

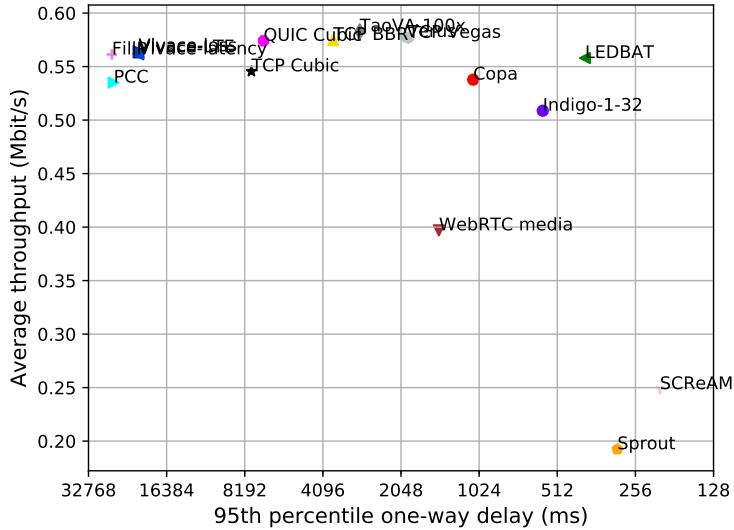
Pantheon Report

Generated at 2018-03-05 22:19:55 (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.

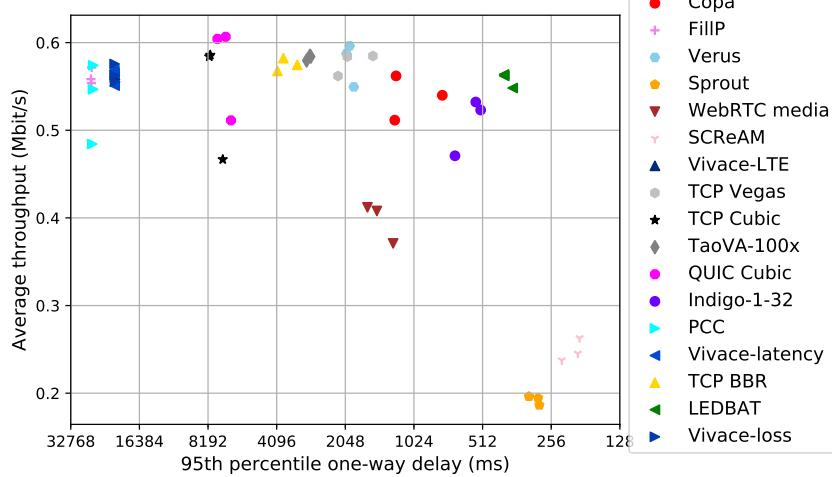
Git summary:

```
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



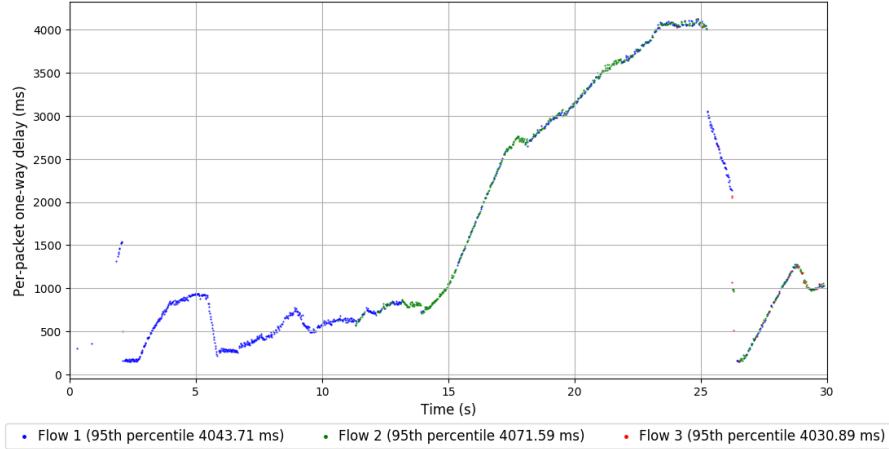
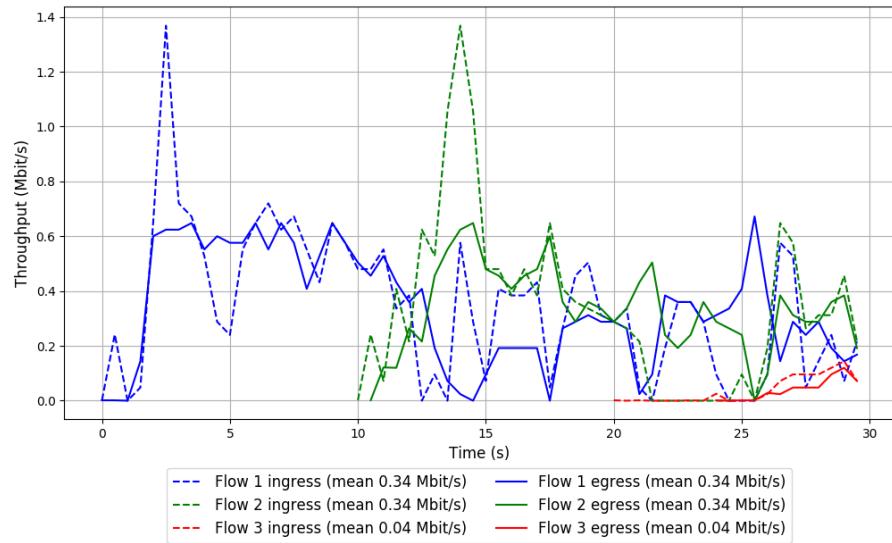
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	0.36	0.32	0.03	3700.47	3751.47	3586.53	2.31	5.28	43.81
TCP Cubic	3	0.54	0.02	0.00	7731.27	6084.79	7870.47	31.13	53.03	90.92
LEDBAT	3	0.25	0.35	0.24	344.89	429.78	400.80	0.05	0.90	7.27
PCC	3	0.53	0.00	N/A	26216.11	N/A	N/A	98.50	N/A	N/A
QUIC Cubic	3	0.54	0.06	0.00	6895.60	7010.40	7091.80	24.99	33.17	22.22
SCReAM	3	0.08	0.18	0.13	195.03	213.36	212.95	0.83	0.89	2.01
WebRTC media	3	0.21	0.12	0.06	1485.20	1393.66	1345.52	2.60	5.25	9.19
Sprout	3	0.09	0.10	0.10	622.34	234.53	262.92	1.17	2.06	4.88
TaoVA-100x	3	0.36	0.26	0.20	2444.97	3021.35	3238.72	4.27	17.54	23.20
TCP Vegas	3	0.42	0.21	0.13	1894.76	1970.17	2000.19	3.73	7.49	25.50
Verus	3	0.57	0.01	0.01	1953.86	1896.88	1951.19	5.51	6.36	9.70
Copa	3	0.33	0.23	0.21	1022.28	1086.51	1170.57	4.95	8.69	15.71
FillP	3	0.56	0.00	N/A	26628.93	N/A	N/A	98.73	N/A	N/A
Indigo-1-32	3	0.28	0.21	0.28	538.87	538.38	625.49	1.36	2.59	6.40
Vivace-latency	3	0.56	0.00	N/A	21062.49	N/A	N/A	71.28	N/A	N/A
Vivace-loss	3	0.57	0.00	N/A	21006.69	N/A	N/A	89.18	N/A	N/A
Vivace-LTE	3	0.56	0.00	N/A	21013.75	N/A	N/A	71.67	N/A	N/A

Run 1: Statistics of TCP BBR

```
Start at: 2018-03-05 20:19:47
End at: 2018-03-05 20:20:17
Local clock offset: -6.644 ms
Remote clock offset: -4.896 ms

# Below is generated by plot.py at 2018-03-05 22:19:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 4061.708 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 4043.714 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 4071.591 ms
Loss rate: 5.61%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 4030.890 ms
Loss rate: 35.07%
```

Run 1: Report of TCP BBR — Data Link

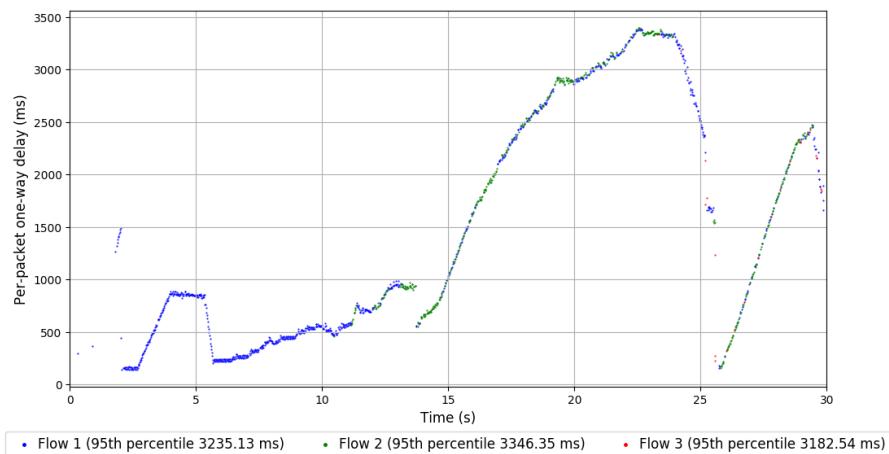
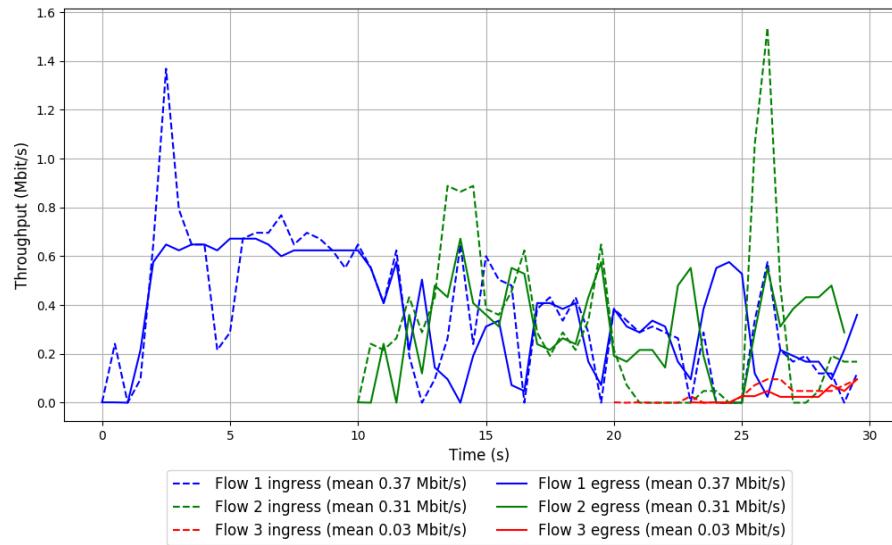


Run 2: Statistics of TCP BBR

```
Start at: 2018-03-05 20:42:24
End at: 2018-03-05 20:42:55
Local clock offset: -6.093 ms
Remote clock offset: 0.933 ms

# Below is generated by plot.py at 2018-03-05 22:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 3328.027 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 3235.132 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 3346.354 ms
Loss rate: 4.67%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 3182.541 ms
Loss rate: 38.78%
```

Run 2: Report of TCP BBR — Data Link

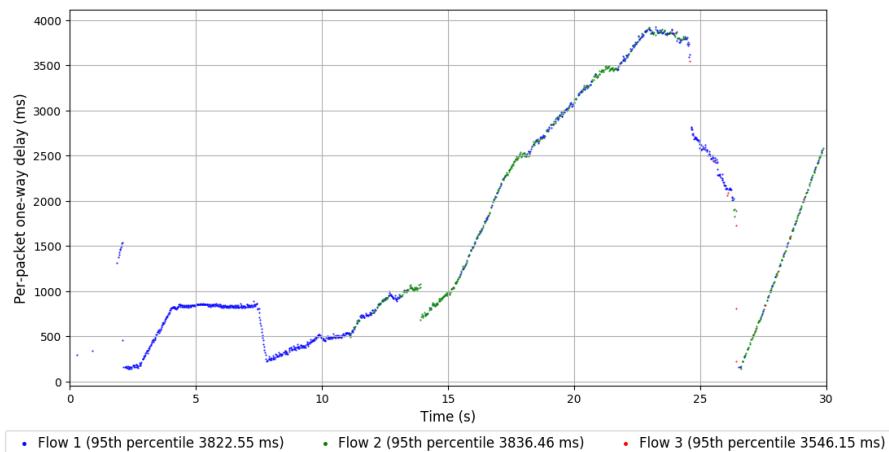
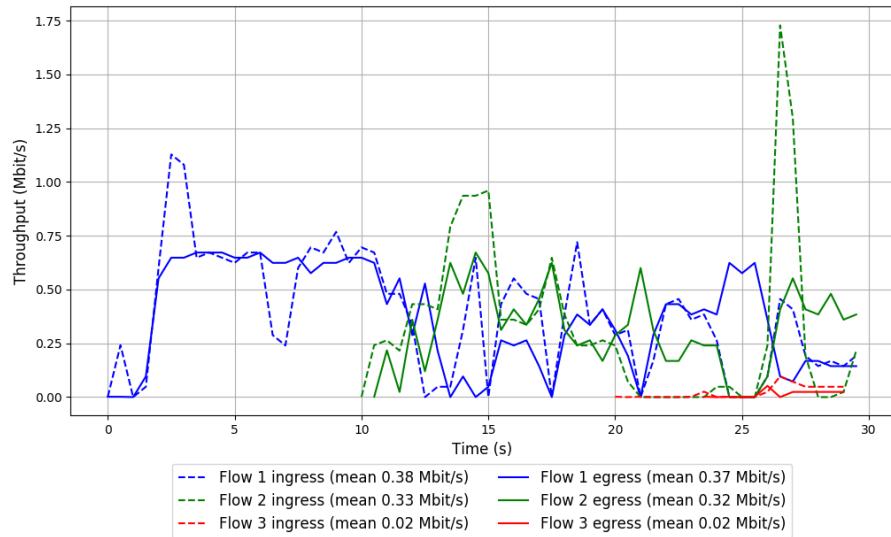


Run 3: Statistics of TCP BBR

```
Start at: 2018-03-05 21:04:52
End at: 2018-03-05 21:05:22
Local clock offset: -5.79 ms
Remote clock offset: 1.007 ms

# Below is generated by plot.py at 2018-03-05 22:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3827.640 ms
Loss rate: 5.03%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 3822.553 ms
Loss rate: 3.78%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 3836.463 ms
Loss rate: 5.55%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3546.147 ms
Loss rate: 57.58%
```

Run 3: Report of TCP BBR — Data Link

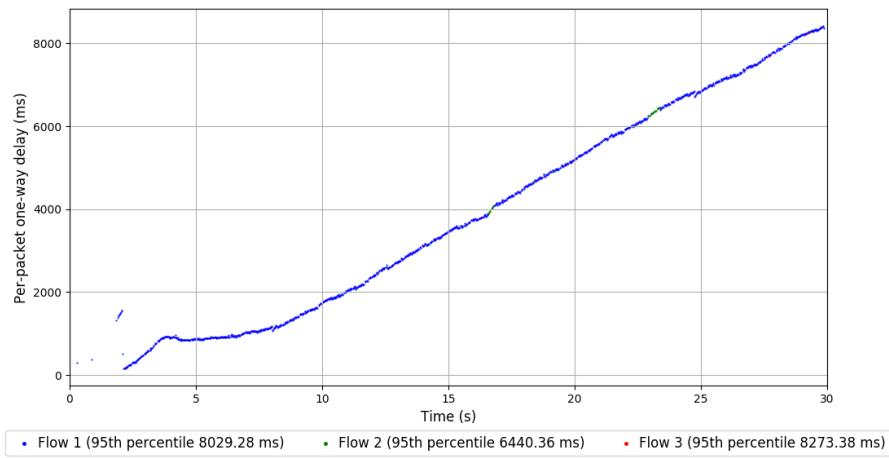
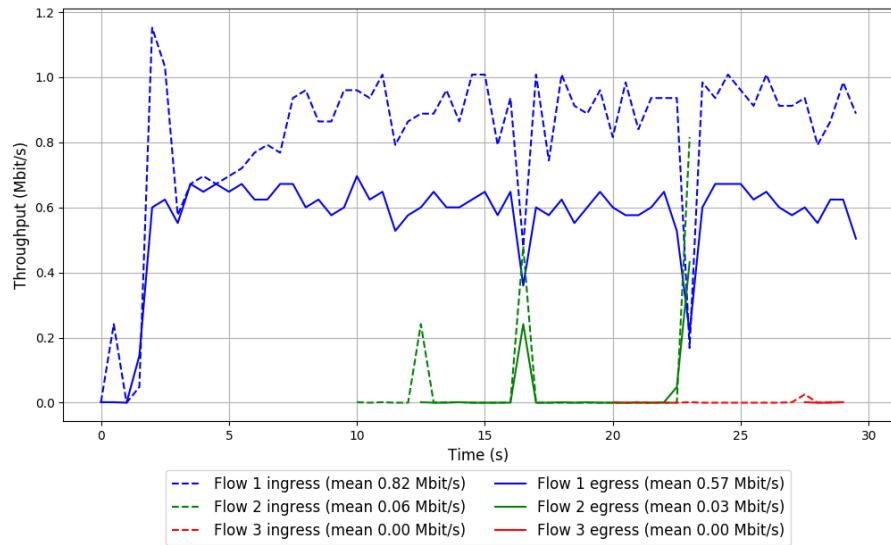


Run 1: Statistics of TCP Cubic

```
Start at: 2018-03-05 20:26:01
End at: 2018-03-05 20:26:31
Local clock offset: -6.641 ms
Remote clock offset: -5.804 ms

# Below is generated by plot.py at 2018-03-05 22:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8009.185 ms
Loss rate: 31.55%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8029.276 ms
Loss rate: 30.84%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6440.359 ms
Loss rate: 52.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8273.381 ms
Loss rate: 91.06%
```

Run 1: Report of TCP Cubic — Data Link

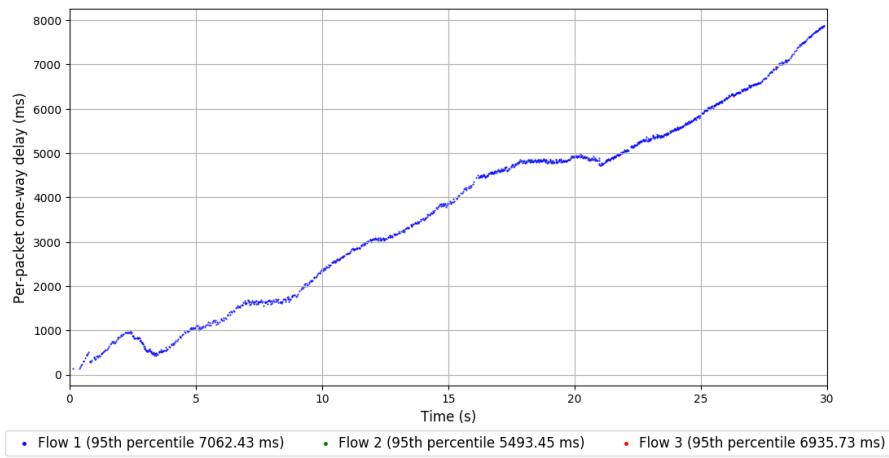
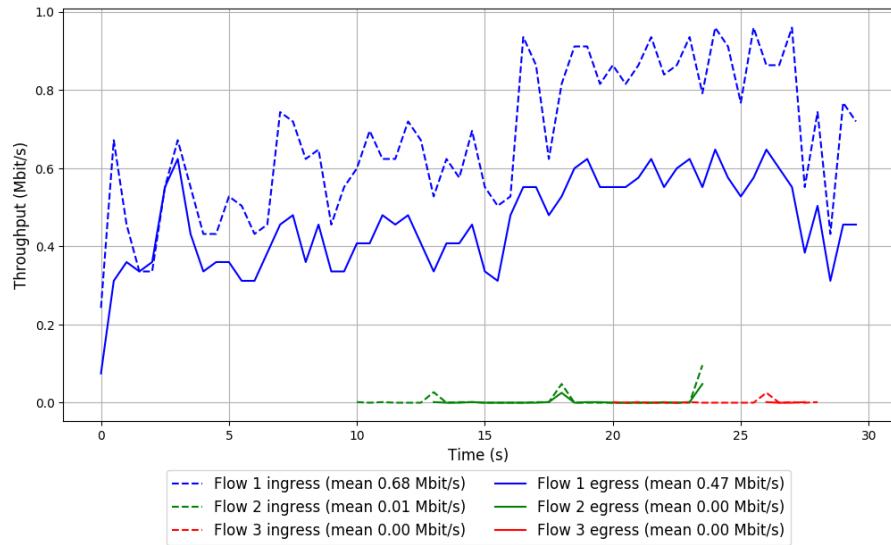


Run 2: Statistics of TCP Cubic

