

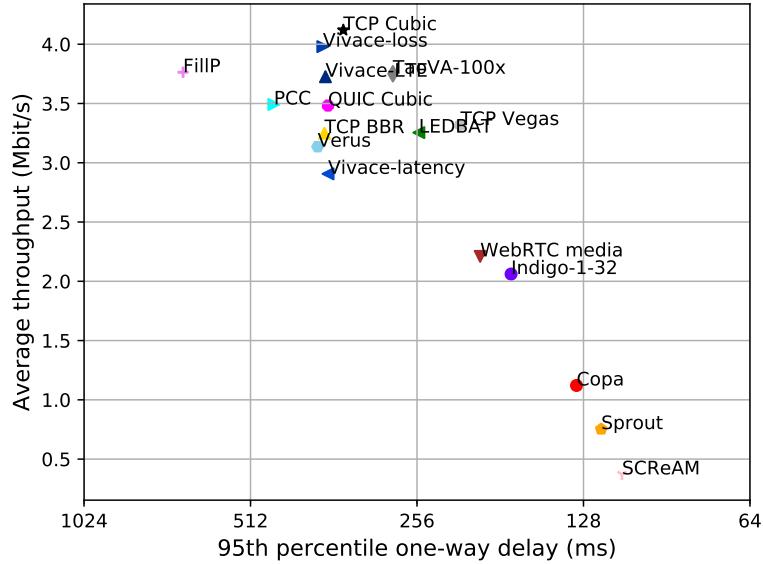
Pantheon Report

Generated at 2018-01-30 17:05:12 (UTC).
Data path: China ppp0 (*remote*) → AWS Korea 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 `ntp.nict.jp` and have been applied to correct the timestamps in logs.

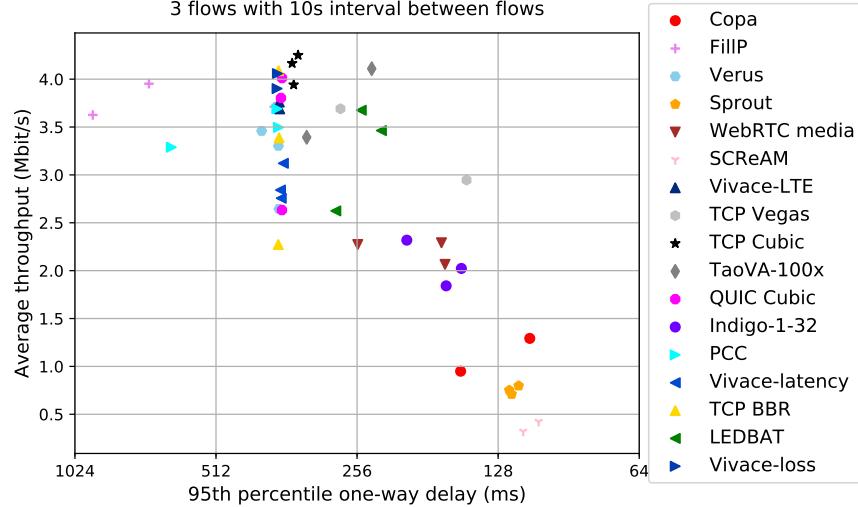
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
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 @ b3465b942e2826f2b179aab4a906ce6bb7cf3cf
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 China ppp0 to AWS Korea Ethernet, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



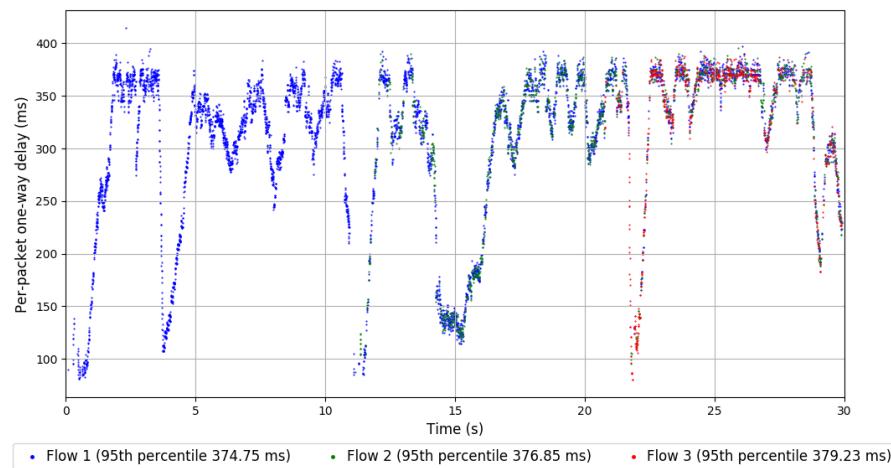
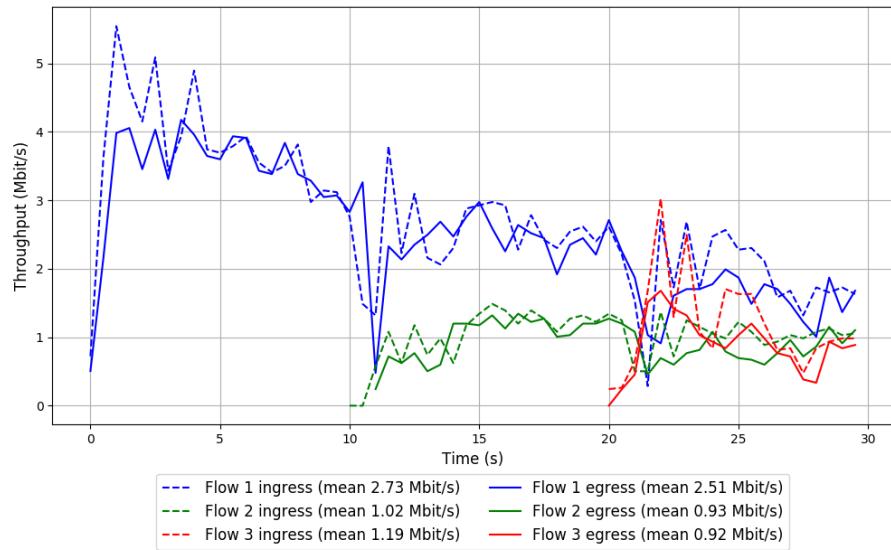
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	2.06	1.22	1.23	374.34	377.62	380.37	11.22	17.25	27.60
TCP Cubic	3	2.98	1.26	0.95	346.91	348.00	328.98	1.29	2.99	4.64
LEDBAT	3	2.46	0.82	0.76	250.09	261.86	263.78	0.55	1.10	4.82
PCC	3	1.79	1.88	1.46	373.96	498.81	778.12	21.99	34.44	73.15
QUIC Cubic	3	2.05	1.78	0.87	280.32	372.11	372.27	3.10	6.14	10.01
SCReAM	2	0.17	0.20	0.21	110.71	107.97	103.56	0.46	0.82	1.28
WebRTC media	3	1.36	0.60	0.27	194.67	198.91	190.97	0.48	1.27	2.71
Sprout	3	0.34	0.42	0.40	118.86	118.77	119.15	0.16	0.87	2.06
TaoVA-100x	2	2.12	1.85	1.23	263.32	273.55	338.10	1.60	1.97	19.60
TCP Vegas	2	1.64	1.84	1.40	214.73	227.69	174.07	1.36	2.88	1.36
Verus	3	2.78	0.47	0.16	379.19	403.71	382.55	49.88	59.40	62.31
Copa	2	0.57	0.53	0.63	136.07	127.97	130.57	1.31	2.67	3.77
FillP	3	2.03	1.81	1.71	378.85	805.43	789.24	24.00	47.69	55.84
Indigo-1-32	3	0.89	1.08	1.40	188.26	164.30	174.26	3.60	0.98	1.44
Vivace-latency	3	1.57	1.41	1.25	367.62	371.24	376.46	5.55	8.17	17.32
Vivace-loss	2	2.76	1.29	1.19	378.14	380.19	379.63	25.80	24.21	29.90
Vivace-LTE	2	2.21	1.62	1.38	372.69	376.91	377.08	7.70	14.59	18.12

Run 1: Statistics of TCP BBR

```
Start at: 2018-01-30 13:51:35
End at: 2018-01-30 13:52:05
Local clock offset: -0.107 ms
Remote clock offset: 16.158 ms

# Below is generated by plot.py at 2018-01-30 17:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 375.479 ms
Loss rate: 11.34%
-- Flow 1:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 374.749 ms
Loss rate: 8.66%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 376.849 ms
Loss rate: 13.74%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 379.226 ms
Loss rate: 25.81%
```

Run 1: Report of TCP BBR — Data Link

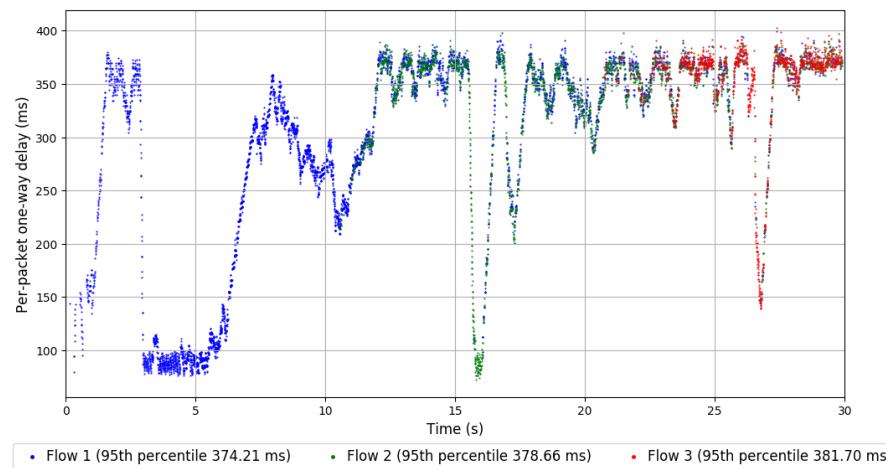
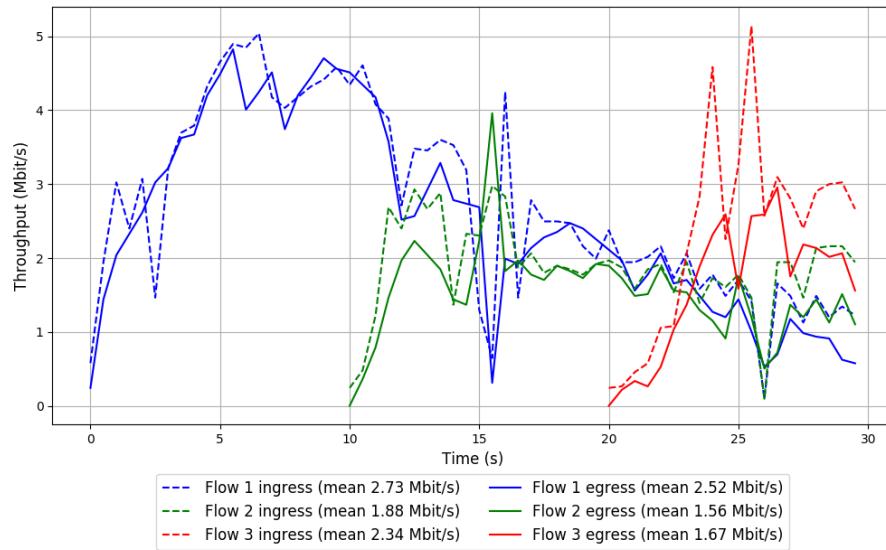


Run 2: Statistics of TCP BBR

```
Start at: 2018-01-30 14:23:25
End at: 2018-01-30 14:23:55
Local clock offset: 2.29 ms
Remote clock offset: 16.261 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 376.535 ms
Loss rate: 14.56%
-- Flow 1:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 374.215 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 378.664 ms
Loss rate: 18.34%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 381.701 ms
Loss rate: 30.97%
```

Run 2: Report of TCP BBR — Data Link

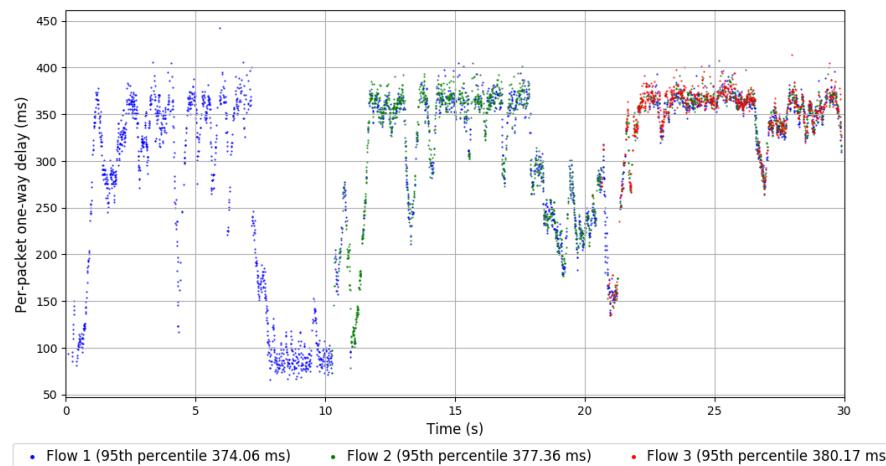
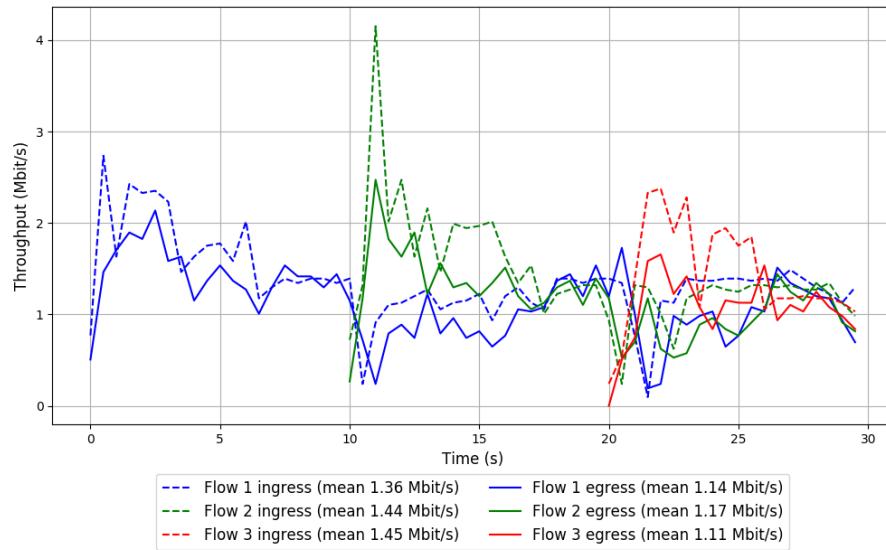


Run 3: Statistics of TCP BBR

```
Start at: 2018-01-30 14:54:50
End at: 2018-01-30 14:55:20
Local clock offset: 6.583 ms
Remote clock offset: -3.646 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 376.973 ms
Loss rate: 19.37%
-- Flow 1:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 374.059 ms
Loss rate: 16.83%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 377.355 ms
Loss rate: 19.67%
-- Flow 3:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 380.171 ms
Loss rate: 26.02%
```

Run 3: Report of TCP BBR — Data Link

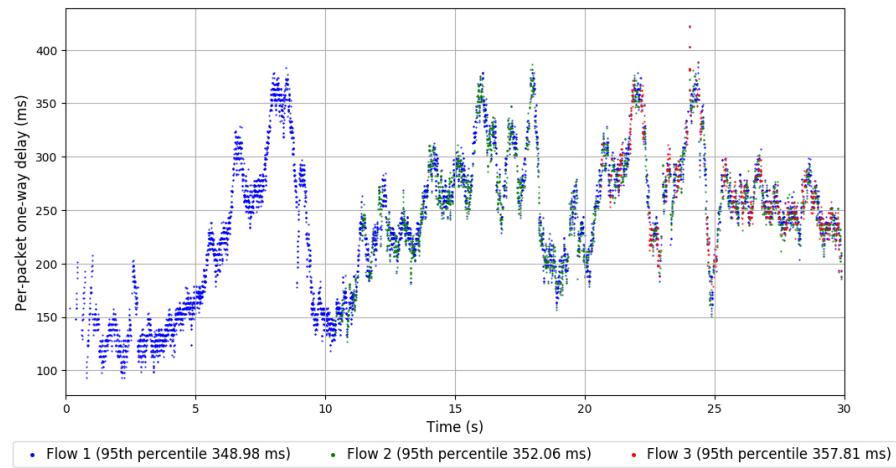
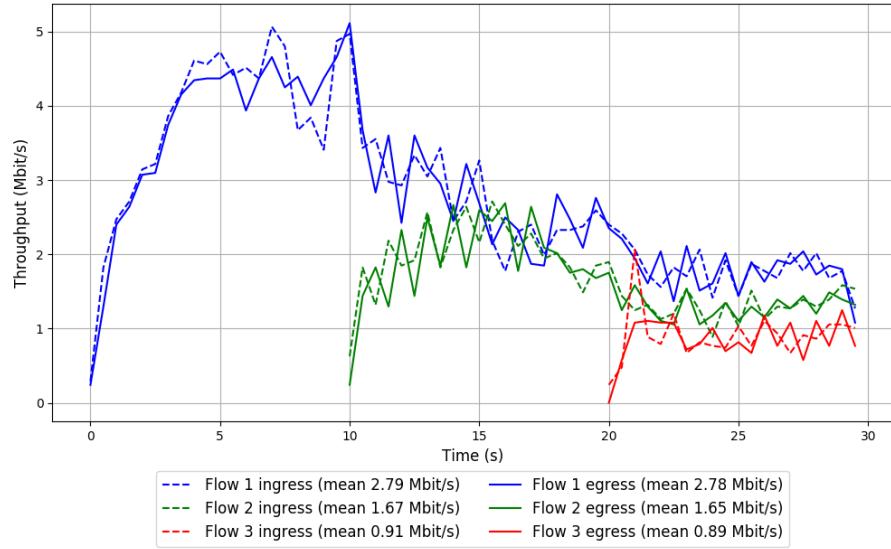


