

Pantheon Report

Generated at 2018-03-21 07:51:02 (UTC).

Data path: China Ethernet (*remote*) → AWS Korea Ethernet (*local*).

Repeated the test of 17 congestion control schemes 10 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).

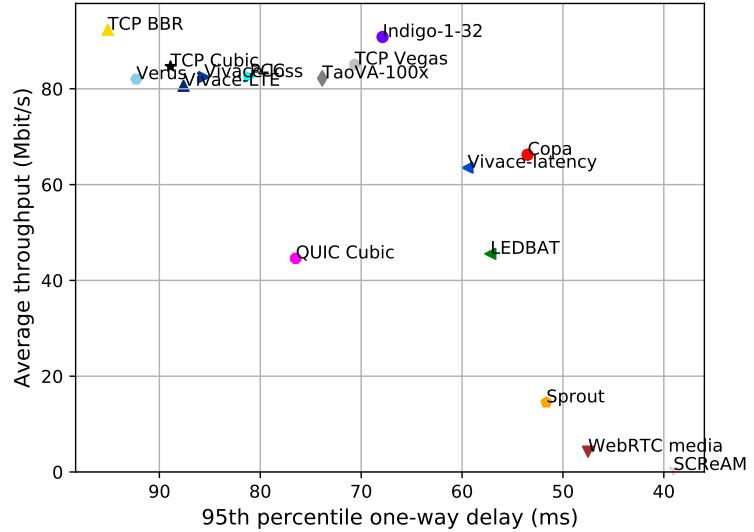
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

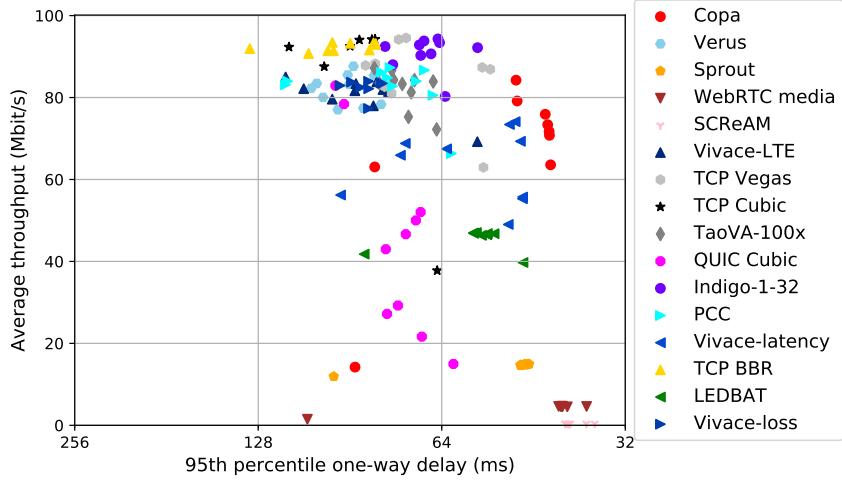
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bfff6c4a2
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 @ f0f2e693303aeee82ea808e6928eac4f1083a6681
  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 @ f1a14bf7e749737437f61b1eaeeb30b267cde681
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 Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



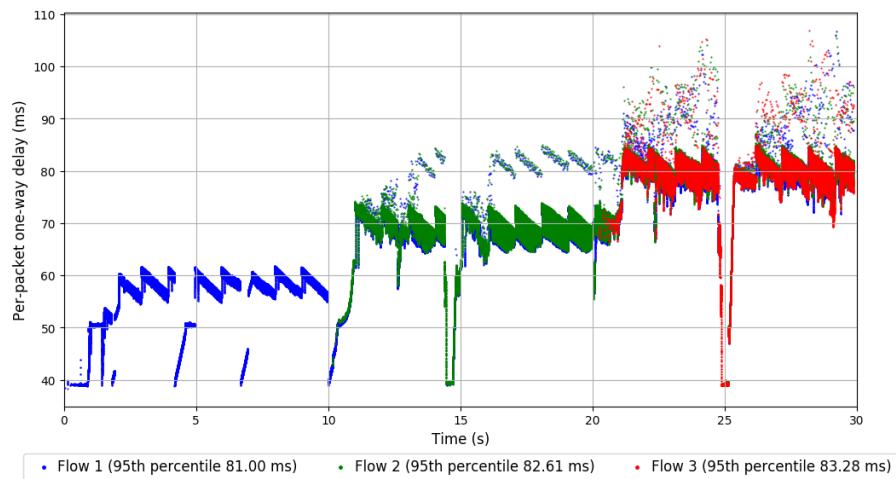
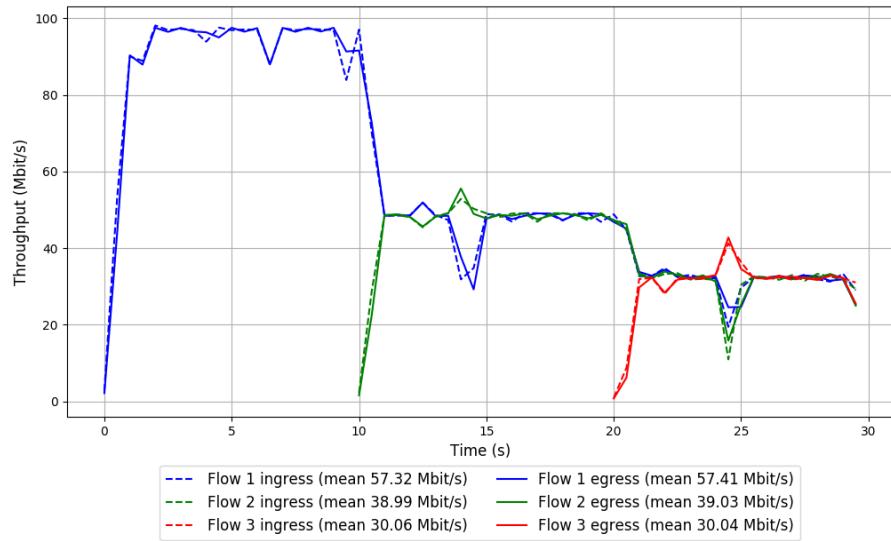
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	56.81	39.04	29.46	93.38	95.68	97.11	0.41	0.85	2.11
TCP Cubic	7	50.82	35.05	32.30	86.55	91.61	90.76	0.38	0.92	2.48
LEDBAT	10	30.13	18.97	8.71	56.23	58.02	59.66	0.68	1.01	2.24
PCC	10	63.87	17.55	21.54	80.46	81.51	81.94	0.47	0.85	1.62
QUIC Cubic	10	14.43	32.27	26.87	53.08	78.98	76.78	0.12	1.12	2.13
SCReAM	9	0.21	0.21	0.22	38.97	38.89	38.93	0.25	0.47	1.11
WebRTC media	9	2.32	1.49	0.63	47.65	47.60	44.55	0.54	0.65	1.54
Sprout	10	7.44	7.29	6.90	51.55	51.44	52.31	0.39	0.69	1.32
TaoVA-100x	10	51.31	35.40	23.38	71.84	75.20	76.73	3.86	5.27	6.85
TCP Vegas	9	59.79	27.64	21.12	70.36	70.94	68.91	0.39	0.59	1.43
Verus	10	50.95	34.90	24.69	88.17	93.76	97.68	0.59	1.25	2.56
Copa	9	43.18	26.04	17.44	53.24	53.70	53.46	0.57	0.99	1.70
FillP	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo-1-32	10	73.54	16.64	19.26	66.94	70.46	71.55	0.31	0.53	1.12
Vivace-latency	10	48.38	18.57	8.64	58.61	59.84	57.99	0.55	0.98	1.95
Vivace-loss	8	55.68	30.04	21.29	84.66	86.01	86.89	1.32	1.89	8.58
Vivace-LTE	10	54.71	28.53	21.48	85.58	88.58	91.02	0.86	1.81	3.36

Run 1: Statistics of TCP BBR

```
Start at: 2018-03-20 23:46:38
End at: 2018-03-20 23:47:08
Local clock offset: -0.256 ms
Remote clock offset: 5.053 ms

# Below is generated by plot.py at 2018-03-21 07:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 82.121 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 57.41 Mbit/s
95th percentile per-packet one-way delay: 81.002 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 82.607 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 83.284 ms
Loss rate: 1.75%
```

Run 1: Report of TCP BBR — Data Link

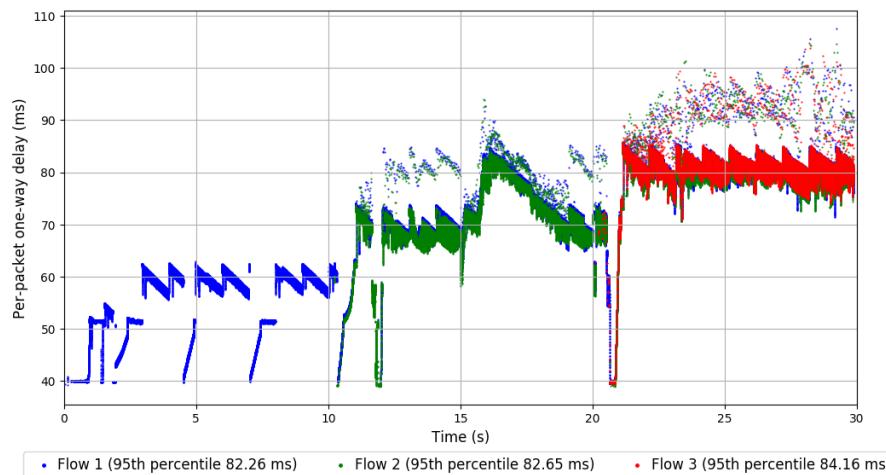
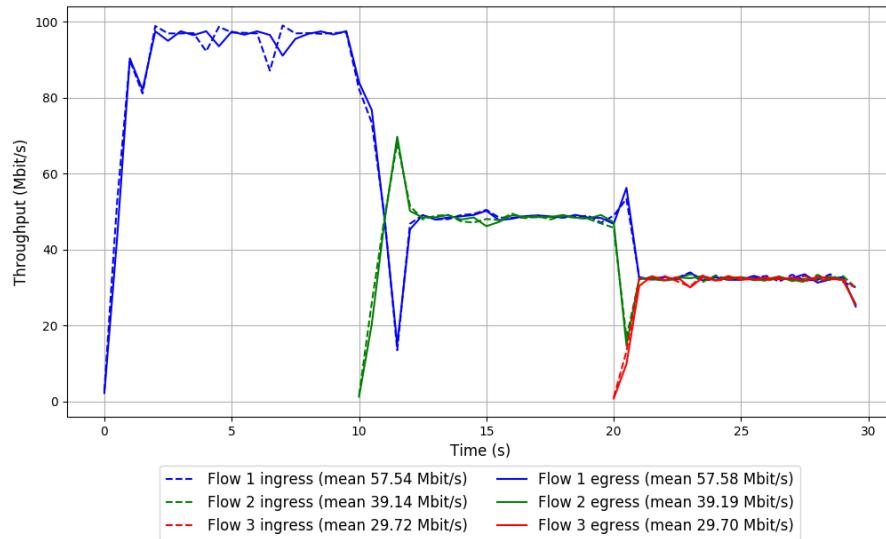


Run 2: Statistics of TCP BBR

```
Start at: 2018-03-21 00:09:23
End at: 2018-03-21 00:09:53
Local clock offset: 5.806 ms
Remote clock offset: 4.102 ms

# Below is generated by plot.py at 2018-03-21 07:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.32 Mbit/s
95th percentile per-packet one-way delay: 82.815 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 82.260 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 39.19 Mbit/s
95th percentile per-packet one-way delay: 82.648 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: 84.162 ms
Loss rate: 1.58%
```

Run 2: Report of TCP BBR — Data Link

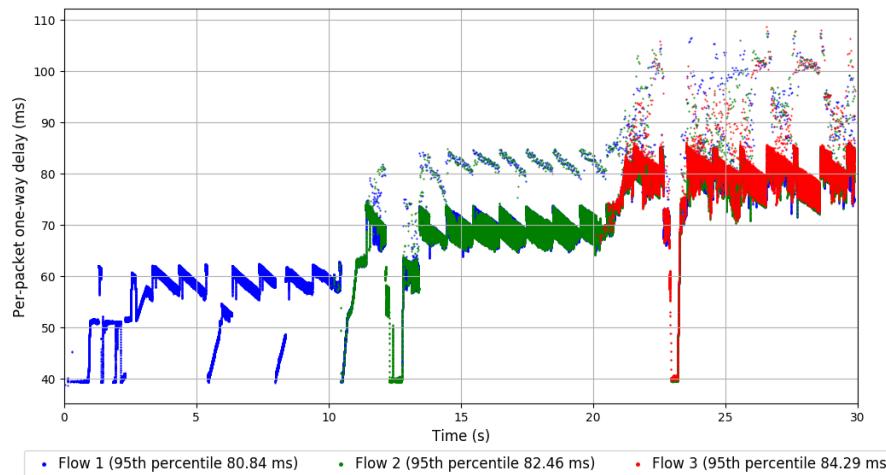
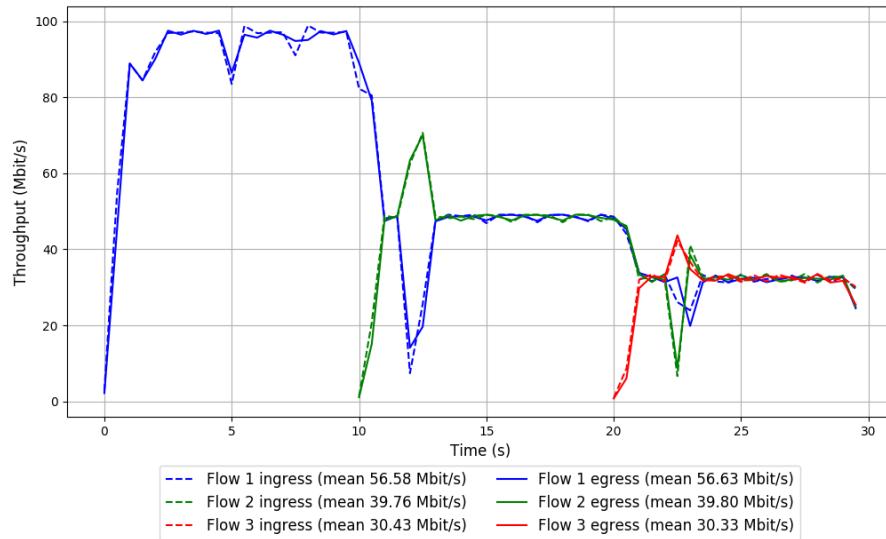


Run 3: Statistics of TCP BBR

```
Start at: 2018-03-21 00:32:09
End at: 2018-03-21 00:32:39
Local clock offset: 8.871 ms
Remote clock offset: -2.034 ms

# Below is generated by plot.py at 2018-03-21 07:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 82.274 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 80.838 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 82.456 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 30.33 Mbit/s
95th percentile per-packet one-way delay: 84.286 ms
Loss rate: 1.75%
```

Run 3: Report of TCP BBR — Data Link

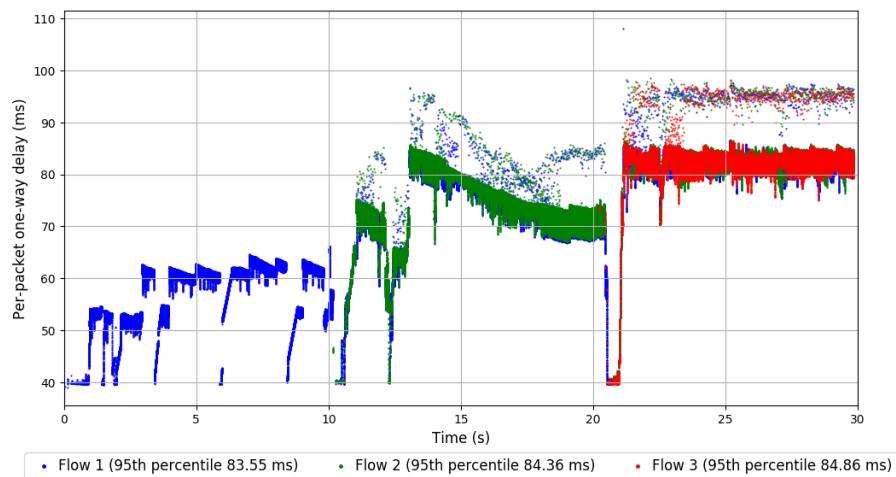
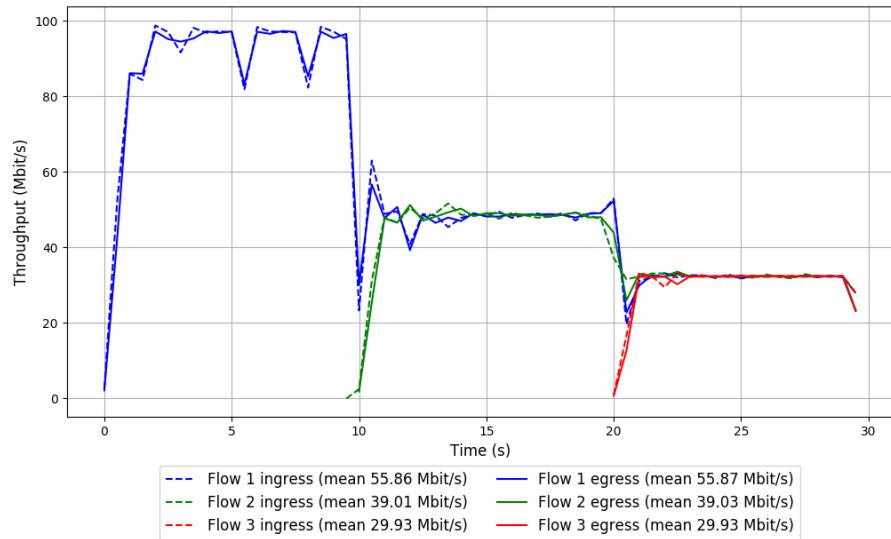


Run 4: Statistics of TCP BBR

```
Start at: 2018-03-21 00:55:13
End at: 2018-03-21 00:55:43
Local clock offset: 6.062 ms
Remote clock offset: -2.413 ms

# Below is generated by plot.py at 2018-03-21 07:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.59 Mbit/s
95th percentile per-packet one-way delay: 84.110 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 55.87 Mbit/s
95th percentile per-packet one-way delay: 83.554 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 84.363 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 84.862 ms
Loss rate: 1.72%
```

Run 4: Report of TCP BBR — Data Link

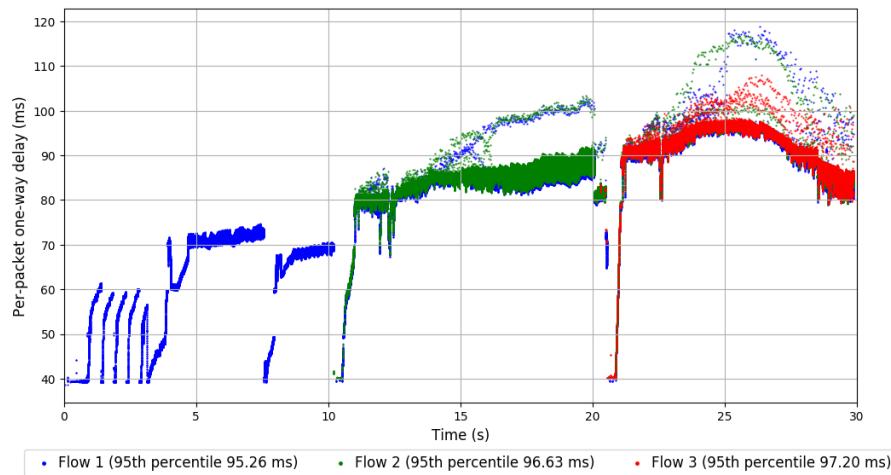
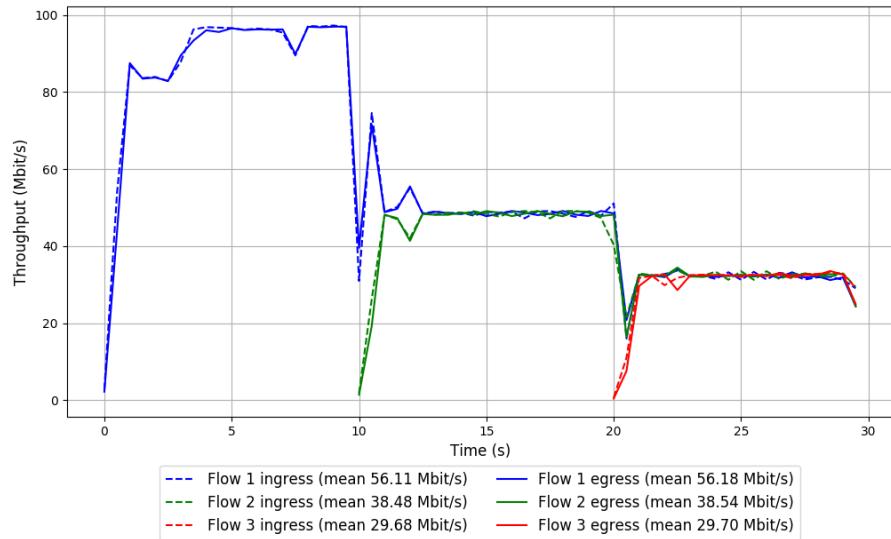


Run 5: Statistics of TCP BBR

```
Start at: 2018-03-21 01:17:57
End at: 2018-03-21 01:18:27
Local clock offset: -0.095 ms
Remote clock offset: -2.465 ms

# Below is generated by plot.py at 2018-03-21 07:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.43 Mbit/s
95th percentile per-packet one-way delay: 96.321 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 95.261 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 96.633 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: 97.198 ms
Loss rate: 1.68%
```

Run 5: Report of TCP BBR — Data Link

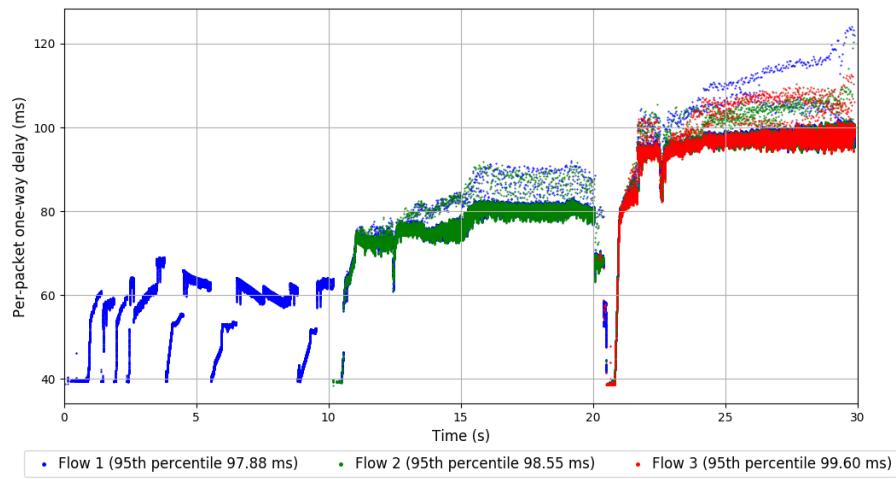
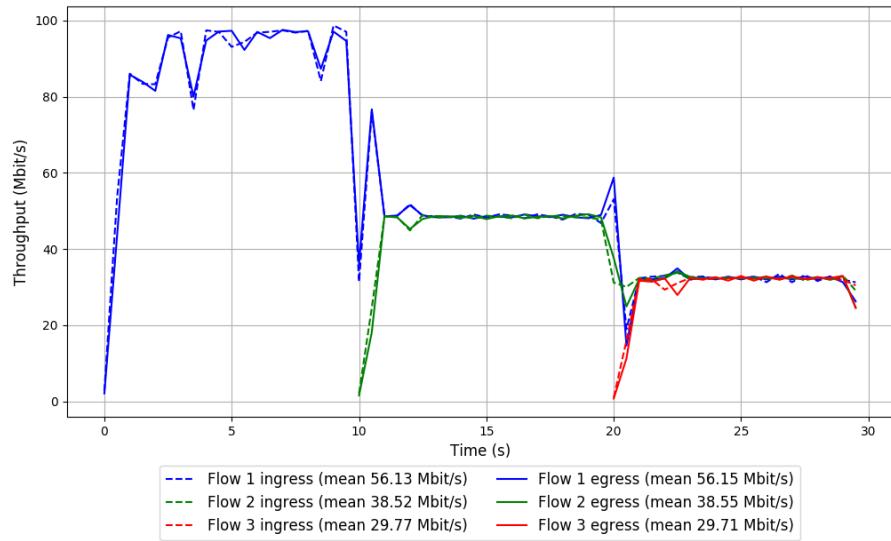


Run 6: Statistics of TCP BBR

```
Start at: 2018-03-21 01:40:44
End at: 2018-03-21 01:41:14
Local clock offset: -3.613 ms
Remote clock offset: -1.804 ms

# Below is generated by plot.py at 2018-03-21 07:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.42 Mbit/s
95th percentile per-packet one-way delay: 98.391 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 56.15 Mbit/s
95th percentile per-packet one-way delay: 97.880 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 98.554 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 29.71 Mbit/s
95th percentile per-packet one-way delay: 99.604 ms
Loss rate: 1.90%
```

Run 6: Report of TCP BBR — Data Link

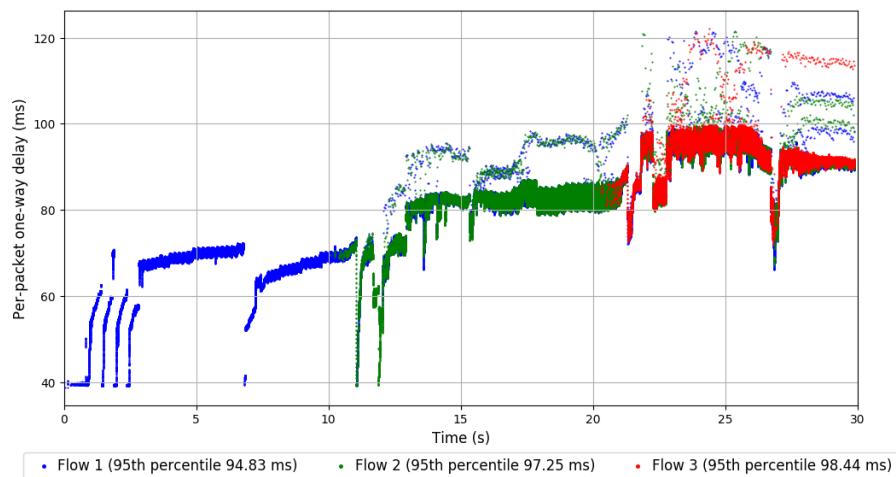
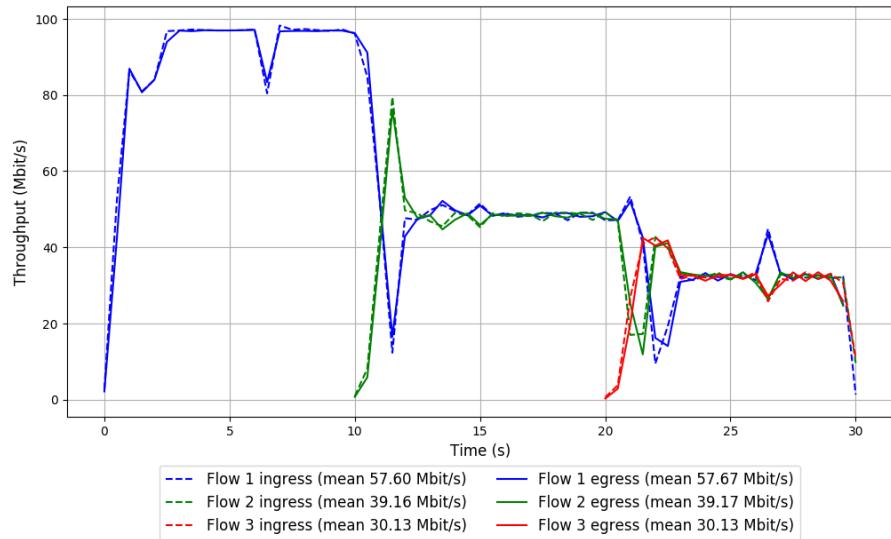


Run 7: Statistics of TCP BBR

```
Start at: 2018-03-21 02:03:27
End at: 2018-03-21 02:03:57
Local clock offset: 1.686 ms
Remote clock offset: -1.537 ms

# Below is generated by plot.py at 2018-03-21 07:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 96.738 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 94.825 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 97.248 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 98.441 ms
Loss rate: 3.74%
```

Run 7: Report of TCP BBR — Data Link

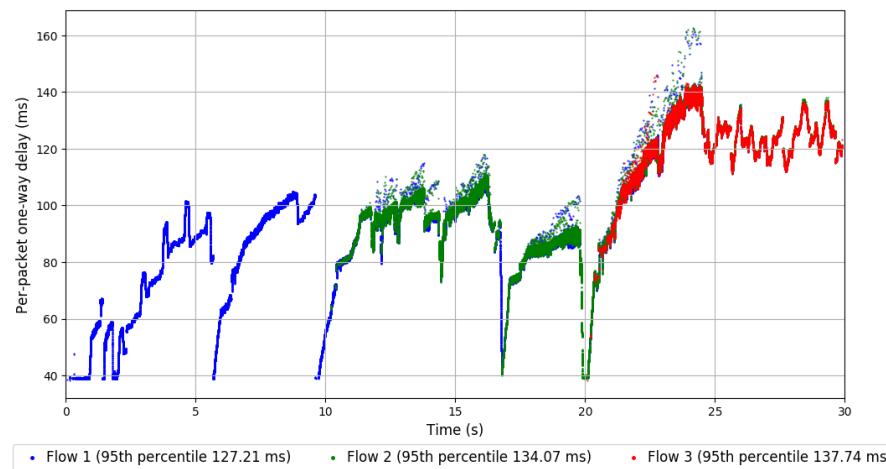
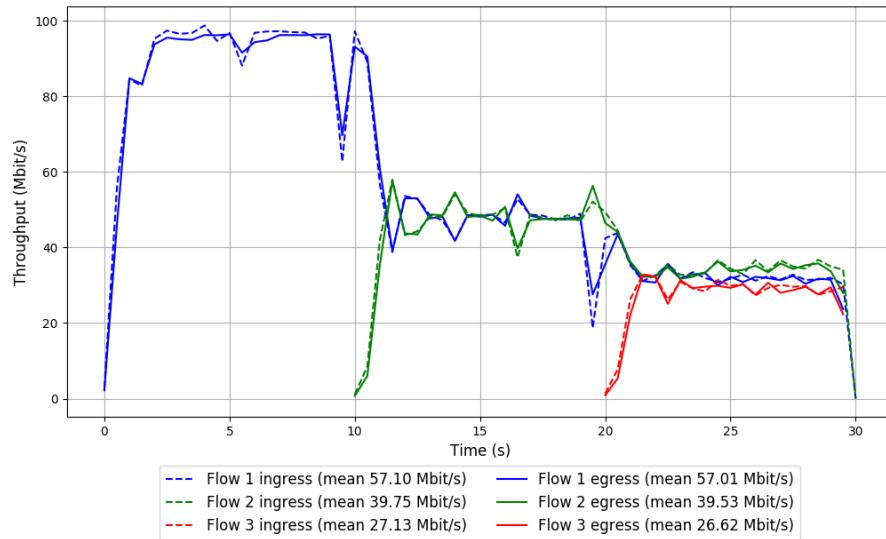


Run 8: Statistics of TCP BBR

```
Start at: 2018-03-21 02:26:28
End at: 2018-03-21 02:26:58
Local clock offset: -6.154 ms
Remote clock offset: -1.465 ms

# Below is generated by plot.py at 2018-03-21 07:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.96 Mbit/s
95th percentile per-packet one-way delay: 132.139 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 57.01 Mbit/s
95th percentile per-packet one-way delay: 127.207 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 134.068 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 26.62 Mbit/s
95th percentile per-packet one-way delay: 137.735 ms
Loss rate: 3.09%
```

Run 8: Report of TCP BBR — Data Link

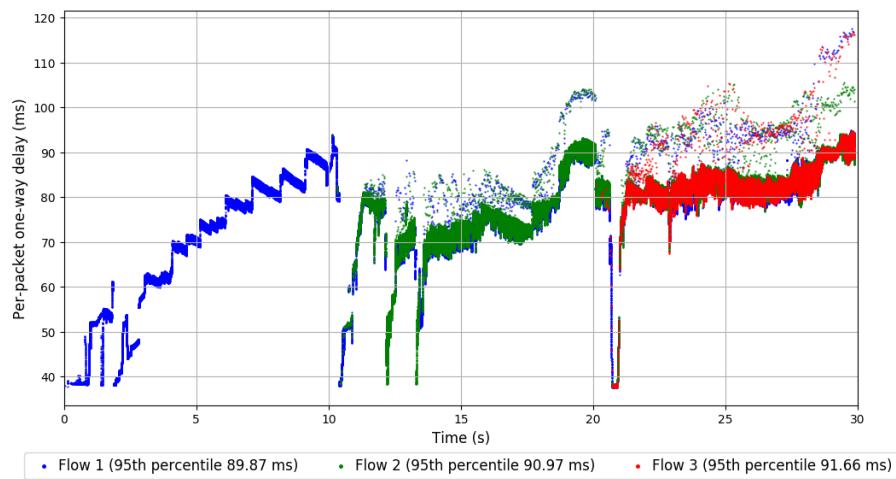
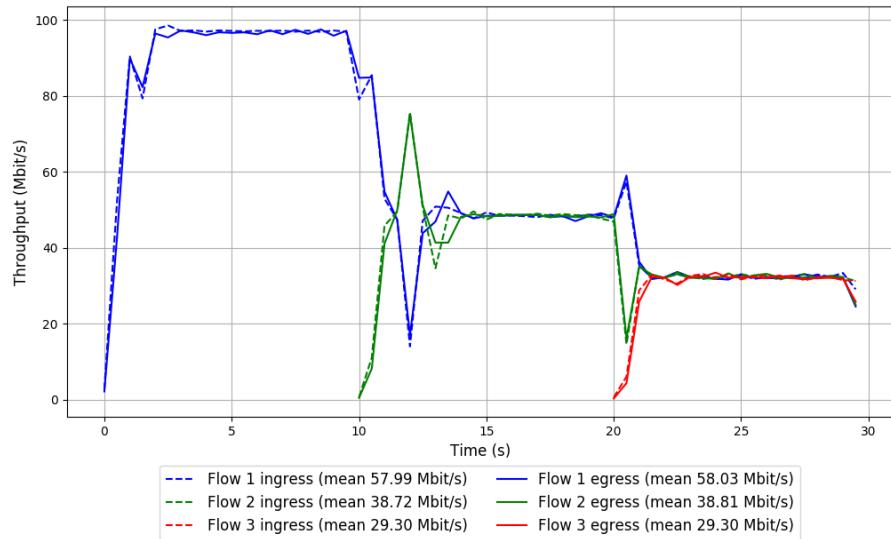


Run 9: Statistics of TCP BBR

```
Start at: 2018-03-21 02:49:13
End at: 2018-03-21 02:49:43
Local clock offset: -10.816 ms
Remote clock offset: -2.321 ms

# Below is generated by plot.py at 2018-03-21 07:32:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 90.404 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 89.866 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 90.968 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 91.661 ms
Loss rate: 1.93%
```

Run 9: Report of TCP BBR — Data Link

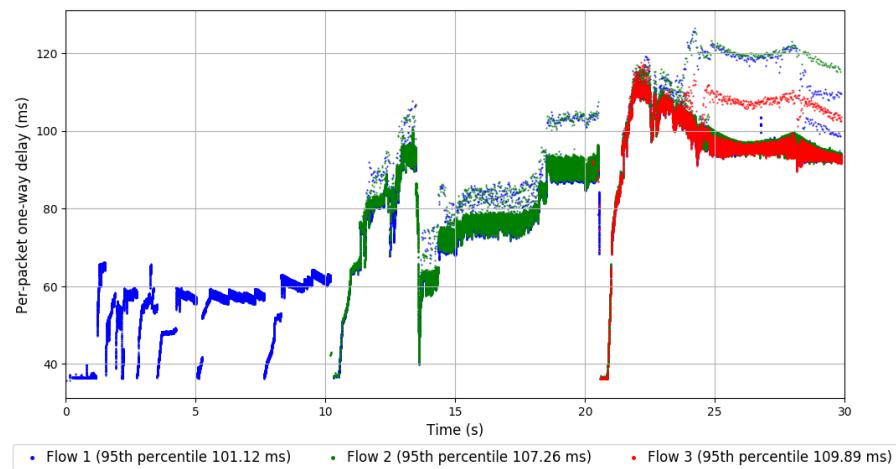
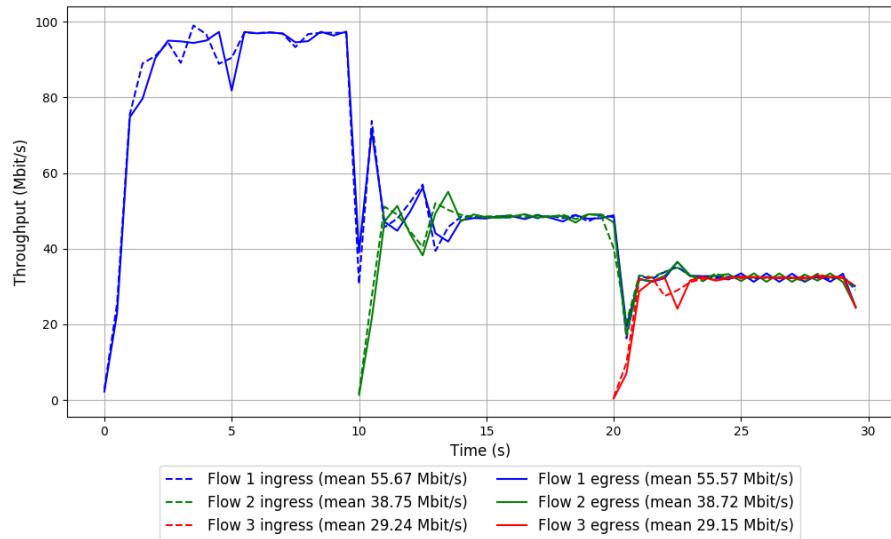


Run 10: Statistics of TCP BBR

```
Start at: 2018-03-21 03:13:17
End at: 2018-03-21 03:13:48
Local clock offset: 1.889 ms
Remote clock offset: -0.488 ms

# Below is generated by plot.py at 2018-03-21 07:32:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.75 Mbit/s
95th percentile per-packet one-way delay: 105.849 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 101.117 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 107.257 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 109.891 ms
Loss rate: 2.01%
```

Run 10: Report of TCP BBR — Data Link

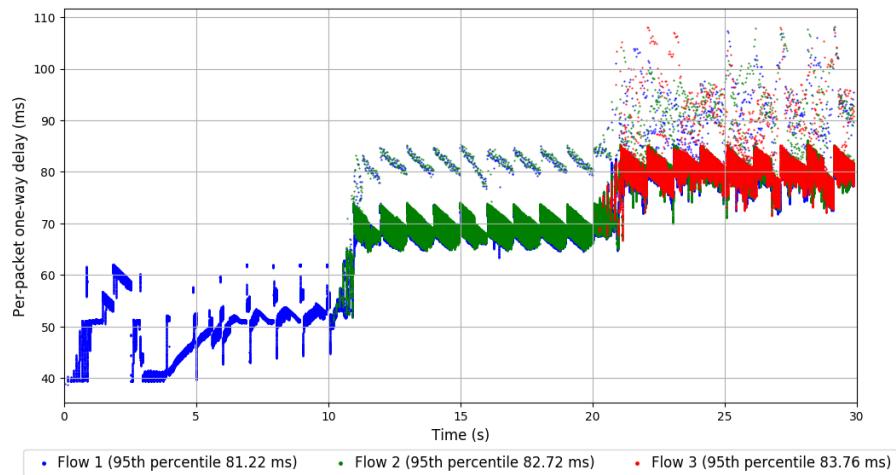
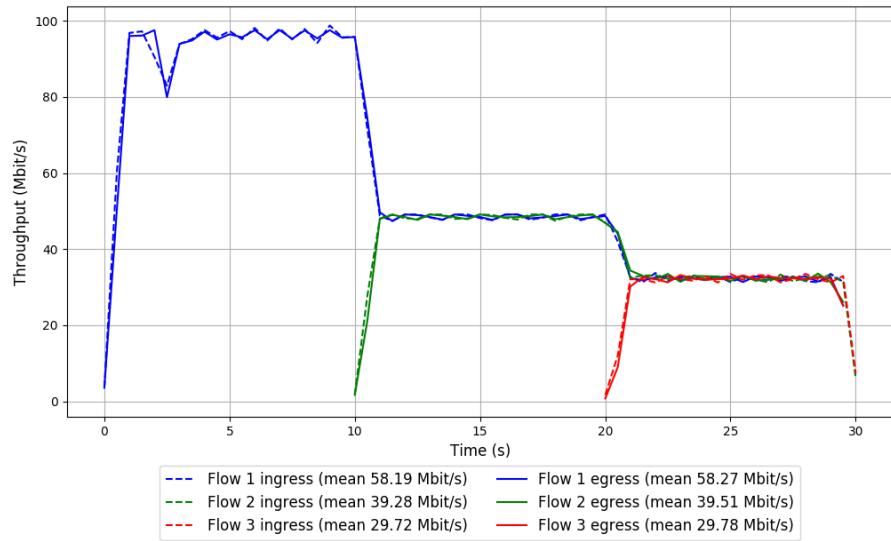


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-03-20 23:45:21
End at: 2018-03-20 23:45:51
Local clock offset: 0.166 ms
Remote clock offset: 5.027 ms

# Below is generated by plot.py at 2018-03-21 07:32:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.25 Mbit/s
95th percentile per-packet one-way delay: 82.341 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 81.217 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 39.51 Mbit/s
95th percentile per-packet one-way delay: 82.720 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 29.78 Mbit/s
95th percentile per-packet one-way delay: 83.757 ms
Loss rate: 3.24%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-21 00:08:08

End at: 2018-03-21 00:08:38

Local clock offset: 5.243 ms

Remote clock offset: 5.074 ms

Run 2: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of TCP Cubic

Start at: 2018-03-21 00:30:54

End at: 2018-03-21 00:31:24

Local clock offset: 8.856 ms

Remote clock offset: -1.882 ms

Run 3: Report of TCP Cubic — Data Link

Figure is missing

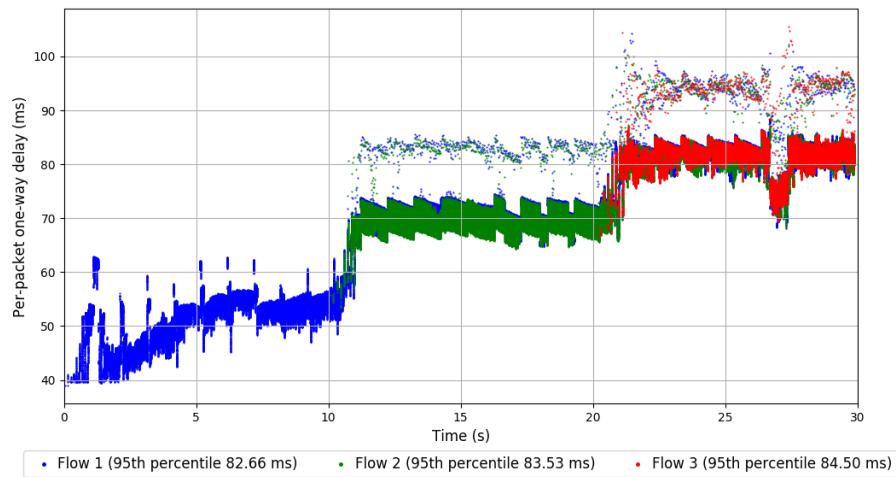
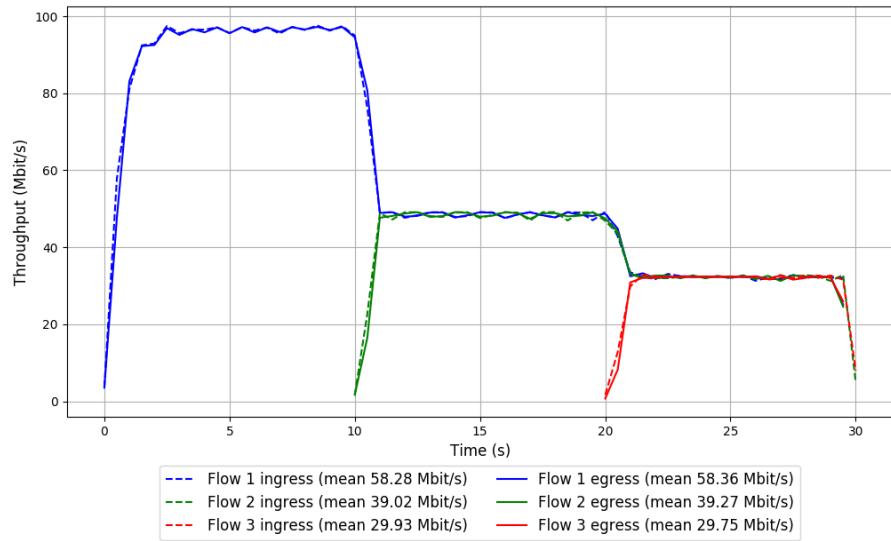
Figure is missing

Run 4: Statistics of TCP Cubic

```
Start at: 2018-03-21 00:53:56
End at: 2018-03-21 00:54:26
Local clock offset: 5.704 ms
Remote clock offset: -2.364 ms

# Below is generated by plot.py at 2018-03-21 07:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 83.316 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 58.36 Mbit/s
95th percentile per-packet one-way delay: 82.661 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 83.531 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 84.496 ms
Loss rate: 3.23%
```

Run 4: Report of TCP Cubic — Data Link

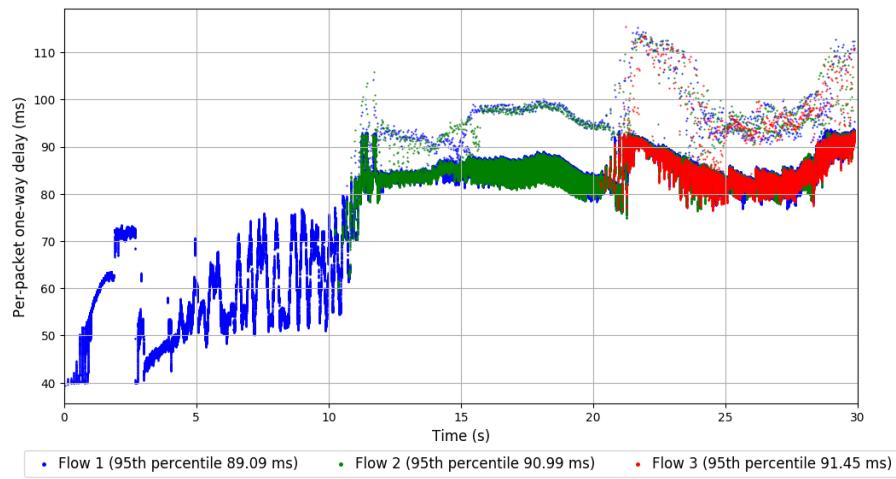
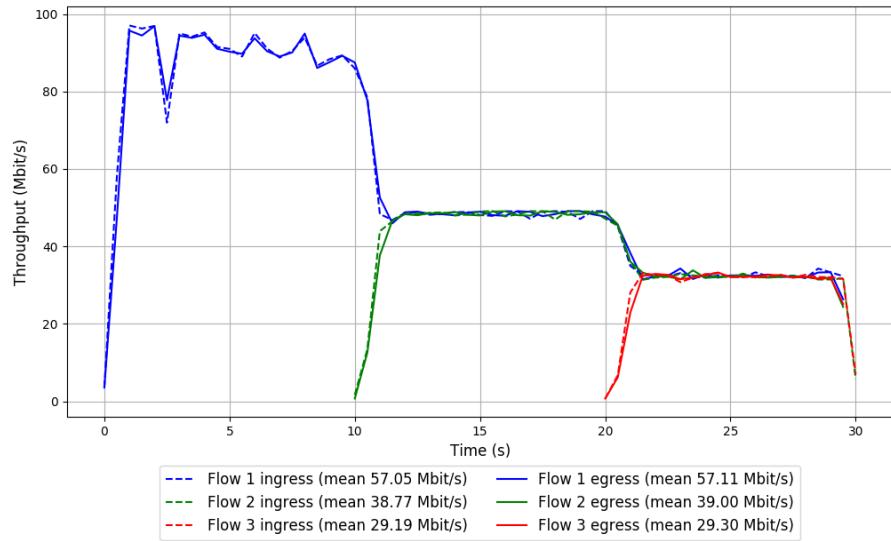


Run 5: Statistics of TCP Cubic

```
Start at: 2018-03-21 01:16:41
End at: 2018-03-21 01:17:11
Local clock offset: 0.337 ms
Remote clock offset: -2.614 ms

# Below is generated by plot.py at 2018-03-21 07:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 90.475 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 57.11 Mbit/s
95th percentile per-packet one-way delay: 89.091 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 90.988 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 91.455 ms
Loss rate: 3.31%
```

Run 5: Report of TCP Cubic — Data Link

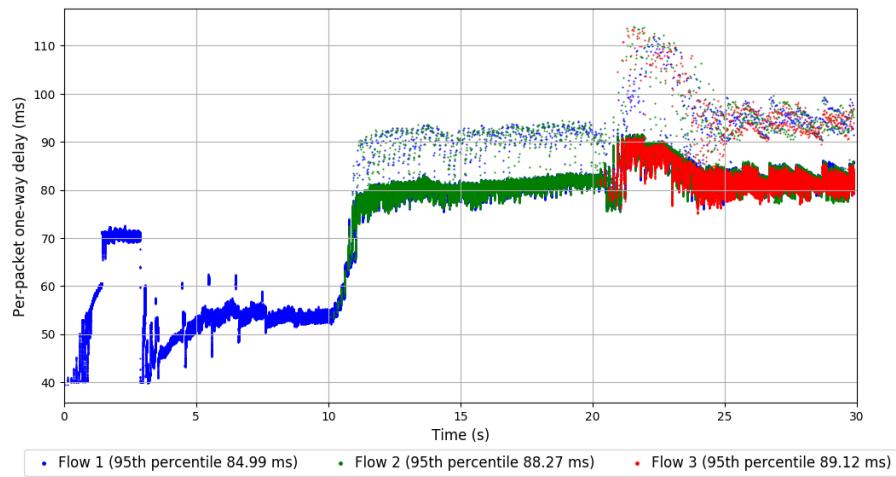
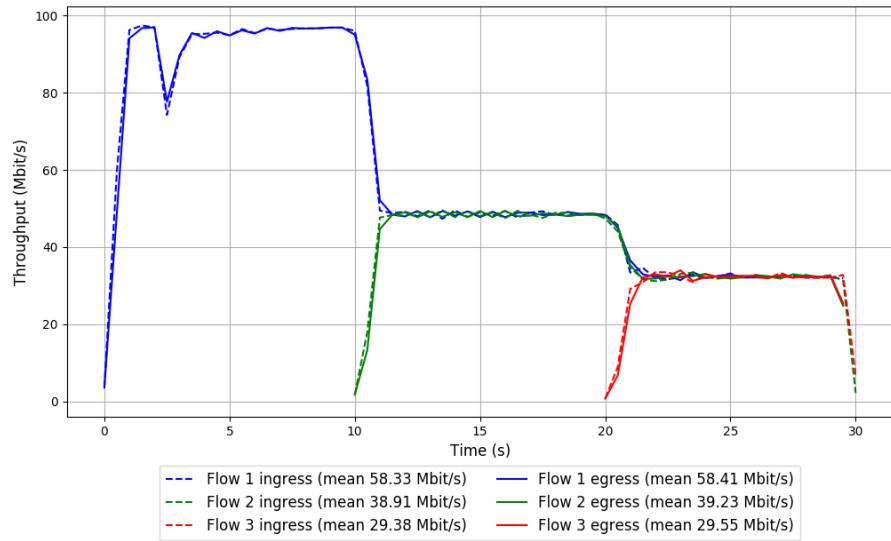


Run 6: Statistics of TCP Cubic

```
Start at: 2018-03-21 01:39:28
End at: 2018-03-21 01:39:58
Local clock offset: -3.944 ms
Remote clock offset: -1.845 ms

# Below is generated by plot.py at 2018-03-21 07:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 87.345 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 84.993 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 88.273 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 89.120 ms
Loss rate: 3.25%
```

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-21 02:02:12

End at: 2018-03-21 02:02:42

Local clock offset: 1.0 ms

Remote clock offset: -1.566 ms

Run 7: Report of TCP Cubic — Data Link

Figure is missing

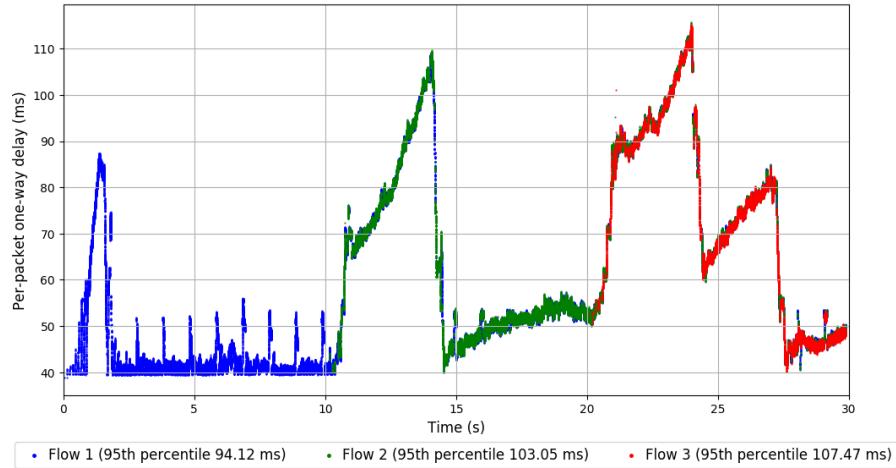
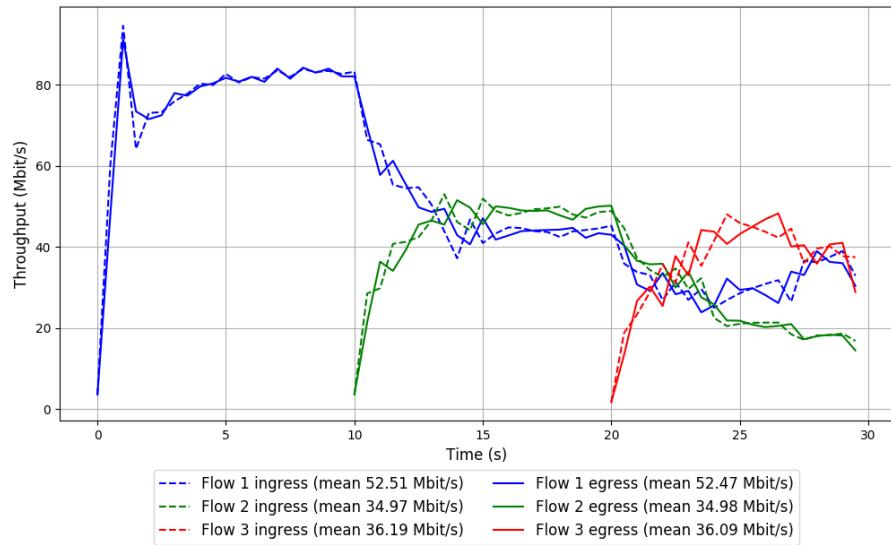
Figure is missing

Run 8: Statistics of TCP Cubic

```
Start at: 2018-03-21 02:25:11
End at: 2018-03-21 02:25:41
Local clock offset: -5.284 ms
Remote clock offset: -1.398 ms

# Below is generated by plot.py at 2018-03-21 07:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.55 Mbit/s
95th percentile per-packet one-way delay: 99.760 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 52.47 Mbit/s
95th percentile per-packet one-way delay: 94.119 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 103.050 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 36.09 Mbit/s
95th percentile per-packet one-way delay: 107.474 ms
Loss rate: 1.52%
```

Run 8: Report of TCP Cubic — Data Link

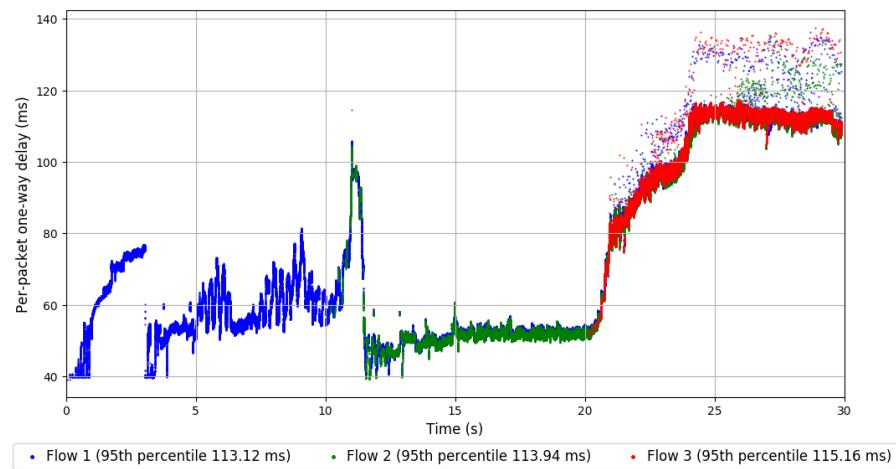
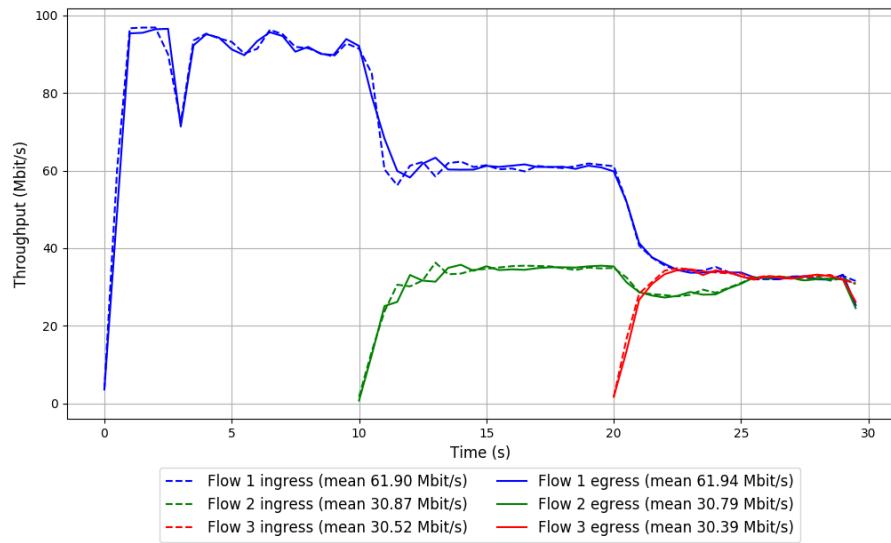


Run 9: Statistics of TCP Cubic

```
Start at: 2018-03-21 02:47:56
End at: 2018-03-21 02:48:26
Local clock offset: -11.41 ms
Remote clock offset: -2.302 ms

# Below is generated by plot.py at 2018-03-21 07:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.33 Mbit/s
95th percentile per-packet one-way delay: 113.963 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 113.116 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 30.79 Mbit/s
95th percentile per-packet one-way delay: 113.935 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 115.157 ms
Loss rate: 2.11%
```

Run 9: Report of TCP Cubic — Data Link

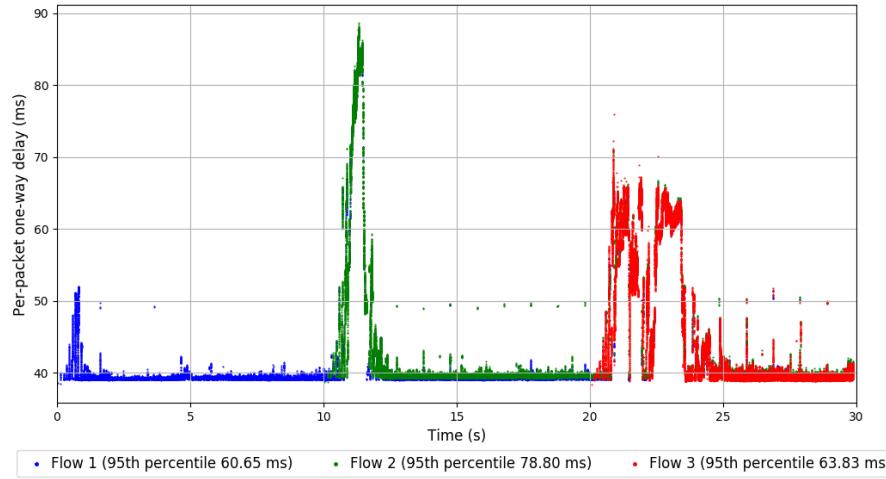
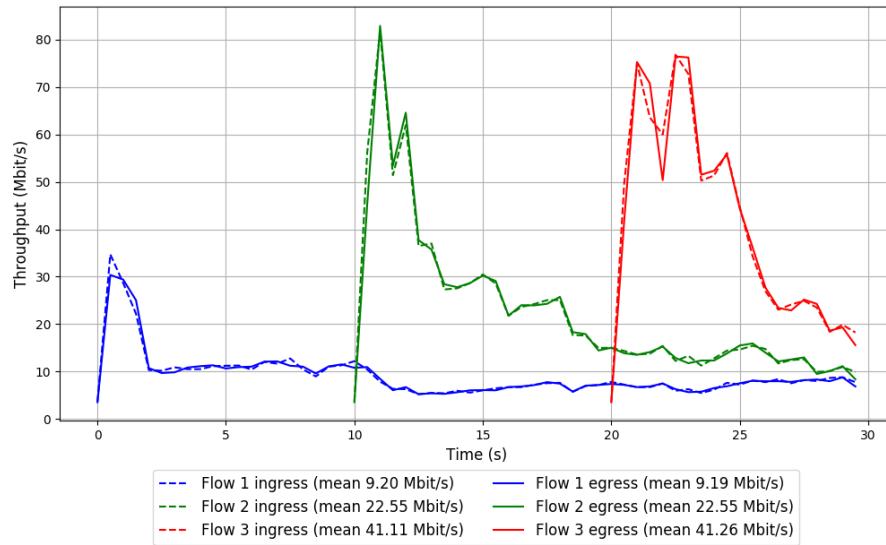


```
Run 10: Statistics of TCP Cubic
```

```
Start at: 2018-03-21 03:12:03
End at: 2018-03-21 03:12:33
Local clock offset: 4.37 ms
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2018-03-21 07:33:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.77 Mbit/s
95th percentile per-packet one-way delay: 65.114 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 9.19 Mbit/s
95th percentile per-packet one-way delay: 60.648 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 22.55 Mbit/s
95th percentile per-packet one-way delay: 78.800 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 0.67%
```

Run 10: Report of TCP Cubic — Data Link

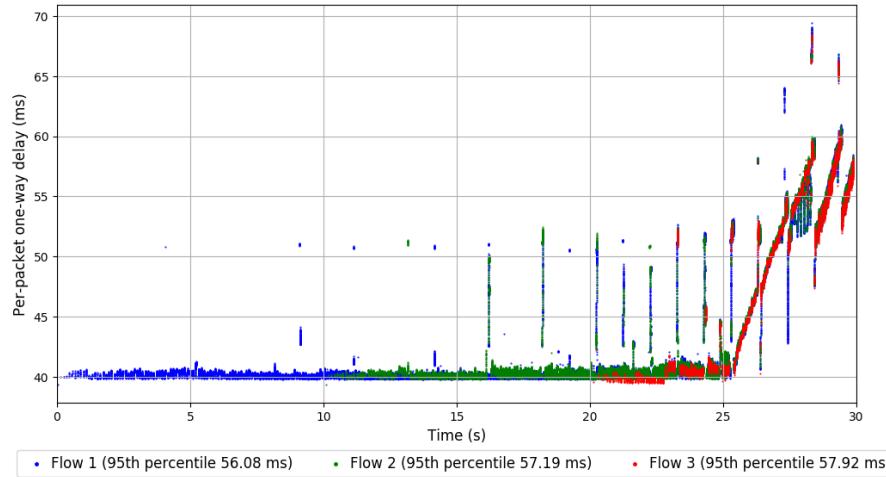
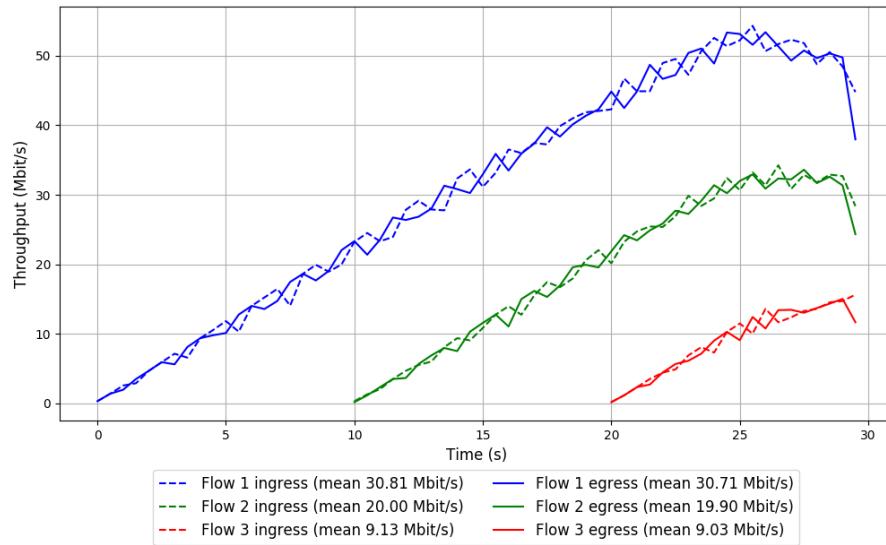