```
Start at: 2018-03-05 20:48:37
End at: 2018-03-05 20:49:07
Local clock offset: -5.983 ms
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2018-03-05 22:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 7062.426 ms
Loss rate: 31.96%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 7062.426 ms
Loss rate: 31.81%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5493.454 ms
Loss rate: 53.44%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6935.731 ms
Loss rate: 90.64%
```

Run 2: Report of TCP Cubic — Data Link

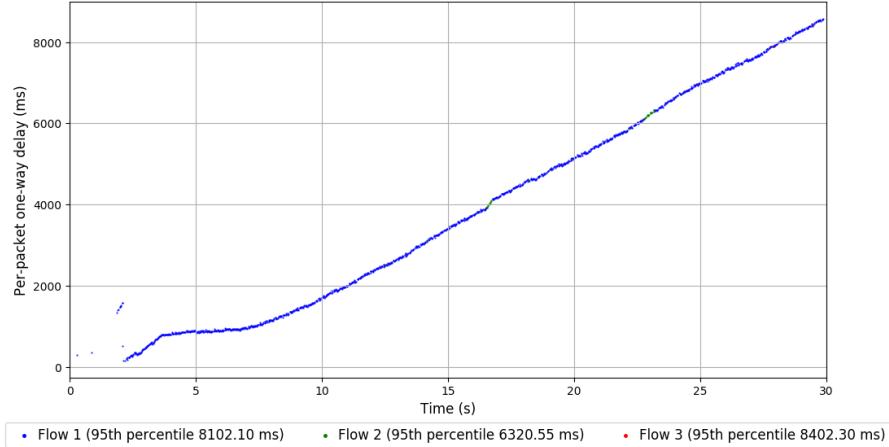
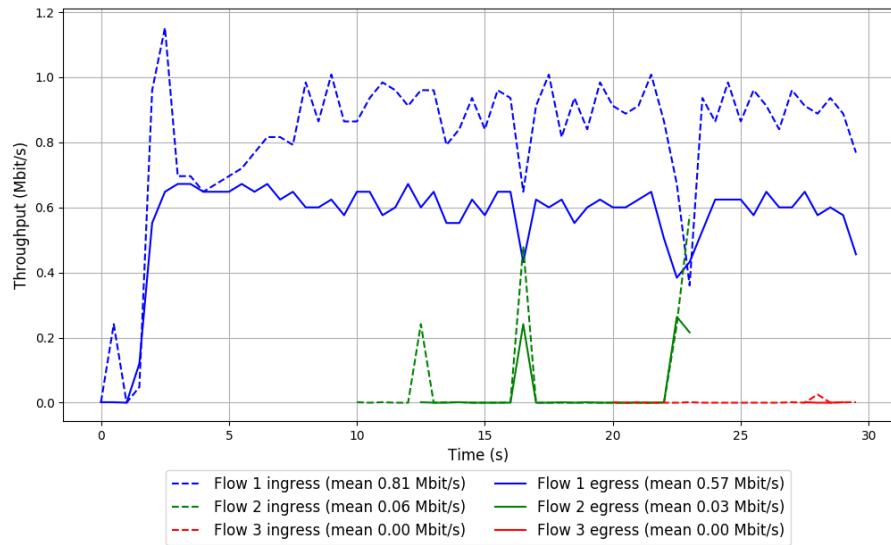


Run 3: Statistics of TCP Cubic

```
Start at: 2018-03-05 21:11:06
End at: 2018-03-05 21:11:36
Local clock offset: -5.74 ms
Remote clock offset: -4.596 ms

# Below is generated by plot.py at 2018-03-05 22:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 8092.168 ms
Loss rate: 31.46%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8102.096 ms
Loss rate: 30.74%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6320.548 ms
Loss rate: 52.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8402.302 ms
Loss rate: 91.06%
```

Run 3: Report of TCP Cubic — Data Link

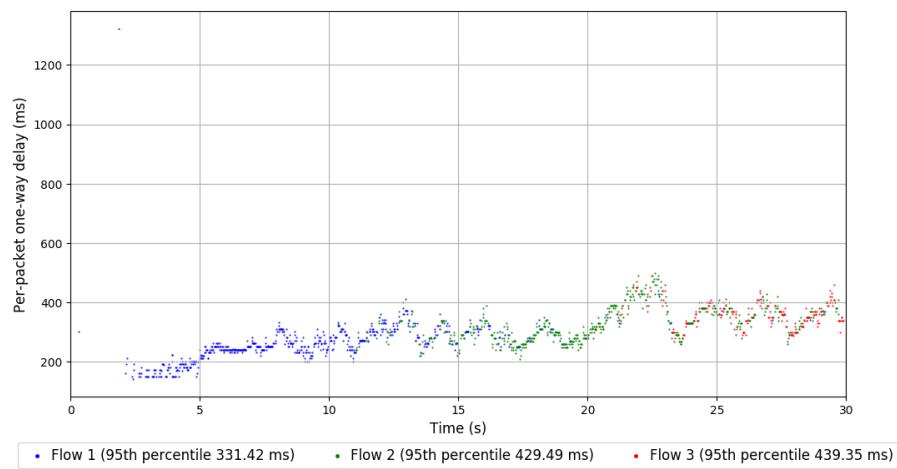
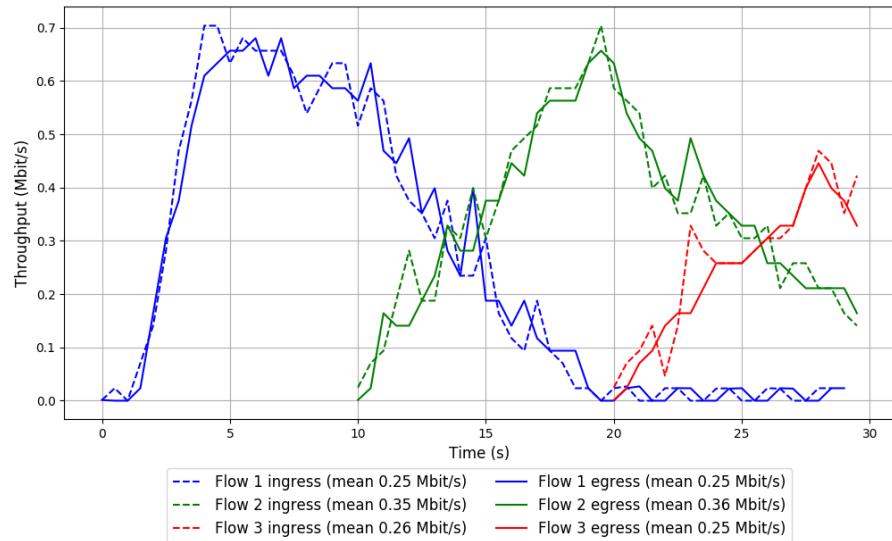


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-03-05 20:17:18
End at: 2018-03-05 20:17:48
Local clock offset: -6.661 ms
Remote clock offset: -0.871 ms

# Below is generated by plot.py at 2018-03-05 22:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 411.274 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 331.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 429.486 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 439.353 ms
Loss rate: 7.21%
```

Run 1: Report of LEDBAT — Data Link

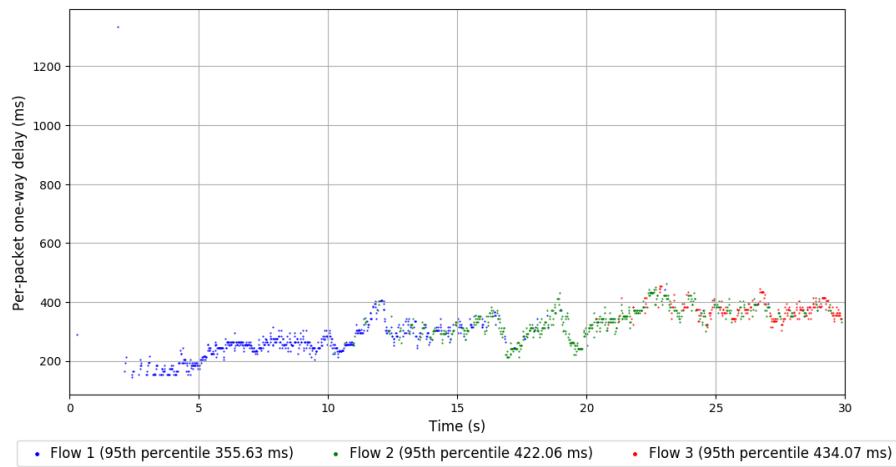
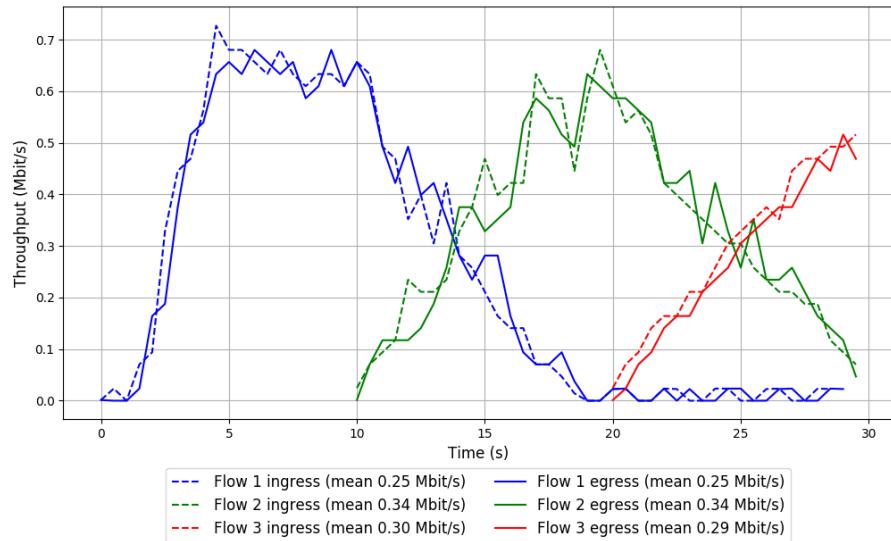


Run 2: Statistics of LEDBAT

```
Start at: 2018-03-05 20:39:55
End at: 2018-03-05 20:40:25
Local clock offset: -6.19 ms
Remote clock offset: -4.823 ms

# Below is generated by plot.py at 2018-03-05 22:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 412.333 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 355.628 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 422.057 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 434.073 ms
Loss rate: 8.69%
```

Run 2: Report of LEDBAT — Data Link

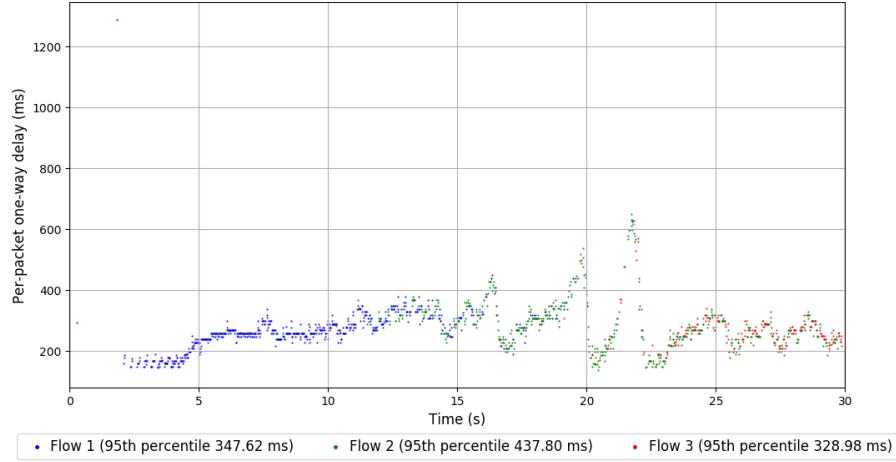
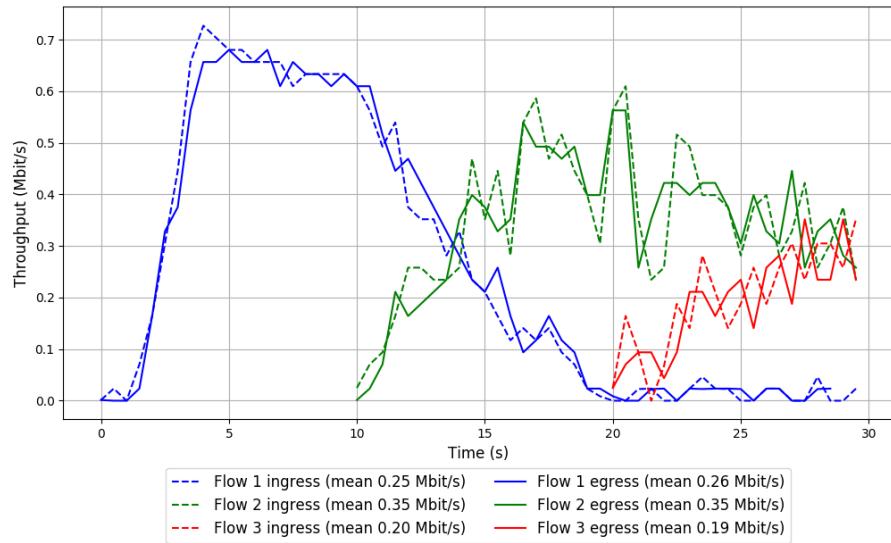


Run 3: Statistics of LEDBAT

```
Start at: 2018-03-05 21:02:23
End at: 2018-03-05 21:02:53
Local clock offset: -5.864 ms
Remote clock offset: -0.739 ms

# Below is generated by plot.py at 2018-03-05 22:19:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 377.826 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 347.624 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 437.804 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 328.982 ms
Loss rate: 5.92%
```

Run 3: Report of LEDBAT — Data Link

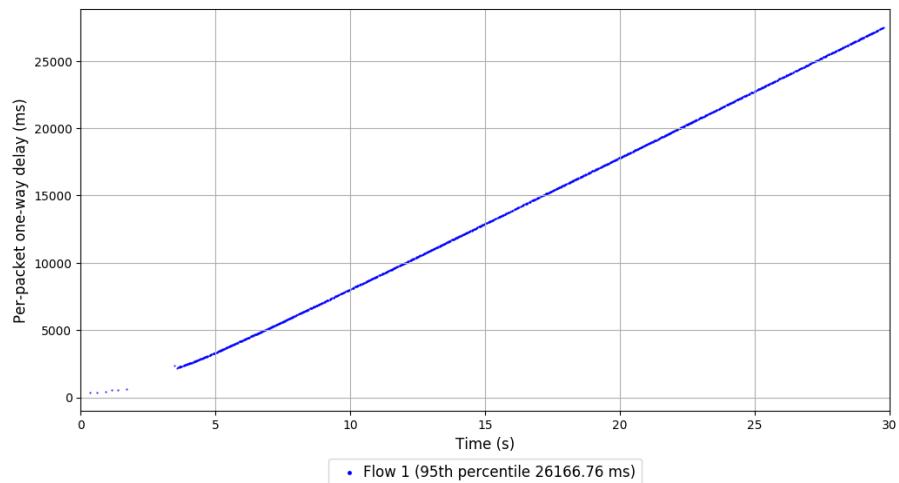
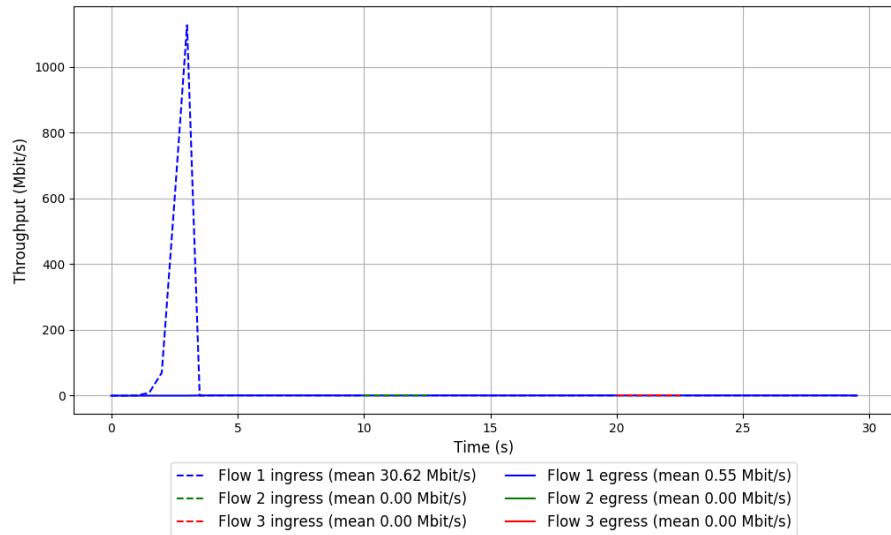


```
Run 1: Statistics of PCC
```

```
Start at: 2018-03-05 20:14:49
End at: 2018-03-05 20:15:19
Local clock offset: -6.697 ms
Remote clock offset: 0.701 ms

# Below is generated by plot.py at 2018-03-05 22:19:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26166.757 ms
Loss rate: 98.24%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26166.757 ms
Loss rate: 98.24%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of PCC — Data Link

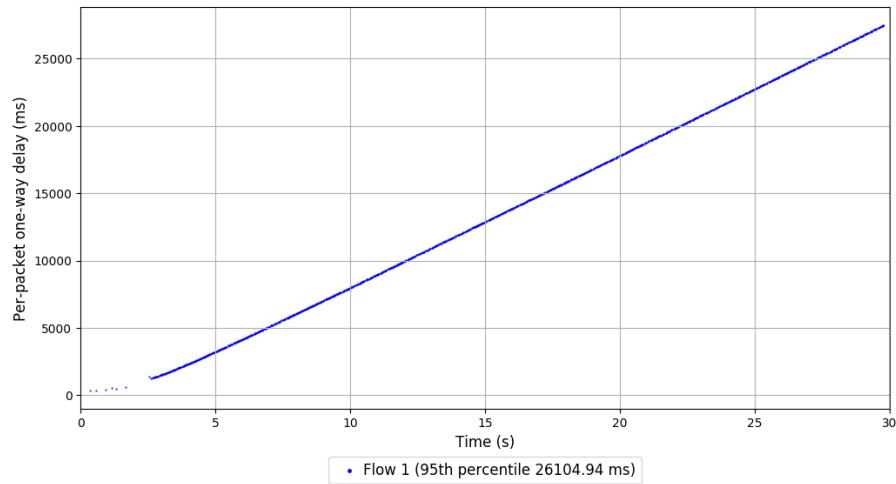
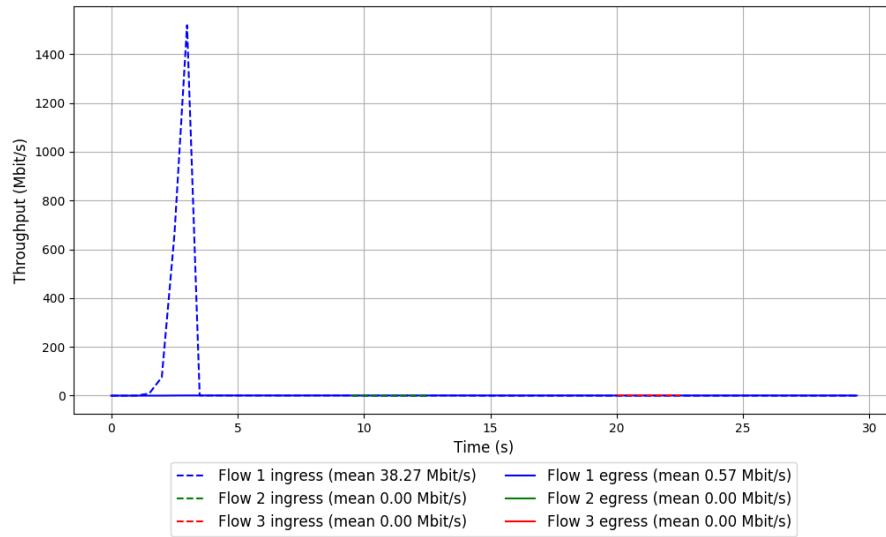


Run 2: Statistics of PCC

```
Start at: 2018-03-05 20:37:25
End at: 2018-03-05 20:37:55
Local clock offset: -6.324 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26104.937 ms
Loss rate: 98.52%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26104.937 ms
Loss rate: 98.52%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of PCC — Data Link