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-01-30 13:56:43
End at: 2018-01-30 13:57:13
Local clock offset: 0.111 ms
Remote clock offset: 16.957 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 352.206 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 348.980 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 352.062 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 357.808 ms
Loss rate: 5.31%
```

Run 1: Report of TCP Cubic — Data Link

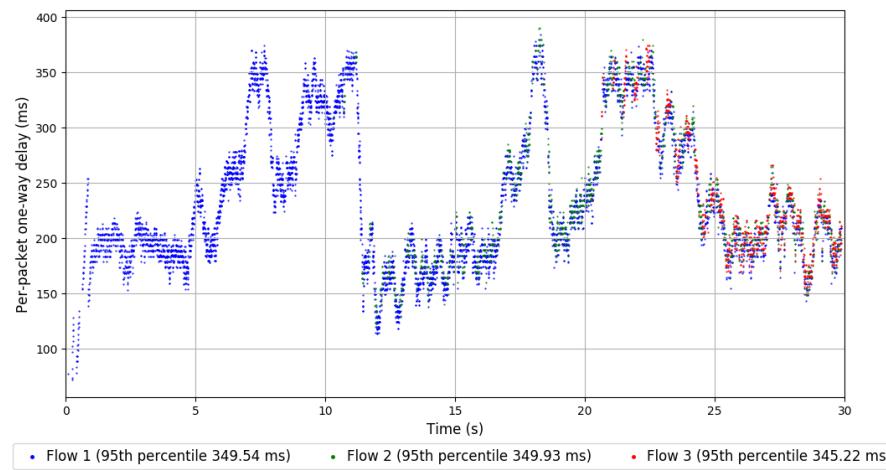
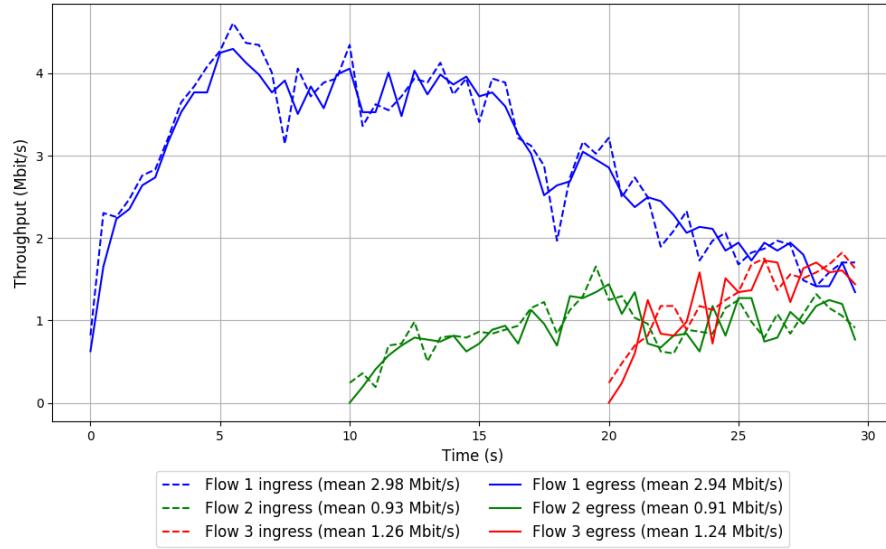


Run 2: Statistics of TCP Cubic

```
Start at: 2018-01-30 14:28:38
End at: 2018-01-30 14:29:08
Local clock offset: -0.331 ms
Remote clock offset: 16.626 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 349.553 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 349.536 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 349.931 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 345.220 ms
Loss rate: 4.33%
```

Run 2: Report of TCP Cubic — Data Link

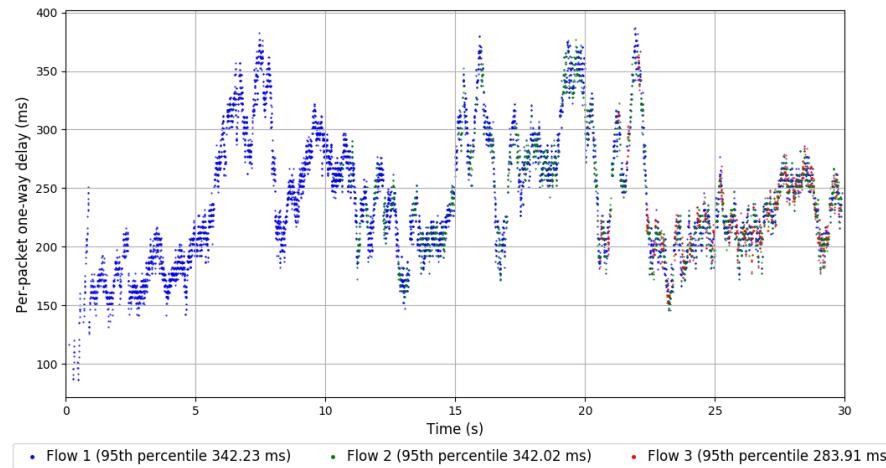
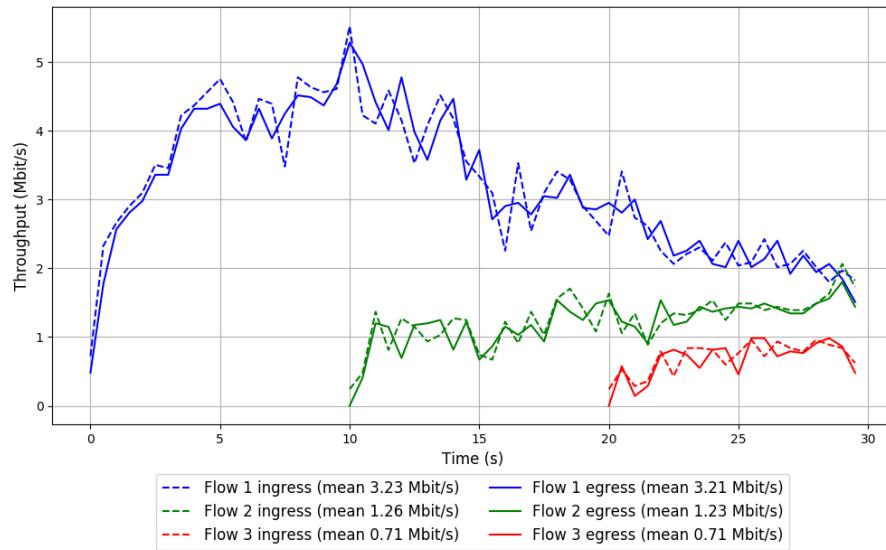


Run 3: Statistics of TCP Cubic

```
Start at: 2018-01-30 14:59:45
End at: 2018-01-30 15:00:15
Local clock offset: 9.776 ms
Remote clock offset: -4.924 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 342.070 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 342.228 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 342.019 ms
Loss rate: 3.36%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 283.913 ms
Loss rate: 4.27%
```

Run 3: Report of TCP Cubic — Data Link

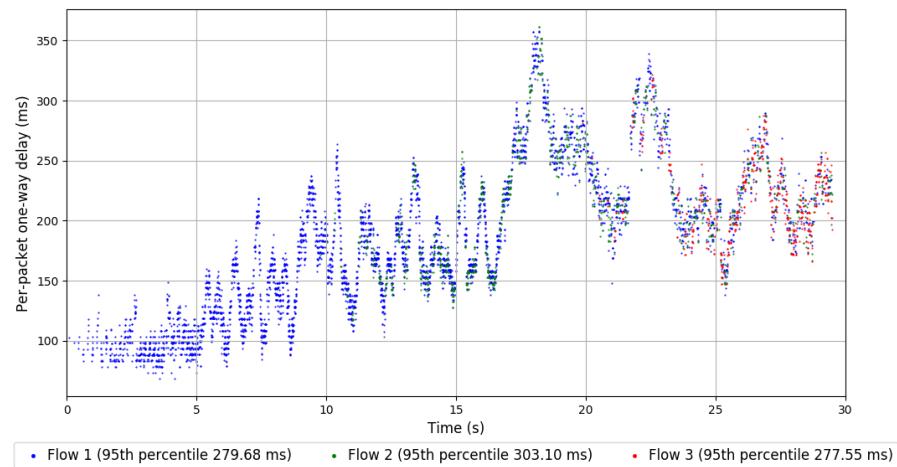
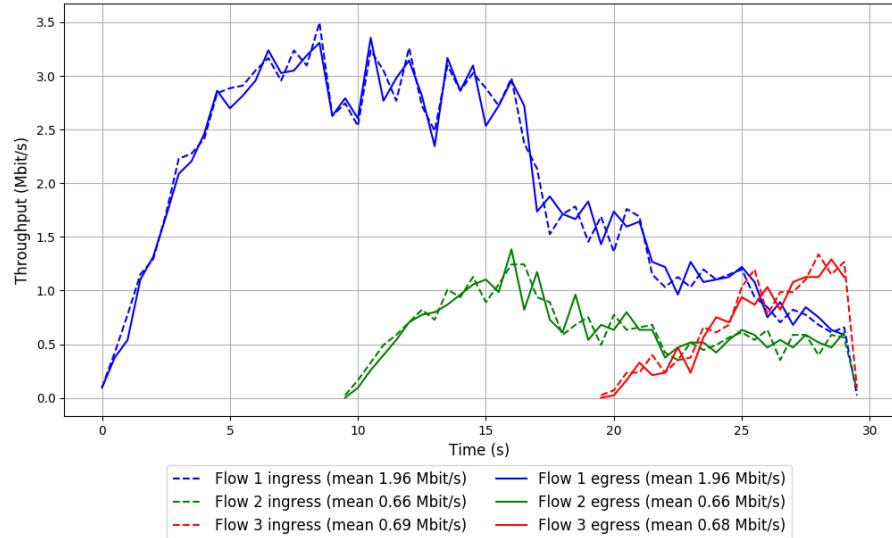


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-01-30 13:37:24
End at: 2018-01-30 13:37:54
Local clock offset: -2.962 ms
Remote clock offset: 14.083 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 284.191 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 279.677 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 303.095 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 277.545 ms
Loss rate: 5.10%
```

Run 1: Report of LEDBAT — Data Link

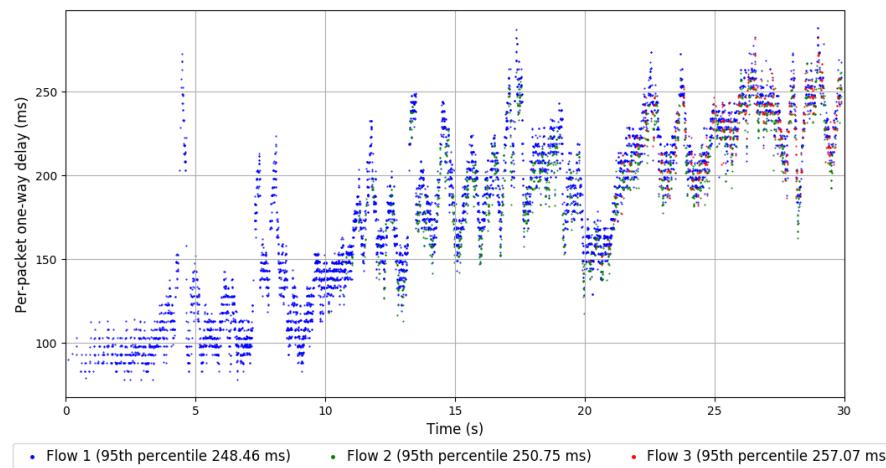
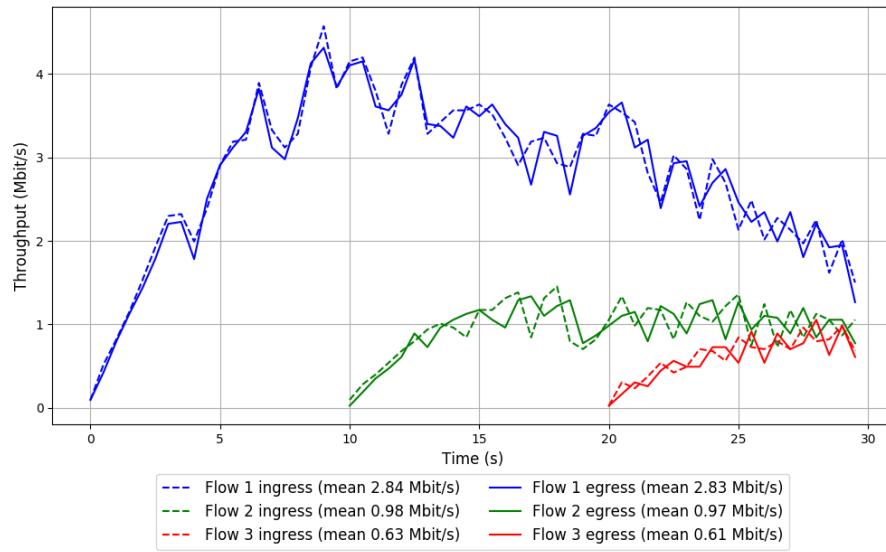


Run 2: Statistics of LEDBAT

```
Start at: 2018-01-30 14:10:01
End at: 2018-01-30 14:10:31
Local clock offset: 0.569 ms
Remote clock offset: 15.689 ms

# Below is generated by plot.py at 2018-01-30 17:04:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 250.813 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 248.459 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 250.749 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 257.067 ms
Loss rate: 4.17%
```

Run 2: Report of LEDBAT — Data Link

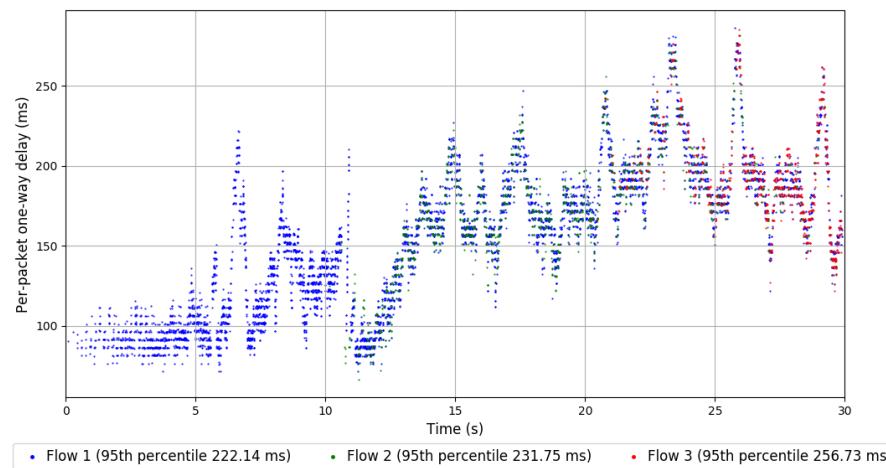
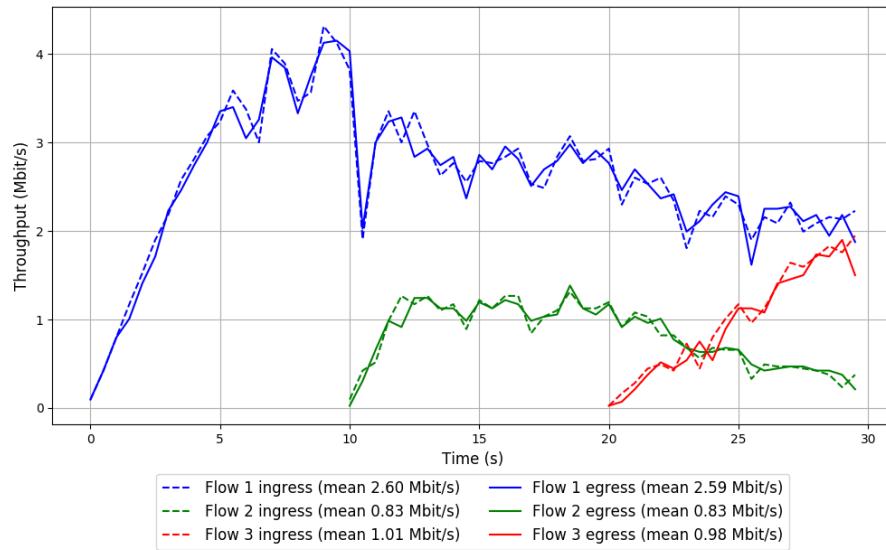


Run 3: Statistics of LEDBAT

```
Start at: 2018-01-30 14:41:33
End at: 2018-01-30 14:42:03
Local clock offset: 4.734 ms
Remote clock offset: 2.682 ms

# Below is generated by plot.py at 2018-01-30 17:04:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 227.197 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 222.137 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 231.749 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 256.731 ms
Loss rate: 5.18%
```

Run 3: Report of LEDBAT — Data Link

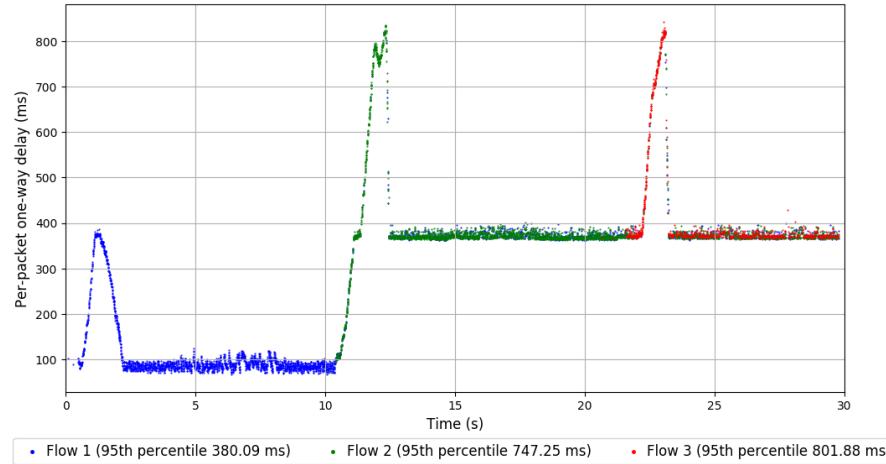
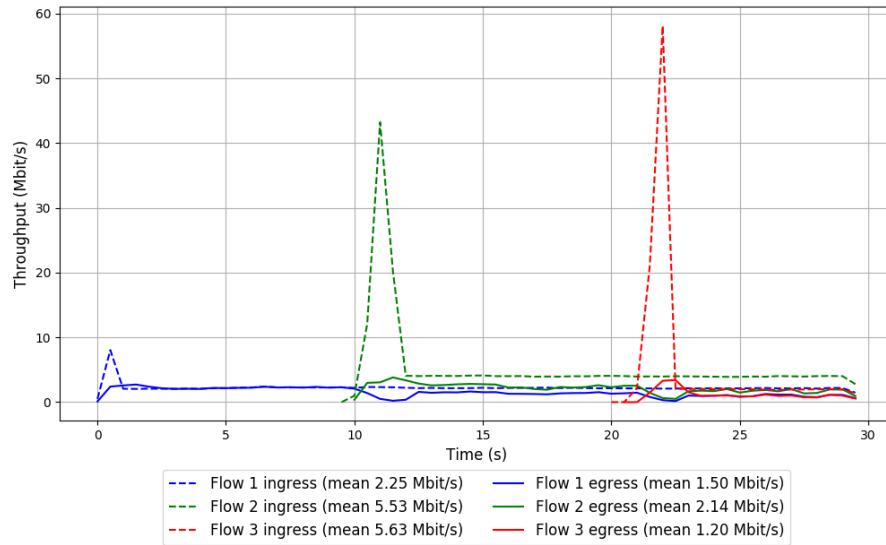


Run 1: Statistics of PCC

```
Start at: 2018-01-30 14:01:36
End at: 2018-01-30 14:02:06
Local clock offset: 0.37 ms
Remote clock offset: 16.137 ms

# Below is generated by plot.py at 2018-01-30 17:04:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 637.704 ms
Loss rate: 57.97%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 380.094 ms
Loss rate: 33.80%
-- Flow 2:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 747.251 ms
Loss rate: 61.53%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 801.876 ms
Loss rate: 80.24%
```

