Pantheon Report

Generated at 2019-01-25 03:26:16 (UTC).

Data path: AWS India 1 on `ens5` (*local*) →India on `em1` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.
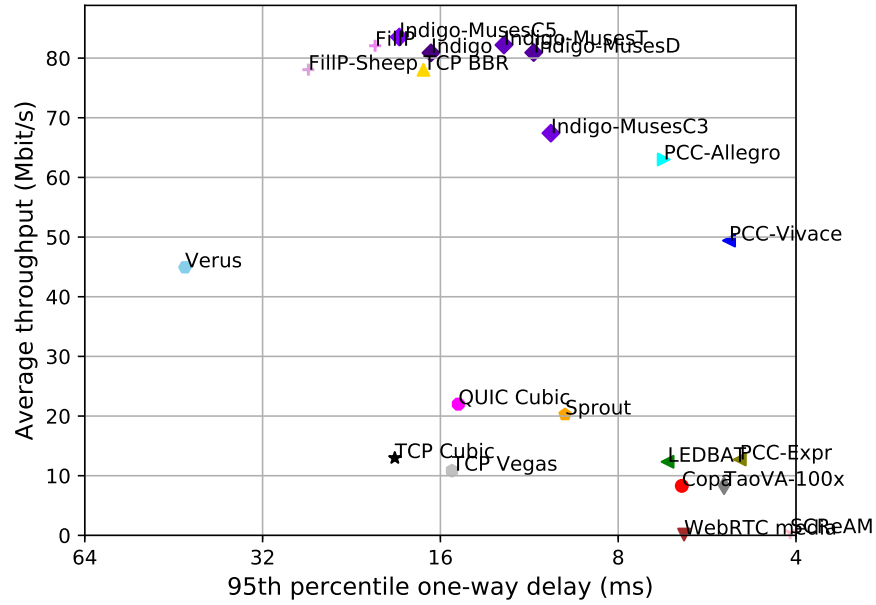
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
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
```
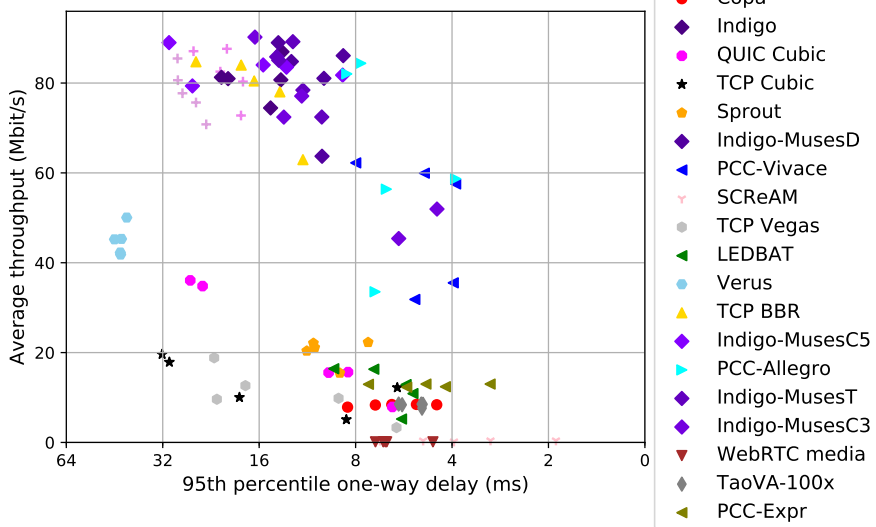
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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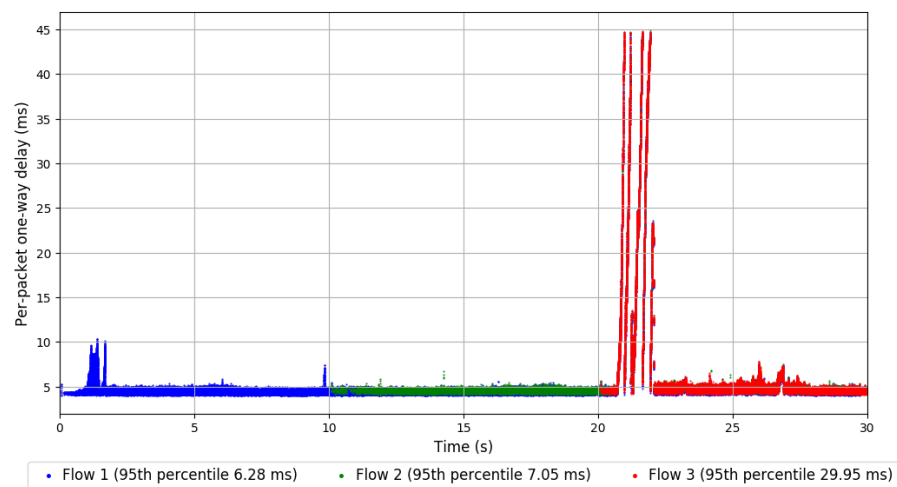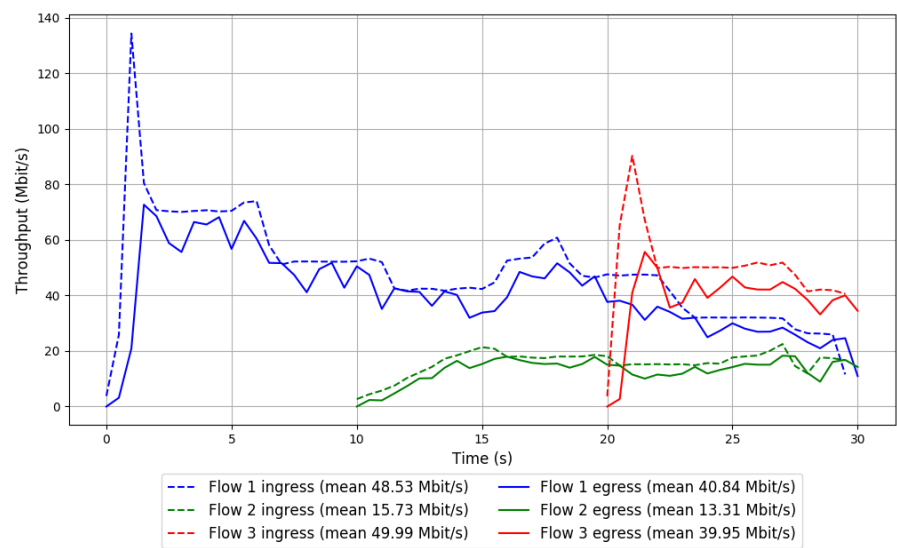3 flows with 10s interval between flows

3

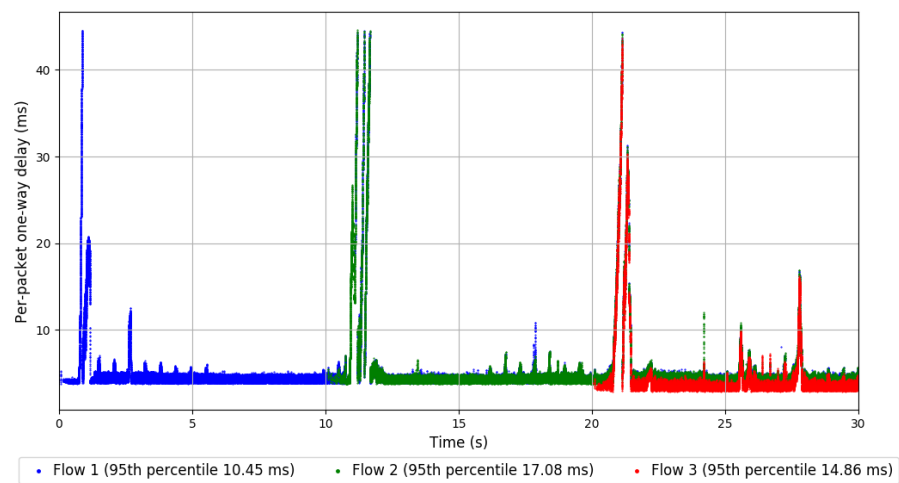| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	48.61	28.74	31.11	14.28	19.71	20.06	15.83	17.79	18.16
Copa	5	0.00	10.16	4.62	6.42	6.63	5.93	98.03	68.85	76.06
TCP Cubic	5	5.54	6.95	8.43	20.66	17.77	12.70	2.98	5.90	2.99
FillP	5	47.48	39.38	25.42	19.99	23.22	15.71	27.26	37.04	39.77
FillP-Sheep	5	44.83	36.13	27.72	25.06	29.98	24.04	16.50	20.73	21.70
Indigo	5	50.93	31.45	28.38	15.45	20.36	14.11	20.17	32.26	40.82
Indigo-MusesC3	5	41.57	24.52	33.33	9.64	8.78	10.50	10.54	10.72	11.95
Indigo-MusesC5	5	65.07	24.17	9.10	18.29	20.03	18.84	14.13	16.45	18.02
Indigo-MusesD	5	75.53	6.35	4.26	11.09	11.32	11.38	12.38	12.41	12.60
Indigo-MusesT	5	69.14	14.64	12.36	13.49	11.55	9.83	15.59	14.83	13.25
LEDBAT	5	6.68	6.35	4.61	6.30	6.51	6.88	1.10	1.09	1.63
PCC-Allegro	5	56.34	5.82	8.50	6.62	5.94	5.82	13.30	11.09	10.60
PCC-Expr	5	7.87	4.91	4.82	4.97	5.00	5.01	39.98	33.24	28.38
QUIC Cubic	5	9.49	12.66	12.43	14.46	17.12	12.07	3.82	3.84	2.54
SCReAM	5	0.18	0.19	0.19	3.74	3.72	4.13	0.69	0.71	1.14
Sprout	5	10.54	10.21	8.89	9.79	9.85	10.00	1.69	2.22	2.78
TaoVA-100x	5	0.00	9.72	5.58	5.24	5.68	6.18	95.92	74.42	50.48
TCP Vegas	5	5.73	4.45	6.48	14.79	9.56	16.36	4.01	3.04	4.88
Verus	5	23.95	23.74	17.95	43.64	42.57	41.24	64.06	37.76	41.69
PCC-Vivace	5	38.58	14.38	3.95	5.21	4.66	4.91	7.66	8.02	7.63
WebRTC media	5	0.05	0.04	0.05	6.04	6.07	6.34	0.40	0.18	1.88

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-25 01:23:55
End at: 2019-01-25 01:24:25
Local clock offset: 0.481 ms
Remote clock offset: -4.458 ms


# Below is generated by plot.py at 2019-01-25 03:19:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.95 Mbit/s
95th percentile per-packet one-way delay: 11.681 ms
Loss rate: 16.72%
-- Flow 1:
Average throughput: 40.84 Mbit/s
95th percentile per-packet one-way delay: 6.283 ms
Loss rate: 15.85%
-- Flow 2:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 7.046 ms
Loss rate: 15.44%
-- Flow 3:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 29.953 ms
Loss rate: 20.09%
```
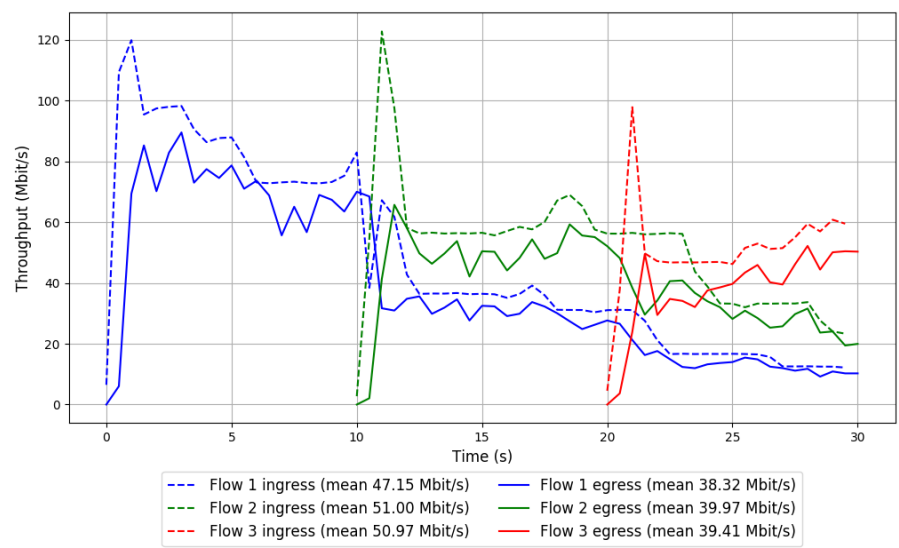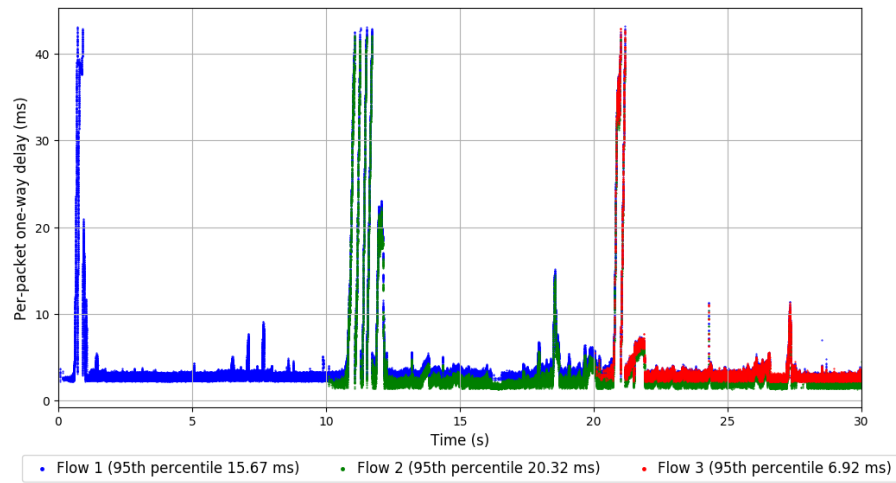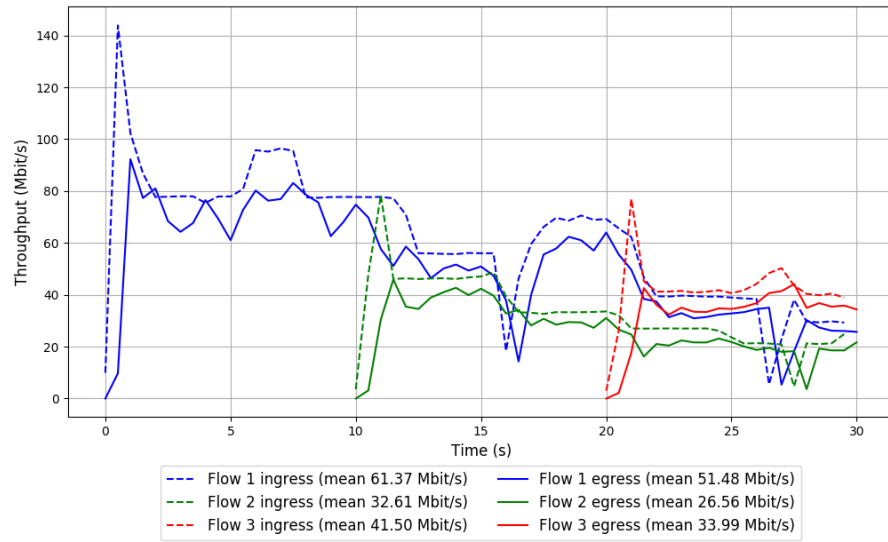
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 48.53 Mbit/s) --- Flow 1 egress (mean 40.84 Mbit/s)
Flow 2 ingress (mean 15.73 Mbit/s) --- Flow 2 egress (mean 13.31 Mbit/s)
Flow 3 ingress (mean 49.99 Mbit/s) --- Flow 3 egress (mean 39.95 Mbit/s)

Flow 1 (95th percentile 6.28 ms)   Flow 2 (95th percentile 7.05 ms)   Flow 3 (95th percentile 29.95 ms)
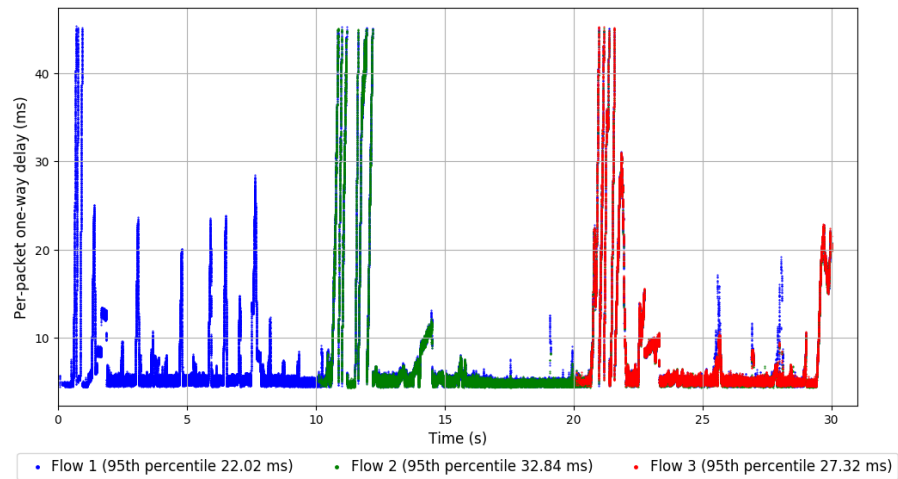
6

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-25 01:50:41
End at: 2019-01-25 01:51:11
Local clock offset: 1.118 ms
Remote clock offset: -5.768 ms


# Below is generated by plot.py at 2019-01-25 03:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.04 Mbit/s
95th percentile per-packet one-way delay: 13.789 ms
Loss rate: 20.41%
-- Flow 1:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 10.451 ms
Loss rate: 18.74%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 17.083 ms
Loss rate: 21.62%
-- Flow 3:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 14.860 ms
Loss rate: 22.67%
```

Run 2: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 47.15 Mbit/s) —— Flow 1 egress (mean 38.32 Mbit/s)
- - - Flow 2 ingress (mean 51.00 Mbit/s) —— Flow 2 egress (mean 39.97 Mbit/s)
- - - Flow 3 ingress (mean 50.97 Mbit/s) —— Flow 3 egress (mean 39.41 Mbit/s)

- Flow 1 (95th percentile 10.45 ms)   - Flow 2 (95th percentile 17.08 ms)   - Flow 3 (95th percentile 14.86 ms)
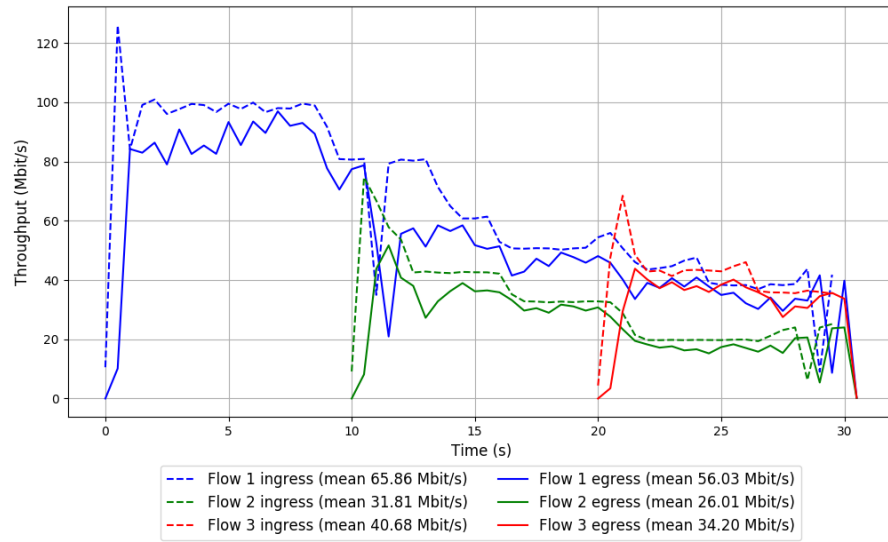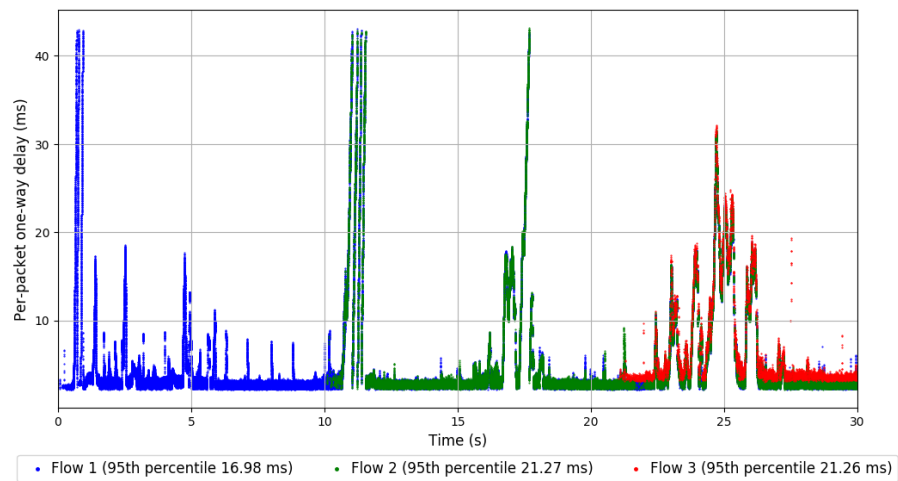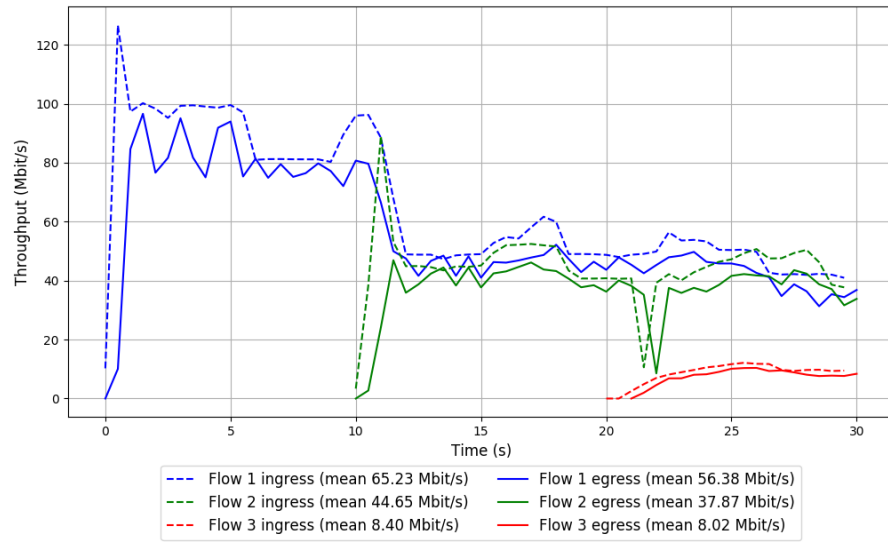
8

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-25 02:17:02
End at: 2019-01-25 02:17:32
Local clock offset: 2.24 ms
Remote clock offset: -5.457 ms


# Below is generated by plot.py at 2019-01-25 03:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.47 Mbit/s
95th percentile per-packet one-way delay: 16.581 ms
Loss rate: 16.95%
-- Flow 1:
Average throughput: 51.48 Mbit/s
95th percentile per-packet one-way delay: 15.674 ms
Loss rate: 16.12%
-- Flow 2:
Average throughput: 26.56 Mbit/s
95th percentile per-packet one-way delay: 20.324 ms
Loss rate: 18.56%
-- Flow 3:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 6.917 ms
Loss rate: 18.11%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 61.37 Mbit/s)   Flow 1 egress (mean 51.48 Mbit/s)
Flow 2 ingress (mean 32.61 Mbit/s)   Flow 2 egress (mean 26.56 Mbit/s)
Flow 3 ingress (mean 41.50 Mbit/s)   Flow 3 egress (mean 33.99 Mbit/s)

Flow 1 (95th percentile 15.67 ms)   Flow 2 (95th percentile 20.32 ms)   Flow 3 (95th percentile 6.92 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-25 02:43:50
End at: 2019-01-25 02:44:20
Local clock offset: 1.17 ms
Remote clock offset: -3.084 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.74 Mbit/s
95th percentile per-packet one-way delay: 25.201 ms
Loss rate: 15.70%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 22.018 ms
Loss rate: 14.89%
-- Flow 2:
Average throughput: 26.01 Mbit/s
95th percentile per-packet one-way delay: 32.844 ms
Loss rate: 18.16%
-- Flow 3:
Average throughput: 34.20 Mbit/s
95th percentile per-packet one-way delay: 27.324 ms
Loss rate: 15.81%
```
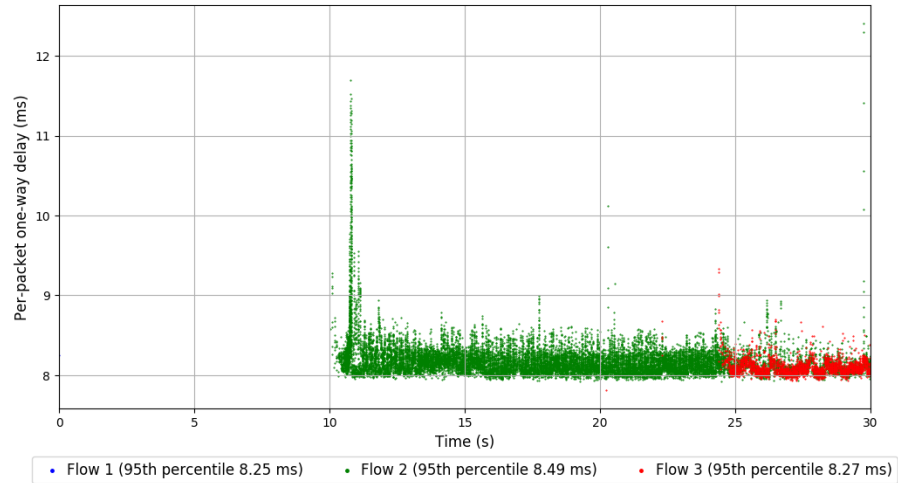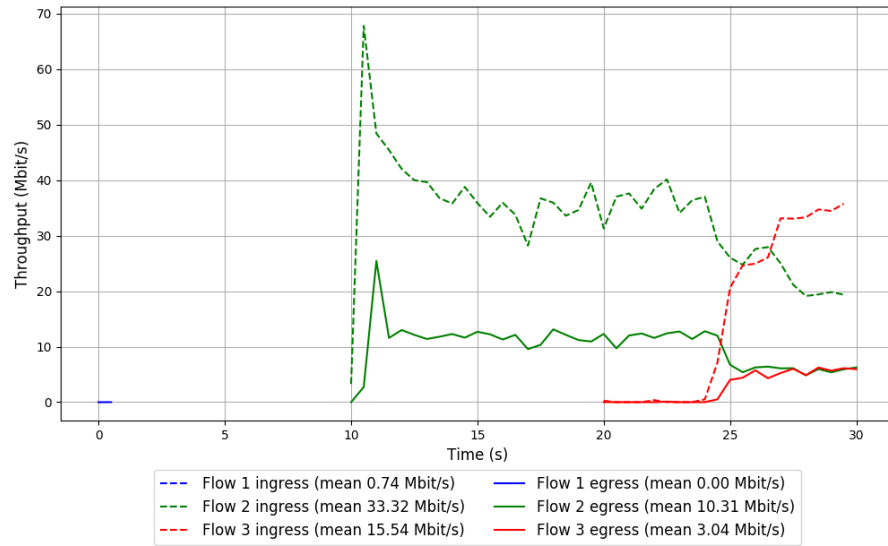
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 65.86 Mbit/s) --- Flow 1 egress (mean 56.03 Mbit/s)
Flow 2 ingress (mean 31.81 Mbit/s) --- Flow 2 egress (mean 26.01 Mbit/s)
Flow 3 ingress (mean 40.68 Mbit/s) --- Flow 3 egress (mean 34.20 Mbit/s)

Flow 1 (95th percentile 22.02 ms) • Flow 2 (95th percentile 32.84 ms) • Flow 3 (95th percentile 27.32 ms)

12

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-25 03:10:26
End at: 2019-01-25 03:10:56
Local clock offset: 1.348 ms
Remote clock offset: -5.142 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.00 Mbit/s
95th percentile per-packet one-way delay: 18.207 ms
Loss rate: 14.08%
-- Flow 1:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 16.978 ms
Loss rate: 13.57%
-- Flow 2:
Average throughput: 37.87 Mbit/s
95th percentile per-packet one-way delay: 21.272 ms
Loss rate: 15.18%
-- Flow 3:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 21.263 ms
Loss rate: 14.11%
```

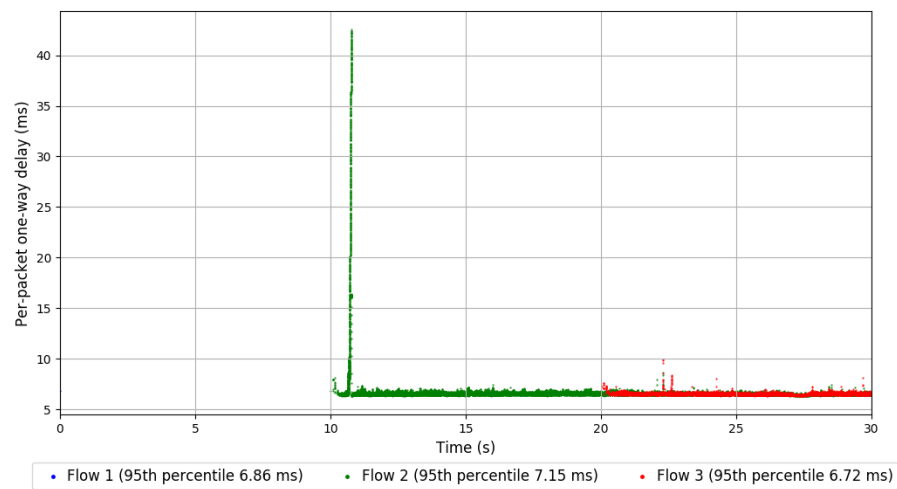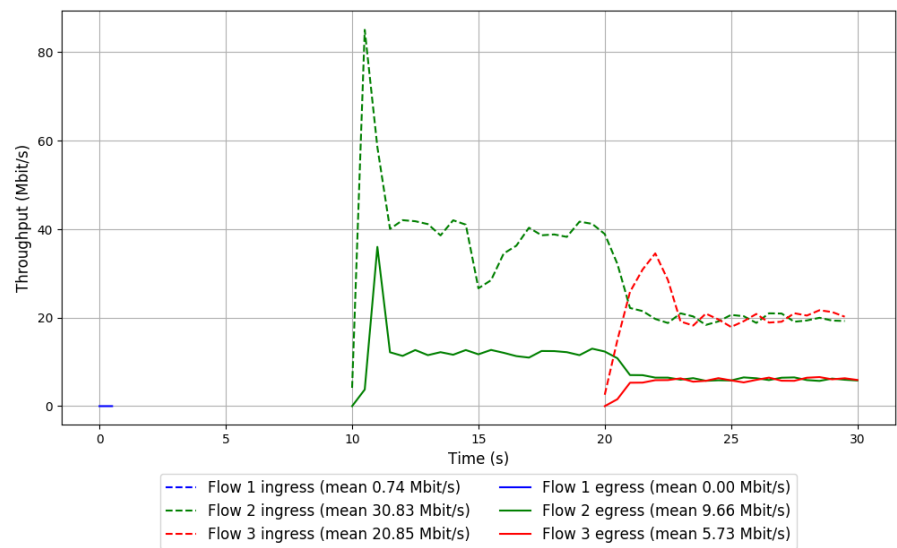Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-01-25 01:16:46
End at: 2019-01-25 01:17:16
Local clock offset: -2.42 ms
Remote clock offset: -3.574 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 8.475 ms
Loss rate: 71.28%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8.249 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 10.31 Mbit/s
95th percentile per-packet one-way delay: 8.491 ms
Loss rate: 69.06%
-- Flow 3:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 8.266 ms
Loss rate: 80.86%
```
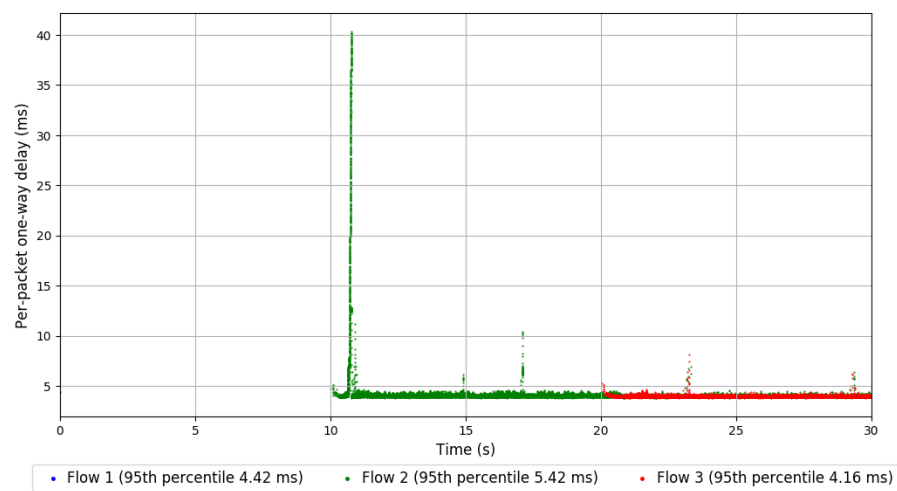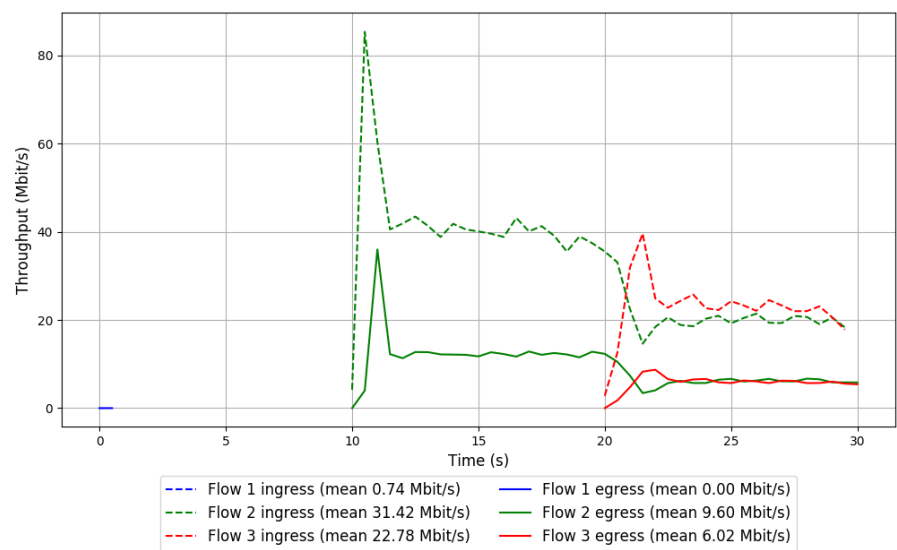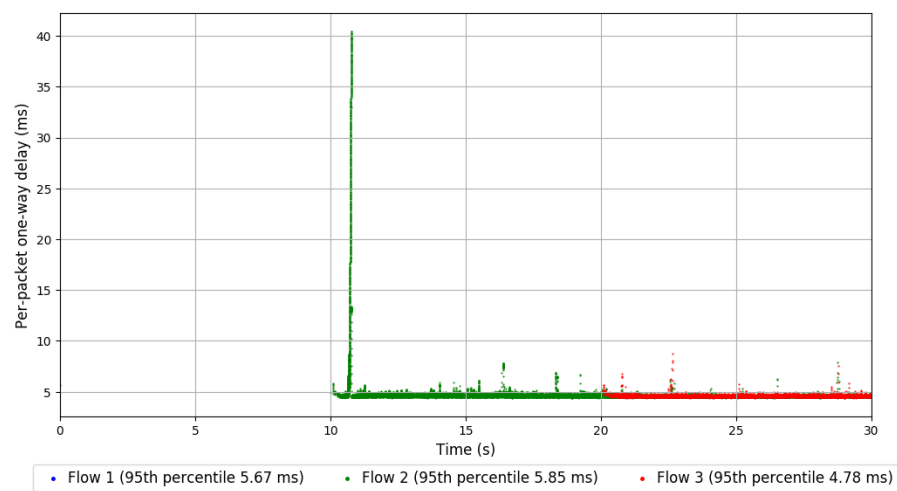
Run 1: Report of Copa — Data Link

- - - Flow 1 ingress (mean 0.74 Mbit/s)   —— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 33.32 Mbit/s)   —— Flow 2 egress (mean 10.31 Mbit/s)
- - - Flow 3 ingress (mean 15.54 Mbit/s)   —— Flow 3 egress (mean 3.04 Mbit/s)

• Flow 1 (95th percentile 8.25 ms)   • Flow 2 (95th percentile 8.49 ms)   • Flow 3 (95th percentile 8.27 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-25 01:43:06
End at: 2019-01-25 01:43:36
Local clock offset: -0.617 ms
Remote clock offset: -3.704 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 6.941 ms
Loss rate: 69.65%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.859 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 7.150 ms
Loss rate: 68.67%
-- Flow 3:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 6.722 ms
Loss rate: 72.54%
```
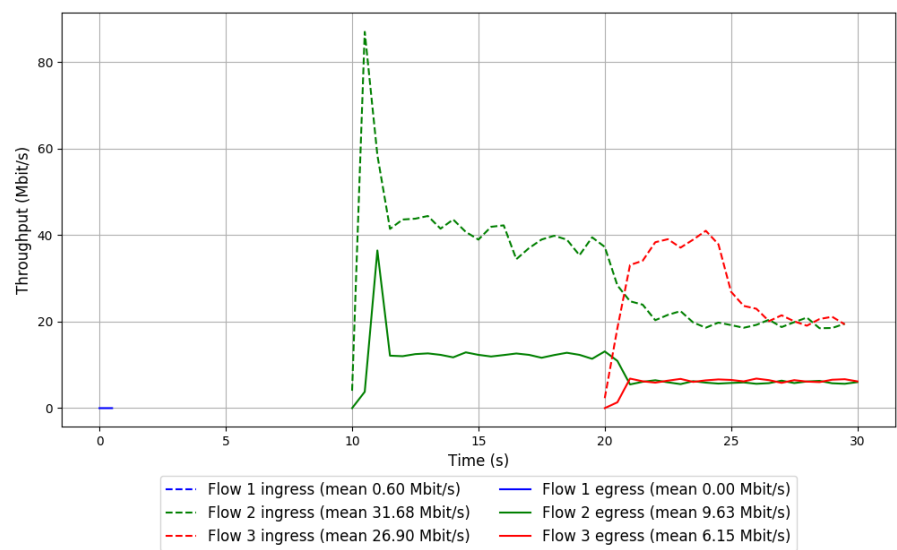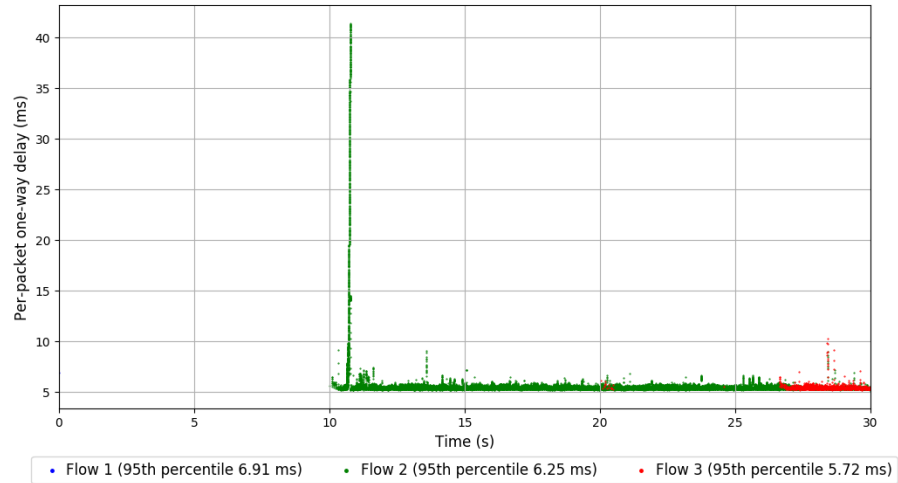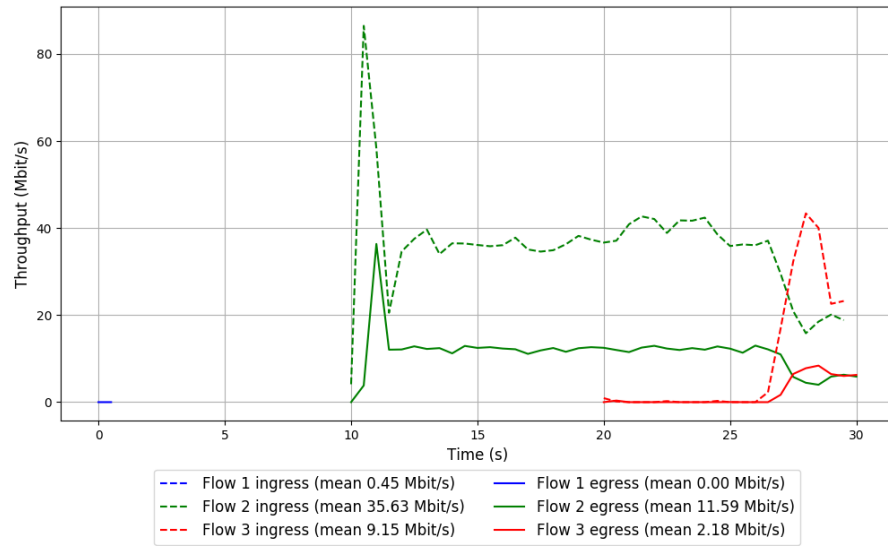
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 0.74 Mbit/s) — — — — Flow 1 egress (mean 0.00 Mbit/s) ————
Flow 2 ingress (mean 30.83 Mbit/s) — — — Flow 2 egress (mean 9.66 Mbit/s) ————
Flow 3 ingress (mean 20.85 Mbit/s) — — — Flow 3 egress (mean 5.73 Mbit/s) ————

• Flow 1 (95th percentile 6.86 ms)   • Flow 2 (95th percentile 7.15 ms)   • Flow 3 (95th percentile 6.72 ms)

18

```
Run 3: Statistics of Copa

Start at: 2019-01-25 02:09:27
End at: 2019-01-25 02:09:57
Local clock offset: 0.459 ms
Remote clock offset: -4.933 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 4.465 ms
Loss rate: 70.54%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4.418 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 5.421 ms
Loss rate: 69.44%
-- Flow 3:
Average throughput: 6.02 Mbit/s
95th percentile per-packet one-way delay: 4.155 ms
Loss rate: 73.59%
```
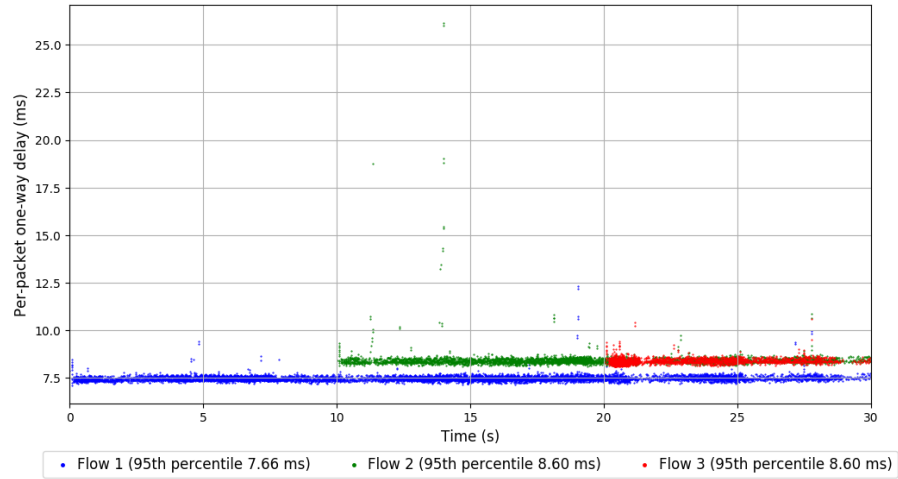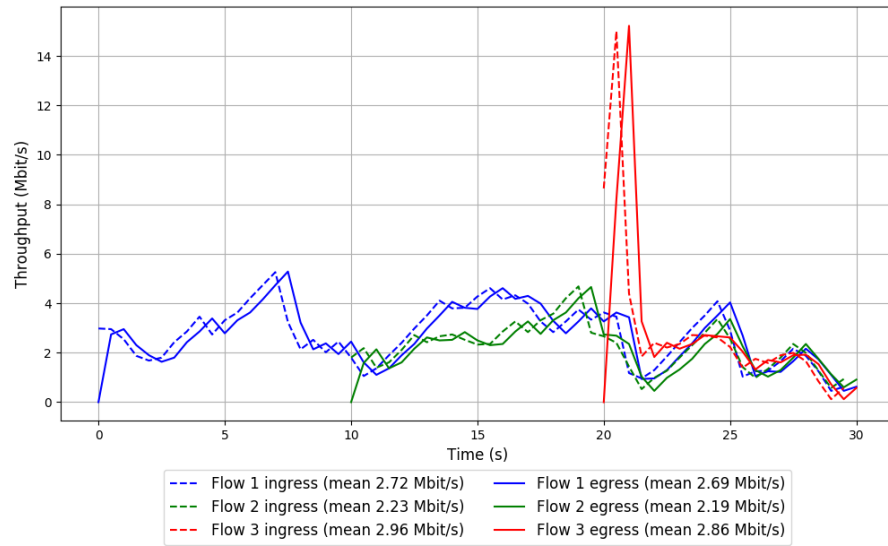
Run 3: Report of Copa — Data Link

- Flow 1 ingress (mean 0.74 Mbit/s)
- Flow 1 egress (mean 0.00 Mbit/s)
- Flow 2 ingress (mean 31.42 Mbit/s)
- Flow 2 egress (mean 9.60 Mbit/s)
- Flow 3 ingress (mean 22.78 Mbit/s)
- Flow 3 egress (mean 6.02 Mbit/s)

- Flow 1 (95th percentile 4.42 ms)
- Flow 2 (95th percentile 5.42 ms)
- Flow 3 (95th percentile 4.16 ms)

