Pantheon Report

Generated at 2018-03-13 22:46:19 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) →Colombia Ethernet (*remote*).

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.

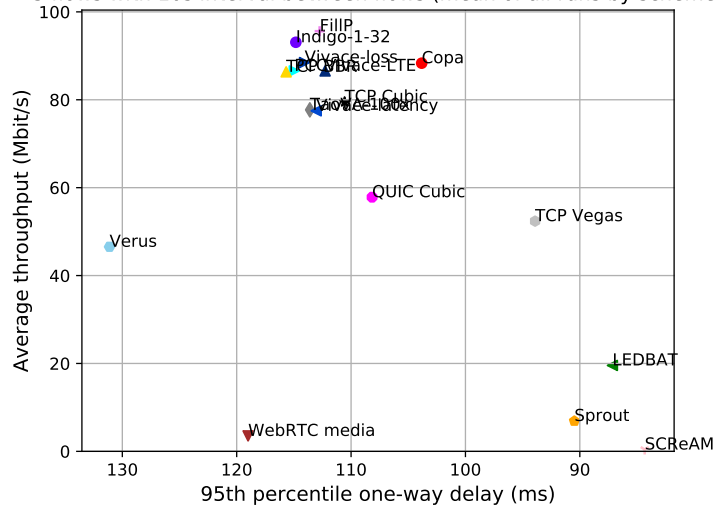Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

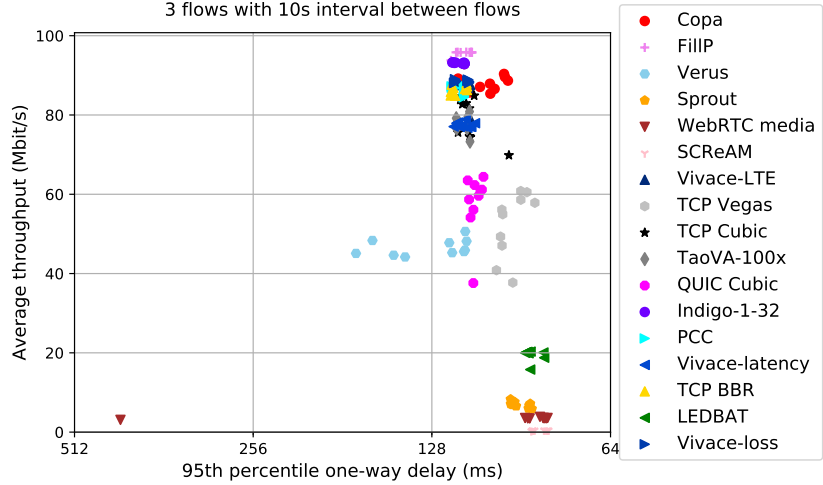NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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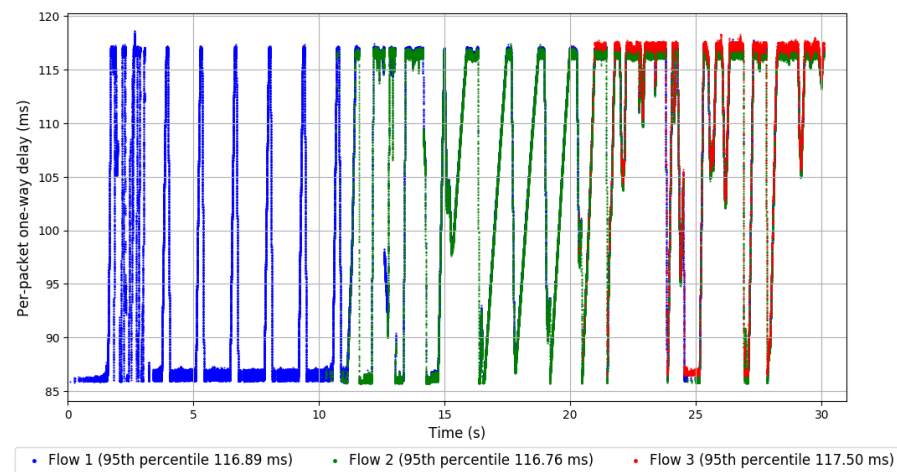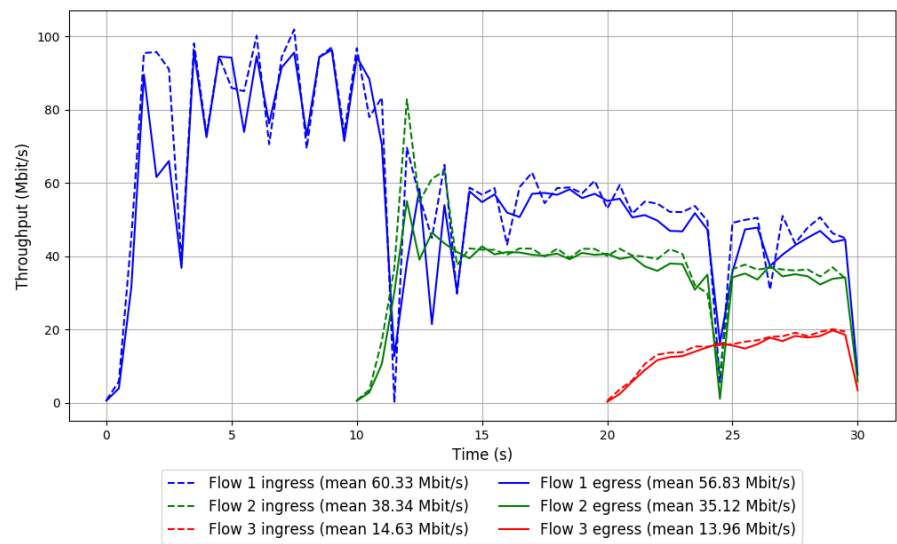3 flows with 10s interval between flows

2

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	53.77	37.57	22.80	115.51	115.57	115.85	6.95	9.78	10.34
TCP Cubic	10	47.50	38.37	19.48	109.24	111.57	112.21	0.40	0.75	0.82
LEDBAT	10	12.44	8.62	4.20	86.93	87.05	86.52	0.01	0.00	0.00
PCC	10	77.08	10.40	7.81	114.94	114.96	114.97	2.78	4.71	5.24
QUIC Cubic	10	37.44	23.54	14.68	108.91	105.75	103.79	0.90	0.89	3.71
SCReAM	10	0.21	0.21	0.22	84.10	84.30	84.07	0.00	0.06	0.00
WebRTC media	10	2.06	1.18	0.28	110.16	141.45	84.47	0.00	0.00	0.00
Sprout	10	3.76	3.30	2.89	90.38	90.29	89.98	0.00	0.00	0.00
TaoVA-100x	10	49.26	32.18	21.68	113.56	113.65	113.75	4.15	8.22	10.27
TCP Vegas	10	23.00	27.87	32.66	94.46	94.49	93.41	0.65	0.84	1.26
Verus	10	28.78	20.13	14.32	132.22	116.81	117.47	39.77	30.58	30.65
Copa	10	75.03	15.17	10.72	103.52	102.83	101.47	17.29	1.42	0.09
FillP	10	51.25	45.54	42.54	112.97	112.24	122.93	25.25	34.34	46.66
Indigo-1-32	10	63.23	24.10	43.33	114.59	114.56	114.90	15.40	34.39	60.81
Vivace-latency	10	64.07	15.31	9.81	113.02	112.59	111.66	0.28	0.53	0.49
Vivace-loss	10	81.90	7.96	3.90	114.07	113.95	113.82	2.96	3.46	4.54
Vivace-LTE	10	73.99	13.83	10.26	112.23	112.30	112.28	3.09	2.49	3.06

```
Run 1: Statistics of TCP BBR

Start at: 2018-03-13 18:19:46
End at: 2018-03-13 18:20:16
Local clock offset: -4.556 ms
Remote clock offset: -0.948 ms


# Below is generated by plot.py at 2018-03-13 22:21:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 116.932 ms
Loss rate: 6.37%
-- Flow 1:
Average throughput: 56.83 Mbit/s
95th percentile per-packet one-way delay: 116.885 ms
Loss rate: 5.71%
-- Flow 2:
Average throughput: 35.12 Mbit/s
95th percentile per-packet one-way delay: 116.759 ms
Loss rate: 8.25%
-- Flow 3:
Average throughput: 13.96 Mbit/s
95th percentile per-packet one-way delay: 117.495 ms
Loss rate: 4.63%
```
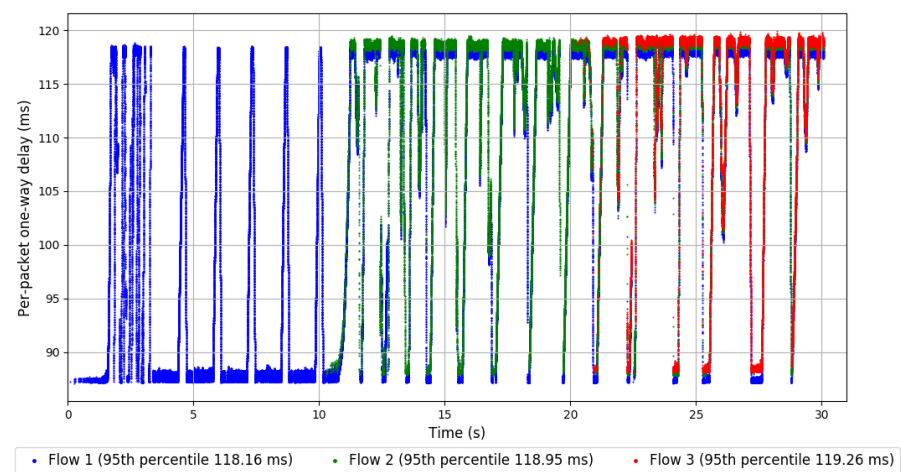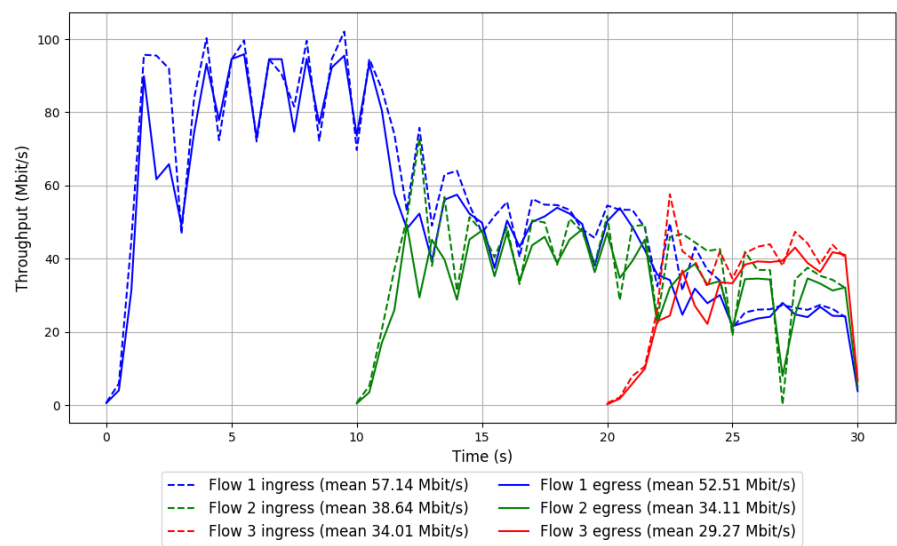
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 60.33 Mbit/s)   Flow 1 egress (mean 56.83 Mbit/s)
Flow 2 ingress (mean 38.34 Mbit/s)   Flow 2 egress (mean 35.12 Mbit/s)
Flow 3 ingress (mean 14.63 Mbit/s)   Flow 3 egress (mean 13.96 Mbit/s)

Flow 1 (95th percentile 116.89 ms)   Flow 2 (95th percentile 116.76 ms)   Flow 3 (95th percentile 117.50 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-03-13 18:43:31
End at: 2018-03-13 18:44:01
Local clock offset: -4.842 ms
Remote clock offset: 0.696 ms


# Below is generated by plot.py at 2018-03-13 22:21:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.92 Mbit/s
95th percentile per-packet one-way delay: 118.965 ms
Loss rate: 9.72%
-- Flow 1:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 118.160 ms
Loss rate: 8.02%
-- Flow 2:
Average throughput: 34.11 Mbit/s
95th percentile per-packet one-way delay: 118.951 ms
Loss rate: 11.65%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 119.257 ms
Loss rate: 13.93%
```
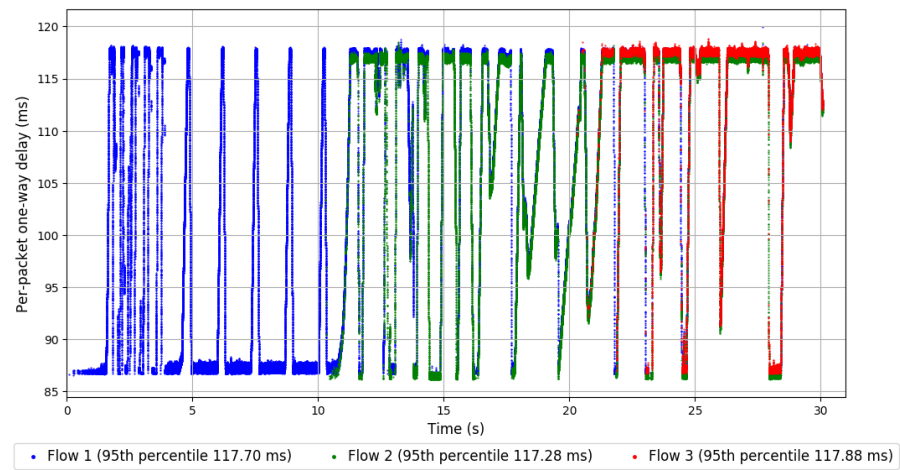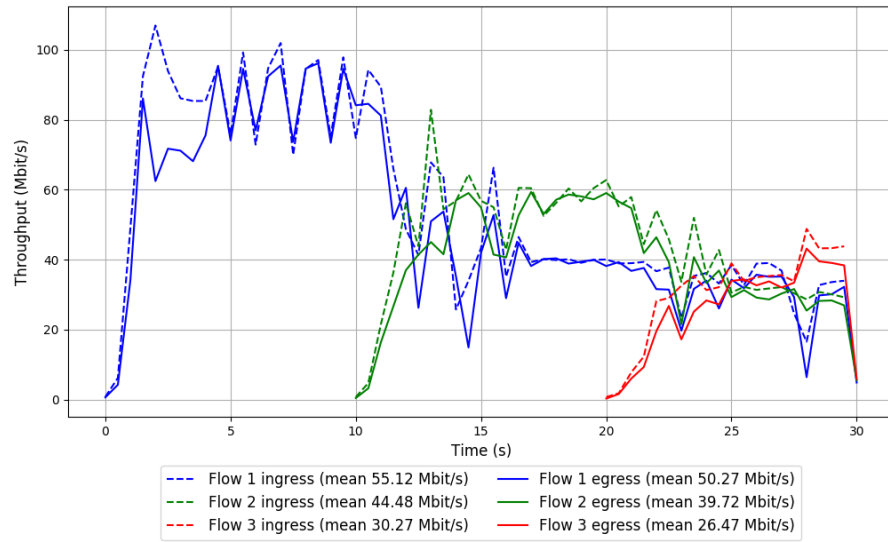
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 57.14 Mbit/s) --- Flow 1 egress (mean 52.51 Mbit/s)
Flow 2 ingress (mean 38.64 Mbit/s) --- Flow 2 egress (mean 34.11 Mbit/s)
Flow 3 ingress (mean 34.01 Mbit/s) --- Flow 3 egress (mean 29.27 Mbit/s)

Flow 1 (95th percentile 118.16 ms) • Flow 2 (95th percentile 118.95 ms) • Flow 3 (95th percentile 119.26 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-03-13 19:06:58
End at: 2018-03-13 19:07:28
Local clock offset: -6.108 ms
Remote clock offset: 0.025 ms


# Below is generated by plot.py at 2018-03-13 22:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 117.713 ms
Loss rate: 9.72%
-- Flow 1:
Average throughput: 50.27 Mbit/s
95th percentile per-packet one-way delay: 117.703 ms
Loss rate: 8.72%
-- Flow 2:
Average throughput: 39.72 Mbit/s
95th percentile per-packet one-way delay: 117.277 ms
Loss rate: 10.65%
-- Flow 3:
Average throughput: 26.47 Mbit/s
95th percentile per-packet one-way delay: 117.878 ms
Loss rate: 12.48%
```
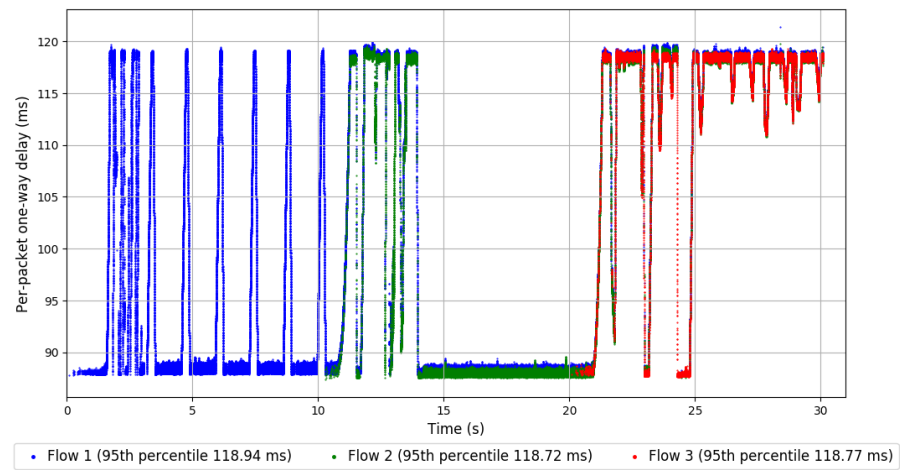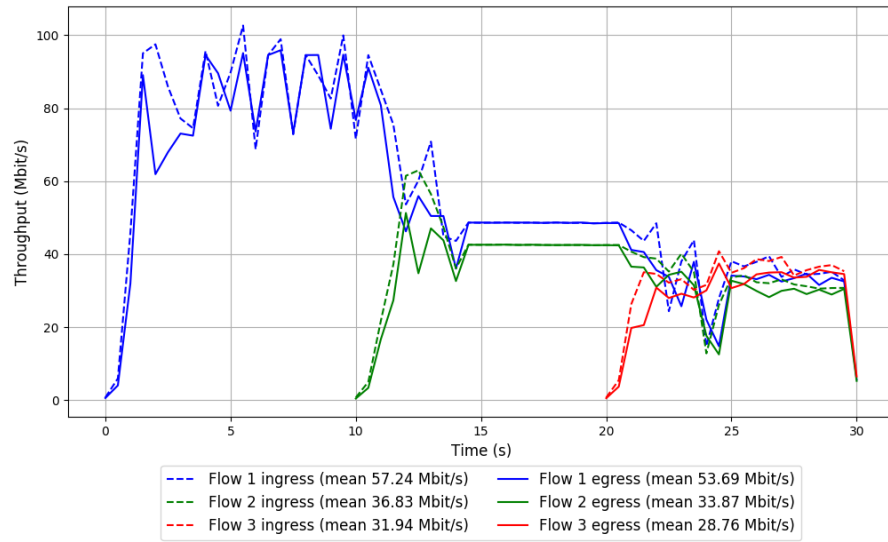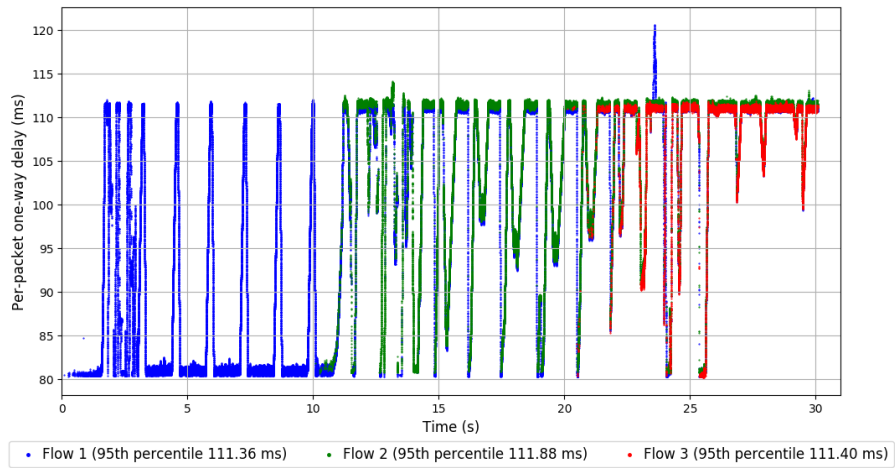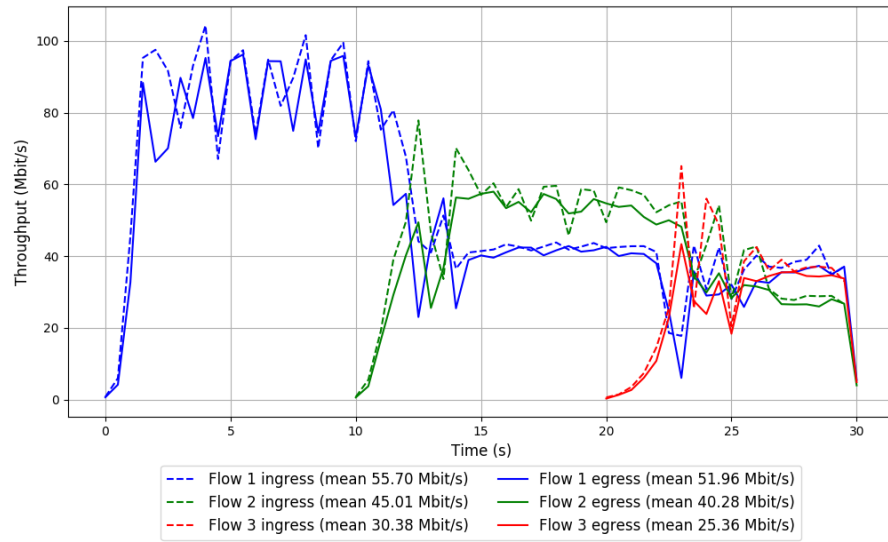
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.12 Mbit/s) --- Flow 1 egress (mean 50.27 Mbit/s)
Flow 2 ingress (mean 44.48 Mbit/s) --- Flow 2 egress (mean 39.72 Mbit/s)
Flow 3 ingress (mean 30.27 Mbit/s) --- Flow 3 egress (mean 26.47 Mbit/s)

Flow 1 (95th percentile 117.70 ms) • Flow 2 (95th percentile 117.28 ms) • Flow 3 (95th percentile 117.88 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2018-03-13 19:30:25
End at: 2018-03-13 19:30:55
Local clock offset: -2.382 ms
Remote clock offset: 1.055 ms


# Below is generated by plot.py at 2018-03-13 22:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.80 Mbit/s
95th percentile per-packet one-way delay: 118.882 ms
Loss rate: 7.02%
-- Flow 1:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 118.942 ms
Loss rate: 6.11%
-- Flow 2:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 118.721 ms
Loss rate: 8.01%
-- Flow 3:
Average throughput: 28.76 Mbit/s
95th percentile per-packet one-way delay: 118.768 ms
Loss rate: 9.67%
```
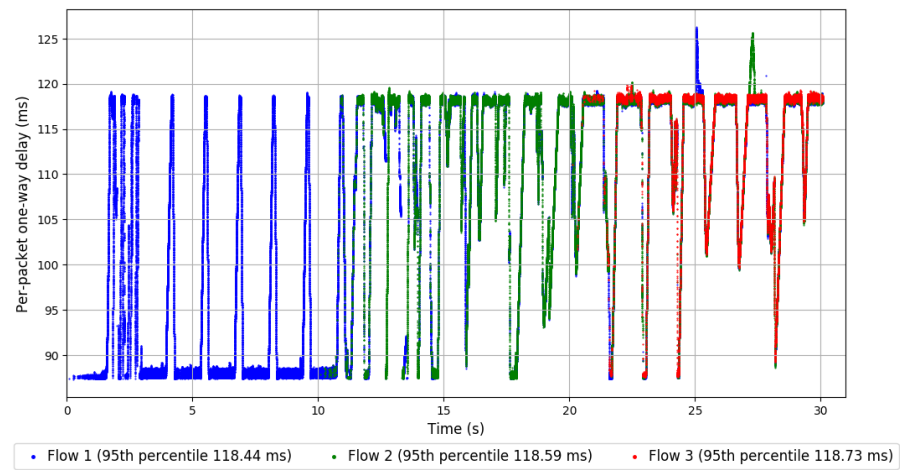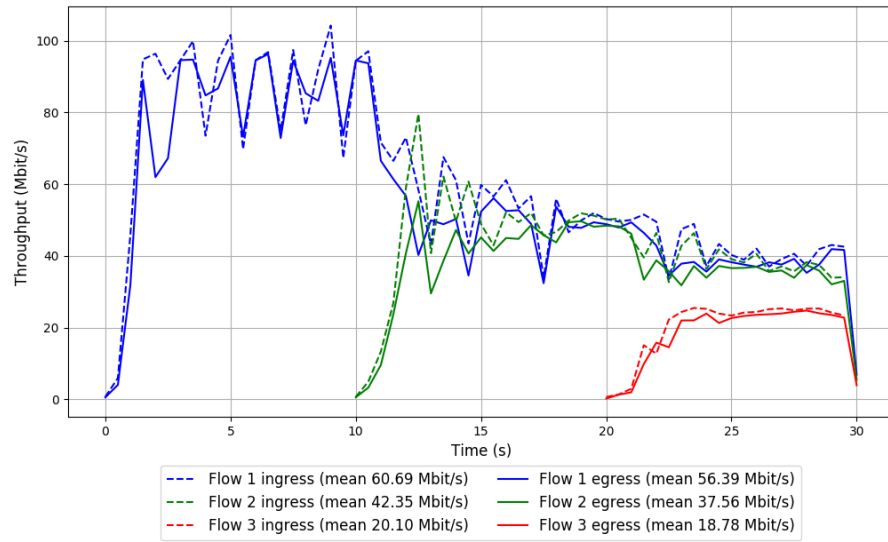
Run 4: Report of TCP BBR — Data Link

- Flow 1 ingress (mean 57.24 Mbit/s)   — Flow 1 egress (mean 53.69 Mbit/s)
- Flow 2 ingress (mean 36.83 Mbit/s)   — Flow 2 egress (mean 33.87 Mbit/s)
- Flow 3 ingress (mean 31.94 Mbit/s)   — Flow 3 egress (mean 28.76 Mbit/s)

- Flow 1 (95th percentile 118.94 ms)   • Flow 2 (95th percentile 118.72 ms)   • Flow 3 (95th percentile 118.77 ms)

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```
Run 5: Statistics of TCP BBR

Start at: 2018-03-13 19:53:51
End at: 2018-03-13 19:54:21
Local clock offset: -3.471 ms
Remote clock offset: -5.785 ms


# Below is generated by plot.py at 2018-03-13 22:21:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.20 Mbit/s
95th percentile per-packet one-way delay: 111.719 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 111.356 ms
Loss rate: 6.63%
-- Flow 2:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 111.877 ms
Loss rate: 10.36%
-- Flow 3:
Average throughput: 25.36 Mbit/s
95th percentile per-packet one-way delay: 111.397 ms
Loss rate: 16.50%
```
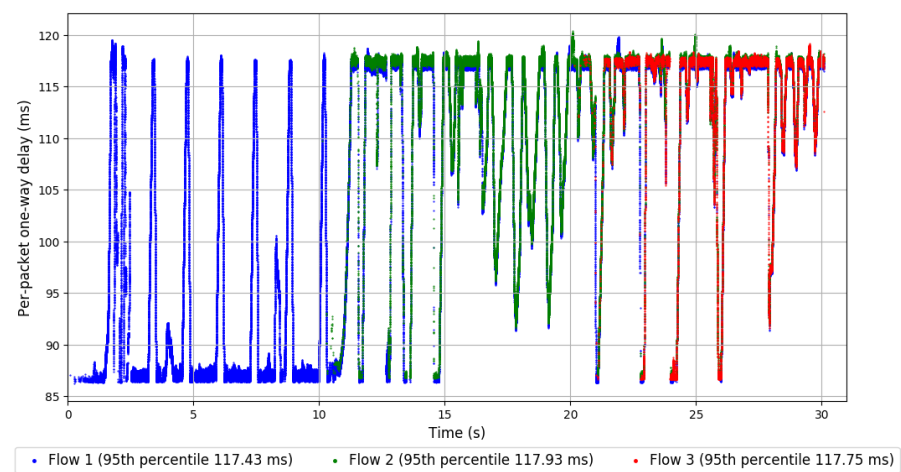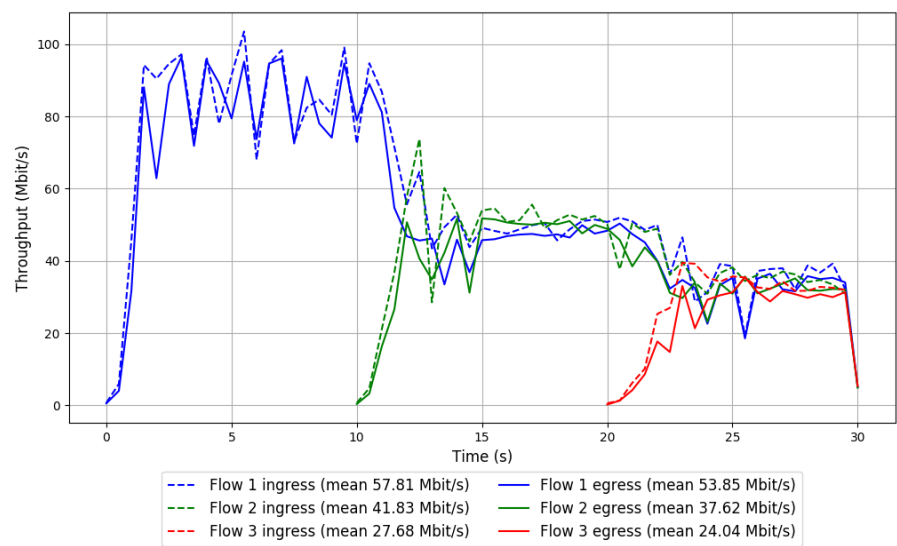
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2018-03-13 20:17:30
End at: 2018-03-13 20:18:00
Local clock offset: -5.563 ms
Remote clock offset: 0.654 ms

# Below is generated by plot.py at 2018-03-13 22:21:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 118.536 ms
Loss rate: 8.19%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 118.441 ms
Loss rate: 6.99%
-- Flow 2:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 118.586 ms
Loss rate: 11.18%
-- Flow 3:
Average throughput: 18.78 Mbit/s
95th percentile per-packet one-way delay: 118.727 ms
Loss rate: 6.51%
```
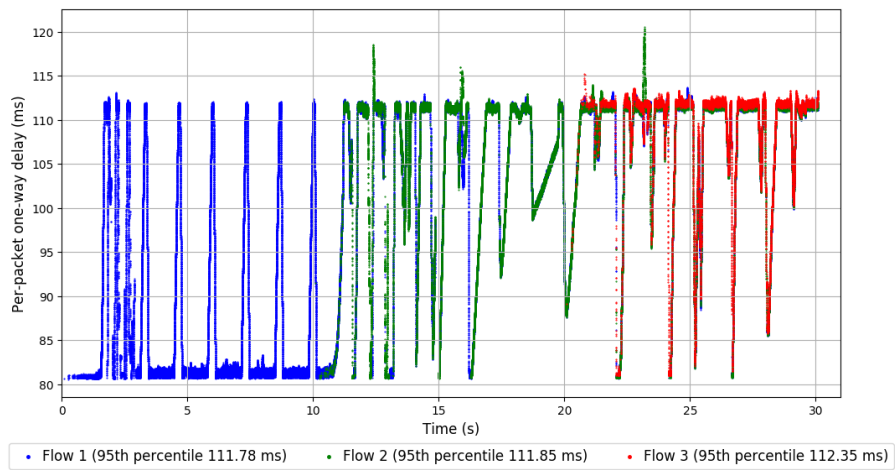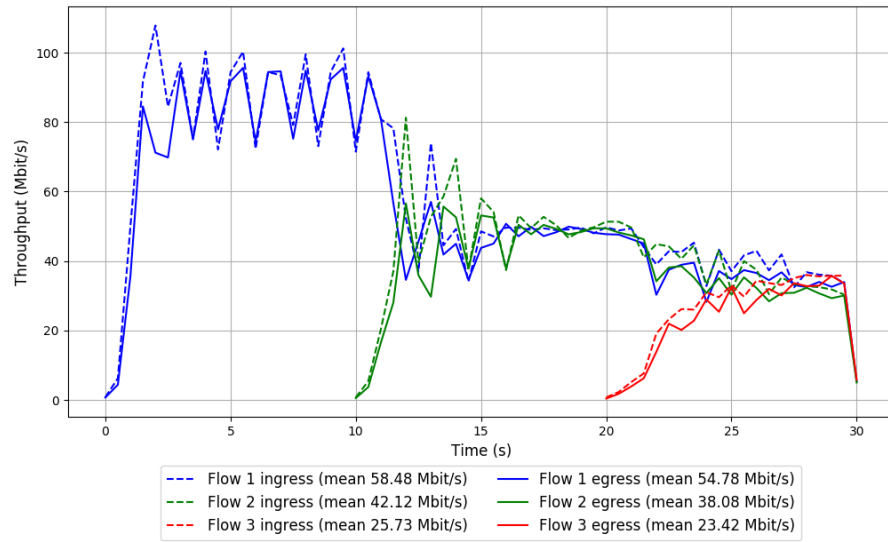
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 60.69 Mbit/s)　　Flow 1 egress (mean 56.39 Mbit/s)
Flow 2 ingress (mean 42.35 Mbit/s)　　Flow 2 egress (mean 37.56 Mbit/s)
Flow 3 ingress (mean 20.10 Mbit/s)　　Flow 3 egress (mean 18.78 Mbit/s)

Flow 1 (95th percentile 118.44 ms)　　Flow 2 (95th percentile 118.59 ms)　　Flow 3 (95th percentile 118.73 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-03-13 20:40:57
End at: 2018-03-13 20:41:27
Local clock offset: -5.658 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2018-03-13 22:21:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.85 Mbit/s
95th percentile per-packet one-way delay: 117.787 ms
Loss rate: 8.33%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 117.430 ms
Loss rate: 6.75%
-- Flow 2:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: 117.933 ms
Loss rate: 10.02%
-- Flow 3:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 117.754 ms
Loss rate: 13.17%
```
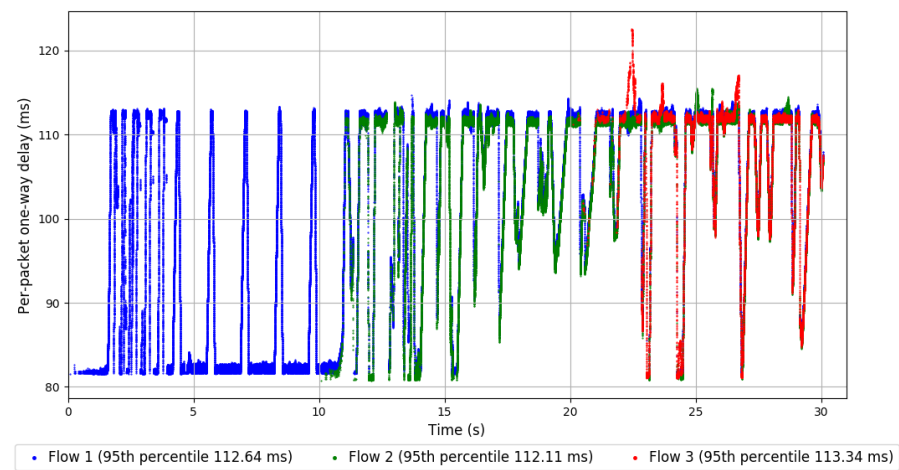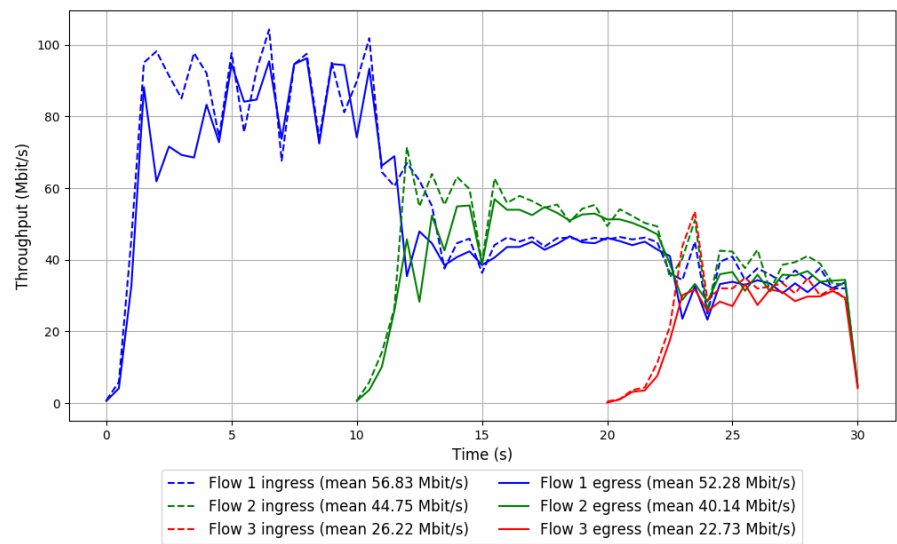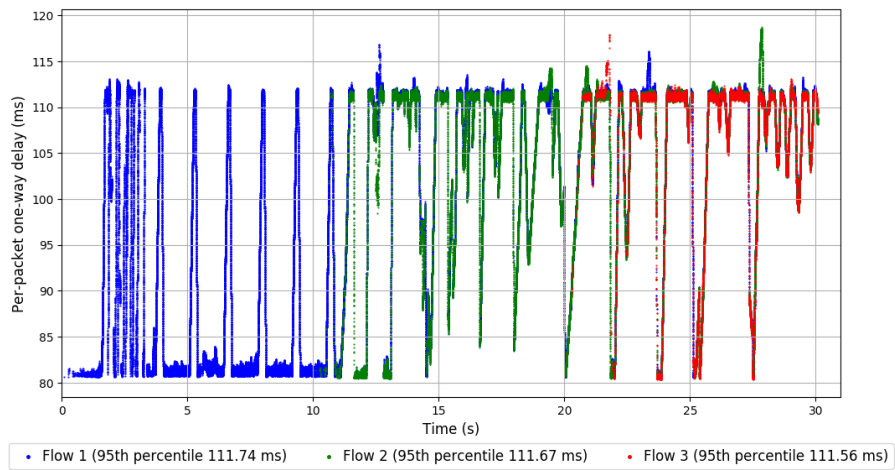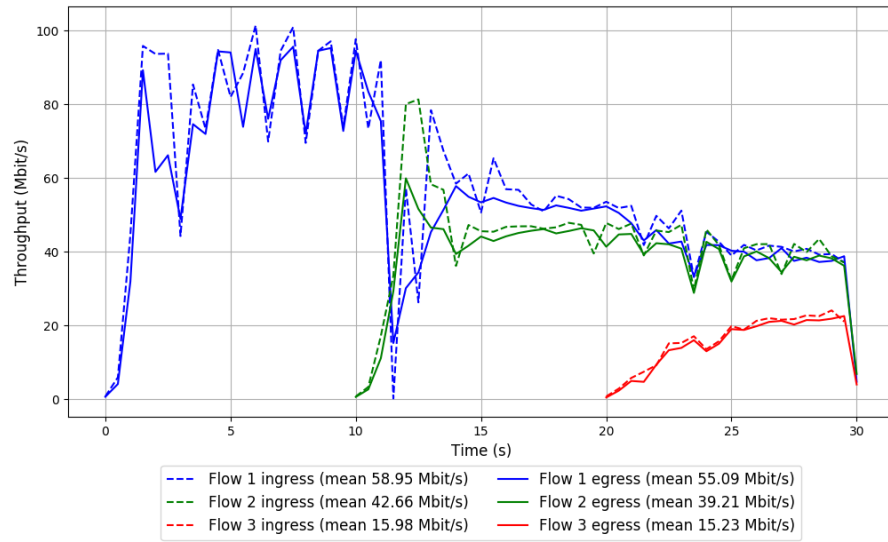
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 57.81 Mbit/s) --- Flow 1 egress (mean 53.85 Mbit/s)
Flow 2 ingress (mean 41.83 Mbit/s) --- Flow 2 egress (mean 37.62 Mbit/s)
Flow 3 ingress (mean 27.68 Mbit/s) --- Flow 3 egress (mean 24.04 Mbit/s)

Flow 1 (95th percentile 117.43 ms)   Flow 2 (95th percentile 117.93 ms)   Flow 3 (95th percentile 117.75 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-03-13 21:04:24
End at: 2018-03-13 21:04:54
Local clock offset: -3.622 ms
Remote clock offset: -5.503 ms


# Below is generated by plot.py at 2018-03-13 22:21:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.93 Mbit/s
95th percentile per-packet one-way delay: 111.917 ms
Loss rate: 7.42%
-- Flow 1:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 111.778 ms
Loss rate: 6.23%
-- Flow 2:
Average throughput: 38.08 Mbit/s
95th percentile per-packet one-way delay: 111.854 ms
Loss rate: 9.50%
-- Flow 3:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 112.346 ms
Loss rate: 8.76%
```

Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 58.48 Mbit/s) --- Flow 1 egress (mean 54.78 Mbit/s)
Flow 2 ingress (mean 42.12 Mbit/s) --- Flow 2 egress (mean 38.08 Mbit/s)
Flow 3 ingress (mean 25.73 Mbit/s) --- Flow 3 egress (mean 23.42 Mbit/s)

Flow 1 (95th percentile 111.78 ms)   Flow 2 (95th percentile 111.85 ms)   Flow 3 (95th percentile 112.35 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2018-03-13 21:28:05
End at: 2018-03-13 21:28:35
Local clock offset: -1.896 ms
Remote clock offset: -5.684 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.57 Mbit/s
95th percentile per-packet one-way delay: 112.602 ms
Loss rate: 9.13%
-- Flow 1:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 112.636 ms
Loss rate: 7.92%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 112.107 ms
Loss rate: 10.19%
-- Flow 3:
Average throughput: 22.73 Mbit/s
95th percentile per-packet one-way delay: 113.342 ms
Loss rate: 13.34%
```
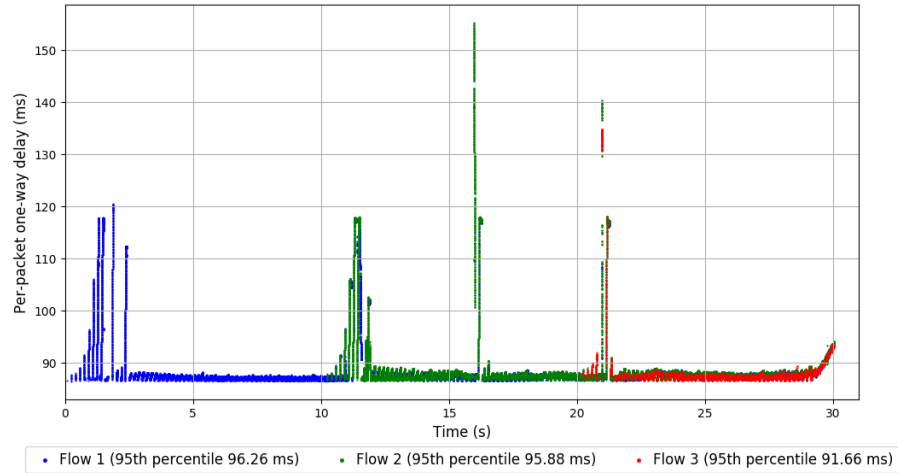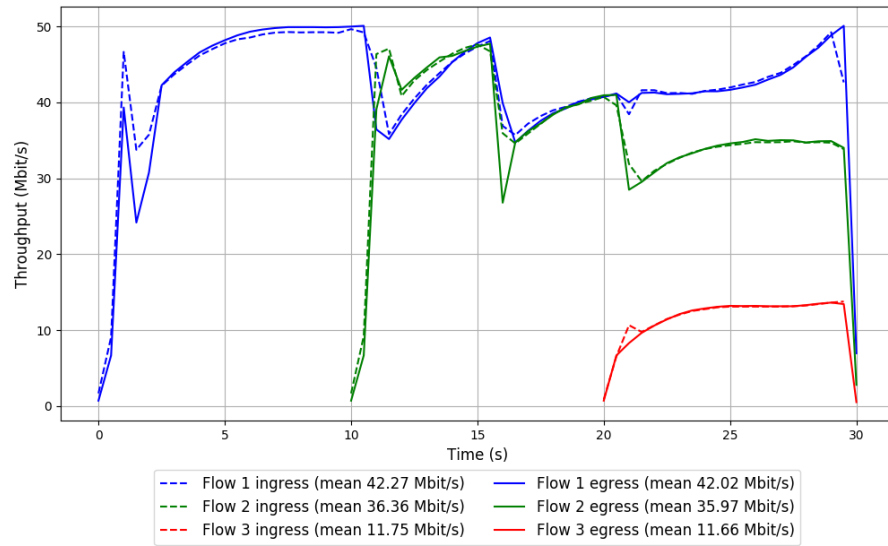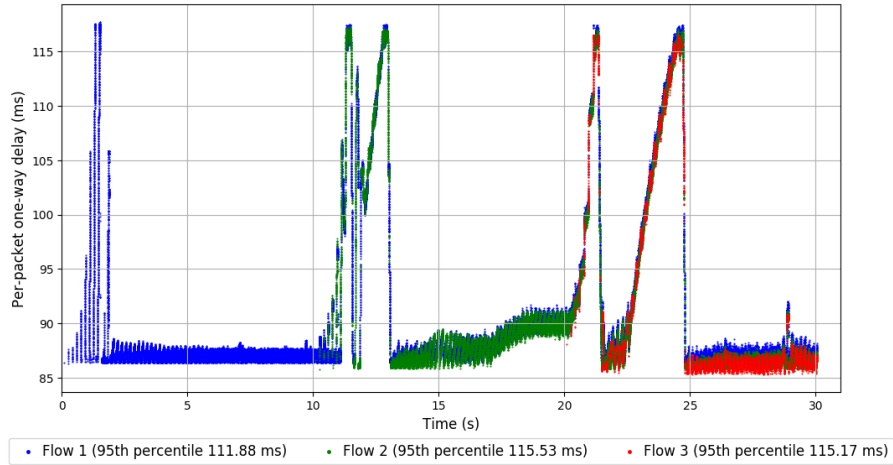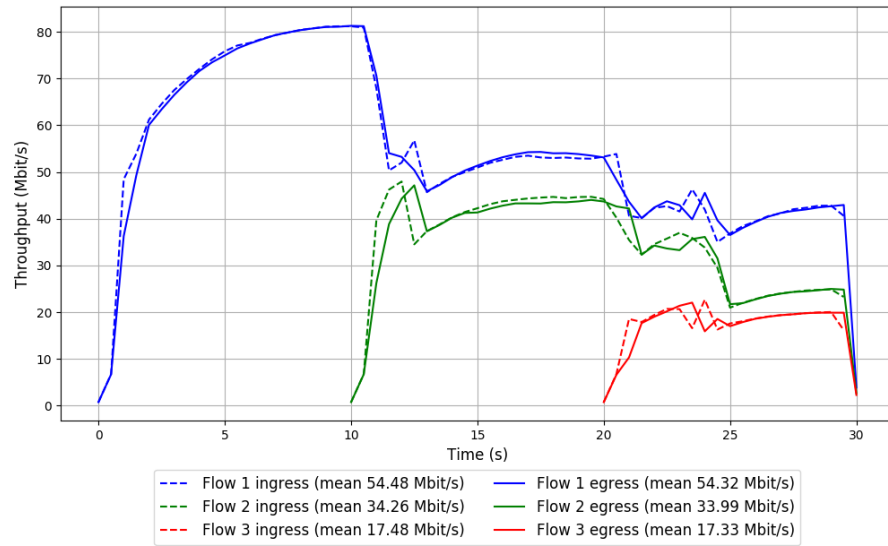
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-03-13 21:51:35
End at: 2018-03-13 21:52:05
Local clock offset: -6.987 ms
Remote clock offset: -5.696 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.28 Mbit/s
95th percentile per-packet one-way delay: 111.720 ms
Loss rate: 6.80%
-- Flow 1:
Average throughput: 55.09 Mbit/s
95th percentile per-packet one-way delay: 111.736 ms
Loss rate: 6.46%
-- Flow 2:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 111.675 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 15.23 Mbit/s
95th percentile per-packet one-way delay: 111.565 ms
Loss rate: 4.45%
```
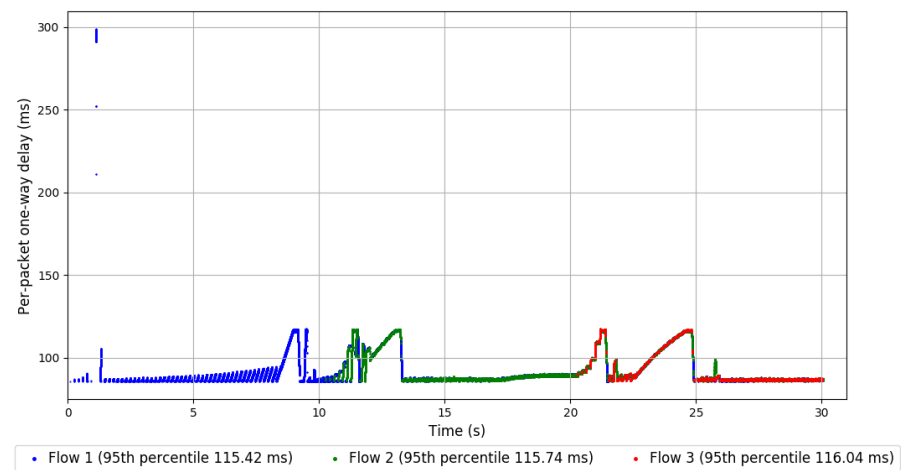
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 58.95 Mbit/s) --- Flow 1 egress (mean 55.09 Mbit/s)
Flow 2 ingress (mean 42.66 Mbit/s) --- Flow 2 egress (mean 39.21 Mbit/s)
Flow 3 ingress (mean 15.98 Mbit/s) --- Flow 3 egress (mean 15.23 Mbit/s)

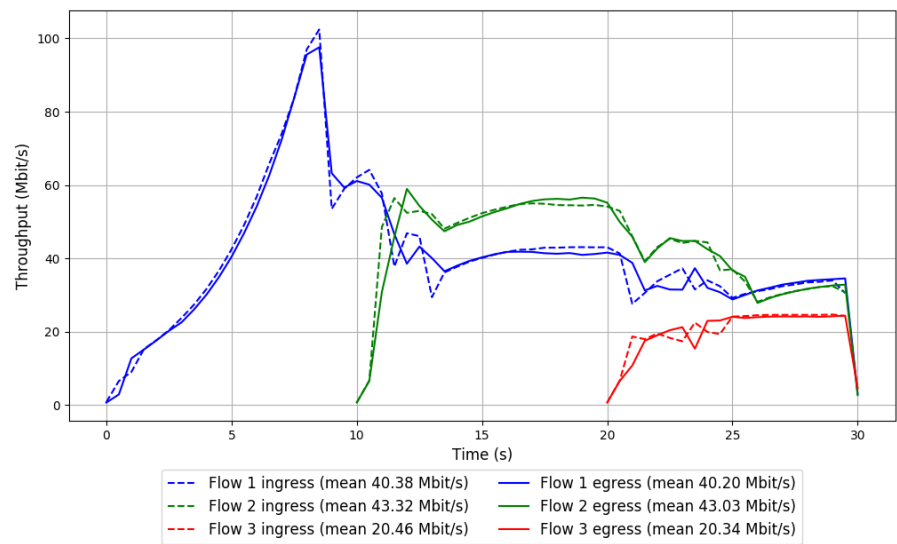Flow 1 (95th percentile 111.74 ms) • Flow 2 (95th percentile 111.67 ms) • Flow 3 (95th percentile 111.56 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2018-03-13 18:21:05
End at: 2018-03-13 18:21:35
Local clock offset: -4.491 ms
Remote clock offset: -0.01 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.85 Mbit/s
95th percentile per-packet one-way delay: 94.922 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 42.02 Mbit/s
95th percentile per-packet one-way delay: 96.256 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 95.883 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 91.661 ms
Loss rate: 0.70%
```
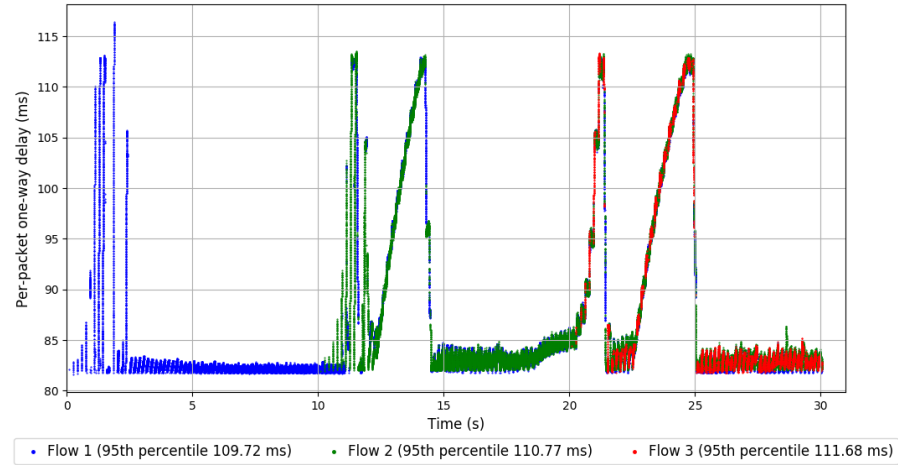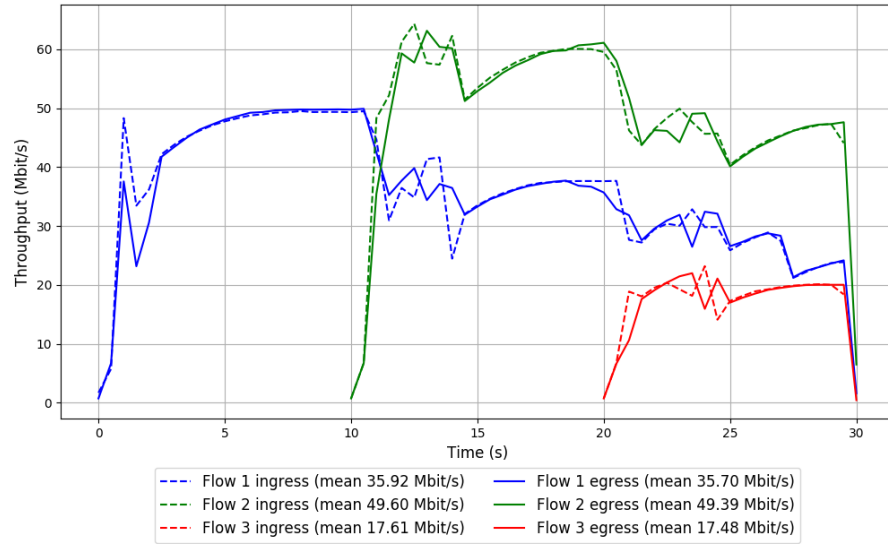
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-03-13 18:44:50
End at: 2018-03-13 18:45:20
Local clock offset: -4.983 ms
Remote clock offset: -1.145 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.73 Mbit/s
95th percentile per-packet one-way delay: 113.698 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 54.32 Mbit/s
95th percentile per-packet one-way delay: 111.884 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 115.535 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 17.33 Mbit/s
95th percentile per-packet one-way delay: 115.171 ms
Loss rate: 0.83%
```

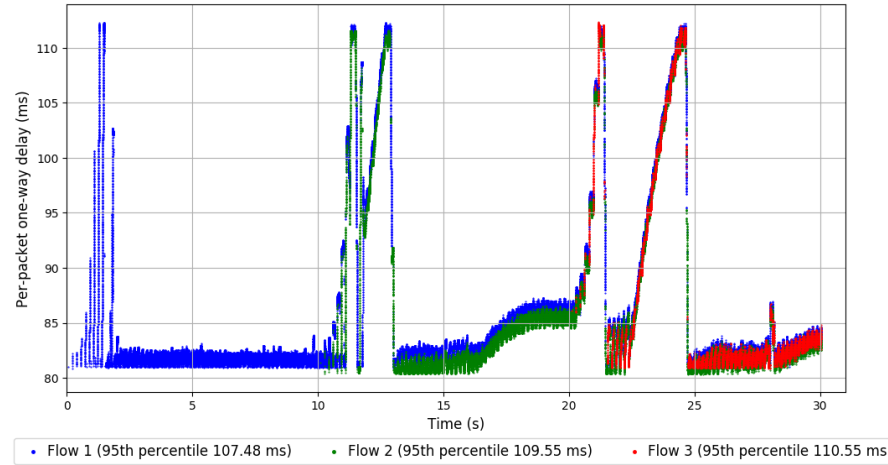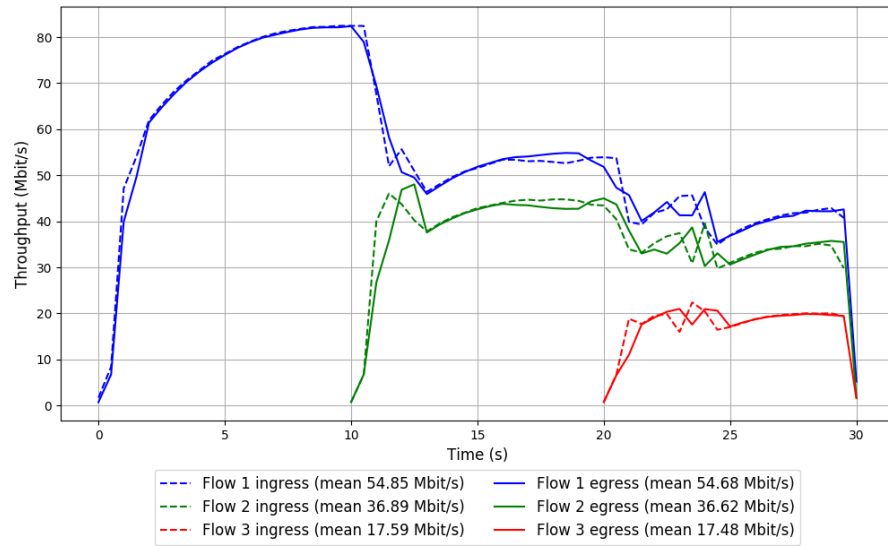Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-03-13 19:08:17
End at: 2018-03-13 19:08:47
Local clock offset: -6.127 ms
Remote clock offset: -0.803 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.59 Mbit/s
95th percentile per-packet one-way delay: 115.635 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 115.423 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 43.03 Mbit/s
95th percentile per-packet one-way delay: 115.744 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 20.34 Mbit/s
95th percentile per-packet one-way delay: 116.037 ms
Loss rate: 0.62%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 40.38 Mbit/s) --- Flow 1 egress (mean 40.20 Mbit/s)
Flow 2 ingress (mean 43.32 Mbit/s) --- Flow 2 egress (mean 43.03 Mbit/s)
Flow 3 ingress (mean 20.46 Mbit/s) --- Flow 3 egress (mean 20.34 Mbit/s)

Flow 1 (95th percentile 115.42 ms) Flow 2 (95th percentile 115.74 ms) Flow 3 (95th percentile 116.04 ms)
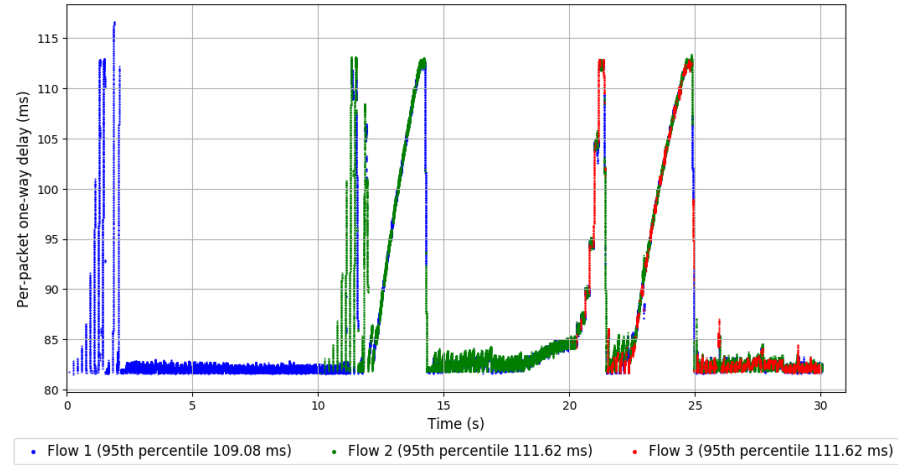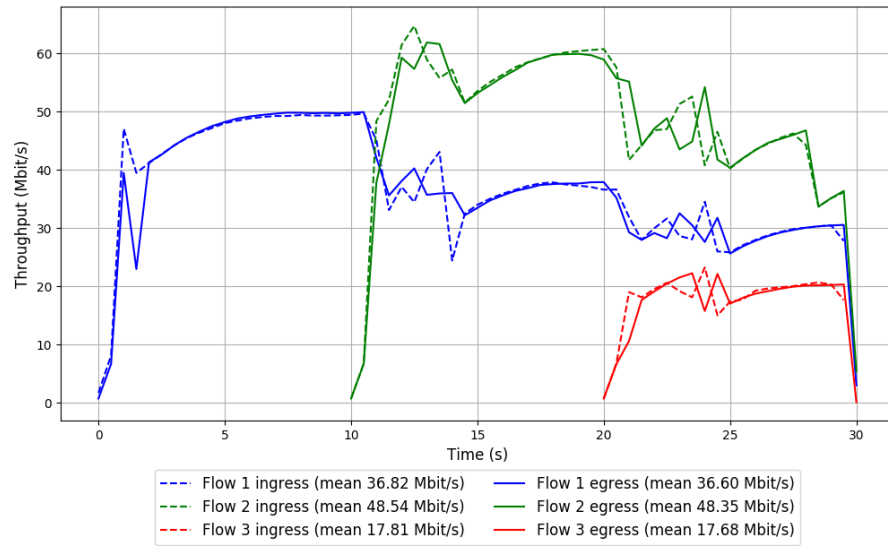
```
Run 4: Statistics of TCP Cubic

Start at: 2018-03-13 19:31:44
End at: 2018-03-13 19:32:14
Local clock offset: -2.236 ms
Remote clock offset: -4.853 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.39 Mbit/s
95th percentile per-packet one-way delay: 110.298 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 109.715 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 110.771 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 111.679 ms
Loss rate: 0.80%
```

Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-03-13 19:55:10
End at: 2018-03-13 19:55:40
Local clock offset: -3.824 ms
Remote clock offset: -5.786 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 108.624 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 54.68 Mbit/s
95th percentile per-packet one-way delay: 107.483 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 109.545 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 110.553 ms
Loss rate: 0.66%
```
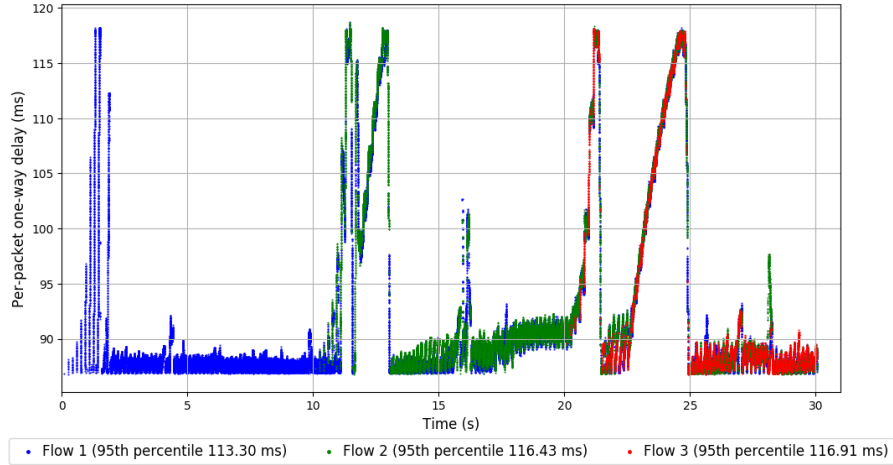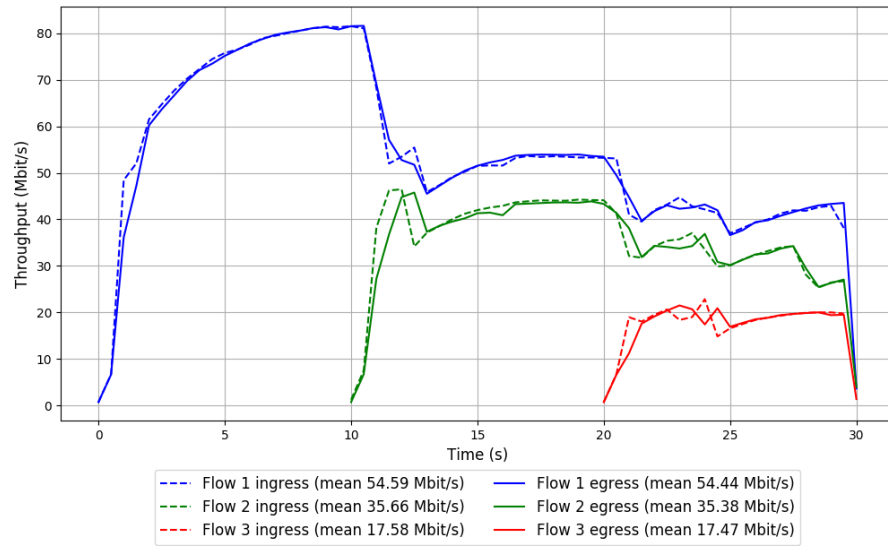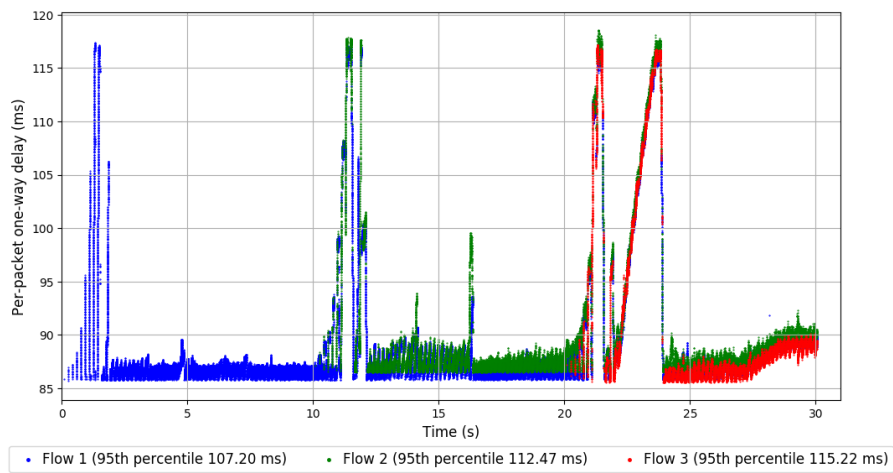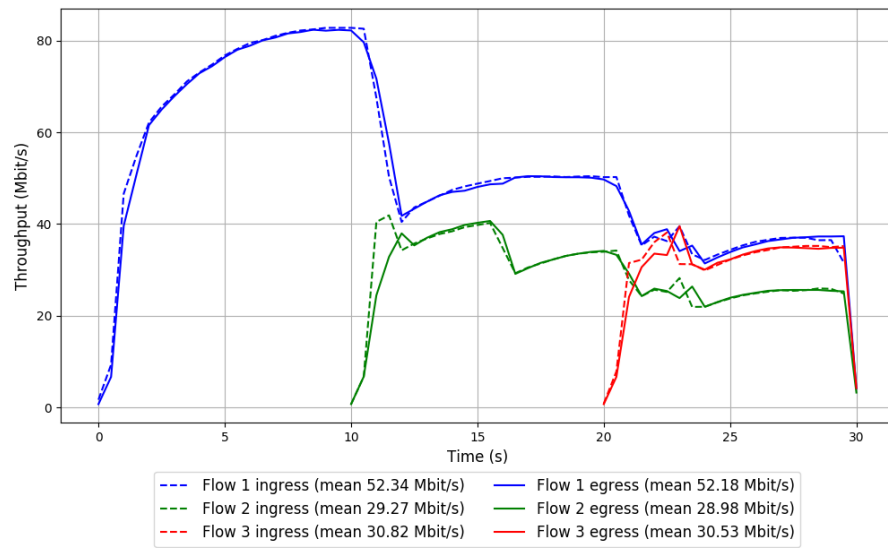
Run 5: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 54.85 Mbit/s) —— Flow 1 egress (mean 54.68 Mbit/s)
- - - Flow 2 ingress (mean 36.89 Mbit/s) —— Flow 2 egress (mean 36.62 Mbit/s)
- - - Flow 3 ingress (mean 17.59 Mbit/s) —— Flow 3 egress (mean 17.48 Mbit/s)

• Flow 1 (95th percentile 107.48 ms)   • Flow 2 (95th percentile 109.55 ms)   • Flow 3 (95th percentile 110.55 ms)

33

```
Run 6: Statistics of TCP Cubic

Start at: 2018-03-13 20:18:49
End at: 2018-03-13 20:19:19
Local clock offset: -5.604 ms
Remote clock offset: -5.184 ms


# Below is generated by plot.py at 2018-03-13 22:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.64 Mbit/s
95th percentile per-packet one-way delay: 110.561 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 109.077 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 48.35 Mbit/s
95th percentile per-packet one-way delay: 111.623 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 17.68 Mbit/s
95th percentile per-packet one-way delay: 111.623 ms
Loss rate: 0.79%
```

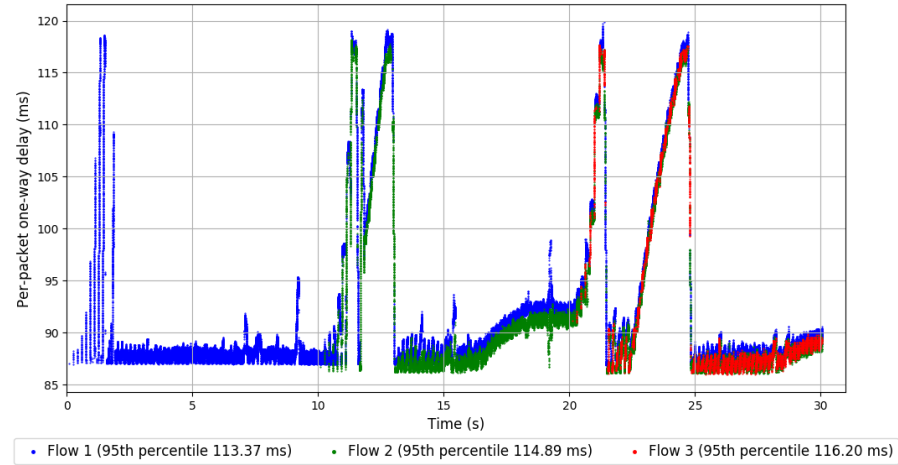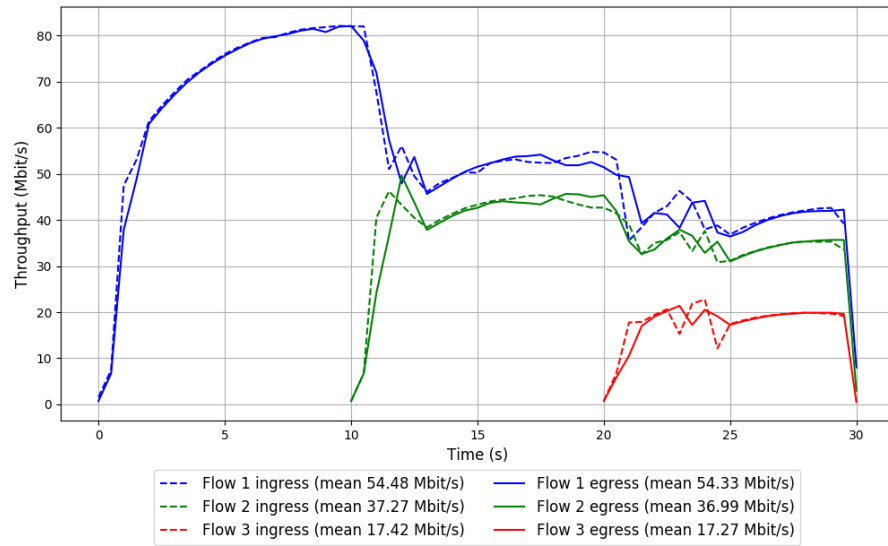Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-03-13 20:42:16
End at: 2018-03-13 20:42:46
Local clock offset: -5.697 ms
Remote clock offset: 0.005 ms