Run 1: Report of PCC — Data Link

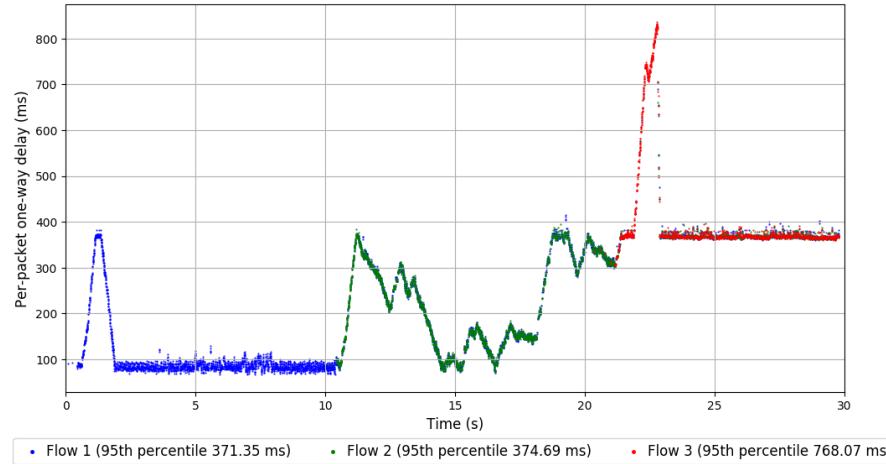
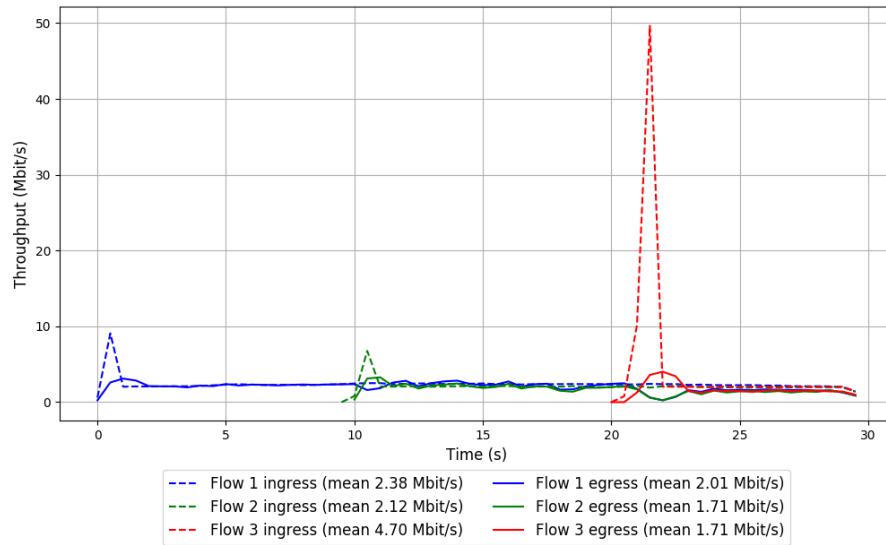


Run 2: Statistics of PCC

```
Start at: 2018-01-30 14:33:22
End at: 2018-01-30 14:33:52
Local clock offset: 2.306 ms
Remote clock offset: 11.941 ms

# Below is generated by plot.py at 2018-01-30 17:04:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 379.589 ms
Loss rate: 31.19%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 371.351 ms
Loss rate: 15.78%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 374.695 ms
Loss rate: 19.91%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 768.069 ms
Loss rate: 65.06%
```

Run 2: Report of PCC — Data Link

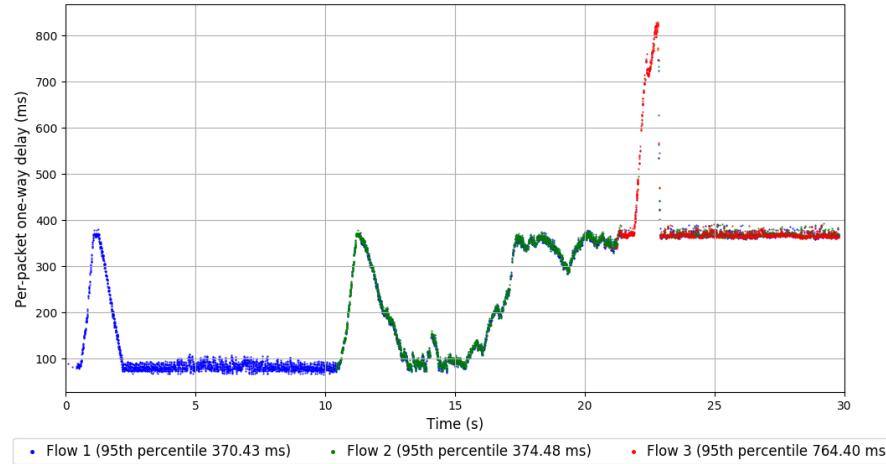
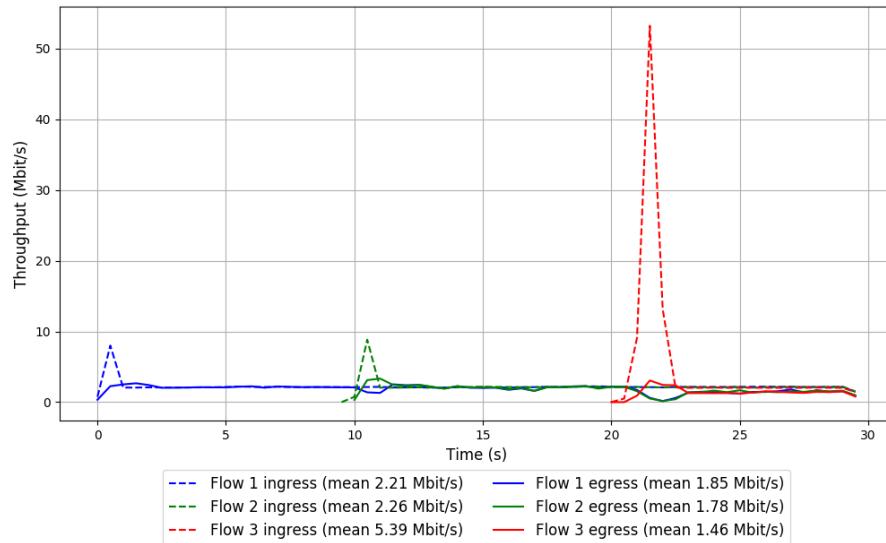


Run 3: Statistics of PCC

```
Start at: 2018-01-30 15:04:35
End at: 2018-01-30 15:05:05
Local clock offset: 8.004 ms
Remote clock offset: -6.005 ms

# Below is generated by plot.py at 2018-01-30 17:04:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 376.538 ms
Loss rate: 36.58%
-- Flow 1:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 370.428 ms
Loss rate: 16.40%
-- Flow 2:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 374.484 ms
Loss rate: 21.89%
-- Flow 3:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 764.402 ms
Loss rate: 74.14%
```

Run 3: Report of PCC — Data Link

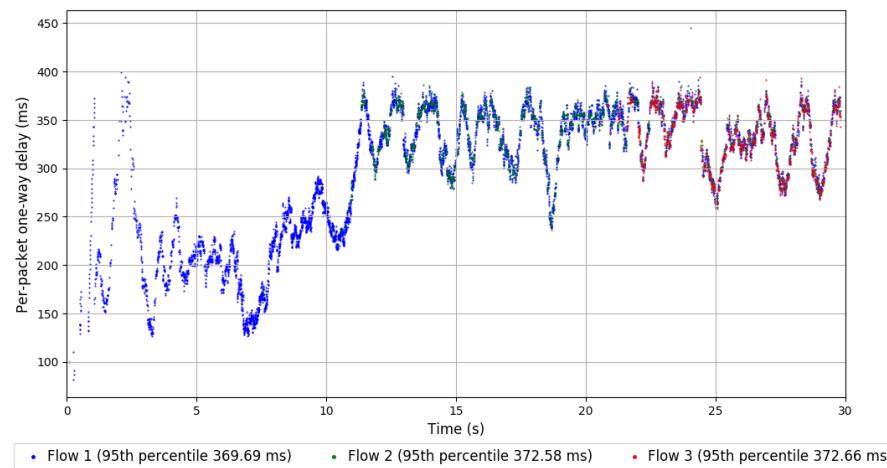
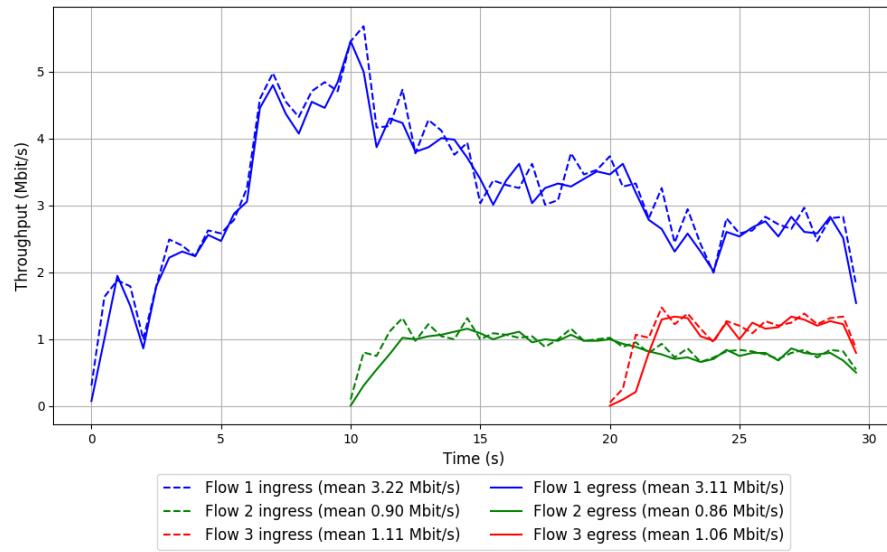


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2018-01-30 14:03:18
End at: 2018-01-30 14:03:48
Local clock offset: -0.065 ms
Remote clock offset: 15.862 ms

# Below is generated by plot.py at 2018-01-30 17:04:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 370.178 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 369.688 ms
Loss rate: 3.91%
-- Flow 2:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 372.581 ms
Loss rate: 6.25%
-- Flow 3:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 372.661 ms
Loss rate: 8.97%
```

Run 1: Report of QUIC Cubic — Data Link

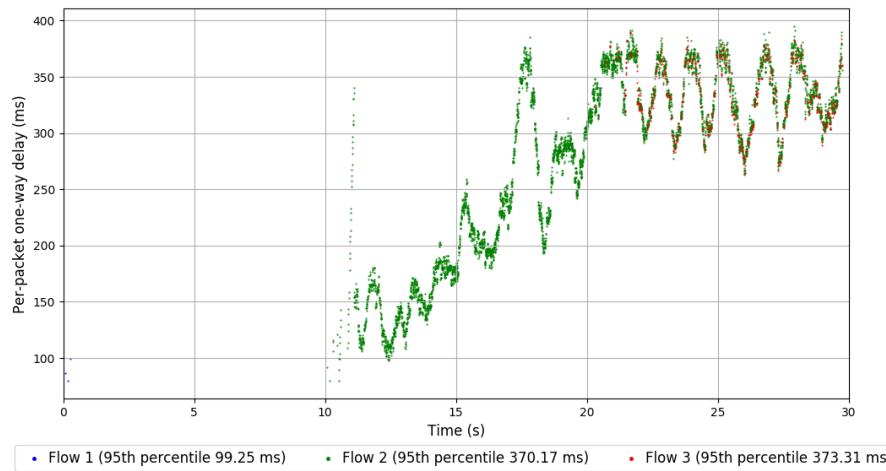
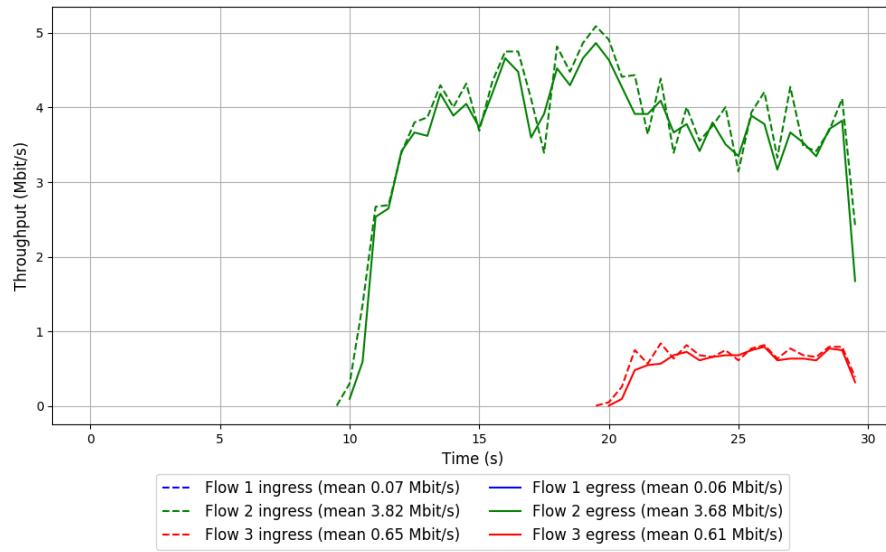


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-01-30 14:34:57
End at: 2018-01-30 14:35:27
Local clock offset: 3.2 ms
Remote clock offset: 9.833 ms

# Below is generated by plot.py at 2018-01-30 17:04:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 370.272 ms
Loss rate: 5.04%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 99.252 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 370.169 ms
Loss rate: 4.60%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 373.308 ms
Loss rate: 10.20%
```

Run 2: Report of QUIC Cubic — Data Link

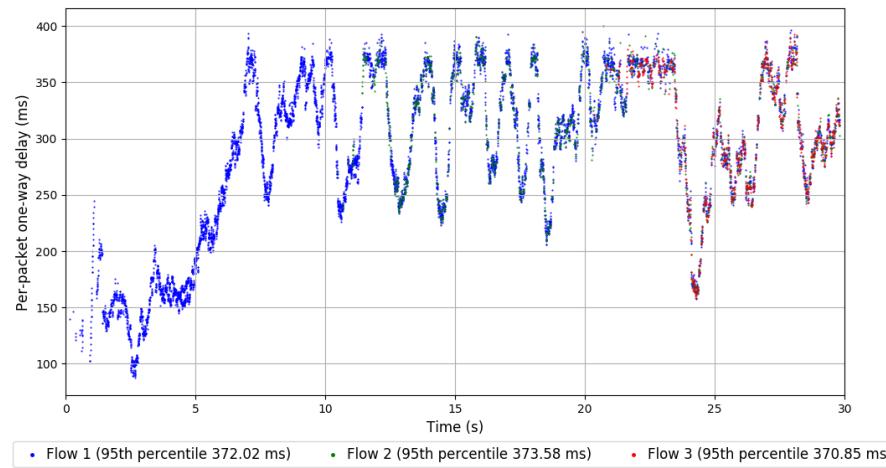
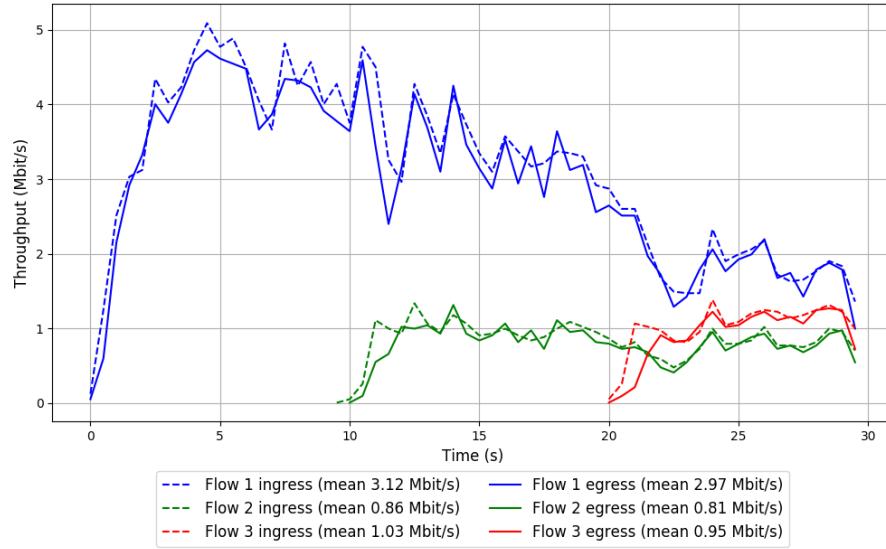


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-01-30 15:06:12
End at: 2018-01-30 15:06:42
Local clock offset: 11.265 ms
Remote clock offset: -5.261 ms

# Below is generated by plot.py at 2018-01-30 17:04:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 372.100 ms
Loss rate: 6.16%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 372.024 ms
Loss rate: 5.39%
-- Flow 2:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 373.580 ms
Loss rate: 7.58%
-- Flow 3:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 370.854 ms
Loss rate: 10.86%
```

Run 3: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

/home/ubuntu/pantheon_data/2018-01-30T13-32-China-ppp0-to-AWS-Korea-3-runs-3-flows/scream_st

Run 1: Report of SCReAM — Data Link

Figure is missing

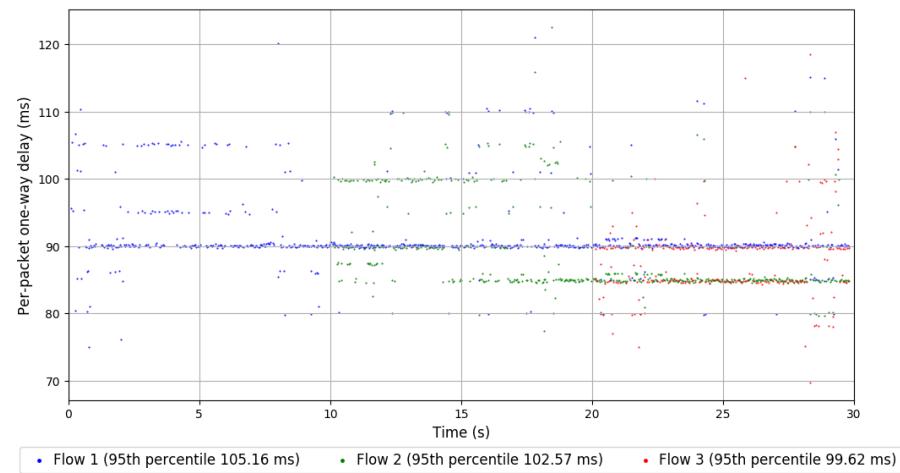
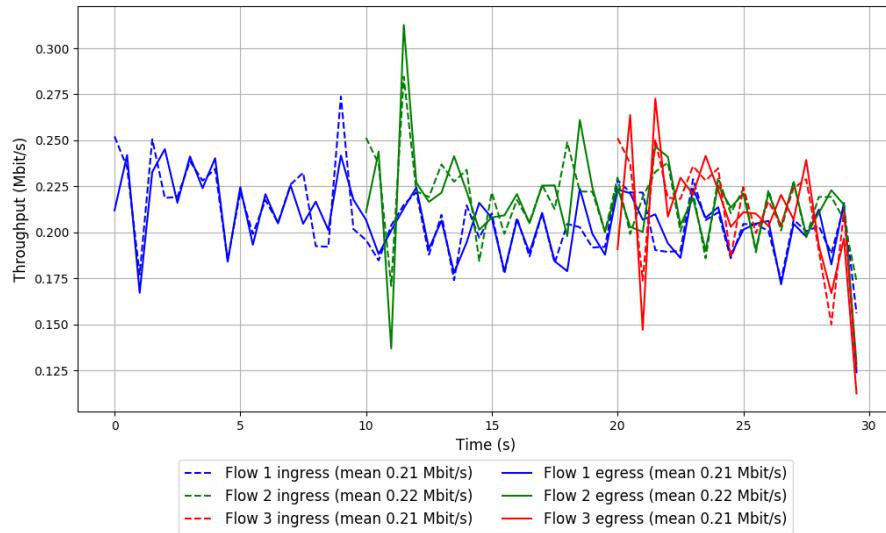
Figure is missing

Run 2: Statistics of SCReAM

```
Start at: 2018-01-30 14:13:21
End at: 2018-01-30 14:13:51
Local clock offset: 1.579 ms
Remote clock offset: 15.751 ms

