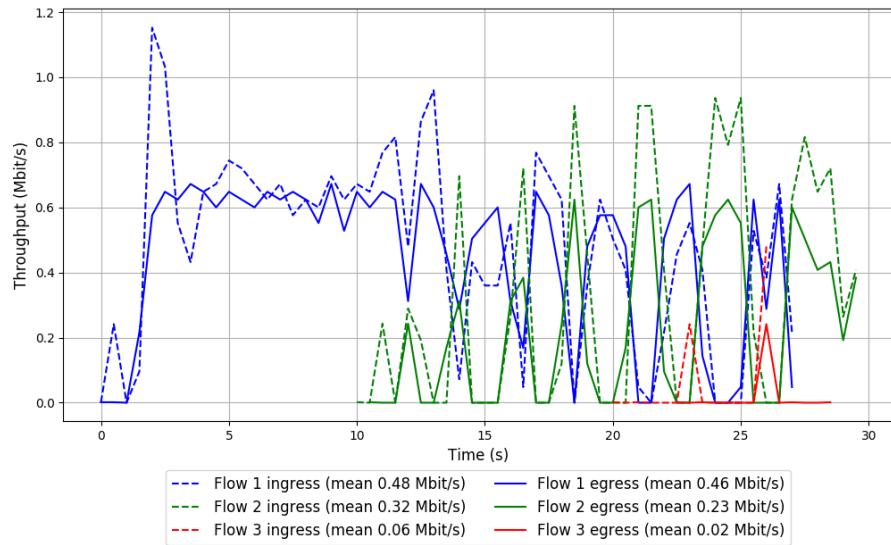


Run 1: Statistics of TCP Cubic

```
Start at: 2018-03-12 22:35:16
End at: 2018-03-12 22:35:46
Local clock offset: -7.462 ms
Remote clock offset: -1.246 ms

# Below is generated by plot.py at 2018-03-13 00:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 3503.198 ms
Loss rate: 16.69%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 3105.154 ms
Loss rate: 7.12%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 4473.371 ms
Loss rate: 33.32%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3284.830 ms
Loss rate: 66.00%
```

Run 1: Report of TCP Cubic — Data Link

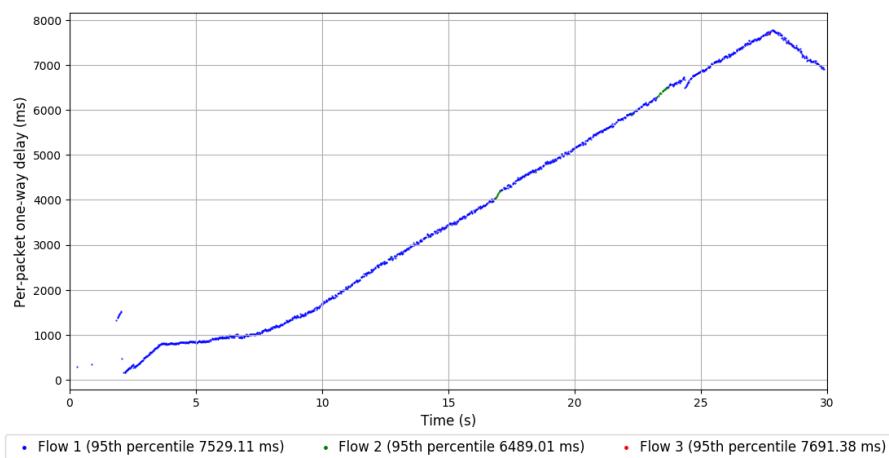
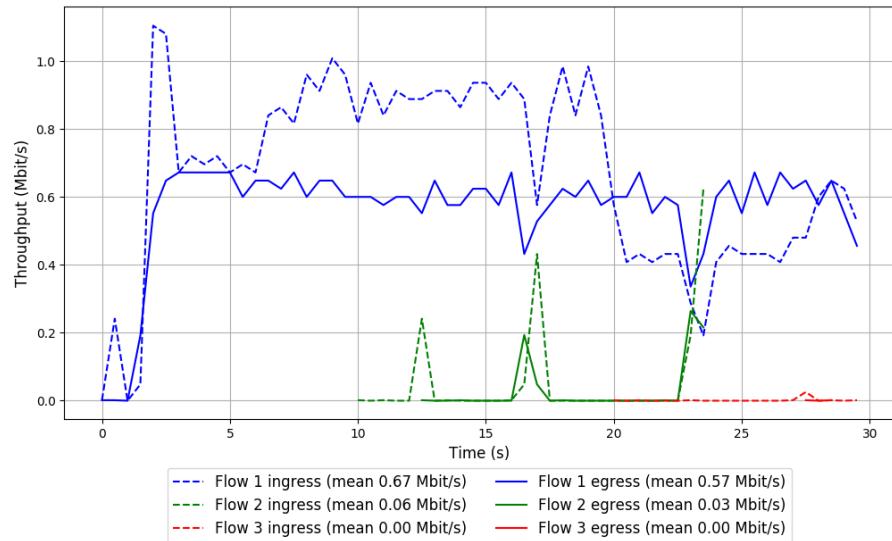


Run 2: Statistics of TCP Cubic

```
Start at: 2018-03-12 22:57:47
End at: 2018-03-12 22:58:17
Local clock offset: -3.392 ms
Remote clock offset: -5.952 ms

# Below is generated by plot.py at 2018-03-13 00:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 7529.115 ms
Loss rate: 17.63%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7529.115 ms
Loss rate: 16.22%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6489.006 ms
Loss rate: 52.87%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7691.382 ms
Loss rate: 91.06%
```

Run 2: Report of TCP Cubic — Data Link

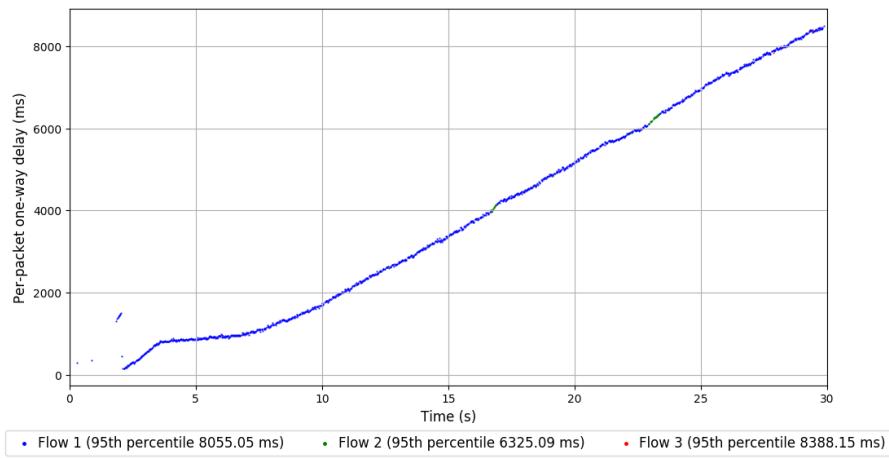
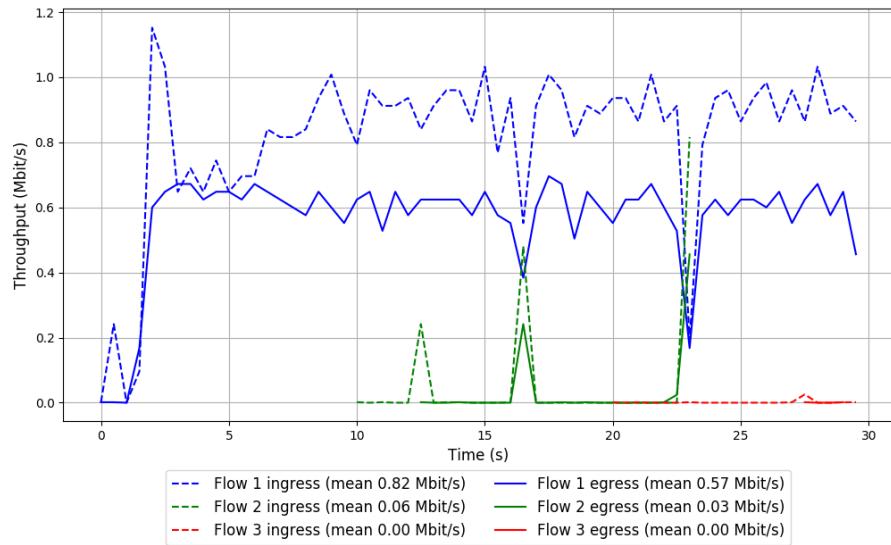


Run 3: Statistics of TCP Cubic

```
Start at: 2018-03-12 23:20:18
End at: 2018-03-12 23:20:48
Local clock offset: -1.314 ms
Remote clock offset: -6.399 ms

# Below is generated by plot.py at 2018-03-13 00:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 8045.303 ms
Loss rate: 31.60%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8055.052 ms
Loss rate: 30.89%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6325.090 ms
Loss rate: 52.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8388.150 ms
Loss rate: 91.06%
```

Run 3: Report of TCP Cubic — Data Link

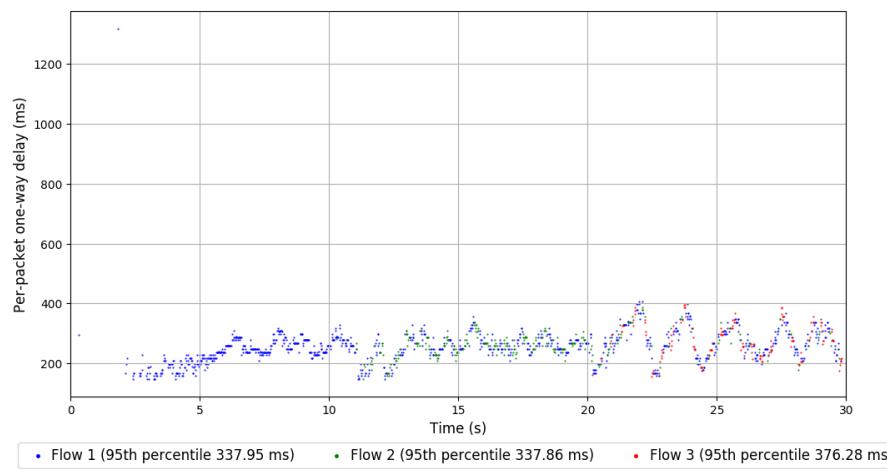
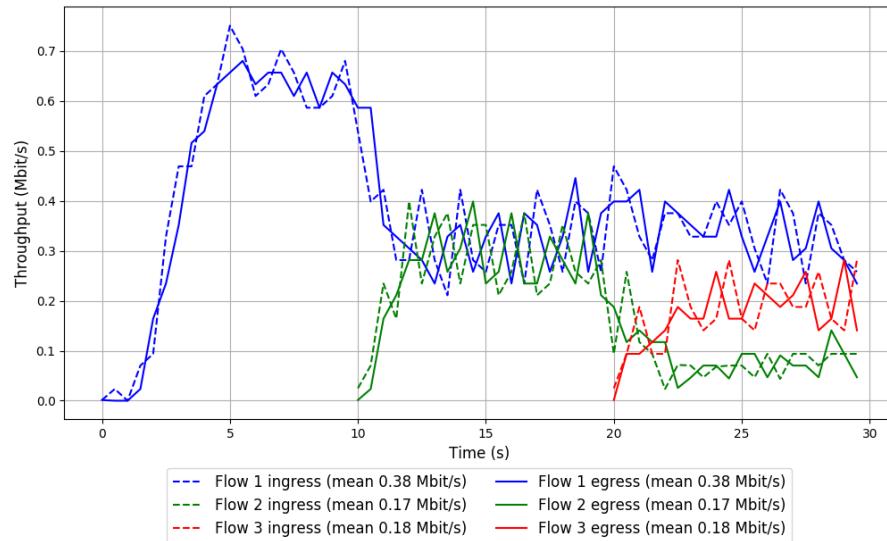


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-03-12 22:24:01
End at: 2018-03-12 22:24:31
Local clock offset: -7.104 ms
Remote clock offset: -6.923 ms

# Below is generated by plot.py at 2018-03-13 00:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 338.195 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 337.951 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 337.864 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 376.279 ms
Loss rate: 4.63%
```

Run 1: Report of LEDBAT — Data Link

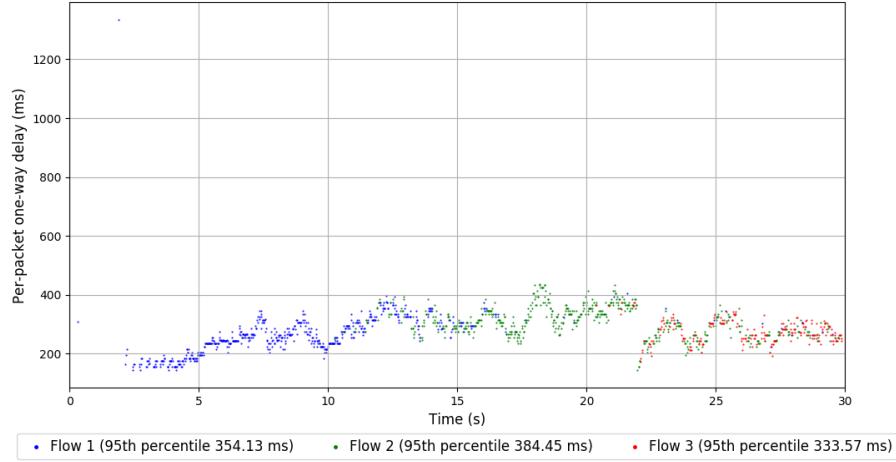
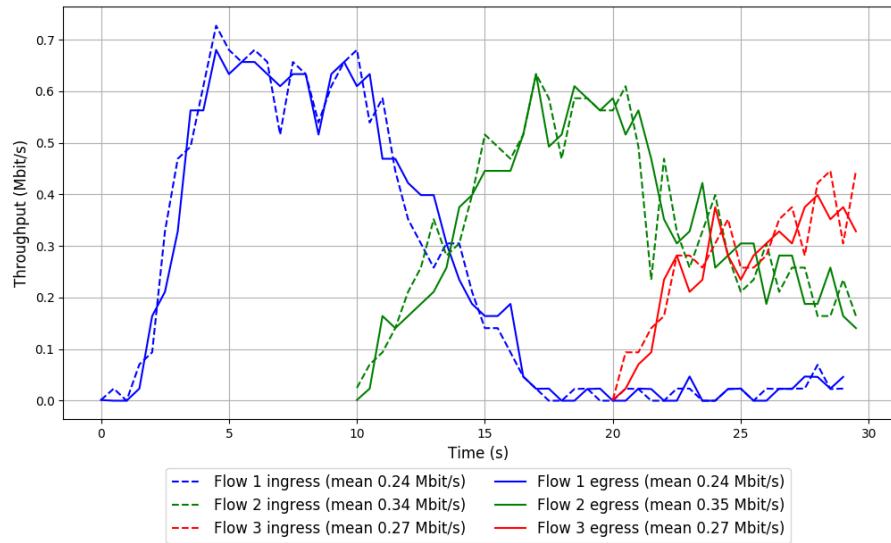


Run 2: Statistics of LEDBAT

```
Start at: 2018-03-12 22:46:32
End at: 2018-03-12 22:47:02
Local clock offset: -6.22 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2018-03-13 00:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 374.200 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 354.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 384.446 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 333.573 ms
Loss rate: 5.65%
```

Run 2: Report of LEDBAT — Data Link

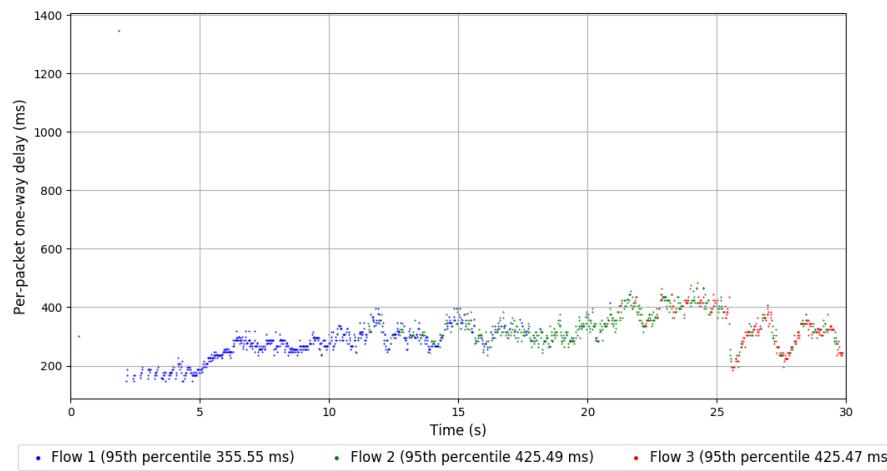
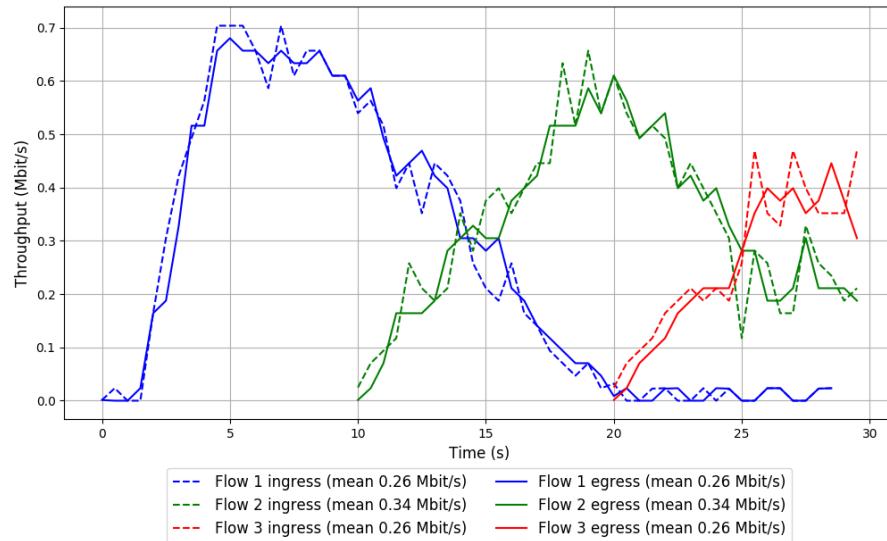


Run 3: Statistics of LEDBAT

```
Start at: 2018-03-12 23:09:03
End at: 2018-03-12 23:09:33
Local clock offset: -1.801 ms
Remote clock offset: -5.624 ms