```
Run 4: Statistics of Copa

Start at: 2019-01-25 02:36:20
End at: 2019-01-25 02:36:50
Local clock offset: 1.494 ms
Remote clock offset: -2.834 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 5.166 ms
Loss rate: 71.84%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.673 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 9.63 Mbit/s
95th percentile per-packet one-way delay: 5.846 ms
Loss rate: 69.59%
-- Flow 3:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 4.780 ms
Loss rate: 77.14%
```
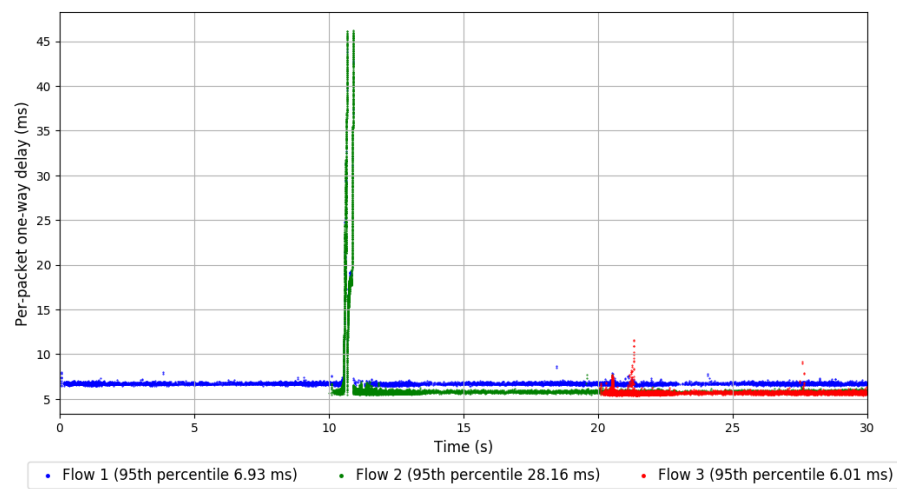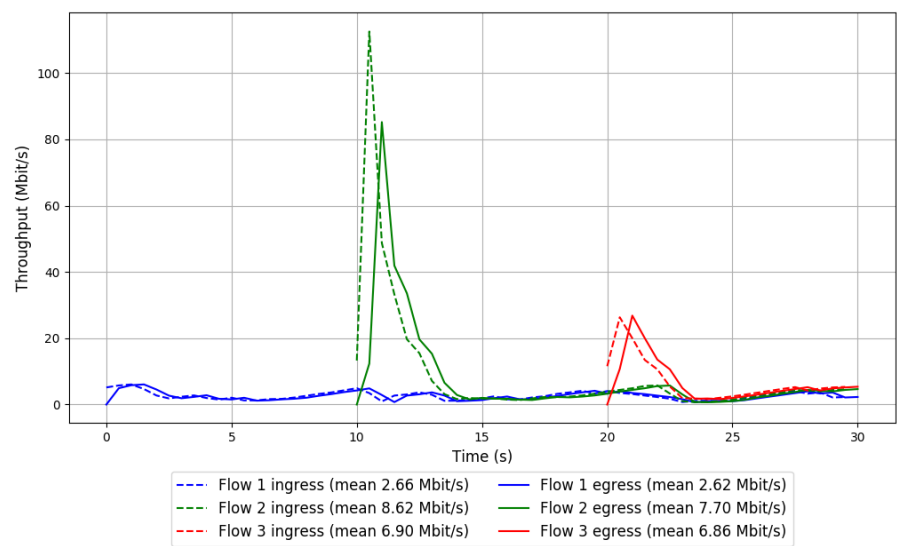
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-01-25 03:03:09
End at: 2019-01-25 03:03:39
Local clock offset: -1.569 ms
Remote clock offset: -4.989 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 6.168 ms
Loss rate: 68.46%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.909 ms
Loss rate: 97.24%
-- Flow 2:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 6.251 ms
Loss rate: 67.47%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 5.722 ms
Loss rate: 76.17%
```
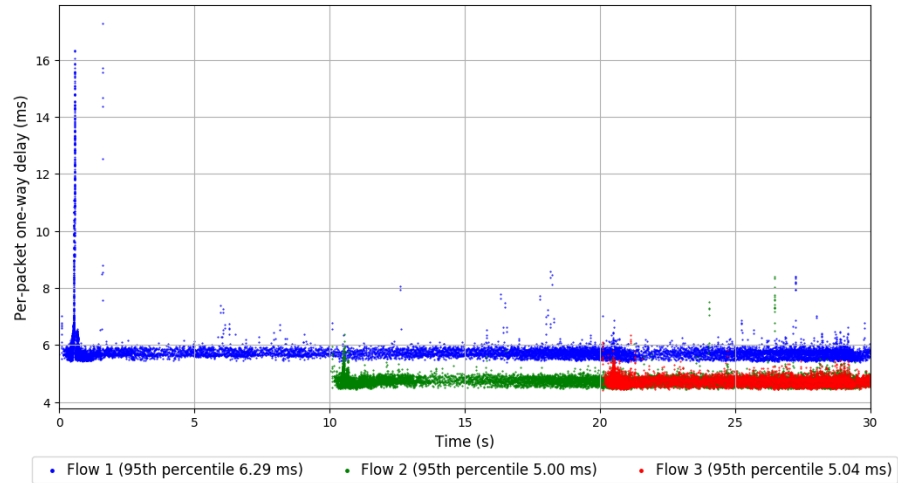
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 0.45 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 35.63 Mbit/s) --- Flow 2 egress (mean 11.59 Mbit/s)
Flow 3 ingress (mean 9.15 Mbit/s) --- Flow 3 egress (mean 2.18 Mbit/s)

Flow 1 (95th percentile 6.91 ms) Flow 2 (95th percentile 6.25 ms) Flow 3 (95th percentile 5.72 ms)
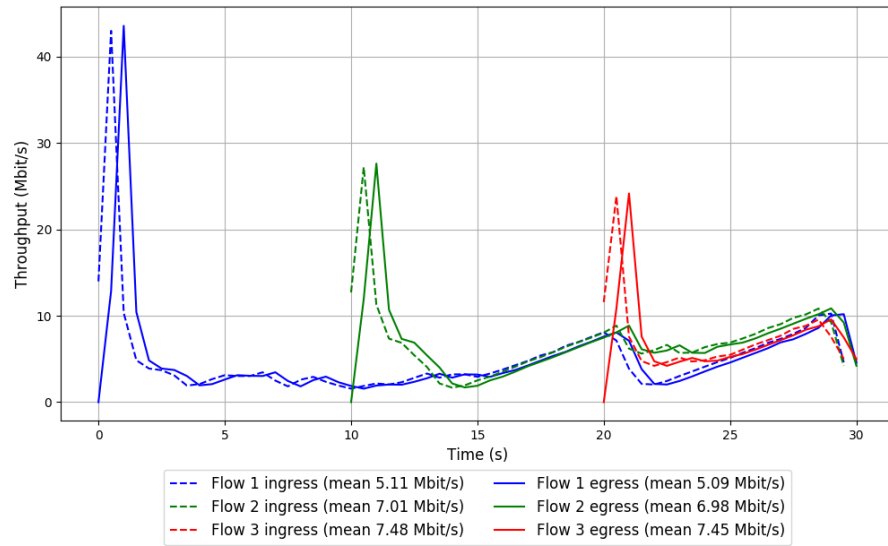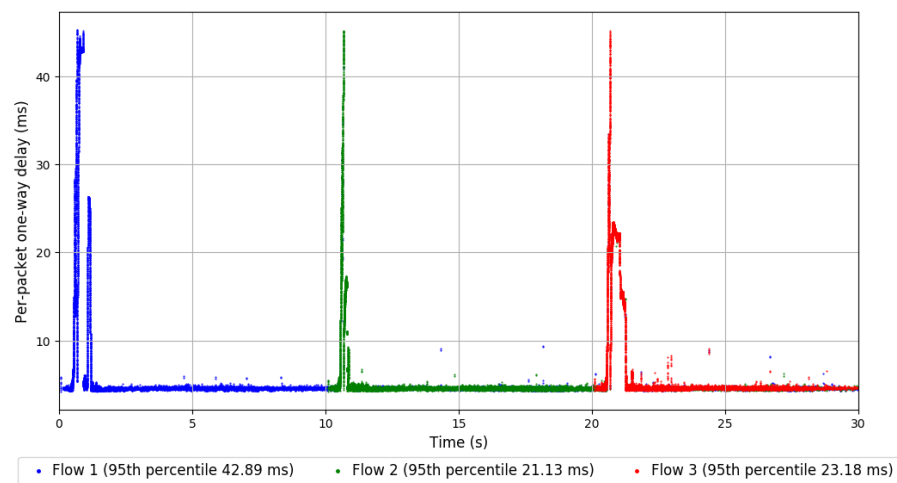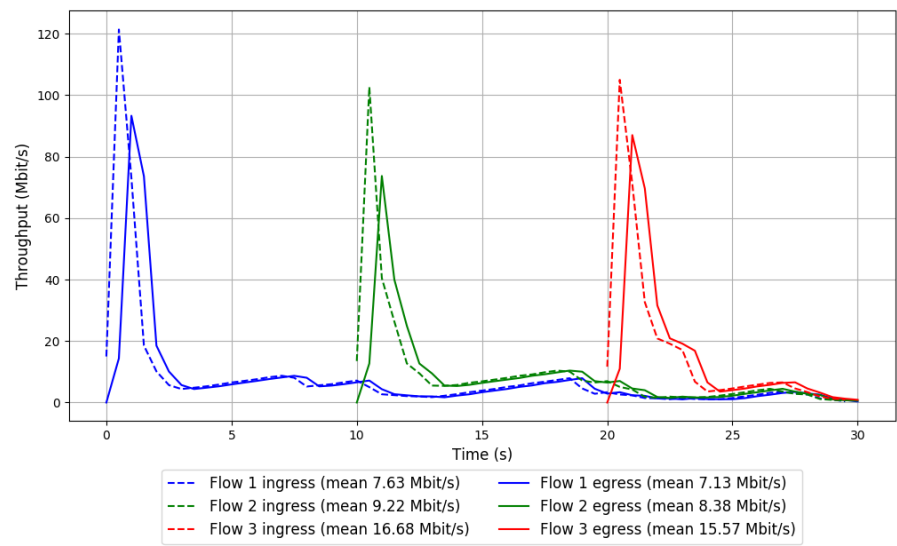
24

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 01:30:08
End at: 2019-01-25 01:30:38
Local clock offset: -2.093 ms
Remote clock offset: -2.974 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 8.549 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 7.658 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 8.596 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 8.599 ms
Loss rate: 3.50%
```

Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 2.72 Mbit/s)   Flow 1 egress (mean 2.69 Mbit/s)
Flow 2 ingress (mean 2.23 Mbit/s)   Flow 2 egress (mean 2.19 Mbit/s)
Flow 3 ingress (mean 2.96 Mbit/s)   Flow 3 egress (mean 2.86 Mbit/s)

Flow 1 (95th percentile 7.66 ms)   Flow 2 (95th percentile 8.60 ms)   Flow 3 (95th percentile 8.60 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-25 01:56:45
End at: 2019-01-25 01:57:15
Local clock offset: 0.932 ms
Remote clock offset: -3.587 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 18.435 ms
Loss rate: 6.20%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 6.927 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 28.163 ms
Loss rate: 10.62%
-- Flow 3:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: 6.015 ms
Loss rate: 0.63%
```
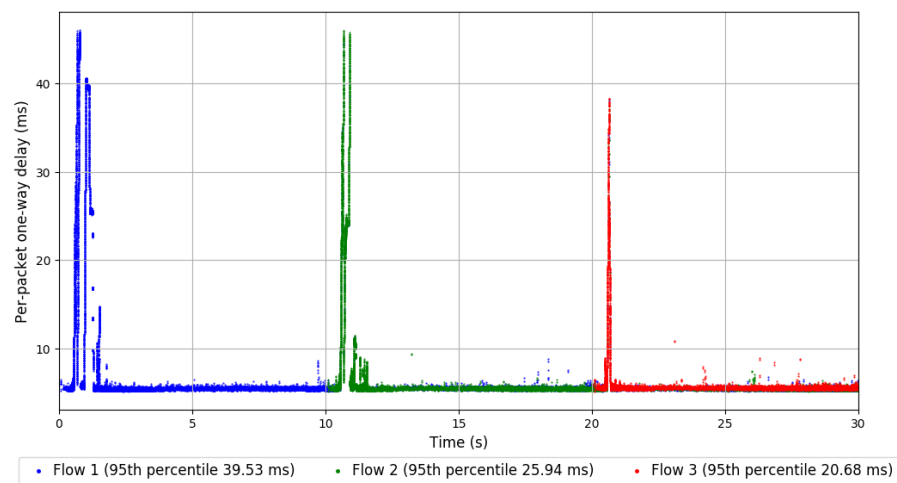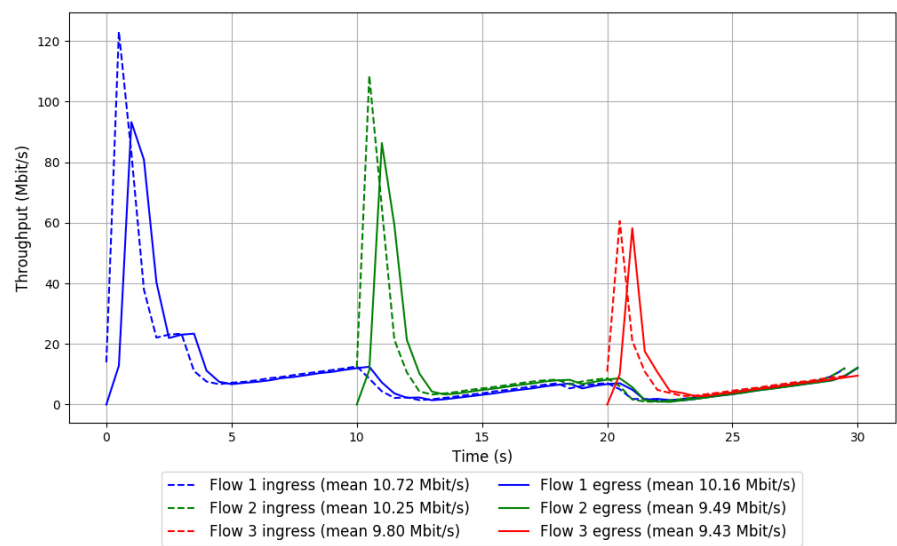
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 2.66 Mbit/s) --- Flow 1 egress (mean 2.62 Mbit/s)
Flow 2 ingress (mean 8.62 Mbit/s) --- Flow 2 egress (mean 7.70 Mbit/s)
Flow 3 ingress (mean 6.90 Mbit/s) --- Flow 3 egress (mean 6.86 Mbit/s)

Flow 1 (95th percentile 6.93 ms)   Flow 2 (95th percentile 28.16 ms)   Flow 3 (95th percentile 6.01 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-25 02:23:19
End at: 2019-01-25 02:23:49
Local clock offset: 1.031 ms
Remote clock offset: -3.453 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.21 Mbit/s
95th percentile per-packet one-way delay: 5.928 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 6.289 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 5.004 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 7.45 Mbit/s
95th percentile per-packet one-way delay: 5.037 ms
Loss rate: 0.45%
```

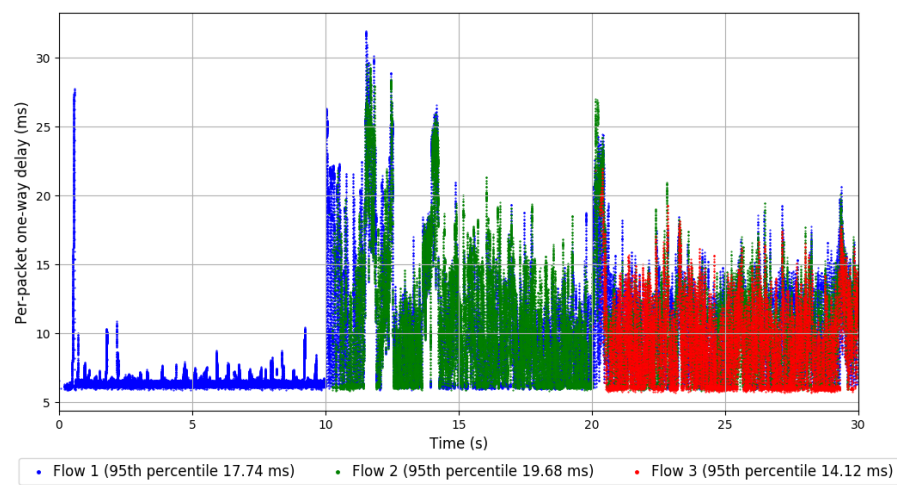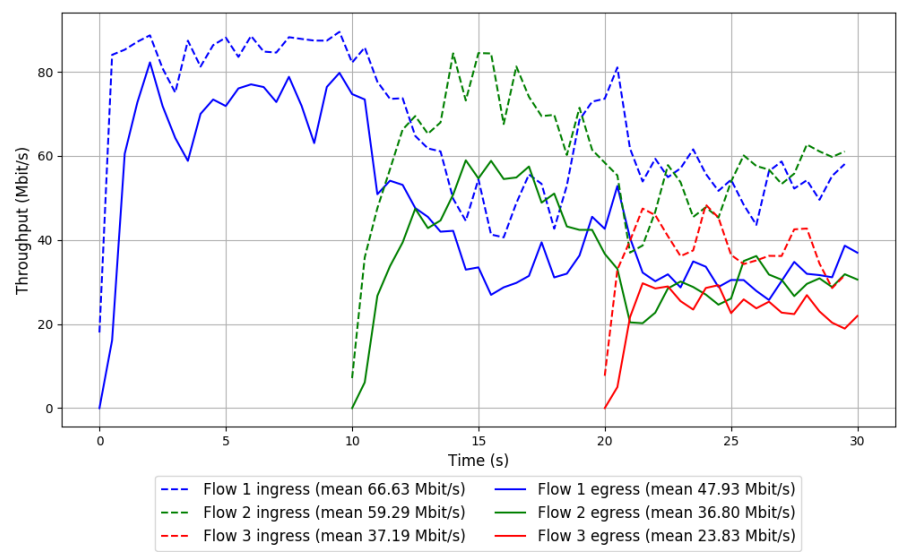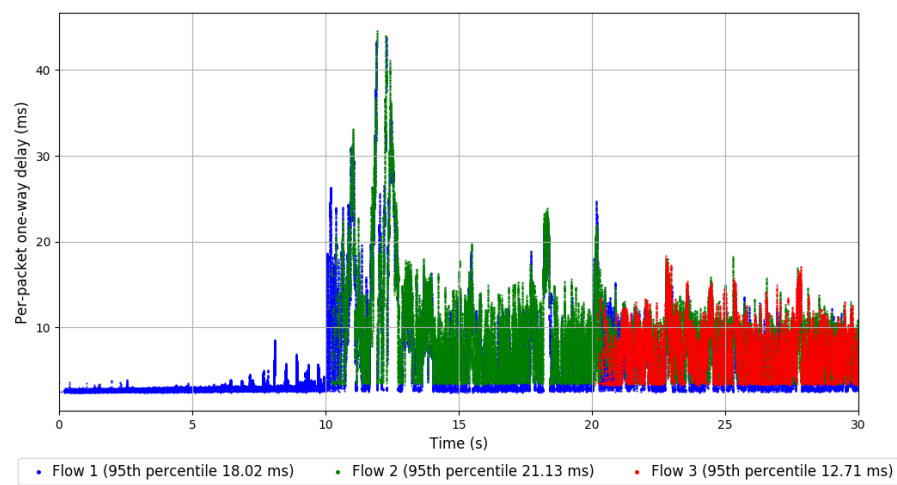Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 5.11 Mbit/s)   Flow 1 egress (mean 5.09 Mbit/s)
Flow 2 ingress (mean 7.01 Mbit/s)   Flow 2 egress (mean 6.98 Mbit/s)
Flow 3 ingress (mean 7.48 Mbit/s)   Flow 3 egress (mean 7.45 Mbit/s)

Flow 1 (95th percentile 6.29 ms)   Flow 2 (95th percentile 5.00 ms)   Flow 3 (95th percentile 5.04 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 02:50:08
End at: 2019-01-25 02:50:38
Local clock offset: -0.318 ms
Remote clock offset: -4.633 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.87 Mbit/s
95th percentile per-packet one-way delay: 30.508 ms
Loss rate: 7.40%
-- Flow 1:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 42.893 ms
Loss rate: 6.59%
-- Flow 2:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 21.133 ms
Loss rate: 9.05%
-- Flow 3:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 23.183 ms
Loss rate: 6.67%
```
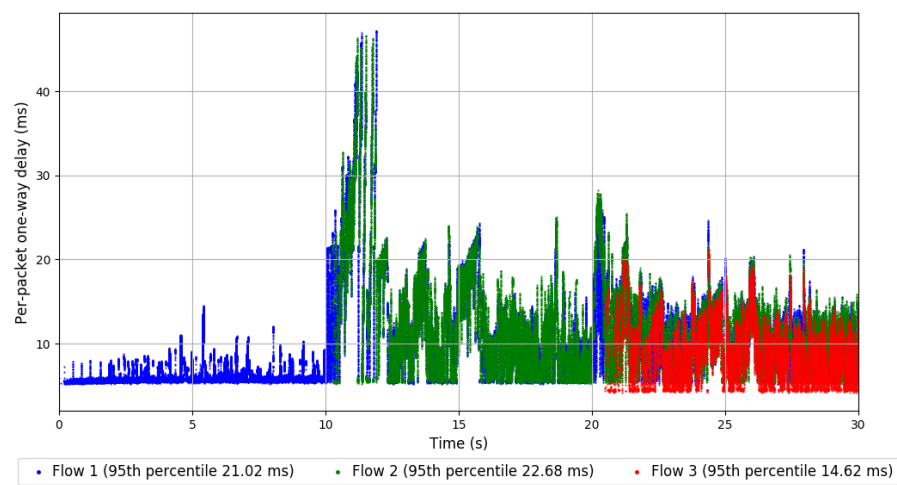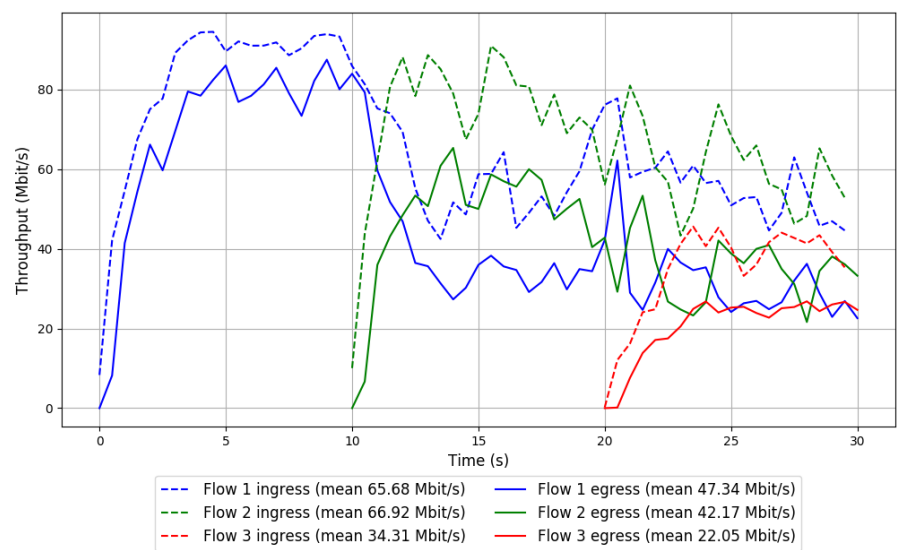
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 7.63 Mbit/s) --- Flow 1 egress (mean 7.13 Mbit/s)
Flow 2 ingress (mean 9.22 Mbit/s) --- Flow 2 egress (mean 8.38 Mbit/s)
Flow 3 ingress (mean 16.68 Mbit/s) --- Flow 3 egress (mean 15.57 Mbit/s)

Flow 1 (95th percentile 42.89 ms) • Flow 2 (95th percentile 21.13 ms) • Flow 3 (95th percentile 23.18 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-25 03:16:38
End at: 2019-01-25 03:17:08
Local clock offset: 0.605 ms
Remote clock offset: -3.722 ms


# Below is generated by plot.py at 2019-01-25 03:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.62 Mbit/s
95th percentile per-packet one-way delay: 32.141 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 39.527 ms
Loss rate: 5.22%
-- Flow 2:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 25.939 ms
Loss rate: 7.36%
-- Flow 3:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 20.675 ms
Loss rate: 3.70%
```

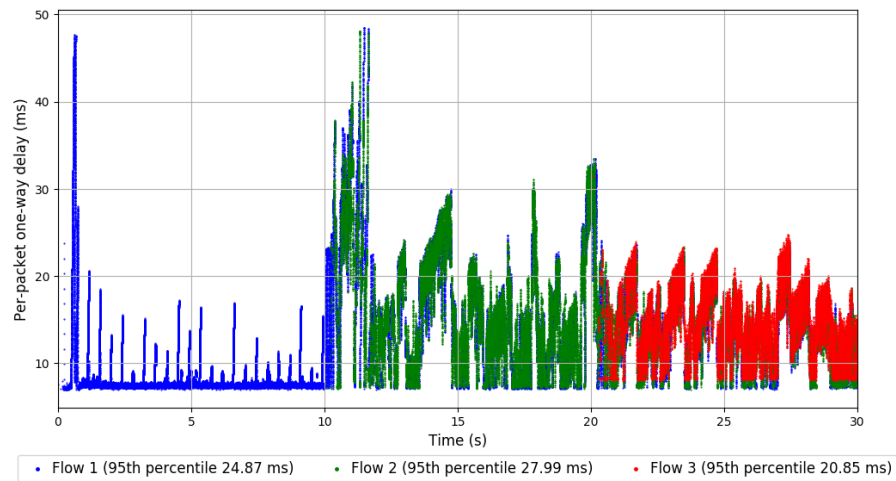Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2019-01-25 01:19:12
End at: 2019-01-25 01:19:42
Local clock offset: -2.126 ms
Remote clock offset: -5.11 ms


# Below is generated by plot.py at 2019-01-25 03:20:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.31 Mbit/s
95th percentile per-packet one-way delay: 17.977 ms
Loss rate: 32.17%
-- Flow 1:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 17.742 ms
Loss rate: 28.06%
-- Flow 2:
Average throughput: 36.80 Mbit/s
95th percentile per-packet one-way delay: 19.681 ms
Loss rate: 37.92%
-- Flow 3:
Average throughput: 23.83 Mbit/s
95th percentile per-packet one-way delay: 14.124 ms
Loss rate: 35.94%
```
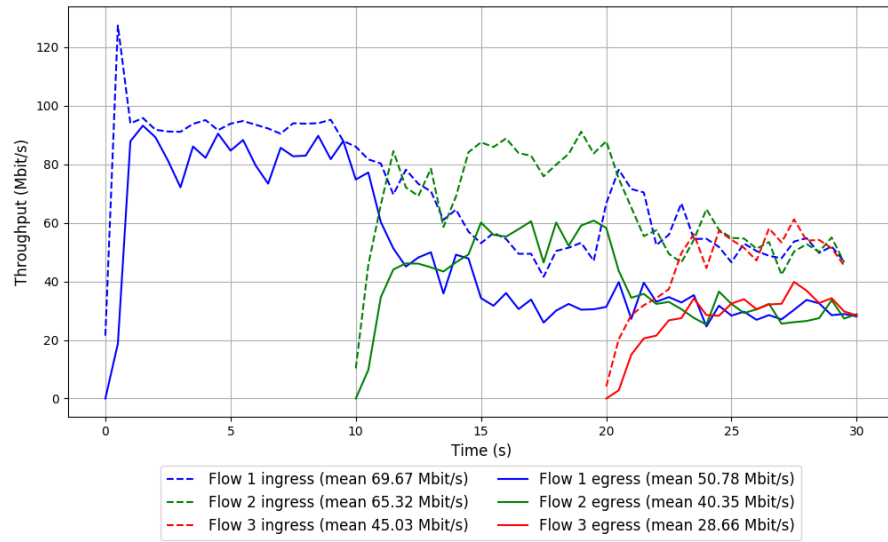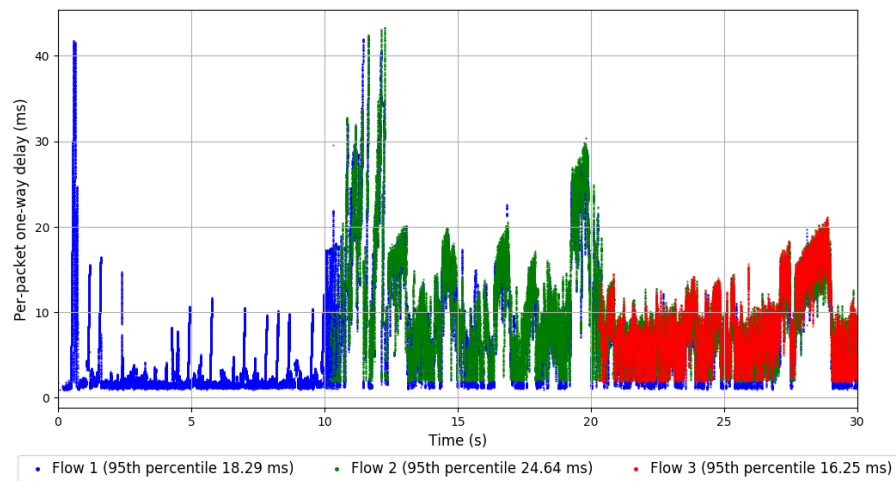
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-01-25 01:45:41
End at: 2019-01-25 01:46:11
Local clock offset: 1.884 ms
Remote clock offset: -5.117 ms


# Below is generated by plot.py at 2019-01-25 03:20:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.78 Mbit/s
95th percentile per-packet one-way delay: 18.233 ms
Loss rate: 33.31%
-- Flow 1:
Average throughput: 39.07 Mbit/s
95th percentile per-packet one-way delay: 18.021 ms
Loss rate: 28.15%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 21.128 ms
Loss rate: 36.48%
-- Flow 3:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 12.713 ms
Loss rate: 43.81%
```
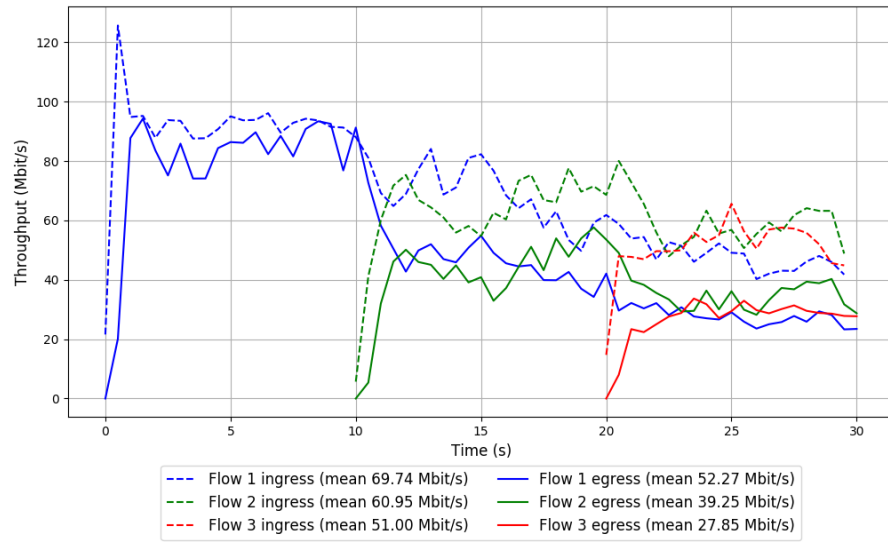
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-01-25 02:12:03
End at: 2019-01-25 02:12:33
Local clock offset: 0.311 ms
Remote clock offset: -4.389 ms


# Below is generated by plot.py at 2019-01-25 03:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.54 Mbit/s
95th percentile per-packet one-way delay: 21.154 ms
Loss rate: 32.11%
-- Flow 1:
Average throughput: 47.34 Mbit/s
95th percentile per-packet one-way delay: 21.021 ms
Loss rate: 27.93%
-- Flow 2:
Average throughput: 42.17 Mbit/s
95th percentile per-packet one-way delay: 22.679 ms
Loss rate: 36.98%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 14.619 ms
Loss rate: 37.18%
```
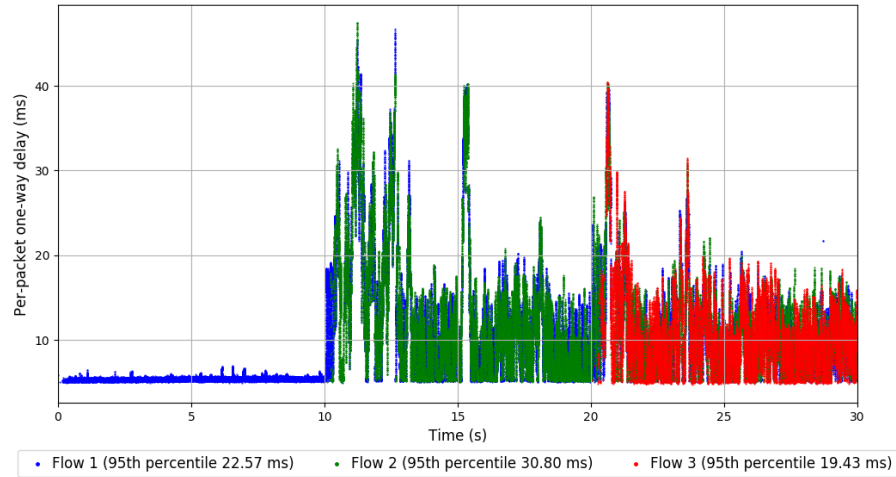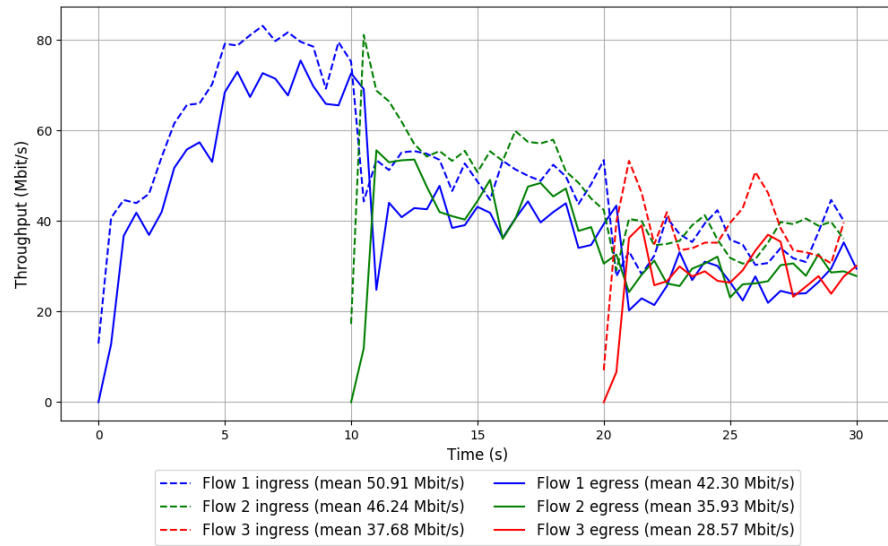
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-01-25 02:38:53
End at: 2019-01-25 02:39:23
Local clock offset: -2.012 ms
Remote clock offset: -3.595 ms

# Below is generated by plot.py at 2019-01-25 03:20:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.09 Mbit/s
95th percentile per-packet one-way delay: 25.650 ms
Loss rate: 31.98%
-- Flow 1:
Average throughput: 50.78 Mbit/s
95th percentile per-packet one-way delay: 24.874 ms
Loss rate: 27.12%
-- Flow 2:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 27.987 ms
Loss rate: 38.23%
-- Flow 3:
Average throughput: 28.66 Mbit/s
95th percentile per-packet one-way delay: 20.854 ms
Loss rate: 36.49%
```
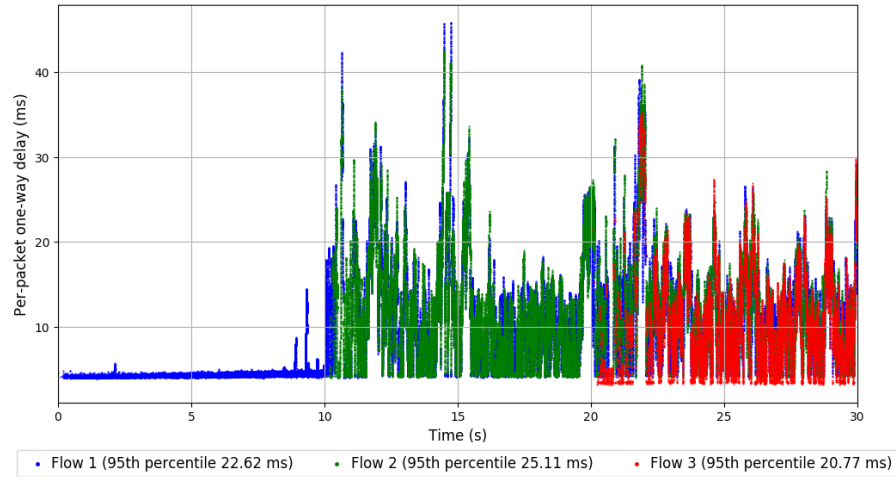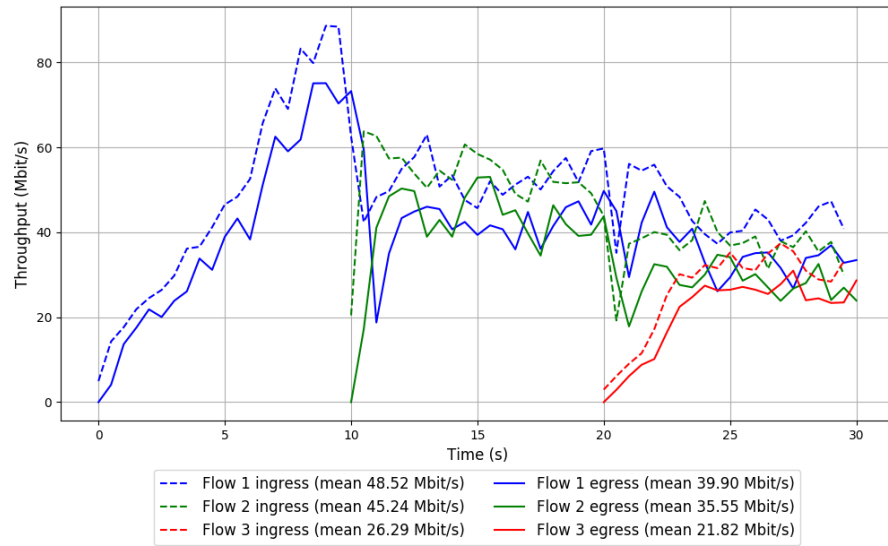
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 69.67 Mbit/s) --- Flow 1 egress (mean 50.78 Mbit/s)
Flow 2 ingress (mean 65.32 Mbit/s) --- Flow 2 egress (mean 40.35 Mbit/s)
Flow 3 ingress (mean 45.03 Mbit/s) --- Flow 3 egress (mean 28.66 Mbit/s)

Flow 1 (95th percentile 24.87 ms)   Flow 2 (95th percentile 27.99 ms)   Flow 3 (95th percentile 20.85 ms)

```
Run 5: Statistics of FillP

Start at: 2019-01-25 03:05:35
End at: 2019-01-25 03:06:05
Local clock offset: 2.116 ms
Remote clock offset: -5.428 ms


# Below is generated by plot.py at 2019-01-25 03:20:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 20.178 ms
Loss rate: 31.12%
-- Flow 1:
Average throughput: 52.27 Mbit/s
95th percentile per-packet one-way delay: 18.290 ms
Loss rate: 25.04%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 24.642 ms
Loss rate: 35.61%
-- Flow 3:
Average throughput: 27.85 Mbit/s
95th percentile per-packet one-way delay: 16.252 ms
Loss rate: 45.42%
```
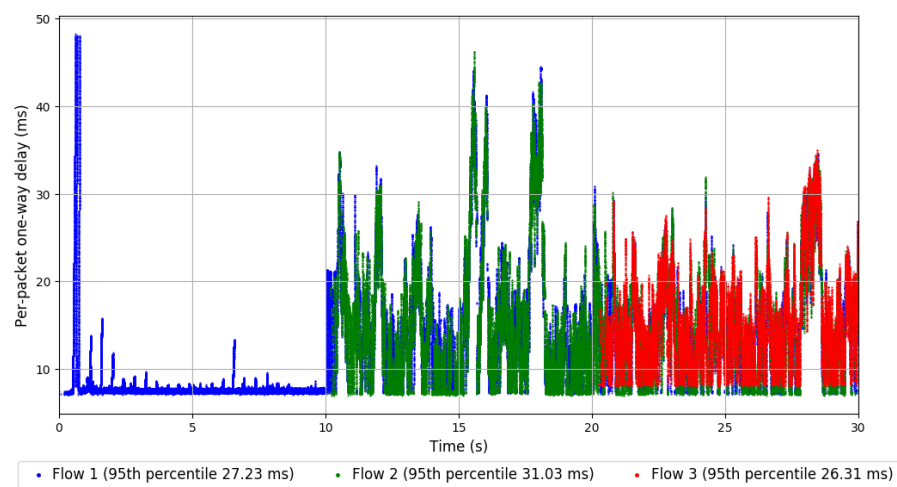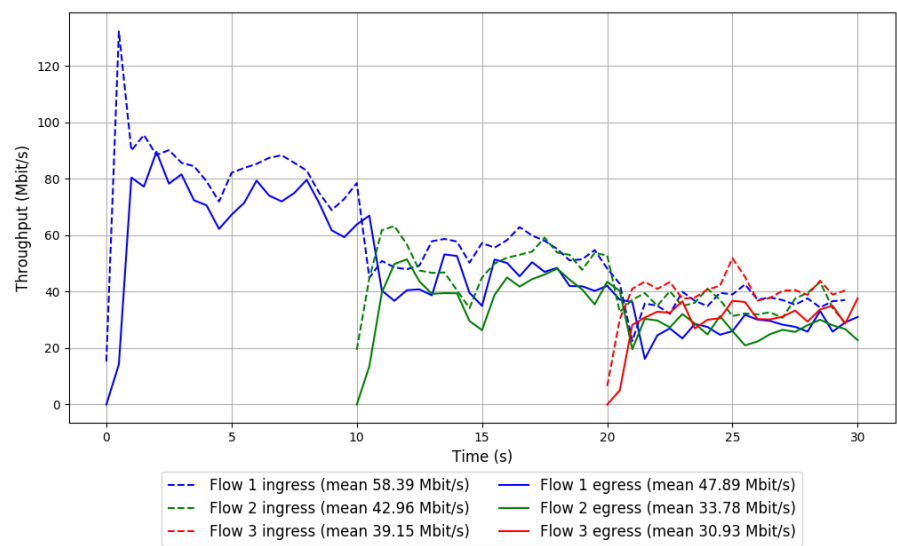
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 69.74 Mbit/s)   Flow 1 egress (mean 52.27 Mbit/s)
Flow 2 ingress (mean 60.95 Mbit/s)   Flow 2 egress (mean 39.25 Mbit/s)
Flow 3 ingress (mean 51.00 Mbit/s)   Flow 3 egress (mean 27.85 Mbit/s)

Flow 1 (95th percentile 18.29 ms)   Flow 2 (95th percentile 24.64 ms)   Flow 3 (95th percentile 16.25 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 01:05:38
End at: 2019-01-25 01:06:08
Local clock offset: -6.291 ms
Remote clock offset: -10.424 ms


# Below is generated by plot.py at 2019-01-25 03:20:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.67 Mbit/s
95th percentile per-packet one-way delay: 25.193 ms
Loss rate: 19.63%
-- Flow 1:
Average throughput: 42.30 Mbit/s
95th percentile per-packet one-way delay: 22.572 ms
Loss rate: 16.92%
-- Flow 2:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 30.797 ms
Loss rate: 22.29%
-- Flow 3:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 19.426 ms
Loss rate: 24.14%
```

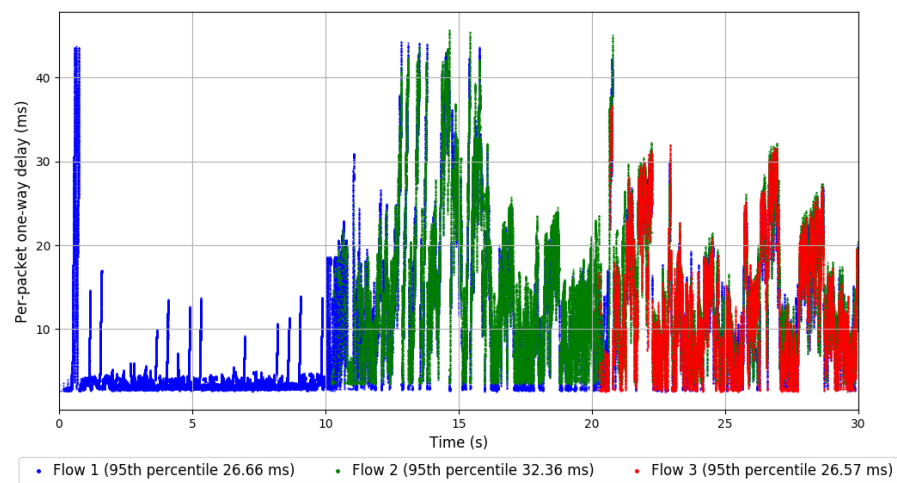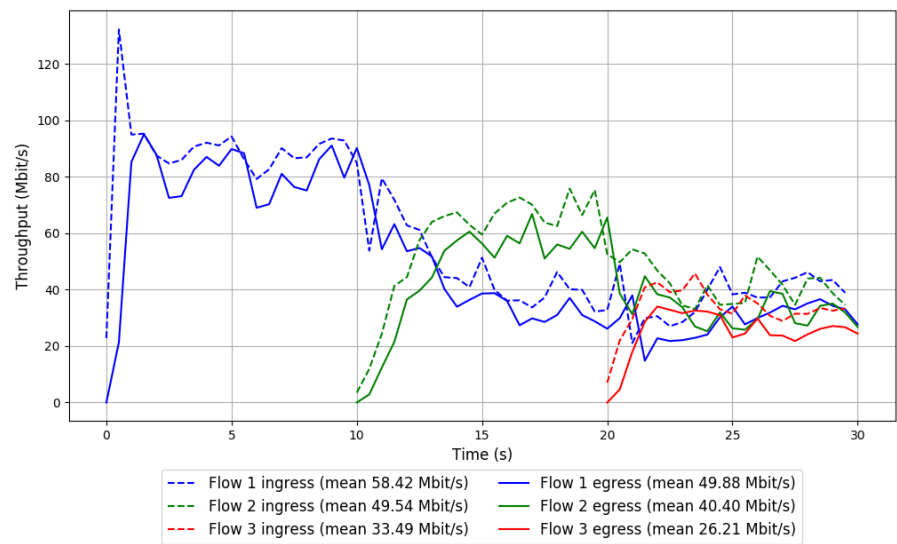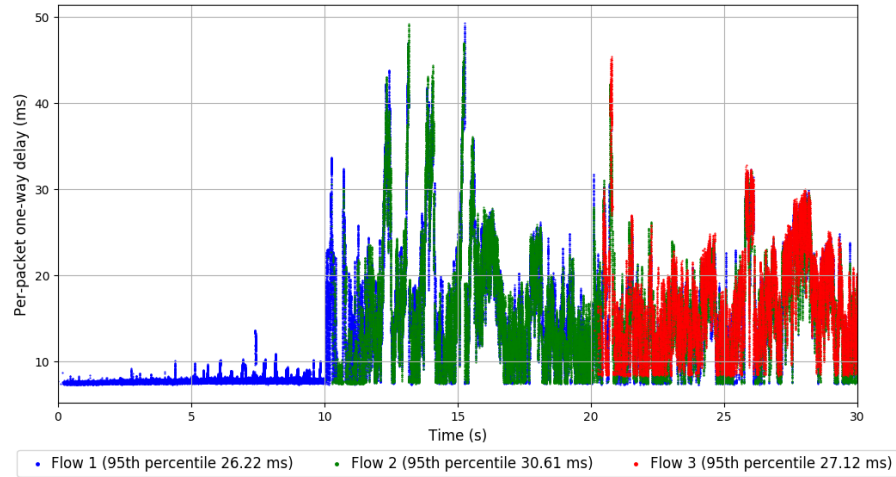Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 01:31:17
End at: 2019-01-25 01:31:47
Local clock offset: 1.058 ms
Remote clock offset: -3.75 ms


