Pantheon Report

Generated at 2019-03-19 04:58:16 (UTC).

Data path: AWS Korea on `ens5` (*local*) →China 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 `ntp.nict.jp` and have been applied to correct the timestamps in logs.
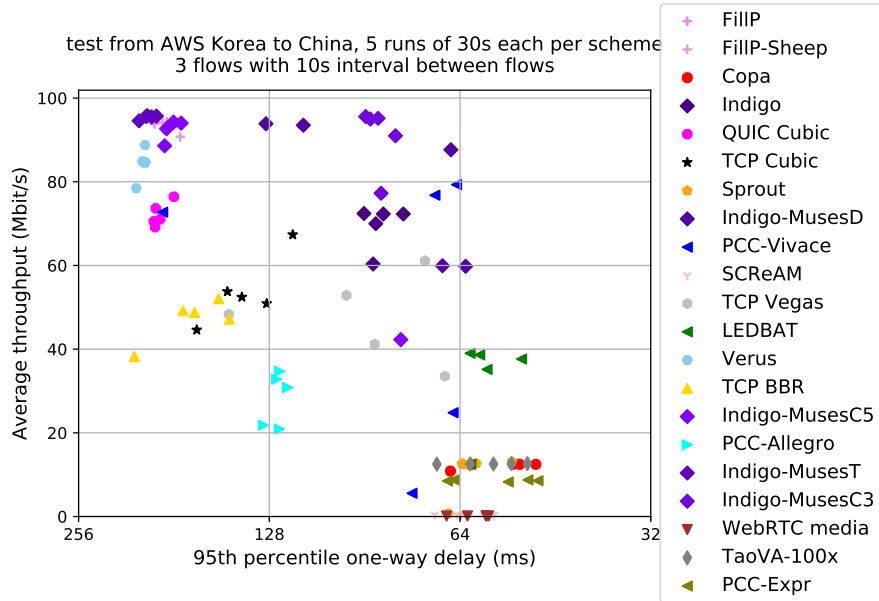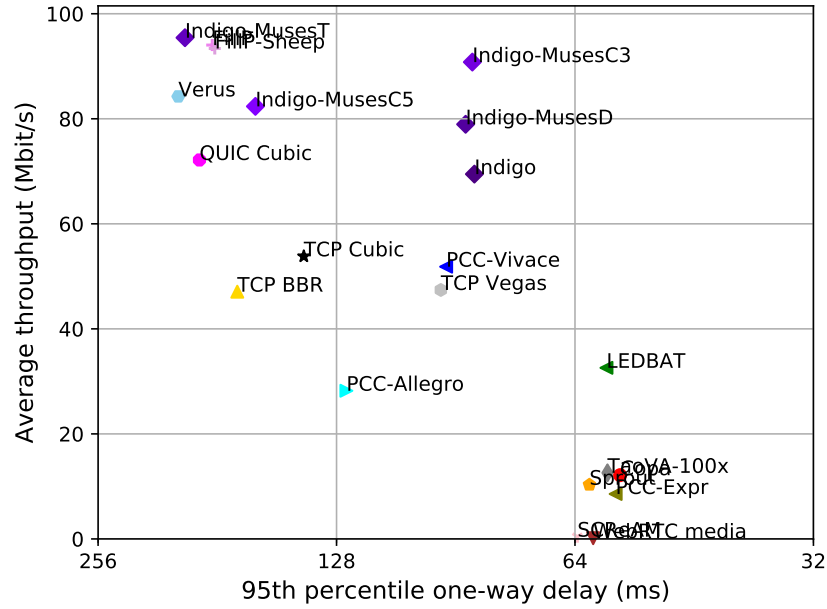
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```

```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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

3

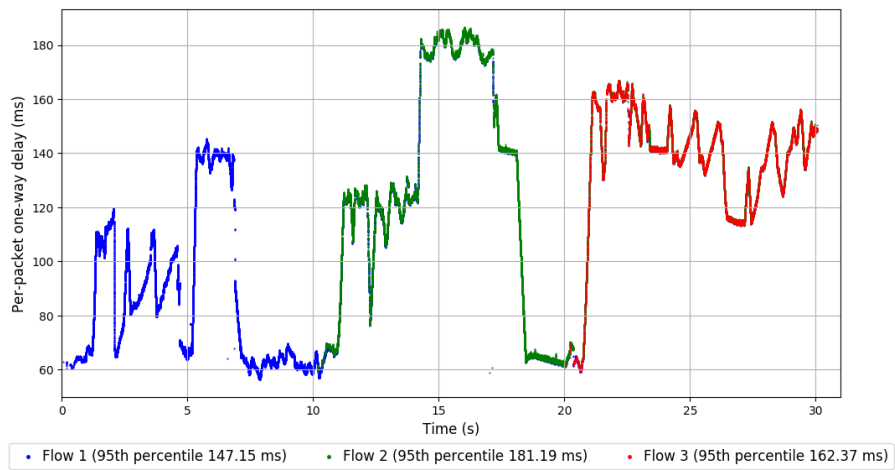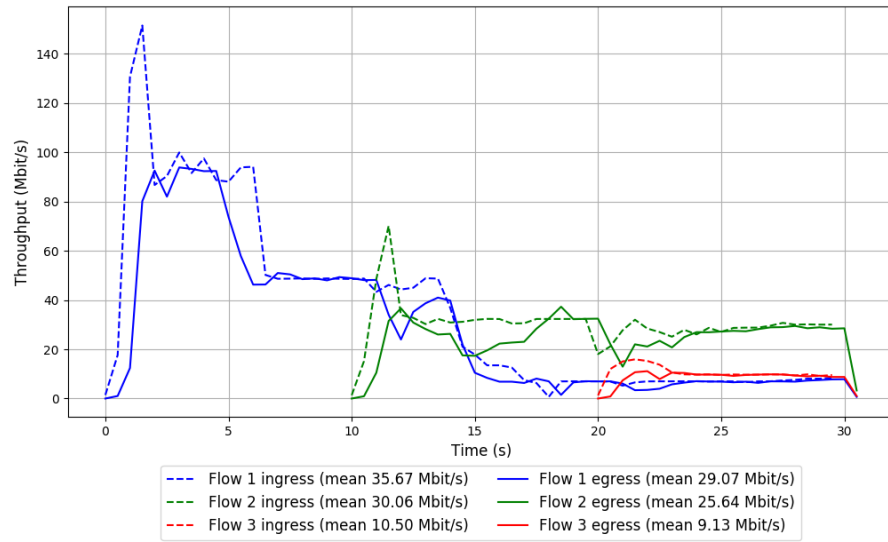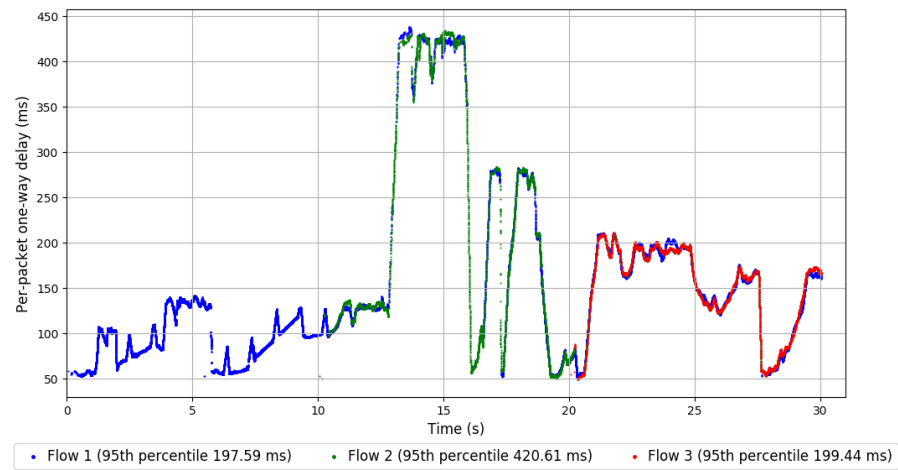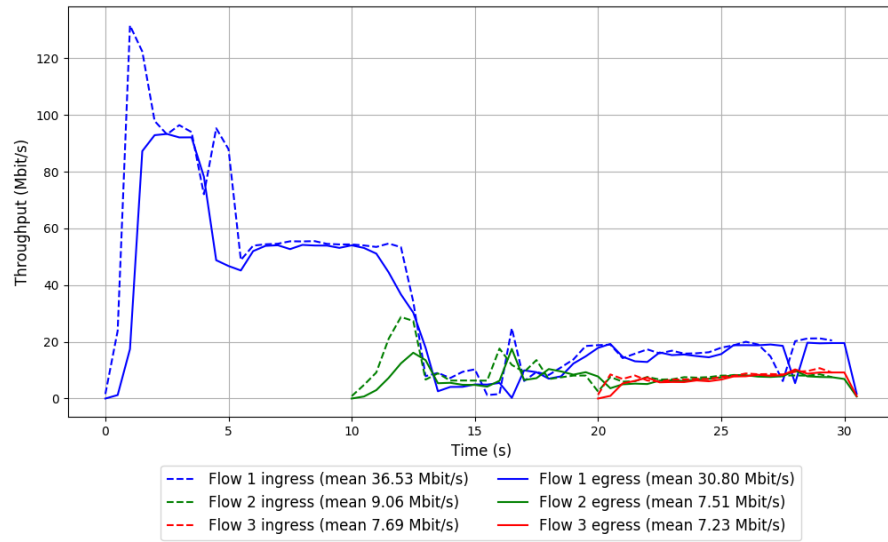| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	34.58	15.53	6.47	162.39	216.50	159.93	15.27	15.13	14.07
Copa	5	8.01	5.38	1.67	56.34	55.95	59.58	40.15	43.41	65.26
TCP Cubic	5	36.72	18.97	13.39	125.74	157.60	184.57	1.51	1.64	1.67
FillP	5	56.15	44.34	25.58	181.51	184.06	187.00	12.34	20.24	15.63
FillP-Sheep	5	52.00	43.72	37.07	177.37	182.59	185.34	3.27	5.00	9.45
Indigo	5	43.37	29.88	19.67	81.99	87.34	87.52	11.67	21.91	28.80
Indigo-MusesC3	5	46.13	50.30	39.80	77.97	84.68	103.15	0.00	0.00	0.00
Indigo-MusesC5	5	50.50	45.65	7.18	158.92	163.15	161.10	0.12	0.17	0.20
Indigo-MusesD	5	54.18	27.38	23.47	86.88	81.95	86.57	0.01	0.00	0.05
Indigo-MusesT	5	59.98	45.87	18.79	195.14	200.05	196.88	1.49	3.69	4.32
LEDBAT	5	19.96	15.14	7.67	58.22	57.10	58.40	0.00	0.00	0.00
PCC-Allegro	5	56.70	3.27	0.55	107.12	132.26	129.06	59.96	67.43	74.88
PCC-Expr	5	0.02	10.97	3.82	54.70	56.60	57.11	85.71	50.11	40.72
QUIC Cubic	5	43.32	34.46	18.72	189.83	187.92	193.83	0.38	0.34	0.55
SCReAM	5	0.22	0.22	0.22	64.44	57.71	54.96	0.00	0.00	0.00
Sprout	5	5.31	5.09	4.93	59.61	62.35	59.20	0.00	0.00	0.00
TaoVA-100x	5	7.43	5.72	5.19	58.77	59.29	55.10	15.98	25.24	34.78
TCP Vegas	5	27.31	23.65	13.07	92.07	97.87	90.31	0.73	0.71	0.58
Verus	5	66.75	17.37	18.93	200.14	205.44	200.66	10.92	39.97	21.46
PCC-Vivace	5	39.52	14.82	7.46	91.59	95.28	67.68	0.19	0.28	0.03
WebRTC media	5	0.05	0.05	0.05	60.26	60.22	54.89	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-03-19 02:32:14
End at: 2019-03-19 02:32:44
Local clock offset: -2.038 ms
Remote clock offset: -22.745 ms


# Below is generated by plot.py at 2019-03-19 04:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 175.170 ms
Loss rate: 16.89%
-- Flow 1:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 147.145 ms
Loss rate: 18.50%
-- Flow 2:
Average throughput: 25.64 Mbit/s
95th percentile per-packet one-way delay: 181.190 ms
Loss rate: 14.70%
-- Flow 3:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 162.372 ms
Loss rate: 13.04%
```

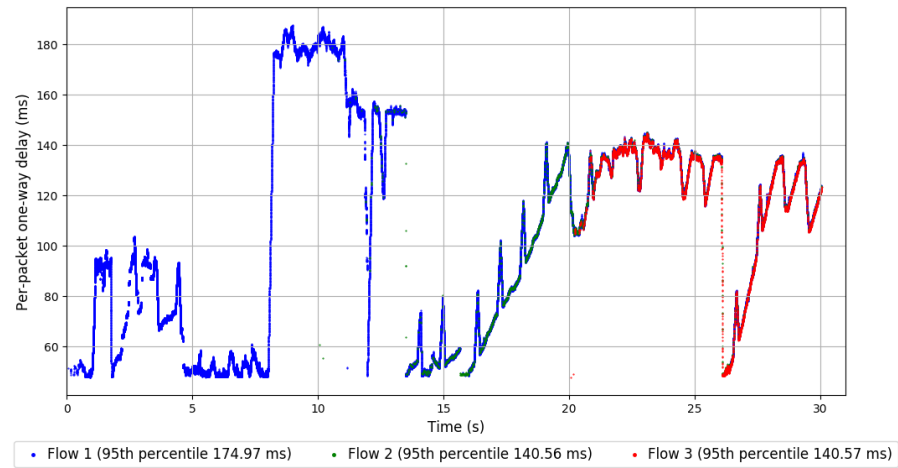# Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 35.67 Mbit/s) --- Flow 1 egress (mean 29.07 Mbit/s)
Flow 2 ingress (mean 30.06 Mbit/s) --- Flow 2 egress (mean 25.64 Mbit/s)
Flow 3 ingress (mean 10.50 Mbit/s) --- Flow 3 egress (mean 9.13 Mbit/s)

Flow 1 (95th percentile 147.15 ms) Flow 2 (95th percentile 181.19 ms) Flow 3 (95th percentile 162.37 ms)
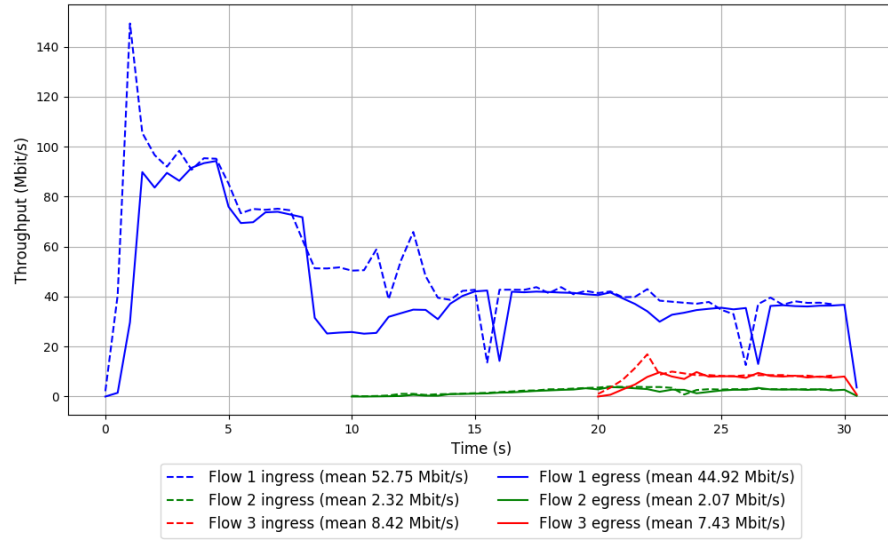
6

```
Run 2: Statistics of TCP BBR

Start at: 2019-03-19 03:01:36
End at: 2019-03-19 03:02:06
Local clock offset: -1.198 ms
Remote clock offset: -13.663 ms


# Below is generated by plot.py at 2019-03-19 04:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 208.995 ms
Loss rate: 15.34%
-- Flow 1:
Average throughput: 30.80 Mbit/s
95th percentile per-packet one-way delay: 197.588 ms
Loss rate: 15.68%
-- Flow 2:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 420.607 ms
Loss rate: 17.17%
-- Flow 3:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 199.445 ms
Loss rate: 6.04%
```
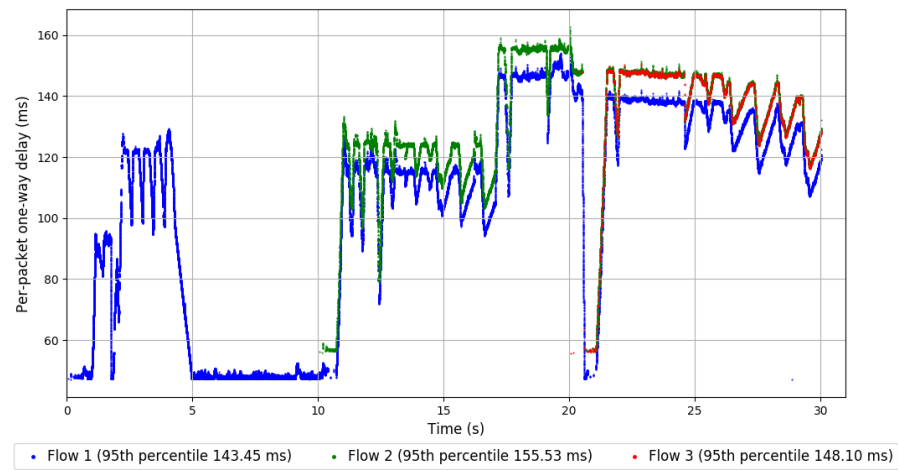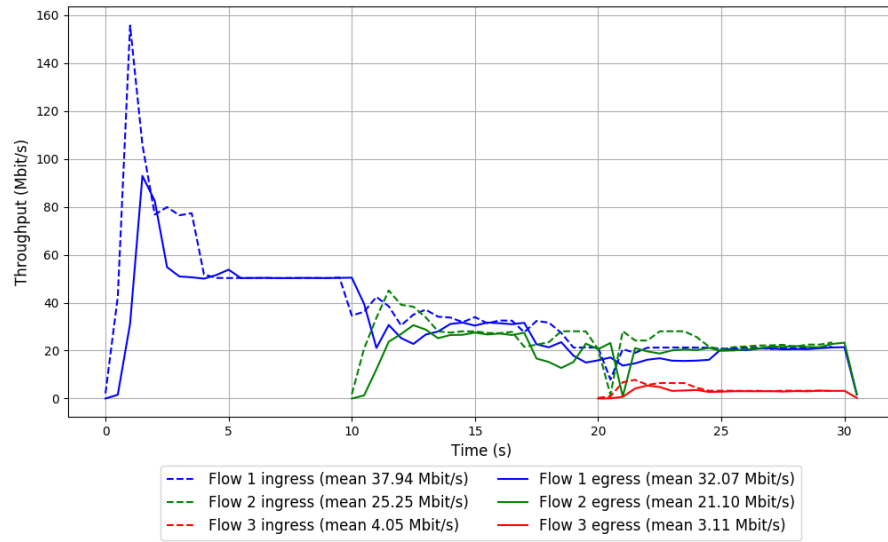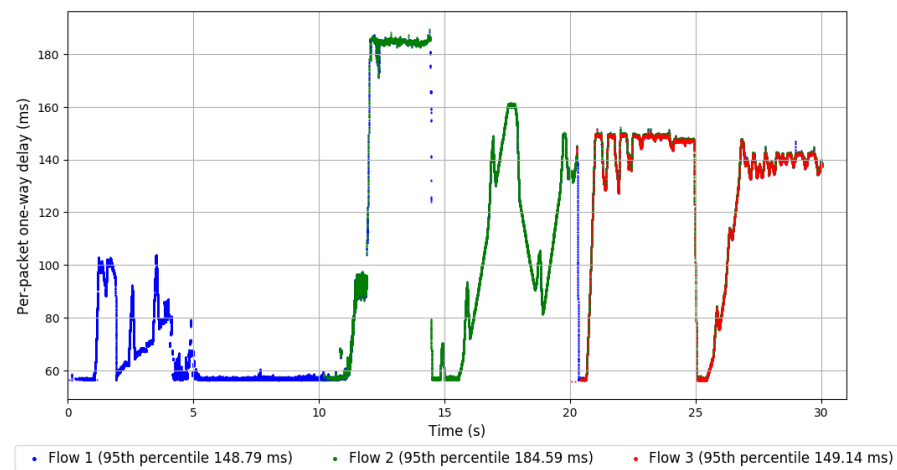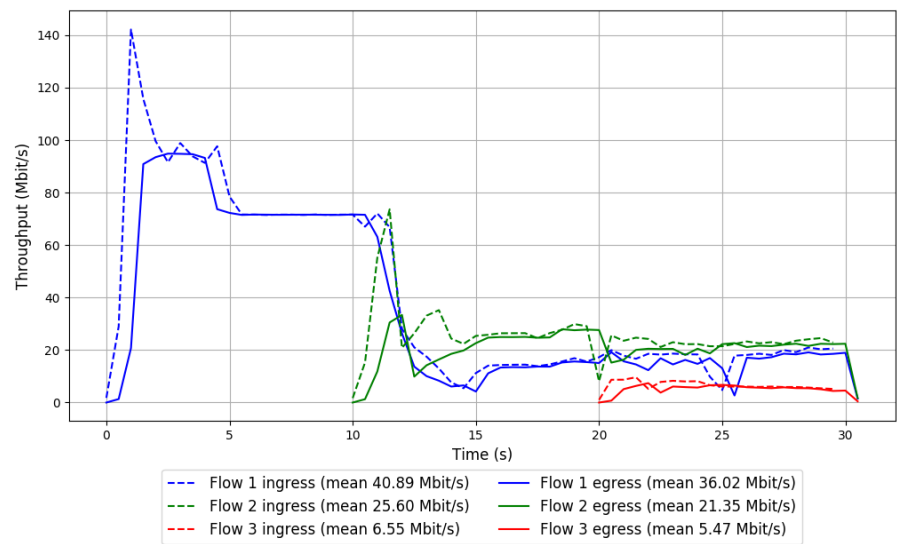
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-03-19 03:28:26
End at: 2019-03-19 03:28:56
Local clock offset: -0.97 ms
Remote clock offset: -1.566 ms


# Below is generated by plot.py at 2019-03-19 04:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.78 Mbit/s
95th percentile per-packet one-way delay: 167.944 ms
Loss rate: 14.55%
-- Flow 1:
Average throughput: 44.92 Mbit/s
95th percentile per-packet one-way delay: 174.971 ms
Loss rate: 14.82%
-- Flow 2:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 140.562 ms
Loss rate: 10.76%
-- Flow 3:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 140.575 ms
Loss rate: 11.61%
```

Run 3: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 52.75 Mbit/s)   —— Flow 1 egress (mean 44.92 Mbit/s)
- - - Flow 2 ingress (mean 2.32 Mbit/s)   —— Flow 2 egress (mean 2.07 Mbit/s)
- - - Flow 3 ingress (mean 8.42 Mbit/s)   —— Flow 3 egress (mean 7.43 Mbit/s)

• Flow 1 (95th percentile 174.97 ms)   • Flow 2 (95th percentile 140.56 ms)   • Flow 3 (95th percentile 140.57 ms)

10

```
Run 4: Statistics of TCP BBR

Start at: 2019-03-19 03:55:11
End at: 2019-03-19 03:55:41
Local clock offset: -1.673 ms
Remote clock offset: -17.407 ms