# Below is generated by plot.py at 2018-03-13 00:36:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 424.780 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 355.554 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 425.487 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 425.467 ms
Loss rate: 5.80%
```

Run 3: Report of LEDBAT — Data Link

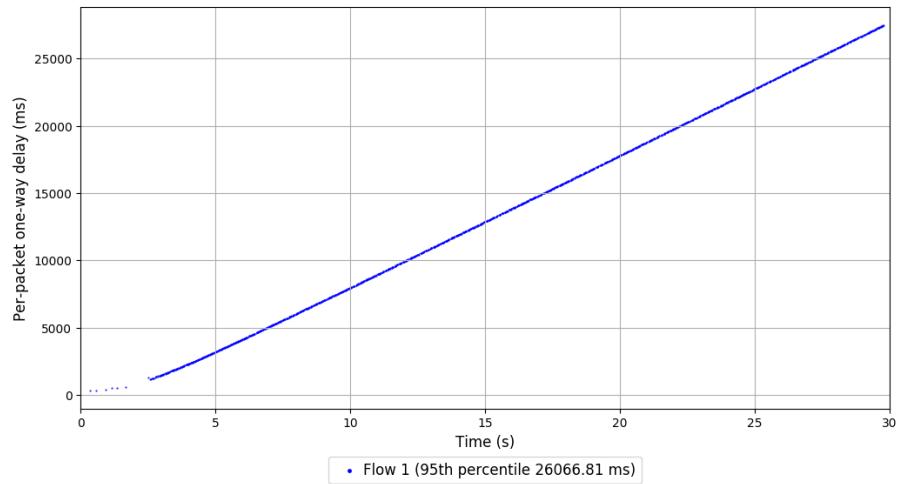
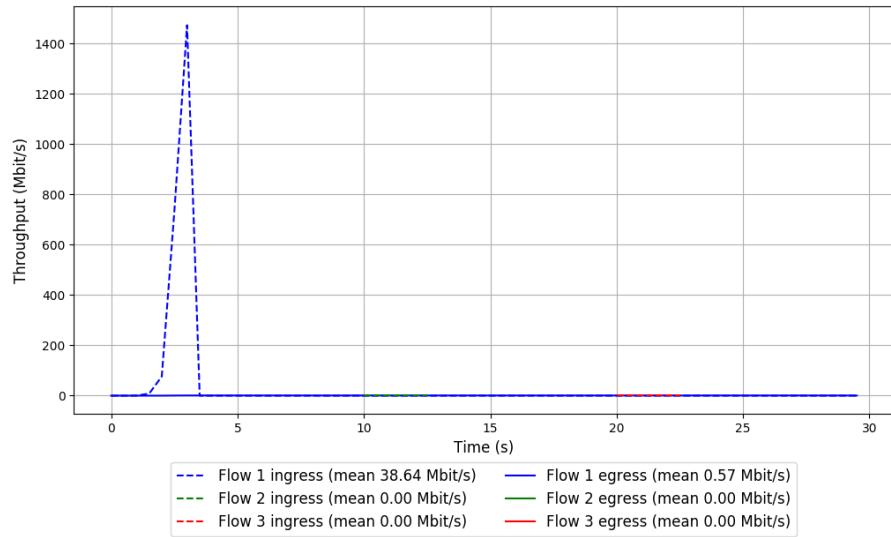


Run 1: Statistics of PCC

```
Start at: 2018-03-12 22:42:46
End at: 2018-03-12 22:43:16
Local clock offset: -7.364 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2018-03-13 00:36:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26066.807 ms
Loss rate: 98.55%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26066.807 ms
Loss rate: 98.55%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of PCC — Data Link

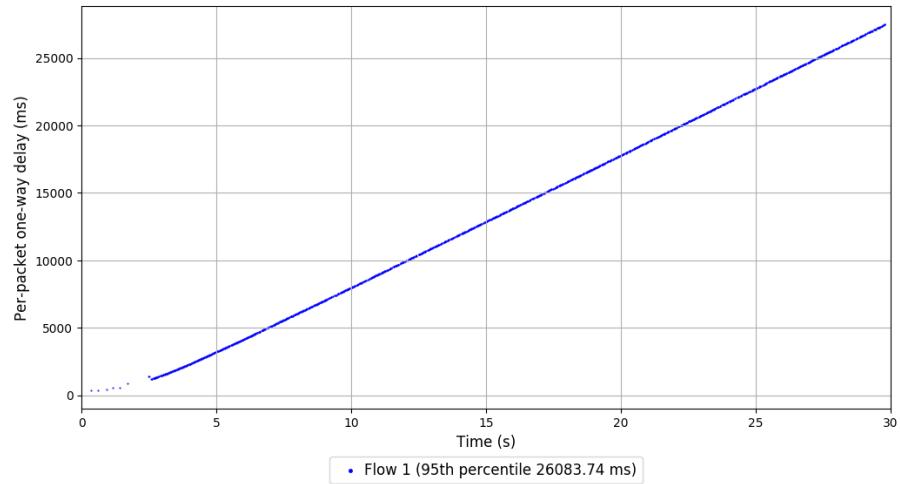
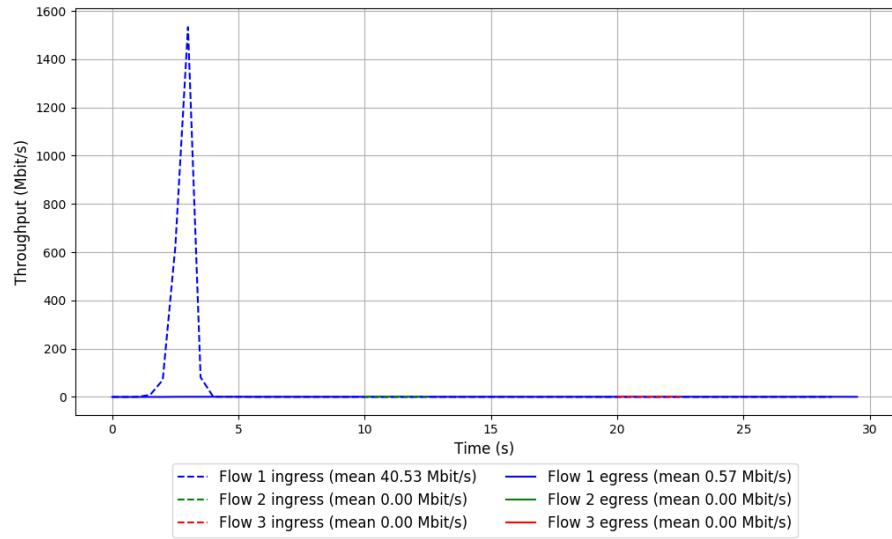


Run 2: Statistics of PCC

```
Start at: 2018-03-12 23:05:17
End at: 2018-03-12 23:05:47
Local clock offset: -2.261 ms
Remote clock offset: -5.699 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26083.739 ms
Loss rate: 98.55%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26083.739 ms
Loss rate: 98.55%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of PCC — Data Link

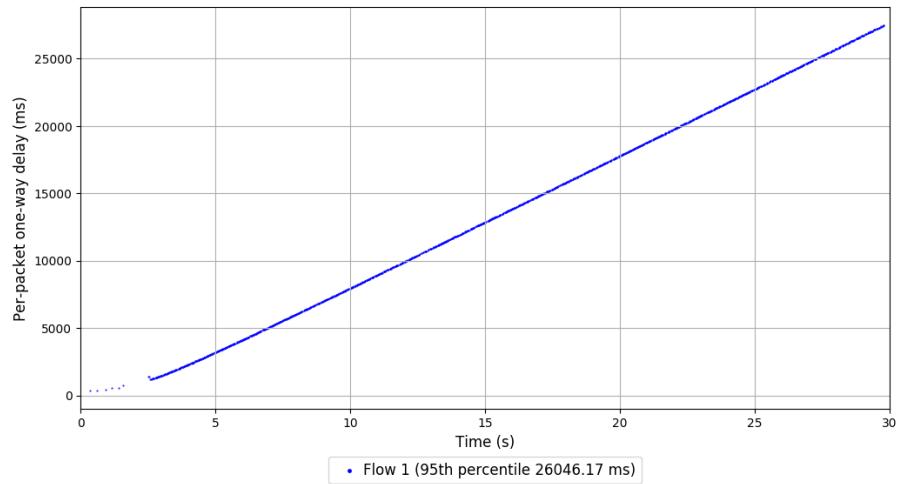
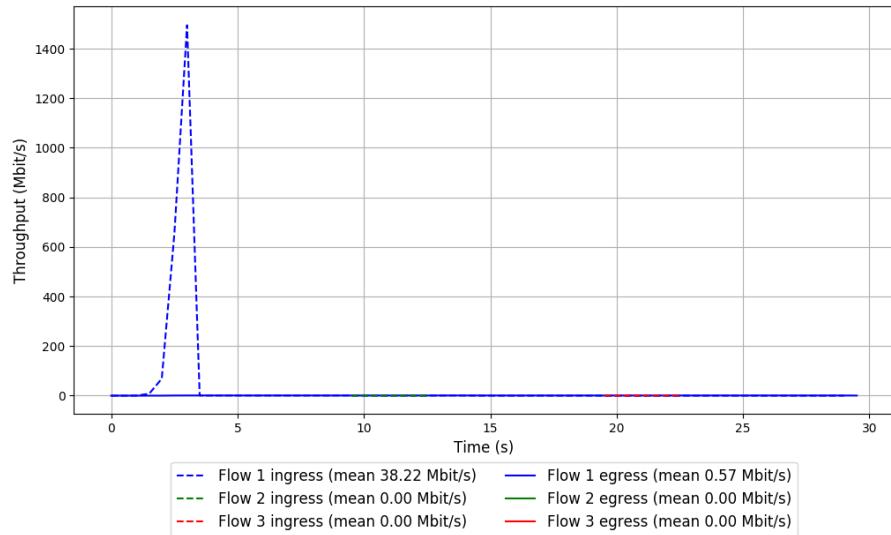


Run 3: Statistics of PCC

```
Start at: 2018-03-12 23:27:46
End at: 2018-03-12 23:28:16
Local clock offset: -2.288 ms
Remote clock offset: -5.472 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26046.174 ms
Loss rate: 98.50%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26046.174 ms
Loss rate: 98.50%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of PCC — Data Link

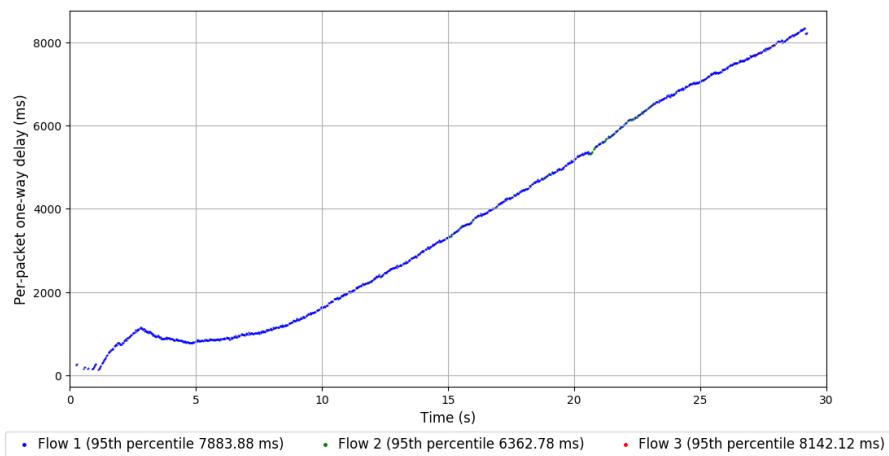
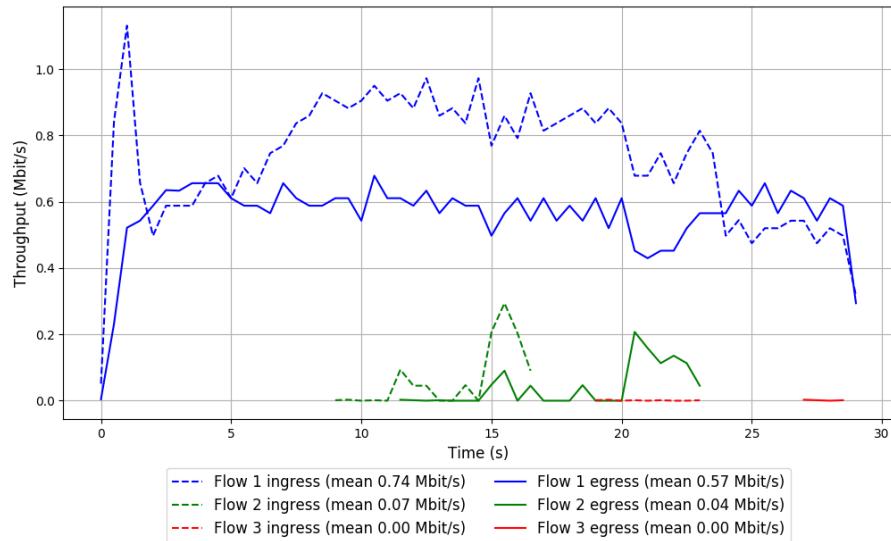


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2018-03-12 22:34:01
End at: 2018-03-12 22:34:31
Local clock offset: -7.392 ms
Remote clock offset: -6.047 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 7883.875 ms
Loss rate: 22.62%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7883.875 ms
Loss rate: 23.11%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6362.779 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8142.124 ms
Loss rate: 33.33%
```

Run 1: Report of QUIC Cubic — Data Link

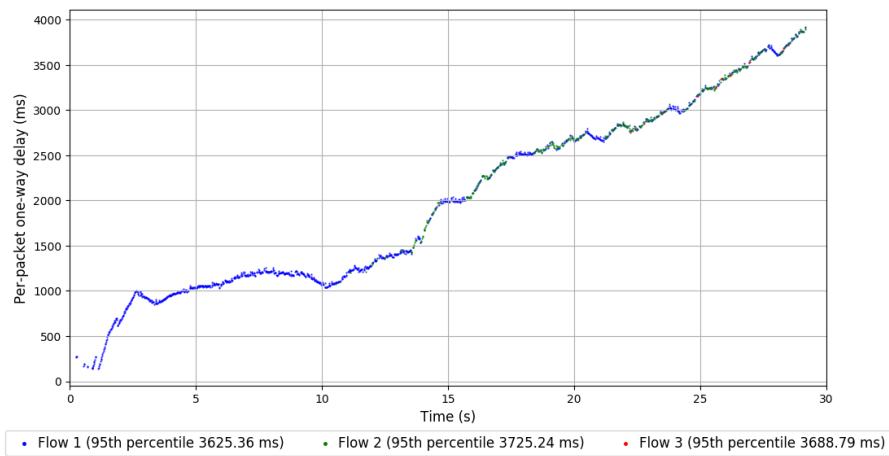
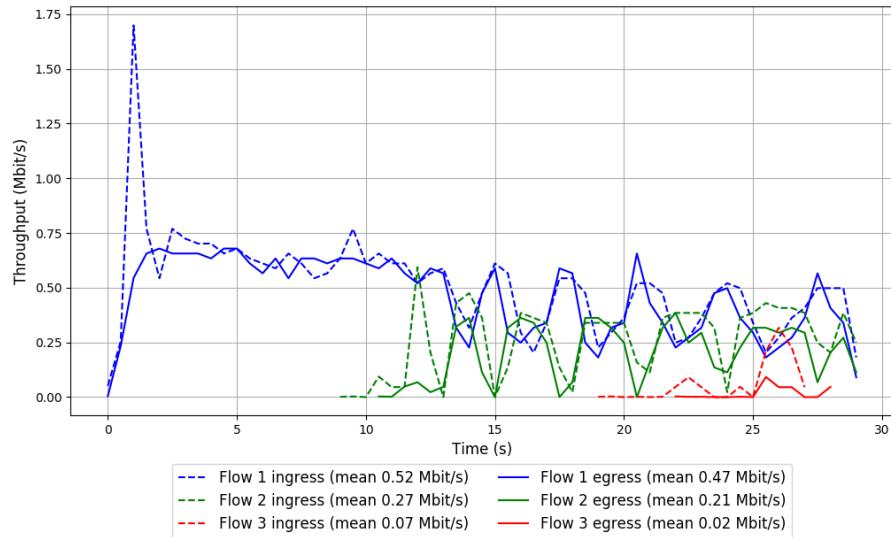


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-03-12 22:56:32
End at: 2018-03-12 22:57:02
Local clock offset: -3.558 ms
Remote clock offset: -1.128 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 3651.419 ms
Loss rate: 16.37%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 3625.360 ms
Loss rate: 10.43%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 3725.238 ms
Loss rate: 27.37%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3688.789 ms
Loss rate: 77.10%
```

Run 2: Report of QUIC Cubic — Data Link

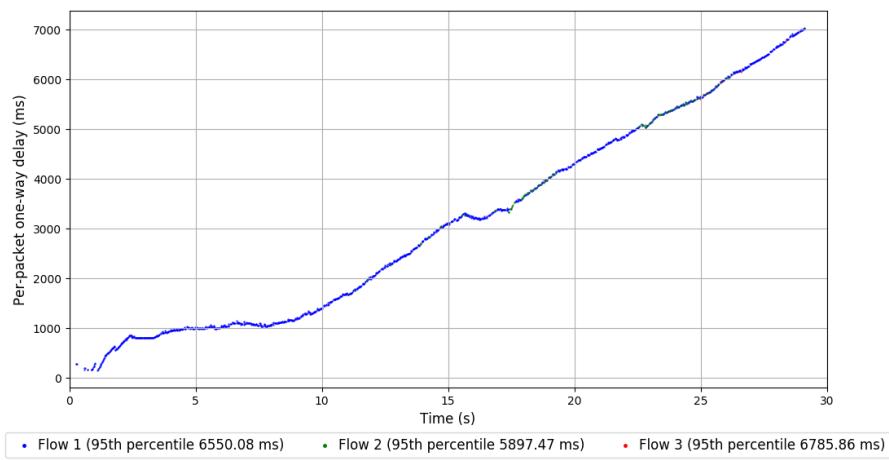
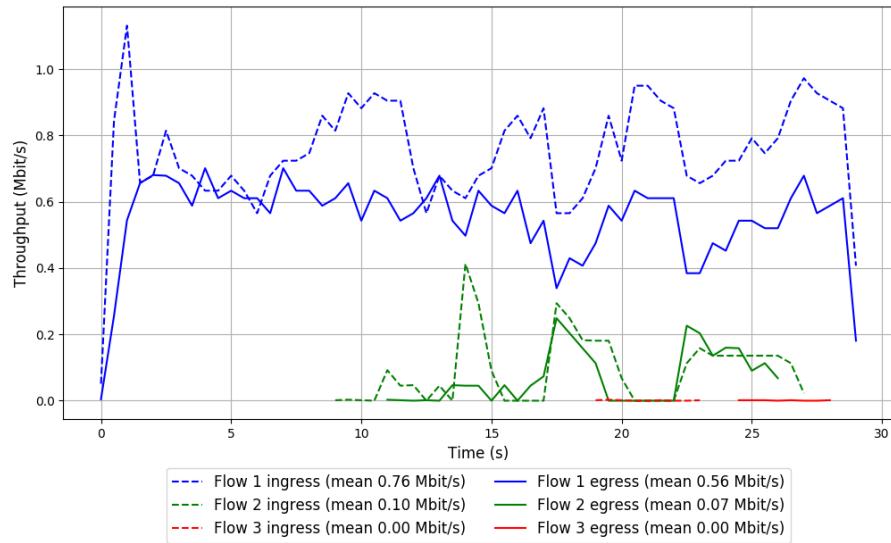