# Below is generated by plot.py at 2018-03-13 22:24:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.80 Mbit/s
95th percentile per-packet one-way delay: 114.673 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 113.300 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 116.434 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 116.905 ms
Loss rate: 0.62%
```

Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-03-13 21:05:43
End at: 2018-03-13 21:06:13
Local clock offset: -3.432 ms
Remote clock offset: -0.683 ms


# Below is generated by plot.py at 2018-03-13 22:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.64 Mbit/s
95th percentile per-packet one-way delay: 110.681 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 107.204 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 112.465 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 115.217 ms
Loss rate: 0.93%
```
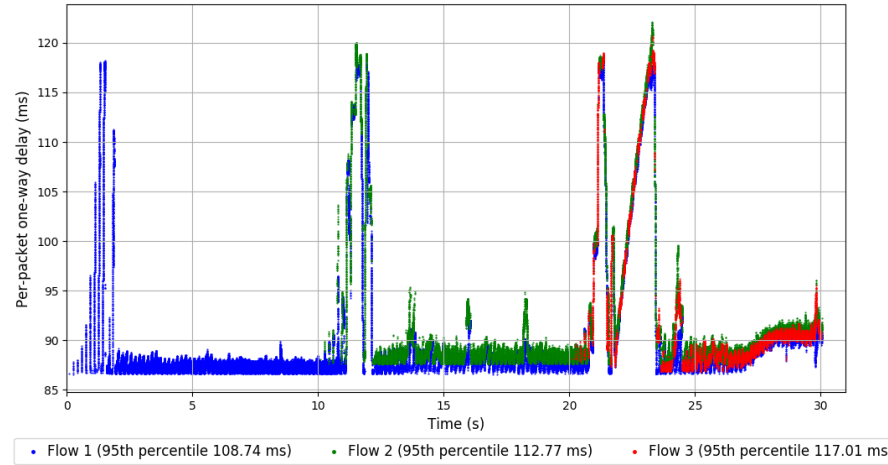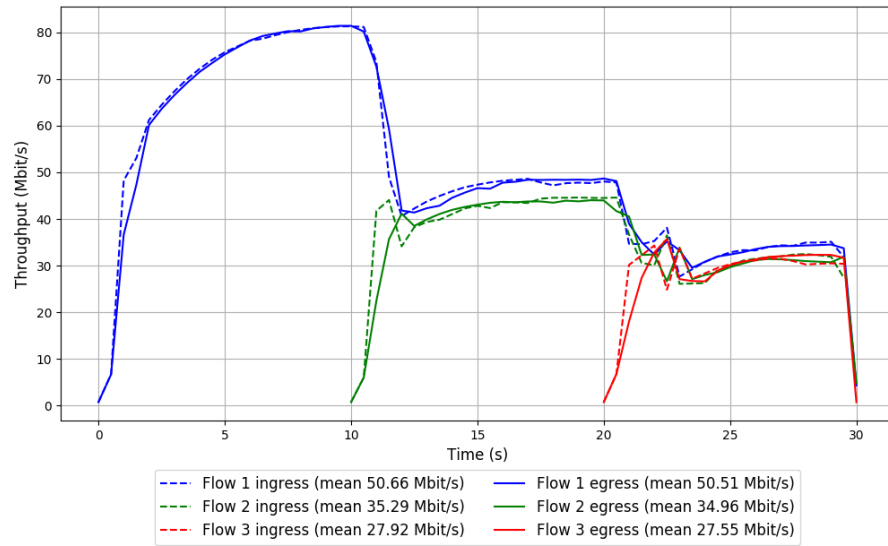
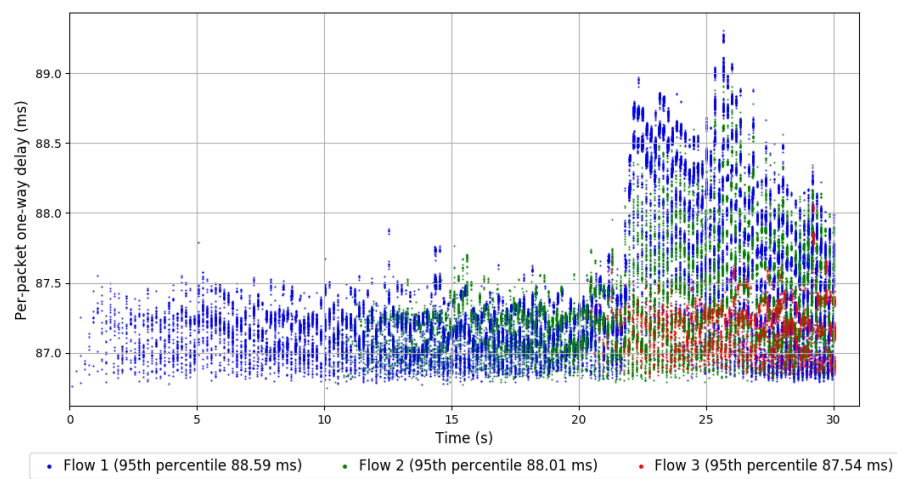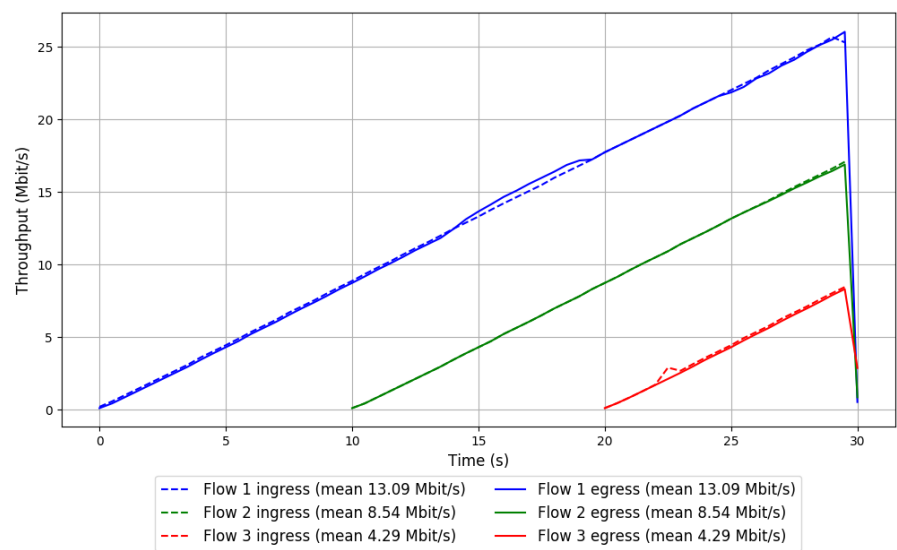Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-03-13 21:29:24
End at: 2018-03-13 21:29:54
Local clock offset: -1.86 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.69 Mbit/s
95th percentile per-packet one-way delay: 114.503 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 54.33 Mbit/s
95th percentile per-packet one-way delay: 113.368 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 36.99 Mbit/s
95th percentile per-packet one-way delay: 114.889 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 17.27 Mbit/s
95th percentile per-packet one-way delay: 116.199 ms
Loss rate: 0.89%
```

Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-03-13 21:52:54
End at: 2018-03-13 21:53:24
Local clock offset: -7.163 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.94 Mbit/s
95th percentile per-packet one-way delay: 112.080 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 50.51 Mbit/s
95th percentile per-packet one-way delay: 108.738 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 112.772 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 117.009 ms
Loss rate: 1.32%
```
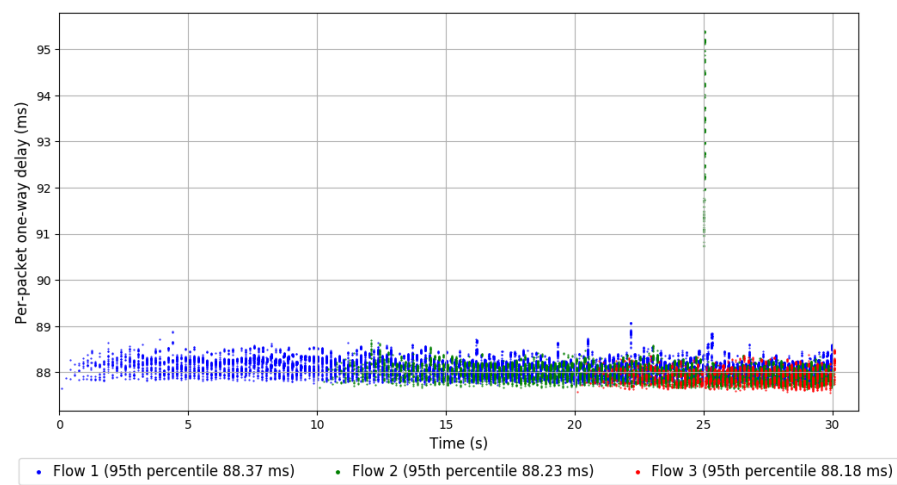
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-03-13 18:14:32
End at: 2018-03-13 18:15:02
Local clock offset: -5.074 ms
Remote clock offset: 0.156 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.18 Mbit/s
95th percentile per-packet one-way delay: 88.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 88.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 88.011 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 87.536 ms
Loss rate: 0.00%
```
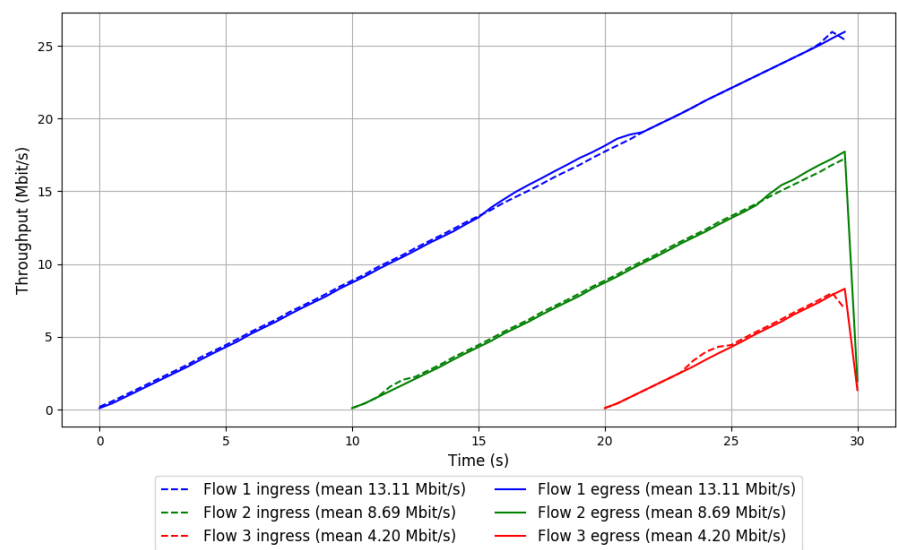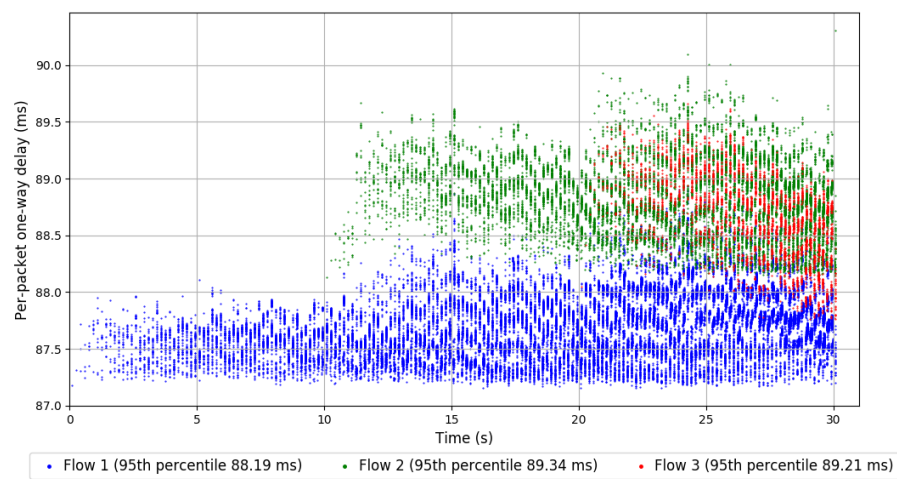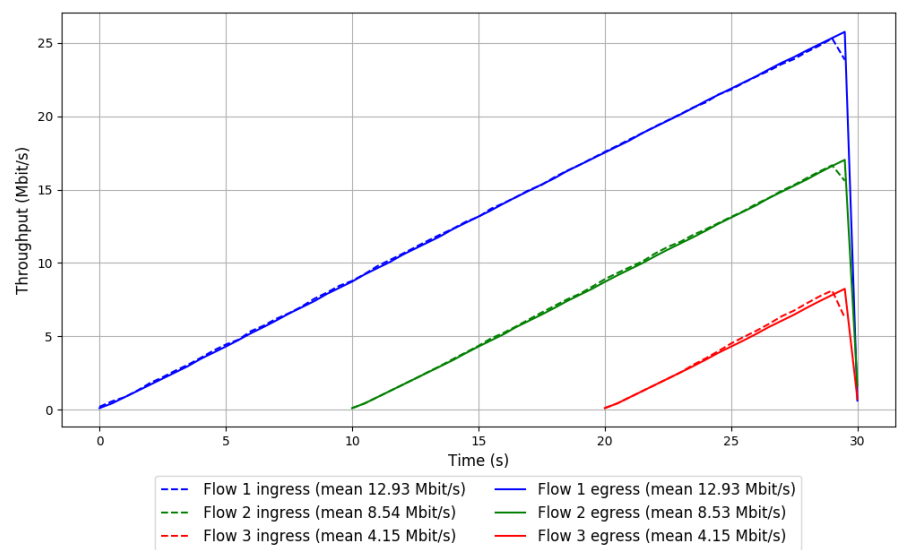
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-03-13 18:38:17
End at: 2018-03-13 18:38:47
Local clock offset: -4.071 ms
Remote clock offset: 0.567 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 88.335 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.11 Mbit/s
95th percentile per-packet one-way delay: 88.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 88.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 88.184 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-03-13 19:01:43
End at: 2018-03-13 19:02:13
Local clock offset: -5.949 ms
Remote clock offset: 1.02 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.99 Mbit/s
95th percentile per-packet one-way delay: 89.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 88.190 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 89.337 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 89.212 ms
Loss rate: 0.00%
```
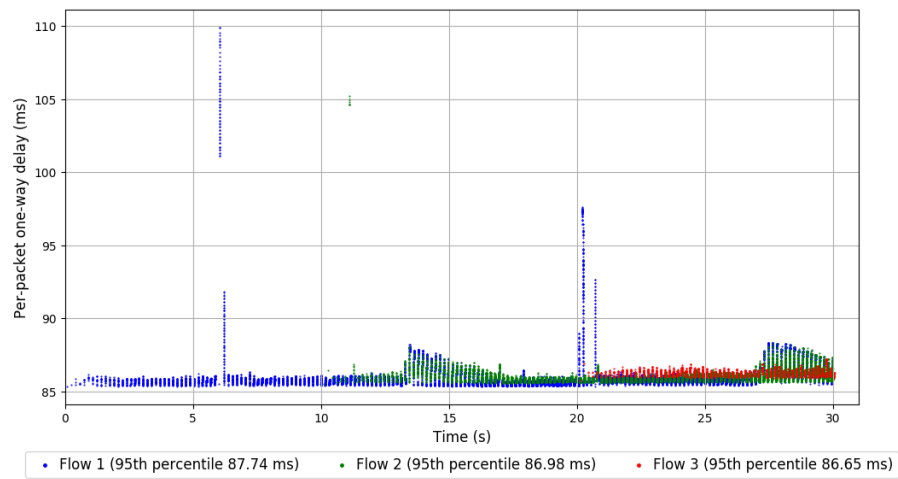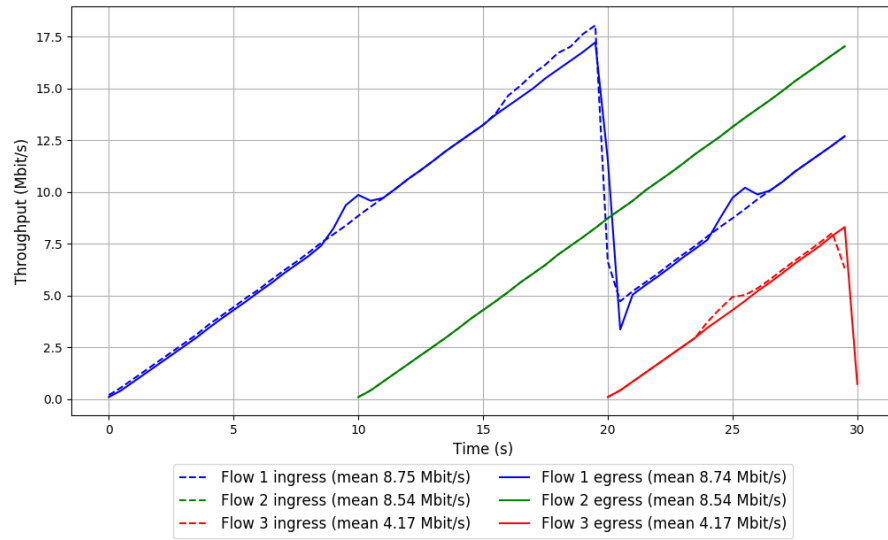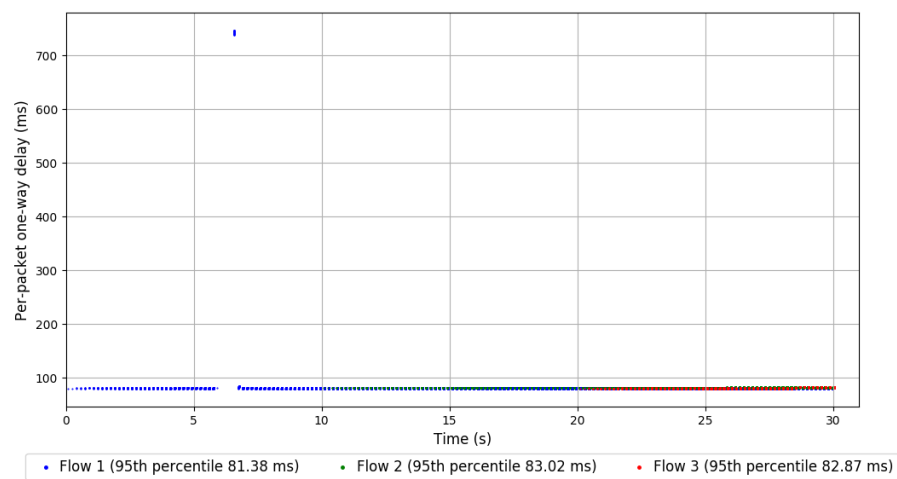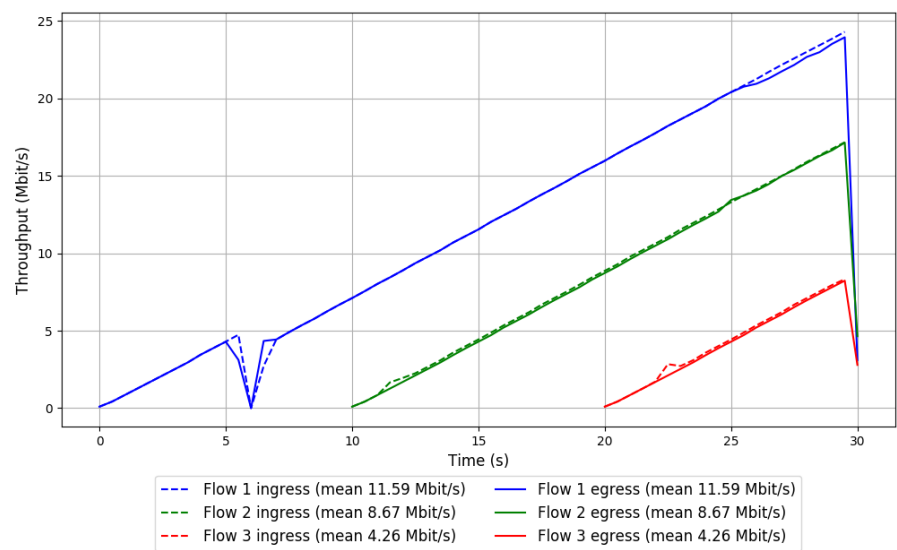
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-03-13 19:25:11
End at: 2018-03-13 19:25:41
Local clock offset: -3.022 ms
Remote clock offset: -0.87 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.78 Mbit/s
95th percentile per-packet one-way delay: 87.401 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 87.739 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 86.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 86.648 ms
Loss rate: 0.00%
```
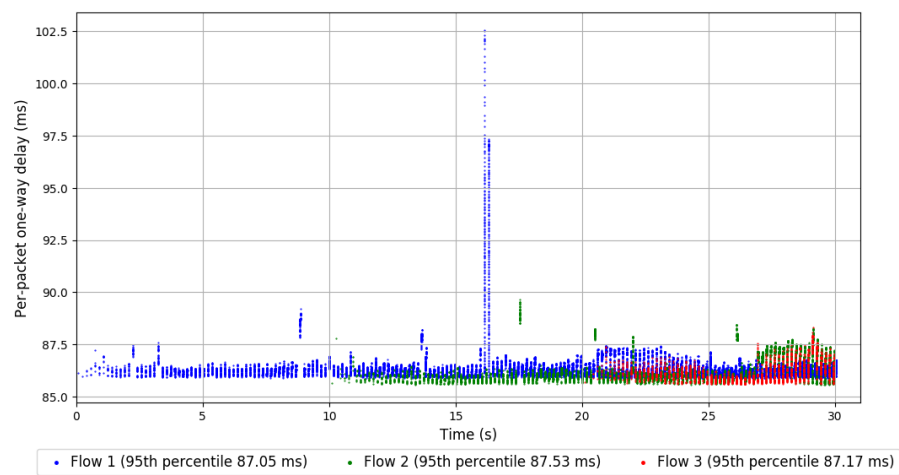
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-03-13 19:48:37
End at: 2018-03-13 19:49:07
Local clock offset: -1.723 ms
Remote clock offset: -5.843 ms

# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.77 Mbit/s
95th percentile per-packet one-way delay: 82.790 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 81.379 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 83.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 82.867 ms
Loss rate: 0.00%
```
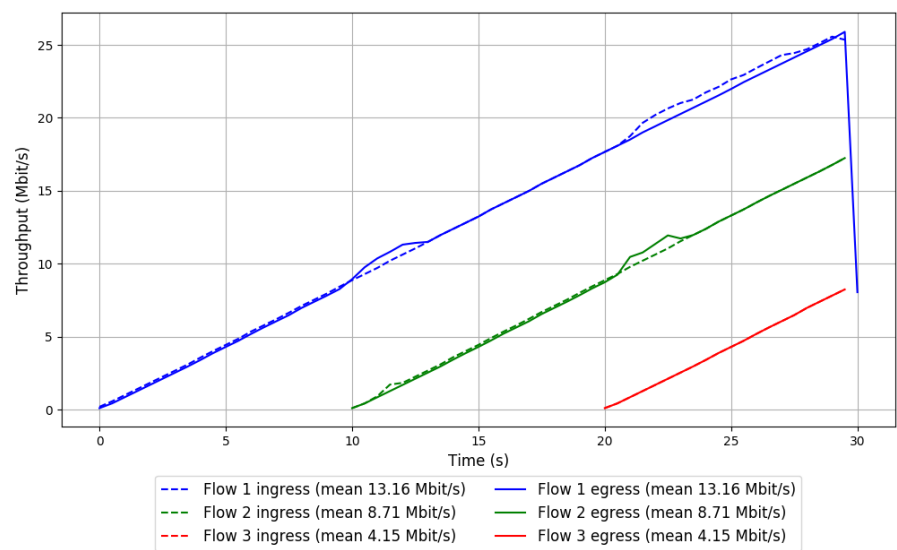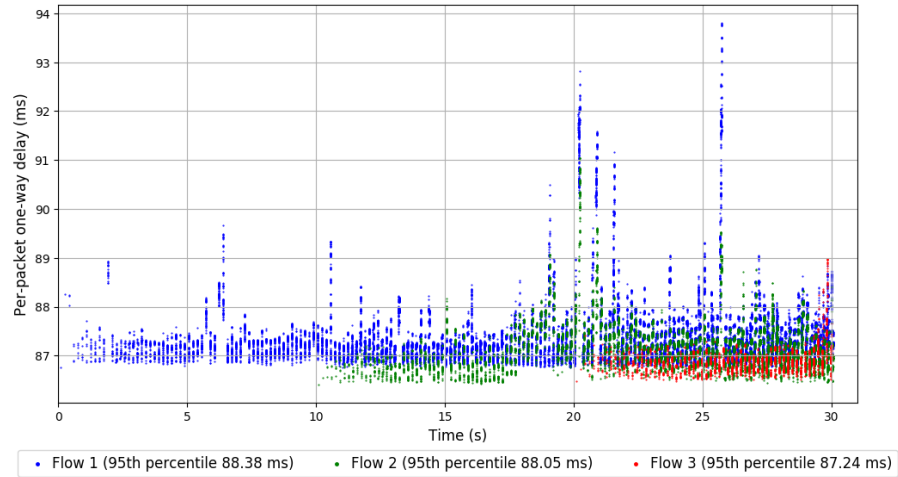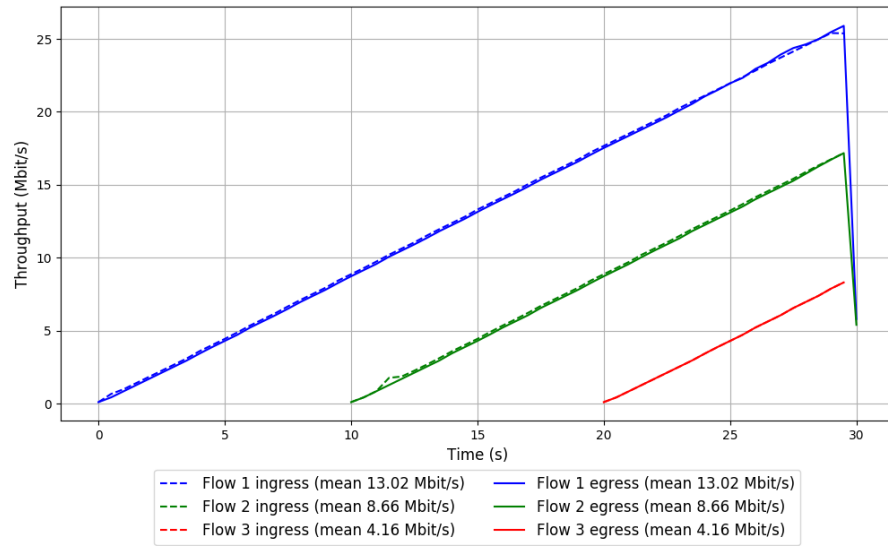
Run 5: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 11.59 Mbit/s) ——— Flow 1 egress (mean 11.59 Mbit/s)
- - - - Flow 2 ingress (mean 8.67 Mbit/s) ——— Flow 2 egress (mean 8.67 Mbit/s)
- - - - Flow 3 ingress (mean 4.26 Mbit/s) ——— Flow 3 egress (mean 4.26 Mbit/s)

• Flow 1 (95th percentile 81.38 ms)   • Flow 2 (95th percentile 83.02 ms)   • Flow 3 (95th percentile 82.87 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-03-13 20:12:16
End at: 2018-03-13 20:12:46
Local clock offset: -5.432 ms
Remote clock offset: -1.105 ms

# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 87.279 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.16 Mbit/s
95th percentile per-packet one-way delay: 87.046 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 87.535 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 87.174 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-03-13 20:35:43
End at: 2018-03-13 20:36:13
Local clock offset: -5.685 ms
Remote clock offset: -0.21 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 88.231 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 88.376 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 88.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 87.240 ms
Loss rate: 0.00%
```
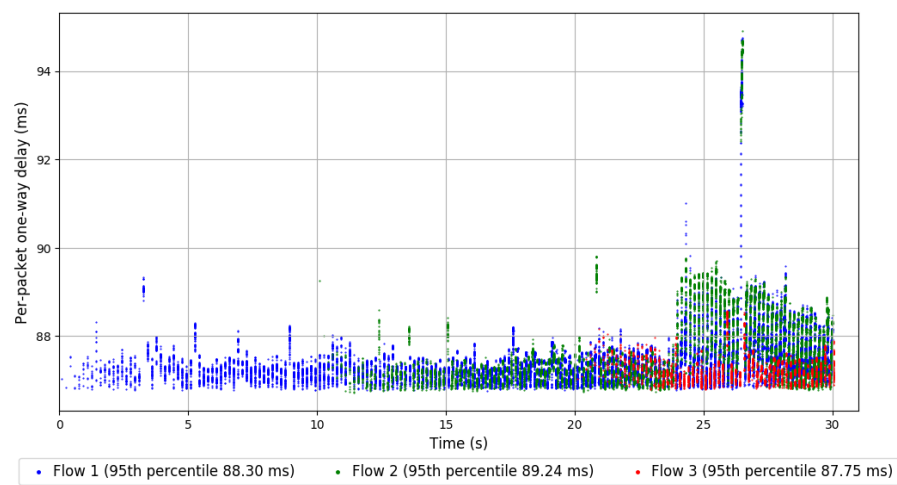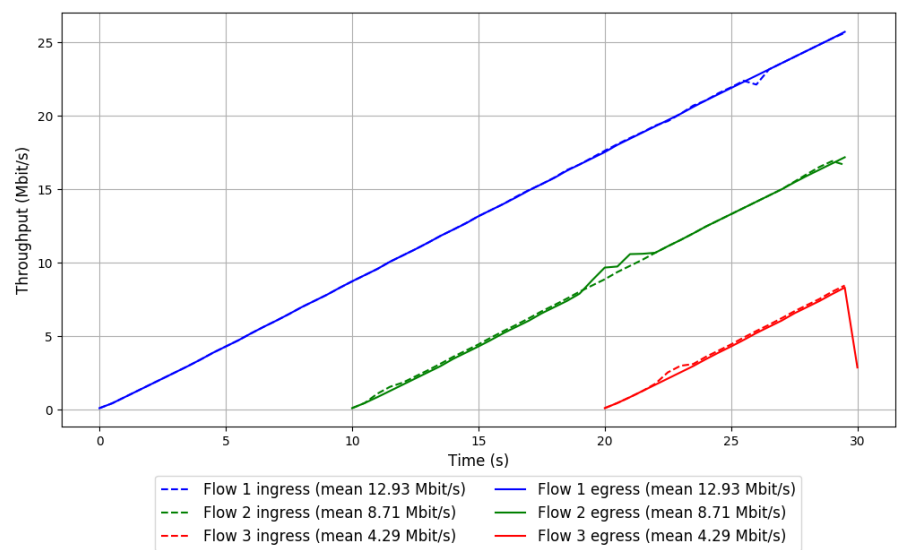
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-03-13 20:59:10
End at: 2018-03-13 20:59:40
Local clock offset: -4.64 ms
Remote clock offset: 0.26 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 88.846 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 88.302 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 89.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 87.746 ms
Loss rate: 0.00%
```
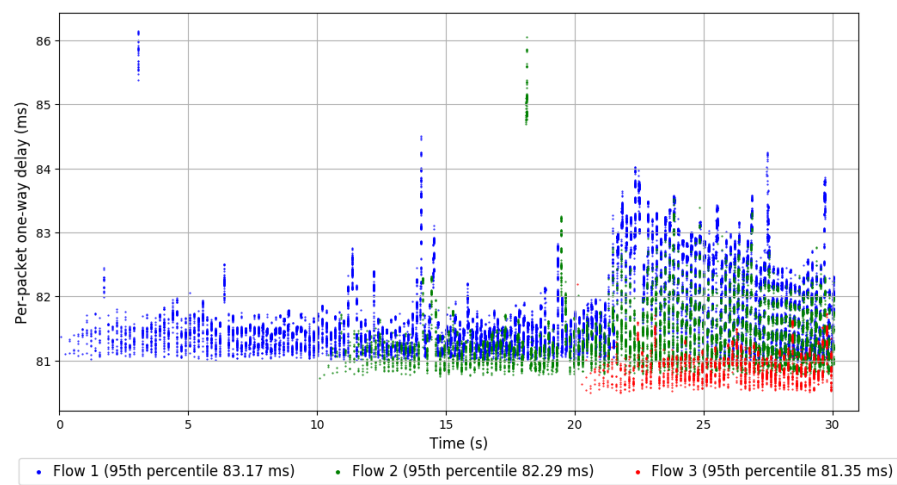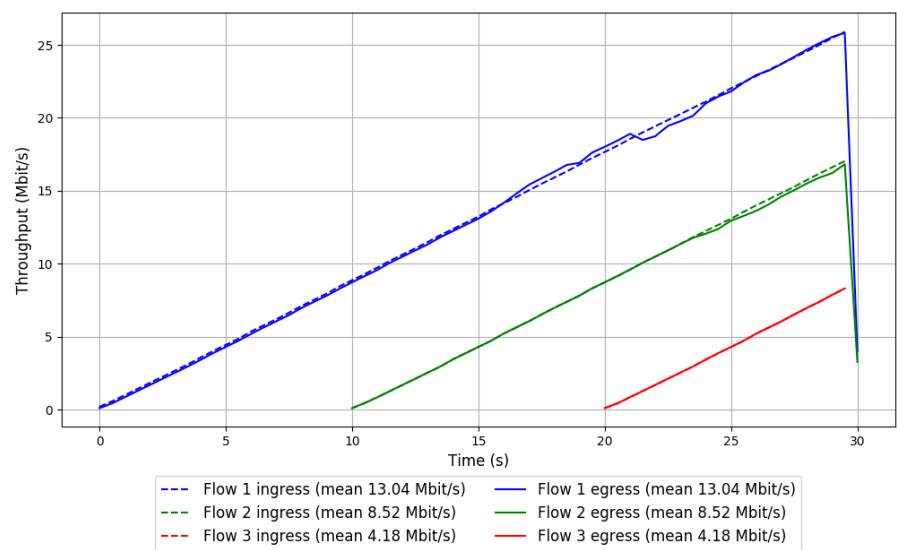
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-03-13 21:22:50
End at: 2018-03-13 21:23:20
Local clock offset: -2.146 ms
Remote clock offset: -5.757 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.08 Mbit/s
95th percentile per-packet one-way delay: 83.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.04 Mbit/s
95th percentile per-packet one-way delay: 83.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 82.289 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 81.348 ms
Loss rate: 0.00%
```
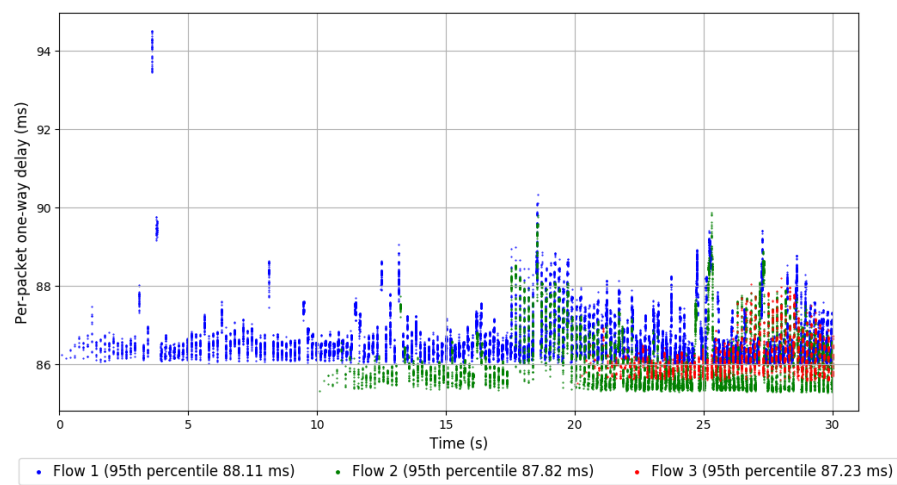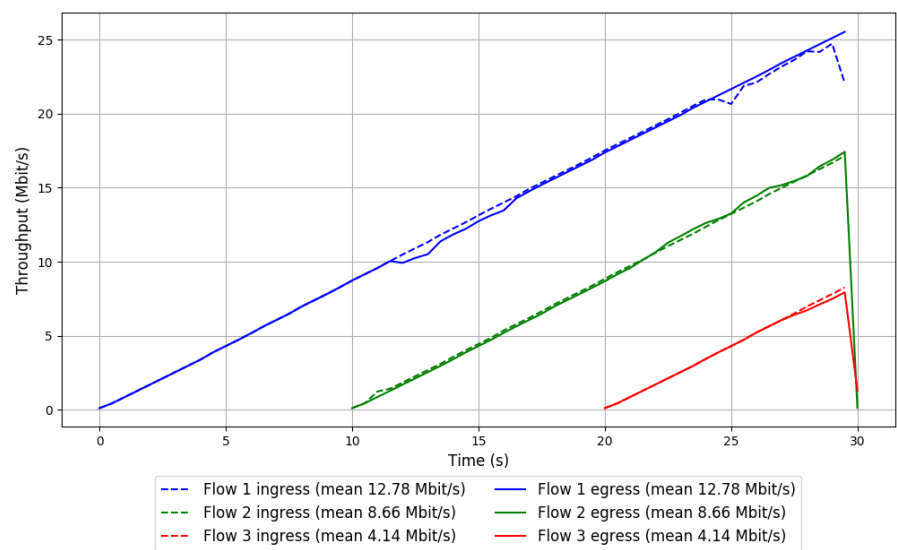
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-03-13 21:46:21
End at: 2018-03-13 21:46:51
Local clock offset: -6.452 ms
Remote clock offset: -0.805 ms


# Below is generated by plot.py at 2018-03-13 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 87.963 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.78 Mbit/s
95th percentile per-packet one-way delay: 88.108 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 87.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 87.231 ms
Loss rate: 0.00%
```

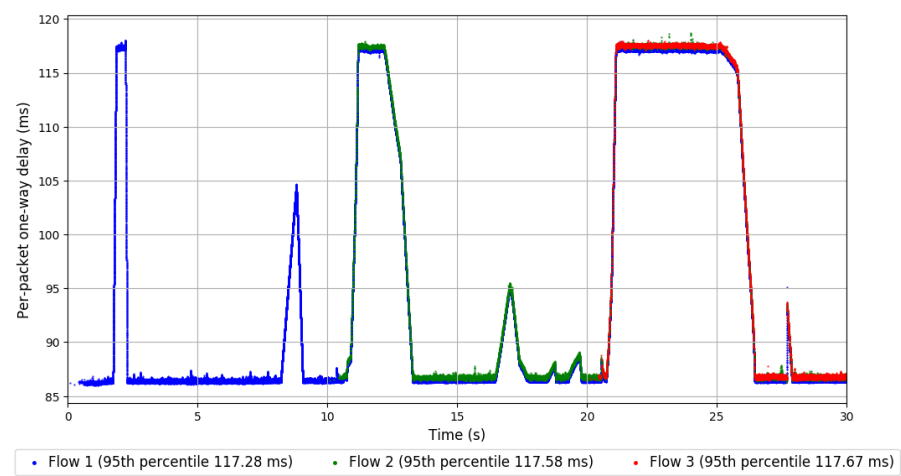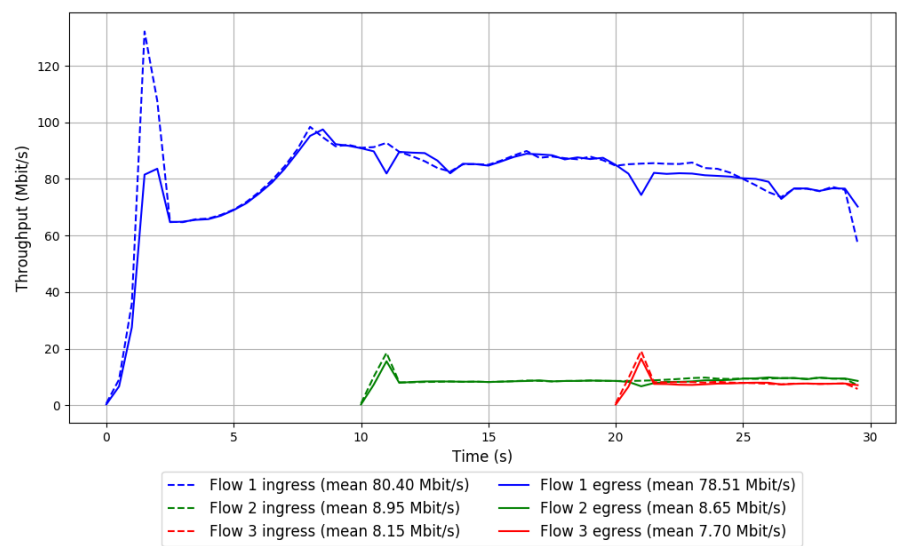Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2018-03-13 18:18:28
End at: 2018-03-13 18:18:58
Local clock offset: -4.664 ms
Remote clock offset: -0.115 ms


# Below is generated by plot.py at 2018-03-13 22:25:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.81 Mbit/s
95th percentile per-packet one-way delay: 117.333 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 78.51 Mbit/s
95th percentile per-packet one-way delay: 117.280 ms
Loss rate: 2.35%
-- Flow 2:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 117.581 ms
Loss rate: 3.33%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 117.665 ms
Loss rate: 5.52%
```
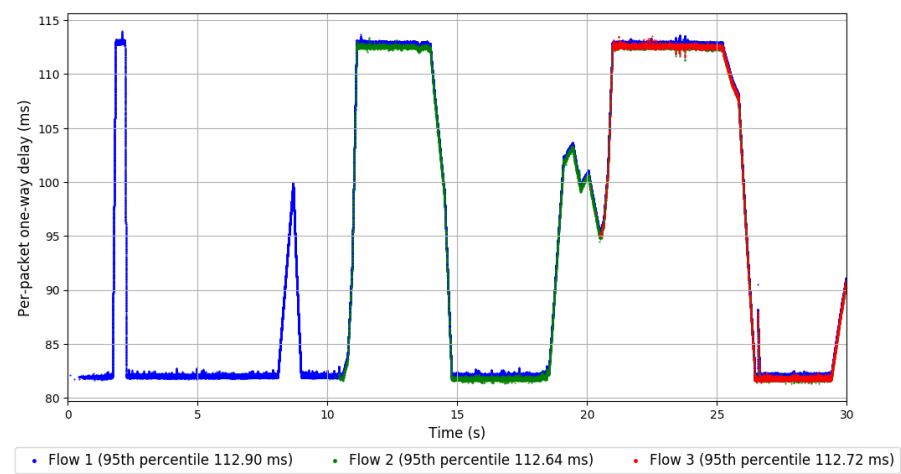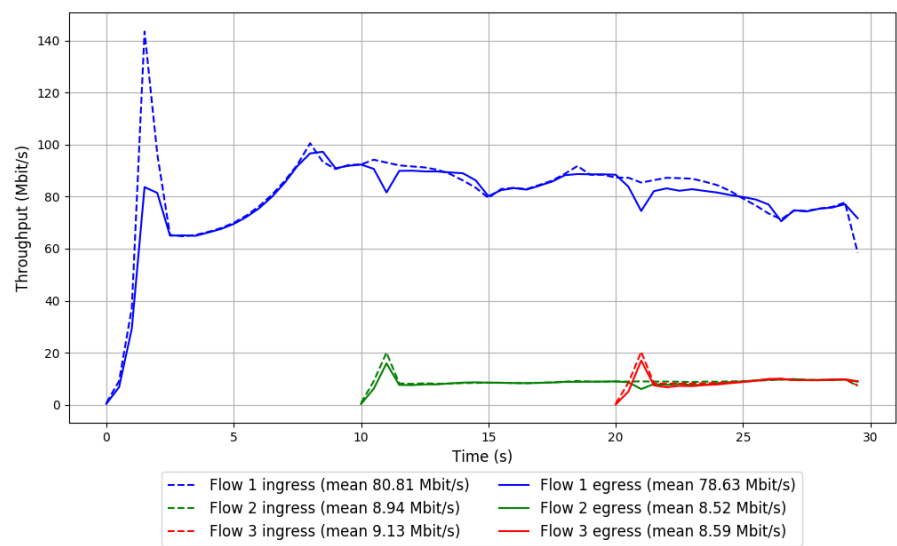
Run 1: Report of PCC — Data Link

- Flow 1 ingress (mean 80.40 Mbit/s)
- Flow 1 egress (mean 78.51 Mbit/s)
- Flow 2 ingress (mean 8.95 Mbit/s)
- Flow 2 egress (mean 8.65 Mbit/s)
- Flow 3 ingress (mean 8.15 Mbit/s)
- Flow 3 egress (mean 7.70 Mbit/s)

- Flow 1 (95th percentile 117.28 ms)
- Flow 2 (95th percentile 117.58 ms)
- Flow 3 (95th percentile 117.67 ms)

```
Run 2: Statistics of PCC

Start at: 2018-03-13 18:42:14
End at: 2018-03-13 18:42:44
Local clock offset: -4.636 ms
Remote clock offset: -5.149 ms

# Below is generated by plot.py at 2018-03-13 22:25:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.12 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 78.63 Mbit/s
95th percentile per-packet one-way delay: 112.899 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 112.639 ms
Loss rate: 4.73%
-- Flow 3:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 112.717 ms
Loss rate: 6.04%
```
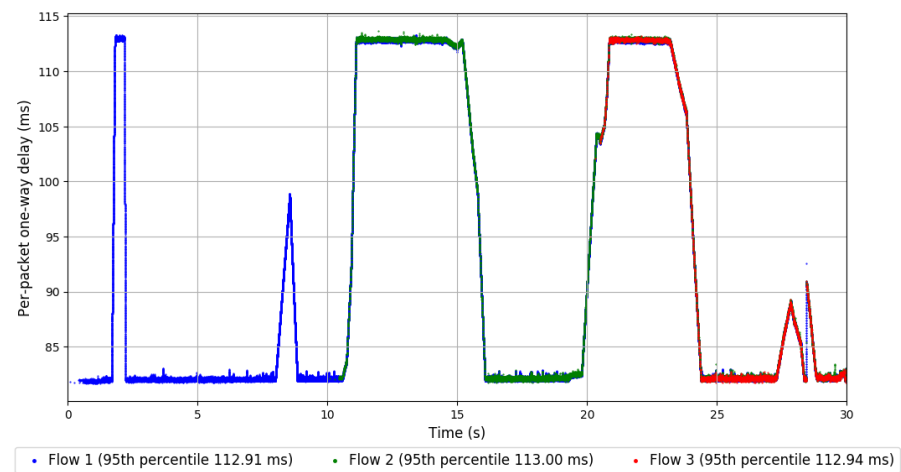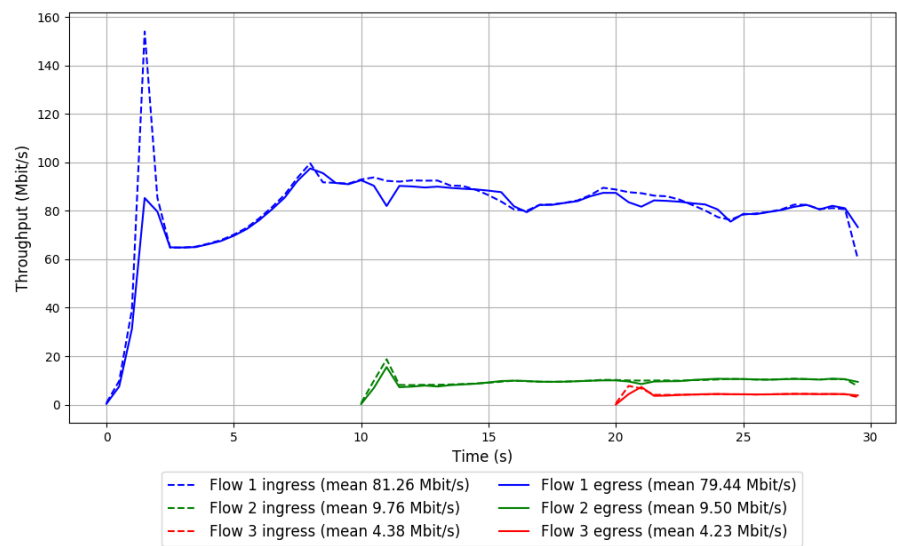
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2018-03-13 19:05:40
End at: 2018-03-13 19:06:10
Local clock offset: -6.064 ms
Remote clock offset: -4.801 ms


# Below is generated by plot.py at 2018-03-13 22:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 112.918 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 79.44 Mbit/s
95th percentile per-packet one-way delay: 112.907 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 113.005 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 112.944 ms
Loss rate: 3.56%
```
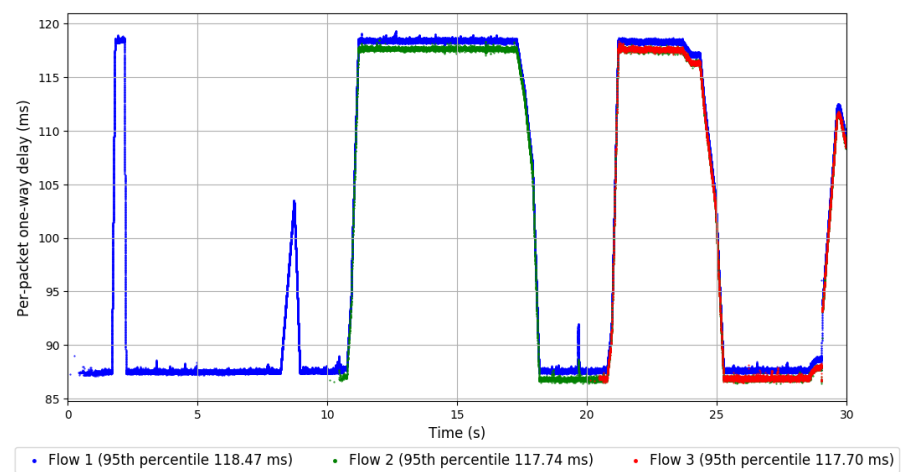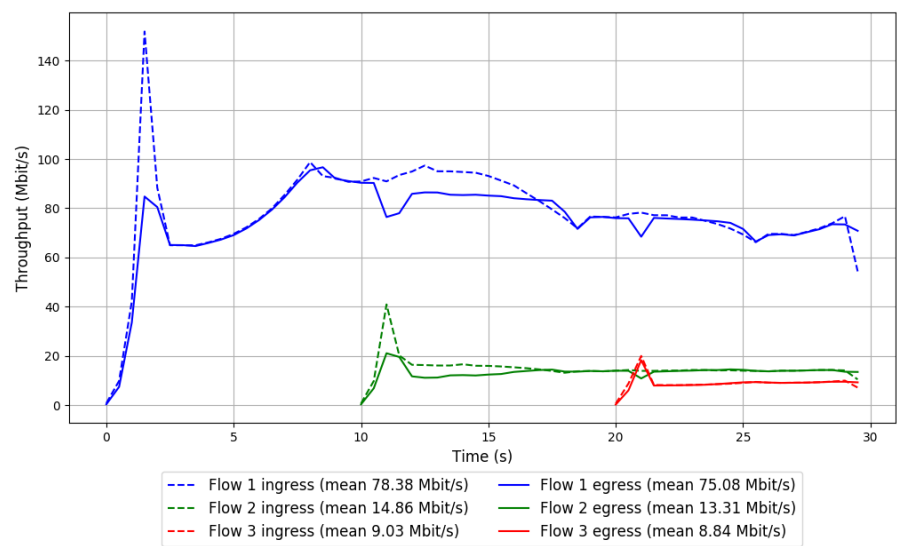
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 81.26 Mbit/s) --- Flow 1 egress (mean 79.44 Mbit/s)
Flow 2 ingress (mean 9.76 Mbit/s) --- Flow 2 egress (mean 9.50 Mbit/s)
Flow 3 ingress (mean 4.38 Mbit/s) --- Flow 3 egress (mean 4.23 Mbit/s)

Flow 1 (95th percentile 112.91 ms) • Flow 2 (95th percentile 113.00 ms) • Flow 3 (95th percentile 112.94 ms)

```
Run 4: Statistics of PCC

Start at: 2018-03-13 19:29:07
End at: 2018-03-13 19:29:37
Local clock offset: -2.551 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-03-13 22:25:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 118.463 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 75.08 Mbit/s
95th percentile per-packet one-way delay: 118.473 ms
Loss rate: 4.14%
-- Flow 2:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 117.737 ms
Loss rate: 10.34%
-- Flow 3:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 117.700 ms
Loss rate: 1.99%
```
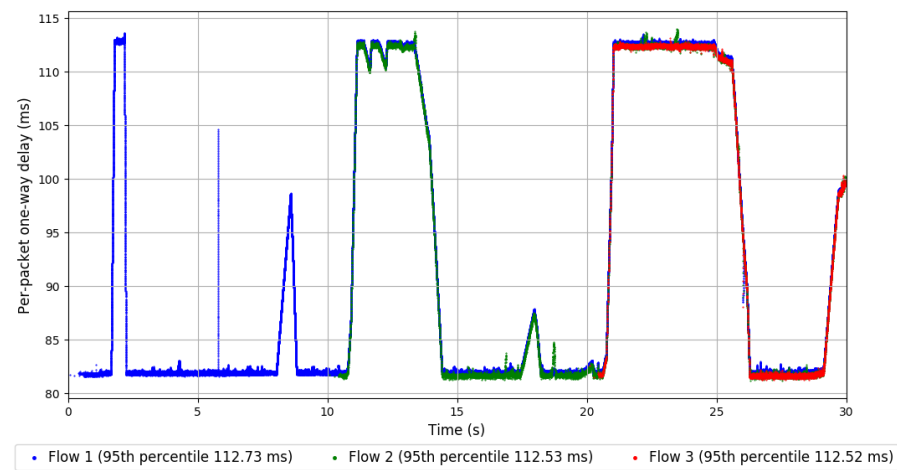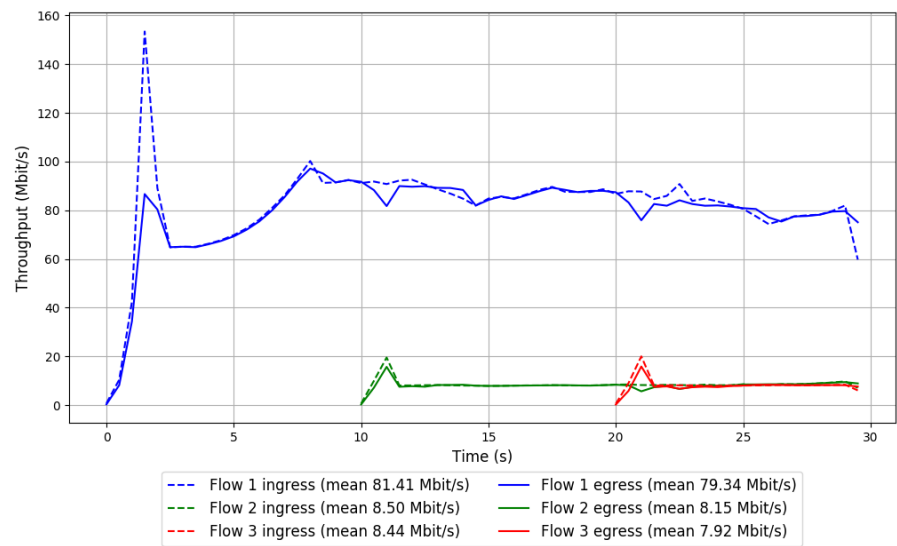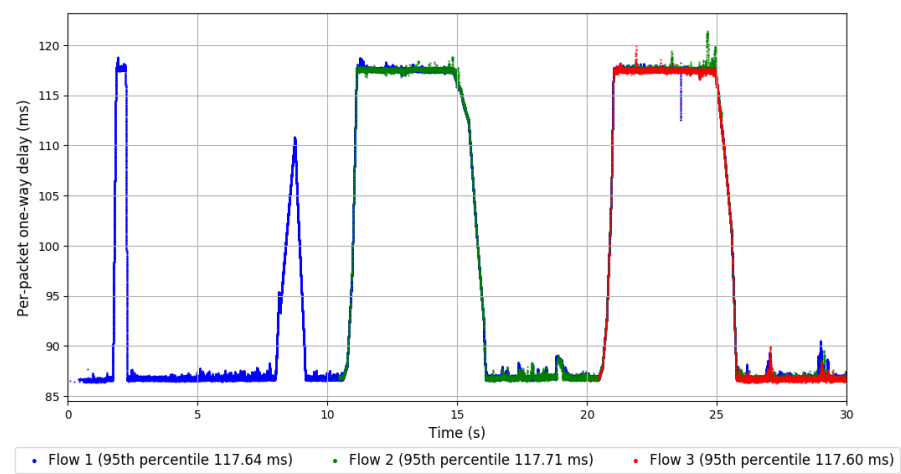
Run 4: Report of PCC — Data Link

- Flow 1 ingress (mean 78.38 Mbit/s)
- Flow 1 egress (mean 75.08 Mbit/s)
- Flow 2 ingress (mean 14.86 Mbit/s)
- Flow 2 egress (mean 13.31 Mbit/s)
- Flow 3 ingress (mean 9.03 Mbit/s)
- Flow 3 egress (mean 8.84 Mbit/s)

- Flow 1 (95th percentile 118.47 ms)
- Flow 2 (95th percentile 117.74 ms)
- Flow 3 (95th percentile 117.70 ms)

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```
Run 5: Statistics of PCC

Start at: 2018-03-13 19:52:33
End at: 2018-03-13 19:53:03
Local clock offset: -3.131 ms
Remote clock offset: -4.904 ms


# Below is generated by plot.py at 2018-03-13 22:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.38 Mbit/s
95th percentile per-packet one-way delay: 112.724 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 79.34 Mbit/s
95th percentile per-packet one-way delay: 112.732 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 8.15 Mbit/s
95th percentile per-packet one-way delay: 112.528 ms
Loss rate: 3.99%
-- Flow 3:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 112.523 ms
Loss rate: 6.01%
```
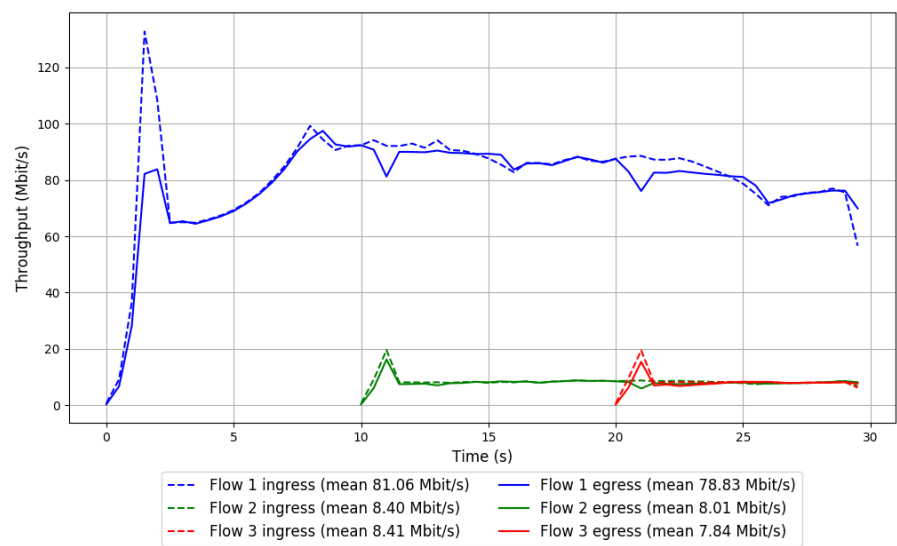
Run 5: Report of PCC — Data Link

```
Run 6: Statistics of PCC

Start at: 2018-03-13 20:16:13
End at: 2018-03-13 20:16:43
Local clock offset: -5.62 ms
Remote clock offset: -0.369 ms


# Below is generated by plot.py at 2018-03-13 22:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 117.648 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 78.83 Mbit/s
95th percentile per-packet one-way delay: 117.644 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 117.713 ms
Loss rate: 4.68%
-- Flow 3:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 117.603 ms
Loss rate: 6.85%
```
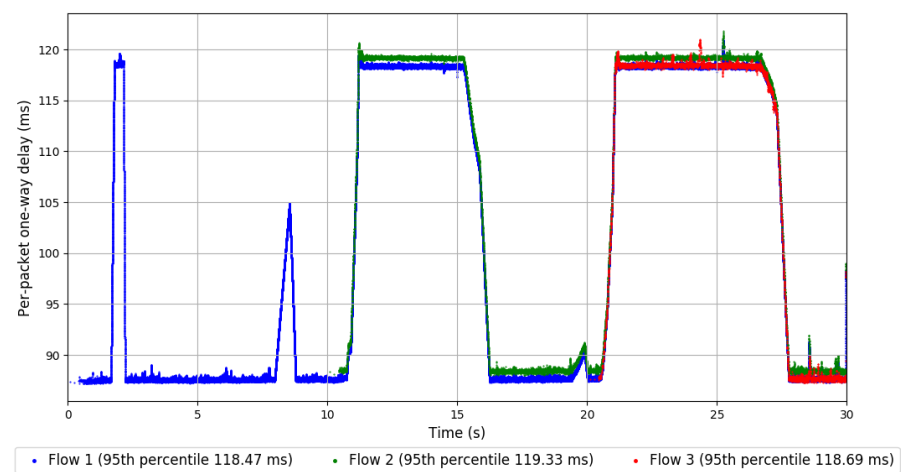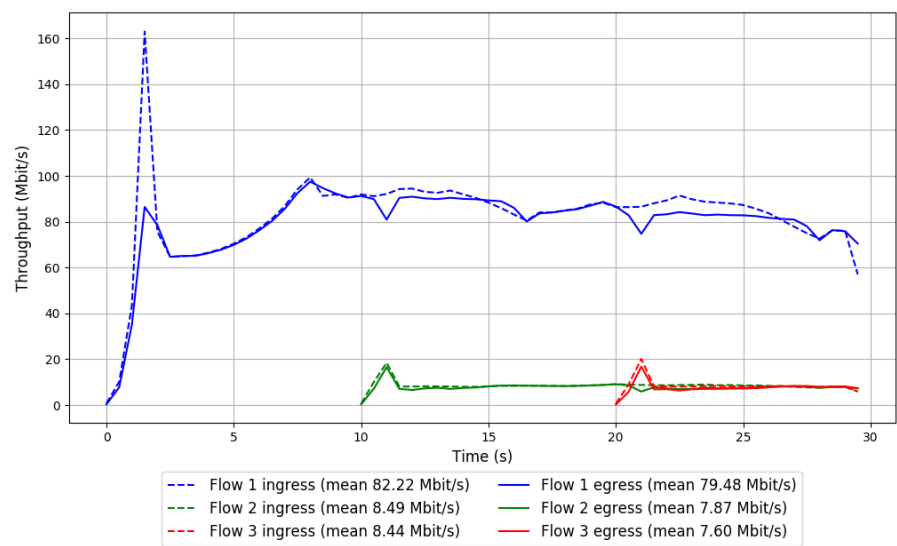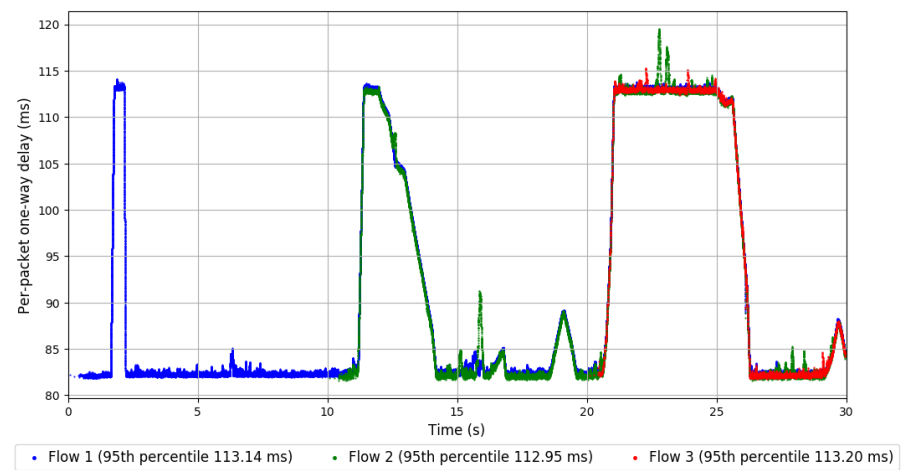
Run 6: Report of PCC — Data Link

- Flow 1 ingress (mean 81.06 Mbit/s)
- Flow 1 egress (mean 78.83 Mbit/s)
- Flow 2 ingress (mean 8.40 Mbit/s)
- Flow 2 egress (mean 8.01 Mbit/s)
- Flow 3 ingress (mean 8.41 Mbit/s)
- Flow 3 egress (mean 7.84 Mbit/s)

- Flow 1 (95th percentile 117.64 ms)
- Flow 2 (95th percentile 117.71 ms)
- Flow 3 (95th percentile 117.60 ms)

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```
Run 7: Statistics of PCC

Start at: 2018-03-13 20:39:39
End at: 2018-03-13 20:40:09
Local clock offset: -5.647 ms
Remote clock offset: 0.852 ms


# Below is generated by plot.py at 2018-03-13 22:25:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 118.562 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 79.48 Mbit/s
95th percentile per-packet one-way delay: 118.475 ms
Loss rate: 3.30%
-- Flow 2:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 119.333 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 118.688 ms
Loss rate: 9.77%
```
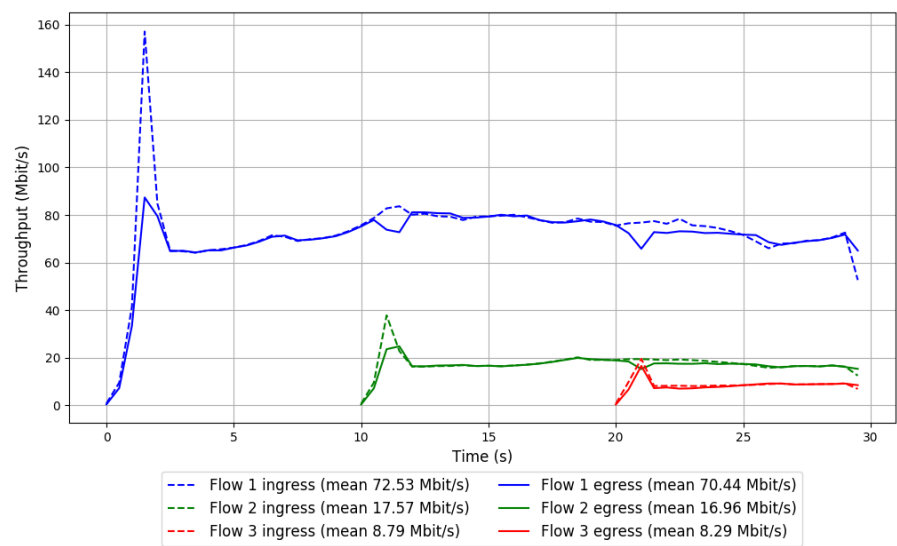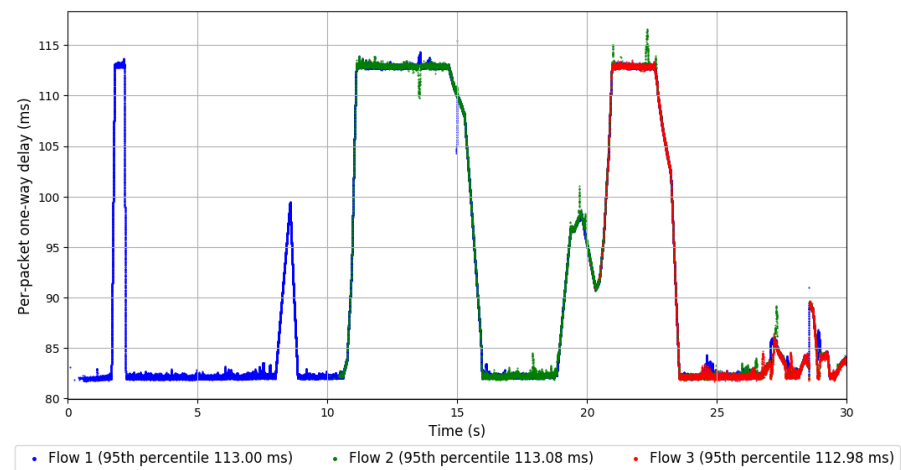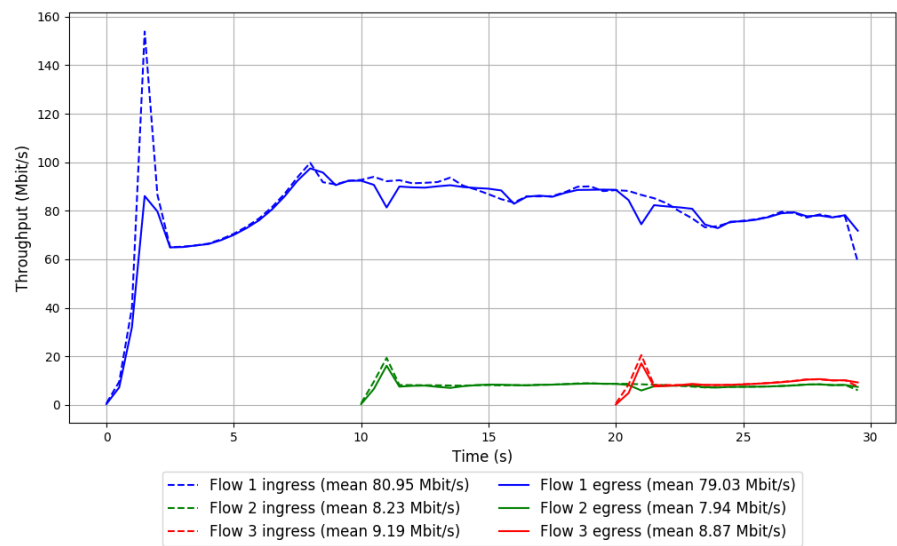
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 82.22 Mbit/s) — Flow 1 egress (mean 79.48 Mbit/s)
Flow 2 ingress (mean 8.49 Mbit/s) — Flow 2 egress (mean 7.87 Mbit/s)
Flow 3 ingress (mean 8.44 Mbit/s) — Flow 3 egress (mean 7.60 Mbit/s)

Flow 1 (95th percentile 118.47 ms) • Flow 2 (95th percentile 119.33 ms) • Flow 3 (95th percentile 118.69 ms)
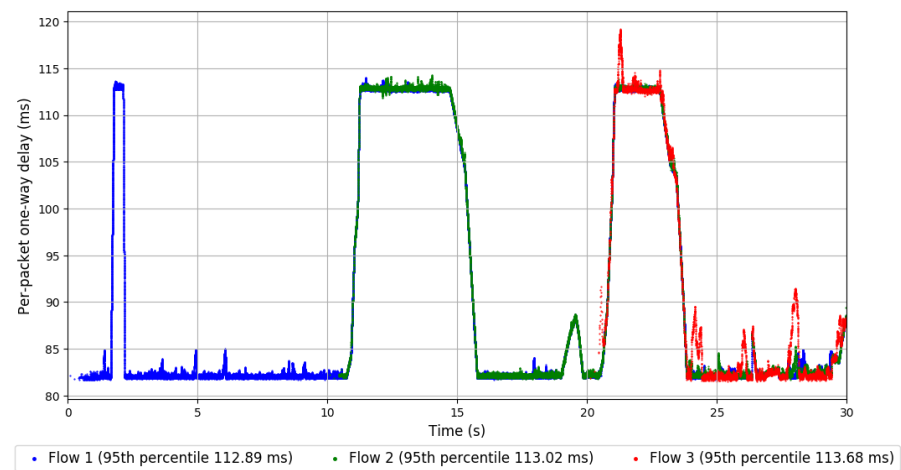
```
Run 8: Statistics of PCC

Start at: 2018-03-13 21:03:06
End at: 2018-03-13 21:03:36
Local clock offset: -3.903 ms
Remote clock offset: -4.747 ms


# Below is generated by plot.py at 2018-03-13 22:25:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 113.139 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 70.44 Mbit/s
95th percentile per-packet one-way delay: 113.144 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 16.96 Mbit/s
95th percentile per-packet one-way delay: 112.948 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 113.201 ms
Loss rate: 5.71%
```

Run 8: Report of PCC — Data Link

Legend (top chart):
- Flow 1 ingress (mean 72.53 Mbit/s) — Flow 1 egress (mean 70.44 Mbit/s)
- Flow 2 ingress (mean 17.57 Mbit/s) — Flow 2 egress (mean 16.96 Mbit/s)
- Flow 3 ingress (mean 8.79 Mbit/s) — Flow 3 egress (mean 8.29 Mbit/s)

Legend (bottom chart):
- Flow 1 (95th percentile 113.14 ms) • Flow 2 (95th percentile 112.95 ms) • Flow 3 (95th percentile 113.20 ms)
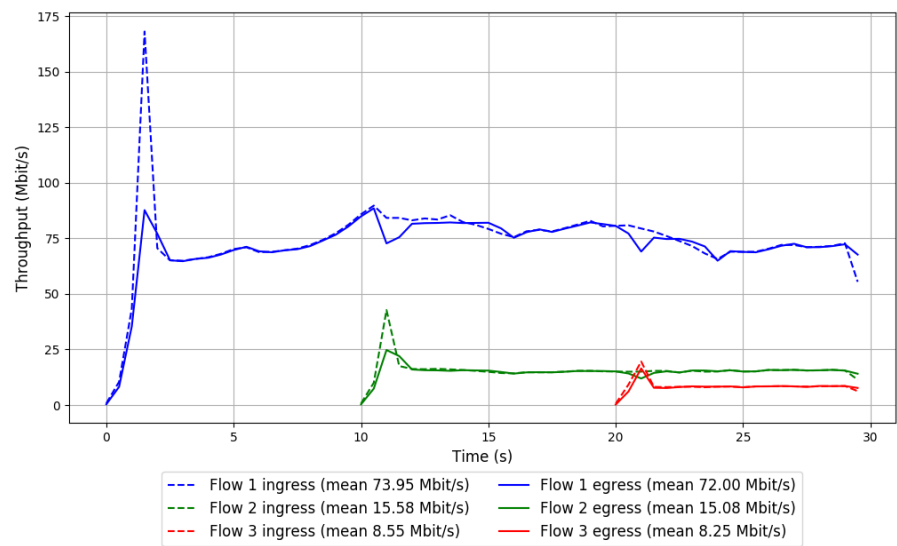
79

```
Run 9: Statistics of PCC

Start at: 2018-03-13 21:26:47
End at: 2018-03-13 21:27:17
Local clock offset: -1.968 ms
Remote clock offset: -4.829 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.23 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 79.03 Mbit/s
95th percentile per-packet one-way delay: 113.004 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 113.079 ms
Loss rate: 3.52%
-- Flow 3:
Average throughput: 8.87 Mbit/s
95th percentile per-packet one-way delay: 112.977 ms
Loss rate: 3.51%
```
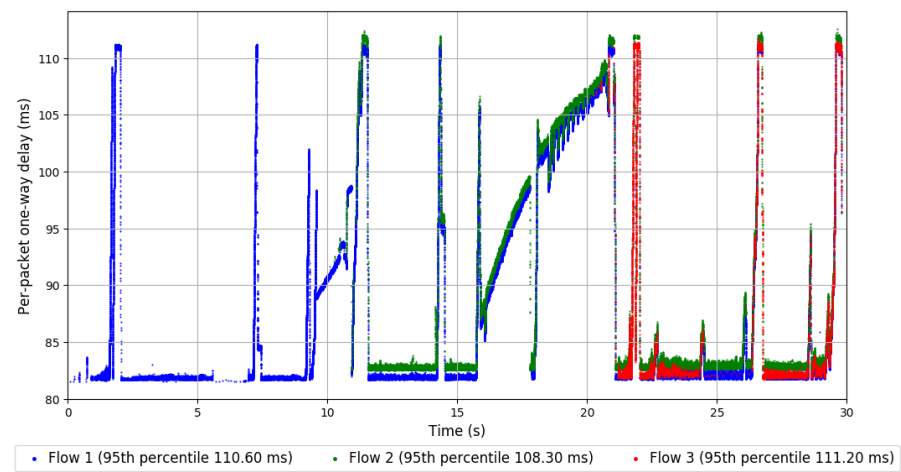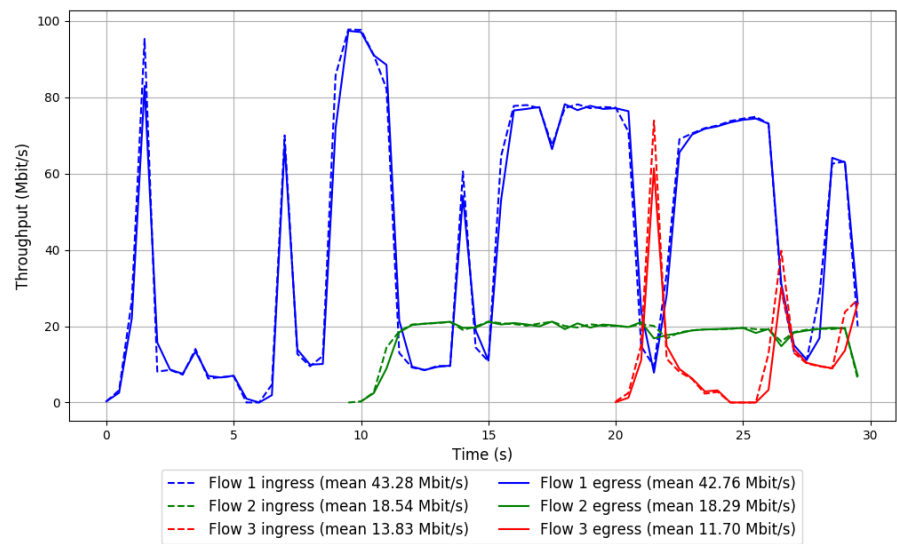
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 80.95 Mbit/s) — Flow 1 egress (mean 79.03 Mbit/s)
Flow 2 ingress (mean 8.23 Mbit/s) — Flow 2 egress (mean 7.94 Mbit/s)
Flow 3 ingress (mean 9.19 Mbit/s) — Flow 3 egress (mean 8.87 Mbit/s)