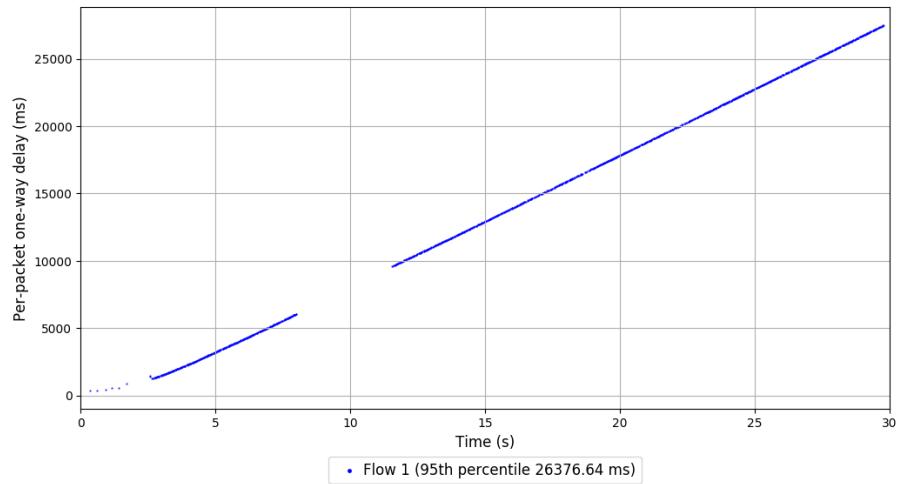
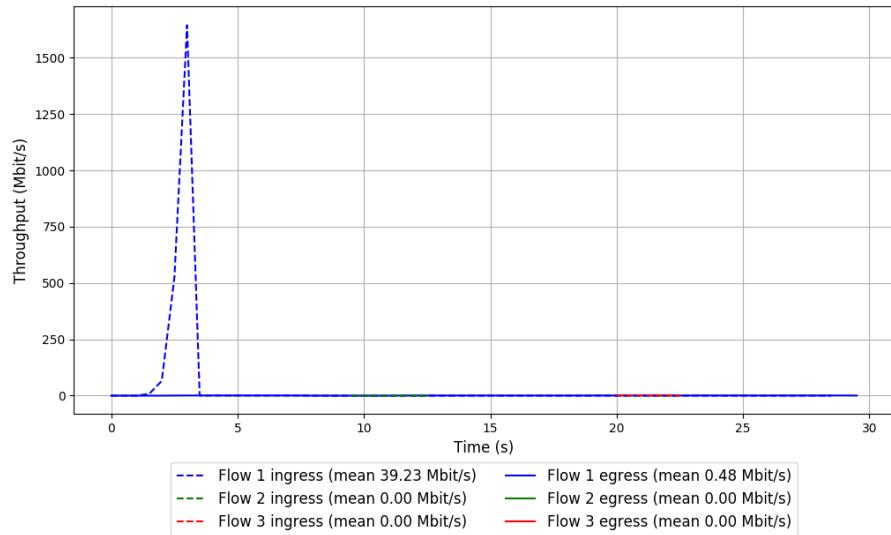


```
Run 3: Statistics of PCC
```

```
Start at: 2018-03-05 20:59:53
End at: 2018-03-05 21:00:23
Local clock offset: -5.804 ms
Remote clock offset: -0.733 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 26376.642 ms
Loss rate: 98.73%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 26376.642 ms
Loss rate: 98.73%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of PCC — Data Link

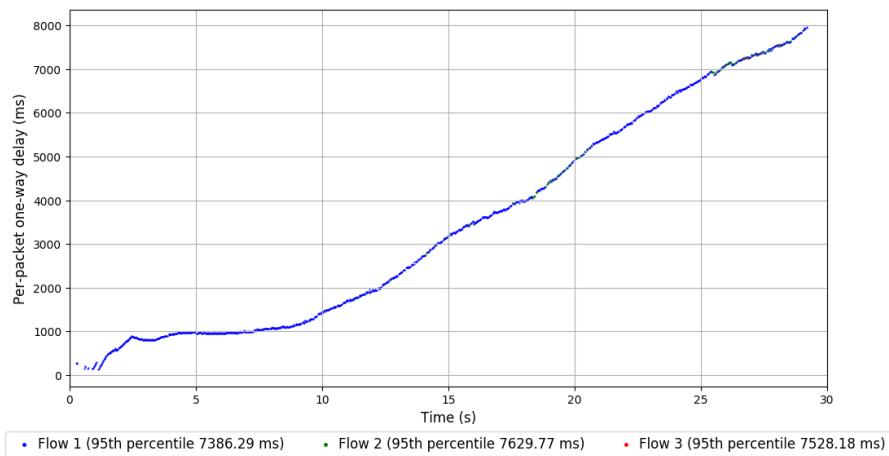
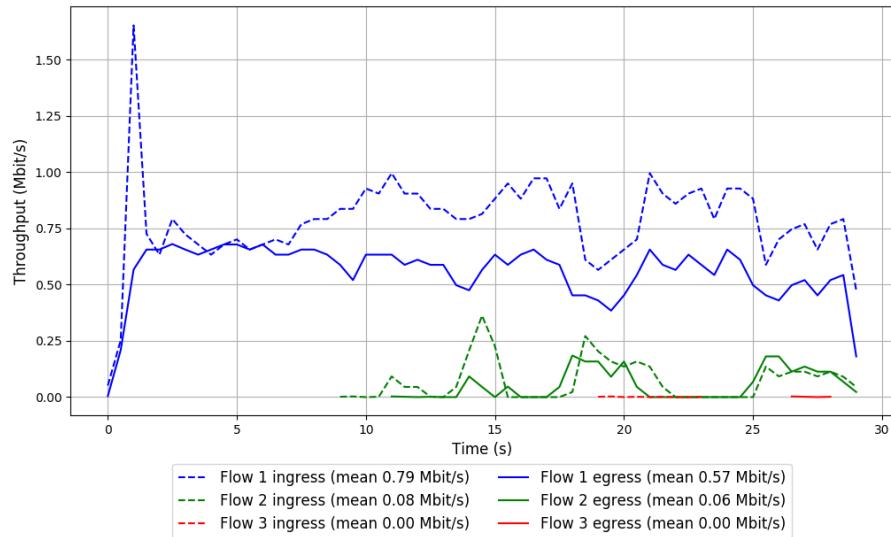


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-05 20:06:04
End at: 2018-03-05 20:06:34
Local clock offset: -6.825 ms
Remote clock offset: 0.74 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 7449.655 ms
Loss rate: 28.92%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7386.293 ms
Loss rate: 28.75%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 7629.770 ms
Loss rate: 31.47%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7528.178 ms
Loss rate: 33.33%
```

Run 1: Report of QUIC Cubic — Data Link

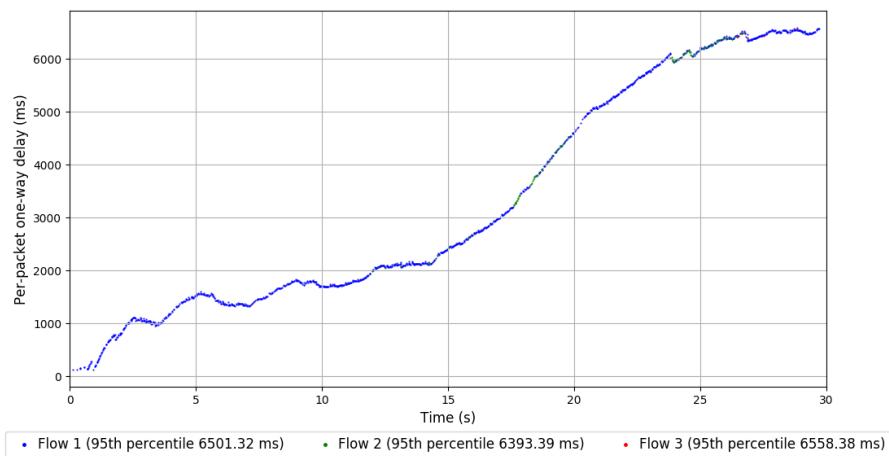
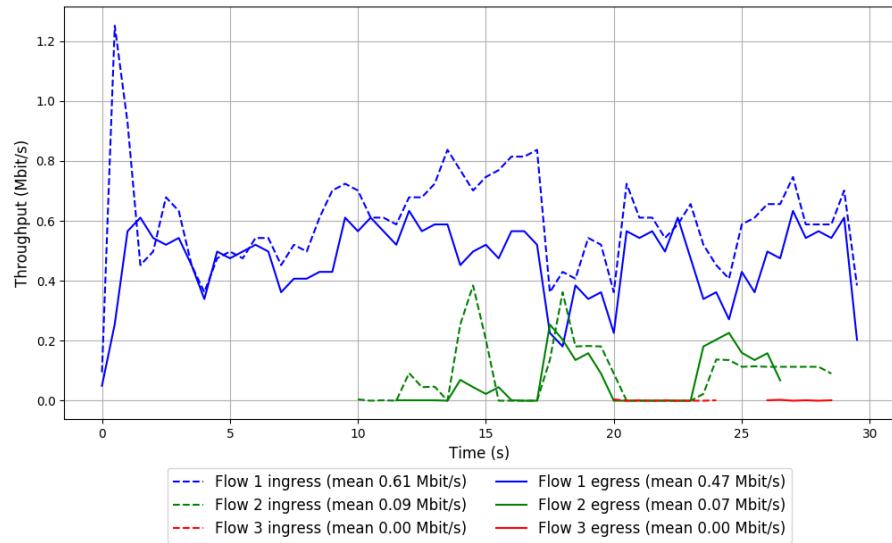


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-03-05 20:28:41
End at: 2018-03-05 20:29:11
Local clock offset: -6.59 ms
Remote clock offset: -0.879 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 6498.177 ms
Loss rate: 23.40%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 6501.325 ms
Loss rate: 22.30%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 6393.390 ms
Loss rate: 35.27%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6558.378 ms
Loss rate: 16.67%
```

Run 2: Report of QUIC Cubic — Data Link

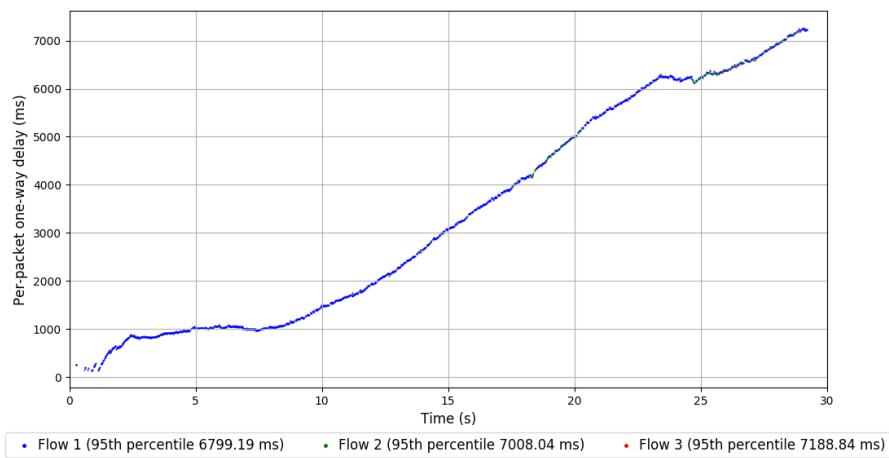
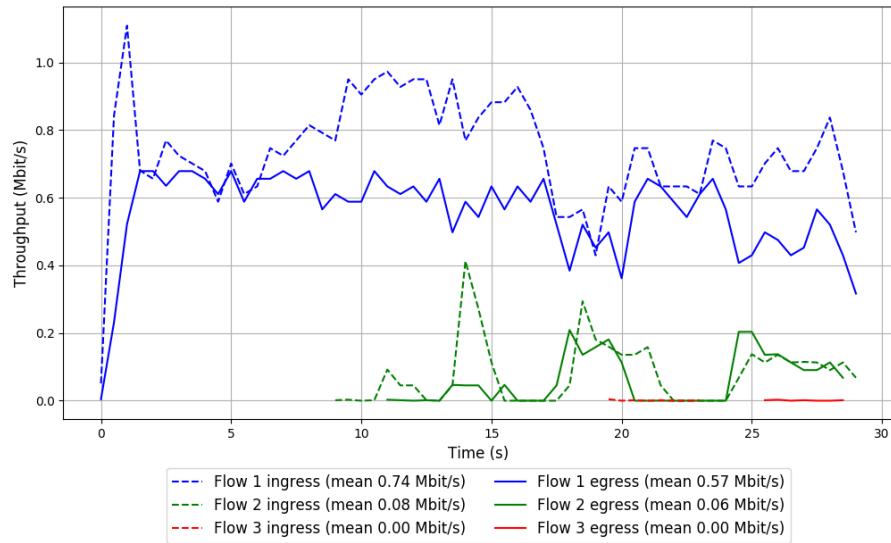


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-03-05 20:51:08
End at: 2018-03-05 20:51:38
Local clock offset: -6.005 ms
Remote clock offset: 0.856 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 6857.323 ms
Loss rate: 24.55%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 6799.193 ms
Loss rate: 23.93%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 7008.038 ms
Loss rate: 32.77%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7188.837 ms
Loss rate: 16.67%
```

Run 3: Report of QUIC Cubic — Data Link

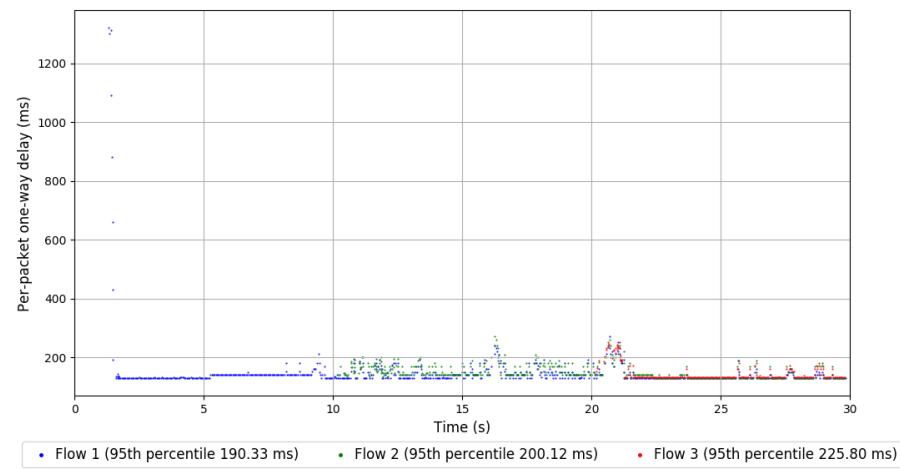
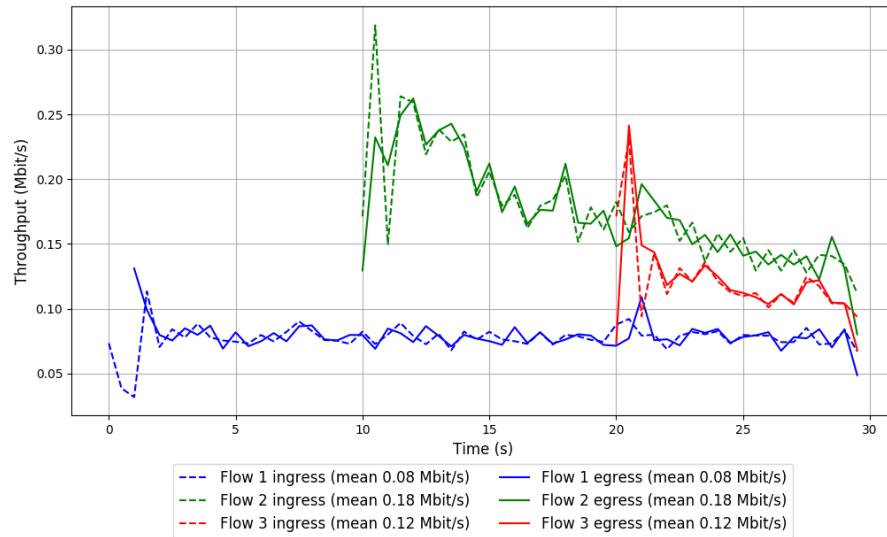


```
Run 1: Statistics of SCReAM
```

```
Start at: 2018-03-05 20:23:31
End at: 2018-03-05 20:24:01
Local clock offset: -6.708 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 195.732 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 190.332 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 200.118 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 225.798 ms
Loss rate: 2.06%
```

Run 1: Report of SCReAM — Data Link

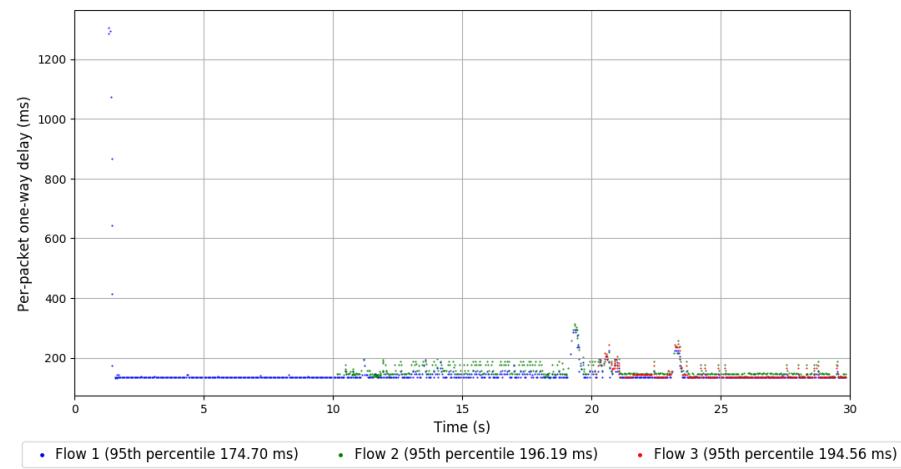
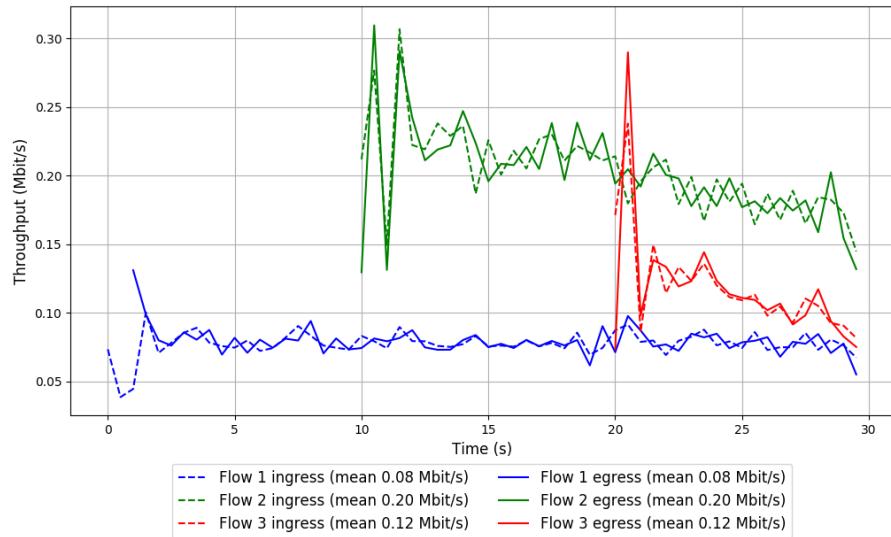


Run 2: Statistics of SCReAM

```
Start at: 2018-03-05 20:46:08
End at: 2018-03-05 20:46:38
Local clock offset: -6.046 ms
Remote clock offset: -4.807 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 192.268 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 174.696 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 196.186 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 194.565 ms
Loss rate: 1.53%
```

Run 2: Report of SCReAM — Data Link

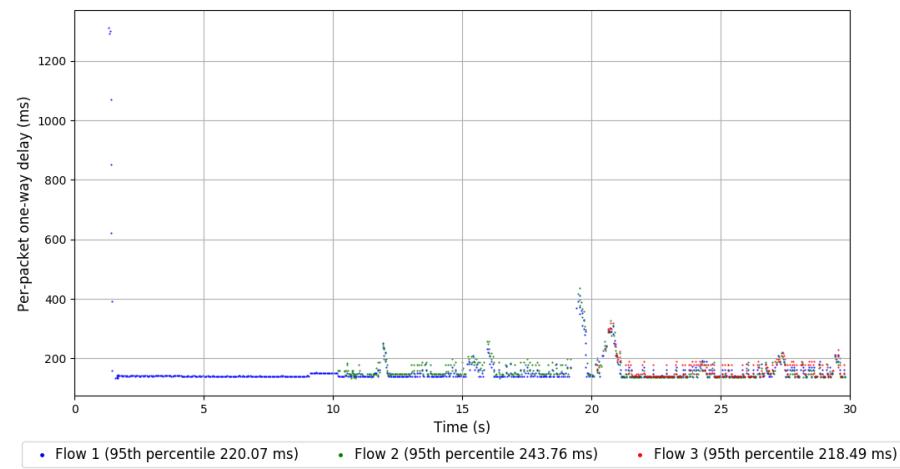
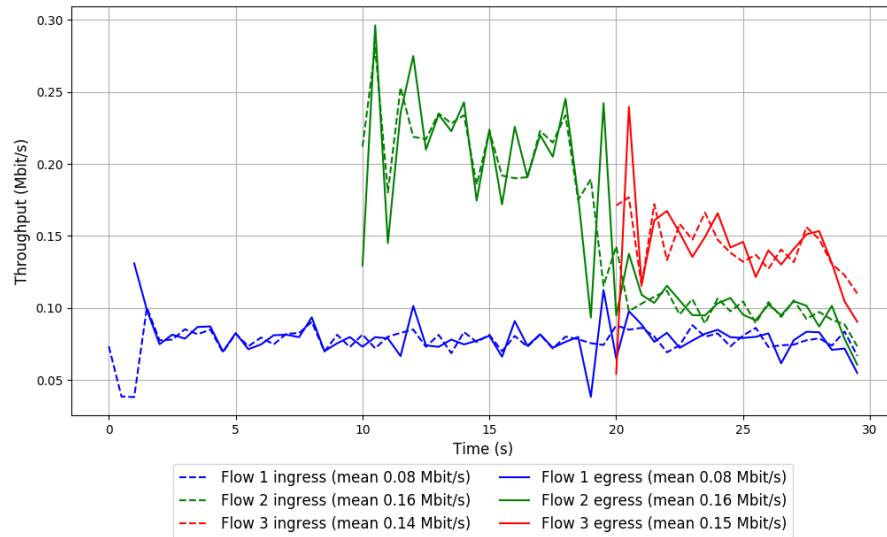