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-03-12 23:19:03
End at: 2018-03-12 23:19:33
Local clock offset: -1.149 ms
Remote clock offset: -5.668 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 6495.650 ms
Loss rate: 26.98%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 6550.081 ms
Loss rate: 26.30%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 5897.467 ms
Loss rate: 35.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6785.857 ms
Loss rate: 16.67%
```

Run 3: Report of QUIC Cubic — Data Link

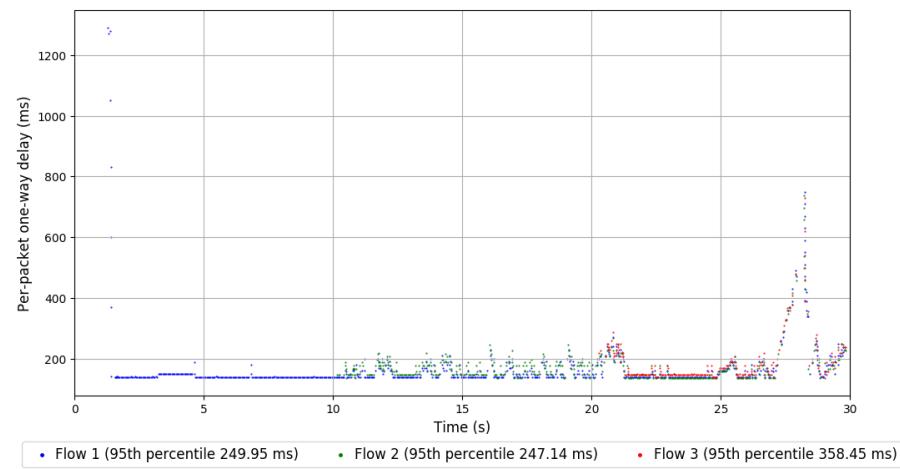
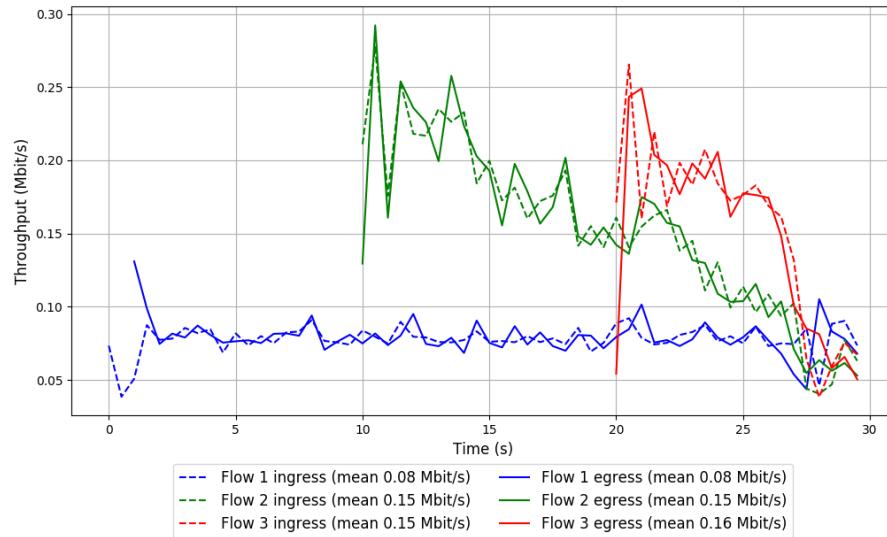


Run 1: Statistics of SCReAM

```
Start at: 2018-03-12 22:32:47
End at: 2018-03-12 22:33:17
Local clock offset: -7.377 ms
Remote clock offset: -6.142 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 258.760 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 249.954 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 247.143 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 358.451 ms
Loss rate: 2.06%
```

Run 1: Report of SCReAM — Data Link

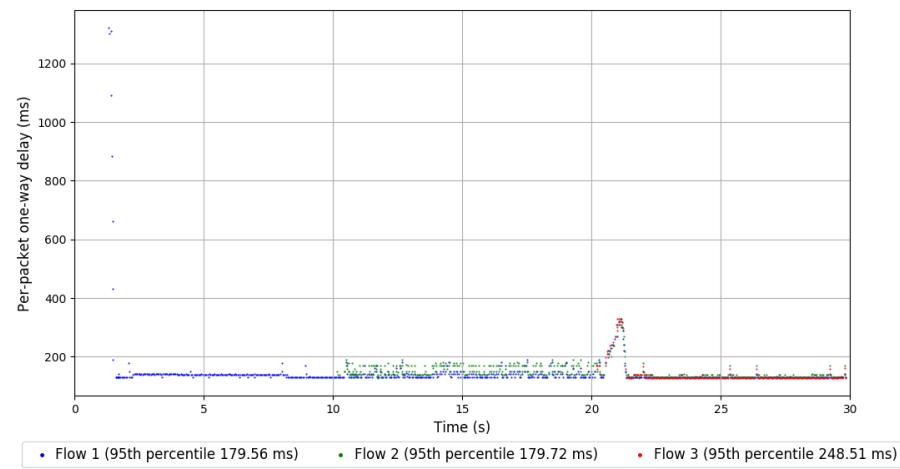
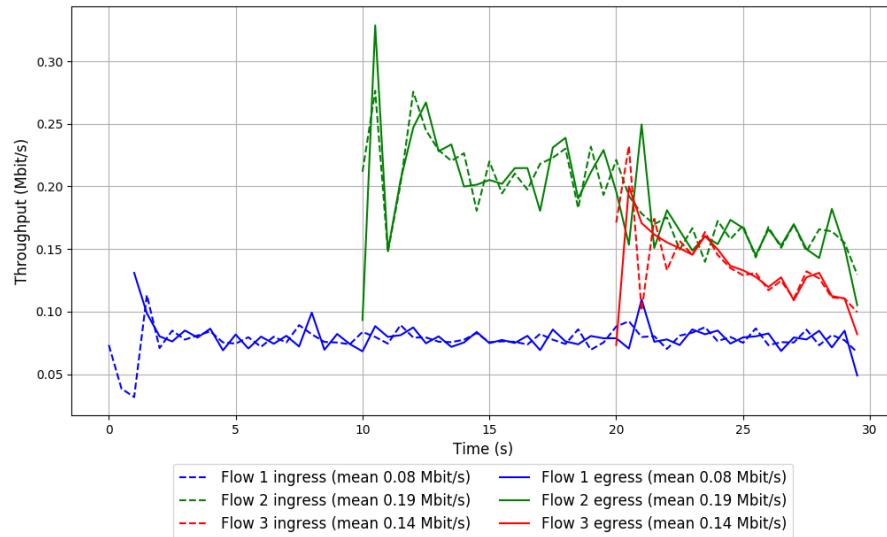


Run 2: Statistics of SCReAM

```
Start at: 2018-03-12 22:55:18
End at: 2018-03-12 22:55:48
Local clock offset: -3.838 ms
Remote clock offset: -1.157 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 180.525 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 179.558 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 179.719 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 248.514 ms
Loss rate: 2.36%
```

Run 2: Report of SCReAM — Data Link

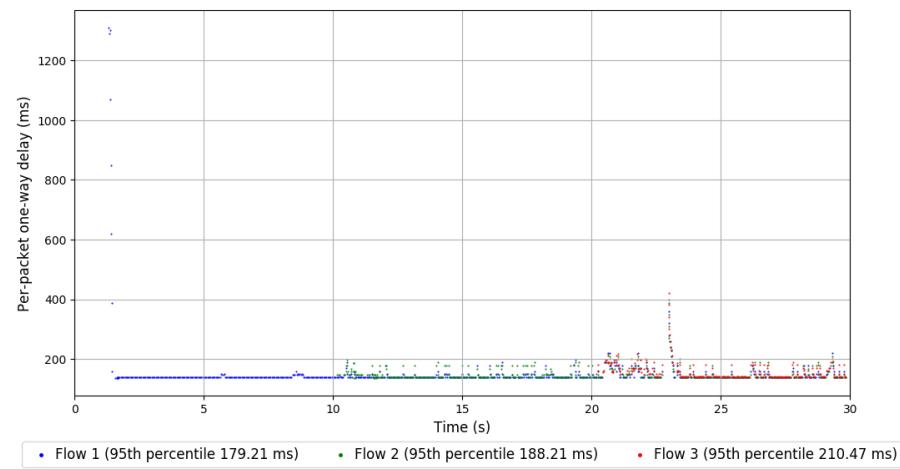
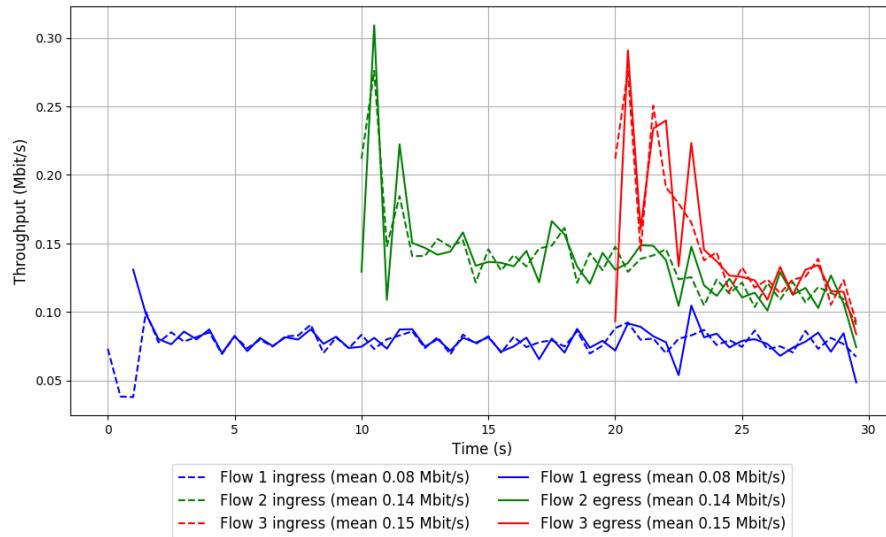


Run 3: Statistics of SCReAM

```
Start at: 2018-03-12 23:17:48
End at: 2018-03-12 23:18:18
Local clock offset: -0.932 ms
Remote clock offset: -6.445 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 190.329 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 179.212 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 188.214 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 210.465 ms
Loss rate: 1.51%
```

Run 3: Report of SCReAM — Data Link

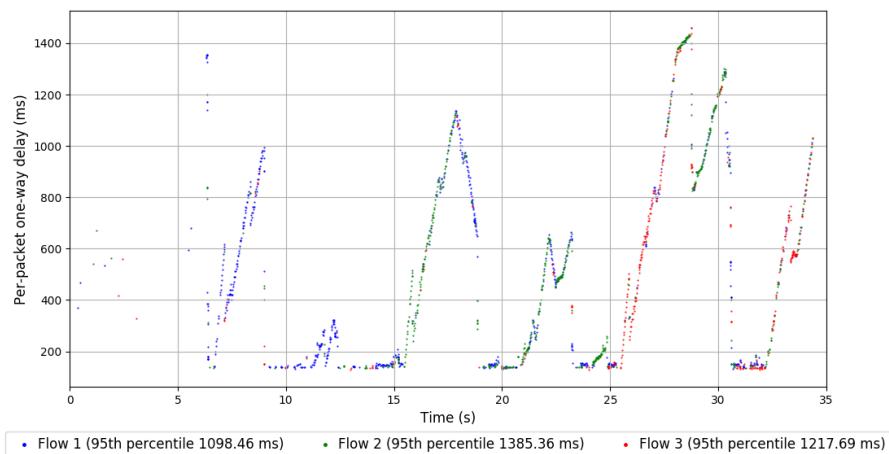
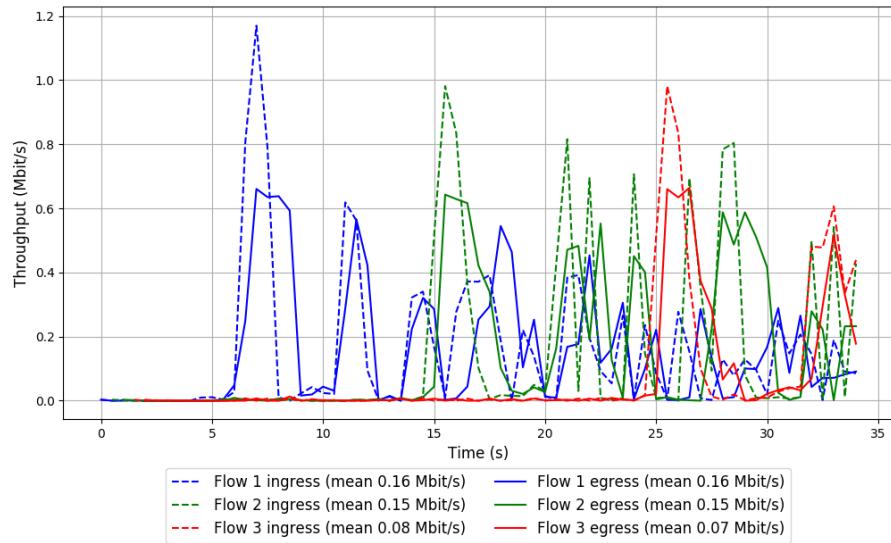


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-12 22:37:46
End at: 2018-03-12 22:38:16
Local clock offset: -7.466 ms
Remote clock offset: -6.088 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 1261.090 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 1098.461 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 1385.363 ms
Loss rate: 5.08%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 1217.686 ms
Loss rate: 17.87%
```

Run 1: Report of WebRTC media — Data Link

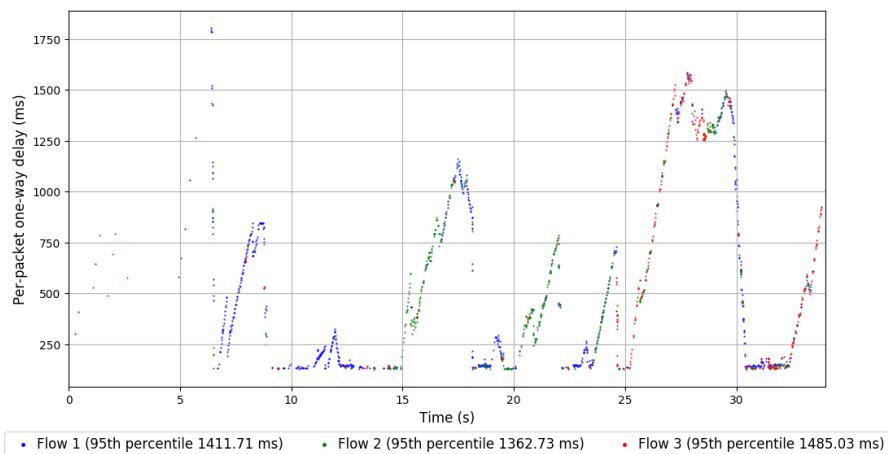
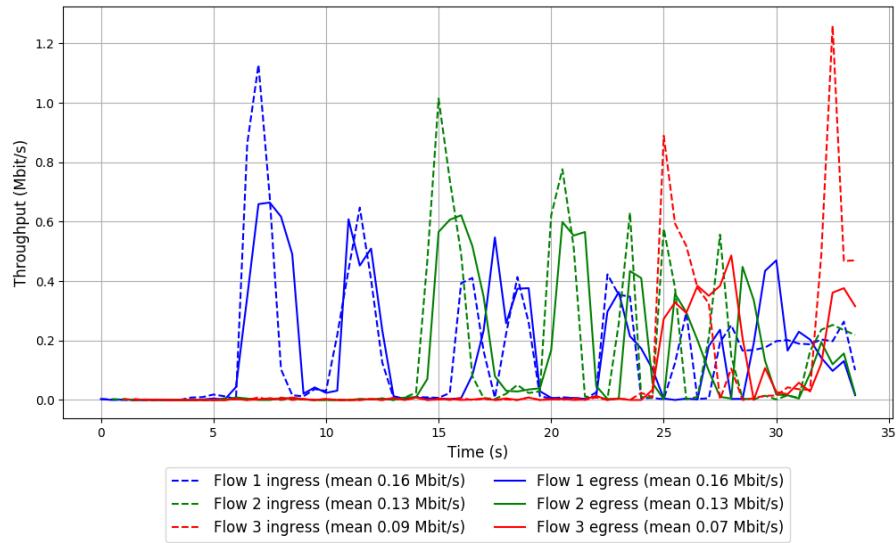


Run 2: Statistics of WebRTC media

```
Start at: 2018-03-12 23:00:17
End at: 2018-03-12 23:00:47
Local clock offset: -2.952 ms
Remote clock offset: -1.75 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 1425.229 ms
Loss rate: 9.70%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 1411.707 ms
Loss rate: 3.84%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1362.726 ms
Loss rate: 5.98%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 1485.028 ms
Loss rate: 26.37%
```

Run 2: Report of WebRTC media — Data Link

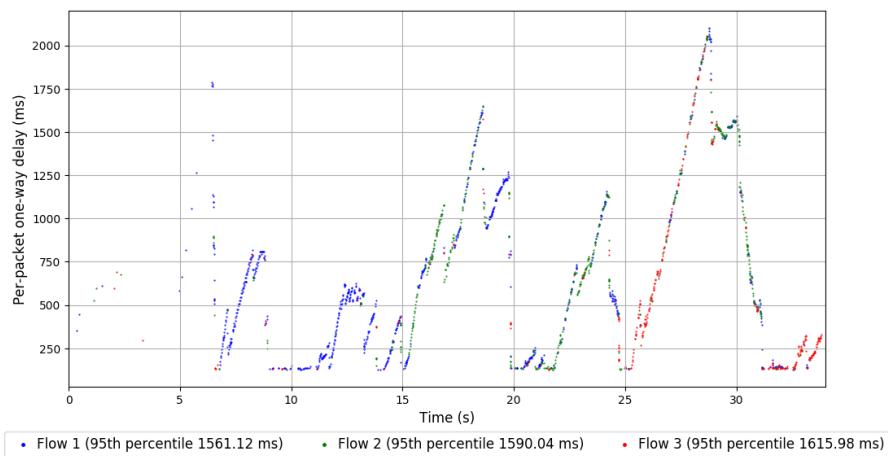
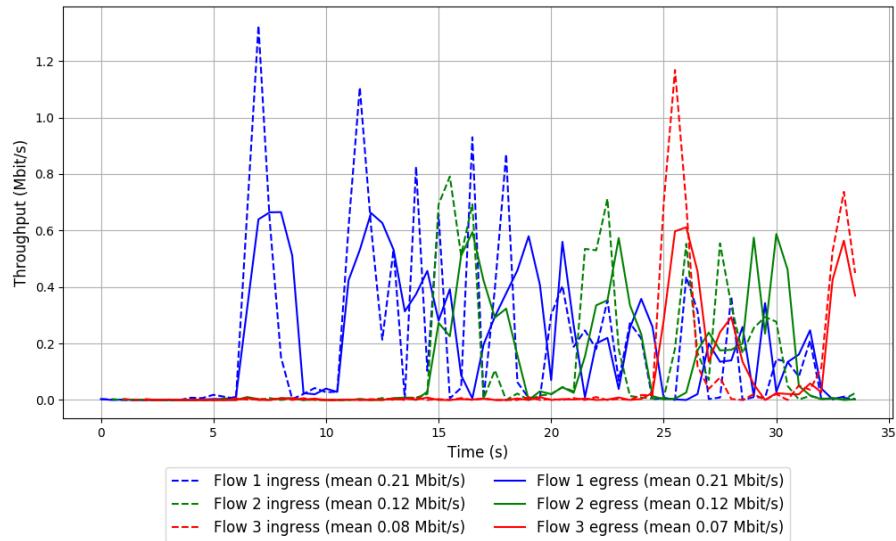


