Pantheon Report

Generated at 2019-01-21 14:28:46 (UTC).

Data path: AWS California 1 on **ens5** (*local*) →Stanford on **eno1** (*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 `time.stanford.edu` and have been applied to correct the timestamps in logs.
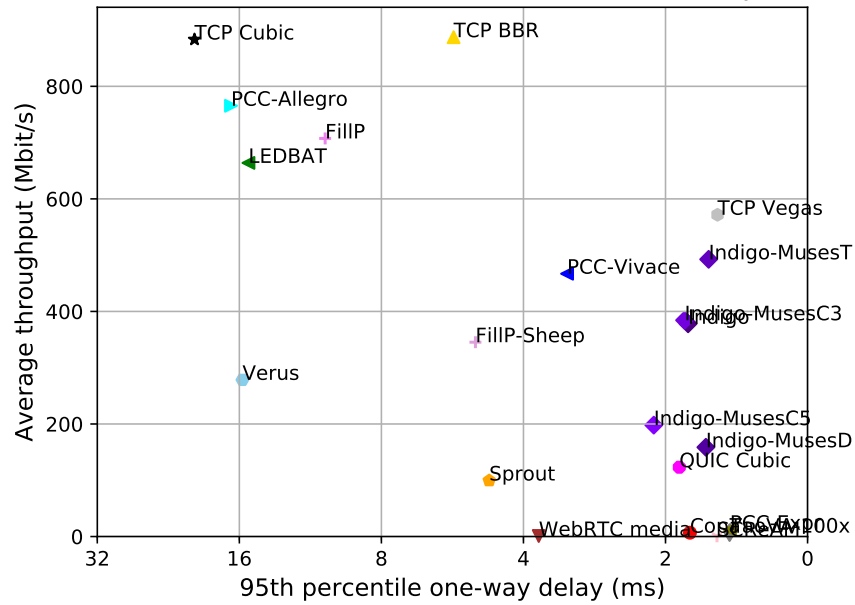
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
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
```
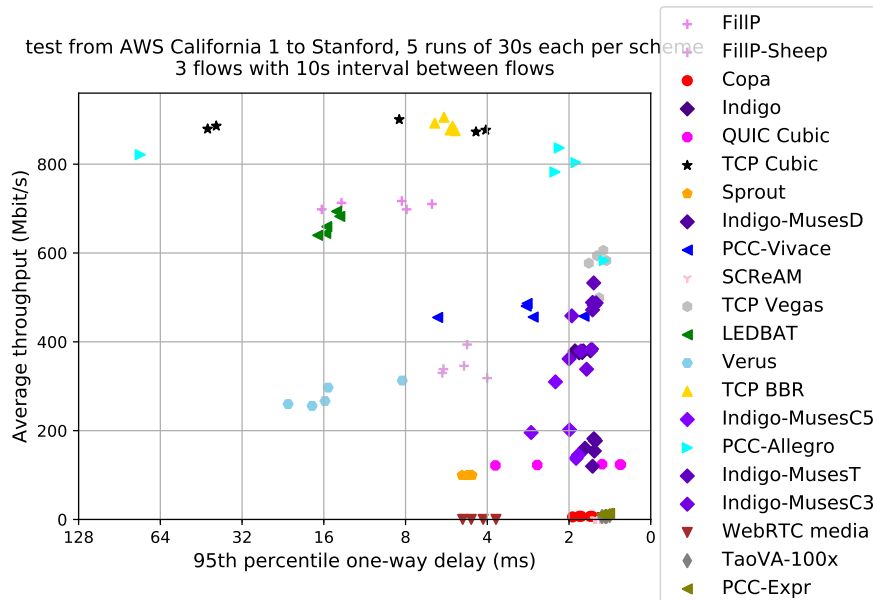
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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

3

| | | mean avg tput (Mbit/s) | | | mean 95th-%ile delay (ms) | | | mean loss rate (%) | | |
scheme	# runs	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	519.08	412.18	281.80	5.64	5.27	3.96	5.48	9.45	13.04
Copa	5	0.00	7.56	6.17	1.23	1.65	1.67	98.60	46.09	39.40
TCP Cubic	5	510.54	392.17	334.96	22.58	2.18	2.26	0.07	0.05	0.05
FillP	5	445.55	303.92	180.19	11.73	4.64	5.12	11.51	13.03	15.65
FillP-Sheep	5	306.58	44.89	27.04	5.17	3.24	2.42	3.13	2.58	6.02
Indigo	5	192.64	188.23	186.52	1.51	1.69	2.00	0.00	0.00	0.00
Indigo-MusesC3	5	188.88	208.57	194.78	1.51	2.00	2.08	0.00	0.00	0.00
Indigo-MusesC5	5	86.53	105.79	141.23	1.75	2.21	2.28	0.01	0.06	0.05
Indigo-MusesD	5	89.99	73.20	69.61	1.38	1.43	1.44	0.00	0.01	0.00
Indigo-MusesT	5	284.04	231.55	196.47	1.35	1.34	1.62	0.00	0.00	0.00
LEDBAT	5	402.86	298.99	218.69	16.52	7.27	7.01	0.12	0.26	0.36
PCC-Allegro	5	677.46	92.43	80.37	17.16	1.38	1.38	0.28	0.14	0.23
PCC-Expr	5	6.80	5.56	4.72	1.11	1.08	1.06	63.33	58.46	59.41
QUIC Cubic	5	66.71	59.91	50.64	1.35	1.49	4.29	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	1.25	1.28	1.29	0.00	0.00	0.00
Sprout	5	49.99	49.88	49.59	4.74	4.77	4.47	0.02	0.04	0.10
TaoVA-100x	5	0.00	6.92	7.15	1.13	1.11	1.04	95.92	30.94	34.37
TCP Vegas	5	254.69	333.10	286.13	1.25	1.27	1.28	0.00	0.00	0.01
Verus	5	152.89	120.85	137.33	11.77	18.40	28.94	2.18	4.39	3.81
PCC-Vivace	5	259.95	232.71	158.48	1.73	6.72	30.51	0.04	0.12	0.83
WebRTC media	5	0.47	0.32	0.15	3.36	3.85	3.73	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-21 11:06:20
End at: 2019-01-21 11:06:50
Local clock offset: 3.194 ms
Remote clock offset: 0.449 ms


# Below is generated by plot.py at 2019-01-21 13:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 875.47 Mbit/s
95th percentile per-packet one-way delay: 5.253 ms
Loss rate: 8.36%
-- Flow 1:
Average throughput: 501.09 Mbit/s
95th percentile per-packet one-way delay: 5.613 ms
Loss rate: 5.76%
-- Flow 2:
Average throughput: 368.35 Mbit/s
95th percentile per-packet one-way delay: 4.359 ms
Loss rate: 11.69%
-- Flow 3:
Average throughput: 388.30 Mbit/s
95th percentile per-packet one-way delay: 2.659 ms
Loss rate: 11.51%
```
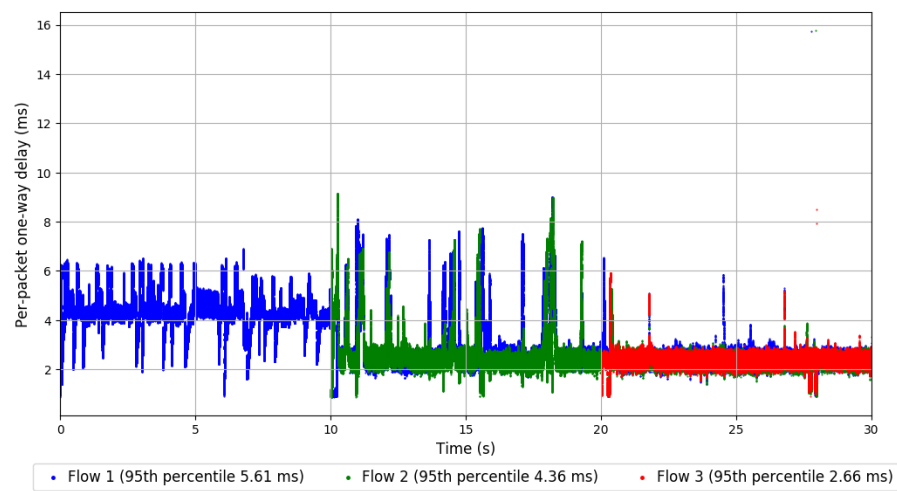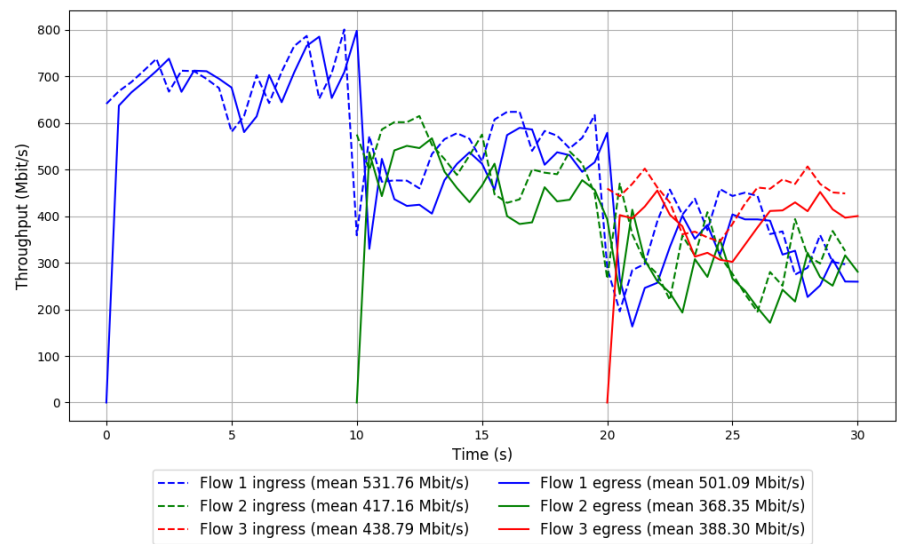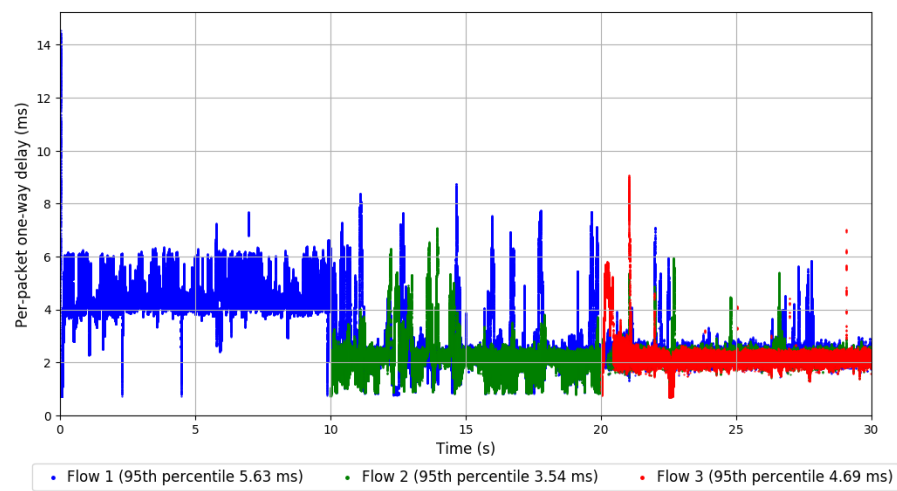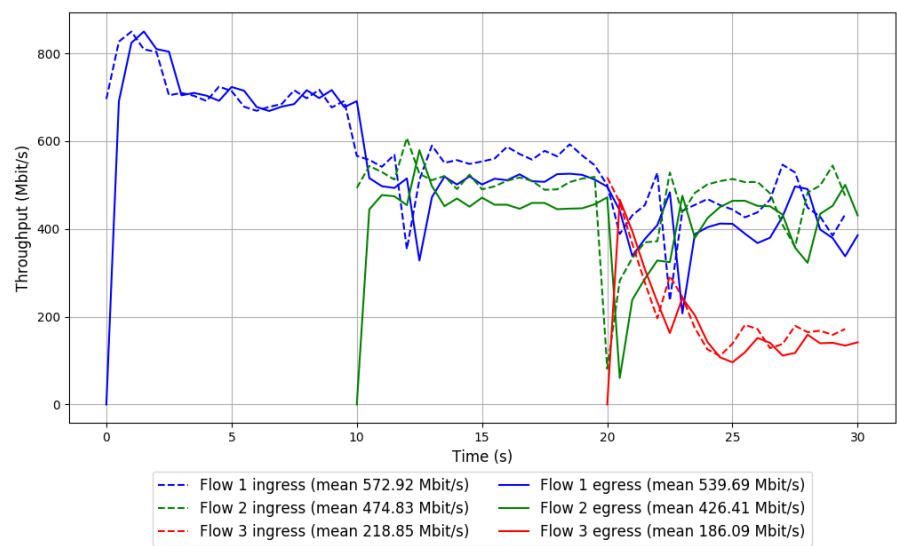
Run 1: Report of TCP BBR — Data Link

6

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-21 11:36:33
End at: 2019-01-21 11:37:03
Local clock offset: 3.529 ms
Remote clock offset: 4.072 ms


# Below is generated by plot.py at 2019-01-21 13:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 885.70 Mbit/s
95th percentile per-packet one-way delay: 5.369 ms
Loss rate: 7.94%
-- Flow 1:
Average throughput: 539.69 Mbit/s
95th percentile per-packet one-way delay: 5.631 ms
Loss rate: 5.80%
-- Flow 2:
Average throughput: 426.41 Mbit/s
95th percentile per-packet one-way delay: 3.536 ms
Loss rate: 10.19%
-- Flow 3:
Average throughput: 186.09 Mbit/s
95th percentile per-packet one-way delay: 4.687 ms
Loss rate: 14.96%
```
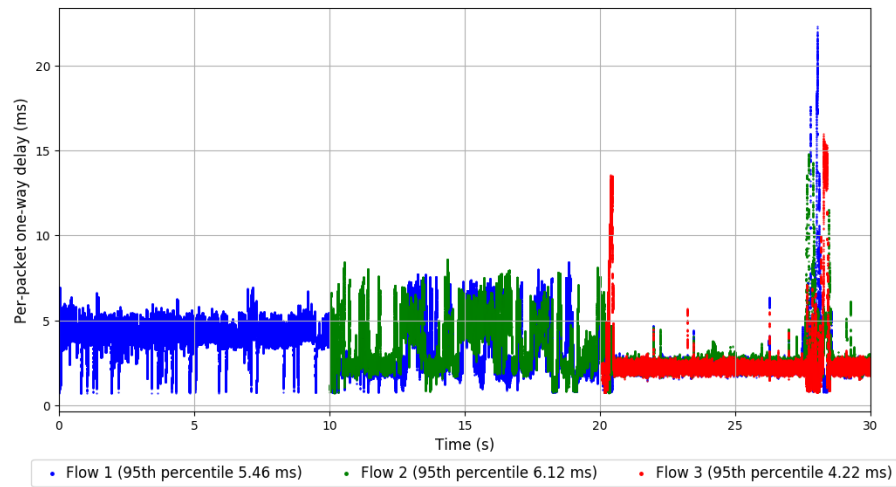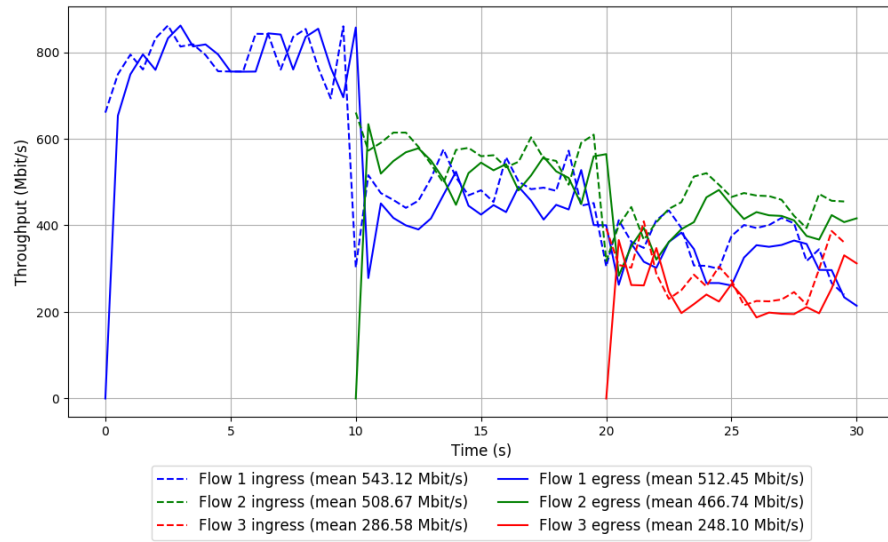
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-21 12:06:56
End at: 2019-01-21 12:07:26
Local clock offset: 3.164 ms
Remote clock offset: 1.242 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.76 Mbit/s
95th percentile per-packet one-way delay: 5.774 ms
Loss rate: 7.30%
-- Flow 1:
Average throughput: 512.45 Mbit/s
95th percentile per-packet one-way delay: 5.457 ms
Loss rate: 5.64%
-- Flow 2:
Average throughput: 466.74 Mbit/s
95th percentile per-packet one-way delay: 6.118 ms
Loss rate: 8.24%
-- Flow 3:
Average throughput: 248.10 Mbit/s
95th percentile per-packet one-way delay: 4.216 ms
Loss rate: 13.43%
```
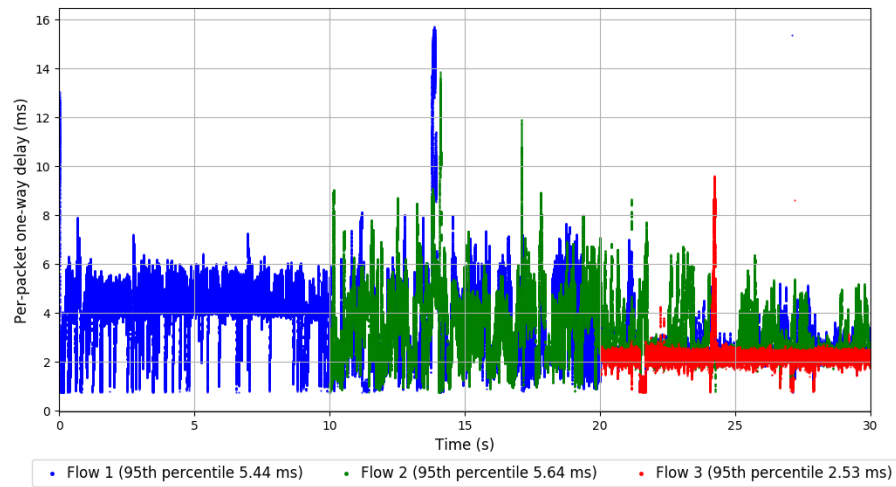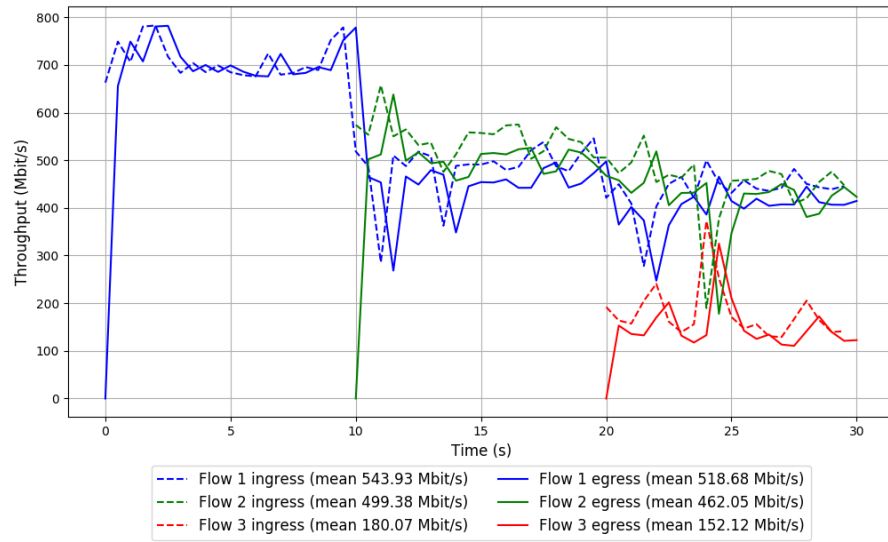
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-21 12:37:10
End at: 2019-01-21 12:37:40
Local clock offset: 3.091 ms
Remote clock offset: 0.168 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.08 Mbit/s
95th percentile per-packet one-way delay: 5.481 ms
Loss rate: 6.34%
-- Flow 1:
Average throughput: 518.68 Mbit/s
95th percentile per-packet one-way delay: 5.438 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 462.05 Mbit/s
95th percentile per-packet one-way delay: 5.645 ms
Loss rate: 7.47%
-- Flow 3:
Average throughput: 152.12 Mbit/s
95th percentile per-packet one-way delay: 2.526 ms
Loss rate: 15.51%
```

Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-21 13:07:21
End at: 2019-01-21 13:07:51
Local clock offset: -0.371 ms
Remote clock offset: -1.554 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 892.54 Mbit/s
95th percentile per-packet one-way delay: 6.246 ms
Loss rate: 7.31%
-- Flow 1:
Average throughput: 523.51 Mbit/s
95th percentile per-packet one-way delay: 6.080 ms
Loss rate: 5.54%
-- Flow 2:
Average throughput: 337.36 Mbit/s
95th percentile per-packet one-way delay: 6.677 ms
Loss rate: 9.65%
-- Flow 3:
Average throughput: 434.37 Mbit/s
95th percentile per-packet one-way delay: 5.714 ms
Loss rate: 9.81%
```
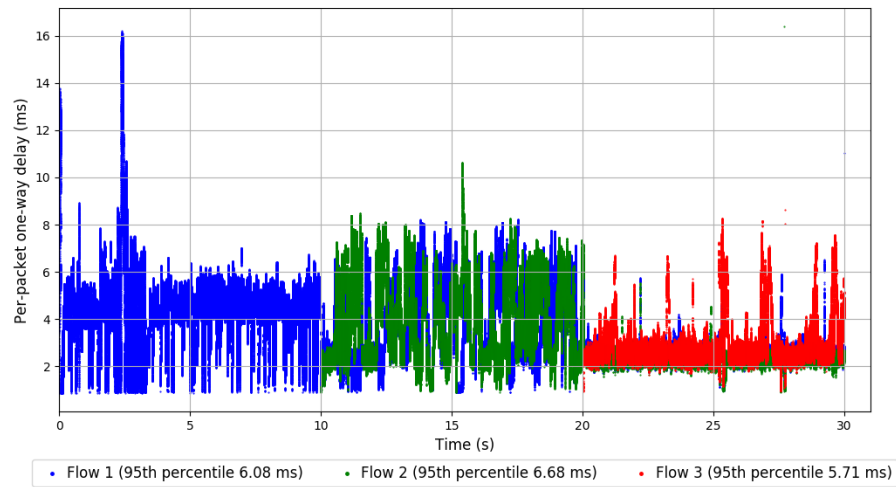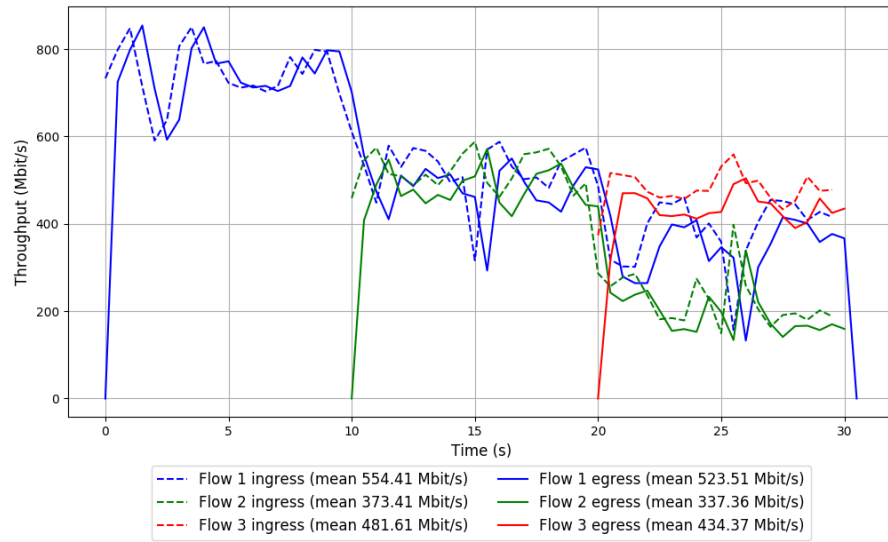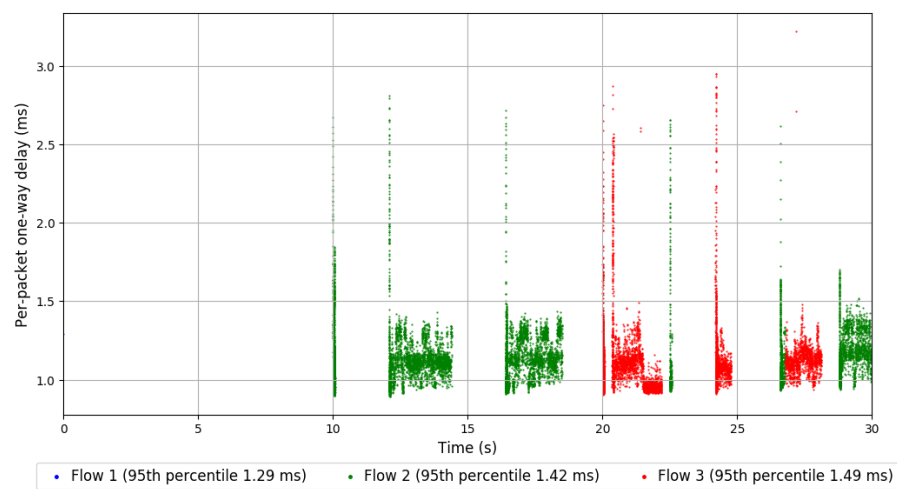
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 554.41 Mbit/s)   Flow 1 egress (mean 523.51 Mbit/s)
Flow 2 ingress (mean 373.41 Mbit/s)   Flow 2 egress (mean 337.36 Mbit/s)
Flow 3 ingress (mean 481.61 Mbit/s)   Flow 3 egress (mean 434.37 Mbit/s)

Flow 1 (95th percentile 6.08 ms)   Flow 2 (95th percentile 6.68 ms)   Flow 3 (95th percentile 5.71 ms)

14

```
Run 1: Statistics of Copa

Start at: 2019-01-21 10:59:32
End at: 2019-01-21 11:00:02
Local clock offset: 2.411 ms
Remote clock offset: 0.298 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 1.433 ms
Loss rate: 51.49%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 1.421 ms
Loss rate: 48.89%
-- Flow 3:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 1.490 ms
Loss rate: 55.53%
```
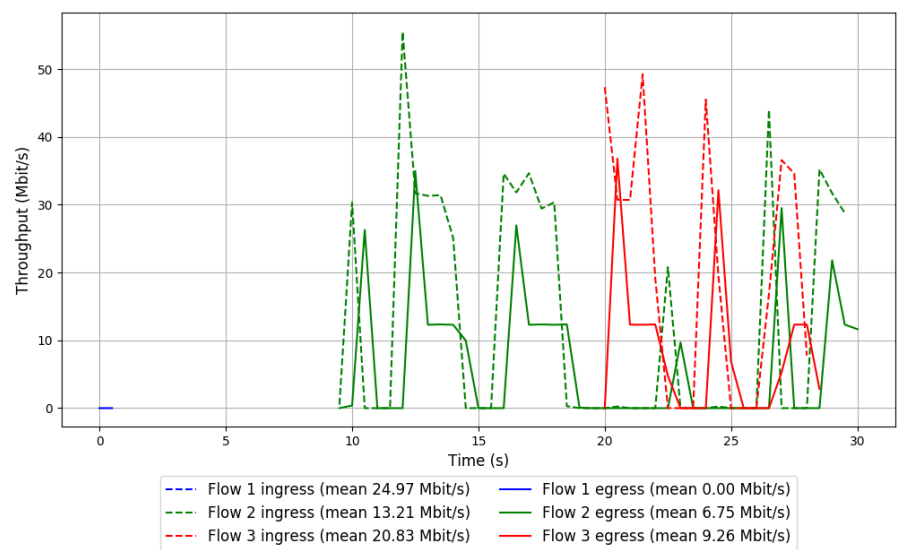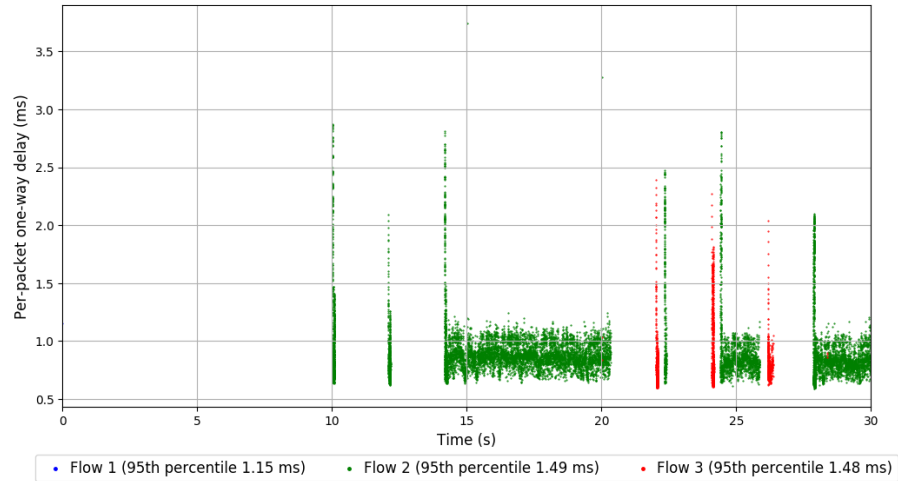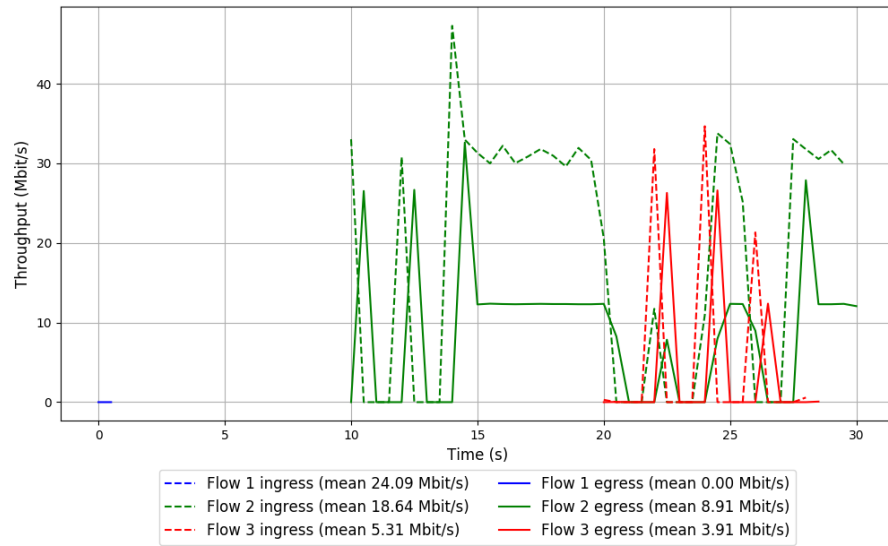
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 24.97 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 13.21 Mbit/s) --- Flow 2 egress (mean 6.75 Mbit/s)
Flow 3 ingress (mean 20.83 Mbit/s) --- Flow 3 egress (mean 9.26 Mbit/s)

Flow 1 (95th percentile 1.29 ms)   Flow 2 (95th percentile 1.42 ms)   Flow 3 (95th percentile 1.49 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-21 11:29:45
End at: 2019-01-21 11:30:15
Local clock offset: 3.549 ms
Remote clock offset: 3.149 ms

# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 1.482 ms
Loss rate: 49.46%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.154 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 1.488 ms
Loss rate: 52.21%
-- Flow 3:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 1.479 ms
Loss rate: 26.28%
```
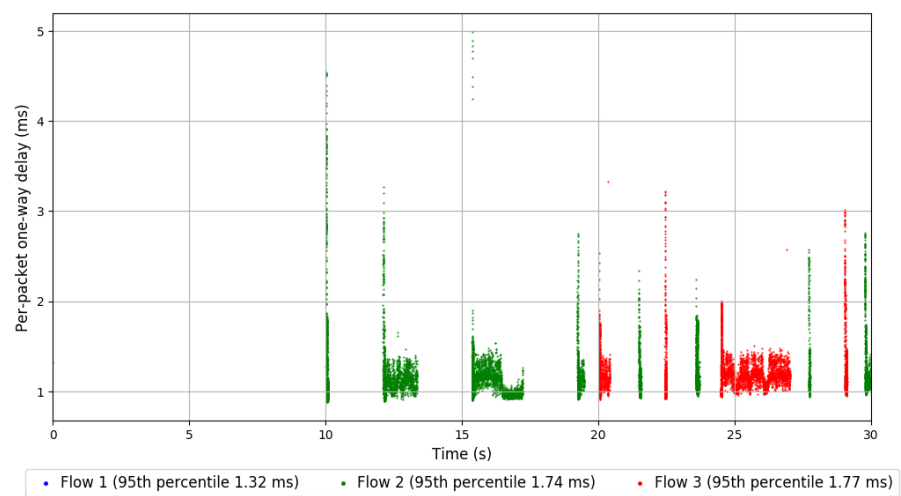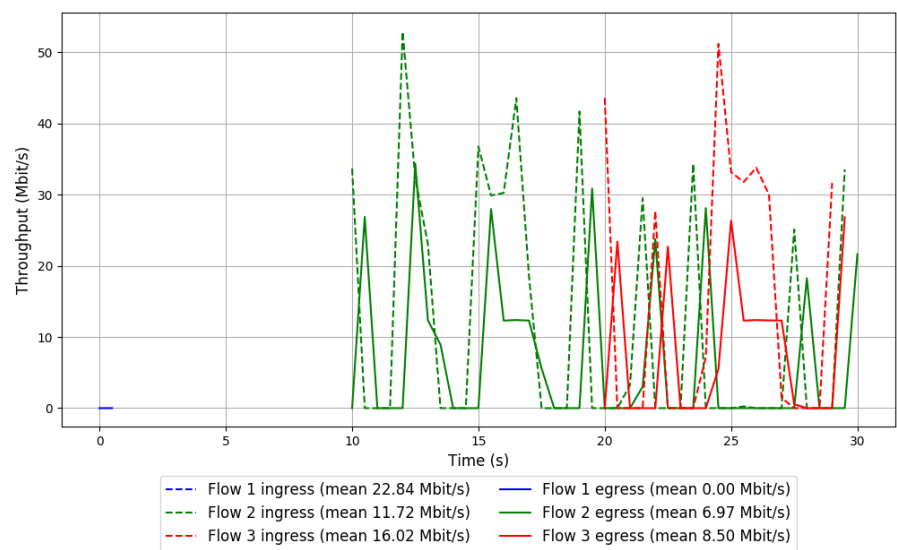
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-01-21 12:00:07
End at: 2019-01-21 12:00:37
Local clock offset: 3.224 ms
Remote clock offset: 2.684 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 1.749 ms
Loss rate: 43.01%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.319 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 1.735 ms
Loss rate: 40.54%
-- Flow 3:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 1.771 ms
Loss rate: 46.94%
```
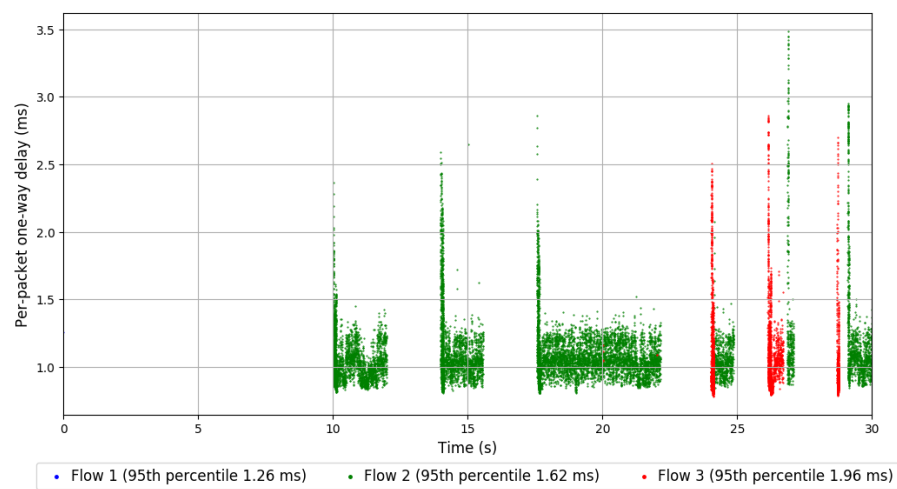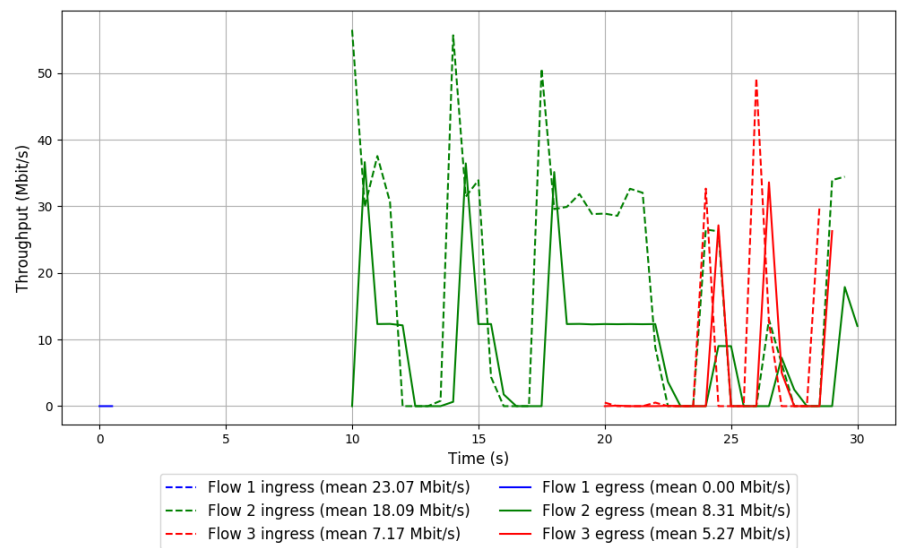
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 22.84 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 11.72 Mbit/s) --- Flow 2 egress (mean 6.97 Mbit/s)
Flow 3 ingress (mean 16.02 Mbit/s) --- Flow 3 egress (mean 8.50 Mbit/s)

Flow 1 (95th percentile 1.32 ms) Flow 2 (95th percentile 1.74 ms) Flow 3 (95th percentile 1.77 ms)

```
Run 4: Statistics of Copa

Start at: 2019-01-21 12:30:21
End at: 2019-01-21 12:30:51
Local clock offset: 3.087 ms
Remote clock offset: 0.321 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 1.704 ms
Loss rate: 50.03%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.260 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 1.620 ms
Loss rate: 54.10%
-- Flow 3:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 1.959 ms
Loss rate: 26.52%
```
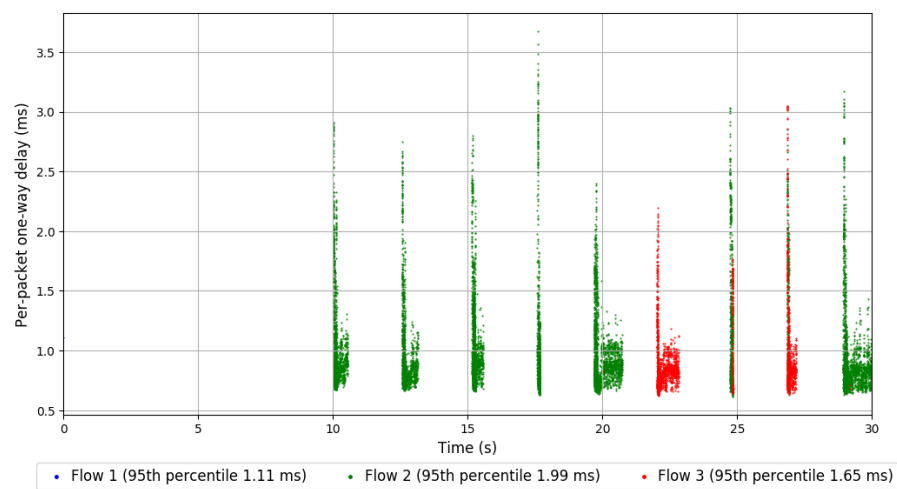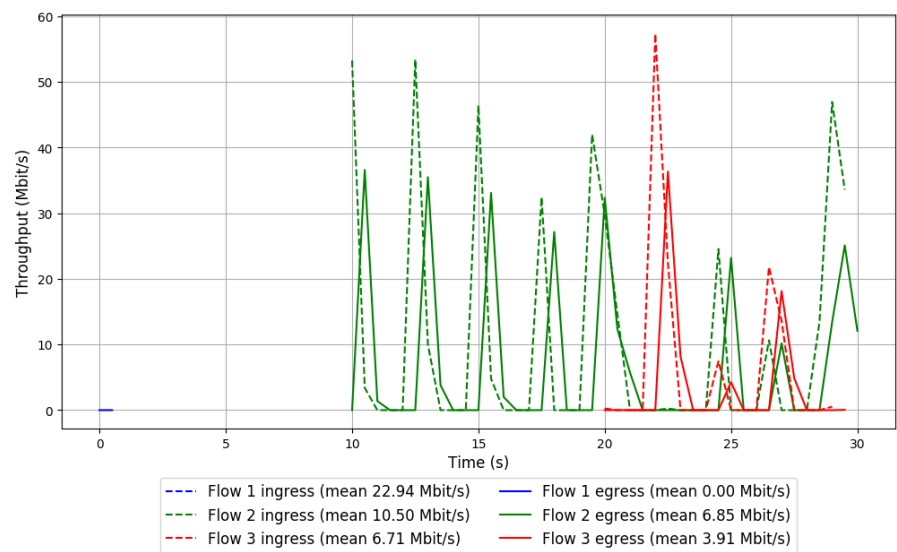
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 23.07 Mbit/s) ---
Flow 2 ingress (mean 18.09 Mbit/s) ---
Flow 3 ingress (mean 7.17 Mbit/s) ---
Flow 1 egress (mean 0.00 Mbit/s) ——
Flow 2 egress (mean 8.31 Mbit/s) ——
Flow 3 egress (mean 5.27 Mbit/s) ——

Flow 1 (95th percentile 1.26 ms)   Flow 2 (95th percentile 1.62 ms)   Flow 3 (95th percentile 1.96 ms)

```
Run 5: Statistics of Copa

Start at: 2019-01-21 13:00:32
End at: 2019-01-21 13:01:02
Local clock offset: 0.343 ms
Remote clock offset: 0.047 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 1.913 ms
Loss rate: 36.33%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.111 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 1.985 ms
Loss rate: 34.71%
-- Flow 3:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 1.646 ms
Loss rate: 41.74%
```
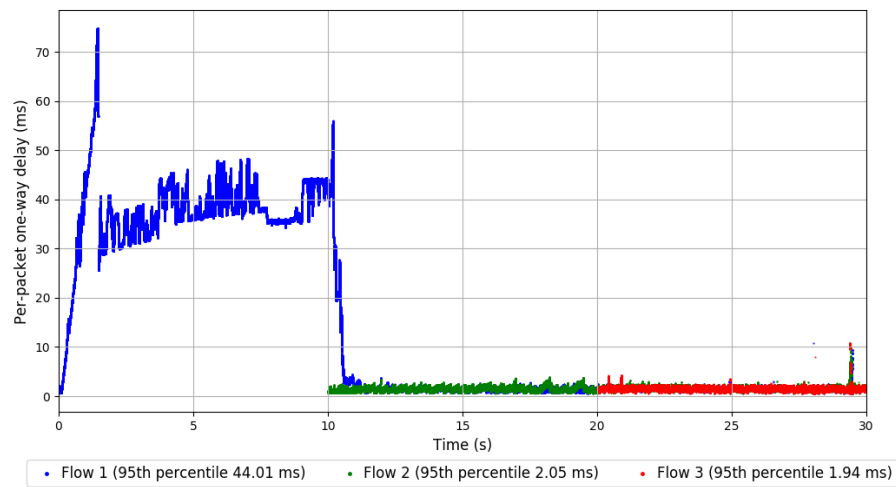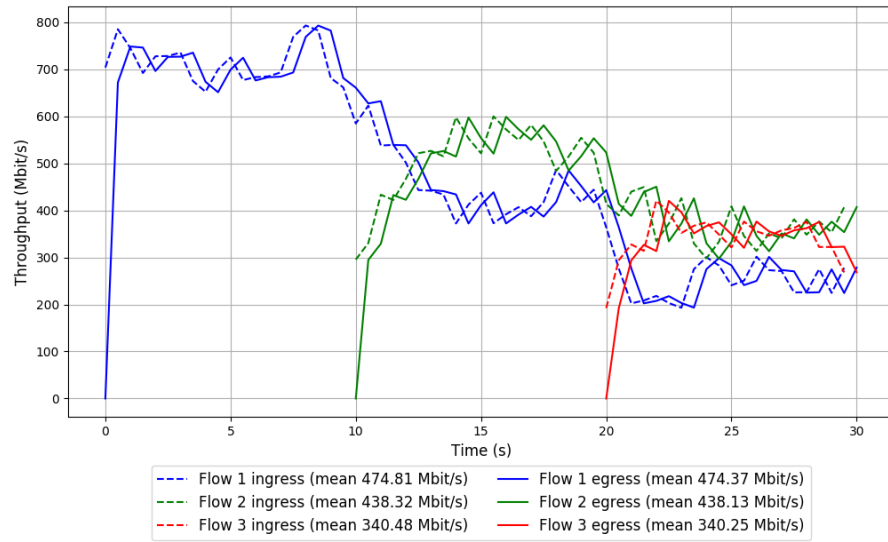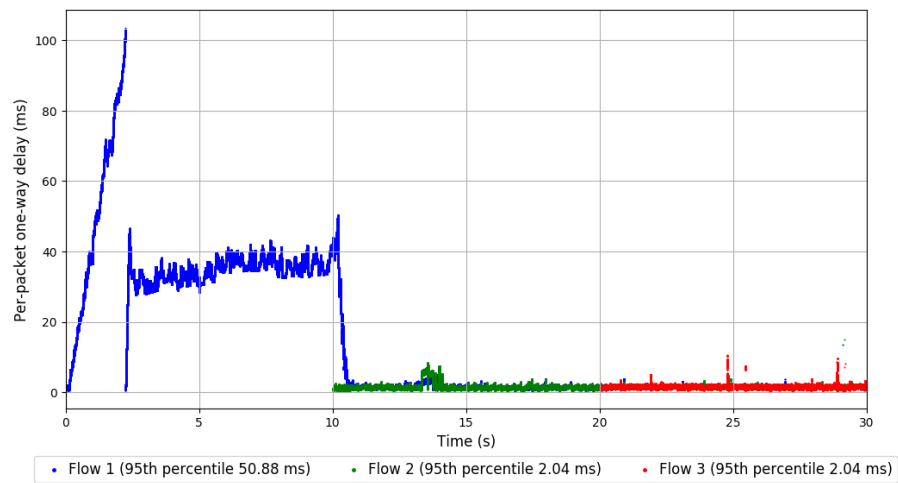
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 22.94 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 10.50 Mbit/s) --- Flow 2 egress (mean 6.85 Mbit/s)
Flow 3 ingress (mean 6.71 Mbit/s) --- Flow 3 egress (mean 3.91 Mbit/s)