Run 3: Statistics of SCReAM

```
Start at: 2018-03-05 21:08:36
End at: 2018-03-05 21:09:06
Local clock offset: -5.738 ms
Remote clock offset: -4.693 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 230.081 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 220.072 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 243.762 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 218.491 ms
Loss rate: 2.44%
```

Run 3: Report of SCReAM — Data Link

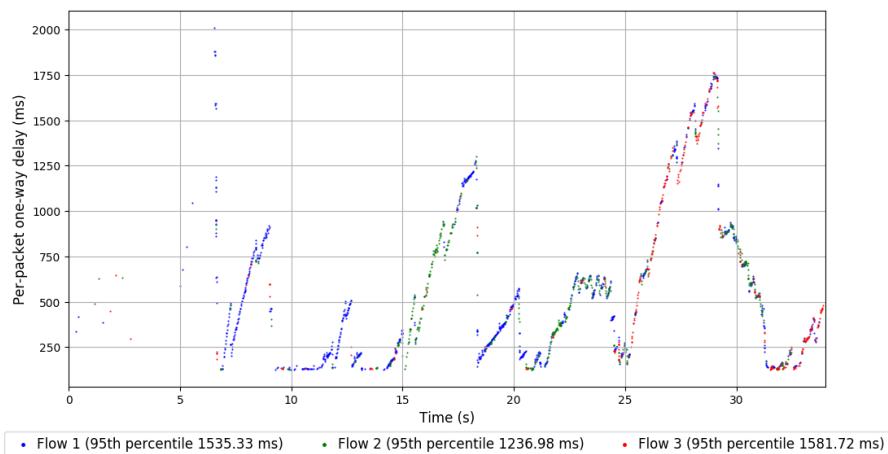
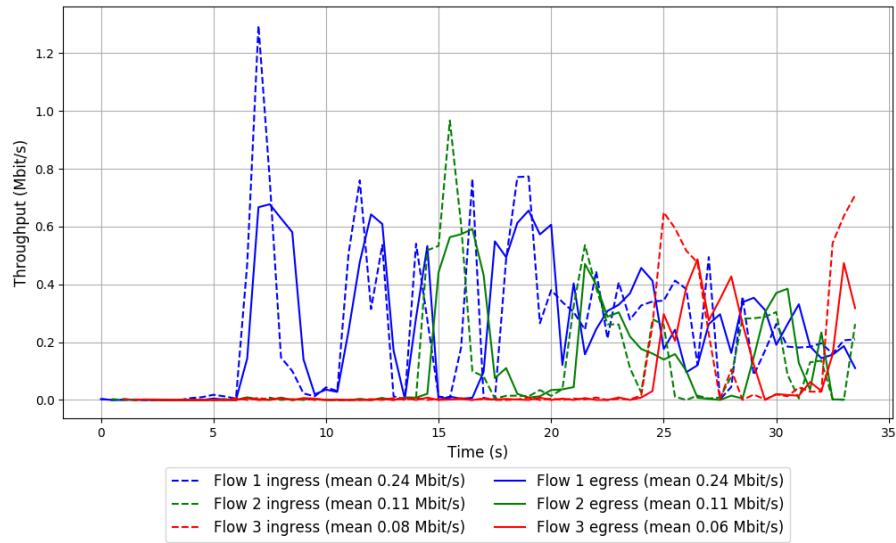


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-05 20:09:50
End at: 2018-03-05 20:10:20
Local clock offset: -6.747 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 1489.161 ms
Loss rate: 4.93%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 1535.333 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 1236.977 ms
Loss rate: 3.58%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 1581.722 ms
Loss rate: 18.98%
```

Run 1: Report of WebRTC media — Data Link

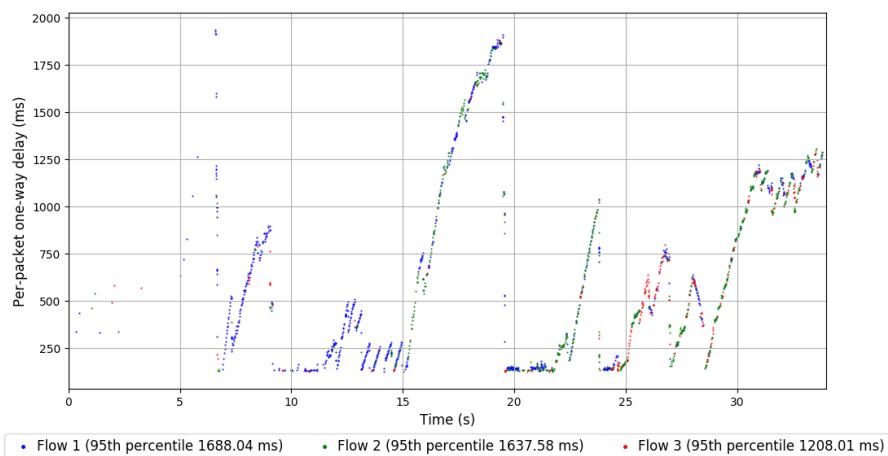
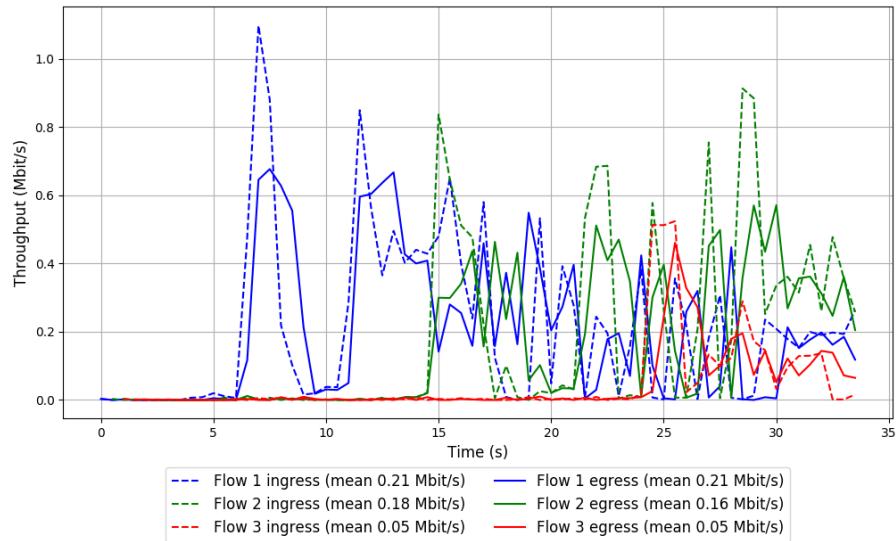


Run 2: Statistics of WebRTC media

```
Start at: 2018-03-05 20:32:26
End at: 2018-03-05 20:32:56
Local clock offset: -6.542 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 1637.581 ms
Loss rate: 6.40%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 1688.035 ms
Loss rate: 4.26%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 1637.581 ms
Loss rate: 8.46%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1208.010 ms
Loss rate: 8.36%
```

Run 2: Report of WebRTC media — Data Link

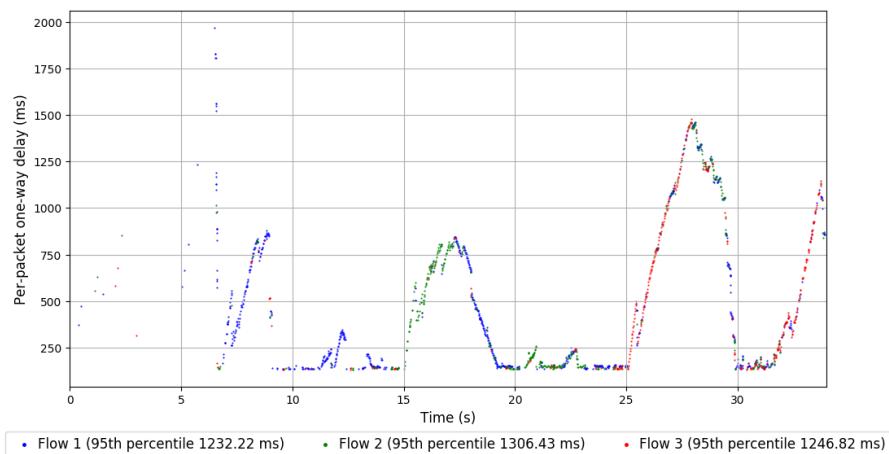
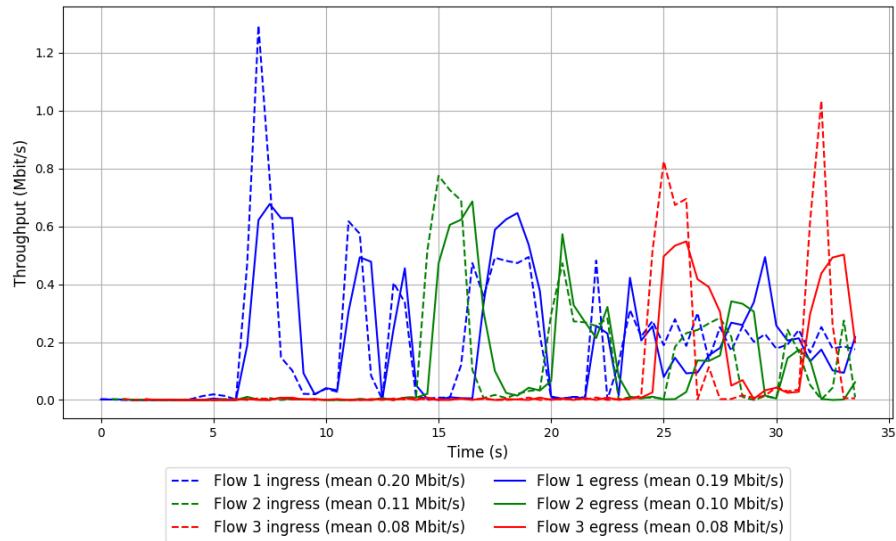


```
Run 3: Statistics of WebRTC media

Start at: 2018-03-05 20:54:54
End at: 2018-03-05 20:55:24
Local clock offset: -5.878 ms
Remote clock offset: -5.614 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 1263.505 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1232.218 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 1306.432 ms
Loss rate: 3.72%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 1246.820 ms
Loss rate: 0.24%
```

Run 3: Report of WebRTC media — Data Link

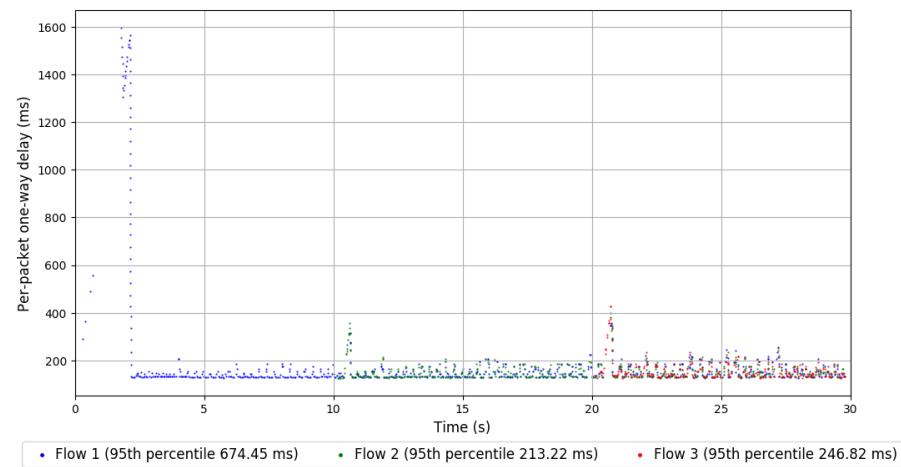
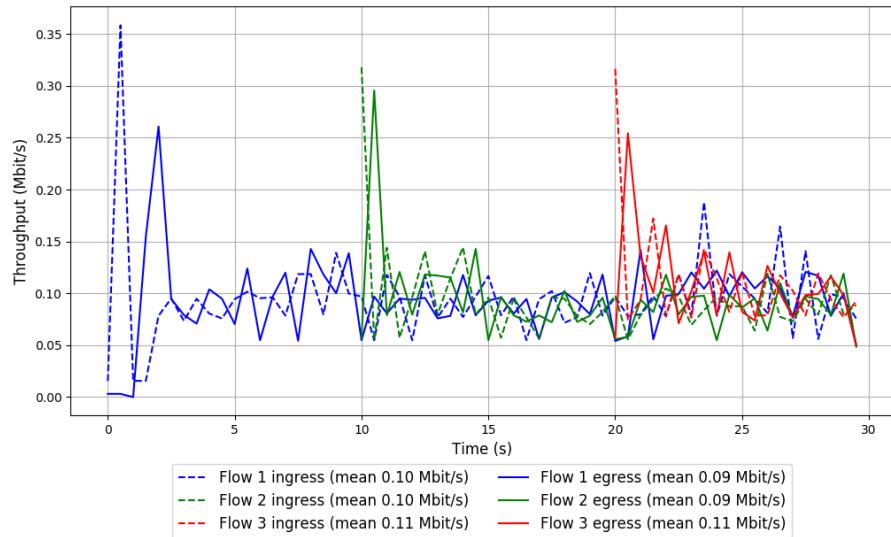


Run 1: Statistics of Sprout

```
Start at: 2018-03-05 20:21:02
End at: 2018-03-05 20:21:32
Local clock offset: -6.615 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 292.310 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 674.450 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 213.216 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 246.820 ms
Loss rate: 2.83%
```

Run 1: Report of Sprout — Data Link

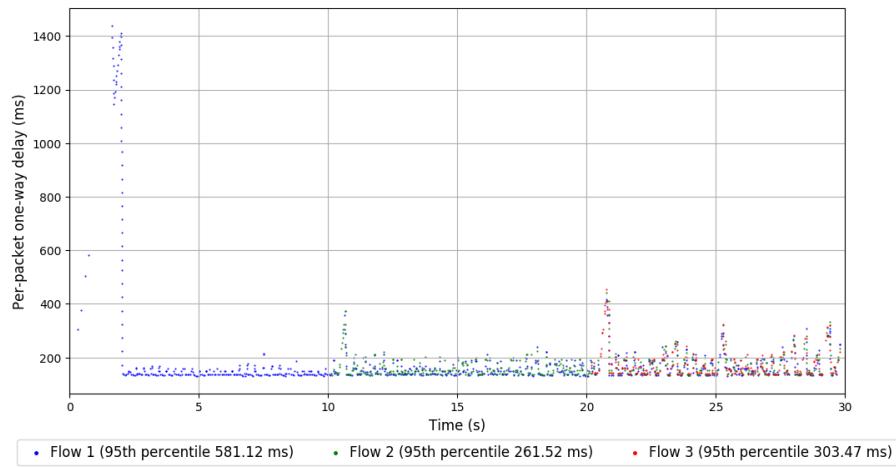
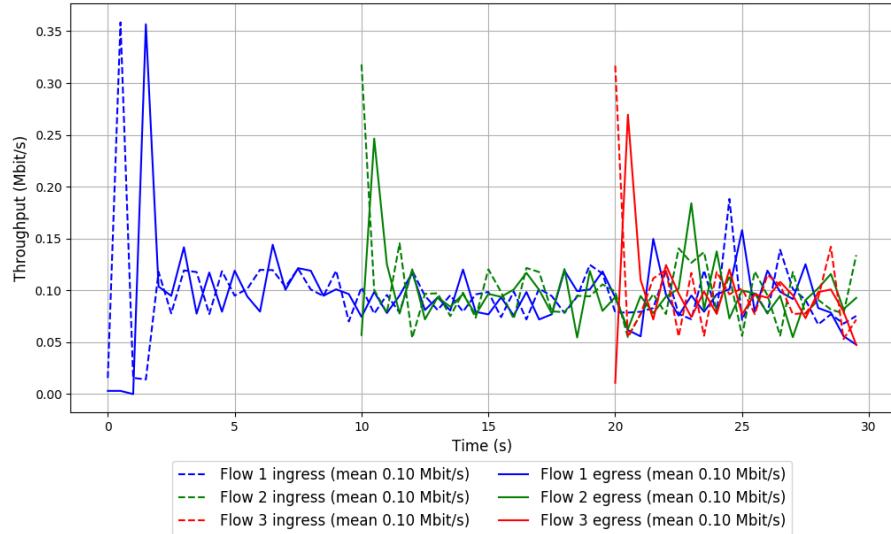


Run 2: Statistics of Sprout

```
Start at: 2018-03-05 20:43:39
End at: 2018-03-05 20:44:09
Local clock offset: -6.101 ms
Remote clock offset: -4.793 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 320.559 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 581.117 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 261.522 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 303.468 ms
Loss rate: 5.59%
```

Run 2: Report of Sprout — Data Link

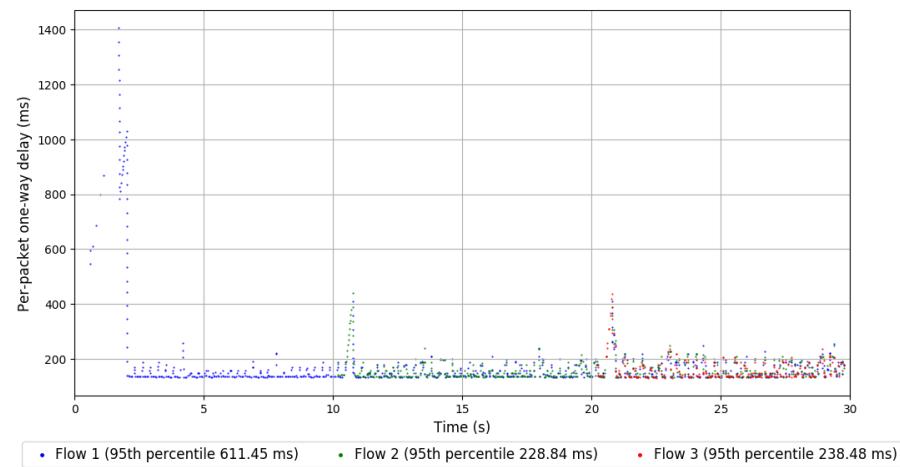
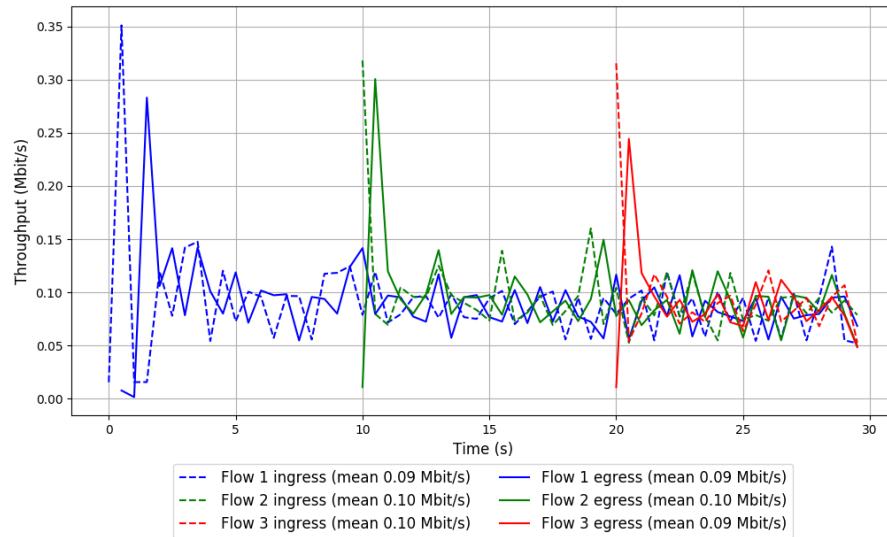


Run 3: Statistics of Sprout