Run 3: Statistics of WebRTC media

```
Start at: 2018-03-12 23:22:47
End at: 2018-03-12 23:23:17
Local clock offset: -1.799 ms
Remote clock offset: -0.648 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 1575.863 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 1561.117 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 1590.036 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 1615.976 ms
Loss rate: 9.19%
```

Run 3: Report of WebRTC media — Data Link

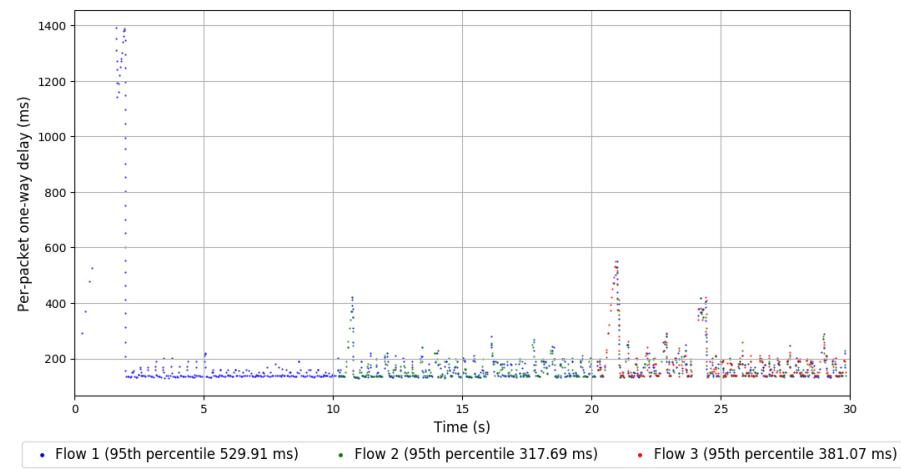
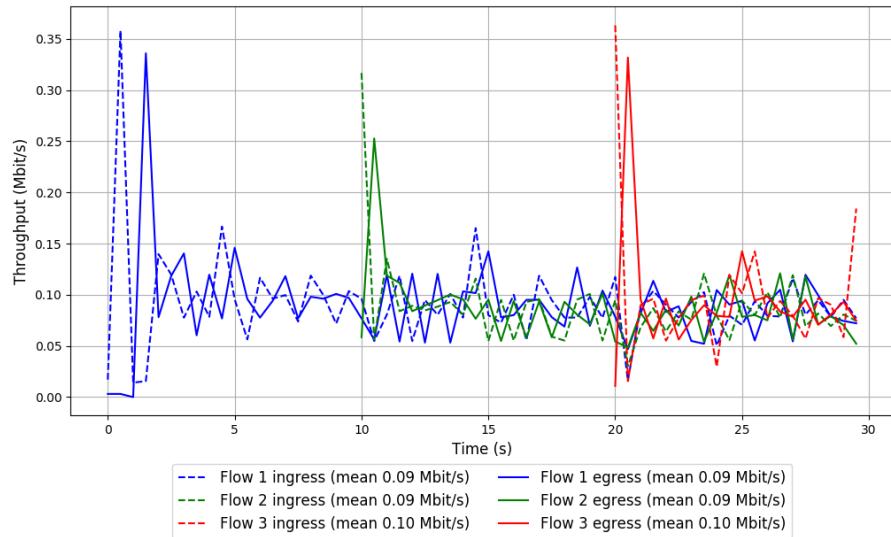


Run 1: Statistics of Sprout

```
Start at: 2018-03-12 22:26:31
End at: 2018-03-12 22:27:01
Local clock offset: -7.288 ms
Remote clock offset: -6.141 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 395.536 ms
Loss rate: 2.88%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 529.910 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 317.695 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 381.074 ms
Loss rate: 6.91%
```

Run 1: Report of Sprout — Data Link

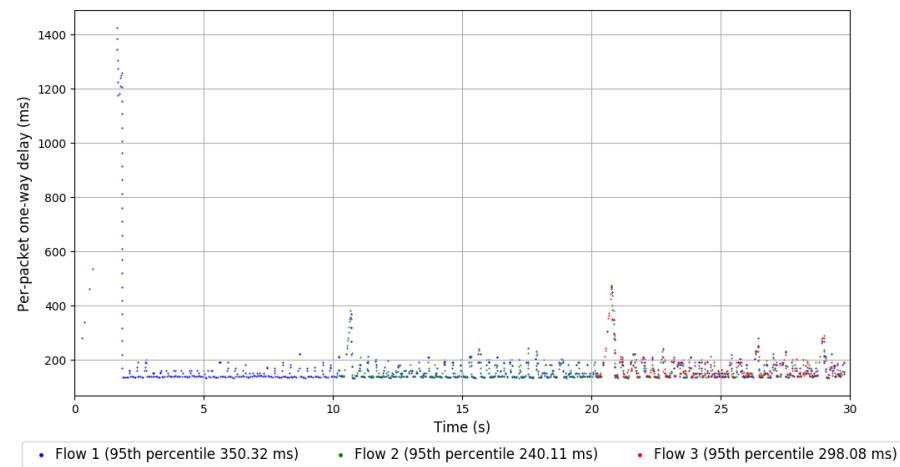
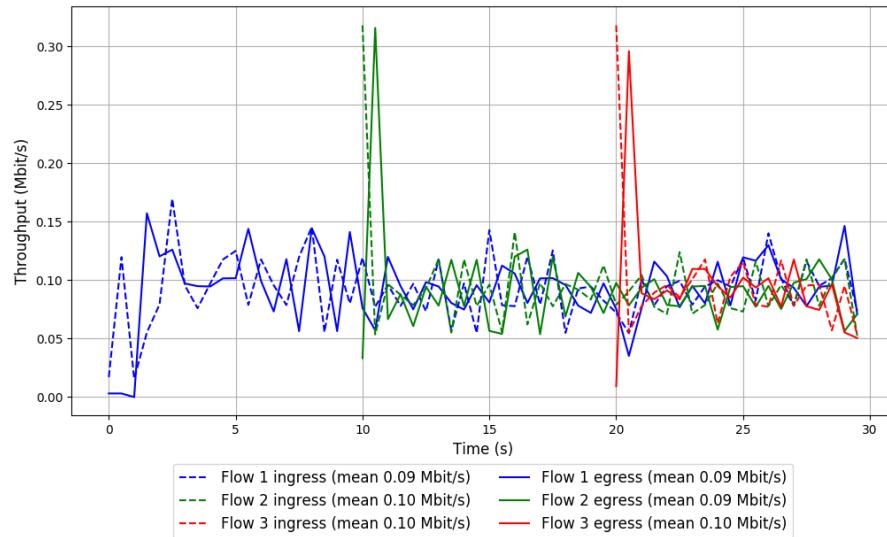


Run 2: Statistics of Sprout

```
Start at: 2018-03-12 22:49:02
End at: 2018-03-12 22:49:32
Local clock offset: -5.371 ms
Remote clock offset: -6.1 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 280.807 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 350.321 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 240.108 ms
Loss rate: 2.99%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 298.076 ms
Loss rate: 3.61%
```

Run 2: Report of Sprout — Data Link

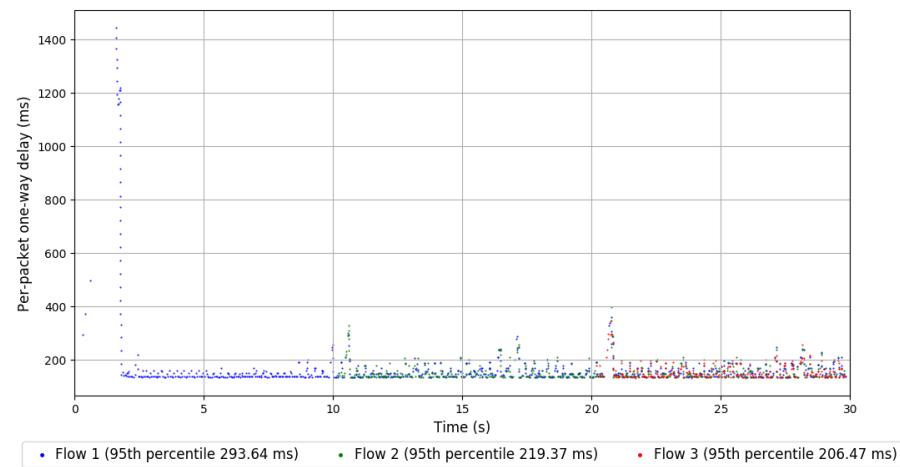
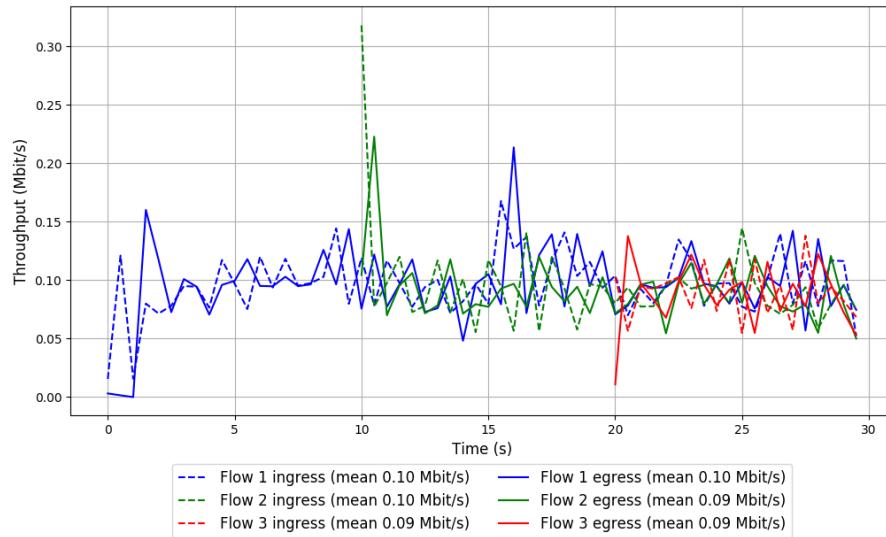


Run 3: Statistics of Sprout

```
Start at: 2018-03-12 23:11:33
End at: 2018-03-12 23:12:03
Local clock offset: -1.511 ms
Remote clock offset: -6.461 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 237.901 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 293.643 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 219.371 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 206.475 ms
Loss rate: 2.54%
```

Run 3: Report of Sprout — Data Link

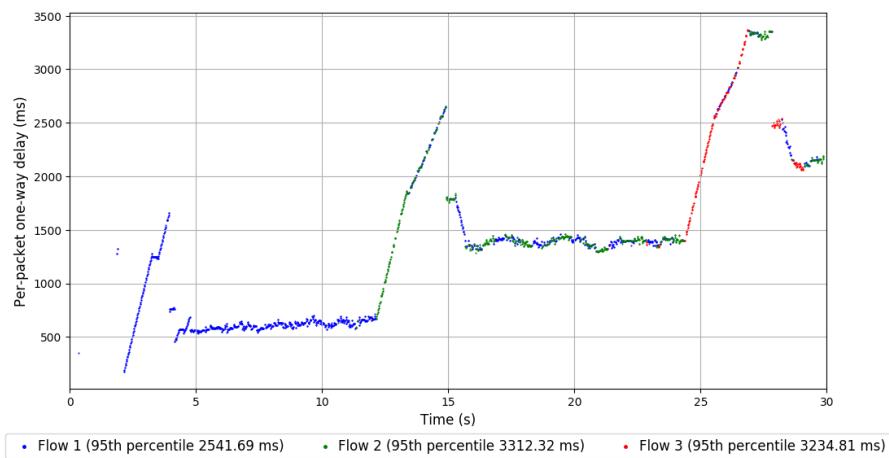
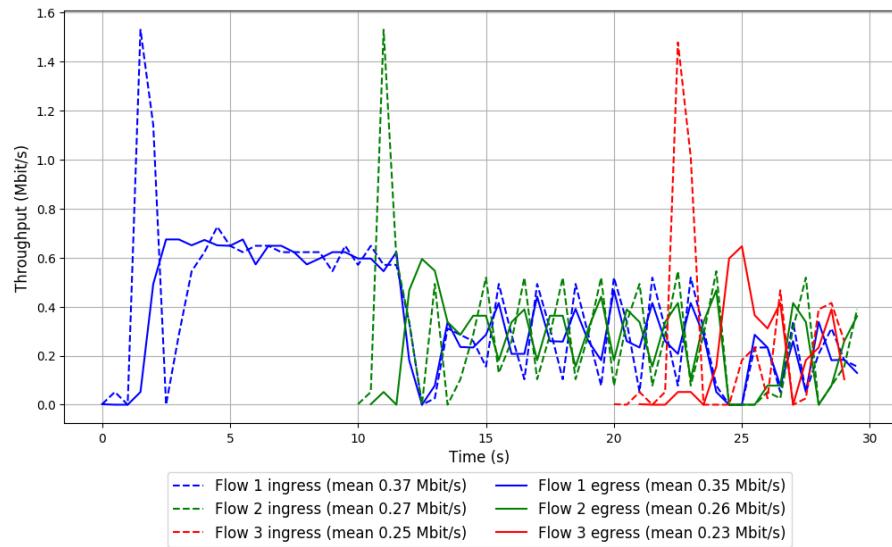


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-03-12 22:41:31
End at: 2018-03-12 22:42:01
Local clock offset: -7.38 ms
Remote clock offset: -1.196 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2964.080 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 2541.693 ms
Loss rate: 5.73%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 3312.323 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 3234.810 ms
Loss rate: 23.72%
```

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

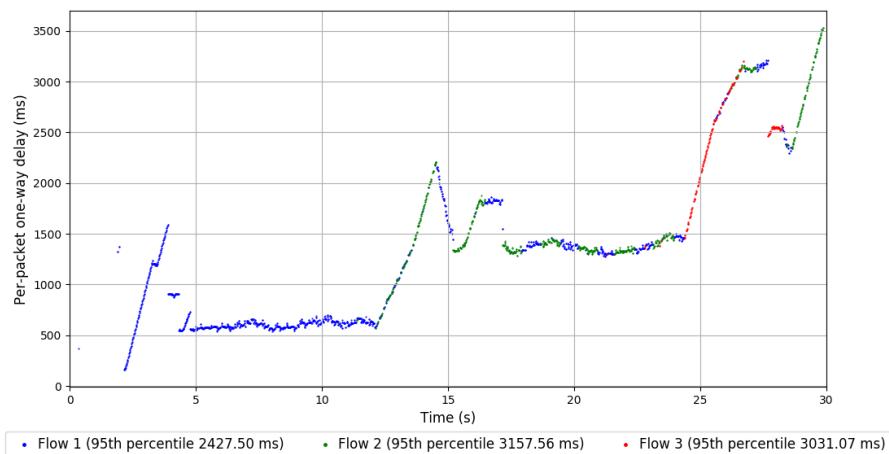
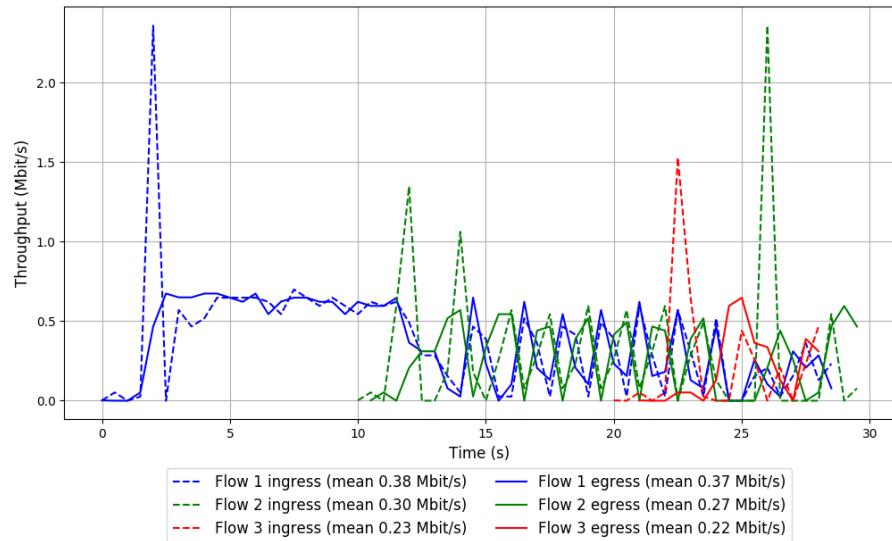


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-03-12 23:04:02
End at: 2018-03-12 23:04:32
Local clock offset: -2.436 ms
Remote clock offset: -5.745 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3111.199 ms
Loss rate: 8.81%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 2427.503 ms
Loss rate: 4.60%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 3157.557 ms
Loss rate: 11.81%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3031.069 ms
Loss rate: 23.17%
```

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

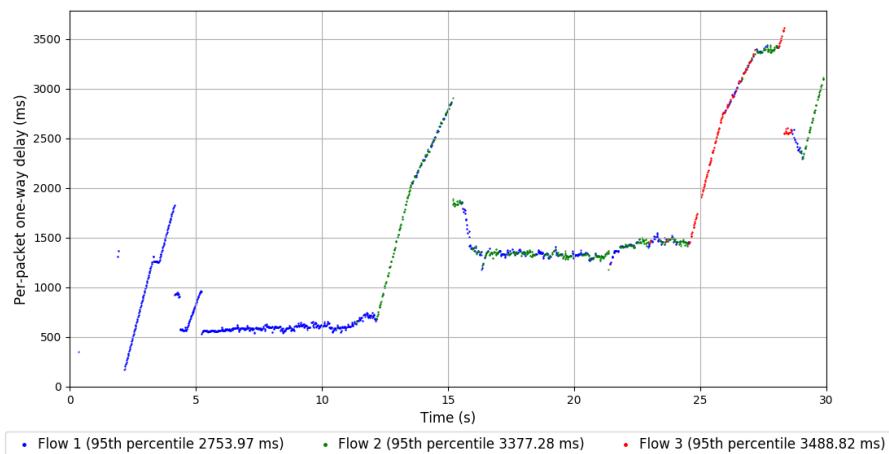
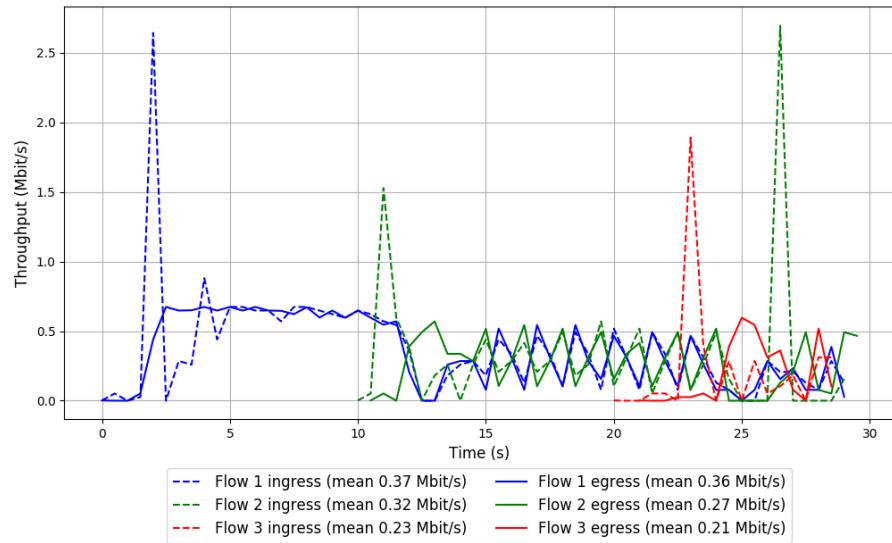


