Pantheon Report

Generated at 2018-10-26 04:44:10 (UTC).

Data path: AWS Brazil 1 on `ens5` (*local*) →Brazil on `p4p1` (*remote*).

Repeated the test of 18 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 `gps.ntp.br` and have been applied to correct the timestamps in logs.
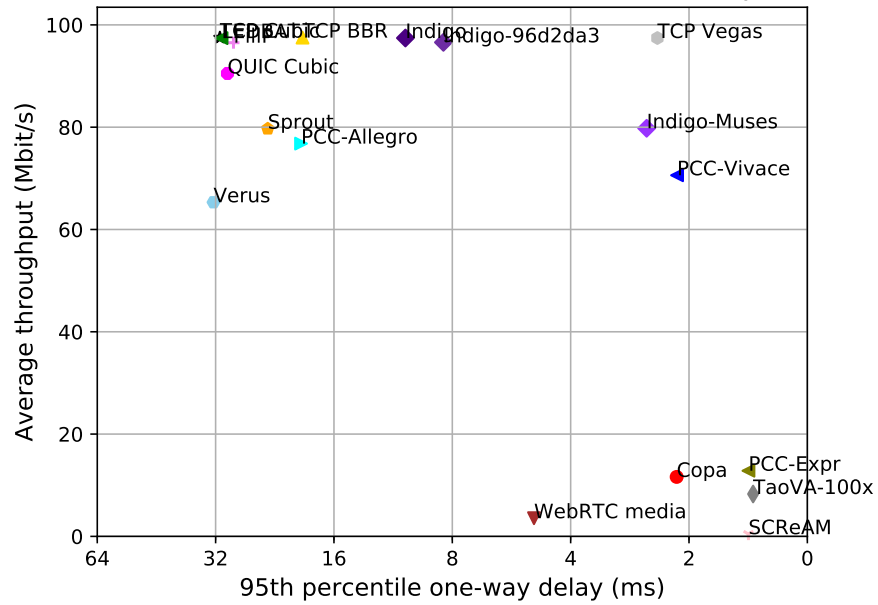
```
System info:
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
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
```
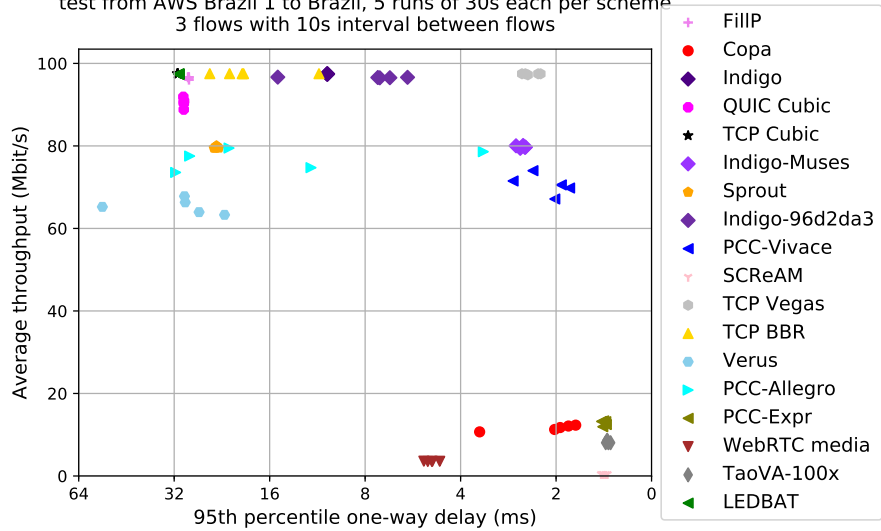
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme
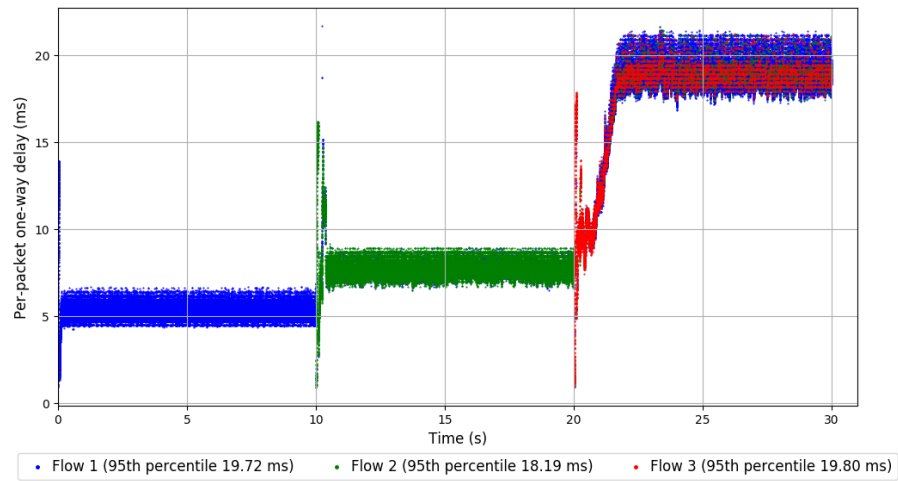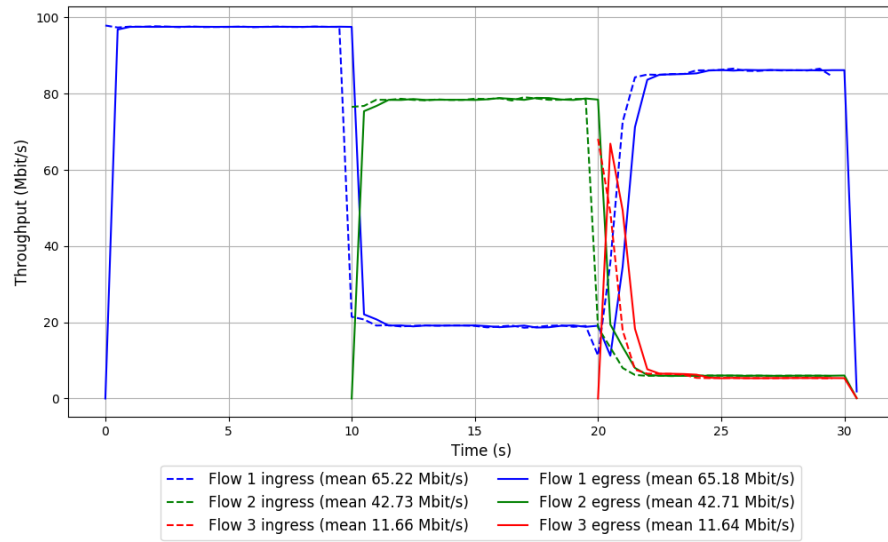## 3 flows with 10s interval between flows

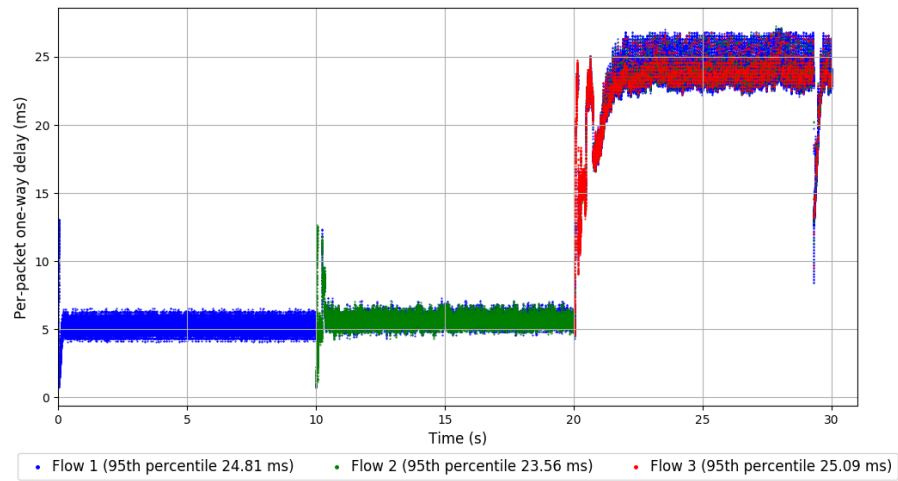| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	68.87	36.57	12.86	19.34	18.24	20.57	0.00	0.00	0.00
Copa	5	7.54	5.28	3.33	1.99	2.49	2.59	66.10	64.44	61.29
TCP Cubic	5	63.87	35.98	29.16	31.18	31.24	31.38	0.03	0.03	0.04
FillP	5	62.39	34.90	32.91	28.79	28.84	28.86	15.92	28.86	35.54
Indigo	5	44.08	44.33	73.30	10.05	10.50	10.55	0.00	0.00	0.00
Indigo-96d2da3	5	60.60	33.01	42.58	7.76	8.08	9.06	0.00	0.00	0.00
LEDBAT	5	61.74	37.88	31.64	30.76	30.94	30.94	0.04	0.07	0.08
Indigo-Muses	5	43.02	39.11	32.53	2.54	2.56	2.75	0.00	0.00	0.00
PCC-Allegro	5	51.51	33.27	9.57	15.80	23.67	24.67	0.08	0.16	0.45
PCC-Expr	5	7.81	5.32	4.50	1.00	1.00	0.98	71.58	70.77	84.05
QUIC Cubic	5	57.57	34.69	30.01	29.79	29.92	29.91	0.17	0.23	0.30
SCReAM	5	0.22	0.22	0.22	1.00	0.99	1.00	0.00	0.00	0.00
Sprout	5	43.45	39.13	30.92	21.86	23.67	25.65	0.00	0.00	0.00
TaoVA-100x	5	0.00	6.75	11.40	0.97	0.91	0.96	95.92	54.58	86.66
TCP Vegas	5	54.17	42.03	45.93	2.22	2.36	2.70	0.00	0.00	0.00
Verus	5	37.92	27.59	27.21	28.78	28.08	31.24	4.61	6.56	11.58
PCC-Vivace	5	40.28	32.89	25.58	1.78	2.49	2.97	0.00	0.00	0.00
WebRTC media	5	1.93	1.25	0.38	4.81	5.14	5.23	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-10-26 03:07:06
End at: 2018-10-26 03:07:36
Local clock offset: -4.616 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-10-26 04:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 19.526 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 19.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.71 Mbit/s
95th percentile per-packet one-way delay: 18.193 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 19.805 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-10-26 03:27:36
End at: 2018-10-26 03:28:06
Local clock offset: -4.855 ms
Remote clock offset: -0.123 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 24.711 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.80 Mbit/s
95th percentile per-packet one-way delay: 24.808 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 23.556 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.43 Mbit/s
95th percentile per-packet one-way delay: 25.090 ms
Loss rate: 0.00%
```
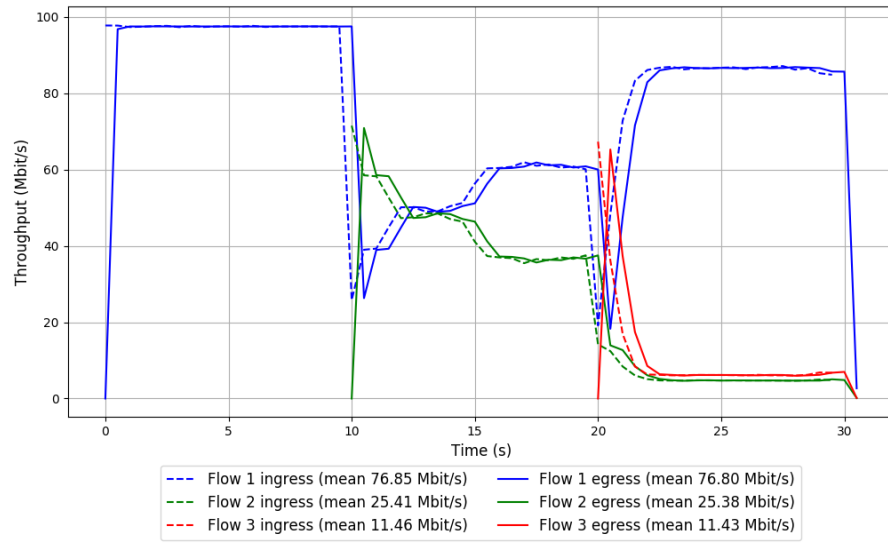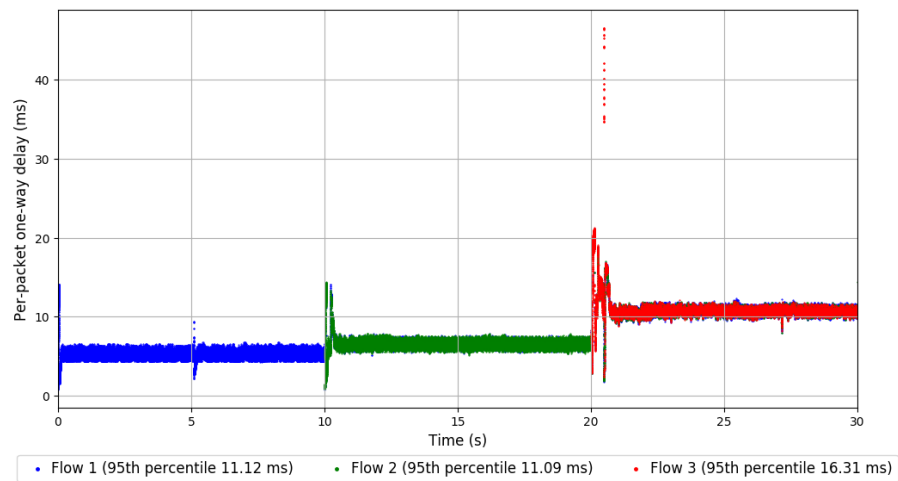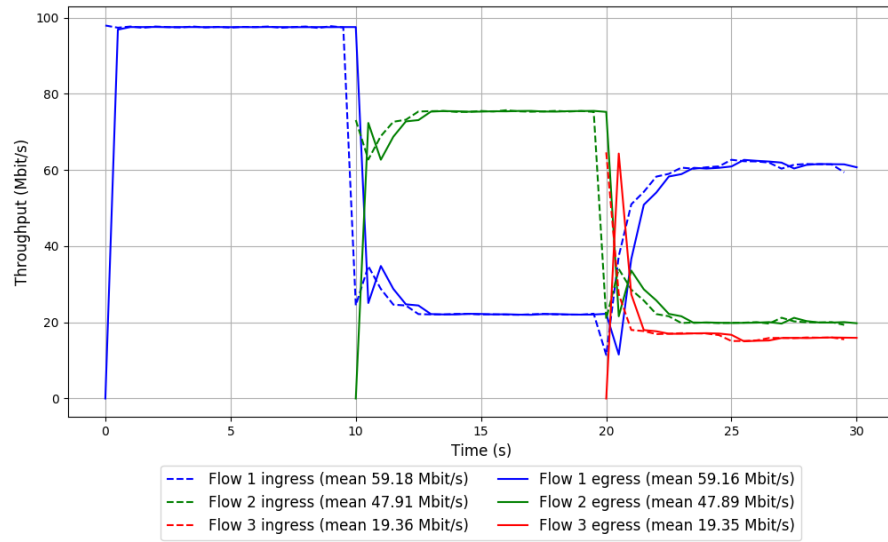
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-10-26 03:48:08
End at: 2018-10-26 03:48:38
Local clock offset: -6.018 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 11.184 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 11.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.89 Mbit/s
95th percentile per-packet one-way delay: 11.088 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.35 Mbit/s
95th percentile per-packet one-way delay: 16.310 ms
Loss rate: 0.00%
```
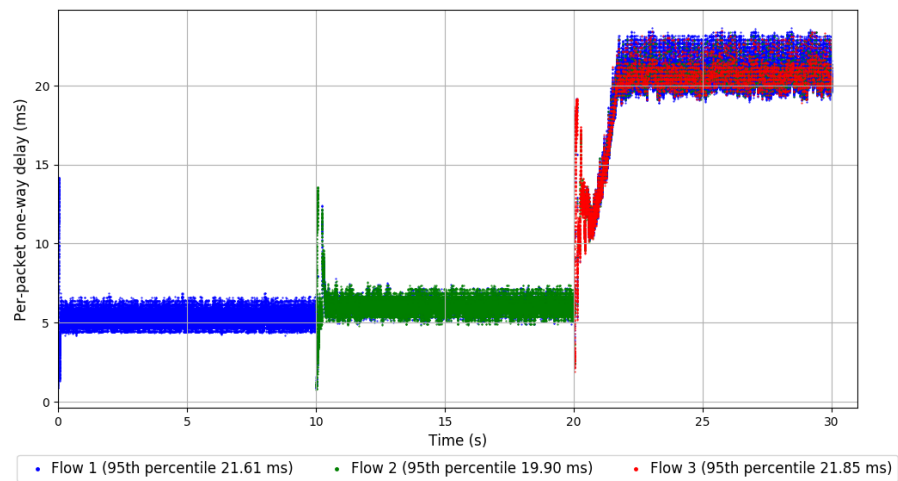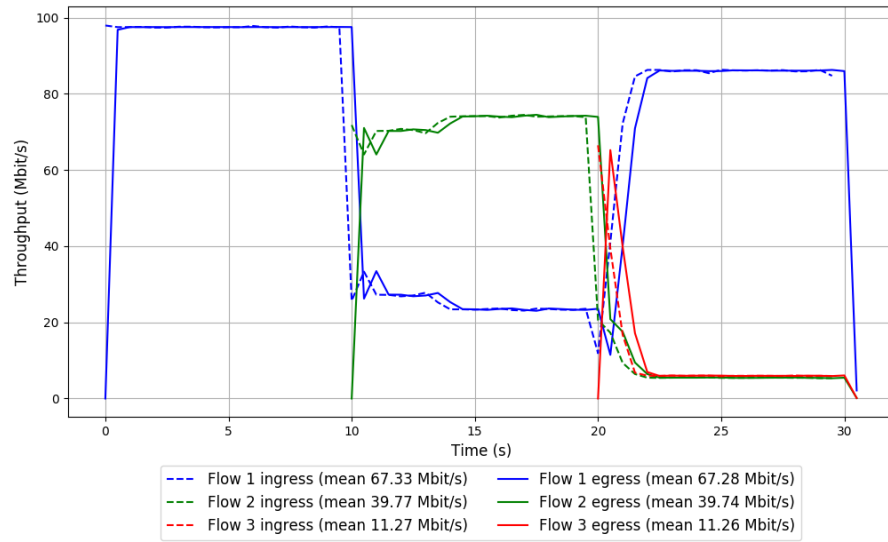
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 59.18 Mbit/s) --- Flow 1 egress (mean 59.16 Mbit/s)
Flow 2 ingress (mean 47.91 Mbit/s) --- Flow 2 egress (mean 47.89 Mbit/s)
Flow 3 ingress (mean 19.36 Mbit/s) --- Flow 3 egress (mean 19.35 Mbit/s)

Flow 1 (95th percentile 11.12 ms)   Flow 2 (95th percentile 11.09 ms)   Flow 3 (95th percentile 16.31 ms)

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```
Run 4: Statistics of TCP BBR

Start at: 2018-10-26 04:08:36
End at: 2018-10-26 04:09:06
Local clock offset: -6.13 ms
Remote clock offset: 0.127 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 21.403 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.28 Mbit/s
95th percentile per-packet one-way delay: 21.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 19.900 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 21.846 ms
Loss rate: 0.00%
```
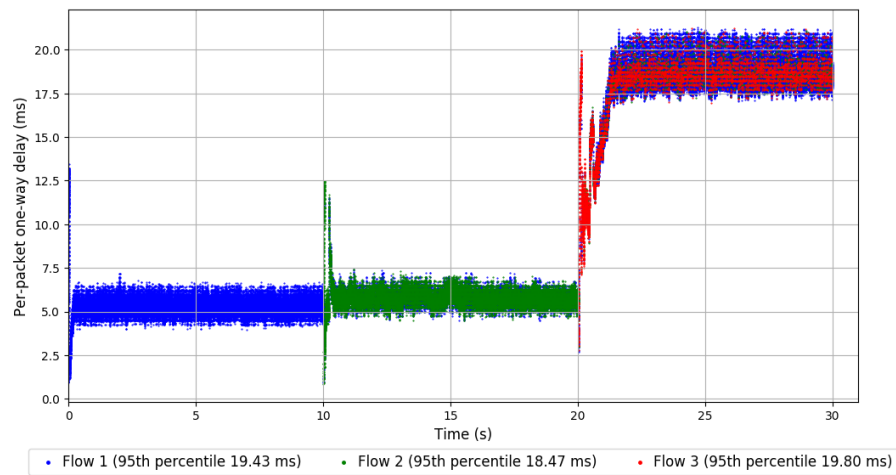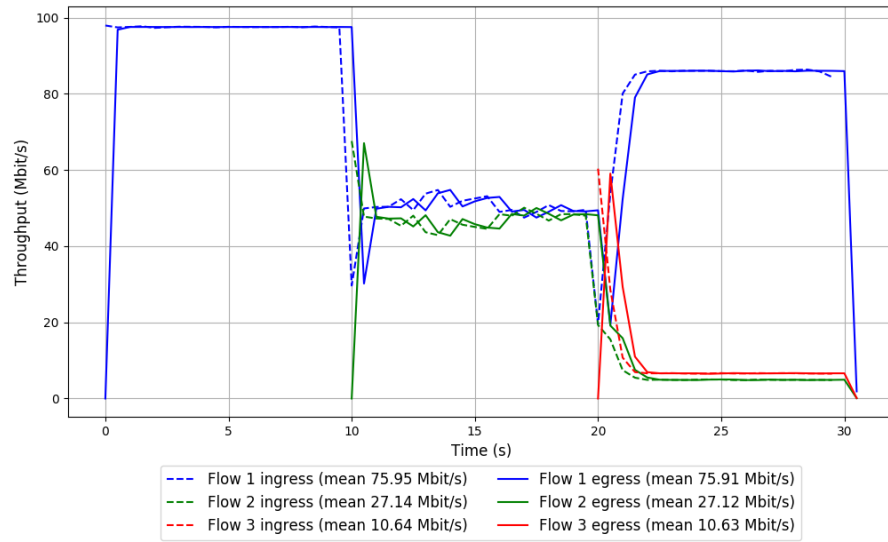
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-10-26 04:29:18
End at: 2018-10-26 04:29:48
Local clock offset: -6.229 ms
Remote clock offset: 0.184 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 19.343 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 19.435 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.12 Mbit/s
95th percentile per-packet one-way delay: 18.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 19.802 ms
Loss rate: 0.00%
```
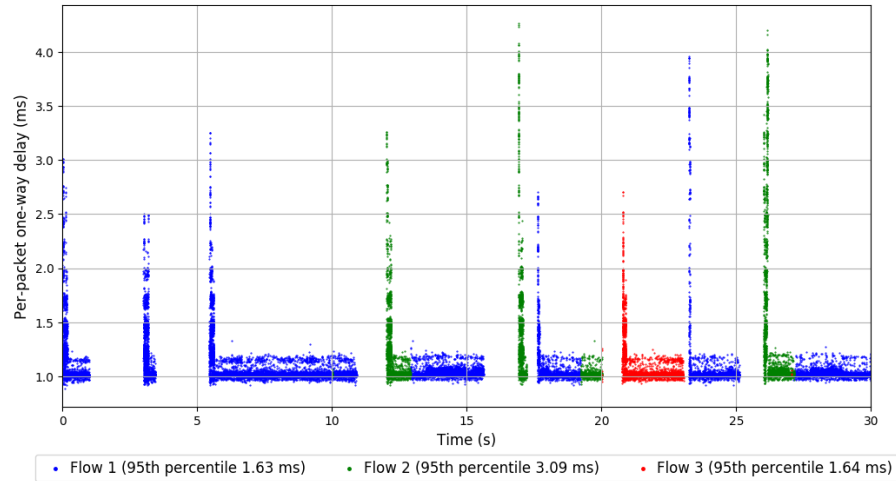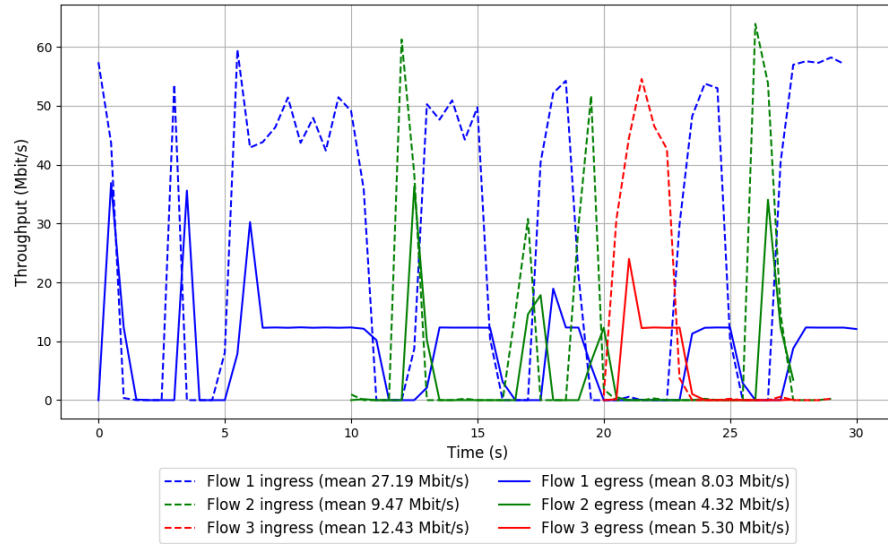
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-10-26 02:59:06
End at: 2018-10-26 02:59:36
Local clock offset: -4.298 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 1.915 ms
Loss rate: 68.25%
-- Flow 1:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 1.632 ms
Loss rate: 70.47%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 3.087 ms
Loss rate: 59.13%
-- Flow 3:
Average throughput: 5.30 Mbit/s
95th percentile per-packet one-way delay: 1.643 ms
Loss rate: 66.84%
```
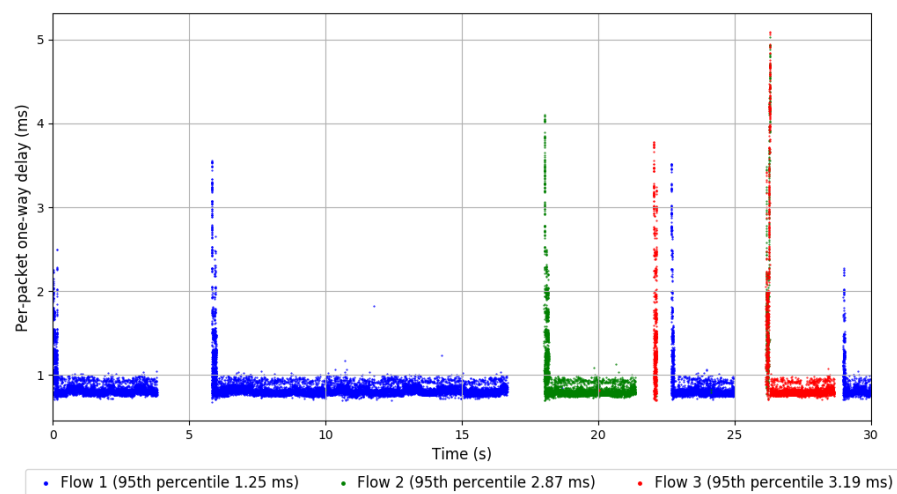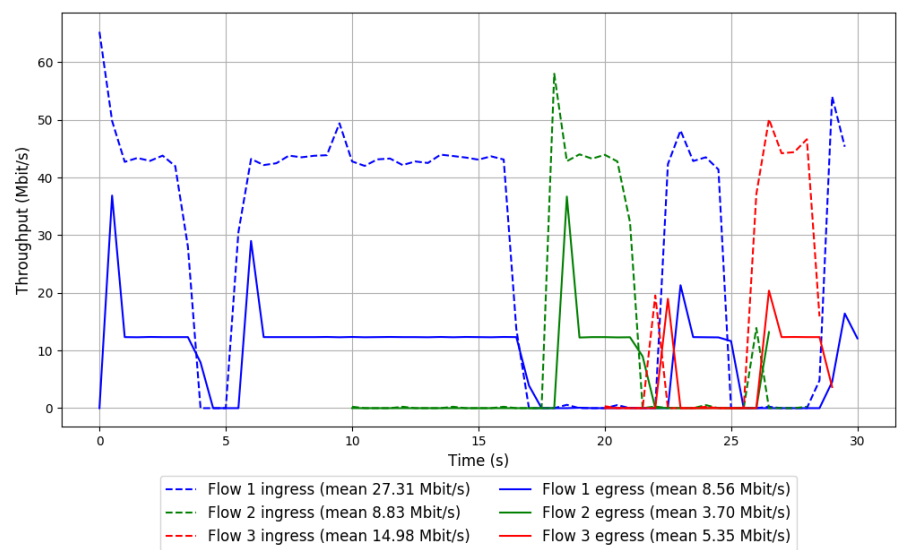
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-10-26 03:19:36
End at: 2018-10-26 03:20:06
Local clock offset: -4.842 ms
Remote clock offset: -0.165 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 1.741 ms
Loss rate: 67.28%
-- Flow 1:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 1.252 ms
Loss rate: 68.65%
-- Flow 2:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 2.868 ms
Loss rate: 62.72%
-- Flow 3:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 3.192 ms
Loss rate: 64.28%
```

Run 2: Report of Copa — Data Link

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```
Run 3: Statistics of Copa

Start at: 2018-10-26 03:40:08
End at: 2018-10-26 03:40:38
Local clock offset: -5.722 ms
Remote clock offset: 0.052 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.32 Mbit/s
95th percentile per-packet one-way delay: 1.589 ms
Loss rate: 69.01%
-- Flow 1:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 1.571 ms
Loss rate: 66.65%
-- Flow 2:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 1.828 ms
Loss rate: 72.60%
-- Flow 3:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 1.057 ms
Loss rate: 73.45%
```
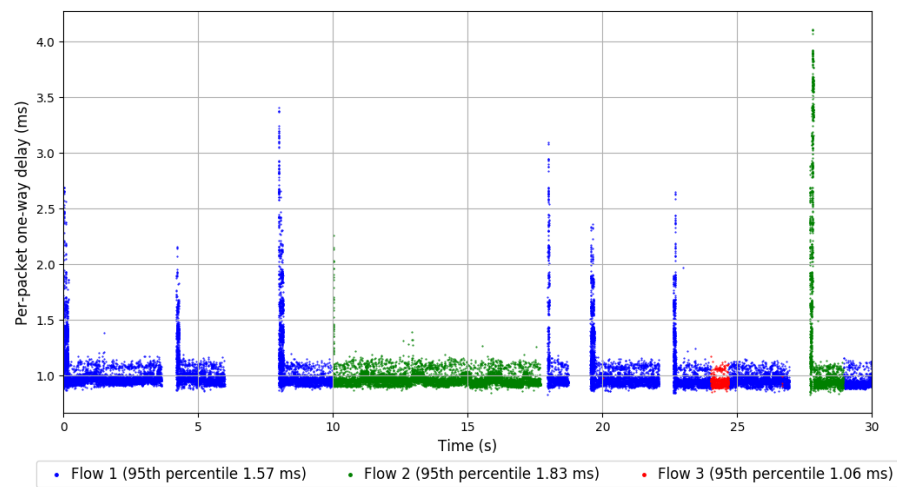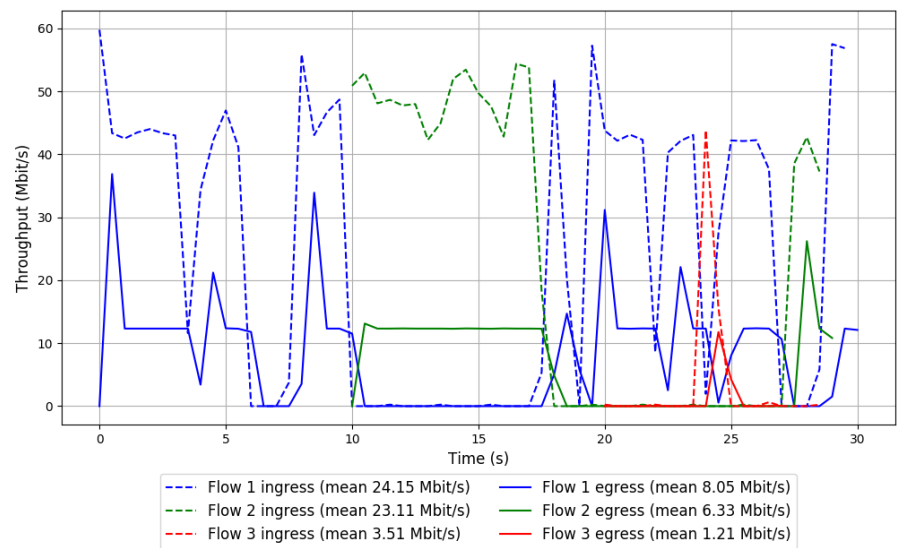
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-10-26 04:00:36
End at: 2018-10-26 04:01:06
Local clock offset: -6.311 ms
Remote clock offset: 0.072 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.27 Mbit/s
95th percentile per-packet one-way delay: 2.021 ms
Loss rate: 62.93%
-- Flow 1:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 2.305 ms
Loss rate: 59.53%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 1.751 ms
Loss rate: 66.60%
-- Flow 3:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 1.568 ms
Loss rate: 51.81%
```
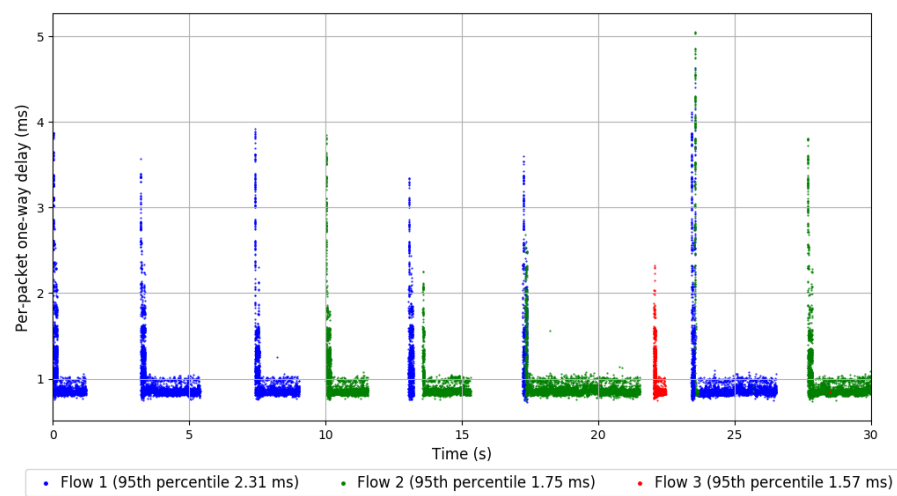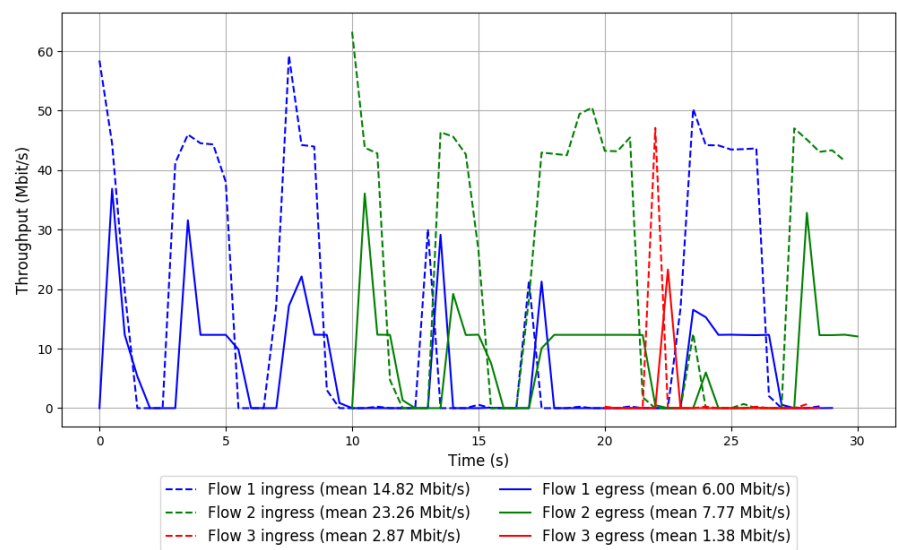
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-10-26 04:21:18
End at: 2018-10-26 04:21:48
Local clock offset: -6.058 ms
Remote clock offset: 0.256 ms


# Below is generated by plot.py at 2018-10-26 04:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.69 Mbit/s
95th percentile per-packet one-way delay: 3.484 ms
Loss rate: 63.20%
-- Flow 1:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 3.180 ms
Loss rate: 65.22%
-- Flow 2:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 2.894 ms
Loss rate: 61.16%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 5.509 ms
Loss rate: 50.08%
```
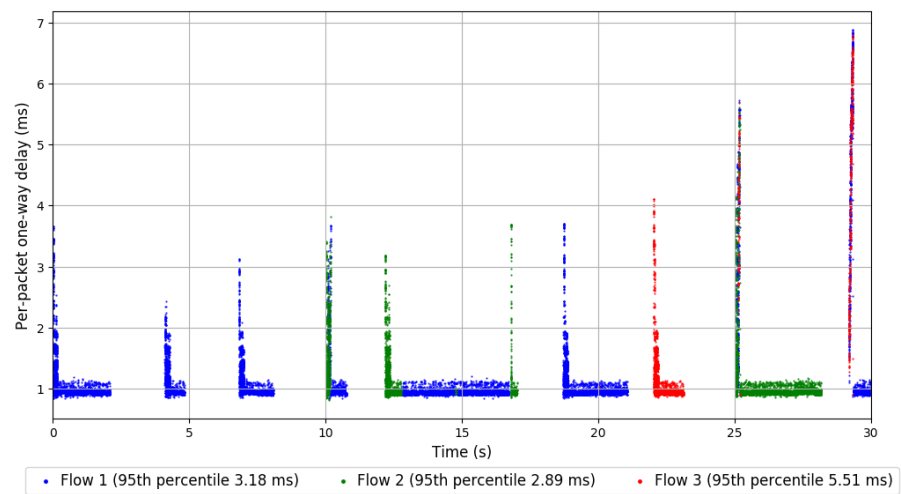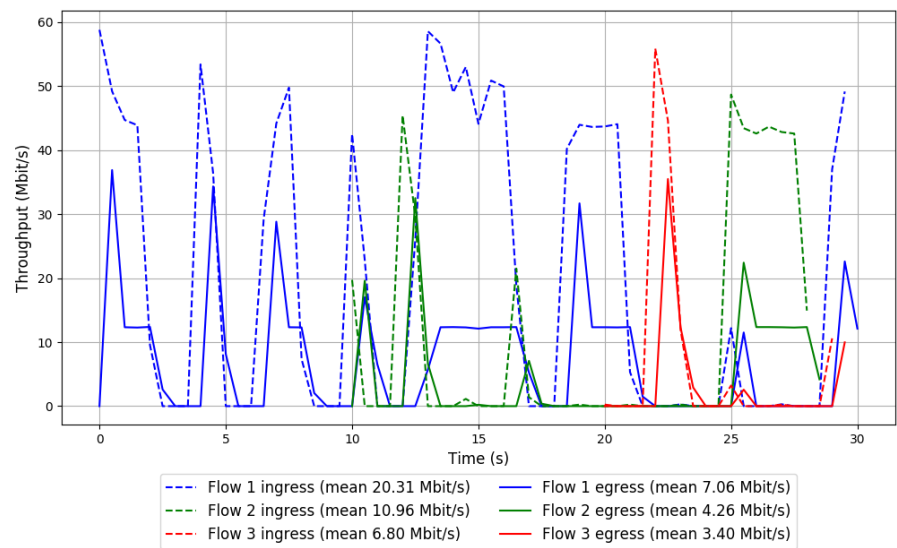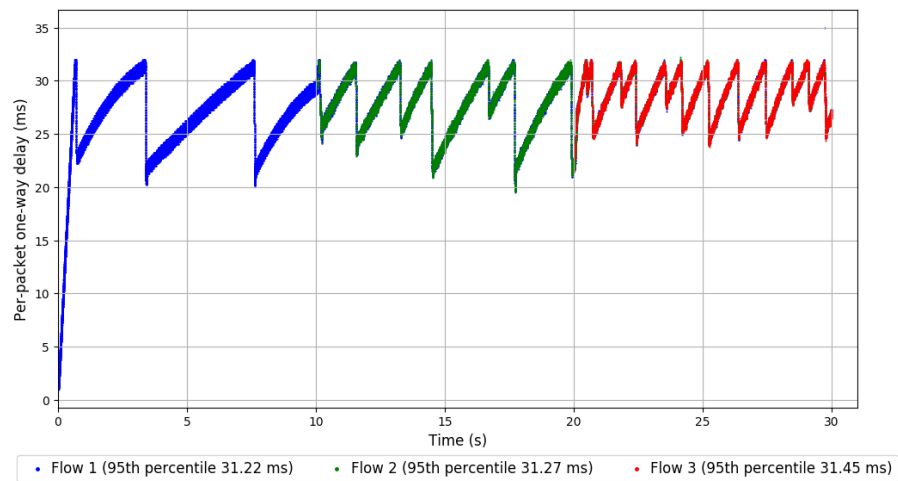
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 20.31 Mbit/s)   Flow 1 egress (mean 7.06 Mbit/s)
Flow 2 ingress (mean 10.96 Mbit/s)   Flow 2 egress (mean 4.26 Mbit/s)
Flow 3 ingress (mean 6.80 Mbit/s)   Flow 3 egress (mean 3.40 Mbit/s)

Flow 1 (95th percentile 3.18 ms)   Flow 2 (95th percentile 2.89 ms)   Flow 3 (95th percentile 5.51 ms)
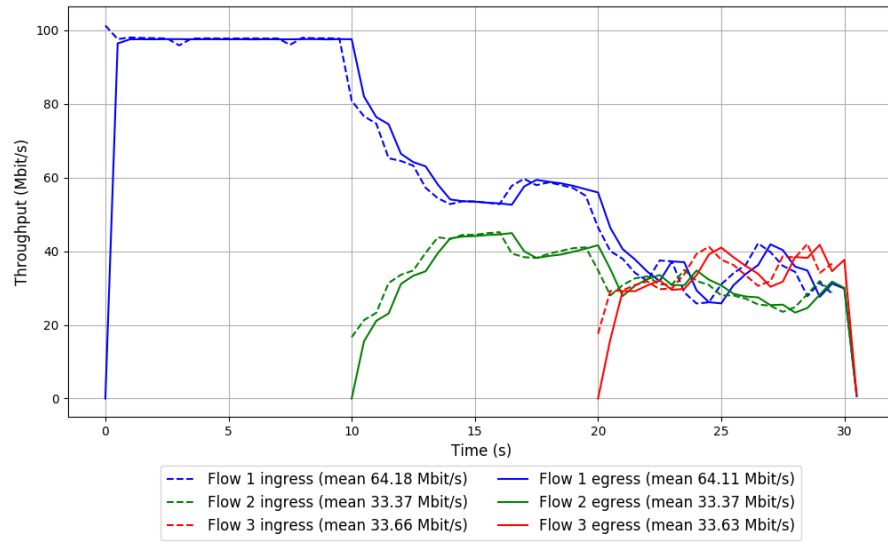
```
Run 1: Statistics of TCP Cubic