# Below is generated by plot.py at 2019-03-19 04:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.17 Mbit/s
95th percentile per-packet one-way delay: 148.045 ms
Loss rate: 15.91%
-- Flow 1:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 143.451 ms
Loss rate: 15.42%
-- Flow 2:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 155.533 ms
Loss rate: 16.42%
-- Flow 3:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 148.098 ms
Loss rate: 23.17%
```
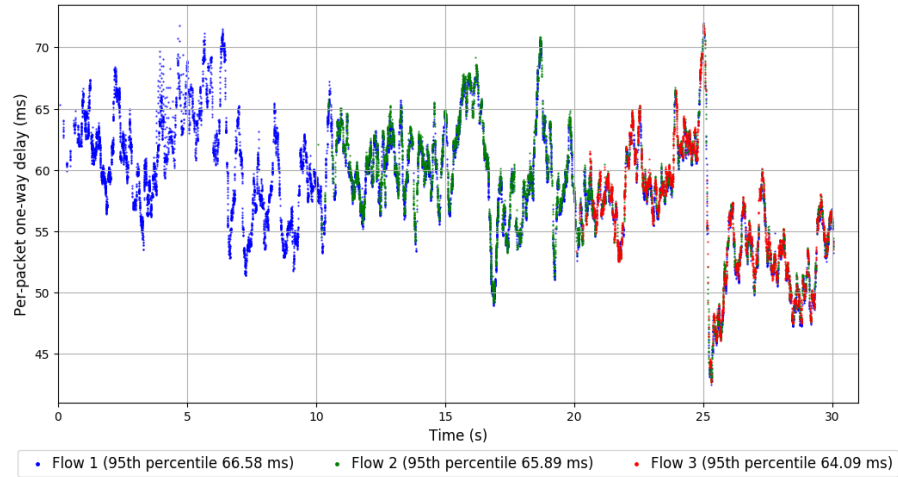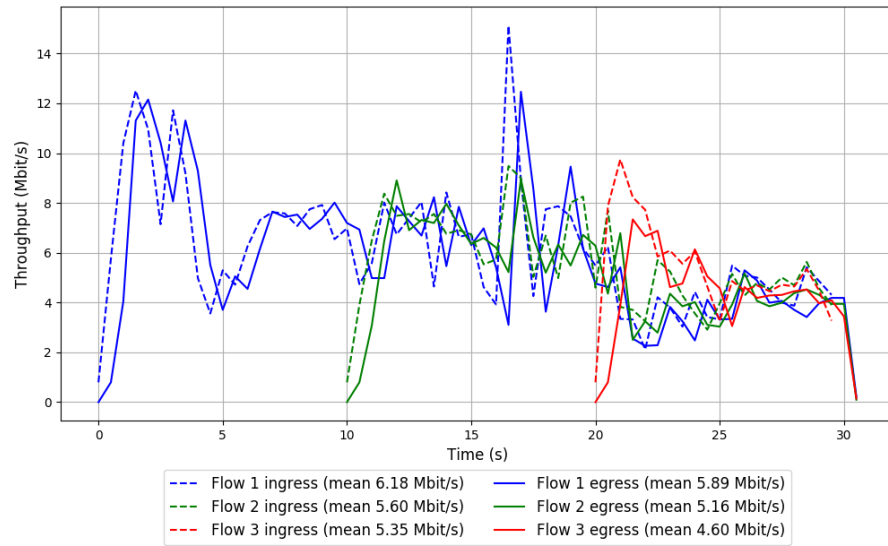
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 37.94 Mbit/s)   Flow 1 egress (mean 32.07 Mbit/s)
Flow 2 ingress (mean 25.25 Mbit/s)   Flow 2 egress (mean 21.10 Mbit/s)
Flow 3 ingress (mean 4.05 Mbit/s)   Flow 3 egress (mean 3.11 Mbit/s)

Flow 1 (95th percentile 143.45 ms)   Flow 2 (95th percentile 155.53 ms)   Flow 3 (95th percentile 148.10 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-03-19 04:22:43
End at: 2019-03-19 04:23:13
Local clock offset: -1.173 ms
Remote clock offset: -18.295 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 153.898 ms
Loss rate: 13.40%
-- Flow 1:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 148.791 ms
Loss rate: 11.91%
-- Flow 2:
Average throughput: 21.35 Mbit/s
95th percentile per-packet one-way delay: 184.585 ms
Loss rate: 16.58%
-- Flow 3:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 149.136 ms
Loss rate: 16.47%
```
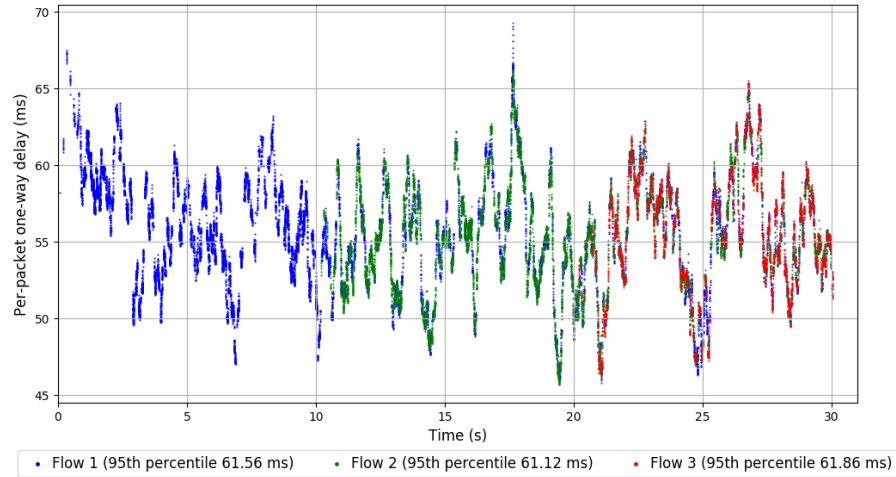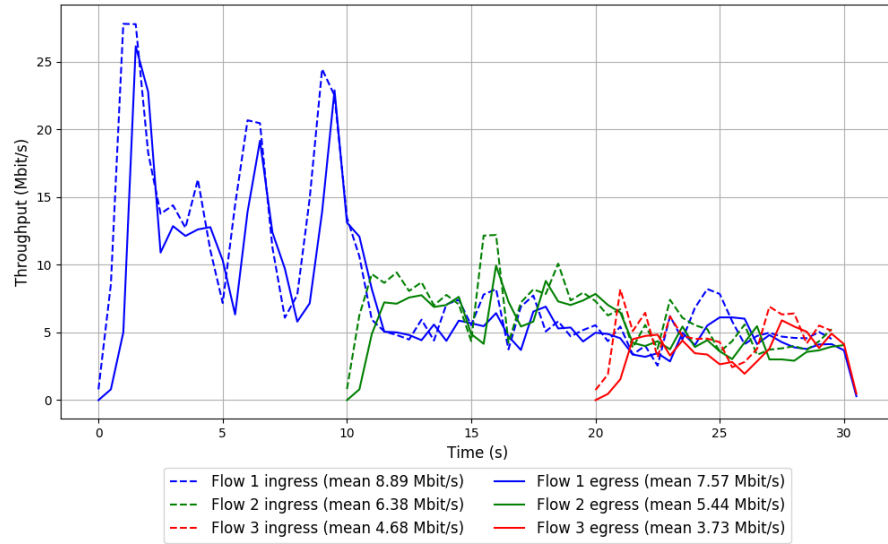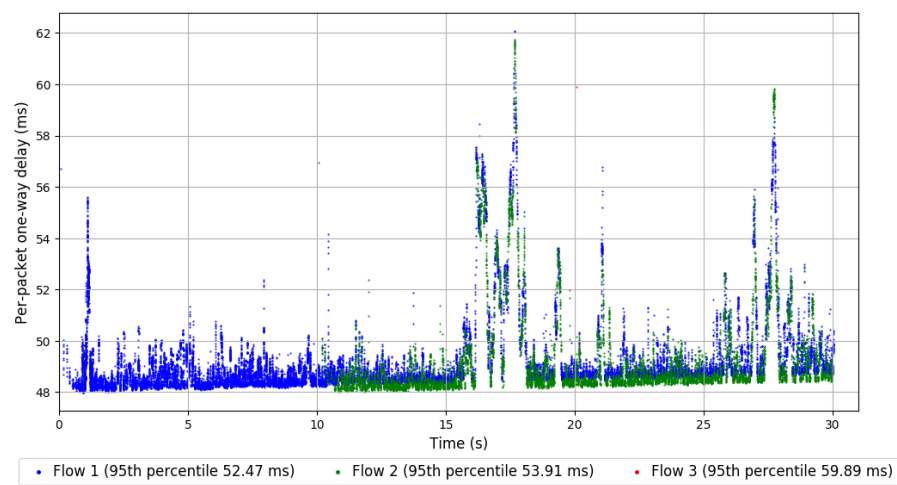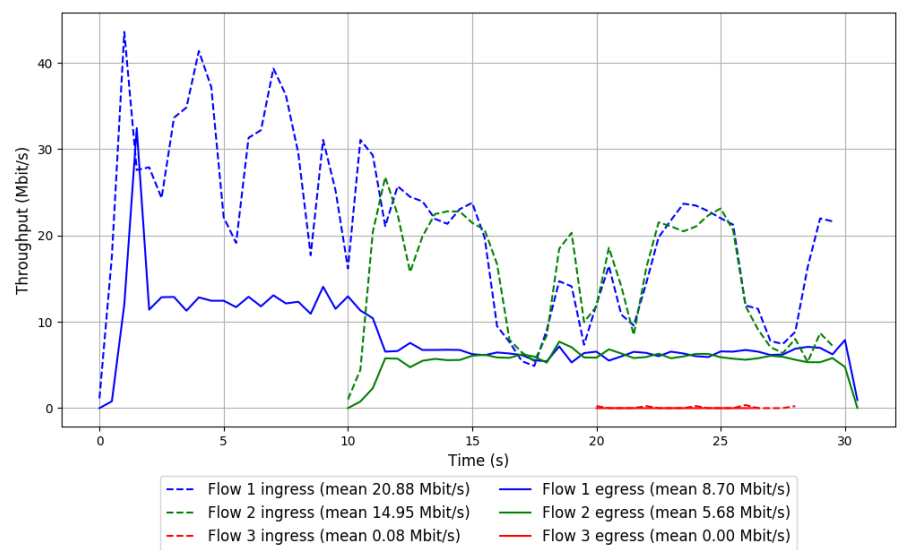
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-03-19 02:34:46
End at: 2019-03-19 02:35:16
Local clock offset: -1.95 ms
Remote clock offset: -24.55 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.86 Mbit/s
95th percentile per-packet one-way delay: 66.266 ms
Loss rate: 7.11%
-- Flow 1:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 66.578 ms
Loss rate: 4.61%
-- Flow 2:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 65.891 ms
Loss rate: 7.98%
-- Flow 3:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 64.093 ms
Loss rate: 13.98%
```

Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 6.18 Mbit/s) — — — Flow 1 egress (mean 5.89 Mbit/s)
Flow 2 ingress (mean 5.60 Mbit/s) — — — Flow 2 egress (mean 5.16 Mbit/s)
Flow 3 ingress (mean 5.35 Mbit/s) — — — Flow 3 egress (mean 4.60 Mbit/s)

• Flow 1 (95th percentile 66.58 ms)   • Flow 2 (95th percentile 65.89 ms)   • Flow 3 (95th percentile 64.09 ms)
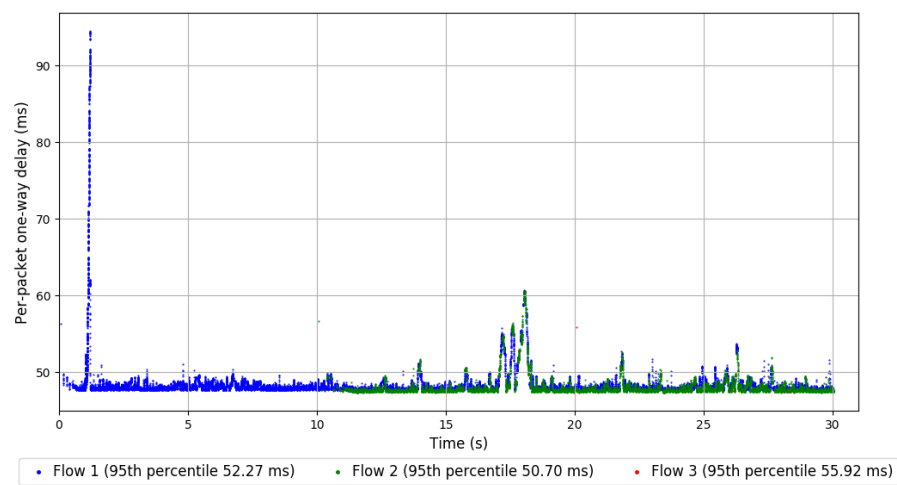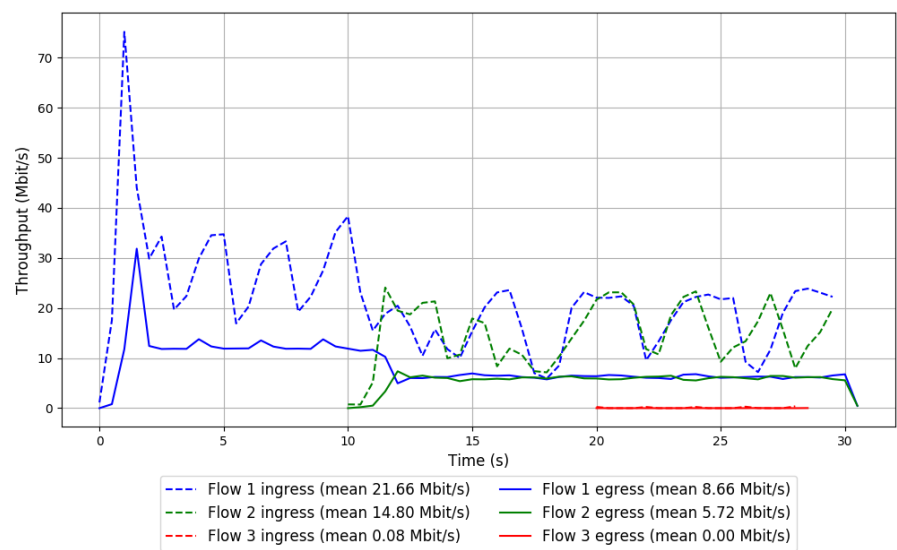
16

```
Run 2: Statistics of Copa

Start at: 2019-03-19 03:04:07
End at: 2019-03-19 03:04:37
Local clock offset: -1.075 ms
Remote clock offset: -10.228 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 61.492 ms
Loss rate: 15.38%
-- Flow 1:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 61.559 ms
Loss rate: 14.87%
-- Flow 2:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 61.125 ms
Loss rate: 14.68%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 61.858 ms
Loss rate: 20.22%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-03-19 03:30:57
End at: 2019-03-19 03:31:27
Local clock offset: -1.135 ms
Remote clock offset: -5.552 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.49 Mbit/s
95th percentile per-packet one-way delay: 52.794 ms
Loss rate: 59.56%
-- Flow 1:
Average throughput: 8.70 Mbit/s
95th percentile per-packet one-way delay: 52.473 ms
Loss rate: 58.34%
-- Flow 2:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 53.909 ms
Loss rate: 62.02%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.893 ms
Loss rate: 98.03%
```
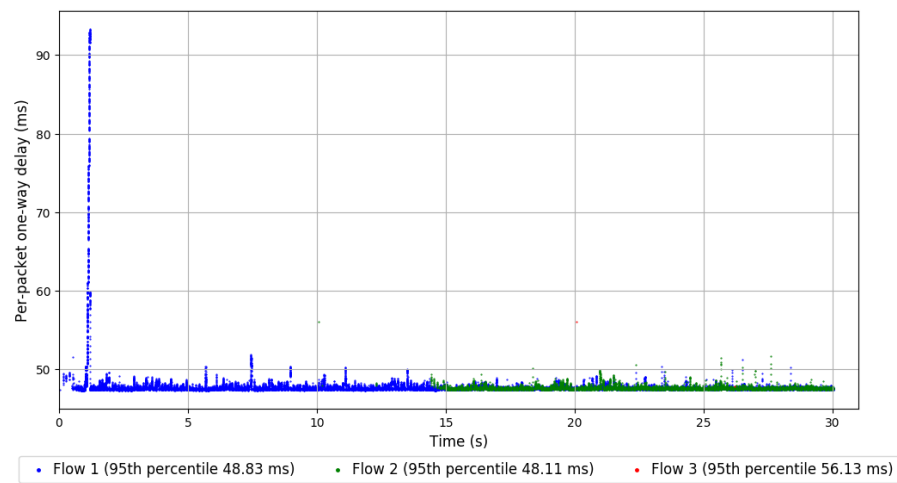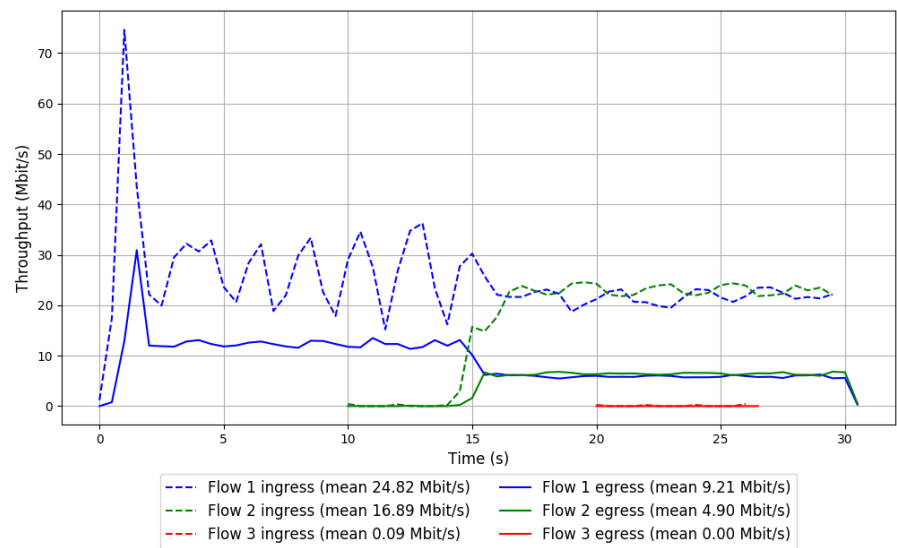
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-03-19 03:57:42
End at: 2019-03-19 03:58:12
Local clock offset: -1.545 ms
Remote clock offset: -17.183 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 51.539 ms
Loss rate: 60.47%
-- Flow 1:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 52.273 ms
Loss rate: 60.02%
-- Flow 2:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 50.705 ms
Loss rate: 61.37%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 55.916 ms
Loss rate: 96.35%
```
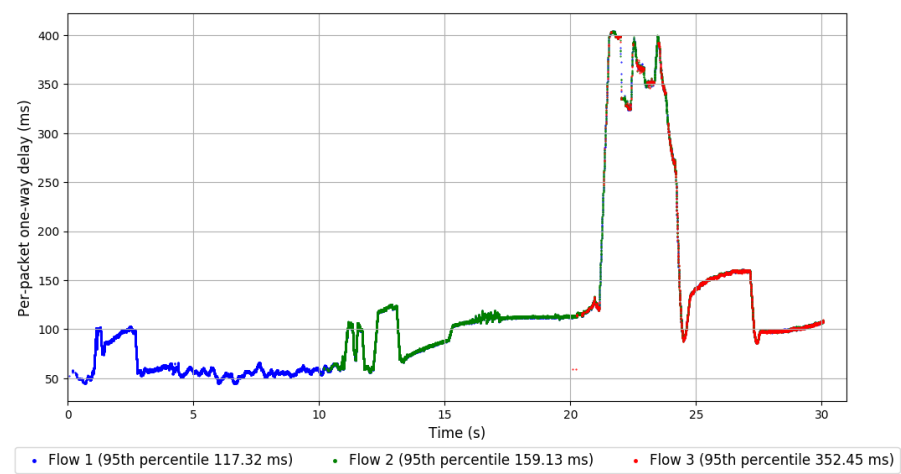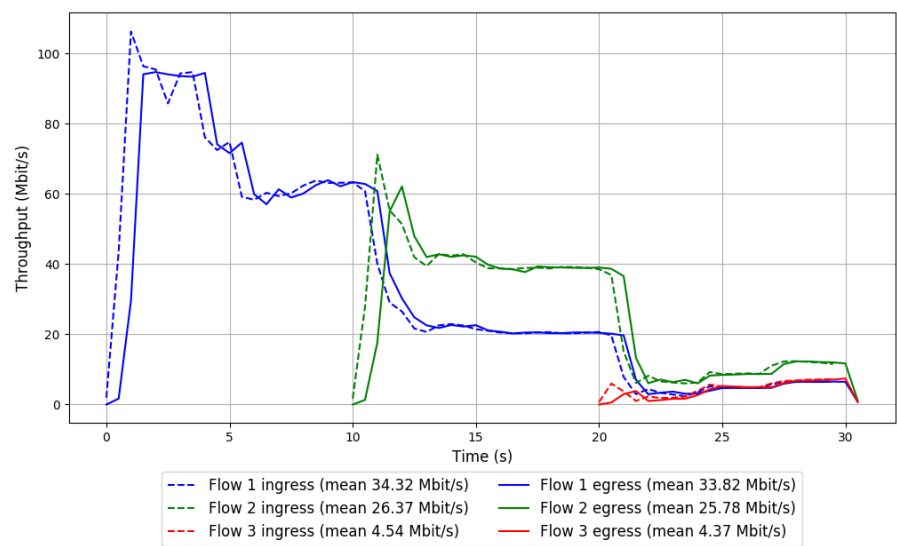
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 21.66 Mbit/s)   Flow 1 egress (mean 8.66 Mbit/s)
Flow 2 ingress (mean 14.80 Mbit/s)   Flow 2 egress (mean 5.72 Mbit/s)
Flow 3 ingress (mean 0.08 Mbit/s)   Flow 3 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 52.27 ms)   • Flow 2 (95th percentile 50.70 ms)   • Flow 3 (95th percentile 55.92 ms)

```
Run 5: Statistics of Copa

Start at: 2019-03-19 04:25:14
End at: 2019-03-19 04:25:44
Local clock offset: -0.879 ms
Remote clock offset: -18.39 ms


# Below is generated by plot.py at 2019-03-19 04:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 48.587 ms
Loss rate: 65.45%
-- Flow 1:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 48.831 ms
Loss rate: 62.90%
-- Flow 2:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 48.111 ms
Loss rate: 71.02%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 56.126 ms
Loss rate: 97.74%
```
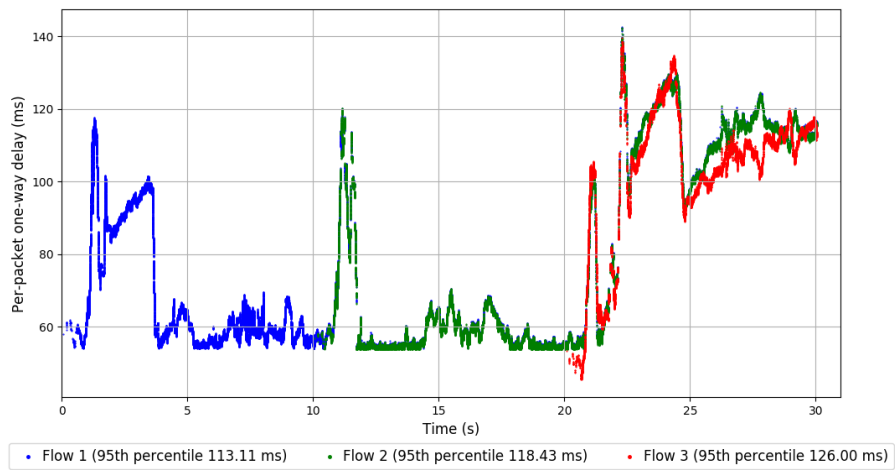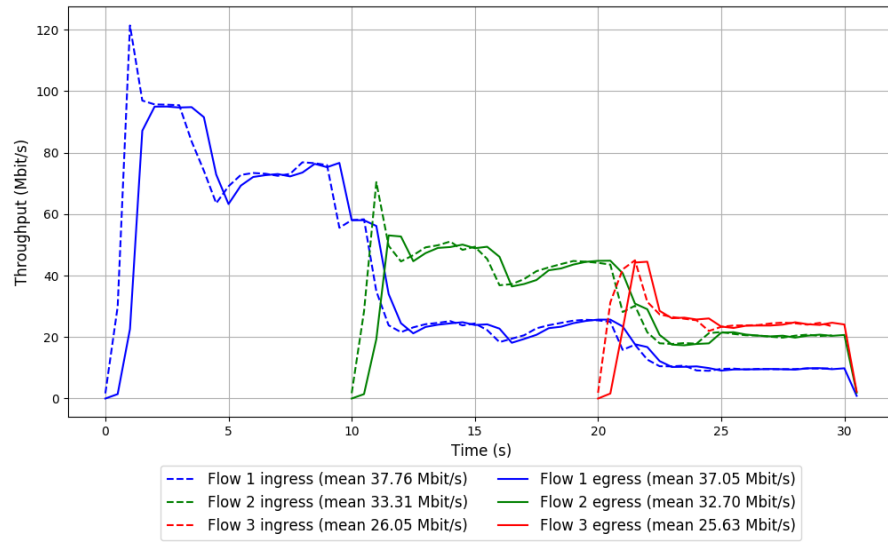
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-03-19 02:48:43
End at: 2019-03-19 02:49:13
Local clock offset: -1.776 ms
Remote clock offset: -20.507 ms


# Below is generated by plot.py at 2019-03-19 04:49:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 141.431 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 25.78 Mbit/s
95th percentile per-packet one-way delay: 159.132 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 352.451 ms
Loss rate: 3.66%
```

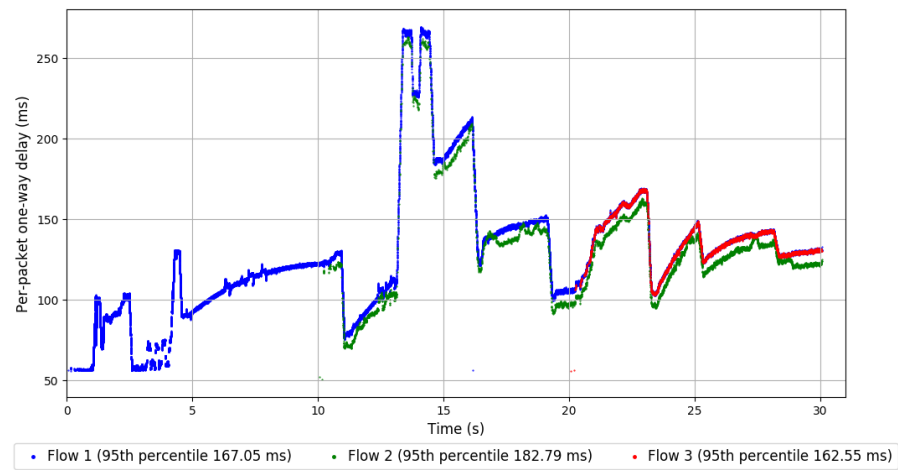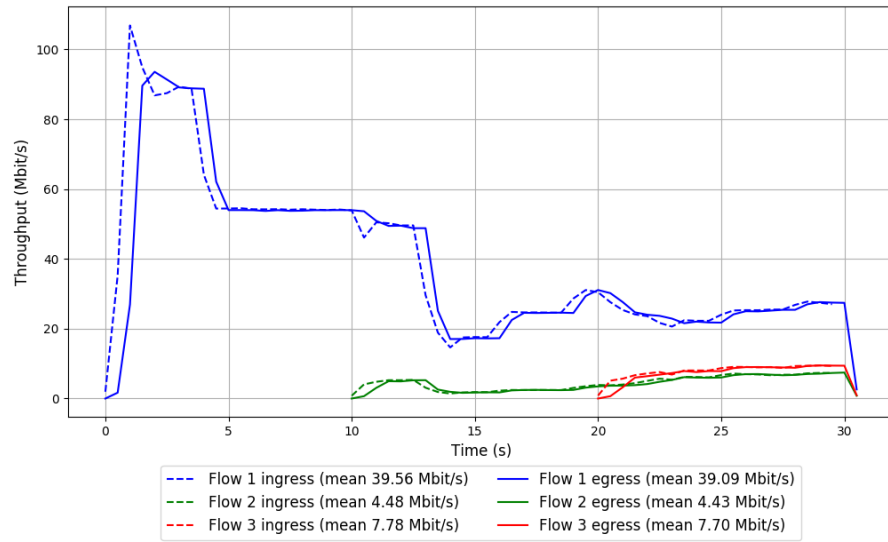Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 34.32 Mbit/s)   Flow 1 egress (mean 33.82 Mbit/s)
Flow 2 ingress (mean 26.37 Mbit/s)   Flow 2 egress (mean 25.78 Mbit/s)
Flow 3 ingress (mean 4.54 Mbit/s)   Flow 3 egress (mean 4.37 Mbit/s)

Flow 1 (95th percentile 117.32 ms)   Flow 2 (95th percentile 159.13 ms)   Flow 3 (95th percentile 352.45 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-03-19 03:15:27
End at: 2019-03-19 03:15:57
Local clock offset: -0.974 ms
Remote clock offset: -5.733 ms


# Below is generated by plot.py at 2019-03-19 04:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.36 Mbit/s
95th percentile per-packet one-way delay: 117.561 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 113.105 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 118.432 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 126.003 ms
Loss rate: 1.61%
```

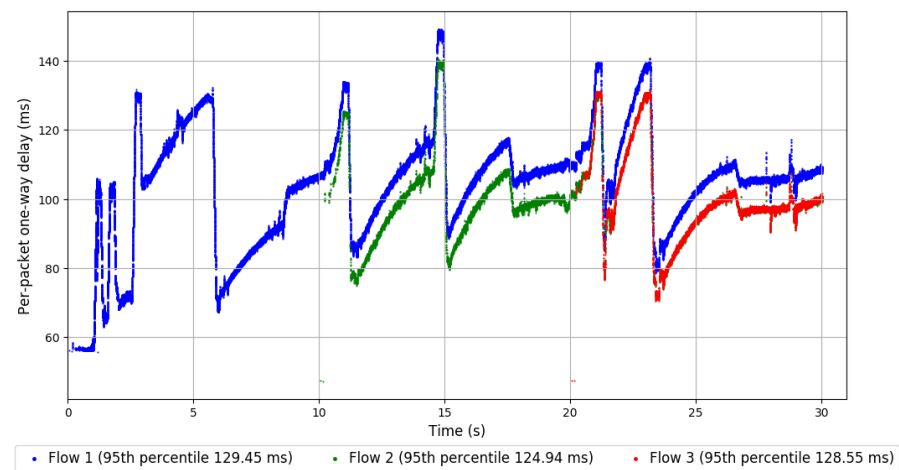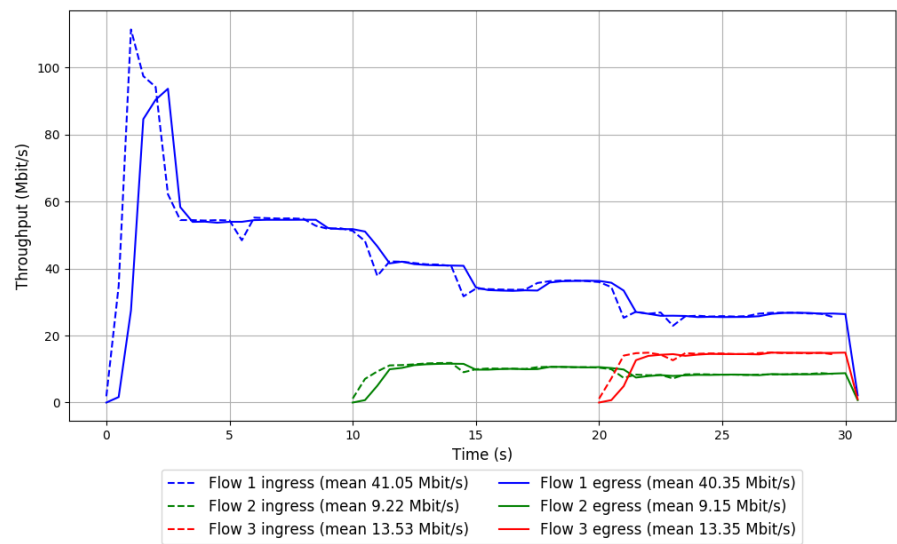Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-03-19 03:42:21
End at: 2019-03-19 03:42:51
Local clock offset: -1.023 ms
Remote clock offset: -14.67 ms


