Pantheon Report

Generated at 2019-01-18 23:40:03 (UTC).

Data path: AWS Brazil 2 on `ens5` (*local*) →Colombia cellular on `ppp0` (*remote*).

Repeated the test of 21 congestion control schemes 3 times.

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

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

```
System info:
Linux 4.15.0-1031-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 @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
```
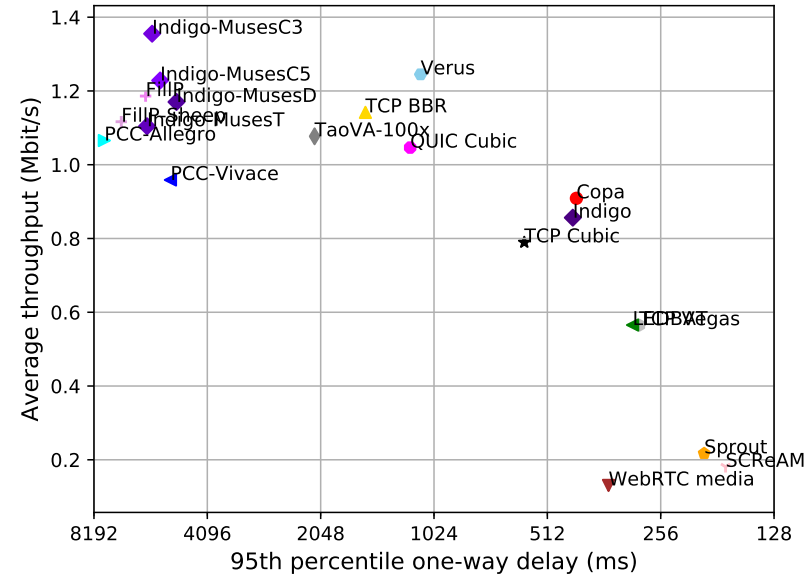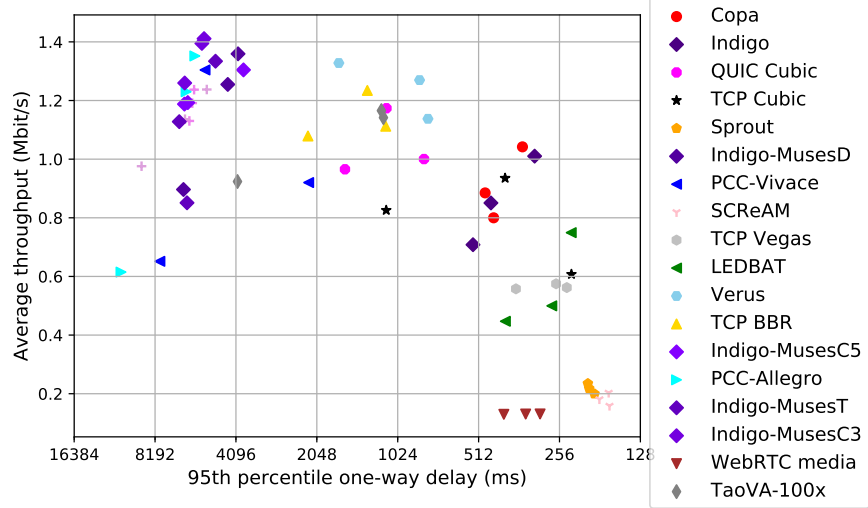
```
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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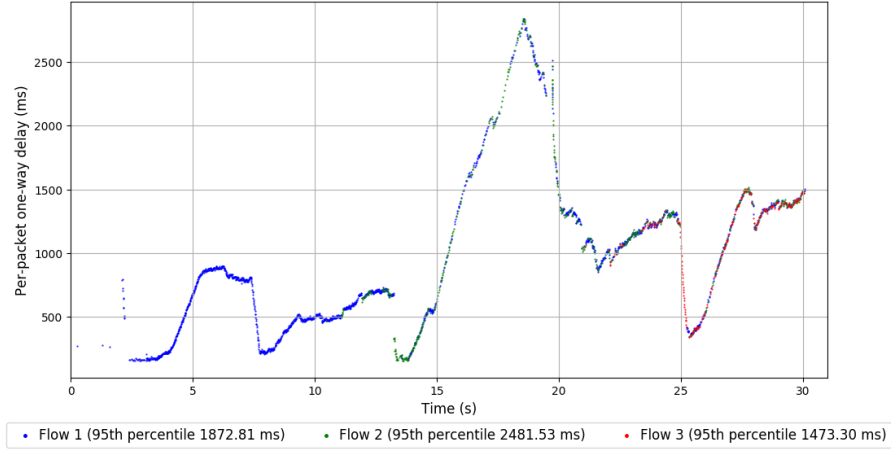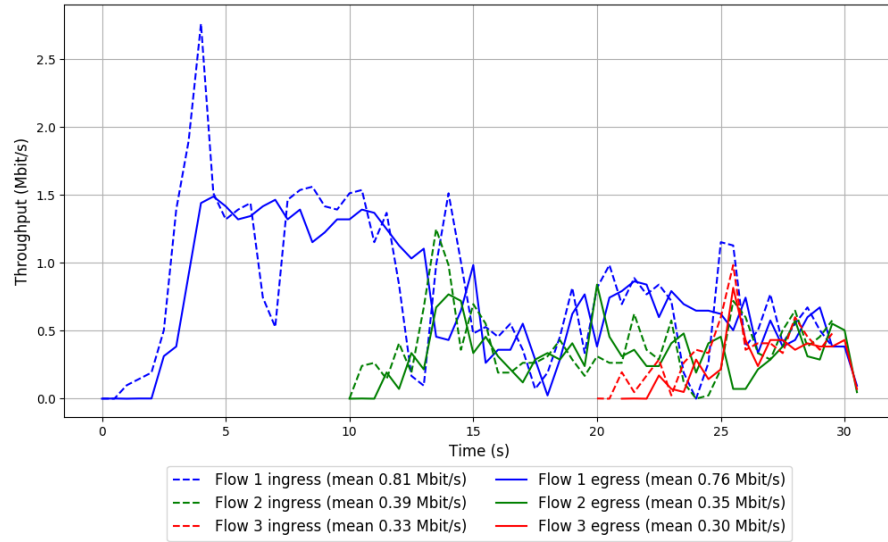3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	0.79	0.34	0.42	1399.76	1660.74	1404.02	6.66	10.56	17.34
Copa	3	0.54	0.39	0.33	440.49	421.30	394.62	6.70	6.67	8.53
TCP Cubic	3	0.36	0.47	0.34	572.74	573.82	586.00	3.76	3.07	6.87
FillP	3	0.78	0.65	0.00	5913.04	6003.66	5660.32	27.26	48.44	84.51
FillP-Sheep	3	0.72	0.61	0.04	6838.71	6989.01	4910.97	14.35	34.37	90.12
Indigo	3	0.50	0.38	0.34	445.35	384.89	504.69	3.27	4.37	5.28
Indigo-MusesC3	3	0.80	0.88	0.00	5554.43	5799.72	5773.77	31.32	88.70	99.91
Indigo-MusesC5	3	0.90	0.56	0.11	5275.42	5141.91	5350.99	24.41	39.40	89.39
Indigo-MusesD	3	0.69	0.59	0.20	4500.98	4968.15	5571.55	26.25	36.61	79.42
Indigo-MusesT	3	0.73	0.55	0.00	5778.89	6022.09	6124.63	27.17	44.53	99.92
LEDBAT	3	0.29	0.28	0.26	267.71	327.15	321.30	3.79	3.15	4.65
PCC-Allegro	3	0.86	0.31	0.00	7256.66	7422.89	6423.79	61.77	36.66	49.68
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QUIC Cubic	3	0.47	0.59	0.50	1199.51	1098.61	1134.37	4.81	4.73	9.29
SCReAM	3	0.08	0.09	0.12	171.37	172.55	178.45	3.35	4.33	4.28
Sprout	3	0.10	0.11	0.12	221.55	184.91	203.27	3.52	2.76	3.85
TaoVA-100x	3	0.63	0.51	0.36	2003.29	2170.20	2564.03	7.81	14.17	19.65
TCP Vegas	3	0.26	0.28	0.35	262.50	249.20	358.98	3.20	3.45	4.27
Verus	3	1.13	0.15	0.04	1045.51	1063.29	1044.48	3.90	3.91	7.46
PCC-Vivace	3	0.43	0.78	0.00	4925.16	5112.72	4586.37	11.30	15.72	20.18
WebRTC media	3	0.04	0.04	0.04	359.73	289.07	293.53	2.96	3.61	2.43

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-18 22:38:10
End at: 2019-01-18 22:38:40
Local clock offset: -8.022 ms
Remote clock offset: 15.885 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 2209.909 ms
Loss rate: 8.72%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 1872.810 ms
Loss rate: 6.31%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 2481.531 ms
Loss rate: 11.35%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 1473.295 ms
Loss rate: 20.13%
```
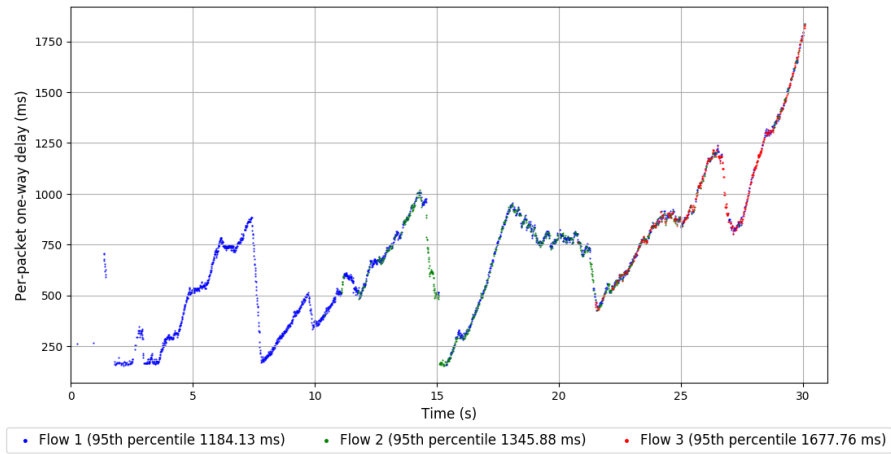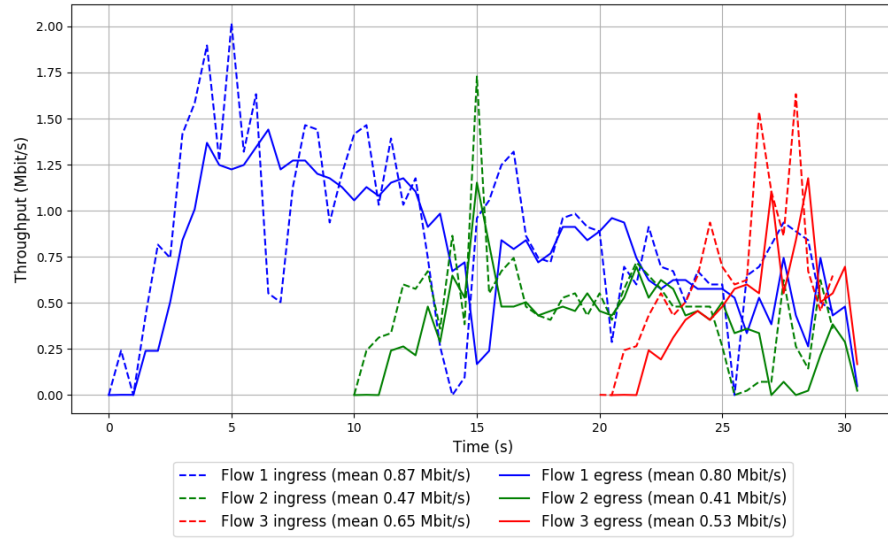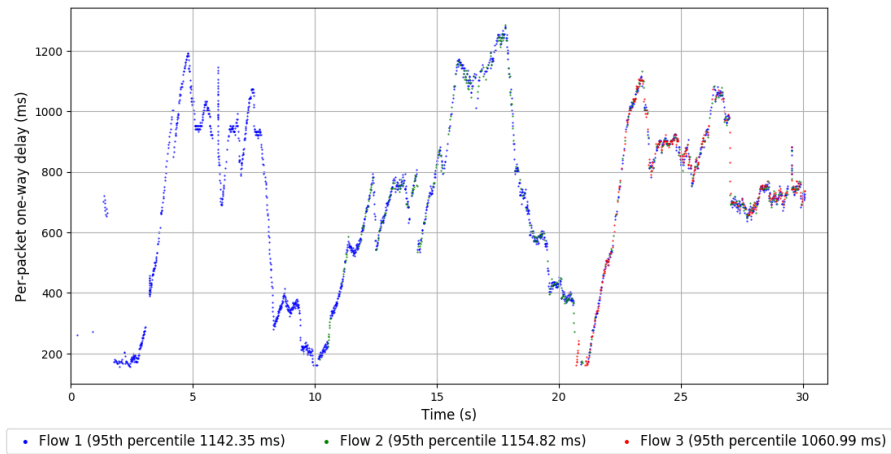
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-18 23:04:07
End at: 2019-01-18 23:04:37
Local clock offset: -8.069 ms
Remote clock offset: 18.626 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 1328.356 ms
Loss rate: 11.82%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 1184.127 ms
Loss rate: 8.23%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 1345.875 ms
Loss rate: 13.72%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 1677.762 ms
Loss rate: 23.54%
```
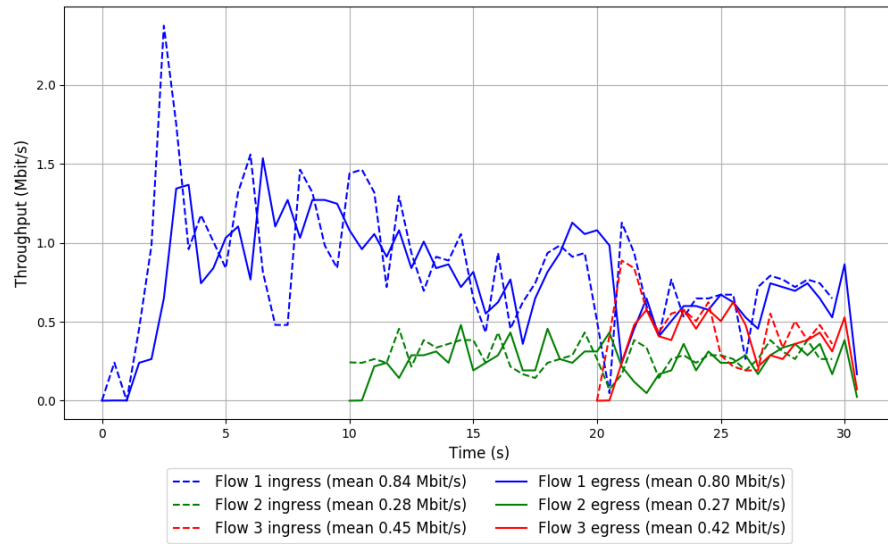
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-18 23:29:58
End at: 2019-01-18 23:30:28
Local clock offset: -4.503 ms
Remote clock offset: 13.832 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 1134.713 ms
Loss rate: 5.99%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 1142.353 ms
Loss rate: 5.43%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 1154.821 ms
Loss rate: 6.61%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 1060.992 ms
Loss rate: 8.35%
```

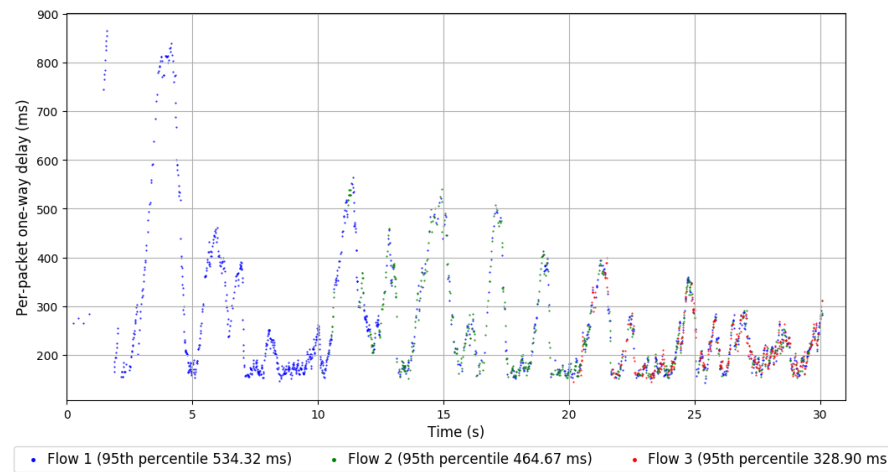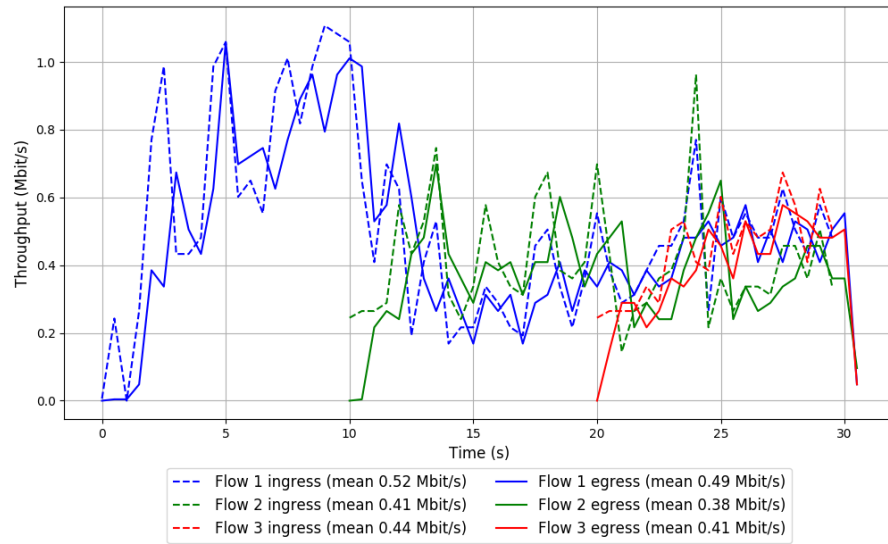# Run 3: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-01-18 22:41:55
End at: 2019-01-18 22:42:25
Local clock offset: -8.103 ms
Remote clock offset: 12.506 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 484.188 ms
Loss rate: 6.17%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 534.316 ms
Loss rate: 5.73%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 464.665 ms
Loss rate: 6.36%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 328.898 ms
Loss rate: 7.35%
```
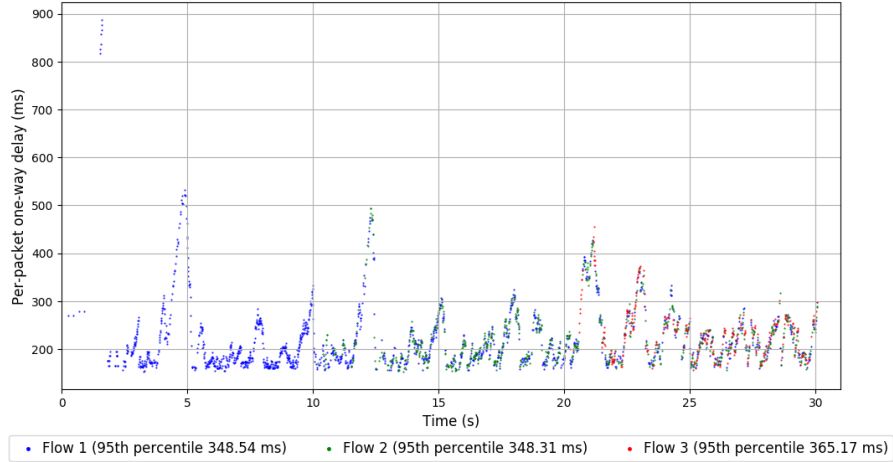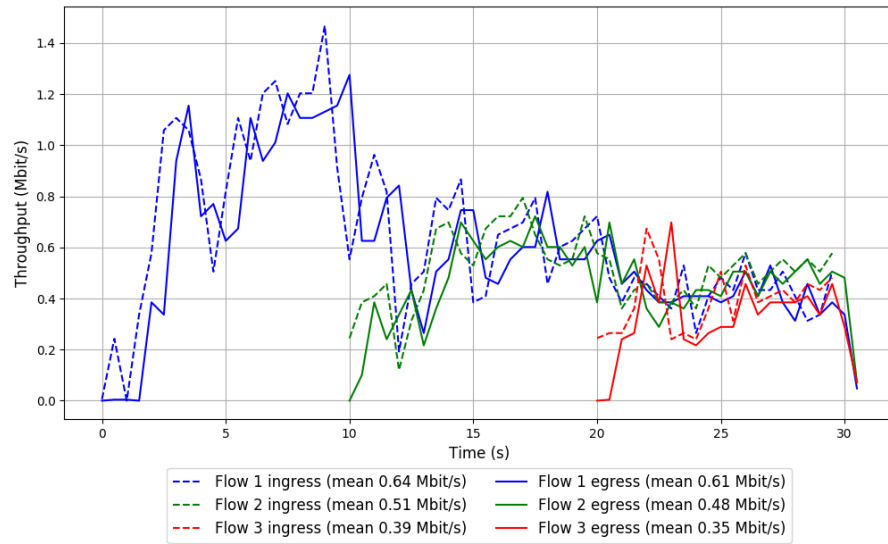
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 0.52 Mbit/s)   Flow 1 egress (mean 0.49 Mbit/s)
Flow 2 ingress (mean 0.41 Mbit/s)   Flow 2 egress (mean 0.38 Mbit/s)
Flow 3 ingress (mean 0.44 Mbit/s)   Flow 3 egress (mean 0.41 Mbit/s)

Flow 1 (95th percentile 534.32 ms)   Flow 2 (95th percentile 464.67 ms)   Flow 3 (95th percentile 328.90 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-18 23:07:48
End at: 2019-01-18 23:08:18
Local clock offset: -7.33 ms
Remote clock offset: 19.967 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 351.622 ms
Loss rate: 7.06%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 348.539 ms
Loss rate: 6.24%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 348.312 ms
Loss rate: 7.05%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 365.170 ms
Loss rate: 11.11%
```
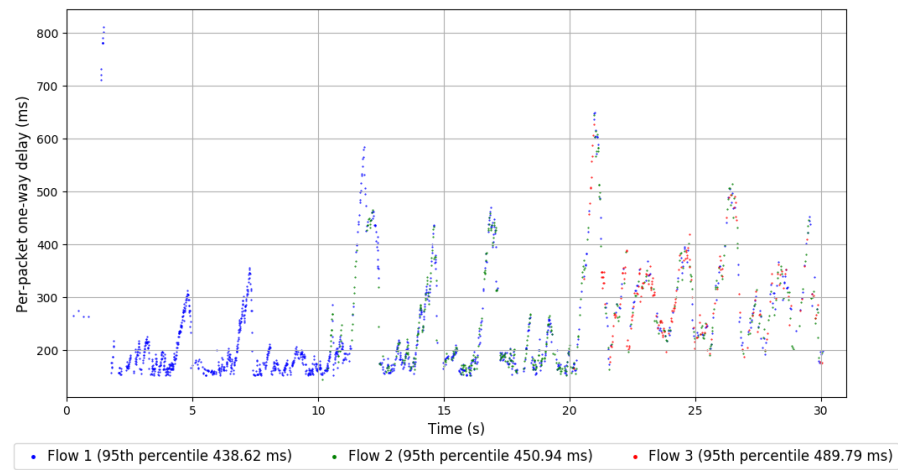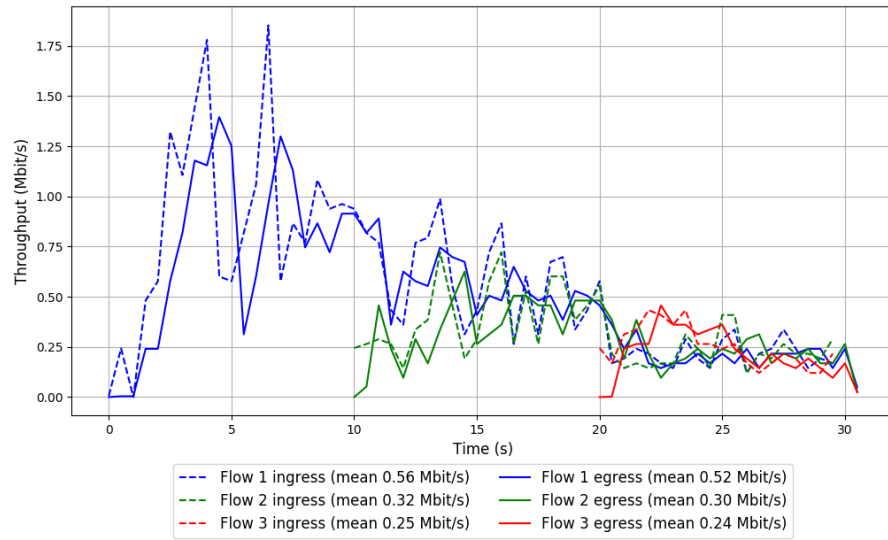
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-01-18 23:33:40
End at: 2019-01-18 23:34:10
Local clock offset: -3.984 ms
Remote clock offset: 5.821 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 450.119 ms
Loss rate: 7.65%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 438.616 ms
Loss rate: 8.12%
-- Flow 2:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 450.937 ms
Loss rate: 6.59%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 489.793 ms
Loss rate: 7.14%
```
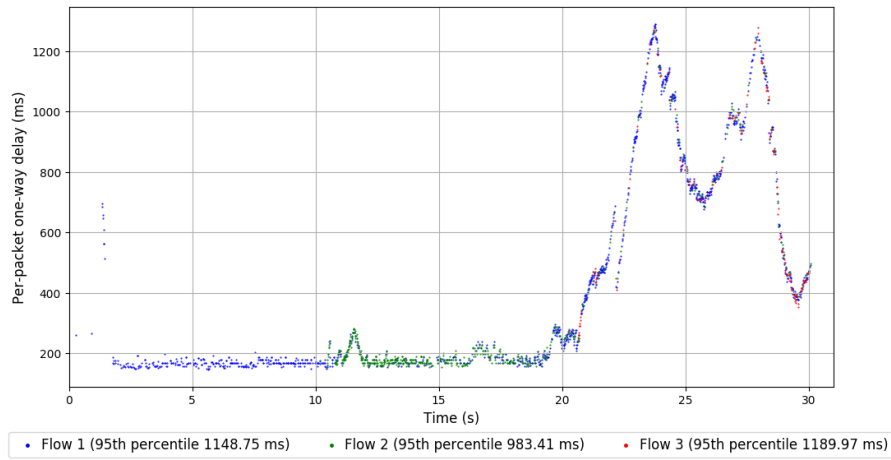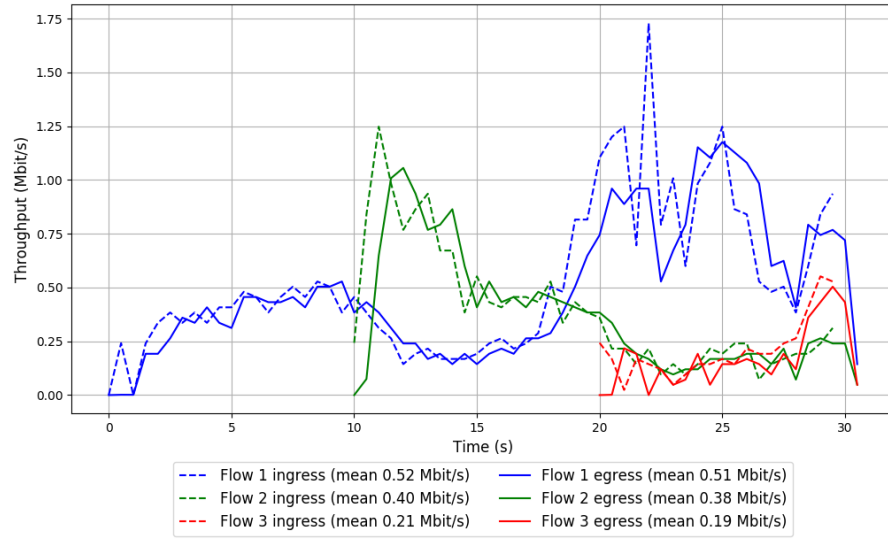
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 0.56 Mbit/s)   Flow 1 egress (mean 0.52 Mbit/s)
Flow 2 ingress (mean 0.32 Mbit/s)   Flow 2 egress (mean 0.30 Mbit/s)
Flow 3 ingress (mean 0.25 Mbit/s)   Flow 3 egress (mean 0.24 Mbit/s)

Flow 1 (95th percentile 438.62 ms)   Flow 2 (95th percentile 450.94 ms)   Flow 3 (95th percentile 489.79 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-18 22:25:50
End at: 2019-01-18 22:26:20
Local clock offset: -6.896 ms
Remote clock offset: 14.58 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 1129.843 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 1148.754 ms
Loss rate: 3.59%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 983.415 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1189.971 ms
Loss rate: 12.56%
```