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-03-20 23:51:38
End at: 2018-03-20 23:52:08
Local clock offset: 0.425 ms
Remote clock offset: 5.341 ms

# Below is generated by plot.py at 2018-03-21 07:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 56.712 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 56.079 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.90 Mbit/s
95th percentile per-packet one-way delay: 57.186 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 57.925 ms
Loss rate: 2.21%
```

Run 1: Report of LEDBAT — Data Link

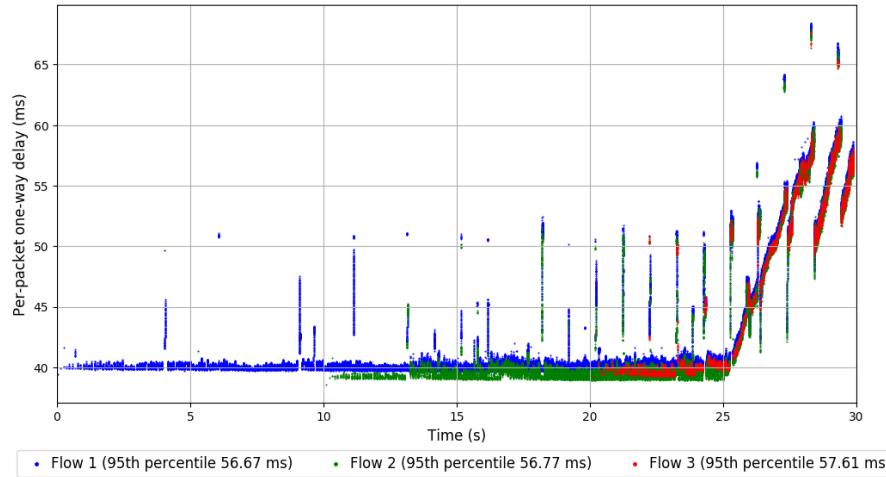
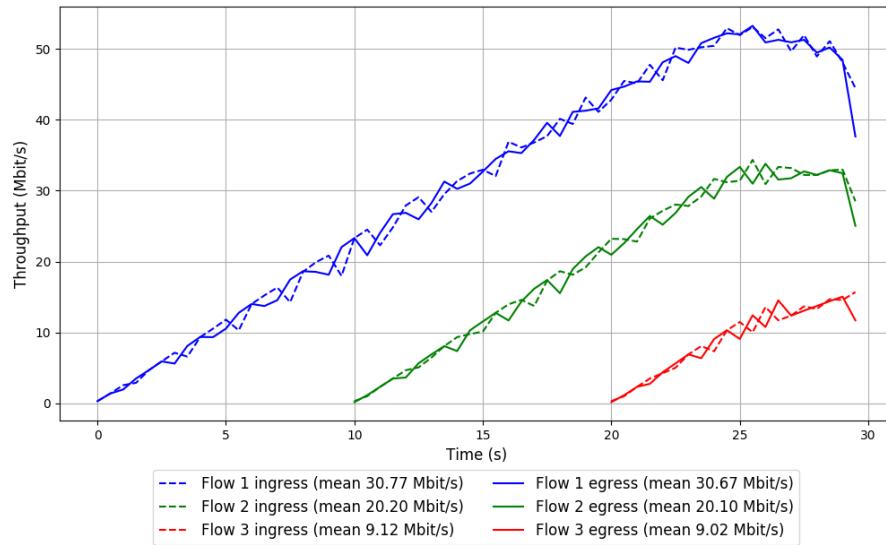


Run 2: Statistics of LEDBAT

```
Start at: 2018-03-21 00:14:24
End at: 2018-03-21 00:14:54
Local clock offset: 6.886 ms
Remote clock offset: 1.477 ms

# Below is generated by plot.py at 2018-03-21 07:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.94 Mbit/s
95th percentile per-packet one-way delay: 56.805 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 56.675 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 20.10 Mbit/s
95th percentile per-packet one-way delay: 56.765 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 57.613 ms
Loss rate: 2.21%
```

Run 2: Report of LEDBAT — Data Link

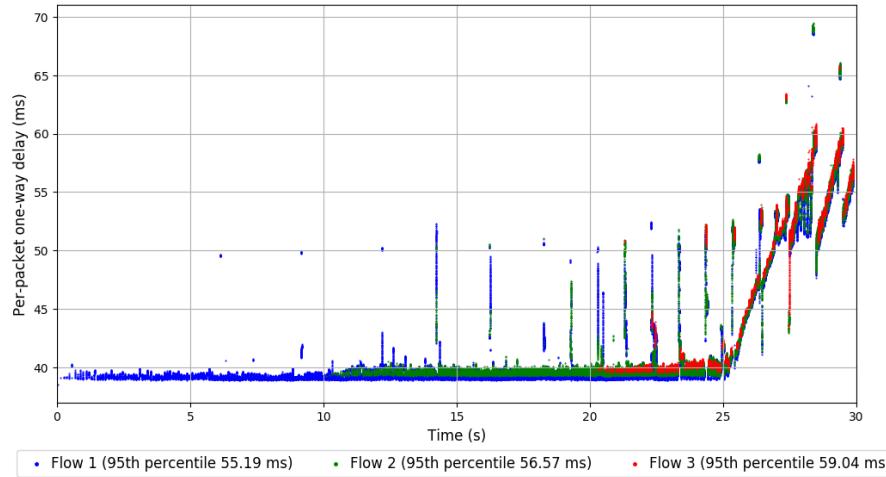
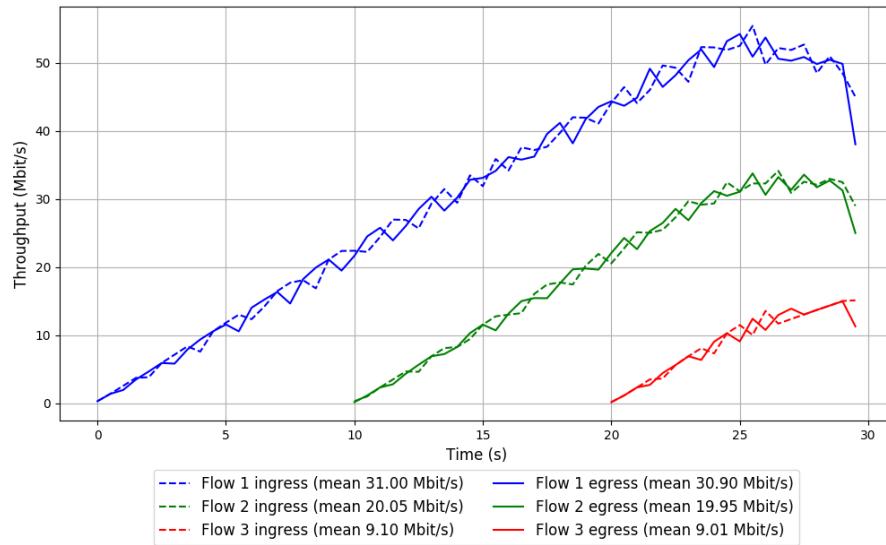


Run 3: Statistics of LEDBAT

```
Start at: 2018-03-21 00:37:17
End at: 2018-03-21 00:37:47
Local clock offset: 6.952 ms
Remote clock offset: -2.497 ms

# Below is generated by plot.py at 2018-03-21 07:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.06 Mbit/s
95th percentile per-packet one-way delay: 56.147 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 55.190 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.95 Mbit/s
95th percentile per-packet one-way delay: 56.566 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 9.01 Mbit/s
95th percentile per-packet one-way delay: 59.043 ms
Loss rate: 2.15%
```

Run 3: Report of LEDBAT — Data Link

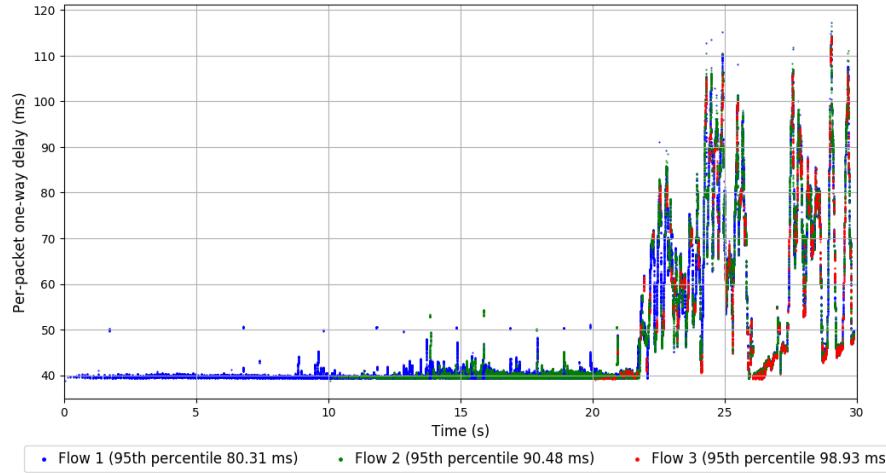
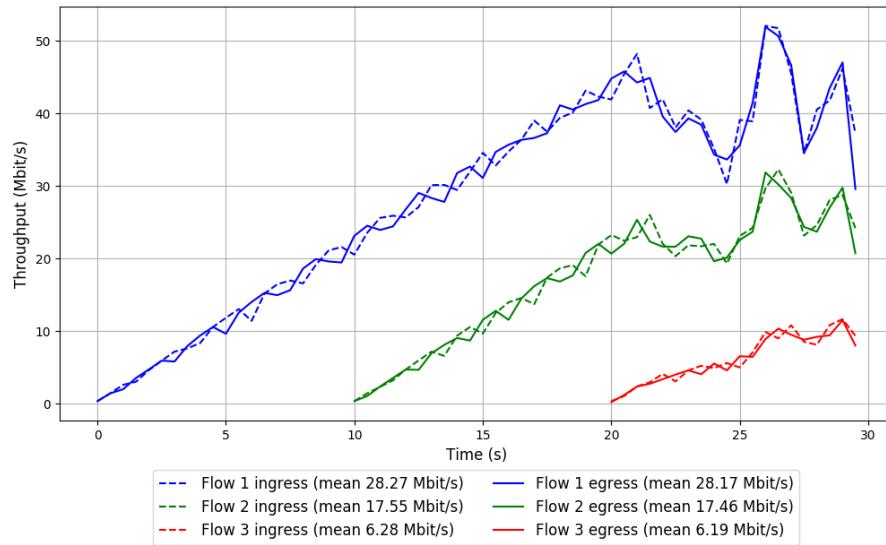


Run 4: Statistics of LEDBAT

```
Start at: 2018-03-21 01:00:12
End at: 2018-03-21 01:00:42
Local clock offset: 6.007 ms
Remote clock offset: -2.508 ms

# Below is generated by plot.py at 2018-03-21 07:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.79 Mbit/s
95th percentile per-packet one-way delay: 85.779 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 80.314 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 17.46 Mbit/s
95th percentile per-packet one-way delay: 90.483 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 98.927 ms
Loss rate: 2.48%
```

Run 4: Report of LEDBAT — Data Link

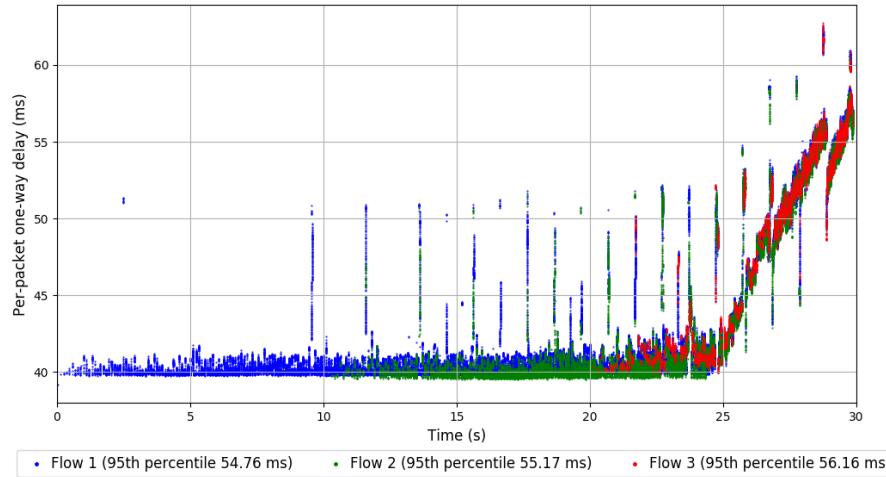
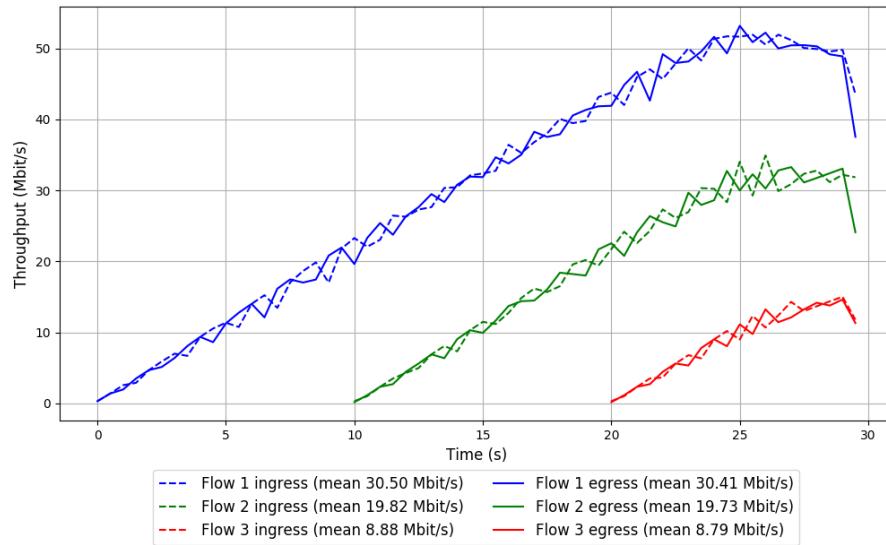


Run 5: Statistics of LEDBAT

```
Start at: 2018-03-21 01:22:58
End at: 2018-03-21 01:23:28
Local clock offset: -1.465 ms
Remote clock offset: -2.188 ms

# Below is generated by plot.py at 2018-03-21 07:33:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.36 Mbit/s
95th percentile per-packet one-way delay: 55.078 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 30.41 Mbit/s
95th percentile per-packet one-way delay: 54.763 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.73 Mbit/s
95th percentile per-packet one-way delay: 55.172 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 8.79 Mbit/s
95th percentile per-packet one-way delay: 56.161 ms
Loss rate: 2.20%
```

Run 5: Report of LEDBAT — Data Link

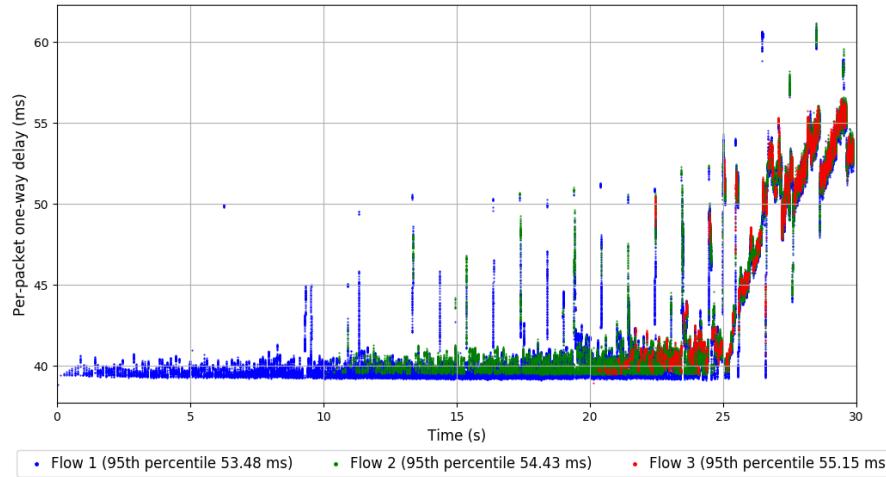
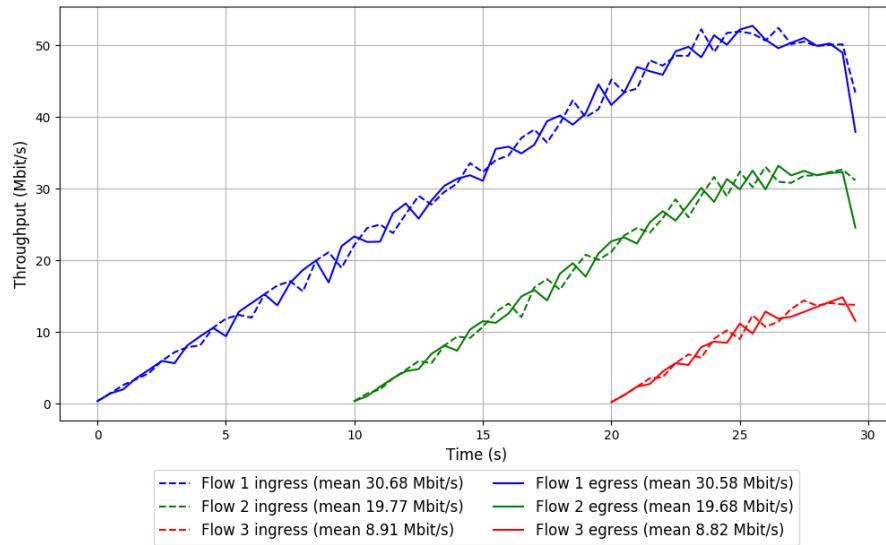


Run 6: Statistics of LEDBAT

```
Start at: 2018-03-21 01:45:43
End at: 2018-03-21 01:46:13
Local clock offset: -0.939 ms
Remote clock offset: -1.919 ms

# Below is generated by plot.py at 2018-03-21 07:33:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 53.475 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.68 Mbit/s
95th percentile per-packet one-way delay: 54.431 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 55.148 ms
Loss rate: 2.25%
```

Run 6: Report of LEDBAT — Data Link

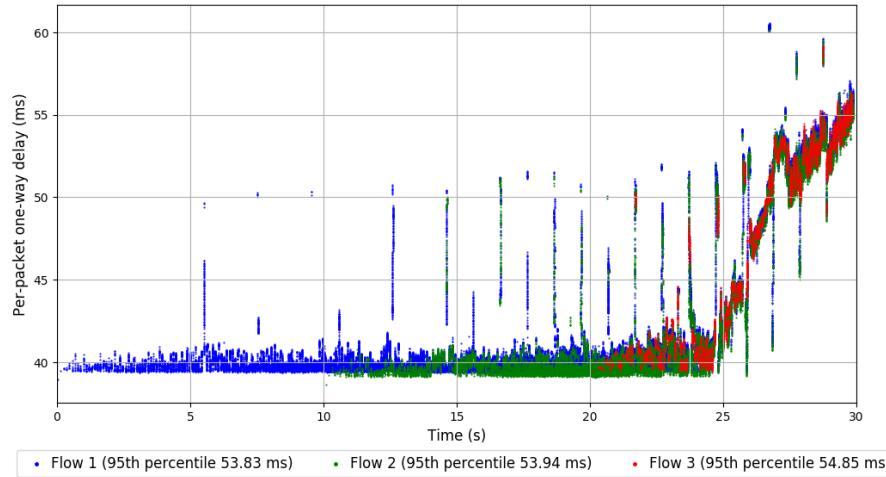
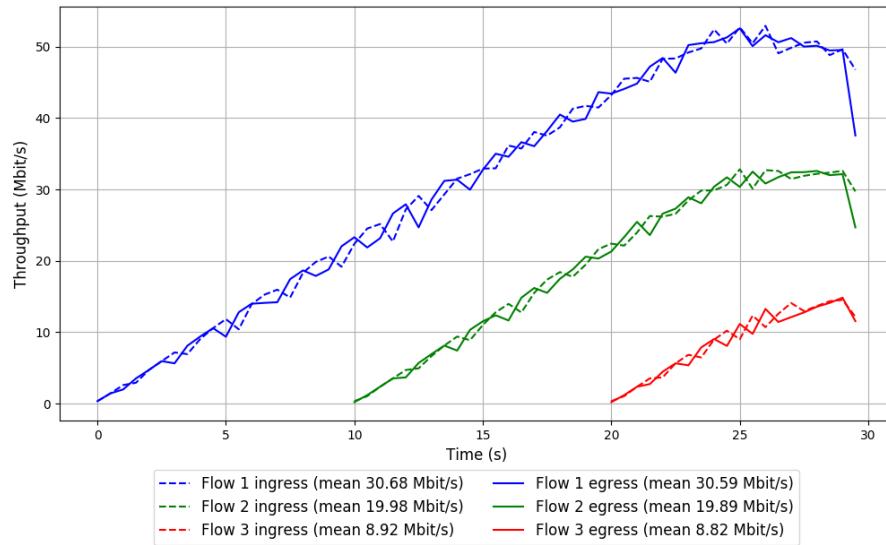


Run 7: Statistics of LEDBAT

```
Start at: 2018-03-21 02:08:33
End at: 2018-03-21 02:09:03
Local clock offset: 2.008 ms
Remote clock offset: -1.489 ms

# Below is generated by plot.py at 2018-03-21 07:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 53.993 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 30.59 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 53.935 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 54.855 ms
Loss rate: 2.25%
```

Run 7: Report of LEDBAT — Data Link

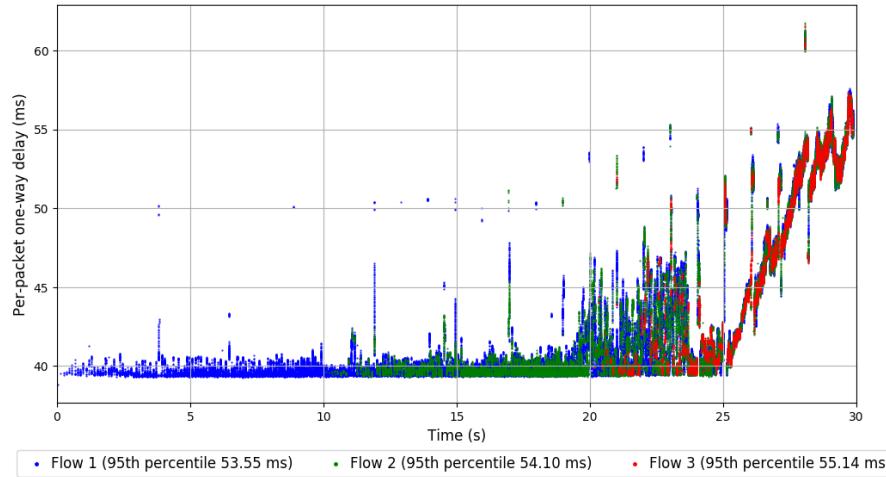
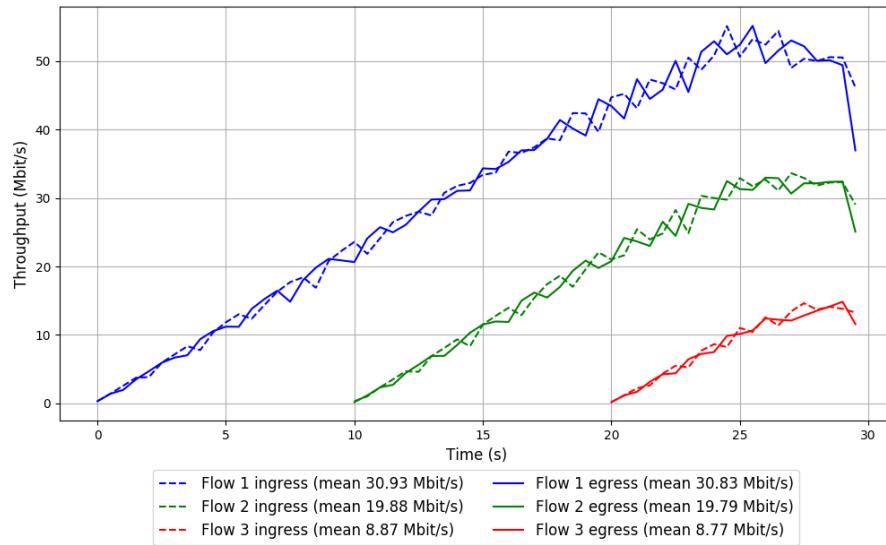


Run 8: Statistics of LEDBAT

```
Start at: 2018-03-21 02:31:27
End at: 2018-03-21 02:31:57
Local clock offset: -7.959 ms
Remote clock offset: -1.842 ms

# Below is generated by plot.py at 2018-03-21 07:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.79 Mbit/s
95th percentile per-packet one-way delay: 53.873 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 53.545 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.79 Mbit/s
95th percentile per-packet one-way delay: 54.099 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 55.140 ms
Loss rate: 2.26%
```

Run 8: Report of LEDBAT — Data Link

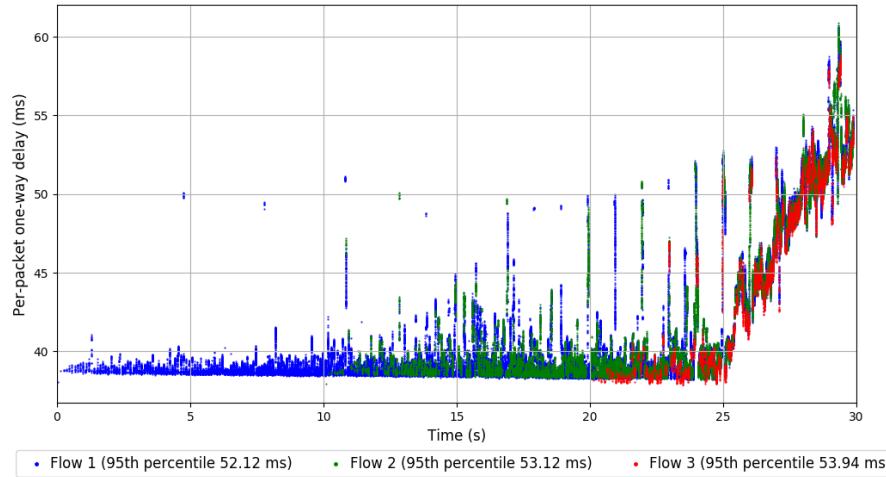
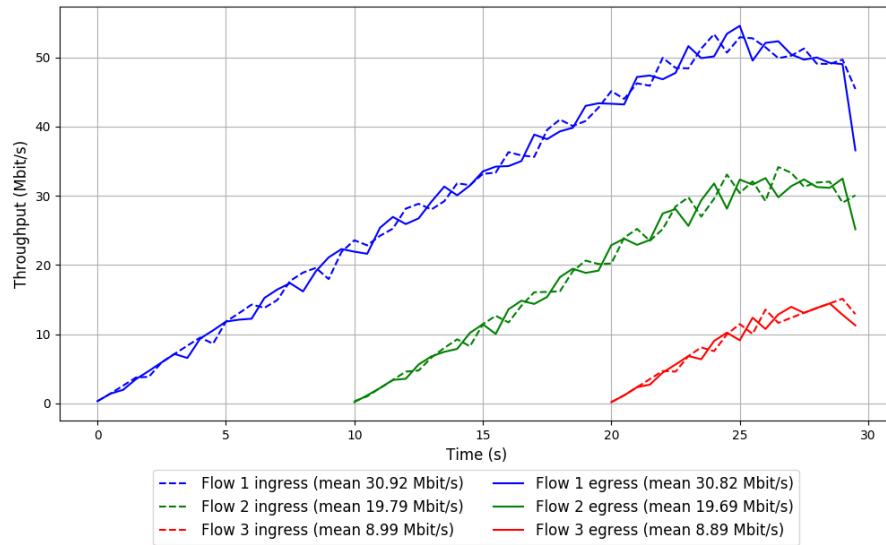


Run 9: Statistics of LEDBAT

```
Start at: 2018-03-21 02:54:12
End at: 2018-03-21 02:54:42
Local clock offset: -4.109 ms
Remote clock offset: -2.394 ms

# Below is generated by plot.py at 2018-03-21 07:33:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.76 Mbit/s
95th percentile per-packet one-way delay: 52.514 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 52.123 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.69 Mbit/s
95th percentile per-packet one-way delay: 53.117 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 53.936 ms
Loss rate: 2.22%
```

Run 9: Report of LEDBAT — Data Link

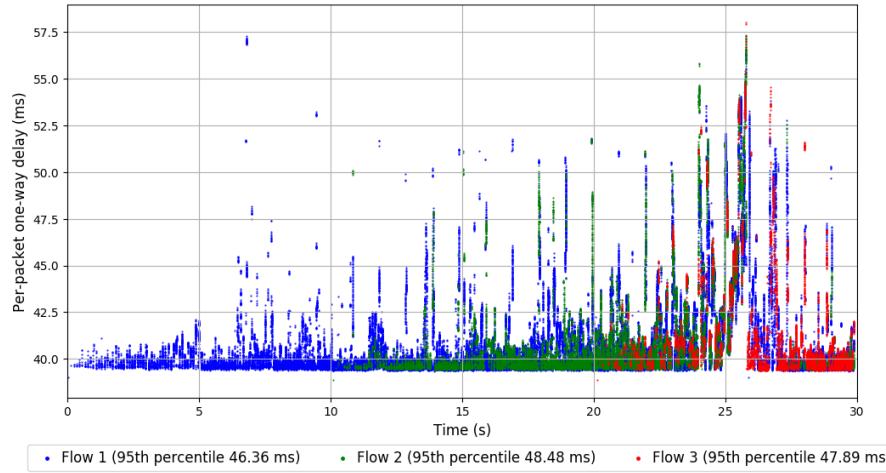
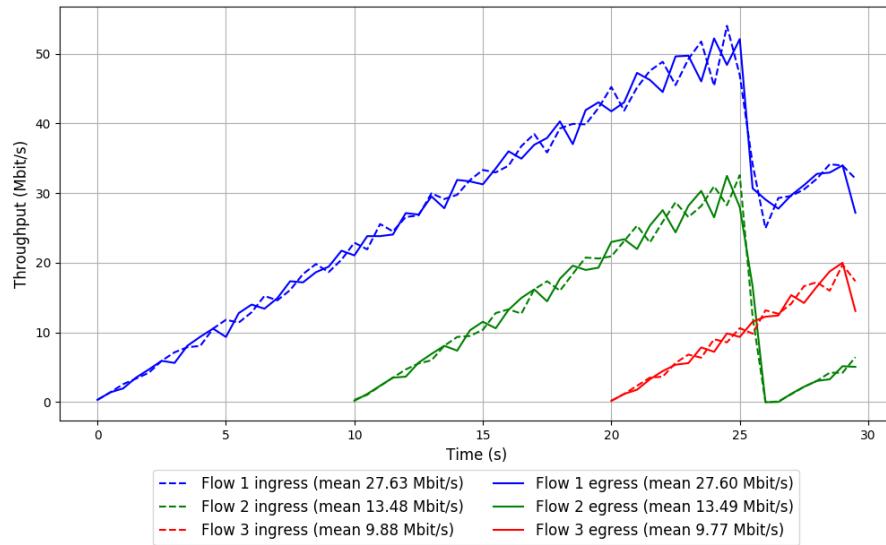


Run 10: Statistics of LEDBAT

```
Start at: 2018-03-21 03:18:23
End at: 2018-03-21 03:18:53
Local clock offset: 5.308 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-03-21 07:33:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 47.087 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 27.60 Mbit/s
95th percentile per-packet one-way delay: 46.356 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 48.476 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 47.892 ms
Loss rate: 2.19%
```

Run 10: Report of LEDBAT — Data Link

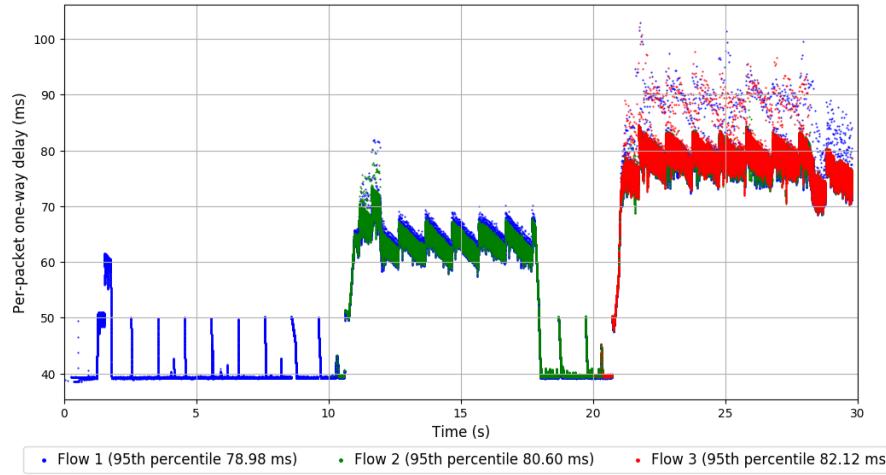
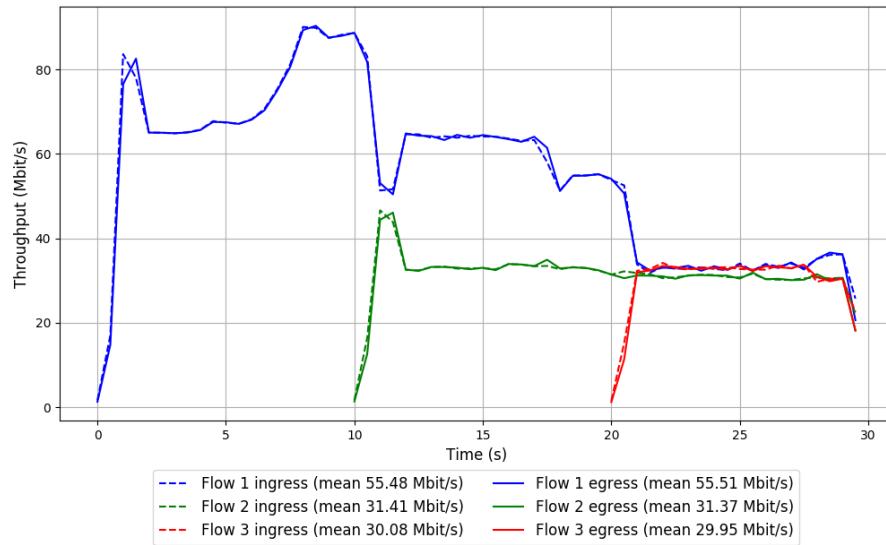


Run 1: Statistics of PCC

```
Start at: 2018-03-20 23:49:09
End at: 2018-03-20 23:49:39
Local clock offset: 0.512 ms
Remote clock offset: 5.237 ms

# Below is generated by plot.py at 2018-03-21 07:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 80.346 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 55.51 Mbit/s
95th percentile per-packet one-way delay: 78.977 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 80.601 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 82.118 ms
Loss rate: 1.53%
```

Run 1: Report of PCC — Data Link

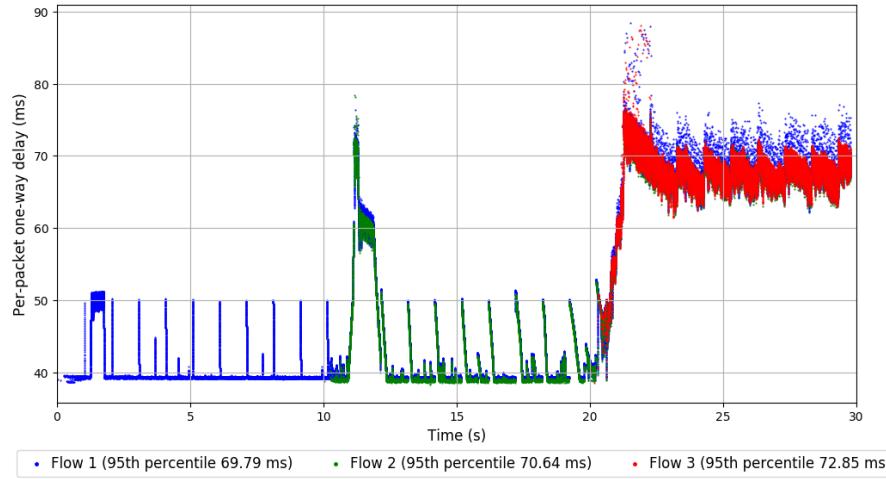
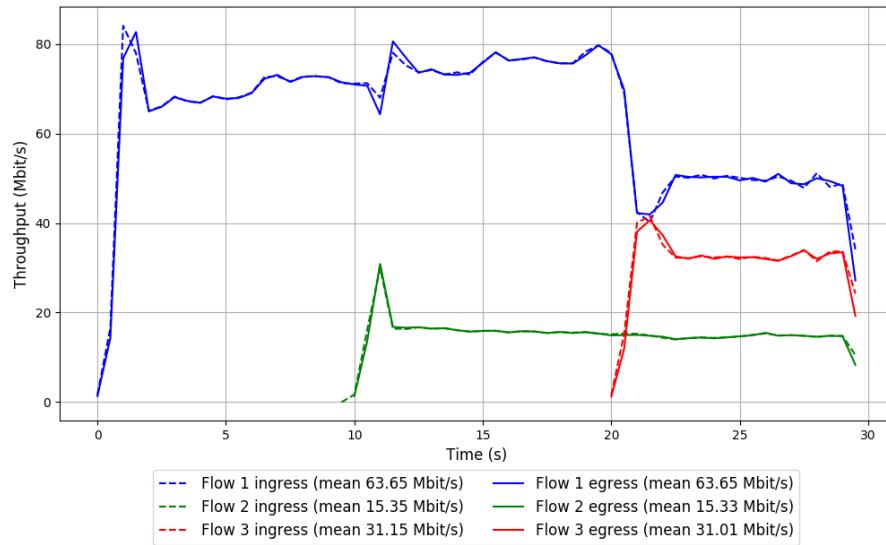


Run 2: Statistics of PCC

```
Start at: 2018-03-21 00:11:55
End at: 2018-03-21 00:12:25
Local clock offset: 6.203 ms
Remote clock offset: 2.604 ms

# Below is generated by plot.py at 2018-03-21 07:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.98 Mbit/s
95th percentile per-packet one-way delay: 70.443 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 63.65 Mbit/s
95th percentile per-packet one-way delay: 69.790 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 15.33 Mbit/s
95th percentile per-packet one-way delay: 70.642 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 72.850 ms
Loss rate: 1.59%
```

Run 2: Report of PCC — Data Link

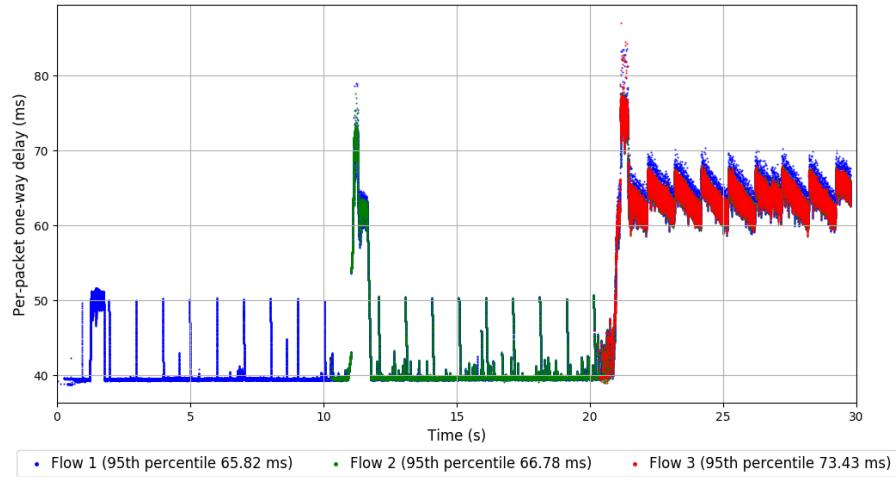
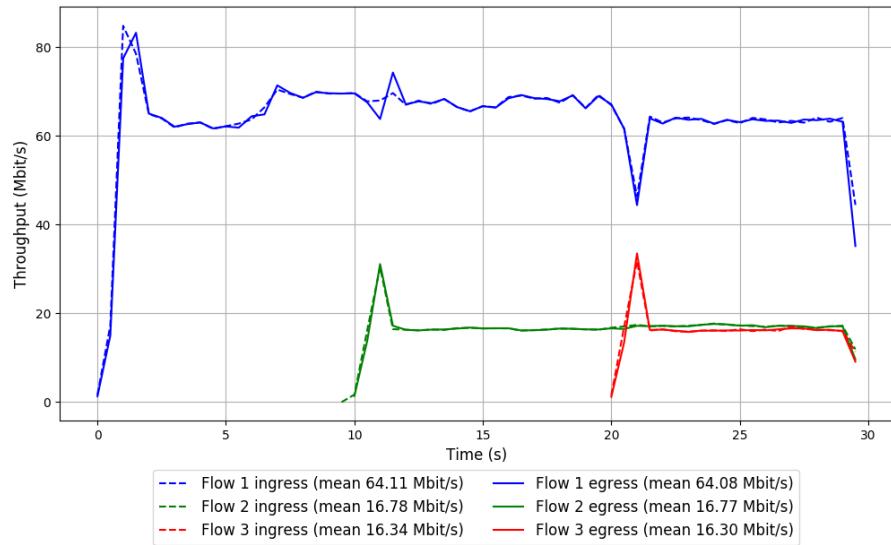


Run 3: Statistics of PCC

```
Start at: 2018-03-21 00:34:43
End at: 2018-03-21 00:35:13
Local clock offset: 7.786 ms
Remote clock offset: -2.28 ms

# Below is generated by plot.py at 2018-03-21 07:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.53 Mbit/s
95th percentile per-packet one-way delay: 66.150 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 64.08 Mbit/s
95th percentile per-packet one-way delay: 65.819 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 66.779 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 16.30 Mbit/s
95th percentile per-packet one-way delay: 73.426 ms
Loss rate: 1.36%
```

Run 3: Report of PCC — Data Link

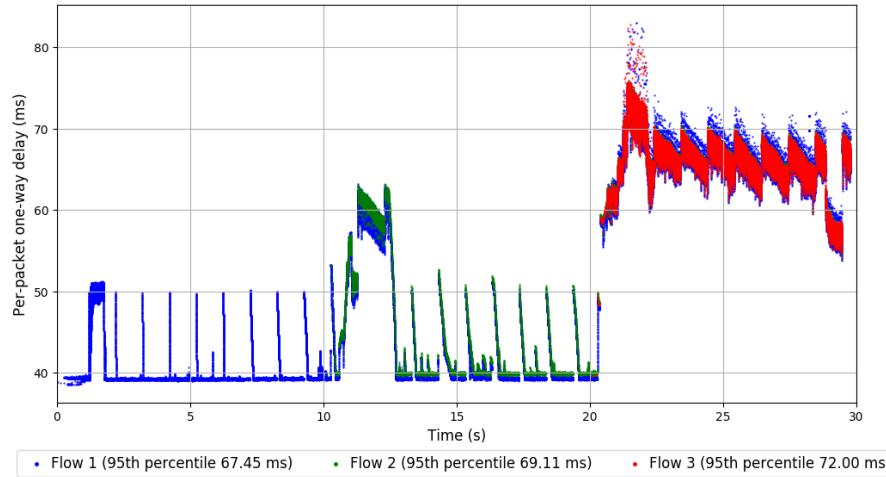
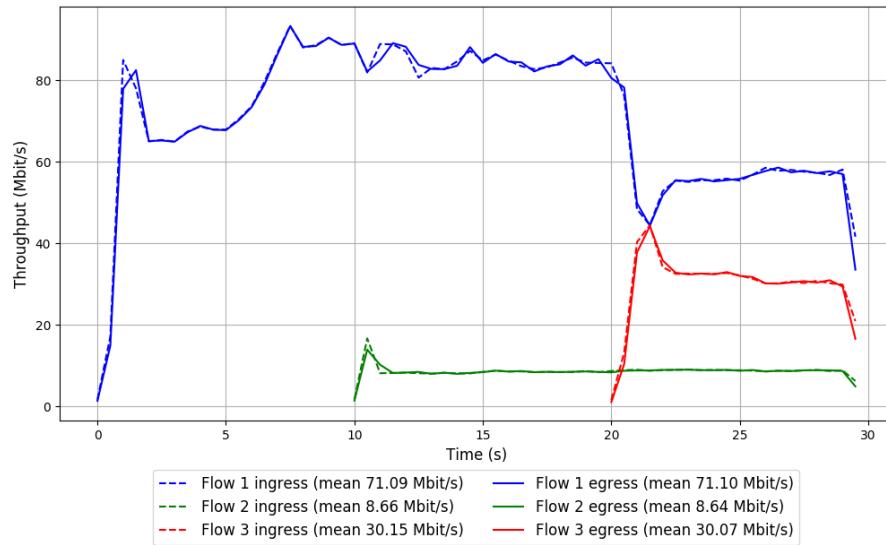


Run 4: Statistics of PCC

```
Start at: 2018-03-21 00:57:44
End at: 2018-03-21 00:58:14
Local clock offset: 6.05 ms
Remote clock offset: -2.461 ms

# Below is generated by plot.py at 2018-03-21 07:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.67 Mbit/s
95th percentile per-packet one-way delay: 68.343 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 71.10 Mbit/s
95th percentile per-packet one-way delay: 67.455 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 8.64 Mbit/s
95th percentile per-packet one-way delay: 69.115 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 30.07 Mbit/s
95th percentile per-packet one-way delay: 72.003 ms
Loss rate: 1.39%
```

Run 4: Report of PCC — Data Link

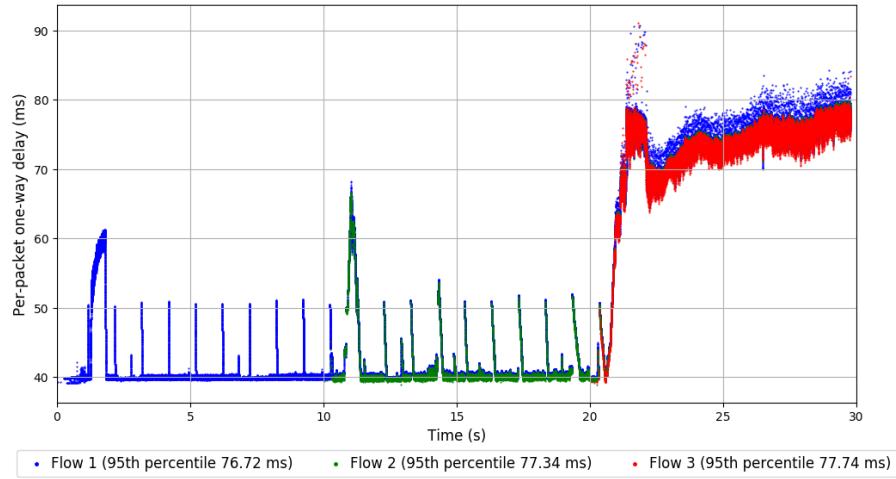
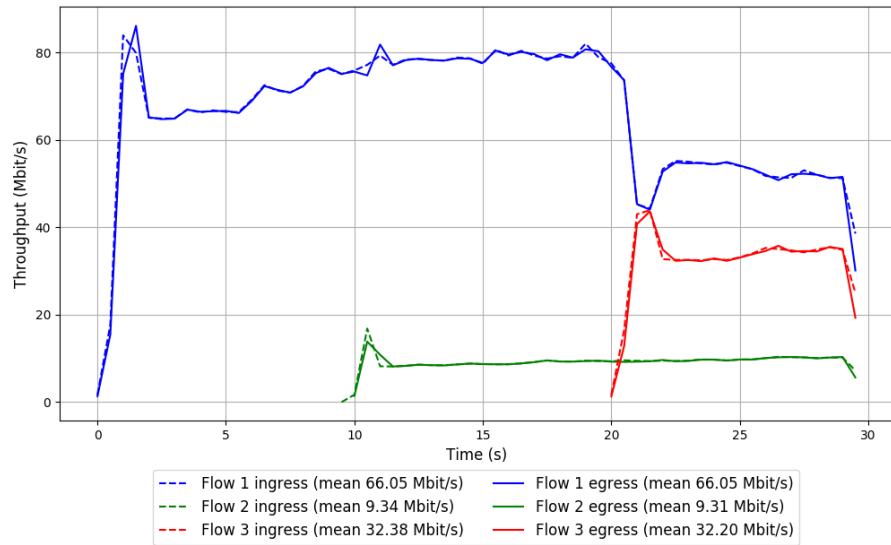


Run 5: Statistics of PCC

```
Start at: 2018-03-21 01:20:28
End at: 2018-03-21 01:20:58
Local clock offset: -0.822 ms
Remote clock offset: -2.234 ms

# Below is generated by plot.py at 2018-03-21 07:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.76 Mbit/s
95th percentile per-packet one-way delay: 77.069 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 66.05 Mbit/s
95th percentile per-packet one-way delay: 76.719 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 77.343 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 77.736 ms
Loss rate: 1.72%
```

Run 5: Report of PCC — Data Link

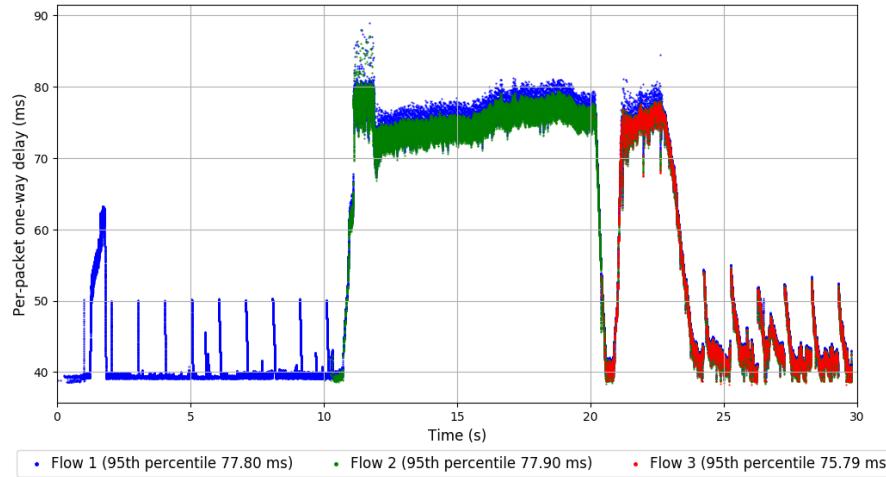
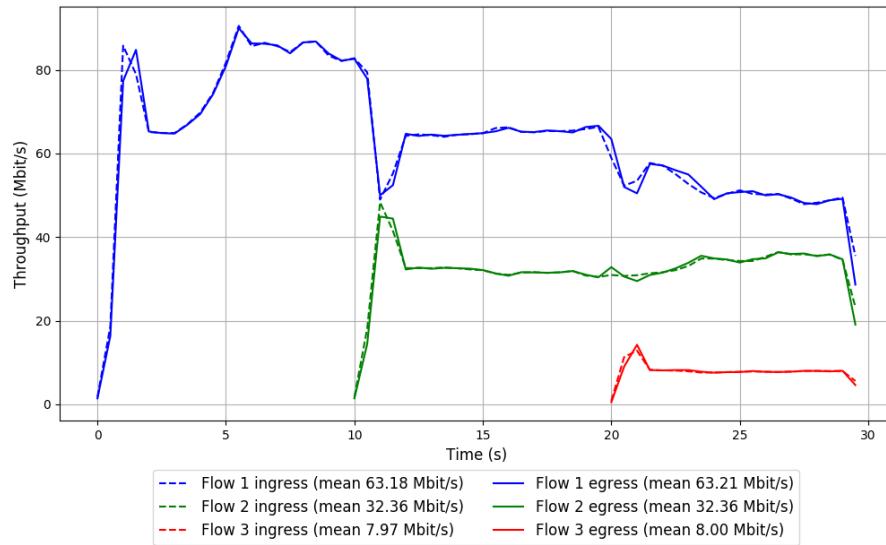


Run 6: Statistics of PCC

```
Start at: 2018-03-21 01:43:15
End at: 2018-03-21 01:43:45
Local clock offset: -2.248 ms
Remote clock offset: -1.827 ms

# Below is generated by plot.py at 2018-03-21 07:35:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.29 Mbit/s
95th percentile per-packet one-way delay: 77.794 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 63.21 Mbit/s
95th percentile per-packet one-way delay: 77.801 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 77.901 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 75.790 ms
Loss rate: 1.06%
```

Run 6: Report of PCC — Data Link

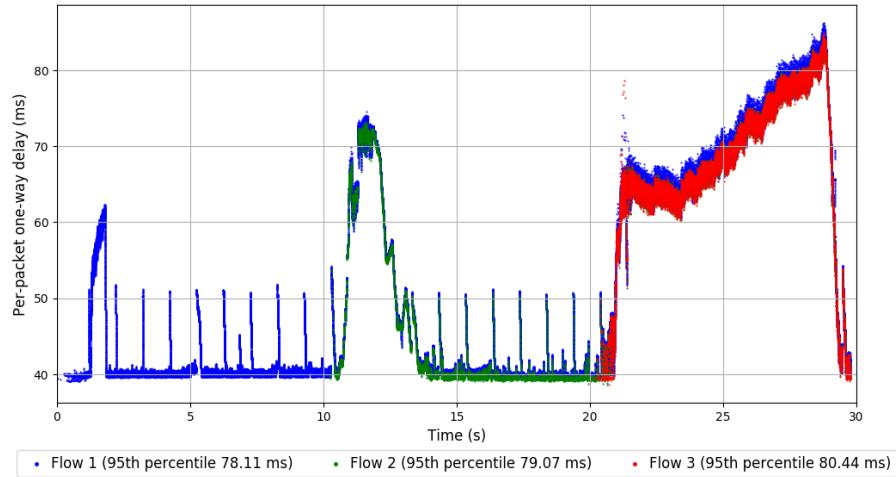
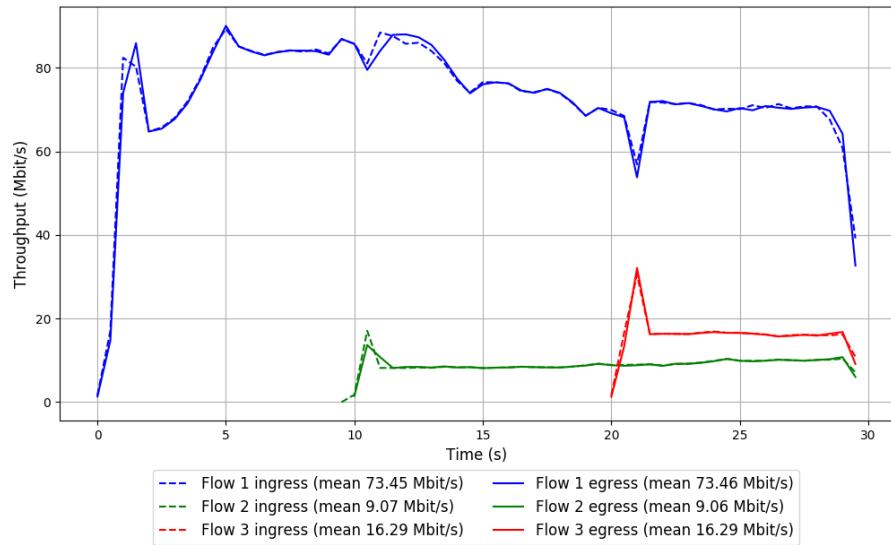


Run 7: Statistics of PCC

```
Start at: 2018-03-21 02:05:59
End at: 2018-03-21 02:06:29
Local clock offset: 1.77 ms
Remote clock offset: -1.603 ms

# Below is generated by plot.py at 2018-03-21 07:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 78.554 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 78.106 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.06 Mbit/s
95th percentile per-packet one-way delay: 79.072 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 16.29 Mbit/s
95th percentile per-packet one-way delay: 80.441 ms
Loss rate: 1.10%
```

Run 7: Report of PCC — Data Link

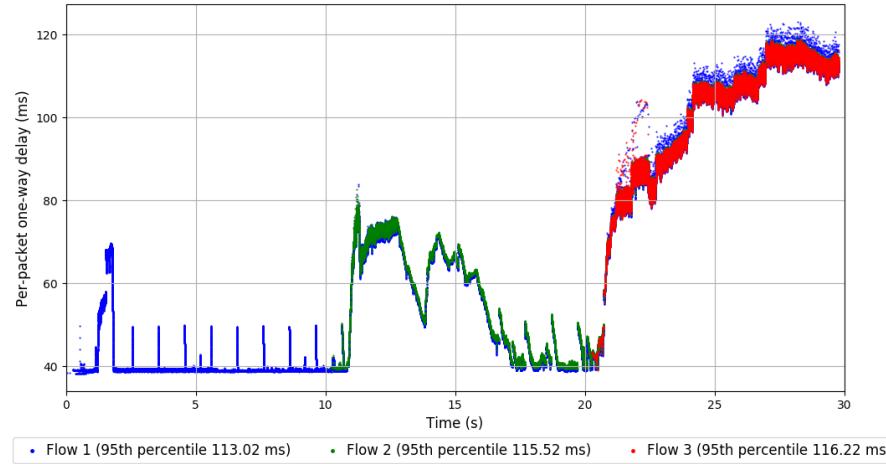
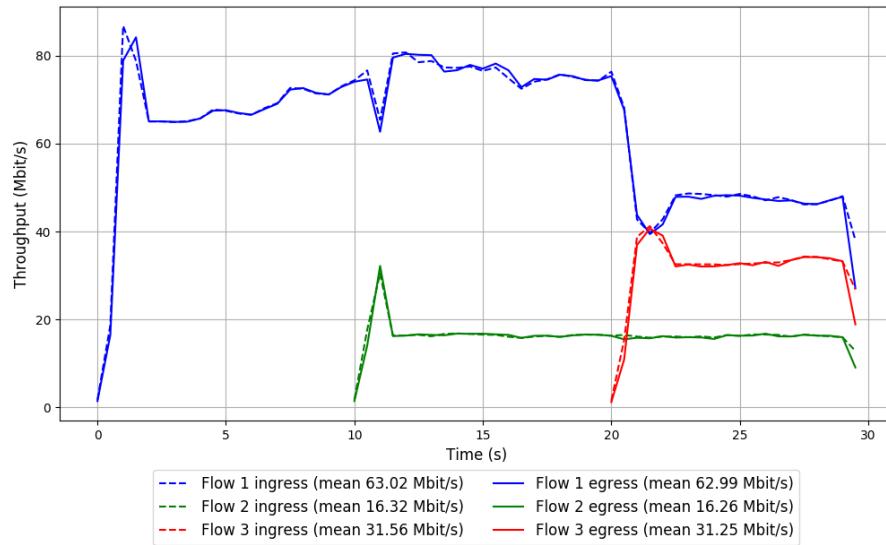


Run 8: Statistics of PCC

```
Start at: 2018-03-21 02:28:59
End at: 2018-03-21 02:29:29
Local clock offset: -7.018 ms
Remote clock offset: -1.701 ms

# Below is generated by plot.py at 2018-03-21 07:35:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.00 Mbit/s
95th percentile per-packet one-way delay: 114.584 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 62.99 Mbit/s
95th percentile per-packet one-way delay: 113.023 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 16.26 Mbit/s
95th percentile per-packet one-way delay: 115.516 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 116.219 ms
Loss rate: 2.51%
```

Run 8: Report of PCC — Data Link

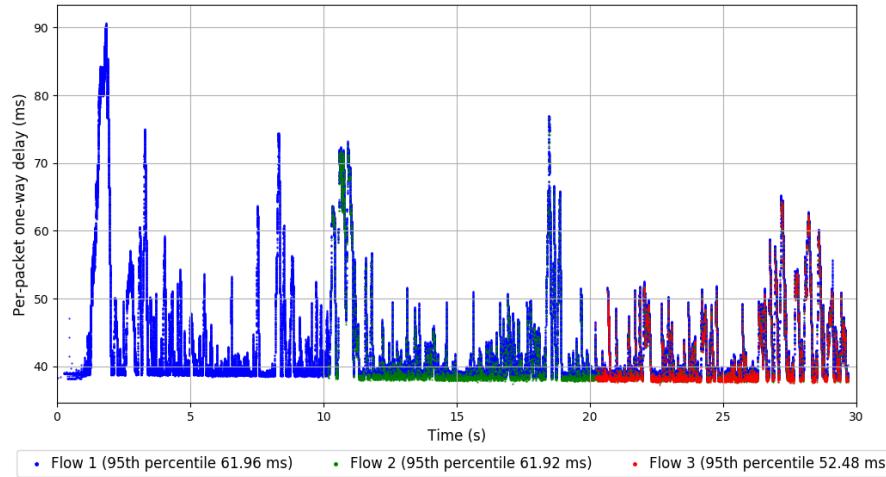
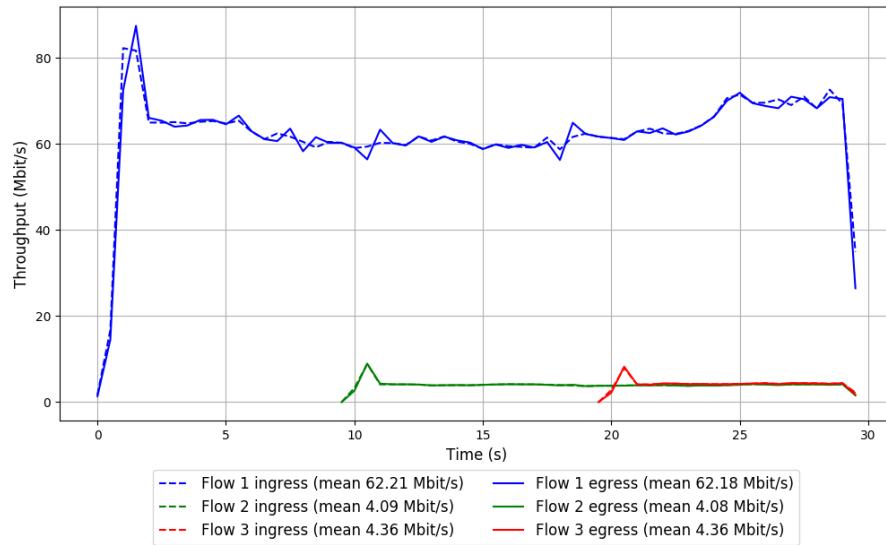


Run 9: Statistics of PCC

```
Start at: 2018-03-21 02:51:44
End at: 2018-03-21 02:52:14
Local clock offset: -7.02 ms
Remote clock offset: -2.39 ms

# Below is generated by plot.py at 2018-03-21 07:35:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.33 Mbit/s
95th percentile per-packet one-way delay: 61.719 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 62.18 Mbit/s
95th percentile per-packet one-way delay: 61.960 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 61.916 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 52.479 ms
Loss rate: 1.13%
```

Run 9: Report of PCC — Data Link

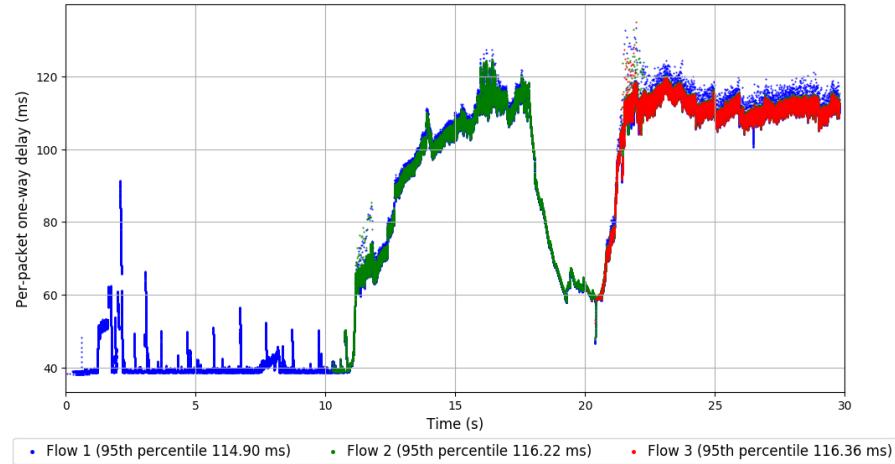
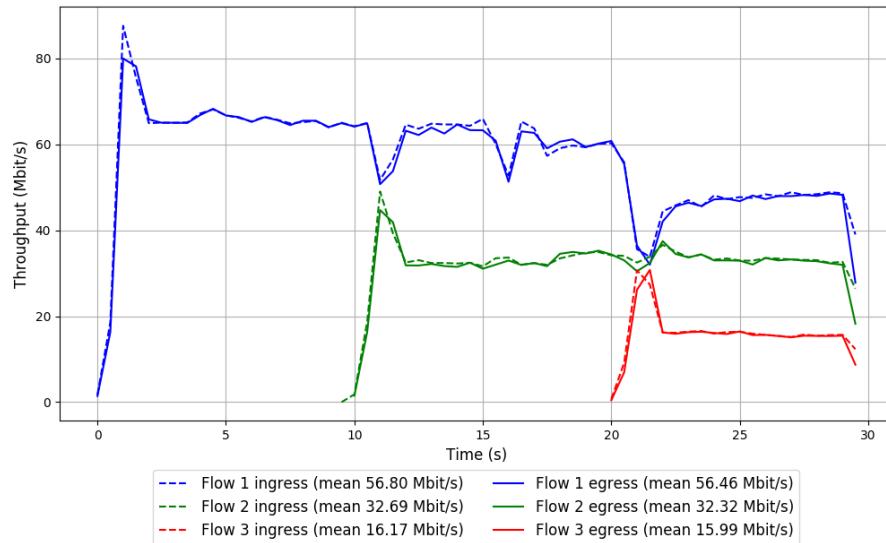


Run 10: Statistics of PCC