# Below is generated by plot.py at 2018-01-30 17:04:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 104.896 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 105.162 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 102.573 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 99.617 ms
Loss rate: 1.18%
```

Run 2: Report of SCReAM — Data Link

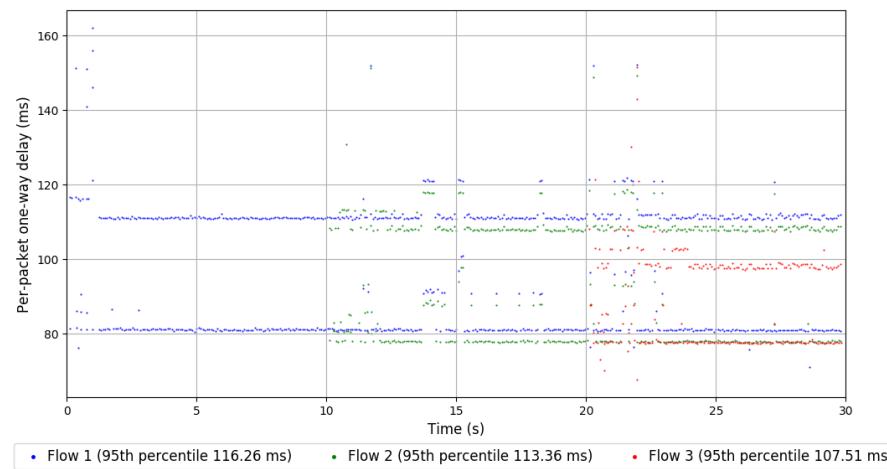
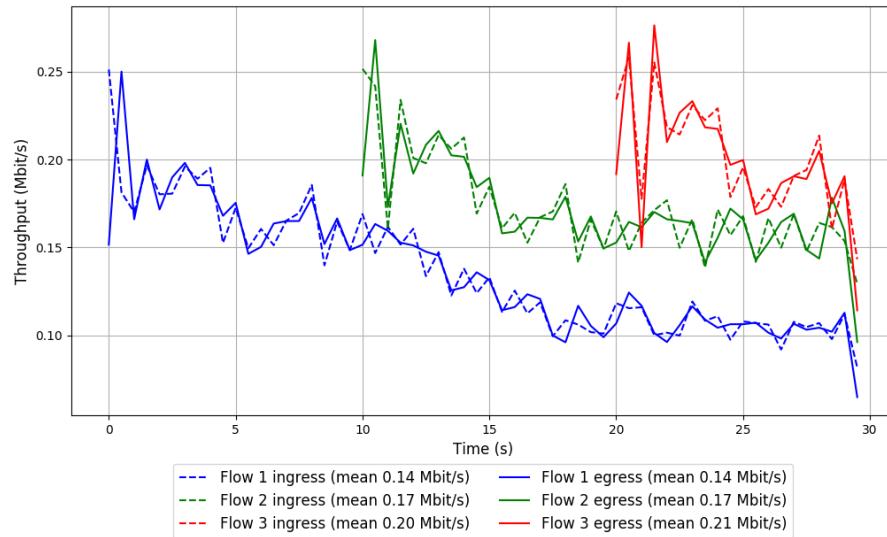


Run 3: Statistics of SCReAM

```
Start at: 2018-01-30 14:44:54
End at: 2018-01-30 14:45:24
Local clock offset: 6.781 ms
Remote clock offset: 0.512 ms

# Below is generated by plot.py at 2018-01-30 17:04:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 113.202 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 116.261 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 113.365 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 107.512 ms
Loss rate: 1.39%
```

Run 3: Report of SCReAM — Data Link

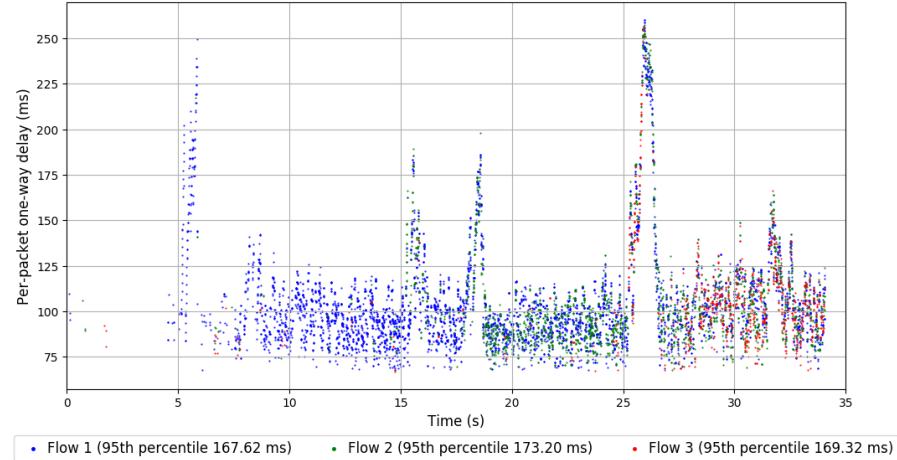
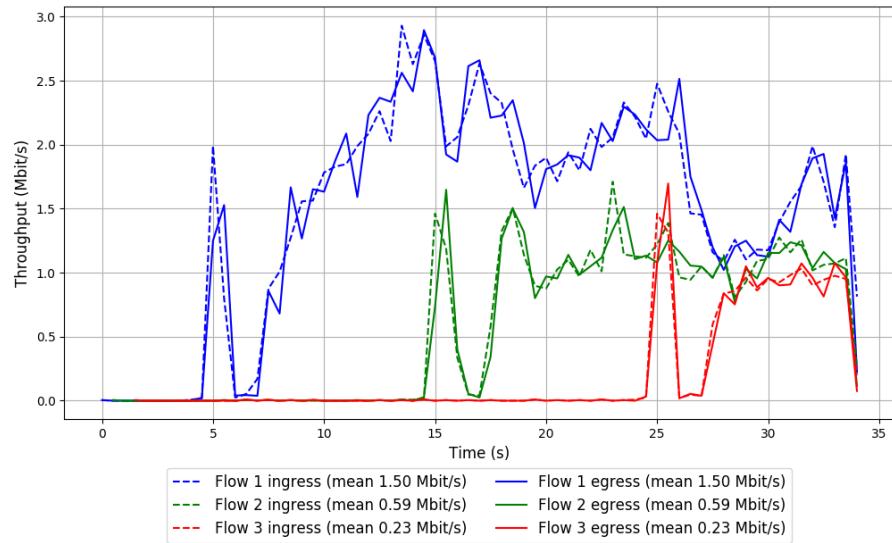


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-30 13:33:53
End at: 2018-01-30 13:34:23
Local clock offset: -3.341 ms
Remote clock offset: 13.6 ms

# Below is generated by plot.py at 2018-01-30 17:04:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 169.105 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 167.618 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 173.198 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 169.319 ms
Loss rate: 1.86%
```

Run 1: Report of WebRTC media — Data Link

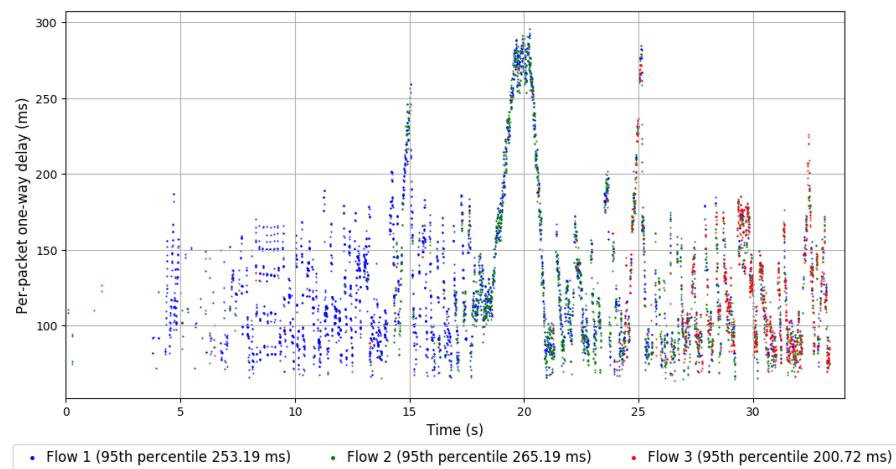
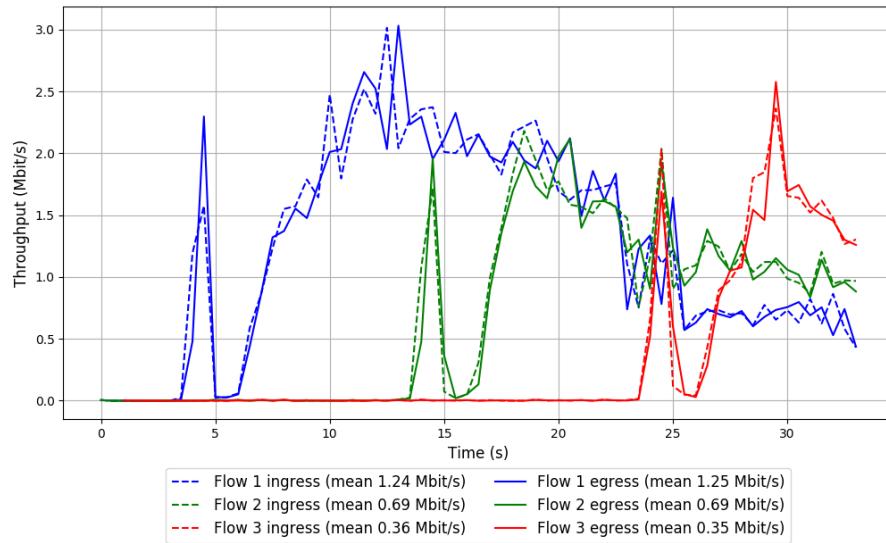


Run 2: Statistics of WebRTC media

```
Start at: 2018-01-30 14:06:39
End at: 2018-01-30 14:07:09
Local clock offset: -1.987 ms
Remote clock offset: 15.754 ms

# Below is generated by plot.py at 2018-01-30 17:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 255.140 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 253.194 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 265.195 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 200.721 ms
Loss rate: 2.50%
```

Run 2: Report of WebRTC media — Data Link

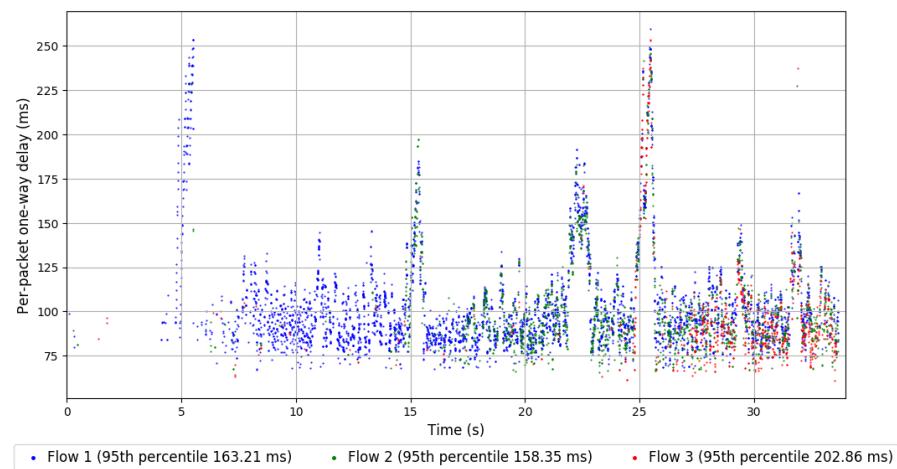
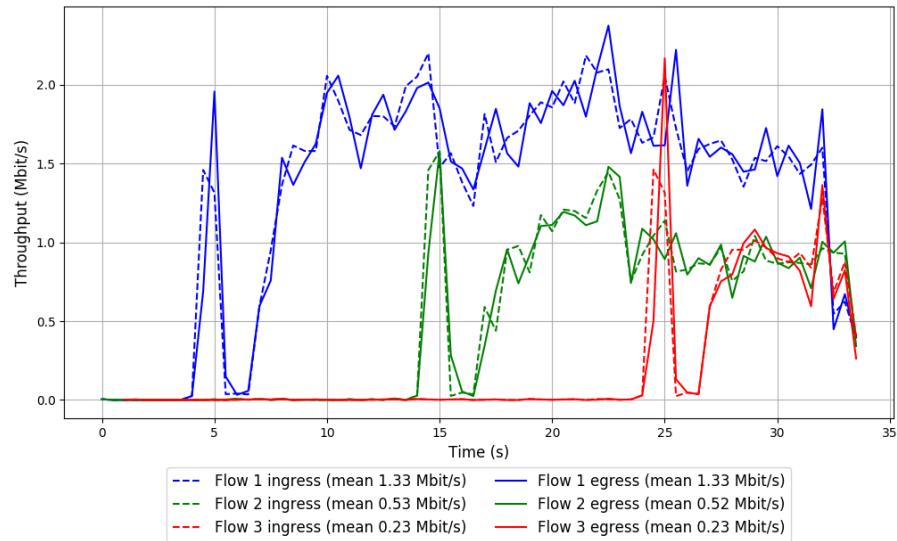


Run 3: Statistics of WebRTC media

```
Start at: 2018-01-30 14:38:13
End at: 2018-01-30 14:38:43
Local clock offset: 3.458 ms
Remote clock offset: 5.569 ms

# Below is generated by plot.py at 2018-01-30 17:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 166.174 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 163.206 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 158.348 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 202.864 ms
Loss rate: 3.78%
```

Run 3: Report of WebRTC media — Data Link

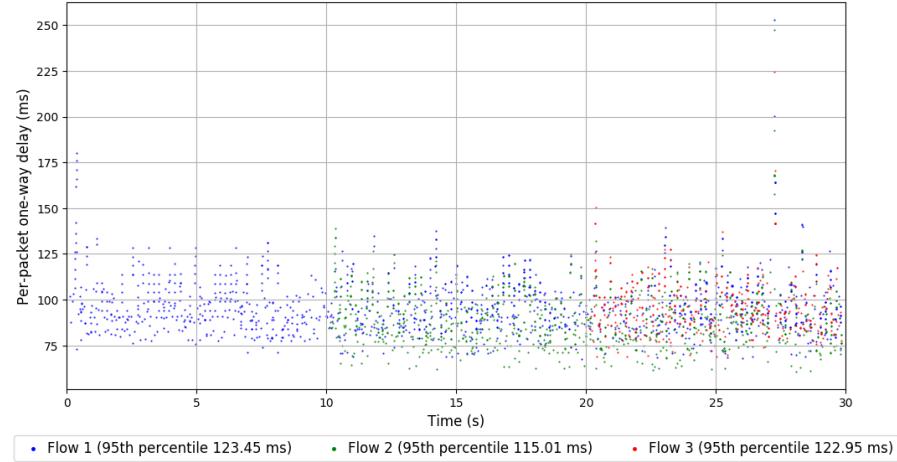
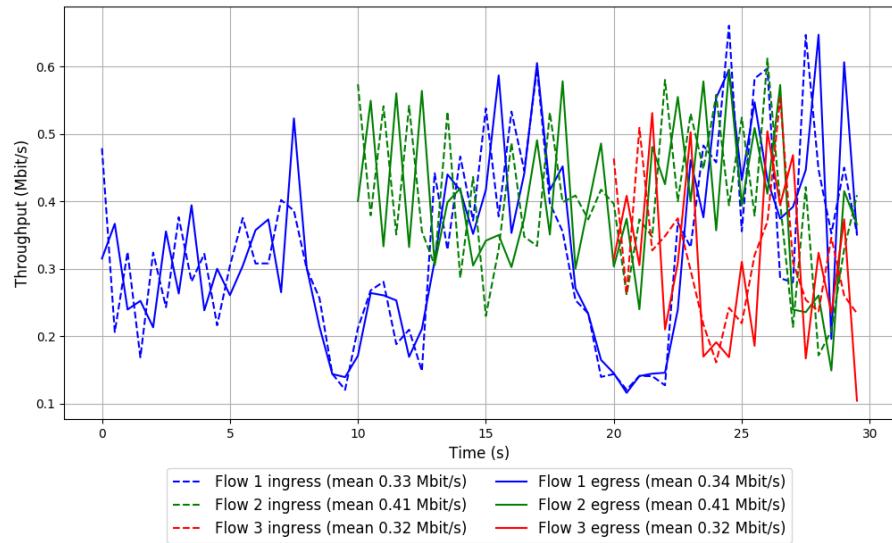


Run 1: Statistics of Sprout

```
Start at: 2018-01-30 13:58:24
End at: 2018-01-30 13:58:54
Local clock offset: 0.495 ms
Remote clock offset: 16.659 ms

# Below is generated by plot.py at 2018-01-30 17:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 119.803 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 123.449 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 115.014 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 122.955 ms
Loss rate: 2.08%
```

Run 1: Report of Sprout — Data Link

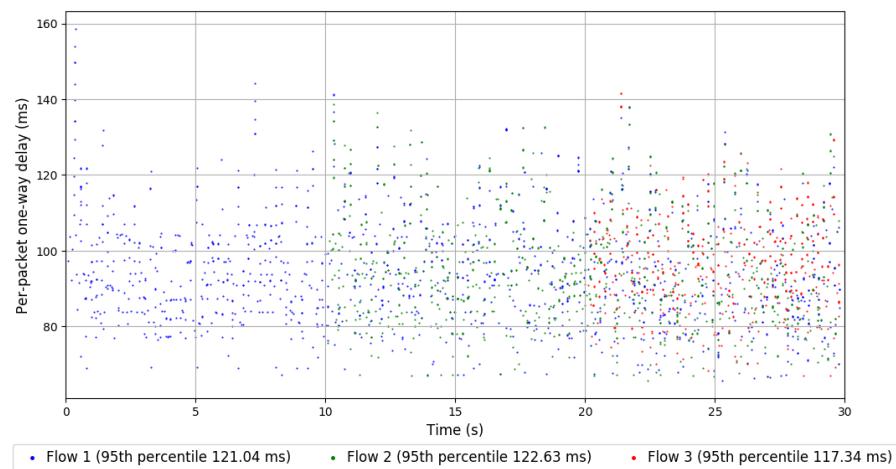
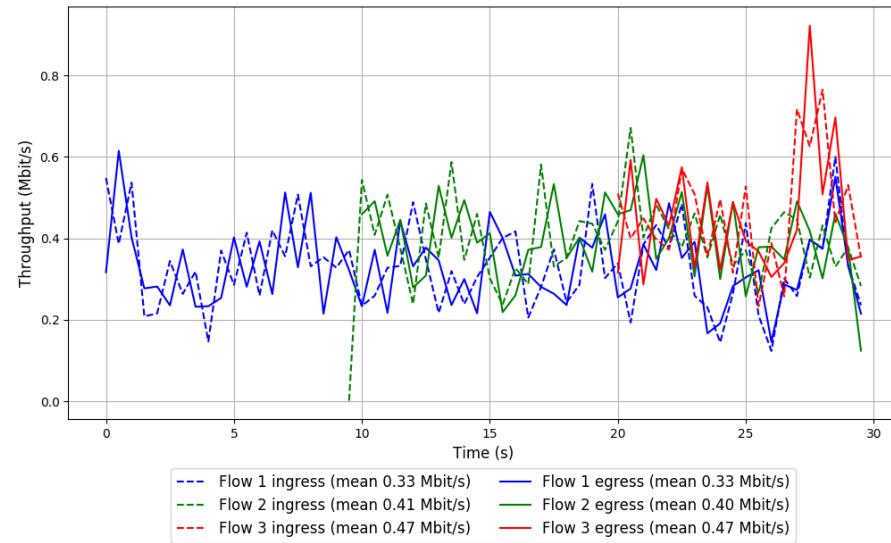