Flow 1 (95th percentile 1.11 ms)   Flow 2 (95th percentile 1.99 ms)   Flow 3 (95th percentile 1.65 ms)
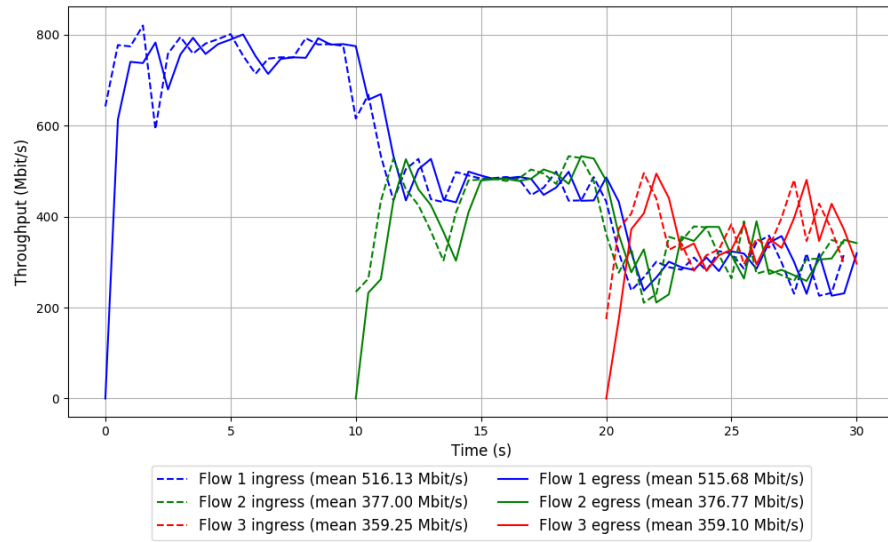
```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-21 11:20:50
End at: 2019-01-21 11:21:20
Local clock offset: 3.832 ms
Remote clock offset: 1.257 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 879.41 Mbit/s
95th percentile per-packet one-way delay: 42.855 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 474.37 Mbit/s
95th percentile per-packet one-way delay: 44.009 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 438.13 Mbit/s
95th percentile per-packet one-way delay: 2.053 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 340.25 Mbit/s
95th percentile per-packet one-way delay: 1.937 ms
Loss rate: 0.07%
```
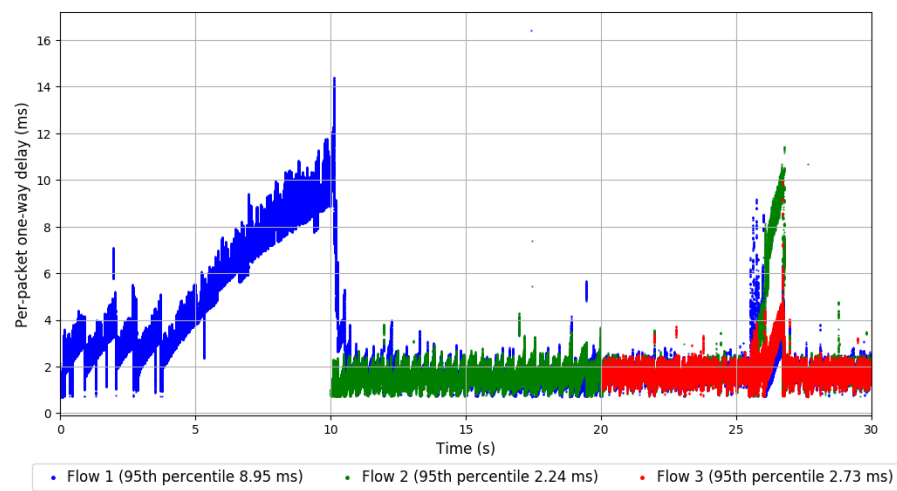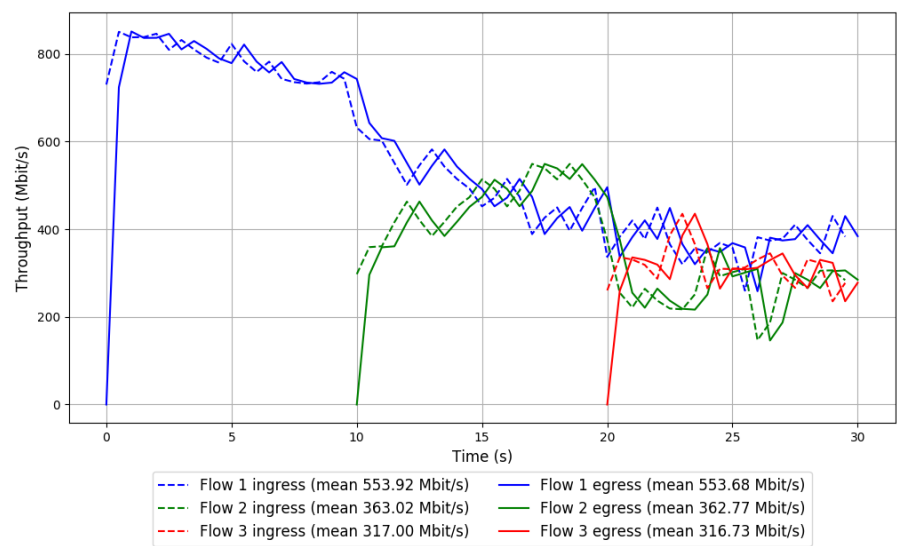
Run 1: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 474.81 Mbit/s) ——— Flow 1 egress (mean 474.37 Mbit/s)
- - - - Flow 2 ingress (mean 438.32 Mbit/s) ——— Flow 2 egress (mean 438.13 Mbit/s)
- - - - Flow 3 ingress (mean 340.48 Mbit/s) ——— Flow 3 egress (mean 340.25 Mbit/s)

- Flow 1 (95th percentile 44.01 ms) • Flow 2 (95th percentile 2.05 ms) • Flow 3 (95th percentile 1.94 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-21 11:51:10
End at: 2019-01-21 11:51:40
Local clock offset: 3.518 ms
Remote clock offset: 5.4 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 886.08 Mbit/s
95th percentile per-packet one-way delay: 39.827 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 515.68 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 376.77 Mbit/s
95th percentile per-packet one-way delay: 2.045 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 359.10 Mbit/s
95th percentile per-packet one-way delay: 2.044 ms
Loss rate: 0.04%
```
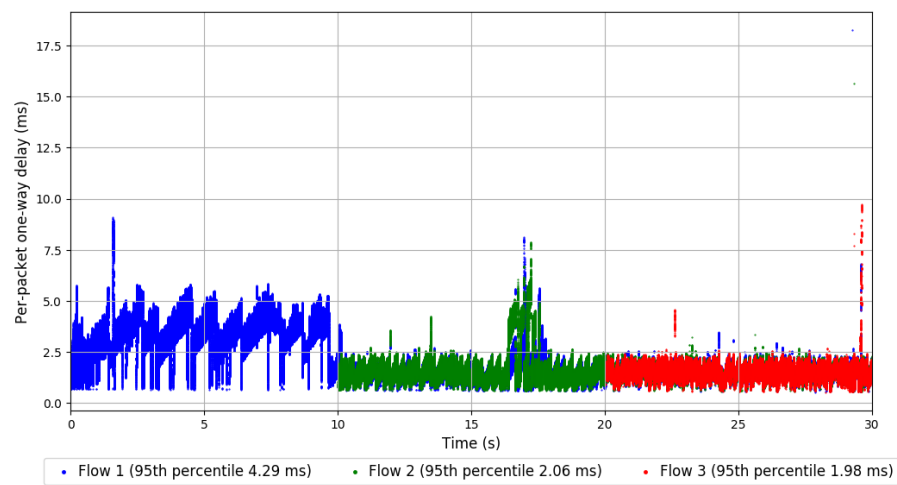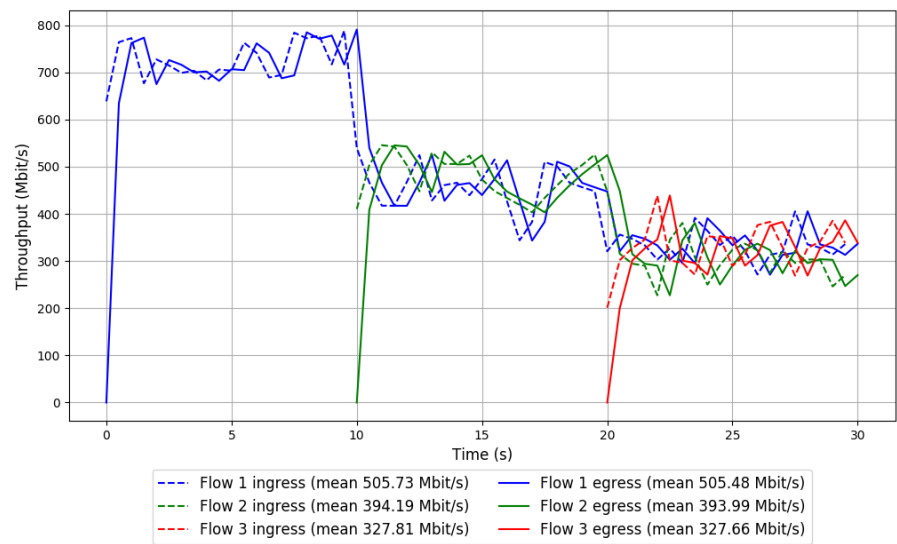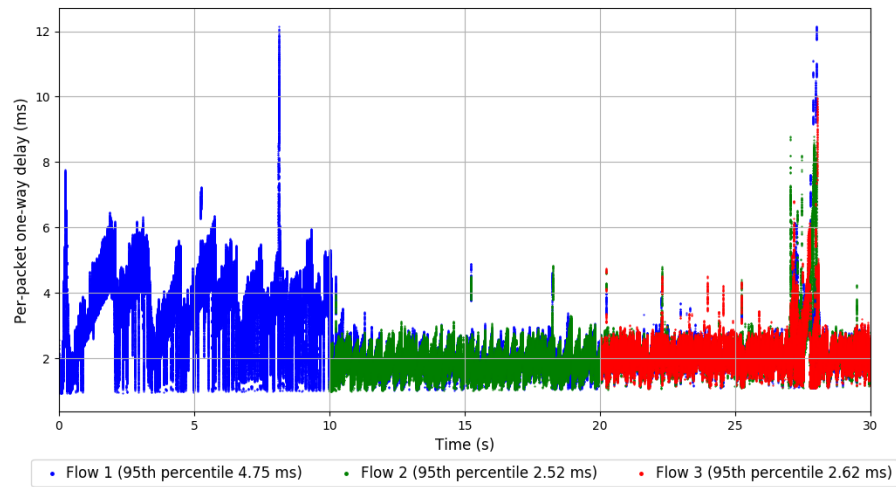
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 516.13 Mbit/s) --- Flow 1 egress (mean 515.68 Mbit/s)
Flow 2 ingress (mean 377.00 Mbit/s) --- Flow 2 egress (mean 376.77 Mbit/s)
Flow 3 ingress (mean 359.25 Mbit/s) --- Flow 3 egress (mean 359.10 Mbit/s)

Flow 1 (95th percentile 50.88 ms) • Flow 2 (95th percentile 2.04 ms) • Flow 3 (95th percentile 2.04 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-21 12:21:28
End at: 2019-01-21 12:21:58
Local clock offset: 3.149 ms
Remote clock offset: 0.374 ms


# Below is generated by plot.py at 2019-01-21 13:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.60 Mbit/s
95th percentile per-packet one-way delay: 8.438 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 553.68 Mbit/s
95th percentile per-packet one-way delay: 8.948 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 362.77 Mbit/s
95th percentile per-packet one-way delay: 2.240 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 316.73 Mbit/s
95th percentile per-packet one-way delay: 2.728 ms
Loss rate: 0.07%
```
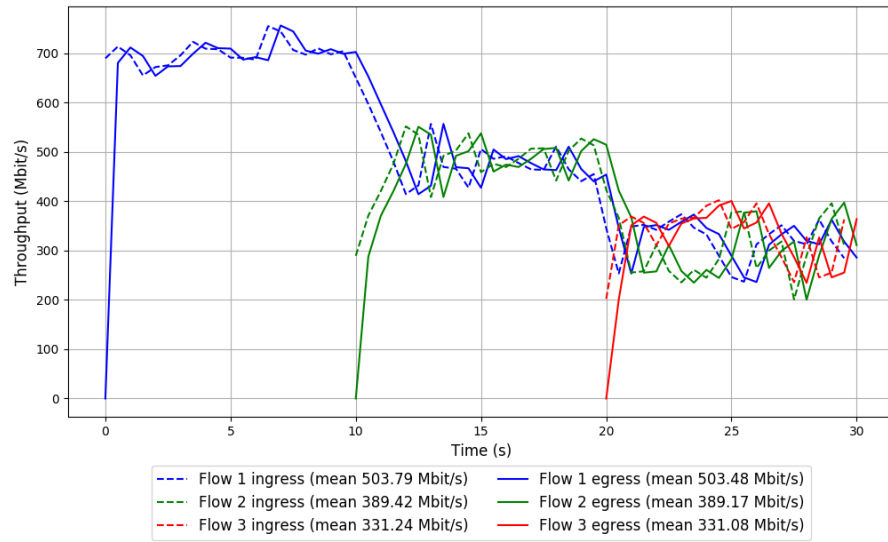
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-21 12:51:37
End at: 2019-01-21 12:52:07
Local clock offset: 2.13 ms
Remote clock offset: 0.131 ms


# Below is generated by plot.py at 2019-01-21 13:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 876.91 Mbit/s
95th percentile per-packet one-way delay: 4.051 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 505.48 Mbit/s
95th percentile per-packet one-way delay: 4.292 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 393.99 Mbit/s
95th percentile per-packet one-way delay: 2.064 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 327.66 Mbit/s
95th percentile per-packet one-way delay: 1.983 ms
Loss rate: 0.04%
```
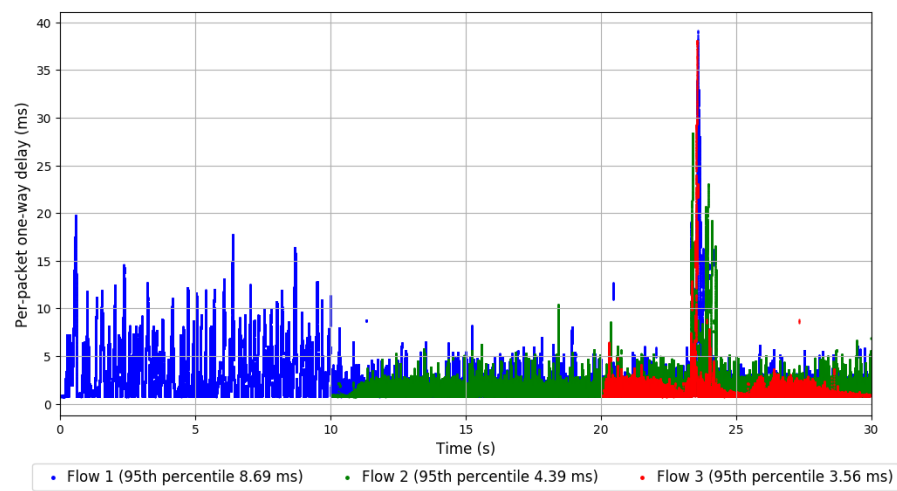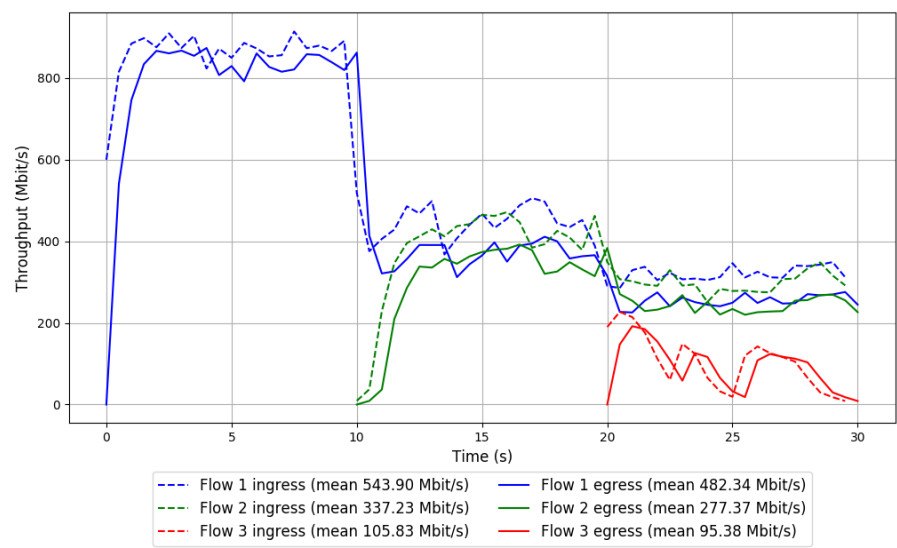
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-21 13:21:56
End at: 2019-01-21 13:22:26
Local clock offset: 0.151 ms
Remote clock offset: -3.433 ms


# Below is generated by plot.py at 2019-01-21 13:53:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 872.84 Mbit/s
95th percentile per-packet one-way delay: 4.402 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 503.48 Mbit/s
95th percentile per-packet one-way delay: 4.747 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 389.17 Mbit/s
95th percentile per-packet one-way delay: 2.520 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 331.08 Mbit/s
95th percentile per-packet one-way delay: 2.621 ms
Loss rate: 0.05%
```
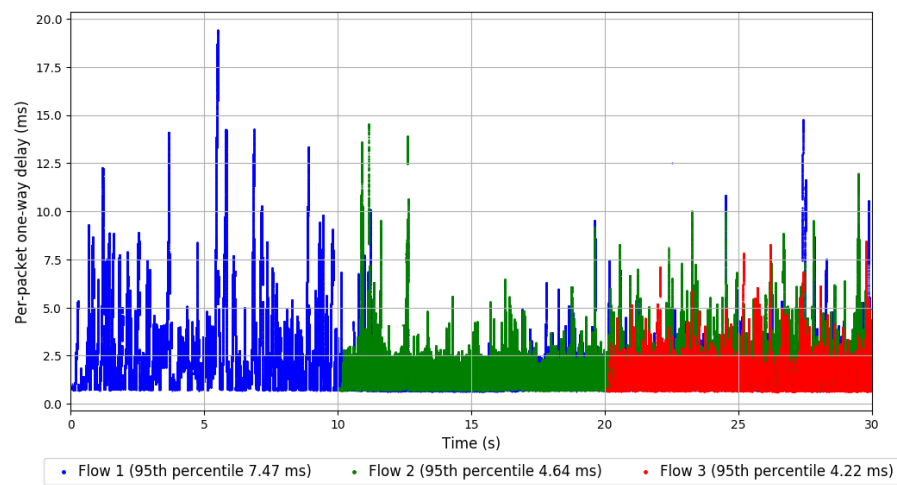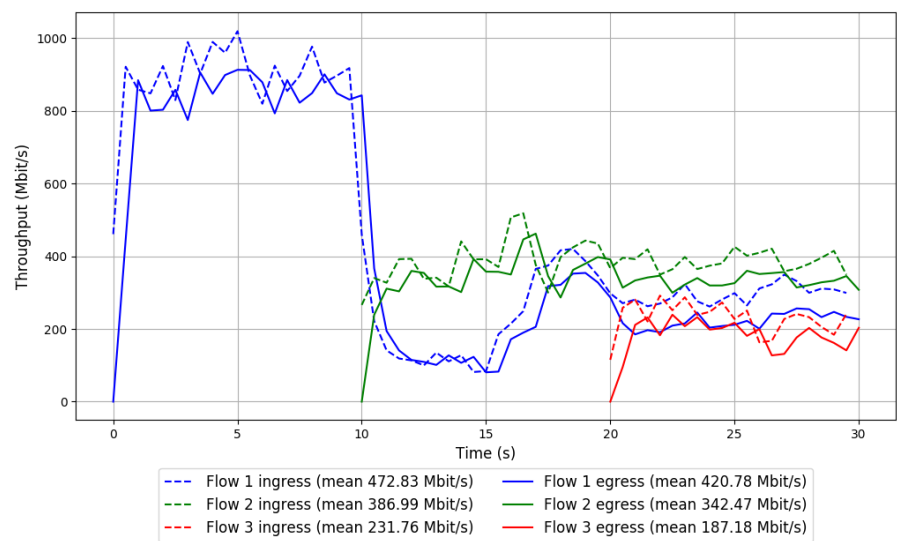
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 503.79 Mbit/s) --- Flow 1 egress (mean 503.48 Mbit/s)
Flow 2 ingress (mean 389.42 Mbit/s) --- Flow 2 egress (mean 389.17 Mbit/s)
Flow 3 ingress (mean 331.24 Mbit/s) --- Flow 3 egress (mean 331.08 Mbit/s)

Flow 1 (95th percentile 4.75 ms)　Flow 2 (95th percentile 2.52 ms)　Flow 3 (95th percentile 2.62 ms)

```
Run 1: Statistics of FillP

Start at: 2019-01-21 11:03:30
End at: 2019-01-21 11:04:00
Local clock offset: 2.909 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2019-01-21 13:54:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.29 Mbit/s
95th percentile per-packet one-way delay: 7.930 ms
Loss rate: 13.06%
-- Flow 1:
Average throughput: 482.34 Mbit/s
95th percentile per-packet one-way delay: 8.692 ms
Loss rate: 11.32%
-- Flow 2:
Average throughput: 277.37 Mbit/s
95th percentile per-packet one-way delay: 4.389 ms
Loss rate: 17.75%
-- Flow 3:
Average throughput: 95.38 Mbit/s
95th percentile per-packet one-way delay: 3.564 ms
Loss rate: 10.02%
```
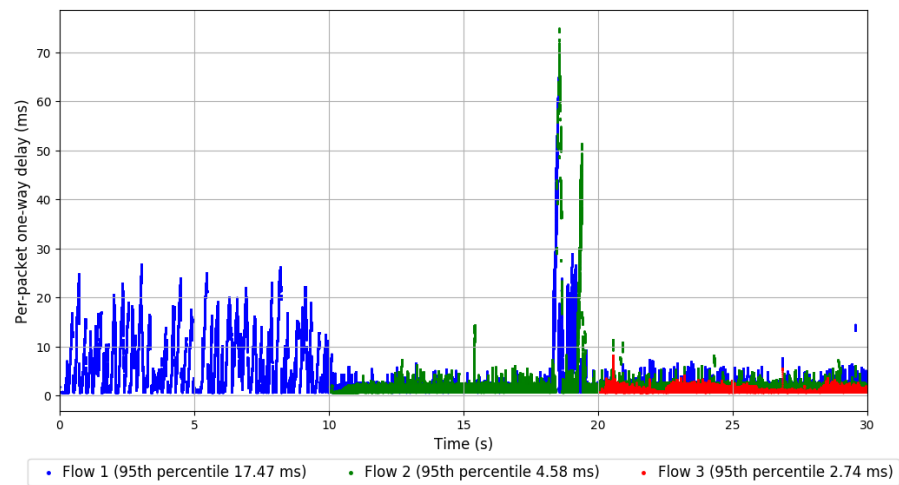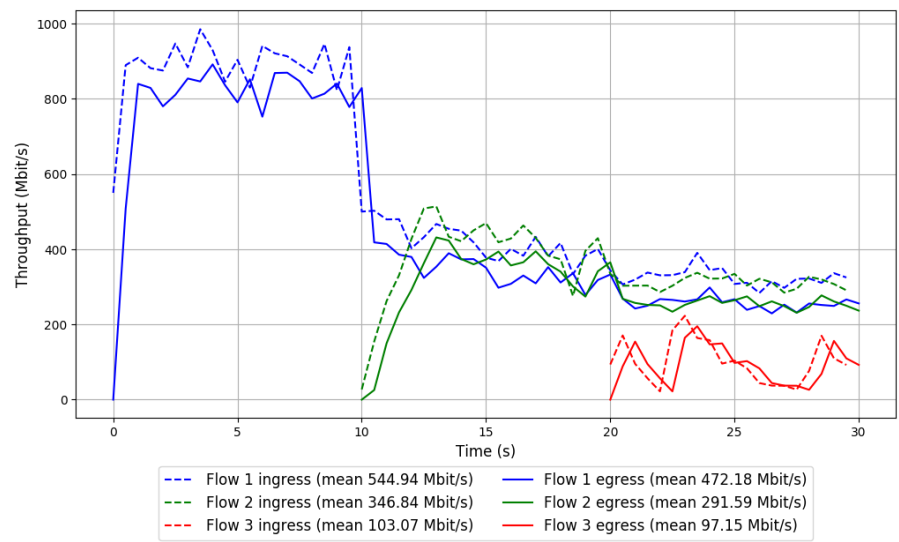
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 543.90 Mbit/s) --- Flow 1 egress (mean 482.34 Mbit/s)
Flow 2 ingress (mean 337.23 Mbit/s) --- Flow 2 egress (mean 277.37 Mbit/s)
Flow 3 ingress (mean 105.83 Mbit/s) --- Flow 3 egress (mean 95.38 Mbit/s)

Flow 1 (95th percentile 8.69 ms)   Flow 2 (95th percentile 4.39 ms)   Flow 3 (95th percentile 3.56 ms)

36

```
Run 2: Statistics of FillP

Start at: 2019-01-21 11:33:43
End at: 2019-01-21 11:34:13
Local clock offset: 3.539 ms
Remote clock offset: 3.77 ms


# Below is generated by plot.py at 2019-01-21 13:54:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.30 Mbit/s
95th percentile per-packet one-way delay: 6.396 ms
Loss rate: 11.95%
-- Flow 1:
Average throughput: 420.78 Mbit/s
95th percentile per-packet one-way delay: 7.466 ms
Loss rate: 11.01%
-- Flow 2:
Average throughput: 342.47 Mbit/s
95th percentile per-packet one-way delay: 4.638 ms
Loss rate: 11.50%
-- Flow 3:
Average throughput: 187.18 Mbit/s
95th percentile per-packet one-way delay: 4.217 ms
Loss rate: 19.24%
```
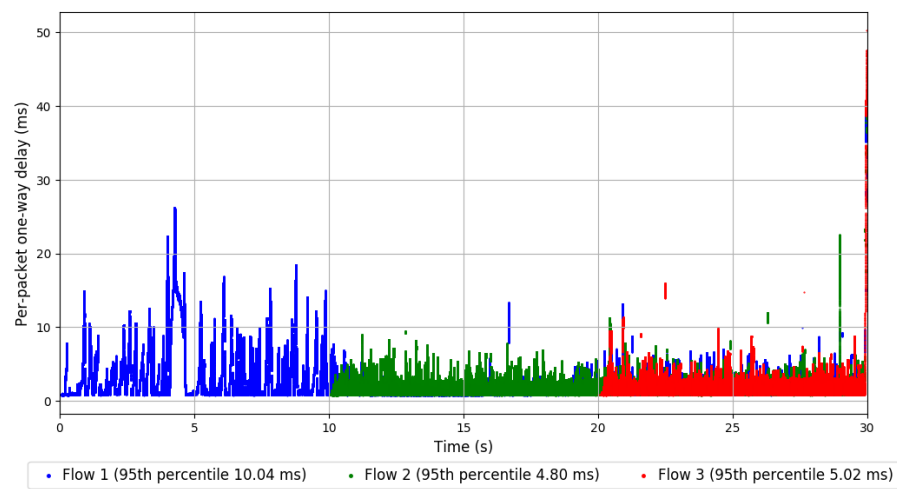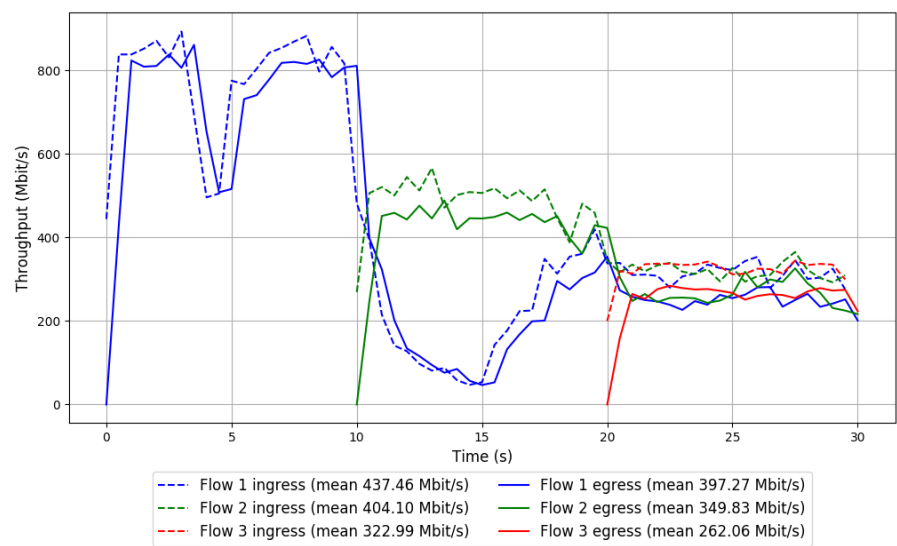
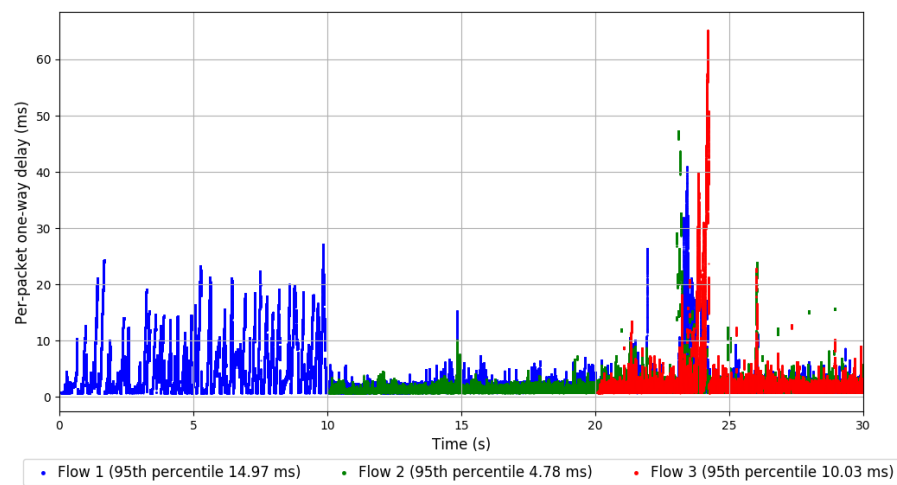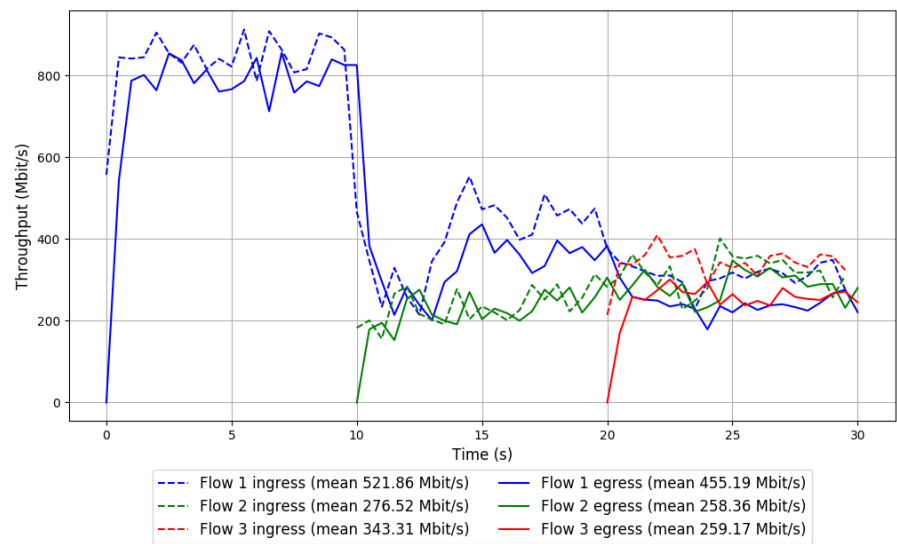Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-01-21 12:04:05
End at: 2019-01-21 12:04:35
Local clock offset: 3.171 ms
Remote clock offset: 1.641 ms


# Below is generated by plot.py at 2019-01-21 13:54:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.33 Mbit/s
95th percentile per-packet one-way delay: 16.280 ms
Loss rate: 13.76%
-- Flow 1:
Average throughput: 472.18 Mbit/s
95th percentile per-packet one-way delay: 17.474 ms
Loss rate: 13.35%
-- Flow 2:
Average throughput: 291.59 Mbit/s
95th percentile per-packet one-way delay: 4.576 ms
Loss rate: 15.93%
-- Flow 3:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 2.744 ms
Loss rate: 5.74%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 544.94 Mbit/s) --- Flow 1 egress (mean 472.18 Mbit/s)
Flow 2 ingress (mean 346.84 Mbit/s) --- Flow 2 egress (mean 291.59 Mbit/s)
Flow 3 ingress (mean 103.07 Mbit/s) --- Flow 3 egress (mean 97.15 Mbit/s)

Flow 1 (95th percentile 17.47 ms) • Flow 2 (95th percentile 4.58 ms) • Flow 3 (95th percentile 2.74 ms)

```
Run 4: Statistics of FillP

Start at: 2019-01-21 12:34:19
End at: 2019-01-21 12:34:49
Local clock offset: 3.091 ms
Remote clock offset: 0.27 ms


# Below is generated by plot.py at 2019-01-21 13:54:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.10 Mbit/s
95th percentile per-packet one-way delay: 8.257 ms
Loss rate: 11.79%
-- Flow 1:
Average throughput: 397.27 Mbit/s
95th percentile per-packet one-way delay: 10.041 ms
Loss rate: 9.09%
-- Flow 2:
Average throughput: 349.83 Mbit/s
95th percentile per-packet one-way delay: 4.802 ms
Loss rate: 13.41%
-- Flow 3:
Average throughput: 262.06 Mbit/s
95th percentile per-packet one-way delay: 5.021 ms
Loss rate: 18.73%
```
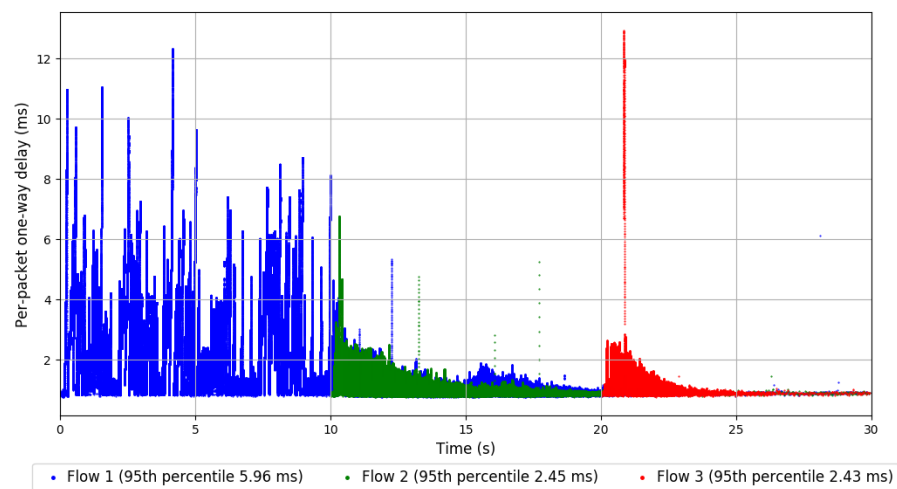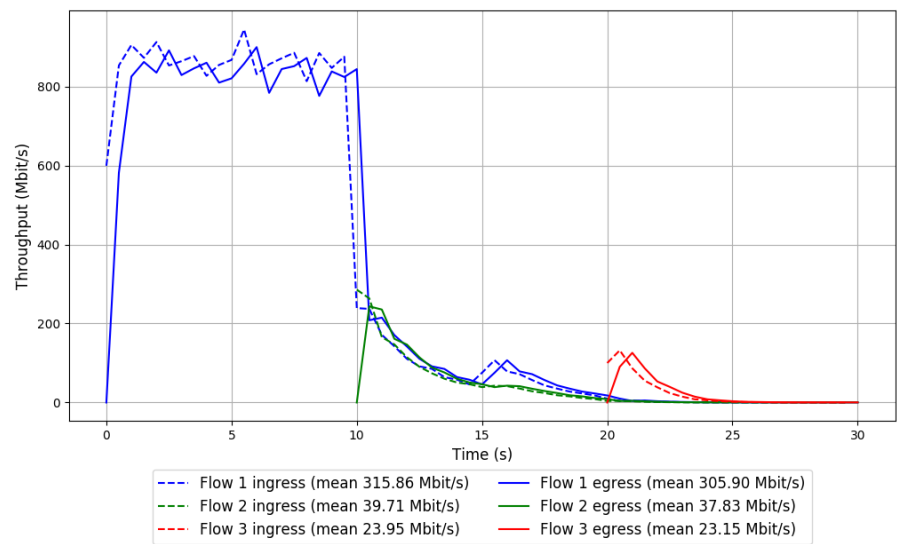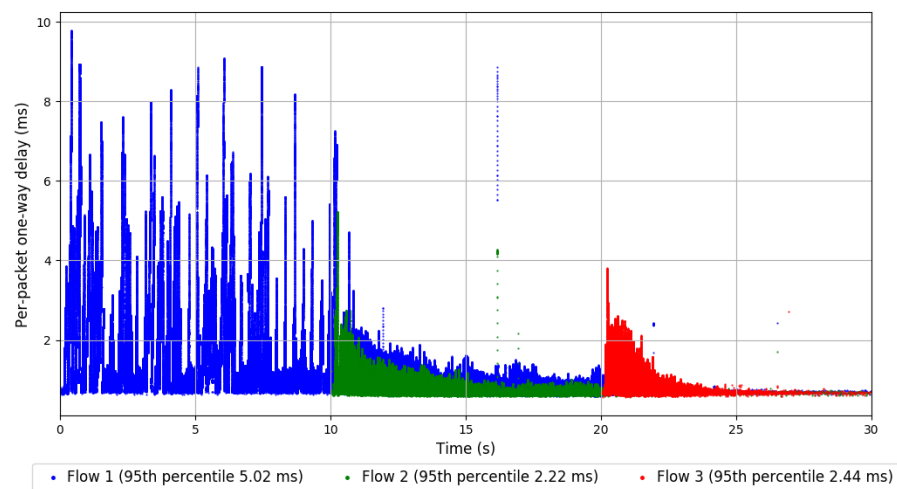
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 437.46 Mbit/s) --- Flow 1 egress (mean 397.27 Mbit/s)
Flow 2 ingress (mean 404.10 Mbit/s) --- Flow 2 egress (mean 349.83 Mbit/s)
Flow 3 ingress (mean 322.99 Mbit/s) --- Flow 3 egress (mean 262.06 Mbit/s)

• Flow 1 (95th percentile 10.04 ms)   • Flow 2 (95th percentile 4.80 ms)   • Flow 3 (95th percentile 5.02 ms)

42

```
Run 5: Statistics of FillP

Start at: 2019-01-21 13:04:30
End at: 2019-01-21 13:05:00
Local clock offset: -0.114 ms
Remote clock offset: -1.015 ms


# Below is generated by plot.py at 2019-01-21 13:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 712.96 Mbit/s
95th percentile per-packet one-way delay: 13.773 ms
Loss rate: 13.00%
-- Flow 1:
Average throughput: 455.19 Mbit/s
95th percentile per-packet one-way delay: 14.975 ms
Loss rate: 12.77%
-- Flow 2:
Average throughput: 258.36 Mbit/s
95th percentile per-packet one-way delay: 4.783 ms
Loss rate: 6.56%
-- Flow 3:
Average throughput: 259.17 Mbit/s
95th percentile per-packet one-way delay: 10.031 ms
Loss rate: 24.50%
```
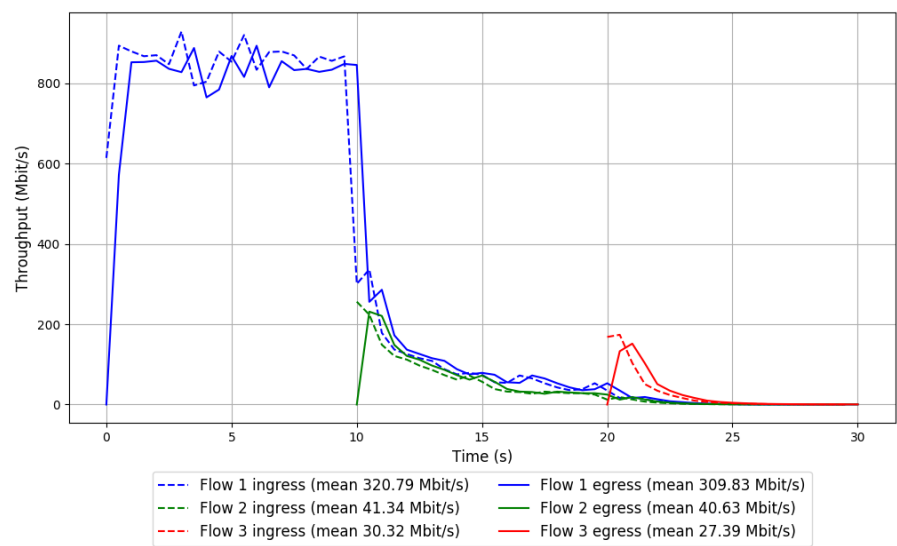
Run 5: Report of FillP — Data Link

44

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-21 11:13:37
End at: 2019-01-21 11:14:07
Local clock offset: 3.725 ms
Remote clock offset: 0.584 ms


# Below is generated by plot.py at 2019-01-21 13:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.52 Mbit/s
95th percentile per-packet one-way delay: 5.802 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 305.90 Mbit/s
95th percentile per-packet one-way delay: 5.956 ms
Loss rate: 3.15%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 2.447 ms
Loss rate: 4.75%
-- Flow 3:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 2.426 ms
Loss rate: 3.34%
```
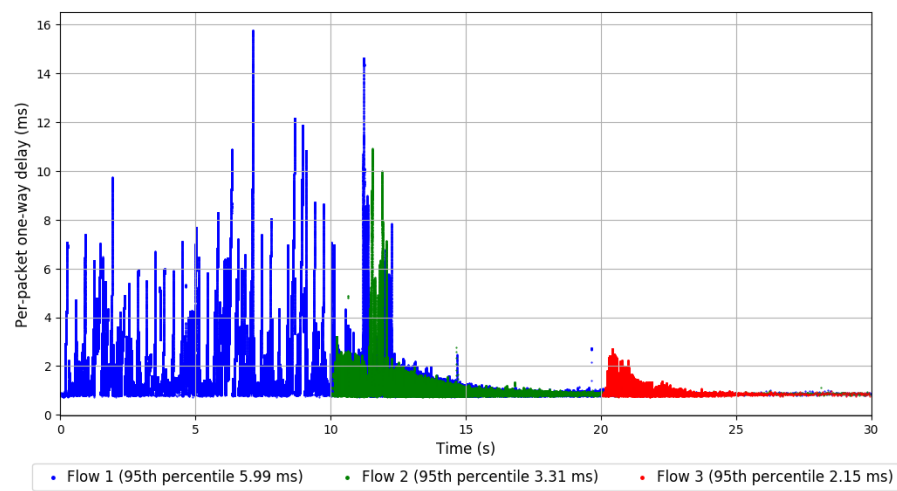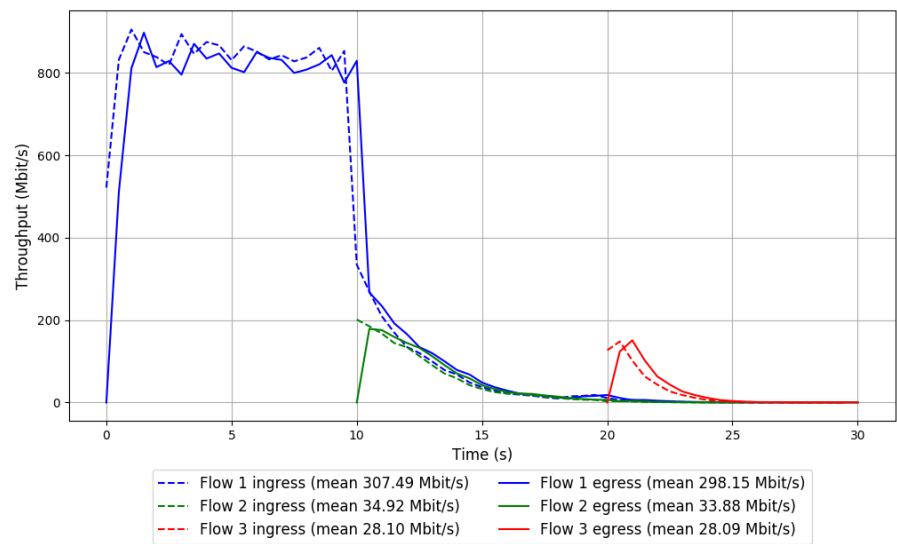
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-21 11:43:59
End at: 2019-01-21 11:44:29
Local clock offset: 3.618 ms
Remote clock offset: 4.767 ms

# Below is generated by plot.py at 2019-01-21 13:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.92 Mbit/s
95th percentile per-packet one-way delay: 4.872 ms
Loss rate: 3.46%
-- Flow 1:
Average throughput: 309.83 Mbit/s
95th percentile per-packet one-way delay: 5.019 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 2.220 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 2.440 ms
Loss rate: 9.66%
```
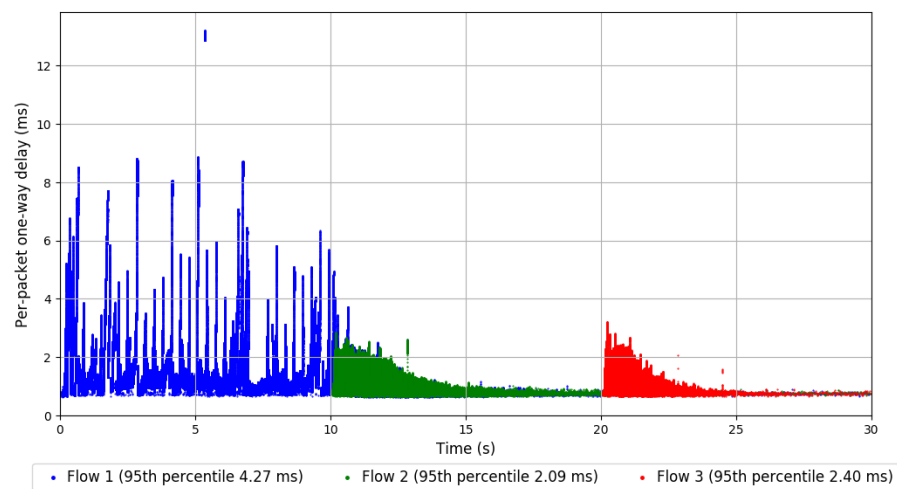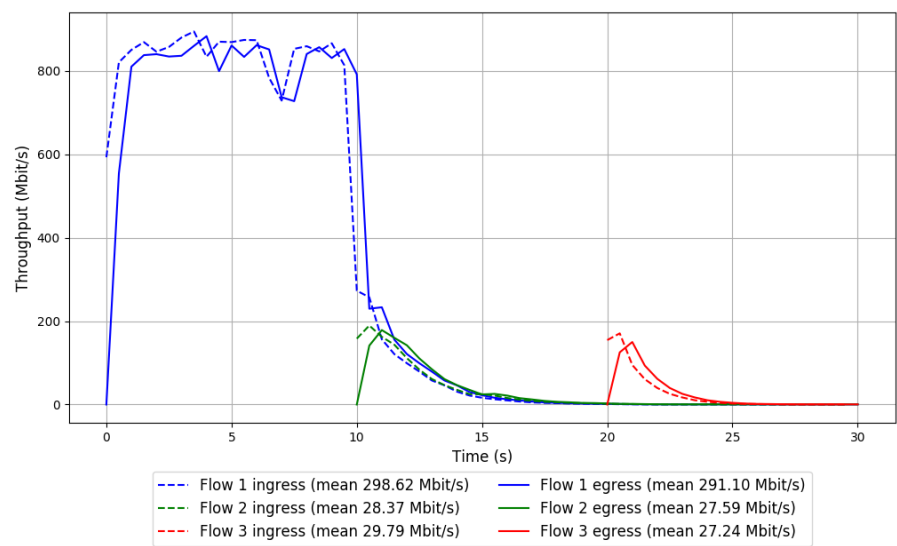
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-21 12:14:12
End at: 2019-01-21 12:14:42
Local clock offset: 3.178 ms
Remote clock offset: 0.708 ms