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-03-12 23:26:32
End at: 2018-03-12 23:27:02
Local clock offset: -2.233 ms
Remote clock offset: -0.648 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 3236.824 ms
Loss rate: 9.97%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 2753.971 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 3377.280 ms
Loss rate: 15.07%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 3488.815 ms
Loss rate: 23.17%
```

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

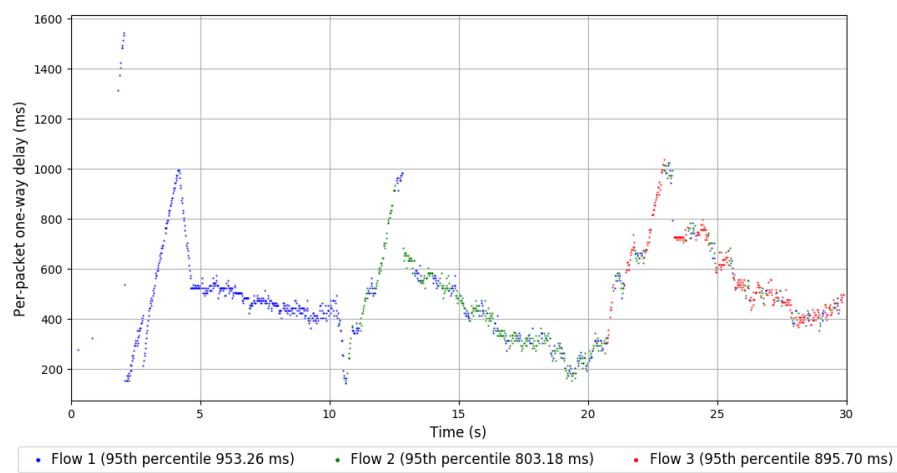
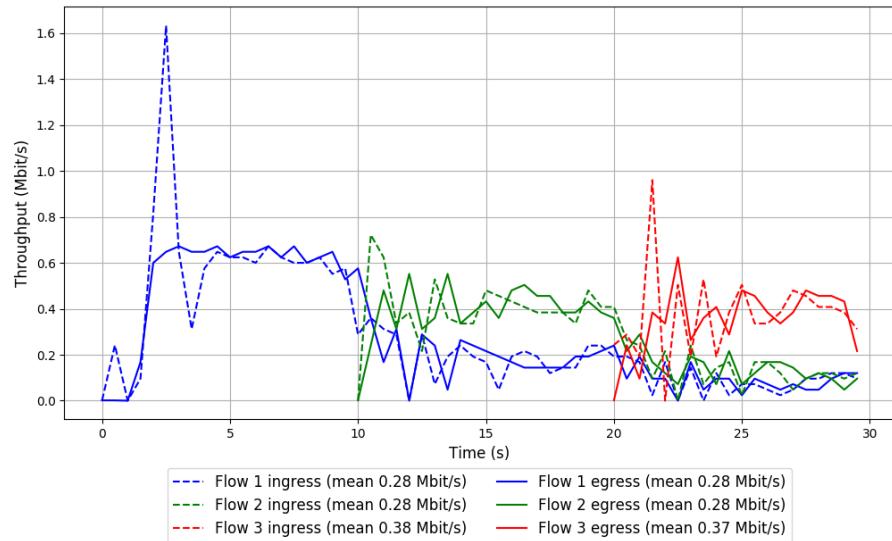


Run 1: Statistics of TCP Vegas

```
Start at: 2018-03-12 22:30:18
End at: 2018-03-12 22:30:48
Local clock offset: -7.405 ms
Remote clock offset: -6.106 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 913.643 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 953.260 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 803.177 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 895.700 ms
Loss rate: 5.45%
```

Run 1: Report of TCP Vegas — Data Link

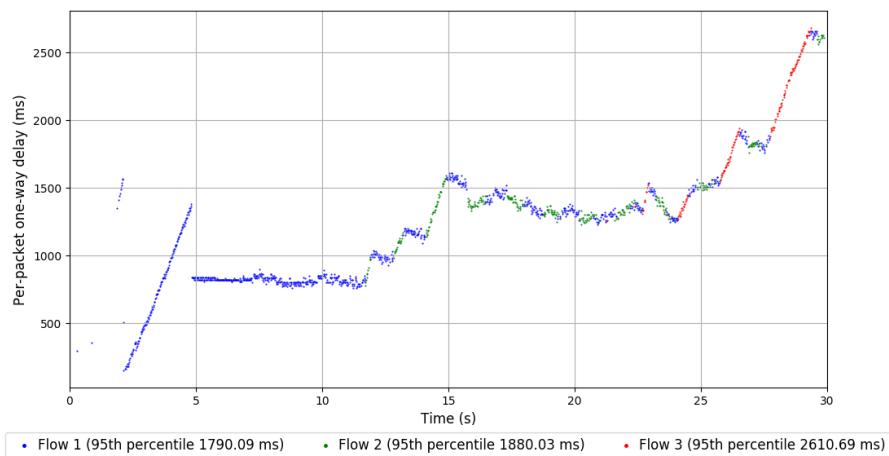
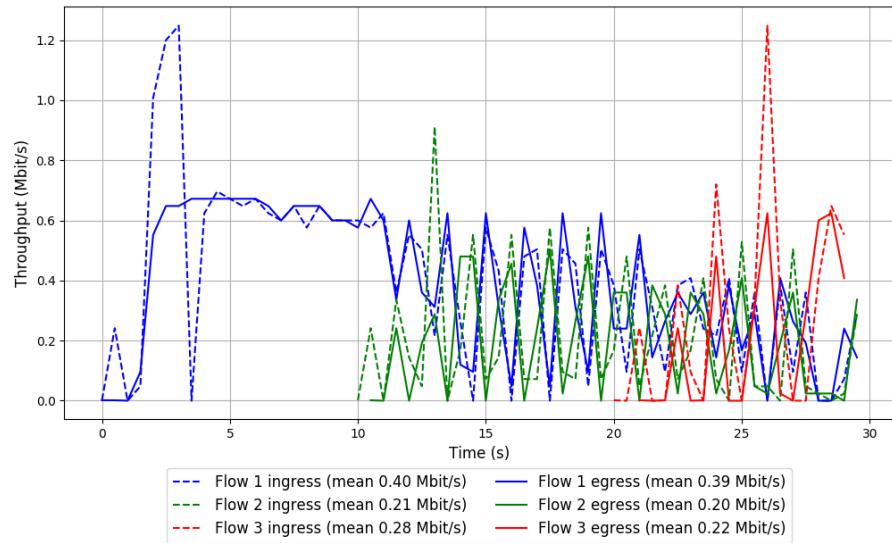


Run 2: Statistics of TCP Vegas

```
Start at: 2018-03-12 22:52:48
End at: 2018-03-12 22:53:18
Local clock offset: -4.37 ms
Remote clock offset: -5.983 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2340.301 ms
Loss rate: 7.99%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 1790.094 ms
Loss rate: 3.43%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 1880.030 ms
Loss rate: 6.70%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2610.690 ms
Loss rate: 30.84%
```

Run 2: Report of TCP Vegas — Data Link

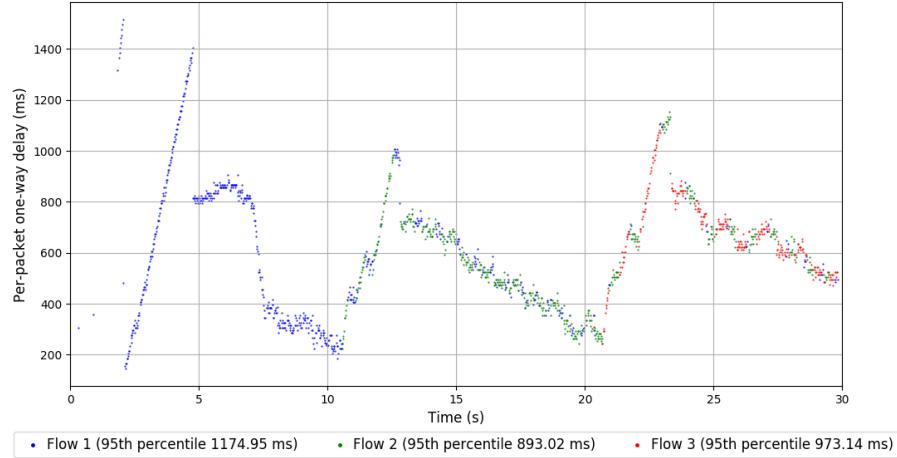
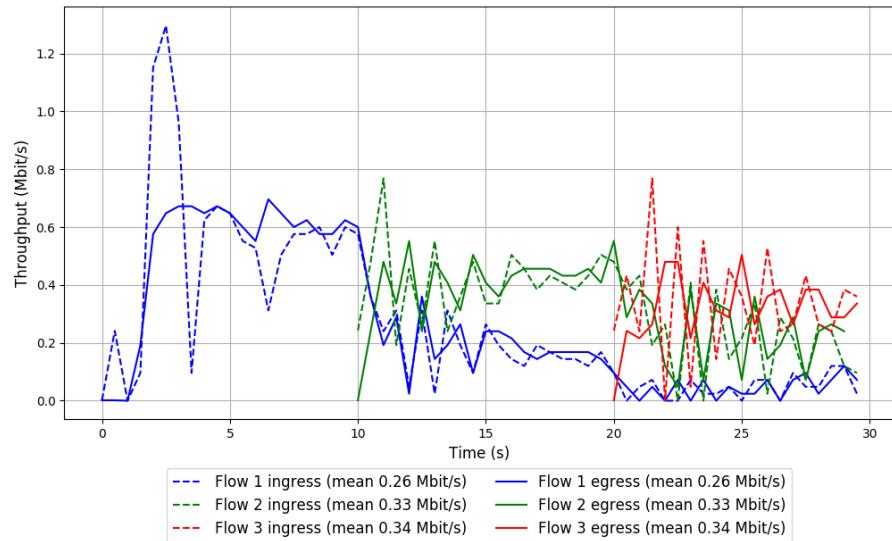


Run 3: Statistics of TCP Vegas

```
Start at: 2018-03-12 23:15:19
End at: 2018-03-12 23:15:49
Local clock offset: -1.221 ms
Remote clock offset: -5.587 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1052.693 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 1174.952 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 893.018 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 973.141 ms
Loss rate: 5.69%
```

Run 3: Report of TCP Vegas — Data Link

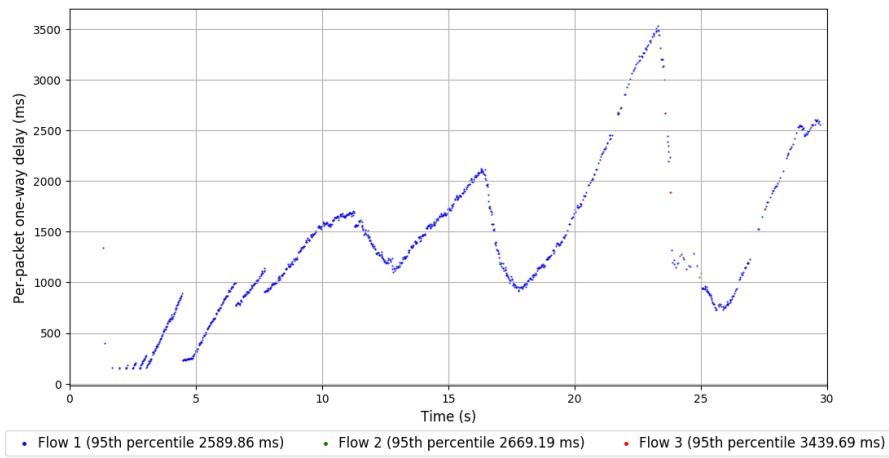
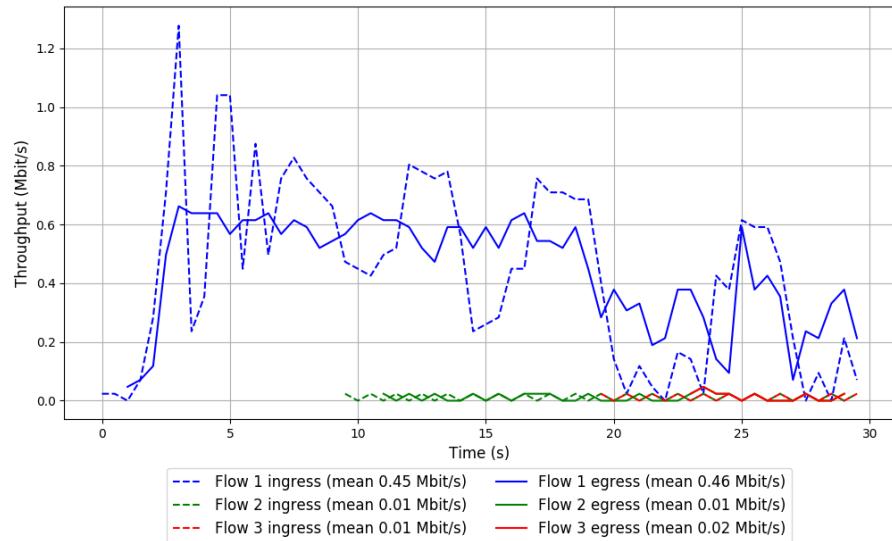


Run 1: Statistics of Verus

```
Start at: 2018-03-12 22:36:31
End at: 2018-03-12 22:37:01
Local clock offset: -7.413 ms
Remote clock offset: -2.144 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 2605.617 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 2589.861 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2669.189 ms
Loss rate: 14.29%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3439.690 ms
Loss rate: 27.27%
```

Run 1: Report of Verus — Data Link

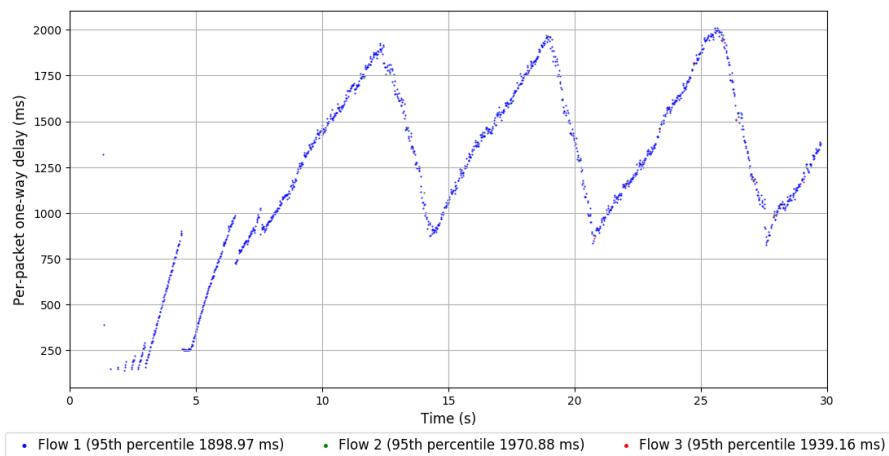
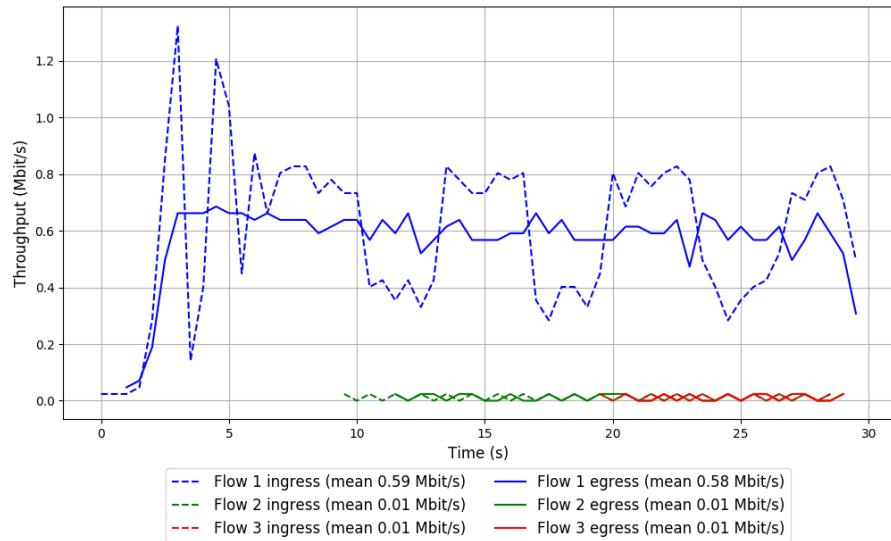


Run 2: Statistics of Verus

```
Start at: 2018-03-12 22:59:02
End at: 2018-03-12 22:59:32
Local clock offset: -3.168 ms
Remote clock offset: -0.809 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 1900.024 ms
Loss rate: 6.27%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1898.966 ms
Loss rate: 6.27%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1970.883 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1939.162 ms
Loss rate: 10.00%
```

Run 2: Report of Verus — Data Link

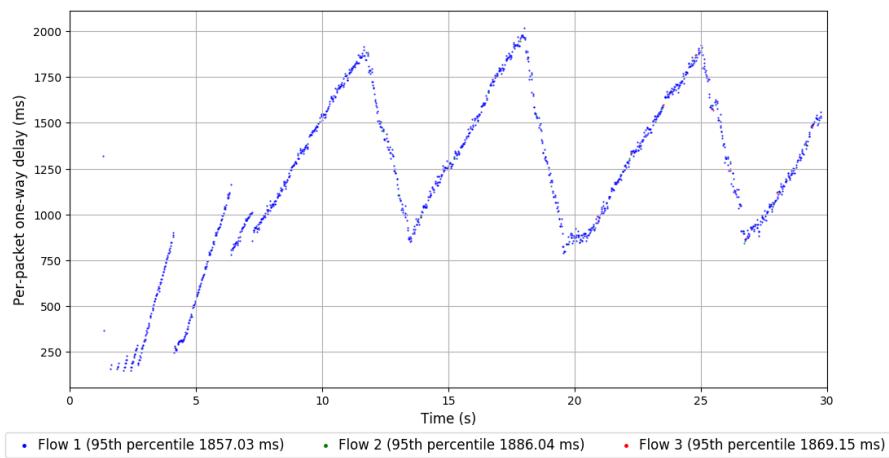
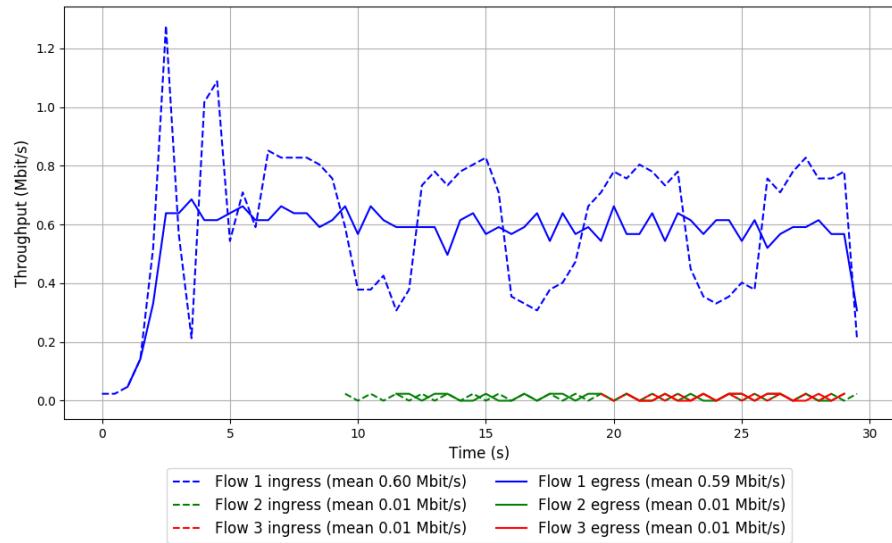


Run 3: Statistics of Verus