Run 2: Statistics of Sprout

```
Start at: 2018-01-30 14:30:14
End at: 2018-01-30 14:30:44
Local clock offset: 2.112 ms
Remote clock offset: 16.765 ms

# Below is generated by plot.py at 2018-01-30 17:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 121.184 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 121.041 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 122.629 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 117.338 ms
Loss rate: 2.01%
```

Run 2: Report of Sprout — Data Link

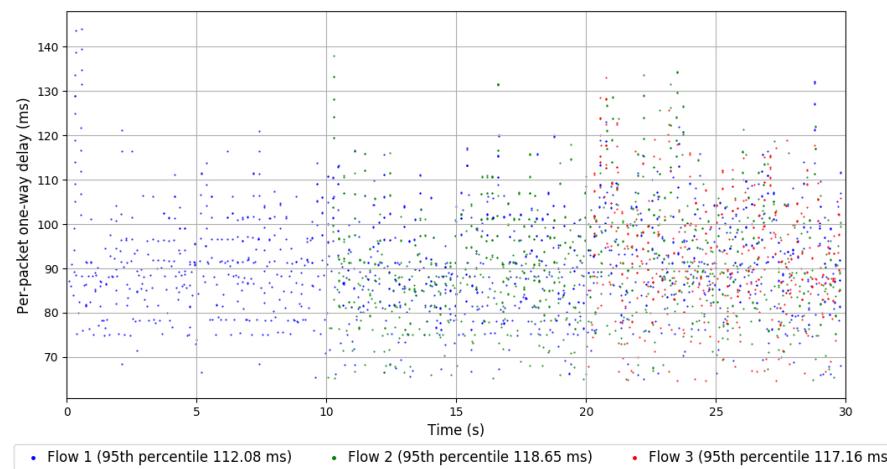
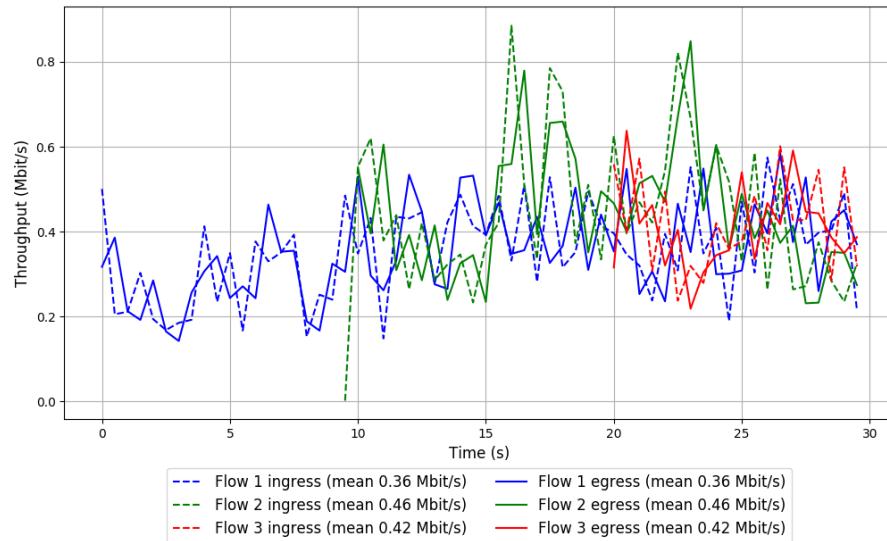


Run 3: Statistics of Sprout

```
Start at: 2018-01-30 15:01:24
End at: 2018-01-30 15:01:54
Local clock offset: 7.439 ms
Remote clock offset: -5.246 ms

# Below is generated by plot.py at 2018-01-30 17:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 115.736 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.079 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 118.653 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 117.157 ms
Loss rate: 2.09%
```

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

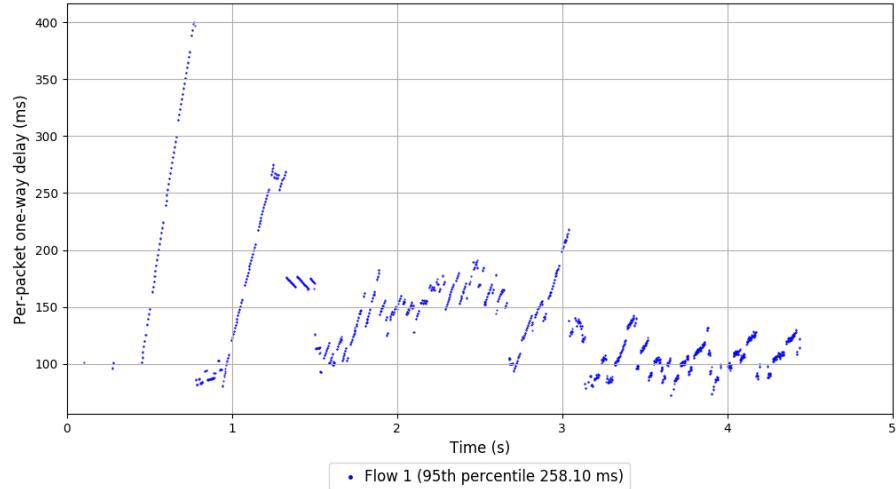
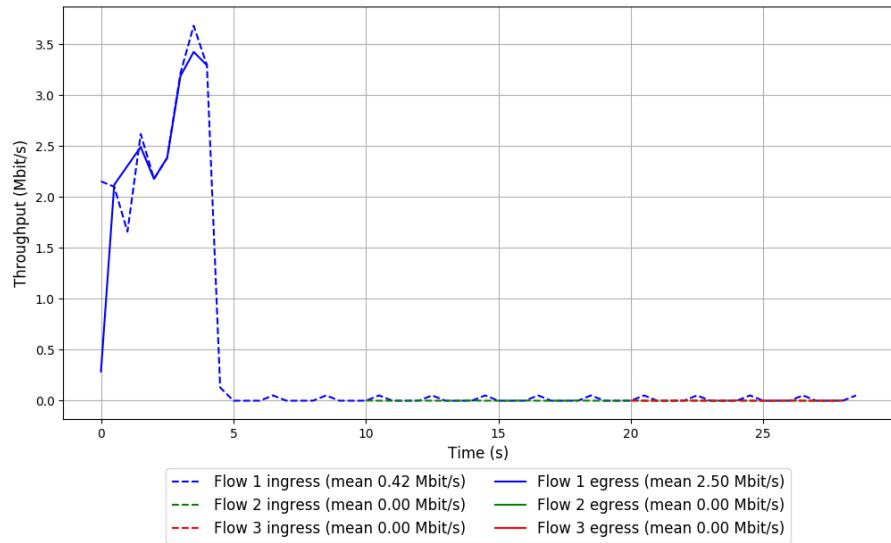
Start at: 2018-01-30 13:42:27

End at: 2018-01-30 13:42:57

Local clock offset: -1.237 ms

Remote clock offset: 14.927 ms

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

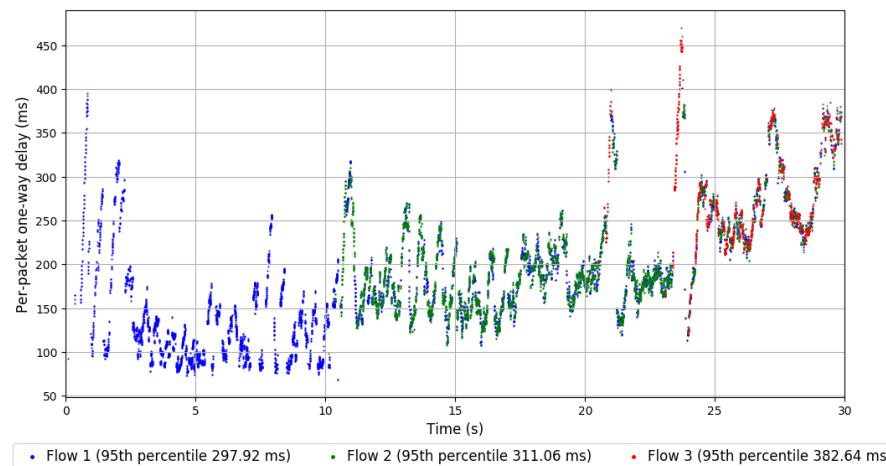
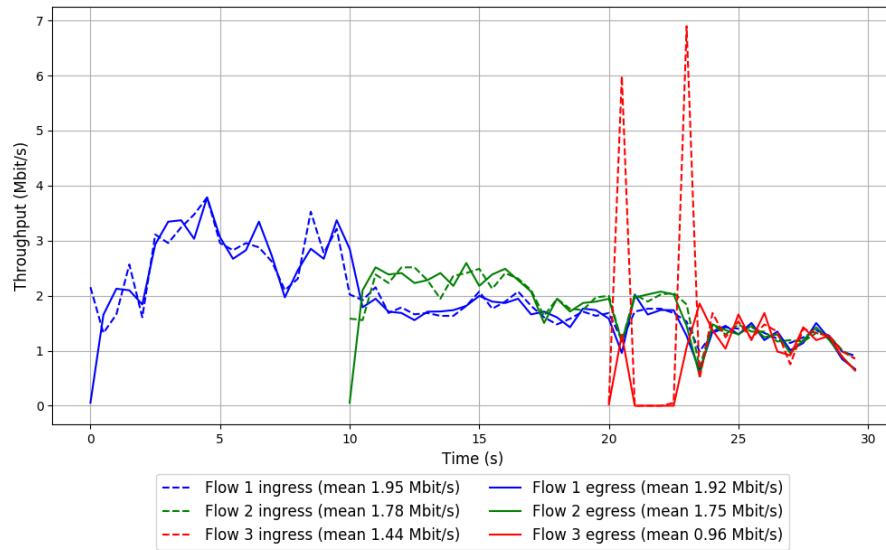


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-01-30 14:14:55
End at: 2018-01-30 14:15:25
Local clock offset: 1.259 ms
Remote clock offset: 15.814 ms

# Below is generated by plot.py at 2018-01-30 17:04:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 327.923 ms
Loss rate: 6.65%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 297.917 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 311.063 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 382.636 ms
Loss rate: 35.24%
```

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

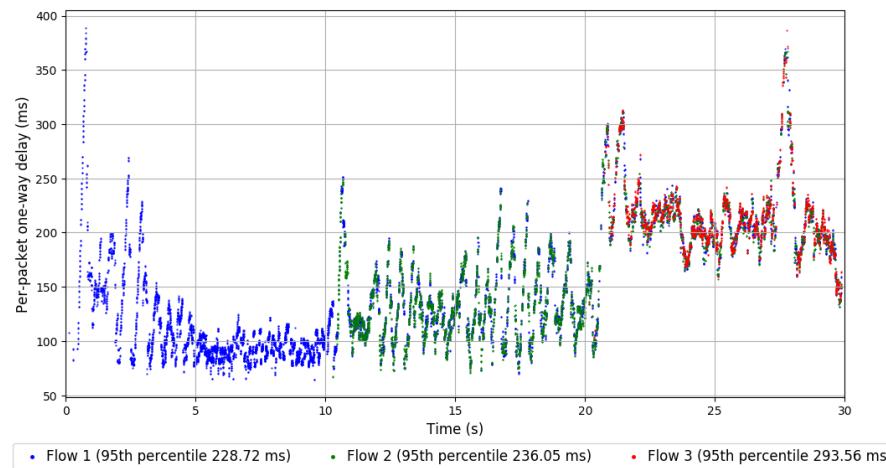
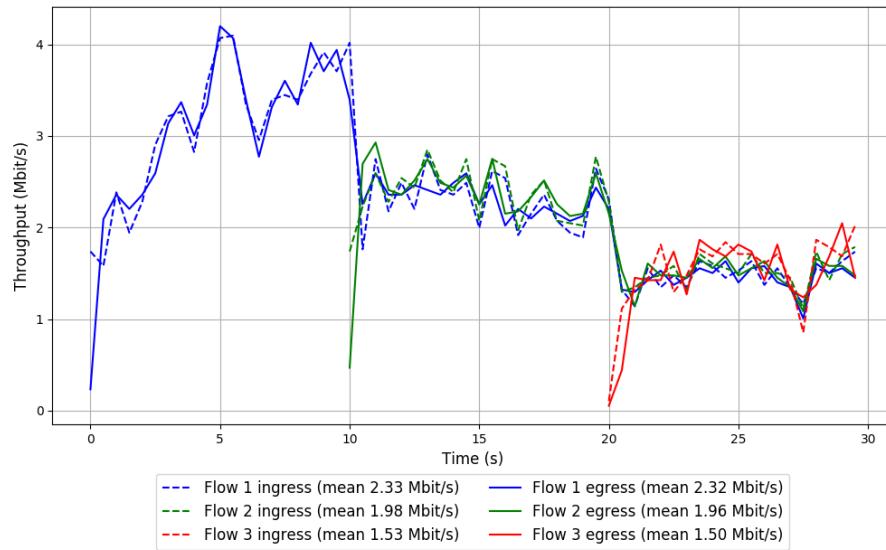


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-01-30 14:46:24
End at: 2018-01-30 14:46:54
Local clock offset: 4.425 ms
Remote clock offset: -0.217 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 238.238 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 228.715 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 236.046 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 293.565 ms
Loss rate: 3.96%
```

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



Run 1: Statistics of TCP Vegas

/home/ubuntu/pantheon_data/2018-01-30T13-32-China-ppp0-to-AWS-Korea-3-runs-3-flows/vegas_st

Run 1: Report of TCP Vegas — Data Link

Figure is missing

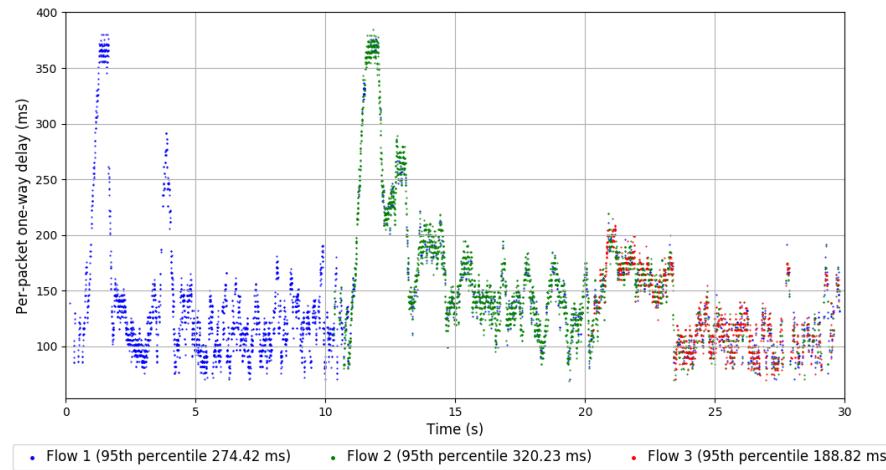
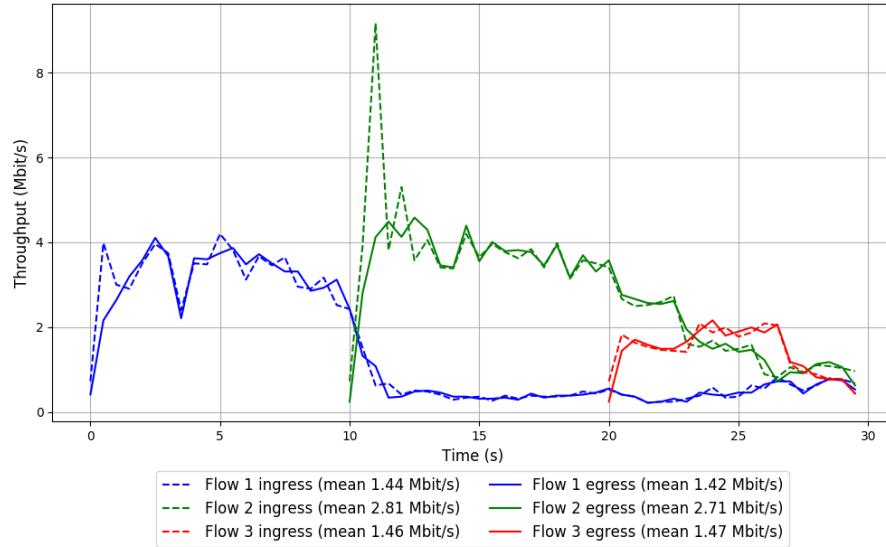
Figure is missing

Run 2: Statistics of TCP Vegas

```
Start at: 2018-01-30 14:20:06
End at: 2018-01-30 14:20:36
Local clock offset: 1.78 ms
Remote clock offset: 16.023 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 277.755 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 274.422 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 320.227 ms
Loss rate: 4.58%
-- Flow 3:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 188.816 ms
Loss rate: 1.17%
```

Run 2: Report of TCP Vegas — Data Link

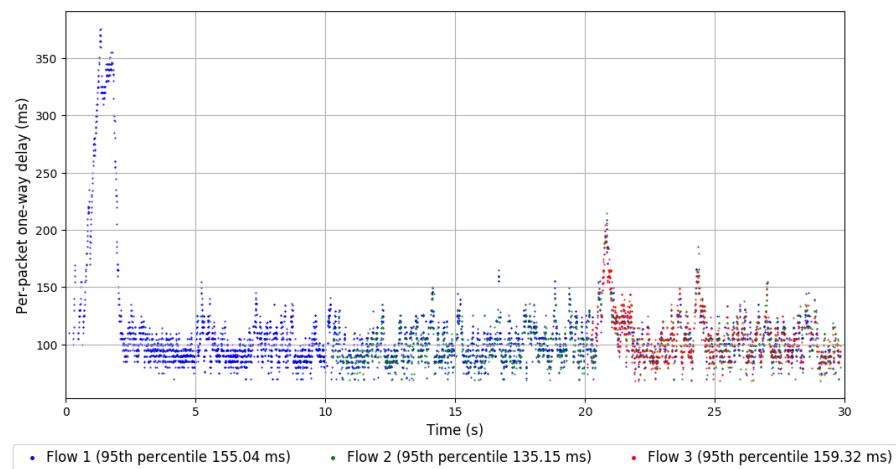
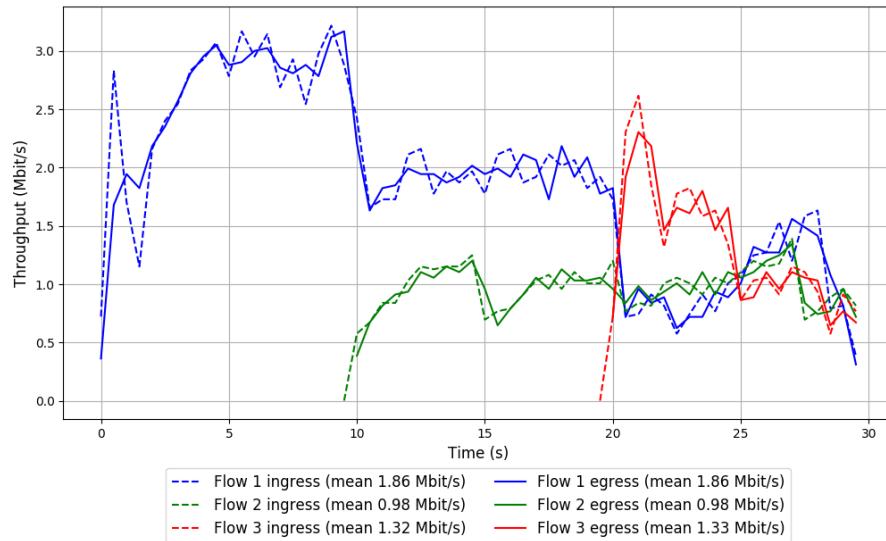