```
Start at: 2018-03-21 03:15:49
End at: 2018-03-21 03:16:20
Local clock offset: 4.964 ms
Remote clock offset: -0.374 ms

# Below is generated by plot.py at 2018-03-21 07:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.11 Mbit/s
95th percentile per-packet one-way delay: 115.481 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 56.46 Mbit/s
95th percentile per-packet one-way delay: 114.902 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 116.222 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 15.99 Mbit/s
95th percentile per-packet one-way delay: 116.363 ms
Loss rate: 2.85%
```

Run 10: Report of PCC — Data Link

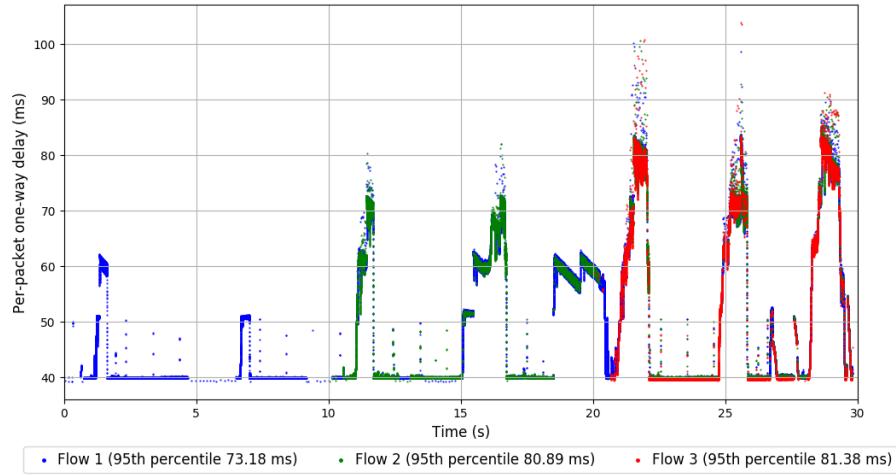
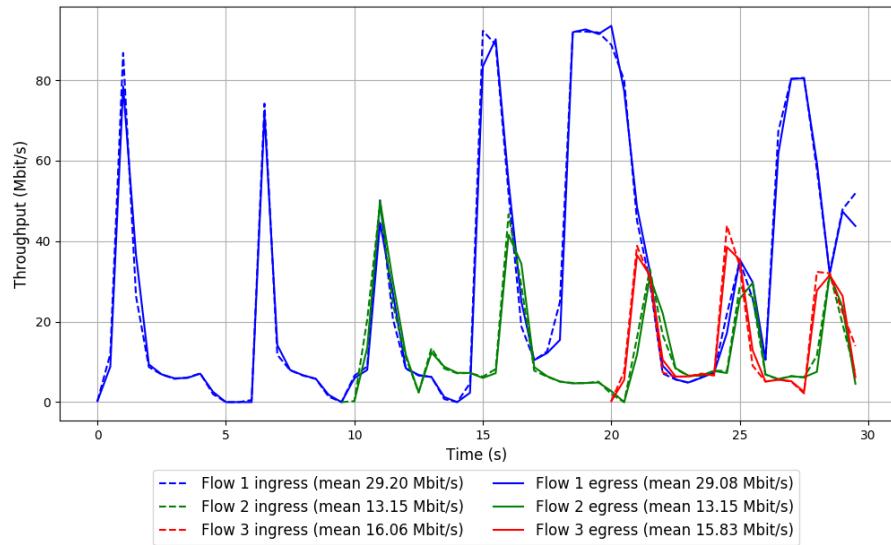


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2018-03-20 23:50:24
End at: 2018-03-20 23:50:54
Local clock offset: 0.475 ms
Remote clock offset: 5.291 ms

# Below is generated by plot.py at 2018-03-21 07:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 79.053 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 73.180 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 80.888 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 15.83 Mbit/s
95th percentile per-packet one-way delay: 81.378 ms
Loss rate: 2.74%
```

Run 1: Report of QUIC Cubic — Data Link

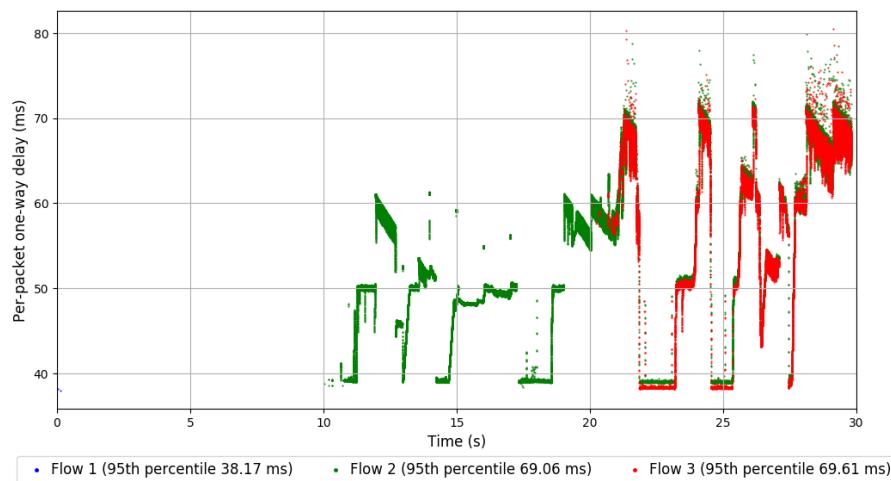
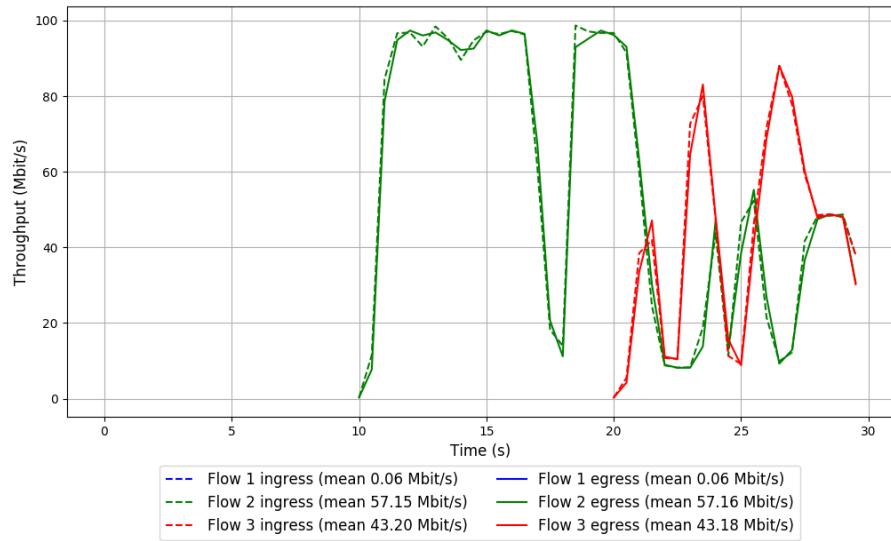


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-03-21 00:13:10
End at: 2018-03-21 00:13:40
Local clock offset: 6.029 ms
Remote clock offset: 2.033 ms

# Below is generated by plot.py at 2018-03-21 07:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.04 Mbit/s
95th percentile per-packet one-way delay: 69.309 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 38.171 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.16 Mbit/s
95th percentile per-packet one-way delay: 69.063 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 69.615 ms
Loss rate: 1.66%
```

Run 2: Report of QUIC Cubic — Data Link

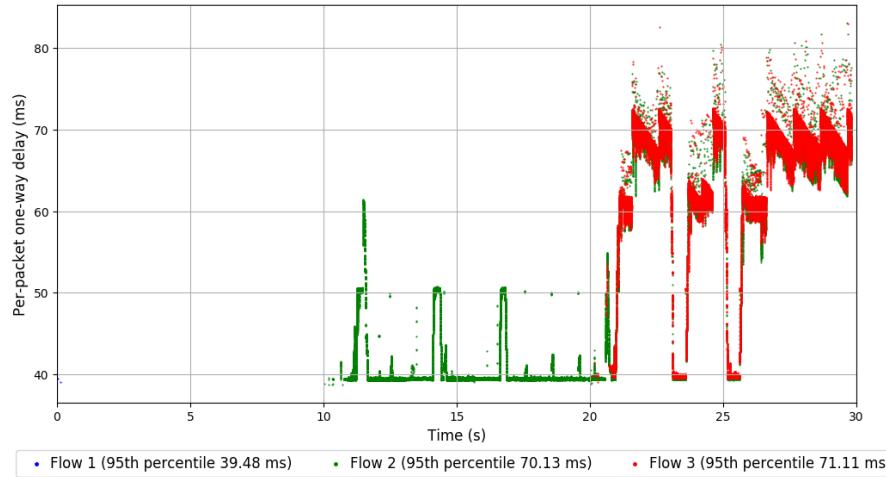
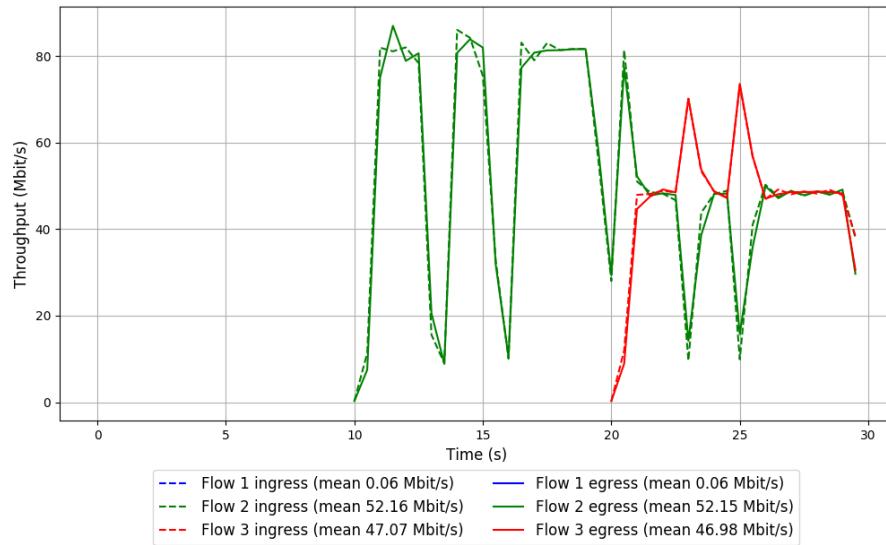


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-03-21 00:36:01
End at: 2018-03-21 00:36:31
Local clock offset: 7.544 ms
Remote clock offset: -2.471 ms

# Below is generated by plot.py at 2018-03-21 07:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.01 Mbit/s
95th percentile per-packet one-way delay: 70.567 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 39.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.15 Mbit/s
95th percentile per-packet one-way delay: 70.132 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 71.114 ms
Loss rate: 1.51%
```

Run 3: Report of QUIC Cubic — Data Link

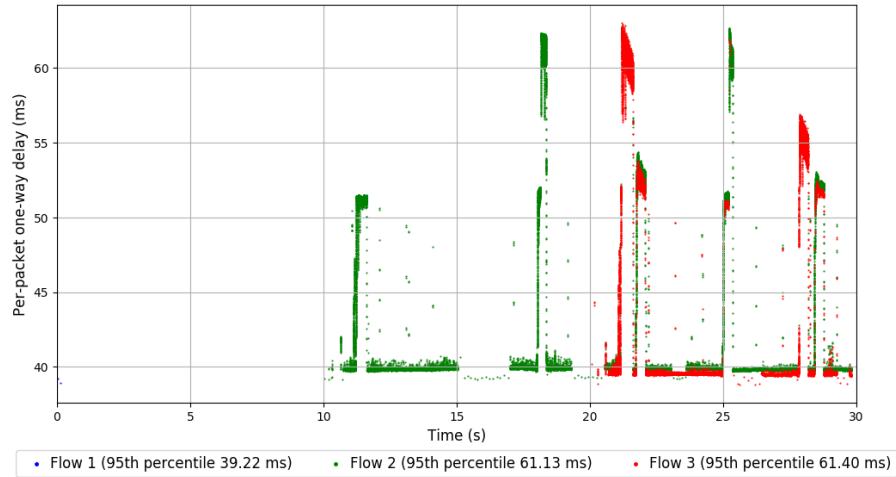
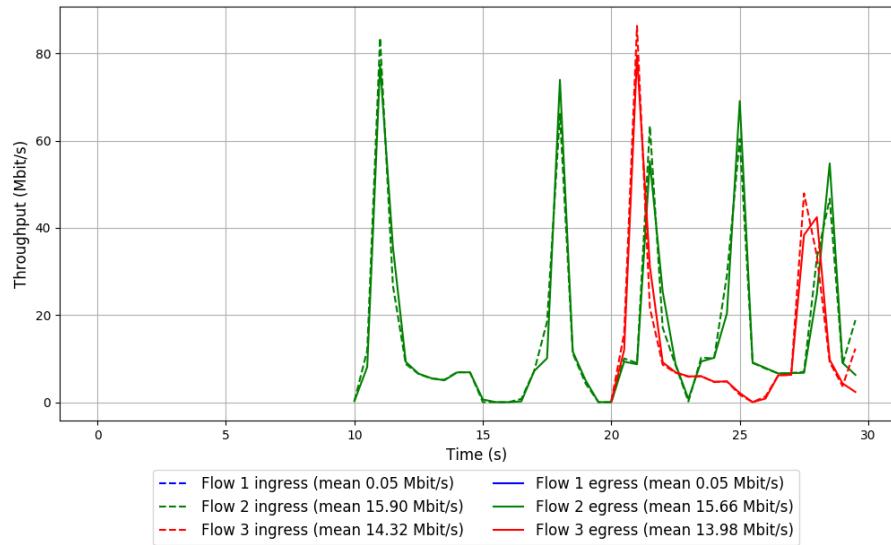


Run 4: Statistics of QUIC Cubic

```
Start at: 2018-03-21 00:58:59
End at: 2018-03-21 00:59:29
Local clock offset: 6.009 ms
Remote clock offset: -2.458 ms

# Below is generated by plot.py at 2018-03-21 07:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.98 Mbit/s
95th percentile per-packet one-way delay: 61.246 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 39.217 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 61.129 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 13.98 Mbit/s
95th percentile per-packet one-way delay: 61.401 ms
Loss rate: 3.52%
```

Run 4: Report of QUIC Cubic — Data Link

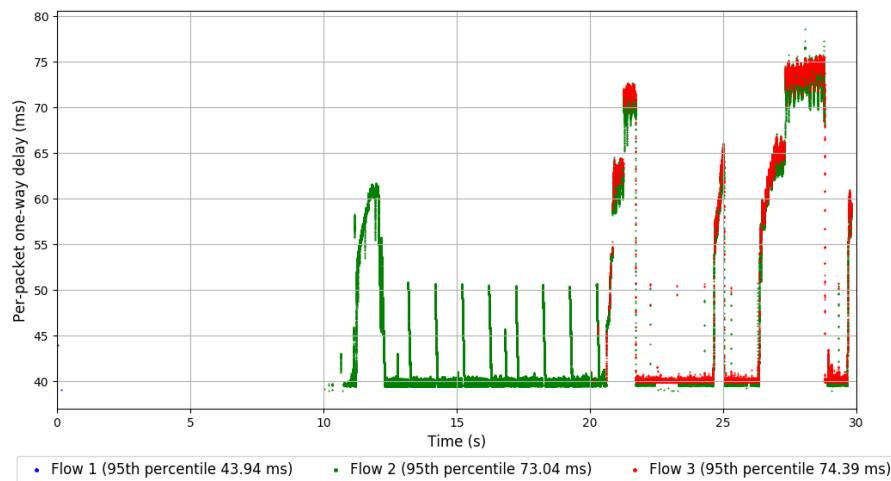
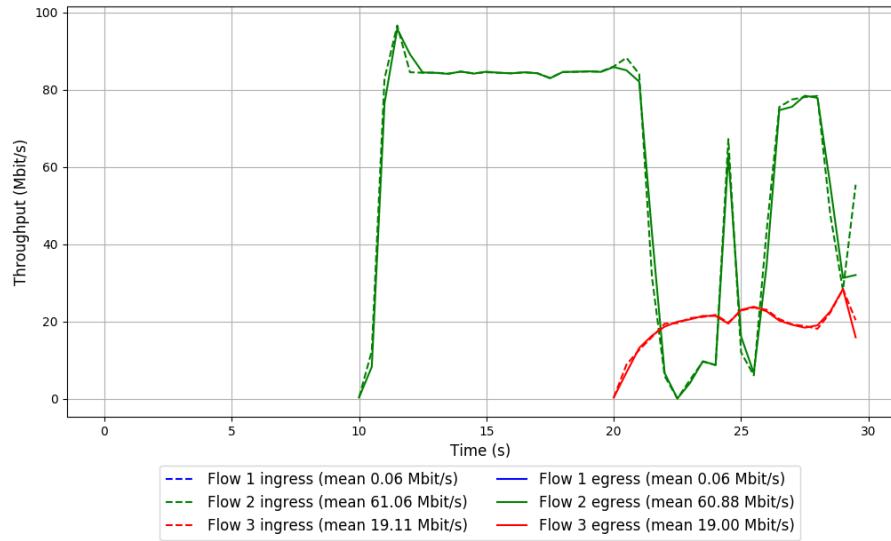


Run 5: Statistics of QUIC Cubic

```
Start at: 2018-03-21 01:21:43
End at: 2018-03-21 01:22:13
Local clock offset: -1.072 ms
Remote clock offset: -2.165 ms

# Below is generated by plot.py at 2018-03-21 07:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 73.308 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 43.943 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.88 Mbit/s
95th percentile per-packet one-way delay: 73.038 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 74.392 ms
Loss rate: 1.67%
```

Run 5: Report of QUIC Cubic — Data Link

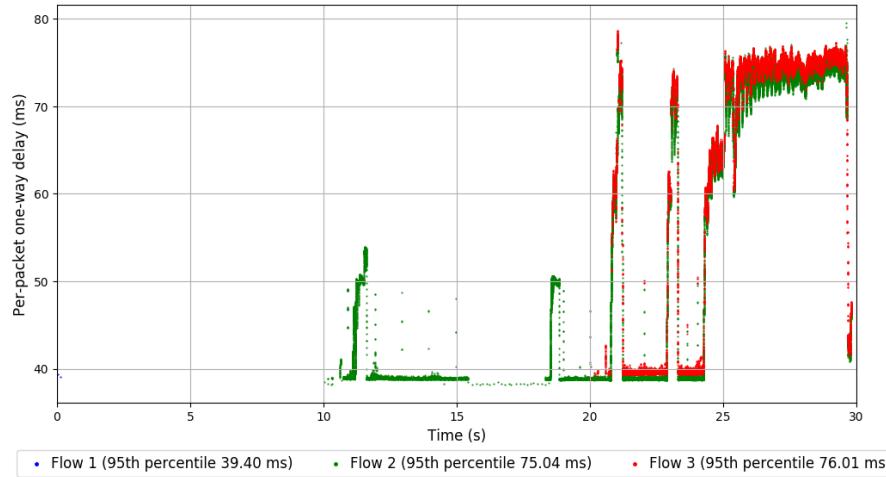
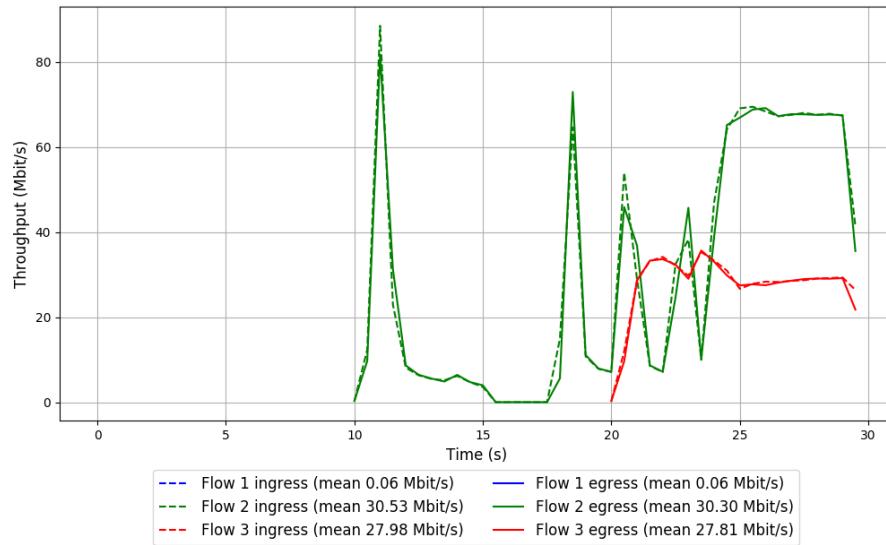


Run 6: Statistics of QUIC Cubic

```
Start at: 2018-03-21 01:44:30
End at: 2018-03-21 01:45:00
Local clock offset: -1.426 ms
Remote clock offset: -1.913 ms

# Below is generated by plot.py at 2018-03-21 07:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 75.518 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 39.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 75.037 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 76.007 ms
Loss rate: 1.65%
```

Run 6: Report of QUIC Cubic — Data Link

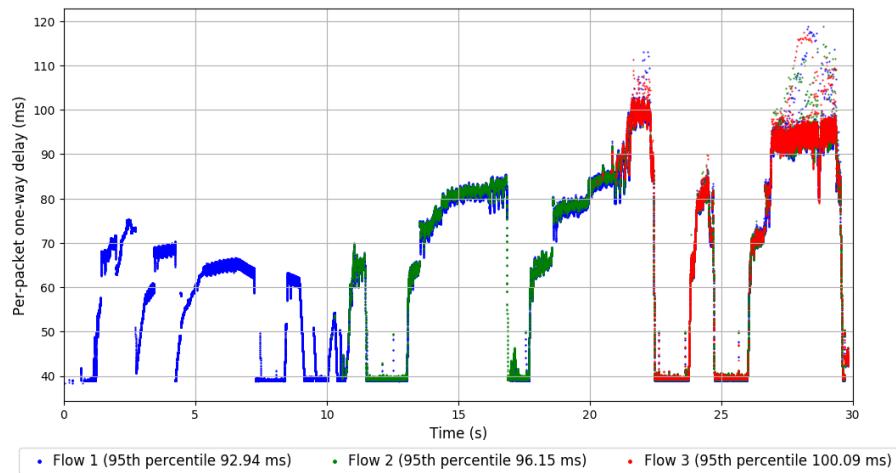
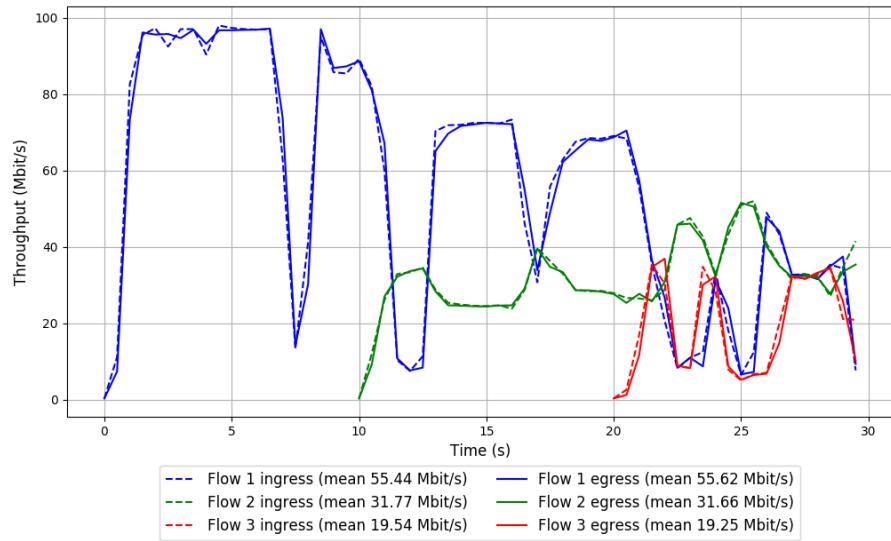


Run 7: Statistics of QUIC Cubic

```
Start at: 2018-03-21 02:07:15
End at: 2018-03-21 02:07:45
Local clock offset: 1.726 ms
Remote clock offset: -1.561 ms

# Below is generated by plot.py at 2018-03-21 07:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.90 Mbit/s
95th percentile per-packet one-way delay: 95.639 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 92.945 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 96.147 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 19.25 Mbit/s
95th percentile per-packet one-way delay: 100.092 ms
Loss rate: 3.19%
```

Run 7: Report of QUIC Cubic — Data Link

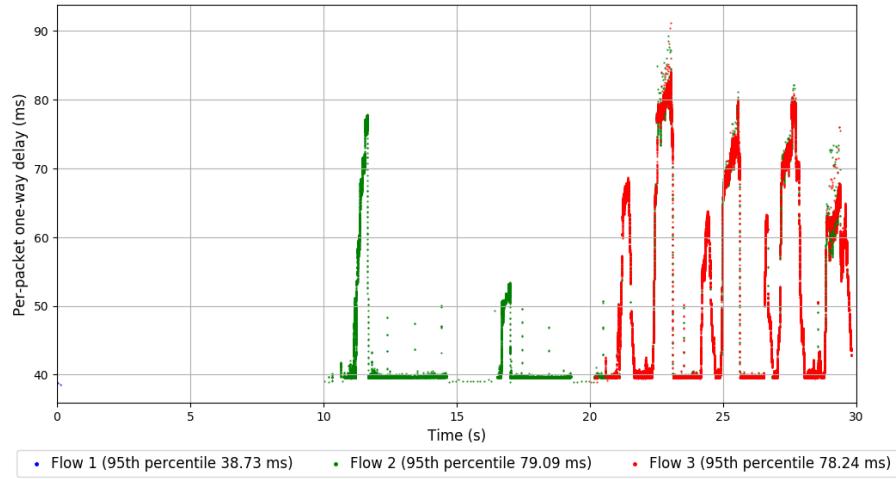
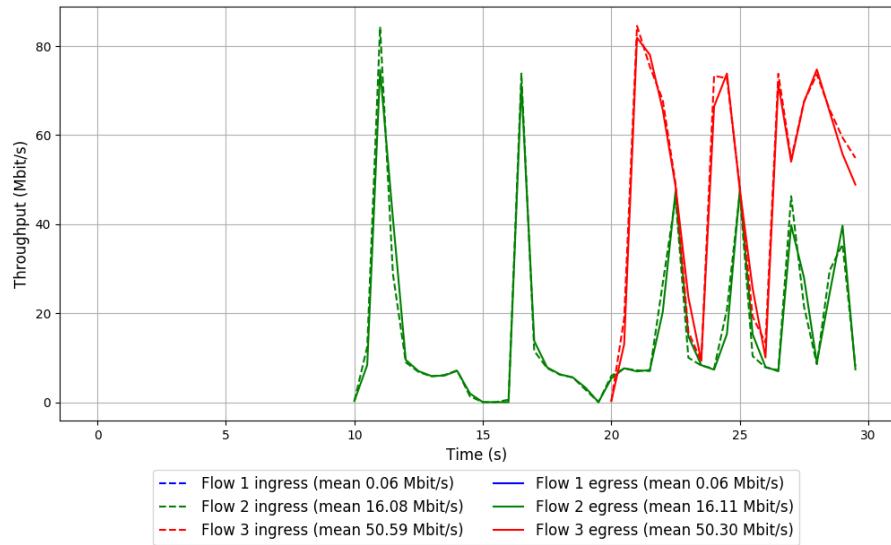


Run 8: Statistics of QUIC Cubic

```
Start at: 2018-03-21 02:30:14
End at: 2018-03-21 02:30:44
Local clock offset: -7.107 ms
Remote clock offset: -1.694 ms

# Below is generated by plot.py at 2018-03-21 07:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 78.680 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 38.733 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.11 Mbit/s
95th percentile per-packet one-way delay: 79.089 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 78.243 ms
Loss rate: 1.62%
```

Run 8: Report of QUIC Cubic — Data Link

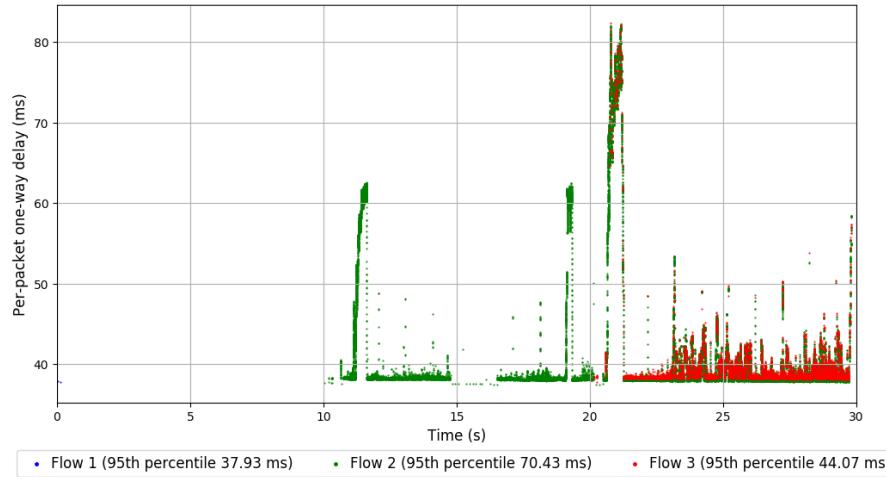
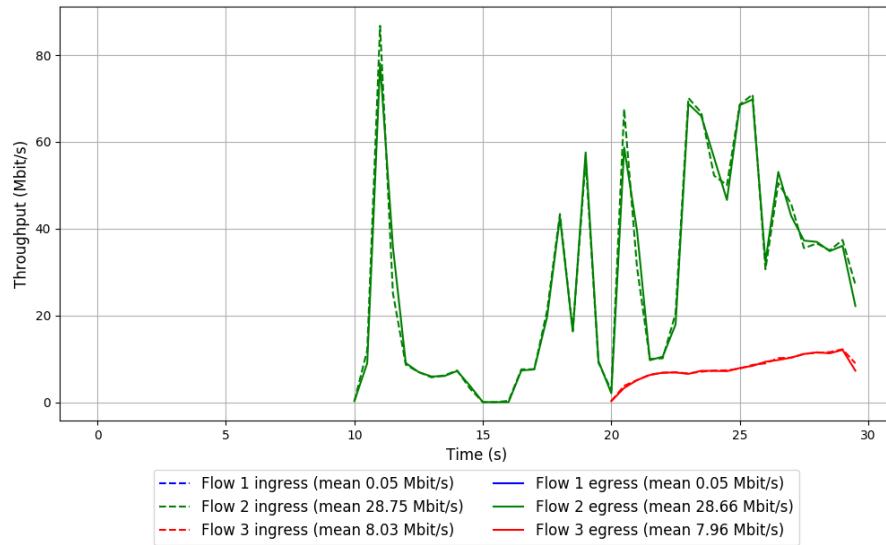


Run 9: Statistics of QUIC Cubic

```
Start at: 2018-03-21 02:52:59
End at: 2018-03-21 02:53:29
Local clock offset: -5.641 ms
Remote clock offset: -2.362 ms

# Below is generated by plot.py at 2018-03-21 07:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 68.992 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 37.931 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.66 Mbit/s
95th percentile per-packet one-way delay: 70.433 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 44.072 ms
Loss rate: 1.89%
```

Run 9: Report of QUIC Cubic — Data Link

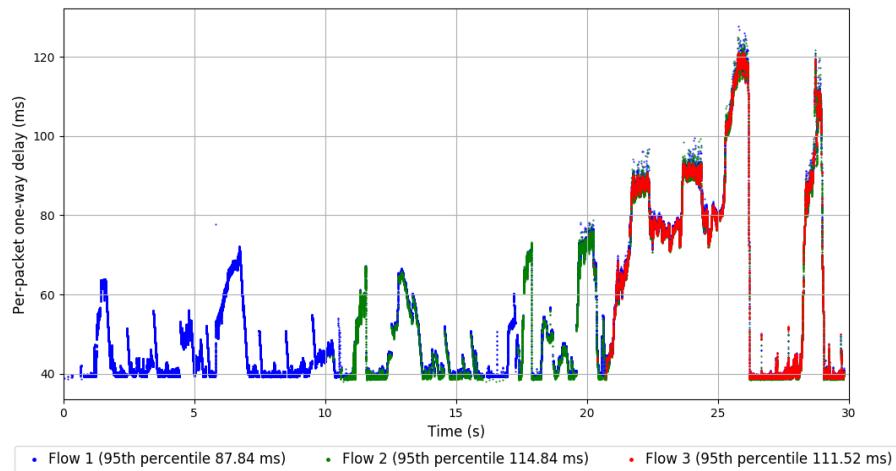
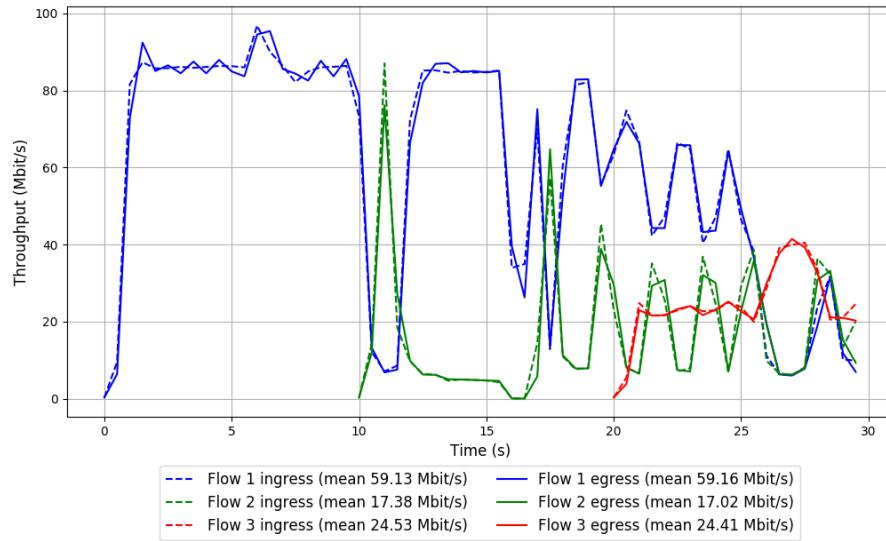


Run 10: Statistics of QUIC Cubic

```
Start at: 2018-03-21 03:17:06
End at: 2018-03-21 03:17:36
Local clock offset: 4.92 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.41 Mbit/s
95th percentile per-packet one-way delay: 92.573 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 87.837 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 17.02 Mbit/s
95th percentile per-packet one-way delay: 114.841 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 111.515 ms
Loss rate: 1.85%
```

Run 10: Report of QUIC Cubic — Data Link

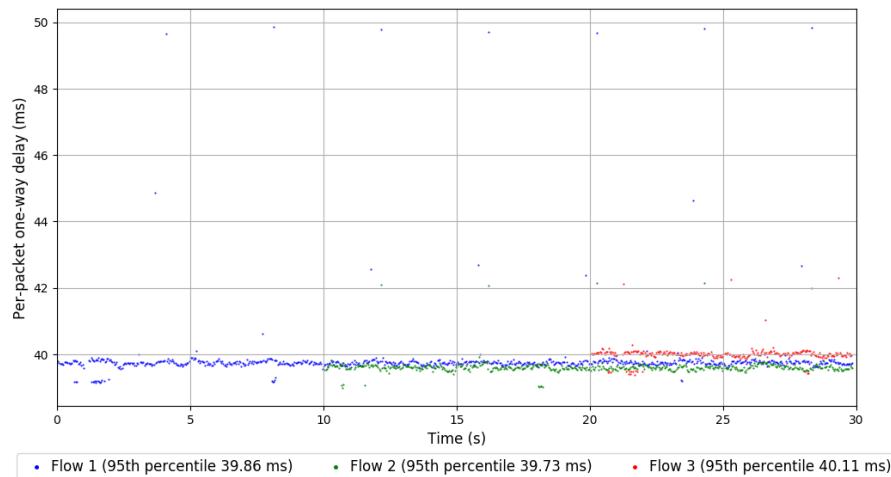
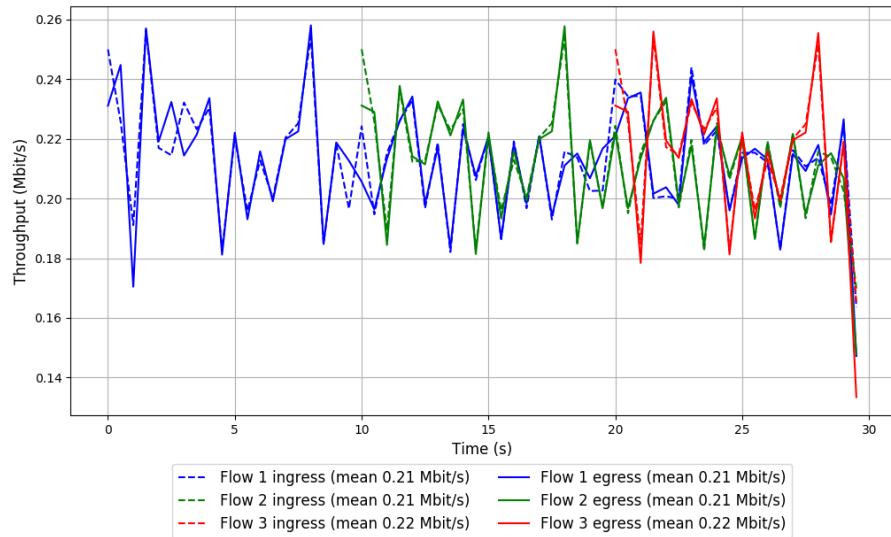


```
Run 1: Statistics of SCReAM

Start at: 2018-03-20 23:56:46
End at: 2018-03-20 23:57:16
Local clock offset: 0.534 ms
Remote clock offset: 5.756 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.059 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.863 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.726 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.113 ms
Loss rate: 1.10%
```

Run 1: Report of SCReAM — Data Link

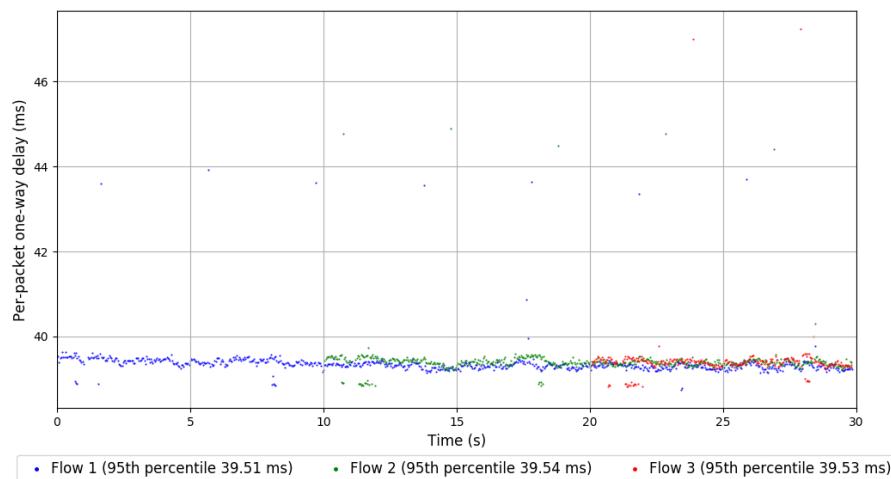
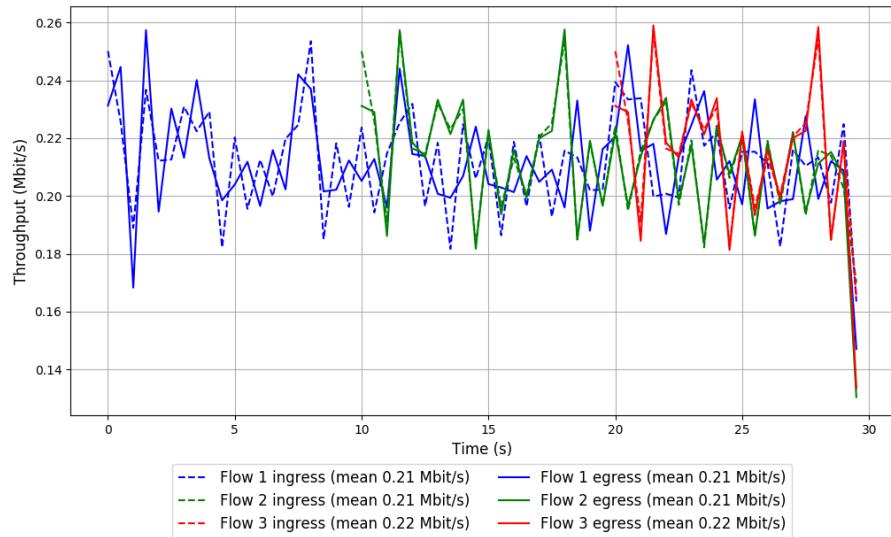


Run 2: Statistics of SCReAM

```
Start at: 2018-03-21 00:19:33
End at: 2018-03-21 00:20:03
Local clock offset: 7.638 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.526 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.505 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.536 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.531 ms
Loss rate: 1.10%
```

Run 2: Report of SCReAM — Data Link

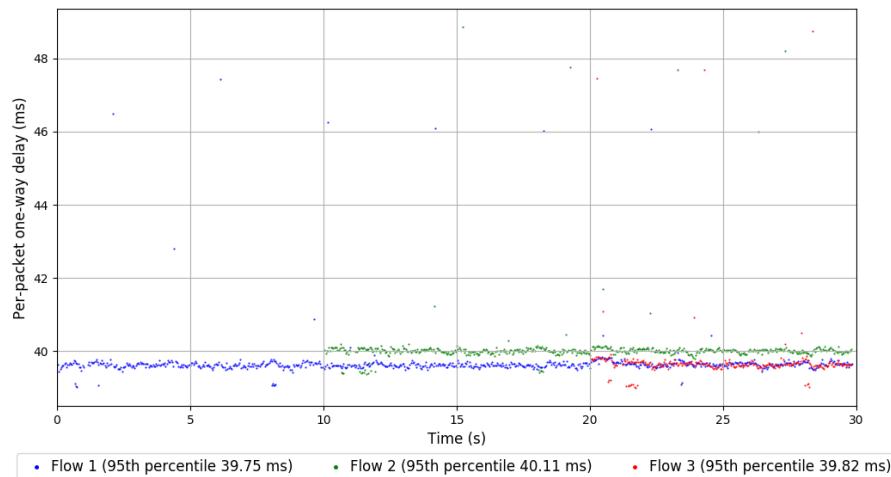
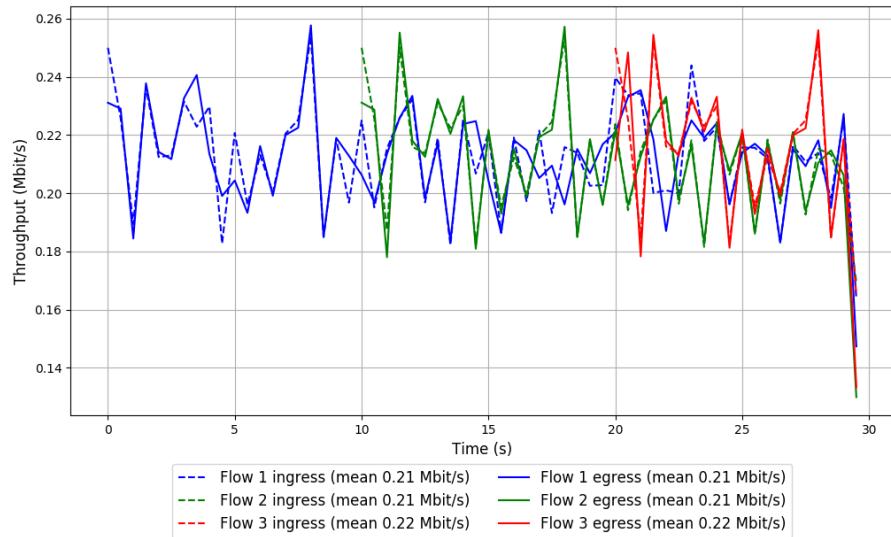


Run 3: Statistics of SCReAM

```
Start at: 2018-03-21 00:42:25
End at: 2018-03-21 00:42:55
Local clock offset: 6.48 ms
Remote clock offset: -2.759 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.083 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.754 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.106 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.819 ms
Loss rate: 1.11%
```

Run 3: Report of SCReAM — Data Link

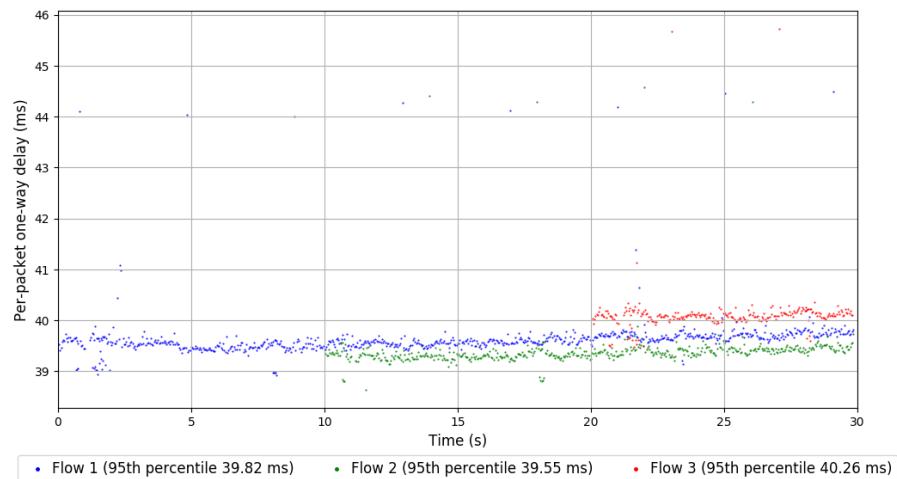
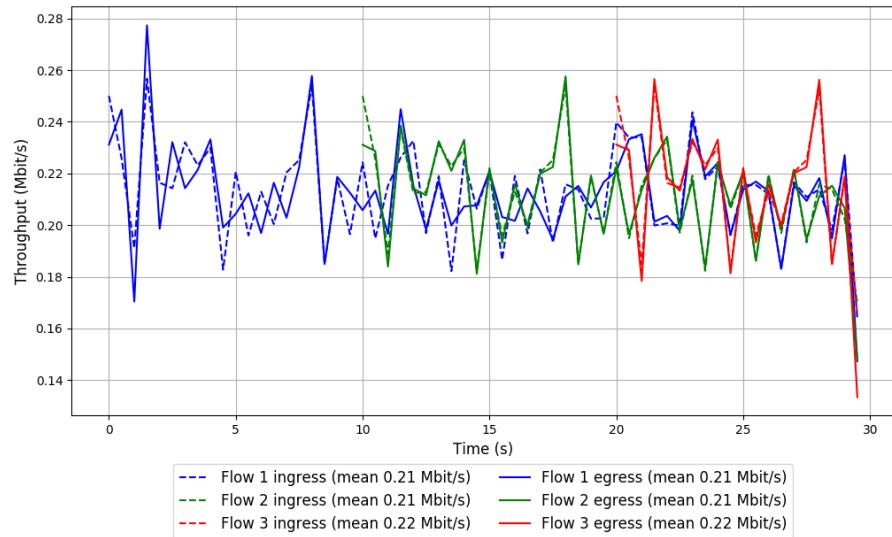


Run 4: Statistics of SCReAM

```
Start at: 2018-03-21 01:05:19
End at: 2018-03-21 01:05:49
Local clock offset: 6.217 ms
Remote clock offset: -2.632 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.154 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.817 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.552 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.262 ms
Loss rate: 1.11%
```

Run 4: Report of SCReAM — Data Link

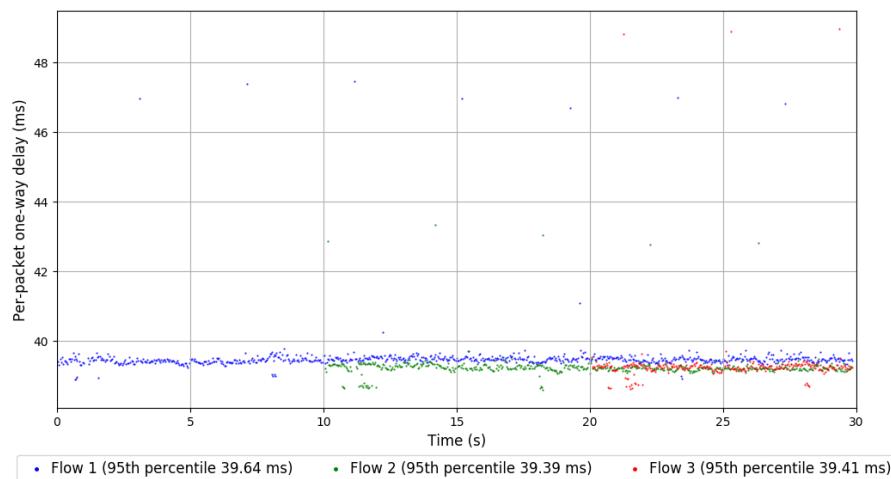
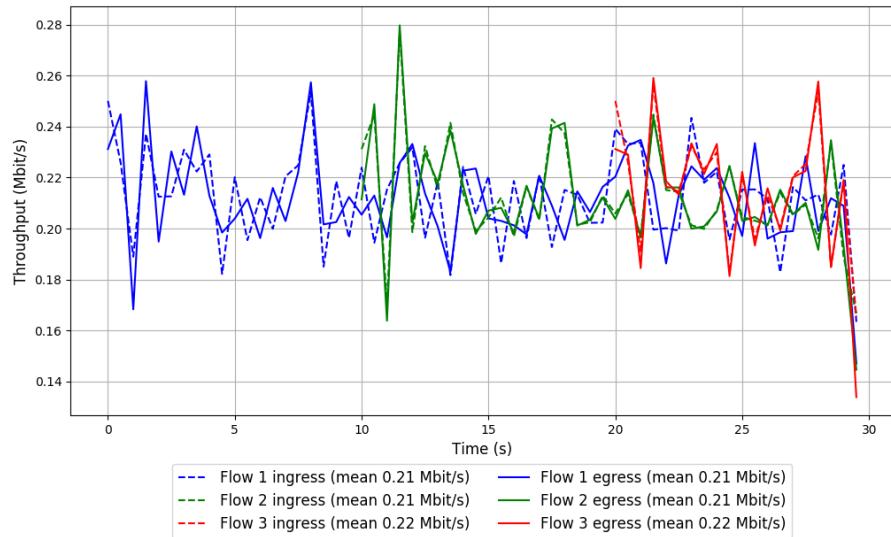


Run 5: Statistics of SCReAM

```
Start at: 2018-03-21 01:28:06
End at: 2018-03-21 01:28:36
Local clock offset: -2.317 ms
Remote clock offset: -1.981 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.593 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.643 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.387 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.407 ms
Loss rate: 1.10%
```

Run 5: Report of SCReAM — Data Link

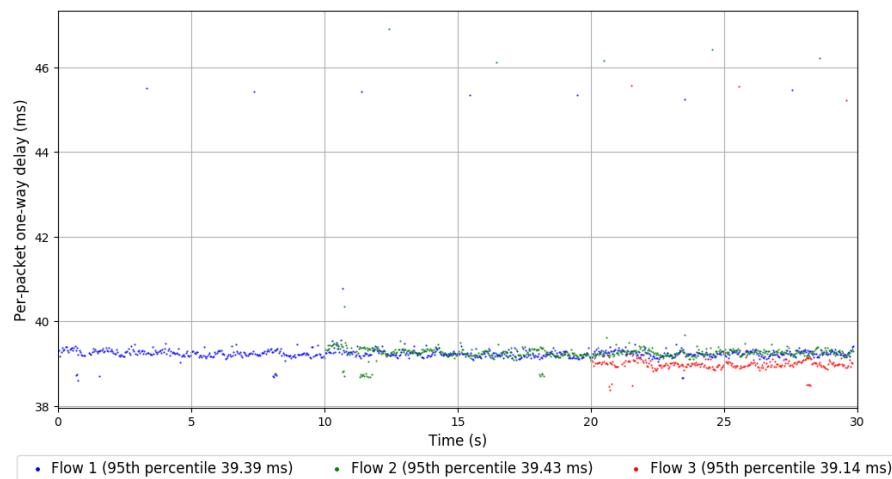
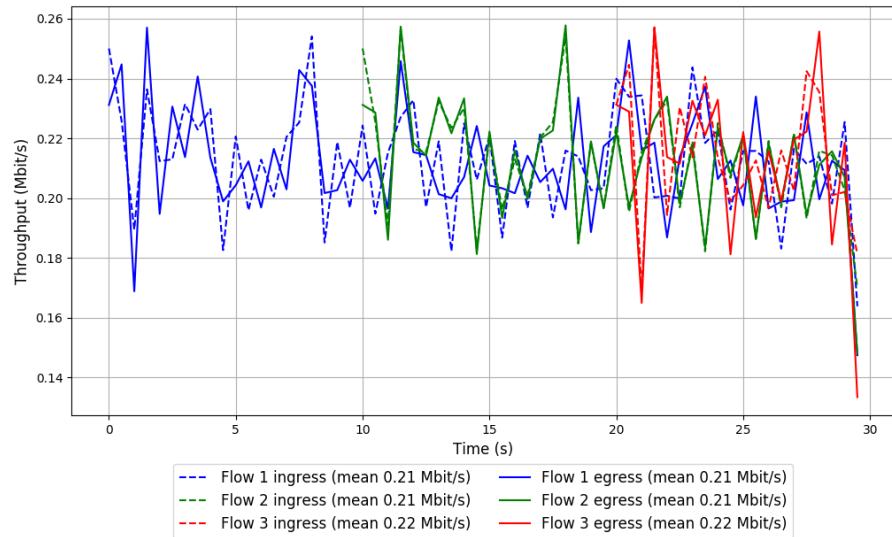


Run 6: Statistics of SCReAM

```
Start at: 2018-03-21 01:50:51
End at: 2018-03-21 01:51:21
Local clock offset: 0.531 ms
Remote clock offset: -1.858 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.392 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.389 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.427 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.138 ms
Loss rate: 1.12%
```

Run 6: Report of SCReAM — Data Link

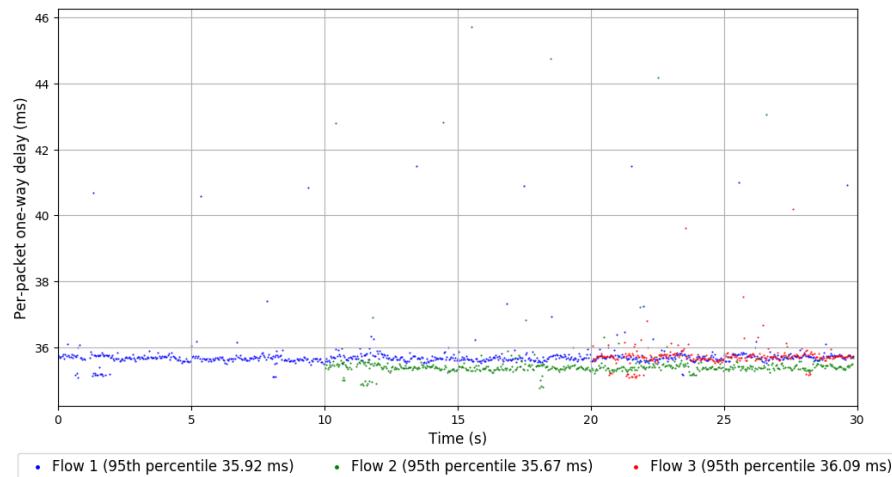
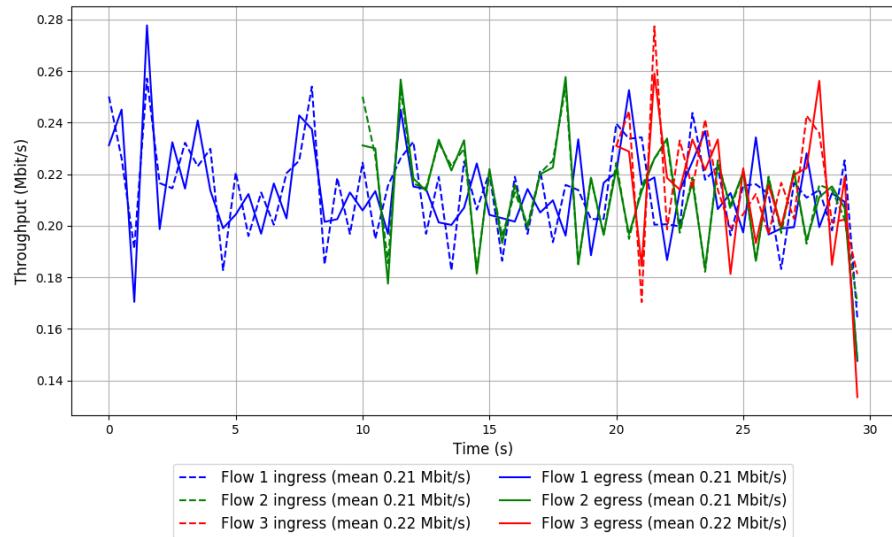


Run 7: Statistics of SCReAM

```
Start at: 2018-03-21 02:13:50
End at: 2018-03-21 02:14:20
Local clock offset: 1.963 ms
Remote clock offset: 2.584 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.910 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.918 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.672 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.087 ms
Loss rate: 1.10%
```

Run 7: Report of SCReAM — Data Link

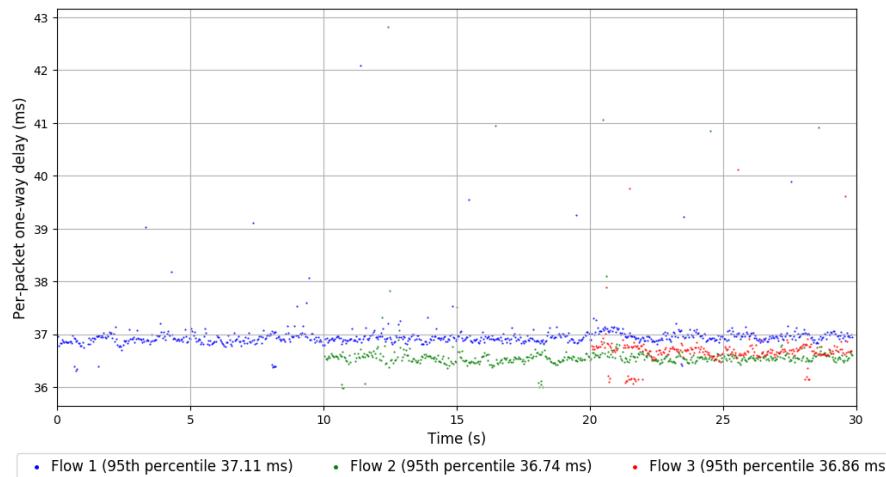
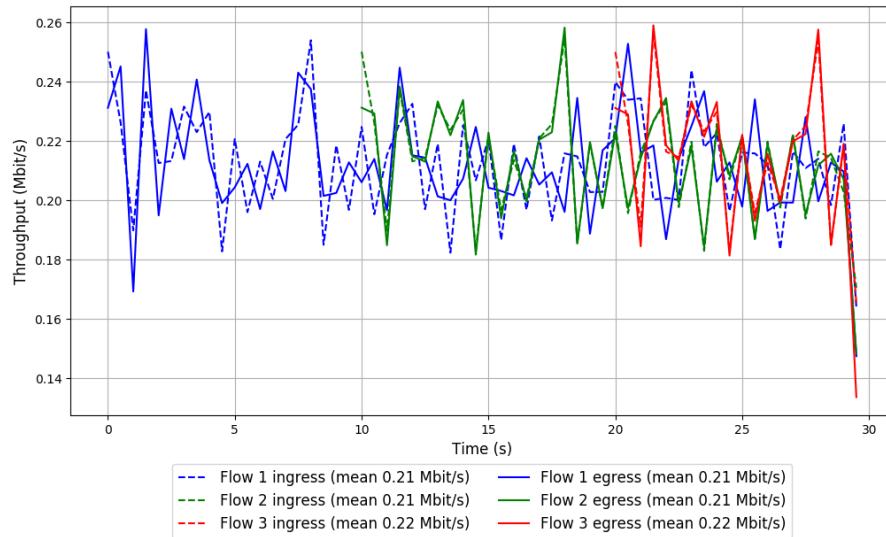


Run 8: Statistics of SCReAM

```
Start at: 2018-03-21 02:36:35
End at: 2018-03-21 02:37:05
Local clock offset: -11.822 ms
Remote clock offset: -2.102 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 37.067 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 37.114 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 36.745 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.856 ms
Loss rate: 1.11%
```

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

/home/ubuntu/pantheon_data/2018-03-20T23-44-China-to-AWS-Korea-10-runs-3-flows/scream_stats_

Run 9: Report of SCReAM — Data Link

Figure is missing

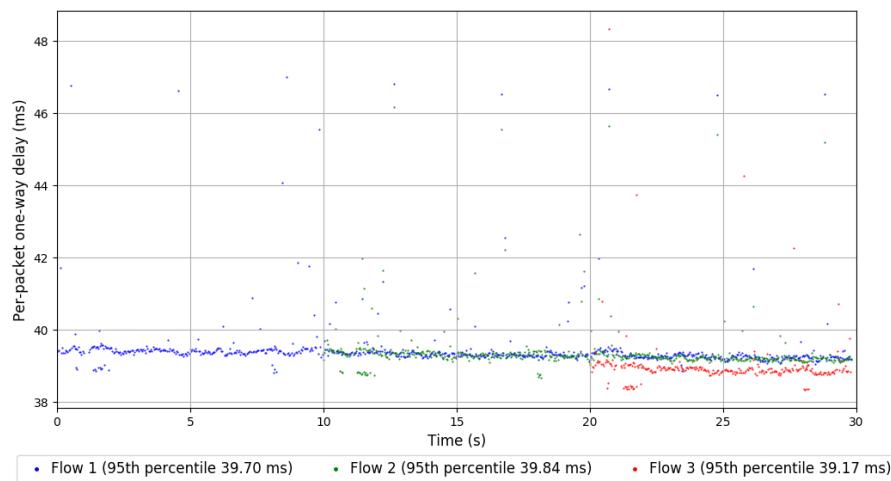
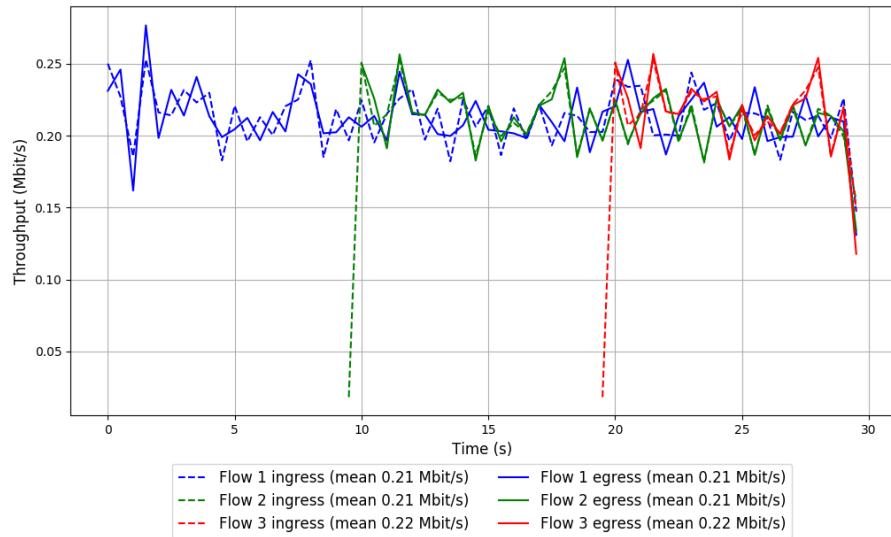
Figure is missing

Run 10: Statistics of SCReAM

```
Start at: 2018-03-21 03:23:32
End at: 2018-03-21 03:24:02
Local clock offset: 5.93 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.694 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.701 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.835 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.175 ms
Loss rate: 1.10%
```

