Pantheon Report

Generated at 2019-04-24 03:32:25 (UTC).

Data path: GCE London on `ens4` (*remote*) →GCE Tokyo on `ens4` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.
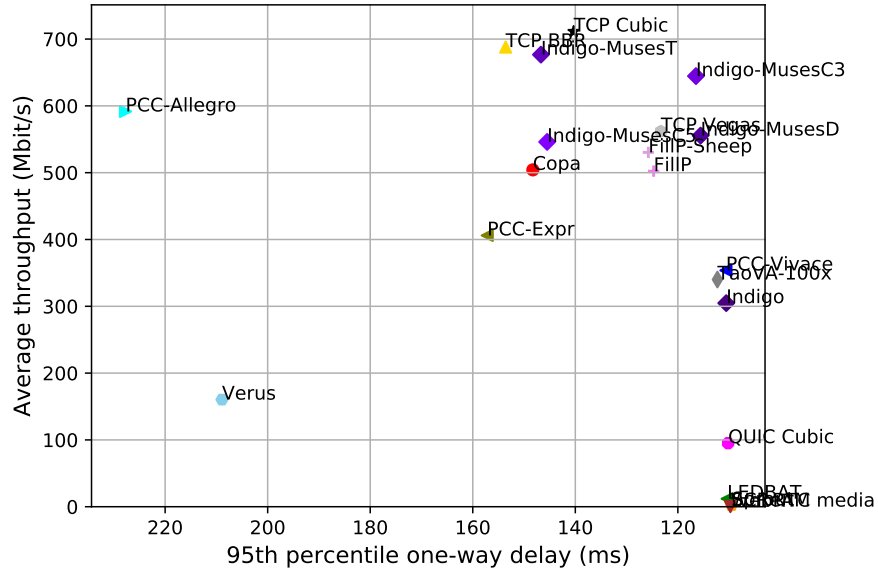
```
System info:
Linux 4.15.0-1028-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 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
```
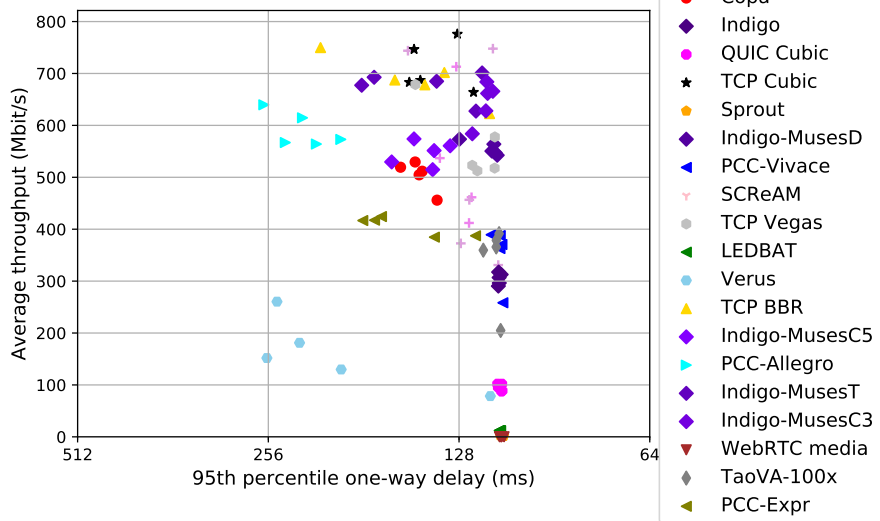
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from GCE London to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from GCE London to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	357.88	356.36	285.88	132.25	176.88	152.82	0.70	1.53	3.52
Copa	5	273.27	251.64	195.35	145.44	150.48	141.06	0.63	1.15	2.76
TCP Cubic	5	377.27	360.11	289.89	131.08	148.01	188.49	0.75	1.31	3.18
FillP	5	213.30	321.73	233.10	135.78	112.84	111.41	0.72	0.90	2.71
FillP-Sheep	5	251.45	306.46	232.67	132.60	112.77	111.92	0.28	0.89	2.50
Indigo	5	162.91	151.14	127.89	110.09	110.98	111.10	0.66	1.14	2.60
Indigo-MusesC3	5	397.53	303.04	199.53	118.71	112.74	111.36	0.48	1.20	3.95
Indigo-MusesC5	5	328.49	299.03	92.78	155.86	135.85	109.70	0.52	1.36	3.89
Indigo-MusesD	5	343.86	299.32	74.62	116.27	112.72	109.76	0.51	1.12	3.48
Indigo-MusesT	5	417.68	323.61	190.80	152.04	120.96	111.47	0.60	1.00	3.98
LEDBAT	5	7.77	5.15	2.47	110.55	110.02	109.42	1.47	2.20	4.10
PCC-Allegro	5	327.45	286.74	228.84	228.05	193.73	193.07	2.57	2.92	3.49
PCC-Expr	5	221.88	203.18	152.46	146.01	145.18	132.09	0.93	1.57	2.85
QUIC Cubic	5	51.74	45.30	40.04	109.04	109.46	109.87	0.92	1.48	3.48
SCReAM	5	0.22	0.22	0.22	109.08	109.13	109.24	0.67	1.20	2.22
Sprout	5	0.89	1.33	0.63	109.02	109.52	108.91	0.73	1.37	2.10
TaoVA-100x	5	158.71	191.55	166.31	110.87	112.80	115.58	0.82	0.96	2.77
TCP Vegas	5	282.59	272.23	301.15	111.53	112.14	133.35	0.70	1.11	2.78
Verus	5	89.80	86.97	40.52	188.72	198.54	131.00	1.43	1.13	2.72
PCC-Vivace	5	200.37	183.15	98.52	110.17	112.19	117.05	0.83	1.35	3.90
WebRTC media	5	0.05	0.05	0.05	109.81	109.25	109.72	0.01	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-04-23 22:26:40
End at: 2019-04-23 22:27:10
Local clock offset: 0.097 ms
Remote clock offset: -0.037 ms


# Below is generated by plot.py at 2019-04-24 01:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.89 Mbit/s
95th percentile per-packet one-way delay: 135.022 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 362.02 Mbit/s
95th percentile per-packet one-way delay: 134.093 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 365.49 Mbit/s
95th percentile per-packet one-way delay: 135.985 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 296.95 Mbit/s
95th percentile per-packet one-way delay: 138.040 ms
Loss rate: 2.82%
```
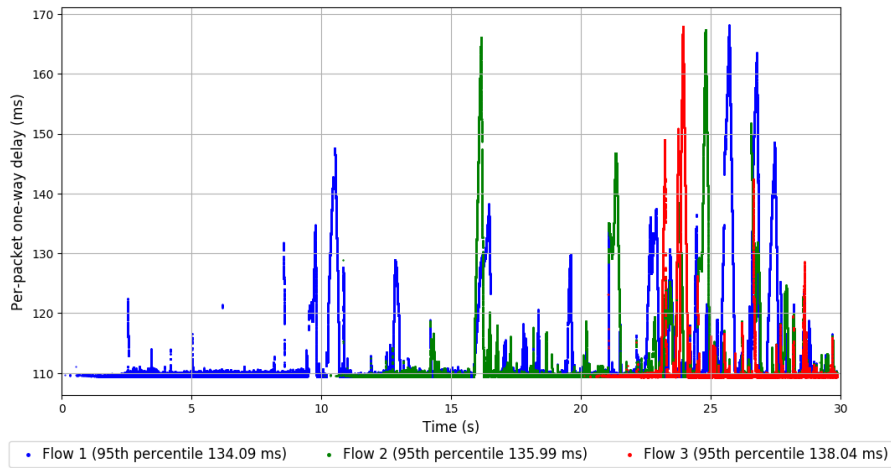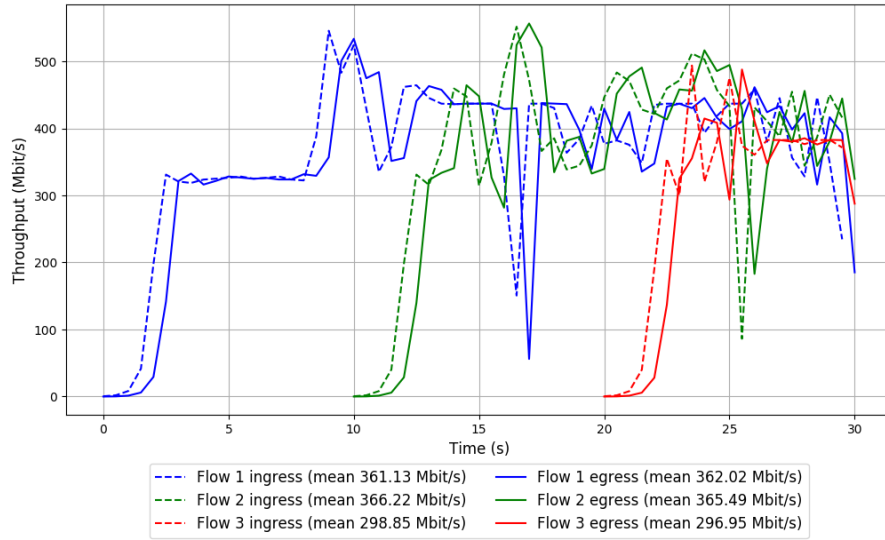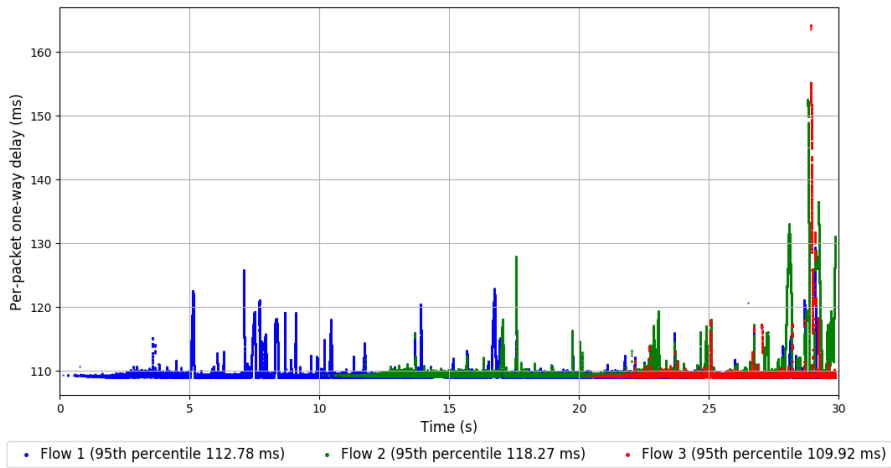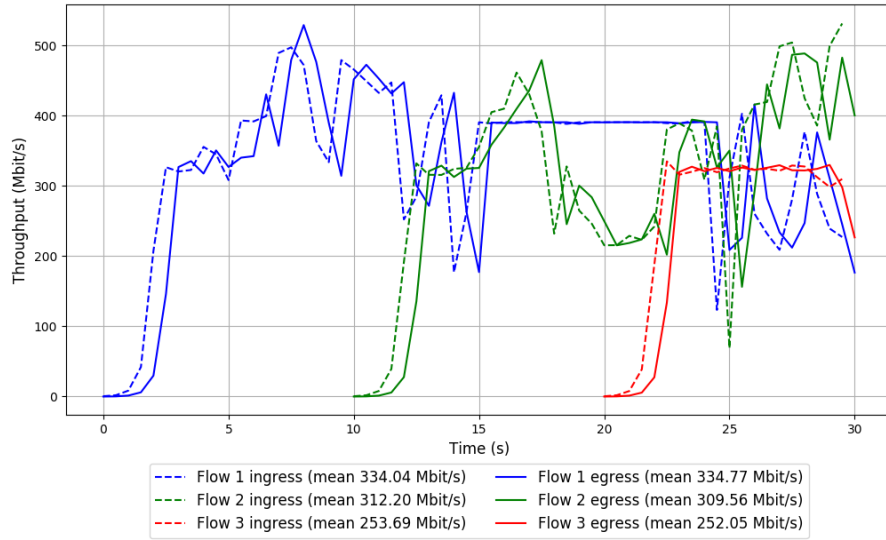
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-04-23 23:03:04
End at: 2019-04-23 23:03:34
Local clock offset: 0.015 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2019-04-24 01:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 622.71 Mbit/s
95th percentile per-packet one-way delay: 114.573 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 334.77 Mbit/s
95th percentile per-packet one-way delay: 112.780 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 309.56 Mbit/s
95th percentile per-packet one-way delay: 118.268 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 252.05 Mbit/s
95th percentile per-packet one-way delay: 109.919 ms
Loss rate: 2.82%
```
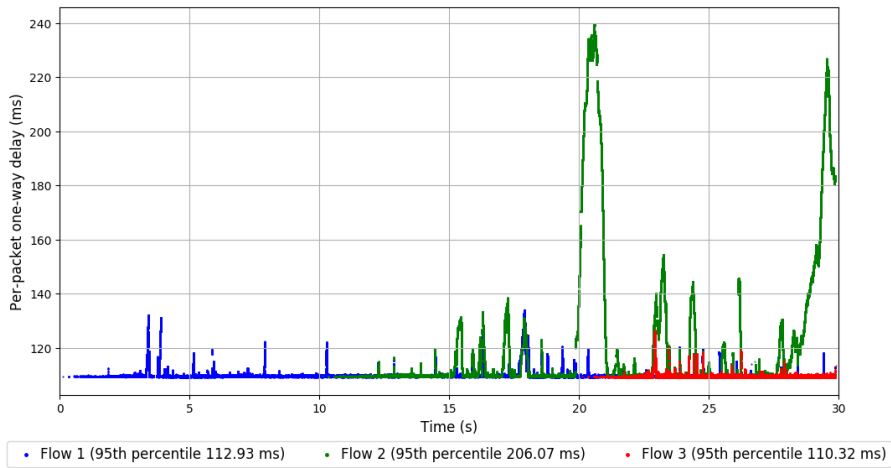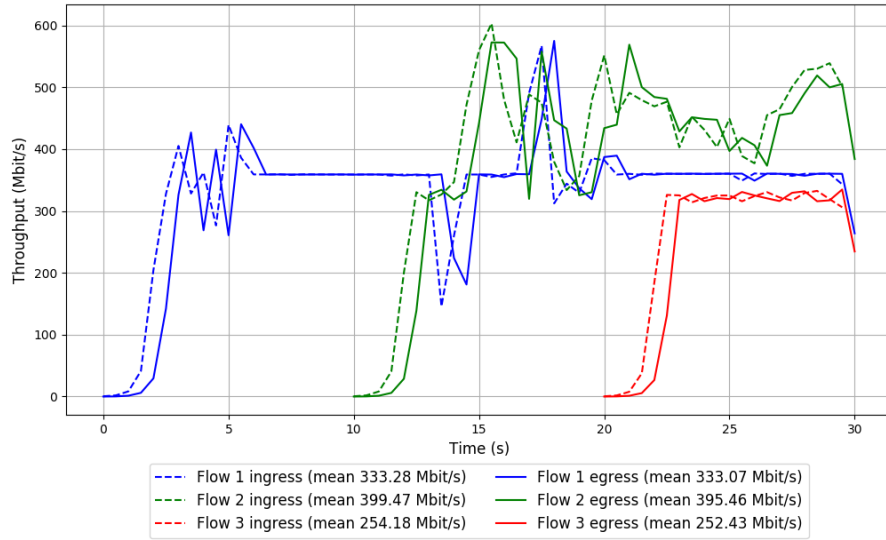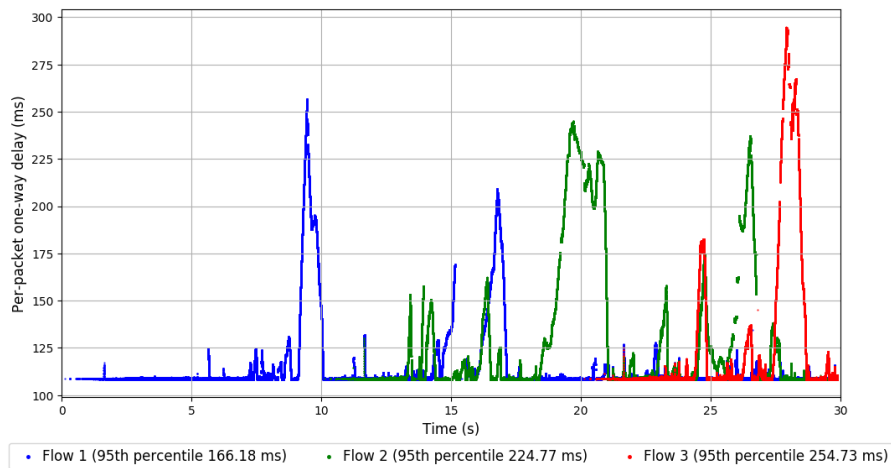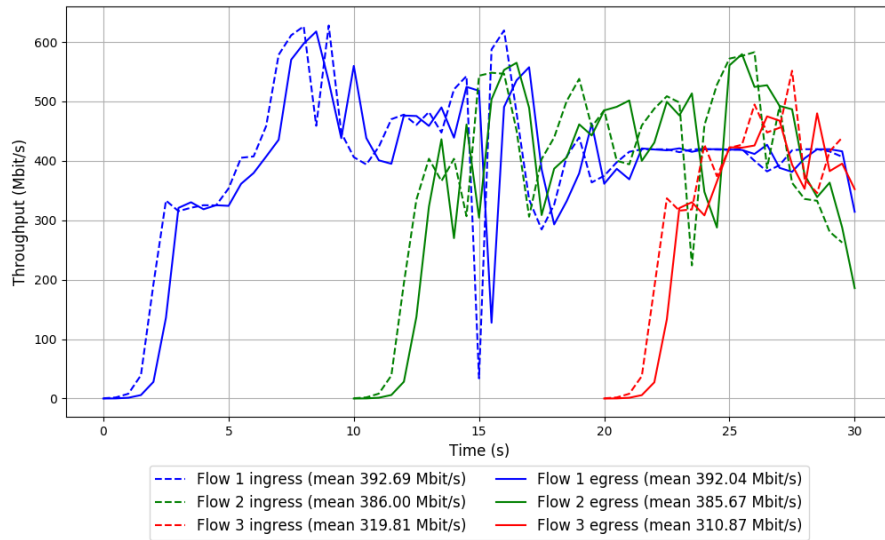
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 334.04 Mbit/s)   Flow 1 egress (mean 334.77 Mbit/s)
Flow 2 ingress (mean 312.20 Mbit/s)   Flow 2 egress (mean 309.56 Mbit/s)
Flow 3 ingress (mean 253.69 Mbit/s)   Flow 3 egress (mean 252.05 Mbit/s)

Flow 1 (95th percentile 112.78 ms)   Flow 2 (95th percentile 118.27 ms)   Flow 3 (95th percentile 109.92 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2019-04-23 23:40:22
End at: 2019-04-23 23:40:52
Local clock offset: -0.056 ms
Remote clock offset: 0.009 ms


# Below is generated by plot.py at 2019-04-24 01:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 678.15 Mbit/s
95th percentile per-packet one-way delay: 144.940 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 333.07 Mbit/s
95th percentile per-packet one-way delay: 112.934 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 395.46 Mbit/s
95th percentile per-packet one-way delay: 206.073 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 252.43 Mbit/s
95th percentile per-packet one-way delay: 110.322 ms
Loss rate: 2.81%
```

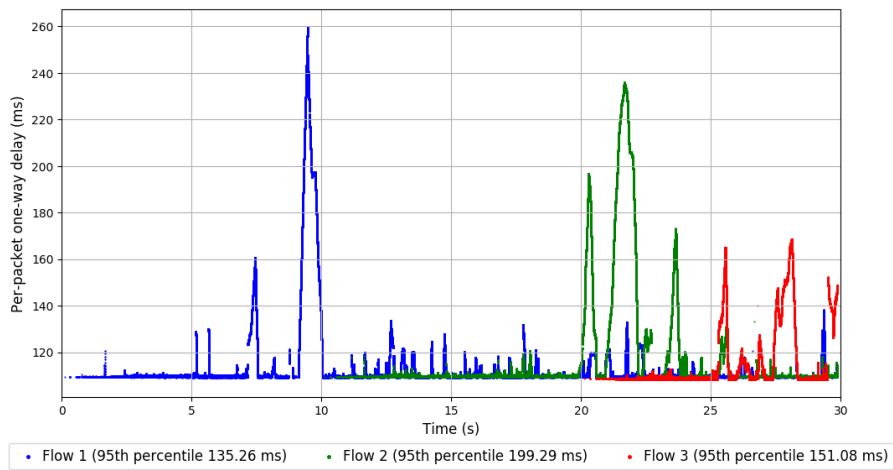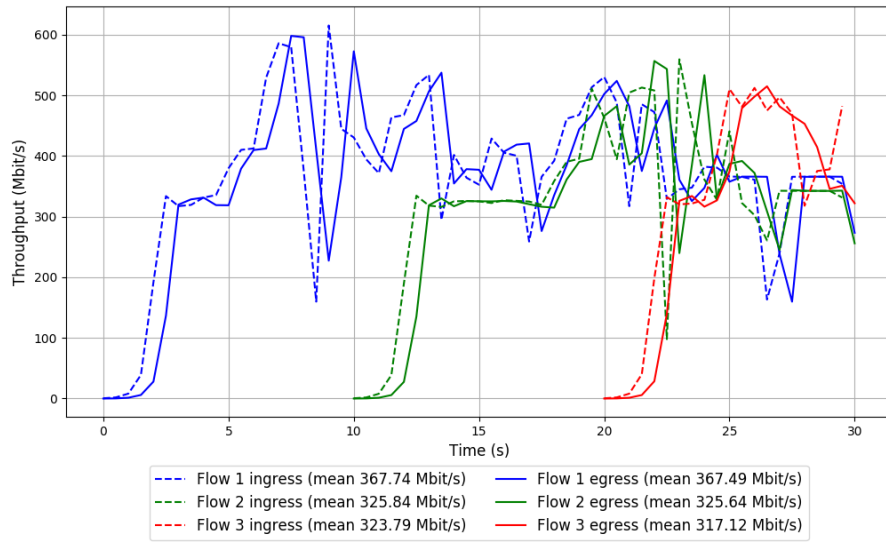Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-04-24 00:18:27
End at: 2019-04-24 00:18:57
Local clock offset: 0.012 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2019-04-24 01:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 749.86 Mbit/s
95th percentile per-packet one-way delay: 211.751 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 392.04 Mbit/s
95th percentile per-packet one-way delay: 166.181 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 385.67 Mbit/s
95th percentile per-packet one-way delay: 224.773 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 310.87 Mbit/s
95th percentile per-packet one-way delay: 254.731 ms
Loss rate: 4.94%
```
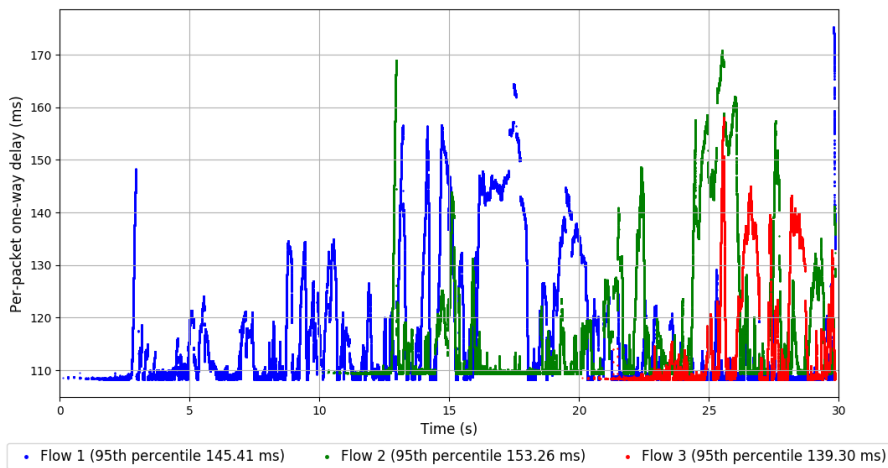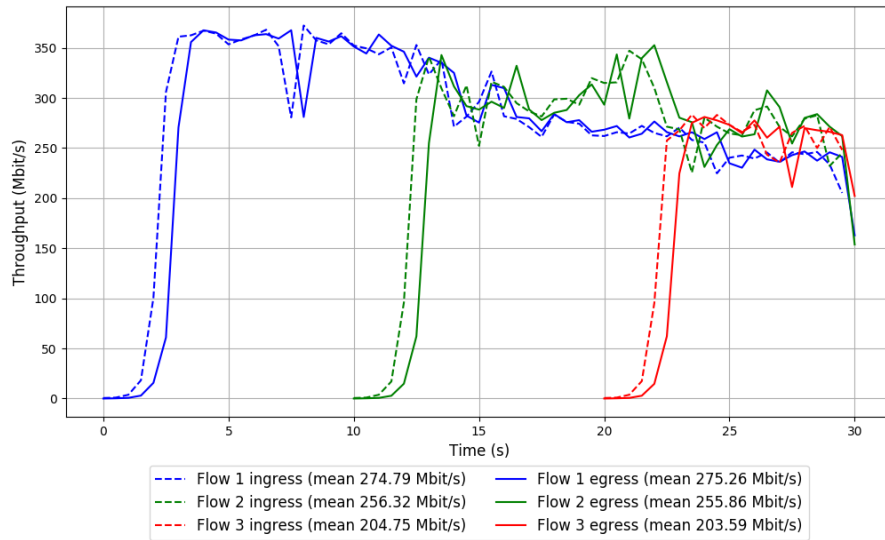
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 392.69 Mbit/s) --- Flow 1 egress (mean 392.04 Mbit/s)
Flow 2 ingress (mean 386.00 Mbit/s) --- Flow 2 egress (mean 385.67 Mbit/s)
Flow 3 ingress (mean 319.81 Mbit/s) --- Flow 3 egress (mean 310.87 Mbit/s)

Flow 1 (95th percentile 166.18 ms)   Flow 2 (95th percentile 224.77 ms)   Flow 3 (95th percentile 254.73 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-04-24 00:55:36
End at: 2019-04-24 00:56:06
Local clock offset: -0.1 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2019-04-24 01:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 687.43 Mbit/s
95th percentile per-packet one-way delay: 161.652 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 367.49 Mbit/s
95th percentile per-packet one-way delay: 135.263 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 325.64 Mbit/s
95th percentile per-packet one-way delay: 199.288 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 317.12 Mbit/s
95th percentile per-packet one-way delay: 151.084 ms
Loss rate: 4.21%
```
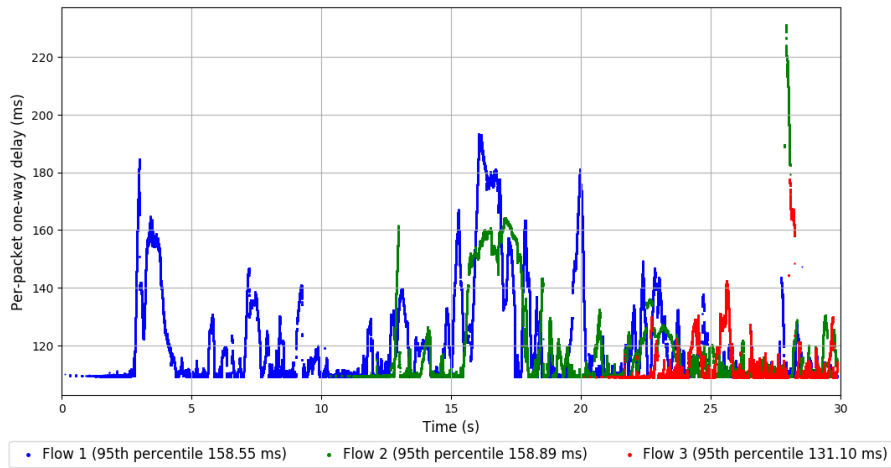
Run 5: Report of TCP BBR — Data Link

- - - - Flow 1 ingress (mean 367.74 Mbit/s) ——— Flow 1 egress (mean 367.49 Mbit/s)
- - - - Flow 2 ingress (mean 325.84 Mbit/s) ——— Flow 2 egress (mean 325.64 Mbit/s)
- - - - Flow 3 ingress (mean 323.79 Mbit/s) ——— Flow 3 egress (mean 317.12 Mbit/s)

• Flow 1 (95th percentile 135.26 ms)   • Flow 2 (95th percentile 199.29 ms)   • Flow 3 (95th percentile 151.08 ms)

```
Run 1: Statistics of Copa

Start at: 2019-04-23 22:32:27
End at: 2019-04-23 22:32:57
Local clock offset: 0.08 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2019-04-24 01:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.70 Mbit/s
95th percentile per-packet one-way delay: 146.337 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 275.26 Mbit/s
95th percentile per-packet one-way delay: 145.405 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 255.86 Mbit/s
95th percentile per-packet one-way delay: 153.259 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 203.59 Mbit/s
95th percentile per-packet one-way delay: 139.296 ms
Loss rate: 2.73%
```
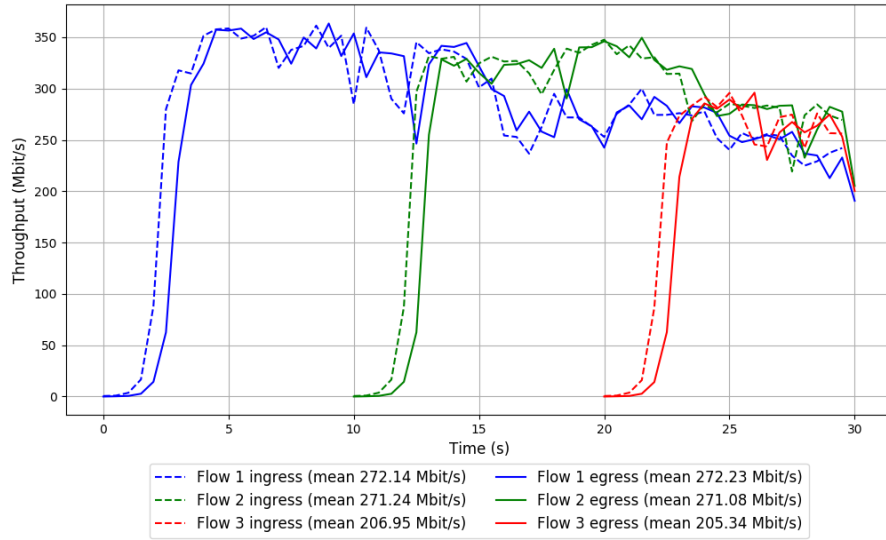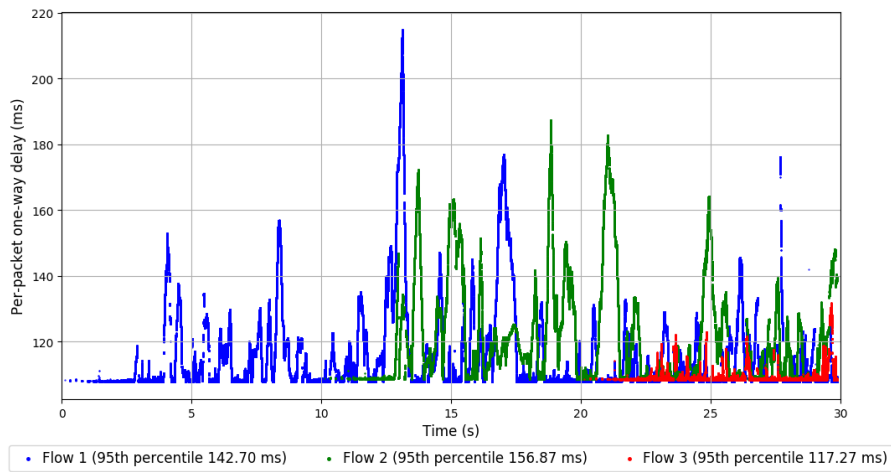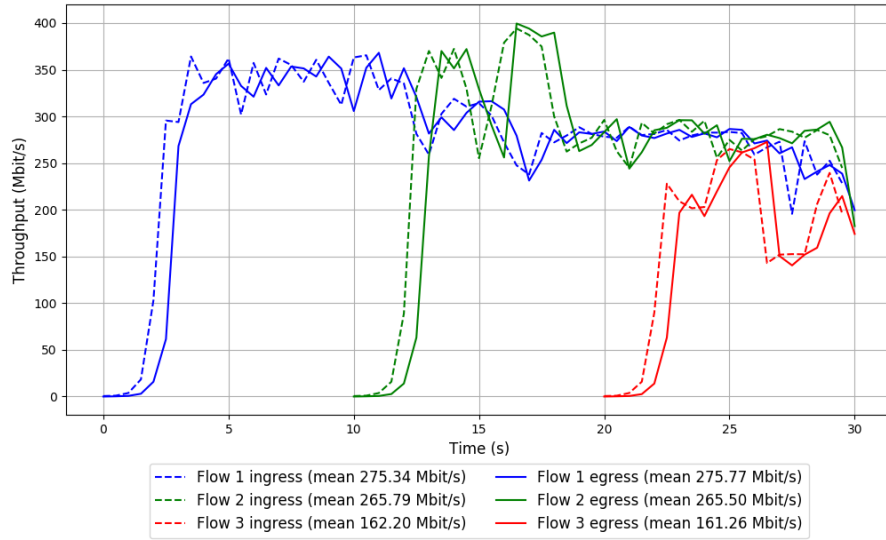
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-04-23 23:09:06
End at: 2019-04-23 23:09:36
Local clock offset: -0.003 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2019-04-24 01:47:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.35 Mbit/s
95th percentile per-packet one-way delay: 158.313 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 272.23 Mbit/s
95th percentile per-packet one-way delay: 158.549 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 271.08 Mbit/s
95th percentile per-packet one-way delay: 158.886 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 205.34 Mbit/s
95th percentile per-packet one-way delay: 131.105 ms
Loss rate: 2.96%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-04-23 23:46:17
End at: 2019-04-23 23:46:47
Local clock offset: -0.671 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2019-04-24 01:47:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.72 Mbit/s
95th percentile per-packet one-way delay: 147.988 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 275.77 Mbit/s
95th percentile per-packet one-way delay: 142.700 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 265.50 Mbit/s
95th percentile per-packet one-way delay: 156.873 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 161.26 Mbit/s
95th percentile per-packet one-way delay: 117.269 ms
Loss rate: 2.75%
```
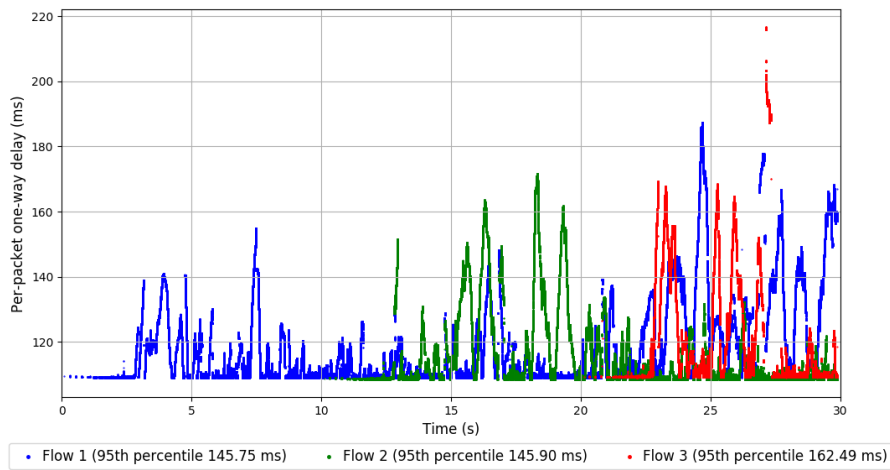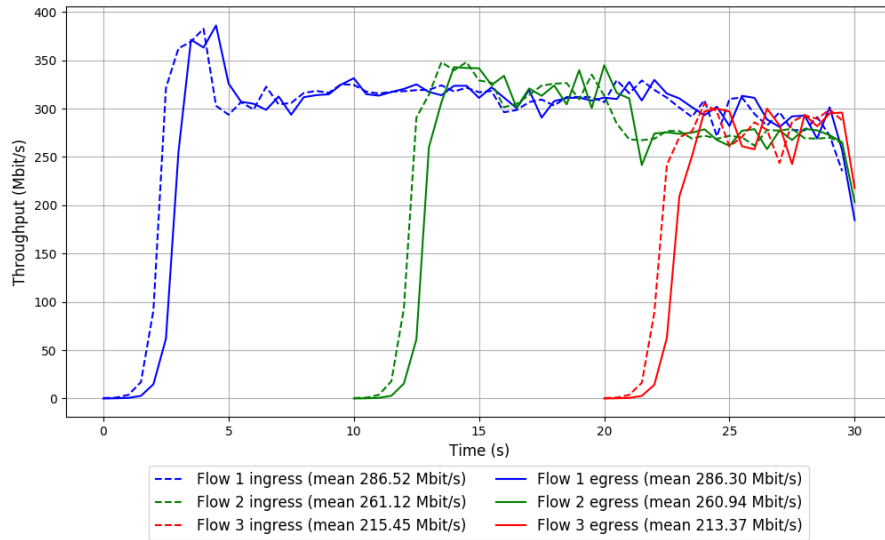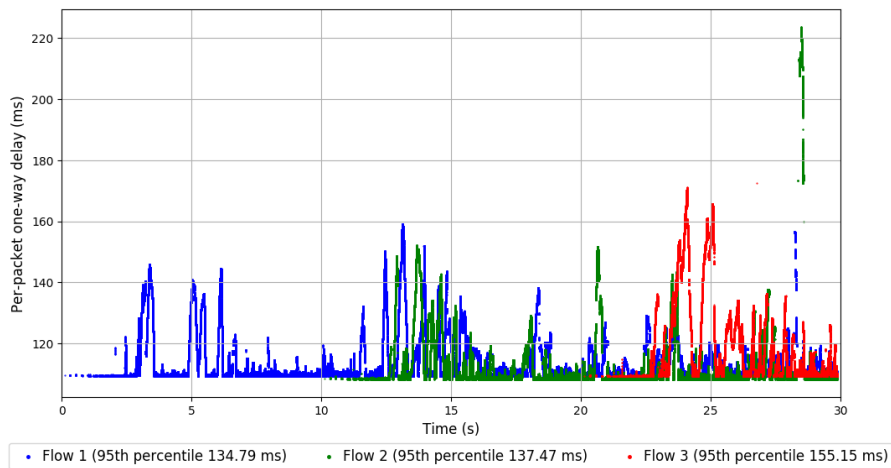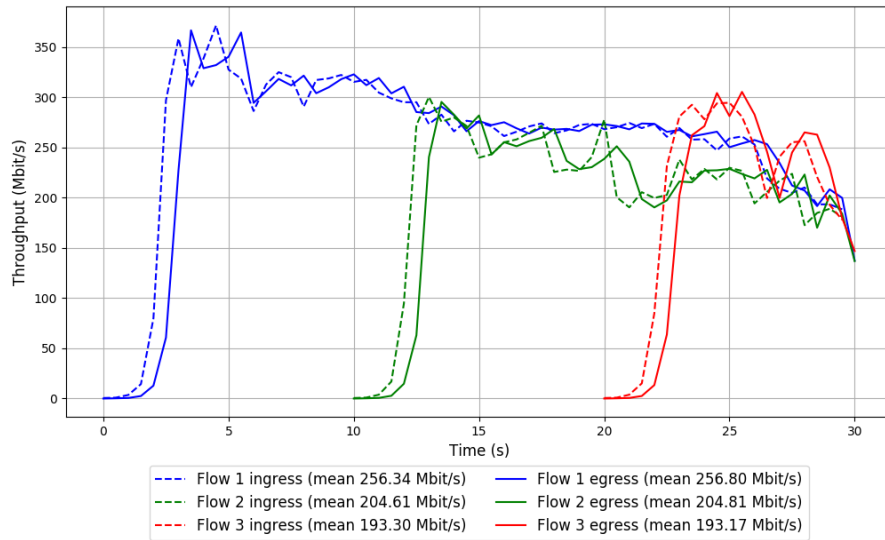
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-04-24 00:24:28
End at: 2019-04-24 00:24:58
Local clock offset: 0.079 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2019-04-24 02:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.47 Mbit/s
95th percentile per-packet one-way delay: 150.141 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 286.30 Mbit/s
95th percentile per-packet one-way delay: 145.752 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 260.94 Mbit/s
95th percentile per-packet one-way delay: 145.899 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 213.37 Mbit/s
95th percentile per-packet one-way delay: 162.486 ms
Loss rate: 3.10%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-04-24 01:01:43
End at: 2019-04-24 01:02:13
Local clock offset: -0.164 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-04-24 02:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.95 Mbit/s
95th percentile per-packet one-way delay: 138.634 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 256.80 Mbit/s
95th percentile per-packet one-way delay: 134.791 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 204.81 Mbit/s
95th percentile per-packet one-way delay: 137.468 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 193.17 Mbit/s
95th percentile per-packet one-way delay: 155.145 ms
Loss rate: 2.26%
```
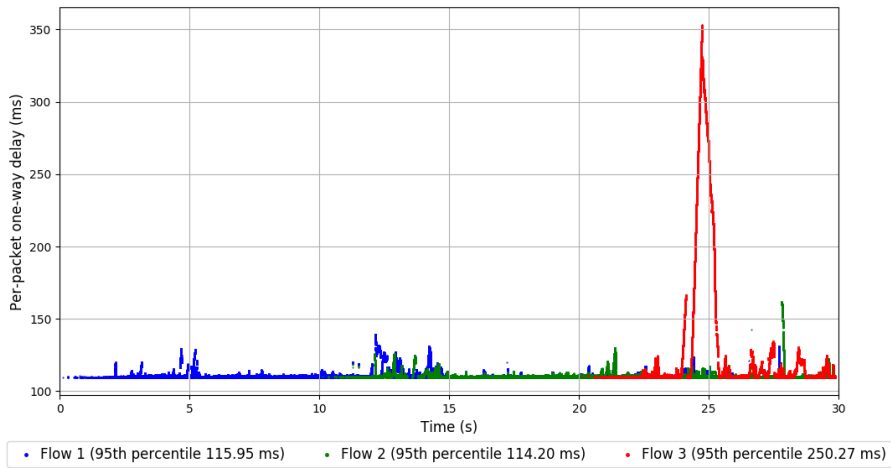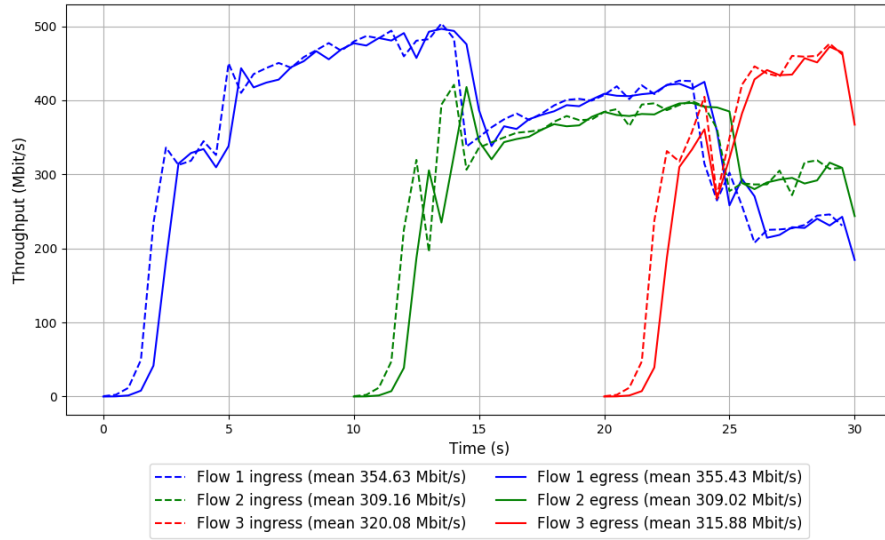
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-04-23 22:28:43
End at: 2019-04-23 22:29:13
Local clock offset: 0.026 ms
Remote clock offset: -0.044 ms


# Below is generated by plot.py at 2019-04-24 02:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 663.88 Mbit/s
95th percentile per-packet one-way delay: 121.427 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 355.43 Mbit/s
95th percentile per-packet one-way delay: 115.954 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 309.02 Mbit/s
95th percentile per-packet one-way delay: 114.199 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 315.88 Mbit/s
95th percentile per-packet one-way delay: 250.267 ms
Loss rate: 3.48%
```
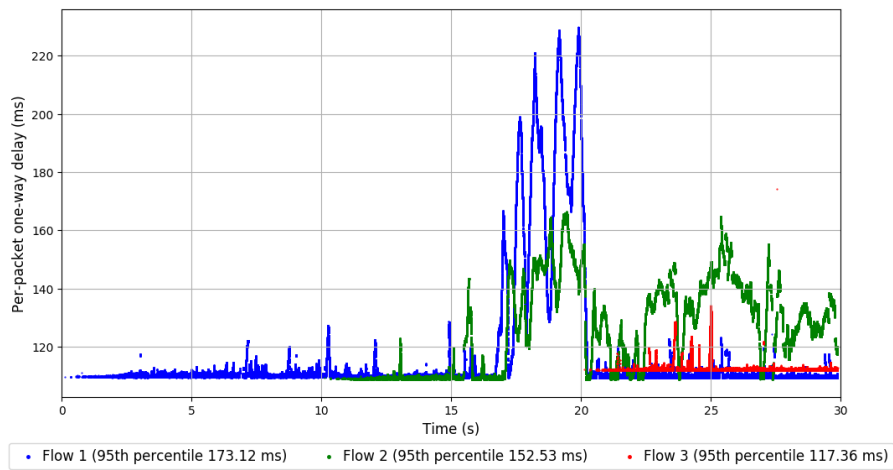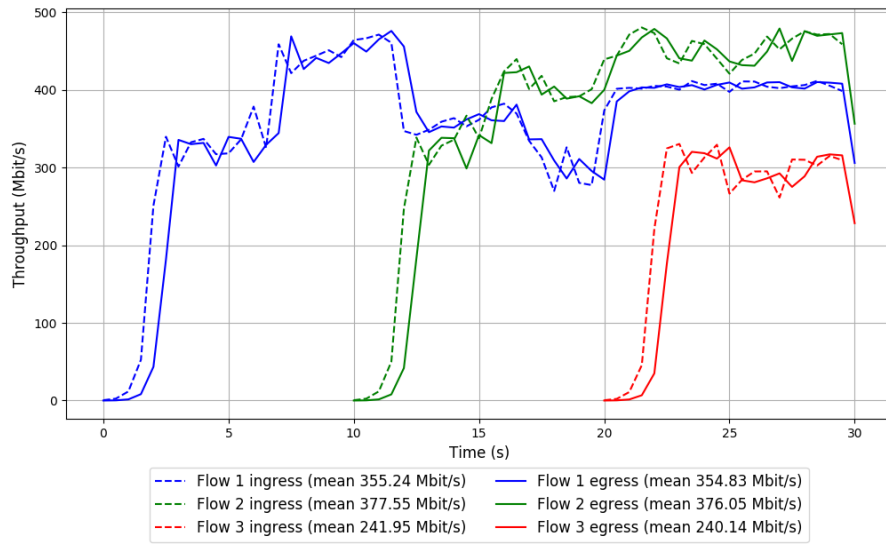
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-04-23 23:05:11
End at: 2019-04-23 23:05:41
Local clock offset: 0.566 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-04-24 02:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 683.05 Mbit/s
95th percentile per-packet one-way delay: 153.336 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 354.83 Mbit/s
95th percentile per-packet one-way delay: 173.115 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 376.05 Mbit/s
95th percentile per-packet one-way delay: 152.533 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 240.14 Mbit/s
95th percentile per-packet one-way delay: 117.355 ms
Loss rate: 2.94%
```
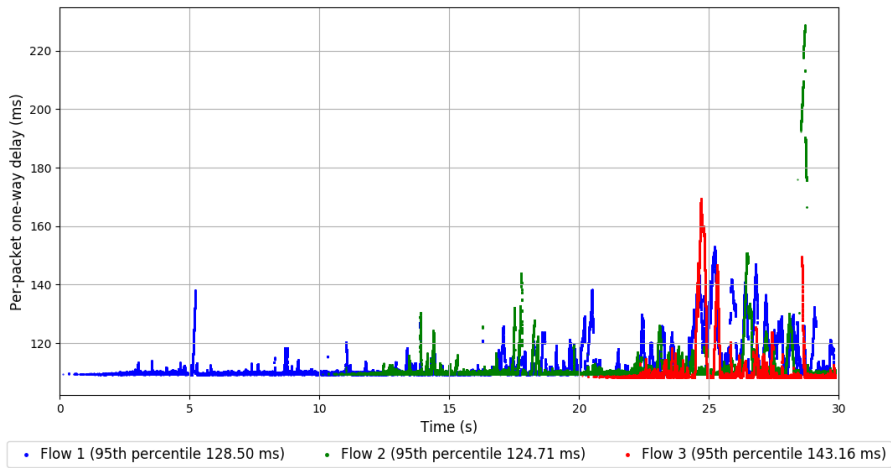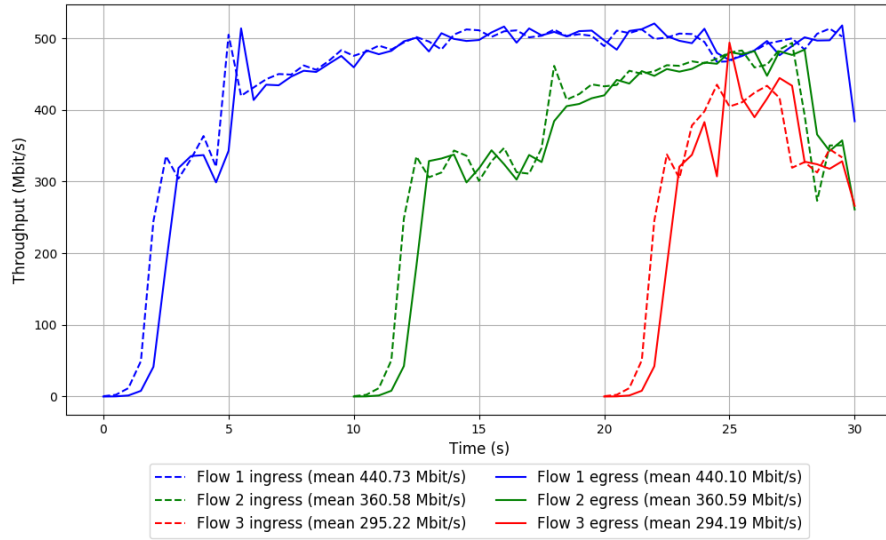
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 355.24 Mbit/s)   Flow 1 egress (mean 354.83 Mbit/s)
Flow 2 ingress (mean 377.55 Mbit/s)   Flow 2 egress (mean 376.05 Mbit/s)
Flow 3 ingress (mean 241.95 Mbit/s)   Flow 3 egress (mean 240.14 Mbit/s)

Flow 1 (95th percentile 173.12 ms)   Flow 2 (95th percentile 152.53 ms)   Flow 3 (95th percentile 117.36 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-04-23 23:42:24
End at: 2019-04-23 23:42:54
Local clock offset: -0.152 ms
Remote clock offset: 0.006 ms


# Below is generated by plot.py at 2019-04-24 02:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 775.93 Mbit/s
95th percentile per-packet one-way delay: 128.784 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 440.10 Mbit/s
95th percentile per-packet one-way delay: 128.504 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 360.59 Mbit/s
95th percentile per-packet one-way delay: 124.714 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 294.19 Mbit/s
95th percentile per-packet one-way delay: 143.161 ms
Loss rate: 2.57%
```