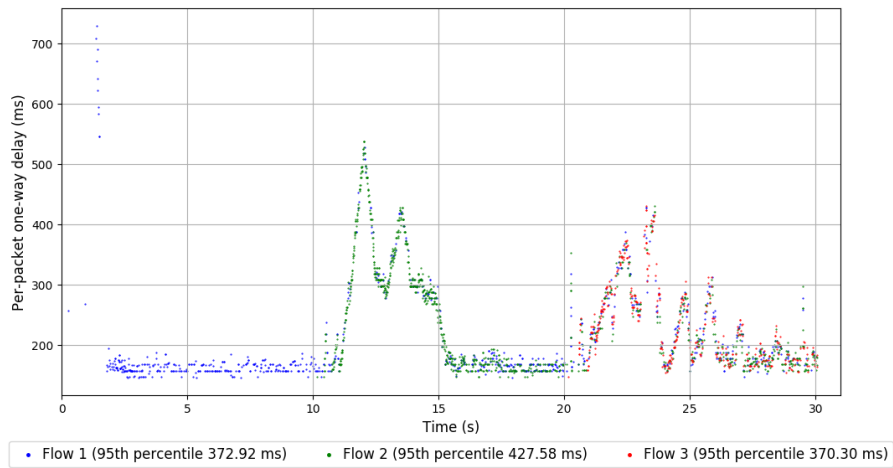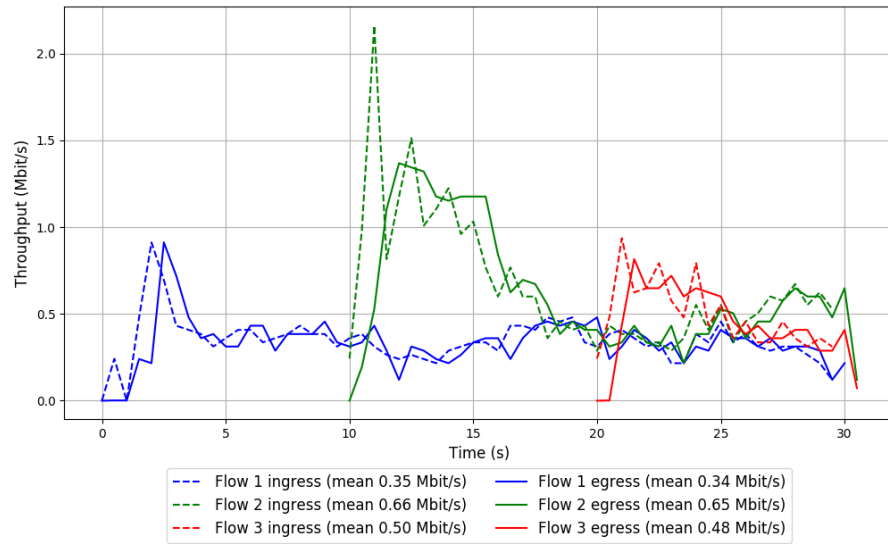Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-18 22:51:46
End at: 2019-01-18 22:52:16
Local clock offset: -8.13 ms
Remote clock offset: 13.581 ms


# Below is generated by plot.py at 2019-01-18 23:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 407.964 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 372.924 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 427.580 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 370.303 ms
Loss rate: 2.44%
```

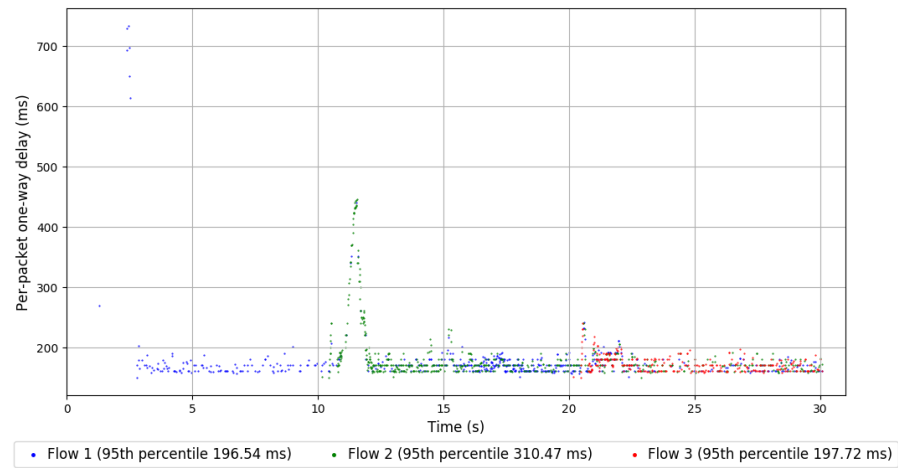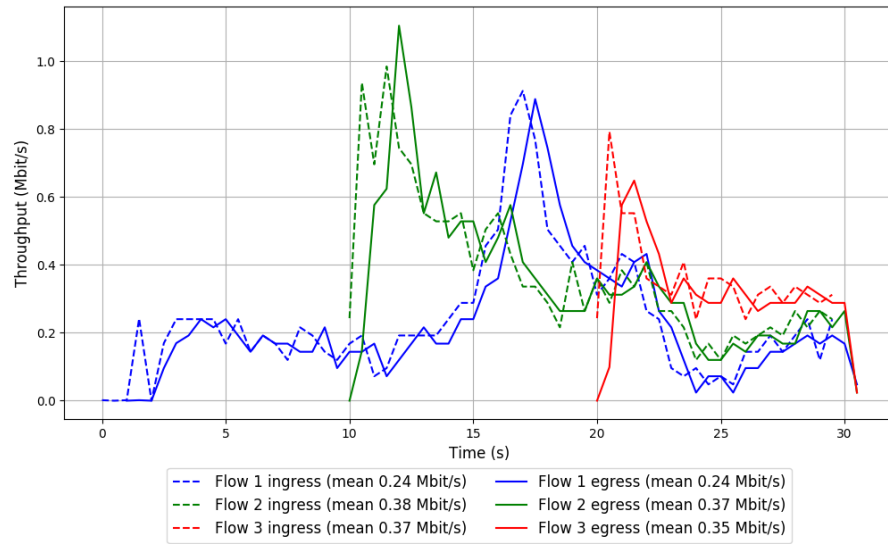Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-18 23:17:42
End at: 2019-01-18 23:18:12
Local clock offset: -7.171 ms
Remote clock offset: 19.989 ms


# Below is generated by plot.py at 2019-01-18 23:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 231.097 ms
Loss rate: 4.65%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 196.537 ms
Loss rate: 5.37%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 310.474 ms
Loss rate: 3.51%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 197.720 ms
Loss rate: 5.61%
```
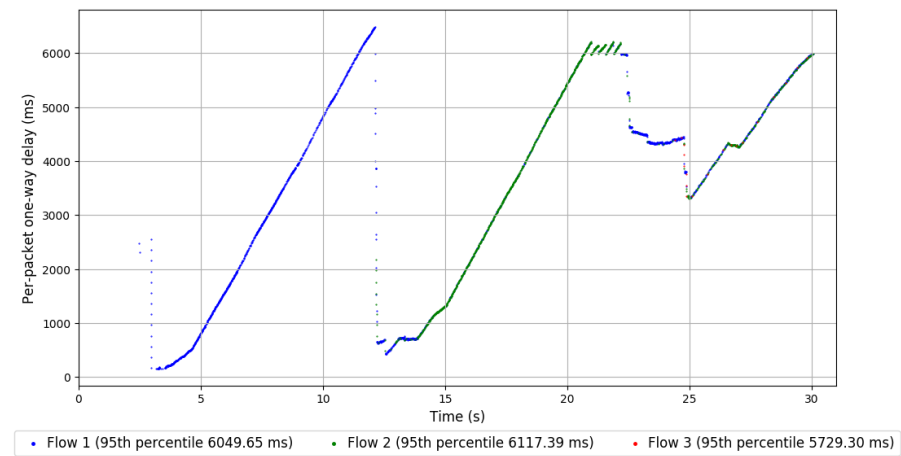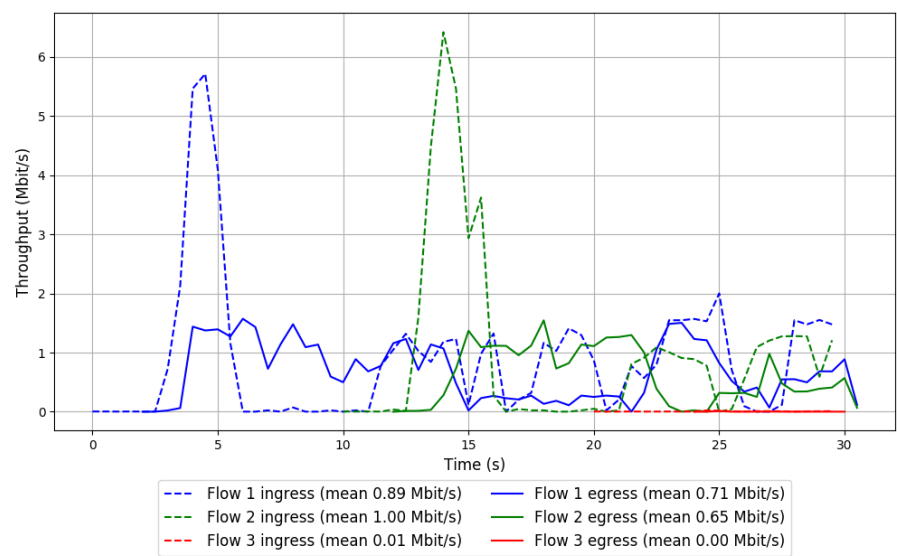
Run 3: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 0.24 Mbit/s)   —— Flow 1 egress (mean 0.24 Mbit/s)
- - - - Flow 2 ingress (mean 0.38 Mbit/s)   —— Flow 2 egress (mean 0.37 Mbit/s)
- - - - Flow 3 ingress (mean 0.37 Mbit/s)   —— Flow 3 egress (mean 0.35 Mbit/s)

- Flow 1 (95th percentile 196.54 ms)   • Flow 2 (95th percentile 310.47 ms)   • Flow 3 (95th percentile 197.72 ms)

```
Run 1: Statistics of FillP

Start at: 2019-01-18 22:22:03
End at: 2019-01-18 22:22:33
Local clock offset: -7.427 ms
Remote clock offset: 13.091 ms


# Below is generated by plot.py at 2019-01-18 23:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 6105.430 ms
Loss rate: 33.17%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 6049.653 ms
Loss rate: 26.60%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 6117.388 ms
Loss rate: 41.75%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5729.303 ms
Loss rate: 79.55%
```
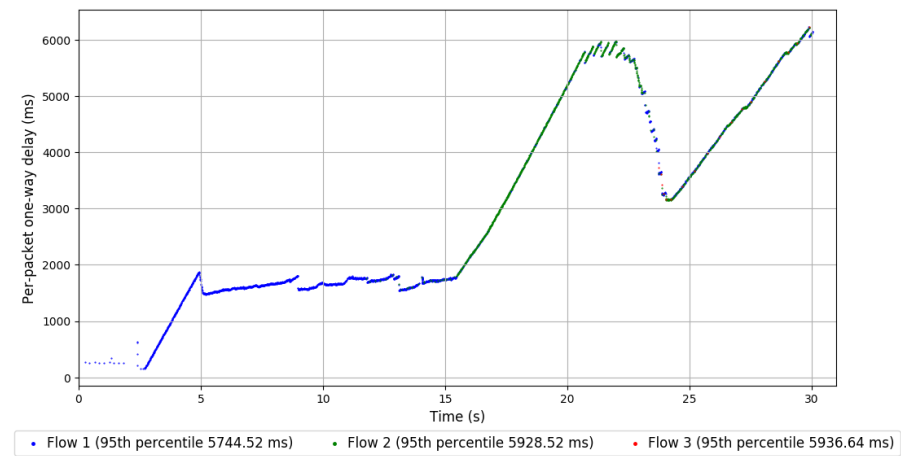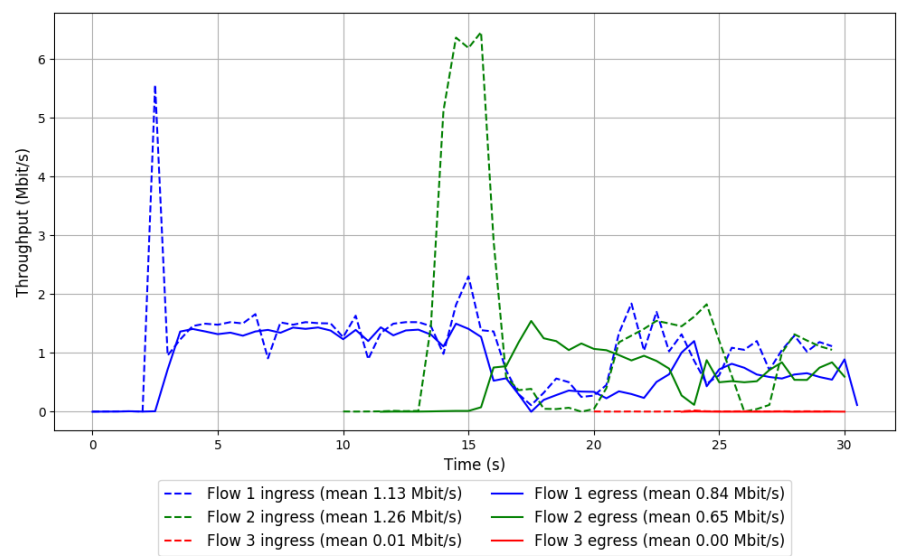
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-01-18 22:48:05
End at: 2019-01-18 22:48:35
Local clock offset: -7.412 ms
Remote clock offset: 16.99 ms


# Below is generated by plot.py at 2019-01-18 23:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 5862.445 ms
Loss rate: 37.61%
-- Flow 1:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 5744.516 ms
Loss rate: 26.41%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 5928.515 ms
Loss rate: 52.66%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5936.644 ms
Loss rate: 79.56%
```

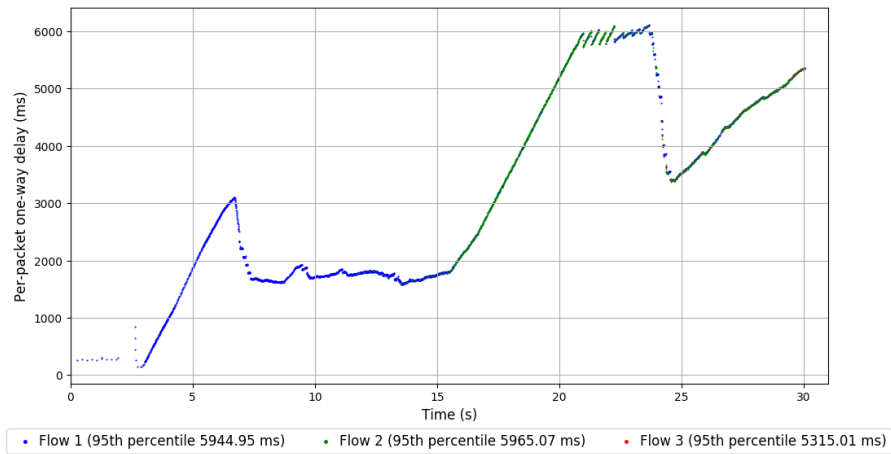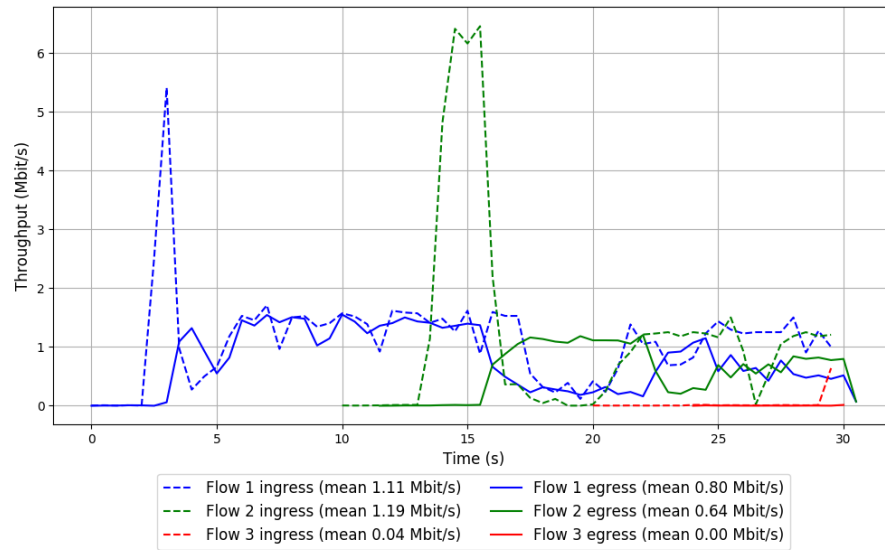Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-01-18 23:13:59
End at: 2019-01-18 23:14:29
Local clock offset: -7.393 ms
Remote clock offset: 15.856 ms


# Below is generated by plot.py at 2019-01-18 23:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 5953.982 ms
Loss rate: 38.36%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 5944.950 ms
Loss rate: 28.78%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 5965.072 ms
Loss rate: 50.90%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5315.006 ms
Loss rate: 94.43%
```

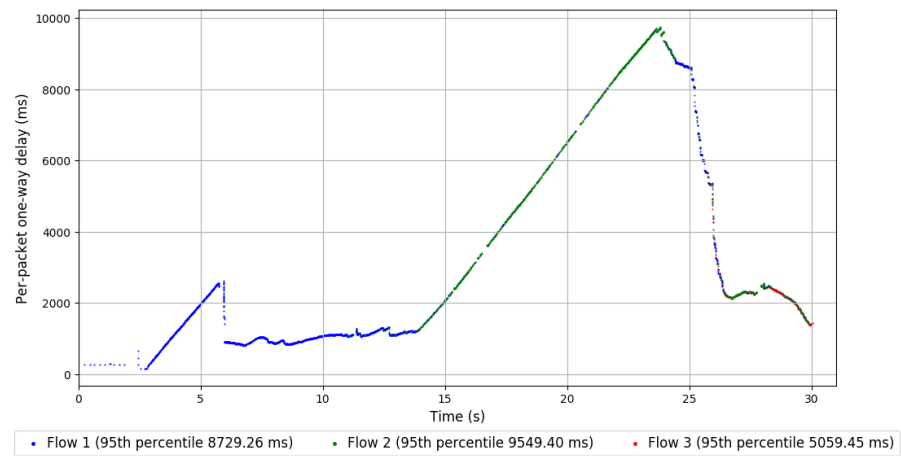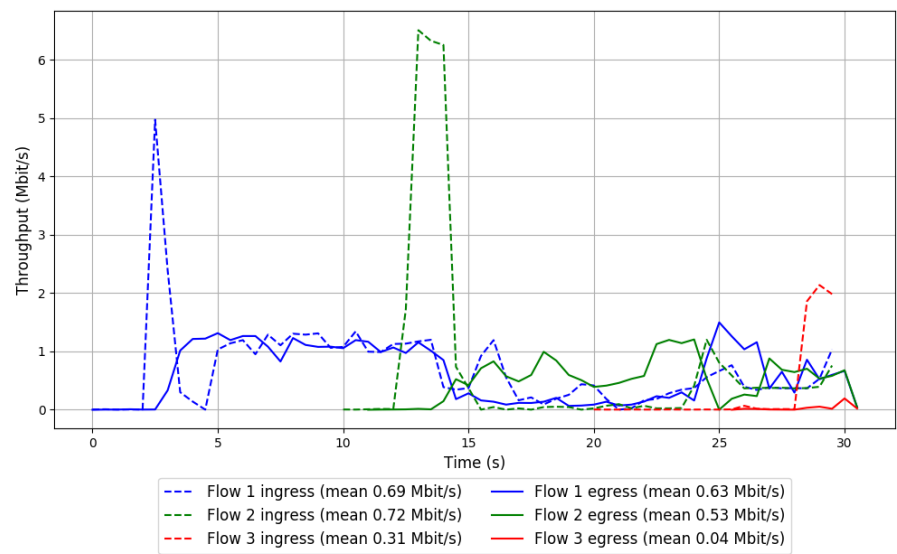Run 3: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-18 22:40:40
End at: 2019-01-18 22:41:10
Local clock offset: -7.305 ms
Remote clock offset: 11.219 ms


# Below is generated by plot.py at 2019-01-18 23:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 9197.214 ms
Loss rate: 23.96%
-- Flow 1:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 8729.261 ms
Loss rate: 9.39%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 9549.398 ms
Loss rate: 29.90%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 5059.447 ms
Loss rate: 94.13%
```

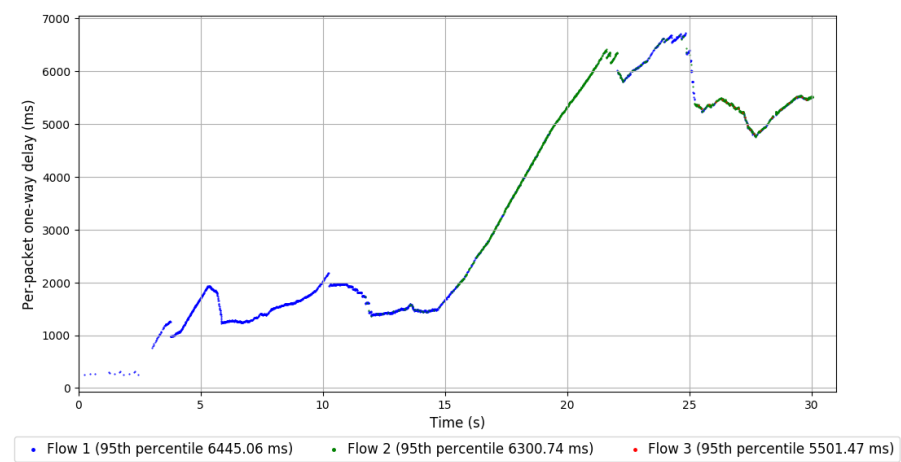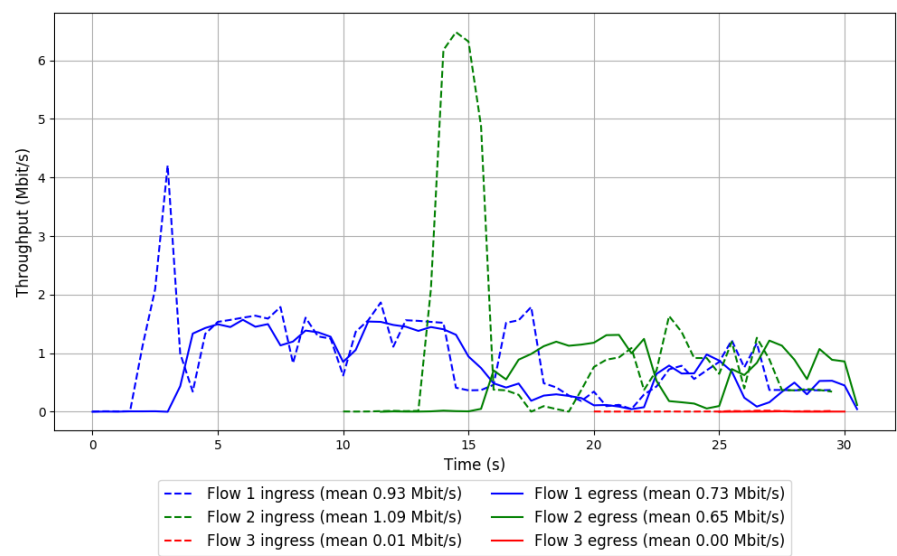# Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.69 Mbit/s)   Flow 1 egress (mean 0.63 Mbit/s)
Flow 2 ingress (mean 0.72 Mbit/s)   Flow 2 egress (mean 0.53 Mbit/s)
Flow 3 ingress (mean 0.31 Mbit/s)   Flow 3 egress (mean 0.04 Mbit/s)

Flow 1 (95th percentile 8729.26 ms)   Flow 2 (95th percentile 9549.40 ms)   Flow 3 (95th percentile 5059.45 ms)

30

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-18 23:06:34
End at: 2019-01-18 23:07:04
Local clock offset: -8.108 ms
Remote clock offset: 15.222 ms


# Below is generated by plot.py at 2019-01-18 23:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 6339.036 ms
Loss rate: 31.74%
-- Flow 1:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 6445.060 ms
Loss rate: 21.44%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 6300.740 ms
Loss rate: 44.80%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5501.467 ms
Loss rate: 78.52%
```
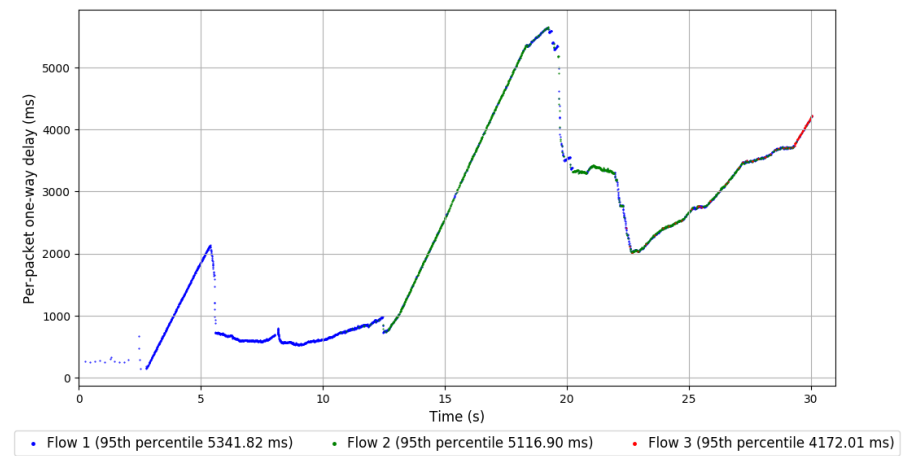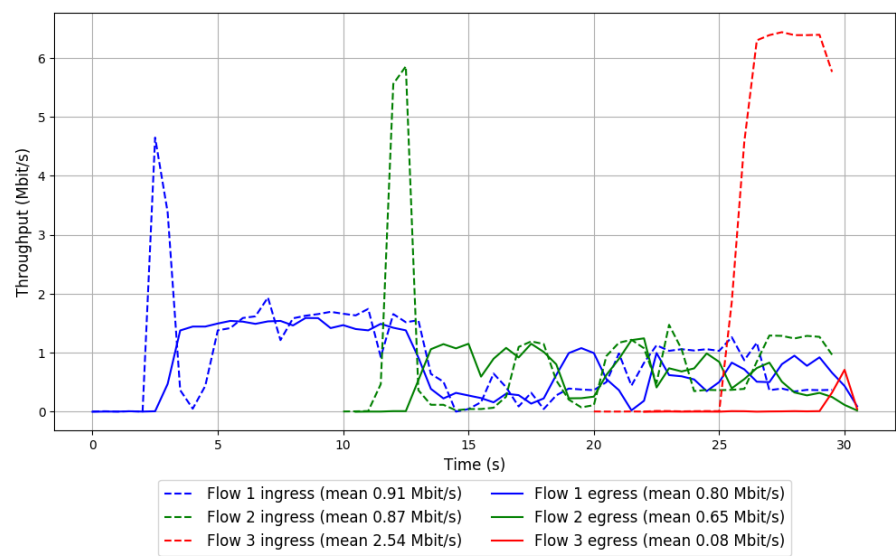
Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.93 Mbit/s) --- Flow 1 egress (mean 0.73 Mbit/s) ---
Flow 2 ingress (mean 1.09 Mbit/s) --- Flow 2 egress (mean 0.65 Mbit/s) ---
Flow 3 ingress (mean 0.01 Mbit/s) --- Flow 3 egress (mean 0.00 Mbit/s) ---