Run 10: Report of SCReAM — Data Link

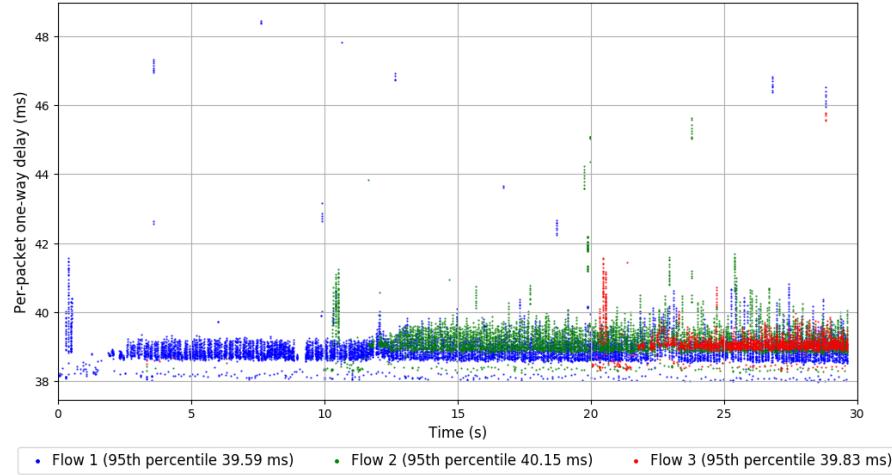
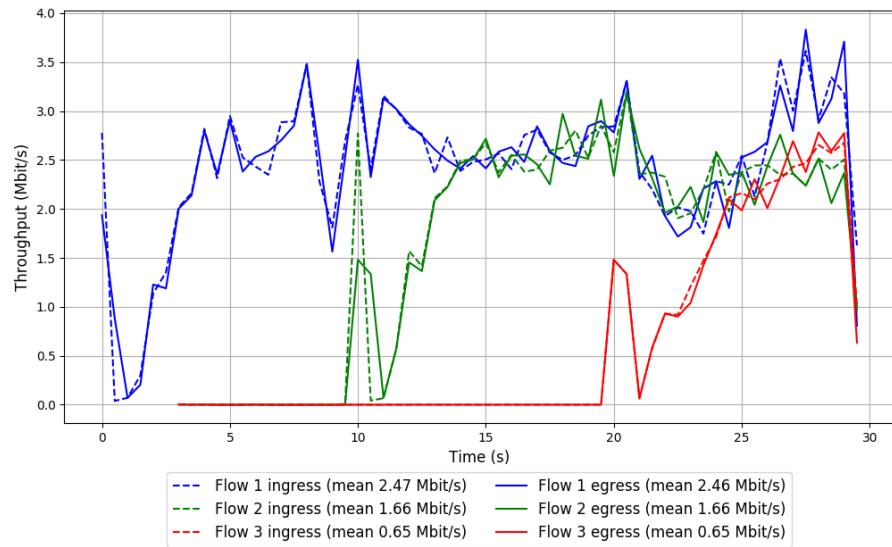


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-21 00:04:25
End at: 2018-03-21 00:04:55
Local clock offset: 3.903 ms
Remote clock offset: 6.386 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 39.828 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 39.591 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 40.149 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 39.833 ms
Loss rate: 1.10%
```

Run 1: Report of WebRTC media — Data Link

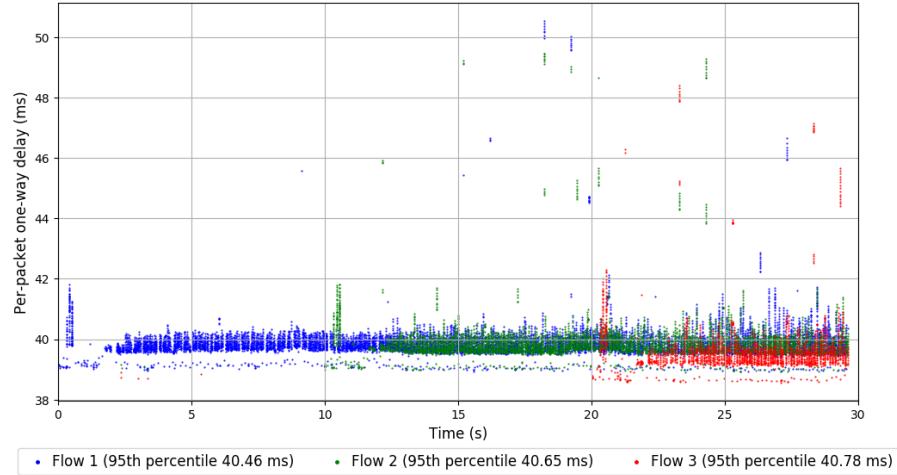
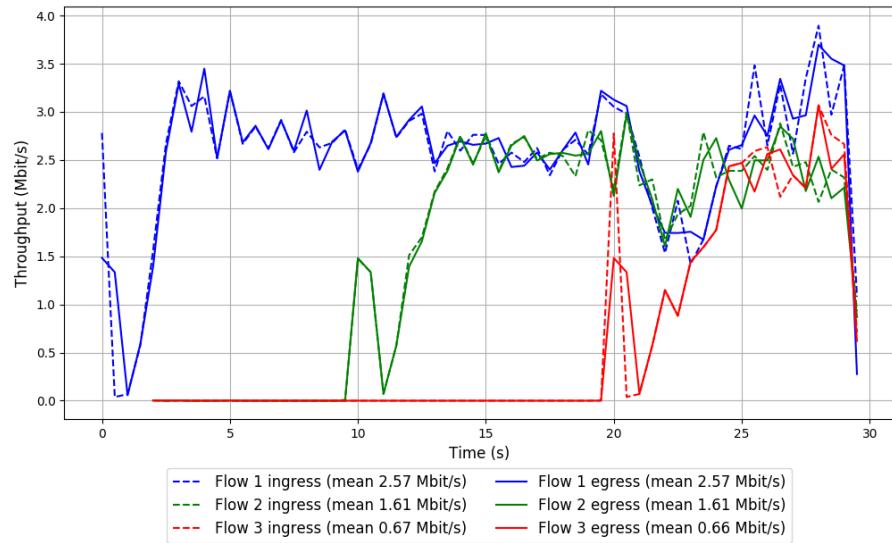


Run 2: Statistics of WebRTC media

```
Start at: 2018-03-21 00:27:10
End at: 2018-03-21 00:27:40
Local clock offset: 8.456 ms
Remote clock offset: -1.504 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 40.553 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 40.462 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 40.650 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 40.784 ms
Loss rate: 1.53%
```

Run 2: Report of WebRTC media — Data Link

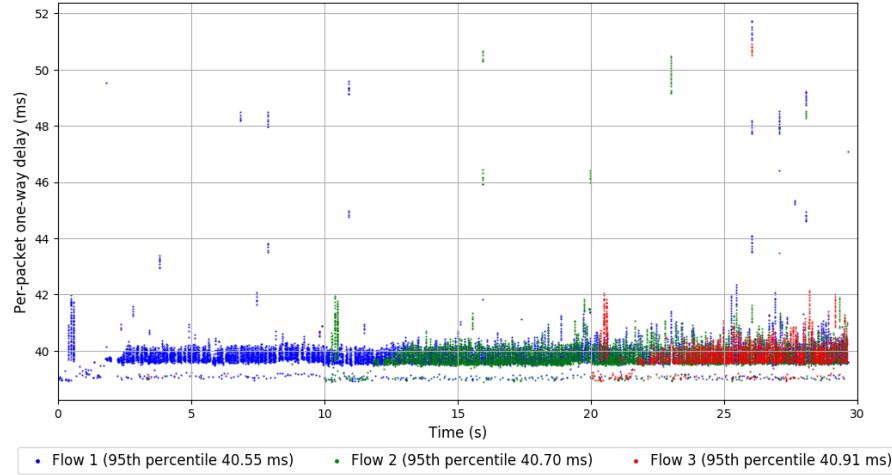
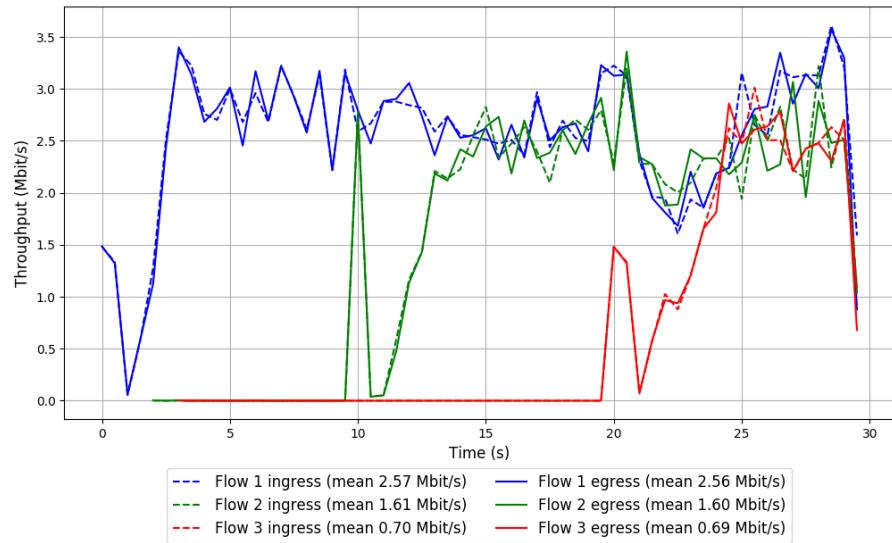


Run 3: Statistics of WebRTC media

```
Start at: 2018-03-21 00:50:14
End at: 2018-03-21 00:50:44
Local clock offset: 6.114 ms
Remote clock offset: -2.436 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 40.666 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 40.554 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 40.696 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 40.914 ms
Loss rate: 1.46%
```

Run 3: Report of WebRTC media — Data Link

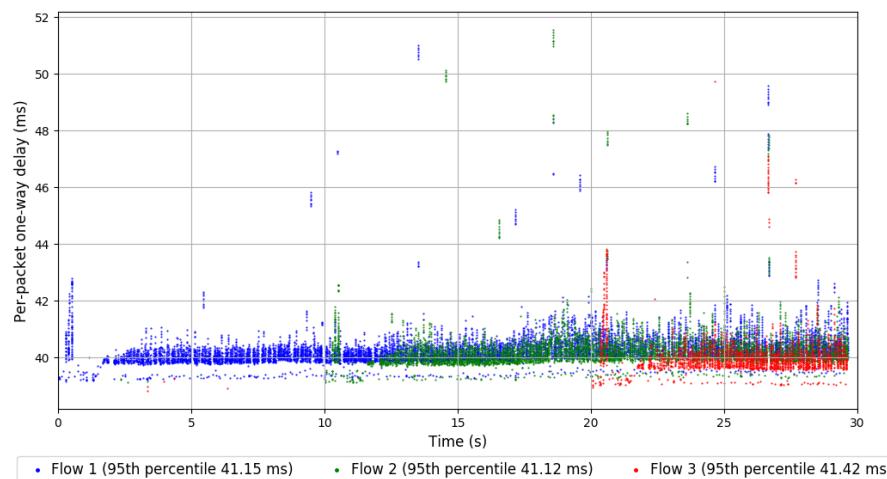
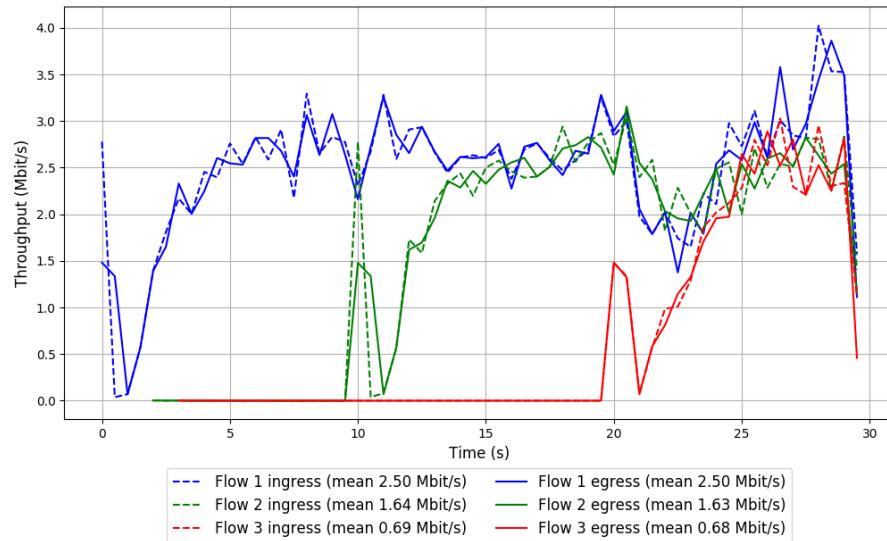


Run 4: Statistics of WebRTC media

```
Start at: 2018-03-21 01:12:58
End at: 2018-03-21 01:13:28
Local clock offset: 1.899 ms
Remote clock offset: -2.777 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 41.156 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 41.146 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 41.118 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 41.425 ms
Loss rate: 1.82%
```

Run 4: Report of WebRTC media — Data Link

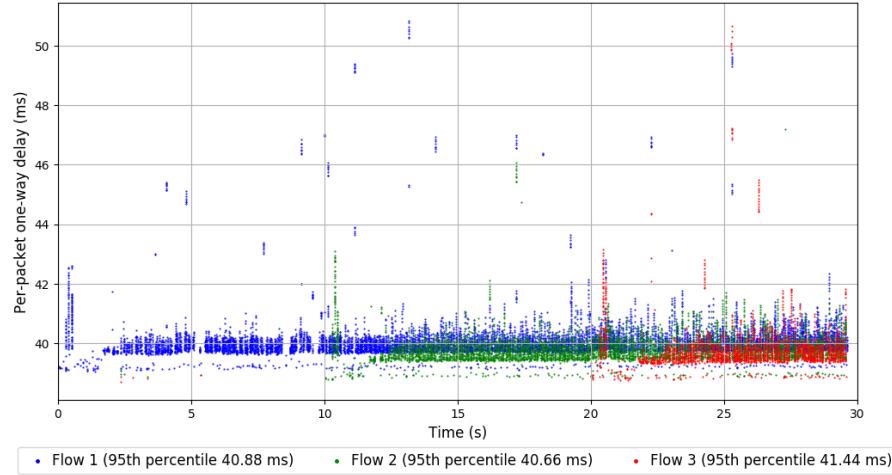
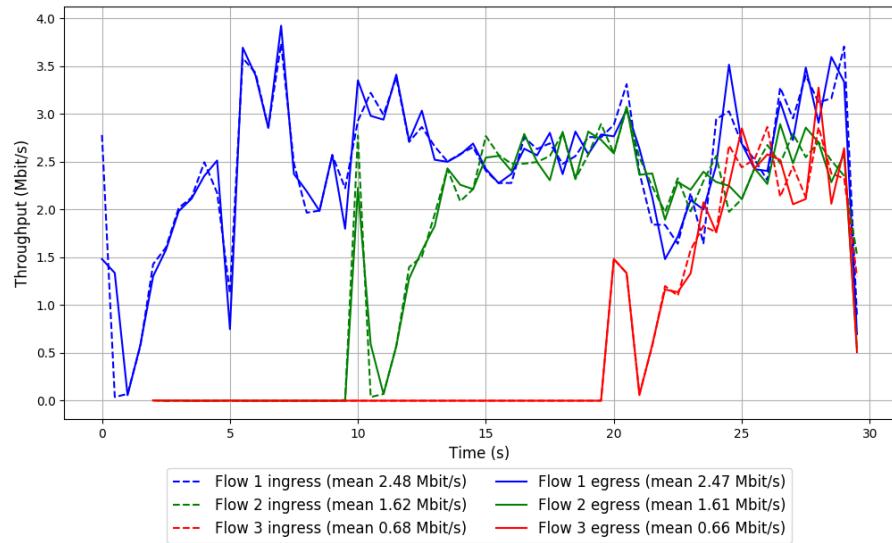


Run 5: Statistics of WebRTC media

```
Start at: 2018-03-21 01:35:44
End at: 2018-03-21 01:36:14
Local clock offset: -3.443 ms
Remote clock offset: -1.831 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 40.839 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 40.880 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 40.655 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 41.444 ms
Loss rate: 2.14%
```

Run 5: Report of WebRTC media — Data Link

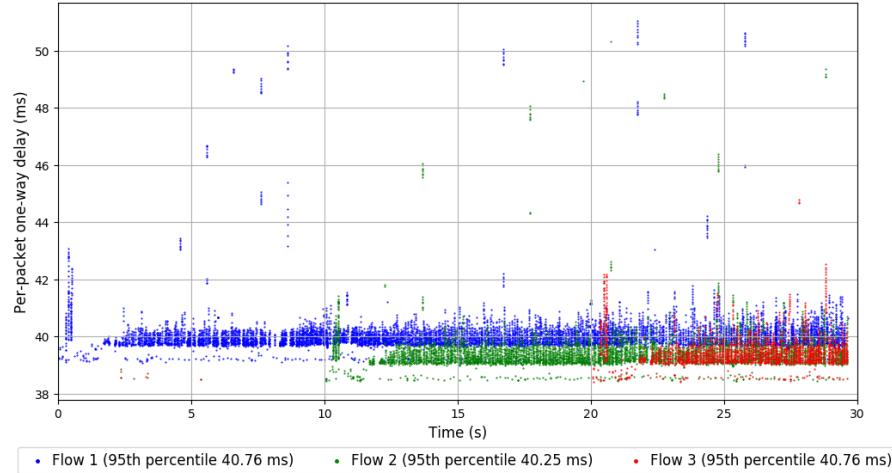
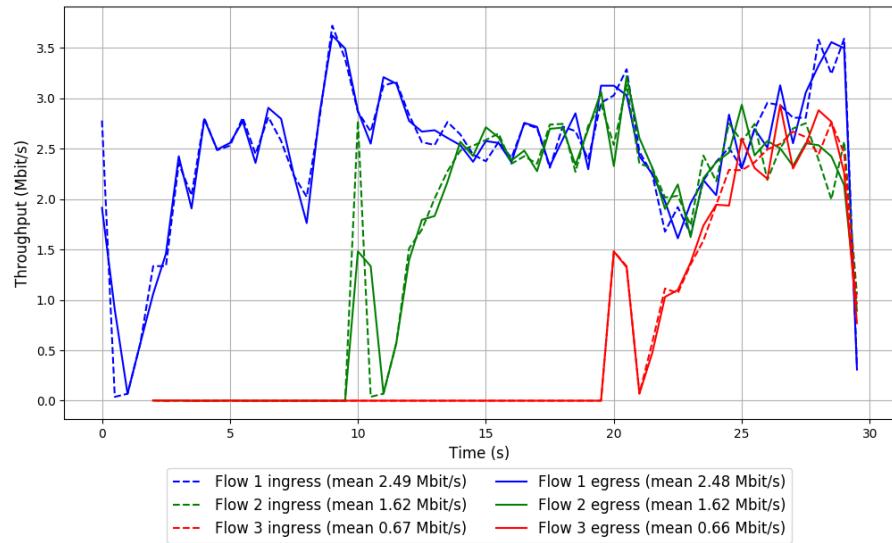


Run 6: Statistics of WebRTC media

```
Start at: 2018-03-21 01:58:29
End at: 2018-03-21 01:58:59
Local clock offset: 1.567 ms
Remote clock offset: -1.661 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 40.654 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 40.757 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 40.246 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 40.759 ms
Loss rate: 1.05%
```

Run 6: Report of WebRTC media — Data Link

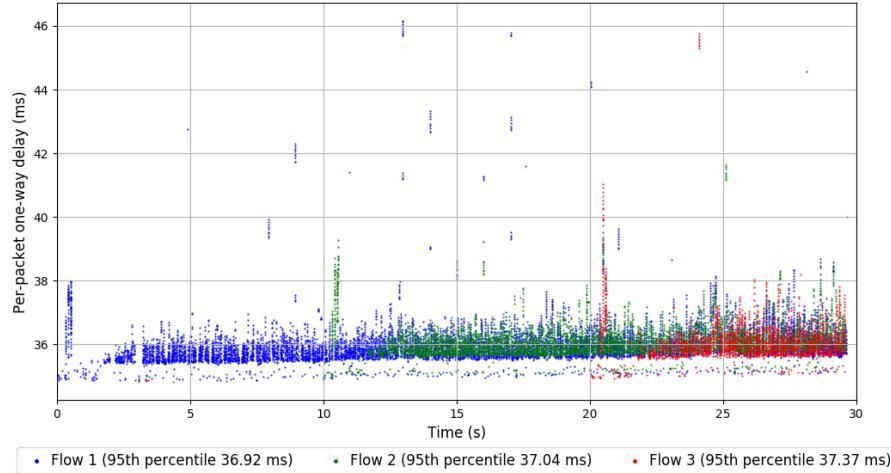
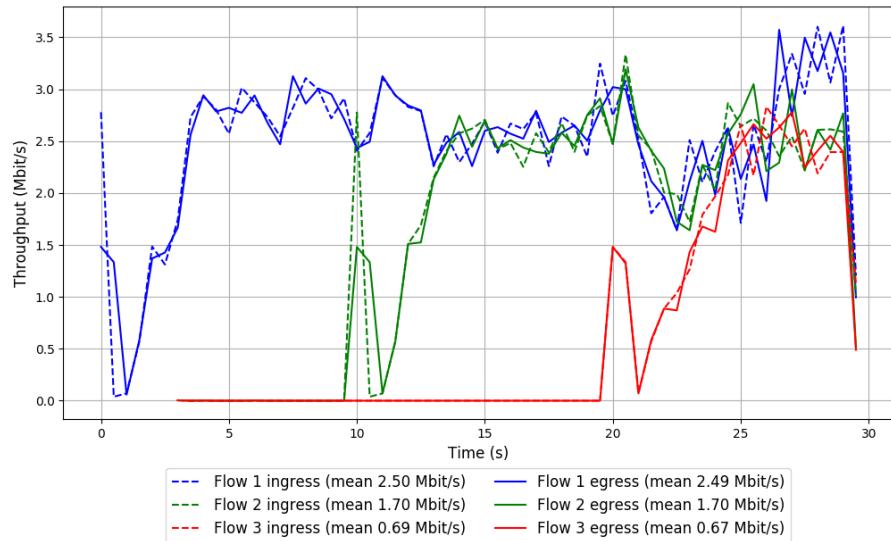


Run 7: Statistics of WebRTC media

```
Start at: 2018-03-21 02:21:28
End at: 2018-03-21 02:21:58
Local clock offset: -3.57 ms
Remote clock offset: 2.611 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 37.031 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 36.924 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 37.037 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 37.370 ms
Loss rate: 1.78%
```

Run 7: Report of WebRTC media — Data Link

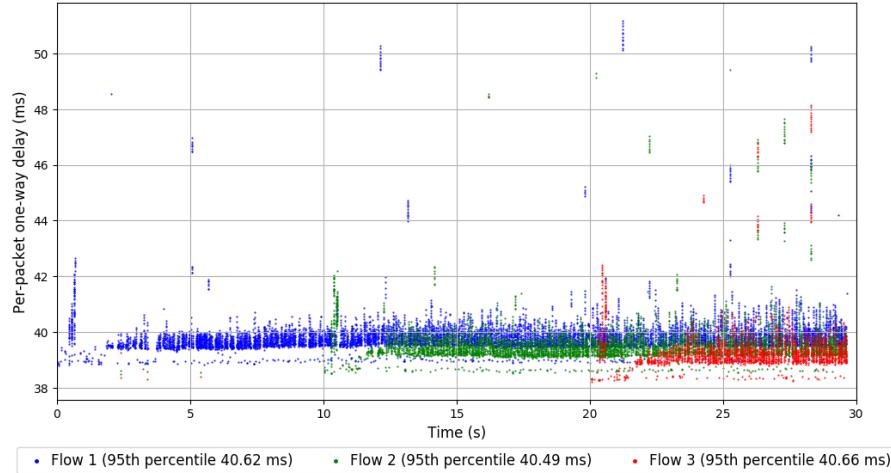
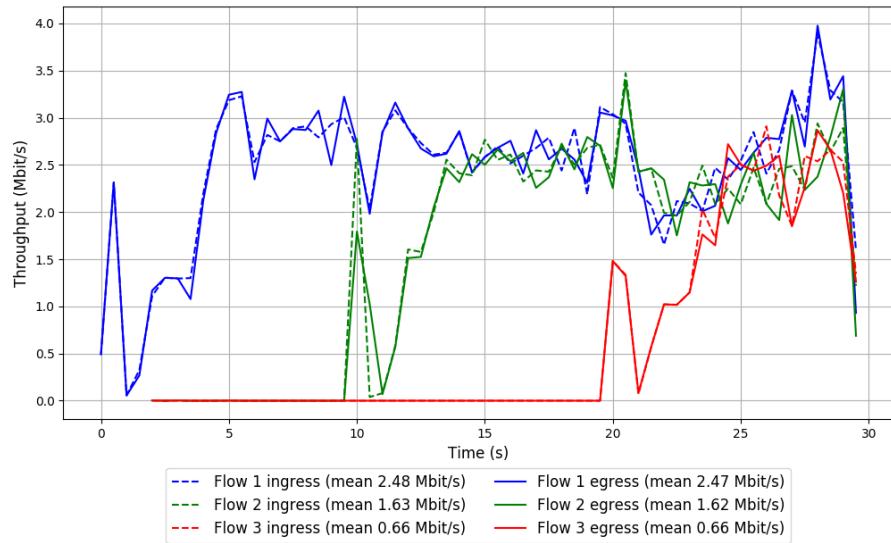


```
Run 8: Statistics of WebRTC media

Start at: 2018-03-21 02:44:13
End at: 2018-03-21 02:44:43
Local clock offset: -10.799 ms
Remote clock offset: -2.226 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 40.586 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 40.617 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 40.493 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 40.664 ms
Loss rate: 1.14%
```

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

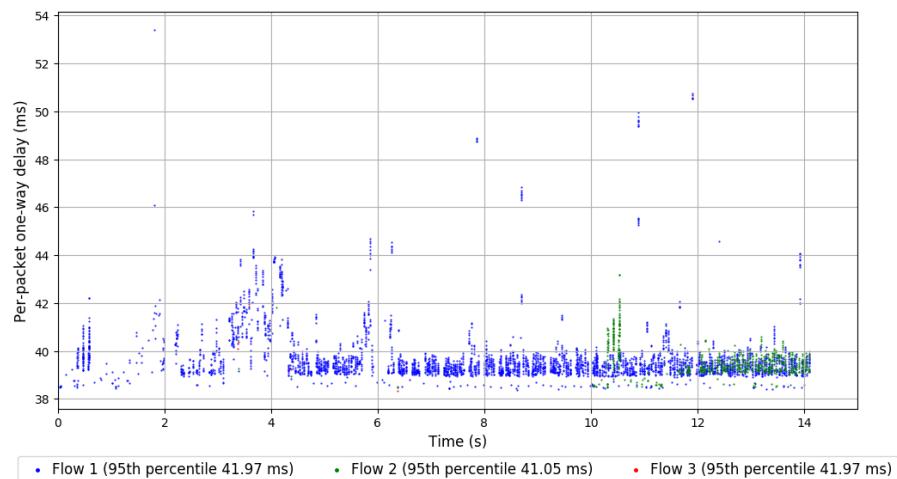
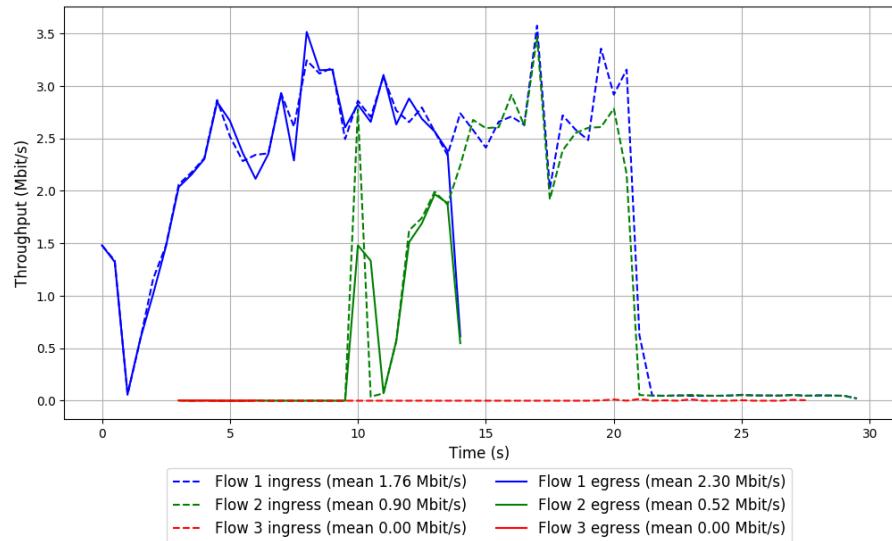
Start at: 2018-03-21 03:07:33

End at: 2018-03-21 03:08:03

Local clock offset: 3.444 ms

Remote clock offset: -0.994 ms

Run 9: Report of WebRTC media — Data Link

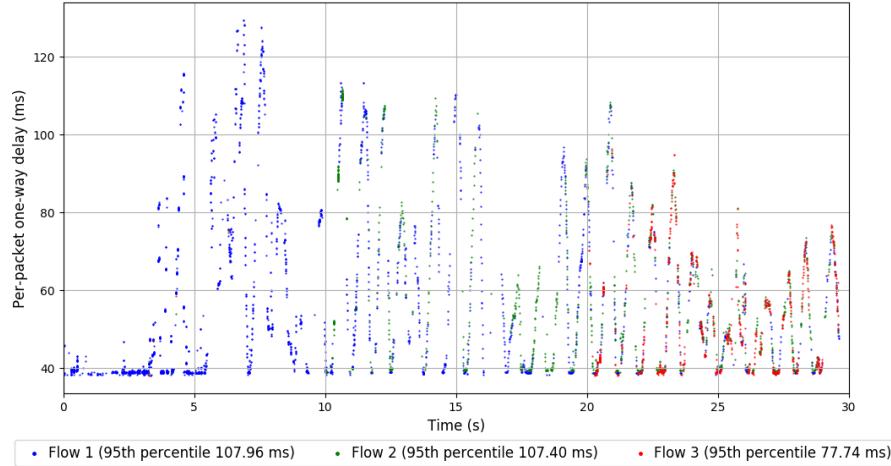
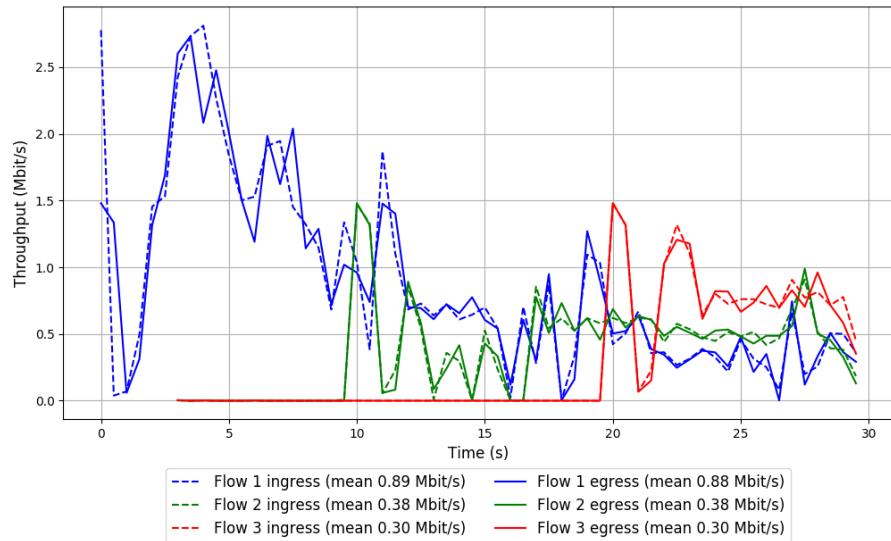


```
Run 10: Statistics of WebRTC media
```

```
Start at: 2018-03-21 03:31:13
End at: 2018-03-21 03:31:43
Local clock offset: 8.61 ms
Remote clock offset: 0.408 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 106.301 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 107.957 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 107.399 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 77.738 ms
Loss rate: 1.83%
```

Run 10: Report of WebRTC media — Data Link

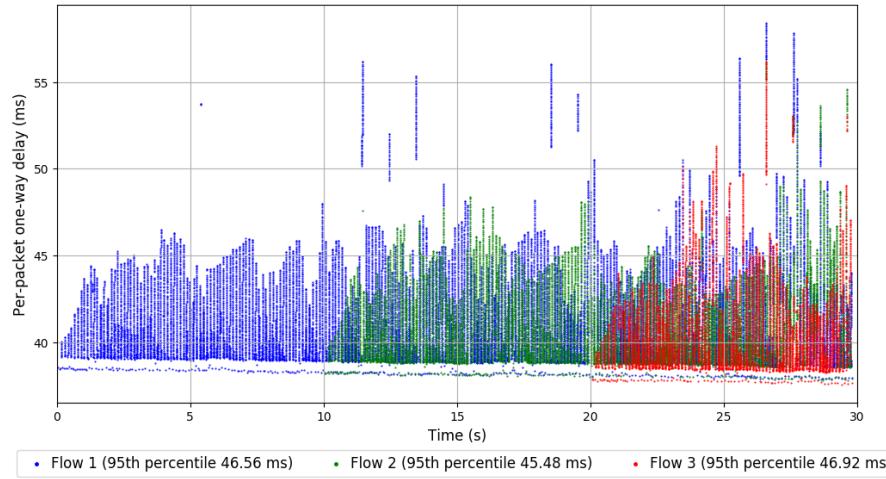
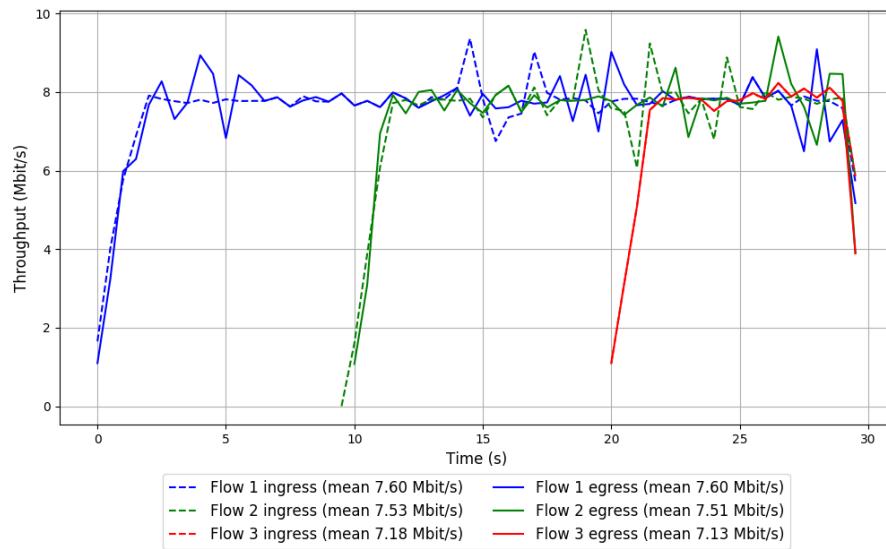


Run 1: Statistics of Sprout

```
Start at: 2018-03-21 00:06:56
End at: 2018-03-21 00:07:26
Local clock offset: 4.782 ms
Remote clock offset: 6.062 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.92 Mbit/s
95th percentile per-packet one-way delay: 46.231 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 46.561 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 45.478 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 46.916 ms
Loss rate: 1.40%
```

Run 1: Report of Sprout — Data Link

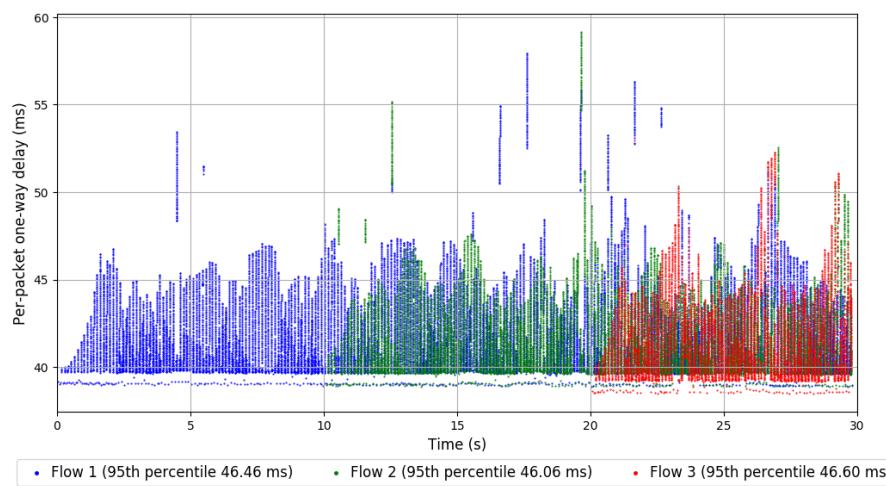
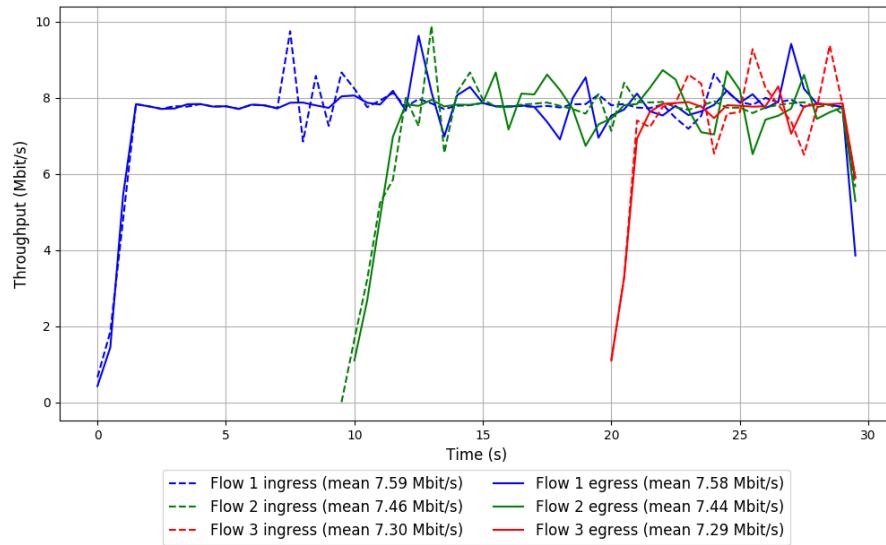


Run 2: Statistics of Sprout

```
Start at: 2018-03-21 00:29:41
End at: 2018-03-21 00:30:11
Local clock offset: 8.58 ms
Remote clock offset: -1.822 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.89 Mbit/s
95th percentile per-packet one-way delay: 46.370 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 46.459 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 46.065 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 46.602 ms
Loss rate: 1.36%
```

Run 2: Report of Sprout — Data Link

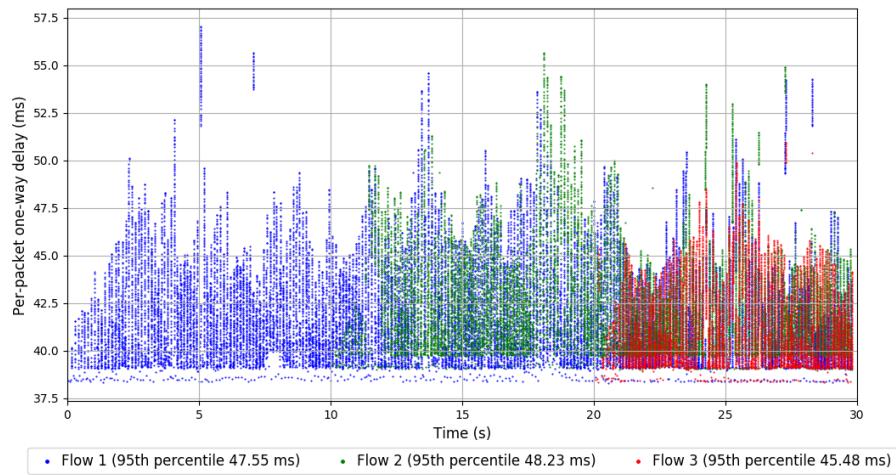
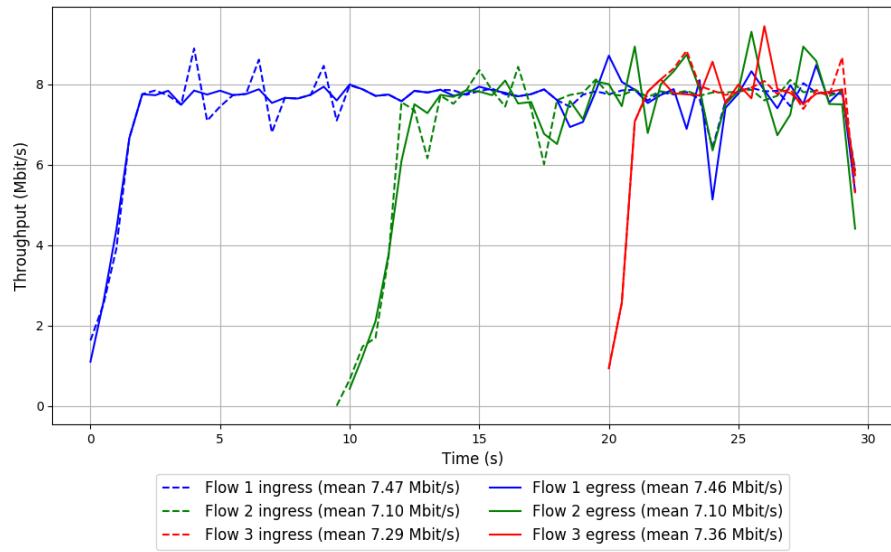


Run 3: Statistics of Sprout

```
Start at: 2018-03-21 00:52:43
End at: 2018-03-21 00:53:13
Local clock offset: 5.773 ms
Remote clock offset: -2.348 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 47.497 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 47.550 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 48.229 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 45.484 ms
Loss rate: 0.24%
```

Run 3: Report of Sprout — Data Link

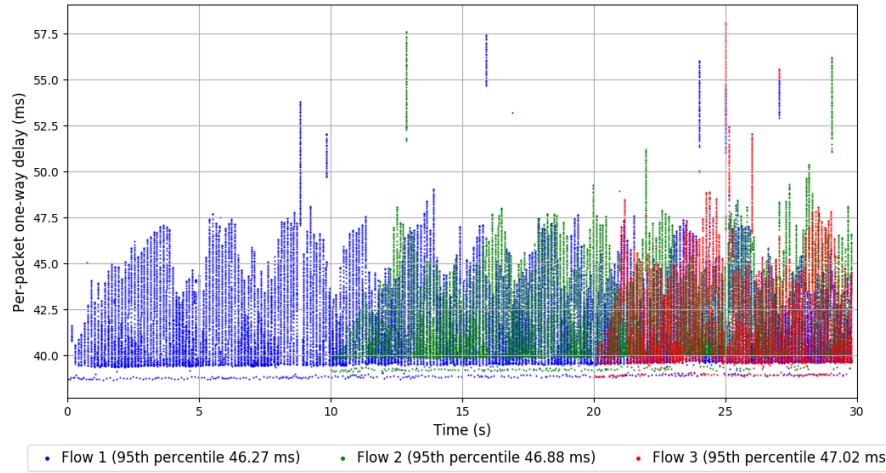
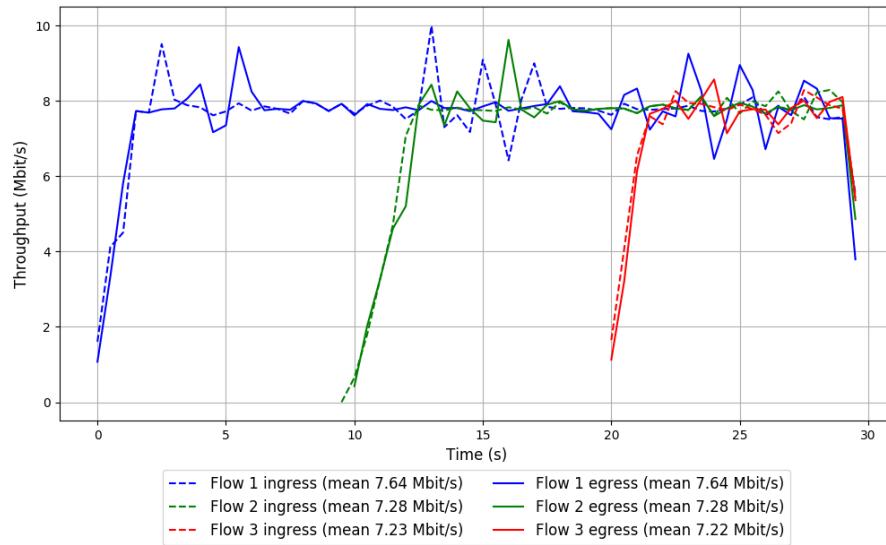


Run 4: Statistics of Sprout

```
Start at: 2018-03-21 01:15:28
End at: 2018-03-21 01:15:58
Local clock offset: 0.717 ms
Remote clock offset: -2.807 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.83 Mbit/s
95th percentile per-packet one-way delay: 46.578 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 46.274 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 46.875 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 47.015 ms
Loss rate: 1.20%
```

Run 4: Report of Sprout — Data Link

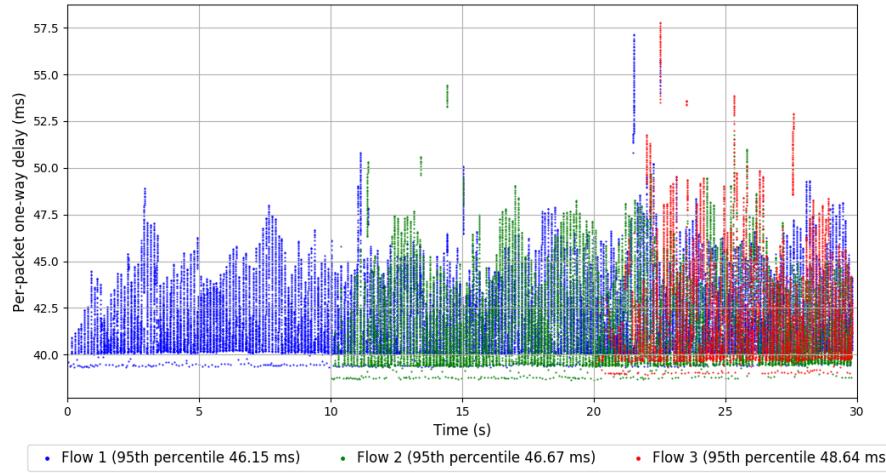
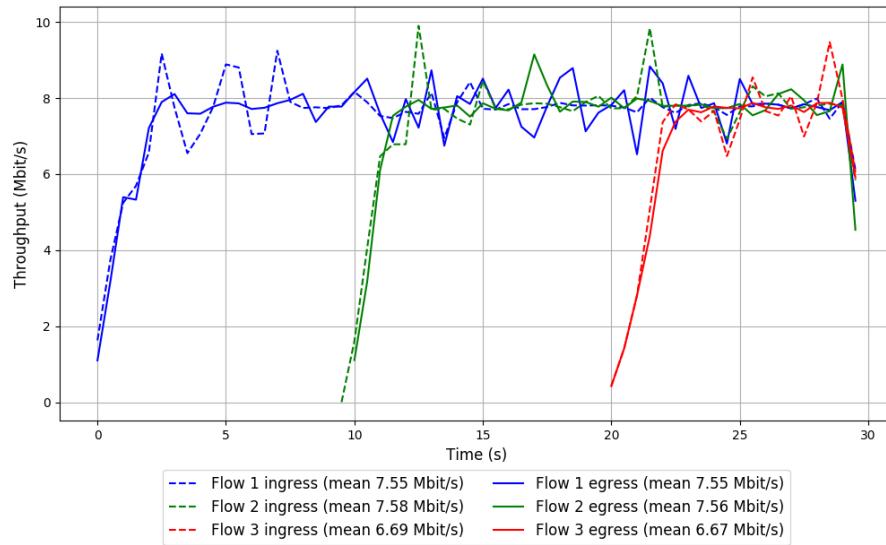


Run 5: Statistics of Sprout

```
Start at: 2018-03-21 01:38:15
End at: 2018-03-21 01:38:45
Local clock offset: -3.741 ms
Remote clock offset: -1.827 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.75 Mbit/s
95th percentile per-packet one-way delay: 46.722 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 46.145 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 46.672 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 48.639 ms
Loss rate: 1.48%
```

Run 5: Report of Sprout — Data Link

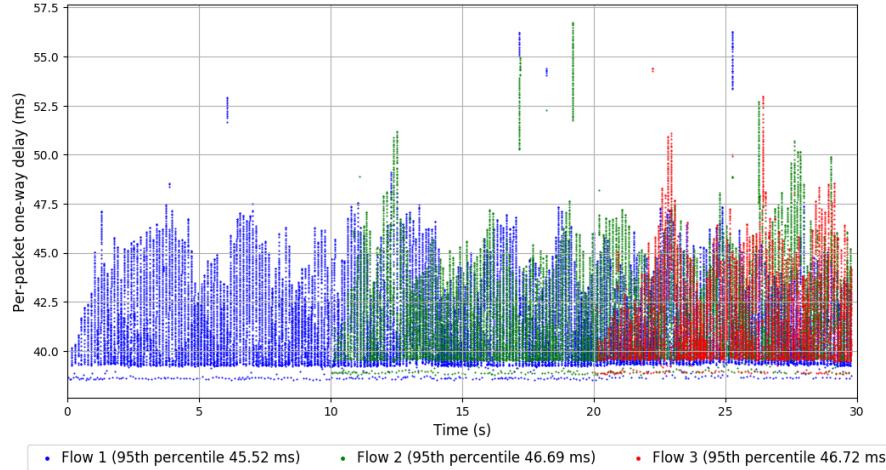
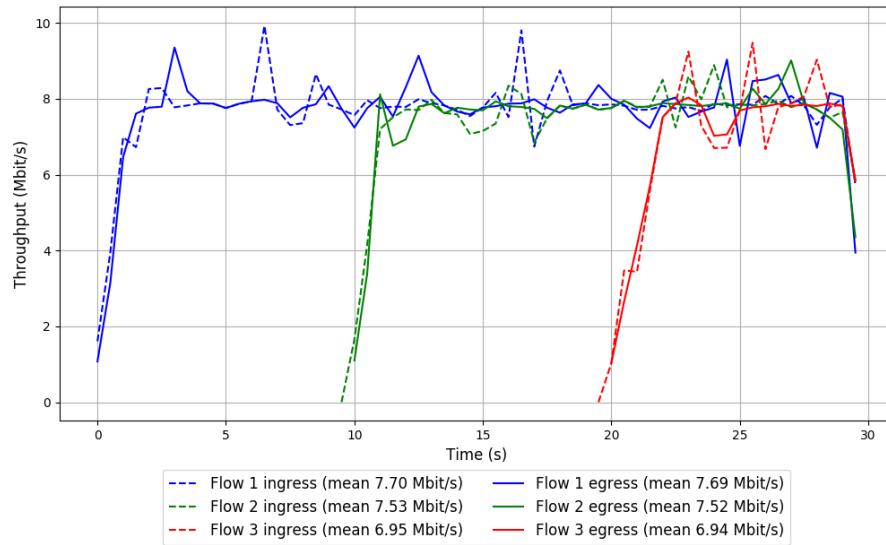


Run 6: Statistics of Sprout

```
Start at: 2018-03-21 02:01:00
End at: 2018-03-21 02:01:30
Local clock offset: 1.684 ms
Remote clock offset: -1.623 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.95 Mbit/s
95th percentile per-packet one-way delay: 46.009 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 45.518 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 46.685 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 46.716 ms
Loss rate: 1.41%
```

Run 6: Report of Sprout — Data Link

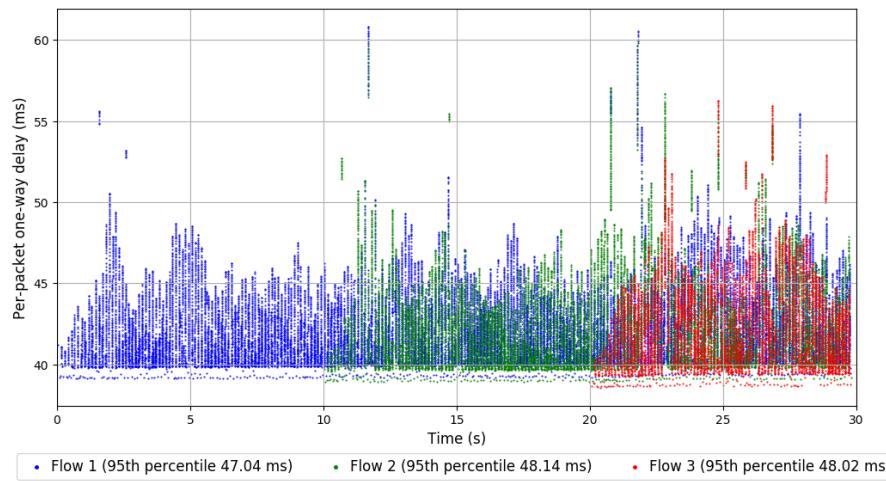
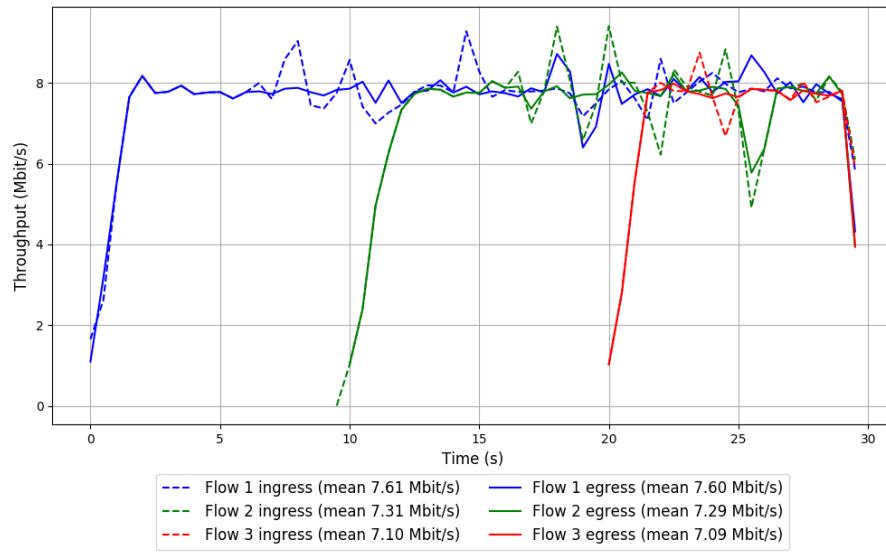


Run 7: Statistics of Sprout

```
Start at: 2018-03-21 02:23:59
End at: 2018-03-21 02:24:29
Local clock offset: -4.839 ms
Remote clock offset: -1.284 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.75 Mbit/s
95th percentile per-packet one-way delay: 47.531 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 47.043 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 48.140 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 48.022 ms
Loss rate: 1.41%
```

Run 7: Report of Sprout — Data Link

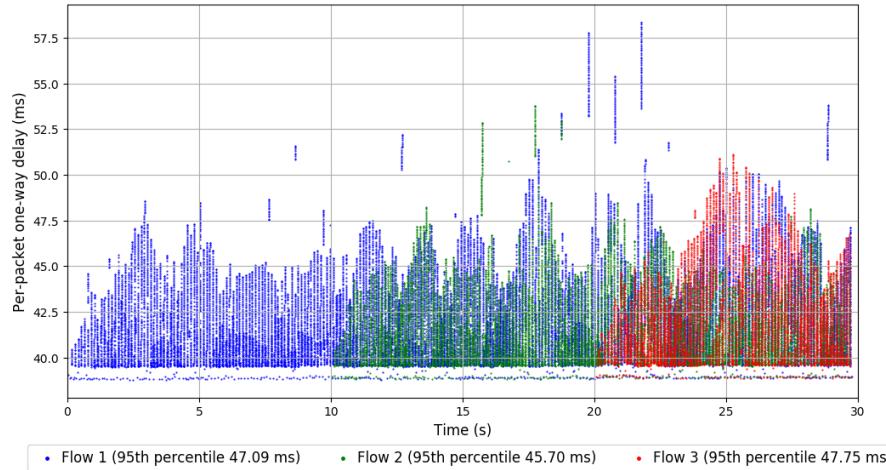
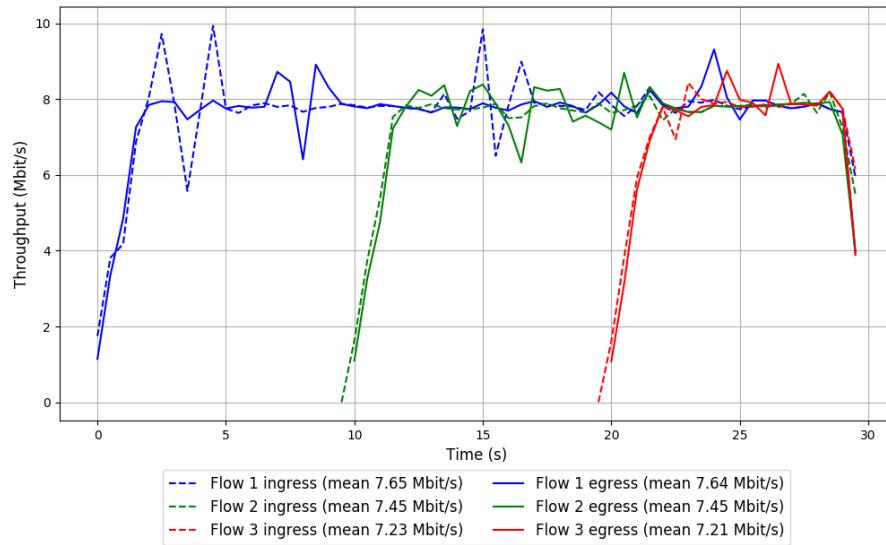


Run 8: Statistics of Sprout

```
Start at: 2018-03-21 02:46:43
End at: 2018-03-21 02:47:13
Local clock offset: -11.11 ms
Remote clock offset: -2.307 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 46.822 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 47.088 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.45 Mbit/s
95th percentile per-packet one-way delay: 45.701 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 47.750 ms
Loss rate: 1.59%
```

Run 8: Report of Sprout — Data Link

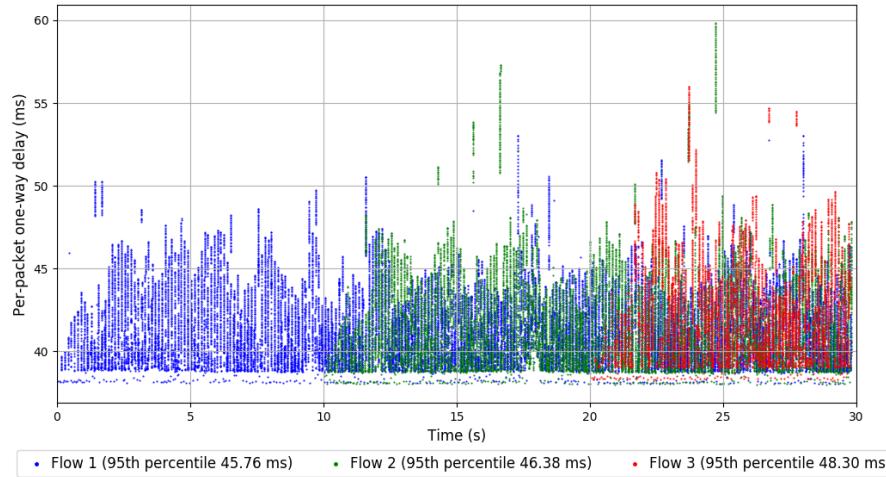
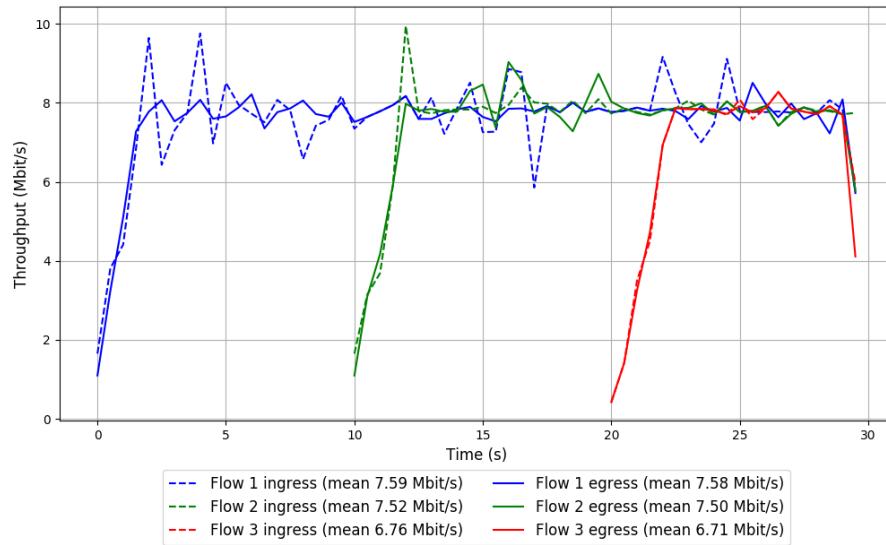


Run 9: Statistics of Sprout

```
Start at: 2018-03-21 03:10:51
End at: 2018-03-21 03:11:21
Local clock offset: 4.012 ms
Remote clock offset: -0.686 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.76 Mbit/s
95th percentile per-packet one-way delay: 46.483 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 45.759 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 46.377 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 48.298 ms
Loss rate: 1.43%
```

Run 9: Report of Sprout — Data Link

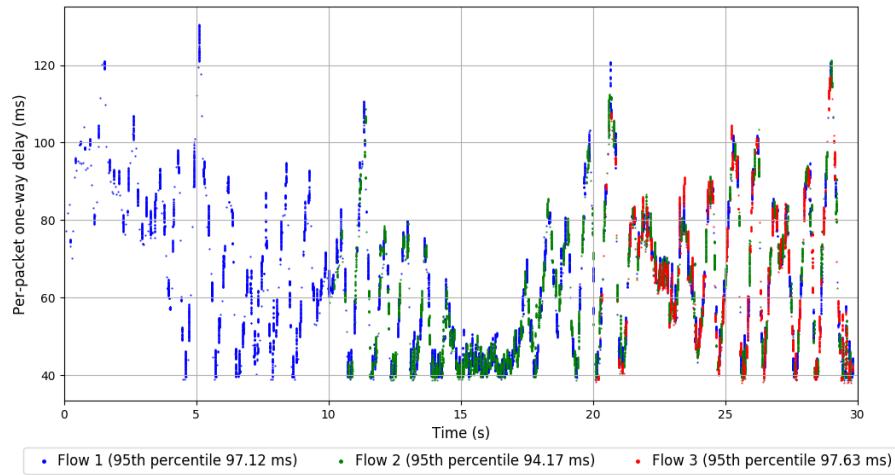
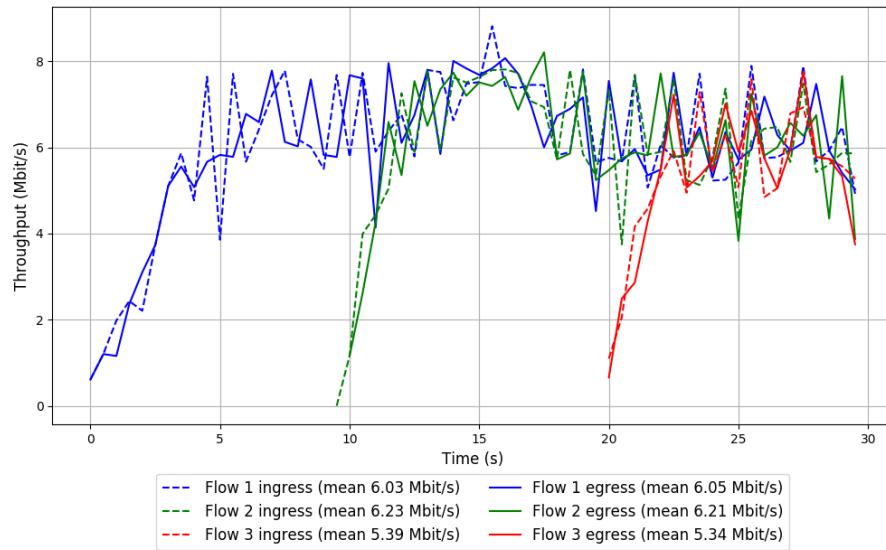


Run 10: Statistics of Sprout

```
Start at: 2018-03-21 03:33:39
End at: 2018-03-21 03:34:09
Local clock offset: 9.002 ms
Remote clock offset: 0.268 ms