# Below is generated by plot.py at 2019-01-25 03:20:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 23.410 ms
Loss rate: 18.91%
-- Flow 1:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 22.616 ms
Loss rate: 17.73%
-- Flow 2:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 25.107 ms
Loss rate: 21.35%
-- Flow 3:
Average throughput: 21.82 Mbit/s
95th percentile per-packet one-way delay: 20.771 ms
Loss rate: 17.02%
```

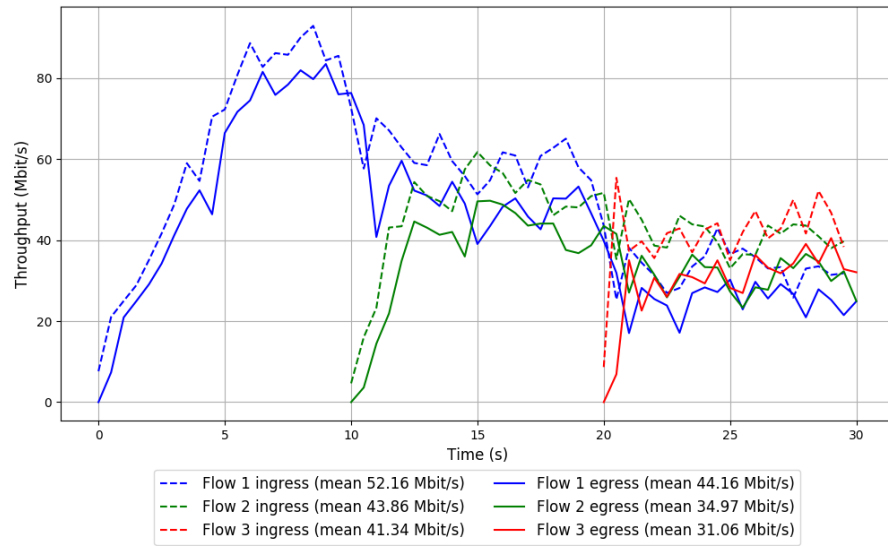Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-25 01:57:55
End at: 2019-01-25 01:58:25
Local clock offset: -0.48 ms
Remote clock offset: -3.184 ms


# Below is generated by plot.py at 2019-01-25 03:20:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.63 Mbit/s
95th percentile per-packet one-way delay: 28.703 ms
Loss rate: 19.30%
-- Flow 1:
Average throughput: 47.89 Mbit/s
95th percentile per-packet one-way delay: 27.233 ms
Loss rate: 17.95%
-- Flow 2:
Average throughput: 33.78 Mbit/s
95th percentile per-packet one-way delay: 31.032 ms
Loss rate: 21.34%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 26.313 ms
Loss rate: 20.89%
```

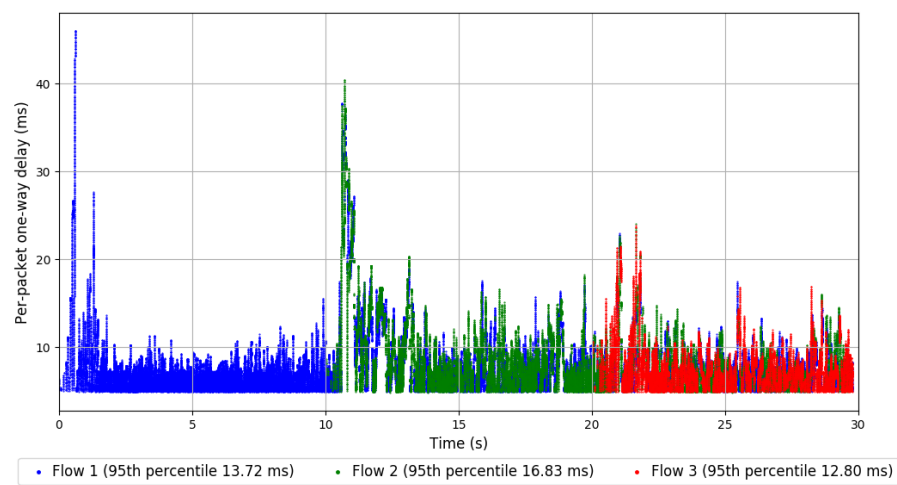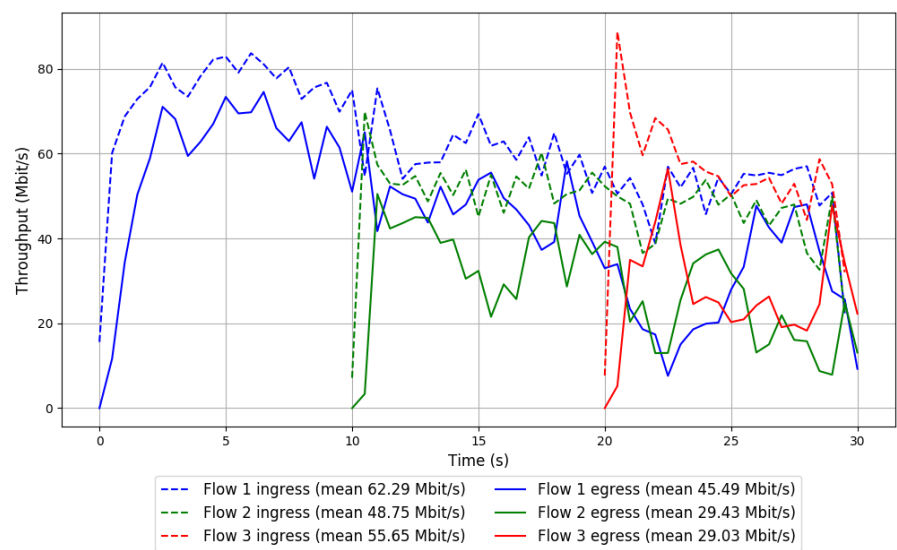Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 58.39 Mbit/s) --- Flow 1 egress (mean 47.89 Mbit/s)
Flow 2 ingress (mean 42.96 Mbit/s) --- Flow 2 egress (mean 33.78 Mbit/s)
Flow 3 ingress (mean 39.15 Mbit/s) --- Flow 3 egress (mean 30.93 Mbit/s)

Flow 1 (95th percentile 27.23 ms)   Flow 2 (95th percentile 31.03 ms)   Flow 3 (95th percentile 26.31 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-25 02:24:30
End at: 2019-01-25 02:25:00
Local clock offset: 1.723 ms
Remote clock offset: -4.486 ms


# Below is generated by plot.py at 2019-01-25 03:21:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 28.774 ms
Loss rate: 16.58%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 26.662 ms
Loss rate: 14.59%
-- Flow 2:
Average throughput: 40.40 Mbit/s
95th percentile per-packet one-way delay: 32.357 ms
Loss rate: 18.40%
-- Flow 3:
Average throughput: 26.21 Mbit/s
95th percentile per-packet one-way delay: 26.570 ms
Loss rate: 21.65%
```

Run 4: Report of FillP-Sheep — Data Link
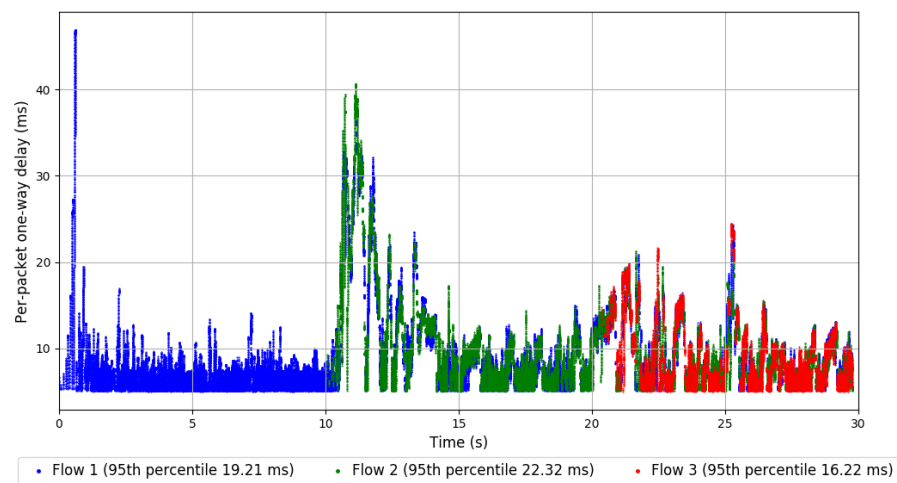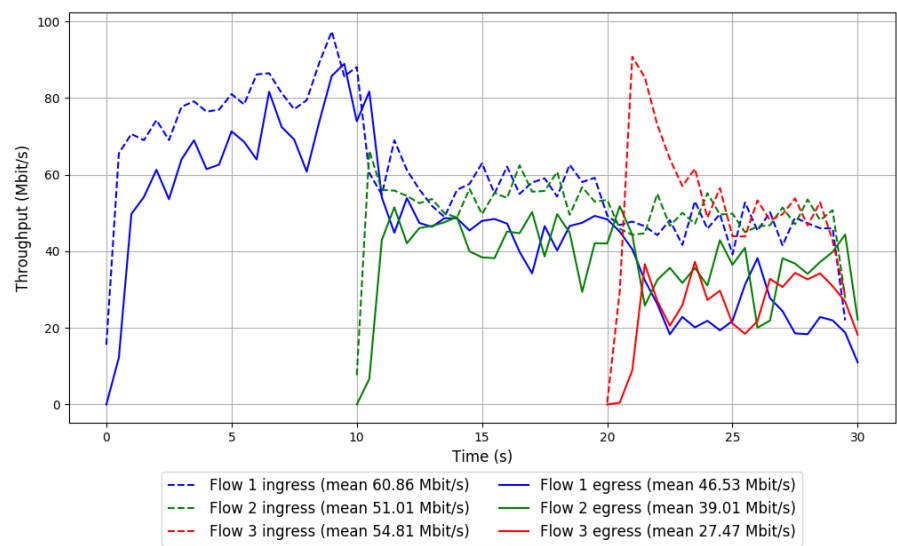
```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-25 02:51:20
End at: 2019-01-25 02:51:50
Local clock offset: -1.38 ms
Remote clock offset: -2.528 ms


# Below is generated by plot.py at 2019-01-25 03:21:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.72 Mbit/s
95th percentile per-packet one-way delay: 27.768 ms
Loss rate: 18.20%
-- Flow 1:
Average throughput: 44.16 Mbit/s
95th percentile per-packet one-way delay: 26.217 ms
Loss rate: 15.29%
-- Flow 2:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 30.610 ms
Loss rate: 20.27%
-- Flow 3:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 27.117 ms
Loss rate: 24.82%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 52.16 Mbit/s) — Flow 1 egress (mean 44.16 Mbit/s)
Flow 2 ingress (mean 43.86 Mbit/s) — Flow 2 egress (mean 34.97 Mbit/s)
Flow 3 ingress (mean 41.34 Mbit/s) — Flow 3 egress (mean 31.06 Mbit/s)

Flow 1 (95th percentile 26.22 ms)   Flow 2 (95th percentile 30.61 ms)   Flow 3 (95th percentile 27.12 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-01-25 01:17:57
End at: 2019-01-25 01:18:27
Local clock offset: -0.275 ms
Remote clock offset: -4.436 ms


# Below is generated by plot.py at 2019-01-25 03:21:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.46 Mbit/s
95th percentile per-packet one-way delay: 14.740 ms
Loss rate: 33.96%
-- Flow 1:
Average throughput: 45.49 Mbit/s
95th percentile per-packet one-way delay: 13.725 ms
Loss rate: 26.97%
-- Flow 2:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 16.832 ms
Loss rate: 39.62%
-- Flow 3:
Average throughput: 29.03 Mbit/s
95th percentile per-packet one-way delay: 12.804 ms
Loss rate: 47.85%
```
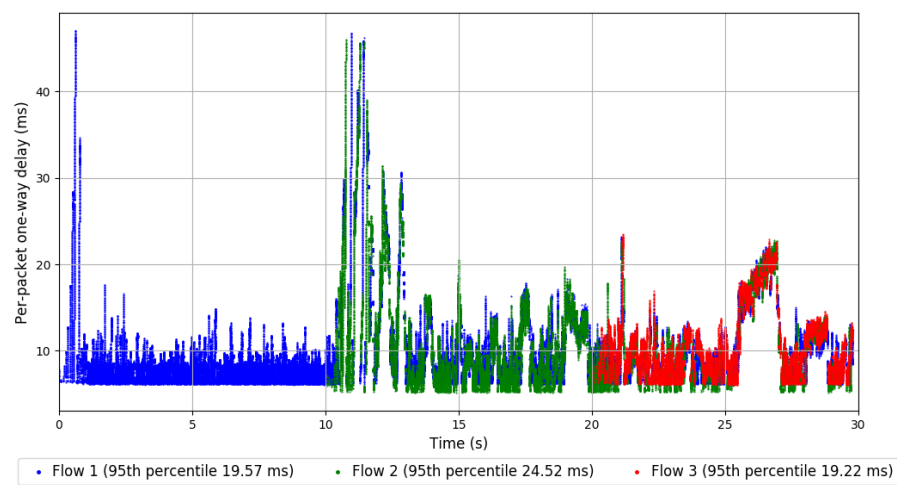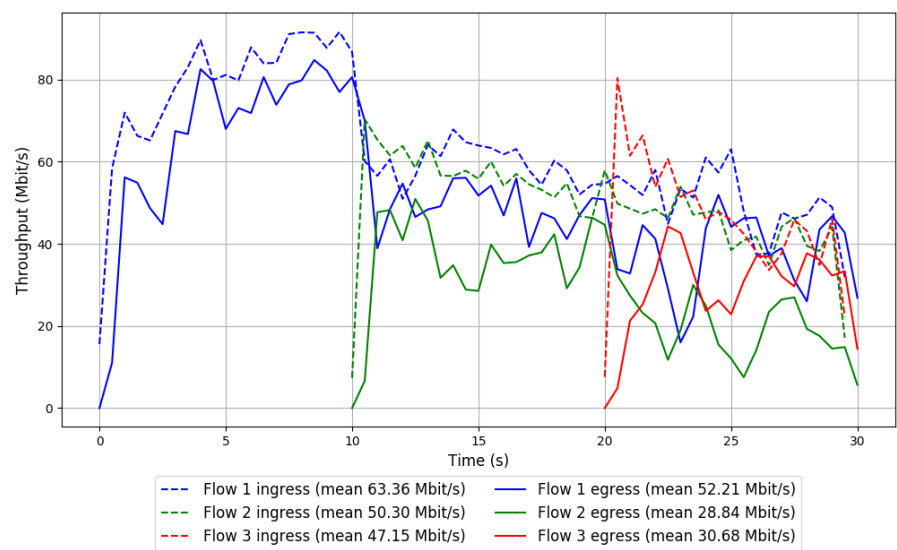
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-25 01:44:16
End at: 2019-01-25 01:44:46
Local clock offset: -0.91 ms
Remote clock offset: -5.447 ms

# Below is generated by plot.py at 2019-01-25 03:21:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.98 Mbit/s
95th percentile per-packet one-way delay: 20.006 ms
Loss rate: 27.61%
-- Flow 1:
Average throughput: 46.53 Mbit/s
95th percentile per-packet one-way delay: 19.212 ms
Loss rate: 23.54%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 22.323 ms
Loss rate: 23.51%
-- Flow 3:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 16.218 ms
Loss rate: 49.91%
```
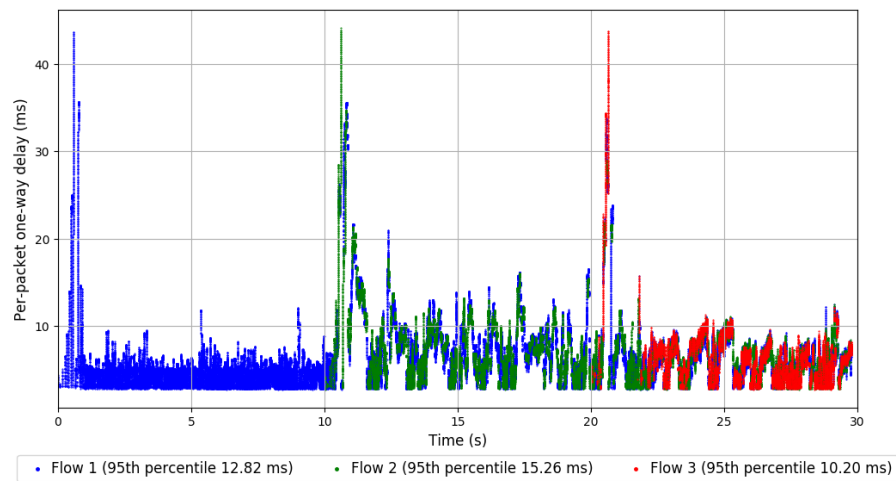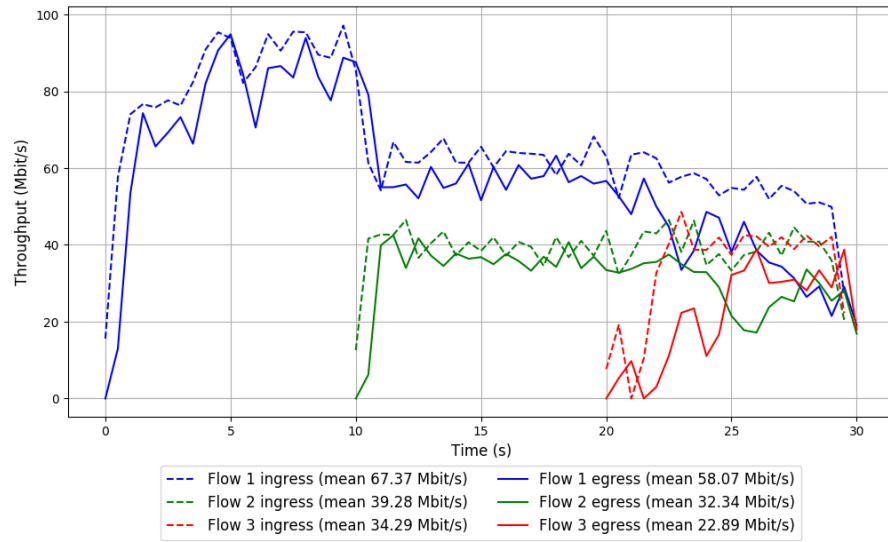
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-25 02:10:36
End at: 2019-01-25 02:11:06
Local clock offset: 2.06 ms
Remote clock offset: -5.202 ms


# Below is generated by plot.py at 2019-01-25 03:21:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.72 Mbit/s
95th percentile per-packet one-way delay: 13.690 ms
Loss rate: 26.84%
-- Flow 1:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 11.939 ms
Loss rate: 18.95%
-- Flow 2:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 22.871 ms
Loss rate: 37.87%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 12.138 ms
Loss rate: 38.20%
```
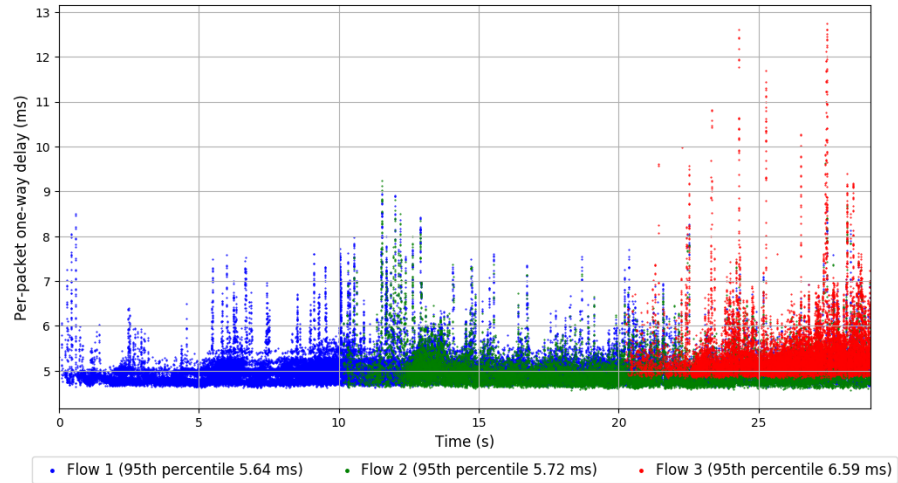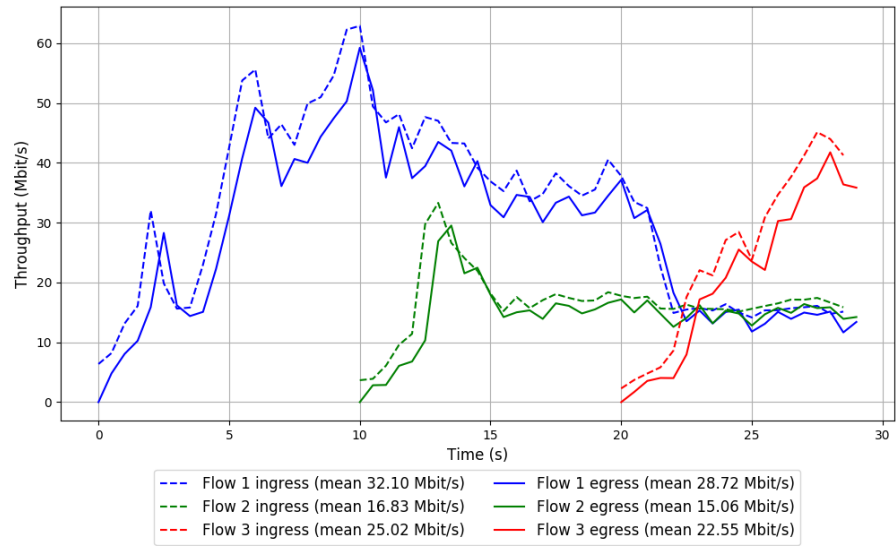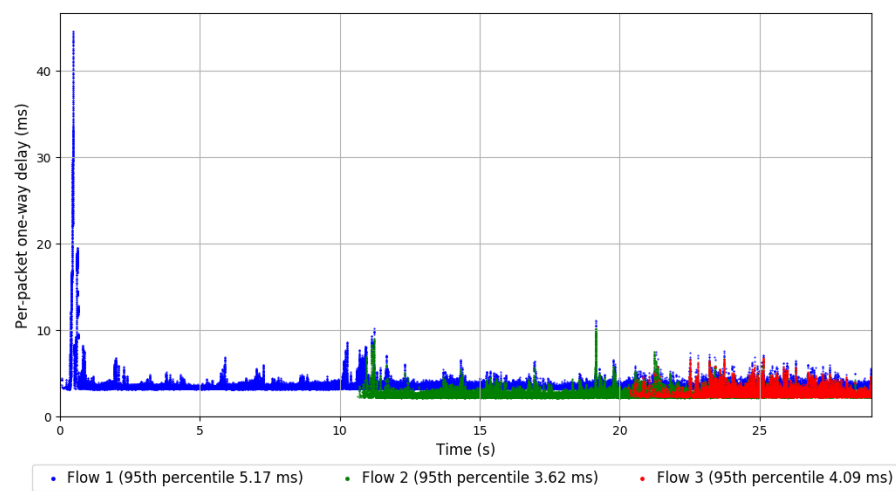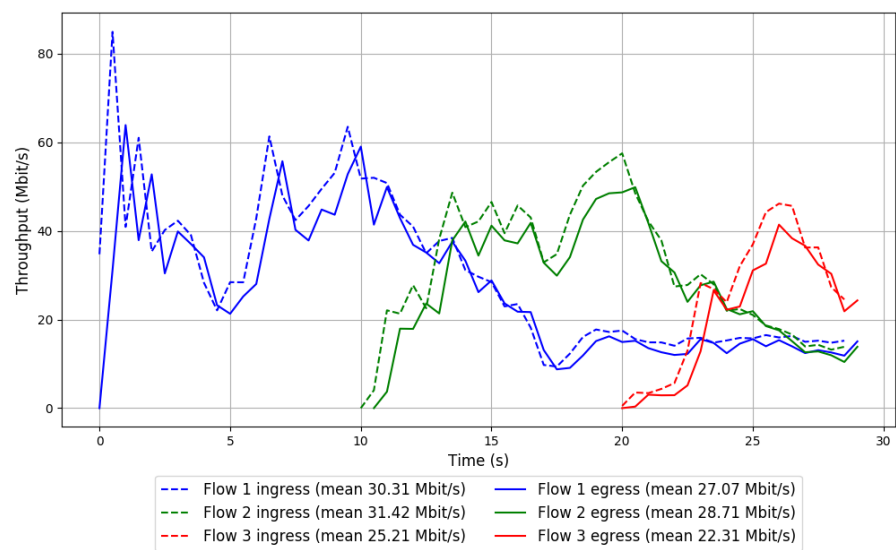
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-01-25 02:37:31
End at: 2019-01-25 02:38:01
Local clock offset: 0.521 ms
Remote clock offset: -3.139 ms


# Below is generated by plot.py at 2019-01-25 03:21:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.28 Mbit/s
95th percentile per-packet one-way delay: 20.985 ms
Loss rate: 27.40%
-- Flow 1:
Average throughput: 52.21 Mbit/s
95th percentile per-packet one-way delay: 19.575 ms
Loss rate: 17.58%
-- Flow 2:
Average throughput: 28.84 Mbit/s
95th percentile per-packet one-way delay: 24.523 ms
Loss rate: 42.65%
-- Flow 3:
Average throughput: 30.68 Mbit/s
95th percentile per-packet one-way delay: 19.219 ms
Loss rate: 34.91%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 63.36 Mbit/s) Flow 1 egress (mean 52.21 Mbit/s)
Flow 2 ingress (mean 50.30 Mbit/s) Flow 2 egress (mean 28.84 Mbit/s)
Flow 3 ingress (mean 47.15 Mbit/s) Flow 3 egress (mean 30.68 Mbit/s)

Flow 1 (95th percentile 19.57 ms)   Flow 2 (95th percentile 24.52 ms)   Flow 3 (95th percentile 19.22 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-01-25 03:04:19
End at: 2019-01-25 03:04:49
Local clock offset: 0.291 ms
Remote clock offset: -5.506 ms


# Below is generated by plot.py at 2019-01-25 03:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 13.577 ms
Loss rate: 16.83%
-- Flow 1:
Average throughput: 58.07 Mbit/s
95th percentile per-packet one-way delay: 12.819 ms
Loss rate: 13.79%
-- Flow 2:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 15.256 ms
Loss rate: 17.66%
-- Flow 3:
Average throughput: 22.89 Mbit/s
95th percentile per-packet one-way delay: 10.195 ms
Loss rate: 33.21%
```
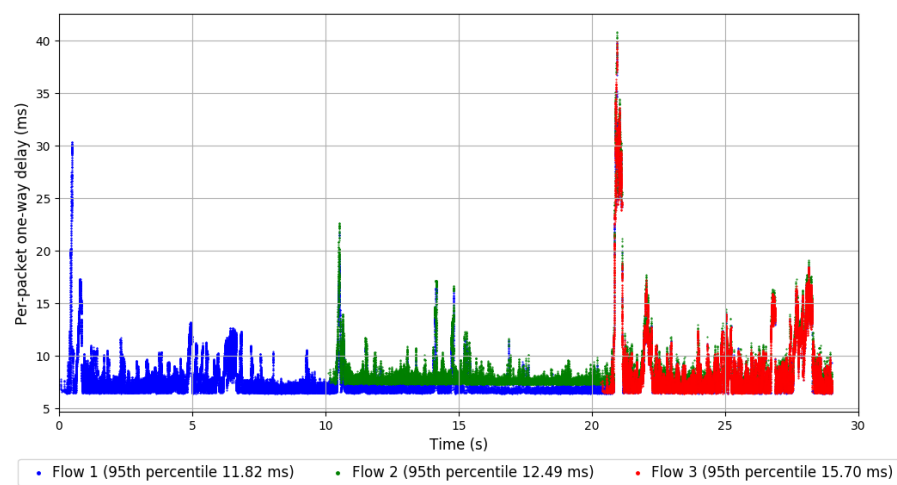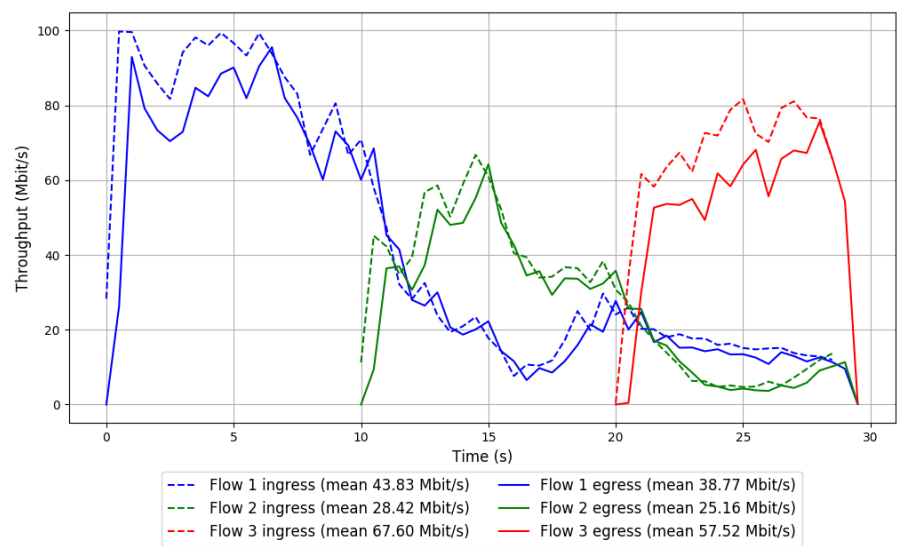
Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 67.37 Mbit/s) --- Flow 1 egress (mean 58.07 Mbit/s)
Flow 2 ingress (mean 39.28 Mbit/s) --- Flow 2 egress (mean 32.34 Mbit/s)
Flow 3 ingress (mean 34.29 Mbit/s) --- Flow 3 egress (mean 22.89 Mbit/s)

Flow 1 (95th percentile 12.82 ms)   Flow 2 (95th percentile 15.26 ms)   Flow 3 (95th percentile 10.20 ms)

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-25 01:09:22
End at: 2019-01-25 01:09:52
Local clock offset: -0.621 ms
Remote clock offset: -5.025 ms

# Below is generated by plot.py at 2019-01-25 03:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 5.868 ms
Loss rate: 10.43%
-- Flow 1:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 5.643 ms
Loss rate: 10.53%
-- Flow 2:
Average throughput: 15.06 Mbit/s
95th percentile per-packet one-way delay: 5.725 ms
Loss rate: 10.49%
-- Flow 3:
Average throughput: 22.55 Mbit/s
95th percentile per-packet one-way delay: 6.587 ms
Loss rate: 9.90%
```

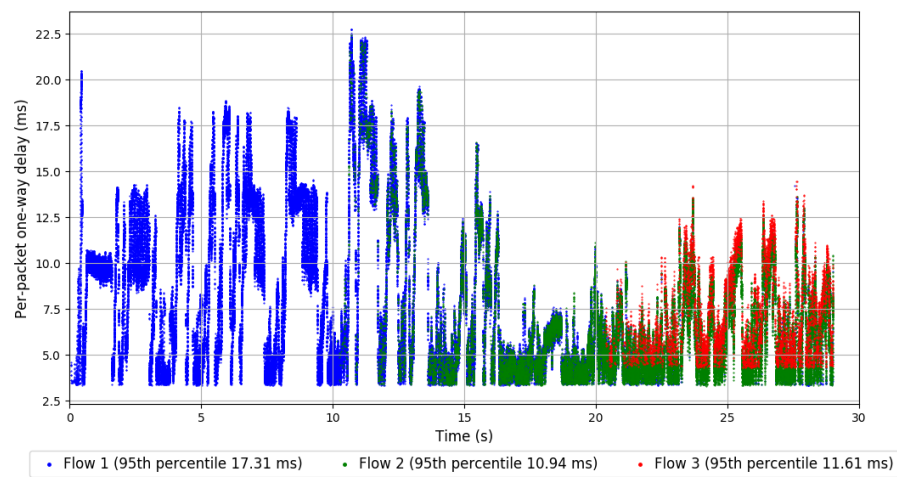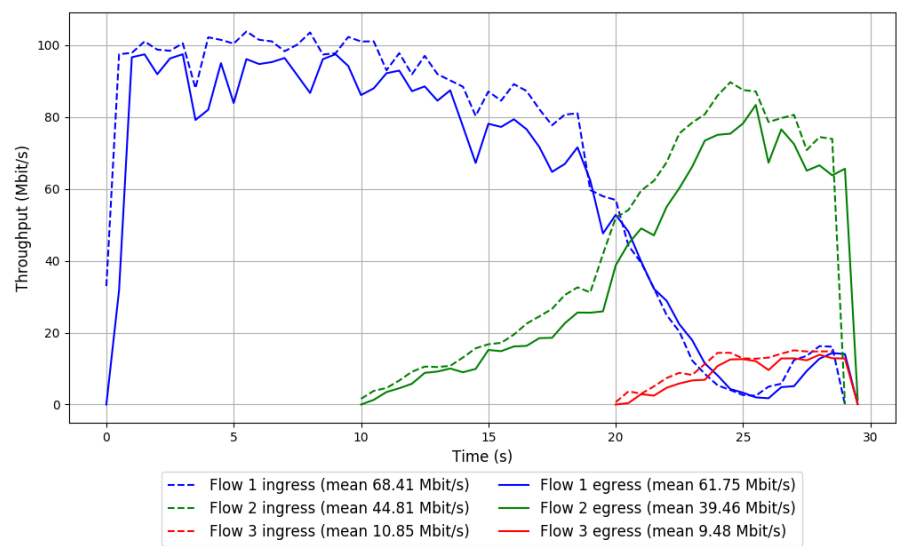# Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-25 01:35:17
End at: 2019-01-25 01:35:47
Local clock offset: 0.857 ms
Remote clock offset: -5.698 ms


# Below is generated by plot.py at 2019-01-25 03:21:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.95 Mbit/s
95th percentile per-packet one-way delay: 4.457 ms
Loss rate: 10.96%
-- Flow 1:
Average throughput: 27.07 Mbit/s
95th percentile per-packet one-way delay: 5.167 ms
Loss rate: 10.72%
-- Flow 2:
Average throughput: 28.71 Mbit/s
95th percentile per-packet one-way delay: 3.616 ms
Loss rate: 11.07%
-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 4.095 ms
Loss rate: 11.61%
```

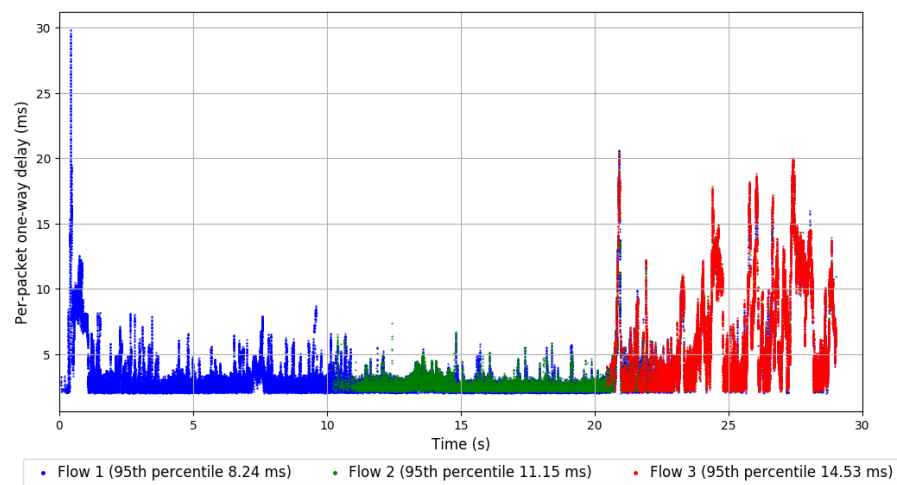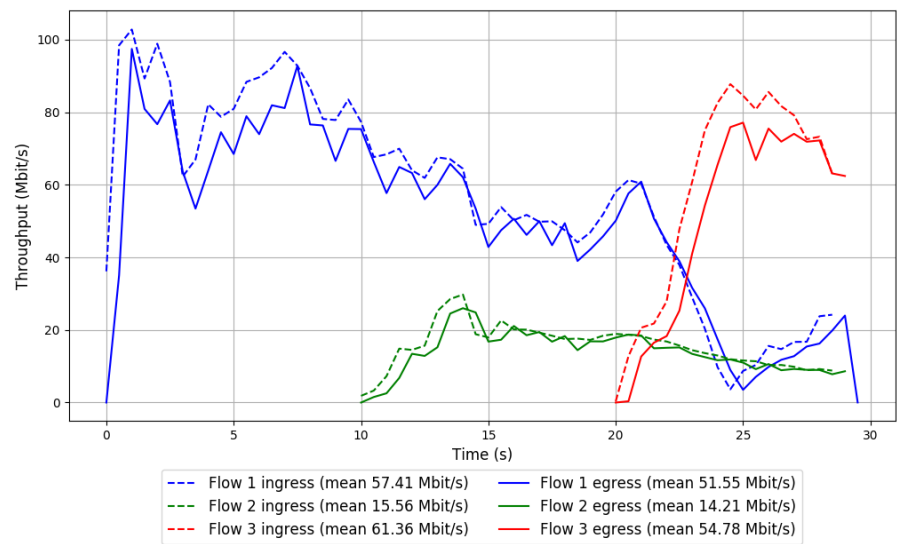Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:01:57
End at: 2019-01-25 02:02:27
Local clock offset: 0.254 ms
Remote clock offset: -3.036 ms


# Below is generated by plot.py at 2019-01-25 03:22:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.42 Mbit/s
95th percentile per-packet one-way delay: 13.402 ms
Loss rate: 12.34%
-- Flow 1:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 11.821 ms
Loss rate: 11.52%
-- Flow 2:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 12.488 ms
Loss rate: 11.47%
-- Flow 3:
Average throughput: 57.52 Mbit/s
95th percentile per-packet one-way delay: 15.697 ms
Loss rate: 14.91%
```

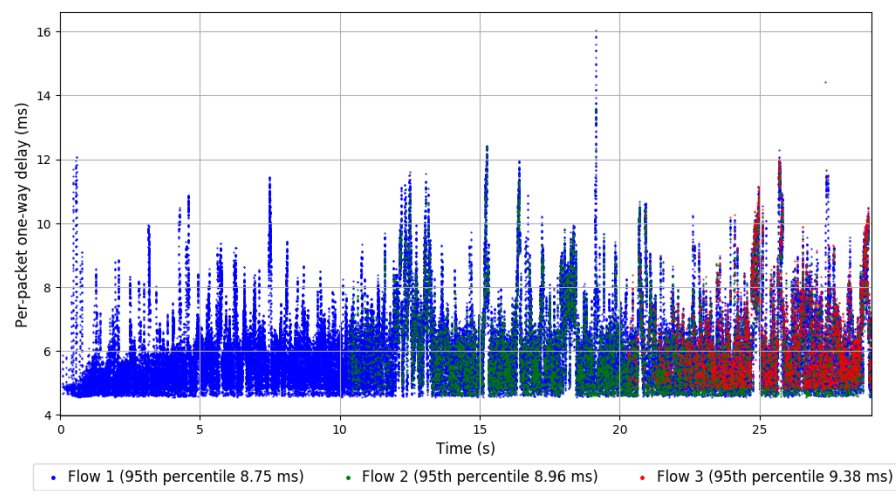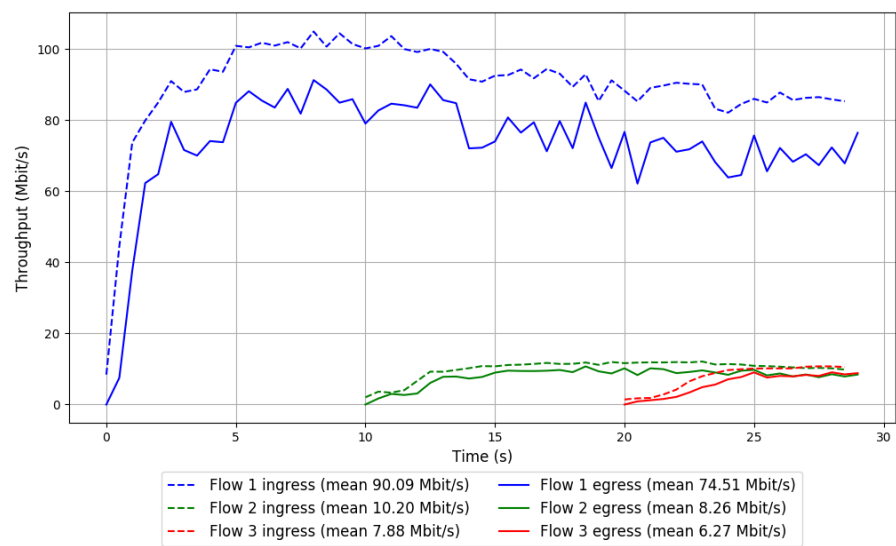Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 43.83 Mbit/s) --- Flow 1 egress (mean 38.77 Mbit/s)
Flow 2 ingress (mean 28.42 Mbit/s) --- Flow 2 egress (mean 25.16 Mbit/s)
Flow 3 ingress (mean 67.60 Mbit/s) --- Flow 3 egress (mean 57.52 Mbit/s)

Flow 1 (95th percentile 11.82 ms)   Flow 2 (95th percentile 12.49 ms)   Flow 3 (95th percentile 15.70 ms)
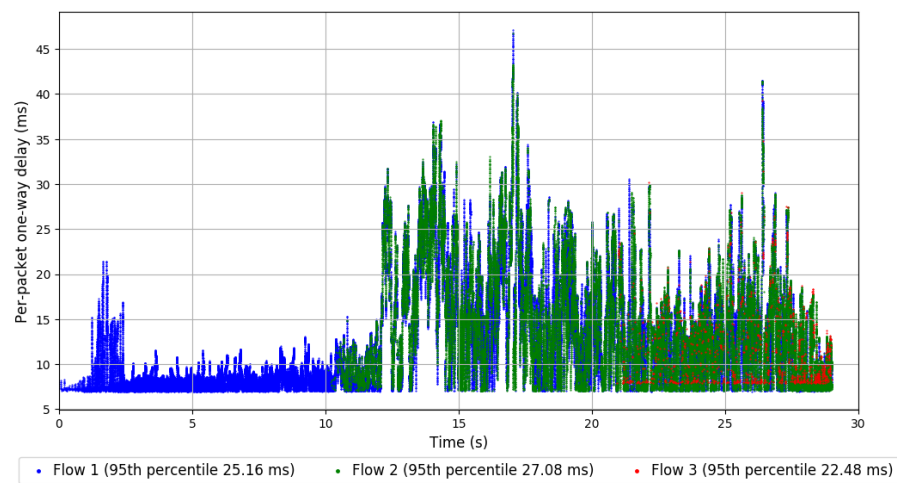
70

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:28:41
End at: 2019-01-25 02:29:11
Local clock offset: 0.839 ms
Remote clock offset: -4.713 ms


# Below is generated by plot.py at 2019-01-25 03:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 16.493 ms
Loss rate: 10.46%
-- Flow 1:
Average throughput: 61.75 Mbit/s
95th percentile per-packet one-way delay: 17.312 ms
Loss rate: 9.73%
-- Flow 2:
Average throughput: 39.46 Mbit/s
95th percentile per-packet one-way delay: 10.941 ms
Loss rate: 11.93%
-- Flow 3:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 11.609 ms
Loss rate: 12.66%
```

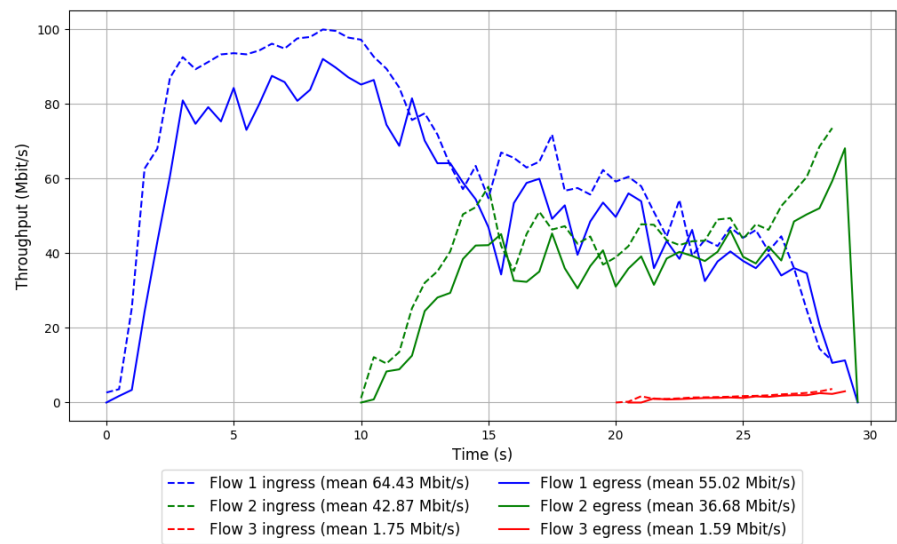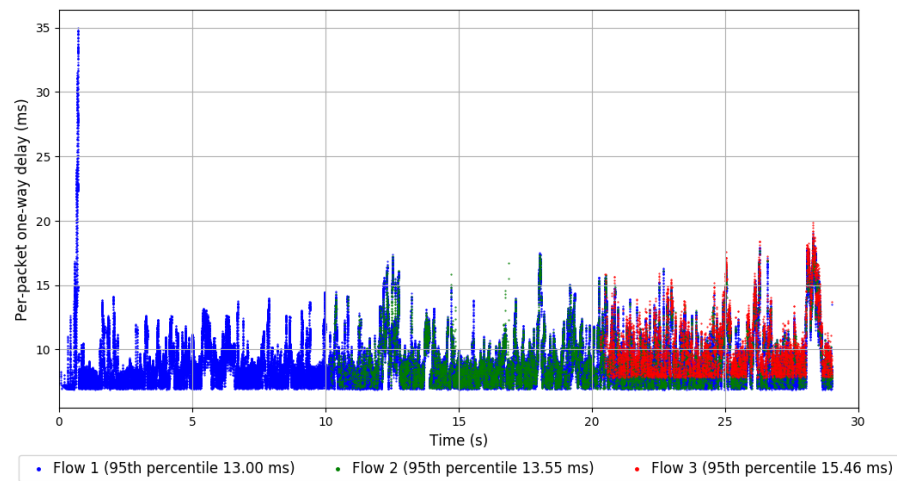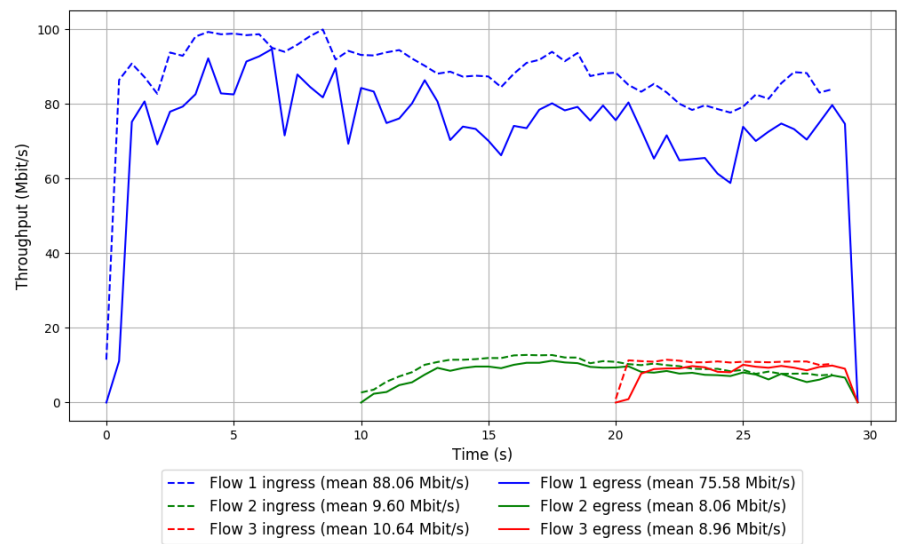Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:55:22
End at: 2019-01-25 02:55:52
Local clock offset: 1.446 ms
Remote clock offset: -5.115 ms