• Flow 1 (95th percentile 6445.06 ms) • Flow 2 (95th percentile 6300.74 ms) • Flow 3 (95th percentile 5501.47 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-18 23:32:26
End at: 2019-01-18 23:32:56
Local clock offset: -3.423 ms
Remote clock offset: 11.72 ms


# Below is generated by plot.py at 2019-01-18 23:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 5258.635 ms
Loss rate: 47.22%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 5341.822 ms
Loss rate: 12.23%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 5116.901 ms
Loss rate: 28.41%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 4172.007 ms
Loss rate: 97.70%
```

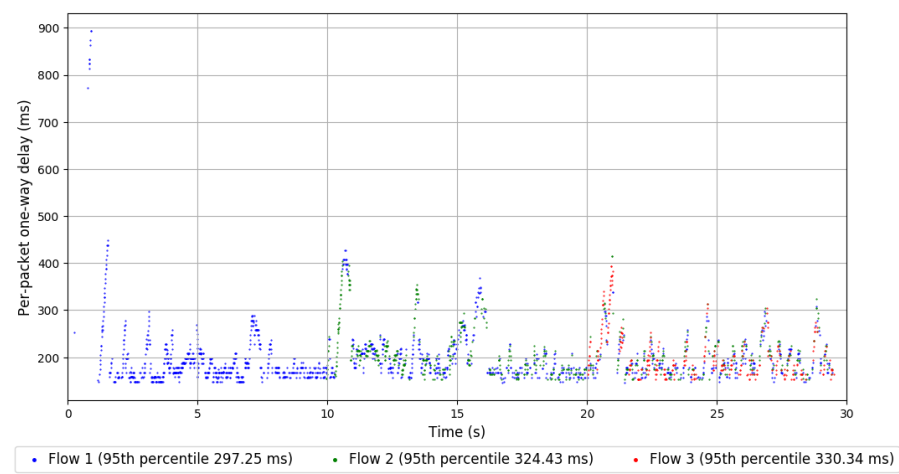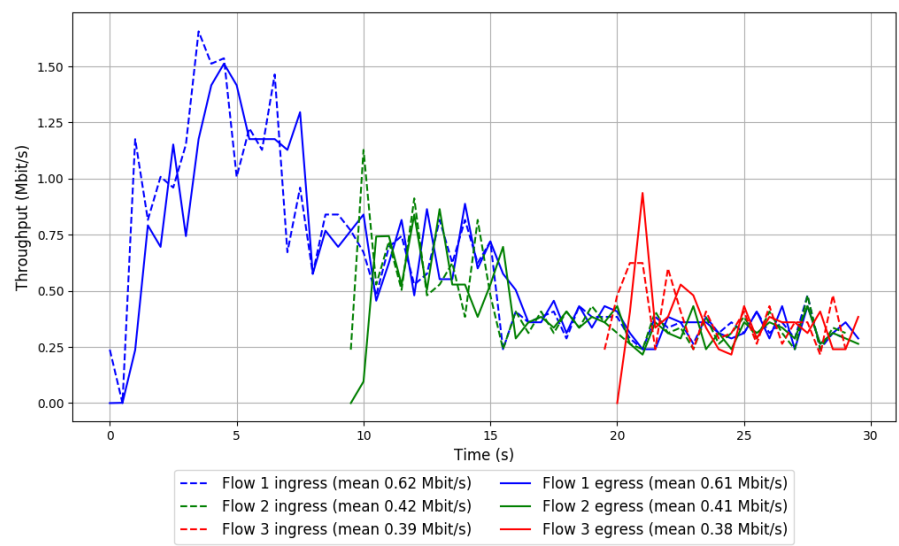Run 3: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-01-18 22:28:19
End at: 2019-01-18 22:28:49
Local clock offset: -7.811 ms
Remote clock offset: 10.351 ms


# Below is generated by plot.py at 2019-01-18 23:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 316.800 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 297.252 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 324.431 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 330.336 ms
Loss rate: 2.89%
```
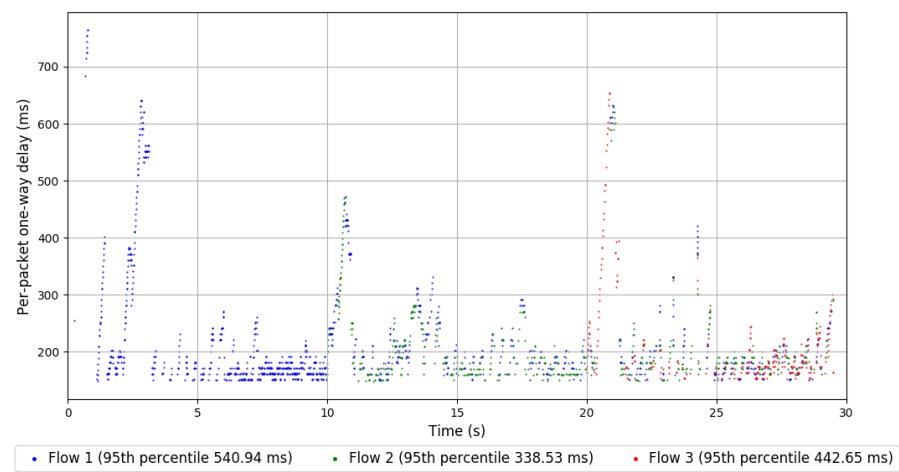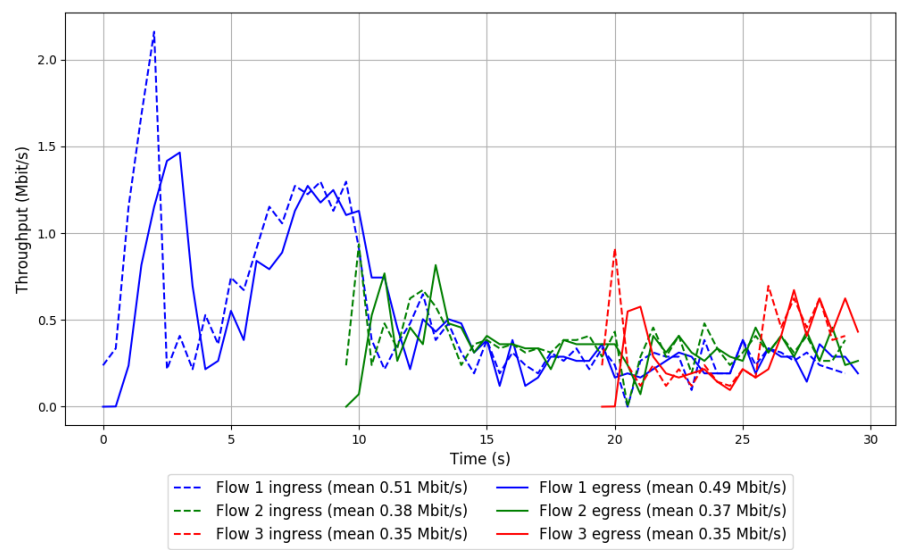
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-18 22:54:15
End at: 2019-01-18 22:54:45
Local clock offset: -8.086 ms
Remote clock offset: 12.602 ms


# Below is generated by plot.py at 2019-01-18 23:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 460.715 ms
Loss rate: 3.45%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 540.943 ms
Loss rate: 4.01%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 338.529 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 442.653 ms
Loss rate: 1.78%
```

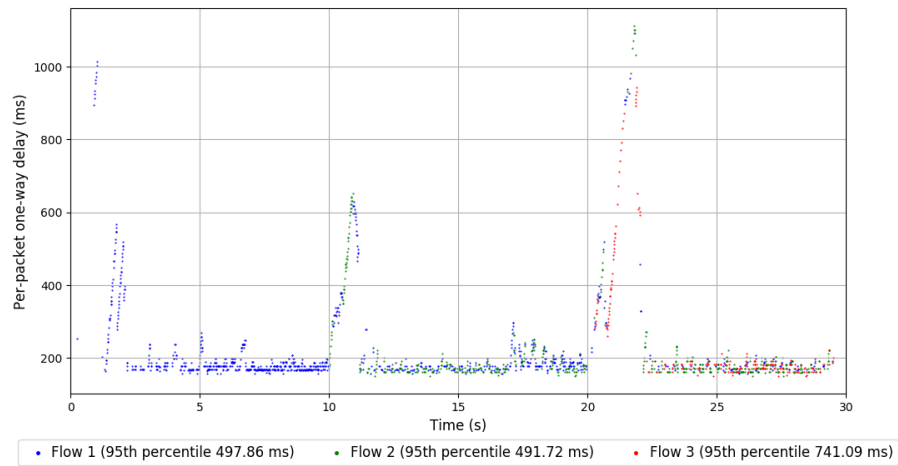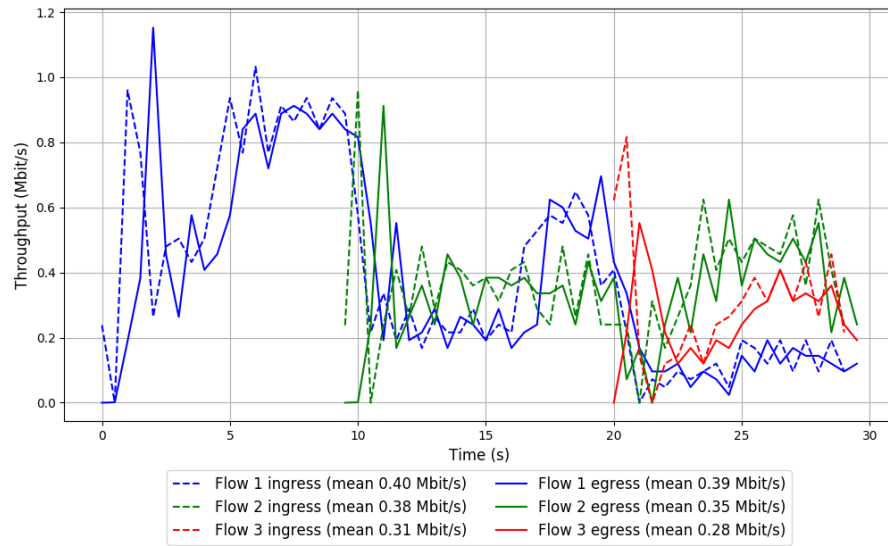## Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-18 23:20:09
End at: 2019-01-18 23:20:39
Local clock offset: -6.906 ms
Remote clock offset: 20.295 ms


# Below is generated by plot.py at 2019-01-18 23:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 537.207 ms
Loss rate: 5.84%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 497.864 ms
Loss rate: 3.69%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 491.721 ms
Loss rate: 7.14%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 741.088 ms
Loss rate: 11.16%
```

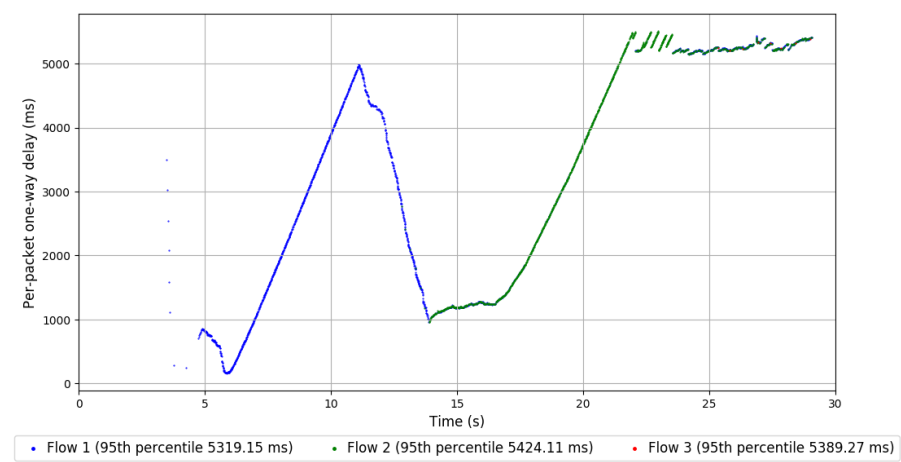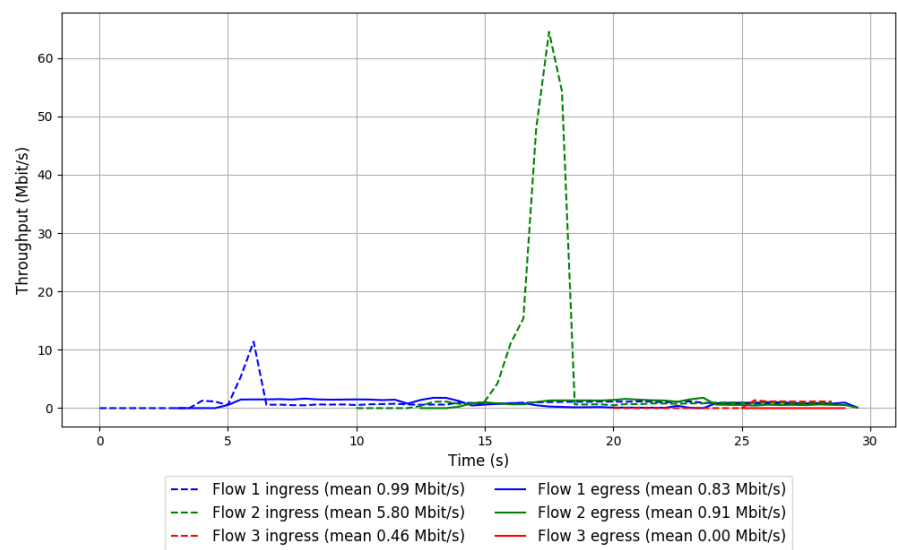Run 3: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-18 22:46:50
End at: 2019-01-18 22:47:20
Local clock offset: -8.181 ms
Remote clock offset: 16.706 ms


# Below is generated by plot.py at 2019-01-18 23:39:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 5382.654 ms
Loss rate: 74.72%
-- Flow 1:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 5319.154 ms
Loss rate: 25.64%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 5424.111 ms
Loss rate: 86.57%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5389.274 ms
Loss rate: 99.89%
```
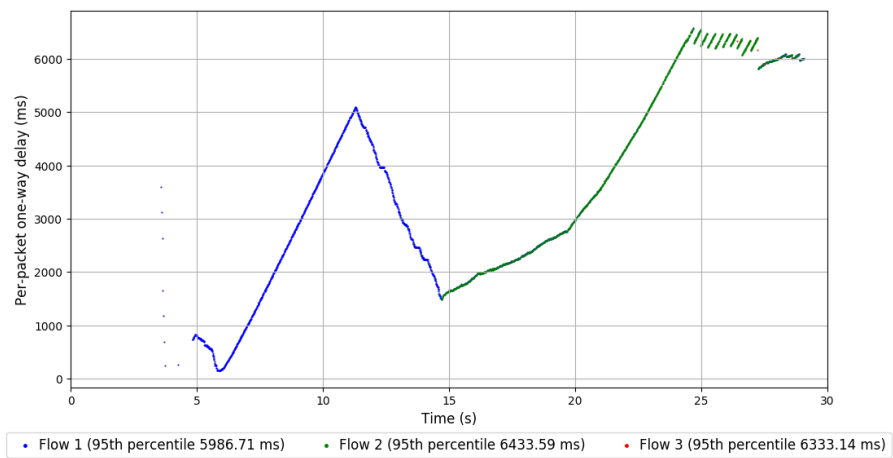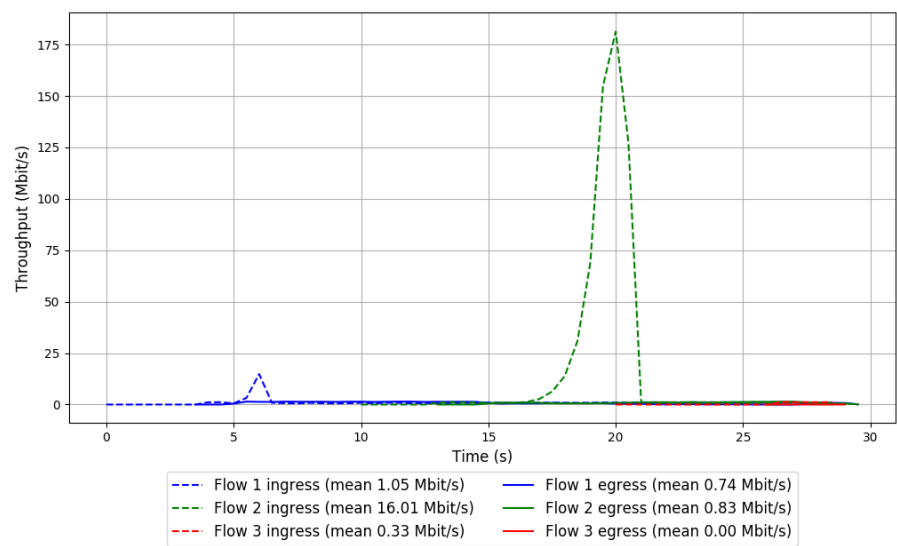
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-18 23:12:43
End at: 2019-01-18 23:13:13
Local clock offset: -8.159 ms
Remote clock offset: 14.648 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 6354.658 ms
Loss rate: 90.47%
-- Flow 1:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 5986.711 ms
Loss rate: 38.40%
-- Flow 2:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 6433.585 ms
Loss rate: 95.60%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6333.141 ms
Loss rate: 99.91%
```

Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-18 23:38:36
End at: 2019-01-18 23:39:06
Local clock offset: -3.526 ms
Remote clock offset: 4.145 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 5484.987 ms
Loss rate: 71.35%
-- Flow 1:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 5357.430 ms
Loss rate: 29.93%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 5541.456 ms
Loss rate: 83.92%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5598.900 ms
Loss rate: 99.92%
```
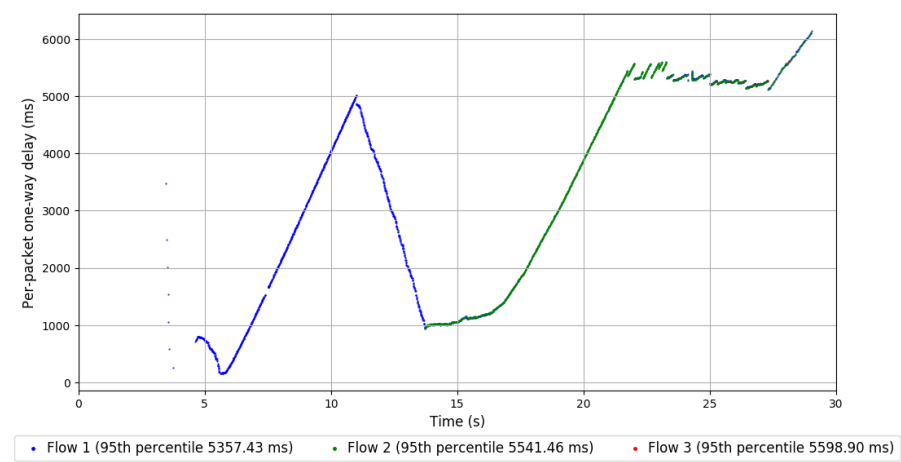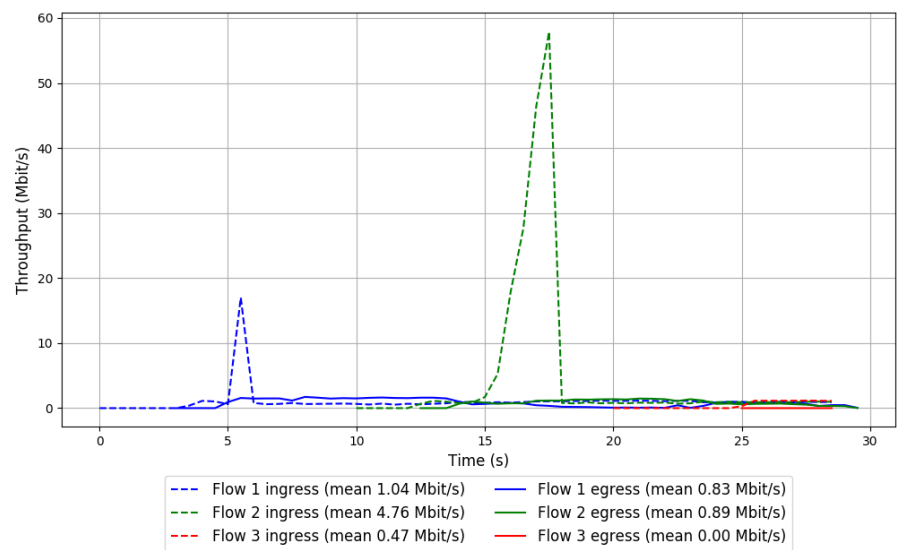
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-18 22:23:19
End at: 2019-01-18 22:23:49
Local clock offset: -7.532 ms
Remote clock offset: 7.404 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 3839.666 ms
Loss rate: 25.88%
-- Flow 1:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 3189.147 ms
Loss rate: 15.67%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 3838.283 ms
Loss rate: 27.48%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 4335.441 ms
Loss rate: 68.36%
```
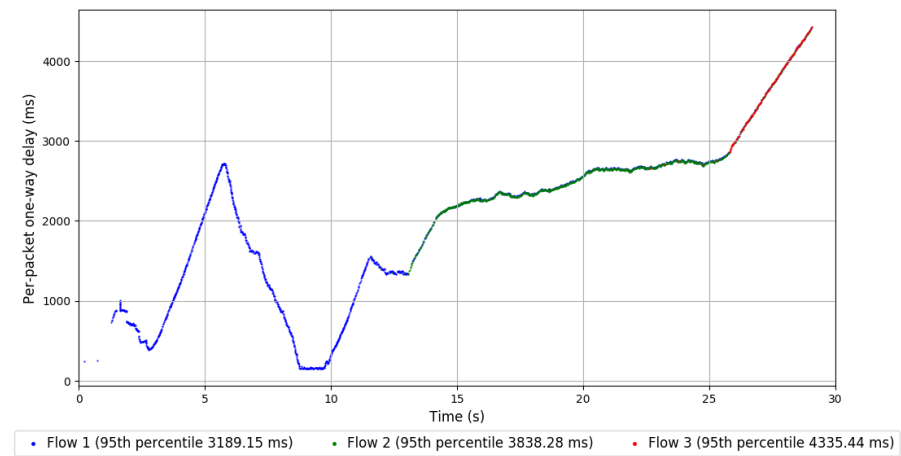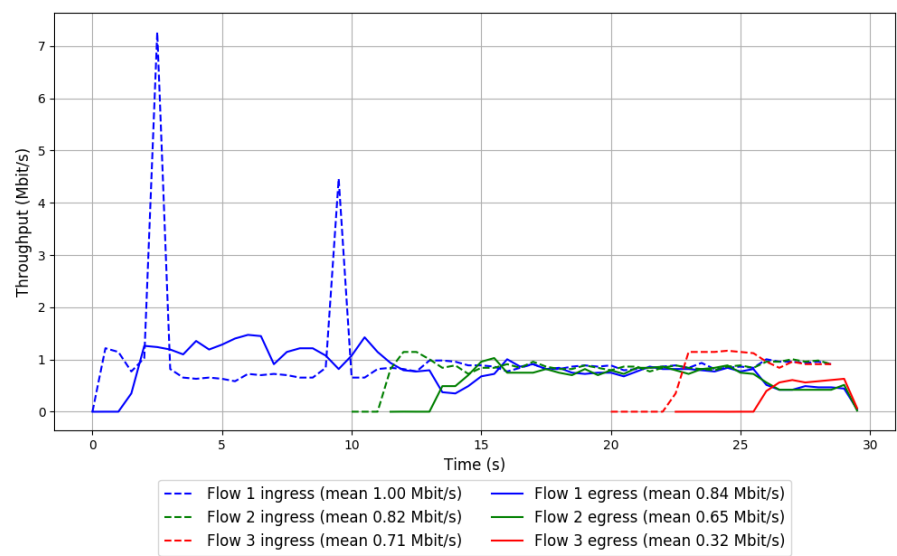
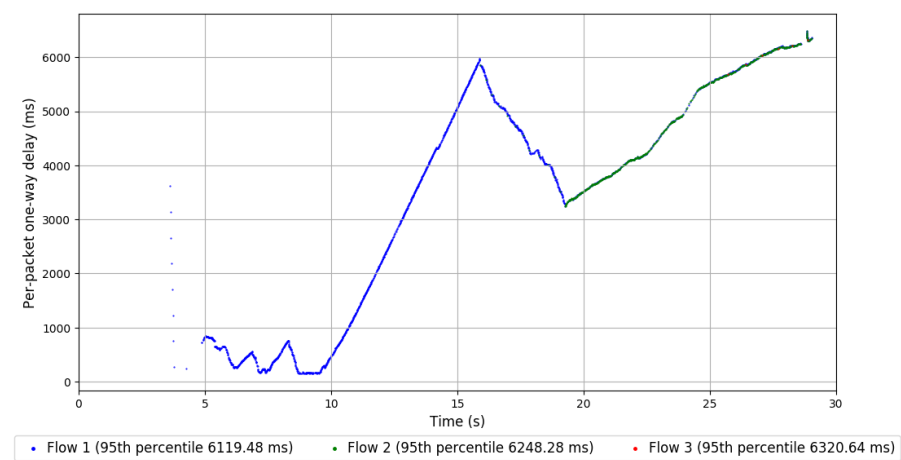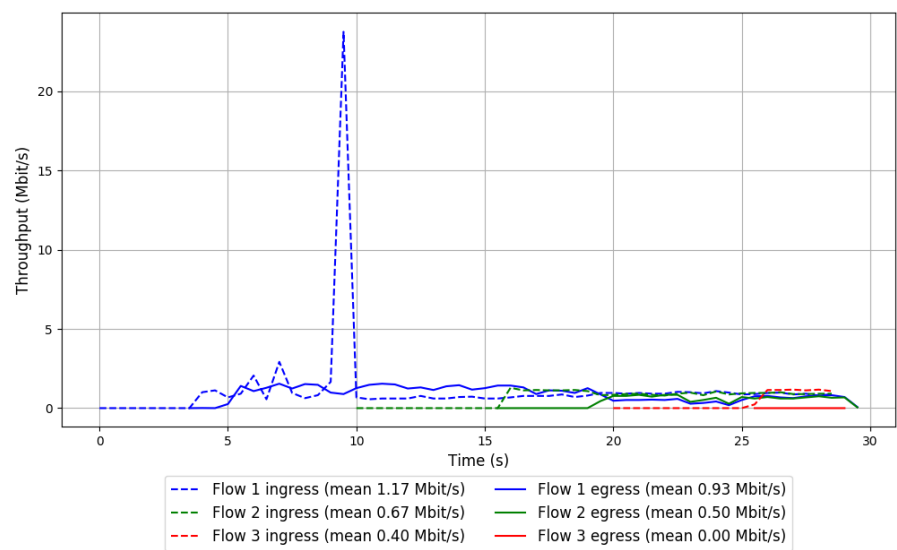Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-18 22:49:19
End at: 2019-01-18 22:49:49
Local clock offset: -8.138 ms
Remote clock offset: 16.298 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 6188.613 ms
Loss rate: 39.41%
-- Flow 1:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 6119.481 ms
Loss rate: 29.94%
-- Flow 2:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 6248.283 ms
Loss rate: 47.93%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6320.635 ms
Loss rate: 99.91%
```

Run 2: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 1.17 Mbit/s) ——— Flow 1 egress (mean 0.93 Mbit/s)
- - - Flow 2 ingress (mean 0.67 Mbit/s) ——— Flow 2 egress (mean 0.50 Mbit/s)
- - - Flow 3 ingress (mean 0.40 Mbit/s) ——— Flow 3 egress (mean 0.00 Mbit/s)

· Flow 1 (95th percentile 6119.48 ms)　　· Flow 2 (95th percentile 6248.28 ms)　　· Flow 3 (95th percentile 6320.64 ms)
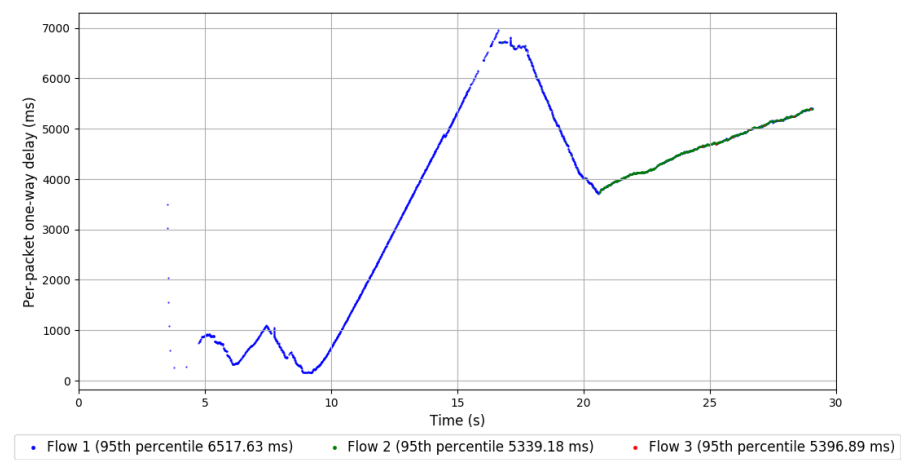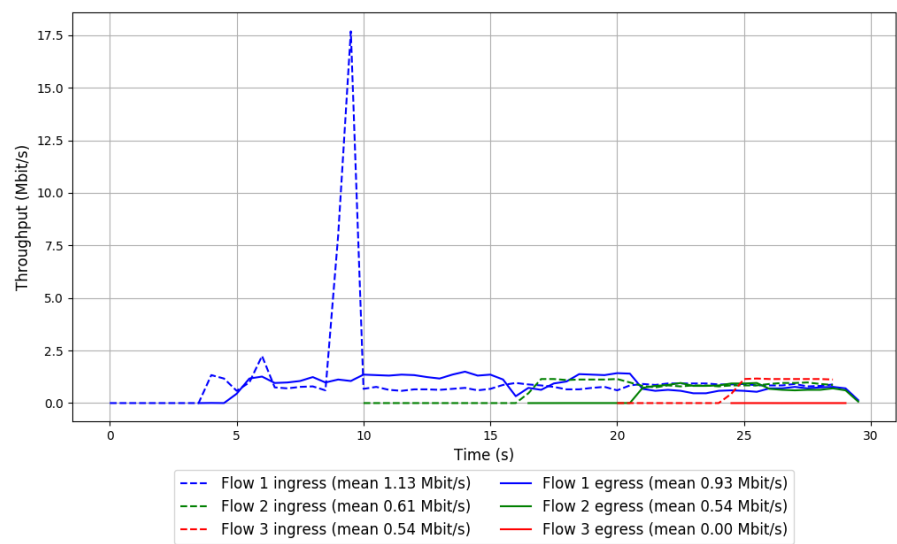
```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-18 23:15:13
End at: 2019-01-18 23:15:43
Local clock offset: -7.396 ms
Remote clock offset: 20.017 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 6368.047 ms
Loss rate: 38.25%
-- Flow 1:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 6517.629 ms
Loss rate: 27.61%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 5339.179 ms
Loss rate: 42.80%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5396.887 ms
Loss rate: 99.91%
```

Run 3: Report of Indigo-MusesC5 — Data Link

- Flow 1 ingress (mean 1.13 Mbit/s)
- Flow 1 egress (mean 0.93 Mbit/s)
- Flow 2 ingress (mean 0.61 Mbit/s)
- Flow 2 egress (mean 0.54 Mbit/s)
- Flow 3 ingress (mean 0.54 Mbit/s)
- Flow 3 egress (mean 0.00 Mbit/s)

- Flow 1 (95th percentile 6517.63 ms)
- Flow 2 (95th percentile 5339.18 ms)
- Flow 3 (95th percentile 5396.89 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-18 22:27:05
End at: 2019-01-18 22:27:35
Local clock offset: -6.986 ms
Remote clock offset: 8.606 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 6421.579 ms
Loss rate: 44.91%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 6273.406 ms
Loss rate: 33.91%
-- Flow 2:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 6615.174 ms
Loss rate: 49.37%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6898.662 ms
Loss rate: 99.93%
```
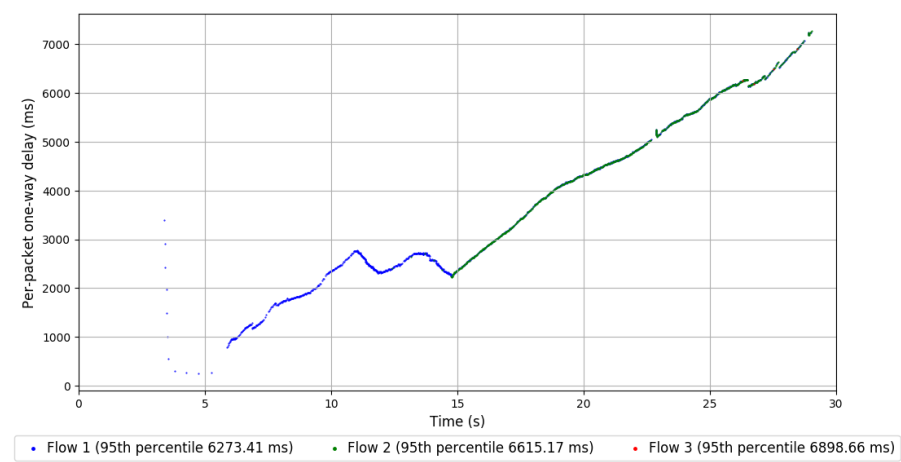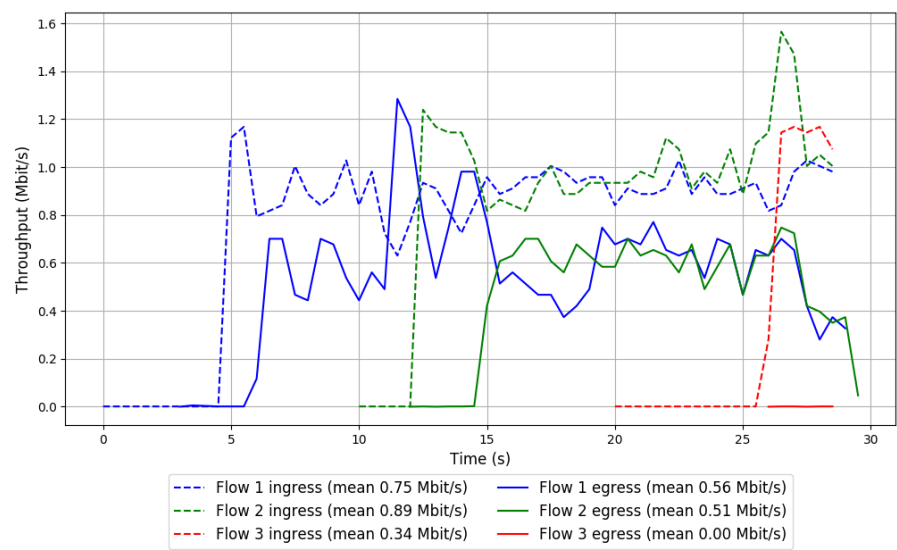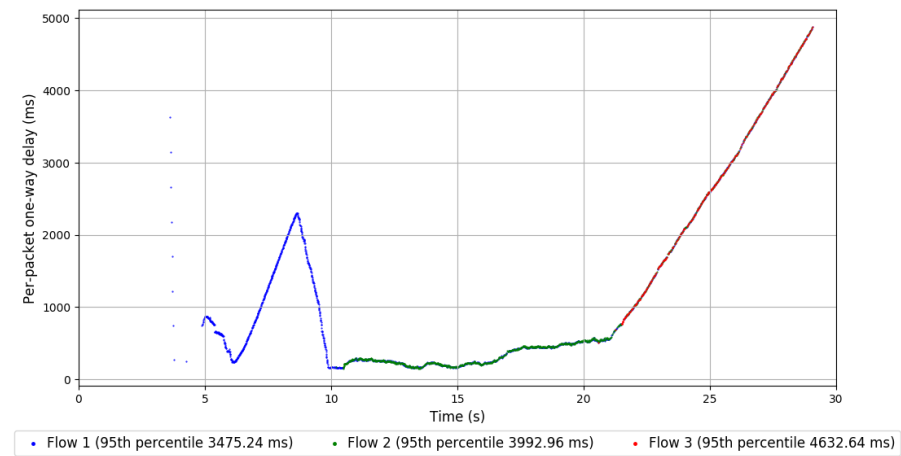
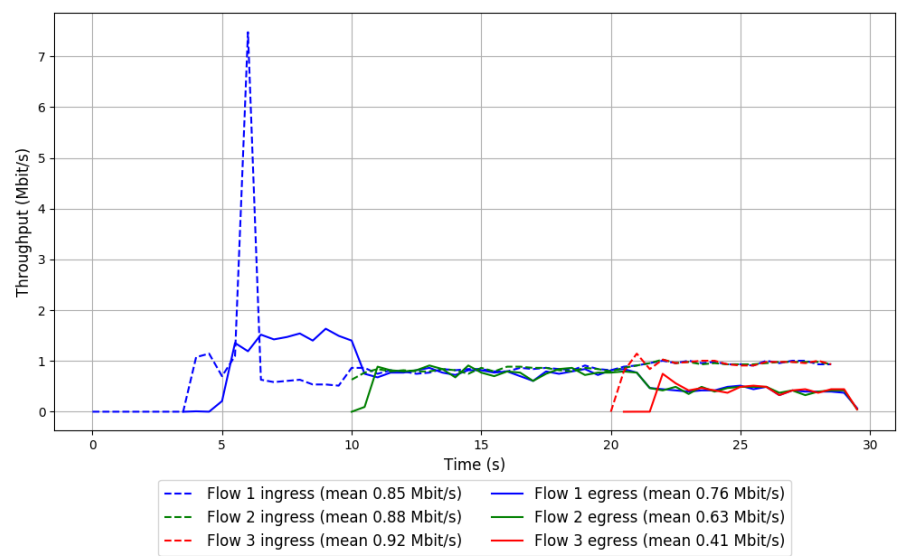Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-18 22:53:00
End at: 2019-01-18 22:53:30
Local clock offset: -7.339 ms
Remote clock offset: 17.383 ms


# Below is generated by plot.py at 2019-01-18 23:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 4022.963 ms
Loss rate: 30.04%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 3475.235 ms
Loss rate: 21.62%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 3992.956 ms
Loss rate: 29.08%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 4632.636 ms
Loss rate: 57.28%
```

Run 2: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 0.85 Mbit/s) Flow 1 egress (mean 0.76 Mbit/s)
Flow 2 ingress (mean 0.88 Mbit/s) Flow 2 egress (mean 0.63 Mbit/s)
Flow 3 ingress (mean 0.92 Mbit/s) Flow 3 egress (mean 0.41 Mbit/s)

Flow 1 (95th percentile 3475.24 ms)   Flow 2 (95th percentile 3992.96 ms)   Flow 3 (95th percentile 4632.64 ms)
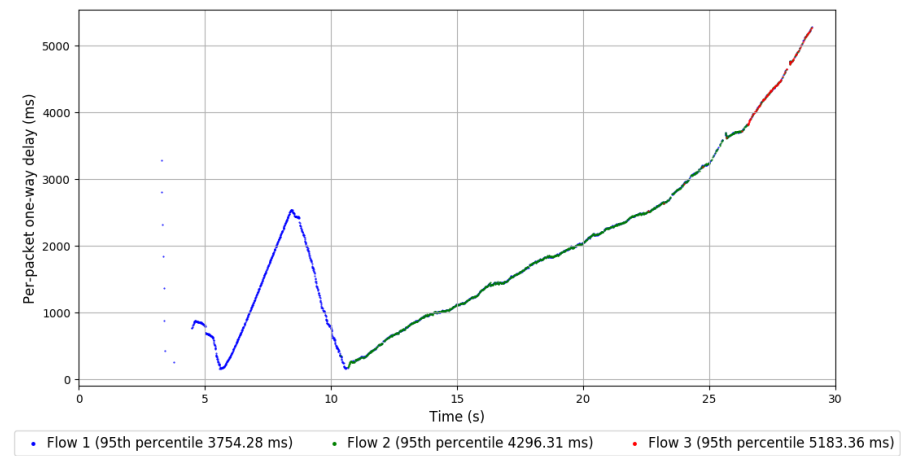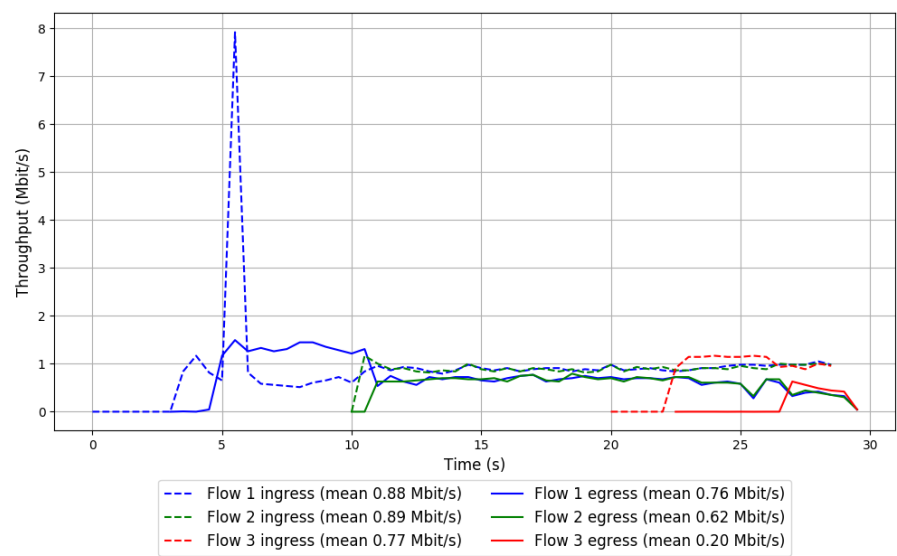
```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-18 23:18:55
End at: 2019-01-18 23:19:25
Local clock offset: -7.37 ms
Remote clock offset: 21.254 ms


# Below is generated by plot.py at 2019-01-18 23:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 4392.860 ms
Loss rate: 34.10%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 3754.285 ms
Loss rate: 23.21%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 4296.315 ms
Loss rate: 31.37%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 5183.359 ms
Loss rate: 81.05%
```
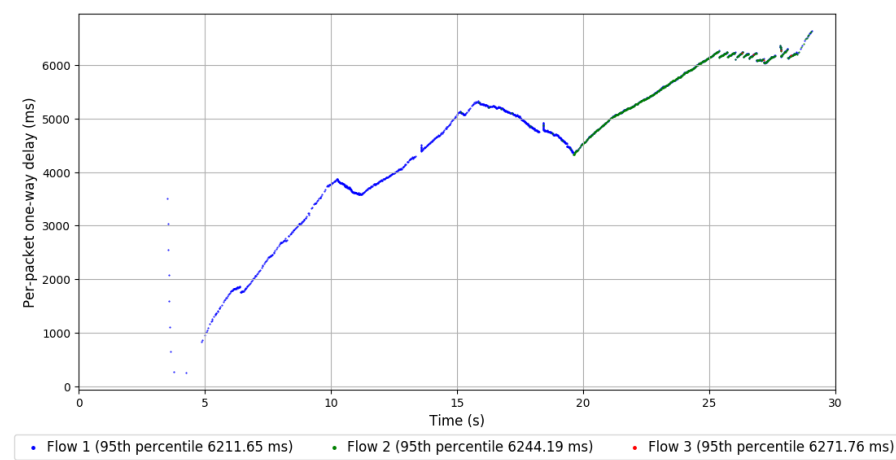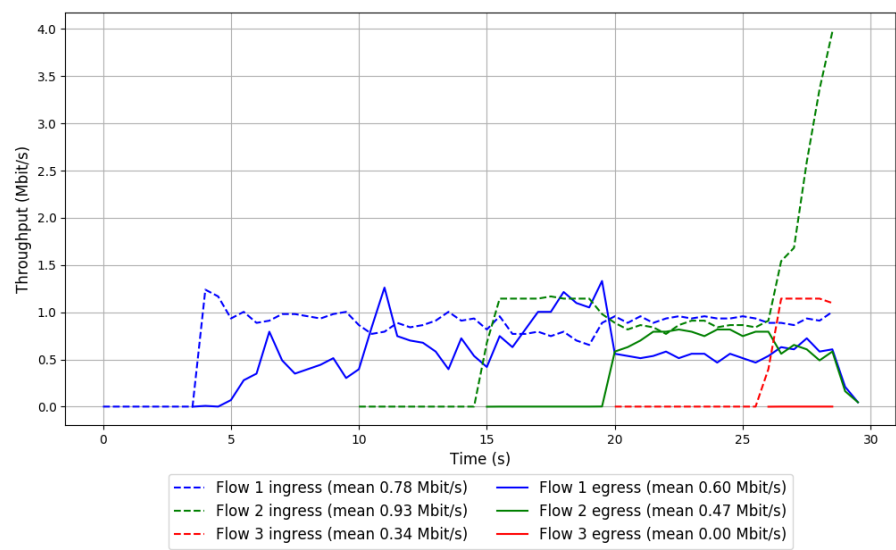
Run 3: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-18 22:35:43
End at: 2019-01-18 22:36:13
Local clock offset: -7.271 ms
Remote clock offset: 11.643 ms


# Below is generated by plot.py at 2019-01-18 23:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 6229.920 ms
Loss rate: 49.84%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 6211.651 ms
Loss rate: 32.78%
-- Flow 2:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 6244.193 ms
Loss rate: 63.20%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6271.759 ms
Loss rate: 99.91%
```
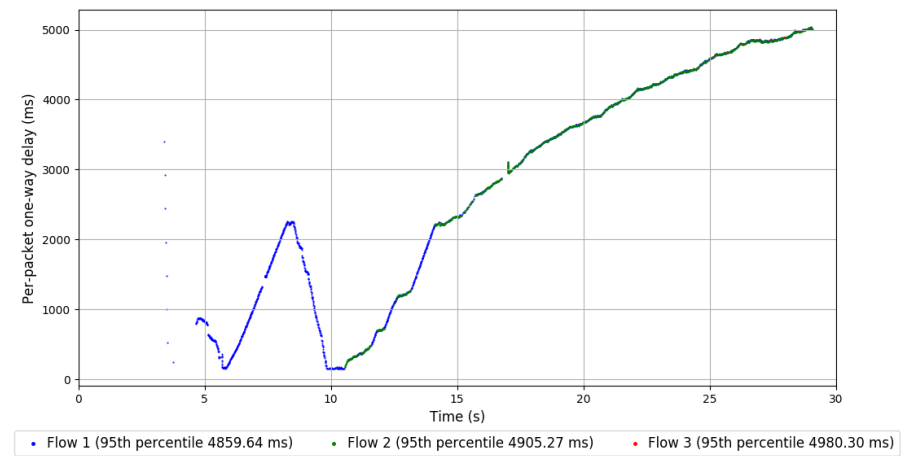
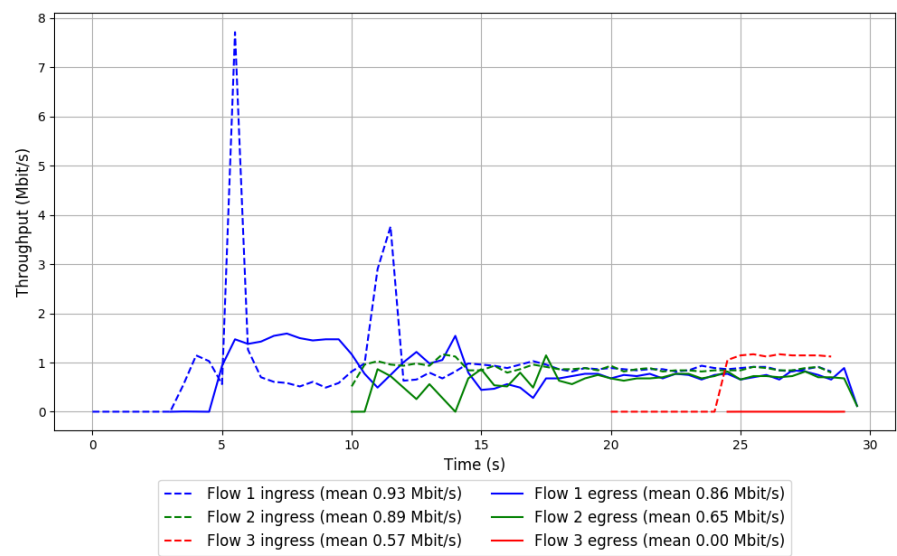Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-18 23:01:39
End at: 2019-01-18 23:02:09
Local clock offset: -7.328 ms
Remote clock offset: 14.653 ms


# Below is generated by plot.py at 2019-01-18 23:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 4879.762 ms
Loss rate: 30.12%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 4859.639 ms
Loss rate: 18.77%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 4905.267 ms
Loss rate: 27.17%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4980.302 ms
Loss rate: 99.91%
```

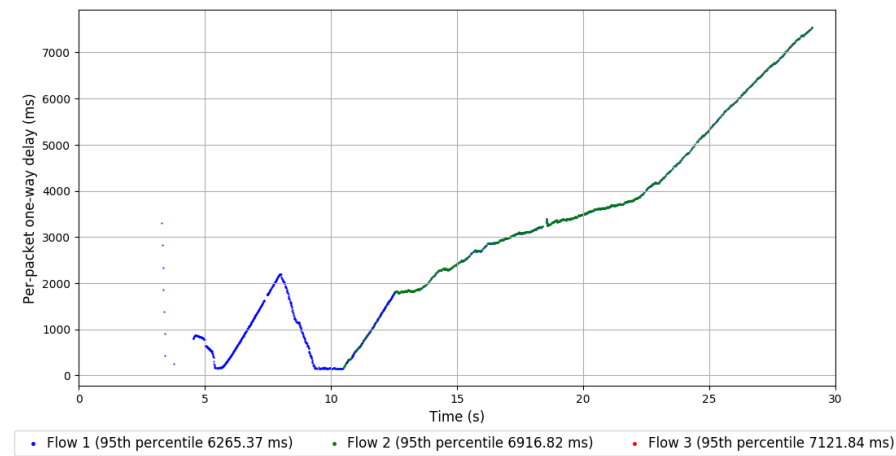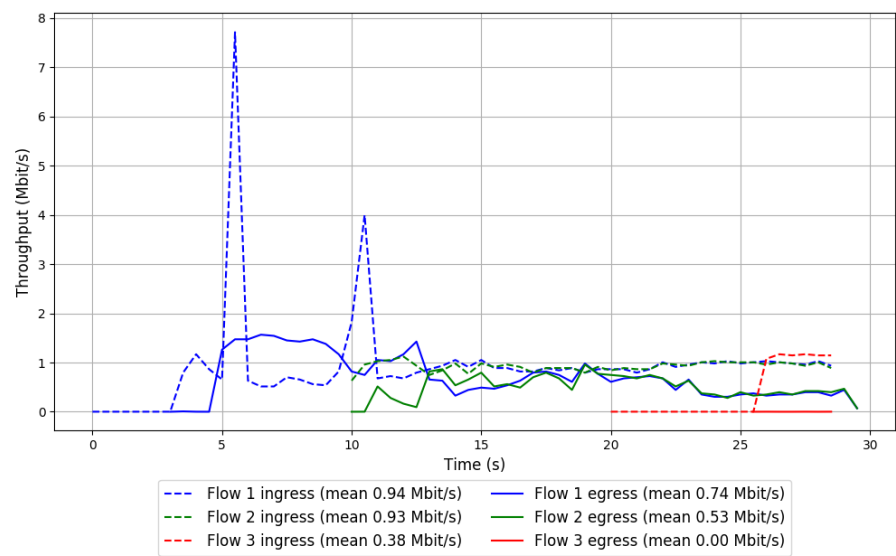Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-18 23:27:31
End at: 2019-01-18 23:28:01
Local clock offset: -4.14 ms
Remote clock offset: 16.933 ms


# Below is generated by plot.py at 2019-01-18 23:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 6656.449 ms
Loss rate: 39.76%
-- Flow 1:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 6265.373 ms
Loss rate: 29.96%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 6916.816 ms
Loss rate: 43.22%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7121.836 ms
Loss rate: 99.95%
```