Start at: 2018-10-26 03:02:31
End at: 2018-10-26 03:03:01
Local clock offset: -4.395 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-10-26 04:35:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 31.245 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 31.219 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 31.268 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 33.63 Mbit/s
95th percentile per-packet one-way delay: 31.451 ms
Loss rate: 0.04%
```

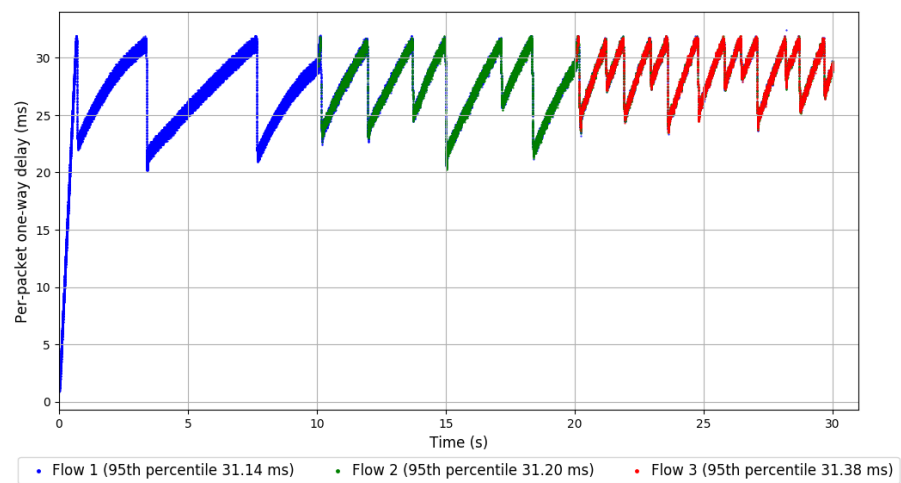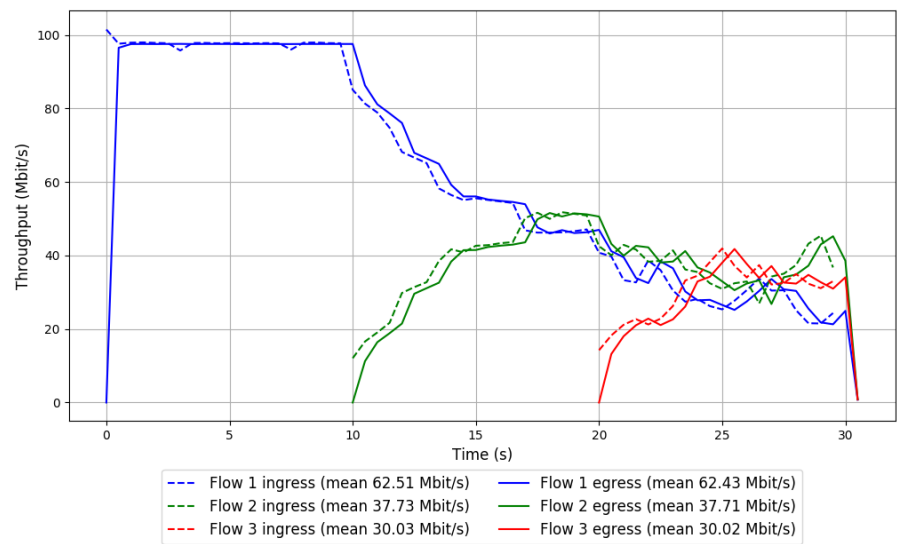Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-10-26 03:23:01
End at: 2018-10-26 03:23:31
Local clock offset: -4.922 ms
Remote clock offset: -0.083 ms


# Below is generated by plot.py at 2018-10-26 04:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 31.177 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.43 Mbit/s
95th percentile per-packet one-way delay: 31.135 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 31.200 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 31.377 ms
Loss rate: 0.04%
```
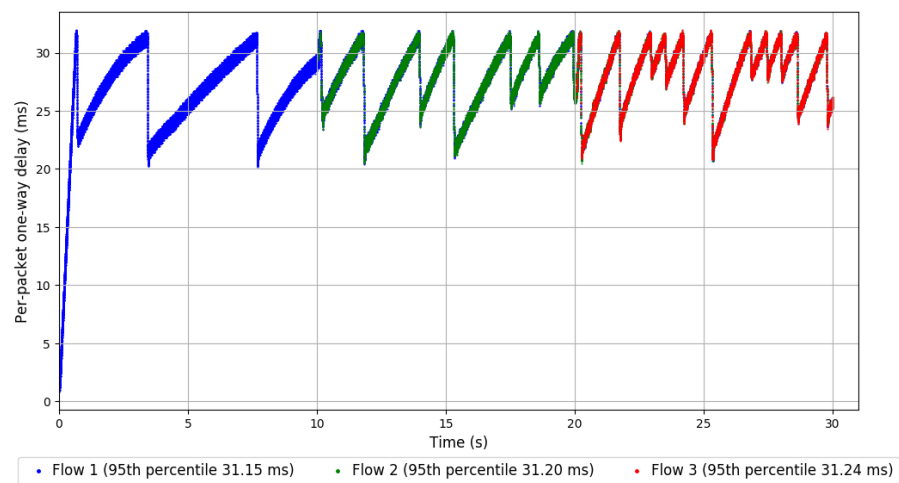
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 62.51 Mbit/s) --- Flow 1 egress (mean 62.43 Mbit/s)
Flow 2 ingress (mean 37.73 Mbit/s) --- Flow 2 egress (mean 37.71 Mbit/s)
Flow 3 ingress (mean 30.03 Mbit/s) --- Flow 3 egress (mean 30.02 Mbit/s)

Flow 1 (95th percentile 31.14 ms)   Flow 2 (95th percentile 31.20 ms)   Flow 3 (95th percentile 31.38 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-10-26 03:43:33
End at: 2018-10-26 03:44:03
Local clock offset: -5.849 ms
Remote clock offset: 0.07 ms


# Below is generated by plot.py at 2018-10-26 04:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 31.170 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 64.56 Mbit/s
95th percentile per-packet one-way delay: 31.152 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.24 Mbit/s
95th percentile per-packet one-way delay: 31.198 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 28.61 Mbit/s
95th percentile per-packet one-way delay: 31.238 ms
Loss rate: 0.03%
```
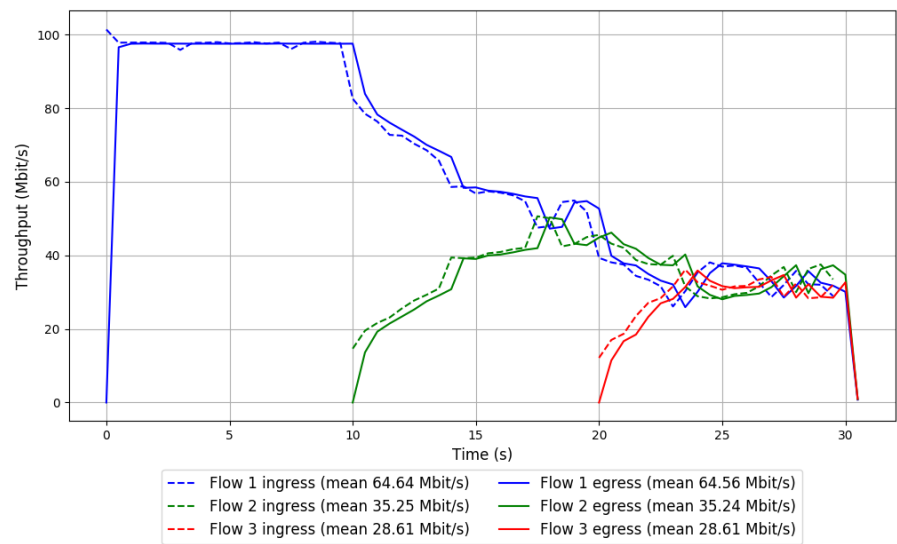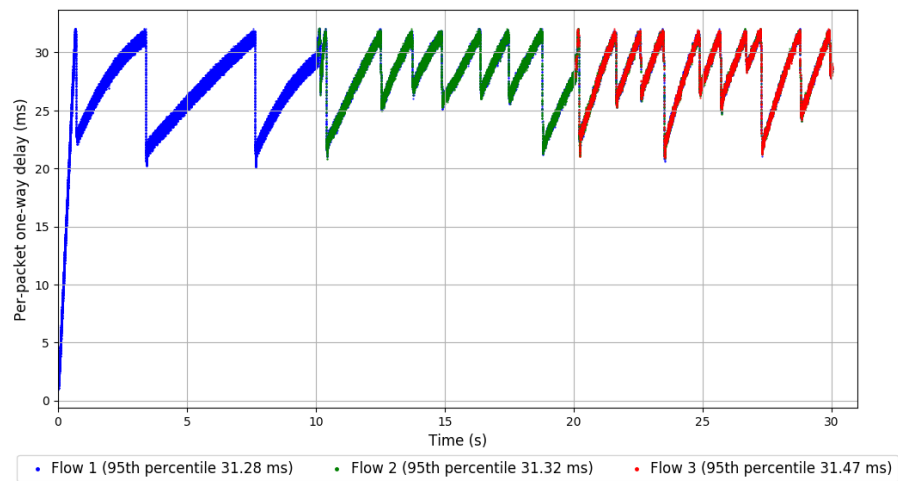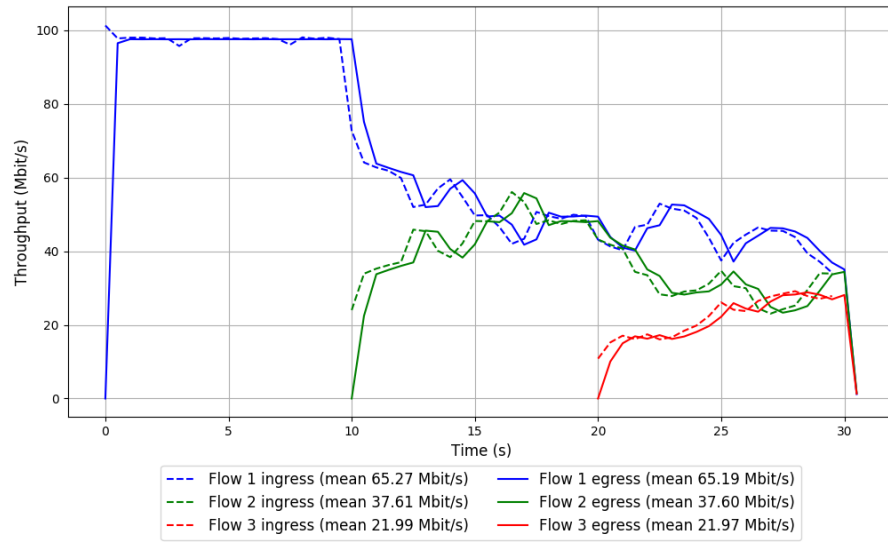
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 64.64 Mbit/s)   Flow 1 egress (mean 64.56 Mbit/s)
Flow 2 ingress (mean 35.25 Mbit/s)   Flow 2 egress (mean 35.24 Mbit/s)
Flow 3 ingress (mean 28.61 Mbit/s)   Flow 3 egress (mean 28.61 Mbit/s)

Flow 1 (95th percentile 31.15 ms)   Flow 2 (95th percentile 31.20 ms)   Flow 3 (95th percentile 31.24 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-10-26 04:04:00
End at: 2018-10-26 04:04:30
Local clock offset: -6.354 ms
Remote clock offset: 0.137 ms


# Below is generated by plot.py at 2018-10-26 04:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 31.299 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 31.281 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 31.322 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 31.466 ms
Loss rate: 0.06%
```
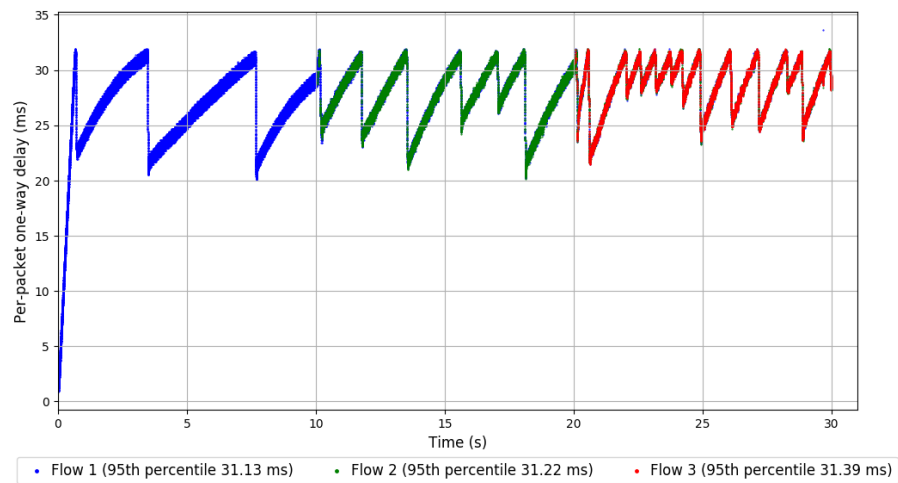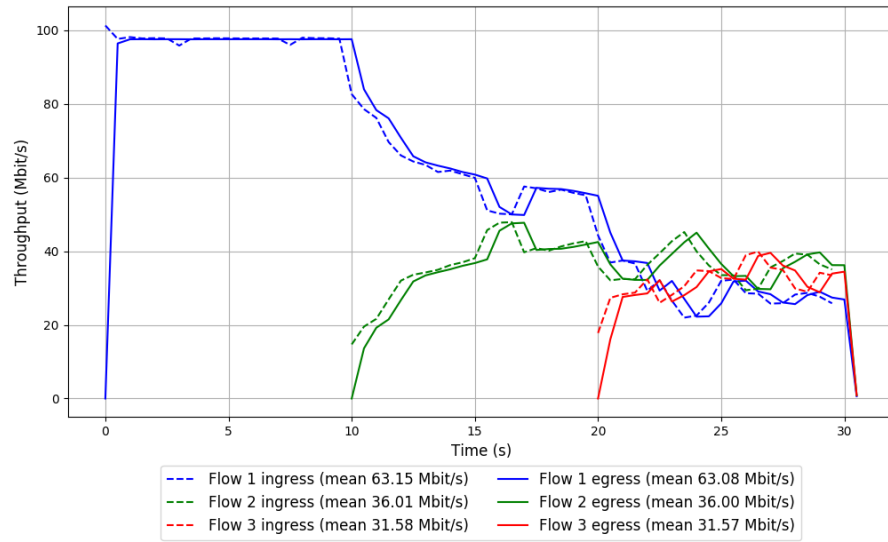
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 65.27 Mbit/s)   Flow 1 egress (mean 65.19 Mbit/s)
Flow 2 ingress (mean 37.61 Mbit/s)   Flow 2 egress (mean 37.60 Mbit/s)
Flow 3 ingress (mean 21.99 Mbit/s)   Flow 3 egress (mean 21.97 Mbit/s)

Flow 1 (95th percentile 31.28 ms)   Flow 2 (95th percentile 31.32 ms)   Flow 3 (95th percentile 31.47 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-10-26 04:24:43
End at: 2018-10-26 04:25:13
Local clock offset: -6.067 ms
Remote clock offset: 0.234 ms


# Below is generated by plot.py at 2018-10-26 04:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 31.166 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 31.130 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.00 Mbit/s
95th percentile per-packet one-way delay: 31.223 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 31.391 ms
Loss rate: 0.04%
```
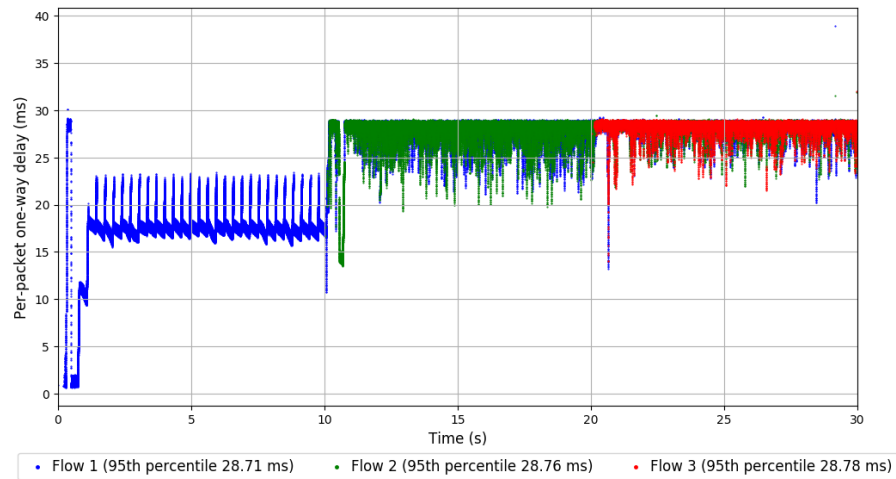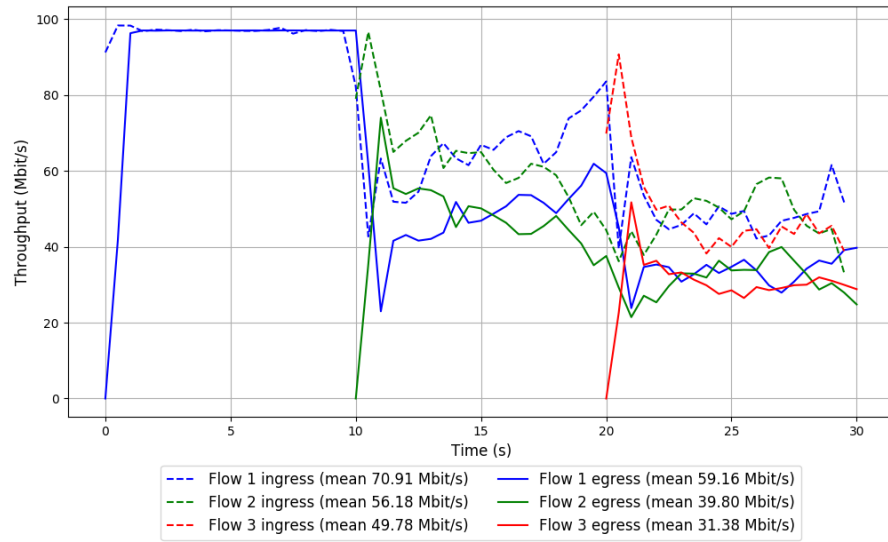
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 63.15 Mbit/s)   Flow 1 egress (mean 63.08 Mbit/s)
Flow 2 ingress (mean 36.01 Mbit/s)   Flow 2 egress (mean 36.00 Mbit/s)
Flow 3 ingress (mean 31.58 Mbit/s)   Flow 3 egress (mean 31.57 Mbit/s)

Flow 1 (95th percentile 31.13 ms)   Flow 2 (95th percentile 31.22 ms)   Flow 3 (95th percentile 31.39 ms)
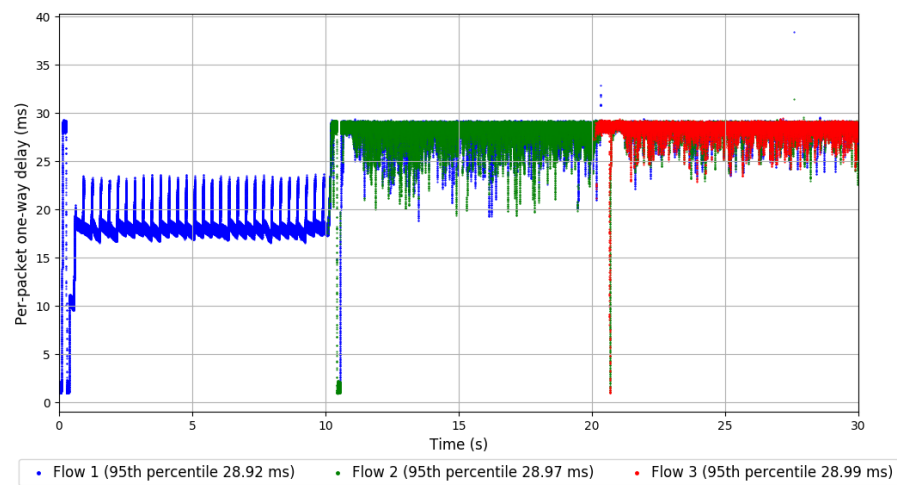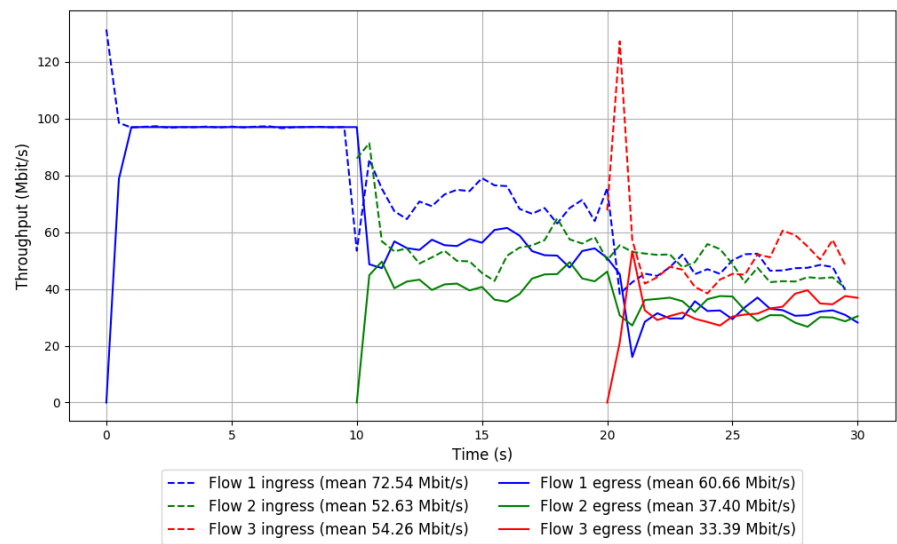
```
Run 1: Statistics of FillP

Start at: 2018-10-26 02:55:36
End at: 2018-10-26 02:56:06
Local clock offset: -4.252 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-10-26 04:36:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 28.741 ms
Loss rate: 22.98%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 28.708 ms
Loss rate: 16.50%
-- Flow 2:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 28.758 ms
Loss rate: 29.11%
-- Flow 3:
Average throughput: 31.38 Mbit/s
95th percentile per-packet one-way delay: 28.783 ms
Loss rate: 36.94%
```
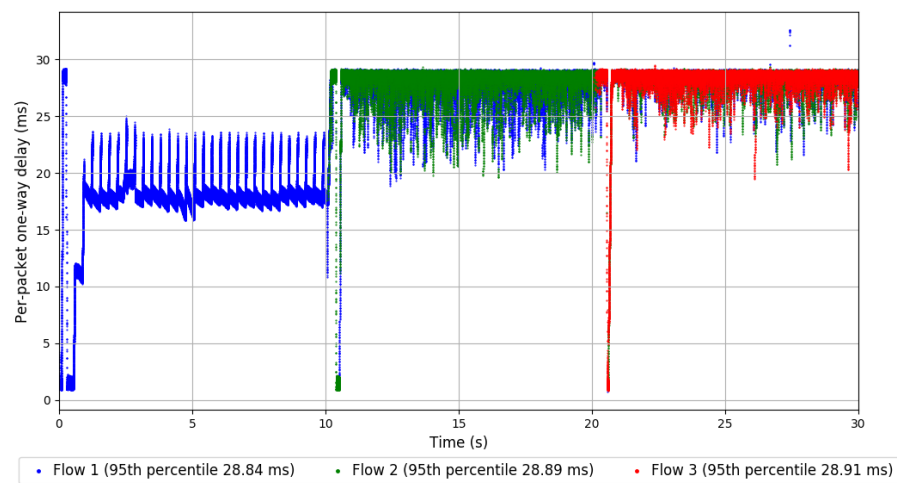
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 70.91 Mbit/s) --- Flow 1 egress (mean 59.16 Mbit/s)
Flow 2 ingress (mean 56.18 Mbit/s) --- Flow 2 egress (mean 39.80 Mbit/s)
Flow 3 ingress (mean 49.78 Mbit/s) --- Flow 3 egress (mean 31.38 Mbit/s)

Flow 1 (95th percentile 28.71 ms)   Flow 2 (95th percentile 28.76 ms)   Flow 3 (95th percentile 28.78 ms)

```
Run 2: Statistics of FillP

Start at: 2018-10-26 03:16:07
End at: 2018-10-26 03:16:37
Local clock offset: -4.923 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-10-26 04:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 28.950 ms
Loss rate: 22.99%
-- Flow 1:
Average throughput: 60.66 Mbit/s
95th percentile per-packet one-way delay: 28.918 ms
Loss rate: 16.30%
-- Flow 2:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 28.972 ms
Loss rate: 28.90%
-- Flow 3:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 28.990 ms
Loss rate: 38.45%
```
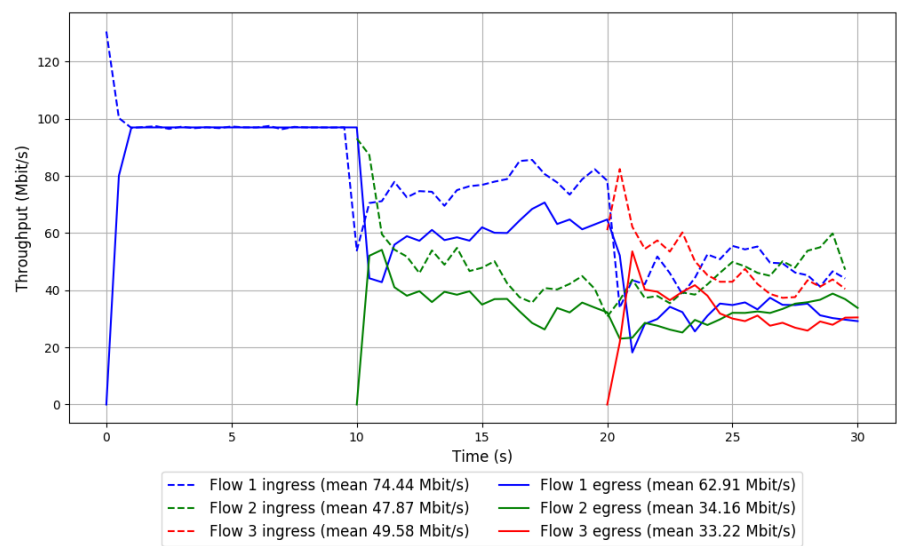
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-10-26 03:36:38
End at: 2018-10-26 03:37:08
Local clock offset: -5.523 ms
Remote clock offset: 0.016 ms


# Below is generated by plot.py at 2018-10-26 04:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.65 Mbit/s
95th percentile per-packet one-way delay: 28.869 ms
Loss rate: 21.19%
-- Flow 1:
Average throughput: 62.91 Mbit/s
95th percentile per-packet one-way delay: 28.837 ms
Loss rate: 15.40%
-- Flow 2:
Average throughput: 34.16 Mbit/s
95th percentile per-packet one-way delay: 28.895 ms
Loss rate: 28.61%
-- Flow 3:
Average throughput: 33.22 Mbit/s
95th percentile per-packet one-way delay: 28.908 ms
Loss rate: 32.99%
```
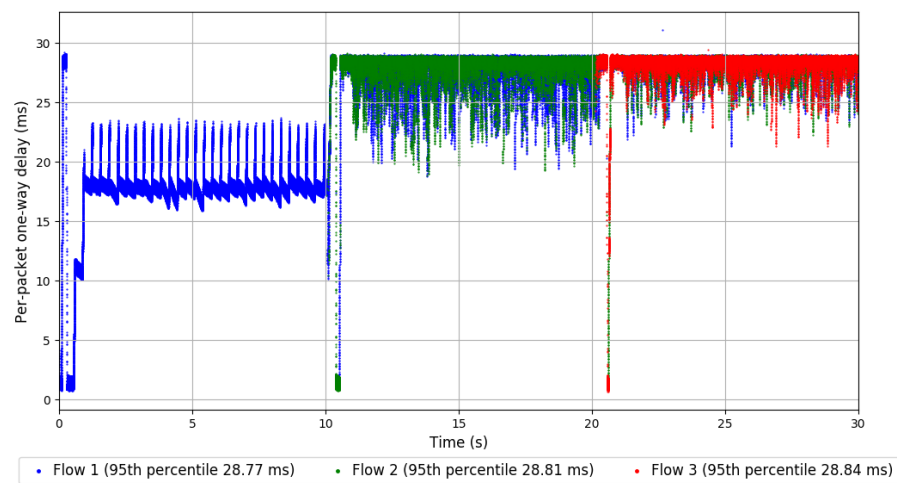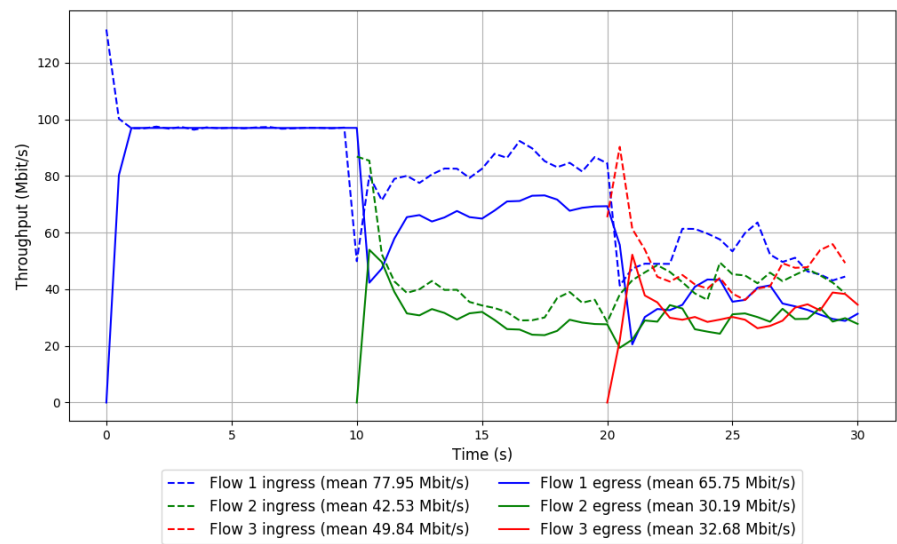
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-10-26 03:57:06
End at: 2018-10-26 03:57:36
Local clock offset: -6.296 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2018-10-26 04:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.65 Mbit/s
95th percentile per-packet one-way delay: 28.793 ms
Loss rate: 21.20%
-- Flow 1:
Average throughput: 65.75 Mbit/s
95th percentile per-packet one-way delay: 28.770 ms
Loss rate: 15.57%
-- Flow 2:
Average throughput: 30.19 Mbit/s
95th percentile per-packet one-way delay: 28.810 ms
Loss rate: 28.98%
-- Flow 3:
Average throughput: 32.68 Mbit/s
95th percentile per-packet one-way delay: 28.836 ms
Loss rate: 34.41%
```
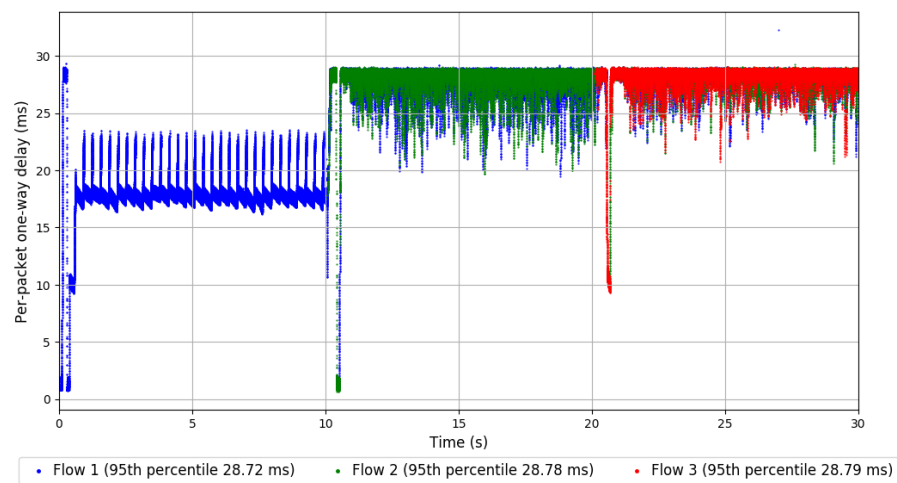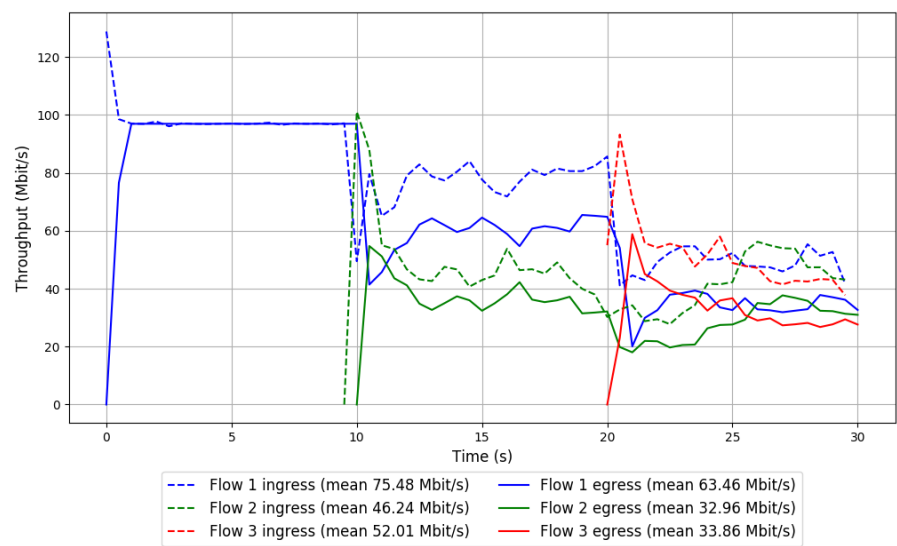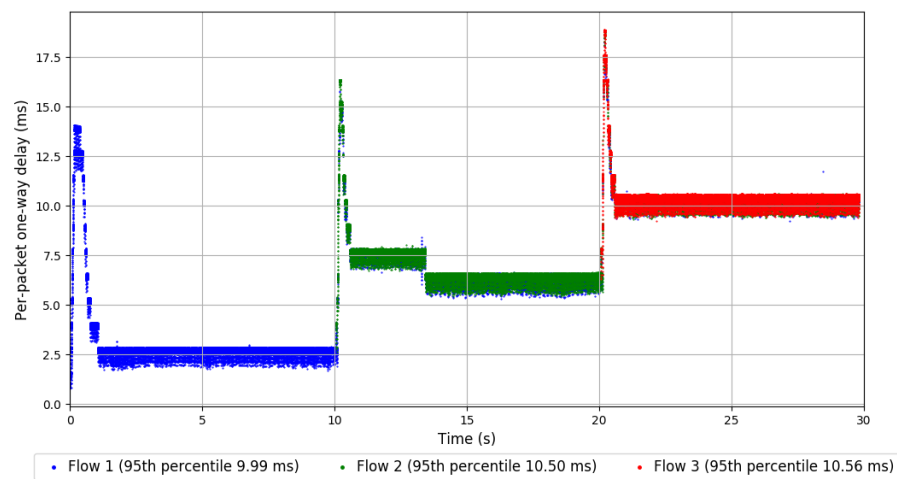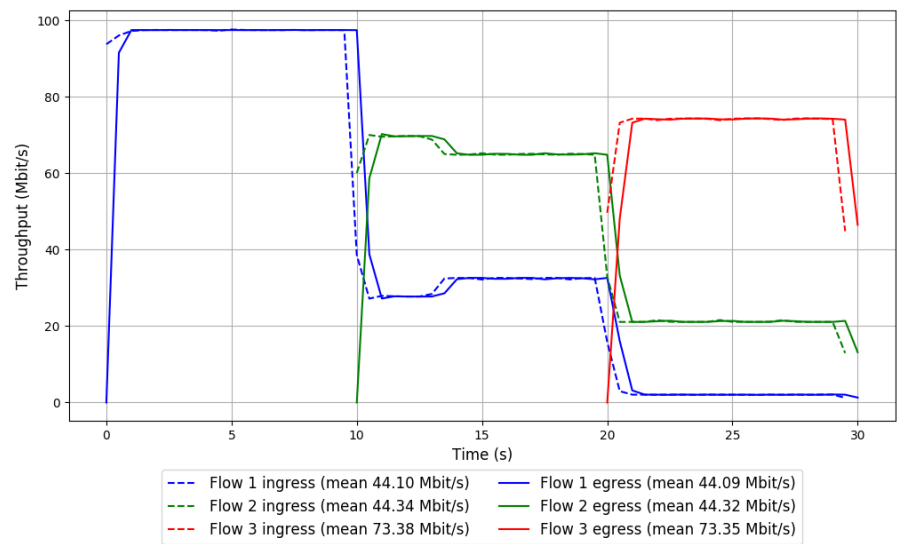
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 77.95 Mbit/s) --- Flow 1 egress (mean 65.75 Mbit/s) ---
Flow 2 ingress (mean 42.53 Mbit/s) --- Flow 2 egress (mean 30.19 Mbit/s) ---
Flow 3 ingress (mean 49.84 Mbit/s) --- Flow 3 egress (mean 32.68 Mbit/s) ---

Flow 1 (95th percentile 28.77 ms)   Flow 2 (95th percentile 28.81 ms)   Flow 3 (95th percentile 28.84 ms)