```
Start at: 2018-03-12 23:21:32
End at: 2018-03-12 23:22:02
Local clock offset: -1.568 ms
Remote clock offset: -5.638 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 1857.516 ms
Loss rate: 6.32%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 1857.034 ms
Loss rate: 6.25%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1886.044 ms
Loss rate: 9.52%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1869.151 ms
Loss rate: 10.00%
```

Run 3: Report of Verus — Data Link

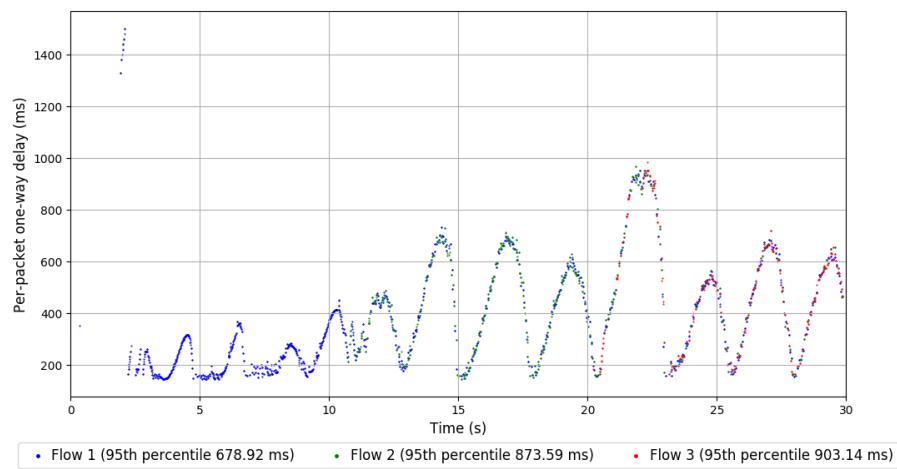
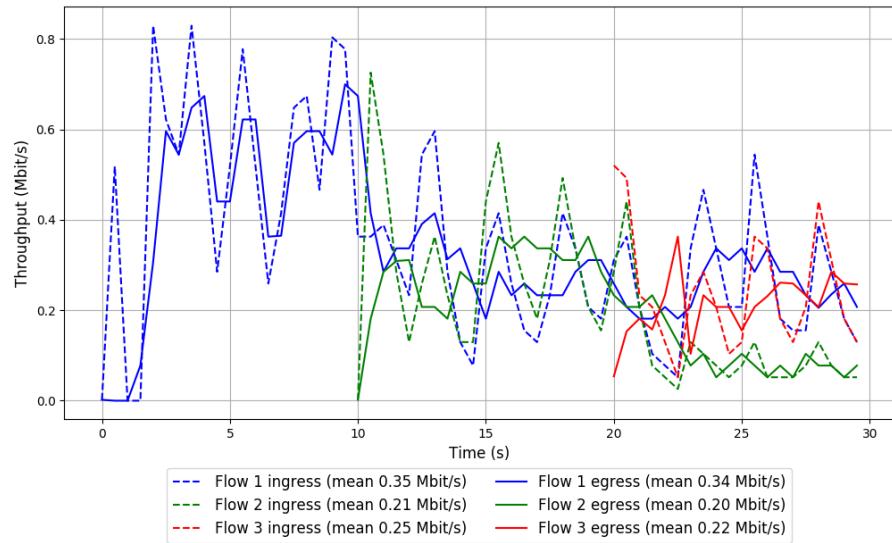


Run 1: Statistics of Copa

```
Start at: 2018-03-12 22:21:32
End at: 2018-03-12 22:22:02
Local clock offset: -6.905 ms
Remote clock offset: -7.091 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 783.165 ms
Loss rate: 6.43%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 678.917 ms
Loss rate: 4.79%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 873.586 ms
Loss rate: 6.88%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 903.141 ms
Loss rate: 12.80%
```

Run 1: Report of Copa — Data Link

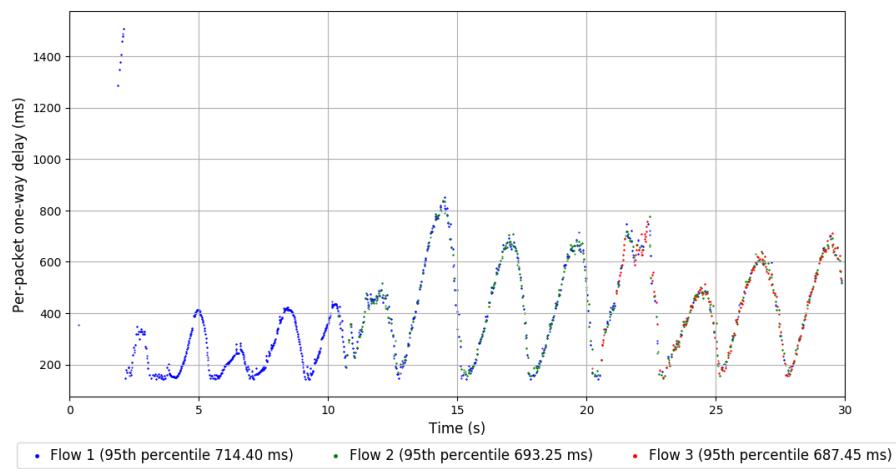
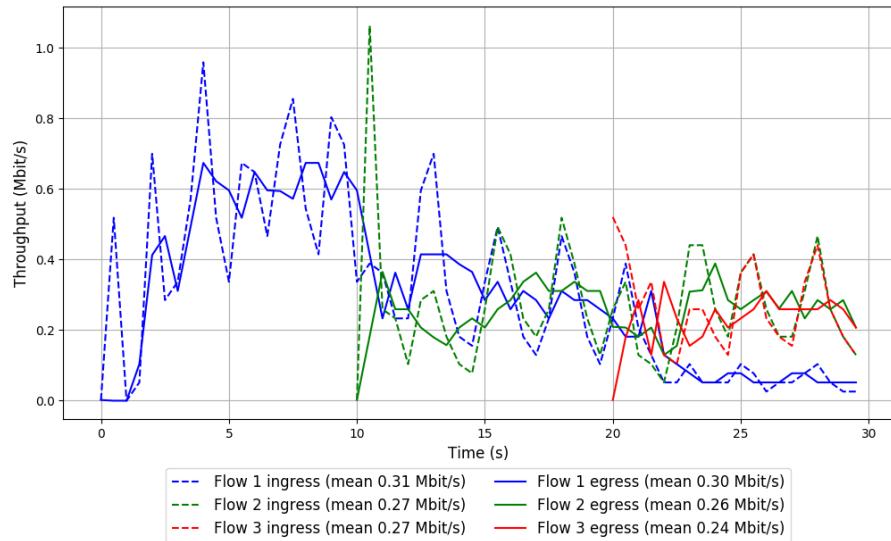


Run 2: Statistics of Copa

```
Start at: 2018-03-12 22:44:03
End at: 2018-03-12 22:44:33
Local clock offset: -7.336 ms
Remote clock offset: -6.81 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 697.723 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 714.396 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 693.246 ms
Loss rate: 6.61%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 687.454 ms
Loss rate: 14.18%
```

Run 2: Report of Copa — Data Link

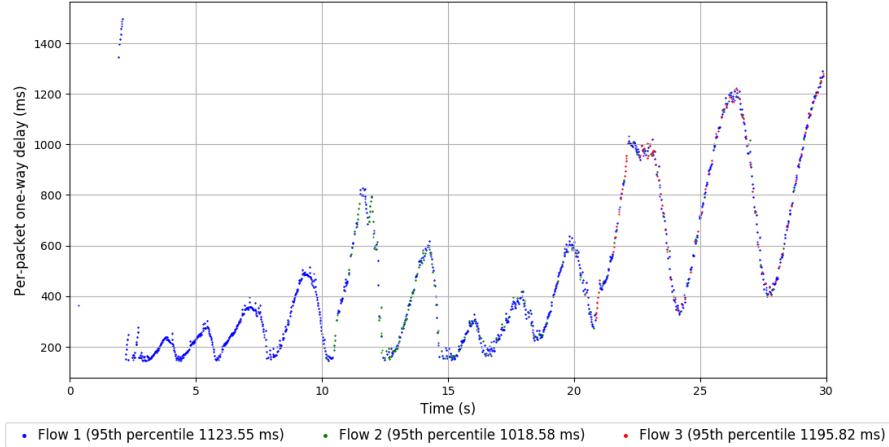
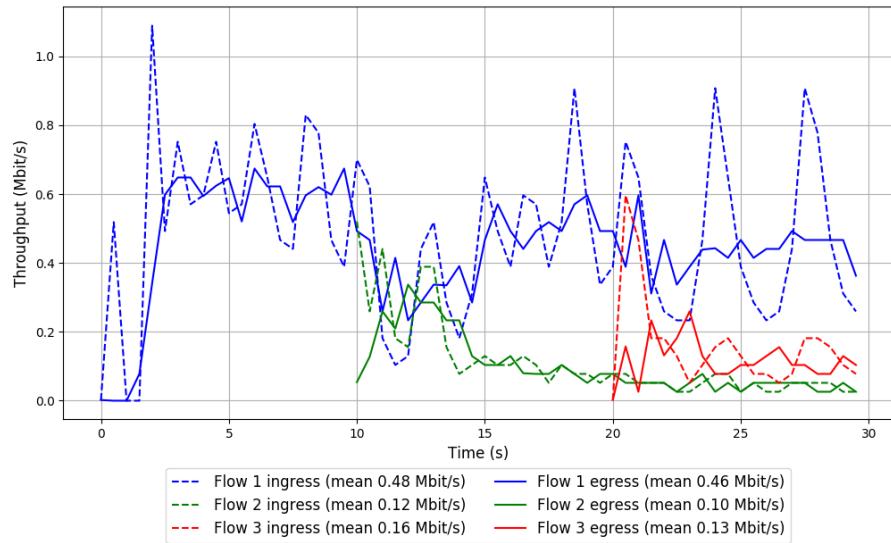


Run 3: Statistics of Copa

```
Start at: 2018-03-12 23:06:33
End at: 2018-03-12 23:07:03
Local clock offset: -2.128 ms
Remote clock offset: -6.621 ms

# Below is generated by plot.py at 2018-03-13 00:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 1138.637 ms
Loss rate: 8.76%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 1123.546 ms
Loss rate: 6.27%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 1018.576 ms
Loss rate: 13.02%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1195.817 ms
Loss rate: 25.27%
```

Run 3: Report of Copa — Data Link

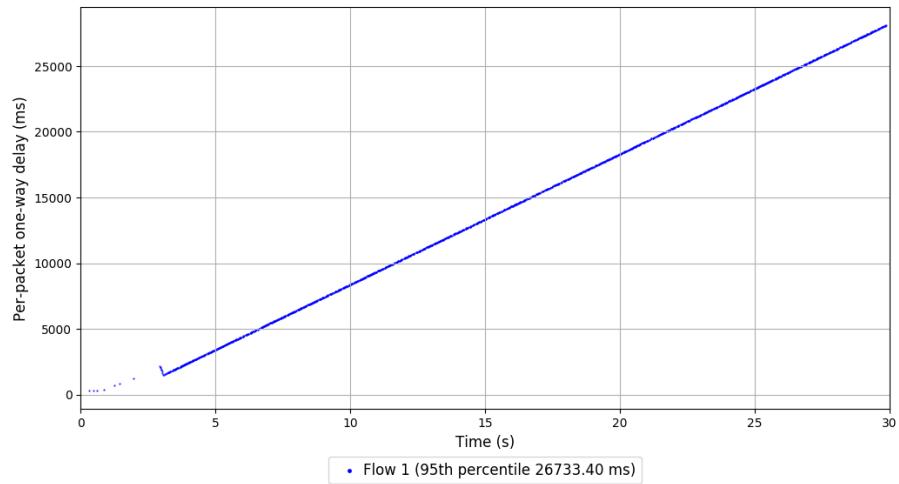
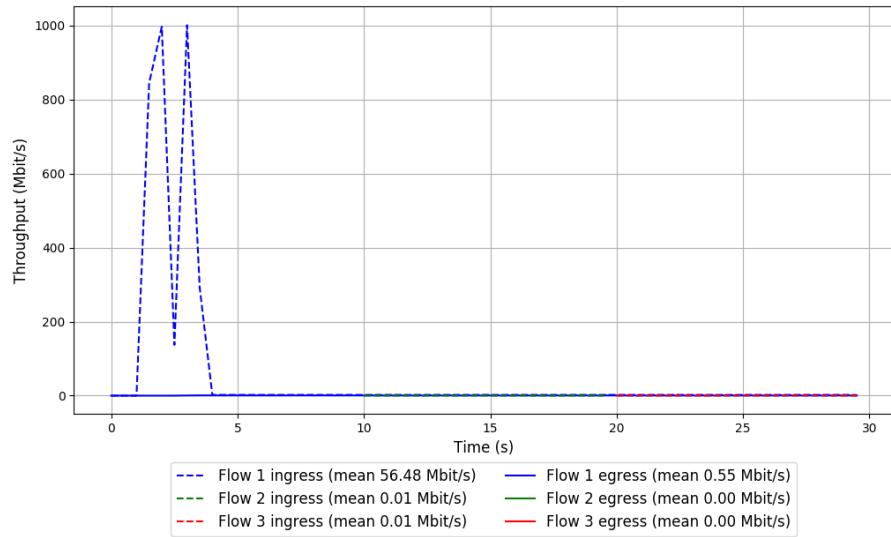


```
Run 1: Statistics of FillP

Start at: 2018-03-12 22:27:46
End at: 2018-03-12 22:28:16
Local clock offset: -7.336 ms
Remote clock offset: -6.018 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26733.403 ms
Loss rate: 99.03%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26733.403 ms
Loss rate: 99.03%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of FillP — Data Link

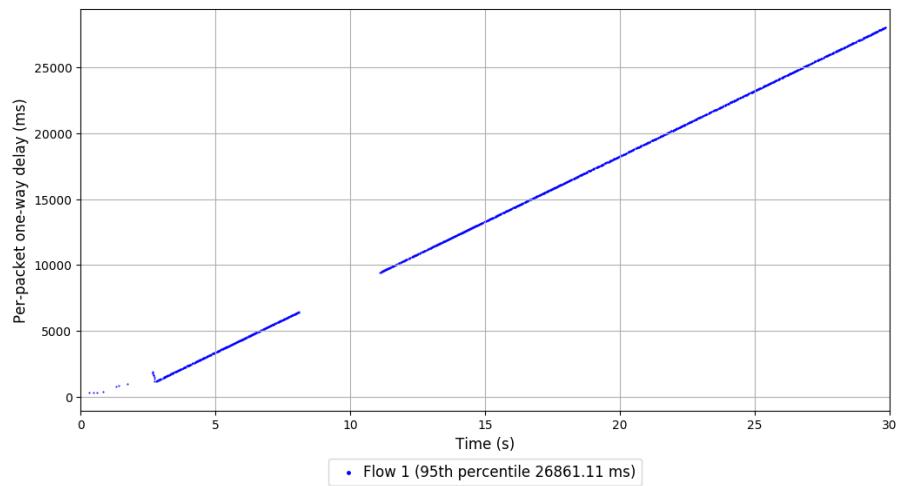
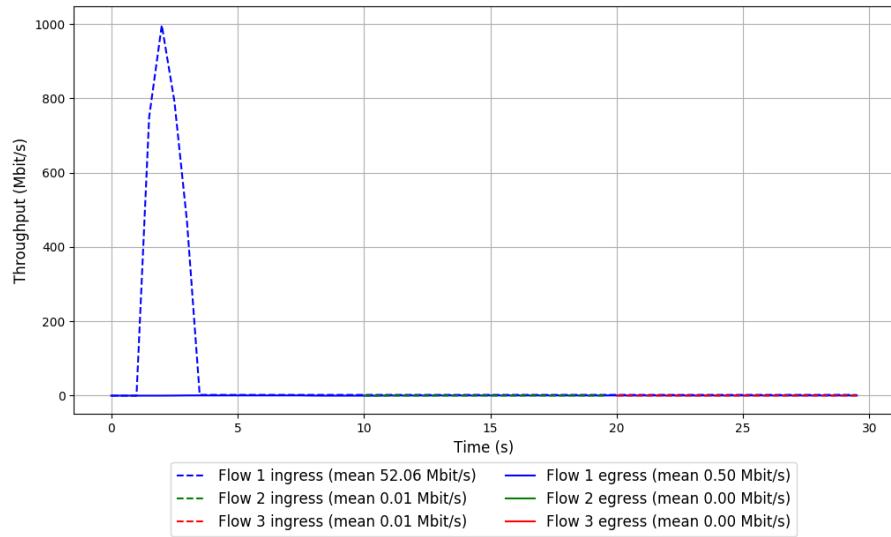


Run 2: Statistics of FillP

```
Start at: 2018-03-12 22:50:16
End at: 2018-03-12 22:50:46
Local clock offset: -5.015 ms
Remote clock offset: -1.06 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 26861.107 ms
Loss rate: 99.04%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 26861.107 ms
Loss rate: 99.04%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of FillP — Data Link

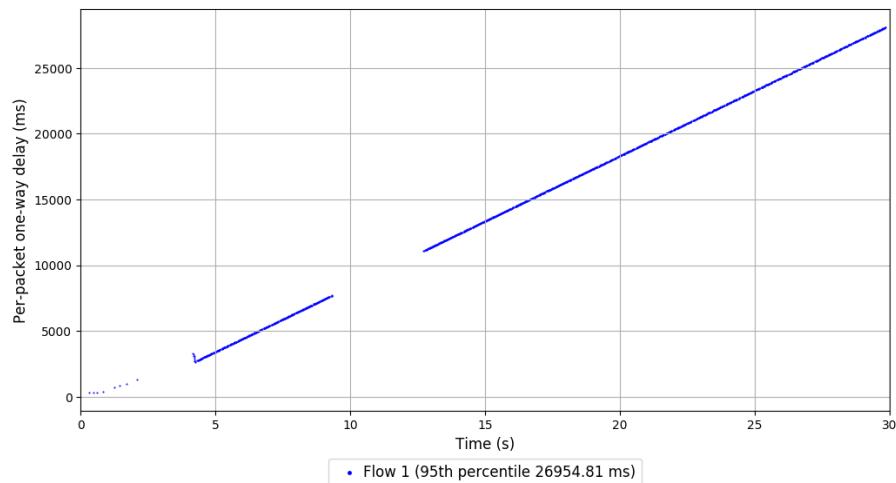
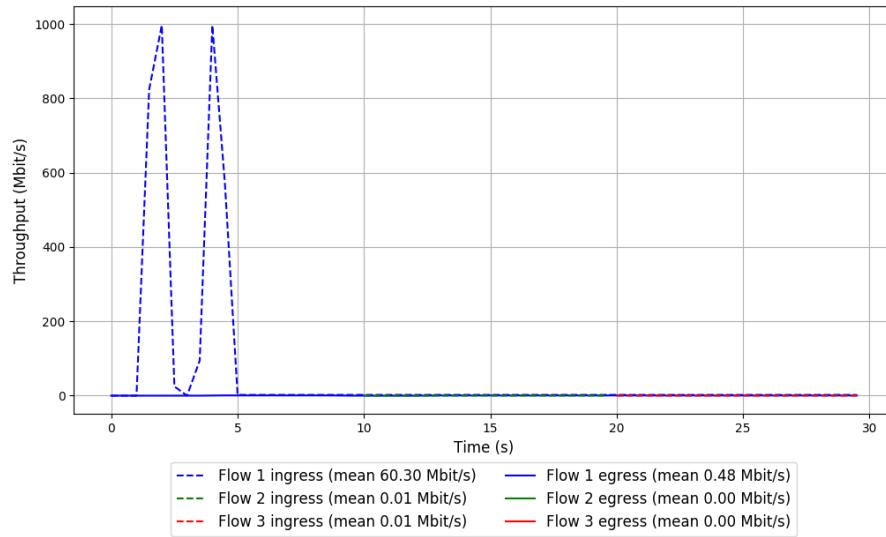


Run 3: Statistics of FillP