```
Start at: 2018-03-05 21:06:07
End at: 2018-03-05 21:06:37
Local clock offset: -5.761 ms
Remote clock offset: -5.506 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 288.599 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 611.447 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 228.840 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 238.482 ms
Loss rate: 6.23%
```

Run 3: Report of Sprout — Data Link

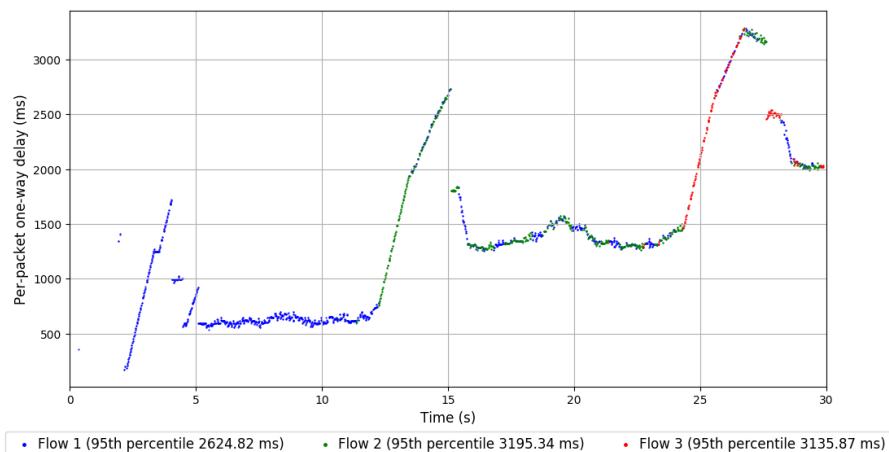
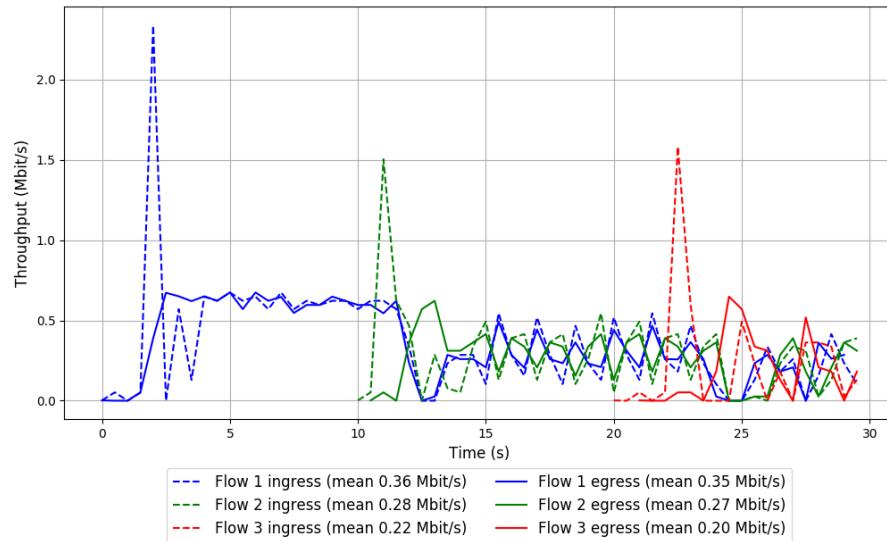


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-03-05 20:22:16
End at: 2018-03-05 20:22:46
Local clock offset: -6.711 ms
Remote clock offset: -5.752 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3027.721 ms
Loss rate: 7.69%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 2624.819 ms
Loss rate: 4.22%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 3195.340 ms
Loss rate: 8.14%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 3135.870 ms
Loss rate: 23.52%
```

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

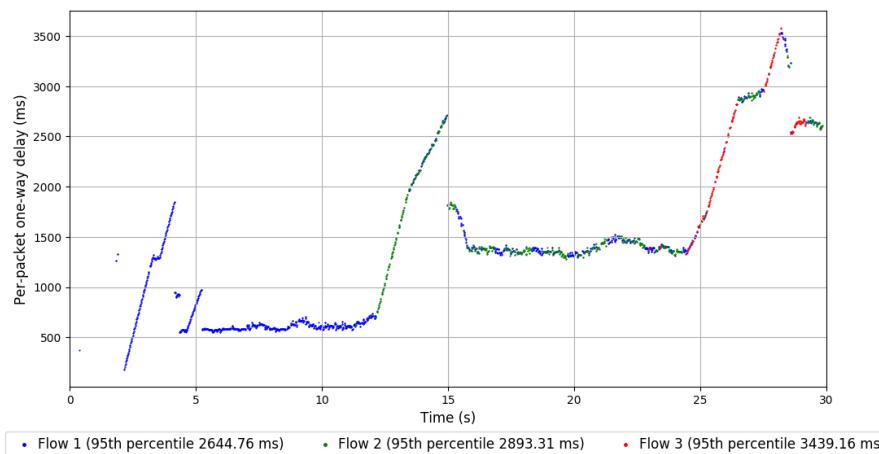
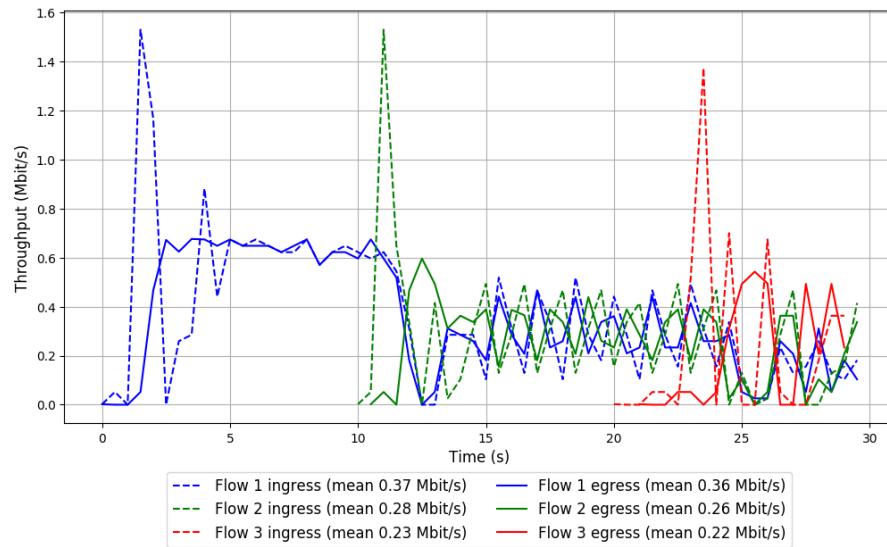


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-03-05 20:44:54
End at: 2018-03-05 20:45:24
Local clock offset: -6.053 ms
Remote clock offset: -4.728 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2903.279 ms
Loss rate: 7.46%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 2644.761 ms
Loss rate: 4.37%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 2893.314 ms
Loss rate: 8.27%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3439.161 ms
Loss rate: 20.95%
```

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

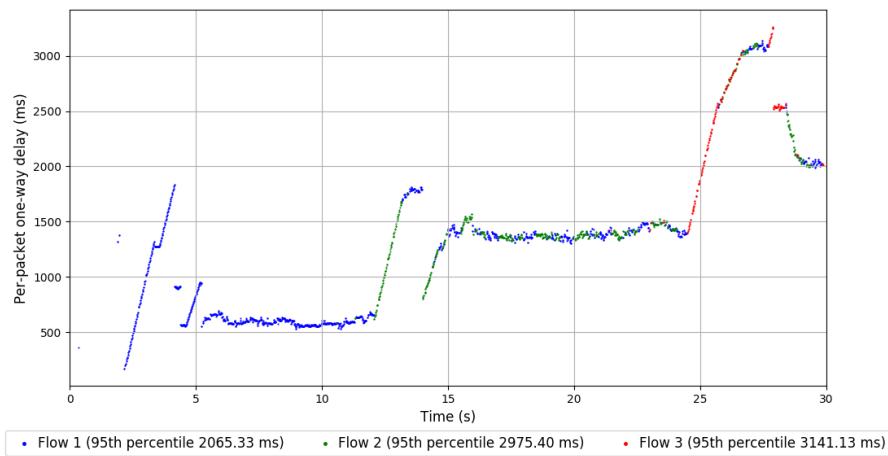
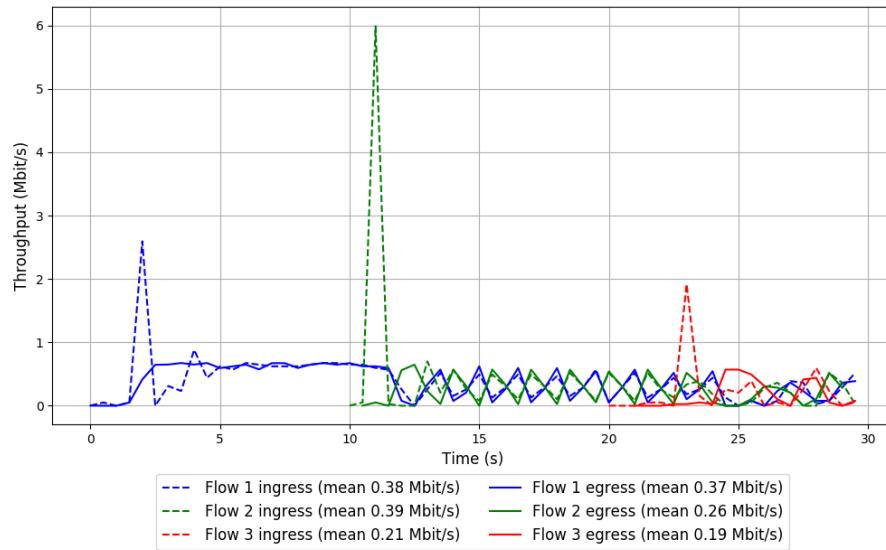


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-03-05 21:07:21
End at: 2018-03-05 21:07:51
Local clock offset: -5.782 ms
Remote clock offset: -4.525 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2928.715 ms
Loss rate: 17.86%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 2065.326 ms
Loss rate: 4.23%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 2975.398 ms
Loss rate: 36.22%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 3141.127 ms
Loss rate: 25.14%
```

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

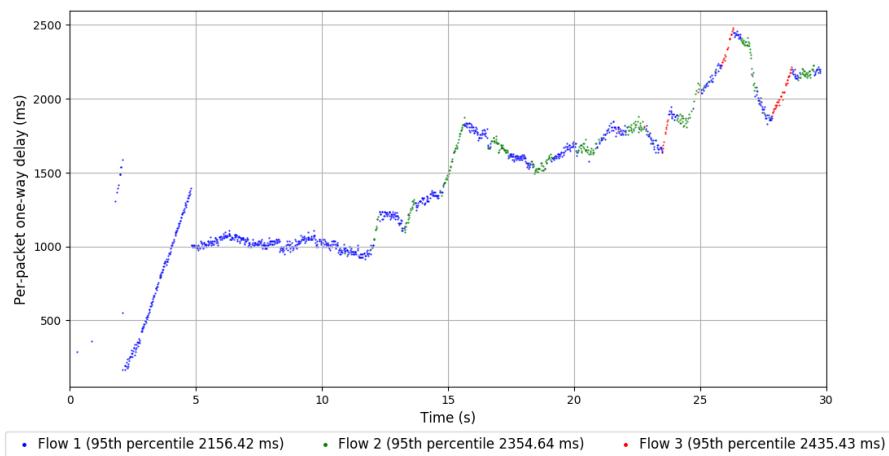
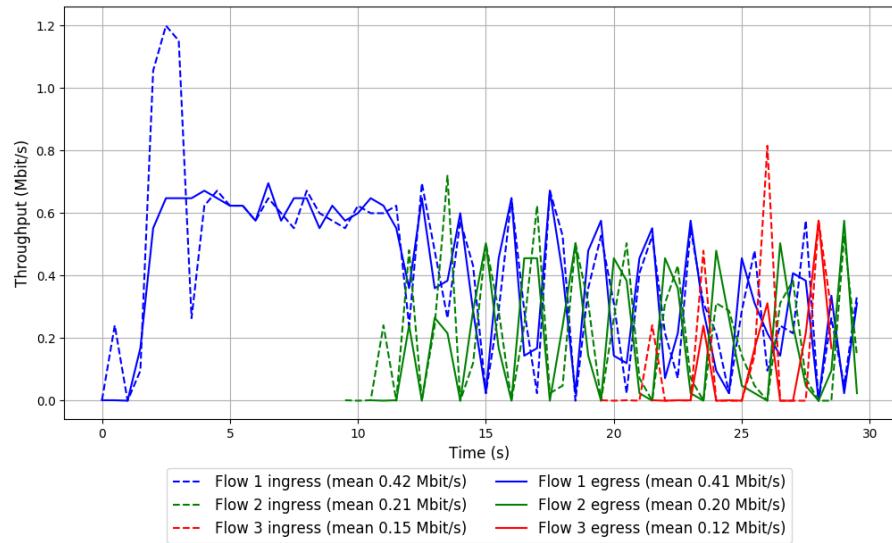


Run 1: Statistics of TCP Vegas

```
Start at: 2018-03-05 20:08:35
End at: 2018-03-05 20:09:05
Local clock offset: -6.803 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 2204.885 ms
Loss rate: 7.57%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 2156.420 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 2354.641 ms
Loss rate: 9.03%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 2435.429 ms
Loss rate: 33.88%
```

Run 1: Report of TCP Vegas — Data Link

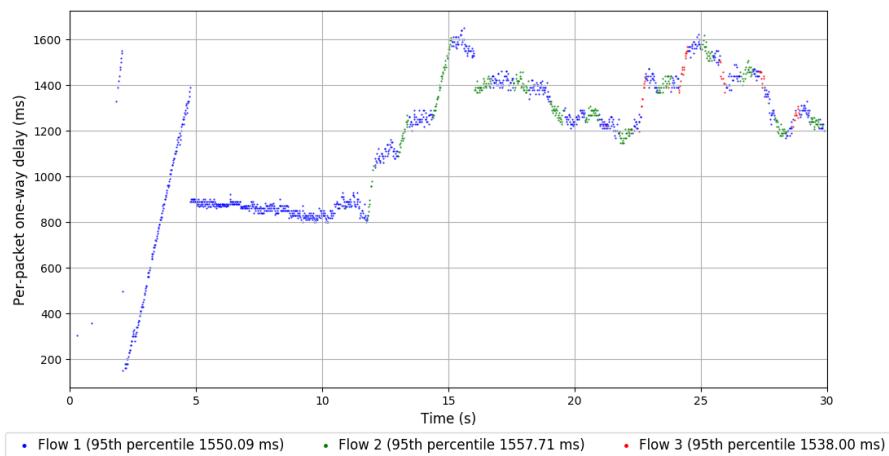
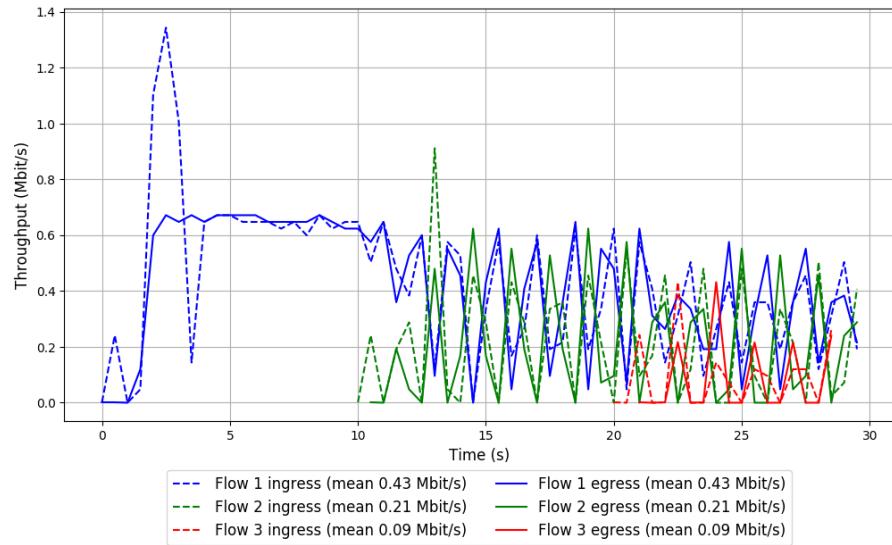


Run 2: Statistics of TCP Vegas

```
Start at: 2018-03-05 20:31:11
End at: 2018-03-05 20:31:41
Local clock offset: -6.634 ms
Remote clock offset: -5.73 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1550.090 ms
Loss rate: 4.44%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1550.090 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 1557.711 ms
Loss rate: 5.63%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 1538.001 ms
Loss rate: 17.85%
```

Run 2: Report of TCP Vegas — Data Link

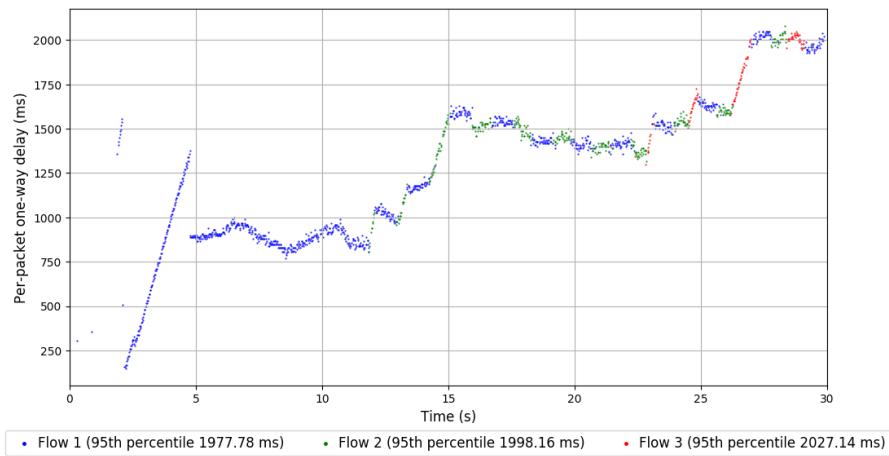
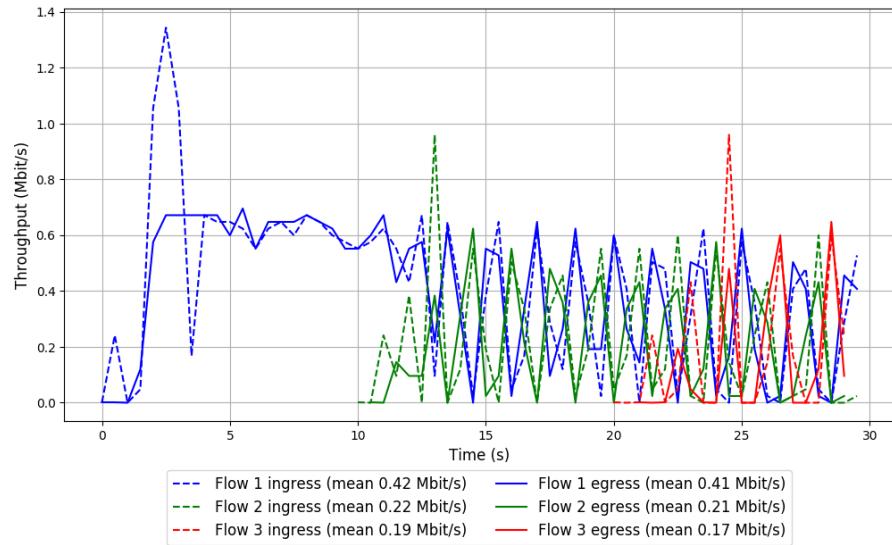


Run 3: Statistics of TCP Vegas

```
Start at: 2018-03-05 20:53:39
End at: 2018-03-05 20:54:09
Local clock offset: -5.929 ms
Remote clock offset: -5.588 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2006.962 ms
Loss rate: 6.50%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 1977.784 ms
Loss rate: 3.56%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 1998.165 ms
Loss rate: 7.82%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 2027.143 ms
Loss rate: 24.78%
```

Run 3: Report of TCP Vegas — Data Link

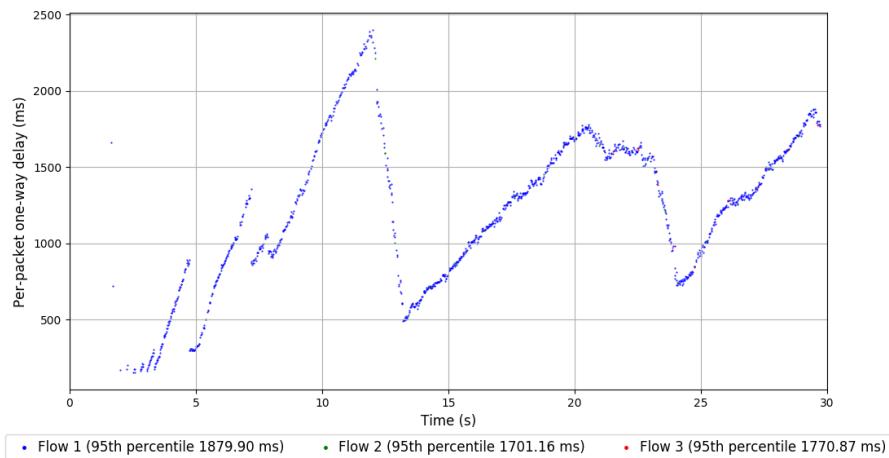
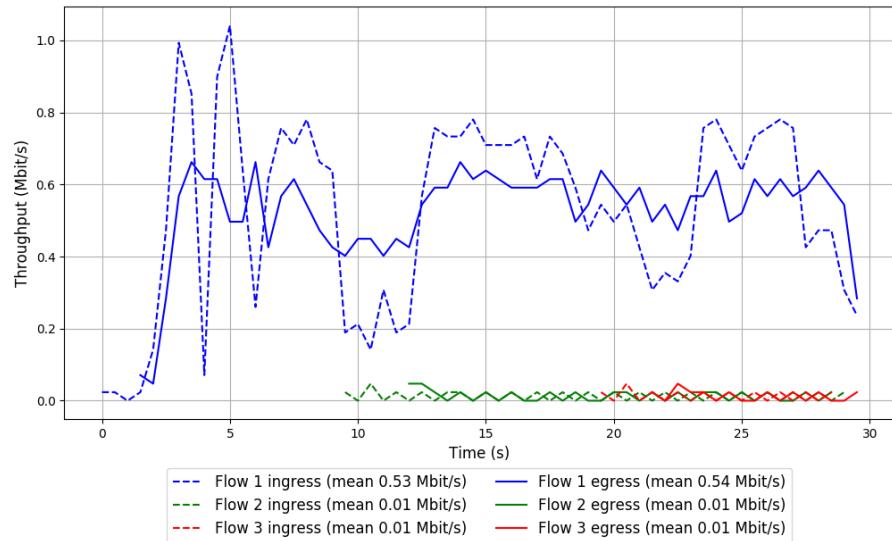