Flow 1 (95th percentile 113.00 ms) • Flow 2 (95th percentile 113.08 ms) • Flow 3 (95th percentile 112.98 ms)

```
Run 10: Statistics of PCC

Start at: 2018-03-13 21:50:17
End at: 2018-03-13 21:50:47
Local clock offset: -6.879 ms
Remote clock offset: -4.824 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.75 Mbit/s
95th percentile per-packet one-way delay: 112.916 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 113.018 ms
Loss rate: 3.13%
-- Flow 3:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 113.679 ms
Loss rate: 3.40%
```
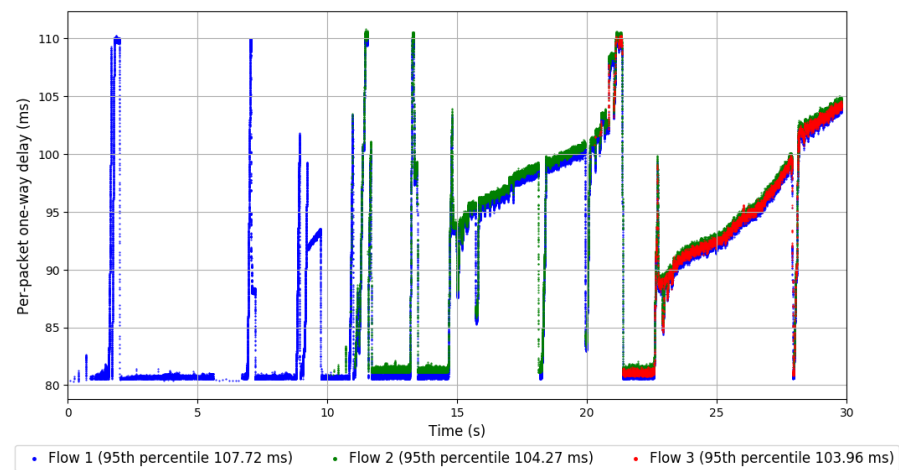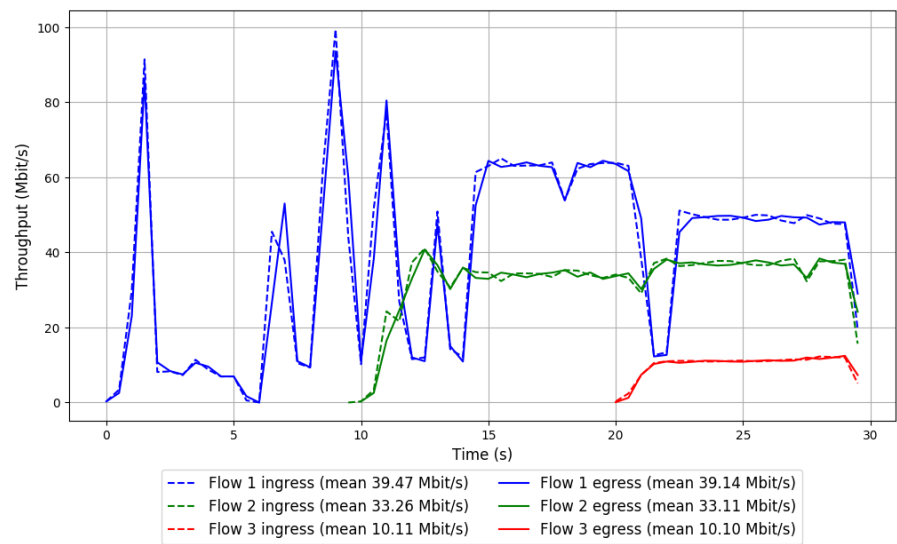
Run 10: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-13 18:13:14
End at: 2018-03-13 18:13:44
Local clock offset: -5.193 ms
Remote clock offset: -4.825 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 110.790 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 110.601 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 18.29 Mbit/s
95th percentile per-packet one-way delay: 108.304 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 11.70 Mbit/s
95th percentile per-packet one-way delay: 111.198 ms
Loss rate: 15.52%
```
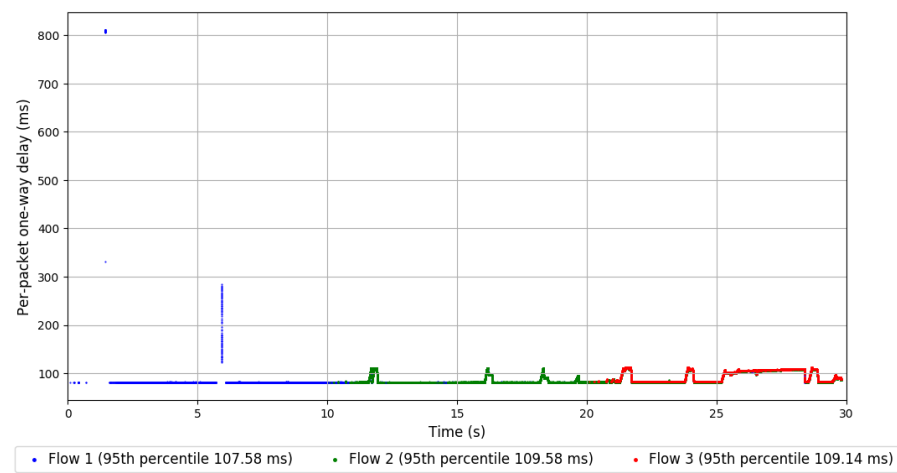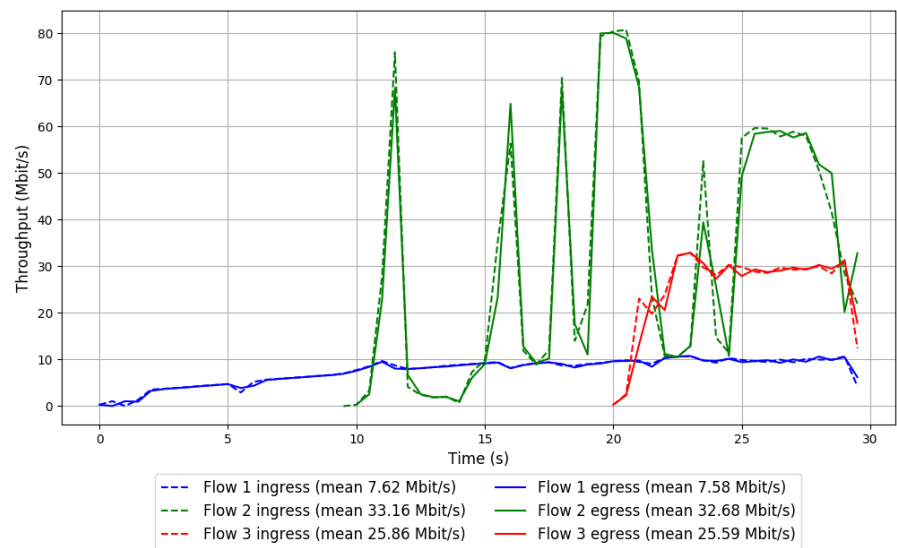
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 43.28 Mbit/s)   Flow 1 egress (mean 42.76 Mbit/s)
Flow 2 ingress (mean 18.54 Mbit/s)   Flow 2 egress (mean 18.29 Mbit/s)
Flow 3 ingress (mean 13.83 Mbit/s)   Flow 3 egress (mean 11.70 Mbit/s)

Flow 1 (95th percentile 110.60 ms)   Flow 2 (95th percentile 108.30 ms)   Flow 3 (95th percentile 111.20 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-03-13 18:37:00
End at: 2018-03-13 18:37:30
Local clock offset: -4.056 ms
Remote clock offset: -5.951 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 104.778 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 107.717 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 33.11 Mbit/s
95th percentile per-packet one-way delay: 104.272 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 103.960 ms
Loss rate: 0.09%
```

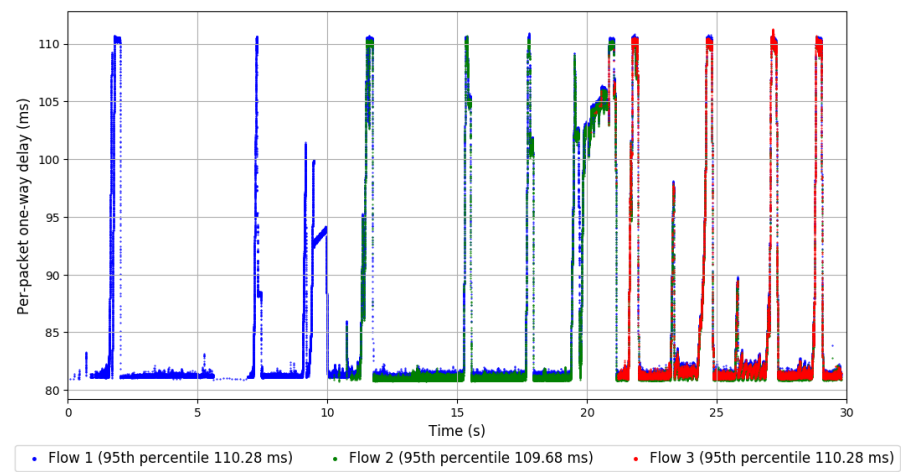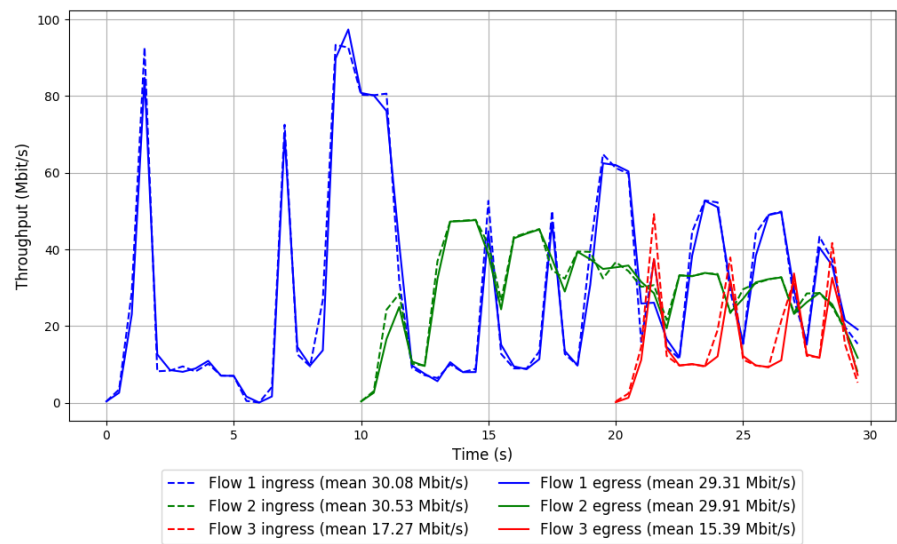Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 39.47 Mbit/s) --- Flow 1 egress (mean 39.14 Mbit/s)
Flow 2 ingress (mean 33.26 Mbit/s) --- Flow 2 egress (mean 33.11 Mbit/s)
Flow 3 ingress (mean 10.11 Mbit/s) --- Flow 3 egress (mean 10.10 Mbit/s)

Flow 1 (95th percentile 107.72 ms) • Flow 2 (95th percentile 104.27 ms) • Flow 3 (95th percentile 103.96 ms)
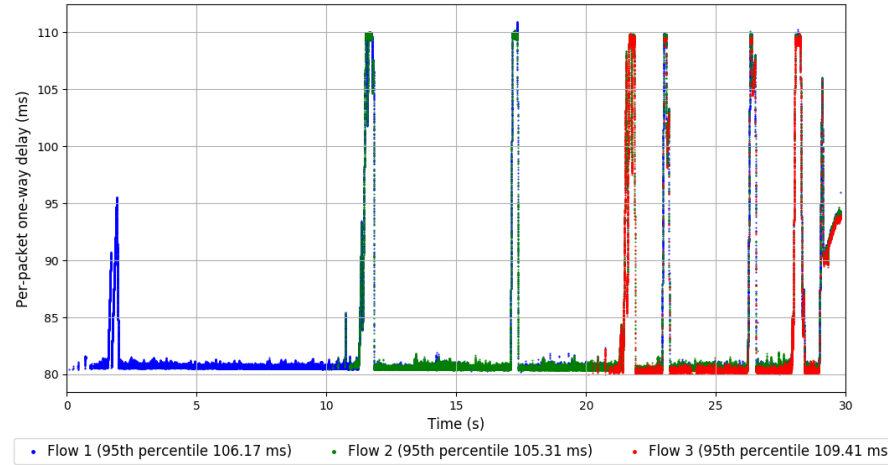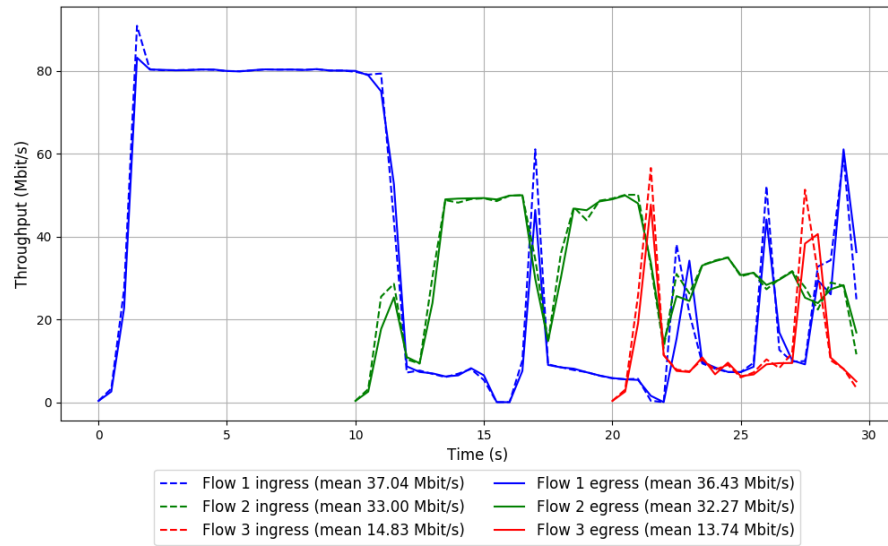
```
Run 3: Statistics of QUIC Cubic

Start at: 2018-03-13 19:00:27
End at: 2018-03-13 19:00:57
Local clock offset: -5.946 ms
Remote clock offset: -4.87 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 108.977 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 107.582 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 32.68 Mbit/s
95th percentile per-packet one-way delay: 109.583 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 25.59 Mbit/s
95th percentile per-packet one-way delay: 109.135 ms
Loss rate: 0.99%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 7.62 Mbit/s) --- Flow 1 egress (mean 7.58 Mbit/s)
Flow 2 ingress (mean 33.16 Mbit/s) --- Flow 2 egress (mean 32.68 Mbit/s)
Flow 3 ingress (mean 25.86 Mbit/s) --- Flow 3 egress (mean 25.59 Mbit/s)

Flow 1 (95th percentile 107.58 ms) • Flow 2 (95th percentile 109.58 ms) • Flow 3 (95th percentile 109.14 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-03-13 19:23:55
End at: 2018-03-13 19:24:25
Local clock offset: -3.244 ms
Remote clock offset: -5.608 ms


# Below is generated by plot.py at 2018-03-13 22:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 110.159 ms
Loss rate: 3.22%
-- Flow 1:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 110.285 ms
Loss rate: 2.53%
-- Flow 2:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 109.683 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 110.284 ms
Loss rate: 11.10%
```
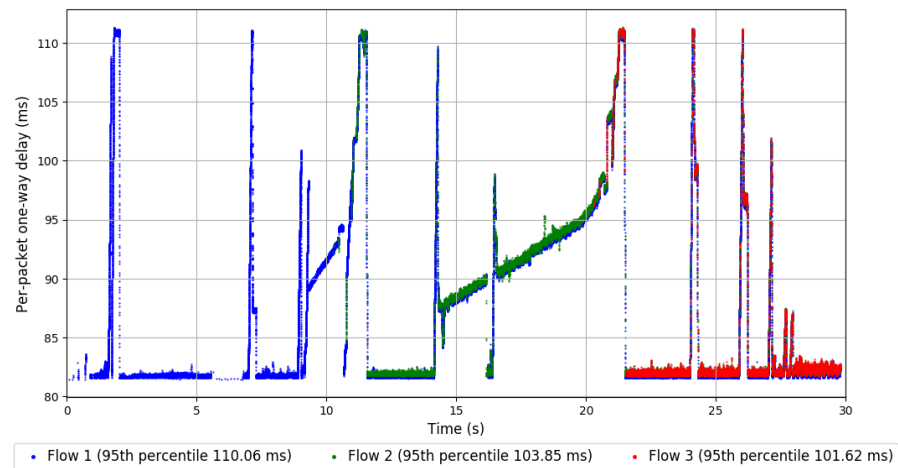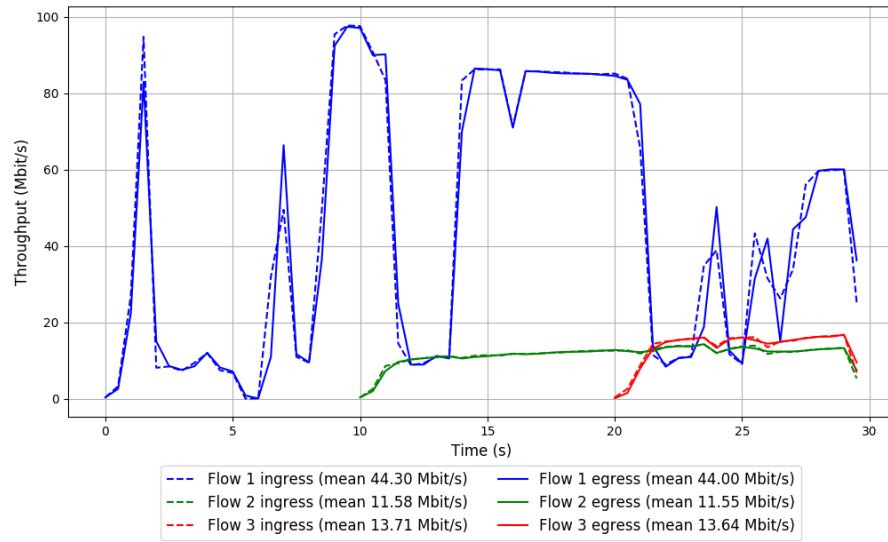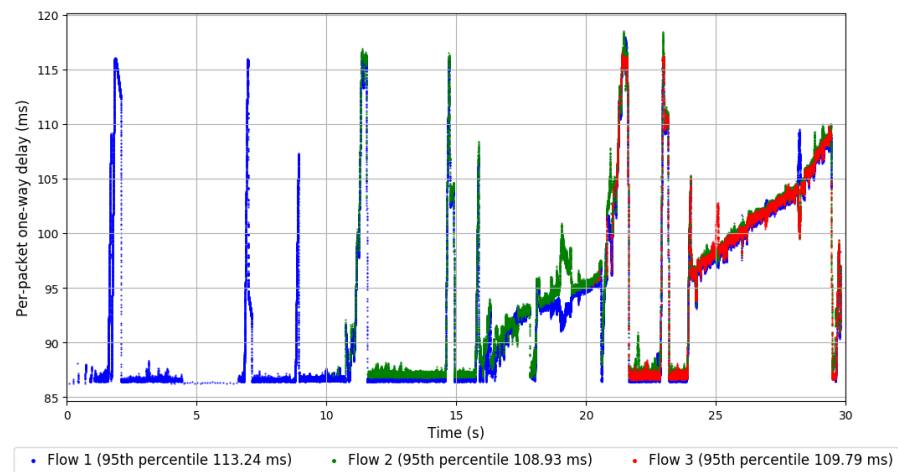
Run 4: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 30.08 Mbit/s) —— Flow 1 egress (mean 29.31 Mbit/s)
- - - Flow 2 ingress (mean 30.53 Mbit/s) —— Flow 2 egress (mean 29.91 Mbit/s)
- - - Flow 3 ingress (mean 17.27 Mbit/s) —— Flow 3 egress (mean 15.39 Mbit/s)

• Flow 1 (95th percentile 110.28 ms)   • Flow 2 (95th percentile 109.68 ms)   • Flow 3 (95th percentile 110.28 ms)
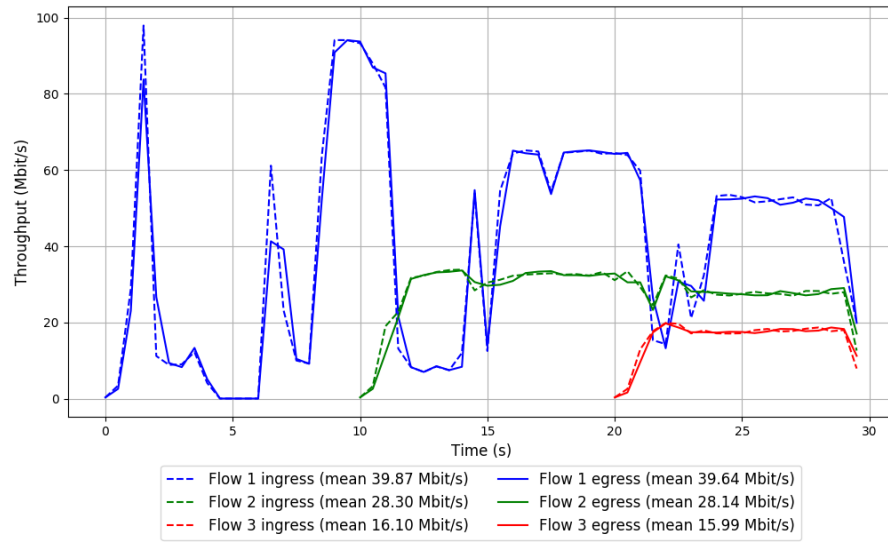
```
Run 5: Statistics of QUIC Cubic

Start at: 2018-03-13 19:47:20
End at: 2018-03-13 19:47:50
Local clock offset: -1.166 ms
Remote clock offset: -5.832 ms


# Below is generated by plot.py at 2018-03-13 22:26:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.32 Mbit/s
95th percentile per-packet one-way delay: 108.435 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 106.174 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 32.27 Mbit/s
95th percentile per-packet one-way delay: 105.305 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 13.74 Mbit/s
95th percentile per-packet one-way delay: 109.413 ms
Loss rate: 7.19%
```

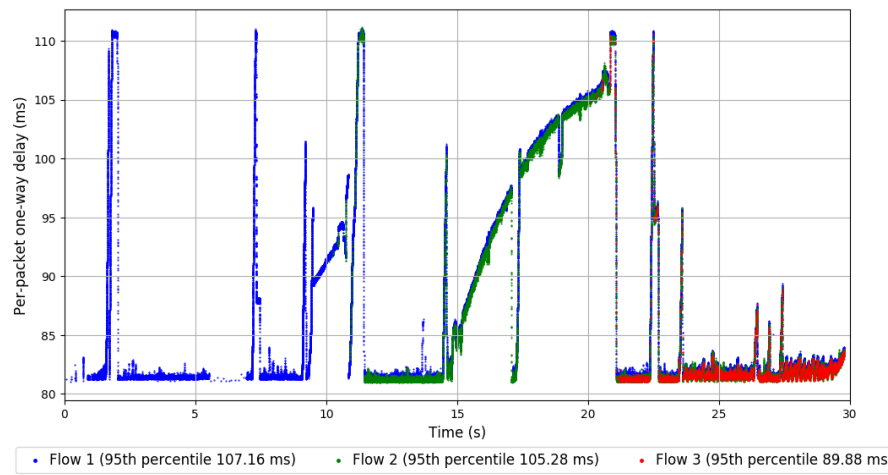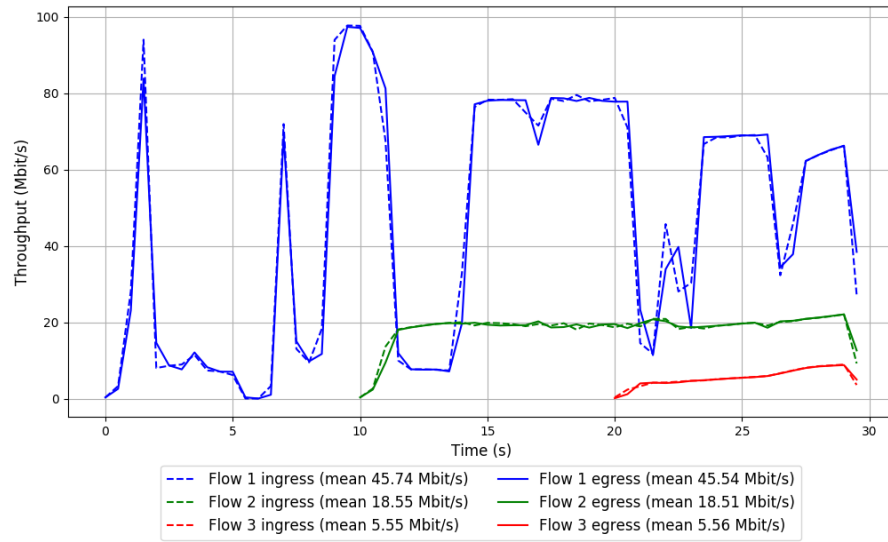Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 37.04 Mbit/s) ——— Flow 1 egress (mean 36.43 Mbit/s)
- - - Flow 2 ingress (mean 33.00 Mbit/s) ——— Flow 2 egress (mean 32.27 Mbit/s)
- - - Flow 3 ingress (mean 14.83 Mbit/s) ——— Flow 3 egress (mean 13.74 Mbit/s)

• Flow 1 (95th percentile 106.17 ms)   • Flow 2 (95th percentile 105.31 ms)   • Flow 3 (95th percentile 109.41 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-03-13 20:10:59
End at: 2018-03-13 20:11:29
Local clock offset: -5.38 ms
Remote clock offset: -5.21 ms


# Below is generated by plot.py at 2018-03-13 22:26:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 108.937 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 44.00 Mbit/s
95th percentile per-packet one-way delay: 110.064 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 103.854 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 13.64 Mbit/s
95th percentile per-packet one-way delay: 101.618 ms
Loss rate: 0.63%
```
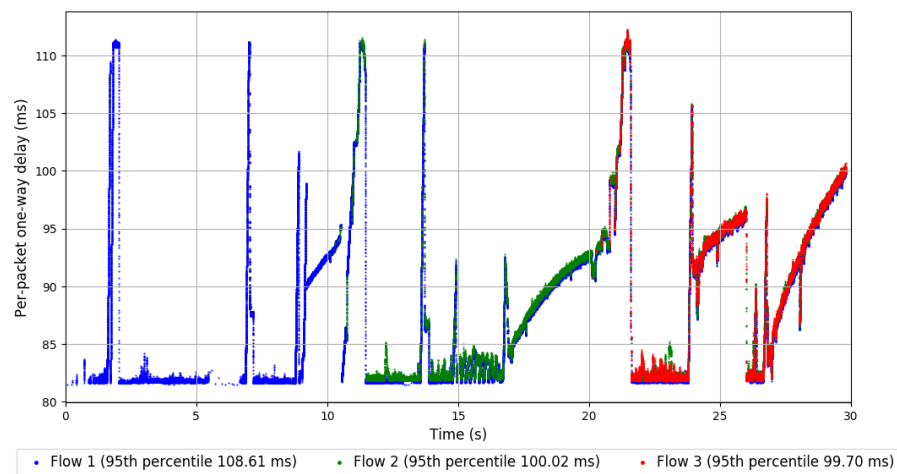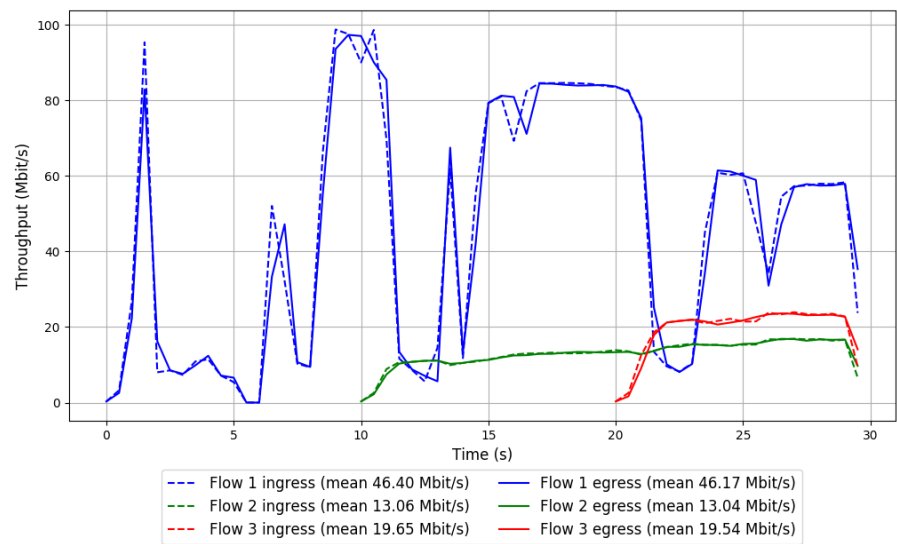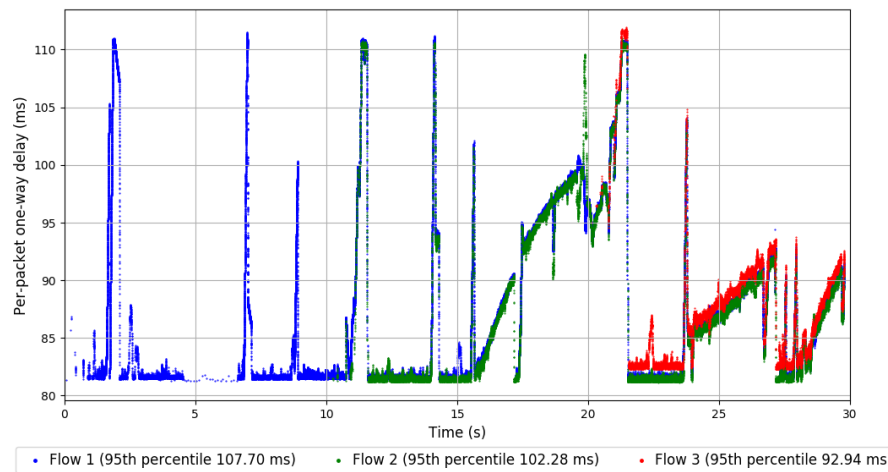
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 44.30 Mbit/s) Flow 1 egress (mean 44.00 Mbit/s)
Flow 2 ingress (mean 11.58 Mbit/s) Flow 2 egress (mean 11.55 Mbit/s)
Flow 3 ingress (mean 13.71 Mbit/s) Flow 3 egress (mean 13.64 Mbit/s)

Flow 1 (95th percentile 110.06 ms)   Flow 2 (95th percentile 103.85 ms)   Flow 3 (95th percentile 101.62 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-03-13 20:34:26
End at: 2018-03-13 20:34:56
Local clock offset: -5.643 ms
Remote clock offset: -0.313 ms


# Below is generated by plot.py at 2018-03-13 22:27:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.51 Mbit/s
95th percentile per-packet one-way delay: 111.366 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 113.242 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 108.927 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 15.99 Mbit/s
95th percentile per-packet one-way delay: 109.789 ms
Loss rate: 0.66%
```
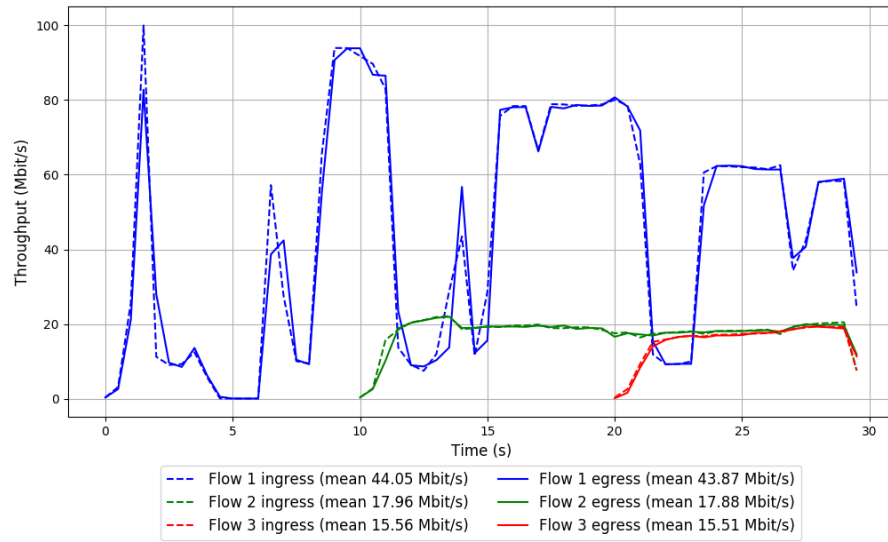
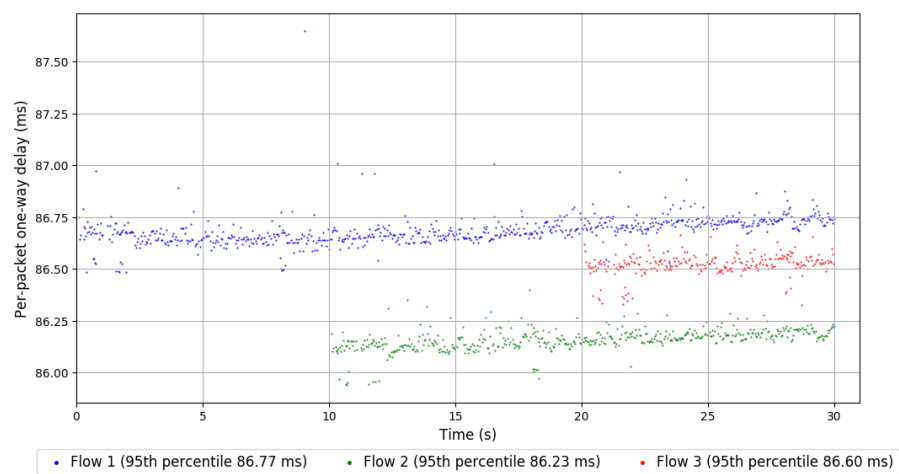Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-03-13 20:57:53
End at: 2018-03-13 20:58:23
Local clock offset: -4.989 ms
Remote clock offset: -5.648 ms


# Below is generated by plot.py at 2018-03-13 22:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 106.755 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 45.54 Mbit/s
95th percentile per-packet one-way delay: 107.160 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 18.51 Mbit/s
95th percentile per-packet one-way delay: 105.276 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 5.56 Mbit/s
95th percentile per-packet one-way delay: 89.875 ms
Loss rate: 0.11%
```

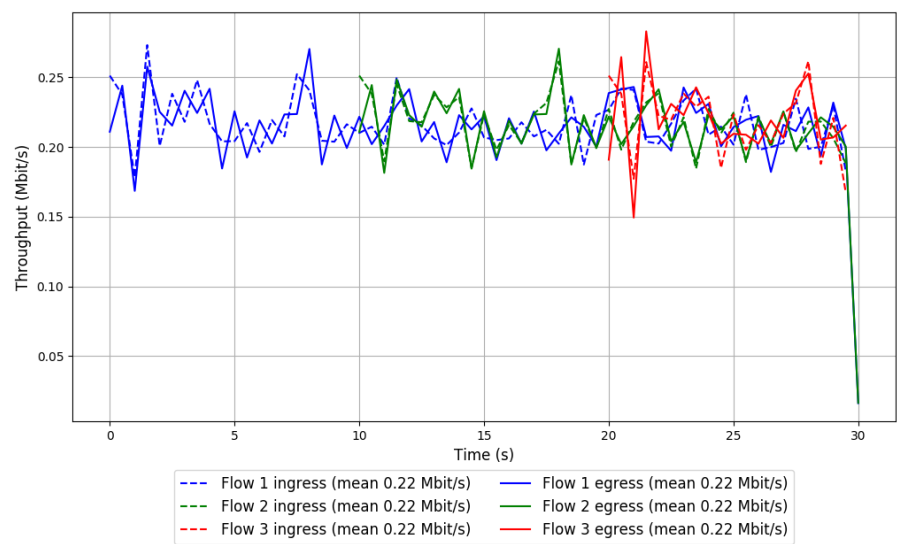Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-03-13 21:21:33
End at: 2018-03-13 21:22:03
Local clock offset: -2.194 ms
Remote clock offset: -4.9 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 105.419 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 46.17 Mbit/s
95th percentile per-packet one-way delay: 108.605 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 13.04 Mbit/s
95th percentile per-packet one-way delay: 100.024 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 19.54 Mbit/s
95th percentile per-packet one-way delay: 99.697 ms
Loss rate: 0.46%
```
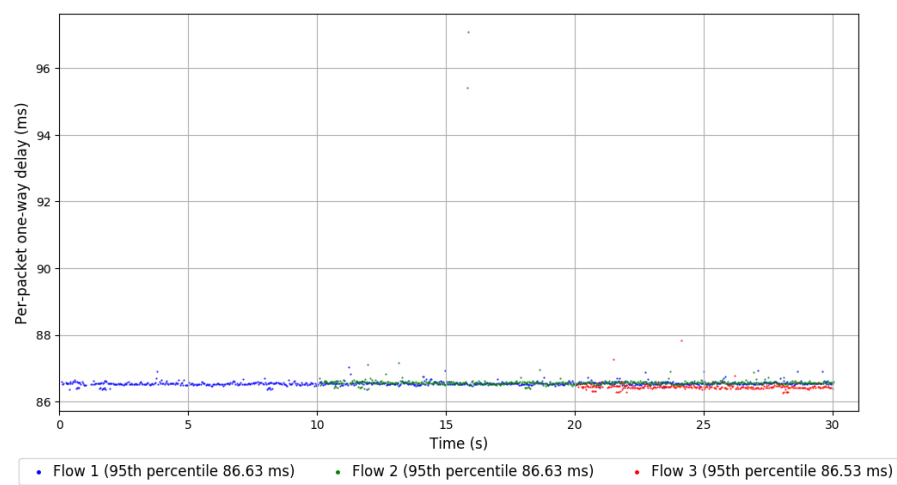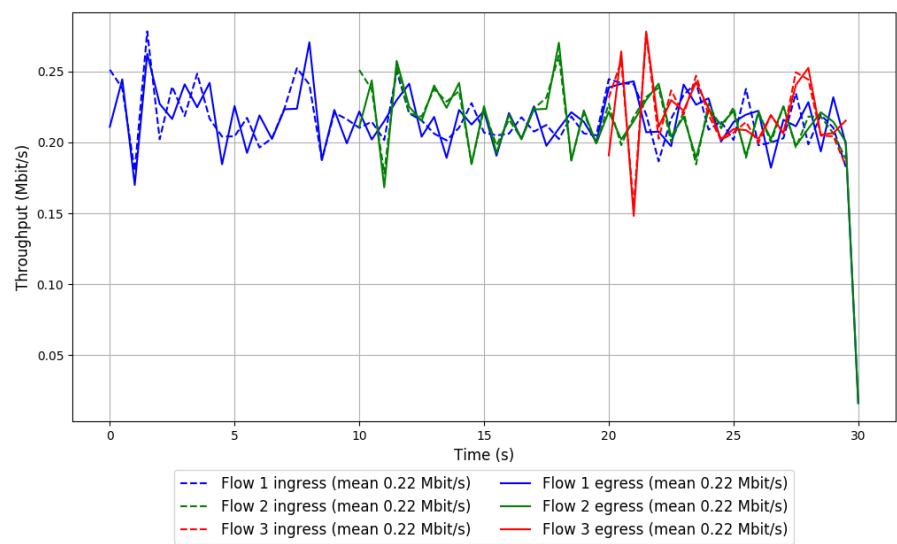
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-13 21:45:04
End at: 2018-03-13 21:45:34
Local clock offset: -6.266 ms
Remote clock offset: -4.897 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.77 Mbit/s
95th percentile per-packet one-way delay: 106.016 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 107.697 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 102.282 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 15.51 Mbit/s
95th percentile per-packet one-way delay: 92.941 ms
Loss rate: 0.34%
```

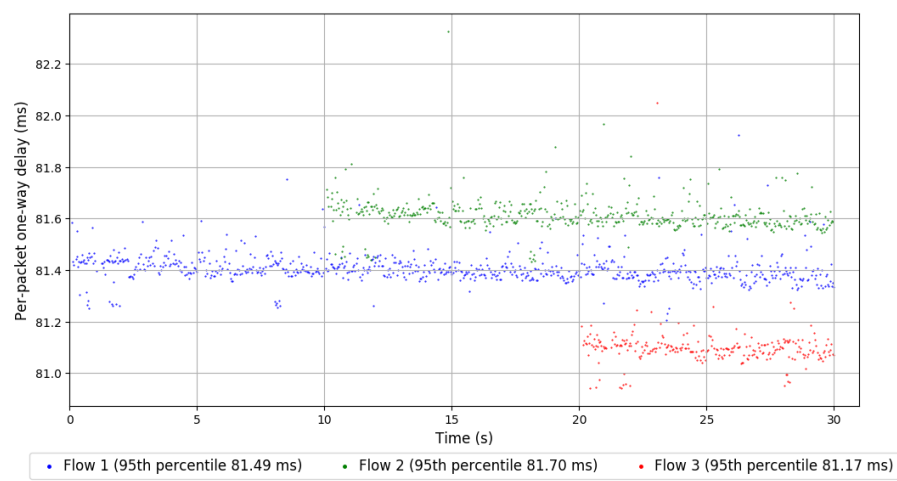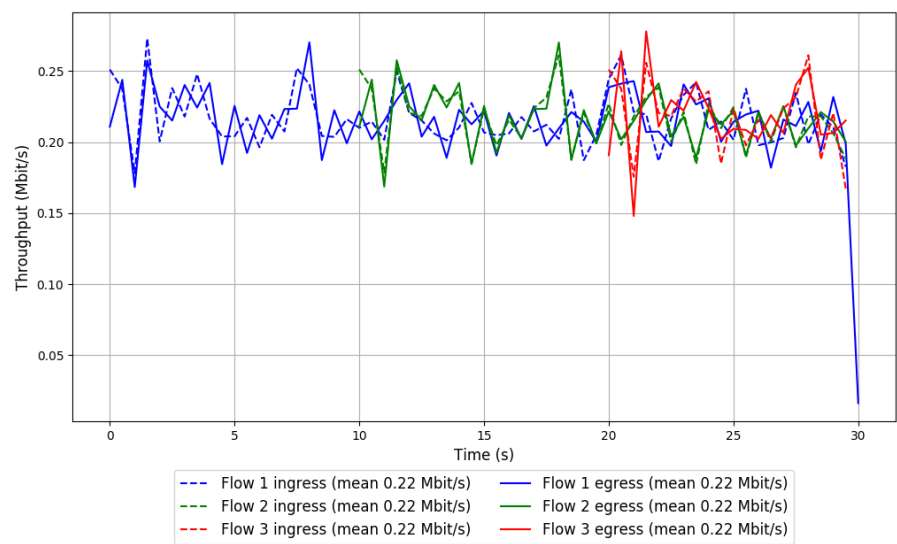Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-03-13 18:04:06
End at: 2018-03-13 18:04:36
Local clock offset: -6.787 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.771 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.233 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.600 ms
Loss rate: 0.00%
```
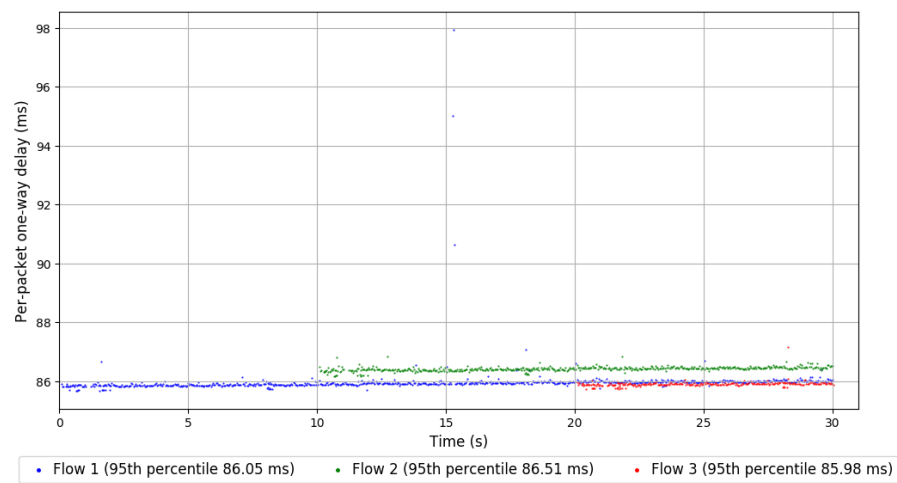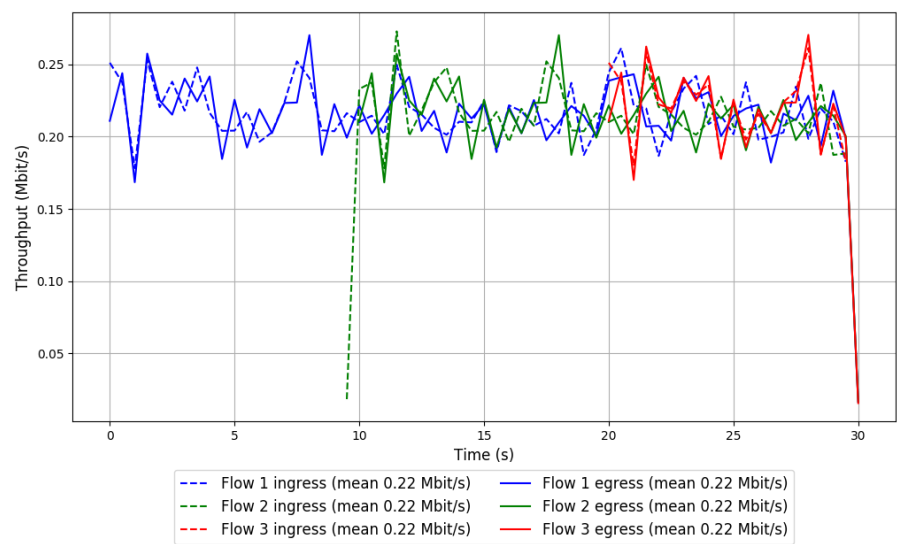
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-03-13 18:27:34
End at: 2018-03-13 18:28:04
Local clock offset: -4.243 ms
Remote clock offset: -0.228 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.625 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.627 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.633 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.527 ms
Loss rate: 0.00%
```
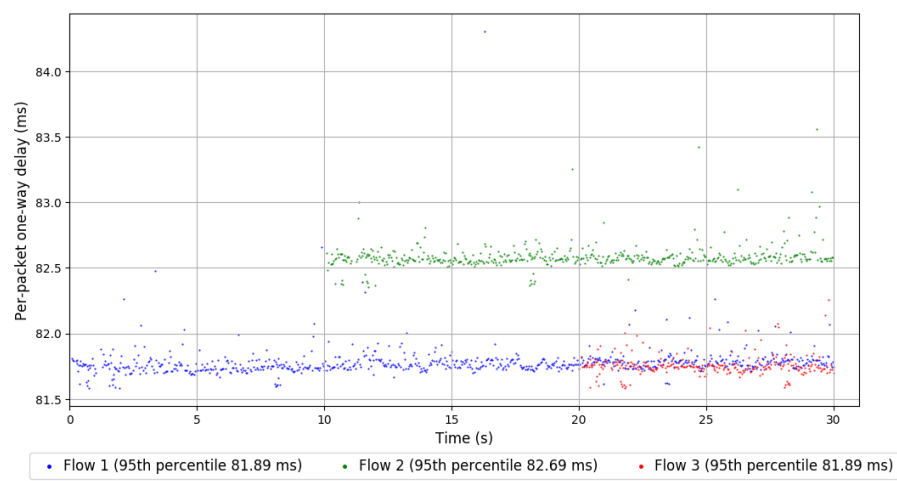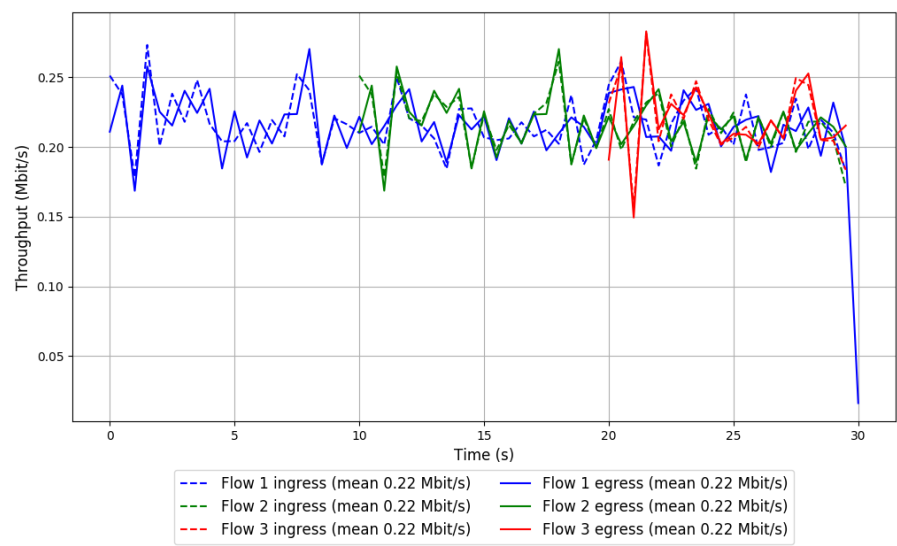
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-03-13 18:51:19
End at: 2018-03-13 18:51:49
Local clock offset: -5.597 ms
Remote clock offset: -5.975 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.656 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.703 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.173 ms
Loss rate: 0.00%
```
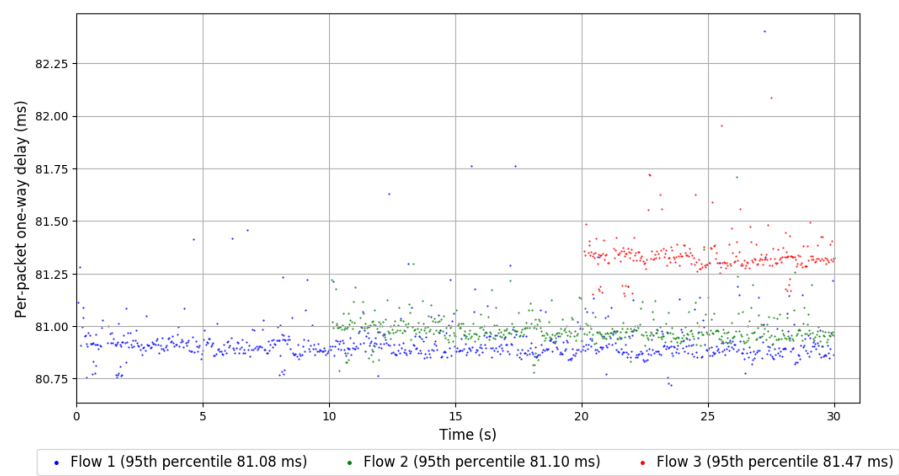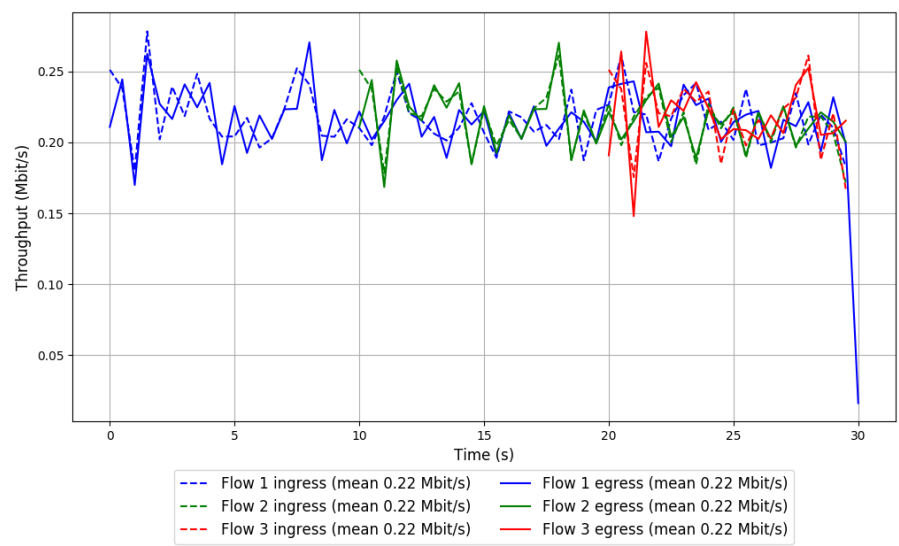
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-03-13 19:14:46
End at: 2018-03-13 19:15:16
Local clock offset: -5.542 ms
Remote clock offset: -0.835 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.051 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.985 ms
Loss rate: 0.00%
```
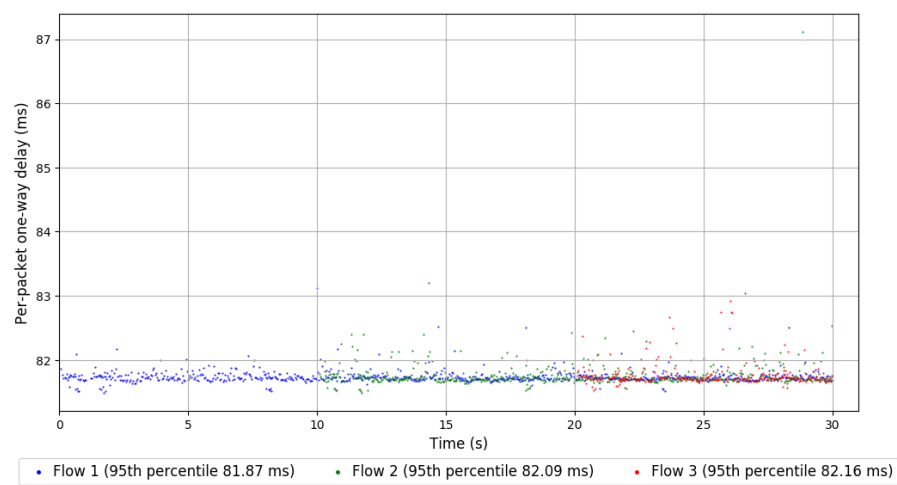
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-03-13 19:38:13
End at: 2018-03-13 19:38:43
Local clock offset: -1.686 ms
Remote clock offset: -4.894 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.893 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.887 ms
Loss rate: 0.00%
```
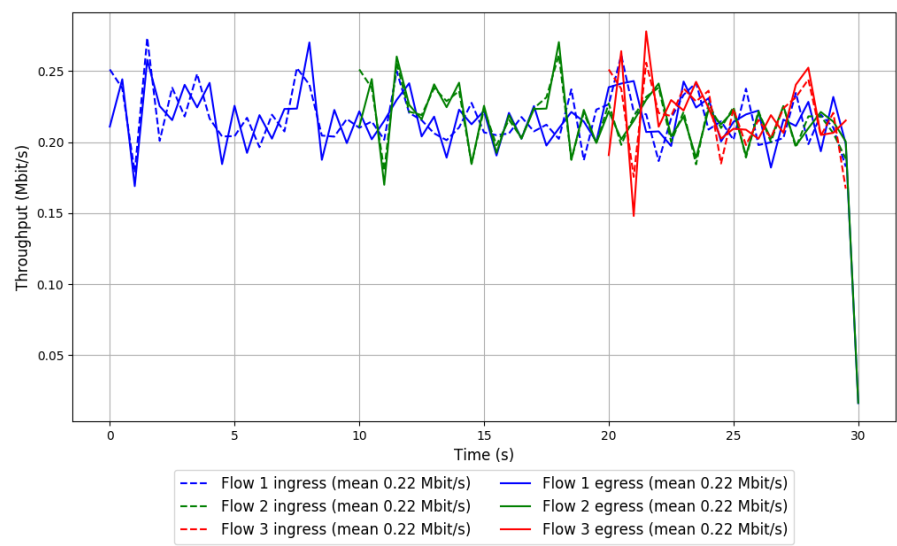
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-03-13 20:01:39
End at: 2018-03-13 20:02:09
Local clock offset: -4.853 ms
Remote clock offset: -5.825 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.100 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.474 ms
Loss rate: 0.00%
```
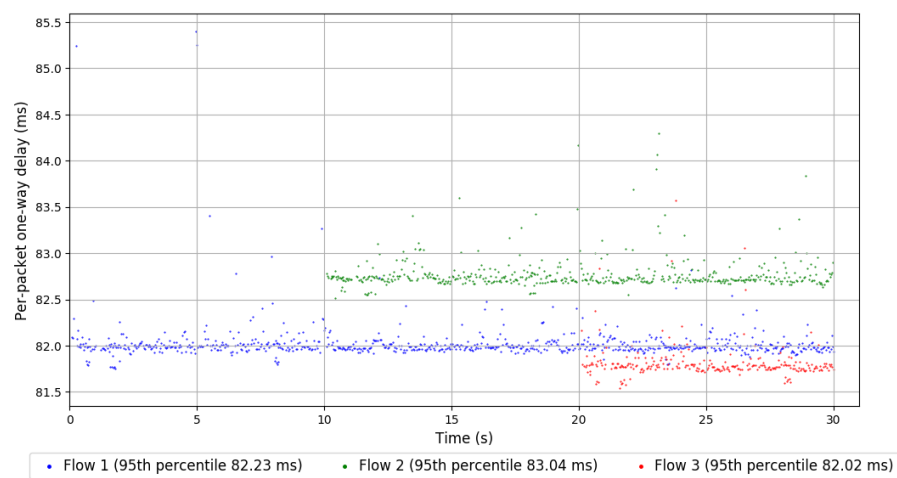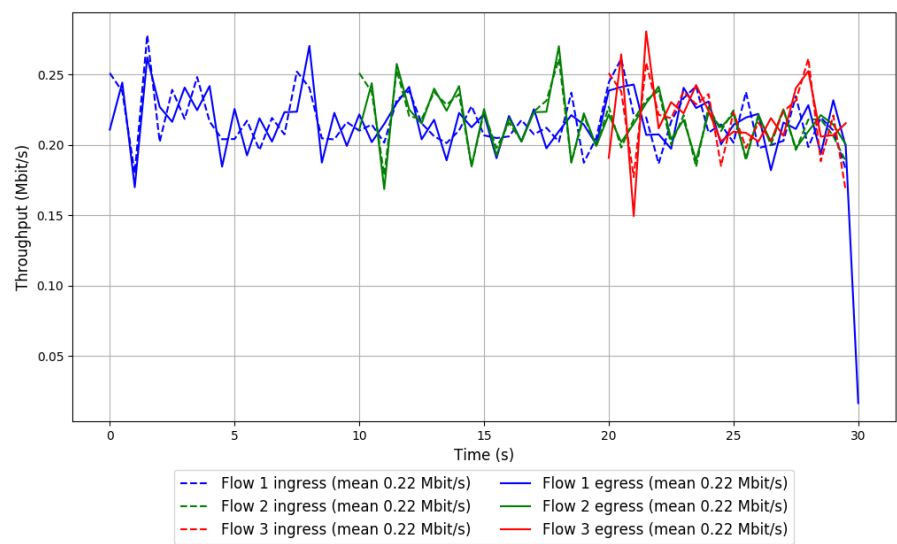
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-03-13 20:25:18
End at: 2018-03-13 20:25:48
Local clock offset: -5.701 ms
Remote clock offset: -5.276 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.987 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.086 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.160 ms
Loss rate: 0.00%
```
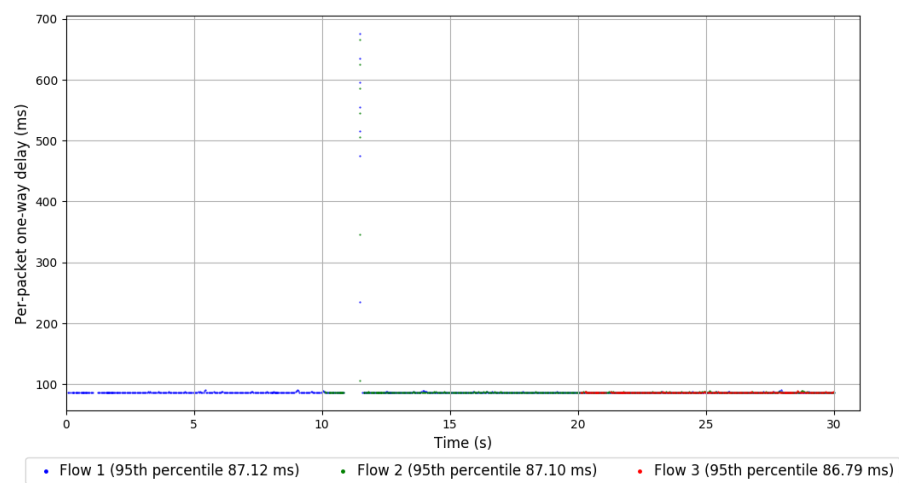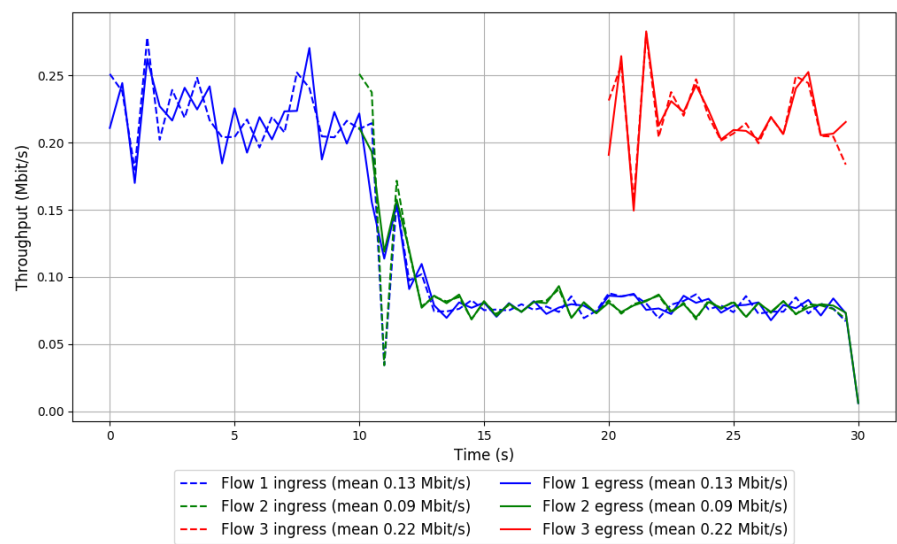
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-03-13 20:48:45
End at: 2018-03-13 20:49:15
Local clock offset: -5.664 ms
Remote clock offset: -4.803 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.858 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.228 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.038 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.015 ms
Loss rate: 0.00%
```
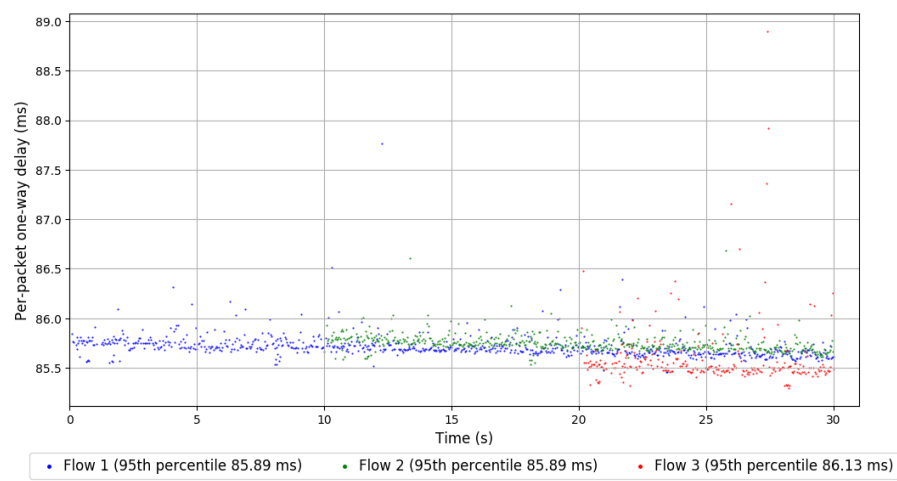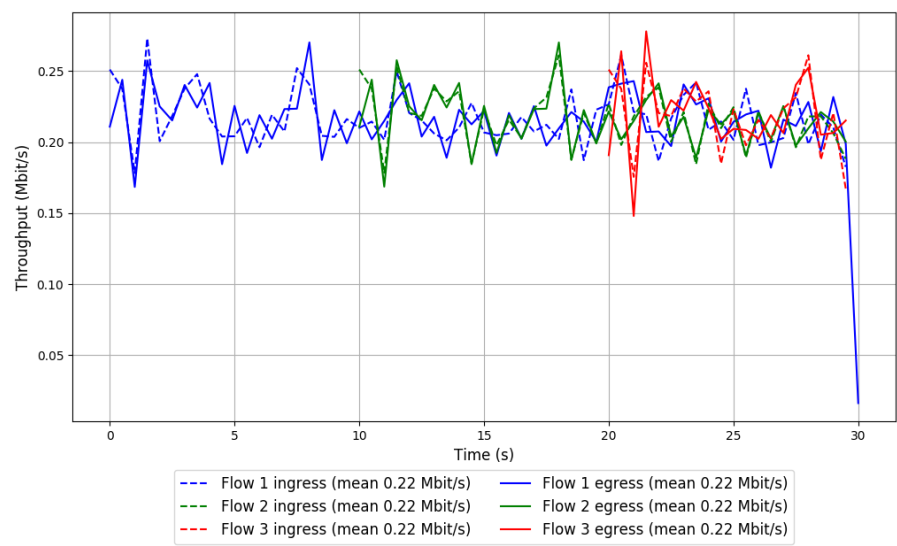
Run 8: Report of SCReAM — Data Link

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```
Run 9: Statistics of SCReAM

Start at: 2018-03-13 21:12:12
End at: 2018-03-13 21:12:42
Local clock offset: -2.805 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 87.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 87.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 87.096 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.793 ms
Loss rate: 0.00%
```
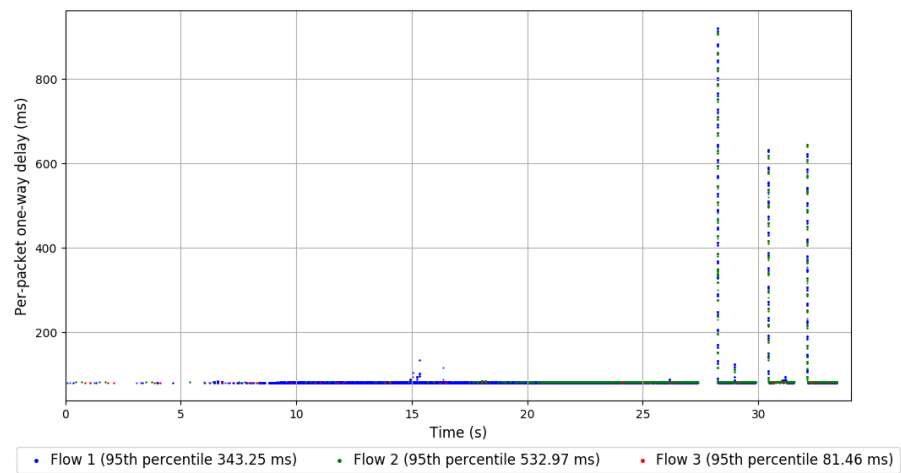
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-03-13 21:35:55
End at: 2018-03-13 21:36:25
Local clock offset: -4.459 ms
Remote clock offset: -0.882 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.905 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.885 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.889 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.126 ms
Loss rate: 0.00%
```
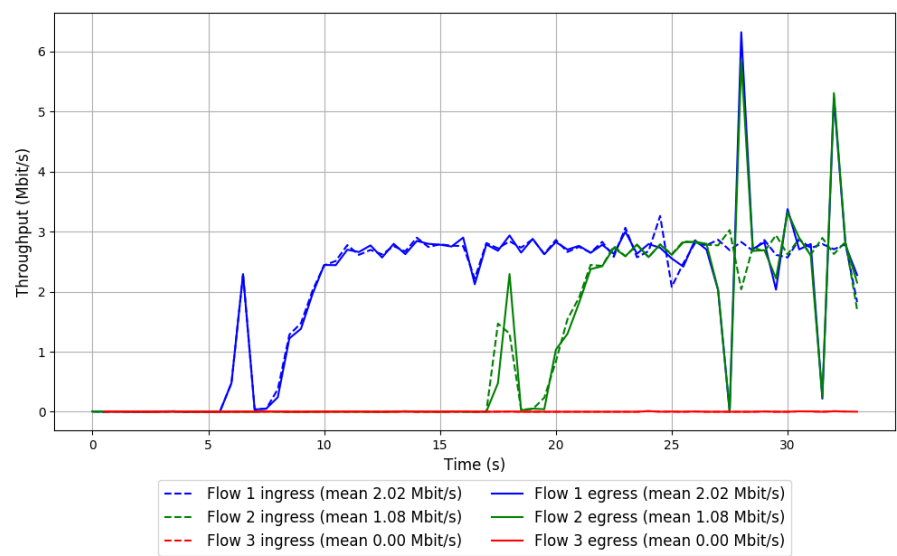
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-03-13 18:10:38
End at: 2018-03-13 18:11:08
Local clock offset: -5.5 ms
Remote clock offset: -5.678 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 428.395 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 343.251 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 532.972 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 81.464 ms
Loss rate: 0.00%
```