# Below is generated by plot.py at 2018-03-21 07:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 96.228 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 97.123 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 94.175 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 97.628 ms
Loss rate: 1.67%
```

Run 10: Report of Sprout — Data Link

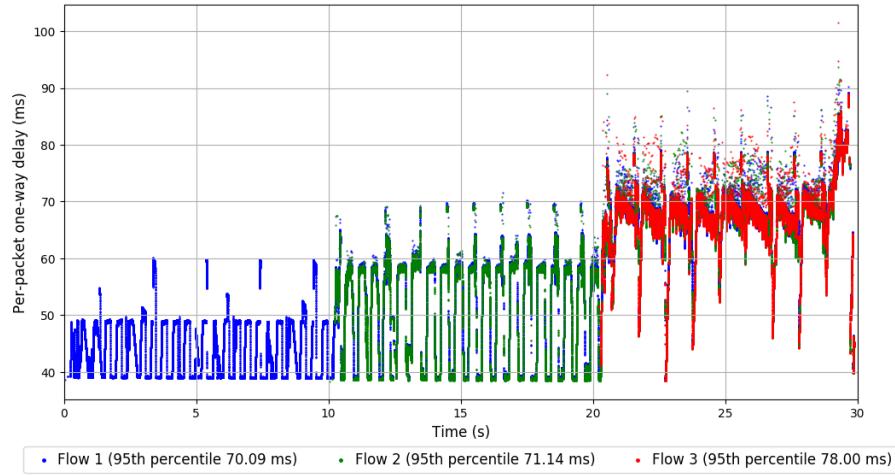
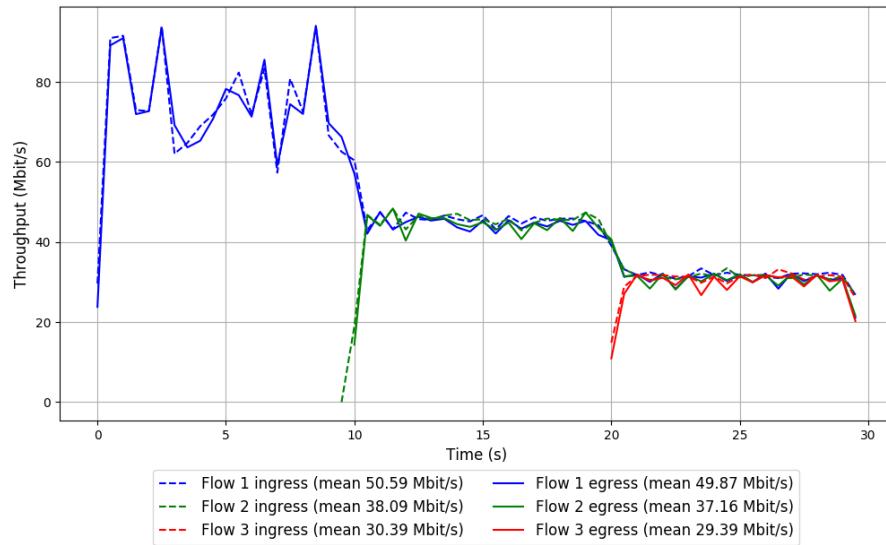


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-03-20 23:57:57
End at: 2018-03-20 23:58:27
Local clock offset: 0.458 ms
Remote clock offset: 5.804 ms

# Below is generated by plot.py at 2018-03-21 07:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.23 Mbit/s
95th percentile per-packet one-way delay: 70.948 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 49.87 Mbit/s
95th percentile per-packet one-way delay: 70.087 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 37.16 Mbit/s
95th percentile per-packet one-way delay: 71.142 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 78.001 ms
Loss rate: 4.49%
```

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

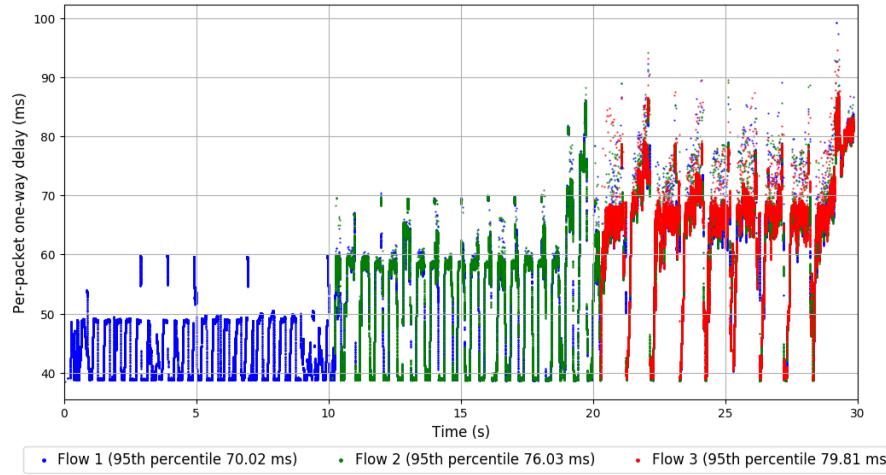
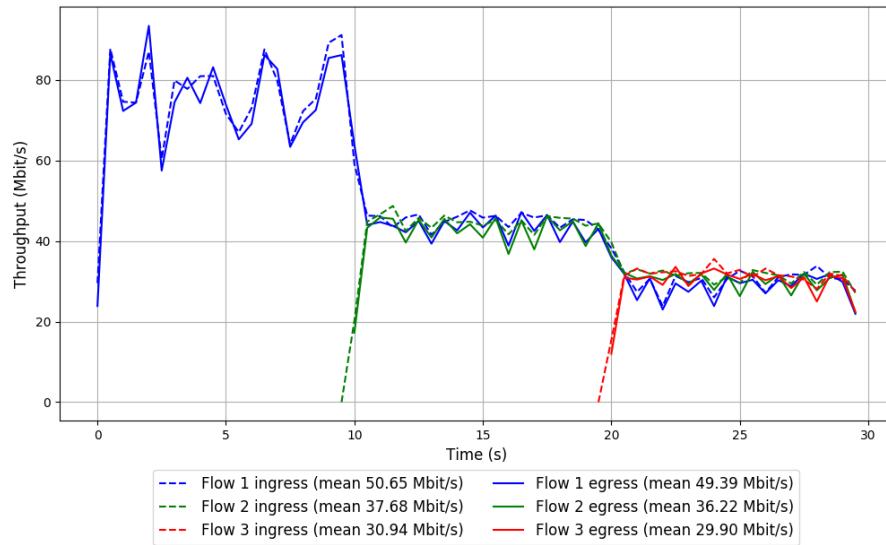


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-03-21 00:20:44
End at: 2018-03-21 00:21:14
Local clock offset: 7.474 ms
Remote clock offset: -0.477 ms

# Below is generated by plot.py at 2018-03-21 07:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.31 Mbit/s
95th percentile per-packet one-way delay: 74.290 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 70.022 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 76.032 ms
Loss rate: 4.52%
-- Flow 3:
Average throughput: 29.90 Mbit/s
95th percentile per-packet one-way delay: 79.811 ms
Loss rate: 4.94%
```

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

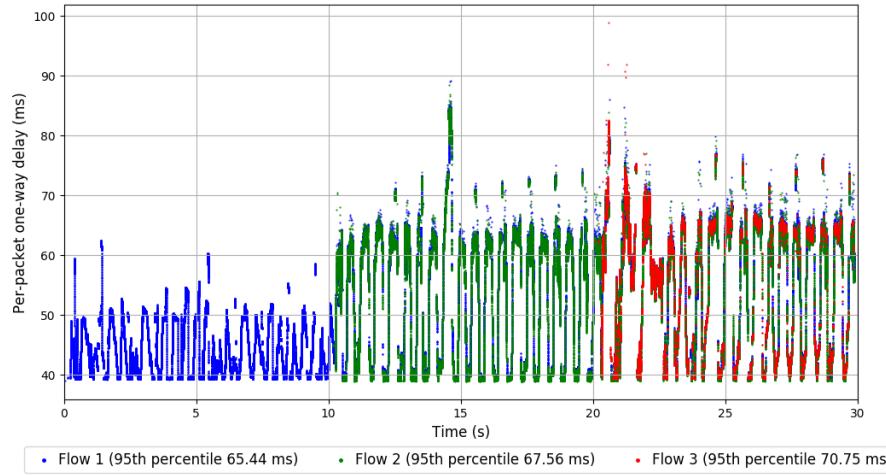
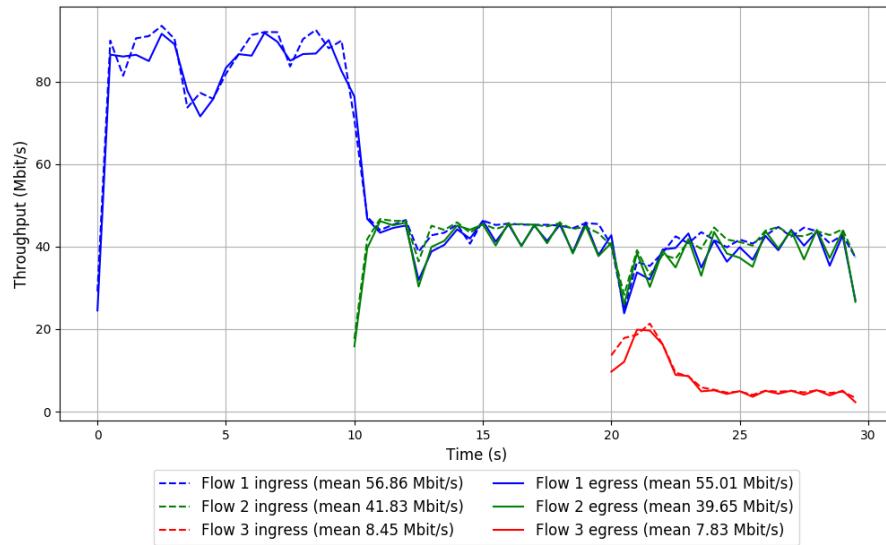


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-03-21 00:43:36
End at: 2018-03-21 00:44:06
Local clock offset: 6.097 ms
Remote clock offset: -2.657 ms

# Below is generated by plot.py at 2018-03-21 07:39:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 66.092 ms
Loss rate: 4.45%
-- Flow 1:
Average throughput: 55.01 Mbit/s
95th percentile per-packet one-way delay: 65.435 ms
Loss rate: 3.59%
-- Flow 2:
Average throughput: 39.65 Mbit/s
95th percentile per-packet one-way delay: 67.565 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 70.750 ms
Loss rate: 8.83%
```

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

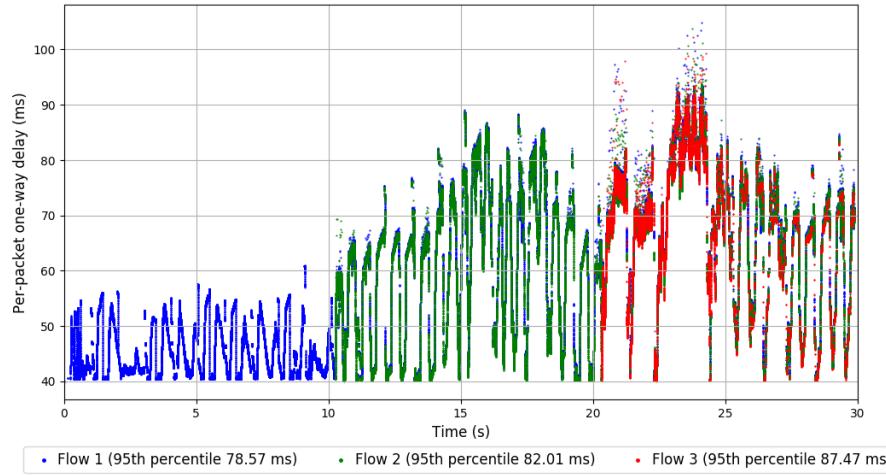
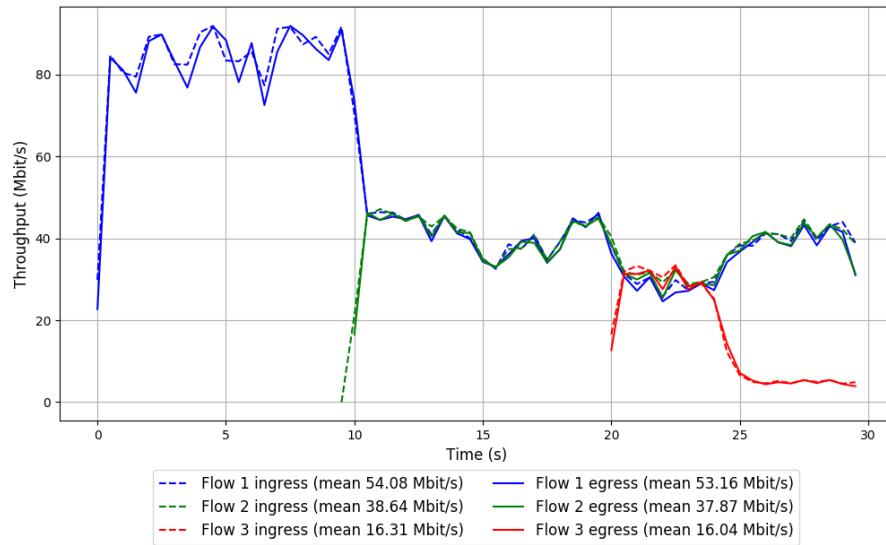


Run 4: Statistics of TaoVA-100x

```
Start at: 2018-03-21 01:06:30
End at: 2018-03-21 01:07:00
Local clock offset: 5.866 ms
Remote clock offset: -2.674 ms

# Below is generated by plot.py at 2018-03-21 07:39:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 81.091 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 53.16 Mbit/s
95th percentile per-packet one-way delay: 78.572 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 37.87 Mbit/s
95th percentile per-packet one-way delay: 82.006 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 87.469 ms
Loss rate: 2.88%
```

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

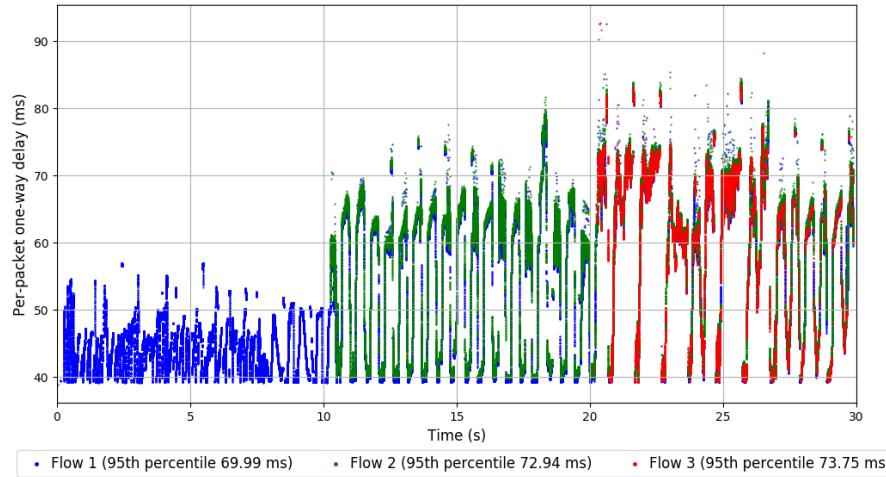
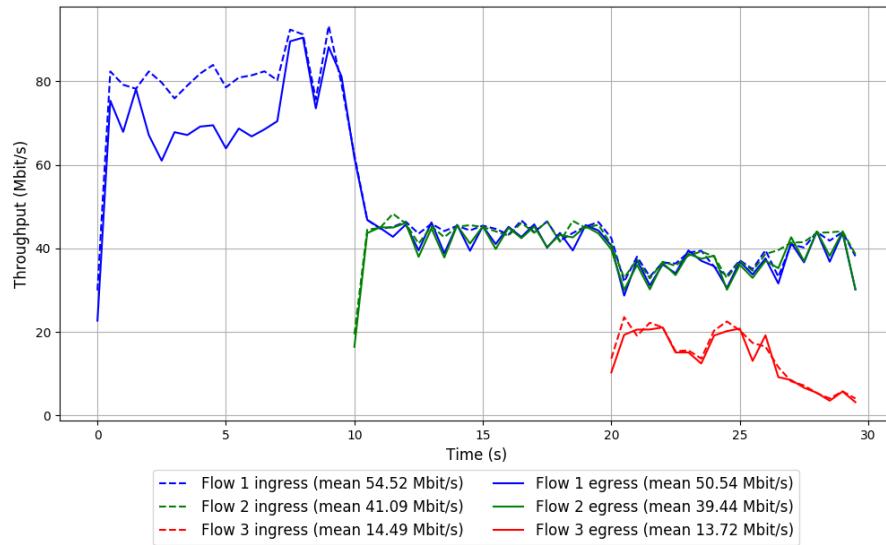


Run 5: Statistics of TaoVA-100x

```
Start at: 2018-03-21 01:29:17
End at: 2018-03-21 01:29:47
Local clock offset: -2.434 ms
Remote clock offset: -1.923 ms

# Below is generated by plot.py at 2018-03-21 07:39:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.27 Mbit/s
95th percentile per-packet one-way delay: 71.814 ms
Loss rate: 6.58%
-- Flow 1:
Average throughput: 50.54 Mbit/s
95th percentile per-packet one-way delay: 69.986 ms
Loss rate: 7.63%
-- Flow 2:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 72.935 ms
Loss rate: 4.52%
-- Flow 3:
Average throughput: 13.72 Mbit/s
95th percentile per-packet one-way delay: 73.752 ms
Loss rate: 6.36%
```

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

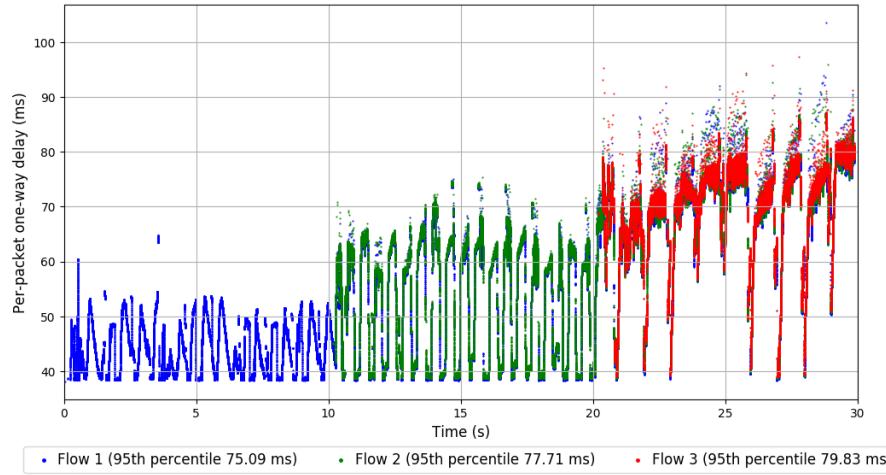
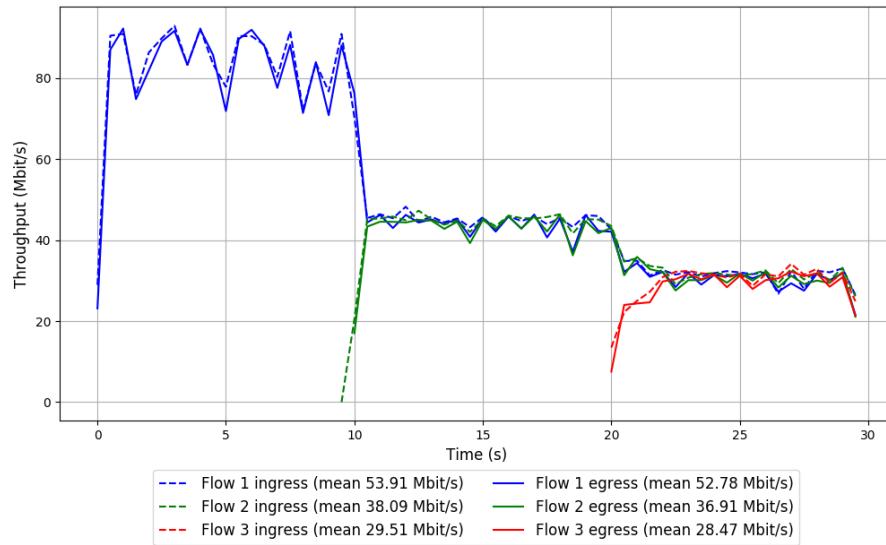


Run 6: Statistics of TaoVA-100x

```
Start at: 2018-03-21 01:52:03
End at: 2018-03-21 01:52:33
Local clock offset: 0.136 ms
Remote clock offset: -1.862 ms

# Below is generated by plot.py at 2018-03-21 07:39:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 77.268 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 75.093 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 77.711 ms
Loss rate: 3.70%
-- Flow 3:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 79.829 ms
Loss rate: 4.61%
```

Run 6: Report of TaoVA-100x — Data Link

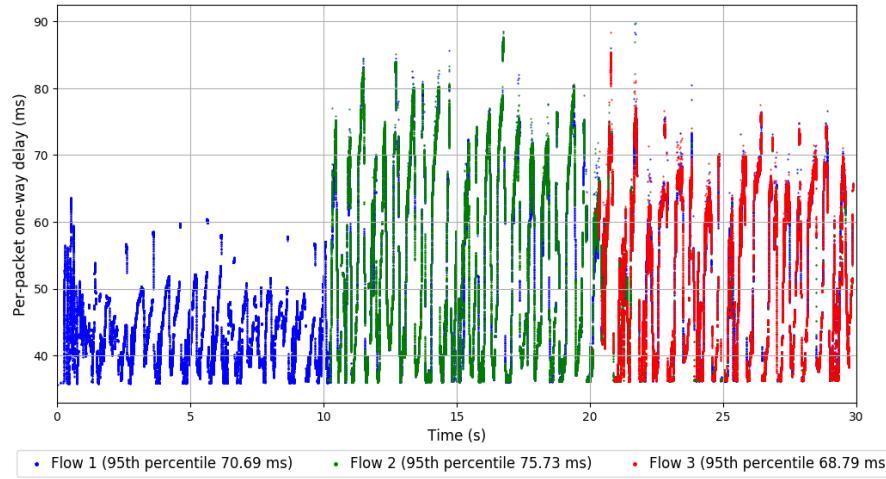
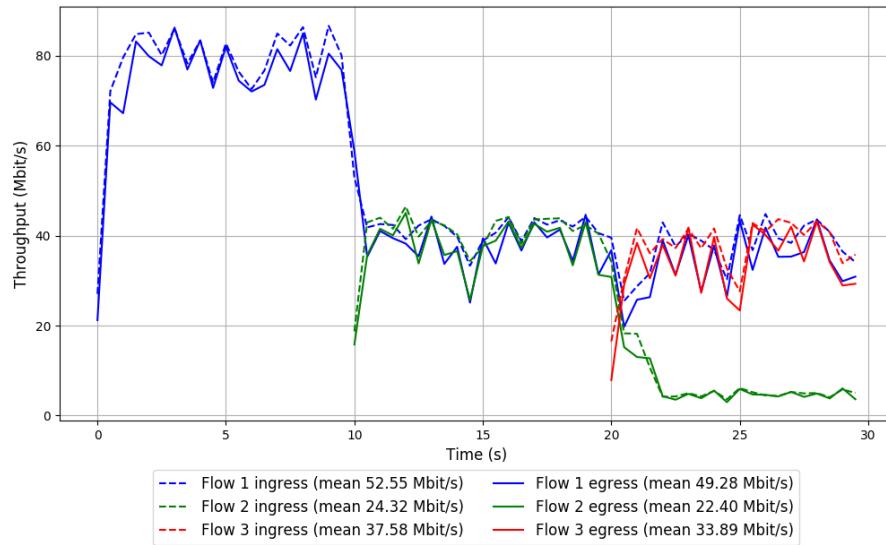


Run 7: Statistics of TaoVA-100x

```
Start at: 2018-03-21 02:15:01
End at: 2018-03-21 02:15:32
Local clock offset: 1.595 ms
Remote clock offset: 2.585 ms

# Below is generated by plot.py at 2018-03-21 07:39:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.28 Mbit/s
95th percentile per-packet one-way delay: 72.574 ms
Loss rate: 7.62%
-- Flow 1:
Average throughput: 49.28 Mbit/s
95th percentile per-packet one-way delay: 70.688 ms
Loss rate: 6.55%
-- Flow 2:
Average throughput: 22.40 Mbit/s
95th percentile per-packet one-way delay: 75.730 ms
Loss rate: 8.53%
-- Flow 3:
Average throughput: 33.89 Mbit/s
95th percentile per-packet one-way delay: 68.788 ms
Loss rate: 10.97%
```

Run 7: Report of TaoVA-100x — Data Link

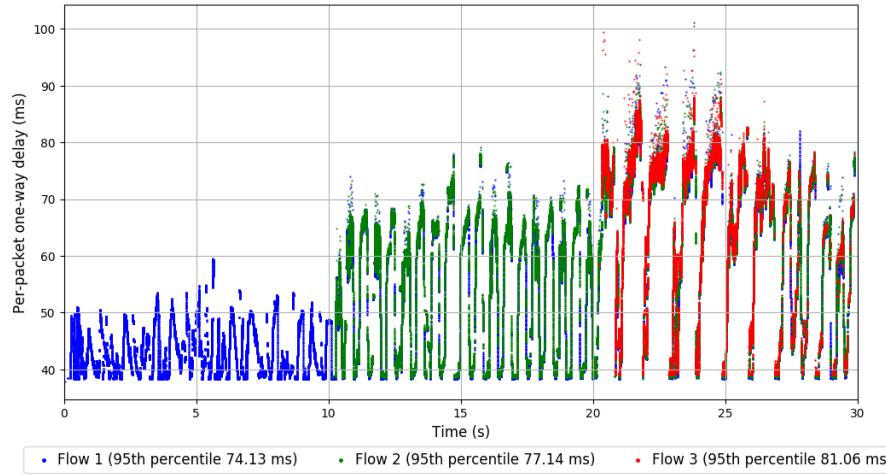
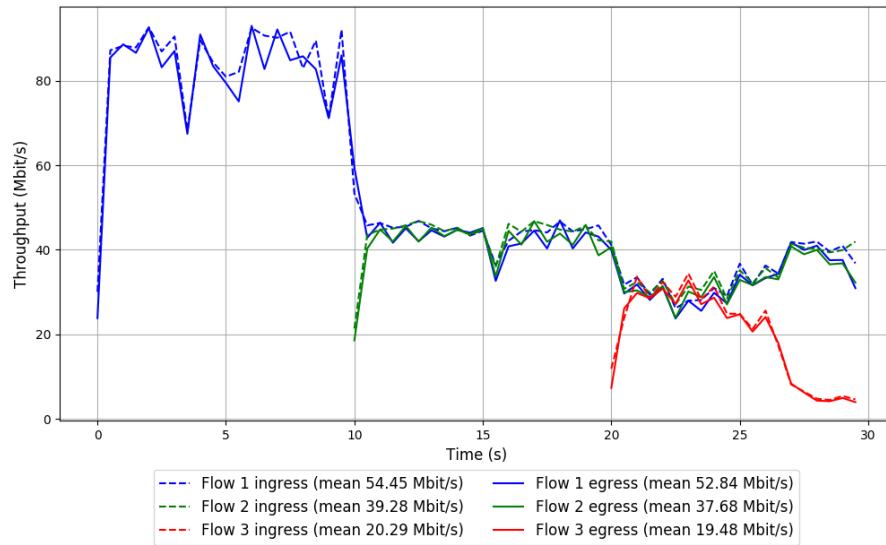


Run 8: Statistics of TaoVA-100x

```
Start at: 2018-03-21 02:37:46
End at: 2018-03-21 02:38:16
Local clock offset: -9.917 ms
Remote clock offset: -2.082 ms

# Below is generated by plot.py at 2018-03-21 07:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.28 Mbit/s
95th percentile per-packet one-way delay: 76.720 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 52.84 Mbit/s
95th percentile per-packet one-way delay: 74.134 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 77.145 ms
Loss rate: 4.65%
-- Flow 3:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 81.064 ms
Loss rate: 4.81%
```

Run 8: Report of TaoVA-100x — Data Link

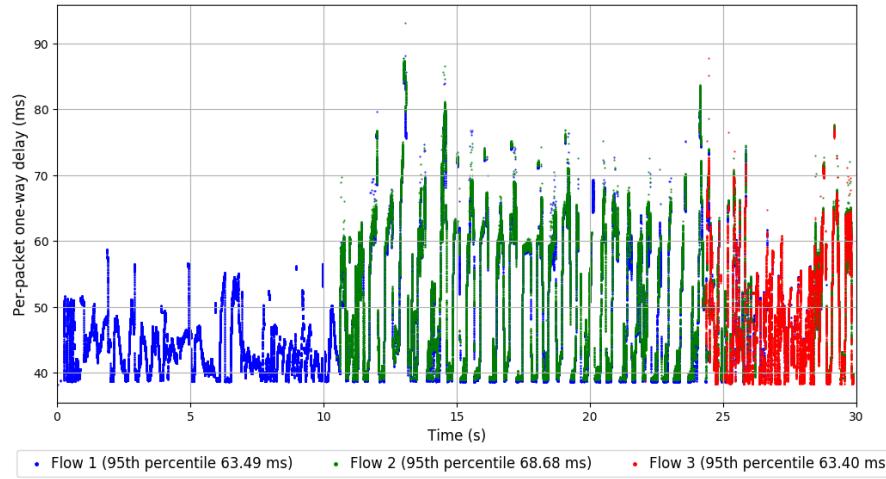
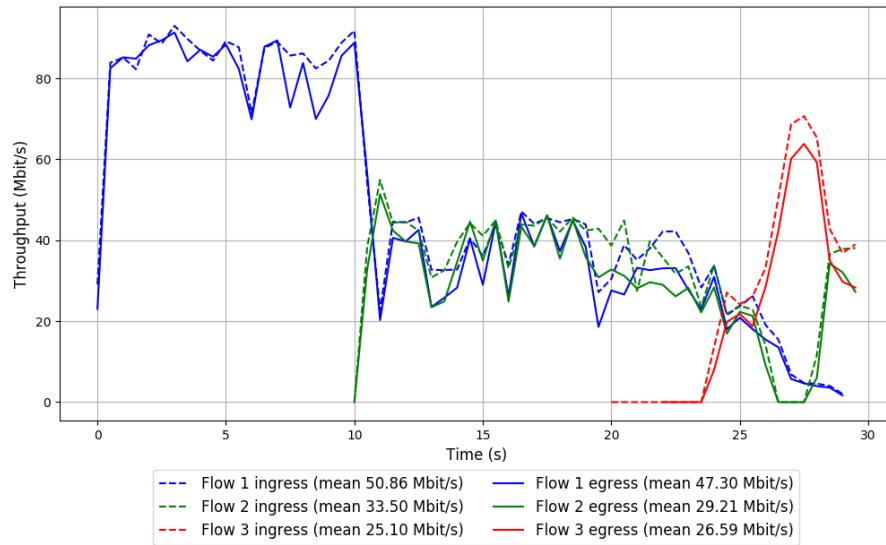


Run 9: Statistics of TaoVA-100x

```
Start at: 2018-03-21 03:01:11
End at: 2018-03-21 03:01:41
Local clock offset: 0.916 ms
Remote clock offset: -1.877 ms

# Below is generated by plot.py at 2018-03-21 07:41:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.22 Mbit/s
95th percentile per-packet one-way delay: 65.248 ms
Loss rate: 9.90%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 63.490 ms
Loss rate: 7.28%
-- Flow 2:
Average throughput: 29.21 Mbit/s
95th percentile per-packet one-way delay: 68.681 ms
Loss rate: 13.31%
-- Flow 3:
Average throughput: 26.59 Mbit/s
95th percentile per-packet one-way delay: 63.398 ms
Loss rate: 16.58%
```

Run 9: Report of TaoVA-100x — Data Link

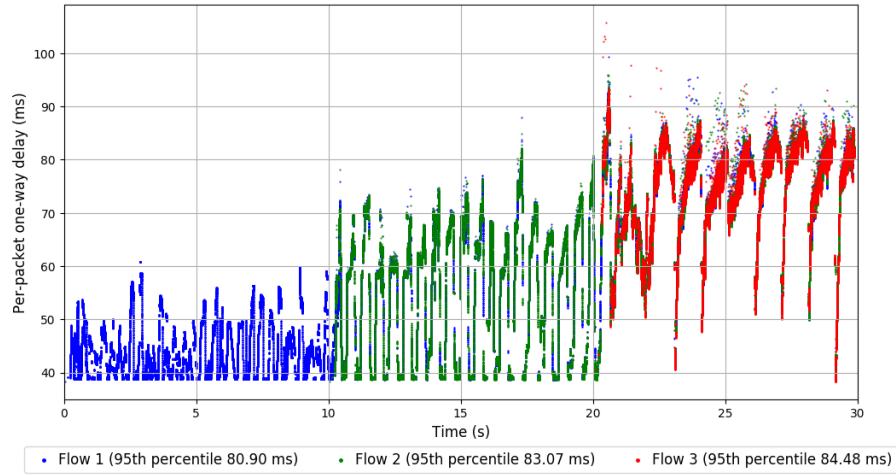
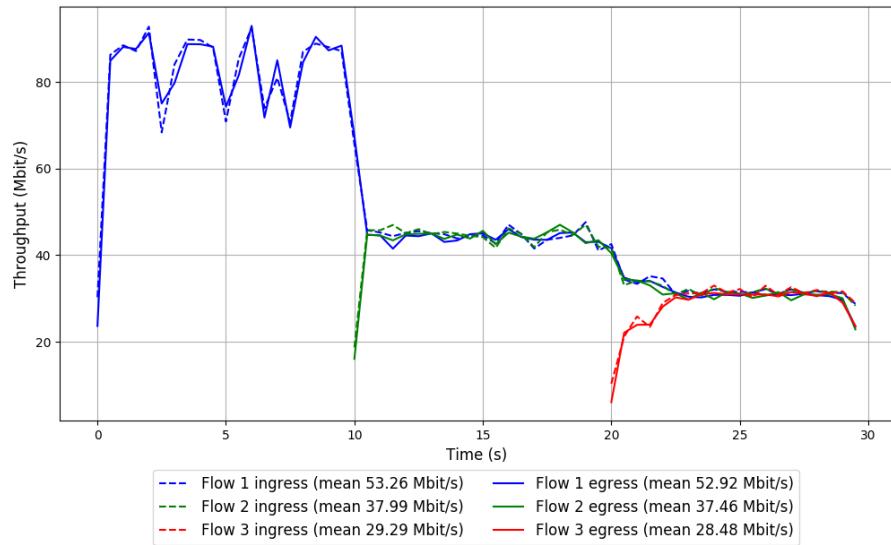


Run 10: Statistics of TaoVA-100x

```
Start at: 2018-03-21 03:24:44
End at: 2018-03-21 03:25:14
Local clock offset: 6.183 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 82.534 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 52.92 Mbit/s
95th percentile per-packet one-way delay: 80.896 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 83.068 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 84.476 ms
Loss rate: 4.00%
```

Run 10: Report of TaoVA-100x — Data Link

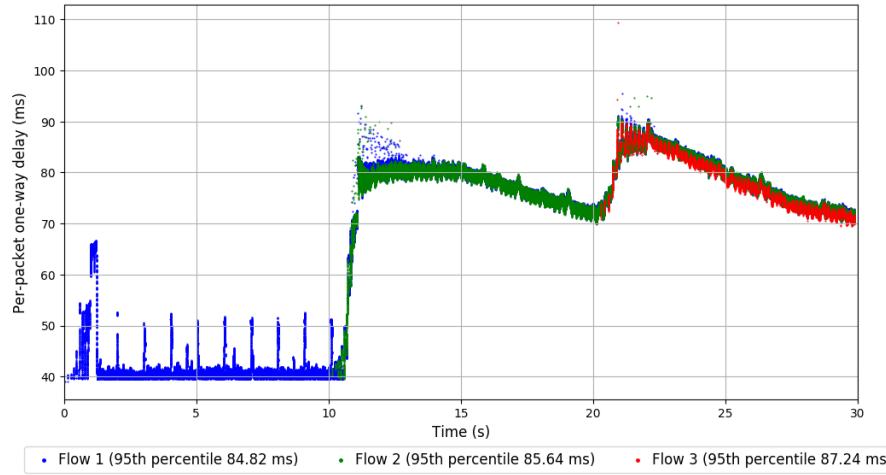
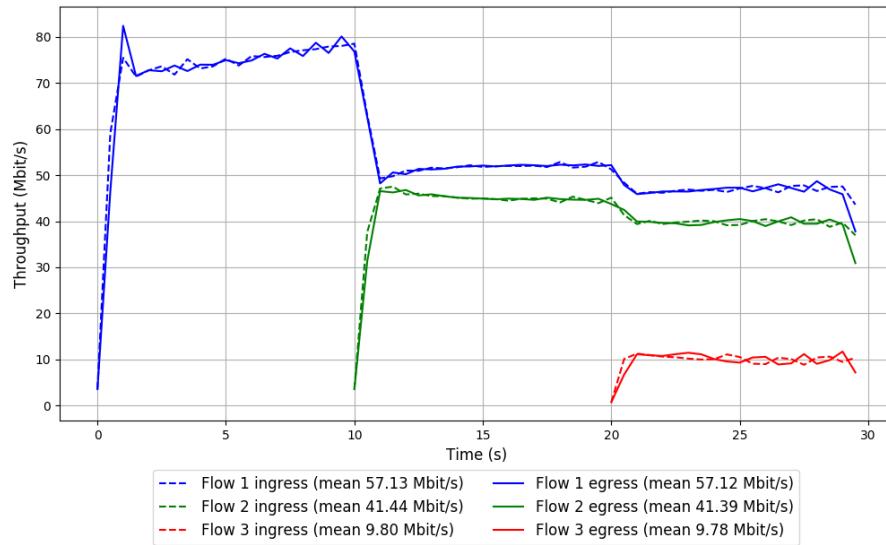


Run 1: Statistics of TCP Vegas

```
Start at: 2018-03-21 00:03:09
End at: 2018-03-21 00:03:39
Local clock offset: 3.459 ms
Remote clock offset: 6.241 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.83 Mbit/s
95th percentile per-packet one-way delay: 85.347 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 57.12 Mbit/s
95th percentile per-packet one-way delay: 84.823 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 85.638 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 87.236 ms
Loss rate: 1.67%
```

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-21 00:25:55

End at: 2018-03-21 00:26:25

Local clock offset: 8.318 ms

Remote clock offset: -1.306 ms

Run 2: Report of TCP Vegas — Data Link

Figure is missing

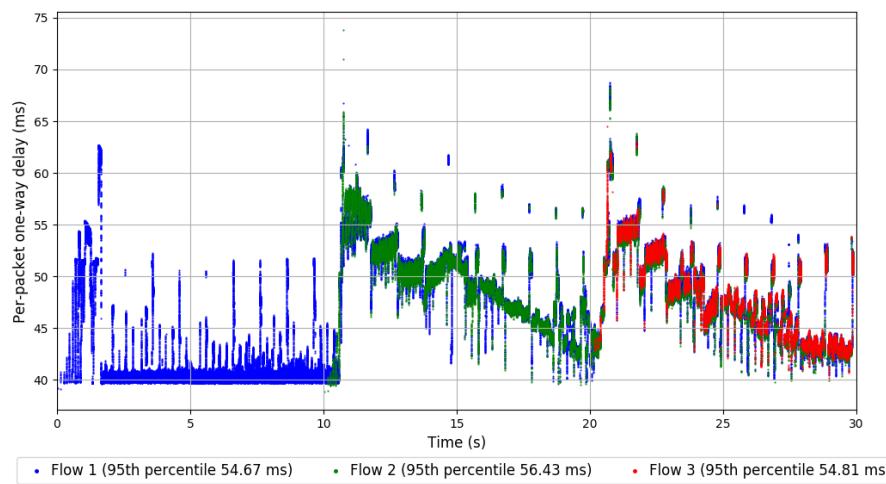
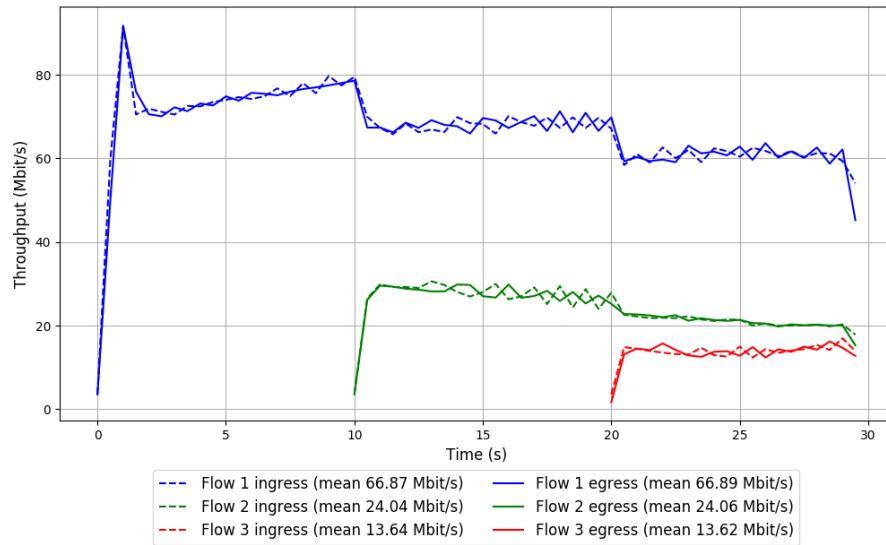
Figure is missing

Run 3: Statistics of TCP Vegas

```
Start at: 2018-03-21 00:48:57
End at: 2018-03-21 00:49:27
Local clock offset: 5.91 ms
Remote clock offset: -2.394 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 54.925 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 66.89 Mbit/s
95th percentile per-packet one-way delay: 54.673 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 24.06 Mbit/s
95th percentile per-packet one-way delay: 56.428 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 13.62 Mbit/s
95th percentile per-packet one-way delay: 54.811 ms
Loss rate: 1.28%
```

Run 3: Report of TCP Vegas — Data Link

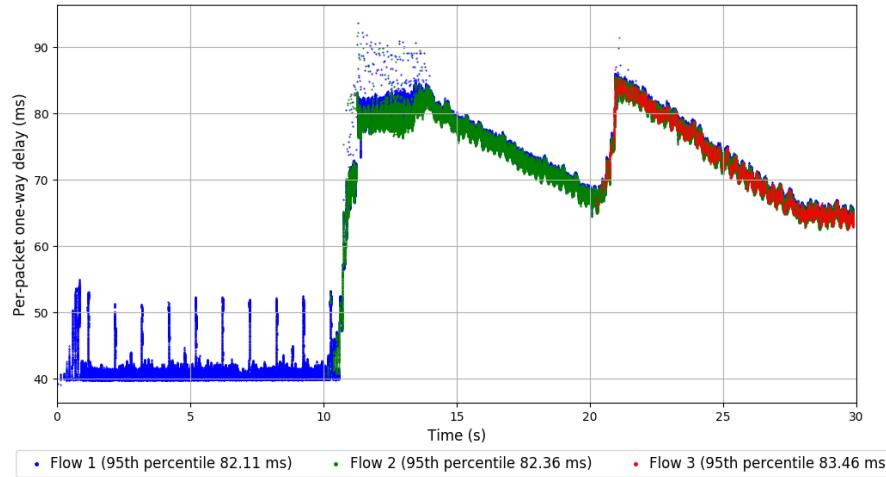
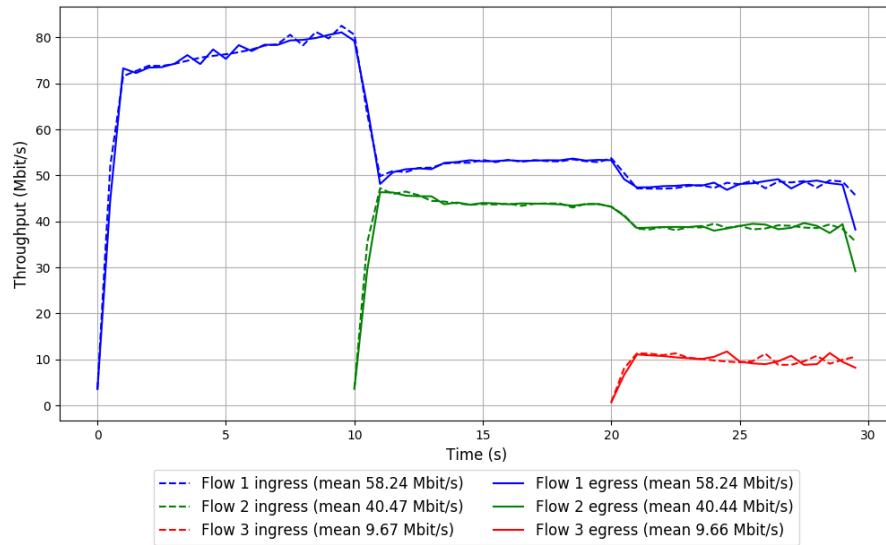


Run 4: Statistics of TCP Vegas

```
Start at: 2018-03-21 01:11:41
End at: 2018-03-21 01:12:11
Local clock offset: 2.444 ms
Remote clock offset: -2.768 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 82.272 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 58.24 Mbit/s
95th percentile per-packet one-way delay: 82.105 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 40.44 Mbit/s
95th percentile per-packet one-way delay: 82.356 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 83.457 ms
Loss rate: 1.67%
```

Run 4: Report of TCP Vegas — Data Link

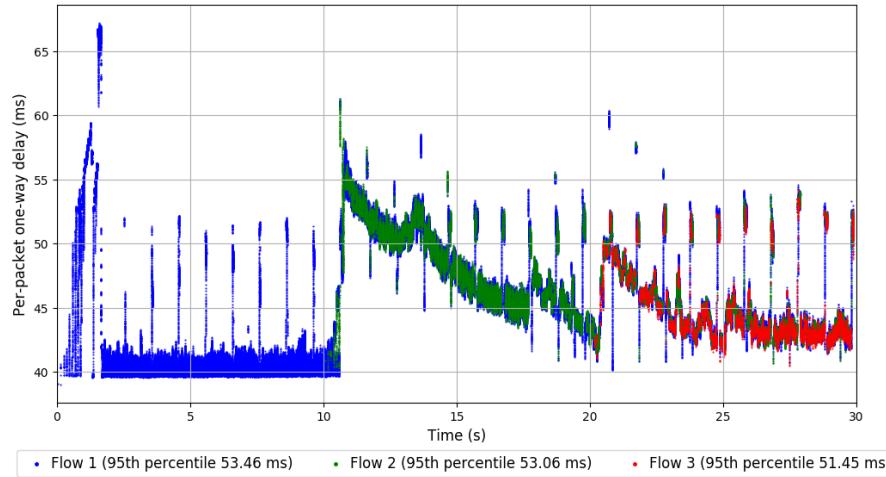
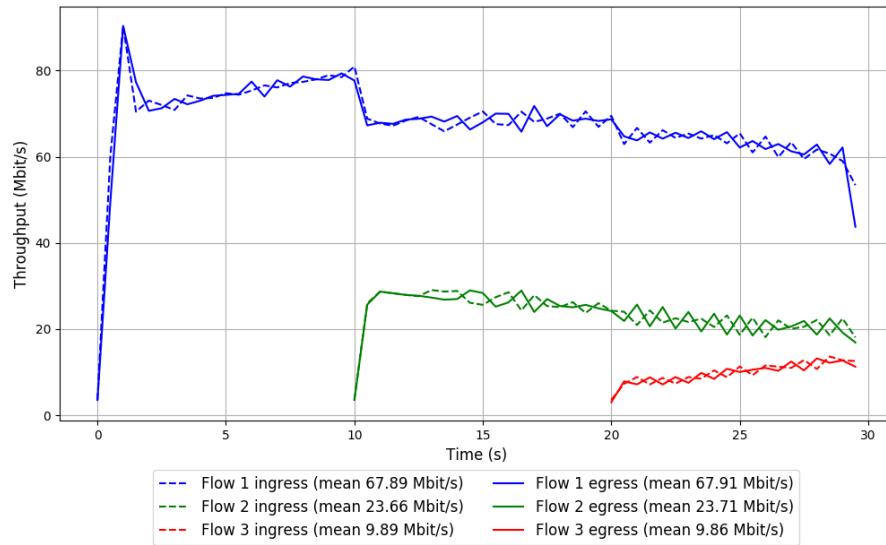


Run 5: Statistics of TCP Vegas

```
Start at: 2018-03-21 01:34:28
End at: 2018-03-21 01:34:58
Local clock offset: -3.129 ms
Remote clock offset: -1.875 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 53.282 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 67.91 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 23.71 Mbit/s
95th percentile per-packet one-way delay: 53.061 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 51.453 ms
Loss rate: 1.45%
```

Run 5: Report of TCP Vegas — Data Link

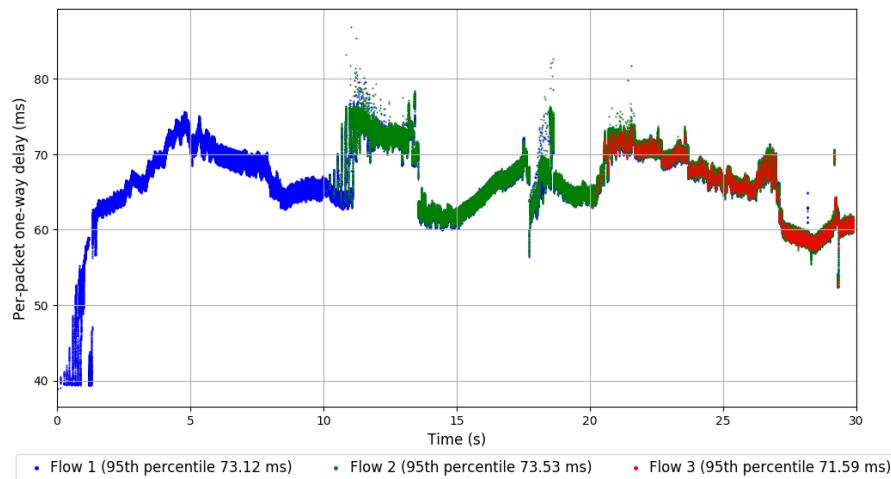
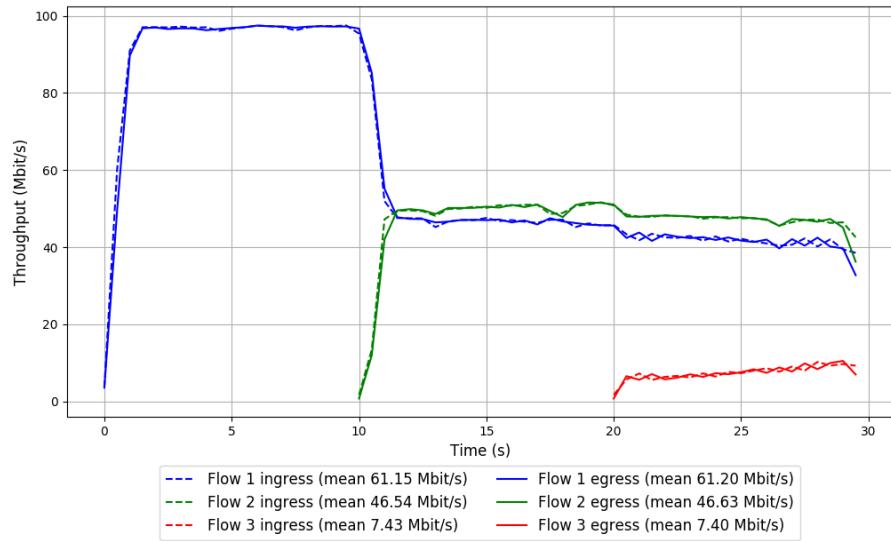


Run 6: Statistics of TCP Vegas

```
Start at: 2018-03-21 01:57:13
End at: 2018-03-21 01:57:43
Local clock offset: 1.507 ms
Remote clock offset: -1.637 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.55 Mbit/s
95th percentile per-packet one-way delay: 73.218 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 61.20 Mbit/s
95th percentile per-packet one-way delay: 73.124 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 46.63 Mbit/s
95th percentile per-packet one-way delay: 73.527 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 71.587 ms
Loss rate: 1.84%
```

Run 6: Report of TCP Vegas — Data Link

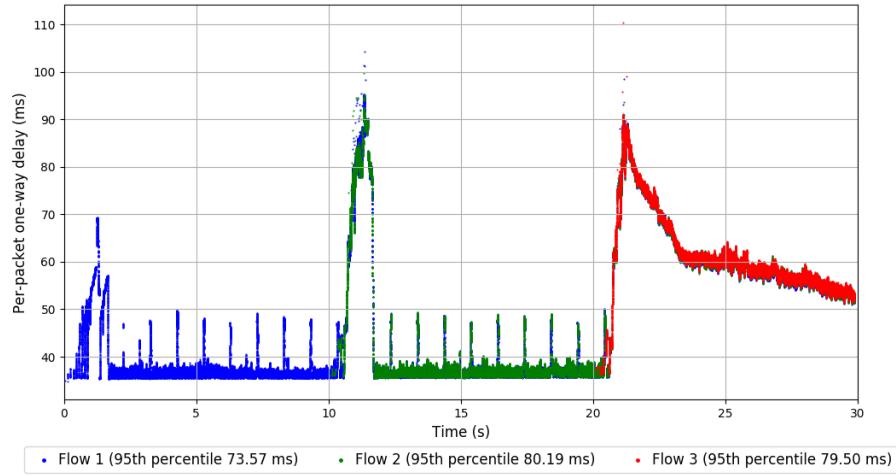
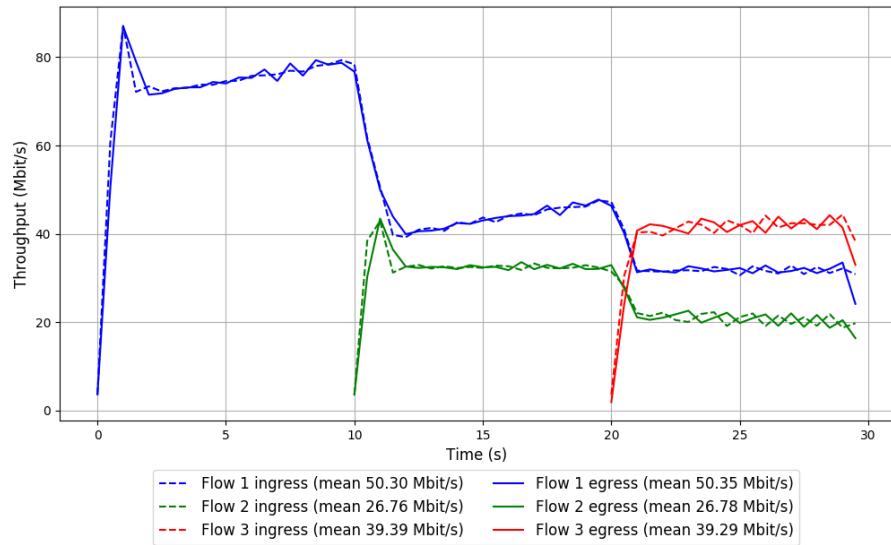


Run 7: Statistics of TCP Vegas

```
Start at: 2018-03-21 02:20:12
End at: 2018-03-21 02:20:42
Local clock offset: -2.892 ms
Remote clock offset: 2.646 ms

# Below is generated by plot.py at 2018-03-21 07:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.06 Mbit/s
95th percentile per-packet one-way delay: 77.344 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 50.35 Mbit/s
95th percentile per-packet one-way delay: 73.571 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 26.78 Mbit/s
95th percentile per-packet one-way delay: 80.189 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 39.29 Mbit/s
95th percentile per-packet one-way delay: 79.500 ms
Loss rate: 1.50%
```

Run 7: Report of TCP Vegas — Data Link

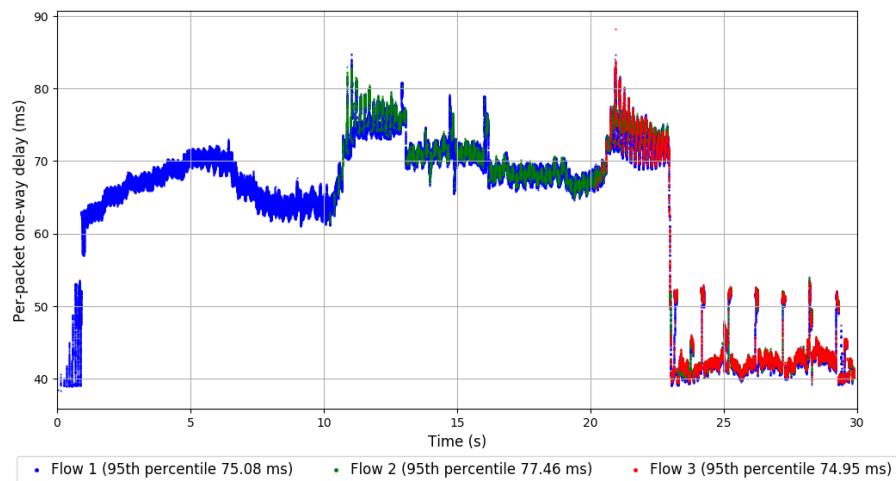
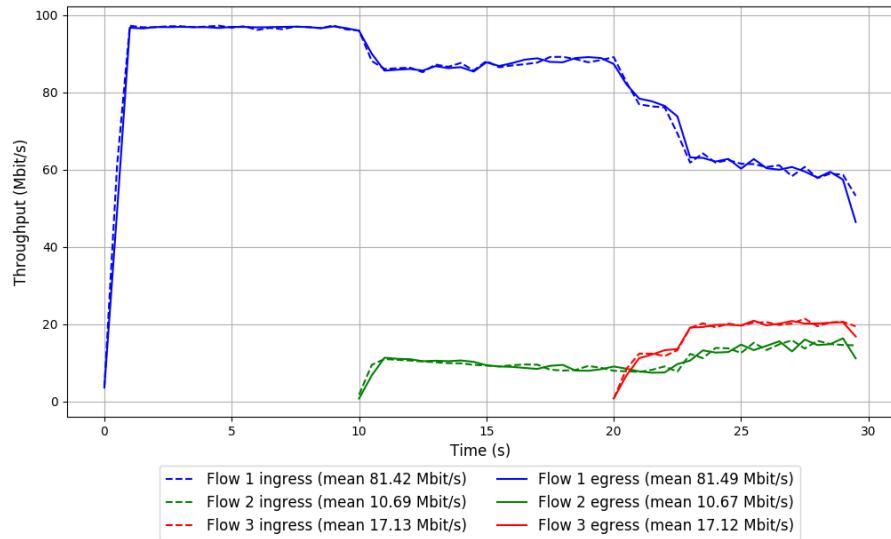


Run 8: Statistics of TCP Vegas

```
Start at: 2018-03-21 02:42:57
End at: 2018-03-21 02:43:27
Local clock offset: -10.564 ms
Remote clock offset: -2.267 ms

# Below is generated by plot.py at 2018-03-21 07:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 75.315 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 81.49 Mbit/s
95th percentile per-packet one-way delay: 75.079 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 10.67 Mbit/s
95th percentile per-packet one-way delay: 77.458 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 74.954 ms
Loss rate: 1.33%
```

Run 8: Report of TCP Vegas — Data Link

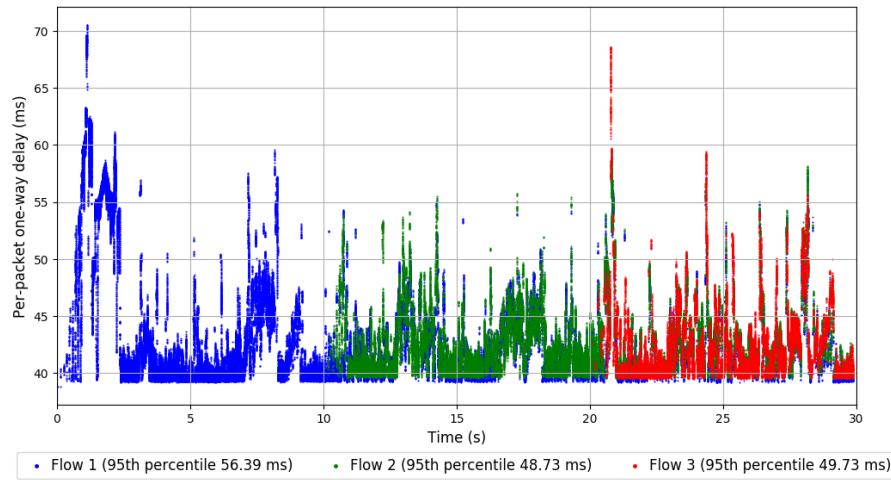
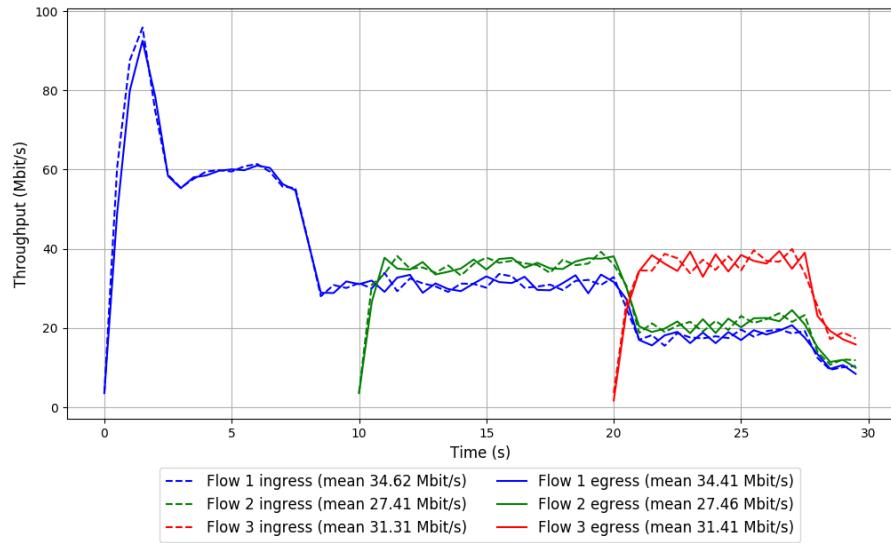


Run 9: Statistics of TCP Vegas

```
Start at: 2018-03-21 03:06:18
End at: 2018-03-21 03:06:48
Local clock offset: 3.193 ms
Remote clock offset: -1.162 ms

# Below is generated by plot.py at 2018-03-21 07:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.95 Mbit/s
95th percentile per-packet one-way delay: 54.665 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 34.41 Mbit/s
95th percentile per-packet one-way delay: 56.388 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 48.734 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 49.729 ms
Loss rate: 0.81%
```

Run 9: Report of TCP Vegas — Data Link

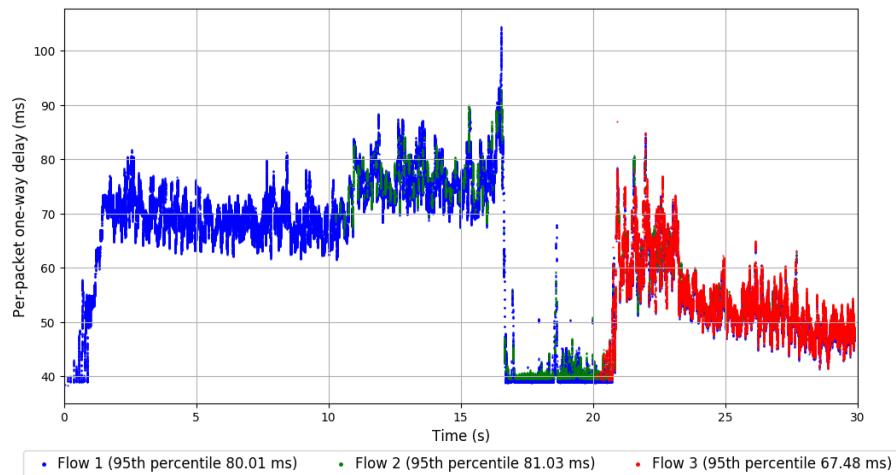
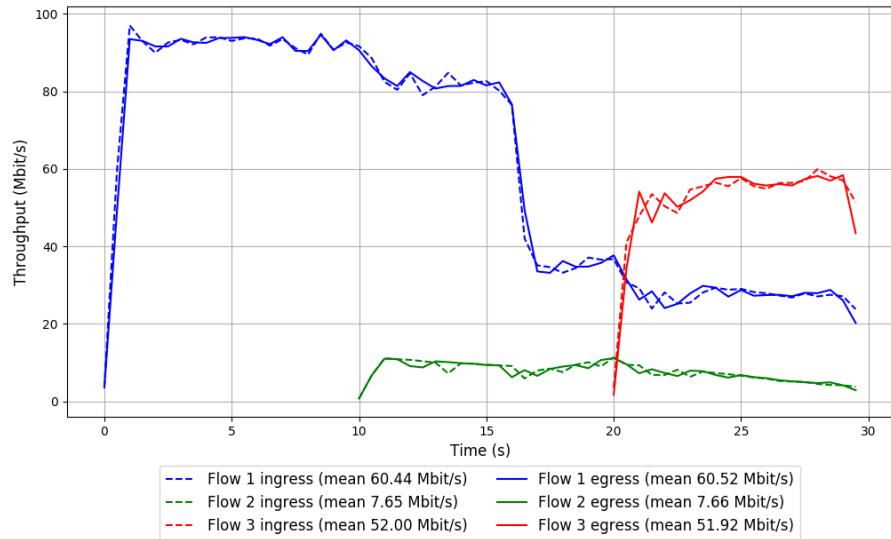


Run 10: Statistics of TCP Vegas

```
Start at: 2018-03-21 03:29:55
End at: 2018-03-21 03:30:25
Local clock offset: 8.348 ms
Remote clock offset: 0.33 ms

# Below is generated by plot.py at 2018-03-21 07:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.64 Mbit/s
95th percentile per-packet one-way delay: 79.404 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 60.52 Mbit/s
95th percentile per-packet one-way delay: 80.012 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 81.033 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 51.92 Mbit/s
95th percentile per-packet one-way delay: 67.479 ms
Loss rate: 1.31%
```