Run 3: Report of Indigo-MusesT — Data Link

- - - - Flow 1 ingress (mean 0.94 Mbit/s)   —— Flow 1 egress (mean 0.74 Mbit/s)
- - - - Flow 2 ingress (mean 0.93 Mbit/s)   —— Flow 2 egress (mean 0.53 Mbit/s)
- - - - Flow 3 ingress (mean 0.38 Mbit/s)   —— Flow 3 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 6265.37 ms)   • Flow 2 (95th percentile 6916.82 ms)   • Flow 3 (95th percentile 7121.84 ms)
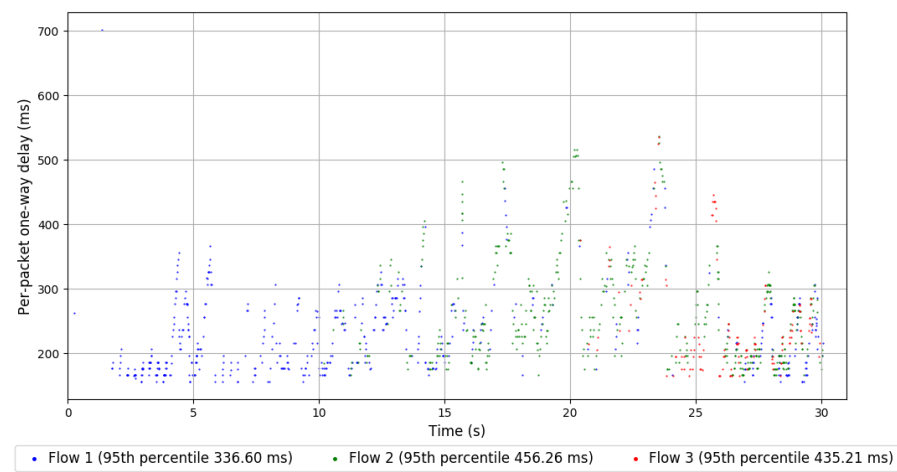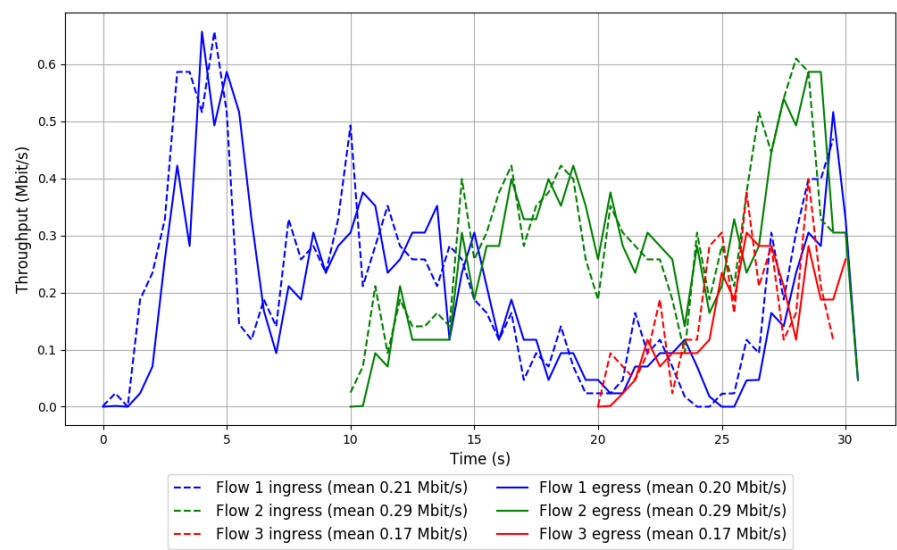
```
Run 1: Statistics of LEDBAT

Start at: 2019-01-18 22:33:14
End at: 2019-01-18 22:33:44
Local clock offset: -7.145 ms
Remote clock offset: 16.206 ms


# Below is generated by plot.py at 2019-01-18 23:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 407.191 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 336.596 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 456.260 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 435.207 ms
Loss rate: 5.55%
```
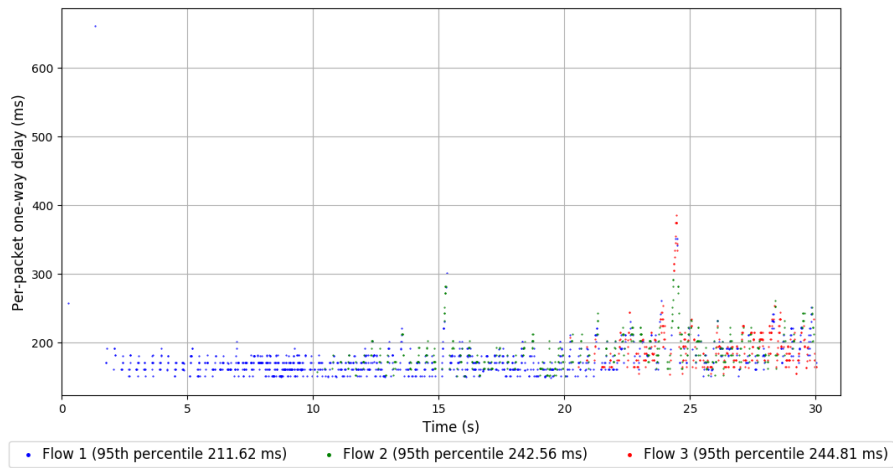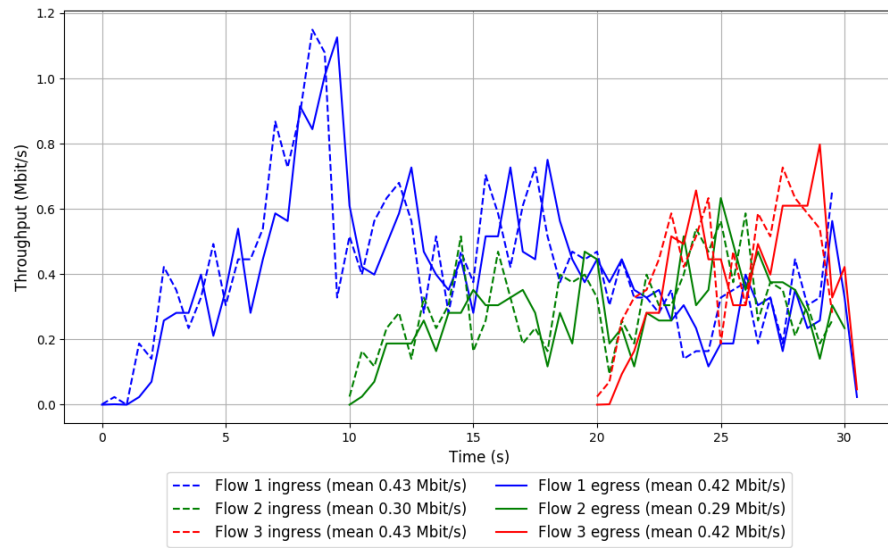
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-18 22:59:12
End at: 2019-01-18 22:59:42
Local clock offset: -7.37 ms
Remote clock offset: 14.171 ms


# Below is generated by plot.py at 2019-01-18 23:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 231.582 ms
Loss rate: 3.26%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 211.625 ms
Loss rate: 3.30%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 242.565 ms
Loss rate: 4.08%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 244.806 ms
Loss rate: 1.94%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.43 Mbit/s)   Flow 1 egress (mean 0.42 Mbit/s)
Flow 2 ingress (mean 0.30 Mbit/s)   Flow 2 egress (mean 0.29 Mbit/s)
Flow 3 ingress (mean 0.43 Mbit/s)   Flow 3 egress (mean 0.42 Mbit/s)

Flow 1 (95th percentile 211.62 ms)   Flow 2 (95th percentile 242.56 ms)   Flow 3 (95th percentile 244.81 ms)
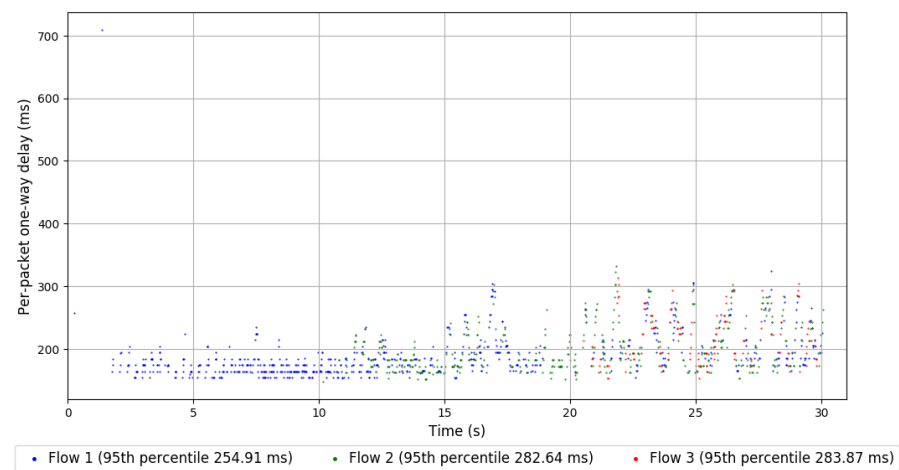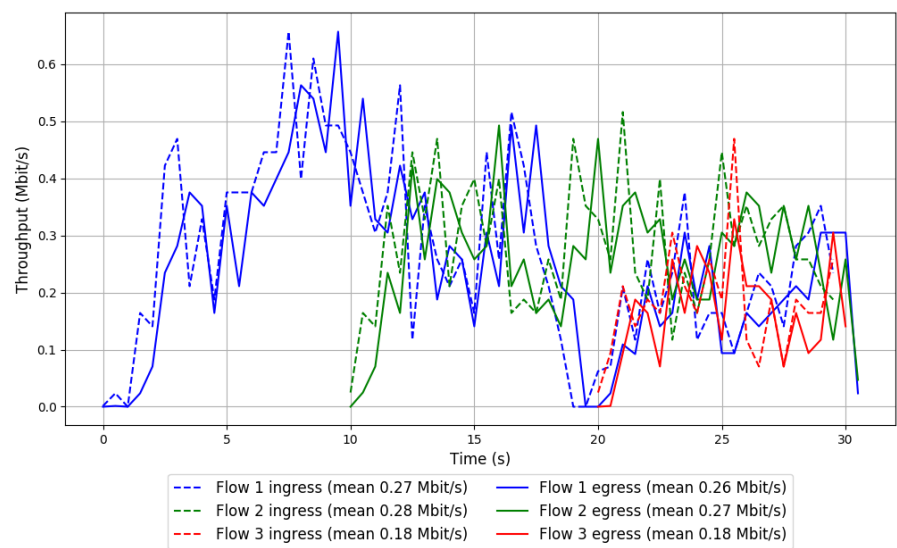
```
Run 3: Statistics of LEDBAT

Start at: 2019-01-18 23:25:04
End at: 2019-01-18 23:25:34
Local clock offset: -4.672 ms
Remote clock offset: 16.903 ms


# Below is generated by plot.py at 2019-01-18 23:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 273.489 ms
Loss rate: 4.30%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 254.905 ms
Loss rate: 4.33%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 282.636 ms
Loss rate: 3.55%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 283.874 ms
Loss rate: 6.45%
```
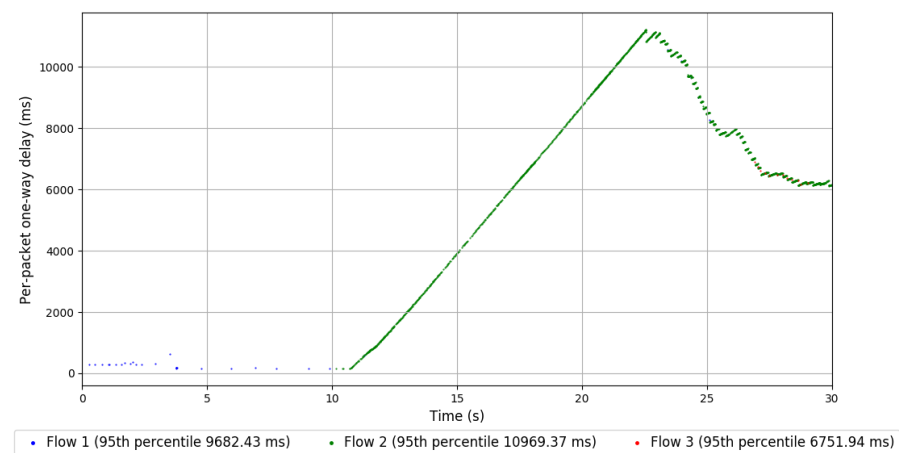
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.27 Mbit/s) — — —   Flow 1 egress (mean 0.26 Mbit/s)
Flow 2 ingress (mean 0.28 Mbit/s) — — —   Flow 2 egress (mean 0.27 Mbit/s)
Flow 3 ingress (mean 0.18 Mbit/s) — — —   Flow 3 egress (mean 0.18 Mbit/s)

Flow 1 (95th percentile 254.91 ms)   Flow 2 (95th percentile 282.64 ms)   Flow 3 (95th percentile 283.87 ms)
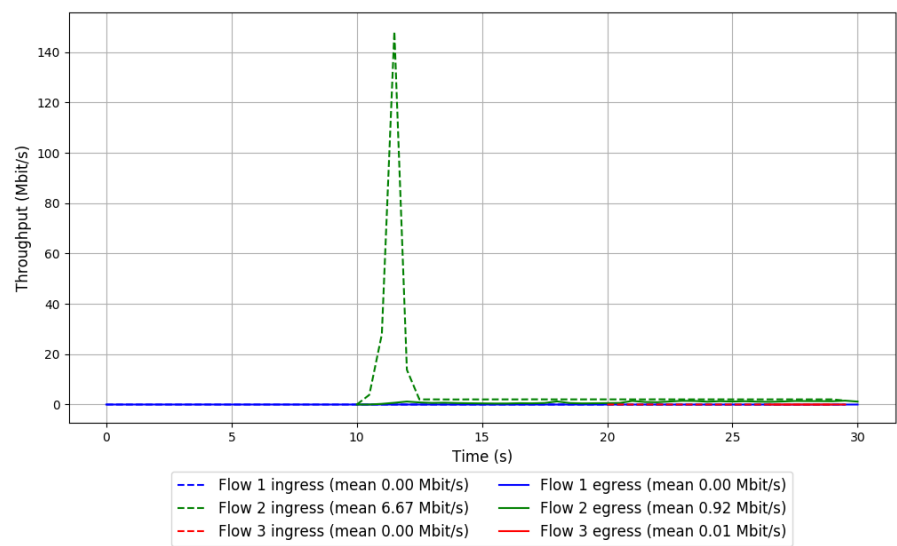
```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-18 22:45:36
End at: 2019-01-18 22:46:06
Local clock offset: -8.226 ms
Remote clock offset: 17.917 ms


# Below is generated by plot.py at 2019-01-18 23:39:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 10966.025 ms
Loss rate: 86.24%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 9682.432 ms
Loss rate: 17.14%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 10969.369 ms
Loss rate: 86.27%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 6751.937 ms
Loss rate: 44.83%
```
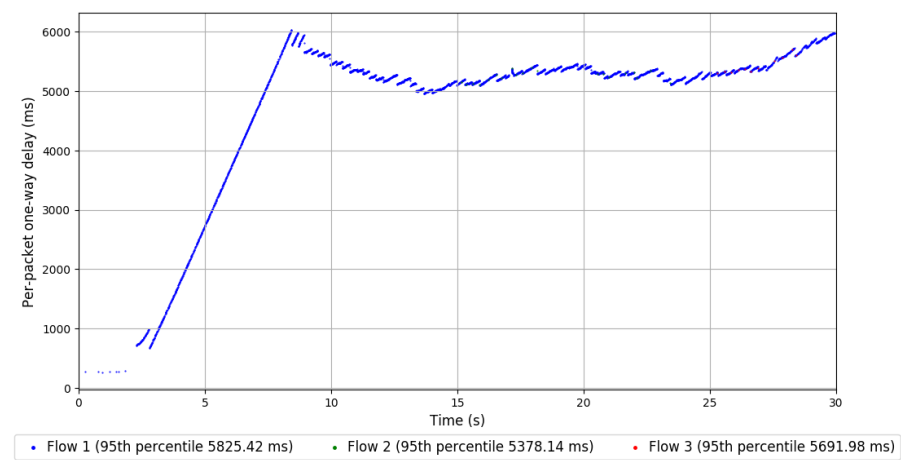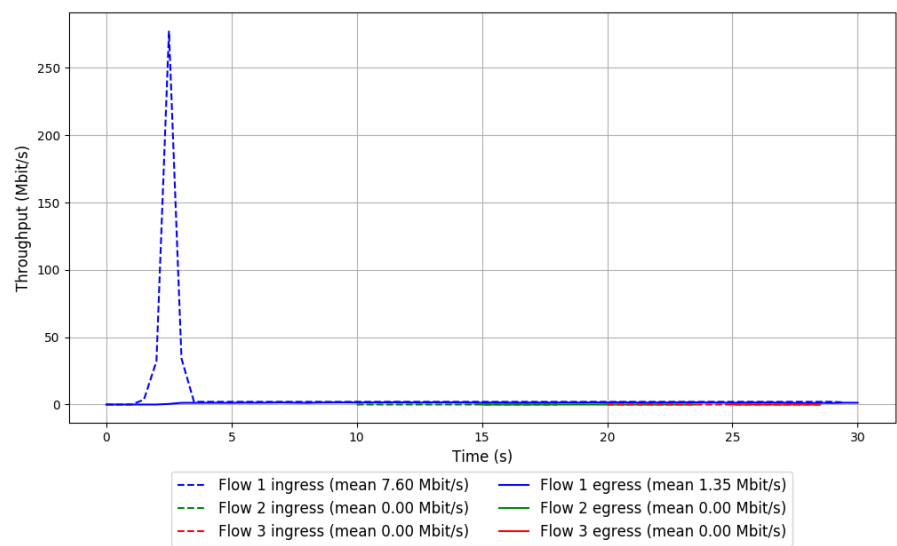
Run 1: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 0.00 Mbit/s)   —— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 6.67 Mbit/s)   —— Flow 2 egress (mean 0.92 Mbit/s)
- - - Flow 3 ingress (mean 0.00 Mbit/s)   —— Flow 3 egress (mean 0.01 Mbit/s)

- Flow 1 (95th percentile 9682.43 ms)   • Flow 2 (95th percentile 10969.37 ms)   • Flow 3 (95th percentile 6751.94 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-18 23:11:29
End at: 2019-01-18 23:11:59
Local clock offset: -7.375 ms
Remote clock offset: 19.351 ms


# Below is generated by plot.py at 2019-01-18 23:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 5824.202 ms
Loss rate: 82.33%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 5825.419 ms
Loss rate: 82.34%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5378.140 ms
Loss rate: 5.31%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5691.981 ms
Loss rate: 52.11%
```
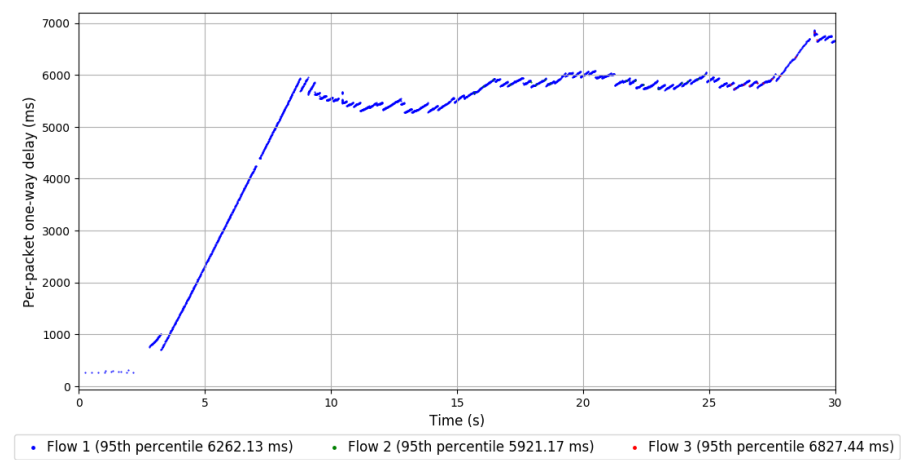
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-18 23:37:22
End at: 2019-01-18 23:37:52
Local clock offset: -3.613 ms
Remote clock offset: 4.712 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 6276.277 ms
Loss rate: 85.81%
-- Flow 1:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 6262.134 ms
Loss rate: 85.82%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5921.170 ms
Loss rate: 18.39%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6827.442 ms
Loss rate: 52.11%
```
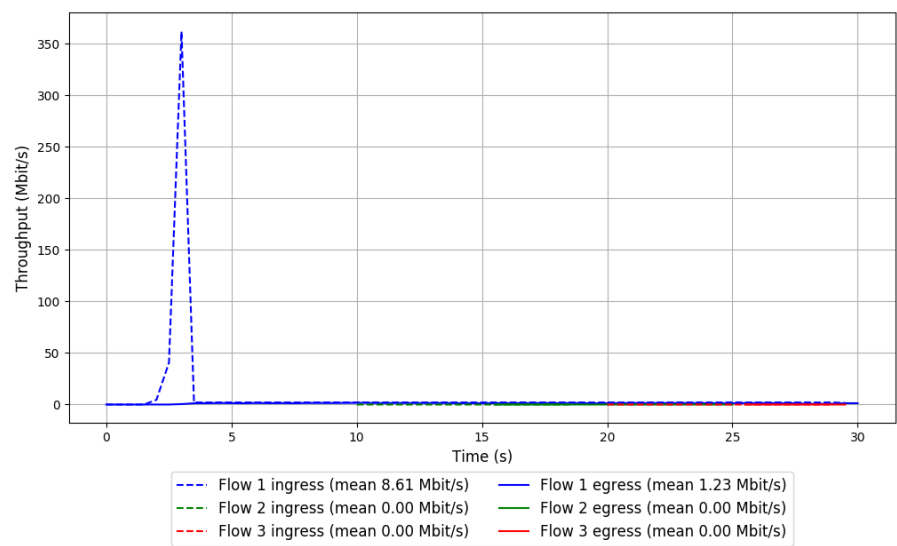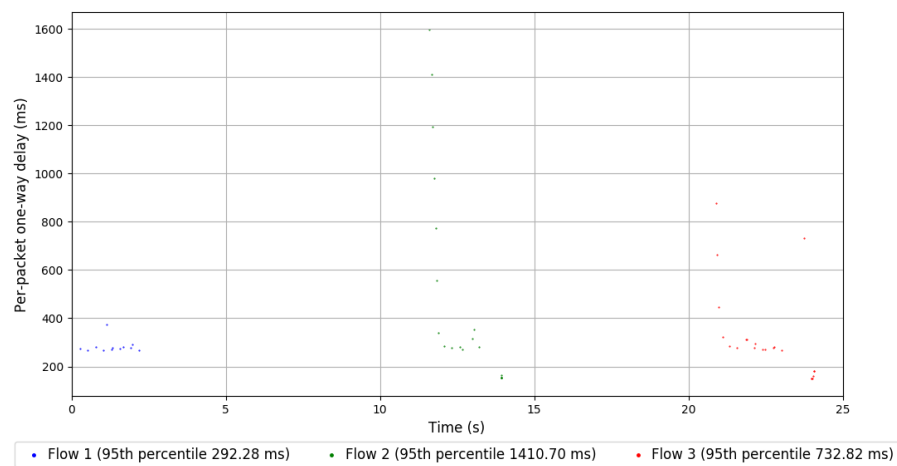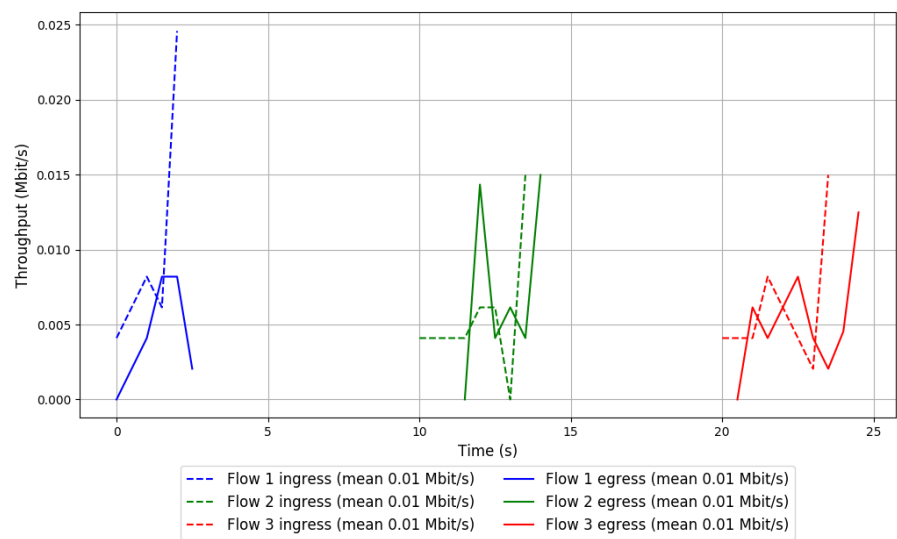
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 8.61 Mbit/s) — Flow 1 egress (mean 1.23 Mbit/s)
Flow 2 ingress (mean 0.00 Mbit/s) — Flow 2 egress (mean 0.00 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) — Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 6262.13 ms)   Flow 2 (95th percentile 5921.17 ms)   Flow 3 (95th percentile 6827.44 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-18 22:34:30
End at: 2019-01-18 22:35:00
Local clock offset: -7.945 ms
Remote clock offset: 15.211 ms
```

Run 1: Report of PCC-Expr — Data Link
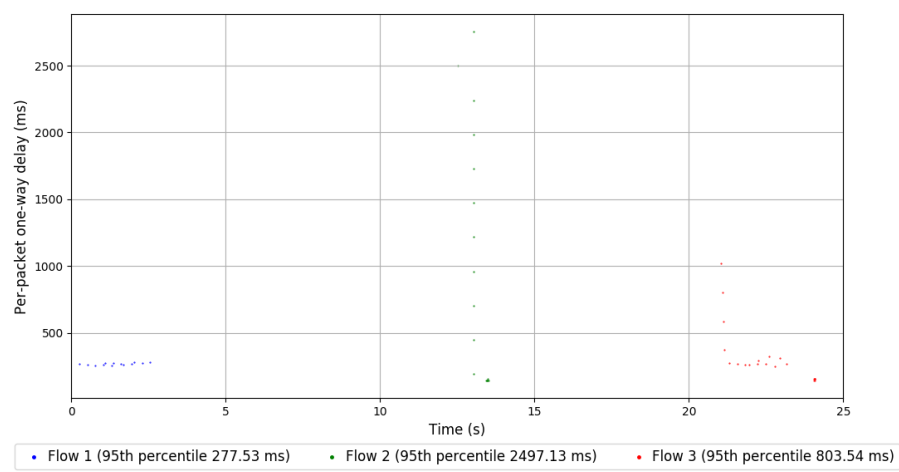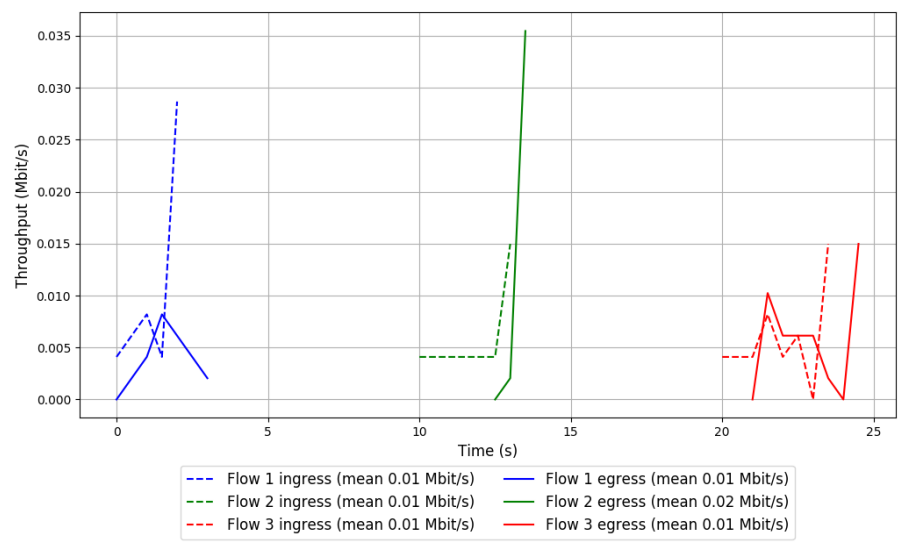
Run 2: Statistics of PCC-Expr

Start at: 2019-01-18 23:00:26
End at: 2019-01-18 23:00:56
Local clock offset: -7.288 ms
Remote clock offset: 13.504 ms

Run 2: Report of PCC-Expr — Data Link
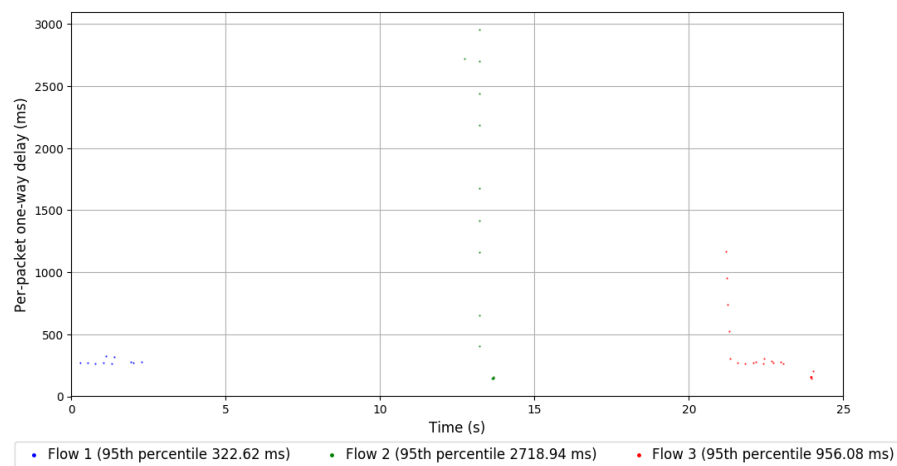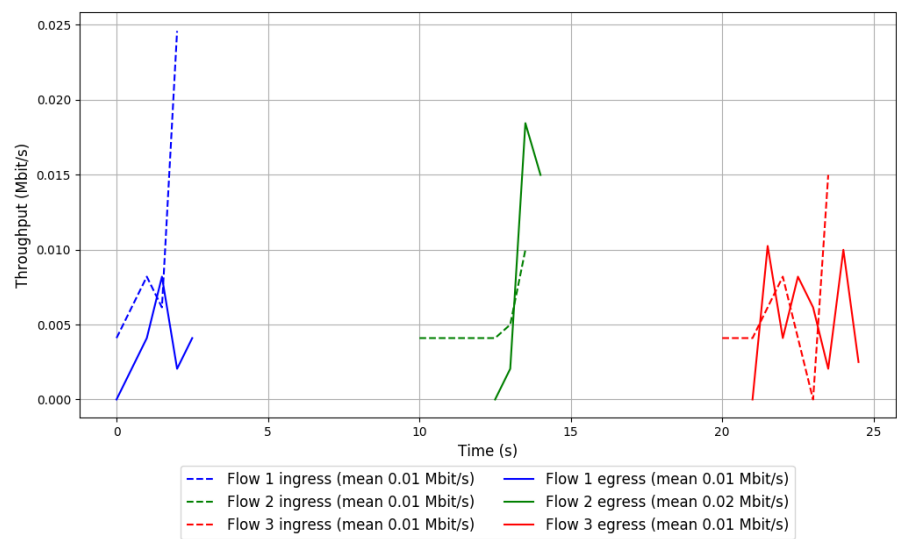
```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-18 23:26:18
End at: 2019-01-18 23:26:48
Local clock offset: -4.376 ms
Remote clock offset: 20.356 ms
```

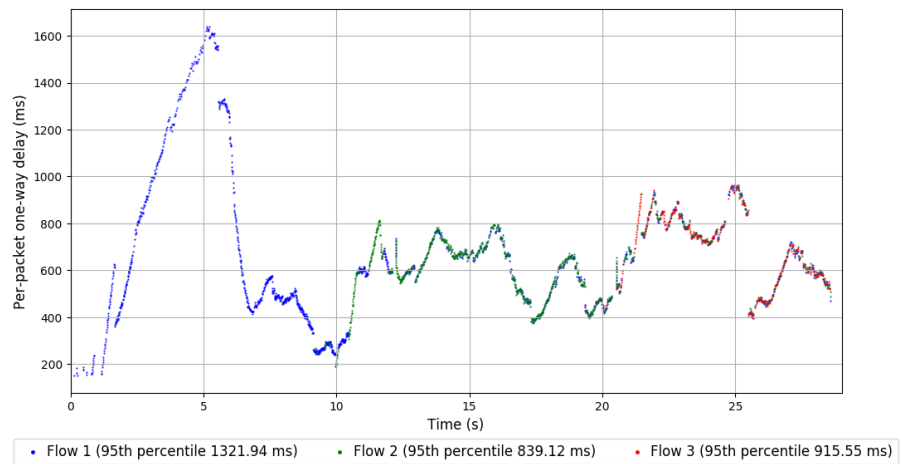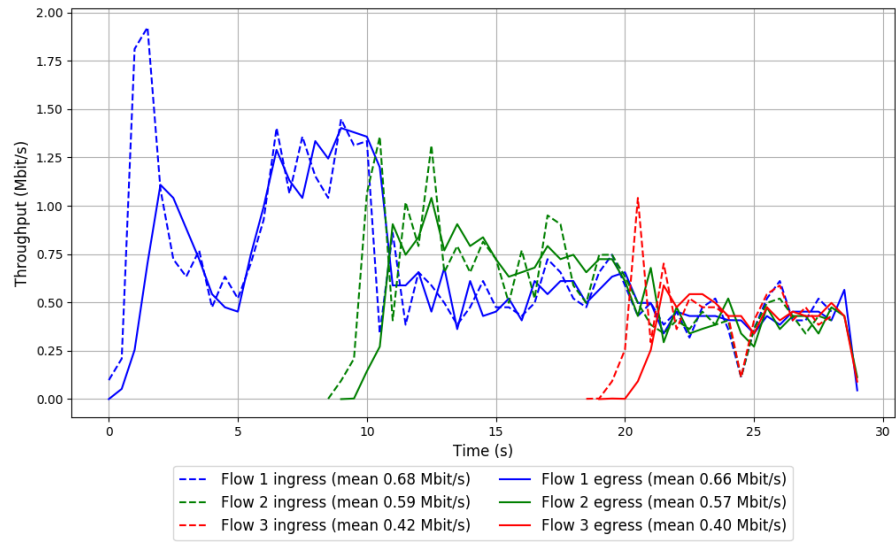# Run 3: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-18 22:39:24
End at: 2019-01-18 22:39:54
Local clock offset: -8.044 ms
Remote clock offset: 12.254 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 1127.659 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 1321.938 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 839.124 ms
Loss rate: 4.42%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 915.548 ms
Loss rate: 7.37%
```