Run 1: Statistics of Verus

```
Start at: 2018-03-05 20:13:34
End at: 2018-03-05 20:14:04
Local clock offset: -6.683 ms
Remote clock offset: -5.801 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 1879.899 ms
Loss rate: 4.82%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1879.899 ms
Loss rate: 4.71%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1701.159 ms
Loss rate: 9.09%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1770.868 ms
Loss rate: 9.09%
```

Run 1: Report of Verus — Data Link

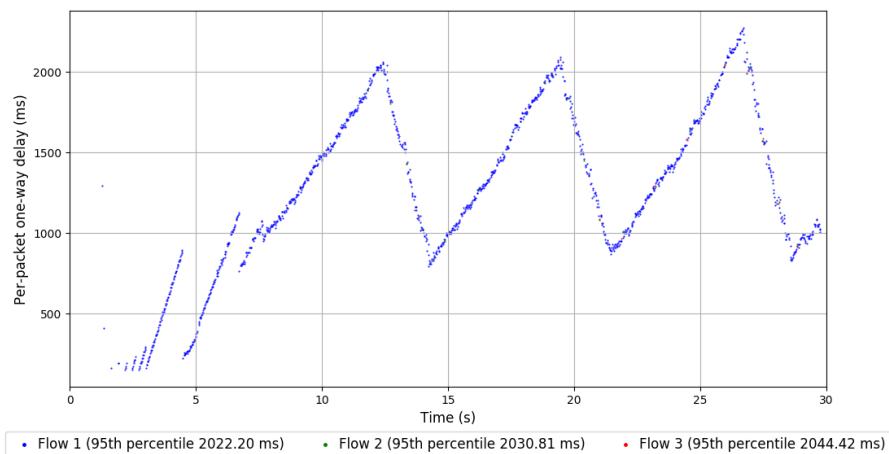
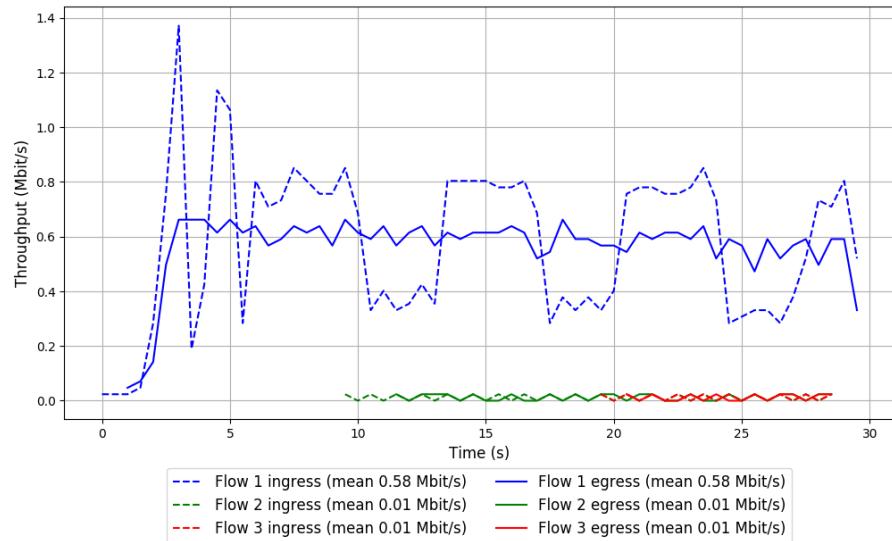


Run 2: Statistics of Verus

```
Start at: 2018-03-05 20:36:10
End at: 2018-03-05 20:36:40
Local clock offset: -6.398 ms
Remote clock offset: -4.864 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 2024.899 ms
Loss rate: 5.16%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2022.202 ms
Loss rate: 5.13%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2030.813 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2044.417 ms
Loss rate: 10.00%
```

Run 2: Report of Verus — Data Link

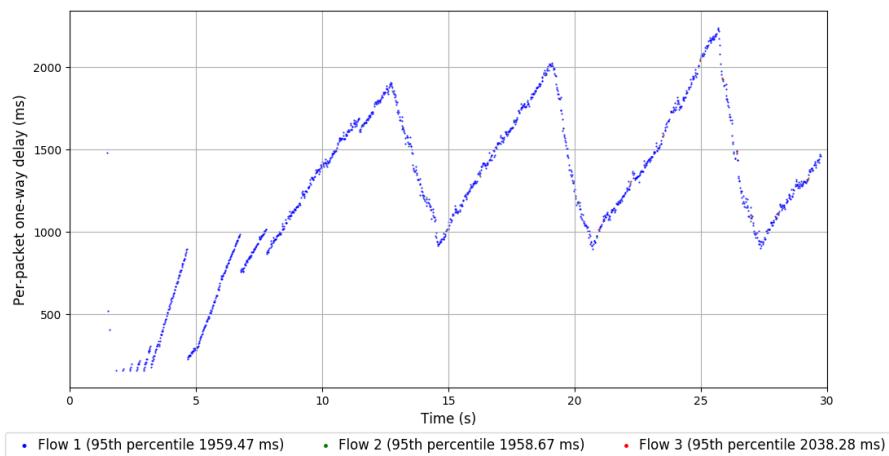
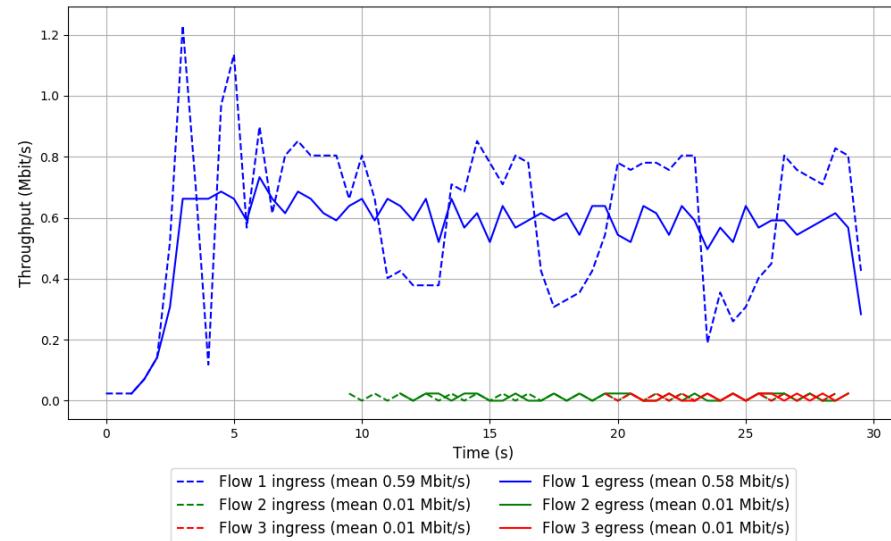


Run 3: Statistics of Verus

```
Start at: 2018-03-05 20:58:38
End at: 2018-03-05 20:59:08
Local clock offset: -5.844 ms
Remote clock offset: -5.591 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 1960.190 ms
Loss rate: 6.68%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1959.470 ms
Loss rate: 6.68%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1958.672 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2038.275 ms
Loss rate: 10.00%
```

Run 3: Report of Verus — Data Link

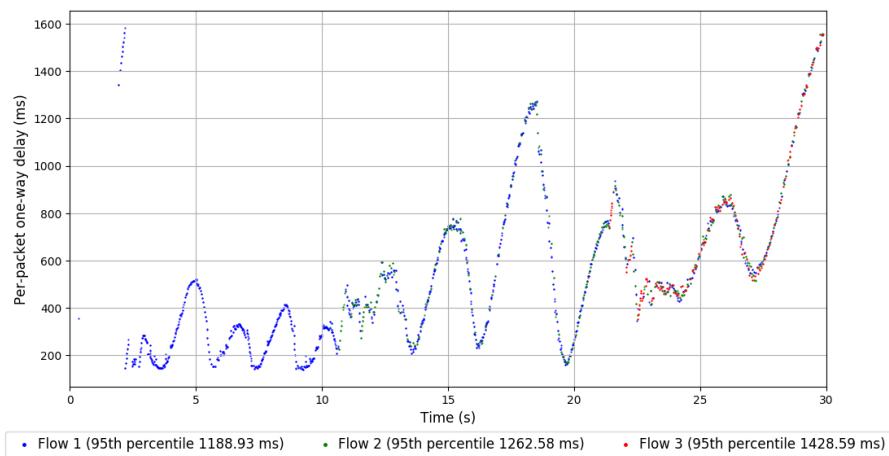
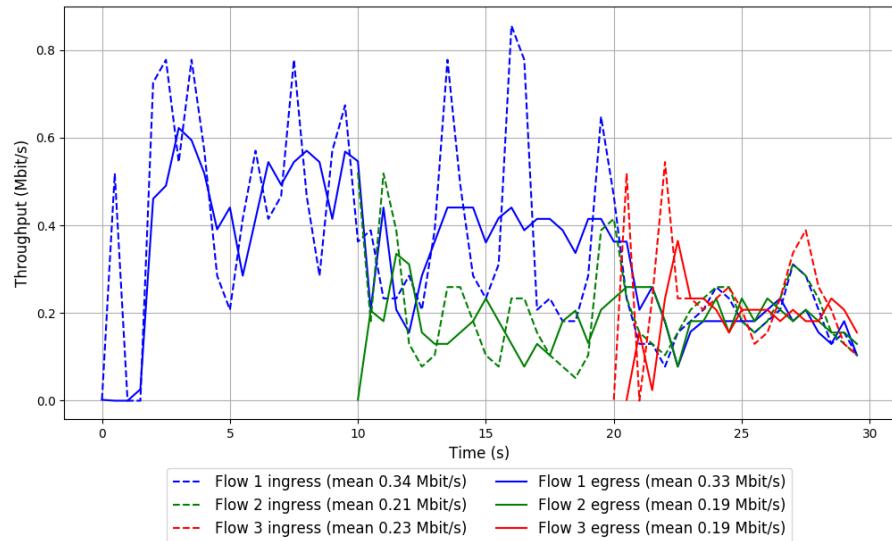


Run 1: Statistics of Copa

```
Start at: 2018-03-05 20:12:20
End at: 2018-03-05 20:12:50
Local clock offset: -6.787 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 1242.833 ms
Loss rate: 9.86%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 1188.934 ms
Loss rate: 6.08%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1262.581 ms
Loss rate: 12.27%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1428.587 ms
Loss rate: 22.46%
```

Run 1: Report of Copa — Data Link

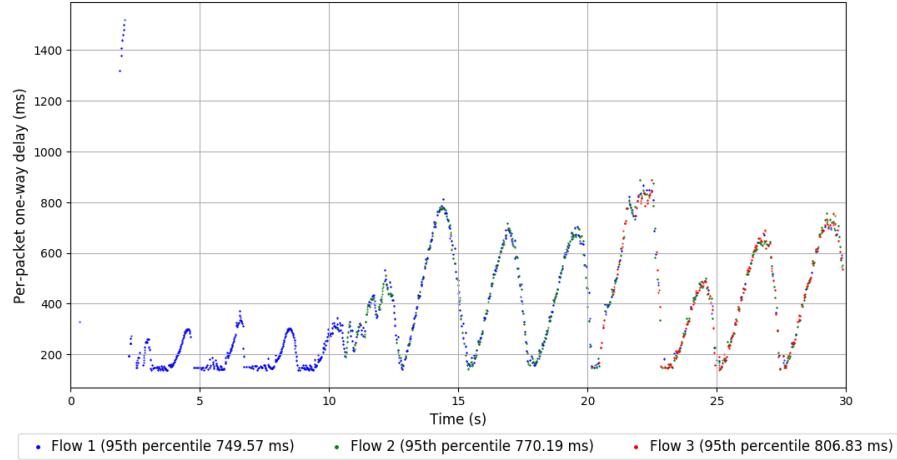
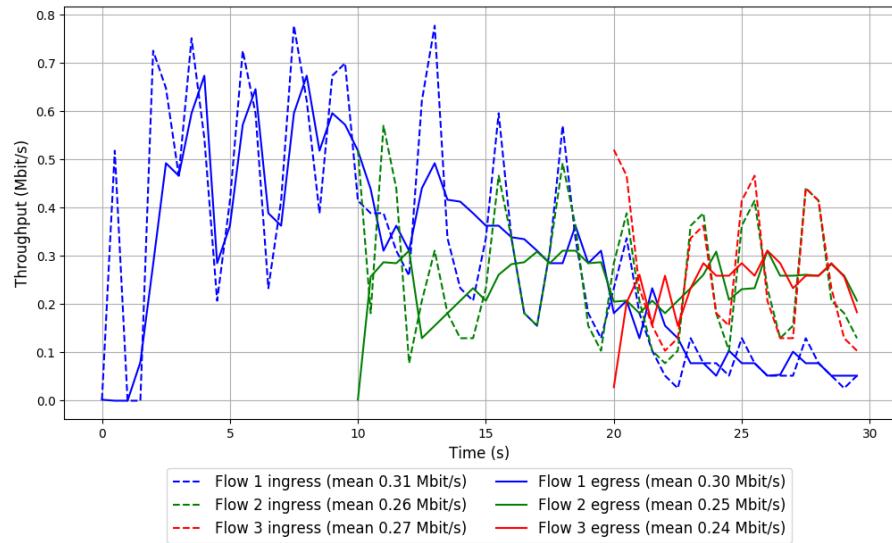


Run 2: Statistics of Copa

```
Start at: 2018-03-05 20:34:56
End at: 2018-03-05 20:35:26
Local clock offset: -6.376 ms
Remote clock offset: 0.857 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 768.986 ms
Loss rate: 6.75%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 749.569 ms
Loss rate: 5.06%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 770.191 ms
Loss rate: 7.46%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 806.826 ms
Loss rate: 11.22%
```

Run 2: Report of Copa — Data Link

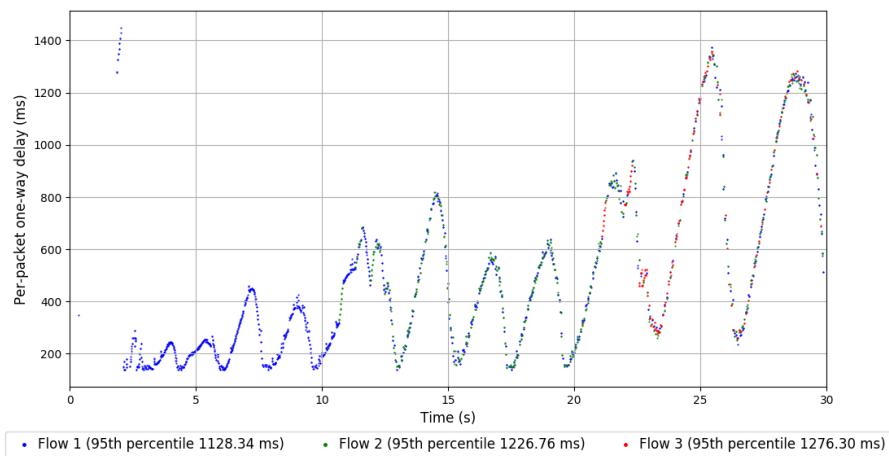
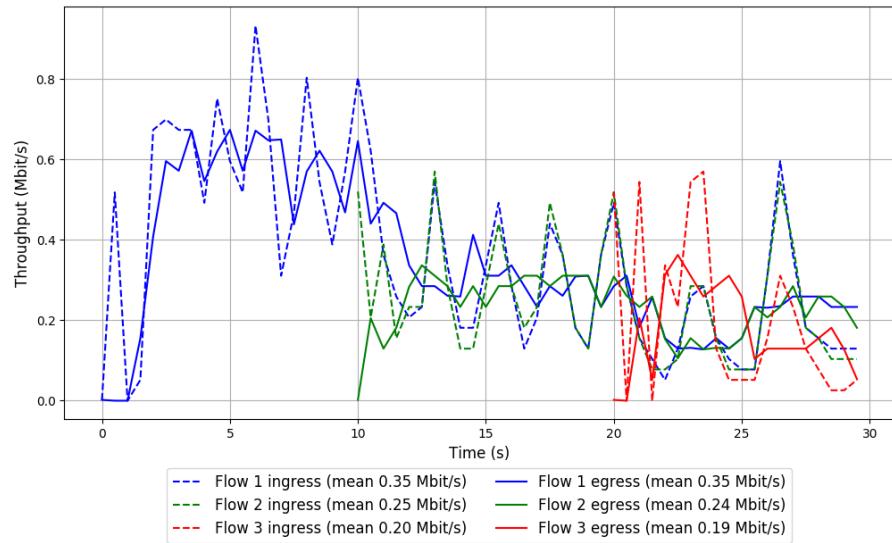


Run 3: Statistics of Copa

```
Start at: 2018-03-05 20:57:24
End at: 2018-03-05 20:57:54
Local clock offset: -5.845 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-03-05 22:19:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 1226.756 ms
Loss rate: 5.56%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 1128.337 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 1226.756 ms
Loss rate: 6.34%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1276.296 ms
Loss rate: 13.45%
```

Run 3: Report of Copa — Data Link

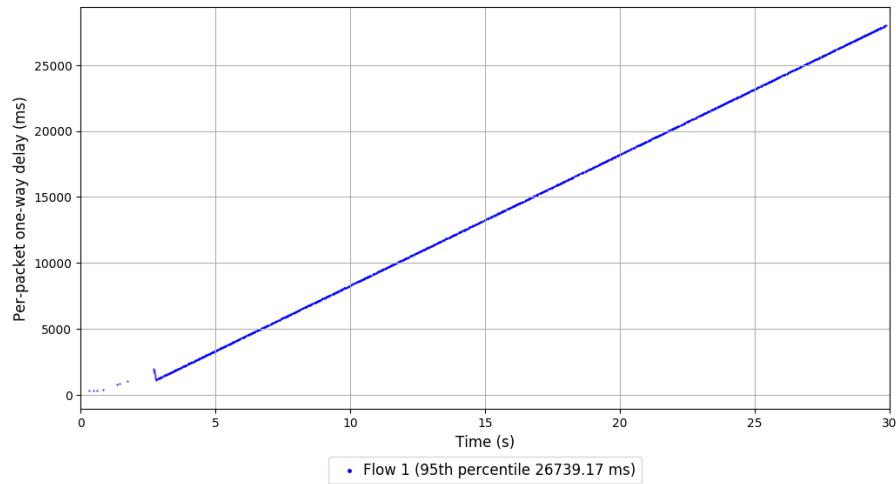
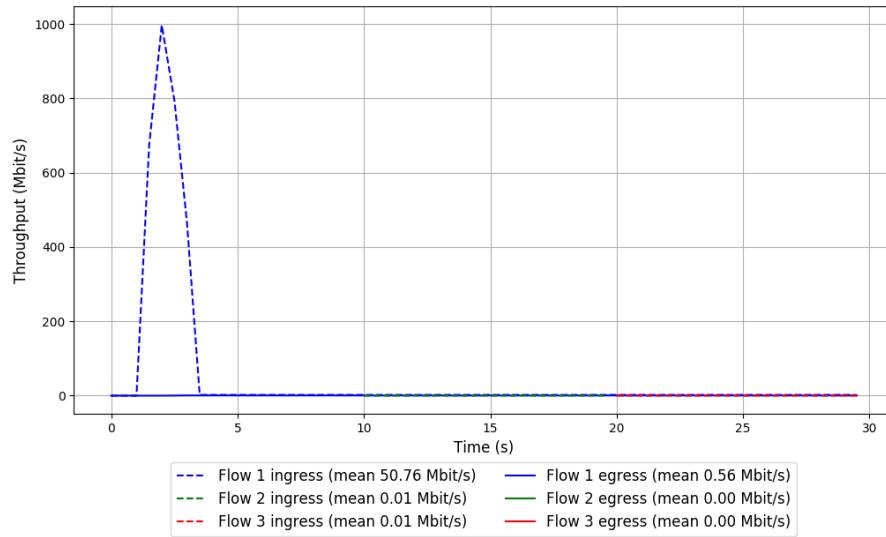


```
Run 1: Statistics of FillP

Start at: 2018-03-05 20:07:19
End at: 2018-03-05 20:07:49
Local clock offset: -6.783 ms
Remote clock offset: -5.814 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 26739.173 ms
Loss rate: 98.91%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 26739.173 ms
Loss rate: 98.91%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of FillP — Data Link

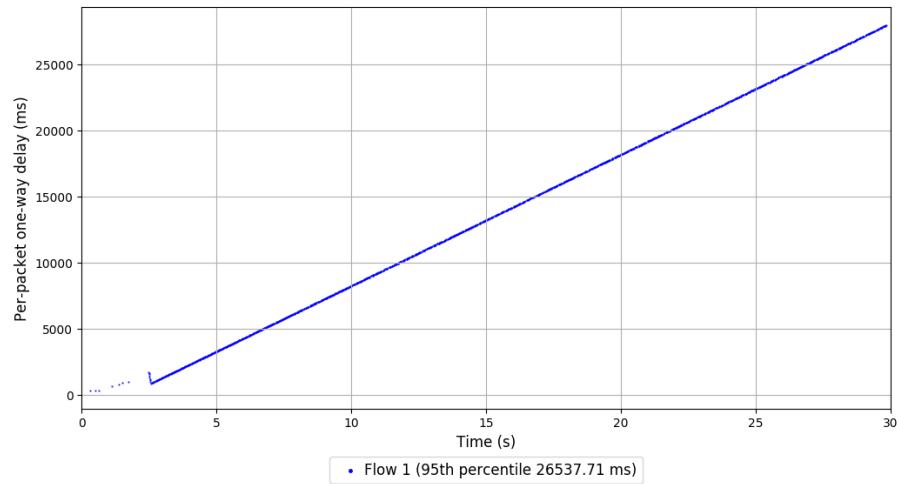
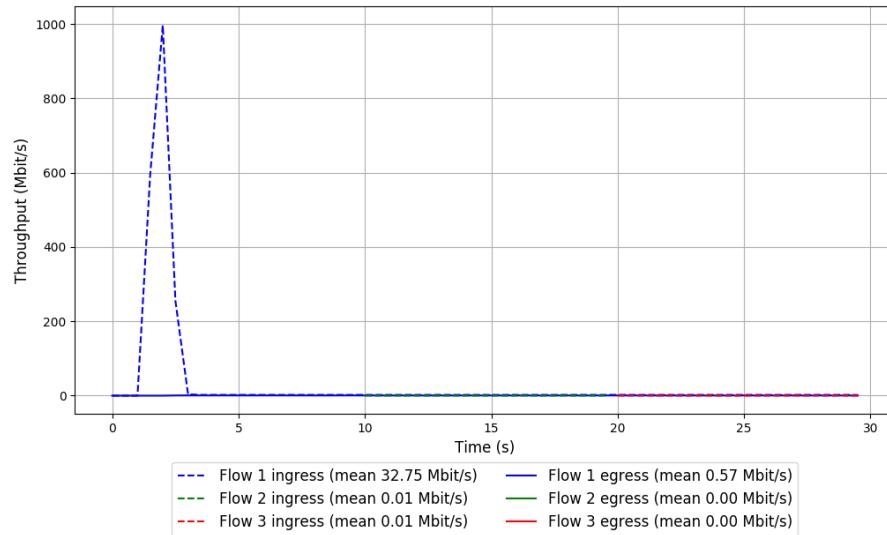