# Below is generated by plot.py at 2019-03-19 04:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.60 Mbit/s
95th percentile per-packet one-way delay: 166.638 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 167.049 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 182.790 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 162.551 ms
Loss rate: 1.01%
```
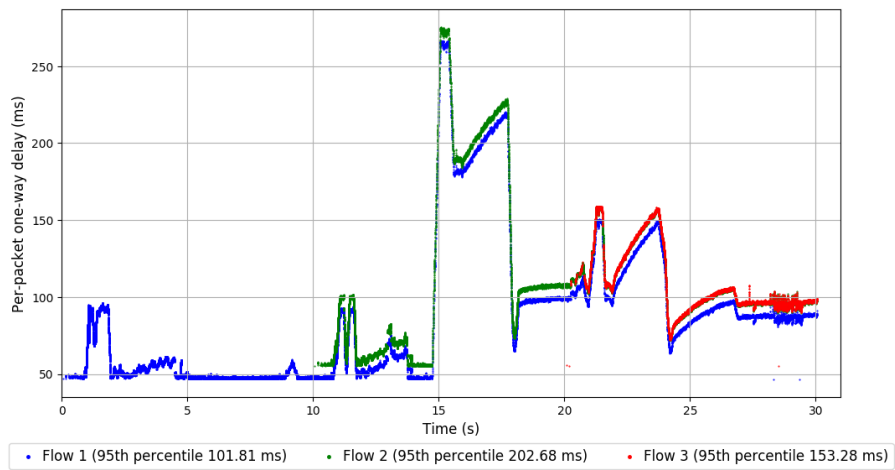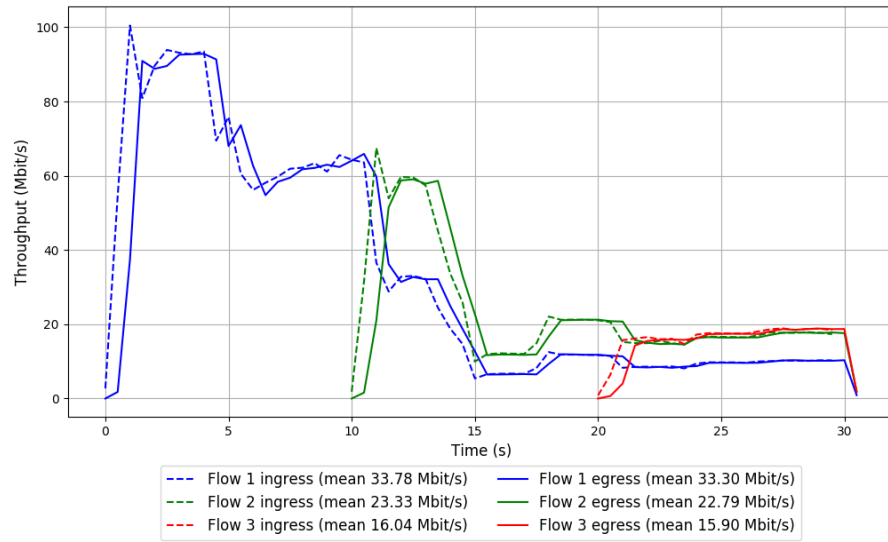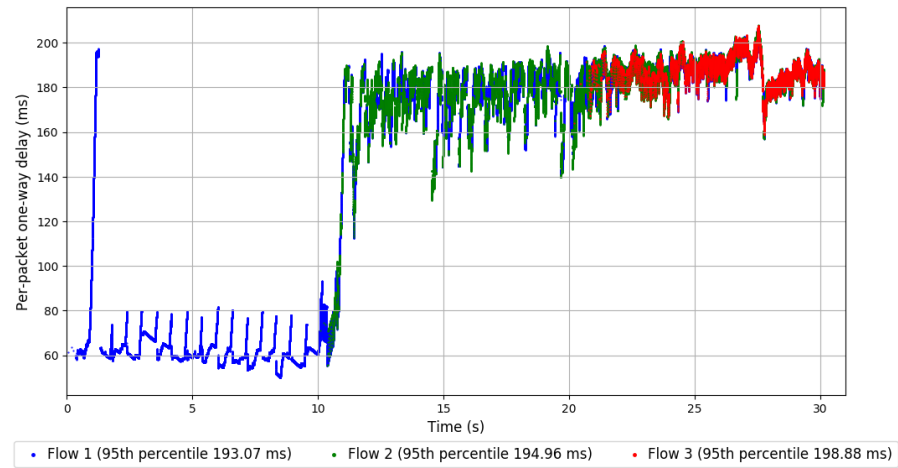
Run 3: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 39.56 Mbit/s) ——— Flow 1 egress (mean 39.09 Mbit/s)
- - - - Flow 2 ingress (mean 4.48 Mbit/s) ——— Flow 2 egress (mean 4.43 Mbit/s)
- - - - Flow 3 ingress (mean 7.78 Mbit/s) ——— Flow 3 egress (mean 7.70 Mbit/s)

- Flow 1 (95th percentile 167.05 ms)   • Flow 2 (95th percentile 182.79 ms)   • Flow 3 (95th percentile 162.55 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-03-19 04:09:49
End at: 2019-03-19 04:10:19
Local clock offset: -1.921 ms
Remote clock offset: -17.885 ms


# Below is generated by plot.py at 2019-03-19 04:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.89 Mbit/s
95th percentile per-packet one-way delay: 129.227 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 129.449 ms
Loss rate: 1.69%
-- Flow 2:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 124.940 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 128.546 ms
Loss rate: 1.21%
```

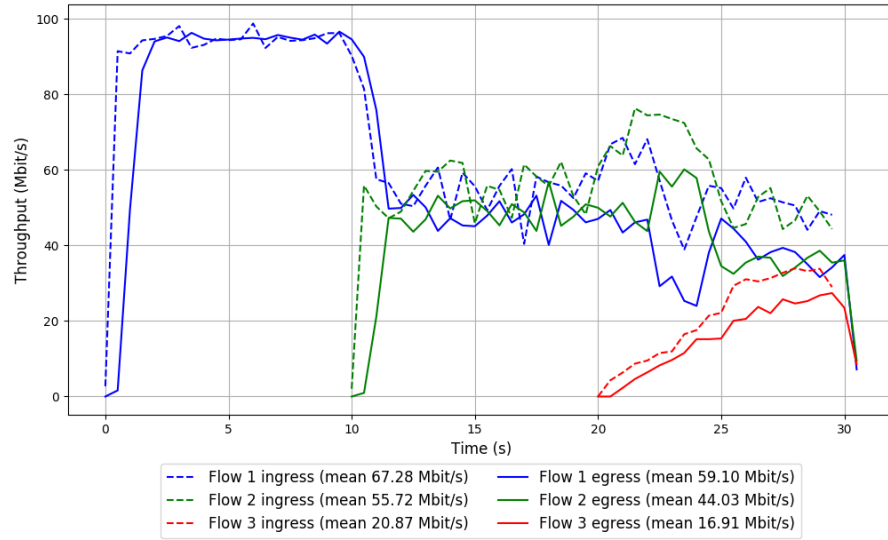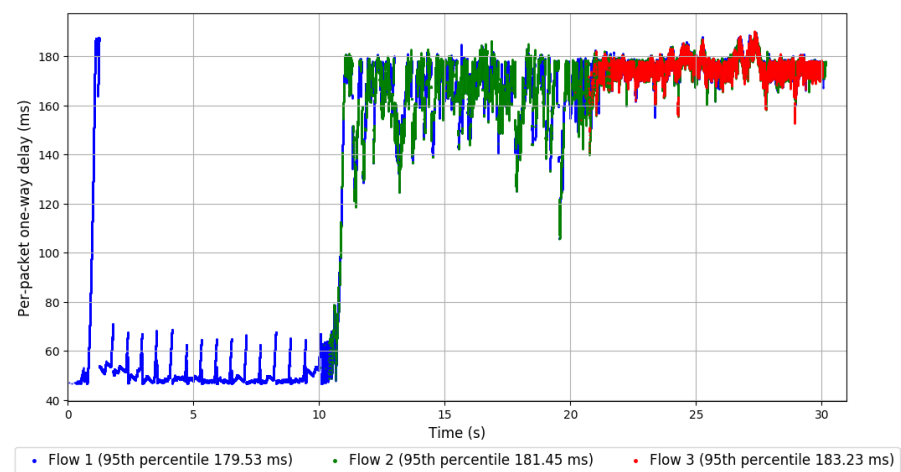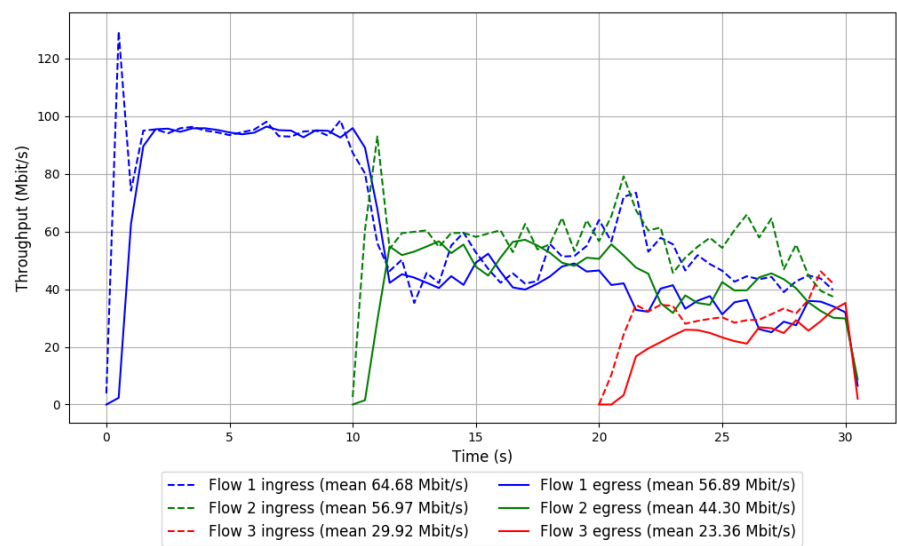Run 4: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 41.05 Mbit/s) ——— Flow 1 egress (mean 40.35 Mbit/s)
- - - Flow 2 ingress (mean 9.22 Mbit/s) ——— Flow 2 egress (mean 9.15 Mbit/s)
- - - Flow 3 ingress (mean 13.53 Mbit/s) ——— Flow 3 egress (mean 13.35 Mbit/s)

- Flow 1 (95th percentile 129.45 ms)   - Flow 2 (95th percentile 124.94 ms)   - Flow 3 (95th percentile 128.55 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-03-19 04:36:34
End at: 2019-03-19 04:37:04
Local clock offset: -0.287 ms
Remote clock offset: -17.748 ms


# Below is generated by plot.py at 2019-03-19 04:50:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.77 Mbit/s
95th percentile per-packet one-way delay: 149.050 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 33.30 Mbit/s
95th percentile per-packet one-way delay: 101.805 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 202.681 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 15.90 Mbit/s
95th percentile per-packet one-way delay: 153.278 ms
Loss rate: 0.86%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 33.78 Mbit/s) --- Flow 1 egress (mean 33.30 Mbit/s)
Flow 2 ingress (mean 23.33 Mbit/s) --- Flow 2 egress (mean 22.79 Mbit/s)
Flow 3 ingress (mean 16.04 Mbit/s) --- Flow 3 egress (mean 15.90 Mbit/s)

Flow 1 (95th percentile 101.81 ms) · Flow 2 (95th percentile 202.68 ms) · Flow 3 (95th percentile 153.28 ms)
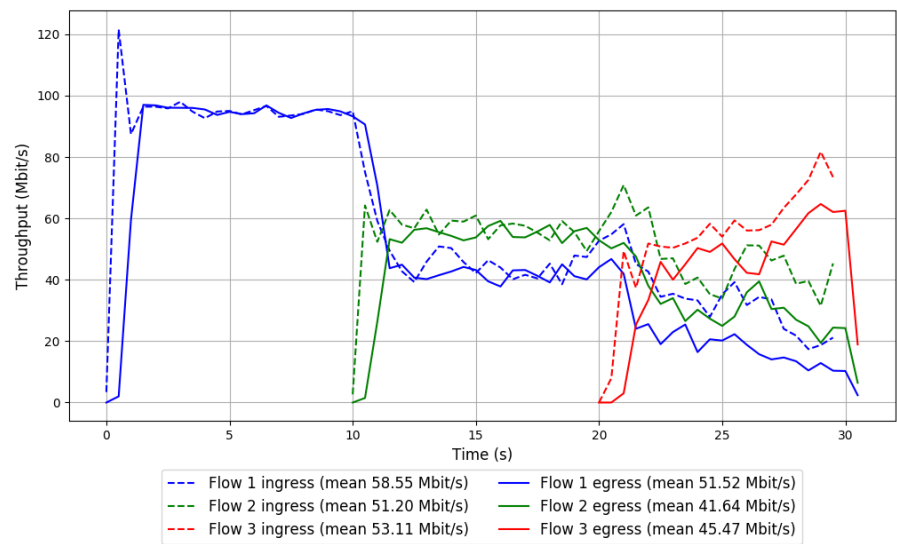
```
Run 1: Statistics of FillP

Start at: 2019-03-19 02:57:47
End at: 2019-03-19 02:58:17
Local clock offset: -1.239 ms
Remote clock offset: -13.505 ms


# Below is generated by plot.py at 2019-03-19 04:50:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.86 Mbit/s
95th percentile per-packet one-way delay: 194.354 ms
Loss rate: 15.27%
-- Flow 1:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 193.074 ms
Loss rate: 12.00%
-- Flow 2:
Average throughput: 44.03 Mbit/s
95th percentile per-packet one-way delay: 194.958 ms
Loss rate: 20.54%
-- Flow 3:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 198.875 ms
Loss rate: 18.84%
```
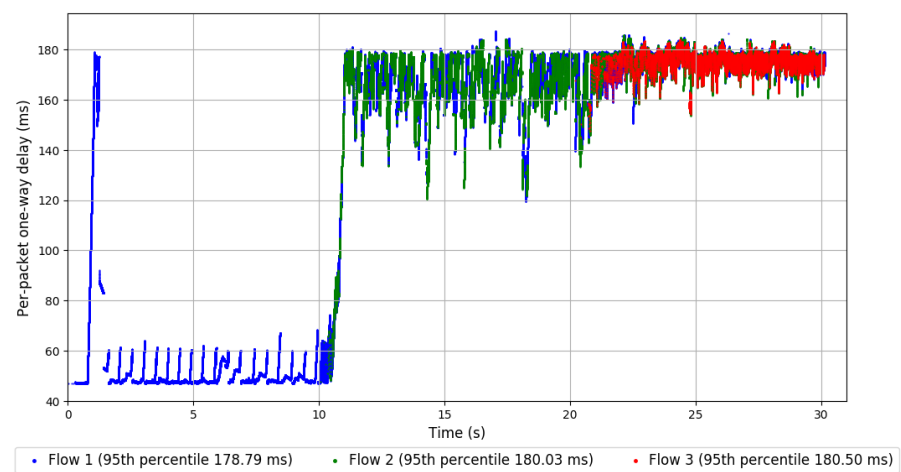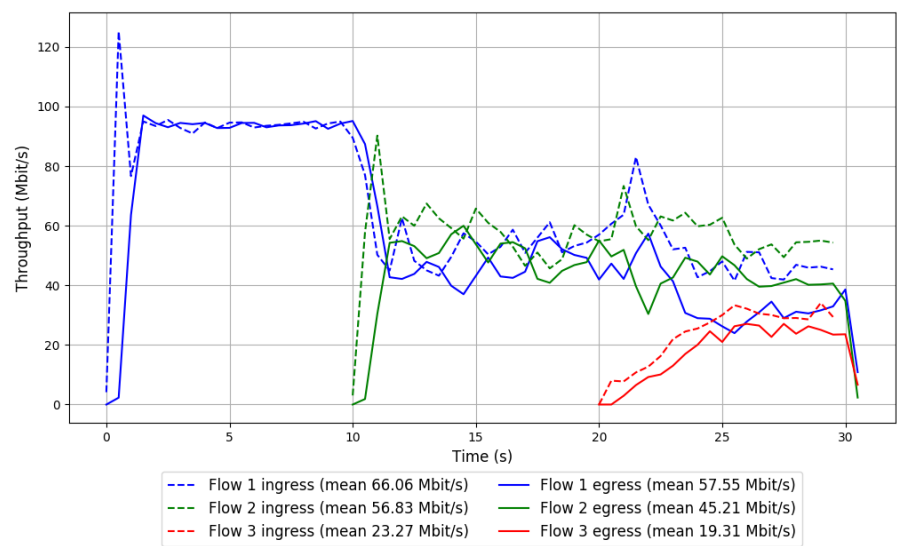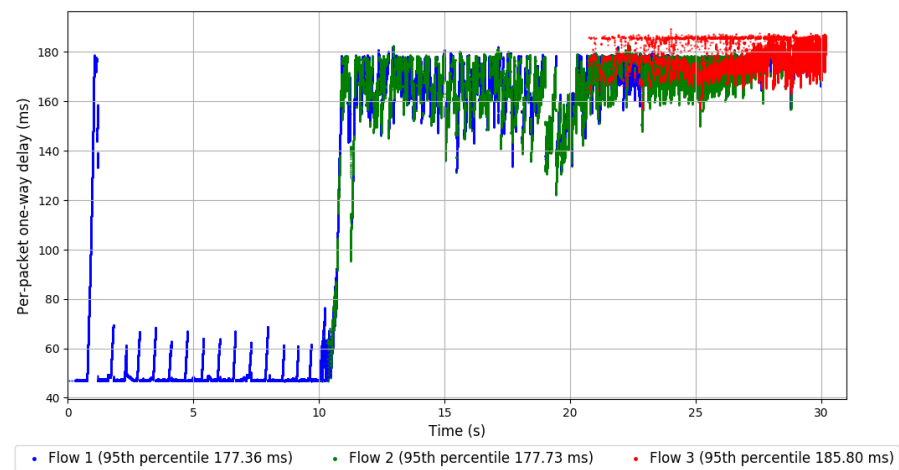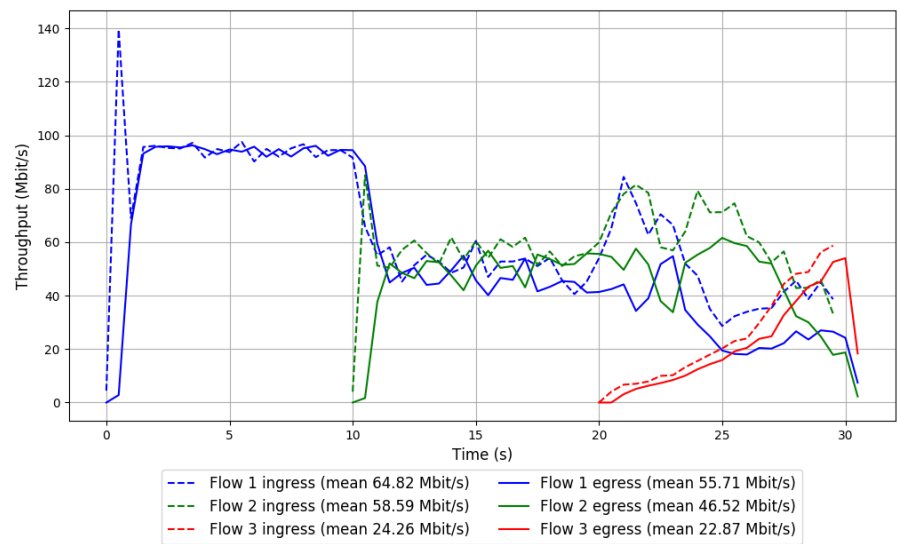
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-03-19 03:24:37
End at: 2019-03-19 03:25:07
Local clock offset: -1.072 ms
Remote clock offset: -1.029 ms

# Below is generated by plot.py at 2019-03-19 04:51:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 180.594 ms
Loss rate: 16.11%
-- Flow 1:
Average throughput: 56.89 Mbit/s
95th percentile per-packet one-way delay: 179.534 ms
Loss rate: 11.78%
-- Flow 2:
Average throughput: 44.30 Mbit/s
95th percentile per-packet one-way delay: 181.446 ms
Loss rate: 21.77%
-- Flow 3:
Average throughput: 23.36 Mbit/s
95th percentile per-packet one-way delay: 183.226 ms
Loss rate: 22.71%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 64.68 Mbit/s) —— Flow 1 egress (mean 56.89 Mbit/s)
Flow 2 ingress (mean 56.97 Mbit/s) —— Flow 2 egress (mean 44.30 Mbit/s)
Flow 3 ingress (mean 29.92 Mbit/s) —— Flow 3 egress (mean 23.36 Mbit/s)

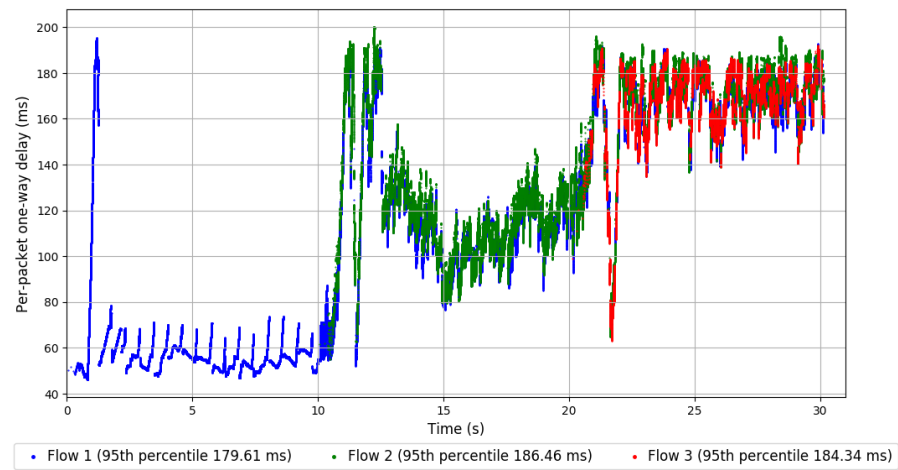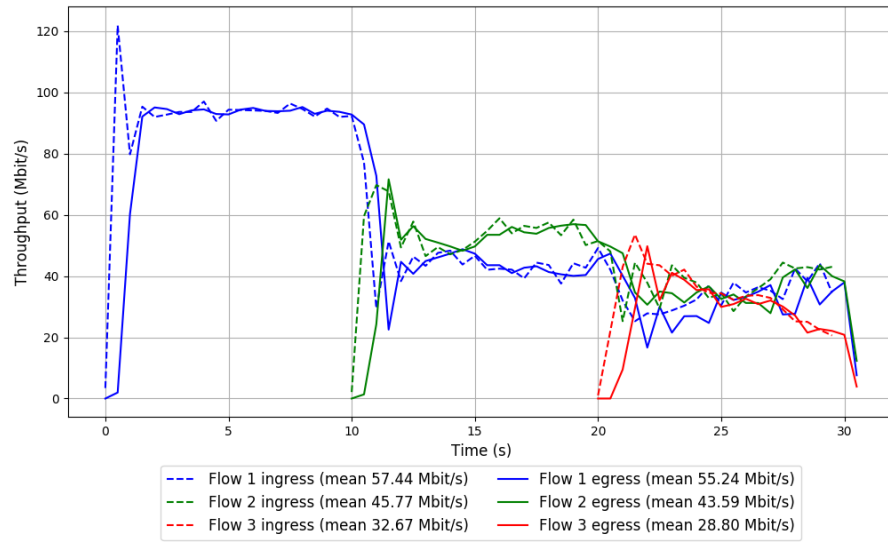Flow 1 (95th percentile 179.53 ms) Flow 2 (95th percentile 181.45 ms) Flow 3 (95th percentile 183.23 ms)

```
Run 3: Statistics of FillP

Start at: 2019-03-19 03:51:21
End at: 2019-03-19 03:51:51
Local clock offset: -1.416 ms
Remote clock offset: -16.851 ms

# Below is generated by plot.py at 2019-03-19 04:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 185.812 ms
Loss rate: 14.10%
-- Flow 1:
Average throughput: 51.52 Mbit/s
95th percentile per-packet one-way delay: 178.804 ms
Loss rate: 11.74%
-- Flow 2:
Average throughput: 41.64 Mbit/s
95th percentile per-packet one-way delay: 186.152 ms
Loss rate: 18.15%
-- Flow 3:
Average throughput: 45.47 Mbit/s
95th percentile per-packet one-way delay: 186.604 ms
Loss rate: 14.13%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 58.55 Mbit/s) — Flow 1 egress (mean 51.52 Mbit/s)
Flow 2 ingress (mean 51.20 Mbit/s) — Flow 2 egress (mean 41.64 Mbit/s)
Flow 3 ingress (mean 53.11 Mbit/s) — Flow 3 egress (mean 45.47 Mbit/s)

Flow 1 (95th percentile 178.80 ms) — Flow 2 (95th percentile 186.15 ms) — Flow 3 (95th percentile 186.60 ms)

```
Run 4: Statistics of FillP

Start at: 2019-03-19 04:18:53
End at: 2019-03-19 04:19:23
Local clock offset: -1.443 ms
Remote clock offset: -18.383 ms


# Below is generated by plot.py at 2019-03-19 04:51:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 179.463 ms
Loss rate: 15.49%
-- Flow 1:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 178.788 ms
Loss rate: 12.51%
-- Flow 2:
Average throughput: 45.21 Mbit/s
95th percentile per-packet one-way delay: 180.028 ms
Loss rate: 20.37%
-- Flow 3:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 180.495 ms
Loss rate: 16.98%
```
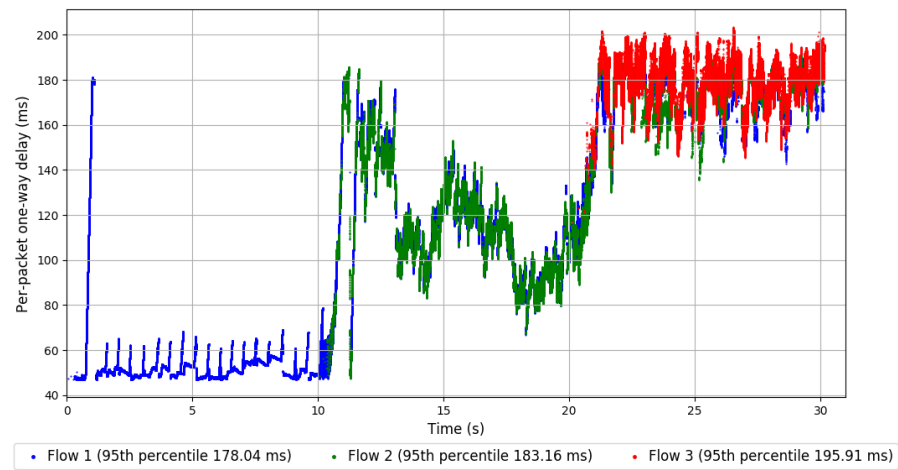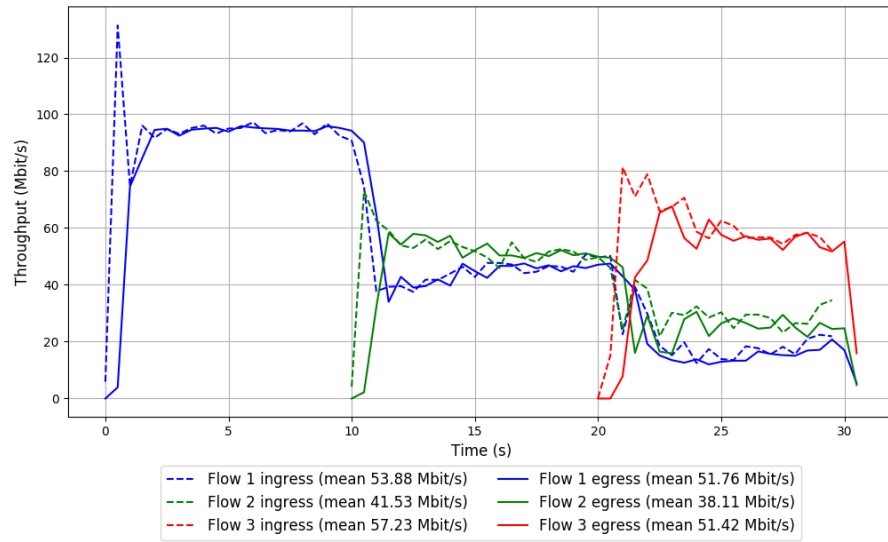
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 66.06 Mbit/s) — Flow 1 egress (mean 57.55 Mbit/s)
Flow 2 ingress (mean 56.83 Mbit/s) — Flow 2 egress (mean 45.21 Mbit/s)
Flow 3 ingress (mean 23.27 Mbit/s) — Flow 3 egress (mean 19.31 Mbit/s)

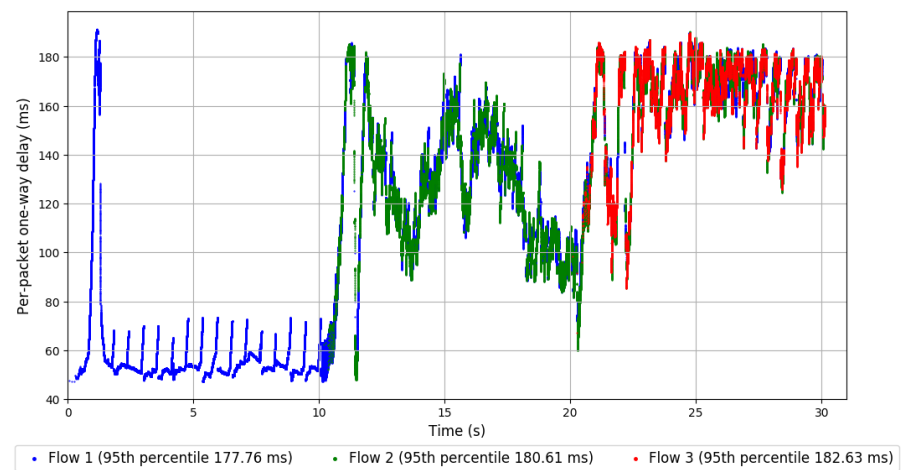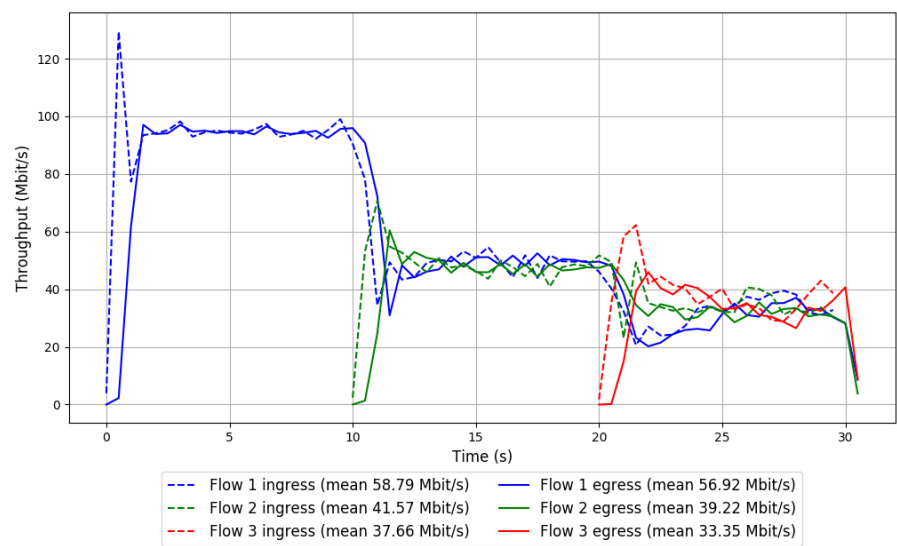Flow 1 (95th percentile 178.79 ms)   Flow 2 (95th percentile 180.03 ms)   Flow 3 (95th percentile 180.50 ms)