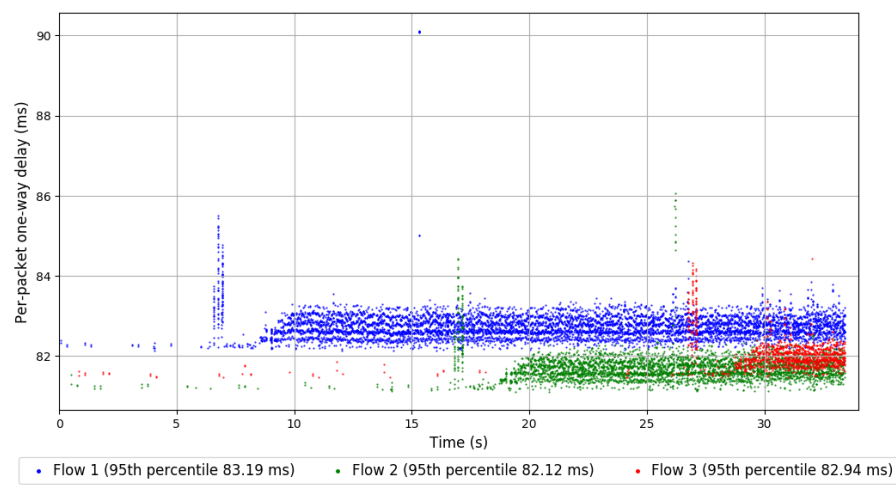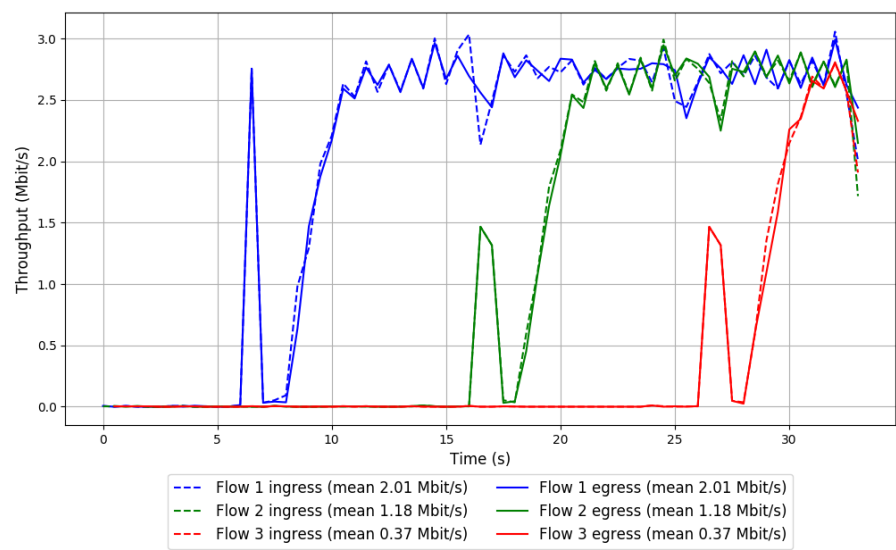Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-03-13 18:34:09
End at: 2018-03-13 18:34:39
Local clock offset: -4.118 ms
Remote clock offset: -5.193 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 83.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 83.186 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 82.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 82.945 ms
Loss rate: 0.00%
```
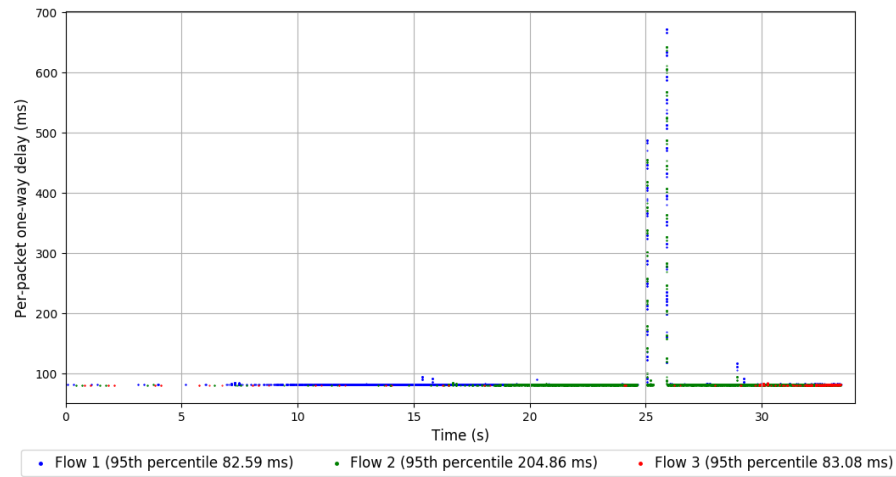
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-03-13 18:57:51
End at: 2018-03-13 18:58:21
Local clock offset: -5.831 ms
Remote clock offset: -5.8 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 84.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 82.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 204.863 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 83.084 ms
Loss rate: 0.00%
```
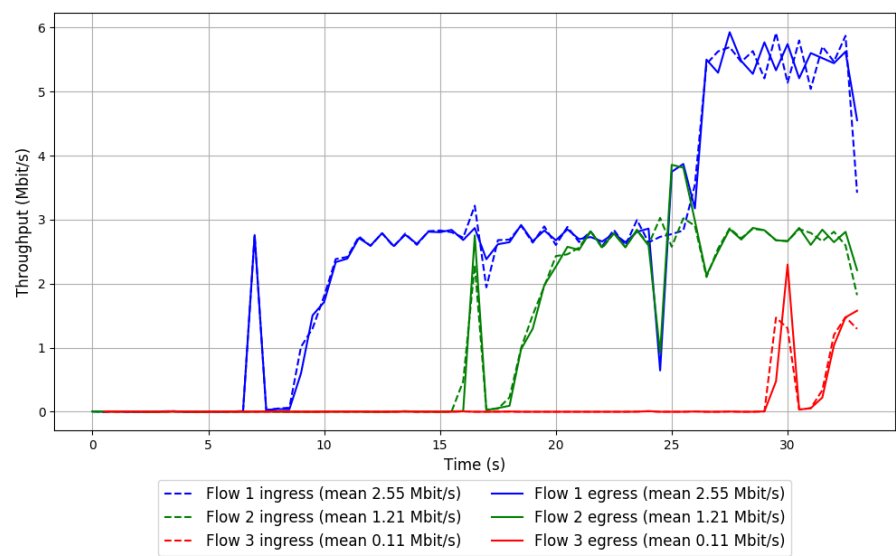
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-03-13 19:21:18
End at: 2018-03-13 19:21:48
Local clock offset: -3.732 ms
Remote clock offset: -4.81 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 82.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 82.782 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 82.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 83.185 ms
Loss rate: 0.00%
```
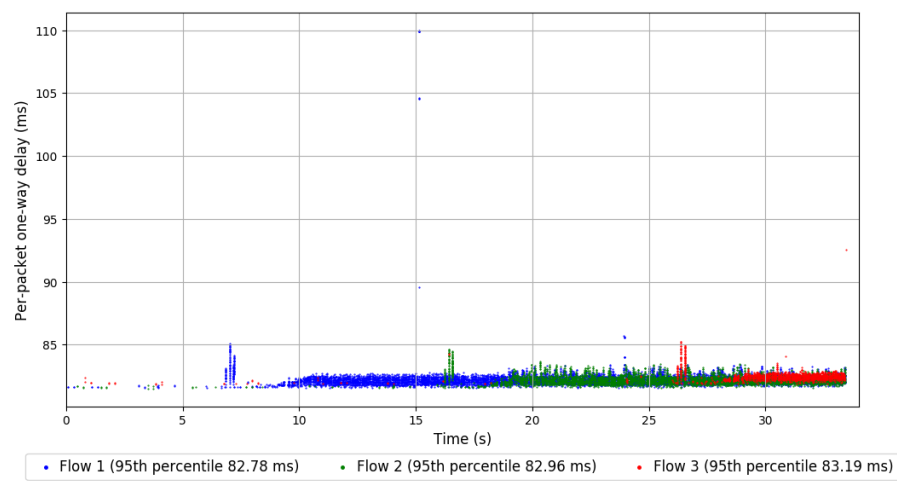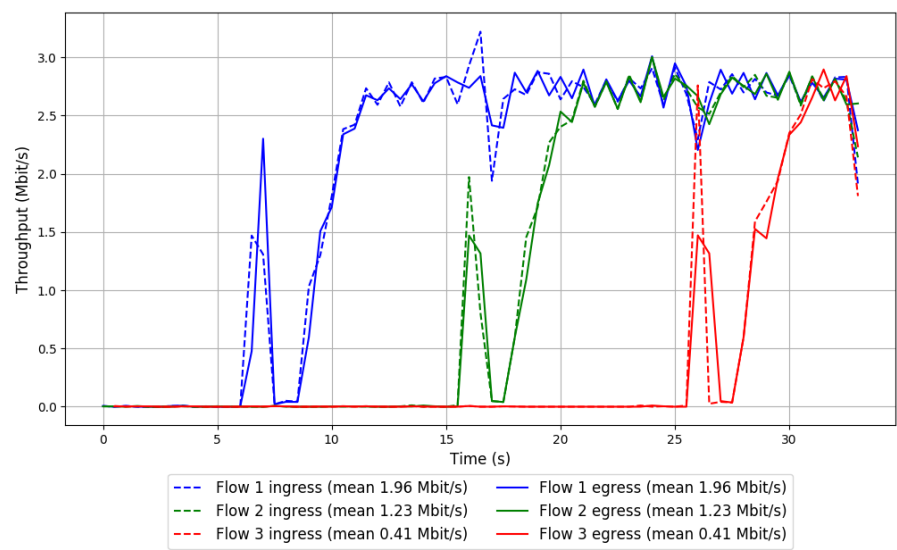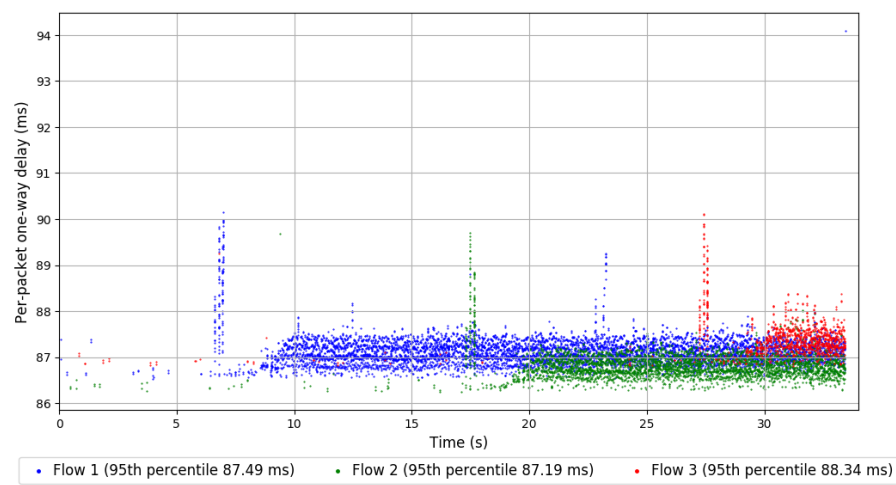
Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.96 Mbit/s)   Flow 1 egress (mean 1.96 Mbit/s)
Flow 2 ingress (mean 1.23 Mbit/s)   Flow 2 egress (mean 1.23 Mbit/s)
Flow 3 ingress (mean 0.41 Mbit/s)   Flow 3 egress (mean 0.41 Mbit/s)

Flow 1 (95th percentile 82.78 ms)   Flow 2 (95th percentile 82.96 ms)   Flow 3 (95th percentile 83.19 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-03-13 19:44:45
End at: 2018-03-13 19:45:15
Local clock offset: -1.215 ms
Remote clock offset: 0.086 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 87.574 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 87.486 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 87.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 88.343 ms
Loss rate: 0.00%
```
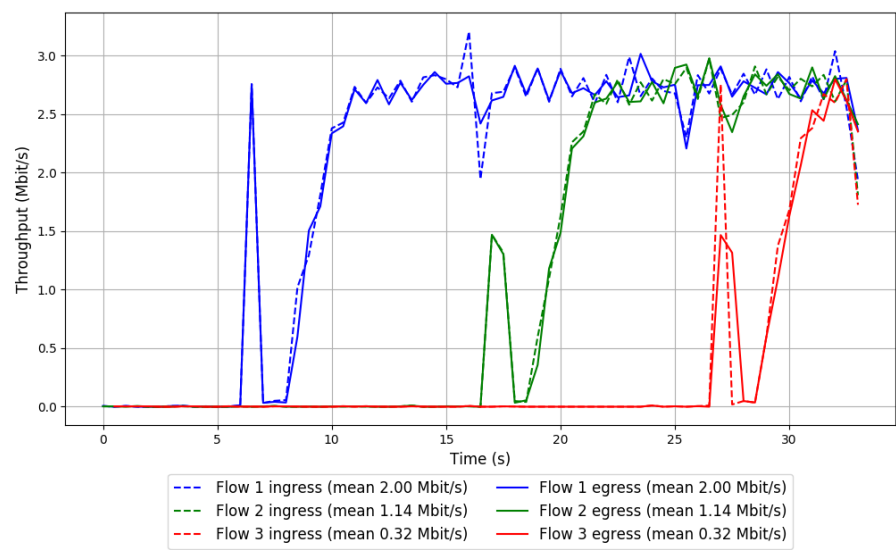
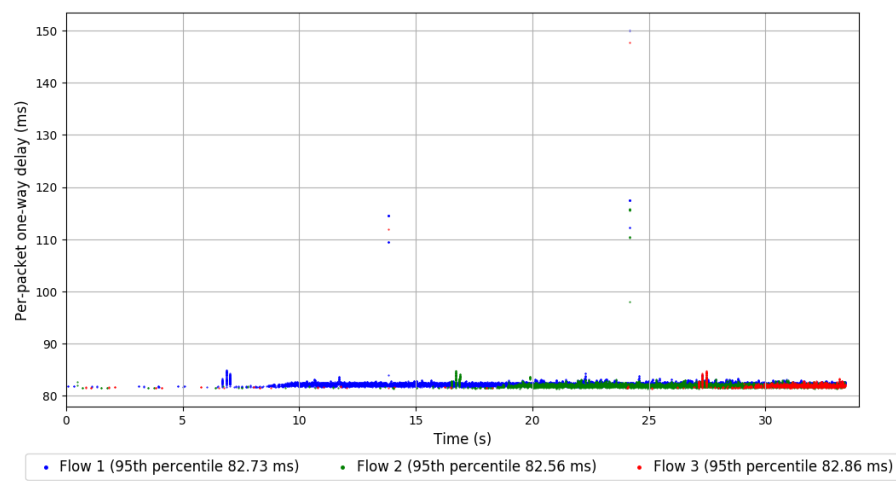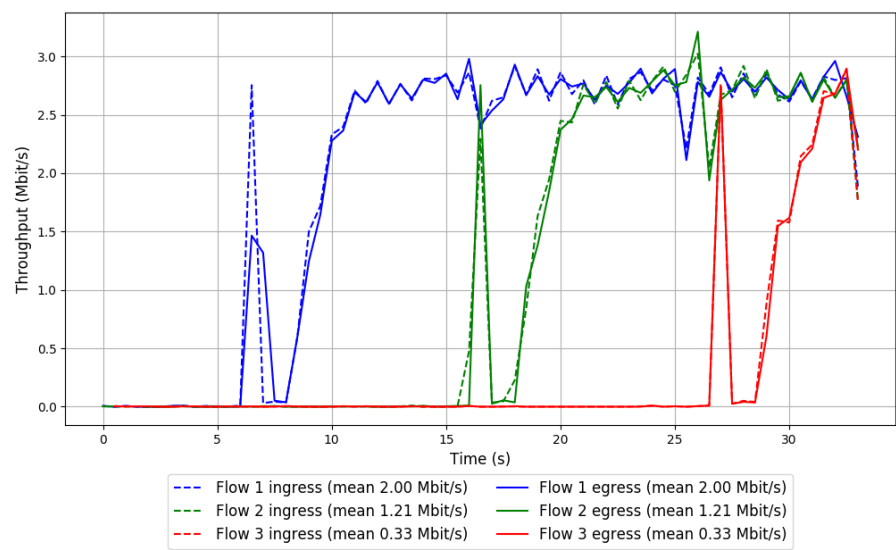Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-03-13 20:08:15
End at: 2018-03-13 20:08:45
Local clock offset: -5.251 ms
Remote clock offset: -5.171 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 82.698 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 82.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 82.556 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 82.857 ms
Loss rate: 0.00%
```

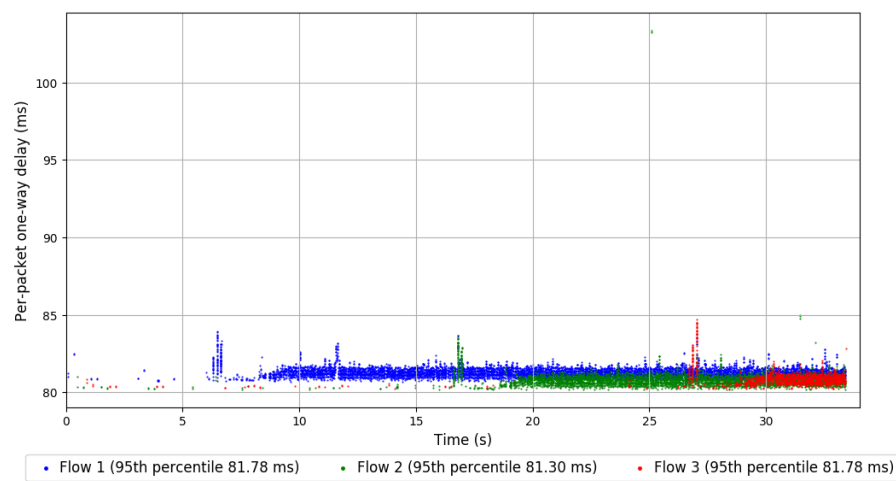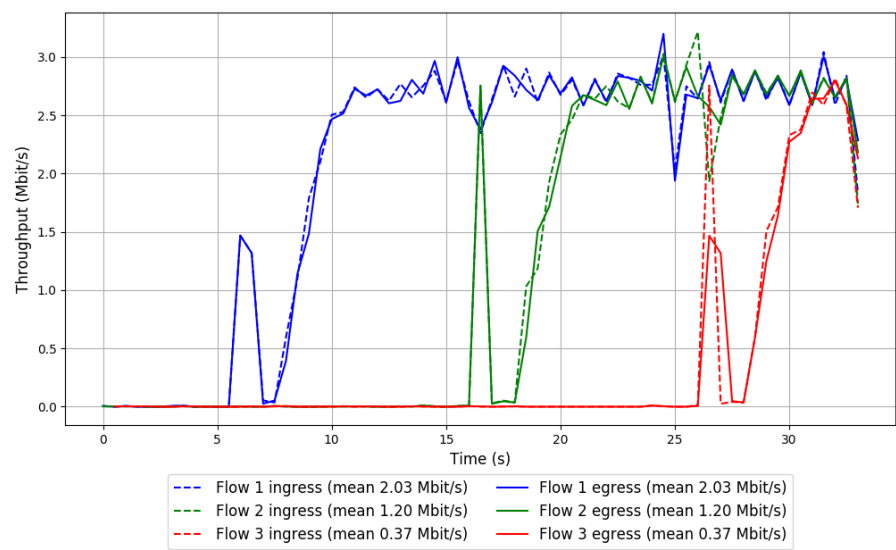Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-03-13 20:31:50
End at: 2018-03-13 20:32:20
Local clock offset: -5.607 ms
Remote clock offset: -6.118 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 81.703 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 81.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 81.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 81.781 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-03-13 20:55:17
End at: 2018-03-13 20:55:47
Local clock offset: -5.722 ms
Remote clock offset: 0.11 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 88.228 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 87.607 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 88.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 88.332 ms
Loss rate: 0.01%
```
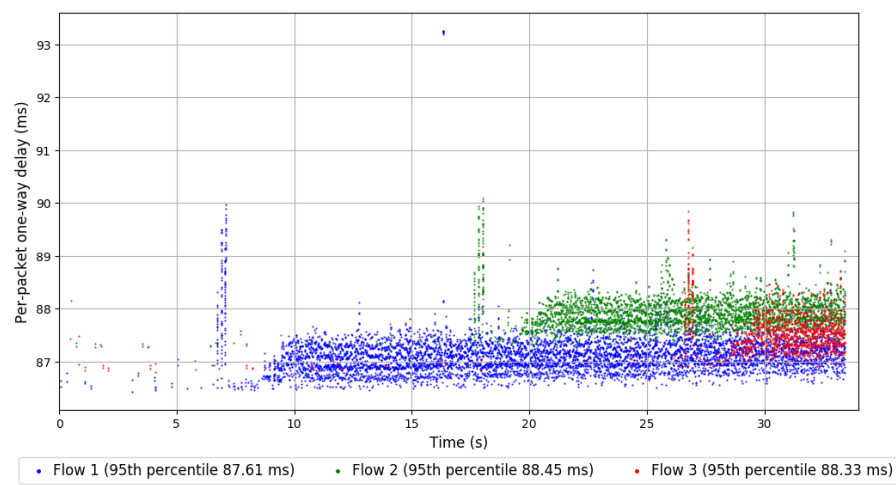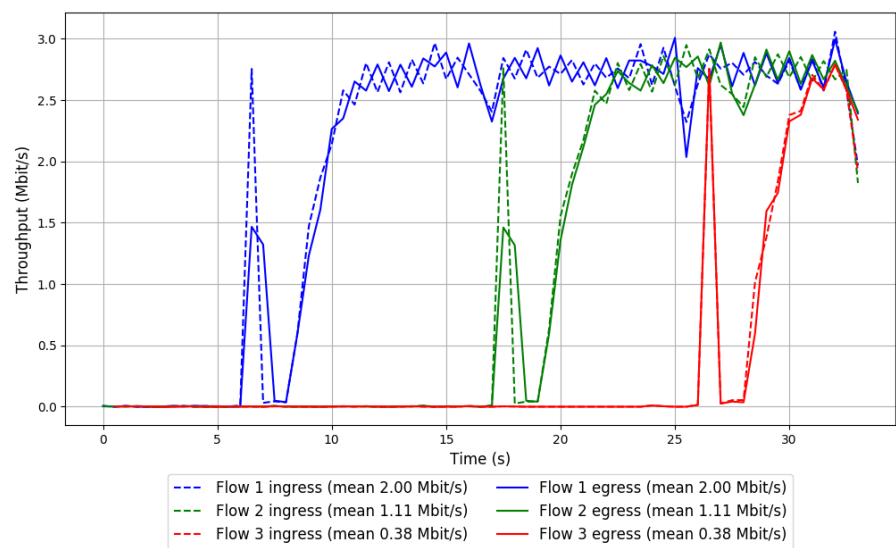
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-03-13 21:18:56
End at: 2018-03-13 21:19:26
Local clock offset: -2.4 ms
Remote clock offset: 0.956 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 89.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 88.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 89.395 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 89.327 ms
Loss rate: 0.00%
```
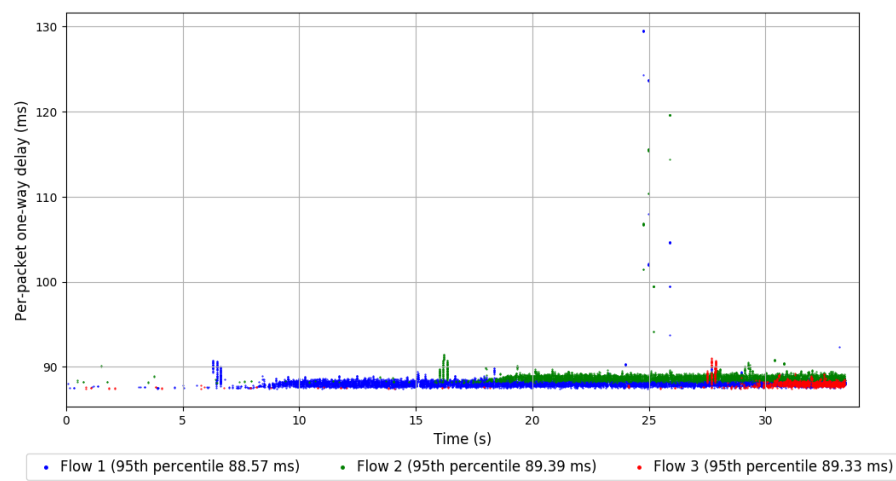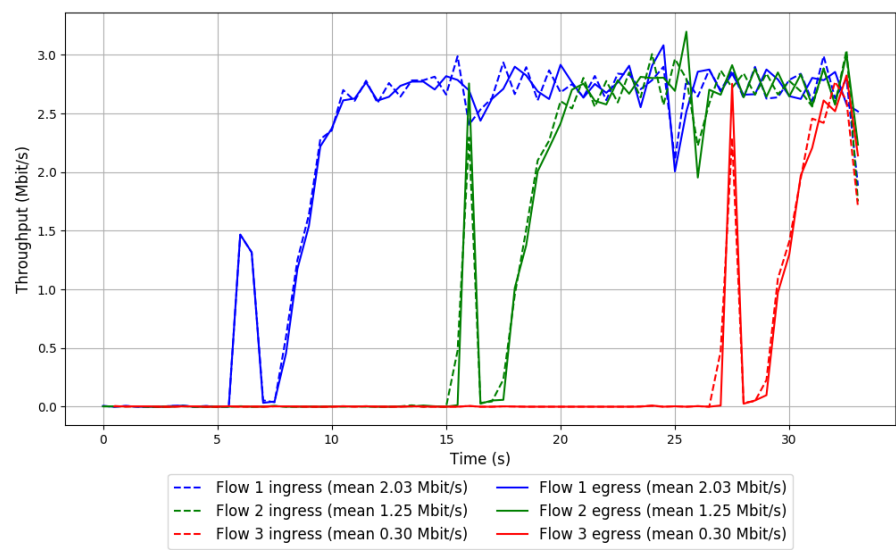
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-03-13 21:42:28
End at: 2018-03-13 21:42:58
Local clock offset: -5.911 ms
Remote clock offset: -5.68 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 82.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 81.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 82.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 83.407 ms
Loss rate: 0.00%
```
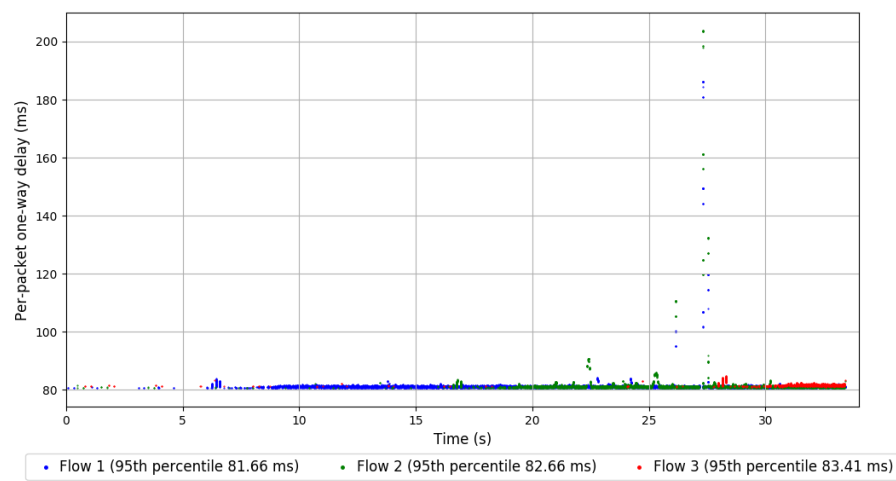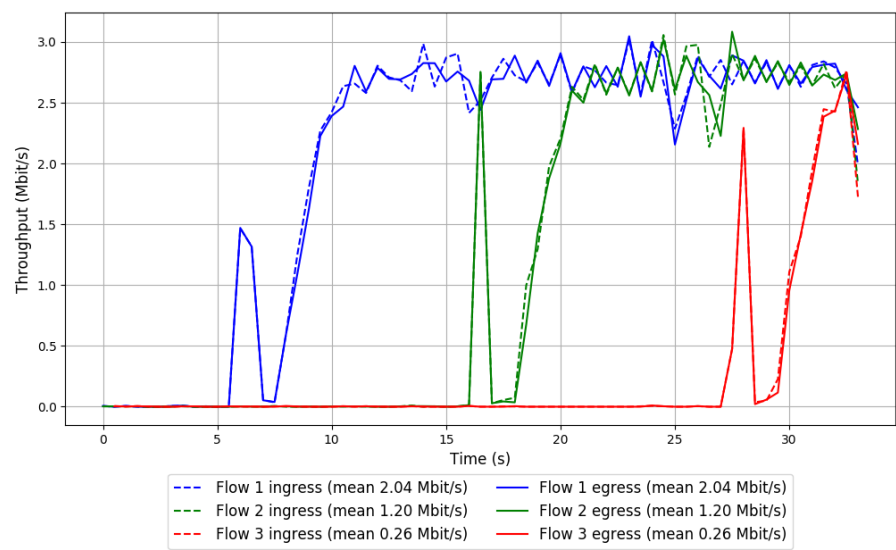
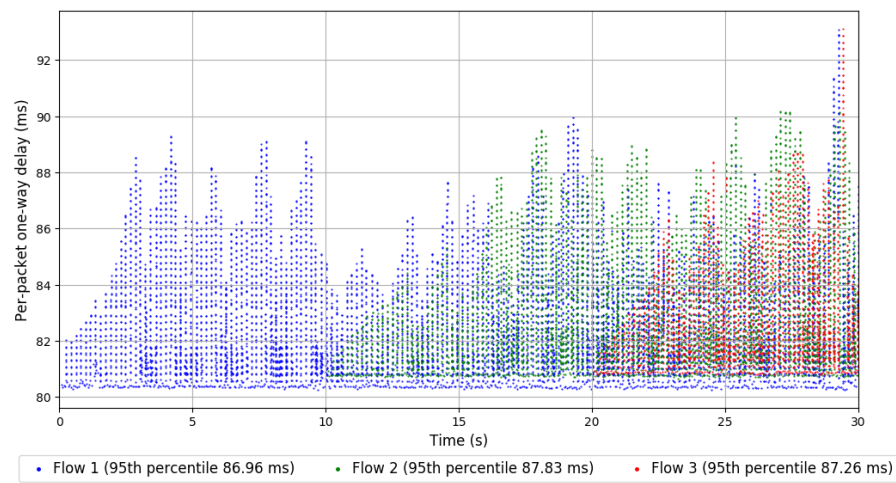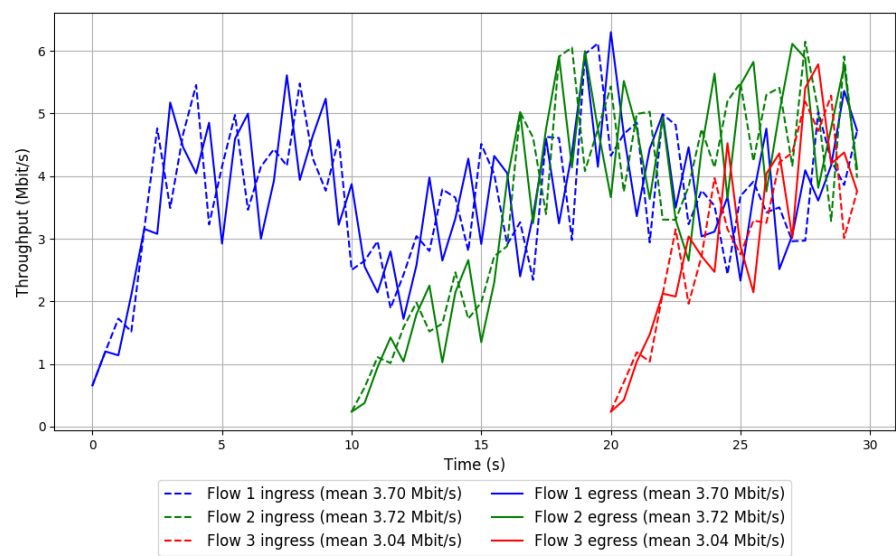## Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-03-13 18:00:15
End at: 2018-03-13 18:00:45
Local clock offset: -6.643 ms
Remote clock offset: -5.663 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 87.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 86.959 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 87.831 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 87.264 ms
Loss rate: 0.00%
```
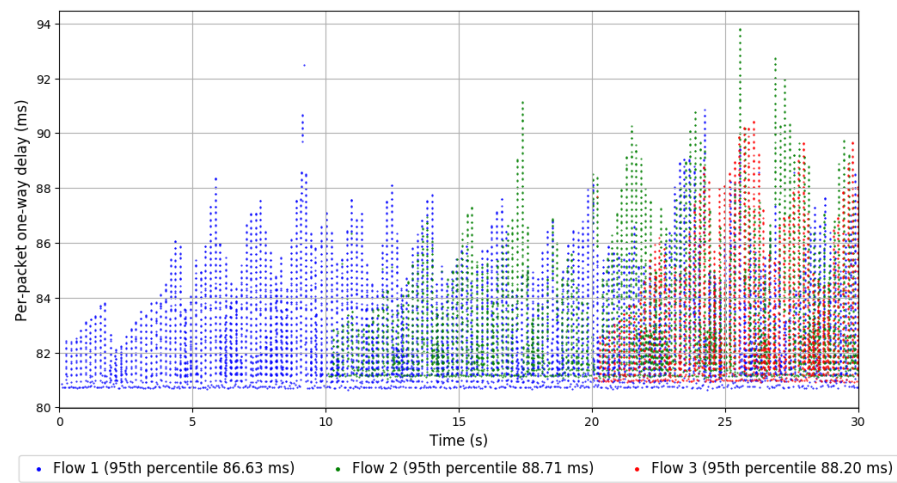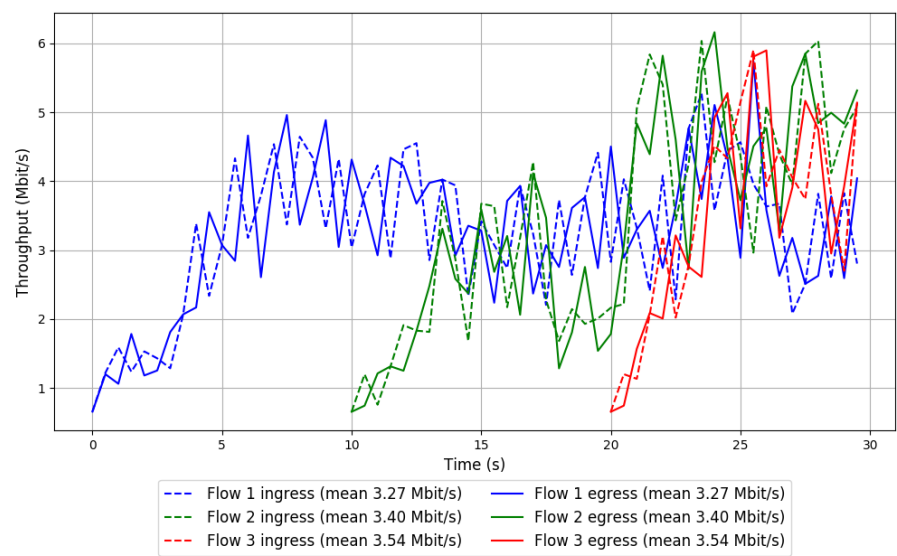
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-03-13 18:23:43
End at: 2018-03-13 18:24:13
Local clock offset: -4.383 ms
Remote clock offset: -5.823 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 87.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 86.628 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 88.710 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 88.199 ms
Loss rate: 0.00%
```
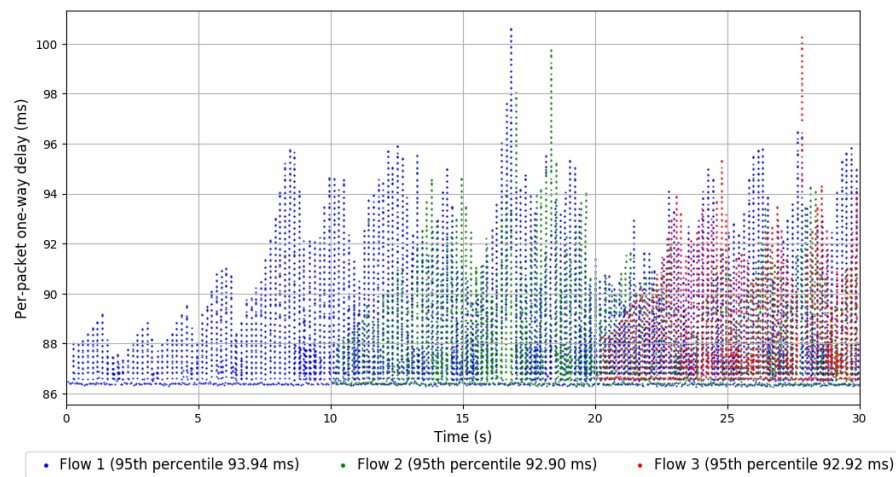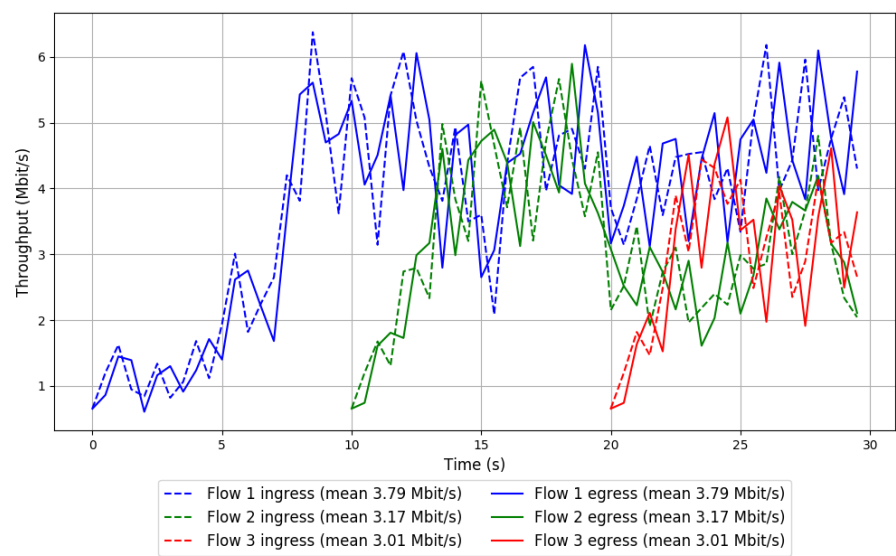
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-03-13 18:47:29
End at: 2018-03-13 18:47:59
Local clock offset: -5.241 ms
Remote clock offset: -0.302 ms

# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 93.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 93.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 92.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 92.922 ms
Loss rate: 0.00%
```
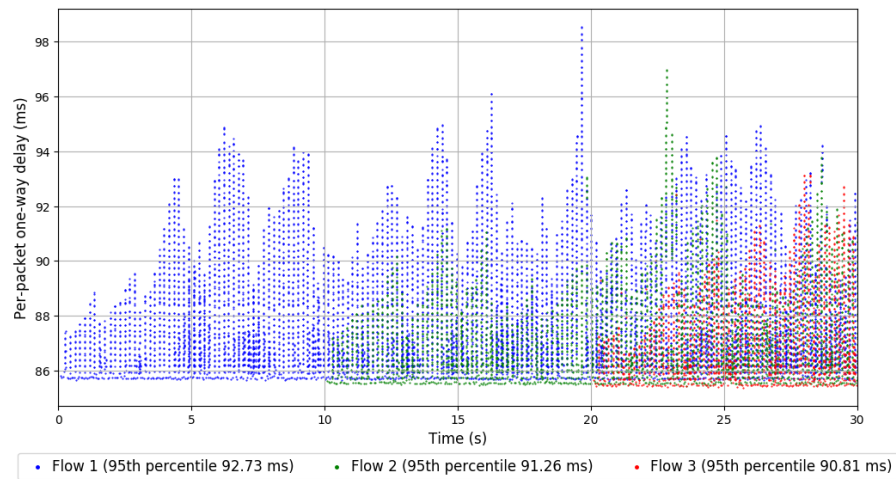
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-03-13 19:10:55
End at: 2018-03-13 19:11:25
Local clock offset: -6.269 ms
Remote clock offset: -0.836 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 92.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 92.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 91.263 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 90.805 ms
Loss rate: 0.00%
```
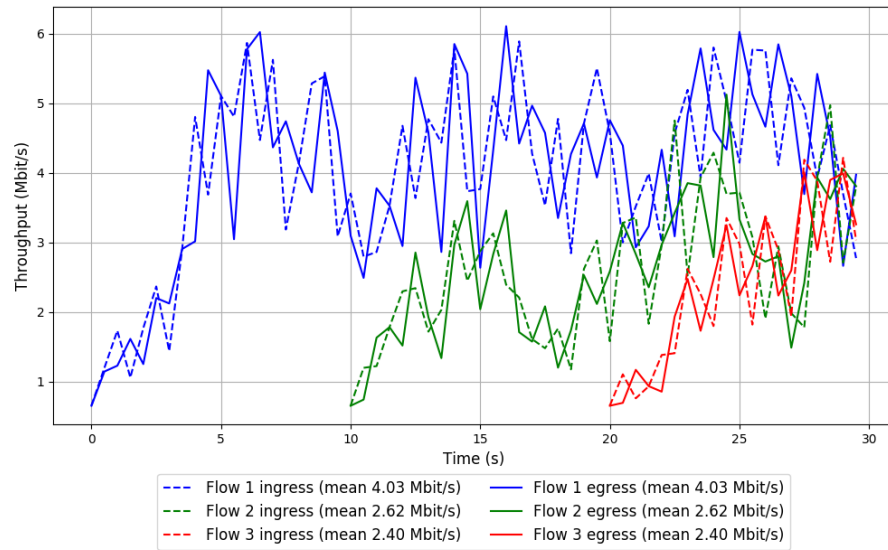
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-03-13 19:34:22
End at: 2018-03-13 19:34:52
Local clock offset: -2.004 ms
Remote clock offset: -0.926 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 92.814 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 93.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.25 Mbit/s
95th percentile per-packet one-way delay: 92.021 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 92.432 ms
Loss rate: 0.00%
```
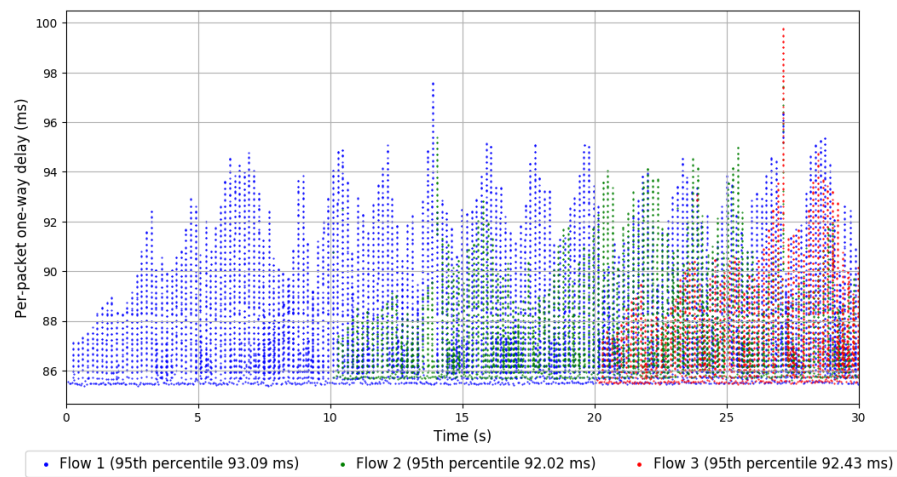
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-03-13 19:57:49
End at: 2018-03-13 19:58:19
Local clock offset: -4.302 ms
Remote clock offset: 0.065 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 94.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 94.376 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 94.308 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 93.989 ms
Loss rate: 0.00%
```
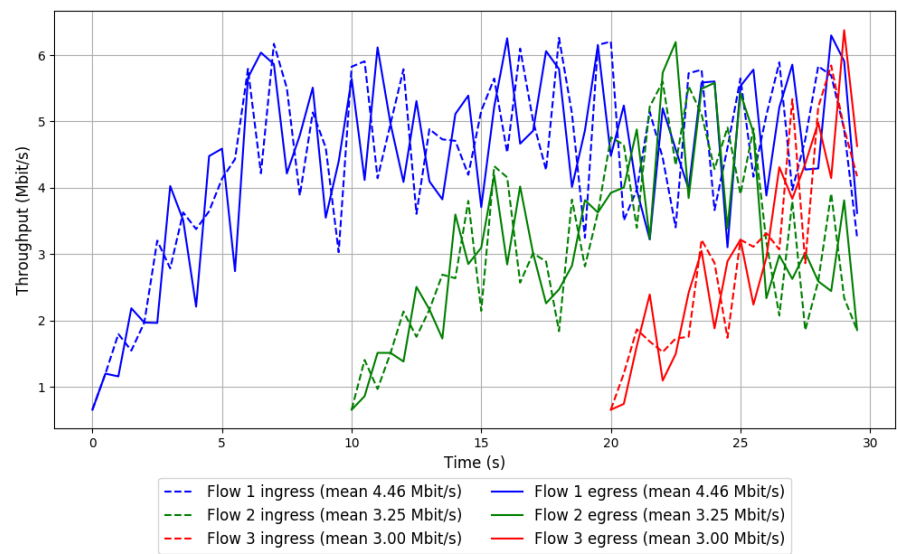
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-03-13 20:21:27
End at: 2018-03-13 20:21:57
Local clock offset: -5.734 ms
Remote clock offset: -0.246 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 94.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 94.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 94.561 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 91.766 ms
Loss rate: 0.00%
```
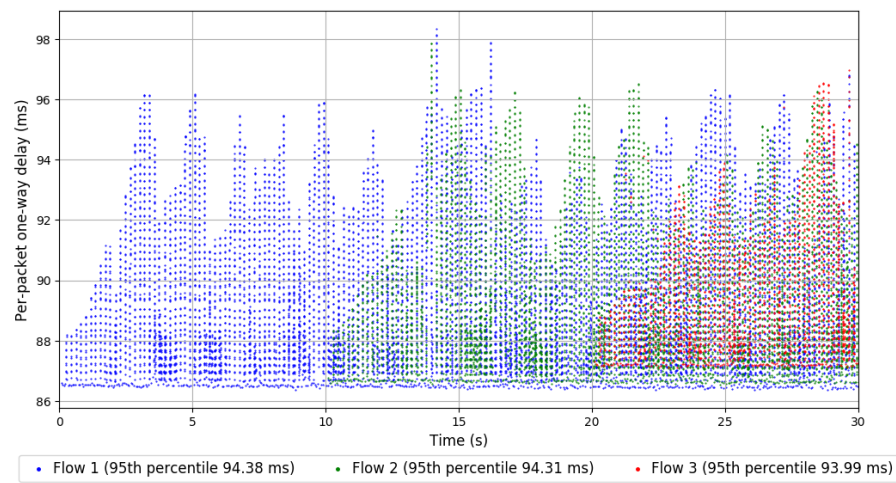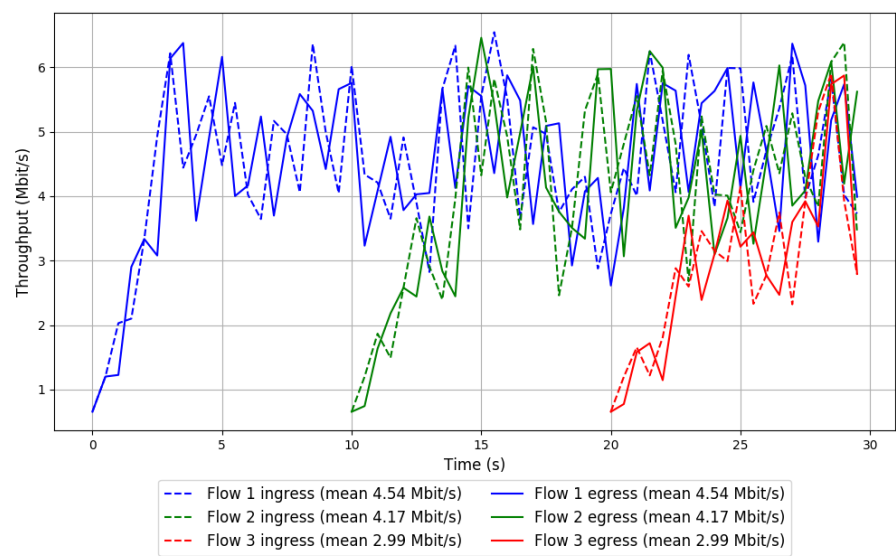
Run 7: Report of Sprout — Data Link

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```
Run 8: Statistics of Sprout

Start at: 2018-03-13 20:44:54
End at: 2018-03-13 20:45:24
Local clock offset: -5.73 ms
Remote clock offset: -4.913 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 88.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 87.768 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 87.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 88.881 ms
Loss rate: 0.00%
```
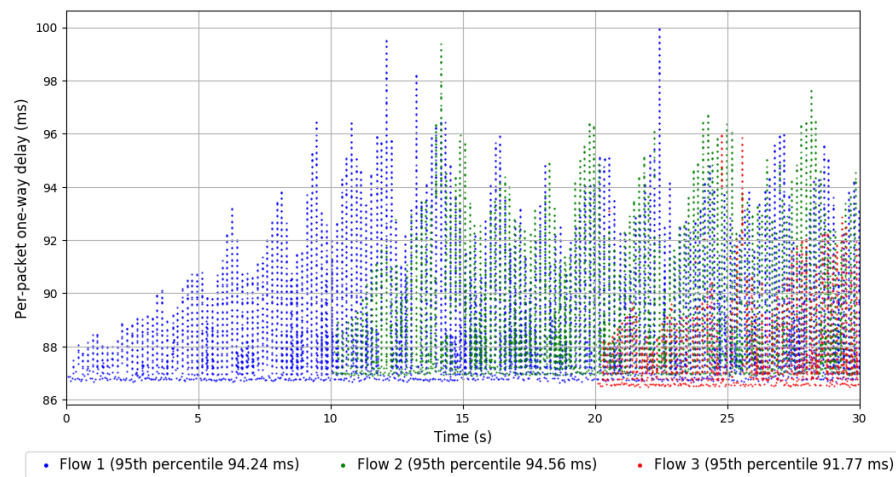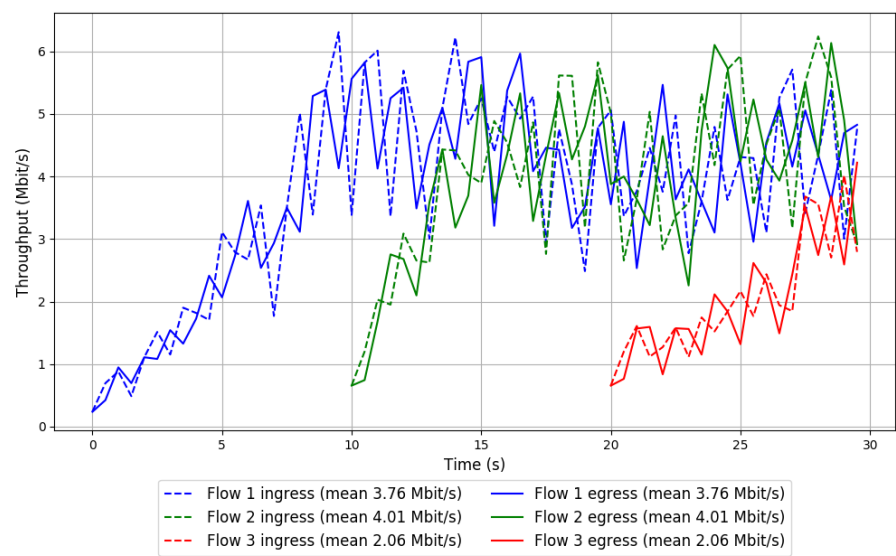
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-03-13 21:08:21
End at: 2018-03-13 21:08:51
Local clock offset: -3.139 ms
Remote clock offset: -5.597 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.87 Mbit/s
95th percentile per-packet one-way delay: 86.816 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 86.316 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 86.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 88.154 ms
Loss rate: 0.00%
```
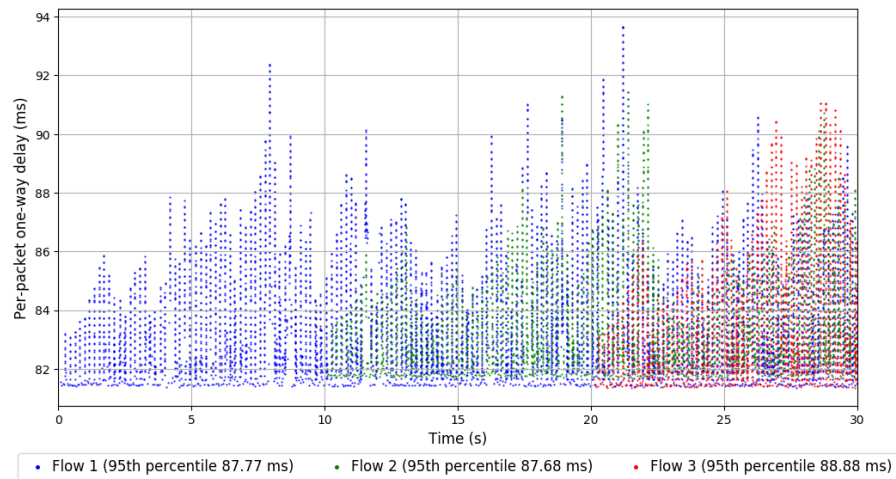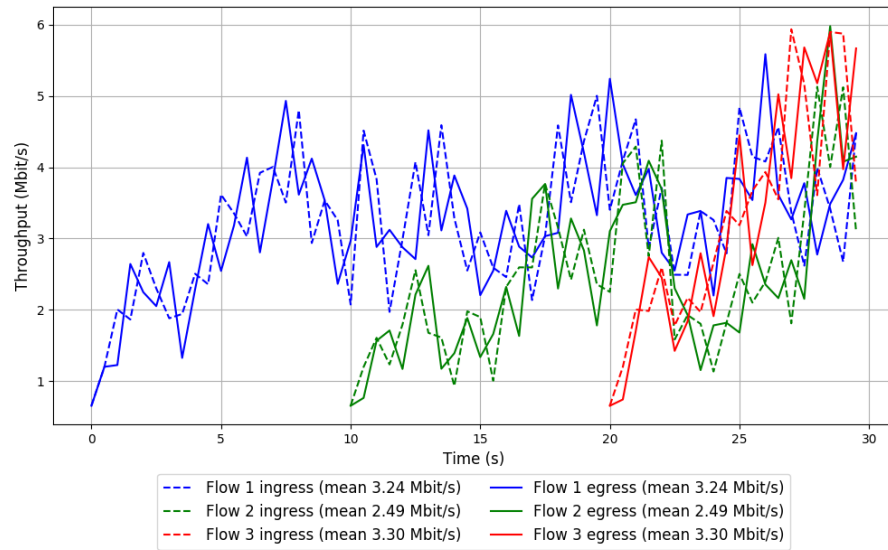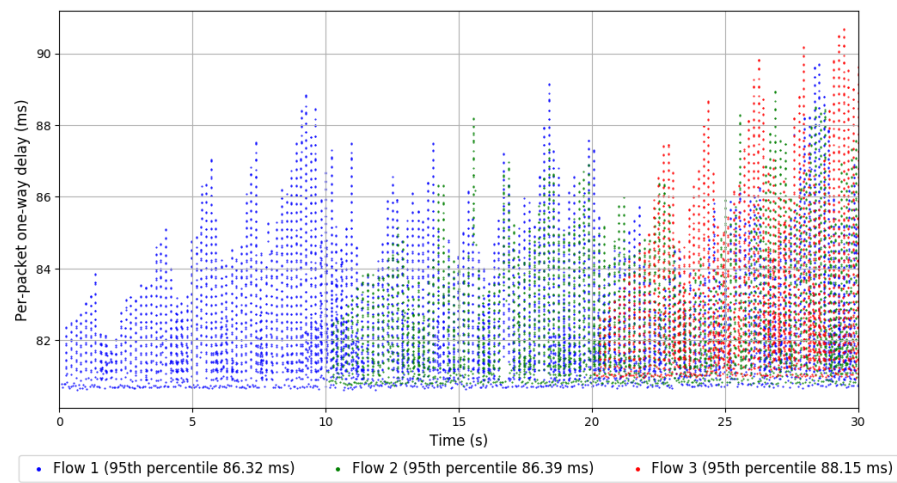
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-03-13 21:32:03
End at: 2018-03-13 21:32:33
Local clock offset: -3.001 ms
Remote clock offset: -5.694 ms


# Below is generated by plot.py at 2018-03-13 22:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.87 Mbit/s
95th percentile per-packet one-way delay: 87.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 87.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 87.198 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 85.402 ms
Loss rate: 0.00%
```
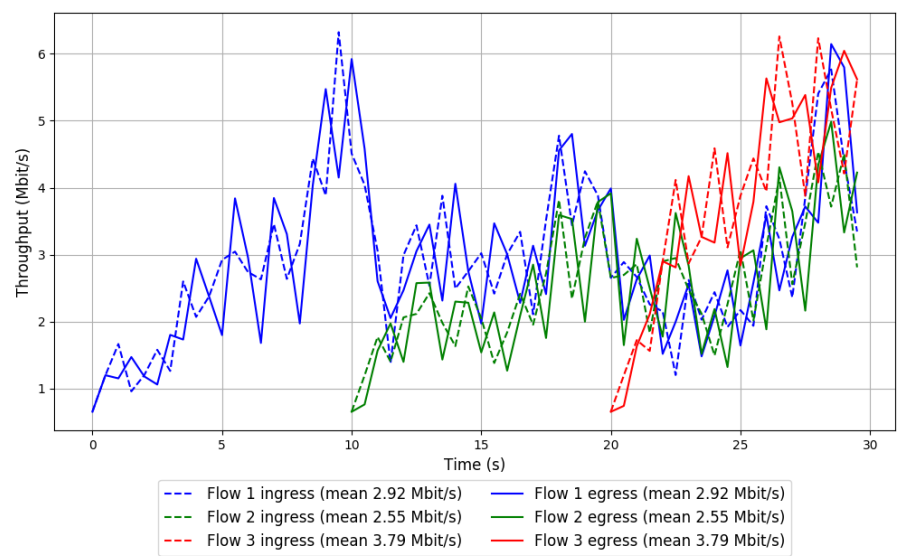
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 3.91 Mbit/s) — Flow 1 egress (mean 3.91 Mbit/s)
Flow 2 ingress (mean 3.58 Mbit/s) — Flow 2 egress (mean 3.58 Mbit/s)
Flow 3 ingress (mean 1.77 Mbit/s) — Flow 3 egress (mean 1.77 Mbit/s)

Flow 1 (95th percentile 87.80 ms) • Flow 2 (95th percentile 87.20 ms) • Flow 3 (95th percentile 85.40 ms)

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```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-13 18:15:47
End at: 2018-03-13 18:16:17
Local clock offset: -4.951 ms
Remote clock offset: -4.907 ms

# Below is generated by plot.py at 2018-03-13 22:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.59 Mbit/s
95th percentile per-packet one-way delay: 111.278 ms
Loss rate: 5.44%
-- Flow 1:
Average throughput: 44.97 Mbit/s
95th percentile per-packet one-way delay: 111.449 ms
Loss rate: 4.34%
-- Flow 2:
Average throughput: 44.26 Mbit/s
95th percentile per-packet one-way delay: 111.076 ms
Loss rate: 6.32%
-- Flow 3:
Average throughput: 15.53 Mbit/s
95th percentile per-packet one-way delay: 111.260 ms
Loss rate: 9.73%
```
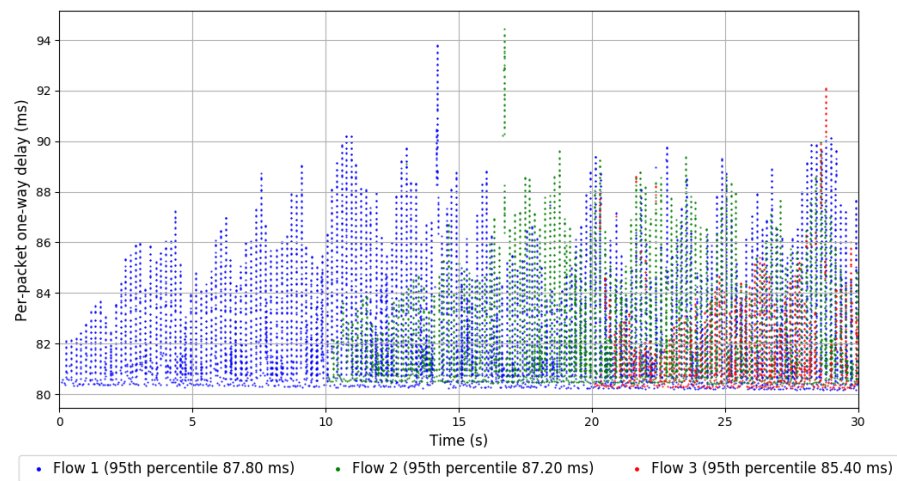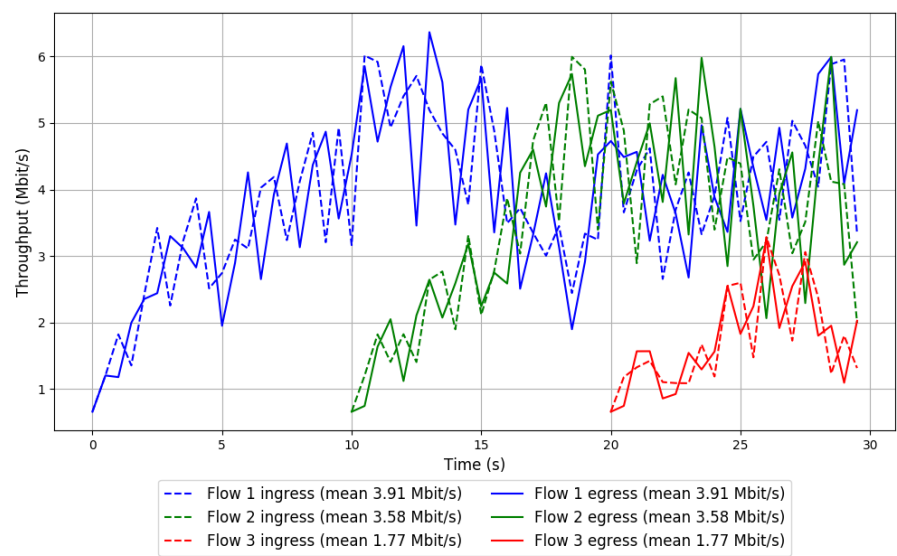
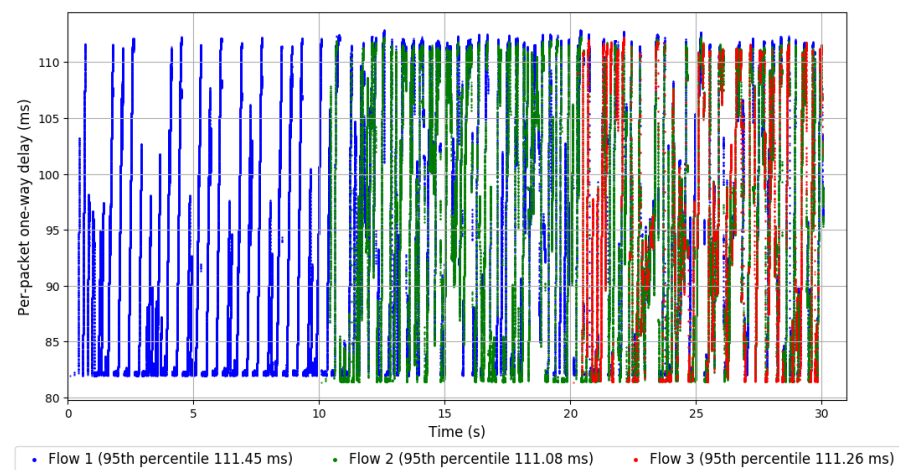Run 1: Report of TaoVA-100x — Data Link

```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-13 18:39:32
End at: 2018-03-13 18:40:02
Local clock offset: -4.164 ms
Remote clock offset: -1.194 ms


# Below is generated by plot.py at 2018-03-13 22:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.23 Mbit/s
95th percentile per-packet one-way delay: 115.323 ms
Loss rate: 6.45%
-- Flow 1:
Average throughput: 53.49 Mbit/s
95th percentile per-packet one-way delay: 115.272 ms
Loss rate: 4.28%
-- Flow 2:
Average throughput: 20.34 Mbit/s
95th percentile per-packet one-way delay: 115.412 ms
Loss rate: 10.57%
-- Flow 3:
Average throughput: 33.83 Mbit/s
95th percentile per-packet one-way delay: 115.430 ms
Loss rate: 11.09%
```

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

Flow 1 ingress (mean 55.89 Mbit/s) --- Flow 1 egress (mean 53.49 Mbit/s)
Flow 2 ingress (mean 22.74 Mbit/s) --- Flow 2 egress (mean 20.34 Mbit/s)
Flow 3 ingress (mean 37.98 Mbit/s) --- Flow 3 egress (mean 33.83 Mbit/s)

Flow 1 (95th percentile 115.27 ms) · Flow 2 (95th percentile 115.41 ms) · Flow 3 (95th percentile 115.43 ms)

```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-13 19:02:59
End at: 2018-03-13 19:03:29
Local clock offset: -6.08 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2018-03-13 22:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 116.319 ms
Loss rate: 6.57%
-- Flow 1:
Average throughput: 53.20 Mbit/s
95th percentile per-packet one-way delay: 116.324 ms
Loss rate: 4.32%
-- Flow 2:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 116.243 ms
Loss rate: 10.34%
-- Flow 3:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 116.864 ms
Loss rate: 16.83%
```
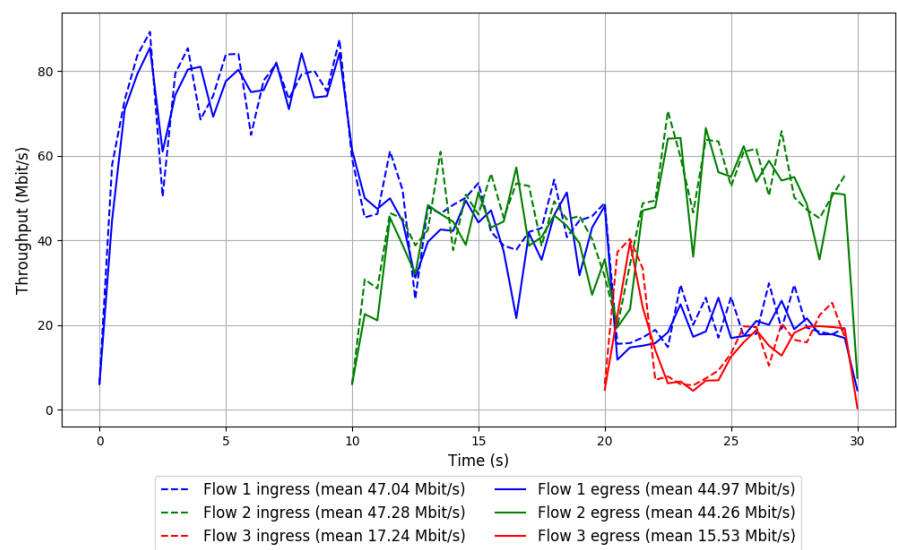
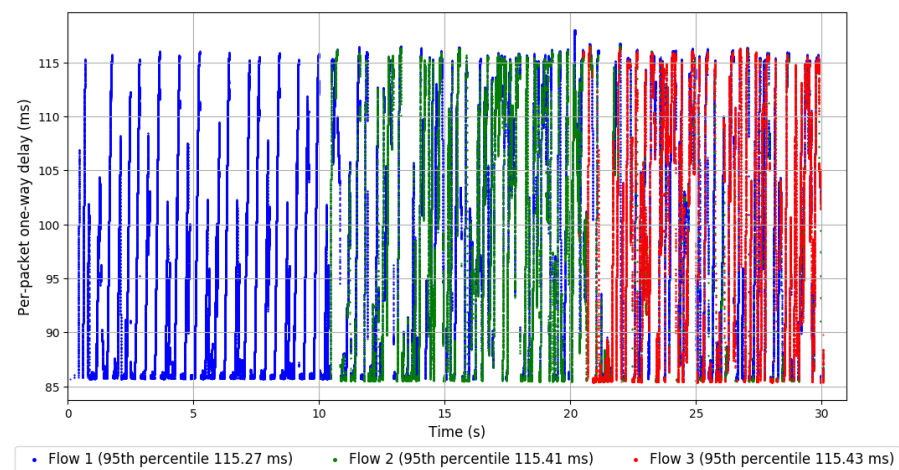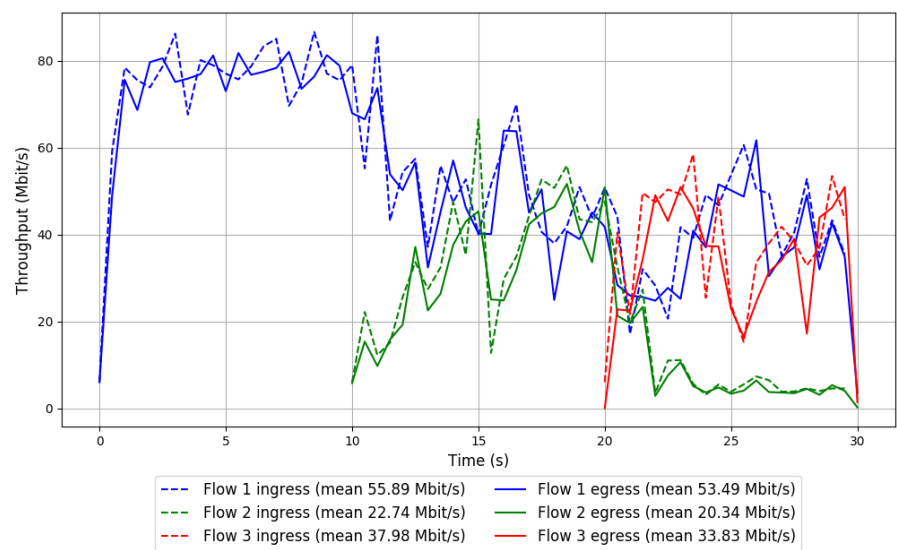Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 55.63 Mbit/s) --- Flow 1 egress (mean 53.20 Mbit/s)
Flow 2 ingress (mean 35.54 Mbit/s) --- Flow 2 egress (mean 31.83 Mbit/s)
Flow 3 ingress (mean 10.58 Mbit/s) --- Flow 3 egress (mean 8.80 Mbit/s)

Flow 1 (95th percentile 116.32 ms) • Flow 2 (95th percentile 116.24 ms) • Flow 3 (95th percentile 116.86 ms)
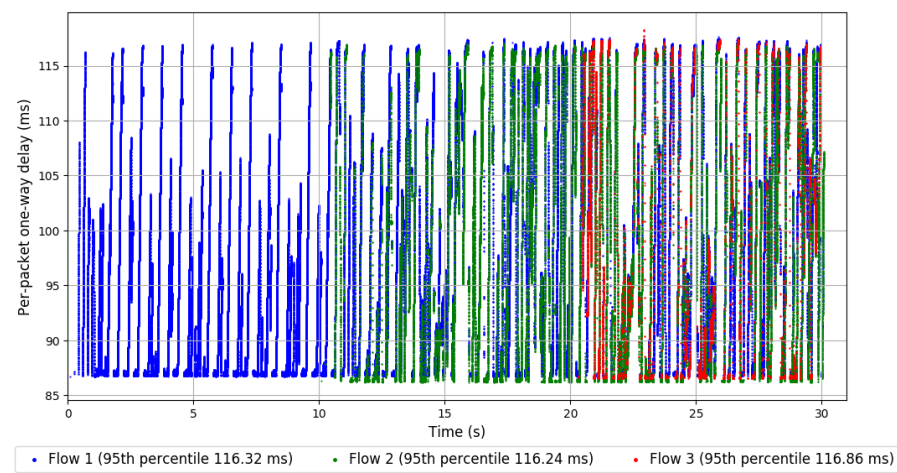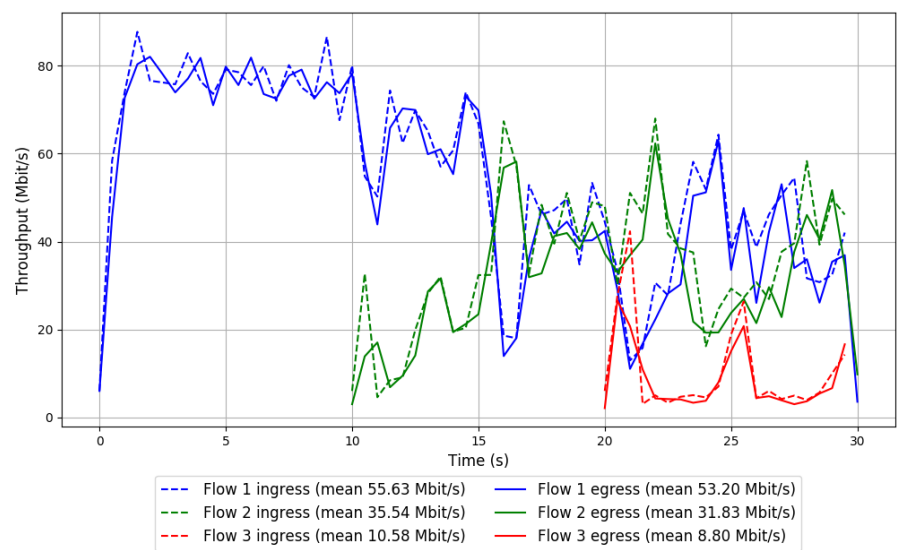
```
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-13 19:26:26
End at: 2018-03-13 19:26:56
Local clock offset: -2.847 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2018-03-13 22:29:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.19 Mbit/s
95th percentile per-packet one-way delay: 116.432 ms
Loss rate: 6.01%
-- Flow 1:
Average throughput: 51.03 Mbit/s
95th percentile per-packet one-way delay: 116.468 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 37.26 Mbit/s
95th percentile per-packet one-way delay: 116.391 ms
Loss rate: 8.27%
-- Flow 3:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 116.236 ms
Loss rate: 11.85%
```

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

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```
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-13 19:49:52
End at: 2018-03-13 19:50:22
Local clock offset: -2.231 ms
Remote clock offset: -5.808 ms


# Below is generated by plot.py at 2018-03-13 22:29:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.28 Mbit/s
95th percentile per-packet one-way delay: 110.401 ms
Loss rate: 4.83%
-- Flow 1:
Average throughput: 47.85 Mbit/s
95th percentile per-packet one-way delay: 110.348 ms
Loss rate: 3.56%
-- Flow 2:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 110.446 ms
Loss rate: 7.27%
-- Flow 3:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: 110.542 ms
Loss rate: 6.85%
```
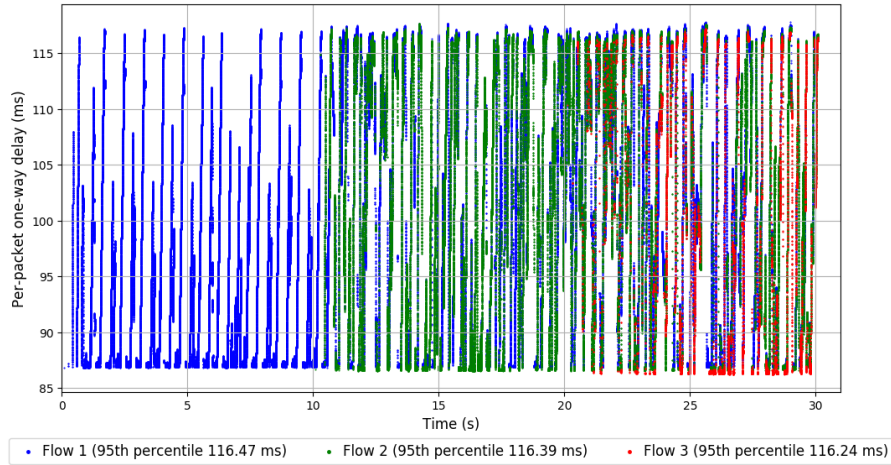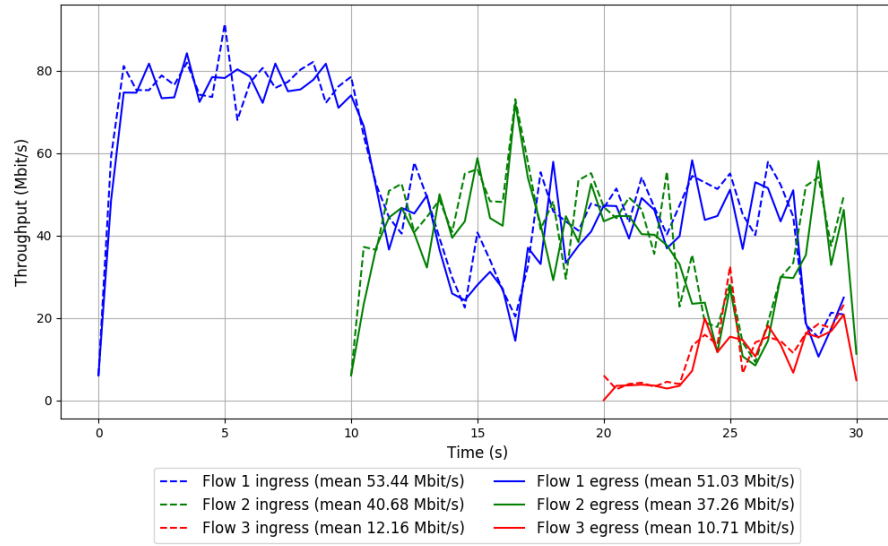
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 49.62 Mbit/s)   Flow 1 egress (mean 47.85 Mbit/s)
Flow 2 ingress (mean 28.55 Mbit/s)   Flow 2 egress (mean 26.45 Mbit/s)
Flow 3 ingress (mean 25.71 Mbit/s)   Flow 3 egress (mean 23.91 Mbit/s)

Flow 1 (95th percentile 110.35 ms)   Flow 2 (95th percentile 110.45 ms)   Flow 3 (95th percentile 110.54 ms)

```
Run 6: Statistics of TaoVA-100x

Start at: 2018-03-13 20:13:31
End at: 2018-03-13 20:14:01
Local clock offset: -5.447 ms
Remote clock offset: -5.134 ms

# Below is generated by plot.py at 2018-03-13 22:30:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.55 Mbit/s
95th percentile per-packet one-way delay: 111.461 ms
Loss rate: 5.26%
-- Flow 1:
Average throughput: 51.84 Mbit/s
95th percentile per-packet one-way delay: 111.454 ms
Loss rate: 3.66%
-- Flow 2:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 111.519 ms
Loss rate: 8.01%
-- Flow 3:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 111.375 ms
Loss rate: 9.32%
```

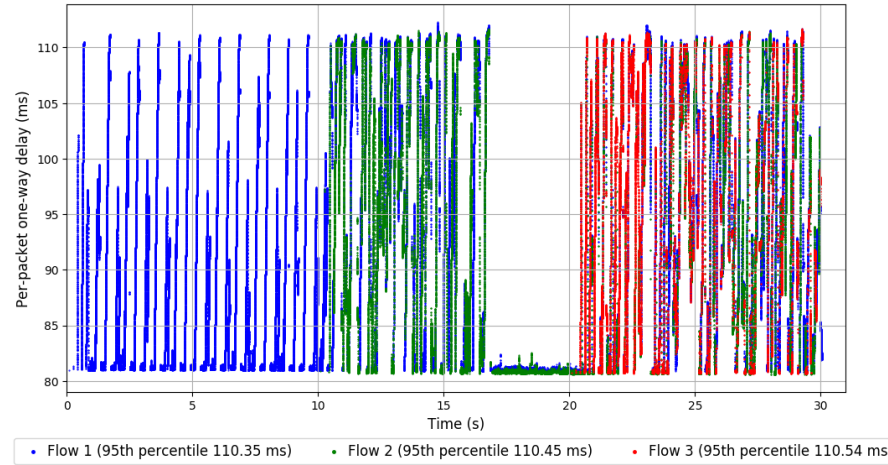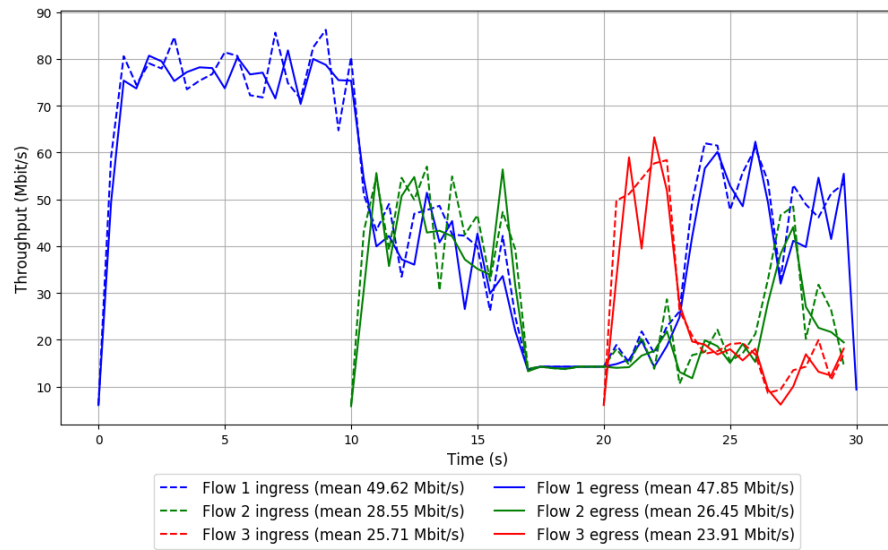Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 53.86 Mbit/s) — — —   Flow 1 egress (mean 51.84 Mbit/s) ———
Flow 2 ingress (mean 33.06 Mbit/s) — — —   Flow 2 egress (mean 30.40 Mbit/s) ———
Flow 3 ingress (mean 18.68 Mbit/s) — — —   Flow 3 egress (mean 16.91 Mbit/s) ———

• Flow 1 (95th percentile 111.45 ms)   • Flow 2 (95th percentile 111.52 ms)   • Flow 3 (95th percentile 111.38 ms)
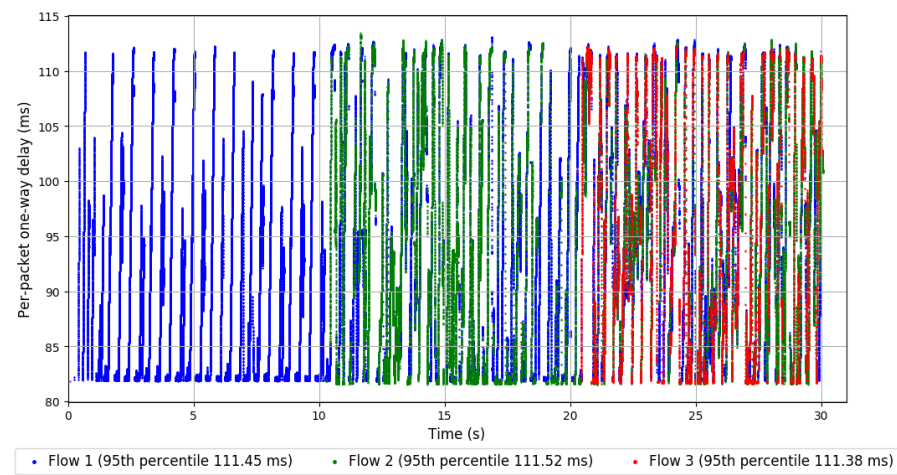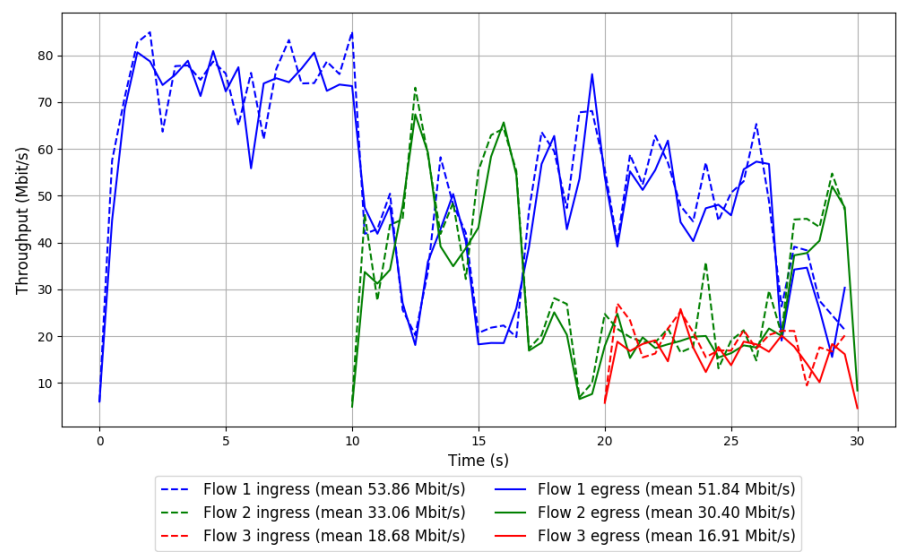
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```
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-13 20:36:58
End at: 2018-03-13 20:37:28
Local clock offset: -5.642 ms
Remote clock offset: -5.91 ms