Run 10: Report of TCP Vegas — Data Link

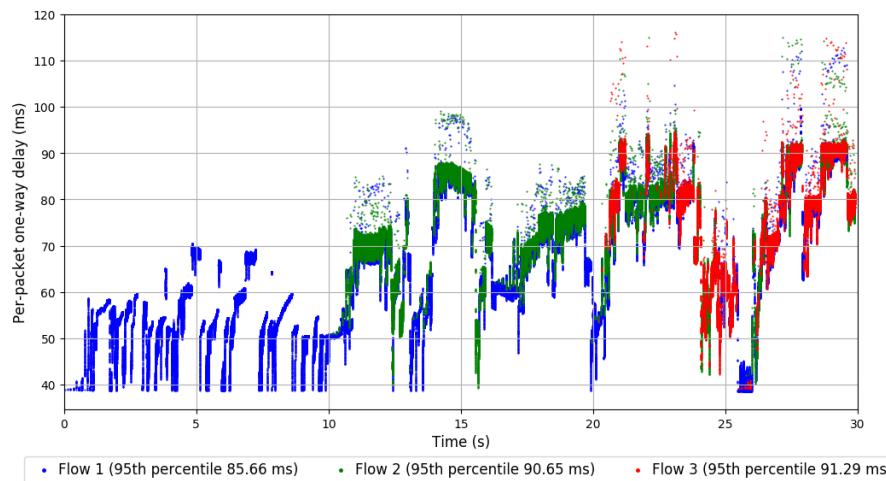
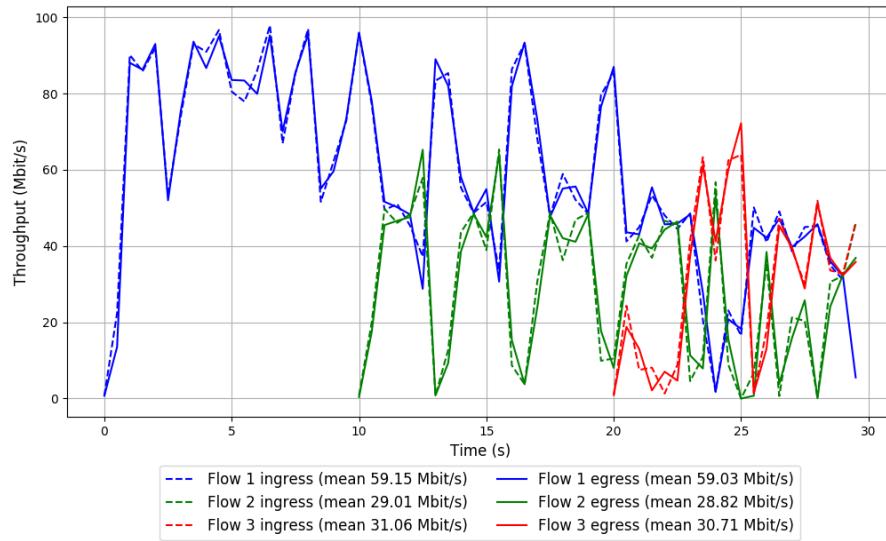


Run 1: Statistics of Verus

```
Start at: 2018-03-20 23:59:17
End at: 2018-03-20 23:59:47
Local clock offset: 1.409 ms
Remote clock offset: 5.929 ms

# Below is generated by plot.py at 2018-03-21 07:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 89.329 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 59.03 Mbit/s
95th percentile per-packet one-way delay: 85.664 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 28.82 Mbit/s
95th percentile per-packet one-way delay: 90.652 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 91.292 ms
Loss rate: 2.46%
```

Run 1: Report of Verus — Data Link

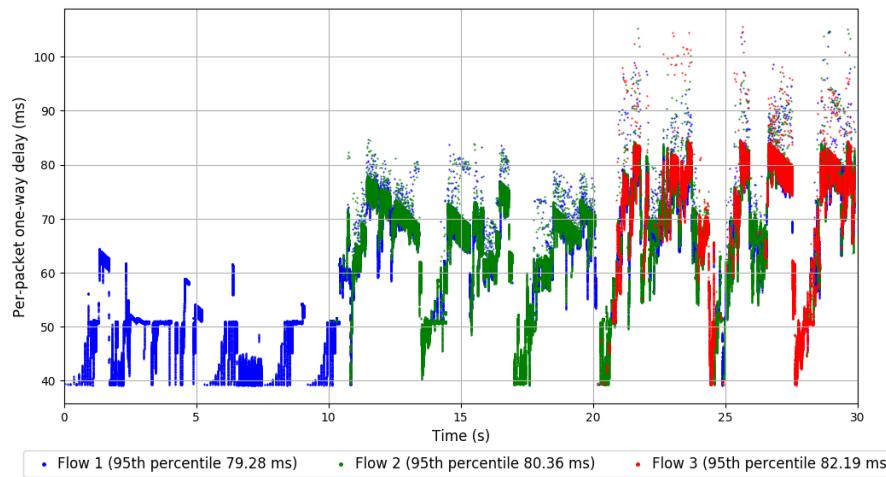
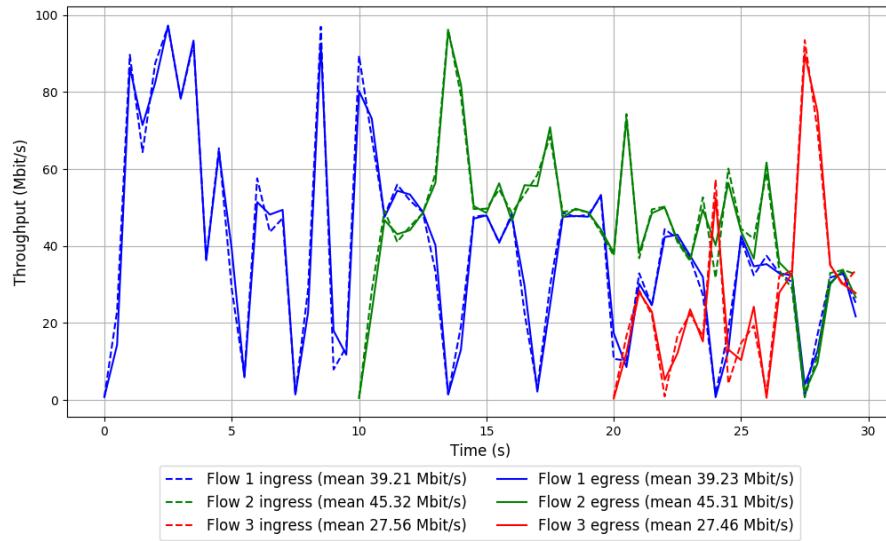


Run 2: Statistics of Verus

```
Start at: 2018-03-21 00:22:04
End at: 2018-03-21 00:22:34
Local clock offset: 7.802 ms
Remote clock offset: -0.69 ms

# Below is generated by plot.py at 2018-03-21 07:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.35 Mbit/s
95th percentile per-packet one-way delay: 80.462 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 79.276 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 45.31 Mbit/s
95th percentile per-packet one-way delay: 80.365 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 82.194 ms
Loss rate: 1.92%
```

Run 2: Report of Verus — Data Link

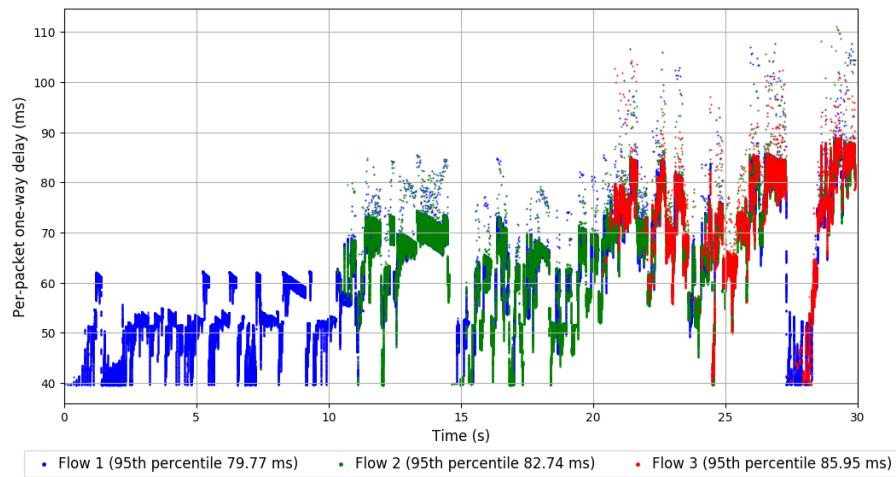
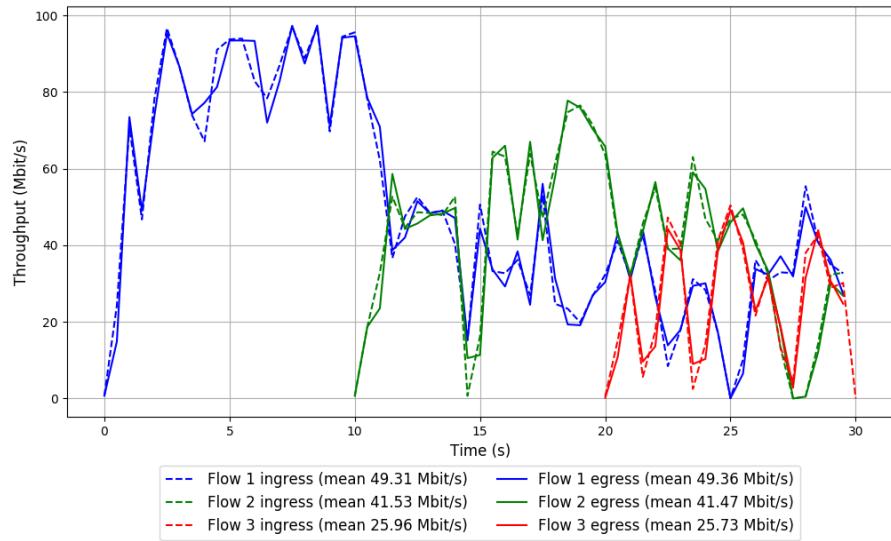


Run 3: Statistics of Verus

```
Start at: 2018-03-21 00:45:05
End at: 2018-03-21 00:45:35
Local clock offset: 6.268 ms
Remote clock offset: -2.555 ms

# Below is generated by plot.py at 2018-03-21 07:42:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.34 Mbit/s
95th percentile per-packet one-way delay: 82.691 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 79.765 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 82.736 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 85.948 ms
Loss rate: 2.55%
```

Run 3: Report of Verus — Data Link

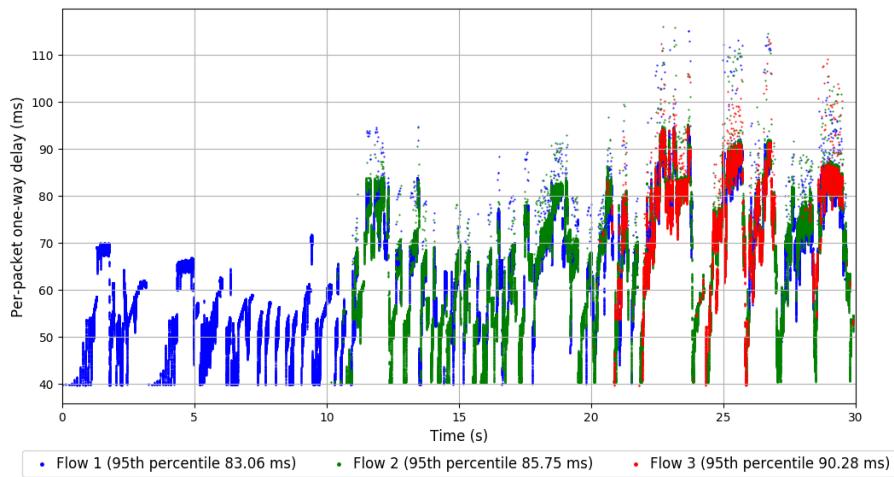
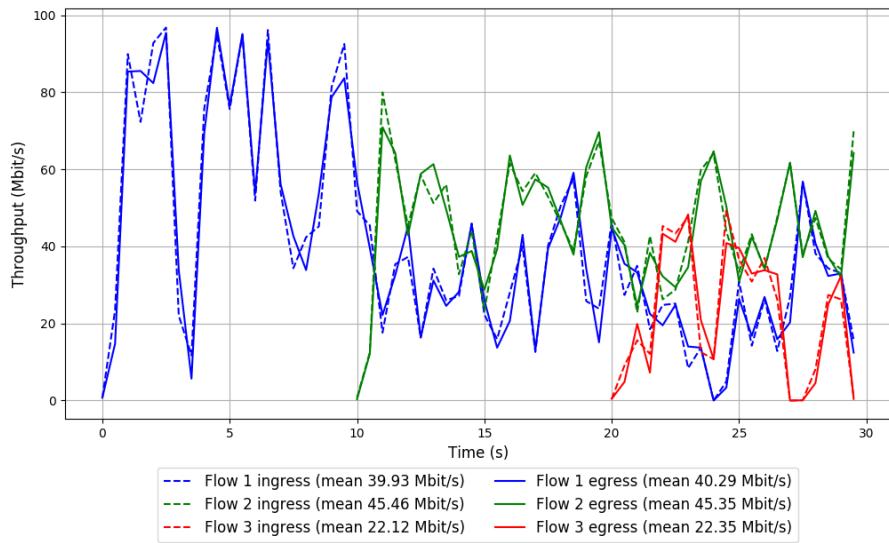


Run 4: Statistics of Verus

```
Start at: 2018-03-21 01:07:50
End at: 2018-03-21 01:08:20
Local clock offset: 4.65 ms
Remote clock offset: -2.652 ms

# Below is generated by plot.py at 2018-03-21 07:42:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.39 Mbit/s
95th percentile per-packet one-way delay: 86.054 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 83.058 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 85.750 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 90.279 ms
Loss rate: 0.11%
```

Run 4: Report of Verus — Data Link

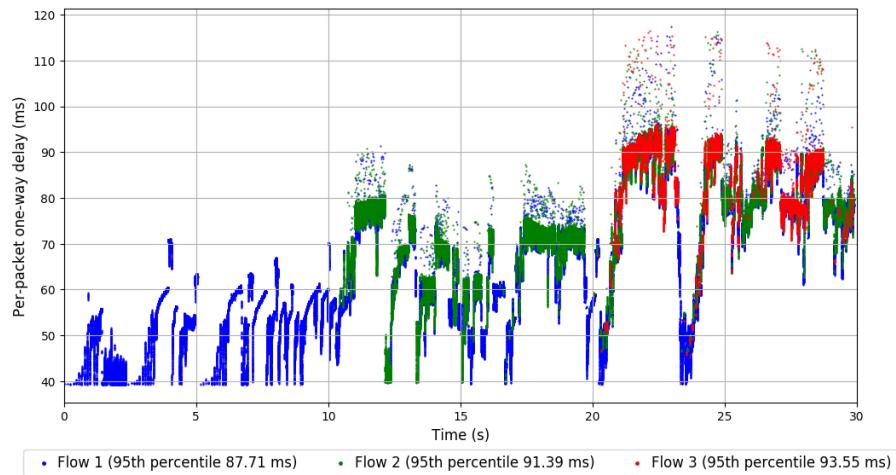
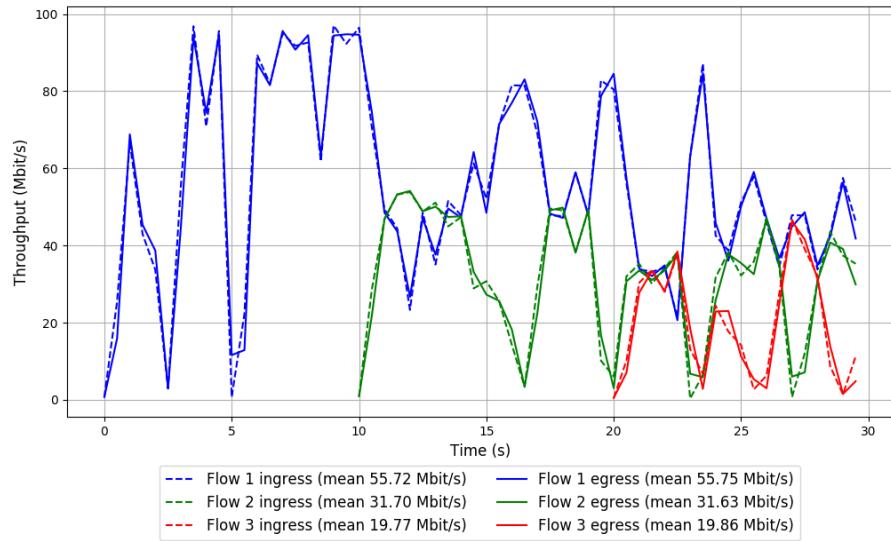


Run 5: Statistics of Verus

```
Start at: 2018-03-21 01:30:37
End at: 2018-03-21 01:31:07
Local clock offset: -2.592 ms
Remote clock offset: -1.96 ms

# Below is generated by plot.py at 2018-03-21 07:42:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.21 Mbit/s
95th percentile per-packet one-way delay: 90.745 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 55.75 Mbit/s
95th percentile per-packet one-way delay: 87.706 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 91.394 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 93.549 ms
Loss rate: 1.64%
```

Run 5: Report of Verus — Data Link

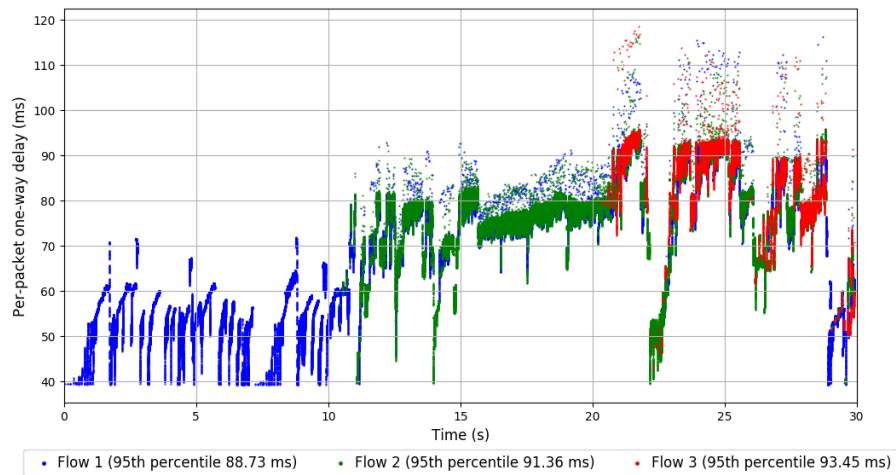
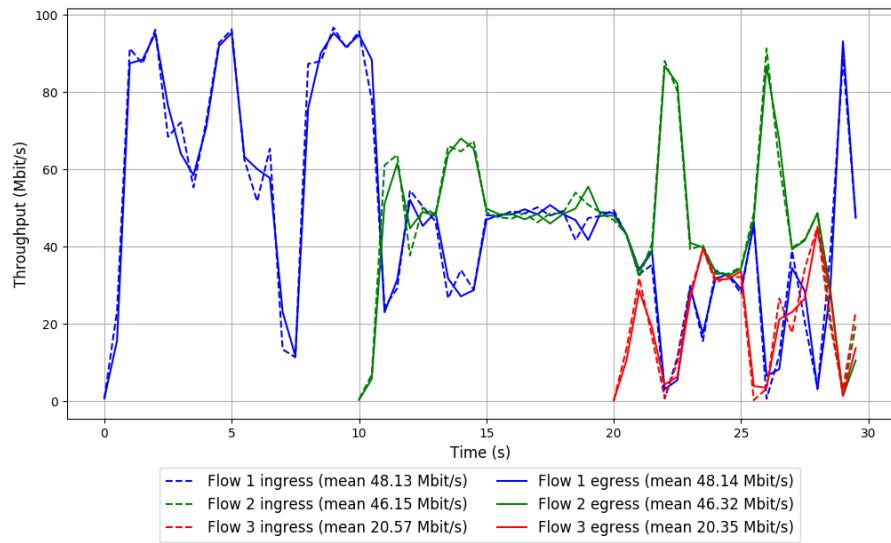


Run 6: Statistics of Verus

```
Start at: 2018-03-21 01:53:23
End at: 2018-03-21 01:53:53
Local clock offset: 1.055 ms
Remote clock offset: -1.854 ms

# Below is generated by plot.py at 2018-03-21 07:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 91.296 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 88.733 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 46.32 Mbit/s
95th percentile per-packet one-way delay: 91.358 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 20.35 Mbit/s
95th percentile per-packet one-way delay: 93.453 ms
Loss rate: 2.67%
```

Run 6: Report of Verus — Data Link

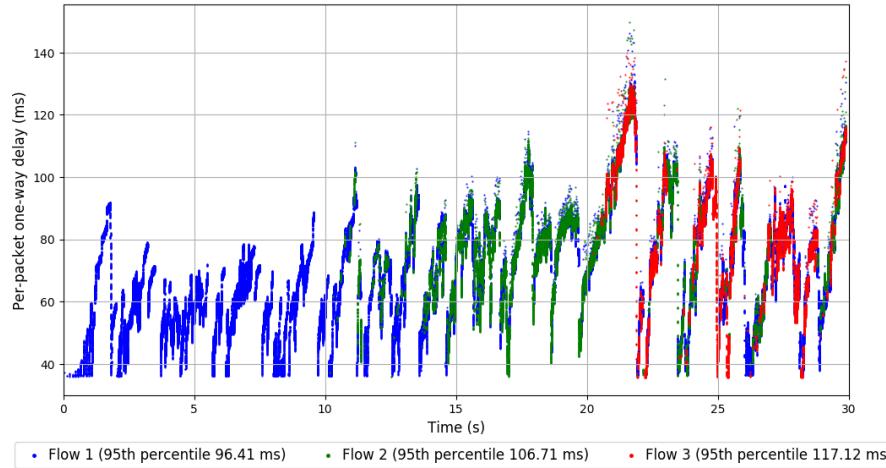
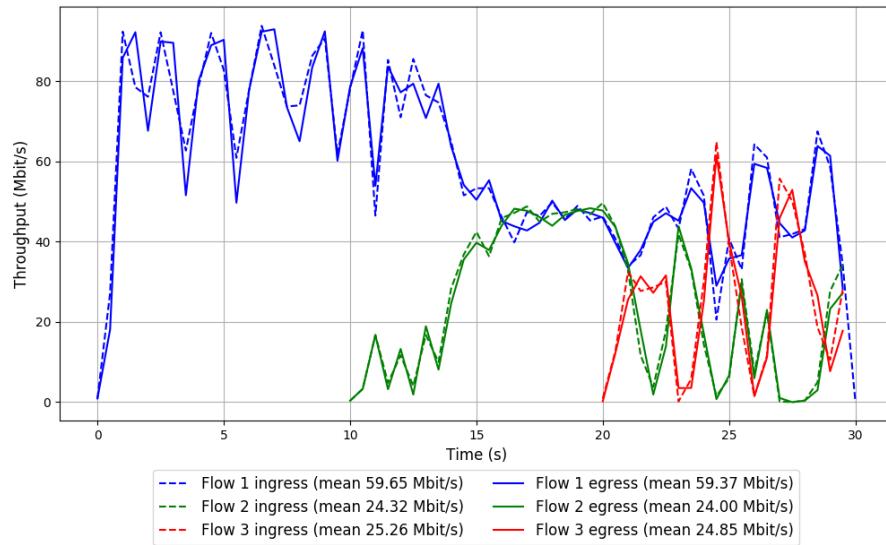


Run 7: Statistics of Verus

```
Start at: 2018-03-21 02:16:21
End at: 2018-03-21 02:16:51
Local clock offset: 0.247 ms
Remote clock offset: 2.653 ms

# Below is generated by plot.py at 2018-03-21 07:43:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.45 Mbit/s
95th percentile per-packet one-way delay: 102.622 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 96.406 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 24.00 Mbit/s
95th percentile per-packet one-way delay: 106.709 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 117.120 ms
Loss rate: 3.45%
```

Run 7: Report of Verus — Data Link

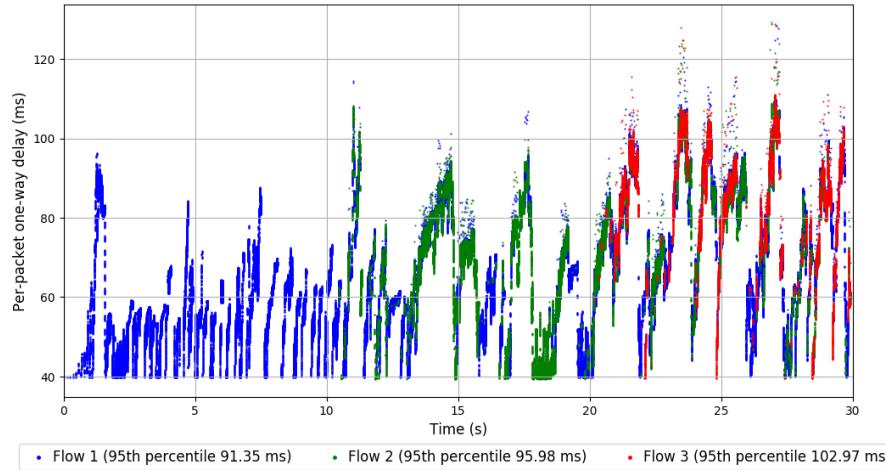
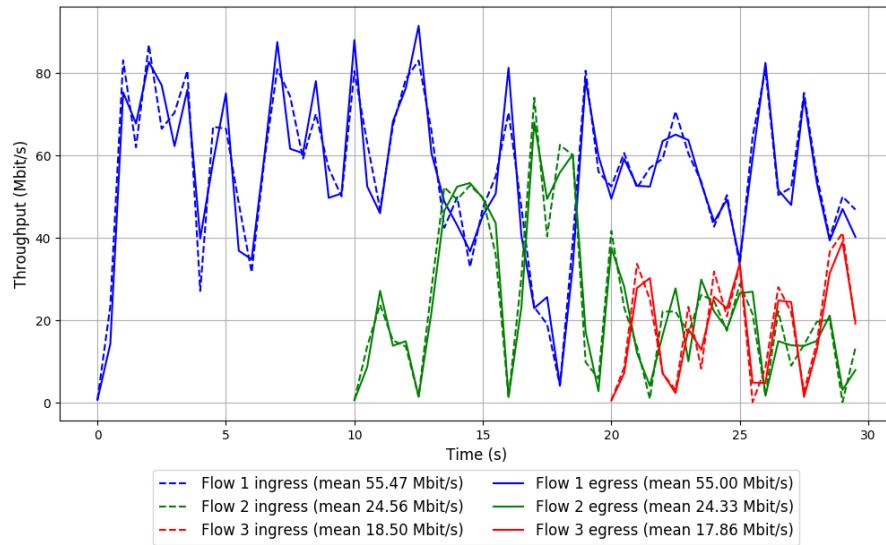


Run 8: Statistics of Verus

```
Start at: 2018-03-21 02:39:05
End at: 2018-03-21 02:39:35
Local clock offset: -9.554 ms
Remote clock offset: -2.156 ms

# Below is generated by plot.py at 2018-03-21 07:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.03 Mbit/s
95th percentile per-packet one-way delay: 94.756 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 91.350 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 95.978 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 102.965 ms
Loss rate: 4.63%
```

Run 8: Report of Verus — Data Link

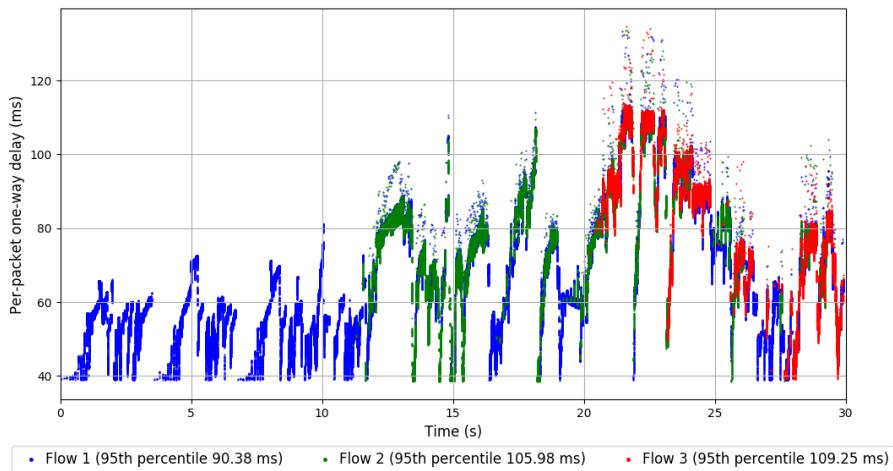
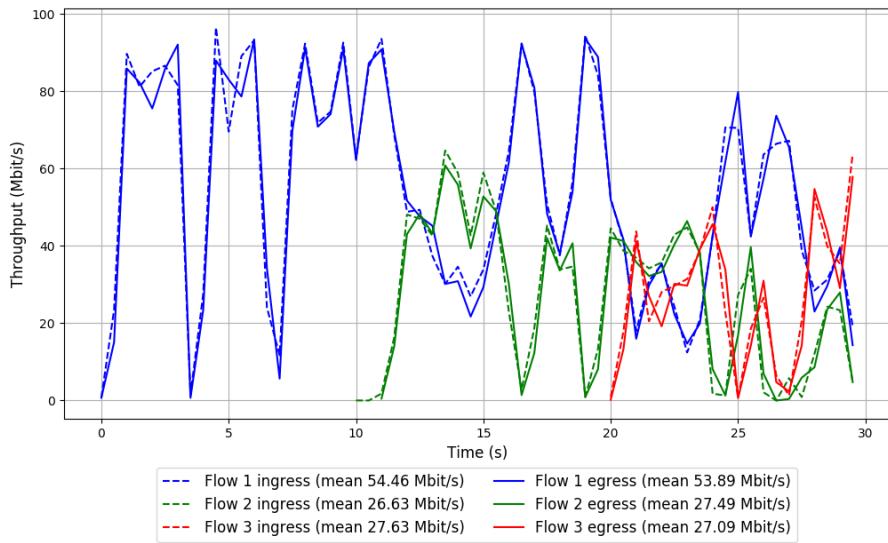


Run 9: Statistics of Verus

```
Start at: 2018-03-21 03:02:29
End at: 2018-03-21 03:02:59
Local clock offset: 1.636 ms
Remote clock offset: -1.642 ms

# Below is generated by plot.py at 2018-03-21 07:43:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.04 Mbit/s
95th percentile per-packet one-way delay: 100.191 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 53.89 Mbit/s
95th percentile per-packet one-way delay: 90.376 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 27.49 Mbit/s
95th percentile per-packet one-way delay: 105.985 ms
Loss rate: 2.57%
-- Flow 3:
Average throughput: 27.09 Mbit/s
95th percentile per-packet one-way delay: 109.246 ms
Loss rate: 3.26%
```

Run 9: Report of Verus — Data Link

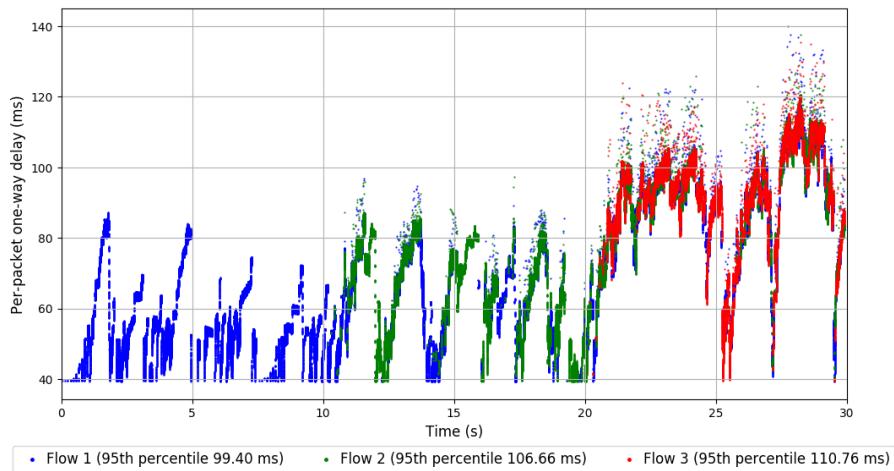
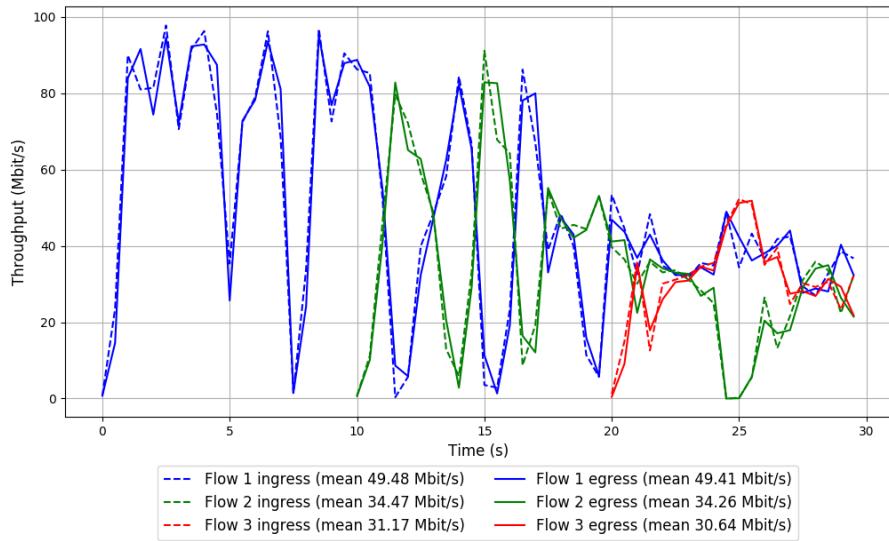


Run 10: Statistics of Verus

```
Start at: 2018-03-21 03:26:03
End at: 2018-03-21 03:26:33
Local clock offset: 6.934 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-03-21 07:43:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.25 Mbit/s
95th percentile per-packet one-way delay: 104.799 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 49.41 Mbit/s
95th percentile per-packet one-way delay: 99.398 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 106.657 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 110.761 ms
Loss rate: 2.95%
```

Run 10: Report of Verus — Data Link

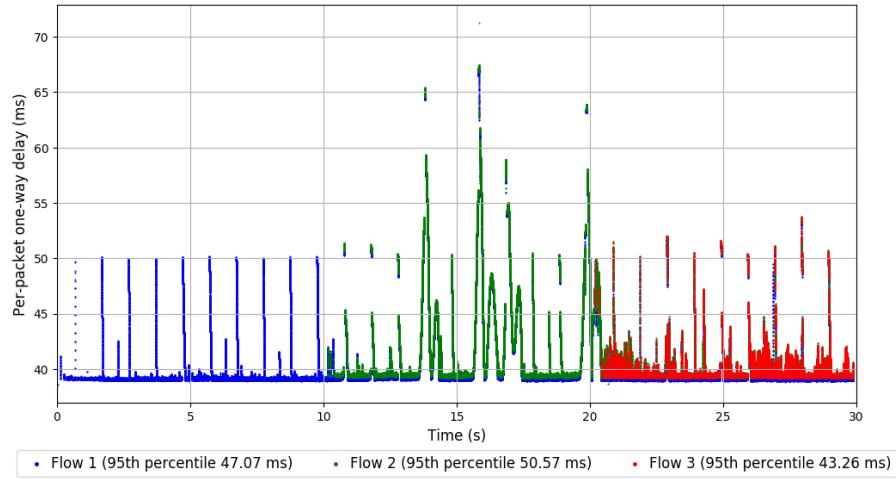
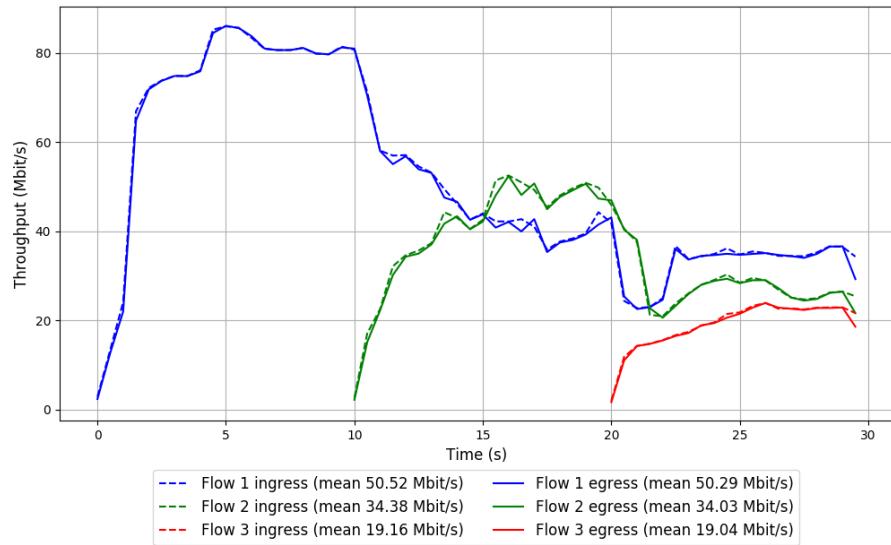


Run 1: Statistics of Copa

```
Start at: 2018-03-21 00:05:36
End at: 2018-03-21 00:06:06
Local clock offset: 4.584 ms
Remote clock offset: 6.475 ms

# Below is generated by plot.py at 2018-03-21 07:44:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.16 Mbit/s
95th percentile per-packet one-way delay: 48.138 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 47.069 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 34.03 Mbit/s
95th percentile per-packet one-way delay: 50.569 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 19.04 Mbit/s
95th percentile per-packet one-way delay: 43.255 ms
Loss rate: 1.73%
```

Run 1: Report of Copa — Data Link

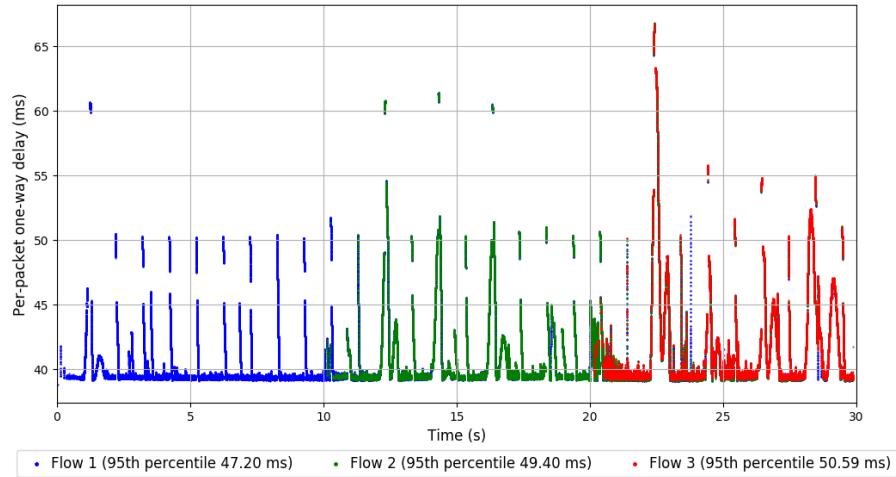
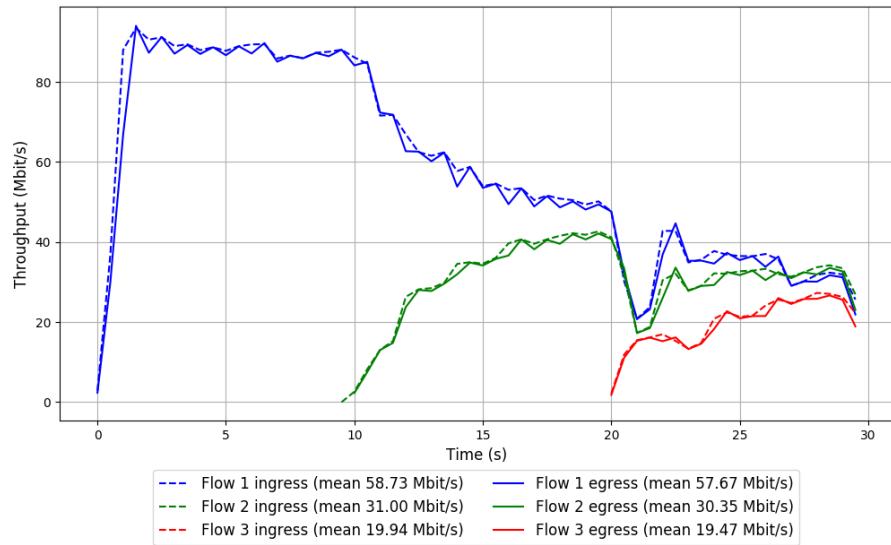


Run 2: Statistics of Copa

```
Start at: 2018-03-21 00:28:21
End at: 2018-03-21 00:28:51
Local clock offset: 8.498 ms
Remote clock offset: -1.648 ms

# Below is generated by plot.py at 2018-03-21 07:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.24 Mbit/s
95th percentile per-packet one-way delay: 48.341 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 47.196 ms
Loss rate: 2.15%
-- Flow 2:
Average throughput: 30.35 Mbit/s
95th percentile per-packet one-way delay: 49.395 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 19.47 Mbit/s
95th percentile per-packet one-way delay: 50.586 ms
Loss rate: 3.47%
```

Run 2: Report of Copa — Data Link

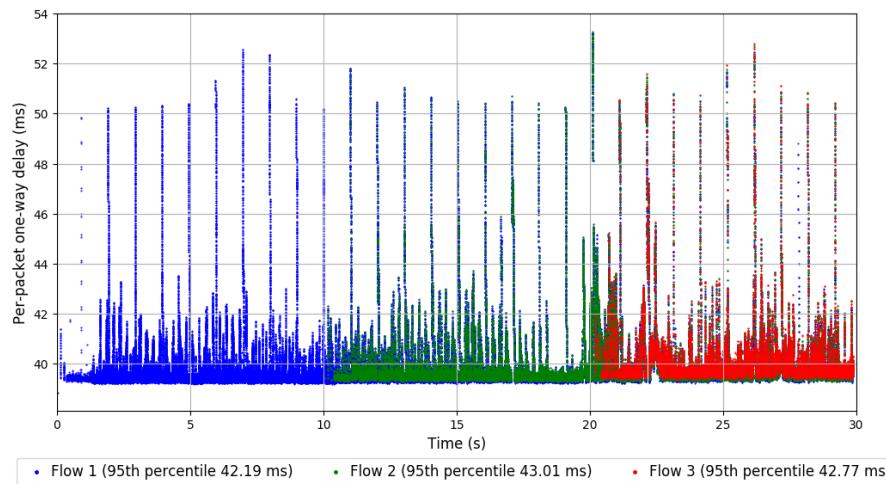
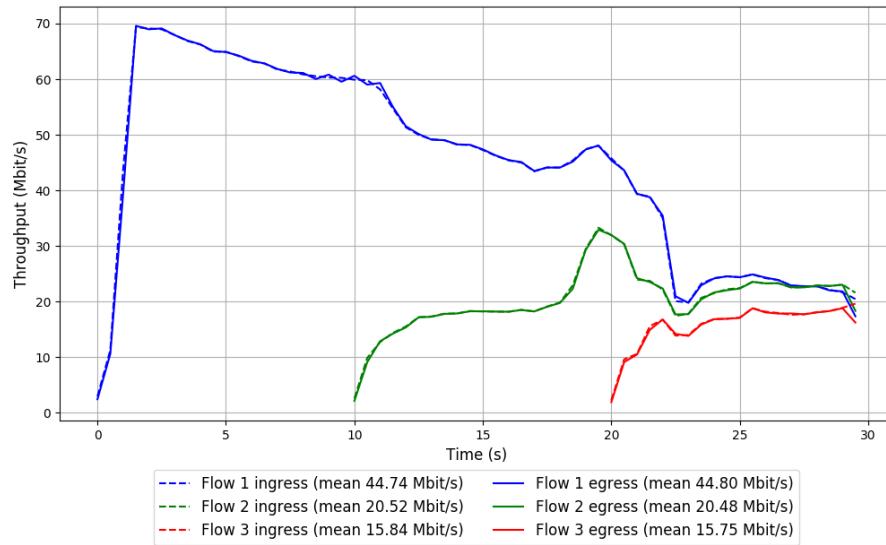


Run 3: Statistics of Copa

```
Start at: 2018-03-21 00:51:25
End at: 2018-03-21 00:51:55
Local clock offset: 5.853 ms
Remote clock offset: -2.4 ms

# Below is generated by plot.py at 2018-03-21 07:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 42.423 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 42.193 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 20.48 Mbit/s
95th percentile per-packet one-way delay: 43.010 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 42.774 ms
Loss rate: 1.65%
```

Run 3: Report of Copa — Data Link

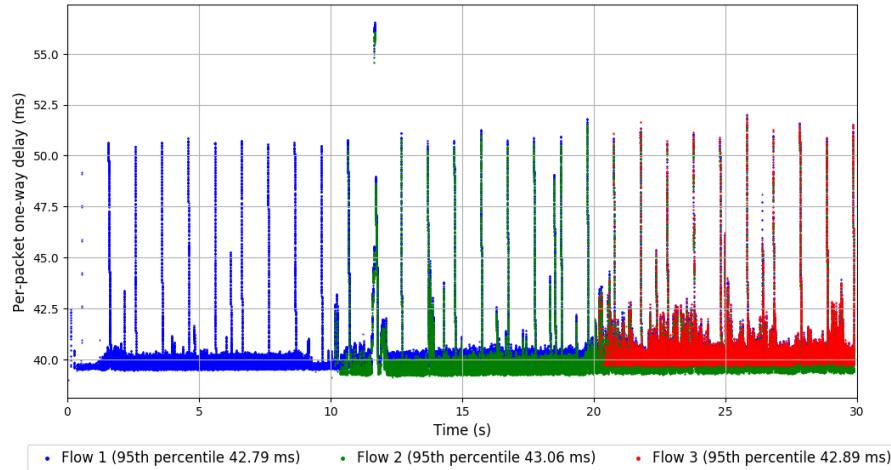
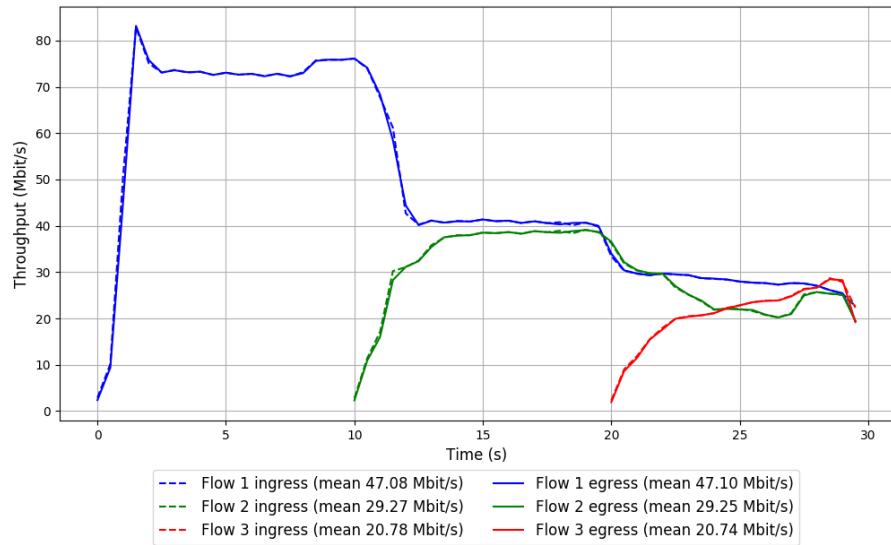


Run 4: Statistics of Copa

```
Start at: 2018-03-21 01:14:09
End at: 2018-03-21 01:14:39
Local clock offset: 1.087 ms
Remote clock offset: -2.871 ms

# Below is generated by plot.py at 2018-03-21 07:44:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.36 Mbit/s
95th percentile per-packet one-way delay: 42.888 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 47.10 Mbit/s
95th percentile per-packet one-way delay: 42.794 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 29.25 Mbit/s
95th percentile per-packet one-way delay: 43.061 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 42.888 ms
Loss rate: 1.24%
```

Run 4: Report of Copa — Data Link

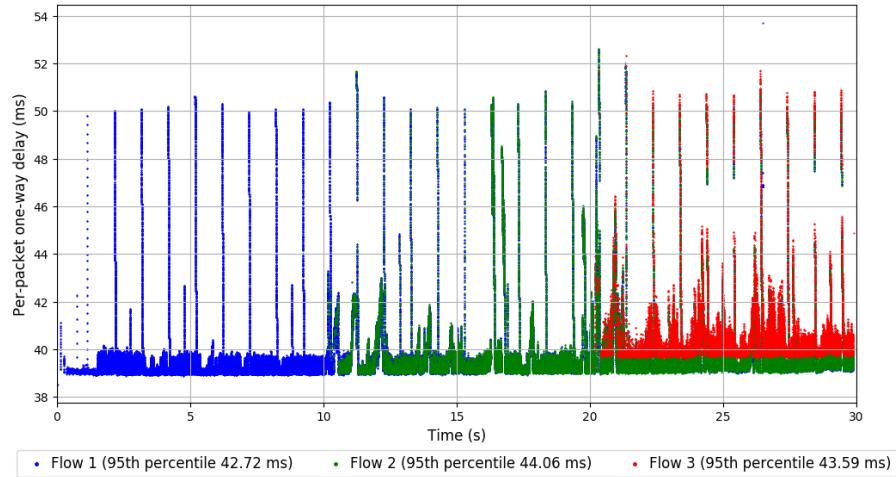
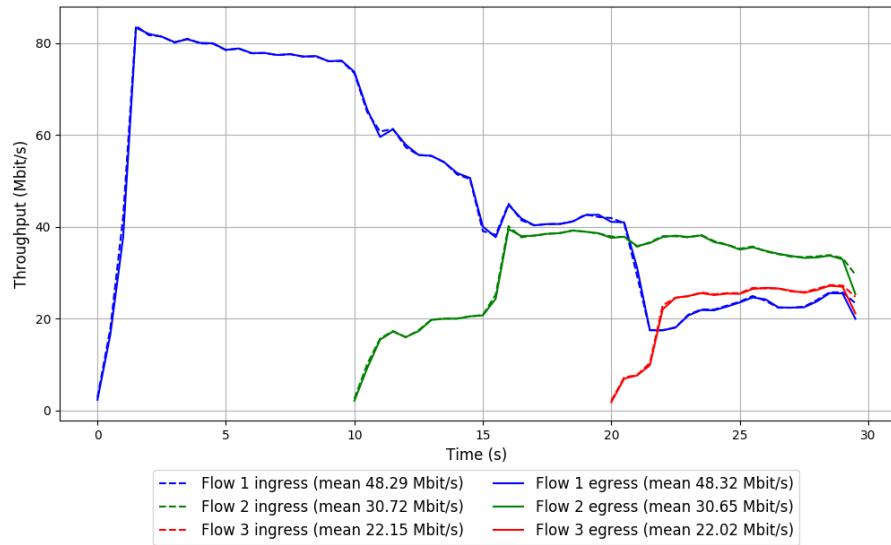


Run 5: Statistics of Copa

```
Start at: 2018-03-21 01:36:56
End at: 2018-03-21 01:37:26
Local clock offset: -3.797 ms
Remote clock offset: -1.868 ms

# Below is generated by plot.py at 2018-03-21 07:45:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 43.287 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 48.32 Mbit/s
95th percentile per-packet one-way delay: 42.721 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 30.65 Mbit/s
95th percentile per-packet one-way delay: 44.061 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 22.02 Mbit/s
95th percentile per-packet one-way delay: 43.585 ms
Loss rate: 1.58%
```

Run 5: Report of Copa — Data Link

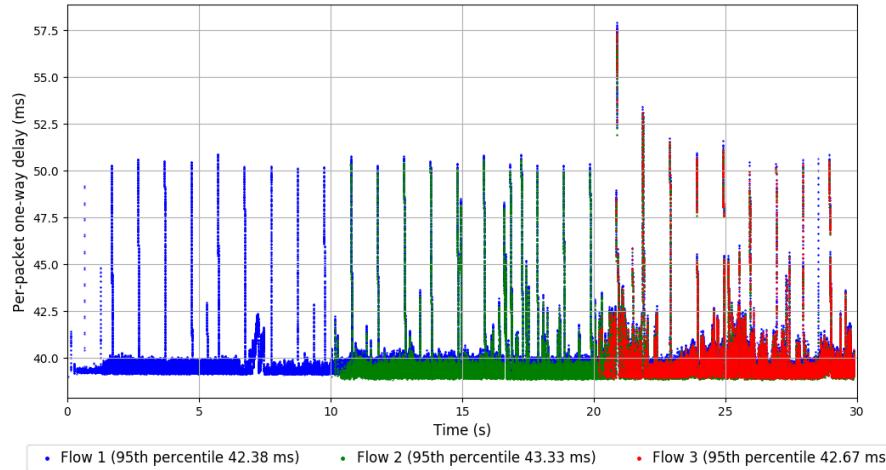
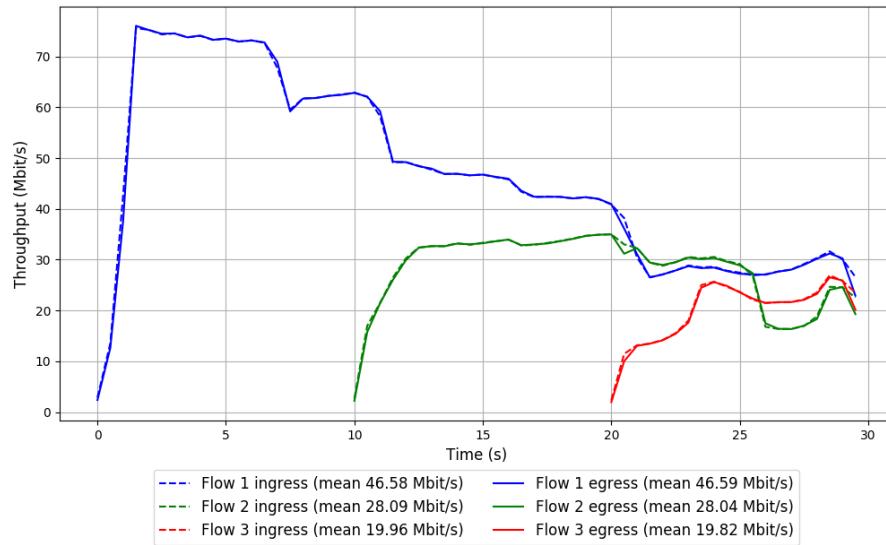


Run 6: Statistics of Copa

```
Start at: 2018-03-21 01:59:41
End at: 2018-03-21 02:00:11
Local clock offset: 1.086 ms
Remote clock offset: -1.638 ms

# Below is generated by plot.py at 2018-03-21 07:45:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.74 Mbit/s
95th percentile per-packet one-way delay: 42.664 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 42.378 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 28.04 Mbit/s
95th percentile per-packet one-way delay: 43.327 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 19.82 Mbit/s
95th percentile per-packet one-way delay: 42.669 ms
Loss rate: 1.73%
```

Run 6: Report of Copa — Data Link

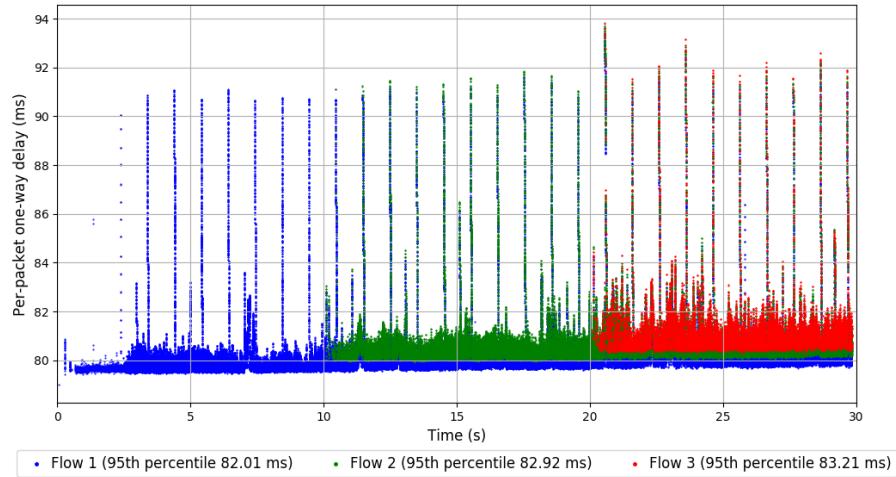
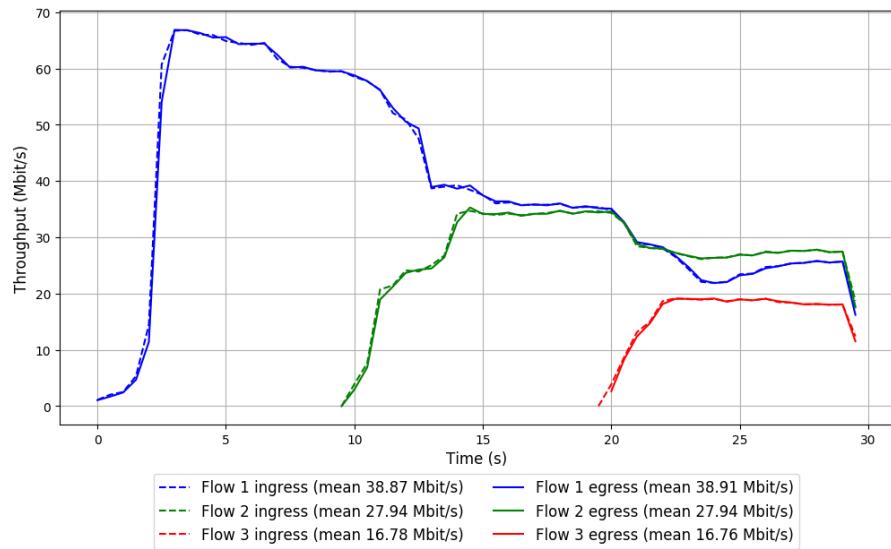


Run 7: Statistics of Copa

```
Start at: 2018-03-21 02:22:41
End at: 2018-03-21 02:23:11
Local clock offset: -4.273 ms
Remote clock offset: -41.754 ms

# Below is generated by plot.py at 2018-03-21 07:45:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.06 Mbit/s
95th percentile per-packet one-way delay: 82.437 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 82.006 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 82.924 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 16.76 Mbit/s
95th percentile per-packet one-way delay: 83.208 ms
Loss rate: 1.15%
```

Run 7: Report of Copa — Data Link

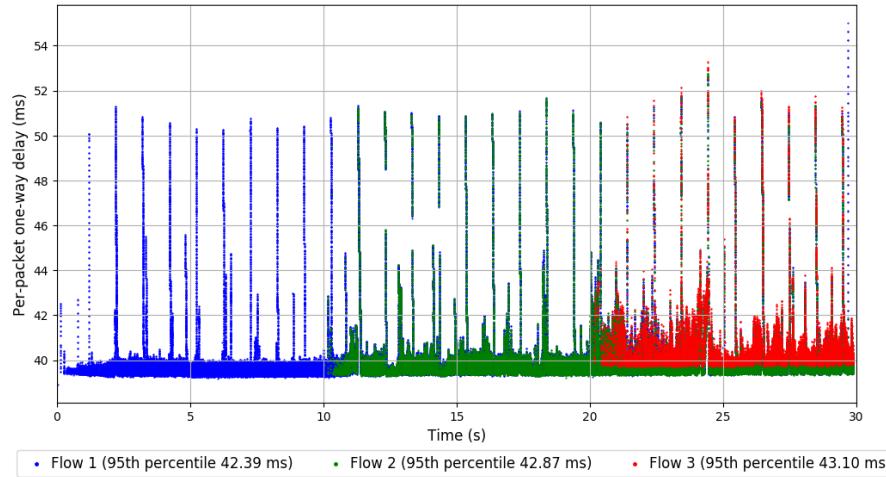
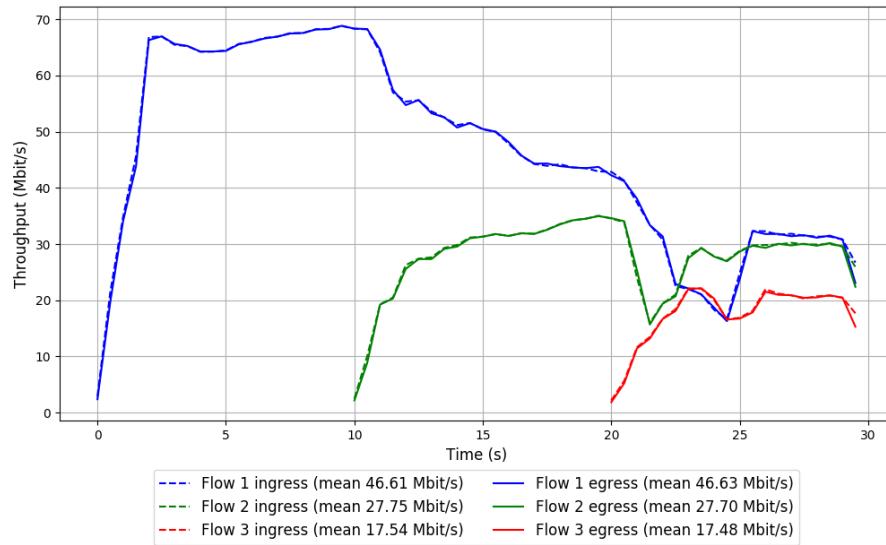


Run 8: Statistics of Copa

```
Start at: 2018-03-21 02:45:25
End at: 2018-03-21 02:45:55
Local clock offset: -10.908 ms
Remote clock offset: -2.275 ms

# Below is generated by plot.py at 2018-03-21 07:45:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.78 Mbit/s
95th percentile per-packet one-way delay: 42.607 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 46.63 Mbit/s
95th percentile per-packet one-way delay: 42.388 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 42.866 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 43.097 ms
Loss rate: 1.39%
```

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

/home/ubuntu/pantheon_data/2018-03-20T23-44-China-to-AWS-Korea-10-runs-3-flows/copa_stats_ru

Run 9: Report of Copa — Data Link

Figure is missing

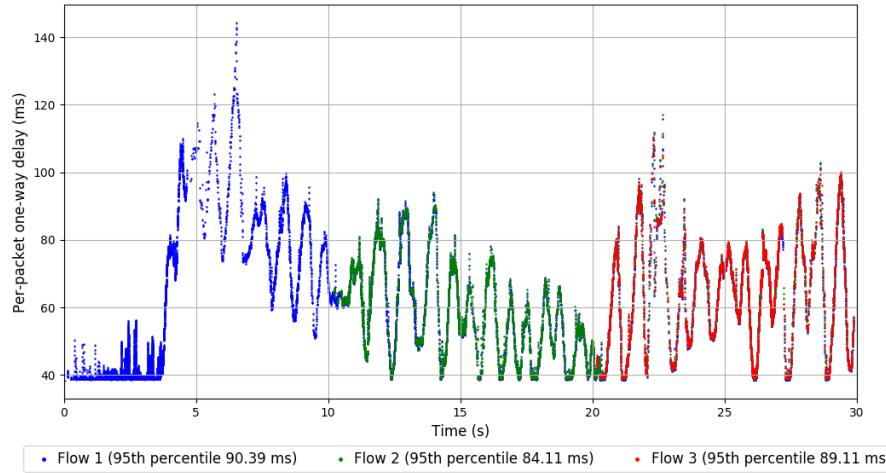
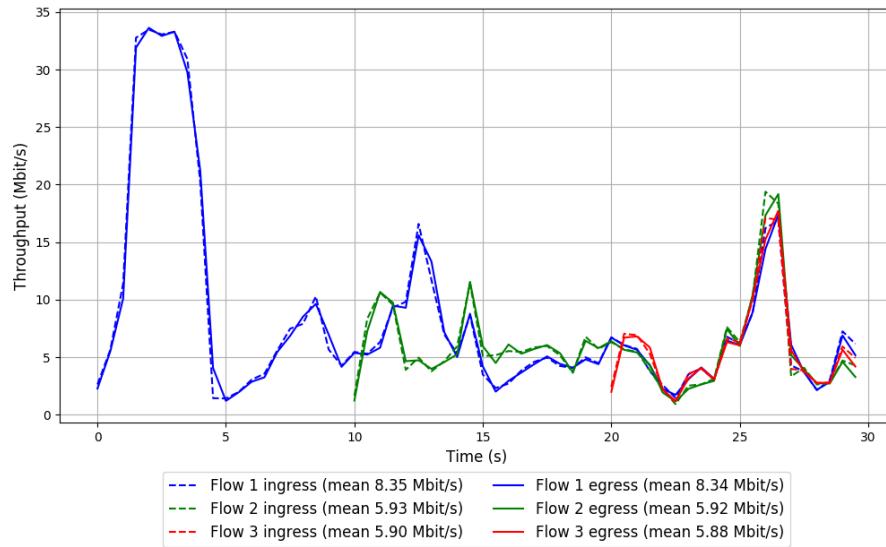
Figure is missing

Run 10: Statistics of Copa

```
Start at: 2018-03-21 03:32:25
End at: 2018-03-21 03:32:55
Local clock offset: 8.705 ms
Remote clock offset: 0.431 ms

# Below is generated by plot.py at 2018-03-21 07:45:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 88.798 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 90.390 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 84.112 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 89.111 ms
Loss rate: 1.35%
```

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-03-20 23:47:54

End at: 2018-03-20 23:48:24

Local clock offset: 0.373 ms

Remote clock offset: 5.138 ms

Run 1: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of FillP

Start at: 2018-03-21 00:10:40
End at: 2018-03-21 00:11:10
Local clock offset: 5.874 ms
Remote clock offset: 3.455 ms

Run 2: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of FillP

Start at: 2018-03-21 00:33:26
End at: 2018-03-21 00:33:56
Local clock offset: 7.698 ms
Remote clock offset: -2.159 ms