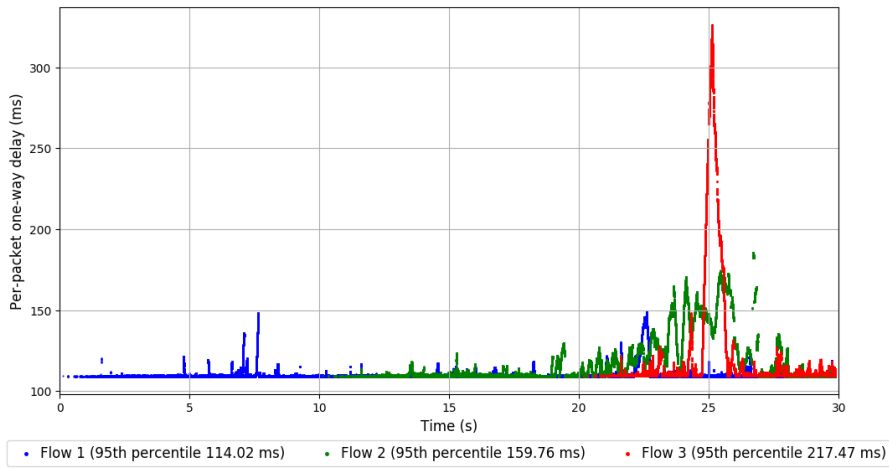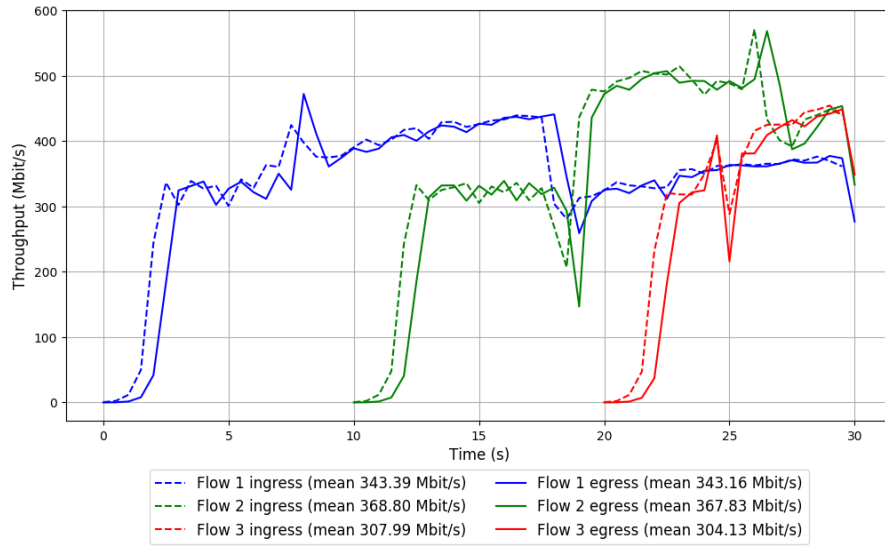Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 440.73 Mbit/s) ---- Flow 1 egress (mean 440.10 Mbit/s) ——
Flow 2 ingress (mean 360.58 Mbit/s) ---- Flow 2 egress (mean 360.59 Mbit/s) ——
Flow 3 ingress (mean 295.22 Mbit/s) ---- Flow 3 egress (mean 294.19 Mbit/s) ——

• Flow 1 (95th percentile 128.50 ms)   • Flow 2 (95th percentile 124.71 ms)   • Flow 3 (95th percentile 143.16 ms)
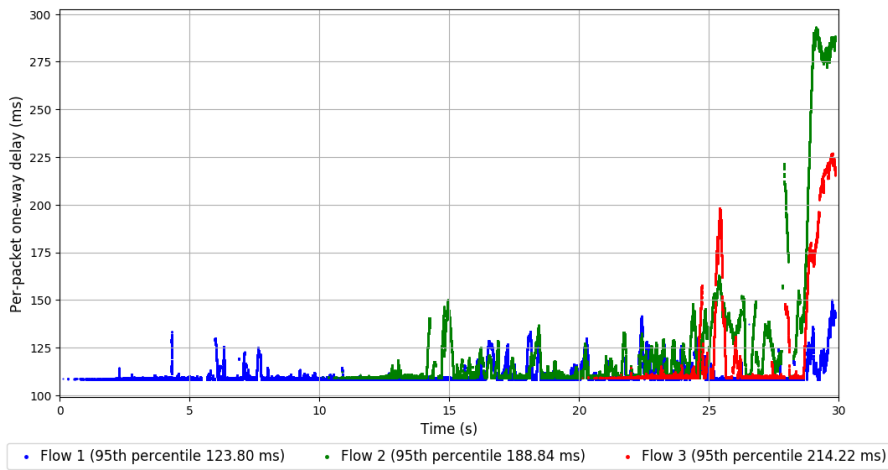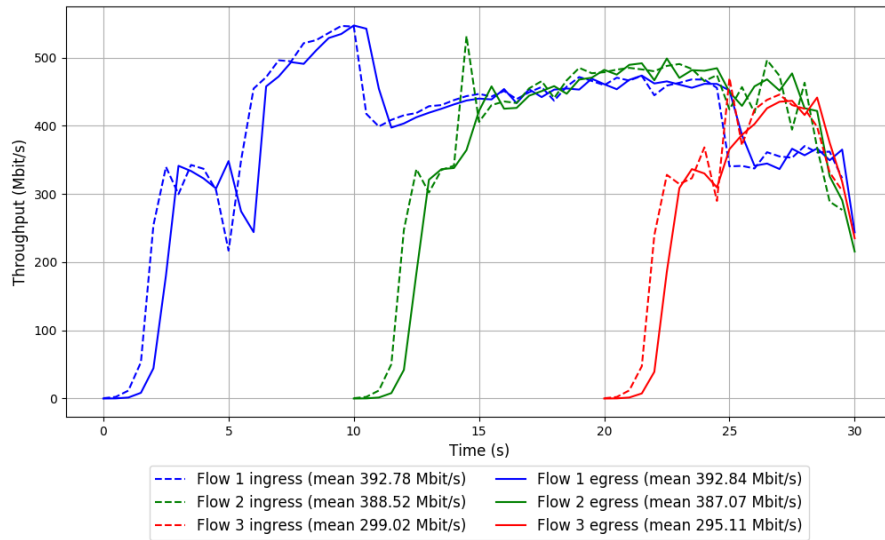
```
Run 4: Statistics of TCP Cubic

Start at: 2019-04-24 00:20:41
End at: 2019-04-24 00:21:11
Local clock offset: 0.083 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2019-04-24 02:00:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.89 Mbit/s
95th percentile per-packet one-way delay: 147.318 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 343.16 Mbit/s
95th percentile per-packet one-way delay: 114.020 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 367.83 Mbit/s
95th percentile per-packet one-way delay: 159.760 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 304.13 Mbit/s
95th percentile per-packet one-way delay: 217.475 ms
Loss rate: 3.42%
```

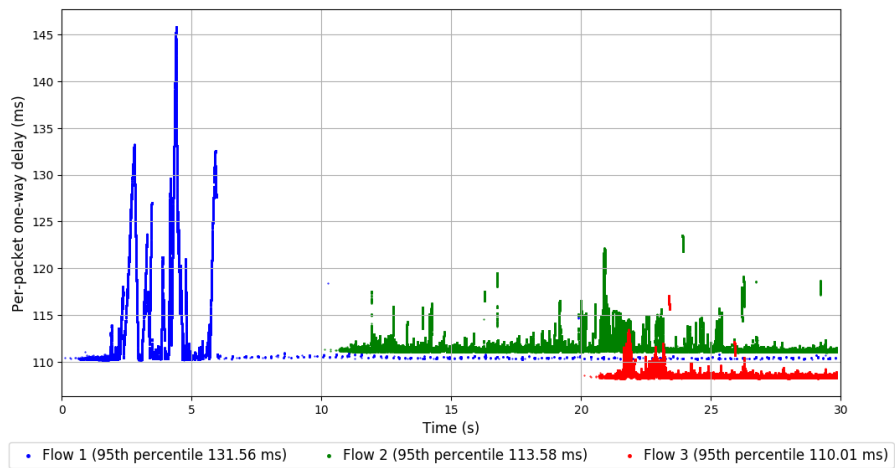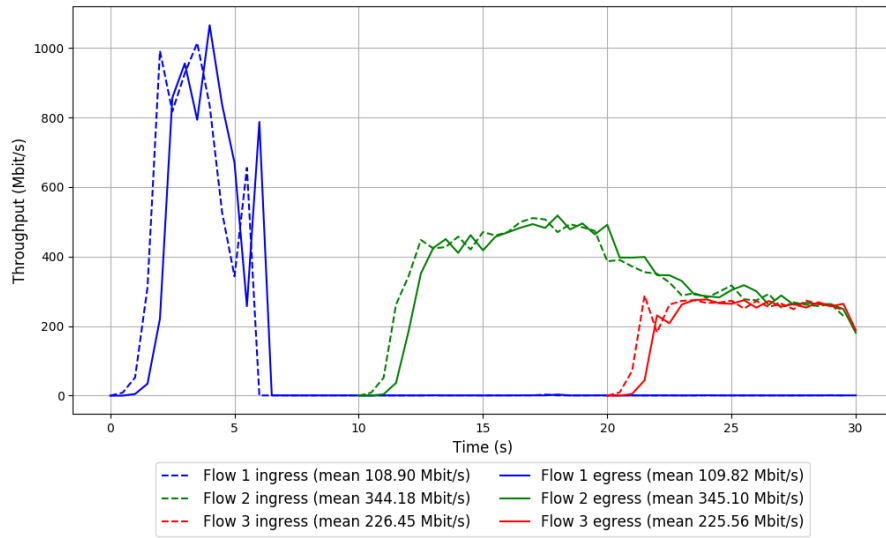Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 343.39 Mbit/s)   Flow 1 egress (mean 343.16 Mbit/s)
Flow 2 ingress (mean 368.80 Mbit/s)   Flow 2 egress (mean 367.83 Mbit/s)
Flow 3 ingress (mean 307.99 Mbit/s)   Flow 3 egress (mean 304.13 Mbit/s)

Flow 1 (95th percentile 114.02 ms)   Flow 2 (95th percentile 159.76 ms)   Flow 3 (95th percentile 217.47 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-04-24 00:57:46
End at: 2019-04-24 00:58:16
Local clock offset: -0.193 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2019-04-24 02:01:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 746.50 Mbit/s
95th percentile per-packet one-way delay: 150.726 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 392.84 Mbit/s
95th percentile per-packet one-way delay: 123.799 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 387.07 Mbit/s
95th percentile per-packet one-way delay: 188.843 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 295.11 Mbit/s
95th percentile per-packet one-way delay: 214.216 ms
Loss rate: 3.47%
```

Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2019-04-23 22:38:06
End at: 2019-04-23 22:38:36
Local clock offset: -0.056 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2019-04-24 02:01:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.03 Mbit/s
95th percentile per-packet one-way delay: 123.431 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 109.82 Mbit/s
95th percentile per-packet one-way delay: 131.565 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 345.10 Mbit/s
95th percentile per-packet one-way delay: 113.584 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 225.56 Mbit/s
95th percentile per-packet one-way delay: 110.008 ms
Loss rate: 2.59%
```
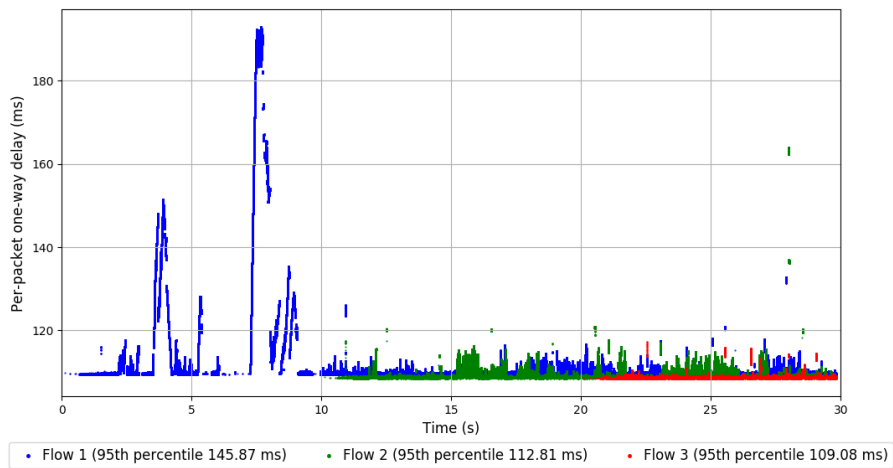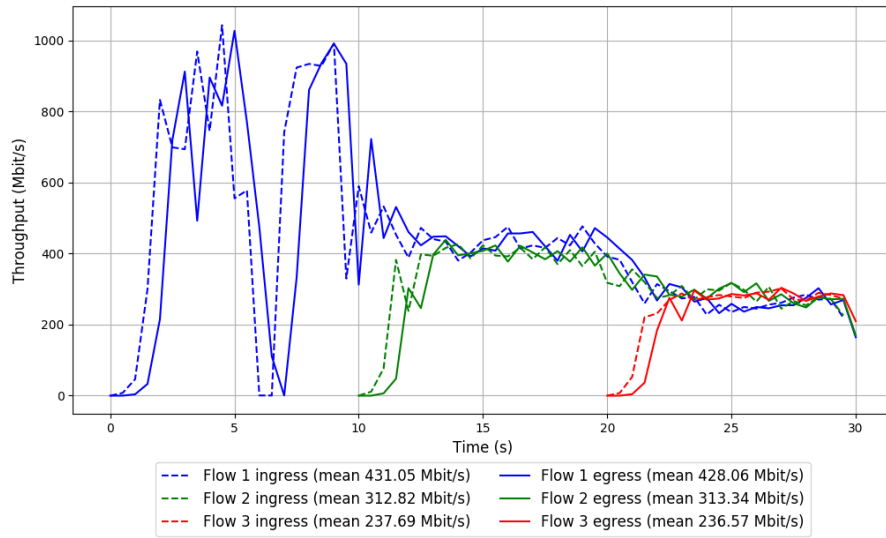
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 108.90 Mbit/s)   Flow 1 egress (mean 109.82 Mbit/s)
Flow 2 ingress (mean 344.18 Mbit/s)   Flow 2 egress (mean 345.10 Mbit/s)
Flow 3 ingress (mean 226.45 Mbit/s)   Flow 3 egress (mean 225.56 Mbit/s)

Flow 1 (95th percentile 131.56 ms)   Flow 2 (95th percentile 113.58 ms)   Flow 3 (95th percentile 110.01 ms)

```
Run 2: Statistics of FillP

Start at: 2019-04-23 23:14:52
End at: 2019-04-23 23:15:22
Local clock offset: 0.021 ms
Remote clock offset: 0.073 ms


# Below is generated by plot.py at 2019-04-24 02:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 713.00 Mbit/s
95th percentile per-packet one-way delay: 129.294 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 428.06 Mbit/s
95th percentile per-packet one-way delay: 145.869 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 313.34 Mbit/s
95th percentile per-packet one-way delay: 112.805 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 236.57 Mbit/s
95th percentile per-packet one-way delay: 109.083 ms
Loss rate: 2.71%
```
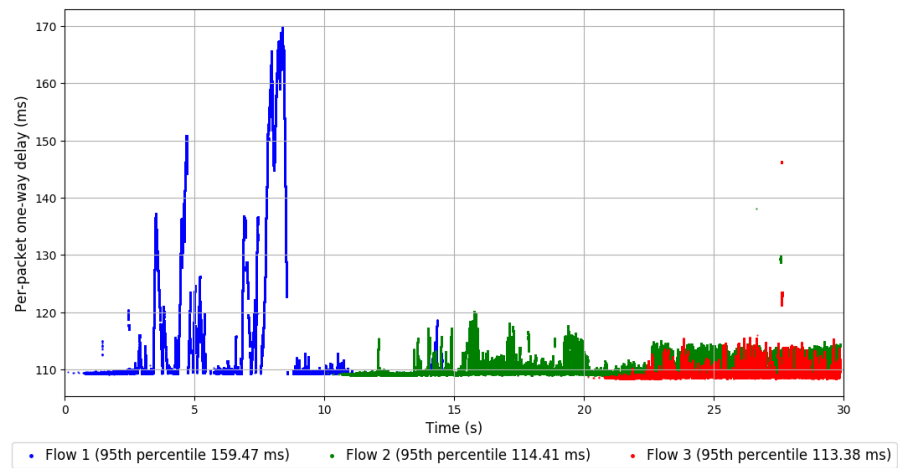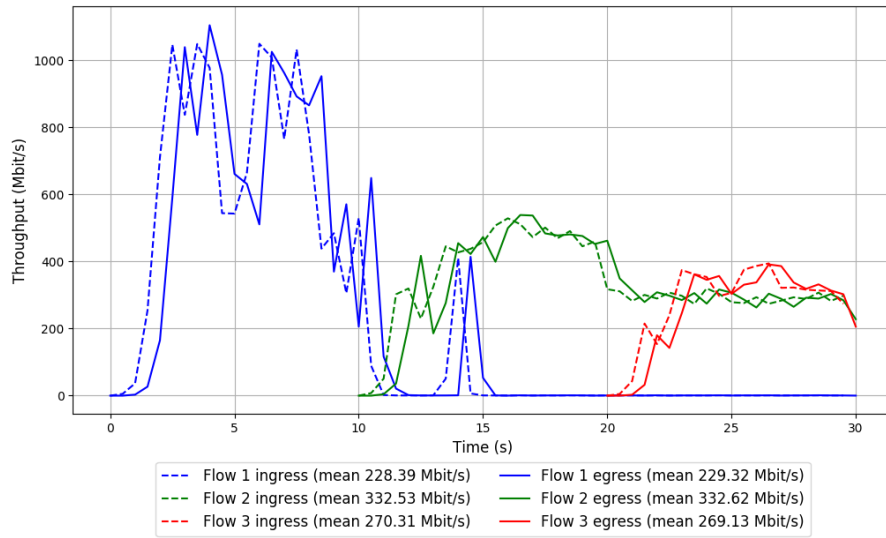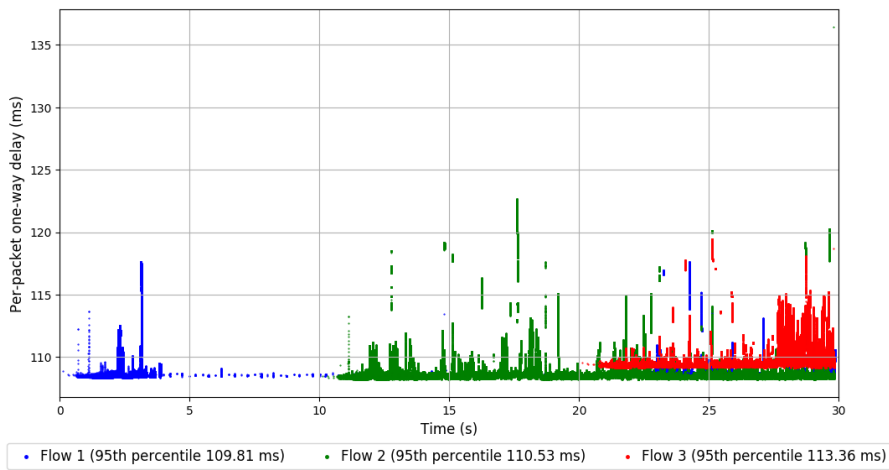
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-04-23 23:52:45
End at: 2019-04-23 23:53:15
Local clock offset: -0.131 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2019-04-24 02:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.92 Mbit/s
95th percentile per-packet one-way delay: 137.238 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 229.32 Mbit/s
95th percentile per-packet one-way delay: 159.472 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 332.62 Mbit/s
95th percentile per-packet one-way delay: 114.406 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 269.13 Mbit/s
95th percentile per-packet one-way delay: 113.376 ms
Loss rate: 2.63%
```
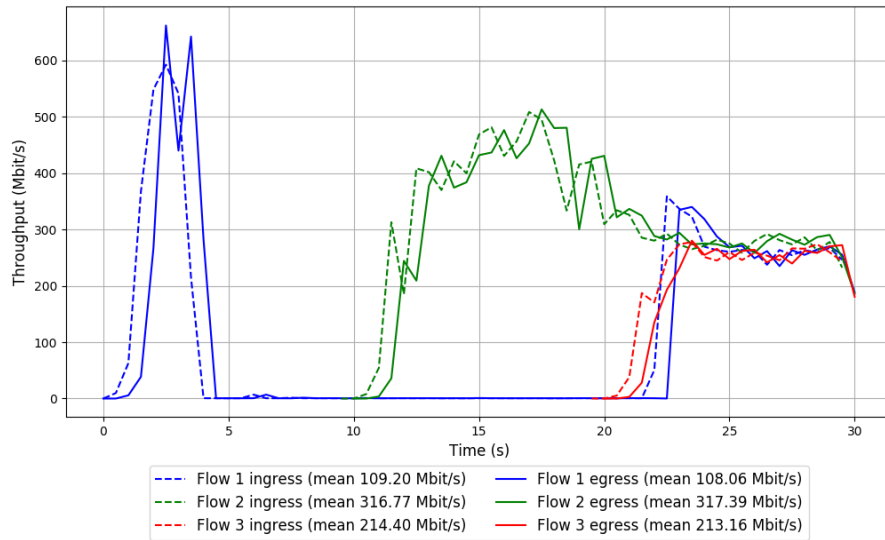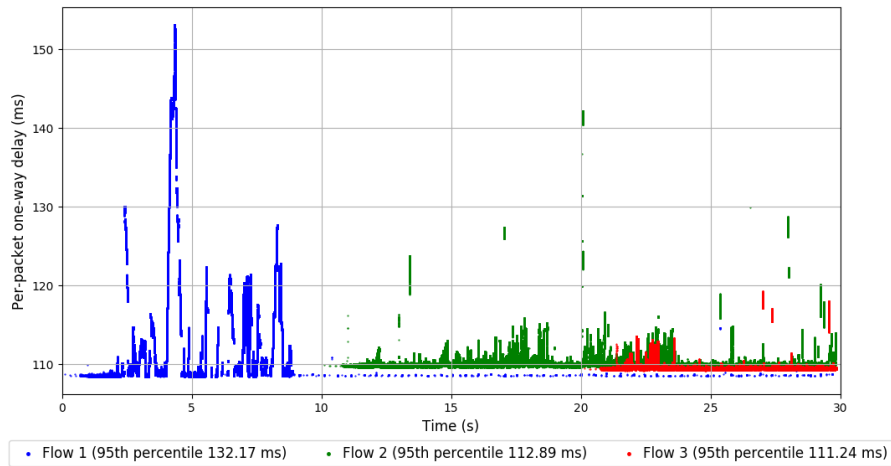
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 228.39 Mbit/s) ---- Flow 1 egress (mean 229.32 Mbit/s)
Flow 2 ingress (mean 332.53 Mbit/s) ---- Flow 2 egress (mean 332.62 Mbit/s)
Flow 3 ingress (mean 270.31 Mbit/s) ---- Flow 3 egress (mean 269.13 Mbit/s)

Flow 1 (95th percentile 159.47 ms)   Flow 2 (95th percentile 114.41 ms)   Flow 3 (95th percentile 113.38 ms)

```
Run 4: Statistics of FillP

Start at: 2019-04-24 00:30:08
End at: 2019-04-24 00:30:38
Local clock offset: 0.095 ms
Remote clock offset: 0.059 ms


# Below is generated by plot.py at 2019-04-24 02:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.30 Mbit/s
95th percentile per-packet one-way delay: 111.361 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 108.06 Mbit/s
95th percentile per-packet one-way delay: 109.810 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 317.39 Mbit/s
95th percentile per-packet one-way delay: 110.530 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 213.16 Mbit/s
95th percentile per-packet one-way delay: 113.363 ms
Loss rate: 2.89%
```
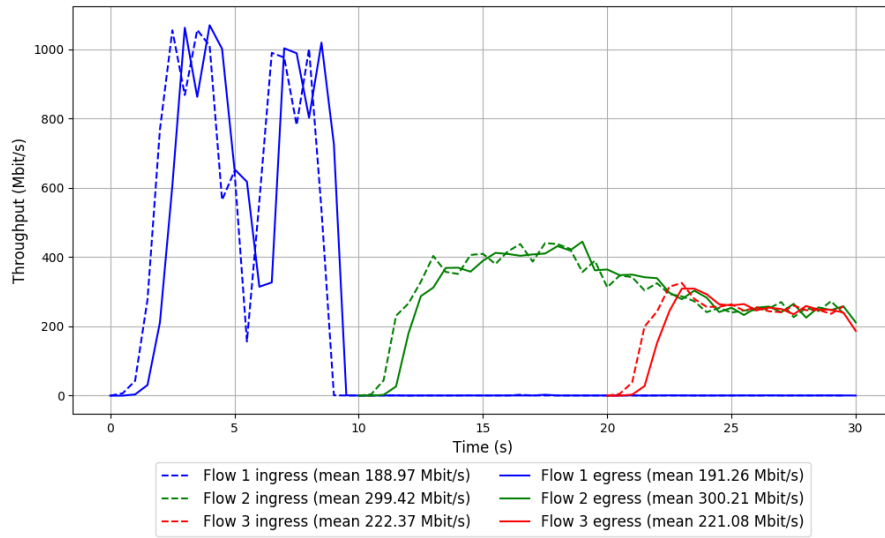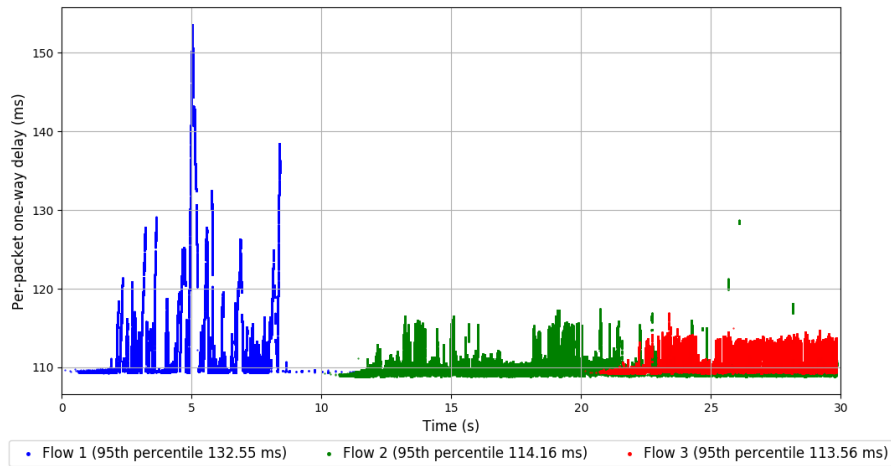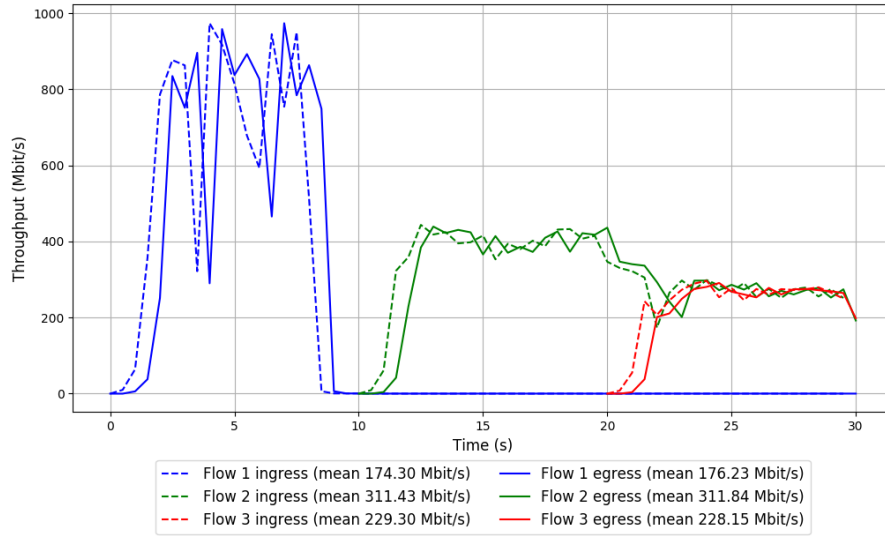
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-04-24 01:07:29
End at: 2019-04-24 01:07:59
Local clock offset: 0.057 ms
Remote clock offset: -0.046 ms


# Below is generated by plot.py at 2019-04-24 02:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.49 Mbit/s
95th percentile per-packet one-way delay: 122.311 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 191.26 Mbit/s
95th percentile per-packet one-way delay: 132.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.21 Mbit/s
95th percentile per-packet one-way delay: 112.892 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 221.08 Mbit/s
95th percentile per-packet one-way delay: 111.242 ms
Loss rate: 2.75%
```

Run 5: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-04-23 22:10:58
End at: 2019-04-23 22:11:28
Local clock offset: 0.048 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2019-04-24 02:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.56 Mbit/s
95th percentile per-packet one-way delay: 123.306 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 176.23 Mbit/s
95th percentile per-packet one-way delay: 132.553 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 311.84 Mbit/s
95th percentile per-packet one-way delay: 114.156 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 228.15 Mbit/s
95th percentile per-packet one-way delay: 113.556 ms
Loss rate: 2.69%
```
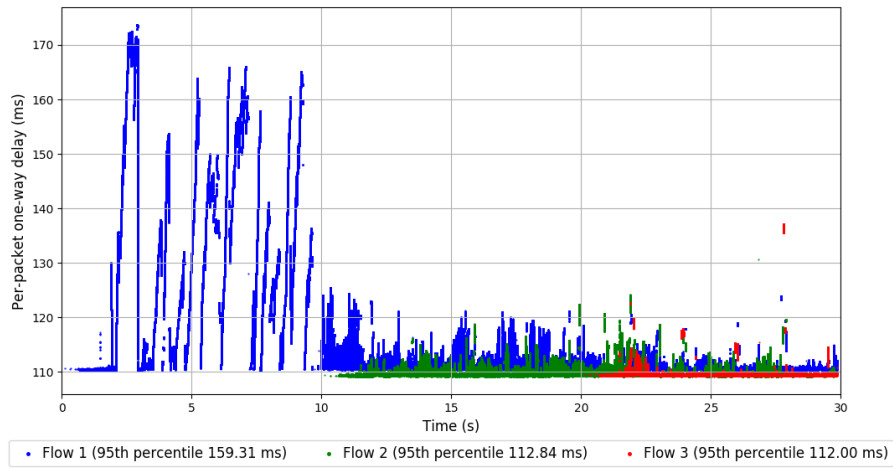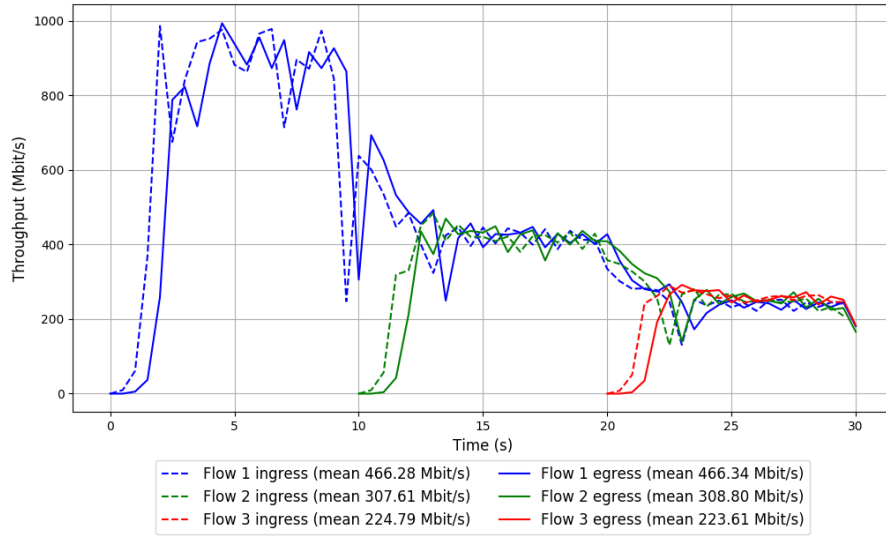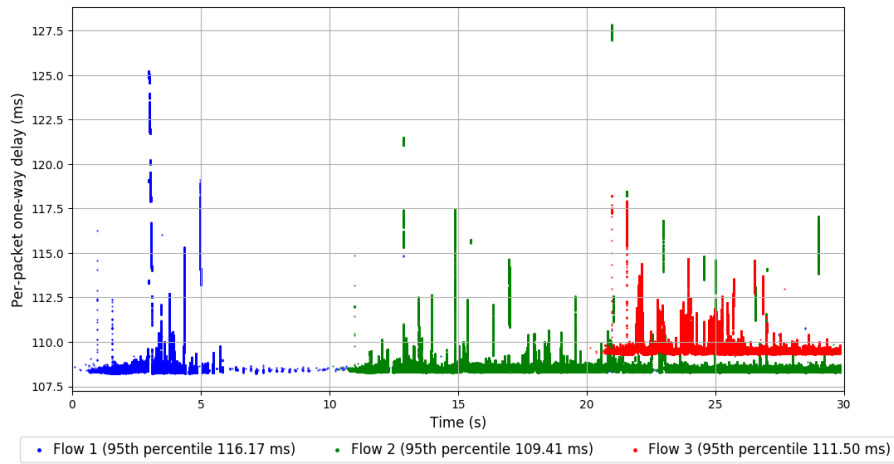
Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 174.30 Mbit/s)   Flow 1 egress (mean 176.23 Mbit/s)
Flow 2 ingress (mean 311.43 Mbit/s)   Flow 2 egress (mean 311.84 Mbit/s)
Flow 3 ingress (mean 229.30 Mbit/s)   Flow 3 egress (mean 228.15 Mbit/s)

Flow 1 (95th percentile 132.55 ms)   Flow 2 (95th percentile 114.16 ms)   Flow 3 (95th percentile 113.56 ms)

46

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-04-23 22:47:21
End at: 2019-04-23 22:47:51
Local clock offset: 0.073 ms
Remote clock offset: -0.09 ms


# Below is generated by plot.py at 2019-04-24 02:16:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 743.85 Mbit/s
95th percentile per-packet one-way delay: 154.115 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 466.34 Mbit/s
95th percentile per-packet one-way delay: 159.314 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 308.80 Mbit/s
95th percentile per-packet one-way delay: 112.837 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 223.61 Mbit/s
95th percentile per-packet one-way delay: 111.998 ms
Loss rate: 2.70%
```
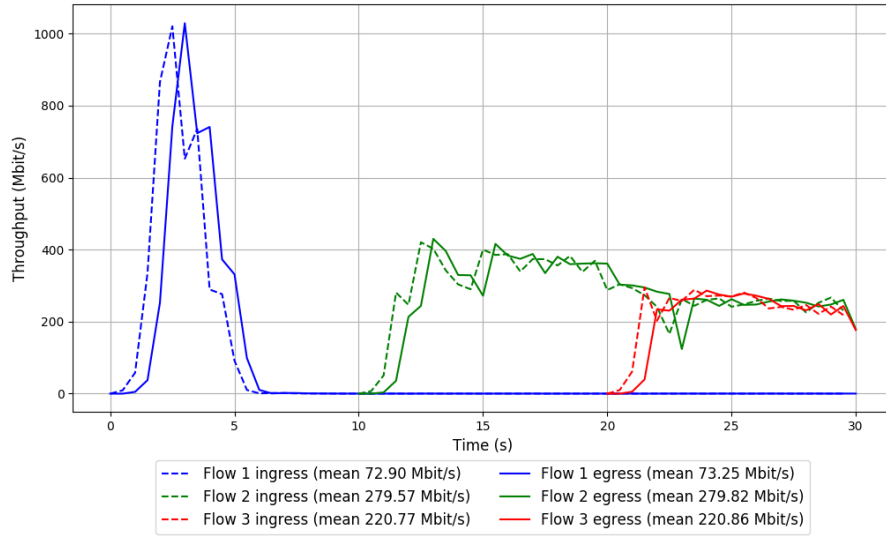
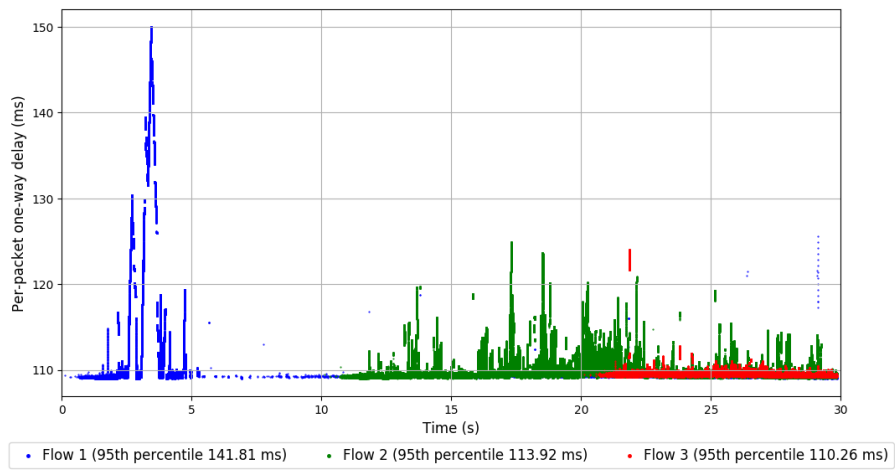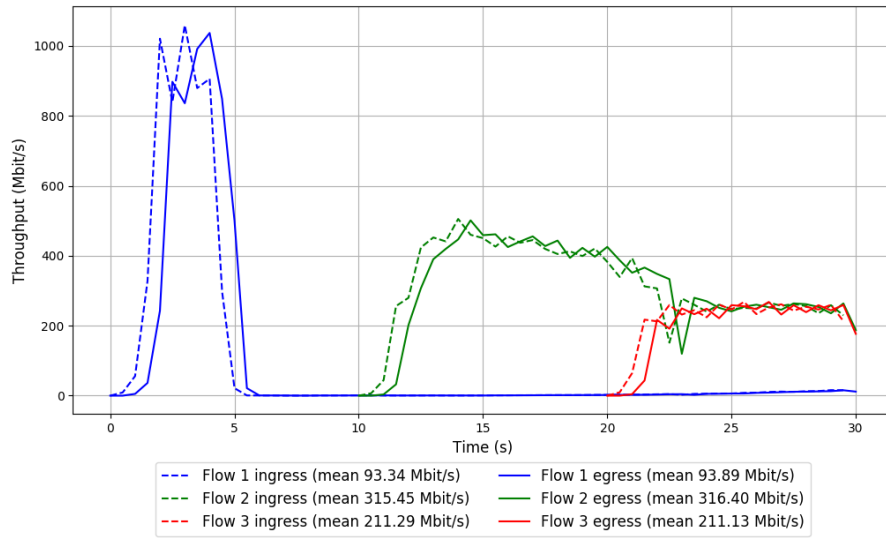# Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 466.28 Mbit/s) --- Flow 1 egress (mean 466.34 Mbit/s)
Flow 2 ingress (mean 307.61 Mbit/s) --- Flow 2 egress (mean 308.80 Mbit/s)
Flow 3 ingress (mean 224.79 Mbit/s) --- Flow 3 egress (mean 223.61 Mbit/s)