# Below is generated by plot.py at 2019-01-25 03:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 11.784 ms
Loss rate: 10.11%
-- Flow 1:
Average throughput: 51.55 Mbit/s
95th percentile per-packet one-way delay: 8.236 ms
Loss rate: 10.19%
-- Flow 2:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 11.150 ms
Loss rate: 8.66%
-- Flow 3:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 14.527 ms
Loss rate: 10.68%
```

Run 5: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 57.41 Mbit/s)   Flow 1 egress (mean 51.55 Mbit/s)
Flow 2 ingress (mean 15.56 Mbit/s)   Flow 2 egress (mean 14.21 Mbit/s)
Flow 3 ingress (mean 61.36 Mbit/s)   Flow 3 egress (mean 54.78 Mbit/s)

Flow 1 (95th percentile 8.24 ms)   Flow 2 (95th percentile 11.15 ms)   Flow 3 (95th percentile 14.53 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-25 01:14:04
End at: 2019-01-25 01:14:34
Local clock offset: 1.071 ms
Remote clock offset: -3.306 ms


# Below is generated by plot.py at 2019-01-25 03:22:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.76 Mbit/s
95th percentile per-packet one-way delay: 8.781 ms
Loss rate: 17.48%
-- Flow 1:
Average throughput: 74.51 Mbit/s
95th percentile per-packet one-way delay: 8.751 ms
Loss rate: 17.29%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 8.964 ms
Loss rate: 18.98%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 9.378 ms
Loss rate: 20.55%
```
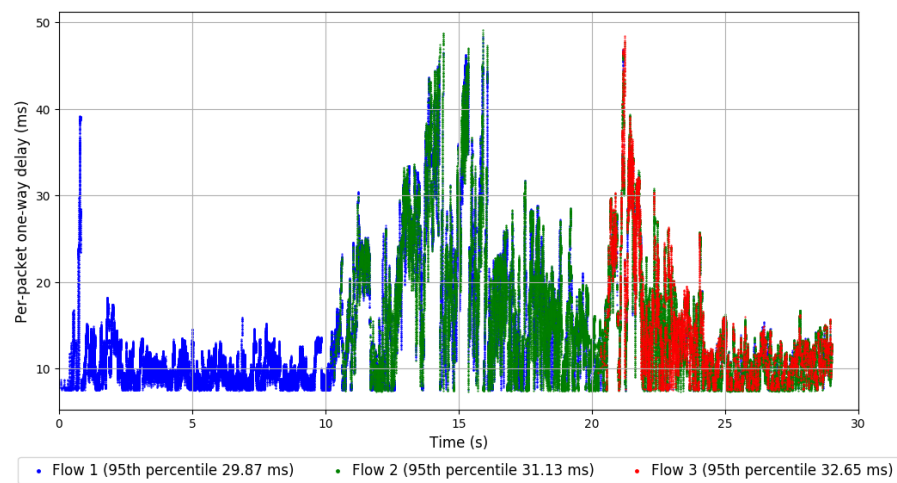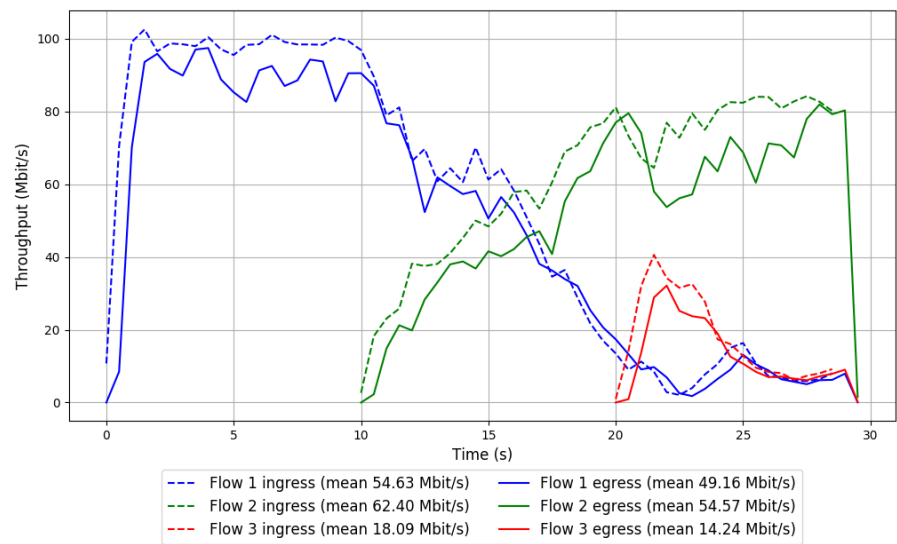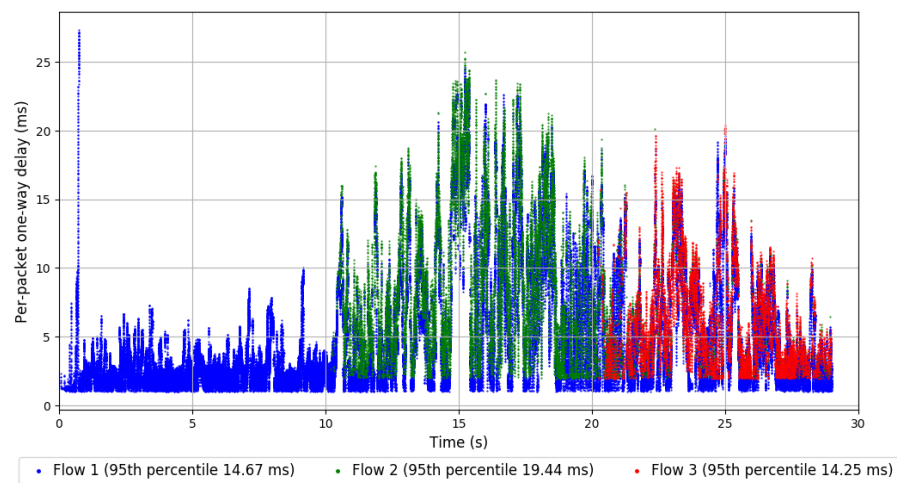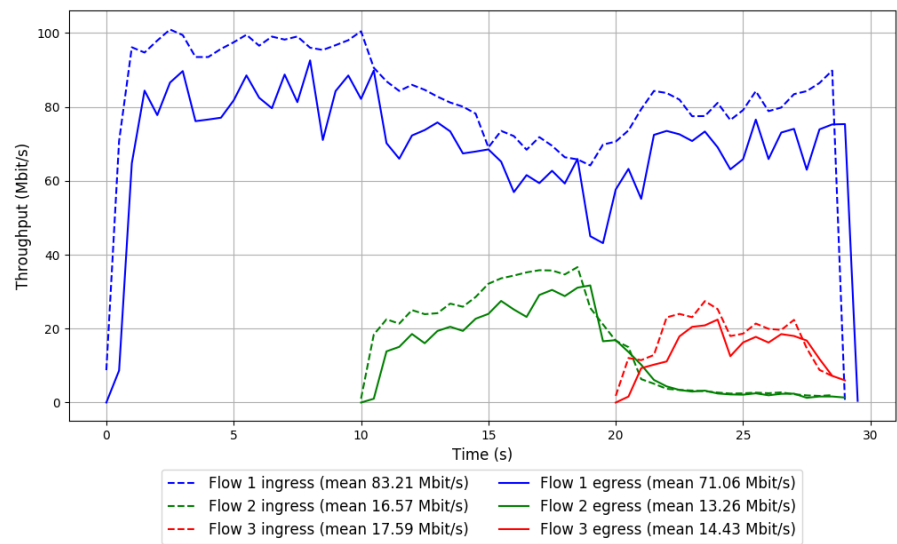
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-25 01:40:19
End at: 2019-01-25 01:40:49
Local clock offset: -0.996 ms
Remote clock offset: -3.279 ms


# Below is generated by plot.py at 2019-01-25 03:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.36 Mbit/s
95th percentile per-packet one-way delay: 25.852 ms
Loss rate: 14.54%
-- Flow 1:
Average throughput: 55.02 Mbit/s
95th percentile per-packet one-way delay: 25.163 ms
Loss rate: 14.59%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 27.079 ms
Loss rate: 14.43%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 22.483 ms
Loss rate: 14.33%
```

Run 2: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 64.43 Mbit/s) —— Flow 1 egress (mean 55.02 Mbit/s)
- - - Flow 2 ingress (mean 42.87 Mbit/s) —— Flow 2 egress (mean 36.68 Mbit/s)
- - - Flow 3 ingress (mean 1.75 Mbit/s) —— Flow 3 egress (mean 1.59 Mbit/s)

• Flow 1 (95th percentile 25.16 ms)   • Flow 2 (95th percentile 27.08 ms)   • Flow 3 (95th percentile 22.48 ms)
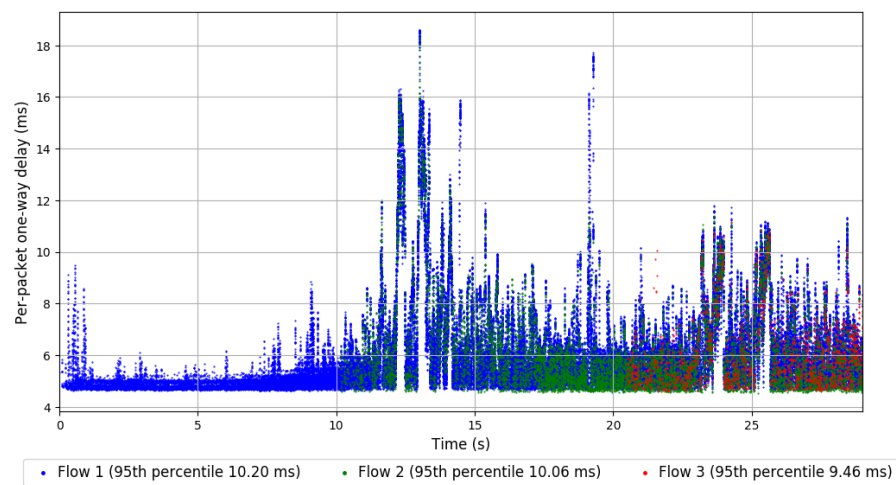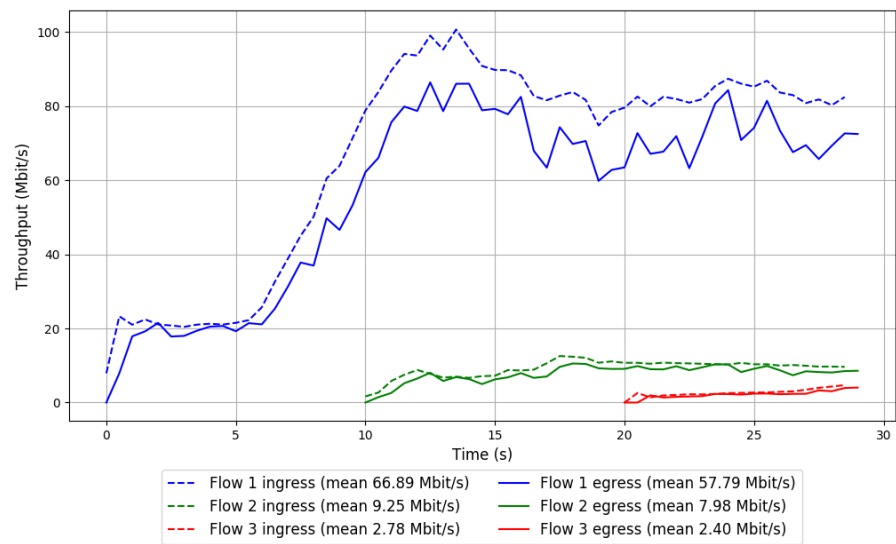
```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 02:06:50
End at: 2019-01-25 02:07:20
Local clock offset: -0.586 ms
Remote clock offset: -3.037 ms


# Below is generated by plot.py at 2019-01-25 03:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.53 Mbit/s
95th percentile per-packet one-way delay: 13.150 ms
Loss rate: 14.33%
-- Flow 1:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 12.998 ms
Loss rate: 14.15%
-- Flow 2:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 13.553 ms
Loss rate: 16.09%
-- Flow 3:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 15.463 ms
Loss rate: 15.78%
```
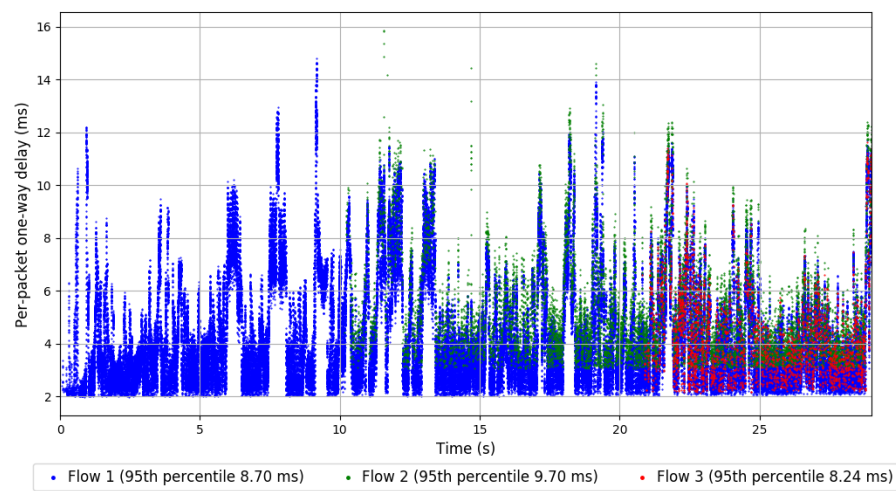
Run 3: Report of Indigo-MusesC5 — Data Link

- - - - Flow 1 ingress (mean 88.06 Mbit/s) ——— Flow 1 egress (mean 75.58 Mbit/s)
- - - - Flow 2 ingress (mean 9.60 Mbit/s) ——— Flow 2 egress (mean 8.06 Mbit/s)
- - - - Flow 3 ingress (mean 10.64 Mbit/s) ——— Flow 3 egress (mean 8.96 Mbit/s)

• Flow 1 (95th percentile 13.00 ms)   • Flow 2 (95th percentile 13.55 ms)   • Flow 3 (95th percentile 15.46 ms)
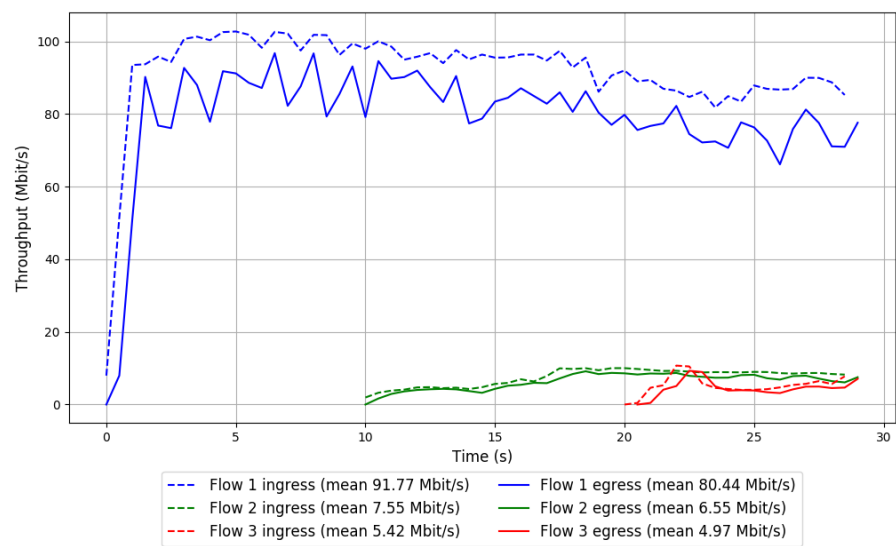
80

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 02:33:41
End at: 2019-01-25 02:34:11
Local clock offset: -1.805 ms
Remote clock offset: -3.17 ms


# Below is generated by plot.py at 2019-01-25 03:22:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.00 Mbit/s
95th percentile per-packet one-way delay: 30.581 ms
Loss rate: 11.63%
-- Flow 1:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 29.868 ms
Loss rate: 10.00%
-- Flow 2:
Average throughput: 54.57 Mbit/s
95th percentile per-packet one-way delay: 31.126 ms
Loss rate: 12.52%
-- Flow 3:
Average throughput: 14.24 Mbit/s
95th percentile per-packet one-way delay: 32.651 ms
Loss rate: 21.27%
```

Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 54.63 Mbit/s) --- Flow 1 egress (mean 49.16 Mbit/s)
Flow 2 ingress (mean 62.40 Mbit/s) --- Flow 2 egress (mean 54.57 Mbit/s)
Flow 3 ingress (mean 18.09 Mbit/s) --- Flow 3 egress (mean 14.24 Mbit/s)

Flow 1 (95th percentile 29.87 ms)   Flow 2 (95th percentile 31.13 ms)   Flow 3 (95th percentile 32.65 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 03:00:15
End at: 2019-01-25 03:00:45
Local clock offset: 2.712 ms
Remote clock offset: -4.913 ms


# Below is generated by plot.py at 2019-01-25 03:22:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.02 Mbit/s
95th percentile per-packet one-way delay: 15.545 ms
Loss rate: 15.40%
-- Flow 1:
Average throughput: 71.06 Mbit/s
95th percentile per-packet one-way delay: 14.673 ms
Loss rate: 14.60%
-- Flow 2:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 19.438 ms
Loss rate: 20.22%
-- Flow 3:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 14.249 ms
Loss rate: 18.17%
```
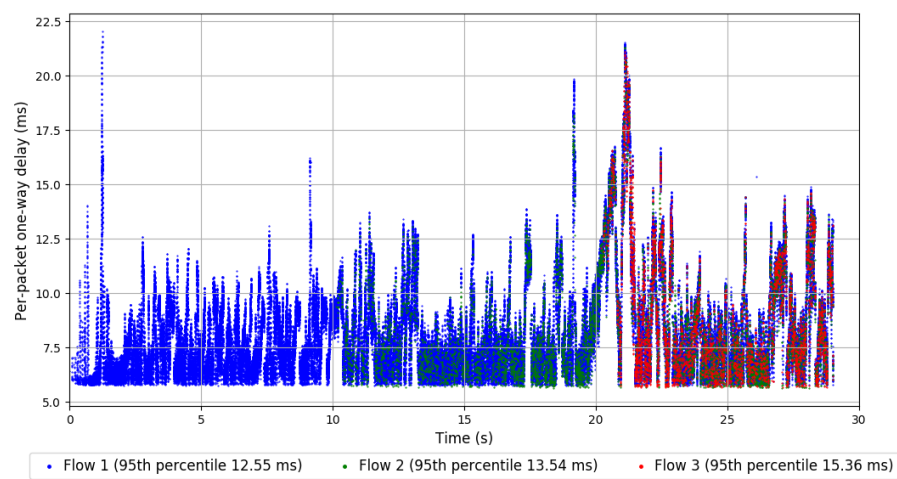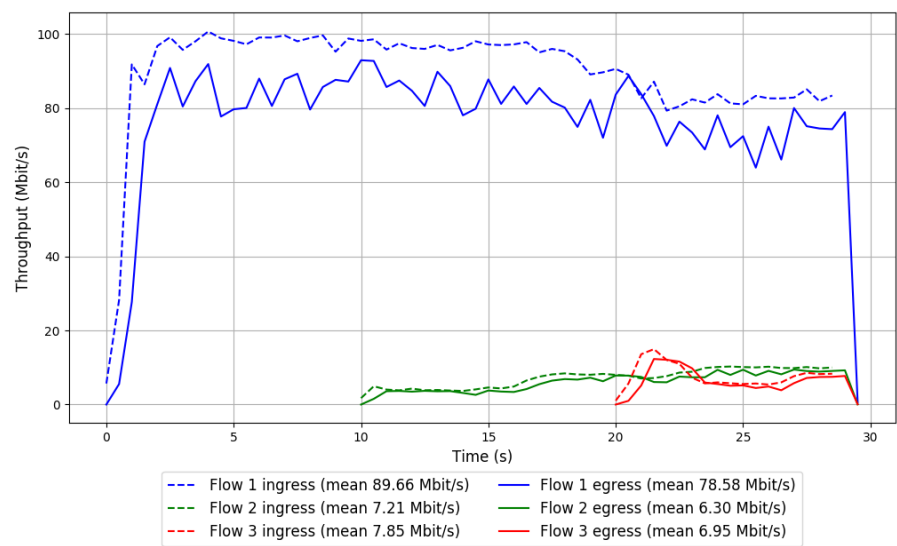
Run 5: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 83.21 Mbit/s) ——— Flow 1 egress (mean 71.06 Mbit/s)
- - - Flow 2 ingress (mean 16.57 Mbit/s) ——— Flow 2 egress (mean 13.26 Mbit/s)
- - - Flow 3 ingress (mean 17.59 Mbit/s) ——— Flow 3 egress (mean 14.43 Mbit/s)

• Flow 1 (95th percentile 14.67 ms) • Flow 2 (95th percentile 19.44 ms) • Flow 3 (95th percentile 14.25 ms)

84

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:06:55
End at: 2019-01-25 01:07:25
Local clock offset: 0.645 ms
Remote clock offset: -4.019 ms


# Below is generated by plot.py at 2019-01-25 03:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.71 Mbit/s
95th percentile per-packet one-way delay: 10.183 ms
Loss rate: 13.61%
-- Flow 1:
Average throughput: 57.79 Mbit/s
95th percentile per-packet one-way delay: 10.204 ms
Loss rate: 13.59%
-- Flow 2:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 10.063 ms
Loss rate: 13.73%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 9.464 ms
Loss rate: 13.88%
```
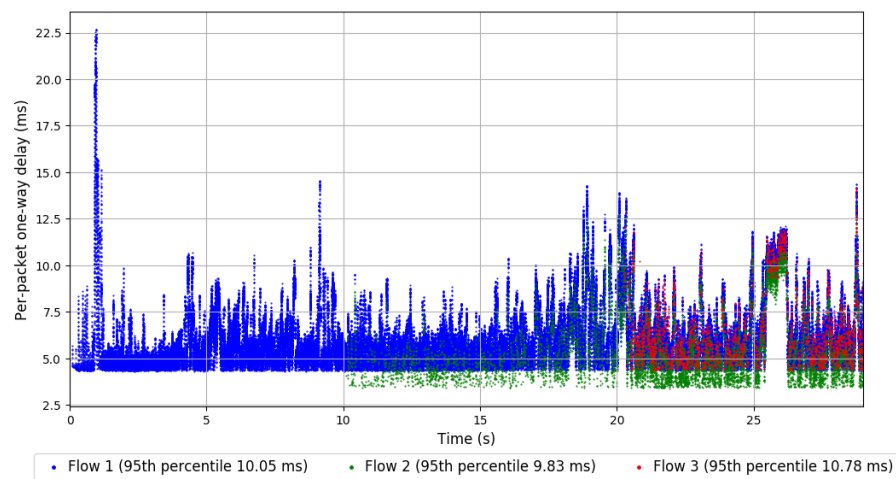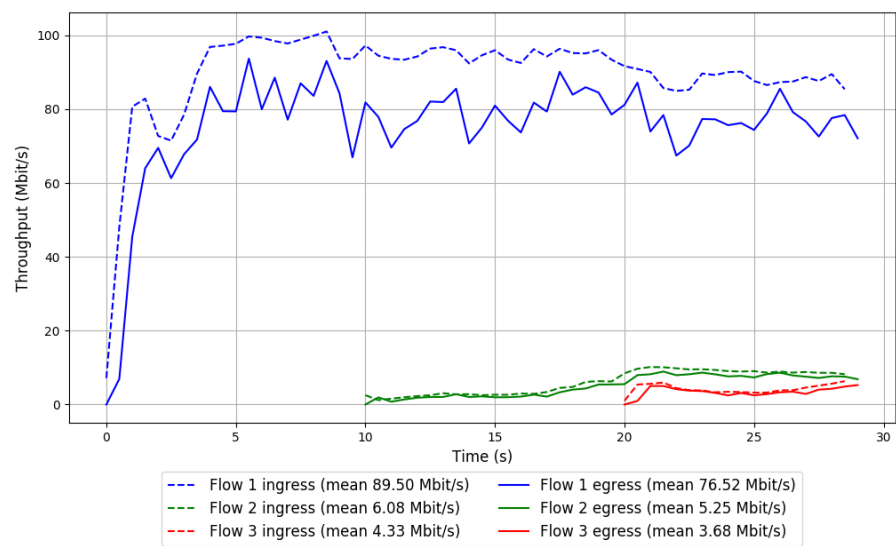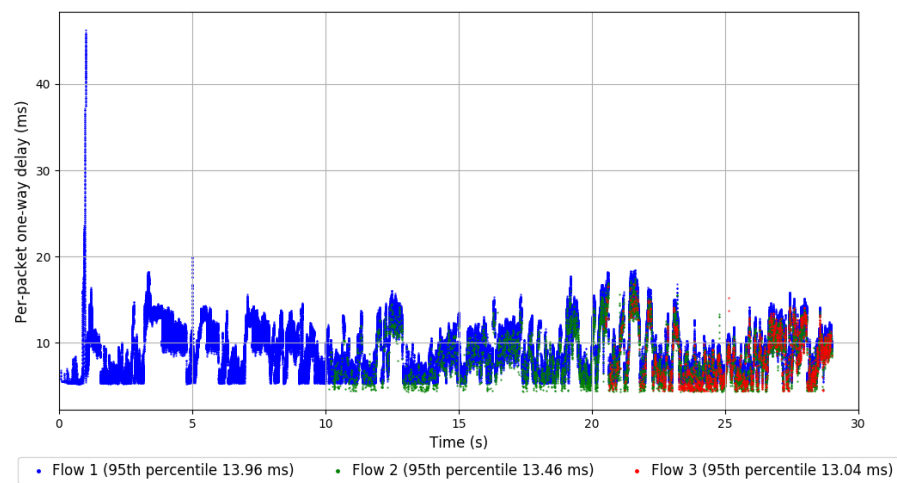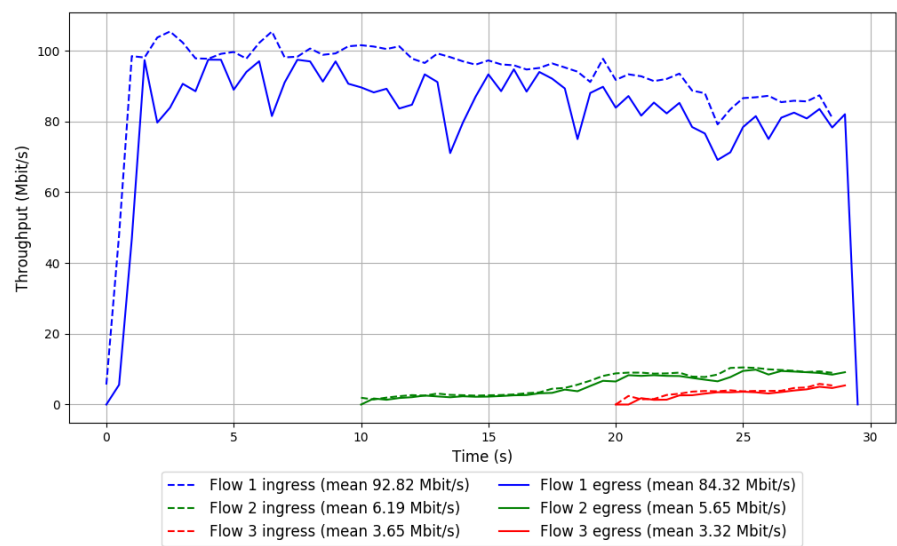
Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 66.89 Mbit/s)   Flow 1 egress (mean 57.79 Mbit/s)
Flow 2 ingress (mean 9.25 Mbit/s)   Flow 2 egress (mean 7.98 Mbit/s)
Flow 3 ingress (mean 2.78 Mbit/s)   Flow 3 egress (mean 2.40 Mbit/s)

Flow 1 (95th percentile 10.20 ms)   Flow 2 (95th percentile 10.06 ms)   Flow 3 (95th percentile 9.46 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:32:39
End at: 2019-01-25 01:33:09
Local clock offset: 0.406 ms
Remote clock offset: -5.943 ms


# Below is generated by plot.py at 2019-01-25 03:23:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 8.744 ms
Loss rate: 12.39%
-- Flow 1:
Average throughput: 80.44 Mbit/s
95th percentile per-packet one-way delay: 8.702 ms
Loss rate: 12.33%
-- Flow 2:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 9.699 ms
Loss rate: 13.21%
-- Flow 3:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 8.240 ms
Loss rate: 13.58%
```

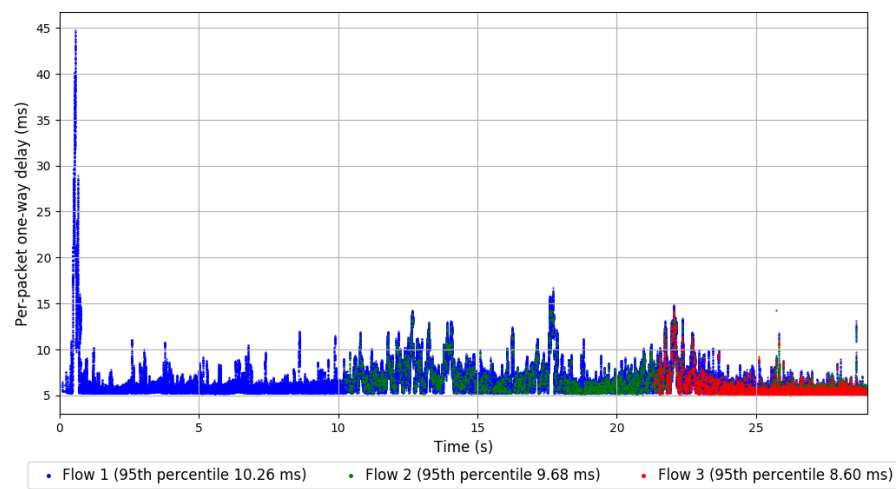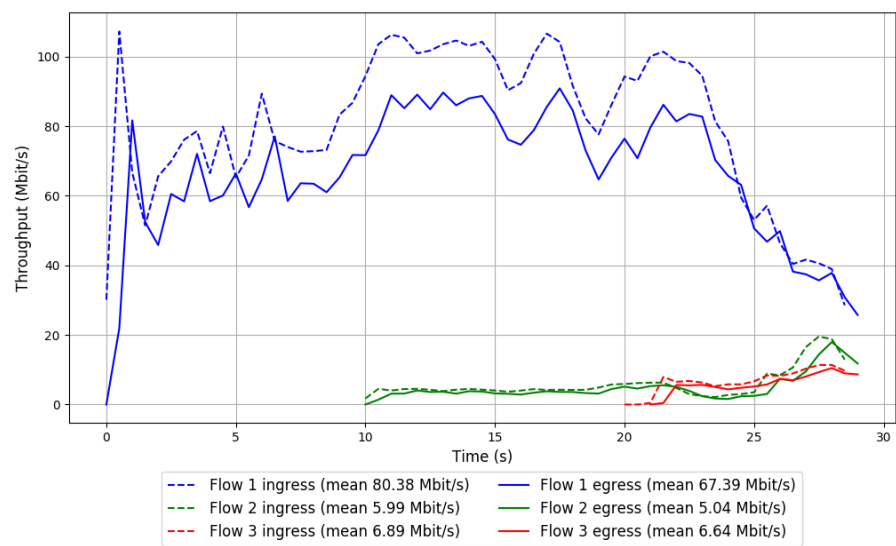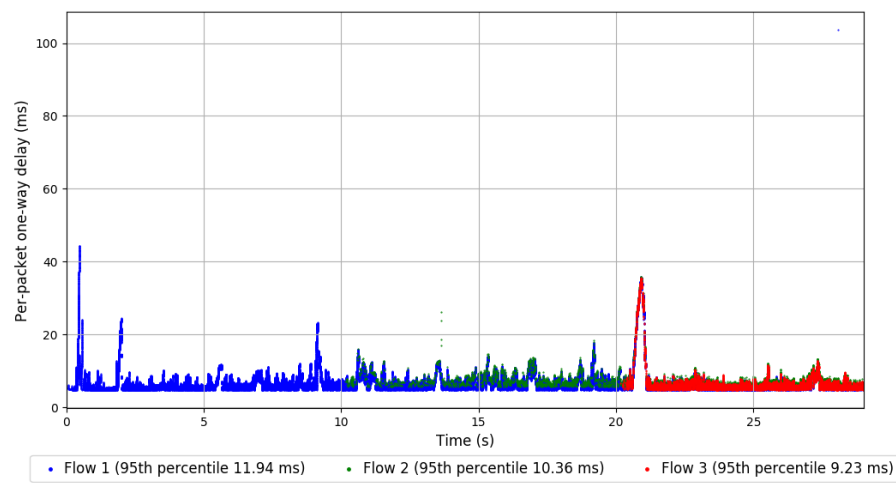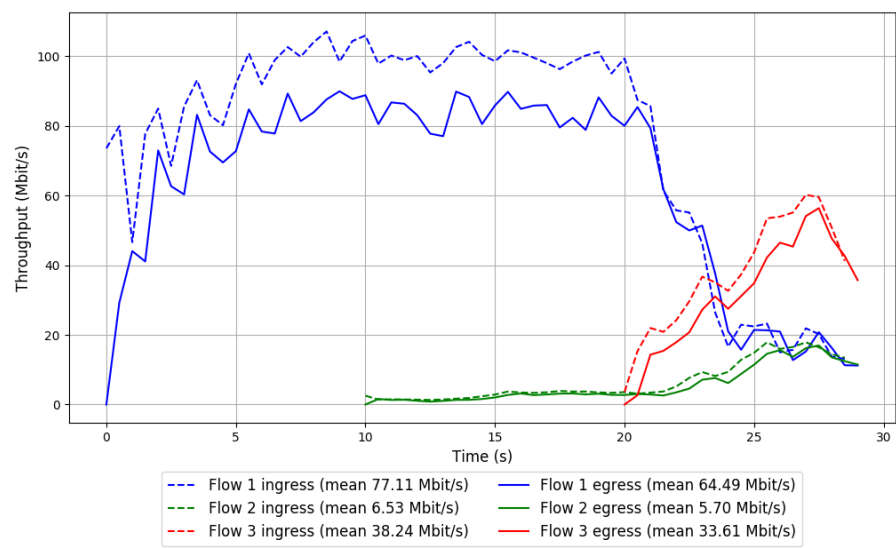Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:59:13
End at: 2019-01-25 01:59:43
Local clock offset: -0.46 ms
Remote clock offset: -4.719 ms


# Below is generated by plot.py at 2019-01-25 03:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.79 Mbit/s
95th percentile per-packet one-way delay: 12.693 ms
Loss rate: 12.35%
-- Flow 1:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 12.555 ms
Loss rate: 12.36%
-- Flow 2:
Average throughput: 6.30 Mbit/s
95th percentile per-packet one-way delay: 13.538 ms
Loss rate: 12.66%
-- Flow 3:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 15.355 ms
Loss rate: 11.51%
```

Run 3: Report of Indigo-MusesD — Data Link

Legend:
- Flow 1 ingress (mean 89.66 Mbit/s) — Flow 1 egress (mean 78.58 Mbit/s)
- Flow 2 ingress (mean 7.21 Mbit/s) — Flow 2 egress (mean 6.30 Mbit/s)
- Flow 3 ingress (mean 7.85 Mbit/s) — Flow 3 egress (mean 6.95 Mbit/s)

Legend:
- Flow 1 (95th percentile 12.55 ms)
- Flow 2 (95th percentile 13.54 ms)
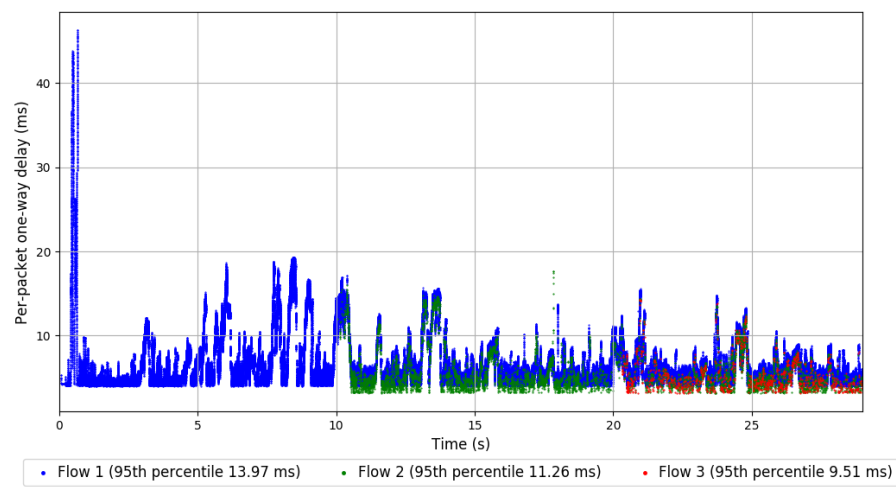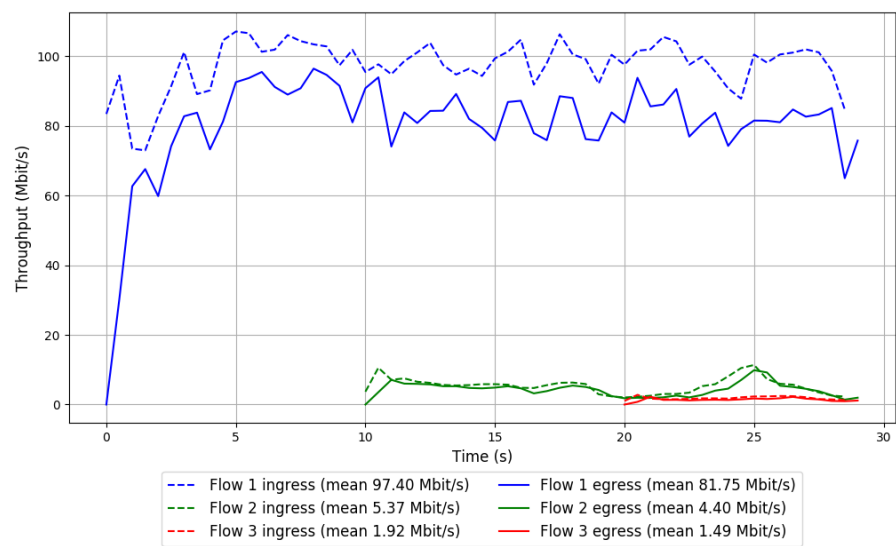- Flow 3 (95th percentile 15.36 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-25 02:25:49
End at: 2019-01-25 02:26:19
Local clock offset: 0.704 ms
Remote clock offset: -4.79 ms


# Below is generated by plot.py at 2019-01-25 03:23:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.05 Mbit/s
95th percentile per-packet one-way delay: 10.046 ms
Loss rate: 14.48%
-- Flow 1:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 10.047 ms
Loss rate: 14.50%
-- Flow 2:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 9.831 ms
Loss rate: 13.70%
-- Flow 3:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 10.779 ms
Loss rate: 14.96%
```

Run 4: Report of Indigo-MusesD — Data Link

- - - - Flow 1 ingress (mean 89.50 Mbit/s) ——— Flow 1 egress (mean 76.52 Mbit/s)
- - - - Flow 2 ingress (mean 6.08 Mbit/s) ——— Flow 2 egress (mean 5.25 Mbit/s)
- - - - Flow 3 ingress (mean 4.33 Mbit/s) ——— Flow 3 egress (mean 3.68 Mbit/s)

• Flow 1 (95th percentile 10.05 ms)   • Flow 2 (95th percentile 9.83 ms)   • Flow 3 (95th percentile 10.78 ms)

92

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-25 02:52:43
End at: 2019-01-25 02:53:13
Local clock offset: 0.739 ms
Remote clock offset: -3.55 ms

# Below is generated by plot.py at 2019-01-25 03:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.98 Mbit/s
95th percentile per-packet one-way delay: 13.941 ms
Loss rate: 9.13%
-- Flow 1:
Average throughput: 84.32 Mbit/s
95th percentile per-packet one-way delay: 13.960 ms
Loss rate: 9.14%
-- Flow 2:
Average throughput: 5.65 Mbit/s
95th percentile per-packet one-way delay: 13.465 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 13.041 ms
Loss rate: 9.08%
```
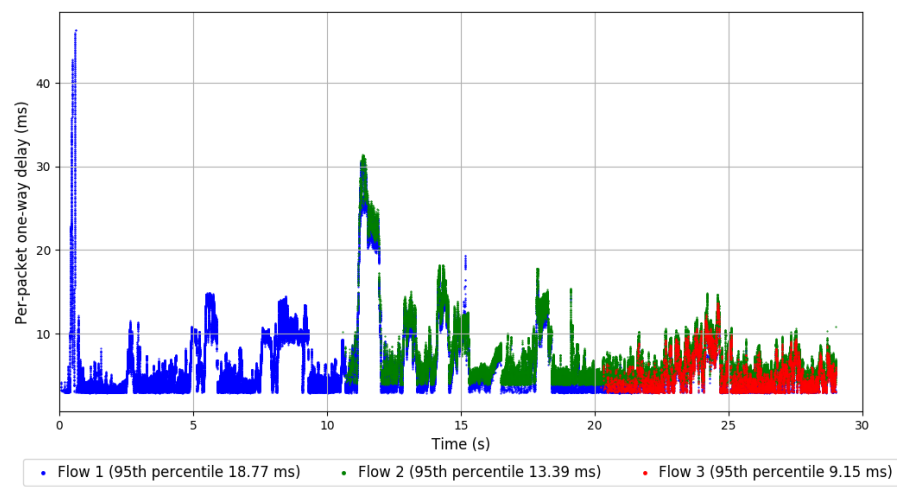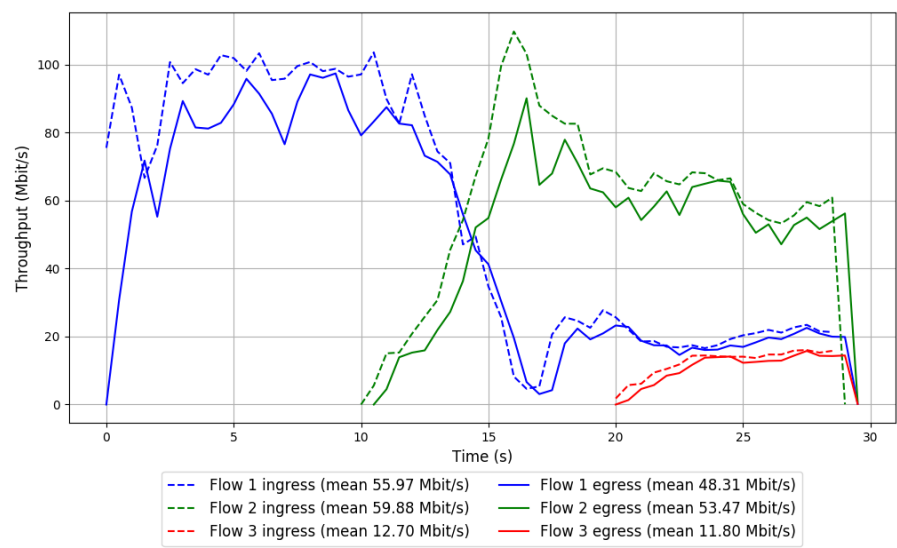
Run 5: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 92.82 Mbit/s)   Flow 1 egress (mean 84.32 Mbit/s)
Flow 2 ingress (mean 6.19 Mbit/s)   Flow 2 egress (mean 5.65 Mbit/s)
Flow 3 ingress (mean 3.65 Mbit/s)   Flow 3 egress (mean 3.32 Mbit/s)

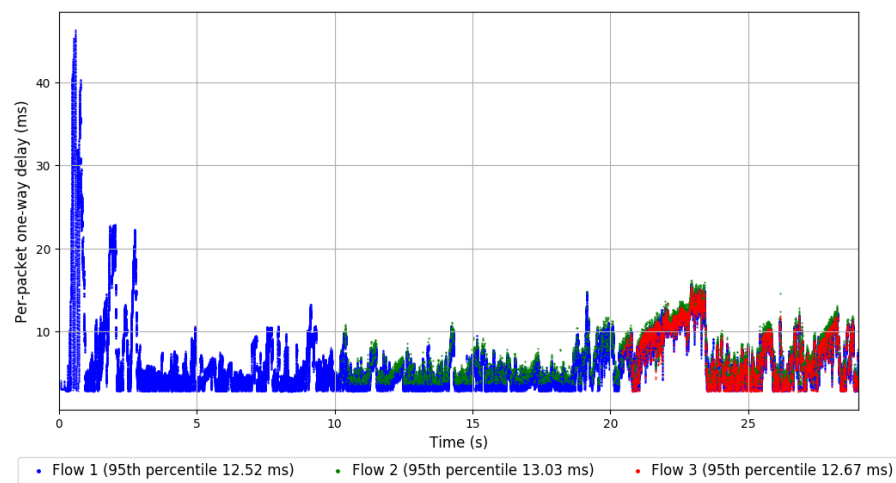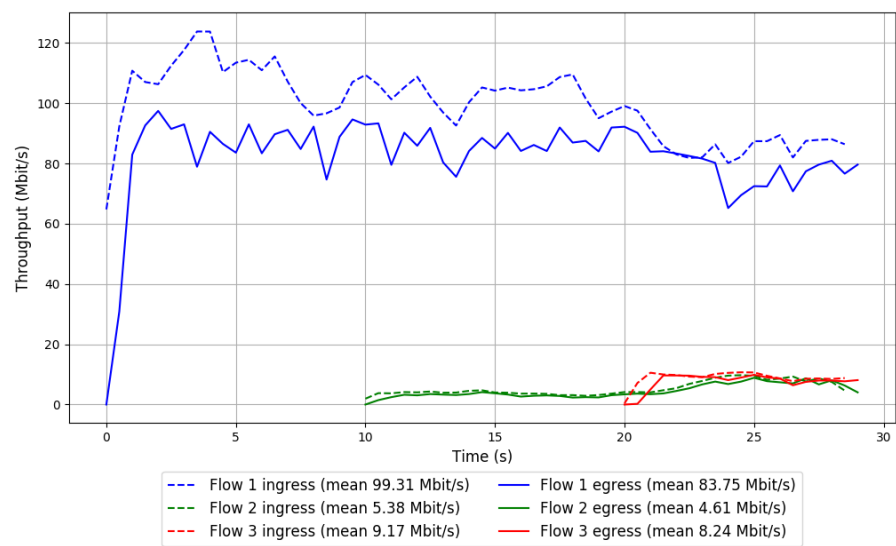Flow 1 (95th percentile 13.96 ms)   Flow 2 (95th percentile 13.46 ms)   Flow 3 (95th percentile 13.04 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:15:27
End at: 2019-01-25 01:15:57
Local clock offset: -0.375 ms
Remote clock offset: -4.344 ms