Run 3: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of FillP

Start at: 2018-03-21 00:56:29
End at: 2018-03-21 00:56:59
Local clock offset: 5.931 ms
Remote clock offset: -2.432 ms

Run 4: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of FillP

Start at: 2018-03-21 01:19:14
End at: 2018-03-21 01:19:44
Local clock offset: -0.355 ms
Remote clock offset: -2.377 ms

Run 5: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of FillP

Start at: 2018-03-21 01:42:01
End at: 2018-03-21 01:42:31
Local clock offset: -2.993 ms
Remote clock offset: -1.879 ms

Run 6: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of FillP

Start at: 2018-03-21 02:04:44
End at: 2018-03-21 02:05:14
Local clock offset: 1.78 ms
Remote clock offset: -1.583 ms

Run 7: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of FillP

Start at: 2018-03-21 02:27:44
End at: 2018-03-21 02:28:14
Local clock offset: -6.637 ms
Remote clock offset: -1.604 ms

Run 8: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of FillP

Start at: 2018-03-21 02:50:29
End at: 2018-03-21 02:50:59
Local clock offset: -11.449 ms
Remote clock offset: -2.336 ms

Run 9: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of FillP

Start at: 2018-03-21 03:14:34
End at: 2018-03-21 03:15:04
Local clock offset: 4.638 ms
Remote clock offset: -0.435 ms

Run 10: Report of FillP — Data Link

Figure is missing

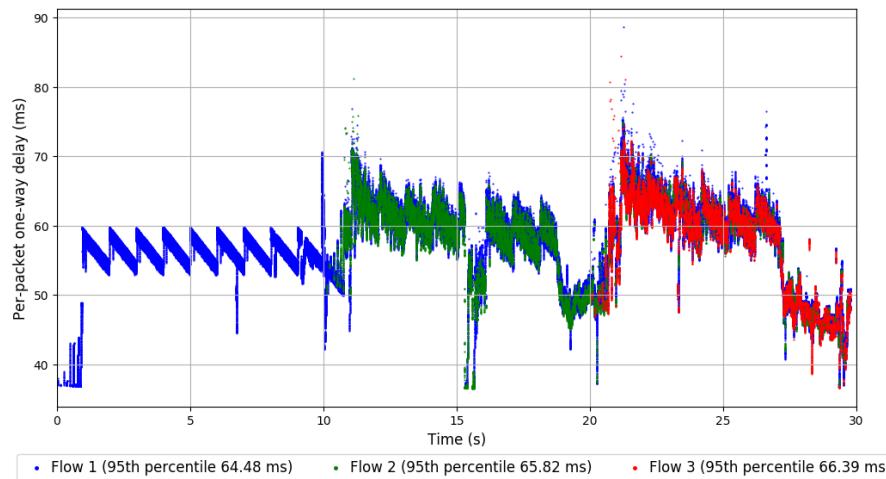
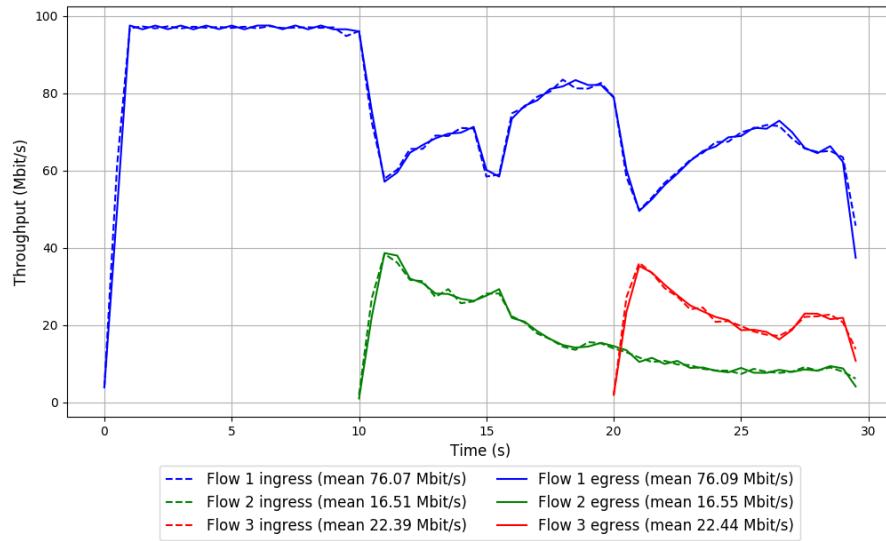
Figure is missing

Run 1: Statistics of Indigo-1-32

```
Start at: 2018-03-20 23:54:10
End at: 2018-03-20 23:54:40
Local clock offset: -2.475 ms
Remote clock offset: 5.569 ms

# Below is generated by plot.py at 2018-03-21 07:45:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 64.928 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 76.09 Mbit/s
95th percentile per-packet one-way delay: 64.476 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 65.817 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 22.44 Mbit/s
95th percentile per-packet one-way delay: 66.392 ms
Loss rate: 1.00%
```

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

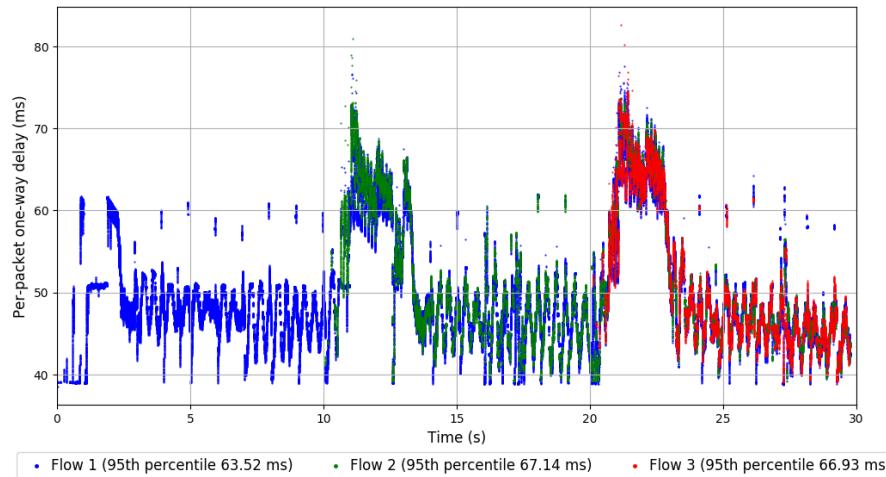
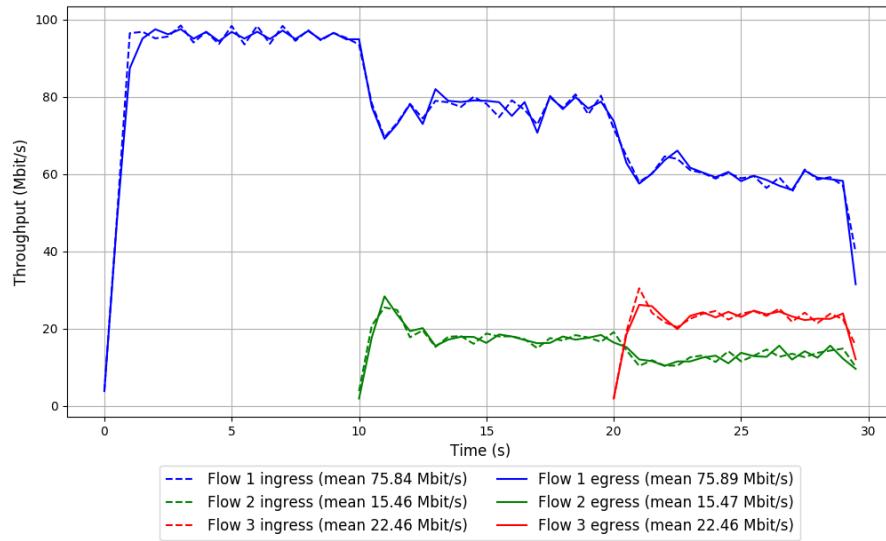


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-03-21 00:16:57
End at: 2018-03-21 00:17:27
Local clock offset: 7.074 ms
Remote clock offset: 0.557 ms

# Below is generated by plot.py at 2018-03-21 07:46:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.40 Mbit/s
95th percentile per-packet one-way delay: 64.527 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 75.89 Mbit/s
95th percentile per-packet one-way delay: 63.516 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 67.143 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 66.934 ms
Loss rate: 1.21%
```

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

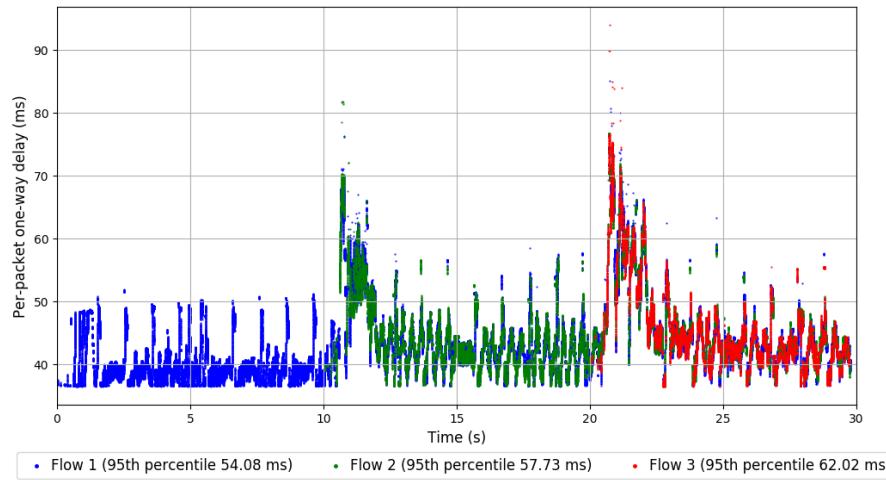
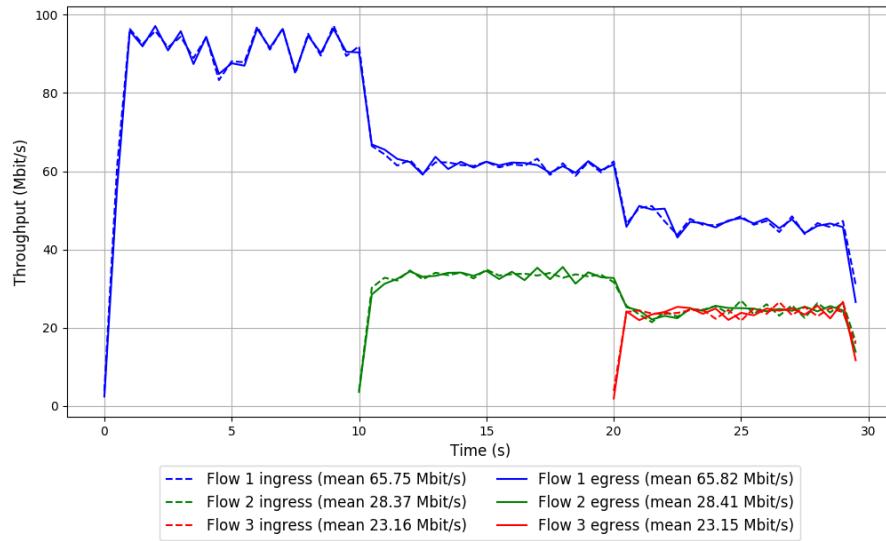


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-03-21 00:39:51
End at: 2018-03-21 00:40:21
Local clock offset: 3.759 ms
Remote clock offset: -2.774 ms

# Below is generated by plot.py at 2018-03-21 07:46:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 55.900 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 65.82 Mbit/s
95th percentile per-packet one-way delay: 54.081 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 57.733 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 62.018 ms
Loss rate: 1.16%
```

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

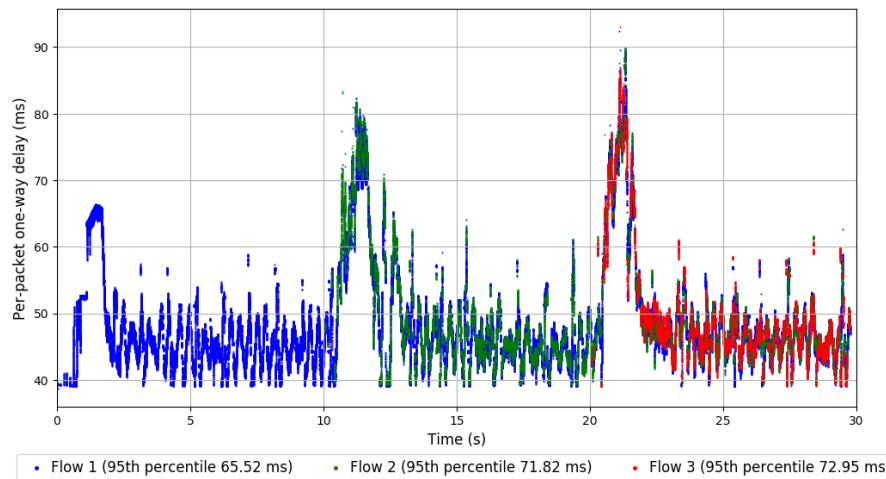
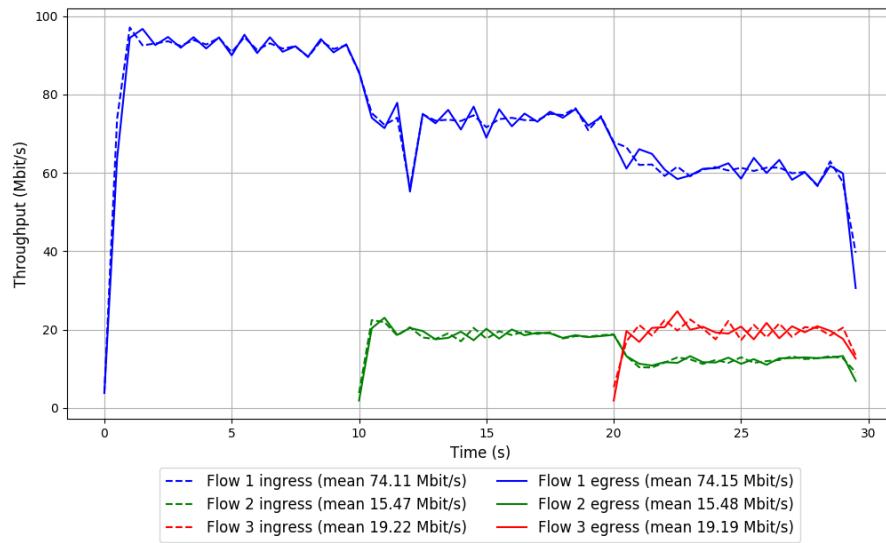


Run 4: Statistics of Indigo-1-32

```
Start at: 2018-03-21 01:02:43
End at: 2018-03-21 01:03:13
Local clock offset: 6.151 ms
Remote clock offset: -2.469 ms

# Below is generated by plot.py at 2018-03-21 07:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 66.640 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 74.15 Mbit/s
95th percentile per-packet one-way delay: 65.521 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 71.816 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 19.19 Mbit/s
95th percentile per-packet one-way delay: 72.955 ms
Loss rate: 1.23%
```

Run 4: Report of Indigo-1-32 — Data Link

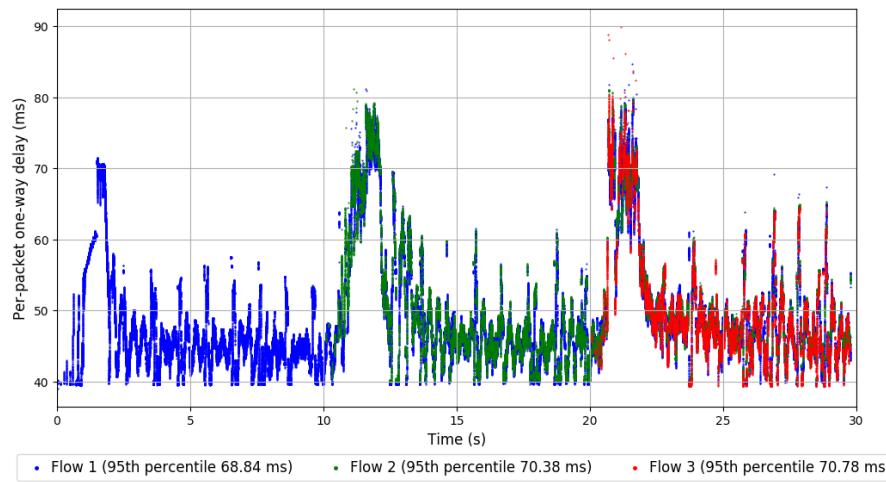
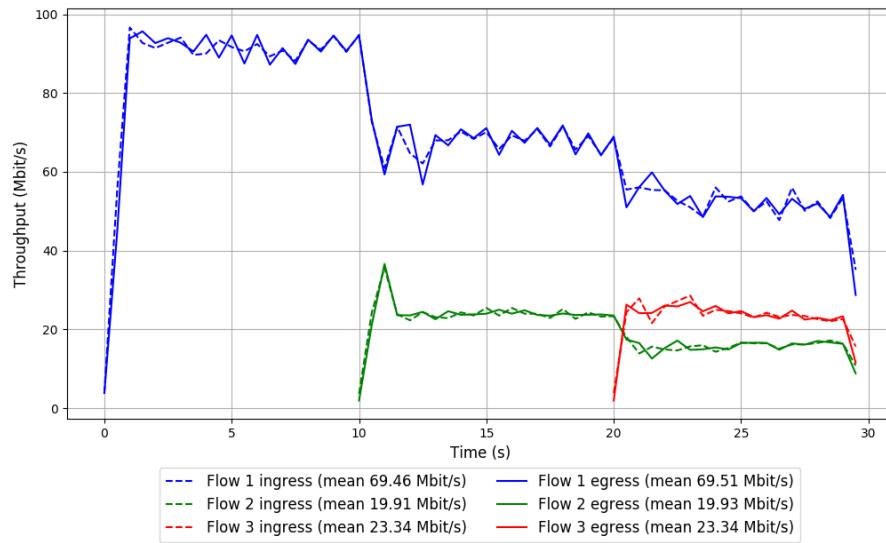


Run 5: Statistics of Indigo-1-32

```
Start at: 2018-03-21 01:25:30
End at: 2018-03-21 01:26:00
Local clock offset: -1.773 ms
Remote clock offset: -2.086 ms

# Below is generated by plot.py at 2018-03-21 07:46:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 69.284 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 68.838 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 19.93 Mbit/s
95th percentile per-packet one-way delay: 70.384 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 23.34 Mbit/s
95th percentile per-packet one-way delay: 70.785 ms
Loss rate: 1.18%
```

Run 5: Report of Indigo-1-32 — Data Link

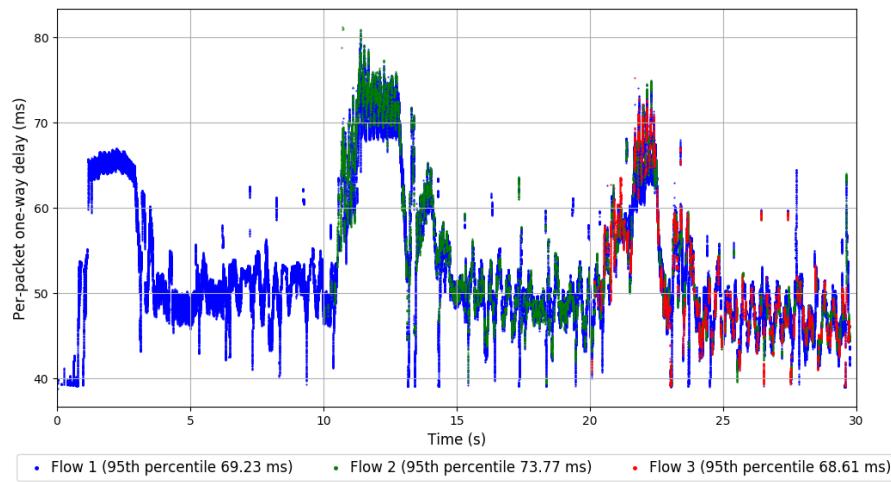
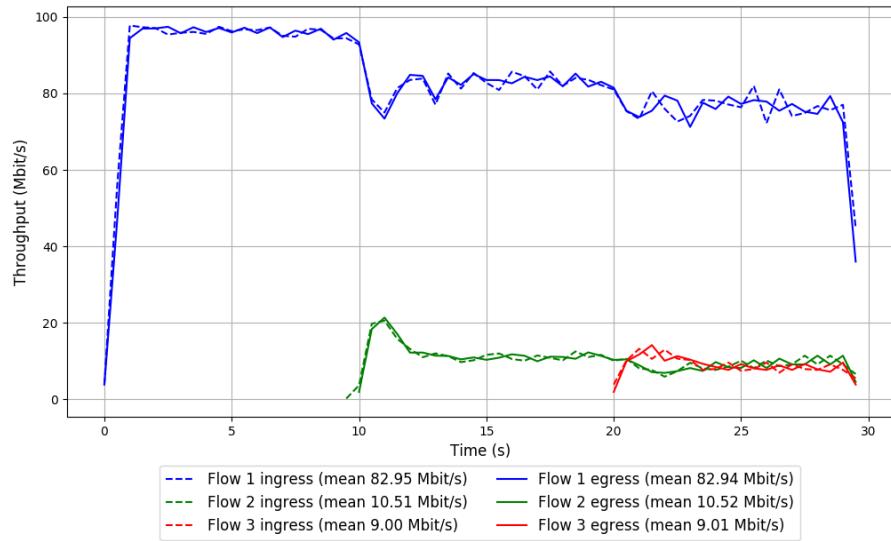


Run 6: Statistics of Indigo-1-32

```
Start at: 2018-03-21 01:48:16
End at: 2018-03-21 01:48:46
Local clock offset: -0.243 ms
Remote clock offset: -1.958 ms

# Below is generated by plot.py at 2018-03-21 07:46:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.84 Mbit/s
95th percentile per-packet one-way delay: 69.647 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 82.94 Mbit/s
95th percentile per-packet one-way delay: 69.230 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 10.52 Mbit/s
95th percentile per-packet one-way delay: 73.767 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 9.01 Mbit/s
95th percentile per-packet one-way delay: 68.609 ms
Loss rate: 0.96%
```

Run 6: Report of Indigo-1-32 — Data Link

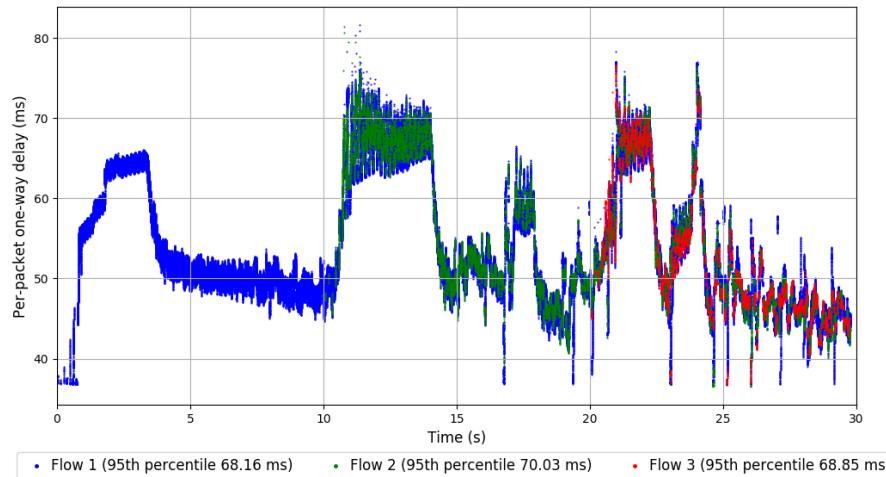
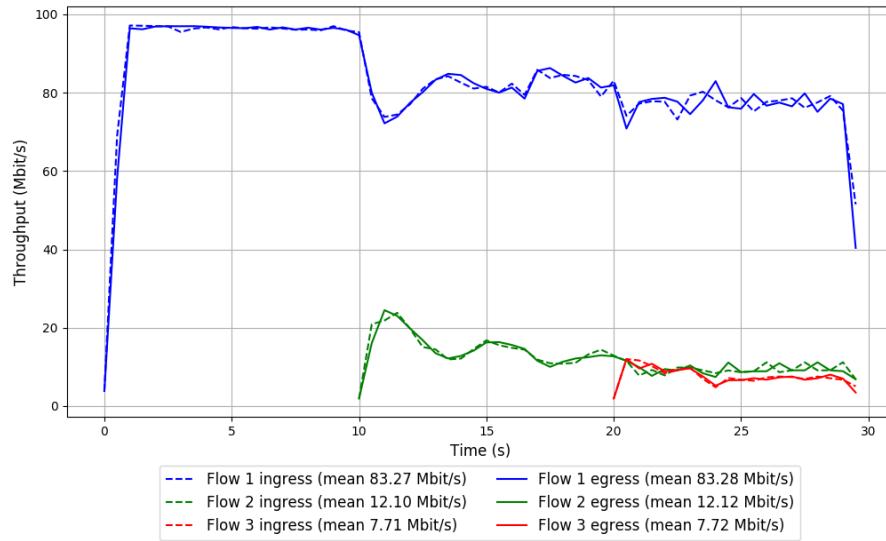


Run 7: Statistics of Indigo-1-32

```
Start at: 2018-03-21 02:11:08
End at: 2018-03-21 02:11:38
Local clock offset: -0.997 ms
Remote clock offset: -1.552 ms

# Below is generated by plot.py at 2018-03-21 07:46:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 68.427 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 83.28 Mbit/s
95th percentile per-packet one-way delay: 68.157 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 12.12 Mbit/s
95th percentile per-packet one-way delay: 70.028 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 68.852 ms
Loss rate: 1.11%
```

Run 7: Report of Indigo-1-32 — Data Link

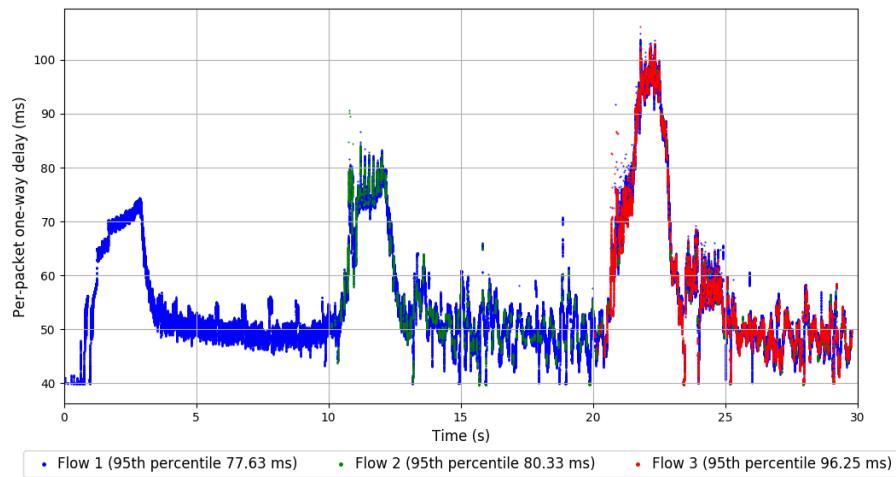
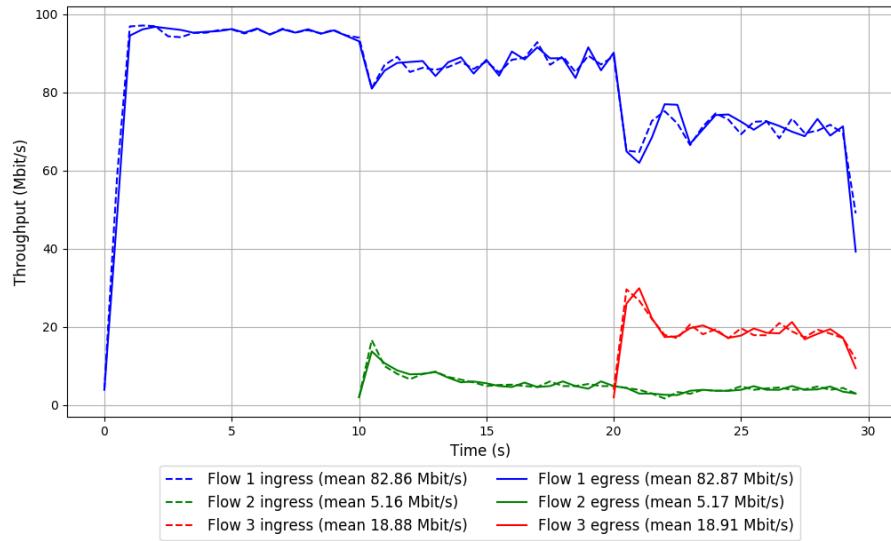


Run 8: Statistics of Indigo-1-32

```
Start at: 2018-03-21 02:34:00
End at: 2018-03-21 02:34:30
Local clock offset: -8.184 ms
Remote clock offset: -1.987 ms

# Below is generated by plot.py at 2018-03-21 07:46:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 79.266 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 82.87 Mbit/s
95th percentile per-packet one-way delay: 77.627 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 80.333 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 18.91 Mbit/s
95th percentile per-packet one-way delay: 96.254 ms
Loss rate: 1.00%
```

Run 8: Report of Indigo-1-32 — Data Link

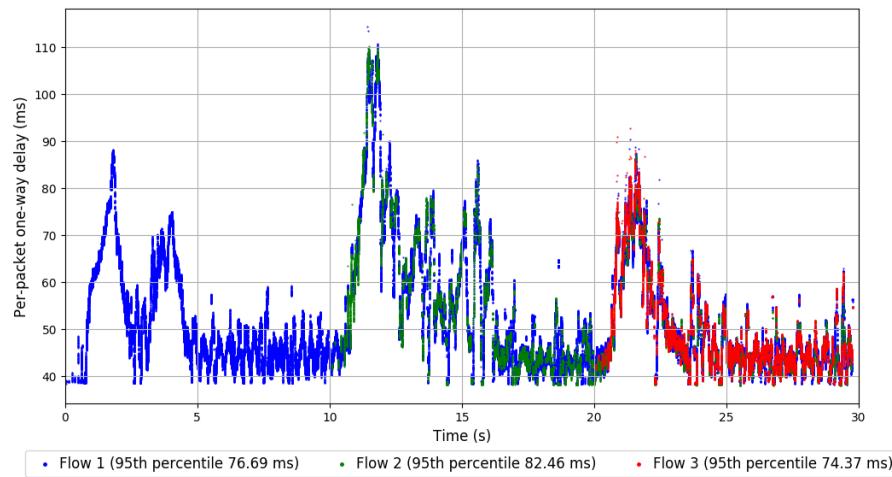
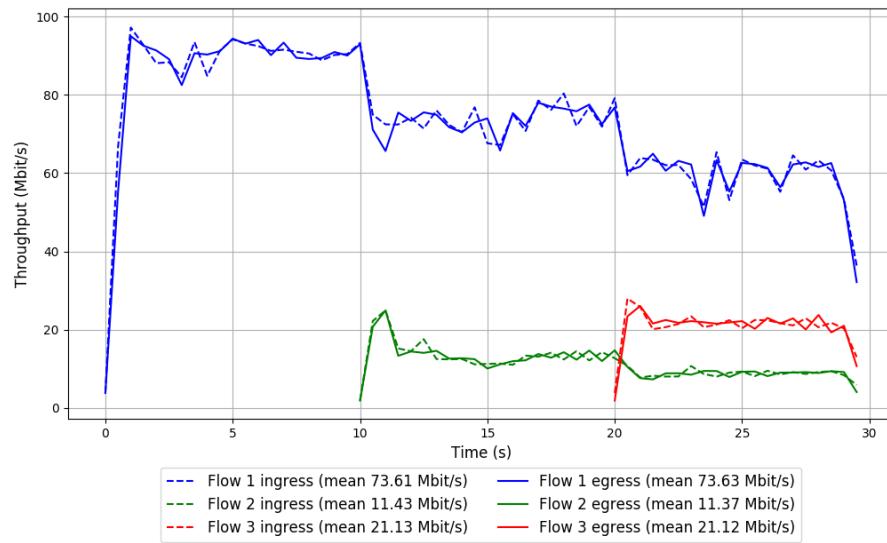


Run 9: Statistics of Indigo-1-32

```
Start at: 2018-03-21 02:56:44
End at: 2018-03-21 02:57:14
Local clock offset: -1.866 ms
Remote clock offset: -2.435 ms

# Below is generated by plot.py at 2018-03-21 07:47:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 76.989 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 73.63 Mbit/s
95th percentile per-packet one-way delay: 76.694 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 11.37 Mbit/s
95th percentile per-packet one-way delay: 82.464 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: 74.368 ms
Loss rate: 1.19%
```

Run 9: Report of Indigo-1-32 — Data Link

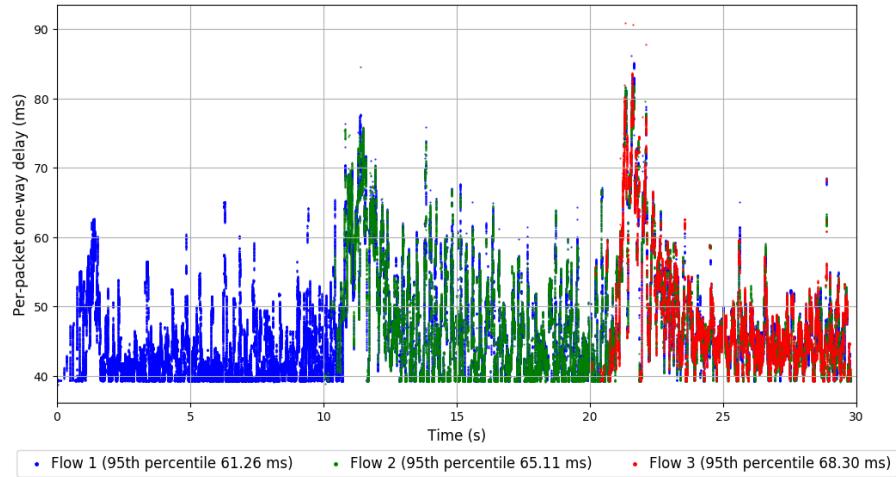
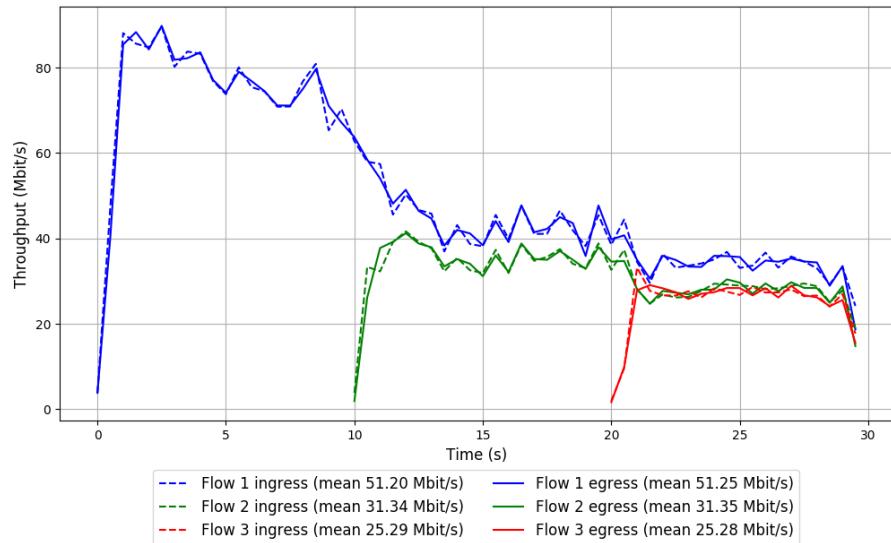


Run 10: Statistics of Indigo-1-32

```
Start at: 2018-03-21 03:20:57
End at: 2018-03-21 03:21:27
Local clock offset: 5.49 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-03-21 07:47:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.26 Mbit/s
95th percentile per-packet one-way delay: 63.177 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 51.25 Mbit/s
95th percentile per-packet one-way delay: 61.255 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 65.108 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 25.28 Mbit/s
95th percentile per-packet one-way delay: 68.304 ms
Loss rate: 1.19%
```

Run 10: Report of Indigo-1-32 — Data Link

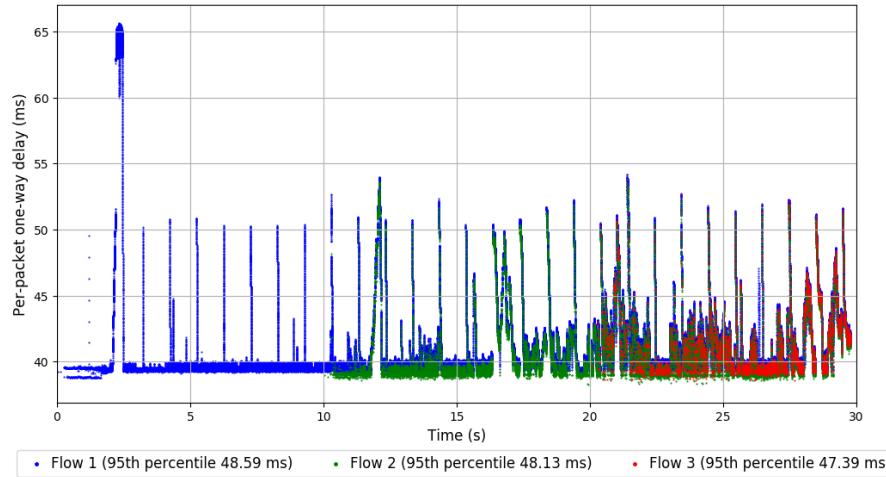
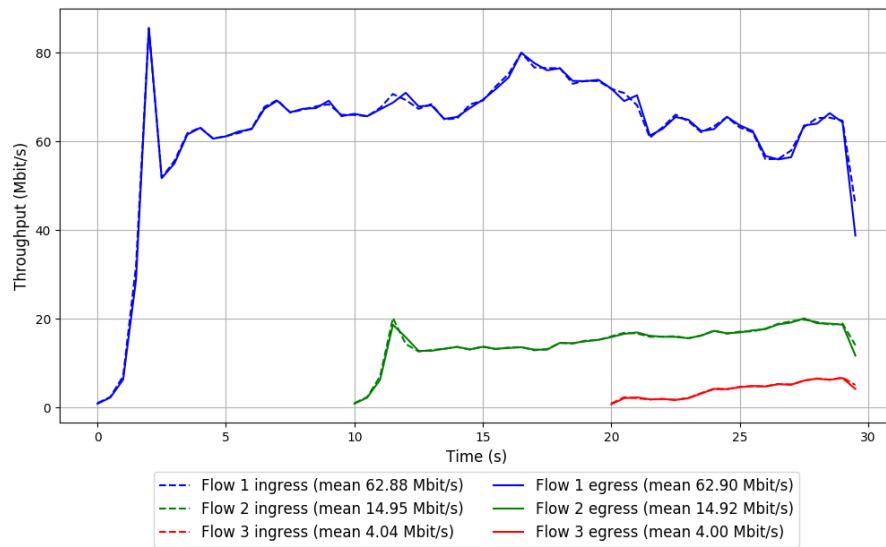


Run 1: Statistics of Vivace-latency

```
Start at: 2018-03-21 00:01:52
End at: 2018-03-21 00:02:22
Local clock offset: 3.102 ms
Remote clock offset: 6.119 ms

# Below is generated by plot.py at 2018-03-21 07:47:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.11 Mbit/s
95th percentile per-packet one-way delay: 48.497 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 48.590 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 14.92 Mbit/s
95th percentile per-packet one-way delay: 48.130 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 47.391 ms
Loss rate: 2.01%
```

Run 1: Report of Vivace-latency — Data Link

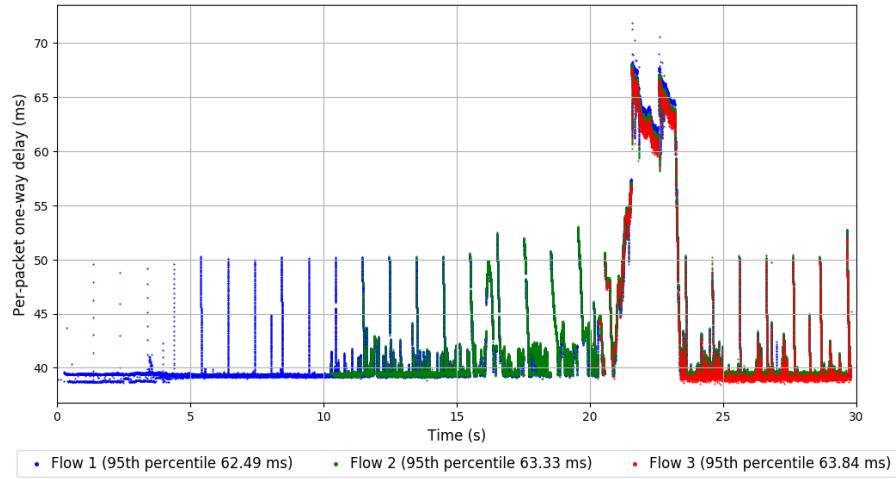
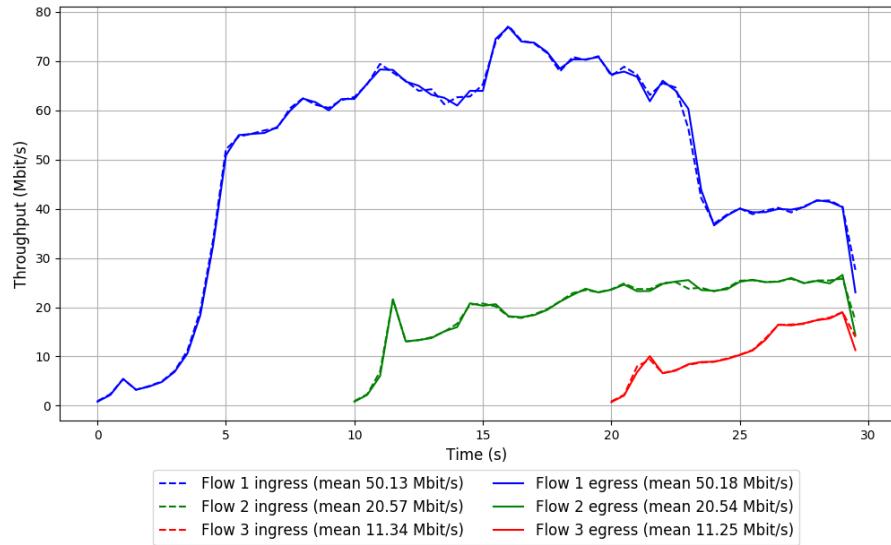


Run 2: Statistics of Vivace-latency

```
Start at: 2018-03-21 00:24:38
End at: 2018-03-21 00:25:08
Local clock offset: 8.27 ms
Remote clock offset: -1.128 ms

# Below is generated by plot.py at 2018-03-21 07:47:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.48 Mbit/s
95th percentile per-packet one-way delay: 62.825 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 50.18 Mbit/s
95th percentile per-packet one-way delay: 62.488 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 20.54 Mbit/s
95th percentile per-packet one-way delay: 63.326 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 11.25 Mbit/s
95th percentile per-packet one-way delay: 63.845 ms
Loss rate: 1.89%
```

Run 2: Report of Vivace-latency — Data Link

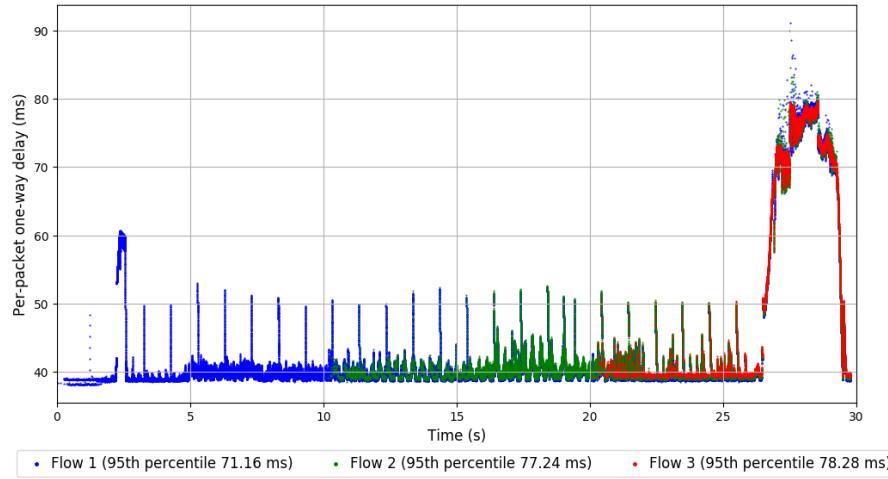
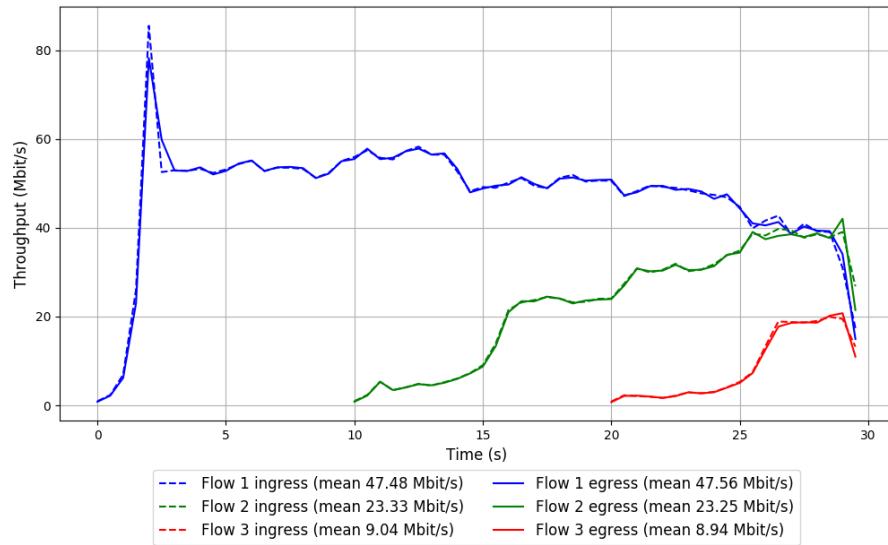


Run 3: Statistics of Vivace-latency

```
Start at: 2018-03-21 00:47:41
End at: 2018-03-21 00:48:11
Local clock offset: 5.754 ms
Remote clock offset: -2.458 ms

# Below is generated by plot.py at 2018-03-21 07:47:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.91 Mbit/s
95th percentile per-packet one-way delay: 74.816 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 71.158 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 77.239 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 78.283 ms
Loss rate: 2.17%
```

Run 3: Report of Vivace-latency — Data Link

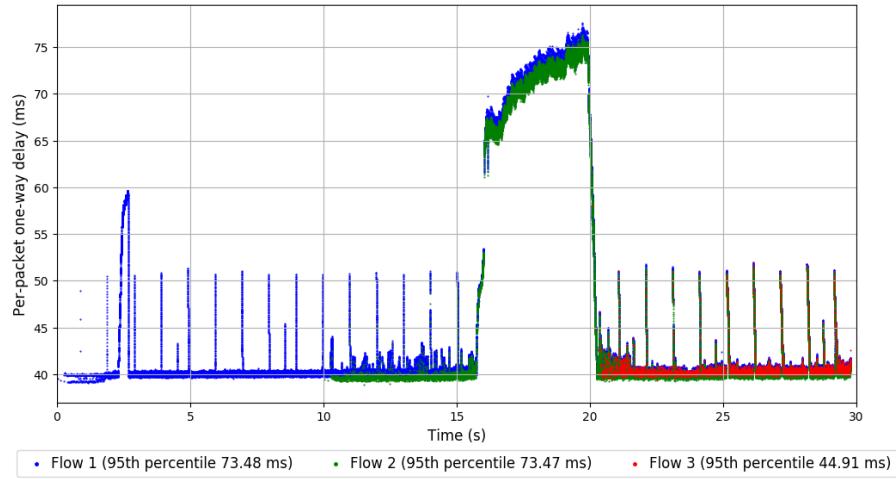
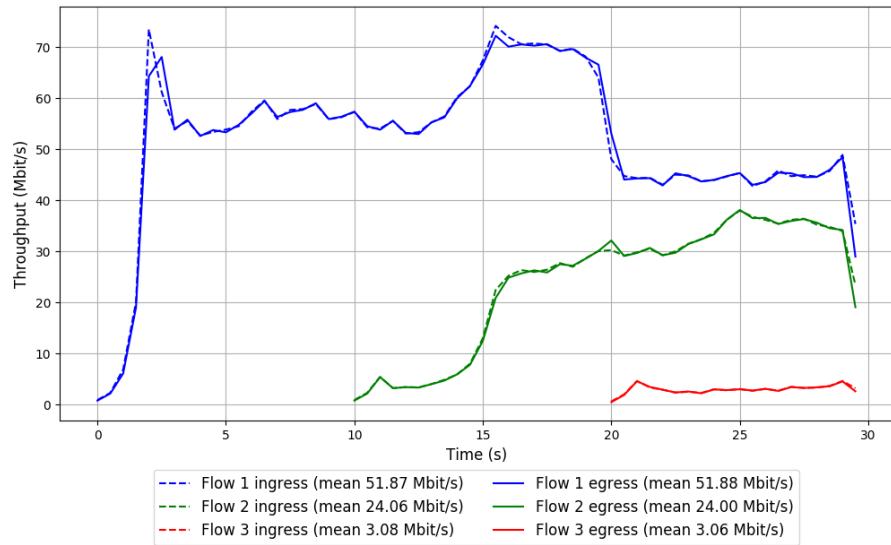


Run 4: Statistics of Vivace-latency

```
Start at: 2018-03-21 01:10:25
End at: 2018-03-21 01:10:55
Local clock offset: 2.82 ms
Remote clock offset: -2.75 ms

# Below is generated by plot.py at 2018-03-21 07:47:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.80 Mbit/s
95th percentile per-packet one-way delay: 73.448 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 51.88 Mbit/s
95th percentile per-packet one-way delay: 73.481 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 24.00 Mbit/s
95th percentile per-packet one-way delay: 73.471 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 44.906 ms
Loss rate: 1.66%
```

Run 4: Report of Vivace-latency — Data Link

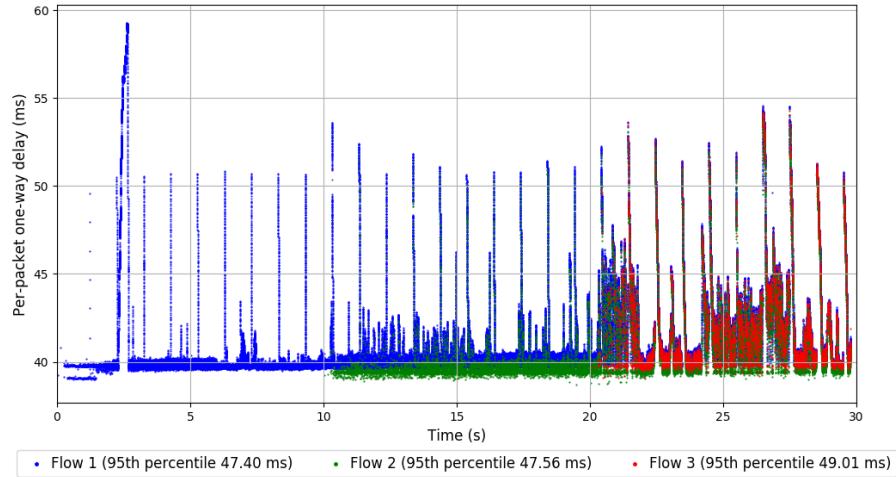
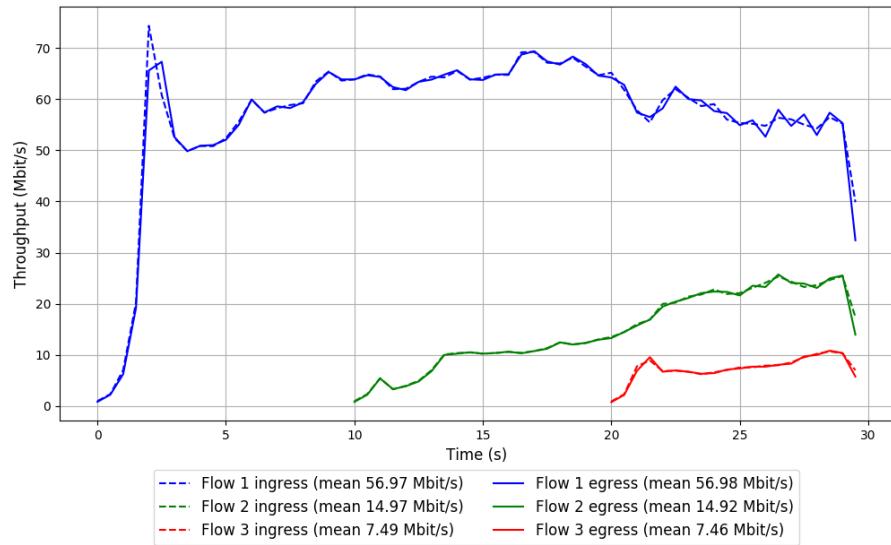


Run 5: Statistics of Vivace-latency

```
Start at: 2018-03-21 01:33:12
End at: 2018-03-21 01:33:42
Local clock offset: -2.816 ms
Remote clock offset: -1.823 ms

# Below is generated by plot.py at 2018-03-21 07:47:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.32 Mbit/s
95th percentile per-packet one-way delay: 47.550 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 56.98 Mbit/s
95th percentile per-packet one-way delay: 47.401 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 14.92 Mbit/s
95th percentile per-packet one-way delay: 47.557 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 49.010 ms
Loss rate: 1.37%
```

Run 5: Report of Vivace-latency — Data Link

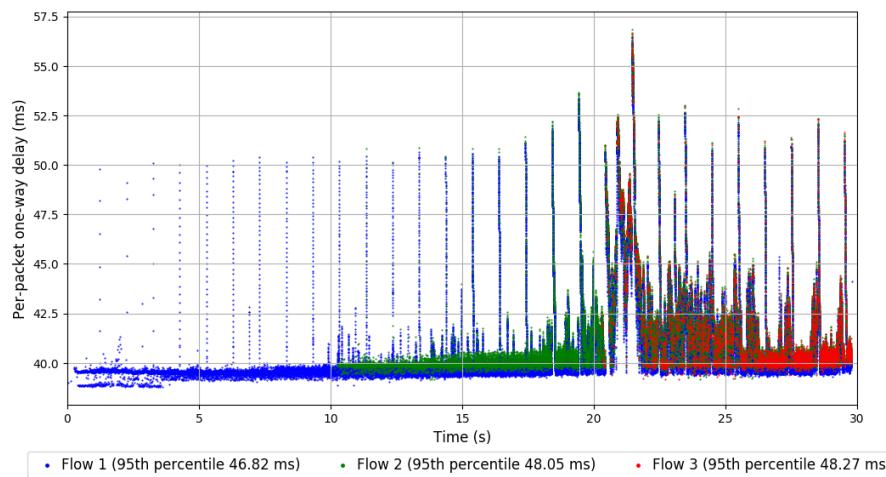
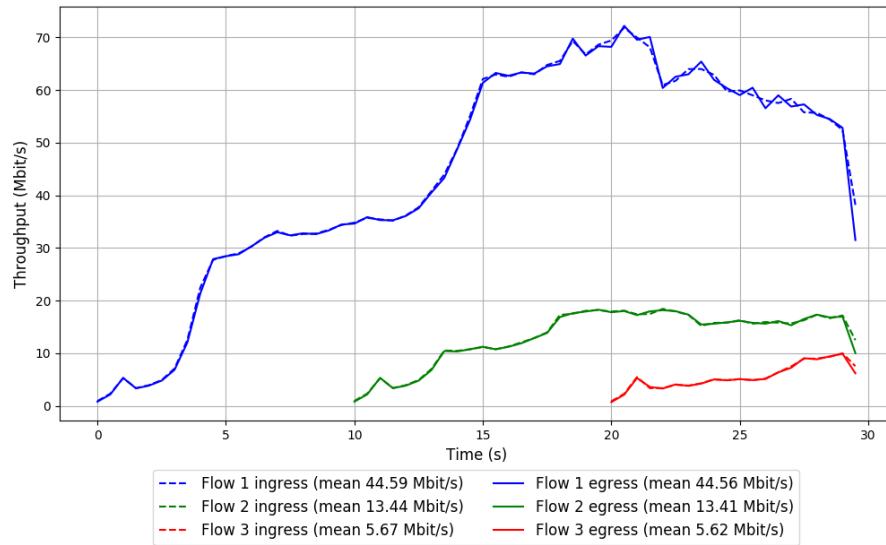


Run 6: Statistics of Vivace-latency

```
Start at: 2018-03-21 01:55:57
End at: 2018-03-21 01:56:27
Local clock offset: 1.44 ms
Remote clock offset: -1.695 ms

# Below is generated by plot.py at 2018-03-21 07:47:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.30 Mbit/s
95th percentile per-packet one-way delay: 47.190 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 46.822 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 48.054 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 48.274 ms
Loss rate: 1.98%
```

Run 6: Report of Vivace-latency — Data Link

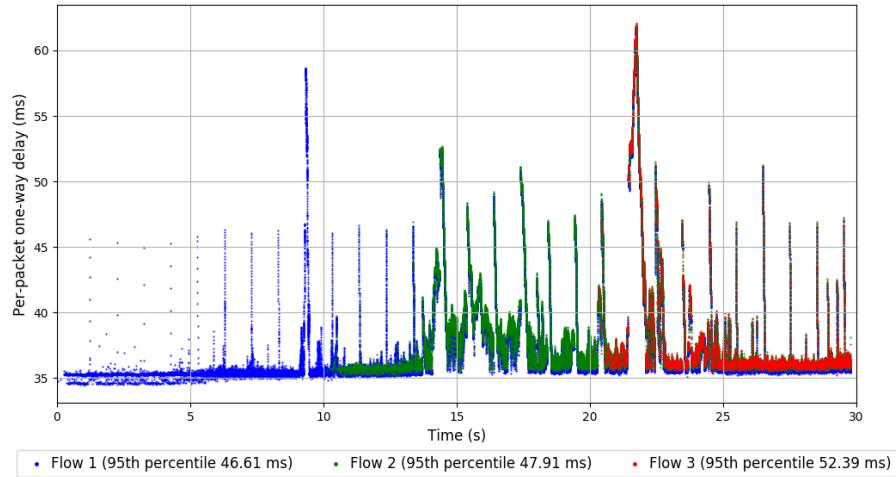
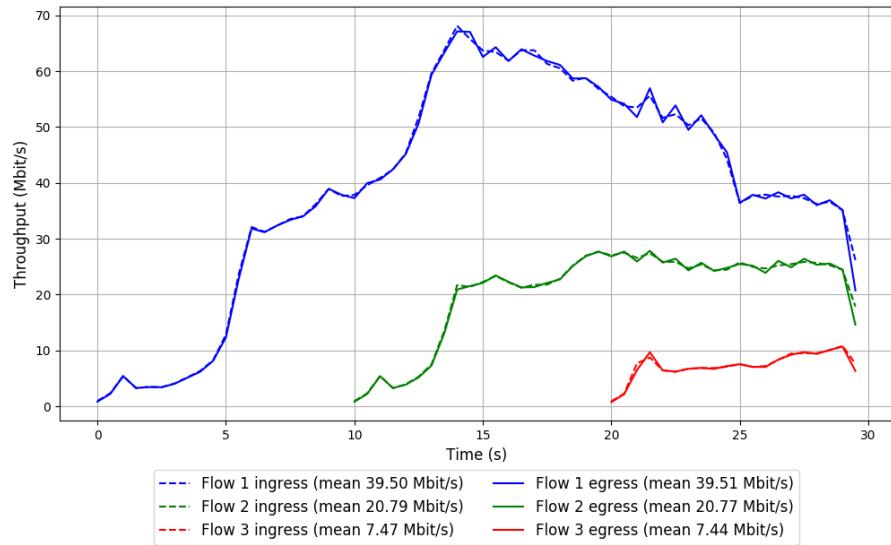


Run 7: Statistics of Vivace-latency

```
Start at: 2018-03-21 02:18:56
End at: 2018-03-21 02:19:26
Local clock offset: -1.845 ms
Remote clock offset: 2.678 ms

# Below is generated by plot.py at 2018-03-21 07:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.72 Mbit/s
95th percentile per-packet one-way delay: 47.158 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 39.51 Mbit/s
95th percentile per-packet one-way delay: 46.612 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 47.909 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 52.391 ms
Loss rate: 1.49%
```

Run 7: Report of Vivace-latency — Data Link

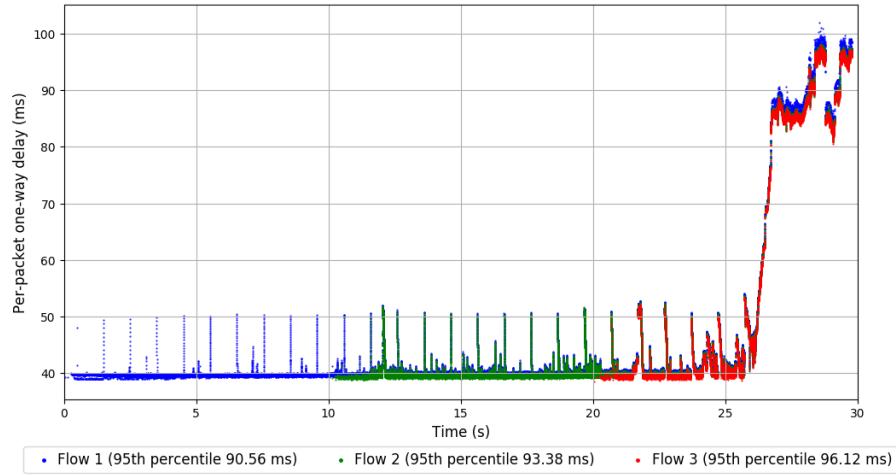
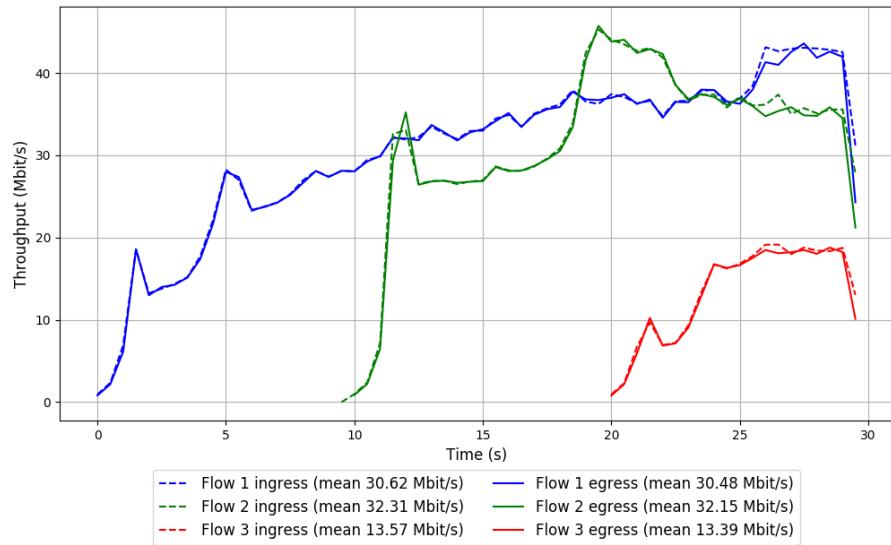


Run 8: Statistics of Vivace-latency

```
Start at: 2018-03-21 02:41:40
End at: 2018-03-21 02:42:10
Local clock offset: -10.155 ms
Remote clock offset: -2.235 ms

# Below is generated by plot.py at 2018-03-21 07:48:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 93.798 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 30.48 Mbit/s
95th percentile per-packet one-way delay: 90.557 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 93.377 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 96.120 ms
Loss rate: 2.54%
```