```
Run 5: Statistics of FillP

Start at: 2018-10-26 04:17:48
End at: 2018-10-26 04:18:18
Local clock offset: -6.055 ms
Remote clock offset: 0.123 ms


# Below is generated by plot.py at 2018-10-26 04:36:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 28.754 ms
Loss rate: 21.71%
-- Flow 1:
Average throughput: 63.46 Mbit/s
95th percentile per-packet one-way delay: 28.720 ms
Loss rate: 15.85%
-- Flow 2:
Average throughput: 32.96 Mbit/s
95th percentile per-packet one-way delay: 28.779 ms
Loss rate: 28.69%
-- Flow 3:
Average throughput: 33.86 Mbit/s
95th percentile per-packet one-way delay: 28.791 ms
Loss rate: 34.90%
```

Run 5: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-10-26 02:57:55
End at: 2018-10-26 02:58:25
Local clock offset: -4.238 ms
Remote clock offset: -0.203 ms


# Below is generated by plot.py at 2018-10-26 04:36:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 10.540 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.09 Mbit/s
95th percentile per-packet one-way delay: 9.995 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.32 Mbit/s
95th percentile per-packet one-way delay: 10.504 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.35 Mbit/s
95th percentile per-packet one-way delay: 10.557 ms
Loss rate: 0.00%
```
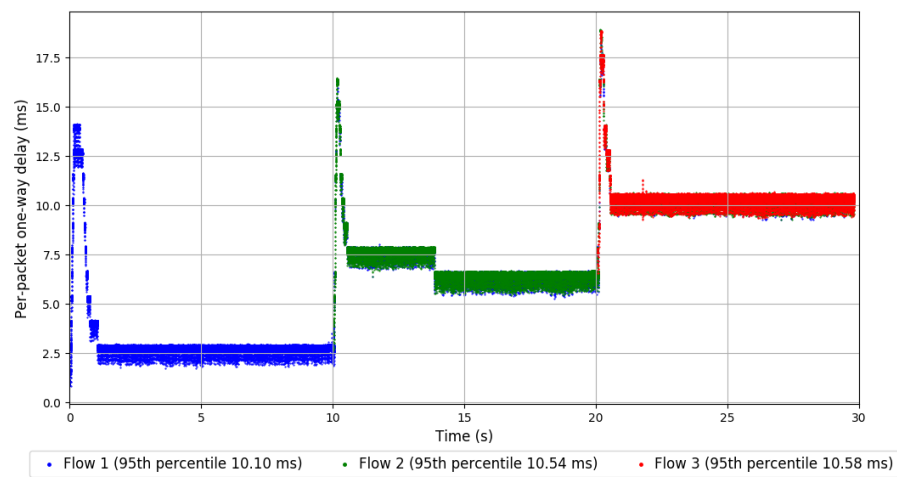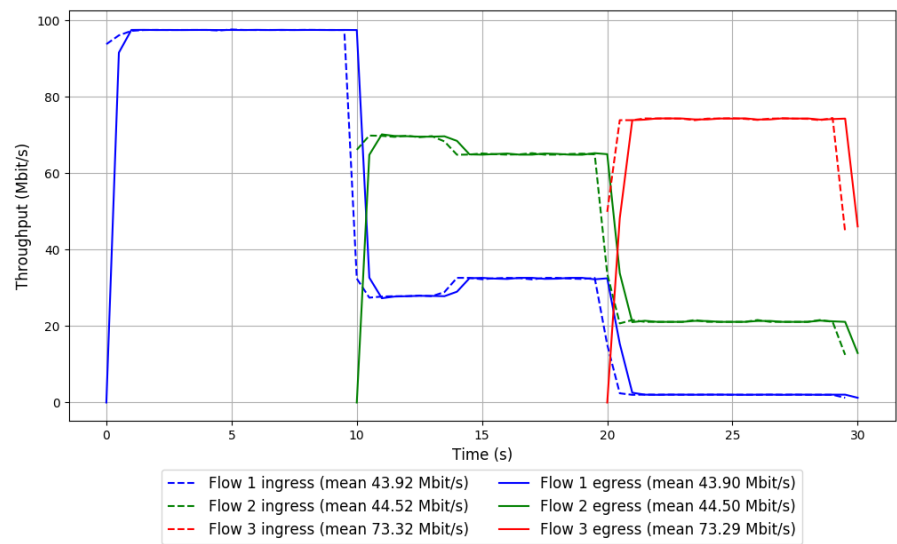
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-10-26 03:18:26
End at: 2018-10-26 03:18:56
Local clock offset: -4.911 ms
Remote clock offset: -0.11 ms


# Below is generated by plot.py at 2018-10-26 04:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 10.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.90 Mbit/s
95th percentile per-packet one-way delay: 10.095 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.50 Mbit/s
95th percentile per-packet one-way delay: 10.539 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.29 Mbit/s
95th percentile per-packet one-way delay: 10.579 ms
Loss rate: 0.00%
```
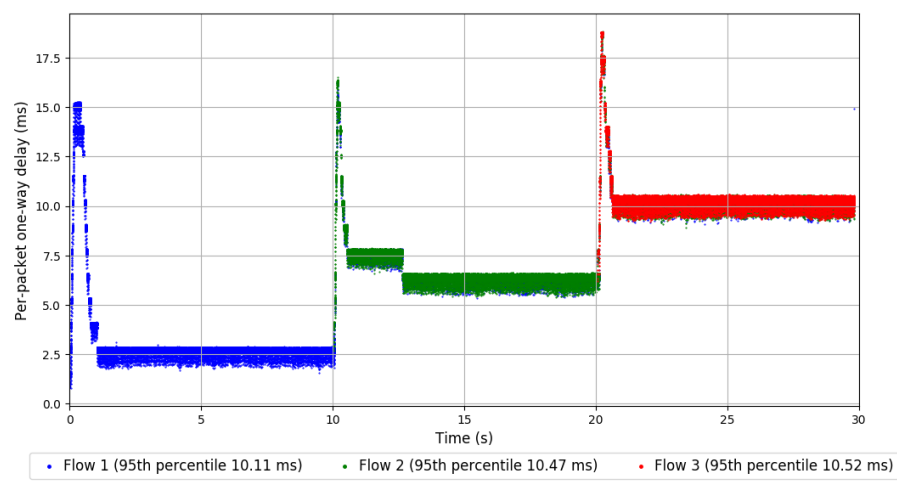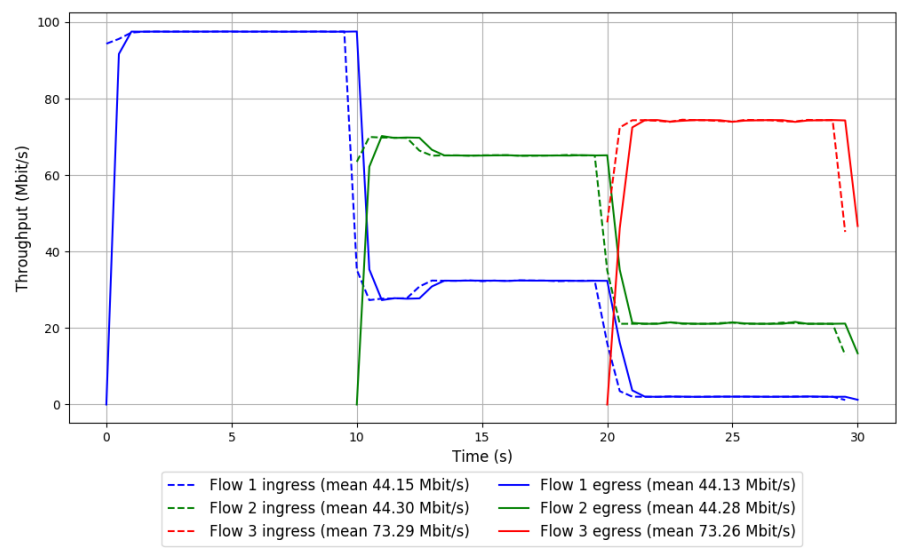
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-10-26 03:38:57
End at: 2018-10-26 03:39:27
Local clock offset: -5.658 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-10-26 04:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 10.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.13 Mbit/s
95th percentile per-packet one-way delay: 10.114 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.28 Mbit/s
95th percentile per-packet one-way delay: 10.473 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 10.522 ms
Loss rate: 0.00%
```
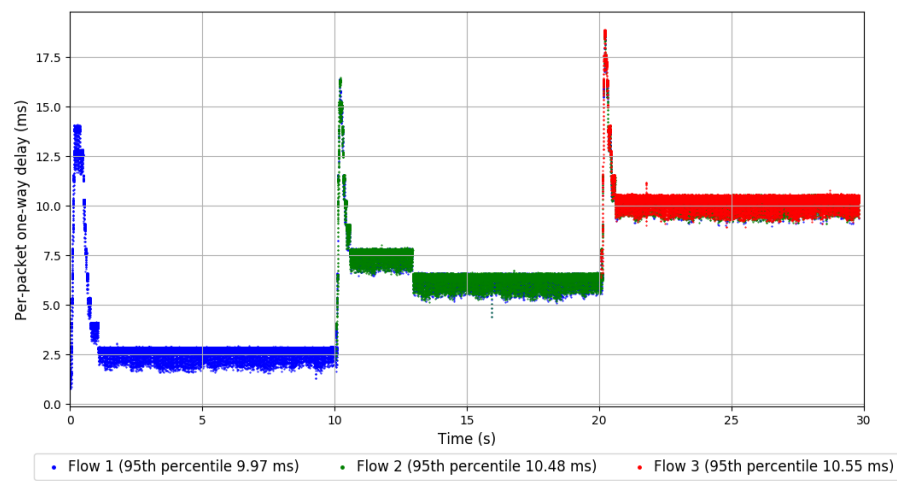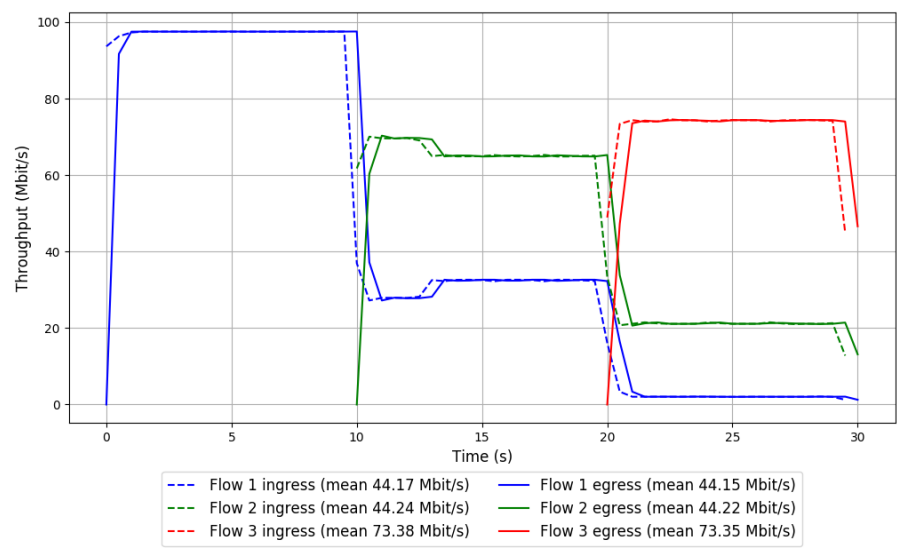
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-10-26 03:59:25
End at: 2018-10-26 03:59:55
Local clock offset: -6.331 ms
Remote clock offset: 0.057 ms


# Below is generated by plot.py at 2018-10-26 04:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 10.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 9.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.22 Mbit/s
95th percentile per-packet one-way delay: 10.477 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.35 Mbit/s
95th percentile per-packet one-way delay: 10.546 ms
Loss rate: 0.00%
```
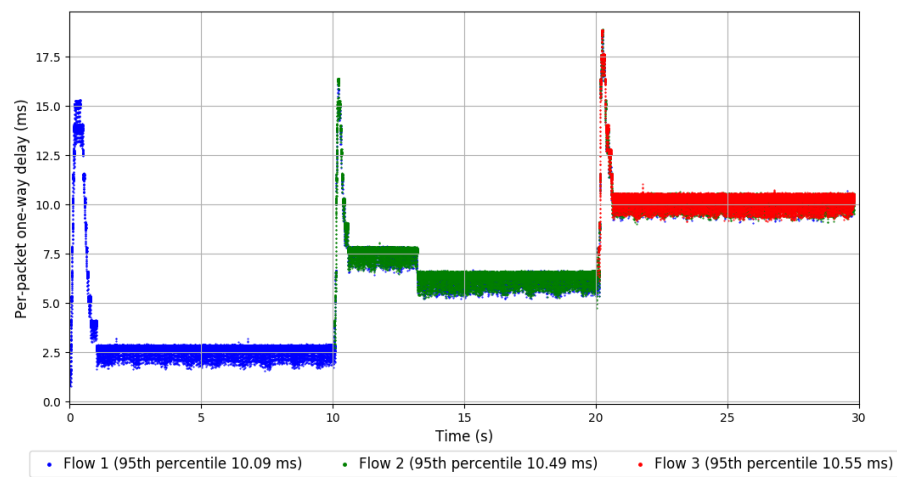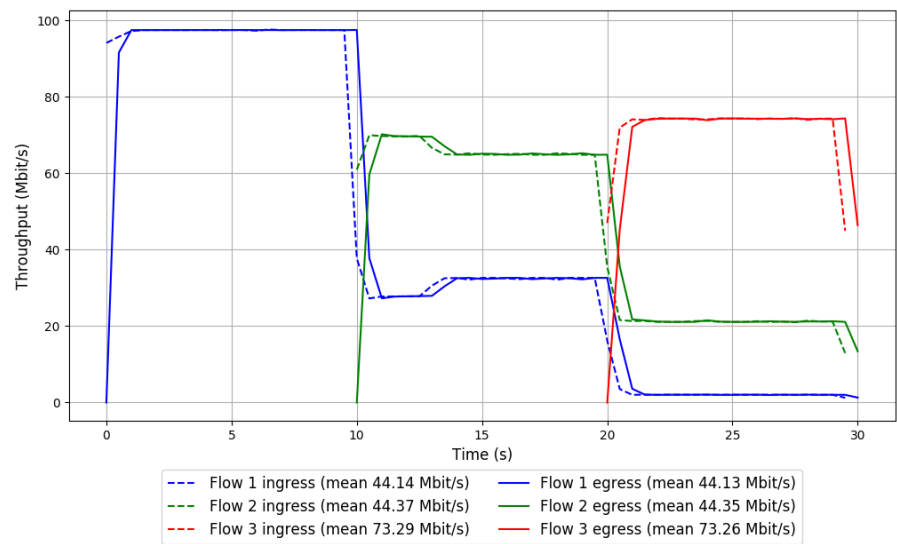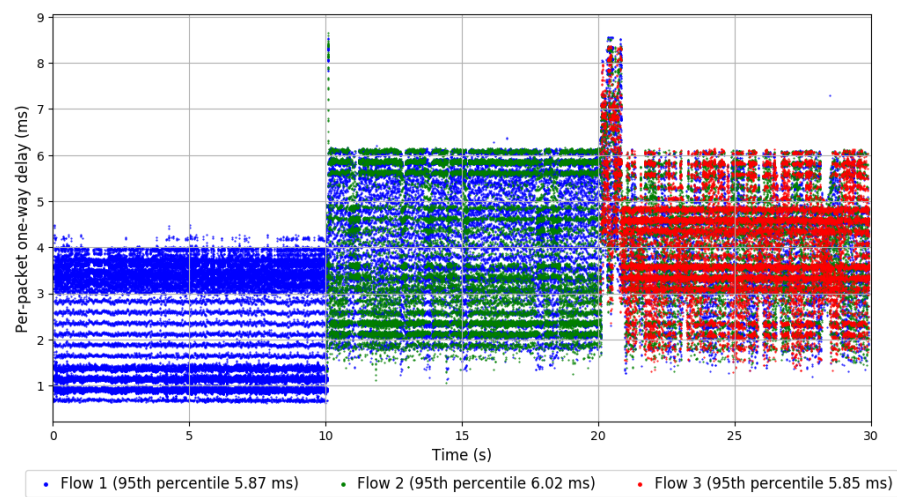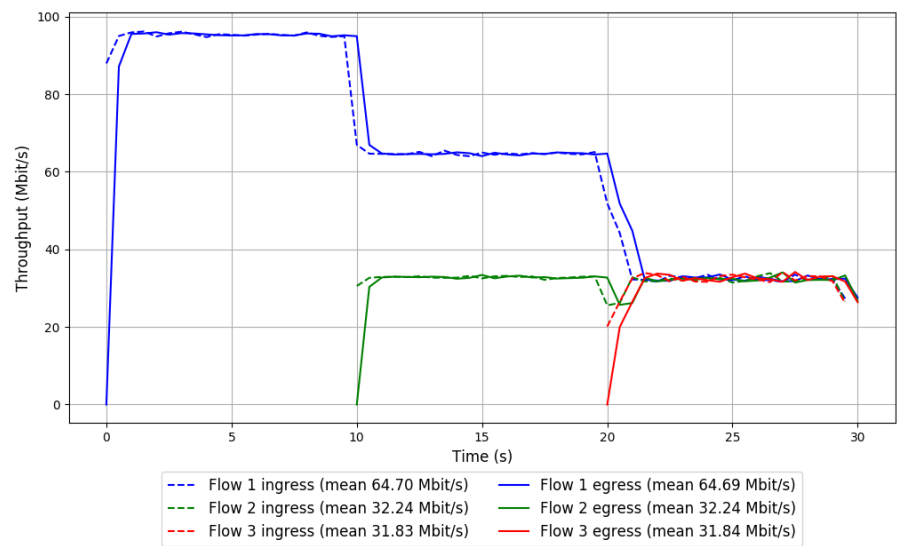
Run 4: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 44.17 Mbit/s) —— Flow 1 egress (mean 44.15 Mbit/s)
- - - Flow 2 ingress (mean 44.24 Mbit/s) —— Flow 2 egress (mean 44.22 Mbit/s)
- - - Flow 3 ingress (mean 73.38 Mbit/s) —— Flow 3 egress (mean 73.35 Mbit/s)

- Flow 1 (95th percentile 9.97 ms)   • Flow 2 (95th percentile 10.48 ms)   • Flow 3 (95th percentile 10.55 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-10-26 04:20:07
End at: 2018-10-26 04:20:37
Local clock offset: -6.052 ms
Remote clock offset: 0.194 ms


# Below is generated by plot.py at 2018-10-26 04:37:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 10.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.13 Mbit/s
95th percentile per-packet one-way delay: 10.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.35 Mbit/s
95th percentile per-packet one-way delay: 10.491 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 10.546 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

Legend (top plot):
- Flow 1 ingress (mean 44.14 Mbit/s) — Flow 1 egress (mean 44.13 Mbit/s)
- Flow 2 ingress (mean 44.37 Mbit/s) — Flow 2 egress (mean 44.35 Mbit/s)
- Flow 3 ingress (mean 73.29 Mbit/s) — Flow 3 egress (mean 73.26 Mbit/s)

Legend (bottom plot):
- Flow 1 (95th percentile 10.09 ms)
- Flow 2 (95th percentile 10.49 ms)
- Flow 3 (95th percentile 10.55 ms)

```
Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:05:57
End at: 2018-10-26 03:06:27
Local clock offset: -4.486 ms
Remote clock offset: -0.278 ms


# Below is generated by plot.py at 2018-10-26 04:37:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.63 Mbit/s
95th percentile per-packet one-way delay: 5.880 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.69 Mbit/s
95th percentile per-packet one-way delay: 5.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.24 Mbit/s
95th percentile per-packet one-way delay: 6.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 5.851 ms
Loss rate: 0.00%
```
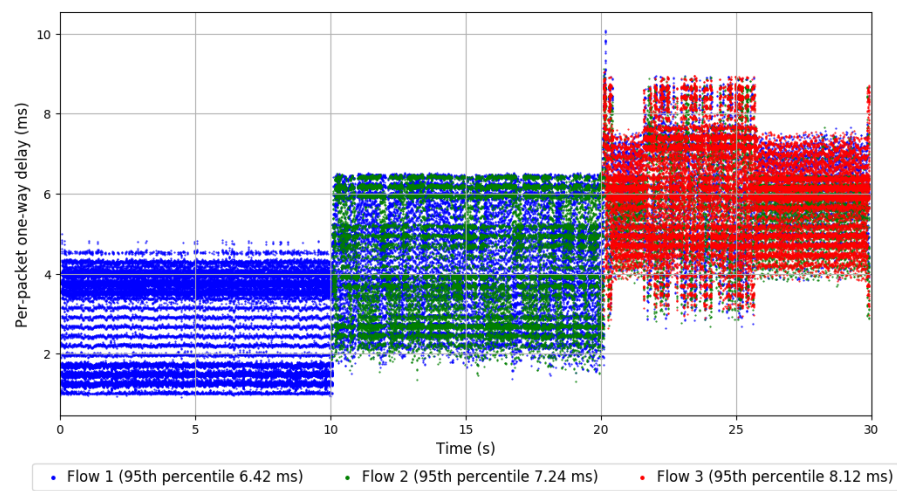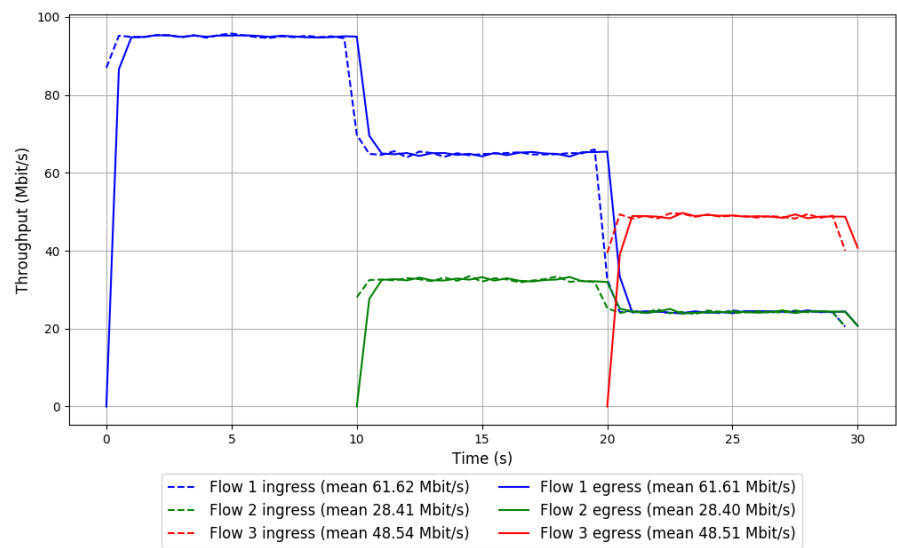
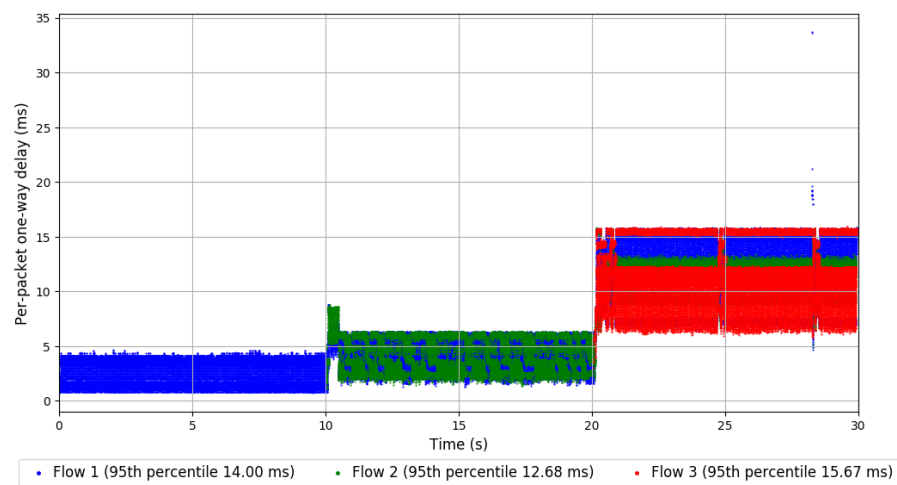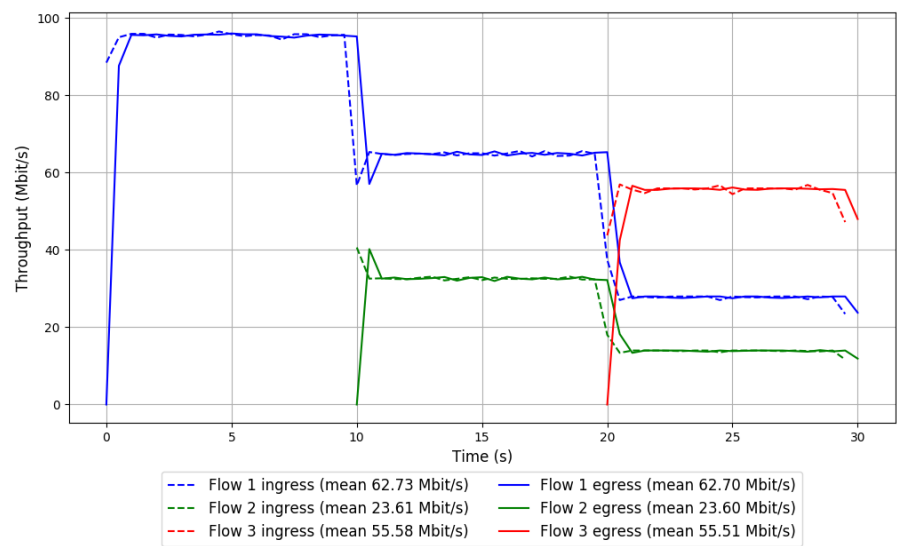Run 1: Report of Indigo-96d2da3 — Data Link

```
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:26:27
End at: 2018-10-26 03:26:57
Local clock offset: -4.983 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2018-10-26 04:37:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 7.192 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.61 Mbit/s
95th percentile per-packet one-way delay: 6.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 7.241 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 8.123 ms
Loss rate: 0.00%
```
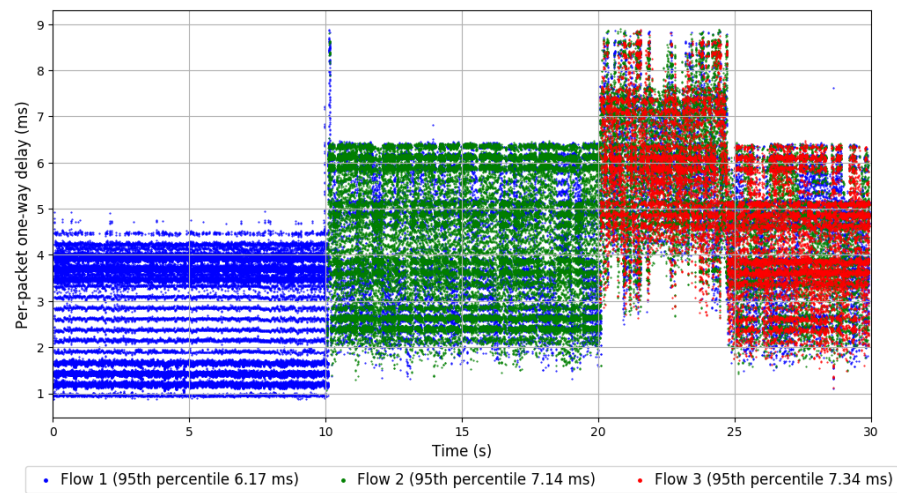
Run 2: Report of Indigo-96d2da3 — Data Link

- - - Flow 1 ingress (mean 61.62 Mbit/s) —— Flow 1 egress (mean 61.61 Mbit/s)
- - - Flow 2 ingress (mean 28.41 Mbit/s) —— Flow 2 egress (mean 28.40 Mbit/s)
- - - Flow 3 ingress (mean 48.54 Mbit/s) —— Flow 3 egress (mean 48.51 Mbit/s)

• Flow 1 (95th percentile 6.42 ms)   • Flow 2 (95th percentile 7.24 ms)   • Flow 3 (95th percentile 8.12 ms)

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```
Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:46:59
End at: 2018-10-26 03:47:29
Local clock offset: -6.051 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2018-10-26 04:37:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.67 Mbit/s
95th percentile per-packet one-way delay: 15.086 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.70 Mbit/s
95th percentile per-packet one-way delay: 13.999 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.60 Mbit/s
95th percentile per-packet one-way delay: 12.675 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.51 Mbit/s
95th percentile per-packet one-way delay: 15.673 ms
Loss rate: 0.00%
```
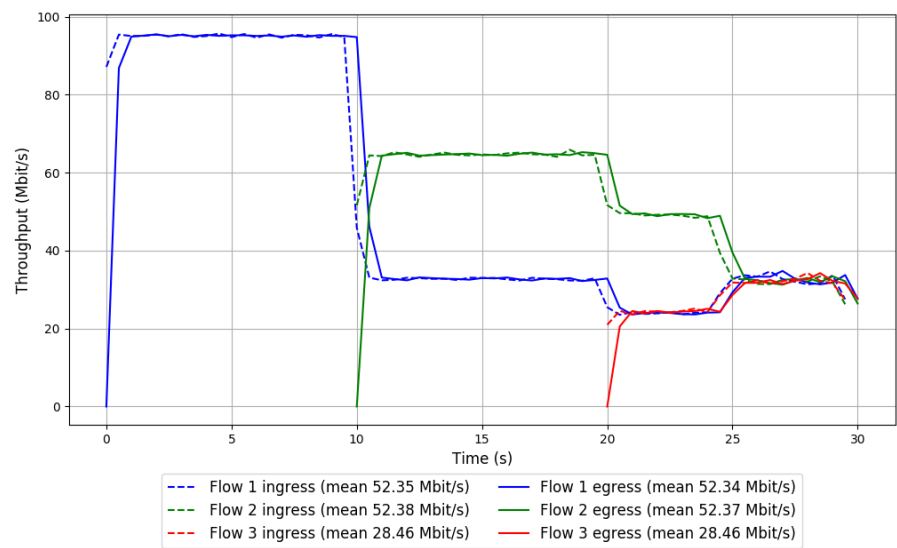
Run 3: Report of Indigo-96d2da3 — Data Link

```
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-26 04:07:27
End at: 2018-10-26 04:07:57
Local clock offset: -6.21 ms
Remote clock offset: 0.177 ms


# Below is generated by plot.py at 2018-10-26 04:38:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 6.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.34 Mbit/s
95th percentile per-packet one-way delay: 6.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.37 Mbit/s
95th percentile per-packet one-way delay: 7.136 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 7.342 ms
Loss rate: 0.00%
```
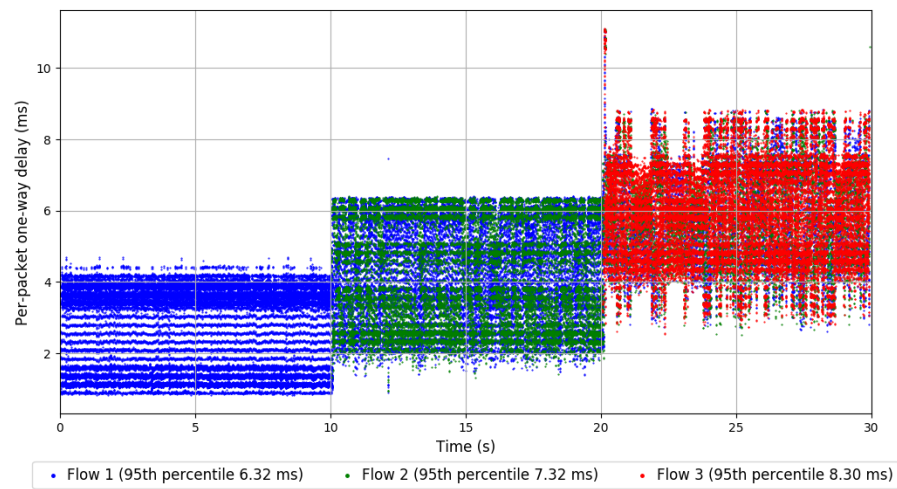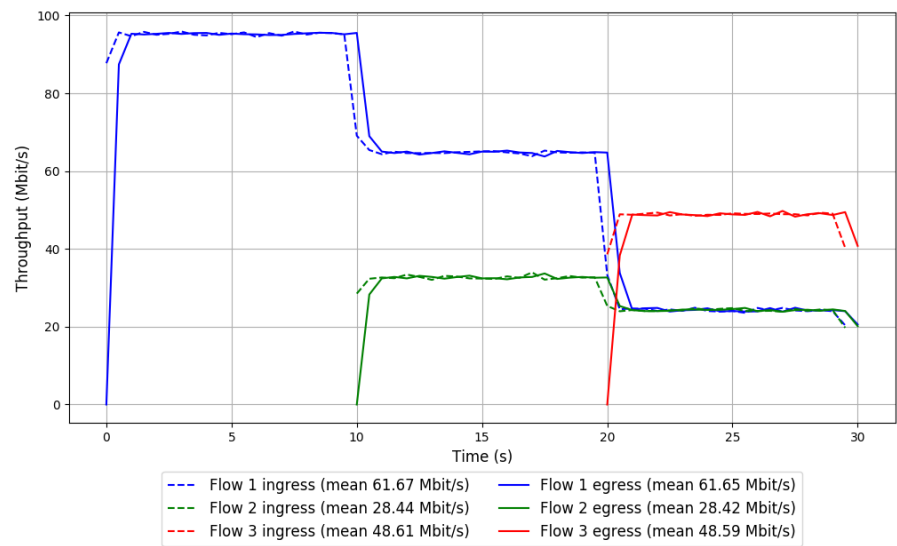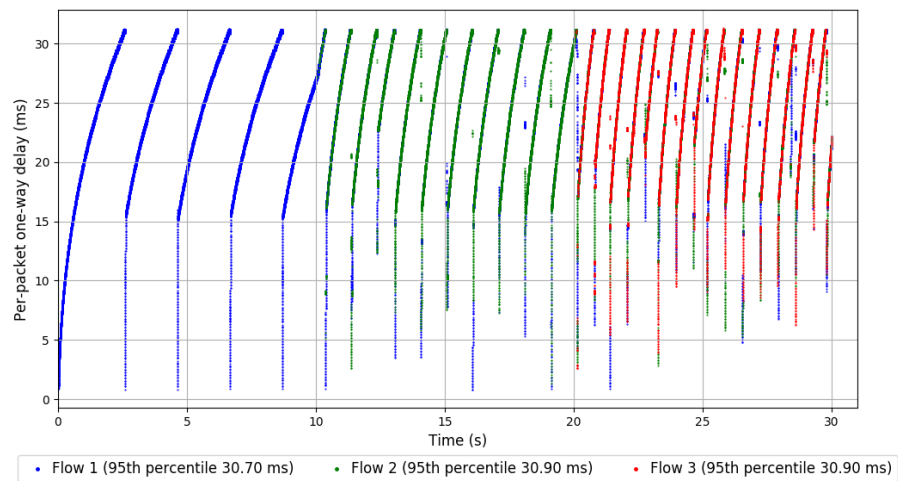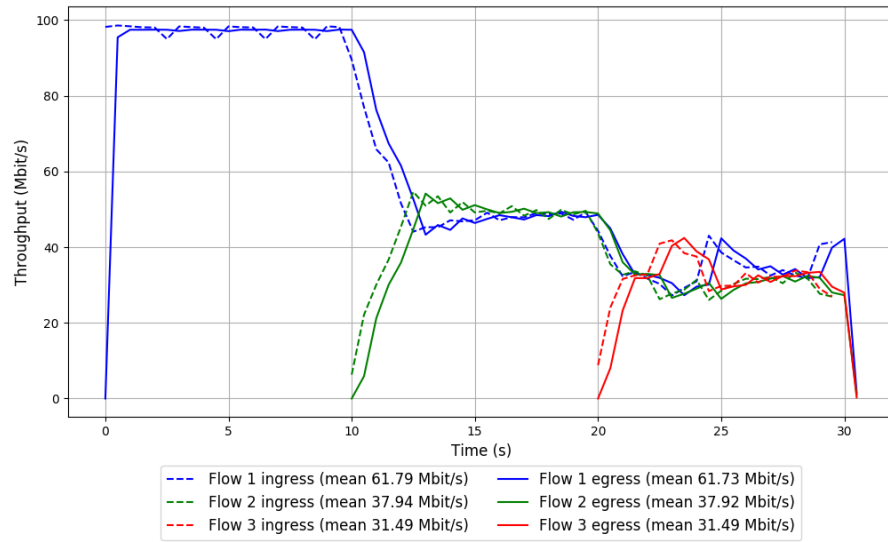
Run 4: Report of Indigo-96d2da3 — Data Link

- - - - Flow 1 ingress (mean 52.35 Mbit/s) ——— Flow 1 egress (mean 52.34 Mbit/s)
- - - - Flow 2 ingress (mean 52.38 Mbit/s) ——— Flow 2 egress (mean 52.37 Mbit/s)
- - - - Flow 3 ingress (mean 28.46 Mbit/s) ——— Flow 3 egress (mean 28.46 Mbit/s)

- Flow 1 (95th percentile 6.17 ms)   • Flow 2 (95th percentile 7.14 ms)   • Flow 3 (95th percentile 7.34 ms)

```
Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-26 04:28:08
End at: 2018-10-26 04:28:38
Local clock offset: -6.148 ms
Remote clock offset: 0.215 ms


# Below is generated by plot.py at 2018-10-26 04:38:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 7.296 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 6.323 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.42 Mbit/s
95th percentile per-packet one-way delay: 7.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.59 Mbit/s
95th percentile per-packet one-way delay: 8.300 ms
Loss rate: 0.00%
```

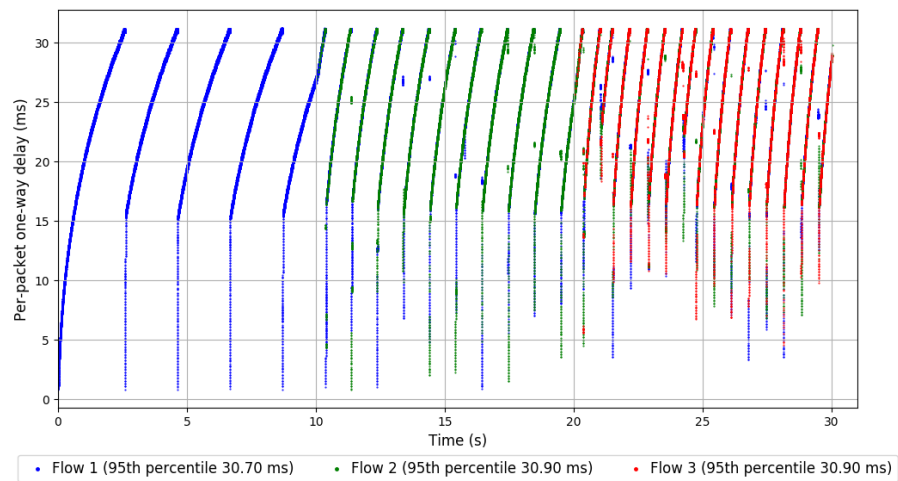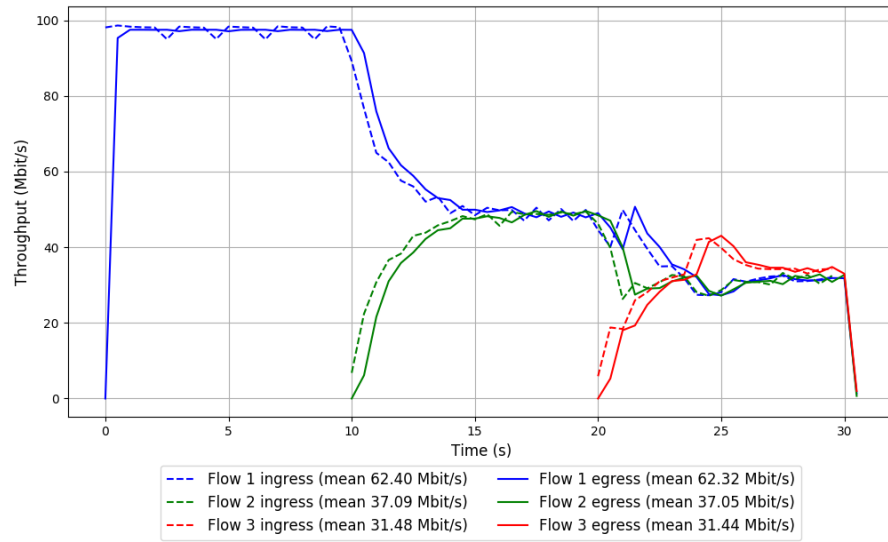Run 5: Report of Indigo-96d2da3 — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-10-26 03:08:15
End at: 2018-10-26 03:08:45
Local clock offset: -4.682 ms
Remote clock offset: -0.156 ms