# Below is generated by plot.py at 2019-01-25 03:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 10.202 ms
Loss rate: 16.12%
-- Flow 1:
Average throughput: 67.39 Mbit/s
95th percentile per-packet one-way delay: 10.258 ms
Loss rate: 16.16%
-- Flow 2:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 9.684 ms
Loss rate: 15.91%
-- Flow 3:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 8.601 ms
Loss rate: 14.69%
```
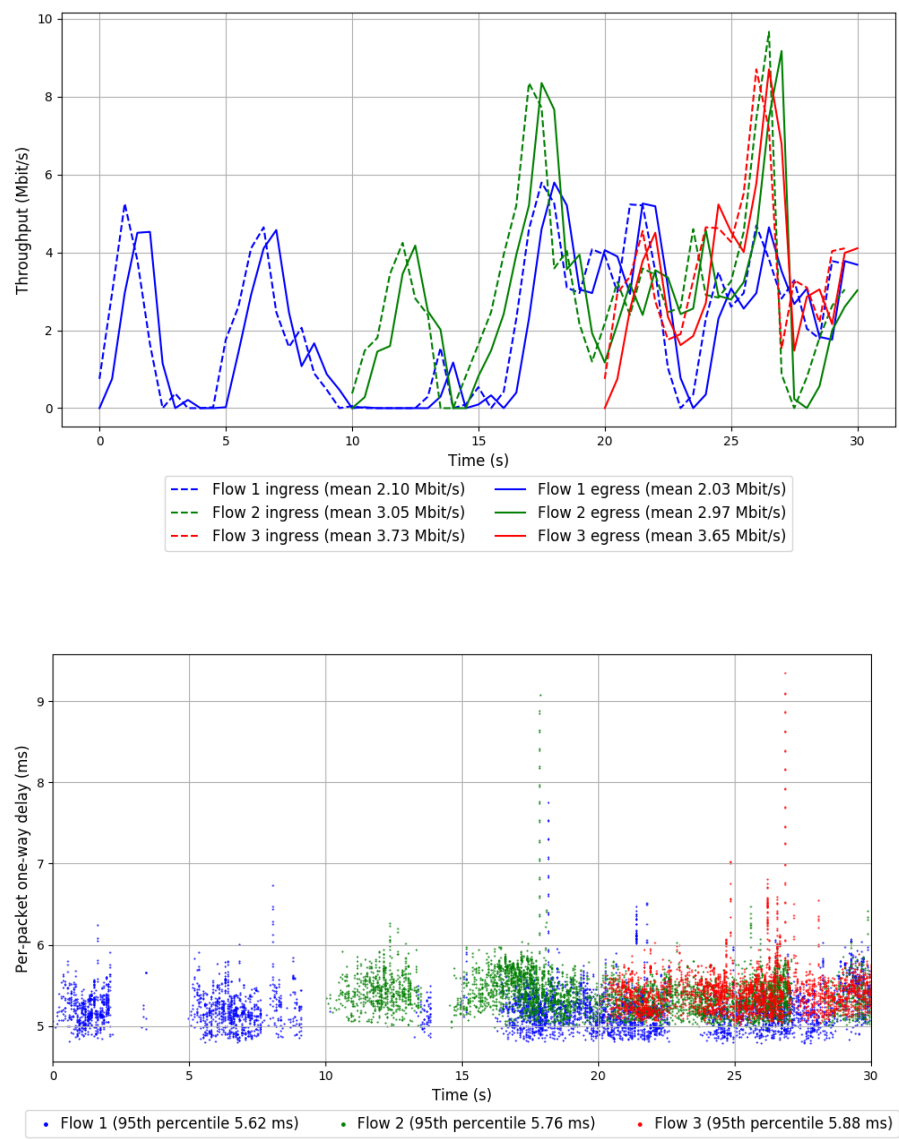
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:41:42
End at: 2019-01-25 01:42:12
Local clock offset: -0.336 ms
Remote clock offset: -4.998 ms


# Below is generated by plot.py at 2019-01-25 03:23:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.44 Mbit/s
95th percentile per-packet one-way delay: 11.685 ms
Loss rate: 15.66%
-- Flow 1:
Average throughput: 64.49 Mbit/s
95th percentile per-packet one-way delay: 11.941 ms
Loss rate: 16.36%
-- Flow 2:
Average throughput: 5.70 Mbit/s
95th percentile per-packet one-way delay: 10.361 ms
Loss rate: 12.59%
-- Flow 3:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 9.227 ms
Loss rate: 12.14%
```

Run 2: Report of Indigo-MusesT — Data Link
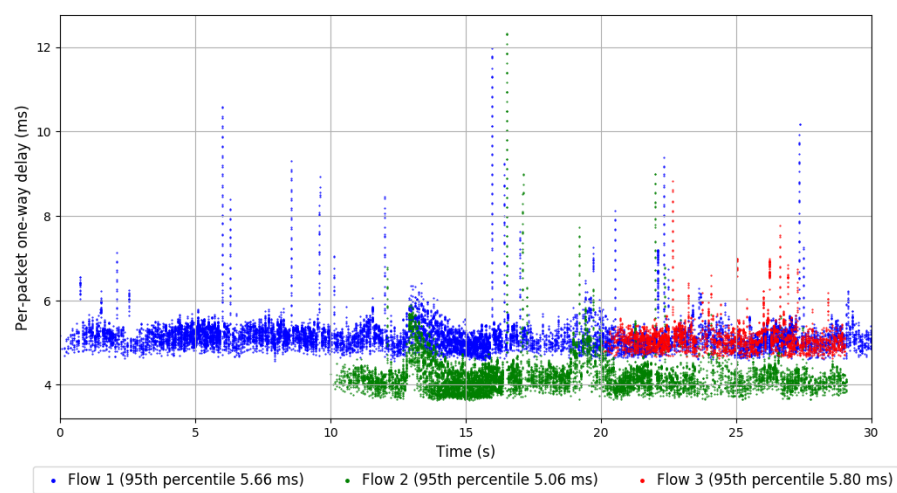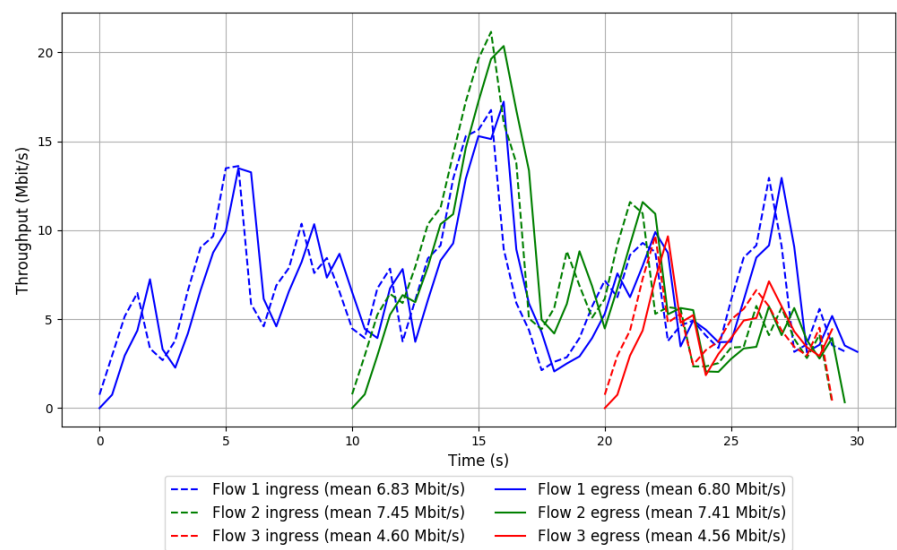
```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-25 02:08:11
End at: 2019-01-25 02:08:41
Local clock offset: 0.46 ms
Remote clock offset: -5.695 ms


# Below is generated by plot.py at 2019-01-25 03:23:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.07 Mbit/s
95th percentile per-packet one-way delay: 13.902 ms
Loss rate: 16.18%
-- Flow 1:
Average throughput: 81.75 Mbit/s
95th percentile per-packet one-way delay: 13.974 ms
Loss rate: 16.07%
-- Flow 2:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 11.262 ms
Loss rate: 18.23%
-- Flow 3:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 9.506 ms
Loss rate: 22.28%
```

Run 3: Report of Indigo-MusesT — Data Link

- - - - Flow 1 ingress (mean 97.40 Mbit/s) ——— Flow 1 egress (mean 81.75 Mbit/s)
- - - - Flow 2 ingress (mean 5.37 Mbit/s) ——— Flow 2 egress (mean 4.40 Mbit/s)
- - - - Flow 3 ingress (mean 1.92 Mbit/s) ——— Flow 3 egress (mean 1.49 Mbit/s)

- Flow 1 (95th percentile 13.97 ms) • Flow 2 (95th percentile 11.26 ms) • Flow 3 (95th percentile 9.51 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 02:35:00
End at: 2019-01-25 02:35:30
Local clock offset: 1.232 ms
Remote clock offset: -4.572 ms


# Below is generated by plot.py at 2019-01-25 03:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.84 Mbit/s
95th percentile per-packet one-way delay: 14.102 ms
Loss rate: 13.17%
-- Flow 1:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 18.775 ms
Loss rate: 13.67%
-- Flow 2:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 13.394 ms
Loss rate: 13.07%
-- Flow 3:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 9.146 ms
Loss rate: 7.02%
```

Run 4: Report of Indigo-MusesT — Data Link
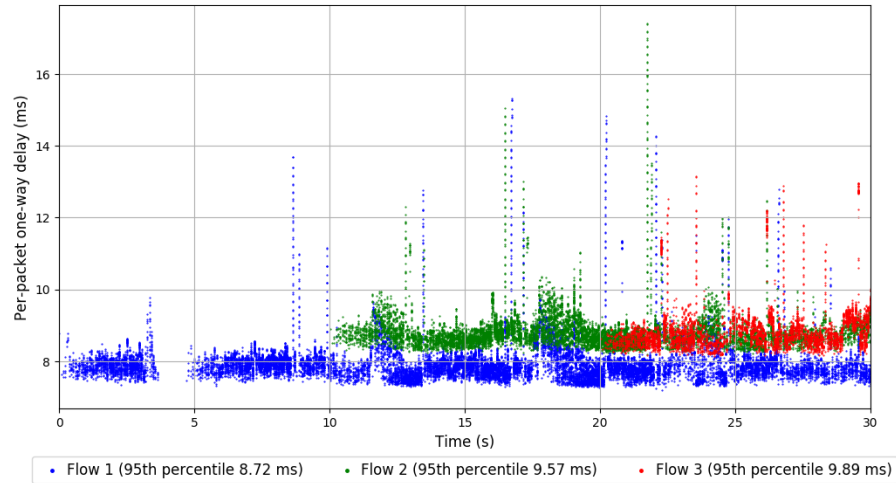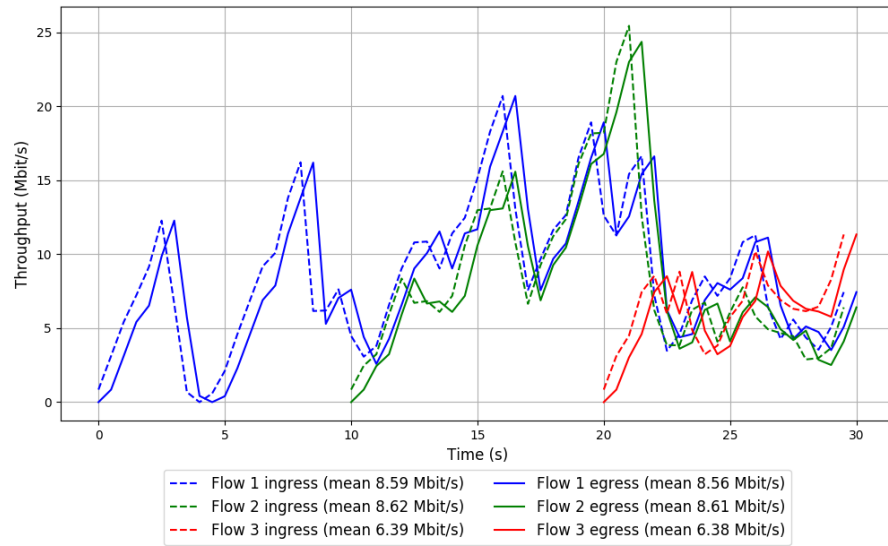
```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-25 03:01:44
End at: 2019-01-25 03:02:14
Local clock offset: 0.327 ms
Remote clock offset: -5.577 ms


# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.21 Mbit/s
95th percentile per-packet one-way delay: 12.557 ms
Loss rate: 15.48%
-- Flow 1:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 12.524 ms
Loss rate: 15.67%
-- Flow 2:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 13.033 ms
Loss rate: 14.37%
-- Flow 3:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 12.671 ms
Loss rate: 10.14%
```
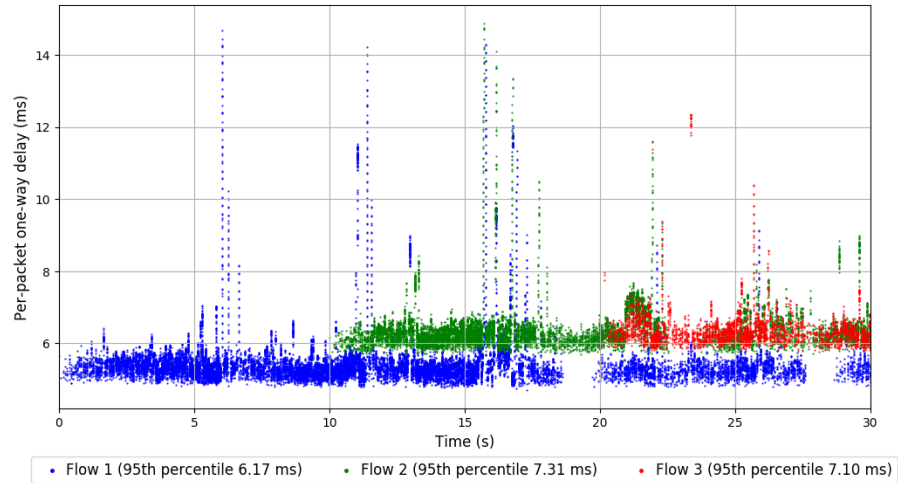
Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 01:21:36
End at: 2019-01-25 01:22:06
Local clock offset: 0.282 ms
Remote clock offset: -3.781 ms

# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 5.752 ms
Loss rate: 3.01%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 5.622 ms
Loss rate: 3.67%
-- Flow 2:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 5.760 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 5.879 ms
Loss rate: 2.33%
```
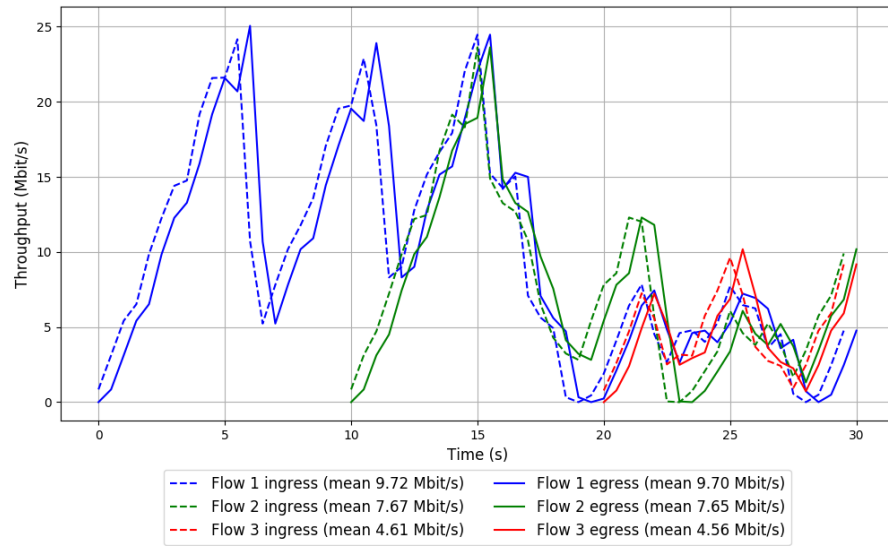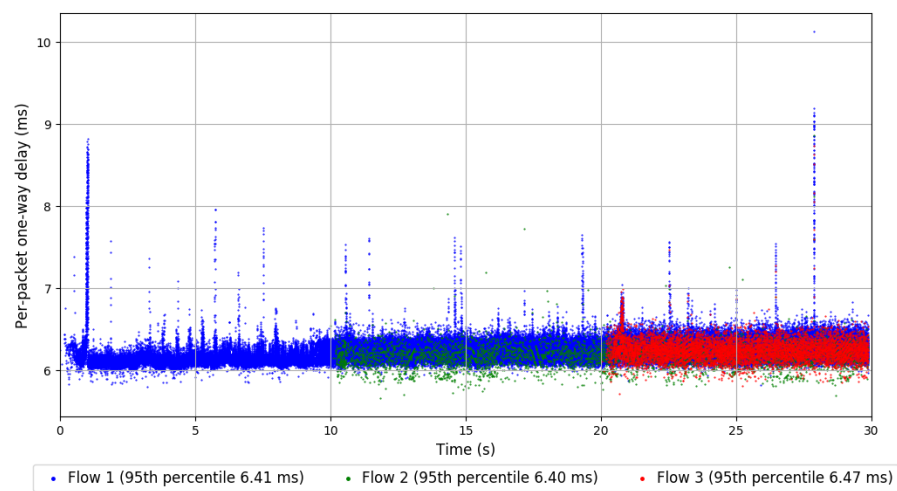
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-25 01:48:19
End at: 2019-01-25 01:48:49
Local clock offset: 1.98 ms
Remote clock offset: -4.009 ms

# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 5.567 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 5.658 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 5.062 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 5.799 ms
Loss rate: 1.66%
```
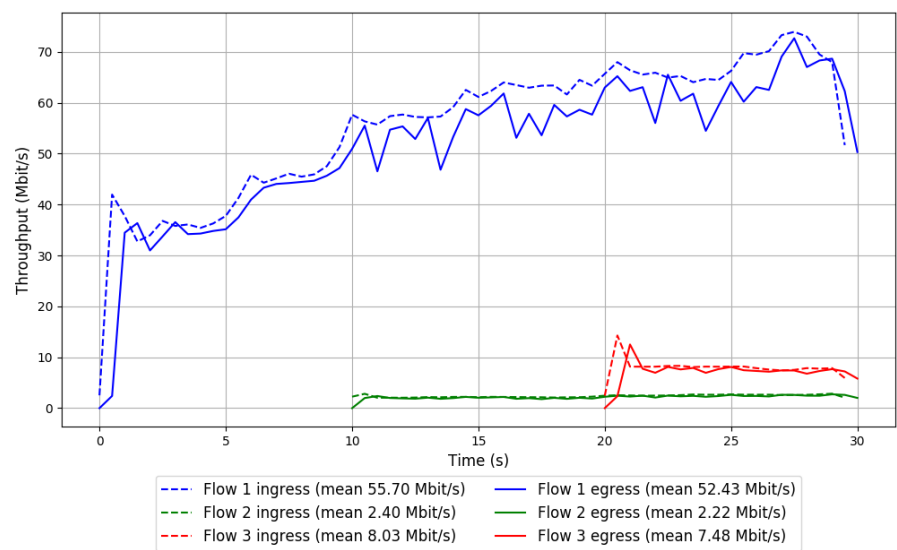
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-25 02:14:40
End at: 2019-01-25 02:15:10
Local clock offset: 2.017 ms
Remote clock offset: -3.651 ms


# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.87 Mbit/s
95th percentile per-packet one-way delay: 5.299 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 5.308 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 4.868 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 5.757 ms
Loss rate: 2.88%
```
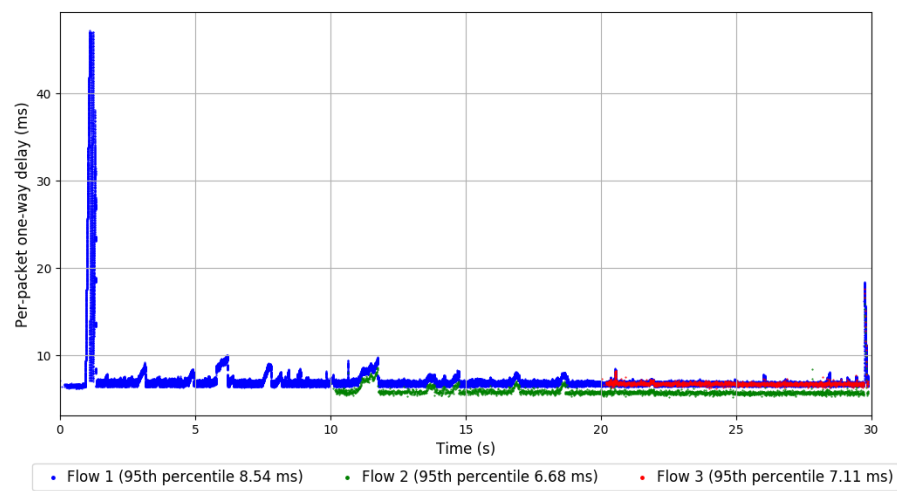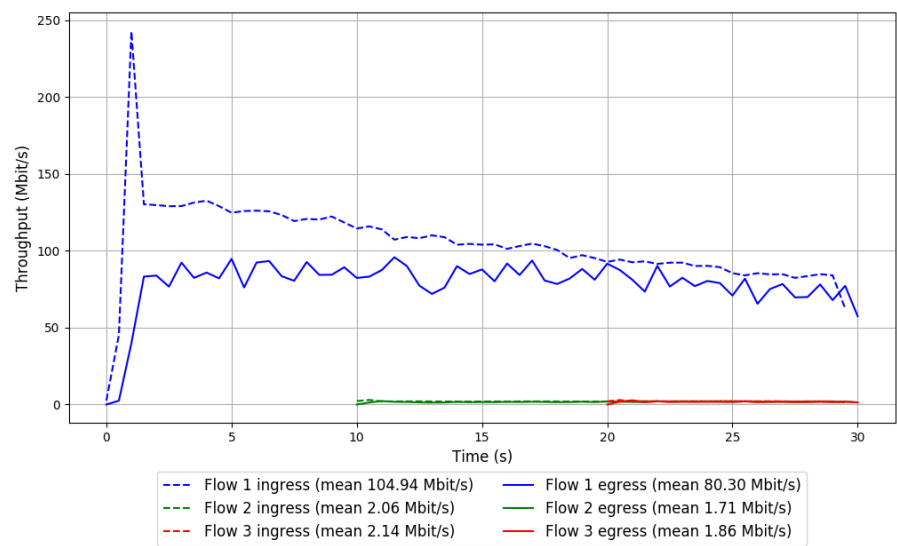
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 6.37 Mbit/s) — — —   Flow 1 egress (mean 6.32 Mbit/s) ———
Flow 2 ingress (mean 5.17 Mbit/s) — — —   Flow 2 egress (mean 5.09 Mbit/s) ———
Flow 3 ingress (mean 3.99 Mbit/s) — — —   Flow 3 egress (mean 3.88 Mbit/s) ———

• Flow 1 (95th percentile 5.31 ms)   • Flow 2 (95th percentile 4.87 ms)   • Flow 3 (95th percentile 5.76 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-25 02:41:23
End at: 2019-01-25 02:41:53
Local clock offset: -1.506 ms
Remote clock offset: -2.942 ms


# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 9.360 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 8.722 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 9.568 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 6.38 Mbit/s
95th percentile per-packet one-way delay: 9.890 ms
Loss rate: 0.17%
```
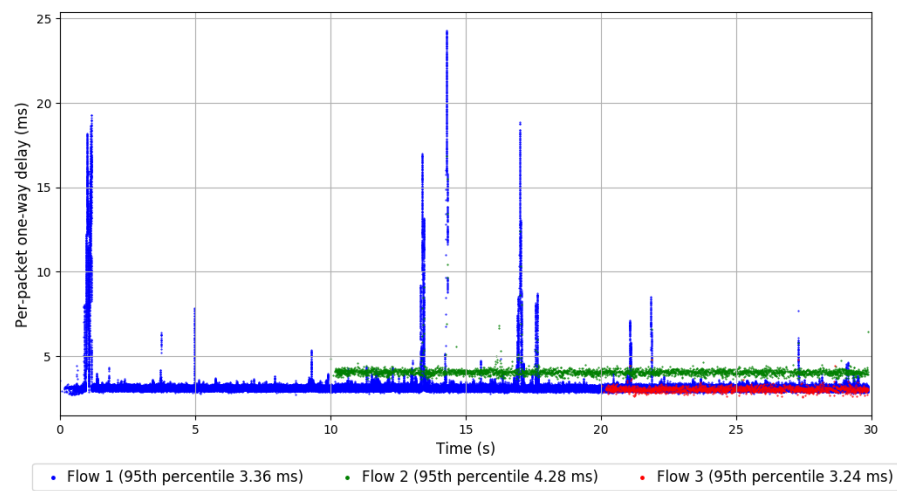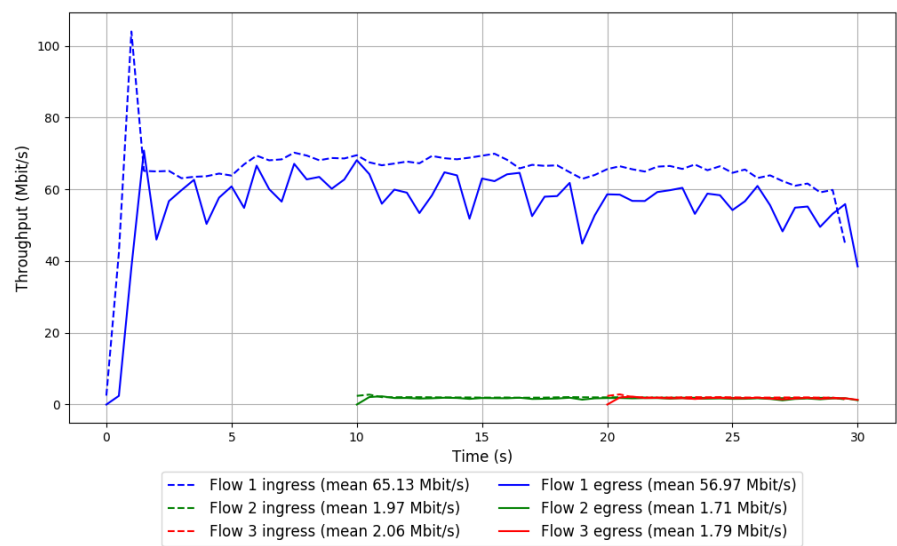
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-25 03:08:03
End at: 2019-01-25 03:08:33
Local clock offset: -0.751 ms
Remote clock offset: -4.572 ms


# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.30 Mbit/s
95th percentile per-packet one-way delay: 7.020 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 9.70 Mbit/s
95th percentile per-packet one-way delay: 6.166 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 7.311 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 7.098 ms
Loss rate: 1.13%
```
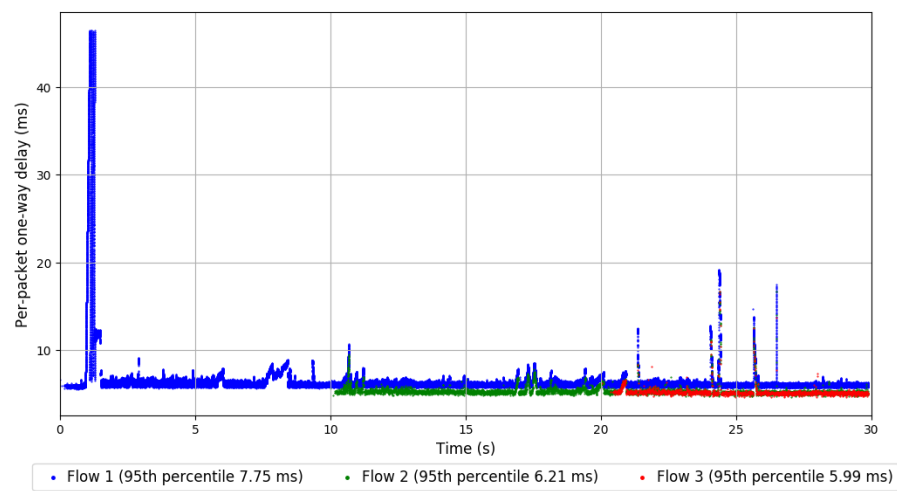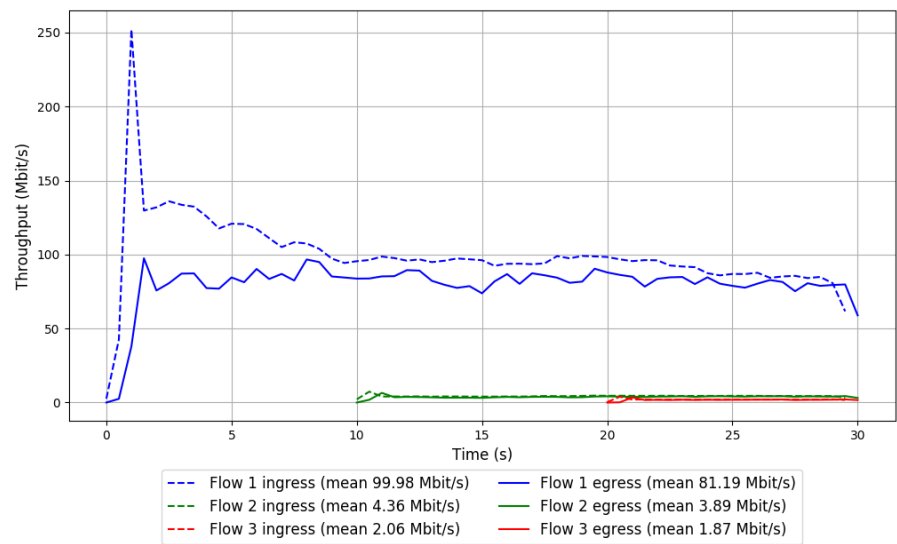
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 01:08:10
End at: 2019-01-25 01:08:40
Local clock offset: 0.093 ms
Remote clock offset: -3.196 ms


# Below is generated by plot.py at 2019-01-25 03:24:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 6.414 ms
Loss rate: 5.95%
-- Flow 1:
Average throughput: 52.43 Mbit/s
95th percentile per-packet one-way delay: 6.411 ms
Loss rate: 5.87%
-- Flow 2:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 6.396 ms
Loss rate: 7.23%
-- Flow 3:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 6.475 ms
Loss rate: 6.93%
```

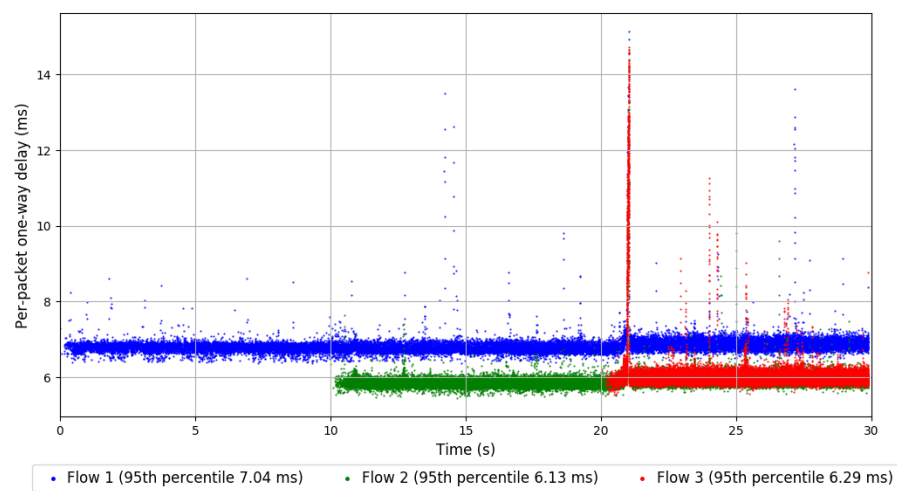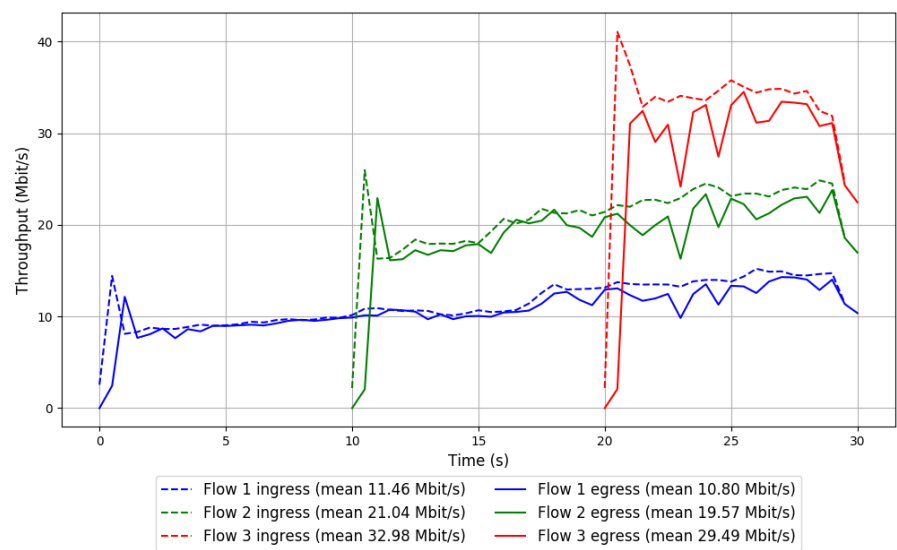Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 01:34:01
End at: 2019-01-25 01:34:31
Local clock offset: -0.082 ms
Remote clock offset: -3.263 ms


# Below is generated by plot.py at 2019-01-25 03:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.04 Mbit/s
95th percentile per-packet one-way delay: 8.522 ms
Loss rate: 23.34%
-- Flow 1:
Average throughput: 80.30 Mbit/s
95th percentile per-packet one-way delay: 8.545 ms
Loss rate: 23.49%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 6.685 ms
Loss rate: 17.30%
-- Flow 3:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 7.109 ms
Loss rate: 13.16%
```
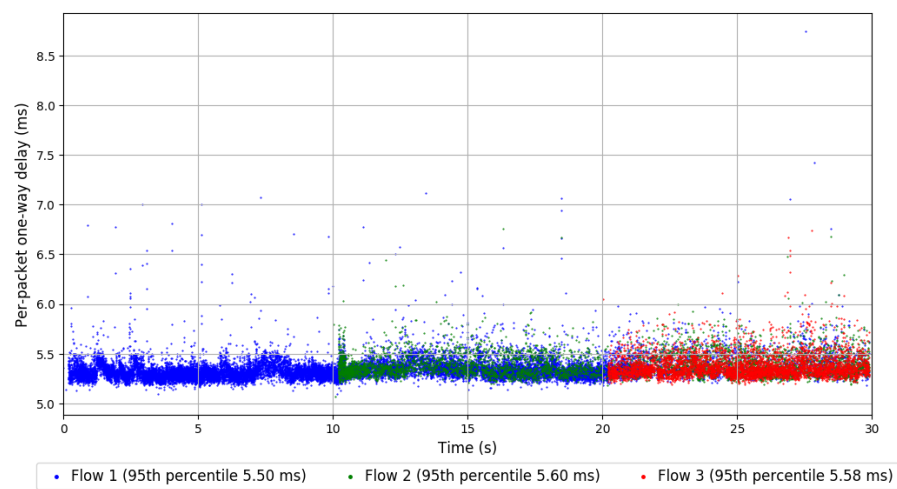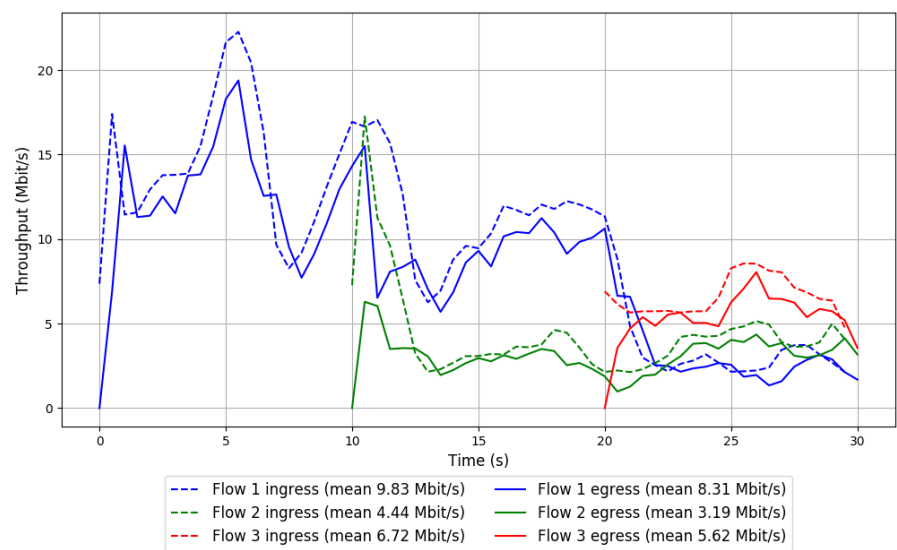
Run 2: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 104.94 Mbit/s) ——— Flow 1 egress (mean 80.30 Mbit/s)
- - - Flow 2 ingress (mean 2.06 Mbit/s) ——— Flow 2 egress (mean 1.71 Mbit/s)
- - - Flow 3 ingress (mean 2.14 Mbit/s) ——— Flow 3 egress (mean 1.86 Mbit/s)

- Flow 1 (95th percentile 8.54 ms)　　• Flow 2 (95th percentile 6.68 ms)　　• Flow 3 (95th percentile 7.11 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 02:00:40
End at: 2019-01-25 02:01:10
Local clock offset: 2.011 ms
Remote clock offset: -4.998 ms


# Below is generated by plot.py at 2019-01-25 03:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 3.898 ms
Loss rate: 12.55%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 3.360 ms
Loss rate: 12.53%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 4.280 ms
Loss rate: 13.13%
-- Flow 3:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 3.239 ms
Loss rate: 13.28%
```
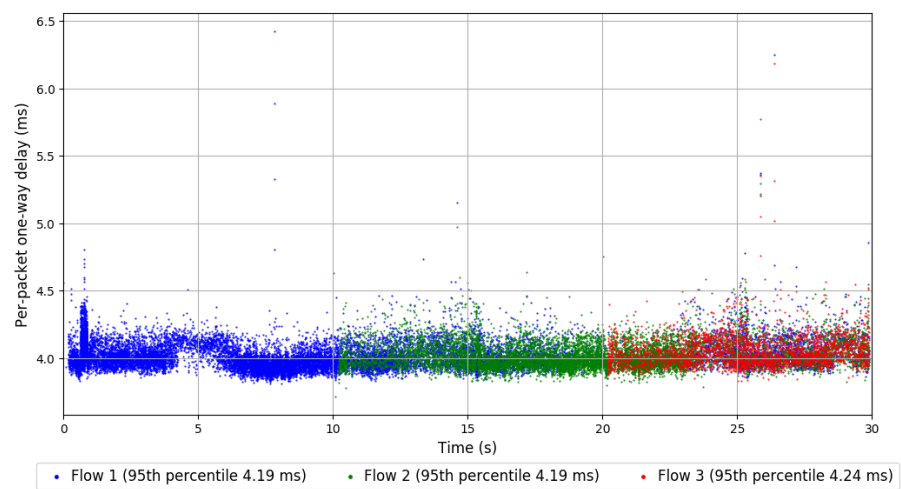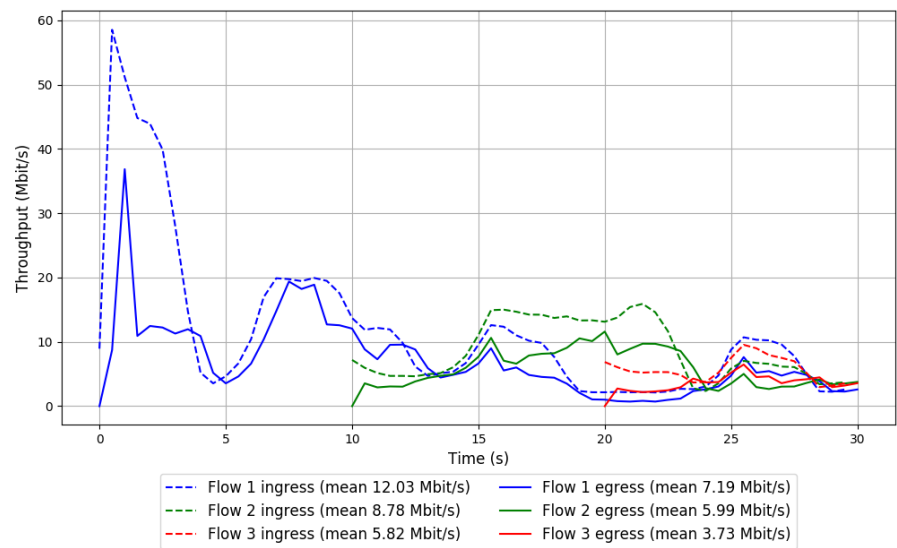
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 65.13 Mbit/s) — — — — Flow 1 egress (mean 56.97 Mbit/s)
Flow 2 ingress (mean 1.97 Mbit/s) — — — — Flow 2 egress (mean 1.71 Mbit/s)
Flow 3 ingress (mean 2.06 Mbit/s) — — — — Flow 3 egress (mean 1.79 Mbit/s)

Flow 1 (95th percentile 3.36 ms)   Flow 2 (95th percentile 4.28 ms)   Flow 3 (95th percentile 3.24 ms)
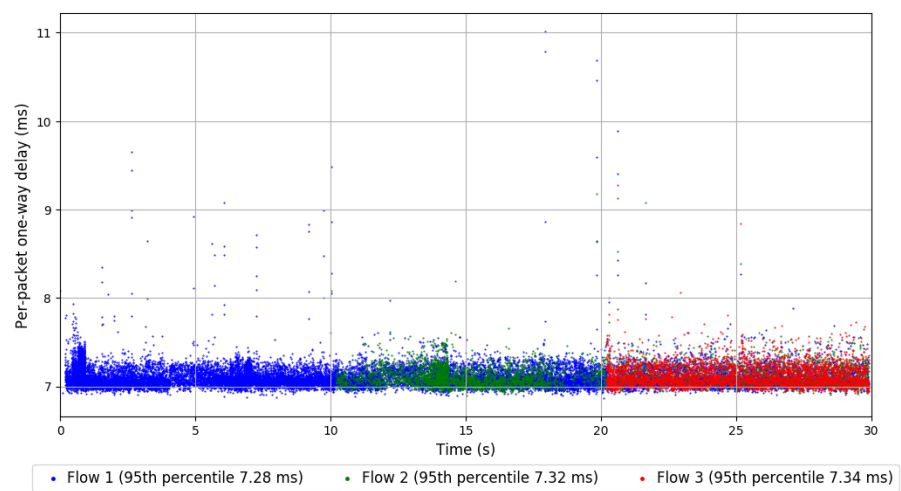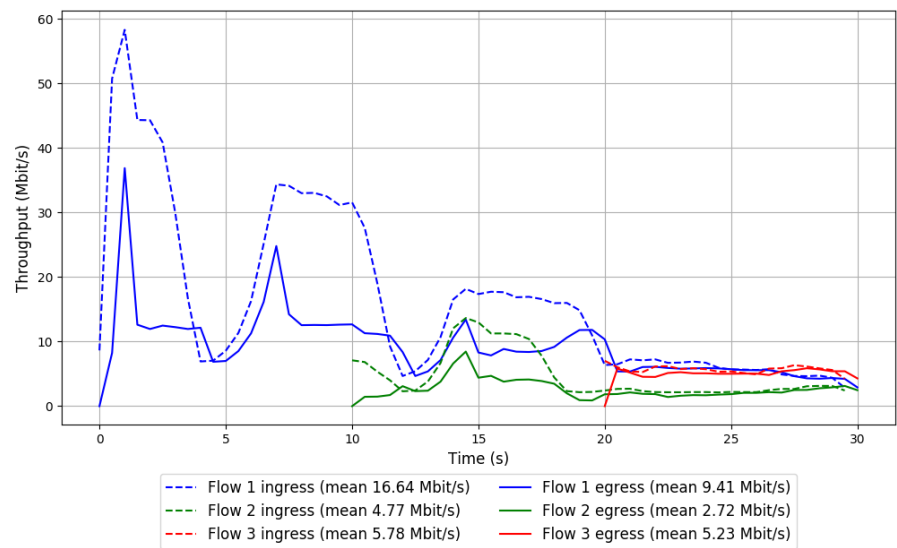
120

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 02:27:22
End at: 2019-01-25 02:27:52
Local clock offset: -1.056 ms
Remote clock offset: -5.119 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 7.707 ms
Loss rate: 18.51%
-- Flow 1:
Average throughput: 81.19 Mbit/s
95th percentile per-packet one-way delay: 7.753 ms
Loss rate: 18.80%
-- Flow 2:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 6.210 ms
Loss rate: 10.78%
-- Flow 3:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 5.988 ms
Loss rate: 9.05%
```

Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 99.98 Mbit/s) --- Flow 1 egress (mean 81.19 Mbit/s)
Flow 2 ingress (mean 4.36 Mbit/s) --- Flow 2 egress (mean 3.89 Mbit/s)
Flow 3 ingress (mean 2.06 Mbit/s) --- Flow 3 egress (mean 1.87 Mbit/s)