# Below is generated by plot.py at 2018-03-13 22:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.85 Mbit/s
95th percentile per-packet one-way delay: 110.596 ms
Loss rate: 5.54%
-- Flow 1:
Average throughput: 48.98 Mbit/s
95th percentile per-packet one-way delay: 110.171 ms
Loss rate: 4.30%
-- Flow 2:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 110.924 ms
Loss rate: 6.82%
-- Flow 3:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 111.115 ms
Loss rate: 8.48%
```
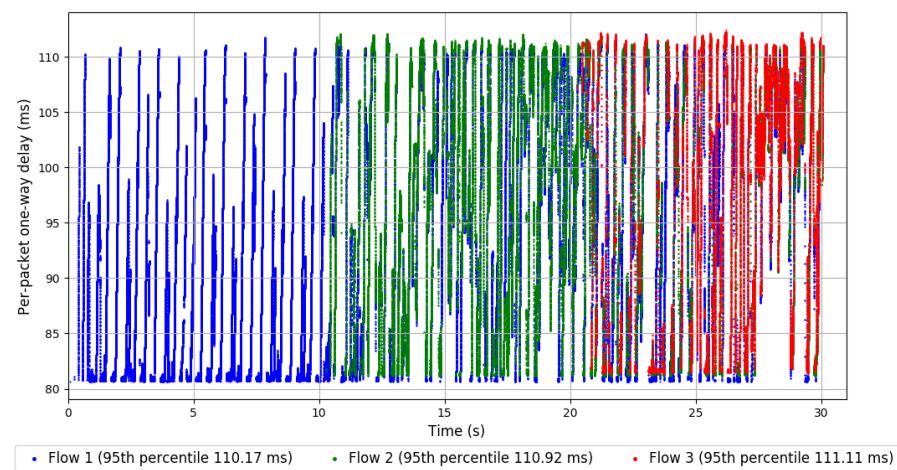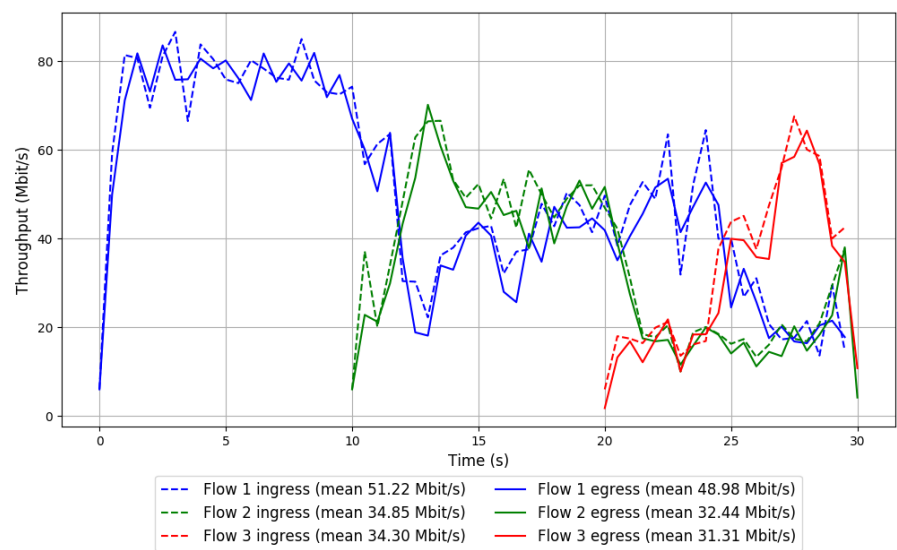
Run 7: Report of TaoVA-100x — Data Link

```
Run 8: Statistics of TaoVA-100x

Start at: 2018-03-13 21:00:25
End at: 2018-03-13 21:00:55
Local clock offset: -4.352 ms
Remote clock offset: -4.82 ms


# Below is generated by plot.py at 2018-03-13 22:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.62 Mbit/s
95th percentile per-packet one-way delay: 111.664 ms
Loss rate: 5.74%
-- Flow 1:
Average throughput: 44.30 Mbit/s
95th percentile per-packet one-way delay: 111.489 ms
Loss rate: 4.05%
-- Flow 2:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 112.140 ms
Loss rate: 10.94%
-- Flow 3:
Average throughput: 49.63 Mbit/s
95th percentile per-packet one-way delay: 111.436 ms
Loss rate: 4.82%
```
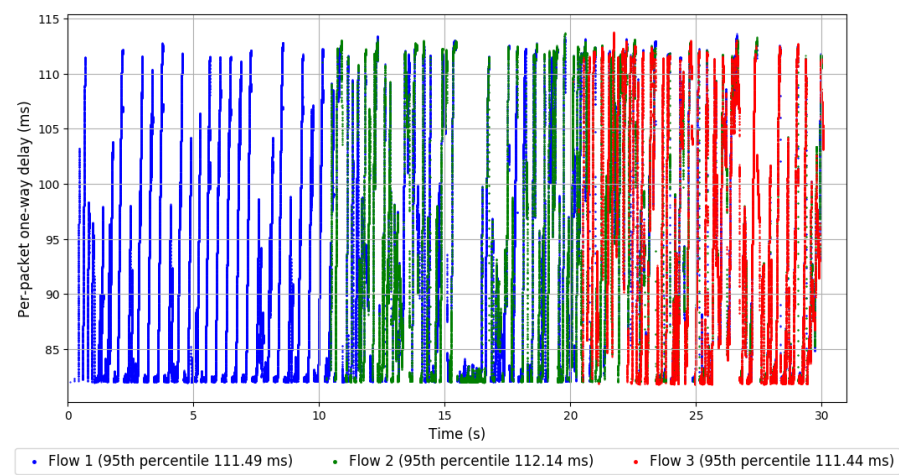
Run 8: Report of TaoVA-100x — Data Link

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```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-13 21:24:05
End at: 2018-03-13 21:24:35
Local clock offset: -2.092 ms
Remote clock offset: 0.15 ms


# Below is generated by plot.py at 2018-03-13 22:31:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.55 Mbit/s
95th percentile per-packet one-way delay: 116.298 ms
Loss rate: 5.91%
-- Flow 1:
Average throughput: 43.50 Mbit/s
95th percentile per-packet one-way delay: 116.340 ms
Loss rate: 4.83%
-- Flow 2:
Average throughput: 45.02 Mbit/s
95th percentile per-packet one-way delay: 116.220 ms
Loss rate: 6.66%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 116.814 ms
Loss rate: 12.95%
```
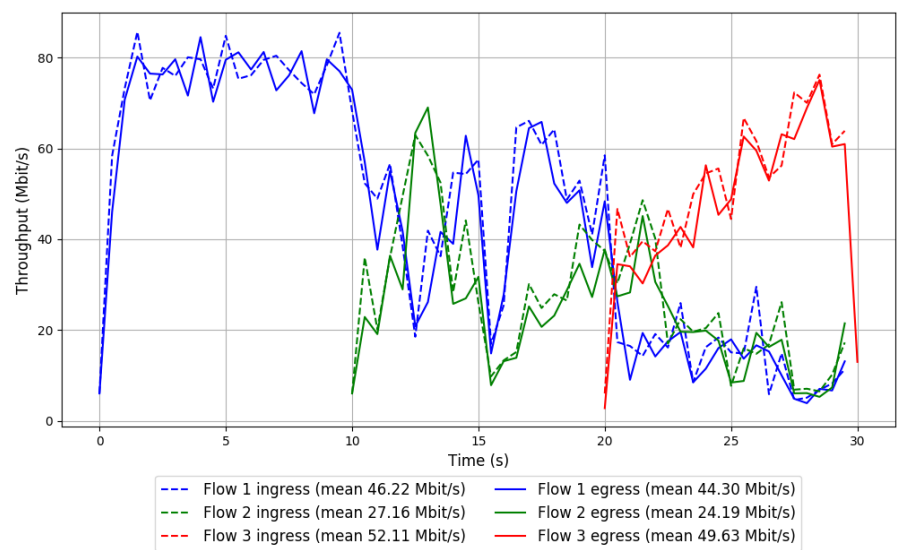
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 45.73 Mbit/s) --- Flow 1 egress (mean 43.50 Mbit/s)
Flow 2 ingress (mean 48.25 Mbit/s) --- Flow 2 egress (mean 45.02 Mbit/s)
Flow 3 ingress (mean 10.67 Mbit/s) --- Flow 3 egress (mean 11.62 Mbit/s)

Flow 1 (95th percentile 116.34 ms) · Flow 2 (95th percentile 116.22 ms) · Flow 3 (95th percentile 116.81 ms)

```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-13 21:47:36
End at: 2018-03-13 21:48:06
Local clock offset: -6.624 ms
Remote clock offset: 0.083 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.95 Mbit/s
95th percentile per-packet one-way delay: 116.276 ms
Loss rate: 5.04%
-- Flow 1:
Average throughput: 53.48 Mbit/s
95th percentile per-packet one-way delay: 116.315 ms
Loss rate: 3.74%
-- Flow 2:
Average throughput: 29.60 Mbit/s
95th percentile per-packet one-way delay: 116.144 ms
Loss rate: 6.98%
-- Flow 3:
Average throughput: 14.55 Mbit/s
95th percentile per-packet one-way delay: 116.445 ms
Loss rate: 10.82%
```
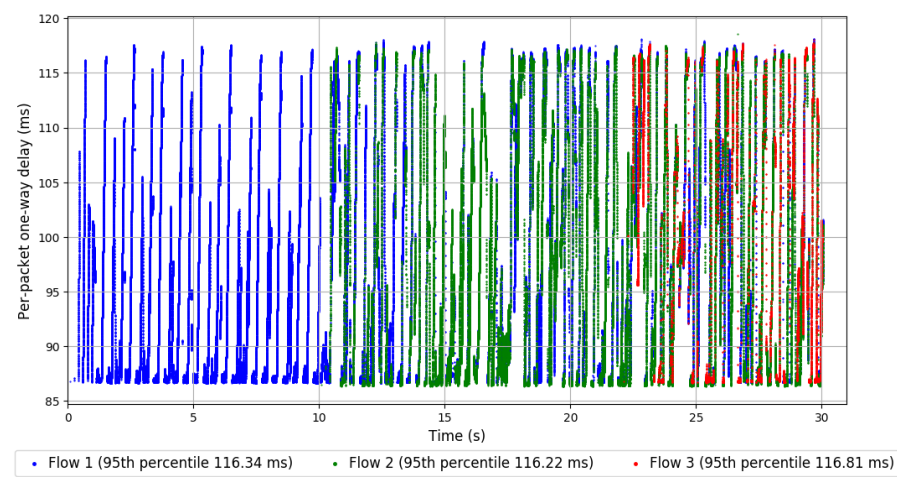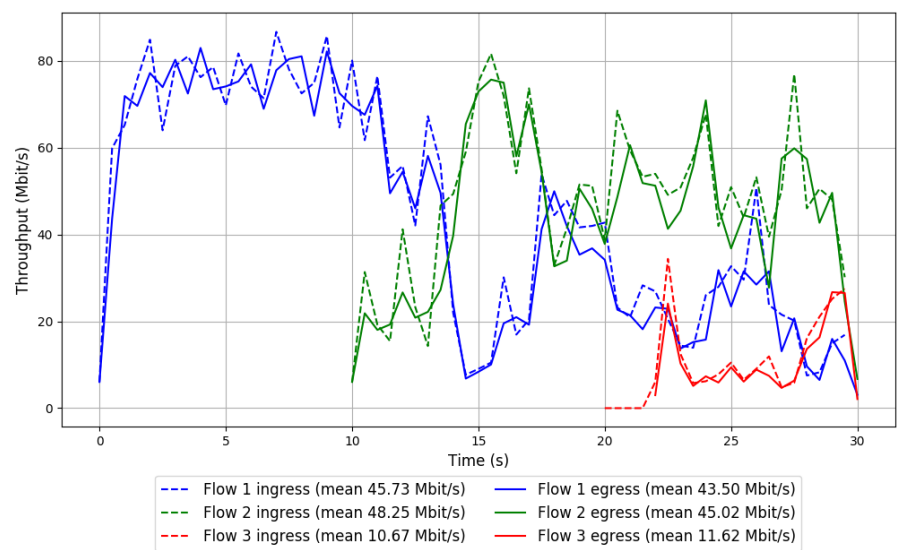
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 55.57 Mbit/s) --- Flow 1 egress (mean 53.48 Mbit/s)
Flow 2 ingress (mean 31.81 Mbit/s) --- Flow 2 egress (mean 29.60 Mbit/s)
Flow 3 ingress (mean 16.27 Mbit/s) --- Flow 3 egress (mean 14.55 Mbit/s)

Flow 1 (95th percentile 116.31 ms)   Flow 2 (95th percentile 116.14 ms)   Flow 3 (95th percentile 116.44 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-03-13 18:01:29
End at: 2018-03-13 18:01:59
Local clock offset: -6.679 ms
Remote clock offset: 0.115 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.31 Mbit/s
95th percentile per-packet one-way delay: 98.060 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 106.816 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 93.489 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 36.84 Mbit/s
95th percentile per-packet one-way delay: 94.405 ms
Loss rate: 1.05%
```
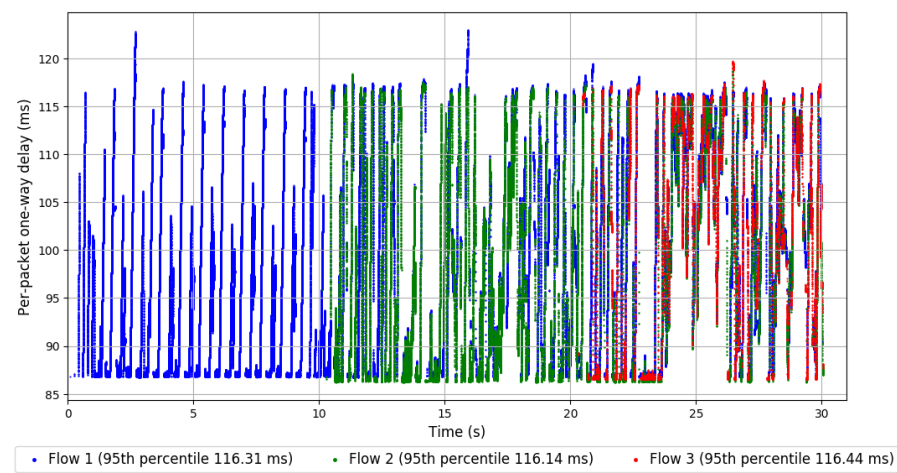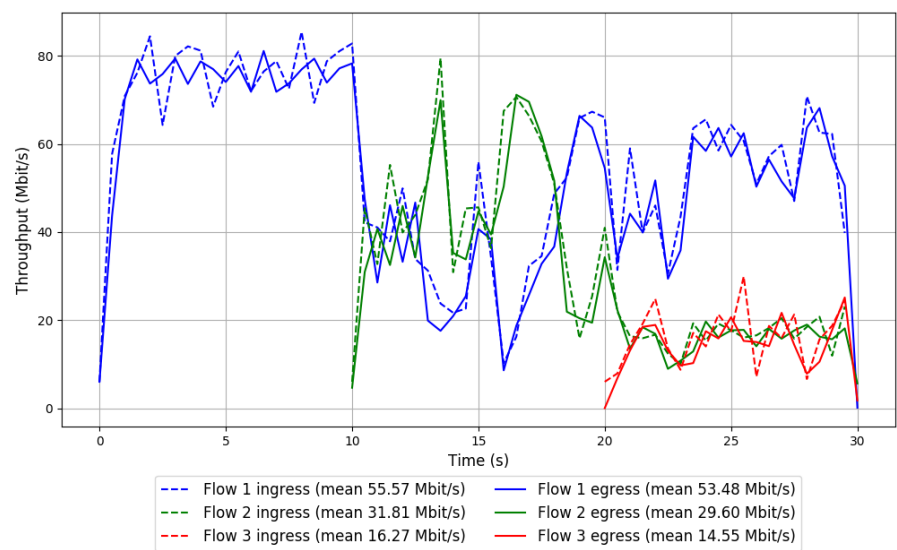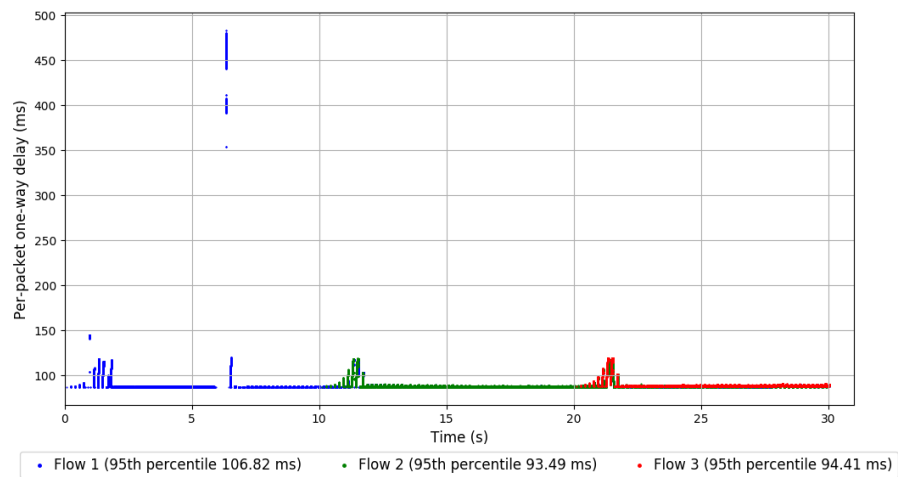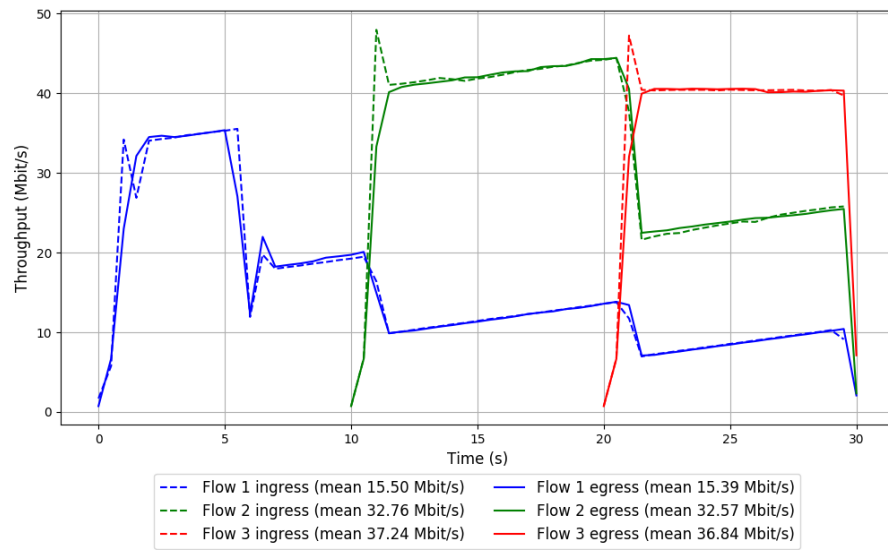
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-03-13 18:24:57
End at: 2018-03-13 18:25:27
Local clock offset: -4.336 ms
Remote clock offset: -5.899 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 90.636 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 27.36 Mbit/s
95th percentile per-packet one-way delay: 90.054 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 28.73 Mbit/s
95th percentile per-packet one-way delay: 91.824 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 87.522 ms
Loss rate: 1.59%
```

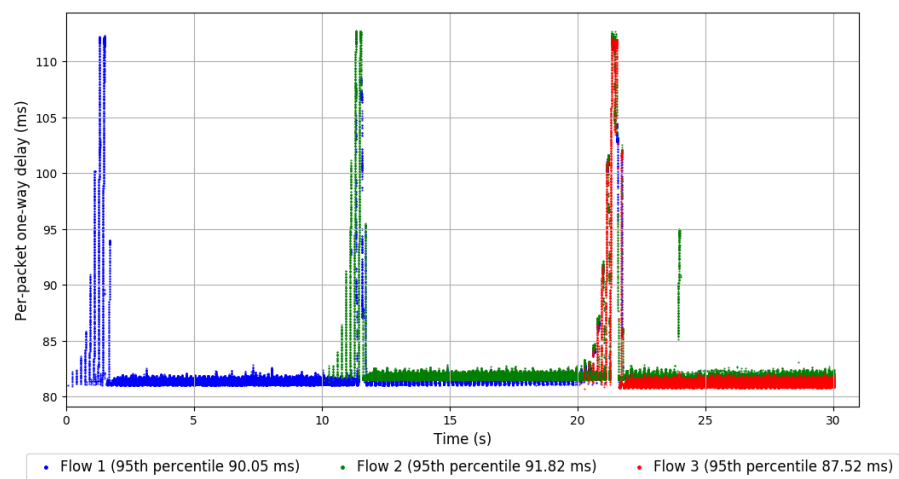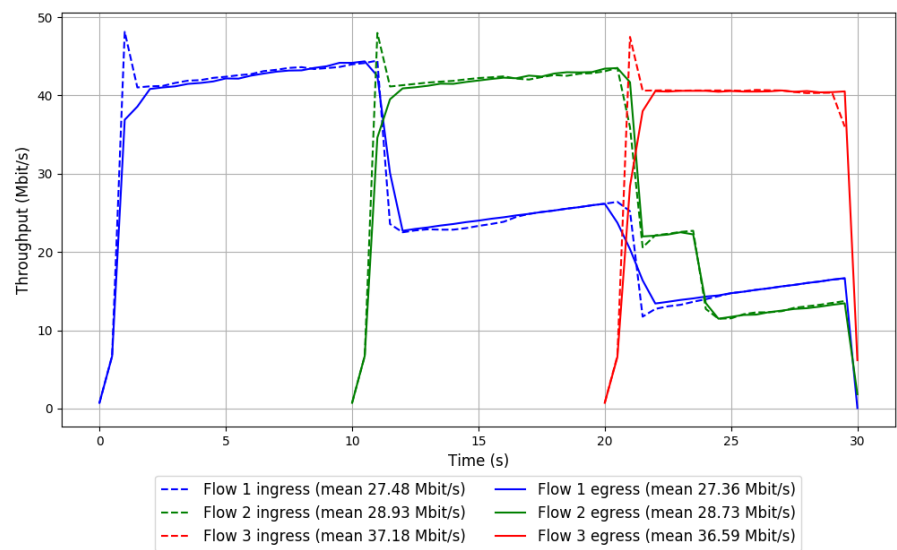Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-03-13 18:48:42
End at: 2018-03-13 18:49:12
Local clock offset: -5.422 ms
Remote clock offset: -5.176 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 93.502 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 99.807 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 18.33 Mbit/s
95th percentile per-packet one-way delay: 93.056 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 87.629 ms
Loss rate: 0.97%
```

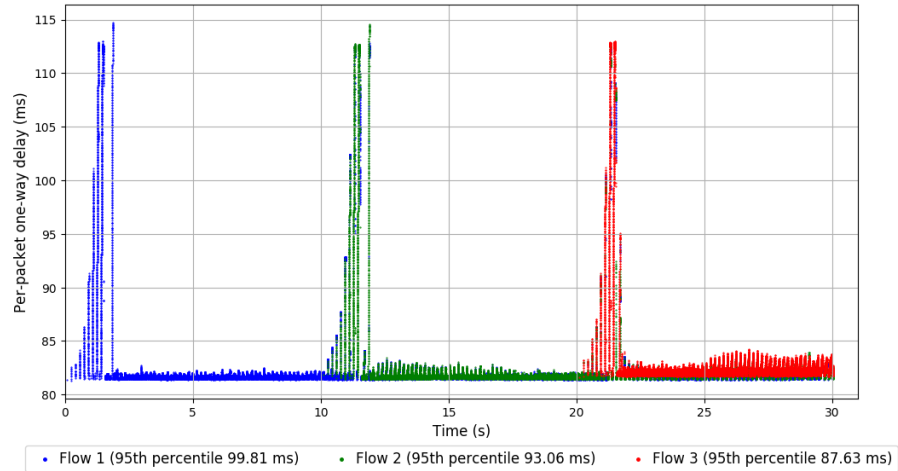Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-03-13 19:12:09
End at: 2018-03-13 19:12:39
Local clock offset: -6.221 ms
Remote clock offset: -5.575 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.85 Mbit/s
95th percentile per-packet one-way delay: 85.834 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 28.70 Mbit/s
95th percentile per-packet one-way delay: 82.750 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 86.698 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 96.339 ms
Loss rate: 0.38%
```
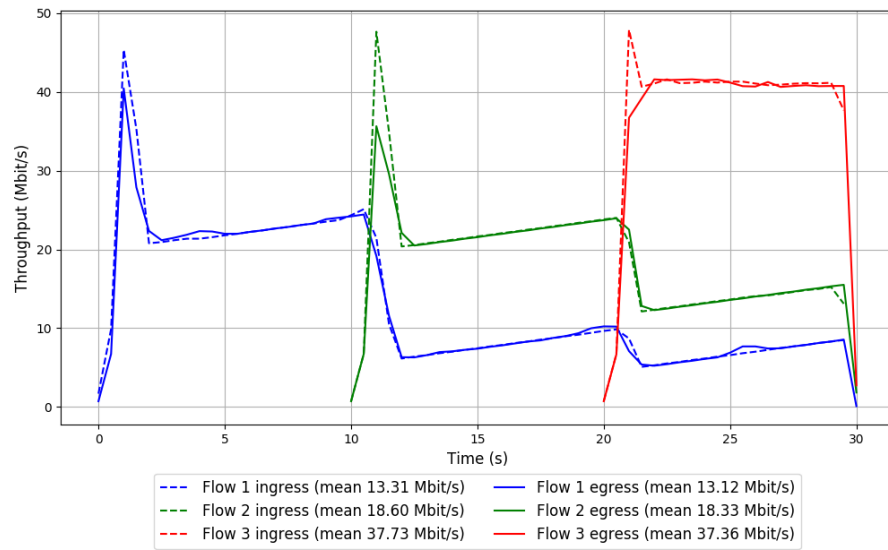
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-03-13 19:35:36
End at: 2018-03-13 19:36:06
Local clock offset: -1.872 ms
Remote clock offset: -0.09 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 97.491 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 22.23 Mbit/s
95th percentile per-packet one-way delay: 96.454 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 18.66 Mbit/s
95th percentile per-packet one-way delay: 104.915 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 92.450 ms
Loss rate: 1.00%
```
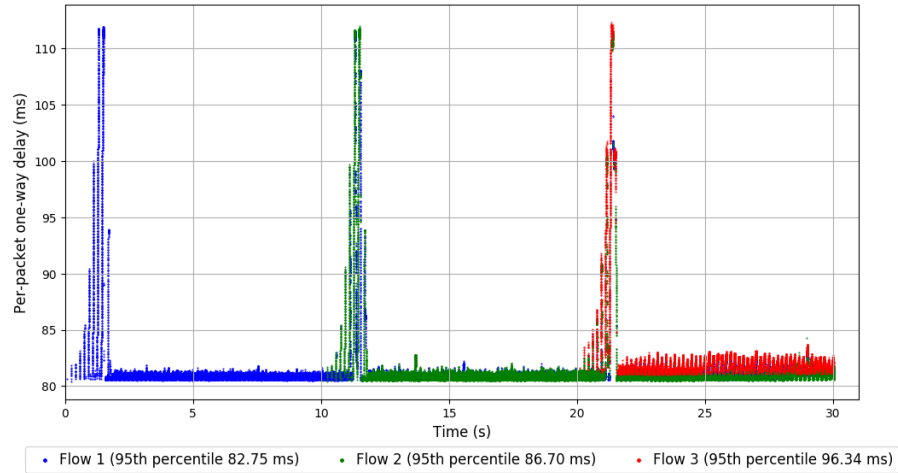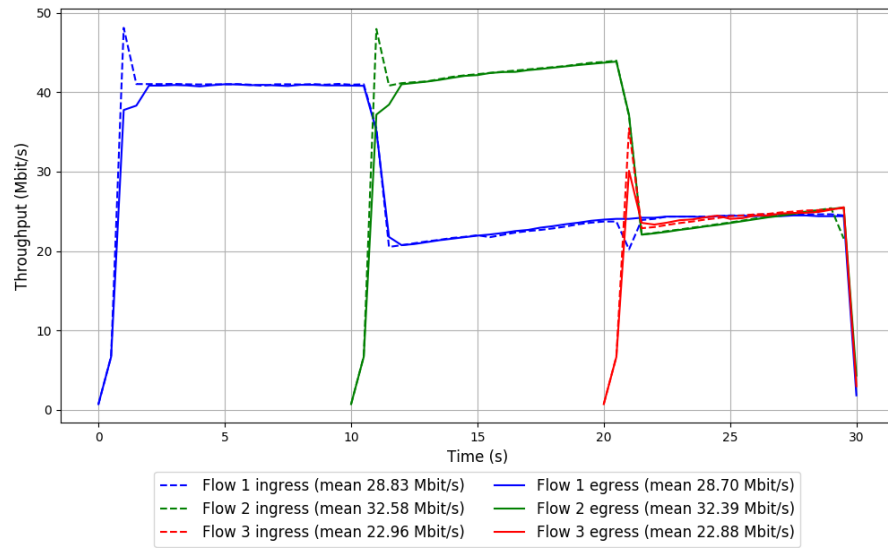
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-03-13 19:59:03
End at: 2018-03-13 19:59:33
Local clock offset: -4.504 ms
Remote clock offset: -1.09 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.84 Mbit/s
95th percentile per-packet one-way delay: 99.636 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 96.457 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 18.70 Mbit/s
95th percentile per-packet one-way delay: 102.211 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 21.60 Mbit/s
95th percentile per-packet one-way delay: 105.097 ms
Loss rate: 2.51%
```

Run 6: Report of TCP Vegas — Data Link

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```
Run 7: Statistics of TCP Vegas

Start at: 2018-03-13 20:22:41
End at: 2018-03-13 20:23:11
Local clock offset: -5.655 ms
Remote clock offset: 0.558 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 97.556 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 21.65 Mbit/s
95th percentile per-packet one-way delay: 93.868 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 99.649 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 93.370 ms
Loss rate: 1.63%
```
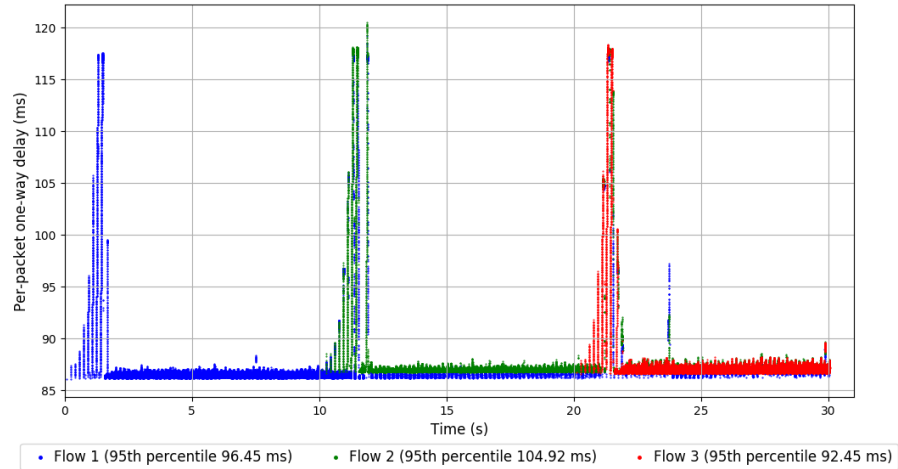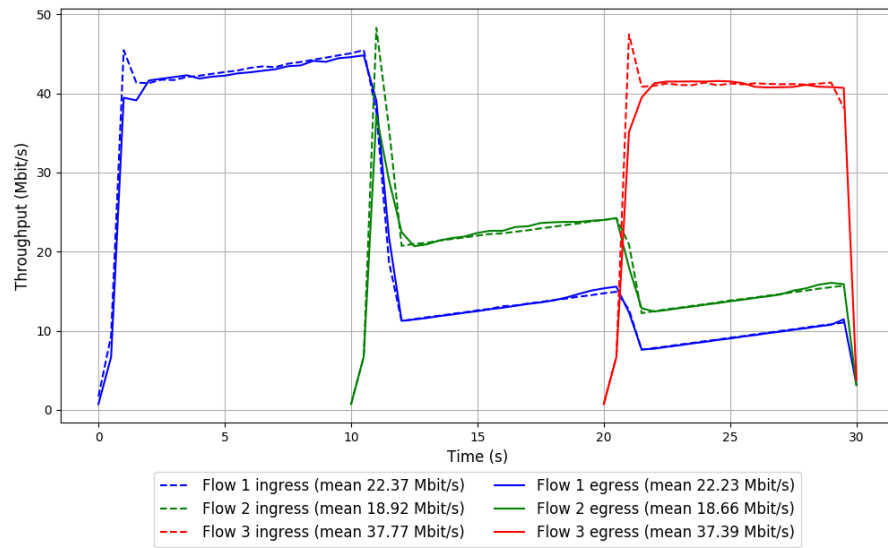
Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 21.82 Mbit/s) --- Flow 1 egress (mean 21.65 Mbit/s)
Flow 2 ingress (mean 32.90 Mbit/s) --- Flow 2 egress (mean 32.70 Mbit/s)
Flow 3 ingress (mean 38.93 Mbit/s) --- Flow 3 egress (mean 38.29 Mbit/s)

Flow 1 (95th percentile 93.87 ms) · Flow 2 (95th percentile 99.65 ms) · Flow 3 (95th percentile 93.37 ms)

197

```
Run 8: Statistics of TCP Vegas

Start at: 2018-03-13 20:46:08
End at: 2018-03-13 20:46:38
Local clock offset: -5.671 ms
Remote clock offset: -5.684 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 90.648 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 91.100 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 90.812 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 35.12 Mbit/s
95th percentile per-packet one-way delay: 87.954 ms
Loss rate: 1.71%
```
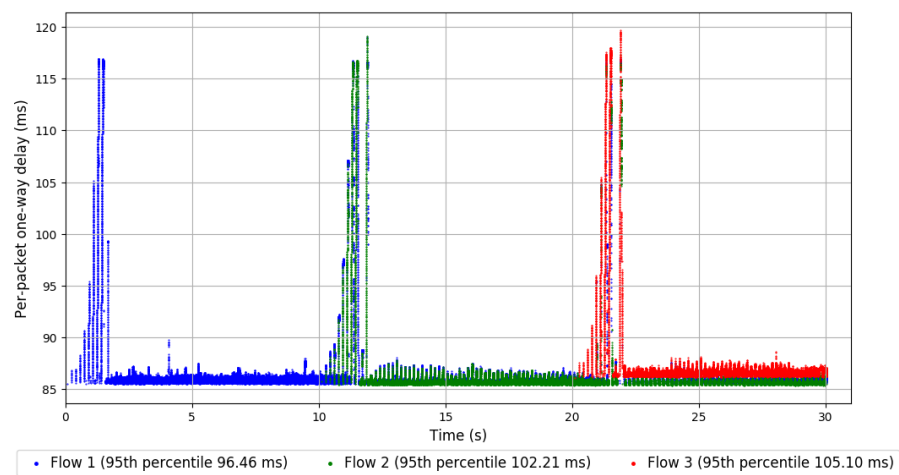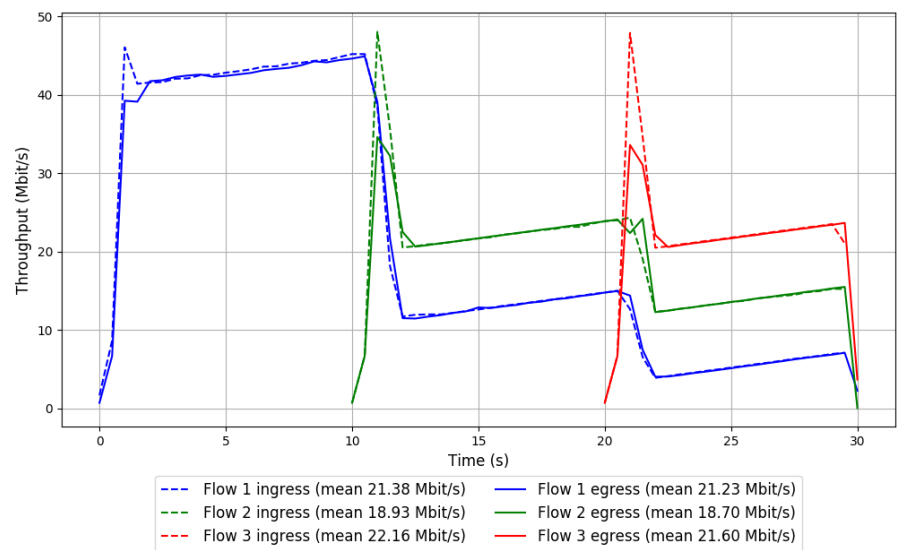
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-03-13 21:09:35
End at: 2018-03-13 21:10:05
Local clock offset: -3.025 ms
Remote clock offset: -5.675 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.52 Mbit/s
95th percentile per-packet one-way delay: 88.522 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 89.860 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 31.07 Mbit/s
95th percentile per-packet one-way delay: 87.840 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 87.233 ms
Loss rate: 1.36%
```
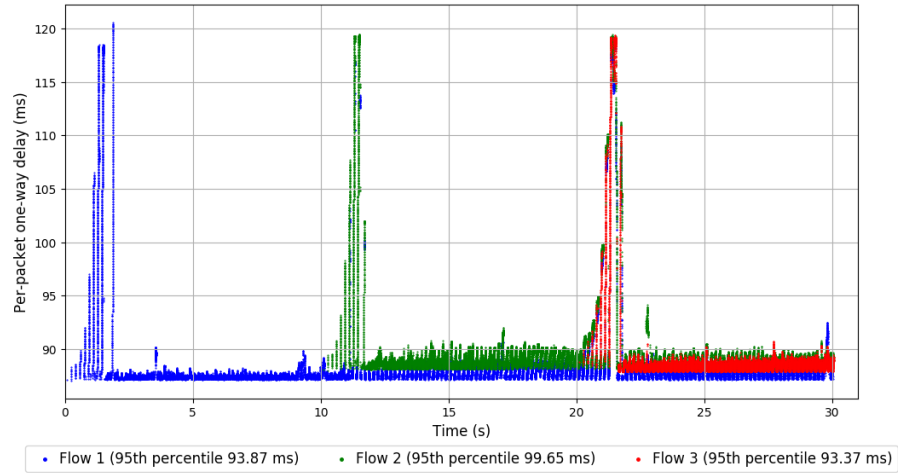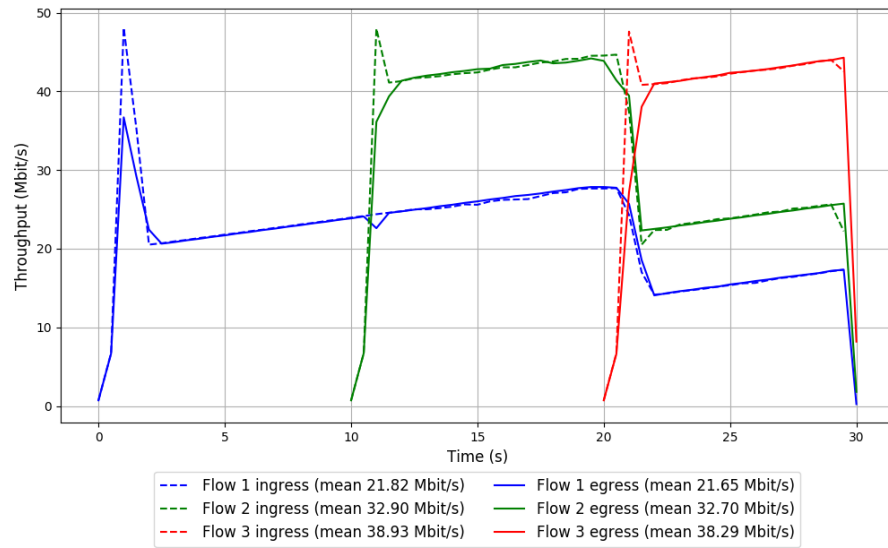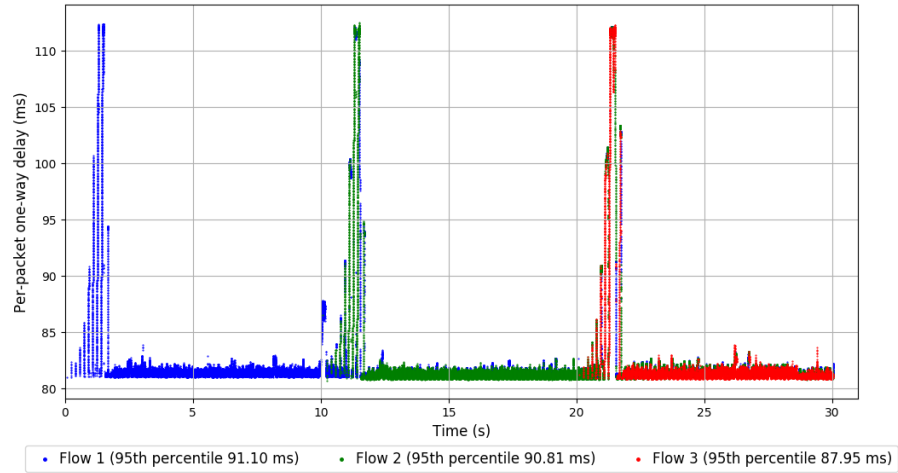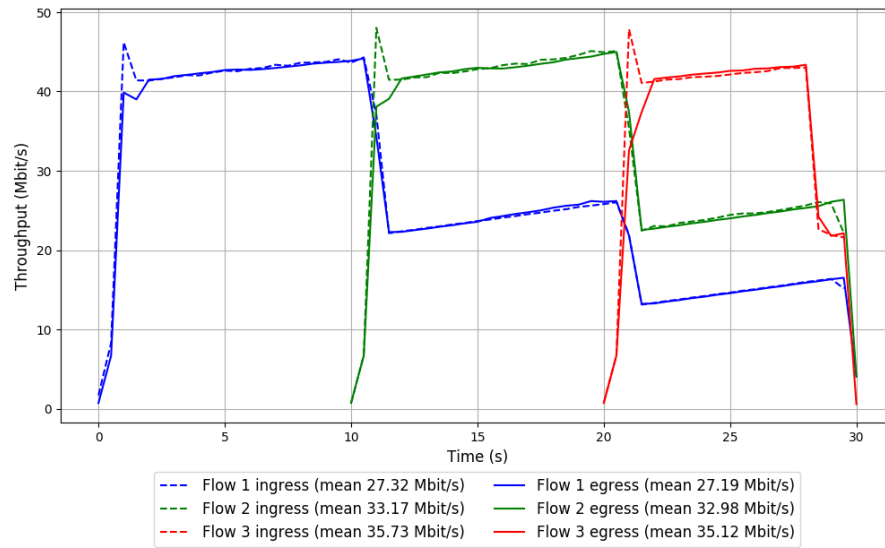
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-03-13 21:33:17
End at: 2018-03-13 21:33:47
Local clock offset: -3.679 ms
Remote clock offset: 1.027 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.95 Mbit/s
95th percentile per-packet one-way delay: 97.239 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 25.71 Mbit/s
95th percentile per-packet one-way delay: 97.435 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 32.55 Mbit/s
95th percentile per-packet one-way delay: 94.445 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 22.90 Mbit/s
95th percentile per-packet one-way delay: 102.094 ms
Loss rate: 0.36%
```
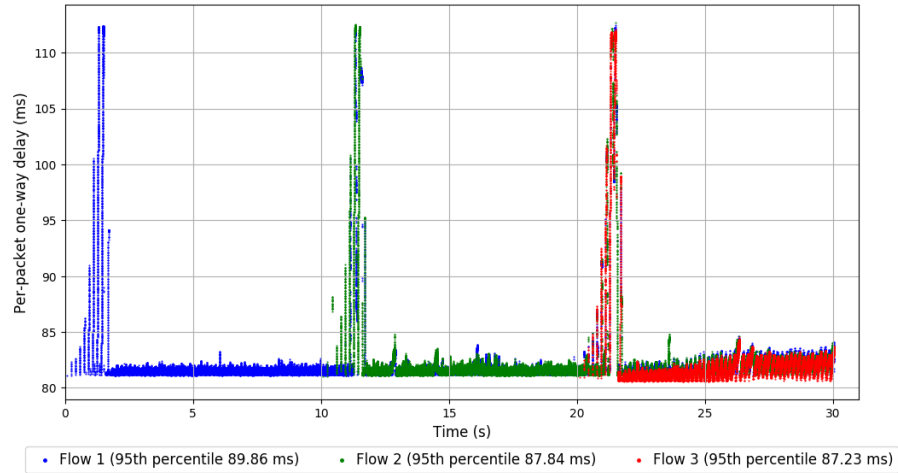
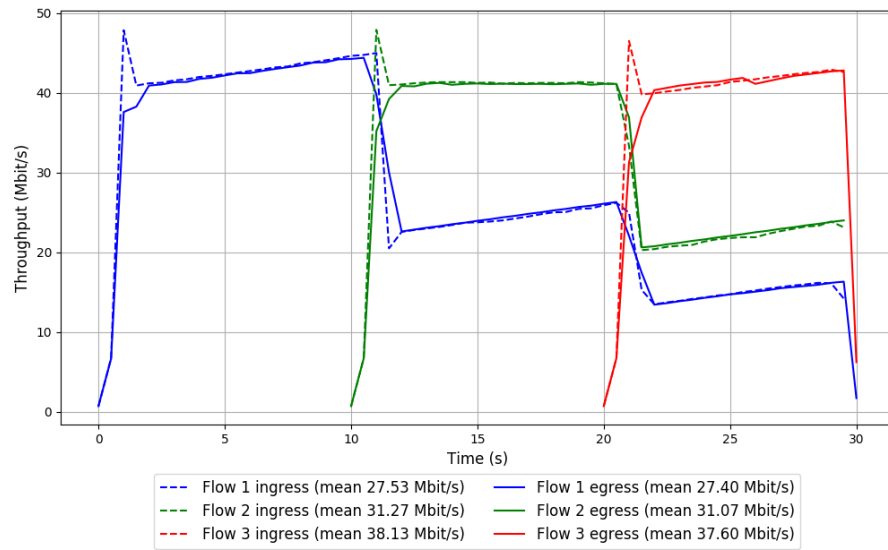Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-03-13 18:05:19
End at: 2018-03-13 18:05:49
Local clock offset: -6.641 ms
Remote clock offset: -4.798 ms


# Below is generated by plot.py at 2018-03-13 22:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.77 Mbit/s
95th percentile per-packet one-way delay: 119.644 ms
Loss rate: 44.54%
-- Flow 1:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 150.531 ms
Loss rate: 54.34%
-- Flow 2:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 112.764 ms
Loss rate: 22.10%
-- Flow 3:
Average throughput: 18.72 Mbit/s
95th percentile per-packet one-way delay: 112.517 ms
Loss rate: 23.28%
```

Run 1: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 59.85 Mbit/s)   —— Flow 1 egress (mean 27.25 Mbit/s)
- - - - Flow 2 ingress (mean 29.70 Mbit/s)   —— Flow 2 egress (mean 23.08 Mbit/s)
- - - - Flow 3 ingress (mean 24.58 Mbit/s)   —— Flow 3 egress (mean 18.72 Mbit/s)

- Flow 1 (95th percentile 150.53 ms)   • Flow 2 (95th percentile 112.76 ms)   • Flow 3 (95th percentile 112.52 ms)

```
Run 2: Statistics of Verus

Start at: 2018-03-13 18:28:48
End at: 2018-03-13 18:29:18
Local clock offset: -4.214 ms
Remote clock offset: -5.942 ms


# Below is generated by plot.py at 2018-03-13 22:32:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 148.434 ms
Loss rate: 74.56%
-- Flow 1:
Average throughput: 33.53 Mbit/s
95th percentile per-packet one-way delay: 150.337 ms
Loss rate: 79.21%
-- Flow 2:
Average throughput: 16.88 Mbit/s
95th percentile per-packet one-way delay: 111.675 ms
Loss rate: 21.33%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 91.779 ms
Loss rate: 64.71%
```
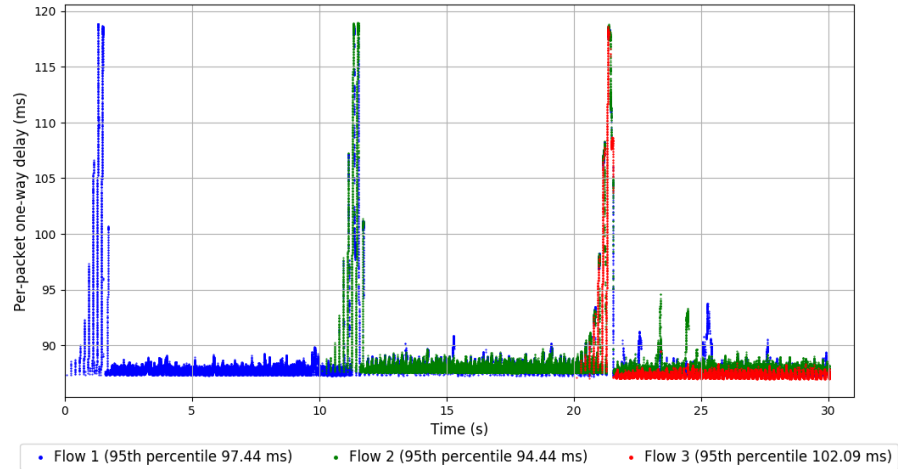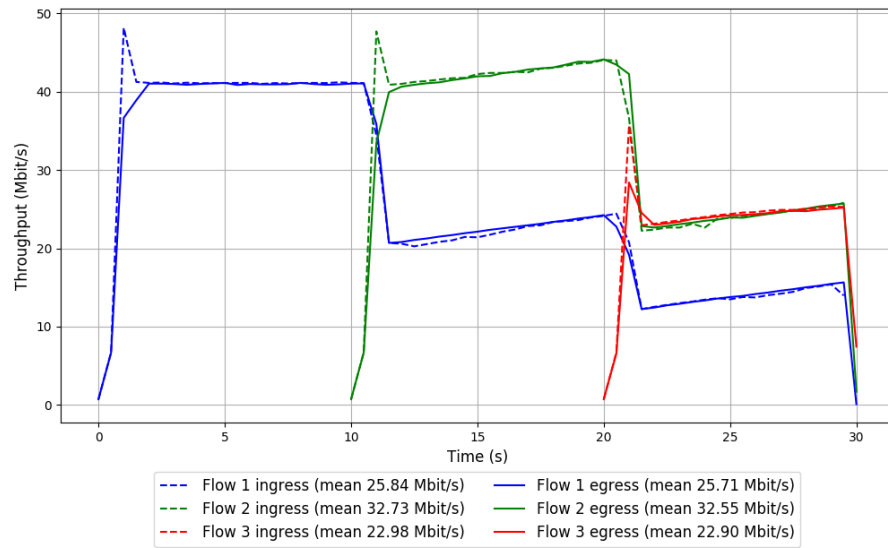
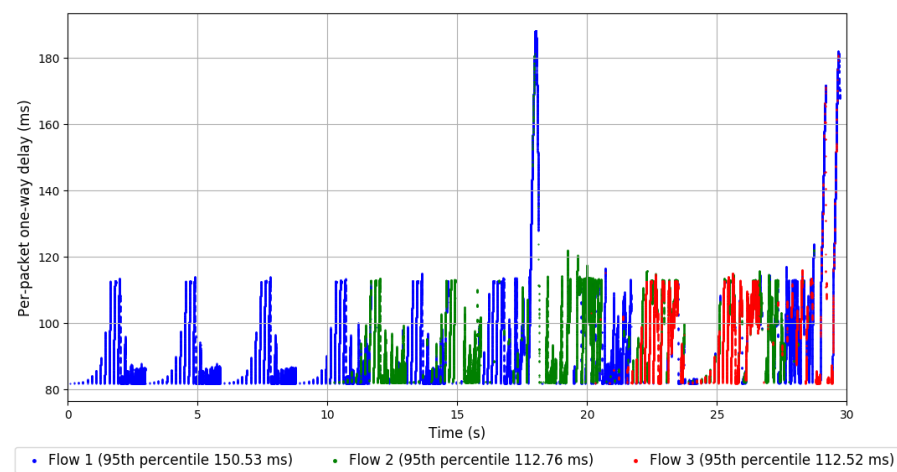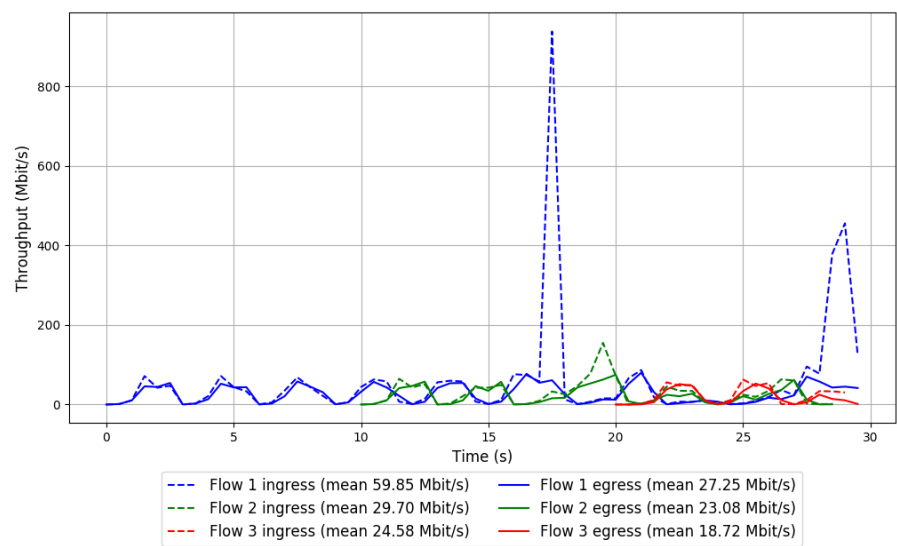Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-03-13 18:52:32
End at: 2018-03-13 18:53:02
Local clock offset: -5.632 ms
Remote clock offset: -5.122 ms

# Below is generated by plot.py at 2018-03-13 22:32:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.55 Mbit/s
95th percentile per-packet one-way delay: 113.005 ms
Loss rate: 35.88%
-- Flow 1:
Average throughput: 25.53 Mbit/s
95th percentile per-packet one-way delay: 112.447 ms
Loss rate: 23.33%
-- Flow 2:
Average throughput: 20.49 Mbit/s
95th percentile per-packet one-way delay: 112.930 ms
Loss rate: 23.47%
-- Flow 3:
Average throughput: 19.55 Mbit/s
95th percentile per-packet one-way delay: 167.171 ms
Loss rate: 67.87%
```
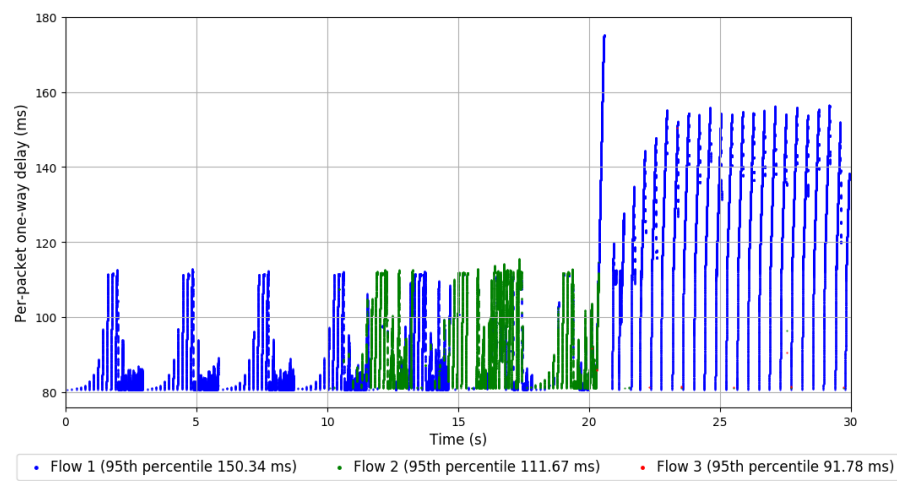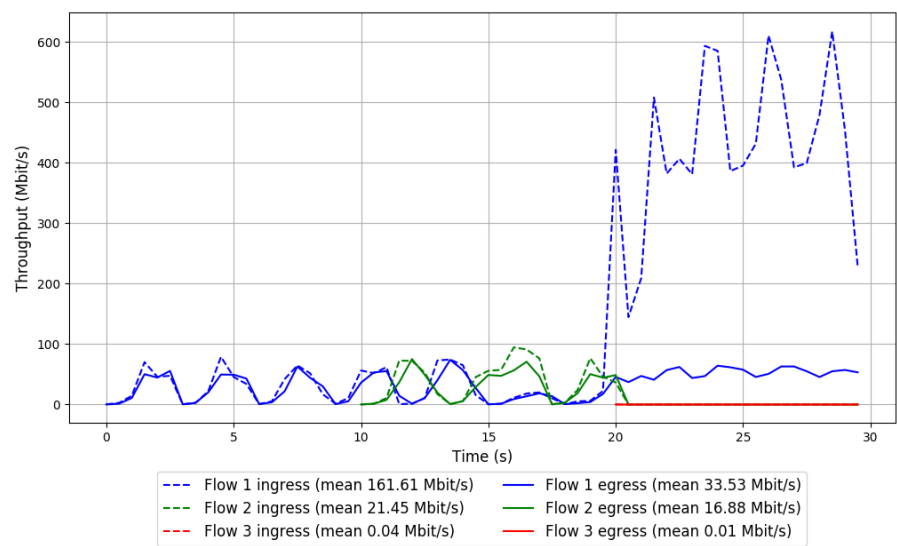
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 33.31 Mbit/s) --- Flow 1 egress (mean 25.53 Mbit/s)
Flow 2 ingress (mean 26.80 Mbit/s) --- Flow 2 egress (mean 20.49 Mbit/s)
Flow 3 ingress (mean 61.04 Mbit/s) --- Flow 3 egress (mean 19.55 Mbit/s)

Flow 1 (95th percentile 112.45 ms)   Flow 2 (95th percentile 112.93 ms)   Flow 3 (95th percentile 167.17 ms)

```
Run 4: Statistics of Verus

Start at: 2018-03-13 19:15:59
End at: 2018-03-13 19:16:29
Local clock offset: -5.228 ms
Remote clock offset: -5.682 ms


# Below is generated by plot.py at 2018-03-13 22:32:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.15 Mbit/s
95th percentile per-packet one-way delay: 111.864 ms
Loss rate: 24.47%
-- Flow 1:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 111.861 ms
Loss rate: 20.02%
-- Flow 2:
Average throughput: 22.15 Mbit/s
95th percentile per-packet one-way delay: 111.832 ms
Loss rate: 28.58%
-- Flow 3:
Average throughput: 15.29 Mbit/s
95th percentile per-packet one-way delay: 112.213 ms
Loss rate: 34.24%
```

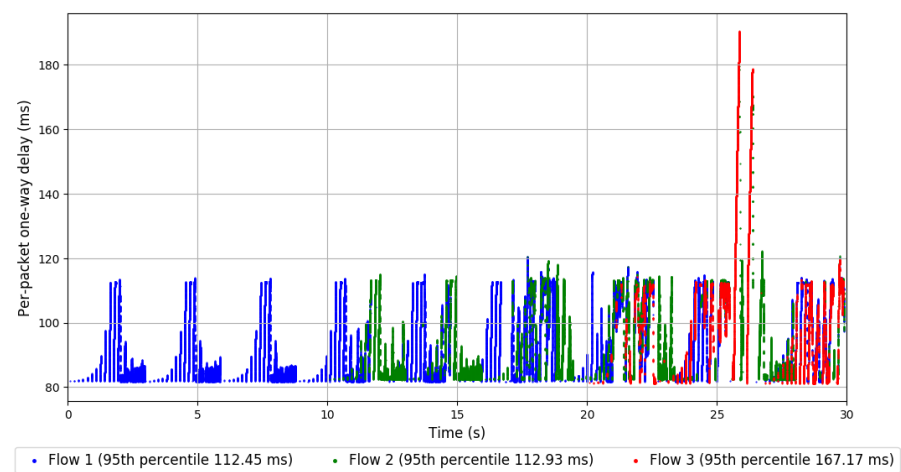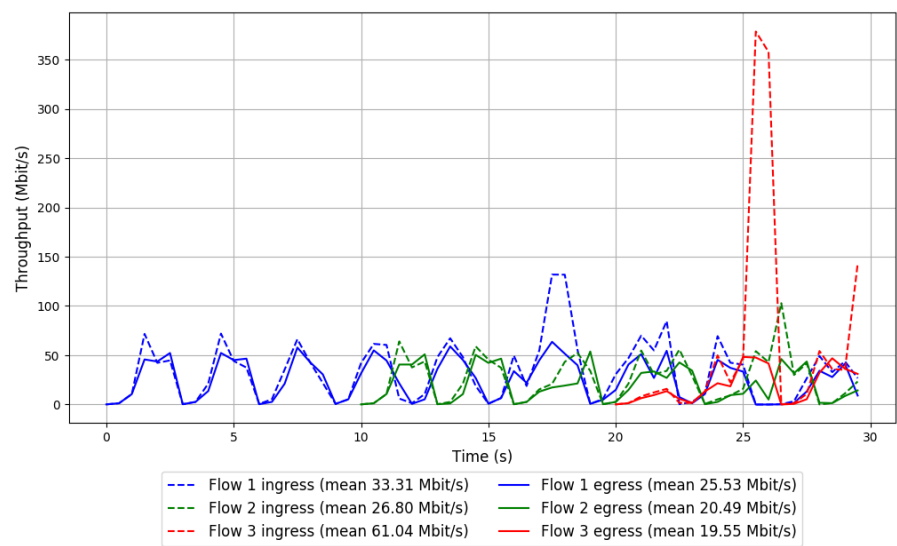# Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-03-13 19:39:26
End at: 2018-03-13 19:39:56
Local clock offset: -1.594 ms
Remote clock offset: -4.857 ms


# Below is generated by plot.py at 2018-03-13 22:32:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 112.444 ms
Loss rate: 17.01%
-- Flow 1:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 112.539 ms
Loss rate: 15.78%
-- Flow 2:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 112.350 ms
Loss rate: 19.83%
-- Flow 3:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 112.211 ms
Loss rate: 13.70%
```
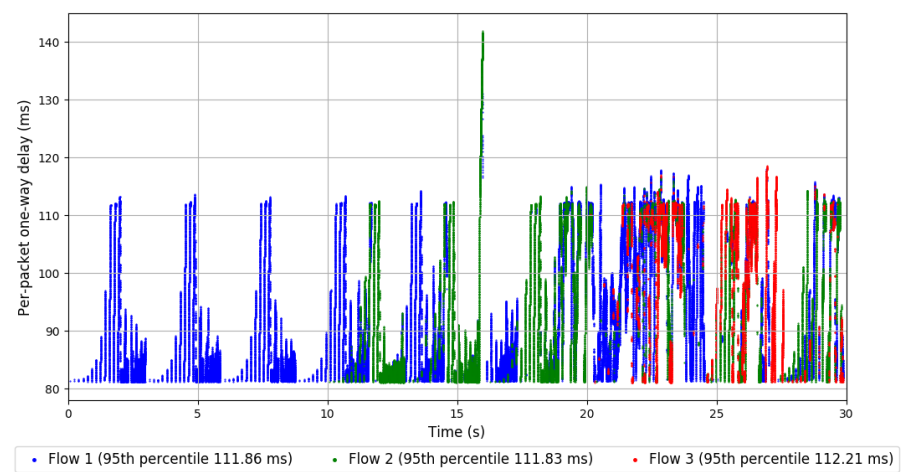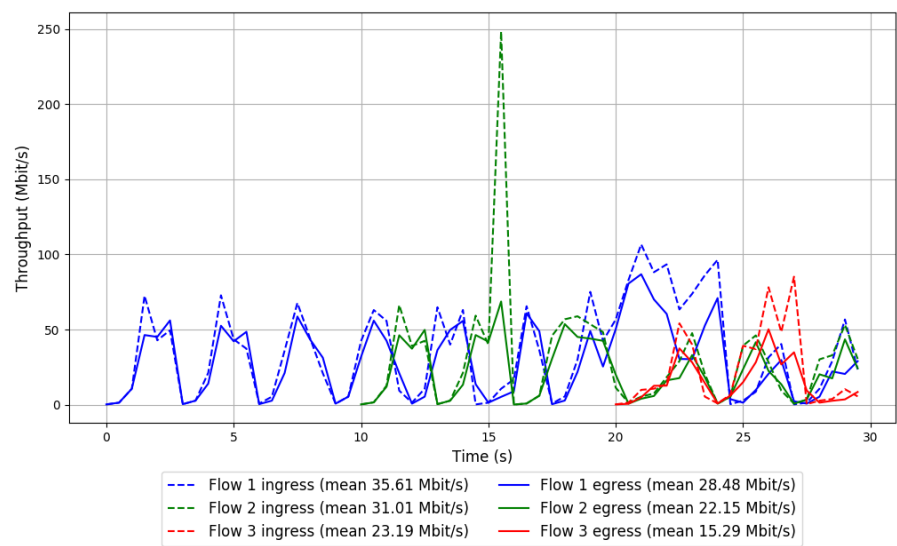
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-03-13 20:02:52
End at: 2018-03-13 20:03:22
Local clock offset: -4.868 ms
Remote clock offset: -5.068 ms


# Below is generated by plot.py at 2018-03-13 22:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: 161.170 ms
Loss rate: 83.50%
-- Flow 1:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 161.804 ms
Loss rate: 84.88%
-- Flow 2:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 111.779 ms
Loss rate: 10.77%
-- Flow 3:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 112.108 ms
Loss rate: 17.19%
```
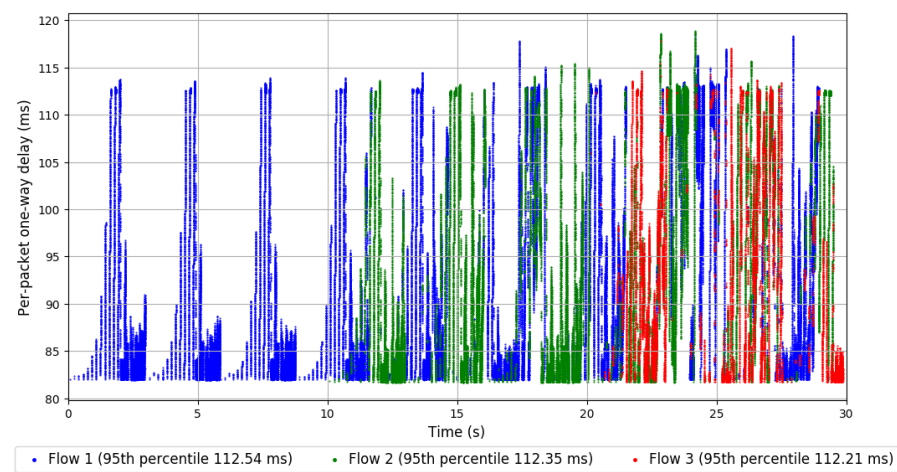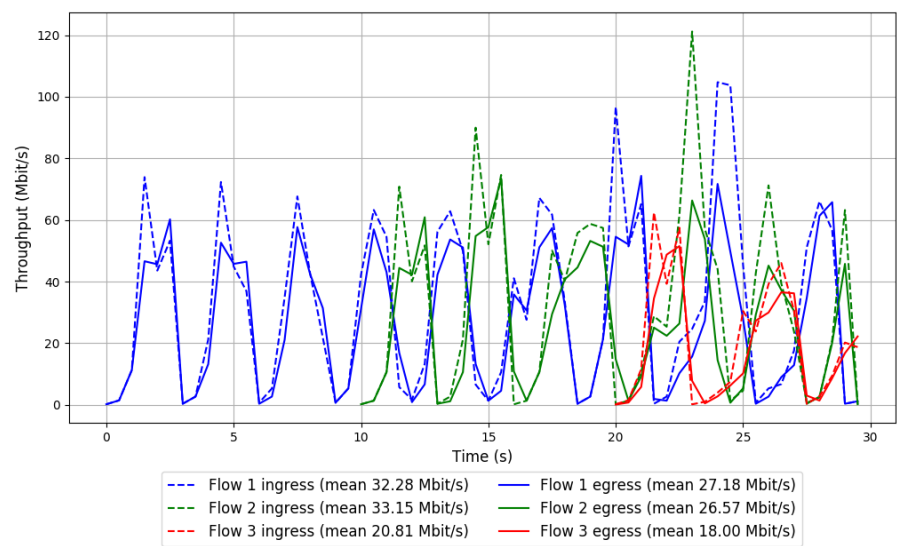
Run 6: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 287.51 Mbit/s) ——— Flow 1 egress (mean 43.47 Mbit/s)
- - - - Flow 2 ingress (mean 5.65 Mbit/s) ——— Flow 2 egress (mean 5.04 Mbit/s)
- - - - Flow 3 ingress (mean 6.15 Mbit/s) ——— Flow 3 egress (mean 5.68 Mbit/s)

- Flow 1 (95th percentile 161.80 ms)   - Flow 2 (95th percentile 111.78 ms)   - Flow 3 (95th percentile 112.11 ms)

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```
Run 7: Statistics of Verus

Start at: 2018-03-13 20:26:31
End at: 2018-03-13 20:27:01
Local clock offset: -5.603 ms
Remote clock offset: -5.21 ms

# Below is generated by plot.py at 2018-03-13 22:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.88 Mbit/s
95th percentile per-packet one-way delay: 112.566 ms
Loss rate: 29.19%
-- Flow 1:
Average throughput: 21.41 Mbit/s
95th percentile per-packet one-way delay: 112.456 ms
Loss rate: 10.16%
-- Flow 2:
Average throughput: 28.50 Mbit/s
95th percentile per-packet one-way delay: 113.432 ms
Loss rate: 44.39%
-- Flow 3:
Average throughput: 17.41 Mbit/s
95th percentile per-packet one-way delay: 111.998 ms
Loss rate: 20.47%
```

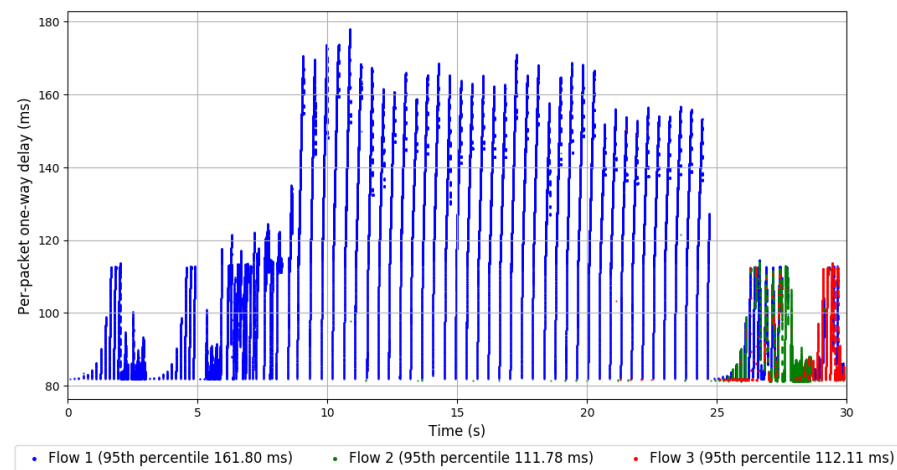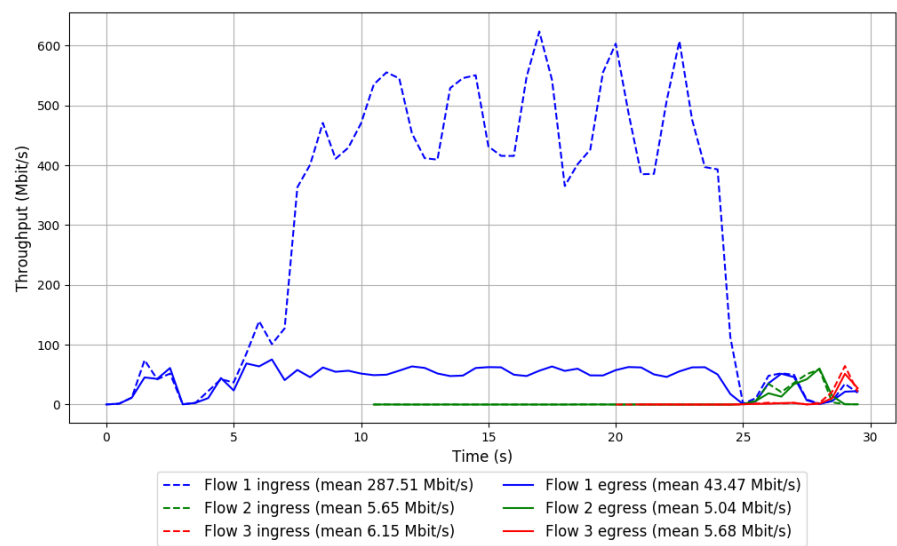Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-03-13 20:49:59
End at: 2018-03-13 20:50:29
Local clock offset: -5.695 ms
Remote clock offset: 0.925 ms


# Below is generated by plot.py at 2018-03-13 22:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.26 Mbit/s
95th percentile per-packet one-way delay: 118.282 ms
Loss rate: 17.96%
-- Flow 1:
Average throughput: 23.48 Mbit/s
95th percentile per-packet one-way delay: 118.311 ms
Loss rate: 13.43%
-- Flow 2:
Average throughput: 22.99 Mbit/s
95th percentile per-packet one-way delay: 118.019 ms
Loss rate: 21.60%
-- Flow 3:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 118.443 ms
Loss rate: 23.92%
```
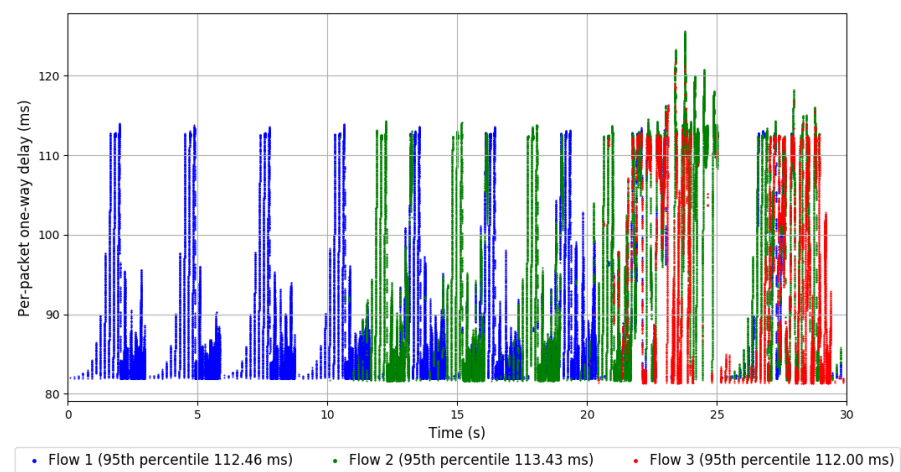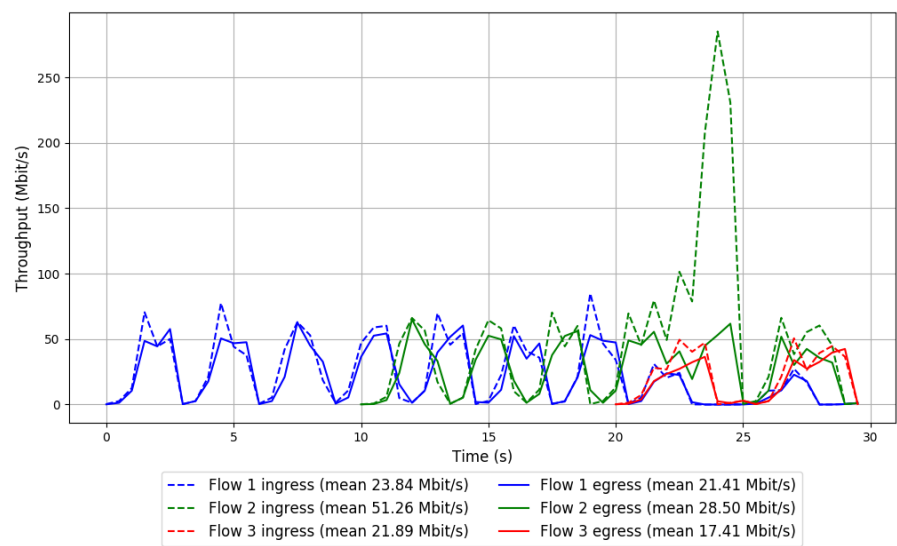
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 27.15 Mbit/s) --- Flow 1 egress (mean 23.48 Mbit/s)
Flow 2 ingress (mean 29.31 Mbit/s) --- Flow 2 egress (mean 22.99 Mbit/s)
Flow 3 ingress (mean 26.65 Mbit/s) --- Flow 3 egress (mean 20.31 Mbit/s)

Flow 1 (95th percentile 118.31 ms)   Flow 2 (95th percentile 118.02 ms)   Flow 3 (95th percentile 118.44 ms)

```
Run 9: Statistics of Verus

Start at: 2018-03-13 21:13:25
End at: 2018-03-13 21:13:55
Local clock offset: -2.707 ms
Remote clock offset: 0.951 ms