```
Start at: 2018-03-12 23:12:47
End at: 2018-03-12 23:13:17
Local clock offset: -1.42 ms
Remote clock offset: -5.672 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 26954.805 ms
Loss rate: 99.22%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 26954.805 ms
Loss rate: 99.22%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of FillP — Data Link

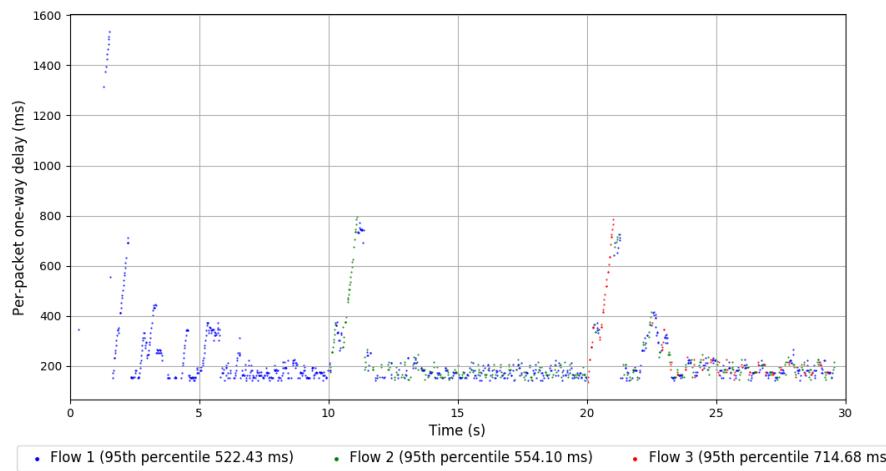
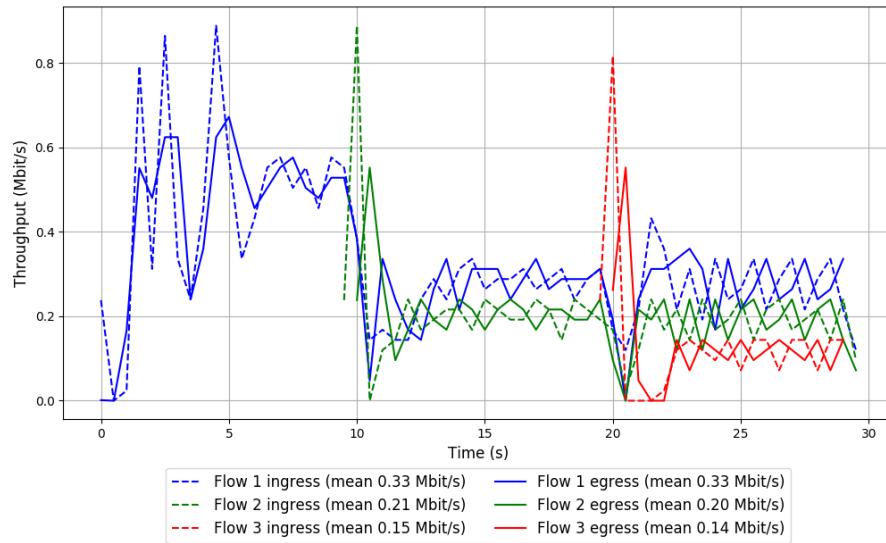


Run 1: Statistics of Indigo-1-32

```
Start at: 2018-03-12 22:22:46
End at: 2018-03-12 22:23:16
Local clock offset: -6.986 ms
Remote clock offset: -6.186 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 591.963 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 522.427 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 554.100 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 714.677 ms
Loss rate: 9.49%
```

Run 1: Report of Indigo-1-32 — Data Link

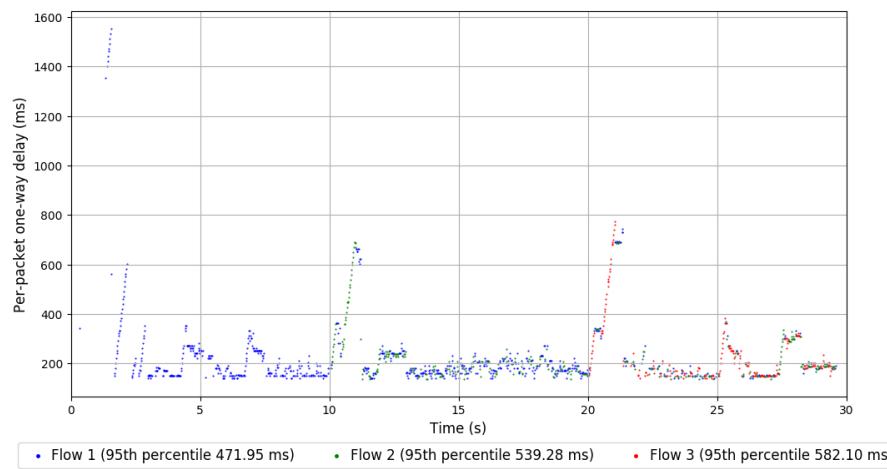
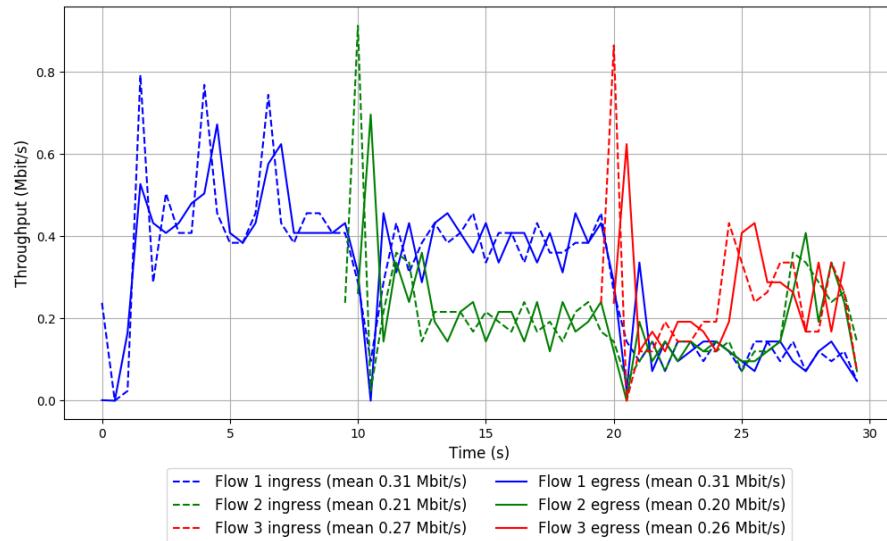


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-03-12 22:45:17
End at: 2018-03-12 22:45:47
Local clock offset: -6.77 ms
Remote clock offset: -1.218 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 540.994 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 471.949 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 539.277 ms
Loss rate: 4.36%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 582.095 ms
Loss rate: 6.51%
```

Run 2: Report of Indigo-1-32 — Data Link

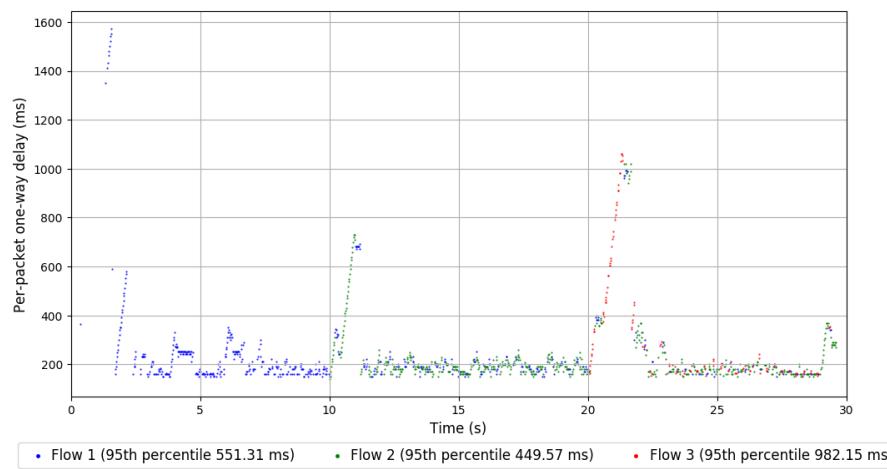
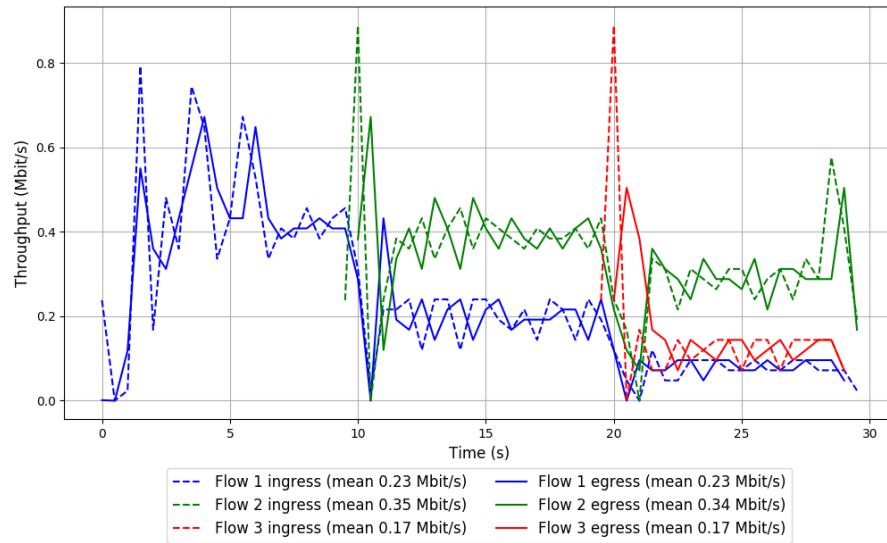


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-03-12 23:07:48
End at: 2018-03-12 23:08:18
Local clock offset: -2.03 ms
Remote clock offset: -6.502 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 638.918 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 551.309 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 449.568 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 982.146 ms
Loss rate: 2.27%
```

Run 3: Report of Indigo-1-32 — Data Link

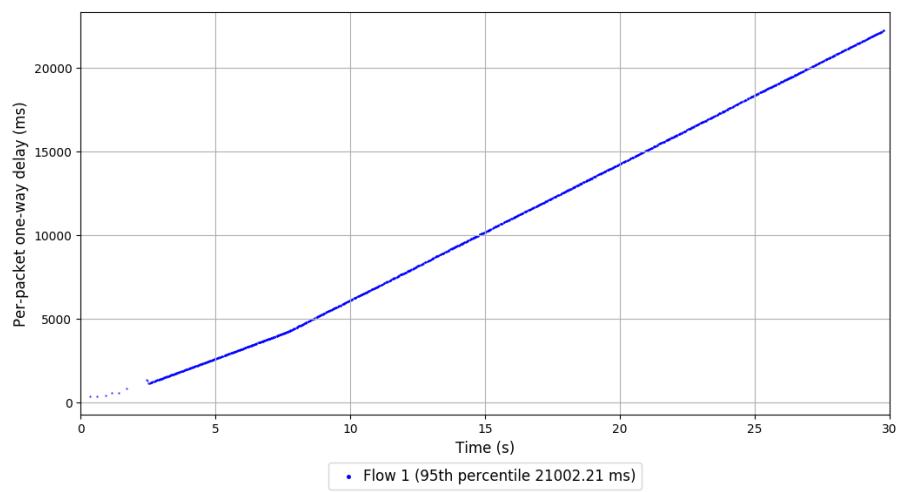
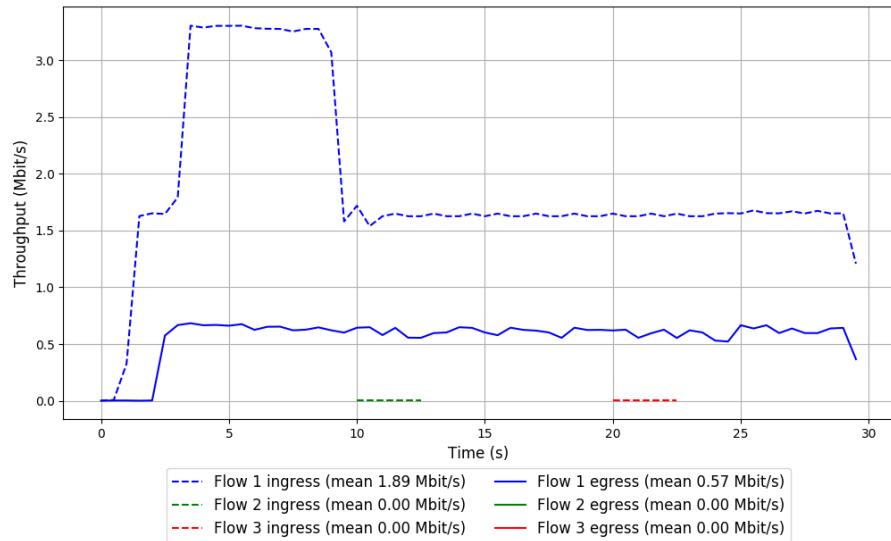


```
Run 1: Statistics of Vivace-latency
```

```
Start at: 2018-03-12 22:29:02
End at: 2018-03-12 22:29:32
Local clock offset: -7.327 ms
Remote clock offset: -6.083 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21002.214 ms
Loss rate: 70.08%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21002.214 ms
Loss rate: 70.07%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-latency — Data Link

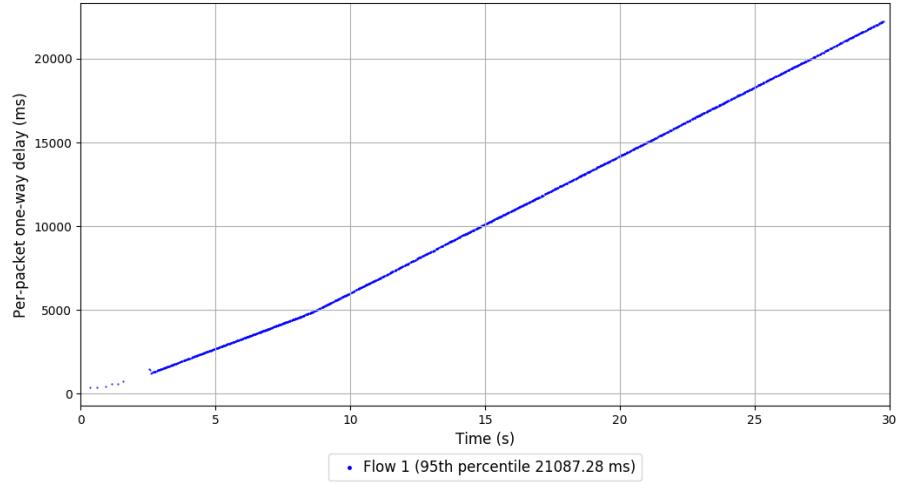
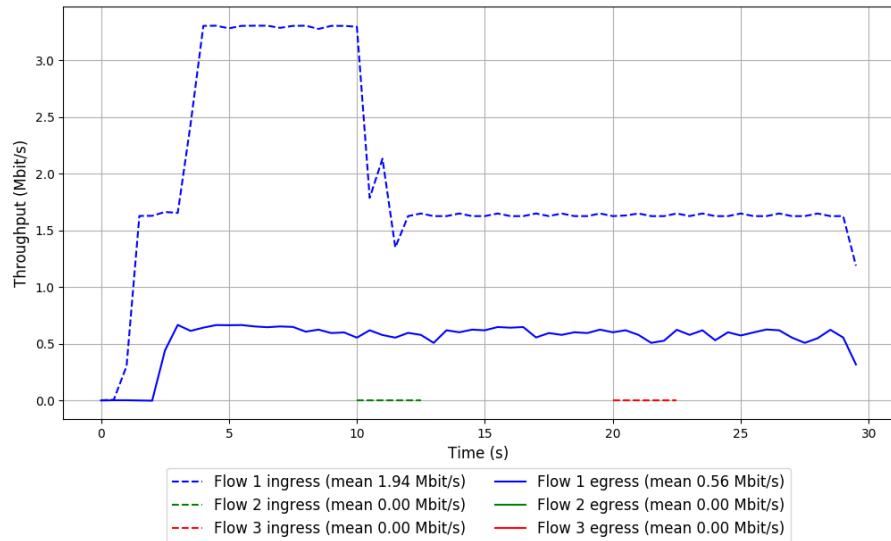


Run 2: Statistics of Vivace-latency

```
Start at: 2018-03-12 22:51:33
End at: 2018-03-12 22:52:03
Local clock offset: -4.652 ms
Remote clock offset: -1.143 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21087.282 ms
Loss rate: 71.76%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21087.282 ms
Loss rate: 71.75%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Vivace-latency — Data Link