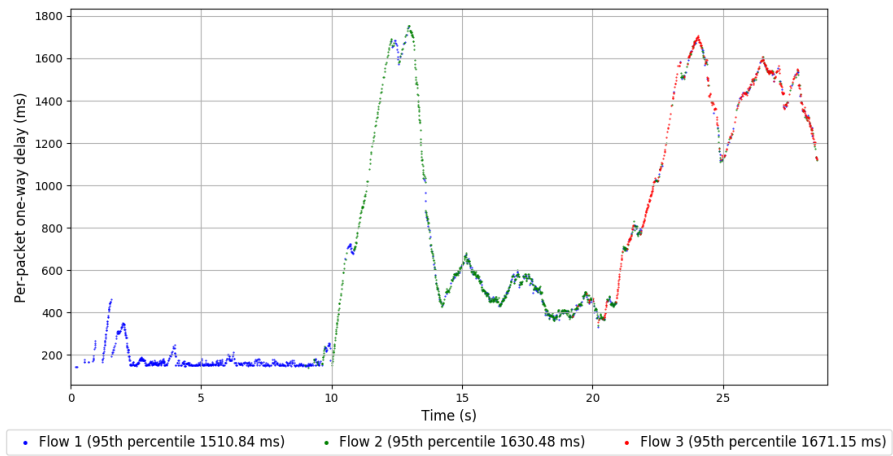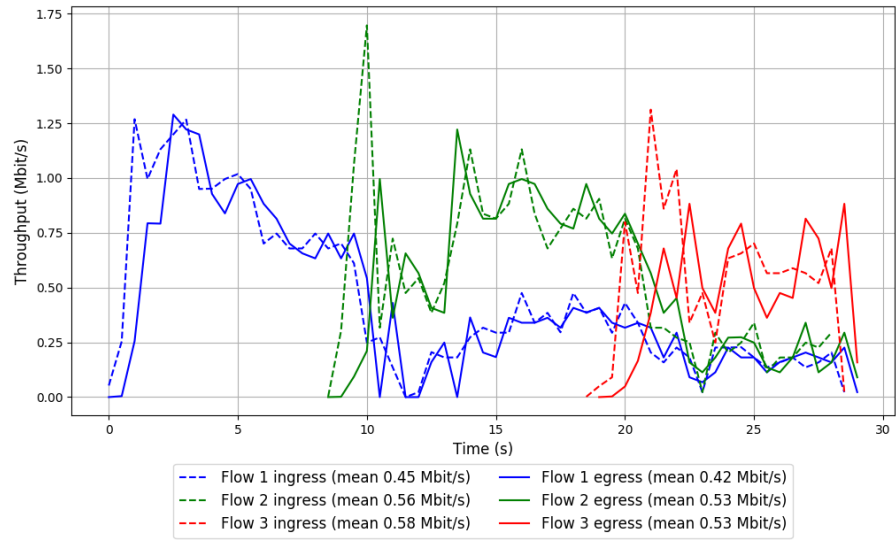Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-18 23:05:20
End at: 2019-01-18 23:05:50
Local clock offset: -8.156 ms
Remote clock offset: 13.685 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 1609.125 ms
Loss rate: 6.70%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 1510.844 ms
Loss rate: 5.60%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 1630.476 ms
Loss rate: 5.22%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 1671.153 ms
Loss rate: 12.13%
```

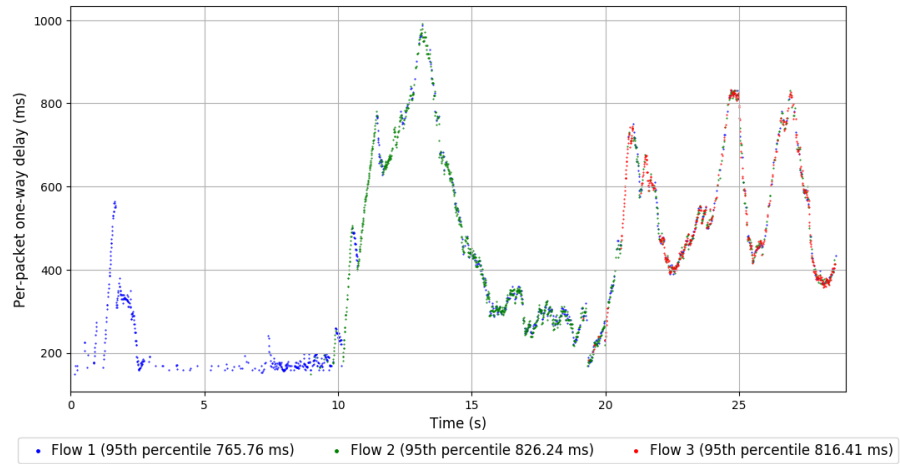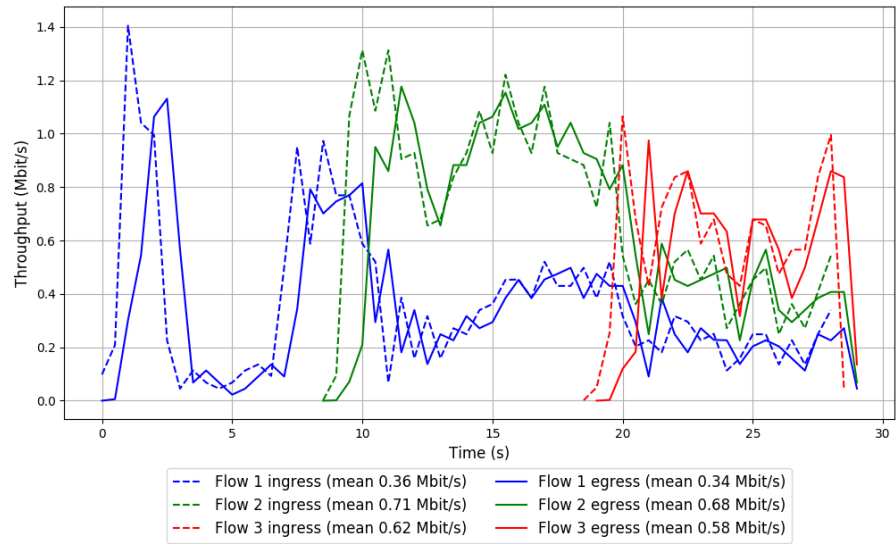Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-18 23:31:12
End at: 2019-01-18 23:31:42
Local clock offset: -3.529 ms
Remote clock offset: 13.844 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 817.441 ms
Loss rate: 5.66%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 765.756 ms
Loss rate: 5.61%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 826.244 ms
Loss rate: 4.54%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 816.411 ms
Loss rate: 8.37%
```

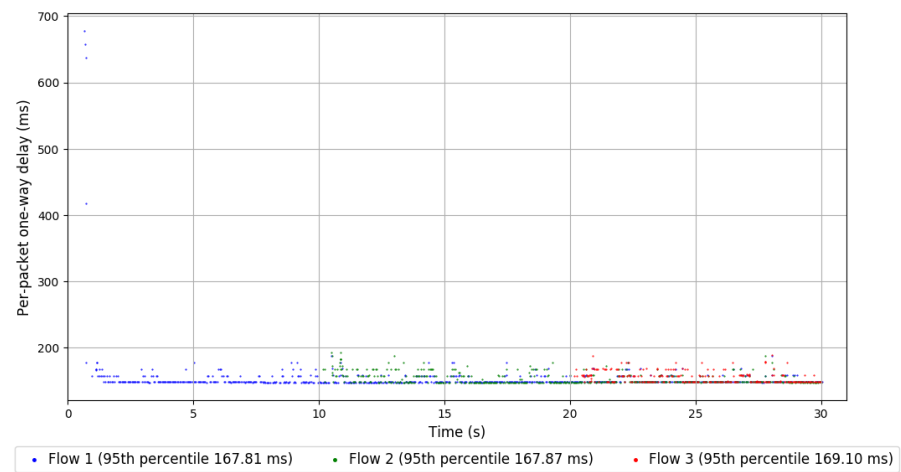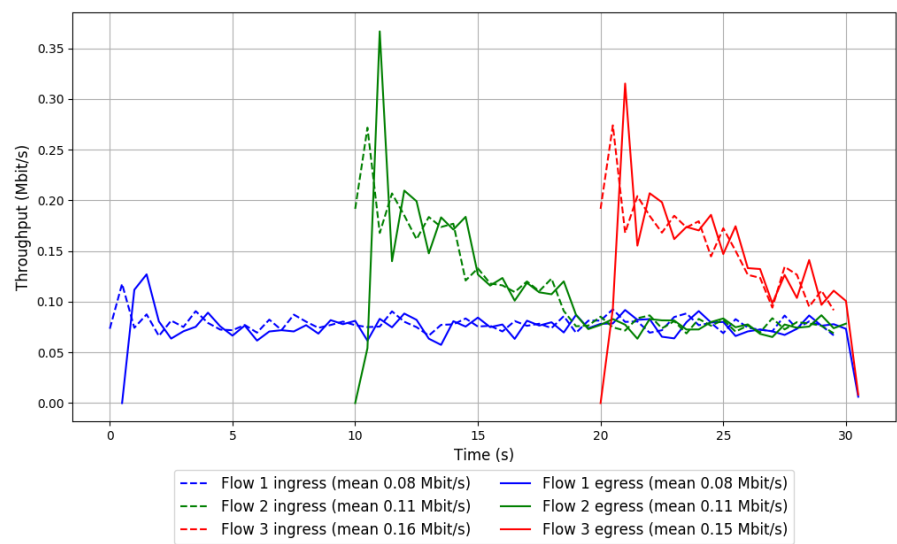Run 3: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-01-18 22:44:22
End at: 2019-01-18 22:44:52
Local clock offset: -8.152 ms
Remote clock offset: 12.894 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 167.954 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 167.813 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 167.869 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 169.101 ms
Loss rate: 2.09%
```

Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.08 Mbit/s)   Flow 1 egress (mean 0.08 Mbit/s)
Flow 2 ingress (mean 0.11 Mbit/s)   Flow 2 egress (mean 0.11 Mbit/s)
Flow 3 ingress (mean 0.16 Mbit/s)   Flow 3 egress (mean 0.15 Mbit/s)

• Flow 1 (95th percentile 167.81 ms)   • Flow 2 (95th percentile 167.87 ms)   • Flow 3 (95th percentile 169.10 ms)
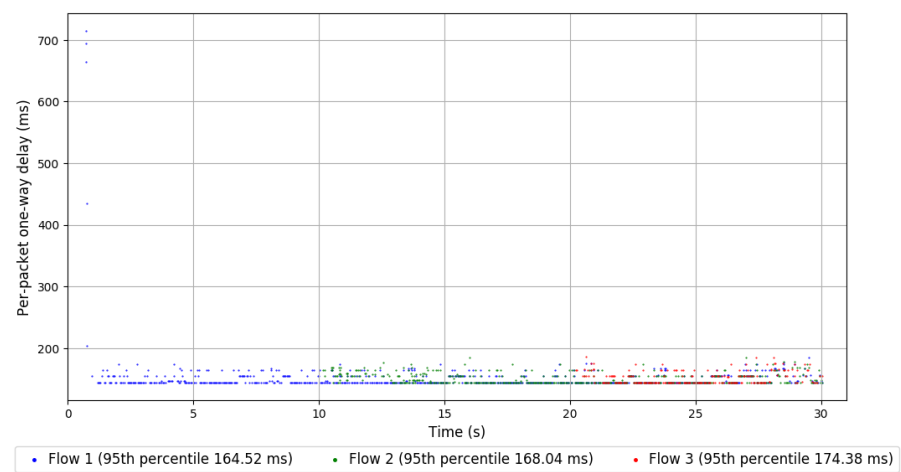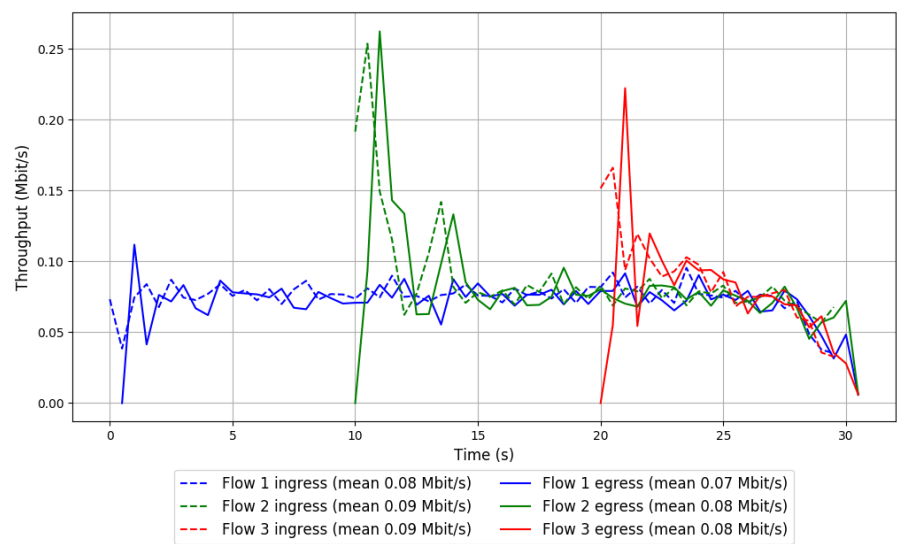
90

```
Run 2: Statistics of SCReAM

Start at: 2019-01-18 23:10:16
End at: 2019-01-18 23:10:46
Local clock offset: -8.13 ms
Remote clock offset: 15.552 ms


# Below is generated by plot.py at 2019-01-18 23:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 166.770 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 164.520 ms
Loss rate: 3.54%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 168.045 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 174.383 ms
Loss rate: 6.62%
```
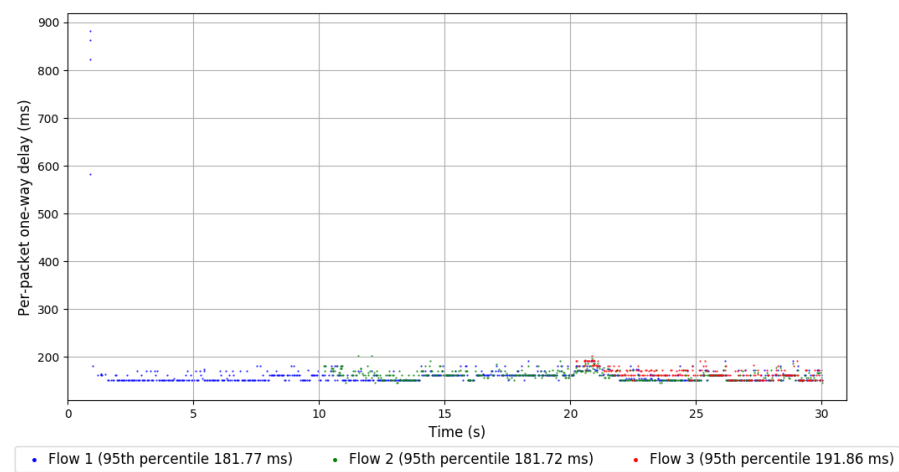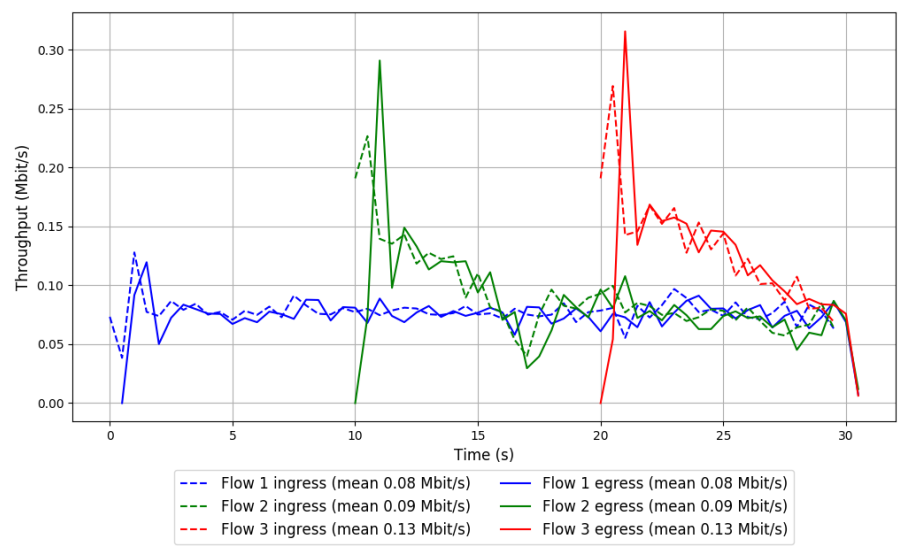
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-18 23:36:08
End at: 2019-01-18 23:36:38
Local clock offset: -3.734 ms
Remote clock offset: 9.068 ms


# Below is generated by plot.py at 2019-01-18 23:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 181.858 ms
Loss rate: 4.32%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 181.771 ms
Loss rate: 3.38%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 181.722 ms
Loss rate: 5.64%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 191.860 ms
Loss rate: 4.13%
```

Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-18 22:32:00
End at: 2019-01-18 22:32:30
Local clock offset: -7.942 ms
Remote clock offset: 9.987 ms


# Below is generated by plot.py at 2019-01-18 23:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 189.644 ms
Loss rate: 2.85%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 209.477 ms
Loss rate: 3.64%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 178.229 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 198.643 ms
Loss rate: 1.80%
```
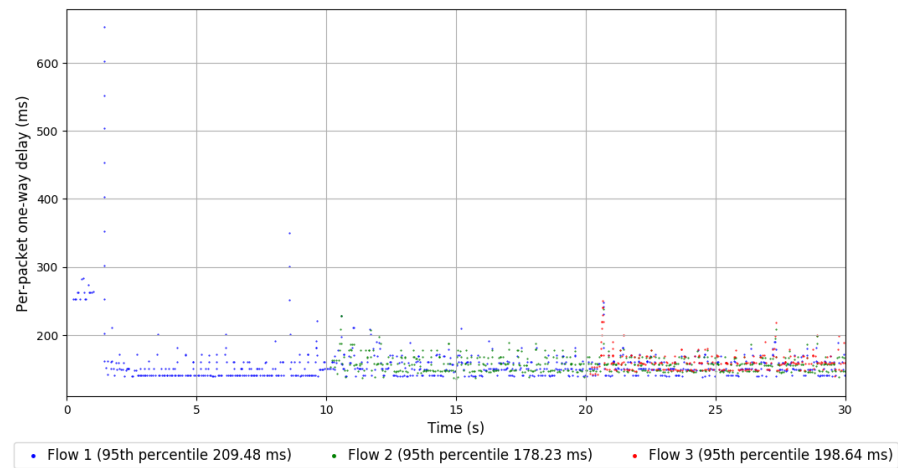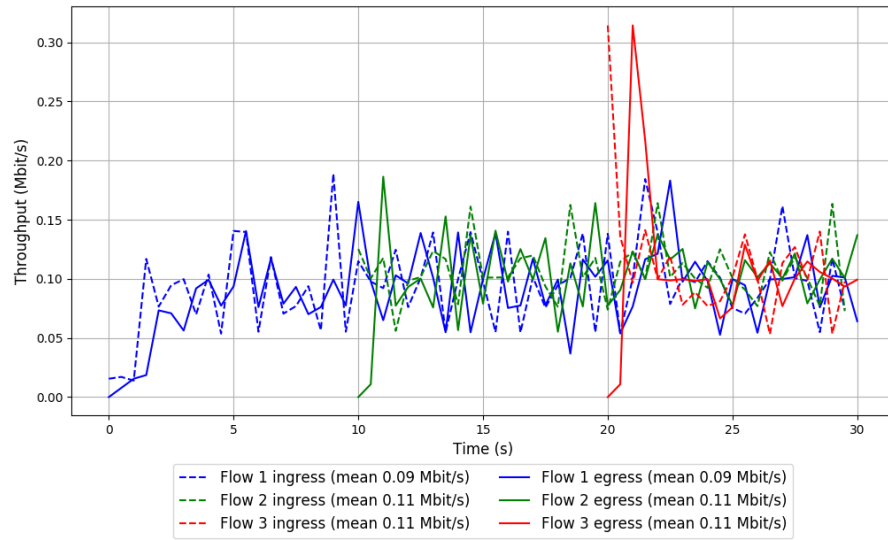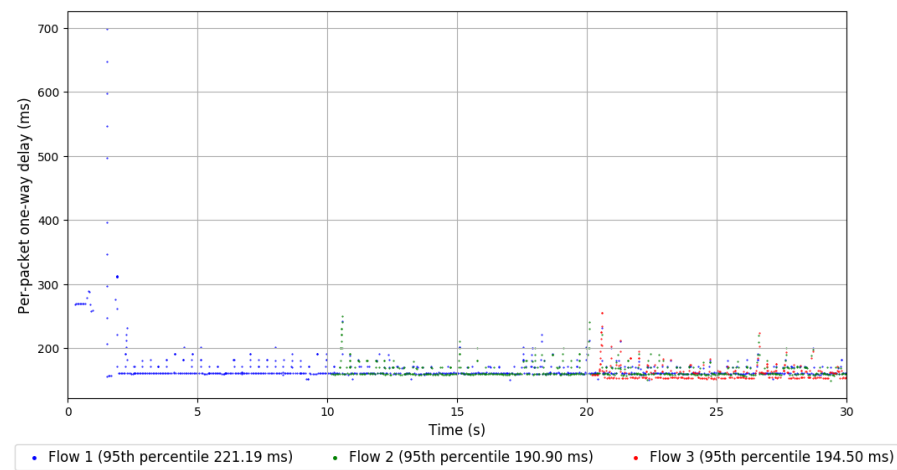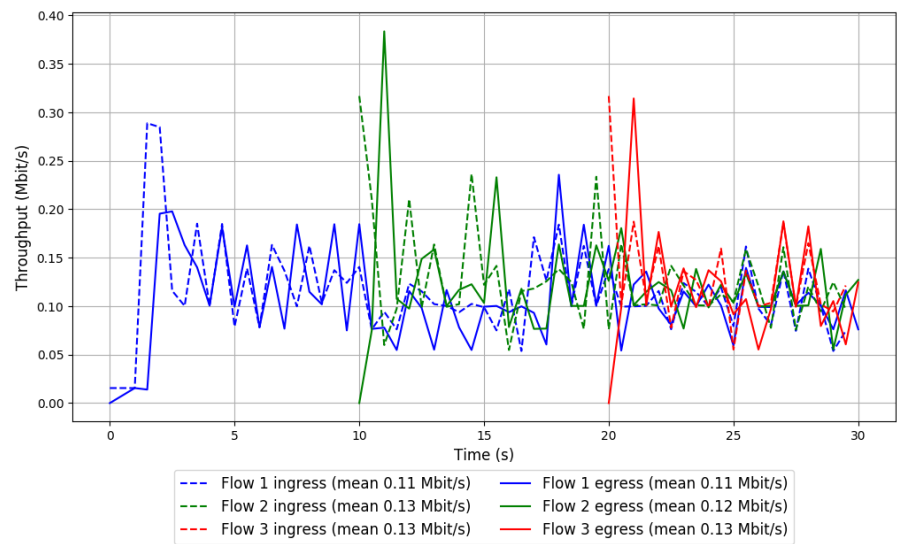
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-18 22:57:57
End at: 2019-01-18 22:58:27
Local clock offset: -8.07 ms
Remote clock offset: 19.429 ms


# Below is generated by plot.py at 2019-01-18 23:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 200.735 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 221.195 ms
Loss rate: 4.47%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 190.904 ms
Loss rate: 2.95%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 194.497 ms
Loss rate: 5.86%
```
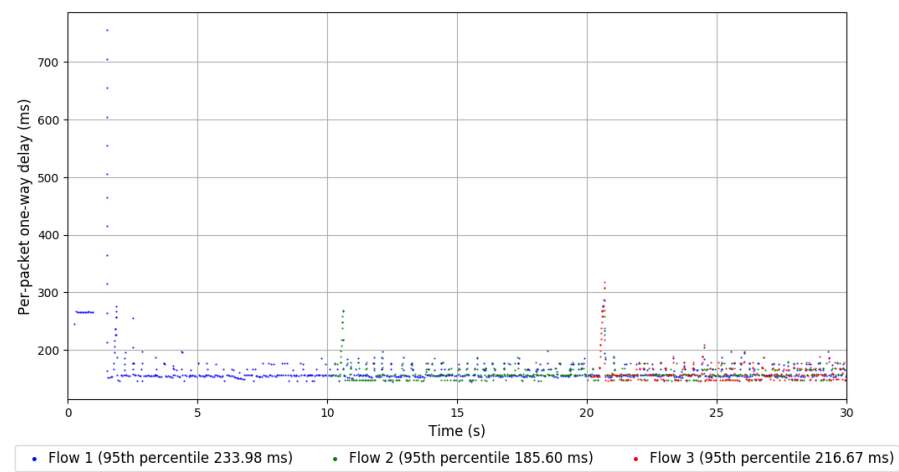
Run 2: Report of Sprout — Data Link