# Below is generated by plot.py at 2018-03-13 22:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.18 Mbit/s
95th percentile per-packet one-way delay: 141.998 ms
Loss rate: 70.05%
-- Flow 1:
Average throughput: 19.73 Mbit/s
95th percentile per-packet one-way delay: 118.576 ms
Loss rate: 15.28%
-- Flow 2:
Average throughput: 28.11 Mbit/s
95th percentile per-packet one-way delay: 146.498 ms
Loss rate: 84.02%
-- Flow 3:
Average throughput: 19.91 Mbit/s
95th percentile per-packet one-way delay: 118.396 ms
Loss rate: 21.37%
```
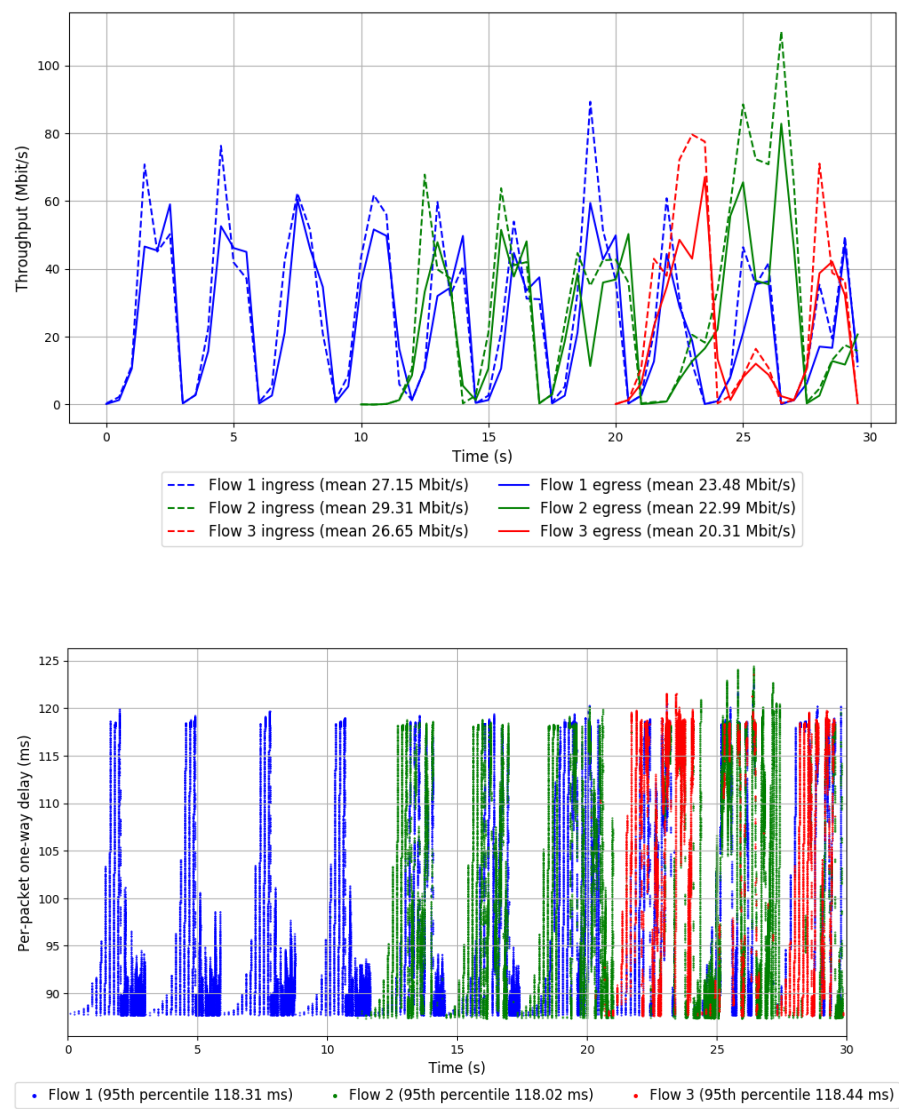
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 23.29 Mbit/s)   Flow 1 egress (mean 19.73 Mbit/s)
Flow 2 ingress (mean 176.04 Mbit/s)   Flow 2 egress (mean 28.11 Mbit/s)
Flow 3 ingress (mean 22.76 Mbit/s)   Flow 3 egress (mean 19.91 Mbit/s)

Flow 1 (95th percentile 118.58 ms)   Flow 2 (95th percentile 146.50 ms)   Flow 3 (95th percentile 118.40 ms)

```
Run 10: Statistics of Verus

Start at: 2018-03-13 21:37:08
End at: 2018-03-13 21:37:38
Local clock offset: -4.78 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2018-03-13 22:33:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.08 Mbit/s
95th percentile per-packet one-way delay: 171.796 ms
Loss rate: 78.63%
-- Flow 1:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 173.351 ms
Loss rate: 81.23%
-- Flow 2:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 116.782 ms
Loss rate: 29.73%
-- Flow 3:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 117.840 ms
Loss rate: 19.76%
```
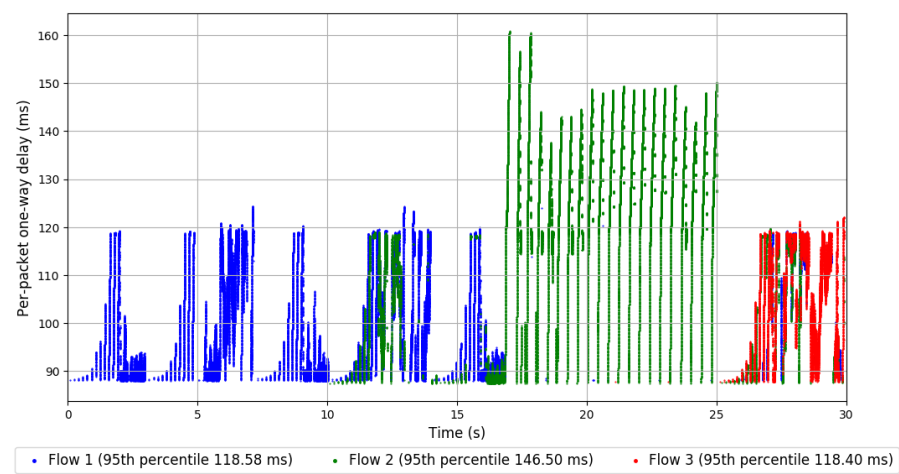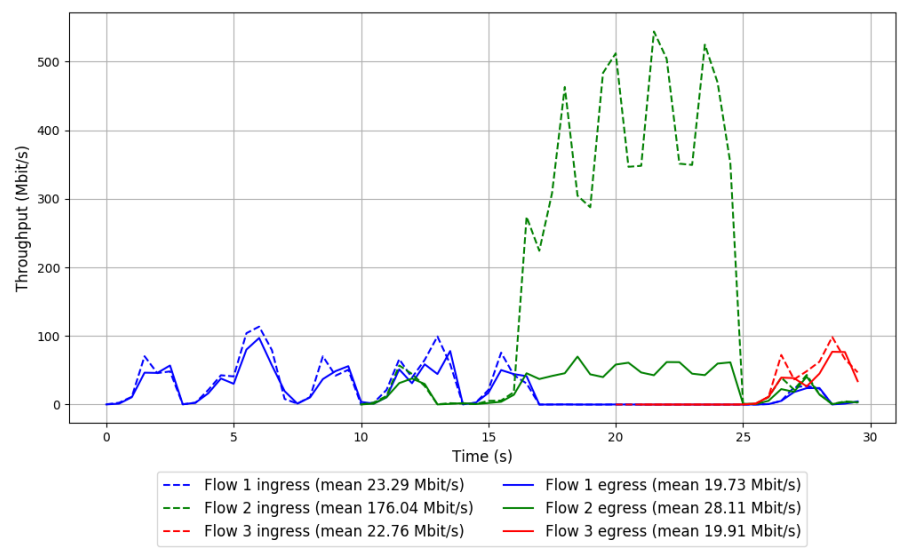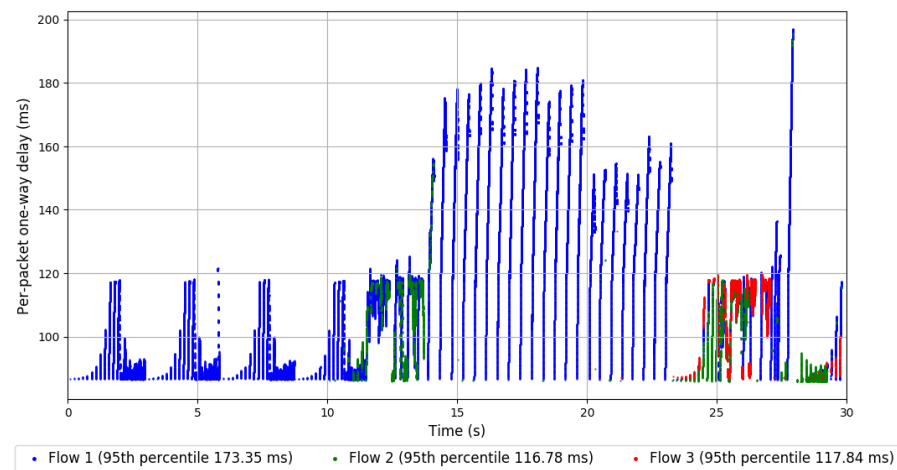
Run 10: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 201.15 Mbit/s)   —— Flow 1 egress (mean 37.71 Mbit/s)
- - - - Flow 2 ingress (mean 10.69 Mbit/s)   —— Flow 2 egress (mean 7.50 Mbit/s)
- - - - Flow 3 ingress (mean 9.23 Mbit/s)   —— Flow 3 egress (mean 8.30 Mbit/s)

- Flow 1 (95th percentile 173.35 ms)   • Flow 2 (95th percentile 116.78 ms)   • Flow 3 (95th percentile 117.84 ms)

```
Run 1: Statistics of Copa

Start at: 2018-03-13 18:11:52
End at: 2018-03-13 18:12:22
Local clock offset: -5.323 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2018-03-13 22:34:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 106.185 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 67.75 Mbit/s
95th percentile per-packet one-way delay: 105.595 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 22.53 Mbit/s
95th percentile per-packet one-way delay: 106.369 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 13.07 Mbit/s
95th percentile per-packet one-way delay: 109.527 ms
Loss rate: 0.07%
```
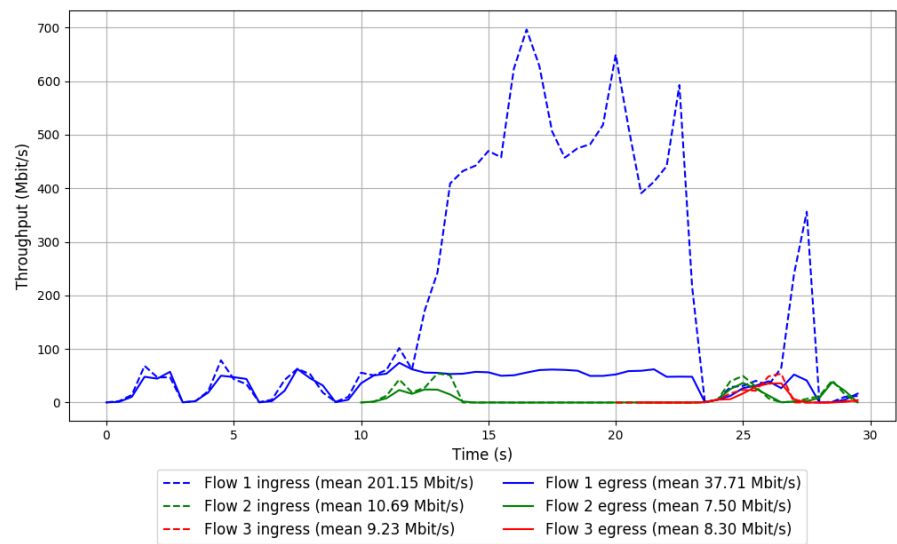
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 67.77 Mbit/s)   Flow 1 egress (mean 67.75 Mbit/s)
Flow 2 ingress (mean 22.54 Mbit/s)   Flow 2 egress (mean 22.53 Mbit/s)
Flow 3 ingress (mean 13.07 Mbit/s)   Flow 3 egress (mean 13.07 Mbit/s)

Flow 1 (95th percentile 105.59 ms)   Flow 2 (95th percentile 106.37 ms)   Flow 3 (95th percentile 109.53 ms)

```
Run 2: Statistics of Copa

Start at: 2018-03-13 18:35:23
End at: 2018-03-13 18:35:53
Local clock offset: -4.105 ms
Remote clock offset: -5.148 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 112.886 ms
Loss rate: 89.18%
-- Flow 1:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 112.886 ms
Loss rate: 89.18%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 112.751 ms
Loss rate: 75.00%
```
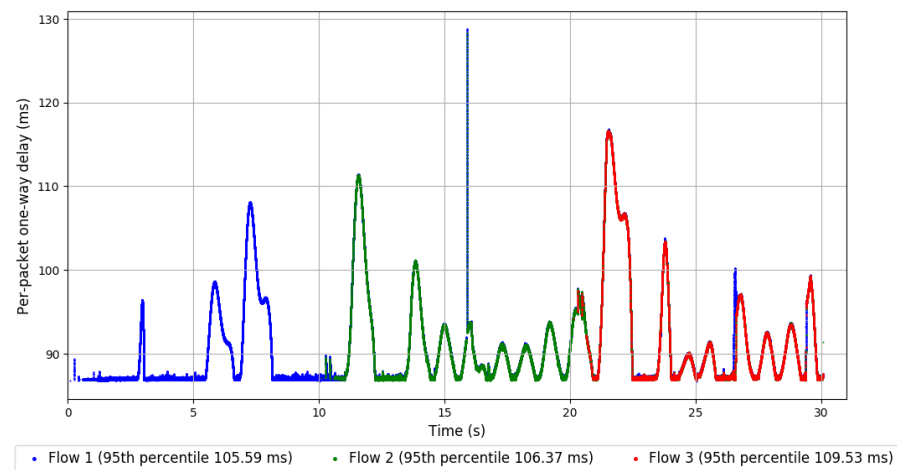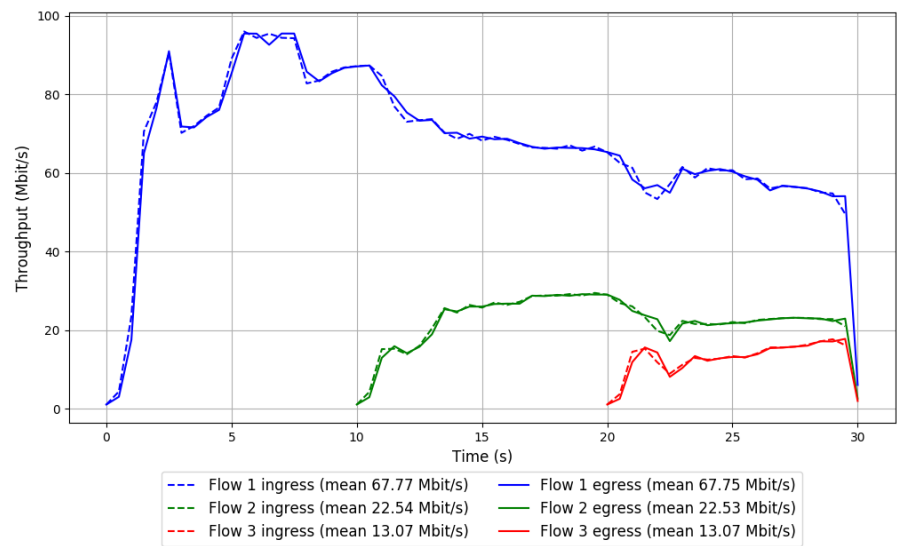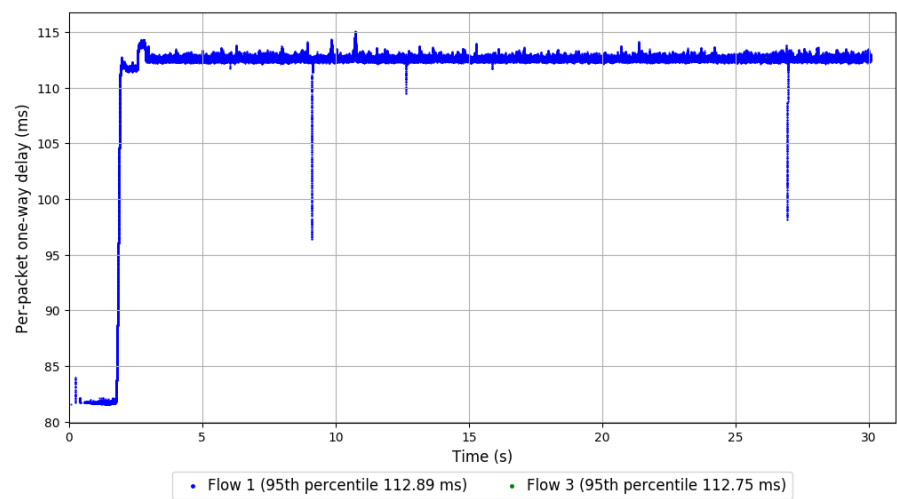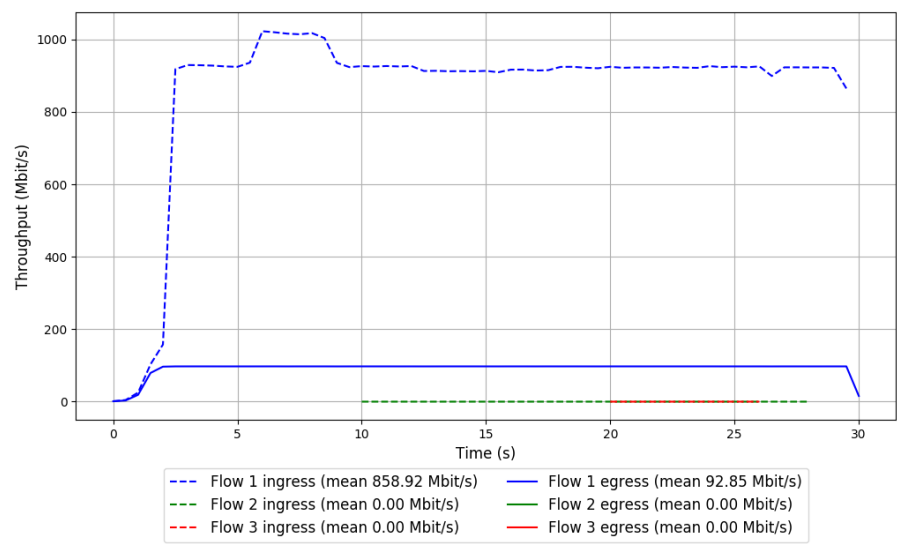
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-03-13 18:59:05
End at: 2018-03-13 18:59:35
Local clock offset: -5.865 ms
Remote clock offset: -5.692 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 95.284 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.52 Mbit/s
95th percentile per-packet one-way delay: 94.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 98.006 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.60 Mbit/s
95th percentile per-packet one-way delay: 98.065 ms
Loss rate: 0.00%
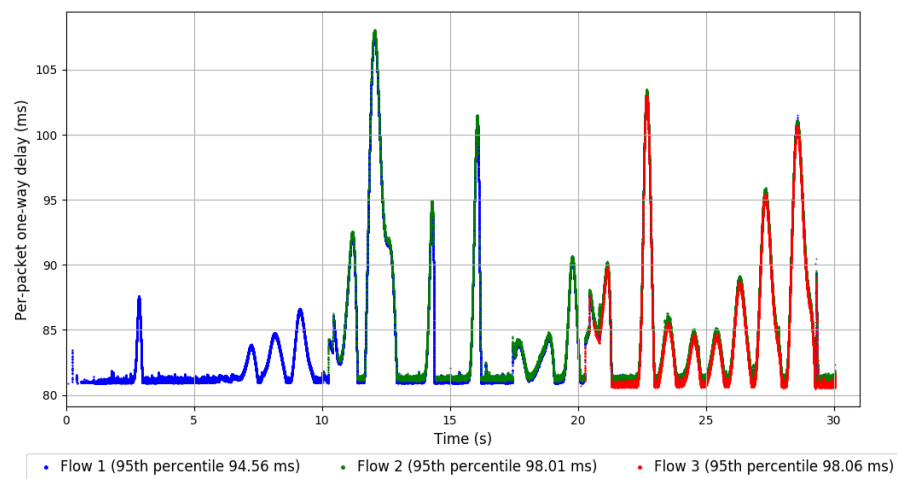```

Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-03-13 19:22:32
End at: 2018-03-13 19:23:02
Local clock offset: -3.476 ms
Remote clock offset: 1.13 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 96.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.05 Mbit/s
95th percentile per-packet one-way delay: 96.632 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 98.209 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.34 Mbit/s
95th percentile per-packet one-way delay: 97.297 ms
Loss rate: 0.00%
```
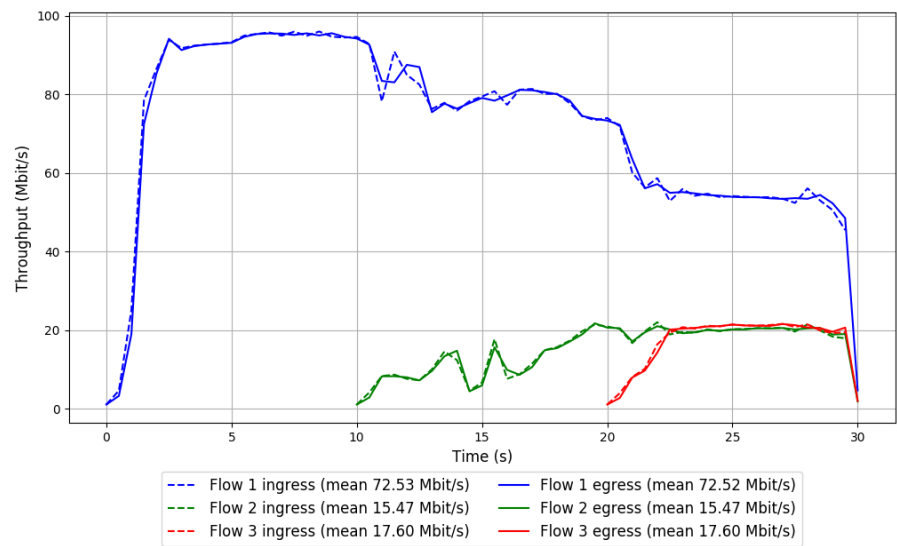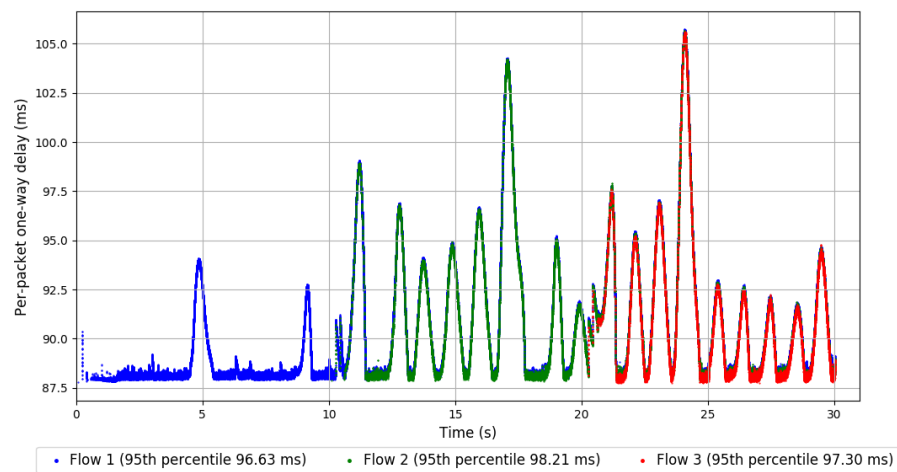
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-03-13 19:45:58
End at: 2018-03-13 19:46:28
Local clock offset: -1.227 ms
Remote clock offset: -4.874 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.67 Mbit/s
95th percentile per-packet one-way delay: 110.633 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 71.38 Mbit/s
95th percentile per-packet one-way delay: 109.788 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 16.92 Mbit/s
95th percentile per-packet one-way delay: 111.760 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 111.261 ms
Loss rate: 0.64%
```
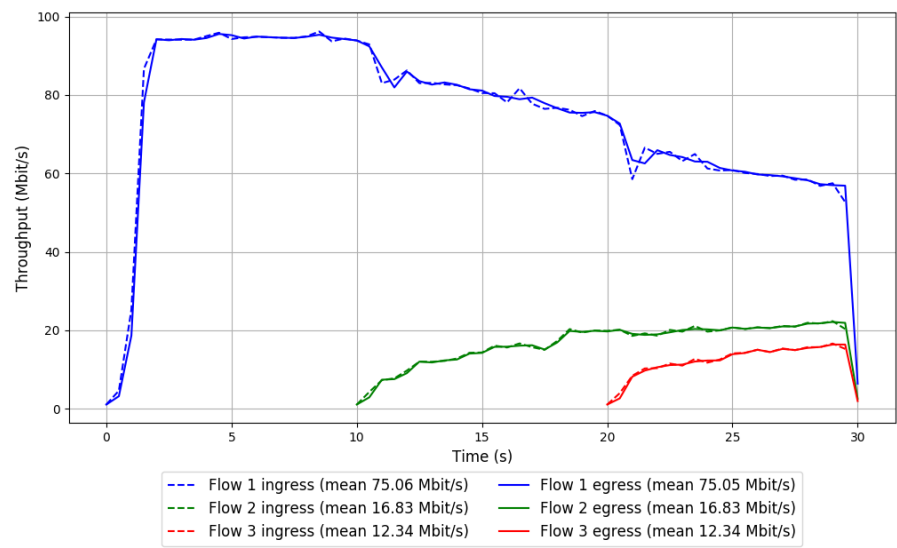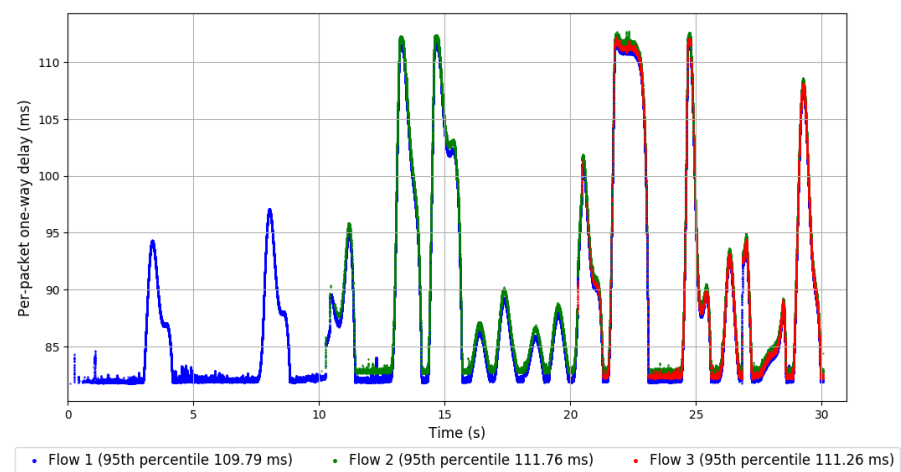
## Run 5: Report of Copa — Data Link



- - - - Flow 1 ingress (mean 71.47 Mbit/s) —— Flow 1 egress (mean 71.38 Mbit/s)
- - - - Flow 2 ingress (mean 16.97 Mbit/s) —— Flow 2 egress (mean 16.92 Mbit/s)
- - - - Flow 3 ingress (mean 9.18 Mbit/s) —— Flow 3 egress (mean 9.12 Mbit/s)



• Flow 1 (95th percentile 109.79 ms)   • Flow 2 (95th percentile 111.76 ms)   • Flow 3 (95th percentile 111.26 ms)
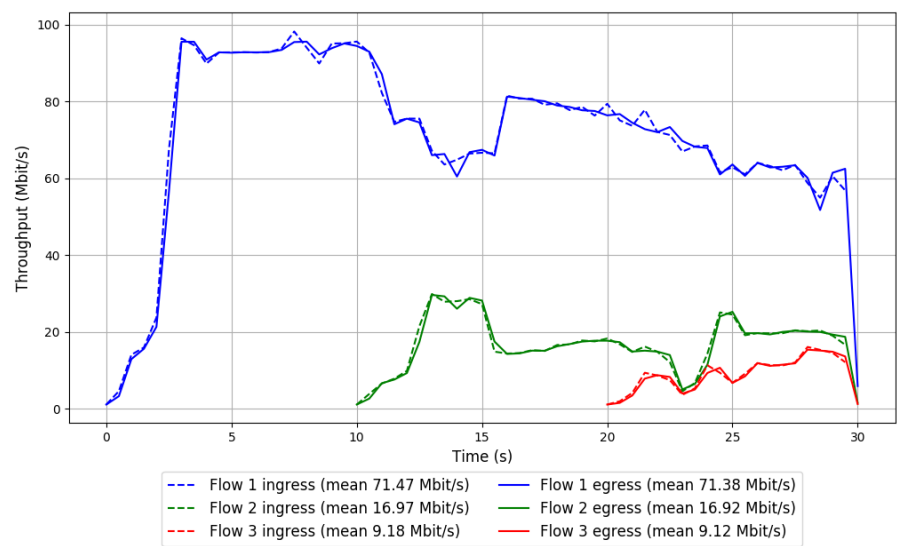
```
Run 6: Statistics of Copa

Start at: 2018-03-13 20:09:29
End at: 2018-03-13 20:09:59
Local clock offset: -5.387 ms
Remote clock offset: -6.009 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.19 Mbit/s
95th percentile per-packet one-way delay: 115.598 ms
Loss rate: 83.39%
-- Flow 1:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 115.634 ms
Loss rate: 83.55%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 110.260 ms
Loss rate: 12.40%
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-03-13 20:33:03
End at: 2018-03-13 20:33:33
Local clock offset: -5.602 ms
Remote clock offset: -0.197 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.59 Mbit/s
95th percentile per-packet one-way delay: 96.402 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 96.248 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 21.29 Mbit/s
95th percentile per-packet one-way delay: 97.090 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 97.281 ms
Loss rate: 0.00%
```
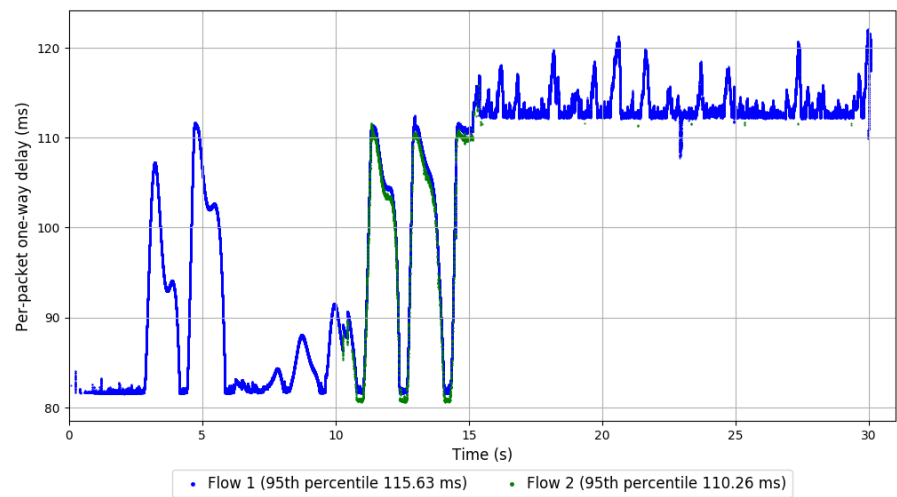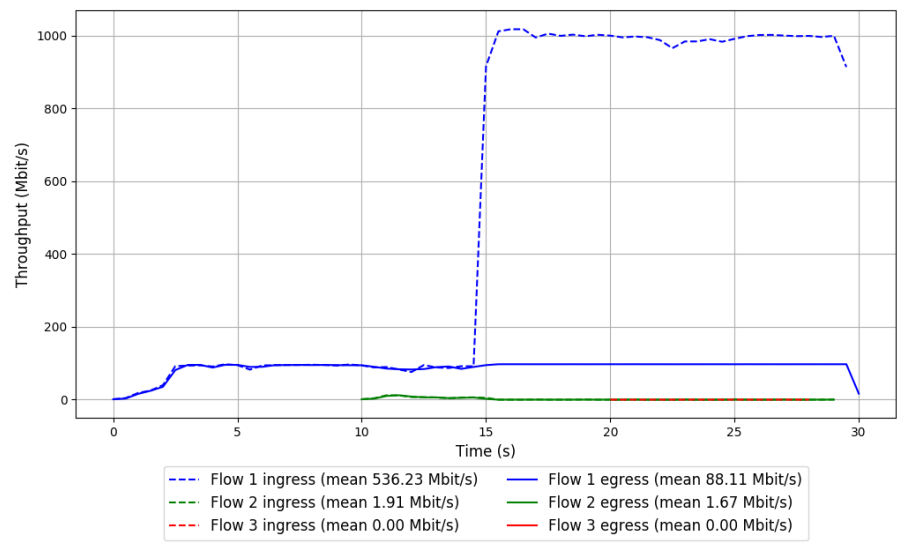
Run 7: Report of Copa — Data Link



Flow 1 ingress (mean 72.00 Mbit/s) -- Flow 1 egress (mean 72.00 Mbit/s)
Flow 2 ingress (mean 21.29 Mbit/s) -- Flow 2 egress (mean 21.29 Mbit/s)
Flow 3 ingress (mean 10.28 Mbit/s) -- Flow 3 egress (mean 10.28 Mbit/s)



Flow 1 (95th percentile 96.25 ms) · Flow 2 (95th percentile 97.09 ms) · Flow 3 (95th percentile 97.28 ms)
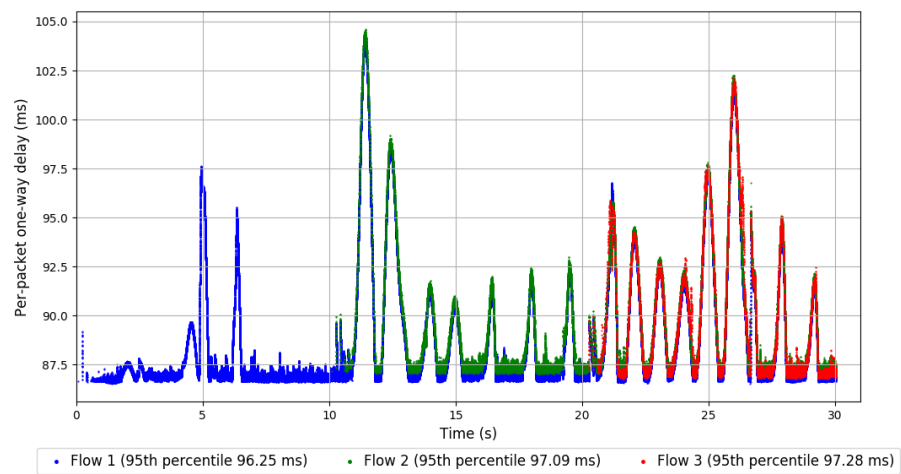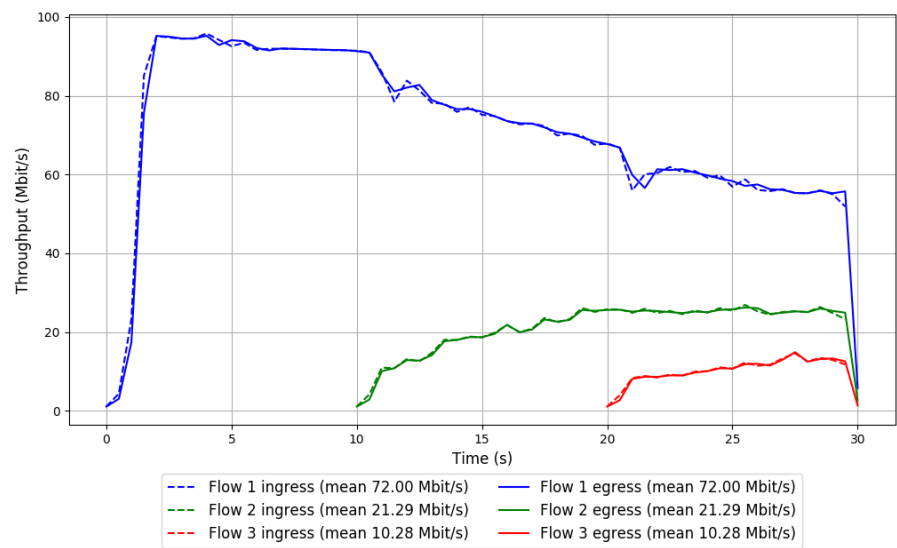
```
Run 8: Statistics of Copa

Start at: 2018-03-13 20:56:31
End at: 2018-03-13 20:57:01
Local clock offset: -5.373 ms
Remote clock offset: 1.012 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 102.007 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.09 Mbit/s
95th percentile per-packet one-way delay: 101.345 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.60 Mbit/s
95th percentile per-packet one-way delay: 104.297 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.78 Mbit/s
95th percentile per-packet one-way delay: 103.423 ms
Loss rate: 0.00%
```

Run 8: Report of Copa — Data Link



Flow 1 ingress (mean 68.10 Mbit/s) — Flow 1 egress (mean 68.09 Mbit/s)
Flow 2 ingress (mean 19.60 Mbit/s) — Flow 2 egress (mean 19.60 Mbit/s)
Flow 3 ingress (mean 12.78 Mbit/s) — Flow 3 egress (mean 12.78 Mbit/s)



Flow 1 (95th percentile 101.34 ms) — Flow 2 (95th percentile 104.30 ms) — Flow 3 (95th percentile 103.42 ms)

```
Run 9: Statistics of Copa

Start at: 2018-03-13 21:20:10
End at: 2018-03-13 21:20:40
Local clock offset: -2.12 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.88 Mbit/s
95th percentile per-packet one-way delay: 102.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 101.995 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.40 Mbit/s
95th percentile per-packet one-way delay: 102.525 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 102.892 ms
Loss rate: 0.00%
```
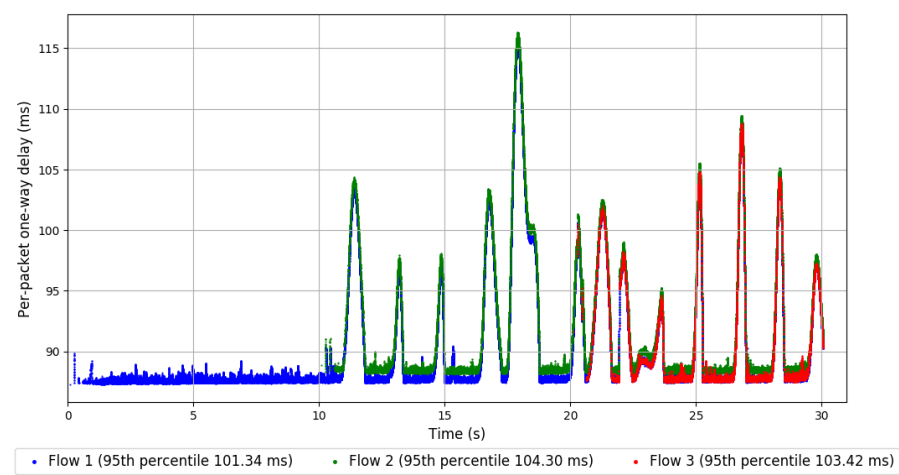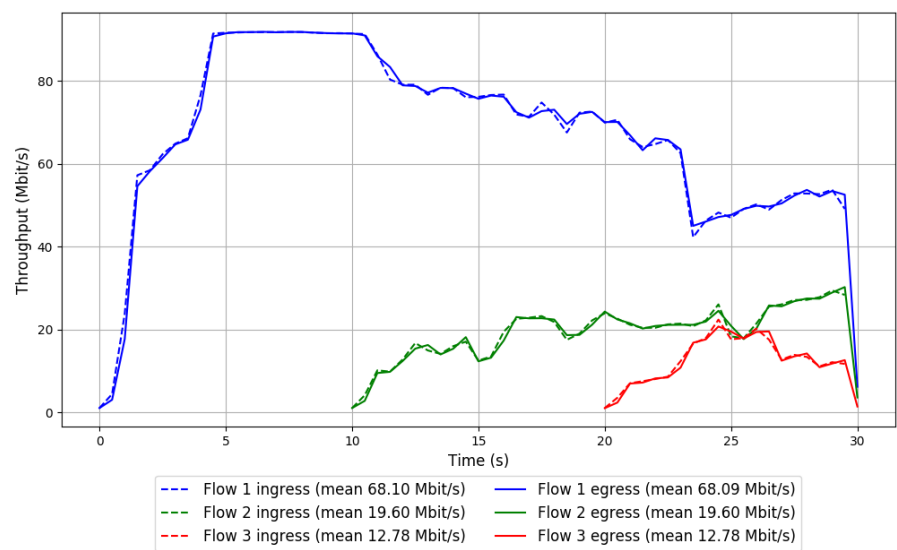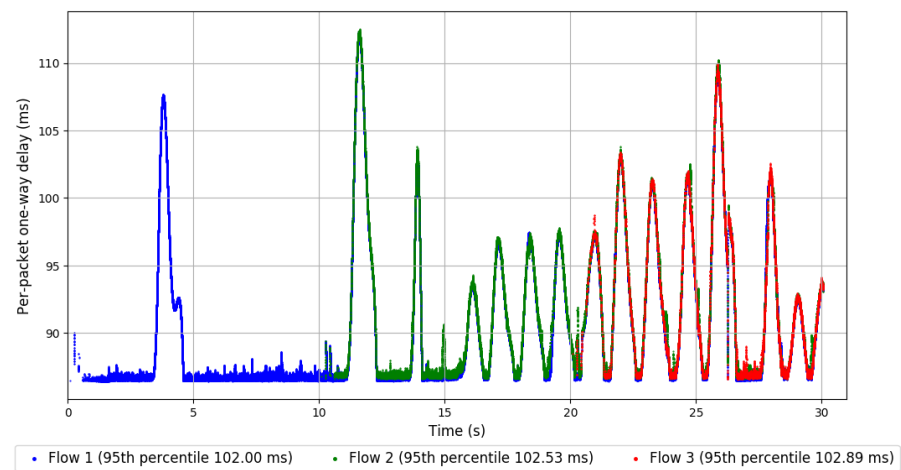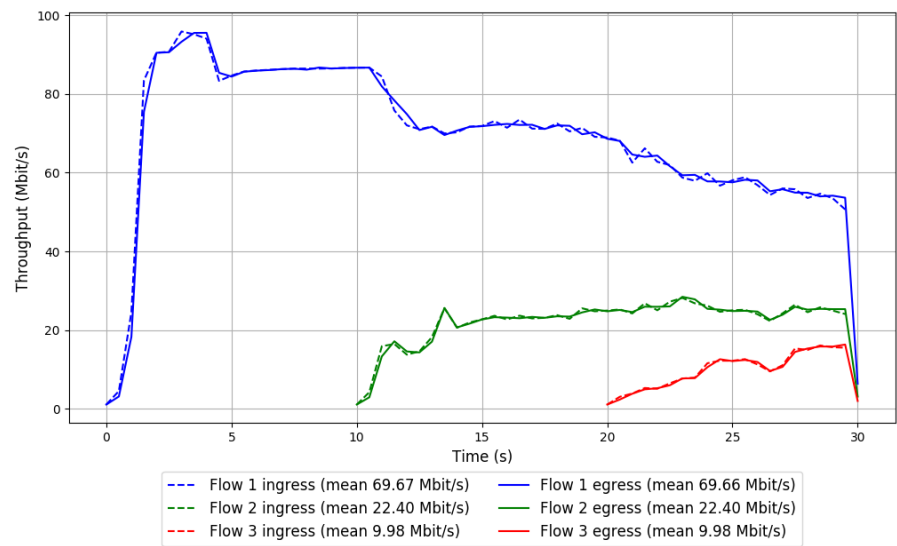
Run 9: Report of Copa — Data Link



Flow 1 ingress (mean 69.67 Mbit/s) — Flow 1 egress (mean 69.66 Mbit/s)
Flow 2 ingress (mean 22.40 Mbit/s) — Flow 2 egress (mean 22.40 Mbit/s)
Flow 3 ingress (mean 9.98 Mbit/s) — Flow 3 egress (mean 9.98 Mbit/s)



Flow 1 (95th percentile 102.00 ms) · Flow 2 (95th percentile 102.53 ms) · Flow 3 (95th percentile 102.89 ms)
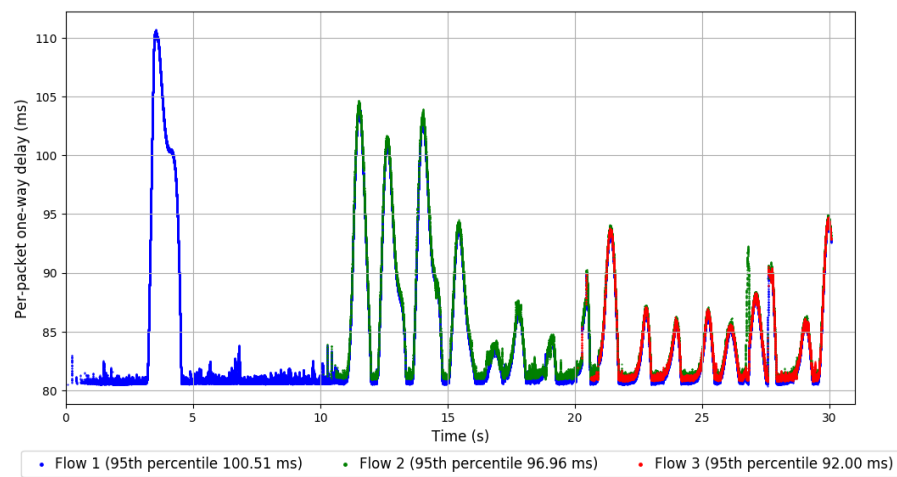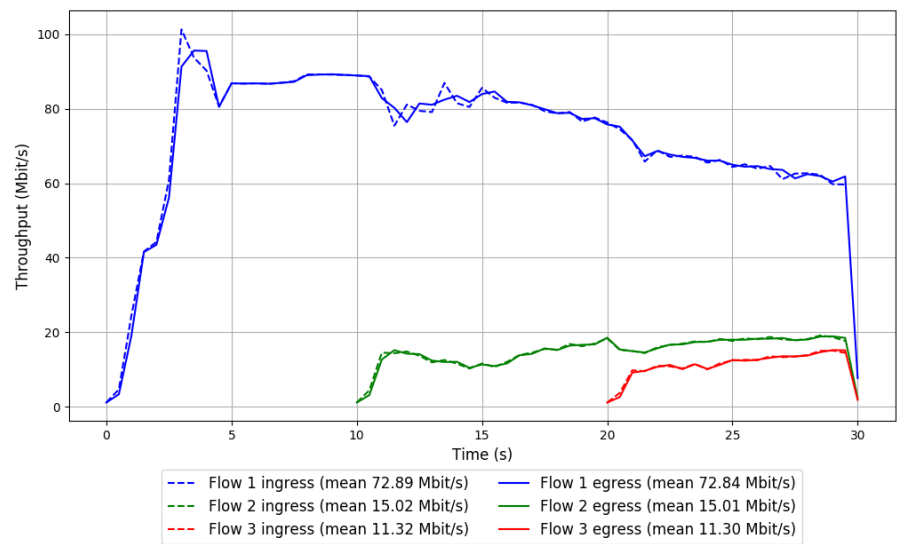
```
Run 10: Statistics of Copa

Start at: 2018-03-13 21:43:42
End at: 2018-03-13 21:44:12
Local clock offset: -6.094 ms
Remote clock offset: -5.676 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.59 Mbit/s
95th percentile per-packet one-way delay: 100.344 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 72.84 Mbit/s
95th percentile per-packet one-way delay: 100.506 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 15.01 Mbit/s
95th percentile per-packet one-way delay: 96.961 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 91.999 ms
Loss rate: 0.00%
```
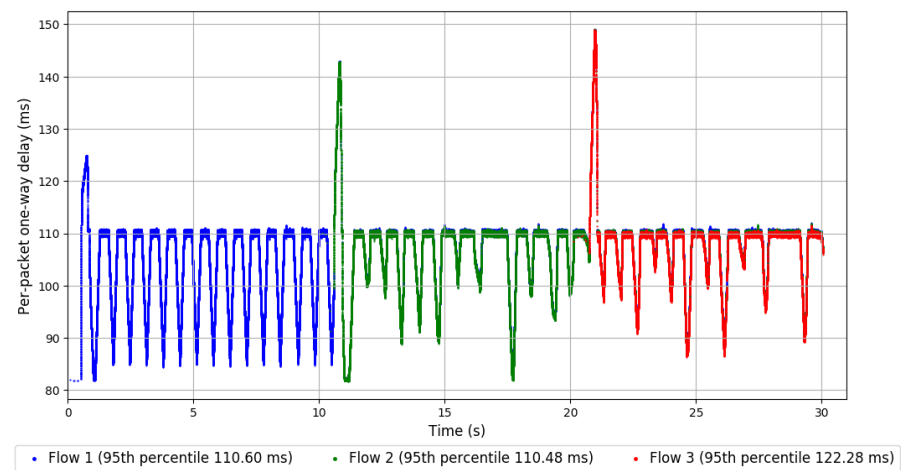
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-03-13 18:17:08
End at: 2018-03-13 18:17:38
Local clock offset: -4.777 ms
Remote clock offset: -4.887 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 110.586 ms
Loss rate: 31.51%
-- Flow 1:
Average throughput: 53.50 Mbit/s
95th percentile per-packet one-way delay: 110.599 ms
Loss rate: 24.78%
-- Flow 2:
Average throughput: 43.12 Mbit/s
95th percentile per-packet one-way delay: 110.478 ms
Loss rate: 33.76%
-- Flow 3:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 122.284 ms
Loss rate: 46.47%
```
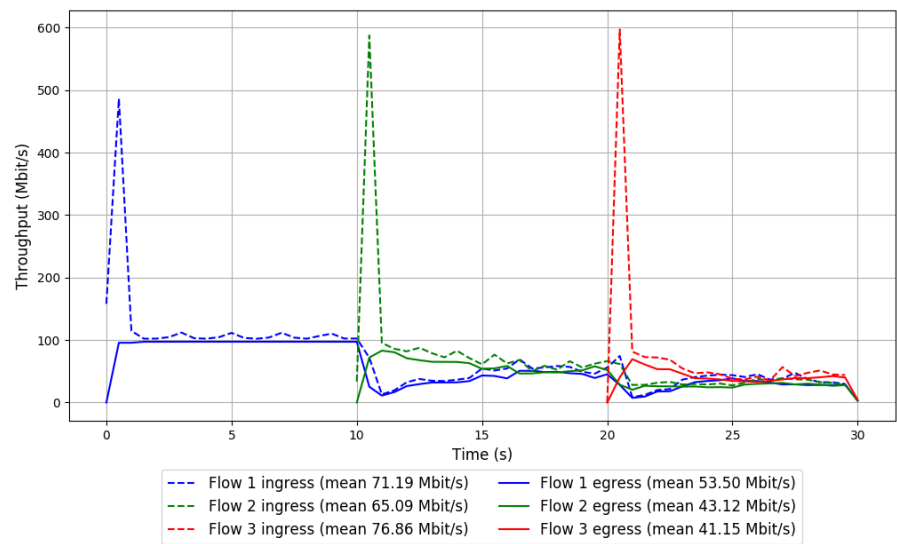
## Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-03-13 18:40:54
End at: 2018-03-13 18:41:24
Local clock offset: -4.428 ms
Remote clock offset: -1.2 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 114.476 ms
Loss rate: 32.05%
-- Flow 1:
Average throughput: 51.63 Mbit/s
95th percentile per-packet one-way delay: 114.446 ms
Loss rate: 24.67%
-- Flow 2:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 114.505 ms
Loss rate: 34.10%
-- Flow 3:
Average throughput: 40.02 Mbit/s
95th percentile per-packet one-way delay: 127.155 ms
Loss rate: 48.12%
```
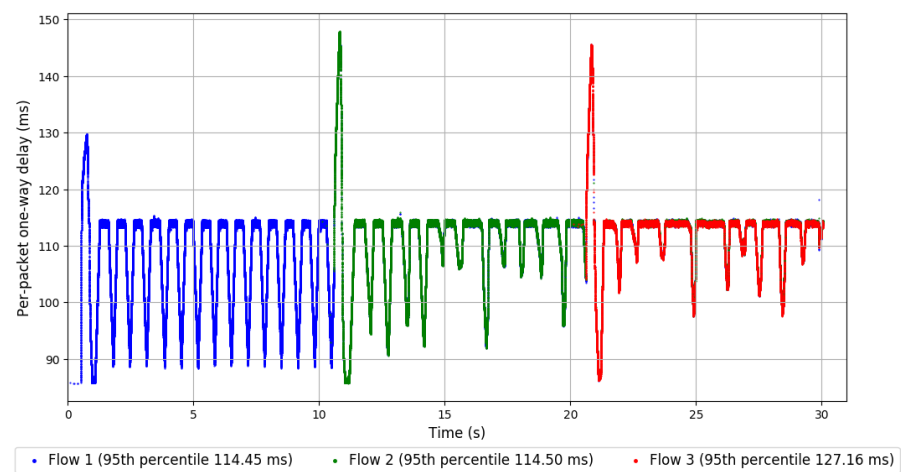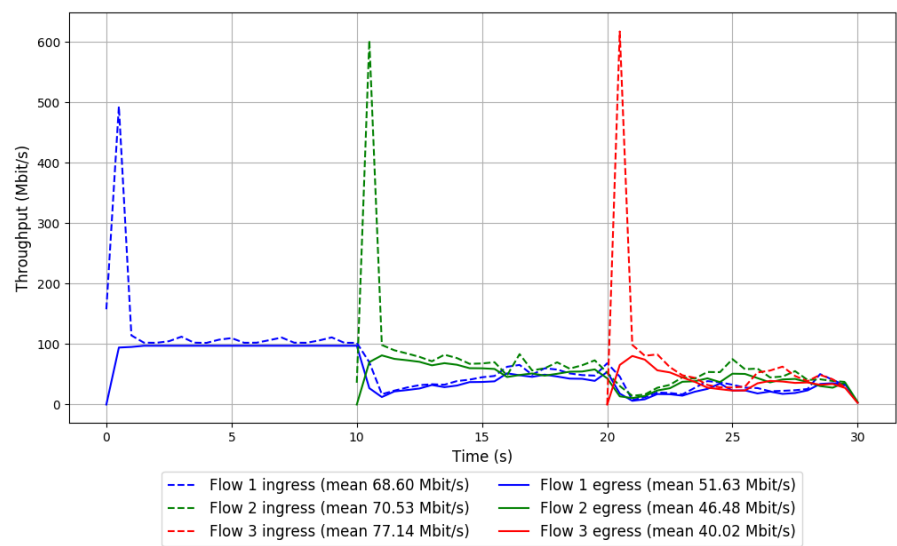
## Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-03-13 19:04:20
End at: 2018-03-13 19:04:50
Local clock offset: -6.032 ms
Remote clock offset: -5.677 ms

Below is generated by plot.py at 2018-03-13 22:40:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 109.661 ms
Loss rate: 32.86%
-- Flow 1:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 109.680 ms
Loss rate: 26.26%
-- Flow 2:
Average throughput: 44.13 Mbit/s
95th percentile per-packet one-way delay: 109.481 ms
Loss rate: 35.92%
-- Flow 3:
Average throughput: 42.94 Mbit/s
95th percentile per-packet one-way delay: 119.369 ms
Loss rate: 45.45%
```
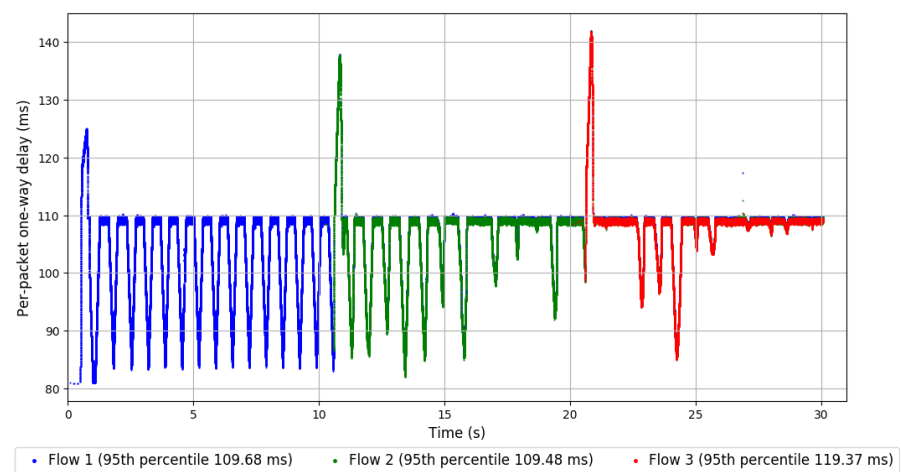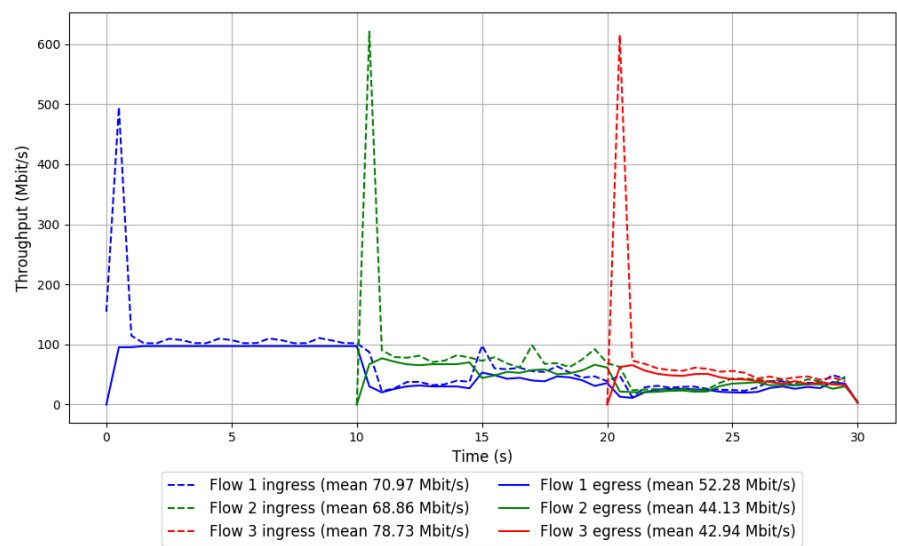
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-03-13 19:27:47
End at: 2018-03-13 19:28:17
Local clock offset: -2.666 ms
Remote clock offset: 0.267 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 116.537 ms
Loss rate: 33.87%
-- Flow 1:
Average throughput: 54.08 Mbit/s
95th percentile per-packet one-way delay: 116.548 ms
Loss rate: 25.45%
-- Flow 2:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 116.315 ms
Loss rate: 34.21%
-- Flow 3:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 126.486 ms
Loss rate: 52.67%
```

Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 72.60 Mbit/s) --- Flow 1 egress (mean 54.08 Mbit/s)
Flow 2 ingress (mean 60.99 Mbit/s) --- Flow 2 egress (mean 40.12 Mbit/s)
Flow 3 ingress (mean 95.91 Mbit/s) --- Flow 3 egress (mean 45.39 Mbit/s)

Flow 1 (95th percentile 116.55 ms)   Flow 2 (95th percentile 116.31 ms)   Flow 3 (95th percentile 126.49 ms)

```
Run 5: Statistics of FillP

Start at: 2018-03-13 19:51:13
End at: 2018-03-13 19:51:43
Local clock offset: -2.772 ms
Remote clock offset: -5.674 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 109.550 ms
Loss rate: 32.25%
-- Flow 1:
Average throughput: 53.23 Mbit/s
95th percentile per-packet one-way delay: 109.459 ms
Loss rate: 25.00%
-- Flow 2:
Average throughput: 43.00 Mbit/s
95th percentile per-packet one-way delay: 109.543 ms
Loss rate: 35.38%
-- Flow 3:
Average throughput: 42.12 Mbit/s
95th percentile per-packet one-way delay: 122.470 ms
Loss rate: 46.67%
```
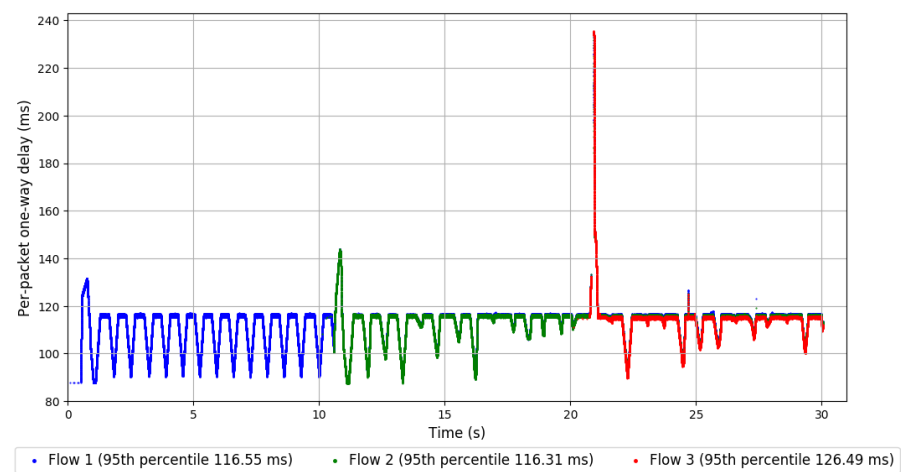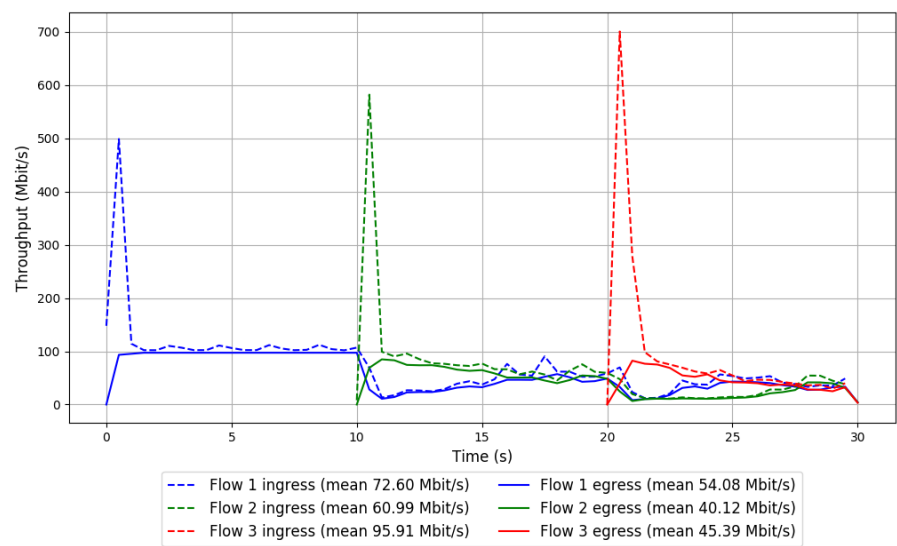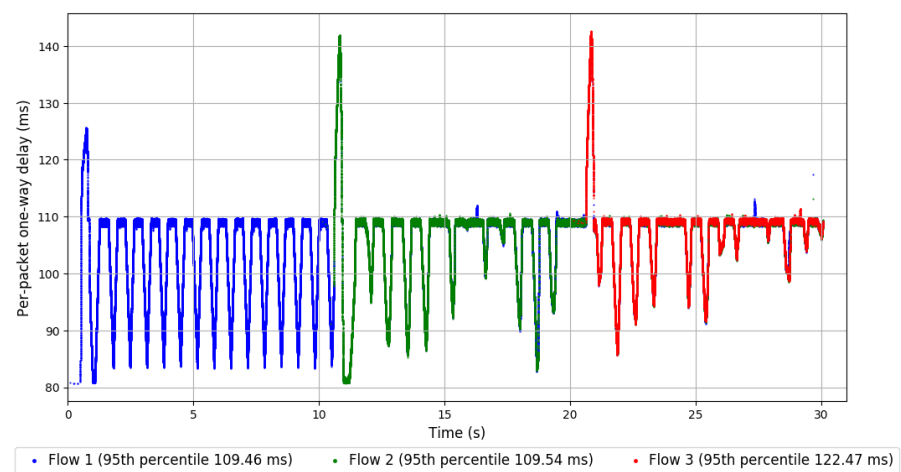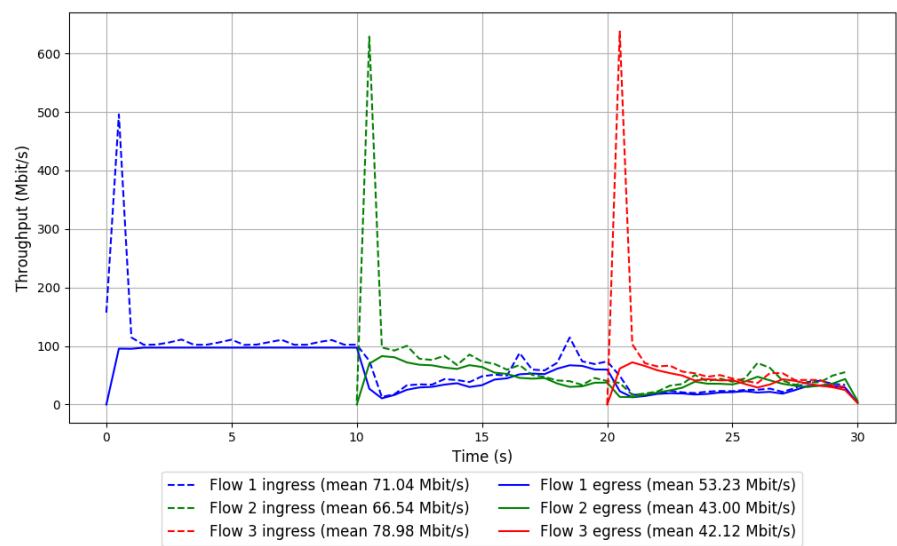
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 71.04 Mbit/s) --- Flow 1 egress (mean 53.23 Mbit/s)
Flow 2 ingress (mean 66.54 Mbit/s) --- Flow 2 egress (mean 43.00 Mbit/s)
Flow 3 ingress (mean 78.98 Mbit/s) --- Flow 3 egress (mean 42.12 Mbit/s)

Flow 1 (95th percentile 109.46 ms)   Flow 2 (95th percentile 109.54 ms)   Flow 3 (95th percentile 122.47 ms)
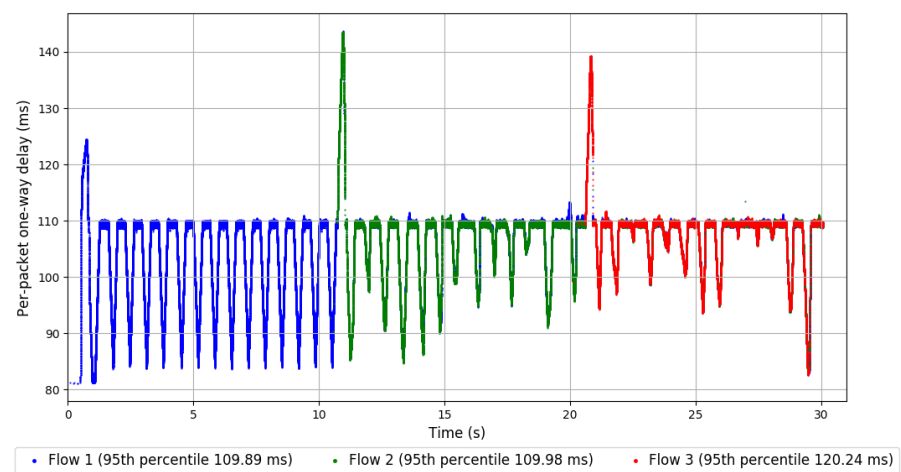
```
Run 6: Statistics of FillP

Start at: 2018-03-13 20:14:52
End at: 2018-03-13 20:15:22
Local clock offset: -5.577 ms
Remote clock offset: -5.997 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 109.936 ms
Loss rate: 32.26%
-- Flow 1:
Average throughput: 56.98 Mbit/s
95th percentile per-packet one-way delay: 109.886 ms
Loss rate: 24.76%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 109.976 ms
Loss rate: 36.90%
-- Flow 3:
Average throughput: 37.86 Mbit/s
95th percentile per-packet one-way delay: 120.241 ms
Loss rate: 47.84%
```

Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 75.80 Mbit/s) — Flow 1 egress (mean 56.98 Mbit/s)
Flow 2 ingress (mean 62.67 Mbit/s) — Flow 2 egress (mean 39.85 Mbit/s)
Flow 3 ingress (mean 72.66 Mbit/s) — Flow 3 egress (mean 37.86 Mbit/s)

Flow 1 (95th percentile 109.89 ms)   Flow 2 (95th percentile 109.98 ms)   Flow 3 (95th percentile 120.24 ms)
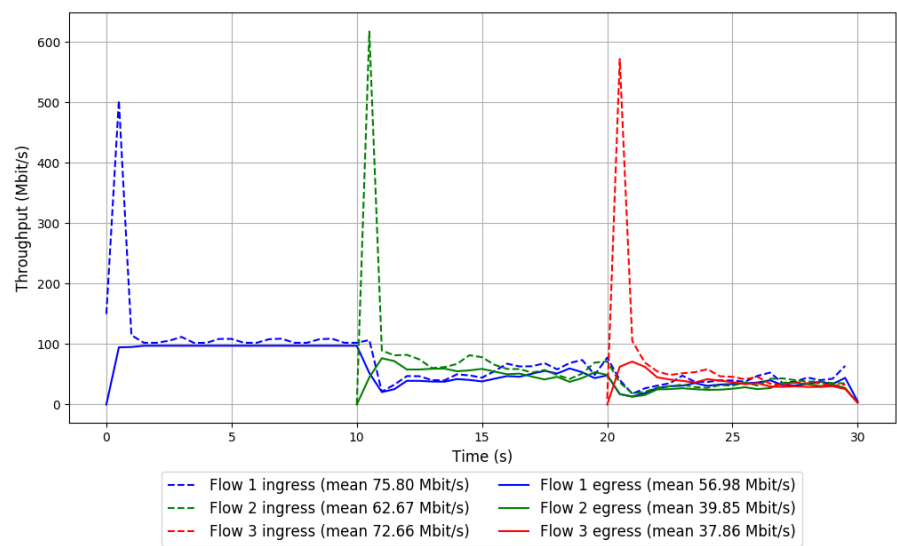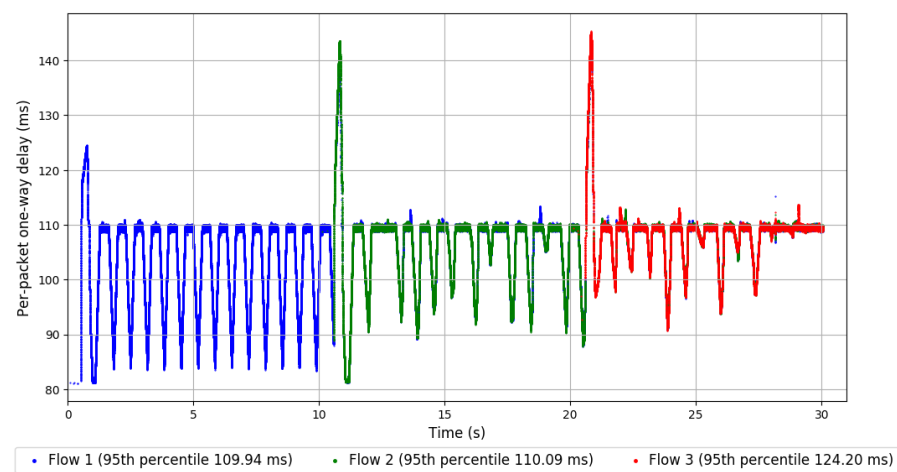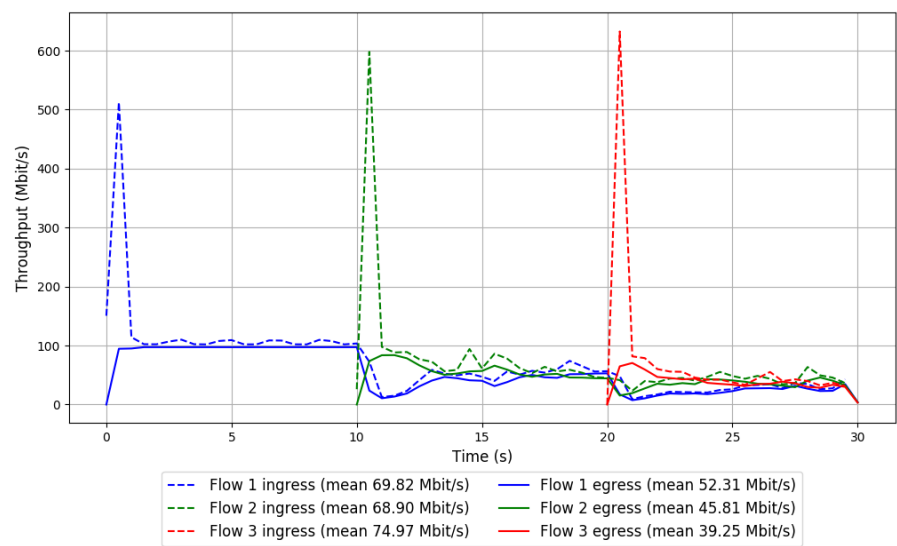
255

```
Run 7: Statistics of FillP

Start at: 2018-03-13 20:38:19
End at: 2018-03-13 20:38:49
Local clock offset: -5.697 ms
Remote clock offset: -5.721 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 110.074 ms
Loss rate: 31.79%
-- Flow 1:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 109.937 ms
Loss rate: 25.01%
-- Flow 2:
Average throughput: 45.81 Mbit/s
95th percentile per-packet one-way delay: 110.086 ms
Loss rate: 33.52%
-- Flow 3:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 124.197 ms
Loss rate: 47.65%
```

Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 69.82 Mbit/s) --- Flow 1 egress (mean 52.31 Mbit/s)
Flow 2 ingress (mean 68.90 Mbit/s) --- Flow 2 egress (mean 45.81 Mbit/s)
Flow 3 ingress (mean 74.97 Mbit/s) --- Flow 3 egress (mean 39.25 Mbit/s)

Flow 1 (95th percentile 109.94 ms) • Flow 2 (95th percentile 110.09 ms) • Flow 3 (95th percentile 124.20 ms)

```
Run 8: Statistics of FillP

Start at: 2018-03-13 21:01:46
End at: 2018-03-13 21:02:16
Local clock offset: -4.03 ms
Remote clock offset: 0.098 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 115.818 ms
Loss rate: 32.34%
-- Flow 1:
Average throughput: 54.72 Mbit/s
95th percentile per-packet one-way delay: 115.581 ms
Loss rate: 24.05%
-- Flow 2:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 115.583 ms
Loss rate: 37.99%
-- Flow 3:
Average throughput: 43.23 Mbit/s
95th percentile per-packet one-way delay: 127.220 ms
Loss rate: 45.71%
```
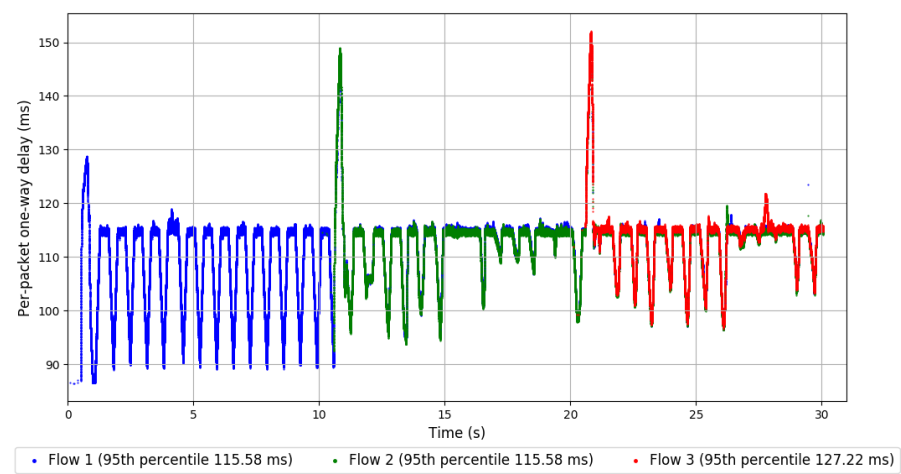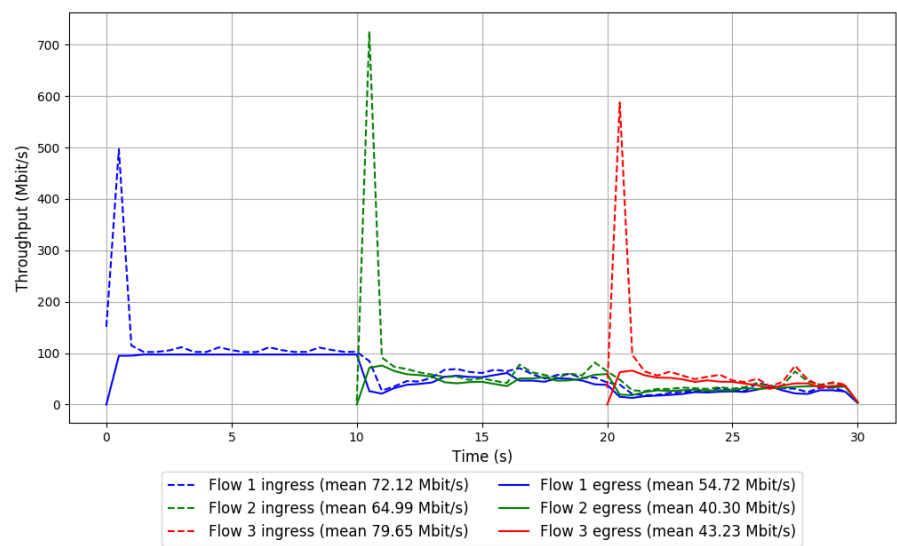
Run 8: Report of FillP — Data Link

- - - - Flow 1 ingress (mean 72.12 Mbit/s) ——— Flow 1 egress (mean 54.72 Mbit/s)
- - - - Flow 2 ingress (mean 64.99 Mbit/s) ——— Flow 2 egress (mean 40.30 Mbit/s)
- - - - Flow 3 ingress (mean 79.65 Mbit/s) ——— Flow 3 egress (mean 43.23 Mbit/s)

- Flow 1 (95th percentile 115.58 ms)   • Flow 2 (95th percentile 115.58 ms)   • Flow 3 (95th percentile 127.22 ms)
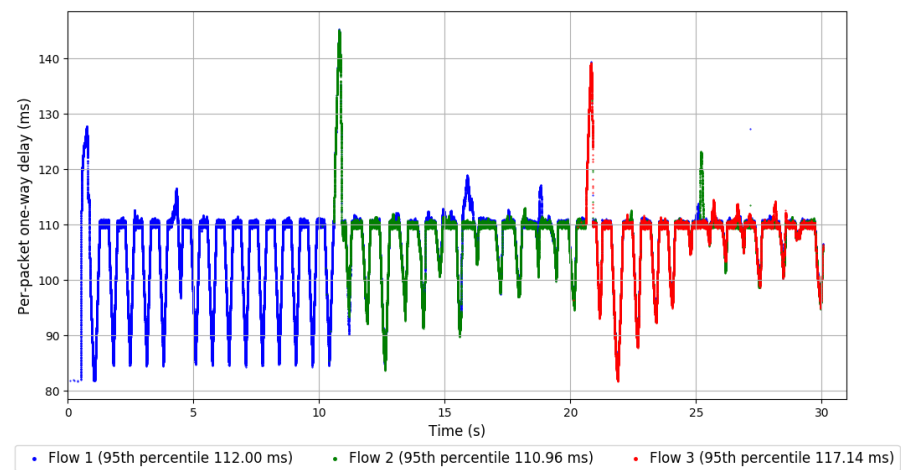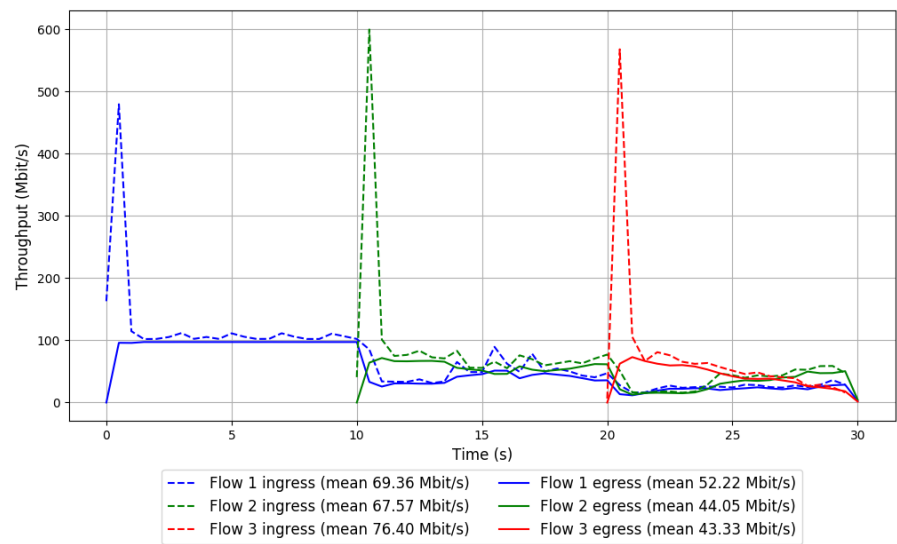
```
Run 9: Statistics of FillP