# Below is generated by plot.py at 2018-10-26 04:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 30.874 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 30.697 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.92 Mbit/s
95th percentile per-packet one-way delay: 30.900 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 30.903 ms
Loss rate: 0.07%
```
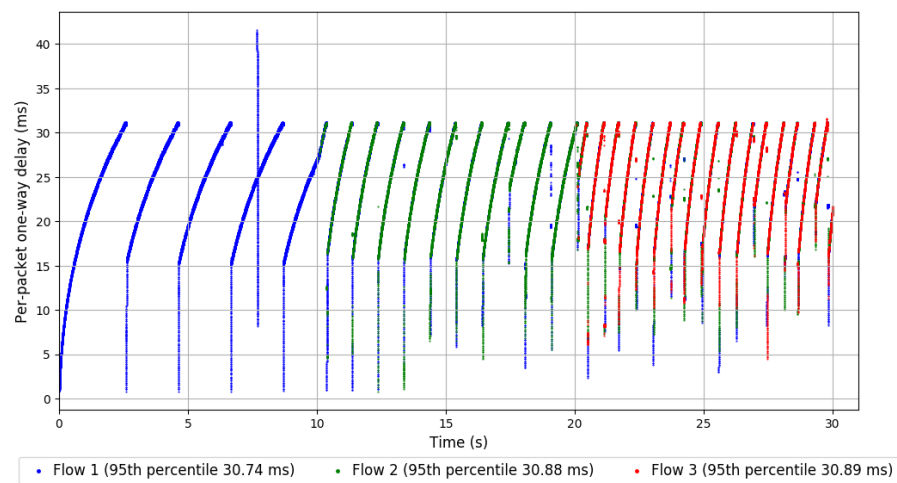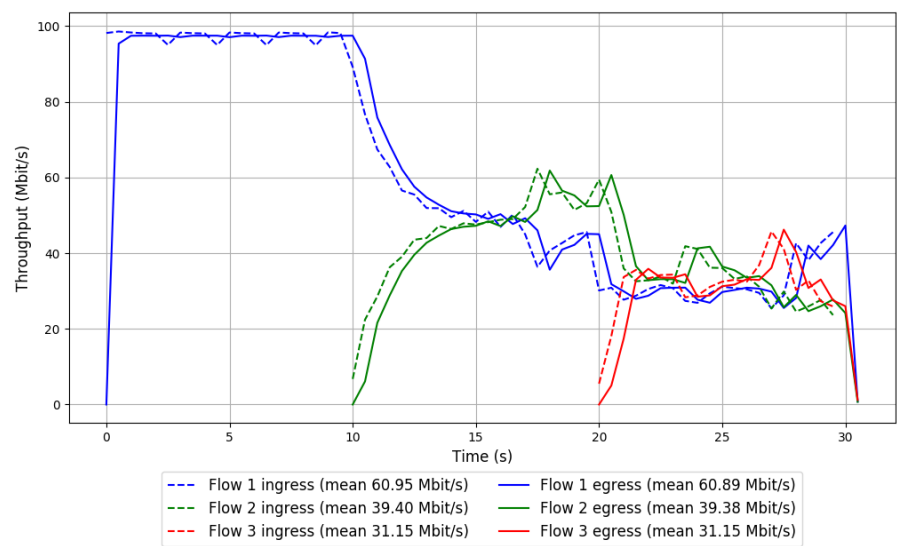
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 61.79 Mbit/s)   Flow 1 egress (mean 61.73 Mbit/s)
Flow 2 ingress (mean 37.94 Mbit/s)   Flow 2 egress (mean 37.92 Mbit/s)
Flow 3 ingress (mean 31.49 Mbit/s)   Flow 3 egress (mean 31.49 Mbit/s)

Flow 1 (95th percentile 30.70 ms)   Flow 2 (95th percentile 30.90 ms)   Flow 3 (95th percentile 30.90 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-10-26 03:28:46
End at: 2018-10-26 03:29:16
Local clock offset: -4.919 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-10-26 04:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 30.870 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.32 Mbit/s
95th percentile per-packet one-way delay: 30.696 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 30.896 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 30.904 ms
Loss rate: 0.08%
```
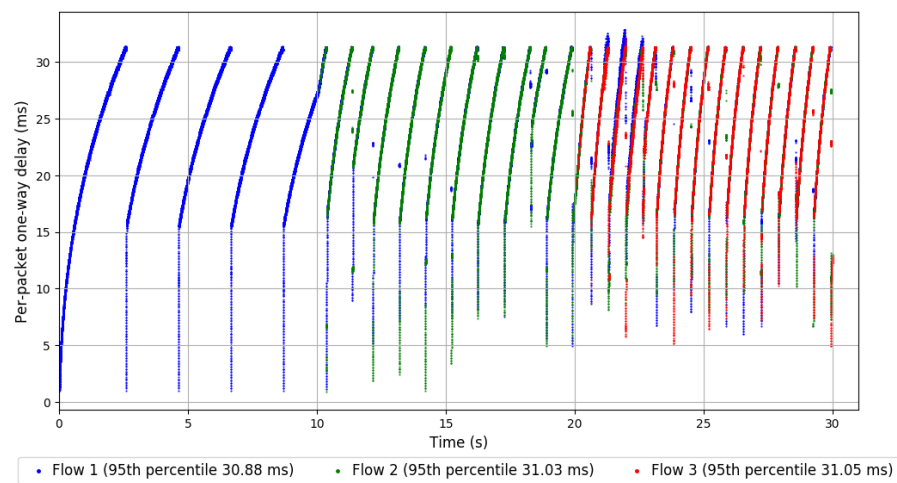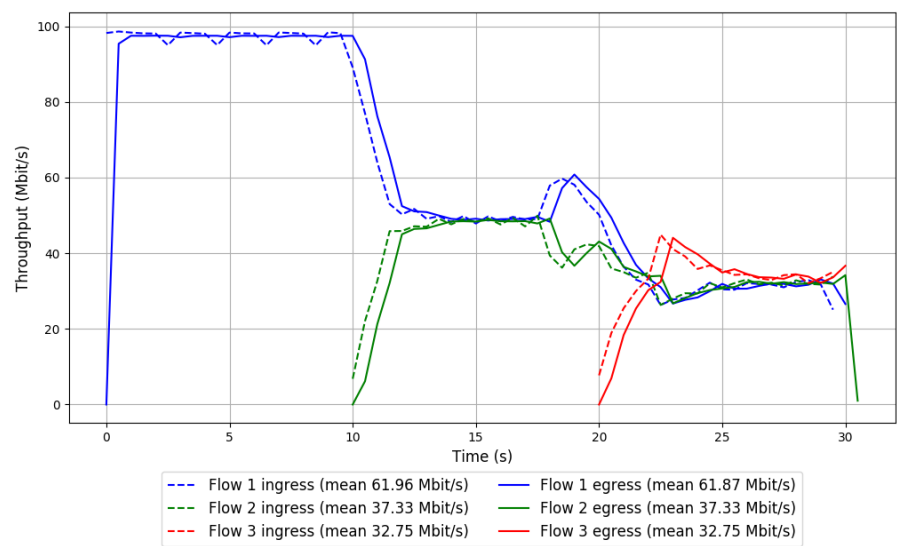
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-10-26 03:49:17
End at: 2018-10-26 03:49:47
Local clock offset: -6.051 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-10-26 04:38:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 30.861 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 30.739 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 30.880 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 30.887 ms
Loss rate: 0.10%
```
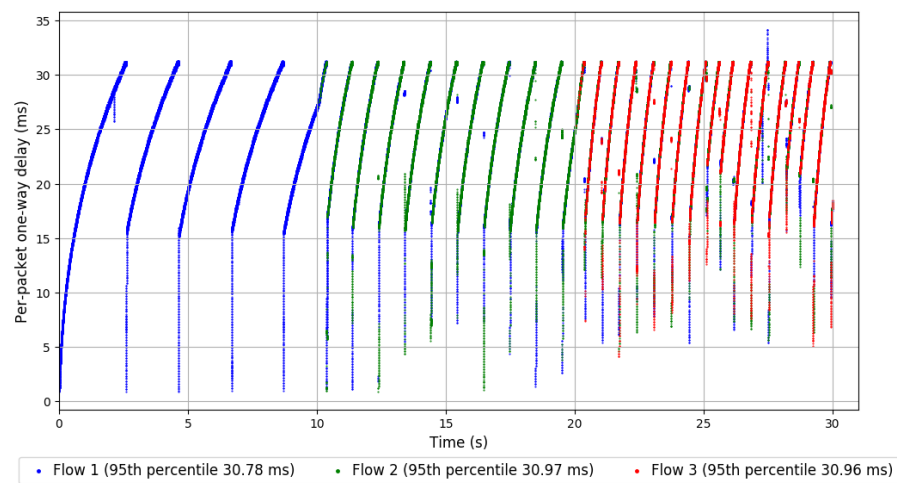
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-10-26 04:09:46
End at: 2018-10-26 04:10:16
Local clock offset: -6.246 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-10-26 04:38:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 31.023 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 30.878 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 31.028 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 31.055 ms
Loss rate: 0.08%
```
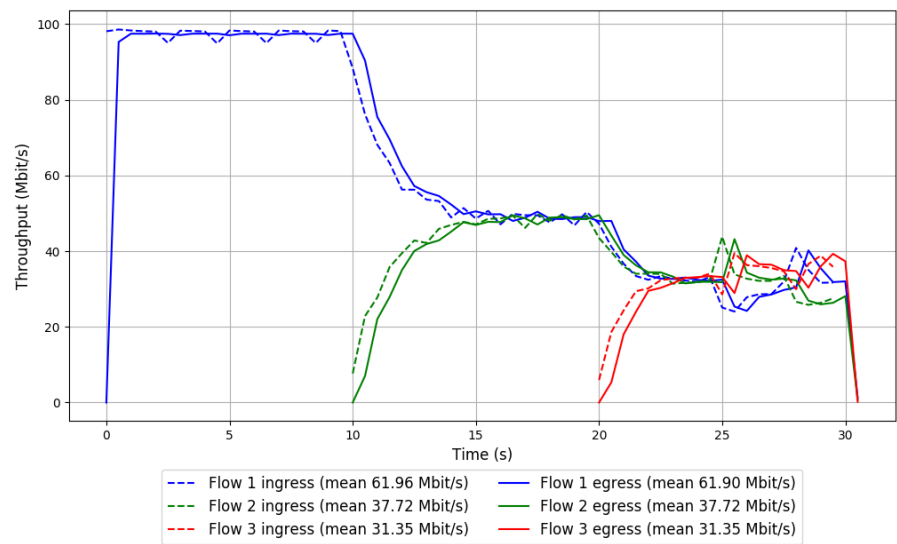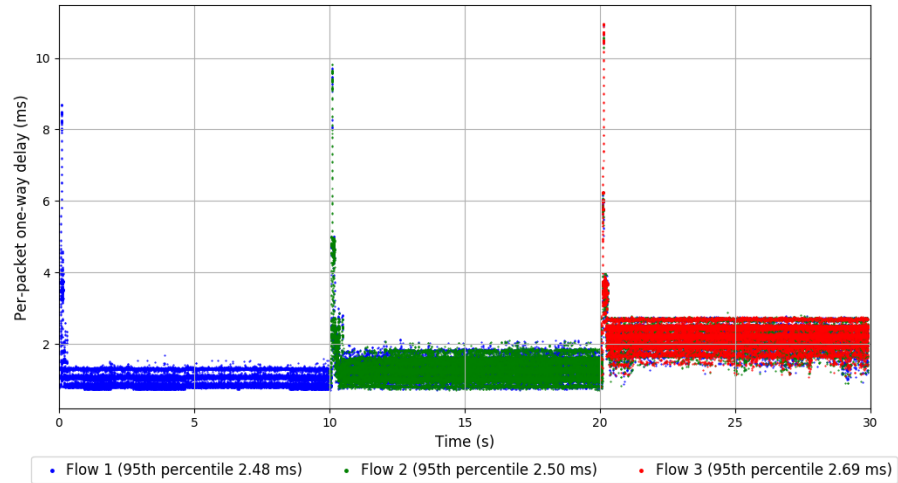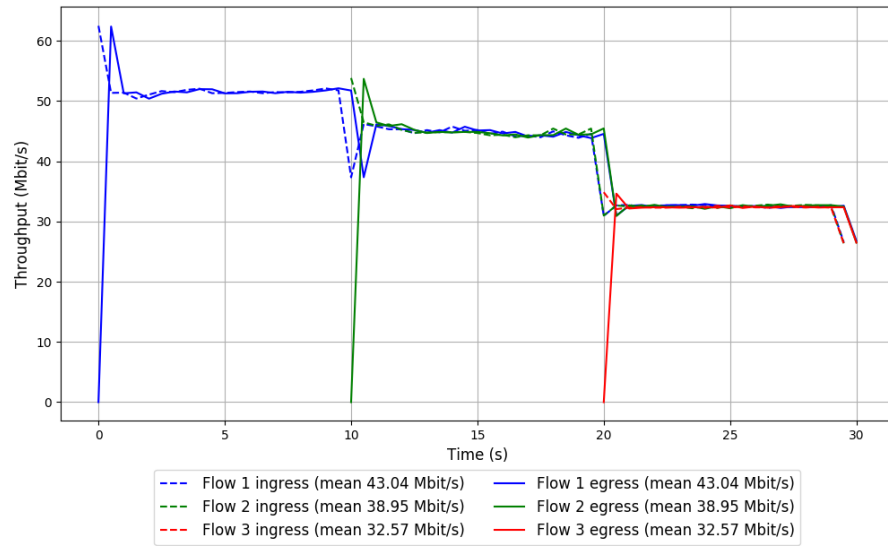
Run 4: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 61.96 Mbit/s) —— Flow 1 egress (mean 61.87 Mbit/s)
- - - - Flow 2 ingress (mean 37.33 Mbit/s) —— Flow 2 egress (mean 37.33 Mbit/s)
- - - - Flow 3 ingress (mean 32.75 Mbit/s) —— Flow 3 egress (mean 32.75 Mbit/s)

• Flow 1 (95th percentile 30.88 ms)   • Flow 2 (95th percentile 31.03 ms)   • Flow 3 (95th percentile 31.05 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-10-26 04:30:27
End at: 2018-10-26 04:30:57
Local clock offset: -6.159 ms
Remote clock offset: 0.283 ms


# Below is generated by plot.py at 2018-10-26 04:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 30.943 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.90 Mbit/s
95th percentile per-packet one-way delay: 30.777 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 30.974 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 30.962 ms
Loss rate: 0.07%
```
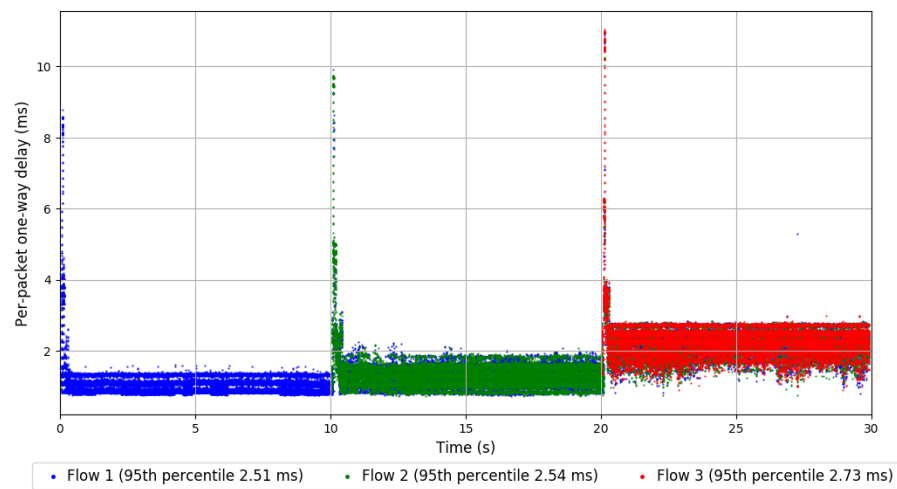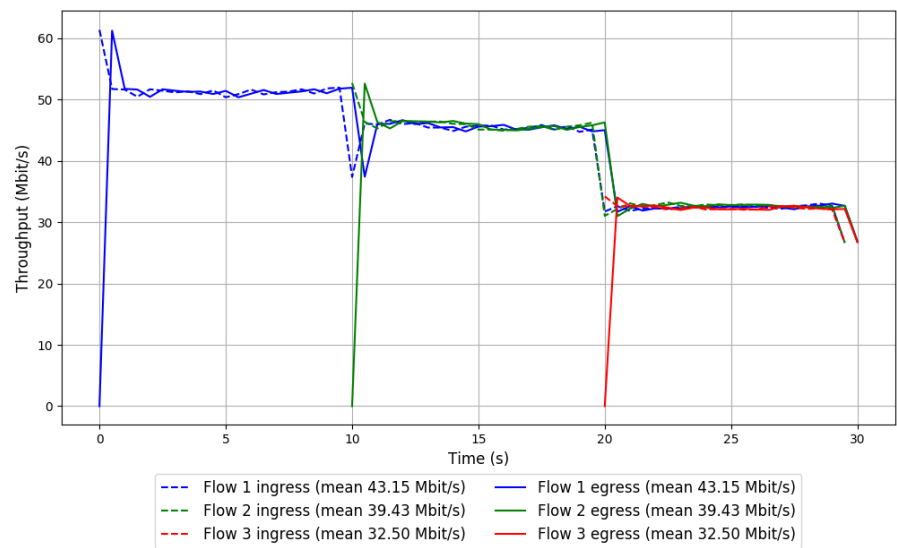
Run 5: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 61.96 Mbit/s)   —— Flow 1 egress (mean 61.90 Mbit/s)
- - - - Flow 2 ingress (mean 37.72 Mbit/s)   —— Flow 2 egress (mean 37.72 Mbit/s)
- - - - Flow 3 ingress (mean 31.35 Mbit/s)   —— Flow 3 egress (mean 31.35 Mbit/s)

• Flow 1 (95th percentile 30.78 ms)   • Flow 2 (95th percentile 30.97 ms)   • Flow 3 (95th percentile 30.96 ms)
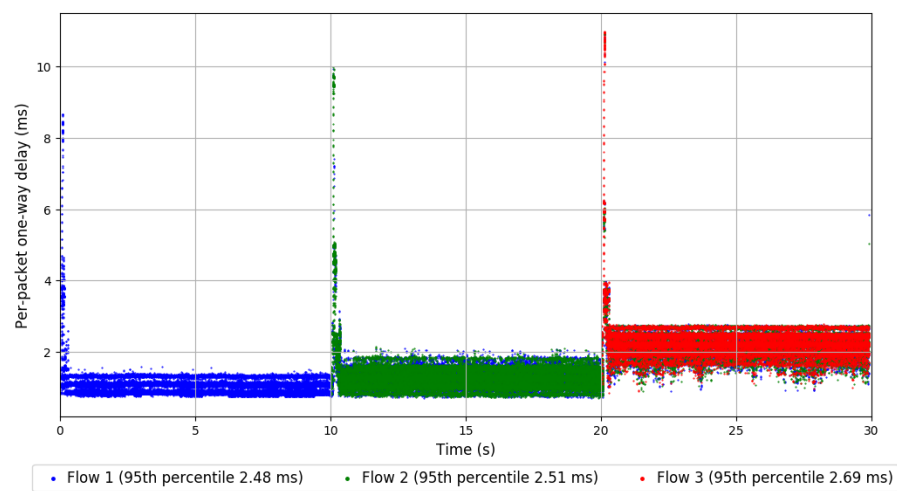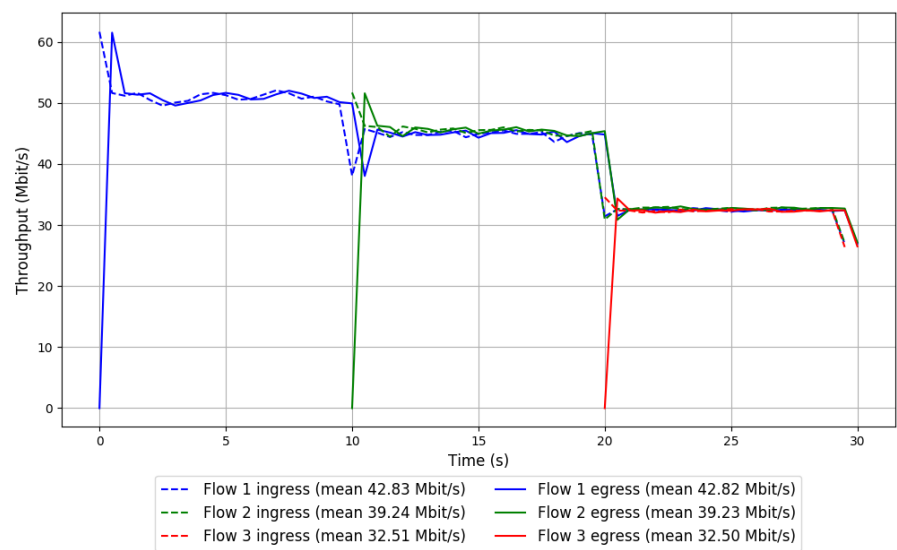
```
Run 1: Statistics of Indigo-Muses

Start at: 2018-10-26 02:52:14
End at: 2018-10-26 02:52:44
Local clock offset: -4.275 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-10-26 04:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.71 Mbit/s
95th percentile per-packet one-way delay: 2.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.04 Mbit/s
95th percentile per-packet one-way delay: 2.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.95 Mbit/s
95th percentile per-packet one-way delay: 2.498 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 2.688 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-Muses — Data Link

```
Run 2: Statistics of Indigo-Muses

Start at: 2018-10-26 03:12:42
End at: 2018-10-26 03:13:12
Local clock offset: -4.749 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-10-26 04:39:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.11 Mbit/s
95th percentile per-packet one-way delay: 2.541 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.15 Mbit/s
95th percentile per-packet one-way delay: 2.513 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 2.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 2.726 ms
Loss rate: 0.00%
```
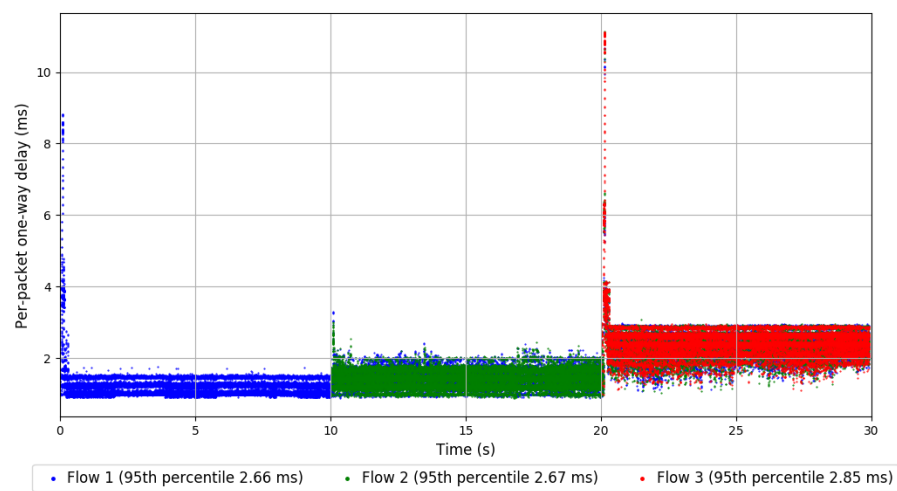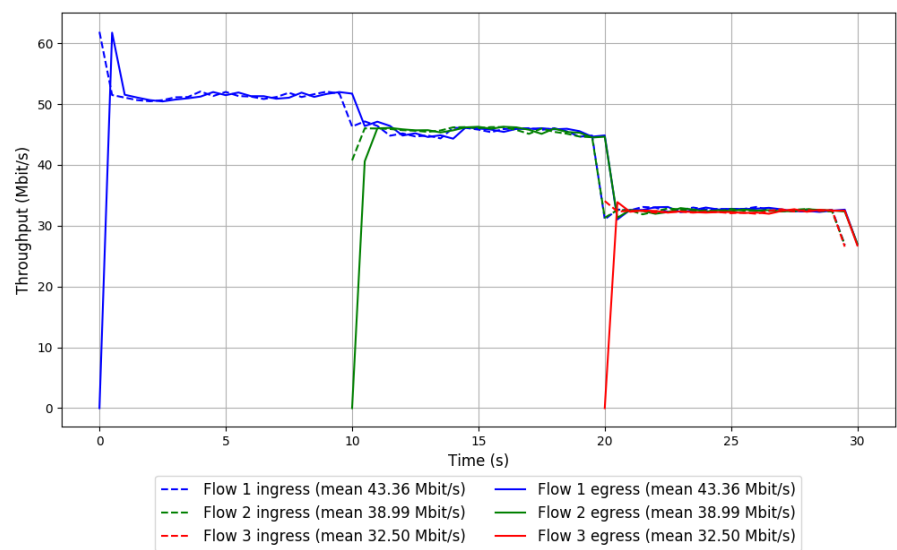
Run 2: Report of Indigo-Muses — Data Link

```
Run 3: Statistics of Indigo-Muses

Start at: 2018-10-26 03:33:13
End at: 2018-10-26 03:33:43
Local clock offset: -5.169 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-10-26 04:39:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.65 Mbit/s
95th percentile per-packet one-way delay: 2.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 2.483 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 2.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 2.693 ms
Loss rate: 0.00%
```
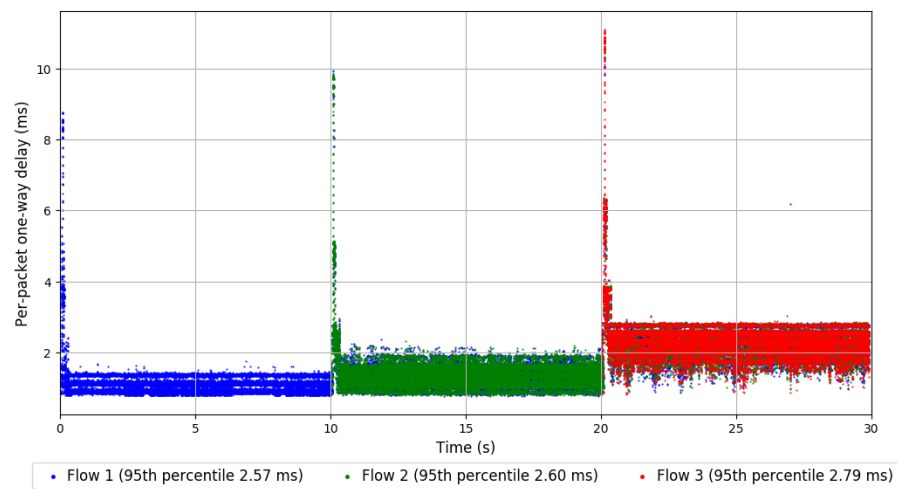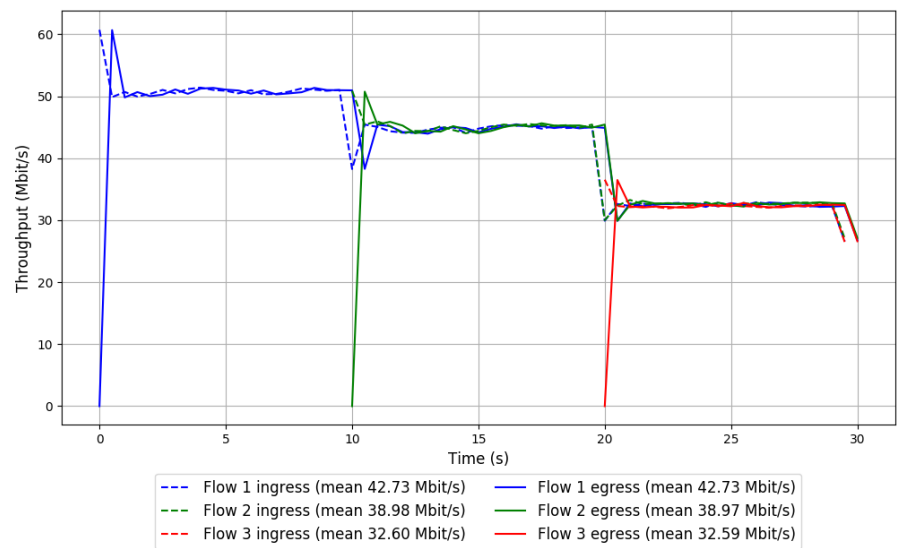
Run 3: Report of Indigo-Muses — Data Link

```
Run 4: Statistics of Indigo-Muses

Start at: 2018-10-26 03:53:44
End at: 2018-10-26 03:54:14
Local clock offset: -6.302 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2018-10-26 04:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.03 Mbit/s
95th percentile per-packet one-way delay: 2.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 2.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 2.671 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 2.853 ms
Loss rate: 0.00%
```
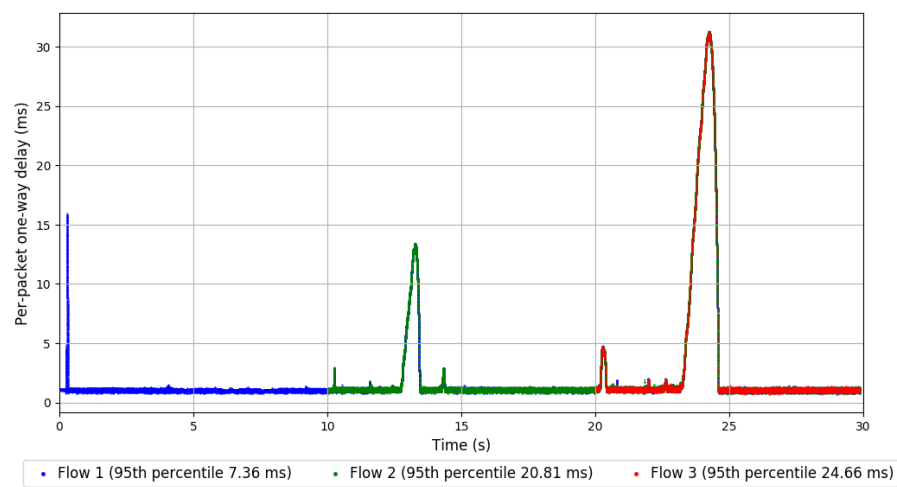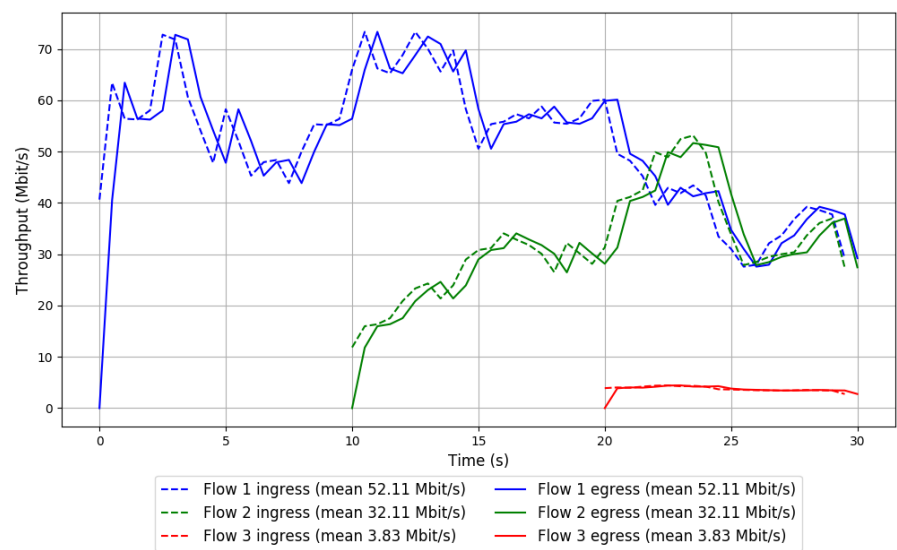
Run 4: Report of Indigo-Muses — Data Link

```
Run 5: Statistics of Indigo-Muses

Start at: 2018-10-26 04:14:13
End at: 2018-10-26 04:14:43
Local clock offset: -6.068 ms
Remote clock offset: 0.185 ms


# Below is generated by plot.py at 2018-10-26 04:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.42 Mbit/s
95th percentile per-packet one-way delay: 2.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.73 Mbit/s
95th percentile per-packet one-way delay: 2.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 2.597 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 2.790 ms
Loss rate: 0.00%
```
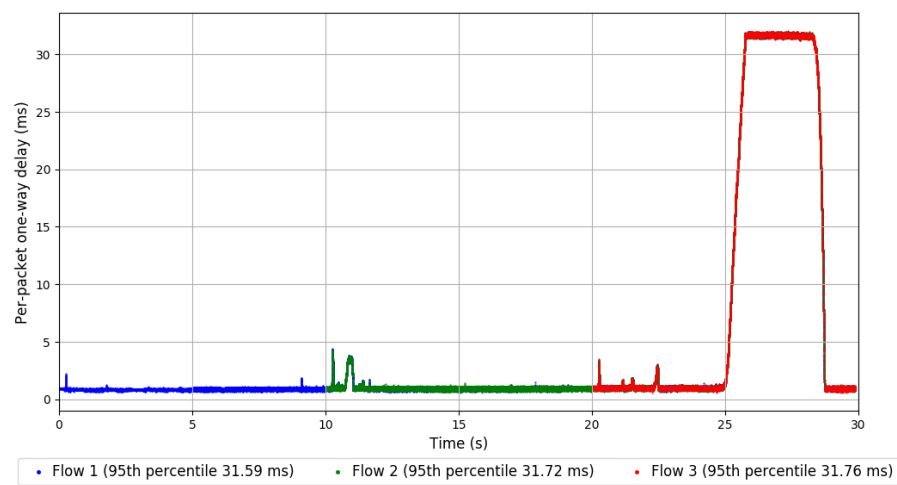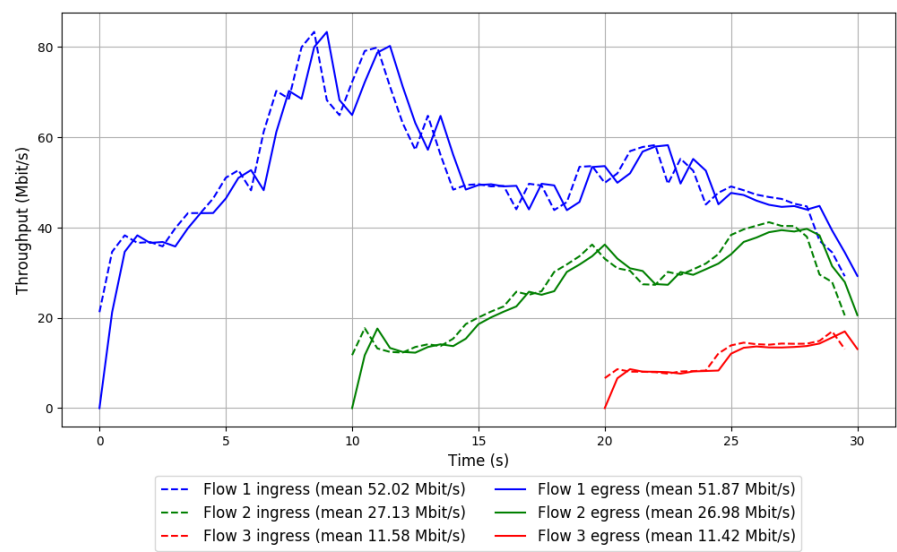
Run 5: Report of Indigo-Muses — Data Link

- - - Flow 1 ingress (mean 42.73 Mbit/s) —— Flow 1 egress (mean 42.73 Mbit/s)
- - - Flow 2 ingress (mean 38.98 Mbit/s) —— Flow 2 egress (mean 38.97 Mbit/s)
- - - Flow 3 ingress (mean 32.60 Mbit/s) —— Flow 3 egress (mean 32.59 Mbit/s)

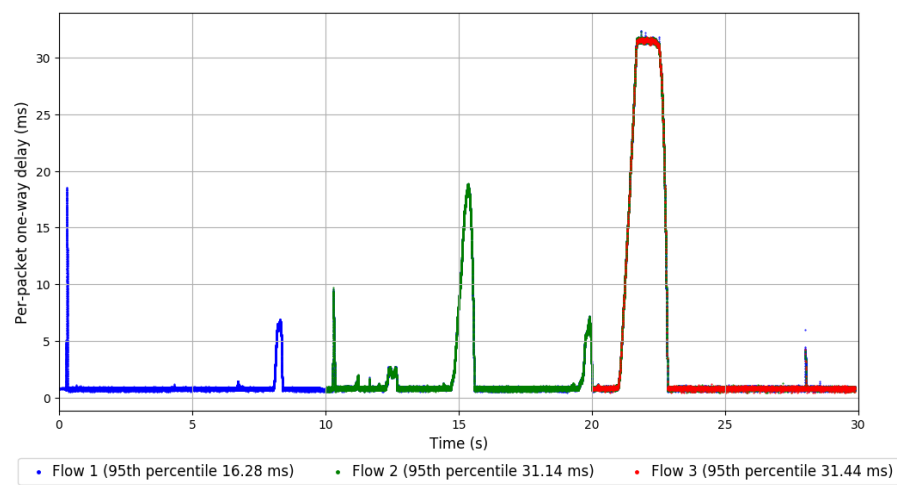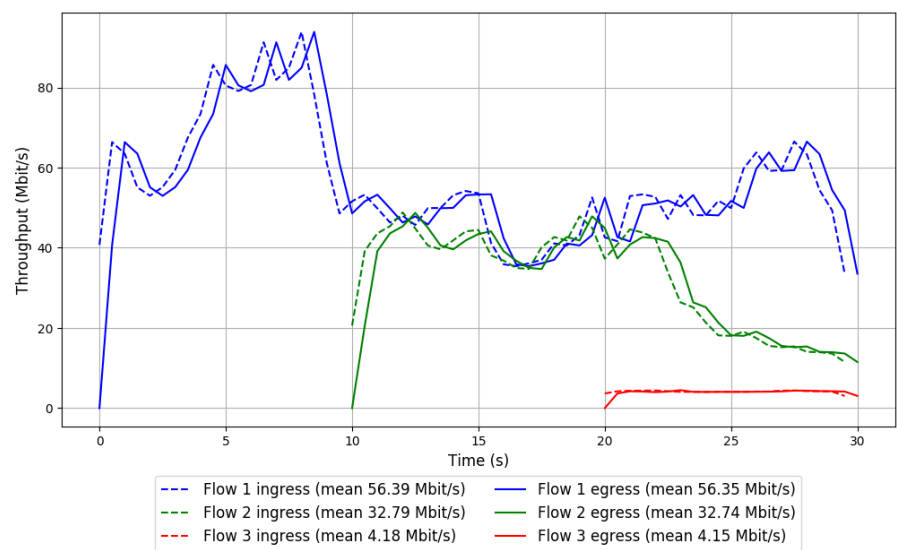• Flow 1 (95th percentile 2.57 ms)   • Flow 2 (95th percentile 2.60 ms)   • Flow 3 (95th percentile 2.79 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-26 03:03:40
End at: 2018-10-26 03:04:10
Local clock offset: -4.486 ms
Remote clock offset: -0.121 ms