Run 3: Statistics of Sprout

Start at: 2019-01-18 23:23:50
End at: 2019-01-18 23:24:20
Local clock offset: -4.968 ms
Remote clock offset: 19.444 ms

Below is generated by plot.py at 2019-01-18 23:39:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 198.453 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 233.977 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 185.596 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 216.669 ms
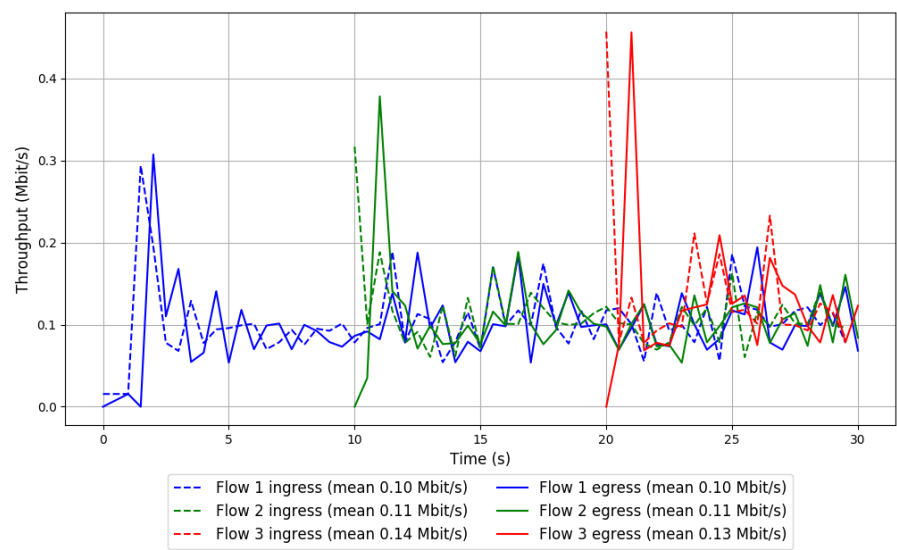Loss rate: 3.89%

Run 3: Report of Sprout — Data Link

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

Start at: 2019-01-18 22:43:09
End at: 2019-01-18 22:43:39
Local clock offset: -8.12 ms
Remote clock offset: 11.404 ms


# Below is generated by plot.py at 2019-01-18 23:39:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 4042.313 ms
Loss rate: 16.71%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 3762.988 ms
Loss rate: 8.45%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 4184.029 ms
Loss rate: 24.45%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 4570.340 ms
Loss rate: 28.47%
```

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

Flow 1 ingress (mean 0.58 Mbit/s)   Flow 1 egress (mean 0.54 Mbit/s)
Flow 2 ingress (mean 0.65 Mbit/s)   Flow 2 egress (mean 0.44 Mbit/s)
Flow 3 ingress (mean 0.45 Mbit/s)   Flow 3 egress (mean 0.34 Mbit/s)

Flow 1 (95th percentile 3762.99 ms)   Flow 2 (95th percentile 4184.03 ms)   Flow 3 (95th percentile 4570.34 ms)
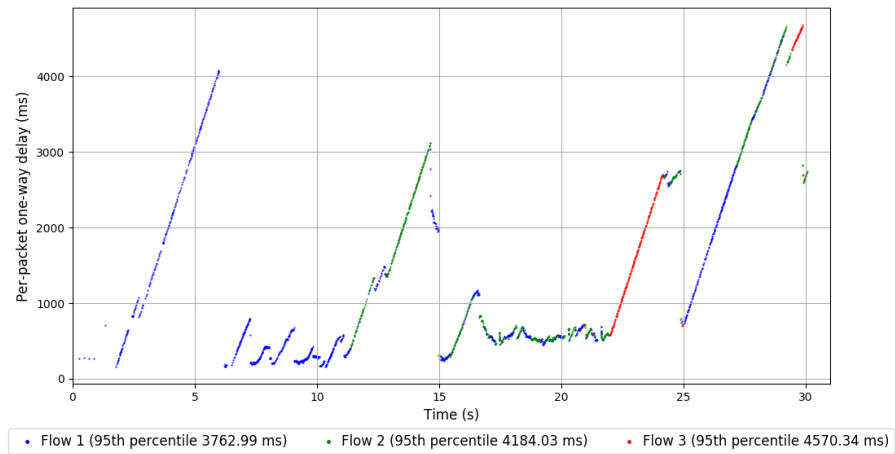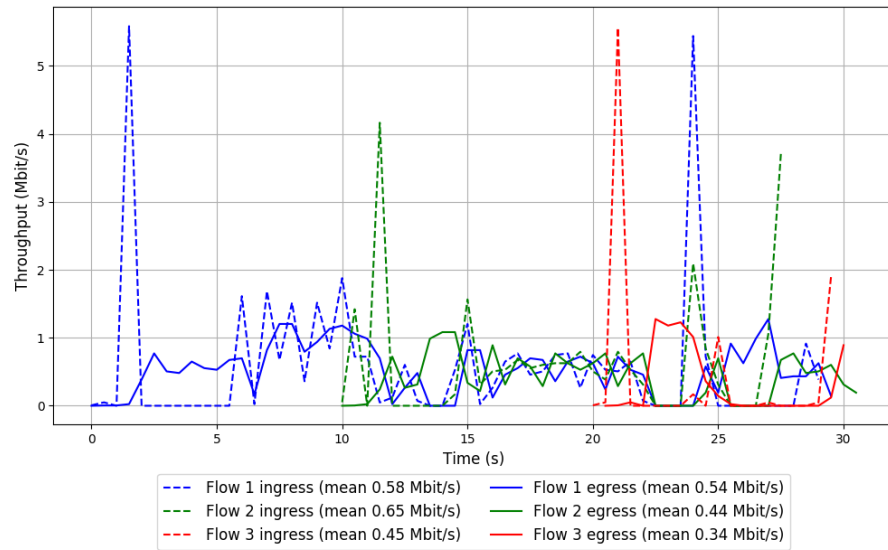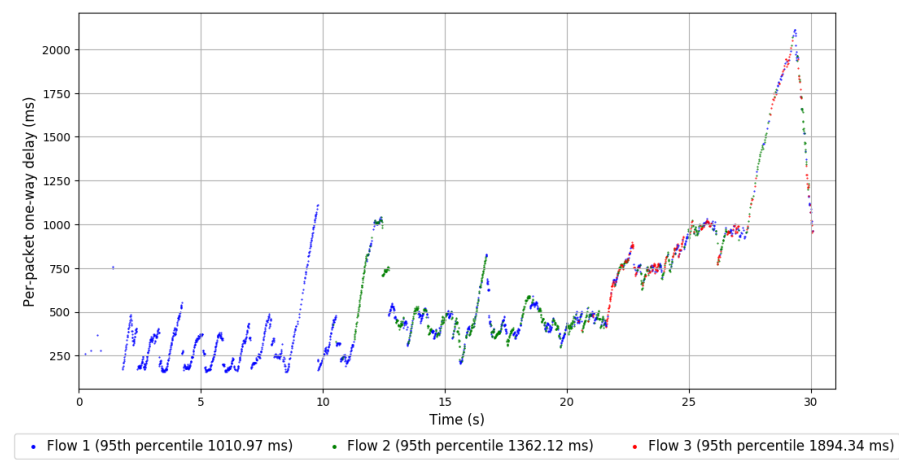
```
Run 2: Statistics of TaoVA-100x

Start at: 2019-01-18 23:09:02
End at: 2019-01-18 23:09:32
Local clock offset: -8.118 ms
Remote clock offset: 19.207 ms


# Below is generated by plot.py at 2019-01-18 23:39:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 1157.292 ms
Loss rate: 7.97%
-- Flow 1:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 1010.972 ms
Loss rate: 6.25%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 1362.122 ms
Loss rate: 8.73%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 1894.336 ms
Loss rate: 15.67%
```

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

Flow 1 ingress (mean 0.72 Mbit/s) ---- Flow 1 egress (mean 0.68 Mbit/s) ——
Flow 2 ingress (mean 0.59 Mbit/s) ---- Flow 2 egress (mean 0.55 Mbit/s) ——
Flow 3 ingress (mean 0.37 Mbit/s) ---- Flow 3 egress (mean 0.32 Mbit/s) ——

• Flow 1 (95th percentile 1010.97 ms)   • Flow 2 (95th percentile 1362.12 ms)   • Flow 3 (95th percentile 1894.34 ms)
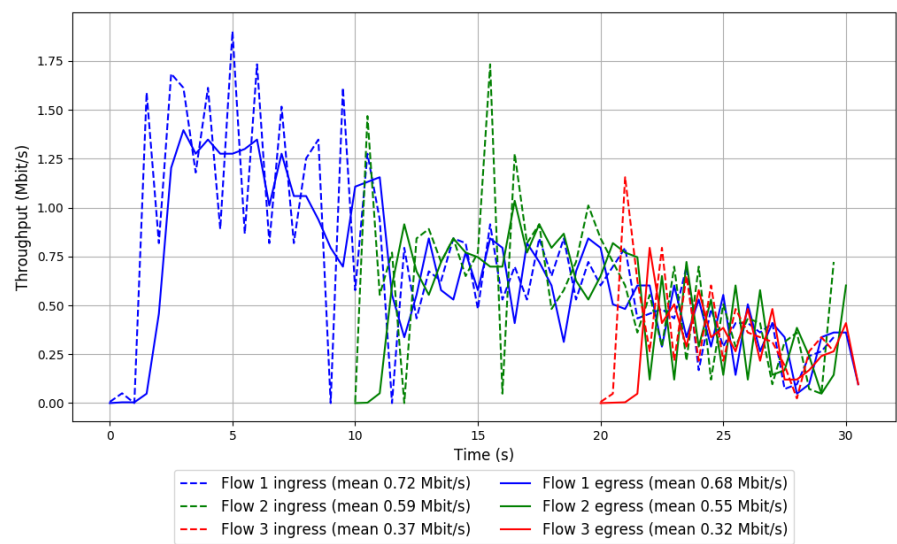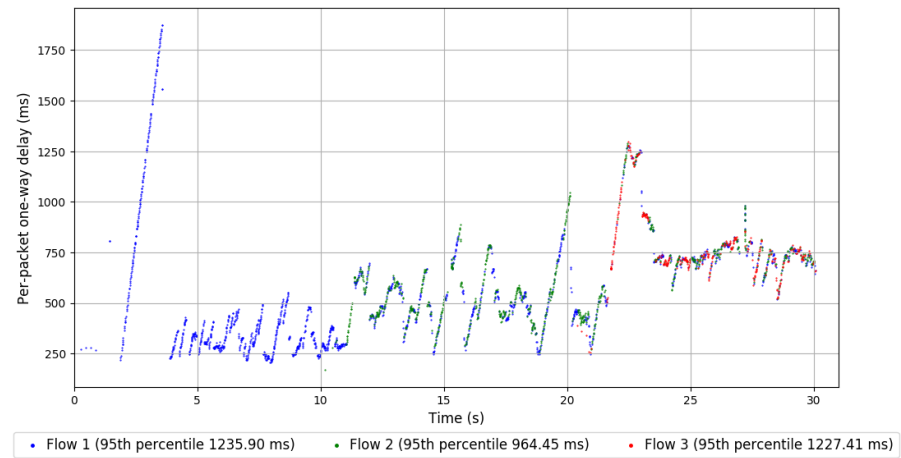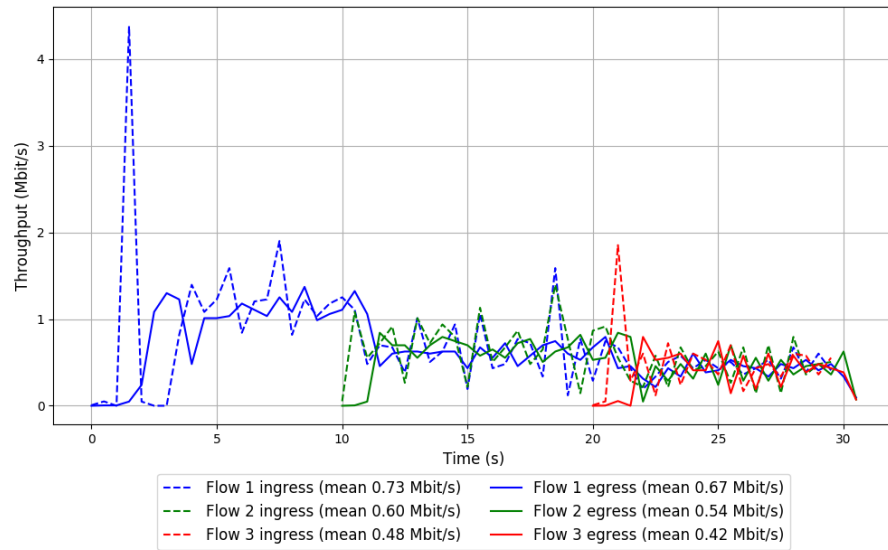
104

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

Start at: 2019-01-18 23:34:54
End at: 2019-01-18 23:35:24
Local clock offset: -3.089 ms
Remote clock offset: 11.121 ms


# Below is generated by plot.py at 2019-01-18 23:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 1177.629 ms
Loss rate: 9.67%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 1235.898 ms
Loss rate: 8.73%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 964.451 ms
Loss rate: 9.32%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 1227.411 ms
Loss rate: 14.81%
```

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

Flow 1 ingress (mean 0.73 Mbit/s) — — —   Flow 1 egress (mean 0.67 Mbit/s)
Flow 2 ingress (mean 0.60 Mbit/s) — — —   Flow 2 egress (mean 0.54 Mbit/s)
Flow 3 ingress (mean 0.48 Mbit/s) — — —   Flow 3 egress (mean 0.42 Mbit/s)

• Flow 1 (95th percentile 1235.90 ms)   • Flow 2 (95th percentile 964.45 ms)   • Flow 3 (95th percentile 1227.41 ms)
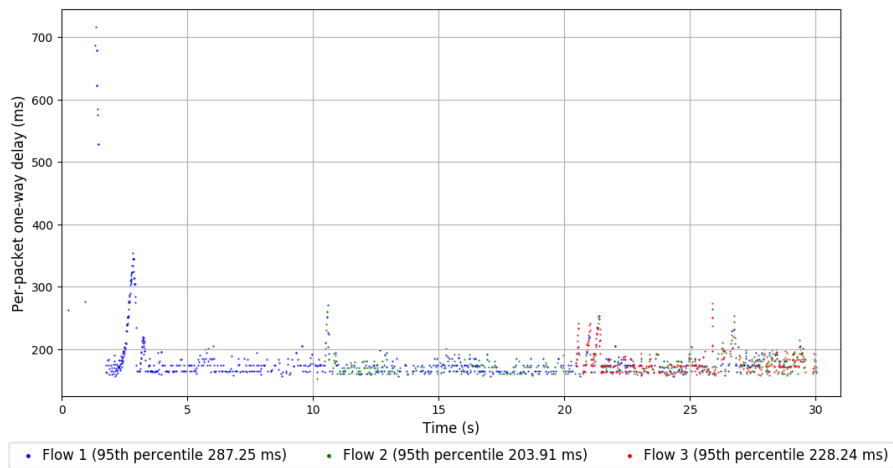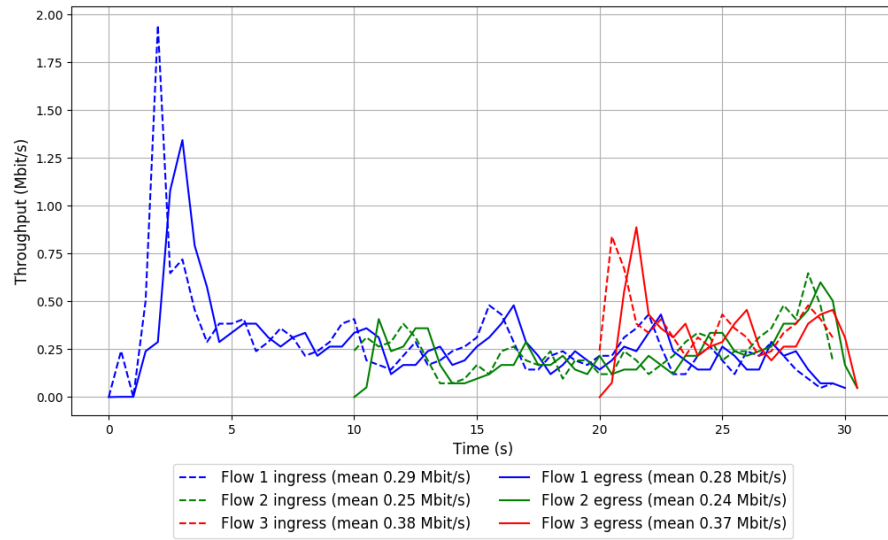
```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-18 22:36:57
End at: 2019-01-18 22:37:27
Local clock offset: -8.0 ms
Remote clock offset: 16.851 ms


# Below is generated by plot.py at 2019-01-18 23:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 240.450 ms
Loss rate: 3.26%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 287.253 ms
Loss rate: 2.90%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 203.913 ms
Loss rate: 3.93%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 228.235 ms
Loss rate: 3.21%
```

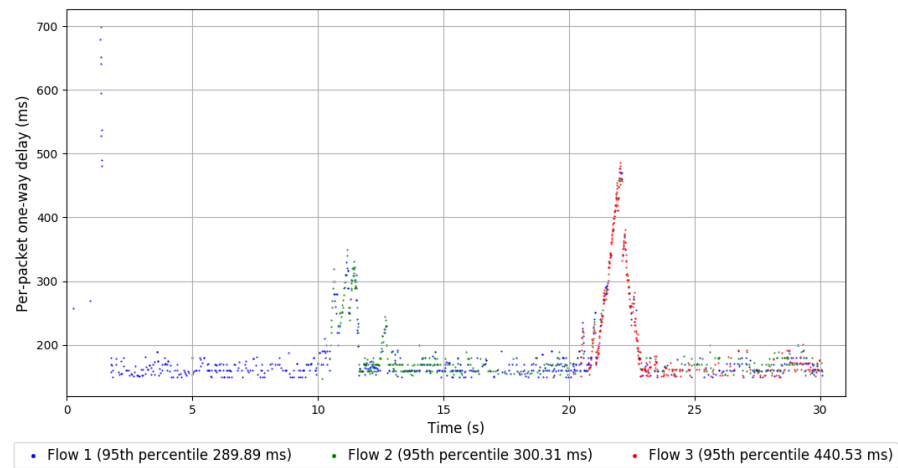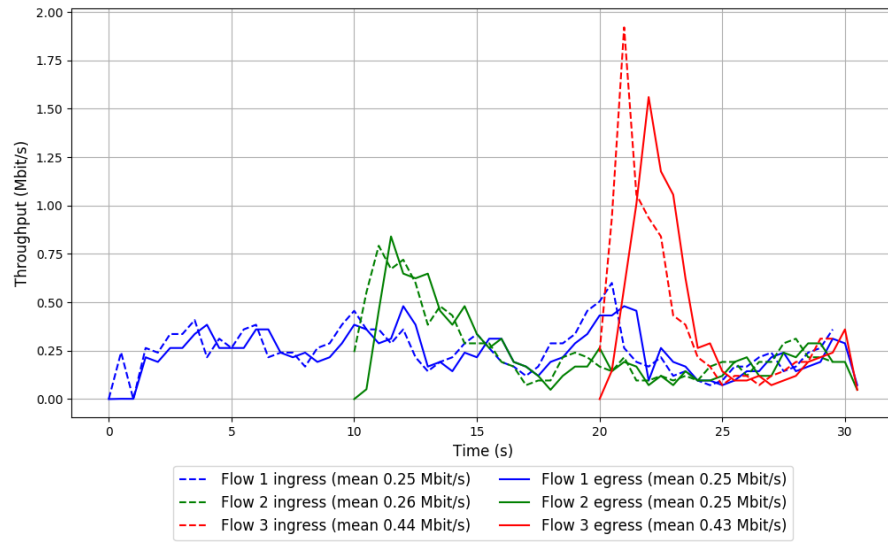Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-18 23:02:53
End at: 2019-01-18 23:03:23
Local clock offset: -7.315 ms
Remote clock offset: 14.742 ms


# Below is generated by plot.py at 2019-01-18 23:39:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 371.834 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 289.894 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 300.314 ms
Loss rate: 3.67%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 440.533 ms
Loss rate: 3.28%
```

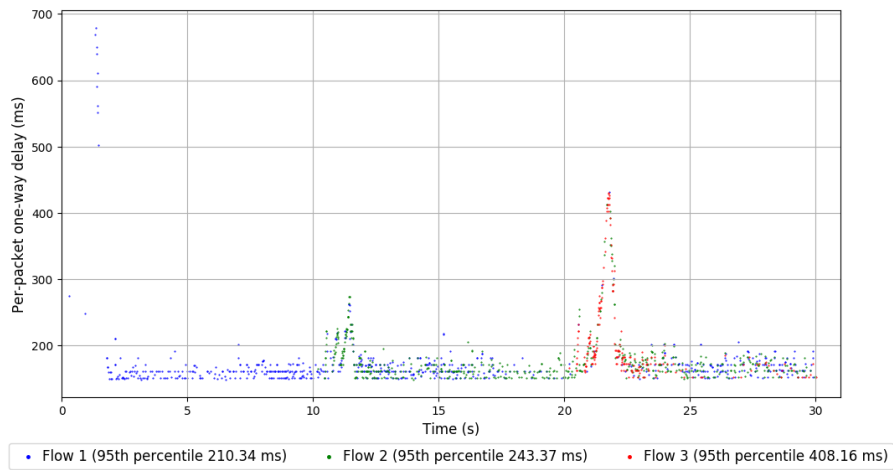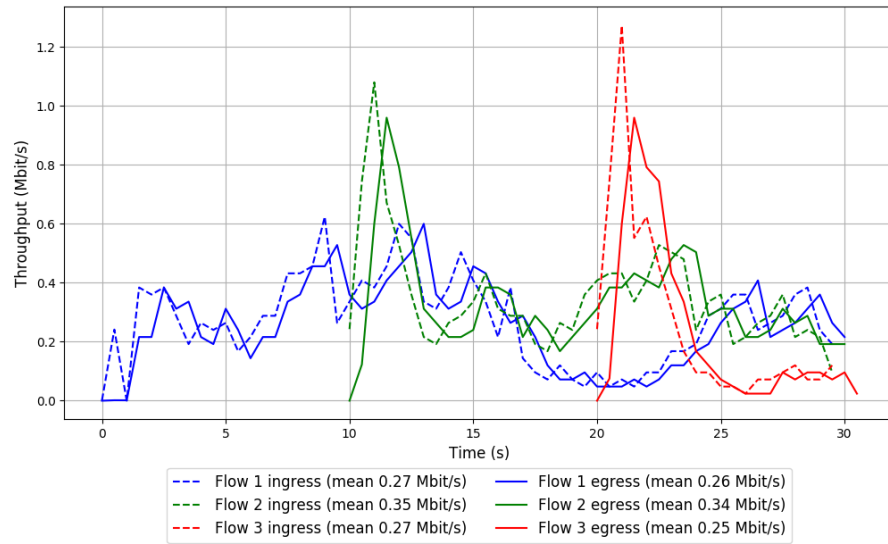Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-18 23:28:45
End at: 2019-01-18 23:29:15
Local clock offset: -3.897 ms
Remote clock offset: 10.095 ms


# Below is generated by plot.py at 2019-01-18 23:39:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 263.567 ms
Loss rate: 3.78%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 210.341 ms
Loss rate: 3.85%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 243.374 ms
Loss rate: 2.74%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 408.160 ms
Loss rate: 6.33%
```

Run 3: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 0.27 Mbit/s) —— Flow 1 egress (mean 0.26 Mbit/s)
- - - Flow 2 ingress (mean 0.35 Mbit/s) —— Flow 2 egress (mean 0.34 Mbit/s)
- - - Flow 3 ingress (mean 0.27 Mbit/s) —— Flow 3 egress (mean 0.25 Mbit/s)

- Flow 1 (95th percentile 210.34 ms)   - Flow 2 (95th percentile 243.37 ms)   - Flow 3 (95th percentile 408.16 ms)