Run 3: Statistics of TCP Vegas

```
Start at: 2018-01-30 14:51:40
End at: 2018-01-30 14:52:10
Local clock offset: 8.419 ms
Remote clock offset: -2.632 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 149.501 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 155.040 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 135.151 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 159.324 ms
Loss rate: 1.55%
```

Run 3: Report of TCP Vegas — Data Link

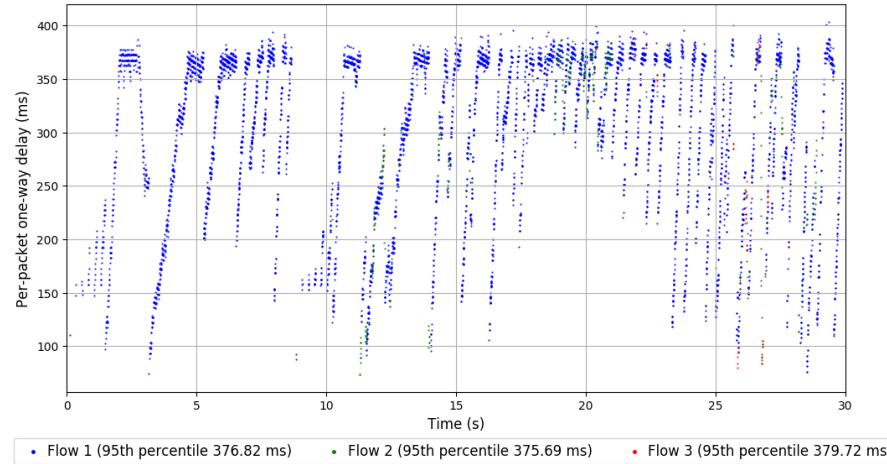
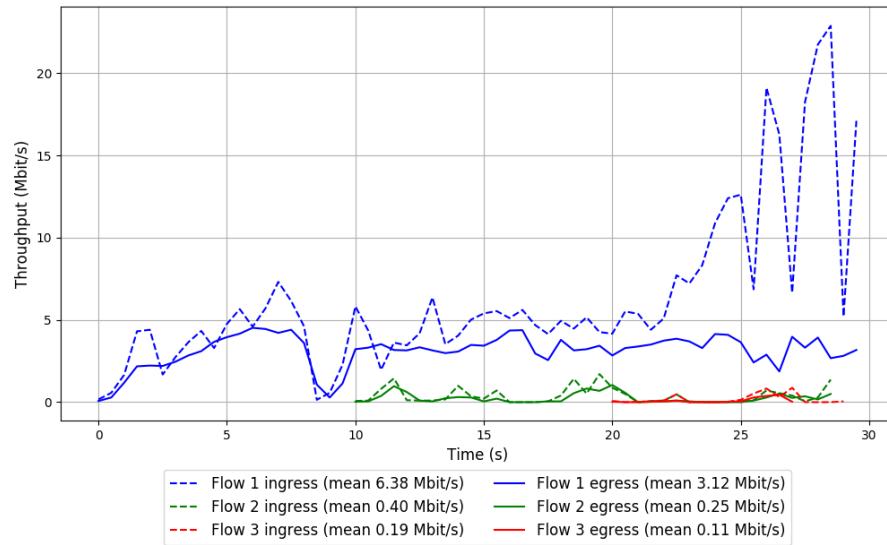


Run 1: Statistics of Verus

```
Start at: 2018-01-30 13:53:12
End at: 2018-01-30 13:53:42
Local clock offset: -0.724 ms
Remote clock offset: 16.39 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 376.785 ms
Loss rate: 50.35%
-- Flow 1:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 376.822 ms
Loss rate: 50.81%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 375.695 ms
Loss rate: 36.32%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 379.717 ms
Loss rate: 59.86%
```

Run 1: Report of Verus — Data Link

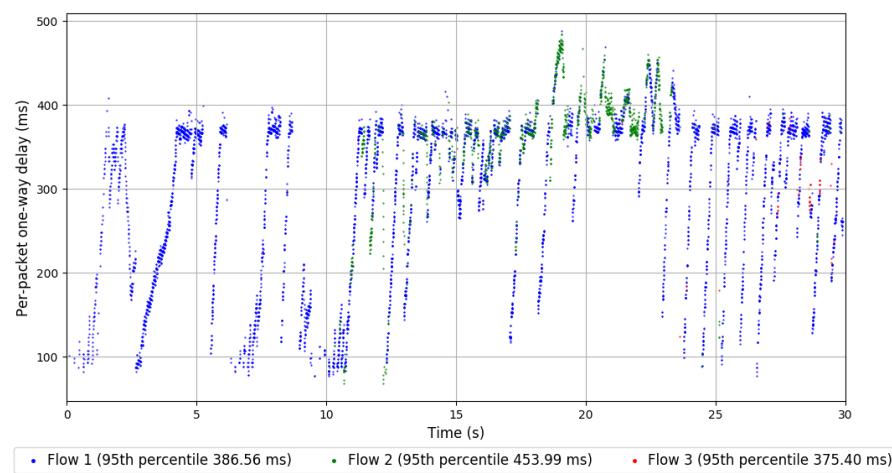
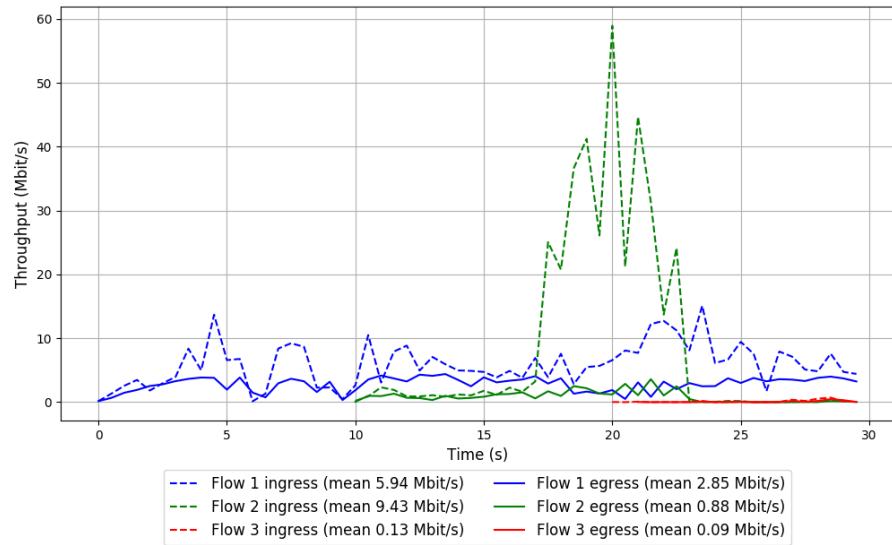


Run 2: Statistics of Verus

```
Start at: 2018-01-30 14:25:08
End at: 2018-01-30 14:25:38
Local clock offset: 2.373 ms
Remote clock offset: 16.397 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 409.164 ms
Loss rate: 71.52%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 386.558 ms
Loss rate: 52.12%
-- Flow 2:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 453.989 ms
Loss rate: 90.51%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 375.399 ms
Loss rate: 43.27%
```

Run 2: Report of Verus — Data Link

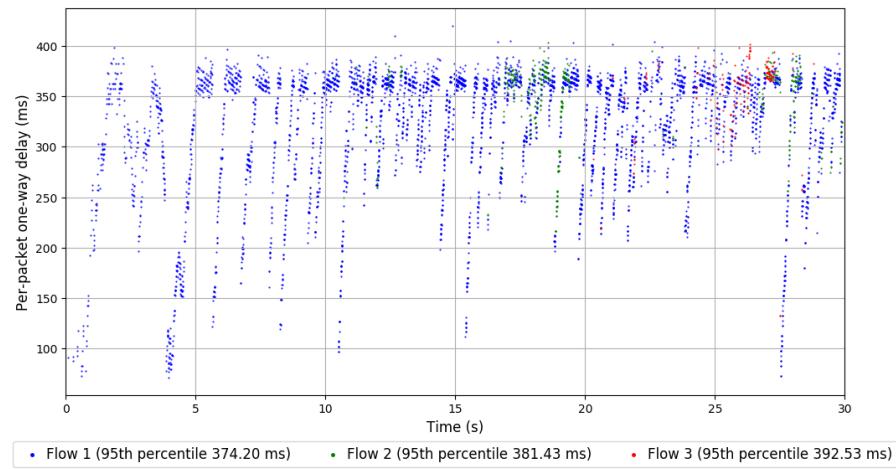
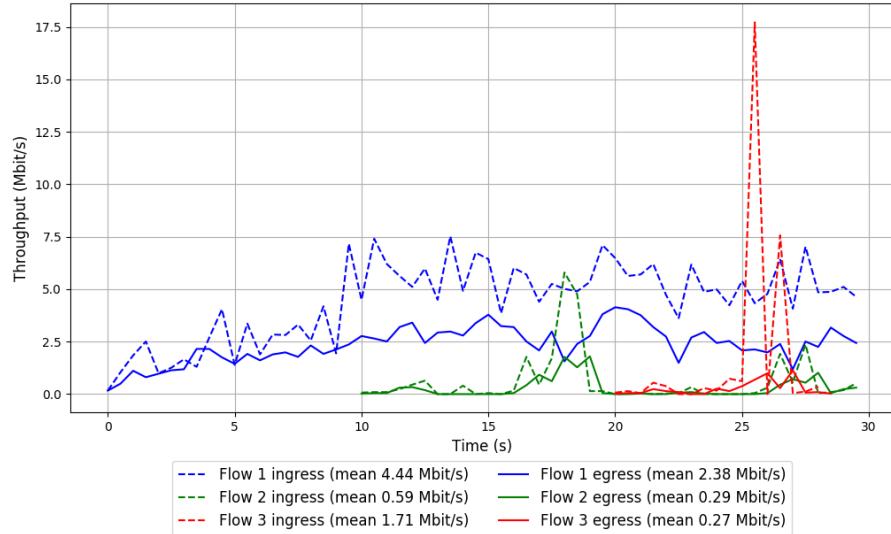


Run 3: Statistics of Verus

```
Start at: 2018-01-30 14:56:22
End at: 2018-01-30 14:56:52
Local clock offset: 9.124 ms
Remote clock offset: -4.096 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 375.868 ms
Loss rate: 50.42%
-- Flow 1:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 374.203 ms
Loss rate: 46.71%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 381.433 ms
Loss rate: 51.36%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 392.532 ms
Loss rate: 83.81%
```

Run 3: Report of Verus — Data Link



Run 1: Statistics of Copa

/home/ubuntu/pantheon_data/2018-01-30T13-32-China-ppp0-to-AWS-Korea-3-runs-3-flows/copa_stat

Run 1: Report of Copa — Data Link

Figure is missing

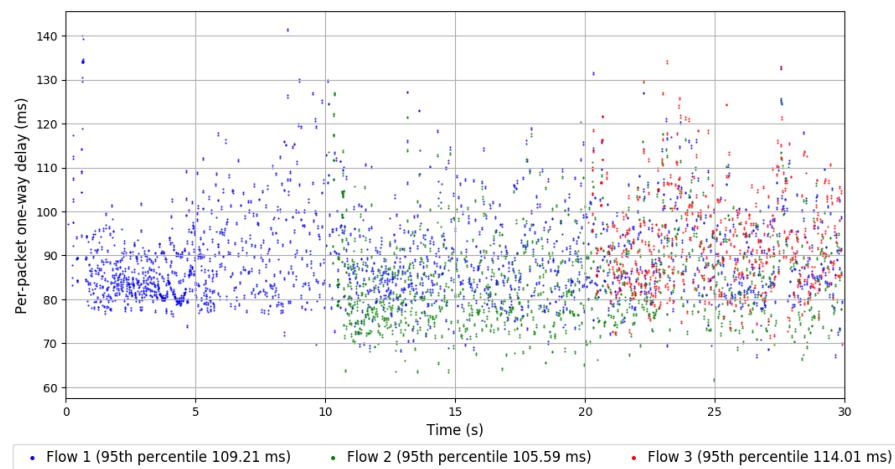
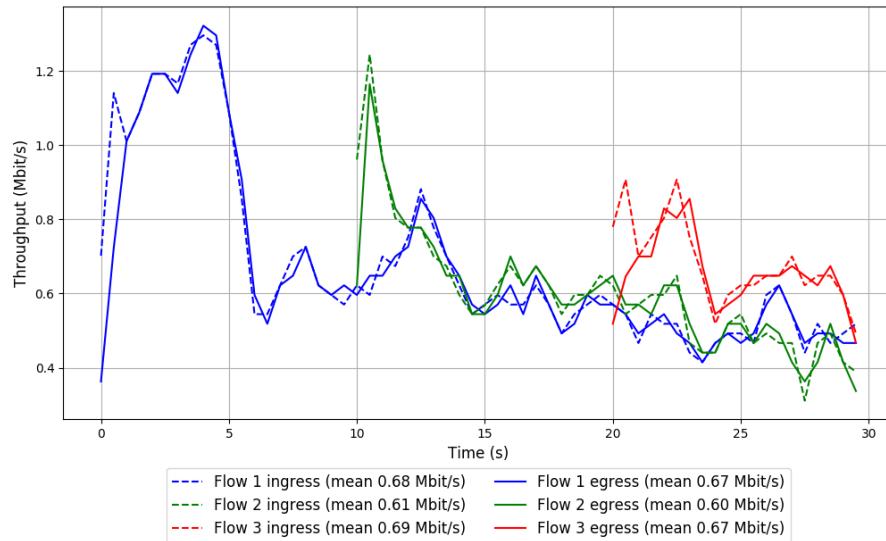
Figure is missing

Run 2: Statistics of Copa

```
Start at: 2018-01-30 14:21:45
End at: 2018-01-30 14:22:15
Local clock offset: 2.045 ms
Remote clock offset: 16.113 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 109.595 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 109.206 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 105.588 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 114.006 ms
Loss rate: 4.03%
```

Run 2: Report of Copa — Data Link

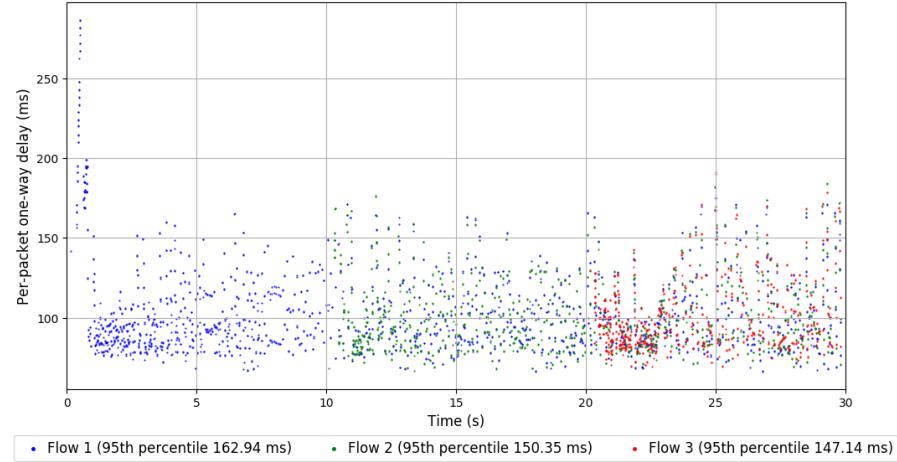
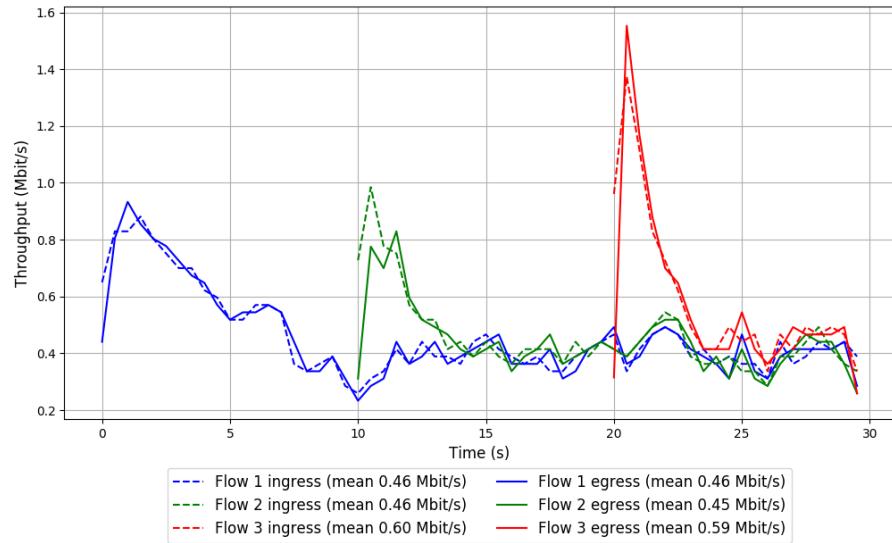


Run 3: Statistics of Copa

```
Start at: 2018-01-30 14:53:17
End at: 2018-01-30 14:53:47
Local clock offset: 8.756 ms
Remote clock offset: -3.072 ms

# Below is generated by plot.py at 2018-01-30 17:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 153.916 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 162.940 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 150.349 ms
Loss rate: 3.71%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 147.144 ms
Loss rate: 3.51%
```

Run 3: Report of Copa — Data Link

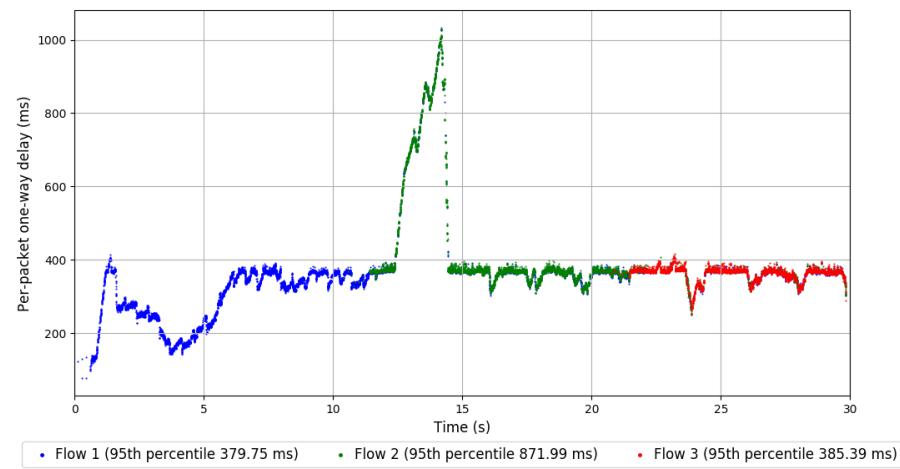
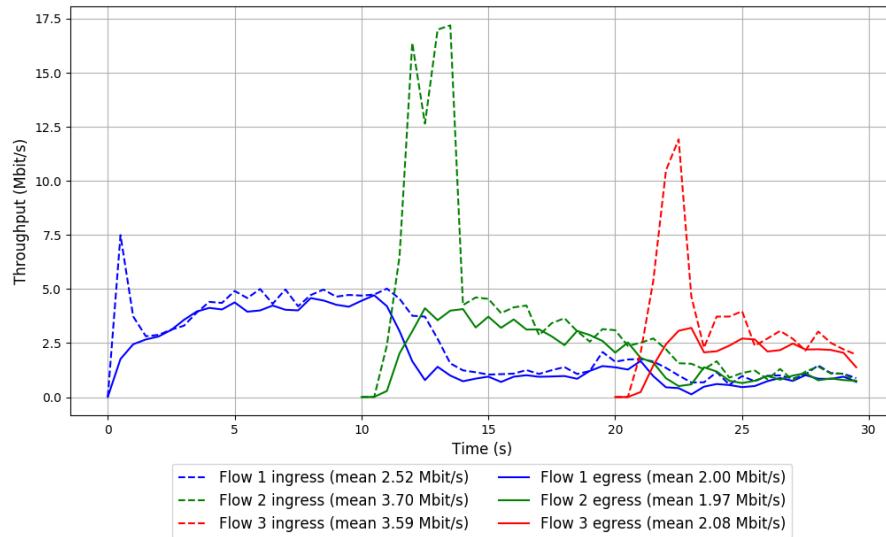


```
Run 1: Statistics of FillP

Start at: 2018-01-30 13:35:33
End at: 2018-01-30 13:36:03
Local clock offset: -3.167 ms
Remote clock offset: 13.828 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 711.881 ms
Loss rate: 36.37%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 379.755 ms
Loss rate: 21.17%
-- Flow 2:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 871.986 ms
Loss rate: 47.93%
-- Flow 3:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 385.389 ms
Loss rate: 44.78%
```