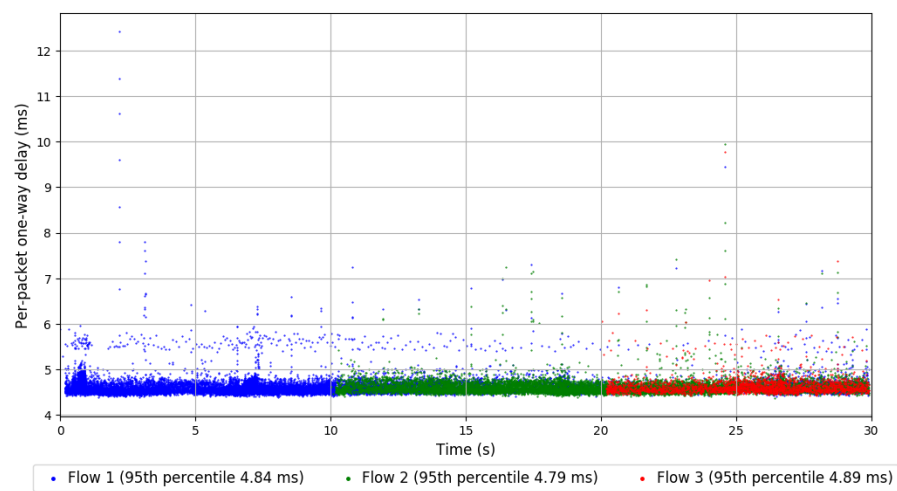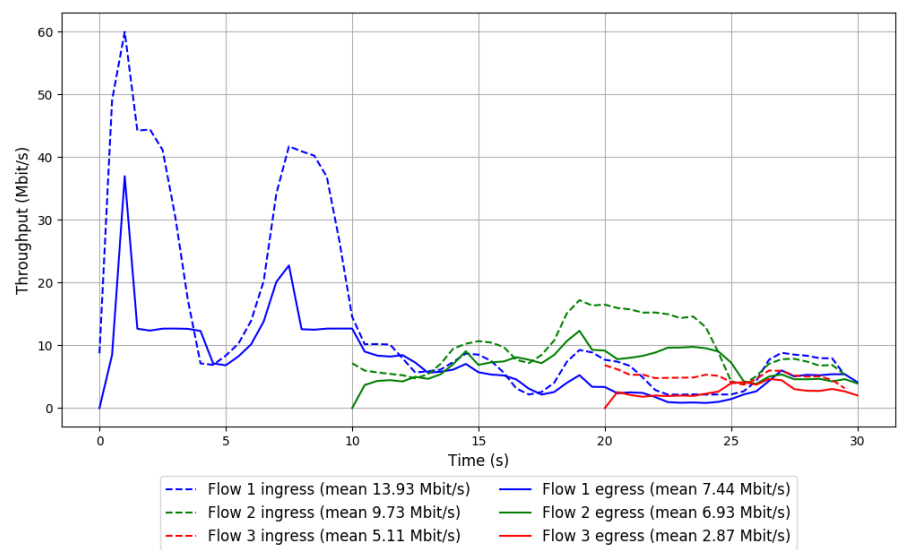Flow 1 (95th percentile 7.75 ms)   Flow 2 (95th percentile 6.21 ms)   Flow 3 (95th percentile 5.99 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-25 02:54:09
End at: 2019-01-25 02:54:39
Local clock offset: -1.387 ms
Remote clock offset: -4.366 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 6.955 ms
Loss rate: 7.69%
-- Flow 1:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 7.043 ms
Loss rate: 5.81%
-- Flow 2:
Average throughput: 19.57 Mbit/s
95th percentile per-packet one-way delay: 6.130 ms
Loss rate: 6.99%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 6.291 ms
Loss rate: 10.56%
```

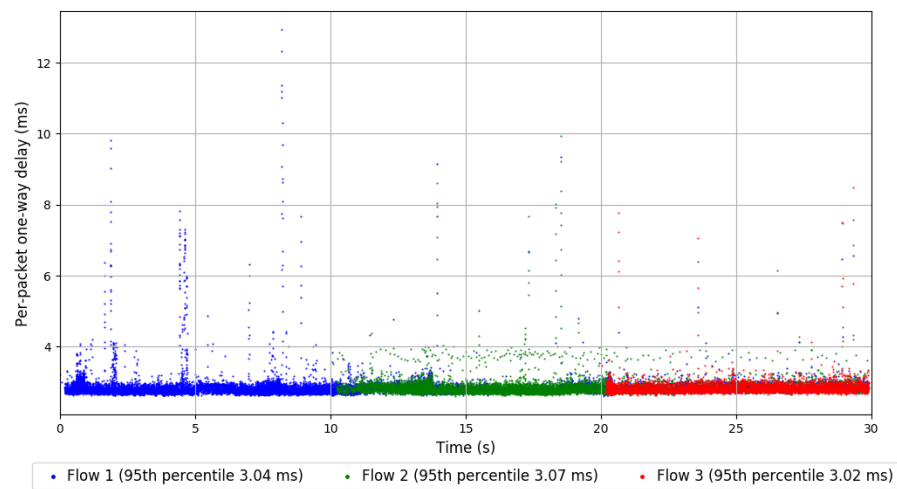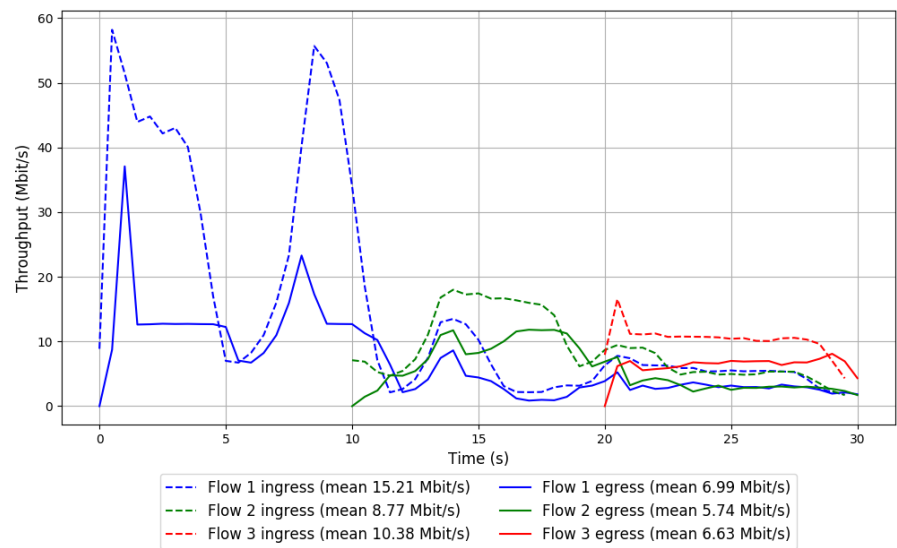Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-25 01:20:26
End at: 2019-01-25 01:20:56
Local clock offset: -1.941 ms
Remote clock offset: -5.796 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 5.540 ms
Loss rate: 18.12%
-- Flow 1:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 5.500 ms
Loss rate: 15.52%
-- Flow 2:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 5.604 ms
Loss rate: 28.09%
-- Flow 3:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 5.581 ms
Loss rate: 16.40%
```

Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-25 01:47:06
End at: 2019-01-25 01:47:36
Local clock offset: 0.466 ms
Remote clock offset: -5.295 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 4.196 ms
Loss rate: 37.33%
-- Flow 1:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 4.188 ms
Loss rate: 40.22%
-- Flow 2:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 4.194 ms
Loss rate: 31.81%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 4.235 ms
Loss rate: 36.01%
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-25 02:13:29
End at: 2019-01-25 02:13:59
Local clock offset: -2.004 ms
Remote clock offset: -4.156 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 7.296 ms
Loss rate: 40.43%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 7.280 ms
Loss rate: 43.49%
-- Flow 2:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 7.320 ms
Loss rate: 43.01%
-- Flow 3:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 7.340 ms
Loss rate: 9.48%
```
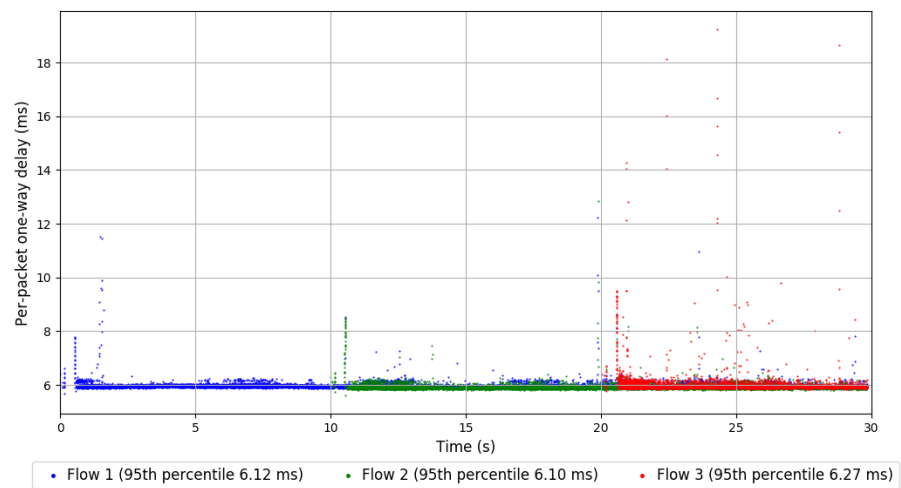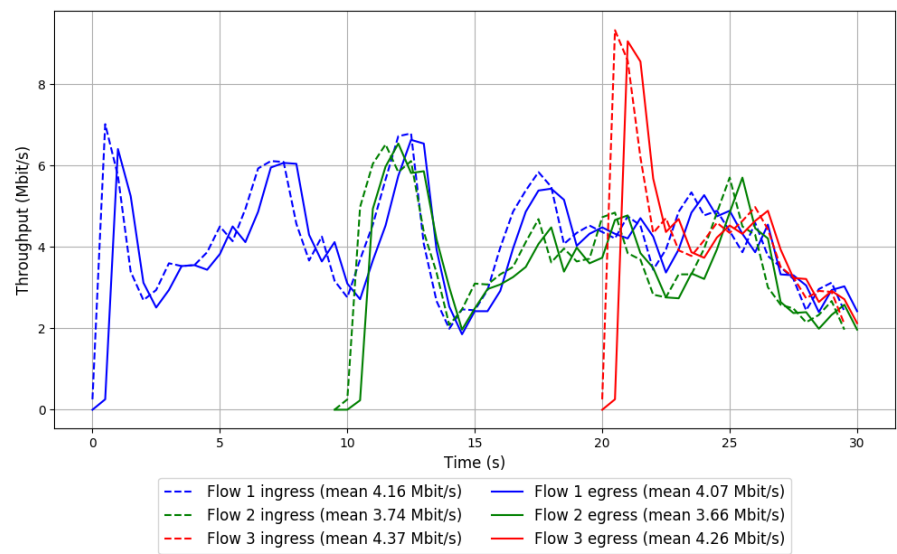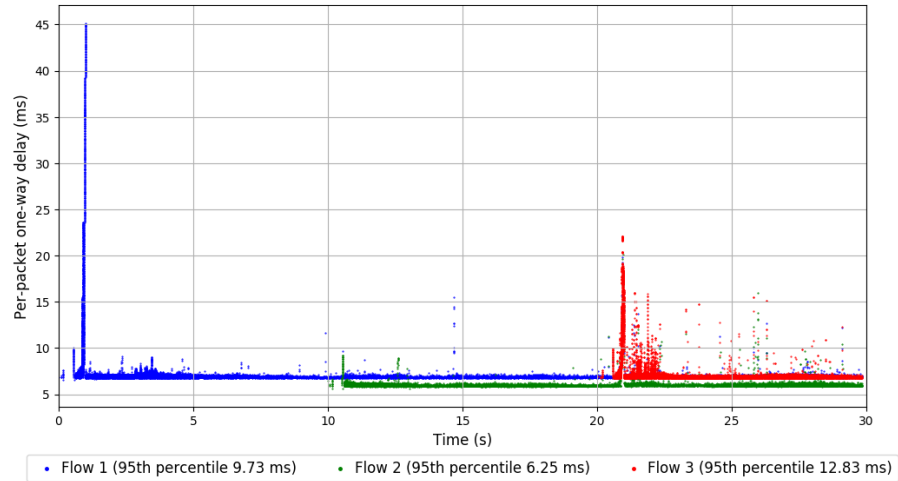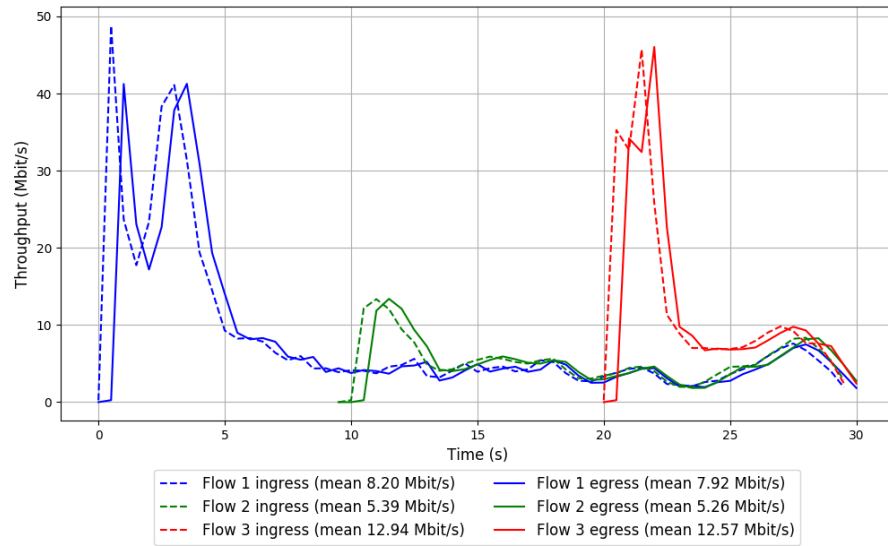
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 02:40:12
End at: 2019-01-25 02:40:42
Local clock offset: 1.35 ms
Remote clock offset: -2.942 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 4.826 ms
Loss rate: 41.19%
-- Flow 1:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 4.842 ms
Loss rate: 46.63%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 4.795 ms
Loss rate: 28.75%
-- Flow 3:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 4.890 ms
Loss rate: 43.92%
```
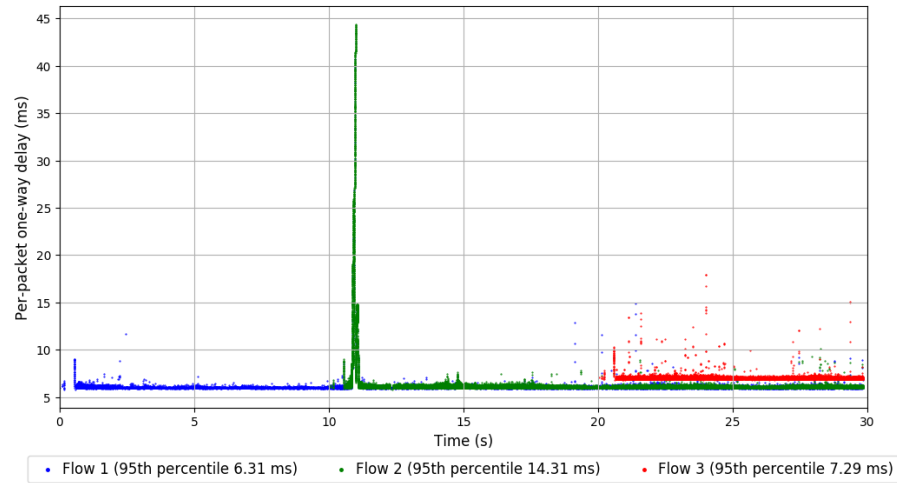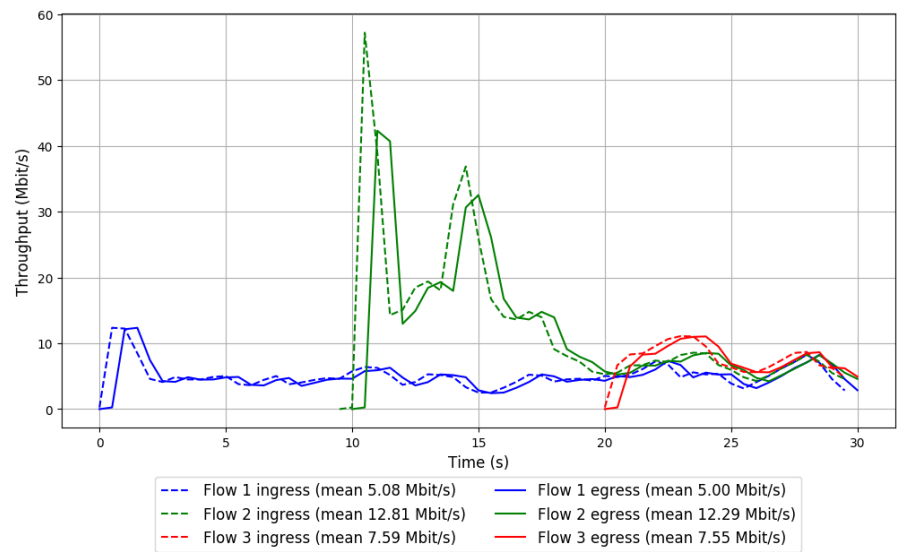
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-25 03:06:52
End at: 2019-01-25 03:07:22
Local clock offset: 1.332 ms
Remote clock offset: -4.655 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 3.043 ms
Loss rate: 46.89%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 3.041 ms
Loss rate: 54.06%
-- Flow 2:
Average throughput: 5.74 Mbit/s
95th percentile per-packet one-way delay: 3.068 ms
Loss rate: 34.52%
-- Flow 3:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 3.019 ms
Loss rate: 36.10%
```

Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 01:22:45
End at: 2019-01-25 01:23:15
Local clock offset: -0.257 ms
Remote clock offset: -3.46 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 6.140 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 6.122 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 6.100 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 6.268 ms
Loss rate: 2.43%
```
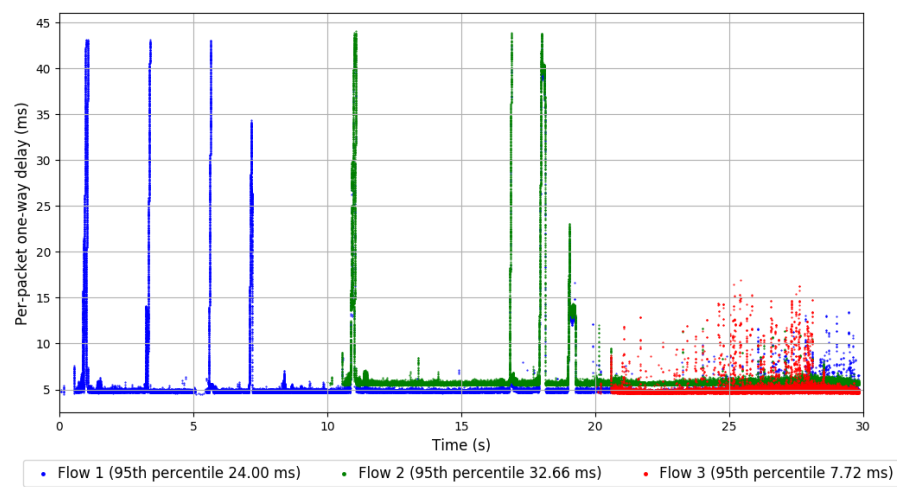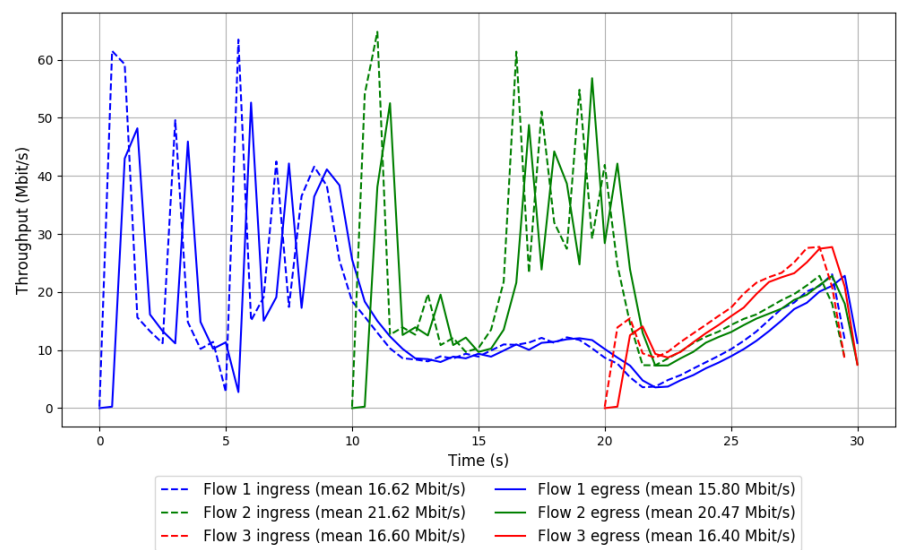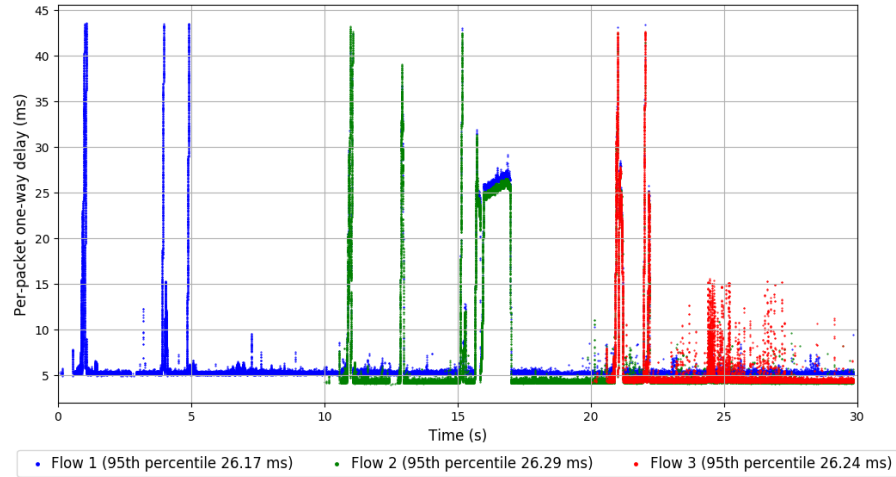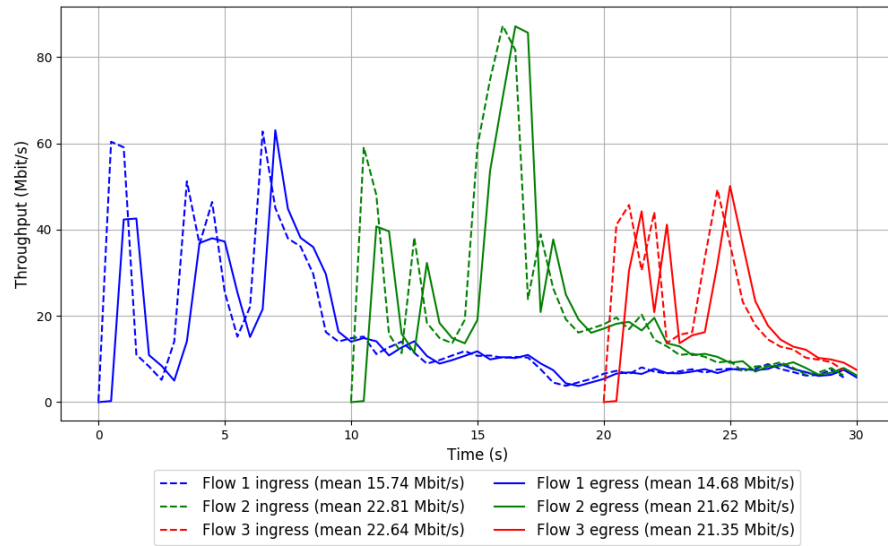
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-25 01:49:30
End at: 2019-01-25 01:50:00
Local clock offset: 0.151 ms
Remote clock offset: -3.767 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 9.713 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 9.729 ms
Loss rate: 3.44%
-- Flow 2:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 6.253 ms
Loss rate: 2.42%
-- Flow 3:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 12.827 ms
Loss rate: 2.86%
```

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 02:15:51
End at: 2019-01-25 02:16:21
Local clock offset: 0.042 ms
Remote clock offset: -3.078 ms


# Below is generated by plot.py at 2019-01-25 03:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 8.450 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 5.00 Mbit/s
95th percentile per-packet one-way delay: 6.306 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 14.314 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 7.291 ms
Loss rate: 0.52%
```
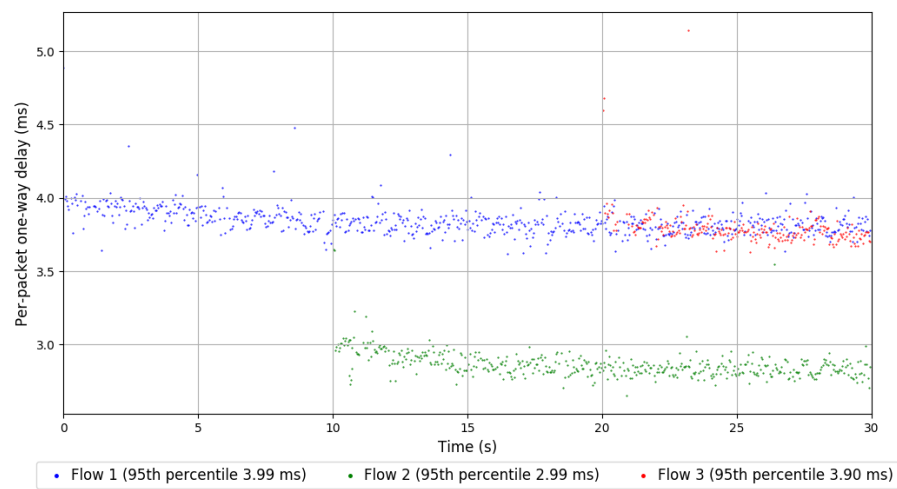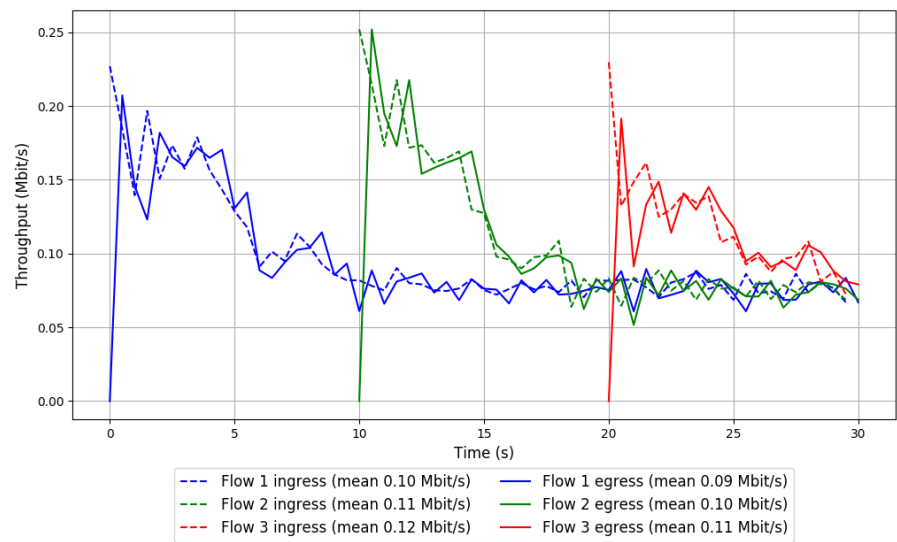
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-25 02:42:36
End at: 2019-01-25 02:43:06
Local clock offset: -0.638 ms
Remote clock offset: -4.717 ms


# Below is generated by plot.py at 2019-01-25 03:25:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 24.029 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 15.80 Mbit/s
95th percentile per-packet one-way delay: 23.995 ms
Loss rate: 4.96%
-- Flow 2:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 32.665 ms
Loss rate: 5.34%
-- Flow 3:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 7.719 ms
Loss rate: 1.20%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-25 03:09:13
End at: 2019-01-25 03:09:43
Local clock offset: -0.705 ms
Remote clock offset: -5.125 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.07 Mbit/s
95th percentile per-packet one-way delay: 26.258 ms
Loss rate: 5.93%
-- Flow 1:
Average throughput: 14.68 Mbit/s
95th percentile per-packet one-way delay: 26.172 ms
Loss rate: 6.73%
-- Flow 2:
Average throughput: 21.62 Mbit/s
95th percentile per-packet one-way delay: 26.286 ms
Loss rate: 5.20%
-- Flow 3:
Average throughput: 21.35 Mbit/s
95th percentile per-packet one-way delay: 26.237 ms
Loss rate: 5.71%
```

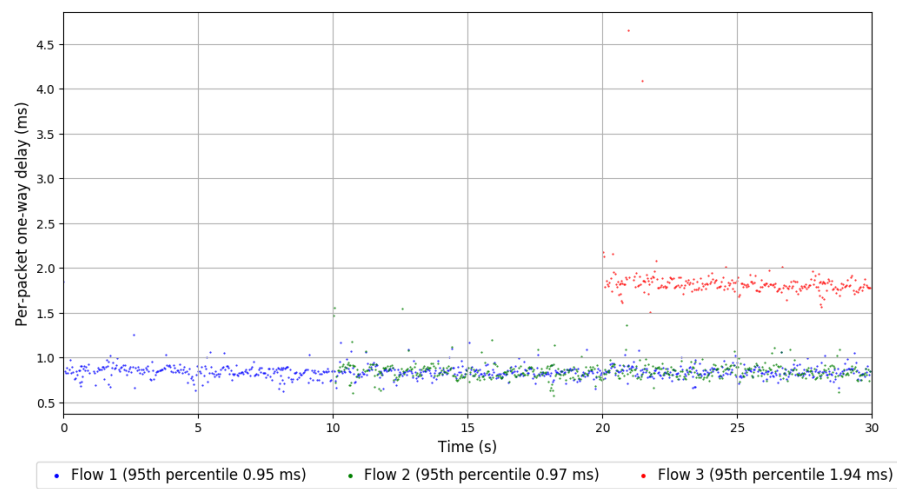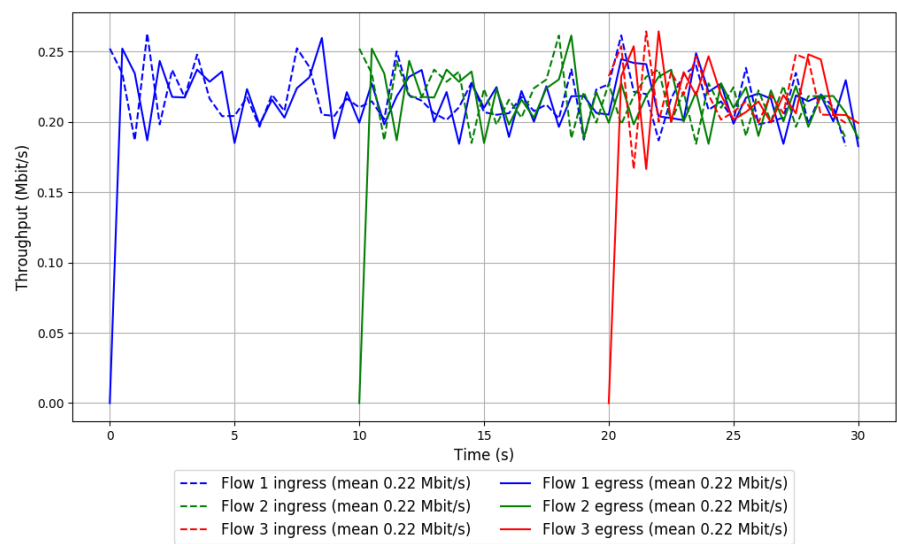Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 01:26:28
End at: 2019-01-25 01:26:58
Local clock offset: 1.134 ms
Remote clock offset: -3.851 ms

# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 3.945 ms
Loss rate: 3.52%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 3.986 ms
Loss rate: 3.18%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 2.994 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 3.898 ms
Loss rate: 4.86%
```
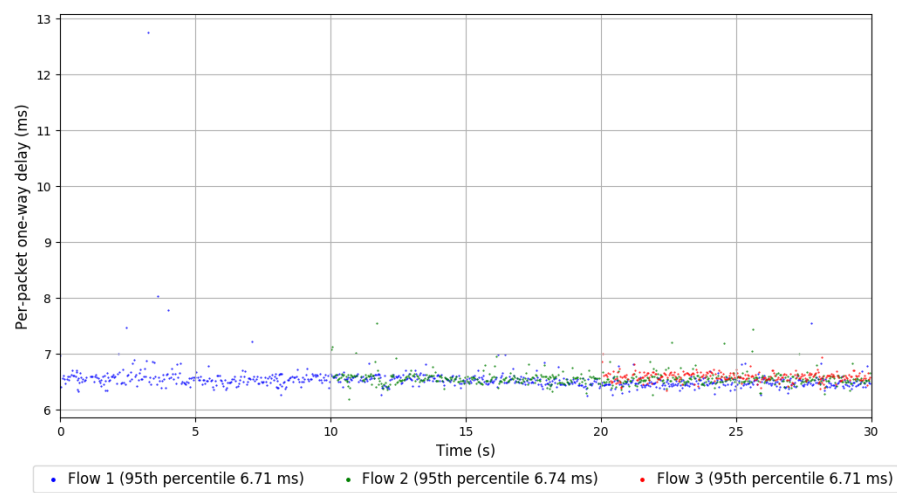
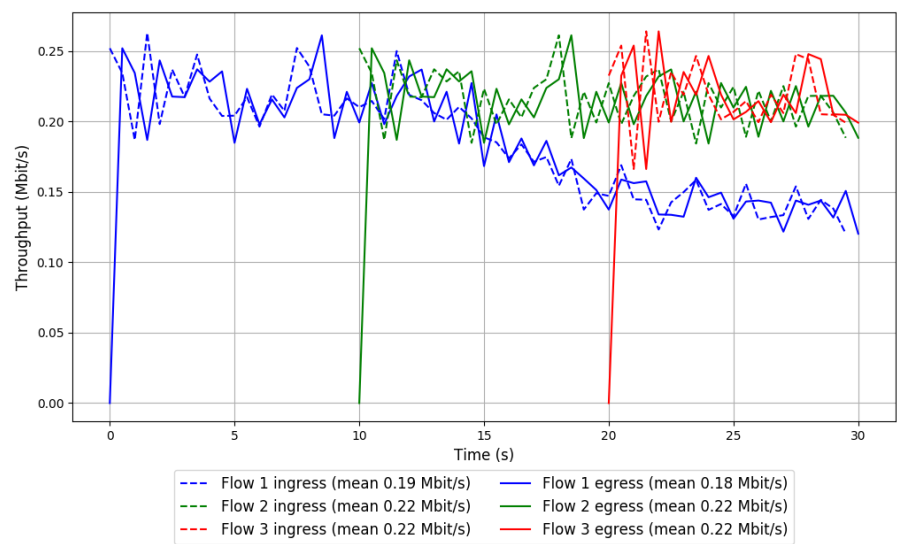# Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-01-25 01:53:10
End at: 2019-01-25 01:53:40
Local clock offset: 2.044 ms
Remote clock offset: -4.095 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 4.924 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4.046 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 4.943 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 4.973 ms
Loss rate: 0.84%
```

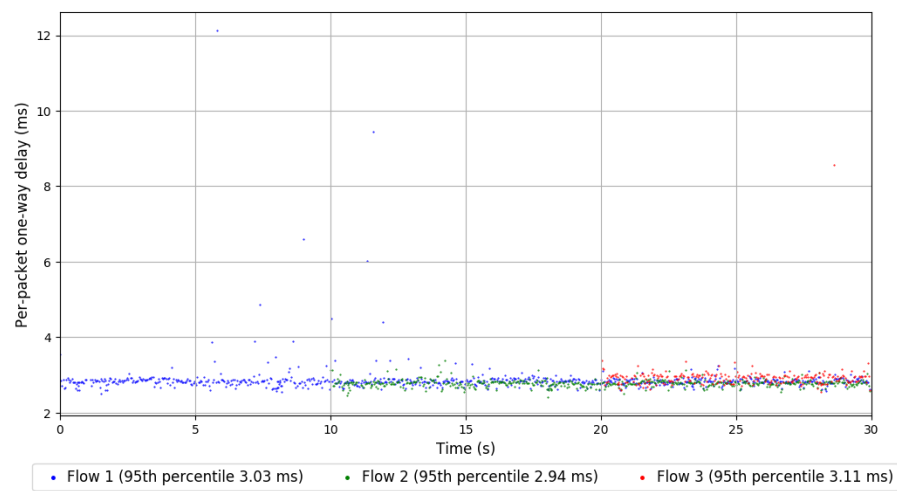## Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-25 02:19:39
End at: 2019-01-25 02:20:09
Local clock offset: -1.82 ms
Remote clock offset: -10.103 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.940 ms
Loss rate: 0.00%
```
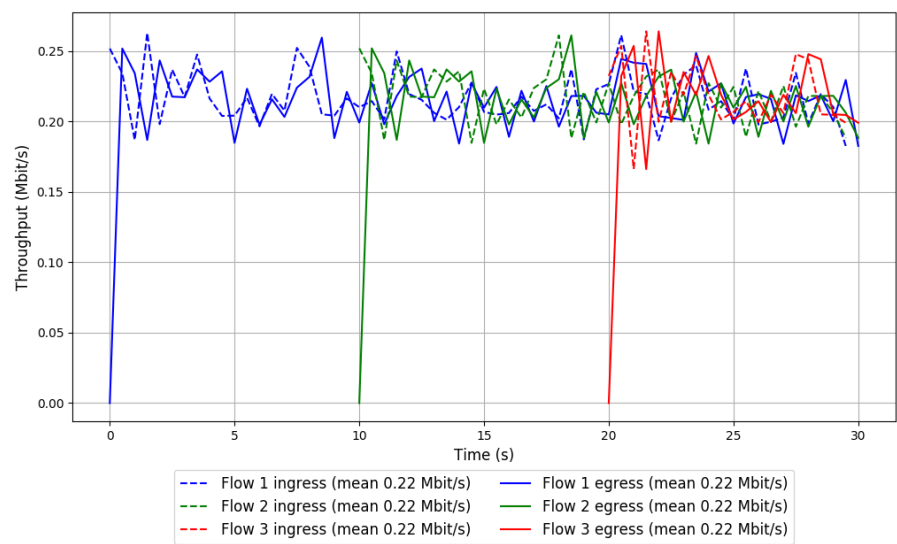
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-25 02:46:31
End at: 2019-01-25 02:47:01
Local clock offset: -0.898 ms
Remote clock offset: -3.177 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 6.713 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 6.707 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.744 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.705 ms
Loss rate: 0.00%
```
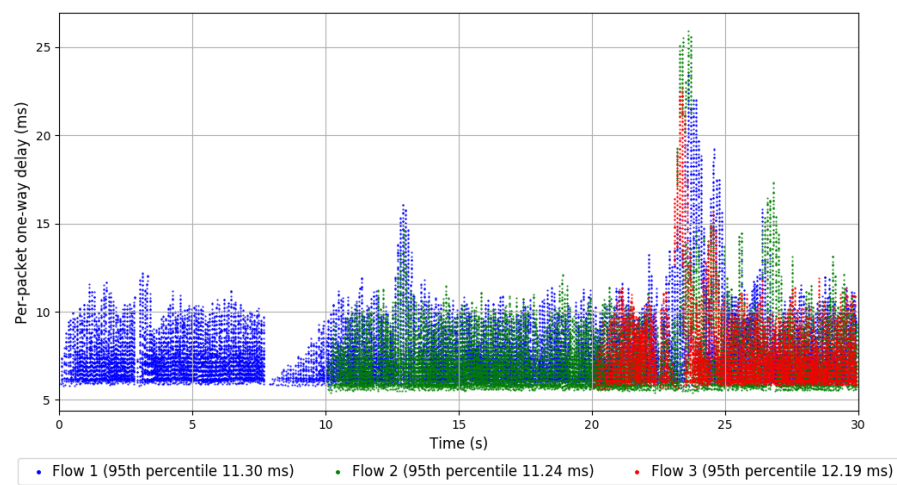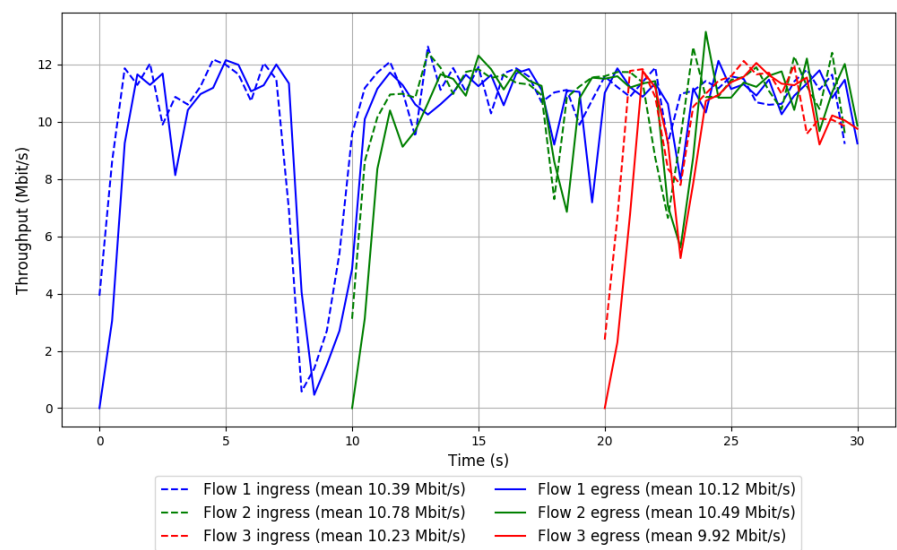
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-01-25 03:12:56
End at: 2019-01-25 03:13:26
Local clock offset: 1.81 ms
Remote clock offset: -4.198 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 3.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.111 ms
Loss rate: 0.00%
```
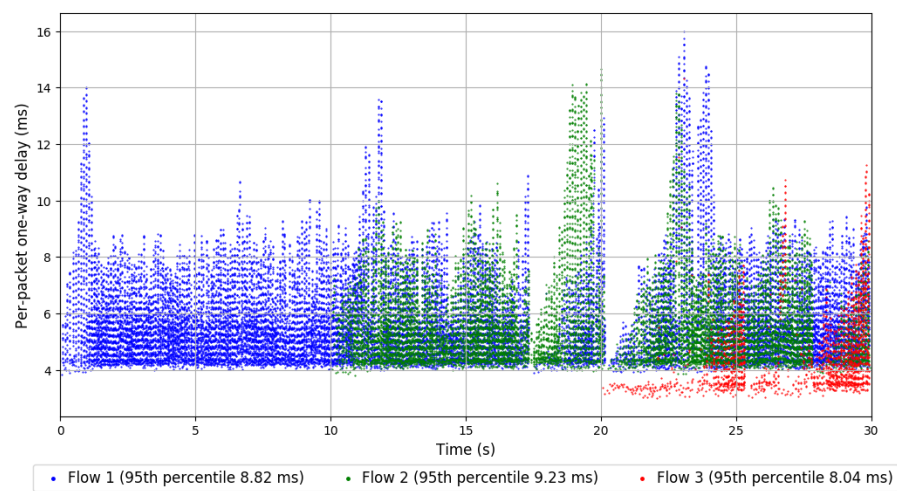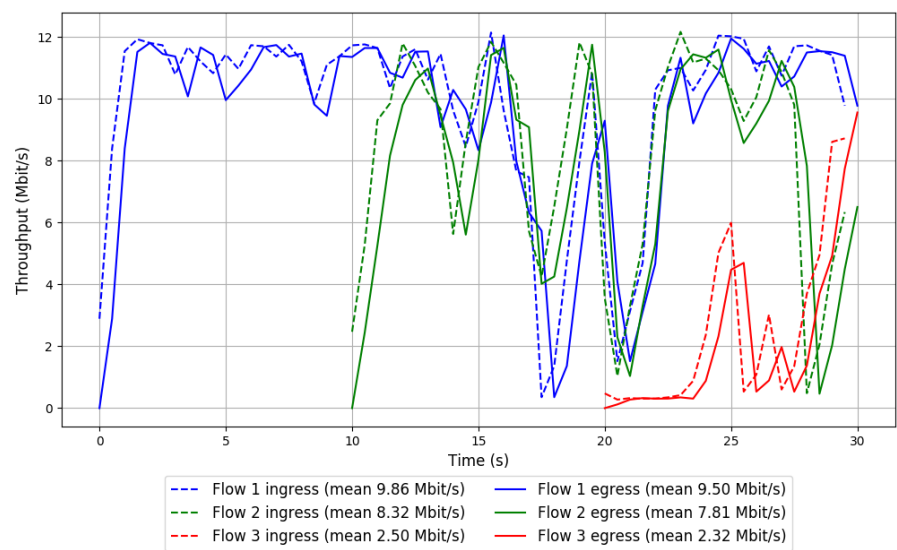
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-25 01:11:44
End at: 2019-01-25 01:12:14
Local clock offset: -2.531 ms
Remote clock offset: -5.959 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 11.364 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 11.302 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 11.244 ms
Loss rate: 2.75%
-- Flow 3:
Average throughput: 9.92 Mbit/s
95th percentile per-packet one-way delay: 12.189 ms
Loss rate: 3.06%
```
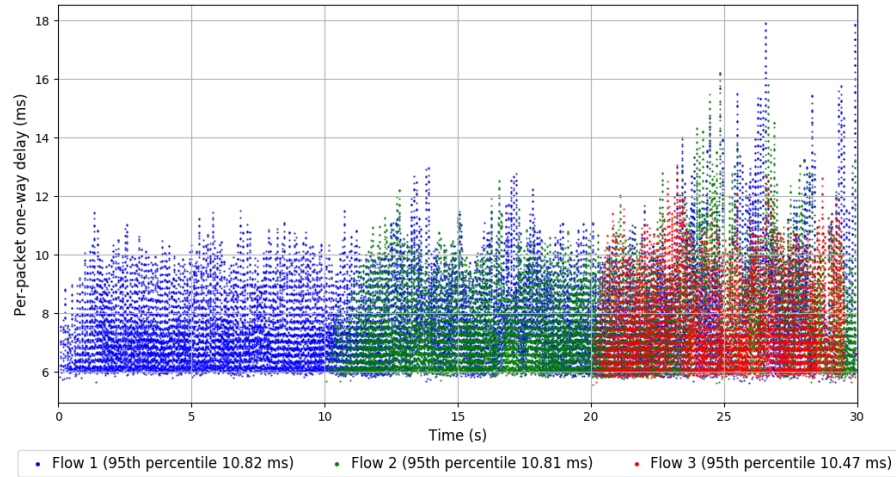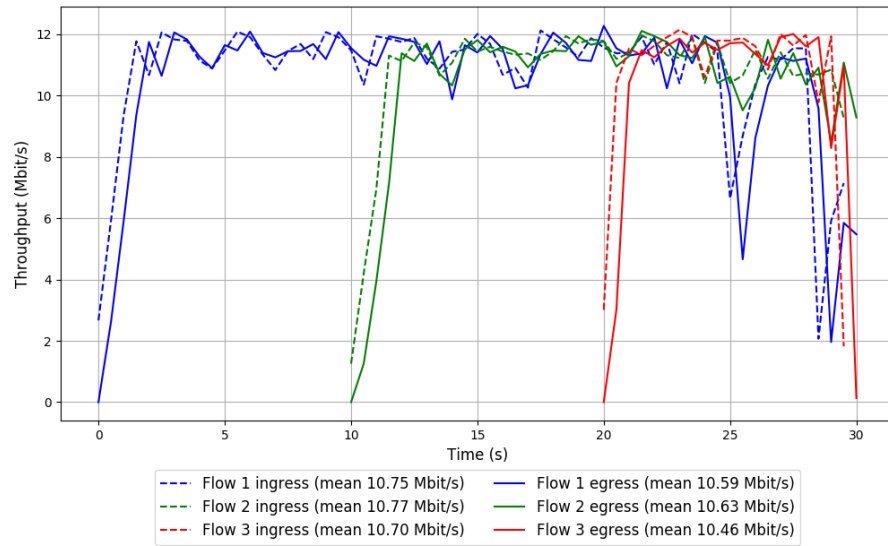
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-25 01:38:01
End at: 2019-01-25 01:38:31
Local clock offset: 1.576 ms
Remote clock offset: -4.38 ms

# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.46 Mbit/s
95th percentile per-packet one-way delay: 8.963 ms
Loss rate: 4.66%
-- Flow 1:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 8.822 ms
Loss rate: 3.59%
-- Flow 2:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 9.227 ms
Loss rate: 6.15%
-- Flow 3:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 8.044 ms
Loss rate: 7.51%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-01-25 02:04:32
End at: 2019-01-25 02:05:02
Local clock offset: -0.622 ms
Remote clock offset: -4.306 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 10.733 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 10.816 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 10.809 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 10.470 ms
Loss rate: 2.21%
```
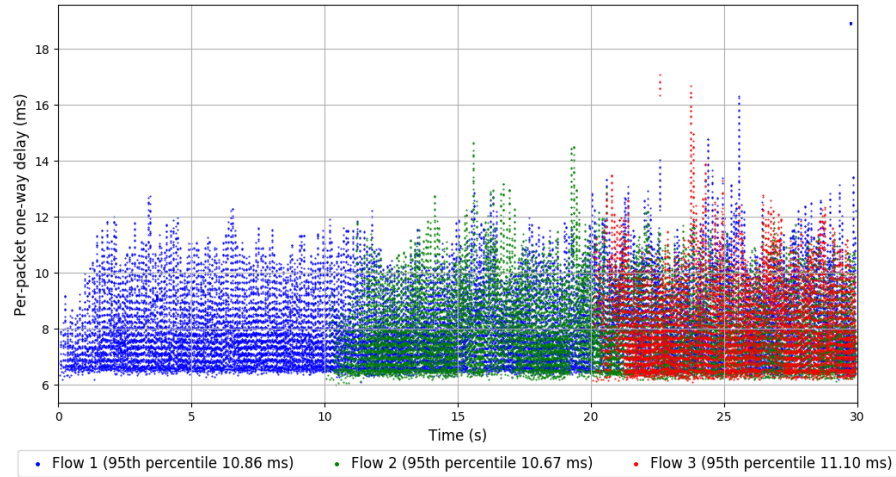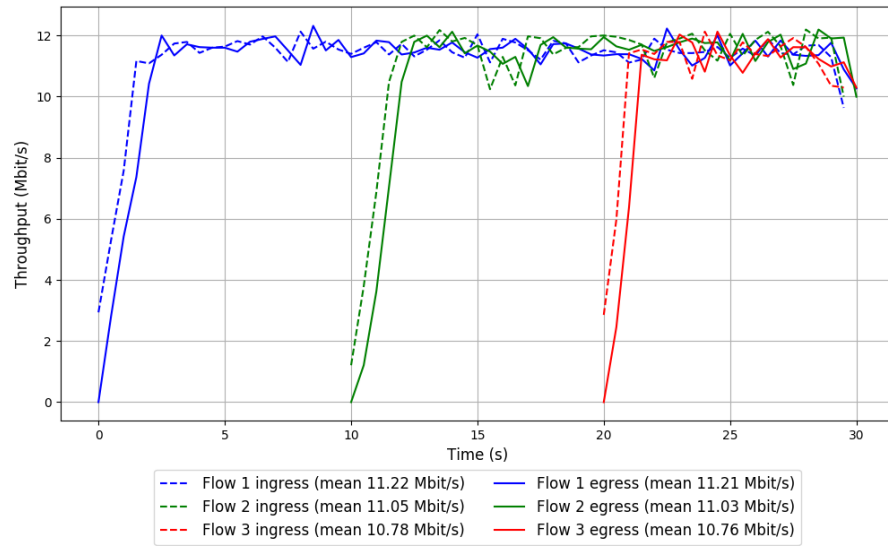
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-01-25 02:31:22
End at: 2019-01-25 02:31:52
Local clock offset: -1.671 ms
Remote clock offset: -4.29 ms