Start at: 2018-03-13 21:25:27
End at: 2018-03-13 21:25:57
Local clock offset: -2.011 ms
Remote clock offset: -4.898 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 112.013 ms
Loss rate: 31.30%
-- Flow 1:
Average throughput: 52.22 Mbit/s
95th percentile per-packet one-way delay: 112.003 ms
Loss rate: 24.65%
-- Flow 2:
Average throughput: 44.05 Mbit/s
95th percentile per-packet one-way delay: 110.958 ms
Loss rate: 34.82%
-- Flow 3:
Average throughput: 43.33 Mbit/s
95th percentile per-packet one-way delay: 117.135 ms
Loss rate: 43.23%
```

Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 69.36 Mbit/s) --- Flow 1 egress (mean 52.22 Mbit/s)
Flow 2 ingress (mean 67.57 Mbit/s) --- Flow 2 egress (mean 44.05 Mbit/s)
Flow 3 ingress (mean 76.40 Mbit/s) --- Flow 3 egress (mean 43.33 Mbit/s)

Flow 1 (95th percentile 112.00 ms)   Flow 2 (95th percentile 110.96 ms)   Flow 3 (95th percentile 117.14 ms)

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```
Run 10: Statistics of FillP

Start at: 2018-03-13 21:48:58
End at: 2018-03-13 21:49:28
Local clock offset: -6.804 ms
Remote clock offset: 0.15 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 118.847 ms
Loss rate: 30.58%
-- Flow 1:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 121.599 ms
Loss rate: 27.85%
-- Flow 2:
Average throughput: 68.53 Mbit/s
95th percentile per-packet one-way delay: 115.474 ms
Loss rate: 26.82%
-- Flow 3:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 122.771 ms
Loss rate: 42.78%
```
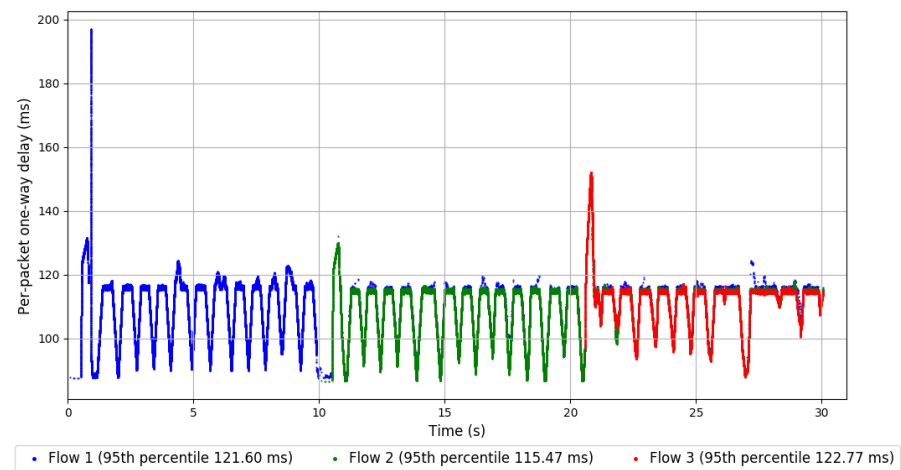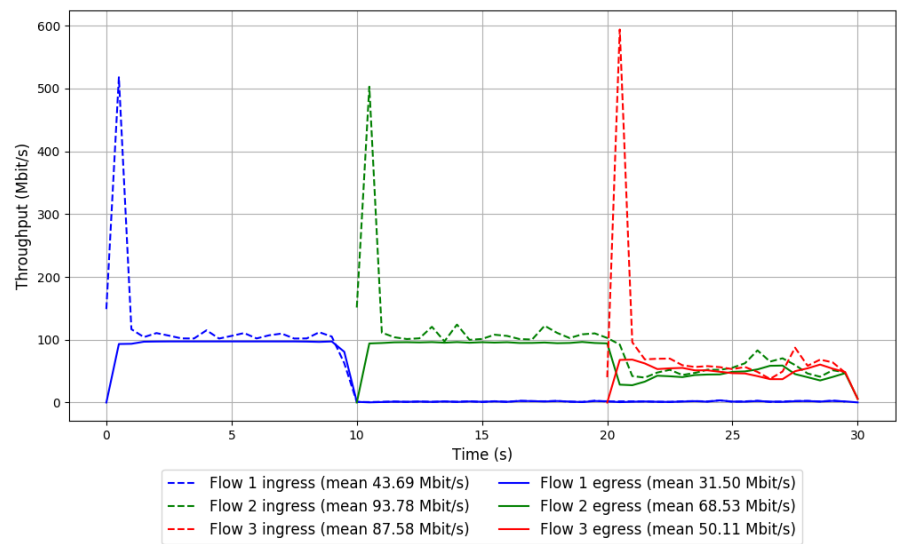
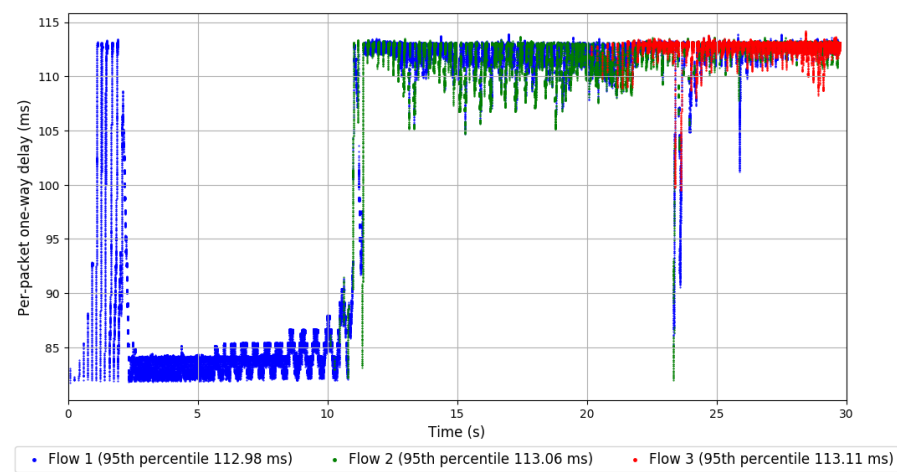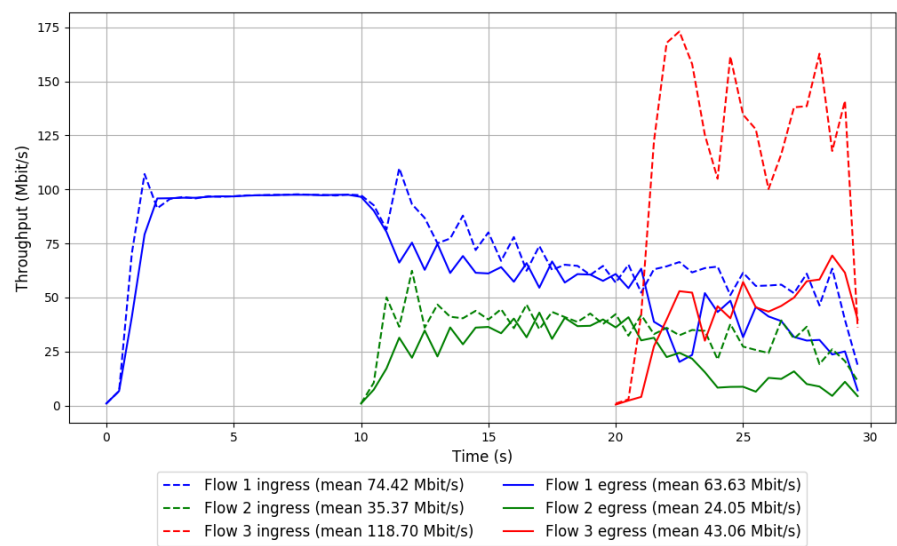Run 10: Report of FillP — Data Link

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

Start at: 2018-03-13 18:07:57
End at: 2018-03-13 18:08:27
Local clock offset: -6.032 ms
Remote clock offset: -4.755 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.21 Mbit/s
95th percentile per-packet one-way delay: 113.055 ms
Loss rate: 31.32%
-- Flow 1:
Average throughput: 63.63 Mbit/s
95th percentile per-packet one-way delay: 112.982 ms
Loss rate: 14.41%
-- Flow 2:
Average throughput: 24.05 Mbit/s
95th percentile per-packet one-way delay: 113.062 ms
Loss rate: 31.91%
-- Flow 3:
Average throughput: 43.06 Mbit/s
95th percentile per-packet one-way delay: 113.111 ms
Loss rate: 63.72%
```

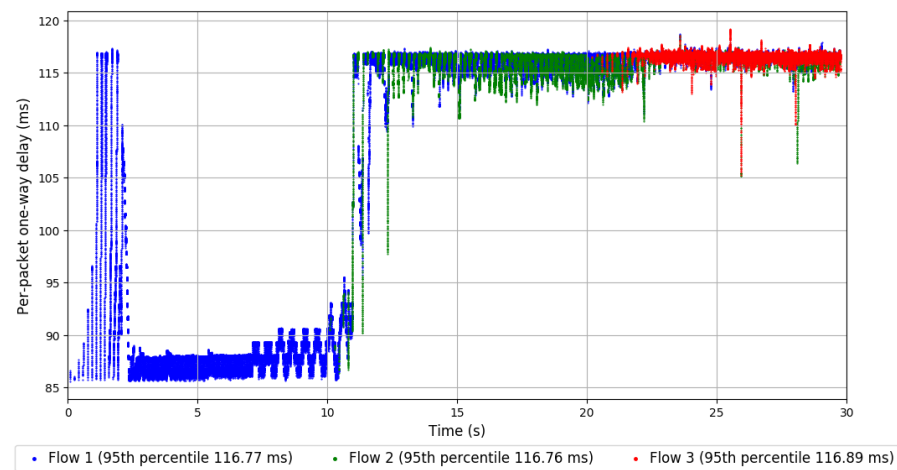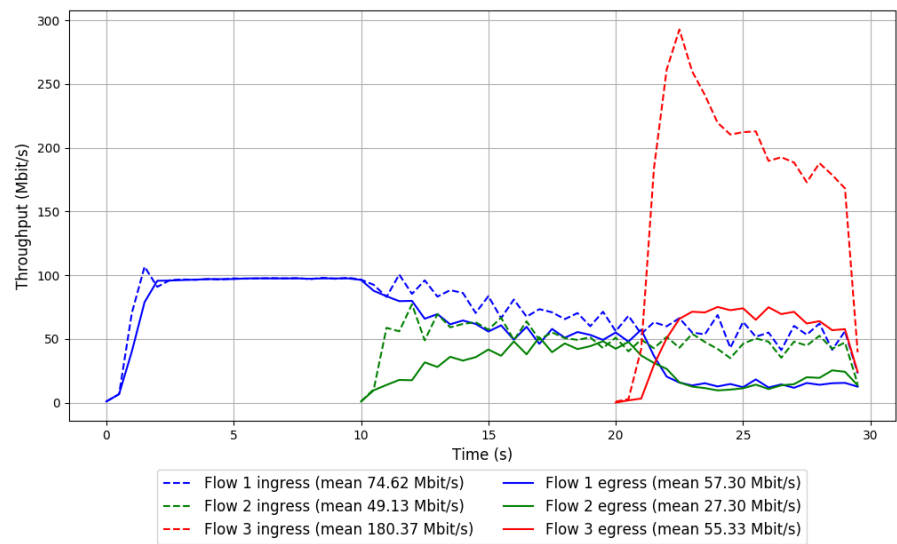Run 1: Report of Indigo-1-32 — Data Link

```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-13 18:31:28
End at: 2018-03-13 18:31:58
Local clock offset: -4.159 ms
Remote clock offset: -1.149 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 116.805 ms
Loss rate: 43.59%
-- Flow 1:
Average throughput: 57.30 Mbit/s
95th percentile per-packet one-way delay: 116.772 ms
Loss rate: 23.13%
-- Flow 2:
Average throughput: 27.30 Mbit/s
95th percentile per-packet one-way delay: 116.758 ms
Loss rate: 44.36%
-- Flow 3:
Average throughput: 55.33 Mbit/s
95th percentile per-packet one-way delay: 116.888 ms
Loss rate: 69.33%
```

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

Flow 1 ingress (mean 74.62 Mbit/s)   Flow 1 egress (mean 57.30 Mbit/s)
Flow 2 ingress (mean 49.13 Mbit/s)   Flow 2 egress (mean 27.30 Mbit/s)
Flow 3 ingress (mean 180.37 Mbit/s)   Flow 3 egress (mean 55.33 Mbit/s)

Flow 1 (95th percentile 116.77 ms)   Flow 2 (95th percentile 116.76 ms)   Flow 3 (95th percentile 116.89 ms)
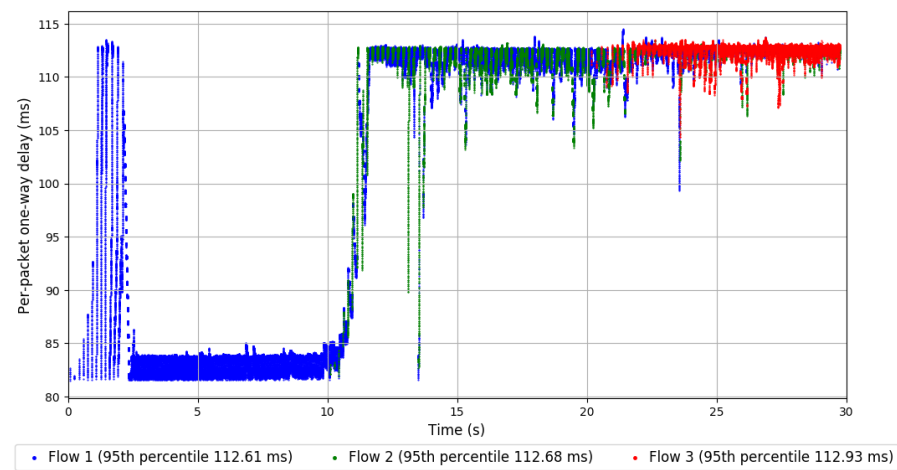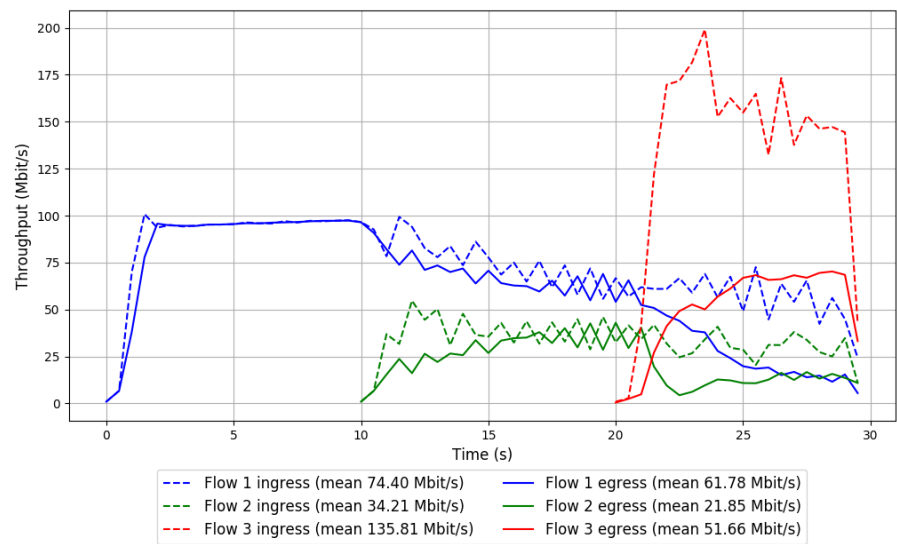
```
Run 3: Statistics of Indigo-1-32

Start at: 2018-03-13 18:55:10
End at: 2018-03-13 18:55:40
Local clock offset: -5.73 ms
Remote clock offset: -5.099 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.84 Mbit/s
95th percentile per-packet one-way delay: 112.833 ms
Loss rate: 34.00%
-- Flow 1:
Average throughput: 61.78 Mbit/s
95th percentile per-packet one-way delay: 112.612 ms
Loss rate: 16.87%
-- Flow 2:
Average throughput: 21.85 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 36.02%
-- Flow 3:
Average throughput: 51.66 Mbit/s
95th percentile per-packet one-way delay: 112.931 ms
Loss rate: 61.96%
```

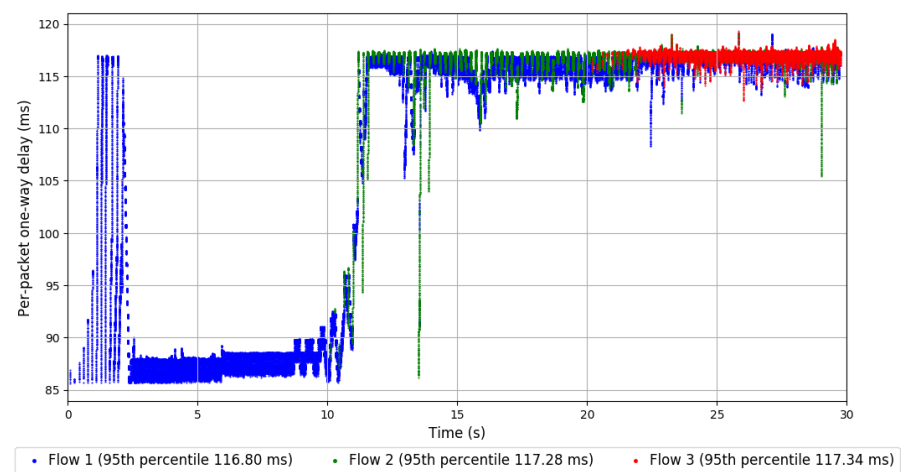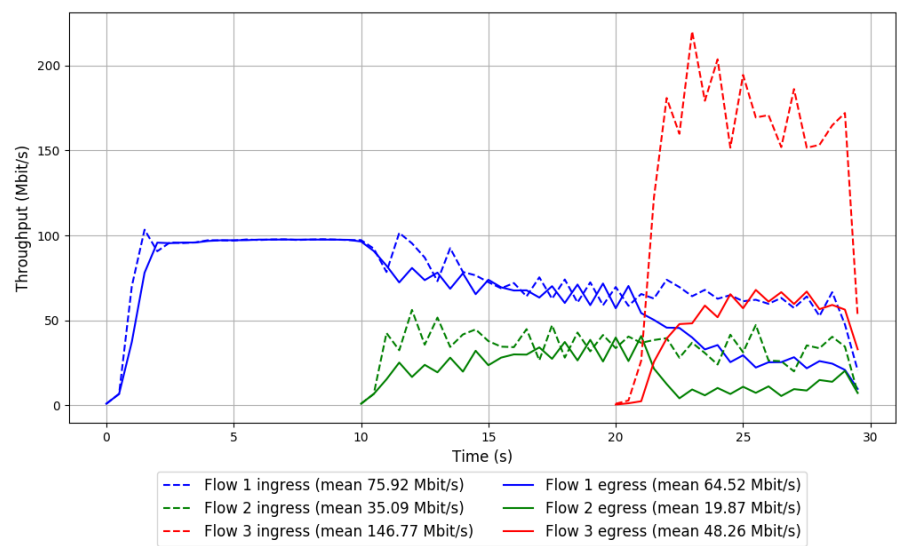Run 3: Report of Indigo-1-32 — Data Link

```
Run 4: Statistics of Indigo-1-32

Start at: 2018-03-13 19:18:37
End at: 2018-03-13 19:19:07
Local clock offset: -4.372 ms
Remote clock offset: -0.796 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 117.244 ms
Loss rate: 36.32%
-- Flow 1:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 116.803 ms
Loss rate: 14.93%
-- Flow 2:
Average throughput: 19.87 Mbit/s
95th percentile per-packet one-way delay: 117.277 ms
Loss rate: 43.28%
-- Flow 3:
Average throughput: 48.26 Mbit/s
95th percentile per-packet one-way delay: 117.337 ms
Loss rate: 67.11%
```

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

Flow 1 ingress (mean 75.92 Mbit/s) --- Flow 1 egress (mean 64.52 Mbit/s)
Flow 2 ingress (mean 35.09 Mbit/s) --- Flow 2 egress (mean 19.87 Mbit/s)
Flow 3 ingress (mean 146.77 Mbit/s) --- Flow 3 egress (mean 48.26 Mbit/s)

Flow 1 (95th percentile 116.80 ms)   Flow 2 (95th percentile 117.28 ms)   Flow 3 (95th percentile 117.34 ms)
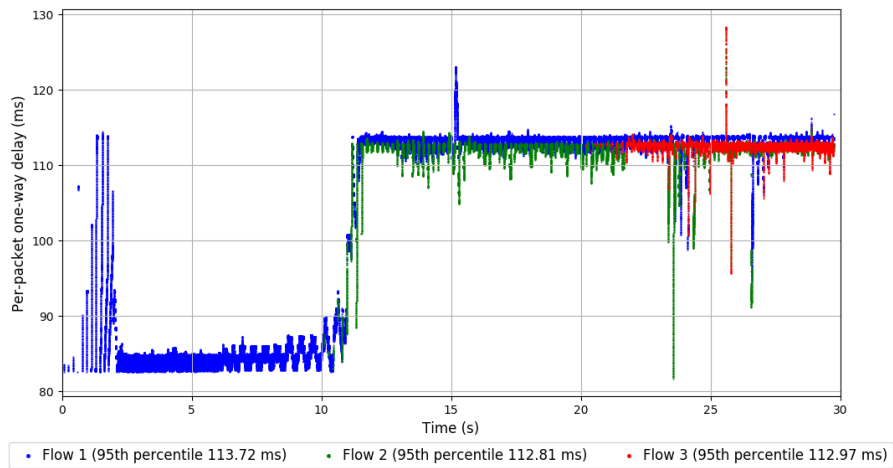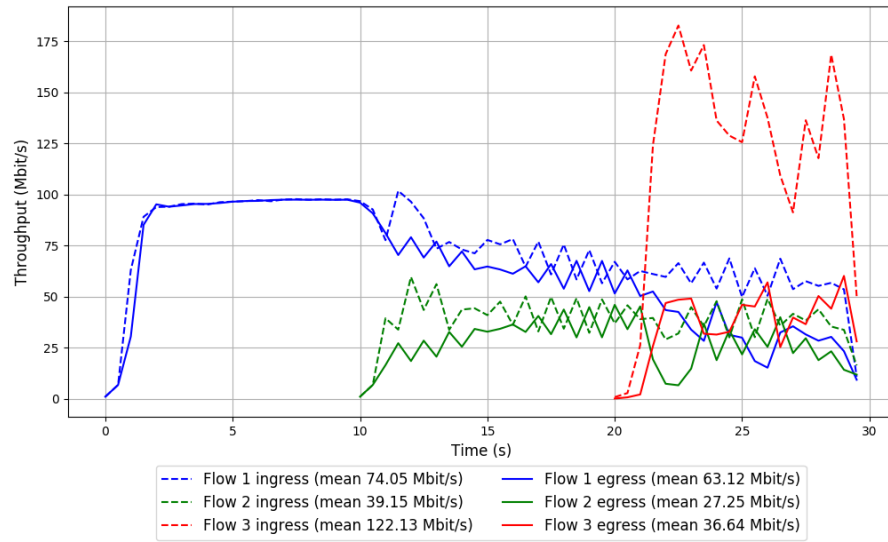
271

```
Run 5: Statistics of Indigo-1-32

Start at: 2018-03-13 19:42:04
End at: 2018-03-13 19:42:34
Local clock offset: -1.389 ms
Remote clock offset: -4.995 ms


# Below is generated by plot.py at 2018-03-13 22:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.98 Mbit/s
95th percentile per-packet one-way delay: 113.703 ms
Loss rate: 33.22%
-- Flow 1:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 113.722 ms
Loss rate: 14.66%
-- Flow 2:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 112.811 ms
Loss rate: 30.29%
-- Flow 3:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 112.970 ms
Loss rate: 70.00%
```

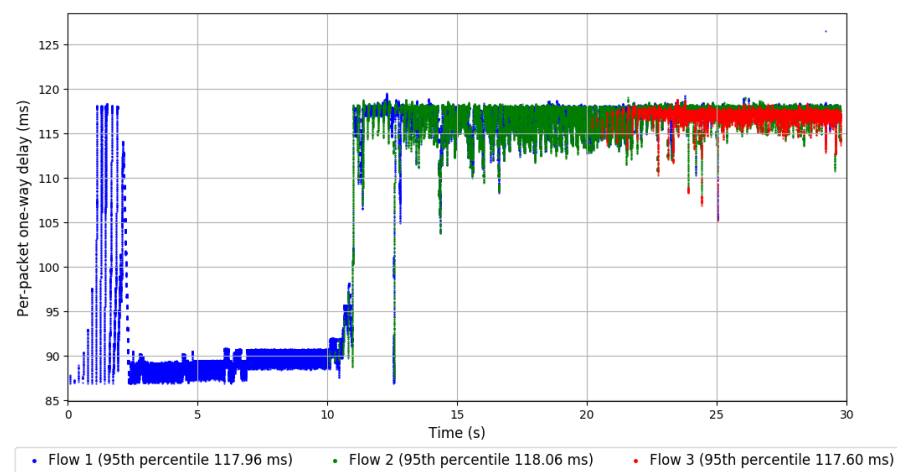Run 5: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 74.05 Mbit/s) —— Flow 1 egress (mean 63.12 Mbit/s)
- - - Flow 2 ingress (mean 39.15 Mbit/s) —— Flow 2 egress (mean 27.25 Mbit/s)
- - - Flow 3 ingress (mean 122.13 Mbit/s) —— Flow 3 egress (mean 36.64 Mbit/s)

• Flow 1 (95th percentile 113.72 ms)   • Flow 2 (95th percentile 112.81 ms)   • Flow 3 (95th percentile 112.97 ms)
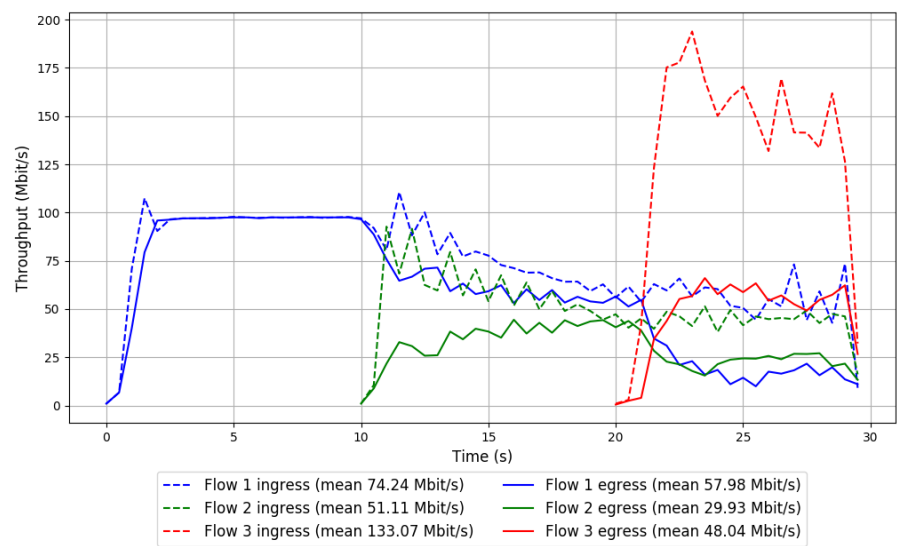
```
Run 6: Statistics of Indigo-1-32

Start at: 2018-03-13 20:05:33
End at: 2018-03-13 20:06:03
Local clock offset: -5.099 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2018-03-13 22:40:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.28 Mbit/s
95th percentile per-packet one-way delay: 117.994 ms
Loss rate: 38.17%
-- Flow 1:
Average throughput: 57.98 Mbit/s
95th percentile per-packet one-way delay: 117.962 ms
Loss rate: 21.82%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 118.058 ms
Loss rate: 41.36%
-- Flow 3:
Average throughput: 48.04 Mbit/s
95th percentile per-packet one-way delay: 117.604 ms
Loss rate: 63.89%
```

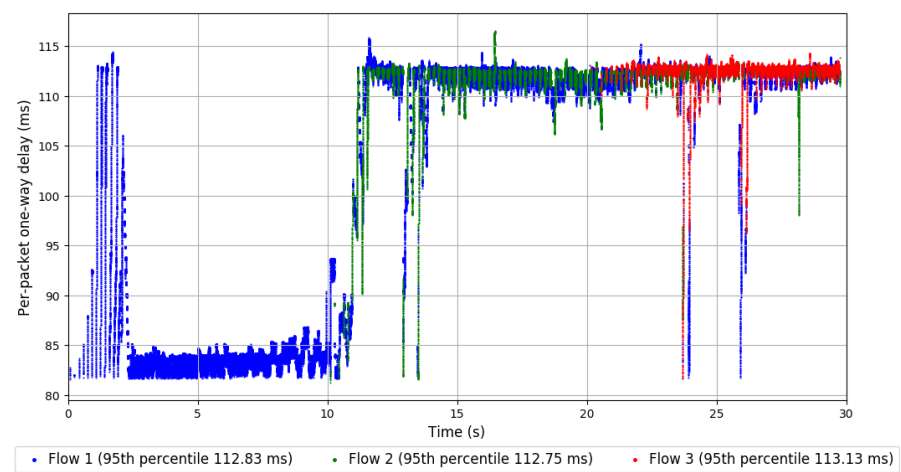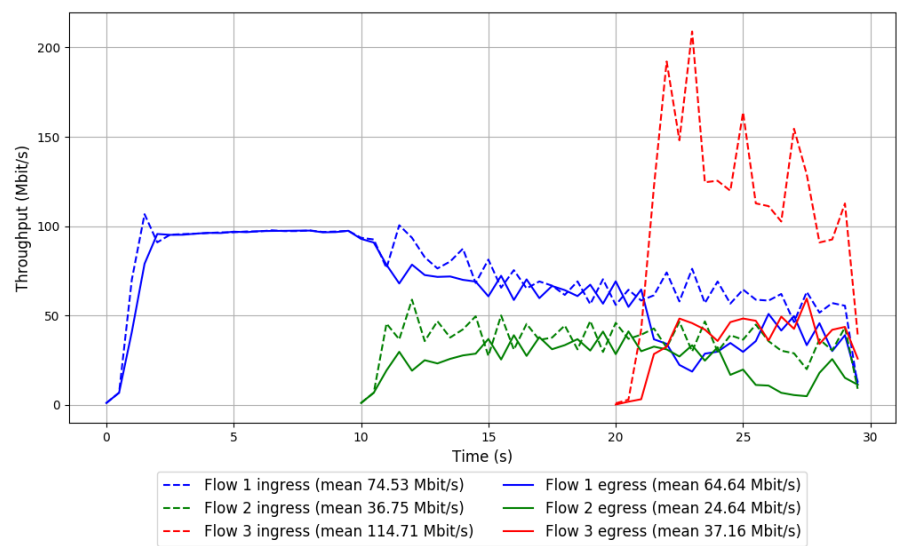# Run 6: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 74.24 Mbit/s) —— Flow 1 egress (mean 57.98 Mbit/s)
- - - Flow 2 ingress (mean 51.11 Mbit/s) —— Flow 2 egress (mean 29.93 Mbit/s)
- - - Flow 3 ingress (mean 133.07 Mbit/s) —— Flow 3 egress (mean 48.04 Mbit/s)

- Flow 1 (95th percentile 117.96 ms) · Flow 2 (95th percentile 118.06 ms) · Flow 3 (95th percentile 117.60 ms)

```
Run 7: Statistics of Indigo-1-32

Start at: 2018-03-13 20:29:09
End at: 2018-03-13 20:29:39
Local clock offset: -5.604 ms
Remote clock offset: -5.191 ms


# Below is generated by plot.py at 2018-03-13 22:40:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.88 Mbit/s
95th percentile per-packet one-way delay: 112.920 ms
Loss rate: 31.54%
-- Flow 1:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 112.828 ms
Loss rate: 13.18%
-- Flow 2:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 112.751 ms
Loss rate: 32.84%
-- Flow 3:
Average throughput: 37.16 Mbit/s
95th percentile per-packet one-way delay: 113.134 ms
Loss rate: 67.60%
```

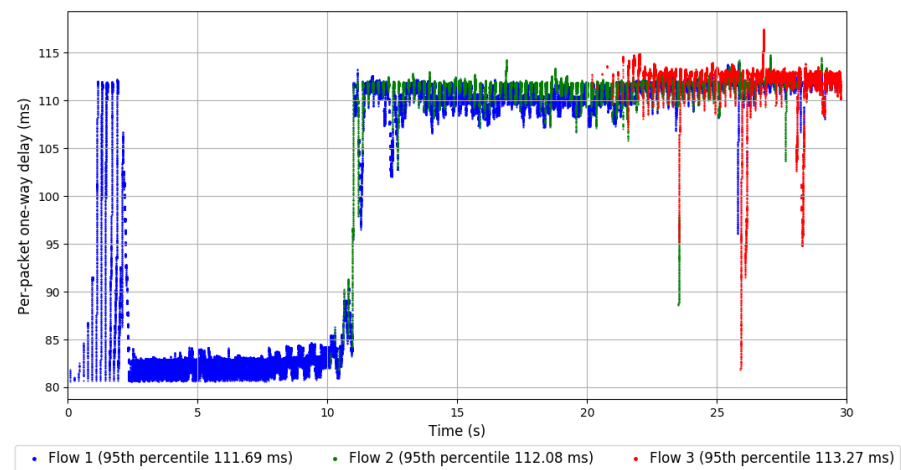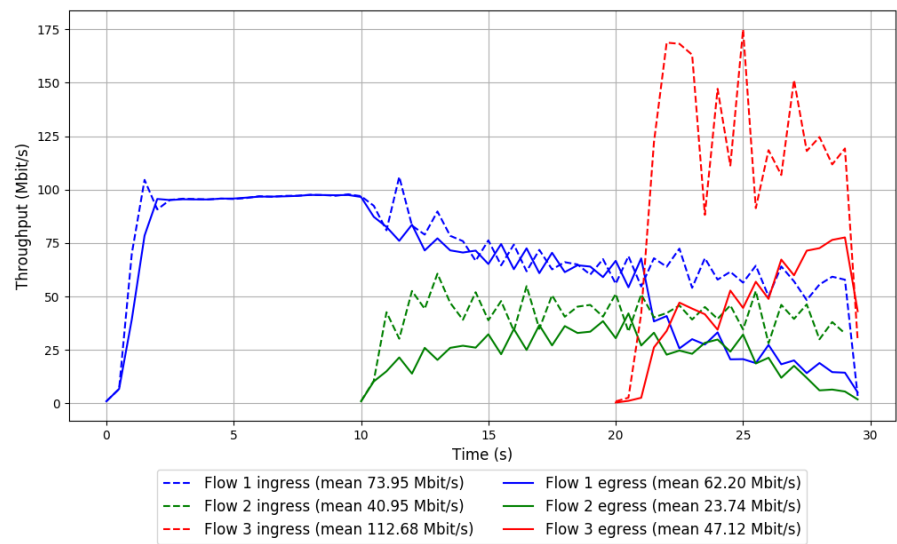# Run 7: Report of Indigo-1-32 — Data Link

```
Run 8: Statistics of Indigo-1-32

Start at: 2018-03-13 20:52:36
End at: 2018-03-13 20:53:06
Local clock offset: -5.702 ms
Remote clock offset: -5.618 ms

# Below is generated by plot.py at 2018-03-13 22:41:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 112.753 ms
Loss rate: 32.18%
-- Flow 1:
Average throughput: 62.20 Mbit/s
95th percentile per-packet one-way delay: 111.694 ms
Loss rate: 15.81%
-- Flow 2:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 112.080 ms
Loss rate: 41.94%
-- Flow 3:
Average throughput: 47.12 Mbit/s
95th percentile per-packet one-way delay: 113.267 ms
Loss rate: 58.18%
```
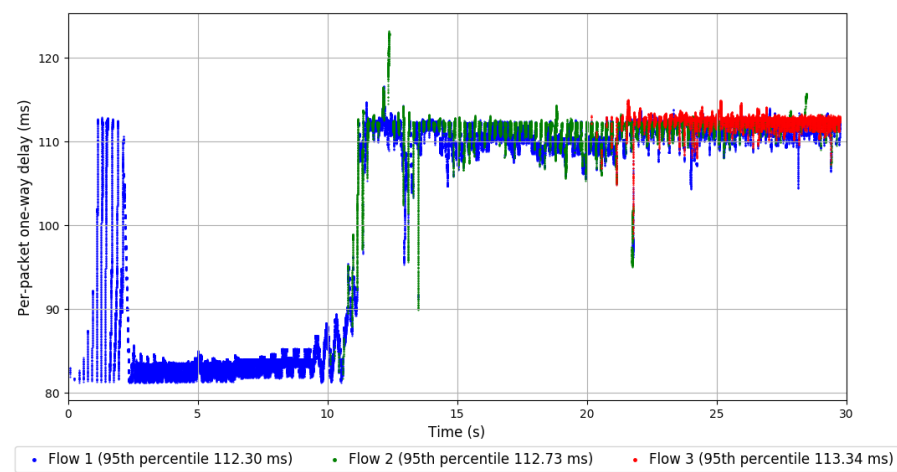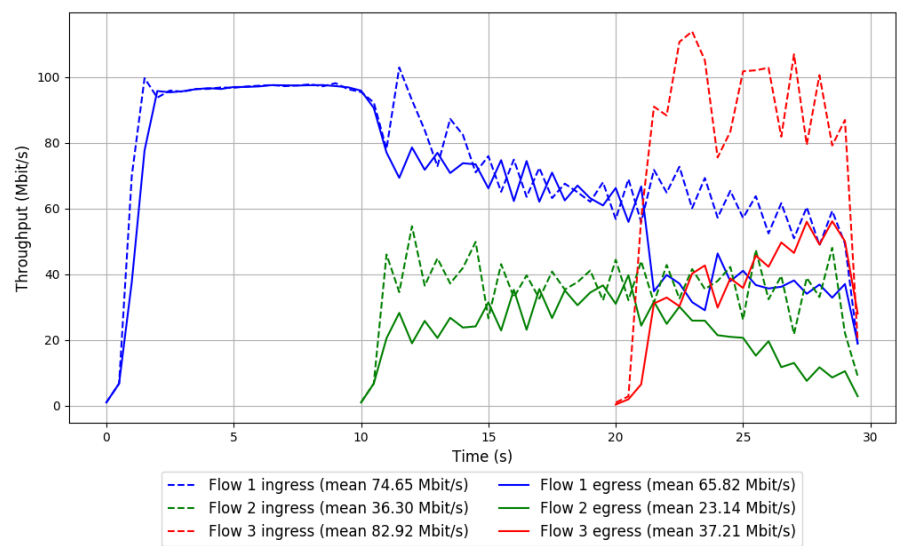
Run 8: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 73.95 Mbit/s) --- Flow 1 egress (mean 62.20 Mbit/s)
Flow 2 ingress (mean 40.95 Mbit/s) --- Flow 2 egress (mean 23.74 Mbit/s)
Flow 3 ingress (mean 112.68 Mbit/s) --- Flow 3 egress (mean 47.12 Mbit/s)

Flow 1 (95th percentile 111.69 ms) • Flow 2 (95th percentile 112.08 ms) • Flow 3 (95th percentile 113.27 ms)

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```
Run 9: Statistics of Indigo-1-32

Start at: 2018-03-13 21:16:12
End at: 2018-03-13 21:16:42
Local clock offset: -2.494 ms
Remote clock offset: -5.69 ms

# Below is generated by plot.py at 2018-03-13 22:41:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 25.67%
-- Flow 1:
Average throughput: 65.82 Mbit/s
95th percentile per-packet one-way delay: 112.303 ms
Loss rate: 11.74%
-- Flow 2:
Average throughput: 23.14 Mbit/s
95th percentile per-packet one-way delay: 112.734 ms
Loss rate: 36.15%
-- Flow 3:
Average throughput: 37.21 Mbit/s
95th percentile per-packet one-way delay: 113.339 ms
Loss rate: 55.12%
```

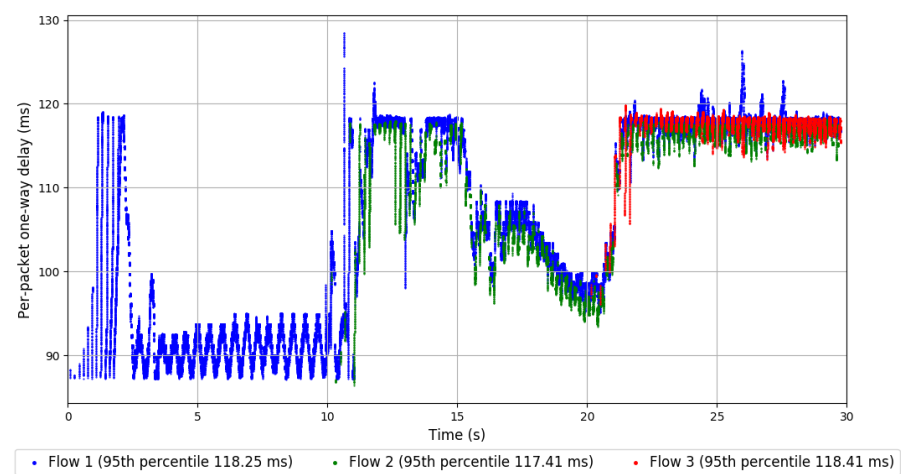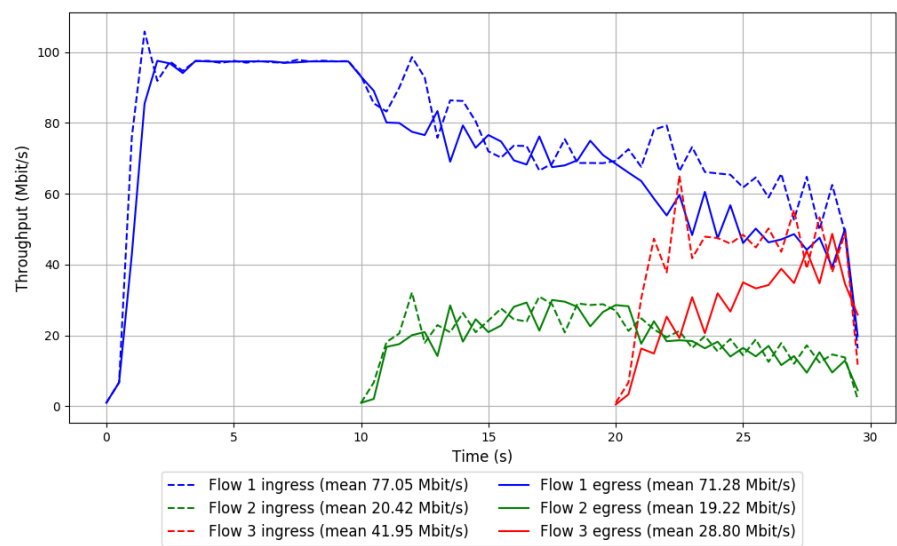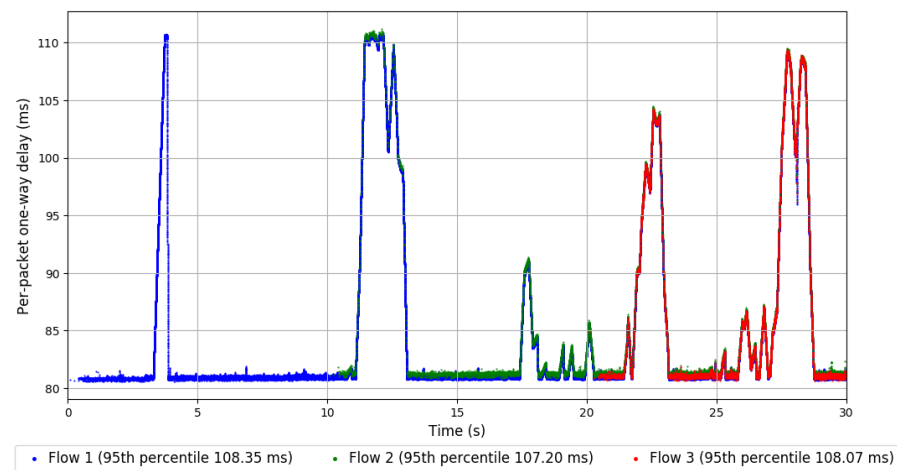## Run 9: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 74.65 Mbit/s) — — — Flow 1 egress (mean 65.82 Mbit/s)
Flow 2 ingress (mean 36.30 Mbit/s) — — — Flow 2 egress (mean 23.14 Mbit/s)
Flow 3 ingress (mean 82.92 Mbit/s) — — — Flow 3 egress (mean 37.21 Mbit/s)

Flow 1 (95th percentile 112.30 ms)   Flow 2 (95th percentile 112.73 ms)   Flow 3 (95th percentile 113.34 ms)

```
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-13 21:39:48
End at: 2018-03-13 21:40:18
Local clock offset: -5.396 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2018-03-13 22:41:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.24 Mbit/s
95th percentile per-packet one-way delay: 118.246 ms
Loss rate: 10.30%
-- Flow 1:
Average throughput: 71.28 Mbit/s
95th percentile per-packet one-way delay: 118.245 ms
Loss rate: 7.40%
-- Flow 2:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 117.413 ms
Loss rate: 5.79%
-- Flow 3:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 118.409 ms
Loss rate: 31.21%
```

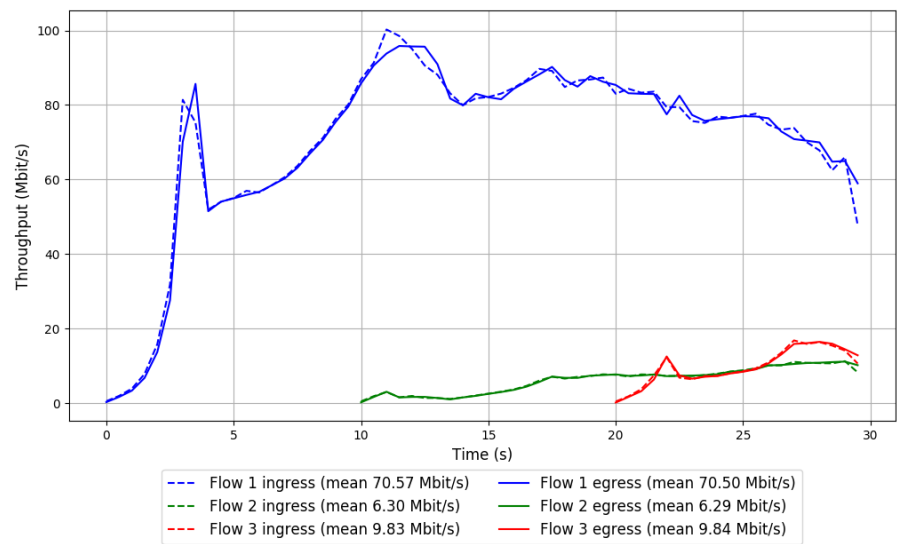Run 10: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 77.05 Mbit/s) --- Flow 1 egress (mean 71.28 Mbit/s)
Flow 2 ingress (mean 20.42 Mbit/s) --- Flow 2 egress (mean 19.22 Mbit/s)
Flow 3 ingress (mean 41.95 Mbit/s) --- Flow 3 egress (mean 28.80 Mbit/s)

Flow 1 (95th percentile 118.25 ms)   Flow 2 (95th percentile 117.41 ms)   Flow 3 (95th percentile 118.41 ms)
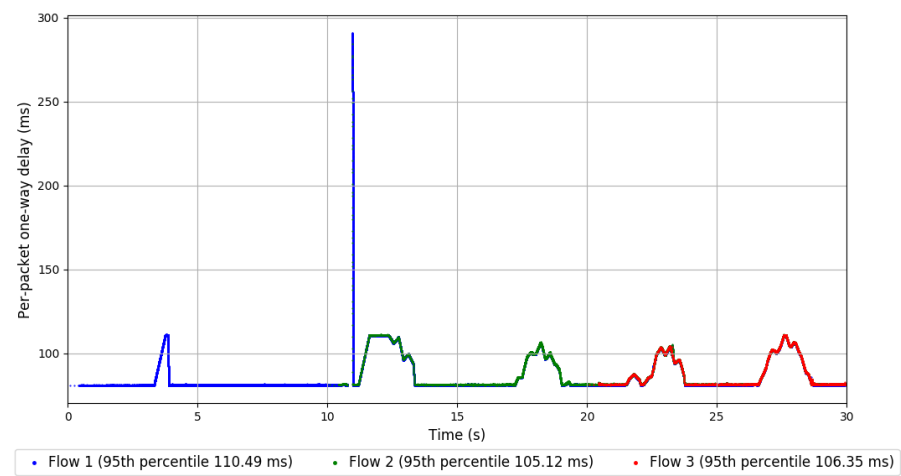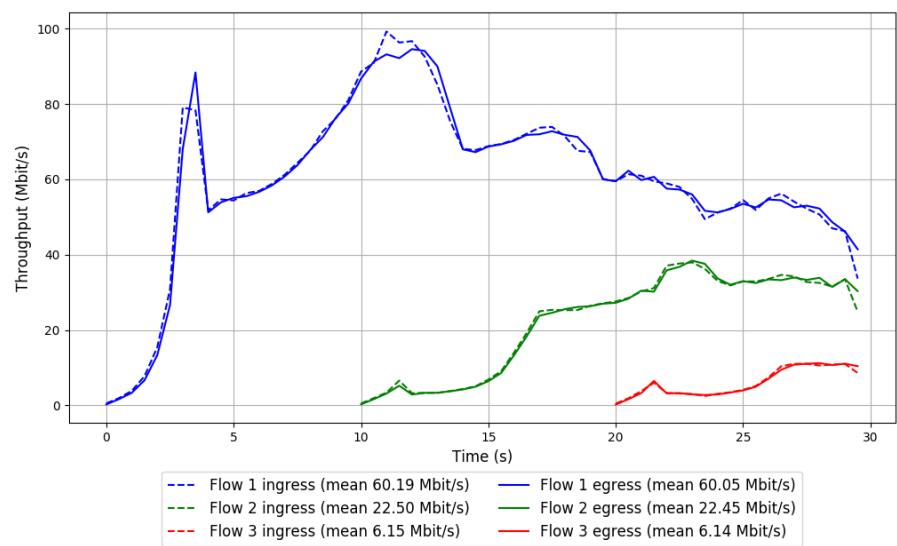
283

```
Run 1: Statistics of Vivace-latency

Start at: 2018-03-13 17:58:55
End at: 2018-03-13 17:59:25
Local clock offset: -6.593 ms
Remote clock offset: -5.637 ms


# Below is generated by plot.py at 2018-03-13 22:41:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 108.259 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 70.50 Mbit/s
95th percentile per-packet one-way delay: 108.350 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 107.202 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 108.067 ms
Loss rate: 0.00%
```

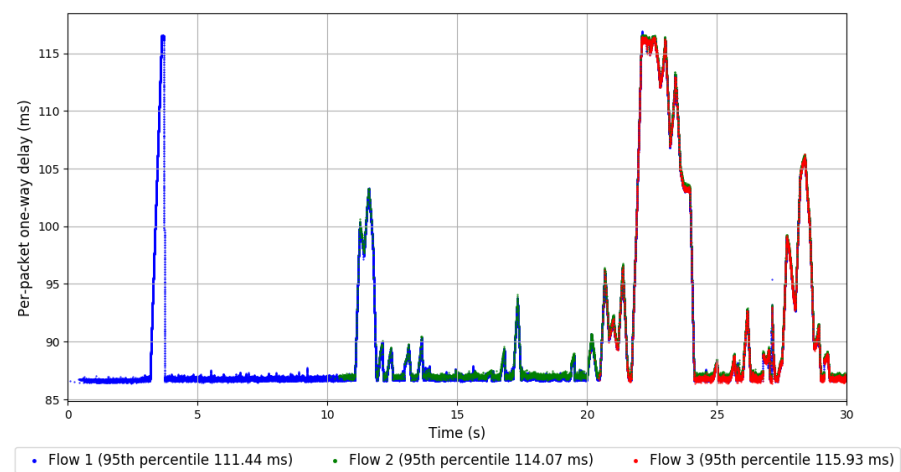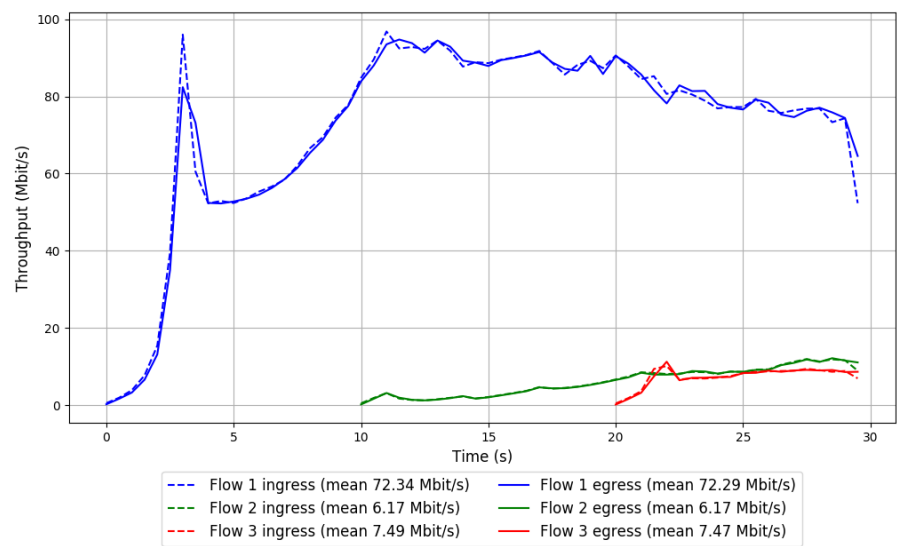Run 1: Report of Vivace-latency — Data Link

```
Run 2: Statistics of Vivace-latency

Start at: 2018-03-13 18:22:23
End at: 2018-03-13 18:22:53
Local clock offset: -4.423 ms
Remote clock offset: -5.788 ms


# Below is generated by plot.py at 2018-03-13 22:41:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.00 Mbit/s
95th percentile per-packet one-way delay: 109.829 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 60.05 Mbit/s
95th percentile per-packet one-way delay: 110.489 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 22.45 Mbit/s
95th percentile per-packet one-way delay: 105.124 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 106.348 ms
Loss rate: 0.10%
```
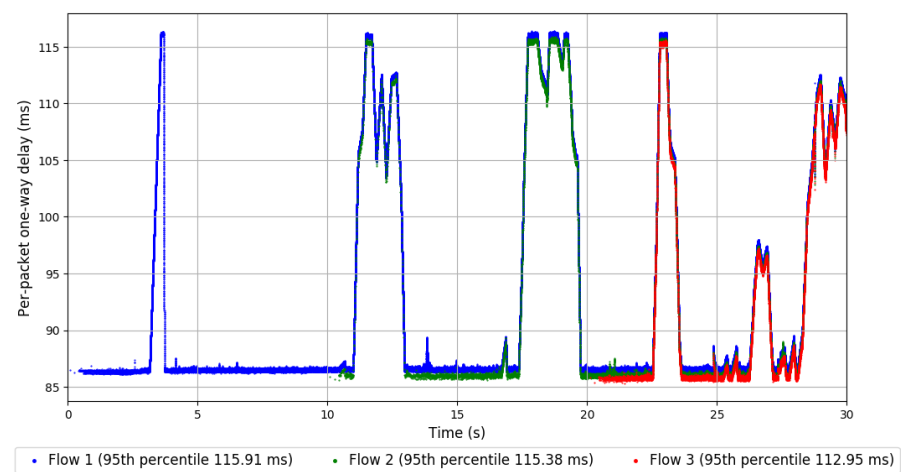
Run 2: Report of Vivace-latency — Data Link

```
Run 3: Statistics of Vivace-latency

Start at: 2018-03-13 18:46:09
End at: 2018-03-13 18:46:39
Local clock offset: -5.17 ms
Remote clock offset: -0.316 ms


# Below is generated by plot.py at 2018-03-13 22:42:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.86 Mbit/s
95th percentile per-packet one-way delay: 112.255 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 72.29 Mbit/s
95th percentile per-packet one-way delay: 111.438 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 114.066 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 115.929 ms
Loss rate: 0.21%
```

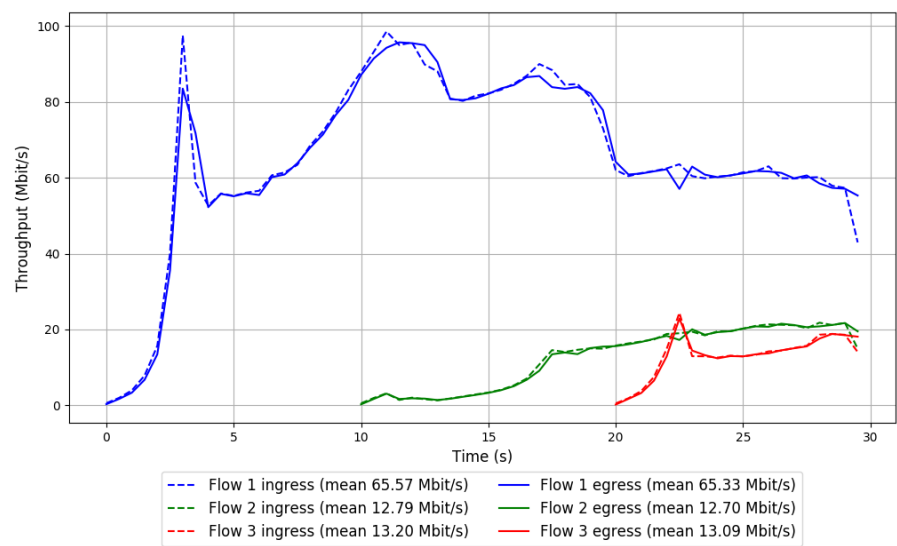Run 3: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 72.34 Mbit/s) ---- Flow 1 egress (mean 72.29 Mbit/s)
Flow 2 ingress (mean 6.17 Mbit/s) ---- Flow 2 egress (mean 6.17 Mbit/s)
Flow 3 ingress (mean 7.49 Mbit/s) ---- Flow 3 egress (mean 7.47 Mbit/s)

Flow 1 (95th percentile 111.44 ms) Flow 2 (95th percentile 114.07 ms) Flow 3 (95th percentile 115.93 ms)

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```
Run 4: Statistics of Vivace-latency

Start at: 2018-03-13 19:09:35
End at: 2018-03-13 19:10:05
Local clock offset: -6.176 ms
Remote clock offset: -0.844 ms


# Below is generated by plot.py at 2018-03-13 22:42:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.10 Mbit/s
95th percentile per-packet one-way delay: 115.697 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 65.33 Mbit/s
95th percentile per-packet one-way delay: 115.909 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 115.384 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 112.949 ms
Loss rate: 0.63%
```
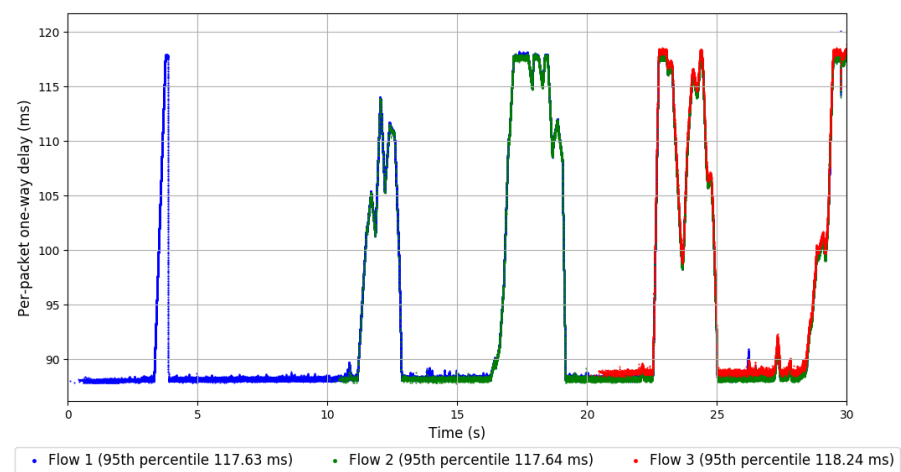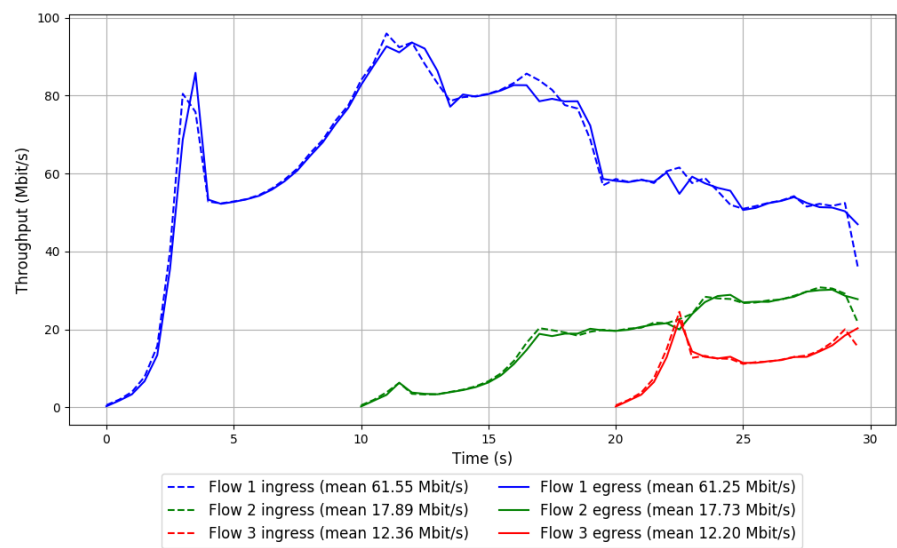
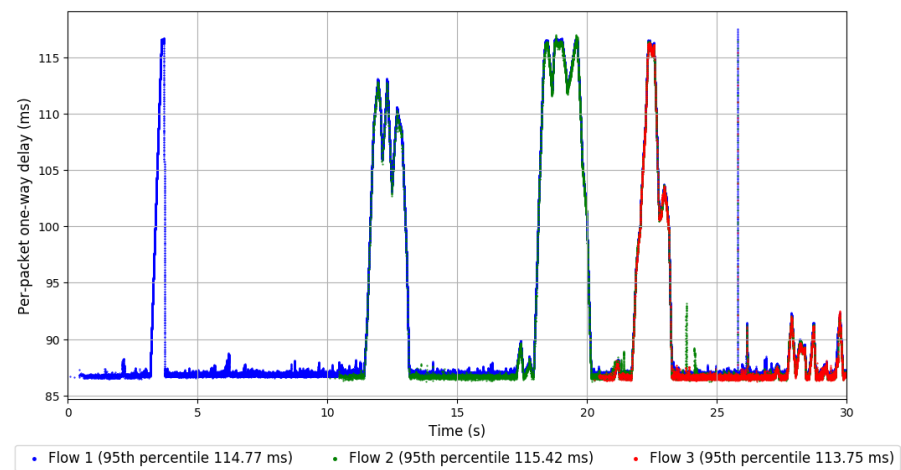# Run 4: Report of Vivace-latency — Data Link

```
Run 5: Statistics of Vivace-latency

Start at: 2018-03-13 19:33:02
End at: 2018-03-13 19:33:32
Local clock offset: -2.089 ms
Remote clock offset: 0.957 ms


# Below is generated by plot.py at 2018-03-13 22:42:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 117.655 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 61.25 Mbit/s
95th percentile per-packet one-way delay: 117.628 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 17.73 Mbit/s
95th percentile per-packet one-way delay: 117.644 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 118.238 ms
Loss rate: 1.01%
```

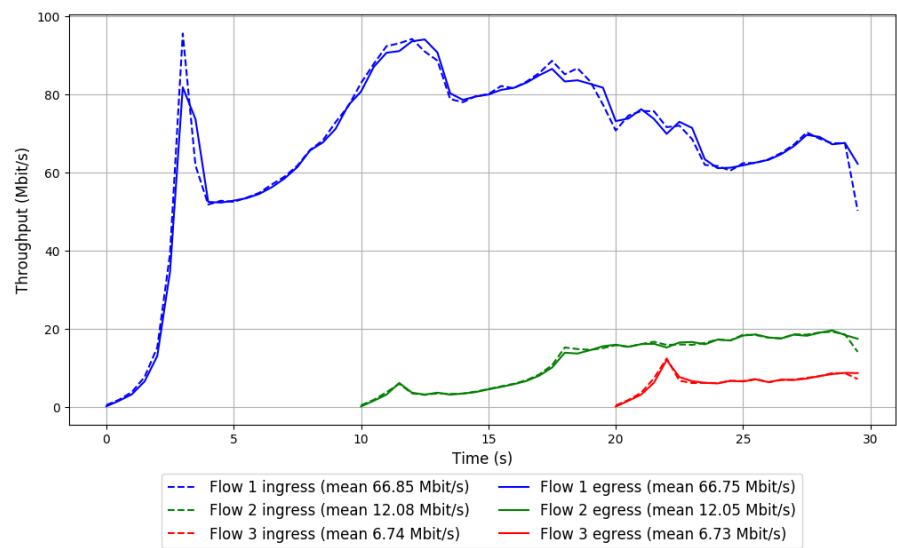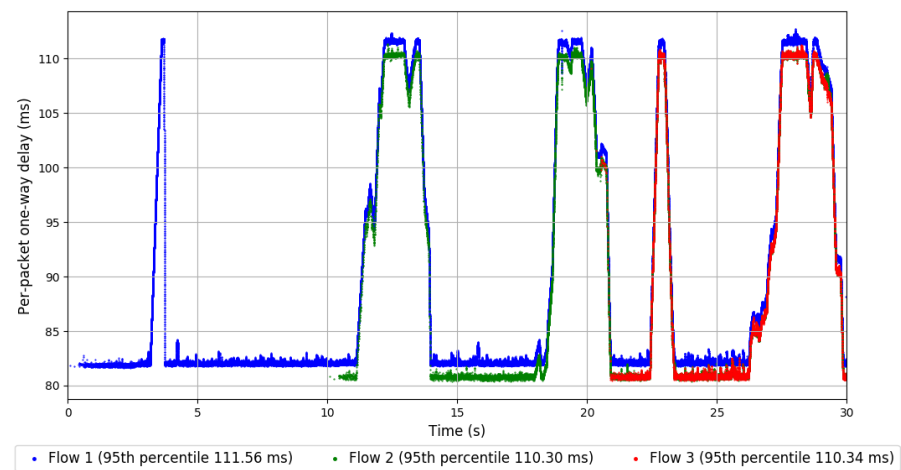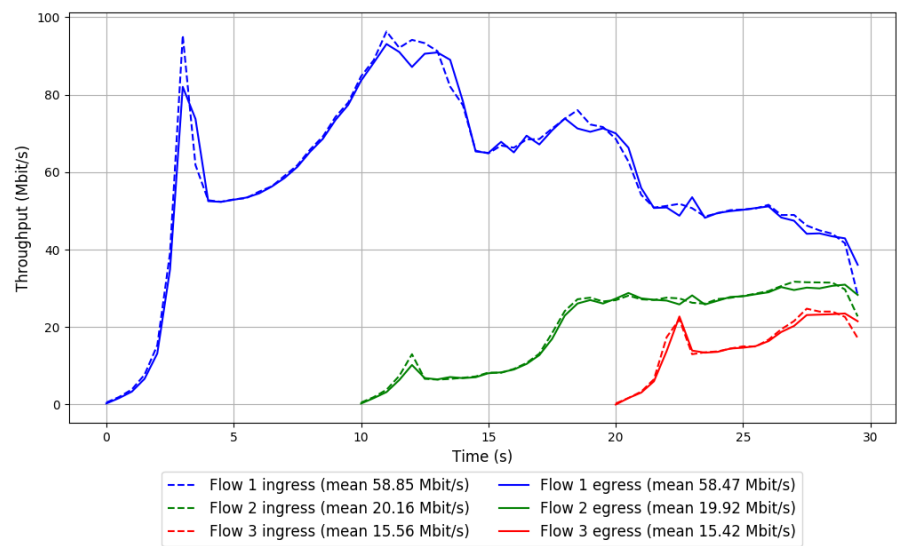# Run 5: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 61.55 Mbit/s) Flow 1 egress (mean 61.25 Mbit/s)
Flow 2 ingress (mean 17.89 Mbit/s) Flow 2 egress (mean 17.73 Mbit/s)
Flow 3 ingress (mean 12.36 Mbit/s) Flow 3 egress (mean 12.20 Mbit/s)

Flow 1 (95th percentile 117.63 ms) Flow 2 (95th percentile 117.64 ms) Flow 3 (95th percentile 118.24 ms)

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```
Run 6: Statistics of Vivace-latency

Start at: 2018-03-13 19:56:29
End at: 2018-03-13 19:56:59
Local clock offset: -4.1 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-03-13 22:42:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 114.871 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 66.75 Mbit/s
95th percentile per-packet one-way delay: 114.771 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 115.423 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 113.755 ms
Loss rate: 0.11%
```
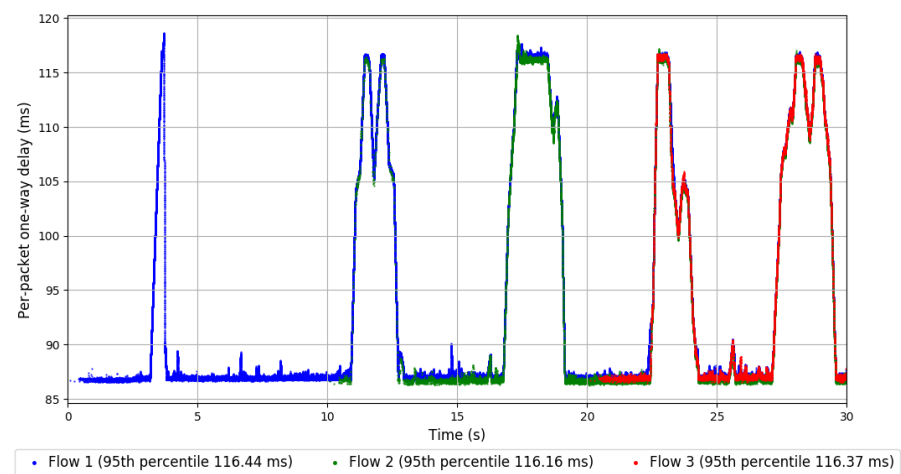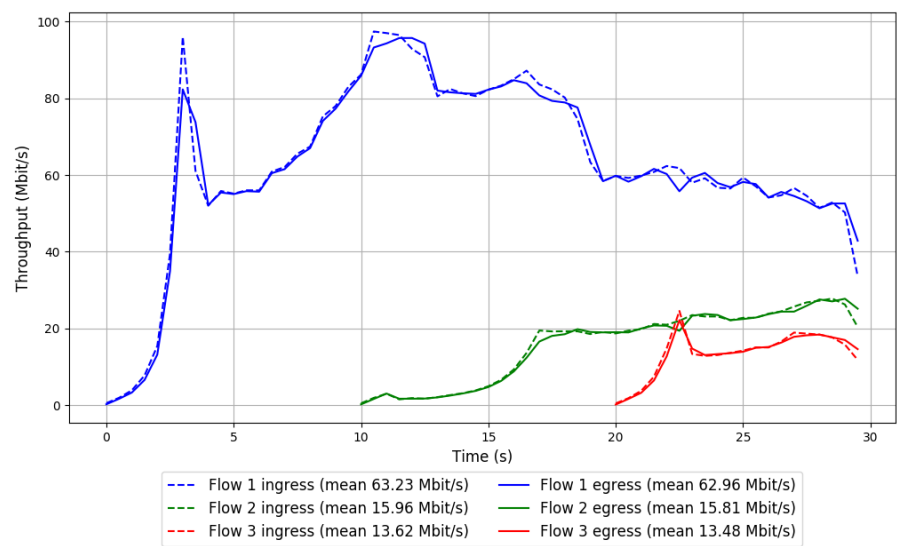
Run 6: Report of Vivace-latency — Data Link

```
Run 7: Statistics of Vivace-latency

Start at: 2018-03-13 20:20:08
End at: 2018-03-13 20:20:38
Local clock offset: -5.666 ms
Remote clock offset: -5.999 ms


# Below is generated by plot.py at 2018-03-13 22:42:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.78 Mbit/s
95th percentile per-packet one-way delay: 111.521 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 58.47 Mbit/s
95th percentile per-packet one-way delay: 111.560 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 19.92 Mbit/s
95th percentile per-packet one-way delay: 110.297 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 110.340 ms
Loss rate: 1.20%
```