Flow 1 (95th percentile 159.31 ms)   Flow 2 (95th percentile 112.84 ms)   Flow 3 (95th percentile 112.00 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-04-23 23:24:40
End at: 2019-04-23 23:25:10
Local clock offset: -0.012 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2019-04-24 02:16:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.91 Mbit/s
95th percentile per-packet one-way delay: 110.998 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 73.25 Mbit/s
95th percentile per-packet one-way delay: 116.166 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 279.82 Mbit/s
95th percentile per-packet one-way delay: 109.405 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 220.86 Mbit/s
95th percentile per-packet one-way delay: 111.495 ms
Loss rate: 2.12%
```

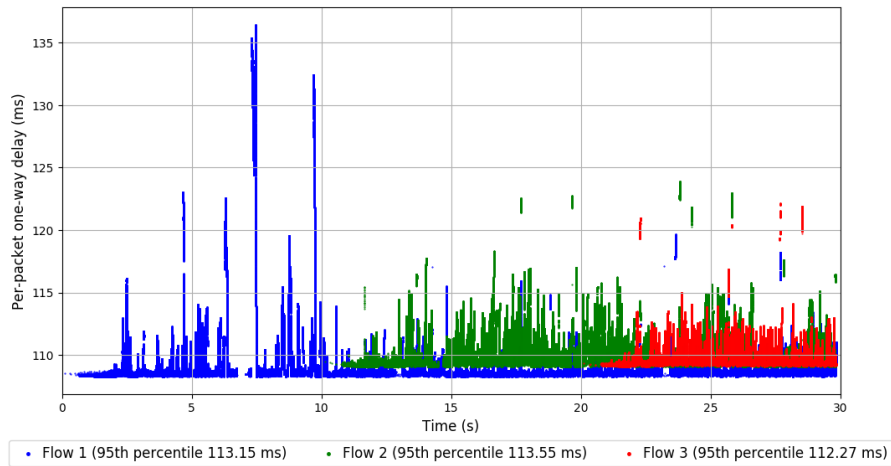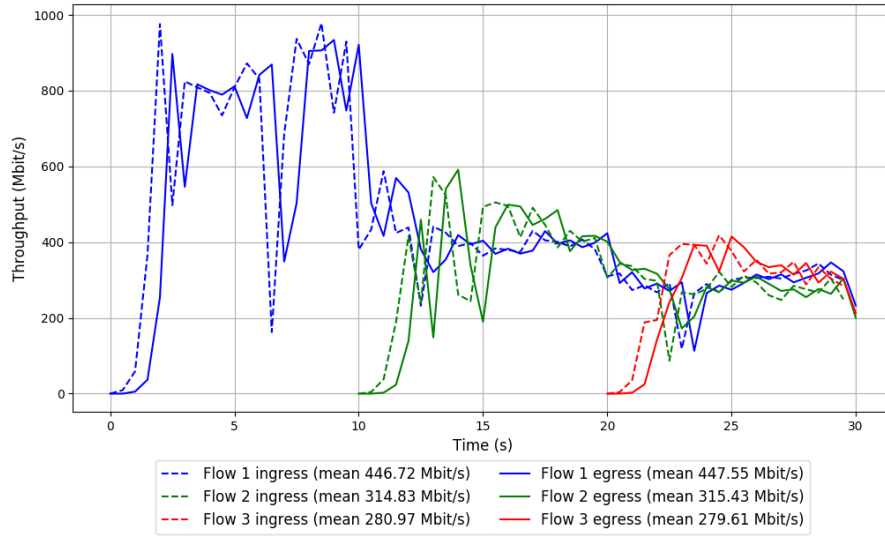Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-04-24 00:02:09
End at: 2019-04-24 00:02:39
Local clock offset: -0.085 ms
Remote clock offset: -0.004 ms


# Below is generated by plot.py at 2019-04-24 02:16:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.68 Mbit/s
95th percentile per-packet one-way delay: 127.174 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 141.807 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 316.40 Mbit/s
95th percentile per-packet one-way delay: 113.923 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 211.13 Mbit/s
95th percentile per-packet one-way delay: 110.262 ms
Loss rate: 2.28%
```

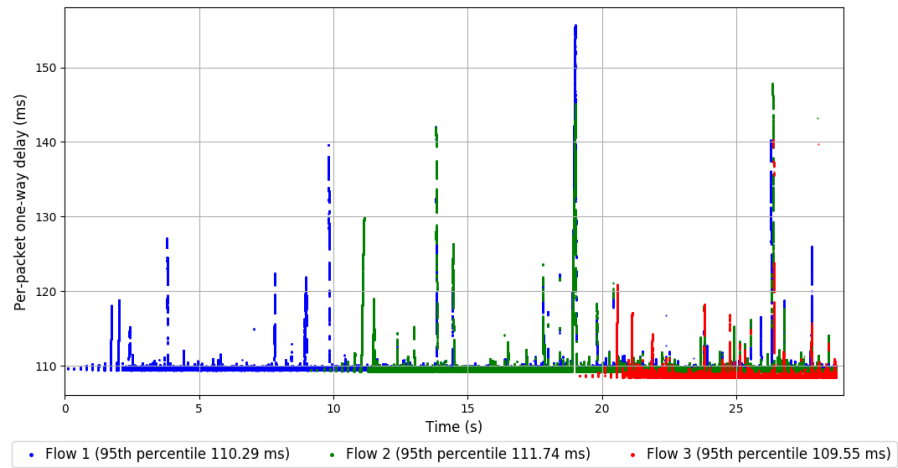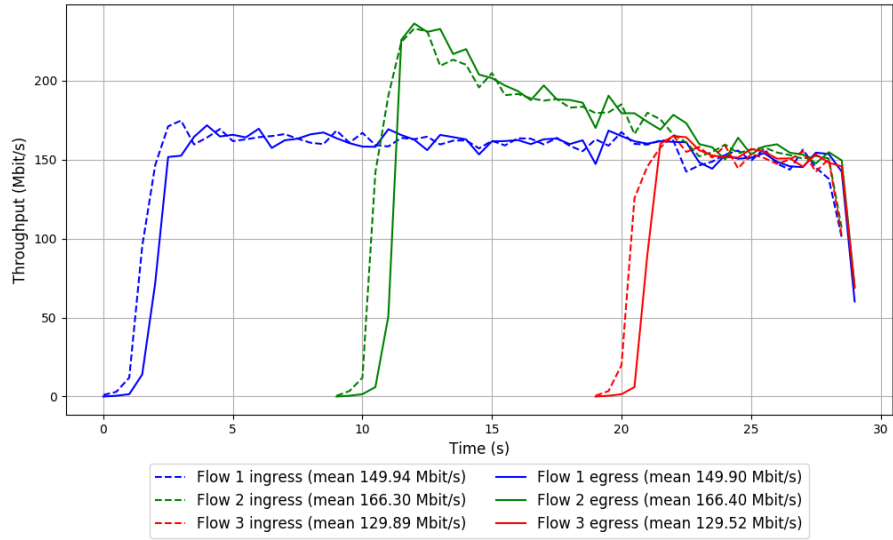Run 4: Report of FillP-Sheep — Data Link

- - - Flow 1 ingress (mean 93.34 Mbit/s)   —— Flow 1 egress (mean 93.89 Mbit/s)
- - - Flow 2 ingress (mean 315.45 Mbit/s)   —— Flow 2 egress (mean 316.40 Mbit/s)
- - - Flow 3 ingress (mean 211.29 Mbit/s)   —— Flow 3 egress (mean 211.13 Mbit/s)

• Flow 1 (95th percentile 141.81 ms)   • Flow 2 (95th percentile 113.92 ms)   • Flow 3 (95th percentile 110.26 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-04-24 00:39:28
End at: 2019-04-24 00:39:58
Local clock offset: -0.08 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 747.79 Mbit/s
95th percentile per-packet one-way delay: 113.175 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 447.55 Mbit/s
95th percentile per-packet one-way delay: 113.152 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 315.43 Mbit/s
95th percentile per-packet one-way delay: 113.549 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 279.61 Mbit/s
95th percentile per-packet one-way delay: 112.269 ms
Loss rate: 2.69%
```
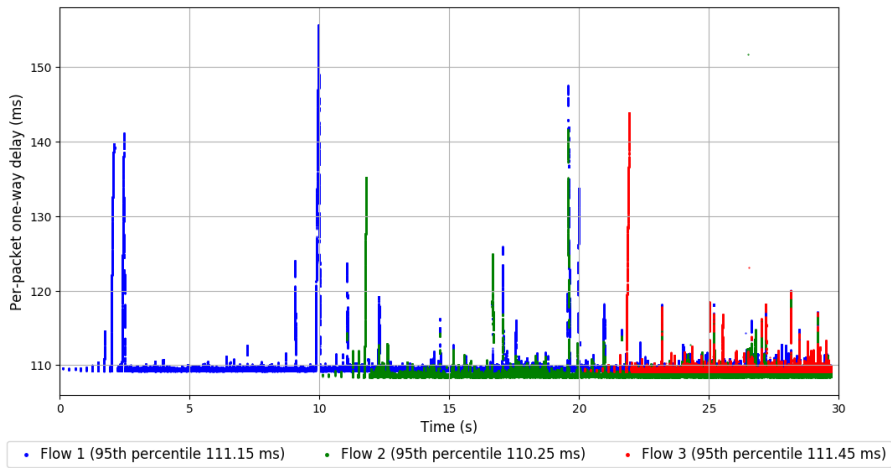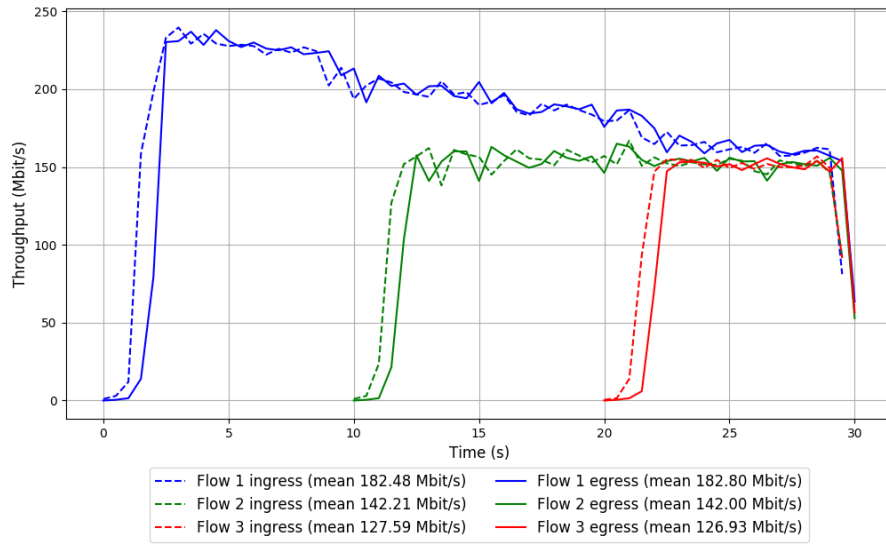
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-04-23 22:21:25
End at: 2019-04-23 22:21:55
Local clock offset: 0.171 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.84 Mbit/s
95th percentile per-packet one-way delay: 110.645 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 149.90 Mbit/s
95th percentile per-packet one-way delay: 110.291 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 166.40 Mbit/s
95th percentile per-packet one-way delay: 111.742 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 129.52 Mbit/s
95th percentile per-packet one-way delay: 109.549 ms
Loss rate: 2.51%
```
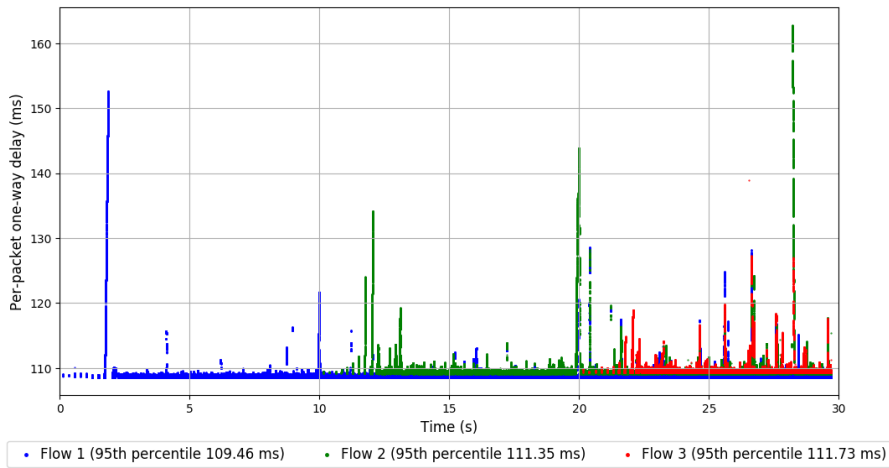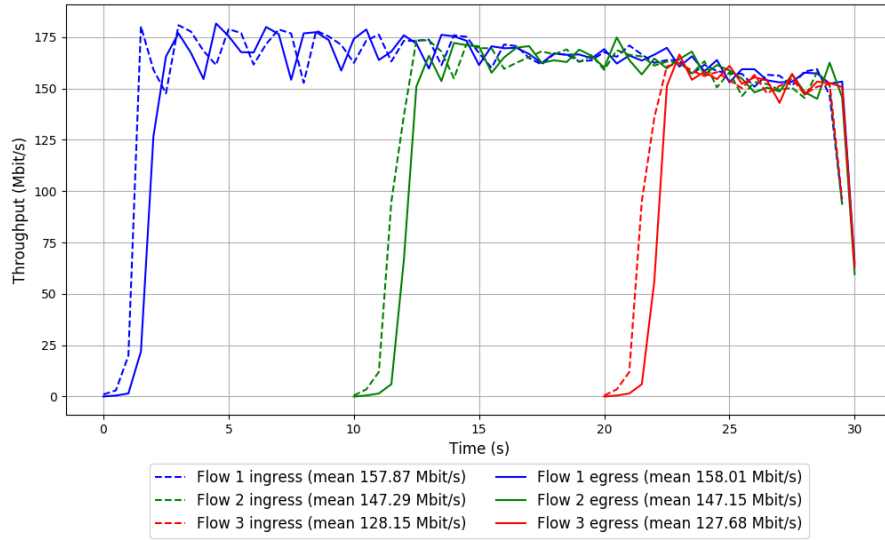
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-04-23 22:57:41
End at: 2019-04-23 22:58:11
Local clock offset: 0.135 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.40 Mbit/s
95th percentile per-packet one-way delay: 110.848 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 182.80 Mbit/s
95th percentile per-packet one-way delay: 111.151 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 142.00 Mbit/s
95th percentile per-packet one-way delay: 110.248 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 126.93 Mbit/s
95th percentile per-packet one-way delay: 111.453 ms
Loss rate: 2.76%
```
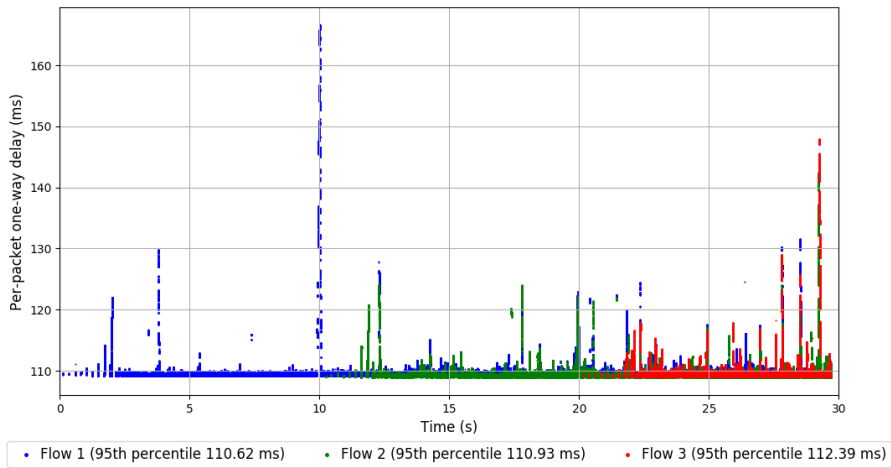
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-04-23 23:35:01
End at: 2019-04-23 23:35:31
Local clock offset: 0.054 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.41 Mbit/s
95th percentile per-packet one-way delay: 110.576 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 158.01 Mbit/s
95th percentile per-packet one-way delay: 109.463 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 147.15 Mbit/s
95th percentile per-packet one-way delay: 111.349 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 127.68 Mbit/s
95th percentile per-packet one-way delay: 111.729 ms
Loss rate: 2.59%
```
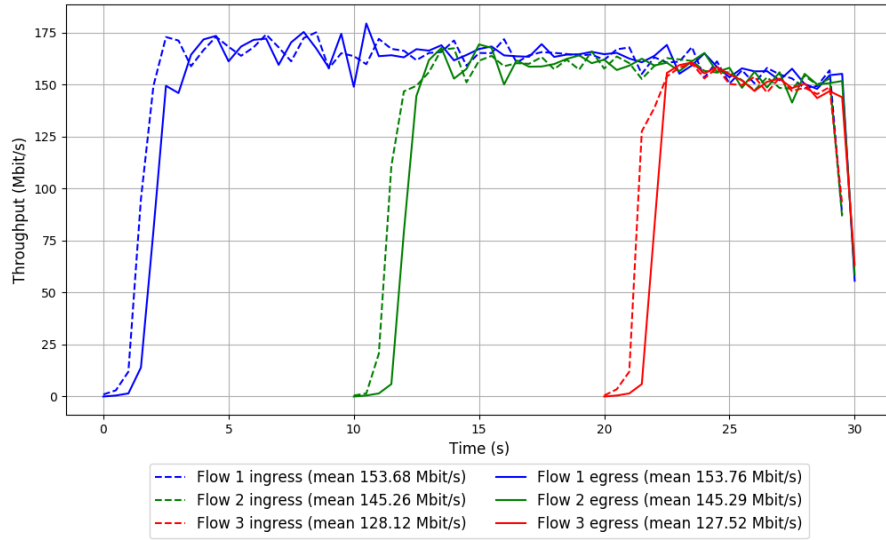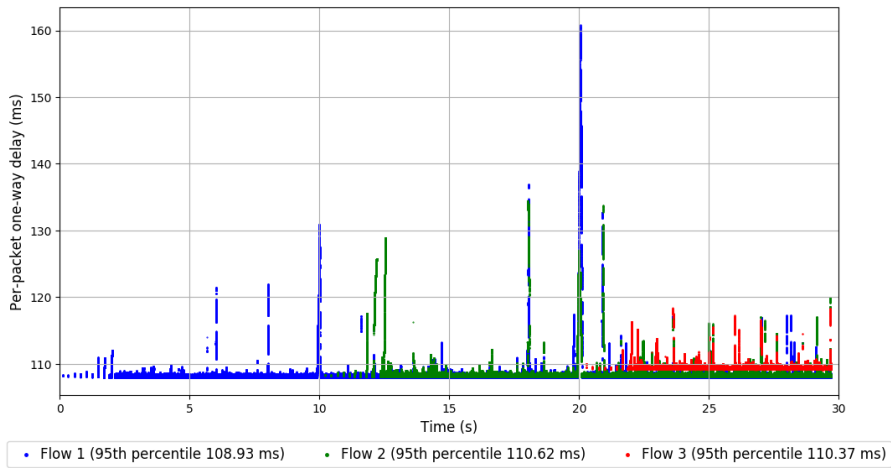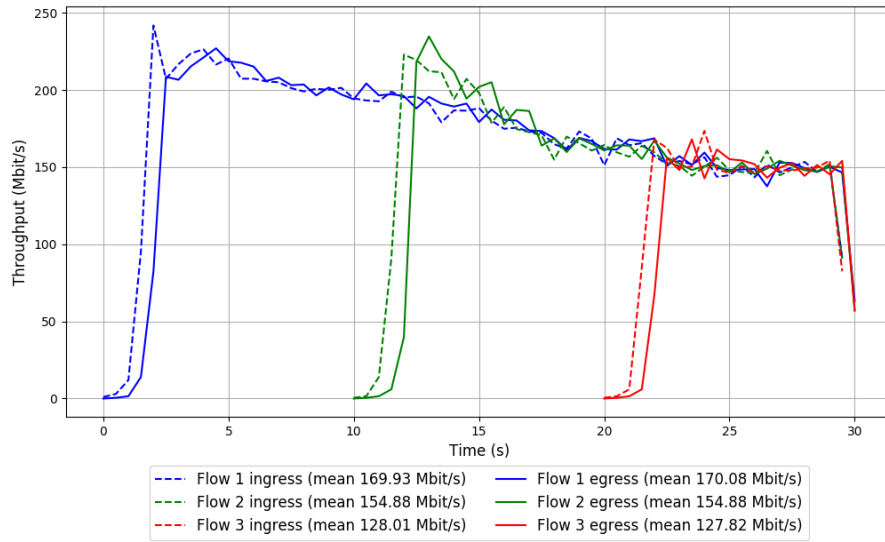
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 157.87 Mbit/s) --- Flow 1 egress (mean 158.01 Mbit/s)
Flow 2 ingress (mean 147.29 Mbit/s) --- Flow 2 egress (mean 147.15 Mbit/s)
Flow 3 ingress (mean 128.15 Mbit/s) --- Flow 3 egress (mean 127.68 Mbit/s)

Flow 1 (95th percentile 109.46 ms)   Flow 2 (95th percentile 111.35 ms)   Flow 3 (95th percentile 111.73 ms)

```
Run 4: Statistics of Indigo

Start at: 2019-04-24 00:13:15
End at: 2019-04-24 00:13:45
Local clock offset: -0.092 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.45 Mbit/s
95th percentile per-packet one-way delay: 110.954 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 153.76 Mbit/s
95th percentile per-packet one-way delay: 110.624 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 145.29 Mbit/s
95th percentile per-packet one-way delay: 110.932 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 127.52 Mbit/s
95th percentile per-packet one-way delay: 112.390 ms
Loss rate: 2.72%
```
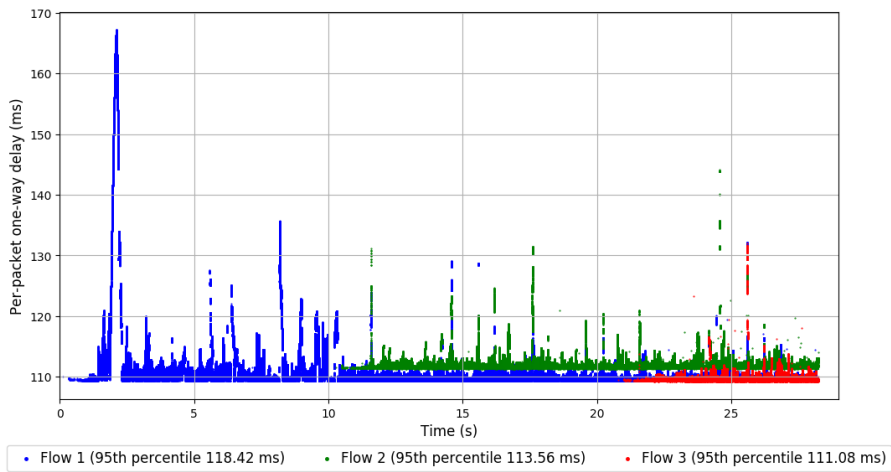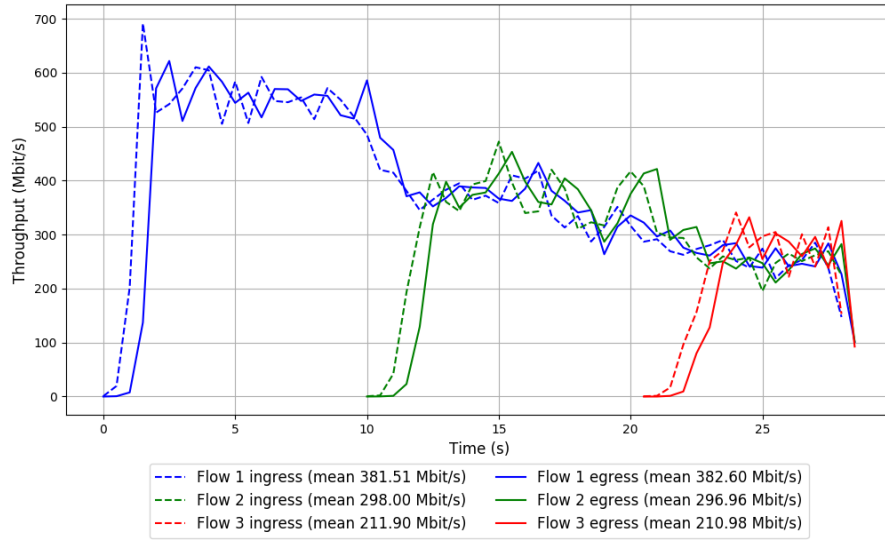
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-04-24 00:50:15
End at: 2019-04-24 00:50:45
Local clock offset: -0.341 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.72 Mbit/s
95th percentile per-packet one-way delay: 109.818 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 170.08 Mbit/s
95th percentile per-packet one-way delay: 108.934 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 154.88 Mbit/s
95th percentile per-packet one-way delay: 110.617 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 127.82 Mbit/s
95th percentile per-packet one-way delay: 110.368 ms
Loss rate: 2.42%
```
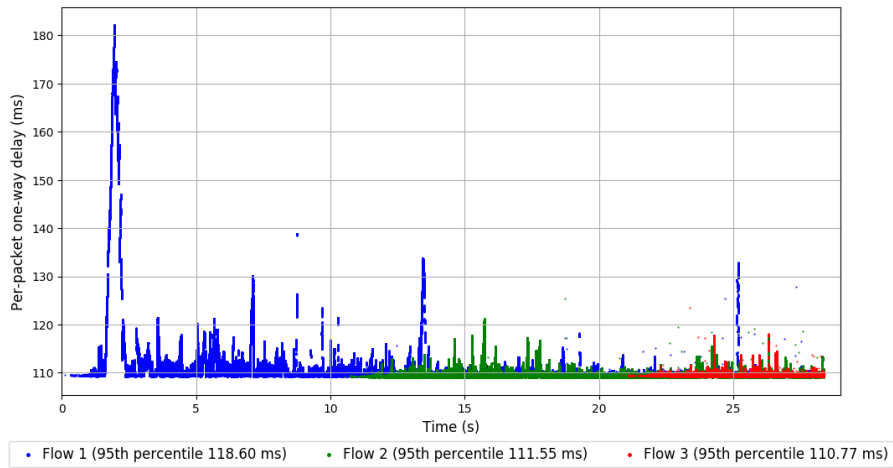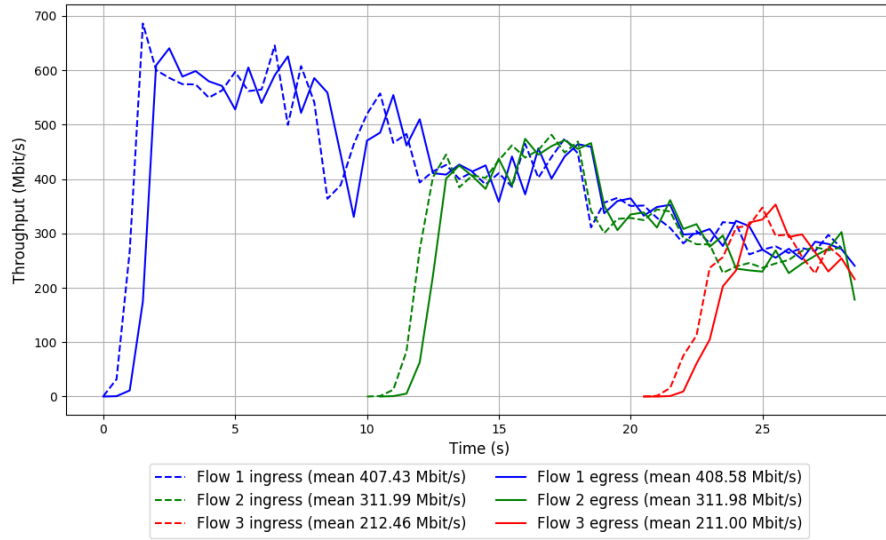
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-04-23 22:16:22
End at: 2019-04-23 22:16:52
Local clock offset: 0.249 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2019-04-24 02:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.98 Mbit/s
95th percentile per-packet one-way delay: 116.108 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 382.60 Mbit/s
95th percentile per-packet one-way delay: 118.415 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 296.96 Mbit/s
95th percentile per-packet one-way delay: 113.562 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 210.98 Mbit/s
95th percentile per-packet one-way delay: 111.075 ms
Loss rate: 3.25%
```
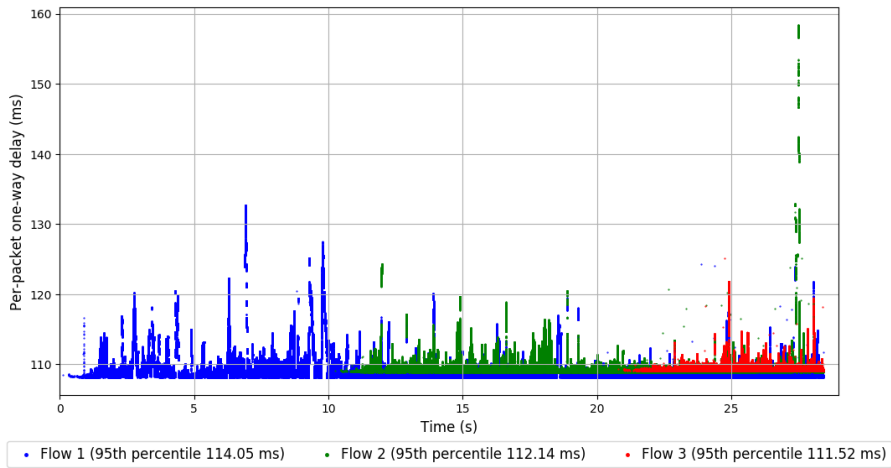
Run 1: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 381.51 Mbit/s) —— Flow 1 egress (mean 382.60 Mbit/s)
Flow 2 ingress (mean 298.00 Mbit/s) —— Flow 2 egress (mean 296.96 Mbit/s)
Flow 3 ingress (mean 211.90 Mbit/s) —— Flow 3 egress (mean 210.98 Mbit/s)

Flow 1 (95th percentile 118.42 ms)   Flow 2 (95th percentile 113.56 ms)   Flow 3 (95th percentile 111.08 ms)

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-04-23 22:52:42
End at: 2019-04-23 22:53:12
Local clock offset: 0.064 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2019-04-24 02:28:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.63 Mbit/s
95th percentile per-packet one-way delay: 115.375 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 408.58 Mbit/s
95th percentile per-packet one-way delay: 118.598 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 311.98 Mbit/s
95th percentile per-packet one-way delay: 111.550 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 211.00 Mbit/s
95th percentile per-packet one-way delay: 110.767 ms
Loss rate: 3.47%
```
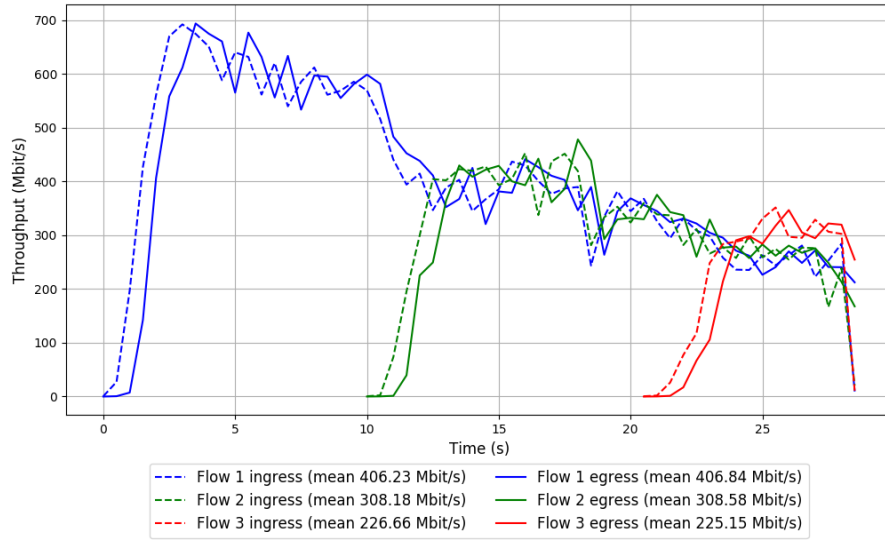
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-04-23 23:30:02
End at: 2019-04-23 23:30:32
Local clock offset: -0.296 ms
Remote clock offset: 0.003 ms


# Below is generated by plot.py at 2019-04-24 02:29:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 665.63 Mbit/s
95th percentile per-packet one-way delay: 113.210 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 406.84 Mbit/s
95th percentile per-packet one-way delay: 114.049 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 308.58 Mbit/s
95th percentile per-packet one-way delay: 112.137 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 225.15 Mbit/s
95th percentile per-packet one-way delay: 111.520 ms
Loss rate: 3.43%
```
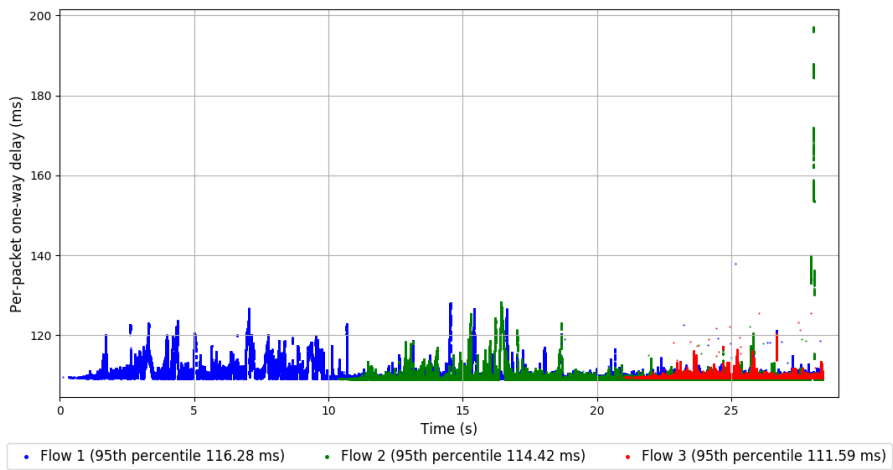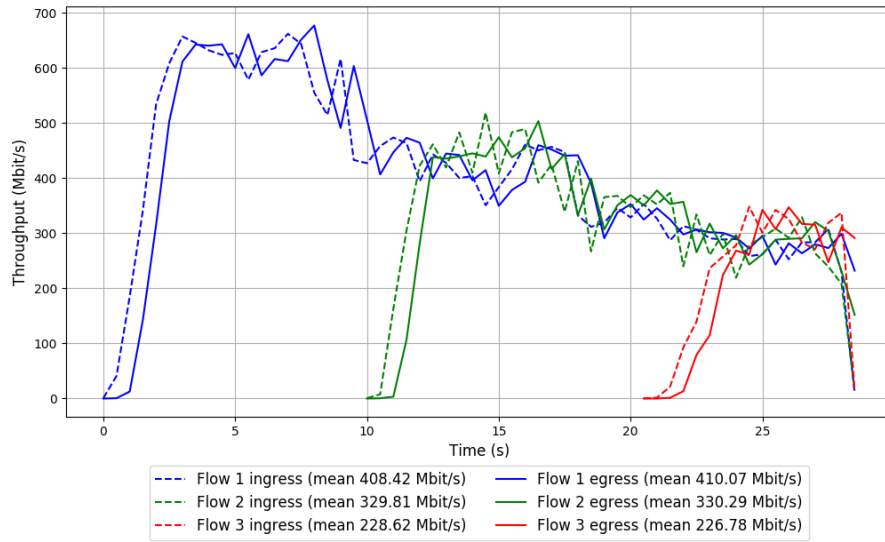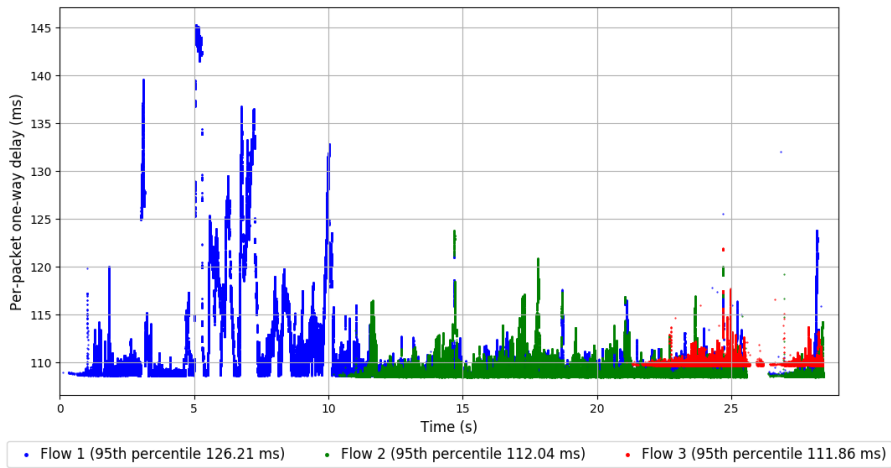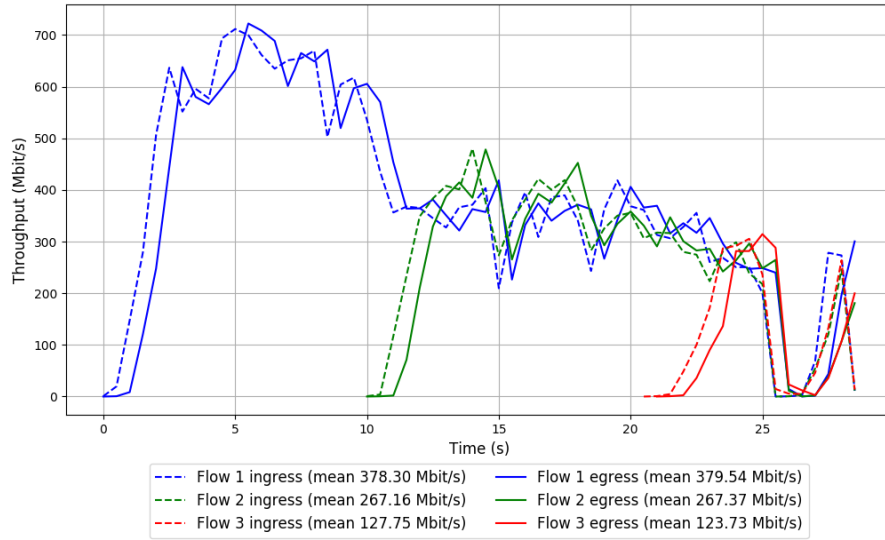
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-04-24 00:07:44
End at: 2019-04-24 00:08:14
Local clock offset: -0.144 ms
Remote clock offset: 0.026 ms


# Below is generated by plot.py at 2019-04-24 02:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 683.82 Mbit/s
95th percentile per-packet one-way delay: 115.702 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 410.07 Mbit/s
95th percentile per-packet one-way delay: 116.285 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 330.29 Mbit/s
95th percentile per-packet one-way delay: 114.415 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 226.78 Mbit/s
95th percentile per-packet one-way delay: 111.589 ms
Loss rate: 3.59%
```
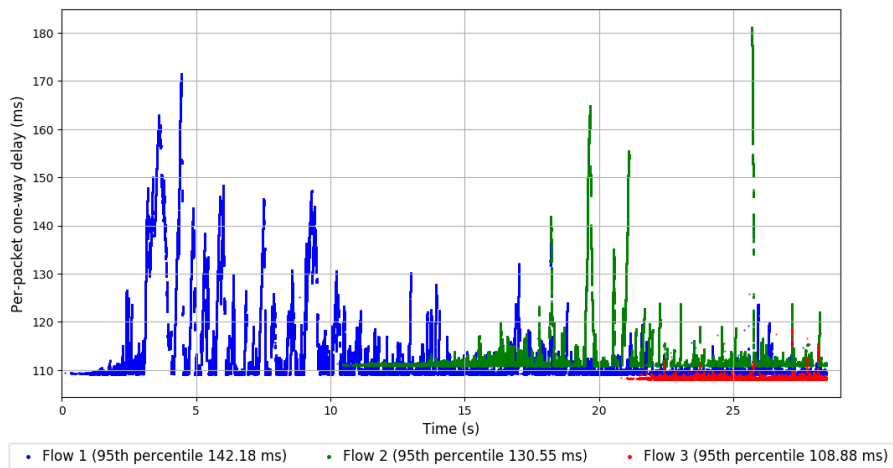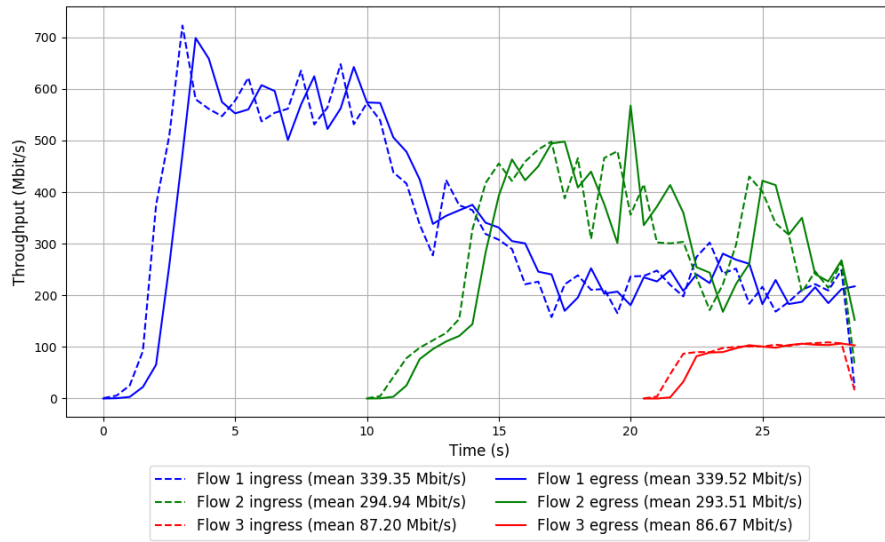
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-04-24 00:45:10
End at: 2019-04-24 00:45:40
Local clock offset: 0.142 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-04-24 02:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 583.81 Mbit/s
95th percentile per-packet one-way delay: 121.981 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 379.54 Mbit/s
95th percentile per-packet one-way delay: 126.213 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 267.37 Mbit/s
95th percentile per-packet one-way delay: 112.044 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 123.73 Mbit/s
95th percentile per-packet one-way delay: 111.864 ms
Loss rate: 6.03%
```

Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-04-23 22:45:33
End at: 2019-04-23 22:46:03
Local clock offset: -0.121 ms
Remote clock offset: -0.061 ms


# Below is generated by plot.py at 2019-04-24 02:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 551.42 Mbit/s
95th percentile per-packet one-way delay: 140.132 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 339.52 Mbit/s
95th percentile per-packet one-way delay: 142.176 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 293.51 Mbit/s
95th percentile per-packet one-way delay: 130.546 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 86.67 Mbit/s
95th percentile per-packet one-way delay: 108.876 ms
Loss rate: 3.34%
```
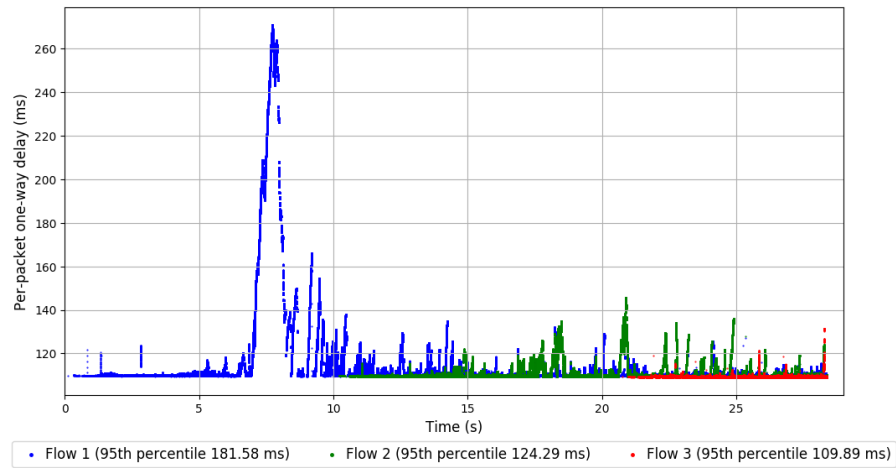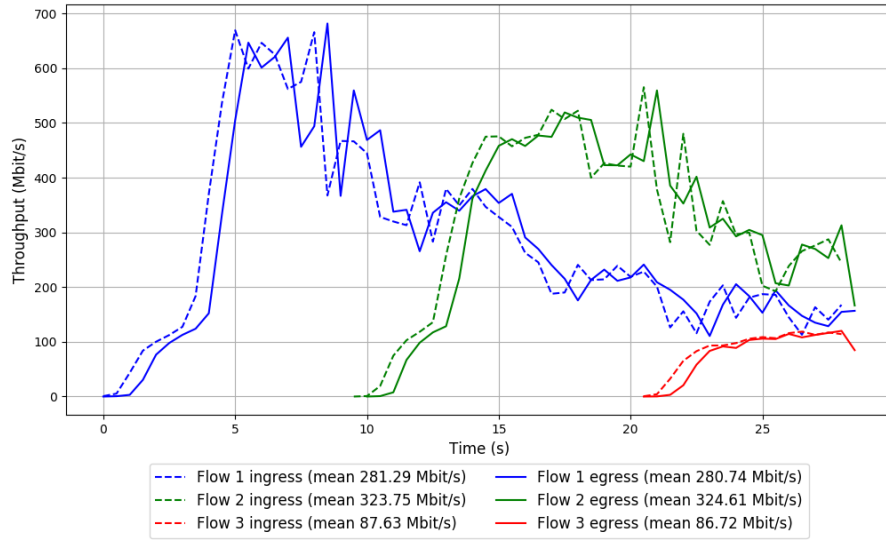
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-04-23 23:22:53
End at: 2019-04-23 23:23:23
Local clock offset: 0.231 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-04-24 02:31:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 514.73 Mbit/s
95th percentile per-packet one-way delay: 140.878 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 280.74 Mbit/s
95th percentile per-packet one-way delay: 181.579 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 324.61 Mbit/s
95th percentile per-packet one-way delay: 124.293 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 86.72 Mbit/s
95th percentile per-packet one-way delay: 109.895 ms
Loss rate: 3.85%
```
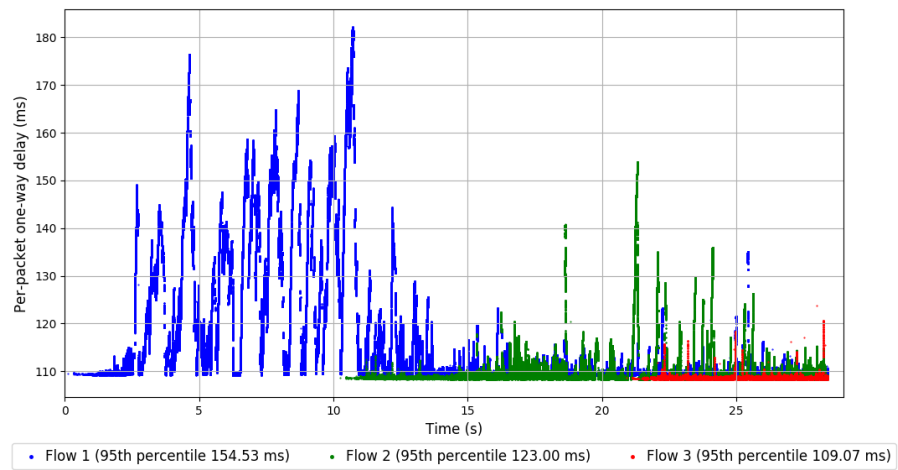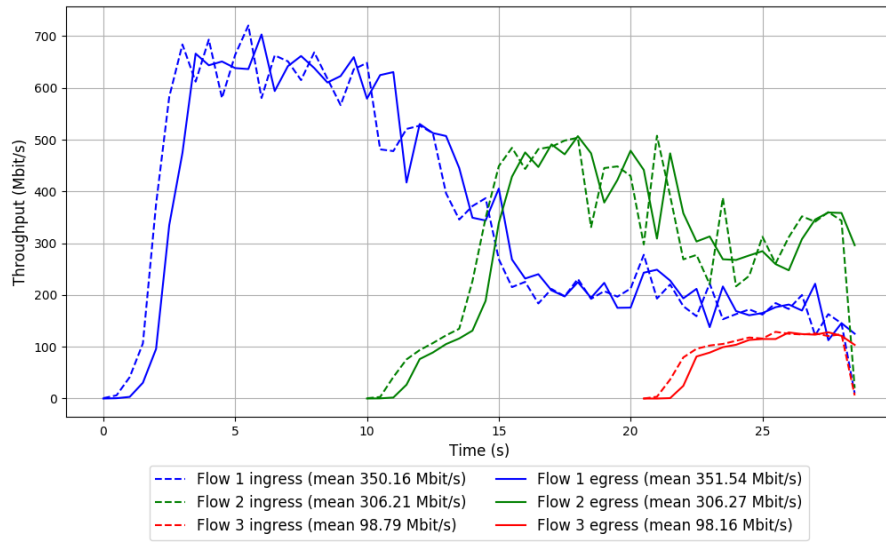
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 281.29 Mbit/s) --- Flow 1 egress (mean 280.74 Mbit/s)
Flow 2 ingress (mean 323.75 Mbit/s) --- Flow 2 egress (mean 324.61 Mbit/s)
Flow 3 ingress (mean 87.63 Mbit/s) --- Flow 3 egress (mean 86.72 Mbit/s)