Run 8: Report of Vivace-latency — Data Link

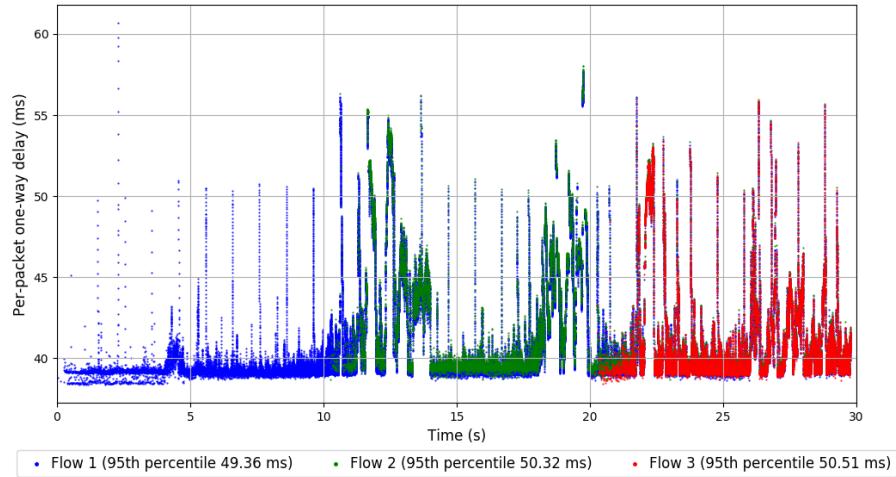
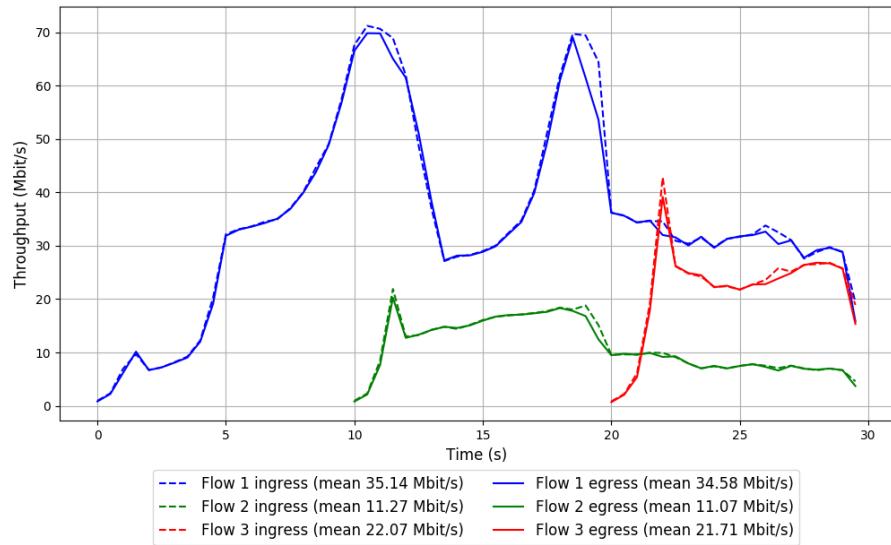


Run 9: Statistics of Vivace-latency

```
Start at: 2018-03-21 03:05:03
End at: 2018-03-21 03:05:33
Local clock offset: 2.692 ms
Remote clock offset: -1.223 ms

# Below is generated by plot.py at 2018-03-21 07:48:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.02 Mbit/s
95th percentile per-packet one-way delay: 49.783 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 49.359 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 11.07 Mbit/s
95th percentile per-packet one-way delay: 50.316 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 21.71 Mbit/s
95th percentile per-packet one-way delay: 50.505 ms
Loss rate: 2.75%
```

Run 9: Report of Vivace-latency — Data Link

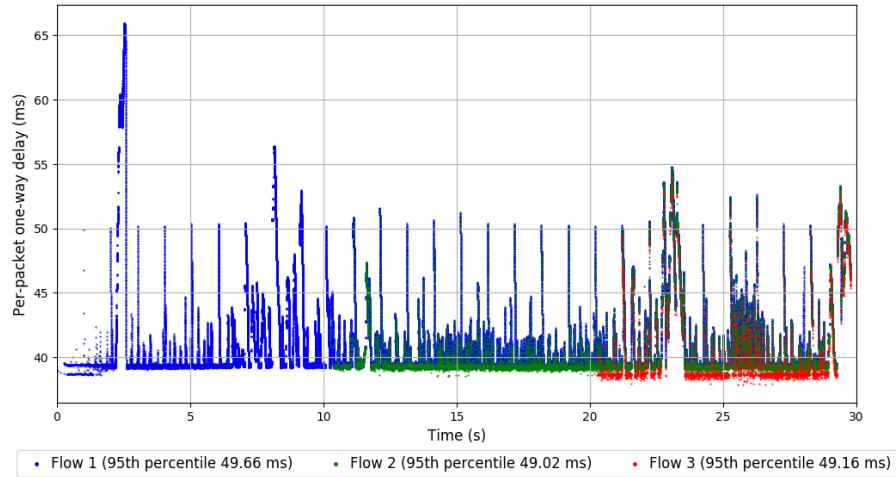
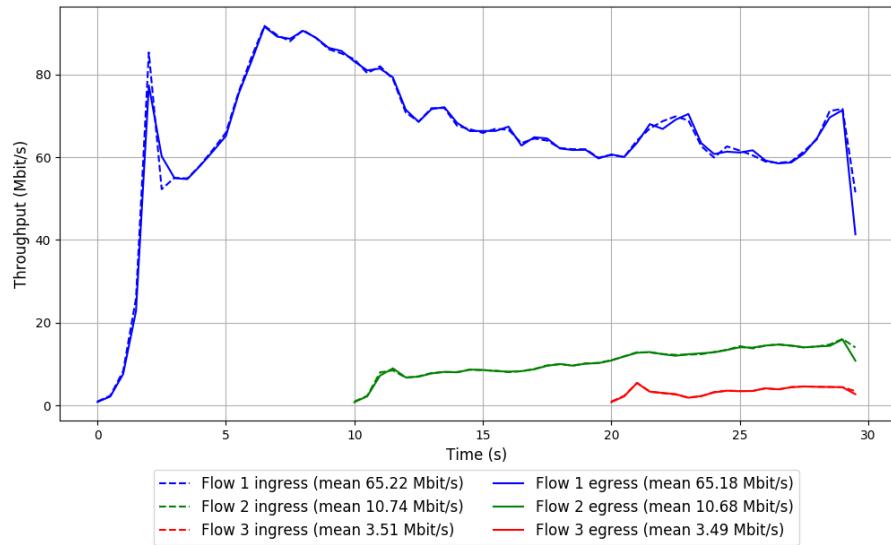


Run 10: Statistics of Vivace-latency

```
Start at: 2018-03-21 03:28:38
End at: 2018-03-21 03:29:08
Local clock offset: 7.694 ms
Remote clock offset: 0.241 ms

# Below is generated by plot.py at 2018-03-21 07:48:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 49.565 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 49.665 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 10.68 Mbit/s
95th percentile per-packet one-way delay: 49.017 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 49.155 ms
Loss rate: 1.67%
```

Run 10: Report of Vivace-latency — Data Link

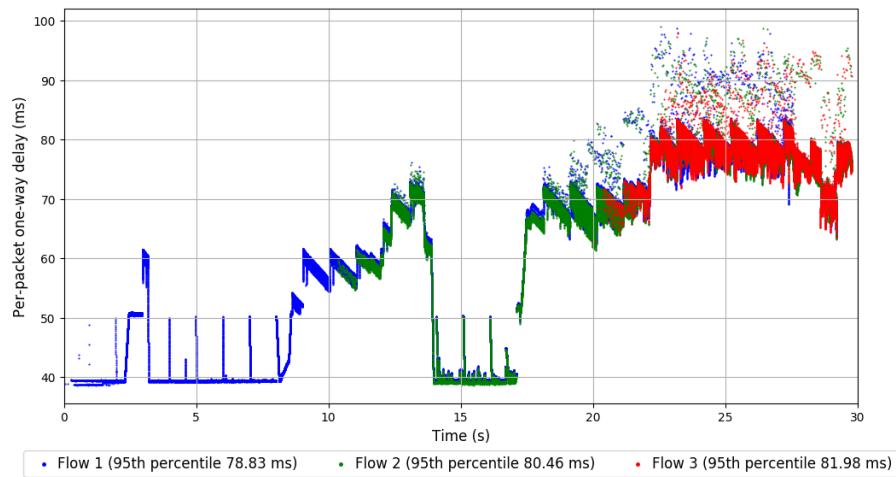
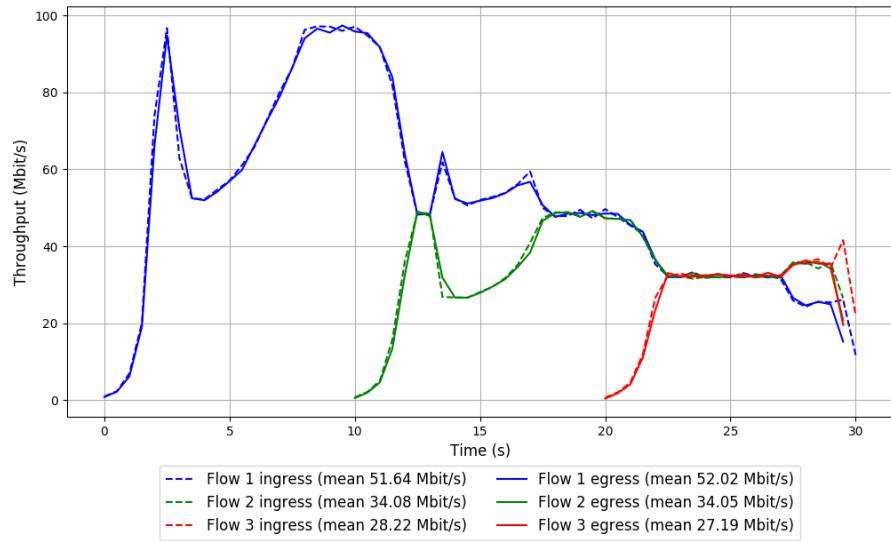


```
Run 1: Statistics of Vivace-loss
```

```
Start at: 2018-03-20 23:55:28
End at: 2018-03-20 23:55:58
Local clock offset: 0.29 ms
Remote clock offset: 5.694 ms

# Below is generated by plot.py at 2018-03-21 07:48:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.45 Mbit/s
95th percentile per-packet one-way delay: 80.070 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 52.02 Mbit/s
95th percentile per-packet one-way delay: 78.829 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 34.05 Mbit/s
95th percentile per-packet one-way delay: 80.462 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 81.980 ms
Loss rate: 8.41%
```

Run 1: Report of Vivace-loss — Data Link

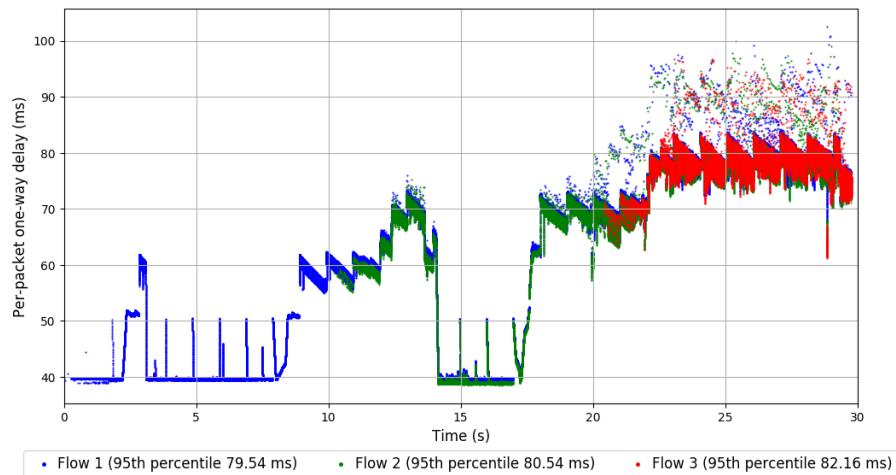
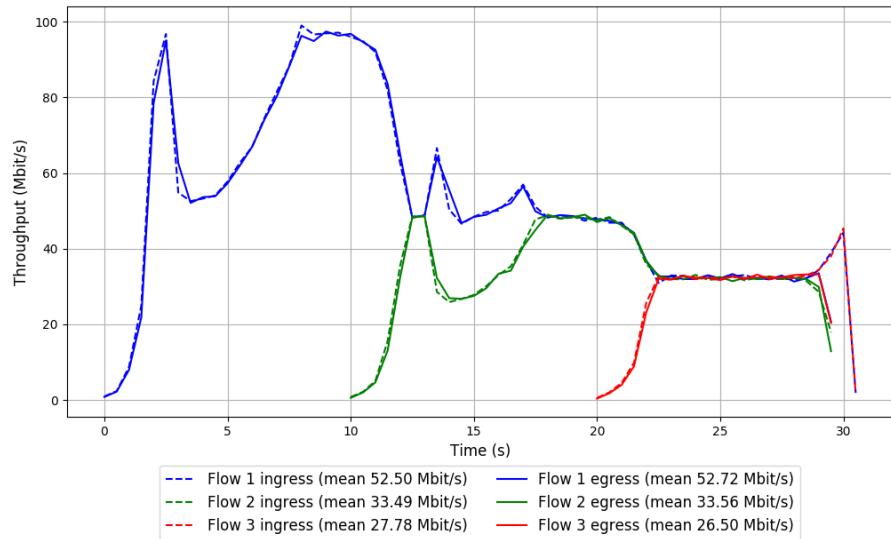


Run 2: Statistics of Vivace-loss

```
Start at: 2018-03-21 00:18:15
End at: 2018-03-21 00:18:45
Local clock offset: 7.284 ms
Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2018-03-21 07:48:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.58 Mbit/s
95th percentile per-packet one-way delay: 80.489 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 79.539 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 33.56 Mbit/s
95th percentile per-packet one-way delay: 80.543 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 26.50 Mbit/s
95th percentile per-packet one-way delay: 82.161 ms
Loss rate: 12.05%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-21 00:41:09

End at: 2018-03-21 00:41:39

Local clock offset: 6.639 ms

Remote clock offset: -2.837 ms

Run 3: Report of Vivace-loss — Data Link

Figure is missing

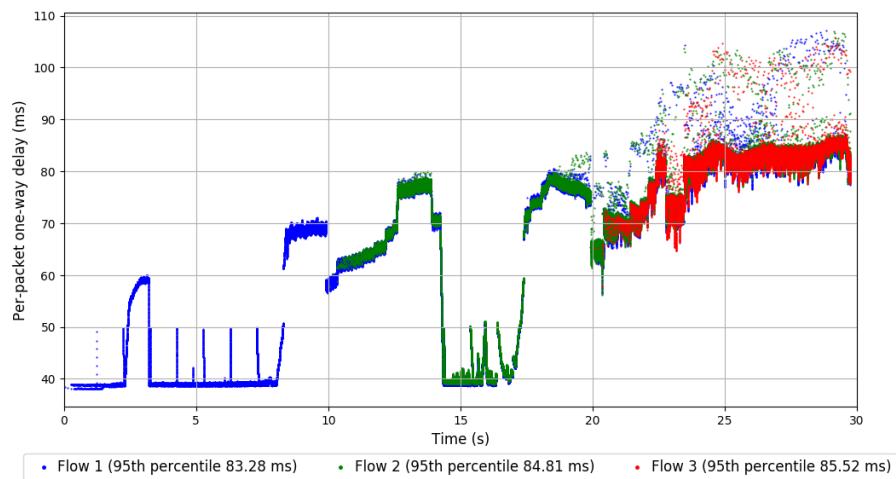
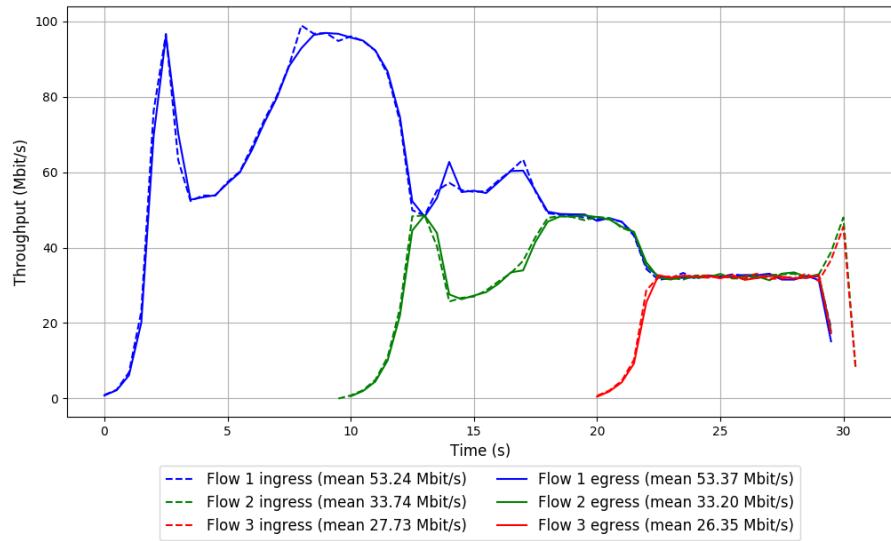
Figure is missing

Run 4: Statistics of Vivace-loss

```
Start at: 2018-03-21 01:04:01
End at: 2018-03-21 01:04:31
Local clock offset: 5.522 ms
Remote clock offset: -2.614 ms

# Below is generated by plot.py at 2018-03-21 07:49:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.95 Mbit/s
95th percentile per-packet one-way delay: 84.372 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 53.37 Mbit/s
95th percentile per-packet one-way delay: 83.276 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 84.807 ms
Loss rate: 5.91%
-- Flow 3:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 85.518 ms
Loss rate: 13.19%
```

Run 4: Report of Vivace-loss — Data Link

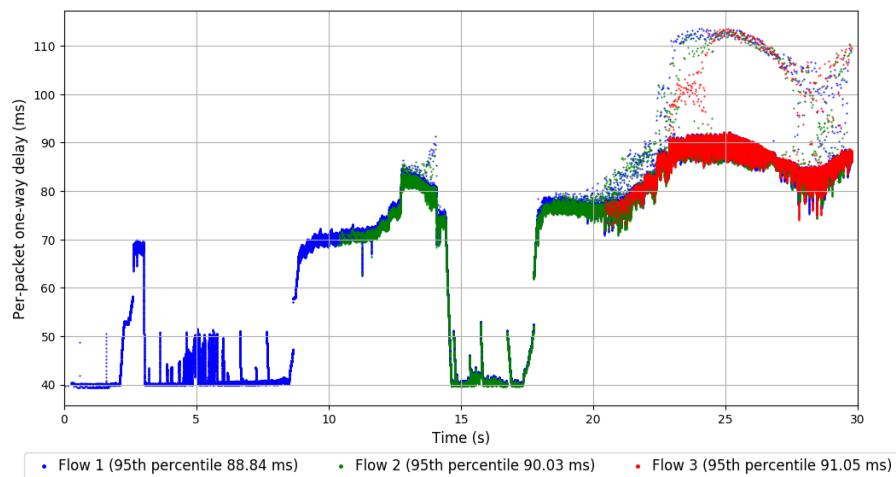
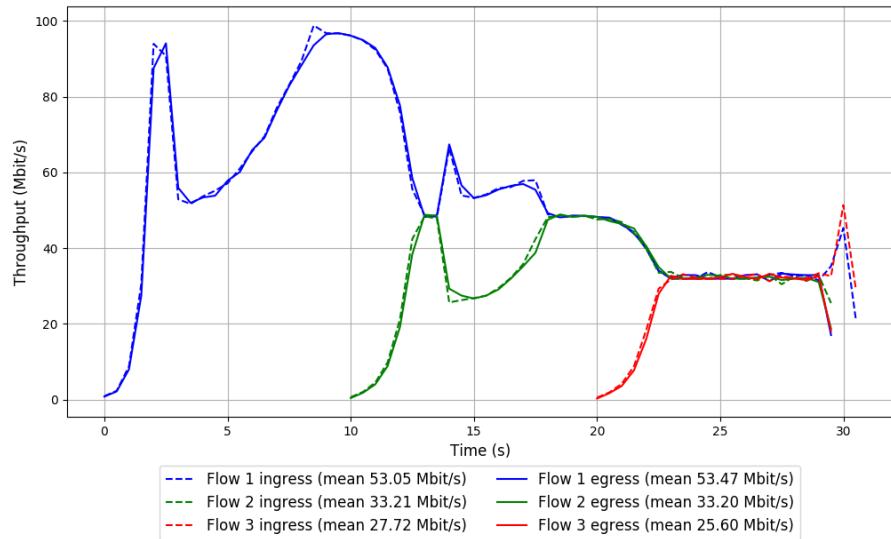


Run 5: Statistics of Vivace-loss

```
Start at: 2018-03-21 01:26:48
End at: 2018-03-21 01:27:18
Local clock offset: -1.842 ms
Remote clock offset: -2.023 ms

# Below is generated by plot.py at 2018-03-21 07:49:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 89.977 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 88.838 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 90.033 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 91.049 ms
Loss rate: 17.02%
```

Run 5: Report of Vivace-loss — Data Link

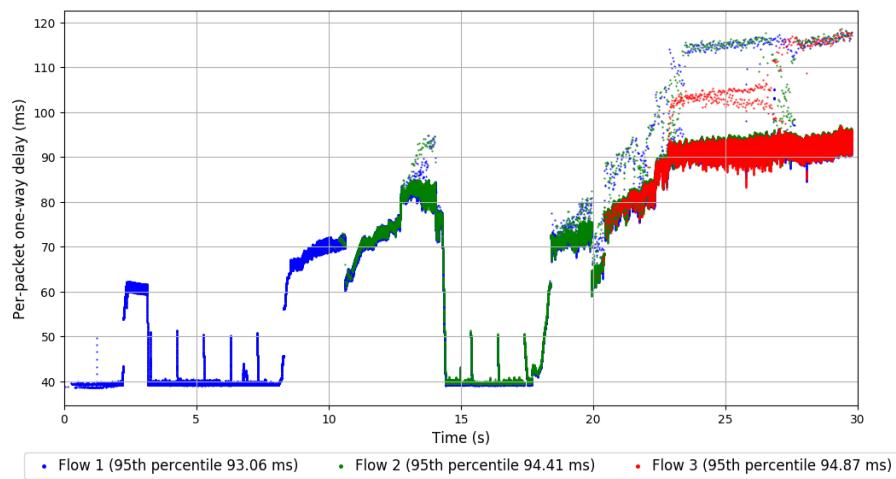
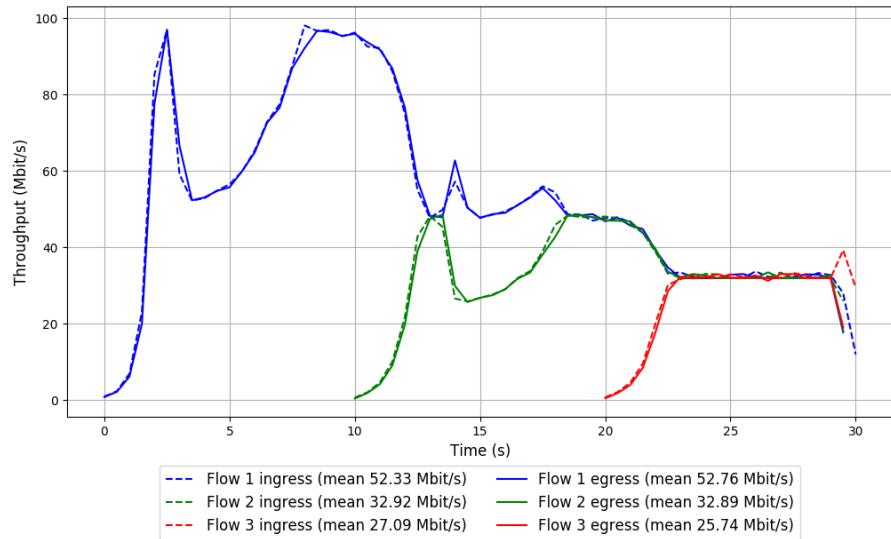


Run 6: Statistics of Vivace-loss

```
Start at: 2018-03-21 01:49:34
End at: 2018-03-21 01:50:04
Local clock offset: 0.213 ms
Remote clock offset: -1.992 ms

# Below is generated by plot.py at 2018-03-21 07:49:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.93 Mbit/s
95th percentile per-packet one-way delay: 93.946 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 93.064 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 32.89 Mbit/s
95th percentile per-packet one-way delay: 94.413 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 25.74 Mbit/s
95th percentile per-packet one-way delay: 94.869 ms
Loss rate: 10.08%
```

Run 6: Report of Vivace-loss — Data Link

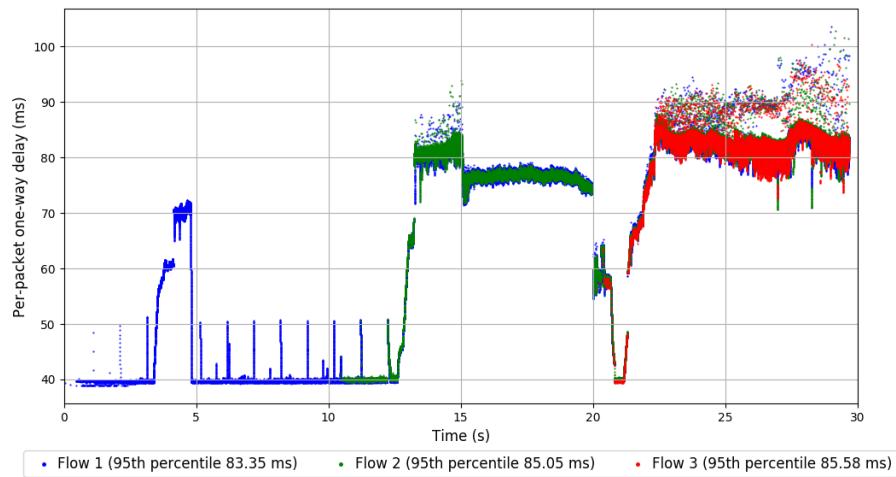
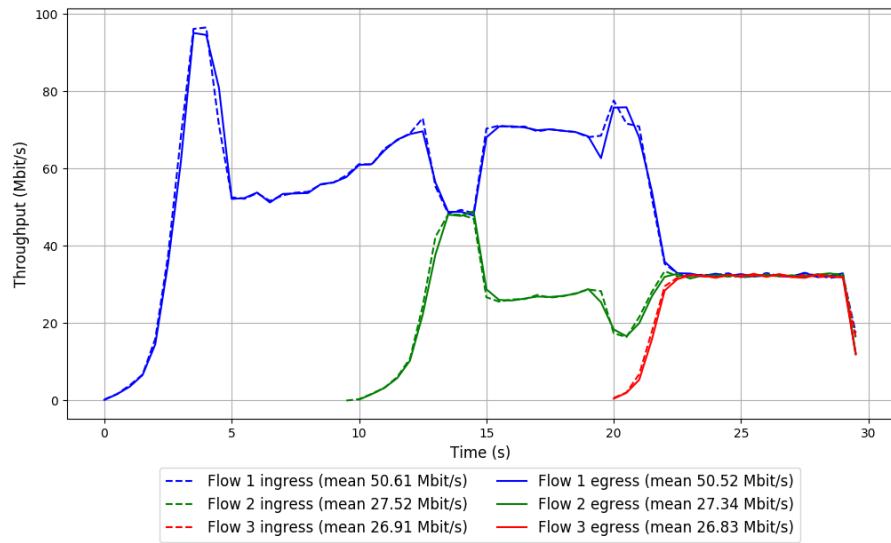


Run 7: Statistics of Vivace-loss

```
Start at: 2018-03-21 02:12:32
End at: 2018-03-21 02:13:02
Local clock offset: 2.054 ms
Remote clock offset: -1.469 ms

# Below is generated by plot.py at 2018-03-21 07:49:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.32 Mbit/s
95th percentile per-packet one-way delay: 84.386 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 50.52 Mbit/s
95th percentile per-packet one-way delay: 83.349 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.34 Mbit/s
95th percentile per-packet one-way delay: 85.045 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 26.83 Mbit/s
95th percentile per-packet one-way delay: 85.584 ms
Loss rate: 1.86%
```

Run 7: Report of Vivace-loss — Data Link

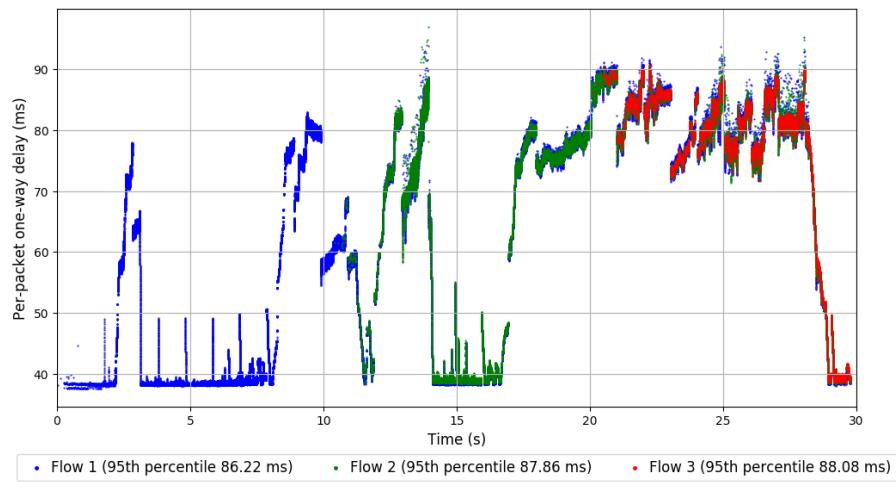
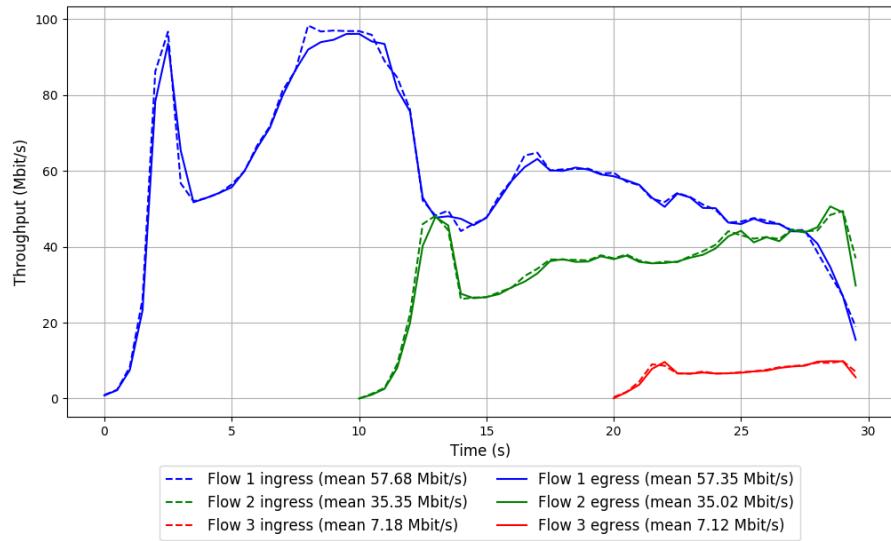


Run 8: Statistics of Vivace-loss

```
Start at: 2018-03-21 02:35:17
End at: 2018-03-21 02:35:47
Local clock offset: -9.408 ms
Remote clock offset: -2.051 ms

# Below is generated by plot.py at 2018-03-21 07:49:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.46 Mbit/s
95th percentile per-packet one-way delay: 86.968 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 57.35 Mbit/s
95th percentile per-packet one-way delay: 86.225 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 35.02 Mbit/s
95th percentile per-packet one-way delay: 87.864 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 88.084 ms
Loss rate: 2.32%
```

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

/home/ubuntu/pantheon_data/2018-03-20T23-44-China-to-AWS-Korea-10-runs-3-flows/vivace_loss_s

Run 9: Report of Vivace-loss — Data Link

Figure is missing

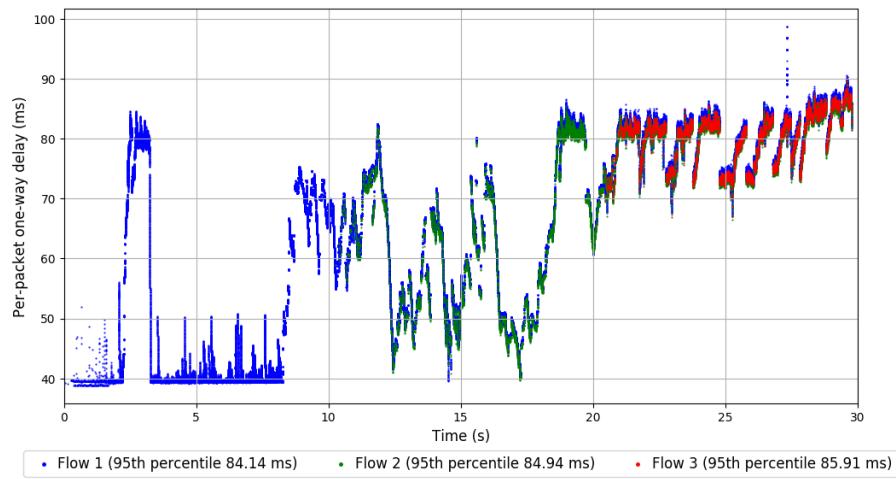
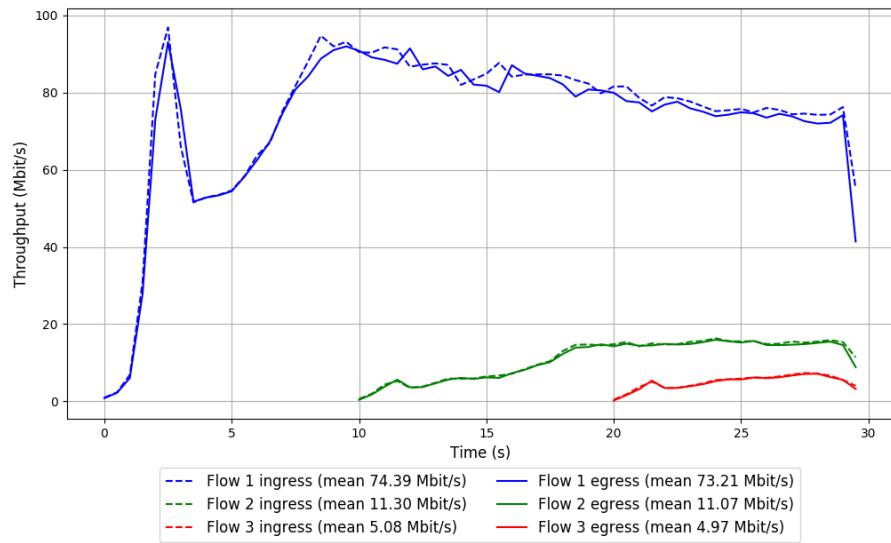
Figure is missing

Run 10: Statistics of Vivace-loss

```
Start at: 2018-03-21 03:22:14
End at: 2018-03-21 03:22:44
Local clock offset: 5.792 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-03-21 07:49:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.15 Mbit/s
95th percentile per-packet one-way delay: 84.325 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 73.21 Mbit/s
95th percentile per-packet one-way delay: 84.137 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 11.07 Mbit/s
95th percentile per-packet one-way delay: 84.944 ms
Loss rate: 2.83%
-- Flow 3:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 85.912 ms
Loss rate: 3.70%
```

Run 10: Report of Vivace-loss — Data Link

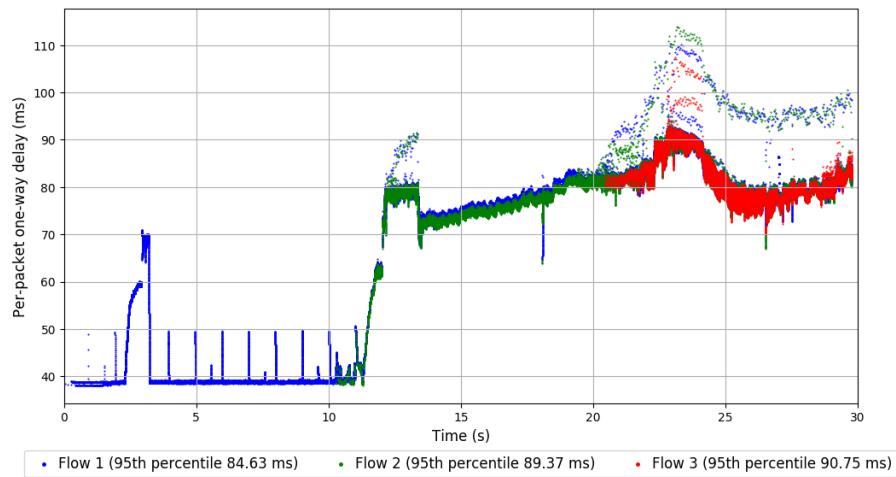
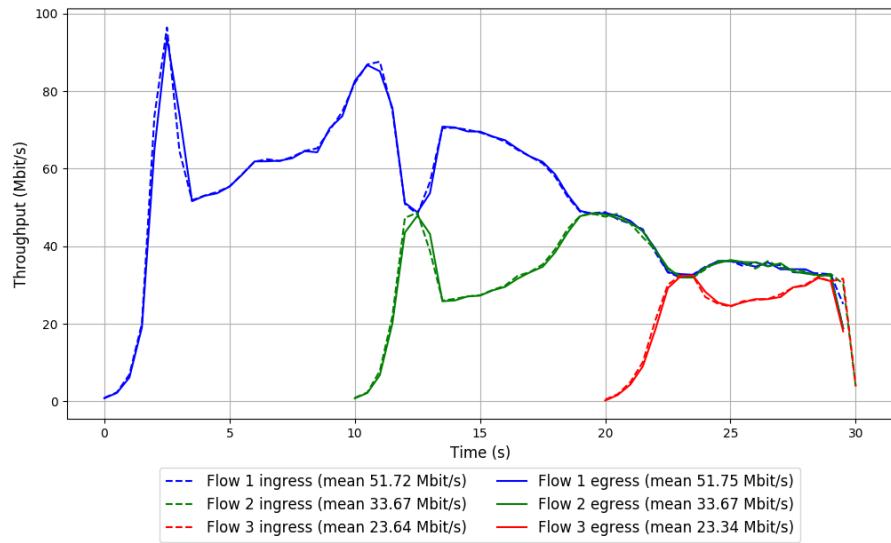


Run 1: Statistics of Vivace-LTE

```
Start at: 2018-03-21 00:00:34
End at: 2018-03-21 00:01:04
Local clock offset: 1.446 ms
Remote clock offset: 5.973 ms

# Below is generated by plot.py at 2018-03-21 07:50:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.67 Mbit/s
95th percentile per-packet one-way delay: 88.859 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 84.631 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 89.374 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 23.34 Mbit/s
95th percentile per-packet one-way delay: 90.751 ms
Loss rate: 4.76%
```

Run 1: Report of Vivace-LTE — Data Link

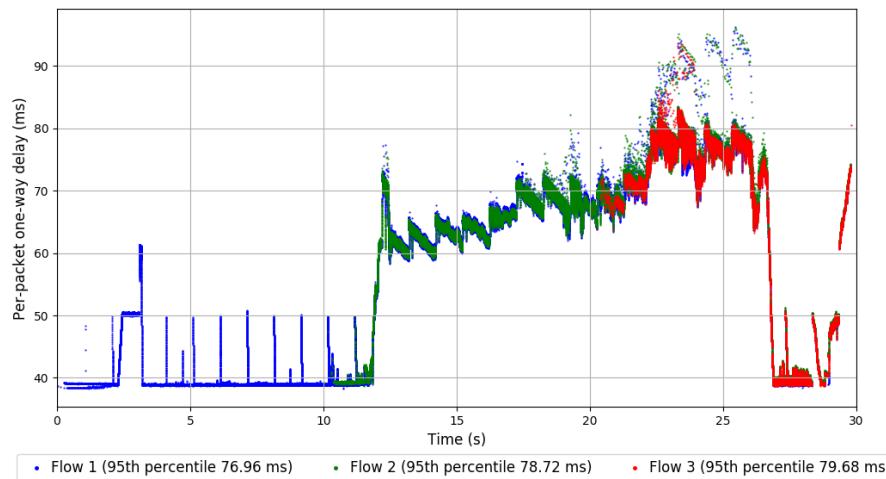
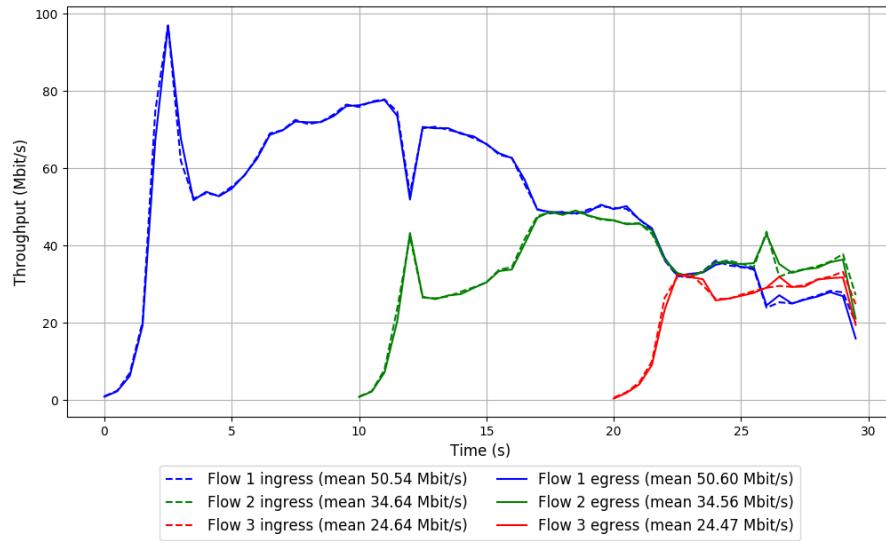


Run 2: Statistics of Vivace-LTE

```
Start at: 2018-03-21 00:23:21
End at: 2018-03-21 00:23:51
Local clock offset: 7.99 ms
Remote clock offset: -0.914 ms

# Below is generated by plot.py at 2018-03-21 07:50:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.47 Mbit/s
95th percentile per-packet one-way delay: 78.261 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 50.60 Mbit/s
95th percentile per-packet one-way delay: 76.958 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 34.56 Mbit/s
95th percentile per-packet one-way delay: 78.716 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 79.683 ms
Loss rate: 2.04%
```

Run 2: Report of Vivace-LTE — Data Link

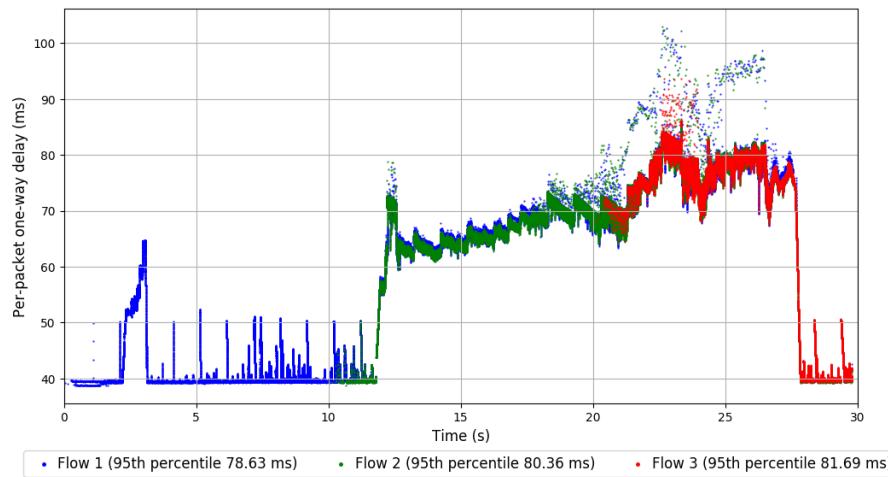
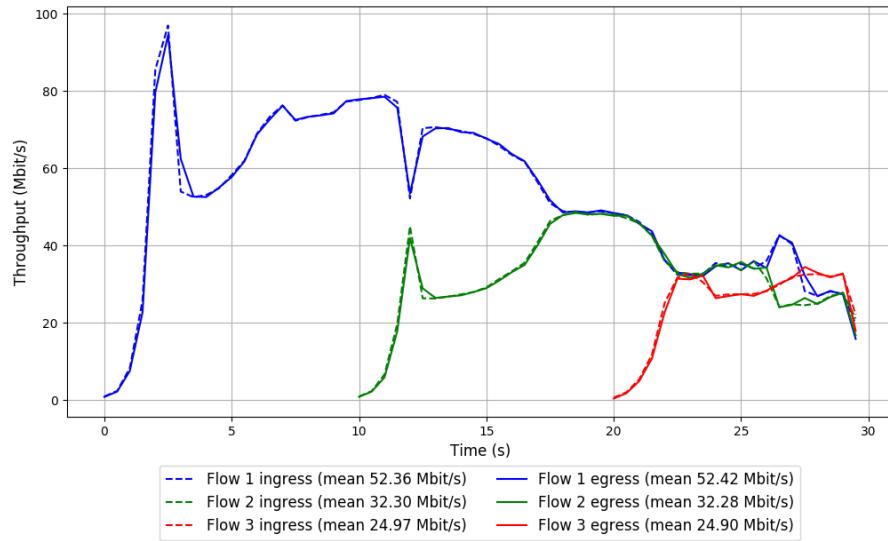


Run 3: Statistics of Vivace-LTE

```
Start at: 2018-03-21 00:46:23
End at: 2018-03-21 00:46:53
Local clock offset: 6.079 ms
Remote clock offset: -2.55 ms

# Below is generated by plot.py at 2018-03-21 07:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 79.902 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 52.42 Mbit/s
95th percentile per-packet one-way delay: 78.628 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 80.357 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 81.688 ms
Loss rate: 1.61%
```

Run 3: Report of Vivace-LTE — Data Link

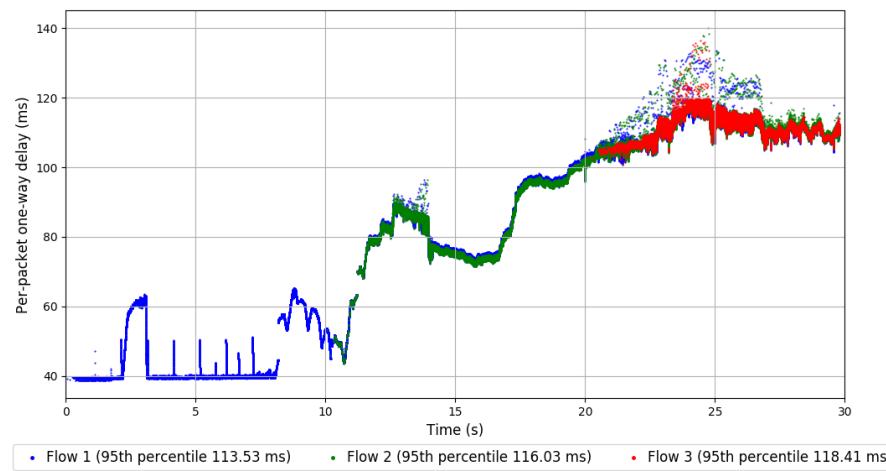
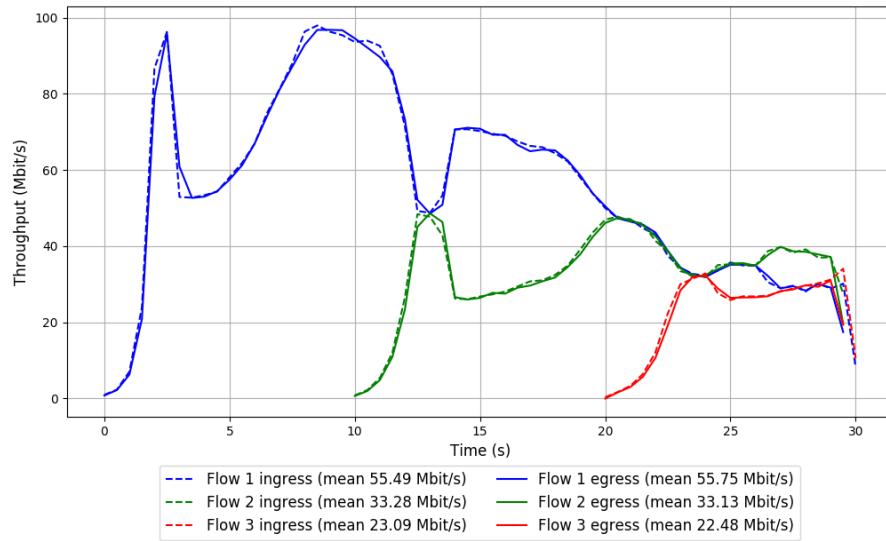


Run 4: Statistics of Vivace-LTE

```
Start at: 2018-03-21 01:09:07
End at: 2018-03-21 01:09:37
Local clock offset: 3.76 ms
Remote clock offset: -2.683 ms

# Below is generated by plot.py at 2018-03-21 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.02 Mbit/s
95th percentile per-packet one-way delay: 115.415 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 55.75 Mbit/s
95th percentile per-packet one-way delay: 113.528 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 116.034 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 22.48 Mbit/s
95th percentile per-packet one-way delay: 118.413 ms
Loss rate: 7.10%
```

Run 4: Report of Vivace-LTE — Data Link

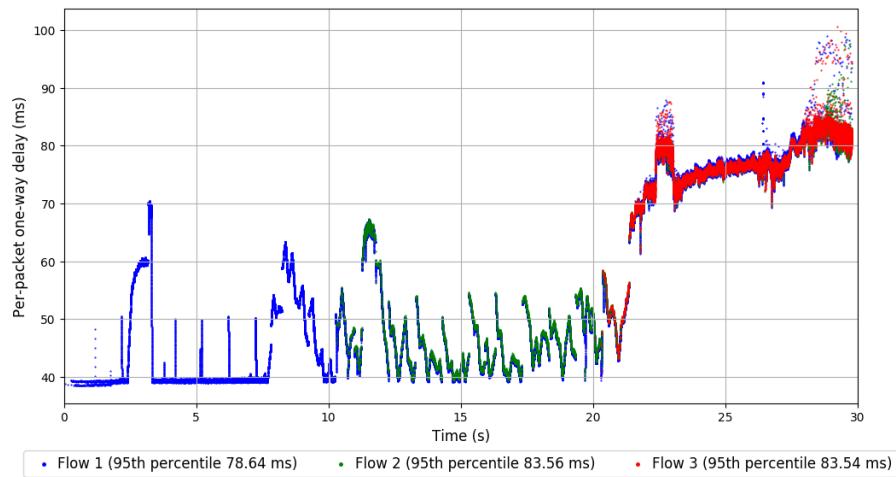
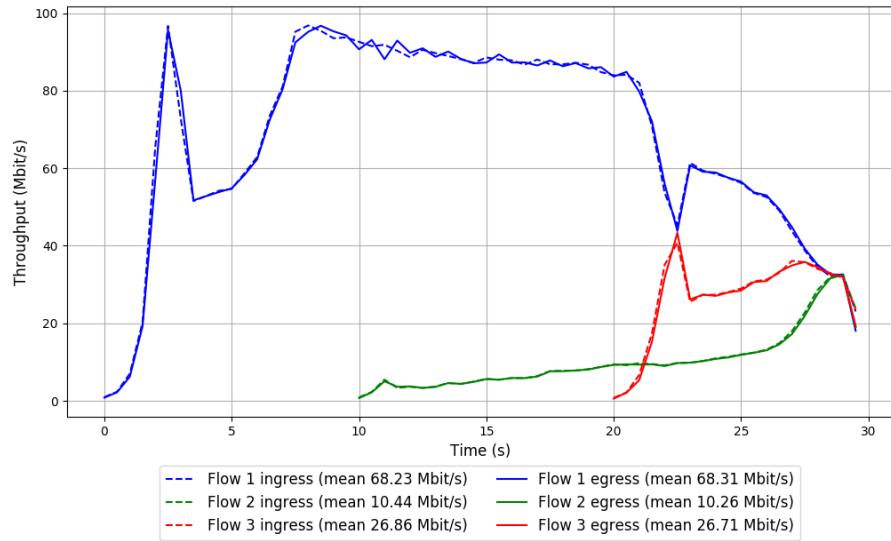


Run 5: Statistics of Vivace-LTE

```
Start at: 2018-03-21 01:31:54
End at: 2018-03-21 01:32:24
Local clock offset: -2.775 ms
Remote clock offset: -1.862 ms

# Below is generated by plot.py at 2018-03-21 07:50:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.85 Mbit/s
95th percentile per-packet one-way delay: 81.788 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 78.643 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 10.26 Mbit/s
95th percentile per-packet one-way delay: 83.557 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 83.538 ms
Loss rate: 1.92%
```

Run 5: Report of Vivace-LTE — Data Link

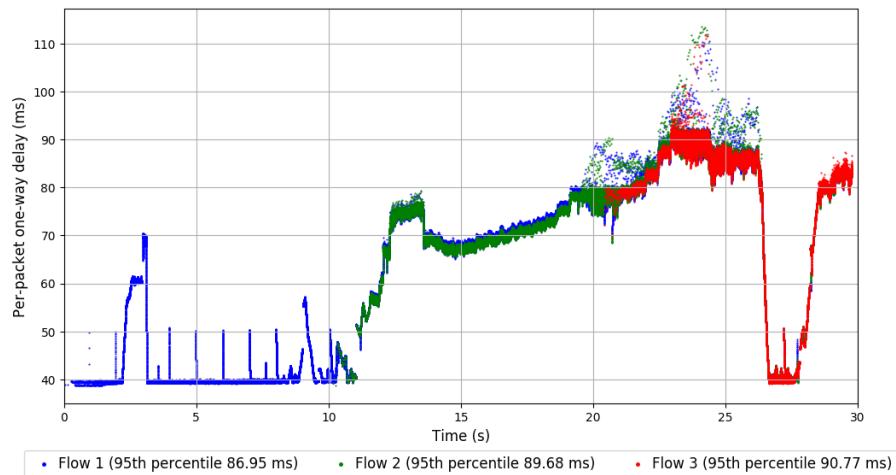
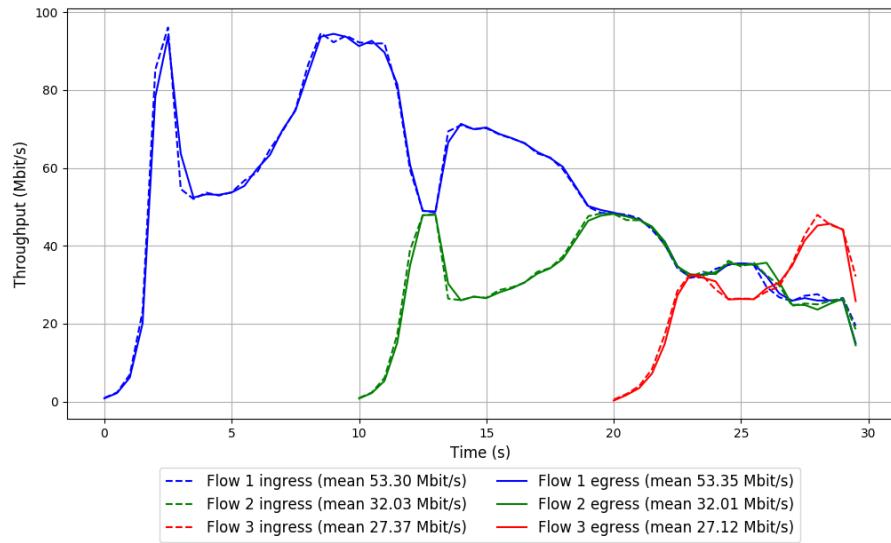


Run 6: Statistics of Vivace-LTE

```
Start at: 2018-03-21 01:54:40
End at: 2018-03-21 01:55:10
Local clock offset: 1.097 ms
Remote clock offset: -1.798 ms

# Below is generated by plot.py at 2018-03-21 07:50:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.40 Mbit/s
95th percentile per-packet one-way delay: 88.505 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 86.948 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 89.676 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 27.12 Mbit/s
95th percentile per-packet one-way delay: 90.767 ms
Loss rate: 2.53%
```

Run 6: Report of Vivace-LTE — Data Link

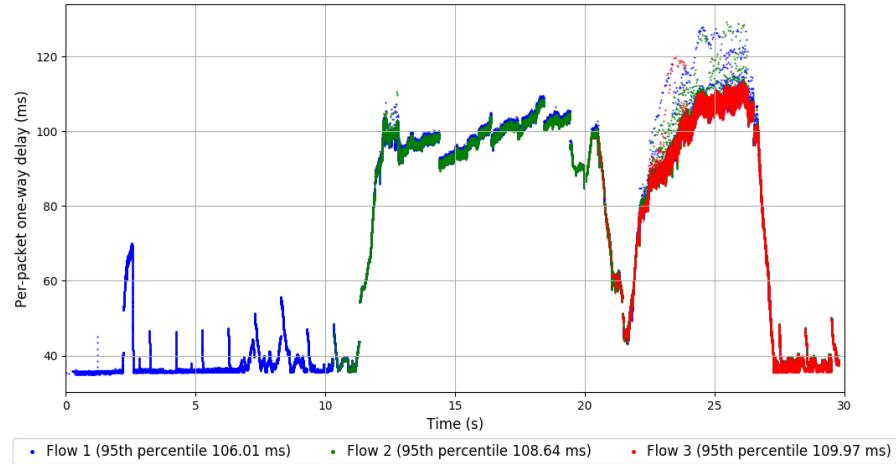
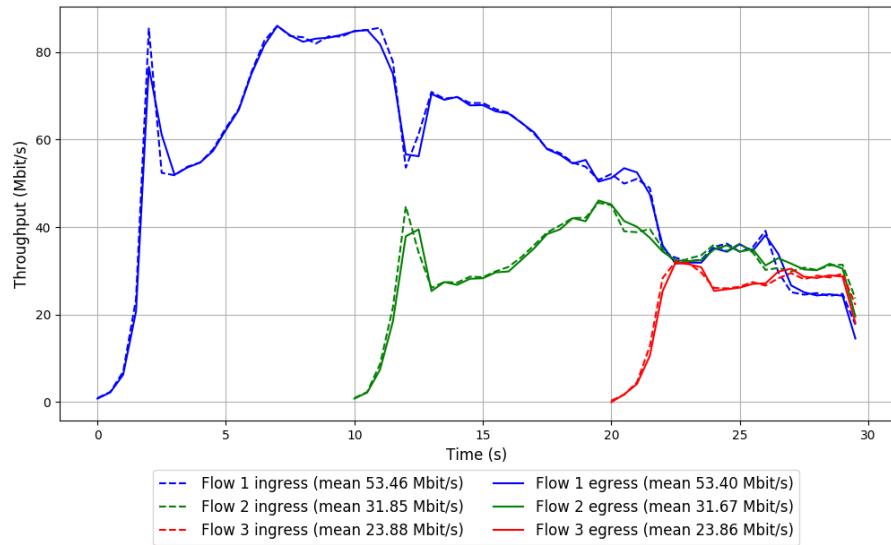


Run 7: Statistics of Vivace-LTE

```
Start at: 2018-03-21 02:17:38
End at: 2018-03-21 02:18:08
Local clock offset: -0.767 ms
Remote clock offset: 2.629 ms

# Below is generated by plot.py at 2018-03-21 07:50:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.16 Mbit/s
95th percentile per-packet one-way delay: 107.811 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 53.40 Mbit/s
95th percentile per-packet one-way delay: 106.013 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 108.644 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 109.967 ms
Loss rate: 1.67%
```

Run 7: Report of Vivace-LTE — Data Link

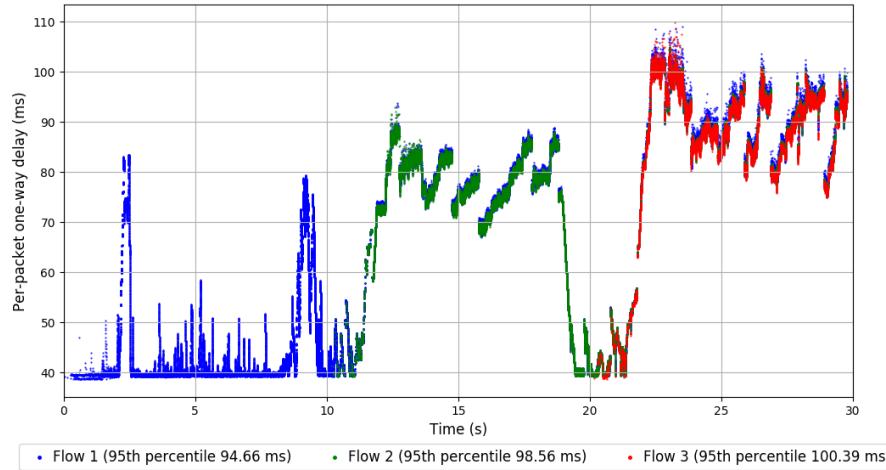
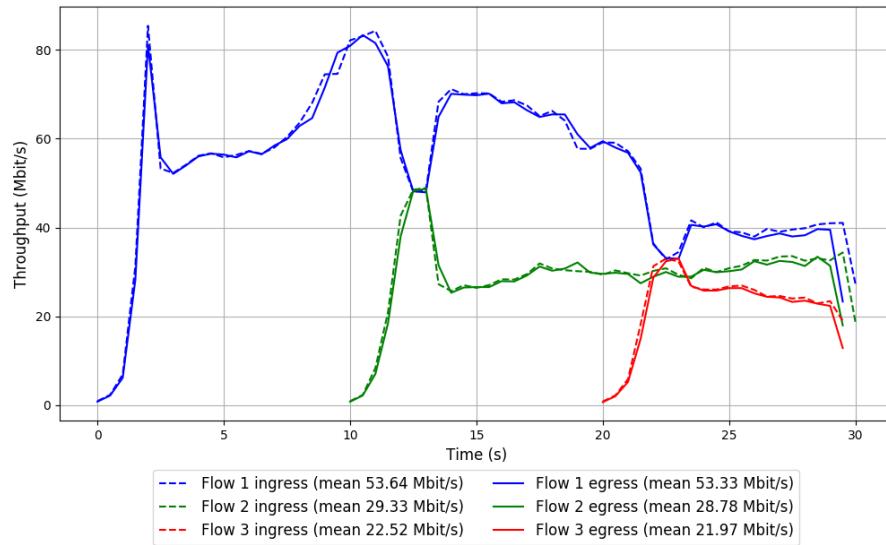


Run 8: Statistics of Vivace-LTE

```
Start at: 2018-03-21 02:40:22
End at: 2018-03-21 02:40:52
Local clock offset: -9.919 ms
Remote clock offset: -2.202 ms

# Below is generated by plot.py at 2018-03-21 07:50:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 96.780 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 94.655 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 98.559 ms
Loss rate: 4.49%
-- Flow 3:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 100.386 ms
Loss rate: 4.01%
```

Run 8: Report of Vivace-LTE — Data Link

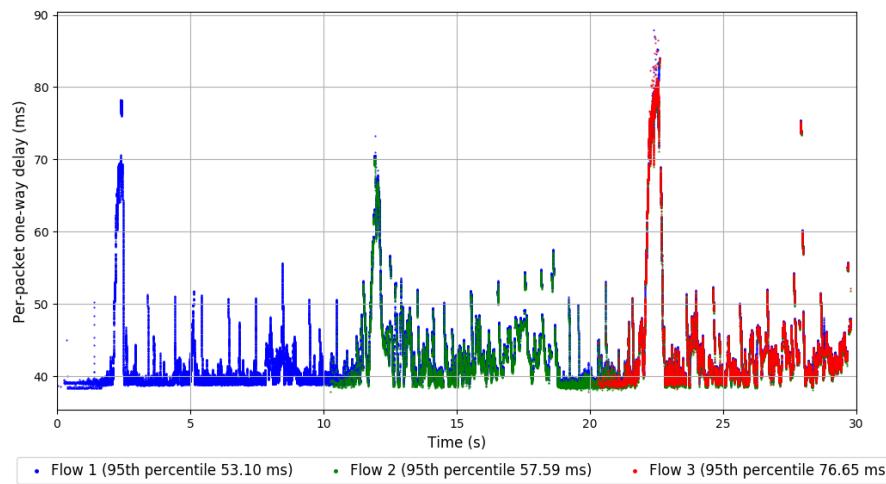
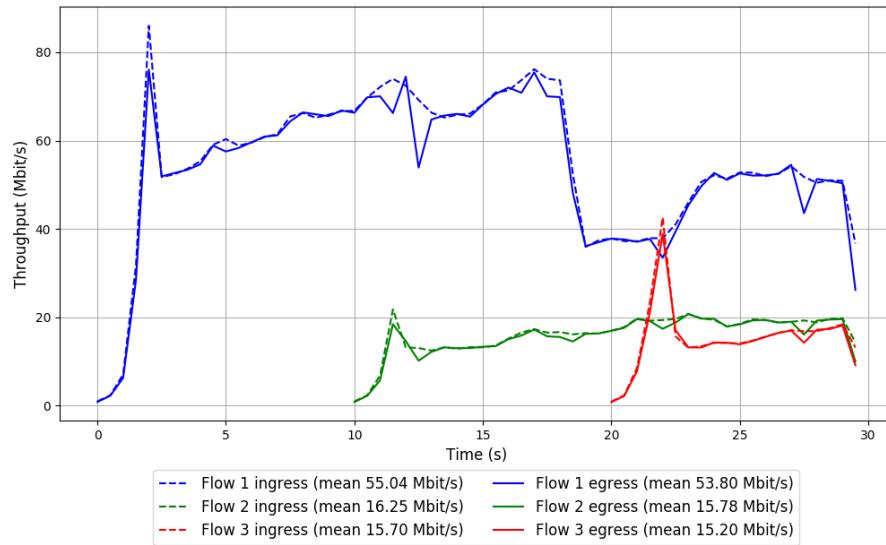


Run 9: Statistics of Vivace-LTE

```
Start at: 2018-03-21 03:03:47
End at: 2018-03-21 03:04:17
Local clock offset: 2.05 ms
Remote clock offset: -1.482 ms

# Below is generated by plot.py at 2018-03-21 07:51:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 55.942 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 53.80 Mbit/s
95th percentile per-packet one-way delay: 53.103 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 15.78 Mbit/s
95th percentile per-packet one-way delay: 57.587 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 76.650 ms
Loss rate: 4.16%
```

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

```
Start at: 2018-03-21 03:27:21
End at: 2018-03-21 03:27:51
Local clock offset: 7.374 ms
Remote clock offset: 0.195 ms

# Below is generated by plot.py at 2018-03-21 07:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.98 Mbit/s
95th percentile per-packet one-way delay: 82.844 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 82.739 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 83.301 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 78.341 ms
Loss rate: 3.85%
```

Run 10: Report of Vivace-LTE — Data Link