Run 7: Report of Vivace-latency — Data Link

```
Run 8: Statistics of Vivace-latency

Start at: 2018-03-13 20:43:34
End at: 2018-03-13 20:44:04
Local clock offset: -5.658 ms
Remote clock offset: -0.075 ms


# Below is generated by plot.py at 2018-03-13 22:42:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 116.414 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 62.96 Mbit/s
95th percentile per-packet one-way delay: 116.441 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 15.81 Mbit/s
95th percentile per-packet one-way delay: 116.163 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.48 Mbit/s
95th percentile per-packet one-way delay: 116.372 ms
Loss rate: 1.04%
```
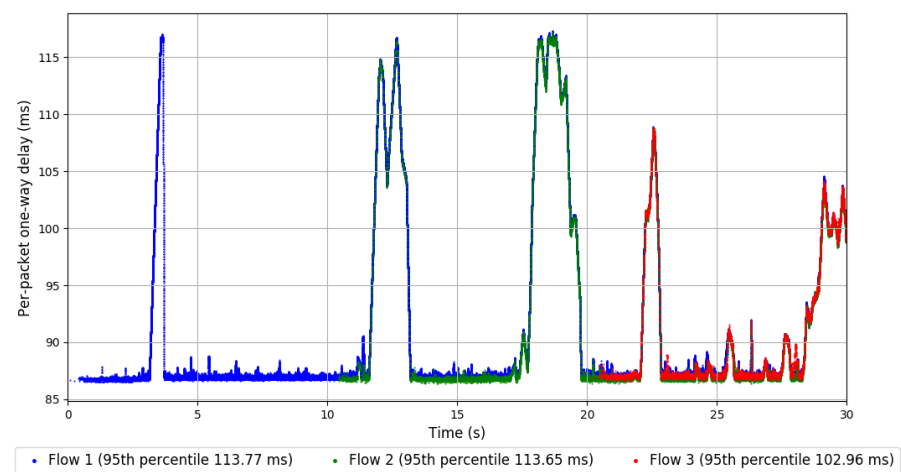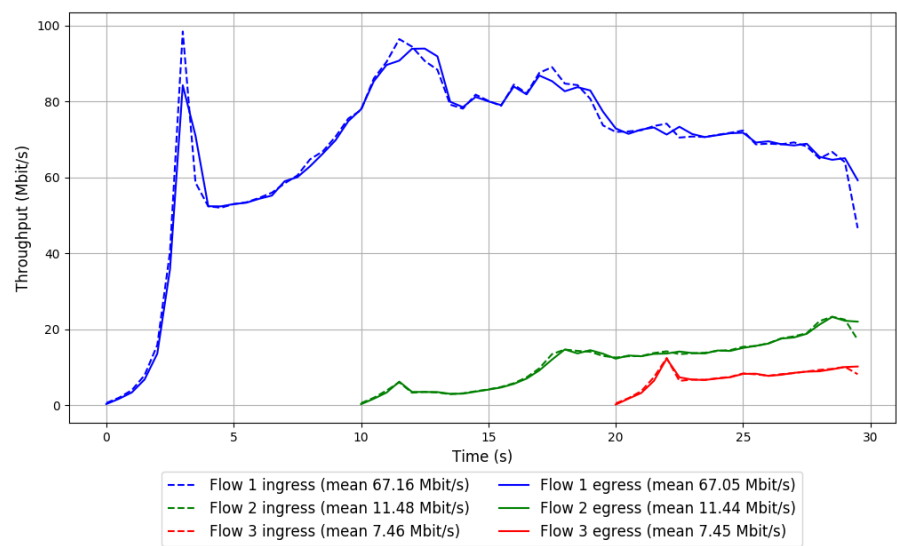
Run 8: Report of Vivace-latency — Data Link

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```
Run 9: Statistics of Vivace-latency

Start at: 2018-03-13 21:07:02
End at: 2018-03-13 21:07:32
Local clock offset: -3.274 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2018-03-13 22:42:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.12 Mbit/s
95th percentile per-packet one-way delay: 113.607 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 67.05 Mbit/s
95th percentile per-packet one-way delay: 113.772 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 113.646 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 7.45 Mbit/s
95th percentile per-packet one-way delay: 102.964 ms
Loss rate: 0.00%
```

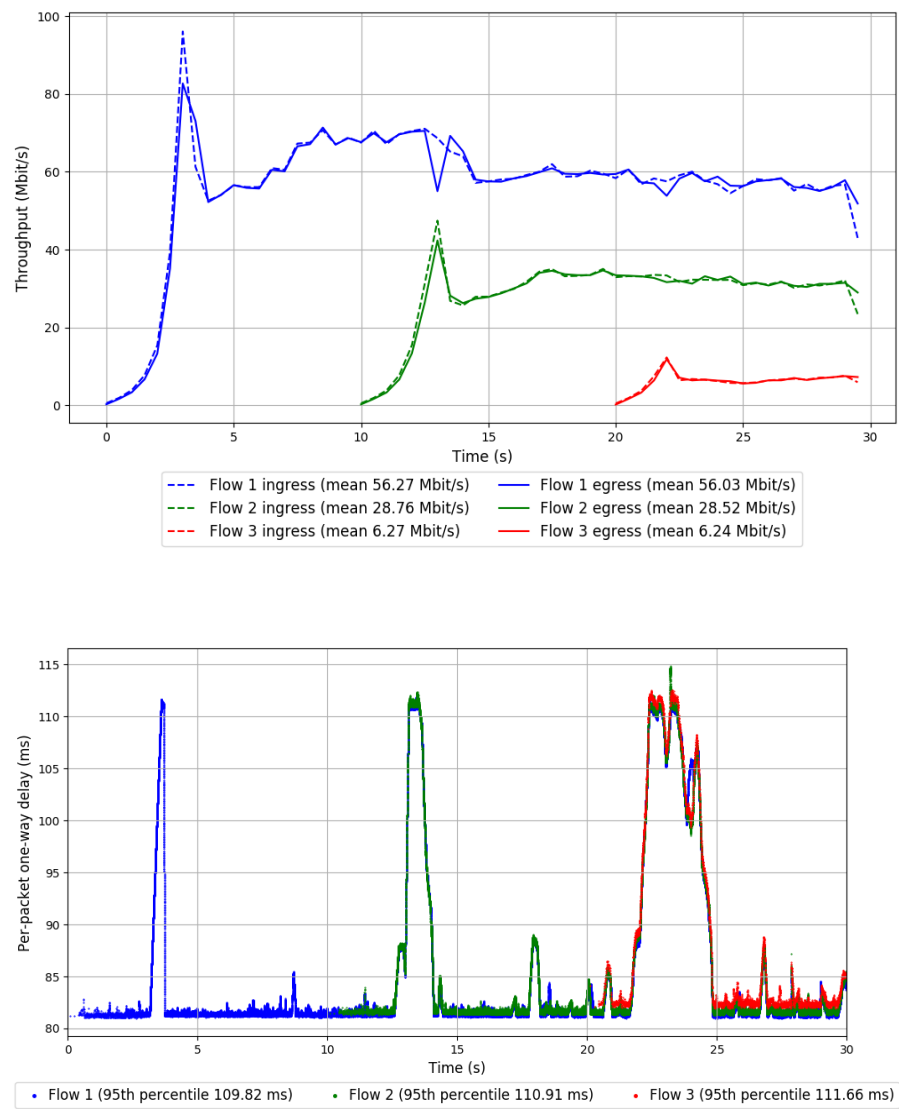## Run 9: Report of Vivace-latency — Data Link

```
Run 10: Statistics of Vivace-latency

Start at: 2018-03-13 21:30:43
End at: 2018-03-13 21:31:13
Local clock offset: -2.6 ms
Remote clock offset: -4.941 ms


# Below is generated by plot.py at 2018-03-13 22:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.04 Mbit/s
95th percentile per-packet one-way delay: 110.409 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 109.816 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 28.52 Mbit/s
95th percentile per-packet one-way delay: 110.910 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 111.658 ms
Loss rate: 0.58%
```

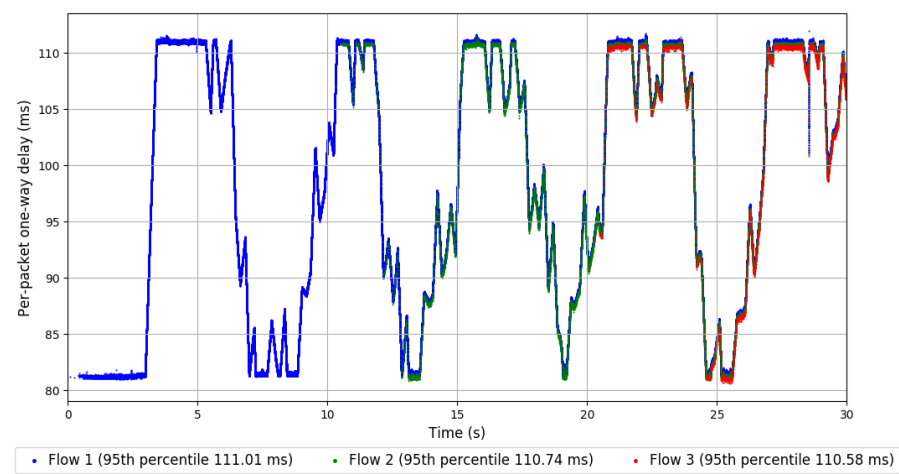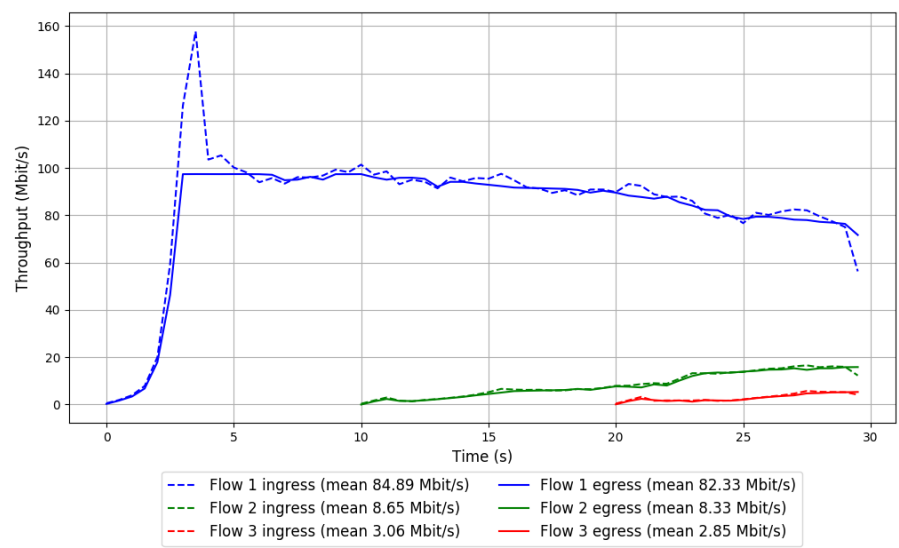Run 10: Report of Vivace-latency — Data Link

```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-13 18:02:45
End at: 2018-03-13 18:03:15
Local clock offset: -6.745 ms
Remote clock offset: -5.684 ms


# Below is generated by plot.py at 2018-03-13 22:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 111.006 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 111.011 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 110.744 ms
Loss rate: 3.65%
-- Flow 3:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 110.581 ms
Loss rate: 6.79%
```

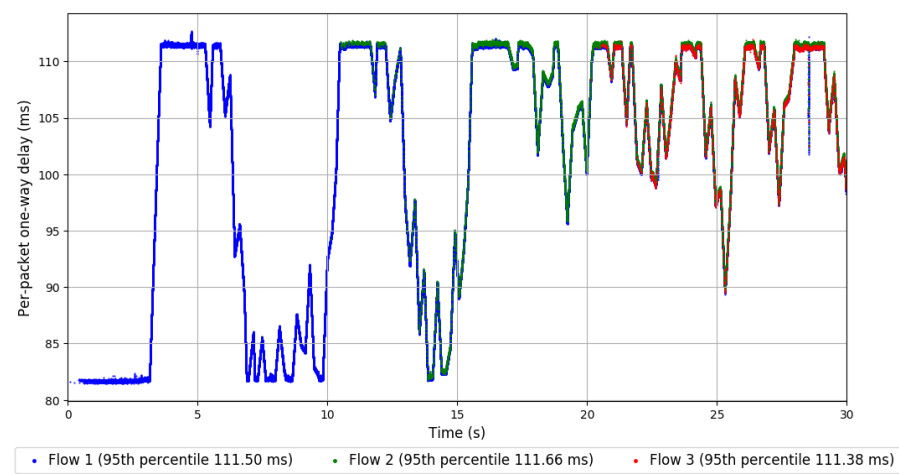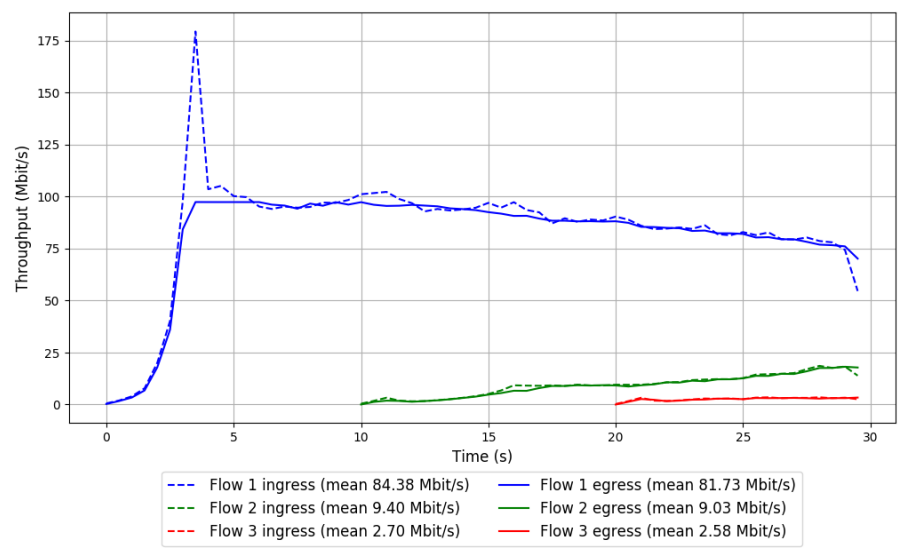Run 1: Report of Vivace-loss — Data Link

```
Run 2: Statistics of Vivace-loss

Start at: 2018-03-13 18:26:14
End at: 2018-03-13 18:26:44
Local clock offset: -4.286 ms
Remote clock offset: -5.061 ms


# Below is generated by plot.py at 2018-03-13 22:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.58 Mbit/s
95th percentile per-packet one-way delay: 111.508 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 81.73 Mbit/s
95th percentile per-packet one-way delay: 111.495 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 111.657 ms
Loss rate: 3.97%
-- Flow 3:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 111.382 ms
Loss rate: 4.54%
```
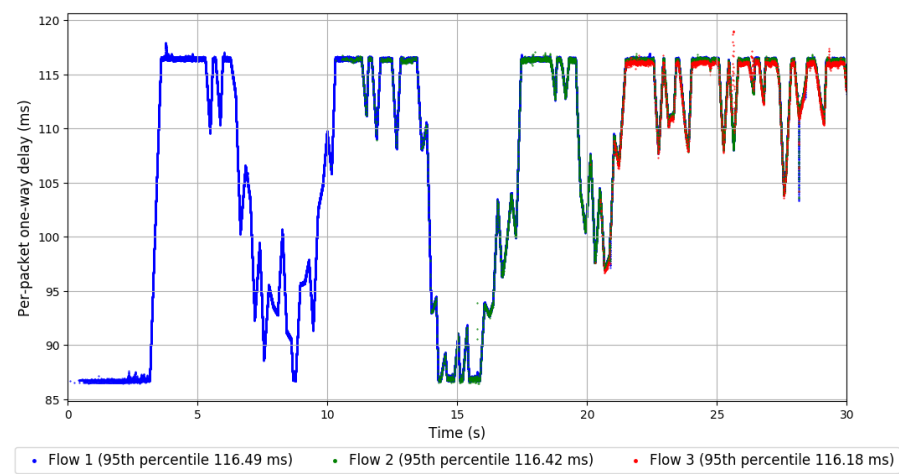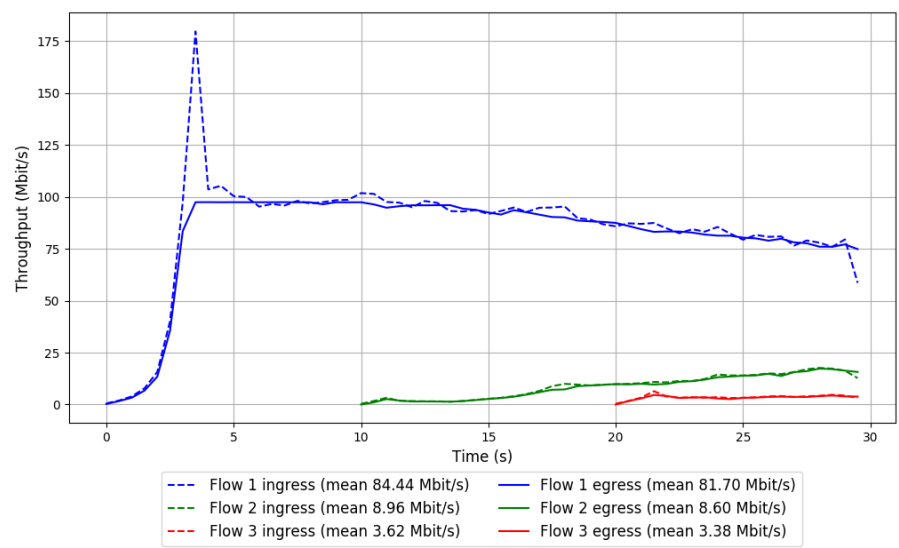
Run 2: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 84.38 Mbit/s) ---- Flow 1 egress (mean 81.73 Mbit/s) ——
Flow 2 ingress (mean 9.40 Mbit/s) ---- Flow 2 egress (mean 9.03 Mbit/s) ——
Flow 3 ingress (mean 2.70 Mbit/s) ---- Flow 3 egress (mean 2.58 Mbit/s) ——

Flow 1 (95th percentile 111.50 ms)   Flow 2 (95th percentile 111.66 ms)   Flow 3 (95th percentile 111.38 ms)

```
Run 3: Statistics of Vivace-loss

Start at: 2018-03-13 18:49:58
End at: 2018-03-13 18:50:28
Local clock offset: -5.457 ms
Remote clock offset: -0.44 ms


# Below is generated by plot.py at 2018-03-13 22:43:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.53 Mbit/s
95th percentile per-packet one-way delay: 116.484 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 116.488 ms
Loss rate: 3.15%
-- Flow 2:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 116.422 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 116.184 ms
Loss rate: 6.68%
```

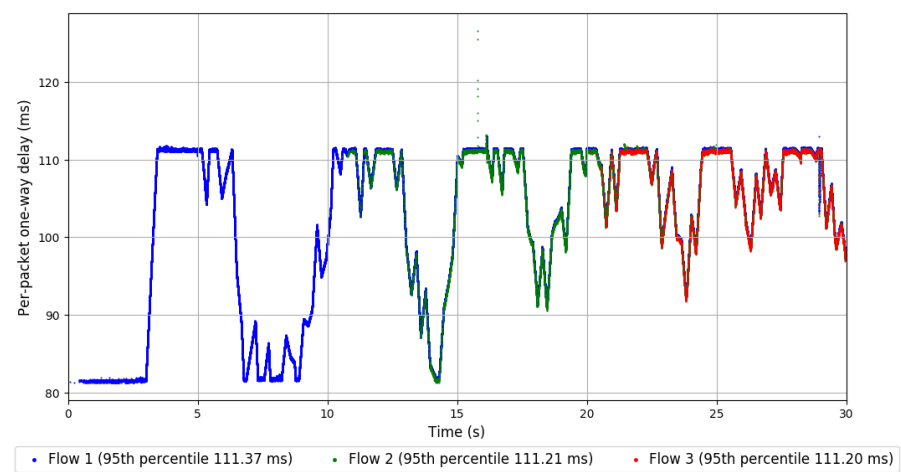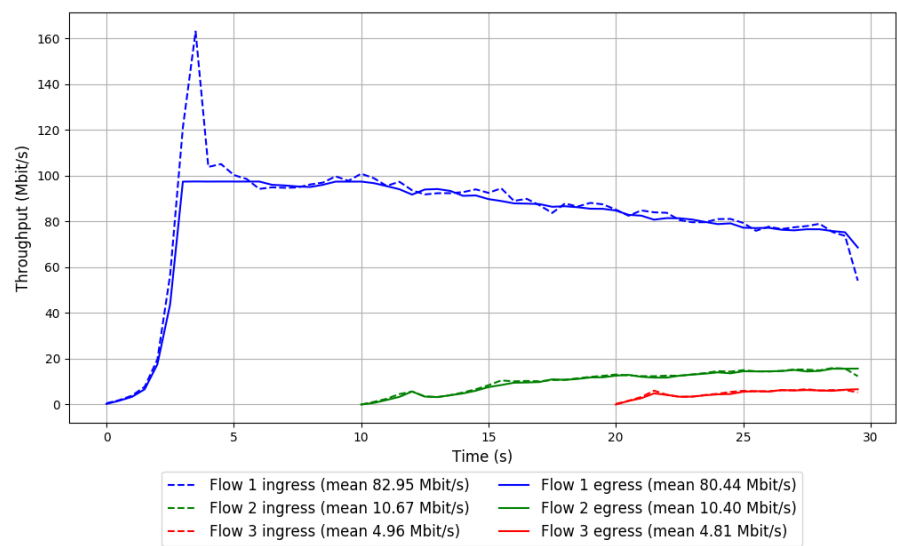Run 3: Report of Vivace-loss — Data Link

```
Run 4: Statistics of Vivace-loss

Start at: 2018-03-13 19:13:25
End at: 2018-03-13 19:13:56
Local clock offset: -6.105 ms
Remote clock offset: -5.626 ms


# Below is generated by plot.py at 2018-03-13 22:44:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 111.366 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 80.44 Mbit/s
95th percentile per-packet one-way delay: 111.372 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 111.213 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 111.201 ms
Loss rate: 3.16%
```

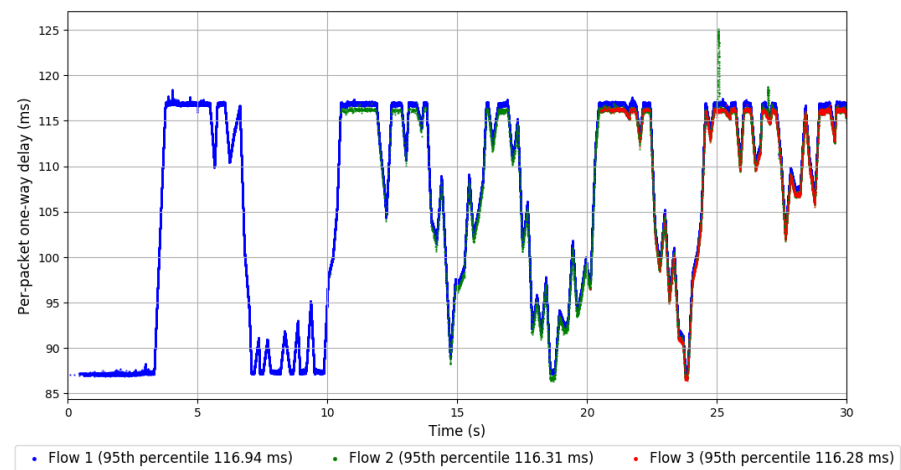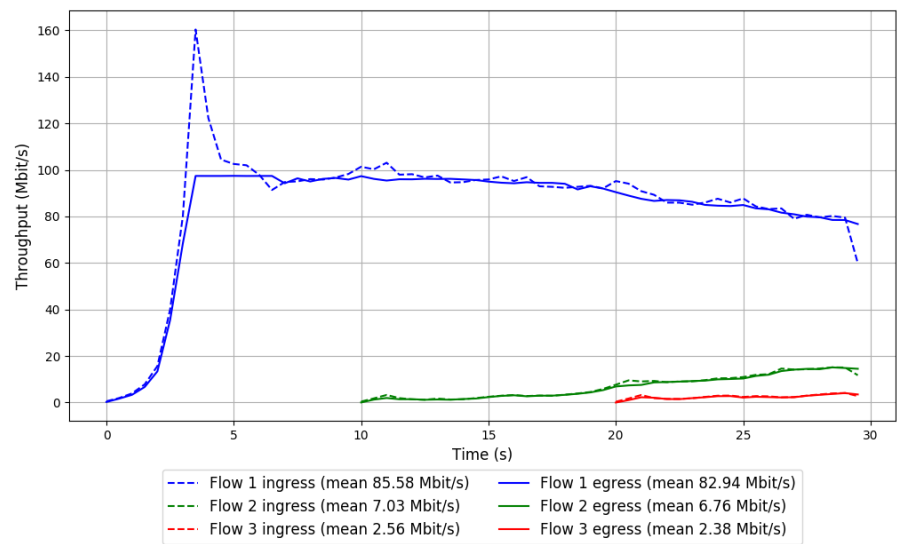Run 4: Report of Vivace-loss — Data Link

- - - Flow 1 ingress (mean 82.95 Mbit/s) —— Flow 1 egress (mean 80.44 Mbit/s)
- - - Flow 2 ingress (mean 10.67 Mbit/s) —— Flow 2 egress (mean 10.40 Mbit/s)
- - - Flow 3 ingress (mean 4.96 Mbit/s) —— Flow 3 egress (mean 4.81 Mbit/s)

- Flow 1 (95th percentile 111.37 ms) - Flow 2 (95th percentile 111.21 ms) - Flow 3 (95th percentile 111.20 ms)

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```
Run 5: Statistics of Vivace-loss

Start at: 2018-03-13 19:36:52
End at: 2018-03-13 19:37:22
Local clock offset: -1.763 ms
Remote clock offset: -0.167 ms


# Below is generated by plot.py at 2018-03-13 22:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 116.937 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 82.94 Mbit/s
95th percentile per-packet one-way delay: 116.940 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 116.305 ms
Loss rate: 3.76%
-- Flow 3:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 116.276 ms
Loss rate: 6.56%
```
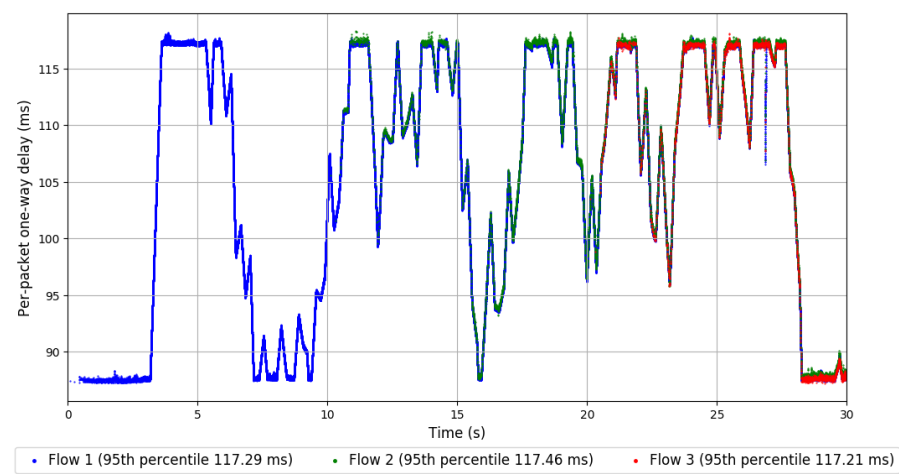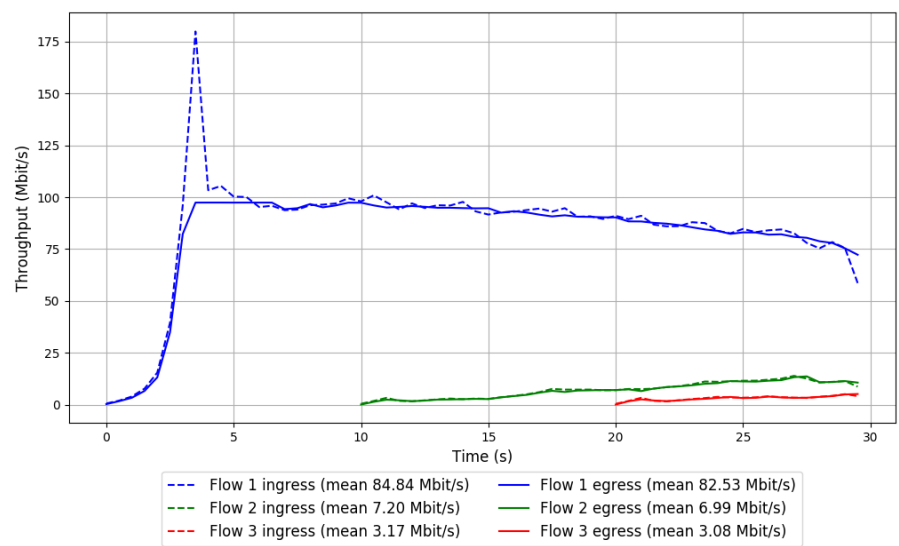
Run 5: Report of Vivace-loss — Data Link

- - - Flow 1 ingress (mean 85.58 Mbit/s)   —— Flow 1 egress (mean 82.94 Mbit/s)
- - - Flow 2 ingress (mean 7.03 Mbit/s)   —— Flow 2 egress (mean 6.76 Mbit/s)
- - - Flow 3 ingress (mean 2.56 Mbit/s)   —— Flow 3 egress (mean 2.38 Mbit/s)

- Flow 1 (95th percentile 116.94 ms)   • Flow 2 (95th percentile 116.31 ms)   • Flow 3 (95th percentile 116.28 ms)

```
Run 6: Statistics of Vivace-loss

Start at: 2018-03-13 20:00:18
End at: 2018-03-13 20:00:48
Local clock offset: -4.62 ms
Remote clock offset: 0.845 ms


# Below is generated by plot.py at 2018-03-13 22:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.18 Mbit/s
95th percentile per-packet one-way delay: 117.297 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 117.286 ms
Loss rate: 2.72%
-- Flow 2:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 117.458 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 117.214 ms
Loss rate: 3.04%
```
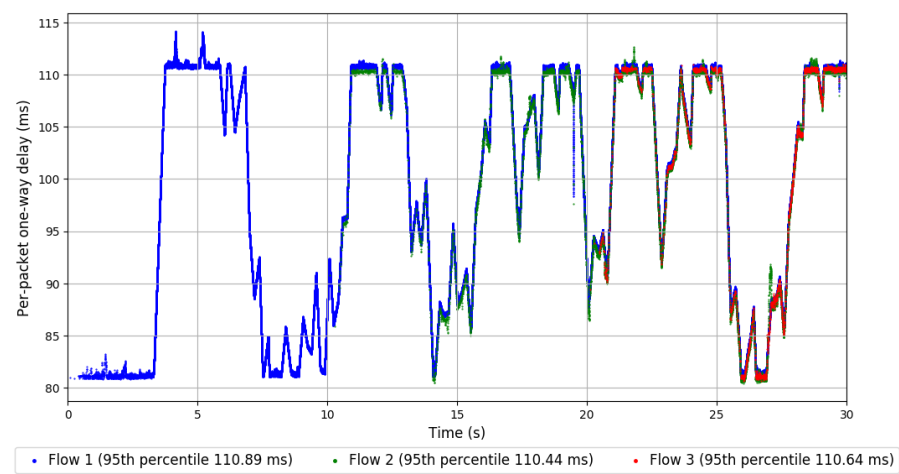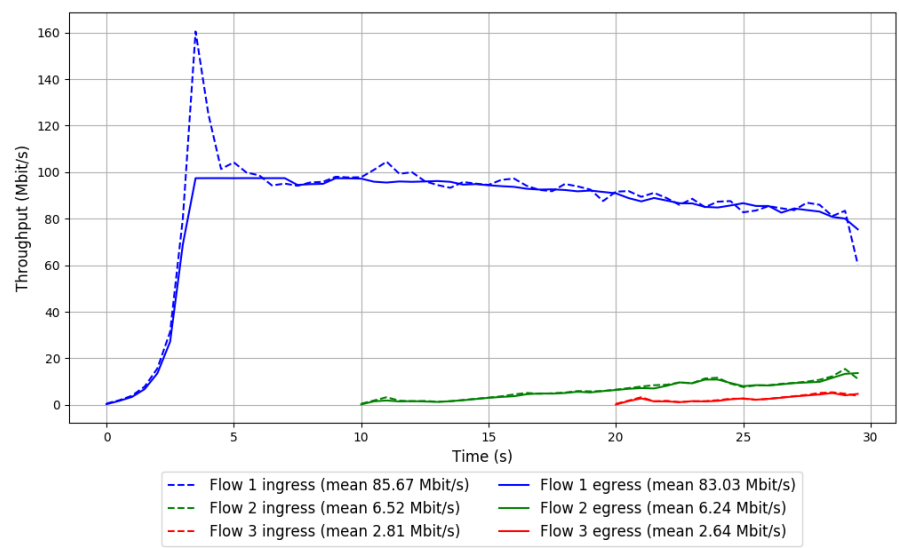
Run 6: Report of Vivace-loss — Data Link

```
Run 7: Statistics of Vivace-loss

Start at: 2018-03-13 20:23:57
End at: 2018-03-13 20:24:27
Local clock offset: -5.627 ms
Remote clock offset: -6.012 ms


# Below is generated by plot.py at 2018-03-13 22:44:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.05 Mbit/s
95th percentile per-packet one-way delay: 110.889 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 83.03 Mbit/s
95th percentile per-packet one-way delay: 110.893 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 110.445 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 110.645 ms
Loss rate: 5.54%
```
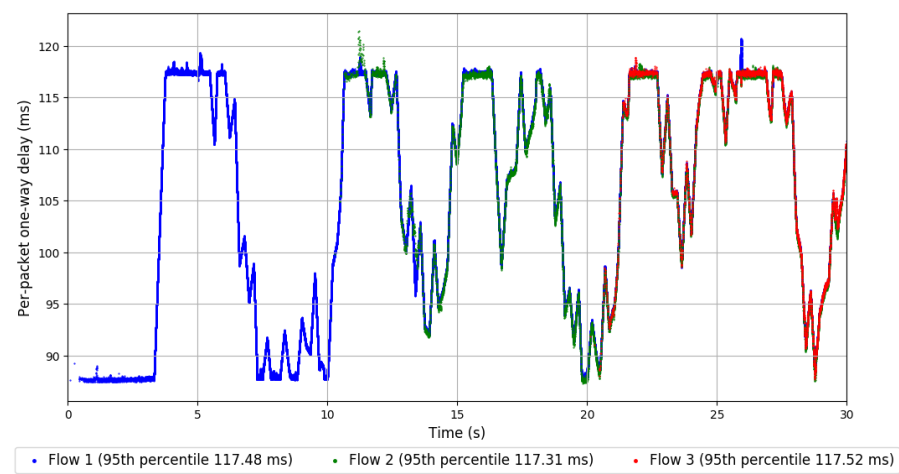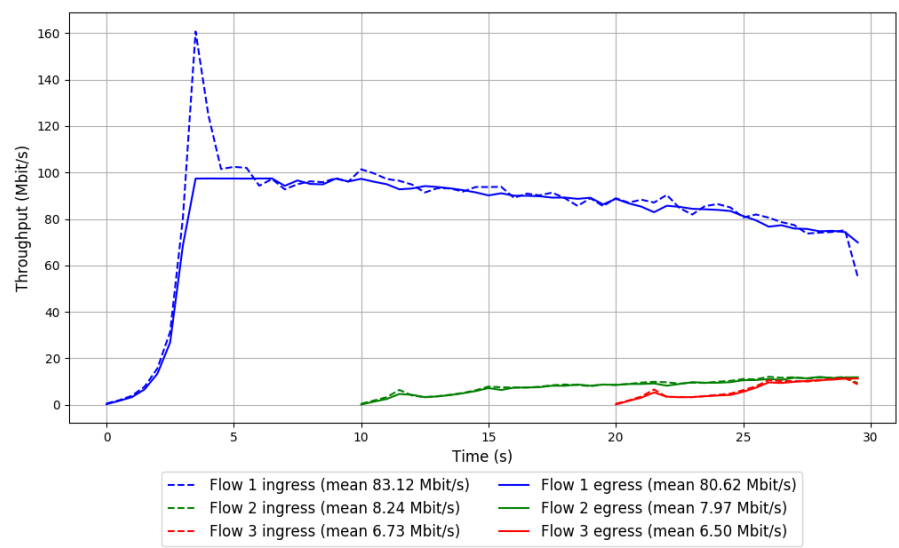
Run 7: Report of Vivace-loss — Data Link

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```
Run 8: Statistics of Vivace-loss

Start at: 2018-03-13 20:47:25
End at: 2018-03-13 20:47:55
Local clock offset: -5.7 ms
Remote clock offset: 0.899 ms


# Below is generated by plot.py at 2018-03-13 22:44:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 117.476 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 80.62 Mbit/s
95th percentile per-packet one-way delay: 117.478 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 117.309 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 117.524 ms
Loss rate: 3.17%
```

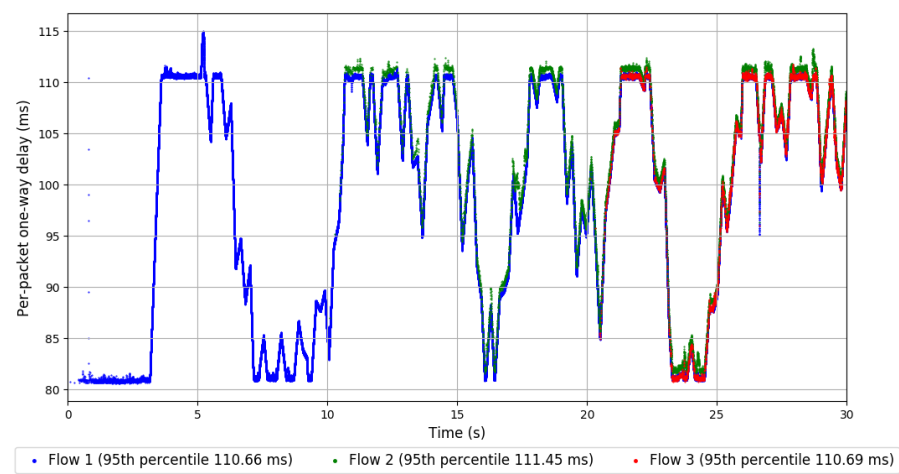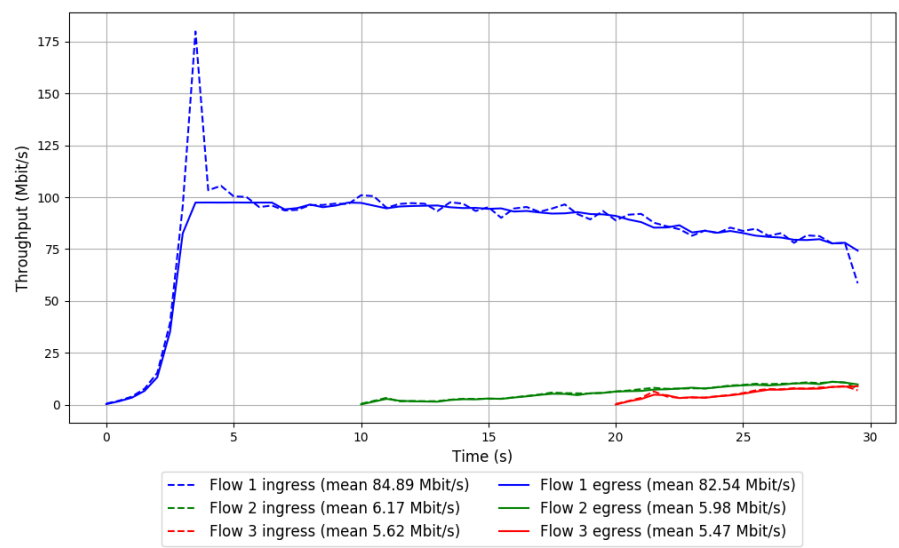Run 8: Report of Vivace-loss — Data Link

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```
Run 9: Statistics of Vivace-loss

Start at: 2018-03-13 21:10:52
End at: 2018-03-13 21:11:22
Local clock offset: -2.884 ms
Remote clock offset: -5.698 ms


# Below is generated by plot.py at 2018-03-13 22:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.32 Mbit/s
95th percentile per-packet one-way delay: 110.684 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 82.54 Mbit/s
95th percentile per-packet one-way delay: 110.663 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 111.446 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 110.691 ms
Loss rate: 2.59%
```

Run 9: Report of Vivace-loss — Data Link

```
Run 10: Statistics of Vivace-loss

Start at: 2018-03-13 21:34:34
End at: 2018-03-13 21:35:04
Local clock offset: -4.048 ms
Remote clock offset: 0.196 ms


# Below is generated by plot.py at 2018-03-13 22:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 117.016 ms
Loss rate: 3.17%
-- Flow 1:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 117.035 ms
Loss rate: 3.15%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 116.536 ms
Loss rate: 3.41%
-- Flow 3:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 116.474 ms
Loss rate: 3.31%
```
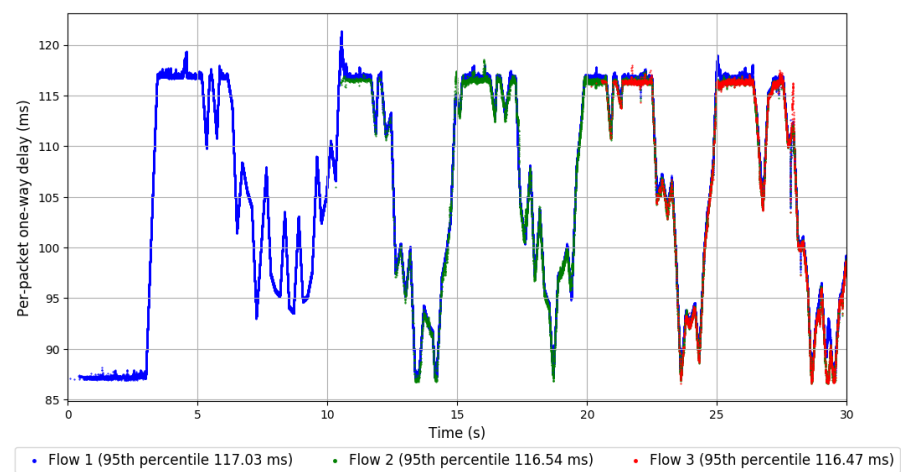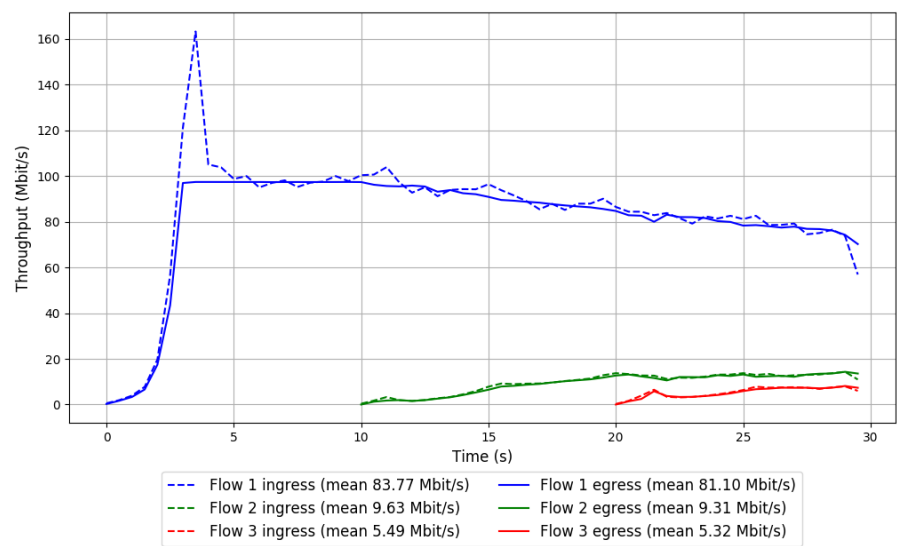
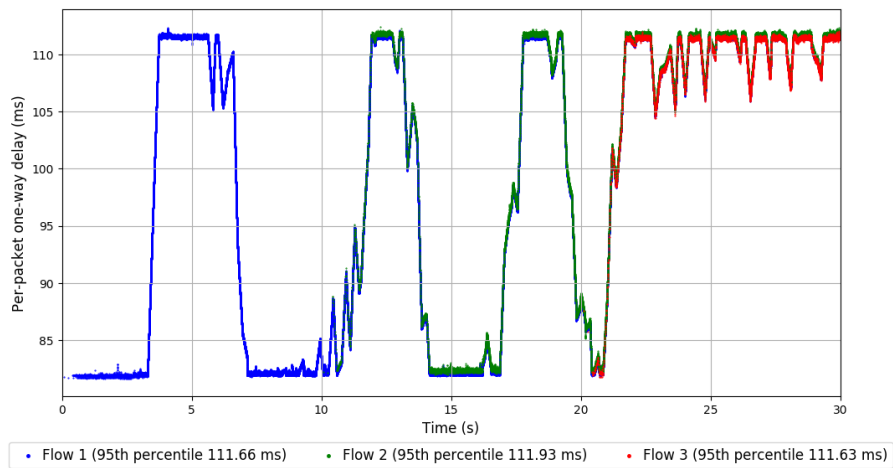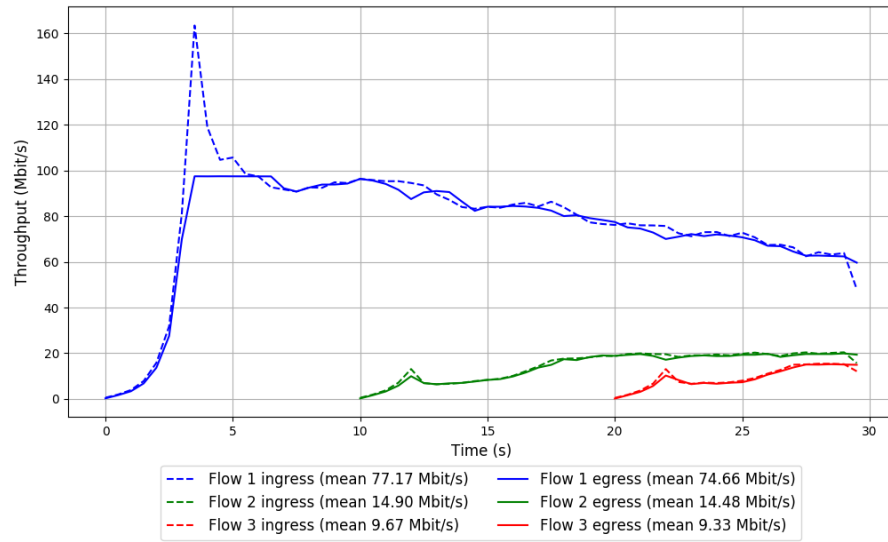# Run 10: Report of Vivace-loss — Data Link

- Flow 1 ingress (mean 83.77 Mbit/s)
- Flow 1 egress (mean 81.10 Mbit/s)
- Flow 2 ingress (mean 9.63 Mbit/s)
- Flow 2 egress (mean 9.31 Mbit/s)
- Flow 3 ingress (mean 5.49 Mbit/s)
- Flow 3 egress (mean 5.32 Mbit/s)

- Flow 1 (95th percentile 117.03 ms)
- Flow 2 (95th percentile 116.54 ms)
- Flow 3 (95th percentile 116.47 ms)

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```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-13 18:09:18
End at: 2018-03-13 18:09:48
Local clock offset: -5.711 ms
Remote clock offset: -4.793 ms

# Below is generated by plot.py at 2018-03-13 22:45:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.37 Mbit/s
95th percentile per-packet one-way delay: 111.710 ms
Loss rate: 3.11%
-- Flow 1:
Average throughput: 74.66 Mbit/s
95th percentile per-packet one-way delay: 111.659 ms
Loss rate: 3.16%
-- Flow 2:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 111.929 ms
Loss rate: 2.65%
-- Flow 3:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 111.633 ms
Loss rate: 3.33%
```
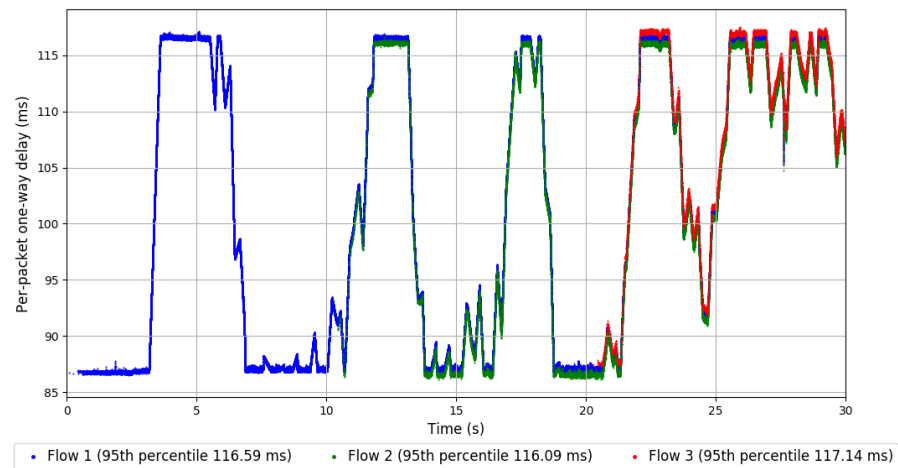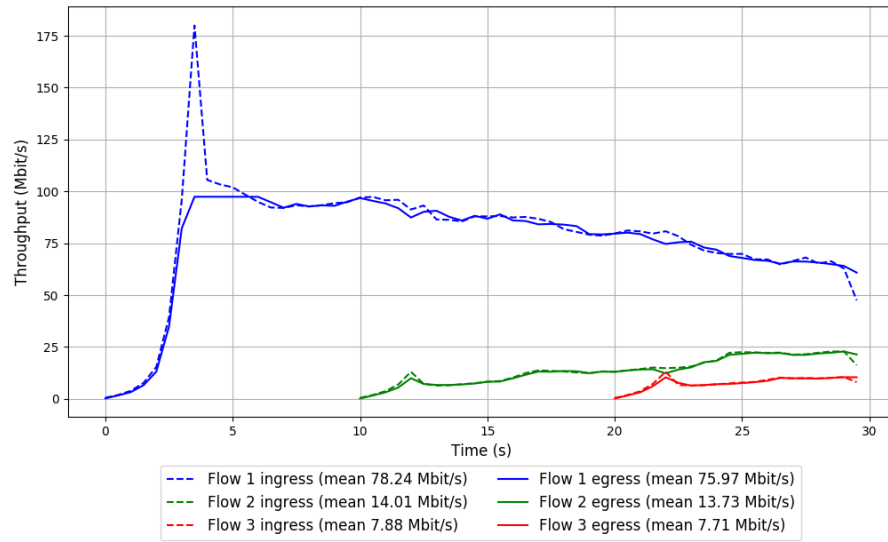
Run 1: Report of Vivace-LTE — Data Link

- Flow 1 ingress (mean 77.17 Mbit/s)
- Flow 1 egress (mean 74.66 Mbit/s)
- Flow 2 ingress (mean 14.90 Mbit/s)
- Flow 2 egress (mean 14.48 Mbit/s)
- Flow 3 ingress (mean 9.67 Mbit/s)
- Flow 3 egress (mean 9.33 Mbit/s)

- Flow 1 (95th percentile 111.66 ms)
- Flow 2 (95th percentile 111.93 ms)
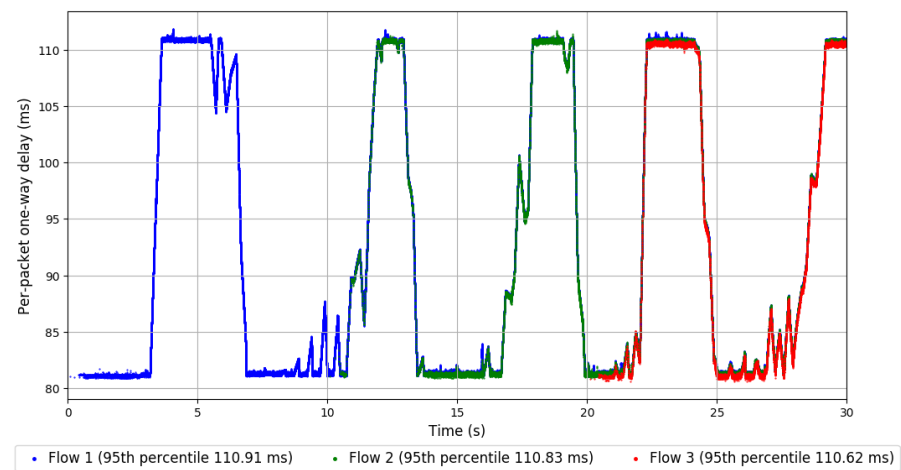- Flow 3 (95th percentile 111.63 ms)

```
Run 2: Statistics of Vivace-LTE

Start at: 2018-03-13 18:32:49
End at: 2018-03-13 18:33:19
Local clock offset: -4.13 ms
Remote clock offset: -0.155 ms


# Below is generated by plot.py at 2018-03-13 22:45:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 116.596 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 75.97 Mbit/s
95th percentile per-packet one-way delay: 116.590 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 13.73 Mbit/s
95th percentile per-packet one-way delay: 116.095 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 117.144 ms
Loss rate: 2.05%
```

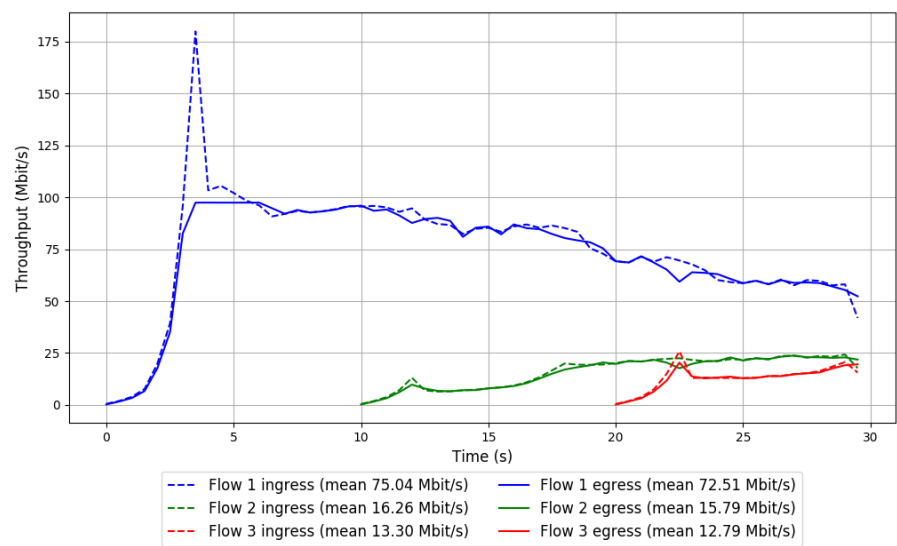# Run 2: Report of Vivace-LTE — Data Link

```
Run 3: Statistics of Vivace-LTE

Start at: 2018-03-13 18:56:30
End at: 2018-03-13 18:57:00
Local clock offset: -5.79 ms
Remote clock offset: -5.795 ms


# Below is generated by plot.py at 2018-03-13 22:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 110.900 ms
Loss rate: 3.22%
-- Flow 1:
Average throughput: 72.51 Mbit/s
95th percentile per-packet one-way delay: 110.911 ms
Loss rate: 3.28%
-- Flow 2:
Average throughput: 15.79 Mbit/s
95th percentile per-packet one-way delay: 110.833 ms
Loss rate: 2.71%
-- Flow 3:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 110.619 ms
Loss rate: 3.50%
```

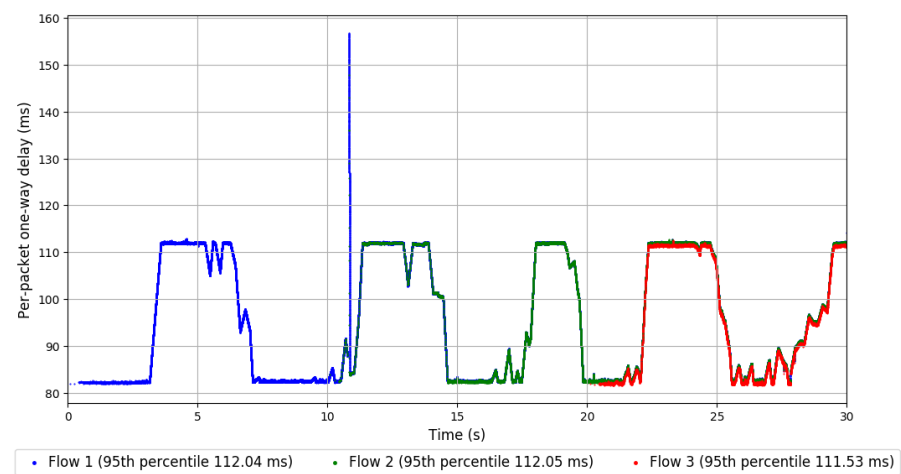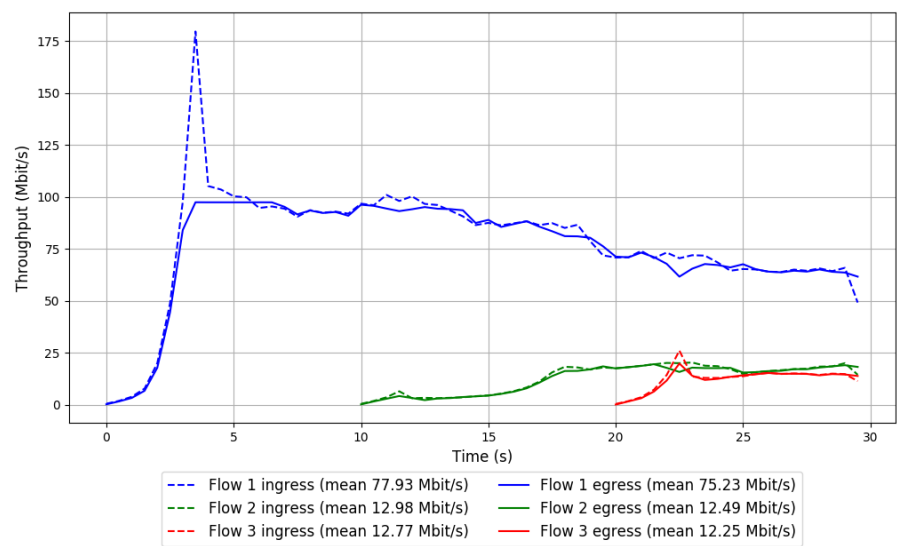# Run 3: Report of Vivace-LTE — Data Link

```
Run 4: Statistics of Vivace-LTE

Start at: 2018-03-13 19:19:58
End at: 2018-03-13 19:20:28
Local clock offset: -4.081 ms
Remote clock offset: -4.667 ms


# Below is generated by plot.py at 2018-03-13 22:45:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.57 Mbit/s
95th percentile per-packet one-way delay: 112.037 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 75.23 Mbit/s
95th percentile per-packet one-way delay: 112.038 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 12.49 Mbit/s
95th percentile per-packet one-way delay: 112.052 ms
Loss rate: 3.70%
-- Flow 3:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 111.533 ms
Loss rate: 3.82%
```

Run 4: Report of Vivace-LTE — Data Link

```
Run 5: Statistics of Vivace-LTE

Start at: 2018-03-13 19:43:24
End at: 2018-03-13 19:43:54
Local clock offset: -1.364 ms
Remote clock offset: 0.777 ms


# Below is generated by plot.py at 2018-03-13 22:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.52 Mbit/s
95th percentile per-packet one-way delay: 117.451 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 75.54 Mbit/s
95th percentile per-packet one-way delay: 117.462 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 117.274 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 117.304 ms
Loss rate: 3.00%
```
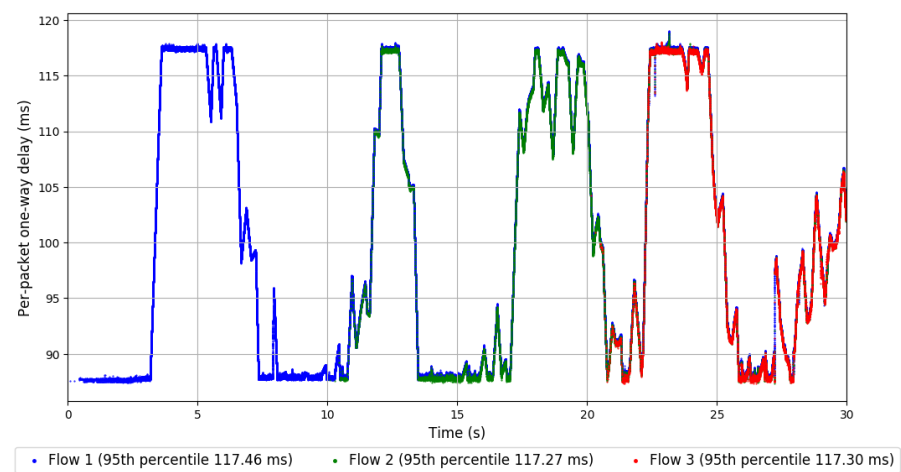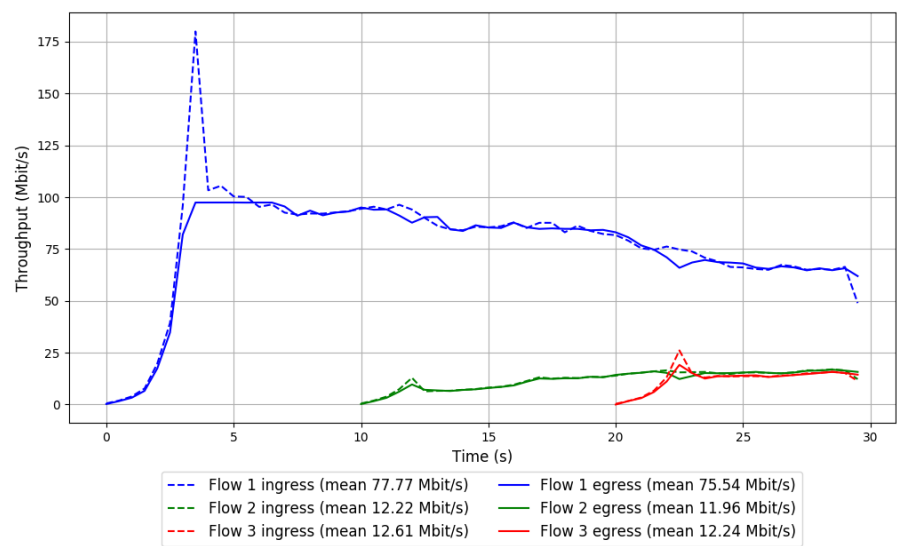
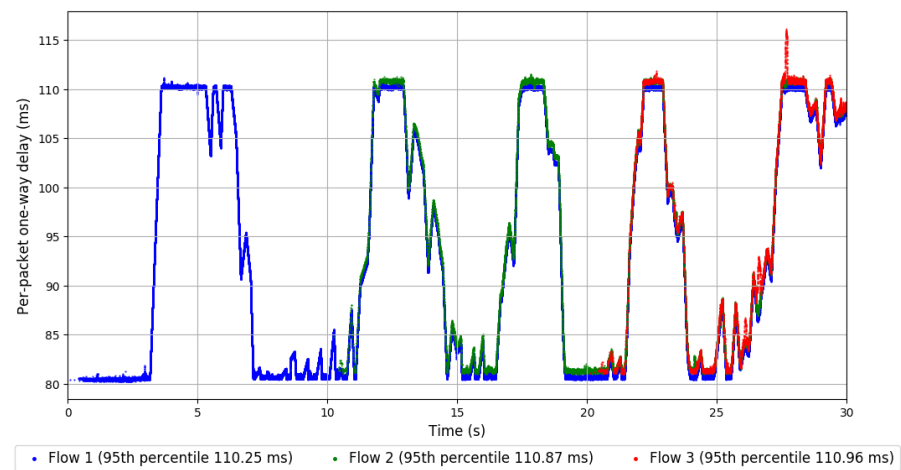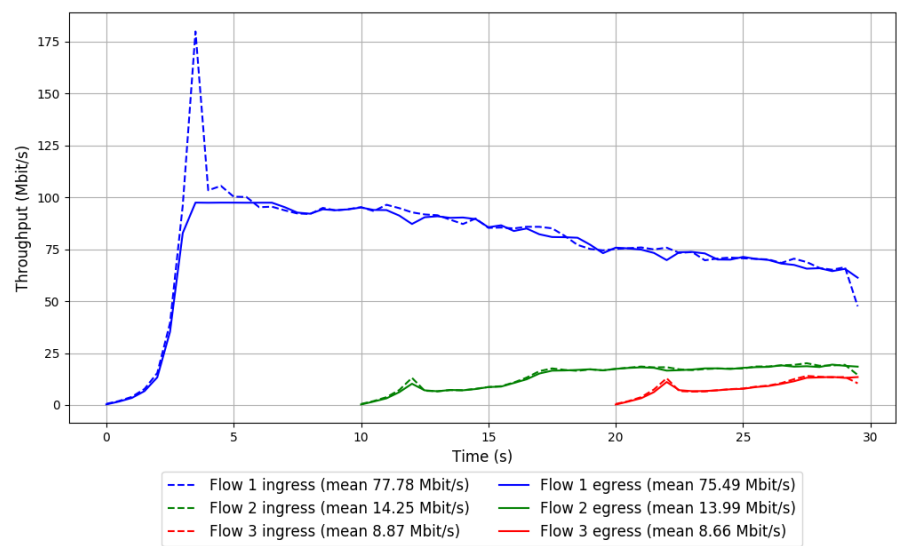Run 5: Report of Vivace-LTE — Data Link

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```
Run 6: Statistics of Vivace-LTE

Start at: 2018-03-13 20:06:54
End at: 2018-03-13 20:07:24
Local clock offset: -5.171 ms
Remote clock offset: -6.035 ms


# Below is generated by plot.py at 2018-03-13 22:45:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 110.302 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 75.49 Mbit/s
95th percentile per-packet one-way delay: 110.249 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 110.870 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 110.958 ms
Loss rate: 2.13%
```

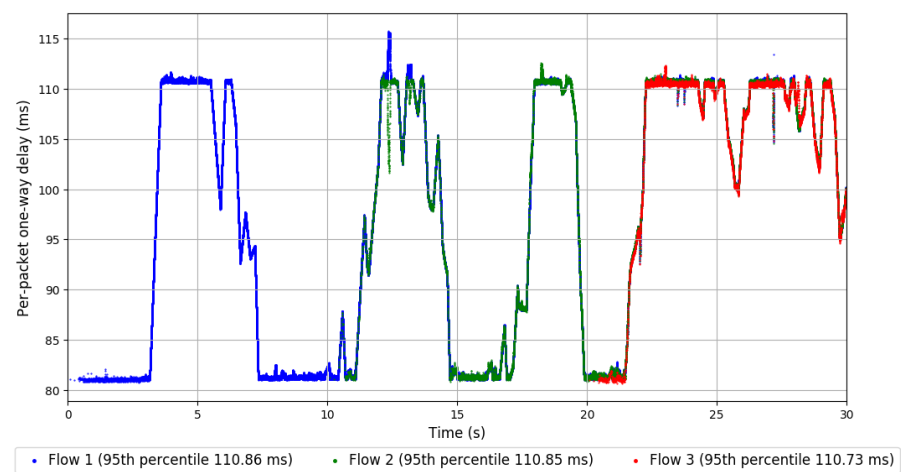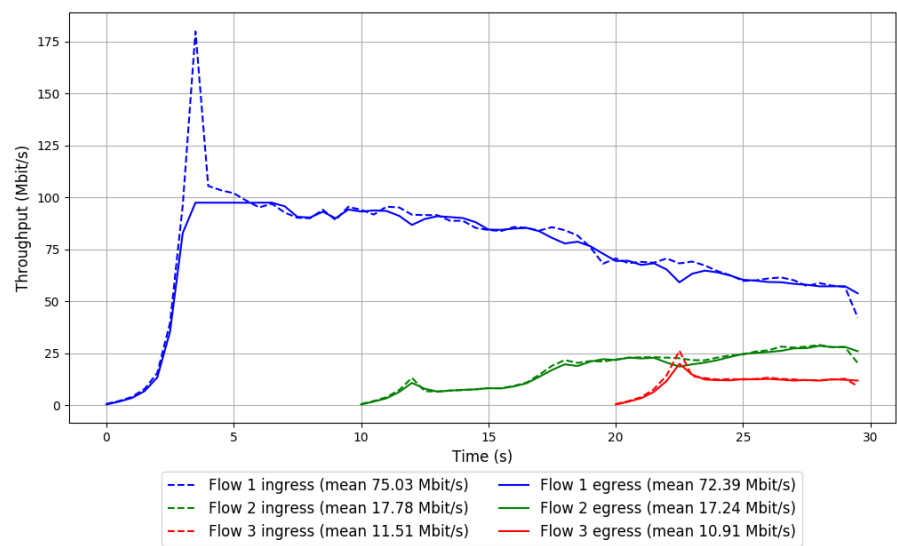# Run 6: Report of Vivace-LTE — Data Link

```
Run 7: Statistics of Vivace-LTE

Start at: 2018-03-13 20:30:29
End at: 2018-03-13 20:30:59
Local clock offset: -5.601 ms
Remote clock offset: -6.103 ms


# Below is generated by plot.py at 2018-03-13 22:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 110.859 ms
Loss rate: 3.46%
-- Flow 1:
Average throughput: 72.39 Mbit/s
95th percentile per-packet one-way delay: 110.862 ms
Loss rate: 3.46%
-- Flow 2:
Average throughput: 17.24 Mbit/s
95th percentile per-packet one-way delay: 110.854 ms
Loss rate: 2.96%
-- Flow 3:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 110.727 ms
Loss rate: 5.03%
```

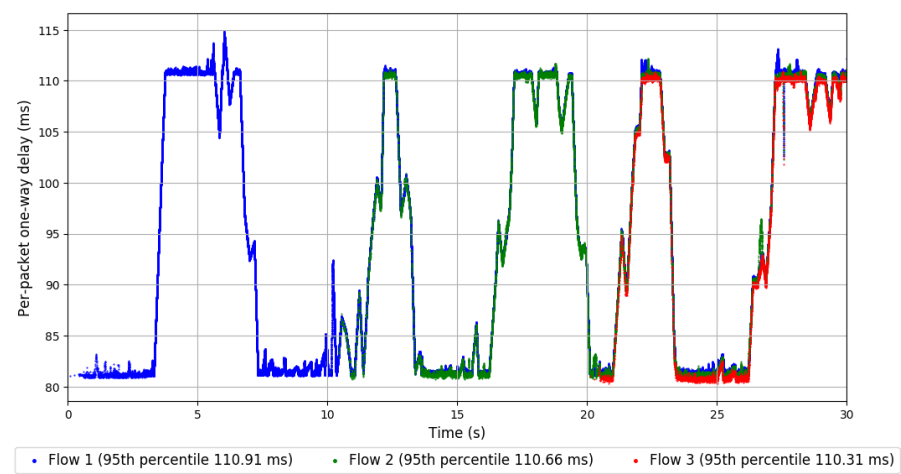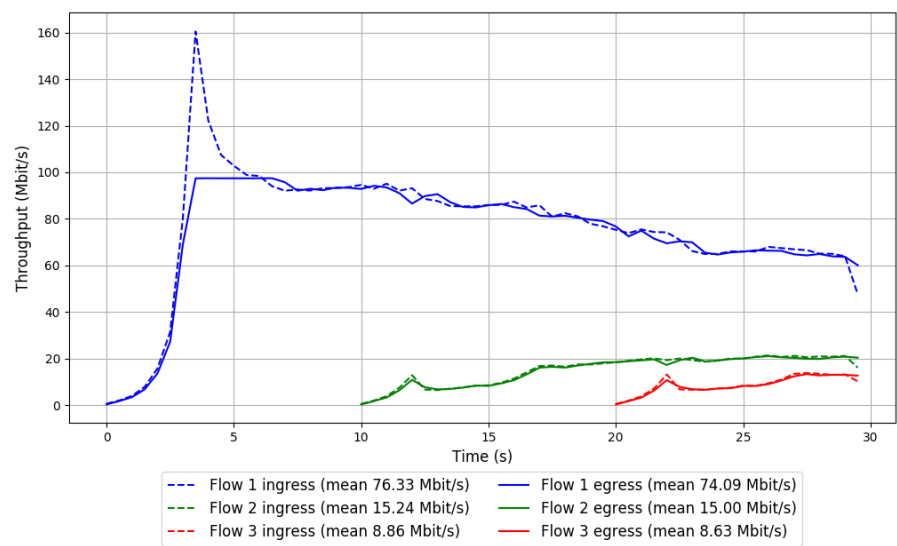# Run 7: Report of Vivace-LTE — Data Link

```
Run 8: Statistics of Vivace-LTE

Start at: 2018-03-13 20:53:57
End at: 2018-03-13 20:54:27
Local clock offset: -5.713 ms
Remote clock offset: -5.651 ms


# Below is generated by plot.py at 2018-03-13 22:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.91 Mbit/s
95th percentile per-packet one-way delay: 110.894 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 110.914 ms
Loss rate: 2.84%
-- Flow 2:
Average throughput: 15.00 Mbit/s
95th percentile per-packet one-way delay: 110.660 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 110.315 ms
Loss rate: 2.30%
```

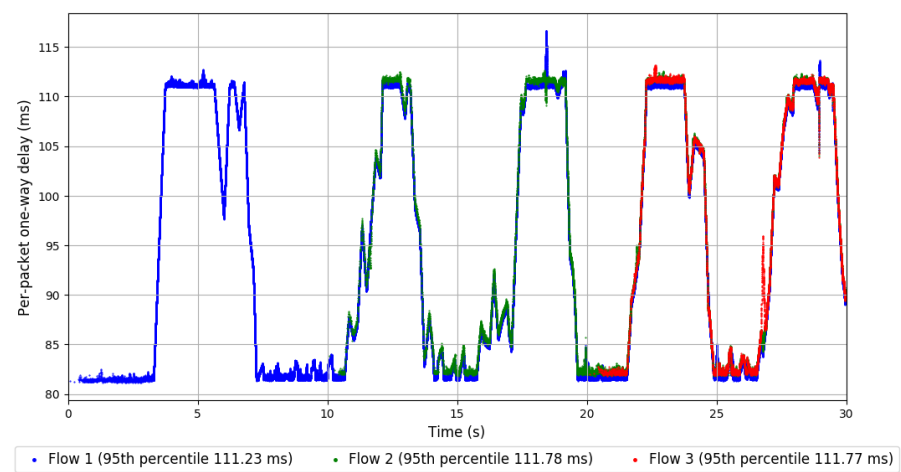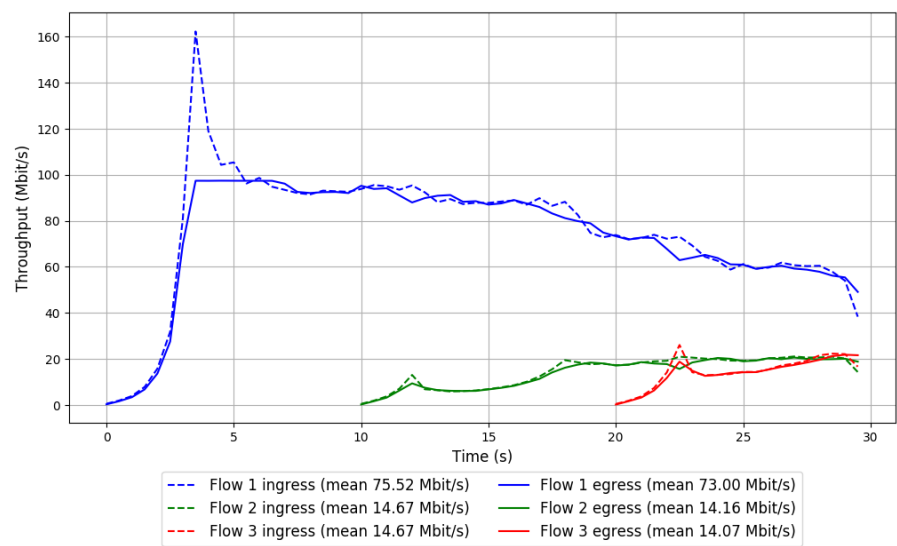# Run 8: Report of Vivace-LTE — Data Link

```
Run 9: Statistics of Vivace-LTE

Start at: 2018-03-13 21:17:34
End at: 2018-03-13 21:18:04
Local clock offset: -2.459 ms
Remote clock offset: -4.944 ms


# Below is generated by plot.py at 2018-03-13 22:46:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 111.519 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 73.00 Mbit/s
95th percentile per-packet one-way delay: 111.234 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 111.780 ms
Loss rate: 3.44%
-- Flow 3:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 111.767 ms
Loss rate: 4.00%
```

Run 9: Report of Vivace-LTE — Data Link

```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-13 21:41:09
End at: 2018-03-13 21:41:39
Local clock offset: -5.683 ms
Remote clock offset: -5.689 ms


# Below is generated by plot.py at 2018-03-13 22:46:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.24 Mbit/s
95th percentile per-packet one-way delay: 110.431 ms
Loss rate: 2.90%
-- Flow 1:
Average throughput: 71.00 Mbit/s
95th percentile per-packet one-way delay: 110.363 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 110.689 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: 110.794 ms
Loss rate: 1.47%
```

Run 10: Report of Vivace-LTE — Data Link