# Below is generated by plot.py at 2019-01-25 03:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 10.833 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 11.21 Mbit/s
95th percentile per-packet one-way delay: 10.864 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 11.03 Mbit/s
95th percentile per-packet one-way delay: 10.673 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 10.76 Mbit/s
95th percentile per-packet one-way delay: 11.100 ms
Loss rate: 0.23%
```

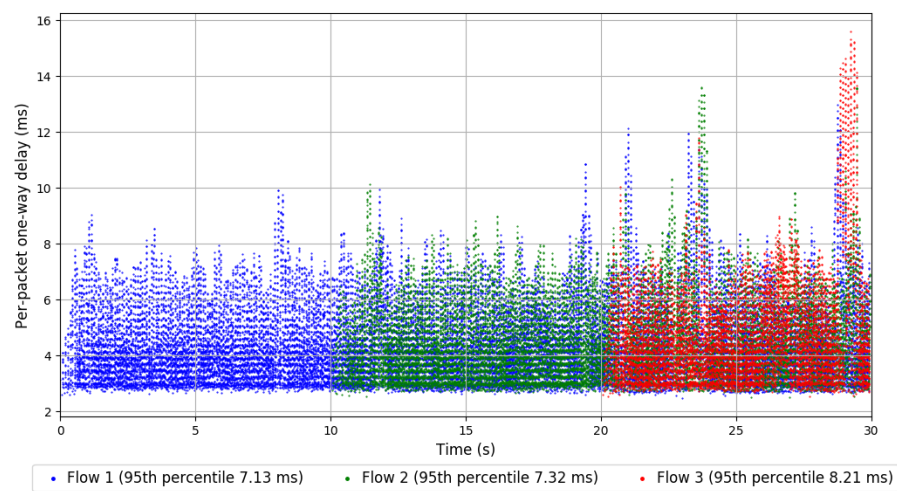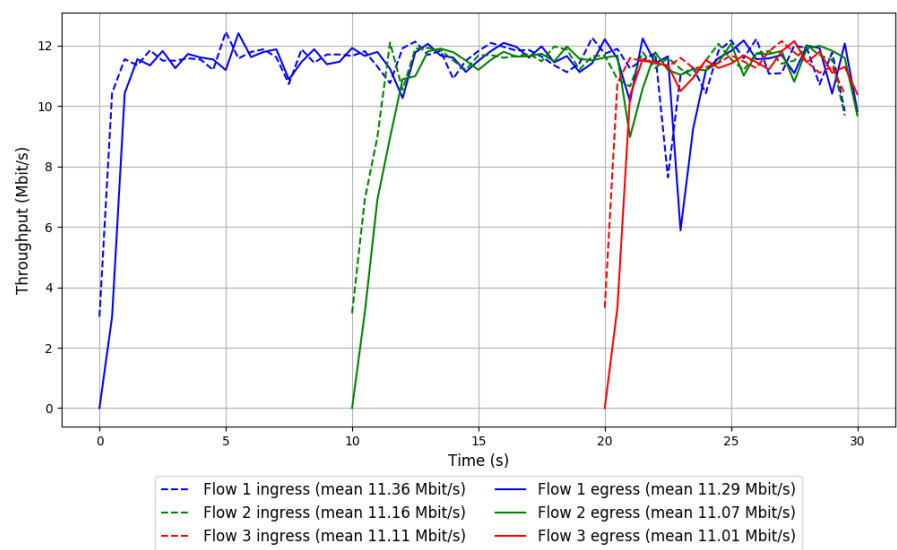Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-01-25 02:57:55
End at: 2019-01-25 02:58:25
Local clock offset: 1.072 ms
Remote clock offset: -4.894 ms


# Below is generated by plot.py at 2019-01-25 03:25:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.28 Mbit/s
95th percentile per-packet one-way delay: 7.312 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 7.135 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 11.07 Mbit/s
95th percentile per-packet one-way delay: 7.319 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 8.209 ms
Loss rate: 0.90%
```
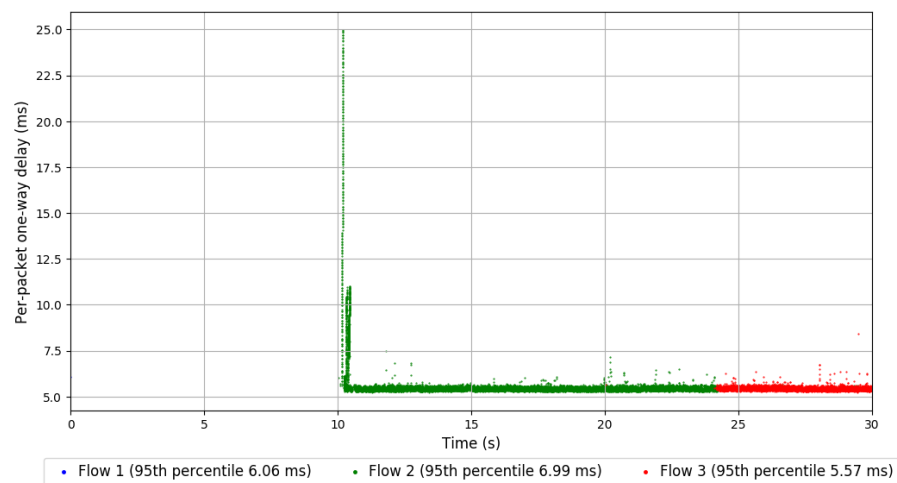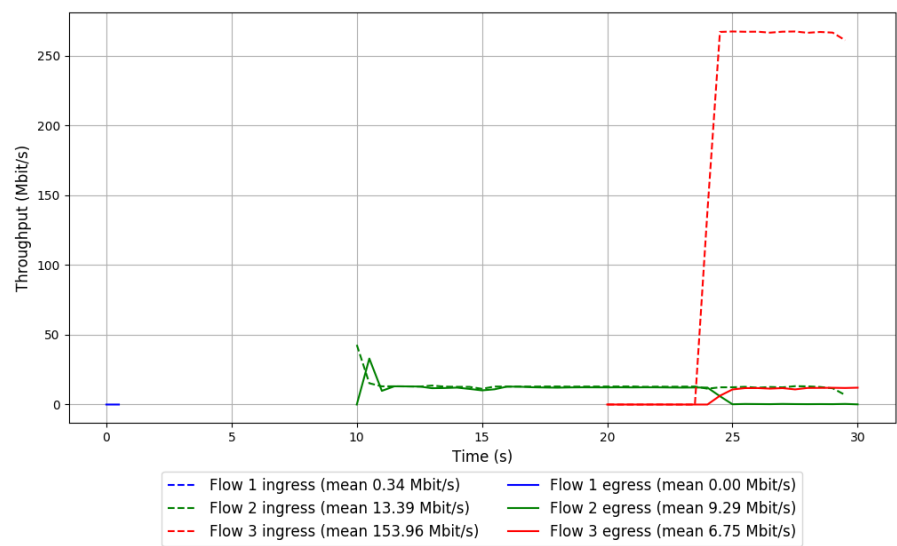
Run 5: Report of Sprout — Data Link

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

Start at: 2019-01-25 01:27:36
End at: 2019-01-25 01:28:06
Local clock offset: -2.675 ms
Remote clock offset: -5.166 ms


# Below is generated by plot.py at 2019-01-25 03:25:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 5.725 ms
Loss rate: 86.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.060 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 6.990 ms
Loss rate: 31.10%
-- Flow 3:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 5.573 ms
Loss rate: 95.62%
```
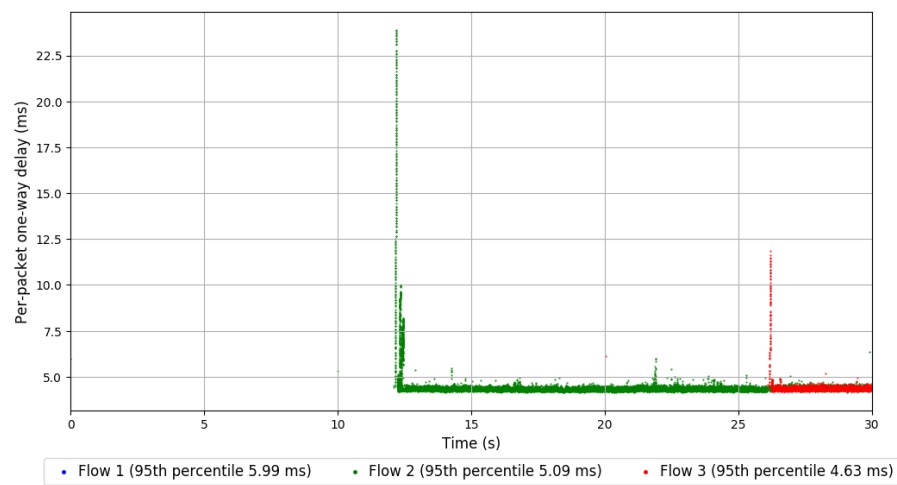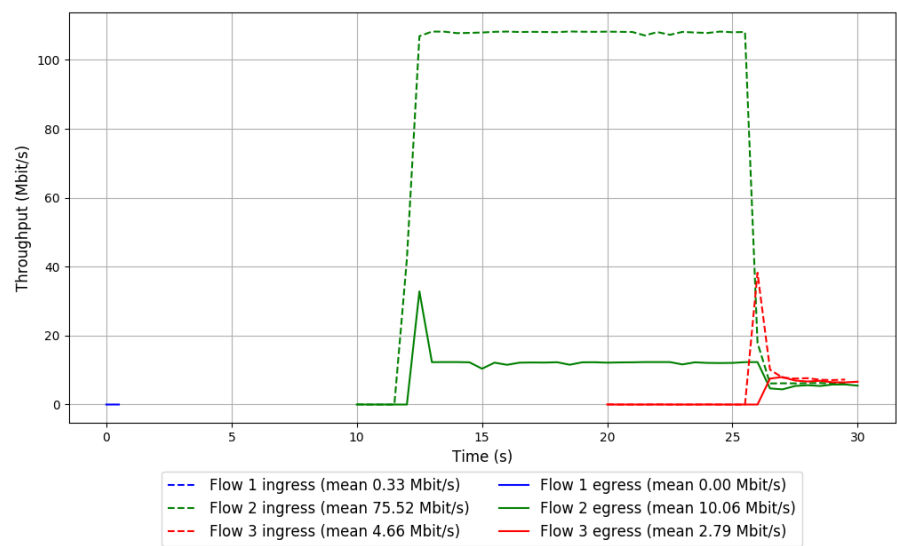
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.34 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 13.39 Mbit/s) --- Flow 2 egress (mean 9.29 Mbit/s)
Flow 3 ingress (mean 153.96 Mbit/s) --- Flow 3 egress (mean 6.75 Mbit/s)

Flow 1 (95th percentile 6.06 ms)   Flow 2 (95th percentile 6.99 ms)   Flow 3 (95th percentile 5.57 ms)

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

Start at: 2019-01-25 01:54:18
End at: 2019-01-25 01:54:48
Local clock offset: 2.651 ms
Remote clock offset: -3.029 ms

# Below is generated by plot.py at 2019-01-25 03:25:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 4.963 ms
Loss rate: 85.30%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.990 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.06 Mbit/s
95th percentile per-packet one-way delay: 5.087 ms
Loss rate: 86.68%
-- Flow 3:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 4.631 ms
Loss rate: 40.28%
```
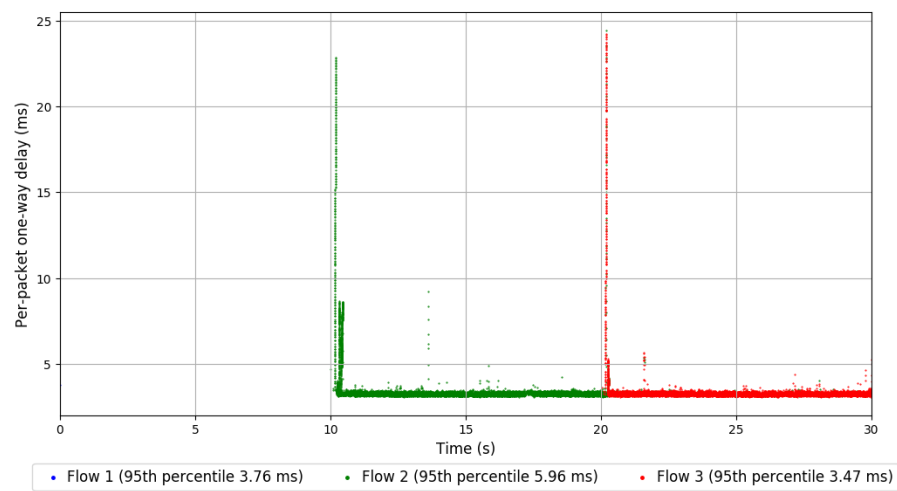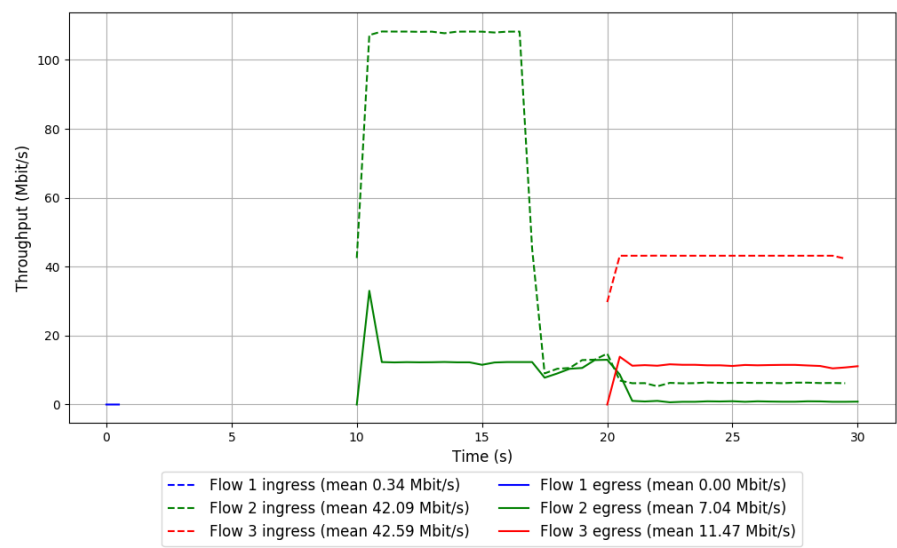
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.33 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 75.52 Mbit/s)   Flow 2 egress (mean 10.06 Mbit/s)
Flow 3 ingress (mean 4.66 Mbit/s)   Flow 3 egress (mean 2.79 Mbit/s)

Flow 1 (95th percentile 5.99 ms)   Flow 2 (95th percentile 5.09 ms)   Flow 3 (95th percentile 4.63 ms)

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

Start at: 2019-01-25 02:20:48
End at: 2019-01-25 02:21:18
Local clock offset: 1.903 ms
Remote clock offset: -3.924 ms

# Below is generated by plot.py at 2019-01-25 03:25:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 4.928 ms
Loss rate: 79.87%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.762 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 5.960 ms
Loss rate: 83.30%
-- Flow 3:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 3.474 ms
Loss rate: 73.07%
```

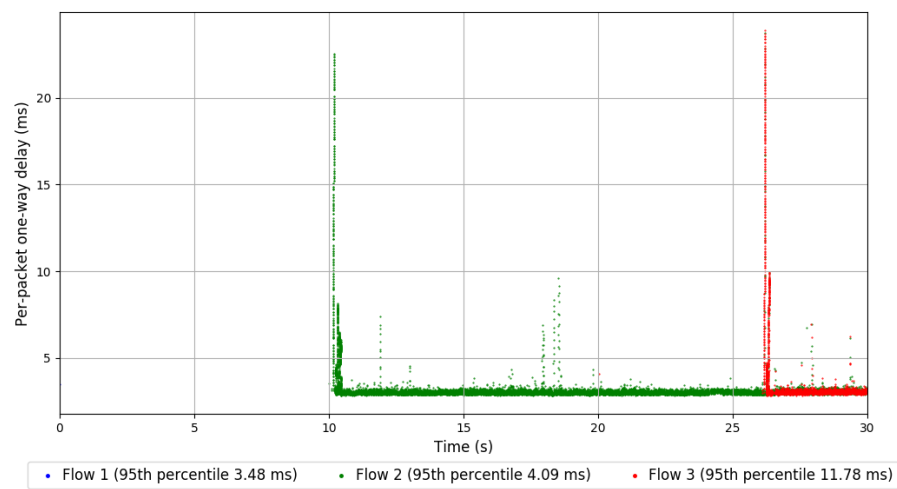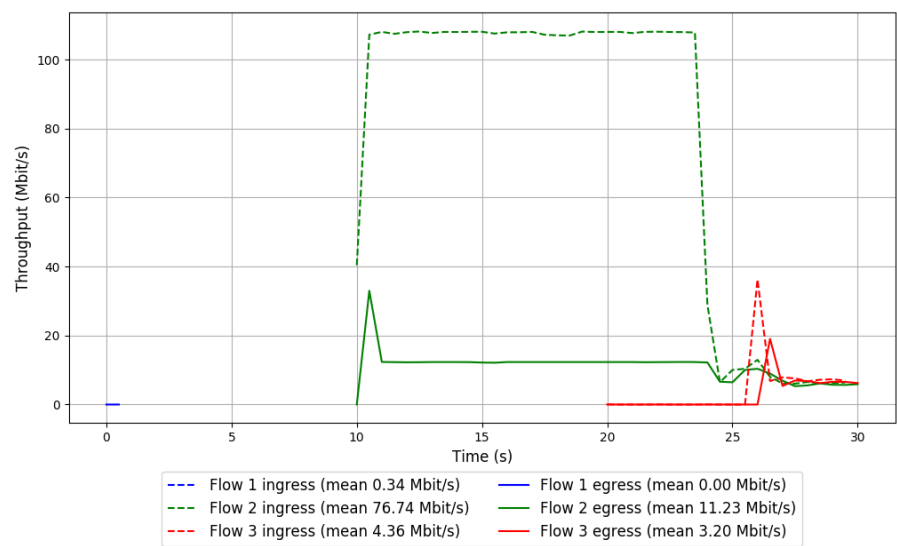Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 02:47:39
End at: 2019-01-25 02:48:09
Local clock offset: 0.715 ms
Remote clock offset: -5.076 ms


# Below is generated by plot.py at 2019-01-25 03:25:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 4.989 ms
Loss rate: 83.75%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.475 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 11.23 Mbit/s
95th percentile per-packet one-way delay: 4.094 ms
Loss rate: 85.37%
-- Flow 3:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 11.775 ms
Loss rate: 26.54%
```
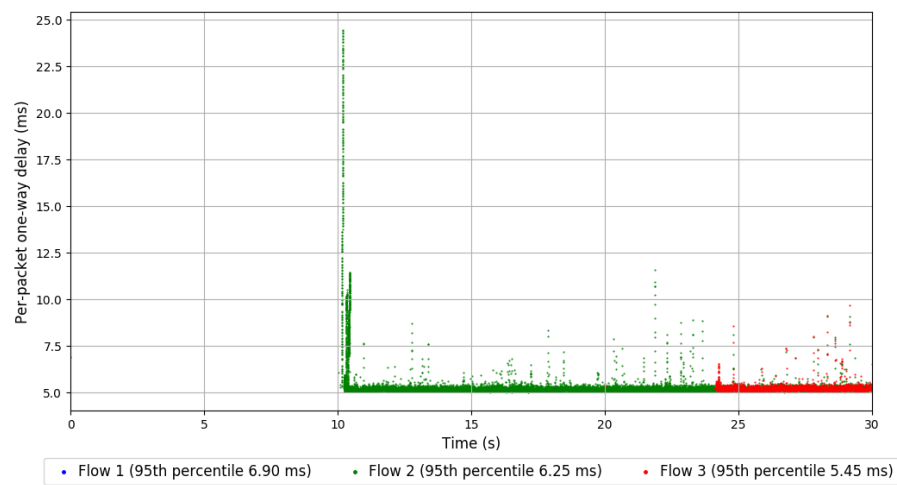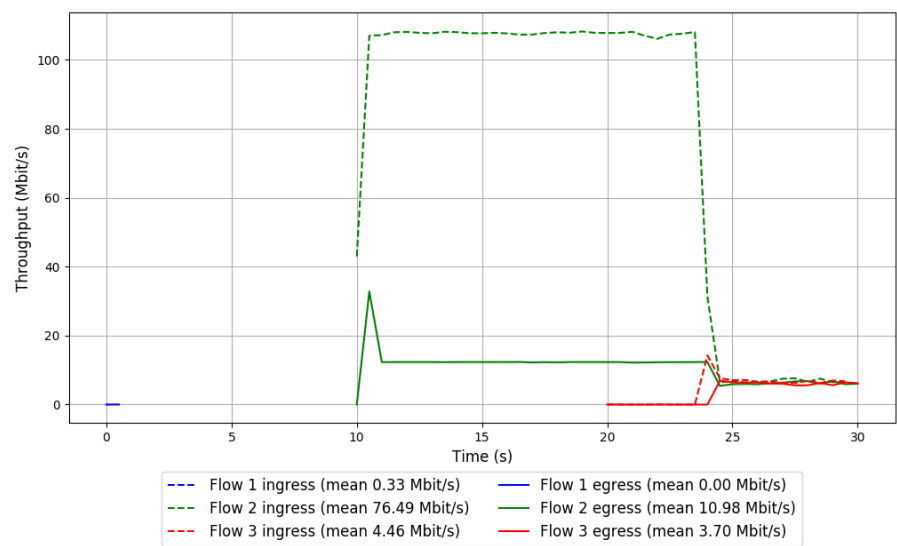
Run 4: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 0.34 Mbit/s)   —— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 76.74 Mbit/s)   —— Flow 2 egress (mean 11.23 Mbit/s)
- - - Flow 3 ingress (mean 4.36 Mbit/s)   —— Flow 3 egress (mean 3.20 Mbit/s)

• Flow 1 (95th percentile 3.48 ms)   • Flow 2 (95th percentile 4.09 ms)   • Flow 3 (95th percentile 11.78 ms)

172

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

Start at: 2019-01-25 03:14:04
End at: 2019-01-25 03:14:34
Local clock offset: 0.005 ms
Remote clock offset: -3.545 ms

# Below is generated by plot.py at 2019-01-25 03:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 5.872 ms
Loss rate: 83.71%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.896 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.98 Mbit/s
95th percentile per-packet one-way delay: 6.253 ms
Loss rate: 85.65%
-- Flow 3:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 5.446 ms
Loss rate: 16.90%
```

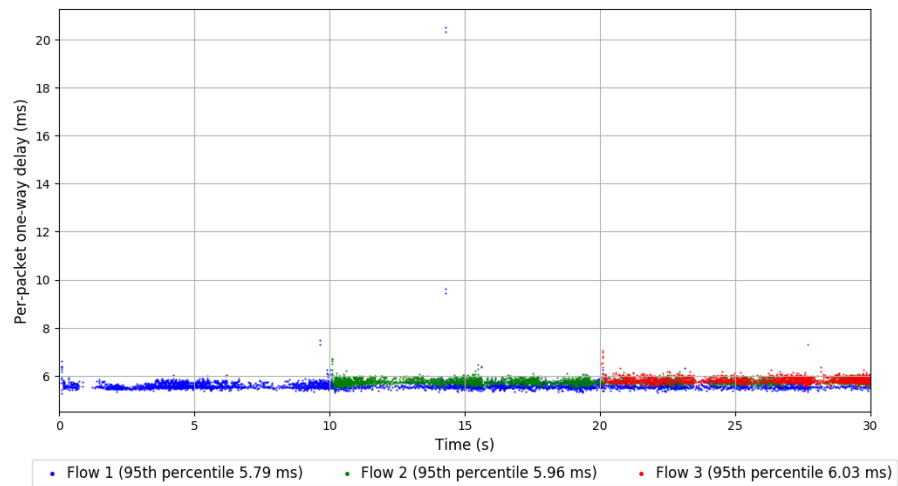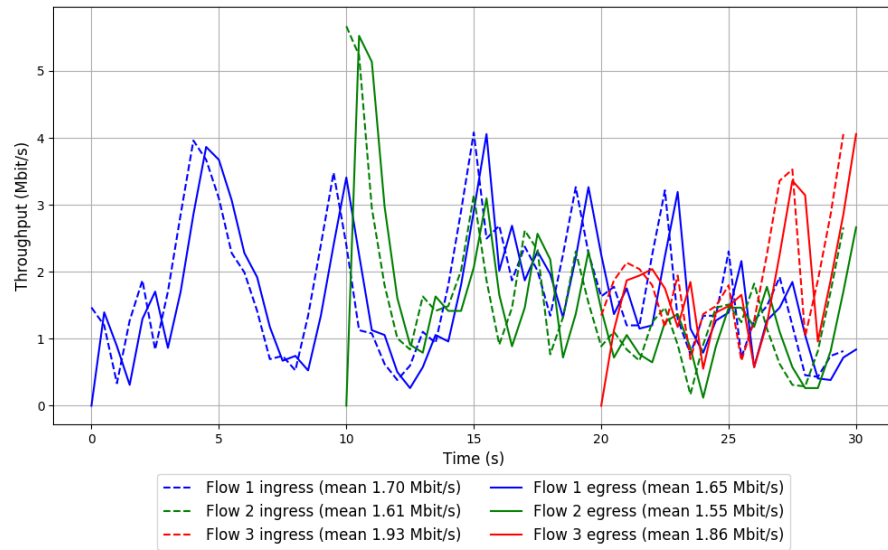Run 5: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 01:25:13
End at: 2019-01-25 01:25:43
Local clock offset: -0.262 ms
Remote clock offset: -3.725 ms


# Below is generated by plot.py at 2019-01-25 03:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 5.962 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 5.791 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 5.962 ms
Loss rate: 3.14%
-- Flow 3:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 6.031 ms
Loss rate: 3.67%
```
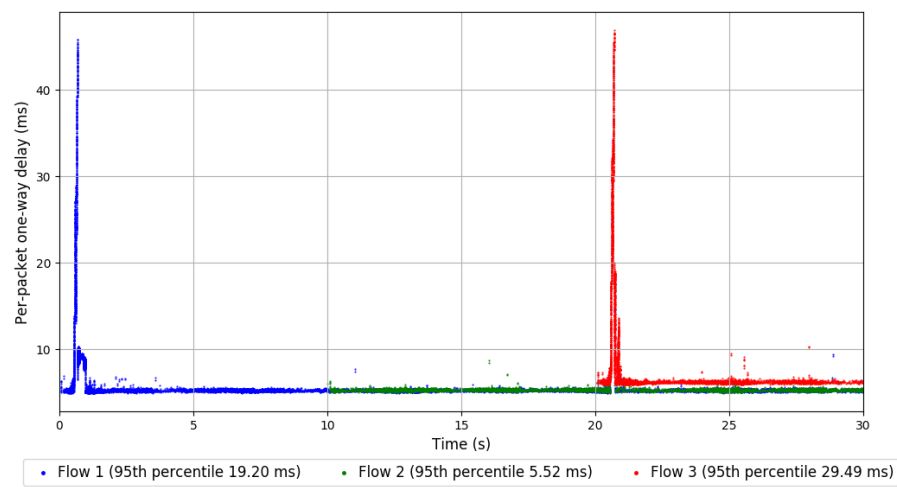
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-25 01:52:00
End at: 2019-01-25 01:52:30
Local clock offset: -0.665 ms
Remote clock offset: -5.57 ms


# Below is generated by plot.py at 2019-01-25 03:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 21.685 ms
Loss rate: 7.32%
-- Flow 1:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 19.195 ms
Loss rate: 5.37%
-- Flow 2:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 5.521 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 29.492 ms
Loss rate: 13.72%
```
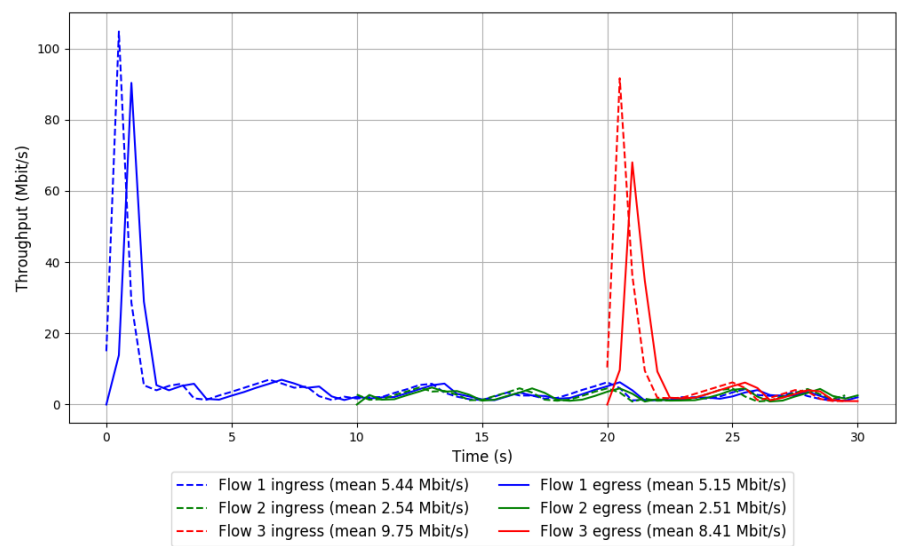
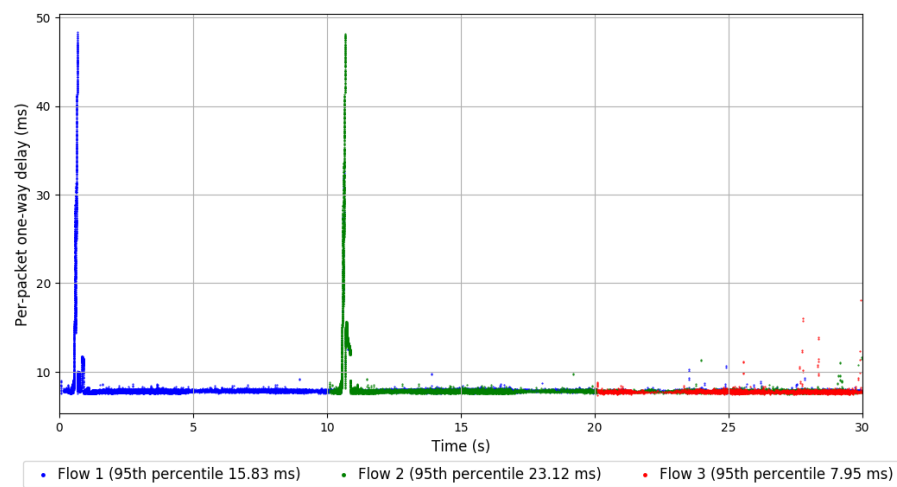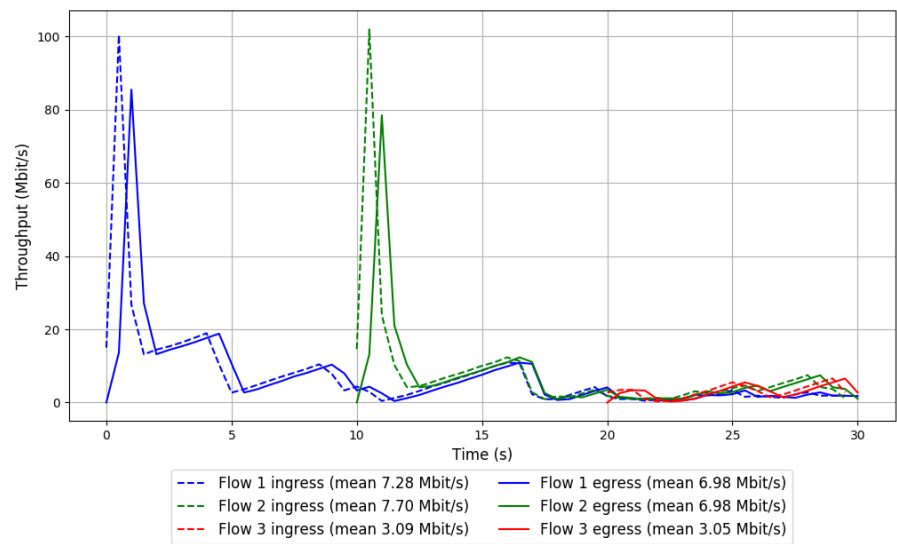## Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-25 02:18:28
End at: 2019-01-25 02:18:58
Local clock offset: -1.389 ms
Remote clock offset: -2.907 ms


# Below is generated by plot.py at 2019-01-25 03:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 17.665 ms
Loss rate: 5.89%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 15.828 ms
Loss rate: 4.08%
-- Flow 2:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 23.122 ms
Loss rate: 9.39%
-- Flow 3:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 7.952 ms
Loss rate: 1.28%
```

Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 02:45:20
End at: 2019-01-25 02:45:50
Local clock offset: 1.131 ms
Remote clock offset: -2.708 ms


# Below is generated by plot.py at 2019-01-25 03:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.83 Mbit/s
95th percentile per-packet one-way delay: 9.042 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 13.905 ms
Loss rate: 3.91%
-- Flow 2:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 6.302 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 5.393 ms
Loss rate: 1.79%
```
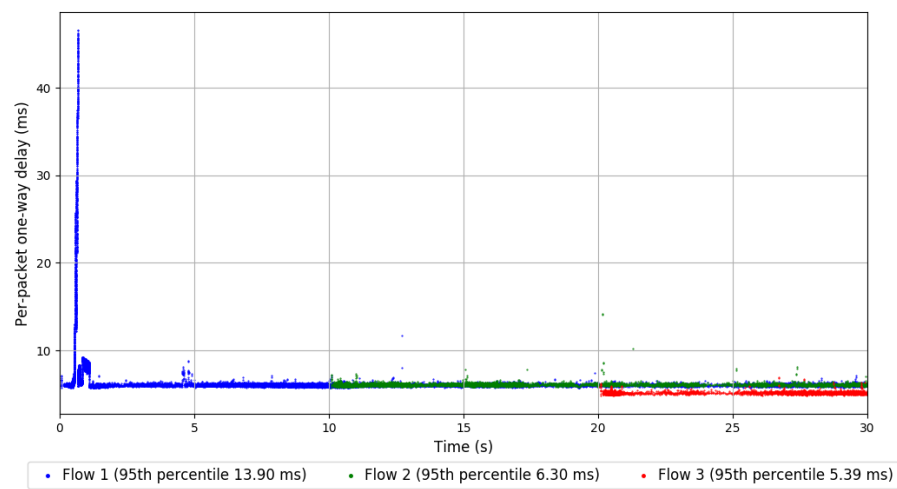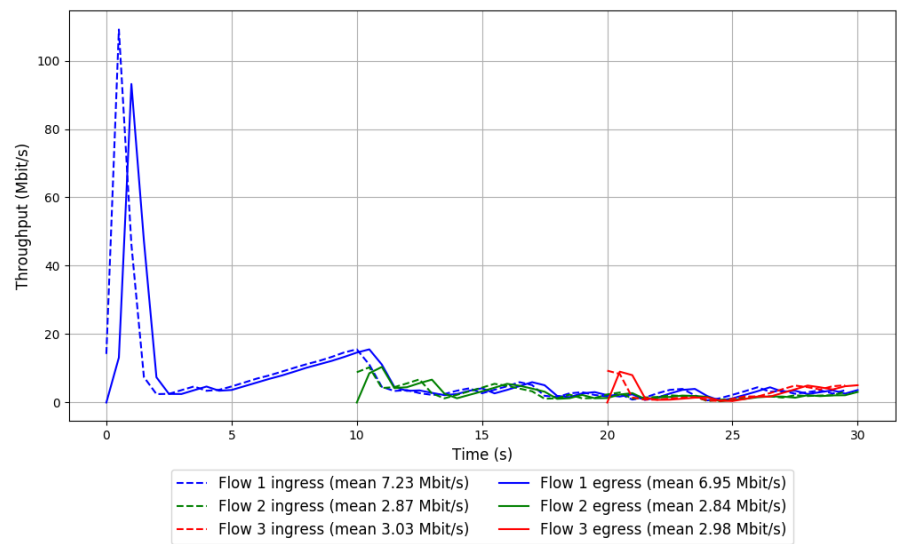
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 7.23 Mbit/s)   Flow 1 egress (mean 6.95 Mbit/s)
Flow 2 ingress (mean 2.87 Mbit/s)   Flow 2 egress (mean 2.84 Mbit/s)
Flow 3 ingress (mean 3.03 Mbit/s)   Flow 3 egress (mean 2.98 Mbit/s)

Flow 1 (95th percentile 13.90 ms)   Flow 2 (95th percentile 6.30 ms)   Flow 3 (95th percentile 5.39 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-25 03:11:44
End at: 2019-01-25 03:12:14
Local clock offset: -1.581 ms
Remote clock offset: -4.0 ms


# Below is generated by plot.py at 2019-01-25 03:25:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 22.110 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 19.247 ms
Loss rate: 3.39%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 6.913 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 16.09 Mbit/s
95th percentile per-packet one-way delay: 32.949 ms
Loss rate: 3.96%
```
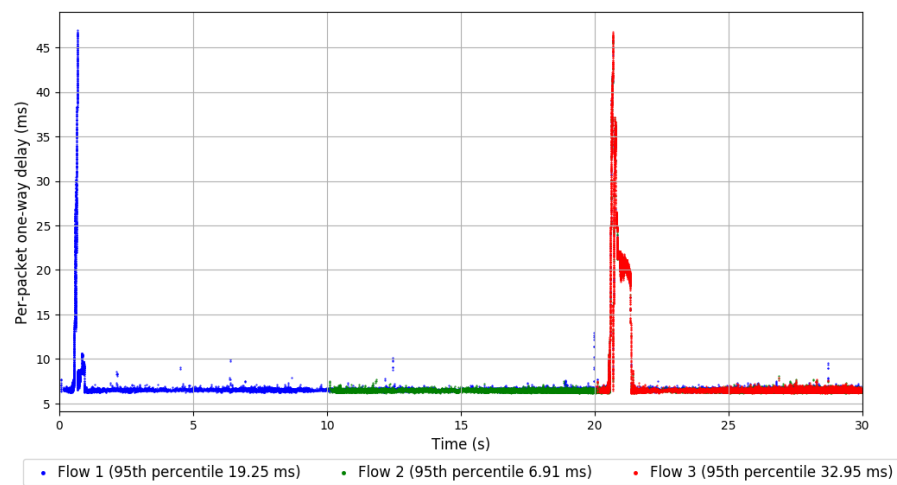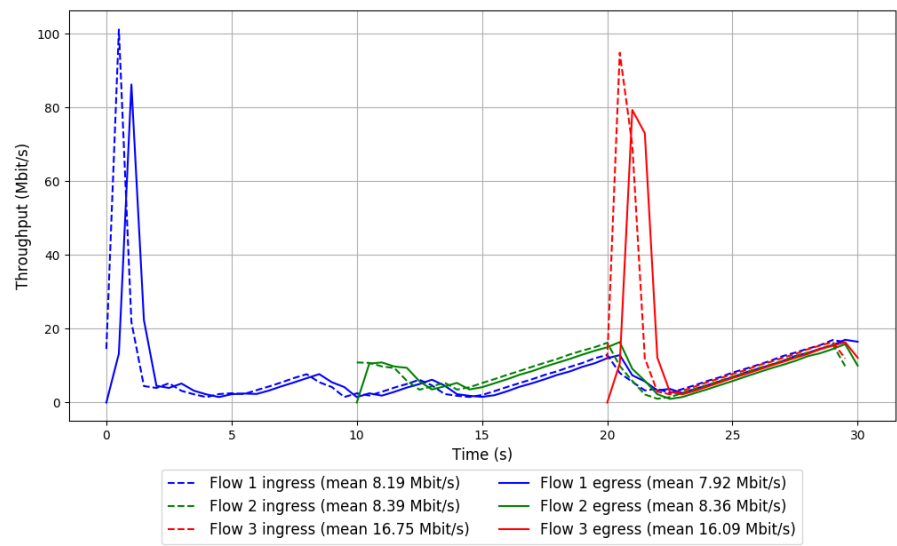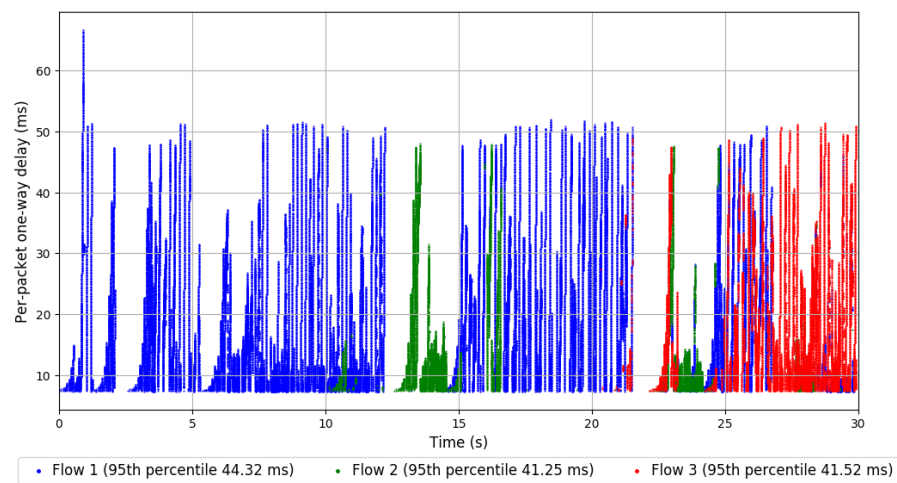
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 8.19 Mbit/s) — Flow 1 egress (mean 7.92 Mbit/s)
Flow 2 ingress (mean 8.39 Mbit/s) — Flow 2 egress (mean 8.36 Mbit/s)
Flow 3 ingress (mean 16.75 Mbit/s) — Flow 3 egress (mean 16.09 Mbit/s)

Flow 1 (95th percentile 19.25 ms)   Flow 2 (95th percentile 6.91 ms)   Flow 3 (95th percentile 32.95 ms)

```
Run 1: Statistics of Verus

Start at: 2019-01-25 01:28:49
End at: 2019-01-25 01:29:19
Local clock offset: -2.959 ms
Remote clock offset: -3.36 ms


# Below is generated by plot.py at 2019-01-25 03:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.28 Mbit/s
95th percentile per-packet one-way delay: 43.409 ms
Loss rate: 48.84%
-- Flow 1:
Average throughput: 27.29 Mbit/s
95th percentile per-packet one-way delay: 44.317 ms
Loss rate: 55.80%
-- Flow 2:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 41.251 ms
Loss rate: 22.35%
-- Flow 3:
Average throughput: 26.32 Mbit/s
95th percentile per-packet one-way delay: 41.518 ms
Loss rate: 32.28%
```
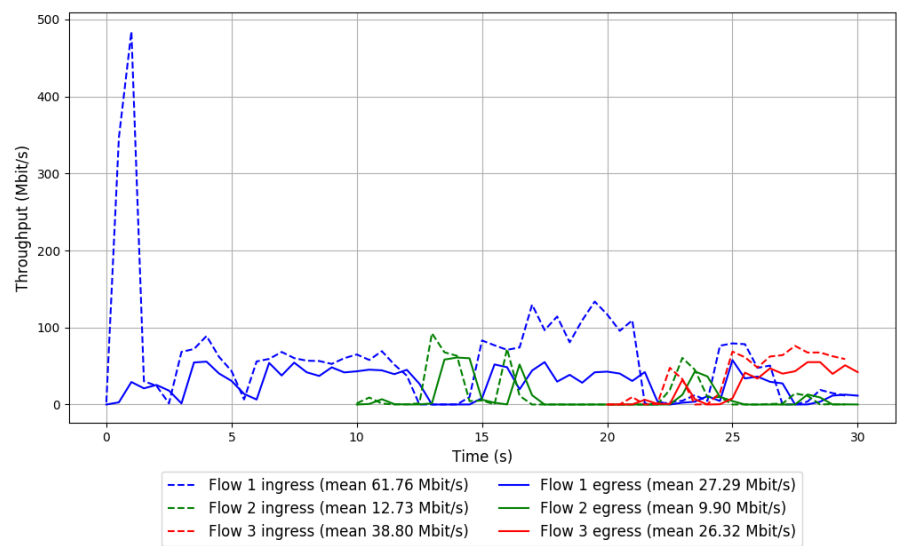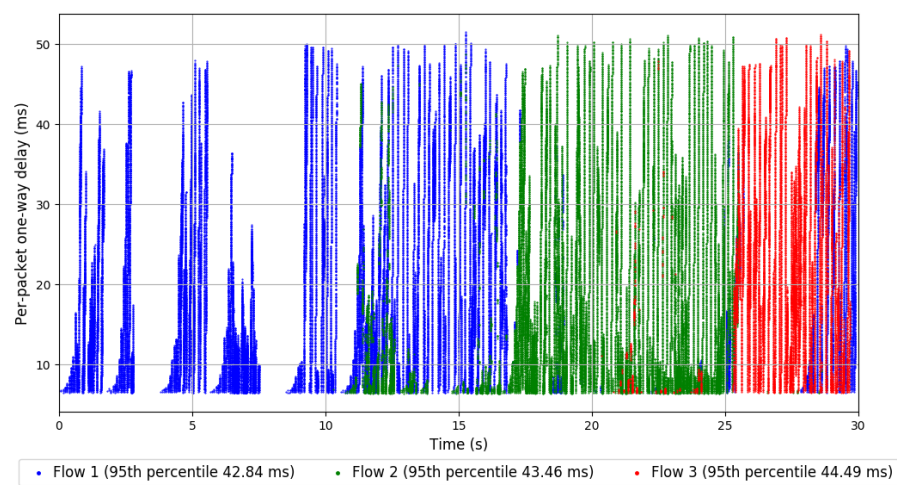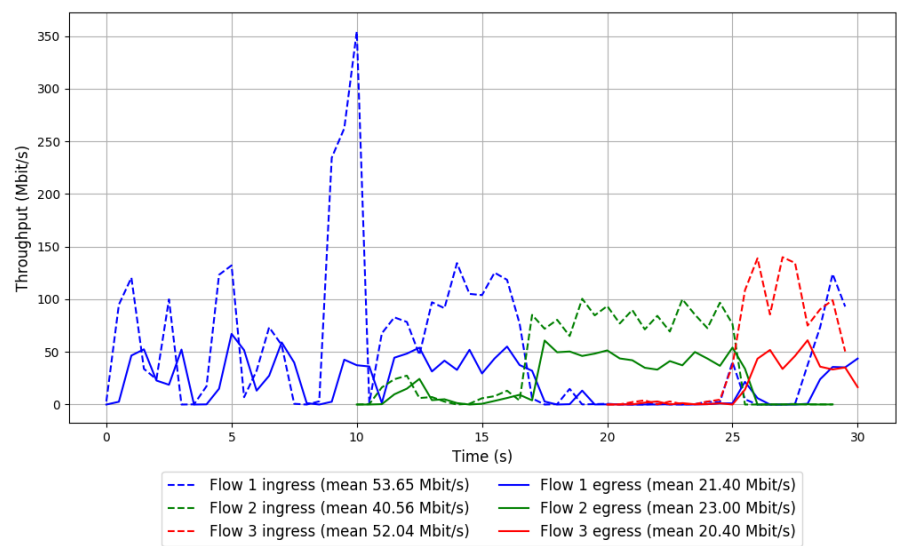
Run 1: Report of Verus — Data Link