# Below is generated by plot.py at 2018-10-26 04:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.73 Mbit/s
95th percentile per-packet one-way delay: 11.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.11 Mbit/s
95th percentile per-packet one-way delay: 7.364 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 20.806 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 24.655 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-10-26 03:24:10
End at: 2018-10-26 03:24:40
Local clock offset: -4.863 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2018-10-26 04:39:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.58 Mbit/s
95th percentile per-packet one-way delay: 31.662 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 51.87 Mbit/s
95th percentile per-packet one-way delay: 31.590 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 31.716 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 31.761 ms
Loss rate: 1.40%
```
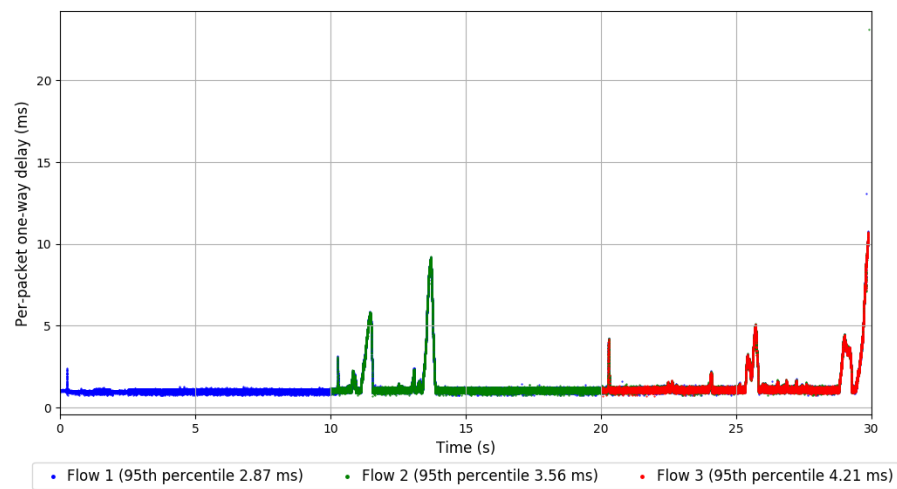
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-10-26 03:44:42
End at: 2018-10-26 03:45:12
Local clock offset: -5.901 ms
Remote clock offset: -0.084 ms


# Below is generated by plot.py at 2018-10-26 04:40:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.49 Mbit/s
95th percentile per-packet one-way delay: 21.485 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 16.284 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 31.145 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 31.437 ms
Loss rate: 0.71%
```
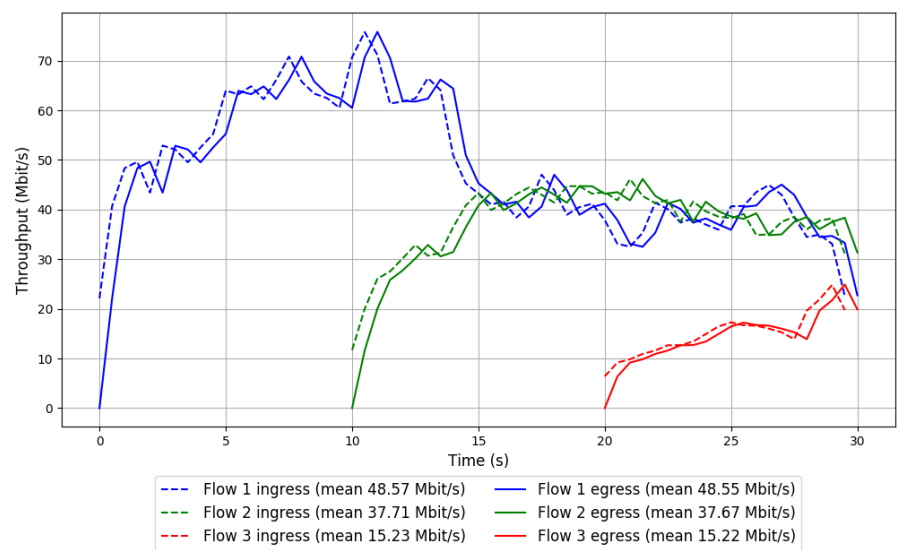
Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-10-26 04:05:10
End at: 2018-10-26 04:05:40
Local clock offset: -6.259 ms
Remote clock offset: 0.175 ms


# Below is generated by plot.py at 2018-10-26 04:40:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.61 Mbit/s
95th percentile per-packet one-way delay: 3.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 2.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.67 Mbit/s
95th percentile per-packet one-way delay: 3.564 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 4.215 ms
Loss rate: 0.00%
```
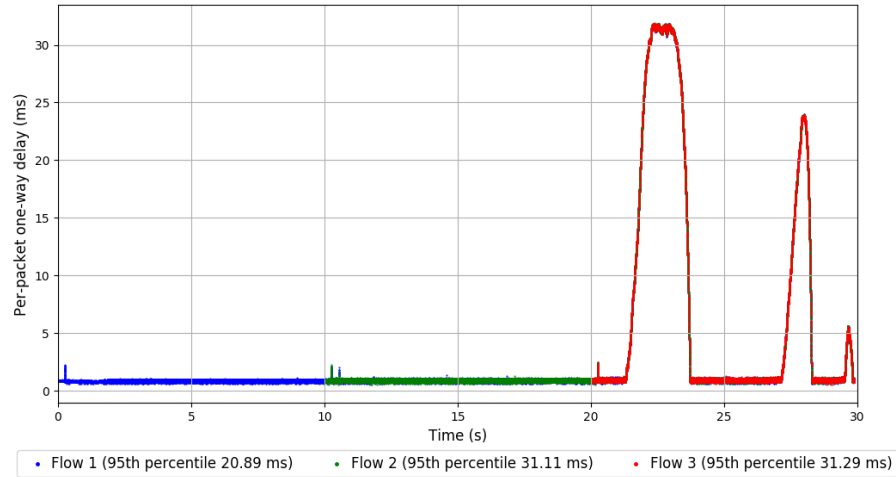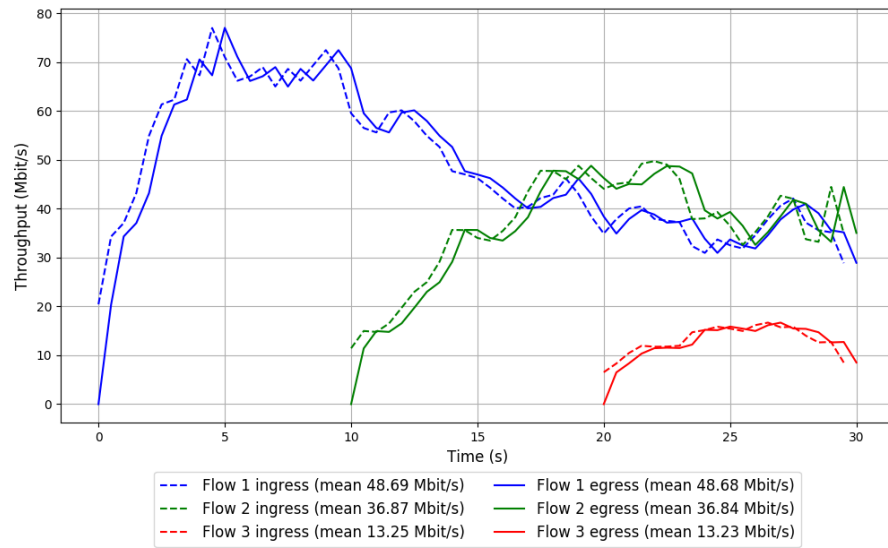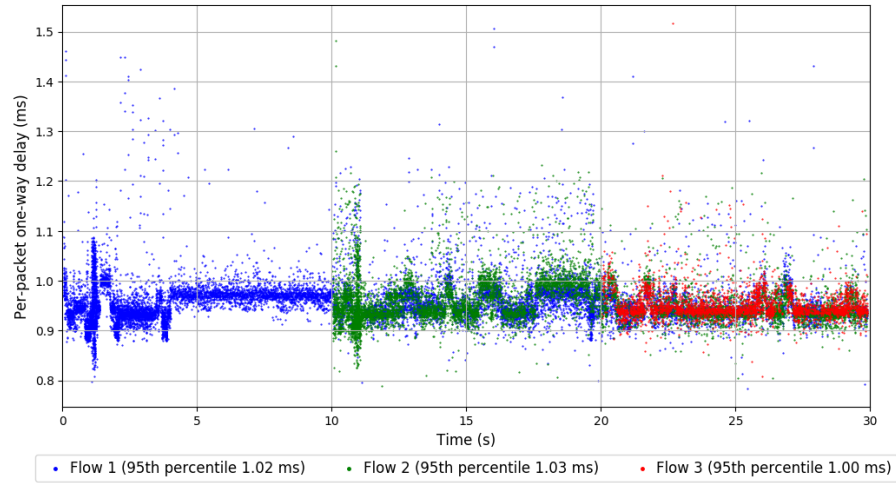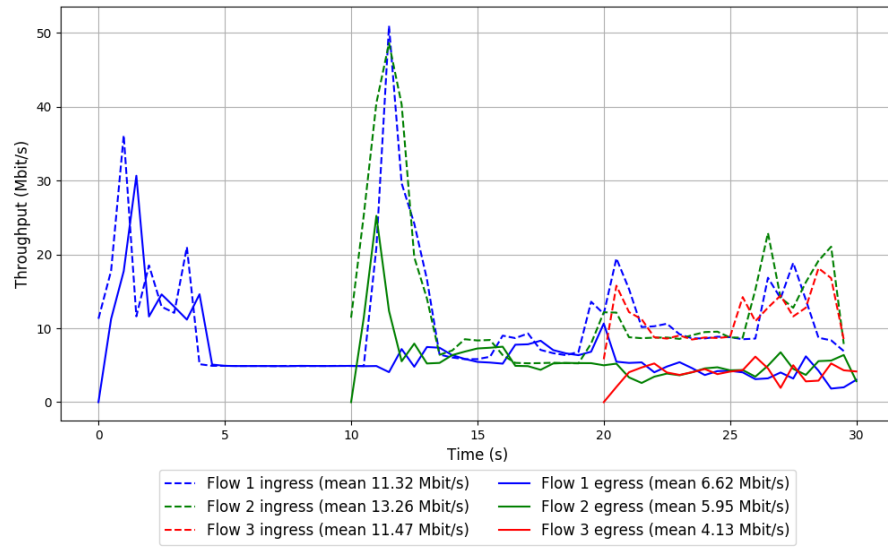
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-10-26 04:25:52
End at: 2018-10-26 04:26:22
Local clock offset: -6.076 ms
Remote clock offset: 0.159 ms


# Below is generated by plot.py at 2018-10-26 04:40:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 28.600 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 48.68 Mbit/s
95th percentile per-packet one-way delay: 20.891 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.84 Mbit/s
95th percentile per-packet one-way delay: 31.112 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 13.23 Mbit/s
95th percentile per-packet one-way delay: 31.286 ms
Loss rate: 0.13%
```
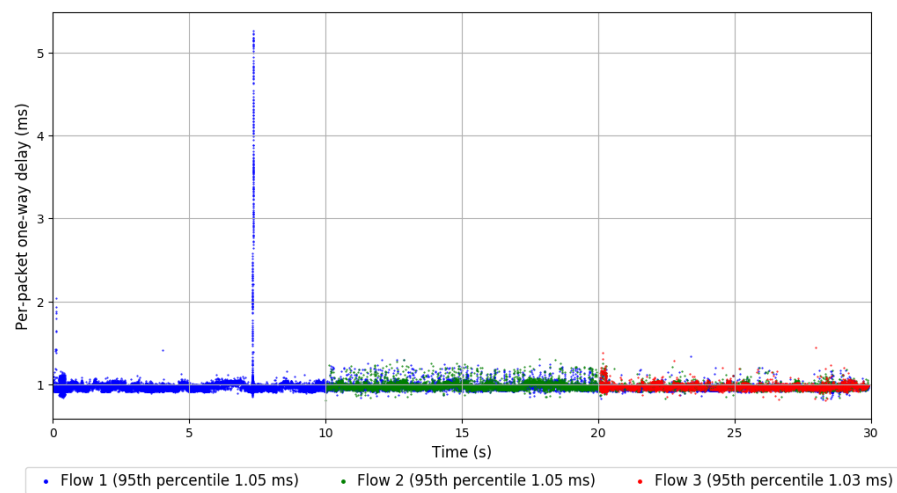
Run 5: Report of PCC-Allegro — Data Link

- Flow 1 ingress (mean 48.69 Mbit/s) ---- Flow 1 egress (mean 48.68 Mbit/s)
- Flow 2 ingress (mean 36.87 Mbit/s) ---- Flow 2 egress (mean 36.84 Mbit/s)
- Flow 3 ingress (mean 13.25 Mbit/s) ---- Flow 3 egress (mean 13.23 Mbit/s)

- Flow 1 (95th percentile 20.89 ms)   • Flow 2 (95th percentile 31.11 ms)   • Flow 3 (95th percentile 31.29 ms)
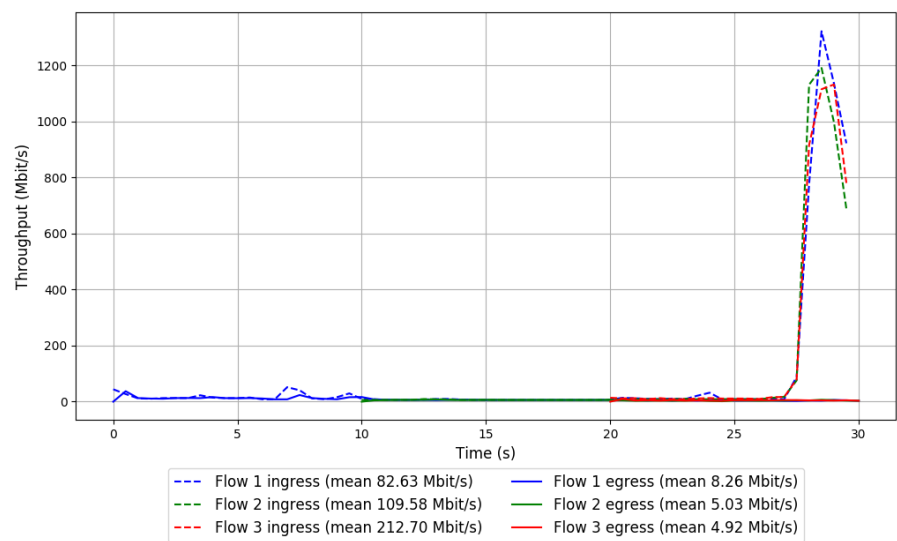
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```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-26 02:54:30
End at: 2018-10-26 02:55:00
Local clock offset: -4.274 ms
Remote clock offset: -0.182 ms


# Below is generated by plot.py at 2018-10-26 04:40:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 1.022 ms
Loss rate: 50.09%
-- Flow 1:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 1.023 ms
Loss rate: 41.51%
-- Flow 2:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 55.15%
-- Flow 3:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 63.95%
```
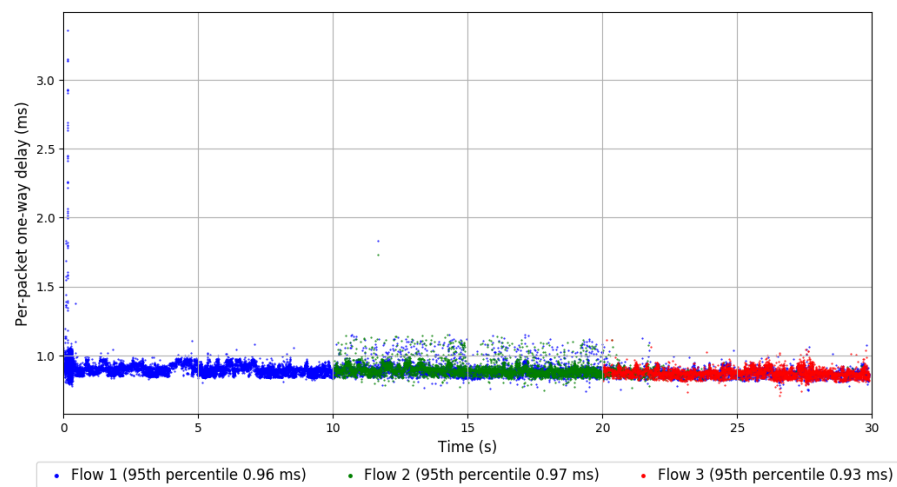
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-10-26 03:14:59
End at: 2018-10-26 03:15:29
Local clock offset: -4.845 ms
Remote clock offset: -0.069 ms


# Below is generated by plot.py at 2018-10-26 04:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 1.047 ms
Loss rate: 94.14%
-- Flow 1:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 1.048 ms
Loss rate: 90.01%
-- Flow 2:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 1.055 ms
Loss rate: 95.41%
-- Flow 3:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 1.029 ms
Loss rate: 97.69%
```
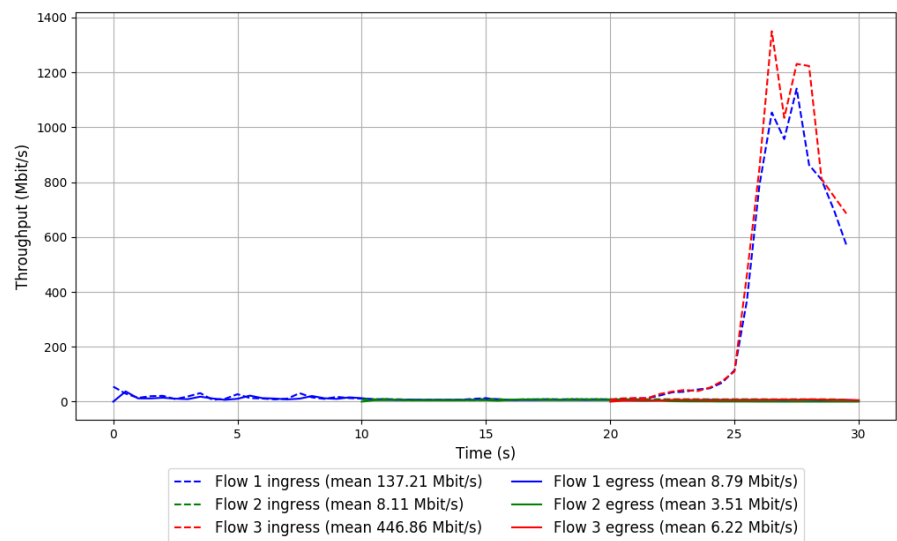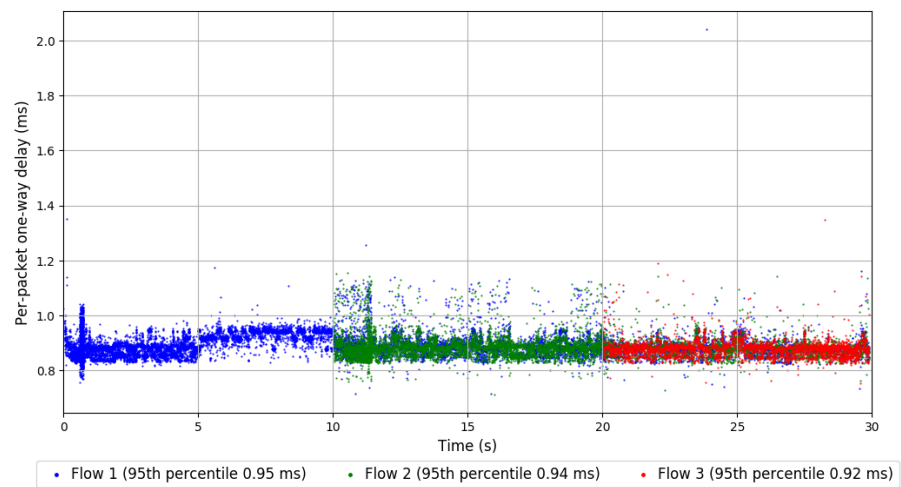
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 82.63 Mbit/s) --- Flow 1 egress (mean 8.26 Mbit/s)
Flow 2 ingress (mean 109.58 Mbit/s) --- Flow 2 egress (mean 5.03 Mbit/s)
Flow 3 ingress (mean 212.70 Mbit/s) --- Flow 3 egress (mean 4.92 Mbit/s)

Flow 1 (95th percentile 1.05 ms) · Flow 2 (95th percentile 1.05 ms) · Flow 3 (95th percentile 1.03 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2018-10-26 03:35:29
End at: 2018-10-26 03:35:59
Local clock offset: -5.322 ms
Remote clock offset: 0.036 ms


# Below is generated by plot.py at 2018-10-26 04:40:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 0.959 ms
Loss rate: 95.46%
-- Flow 1:
Average throughput: 8.79 Mbit/s
95th percentile per-packet one-way delay: 0.962 ms
Loss rate: 93.59%
-- Flow 2:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 0.969 ms
Loss rate: 57.05%
-- Flow 3:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 0.926 ms
Loss rate: 98.61%
```
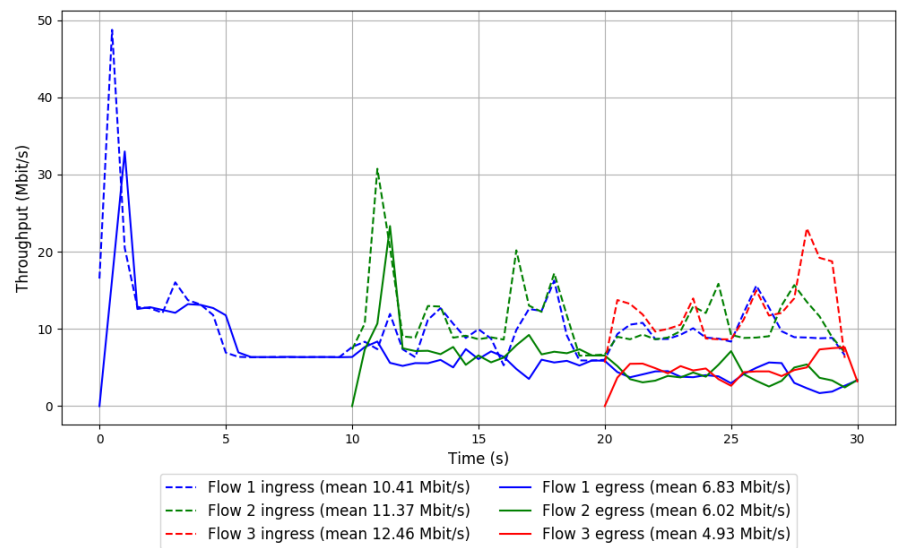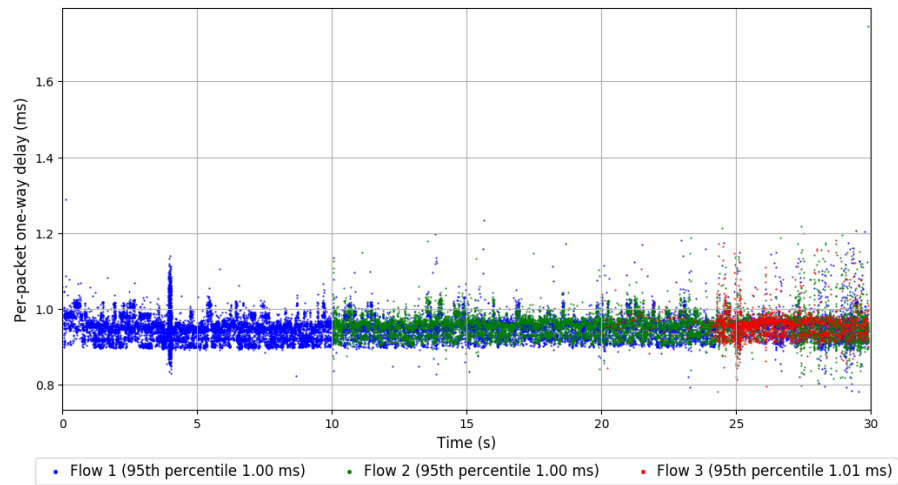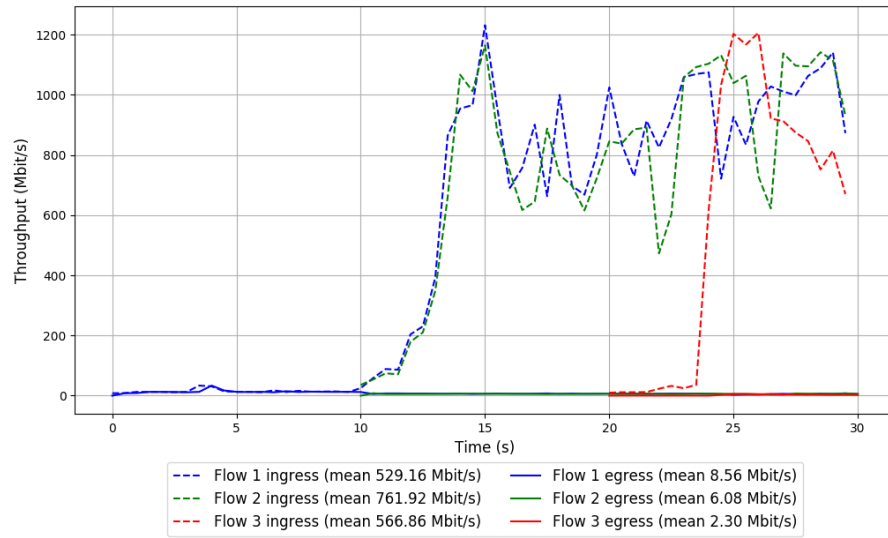
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 137.21 Mbit/s) Flow 1 egress (mean 8.79 Mbit/s)
Flow 2 ingress (mean 8.11 Mbit/s) Flow 2 egress (mean 3.51 Mbit/s)
Flow 3 ingress (mean 446.86 Mbit/s) Flow 3 egress (mean 6.22 Mbit/s)

Flow 1 (95th percentile 0.96 ms) Flow 2 (95th percentile 0.97 ms) Flow 3 (95th percentile 0.93 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2018-10-26 03:56:00
End at: 2018-10-26 03:56:30
Local clock offset: -6.275 ms
Remote clock offset: 0.021 ms


# Below is generated by plot.py at 2018-10-26 04:40:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 0.948 ms
Loss rate: 43.58%
-- Flow 1:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 34.41%
-- Flow 2:
Average throughput: 6.02 Mbit/s
95th percentile per-packet one-way delay: 0.943 ms
Loss rate: 47.05%
-- Flow 3:
Average throughput: 4.93 Mbit/s
95th percentile per-packet one-way delay: 0.919 ms
Loss rate: 60.42%
```
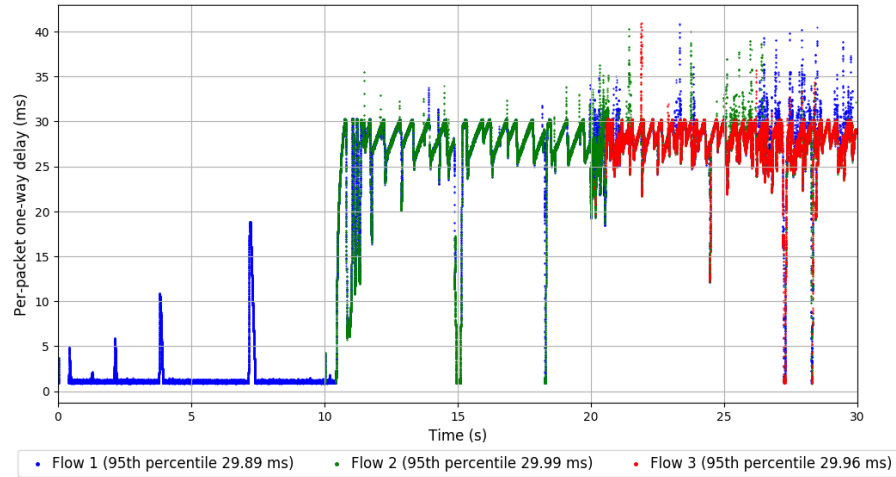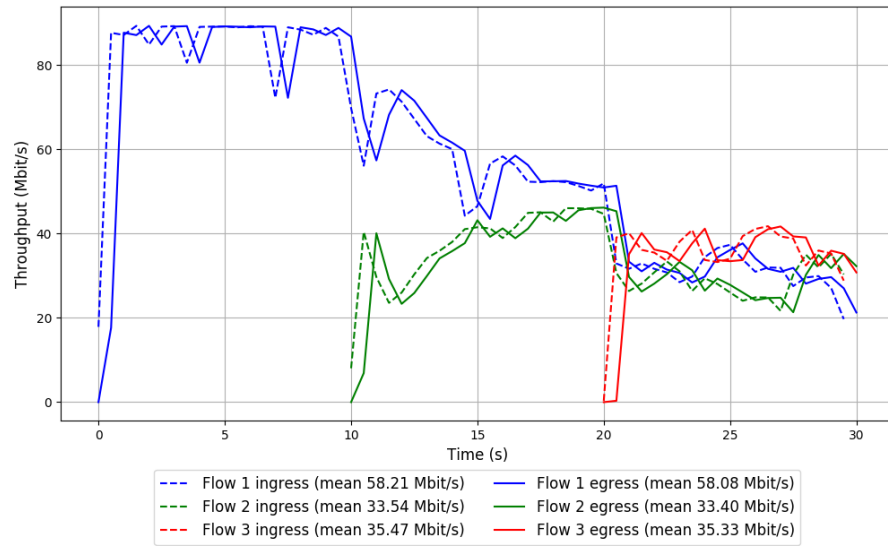
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-10-26 04:16:29
End at: 2018-10-26 04:16:59
Local clock offset: -6.07 ms
Remote clock offset: 0.226 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 98.91%
-- Flow 1:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 1.004 ms
Loss rate: 98.38%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 1.000 ms
Loss rate: 99.20%
-- Flow 3:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 1.012 ms
Loss rate: 99.60%
```
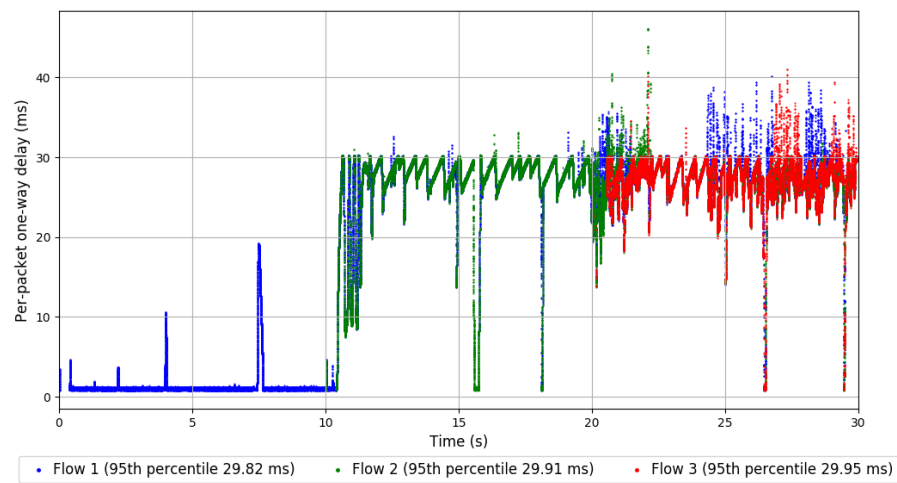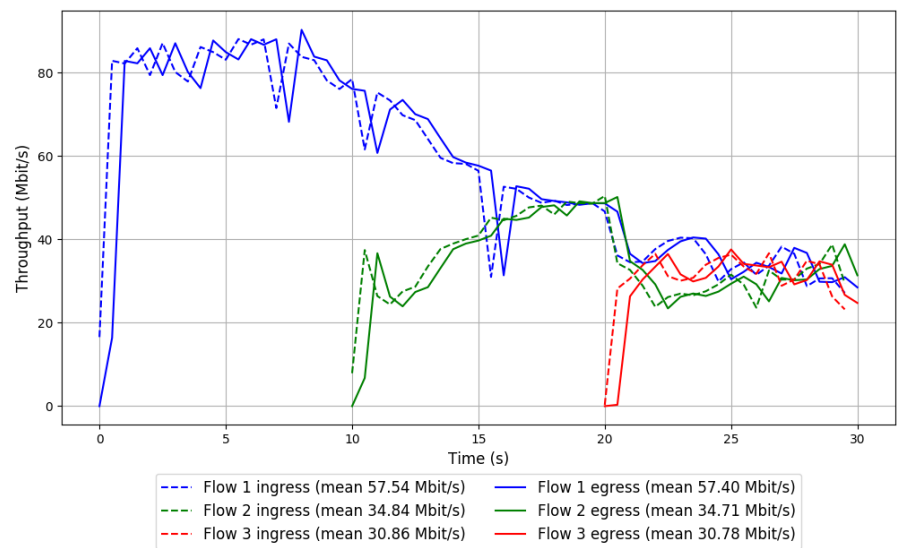
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 529.16 Mbit/s)
Flow 2 ingress (mean 761.92 Mbit/s)
Flow 3 ingress (mean 566.86 Mbit/s)
Flow 1 egress (mean 8.56 Mbit/s)
Flow 2 egress (mean 6.08 Mbit/s)
Flow 3 egress (mean 2.30 Mbit/s)

Flow 1 (95th percentile 1.00 ms)
Flow 2 (95th percentile 1.00 ms)
Flow 3 (95th percentile 1.01 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-10-26 02:56:46
End at: 2018-10-26 02:57:16
Local clock offset: -4.314 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 29.942 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 58.08 Mbit/s
95th percentile per-packet one-way delay: 29.885 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 29.994 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 29.959 ms
Loss rate: 0.35%
```
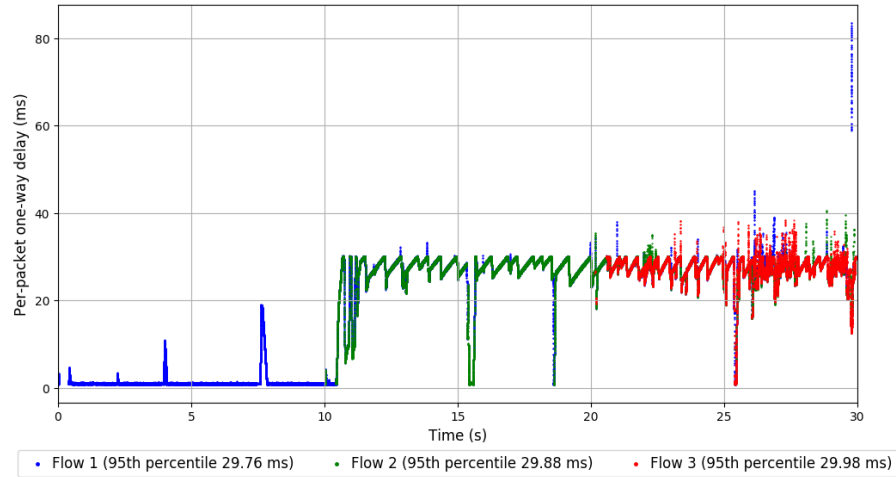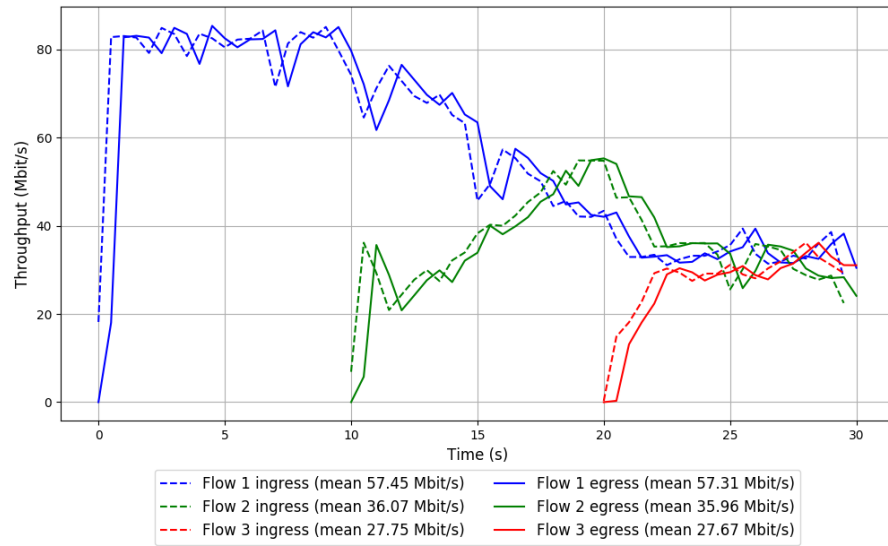
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-10-26 03:17:17
End at: 2018-10-26 03:17:47
Local clock offset: -4.819 ms
Remote clock offset: -0.037 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.61 Mbit/s
95th percentile per-packet one-way delay: 29.869 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.40 Mbit/s
95th percentile per-packet one-way delay: 29.817 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 34.71 Mbit/s
95th percentile per-packet one-way delay: 29.907 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 29.952 ms
Loss rate: 0.19%
```
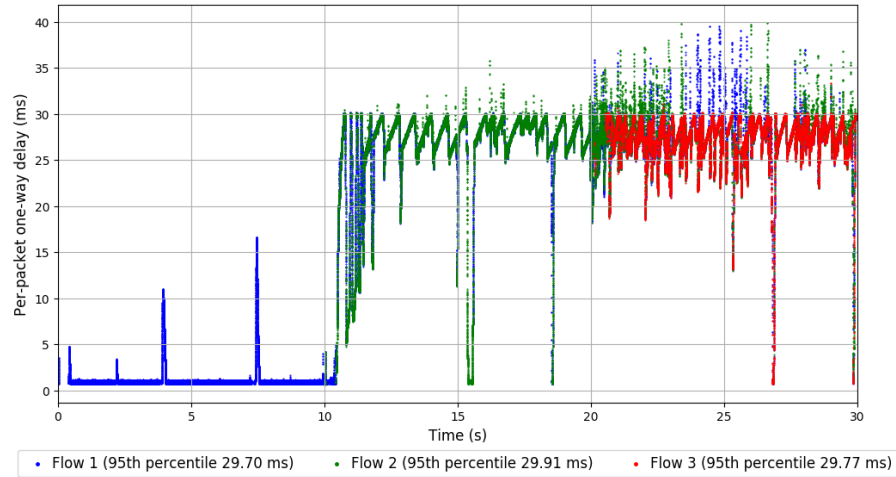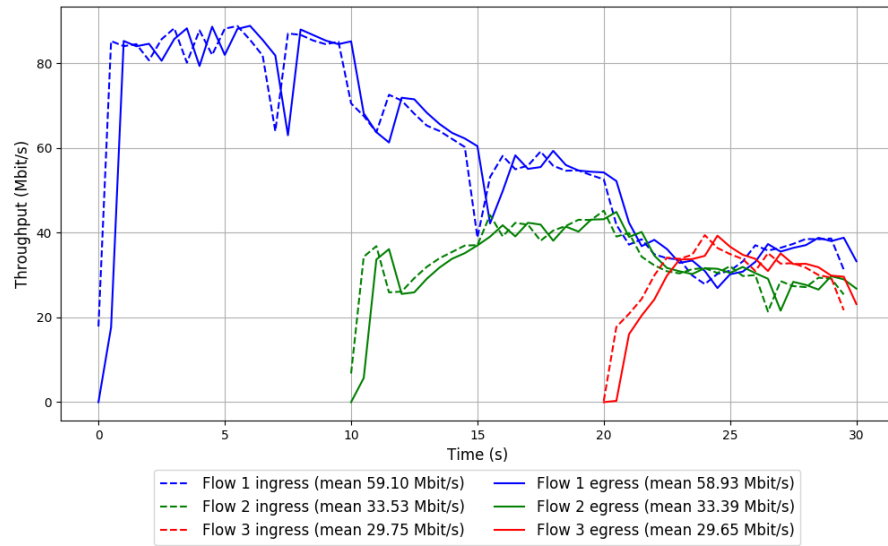
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-10-26 03:37:48
End at: 2018-10-26 03:38:18
Local clock offset: -5.647 ms
Remote clock offset: -0.07 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.31 Mbit/s
95th percentile per-packet one-way delay: 29.831 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 57.31 Mbit/s
95th percentile per-packet one-way delay: 29.756 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 29.875 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 27.67 Mbit/s
95th percentile per-packet one-way delay: 29.982 ms
Loss rate: 0.27%
```

Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-10-26 03:58:16
End at: 2018-10-26 03:58:46
Local clock offset: -6.26 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 29.780 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 58.93 Mbit/s
95th percentile per-packet one-way delay: 29.700 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 29.913 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 29.774 ms
Loss rate: 0.29%
```
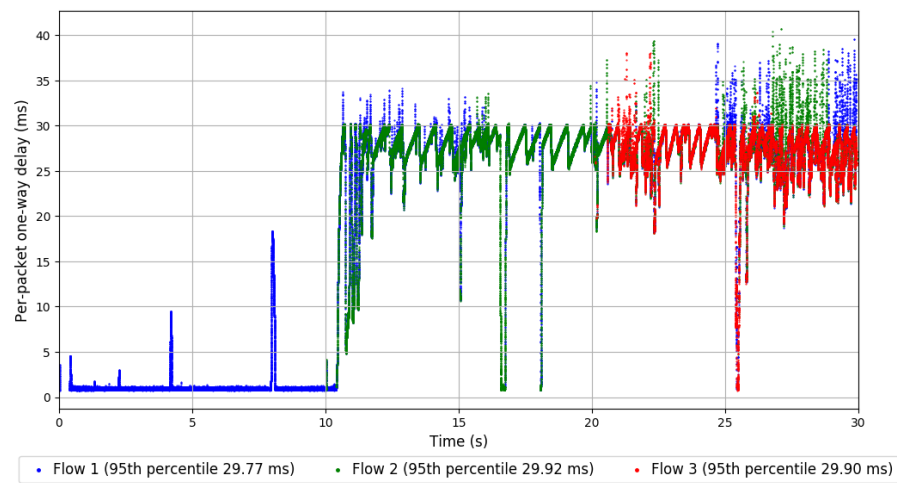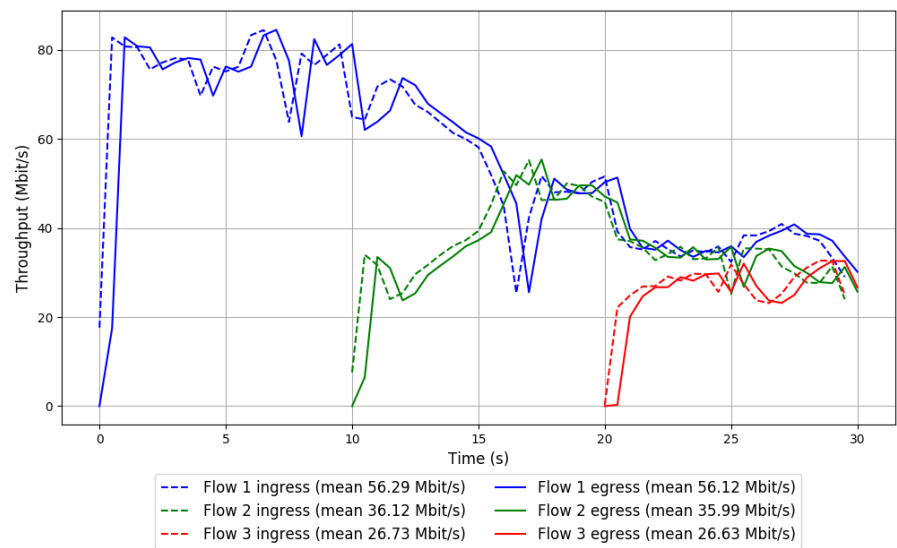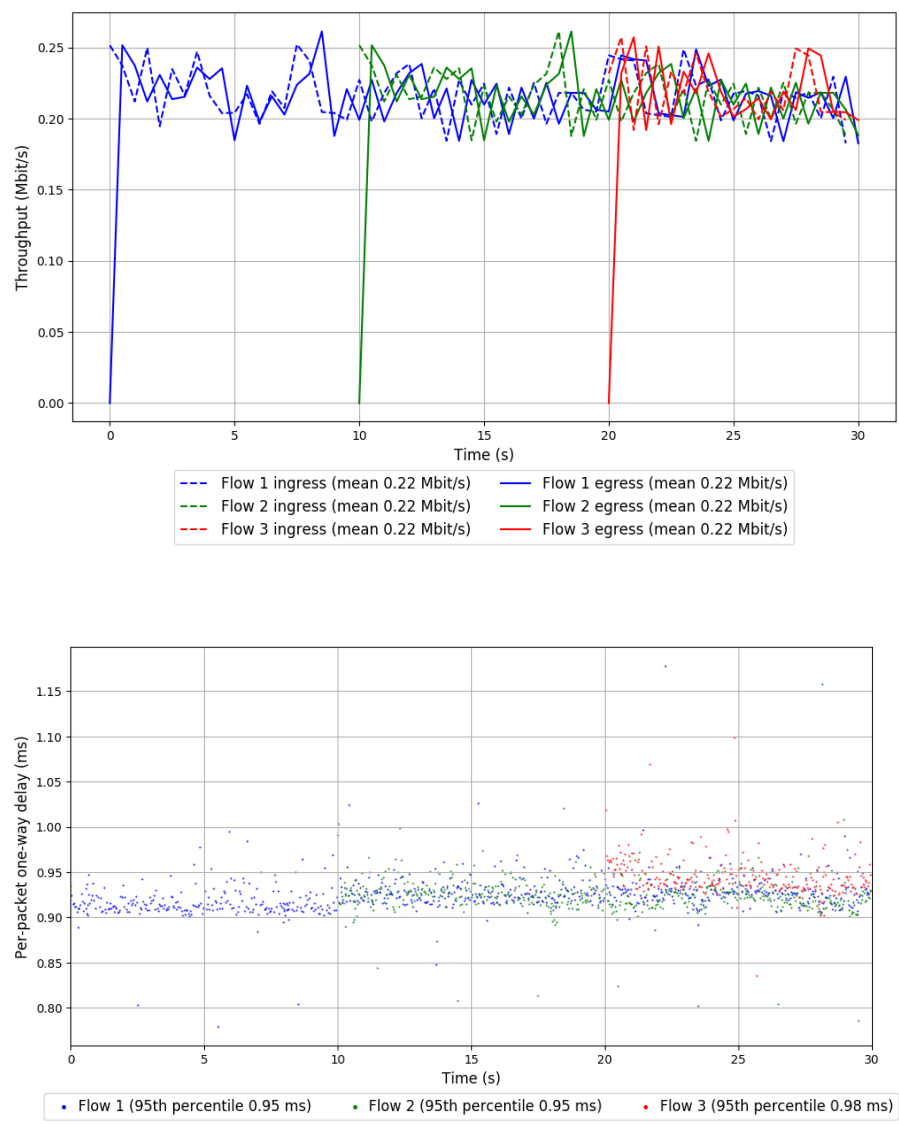
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-10-26 04:18:58
End at: 2018-10-26 04:19:28
Local clock offset: -6.131 ms
Remote clock offset: 0.127 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 29.852 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 29.769 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 29.923 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 26.63 Mbit/s
95th percentile per-packet one-way delay: 29.900 ms
Loss rate: 0.38%
```
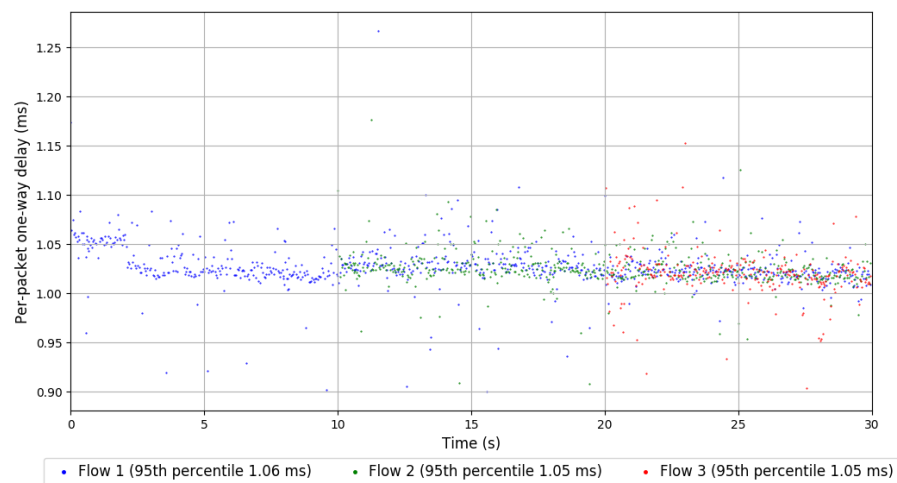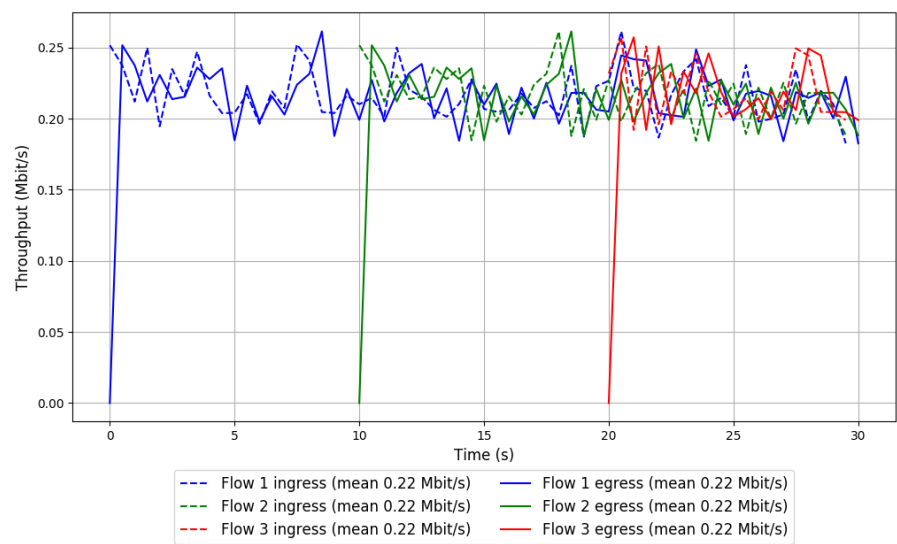
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 56.29 Mbit/s) --- Flow 1 egress (mean 56.12 Mbit/s)
Flow 2 ingress (mean 36.12 Mbit/s) --- Flow 2 egress (mean 35.99 Mbit/s)
Flow 3 ingress (mean 26.73 Mbit/s) --- Flow 3 egress (mean 26.63 Mbit/s)

Flow 1 (95th percentile 29.77 ms) • Flow 2 (95th percentile 29.92 ms) • Flow 3 (95th percentile 29.90 ms)

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```
Run 1: Statistics of SCReAM

Start at: 2018-10-26 02:50:02
End at: 2018-10-26 02:50:32
Local clock offset: -4.253 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.954 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.982 ms
Loss rate: 0.00%
```
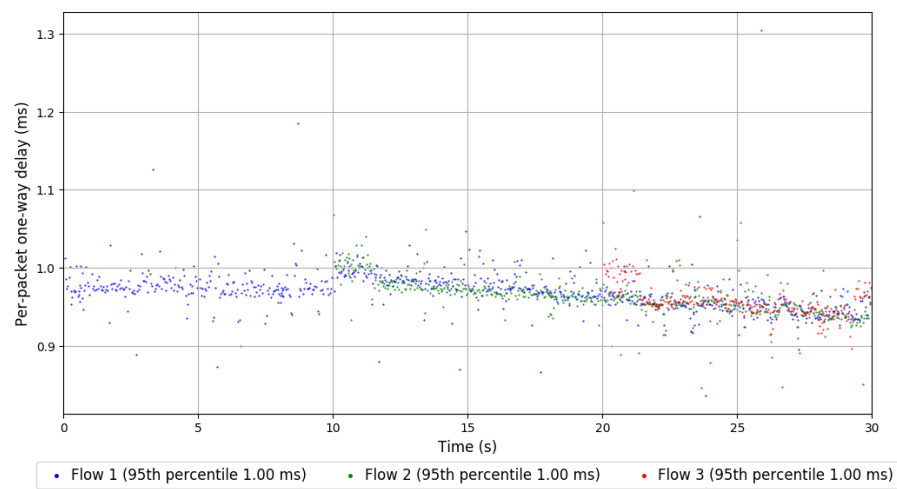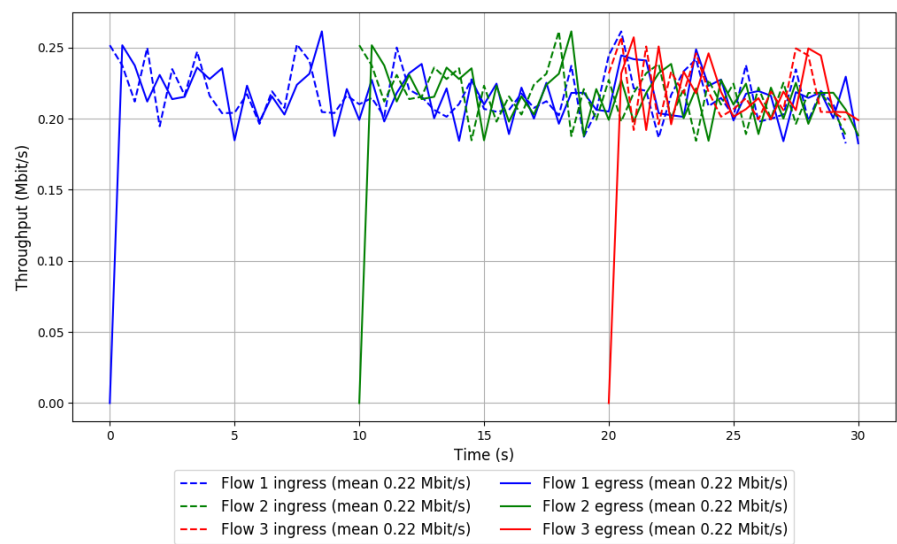
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-10-26 03:10:31
End at: 2018-10-26 03:11:01
Local clock offset: -4.816 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.060 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.053 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.055 ms
Loss rate: 0.00%
```
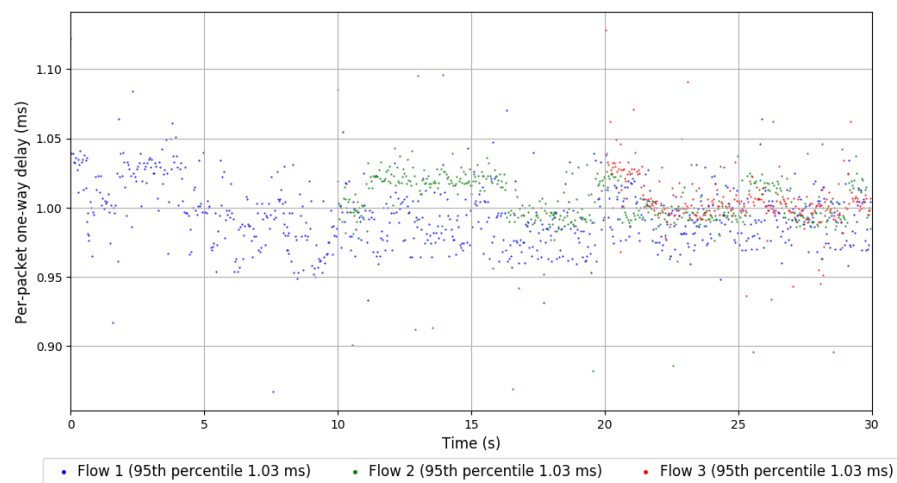
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-10-26 03:31:02
End at: 2018-10-26 03:31:32
Local clock offset: -4.915 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.005 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.002 ms
Loss rate: 0.00%
```
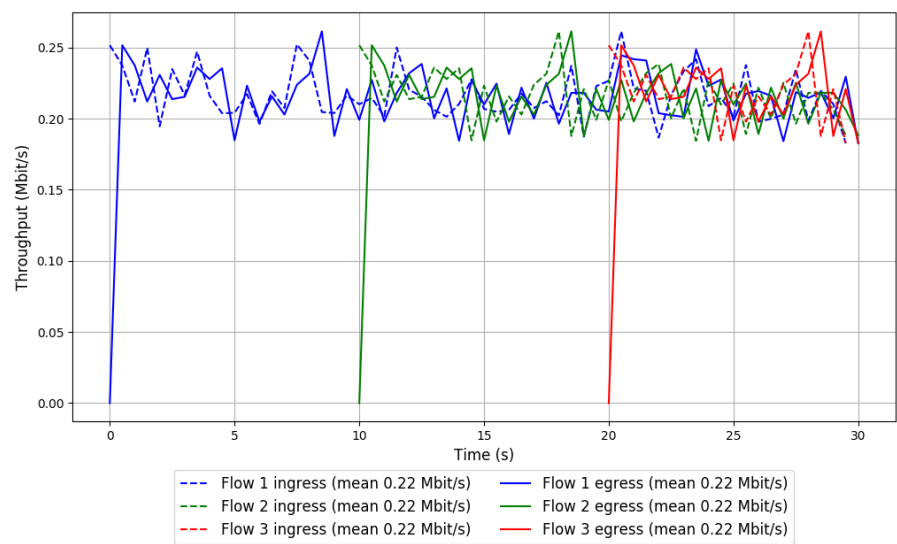
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-10-26 03:51:33
End at: 2018-10-26 03:52:03
Local clock offset: -6.23 ms
Remote clock offset: 0.039 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.029 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.033 ms
Loss rate: 0.00%
```
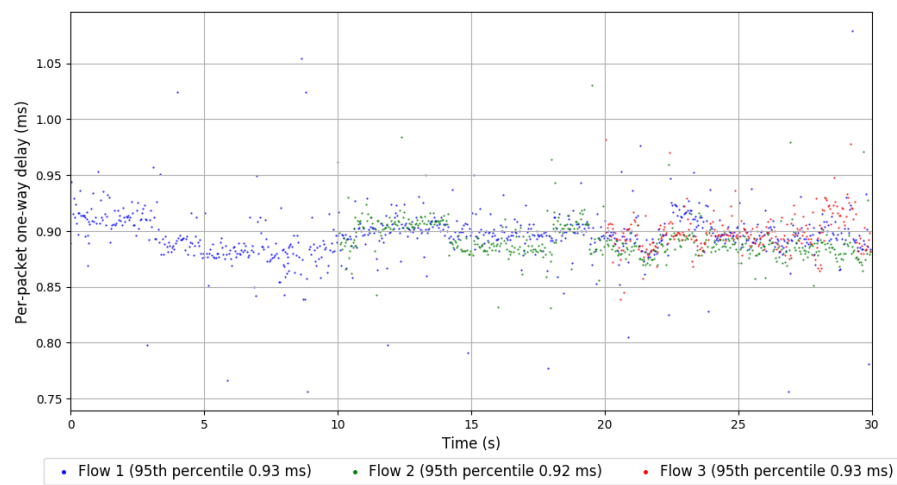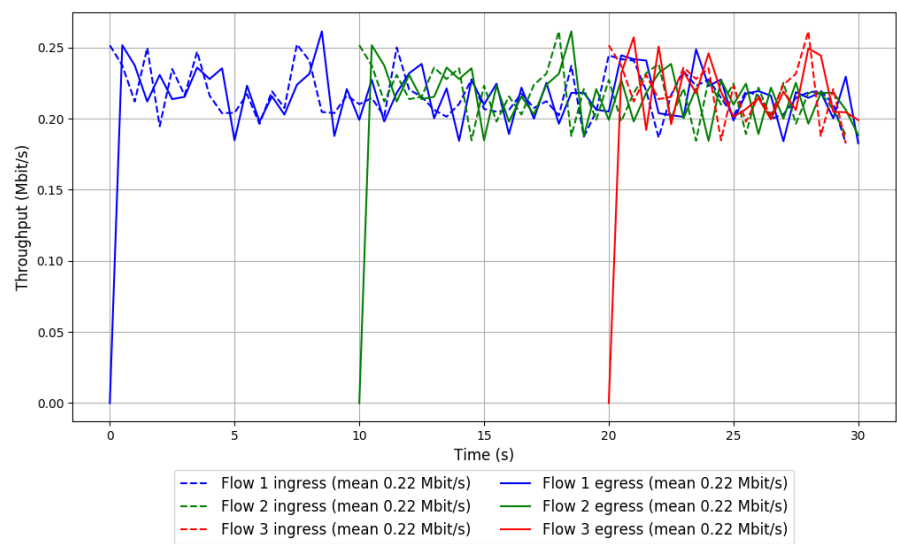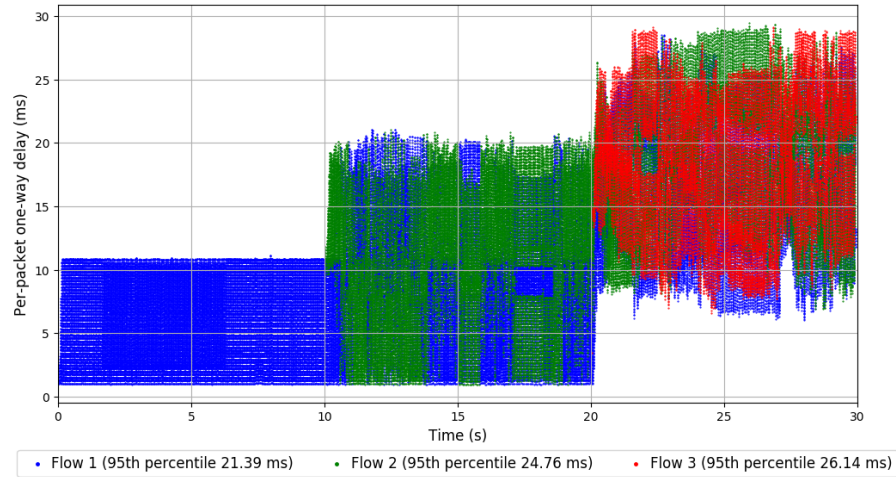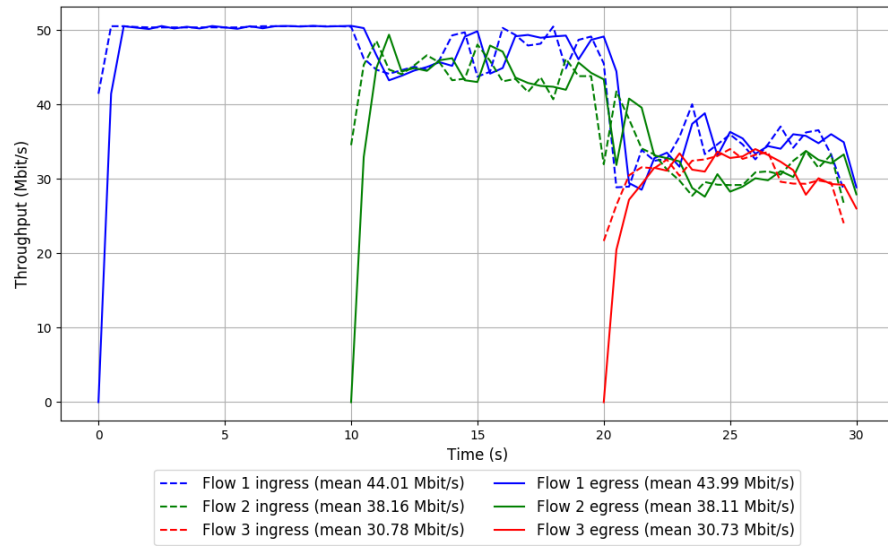
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-10-26 04:12:02
End at: 2018-10-26 04:12:32
Local clock offset: -6.102 ms
Remote clock offset: 0.105 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 0.923 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.925 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.926 ms
Loss rate: 0.00%
```
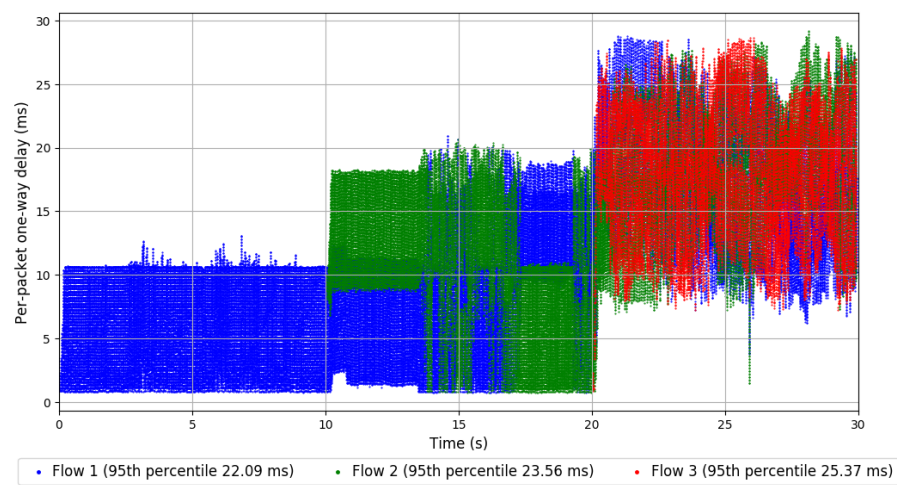
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-10-26 02:53:23
End at: 2018-10-26 02:53:53
Local clock offset: -4.398 ms
Remote clock offset: -0.168 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.51 Mbit/s
95th percentile per-packet one-way delay: 23.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 21.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 24.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.73 Mbit/s
95th percentile per-packet one-way delay: 26.138 ms
Loss rate: 0.00%
```
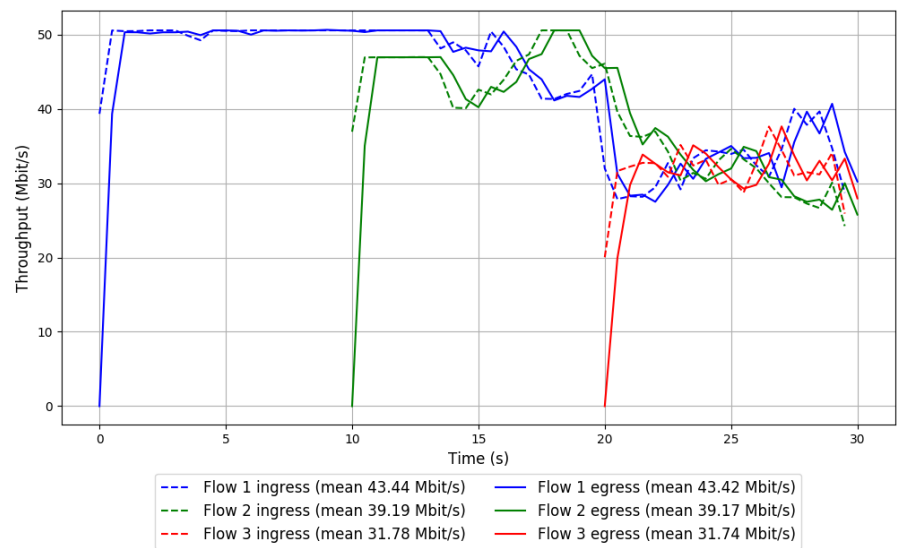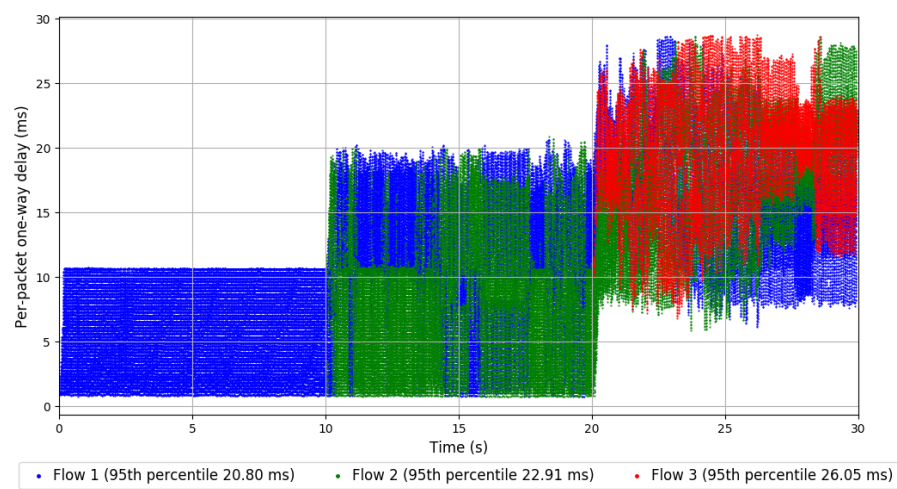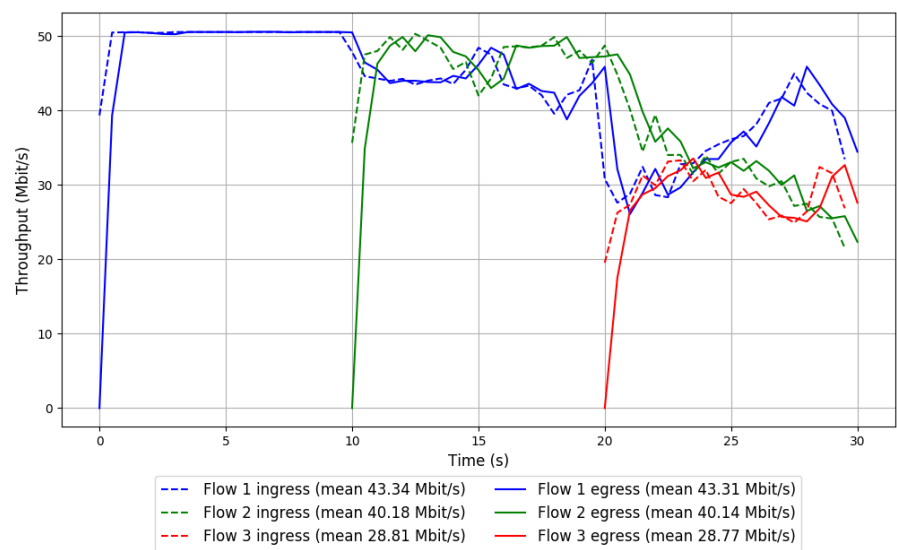
Run 1: Report of Sprout — Data Link

Legend:
- Flow 1 ingress (mean 44.01 Mbit/s) — Flow 1 egress (mean 43.99 Mbit/s)
- Flow 2 ingress (mean 38.16 Mbit/s) — Flow 2 egress (mean 38.11 Mbit/s)
- Flow 3 ingress (mean 30.78 Mbit/s) — Flow 3 egress (mean 30.73 Mbit/s)

Legend:
- Flow 1 (95th percentile 21.39 ms)
- Flow 2 (95th percentile 24.76 ms)
- Flow 3 (95th percentile 26.14 ms)

```
Run 2: Statistics of Sprout

Start at: 2018-10-26 03:13:51
End at: 2018-10-26 03:14:21
Local clock offset: -4.763 ms
Remote clock offset: -0.113 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 23.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.42 Mbit/s
95th percentile per-packet one-way delay: 22.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 23.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 25.372 ms
Loss rate: 0.00%
```
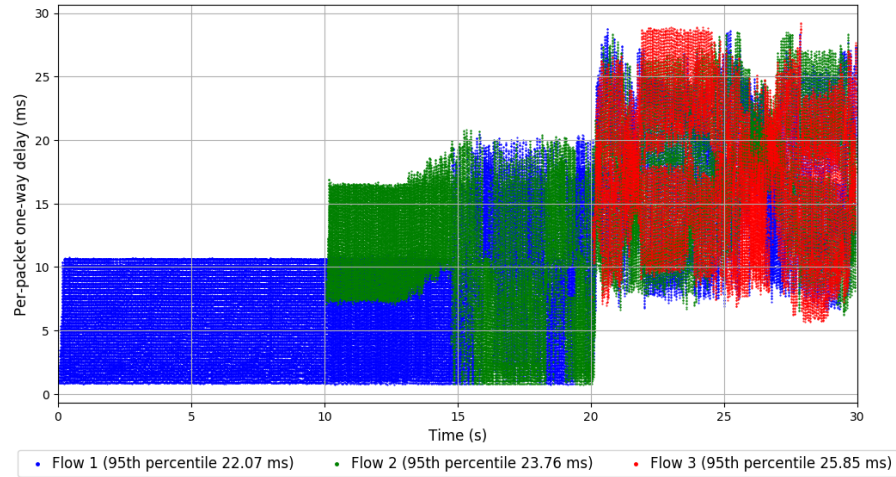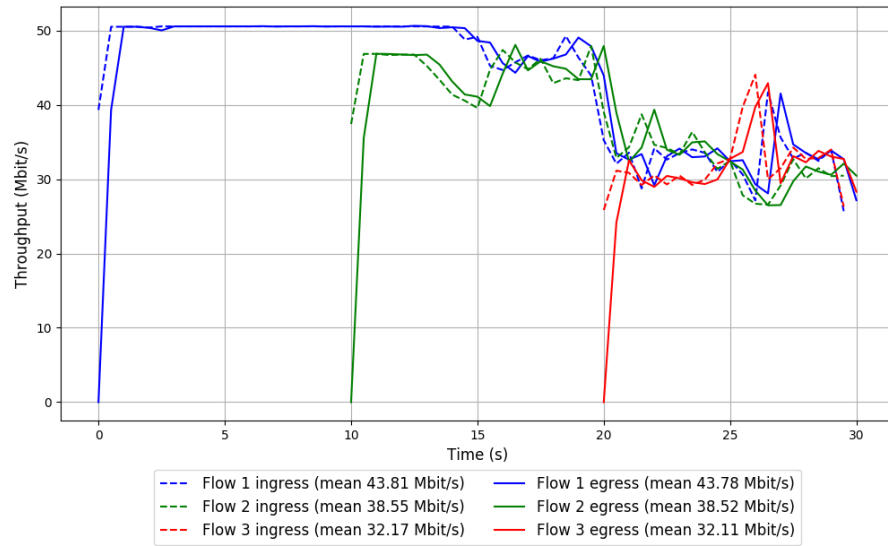
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-10-26 03:34:22
End at: 2018-10-26 03:34:52
Local clock offset: -5.206 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.53 Mbit/s
95th percentile per-packet one-way delay: 23.137 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.31 Mbit/s
95th percentile per-packet one-way delay: 20.799 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 22.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.77 Mbit/s
95th percentile per-packet one-way delay: 26.048 ms
Loss rate: 0.00%
```
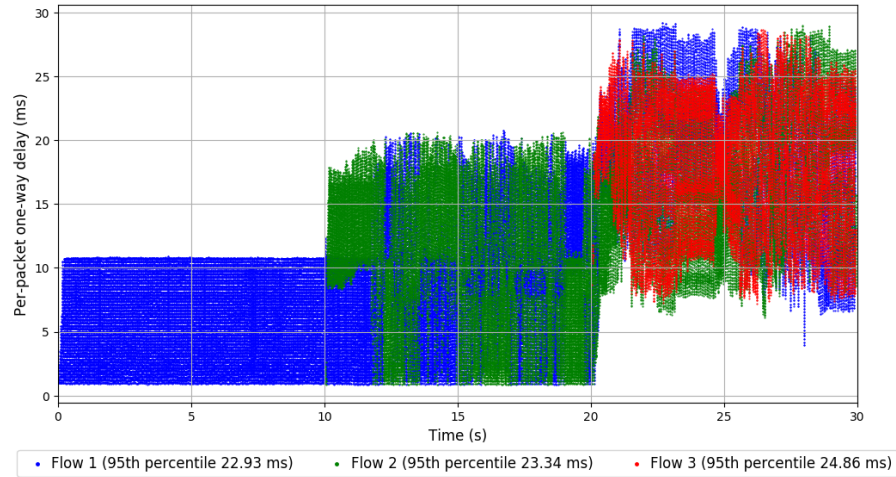
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-10-26 03:54:53
End at: 2018-10-26 03:55:23
Local clock offset: -6.202 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.02 Mbit/s
95th percentile per-packet one-way delay: 23.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.78 Mbit/s
95th percentile per-packet one-way delay: 22.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.52 Mbit/s
95th percentile per-packet one-way delay: 23.756 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 25.850 ms
Loss rate: 0.00%
```
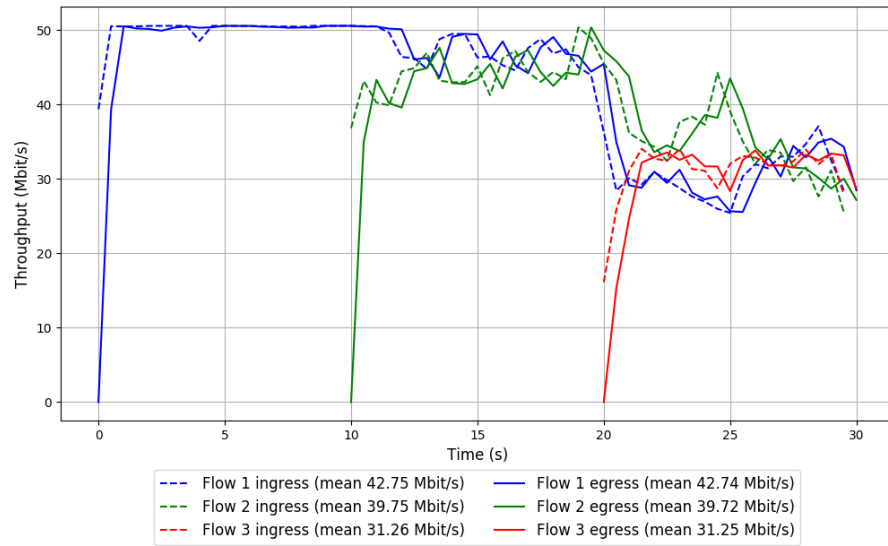
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-10-26 04:15:21
End at: 2018-10-26 04:15:51
Local clock offset: -6.184 ms
Remote clock offset: 0.119 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.48 Mbit/s
95th percentile per-packet one-way delay: 23.706 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.74 Mbit/s
95th percentile per-packet one-way delay: 22.932 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.72 Mbit/s
95th percentile per-packet one-way delay: 23.337 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 24.861 ms
Loss rate: 0.00%
```
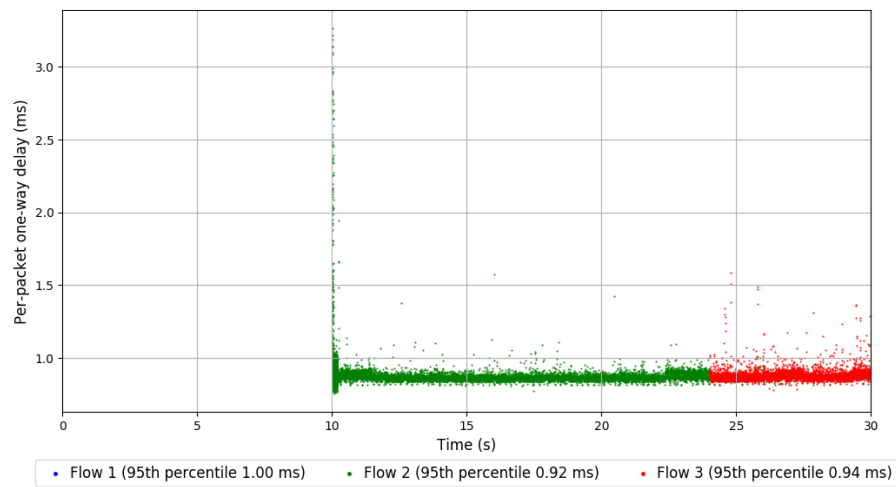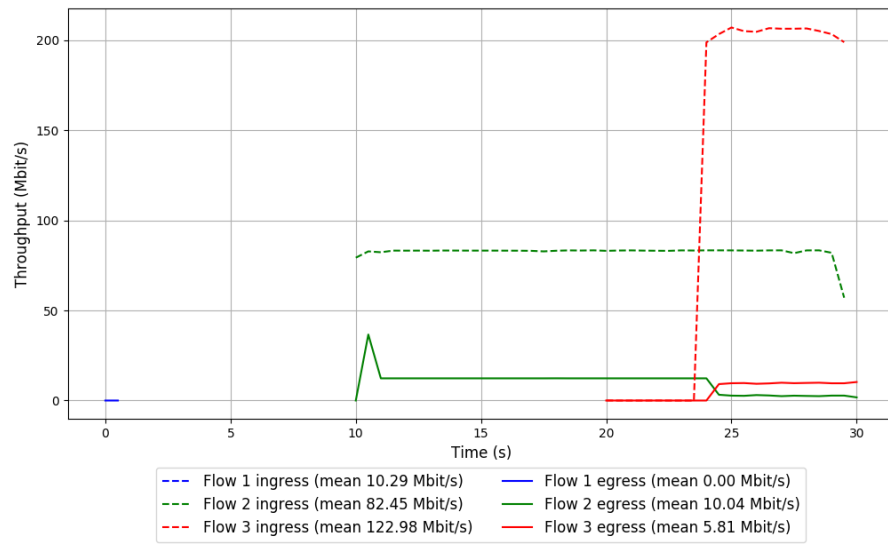
Run 5: Report of Sprout — Data Link

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

Start at: 2018-10-26 02:51:07
End at: 2018-10-26 02:51:37
Local clock offset: -4.253 ms
Remote clock offset: -0.227 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 0.926 ms
Loss rate: 91.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 0.922 ms
Loss rate: 87.83%
-- Flow 3:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 0.935 ms
Loss rate: 95.28%
```
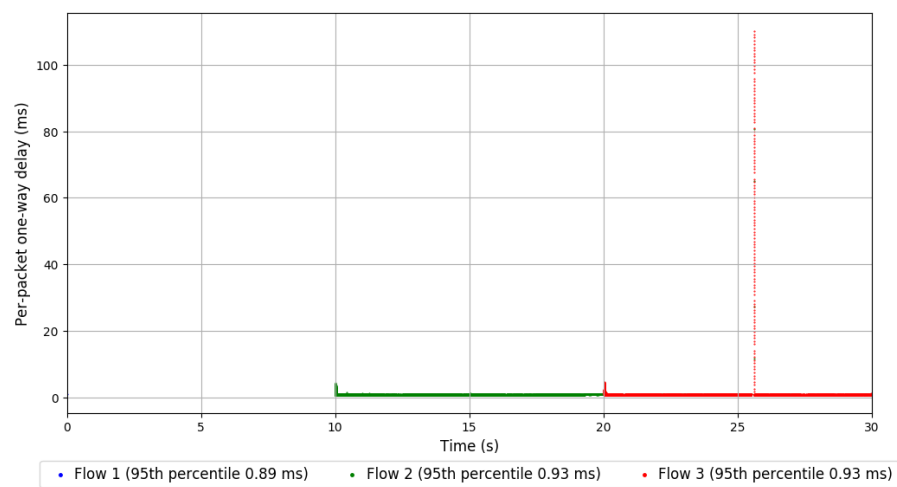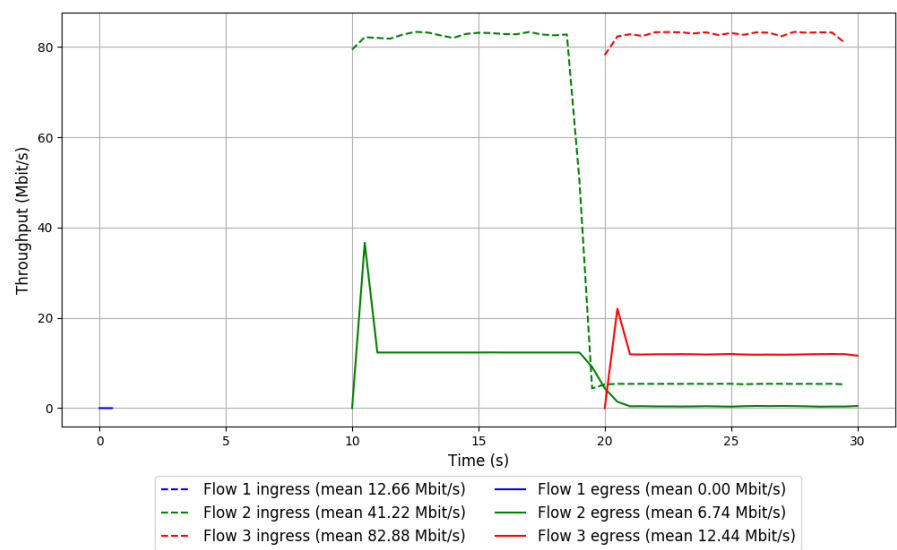
Run 1: Report of TaoVA-100x — Data Link