```
Run 5: Statistics of FillP

Start at: 2019-03-19 04:45:38
End at: 2019-03-19 04:46:08
Local clock offset: -0.073 ms
Remote clock offset: -9.357 ms


# Below is generated by plot.py at 2019-03-19 04:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 178.330 ms
Loss rate: 15.43%
-- Flow 1:
Average throughput: 55.71 Mbit/s
95th percentile per-packet one-way delay: 177.360 ms
Loss rate: 13.69%
-- Flow 2:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 177.728 ms
Loss rate: 20.37%
-- Flow 3:
Average throughput: 22.87 Mbit/s
95th percentile per-packet one-way delay: 185.801 ms
Loss rate: 5.50%
```

Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 64.82 Mbit/s) --- Flow 1 egress (mean 55.71 Mbit/s)
Flow 2 ingress (mean 58.59 Mbit/s) --- Flow 2 egress (mean 46.52 Mbit/s)
Flow 3 ingress (mean 24.26 Mbit/s) --- Flow 3 egress (mean 22.87 Mbit/s)

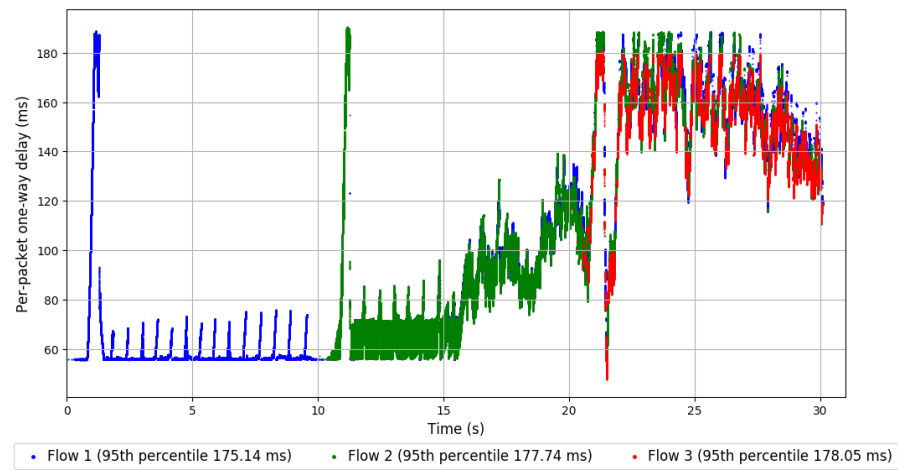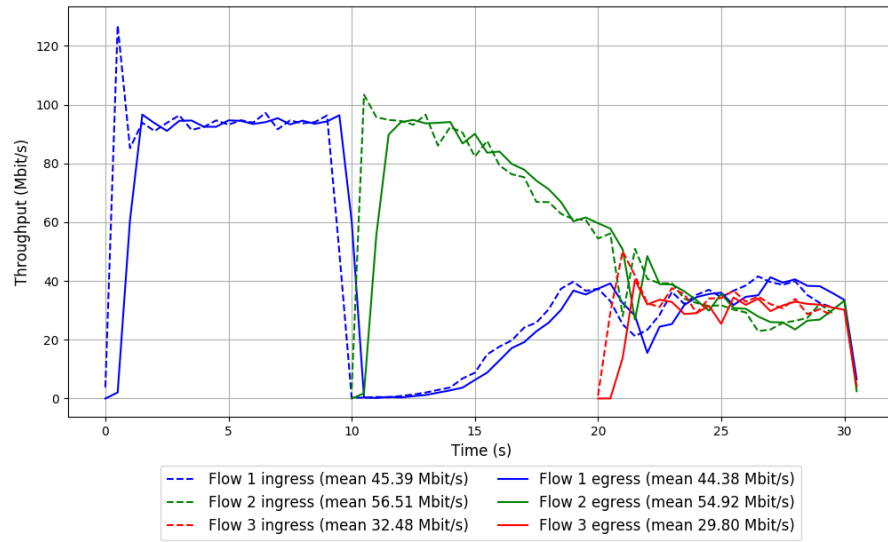Flow 1 (95th percentile 177.36 ms) Flow 2 (95th percentile 177.73 ms) Flow 3 (95th percentile 185.80 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-03-19 02:52:35
End at: 2019-03-19 02:53:05
Local clock offset: -1.473 ms
Remote clock offset: -19.275 ms


# Below is generated by plot.py at 2019-03-19 04:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 183.456 ms
Loss rate: 4.56%
-- Flow 1:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 179.613 ms
Loss rate: 3.46%
-- Flow 2:
Average throughput: 43.59 Mbit/s
95th percentile per-packet one-way delay: 186.459 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 184.336 ms
Loss rate: 11.29%
```

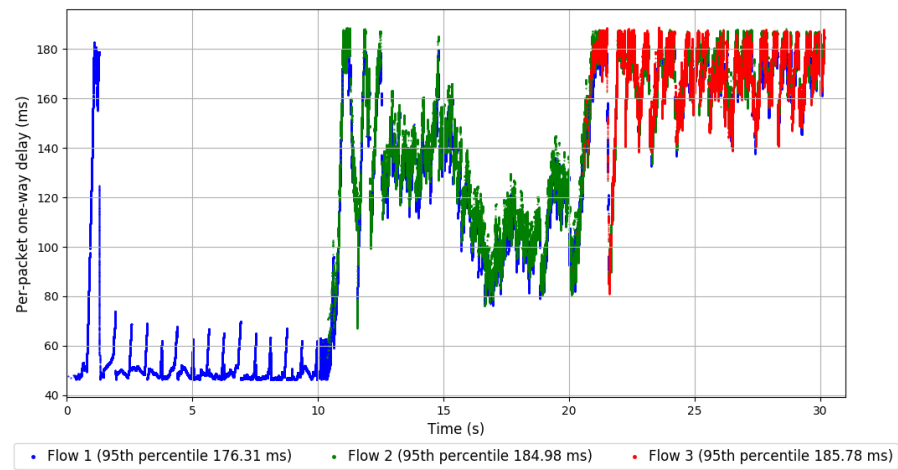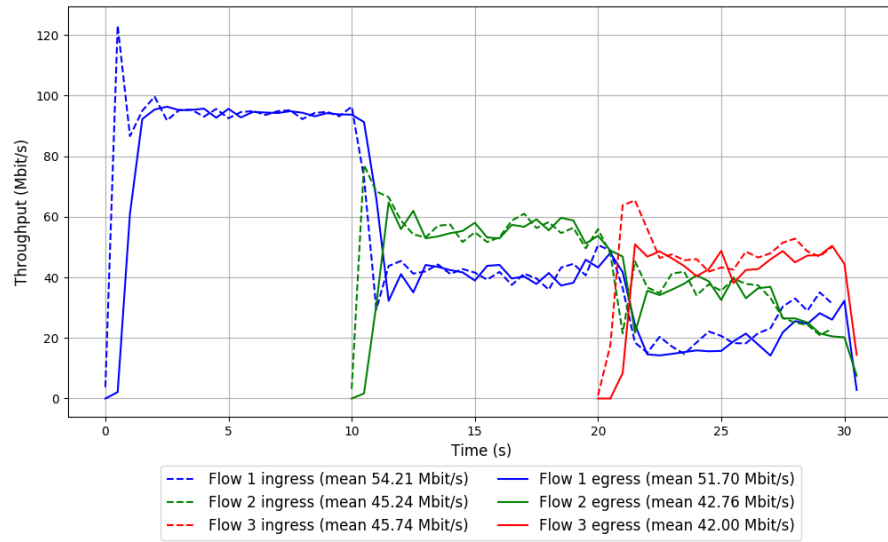Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 57.44 Mbit/s) --- Flow 1 egress (mean 55.24 Mbit/s)
Flow 2 ingress (mean 45.77 Mbit/s) --- Flow 2 egress (mean 43.59 Mbit/s)
Flow 3 ingress (mean 32.67 Mbit/s) --- Flow 3 egress (mean 28.80 Mbit/s)

Flow 1 (95th percentile 179.61 ms)   Flow 2 (95th percentile 186.46 ms)   Flow 3 (95th percentile 184.34 ms)

46

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-03-19 03:19:19
End at: 2019-03-19 03:19:49
Local clock offset: -0.932 ms
Remote clock offset: -2.368 ms


# Below is generated by plot.py at 2019-03-19 04:51:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 188.706 ms
Loss rate: 5.89%
-- Flow 1:
Average throughput: 51.76 Mbit/s
95th percentile per-packet one-way delay: 178.044 ms
Loss rate: 3.64%
-- Flow 2:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 183.157 ms
Loss rate: 7.80%
-- Flow 3:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 195.911 ms
Loss rate: 9.47%
```

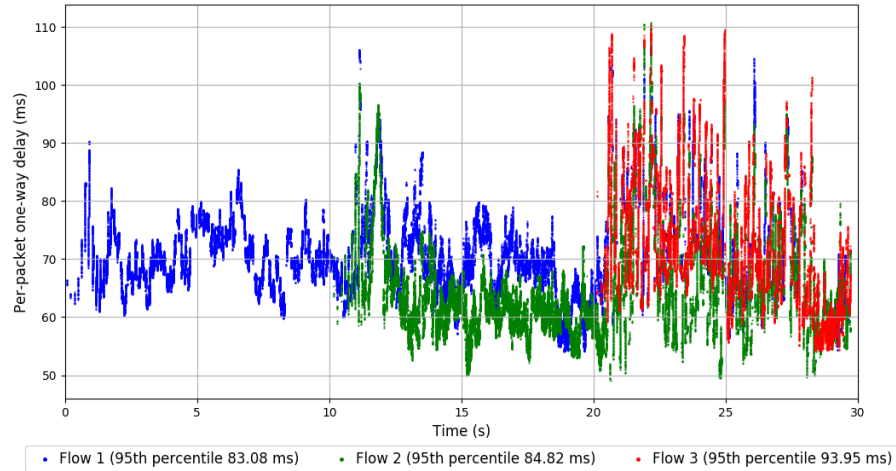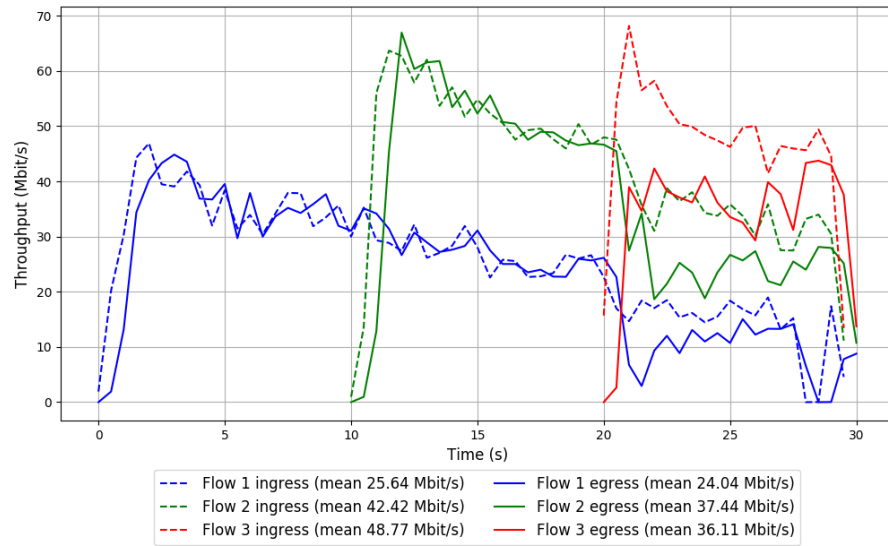Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 53.88 Mbit/s) -- -- -- Flow 1 egress (mean 51.76 Mbit/s)
Flow 2 ingress (mean 41.53 Mbit/s) -- -- -- Flow 2 egress (mean 38.11 Mbit/s)
Flow 3 ingress (mean 57.23 Mbit/s) -- -- -- Flow 3 egress (mean 51.42 Mbit/s)

Flow 1 (95th percentile 178.04 ms)   Flow 2 (95th percentile 183.16 ms)   Flow 3 (95th percentile 195.91 ms)

48

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-03-19 03:46:09
End at: 2019-03-19 03:46:39
Local clock offset: -1.076 ms
Remote clock offset: -15.856 ms


# Below is generated by plot.py at 2019-03-19 04:51:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 179.854 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 56.92 Mbit/s
95th percentile per-packet one-way delay: 177.764 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 180.609 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 182.633 ms
Loss rate: 10.94%
```

Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-03-19 04:13:40
End at: 2019-03-19 04:14:10
Local clock offset: -2.019 ms
Remote clock offset: -18.183 ms


# Below is generated by plot.py at 2019-03-19 04:52:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 176.922 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 175.141 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 54.92 Mbit/s
95th percentile per-packet one-way delay: 177.742 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 29.80 Mbit/s
95th percentile per-packet one-way delay: 178.051 ms
Loss rate: 8.24%
```

Run 4: Report of FillP-Sheep — Data Link

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-03-19 04:40:25
End at: 2019-03-19 04:40:55
Local clock offset: -0.146 ms
Remote clock offset: -13.803 ms


# Below is generated by plot.py at 2019-03-19 04:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 182.900 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 51.70 Mbit/s
95th percentile per-packet one-way delay: 176.307 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 184.978 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 42.00 Mbit/s
95th percentile per-packet one-way delay: 185.780 ms
Loss rate: 7.32%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 54.21 Mbit/s) — Flow 1 egress (mean 51.70 Mbit/s)
Flow 2 ingress (mean 45.24 Mbit/s) — Flow 2 egress (mean 42.76 Mbit/s)
Flow 3 ingress (mean 45.74 Mbit/s) — Flow 3 egress (mean 42.00 Mbit/s)

Flow 1 (95th percentile 176.31 ms)   Flow 2 (95th percentile 184.98 ms)   Flow 3 (95th percentile 185.78 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-03-19 02:50:00
End at: 2019-03-19 02:50:30
Local clock offset: -1.642 ms
Remote clock offset: -19.793 ms


# Below is generated by plot.py at 2019-03-19 04:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.34 Mbit/s
95th percentile per-packet one-way delay: 87.780 ms
Loss rate: 12.96%
-- Flow 1:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 83.083 ms
Loss rate: 6.25%
-- Flow 2:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 84.816 ms
Loss rate: 11.75%
-- Flow 3:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 93.950 ms
Loss rate: 25.97%
```
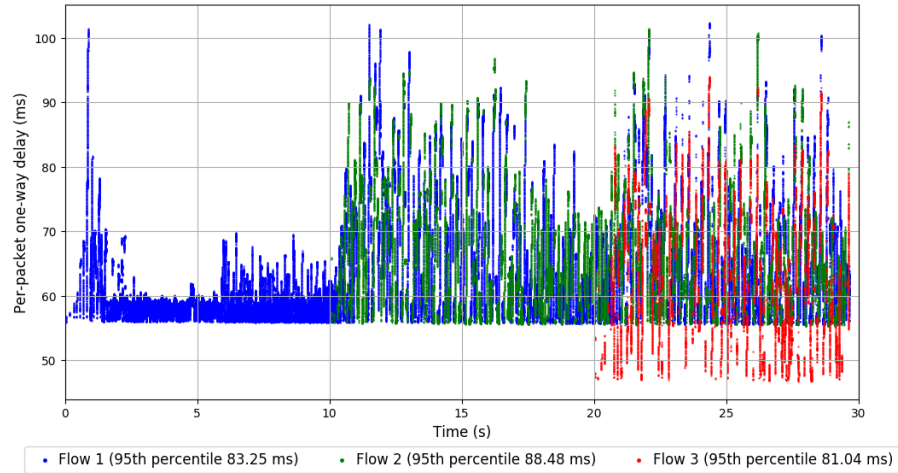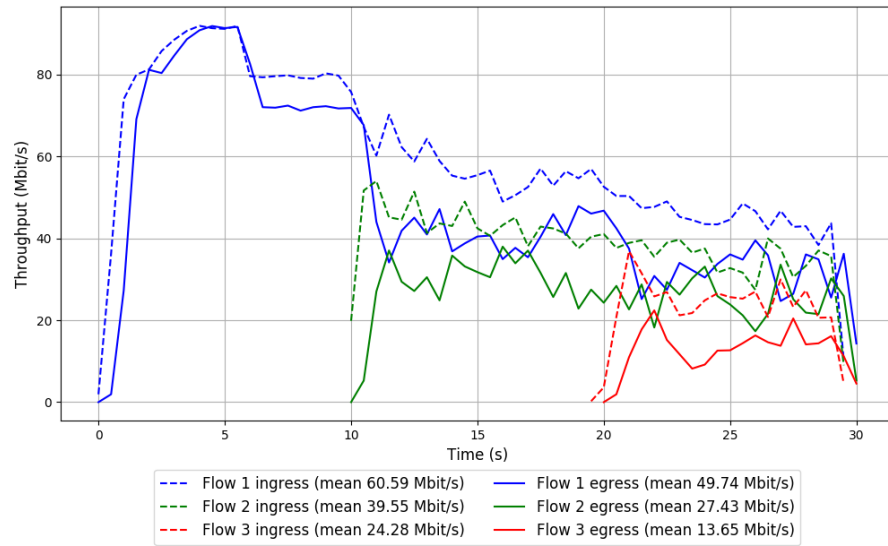
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-03-19 03:16:44
End at: 2019-03-19 03:17:14
Local clock offset: -1.055 ms
Remote clock offset: -2.501 ms


# Below is generated by plot.py at 2019-03-19 04:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.41 Mbit/s
95th percentile per-packet one-way delay: 90.741 ms
Loss rate: 18.57%
-- Flow 1:
Average throughput: 48.56 Mbit/s
95th percentile per-packet one-way delay: 89.235 ms
Loss rate: 12.57%
-- Flow 2:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 91.779 ms
Loss rate: 25.56%
-- Flow 3:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 94.786 ms
Loss rate: 35.36%
```
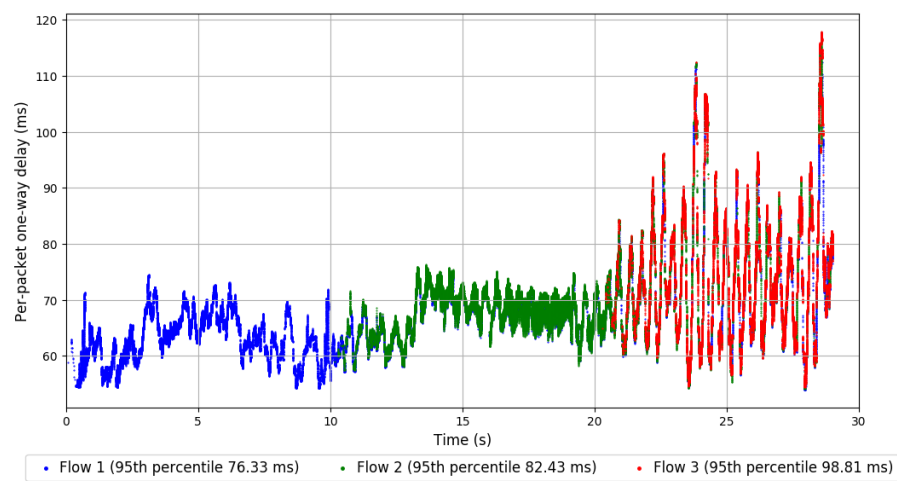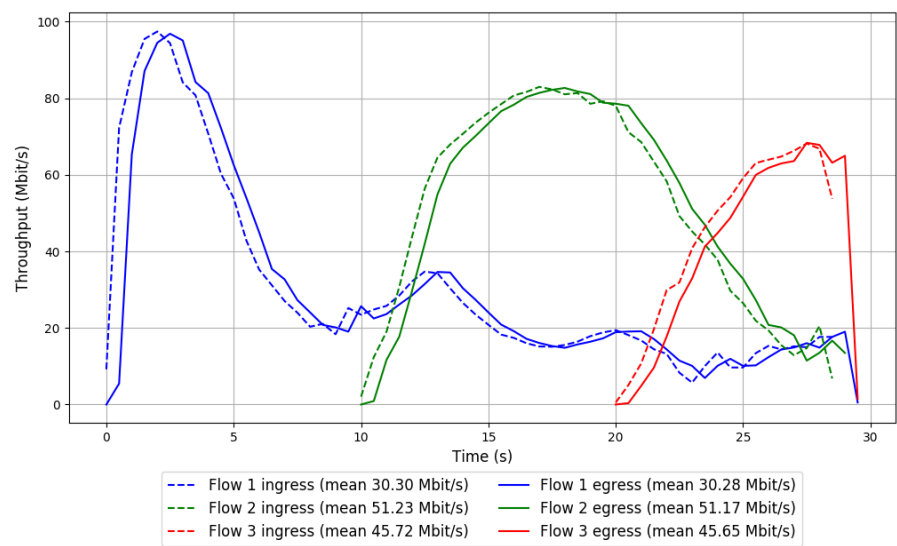
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-03-19 03:43:37
End at: 2019-03-19 03:44:07
Local clock offset: -1.006 ms
Remote clock offset: -13.982 ms


# Below is generated by plot.py at 2019-03-19 04:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.98 Mbit/s
95th percentile per-packet one-way delay: 86.919 ms
Loss rate: 10.59%
-- Flow 1:
Average throughput: 41.84 Mbit/s
95th percentile per-packet one-way delay: 76.178 ms
Loss rate: 7.39%
-- Flow 2:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 91.478 ms
Loss rate: 12.92%
-- Flow 3:
Average throughput: 20.63 Mbit/s
95th percentile per-packet one-way delay: 90.419 ms
Loss rate: 20.91%
```
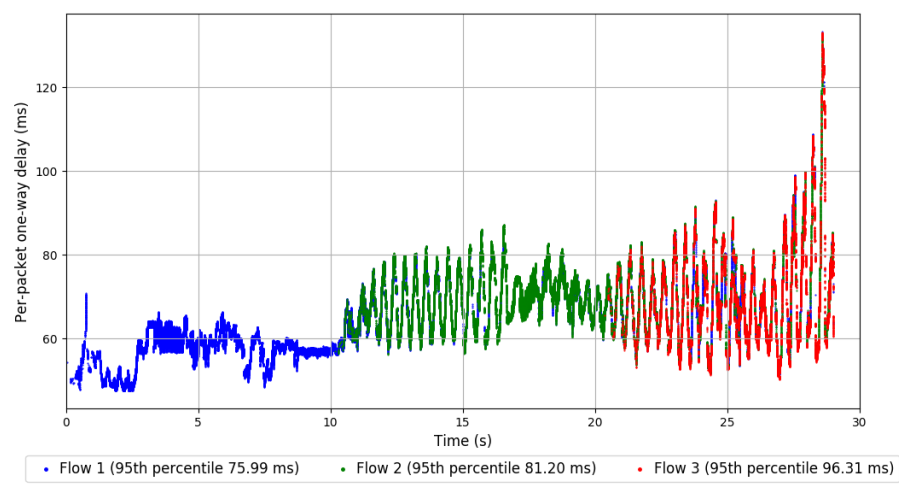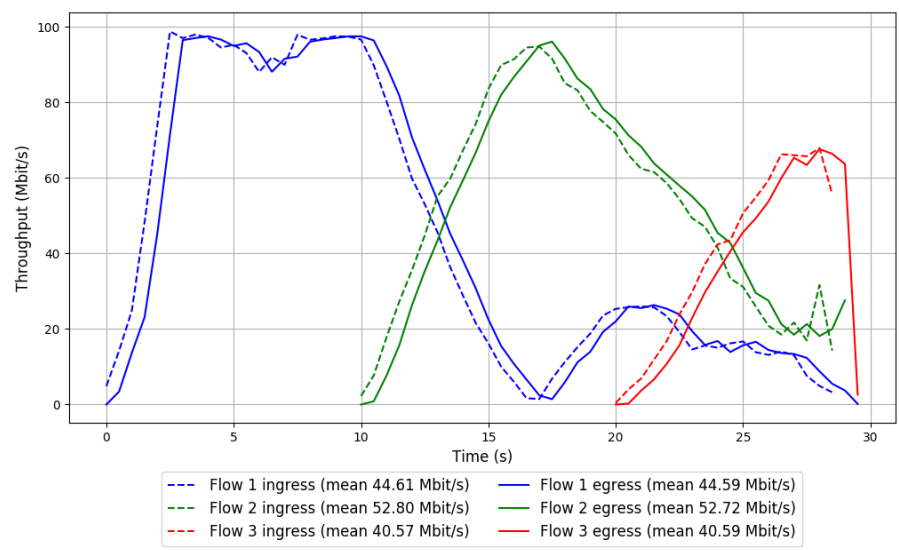
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-03-19 04:11:06
End at: 2019-03-19 04:11:36
Local clock offset: -1.95 ms
Remote clock offset: -18.254 ms


# Below is generated by plot.py at 2019-03-19 04:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.30 Mbit/s
95th percentile per-packet one-way delay: 78.658 ms
Loss rate: 18.28%
-- Flow 1:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 78.220 ms
Loss rate: 14.22%
-- Flow 2:
Average throughput: 25.74 Mbit/s
95th percentile per-packet one-way delay: 80.146 ms
Loss rate: 28.72%
-- Flow 3:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 77.412 ms
Loss rate: 18.16%
```

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-03-19 04:37:51
End at: 2019-03-19 04:38:21
Local clock offset: -0.303 ms
Remote clock offset: -16.083 ms


# Below is generated by plot.py at 2019-03-19 04:52:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.30 Mbit/s
95th percentile per-packet one-way delay: 84.589 ms
Loss rate: 23.55%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 83.245 ms
Loss rate: 17.91%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 88.476 ms
Loss rate: 30.61%
-- Flow 3:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 81.039 ms
Loss rate: 43.60%
```
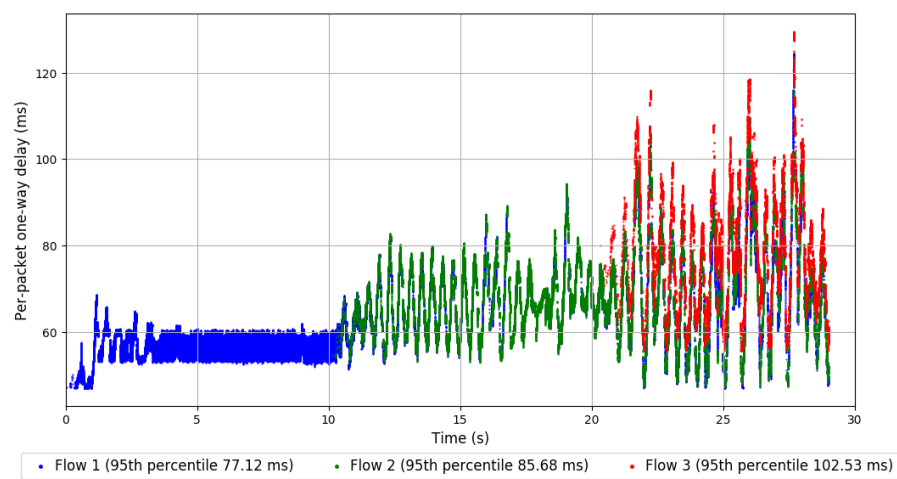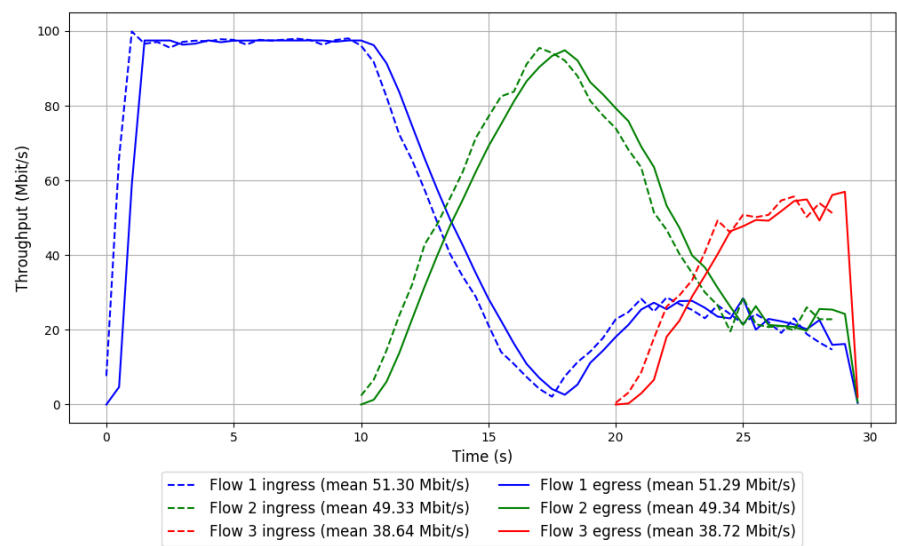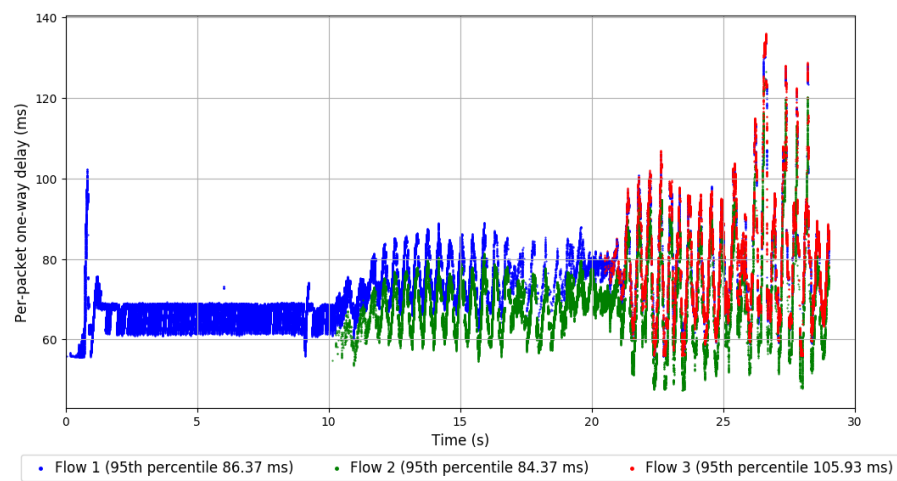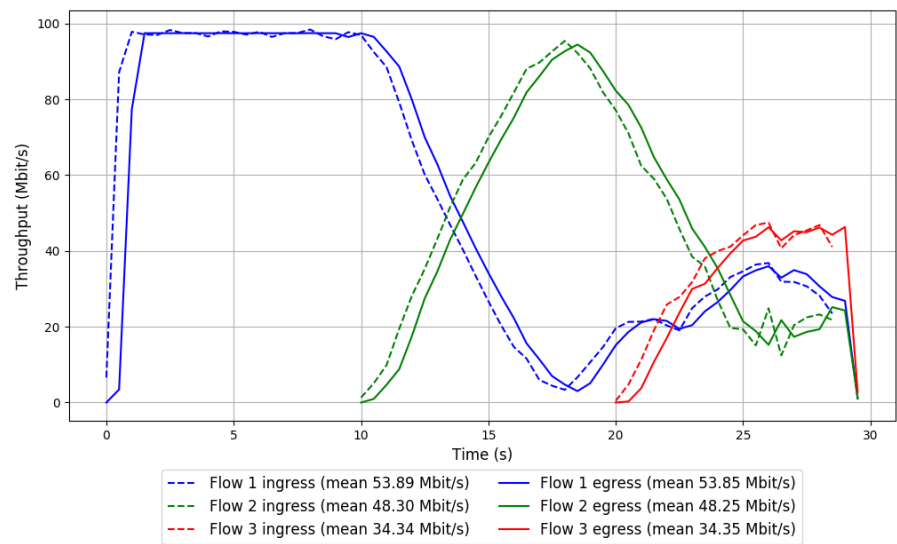
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-19 02:55:13
End at: 2019-03-19 02:55:43
Local clock offset: -1.352 ms
Remote clock offset: -16.894 ms