Flow 1 (95th percentile 181.58 ms)   Flow 2 (95th percentile 124.29 ms)   Flow 3 (95th percentile 109.89 ms)
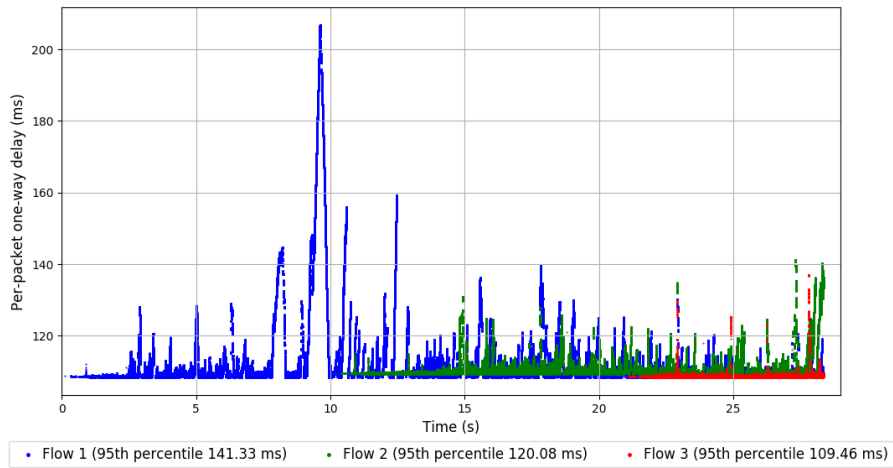
78

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-04-24 00:00:19
End at: 2019-04-24 00:00:49
Local clock offset: -0.058 ms
Remote clock offset: -0.03 ms


# Below is generated by plot.py at 2019-04-24 02:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.91 Mbit/s
95th percentile per-packet one-way delay: 150.763 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 351.54 Mbit/s
95th percentile per-packet one-way delay: 154.530 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 306.27 Mbit/s
95th percentile per-packet one-way delay: 122.995 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 98.16 Mbit/s
95th percentile per-packet one-way delay: 109.072 ms
Loss rate: 3.51%
```
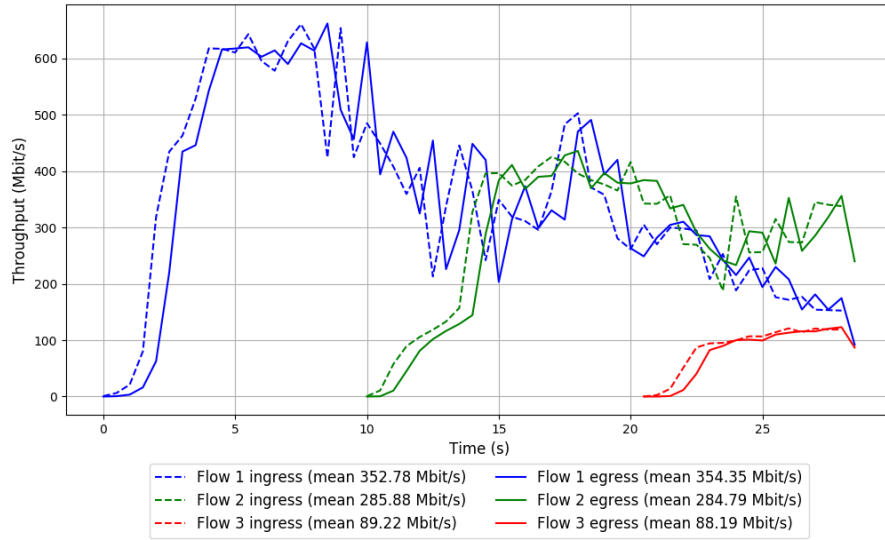
Run 3: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 350.16 Mbit/s) —— Flow 1 egress (mean 351.54 Mbit/s)
- - - Flow 2 ingress (mean 306.21 Mbit/s) —— Flow 2 egress (mean 306.27 Mbit/s)
- - - Flow 3 ingress (mean 98.79 Mbit/s) —— Flow 3 egress (mean 98.16 Mbit/s)

- Flow 1 (95th percentile 154.53 ms)   • Flow 2 (95th percentile 123.00 ms)   • Flow 3 (95th percentile 109.07 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-04-24 00:37:39
End at: 2019-04-24 00:38:09
Local clock offset: 0.073 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2019-04-24 02:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.69 Mbit/s
95th percentile per-packet one-way delay: 132.188 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 354.35 Mbit/s
95th percentile per-packet one-way delay: 141.327 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 284.79 Mbit/s
95th percentile per-packet one-way delay: 120.083 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 88.19 Mbit/s
95th percentile per-packet one-way delay: 109.459 ms
Loss rate: 3.98%
```
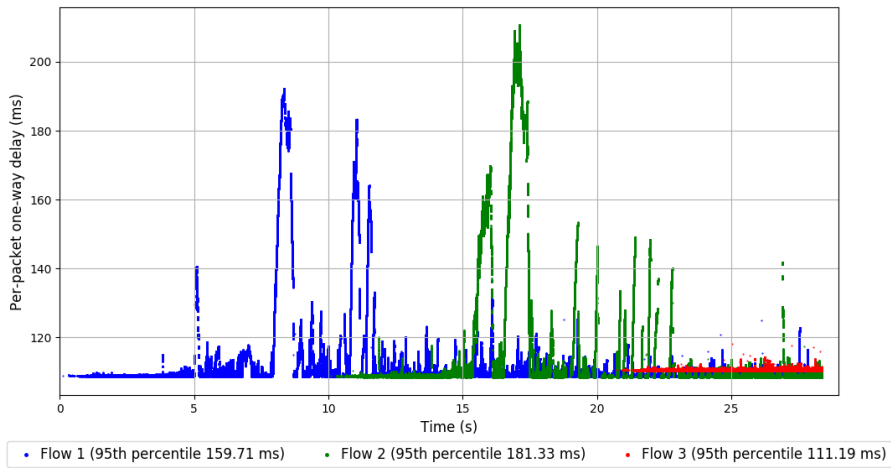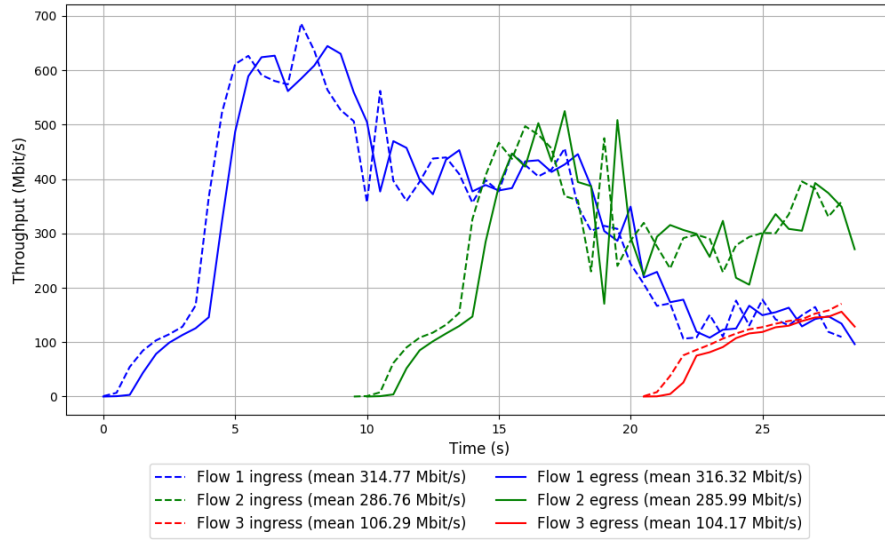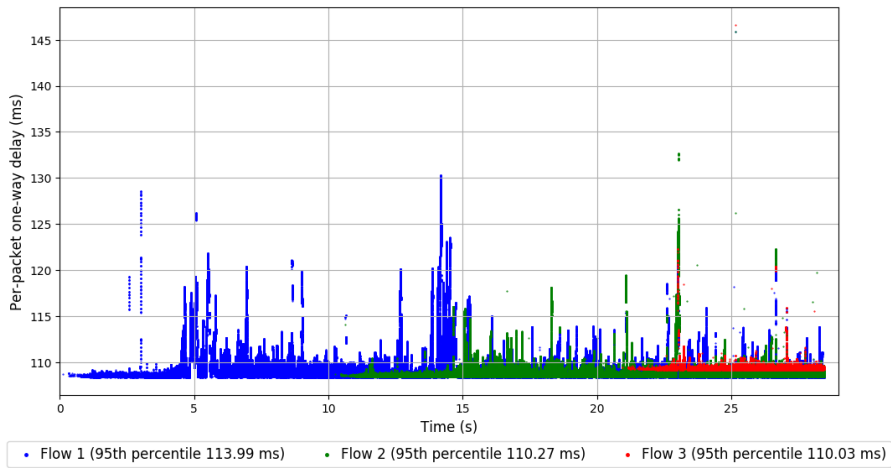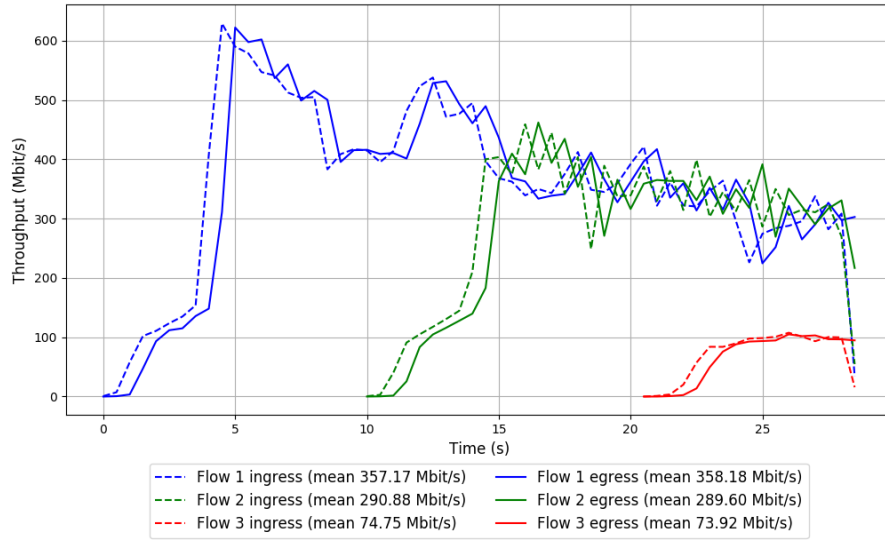
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 352.78 Mbit/s) ---- Flow 1 egress (mean 354.35 Mbit/s) ——
Flow 2 ingress (mean 285.88 Mbit/s) ---- Flow 2 egress (mean 284.79 Mbit/s) ——
Flow 3 ingress (mean 89.22 Mbit/s) ---- Flow 3 egress (mean 88.19 Mbit/s) ——

Flow 1 (95th percentile 141.33 ms) • Flow 2 (95th percentile 120.08 ms) • Flow 3 (95th percentile 109.46 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-04-24 01:15:07
End at: 2019-04-24 01:15:37
Local clock offset: -0.75 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2019-04-24 02:38:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.60 Mbit/s
95th percentile per-packet one-way delay: 163.513 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 316.32 Mbit/s
95th percentile per-packet one-way delay: 159.707 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 285.99 Mbit/s
95th percentile per-packet one-way delay: 181.331 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 104.17 Mbit/s
95th percentile per-packet one-way delay: 111.194 ms
Loss rate: 4.79%
```
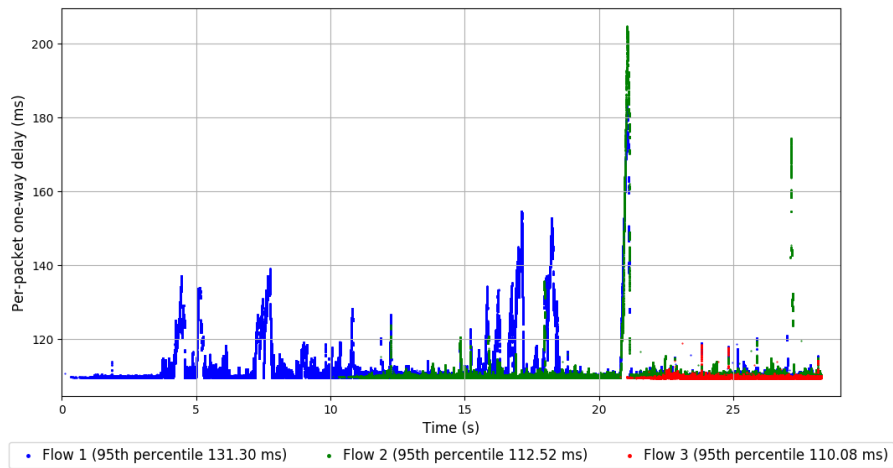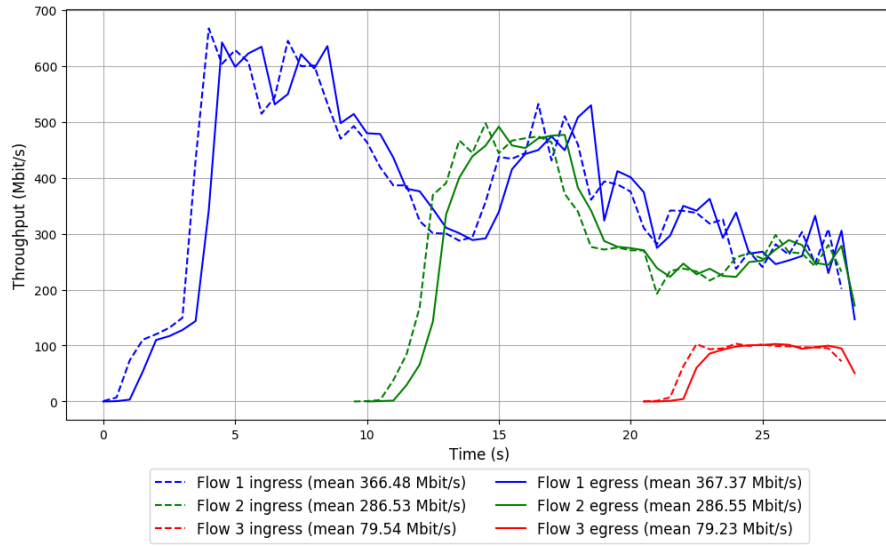
Run 5: Report of Indigo-MusesC5 — Data Link

Legend:
- Flow 1 ingress (mean 314.77 Mbit/s)
- Flow 1 egress (mean 316.32 Mbit/s)
- Flow 2 ingress (mean 286.76 Mbit/s)
- Flow 2 egress (mean 285.99 Mbit/s)
- Flow 3 ingress (mean 106.29 Mbit/s)
- Flow 3 egress (mean 104.17 Mbit/s)

Legend:
- Flow 1 (95th percentile 159.71 ms)
- Flow 2 (95th percentile 181.33 ms)
- Flow 3 (95th percentile 111.19 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-04-23 22:30:38
End at: 2019-04-23 22:31:08
Local clock offset: 0.152 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-04-24 02:39:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.79 Mbit/s
95th percentile per-packet one-way delay: 112.792 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 358.18 Mbit/s
95th percentile per-packet one-way delay: 113.990 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 289.60 Mbit/s
95th percentile per-packet one-way delay: 110.270 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 110.027 ms
Loss rate: 3.94%
```
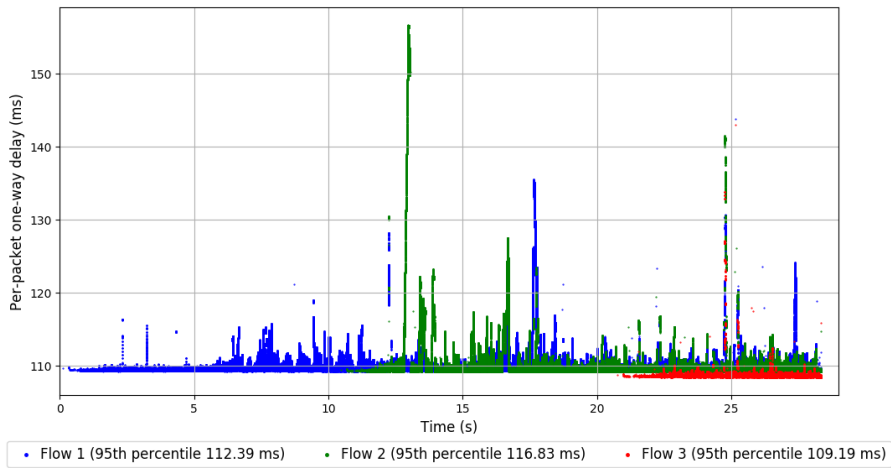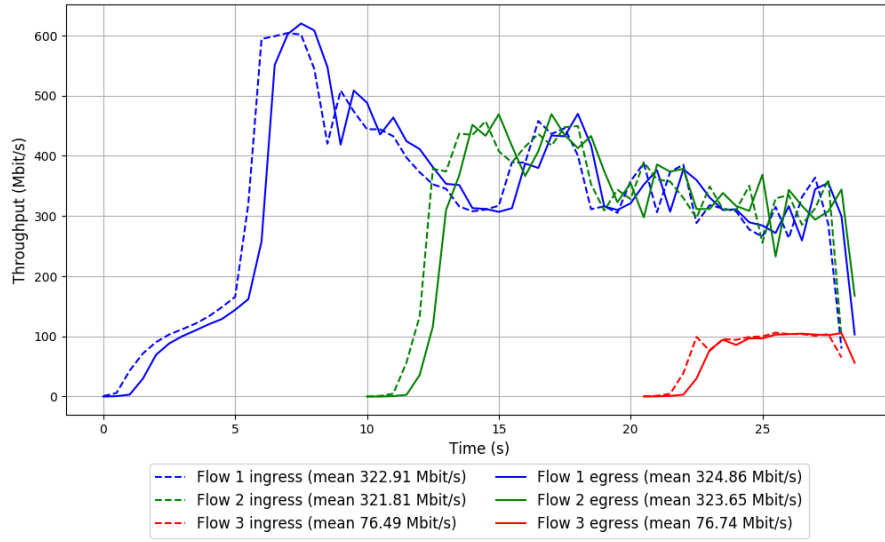
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-04-23 23:07:17
End at: 2019-04-23 23:07:47
Local clock offset: 0.173 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2019-04-24 02:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.49 Mbit/s
95th percentile per-packet one-way delay: 127.794 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 367.37 Mbit/s
95th percentile per-packet one-way delay: 131.296 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 286.55 Mbit/s
95th percentile per-packet one-way delay: 112.517 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 79.23 Mbit/s
95th percentile per-packet one-way delay: 110.085 ms
Loss rate: 3.32%
```

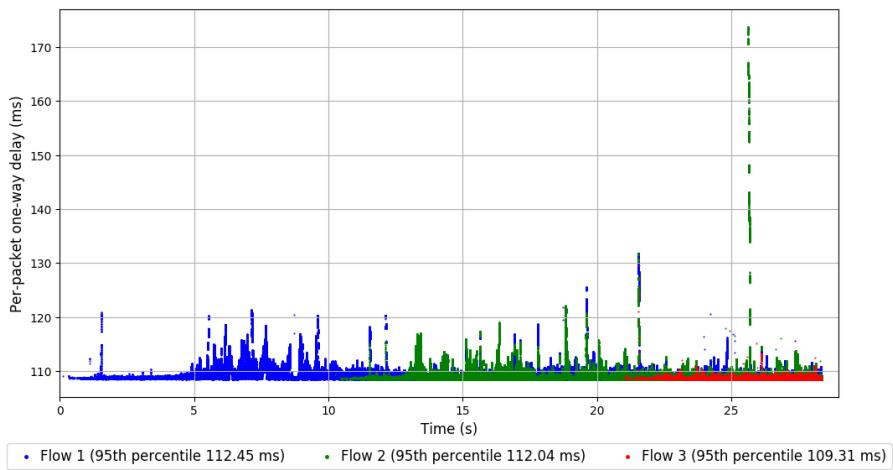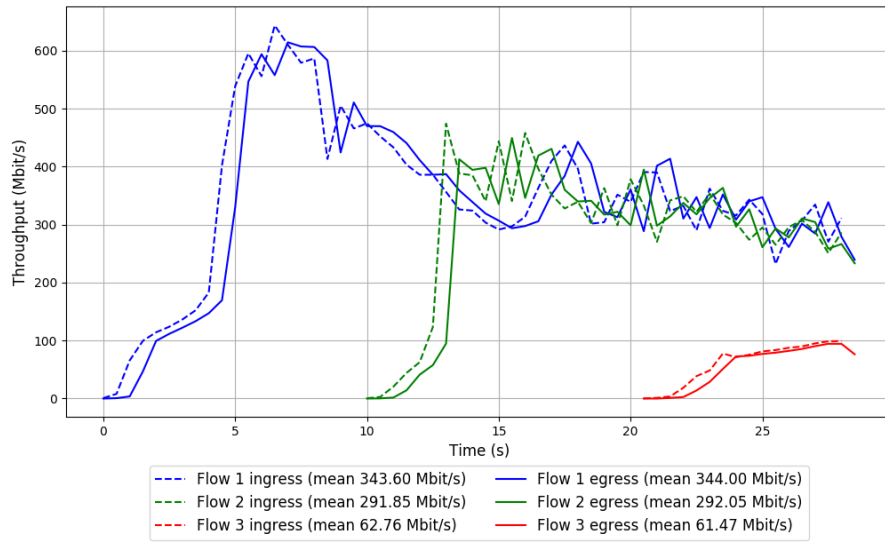Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-04-23 23:44:26
End at: 2019-04-23 23:44:56
Local clock offset: -0.07 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2019-04-24 02:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 550.47 Mbit/s
95th percentile per-packet one-way delay: 113.593 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 324.86 Mbit/s
95th percentile per-packet one-way delay: 112.395 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 323.65 Mbit/s
95th percentile per-packet one-way delay: 116.825 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 76.74 Mbit/s
95th percentile per-packet one-way delay: 109.185 ms
Loss rate: 2.48%
```

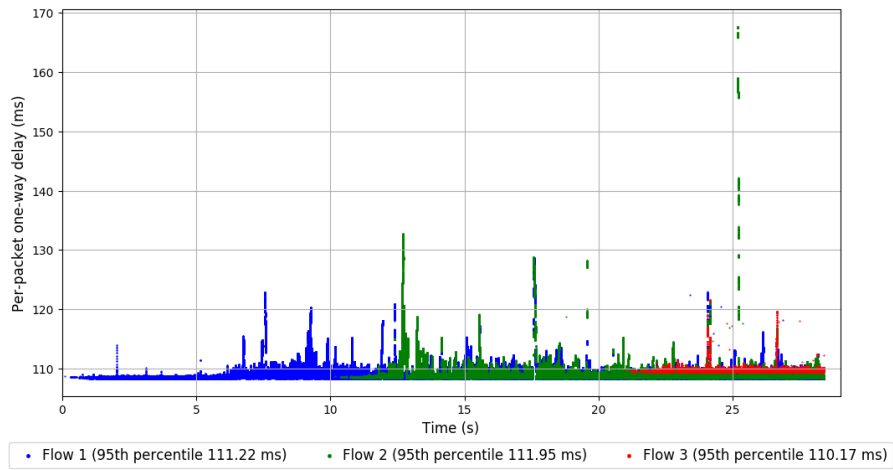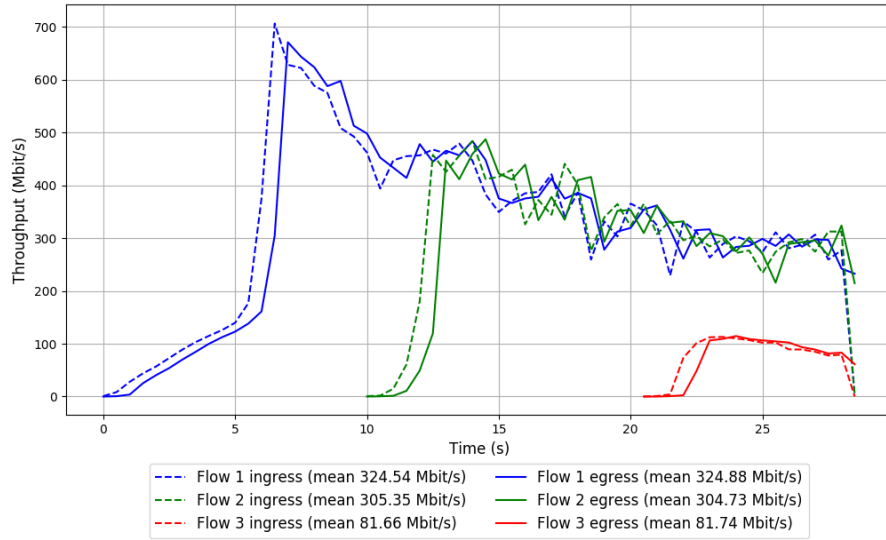Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 322.91 Mbit/s) ---- Flow 1 egress (mean 324.86 Mbit/s)
Flow 2 ingress (mean 321.81 Mbit/s) ---- Flow 2 egress (mean 323.65 Mbit/s)
Flow 3 ingress (mean 76.49 Mbit/s) ---- Flow 3 egress (mean 76.74 Mbit/s)

Flow 1 (95th percentile 112.39 ms)   Flow 2 (95th percentile 116.83 ms)   Flow 3 (95th percentile 109.19 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-04-24 00:22:40
End at: 2019-04-24 00:23:10
Local clock offset: 0.118 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2019-04-24 02:40:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 547.39 Mbit/s
95th percentile per-packet one-way delay: 112.264 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 344.00 Mbit/s
95th percentile per-packet one-way delay: 112.446 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 292.05 Mbit/s
95th percentile per-packet one-way delay: 112.041 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 109.314 ms
Loss rate: 4.92%
```

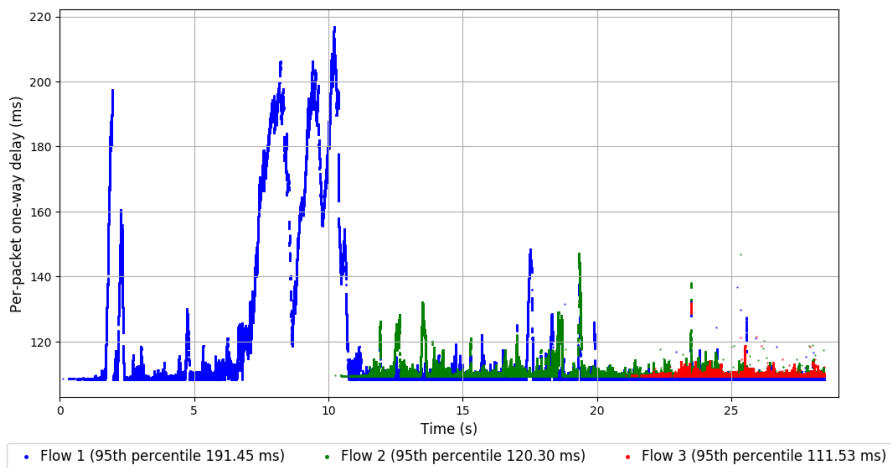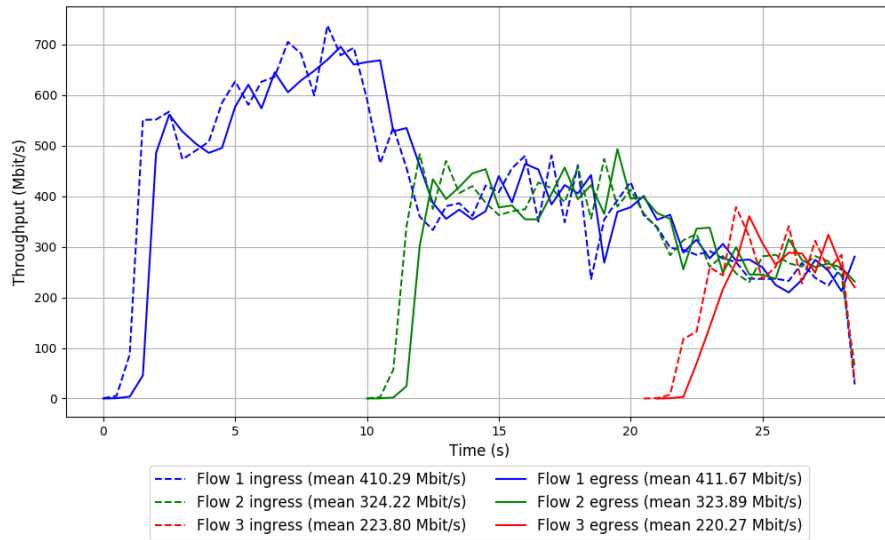# Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 343.60 Mbit/s) --- Flow 1 egress (mean 344.00 Mbit/s)
Flow 2 ingress (mean 291.85 Mbit/s) --- Flow 2 egress (mean 292.05 Mbit/s)
Flow 3 ingress (mean 62.76 Mbit/s) --- Flow 3 egress (mean 61.47 Mbit/s)

Flow 1 (95th percentile 112.45 ms)   Flow 2 (95th percentile 112.04 ms)   Flow 3 (95th percentile 109.31 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-04-24 00:59:52
End at: 2019-04-24 01:00:22
Local clock offset: -0.053 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2019-04-24 02:40:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.50 Mbit/s
95th percentile per-packet one-way delay: 111.413 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 324.88 Mbit/s
95th percentile per-packet one-way delay: 111.225 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 304.73 Mbit/s
95th percentile per-packet one-way delay: 111.948 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 81.74 Mbit/s
95th percentile per-packet one-way delay: 110.174 ms
Loss rate: 2.74%
```
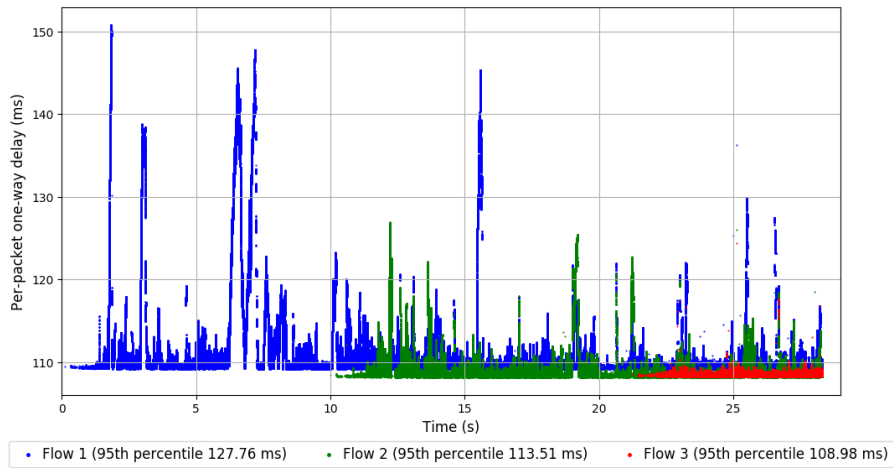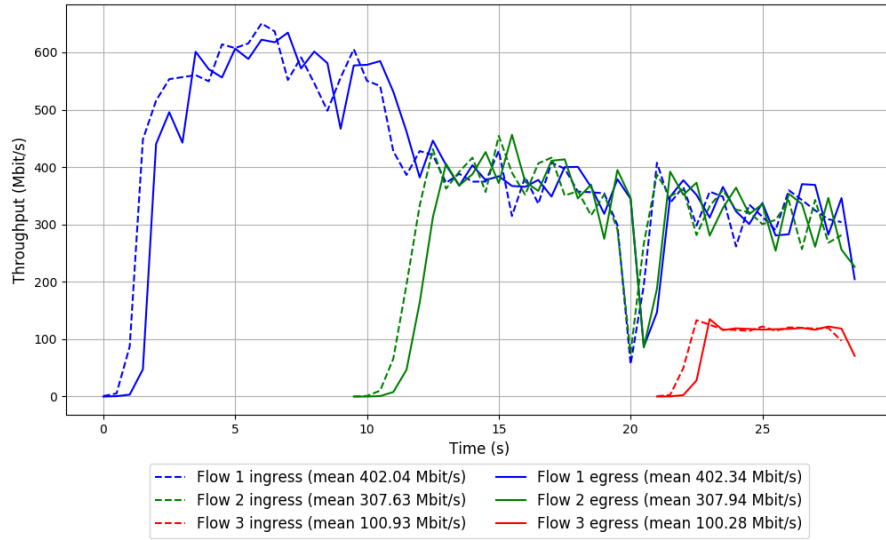
Run 5: Report of Indigo-MusesD — Data Link

- - - Flow 1 ingress (mean 324.54 Mbit/s)   —— Flow 1 egress (mean 324.88 Mbit/s)
- - - Flow 2 ingress (mean 305.35 Mbit/s)   —— Flow 2 egress (mean 304.73 Mbit/s)
- - - Flow 3 ingress (mean 81.66 Mbit/s)   —— Flow 3 egress (mean 81.74 Mbit/s)

• Flow 1 (95th percentile 111.22 ms)   • Flow 2 (95th percentile 111.95 ms)   • Flow 3 (95th percentile 110.17 ms)

94

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-04-23 22:36:12
End at: 2019-04-23 22:36:42
Local clock offset: 0.138 ms
Remote clock offset: -0.046 ms


# Below is generated by plot.py at 2019-04-24 02:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.30 Mbit/s
95th percentile per-packet one-way delay: 182.331 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 411.67 Mbit/s
95th percentile per-packet one-way delay: 191.452 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 323.89 Mbit/s
95th percentile per-packet one-way delay: 120.296 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 220.27 Mbit/s
95th percentile per-packet one-way delay: 111.525 ms
Loss rate: 4.41%
```
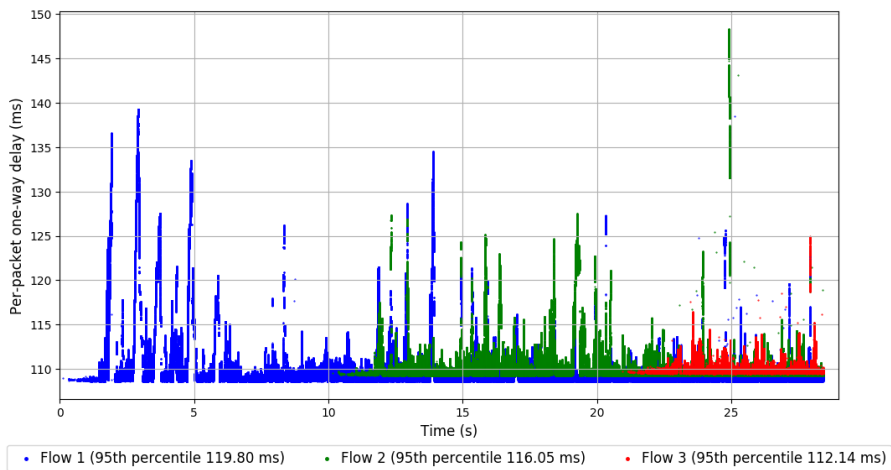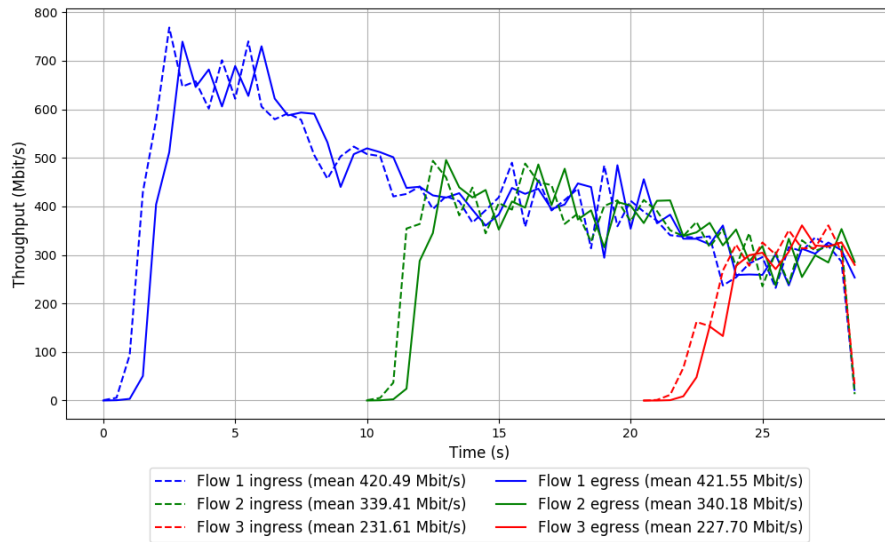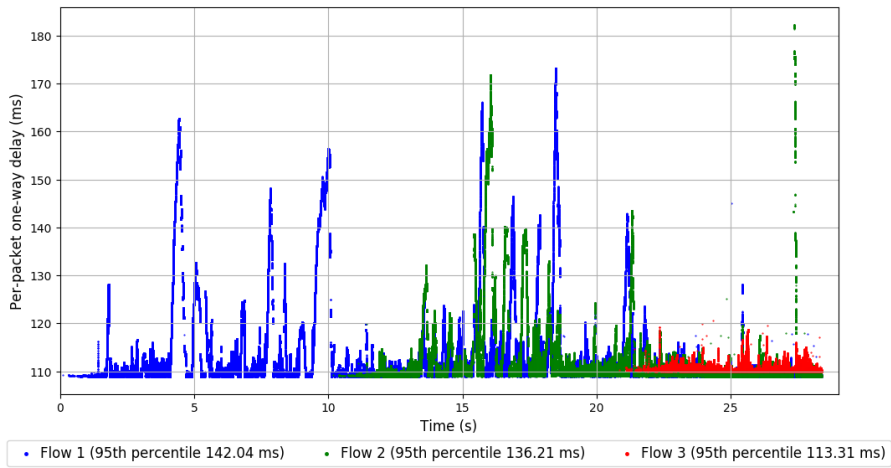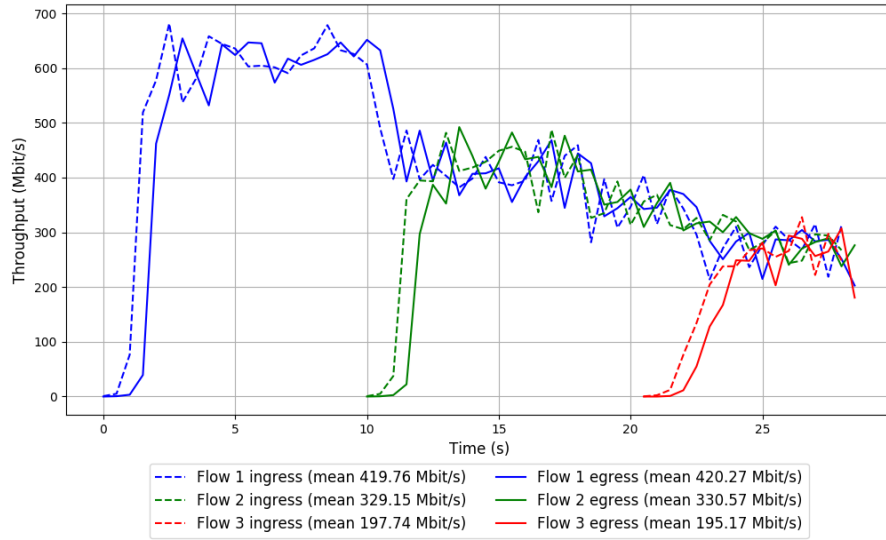
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-04-23 23:12:58
End at: 2019-04-23 23:13:28
Local clock offset: -0.108 ms
Remote clock offset: 0.052 ms


# Below is generated by plot.py at 2019-04-24 02:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.53 Mbit/s
95th percentile per-packet one-way delay: 120.371 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 402.34 Mbit/s
95th percentile per-packet one-way delay: 127.761 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 307.94 Mbit/s
95th percentile per-packet one-way delay: 113.507 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 100.28 Mbit/s
95th percentile per-packet one-way delay: 108.980 ms
Loss rate: 3.59%
```
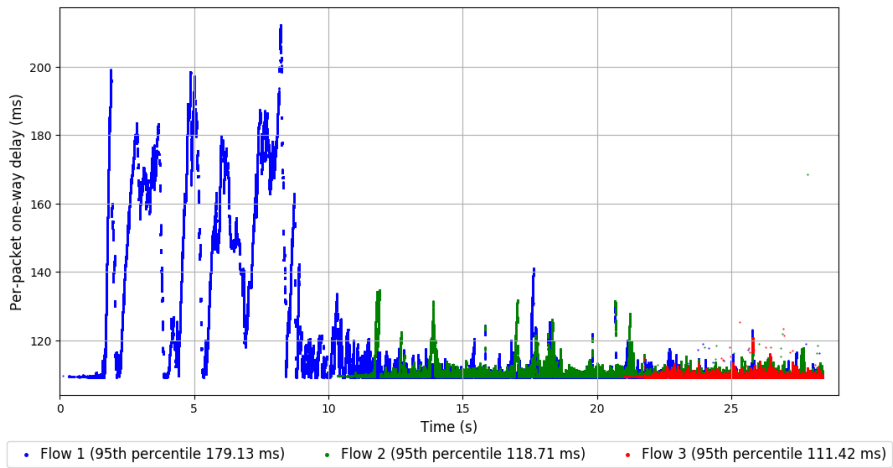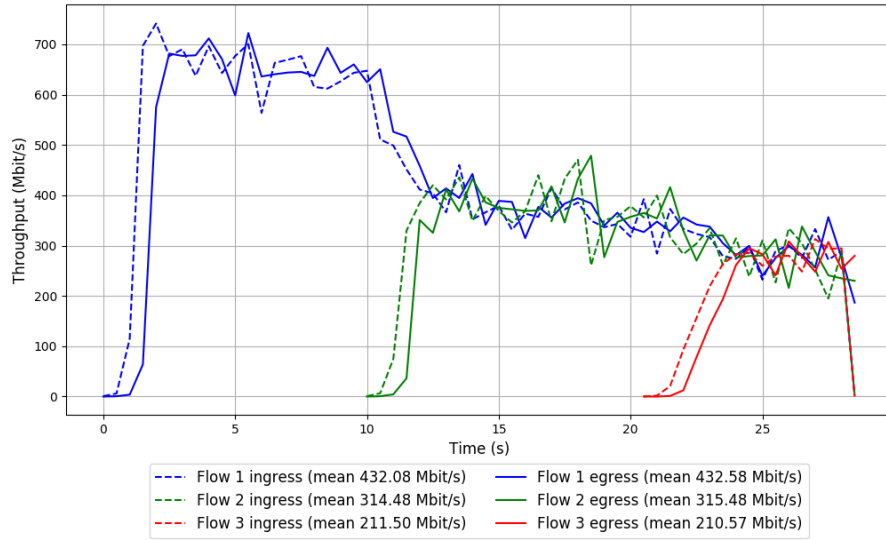
Run 2: Report of Indigo-MusesT — Data Link

- --- Flow 1 ingress (mean 402.04 Mbit/s) — Flow 1 egress (mean 402.34 Mbit/s)
- --- Flow 2 ingress (mean 307.63 Mbit/s) — Flow 2 egress (mean 307.94 Mbit/s)
- --- Flow 3 ingress (mean 100.93 Mbit/s) — Flow 3 egress (mean 100.28 Mbit/s)