- - - - Flow 1 ingress (mean 10.29 Mbit/s) ——— Flow 1 egress (mean 0.00 Mbit/s)
- - - - Flow 2 ingress (mean 82.45 Mbit/s) ——— Flow 2 egress (mean 10.04 Mbit/s)
- - - - Flow 3 ingress (mean 122.98 Mbit/s) ——— Flow 3 egress (mean 5.81 Mbit/s)

- Flow 1 (95th percentile 1.00 ms) · Flow 2 (95th percentile 0.92 ms) · Flow 3 (95th percentile 0.94 ms)
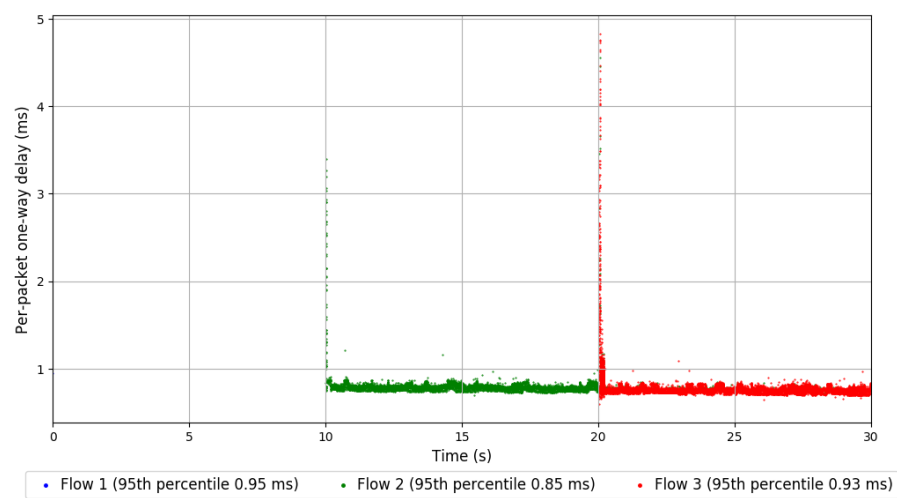
```
Run 2: Statistics of TaoVA-100x

Start at: 2018-10-26 03:11:36
End at: 2018-10-26 03:12:06
Local clock offset: -4.722 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 0.933 ms
Loss rate: 84.33%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.886 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 0.933 ms
Loss rate: 83.68%
-- Flow 3:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 0.934 ms
Loss rate: 84.98%
```
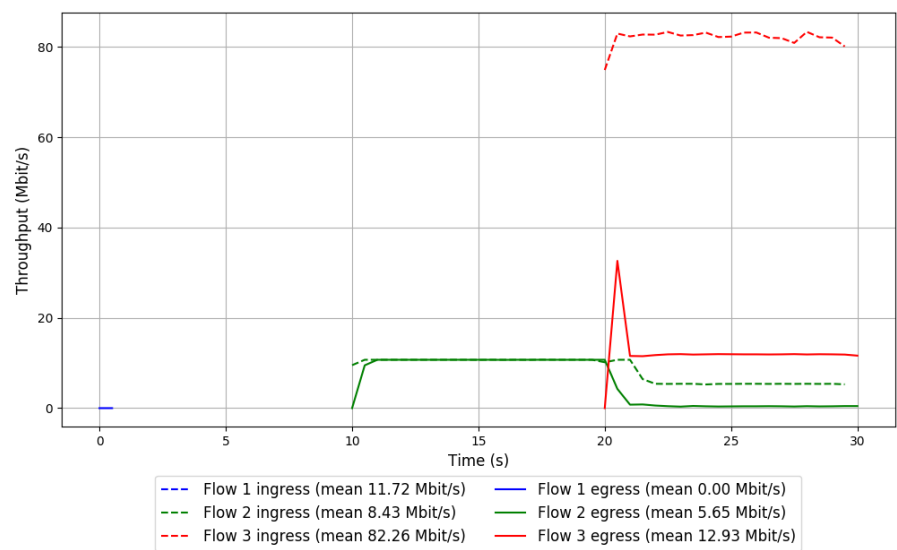
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 12.66 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 41.22 Mbit/s) --- Flow 2 egress (mean 6.74 Mbit/s)
Flow 3 ingress (mean 82.88 Mbit/s) --- Flow 3 egress (mean 12.44 Mbit/s)

Flow 1 (95th percentile 0.89 ms)   Flow 2 (95th percentile 0.93 ms)   Flow 3 (95th percentile 0.93 ms)

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

Start at: 2018-10-26 03:32:07
End at: 2018-10-26 03:32:37
Local clock offset: -4.926 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 0.859 ms
Loss rate: 75.53%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.950 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 5.65 Mbit/s
95th percentile per-packet one-way delay: 0.846 ms
Loss rate: 32.92%
-- Flow 3:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 0.925 ms
Loss rate: 84.28%
```
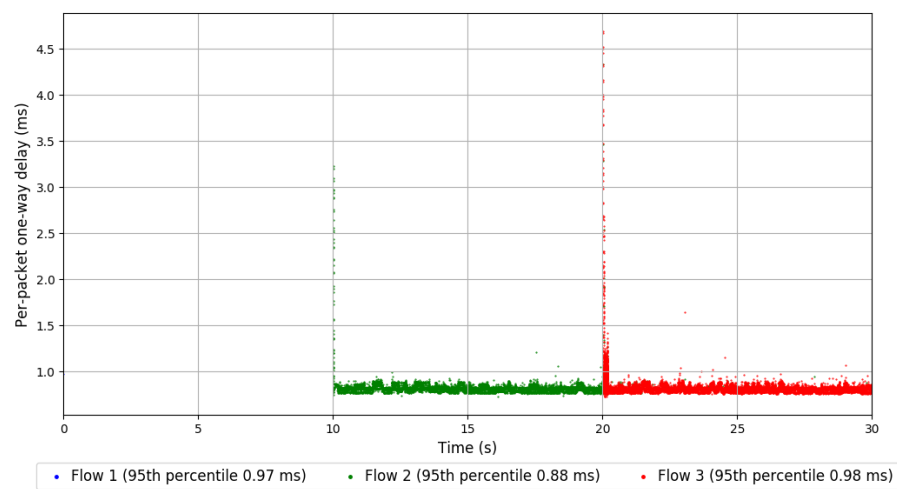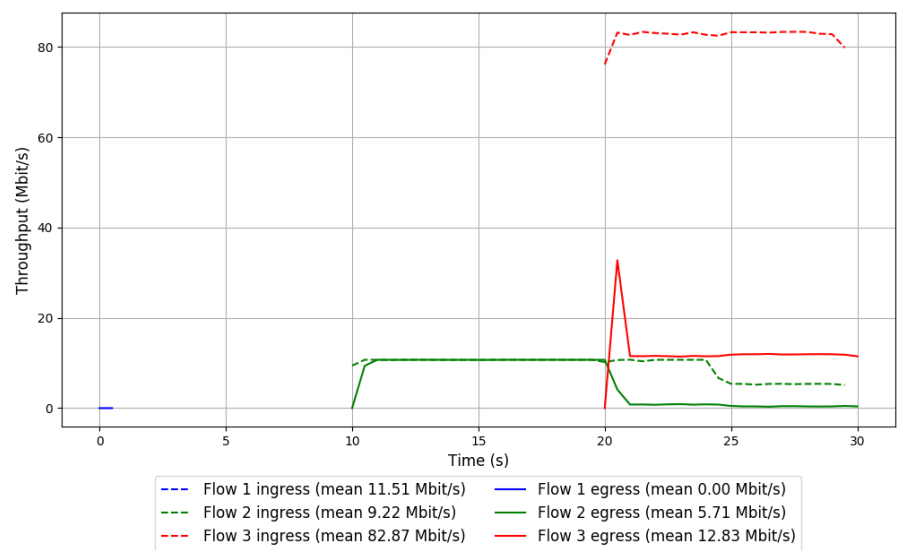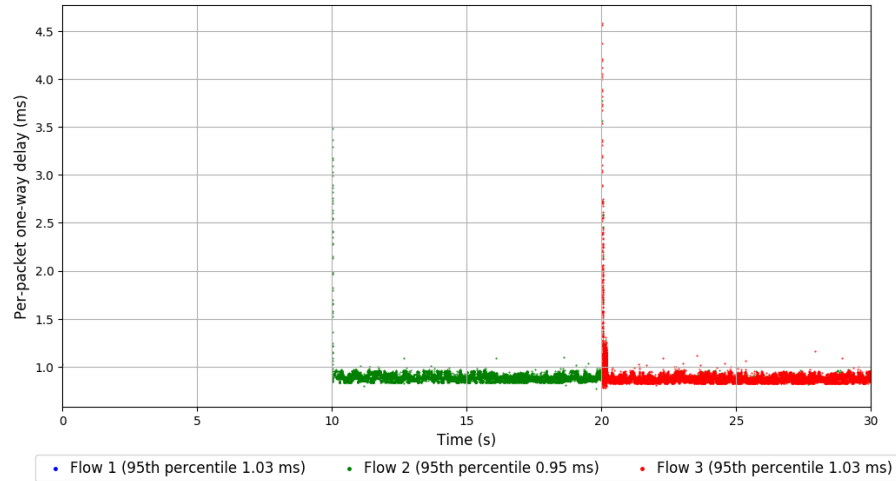
Run 3: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 11.72 Mbit/s) —— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 8.43 Mbit/s) —— Flow 2 egress (mean 5.65 Mbit/s)
- - - Flow 3 ingress (mean 82.26 Mbit/s) —— Flow 3 egress (mean 12.93 Mbit/s)

• Flow 1 (95th percentile 0.95 ms)   • Flow 2 (95th percentile 0.85 ms)   • Flow 3 (95th percentile 0.93 ms)

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

Start at: 2018-10-26 03:52:38
End at: 2018-10-26 03:53:08
Local clock offset: -6.144 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 0.905 ms
Loss rate: 76.06%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.972 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 0.876 ms
Loss rate: 38.14%
-- Flow 3:
Average throughput: 12.83 Mbit/s
95th percentile per-packet one-way delay: 0.985 ms
Loss rate: 84.52%
```
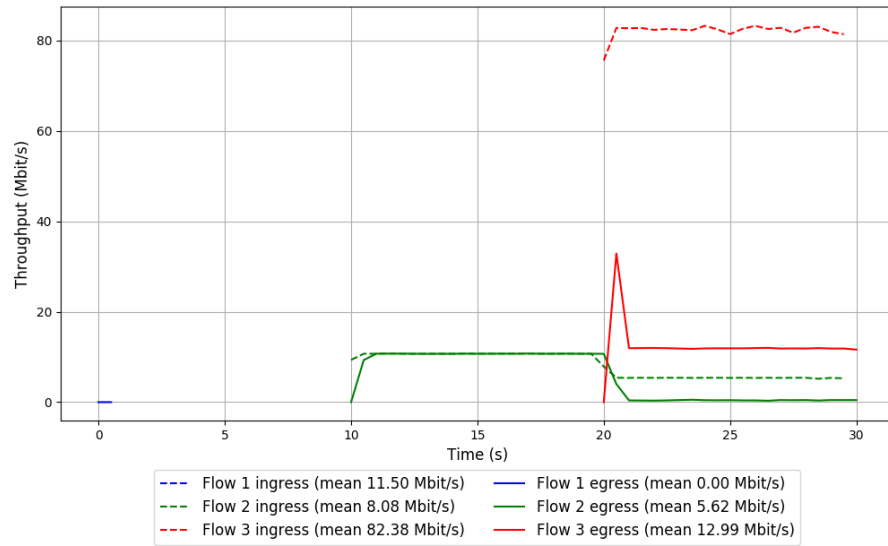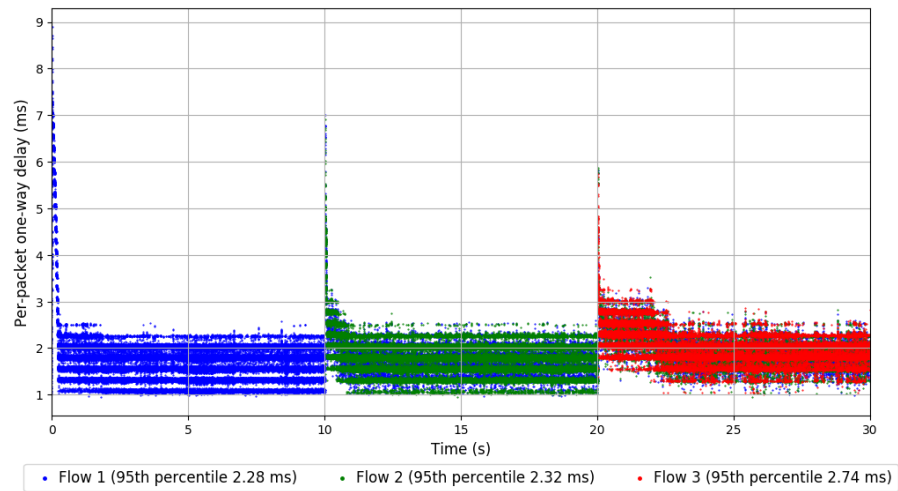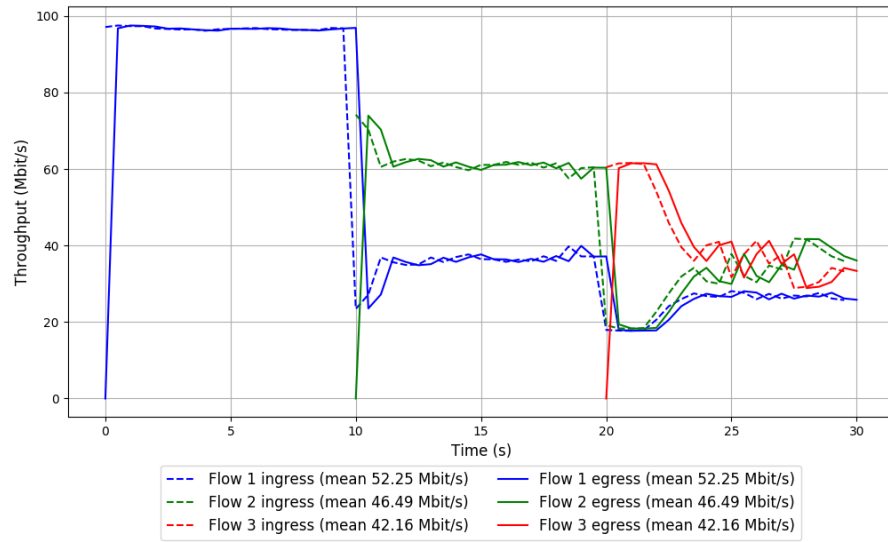
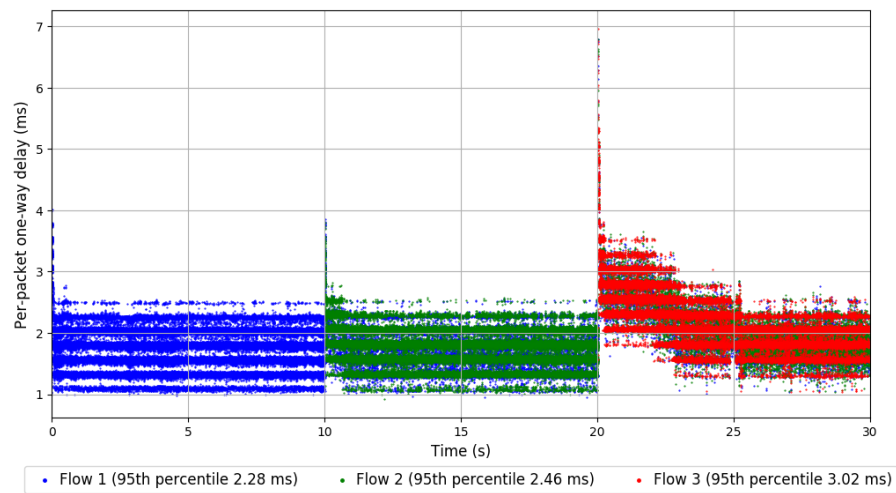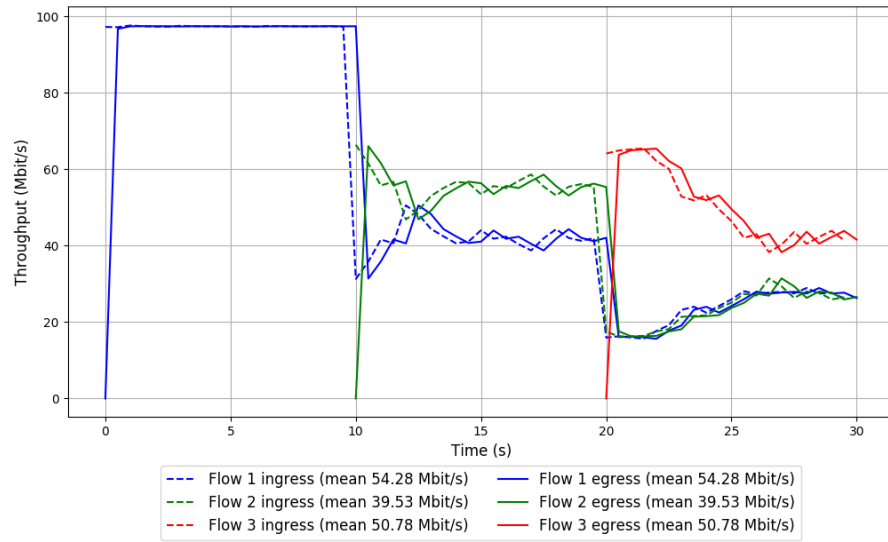Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-10-26 04:13:07
End at: 2018-10-26 04:13:37
Local clock offset: -6.141 ms
Remote clock offset: 0.079 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 75.39%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 0.951 ms
Loss rate: 30.35%
-- Flow 3:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 1.028 ms
Loss rate: 84.24%
```

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

Flow 1 ingress (mean 11.50 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 8.08 Mbit/s) --- Flow 2 egress (mean 5.62 Mbit/s)
Flow 3 ingress (mean 82.38 Mbit/s) --- Flow 3 egress (mean 12.99 Mbit/s)

Flow 1 (95th percentile 1.03 ms)   Flow 2 (95th percentile 0.95 ms)   Flow 3 (95th percentile 1.03 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-10-26 03:00:12
End at: 2018-10-26 03:00:42
Local clock offset: -4.344 ms
Remote clock offset: -0.179 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.23 Mbit/s
95th percentile per-packet one-way delay: 2.455 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 2.282 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.49 Mbit/s
95th percentile per-packet one-way delay: 2.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 2.737 ms
Loss rate: 0.00%
```
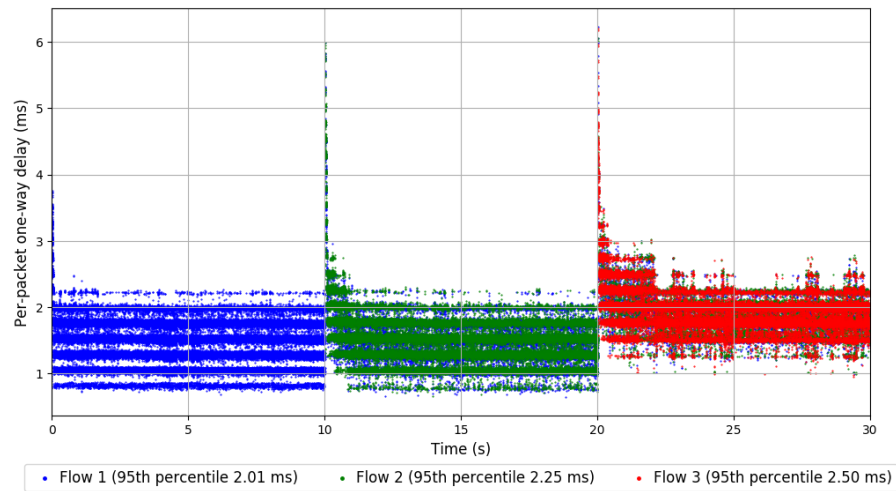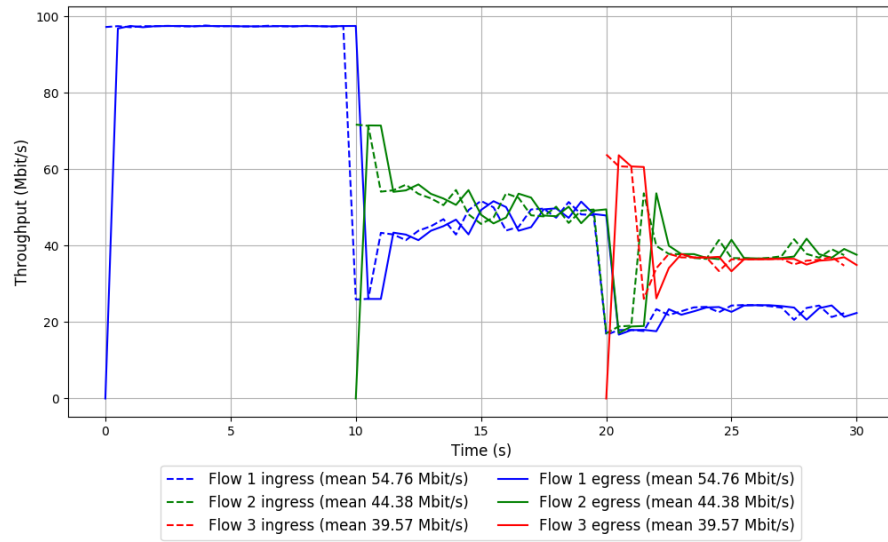
Run 1: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 52.25 Mbit/s) —— Flow 1 egress (mean 52.25 Mbit/s)
- - - Flow 2 ingress (mean 46.49 Mbit/s) —— Flow 2 egress (mean 46.49 Mbit/s)
- - - Flow 3 ingress (mean 42.16 Mbit/s) —— Flow 3 egress (mean 42.16 Mbit/s)

• Flow 1 (95th percentile 2.28 ms)   • Flow 2 (95th percentile 2.32 ms)   • Flow 3 (95th percentile 2.74 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-10-26 03:20:42
End at: 2018-10-26 03:21:12
Local clock offset: -4.96 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 2.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.28 Mbit/s
95th percentile per-packet one-way delay: 2.282 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 2.464 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.78 Mbit/s
95th percentile per-packet one-way delay: 3.024 ms
Loss rate: 0.00%
```
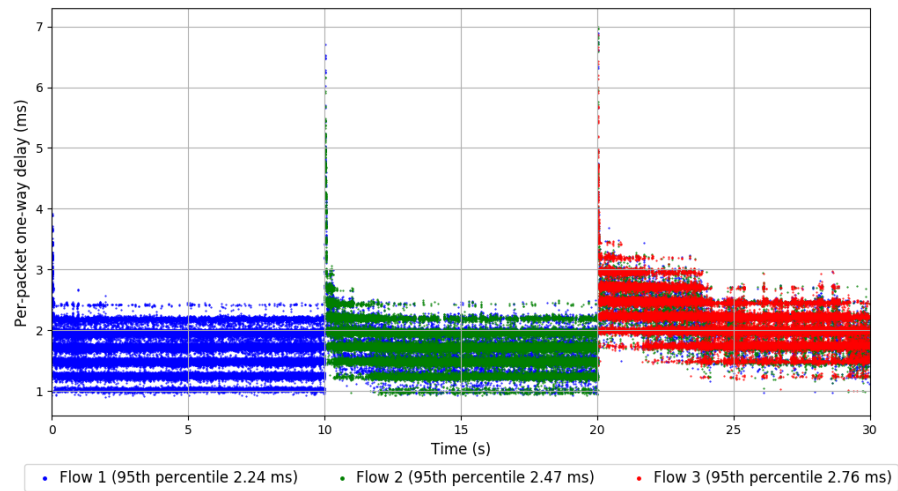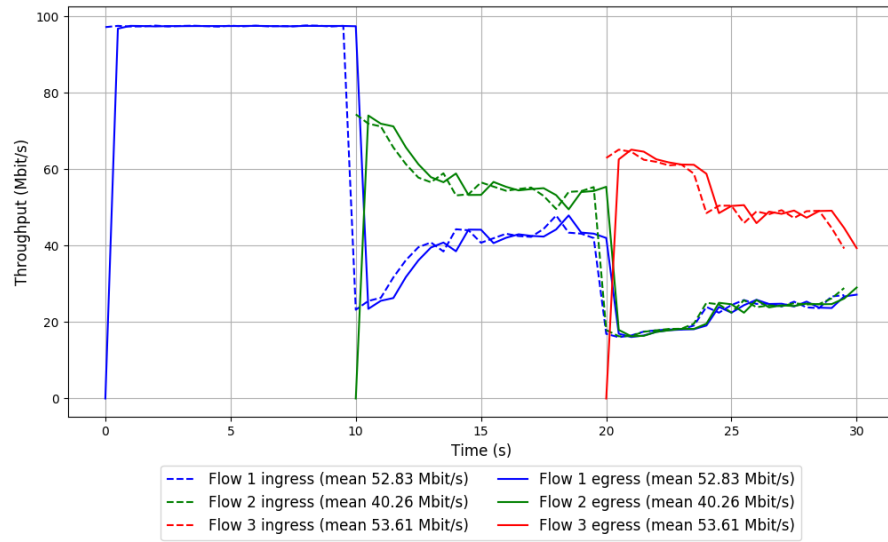
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-10-26 03:41:14
End at: 2018-10-26 03:41:44
Local clock offset: -5.713 ms
Remote clock offset: -0.07 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 2.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.76 Mbit/s
95th percentile per-packet one-way delay: 2.014 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 2.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.57 Mbit/s
95th percentile per-packet one-way delay: 2.496 ms
Loss rate: 0.00%
```
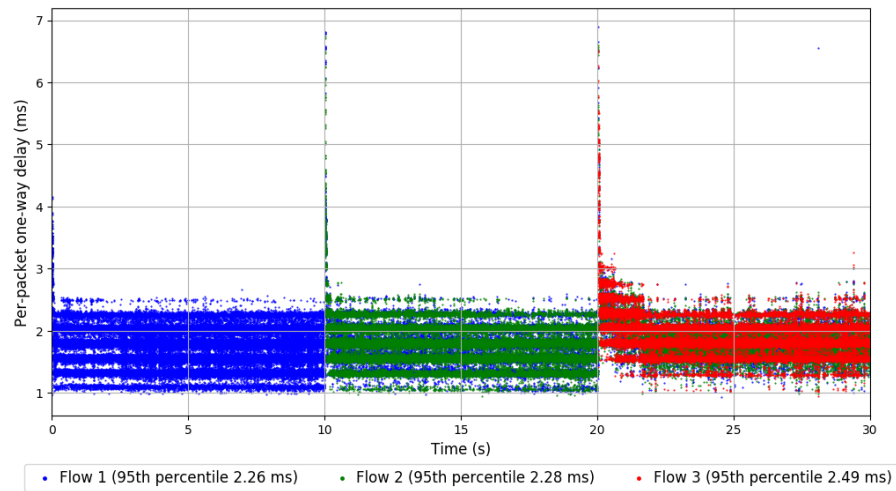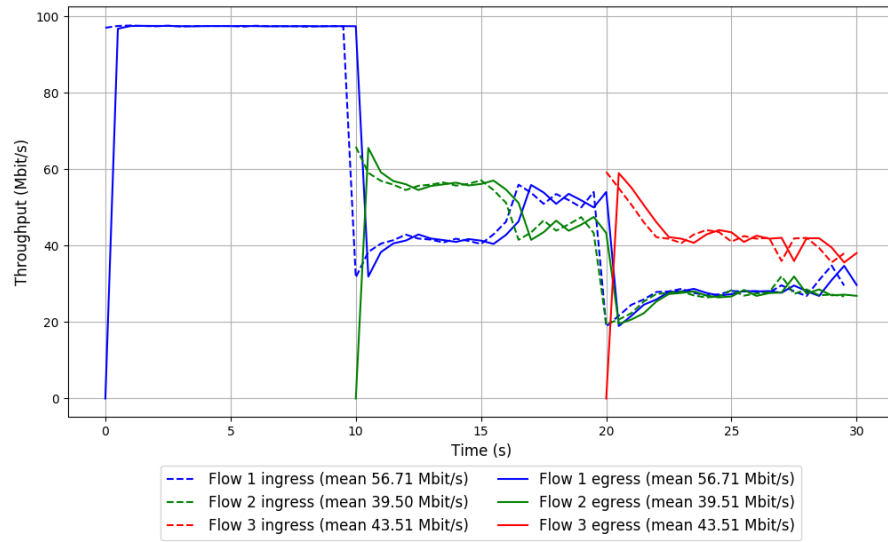
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-10-26 04:01:42
End at: 2018-10-26 04:02:12
Local clock offset: -6.447 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 2.500 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 2.238 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.26 Mbit/s
95th percentile per-packet one-way delay: 2.470 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.61 Mbit/s
95th percentile per-packet one-way delay: 2.760 ms
Loss rate: 0.00%
```
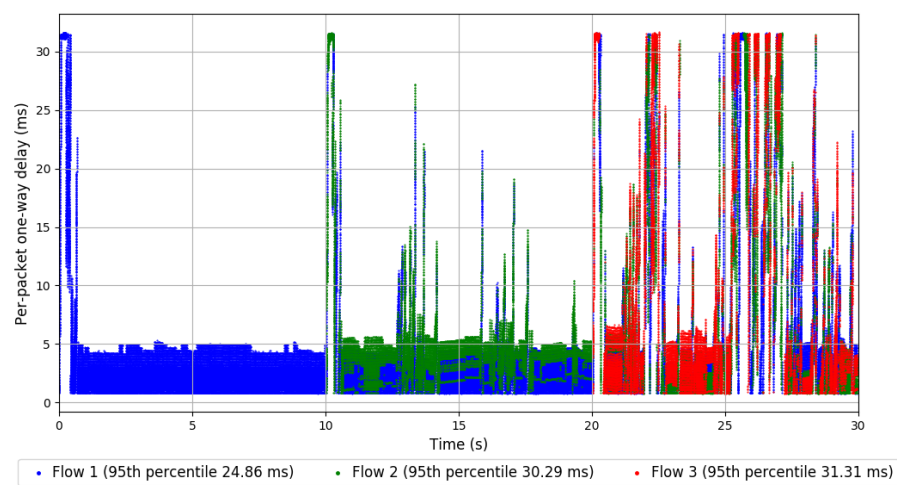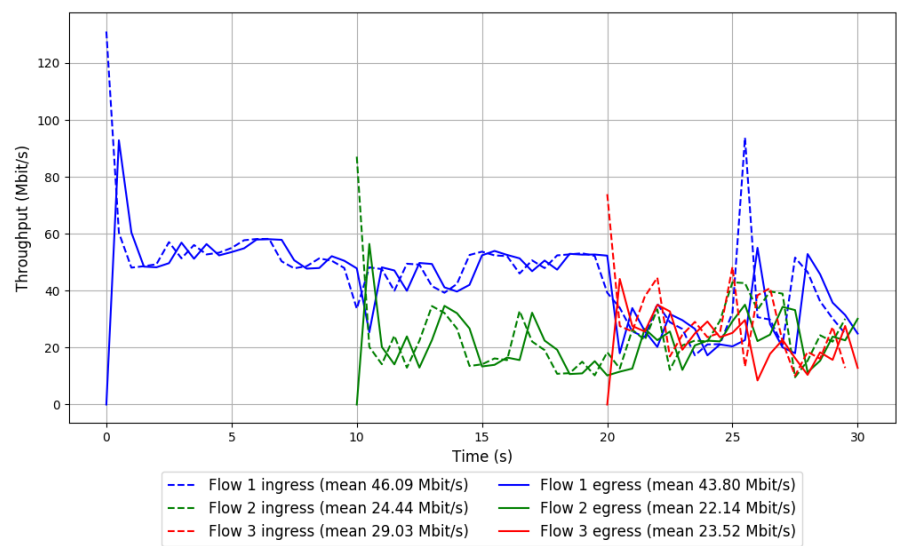
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-10-26 04:22:24
End at: 2018-10-26 04:22:54
Local clock offset: -6.181 ms
Remote clock offset: 0.213 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 2.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.71 Mbit/s
95th percentile per-packet one-way delay: 2.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.51 Mbit/s
95th percentile per-packet one-way delay: 2.278 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.51 Mbit/s
95th percentile per-packet one-way delay: 2.490 ms
Loss rate: 0.00%
```