# Below is generated by plot.py at 2019-03-19 04:52:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.26 Mbit/s
95th percentile per-packet one-way delay: 85.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.28 Mbit/s
95th percentile per-packet one-way delay: 76.325 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.17 Mbit/s
95th percentile per-packet one-way delay: 82.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.65 Mbit/s
95th percentile per-packet one-way delay: 98.809 ms
Loss rate: 0.00%
```
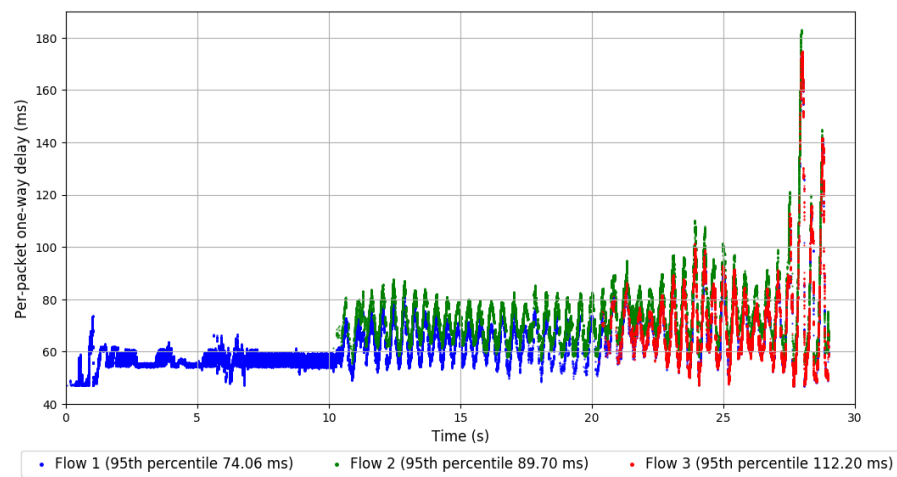
Run 1: Report of Indigo-MusesC3 — Data Link

Legend:
- Flow 1 ingress (mean 30.30 Mbit/s)
- Flow 1 egress (mean 30.28 Mbit/s)
- Flow 2 ingress (mean 51.23 Mbit/s)
- Flow 2 egress (mean 51.17 Mbit/s)
- Flow 3 ingress (mean 45.72 Mbit/s)
- Flow 3 egress (mean 45.65 Mbit/s)

Legend:
- Flow 1 (95th percentile 76.33 ms)
- Flow 2 (95th percentile 82.43 ms)
- Flow 3 (95th percentile 98.81 ms)

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-19 03:22:01
End at: 2019-03-19 03:22:31
Local clock offset: -1.074 ms
Remote clock offset: -1.422 ms


# Below is generated by plot.py at 2019-03-19 04:52:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.00 Mbit/s
95th percentile per-packet one-way delay: 80.927 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.59 Mbit/s
95th percentile per-packet one-way delay: 75.987 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 81.198 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.59 Mbit/s
95th percentile per-packet one-way delay: 96.308 ms
Loss rate: 0.00%
```

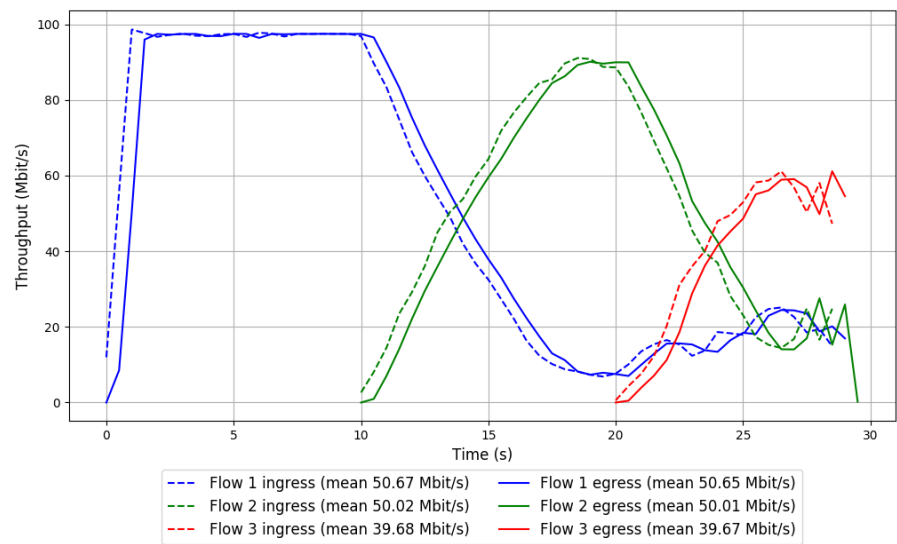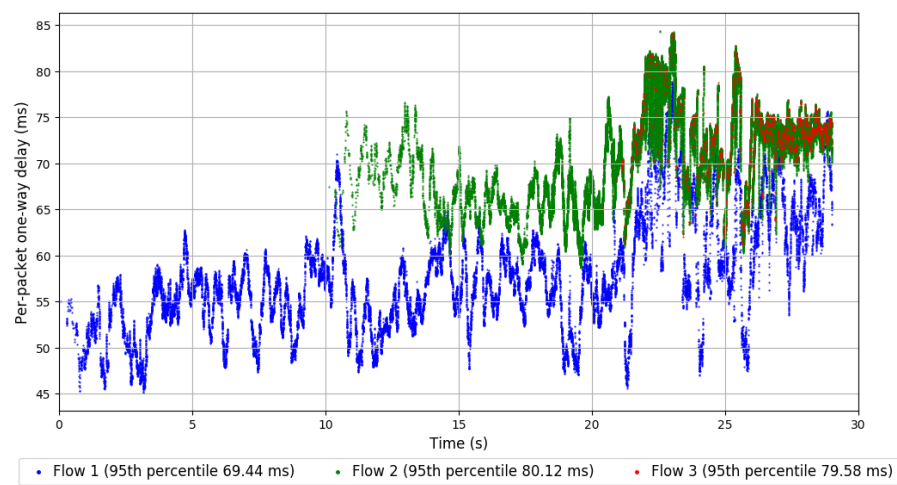Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-19 03:48:46
End at: 2019-03-19 03:49:16
Local clock offset: -1.306 ms
Remote clock offset: -16.438 ms


# Below is generated by plot.py at 2019-03-19 04:53:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 88.664 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.29 Mbit/s
95th percentile per-packet one-way delay: 77.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 85.683 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 102.526 ms
Loss rate: 0.00%
```

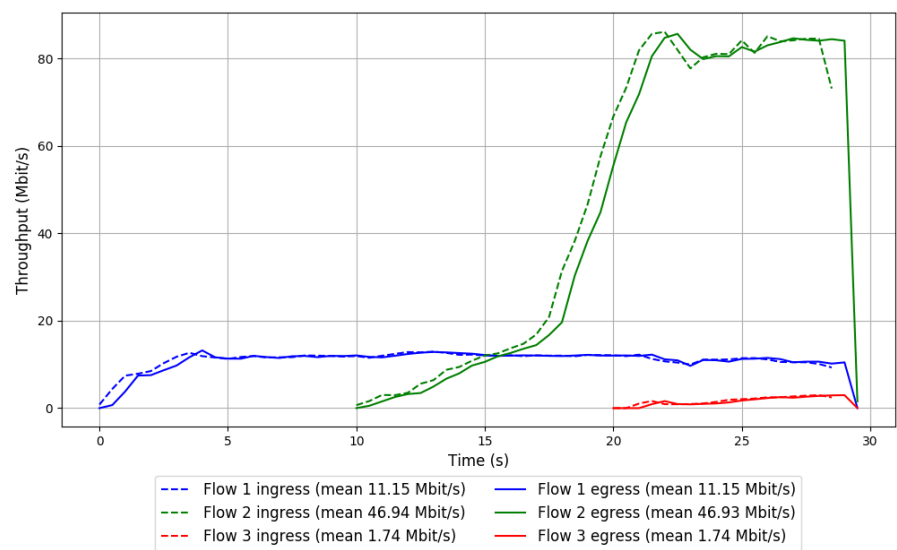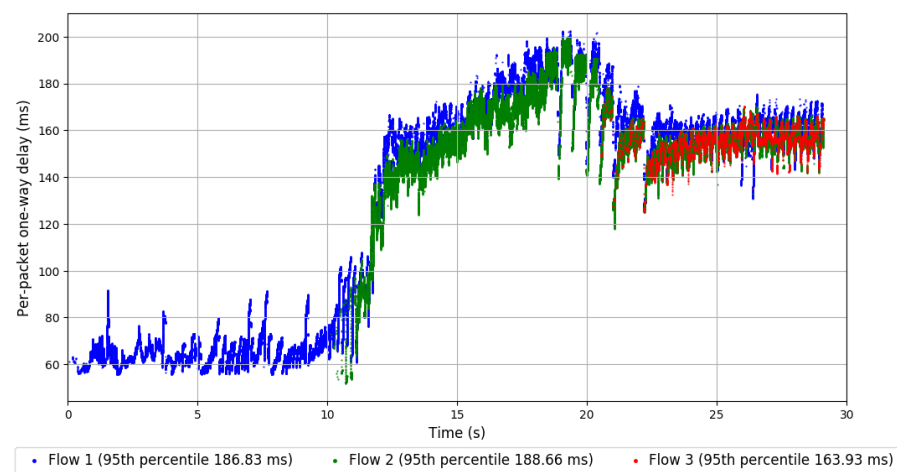Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 51.30 Mbit/s) --- Flow 1 egress (mean 51.29 Mbit/s)
Flow 2 ingress (mean 49.33 Mbit/s) --- Flow 2 egress (mean 49.34 Mbit/s)
Flow 3 ingress (mean 38.64 Mbit/s) --- Flow 3 egress (mean 38.72 Mbit/s)

Flow 1 (95th percentile 77.12 ms)   Flow 2 (95th percentile 85.68 ms)   Flow 3 (95th percentile 102.53 ms)

70

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-19 04:16:17
End at: 2019-03-19 04:16:47
Local clock offset: -2.106 ms
Remote clock offset: -18.456 ms


# Below is generated by plot.py at 2019-03-19 04:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 90.198 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 86.374 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.25 Mbit/s
95th percentile per-packet one-way delay: 84.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 105.930 ms
Loss rate: 0.00%
```

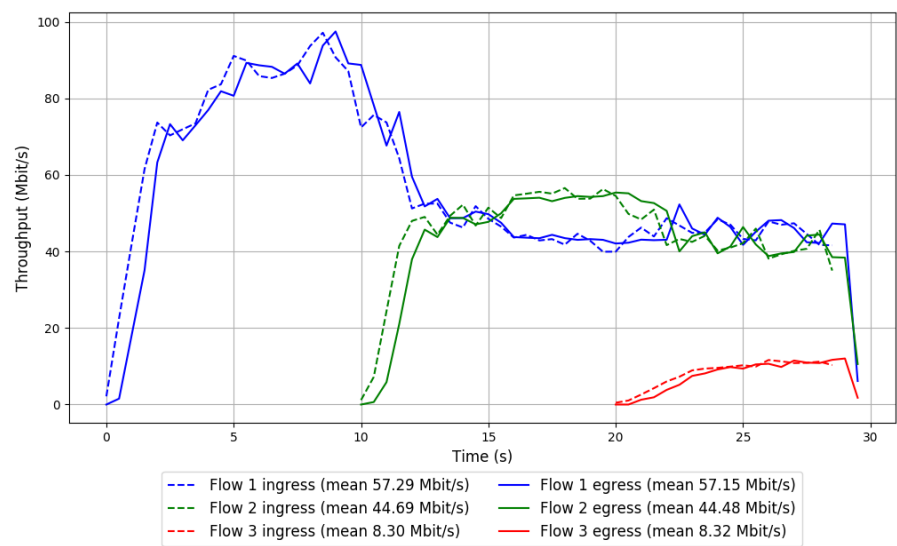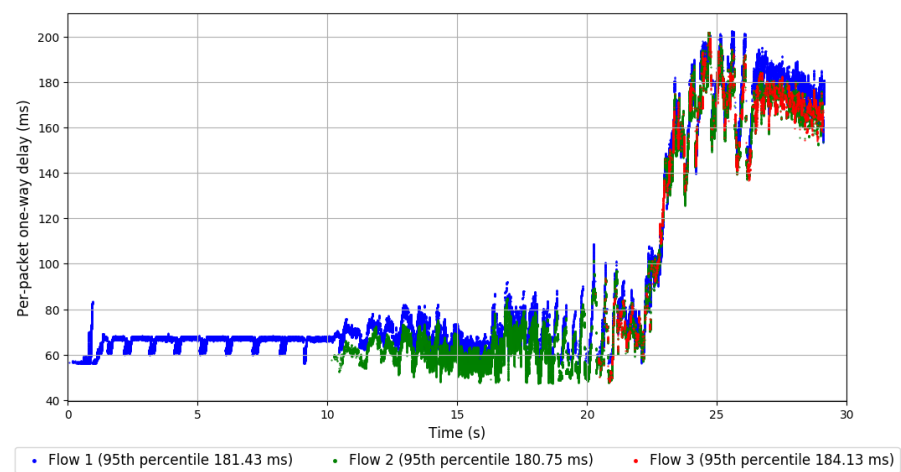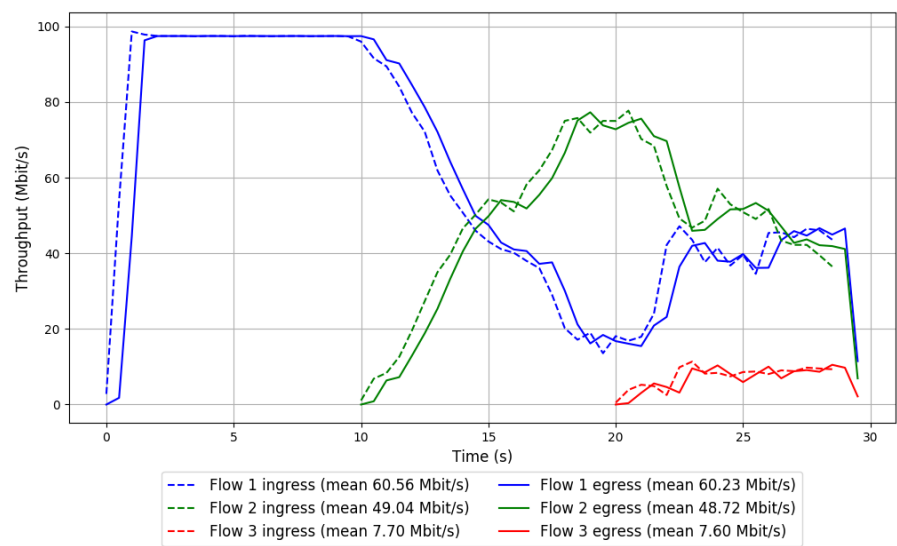Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-19 04:43:02
End at: 2019-03-19 04:43:32
Local clock offset: -0.162 ms
Remote clock offset: -11.099 ms


# Below is generated by plot.py at 2019-03-19 04:53:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 86.191 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.65 Mbit/s
95th percentile per-packet one-way delay: 74.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.01 Mbit/s
95th percentile per-packet one-way delay: 89.703 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 112.196 ms
Loss rate: 0.00%
```

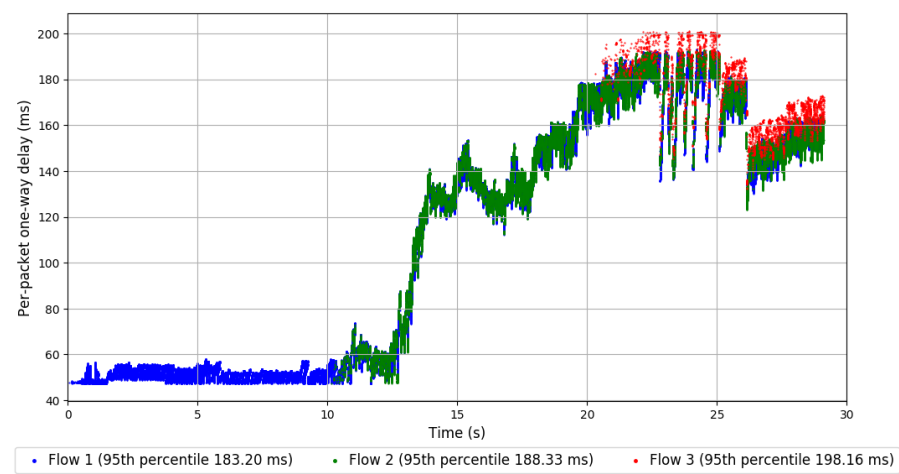Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-19 02:46:23
End at: 2019-03-19 02:46:53
Local clock offset: -2.142 ms
Remote clock offset: -20.358 ms


# Below is generated by plot.py at 2019-03-19 04:53:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.28 Mbit/s
95th percentile per-packet one-way delay: 79.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.15 Mbit/s
95th percentile per-packet one-way delay: 69.438 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.93 Mbit/s
95th percentile per-packet one-way delay: 80.121 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 79.580 ms
Loss rate: 0.00%
```

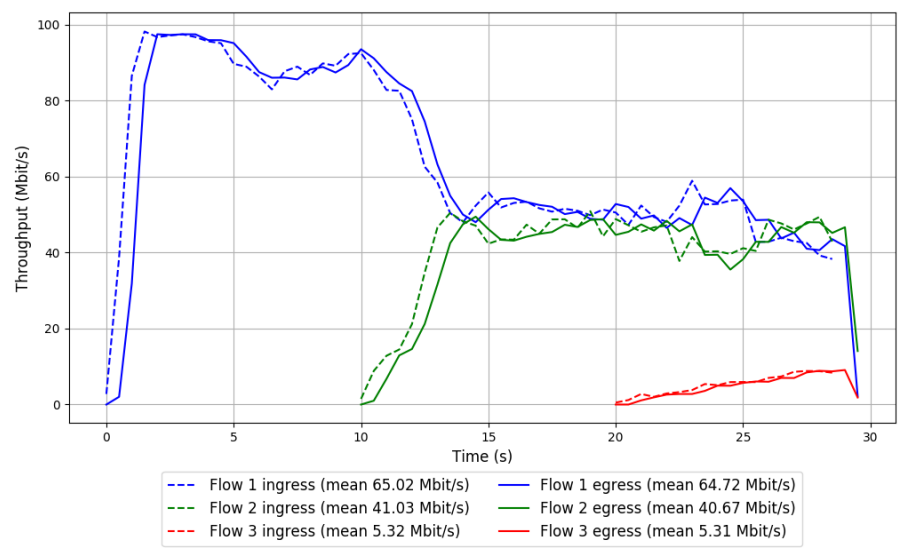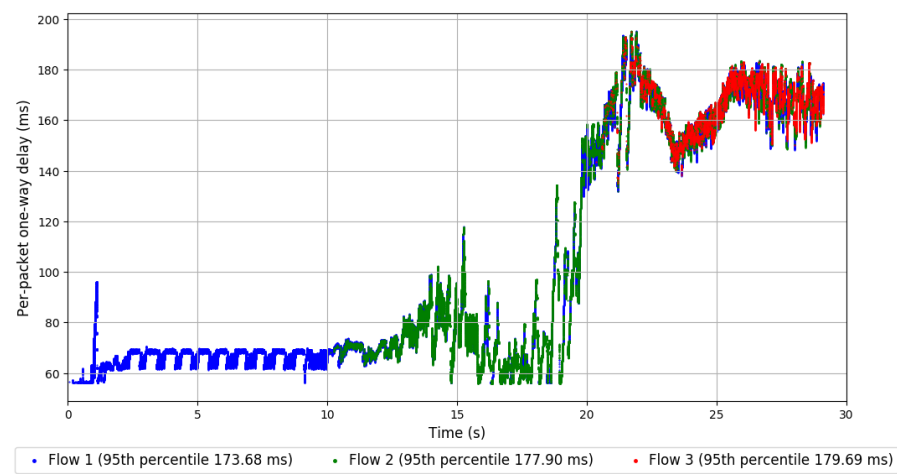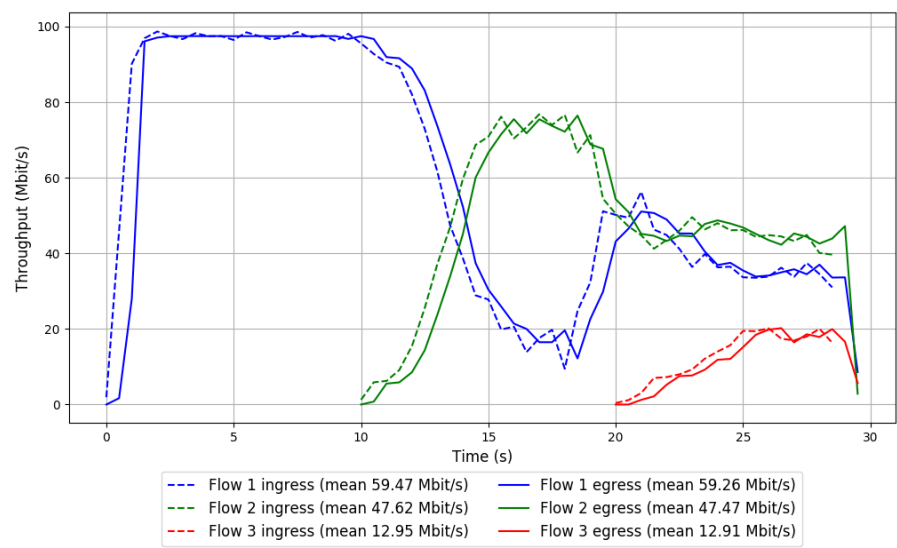Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-19 03:14:09
End at: 2019-03-19 03:14:39
Local clock offset: -0.765 ms
Remote clock offset: -4.023 ms


# Below is generated by plot.py at 2019-03-19 04:53:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.60 Mbit/s
95th percentile per-packet one-way delay: 187.260 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 57.15 Mbit/s
95th percentile per-packet one-way delay: 186.833 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 44.48 Mbit/s
95th percentile per-packet one-way delay: 188.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 163.931 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

- - - - Flow 1 ingress (mean 57.29 Mbit/s) ——— Flow 1 egress (mean 57.15 Mbit/s)
- - - - Flow 2 ingress (mean 44.69 Mbit/s) ——— Flow 2 egress (mean 44.48 Mbit/s)
- - - - Flow 3 ingress (mean 8.30 Mbit/s) ——— Flow 3 egress (mean 8.32 Mbit/s)

• Flow 1 (95th percentile 186.83 ms)   • Flow 2 (95th percentile 188.66 ms)   • Flow 3 (95th percentile 163.93 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-19 03:41:03
End at: 2019-03-19 03:41:33
Local clock offset: -1.007 ms
Remote clock offset: -14.071 ms