# Below is generated by plot.py at 2019-01-21 13:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.98 Mbit/s
95th percentile per-packet one-way delay: 5.857 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 298.15 Mbit/s
95th percentile per-packet one-way delay: 5.994 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 3.309 ms
Loss rate: 2.99%
-- Flow 3:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 2.149 ms
Loss rate: 0.07%
```
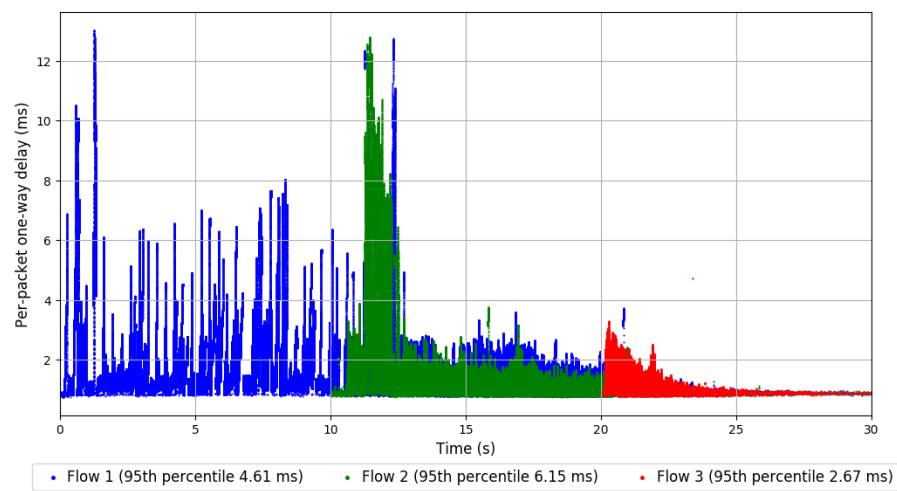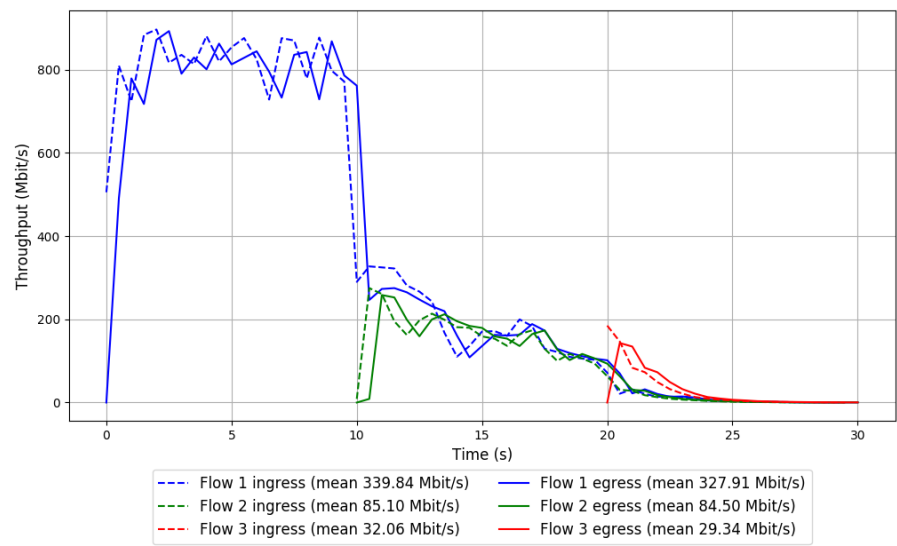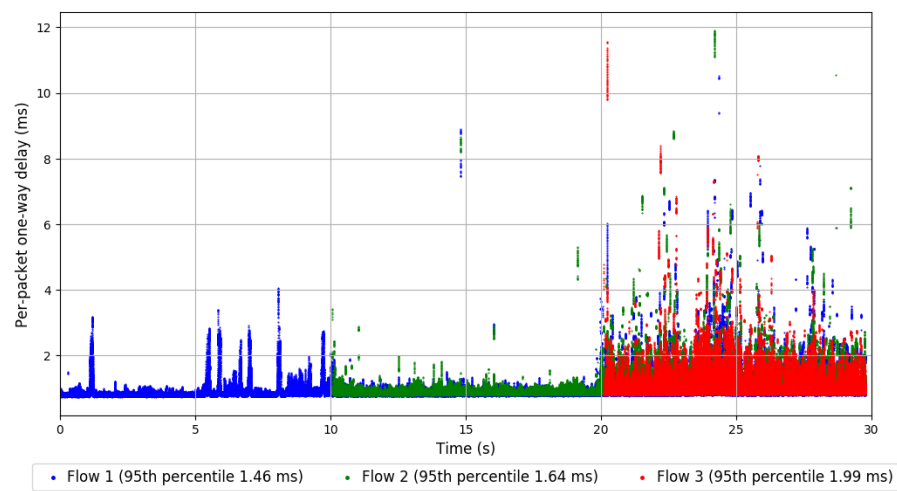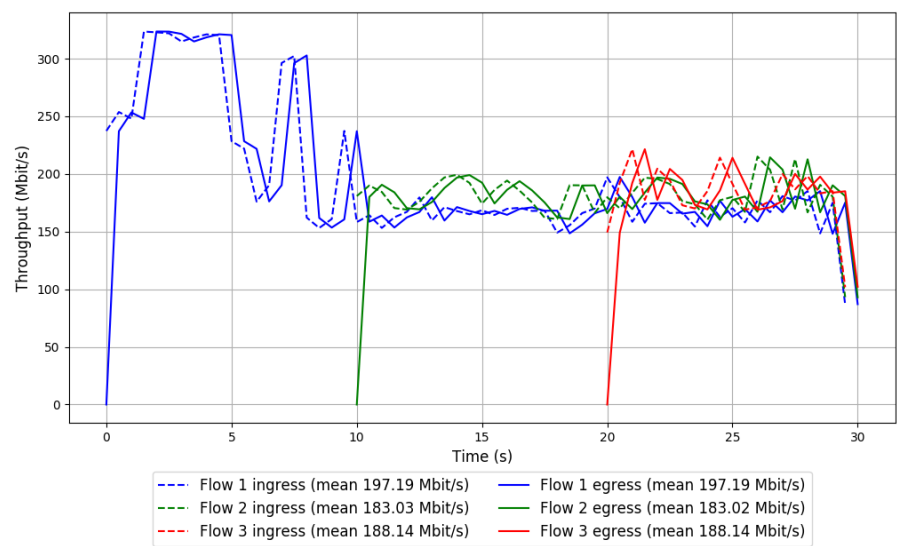
Run 3: Report of FillP-Sheep — Data Link

- - - Flow 1 ingress (mean 307.49 Mbit/s) —— Flow 1 egress (mean 298.15 Mbit/s)
- - - Flow 2 ingress (mean 34.92 Mbit/s) —— Flow 2 egress (mean 33.88 Mbit/s)
- - - Flow 3 ingress (mean 28.10 Mbit/s) —— Flow 3 egress (mean 28.09 Mbit/s)

• Flow 1 (95th percentile 5.99 ms) • Flow 2 (95th percentile 3.31 ms) • Flow 3 (95th percentile 2.15 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-21 12:44:29
End at: 2019-01-21 12:44:59
Local clock offset: 3.102 ms
Remote clock offset: 0.067 ms


# Below is generated by plot.py at 2019-01-21 13:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 318.36 Mbit/s
95th percentile per-packet one-way delay: 4.004 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 291.10 Mbit/s
95th percentile per-packet one-way delay: 4.273 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 27.59 Mbit/s
95th percentile per-packet one-way delay: 2.094 ms
Loss rate: 2.74%
-- Flow 3:
Average throughput: 27.24 Mbit/s
95th percentile per-packet one-way delay: 2.401 ms
Loss rate: 8.55%
```

Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 298.62 Mbit/s)   Flow 1 egress (mean 291.10 Mbit/s)
Flow 2 ingress (mean 28.37 Mbit/s)   Flow 2 egress (mean 27.59 Mbit/s)
Flow 3 ingress (mean 29.79 Mbit/s)   Flow 3 egress (mean 27.24 Mbit/s)

Flow 1 (95th percentile 4.27 ms)   Flow 2 (95th percentile 2.09 ms)   Flow 3 (95th percentile 2.40 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-21 13:14:42
End at: 2019-01-21 13:15:12
Local clock offset: -0.84 ms
Remote clock offset: -2.7 ms


# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.83 Mbit/s
95th percentile per-packet one-way delay: 4.746 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 327.91 Mbit/s
95th percentile per-packet one-way delay: 4.611 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 84.50 Mbit/s
95th percentile per-packet one-way delay: 6.153 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 29.34 Mbit/s
95th percentile per-packet one-way delay: 2.666 ms
Loss rate: 8.46%
```
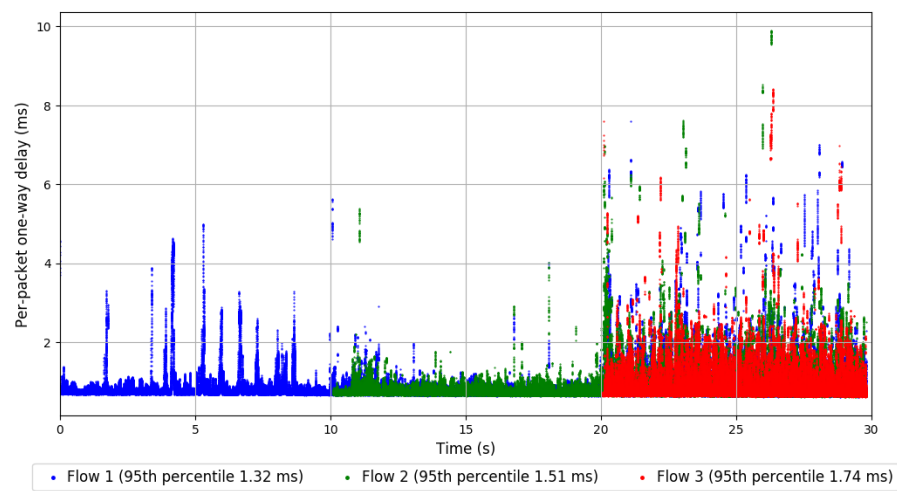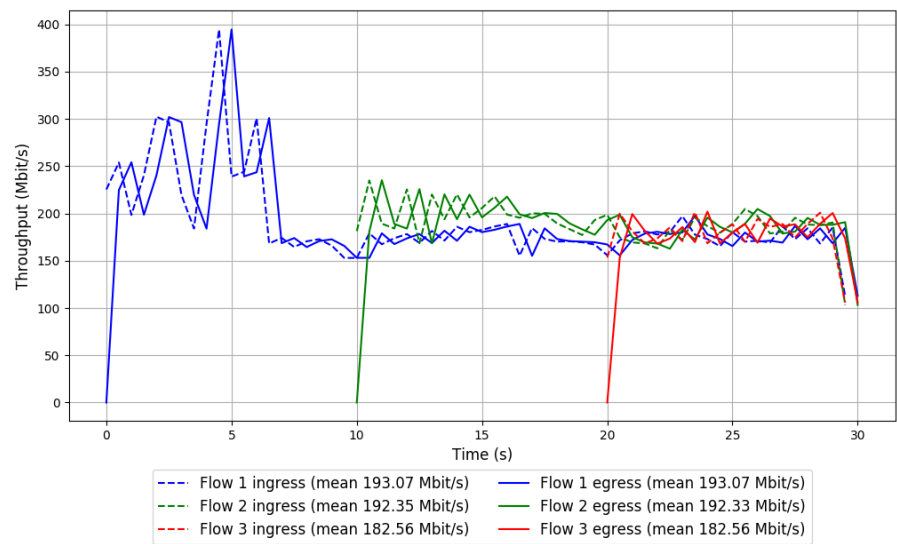
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-01-21 11:02:00
End at: 2019-01-21 11:02:30
Local clock offset: 2.724 ms
Remote clock offset: 0.205 ms


# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.50 Mbit/s
95th percentile per-packet one-way delay: 1.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.19 Mbit/s
95th percentile per-packet one-way delay: 1.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 183.02 Mbit/s
95th percentile per-packet one-way delay: 1.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.14 Mbit/s
95th percentile per-packet one-way delay: 1.985 ms
Loss rate: 0.00%
```
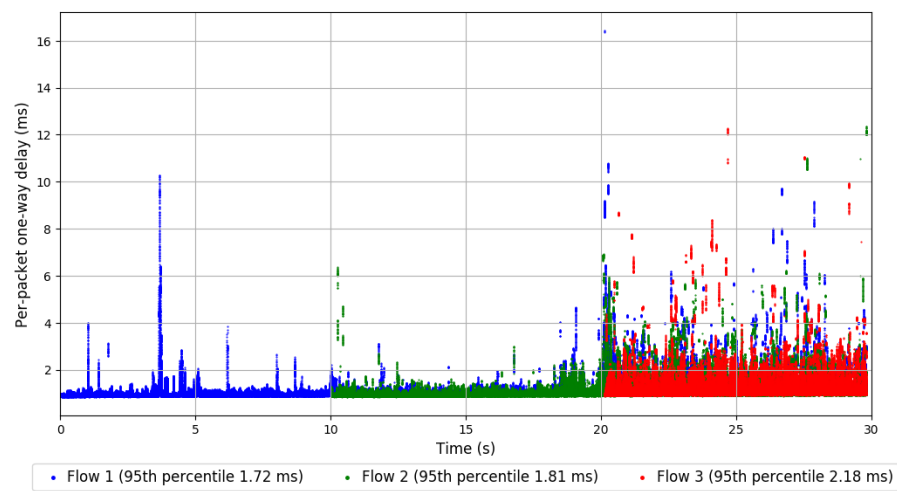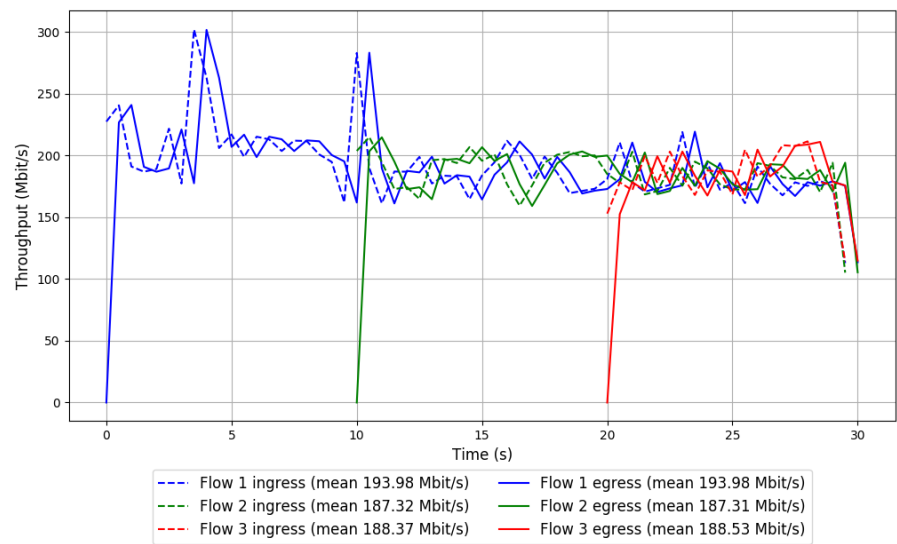
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-21 11:32:12
End at: 2019-01-21 11:32:42
Local clock offset: 3.535 ms
Remote clock offset: 3.498 ms


# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.80 Mbit/s
95th percentile per-packet one-way delay: 1.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.07 Mbit/s
95th percentile per-packet one-way delay: 1.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.33 Mbit/s
95th percentile per-packet one-way delay: 1.510 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 182.56 Mbit/s
95th percentile per-packet one-way delay: 1.740 ms
Loss rate: 0.00%
```
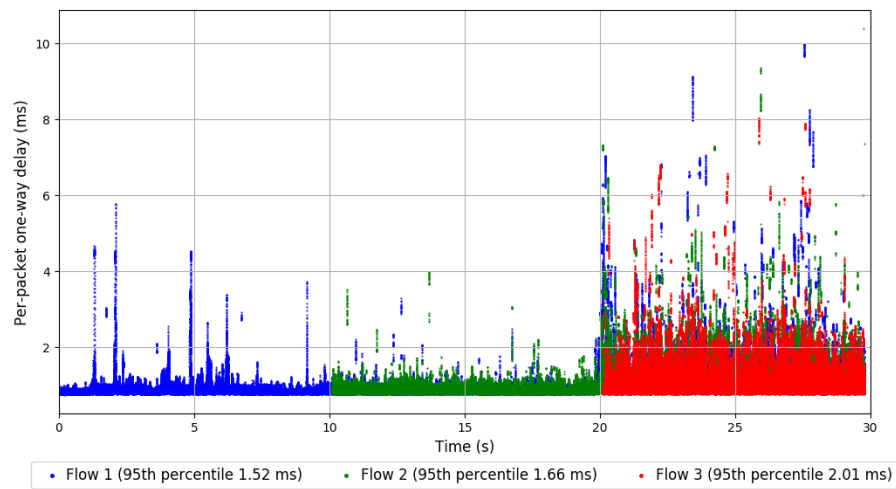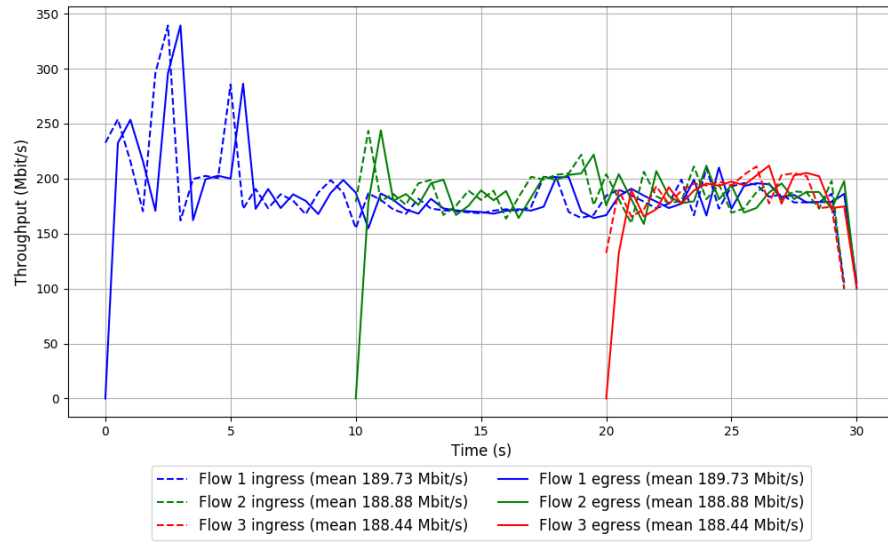
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-21 12:02:35
End at: 2019-01-21 12:03:05
Local clock offset: 3.195 ms
Remote clock offset: 2.09 ms


# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.50 Mbit/s
95th percentile per-packet one-way delay: 1.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.98 Mbit/s
95th percentile per-packet one-way delay: 1.724 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.31 Mbit/s
95th percentile per-packet one-way delay: 1.808 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.53 Mbit/s
95th percentile per-packet one-way delay: 2.182 ms
Loss rate: 0.00%
```
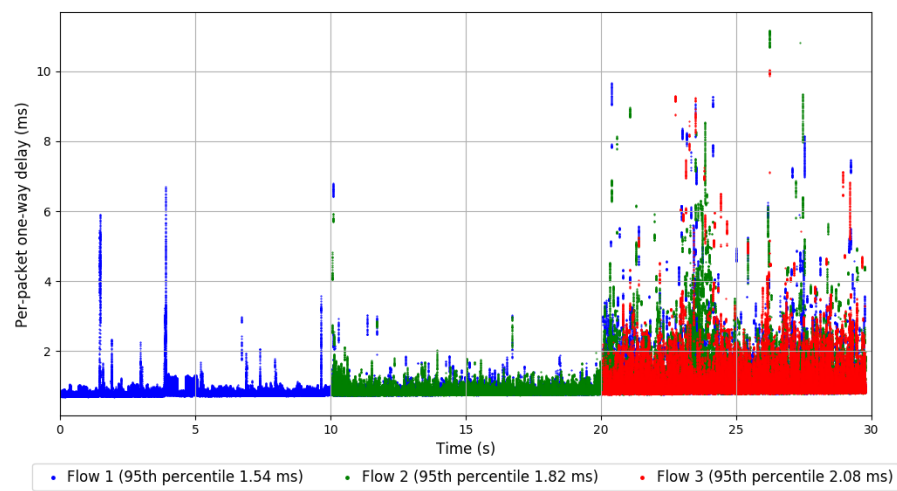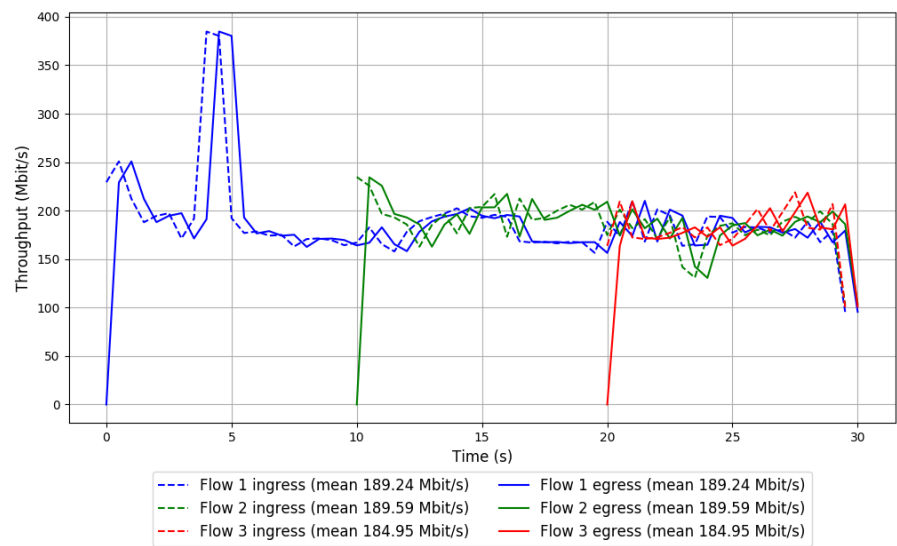
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 193.98 Mbit/s) --- Flow 1 egress (mean 193.98 Mbit/s)
Flow 2 ingress (mean 187.32 Mbit/s) --- Flow 2 egress (mean 187.31 Mbit/s)
Flow 3 ingress (mean 188.37 Mbit/s) --- Flow 3 egress (mean 188.53 Mbit/s)

• Flow 1 (95th percentile 1.72 ms) • Flow 2 (95th percentile 1.81 ms) • Flow 3 (95th percentile 2.18 ms)

```
Run 4: Statistics of Indigo

Start at: 2019-01-21 12:32:49
End at: 2019-01-21 12:33:19
Local clock offset: 3.094 ms
Remote clock offset: 0.249 ms


# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.93 Mbit/s
95th percentile per-packet one-way delay: 1.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.73 Mbit/s
95th percentile per-packet one-way delay: 1.519 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 188.88 Mbit/s
95th percentile per-packet one-way delay: 1.664 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.44 Mbit/s
95th percentile per-packet one-way delay: 2.012 ms
Loss rate: 0.00%
```
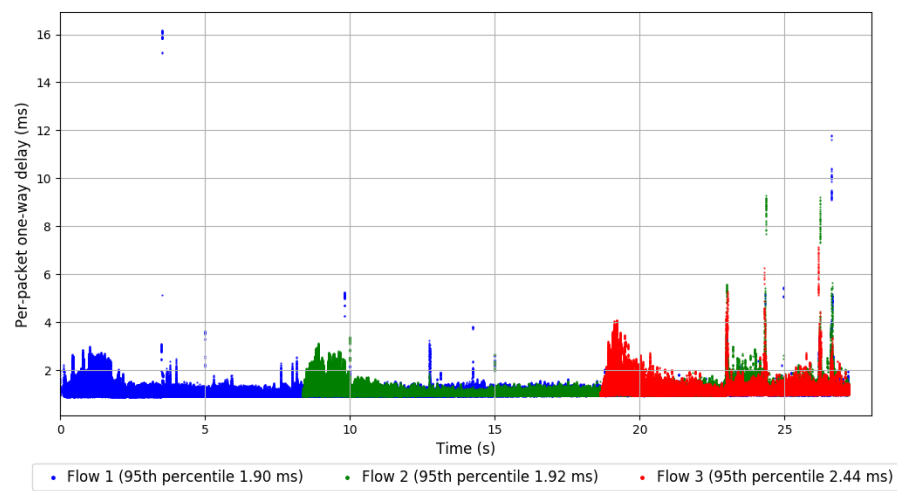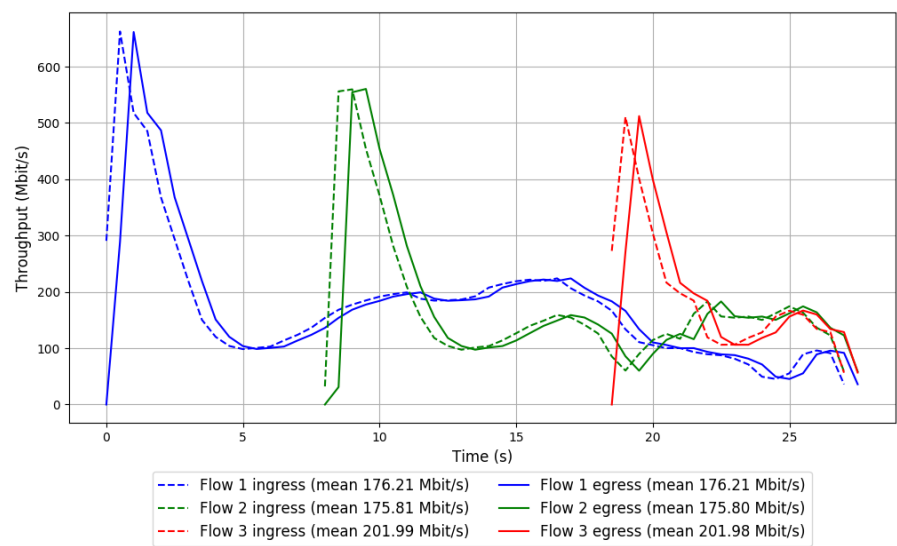
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-01-21 13:03:00
End at: 2019-01-21 13:03:30
Local clock offset: 0.031 ms
Remote clock offset: -0.56 ms

# Below is generated by plot.py at 2019-01-21 13:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.34 Mbit/s
95th percentile per-packet one-way delay: 1.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.24 Mbit/s
95th percentile per-packet one-way delay: 1.537 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.59 Mbit/s
95th percentile per-packet one-way delay: 1.816 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 184.95 Mbit/s
95th percentile per-packet one-way delay: 2.078 ms
Loss rate: 0.00%
```
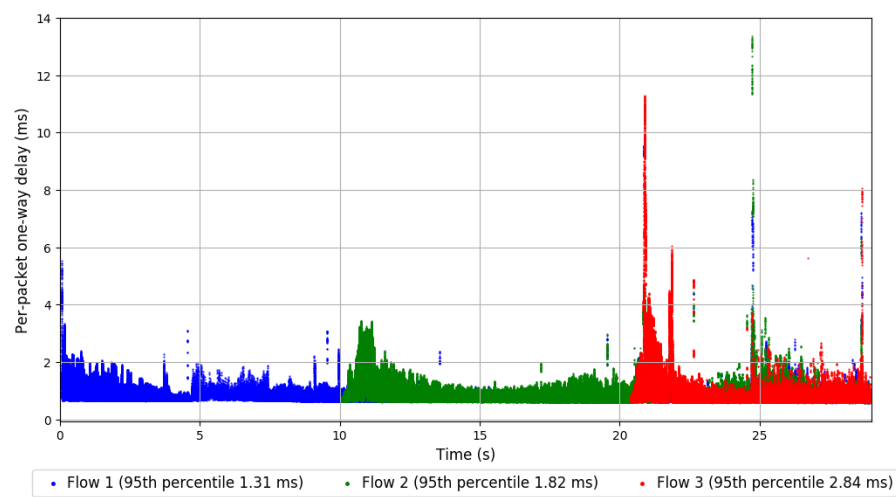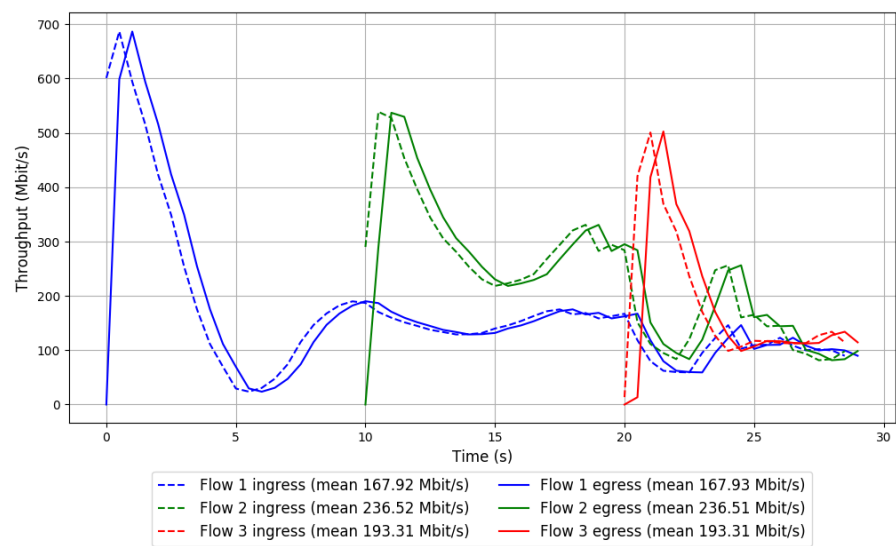
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-21 10:58:07
End at: 2019-01-21 10:58:37
Local clock offset: 2.146 ms
Remote clock offset: 0.283 ms


# Below is generated by plot.py at 2019-01-21 14:01:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.68 Mbit/s
95th percentile per-packet one-way delay: 1.999 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.21 Mbit/s
95th percentile per-packet one-way delay: 1.897 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.80 Mbit/s
95th percentile per-packet one-way delay: 1.917 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 201.98 Mbit/s
95th percentile per-packet one-way delay: 2.444 ms
Loss rate: 0.00%
```
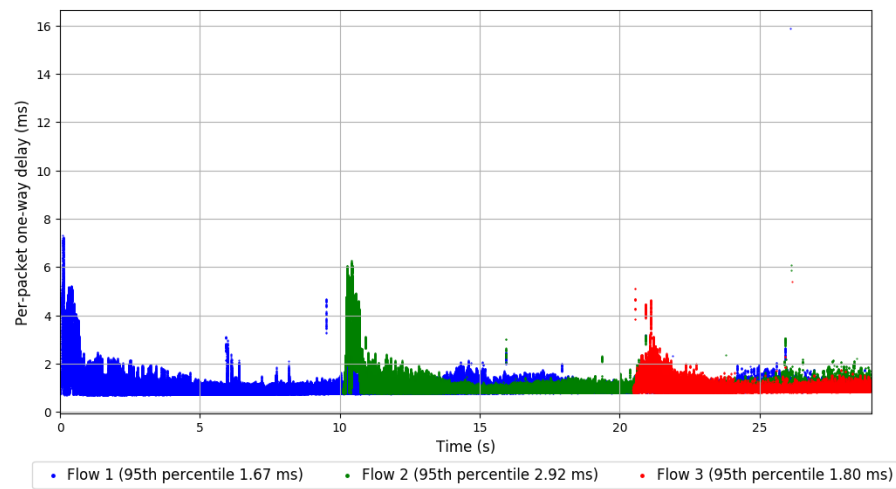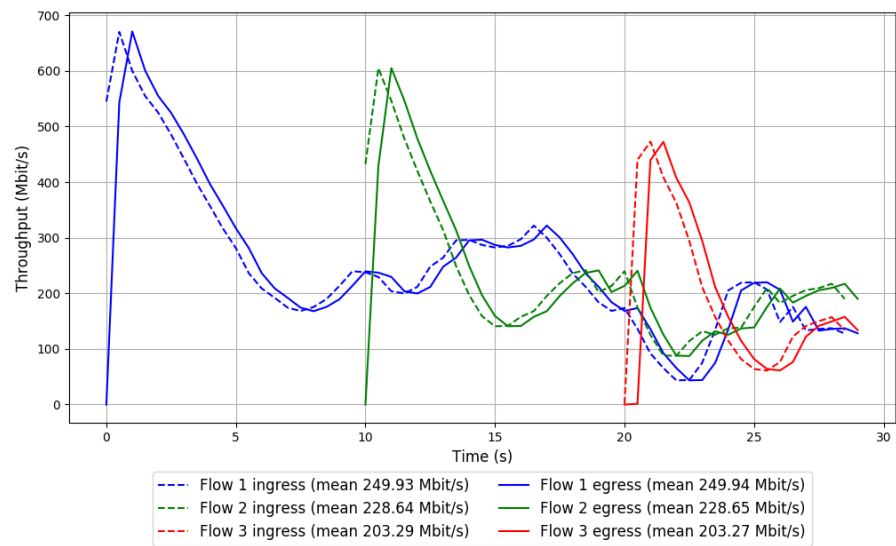
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-21 11:28:18
End at: 2019-01-21 11:28:48
Local clock offset: 3.575 ms
Remote clock offset: 2.933 ms


# Below is generated by plot.py at 2019-01-21 14:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.26 Mbit/s
95th percentile per-packet one-way delay: 1.709 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.93 Mbit/s
95th percentile per-packet one-way delay: 1.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 236.51 Mbit/s
95th percentile per-packet one-way delay: 1.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 193.31 Mbit/s
95th percentile per-packet one-way delay: 2.842 ms
Loss rate: 0.00%
```
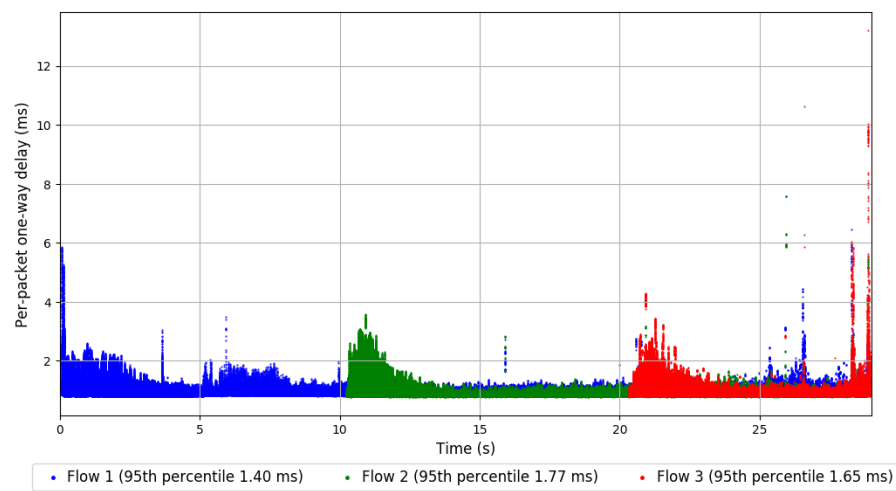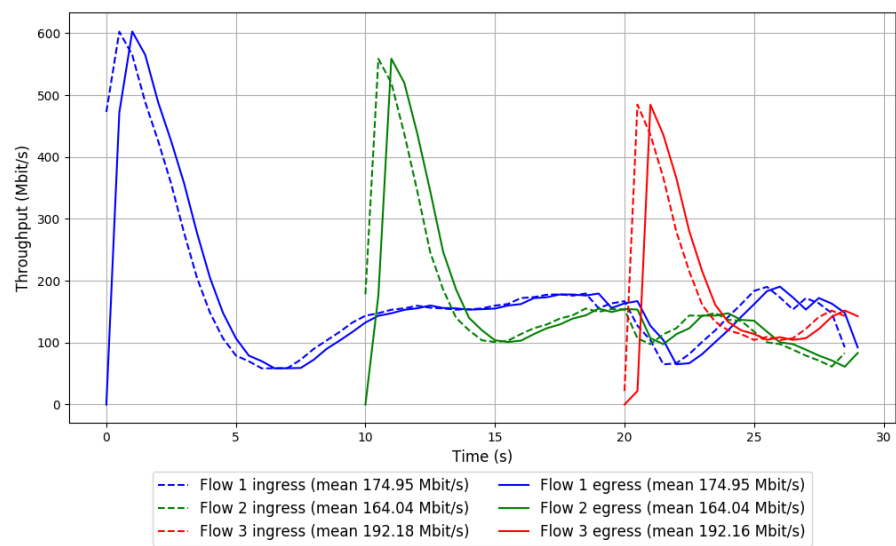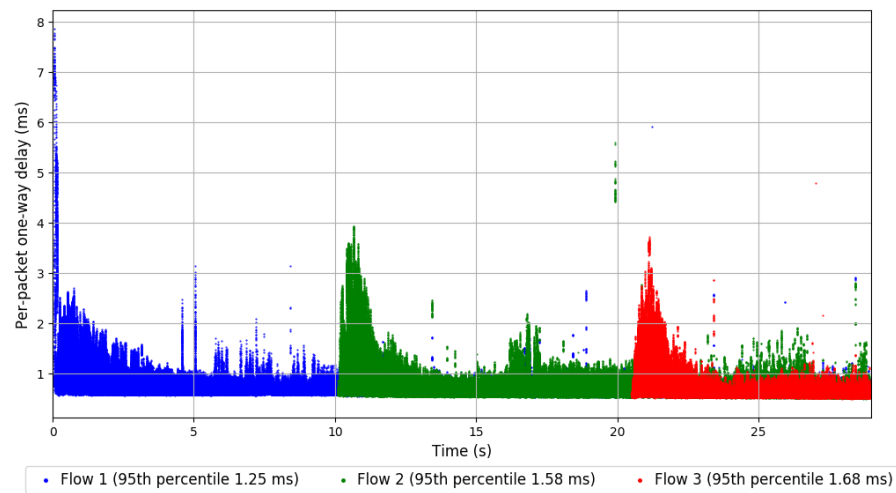
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-21 11:58:38
End at: 2019-01-21 11:59:08
Local clock offset: 3.252 ms
Remote clock offset: 2.999 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.52 Mbit/s
95th percentile per-packet one-way delay: 1.932 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 249.94 Mbit/s
95th percentile per-packet one-way delay: 1.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.65 Mbit/s
95th percentile per-packet one-way delay: 2.920 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 203.27 Mbit/s
95th percentile per-packet one-way delay: 1.797 ms
Loss rate: 0.00%
```
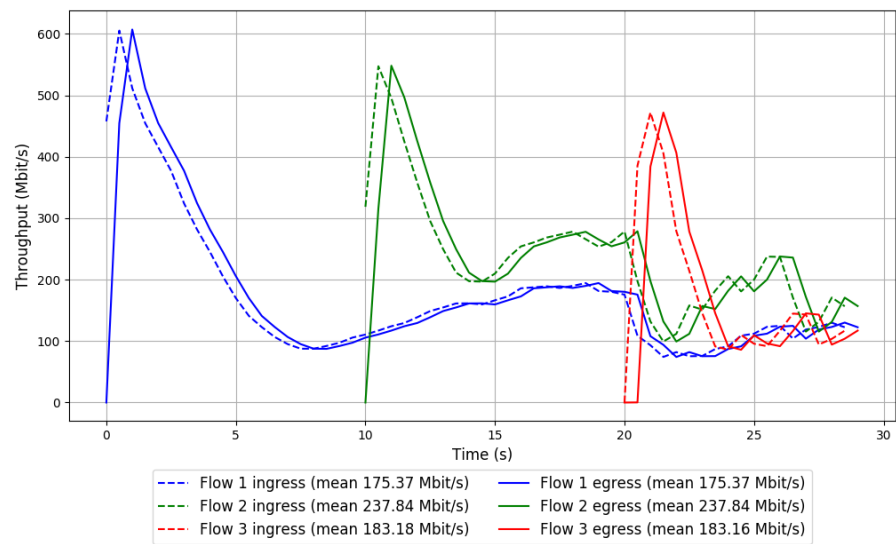
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-21 12:28:56
End at: 2019-01-21 12:29:26
Local clock offset: 3.088 ms
Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.35 Mbit/s
95th percentile per-packet one-way delay: 1.570 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 174.95 Mbit/s
95th percentile per-packet one-way delay: 1.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.04 Mbit/s
95th percentile per-packet one-way delay: 1.775 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.16 Mbit/s
95th percentile per-packet one-way delay: 1.645 ms
Loss rate: 0.01%
```

Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-21 12:59:06
End at: 2019-01-21 12:59:36
Local clock offset: 0.521 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 383.79 Mbit/s
95th percentile per-packet one-way delay: 1.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.37 Mbit/s
95th percentile per-packet one-way delay: 1.245 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 237.84 Mbit/s
95th percentile per-packet one-way delay: 1.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 183.16 Mbit/s
95th percentile per-packet one-way delay: 1.679 ms
Loss rate: 0.01%
```
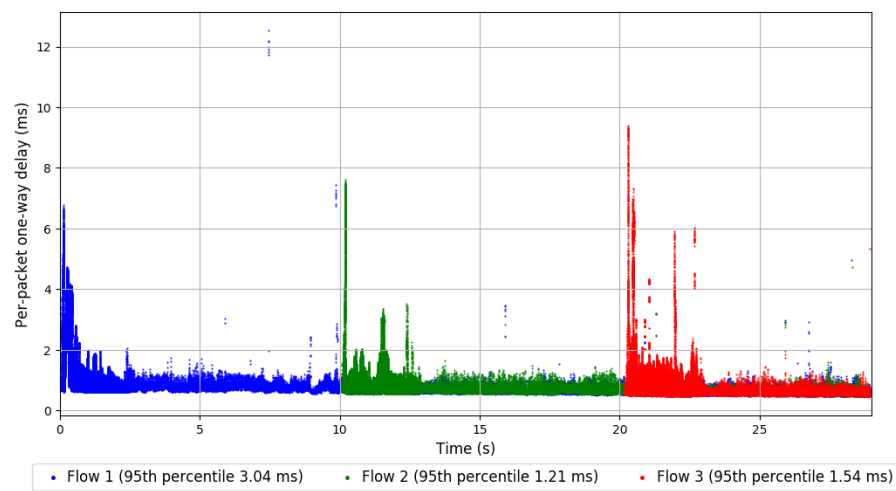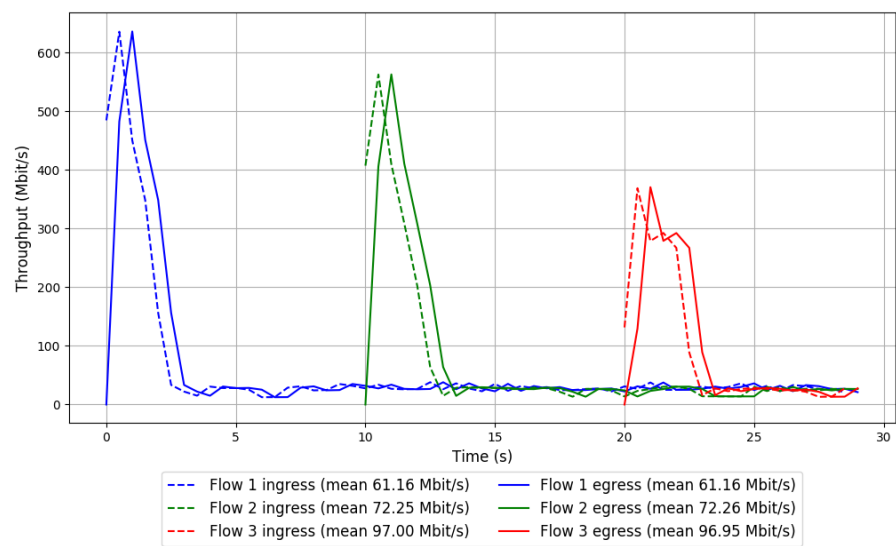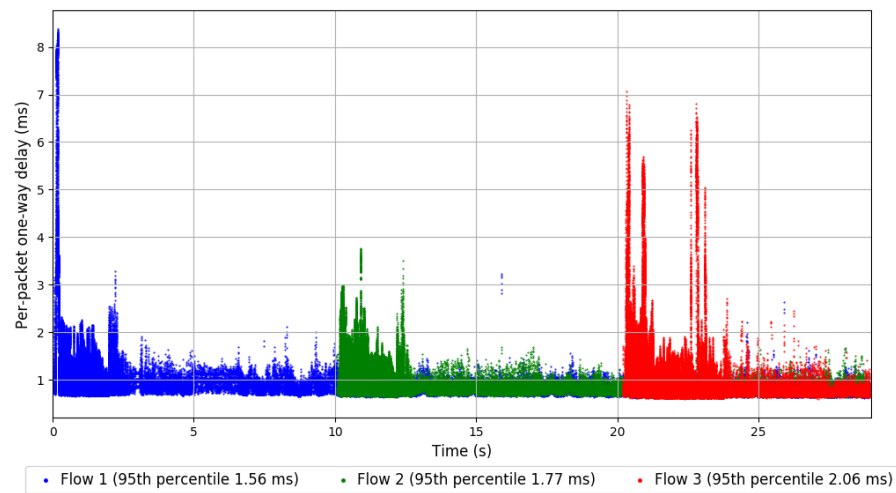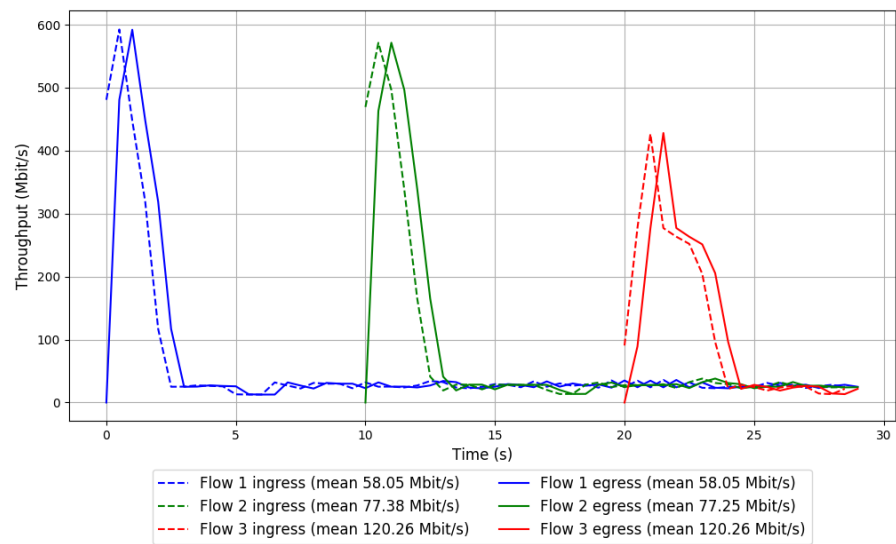
Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-21 11:19:32
End at: 2019-01-21 11:20:02
Local clock offset: 3.951 ms
Remote clock offset: 0.87 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.62 Mbit/s
95th percentile per-packet one-way delay: 1.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.16 Mbit/s
95th percentile per-packet one-way delay: 3.037 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.26 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.95 Mbit/s
95th percentile per-packet one-way delay: 1.542 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-21 11:49:51
End at: 2019-01-21 11:50:21
Local clock offset: 3.616 ms
Remote clock offset: 5.341 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.79 Mbit/s
95th percentile per-packet one-way delay: 1.773 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 1.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 77.25 Mbit/s
95th percentile per-packet one-way delay: 1.771 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 120.26 Mbit/s
95th percentile per-packet one-way delay: 2.059 ms
Loss rate: 0.00%
```
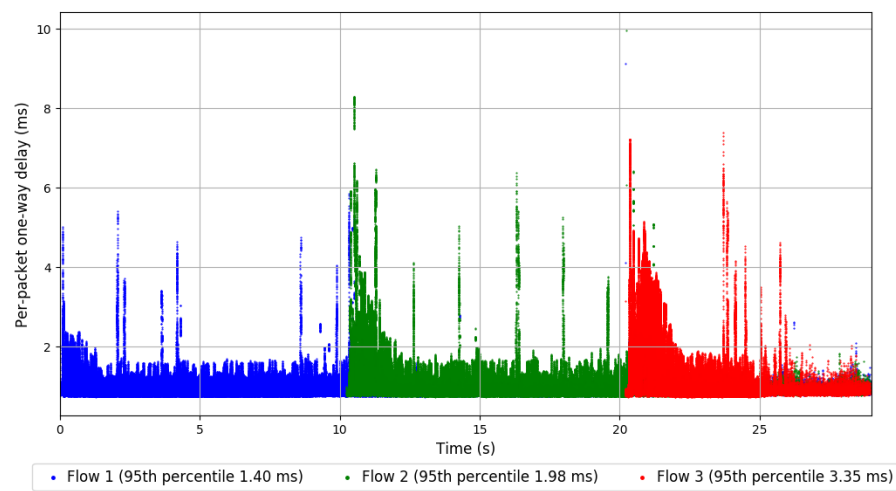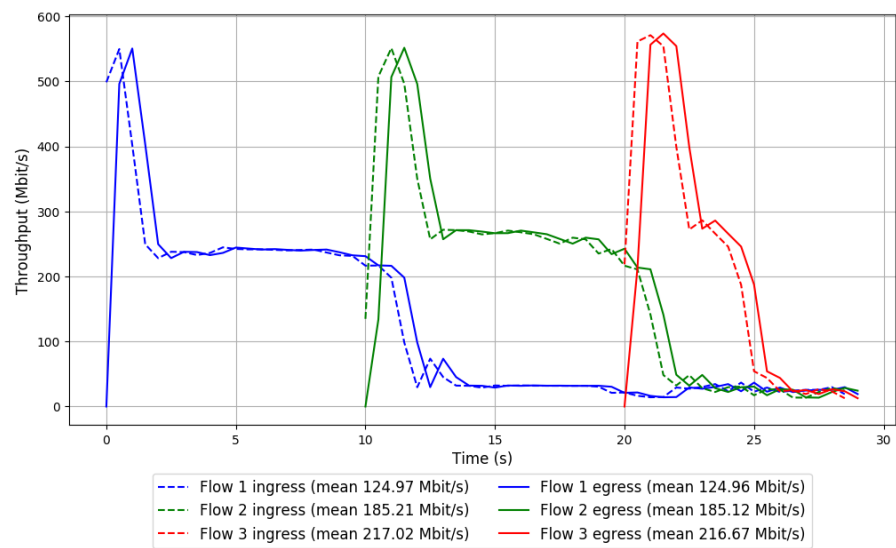
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-21 12:20:04
End at: 2019-01-21 12:20:34
Local clock offset: 3.171 ms
Remote clock offset: 0.461 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.92 Mbit/s
95th percentile per-packet one-way delay: 2.244 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 124.96 Mbit/s
95th percentile per-packet one-way delay: 1.400 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 185.12 Mbit/s
95th percentile per-packet one-way delay: 1.976 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 216.67 Mbit/s
95th percentile per-packet one-way delay: 3.352 ms
Loss rate: 0.19%
```
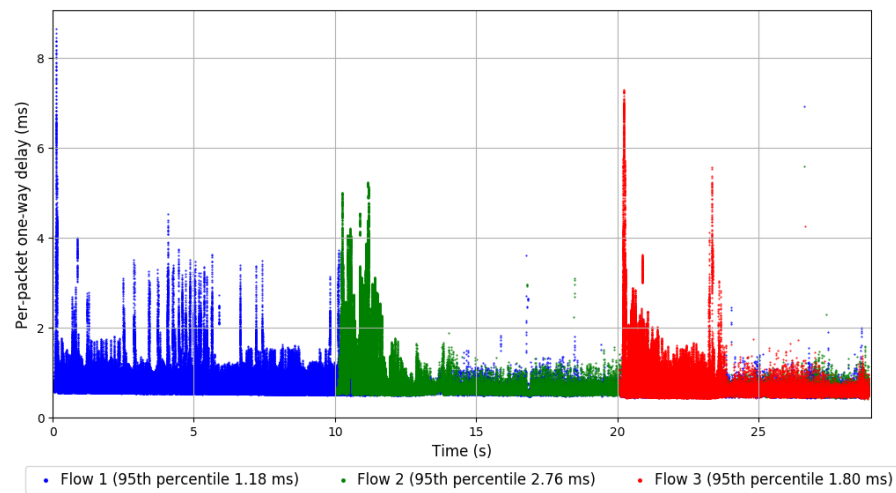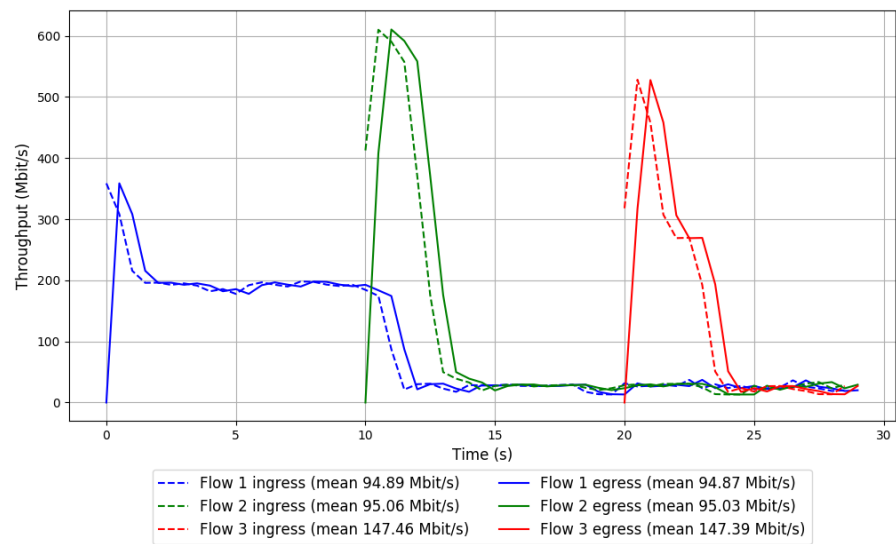
Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-21 12:50:16
End at: 2019-01-21 12:50:46
Local clock offset: 2.575 ms
Remote clock offset: 0.092 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.80 Mbit/s
95th percentile per-packet one-way delay: 1.987 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 1.179 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 2.761 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 147.39 Mbit/s
95th percentile per-packet one-way delay: 1.796 ms
Loss rate: 0.05%
```

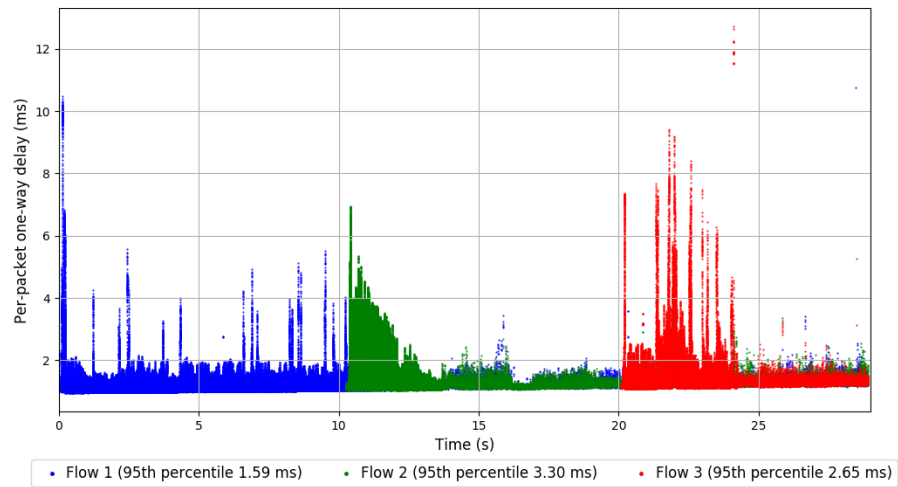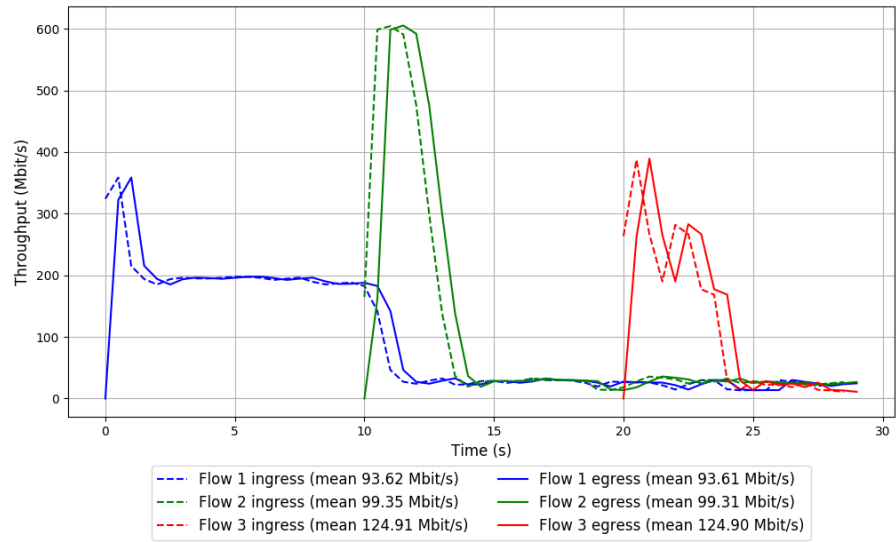Run 4: Report of Indigo-MusesC5 — Data Link

82

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-21 13:20:36
End at: 2019-01-21 13:21:06
Local clock offset: -0.32 ms
Remote clock offset: -3.349 ms


# Below is generated by plot.py at 2019-01-21 14:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.78 Mbit/s
95th percentile per-packet one-way delay: 2.758 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 1.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.31 Mbit/s
95th percentile per-packet one-way delay: 3.304 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 124.90 Mbit/s
95th percentile per-packet one-way delay: 2.653 ms
Loss rate: 0.00%
```
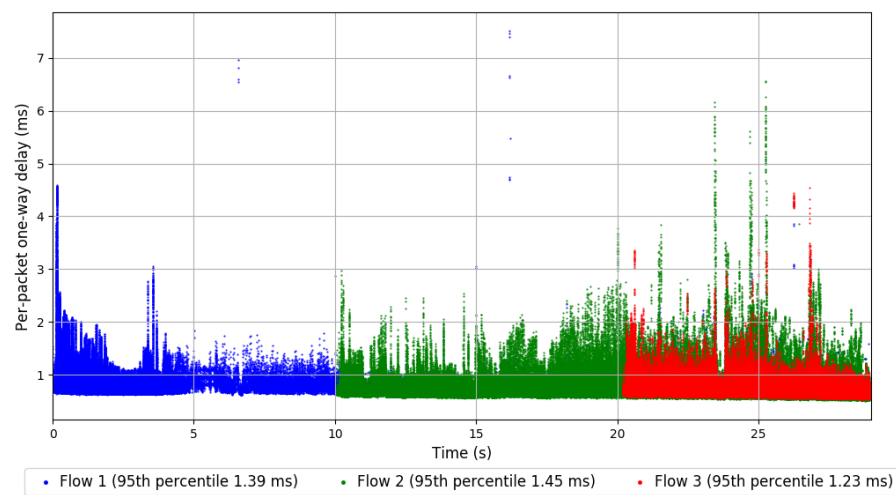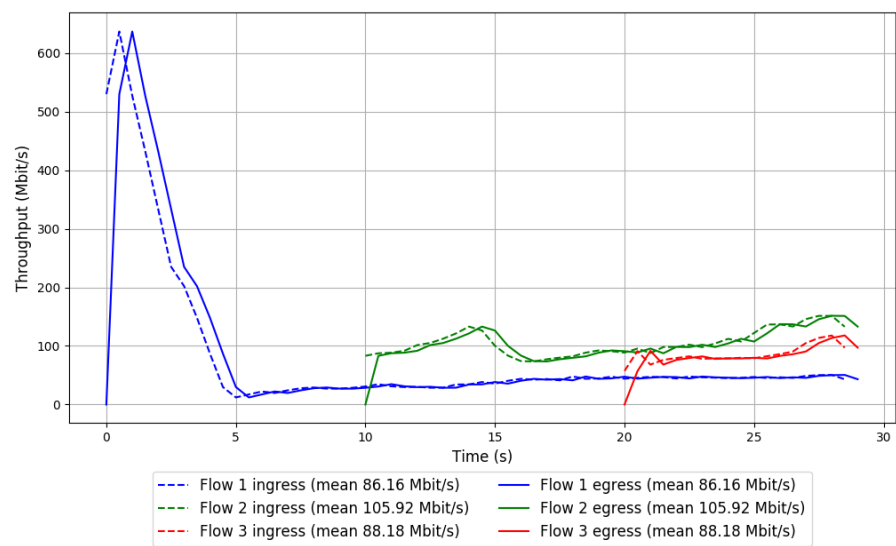
Run 5: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 93.62 Mbit/s) —— Flow 1 egress (mean 93.61 Mbit/s)
- - - Flow 2 ingress (mean 99.35 Mbit/s) —— Flow 2 egress (mean 99.31 Mbit/s)
- - - Flow 3 ingress (mean 124.91 Mbit/s) —— Flow 3 egress (mean 124.90 Mbit/s)