- Flow 1 (95th percentile 127.76 ms)   • Flow 2 (95th percentile 113.51 ms)   • Flow 3 (95th percentile 108.98 ms)

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-04-23 23:50:37
End at: 2019-04-23 23:51:07
Local clock offset: 0.078 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2019-04-24 02:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.00 Mbit/s
95th percentile per-packet one-way delay: 117.693 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 421.55 Mbit/s
95th percentile per-packet one-way delay: 119.798 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 340.18 Mbit/s
95th percentile per-packet one-way delay: 116.050 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 227.70 Mbit/s
95th percentile per-packet one-way delay: 112.142 ms
Loss rate: 4.50%
```
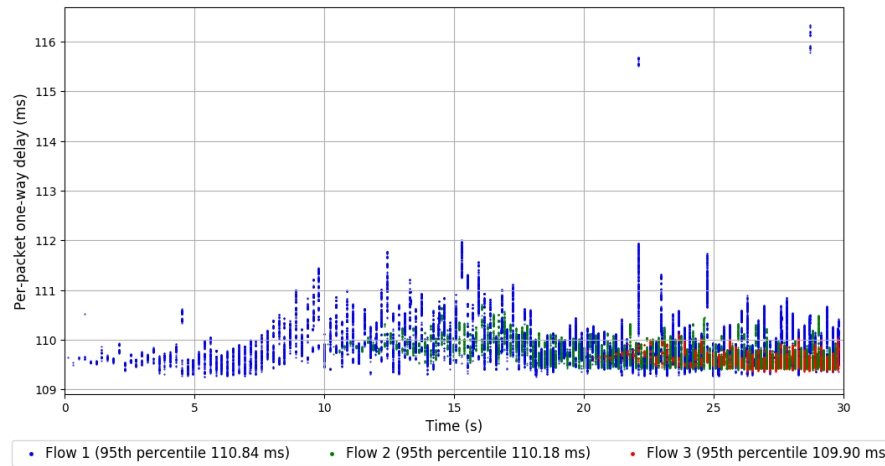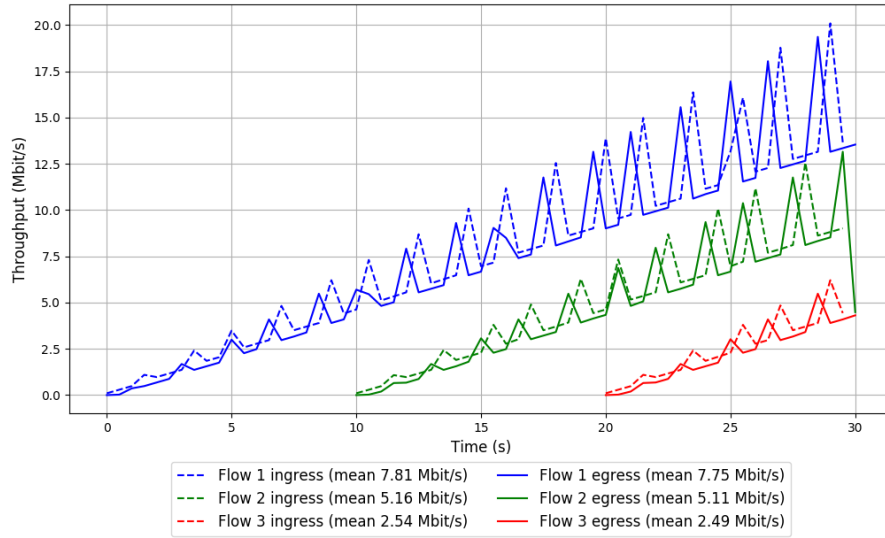
Run 3: Report of Indigo-MusesT — Data Link

- - - Flow 1 ingress (mean 420.49 Mbit/s) —— Flow 1 egress (mean 421.55 Mbit/s)
- - - Flow 2 ingress (mean 339.41 Mbit/s) —— Flow 2 egress (mean 340.18 Mbit/s)
- - - Flow 3 ingress (mean 231.61 Mbit/s) —— Flow 3 egress (mean 227.70 Mbit/s)

• Flow 1 (95th percentile 119.80 ms)   • Flow 2 (95th percentile 116.05 ms)   • Flow 3 (95th percentile 112.14 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-04-24 00:28:13
End at: 2019-04-24 00:28:43
Local clock offset: 0.554 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-04-24 02:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.94 Mbit/s
95th percentile per-packet one-way delay: 138.873 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 420.27 Mbit/s
95th percentile per-packet one-way delay: 142.037 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 330.57 Mbit/s
95th percentile per-packet one-way delay: 136.211 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 195.17 Mbit/s
95th percentile per-packet one-way delay: 113.307 ms
Loss rate: 4.09%
```

Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-04-24 01:05:33
End at: 2019-04-24 01:06:03
Local clock offset: -0.058 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 692.67 Mbit/s
95th percentile per-packet one-way delay: 174.267 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 432.58 Mbit/s
95th percentile per-packet one-way delay: 179.128 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 315.48 Mbit/s
95th percentile per-packet one-way delay: 118.713 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 210.57 Mbit/s
95th percentile per-packet one-way delay: 111.419 ms
Loss rate: 3.29%
```
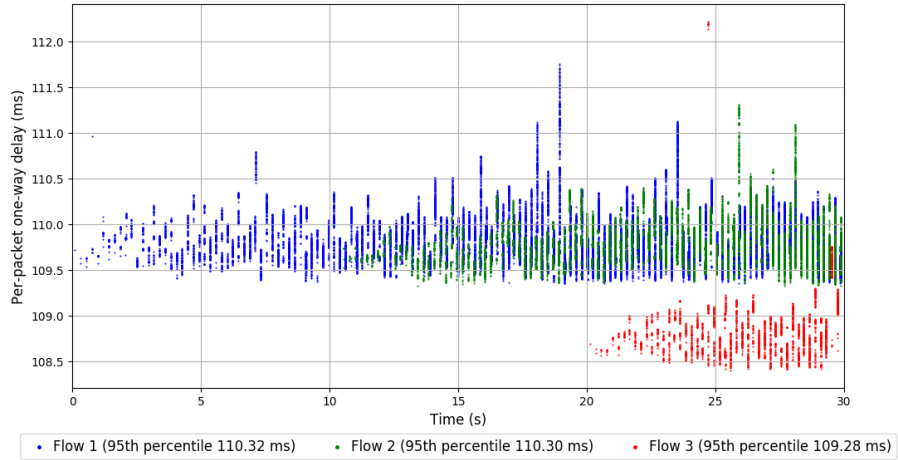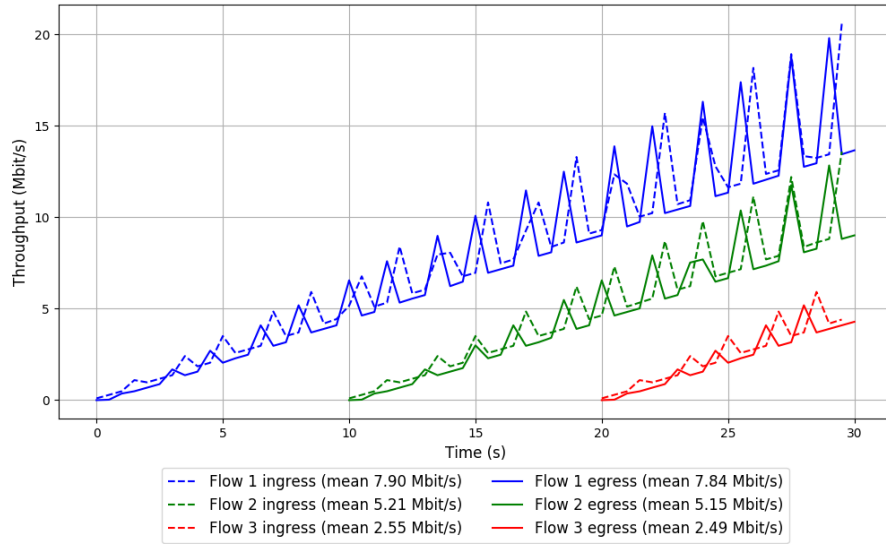
Run 5: Report of Indigo-MusesT — Data Link

- - - - Flow 1 ingress (mean 432.08 Mbit/s)   —— Flow 1 egress (mean 432.58 Mbit/s)
- - - - Flow 2 ingress (mean 314.48 Mbit/s)   —— Flow 2 egress (mean 315.48 Mbit/s)
- - - - Flow 3 ingress (mean 211.50 Mbit/s)   —— Flow 3 egress (mean 210.57 Mbit/s)

- Flow 1 (95th percentile 179.13 ms)   • Flow 2 (95th percentile 118.71 ms)   • Flow 3 (95th percentile 111.42 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-04-23 22:18:14
End at: 2019-04-23 22:18:44
Local clock offset: 0.178 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 110.639 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.836 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 110.177 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 109.898 ms
Loss rate: 4.46%
```
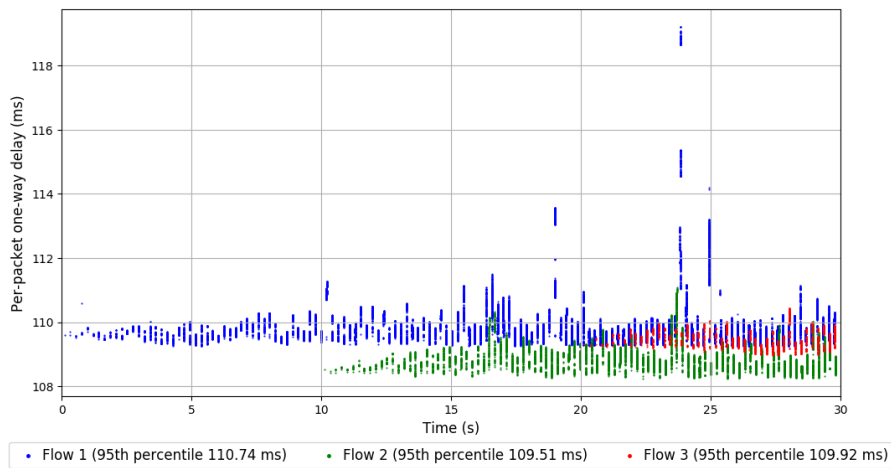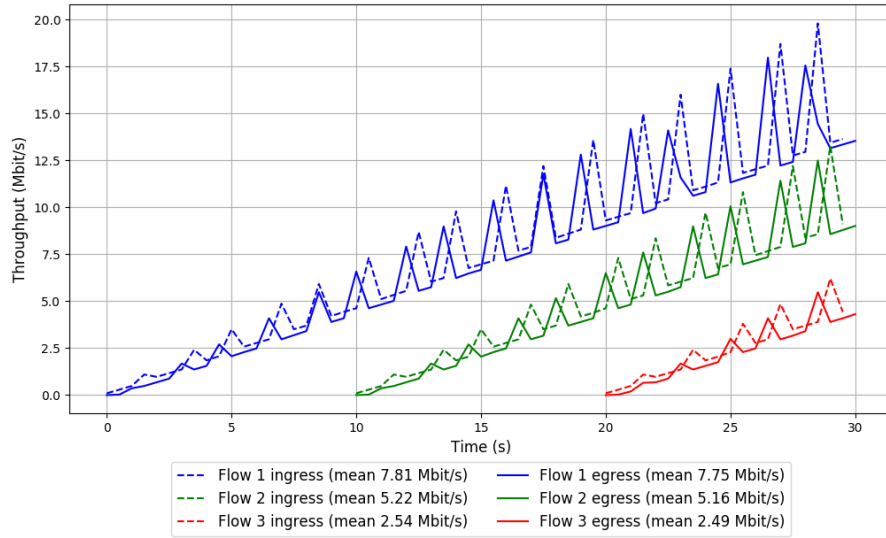
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-04-23 22:54:35
End at: 2019-04-23 22:55:05
Local clock offset: -0.06 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 110.509 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.569 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 110.257 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 109.334 ms
Loss rate: 2.63%
```
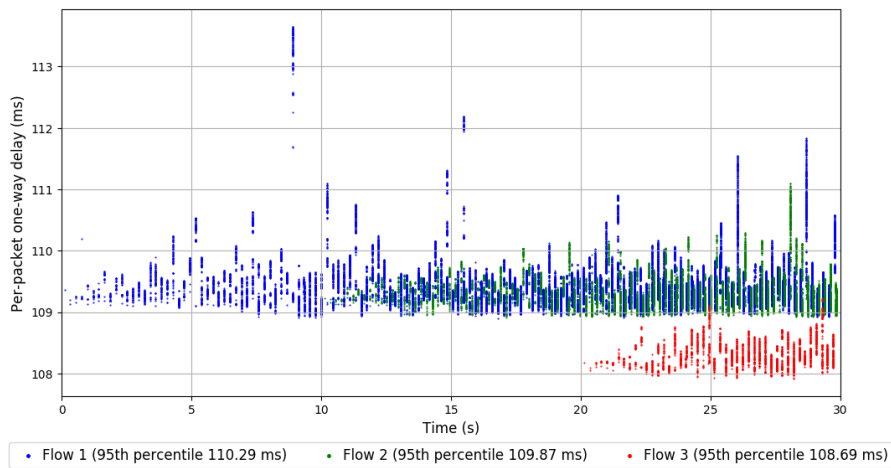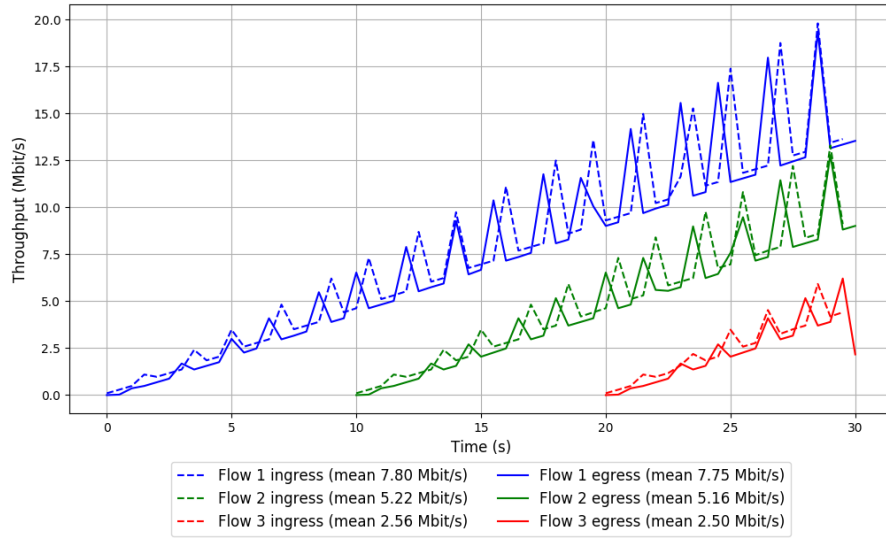
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-04-23 23:31:56
End at: 2019-04-23 23:32:26
Local clock offset: 0.018 ms
Remote clock offset: 0.1 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 110.299 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 110.320 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 110.296 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 109.284 ms
Loss rate: 4.46%
```
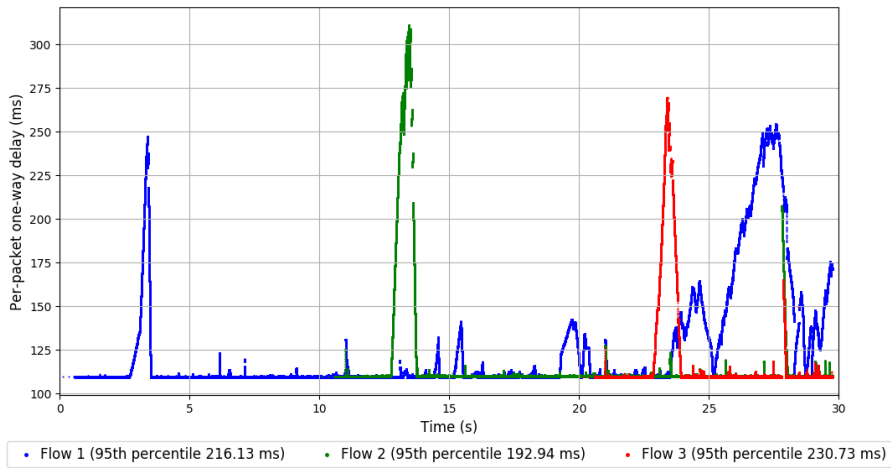
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-04-24 00:09:41
End at: 2019-04-24 00:10:11
Local clock offset: -0.068 ms
Remote clock offset: 0.043 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 110.444 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.744 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 109.508 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 109.917 ms
Loss rate: 4.46%
```
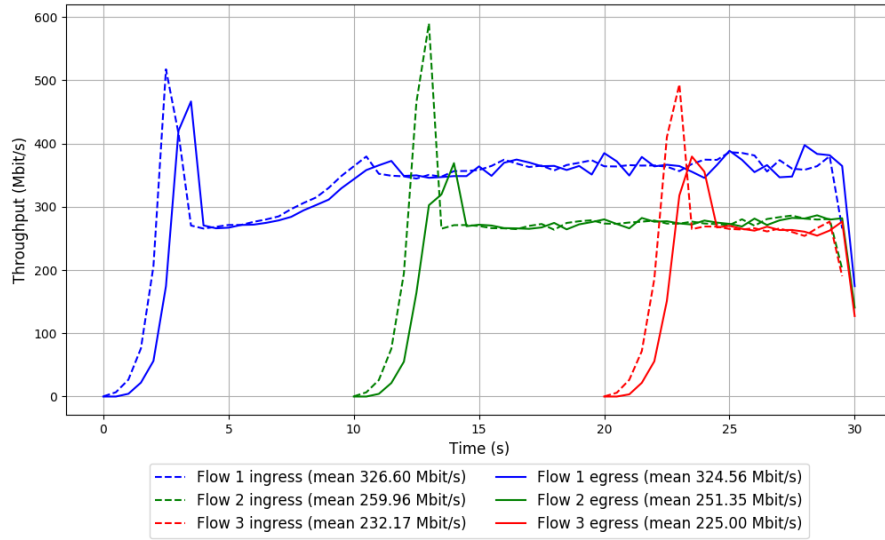
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-04-24 00:47:07
End at: 2019-04-24 00:47:37
Local clock offset: -0.538 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2019-04-24 02:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 110.054 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.286 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 109.867 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 108.688 ms
Loss rate: 4.47%
```
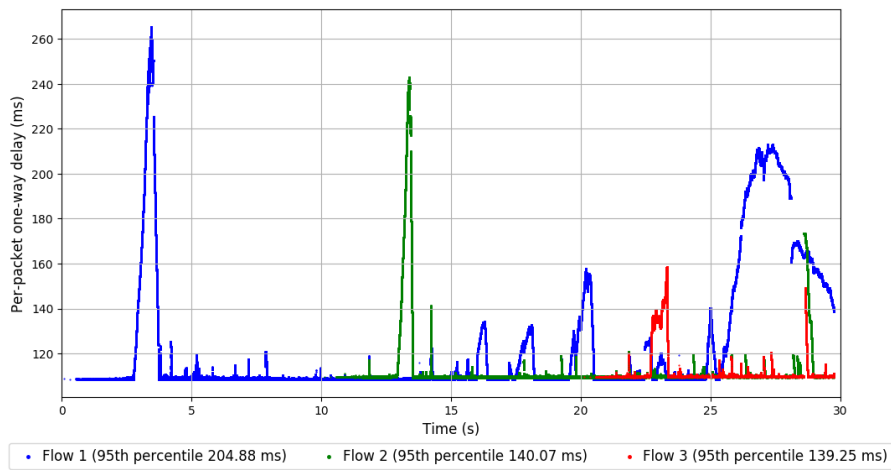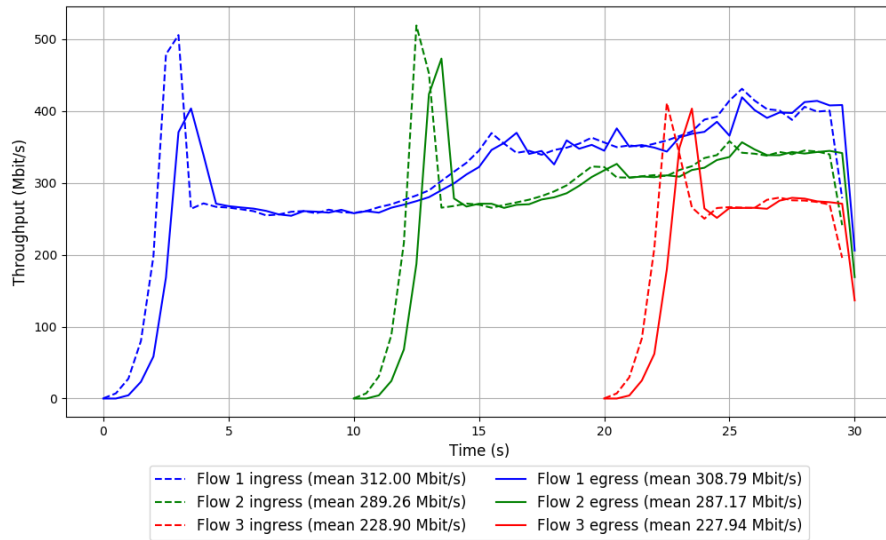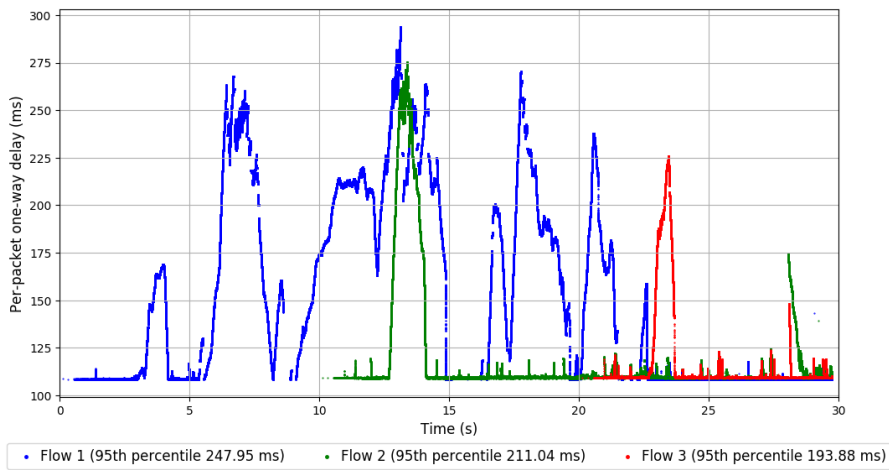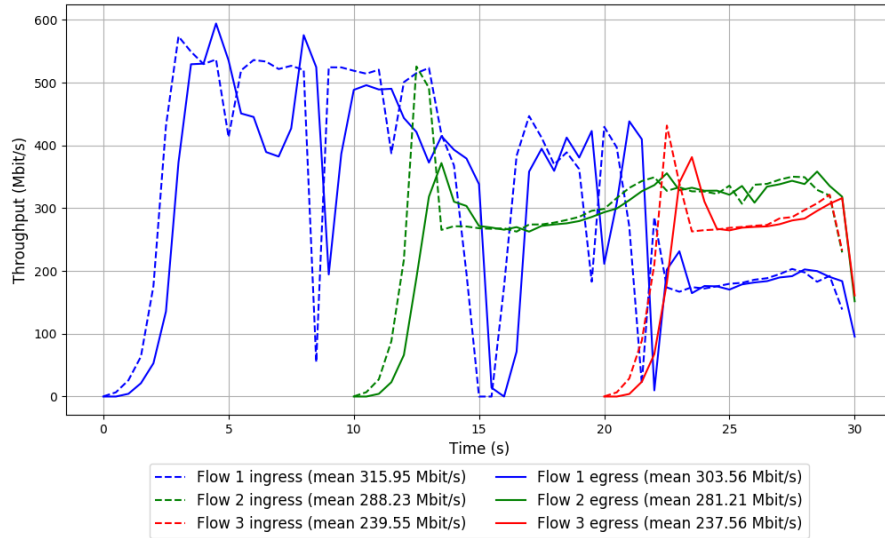
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-04-23 22:42:16
End at: 2019-04-23 22:42:46
Local clock offset: 0.251 ms
Remote clock offset: -0.104 ms


# Below is generated by plot.py at 2019-04-24 02:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 564.05 Mbit/s
95th percentile per-packet one-way delay: 214.971 ms
Loss rate: 2.78%
-- Flow 1:
Average throughput: 324.56 Mbit/s
95th percentile per-packet one-way delay: 216.131 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 251.35 Mbit/s
95th percentile per-packet one-way delay: 192.935 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 225.00 Mbit/s
95th percentile per-packet one-way delay: 230.733 ms
Loss rate: 5.25%
```

Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-04-23 23:19:18
End at: 2019-04-23 23:19:48
Local clock offset: 0.065 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2019-04-24 03:01:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 572.97 Mbit/s
95th percentile per-packet one-way delay: 196.693 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 308.79 Mbit/s
95th percentile per-packet one-way delay: 204.880 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 287.17 Mbit/s
95th percentile per-packet one-way delay: 140.071 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 227.94 Mbit/s
95th percentile per-packet one-way delay: 139.249 ms
Loss rate: 2.64%
```
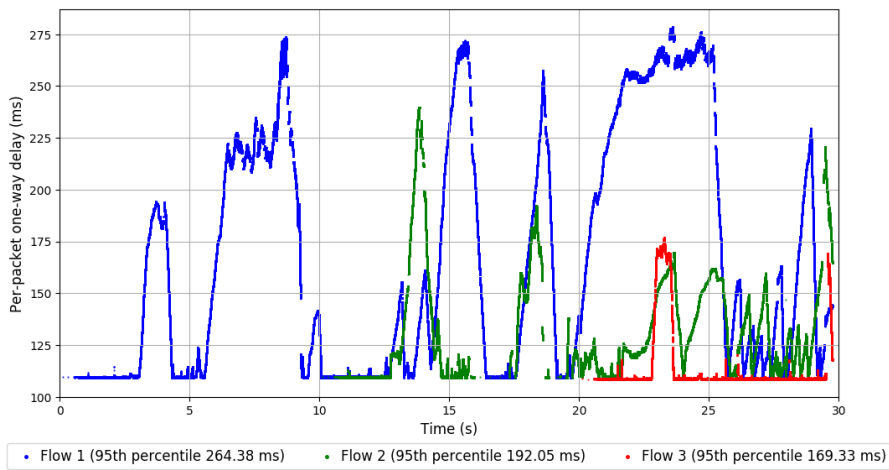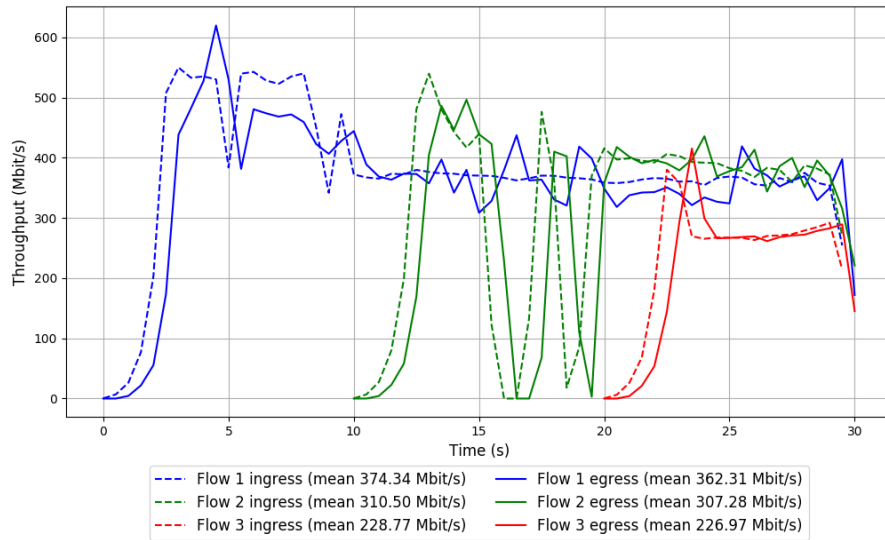
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-04-23 23:57:01
End at: 2019-04-23 23:57:31
Local clock offset: -0.127 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2019-04-24 03:01:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 566.93 Mbit/s
95th percentile per-packet one-way delay: 240.663 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 303.56 Mbit/s
95th percentile per-packet one-way delay: 247.950 ms
Loss rate: 4.62%
-- Flow 2:
Average throughput: 281.21 Mbit/s
95th percentile per-packet one-way delay: 211.044 ms
Loss rate: 3.51%
-- Flow 3:
Average throughput: 237.56 Mbit/s
95th percentile per-packet one-way delay: 193.883 ms
Loss rate: 3.05%
```
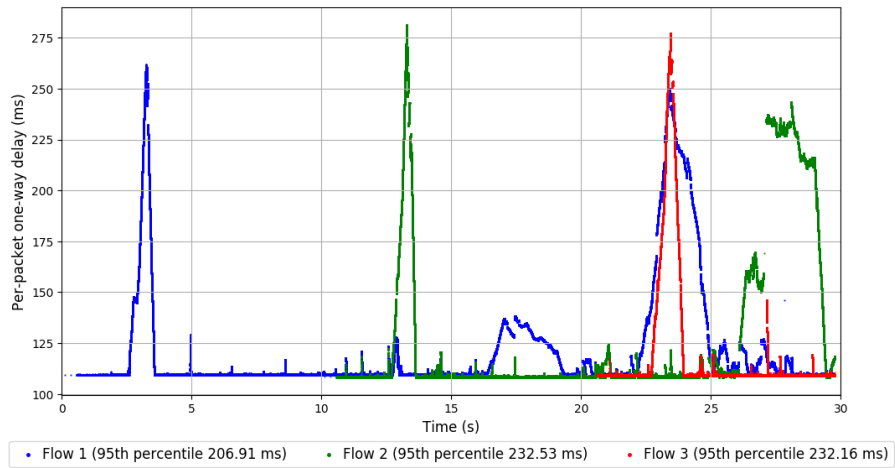
Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-04-24 00:34:17
End at: 2019-04-24 00:34:47
Local clock offset: 0.166 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2019-04-24 03:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 639.63 Mbit/s
95th percentile per-packet one-way delay: 260.184 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 362.31 Mbit/s
95th percentile per-packet one-way delay: 264.385 ms
Loss rate: 3.92%
-- Flow 2:
Average throughput: 307.28 Mbit/s
95th percentile per-packet one-way delay: 192.052 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 226.97 Mbit/s
95th percentile per-packet one-way delay: 169.328 ms
Loss rate: 2.99%
```
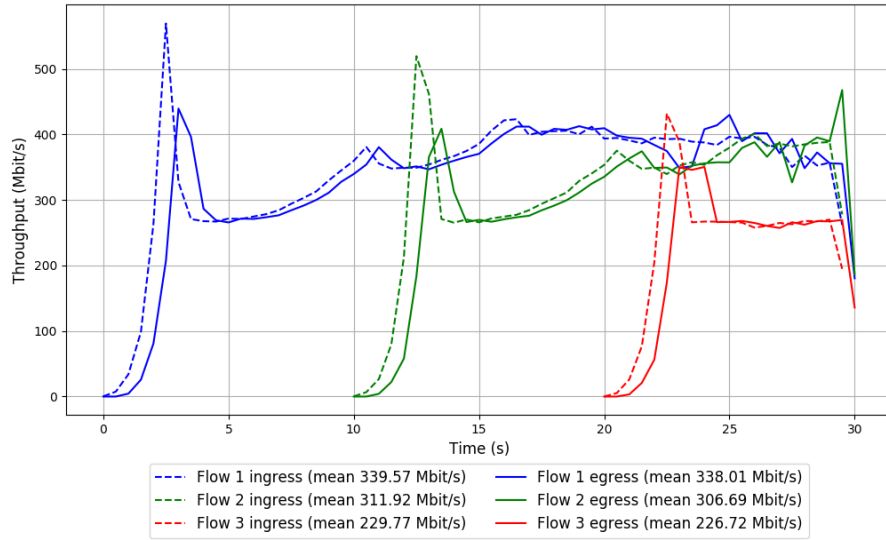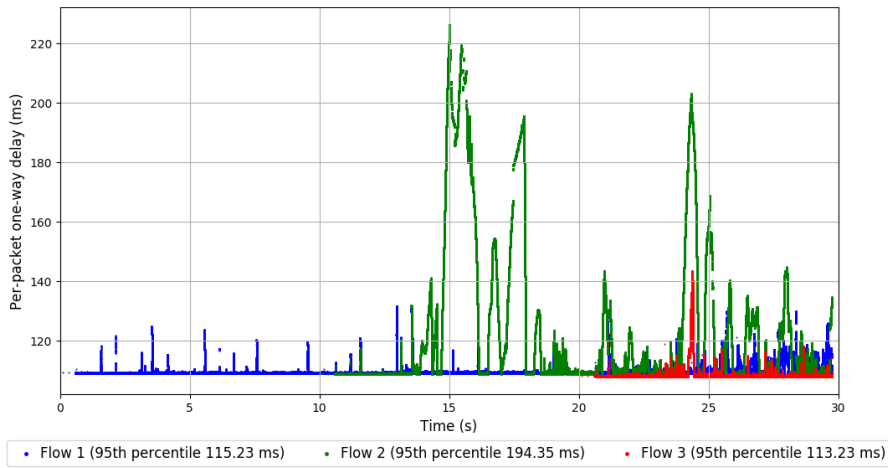
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-04-24 01:11:42
End at: 2019-04-24 01:12:12
Local clock offset: -0.273 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2019-04-24 03:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 614.54 Mbit/s
95th percentile per-packet one-way delay: 226.085 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 338.01 Mbit/s
95th percentile per-packet one-way delay: 206.905 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 306.69 Mbit/s
95th percentile per-packet one-way delay: 232.531 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 226.72 Mbit/s
95th percentile per-packet one-way delay: 232.155 ms
Loss rate: 3.52%
```
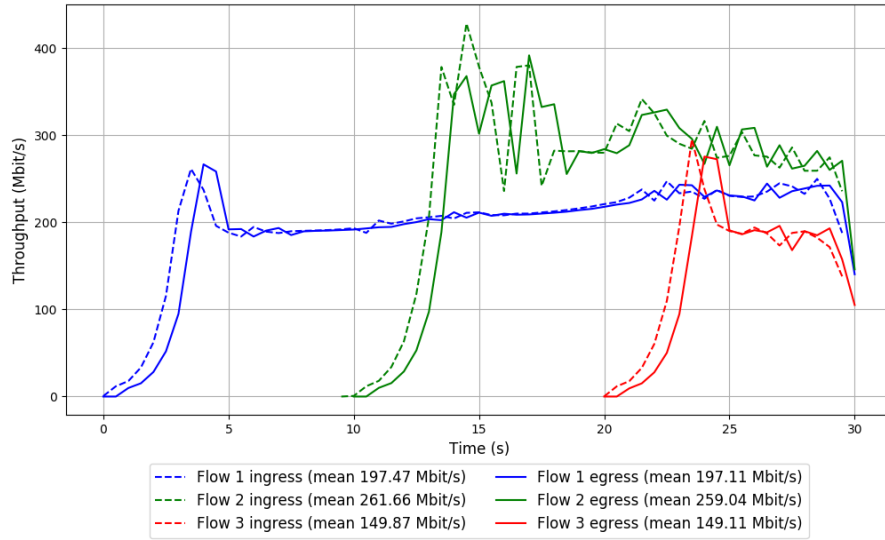
Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-04-23 22:24:39
End at: 2019-04-23 22:25:09
Local clock offset: 0.072 ms
Remote clock offset: 0.332 ms


# Below is generated by plot.py at 2019-04-24 03:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.36 Mbit/s
95th percentile per-packet one-way delay: 174.034 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 197.11 Mbit/s
95th percentile per-packet one-way delay: 115.229 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 259.04 Mbit/s
95th percentile per-packet one-way delay: 194.348 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 149.11 Mbit/s
95th percentile per-packet one-way delay: 113.234 ms
Loss rate: 2.70%
```
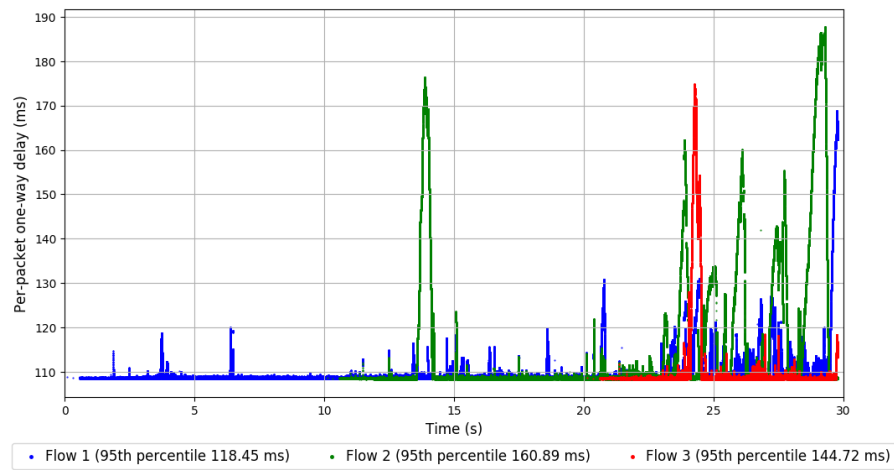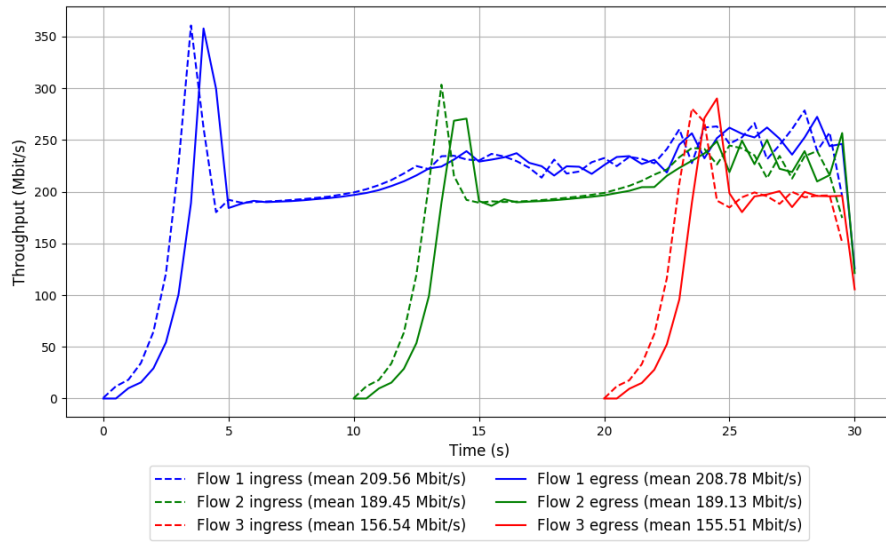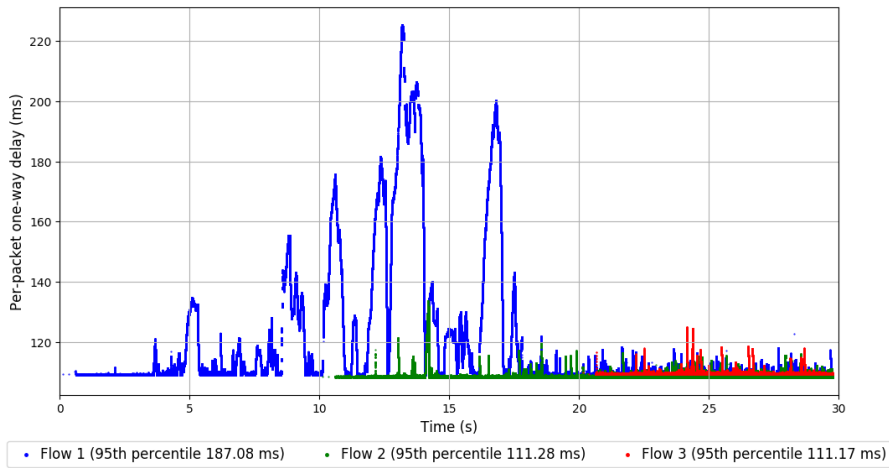
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 197.47 Mbit/s)   Flow 1 egress (mean 197.11 Mbit/s)
Flow 2 ingress (mean 261.66 Mbit/s)   Flow 2 egress (mean 259.04 Mbit/s)
Flow 3 ingress (mean 149.87 Mbit/s)   Flow 3 egress (mean 149.11 Mbit/s)

Flow 1 (95th percentile 115.23 ms)   Flow 2 (95th percentile 194.35 ms)   Flow 3 (95th percentile 113.23 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-04-23 23:01:01
End at: 2019-04-23 23:01:31
Local clock offset: 0.115 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2019-04-24 03:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 384.67 Mbit/s
95th percentile per-packet one-way delay: 140.017 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 208.78 Mbit/s
95th percentile per-packet one-way delay: 118.447 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 189.13 Mbit/s
95th percentile per-packet one-way delay: 160.892 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 155.51 Mbit/s
95th percentile per-packet one-way delay: 144.721 ms
Loss rate: 2.85%
```
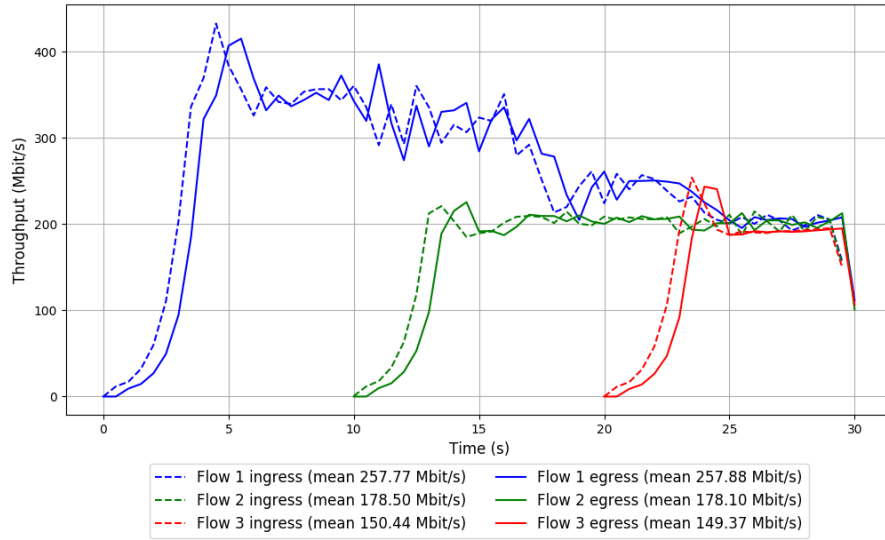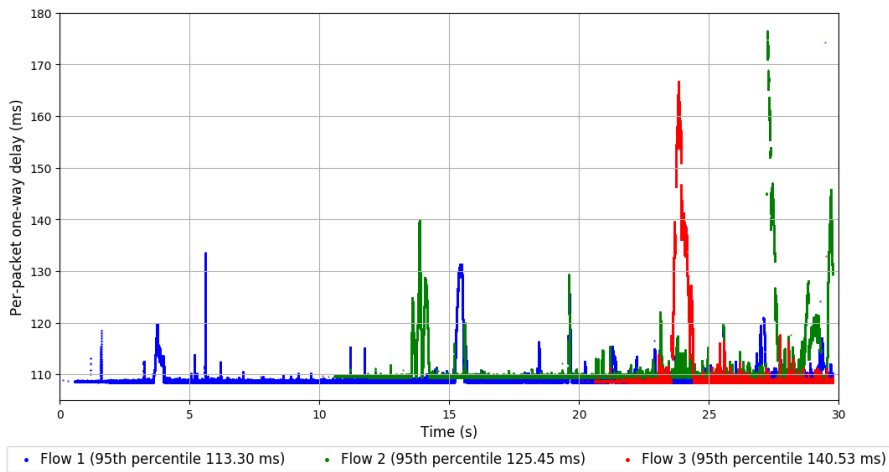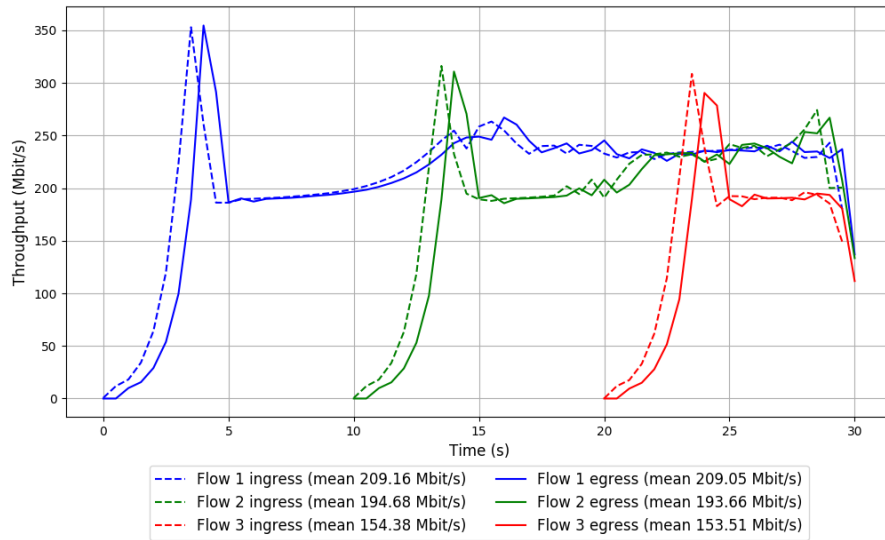
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 209.56 Mbit/s) --- Flow 1 egress (mean 208.78 Mbit/s)
Flow 2 ingress (mean 189.45 Mbit/s) --- Flow 2 egress (mean 189.13 Mbit/s)
Flow 3 ingress (mean 156.54 Mbit/s) --- Flow 3 egress (mean 155.51 Mbit/s)

Flow 1 (95th percentile 118.45 ms)   Flow 2 (95th percentile 160.89 ms)   Flow 3 (95th percentile 144.72 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-04-23 23:38:14
End at: 2019-04-23 23:38:44
Local clock offset: -0.069 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2019-04-24 03:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.35 Mbit/s
95th percentile per-packet one-way delay: 169.692 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 257.88 Mbit/s
95th percentile per-packet one-way delay: 187.077 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 178.10 Mbit/s
95th percentile per-packet one-way delay: 111.284 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 149.37 Mbit/s
95th percentile per-packet one-way delay: 111.165 ms
Loss rate: 2.93%
```
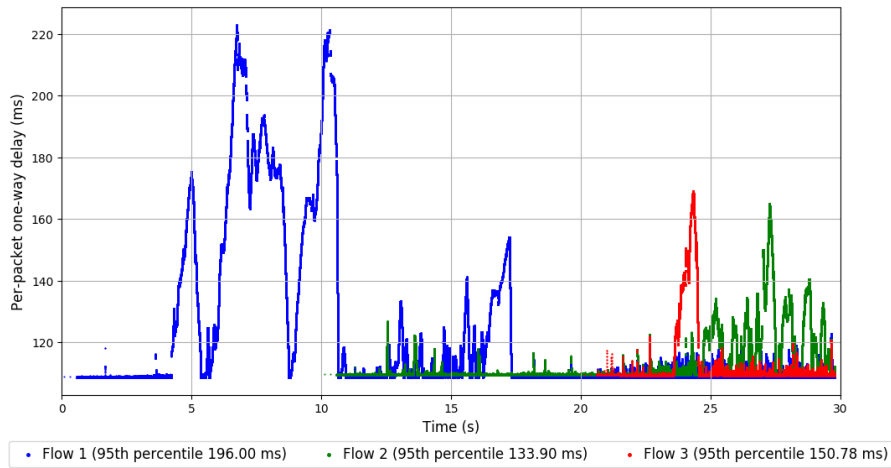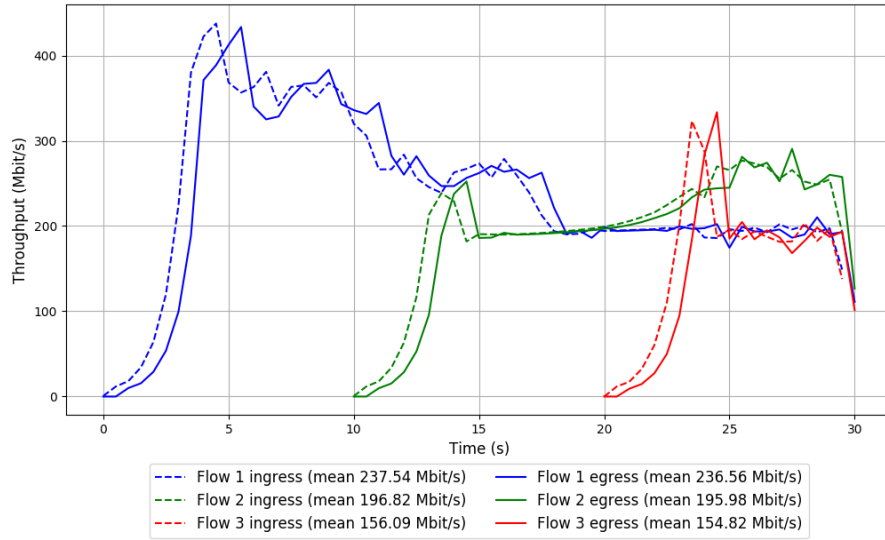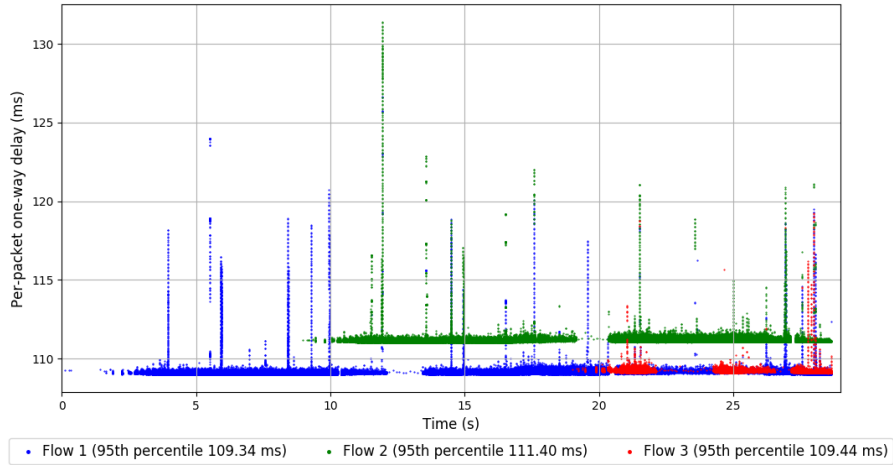
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 257.77 Mbit/s)   Flow 1 egress (mean 257.88 Mbit/s)
Flow 2 ingress (mean 178.50 Mbit/s)   Flow 2 egress (mean 178.10 Mbit/s)
Flow 3 ingress (mean 150.44 Mbit/s)   Flow 3 egress (mean 149.37 Mbit/s)