# Below is generated by plot.py at 2019-03-19 04:53:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 181.326 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 60.23 Mbit/s
95th percentile per-packet one-way delay: 181.430 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 48.72 Mbit/s
95th percentile per-packet one-way delay: 180.745 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 184.132 ms
Loss rate: 0.68%
```

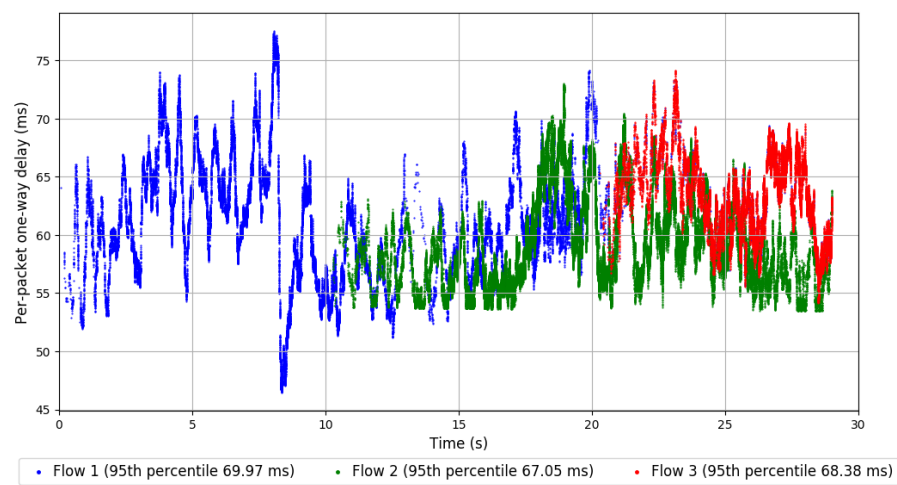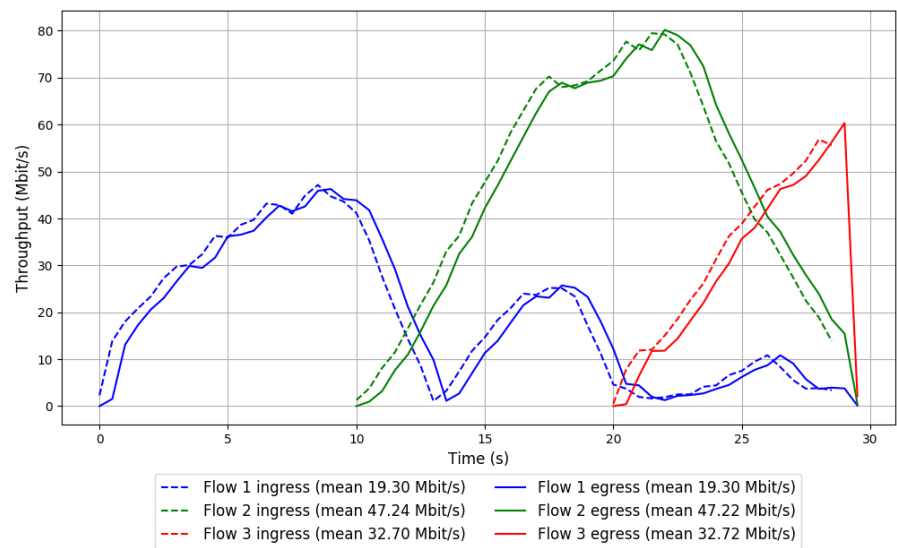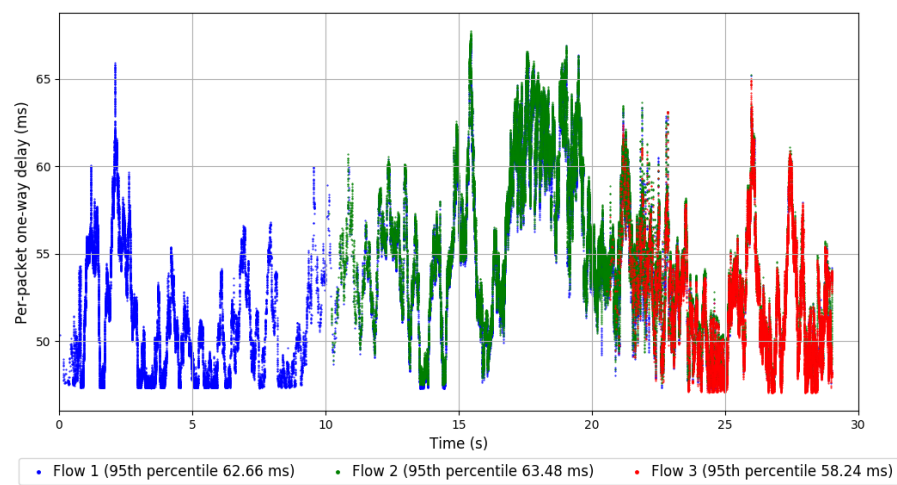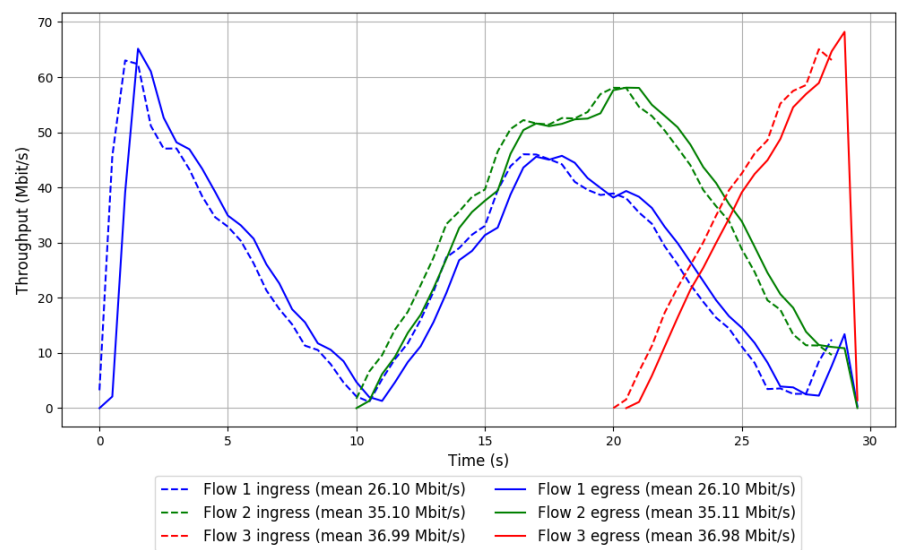Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-19 04:07:47
End at: 2019-03-19 04:08:17
Local clock offset: -2.075 ms
Remote clock offset: -17.886 ms


# Below is generated by plot.py at 2019-03-19 04:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.66 Mbit/s
95th percentile per-packet one-way delay: 185.955 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 64.72 Mbit/s
95th percentile per-packet one-way delay: 183.201 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 40.67 Mbit/s
95th percentile per-packet one-way delay: 188.330 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 198.156 ms
Loss rate: 0.32%
```
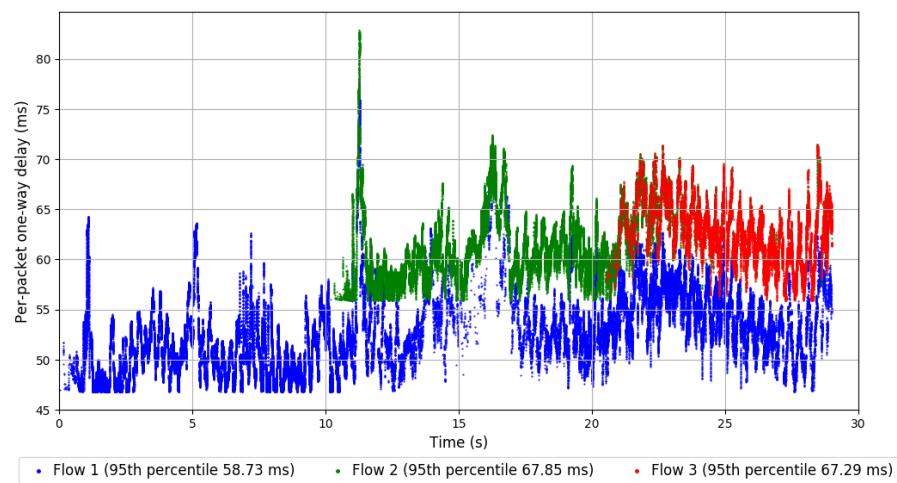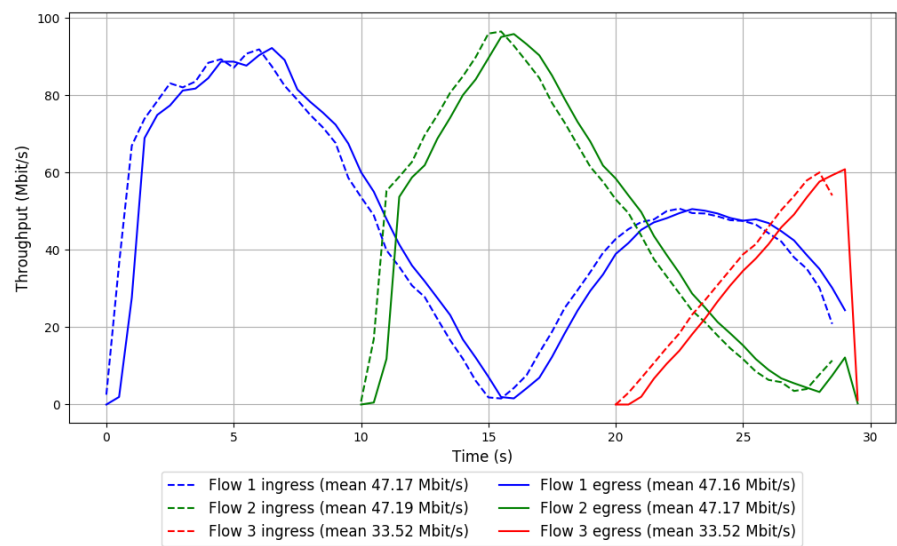
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-19 04:35:16
End at: 2019-03-19 04:35:46
Local clock offset: -0.197 ms
Remote clock offset: -18.401 ms


# Below is generated by plot.py at 2019-03-19 04:54:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.01 Mbit/s
95th percentile per-packet one-way delay: 176.334 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 173.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.47 Mbit/s
95th percentile per-packet one-way delay: 177.899 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 12.91 Mbit/s
95th percentile per-packet one-way delay: 179.688 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 59.47 Mbit/s) --- Flow 1 egress (mean 59.26 Mbit/s)
Flow 2 ingress (mean 47.62 Mbit/s) --- Flow 2 egress (mean 47.47 Mbit/s)
Flow 3 ingress (mean 12.95 Mbit/s) --- Flow 3 egress (mean 12.91 Mbit/s)

Flow 1 (95th percentile 173.68 ms)   Flow 2 (95th percentile 177.90 ms)   Flow 3 (95th percentile 179.69 ms)

84

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-19 02:56:30
End at: 2019-03-19 02:57:00
Local clock offset: -1.293 ms
Remote clock offset: -16.198 ms


# Below is generated by plot.py at 2019-03-19 04:54:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.93 Mbit/s
95th percentile per-packet one-way delay: 68.217 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 19.30 Mbit/s
95th percentile per-packet one-way delay: 69.971 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 47.22 Mbit/s
95th percentile per-packet one-way delay: 67.045 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 68.379 ms
Loss rate: 0.00%
```

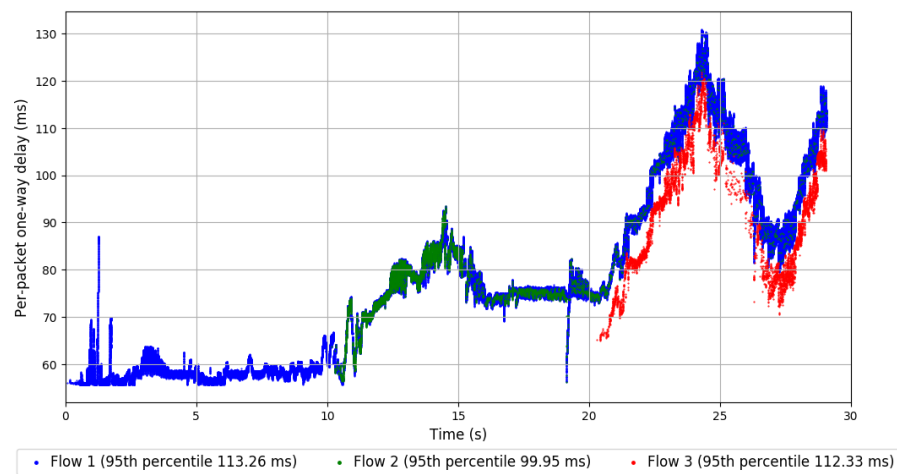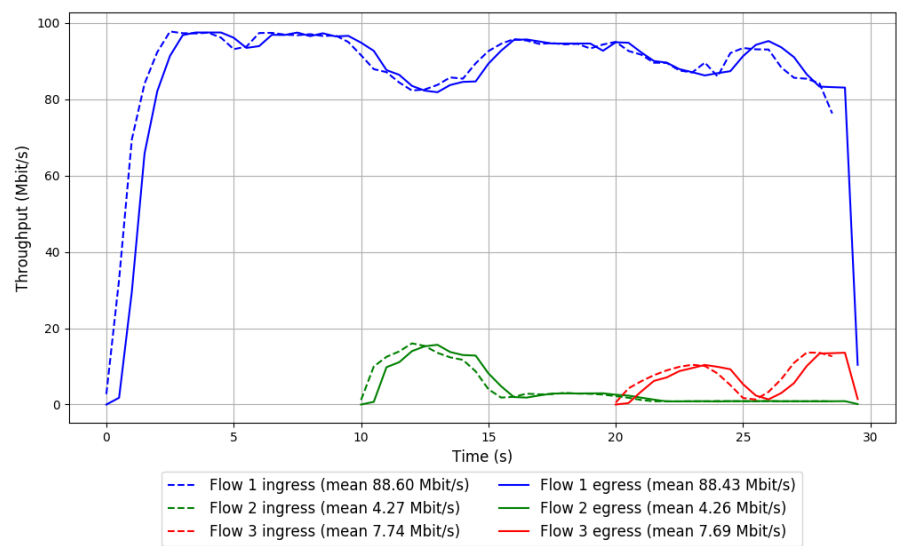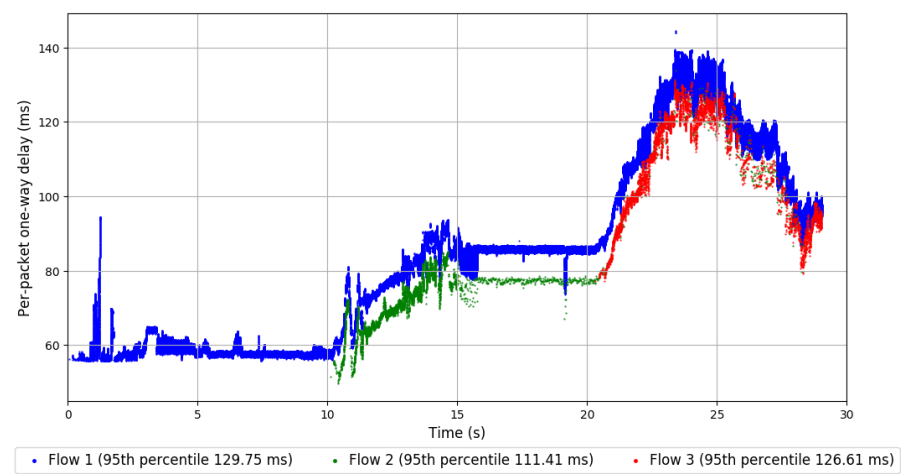Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-19 03:23:20
End at: 2019-03-19 03:23:50
Local clock offset: -1.07 ms
Remote clock offset: -1.167 ms


# Below is generated by plot.py at 2019-03-19 04:54:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.80 Mbit/s
95th percentile per-packet one-way delay: 62.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.10 Mbit/s
95th percentile per-packet one-way delay: 62.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 63.485 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 58.236 ms
Loss rate: 0.00%
```
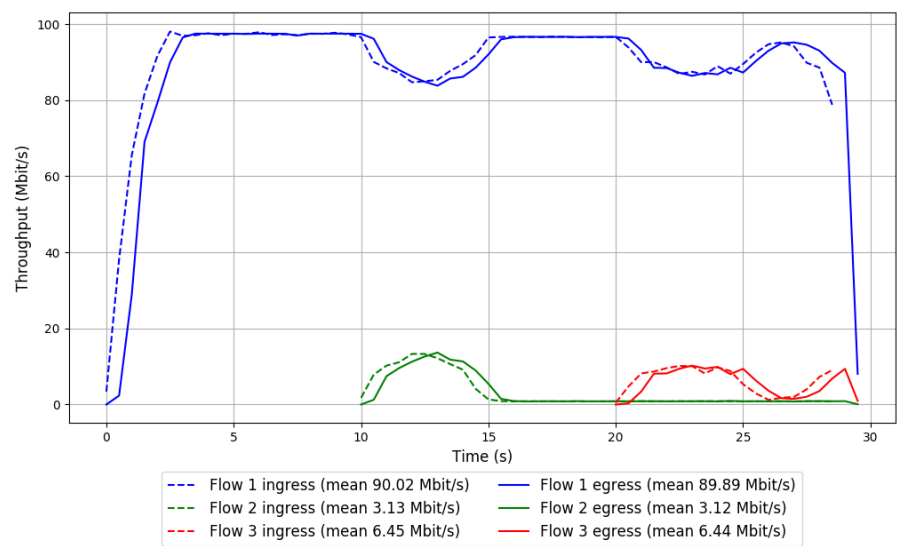
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-19 03:50:04
End at: 2019-03-19 03:50:34
Local clock offset: -1.192 ms
Remote clock offset: -16.675 ms


# Below is generated by plot.py at 2019-03-19 04:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 66.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.16 Mbit/s
95th percentile per-packet one-way delay: 58.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.17 Mbit/s
95th percentile per-packet one-way delay: 67.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.52 Mbit/s
95th percentile per-packet one-way delay: 67.290 ms
Loss rate: 0.00%
```

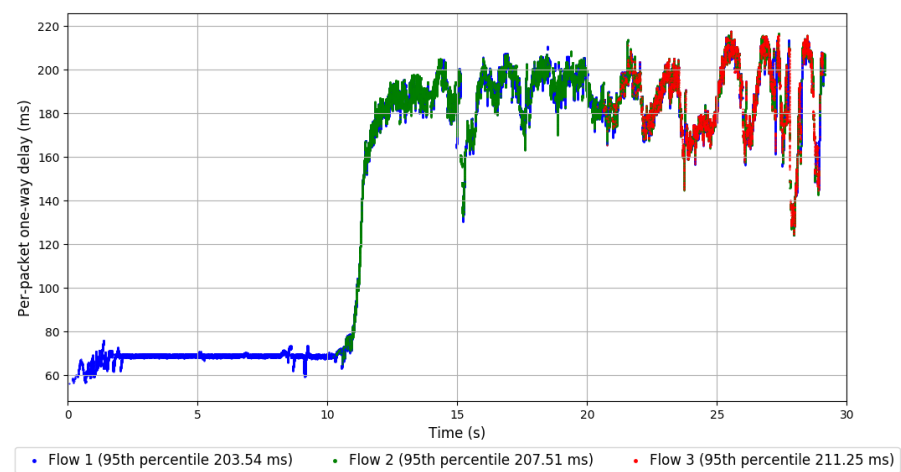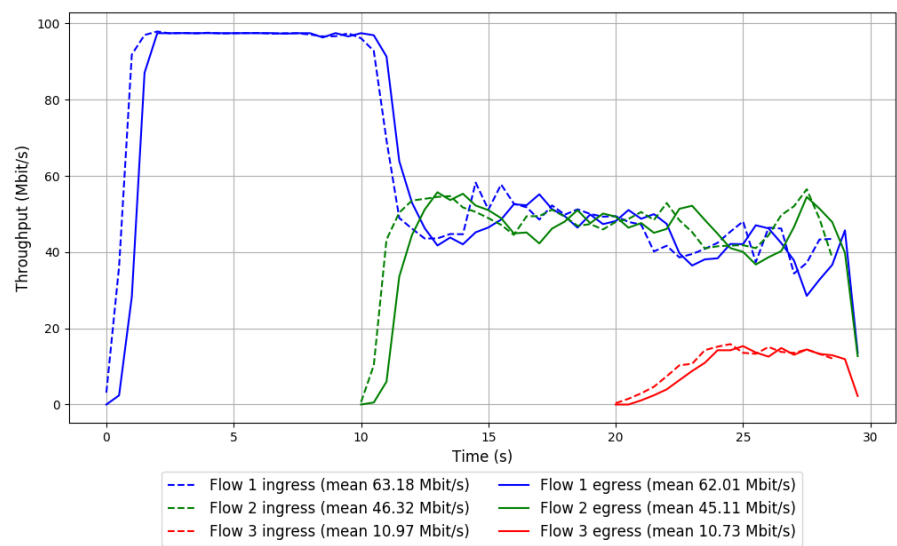Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-19 04:17:35
End at: 2019-03-19 04:18:05
Local clock offset: -1.669 ms
Remote clock offset: -18.459 ms


# Below is generated by plot.py at 2019-03-19 04:54:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 113.120 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 88.43 Mbit/s
95th percentile per-packet one-way delay: 113.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 99.946 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 112.335 ms
Loss rate: 0.24%
```
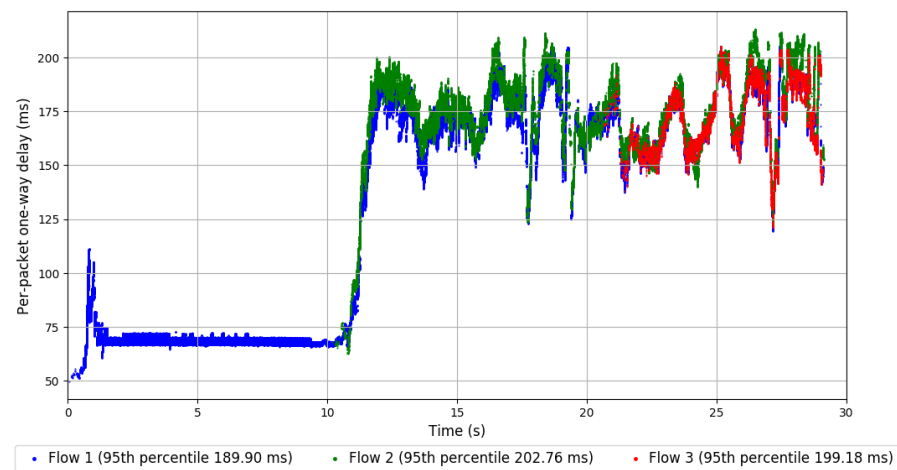
Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 88.60 Mbit/s) — — — Flow 1 egress (mean 88.43 Mbit/s)
Flow 2 ingress (mean 4.27 Mbit/s) — — — Flow 2 egress (mean 4.26 Mbit/s)
Flow 3 ingress (mean 7.74 Mbit/s) — — — Flow 3 egress (mean 7.69 Mbit/s)

Flow 1 (95th percentile 113.26 ms) · Flow 2 (95th percentile 99.95 ms) · Flow 3 (95th percentile 112.33 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-19 04:44:20
End at: 2019-03-19 04:44:50
Local clock offset: -0.127 ms
Remote clock offset: -9.976 ms


# Below is generated by plot.py at 2019-03-19 04:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 129.564 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 129.753 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 111.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 126.610 ms
Loss rate: 0.00%
```
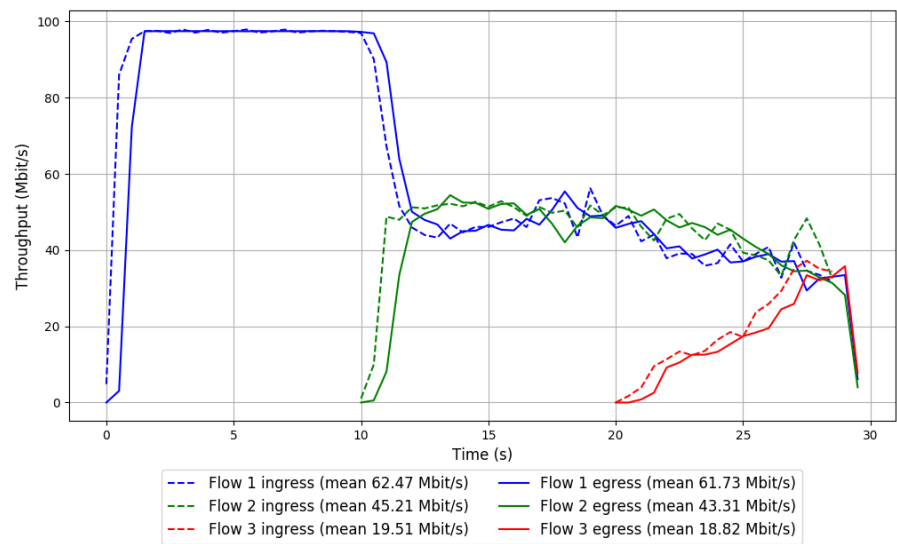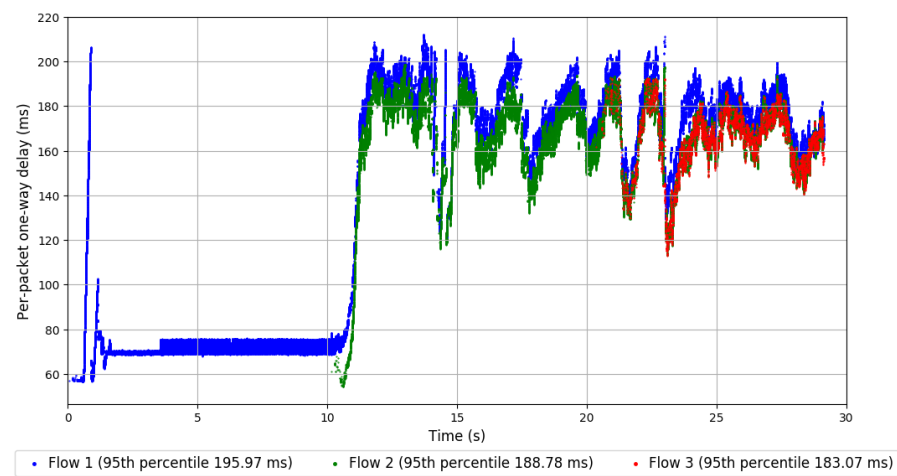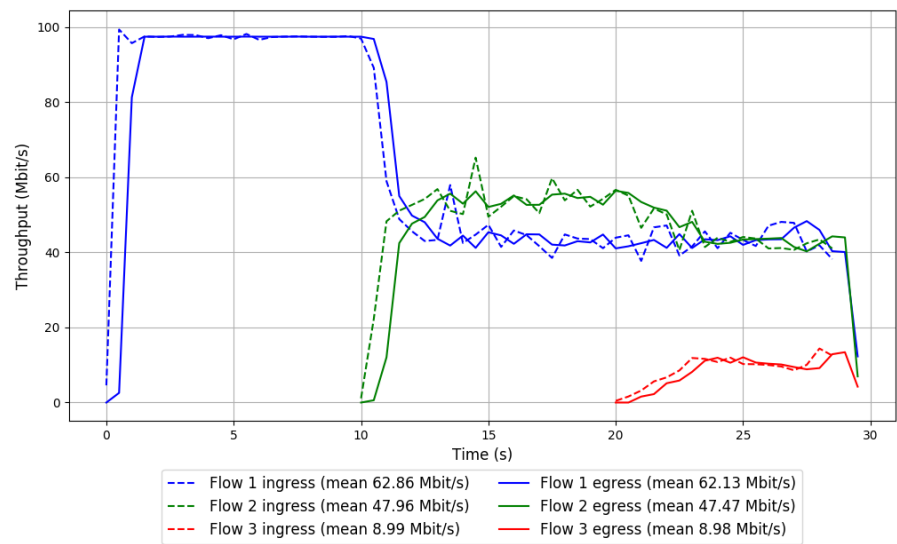
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-19 02:38:35
End at: 2019-03-19 02:39:05
Local clock offset: -2.196 ms
Remote clock offset: -22.948 ms


# Below is generated by plot.py at 2019-03-19 04:54:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.57 Mbit/s
95th percentile per-packet one-way delay: 205.472 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 62.01 Mbit/s
95th percentile per-packet one-way delay: 203.543 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 45.11 Mbit/s
95th percentile per-packet one-way delay: 207.513 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 211.255 ms
Loss rate: 3.11%
```
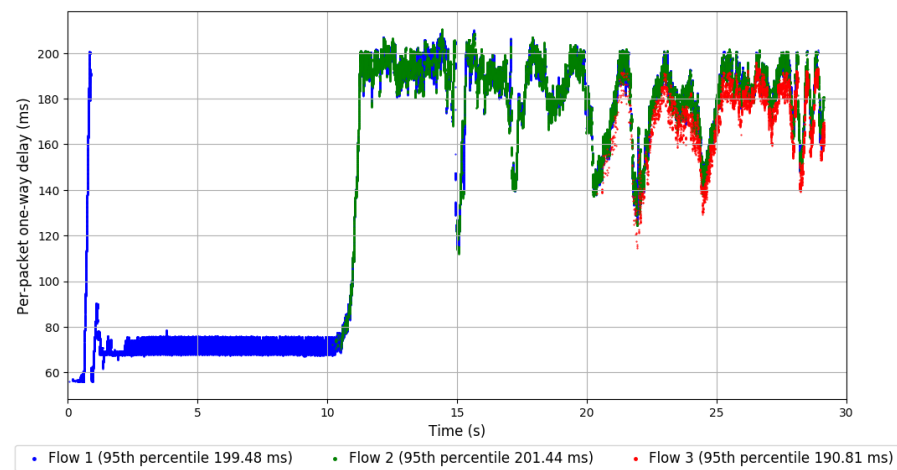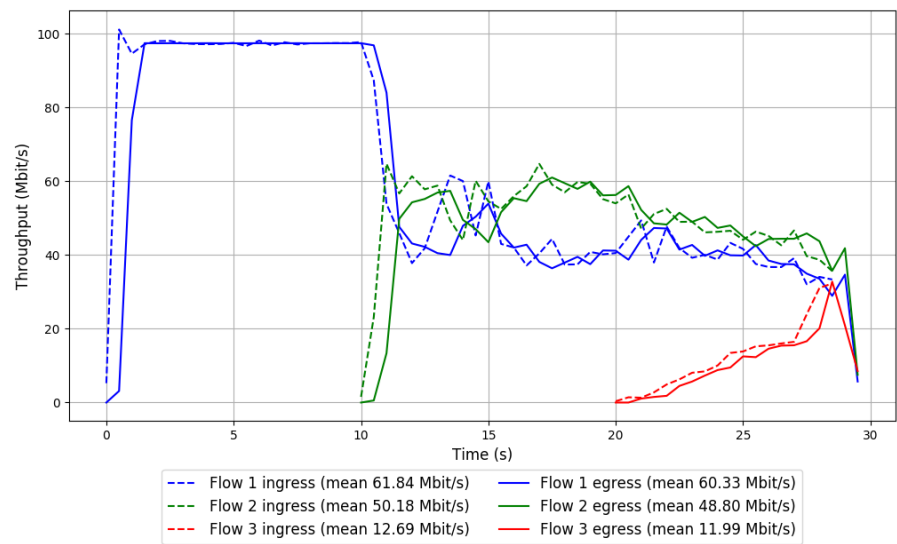
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-19 03:07:52
End at: 2019-03-19 03:08:22
Local clock offset: -0.992 ms
Remote clock offset: -7.91 ms