• Flow 1 (95th percentile 1.59 ms)　　• Flow 2 (95th percentile 3.30 ms)　　• Flow 3 (95th percentile 2.65 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-21 11:25:24
End at: 2019-01-21 11:25:54
Local clock offset: 3.631 ms
Remote clock offset: 2.356 ms


# Below is generated by plot.py at 2019-01-21 14:03:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.86 Mbit/s
95th percentile per-packet one-way delay: 1.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 1.388 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 105.92 Mbit/s
95th percentile per-packet one-way delay: 1.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.18 Mbit/s
95th percentile per-packet one-way delay: 1.227 ms
Loss rate: 0.00%
```
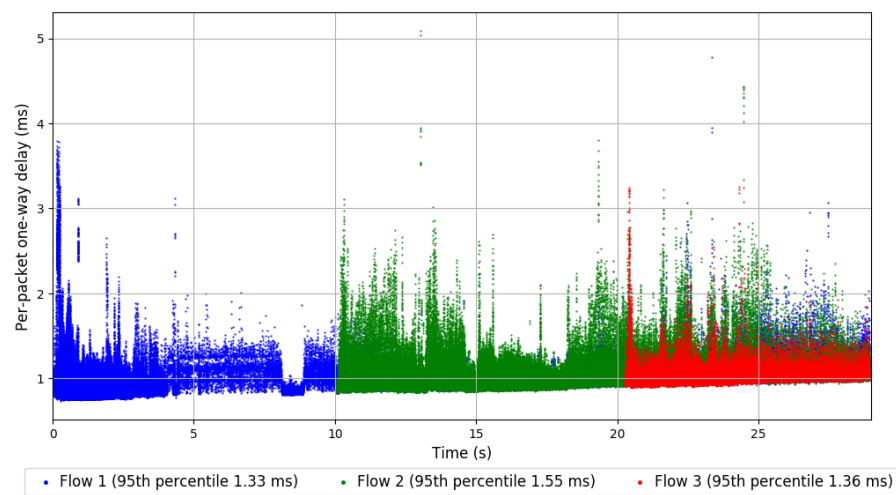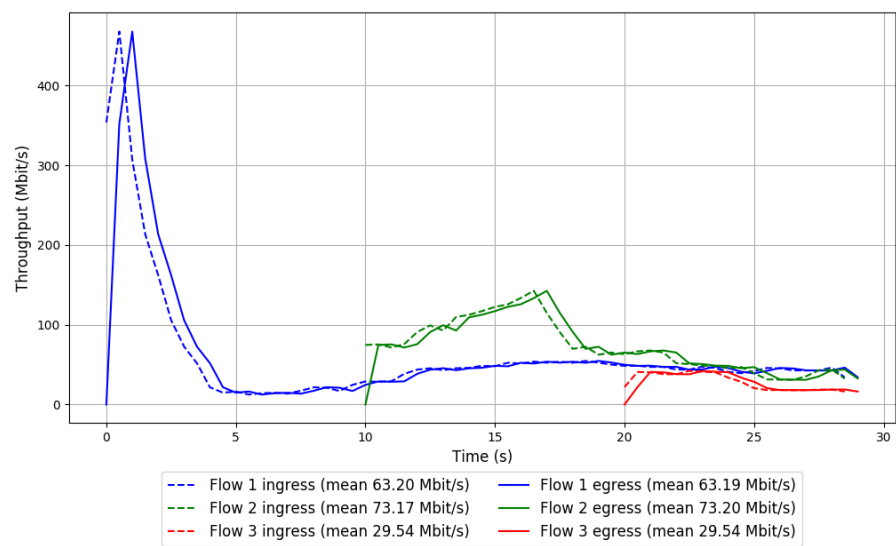
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-21 11:55:44
End at: 2019-01-21 11:56:14
Local clock offset: 3.336 ms
Remote clock offset: 4.164 ms


# Below is generated by plot.py at 2019-01-21 14:03:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.79 Mbit/s
95th percentile per-packet one-way delay: 1.424 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 63.19 Mbit/s
95th percentile per-packet one-way delay: 1.333 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 73.20 Mbit/s
95th percentile per-packet one-way delay: 1.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 1.363 ms
Loss rate: 0.00%
```
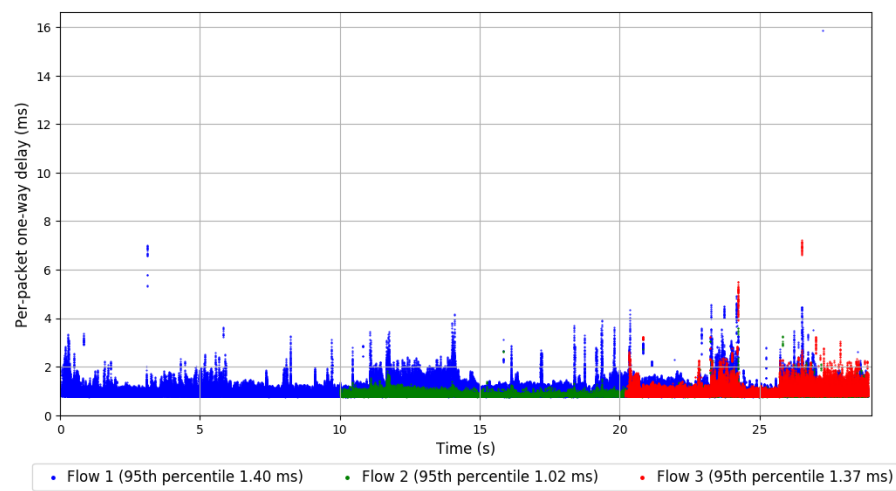
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-21 12:26:00
End at: 2019-01-21 12:26:30
Local clock offset: 3.088 ms
Remote clock offset: 0.363 ms


# Below is generated by plot.py at 2019-01-21 14:04:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.08 Mbit/s
95th percentile per-packet one-way delay: 1.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.64 Mbit/s
95th percentile per-packet one-way delay: 1.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.26 Mbit/s
95th percentile per-packet one-way delay: 1.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.22 Mbit/s
95th percentile per-packet one-way delay: 1.367 ms
Loss rate: 0.00%
```
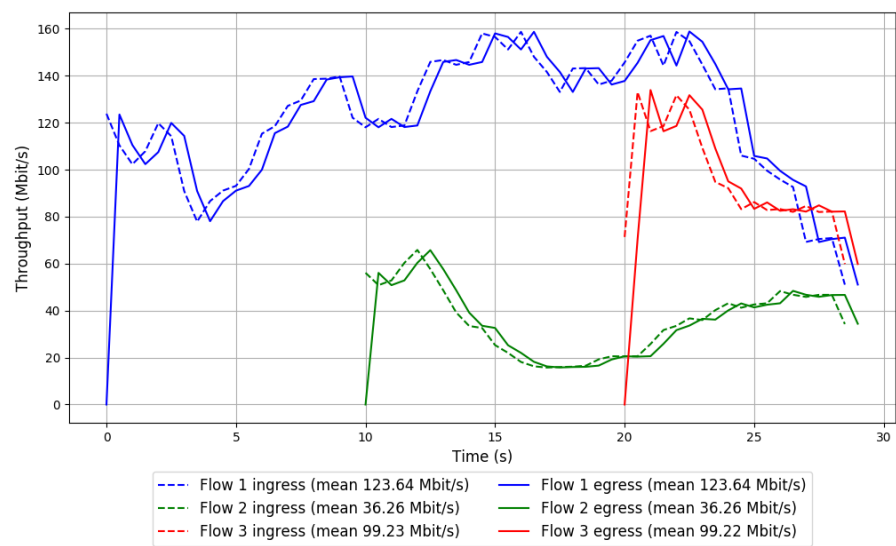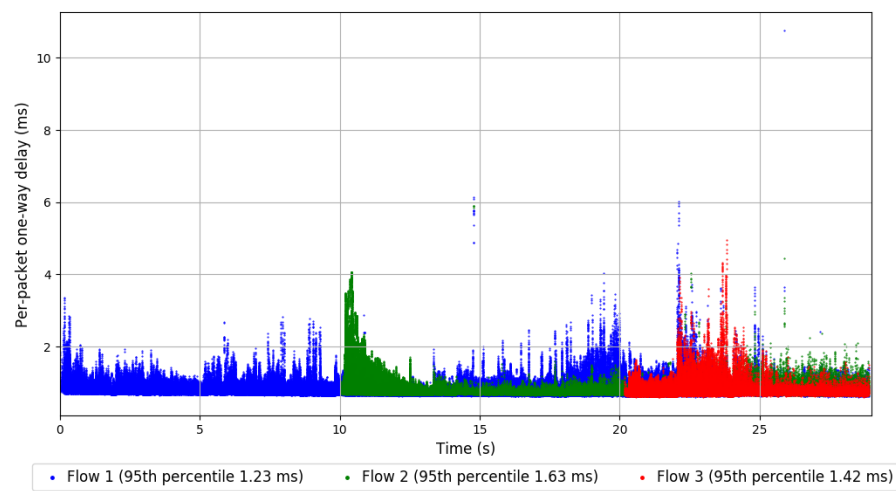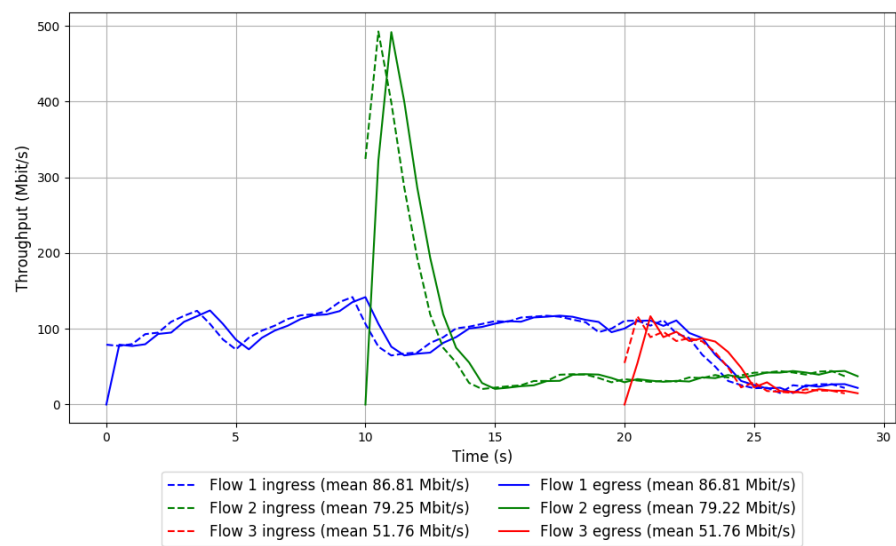
Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 123.64 Mbit/s)   Flow 1 egress (mean 123.64 Mbit/s)
Flow 2 ingress (mean 36.26 Mbit/s)   Flow 2 egress (mean 36.26 Mbit/s)
Flow 3 ingress (mean 99.23 Mbit/s)   Flow 3 egress (mean 99.22 Mbit/s)

Flow 1 (95th percentile 1.40 ms)   Flow 2 (95th percentile 1.02 ms)   Flow 3 (95th percentile 1.37 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-21 12:56:12
End at: 2019-01-21 12:56:42
Local clock offset: 1.058 ms
Remote clock offset: 0.141 ms


# Below is generated by plot.py at 2019-01-21 14:04:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.08 Mbit/s
95th percentile per-packet one-way delay: 1.381 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.81 Mbit/s
95th percentile per-packet one-way delay: 1.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.22 Mbit/s
95th percentile per-packet one-way delay: 1.630 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 51.76 Mbit/s
95th percentile per-packet one-way delay: 1.423 ms
Loss rate: 0.00%
```

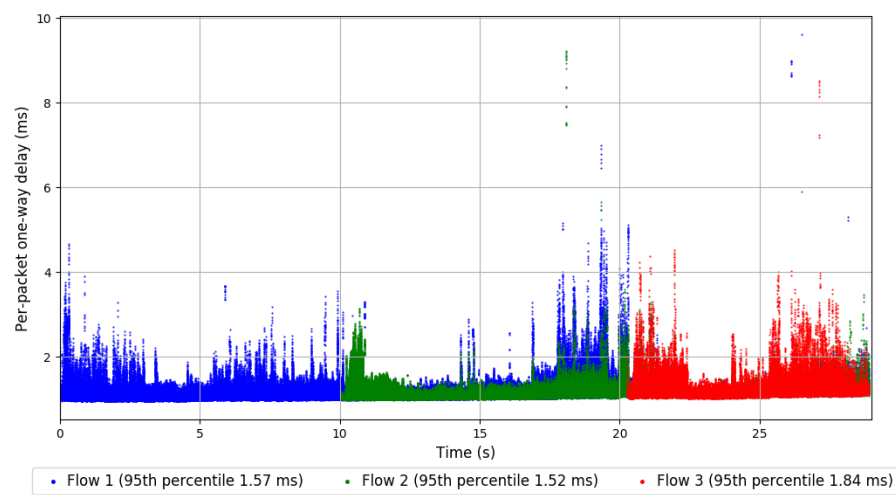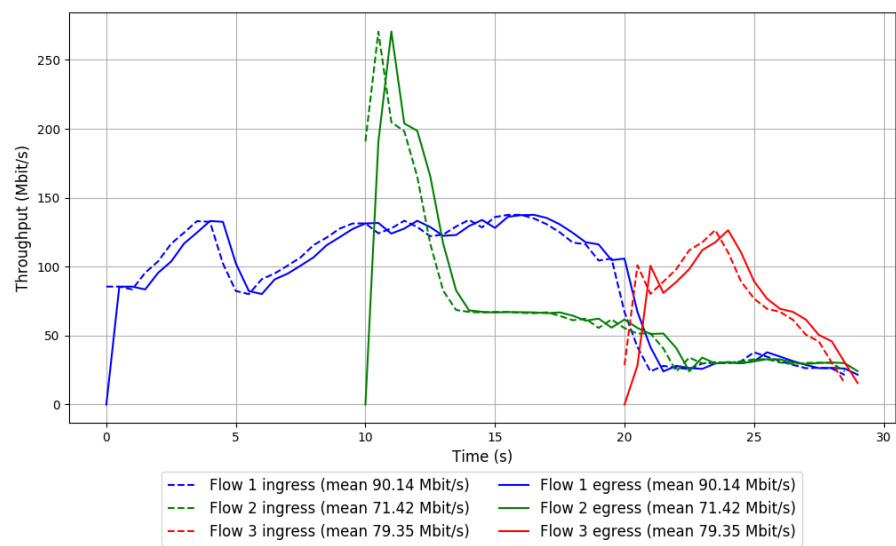Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-21 13:26:30
End at: 2019-01-21 13:27:00
Local clock offset: 1.316 ms
Remote clock offset: -3.603 ms


# Below is generated by plot.py at 2019-01-21 14:04:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.36 Mbit/s
95th percentile per-packet one-way delay: 1.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.14 Mbit/s
95th percentile per-packet one-way delay: 1.572 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.42 Mbit/s
95th percentile per-packet one-way delay: 1.516 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.35 Mbit/s
95th percentile per-packet one-way delay: 1.838 ms
Loss rate: 0.00%
```
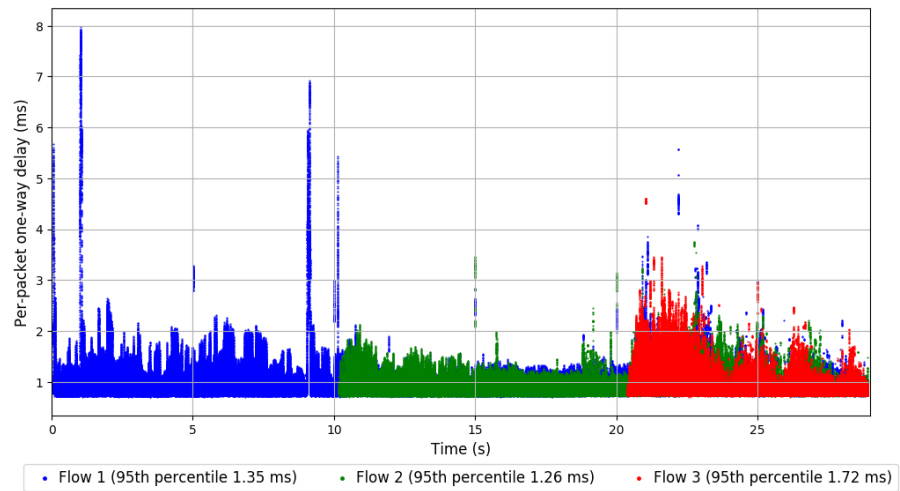
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-21 11:16:33
End at: 2019-01-21 11:17:03
Local clock offset: 3.888 ms
Remote clock offset: 0.575 ms


# Below is generated by plot.py at 2019-01-21 14:08:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.59 Mbit/s
95th percentile per-packet one-way delay: 1.396 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 308.24 Mbit/s
95th percentile per-packet one-way delay: 1.355 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 248.22 Mbit/s
95th percentile per-packet one-way delay: 1.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 214.98 Mbit/s
95th percentile per-packet one-way delay: 1.717 ms
Loss rate: 0.00%
```
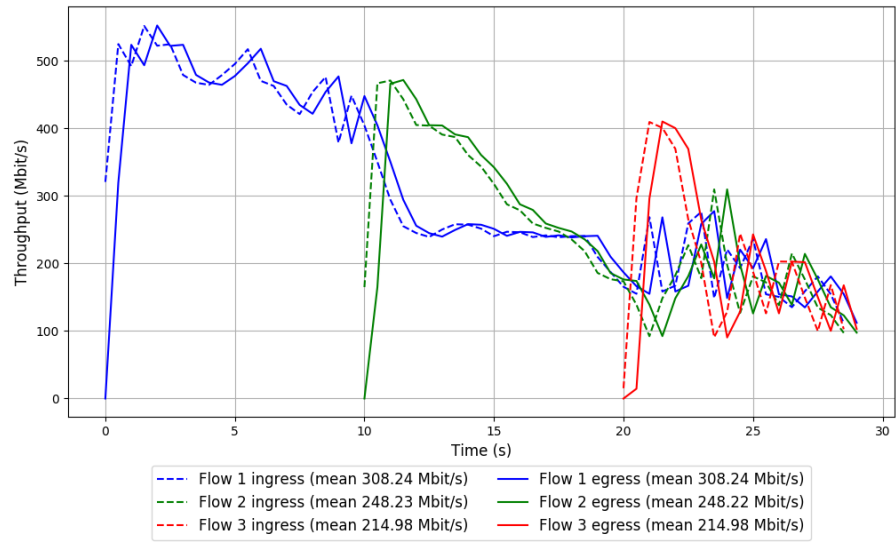
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-21 11:46:56
End at: 2019-01-21 11:47:26
Local clock offset: 3.656 ms
Remote clock offset: 5.107 ms


# Below is generated by plot.py at 2019-01-21 14:08:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.48 Mbit/s
95th percentile per-packet one-way delay: 1.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 277.45 Mbit/s
95th percentile per-packet one-way delay: 1.317 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.23 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.00 Mbit/s
95th percentile per-packet one-way delay: 1.538 ms
Loss rate: 0.00%
```
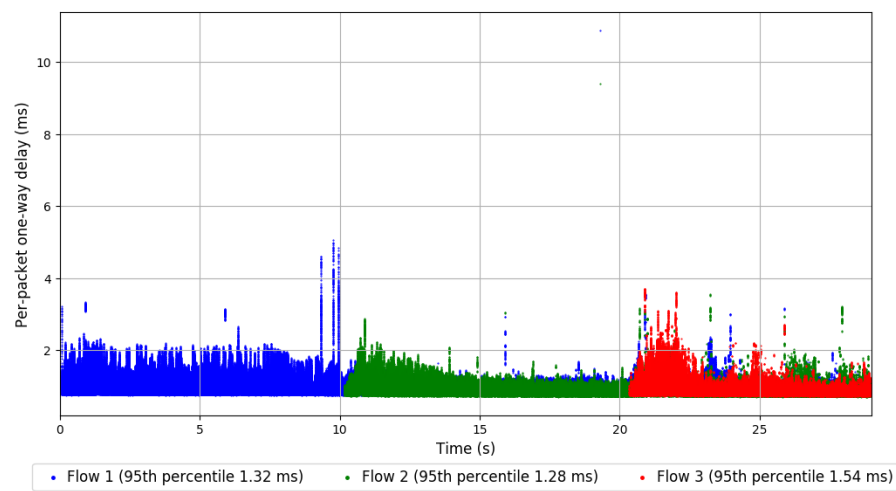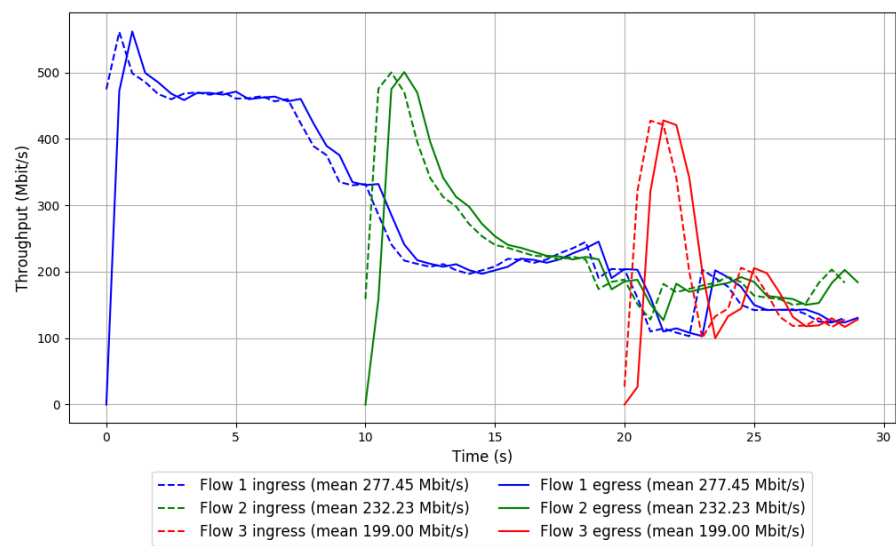
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-21 12:17:09
End at: 2019-01-21 12:17:39
Local clock offset: 3.182 ms
Remote clock offset: 0.522 ms


# Below is generated by plot.py at 2019-01-21 14:08:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 482.29 Mbit/s
95th percentile per-packet one-way delay: 1.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 283.75 Mbit/s
95th percentile per-packet one-way delay: 1.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.40 Mbit/s
95th percentile per-packet one-way delay: 1.354 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 177.74 Mbit/s
95th percentile per-packet one-way delay: 1.559 ms
Loss rate: 0.00%
```
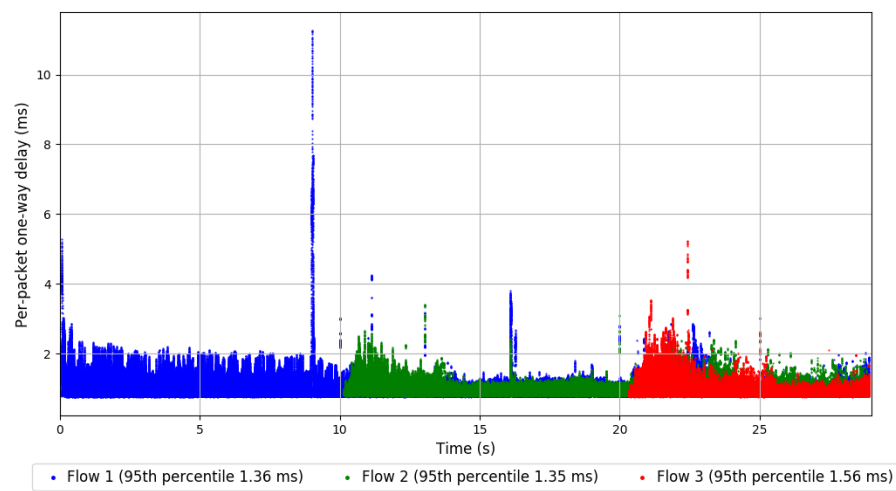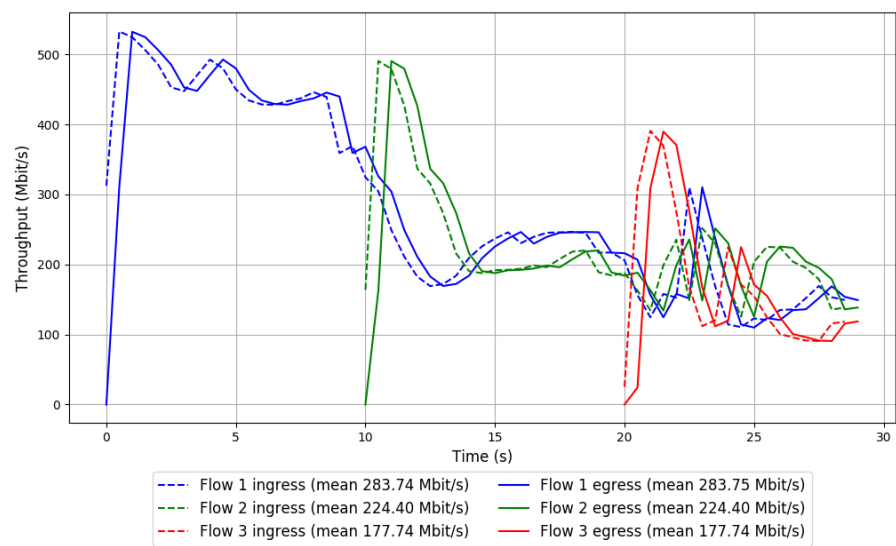
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-21 12:47:20
End at: 2019-01-21 12:47:50
Local clock offset: 3.101 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2019-01-21 14:08:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.94 Mbit/s
95th percentile per-packet one-way delay: 1.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.17 Mbit/s
95th percentile per-packet one-way delay: 1.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 233.33 Mbit/s
95th percentile per-packet one-way delay: 1.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.56 Mbit/s
95th percentile per-packet one-way delay: 1.663 ms
Loss rate: 0.00%
```
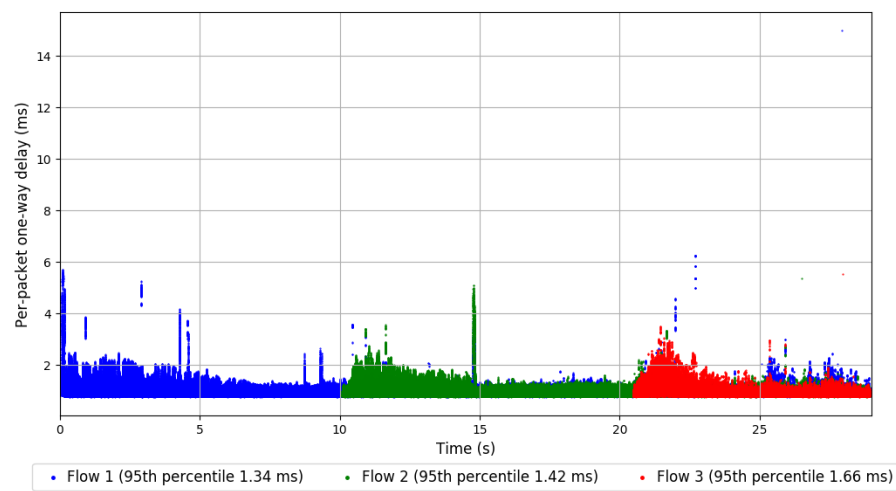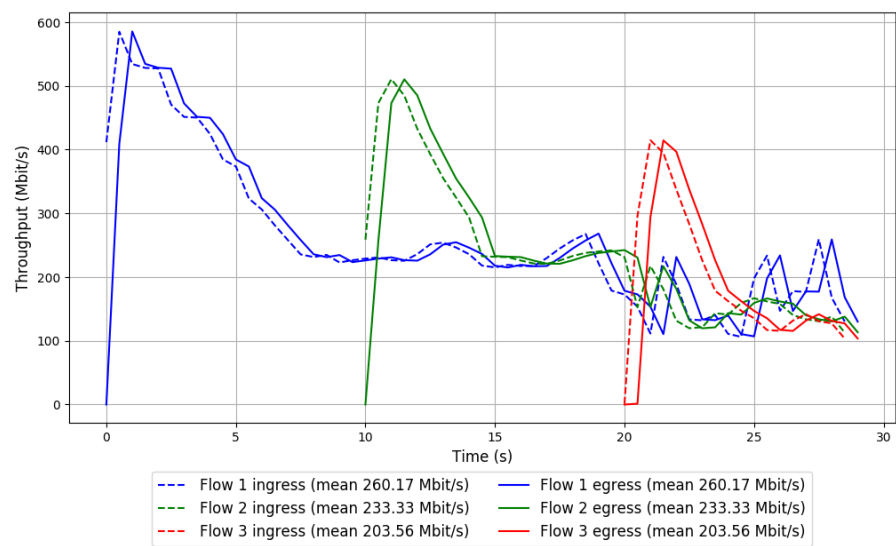
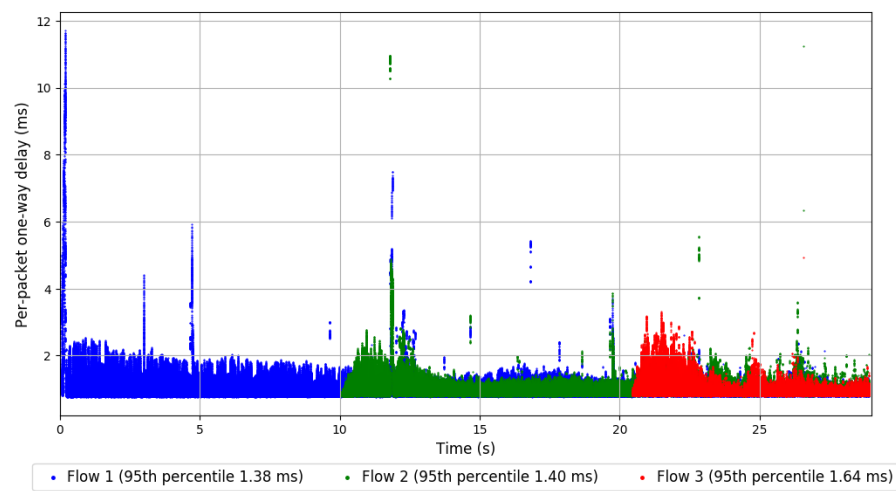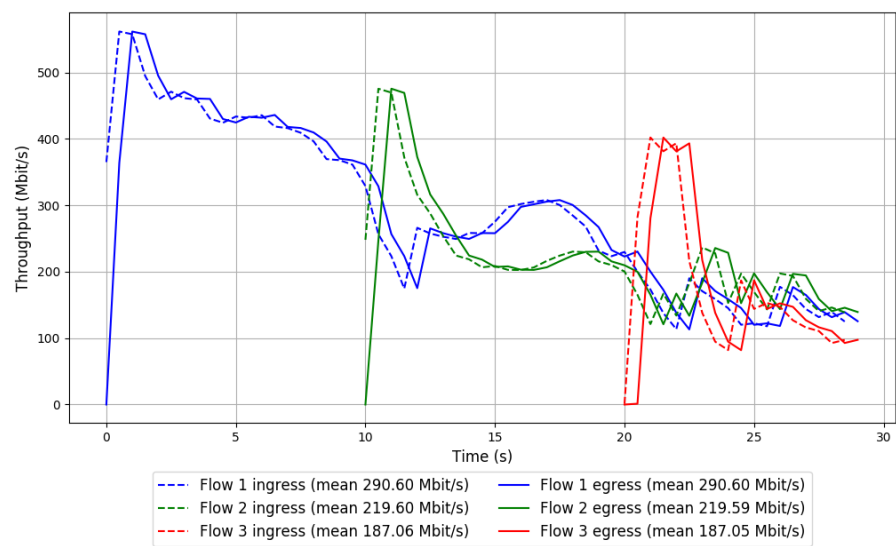Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-21 13:17:41
End at: 2019-01-21 13:18:11
Local clock offset: -0.996 ms
Remote clock offset: -3.034 ms


# Below is generated by plot.py at 2019-01-21 14:08:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.66 Mbit/s
95th percentile per-packet one-way delay: 1.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 290.60 Mbit/s
95th percentile per-packet one-way delay: 1.379 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.59 Mbit/s
95th percentile per-packet one-way delay: 1.403 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.05 Mbit/s
95th percentile per-packet one-way delay: 1.639 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-21 11:10:41
End at: 2019-01-21 11:11:11
Local clock offset: 3.551 ms
Remote clock offset: 0.443 ms


# Below is generated by plot.py at 2019-01-21 14:11:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 644.24 Mbit/s
95th percentile per-packet one-way delay: 15.745 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 445.58 Mbit/s
95th percentile per-packet one-way delay: 16.274 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 252.49 Mbit/s
95th percentile per-packet one-way delay: 7.182 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 126.14 Mbit/s
95th percentile per-packet one-way delay: 4.735 ms
Loss rate: 0.45%
```
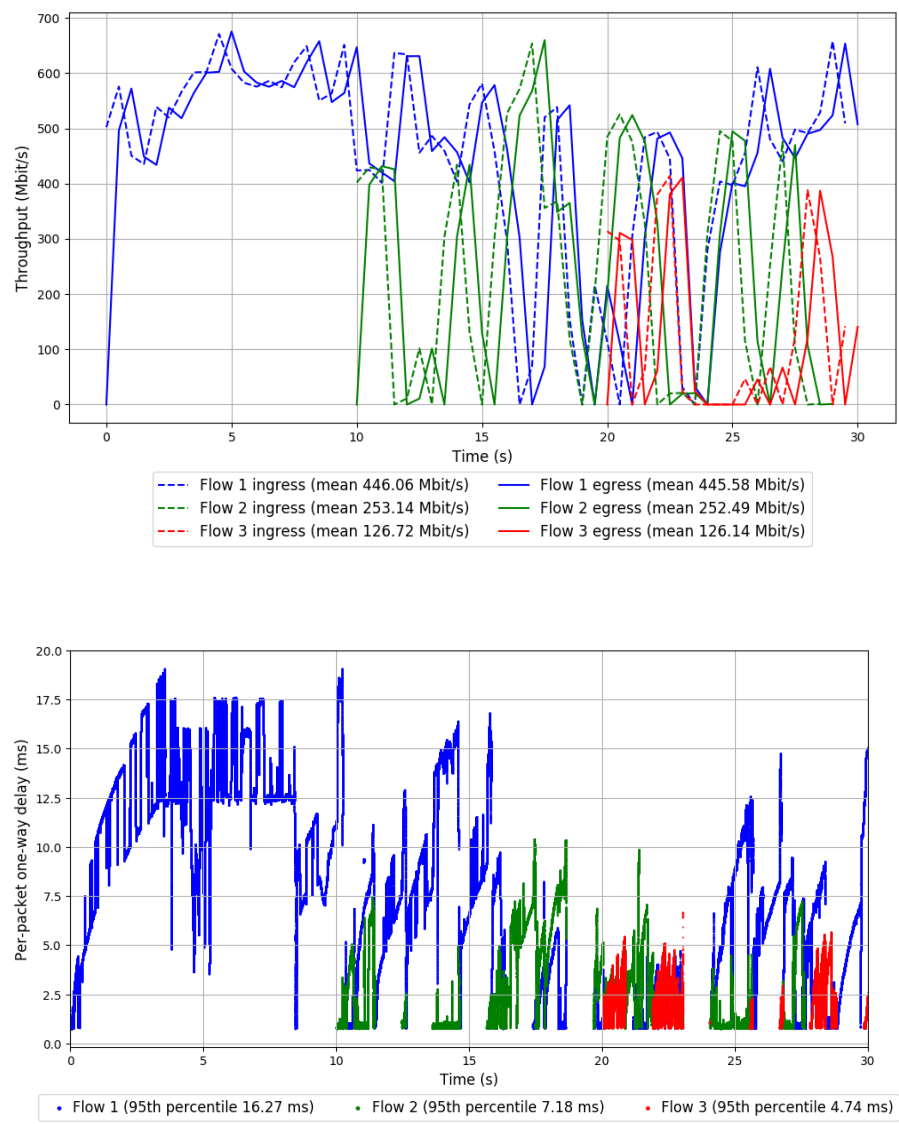
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-21 11:41:01
End at: 2019-01-21 11:41:31
Local clock offset: 3.578 ms
Remote clock offset: 4.582 ms