112

```
Run 1: Statistics of Verus

Start at: 2019-01-18 22:24:35
End at: 2019-01-18 22:25:05
Local clock offset: -7.582 ms
Remote clock offset: 7.778 ms


# Below is generated by plot.py at 2019-01-18 23:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 1696.018 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 1495.784 ms
Loss rate: 3.41%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 1785.149 ms
Loss rate: 4.67%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1731.515 ms
Loss rate: 15.38%
```
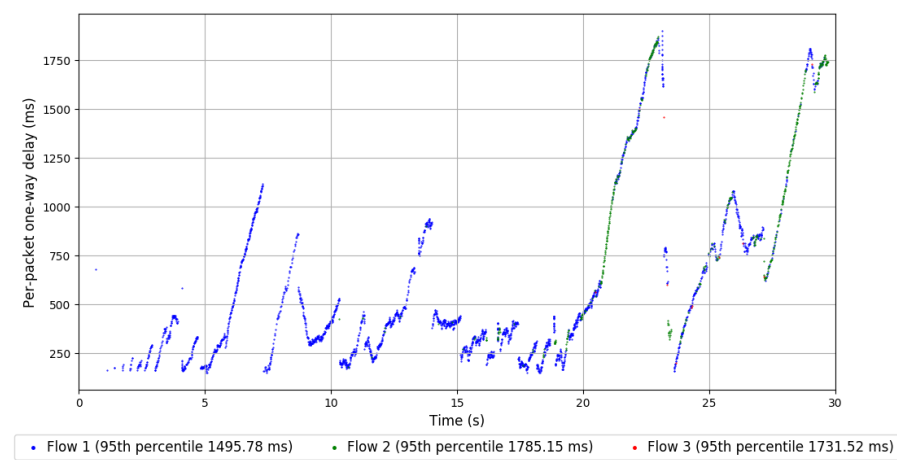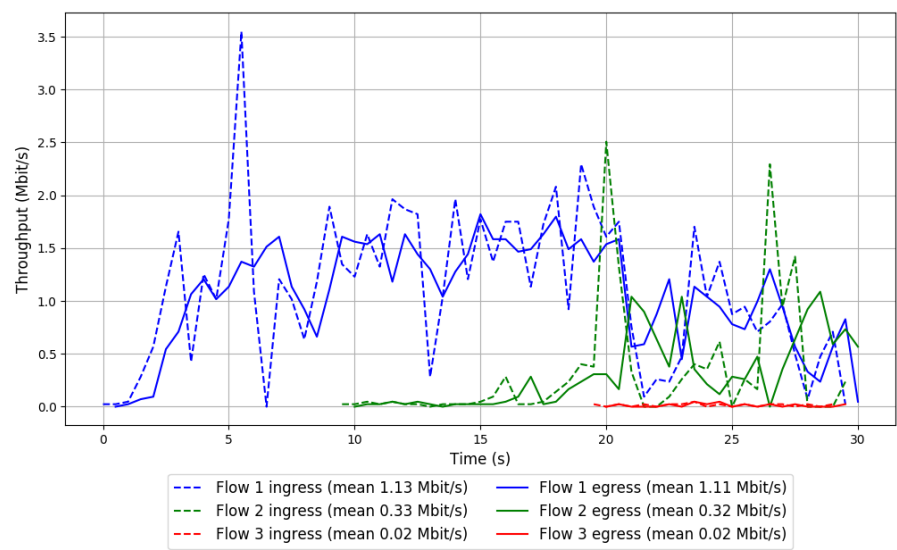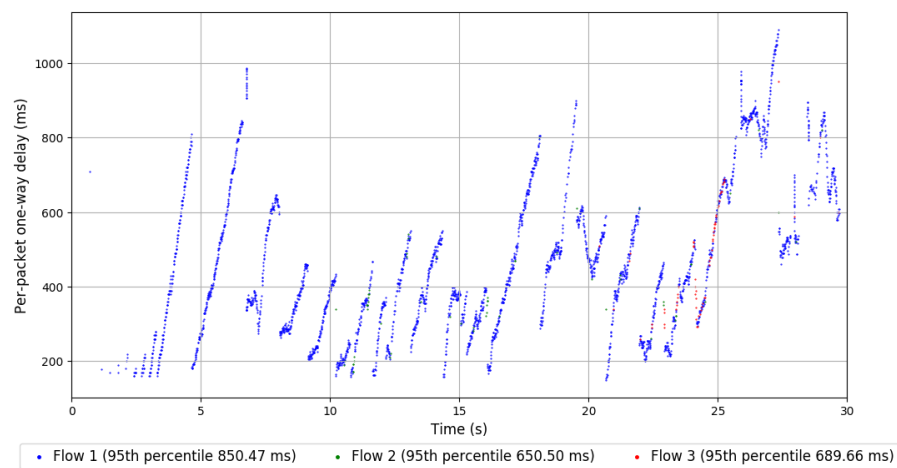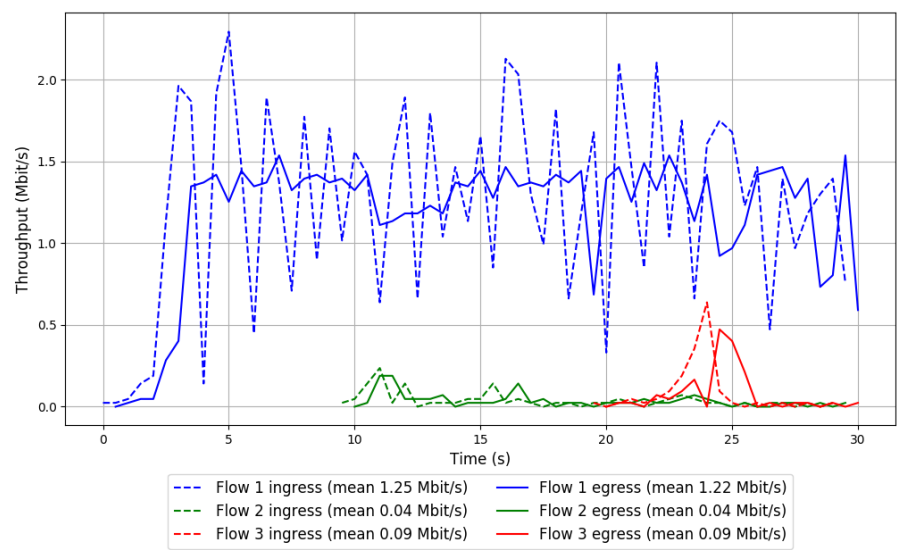
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-18 22:50:33
End at: 2019-01-18 22:51:03
Local clock offset: -8.173 ms
Remote clock offset: 12.464 ms


# Below is generated by plot.py at 2019-01-18 23:39:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 849.169 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 850.470 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 650.500 ms
Loss rate: 4.62%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 689.659 ms
Loss rate: 1.43%
```
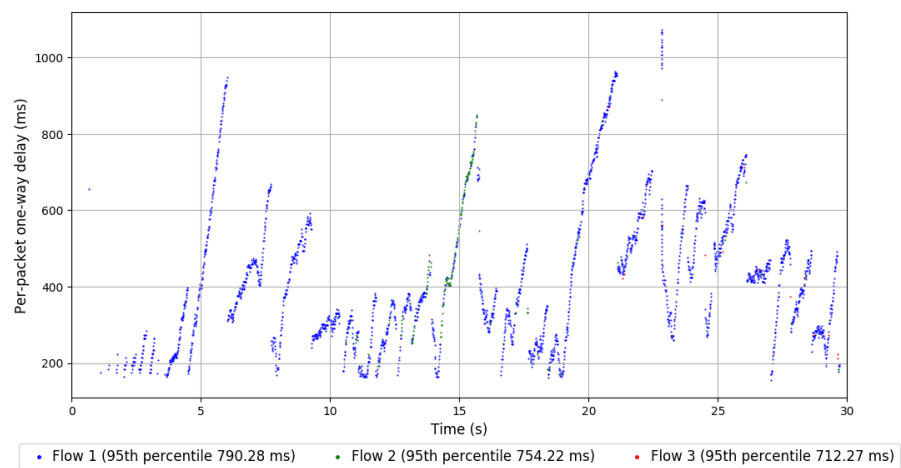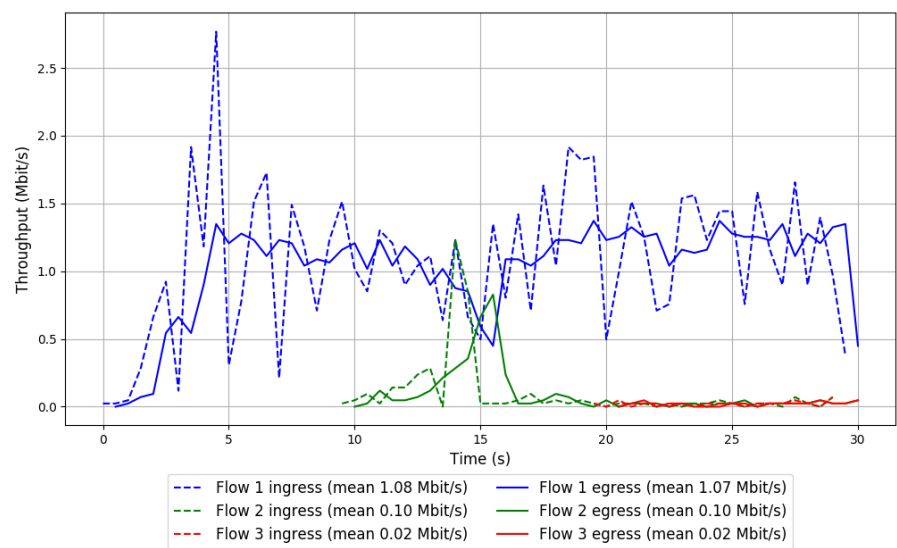
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-18 23:16:28
End at: 2019-01-18 23:16:58
Local clock offset: -8.163 ms
Remote clock offset: 19.916 ms


# Below is generated by plot.py at 2019-01-18 23:39:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 790.284 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 790.284 ms
Loss rate: 3.65%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 754.223 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 712.267 ms
Loss rate: 5.56%
```

Run 3: Report of Verus — Data Link

- Flow 1 ingress (mean 1.08 Mbit/s)
- Flow 1 egress (mean 1.07 Mbit/s)
- Flow 2 ingress (mean 0.10 Mbit/s)
- Flow 2 egress (mean 0.10 Mbit/s)
- Flow 3 ingress (mean 0.02 Mbit/s)
- Flow 3 egress (mean 0.02 Mbit/s)

- Flow 1 (95th percentile 790.28 ms)
- Flow 2 (95th percentile 754.22 ms)
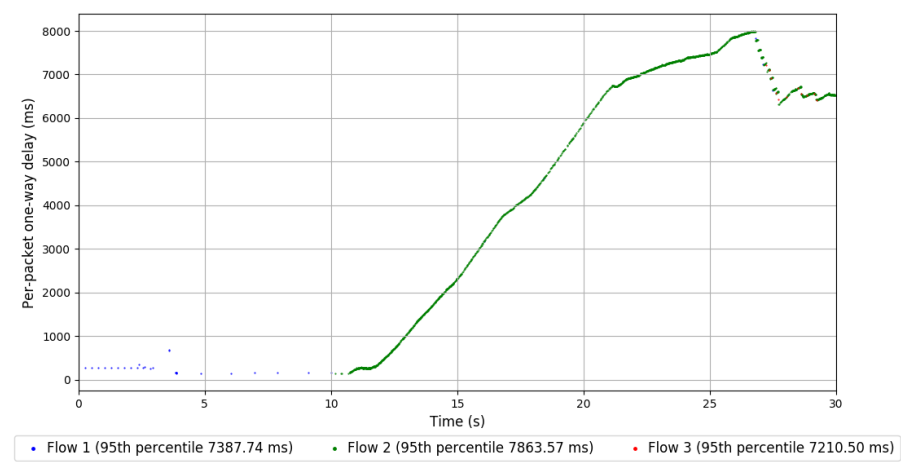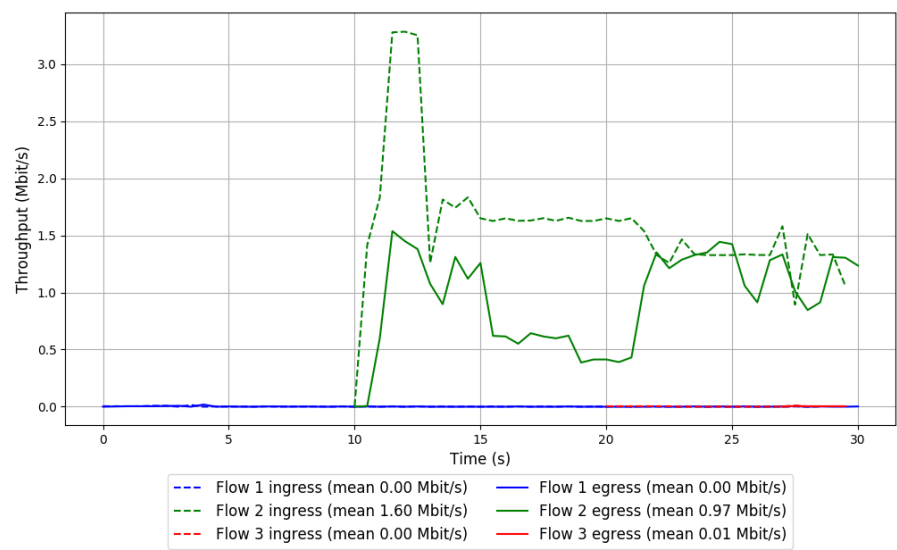- Flow 3 (95th percentile 712.27 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-18 22:30:46
End at: 2019-01-18 22:31:16
Local clock offset: -7.074 ms
Remote clock offset: 13.693 ms


# Below is generated by plot.py at 2019-01-18 23:40:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 7861.648 ms
Loss rate: 39.28%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7387.741 ms
Loss rate: 12.65%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 7863.574 ms
Loss rate: 39.32%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 7210.499 ms
Loss rate: 46.42%
```

Run 1: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 0.00 Mbit/s)   —— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 1.60 Mbit/s)   —— Flow 2 egress (mean 0.97 Mbit/s)
- - - Flow 3 ingress (mean 0.00 Mbit/s)   —— Flow 3 egress (mean 0.01 Mbit/s)

• Flow 1 (95th percentile 7387.74 ms)   • Flow 2 (95th percentile 7863.57 ms)   • Flow 3 (95th percentile 7210.50 ms)
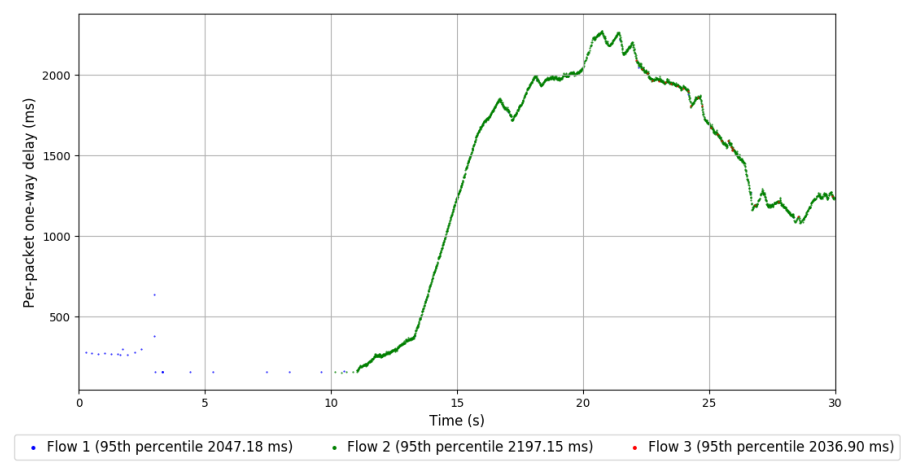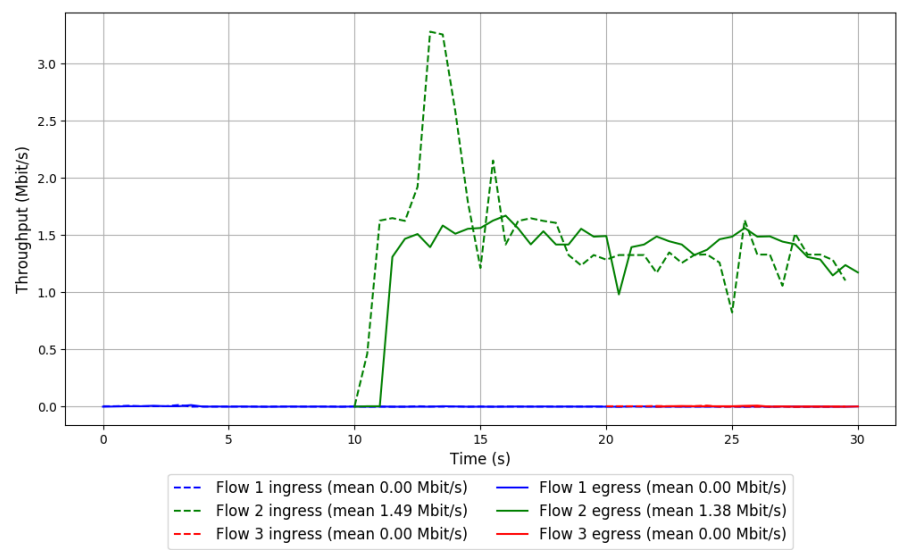
```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-18 22:56:43
End at: 2019-01-18 22:57:13
Local clock offset: -8.06 ms
Remote clock offset: 12.817 ms


# Below is generated by plot.py at 2019-01-18 23:40:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 2196.905 ms
Loss rate: 7.83%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2047.184 ms
Loss rate: 6.30%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 2197.152 ms
Loss rate: 7.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2036.899 ms
Loss rate: 3.91%
```

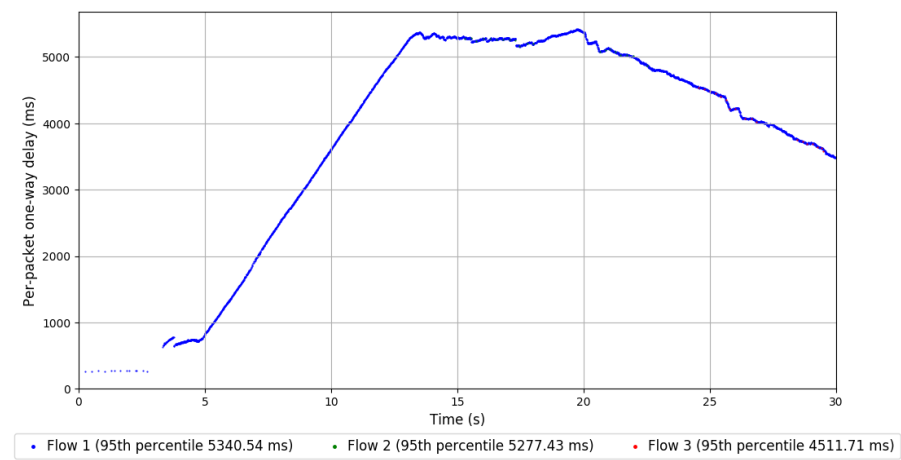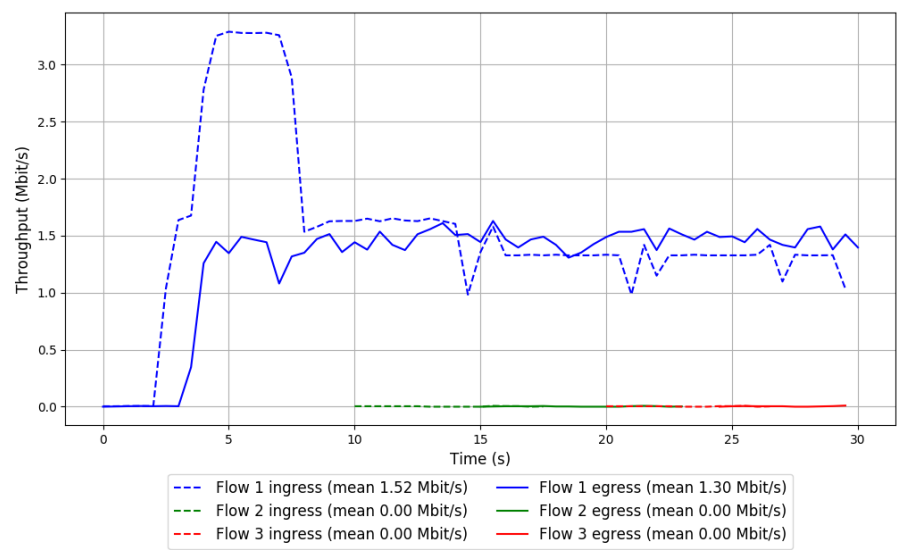## Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-18 23:22:36
End at: 2019-01-18 23:23:06
Local clock offset: -5.389 ms
Remote clock offset: 16.726 ms


# Below is generated by plot.py at 2019-01-18 23:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 5339.830 ms
Loss rate: 14.93%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 5340.542 ms
Loss rate: 14.94%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5277.431 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4511.712 ms
Loss rate: 10.20%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.52 Mbit/s)   Flow 1 egress (mean 1.30 Mbit/s)
Flow 2 ingress (mean 0.00 Mbit/s)   Flow 2 egress (mean 0.00 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s)   Flow 3 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 5340.54 ms)   • Flow 2 (95th percentile 5277.43 ms)   • Flow 3 (95th percentile 4511.71 ms)
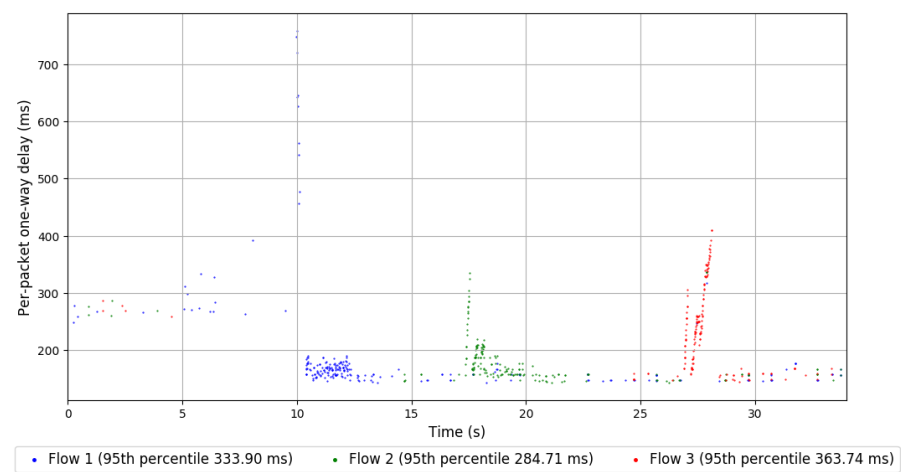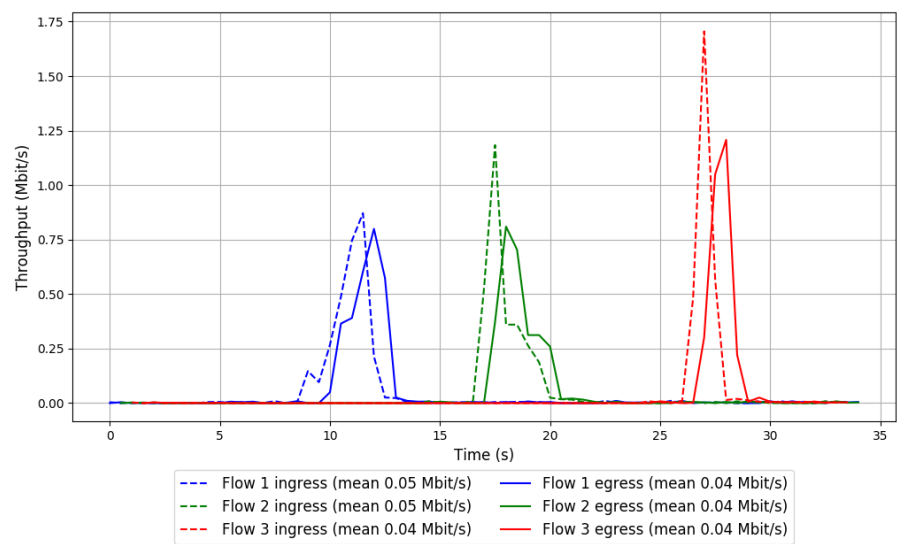
```
Run 1: Statistics of WebRTC media

Start at: 2019-01-18 22:29:33
End at: 2019-01-18 22:30:03
Local clock offset: -7.087 ms
Remote clock offset: 14.387 ms


# Below is generated by plot.py at 2019-01-18 23:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 342.110 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 333.896 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 284.711 ms
Loss rate: 4.21%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 363.743 ms
Loss rate: 0.00%
```

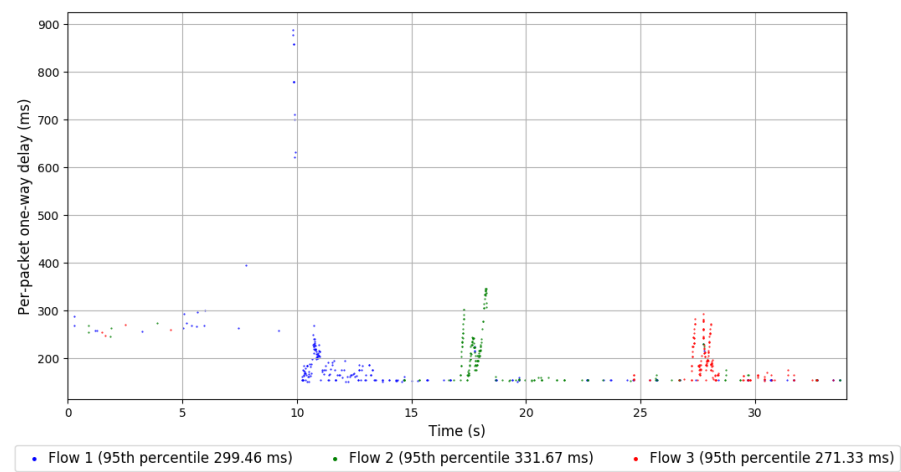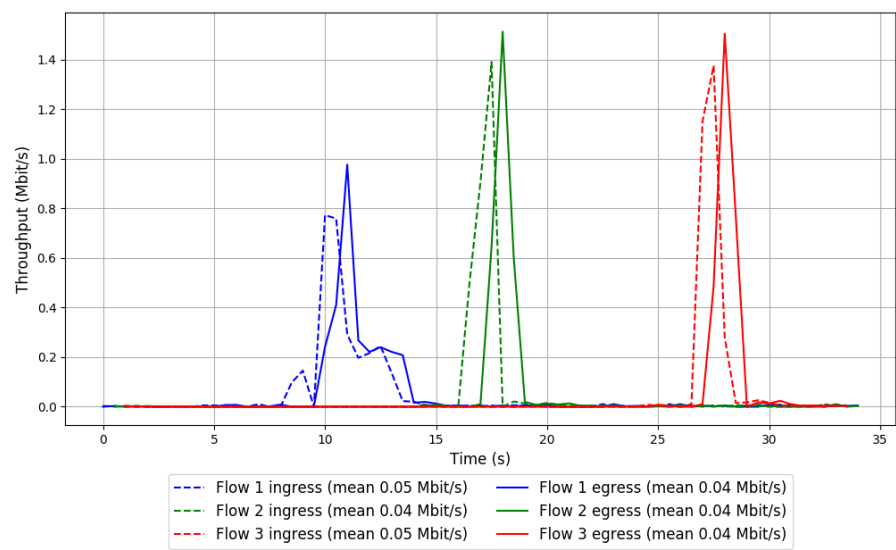Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-18 22:55:29
End at: 2019-01-18 22:55:59
Local clock offset: -7.303 ms
Remote clock offset: 18.996 ms


# Below is generated by plot.py at 2019-01-18 23:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 302.289 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 299.463 ms
Loss rate: 2.40%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 331.670 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 271.335 ms
Loss rate: 2.19%
```

Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-18 23:21:23
End at: 2019-01-18 23:21:53
Local clock offset: -6.487 ms
Remote clock offset: 15.572 ms


# Below is generated by plot.py at 2019-01-18 23:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 412.382 ms
Loss rate: 5.13%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 445.824 ms
Loss rate: 4.66%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 250.817 ms
Loss rate: 5.65%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 245.498 ms
Loss rate: 5.09%
```

Run 3: Report of WebRTC media — Data Link