# Below is generated by plot.py at 2019-03-19 04:54:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.51 Mbit/s
95th percentile per-packet one-way delay: 196.297 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 189.902 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 43.31 Mbit/s
95th percentile per-packet one-way delay: 202.758 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 18.82 Mbit/s
95th percentile per-packet one-way delay: 199.184 ms
Loss rate: 4.16%
```

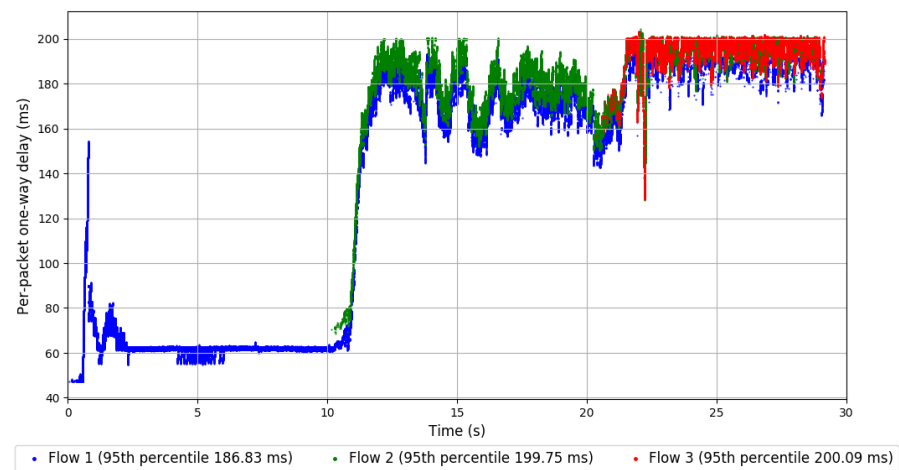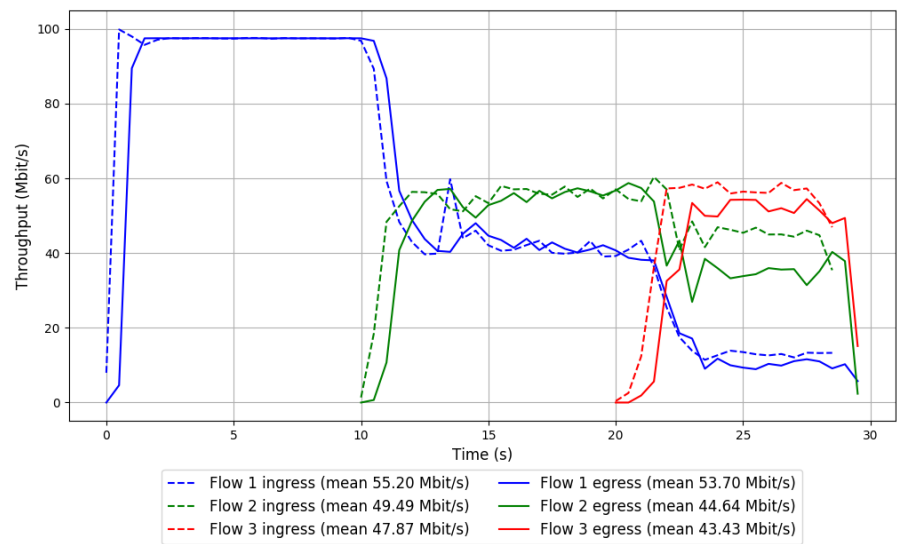Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-19 03:34:43
End at: 2019-03-19 03:35:13
Local clock offset: -1.163 ms
Remote clock offset: -9.654 ms


# Below is generated by plot.py at 2019-03-19 04:54:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.70 Mbit/s
95th percentile per-packet one-way delay: 192.943 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 195.966 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 47.47 Mbit/s
95th percentile per-packet one-way delay: 188.785 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 183.075 ms
Loss rate: 0.07%
```
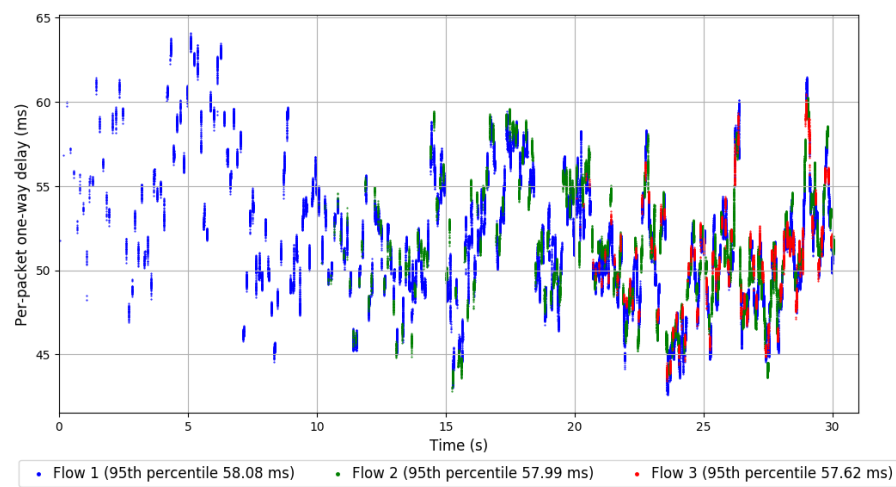
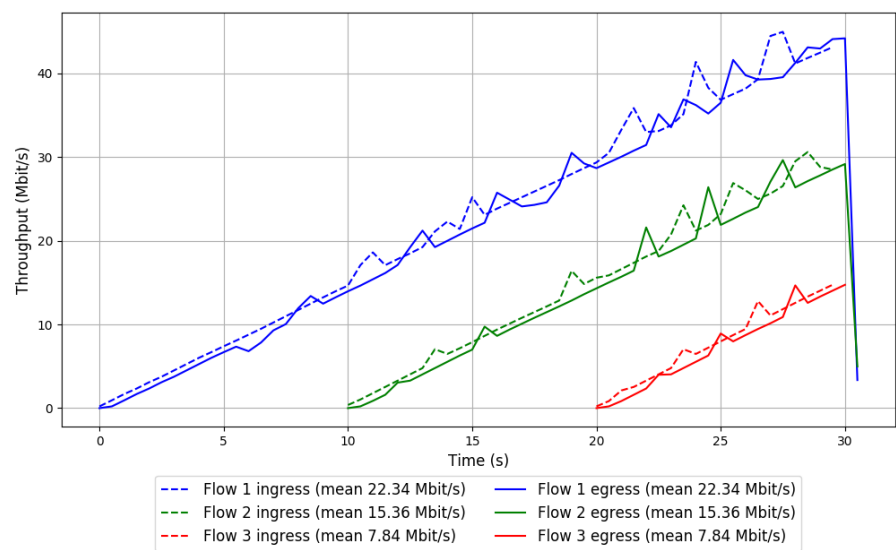Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-19 04:01:27
End at: 2019-03-19 04:01:57
Local clock offset: -1.883 ms
Remote clock offset: -17.751 ms


# Below is generated by plot.py at 2019-03-19 04:55:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 200.234 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 199.478 ms
Loss rate: 2.21%
-- Flow 2:
Average throughput: 48.80 Mbit/s
95th percentile per-packet one-way delay: 201.445 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 190.815 ms
Loss rate: 5.35%
```
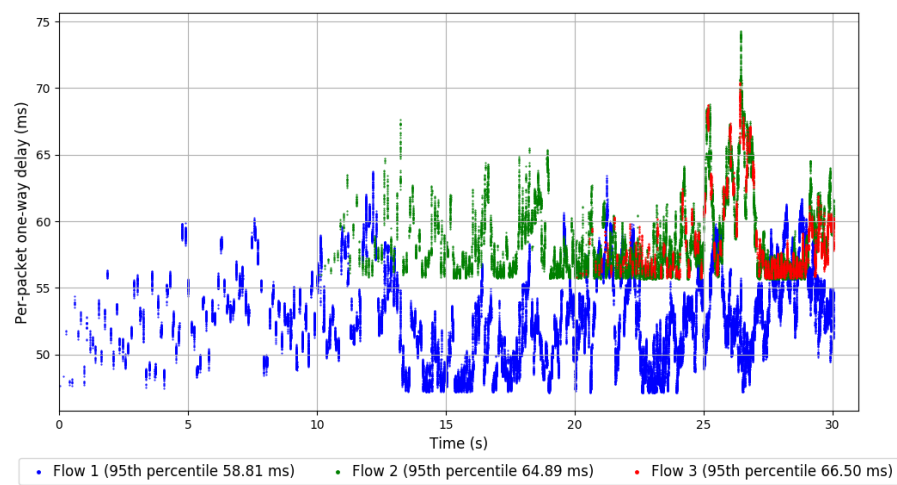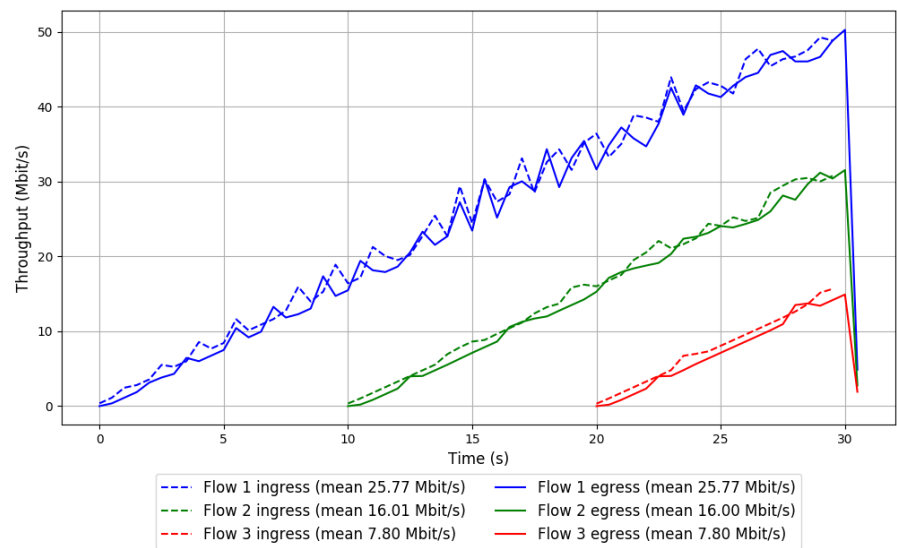
Run 4: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 61.84 Mbit/s) — — — Flow 1 egress (mean 60.33 Mbit/s)
Flow 2 ingress (mean 50.18 Mbit/s) — — — Flow 2 egress (mean 48.80 Mbit/s)
Flow 3 ingress (mean 12.69 Mbit/s) — — — Flow 3 egress (mean 11.99 Mbit/s)

Flow 1 (95th percentile 199.48 ms)   Flow 2 (95th percentile 201.44 ms)   Flow 3 (95th percentile 190.81 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-19 04:28:58
End at: 2019-03-19 04:29:28
Local clock offset: -0.576 ms
Remote clock offset: -18.508 ms


# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 199.344 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 186.827 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 44.64 Mbit/s
95th percentile per-packet one-way delay: 199.754 ms
Loss rate: 9.69%
-- Flow 3:
Average throughput: 43.43 Mbit/s
95th percentile per-packet one-way delay: 200.093 ms
Loss rate: 8.93%
```

Run 5: Report of Indigo-MusesT — Data Link

- - - - Flow 1 ingress (mean 55.20 Mbit/s) —— Flow 1 egress (mean 53.70 Mbit/s)
- - - - Flow 2 ingress (mean 49.49 Mbit/s) —— Flow 2 egress (mean 44.64 Mbit/s)
- - - - Flow 3 ingress (mean 47.87 Mbit/s) —— Flow 3 egress (mean 43.43 Mbit/s)

• Flow 1 (95th percentile 186.83 ms)　• Flow 2 (95th percentile 199.75 ms)　• Flow 3 (95th percentile 200.09 ms)
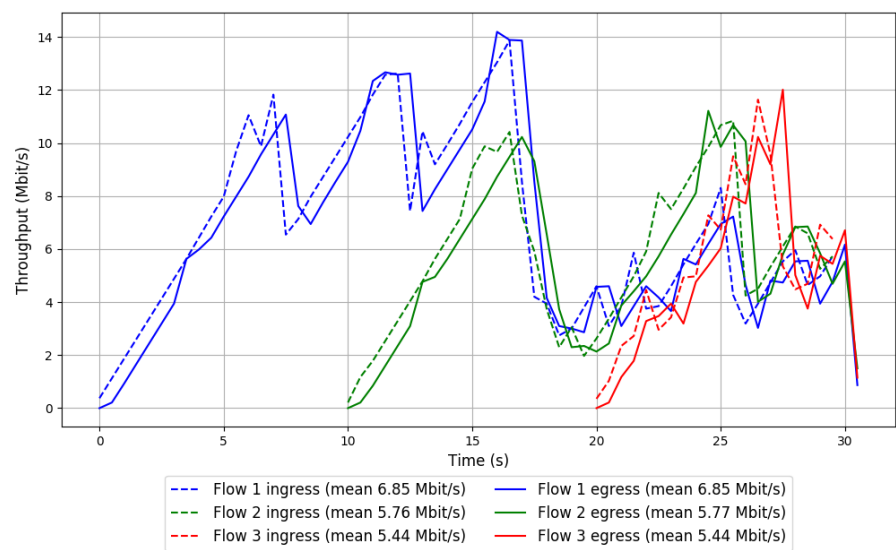
```
Run 1: Statistics of LEDBAT

Start at: 2019-03-19 02:51:19
End at: 2019-03-19 02:51:49
Local clock offset: -1.436 ms
Remote clock offset: -24.188 ms

# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 58.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 22.34 Mbit/s
95th percentile per-packet one-way delay: 58.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 57.986 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 57.617 ms
Loss rate: 0.00%
```
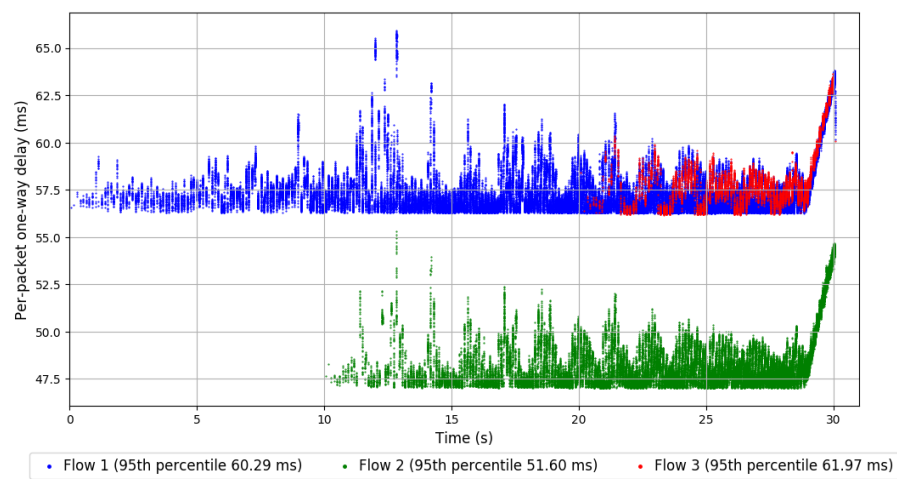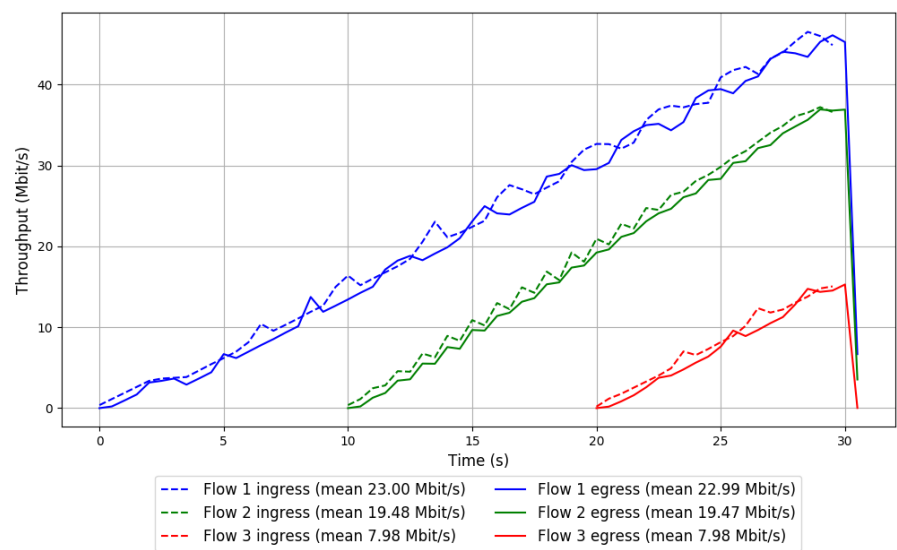
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-03-19 03:18:02
End at: 2019-03-19 03:18:32
Local clock offset: -0.894 ms
Remote clock offset: -2.796 ms


# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 61.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.77 Mbit/s
95th percentile per-packet one-way delay: 58.806 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 64.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 66.499 ms
Loss rate: 0.02%
```
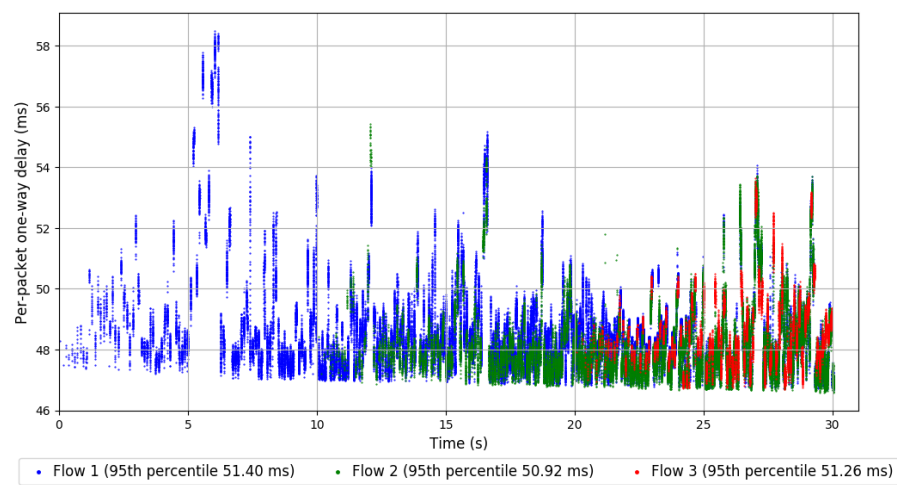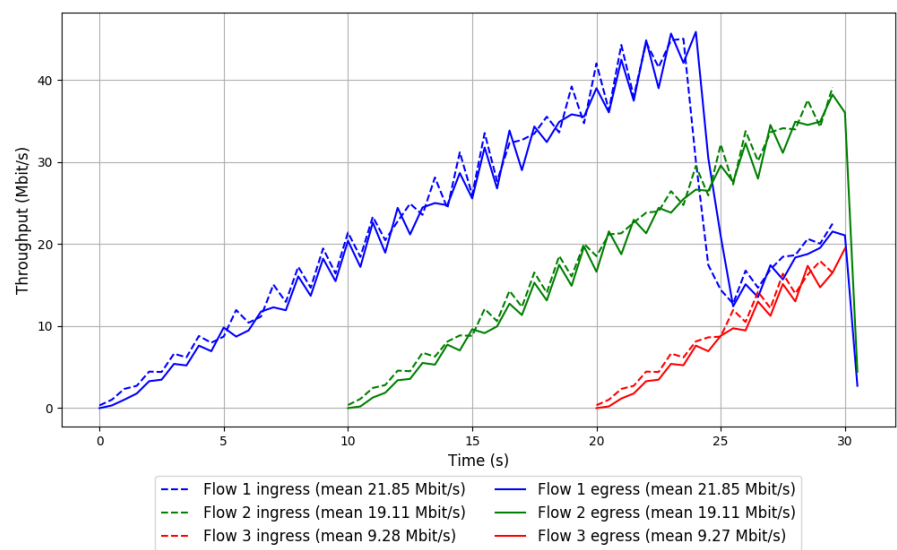
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-03-19 03:44:55
End at: 2019-03-19 03:45:25
Local clock offset: -0.869 ms
Remote clock offset: -16.023 ms

# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.49 Mbit/s
95th percentile per-packet one-way delay: 61.539 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 62.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 60.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 54.667 ms
Loss rate: 0.00%
```
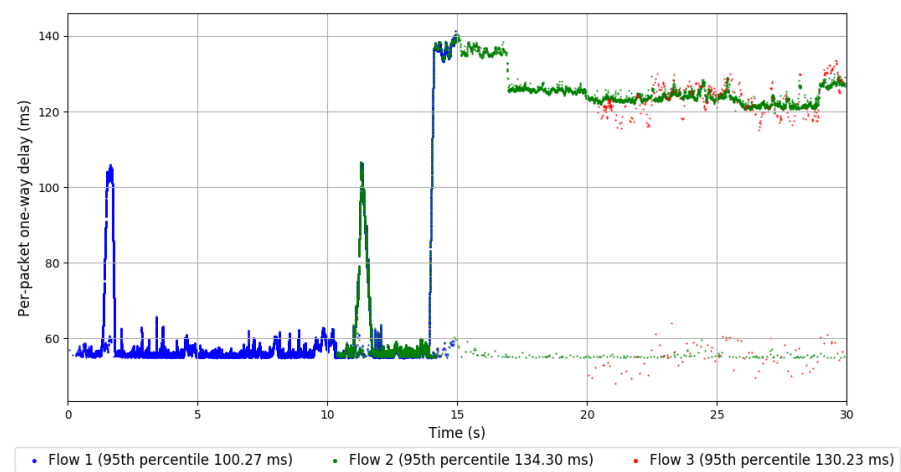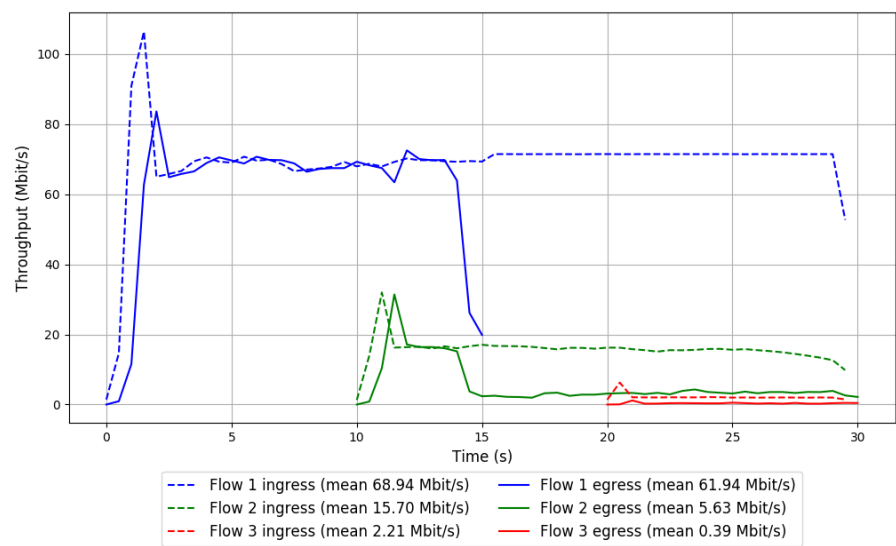
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-03-19 04:12:24
End at: 2019-03-19 04:12:54
Local clock offset: -2.003 ms
Remote clock offset: -17.977 ms


# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 59.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 22.99 Mbit/s
95th percentile per-packet one-way delay: 60.294 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.47 Mbit/s
95th percentile per-packet one-way delay: 51.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 61.974 ms
Loss rate: 0.00%
```
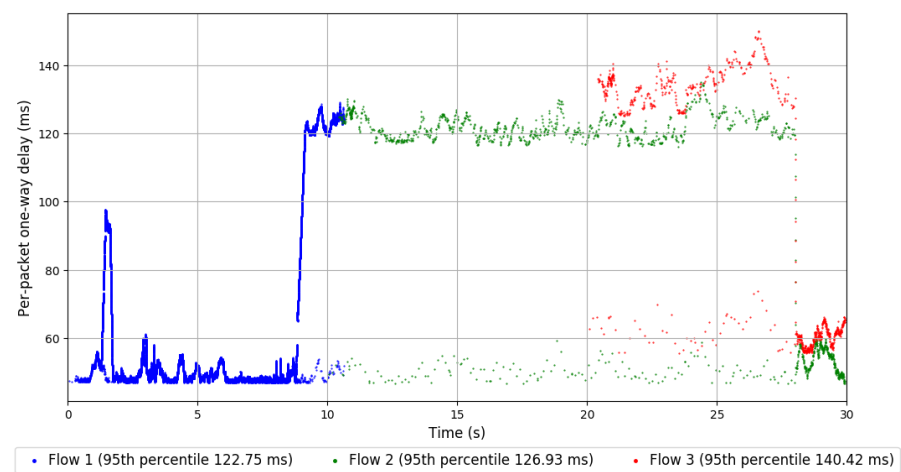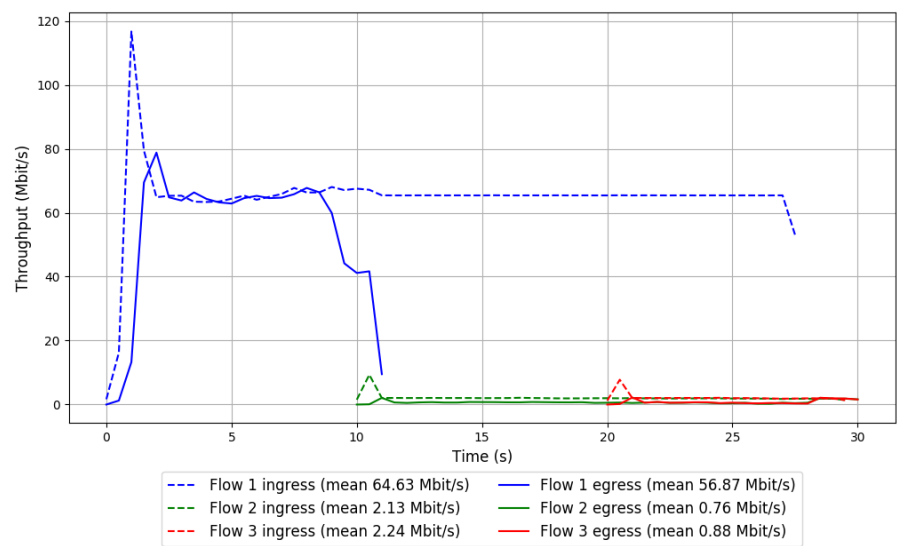
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 23.00 Mbit/s) — Flow 1 egress (mean 22.99 Mbit/s)
Flow 2 ingress (mean 19.48 Mbit/s) — Flow 2 egress (mean 19.47 Mbit/s)
Flow 3 ingress (mean 7.98 Mbit/s) — Flow 3 egress (mean 7.98 Mbit/s)

Flow 1 (95th percentile 60.29 ms)   Flow 2 (95th percentile 51.60 ms)   Flow 3 (95th percentile 61.97 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-03-19 04:39:09
End at: 2019-03-19 04:39:39
Local clock offset: -0.307 ms
Remote clock offset: -14.519 ms

# Below is generated by plot.py at 2019-03-19 04:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.64 Mbit/s
95th percentile per-packet one-way delay: 51.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.85 Mbit/s
95th percentile per-packet one-way delay: 51.403 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.11 Mbit/s
95th percentile per-packet one-way delay: 50.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 51.263 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-19 02:59:05
End at: 2019-03-19 02:59:35
Local clock offset: -1.186 ms
Remote clock offset: -12.426 ms


# Below is generated by plot.py at 2019-03-19 04:55:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 123.307 ms
Loss rate: 56.69%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 100.266 ms
Loss rate: 55.30%
-- Flow 2:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 134.299 ms
Loss rate: 64.13%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 130.230 ms
Loss rate: 82.48%
```
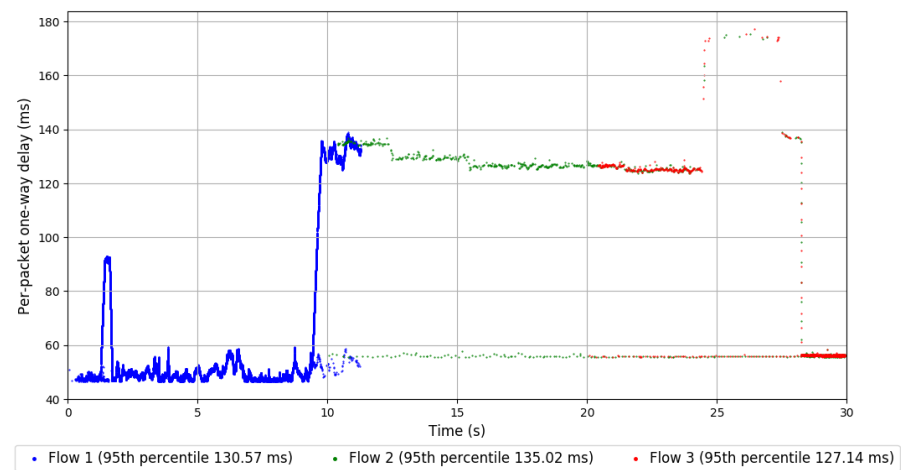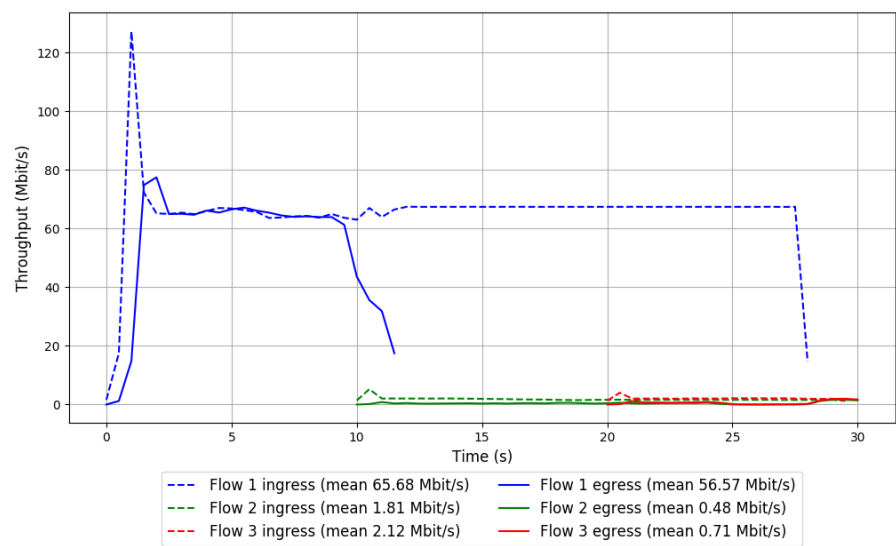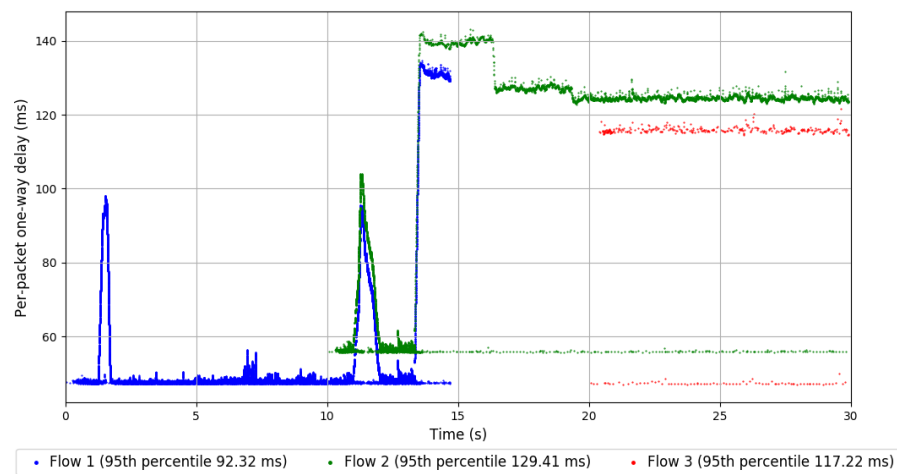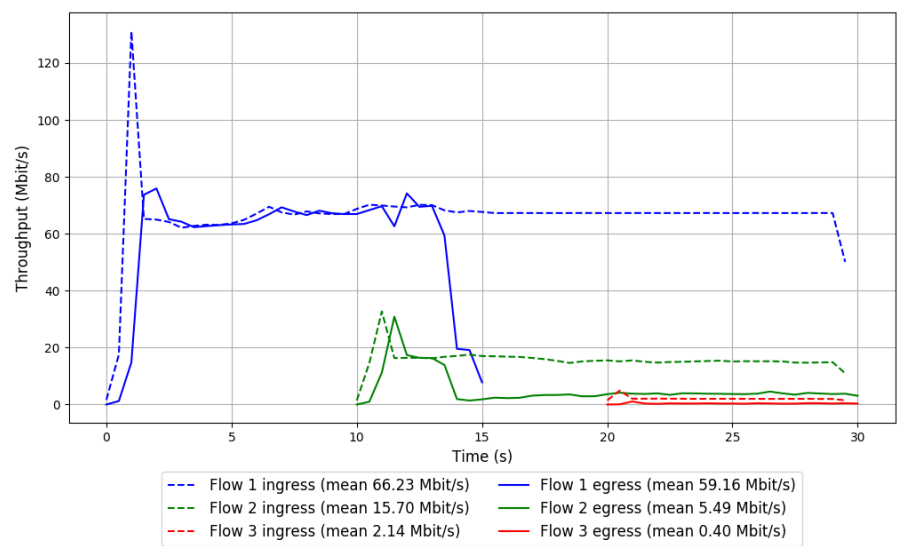
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-03-19 03:25:55
End at: 2019-03-19 03:26:25
Local clock offset: -0.865 ms
Remote clock offset: -0.592 ms