Run 1: Report of FillP — Data Link

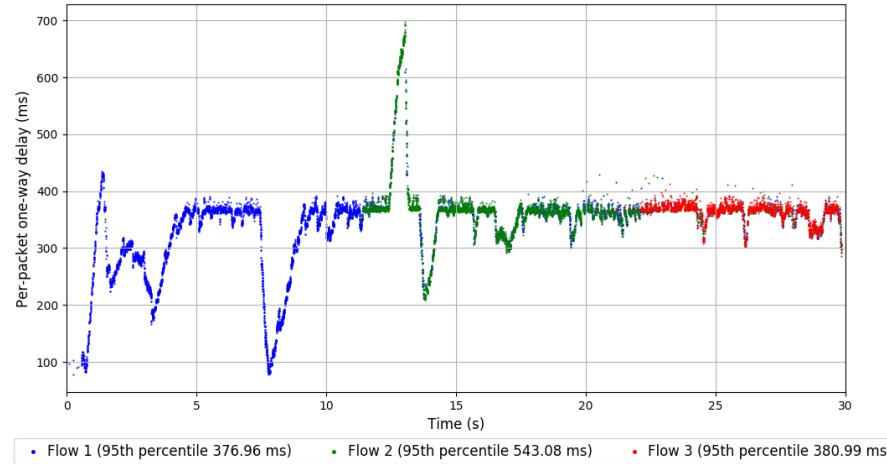
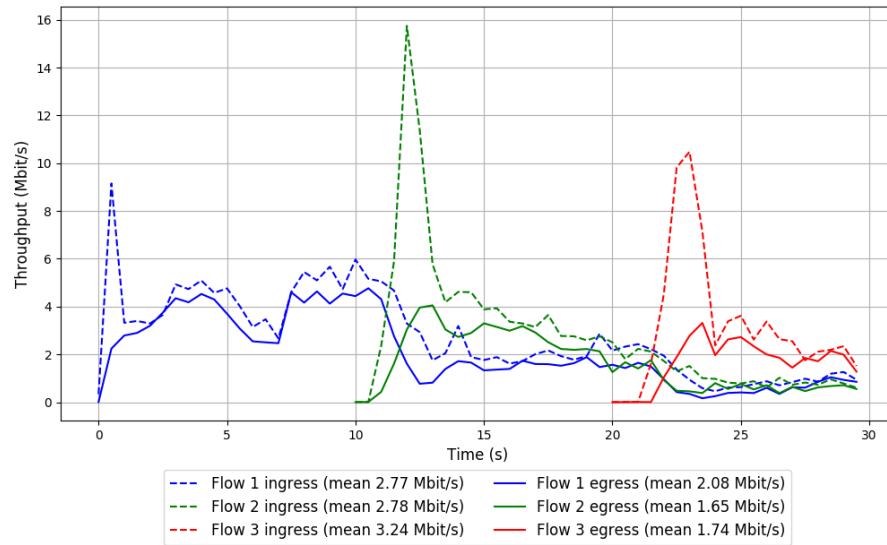


Run 2: Statistics of FillP

```
Start at: 2018-01-30 14:08:19
End at: 2018-01-30 14:08:49
Local clock offset: 0.321 ms
Remote clock offset: 15.655 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 384.549 ms
Loss rate: 35.10%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 376.962 ms
Loss rate: 25.39%
-- Flow 2:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 543.081 ms
Loss rate: 41.85%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 380.985 ms
Loss rate: 48.54%
```

Run 2: Report of FillP — Data Link

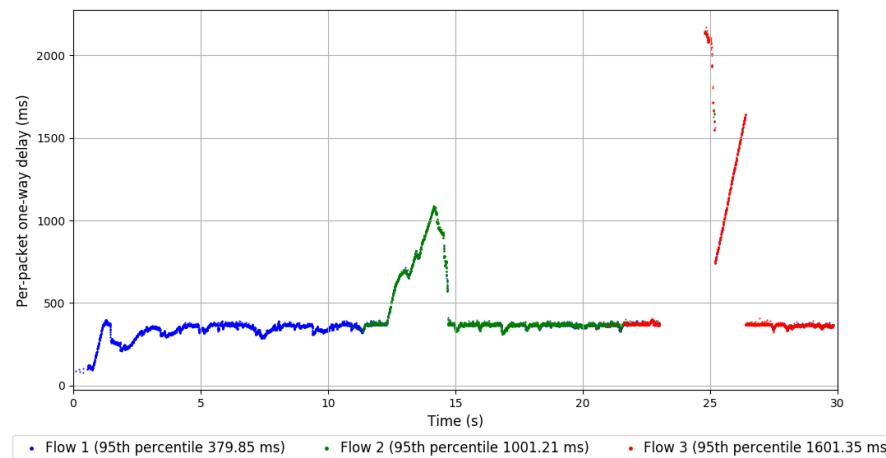
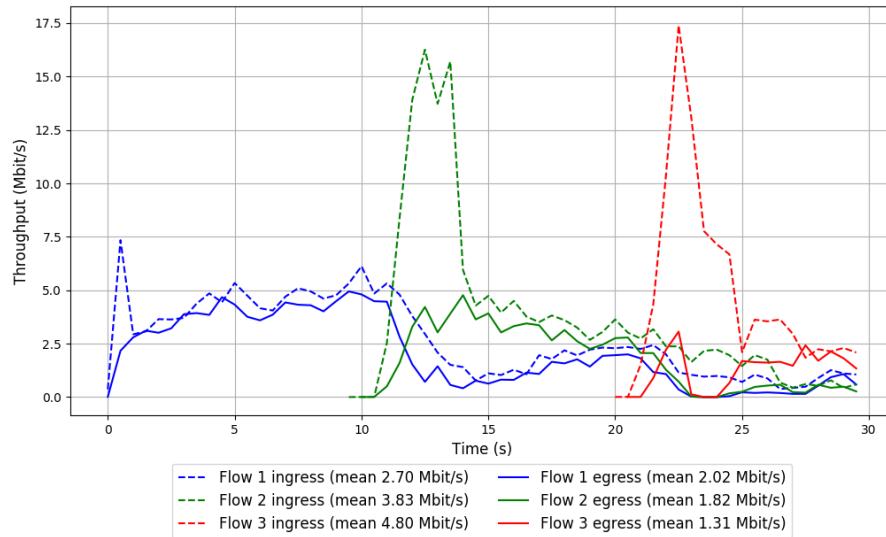


Run 3: Statistics of FillP

```
Start at: 2018-01-30 14:39:53
End at: 2018-01-30 14:40:23
Local clock offset: 4.42 ms
Remote clock offset: 4.001 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 937.829 ms
Loss rate: 47.14%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 379.846 ms
Loss rate: 25.43%
-- Flow 2:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 1001.212 ms
Loss rate: 53.29%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 1601.354 ms
Loss rate: 74.20%
```

Run 3: Report of FillP — Data Link

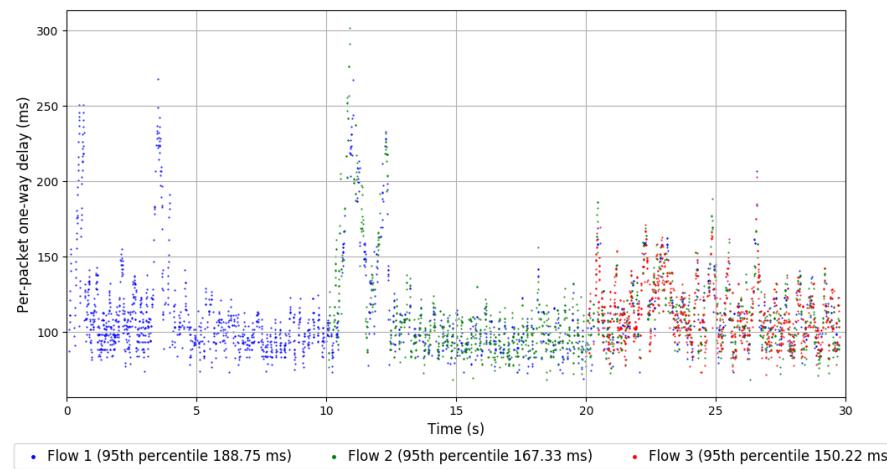
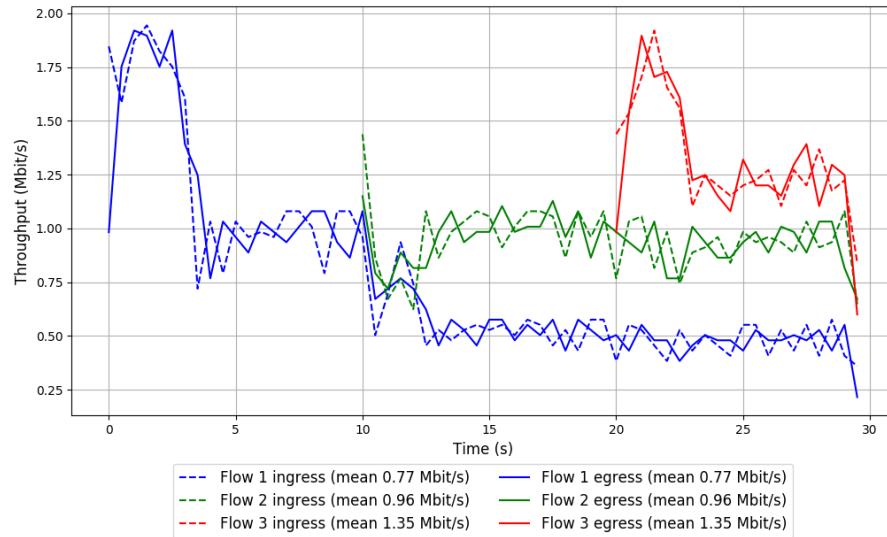


Run 1: Statistics of Indigo-1-32

```
Start at: 2018-01-30 13:59:59
End at: 2018-01-30 14:00:29
Local clock offset: 0.498 ms
Remote clock offset: 16.235 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 165.263 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 188.754 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 167.333 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 150.220 ms
Loss rate: 1.64%
```

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

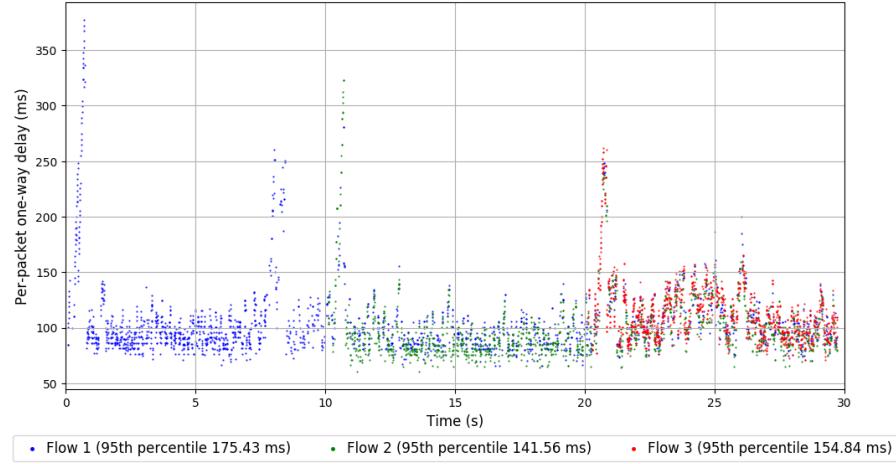
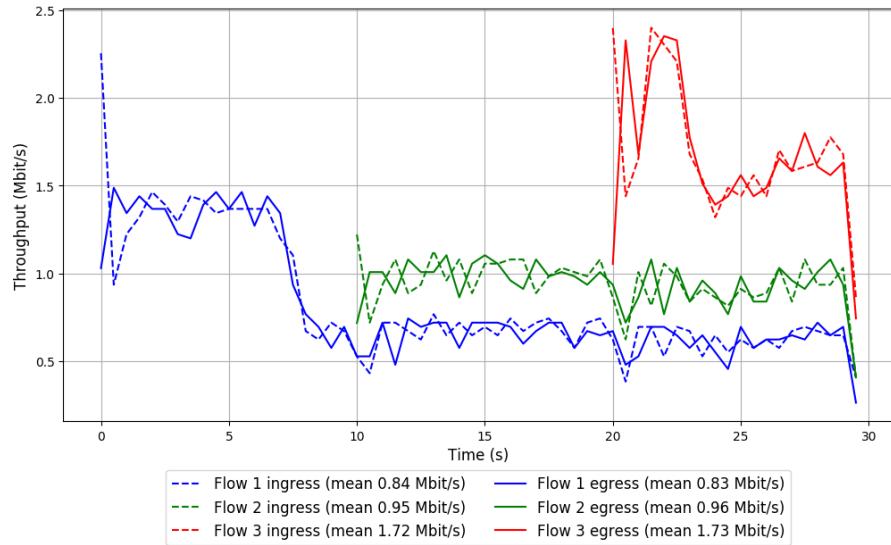


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-01-30 14:31:50
End at: 2018-01-30 14:32:20
Local clock offset: 2.751 ms
Remote clock offset: 15.126 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 153.361 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 175.426 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 141.556 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 154.838 ms
Loss rate: 1.71%
```

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

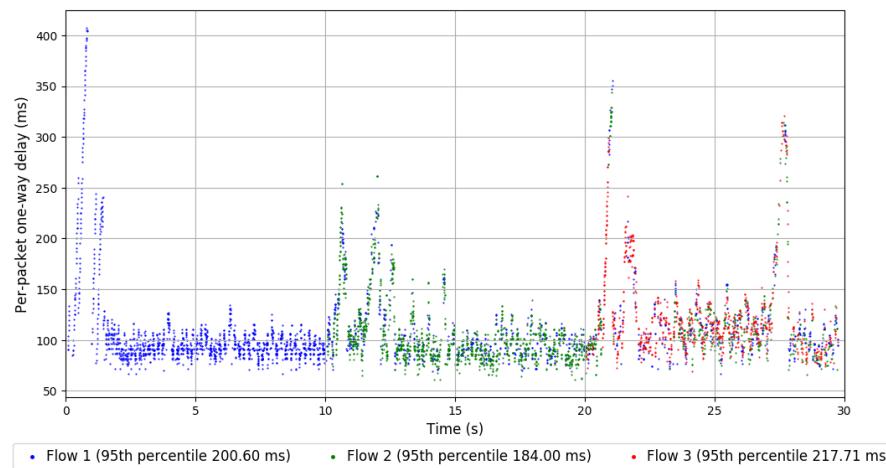
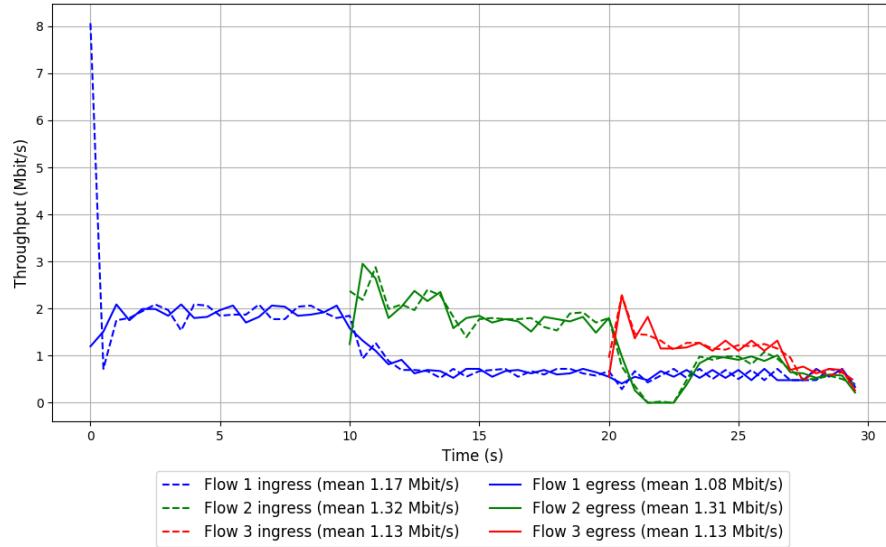


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-01-30 15:02:58
End at: 2018-01-30 15:03:28
Local clock offset: 10.359 ms
Remote clock offset: -5.673 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 200.490 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 200.603 ms
Loss rate: 7.90%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 184.004 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 217.711 ms
Loss rate: 0.98%
```

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

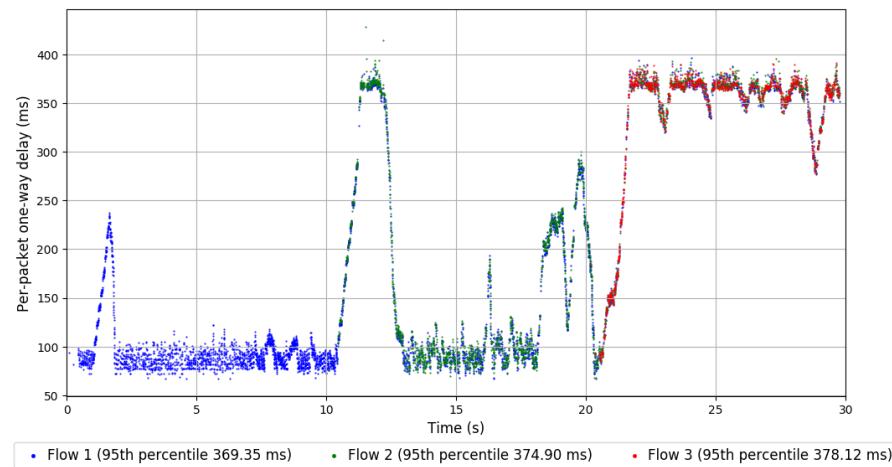
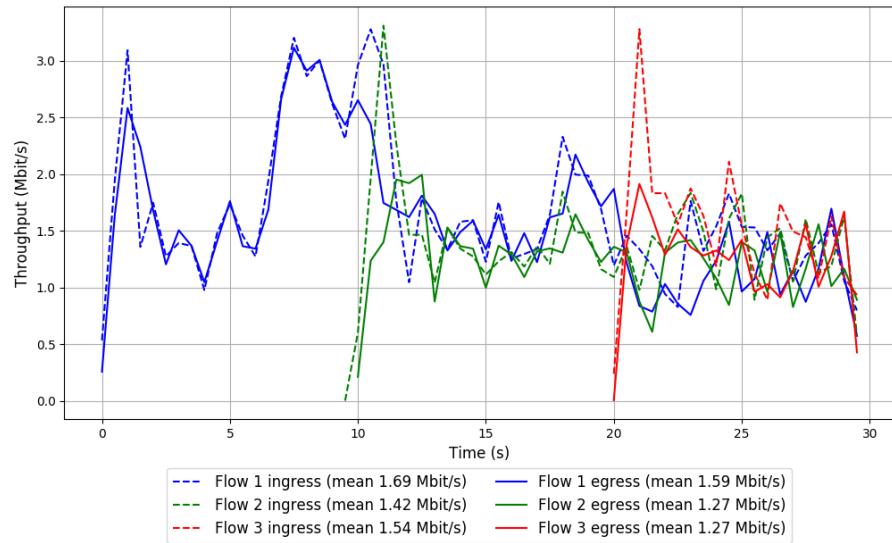


```
Run 1: Statistics of Vivace-latency
```

```
Start at: 2018-01-30 13:54:49
End at: 2018-01-30 13:55:19
Local clock offset: -0.13 ms
Remote clock offset: 16.656 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 373.006 ms
Loss rate: 10.10%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 369.352 ms
Loss rate: 6.83%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 374.899 ms
Loss rate: 11.01%
-- Flow 3:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 378.125 ms
Loss rate: 19.34%
```