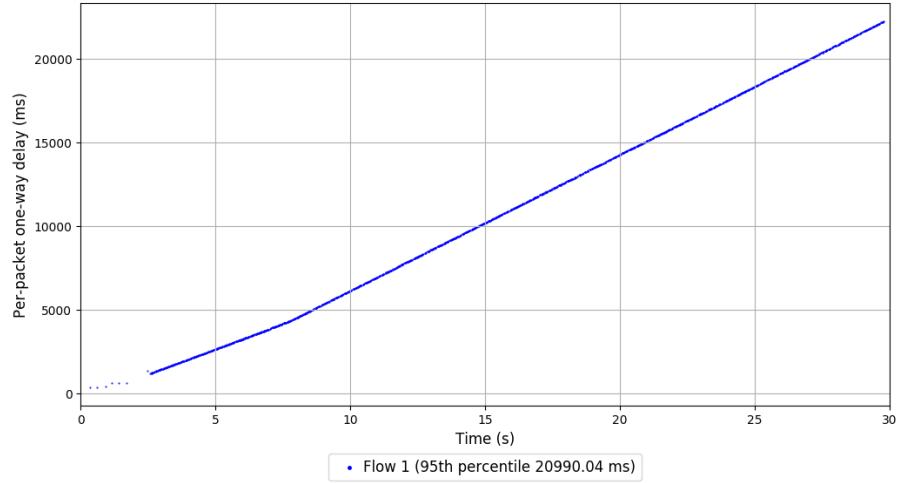
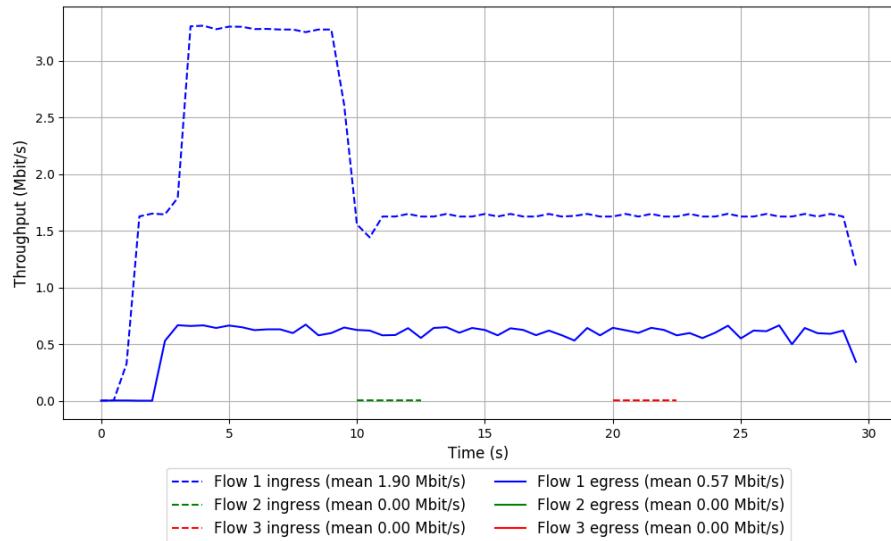


Run 3: Statistics of Vivace-latency

```
Start at: 2018-03-12 23:14:04
End at: 2018-03-12 23:14:34
Local clock offset: -1.286 ms
Remote clock offset: -0.834 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20990.037 ms
Loss rate: 70.54%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20990.037 ms
Loss rate: 70.53%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-latency — Data Link

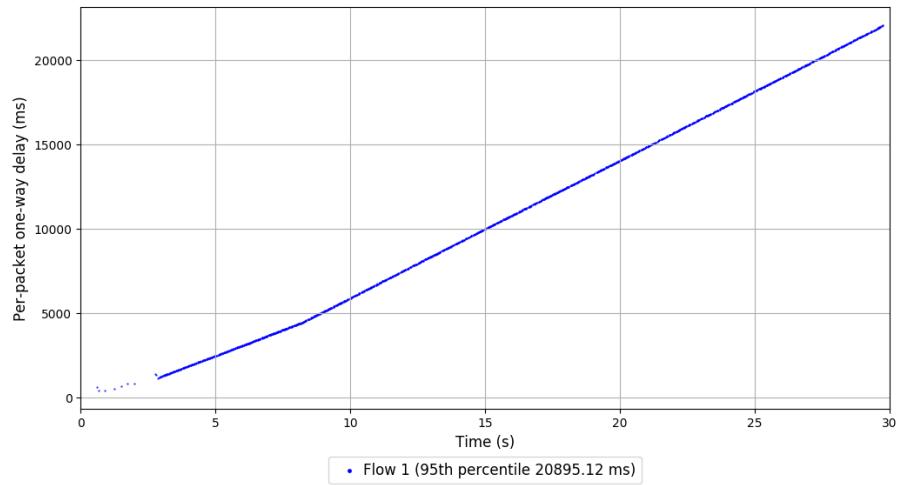
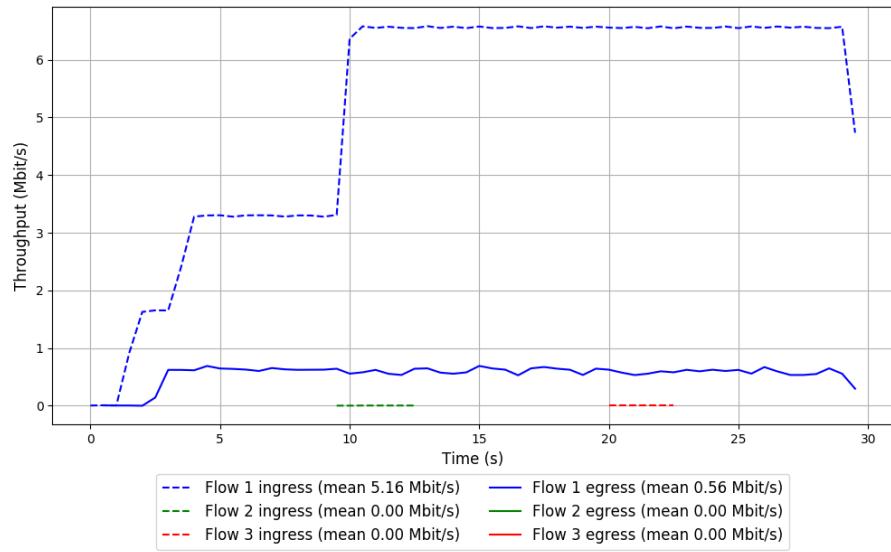


```
Run 1: Statistics of Vivace-loss
```

```
Start at: 2018-03-12 22:39:01
End at: 2018-03-12 22:39:31
Local clock offset: -7.417 ms
Remote clock offset: -6.006 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20895.117 ms
Loss rate: 89.43%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20895.117 ms
Loss rate: 89.43%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-loss — Data Link

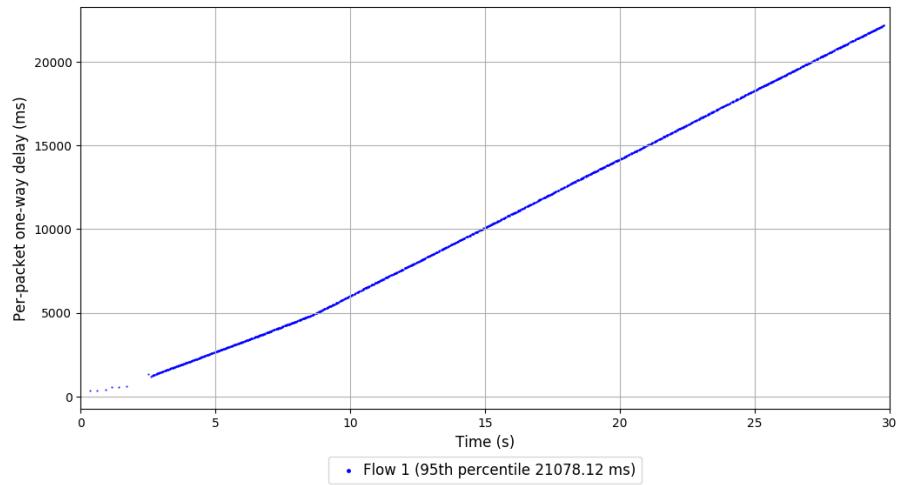
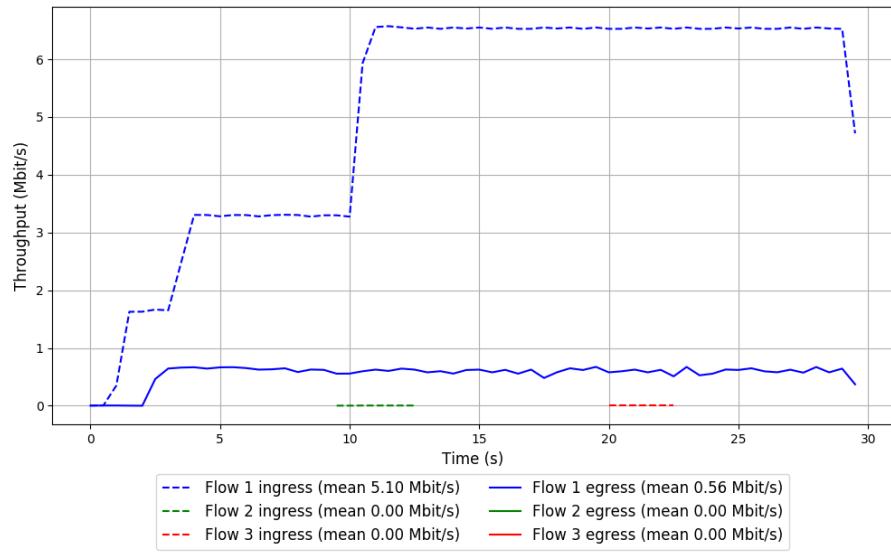


```
Run 2: Statistics of Vivace-loss
```

```
Start at: 2018-03-12 23:01:31
End at: 2018-03-12 23:02:01
Local clock offset: -2.784 ms
Remote clock offset: -1.016 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21078.123 ms
Loss rate: 89.12%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21078.123 ms
Loss rate: 89.11%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Vivace-loss — Data Link

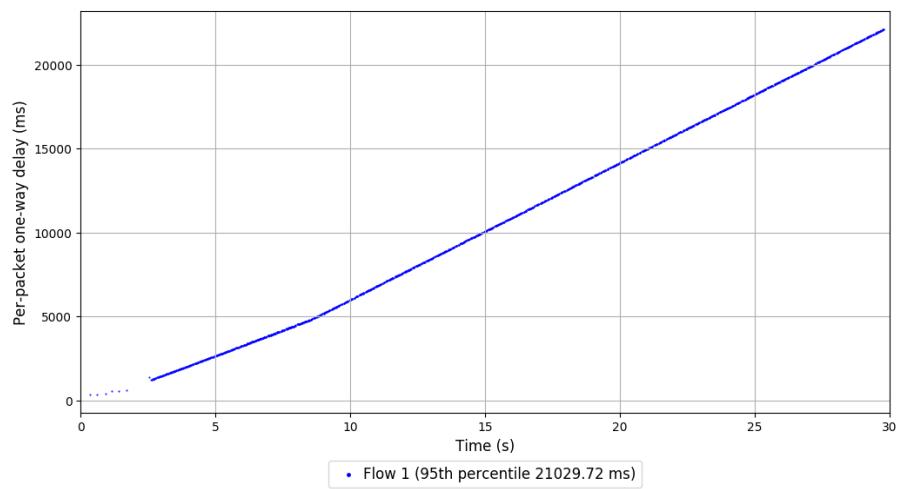
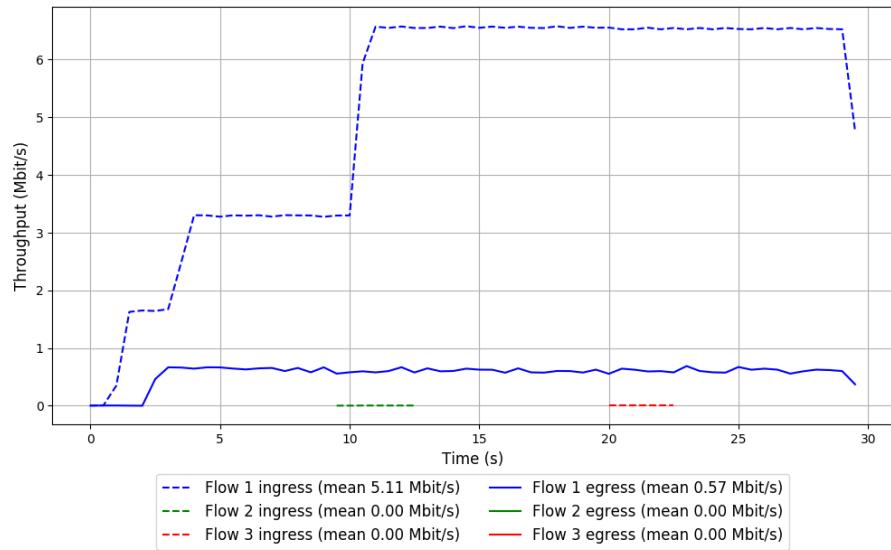


```
Run 3: Statistics of Vivace-loss
```

```
Start at: 2018-03-12 23:24:02
End at: 2018-03-12 23:24:32
Local clock offset: -2.014 ms
Remote clock offset: -6.442 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21029.715 ms
Loss rate: 89.02%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21029.715 ms
Loss rate: 89.02%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-loss — Data Link

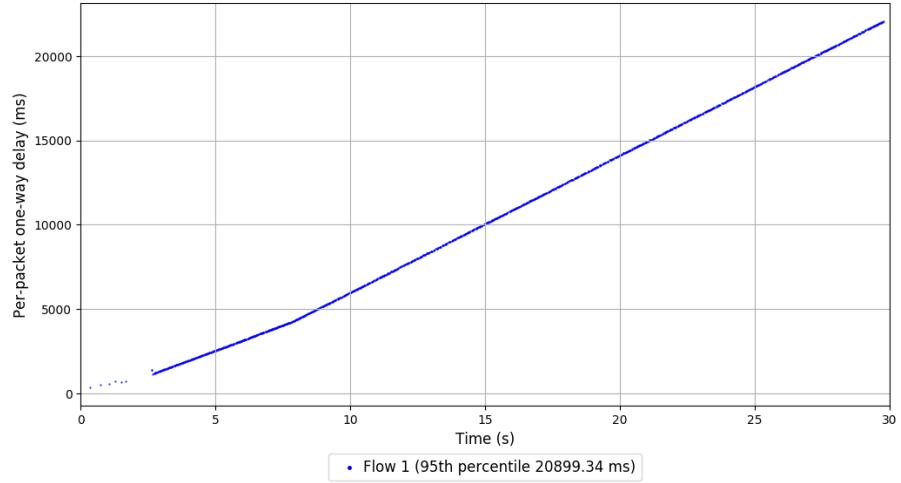
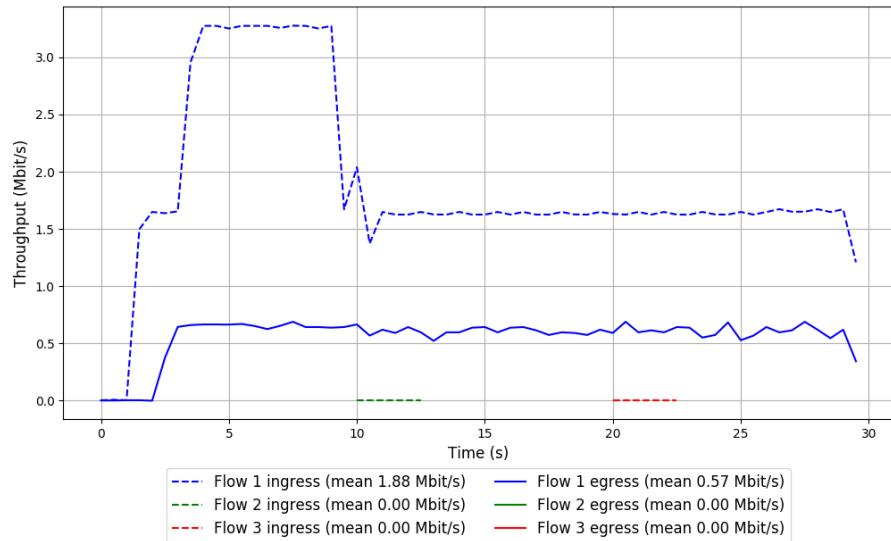


Run 1: Statistics of Vivace-LTE

```
Start at: 2018-03-12 22:25:16
End at: 2018-03-12 22:25:46
Local clock offset: -7.25 ms
Remote clock offset: -6.106 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20899.344 ms
Loss rate: 70.06%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20899.344 ms
Loss rate: 70.05%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-LTE — Data Link

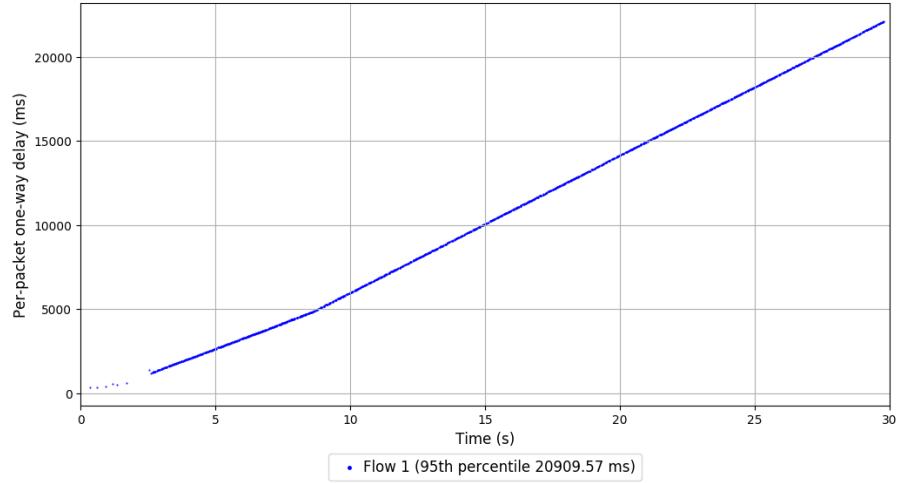
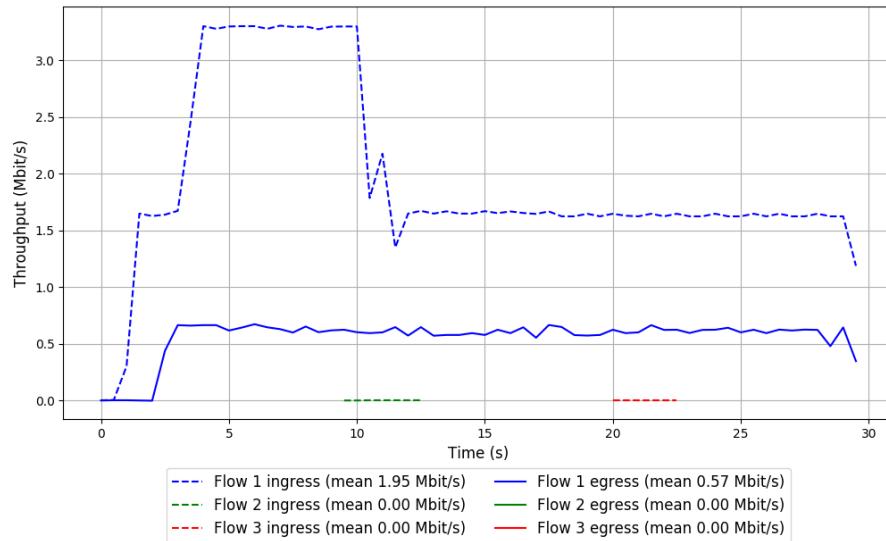


Run 2: Statistics of Vivace-LTE

```
Start at: 2018-03-12 22:47:46
End at: 2018-03-12 22:48:16
Local clock offset: -5.841 ms
Remote clock offset: -6.005 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20909.572 ms
Loss rate: 71.17%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20909.572 ms
Loss rate: 71.16%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

```
Start at: 2018-03-12 23:10:17
End at: 2018-03-12 23:10:47
Local clock offset: -1.683 ms
Remote clock offset: -5.652 ms

# Below is generated by plot.py at 2018-03-13 00:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21086.379 ms
Loss rate: 70.52%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21086.379 ms
Loss rate: 70.50%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-LTE — Data Link