# Below is generated by plot.py at 2019-01-21 14:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 693.65 Mbit/s
95th percentile per-packet one-way delay: 14.357 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 16.504 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 367.61 Mbit/s
95th percentile per-packet one-way delay: 8.558 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 231.20 Mbit/s
95th percentile per-packet one-way delay: 7.700 ms
Loss rate: 0.37%
```
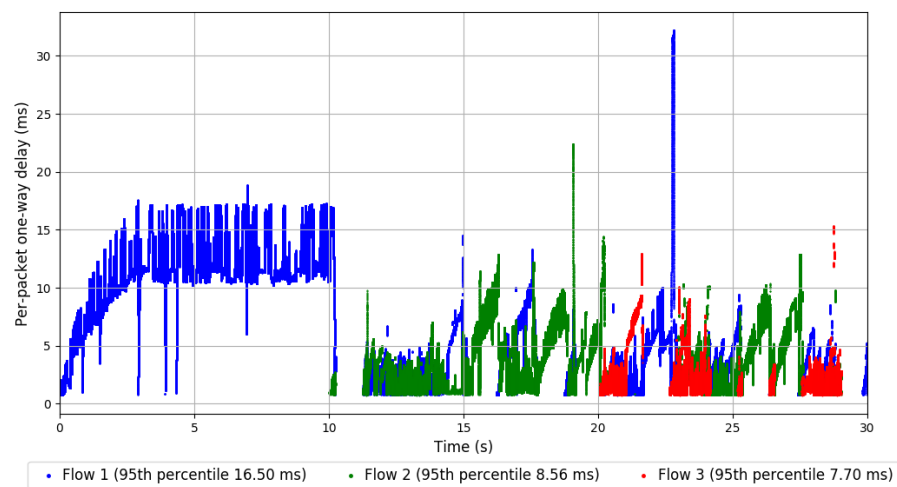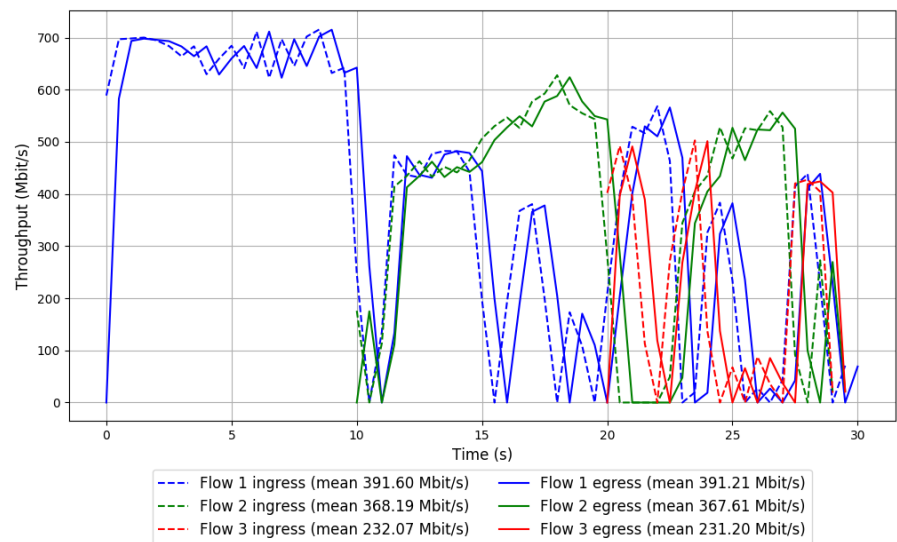
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 391.60 Mbit/s)   Flow 1 egress (mean 391.21 Mbit/s)
Flow 2 ingress (mean 368.19 Mbit/s)   Flow 2 egress (mean 367.61 Mbit/s)
Flow 3 ingress (mean 232.07 Mbit/s)   Flow 3 egress (mean 231.20 Mbit/s)

Flow 1 (95th percentile 16.50 ms)   Flow 2 (95th percentile 8.56 ms)   Flow 3 (95th percentile 7.70 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-21 12:11:16
End at: 2019-01-21 12:11:46
Local clock offset: 3.175 ms
Remote clock offset: 0.825 ms

# Below is generated by plot.py at 2019-01-21 14:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 659.53 Mbit/s
95th percentile per-packet one-way delay: 15.607 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 353.29 Mbit/s
95th percentile per-packet one-way delay: 16.811 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 307.66 Mbit/s
95th percentile per-packet one-way delay: 9.497 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 311.23 Mbit/s
95th percentile per-packet one-way delay: 8.327 ms
Loss rate: 0.32%
```
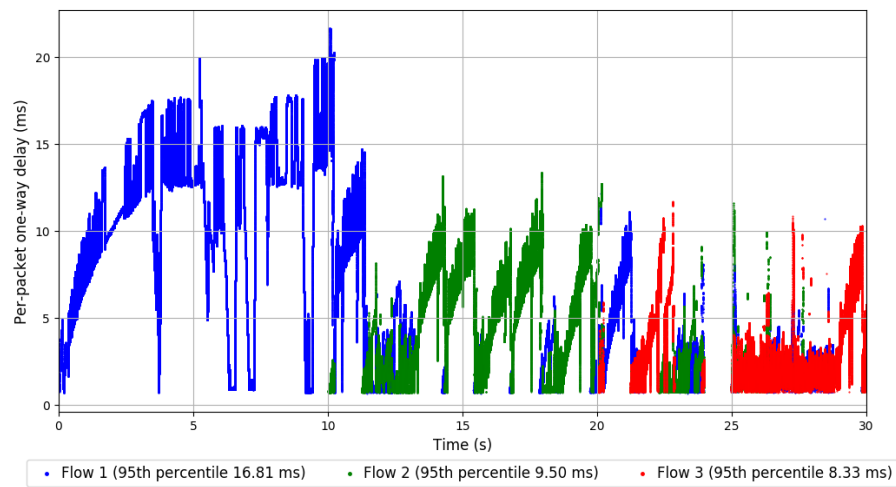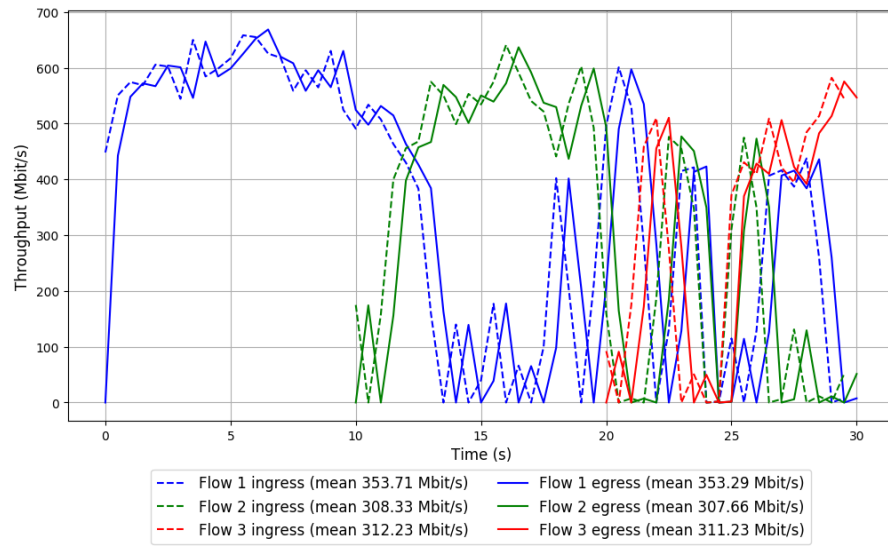
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 353.71 Mbit/s)   Flow 1 egress (mean 353.29 Mbit/s)
Flow 2 ingress (mean 308.33 Mbit/s)   Flow 2 egress (mean 307.66 Mbit/s)
Flow 3 ingress (mean 312.23 Mbit/s)   Flow 3 egress (mean 311.23 Mbit/s)

Flow 1 (95th percentile 16.81 ms)   Flow 2 (95th percentile 9.50 ms)   Flow 3 (95th percentile 8.33 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-21 12:41:35
End at: 2019-01-21 12:42:05
Local clock offset: 3.09 ms
Remote clock offset: 0.161 ms


# Below is generated by plot.py at 2019-01-21 14:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 639.81 Mbit/s
95th percentile per-packet one-way delay: 16.850 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 417.30 Mbit/s
95th percentile per-packet one-way delay: 17.513 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 230.49 Mbit/s
95th percentile per-packet one-way delay: 2.928 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 263.10 Mbit/s
95th percentile per-packet one-way delay: 7.511 ms
Loss rate: 0.34%
```
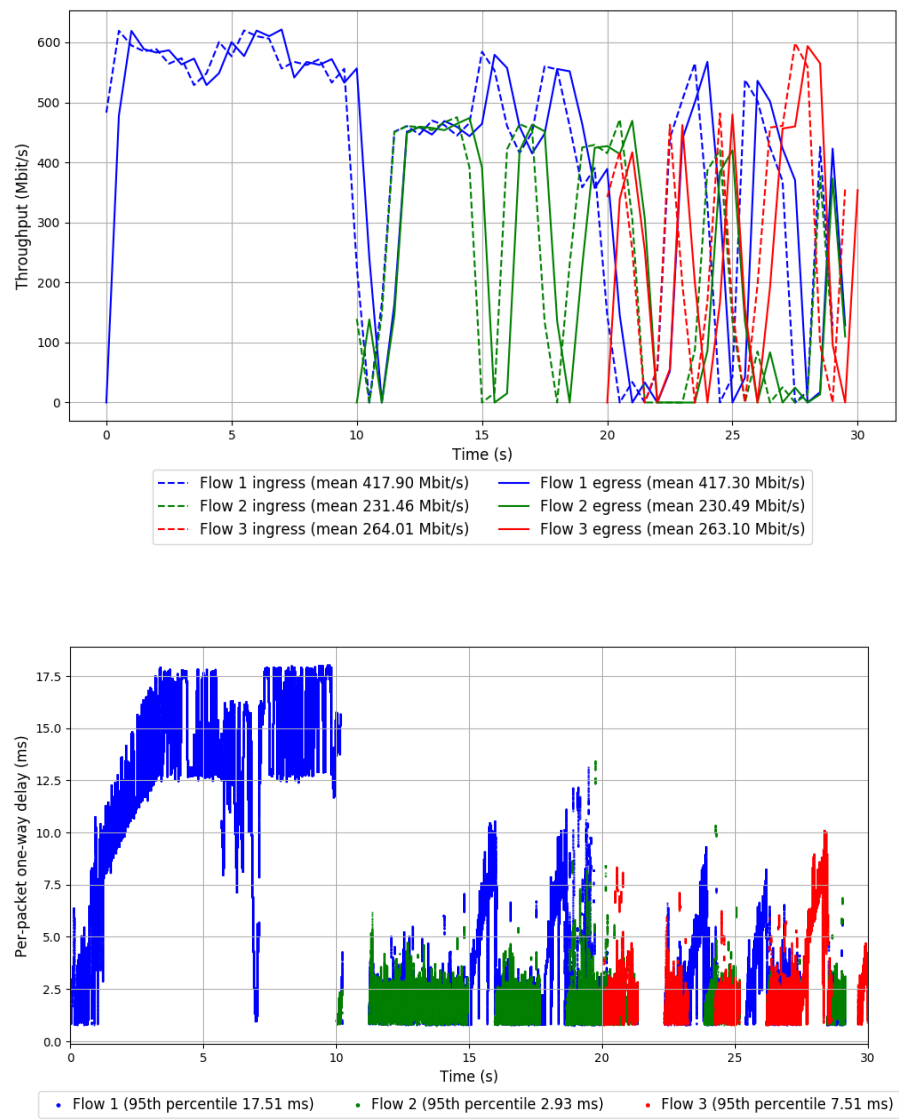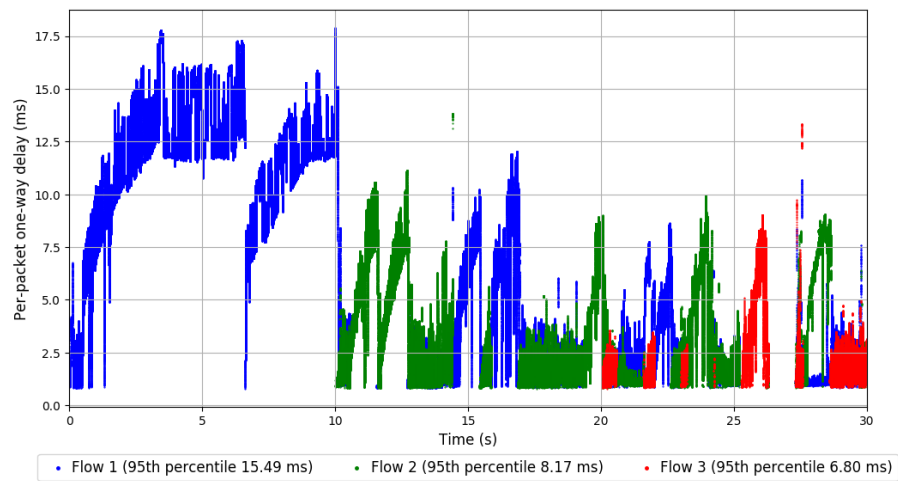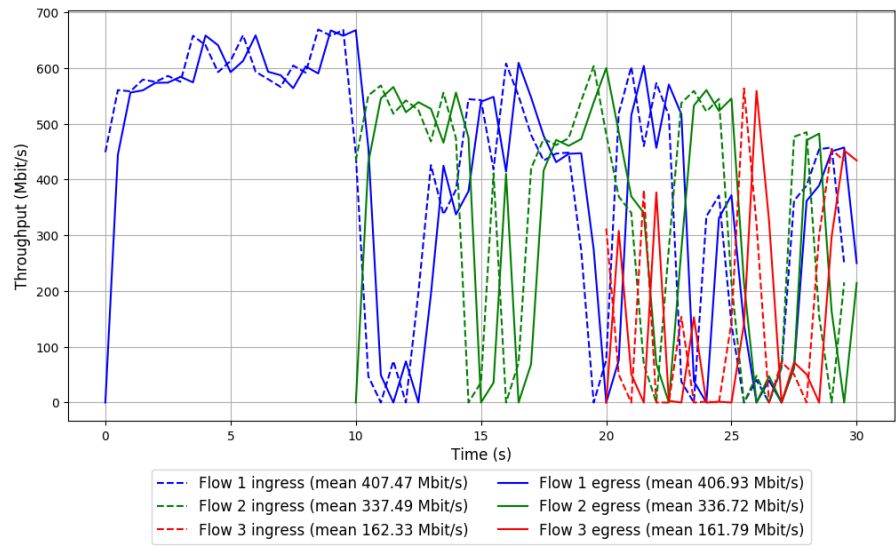
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 417.90 Mbit/s)   Flow 1 egress (mean 417.30 Mbit/s)
Flow 2 ingress (mean 231.46 Mbit/s)   Flow 2 egress (mean 230.49 Mbit/s)
Flow 3 ingress (mean 264.01 Mbit/s)   Flow 3 egress (mean 263.10 Mbit/s)

Flow 1 (95th percentile 17.51 ms)   Flow 2 (95th percentile 2.93 ms)   Flow 3 (95th percentile 7.51 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-21 13:11:45
End at: 2019-01-21 13:12:15
Local clock offset: -0.667 ms
Remote clock offset: -2.318 ms


# Below is generated by plot.py at 2019-01-21 14:15:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 682.41 Mbit/s
95th percentile per-packet one-way delay: 13.975 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 406.93 Mbit/s
95th percentile per-packet one-way delay: 15.490 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 336.72 Mbit/s
95th percentile per-packet one-way delay: 8.173 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 161.79 Mbit/s
95th percentile per-packet one-way delay: 6.797 ms
Loss rate: 0.32%
```
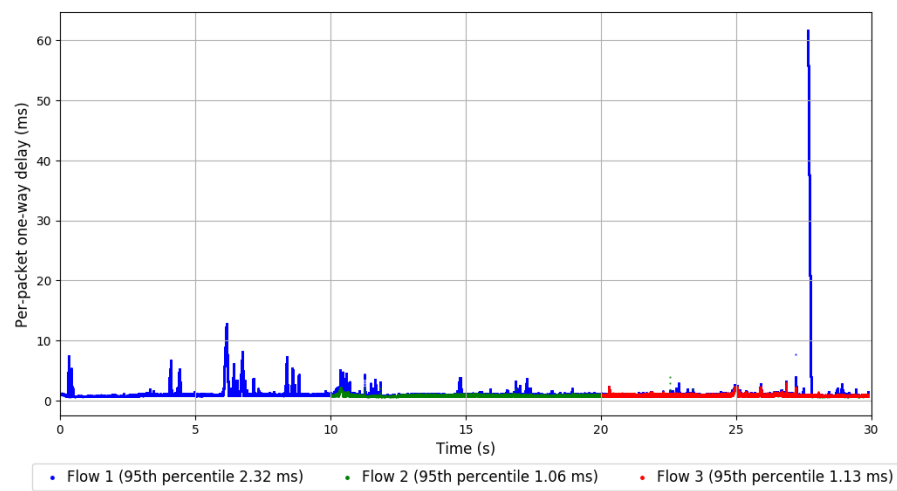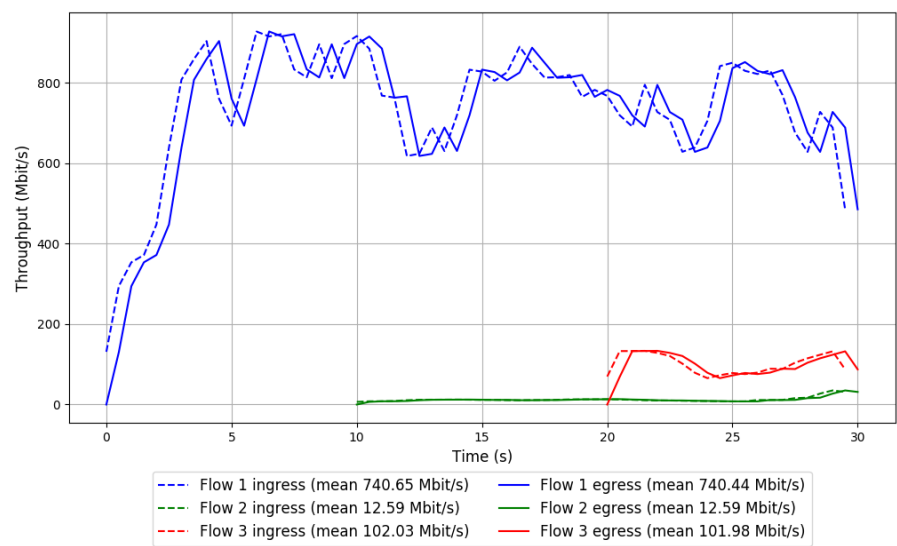
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 407.47 Mbit/s)
Flow 1 egress (mean 406.93 Mbit/s)
Flow 2 ingress (mean 337.49 Mbit/s)
Flow 2 egress (mean 336.72 Mbit/s)
Flow 3 ingress (mean 162.33 Mbit/s)
Flow 3 egress (mean 161.79 Mbit/s)

Flow 1 (95th percentile 15.49 ms)
Flow 2 (95th percentile 8.17 ms)
Flow 3 (95th percentile 6.80 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-21 11:15:01
End at: 2019-01-21 11:15:31
Local clock offset: 3.803 ms
Remote clock offset: 0.483 ms


# Below is generated by plot.py at 2019-01-21 14:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 782.45 Mbit/s
95th percentile per-packet one-way delay: 2.254 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 740.44 Mbit/s
95th percentile per-packet one-way delay: 2.319 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 1.060 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 101.98 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.05%
```
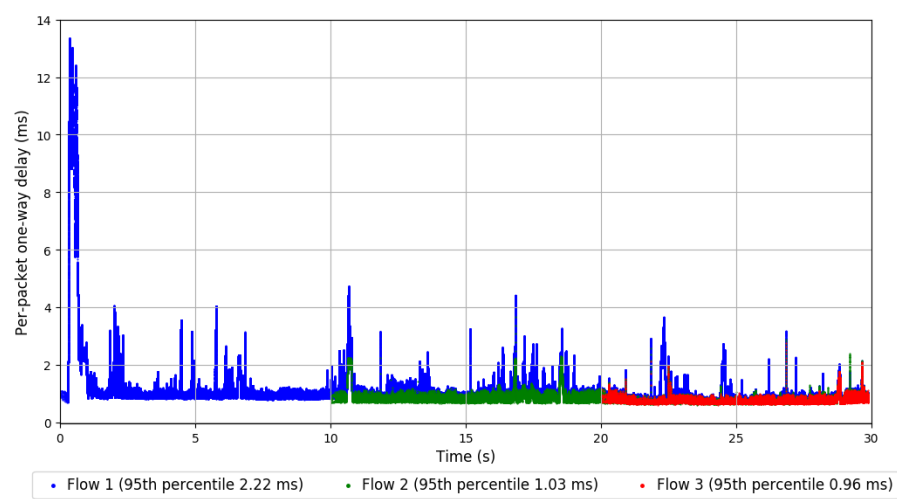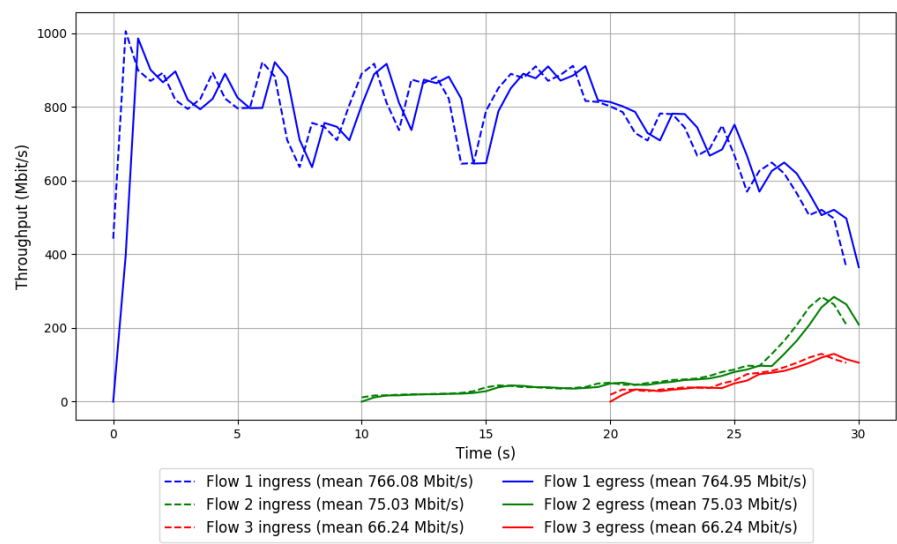
Run 1: Report of PCC-Allegro — Data Link

- - - - Flow 1 ingress (mean 740.65 Mbit/s) ——— Flow 1 egress (mean 740.44 Mbit/s)
- - - - Flow 2 ingress (mean 12.59 Mbit/s) ——— Flow 2 egress (mean 12.59 Mbit/s)
- - - - Flow 3 ingress (mean 102.03 Mbit/s) ——— Flow 3 egress (mean 101.98 Mbit/s)

- Flow 1 (95th percentile 2.32 ms)   • Flow 2 (95th percentile 1.06 ms)   • Flow 3 (95th percentile 1.13 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-21 11:45:22
End at: 2019-01-21 11:45:52
Local clock offset: 3.641 ms
Remote clock offset: 4.912 ms


# Below is generated by plot.py at 2019-01-21 14:17:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.68 Mbit/s
95th percentile per-packet one-way delay: 2.173 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 764.95 Mbit/s
95th percentile per-packet one-way delay: 2.220 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 75.03 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.24 Mbit/s
95th percentile per-packet one-way delay: 0.960 ms
Loss rate: 0.00%
```
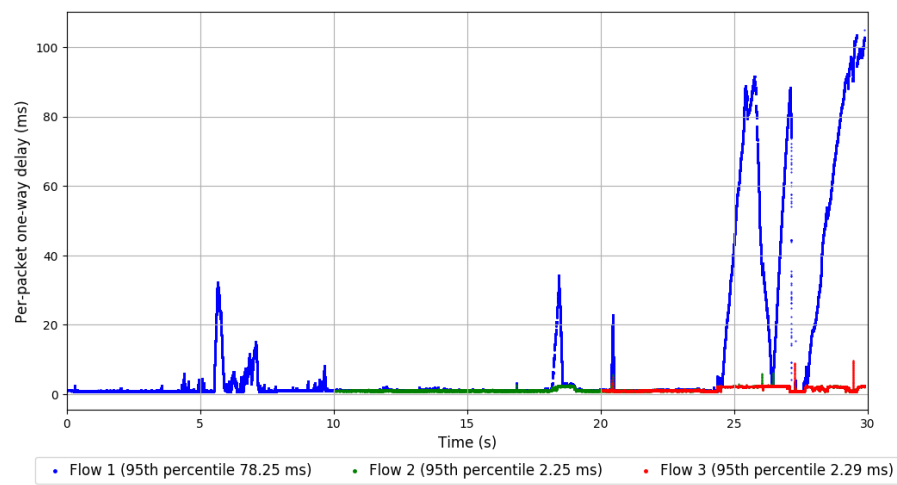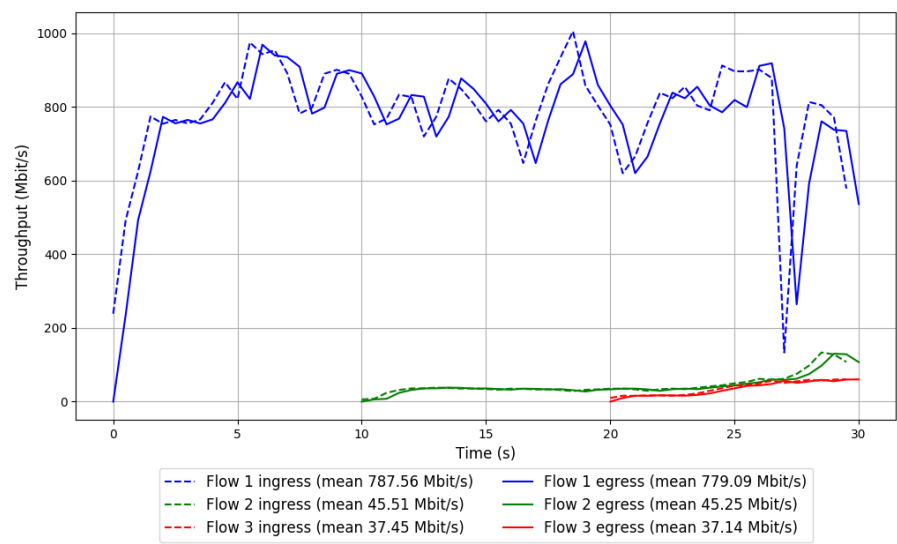
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-21 12:15:35
End at: 2019-01-21 12:16:05
Local clock offset: 3.177 ms
Remote clock offset: 0.567 ms


# Below is generated by plot.py at 2019-01-21 14:18:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 821.42 Mbit/s
95th percentile per-packet one-way delay: 75.916 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 779.09 Mbit/s
95th percentile per-packet one-way delay: 78.255 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 45.25 Mbit/s
95th percentile per-packet one-way delay: 2.254 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 2.289 ms
Loss rate: 0.83%
```
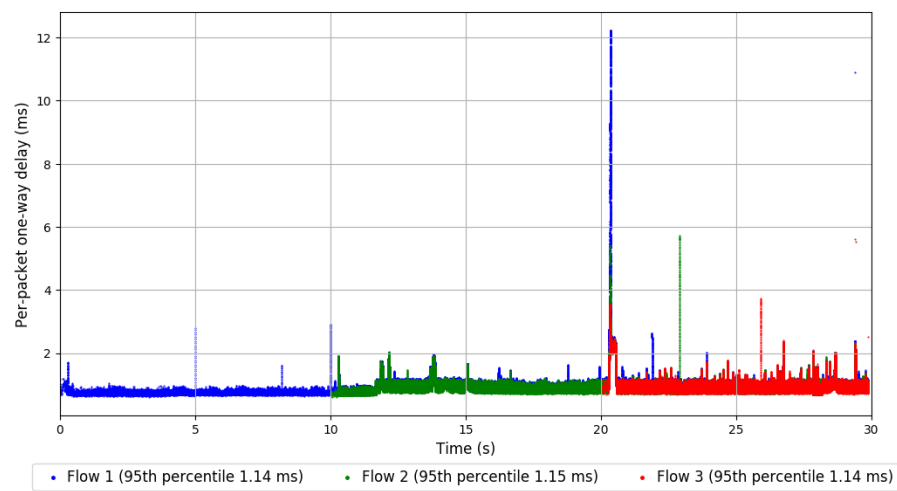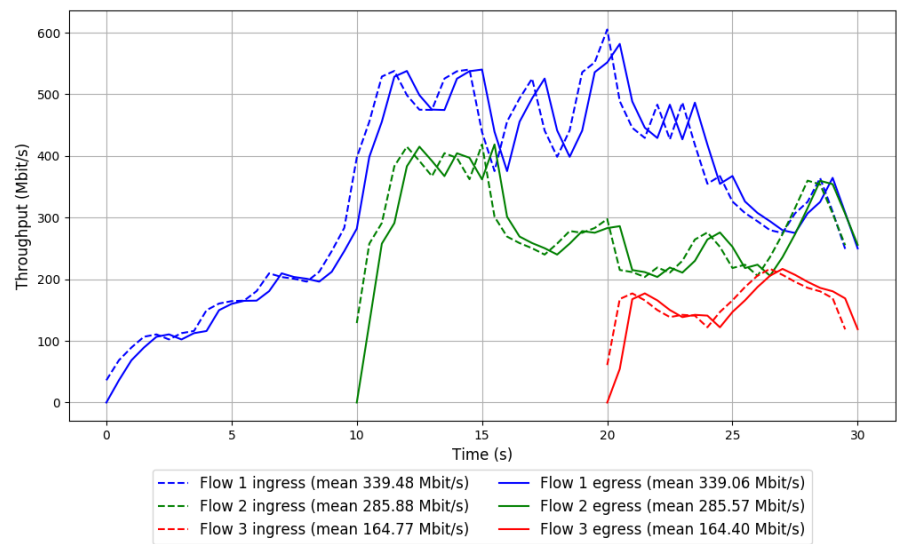
Run 3: Report of PCC-Allegro — Data Link

- - - - Flow 1 ingress (mean 787.56 Mbit/s) —— Flow 1 egress (mean 779.09 Mbit/s)
- - - - Flow 2 ingress (mean 45.51 Mbit/s) —— Flow 2 egress (mean 45.25 Mbit/s)
- - - - Flow 3 ingress (mean 37.45 Mbit/s) —— Flow 3 egress (mean 37.14 Mbit/s)

• Flow 1 (95th percentile 78.25 ms) • Flow 2 (95th percentile 2.25 ms) • Flow 3 (95th percentile 2.29 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-21 12:45:52
End at: 2019-01-21 12:46:22
Local clock offset: 3.095 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2019-01-21 14:18:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 583.12 Mbit/s
95th percentile per-packet one-way delay: 1.138 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 339.06 Mbit/s
95th percentile per-packet one-way delay: 1.136 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 285.57 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 164.40 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.21%
```
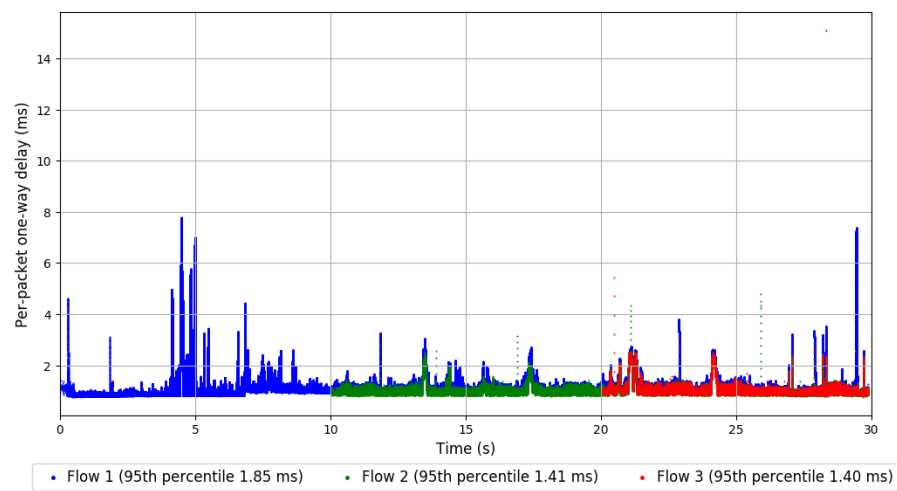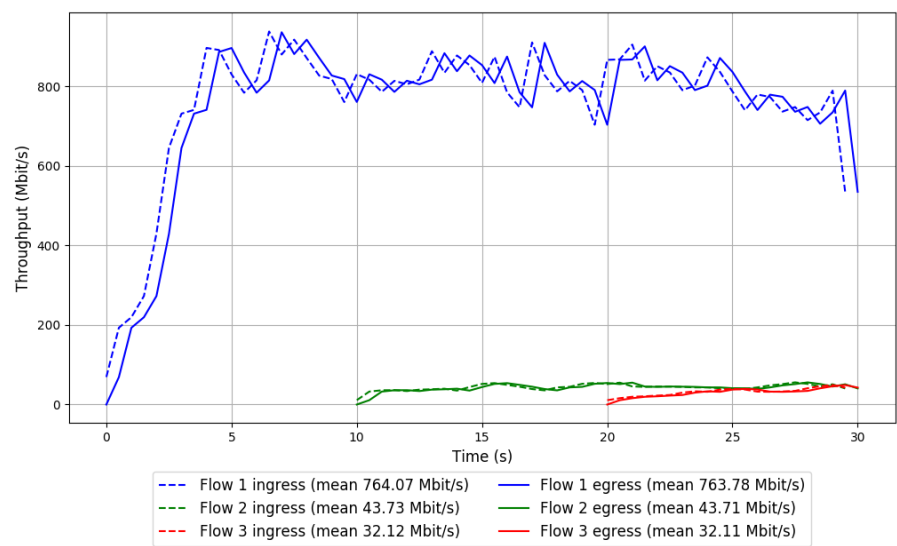
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-21 13:16:07
End at: 2019-01-21 13:16:37
Local clock offset: -0.915 ms
Remote clock offset: -2.86 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 803.43 Mbit/s
95th percentile per-packet one-way delay: 1.831 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 763.78 Mbit/s
95th percentile per-packet one-way delay: 1.848 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 43.71 Mbit/s
95th percentile per-packet one-way delay: 1.412 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 1.403 ms
Loss rate: 0.04%
```
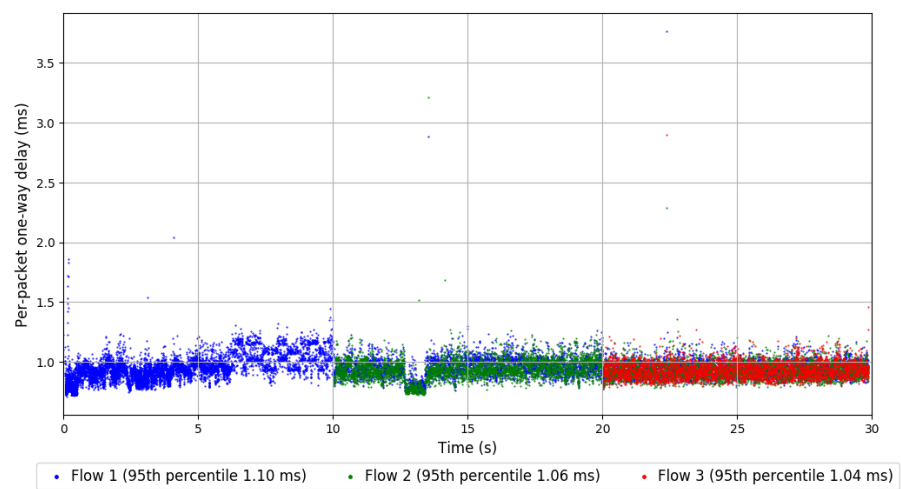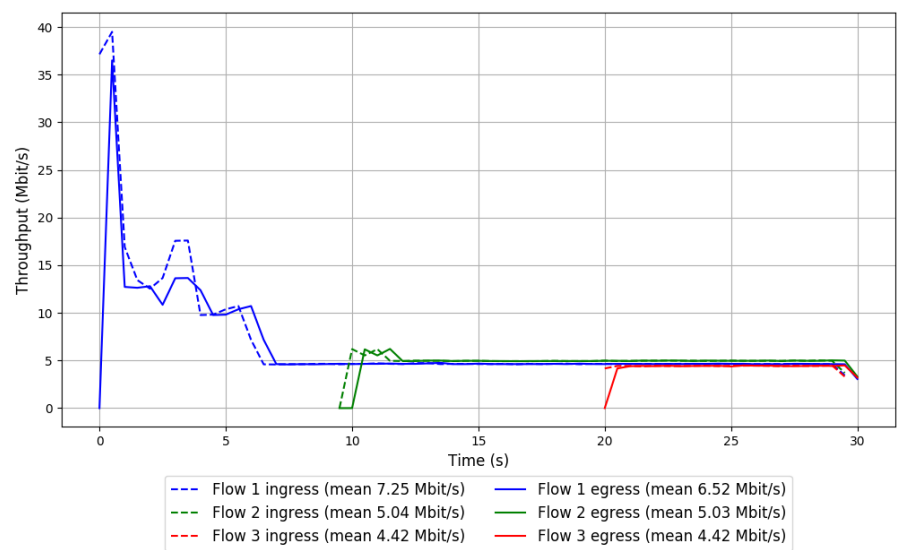
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 764.07 Mbit/s) --- Flow 1 egress (mean 763.78 Mbit/s)
Flow 2 ingress (mean 43.73 Mbit/s) --- Flow 2 egress (mean 43.71 Mbit/s)
Flow 3 ingress (mean 32.12 Mbit/s) --- Flow 3 egress (mean 32.11 Mbit/s)

• Flow 1 (95th percentile 1.85 ms)   • Flow 2 (95th percentile 1.41 ms)   • Flow 3 (95th percentile 1.40 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-21 11:08:11
End at: 2019-01-21 11:08:41
Local clock offset: 3.36 ms
Remote clock offset: 0.349 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 1.078 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 1.096 ms
Loss rate: 10.05%
-- Flow 2:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 1.058 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 1.041 ms
Loss rate: 0.11%
```
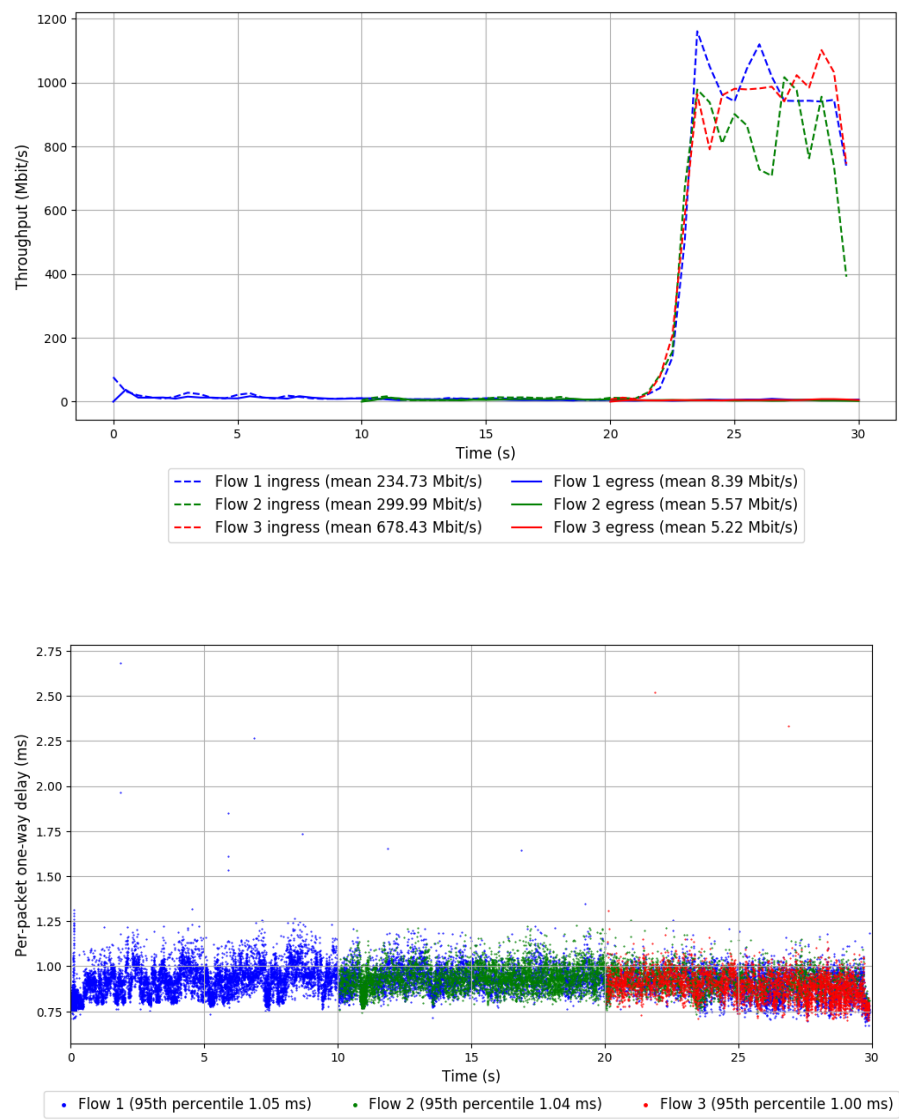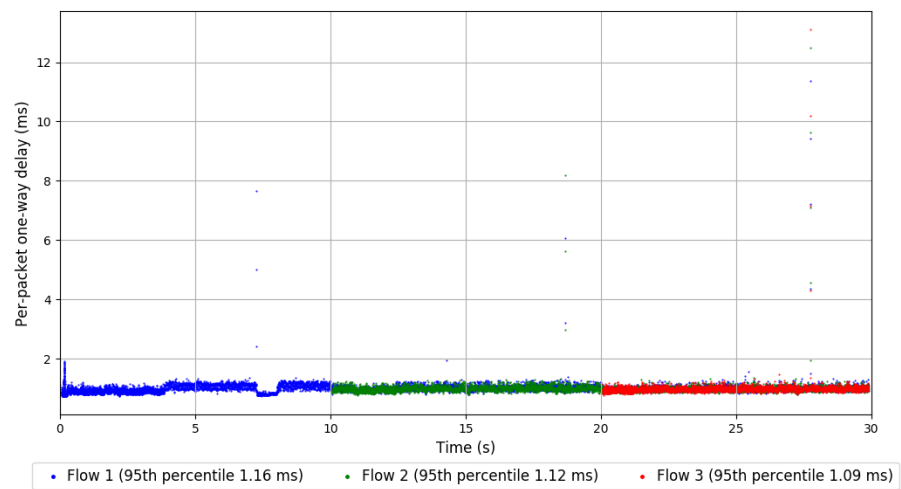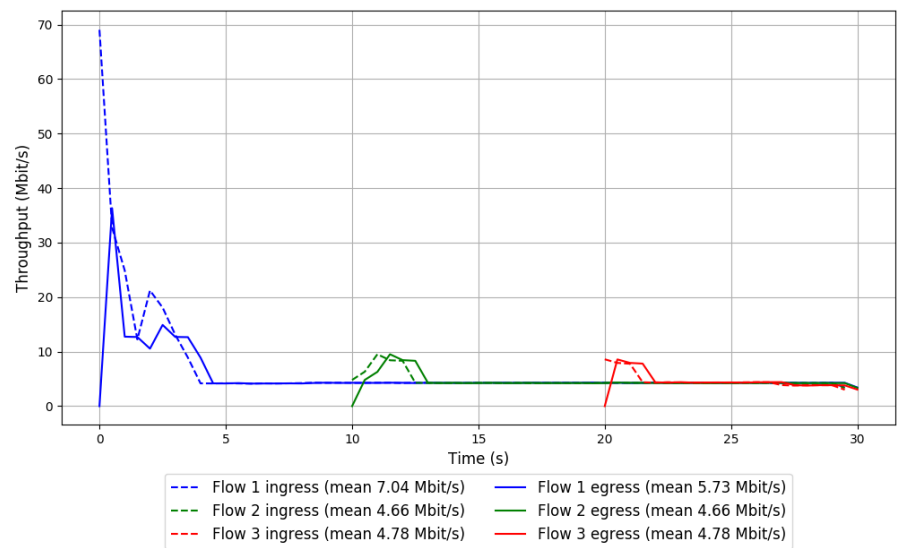
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-21 11:38:24
End at: 2019-01-21 11:38:54
Local clock offset: 3.568 ms
Remote clock offset: 4.323 ms

# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 1.043 ms
Loss rate: 97.90%
-- Flow 1:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 1.051 ms
Loss rate: 96.43%
-- Flow 2:
Average throughput: 5.57 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 98.14%
-- Flow 3:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 99.23%
```
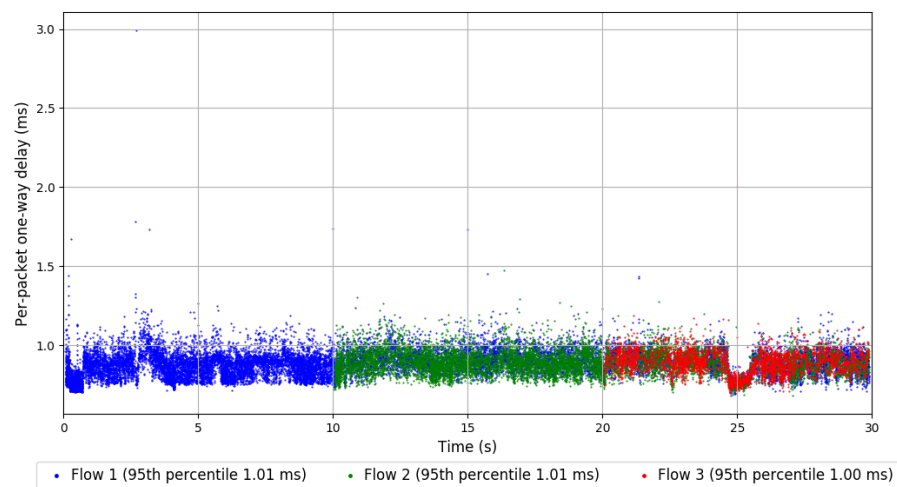
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 234.73 Mbit/s) --- Flow 1 egress (mean 8.39 Mbit/s) ---
Flow 2 ingress (mean 299.99 Mbit/s) --- Flow 2 egress (mean 5.57 Mbit/s) ---
Flow 3 ingress (mean 678.43 Mbit/s) --- Flow 3 egress (mean 5.22 Mbit/s) ---

Flow 1 (95th percentile 1.05 ms) • Flow 2 (95th percentile 1.04 ms) • Flow 3 (95th percentile 1.00 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-21 12:08:46
End at: 2019-01-21 12:09:16
Local clock offset: 3.168 ms
Remote clock offset: 1.075 ms

# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 1.142 ms
Loss rate: 11.24%
-- Flow 1:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 1.164 ms
Loss rate: 18.70%
-- Flow 2:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 1.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.00%
```
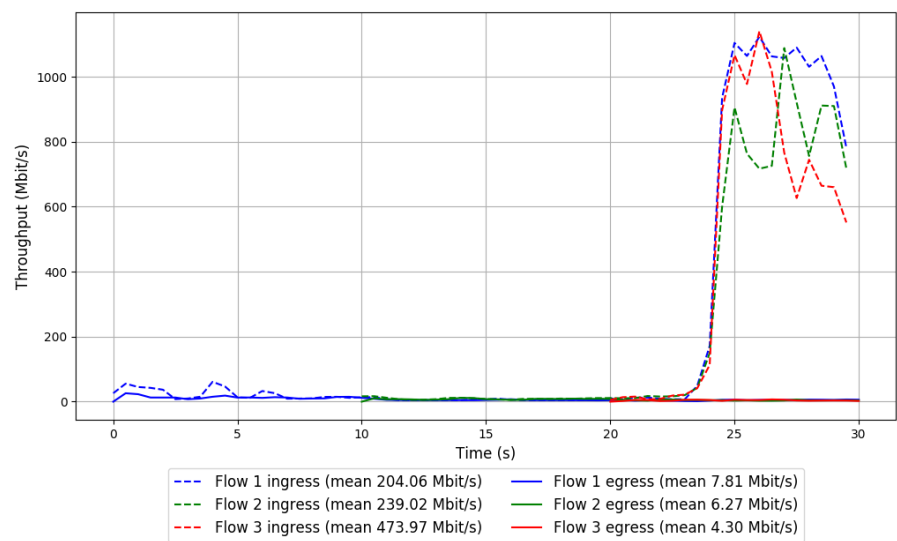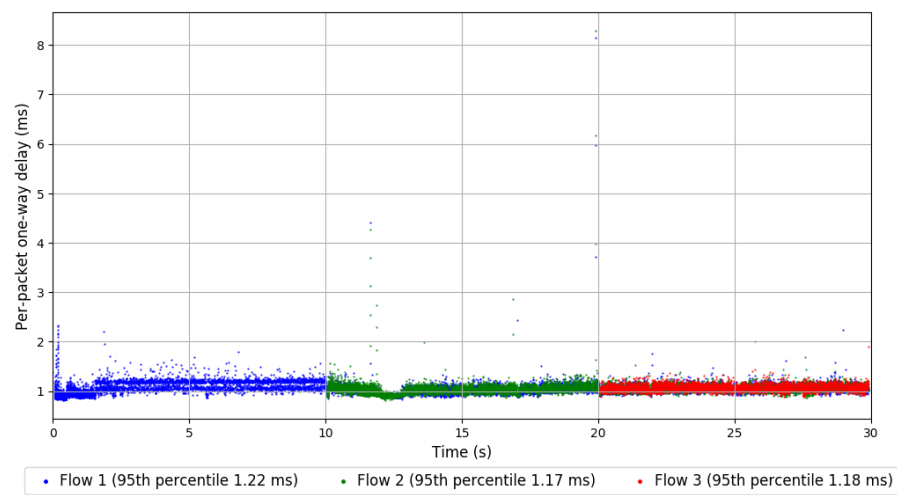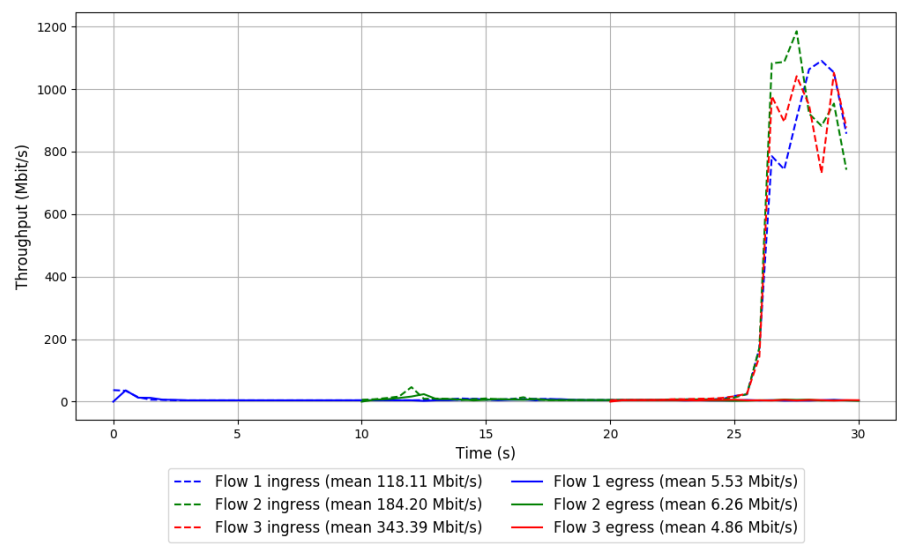
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-21 12:38:58
End at: 2019-01-21 12:39:28
Local clock offset: 3.097 ms
Remote clock offset: 0.124 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.40 Mbit/s
95th percentile per-packet one-way delay: 1.008 ms
Loss rate: 97.42%
-- Flow 1:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 1.009 ms
Loss rate: 96.17%
-- Flow 2:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 1.010 ms
Loss rate: 97.38%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 1.000 ms
Loss rate: 99.10%
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-21 13:09:11
End at: 2019-01-21 13:09:41
Local clock offset: -0.507 ms
Remote clock offset: -1.903 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 1.200 ms
Loss rate: 96.81%
-- Flow 1:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 95.32%
-- Flow 2:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 96.60%
-- Flow 3:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 1.180 ms
Loss rate: 98.59%
```
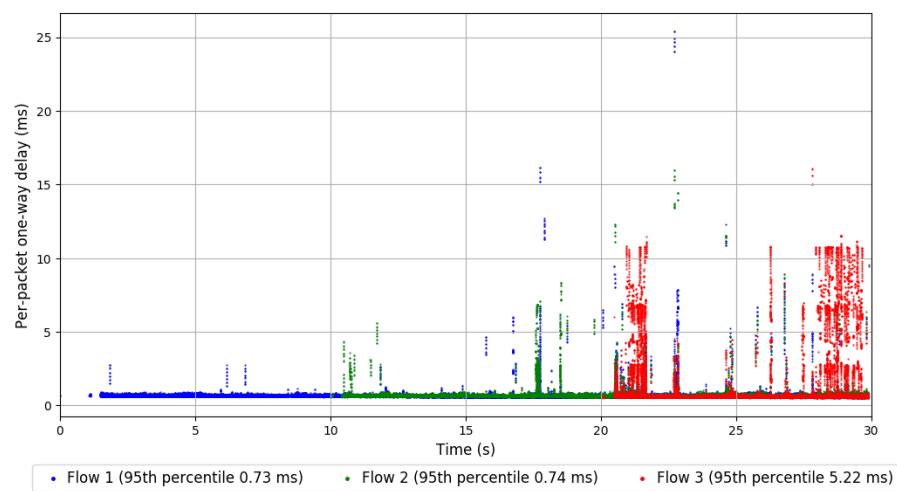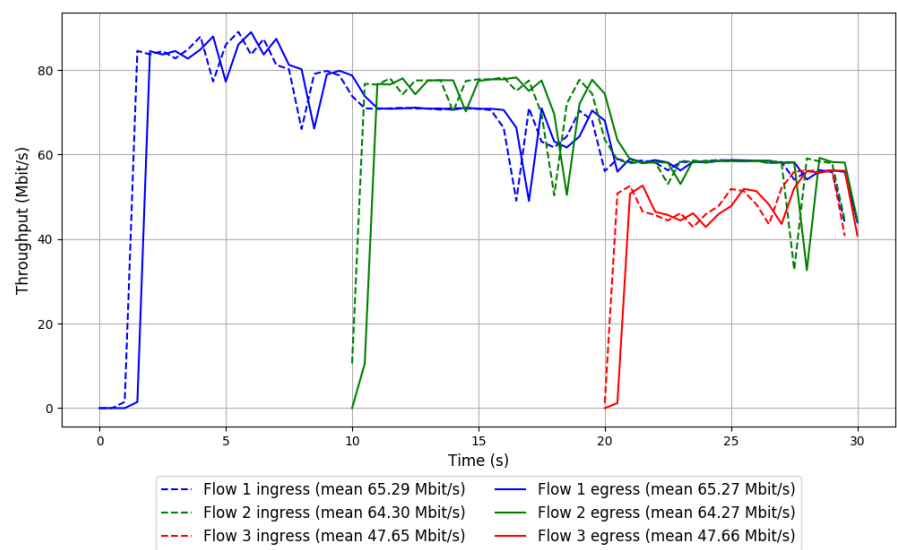
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 118.11 Mbit/s)   Flow 1 egress (mean 5.53 Mbit/s)
Flow 2 ingress (mean 184.20 Mbit/s)   Flow 2 egress (mean 6.26 Mbit/s)
Flow 3 ingress (mean 343.39 Mbit/s)   Flow 3 egress (mean 4.86 Mbit/s)

Flow 1 (95th percentile 1.22 ms)   Flow 2 (95th percentile 1.17 ms)   Flow 3 (95th percentile 1.18 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 11:24:06
End at: 2019-01-21 11:24:36
Local clock offset: 3.686 ms
Remote clock offset: 2.089 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.63 Mbit/s
95th percentile per-packet one-way delay: 0.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.27 Mbit/s
95th percentile per-packet one-way delay: 0.732 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 0.742 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.66 Mbit/s
95th percentile per-packet one-way delay: 5.223 ms
Loss rate: 0.00%
```
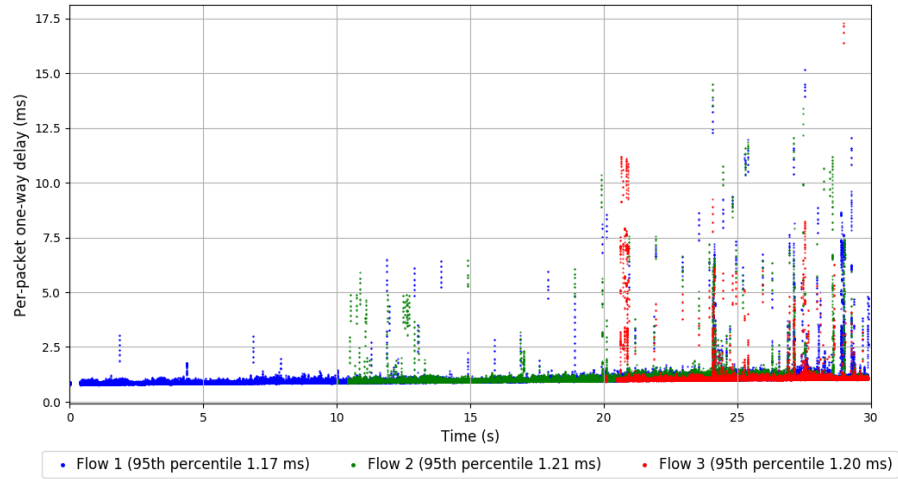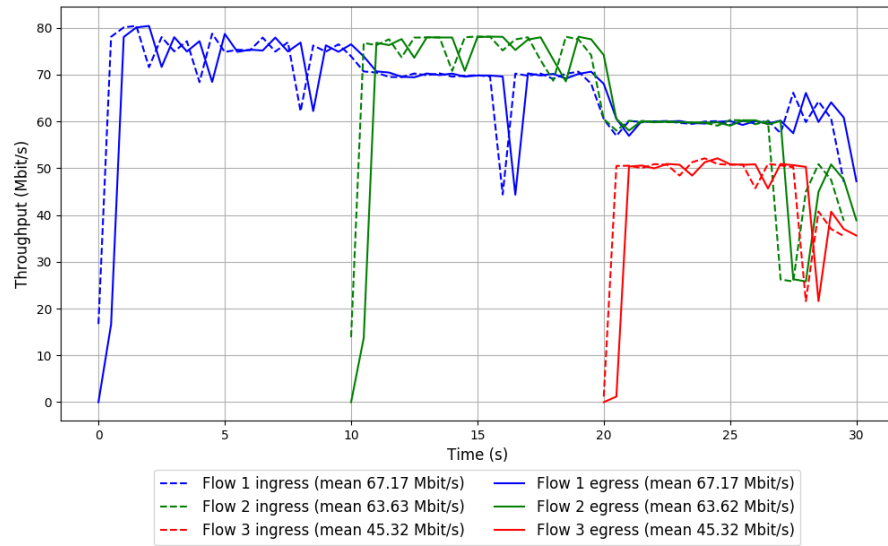
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-21 11:54:26
End at: 2019-01-21 11:54:56
Local clock offset: 3.372 ms
Remote clock offset: 4.866 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.38 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.17 Mbit/s
95th percentile per-packet one-way delay: 1.170 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.62 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.32 Mbit/s
95th percentile per-packet one-way delay: 1.201 ms
Loss rate: 0.00%
```
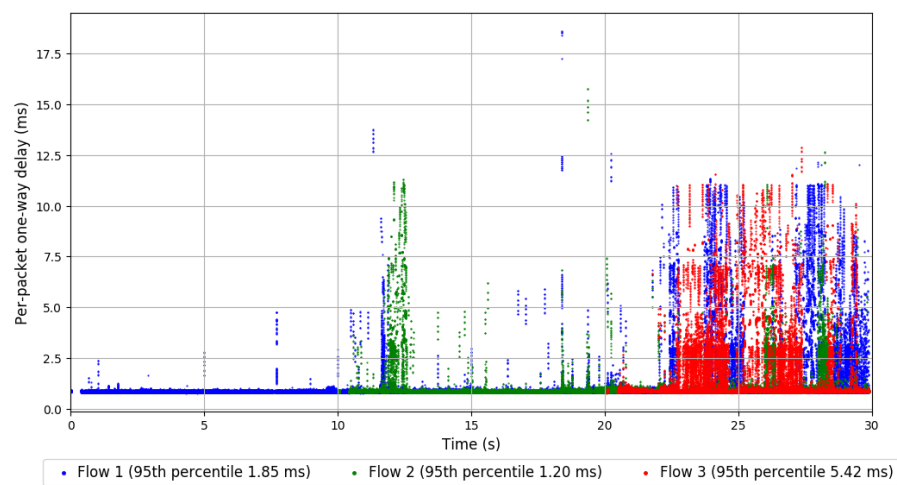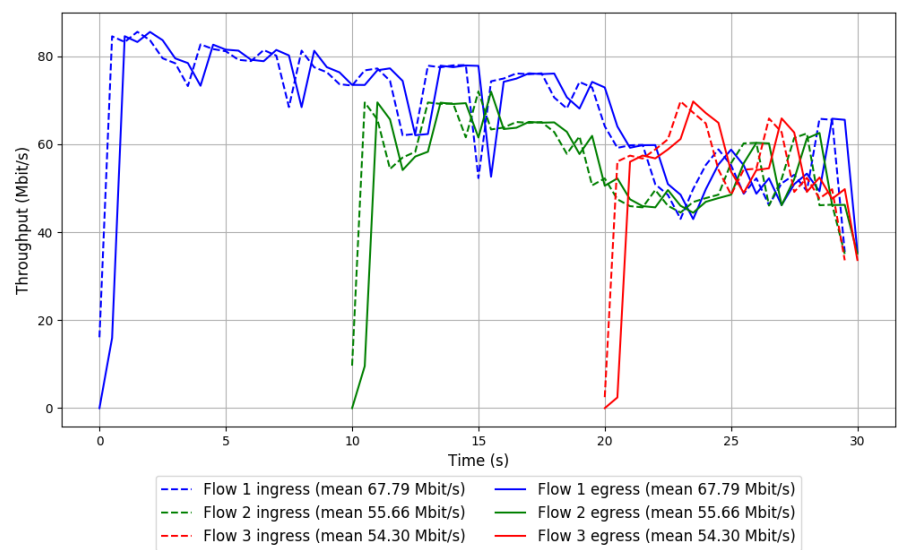
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-21 12:24:42
End at: 2019-01-21 12:25:12
Local clock offset: 3.111 ms
Remote clock offset: 0.425 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.64 Mbit/s
95th percentile per-packet one-way delay: 2.619 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.79 Mbit/s
95th percentile per-packet one-way delay: 1.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 1.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.30 Mbit/s
95th percentile per-packet one-way delay: 5.422 ms
Loss rate: 0.00%
```
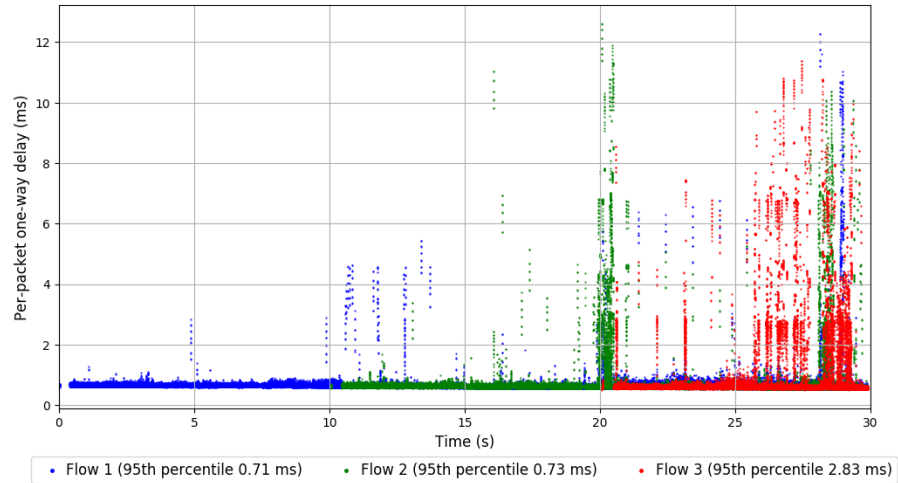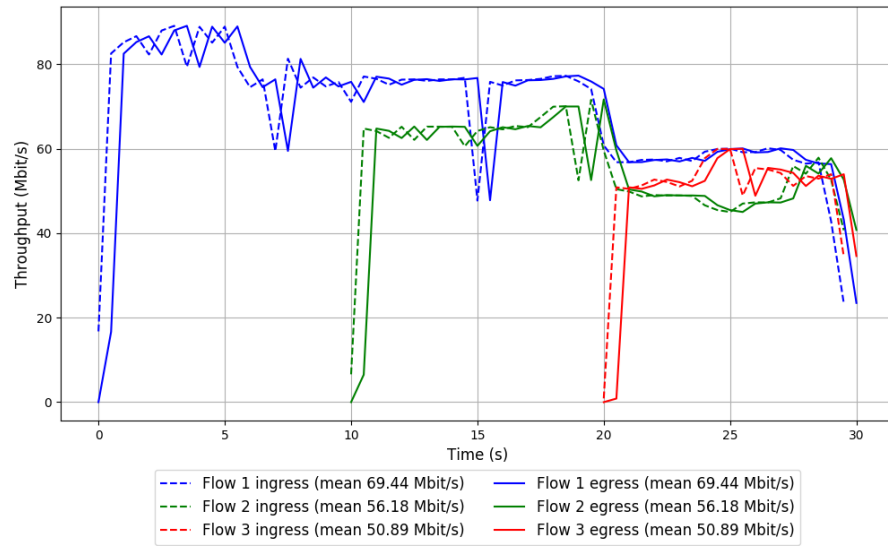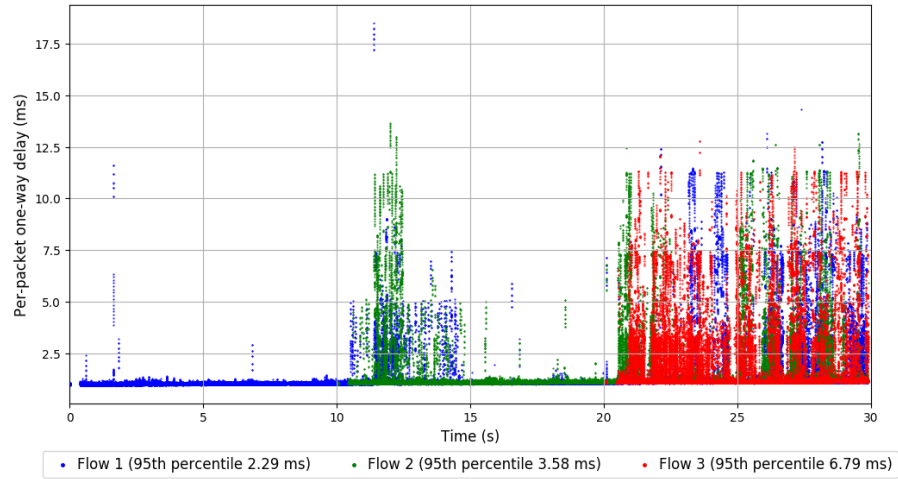
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-21 12:54:54
End at: 2019-01-21 12:55:24
Local clock offset: 1.286 ms
Remote clock offset: 0.04 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.46 Mbit/s
95th percentile per-packet one-way delay: 0.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.44 Mbit/s
95th percentile per-packet one-way delay: 0.708 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 0.726 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.89 Mbit/s
95th percentile per-packet one-way delay: 2.834 ms
Loss rate: 0.00%
```
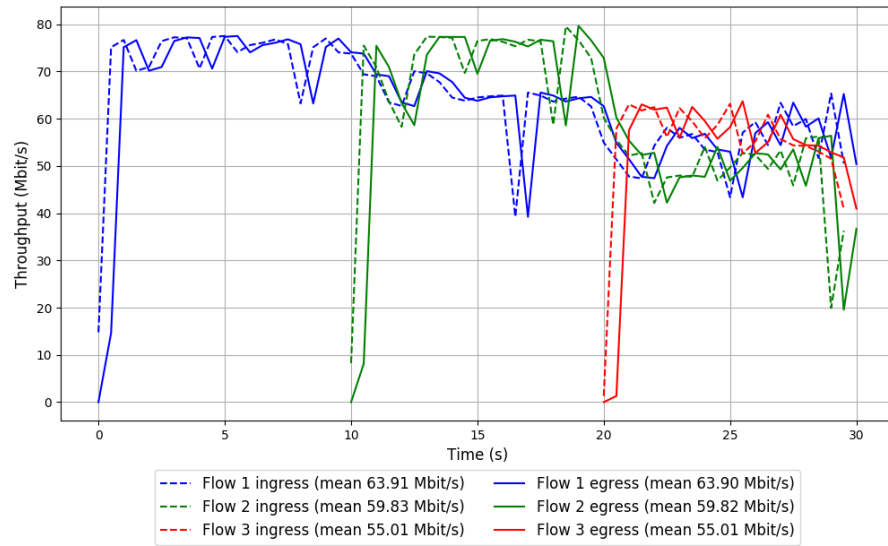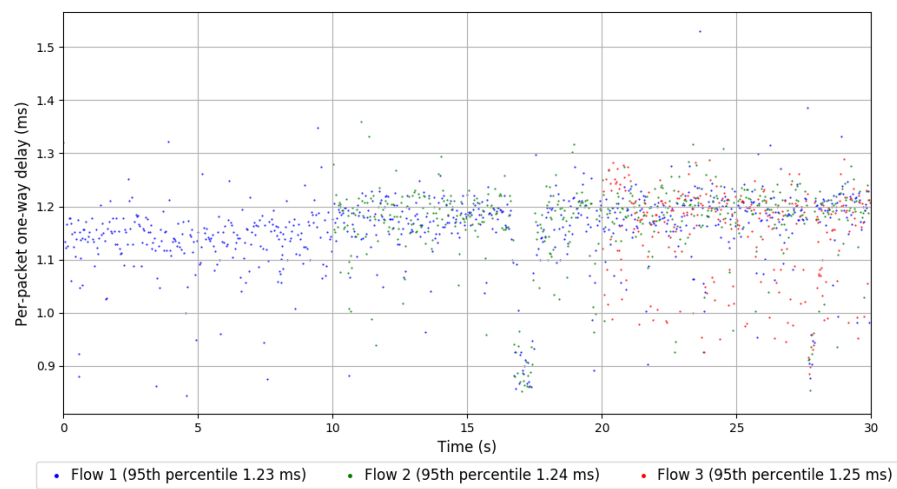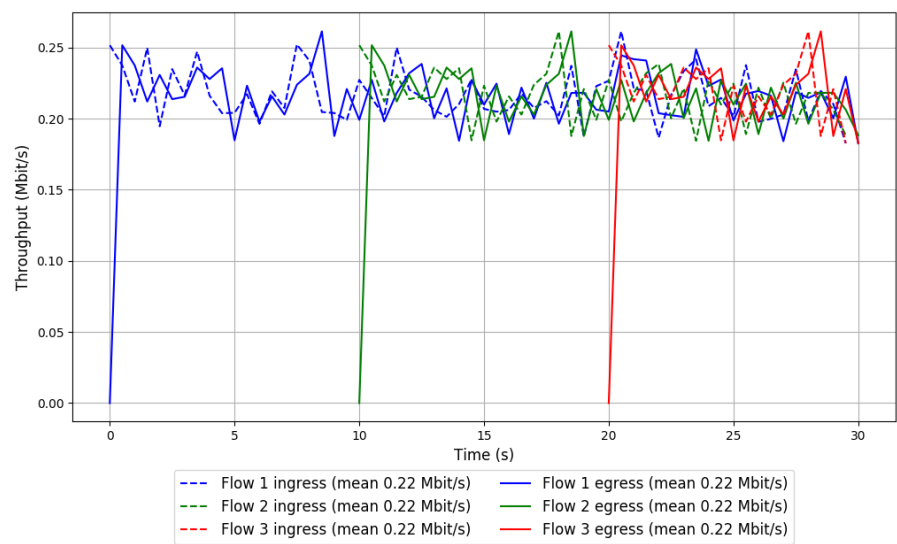
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.44 Mbit/s) — Flow 1 egress (mean 69.44 Mbit/s)
Flow 2 ingress (mean 56.18 Mbit/s) — Flow 2 egress (mean 56.18 Mbit/s)
Flow 3 ingress (mean 50.89 Mbit/s) — Flow 3 egress (mean 50.89 Mbit/s)

Flow 1 (95th percentile 0.71 ms)   Flow 2 (95th percentile 0.73 ms)   Flow 3 (95th percentile 2.83 ms)

142

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-21 13:25:12
End at: 2019-01-21 13:25:42
Local clock offset: 1.05 ms
Remote clock offset: -3.522 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 121.69 Mbit/s
95th percentile per-packet one-way delay: 3.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.90 Mbit/s
95th percentile per-packet one-way delay: 2.285 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 59.82 Mbit/s
95th percentile per-packet one-way delay: 3.581 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.01 Mbit/s
95th percentile per-packet one-way delay: 6.792 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-01-21 11:05:07
End at: 2019-01-21 11:05:37
Local clock offset: 3.073 ms
Remote clock offset: 0.315 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.241 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.231 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.255 ms
Loss rate: 0.00%
```
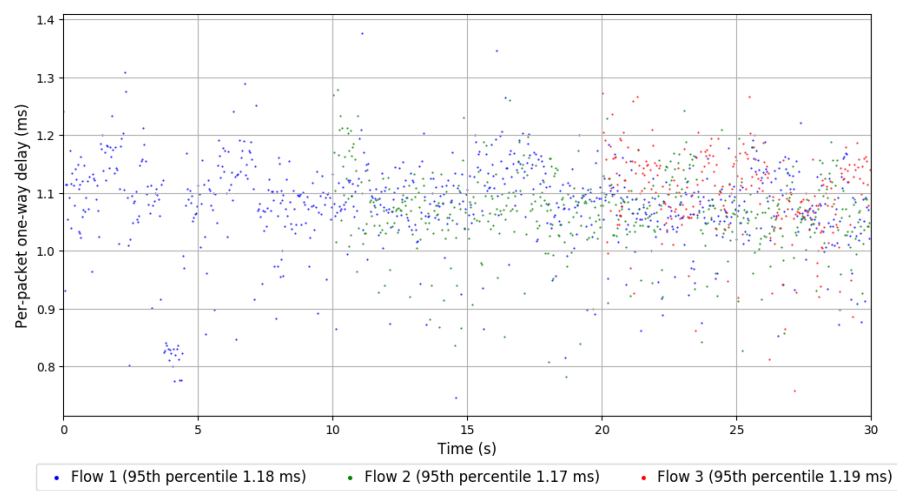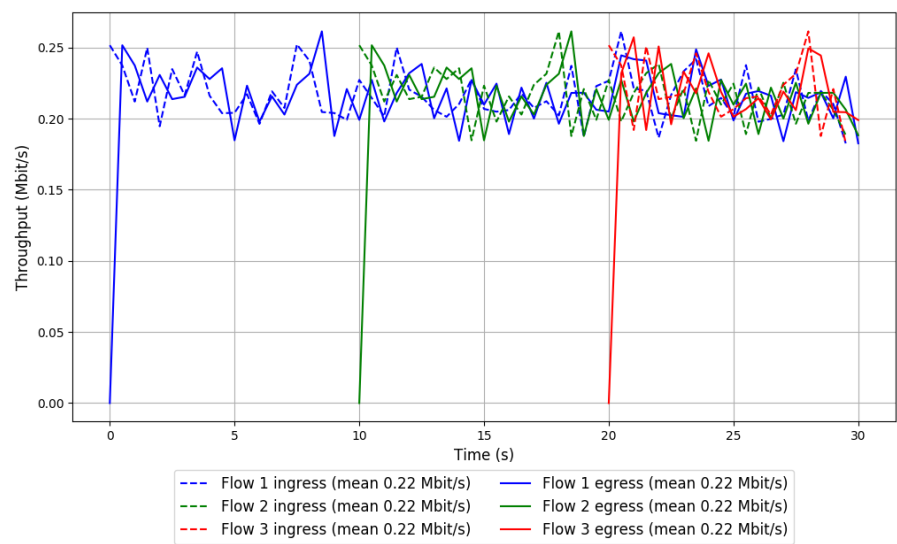
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-01-21 11:35:20
End at: 2019-01-21 11:35:50
Local clock offset: 3.54 ms
Remote clock offset: 3.972 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.173 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.194 ms
Loss rate: 0.00%
```
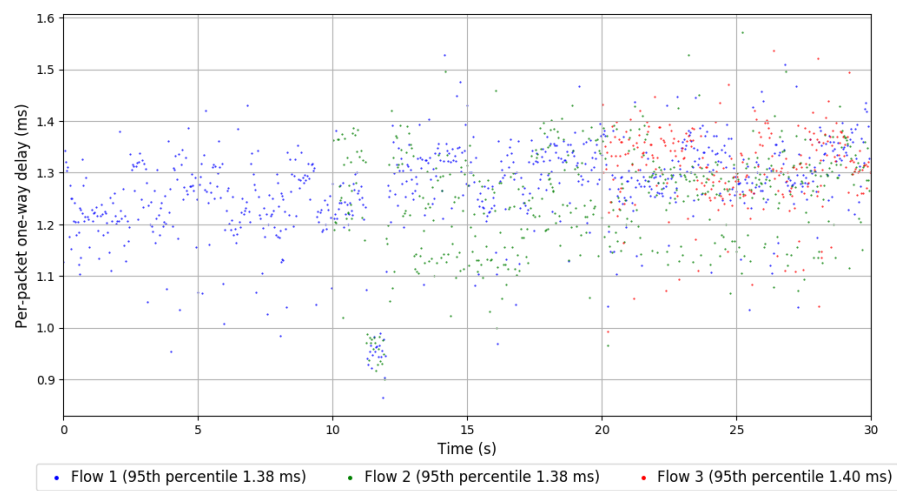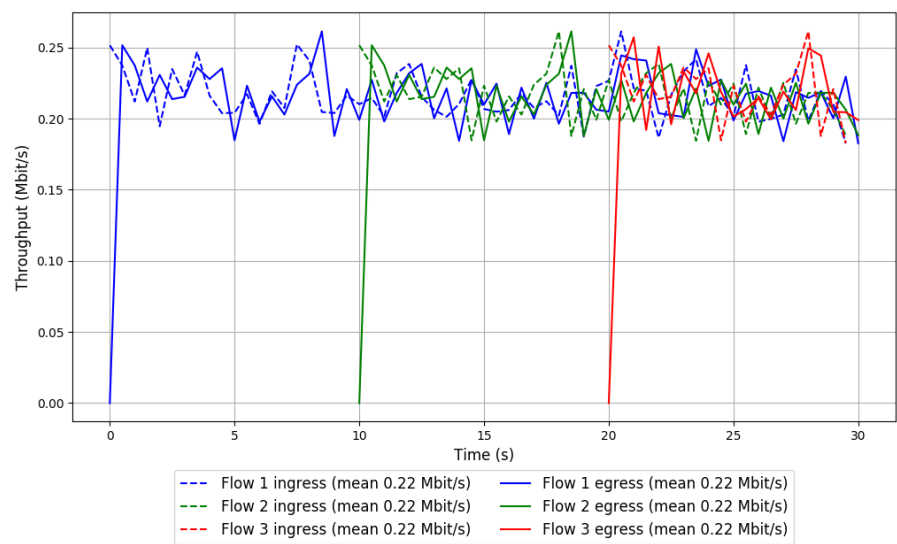
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-21 12:05:42
End at: 2019-01-21 12:06:12
Local clock offset: 3.176 ms
Remote clock offset: 1.581 ms

# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.381 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.403 ms
Loss rate: 0.00%
```
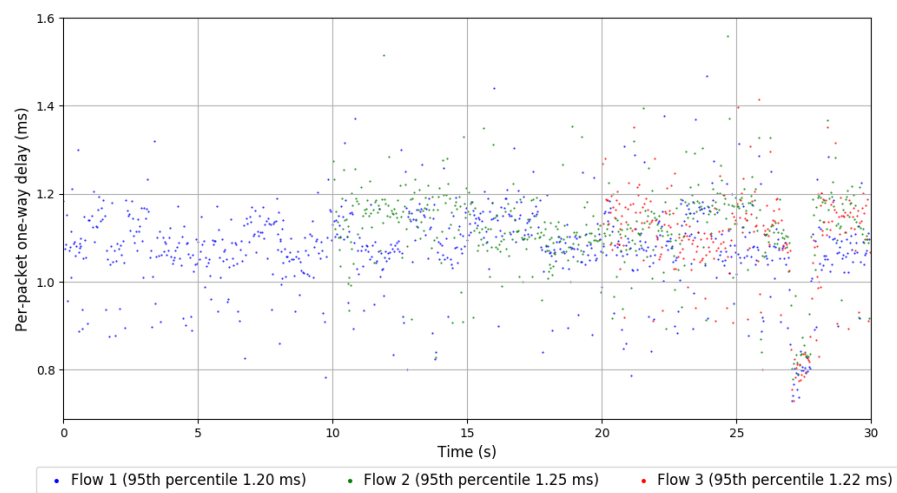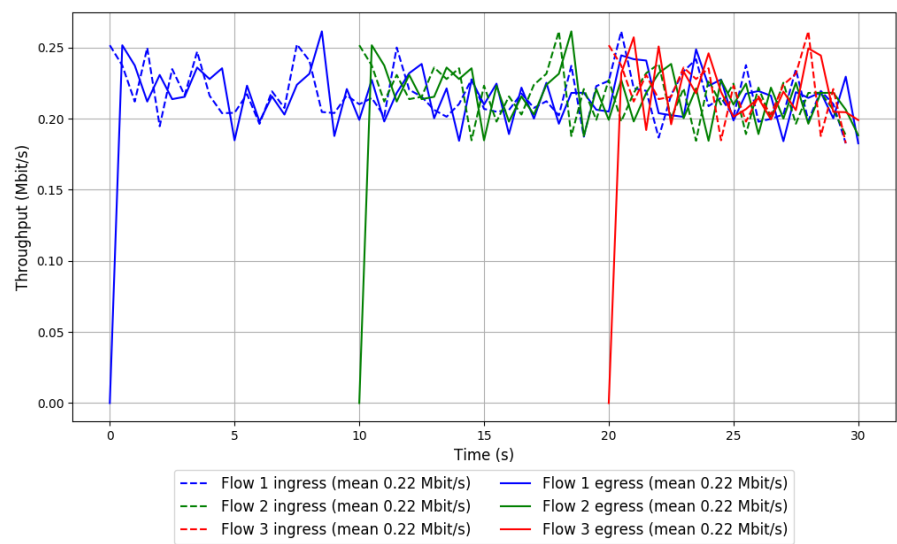
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-21 12:35:56
End at: 2019-01-21 12:36:26
Local clock offset: 3.068 ms
Remote clock offset: 0.158 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.222 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.197 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.255 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.00%
```
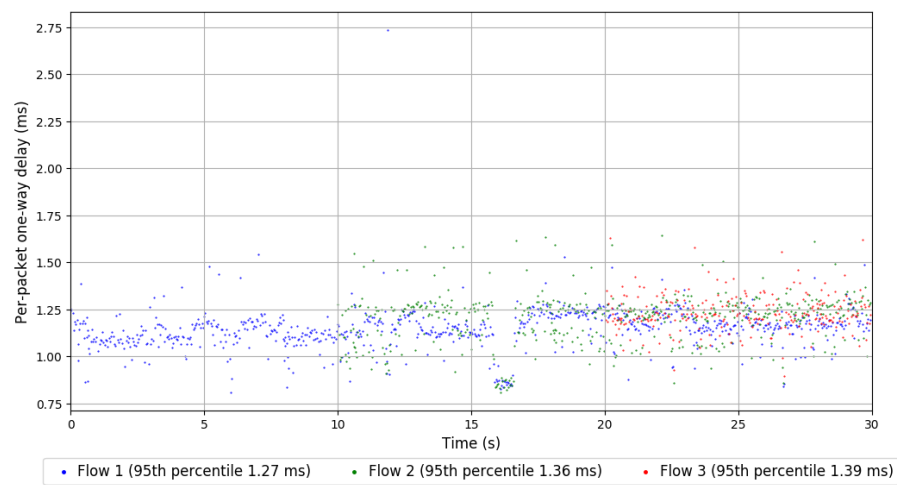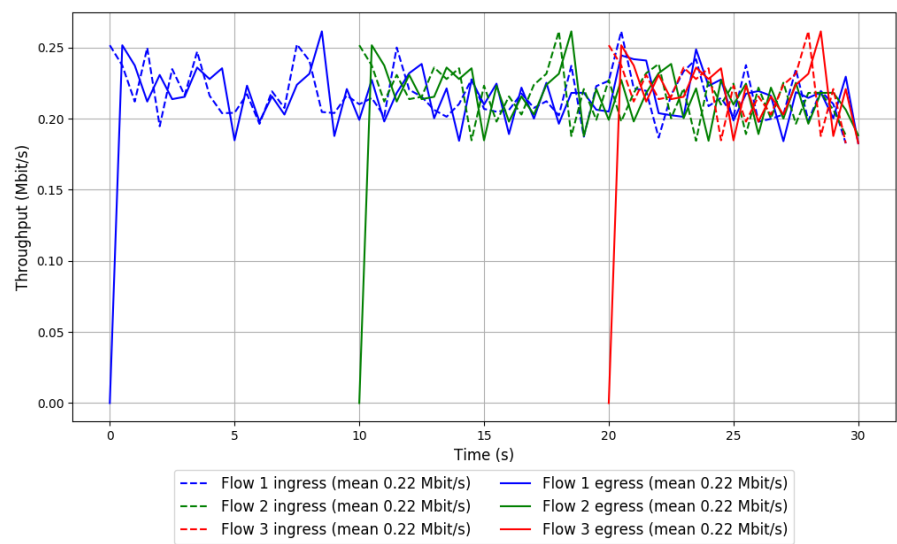
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-01-21 13:06:07
End at: 2019-01-21 13:06:37
Local clock offset: -0.278 ms
Remote clock offset: -1.366 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.390 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-21 11:09:25
End at: 2019-01-21 11:09:55
Local clock offset: 3.448 ms
Remote clock offset: 0.433 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.69 Mbit/s
95th percentile per-packet one-way delay: 4.547 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 4.547 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 49.85 Mbit/s
95th percentile per-packet one-way delay: 4.689 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 49.62 Mbit/s
95th percentile per-packet one-way delay: 4.162 ms
Loss rate: 0.24%
```
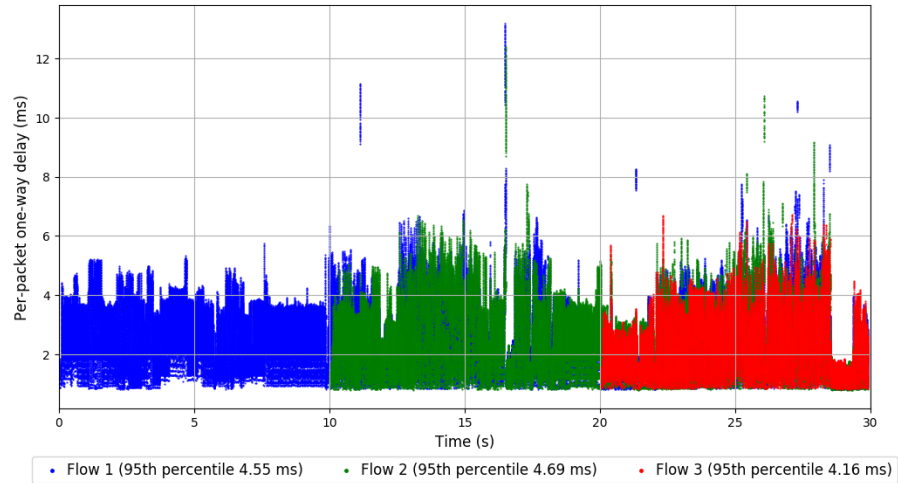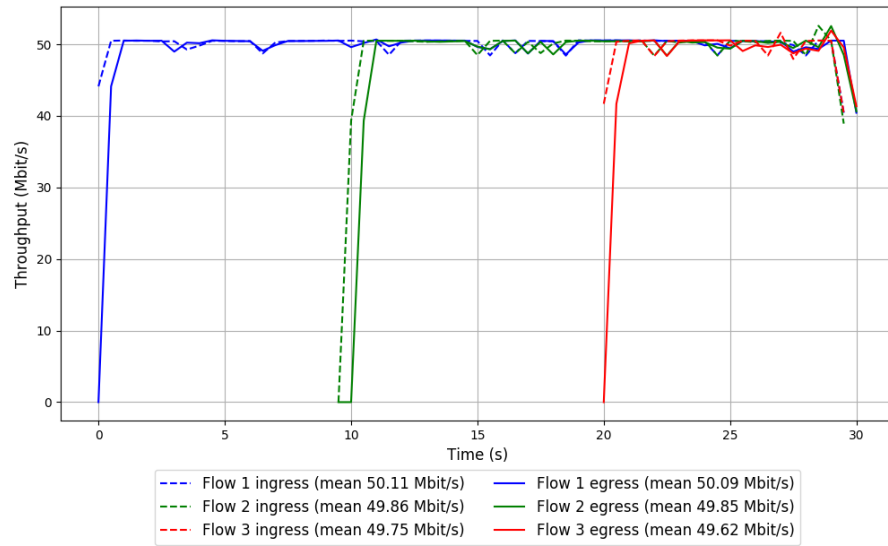
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-21 11:39:45
End at: 2019-01-21 11:40:15
Local clock offset: 3.563 ms
Remote clock offset: 4.482 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.43 Mbit/s
95th percentile per-packet one-way delay: 4.743 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 49.97 Mbit/s
95th percentile per-packet one-way delay: 4.647 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 4.829 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 49.42 Mbit/s
95th percentile per-packet one-way delay: 4.839 ms
Loss rate: 0.04%
```
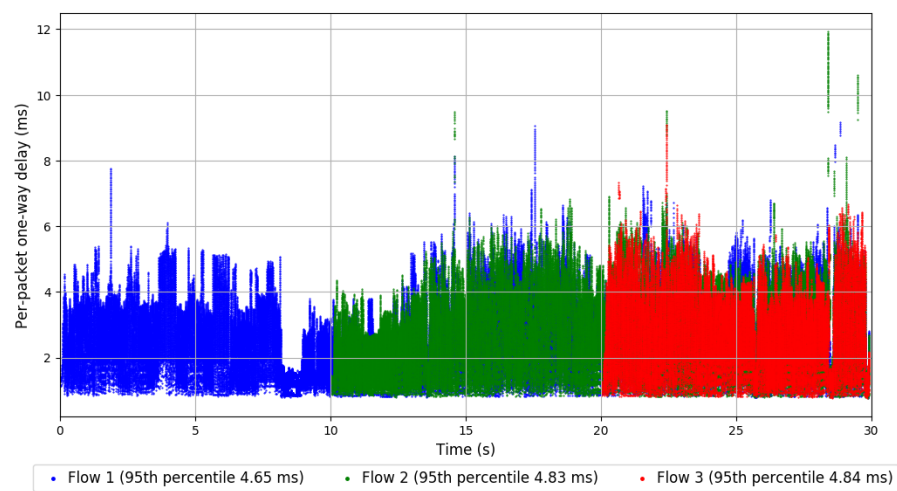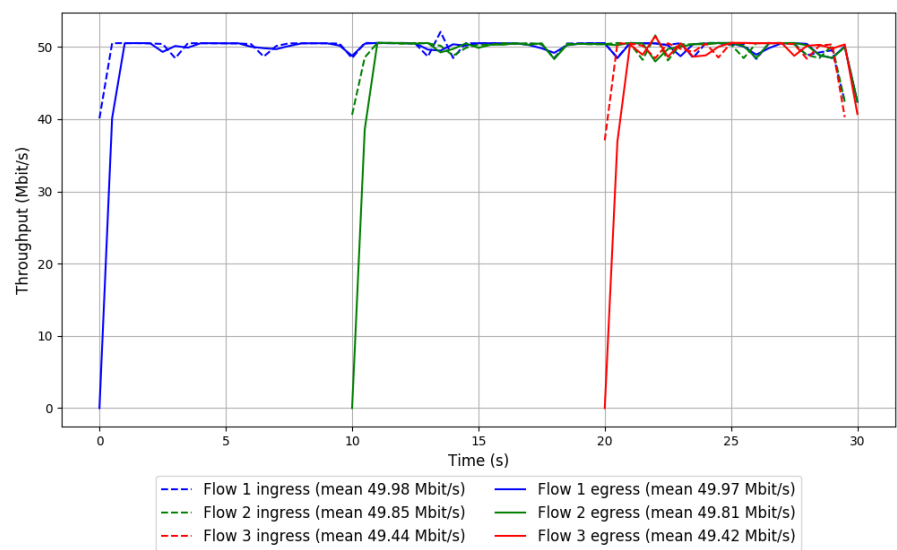
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-01-21 12:10:00
End at: 2019-01-21 12:10:30
Local clock offset: 3.156 ms
Remote clock offset: 0.994 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.63 Mbit/s
95th percentile per-packet one-way delay: 4.643 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.02 Mbit/s
95th percentile per-packet one-way delay: 4.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.91 Mbit/s
95th percentile per-packet one-way delay: 4.534 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 49.64 Mbit/s
95th percentile per-packet one-way delay: 3.978 ms
Loss rate: 0.04%
```
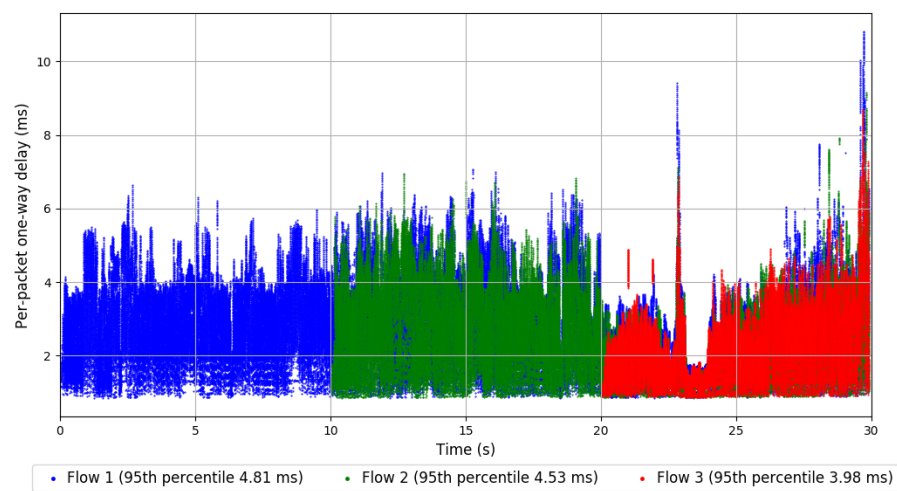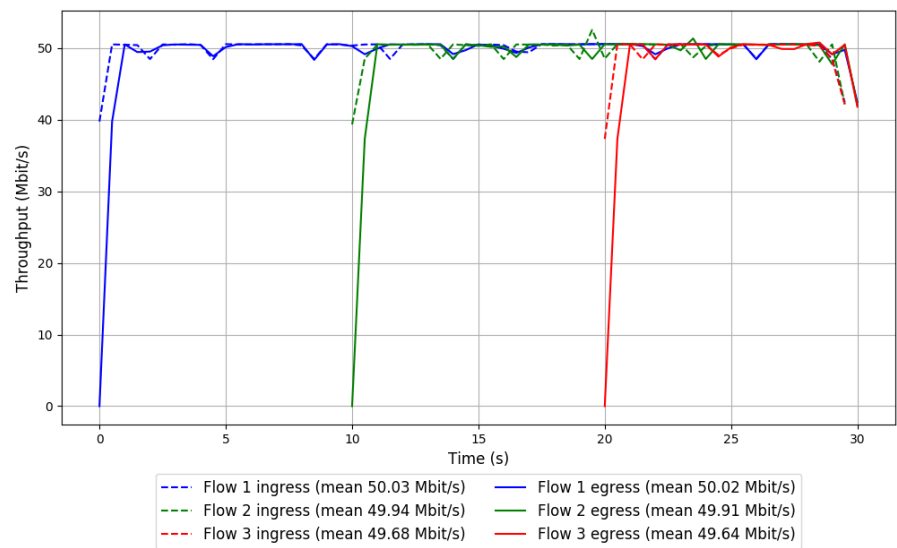
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-01-21 12:40:19
End at: 2019-01-21 12:40:49
Local clock offset: 3.103 ms
Remote clock offset: 0.232 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.55 Mbit/s
95th percentile per-packet one-way delay: 4.750 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 4.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.85 Mbit/s
95th percentile per-packet one-way delay: 4.877 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 4.356 ms
Loss rate: 0.02%
```
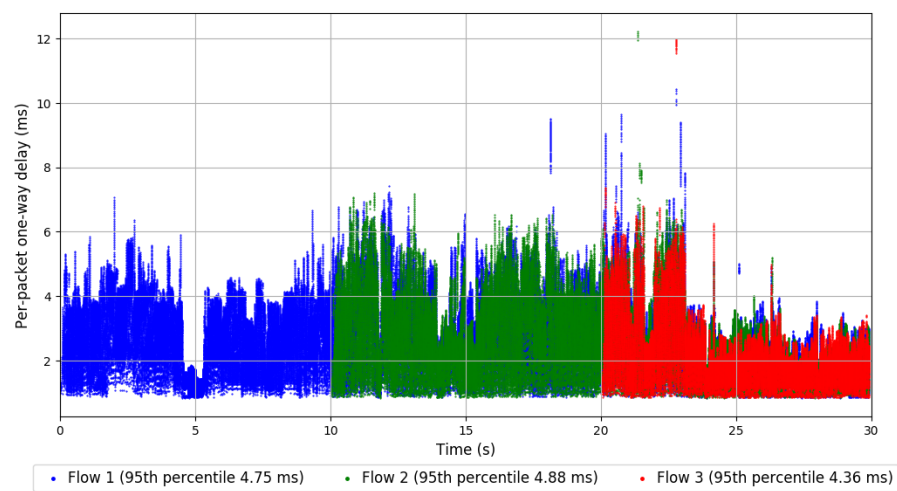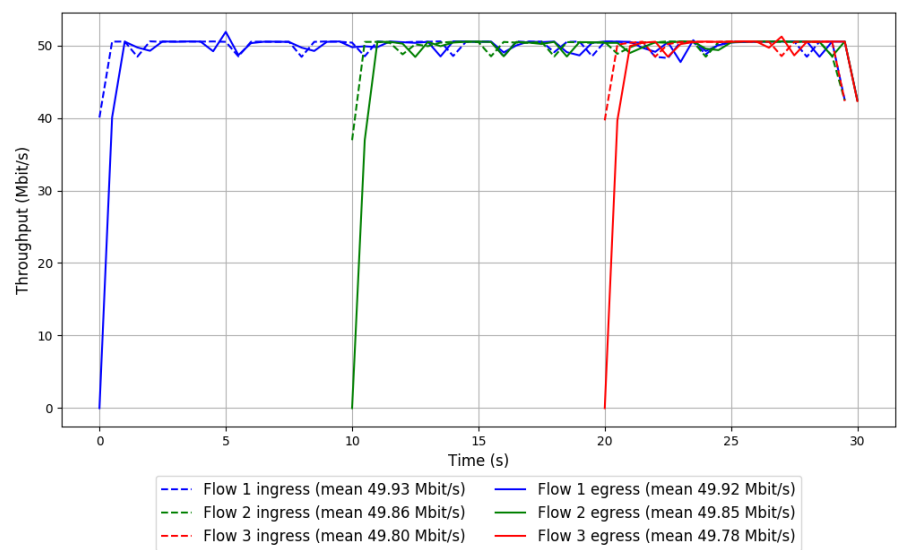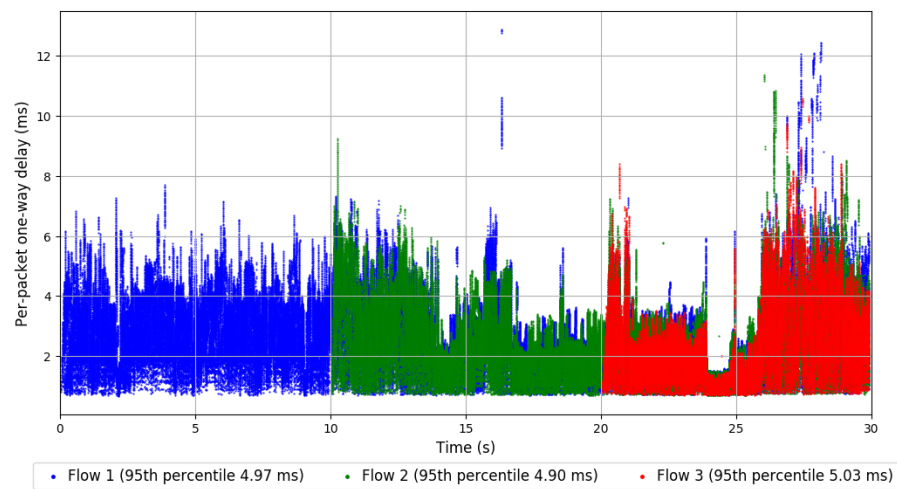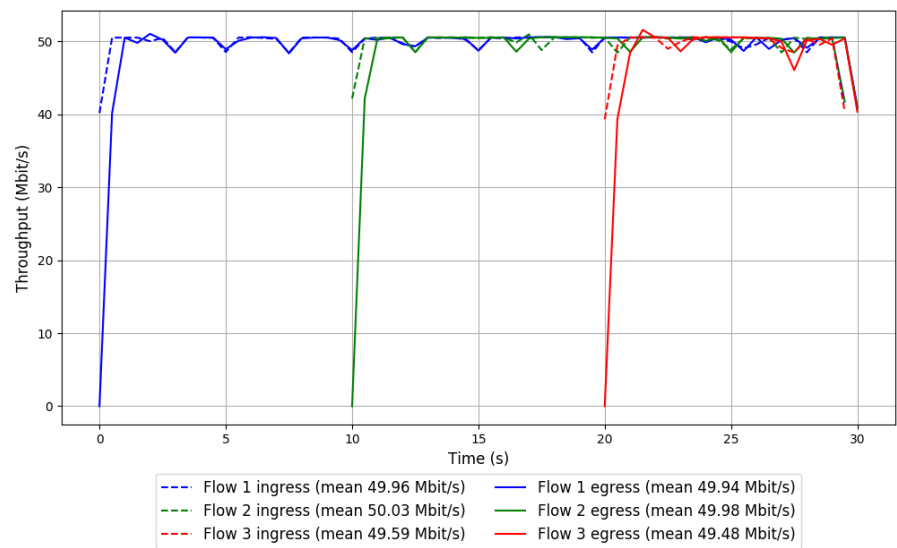
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-01-21 13:10:29
End at: 2019-01-21 13:10:59
Local clock offset: -0.589 ms
Remote clock offset: -2.297 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.55 Mbit/s
95th percentile per-packet one-way delay: 4.956 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 4.966 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 49.98 Mbit/s
95th percentile per-packet one-way delay: 4.904 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 49.48 Mbit/s
95th percentile per-packet one-way delay: 5.032 ms
Loss rate: 0.18%
```
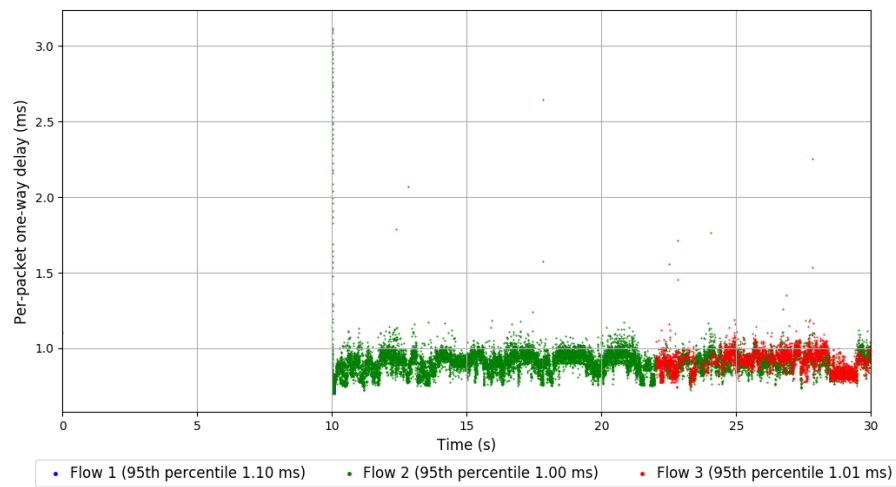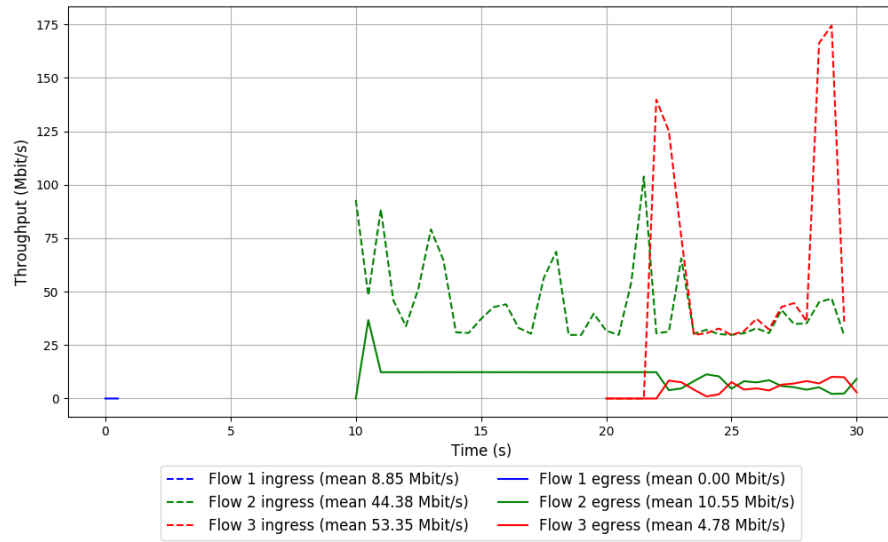
Run 5: Report of Sprout — Data Link