```
Run 2: Statistics of FillP
```

```
Start at: 2018-03-05 20:29:55
End at: 2018-03-05 20:30:25
Local clock offset: -6.614 ms
Remote clock offset: -5.73 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26537.708 ms
Loss rate: 98.28%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26537.708 ms
Loss rate: 98.28%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of FillP — Data Link

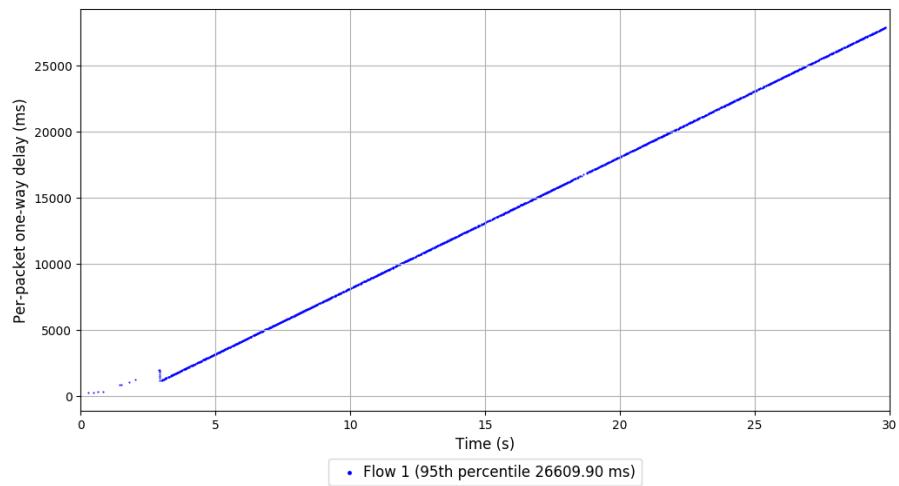
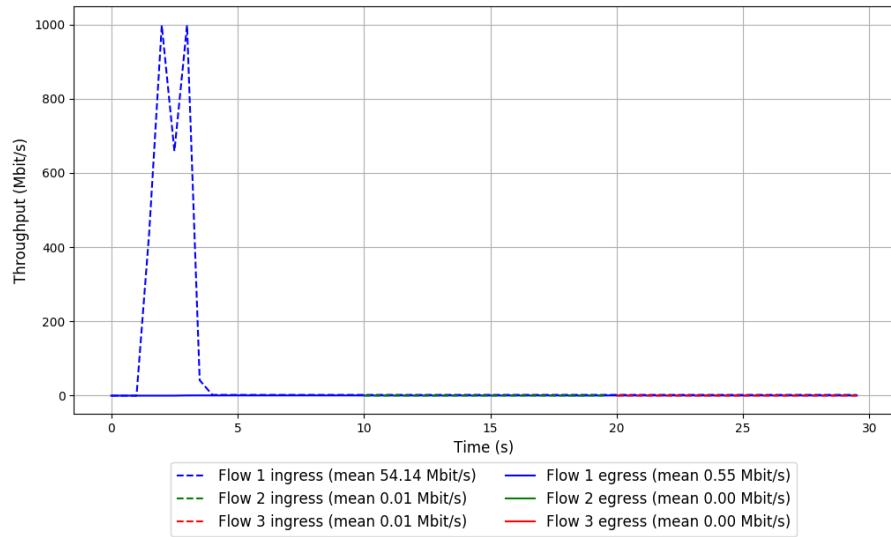


```
Run 3: Statistics of FillP
```

```
Start at: 2018-03-05 20:52:22
End at: 2018-03-05 20:52:52
Local clock offset: -5.924 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26609.902 ms
Loss rate: 98.99%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26609.902 ms
Loss rate: 98.99%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of FillP — Data Link

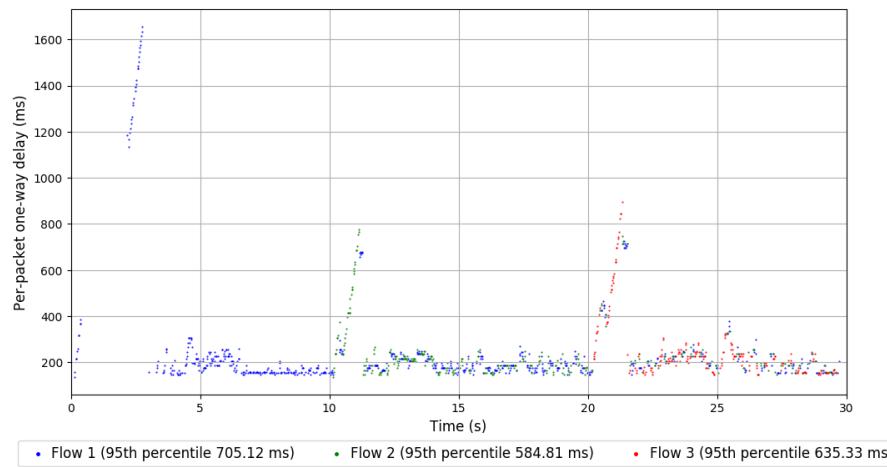
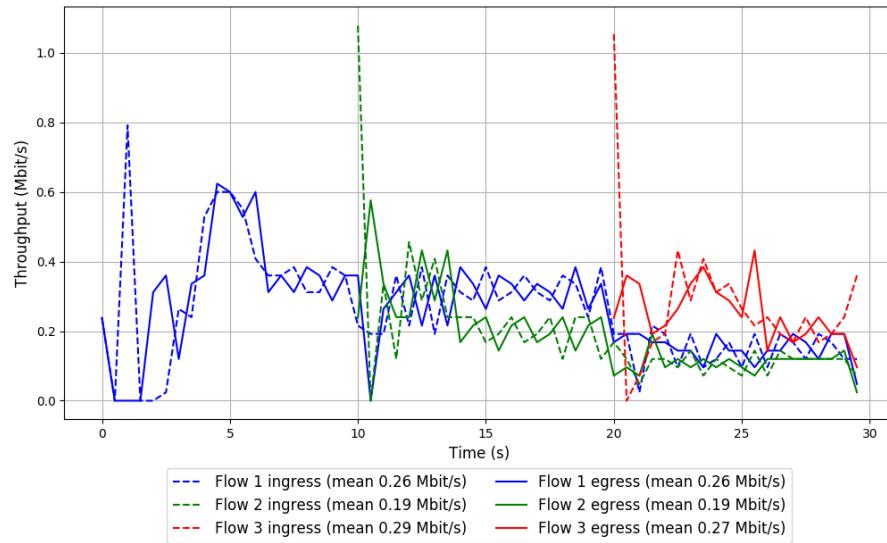


```
Run 1: Statistics of Indigo-1-32
```

```
Start at: 2018-03-05 20:16:04
End at: 2018-03-05 20:16:34
Local clock offset: -6.734 ms
Remote clock offset: -5.736 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 676.669 ms
Loss rate: 3.01%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 705.123 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 584.810 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 635.325 ms
Loss rate: 8.66%
```

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

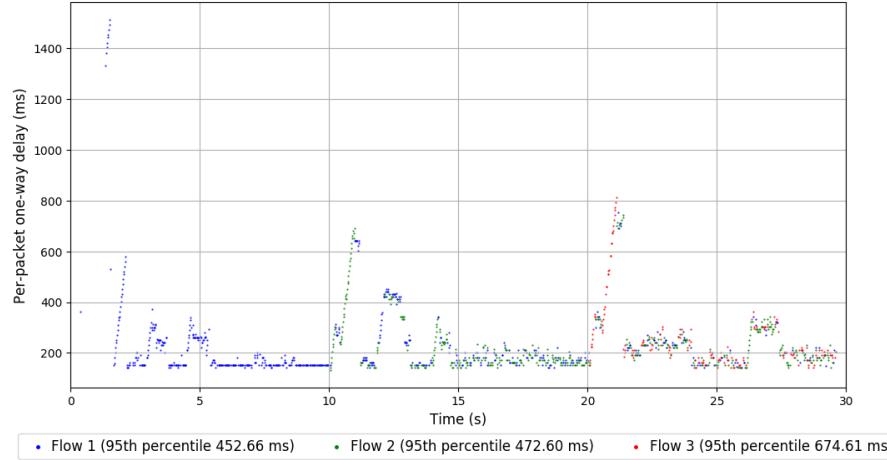
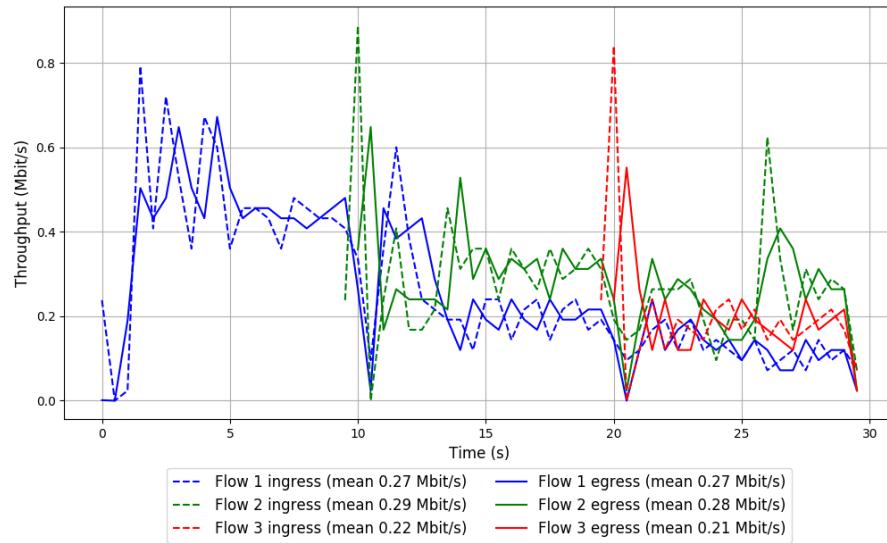


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-03-05 20:38:41
End at: 2018-03-05 20:39:11
Local clock offset: -6.25 ms
Remote clock offset: -0.869 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 522.035 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 452.660 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 472.604 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 674.606 ms
Loss rate: 5.72%
```

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

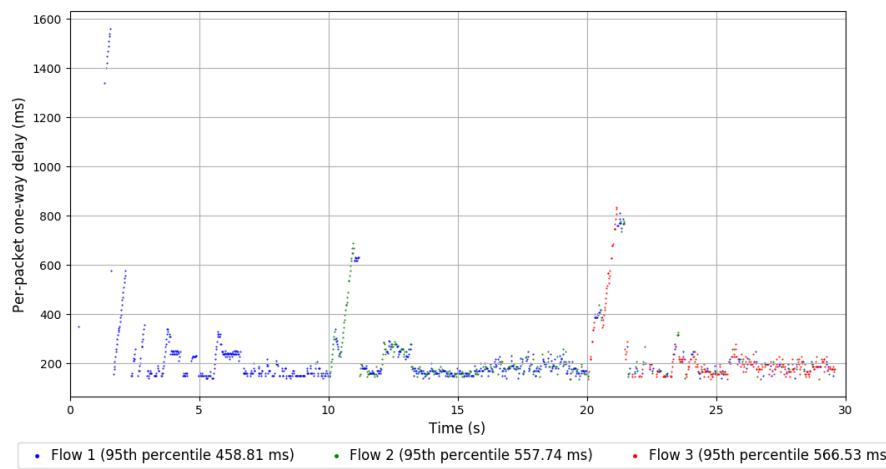
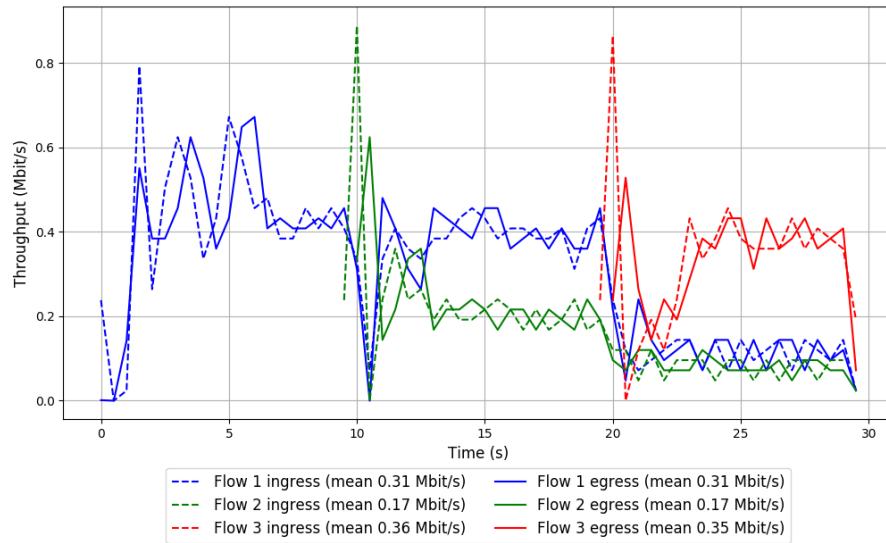


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-03-05 21:01:09
End at: 2018-03-05 21:01:39
Local clock offset: -5.812 ms
Remote clock offset: 0.248 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 548.411 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 458.814 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 557.741 ms
Loss rate: 2.88%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 566.535 ms
Loss rate: 4.81%
```

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

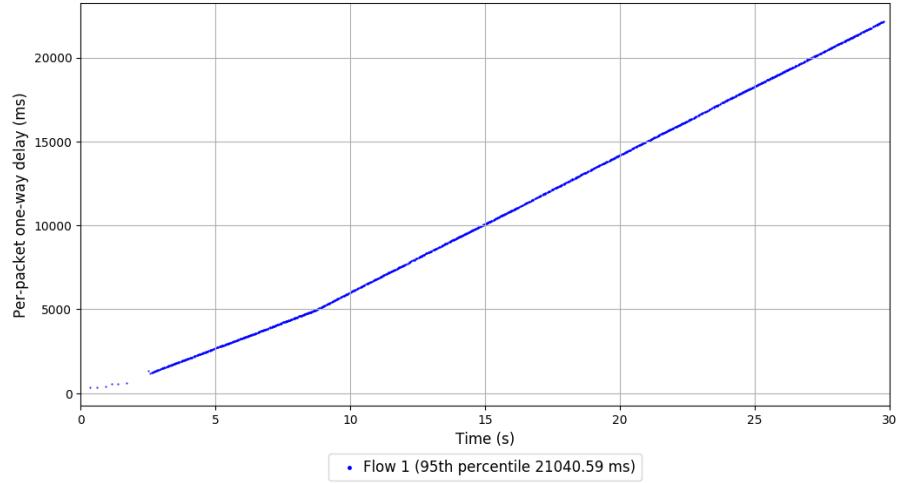
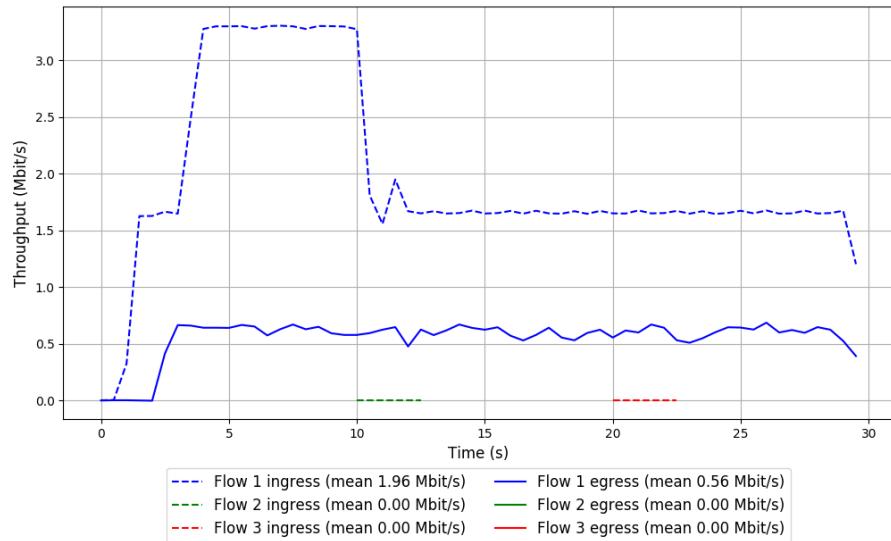


```
Run 1: Statistics of Vivace-latency
```

```
Start at: 2018-03-05 20:24:45
End at: 2018-03-05 20:25:15
Local clock offset: -6.638 ms
Remote clock offset: -0.948 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21040.593 ms
Loss rate: 71.57%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21040.593 ms
Loss rate: 71.55%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-latency — Data Link

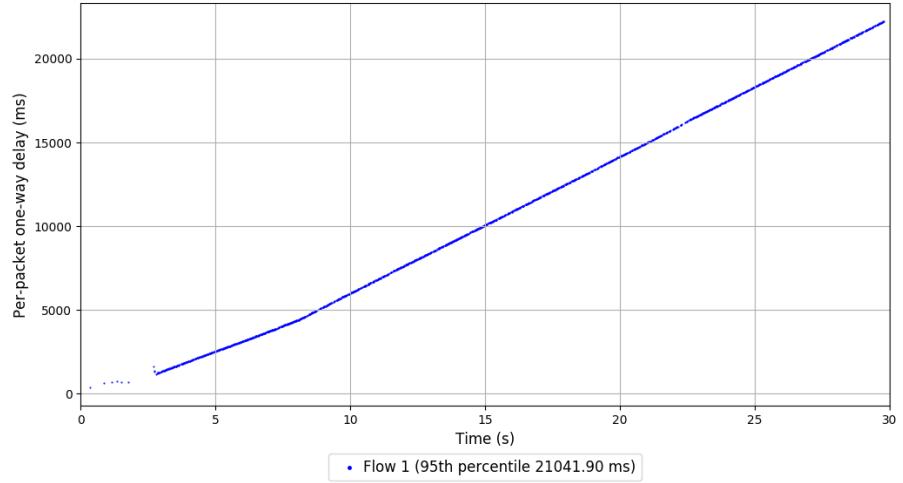
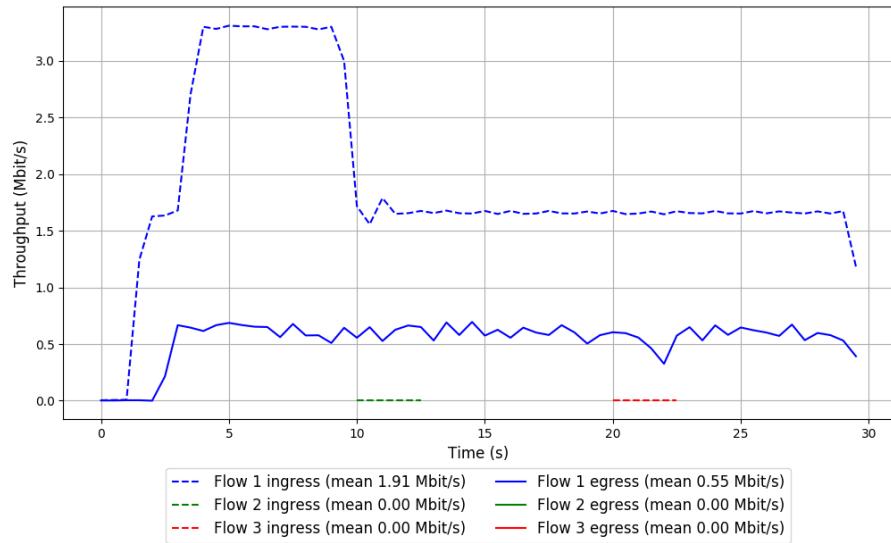