- Flow 1 ingress (mean 61.76 Mbit/s) — Flow 1 egress (mean 27.29 Mbit/s)
- Flow 2 ingress (mean 12.73 Mbit/s) — Flow 2 egress (mean 9.90 Mbit/s)
- Flow 3 ingress (mean 38.80 Mbit/s) — Flow 3 egress (mean 26.32 Mbit/s)

- Flow 1 (95th percentile 44.32 ms) • Flow 2 (95th percentile 41.25 ms) • Flow 3 (95th percentile 41.52 ms)

```
Run 2: Statistics of Verus

Start at: 2019-01-25 01:55:29
End at: 2019-01-25 01:55:59
Local clock offset: -0.432 ms
Remote clock offset: -3.859 ms


# Below is generated by plot.py at 2019-01-25 03:25:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 43.319 ms
Loss rate: 56.14%
-- Flow 1:
Average throughput: 21.40 Mbit/s
95th percentile per-packet one-way delay: 42.845 ms
Loss rate: 60.06%
-- Flow 2:
Average throughput: 23.00 Mbit/s
95th percentile per-packet one-way delay: 43.459 ms
Loss rate: 44.66%
-- Flow 3:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 44.490 ms
Loss rate: 61.13%
```

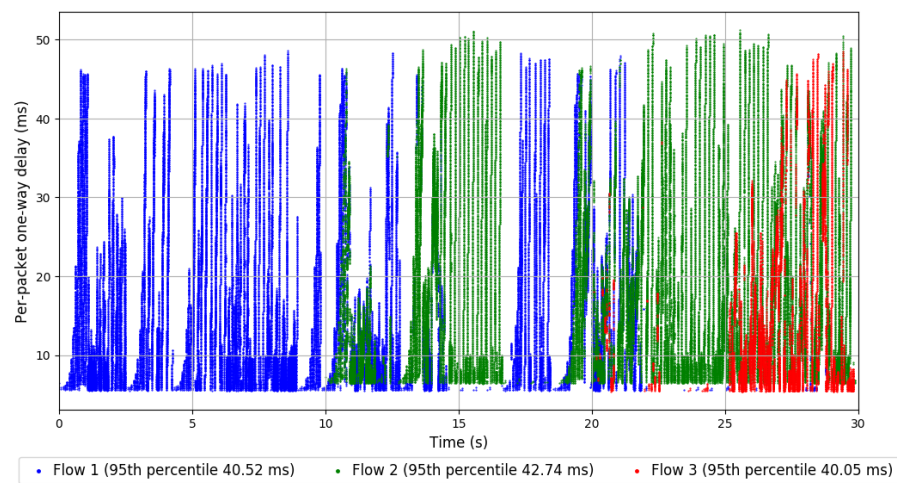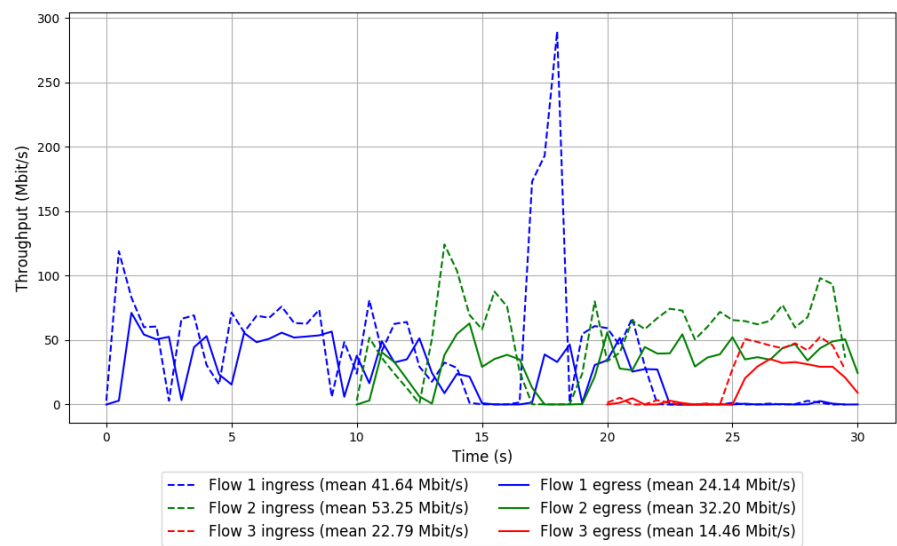Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-25 02:22:00
End at: 2019-01-25 02:22:30
Local clock offset: 0.148 ms
Remote clock offset: -3.338 ms


# Below is generated by plot.py at 2019-01-25 03:25:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 41.453 ms
Loss rate: 40.58%
-- Flow 1:
Average throughput: 24.14 Mbit/s
95th percentile per-packet one-way delay: 40.517 ms
Loss rate: 42.19%
-- Flow 2:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 42.739 ms
Loss rate: 39.52%
-- Flow 3:
Average throughput: 14.46 Mbit/s
95th percentile per-packet one-way delay: 40.047 ms
Loss rate: 36.64%
```
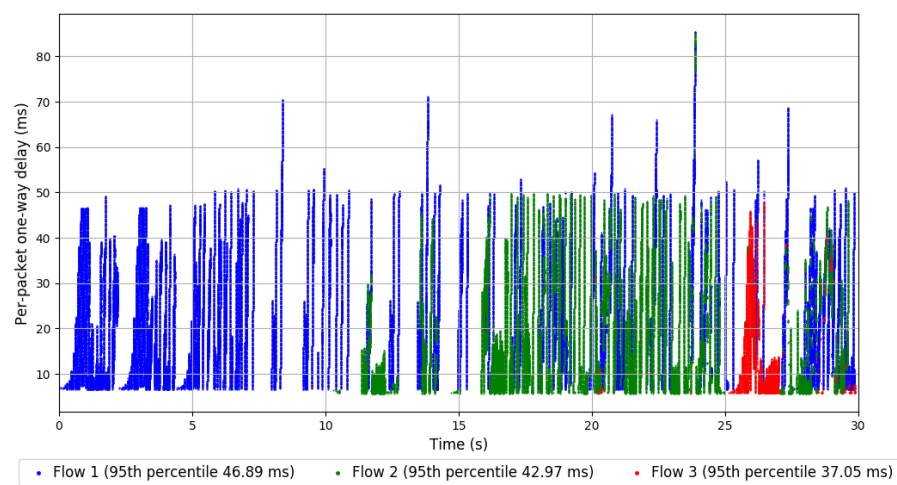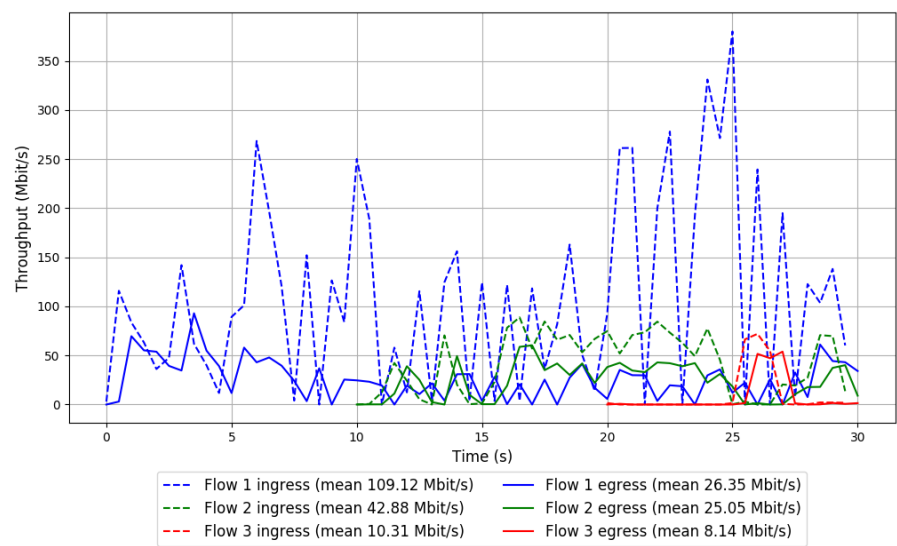
Run 3: Report of Verus — Data Link

- - - Flow 1 ingress (mean 41.64 Mbit/s) —— Flow 1 egress (mean 24.14 Mbit/s)
- - - Flow 2 ingress (mean 53.25 Mbit/s) —— Flow 2 egress (mean 32.20 Mbit/s)
- - - Flow 3 ingress (mean 22.79 Mbit/s) —— Flow 3 egress (mean 14.46 Mbit/s)

• Flow 1 (95th percentile 40.52 ms) • Flow 2 (95th percentile 42.74 ms) • Flow 3 (95th percentile 40.05 ms)

```
Run 4: Statistics of Verus

Start at: 2019-01-25 02:48:51
End at: 2019-01-25 02:49:21
Local clock offset: -0.647 ms
Remote clock offset: -3.651 ms


# Below is generated by plot.py at 2019-01-25 03:26:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.21 Mbit/s
95th percentile per-packet one-way delay: 45.267 ms
Loss rate: 67.73%
-- Flow 1:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 46.889 ms
Loss rate: 75.85%
-- Flow 2:
Average throughput: 25.05 Mbit/s
95th percentile per-packet one-way delay: 42.967 ms
Loss rate: 41.48%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 37.053 ms
Loss rate: 21.21%
```

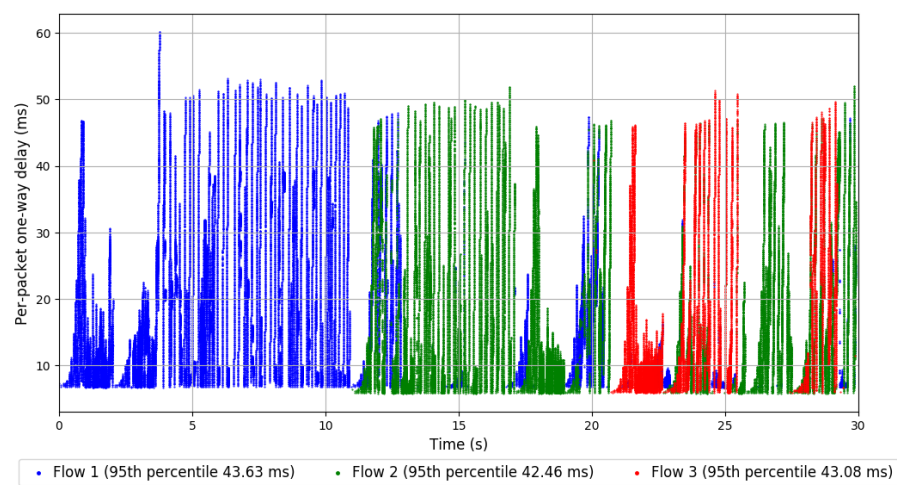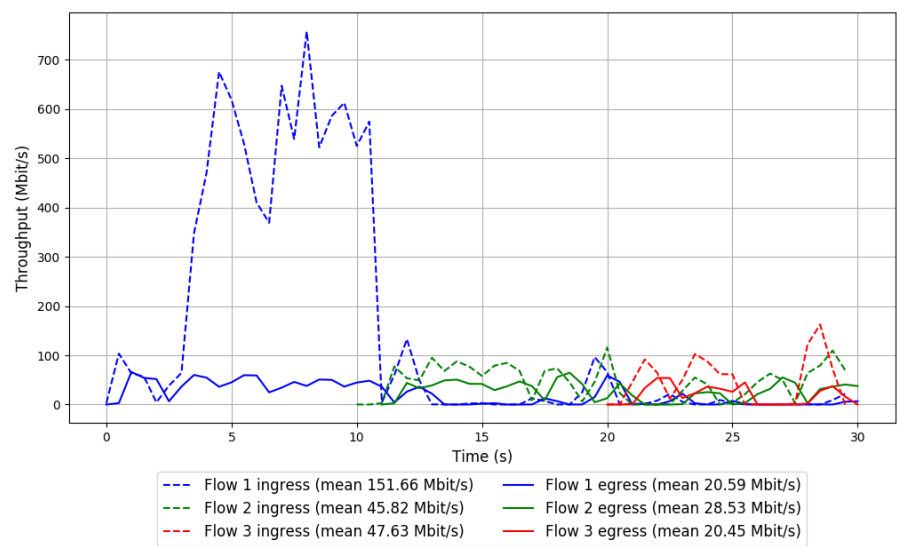Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-01-25 03:15:15
End at: 2019-01-25 03:15:45
Local clock offset: -2.145 ms
Remote clock offset: -4.929 ms


# Below is generated by plot.py at 2019-01-25 03:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.31 Mbit/s
95th percentile per-packet one-way delay: 43.040 ms
Loss rate: 77.07%
-- Flow 1:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 43.627 ms
Loss rate: 86.41%
-- Flow 2:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: 42.458 ms
Loss rate: 40.79%
-- Flow 3:
Average throughput: 20.45 Mbit/s
95th percentile per-packet one-way delay: 43.076 ms
Loss rate: 57.19%
```

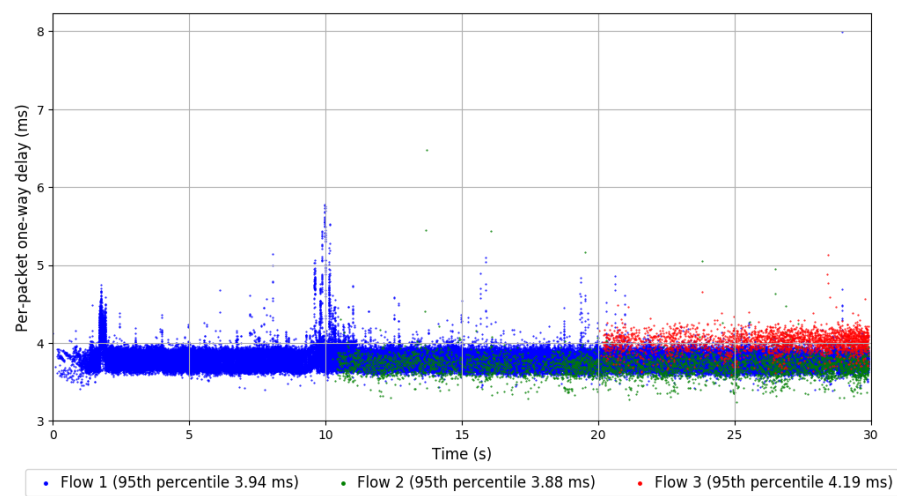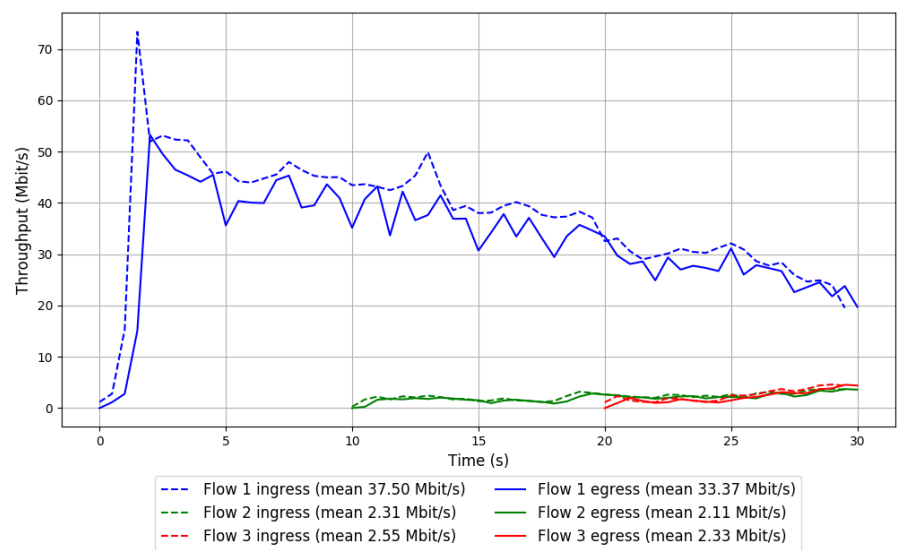Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 01:10:33
End at: 2019-01-25 01:11:03
Local clock offset: -0.572 ms
Remote clock offset: -6.021 ms


# Below is generated by plot.py at 2019-01-25 03:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 3.966 ms
Loss rate: 10.90%
-- Flow 1:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 3.938 ms
Loss rate: 11.01%
-- Flow 2:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 3.881 ms
Loss rate: 9.55%
-- Flow 3:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 4.194 ms
Loss rate: 8.54%
```

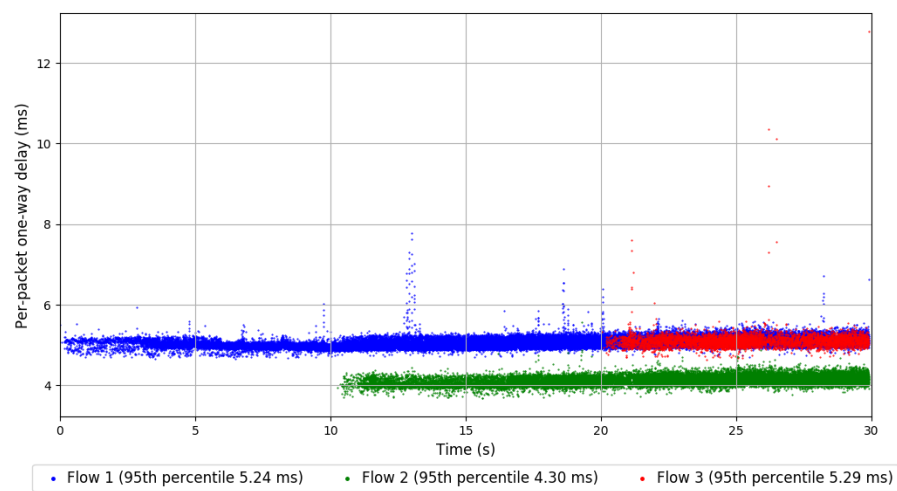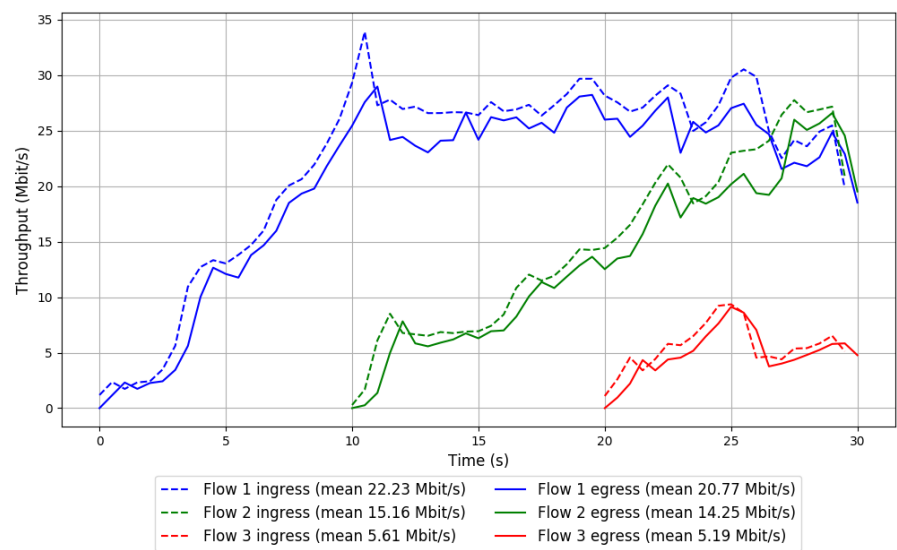Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-25 01:36:43
End at: 2019-01-25 01:37:13
Local clock offset: 1.173 ms
Remote clock offset: -3.811 ms


# Below is generated by plot.py at 2019-01-25 03:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 5.227 ms
Loss rate: 6.81%
-- Flow 1:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 5.242 ms
Loss rate: 6.56%
-- Flow 2:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 4.303 ms
Loss rate: 7.23%
-- Flow 3:
Average throughput: 5.19 Mbit/s
95th percentile per-packet one-way delay: 5.290 ms
Loss rate: 7.49%
```
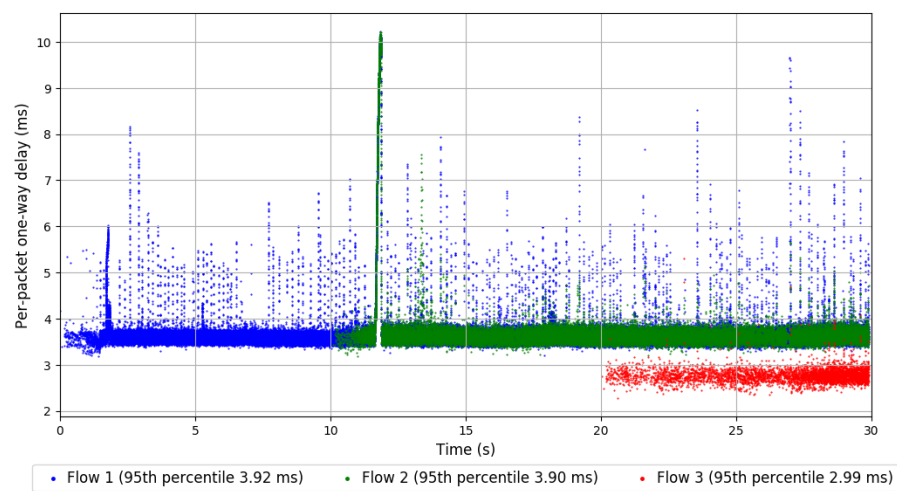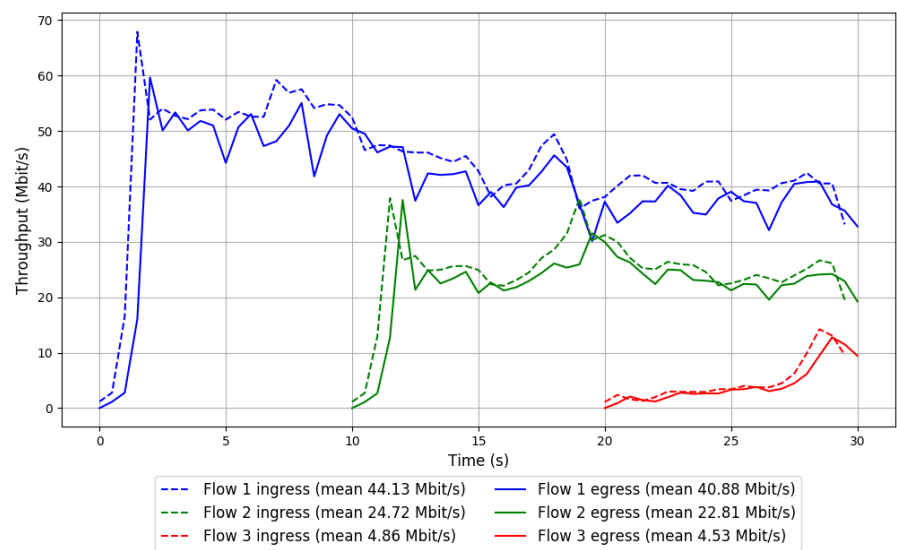
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 22.23 Mbit/s) --- Flow 1 egress (mean 20.77 Mbit/s)
Flow 2 ingress (mean 15.16 Mbit/s) --- Flow 2 egress (mean 14.25 Mbit/s)
Flow 3 ingress (mean 5.61 Mbit/s) --- Flow 3 egress (mean 5.19 Mbit/s)

Flow 1 (95th percentile 5.24 ms) • Flow 2 (95th percentile 4.30 ms) • Flow 3 (95th percentile 5.29 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 02:03:14
End at: 2019-01-25 02:03:44
Local clock offset: 2.291 ms
Remote clock offset: -4.787 ms


# Below is generated by plot.py at 2019-01-25 03:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.54 Mbit/s
95th percentile per-packet one-way delay: 3.898 ms
Loss rate: 7.45%
-- Flow 1:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 3.917 ms
Loss rate: 7.37%
-- Flow 2:
Average throughput: 22.81 Mbit/s
95th percentile per-packet one-way delay: 3.896 ms
Loss rate: 7.74%
-- Flow 3:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 2.993 ms
Loss rate: 6.89%
```

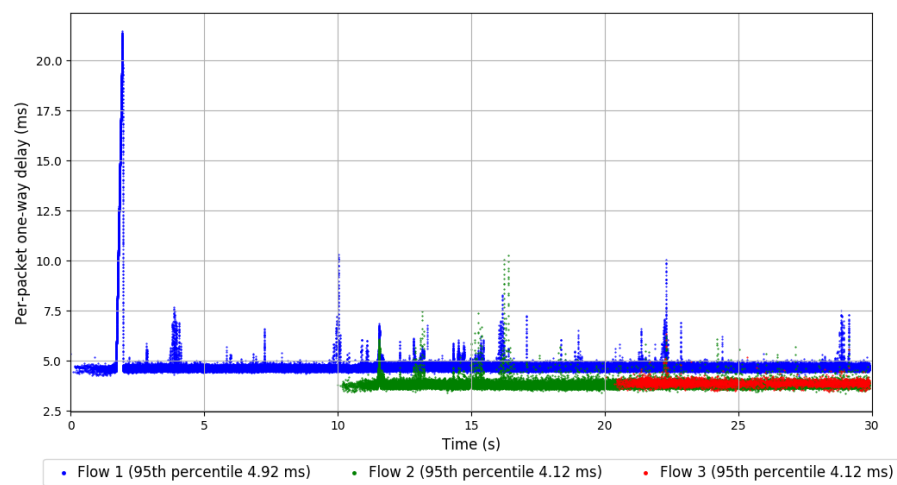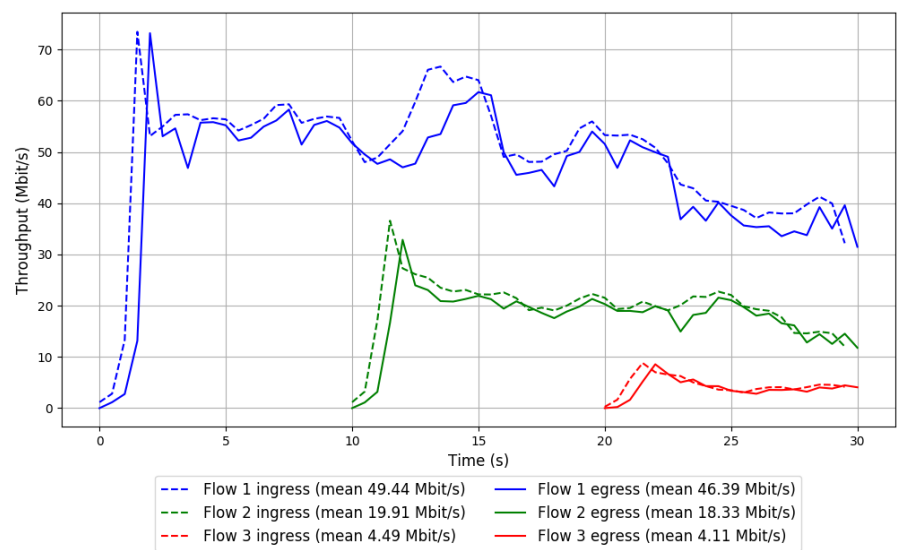Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-25 02:30:03
End at: 2019-01-25 02:30:33
Local clock offset: 1.254 ms
Remote clock offset: -4.039 ms


# Below is generated by plot.py at 2019-01-25 03:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.94 Mbit/s
95th percentile per-packet one-way delay: 4.882 ms
Loss rate: 6.60%
-- Flow 1:
Average throughput: 46.39 Mbit/s
95th percentile per-packet one-way delay: 4.925 ms
Loss rate: 6.18%
-- Flow 2:
Average throughput: 18.33 Mbit/s
95th percentile per-packet one-way delay: 4.122 ms
Loss rate: 7.97%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 4.118 ms
Loss rate: 8.45%
```

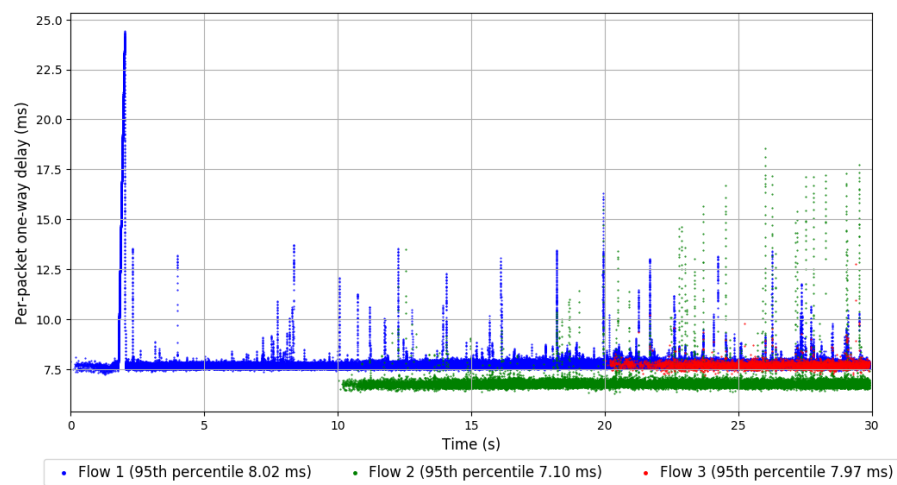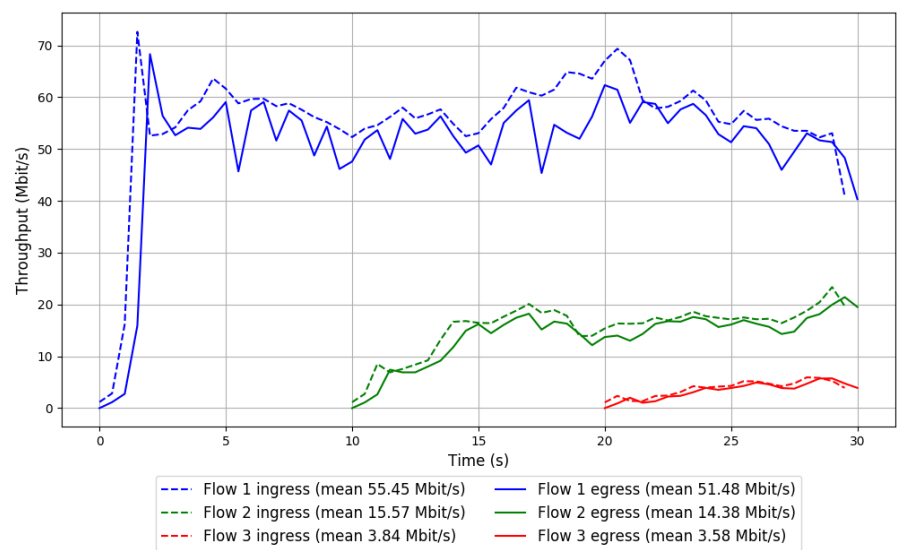Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-25 02:56:40
End at: 2019-01-25 02:57:10
Local clock offset: -1.76 ms
Remote clock offset: -3.891 ms


# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.23 Mbit/s
95th percentile per-packet one-way delay: 7.993 ms
Loss rate: 7.23%
-- Flow 1:
Average throughput: 51.48 Mbit/s
95th percentile per-packet one-way delay: 8.024 ms
Loss rate: 7.16%
-- Flow 2:
Average throughput: 14.38 Mbit/s
95th percentile per-packet one-way delay: 7.103 ms
Loss rate: 7.63%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 7.972 ms
Loss rate: 6.77%
```
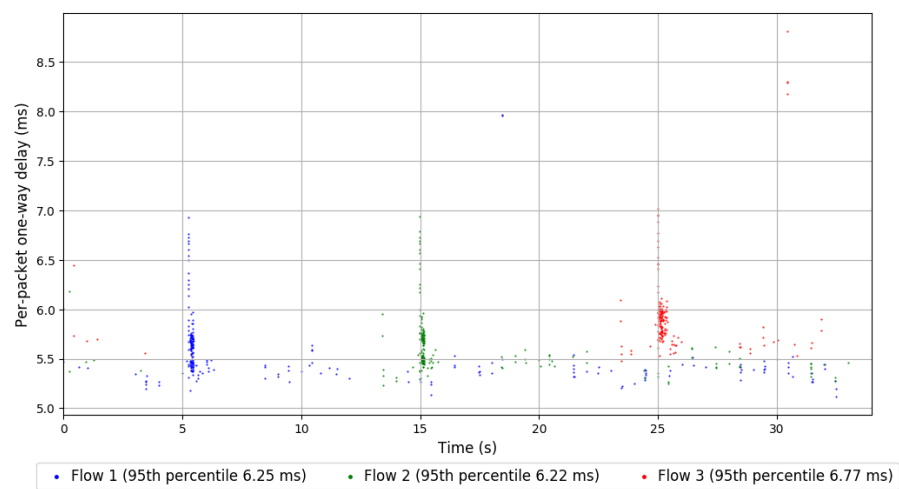
Run 5: Report of PCC-Vivace — Data Link

- - - - Flow 1 ingress (mean 55.45 Mbit/s)   —— Flow 1 egress (mean 51.48 Mbit/s)
- - - - Flow 2 ingress (mean 15.57 Mbit/s)   —— Flow 2 egress (mean 14.38 Mbit/s)
- - - - Flow 3 ingress (mean 3.84 Mbit/s)   —— Flow 3 egress (mean 3.58 Mbit/s)

- Flow 1 (95th percentile 8.02 ms)   • Flow 2 (95th percentile 7.10 ms)   • Flow 3 (95th percentile 7.97 ms)
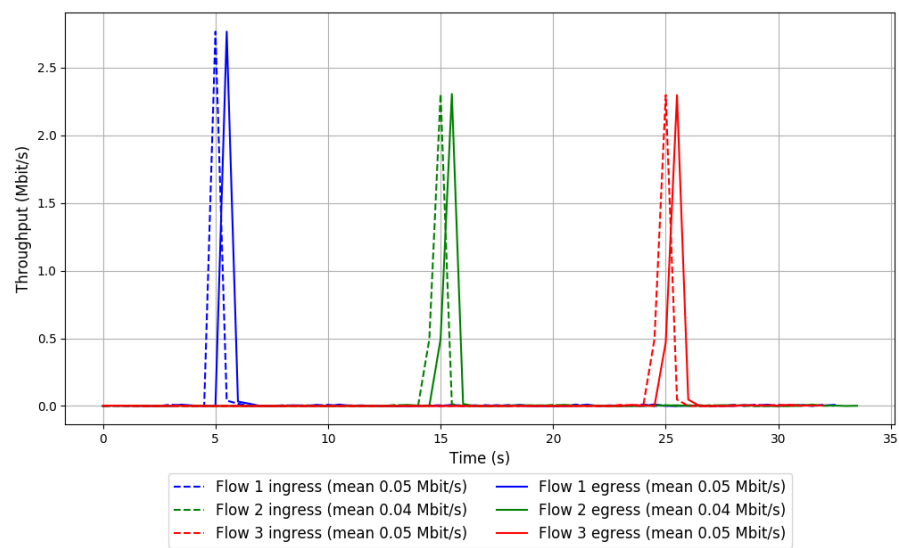
```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 01:12:54
End at: 2019-01-25 01:13:24
Local clock offset: -1.087 ms
Remote clock offset: -4.651 ms


# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 6.462 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.251 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6.219 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.769 ms
Loss rate: 0.83%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 01:39:11
End at: 2019-01-25 01:39:41
Local clock offset: -0.189 ms
Remote clock offset: -3.27 ms


# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 6.936 ms
Loss rate: 3.18%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.013 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6.978 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.689 ms
Loss rate: 8.43%
```
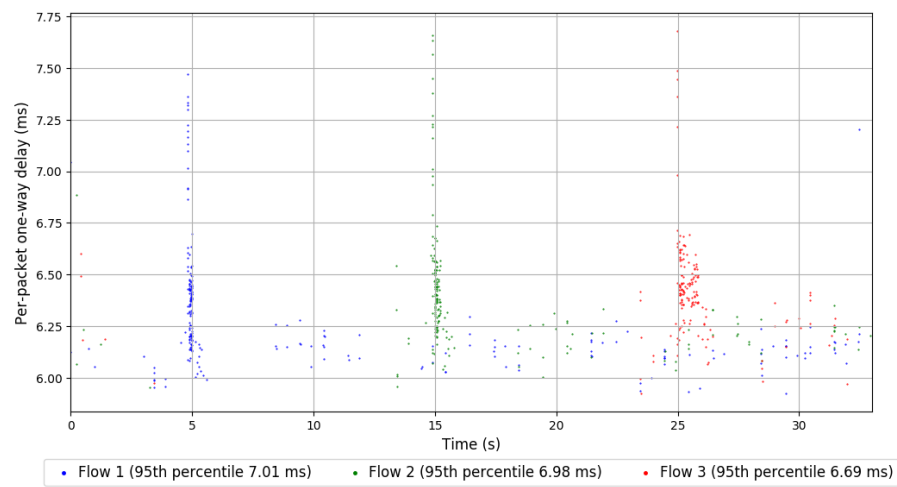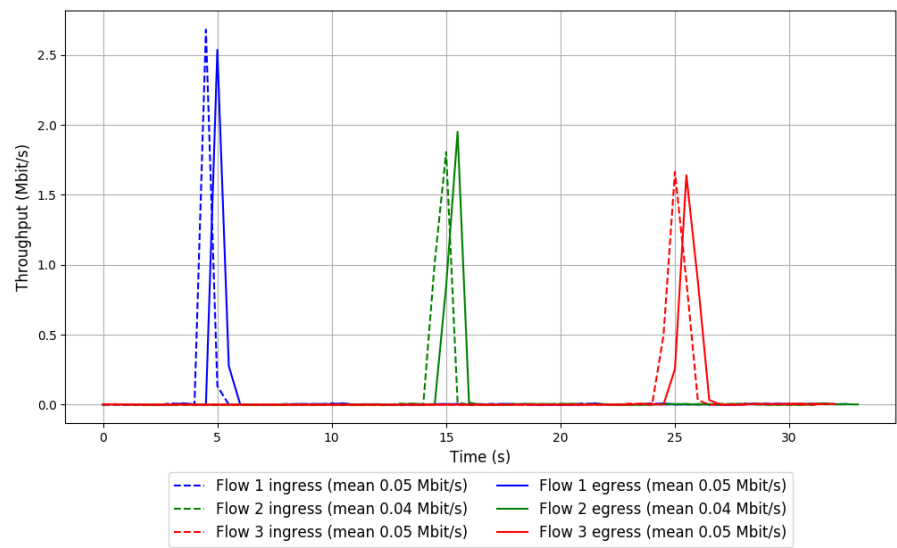
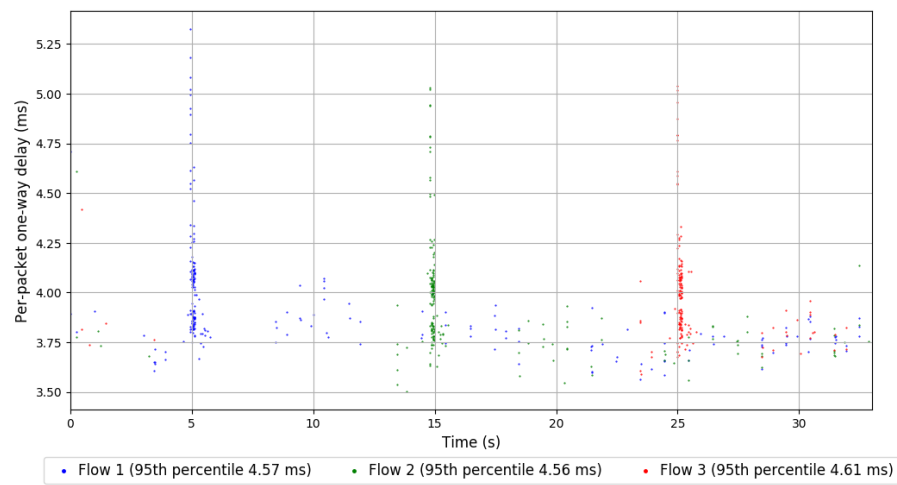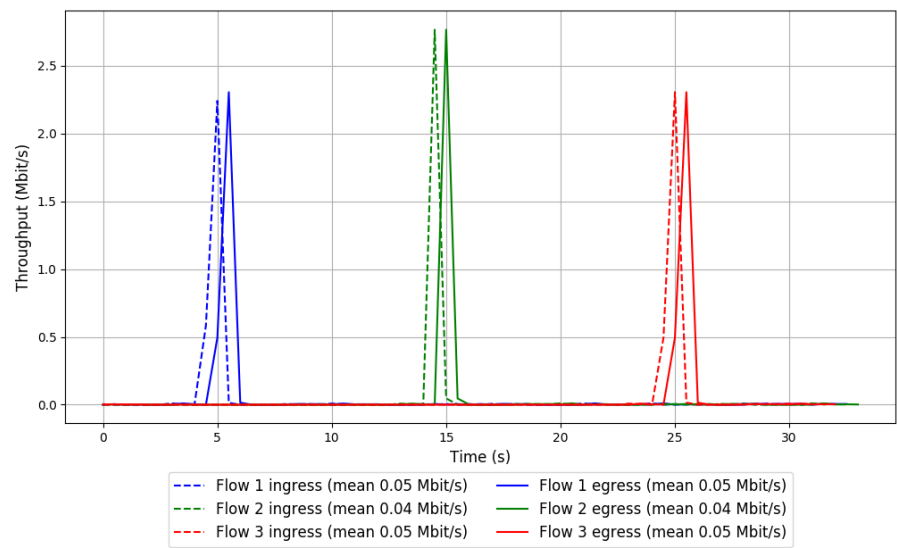Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 02:05:42
End at: 2019-01-25 02:06:12
Local clock offset: 1.312 ms
Remote clock offset: -4.406 ms


# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 4.588 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.566 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 4.564 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.610 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-25 02:32:32
End at: 2019-01-25 02:33:02
Local clock offset: 0.715 ms
Remote clock offset: -3.55 ms

# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 6.399 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.298 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6.442 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.397 ms
Loss rate: 0.05%
```
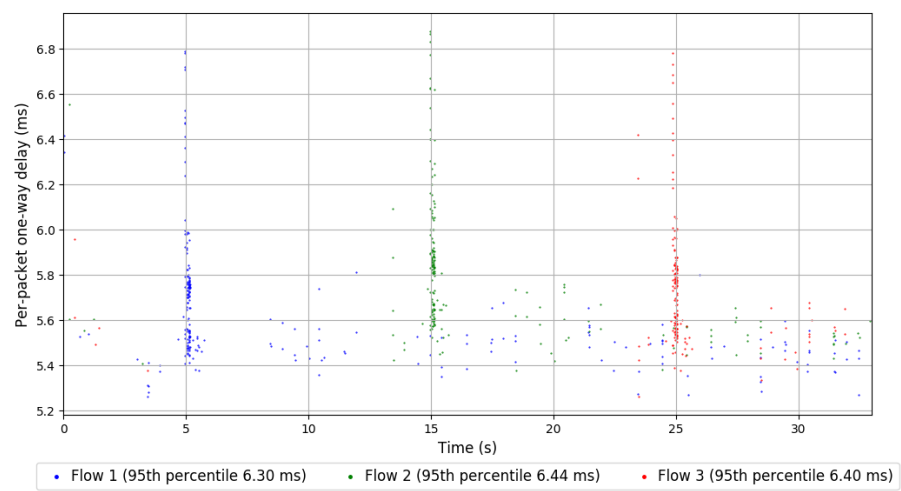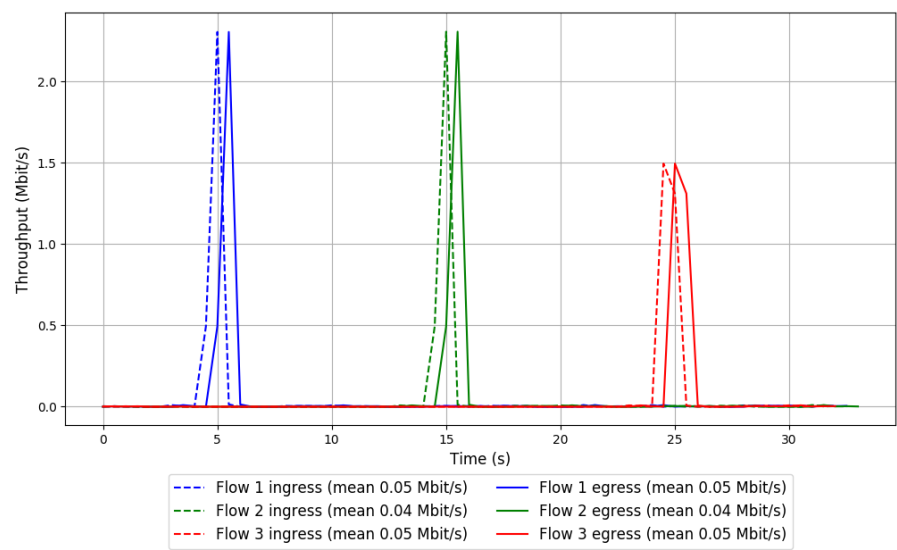
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 02:59:07
End at: 2019-01-25 02:59:37
Local clock offset: -1.407 ms
Remote clock offset: -4.749 ms


# Below is generated by plot.py at 2019-01-25 03:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 6.556 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.071 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.244 ms
Loss rate: 0.07%
```

Run 5: Report of WebRTC media — Data Link