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

Start at: 2019-01-21 11:12:23
End at: 2019-01-21 11:12:53
Local clock offset: 3.657 ms
Remote clock offset: 0.438 ms

# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 1.005 ms
Loss rate: 81.78%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.102 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.55 Mbit/s
95th percentile per-packet one-way delay: 1.002 ms
Loss rate: 76.23%
-- Flow 3:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 1.015 ms
Loss rate: 91.04%
```

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

166

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

Start at: 2019-01-21 11:42:45
End at: 2019-01-21 11:43:15
Local clock offset: 3.584 ms
Remote clock offset: 4.647 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 1.111 ms
Loss rate: 44.83%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 6.31 Mbit/s
95th percentile per-packet one-way delay: 1.124 ms
Loss rate: 56.00%
-- Flow 3:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.00%
```
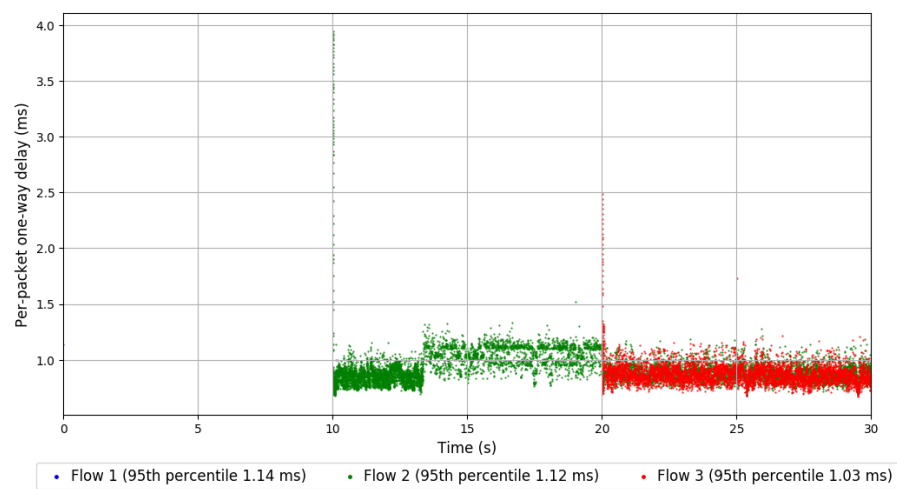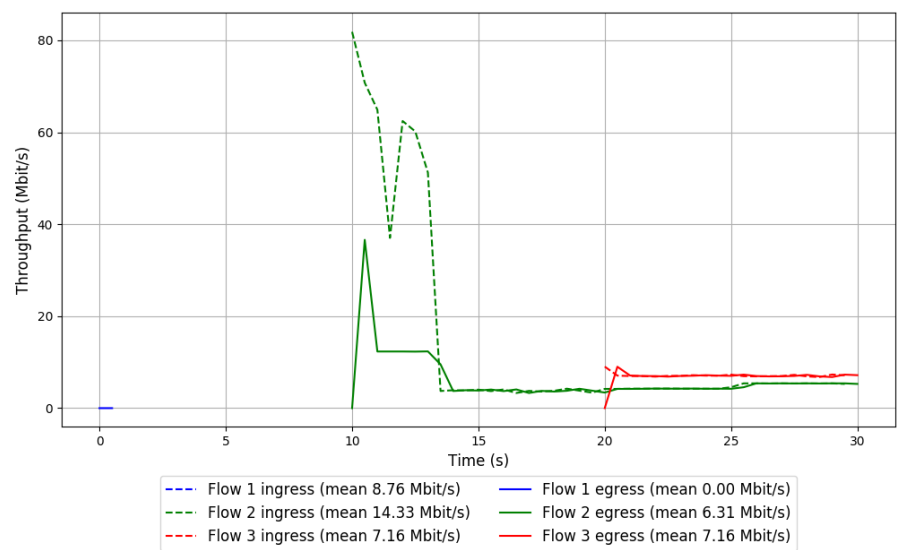
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-21 12:12:58
End at: 2019-01-21 12:13:28
Local clock offset: 3.174 ms
Remote clock offset: 0.78 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 1.193 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.143 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 1.211 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 1.129 ms
Loss rate: 0.24%
```

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

Flow 1 ingress (mean 9.34 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 6.77 Mbit/s)   Flow 2 egress (mean 6.70 Mbit/s)
Flow 3 ingress (mean 6.63 Mbit/s)   Flow 3 egress (mean 6.61 Mbit/s)

Flow 1 (95th percentile 1.14 ms)   Flow 2 (95th percentile 1.21 ms)   Flow 3 (95th percentile 1.13 ms)

170

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

Start at: 2019-01-21 12:43:15
End at: 2019-01-21 12:43:45
Local clock offset: 3.106 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 1.096 ms
Loss rate: 70.10%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.147 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 1.137 ms
Loss rate: 21.42%
-- Flow 3:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 80.47%
```
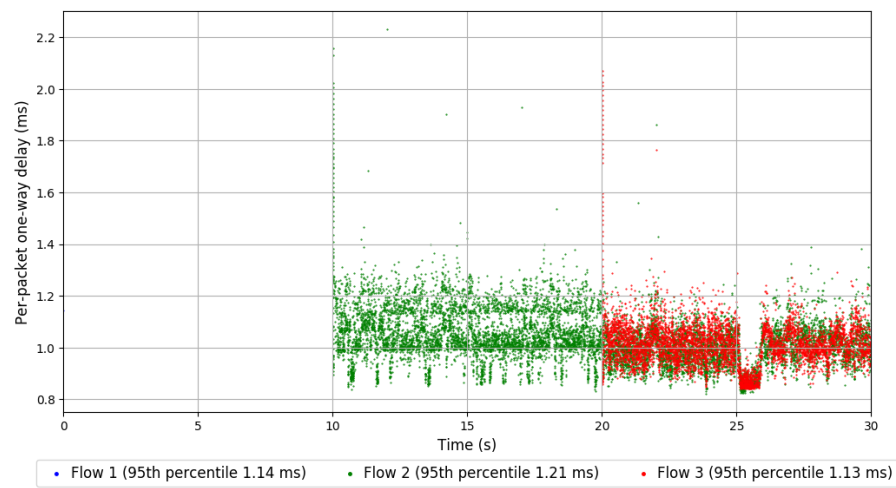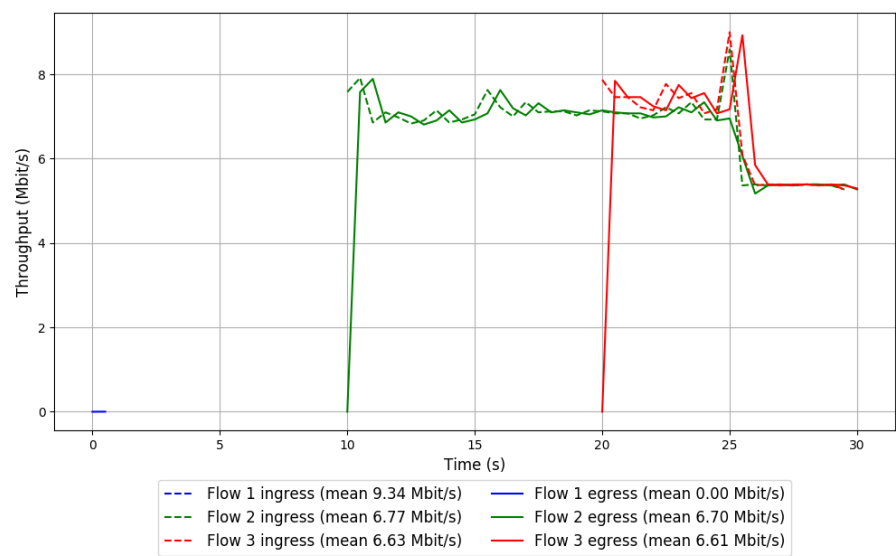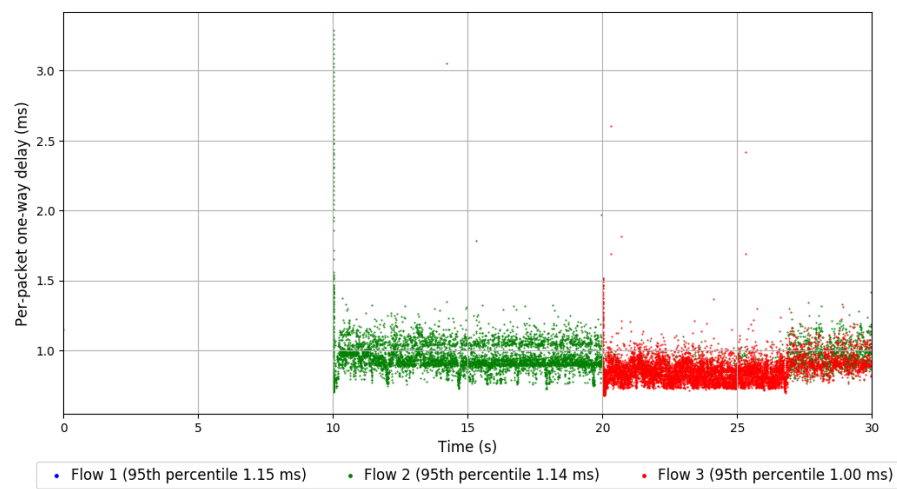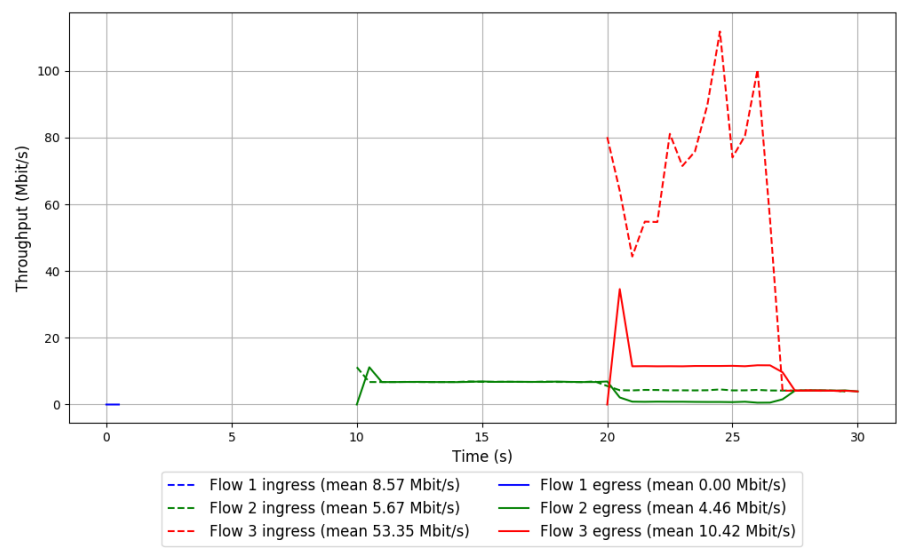
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 8.57 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 5.67 Mbit/s) --- Flow 2 egress (mean 4.46 Mbit/s)
Flow 3 ingress (mean 53.35 Mbit/s) --- Flow 3 egress (mean 10.42 Mbit/s)

Flow 1 (95th percentile 1.15 ms)   Flow 2 (95th percentile 1.14 ms)   Flow 3 (95th percentile 1.00 ms)
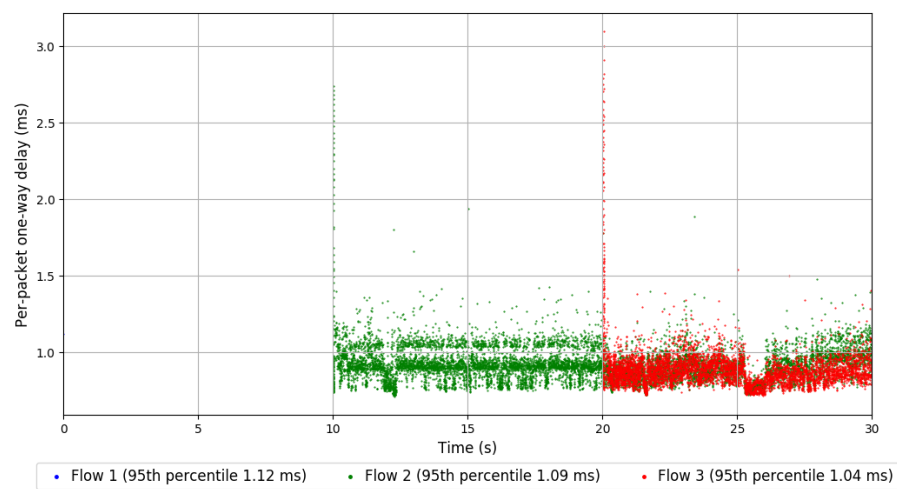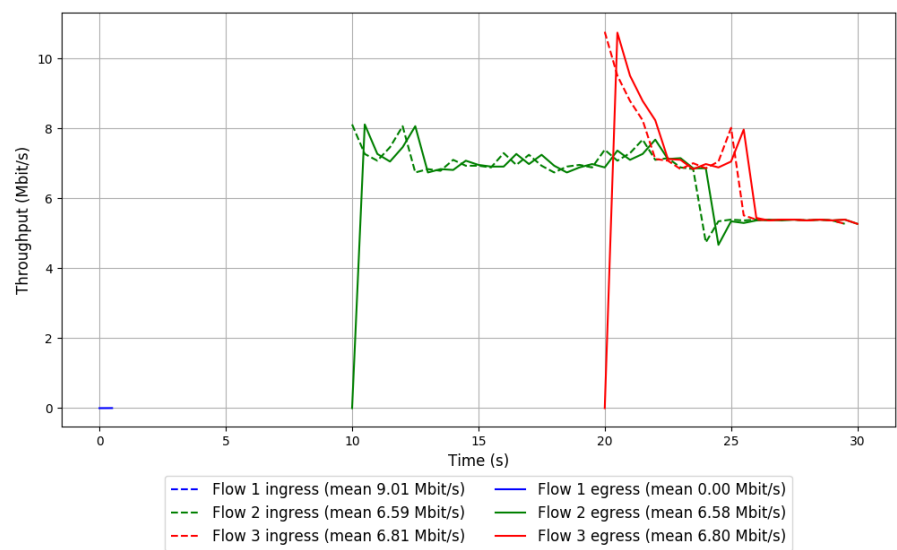
```
Run 5: Statistics of TaoVA-100x

Start at: 2019-01-21 13:13:28
End at: 2019-01-21 13:13:58
Local clock offset: -0.771 ms
Remote clock offset: -2.701 ms


# Below is generated by plot.py at 2019-01-21 14:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 1.083 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.119 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 1.090 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 0.09%
```

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

Flow 1 ingress (mean 9.01 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 6.59 Mbit/s)   Flow 2 egress (mean 6.58 Mbit/s)
Flow 3 ingress (mean 6.81 Mbit/s)   Flow 3 egress (mean 6.80 Mbit/s)

Flow 1 (95th percentile 1.12 ms)   Flow 2 (95th percentile 1.09 ms)   Flow 3 (95th percentile 1.04 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-21 11:22:33
End at: 2019-01-21 11:23:03
Local clock offset: 3.732 ms
Remote clock offset: 1.731 ms


# Below is generated by plot.py at 2019-01-21 14:25:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 582.86 Mbit/s
95th percentile per-packet one-way delay: 1.086 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 279.86 Mbit/s
95th percentile per-packet one-way delay: 1.079 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 325.45 Mbit/s
95th percentile per-packet one-way delay: 1.109 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 259.03 Mbit/s
95th percentile per-packet one-way delay: 1.054 ms
Loss rate: 0.01%
```
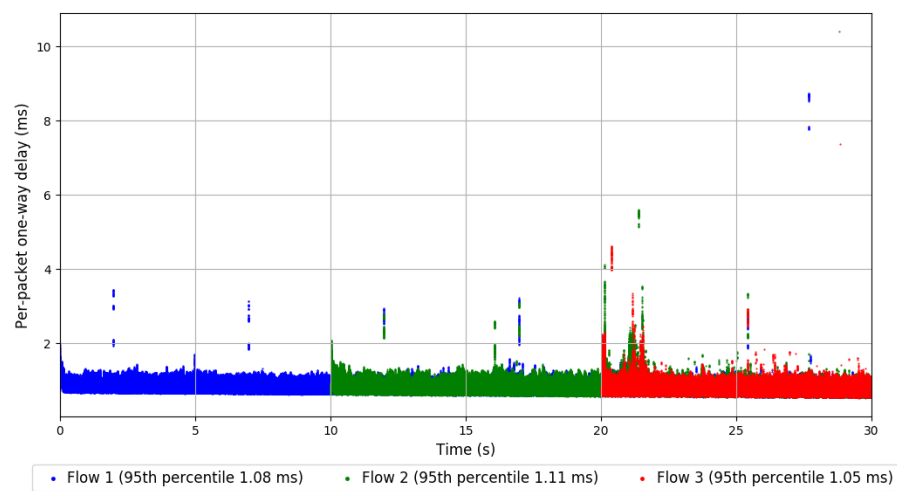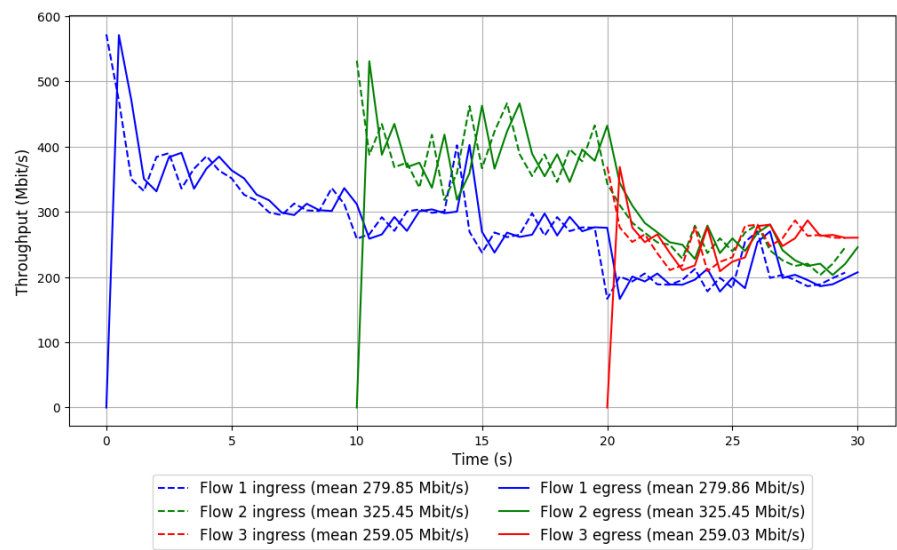
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-21 11:52:53
End at: 2019-01-21 11:53:23
Local clock offset: 3.436 ms
Remote clock offset: 5.639 ms


# Below is generated by plot.py at 2019-01-21 14:25:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 593.88 Mbit/s
95th percentile per-packet one-way delay: 1.314 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 249.50 Mbit/s
95th percentile per-packet one-way delay: 1.241 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 360.38 Mbit/s
95th percentile per-packet one-way delay: 1.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 313.76 Mbit/s
95th percentile per-packet one-way delay: 1.359 ms
Loss rate: 0.03%
```
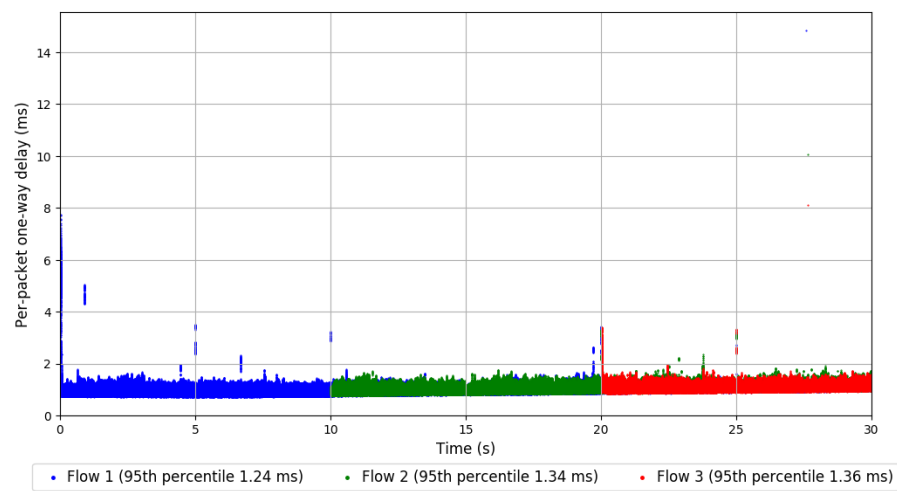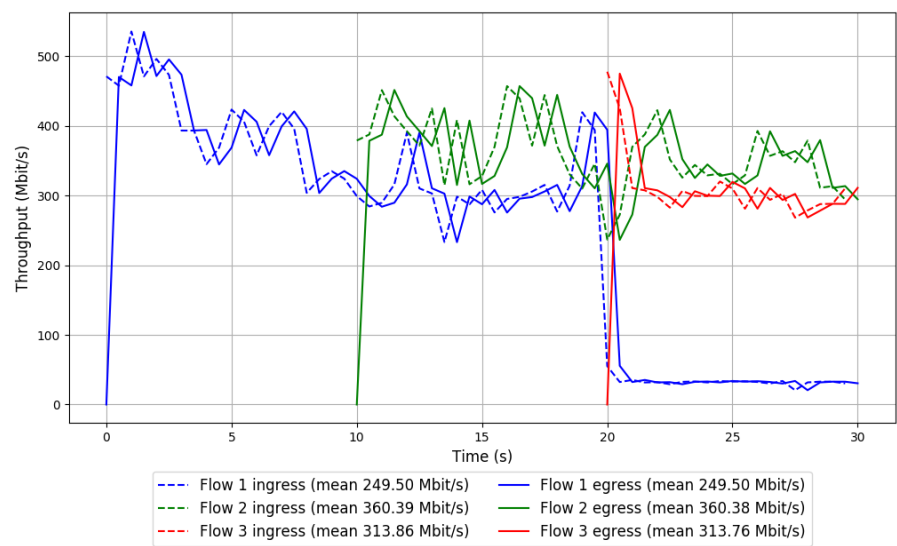
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-21 12:23:12
End at: 2019-01-21 12:23:42
Local clock offset: 3.125 ms
Remote clock offset: 0.428 ms


# Below is generated by plot.py at 2019-01-21 14:25:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.00 Mbit/s
95th percentile per-packet one-way delay: 1.263 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 145.38 Mbit/s
95th percentile per-packet one-way delay: 1.246 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 362.43 Mbit/s
95th percentile per-packet one-way delay: 1.254 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 337.35 Mbit/s
95th percentile per-packet one-way delay: 1.305 ms
Loss rate: 0.02%
```
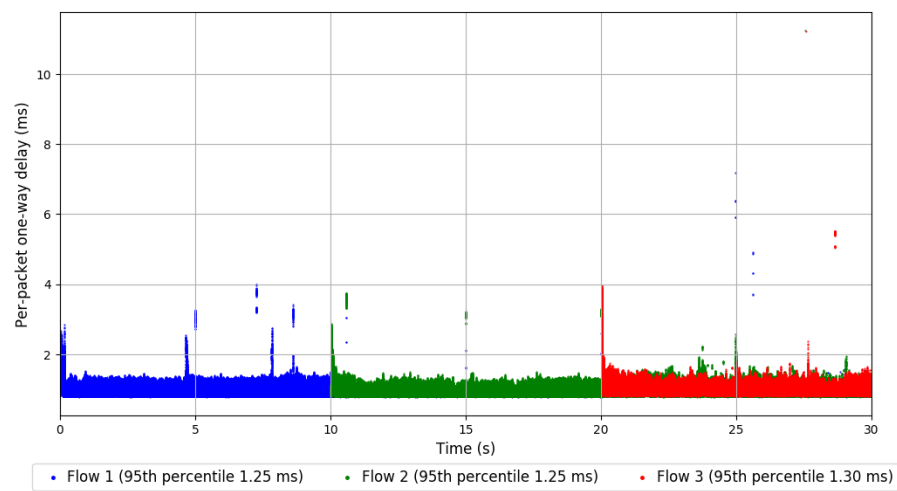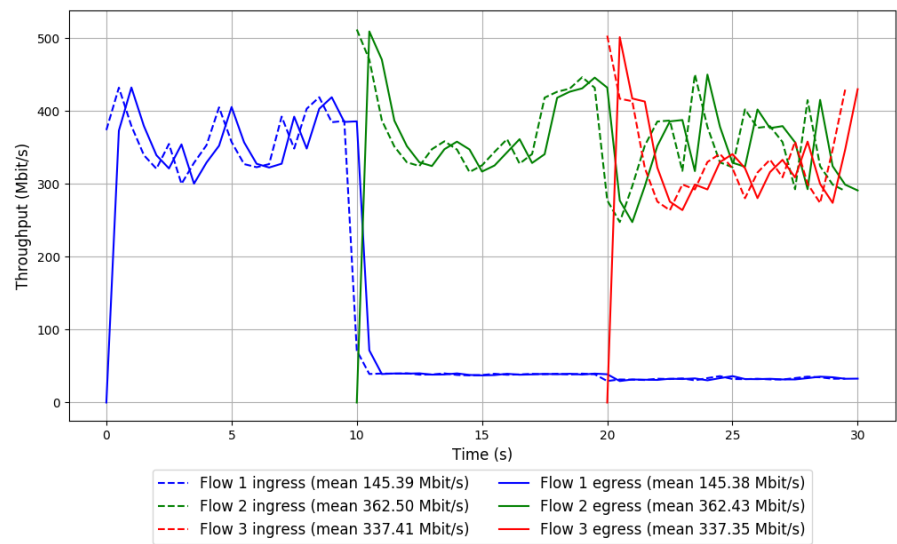
Run 3: Report of TCP Vegas — Data Link

- --- Flow 1 ingress (mean 145.39 Mbit/s) — Flow 1 egress (mean 145.38 Mbit/s)
- --- Flow 2 ingress (mean 362.50 Mbit/s) — Flow 2 egress (mean 362.43 Mbit/s)
- --- Flow 3 ingress (mean 337.41 Mbit/s) — Flow 3 egress (mean 337.35 Mbit/s)

- Flow 1 (95th percentile 1.25 ms) • Flow 2 (95th percentile 1.25 ms) • Flow 3 (95th percentile 1.30 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-21 12:53:20
End at: 2019-01-21 12:53:50
Local clock offset: 1.622 ms
Remote clock offset: 0.109 ms


# Below is generated by plot.py at 2019-01-21 14:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.91 Mbit/s
95th percentile per-packet one-way delay: 1.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 310.06 Mbit/s
95th percentile per-packet one-way delay: 1.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 316.70 Mbit/s
95th percentile per-packet one-way delay: 1.133 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 255.30 Mbit/s
95th percentile per-packet one-way delay: 1.121 ms
Loss rate: 0.00%
```
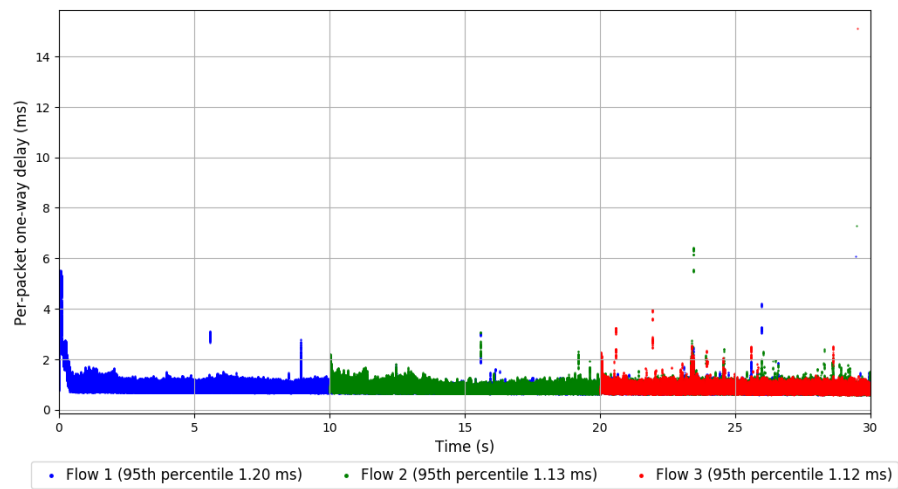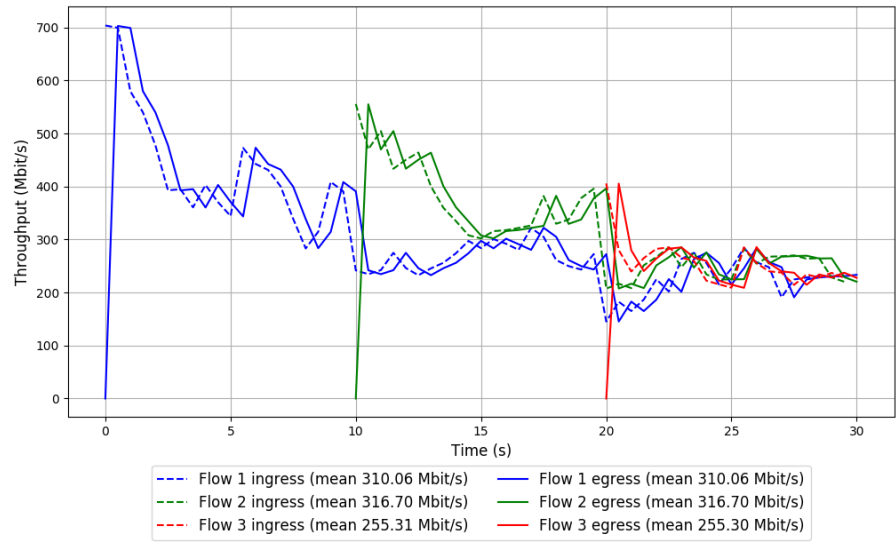
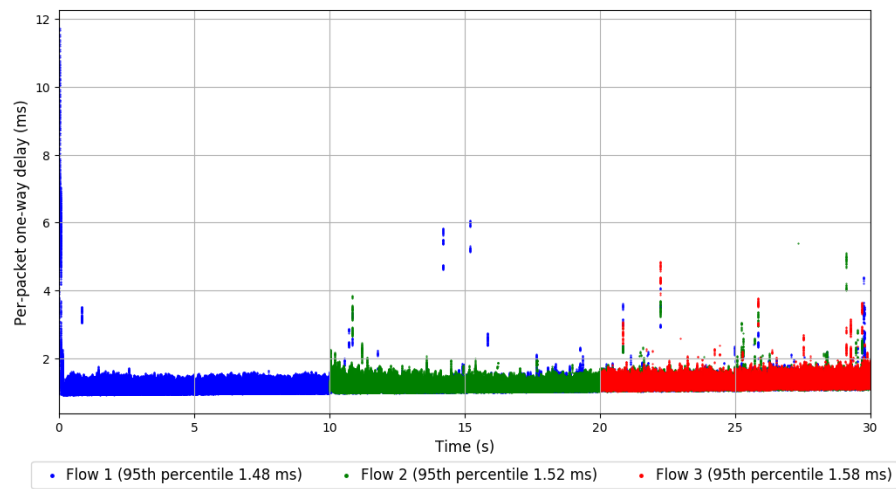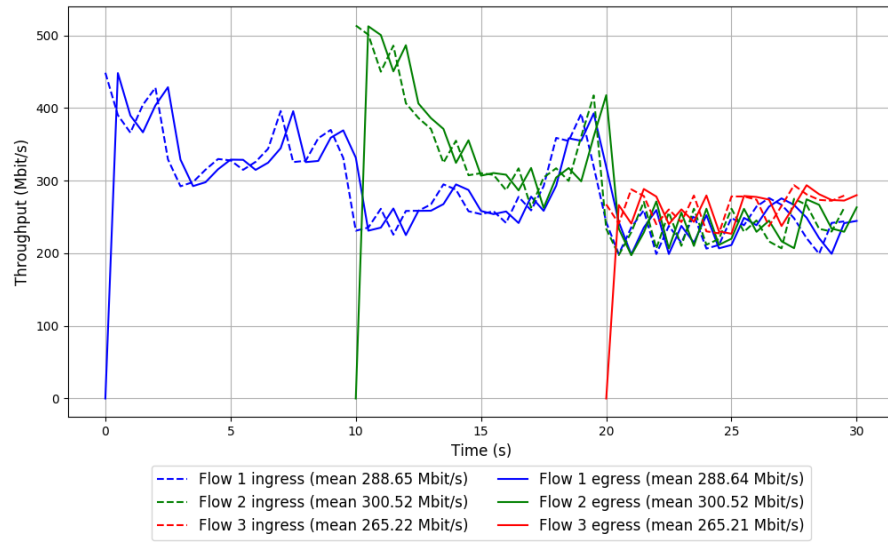Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-21 13:23:39
End at: 2019-01-21 13:24:09
Local clock offset: 0.653 ms
Remote clock offset: -3.495 ms


# Below is generated by plot.py at 2019-01-21 14:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 577.01 Mbit/s
95th percentile per-packet one-way delay: 1.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 288.64 Mbit/s
95th percentile per-packet one-way delay: 1.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.52 Mbit/s
95th percentile per-packet one-way delay: 1.519 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 265.21 Mbit/s
95th percentile per-packet one-way delay: 1.581 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

- --- Flow 1 ingress (mean 288.65 Mbit/s)   —— Flow 1 egress (mean 288.64 Mbit/s)
- --- Flow 2 ingress (mean 300.52 Mbit/s)   —— Flow 2 egress (mean 300.52 Mbit/s)
- --- Flow 3 ingress (mean 265.22 Mbit/s)   —— Flow 3 egress (mean 265.21 Mbit/s)

- Flow 1 (95th percentile 1.48 ms)   • Flow 2 (95th percentile 1.52 ms)   • Flow 3 (95th percentile 1.58 ms)

```
Run 1: Statistics of Verus

Start at: 2019-01-21 11:18:05
End at: 2019-01-21 11:18:35
Local clock offset: 3.967 ms
Remote clock offset: 0.649 ms


# Below is generated by plot.py at 2019-01-21 14:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.98 Mbit/s
95th percentile per-packet one-way delay: 15.424 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 167.72 Mbit/s
95th percentile per-packet one-way delay: 13.194 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 120.78 Mbit/s
95th percentile per-packet one-way delay: 18.249 ms
Loss rate: 5.53%
-- Flow 3:
Average throughput: 148.29 Mbit/s
95th percentile per-packet one-way delay: 15.758 ms
Loss rate: 4.57%
```
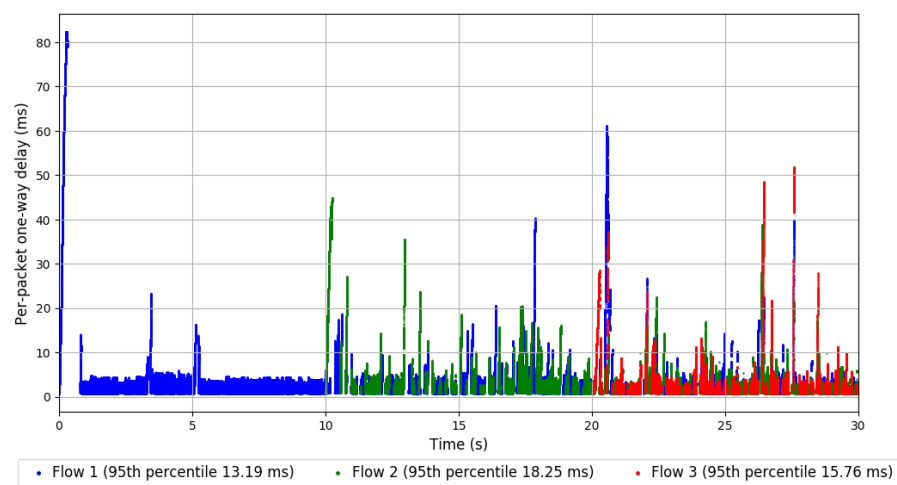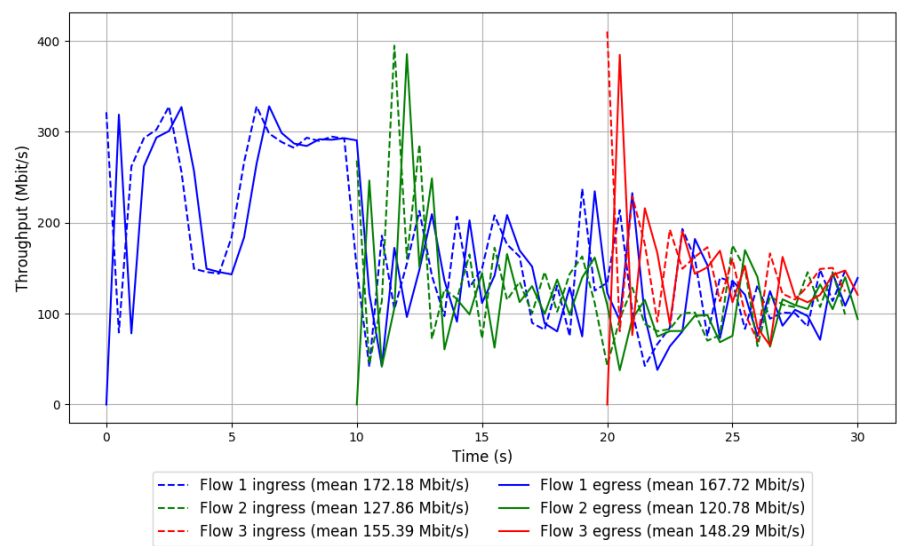
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-21 11:48:26
End at: 2019-01-21 11:48:56
Local clock offset: 3.685 ms
Remote clock offset: 5.203 ms