Run 1: Report of Vivace-latency — Data Link

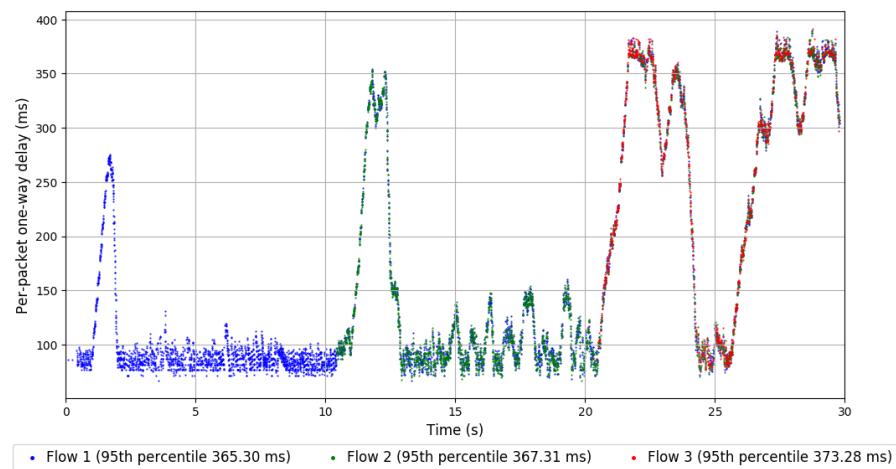
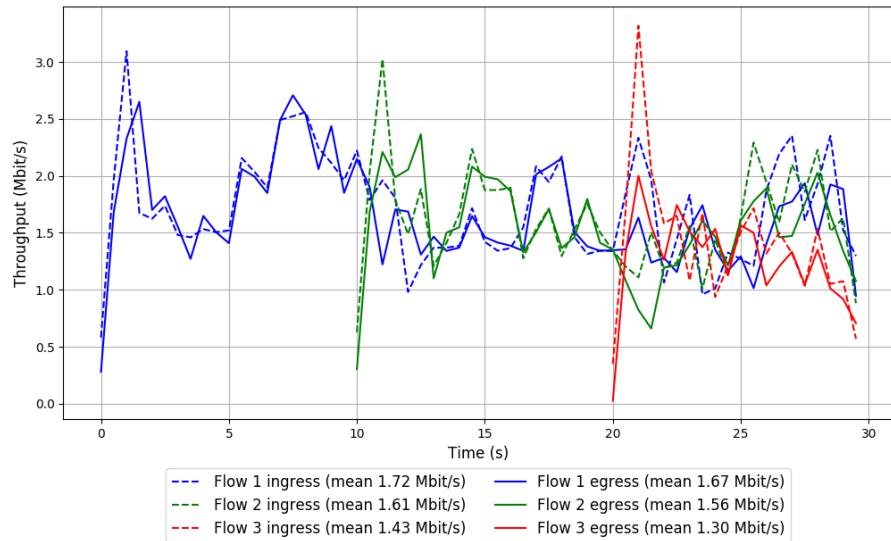


Run 2: Statistics of Vivace-latency

```
Start at: 2018-01-30 14:26:55
End at: 2018-01-30 14:27:25
Local clock offset: 1.902 ms
Remote clock offset: 16.472 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 367.731 ms
Loss rate: 4.89%
-- Flow 1:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 365.297 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 367.310 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 373.282 ms
Loss rate: 10.77%
```

Run 2: Report of Vivace-latency — Data Link

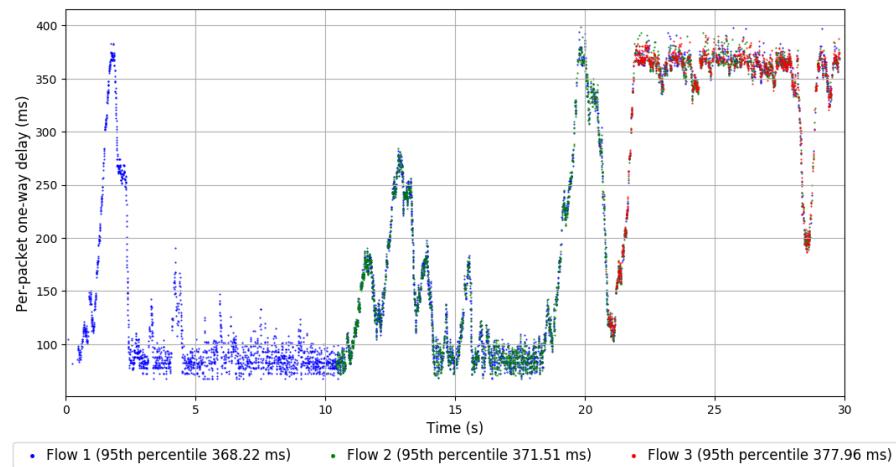
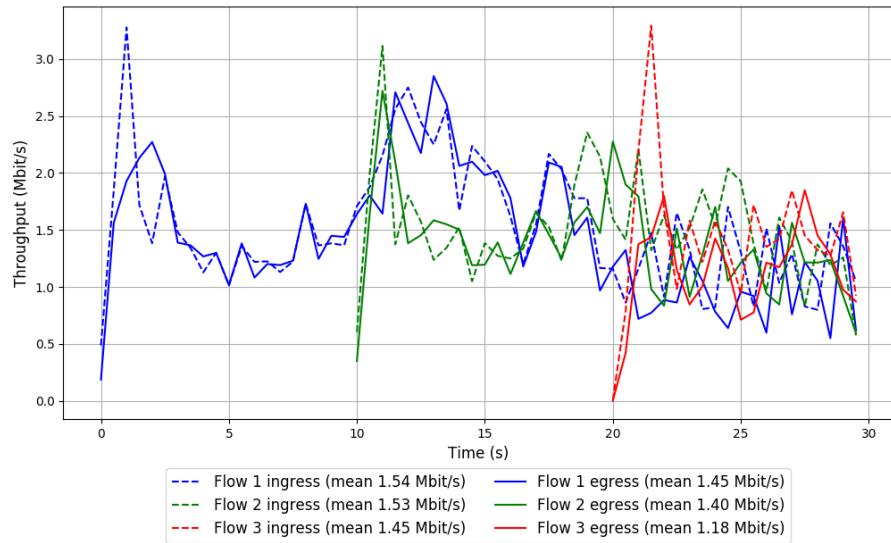


Run 3: Statistics of Vivace-latency

```
Start at: 2018-01-30 14:58:02
End at: 2018-01-30 14:58:32
Local clock offset: 9.471 ms
Remote clock offset: -4.502 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 371.622 ms
Loss rate: 9.65%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 368.221 ms
Loss rate: 6.12%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 371.510 ms
Loss rate: 9.26%
-- Flow 3:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 377.964 ms
Loss rate: 21.86%
```

Run 3: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

/home/ubuntu/pantheon_data/2018-01-30T13-32-China-ppp0-to-AWS-Korea-3-runs-3-flows/vivace_1d

Run 1: Report of Vivace-loss — Data Link

Figure is missing

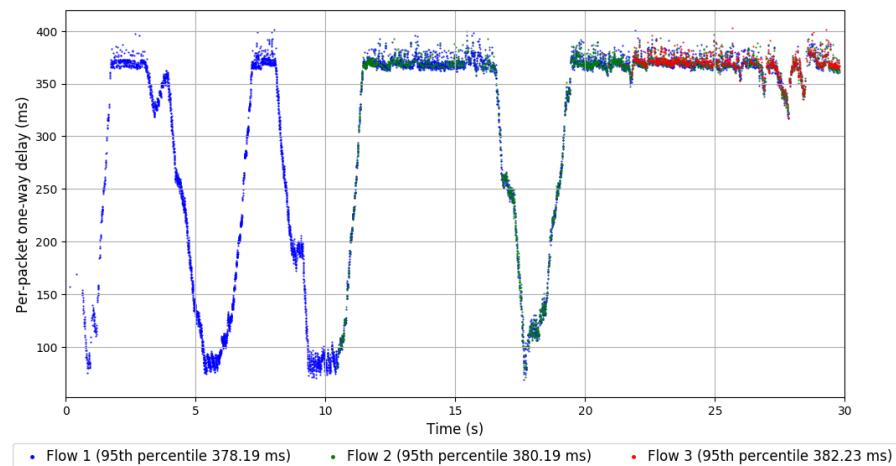
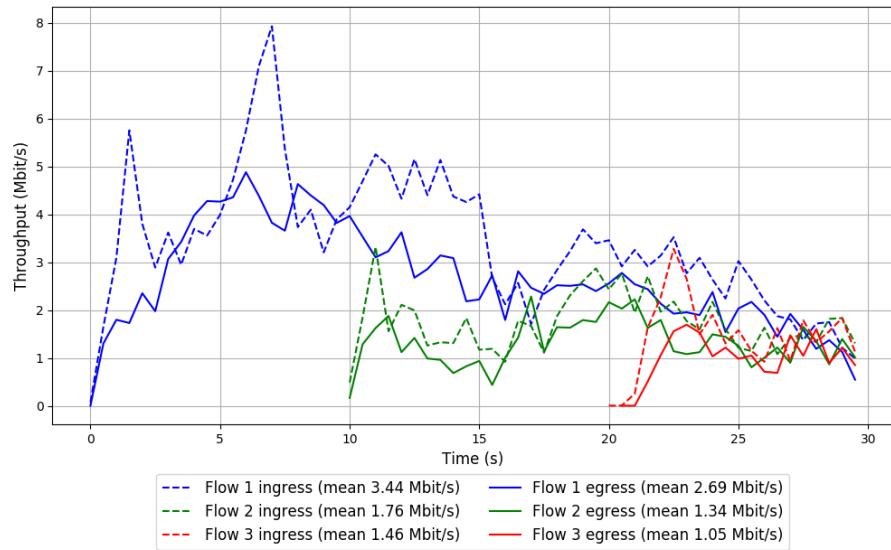
Figure is missing

Run 2: Statistics of Vivace-loss

```
Start at: 2018-01-30 14:18:23
End at: 2018-01-30 14:18:53
Local clock offset: 1.936 ms
Remote clock offset: 16.006 ms

# Below is generated by plot.py at 2018-01-30 17:05:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 379.199 ms
Loss rate: 23.92%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 378.185 ms
Loss rate: 22.30%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 380.187 ms
Loss rate: 24.84%
-- Flow 3:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 382.230 ms
Loss rate: 33.23%
```

Run 2: Report of Vivace-loss — Data Link

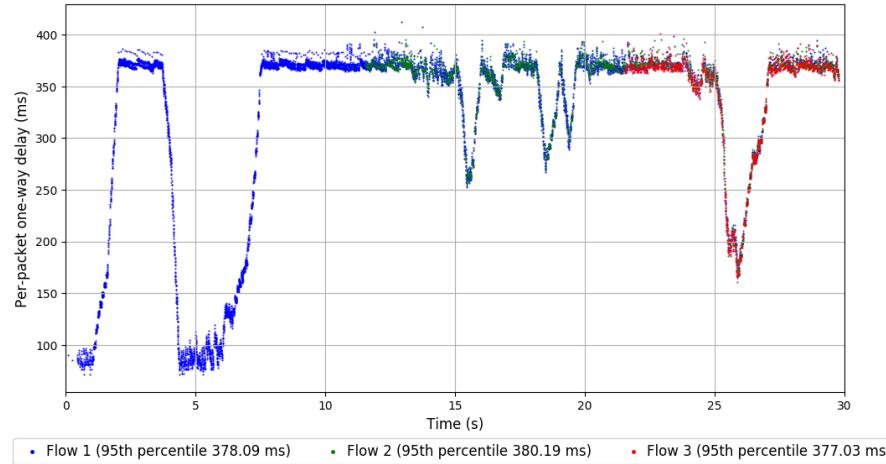
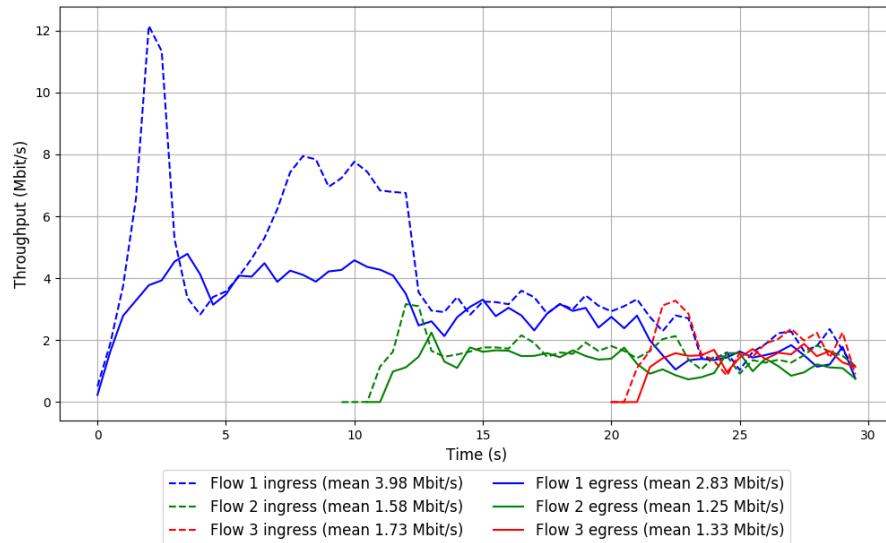


Run 3: Statistics of Vivace-loss

```
Start at: 2018-01-30 14:49:55
End at: 2018-01-30 14:50:25
Local clock offset: 8.27 ms
Remote clock offset: -1.968 ms

# Below is generated by plot.py at 2018-01-30 17:05:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 378.590 ms
Loss rate: 27.96%
-- Flow 1:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 378.086 ms
Loss rate: 29.31%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 380.193 ms
Loss rate: 23.59%
-- Flow 3:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 377.030 ms
Loss rate: 26.57%
```

Run 3: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

/home/ubuntu/pantheon_data/2018-01-30T13-32-China-ppp0-to-AWS-Korea-3-runs-3-flows/vivace_lte

Run 1: Report of Vivace-LTE — Data Link

Figure is missing

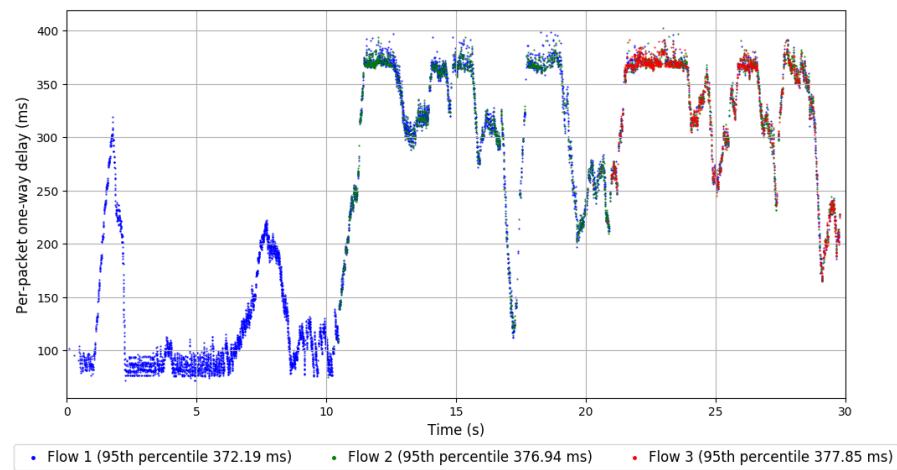
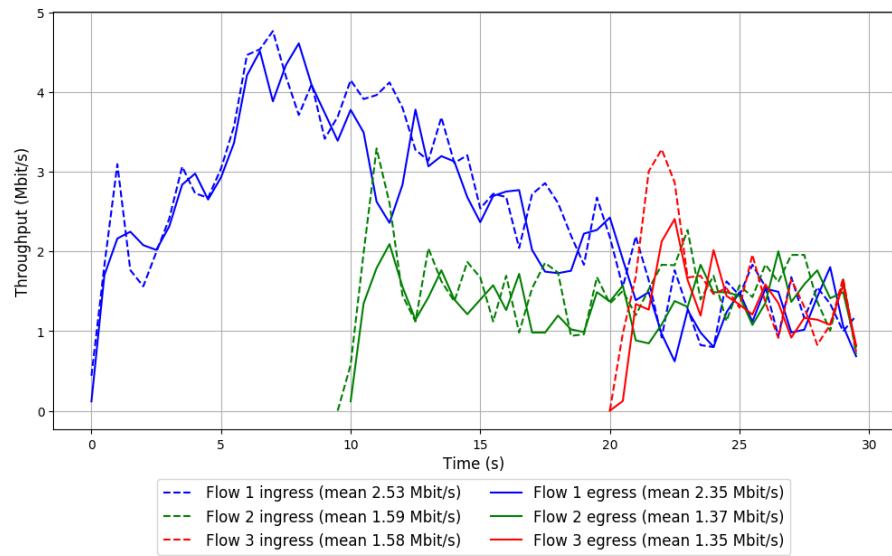
Figure is missing

Run 2: Statistics of Vivace-LTE

```
Start at: 2018-01-30 14:16:39
End at: 2018-01-30 14:17:09
Local clock offset: 1.296 ms
Remote clock offset: 15.896 ms

# Below is generated by plot.py at 2018-01-30 17:05:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 374.453 ms
Loss rate: 10.54%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 372.191 ms
Loss rate: 7.72%
-- Flow 2:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 376.941 ms
Loss rate: 14.20%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 377.847 ms
Loss rate: 16.85%
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

```
Start at: 2018-01-30 14:48:11
End at: 2018-01-30 14:48:41
Local clock offset: 7.56 ms
Remote clock offset: -1.154 ms

# Below is generated by plot.py at 2018-01-30 17:05:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 375.119 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 373.192 ms
Loss rate: 7.67%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 376.888 ms
Loss rate: 14.99%
-- Flow 3:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 376.323 ms
Loss rate: 19.38%
```

Run 3: Report of Vivace-LTE — Data Link