Flow 1 (95th percentile 187.08 ms)   Flow 2 (95th percentile 111.28 ms)   Flow 3 (95th percentile 111.17 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-04-24 00:16:27
End at: 2019-04-24 00:16:57
Local clock offset: 0.092 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2019-04-24 03:14:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.32 Mbit/s
95th percentile per-packet one-way delay: 120.574 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 209.05 Mbit/s
95th percentile per-packet one-way delay: 113.302 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 193.66 Mbit/s
95th percentile per-packet one-way delay: 125.453 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 153.51 Mbit/s
95th percentile per-packet one-way delay: 140.531 ms
Loss rate: 2.77%
```
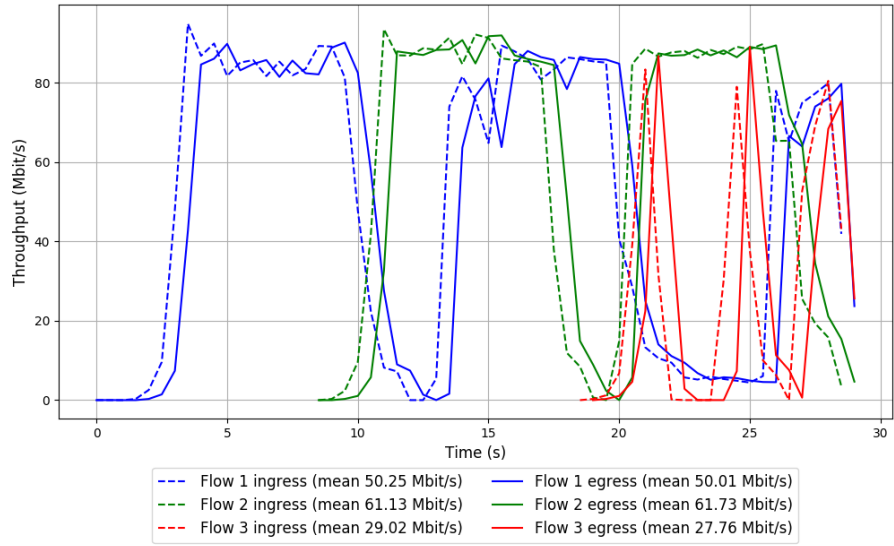
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-04-24 00:53:29
End at: 2019-04-24 00:53:59
Local clock offset: 0.083 ms
Remote clock offset: -0.044 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 416.69 Mbit/s
95th percentile per-packet one-way delay: 181.620 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 236.56 Mbit/s
95th percentile per-packet one-way delay: 196.001 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 195.98 Mbit/s
95th percentile per-packet one-way delay: 133.901 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 154.82 Mbit/s
95th percentile per-packet one-way delay: 150.775 ms
Loss rate: 3.02%
```
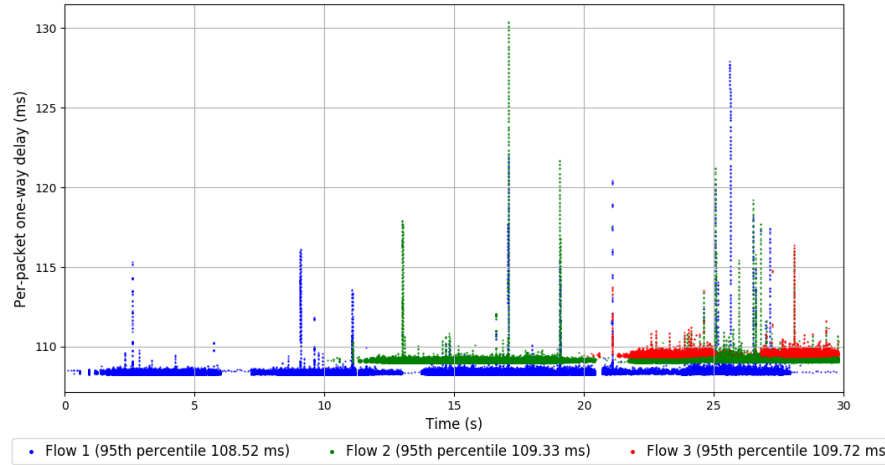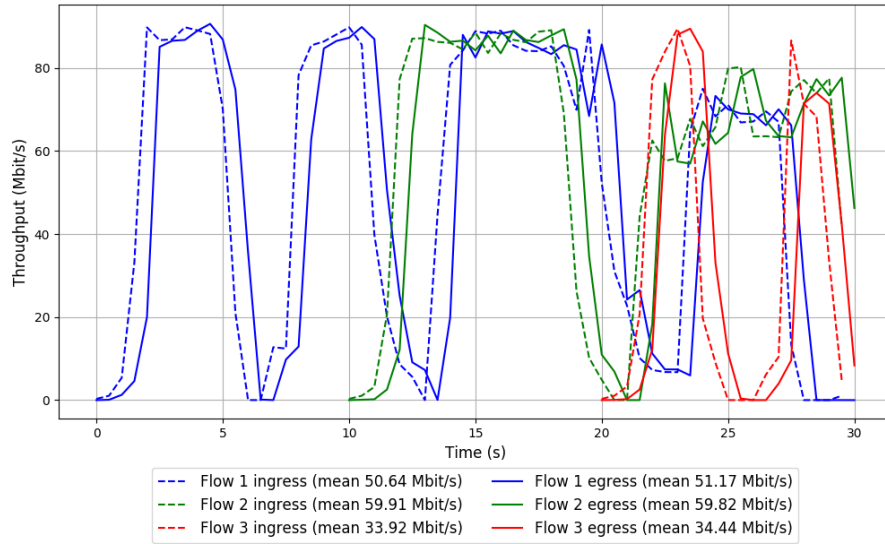
Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-04-23 22:23:16
End at: 2019-04-23 22:23:46
Local clock offset: -0.059 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.91 Mbit/s
95th percentile per-packet one-way delay: 111.323 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 50.01 Mbit/s
95th percentile per-packet one-way delay: 109.336 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 111.401 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 27.76 Mbit/s
95th percentile per-packet one-way delay: 109.443 ms
Loss rate: 6.48%
```
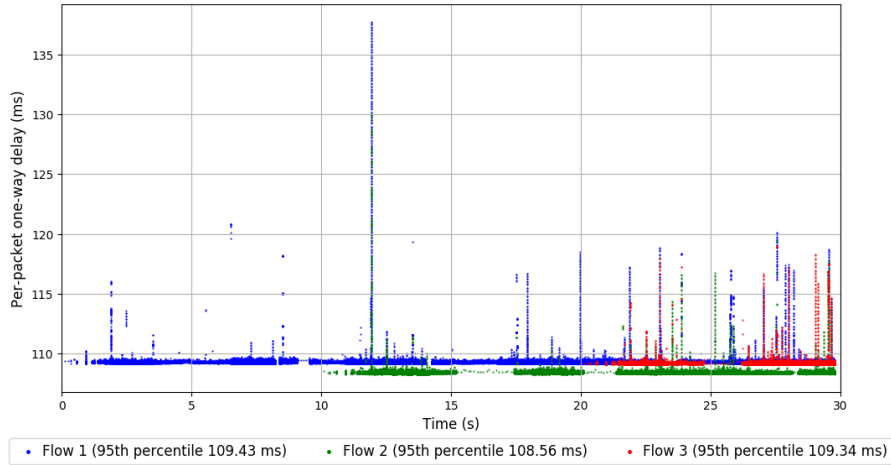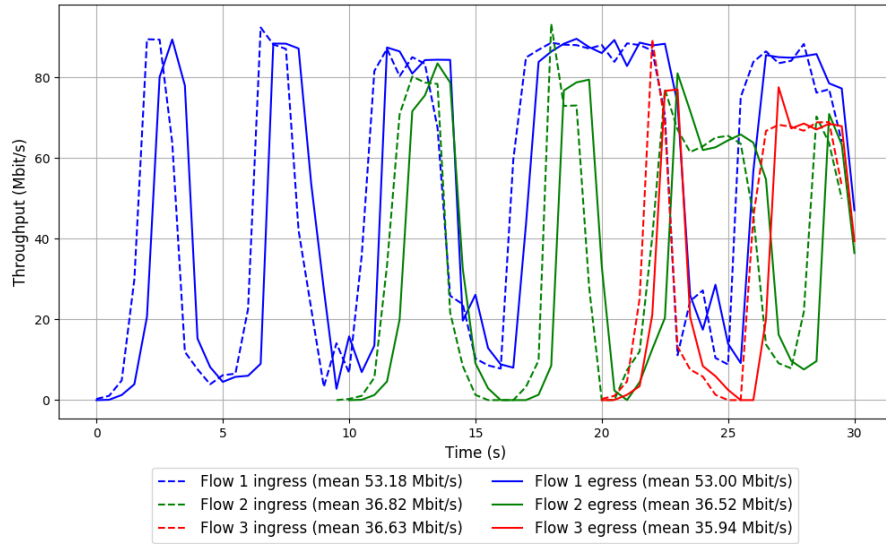
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-04-23 22:59:36
End at: 2019-04-23 23:00:06
Local clock offset: 0.038 ms
Remote clock offset: 0.015 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.86 Mbit/s
95th percentile per-packet one-way delay: 109.528 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 51.17 Mbit/s
95th percentile per-packet one-way delay: 108.517 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 59.82 Mbit/s
95th percentile per-packet one-way delay: 109.328 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 109.718 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-04-23 23:36:51
End at: 2019-04-23 23:37:21
Local clock offset: -0.079 ms
Remote clock offset: 0.026 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.90 Mbit/s
95th percentile per-packet one-way delay: 109.396 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 109.426 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 36.52 Mbit/s
95th percentile per-packet one-way delay: 108.557 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 35.94 Mbit/s
95th percentile per-packet one-way delay: 109.337 ms
Loss rate: 4.08%
```
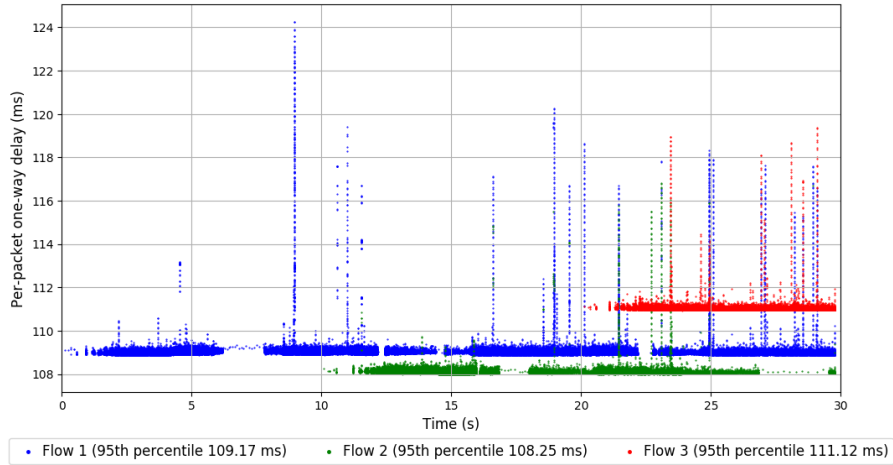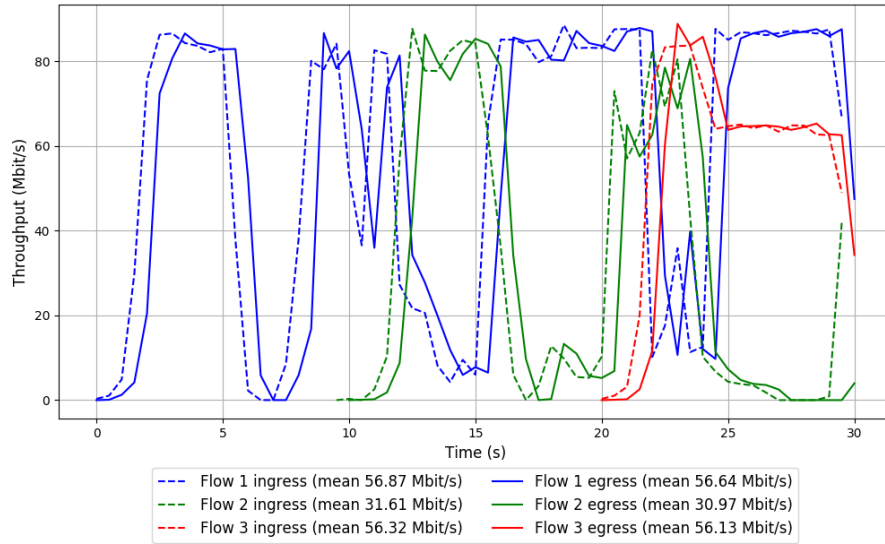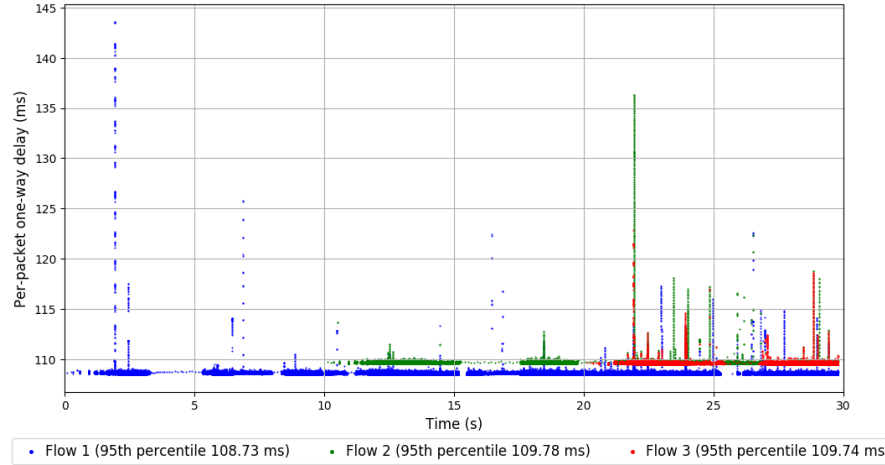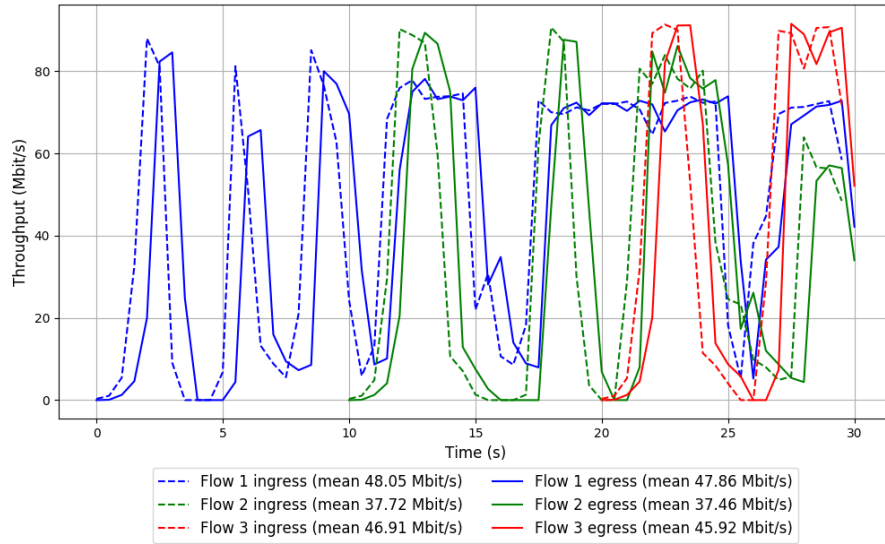
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-04-24 00:15:04
End at: 2019-04-24 00:15:34
Local clock offset: -0.102 ms
Remote clock offset: 0.357 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 111.045 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 56.64 Mbit/s
95th percentile per-packet one-way delay: 109.171 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 108.248 ms
Loss rate: 3.09%
-- Flow 3:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: 111.121 ms
Loss rate: 2.57%
```
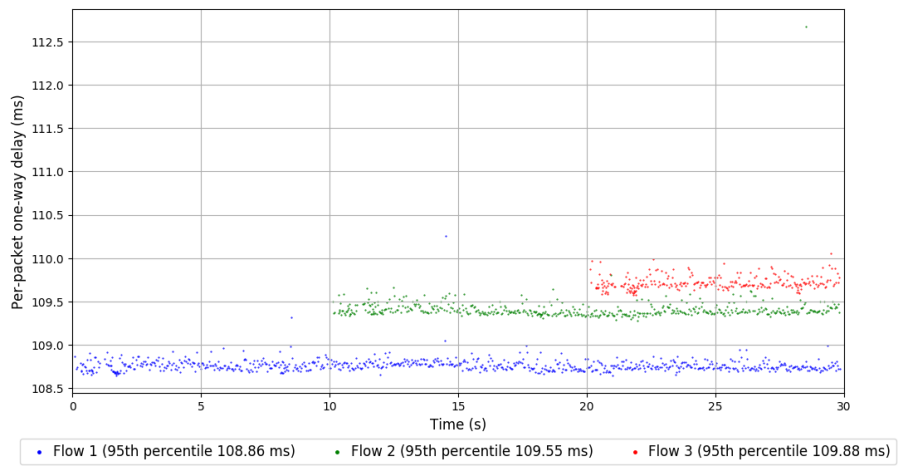
Run 4: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 56.87 Mbit/s)   —— Flow 1 egress (mean 56.64 Mbit/s)
- - - Flow 2 ingress (mean 31.61 Mbit/s)   —— Flow 2 egress (mean 30.97 Mbit/s)
- - - Flow 3 ingress (mean 56.32 Mbit/s)   —— Flow 3 egress (mean 56.13 Mbit/s)

- Flow 1 (95th percentile 109.17 ms)   • Flow 2 (95th percentile 108.25 ms)   • Flow 3 (95th percentile 111.12 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-04-24 00:52:06
End at: 2019-04-24 00:52:36
Local clock offset: 0.024 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 109.709 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 108.735 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 109.783 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 45.92 Mbit/s
95th percentile per-packet one-way delay: 109.739 ms
Loss rate: 4.27%
```
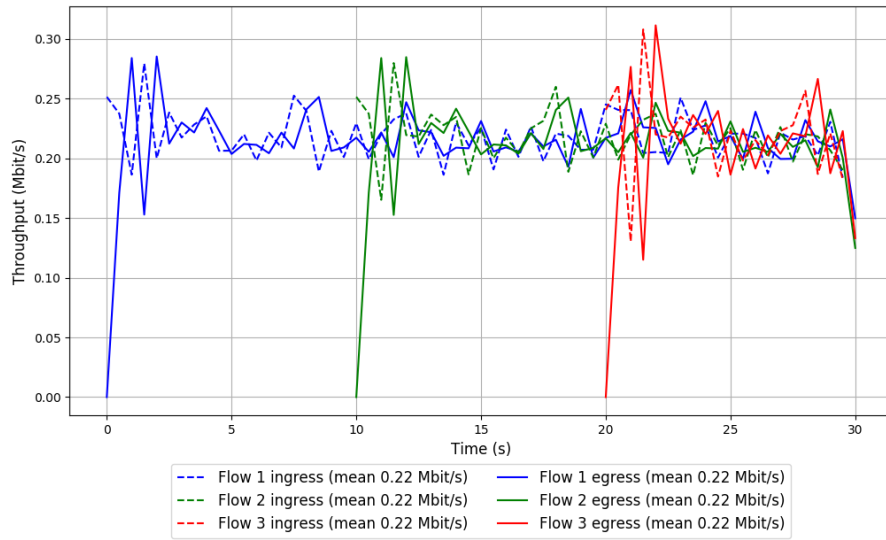
Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-04-23 22:39:44
End at: 2019-04-23 22:40:14
Local clock offset: 0.292 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.737 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.859 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.549 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.877 ms
Loss rate: 2.21%
```
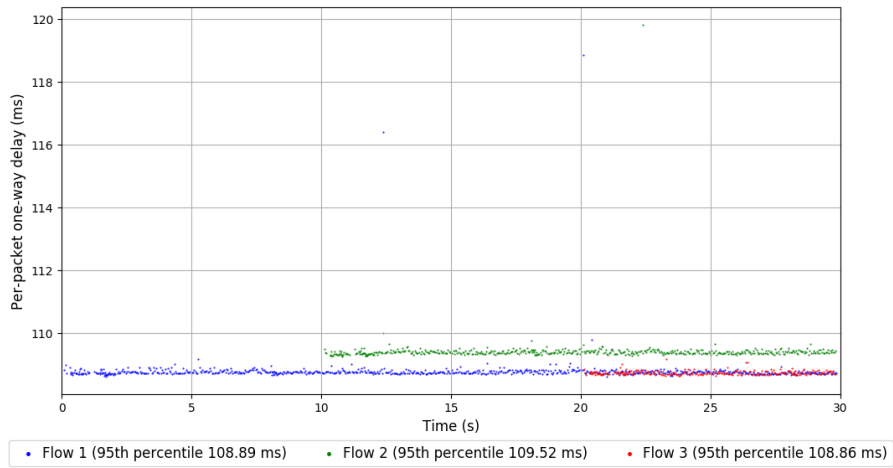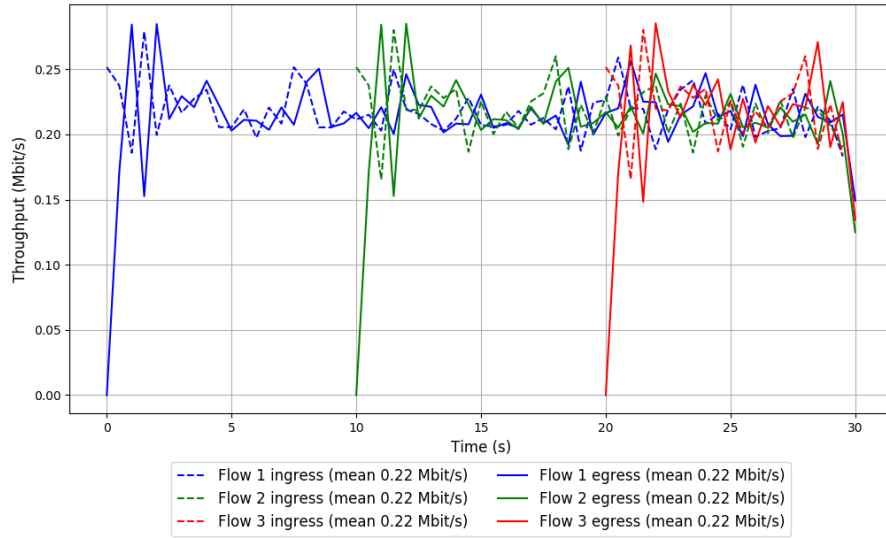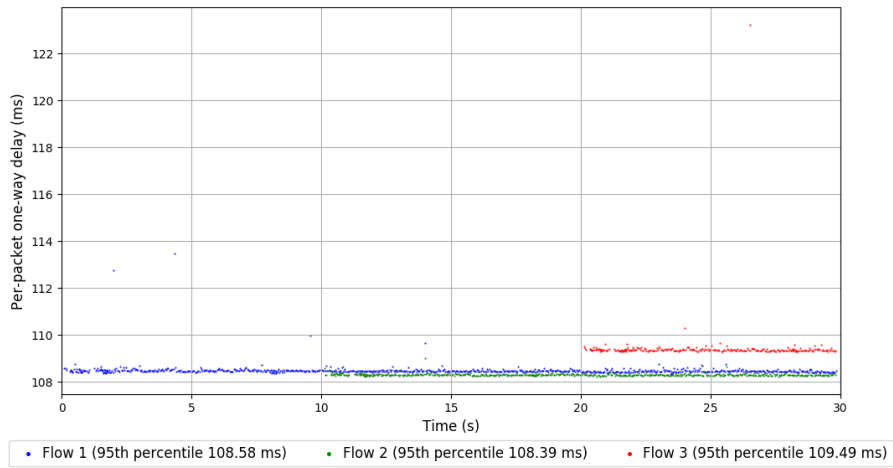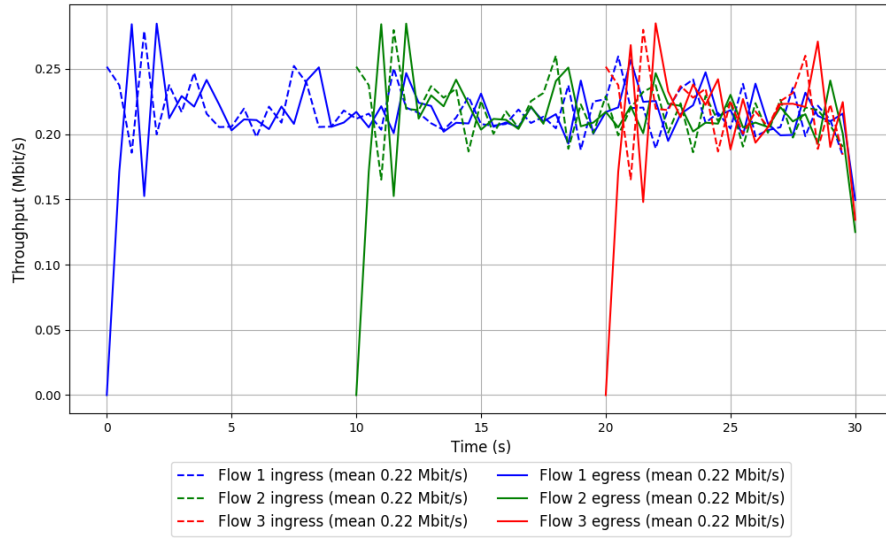
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-04-23 23:16:46
End at: 2019-04-23 23:17:16
Local clock offset: 0.143 ms
Remote clock offset: 0.057 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.463 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.888 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.518 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.862 ms
Loss rate: 2.22%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-04-23 23:54:29
End at: 2019-04-23 23:54:59
Local clock offset: -0.295 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.385 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.579 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.391 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.488 ms
Loss rate: 2.22%
```
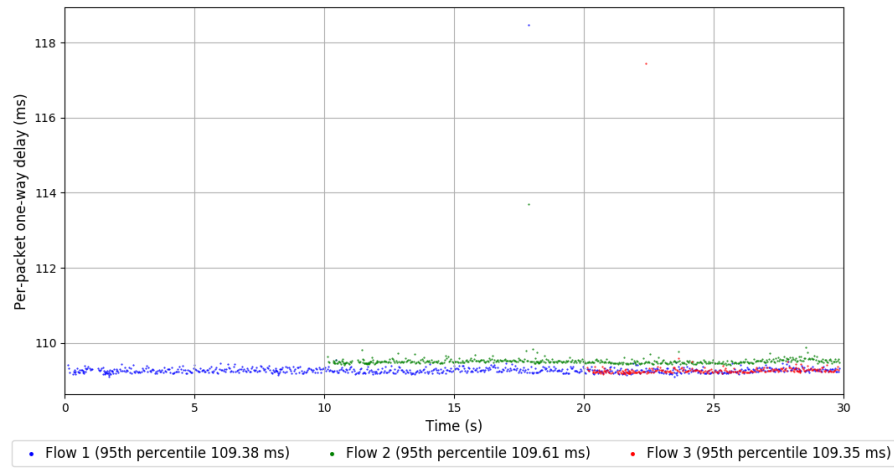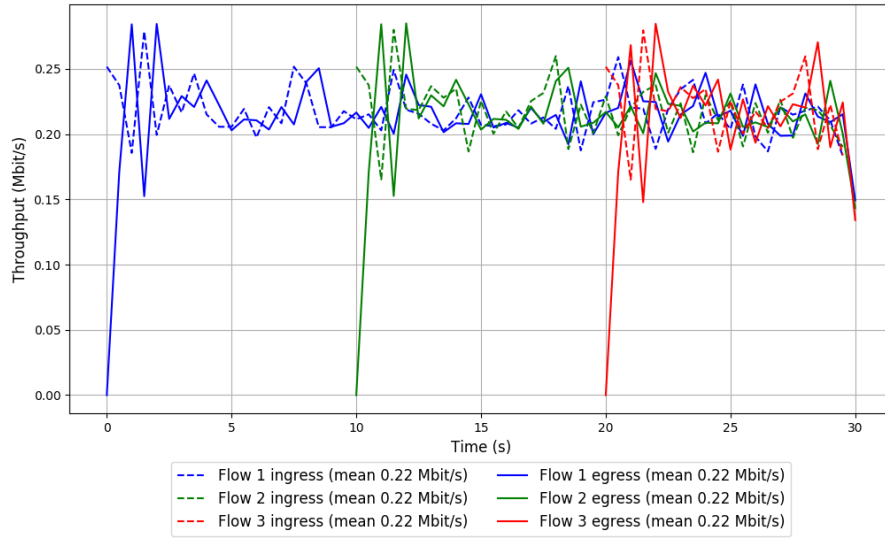
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-04-24 00:31:45
End at: 2019-04-24 00:32:15
Local clock offset: -0.101 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.559 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.375 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.609 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.352 ms
Loss rate: 2.22%
```
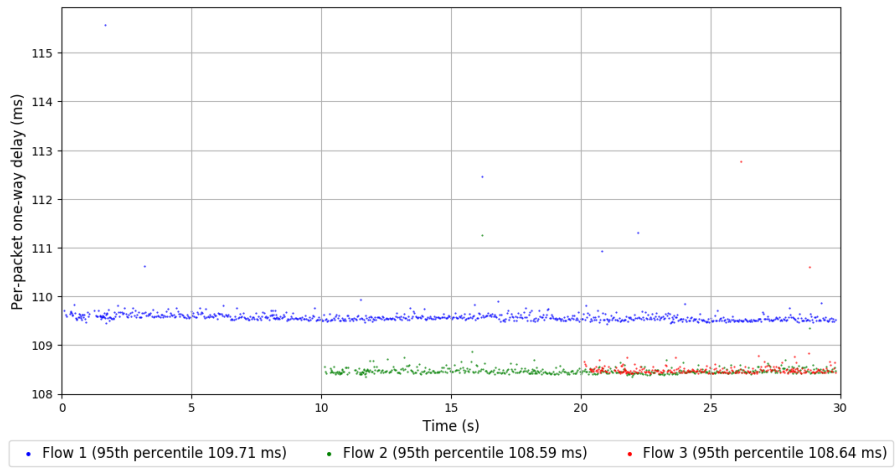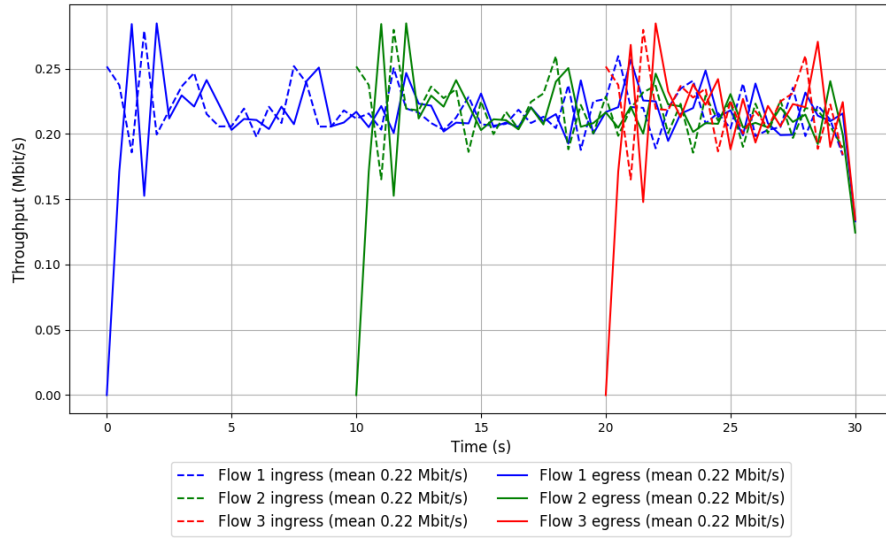
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-04-24 01:09:09
End at: 2019-04-24 01:09:39
Local clock offset: -0.192 ms
Remote clock offset: -0.062 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.661 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.707 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.588 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.642 ms
Loss rate: 2.22%
```
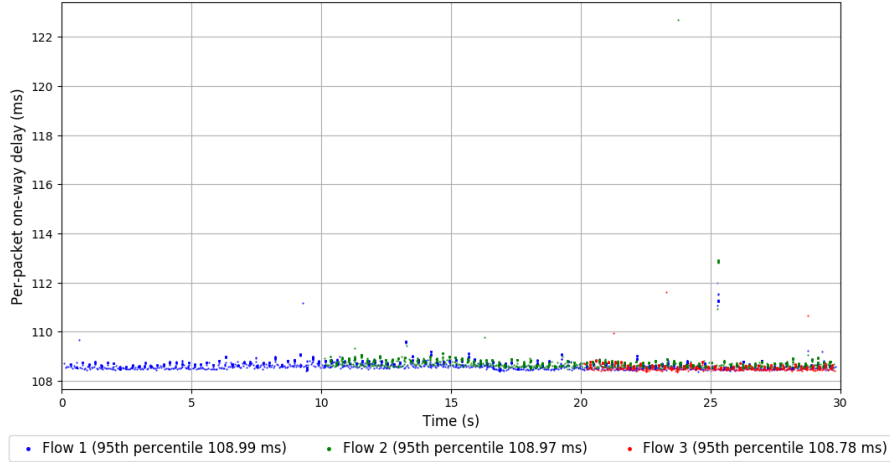
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-04-23 22:44:16
End at: 2019-04-23 22:44:46
Local clock offset: 0.121 ms
Remote clock offset: -0.082 ms


# Below is generated by plot.py at 2019-04-24 03:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 108.967 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 108.987 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 108.975 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 108.781 ms
Loss rate: 1.79%
```
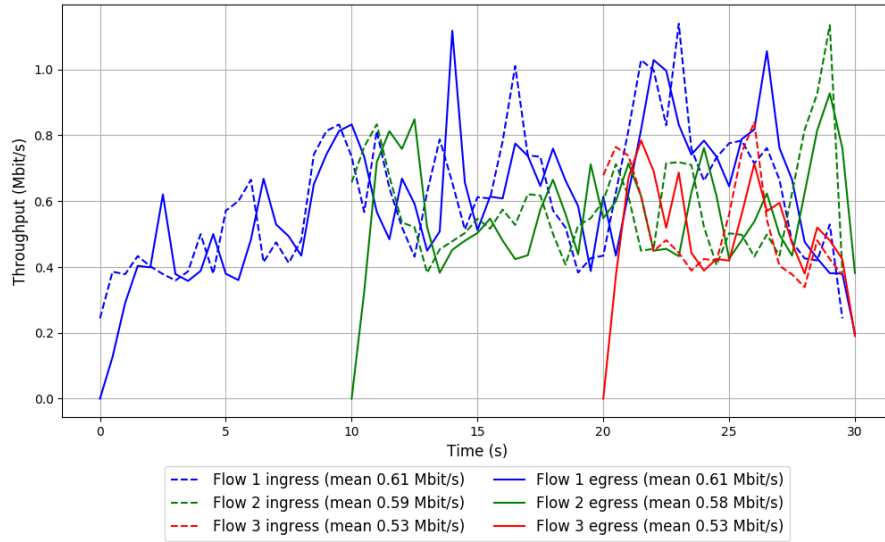
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-04-23 23:21:36
End at: 2019-04-23 23:22:06
Local clock offset: -0.696 ms
Remote clock offset: 0.113 ms


# Below is generated by plot.py at 2019-04-24 03:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 108.814 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 107.965 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 108.840 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 108.624 ms
Loss rate: 2.75%
```
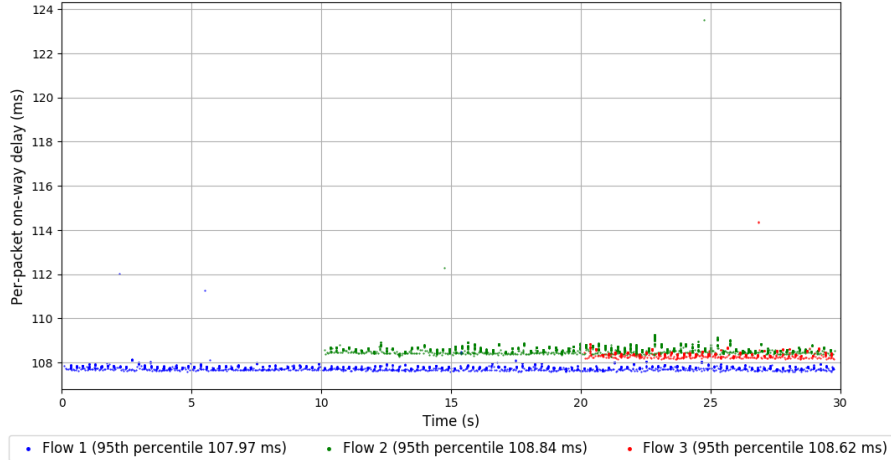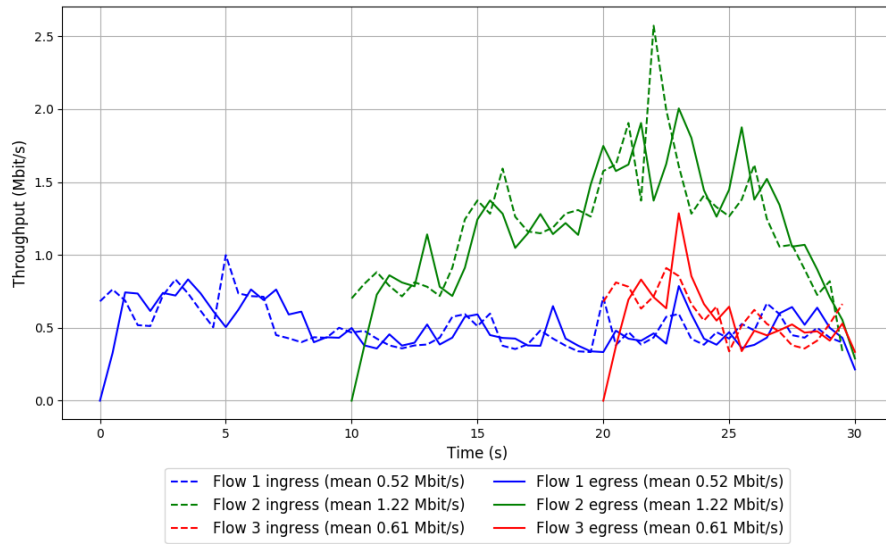
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-04-23 23:59:01
End at: 2019-04-23 23:59:31
Local clock offset: 0.022 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2019-04-24 03:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 110.029 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 110.057 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 109.756 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 110.014 ms
Loss rate: 0.20%
```
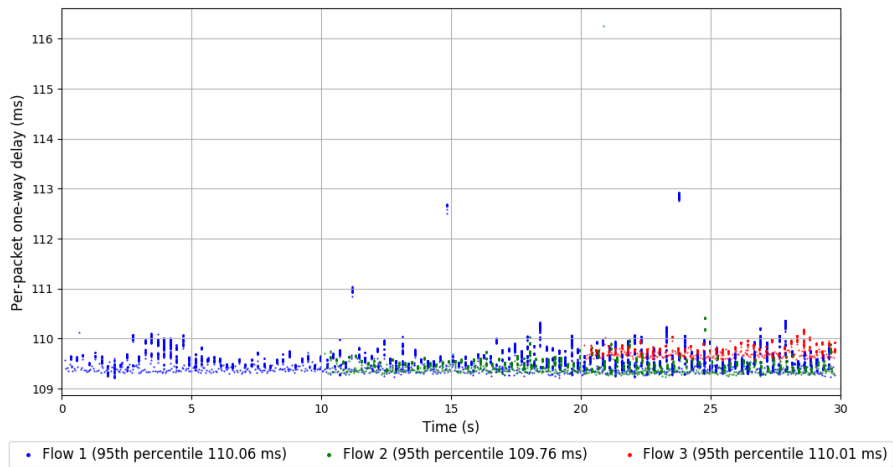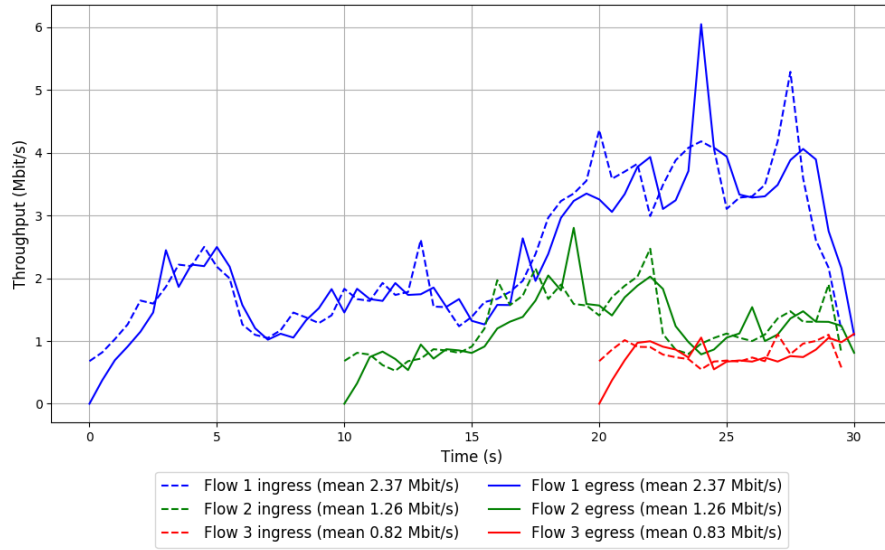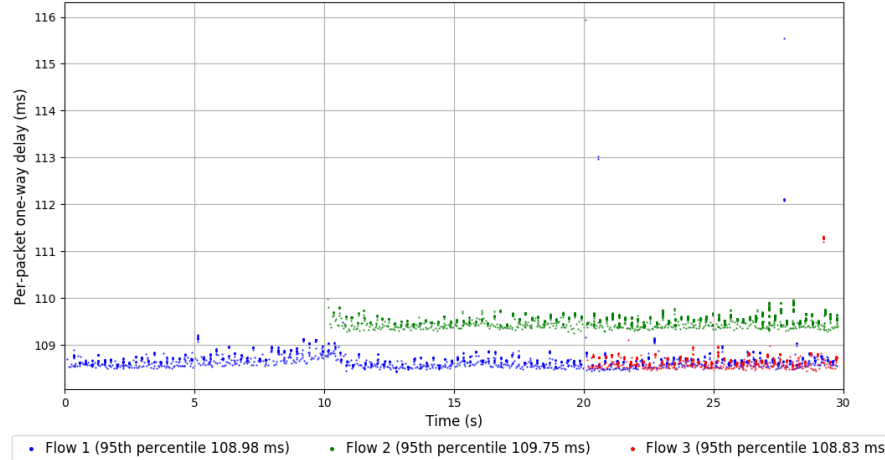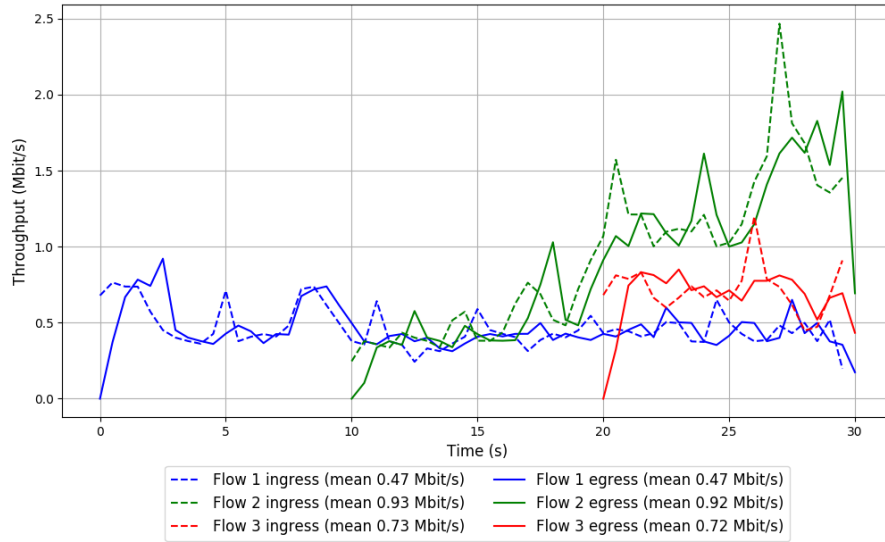
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-04-24 00:36:23
End at: 2019-04-24 00:36:53
Local clock offset: 0.011 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2019-04-24 03:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 109.680 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 108.985 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 109.746 ms
Loss rate: 2.07%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 108.826 ms
Loss rate: 3.32%
```

Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-04-24 01:13:50
End at: 2019-04-24 01:14:20
Local clock offset: -0.216 ms
Remote clock offset: 0.359 ms


# Below is generated by plot.py at 2019-04-24 03:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 110.198 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 109.099 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 110.269 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 108.283 ms
Loss rate: 2.44%
```
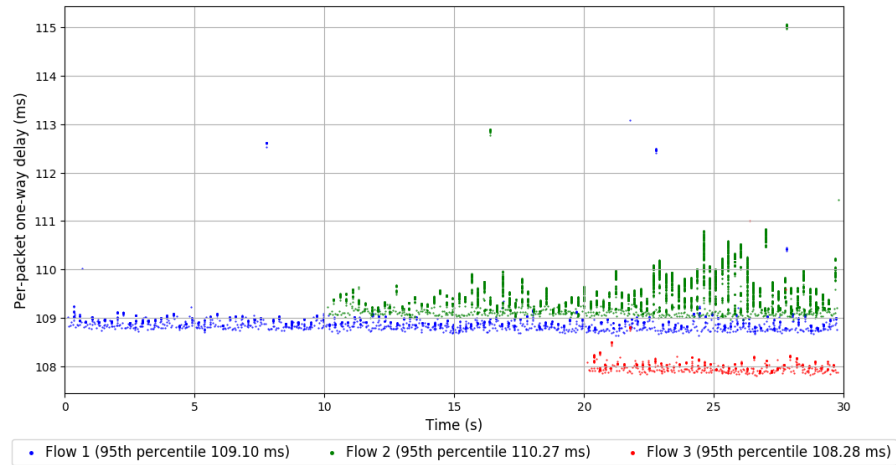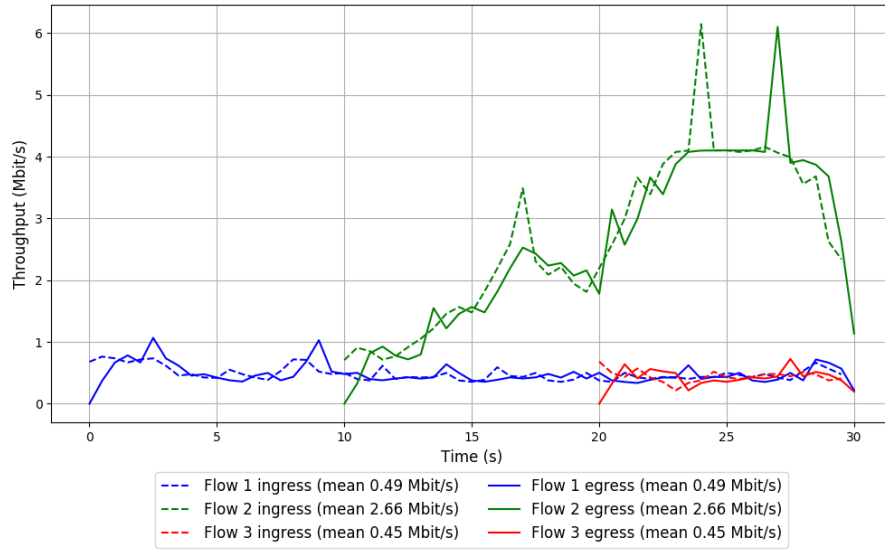
Run 5: Report of Sprout — Data Link

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

Start at: 2019-04-23 22:14:25
End at: 2019-04-23 22:14:55
Local clock offset: 0.24 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2019-04-24 03:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.57 Mbit/s
95th percentile per-packet one-way delay: 111.767 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 199.60 Mbit/s
95th percentile per-packet one-way delay: 109.435 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 190.74 Mbit/s
95th percentile per-packet one-way delay: 114.114 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 160.91 Mbit/s
95th percentile per-packet one-way delay: 116.919 ms
Loss rate: 3.24%
```
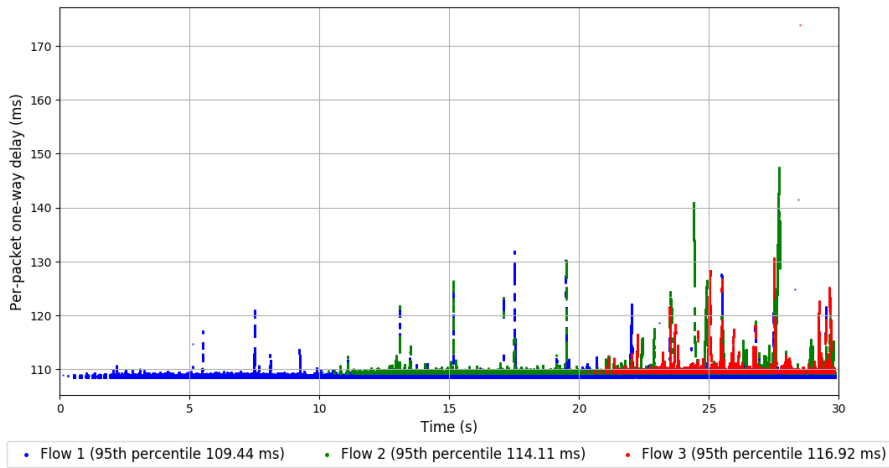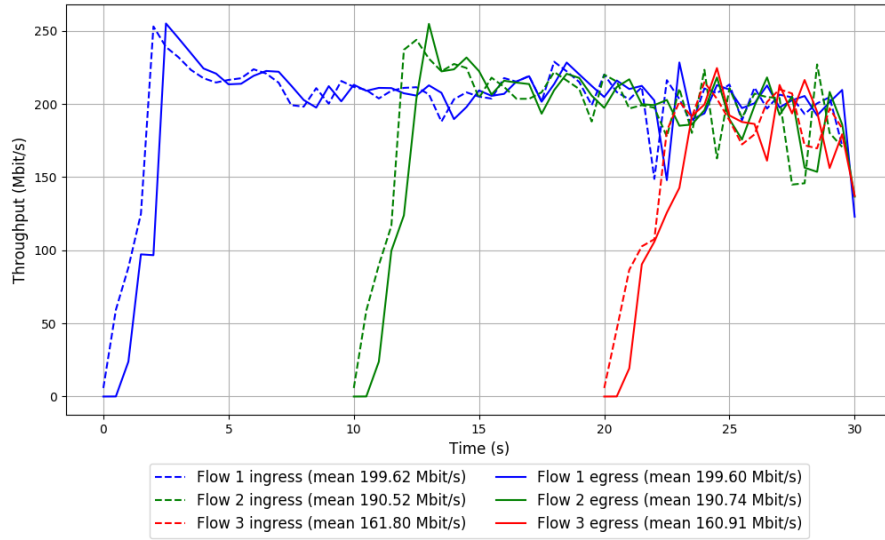
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 199.62 Mbit/s) ---- Flow 1 egress (mean 199.60 Mbit/s) ——
Flow 2 ingress (mean 190.52 Mbit/s) ---- Flow 2 egress (mean 190.74 Mbit/s) ——
Flow 3 ingress (mean 161.80 Mbit/s) ---- Flow 3 egress (mean 160.91 Mbit/s) ——

Flow 1 (95th percentile 109.44 ms)   Flow 2 (95th percentile 114.11 ms)   Flow 3 (95th percentile 116.92 ms)

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

Start at: 2019-04-23 22:51:02
End at: 2019-04-23 22:51:32
Local clock offset: 0.175 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2019-04-24 03:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.91 Mbit/s
95th percentile per-packet one-way delay: 110.034 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 108.565 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 198.58 Mbit/s
95th percentile per-packet one-way delay: 109.190 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 174.52 Mbit/s
95th percentile per-packet one-way delay: 110.938 ms
Loss rate: 2.76%
```
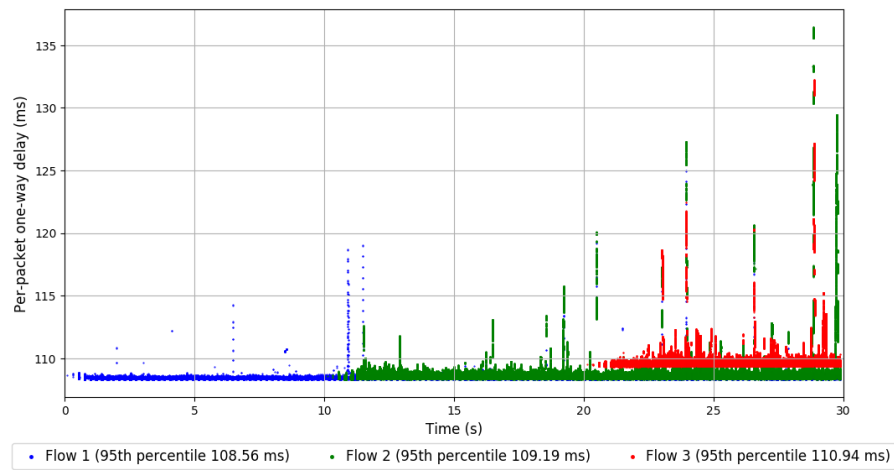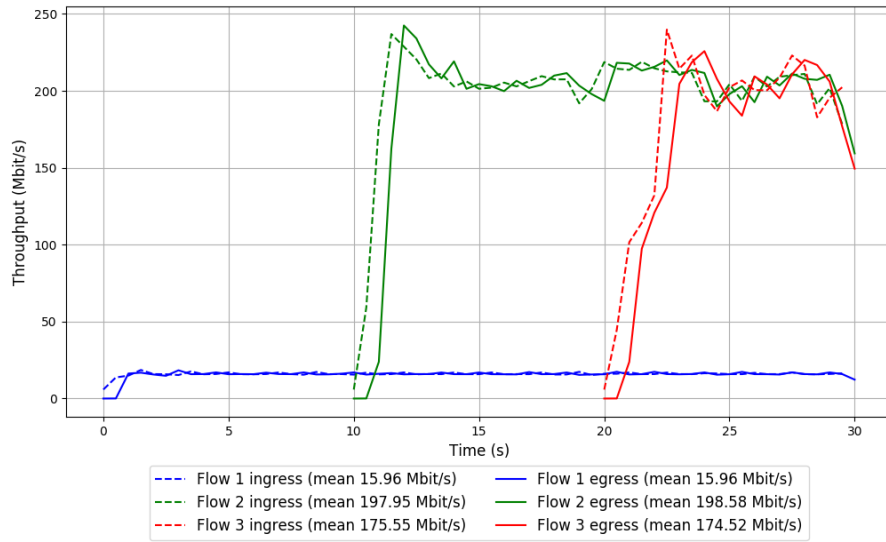
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 15.96 Mbit/s) --- Flow 1 egress (mean 15.96 Mbit/s)
Flow 2 ingress (mean 197.95 Mbit/s) --- Flow 2 egress (mean 198.58 Mbit/s)
Flow 3 ingress (mean 175.55 Mbit/s) --- Flow 3 egress (mean 174.52 Mbit/s)

Flow 1 (95th percentile 108.56 ms) Flow 2 (95th percentile 109.19 ms) Flow 3 (95th percentile 110.94 ms)

168

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

Start at: 2019-04-23 23:28:03
End at: 2019-04-23 23:28:33
Local clock offset: 0.01 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2019-04-24 03:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.79 Mbit/s
95th percentile per-packet one-way delay: 111.805 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 193.92 Mbit/s
95th percentile per-packet one-way delay: 111.373 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 183.90 Mbit/s
95th percentile per-packet one-way delay: 112.059 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 154.42 Mbit/s
95th percentile per-packet one-way delay: 115.665 ms
Loss rate: 3.59%
```
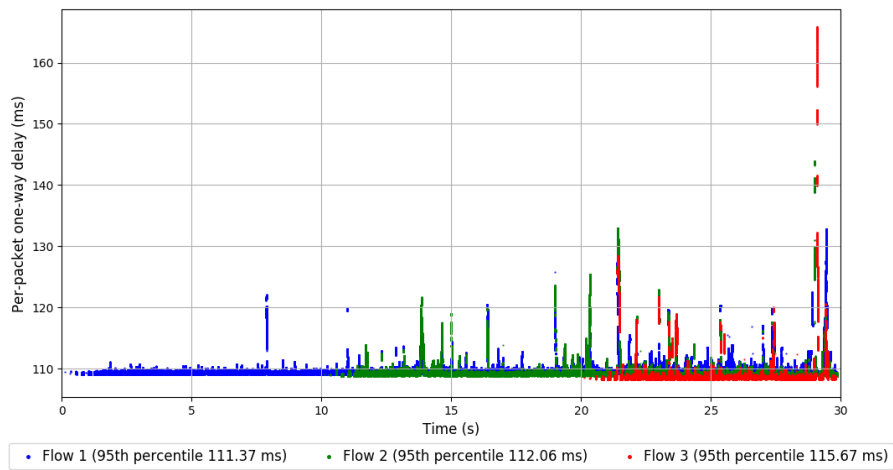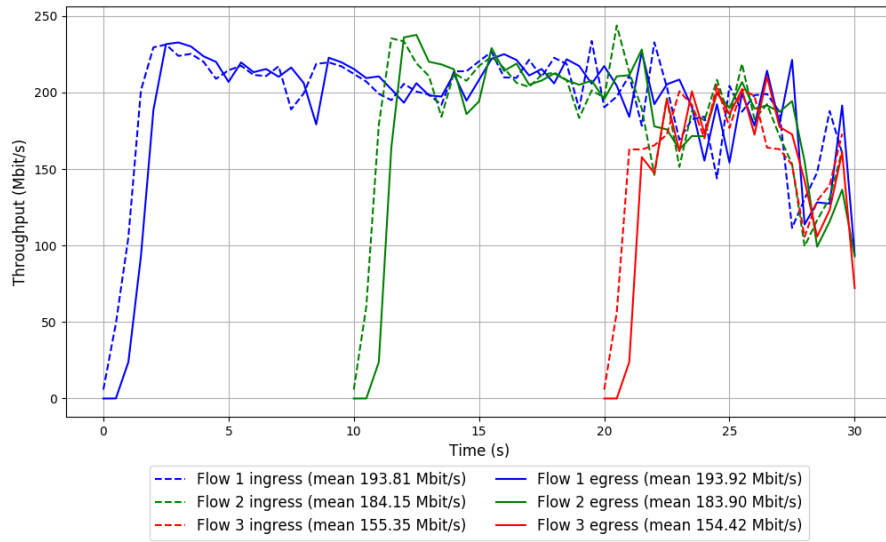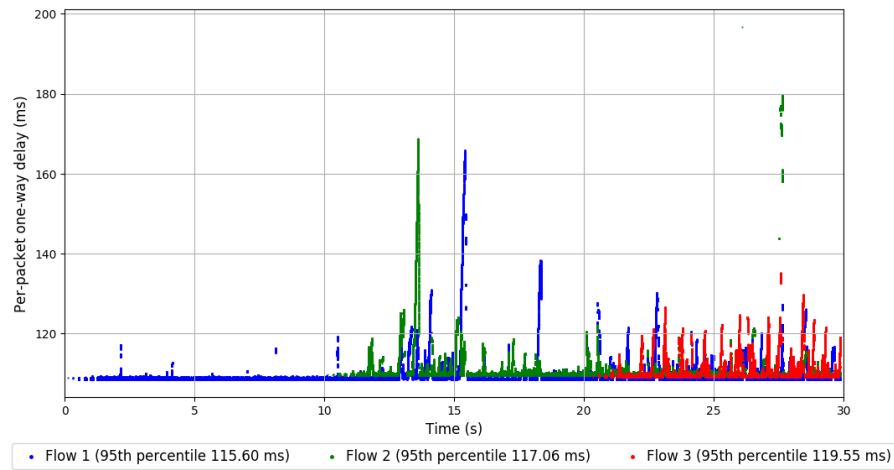
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 193.81 Mbit/s)   Flow 1 egress (mean 193.92 Mbit/s)
Flow 2 ingress (mean 184.15 Mbit/s)   Flow 2 egress (mean 183.90 Mbit/s)
Flow 3 ingress (mean 155.35 Mbit/s)   Flow 3 egress (mean 154.42 Mbit/s)

Flow 1 (95th percentile 111.37 ms)   Flow 2 (95th percentile 112.06 ms)   Flow 3 (95th percentile 115.67 ms)

170

```
Run 4: Statistics of TaoVA-100x

Start at: 2019-04-24 00:05:42
End at: 2019-04-24 00:06:12
Local clock offset: 0.184 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-04-24 03:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.61 Mbit/s
95th percentile per-packet one-way delay: 117.190 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 184.33 Mbit/s
95th percentile per-packet one-way delay: 115.600 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 184.31 Mbit/s
95th percentile per-packet one-way delay: 117.056 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 161.96 Mbit/s
95th percentile per-packet one-way delay: 119.549 ms
Loss rate: 2.34%
```
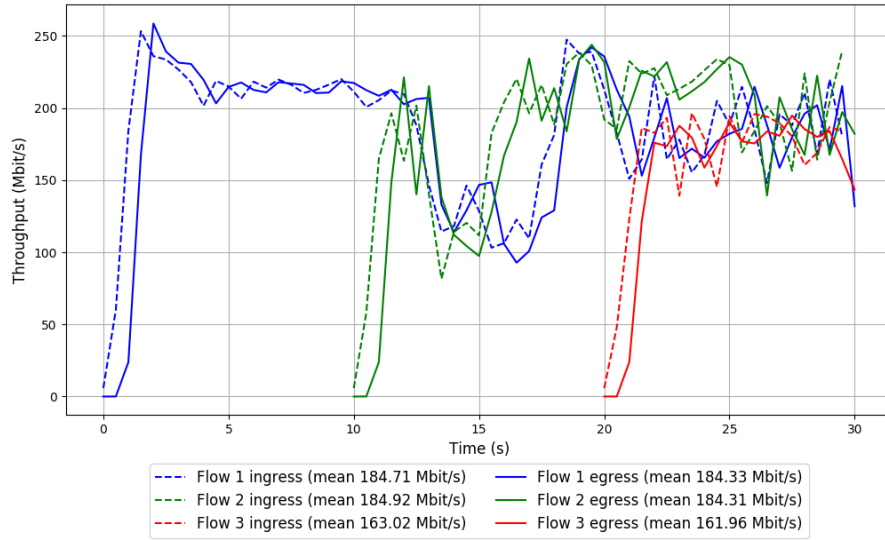
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-04-24 00:43:09
End at: 2019-04-24 00:43:39
Local clock offset: -0.331 ms
Remote clock offset: 0.336 ms


# Below is generated by plot.py at 2019-04-24 03:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.44 Mbit/s
95th percentile per-packet one-way delay: 110.659 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 199.75 Mbit/s
95th percentile per-packet one-way delay: 109.400 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 200.23 Mbit/s
95th percentile per-packet one-way delay: 111.583 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 179.74 Mbit/s
95th percentile per-packet one-way delay: 114.804 ms
Loss rate: 1.92%
```
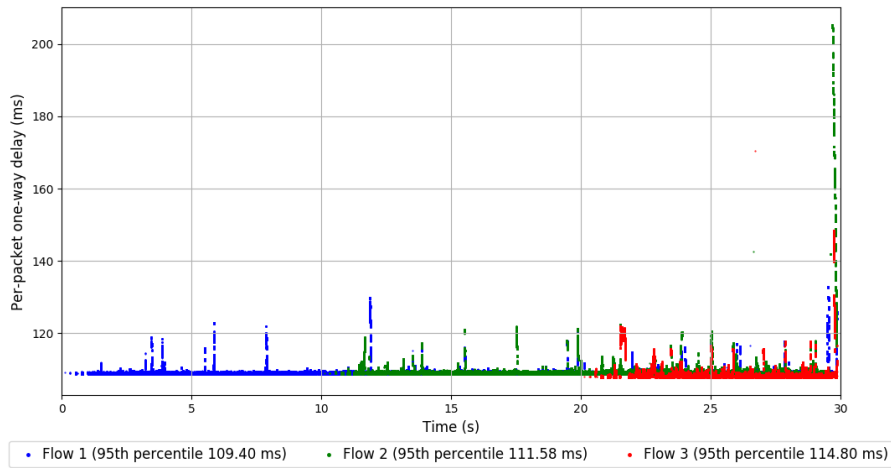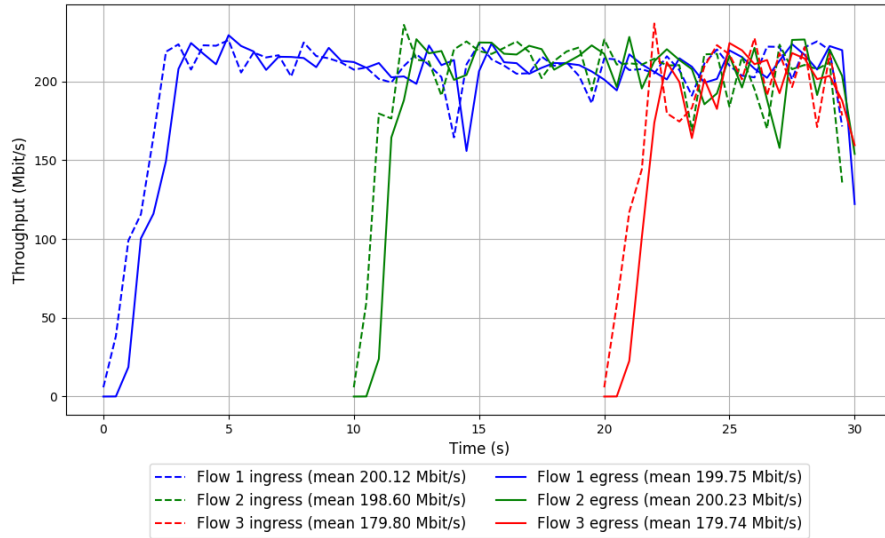
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 200.12 Mbit/s) — Flow 1 egress (mean 199.75 Mbit/s)
Flow 2 ingress (mean 198.60 Mbit/s) — Flow 2 egress (mean 200.23 Mbit/s)
Flow 3 ingress (mean 179.80 Mbit/s) — Flow 3 egress (mean 179.74 Mbit/s)

Flow 1 (95th percentile 109.40 ms)   Flow 2 (95th percentile 111.58 ms)   Flow 3 (95th percentile 114.80 ms)

174

```
Run 1: Statistics of TCP Vegas

Start at: 2019-04-23 22:19:32
End at: 2019-04-23 22:20:02
Local clock offset: 0.009 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2019-04-24 03:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 577.76 Mbit/s
95th percentile per-packet one-way delay: 112.380 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 252.68 Mbit/s
95th percentile per-packet one-way delay: 109.833 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 367.98 Mbit/s
95th percentile per-packet one-way delay: 113.956 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 246.53 Mbit/s
95th percentile per-packet one-way delay: 118.816 ms
Loss rate: 2.62%
```
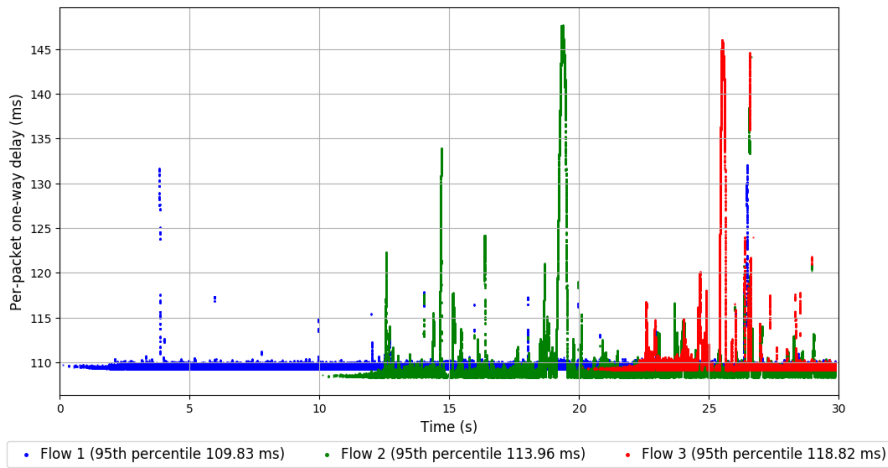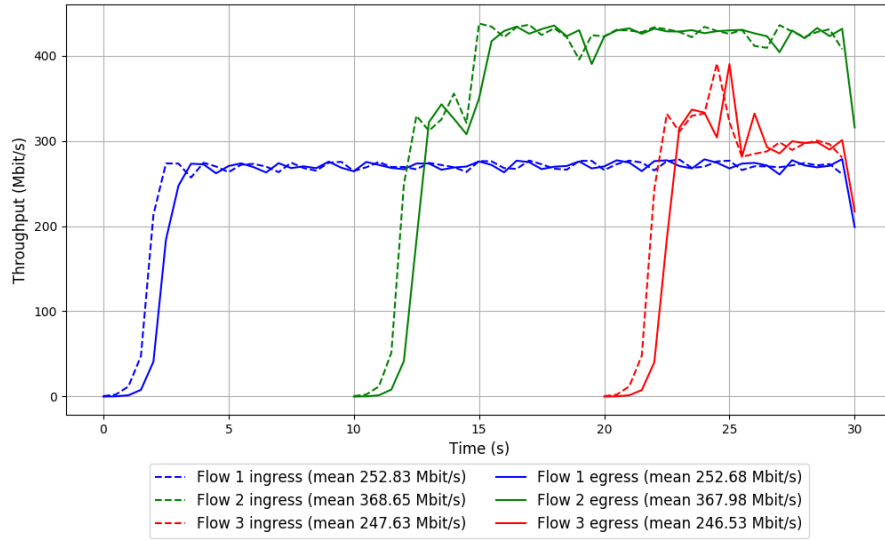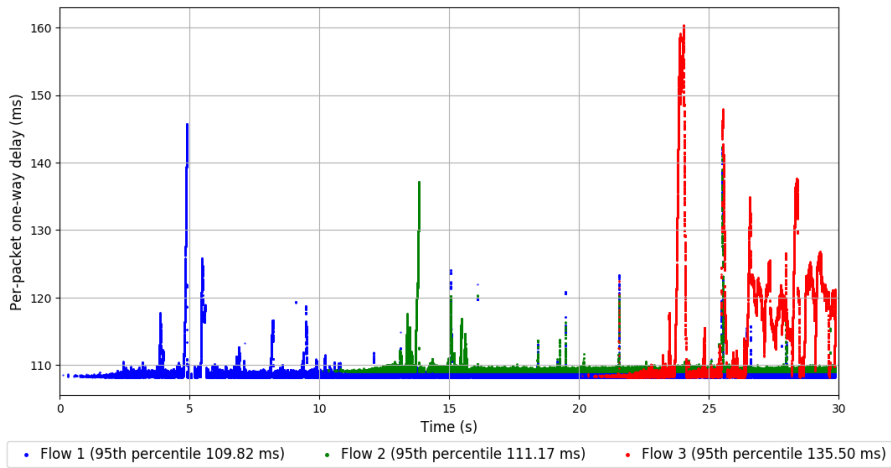
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-04-23 22:55:53
End at: 2019-04-23 22:56:23
Local clock offset: -0.008 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2019-04-24 03:24:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 523.04 Mbit/s
95th percentile per-packet one-way delay: 122.001 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 251.74 Mbit/s
95th percentile per-packet one-way delay: 109.824 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 218.79 Mbit/s
95th percentile per-packet one-way delay: 111.170 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 384.98 Mbit/s
95th percentile per-packet one-way delay: 135.502 ms
Loss rate: 3.04%
```
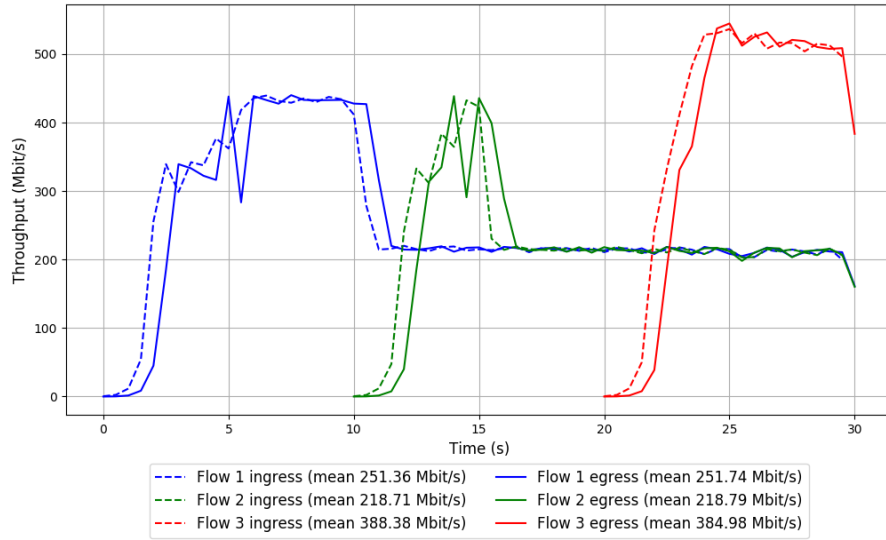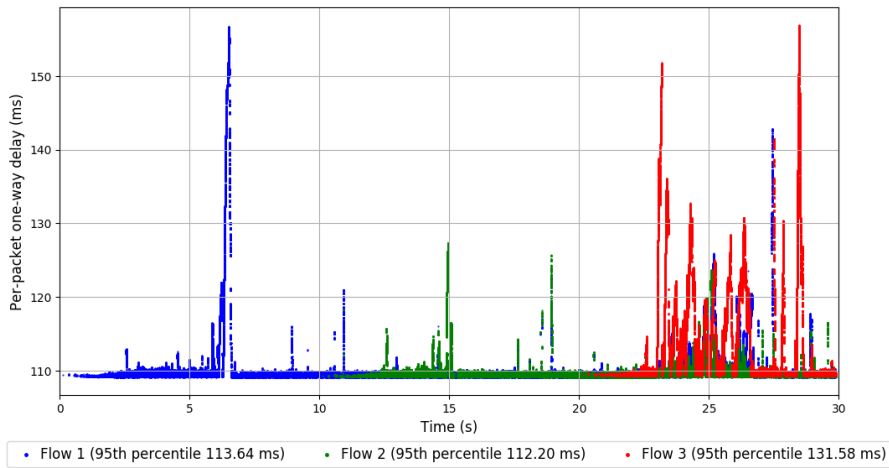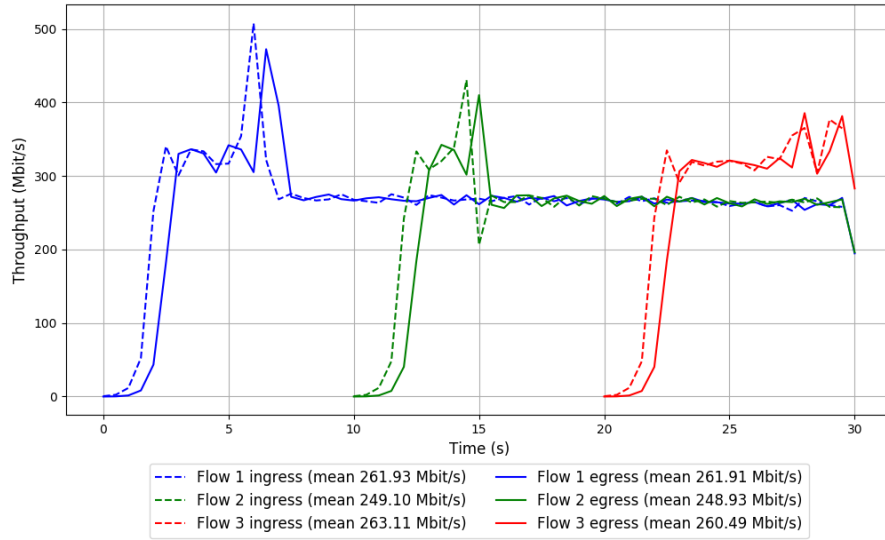
Run 2: Report of TCP Vegas — Data Link

- - - - Flow 1 ingress (mean 251.36 Mbit/s) —— Flow 1 egress (mean 251.74 Mbit/s)
- - - - Flow 2 ingress (mean 218.71 Mbit/s) —— Flow 2 egress (mean 218.79 Mbit/s)
- - - - Flow 3 ingress (mean 388.38 Mbit/s) —— Flow 3 egress (mean 384.98 Mbit/s)

• Flow 1 (95th percentile 109.82 ms)   • Flow 2 (95th percentile 111.17 ms)   • Flow 3 (95th percentile 135.50 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-04-23 23:33:14
End at: 2019-04-23 23:33:44
Local clock offset: 0.004 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2019-04-24 03:24:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.46 Mbit/s
95th percentile per-packet one-way delay: 119.746 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 261.91 Mbit/s
95th percentile per-packet one-way delay: 113.637 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 248.93 Mbit/s
95th percentile per-packet one-way delay: 112.196 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 260.49 Mbit/s
95th percentile per-packet one-way delay: 131.579 ms
Loss rate: 3.17%
```
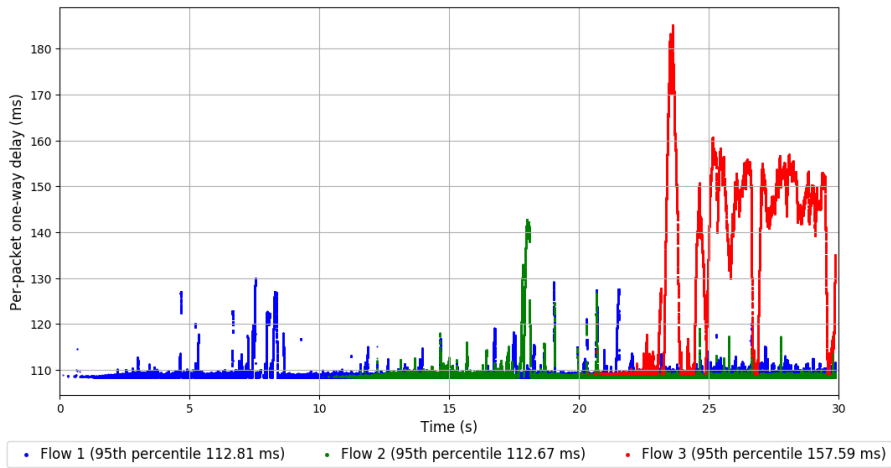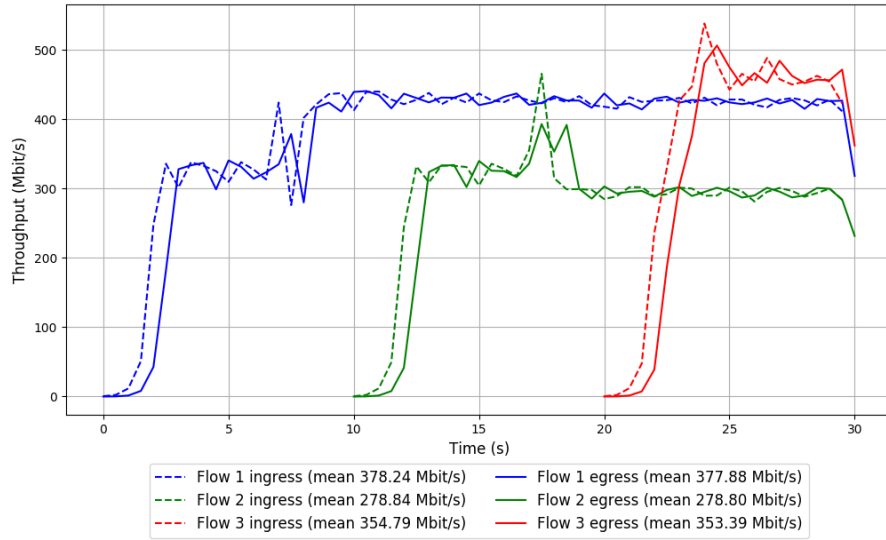
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 261.93 Mbit/s)   Flow 1 egress (mean 261.91 Mbit/s)
Flow 2 ingress (mean 249.10 Mbit/s)   Flow 2 egress (mean 248.93 Mbit/s)
Flow 3 ingress (mean 263.11 Mbit/s)   Flow 3 egress (mean 260.49 Mbit/s)

Flow 1 (95th percentile 113.64 ms)   Flow 2 (95th percentile 112.20 ms)   Flow 3 (95th percentile 131.58 ms)
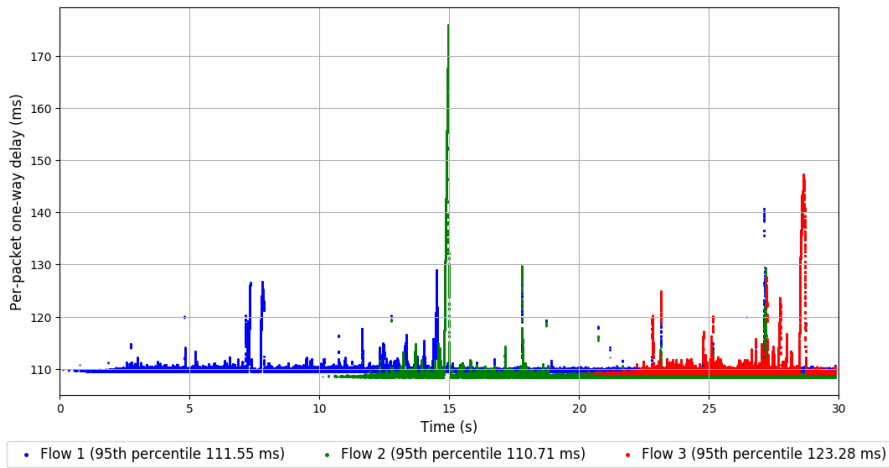
```
Run 4: Statistics of TCP Vegas

Start at: 2019-04-24 00:11:11
End at: 2019-04-24 00:11:41
Local clock offset: -0.106 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2019-04-24 03:29:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 678.65 Mbit/s
95th percentile per-packet one-way delay: 150.005 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 377.88 Mbit/s
95th percentile per-packet one-way delay: 112.812 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 278.80 Mbit/s
95th percentile per-packet one-way delay: 112.675 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 353.39 Mbit/s
95th percentile per-packet one-way delay: 157.594 ms
Loss rate: 2.58%
```

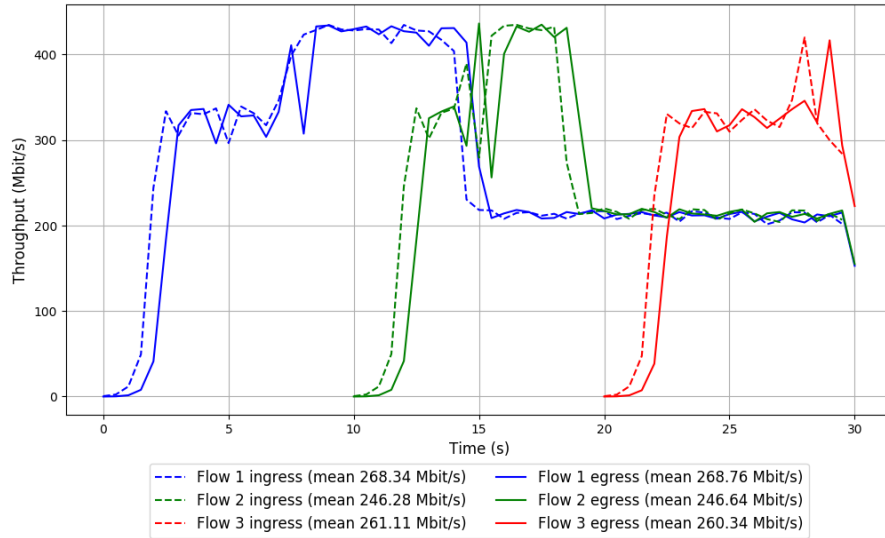# Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-04-24 00:48:26
End at: 2019-04-24 00:48:56
Local clock offset: -0.06 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2019-04-24 03:29:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.70 Mbit/s
95th percentile per-packet one-way delay: 112.462 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 268.76 Mbit/s
95th percentile per-packet one-way delay: 111.549 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 246.64 Mbit/s
95th percentile per-packet one-way delay: 110.714 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 260.34 Mbit/s
95th percentile per-packet one-way delay: 123.280 ms
Loss rate: 2.49%
```