# Below is generated by plot.py at 2019-01-21 14:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.66 Mbit/s
95th percentile per-packet one-way delay: 15.836 ms
Loss rate: 3.18%
-- Flow 1:
Average throughput: 141.00 Mbit/s
95th percentile per-packet one-way delay: 6.872 ms
Loss rate: 2.60%
-- Flow 2:
Average throughput: 113.05 Mbit/s
95th percentile per-packet one-way delay: 26.727 ms
Loss rate: 4.22%
-- Flow 3:
Average throughput: 155.00 Mbit/s
95th percentile per-packet one-way delay: 31.247 ms
Loss rate: 3.23%
```
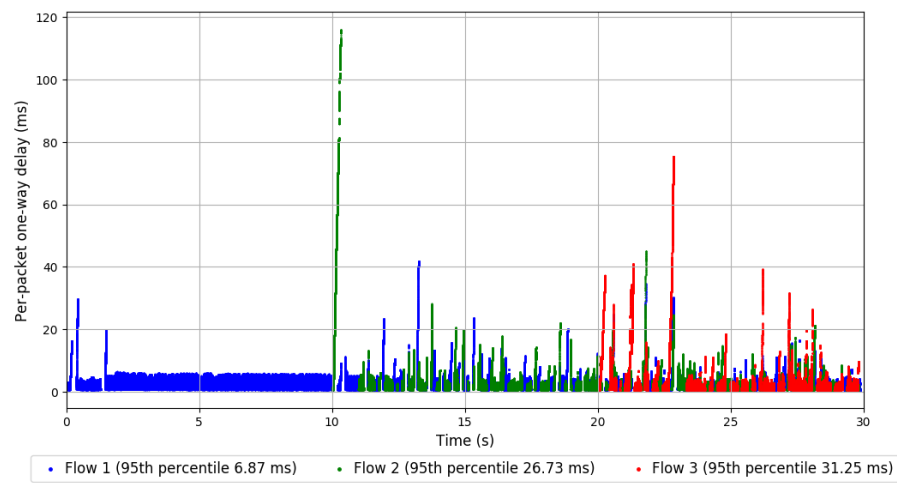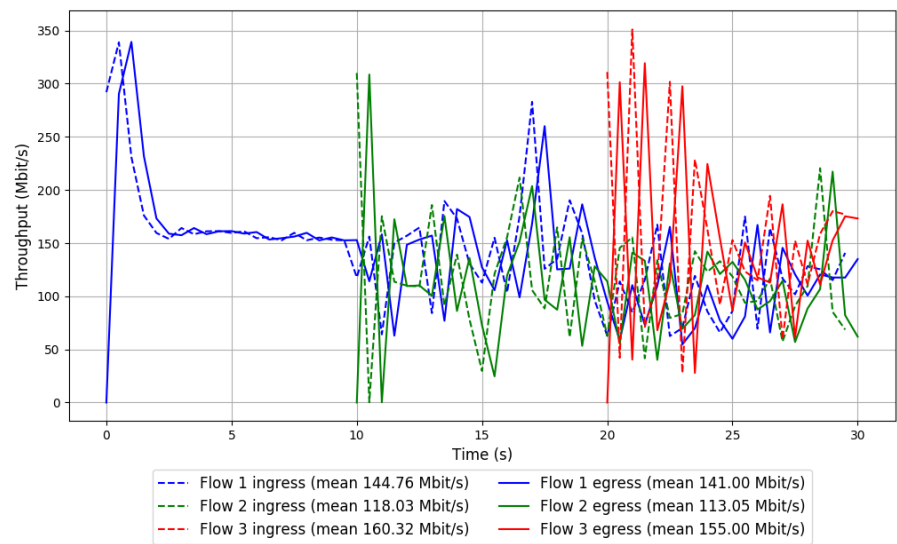
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-21 12:18:39
End at: 2019-01-21 12:19:09
Local clock offset: 3.202 ms
Remote clock offset: 0.439 ms


# Below is generated by plot.py at 2019-01-21 14:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.75 Mbit/s
95th percentile per-packet one-way delay: 17.672 ms
Loss rate: 3.41%
-- Flow 1:
Average throughput: 150.33 Mbit/s
95th percentile per-packet one-way delay: 10.610 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 99.53 Mbit/s
95th percentile per-packet one-way delay: 18.370 ms
Loss rate: 5.61%
-- Flow 3:
Average throughput: 118.43 Mbit/s
95th percentile per-packet one-way delay: 49.756 ms
Loss rate: 4.51%
```
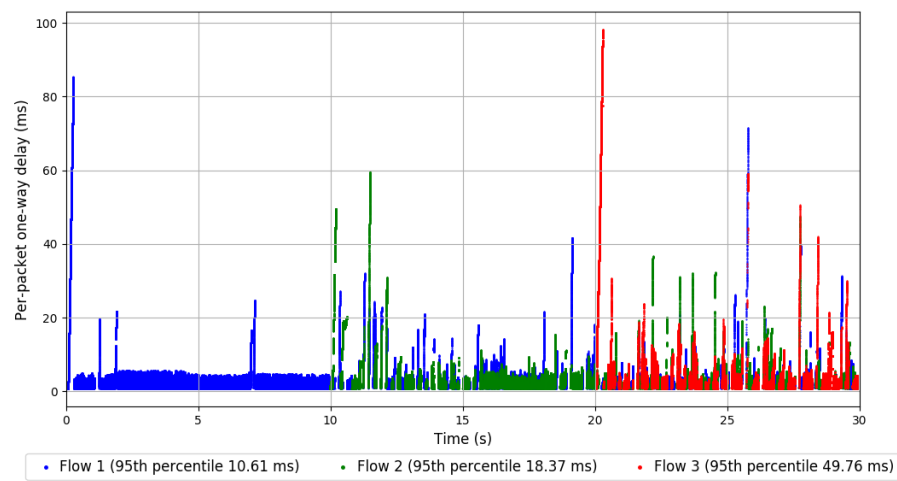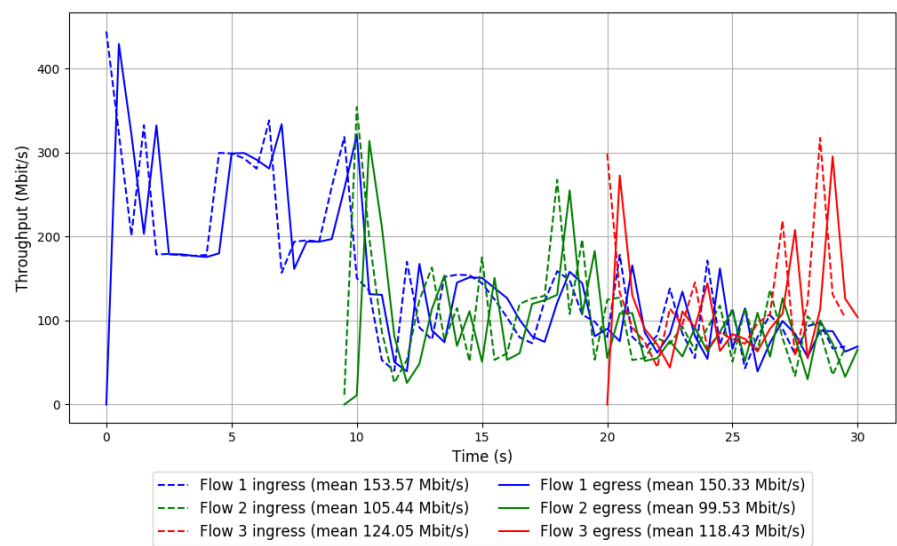
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-01-21 12:48:49
End at: 2019-01-21 12:49:19
Local clock offset: 3.113 ms
Remote clock offset: 0.115 ms


# Below is generated by plot.py at 2019-01-21 14:25:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.84 Mbit/s
95th percentile per-packet one-way delay: 8.227 ms
Loss rate: 2.85%
-- Flow 1:
Average throughput: 179.52 Mbit/s
95th percentile per-packet one-way delay: 7.741 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 132.48 Mbit/s
95th percentile per-packet one-way delay: 6.100 ms
Loss rate: 4.34%
-- Flow 3:
Average throughput: 136.23 Mbit/s
95th percentile per-packet one-way delay: 24.028 ms
Loss rate: 3.66%
```
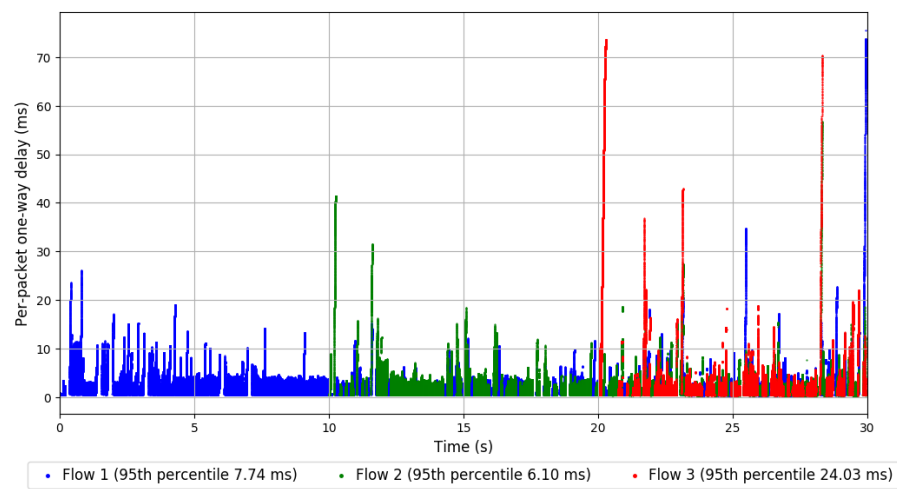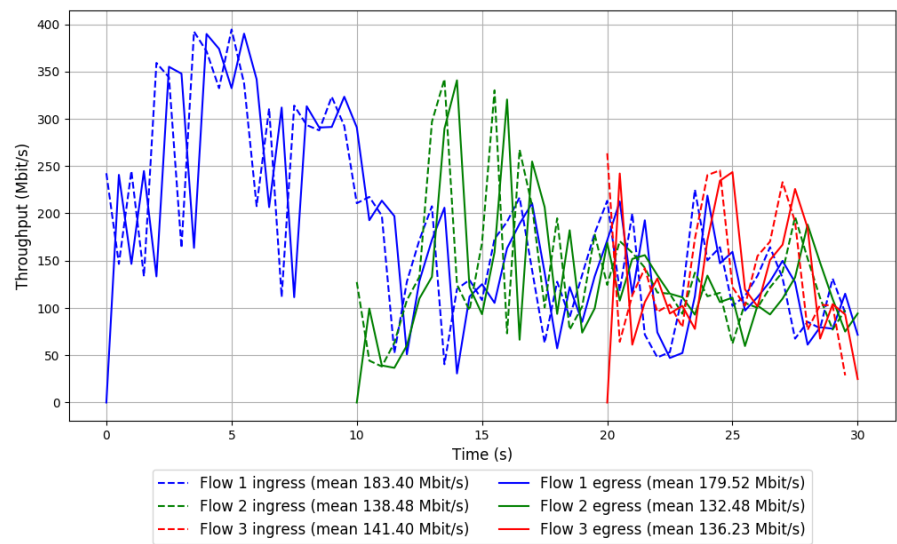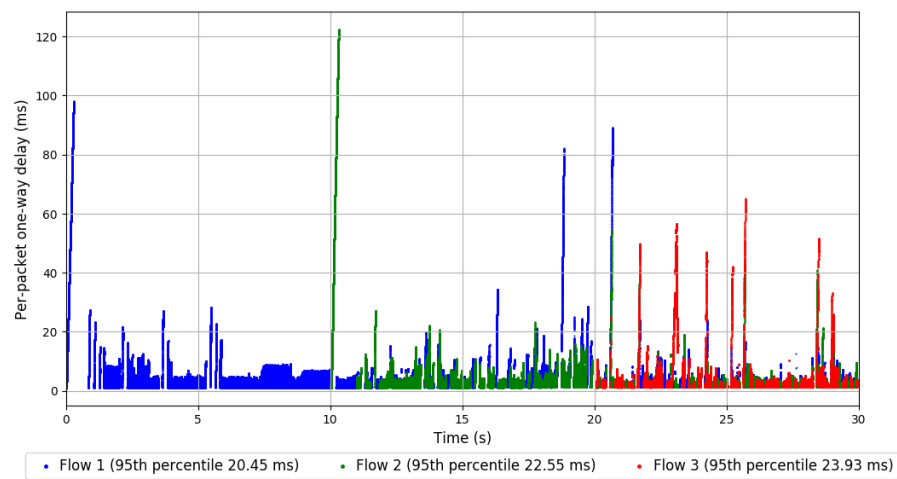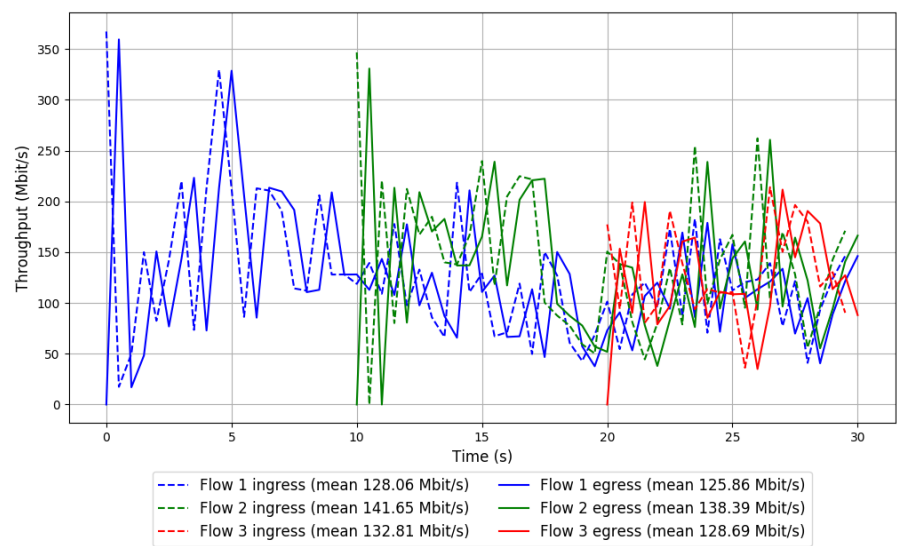
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-01-21 13:19:11
End at: 2019-01-21 13:19:41
Local clock offset: -0.895 ms
Remote clock offset: -3.219 ms


# Below is generated by plot.py at 2019-01-21 14:25:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.85 Mbit/s
95th percentile per-packet one-way delay: 21.658 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 125.86 Mbit/s
95th percentile per-packet one-way delay: 20.445 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 138.39 Mbit/s
95th percentile per-packet one-way delay: 22.548 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 128.69 Mbit/s
95th percentile per-packet one-way delay: 23.926 ms
Loss rate: 3.08%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 128.06 Mbit/s) --- Flow 1 egress (mean 125.86 Mbit/s)
Flow 2 ingress (mean 141.65 Mbit/s) --- Flow 2 egress (mean 138.39 Mbit/s)
Flow 3 ingress (mean 132.81 Mbit/s) --- Flow 3 egress (mean 128.69 Mbit/s)

Flow 1 (95th percentile 20.45 ms)　Flow 2 (95th percentile 22.55 ms)　Flow 3 (95th percentile 23.93 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-21 10:56:32
End at: 2019-01-21 10:57:02
Local clock offset: 1.835 ms
Remote clock offset: 0.175 ms


# Below is generated by plot.py at 2019-01-21 14:27:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.87 Mbit/s
95th percentile per-packet one-way delay: 6.094 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 239.50 Mbit/s
95th percentile per-packet one-way delay: 1.572 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 212.85 Mbit/s
95th percentile per-packet one-way delay: 2.380 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 223.75 Mbit/s
95th percentile per-packet one-way delay: 137.229 ms
Loss rate: 2.86%
```
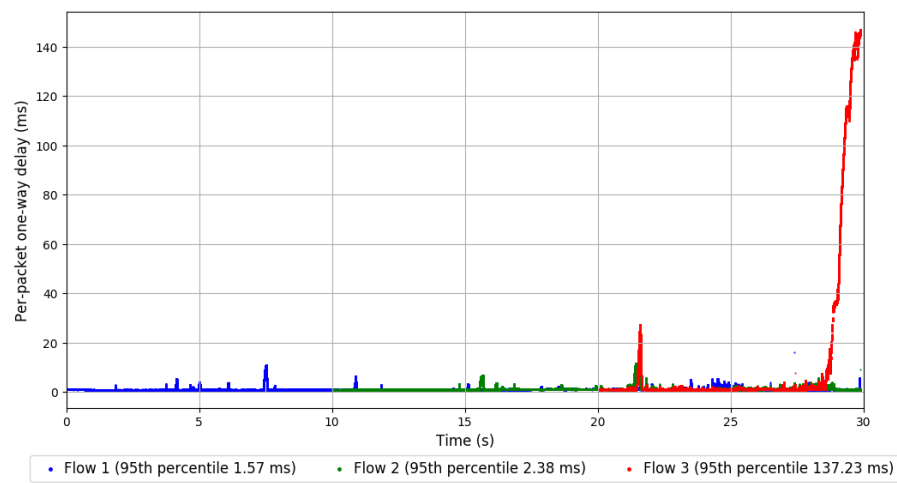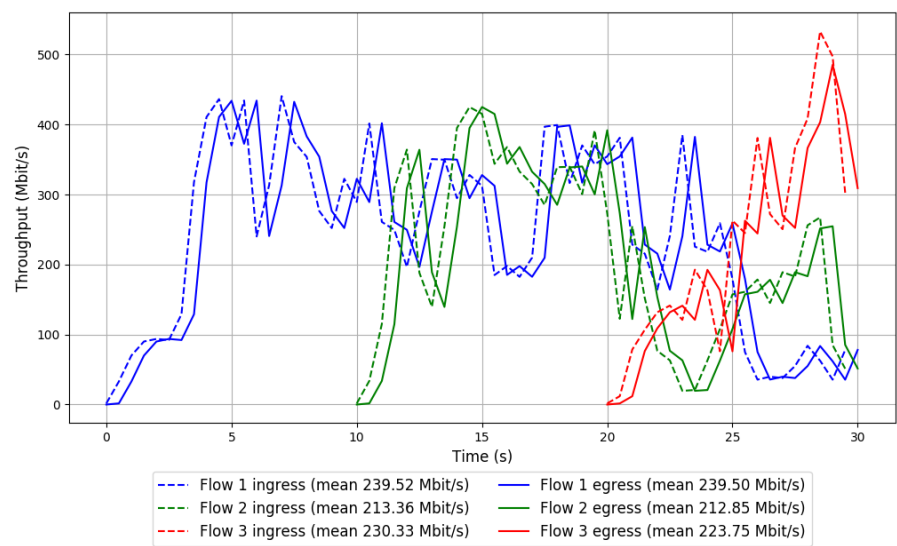
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 239.52 Mbit/s) --- Flow 1 egress (mean 239.50 Mbit/s)
Flow 2 ingress (mean 213.36 Mbit/s) --- Flow 2 egress (mean 212.85 Mbit/s)
Flow 3 ingress (mean 230.33 Mbit/s) --- Flow 3 egress (mean 223.75 Mbit/s)

Flow 1 (95th percentile 1.57 ms) • Flow 2 (95th percentile 2.38 ms) • Flow 3 (95th percentile 137.23 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-21 11:26:43
End at: 2019-01-21 11:27:13
Local clock offset: 3.606 ms
Remote clock offset: 2.694 ms

# Below is generated by plot.py at 2019-01-21 14:28:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 457.66 Mbit/s
95th percentile per-packet one-way delay: 1.633 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 248.51 Mbit/s
95th percentile per-packet one-way delay: 1.870 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 1.424 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 179.14 Mbit/s
95th percentile per-packet one-way delay: 1.391 ms
Loss rate: 0.11%
```
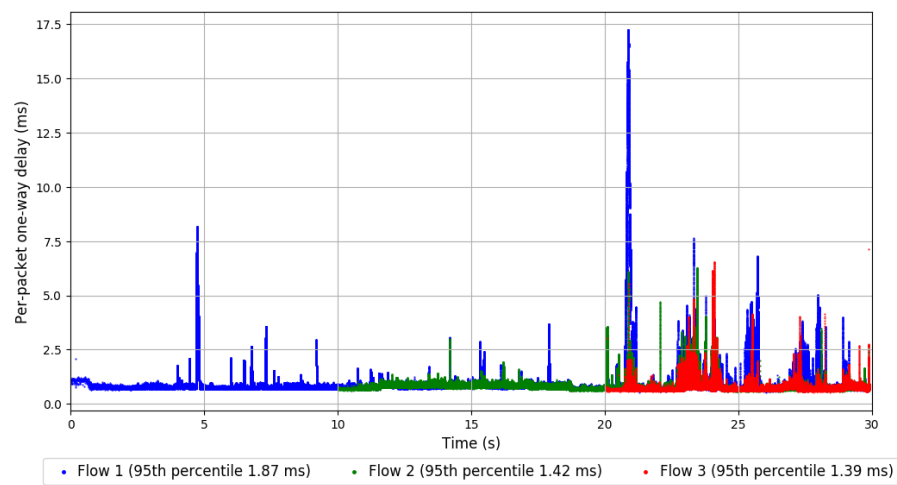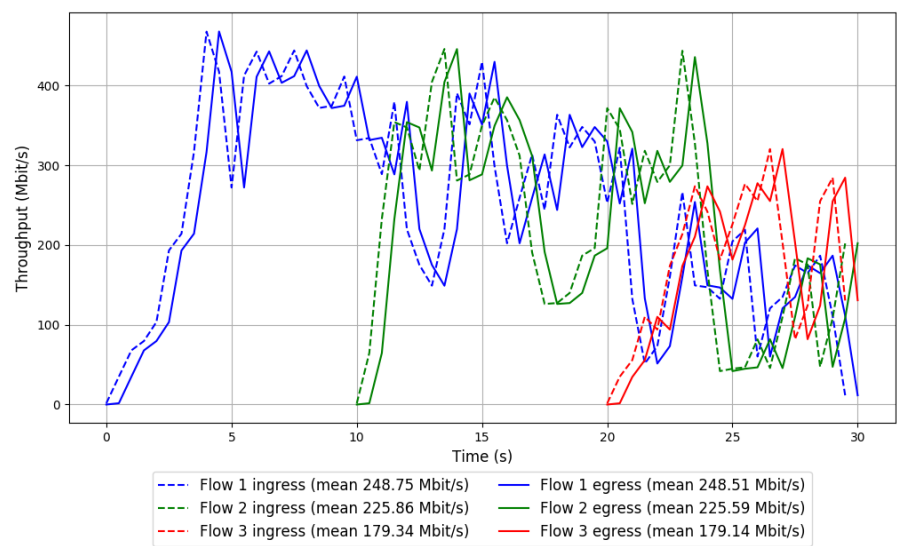
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 248.75 Mbit/s) --- Flow 1 egress (mean 248.51 Mbit/s)
Flow 2 ingress (mean 225.86 Mbit/s) --- Flow 2 egress (mean 225.59 Mbit/s)
Flow 3 ingress (mean 179.34 Mbit/s) --- Flow 3 egress (mean 179.14 Mbit/s)

Flow 1 (95th percentile 1.87 ms) Flow 2 (95th percentile 1.42 ms) Flow 3 (95th percentile 1.39 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-21 11:57:02
End at: 2019-01-21 11:57:32
Local clock offset: 3.301 ms
Remote clock offset: 3.726 ms


# Below is generated by plot.py at 2019-01-21 14:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.47 Mbit/s
95th percentile per-packet one-way delay: 2.876 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 290.88 Mbit/s
95th percentile per-packet one-way delay: 2.353 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 208.08 Mbit/s
95th percentile per-packet one-way delay: 9.063 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 155.15 Mbit/s
95th percentile per-packet one-way delay: 2.347 ms
Loss rate: 0.13%
```
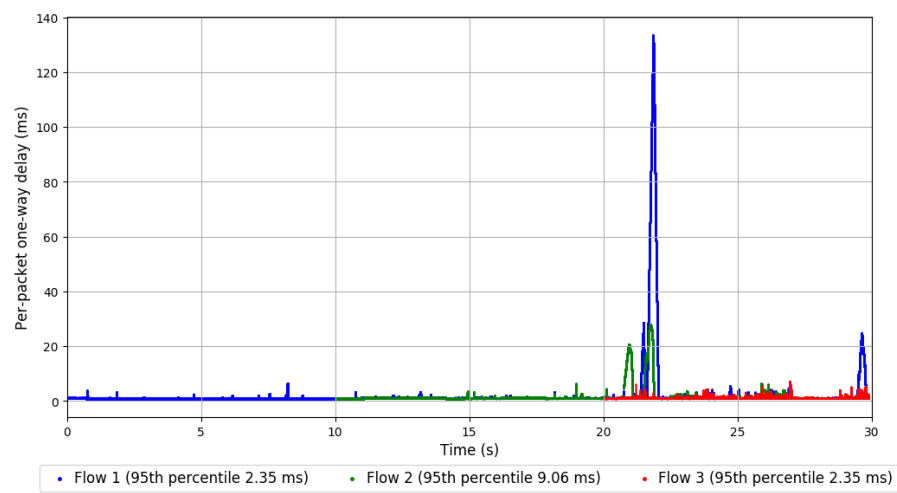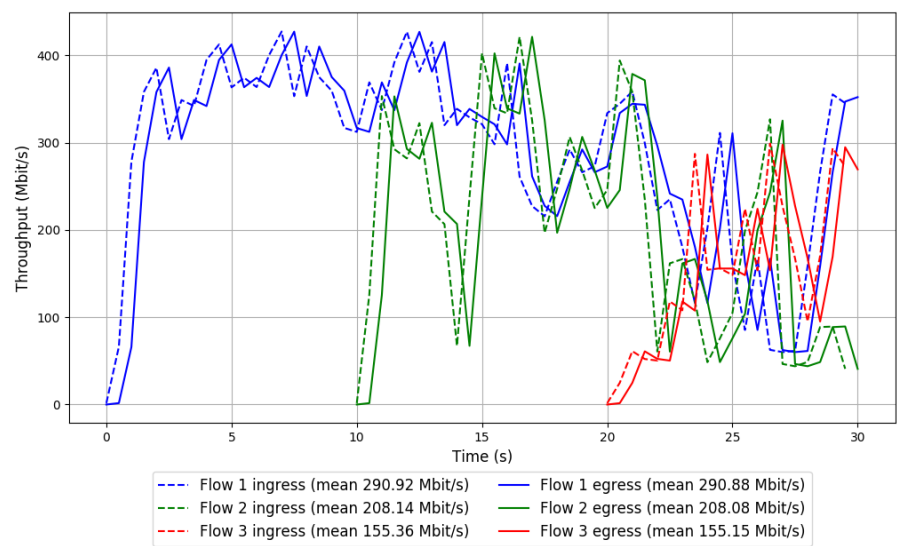
Run 3: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 290.92 Mbit/s) — Flow 1 egress (mean 290.88 Mbit/s)
- - - Flow 2 ingress (mean 208.14 Mbit/s) — Flow 2 egress (mean 208.08 Mbit/s)
- - - Flow 3 ingress (mean 155.36 Mbit/s) — Flow 3 egress (mean 155.15 Mbit/s)

• Flow 1 (95th percentile 2.35 ms)   • Flow 2 (95th percentile 9.06 ms)   • Flow 3 (95th percentile 2.35 ms)

200

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-21 12:27:20
End at: 2019-01-21 12:27:50
Local clock offset: 3.092 ms
Remote clock offset: 0.31 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.34 Mbit/s
95th percentile per-packet one-way delay: 2.854 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 260.62 Mbit/s
95th percentile per-packet one-way delay: 1.774 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 262.23 Mbit/s
95th percentile per-packet one-way delay: 15.838 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 155.48 Mbit/s
95th percentile per-packet one-way delay: 9.748 ms
Loss rate: 1.03%
```
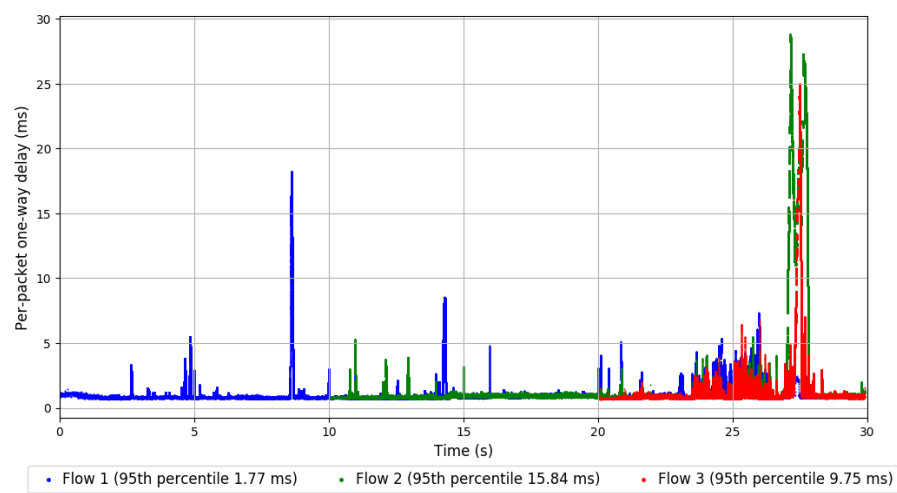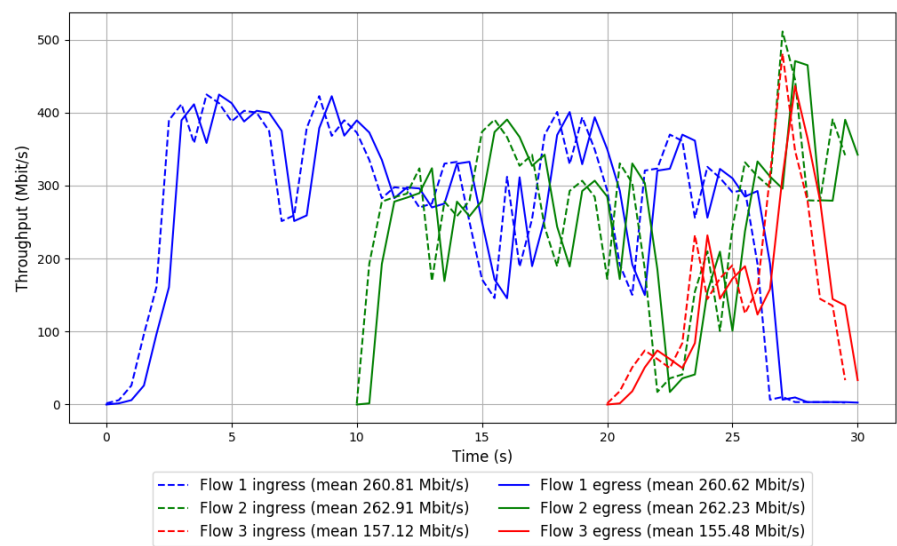
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-21 12:57:31
End at: 2019-01-21 12:58:01
Local clock offset: 0.791 ms
Remote clock offset: 0.014 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.74 Mbit/s
95th percentile per-packet one-way delay: 2.711 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 260.25 Mbit/s
95th percentile per-packet one-way delay: 1.079 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 254.79 Mbit/s
95th percentile per-packet one-way delay: 4.872 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 78.86 Mbit/s
95th percentile per-packet one-way delay: 1.829 ms
Loss rate: 0.03%
```
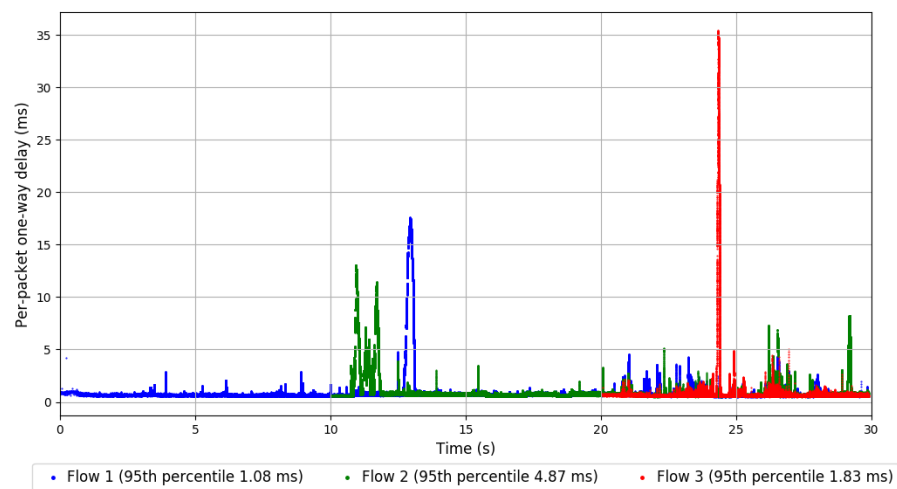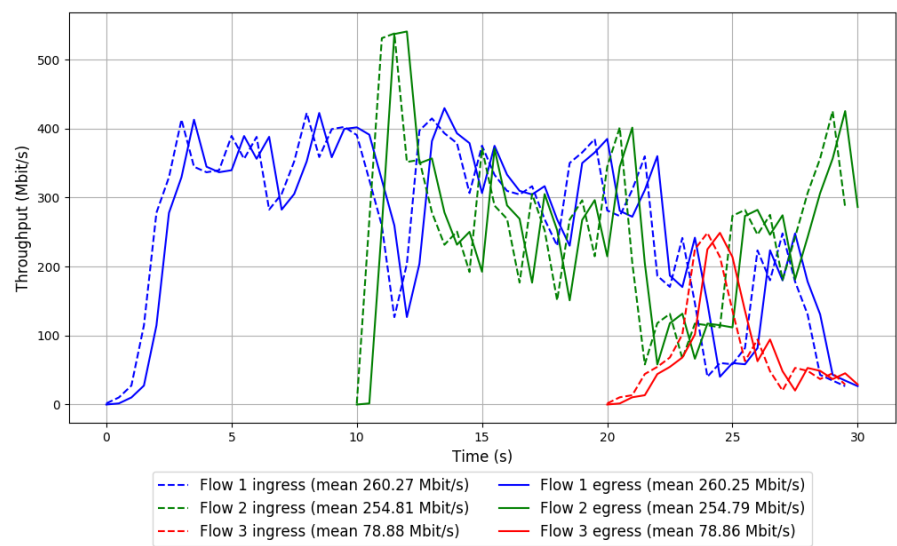
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 260.27 Mbit/s) — Flow 1 egress (mean 260.25 Mbit/s)
Flow 2 ingress (mean 254.81 Mbit/s) — Flow 2 egress (mean 254.79 Mbit/s)
Flow 3 ingress (mean 78.88 Mbit/s) — Flow 3 egress (mean 78.86 Mbit/s)

Flow 1 (95th percentile 1.08 ms) • Flow 2 (95th percentile 4.87 ms) • Flow 3 (95th percentile 1.83 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-21 11:00:46
End at: 2019-01-21 11:01:16
Local clock offset: 2.571 ms
Remote clock offset: 0.181 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 1.194 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 1.238 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 1.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.00%
```
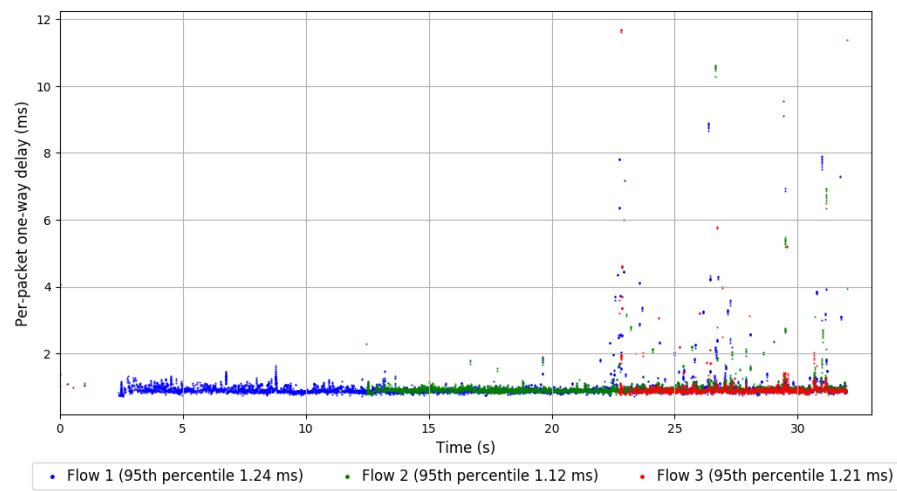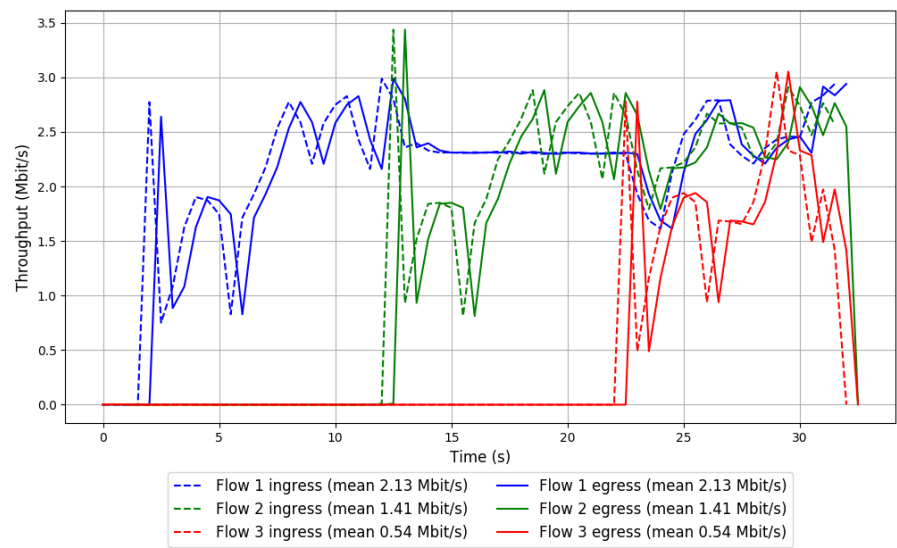
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-21 11:30:59
End at: 2019-01-21 11:31:29
Local clock offset: 3.542 ms
Remote clock offset: 3.335 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.143 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.898 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.914 ms
Loss rate: 0.00%
```
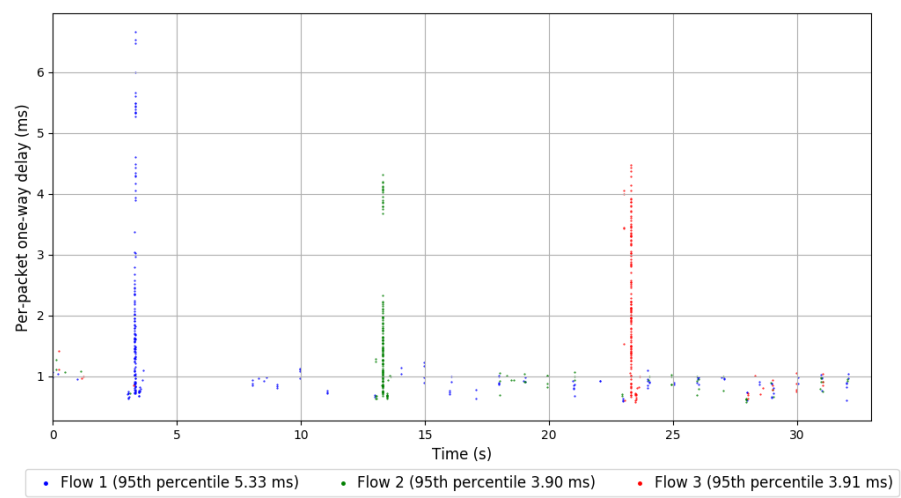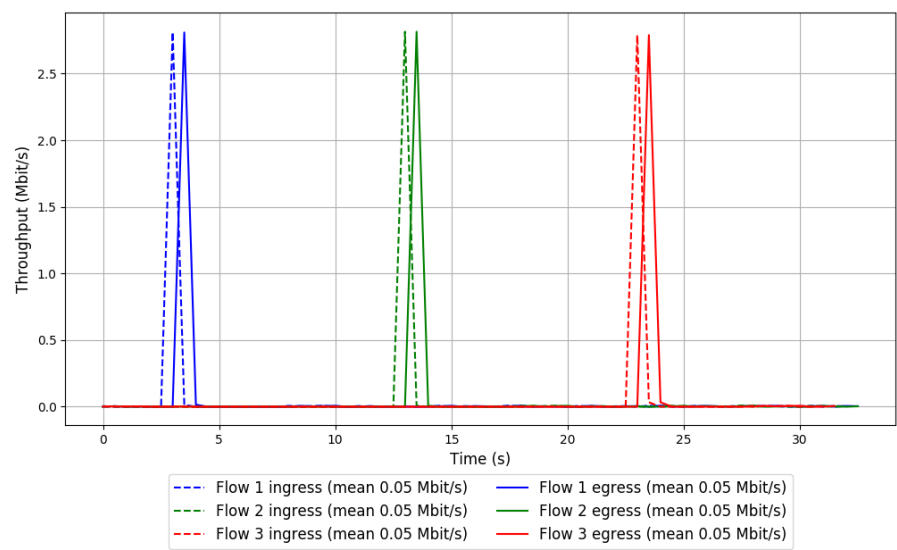
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-21 12:01:21
End at: 2019-01-21 12:01:51
Local clock offset: 3.207 ms
Remote clock offset: 2.308 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.965 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.693 ms
Loss rate: 0.00%
```
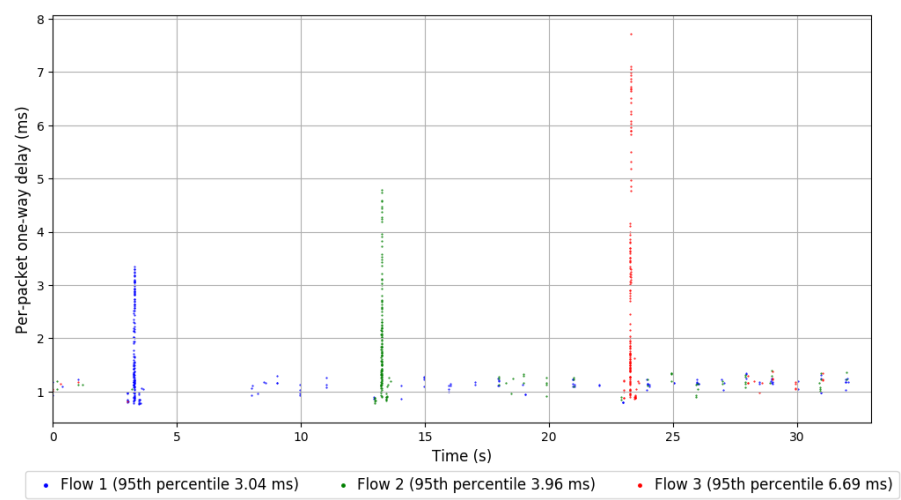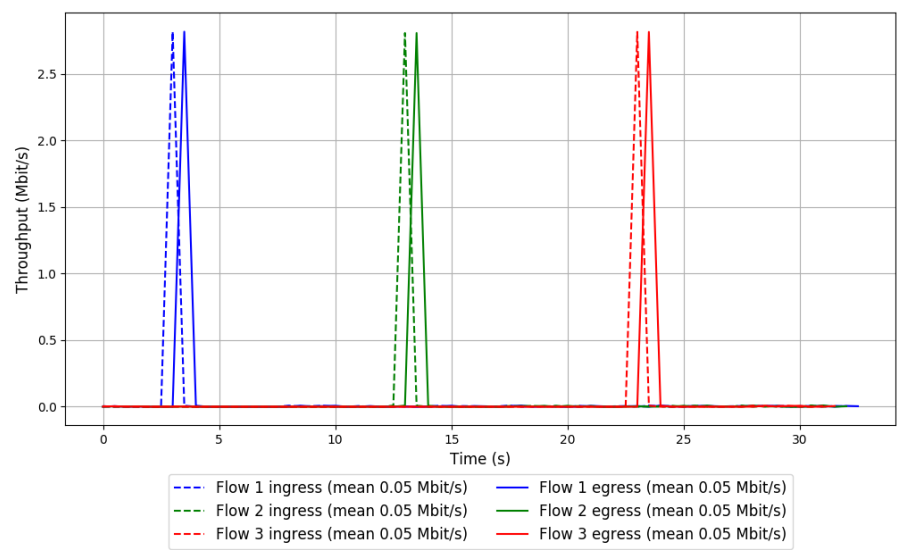
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-21 12:31:35
End at: 2019-01-21 12:32:05
Local clock offset: 3.082 ms
Remote clock offset: 0.234 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.023 ms
Loss rate: 0.00%
```
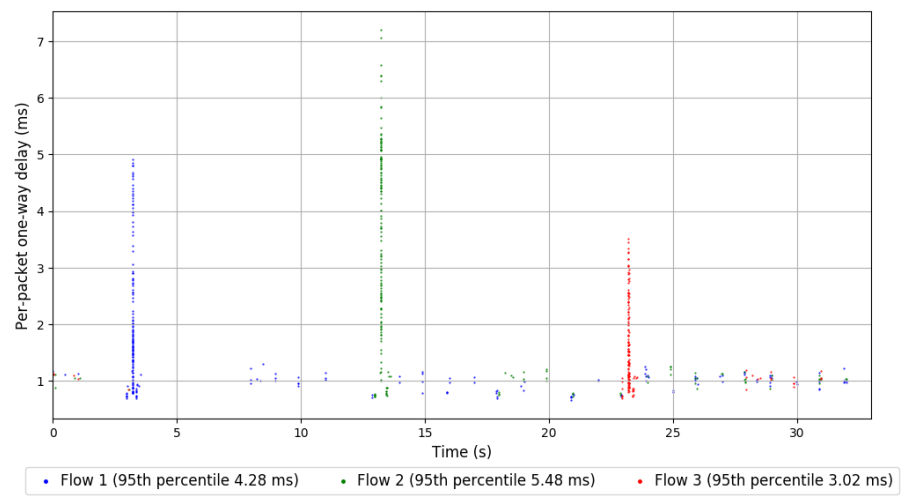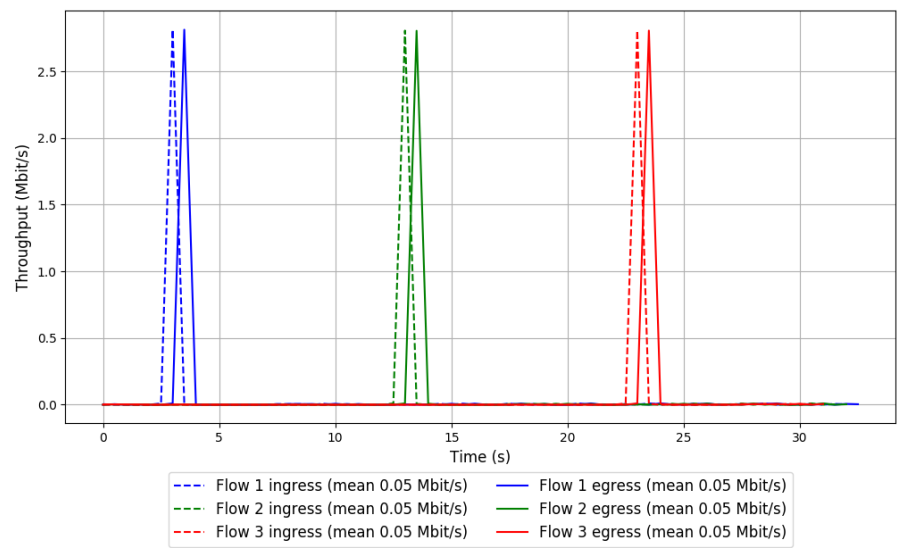
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-21 13:01:46
End at: 2019-01-21 13:02:16
Local clock offset: 0.173 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2019-01-21 14:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.908 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.775 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.818 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link