Run 2: Statistics of Vivace-latency

```
Start at: 2018-03-05 20:47:23
End at: 2018-03-05 20:47:53
Local clock offset: -6.066 ms
Remote clock offset: 0.951 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21041.896 ms
Loss rate: 71.62%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21041.896 ms
Loss rate: 71.61%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Vivace-latency — Data Link

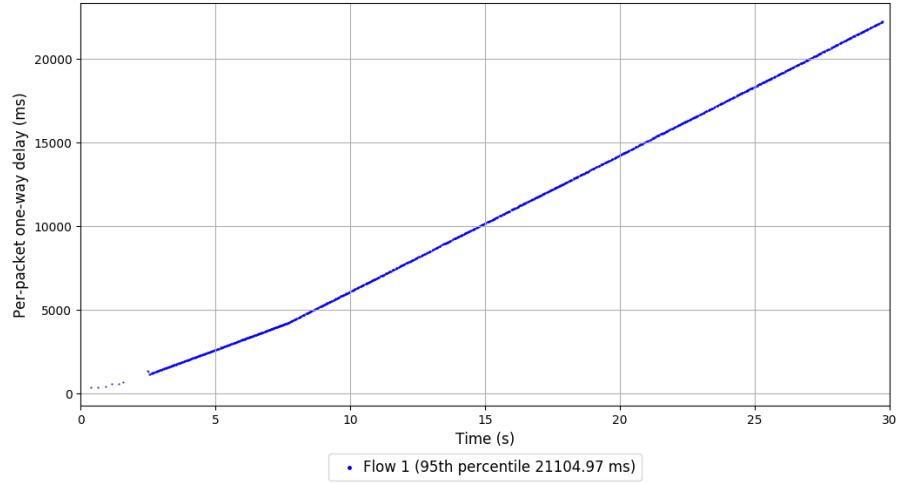
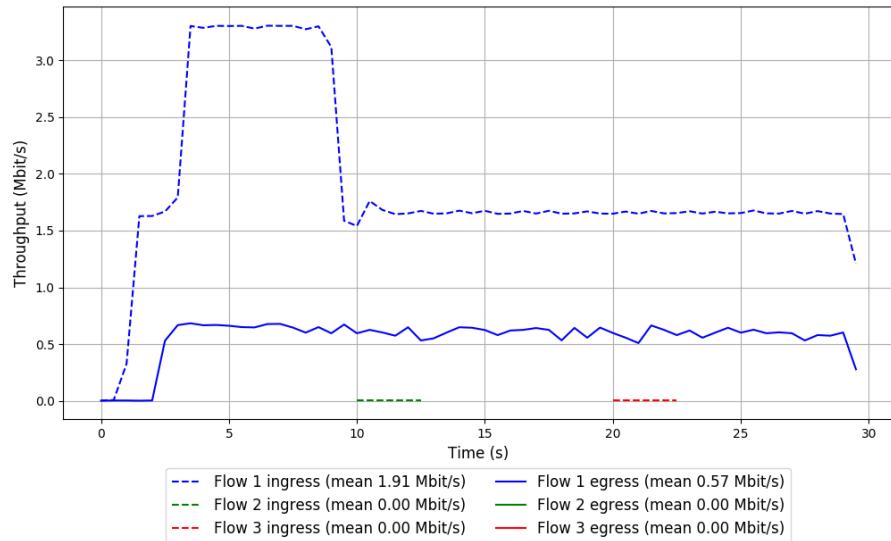


Run 3: Statistics of Vivace-latency

```
Start at: 2018-03-05 21:09:50
End at: 2018-03-05 21:10:20
Local clock offset: -5.808 ms
Remote clock offset: -4.642 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21104.971 ms
Loss rate: 70.70%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21104.971 ms
Loss rate: 70.68%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-latency — Data Link

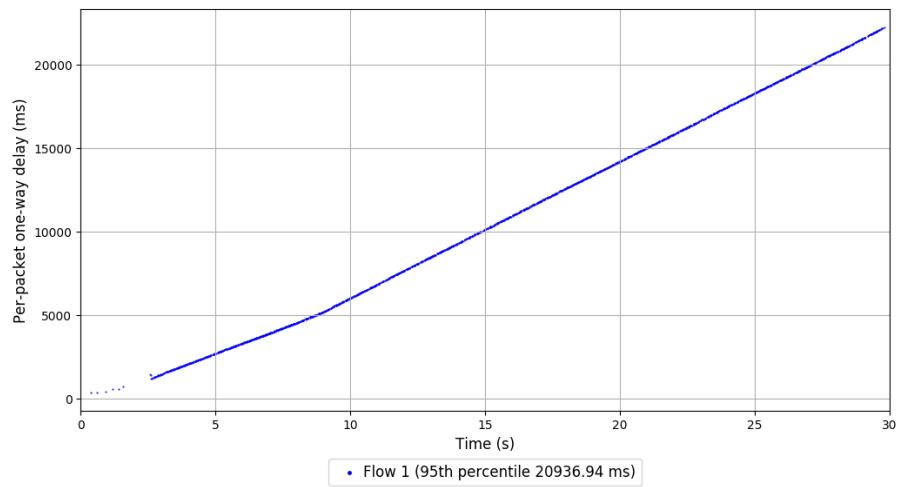
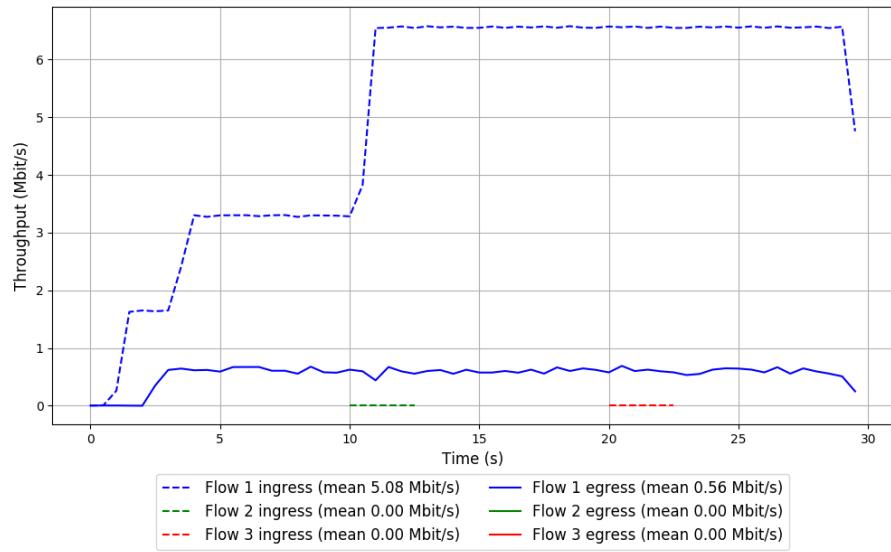


```
Run 1: Statistics of Vivace-loss
```

```
Start at: 2018-03-05 20:11:05
End at: 2018-03-05 20:11:35
Local clock offset: -6.747 ms
Remote clock offset: -5.897 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20936.944 ms
Loss rate: 89.24%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20936.944 ms
Loss rate: 89.23%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-loss — Data Link

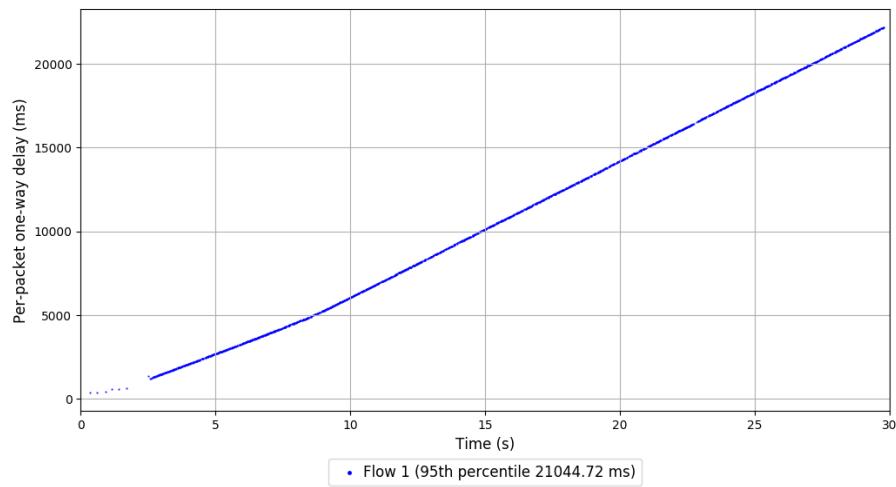
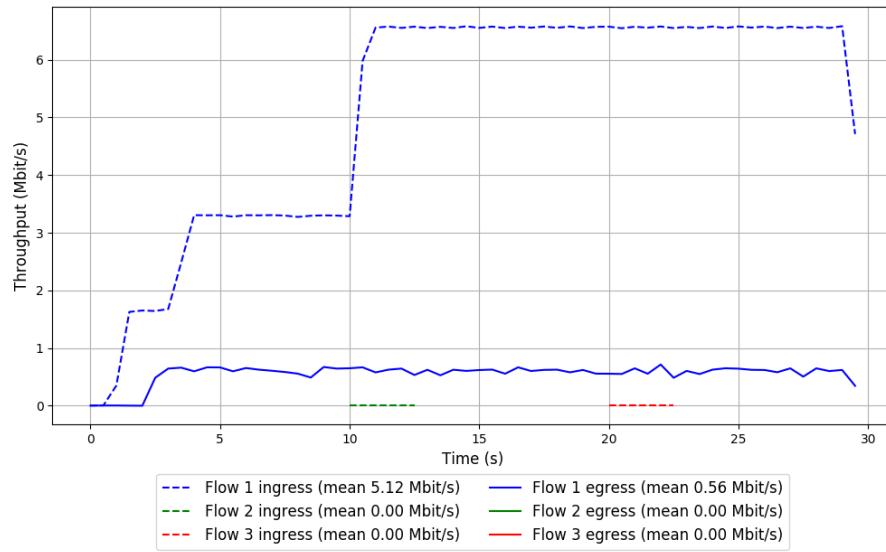


```
Run 2: Statistics of Vivace-loss
```

```
Start at: 2018-03-05 20:33:40
End at: 2018-03-05 20:34:10
Local clock offset: -6.529 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21044.715 ms
Loss rate: 89.18%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21044.715 ms
Loss rate: 89.18%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Vivace-loss — Data Link

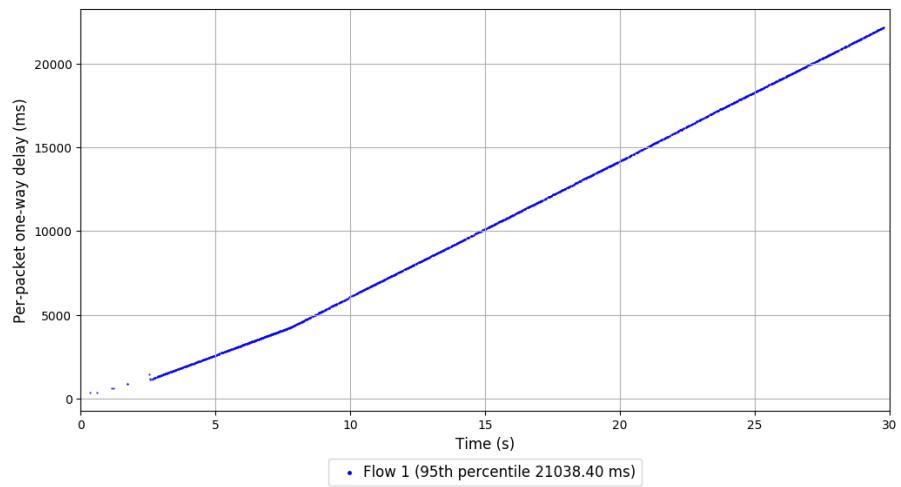
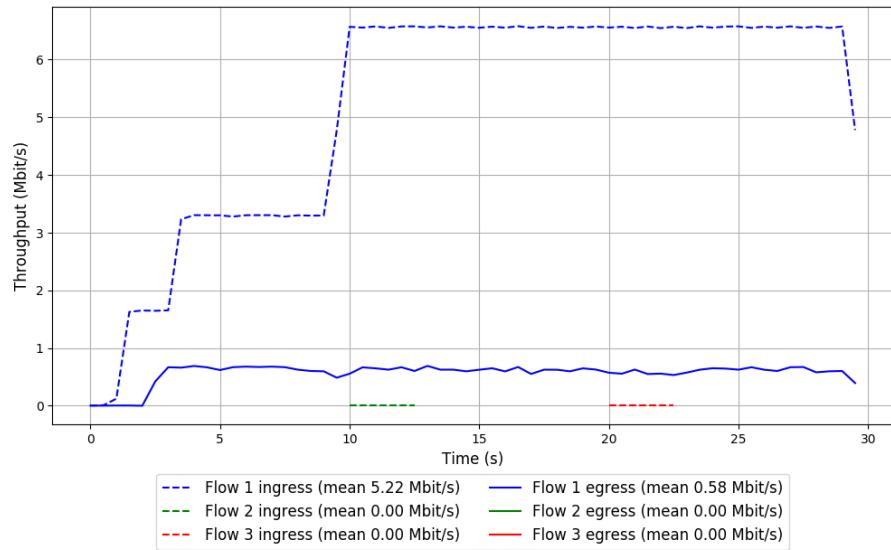


```
Run 3: Statistics of Vivace-loss
```

```
Start at: 2018-03-05 20:56:09
End at: 2018-03-05 20:56:39
Local clock offset: -5.873 ms
Remote clock offset: -4.794 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 21038.398 ms
Loss rate: 89.14%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 21038.398 ms
Loss rate: 89.14%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-loss — Data Link

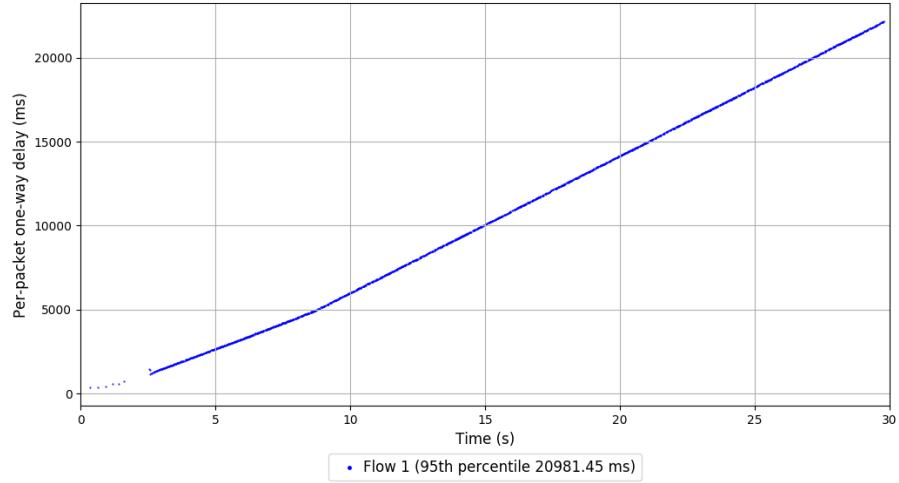
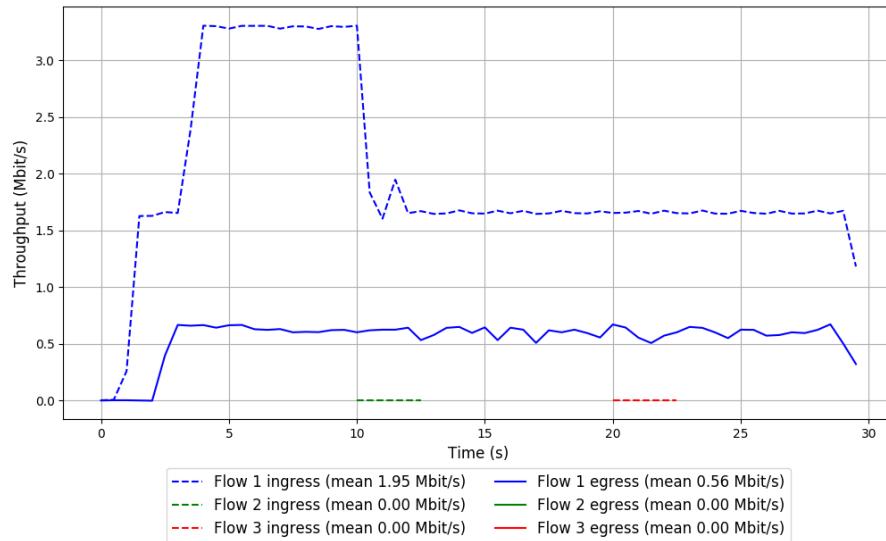


```
Run 1: Statistics of Vivace-LTE
```

```
Start at: 2018-03-05 20:04:49
End at: 2018-03-05 20:05:19
Local clock offset: -6.868 ms
Remote clock offset: -5.001 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20981.451 ms
Loss rate: 71.62%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20981.451 ms
Loss rate: 71.61%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 1: Report of Vivace-LTE — Data Link

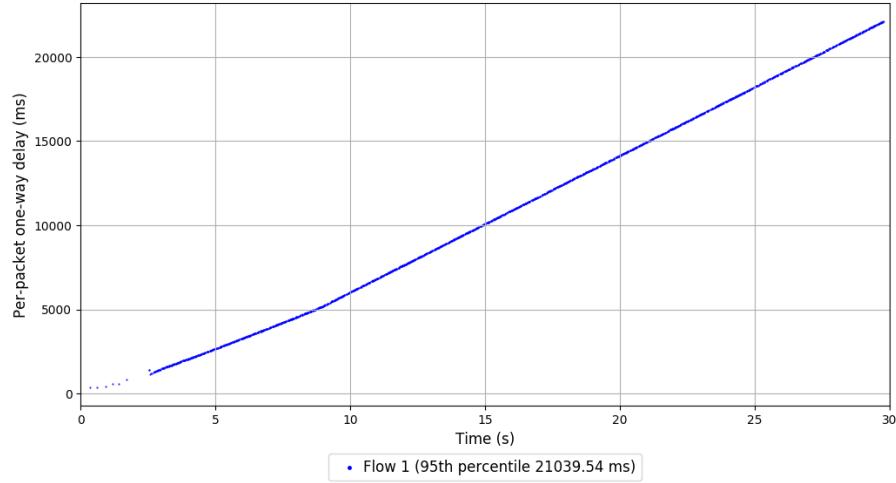
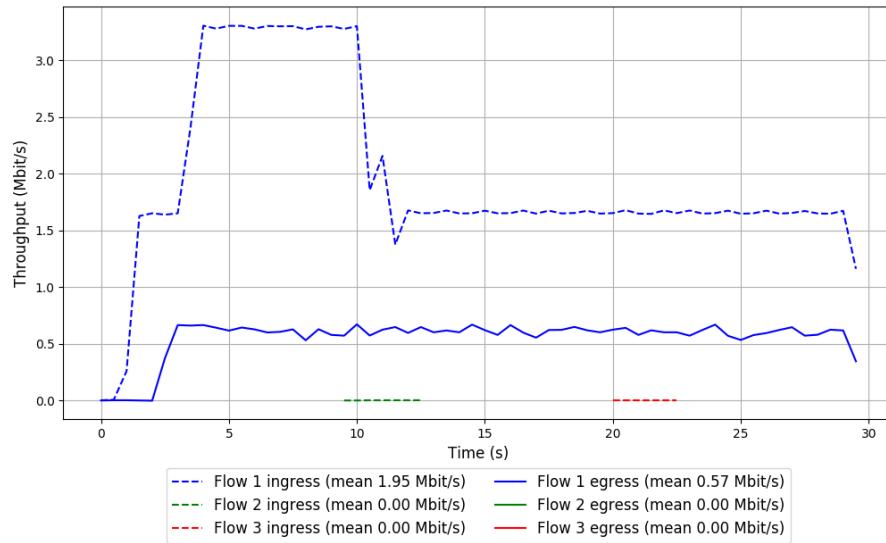


Run 2: Statistics of Vivace-LTE

```
Start at: 2018-03-05 20:27:16
End at: 2018-03-05 20:27:46
Local clock offset: -6.639 ms
Remote clock offset: -4.918 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21039.538 ms
Loss rate: 71.47%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21039.538 ms
Loss rate: 71.46%
-- 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: 2018-03-05 20:49:52
End at: 2018-03-05 20:50:22
Local clock offset: -5.946 ms
Remote clock offset: -4.754 ms

# Below is generated by plot.py at 2018-03-05 22:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21020.252 ms
Loss rate: 71.96%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21020.252 ms
Loss rate: 71.95%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 3: Report of Vivace-LTE — Data Link