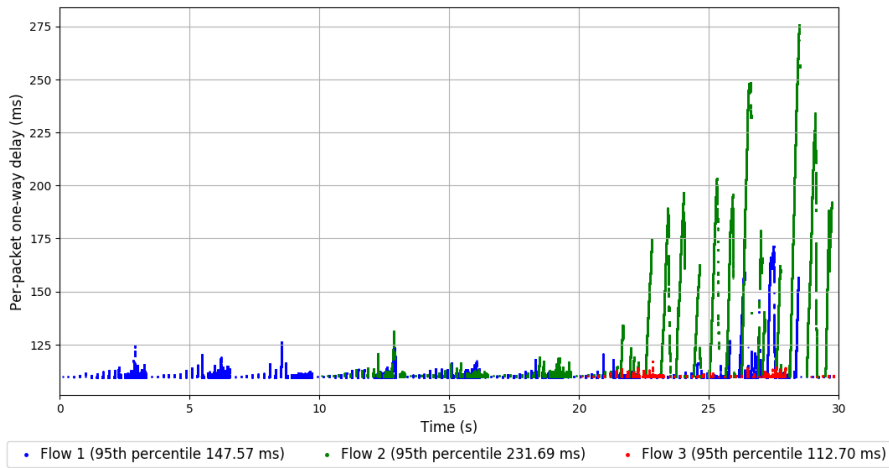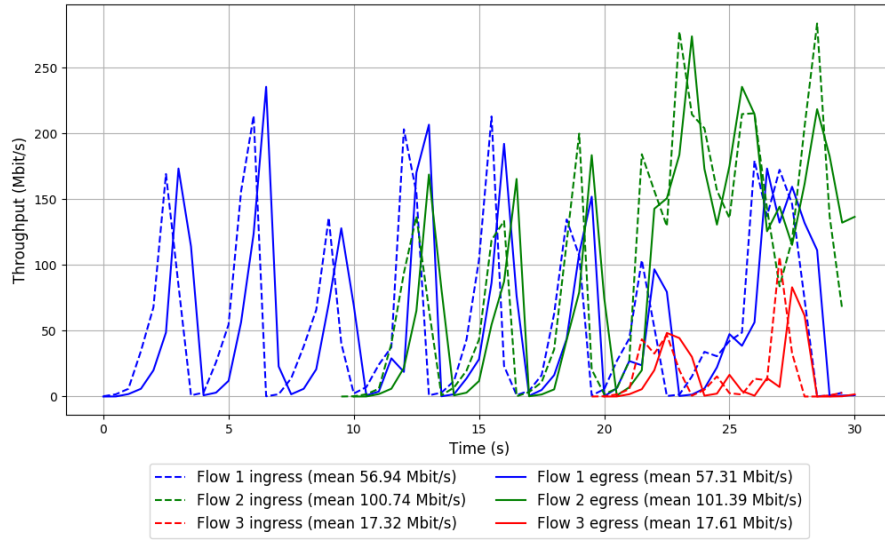Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-04-23 22:34:40
End at: 2019-04-23 22:35:10
Local clock offset: 0.62 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2019-04-24 03:29:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.79 Mbit/s
95th percentile per-packet one-way delay: 196.438 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 57.31 Mbit/s
95th percentile per-packet one-way delay: 147.567 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 101.39 Mbit/s
95th percentile per-packet one-way delay: 231.693 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 17.61 Mbit/s
95th percentile per-packet one-way delay: 112.700 ms
Loss rate: 0.61%
```
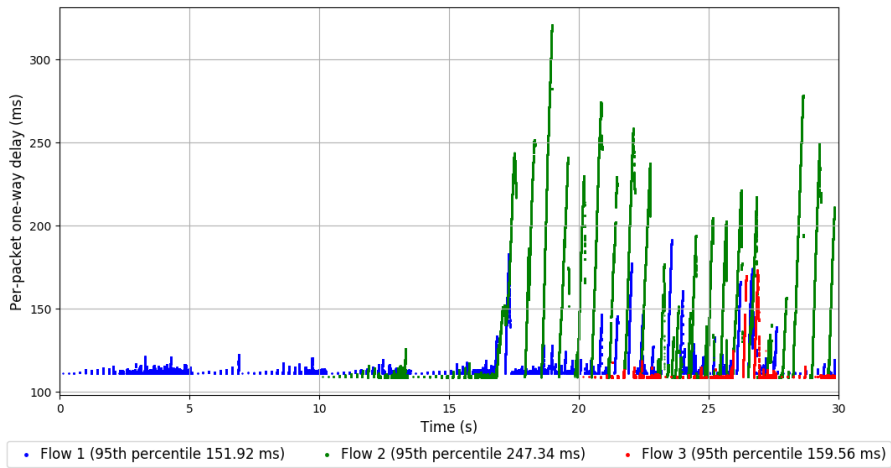
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-04-23 23:11:19
End at: 2019-04-23 23:11:49
Local clock offset: -0.553 ms
Remote clock offset: 0.037 ms


# Below is generated by plot.py at 2019-04-24 03:29:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.14 Mbit/s
95th percentile per-packet one-way delay: 228.537 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 80.61 Mbit/s
95th percentile per-packet one-way delay: 151.920 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 133.09 Mbit/s
95th percentile per-packet one-way delay: 247.337 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 37.61 Mbit/s
95th percentile per-packet one-way delay: 159.556 ms
Loss rate: 3.54%
```
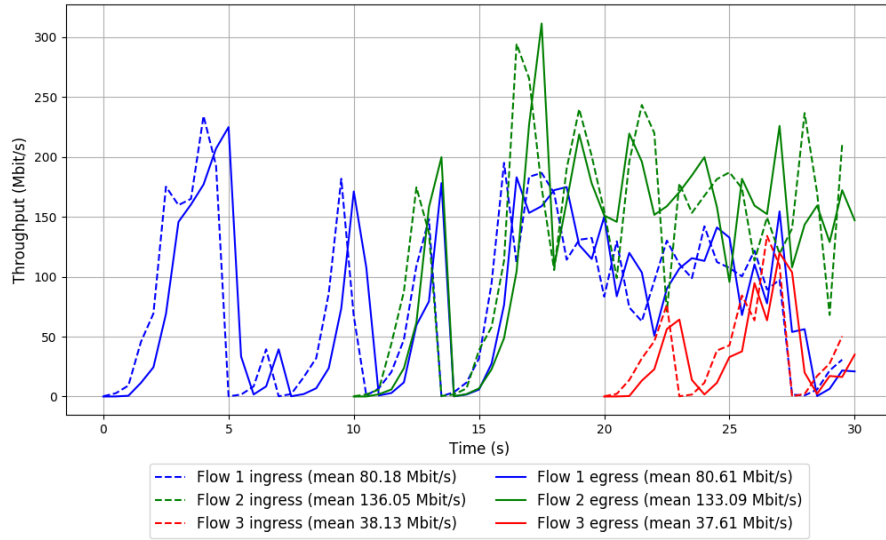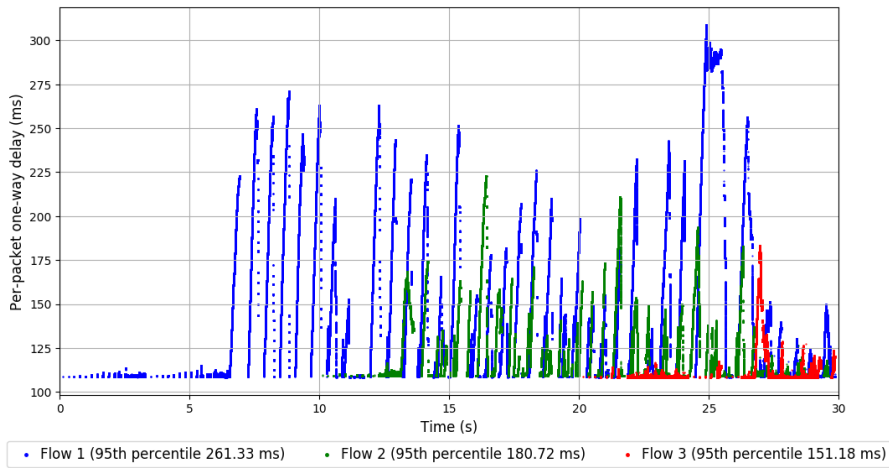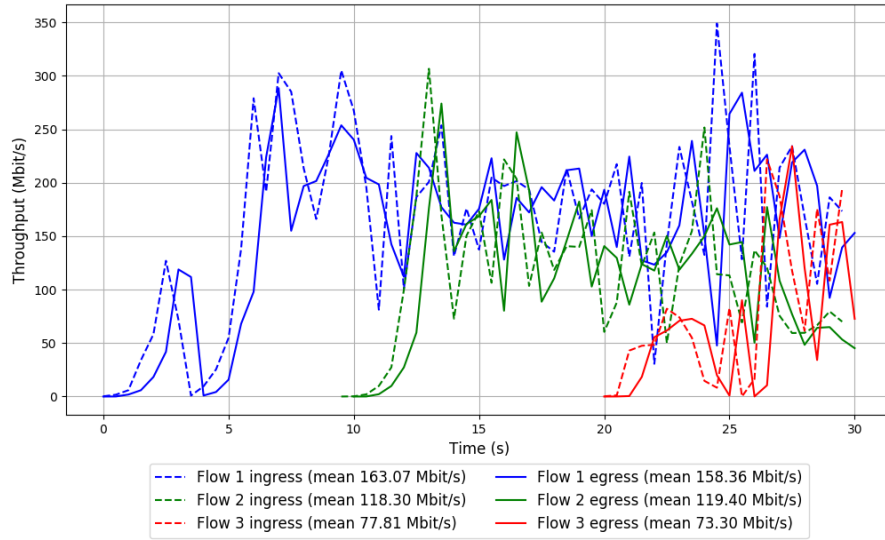
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-04-23 23:48:46
End at: 2019-04-23 23:49:16
Local clock offset: -0.072 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2019-04-24 03:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.44 Mbit/s
95th percentile per-packet one-way delay: 248.056 ms
Loss rate: 3.39%
-- Flow 1:
Average throughput: 158.36 Mbit/s
95th percentile per-packet one-way delay: 261.332 ms
Loss rate: 3.60%
-- Flow 2:
Average throughput: 119.40 Mbit/s
95th percentile per-packet one-way delay: 180.725 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 73.30 Mbit/s
95th percentile per-packet one-way delay: 151.176 ms
Loss rate: 7.90%
```
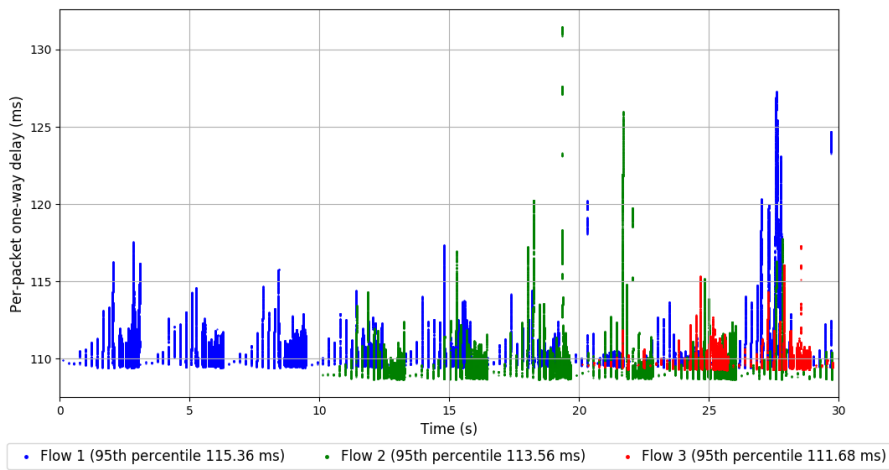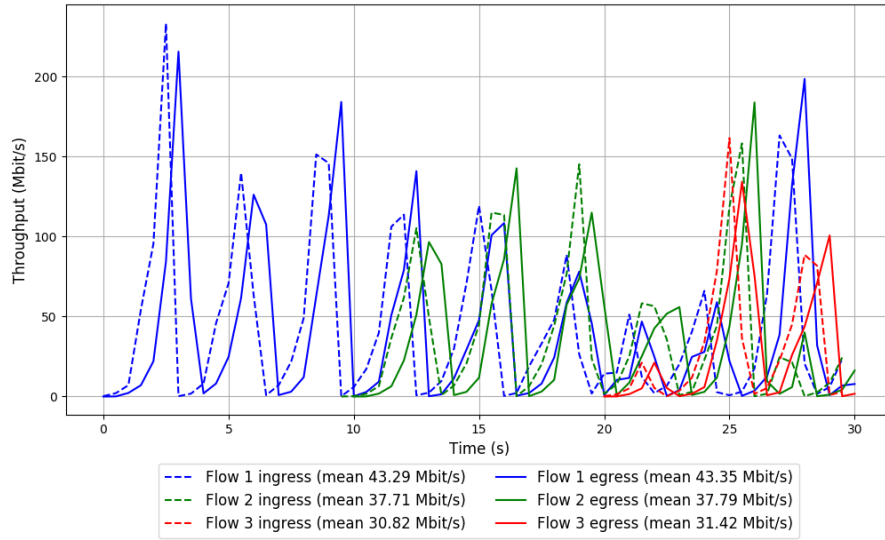
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-04-24 00:26:46
End at: 2019-04-24 00:27:16
Local clock offset: -0.04 ms
Remote clock offset: -0.374 ms


# Below is generated by plot.py at 2019-04-24 03:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.48 Mbit/s
95th percentile per-packet one-way delay: 114.233 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 43.35 Mbit/s
95th percentile per-packet one-way delay: 115.365 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 37.79 Mbit/s
95th percentile per-packet one-way delay: 113.559 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 111.677 ms
Loss rate: 0.33%
```
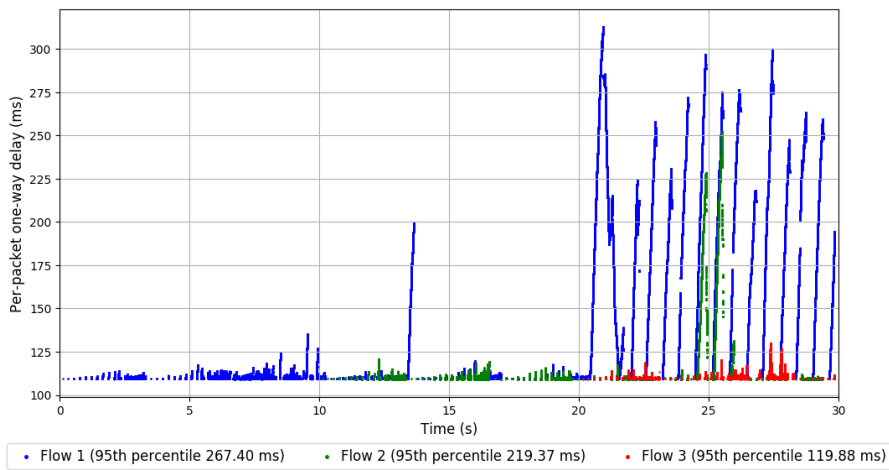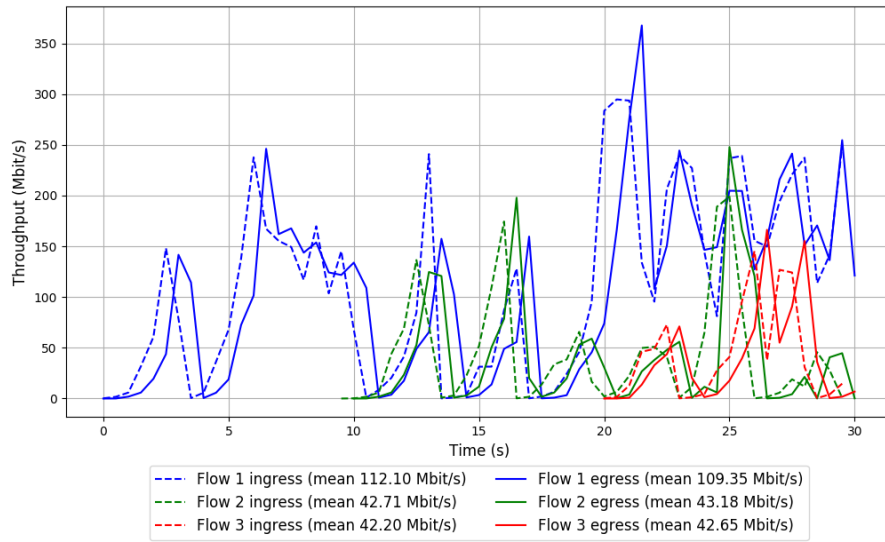
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-04-24 01:03:58
End at: 2019-04-24 01:04:28
Local clock offset: -0.148 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2019-04-24 03:30:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.83 Mbit/s
95th percentile per-packet one-way delay: 257.332 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 109.35 Mbit/s
95th percentile per-packet one-way delay: 267.400 ms
Loss rate: 2.64%
-- Flow 2:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 219.371 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 42.65 Mbit/s
95th percentile per-packet one-way delay: 119.877 ms
Loss rate: 1.21%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 112.10 Mbit/s)   Flow 1 egress (mean 109.35 Mbit/s)
Flow 2 ingress (mean 42.71 Mbit/s)   Flow 2 egress (mean 43.18 Mbit/s)
Flow 3 ingress (mean 42.20 Mbit/s)   Flow 3 egress (mean 42.65 Mbit/s)

Flow 1 (95th percentile 267.40 ms)   Flow 2 (95th percentile 219.37 ms)   Flow 3 (95th percentile 119.88 ms)
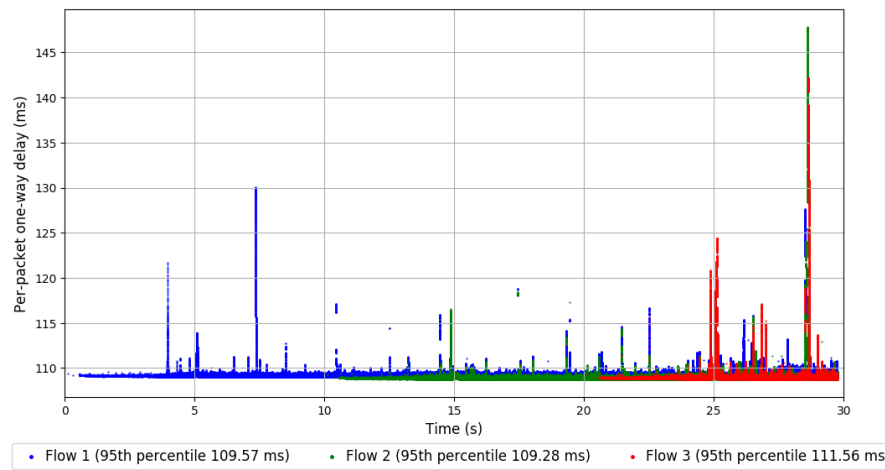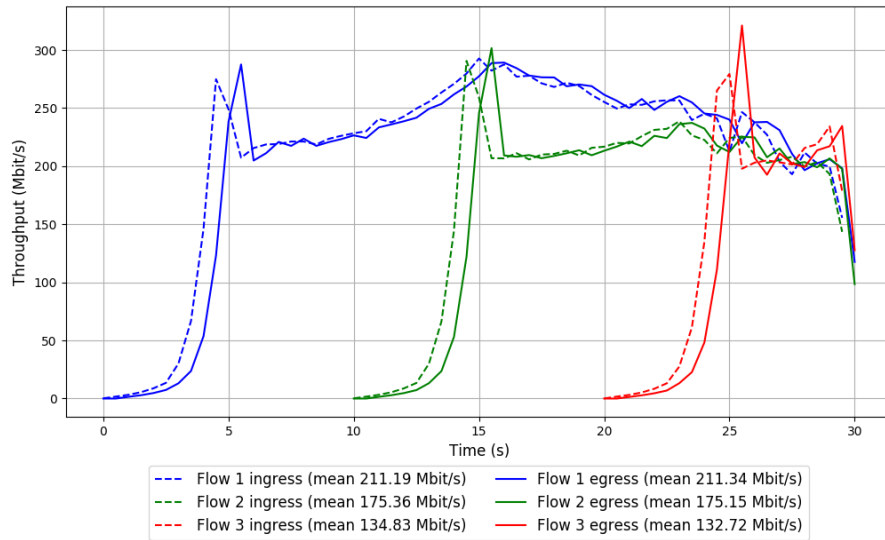
194

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-04-23 22:12:38
End at: 2019-04-23 22:13:08
Local clock offset: -0.022 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2019-04-24 03:31:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.51 Mbit/s
95th percentile per-packet one-way delay: 109.547 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 109.569 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 175.15 Mbit/s
95th percentile per-packet one-way delay: 109.282 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 132.72 Mbit/s
95th percentile per-packet one-way delay: 111.557 ms
Loss rate: 3.76%
```

Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 211.19 Mbit/s) --- Flow 1 egress (mean 211.34 Mbit/s)
Flow 2 ingress (mean 175.36 Mbit/s) --- Flow 2 egress (mean 175.15 Mbit/s)
Flow 3 ingress (mean 134.83 Mbit/s) --- Flow 3 egress (mean 132.72 Mbit/s)

Flow 1 (95th percentile 109.57 ms)   Flow 2 (95th percentile 109.28 ms)   Flow 3 (95th percentile 111.56 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-04-23 22:49:14
End at: 2019-04-23 22:49:44
Local clock offset: 0.01 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2019-04-24 03:31:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.35 Mbit/s
95th percentile per-packet one-way delay: 113.920 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 229.72 Mbit/s
95th percentile per-packet one-way delay: 111.879 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 176.39 Mbit/s
95th percentile per-packet one-way delay: 122.198 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 131.51 Mbit/s
95th percentile per-packet one-way delay: 114.875 ms
Loss rate: 3.74%
```
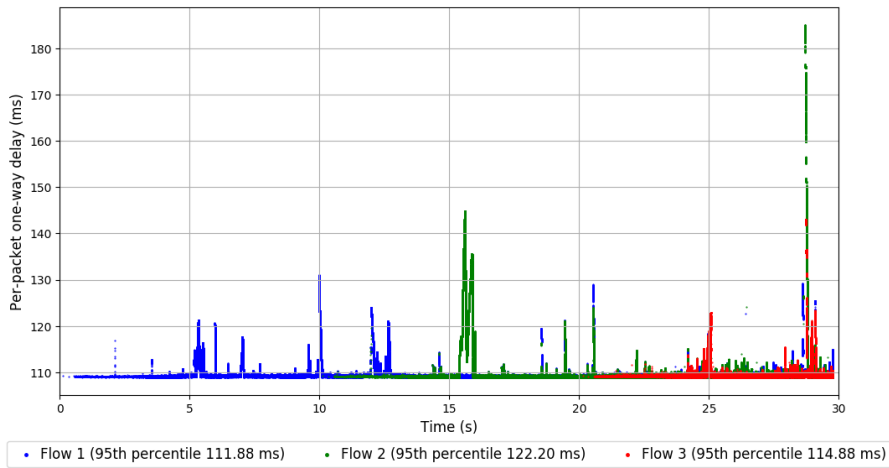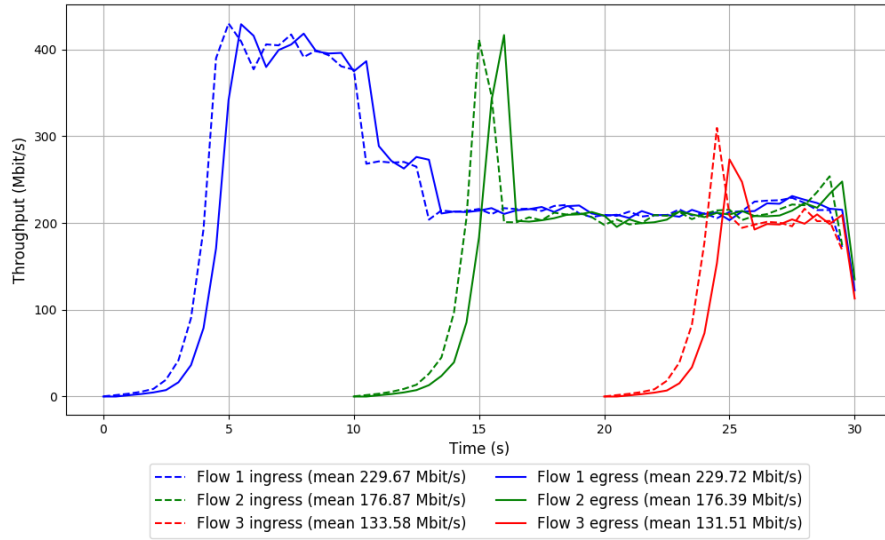
Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-04-23 23:26:14
End at: 2019-04-23 23:26:44
Local clock offset: 0.237 ms
Remote clock offset: 0.095 ms


# Below is generated by plot.py at 2019-04-24 03:31:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.78 Mbit/s
95th percentile per-packet one-way delay: 110.328 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 200.73 Mbit/s
95th percentile per-packet one-way delay: 109.768 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 201.79 Mbit/s
95th percentile per-packet one-way delay: 110.725 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 87.27 Mbit/s
95th percentile per-packet one-way delay: 137.827 ms
Loss rate: 2.59%
```
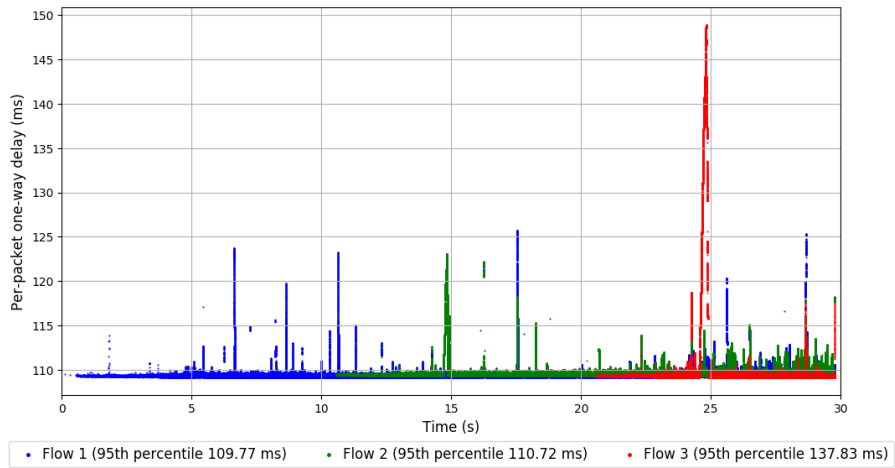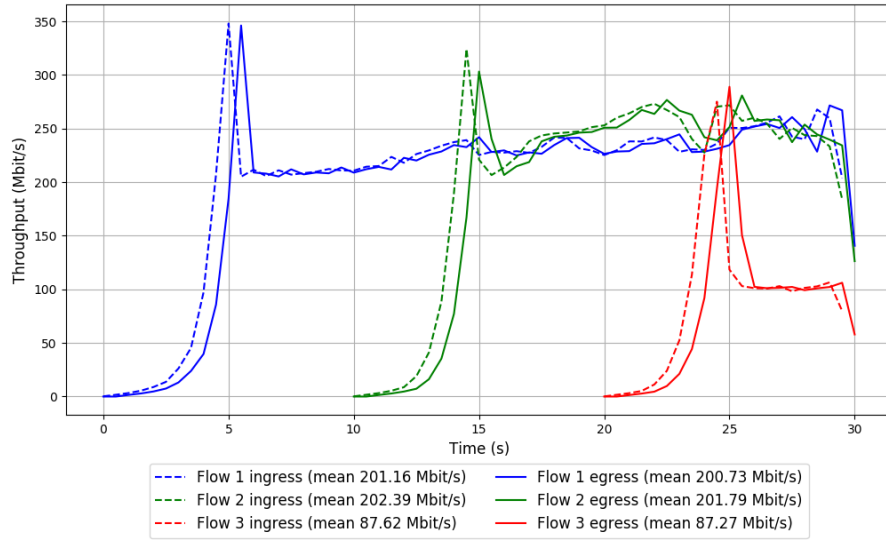
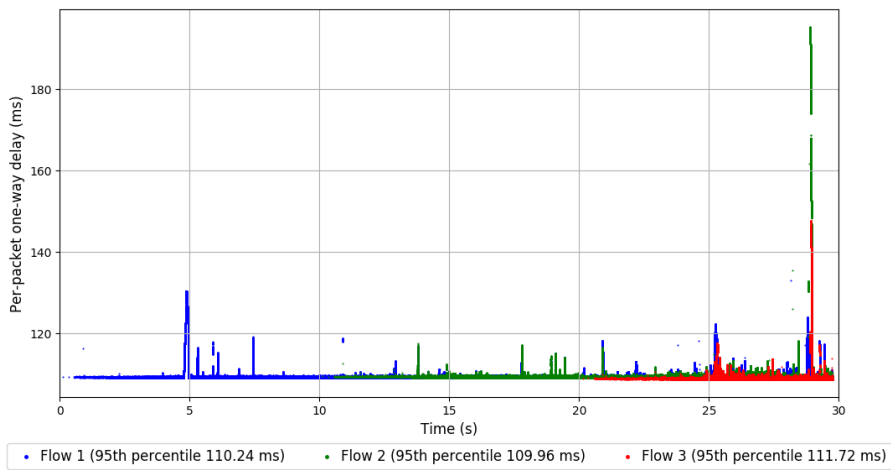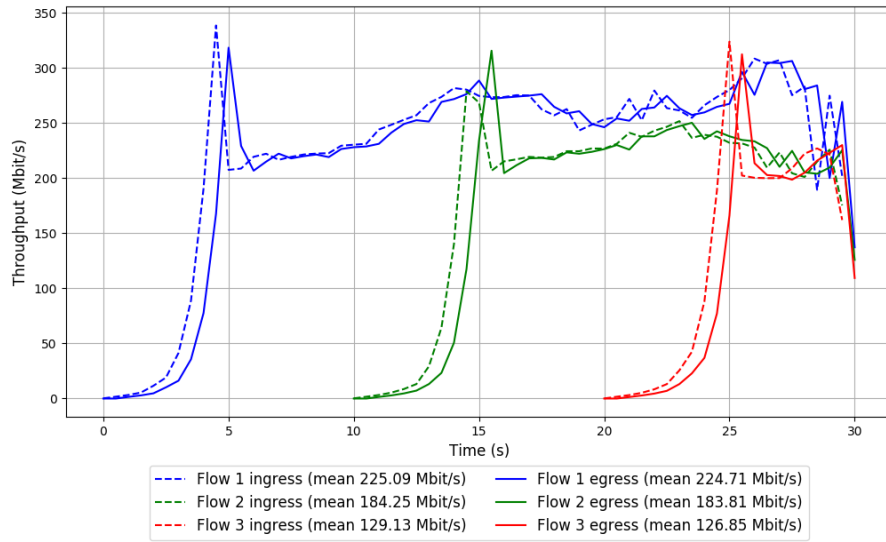## Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-04-24 00:03:47
End at: 2019-04-24 00:04:17
Local clock offset: -0.232 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.70 Mbit/s
95th percentile per-packet one-way delay: 110.217 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 224.71 Mbit/s
95th percentile per-packet one-way delay: 110.242 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 183.81 Mbit/s
95th percentile per-packet one-way delay: 109.959 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 126.85 Mbit/s
95th percentile per-packet one-way delay: 111.717 ms
Loss rate: 3.94%
```

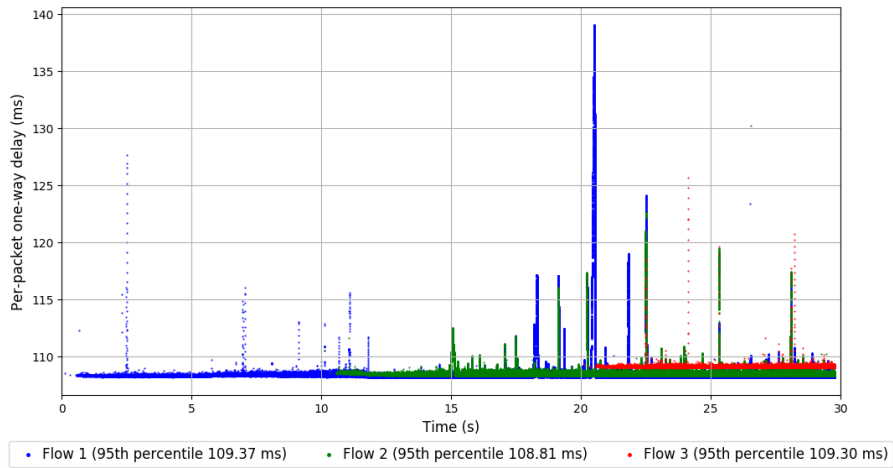# Run 4: Report of PCC-Vivace — Data Link

- - - - Flow 1 ingress (mean 225.09 Mbit/s)   ——— Flow 1 egress (mean 224.71 Mbit/s)
- - - - Flow 2 ingress (mean 184.25 Mbit/s)   ——— Flow 2 egress (mean 183.81 Mbit/s)
- - - - Flow 3 ingress (mean 129.13 Mbit/s)   ——— Flow 3 egress (mean 126.85 Mbit/s)

• Flow 1 (95th percentile 110.24 ms)   • Flow 2 (95th percentile 109.96 ms)   • Flow 3 (95th percentile 111.72 ms)
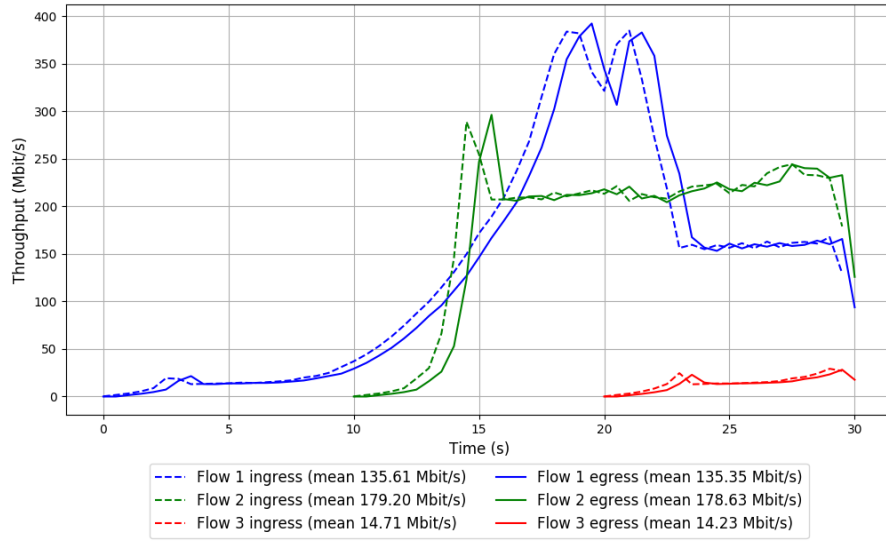
```
Run 5: Statistics of PCC-Vivace

Start at: 2019-04-24 00:41:30
End at: 2019-04-24 00:42:00
Local clock offset: -0.087 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.31 Mbit/s
95th percentile per-packet one-way delay: 109.154 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 135.35 Mbit/s
95th percentile per-packet one-way delay: 109.368 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 178.63 Mbit/s
95th percentile per-packet one-way delay: 108.809 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: 109.298 ms
Loss rate: 5.45%
```

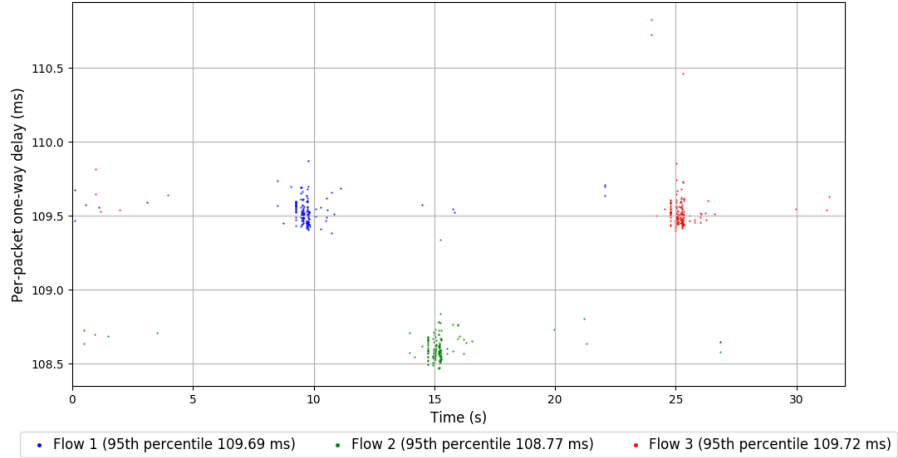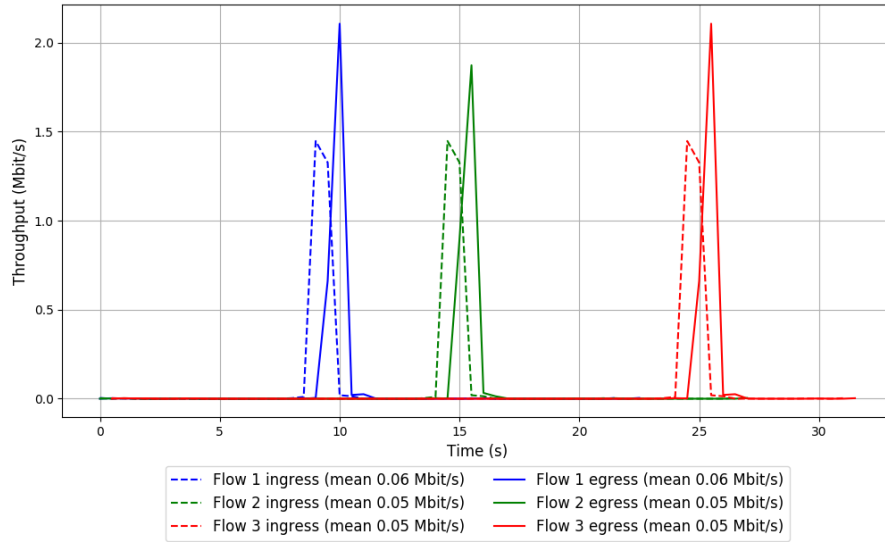# Run 5: Report of PCC-Vivace — Data Link

204

```
Run 1: Statistics of WebRTC media

Start at: 2019-04-23 22:41:00
End at: 2019-04-23 22:41:30
Local clock offset: 0.118 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 109.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 109.691 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.767 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.724 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-04-23 23:18:02
End at: 2019-04-23 23:18:32
Local clock offset: 0.733 ms
Remote clock offset: 0.058 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 110.233 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.281 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.977 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.250 ms
Loss rate: 0.00%
```
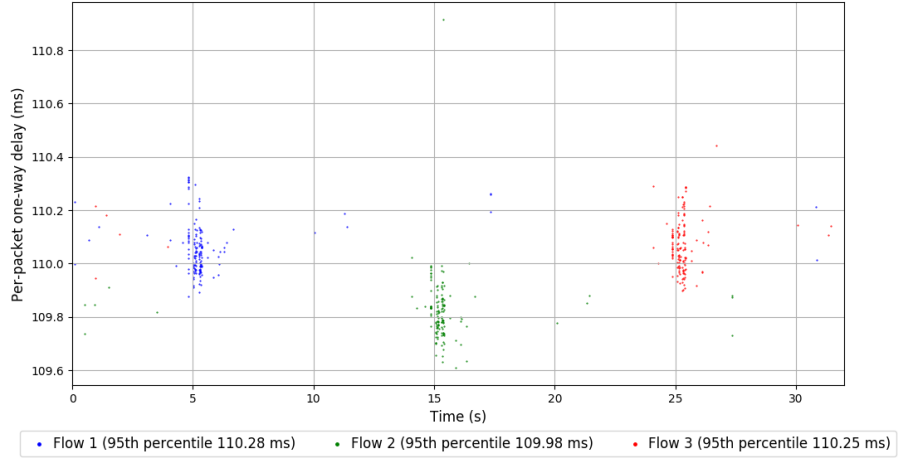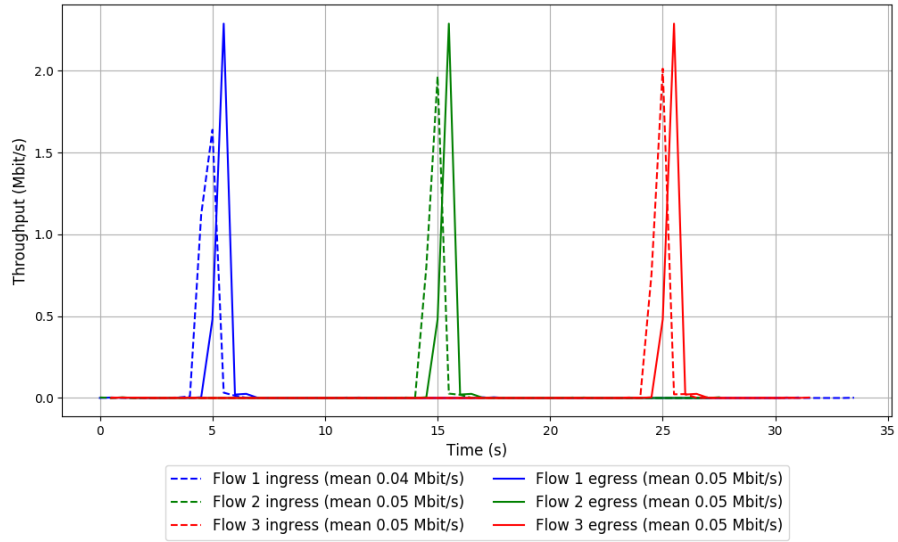
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-04-23 23:55:45
End at: 2019-04-23 23:56:15
Local clock offset: 0.757 ms
Remote clock offset: 0.009 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 110.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.541 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.464 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.334 ms
Loss rate: 0.00%
```
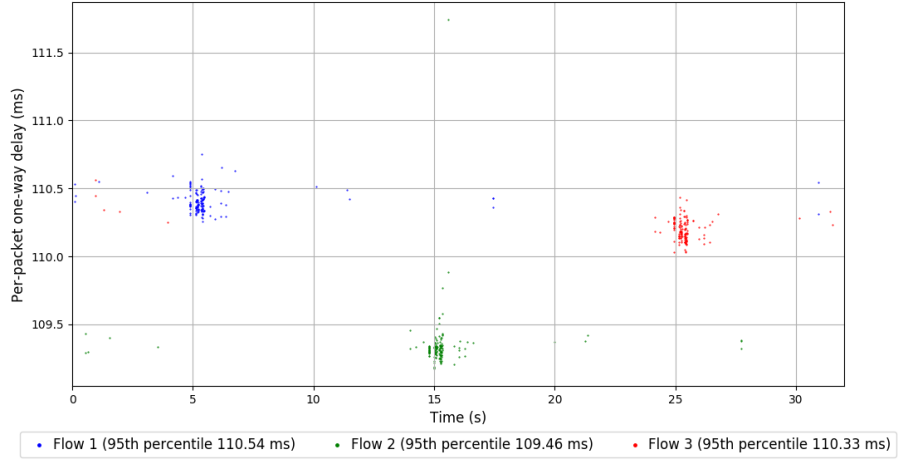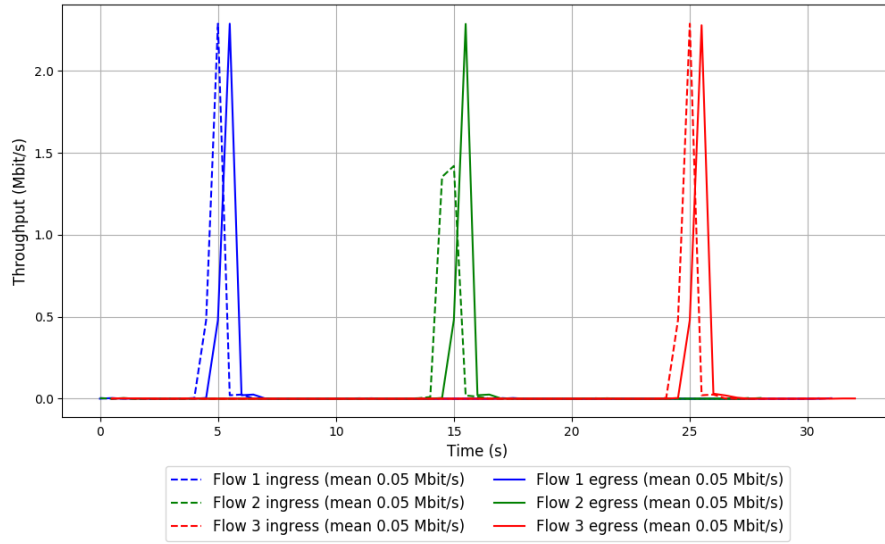
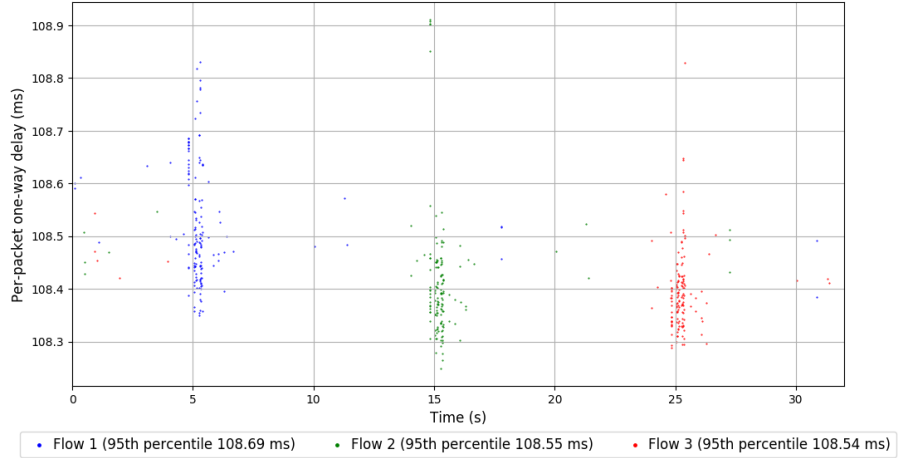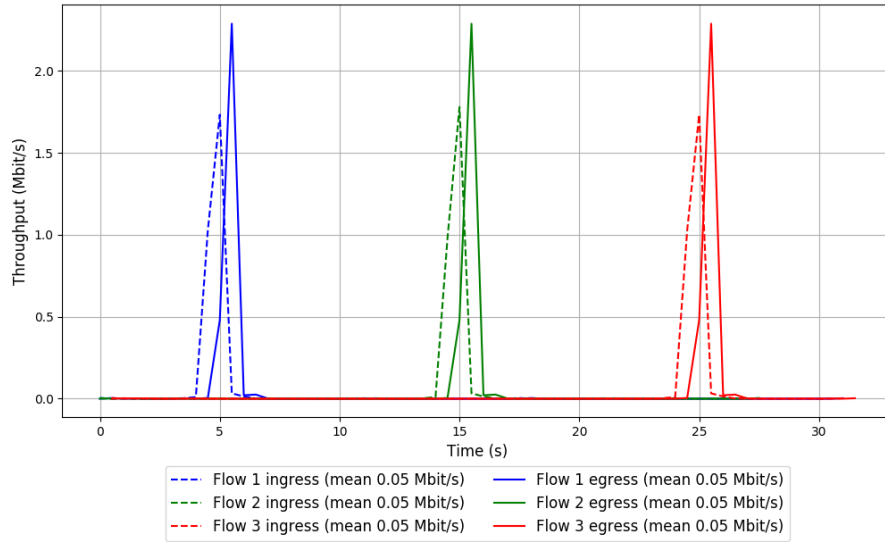## Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-04-24 00:33:01
End at: 2019-04-24 00:33:31
Local clock offset: -0.025 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 108.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.692 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.543 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-04-24 01:10:26
End at: 2019-04-24 01:10:56
Local clock offset: -0.086 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2019-04-24 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 109.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.823 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.485 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.754 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link