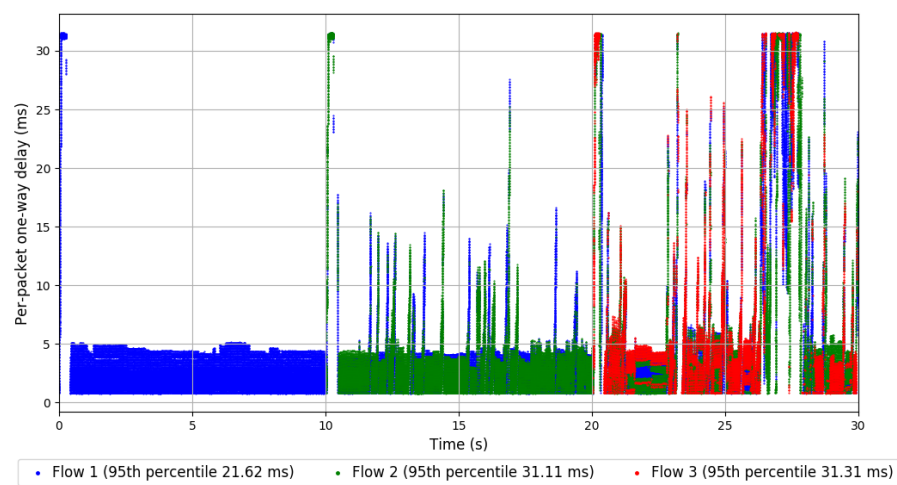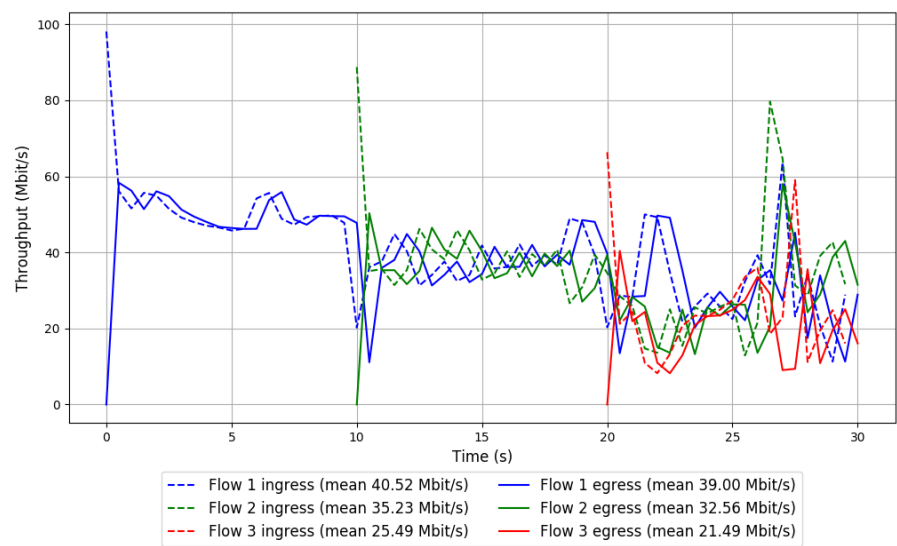Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-10-26 03:04:48
End at: 2018-10-26 03:05:18
Local clock offset: -4.555 ms
Remote clock offset: -0.215 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.33 Mbit/s
95th percentile per-packet one-way delay: 29.535 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 43.80 Mbit/s
95th percentile per-packet one-way delay: 24.865 ms
Loss rate: 4.97%
-- Flow 2:
Average throughput: 22.14 Mbit/s
95th percentile per-packet one-way delay: 30.292 ms
Loss rate: 9.42%
-- Flow 3:
Average throughput: 23.52 Mbit/s
95th percentile per-packet one-way delay: 31.313 ms
Loss rate: 19.00%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-10-26 03:25:18
End at: 2018-10-26 03:25:48
Local clock offset: -4.852 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.80 Mbit/s
95th percentile per-packet one-way delay: 29.697 ms
Loss rate: 6.29%
-- Flow 1:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 21.620 ms
Loss rate: 3.68%
-- Flow 2:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 31.108 ms
Loss rate: 7.47%
-- Flow 3:
Average throughput: 21.49 Mbit/s
95th percentile per-packet one-way delay: 31.306 ms
Loss rate: 15.56%
```
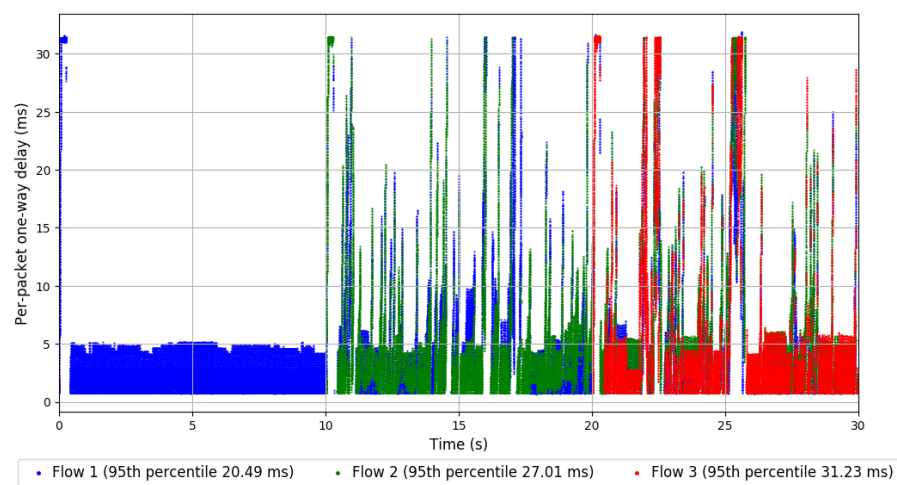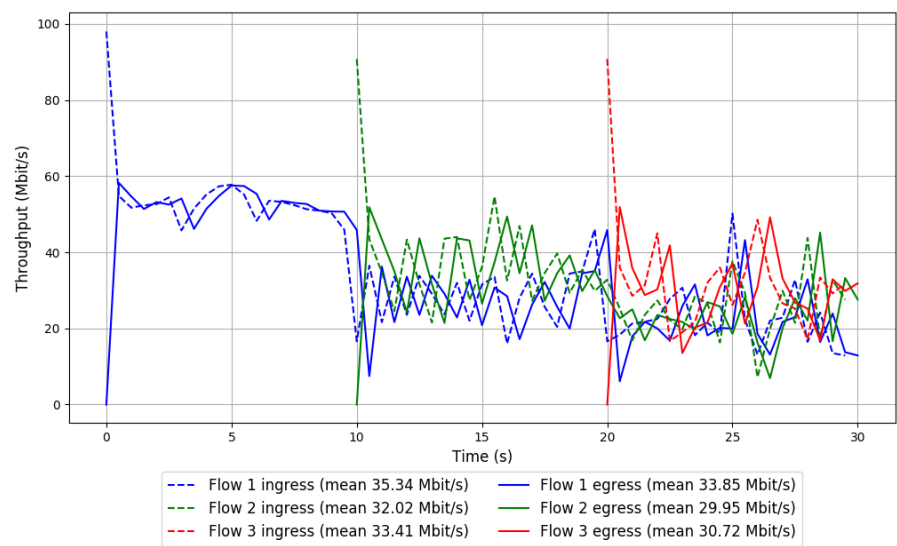
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-10-26 03:45:50
End at: 2018-10-26 03:46:20
Local clock offset: -5.943 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 26.707 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 20.488 ms
Loss rate: 4.22%
-- Flow 2:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 27.012 ms
Loss rate: 6.45%
-- Flow 3:
Average throughput: 30.72 Mbit/s
95th percentile per-packet one-way delay: 31.228 ms
Loss rate: 8.03%
```
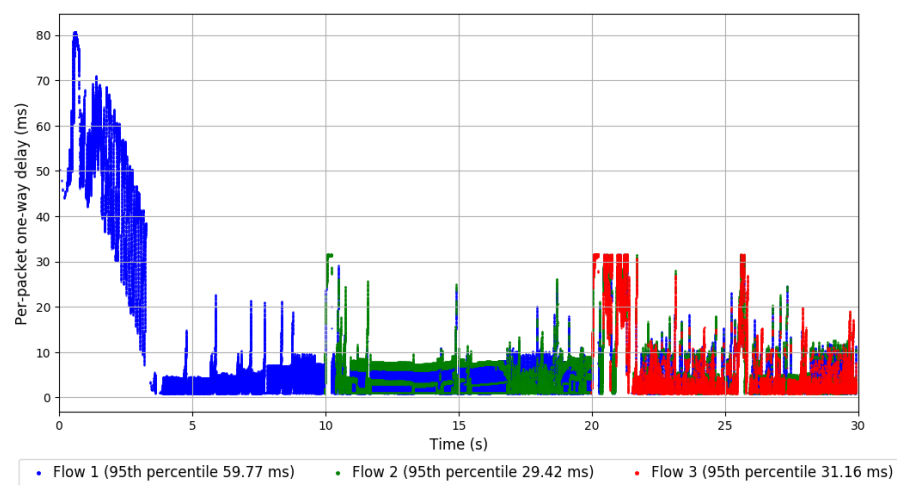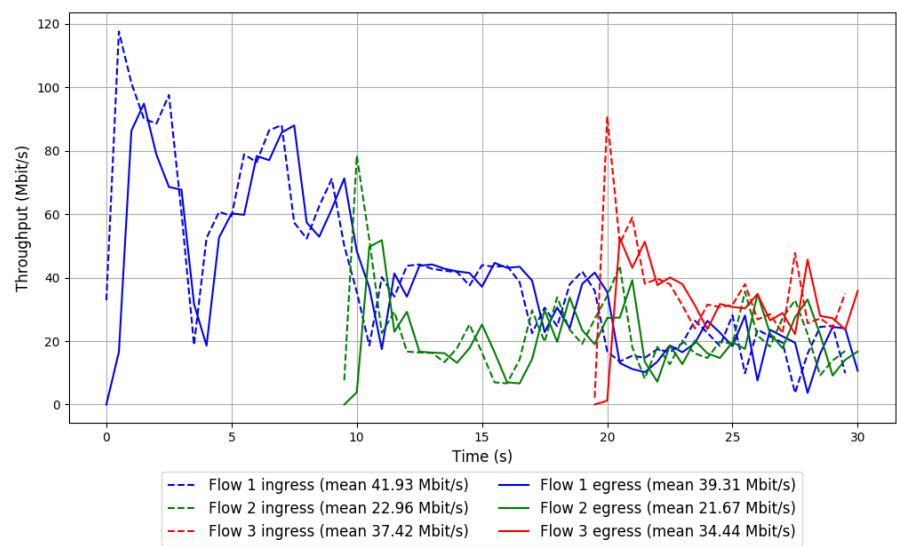
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-10-26 04:06:18
End at: 2018-10-26 04:06:48
Local clock offset: -6.185 ms
Remote clock offset: 0.187 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.23 Mbit/s
95th percentile per-packet one-way delay: 53.896 ms
Loss rate: 6.48%
-- Flow 1:
Average throughput: 39.31 Mbit/s
95th percentile per-packet one-way delay: 59.770 ms
Loss rate: 6.38%
-- Flow 2:
Average throughput: 21.67 Mbit/s
95th percentile per-packet one-way delay: 29.421 ms
Loss rate: 5.56%
-- Flow 3:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 31.160 ms
Loss rate: 7.92%
```
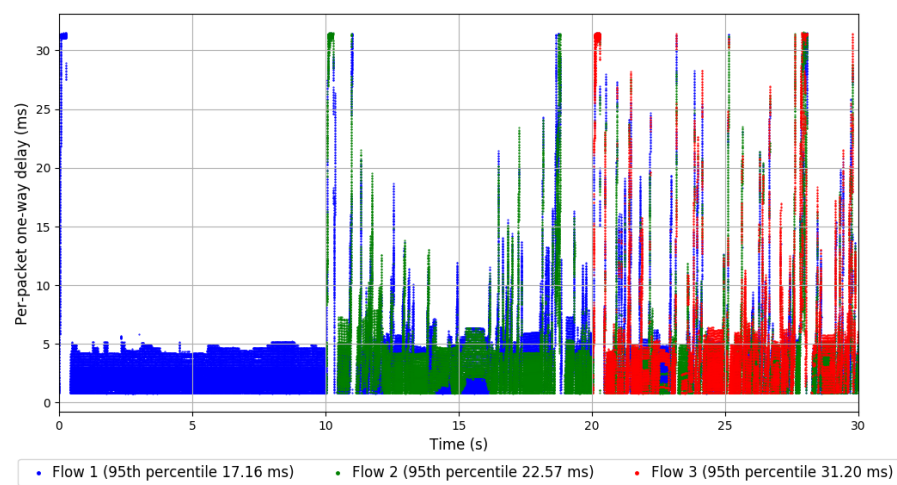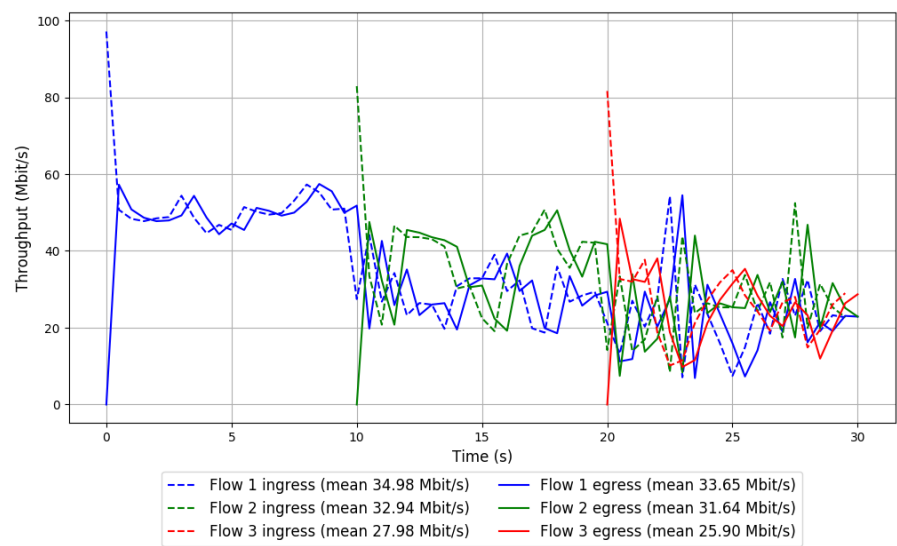
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-10-26 04:27:00
End at: 2018-10-26 04:27:30
Local clock offset: -6.14 ms
Remote clock offset: 0.151 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.30 Mbit/s
95th percentile per-packet one-way delay: 22.199 ms
Loss rate: 4.34%
-- Flow 1:
Average throughput: 33.65 Mbit/s
95th percentile per-packet one-way delay: 17.155 ms
Loss rate: 3.80%
-- Flow 2:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 22.572 ms
Loss rate: 3.92%
-- Flow 3:
Average throughput: 25.90 Mbit/s
95th percentile per-packet one-way delay: 31.201 ms
Loss rate: 7.41%
```

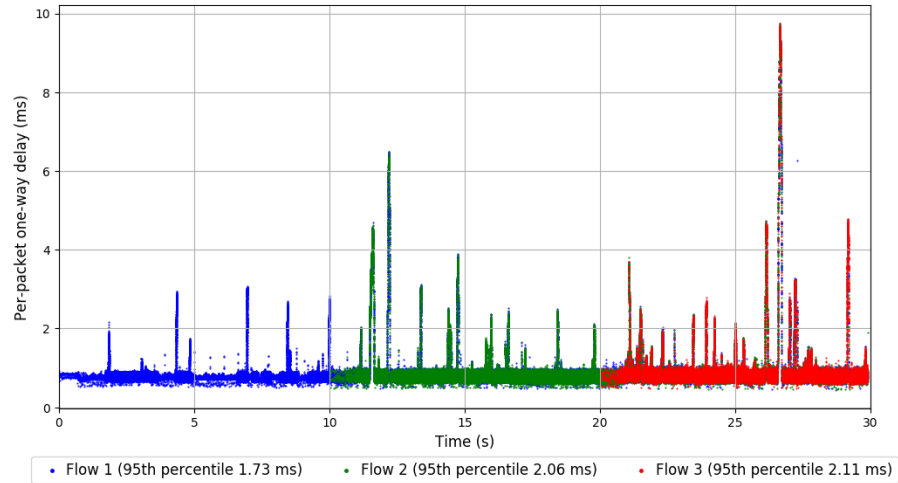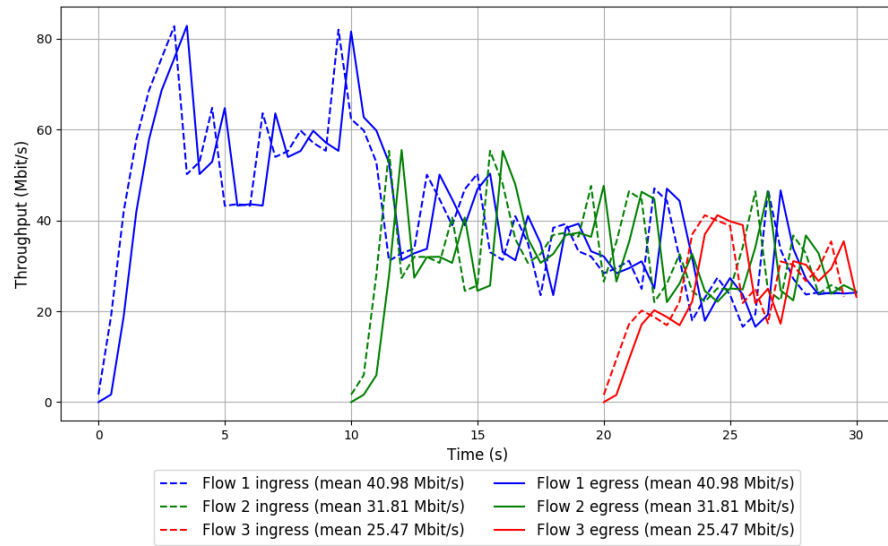Run 5: Report of Verus — Data Link

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```
Run 1: Statistics of PCC-Vivace

Start at: 2018-10-26 03:01:21
End at: 2018-10-26 03:01:51
Local clock offset: -4.198 ms
Remote clock offset: -0.276 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.55 Mbit/s
95th percentile per-packet one-way delay: 1.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 1.726 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 2.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.47 Mbit/s
95th percentile per-packet one-way delay: 2.107 ms
Loss rate: 0.00%
```

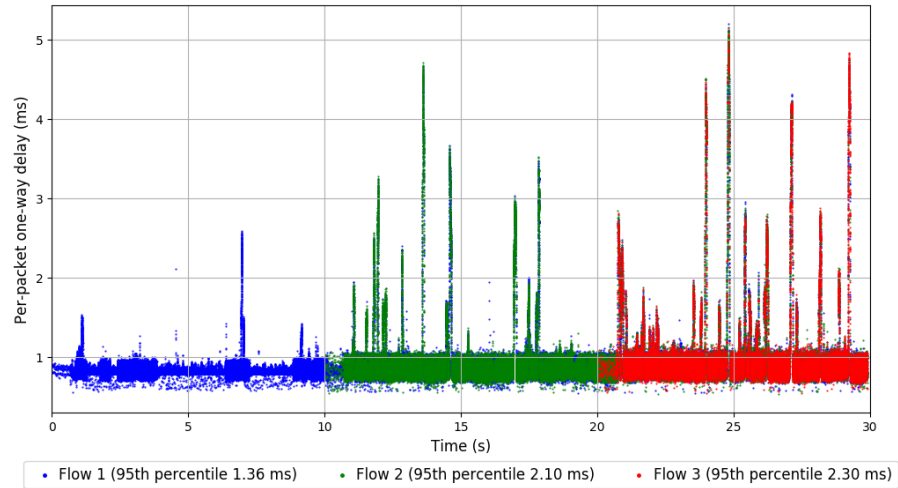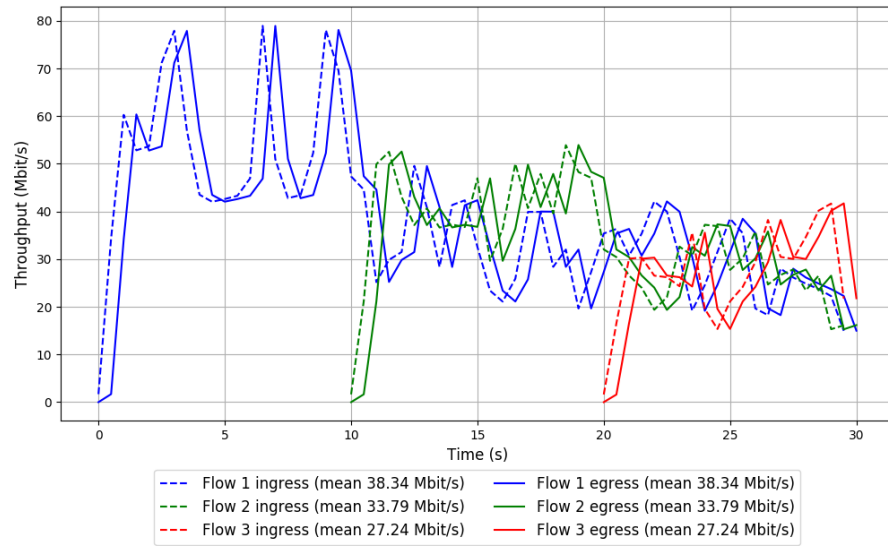Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-10-26 03:21:52
End at: 2018-10-26 03:22:22
Local clock offset: -4.845 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.80 Mbit/s
95th percentile per-packet one-way delay: 1.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.34 Mbit/s
95th percentile per-packet one-way delay: 1.359 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 2.097 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.24 Mbit/s
95th percentile per-packet one-way delay: 2.297 ms
Loss rate: 0.00%
```
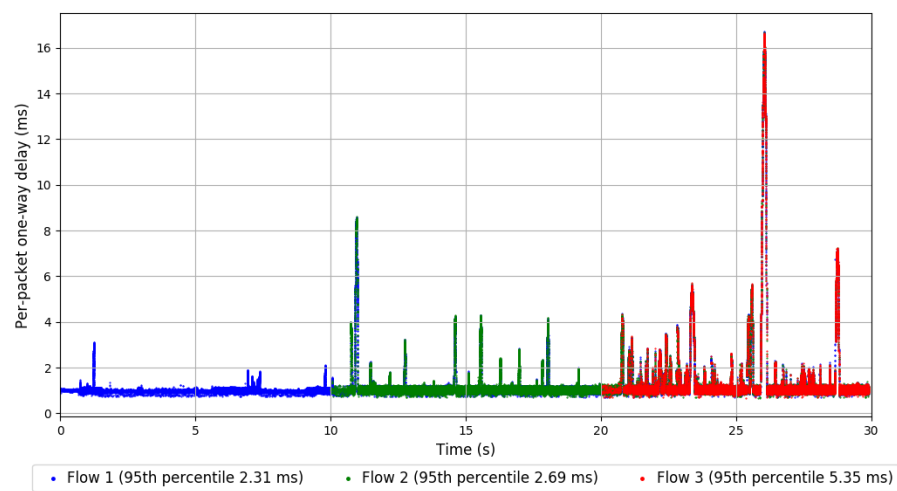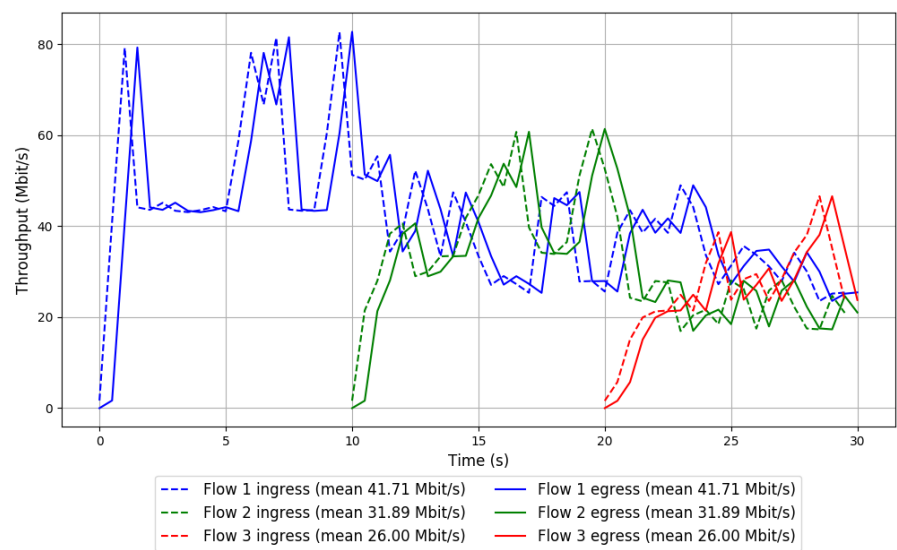
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 38.34 Mbit/s) — Flow 1 egress (mean 38.34 Mbit/s)
Flow 2 ingress (mean 33.79 Mbit/s) — Flow 2 egress (mean 33.79 Mbit/s)
Flow 3 ingress (mean 27.24 Mbit/s) — Flow 3 egress (mean 27.24 Mbit/s)

Flow 1 (95th percentile 1.36 ms)   Flow 2 (95th percentile 2.10 ms)   Flow 3 (95th percentile 2.30 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-10-26 03:42:23
End at: 2018-10-26 03:42:53
Local clock offset: -5.866 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.51 Mbit/s
95th percentile per-packet one-way delay: 2.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.71 Mbit/s
95th percentile per-packet one-way delay: 2.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 2.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.00 Mbit/s
95th percentile per-packet one-way delay: 5.354 ms
Loss rate: 0.00%
```
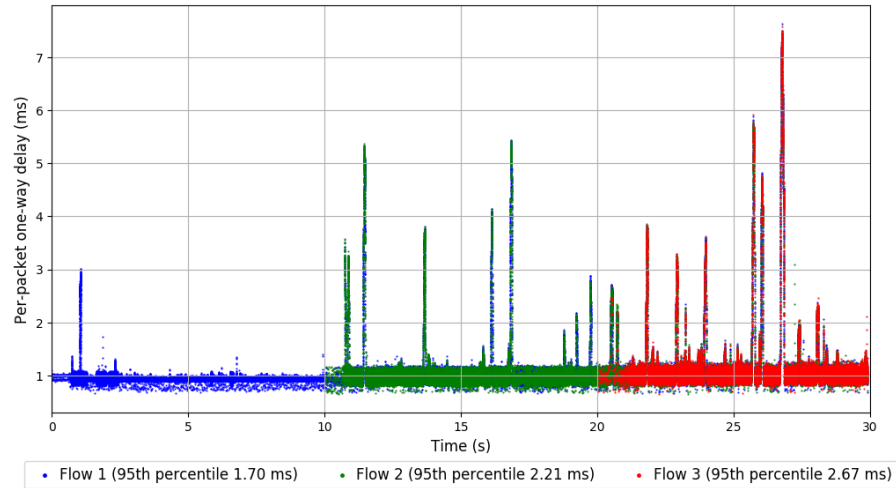
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-10-26 04:02:51
End at: 2018-10-26 04:03:21
Local clock offset: -6.27 ms
Remote clock offset: 0.147 ms


# Below is generated by plot.py at 2018-10-26 04:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.14 Mbit/s
95th percentile per-packet one-way delay: 2.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 1.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 2.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 2.665 ms
Loss rate: 0.00%
```
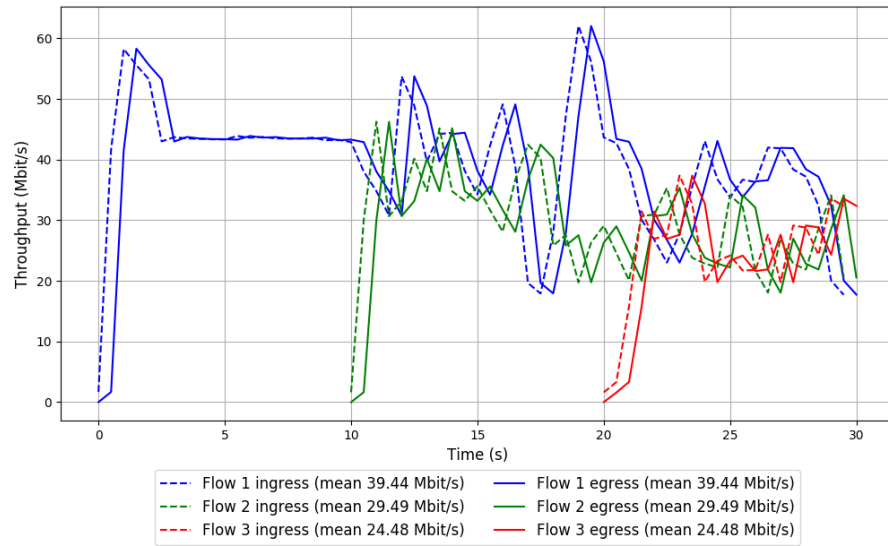
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-10-26 04:23:33
End at: 2018-10-26 04:24:03
Local clock offset: -6.121 ms
Remote clock offset: 0.09 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.00 Mbit/s
95th percentile per-packet one-way delay: 2.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 1.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 3.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 2.404 ms
Loss rate: 0.00%
```
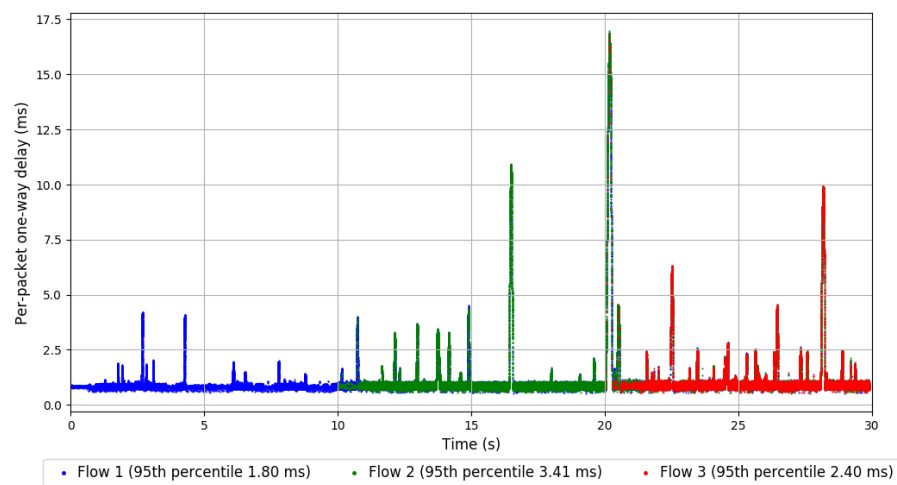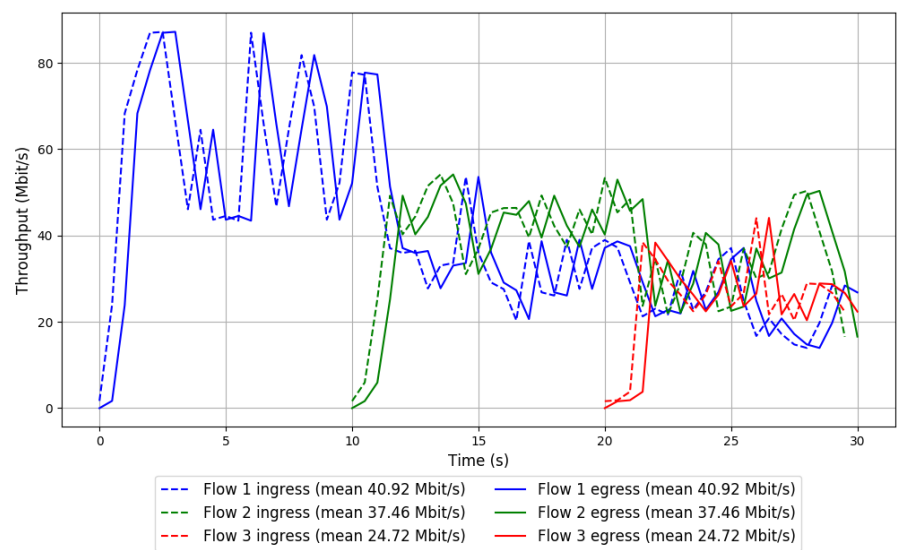
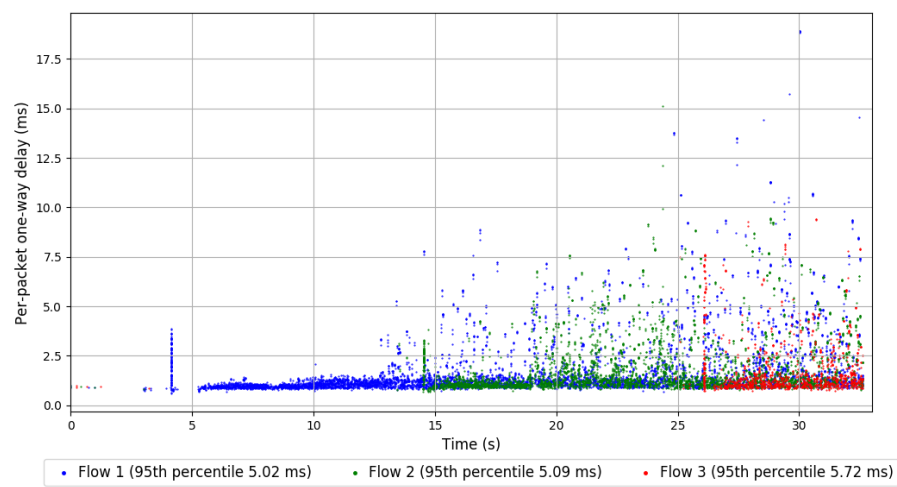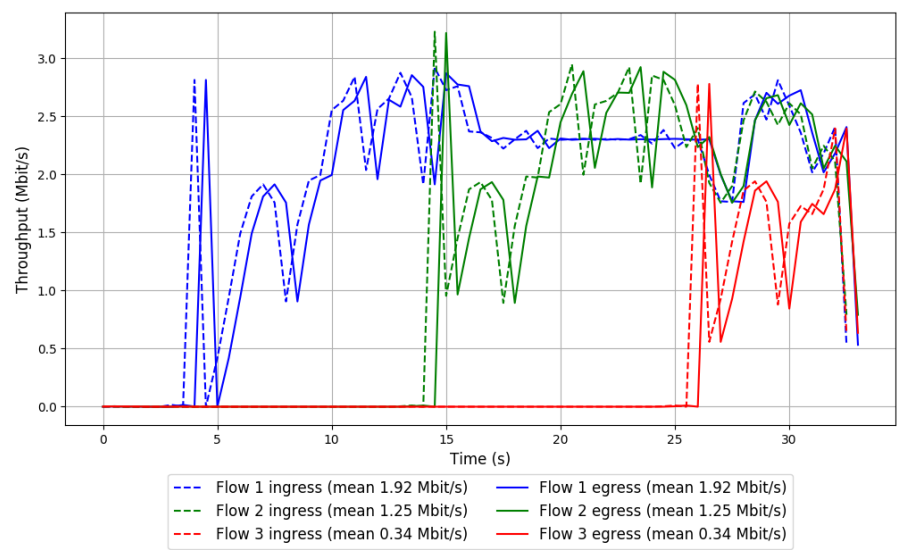# Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-10-26 03:09:26
End at: 2018-10-26 03:09:56
Local clock offset: -4.655 ms
Remote clock offset: -0.175 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 5.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 5.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 5.095 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 5.724 ms
Loss rate: 0.00%
```

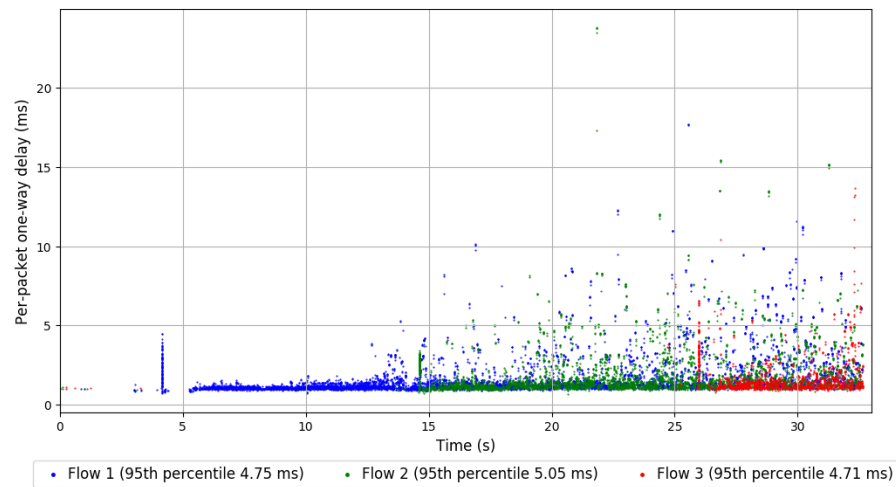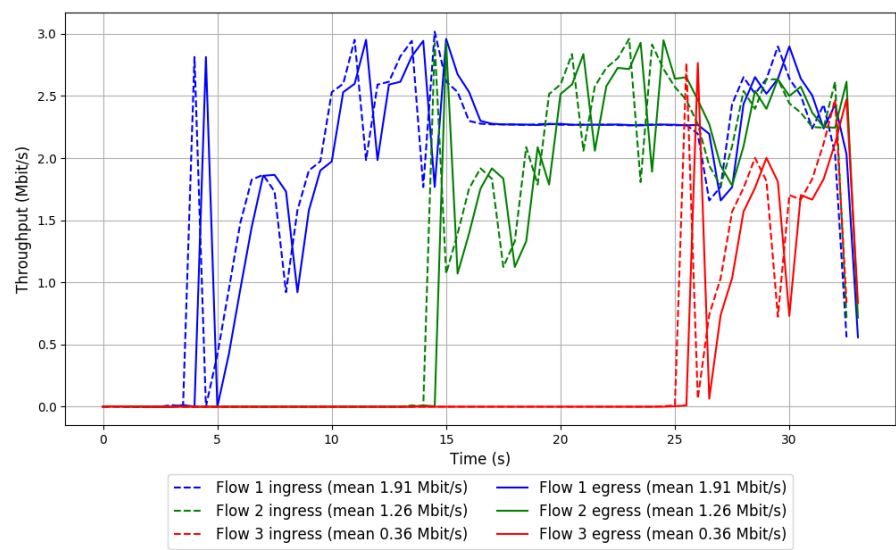Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-10-26 03:29:57
End at: 2018-10-26 03:30:27
Local clock offset: -4.995 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 4.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 4.748 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 5.052 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 4.707 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-10-26 03:50:28
End at: 2018-10-26 03:50:58
Local clock offset: -6.093 ms
Remote clock offset: 0.105 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 4.655 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 4.486 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 5.062 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 4.522 ms
Loss rate: 0.00%
```
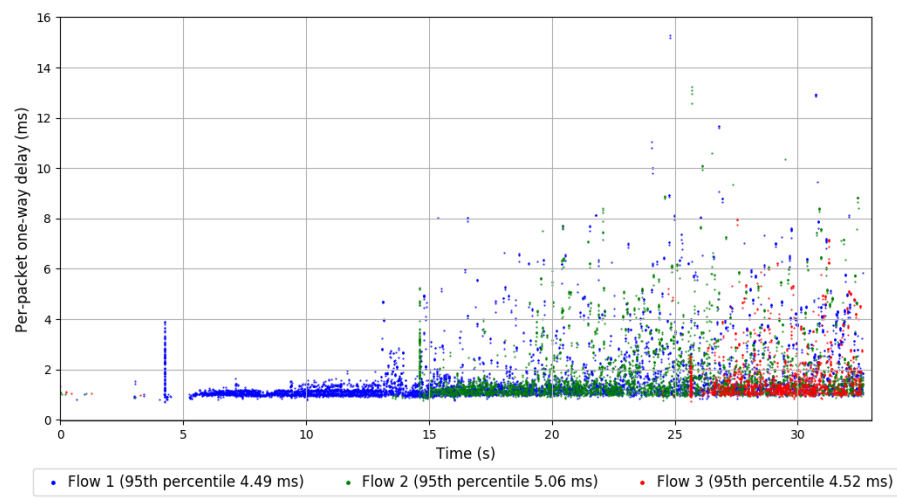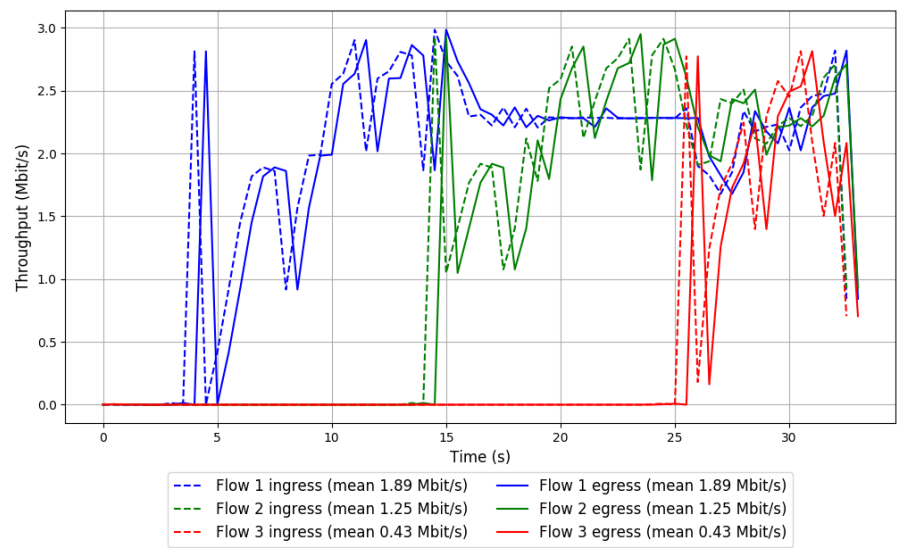
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-10-26 04:10:56
End at: 2018-10-26 04:11:26
Local clock offset: -6.162 ms
Remote clock offset: 0.142 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 4.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 4.754 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 5.095 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 5.844 ms
Loss rate: 0.00%
```
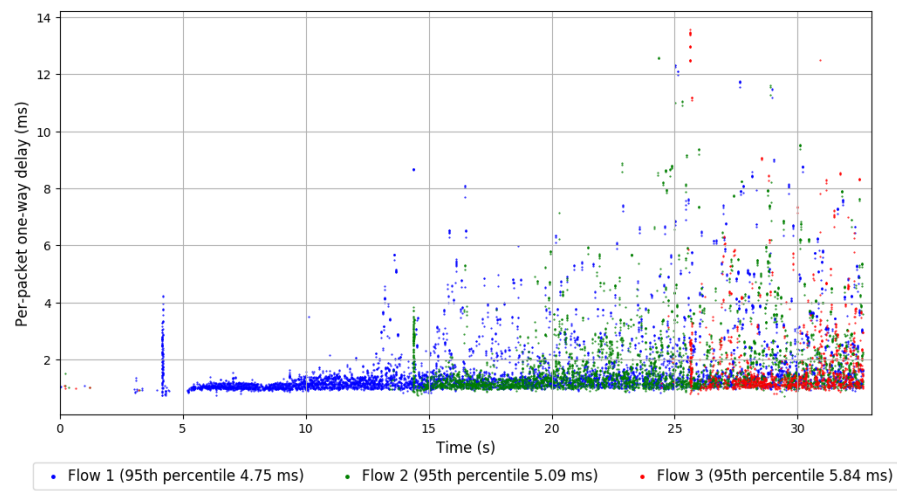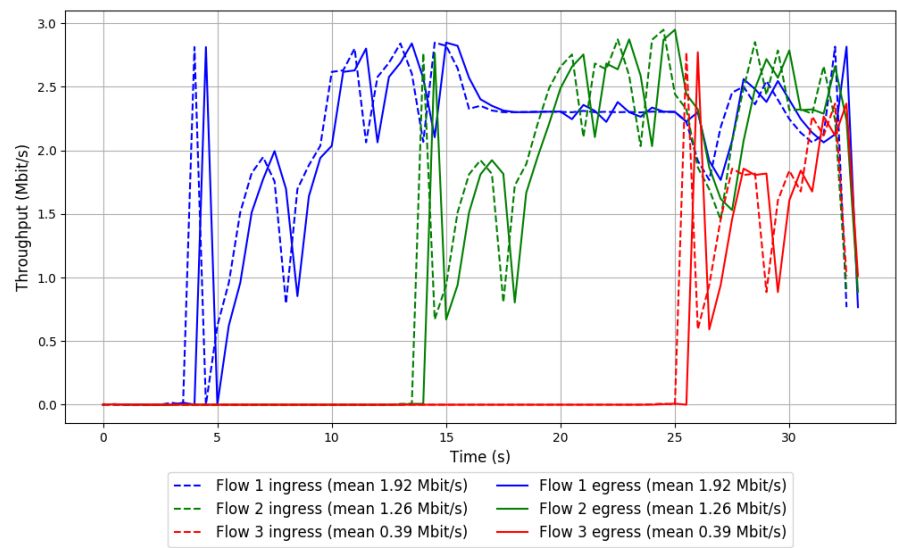
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-10-26 04:31:38
End at: 2018-10-26 04:32:08
Local clock offset: -6.144 ms
Remote clock offset: 0.232 ms


# Below is generated by plot.py at 2018-10-26 04:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 5.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 5.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 5.395 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 5.359 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link