# Below is generated by plot.py at 2019-03-19 04:55:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.93 Mbit/s
95th percentile per-packet one-way delay: 123.428 ms
Loss rate: 66.51%
-- Flow 1:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 122.745 ms
Loss rate: 66.63%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 126.933 ms
Loss rate: 64.50%
-- Flow 3:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 140.421 ms
Loss rate: 60.73%
```

Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 64.63 Mbit/s) ---- Flow 1 egress (mean 56.87 Mbit/s) ——
Flow 2 ingress (mean 2.13 Mbit/s) ---- Flow 2 egress (mean 0.76 Mbit/s) ——
Flow 3 ingress (mean 2.24 Mbit/s) ---- Flow 3 egress (mean 0.88 Mbit/s) ——

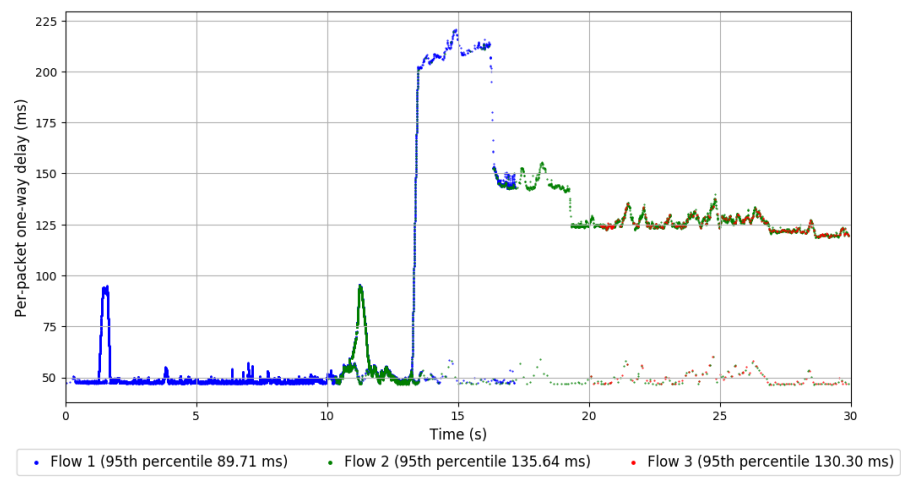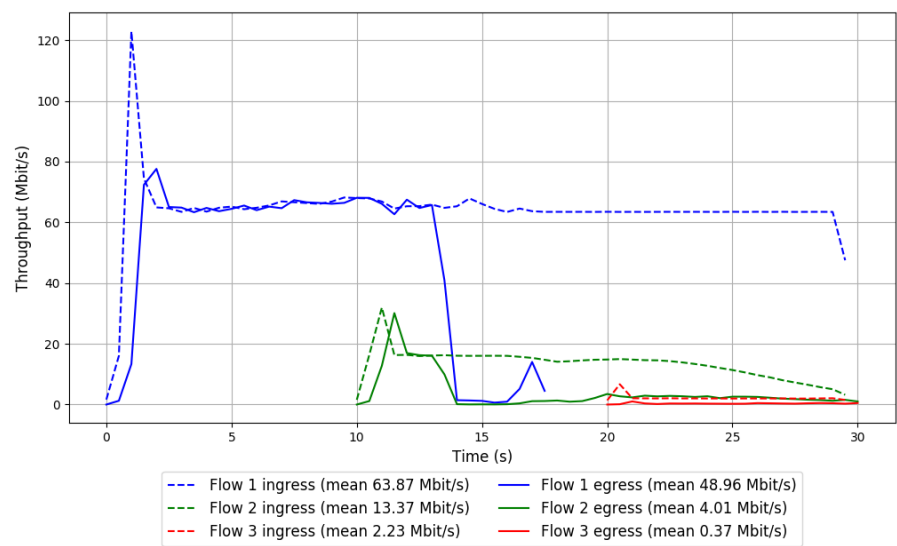Flow 1 (95th percentile 122.75 ms)   Flow 2 (95th percentile 126.93 ms)   Flow 3 (95th percentile 140.42 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-03-19 03:52:40
End at: 2019-03-19 03:53:10
Local clock offset: -1.35 ms
Remote clock offset: -17.158 ms


# Below is generated by plot.py at 2019-03-19 04:55:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 130.743 ms
Loss rate: 65.75%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 130.573 ms
Loss rate: 65.59%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 135.021 ms
Loss rate: 73.51%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 127.138 ms
Loss rate: 66.73%
```

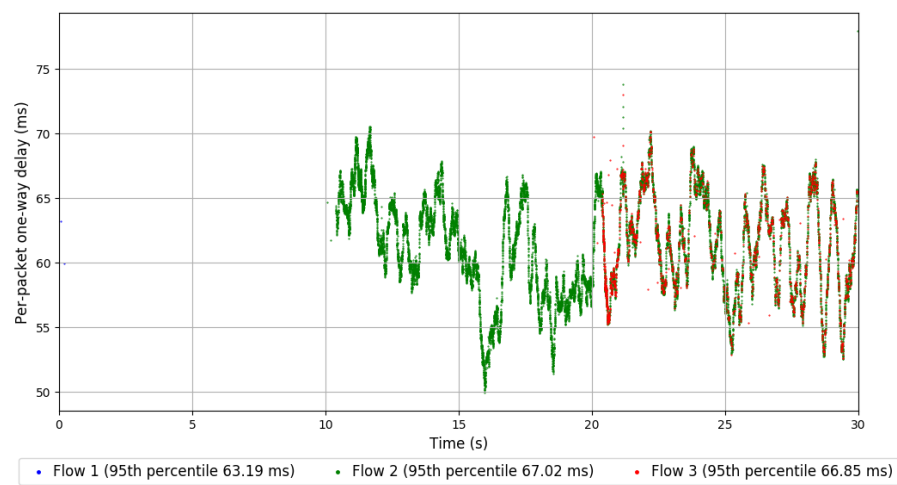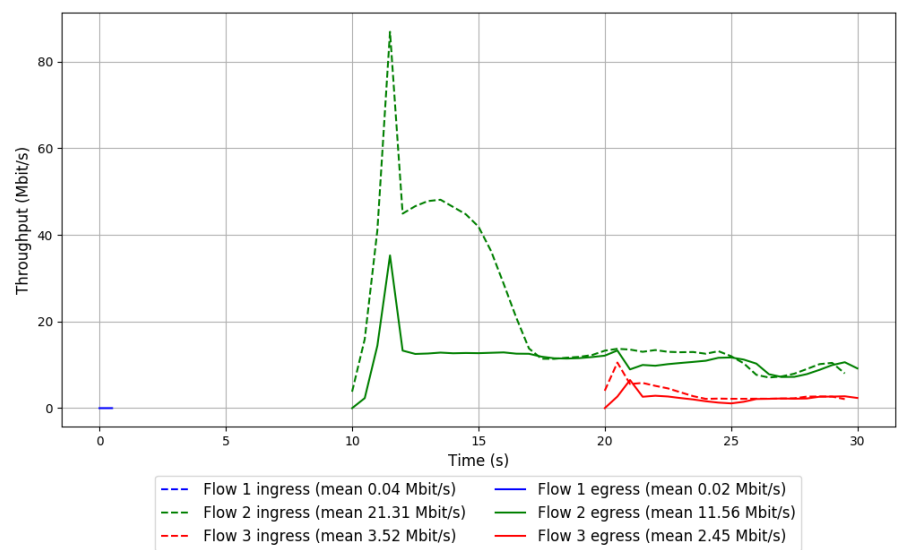## Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 65.68 Mbit/s) --- Flow 1 egress (mean 56.57 Mbit/s)
Flow 2 ingress (mean 1.81 Mbit/s) --- Flow 2 egress (mean 0.48 Mbit/s)
Flow 3 ingress (mean 2.12 Mbit/s) --- Flow 3 egress (mean 0.71 Mbit/s)

Flow 1 (95th percentile 130.57 ms)   Flow 2 (95th percentile 135.02 ms)   Flow 3 (95th percentile 127.14 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-03-19 04:20:12
End at: 2019-03-19 04:20:42
Local clock offset: -1.361 ms
Remote clock offset: -18.359 ms


# Below is generated by plot.py at 2019-03-19 04:55:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.80 Mbit/s
95th percentile per-packet one-way delay: 124.657 ms
Loss rate: 57.60%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 92.316 ms
Loss rate: 56.18%
-- Flow 2:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 129.405 ms
Loss rate: 65.01%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 117.218 ms
Loss rate: 81.26%
```

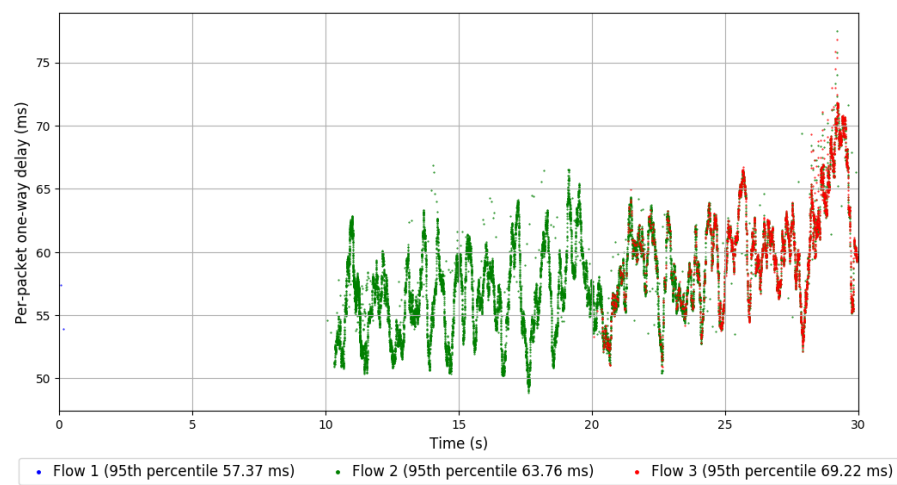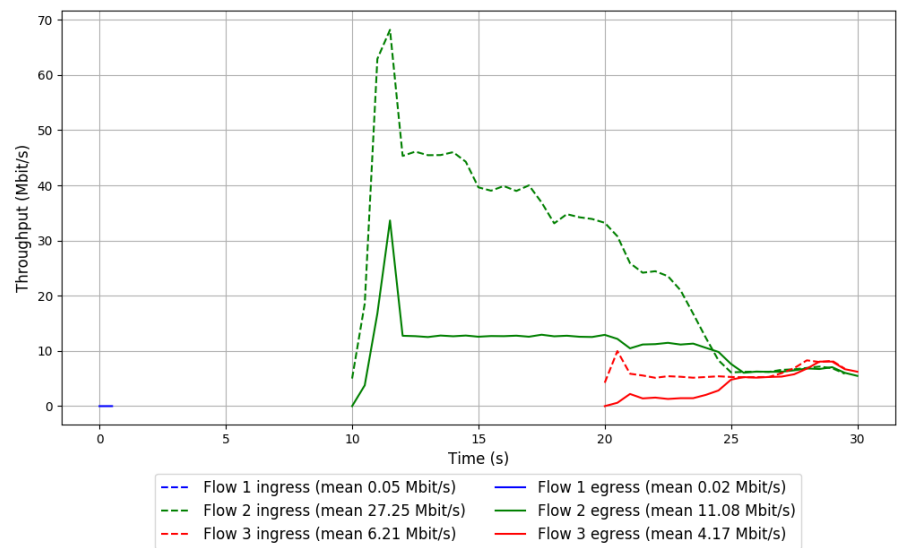Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-03-19 04:46:57
End at: 2019-03-19 04:47:27
Local clock offset: -0.105 ms
Remote clock offset: -8.531 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 119.773 ms
Loss rate: 58.04%
-- Flow 1:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 89.707 ms
Loss rate: 56.09%
-- Flow 2:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 135.643 ms
Loss rate: 69.99%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 130.301 ms
Loss rate: 83.18%
```
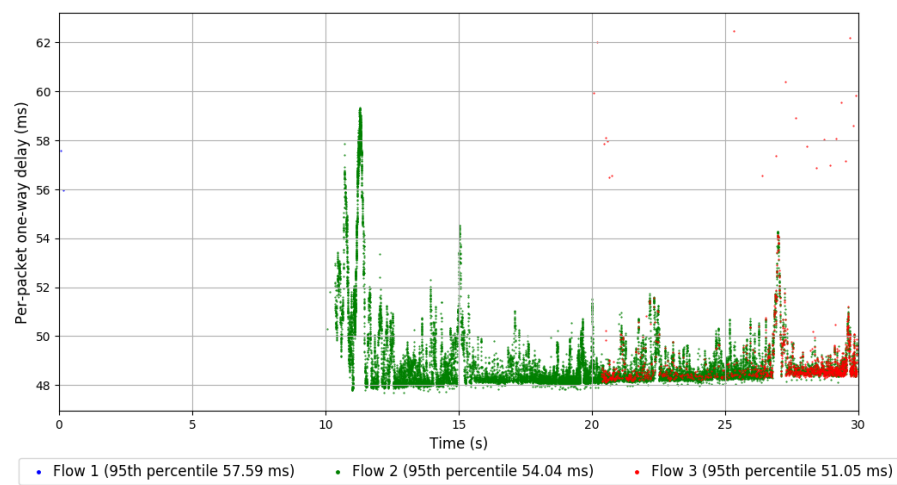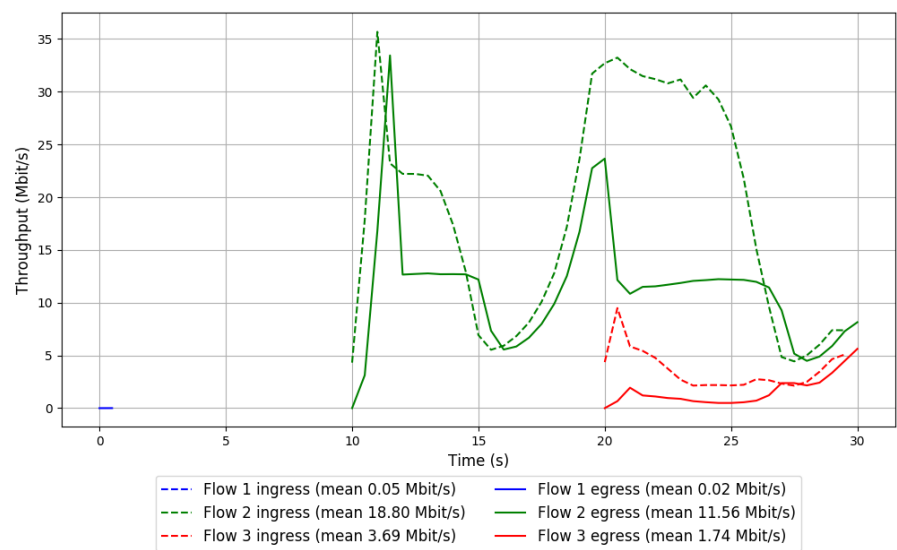
Run 5: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 63.87 Mbit/s) —— Flow 1 egress (mean 48.96 Mbit/s)
- - - Flow 2 ingress (mean 13.37 Mbit/s) —— Flow 2 egress (mean 4.01 Mbit/s)
- - - Flow 3 ingress (mean 2.23 Mbit/s) —— Flow 3 egress (mean 0.37 Mbit/s)

• Flow 1 (95th percentile 89.71 ms)   • Flow 2 (95th percentile 135.64 ms)   • Flow 3 (95th percentile 130.30 ms)
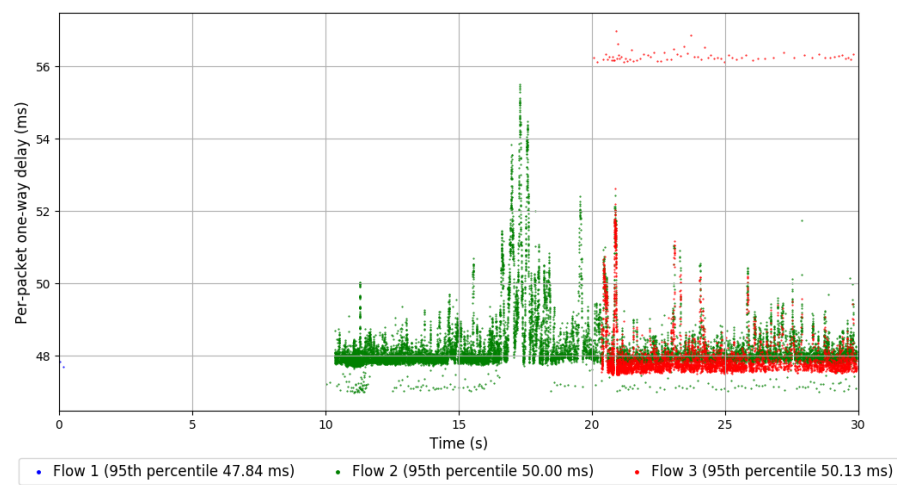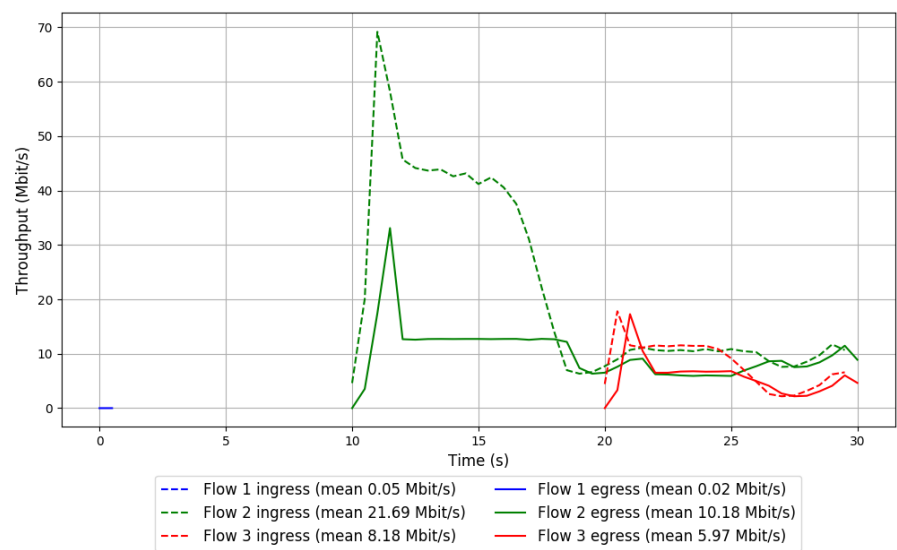
```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-19 02:33:32
End at: 2019-03-19 02:34:02
Local clock offset: -2.079 ms
Remote clock offset: -23.269 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 67.010 ms
Loss rate: 44.59%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 63.189 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 67.021 ms
Loss rate: 45.74%
-- Flow 3:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 66.852 ms
Loss rate: 30.51%
```

Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 0.04 Mbit/s) Flow 1 egress (mean 0.02 Mbit/s)
Flow 2 ingress (mean 21.31 Mbit/s) Flow 2 egress (mean 11.56 Mbit/s)
Flow 3 ingress (mean 3.52 Mbit/s) Flow 3 egress (mean 2.45 Mbit/s)

Flow 1 (95th percentile 63.19 ms) Flow 2 (95th percentile 67.02 ms) Flow 3 (95th percentile 66.85 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-03-19 03:02:52
End at: 2019-03-19 03:03:22
Local clock offset: -1.075 ms
Remote clock offset: -11.325 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 65.390 ms
Loss rate: 56.64%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 57.373 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 63.758 ms
Loss rate: 59.34%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 69.224 ms
Loss rate: 32.83%
```
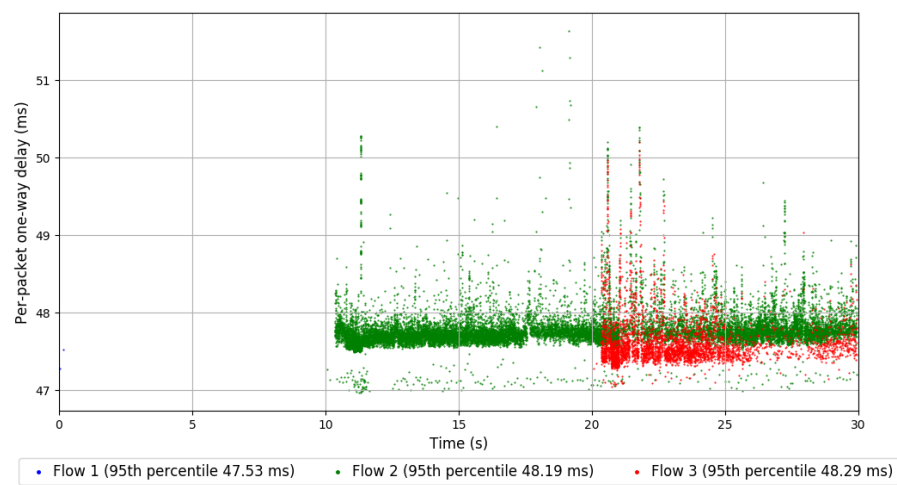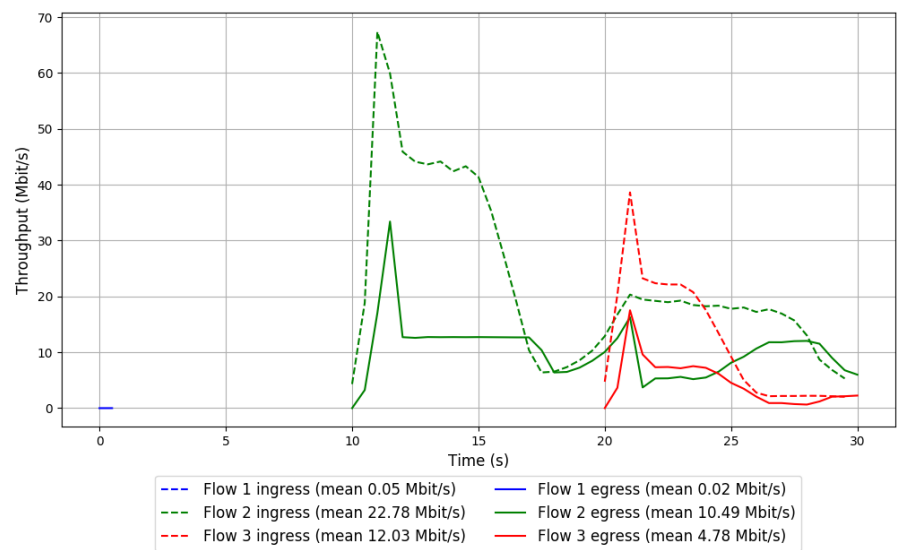
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-03-19 03:29:43
End at: 2019-03-19 03:30:13
Local clock offset: -1.028 ms
Remote clock offset: -4.047 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 53.721 ms
Loss rate: 39.78%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 57.587 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 54.044 ms
Loss rate: 38.49%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 51.046 ms
Loss rate: 52.94%
```
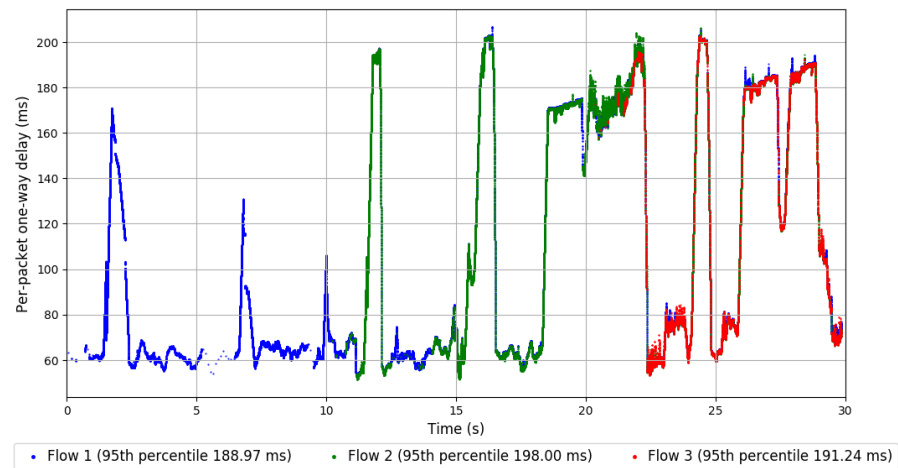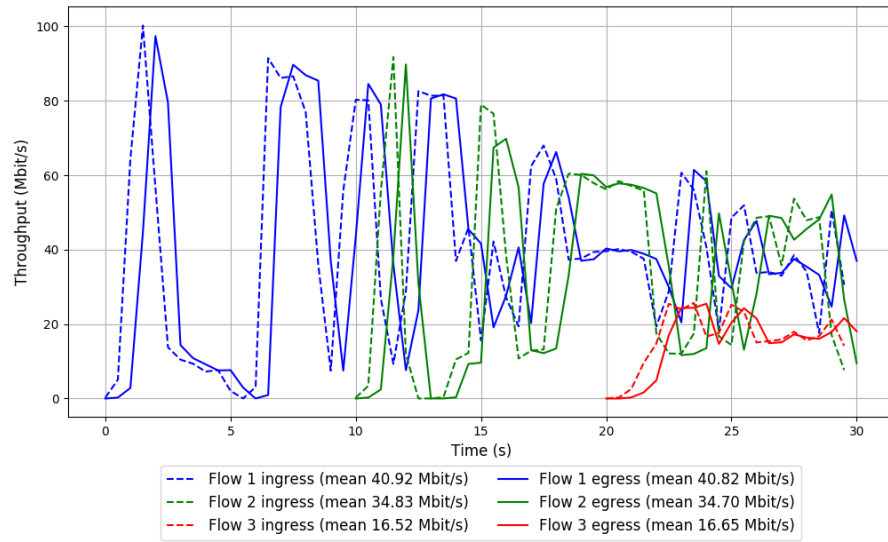
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2019-03-19 03:56:28
End at: 2019-03-19 03:56:58
Local clock offset: -1.724 ms
Remote clock offset: -17.239 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 50.016 ms
Loss rate: 48.97%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 47.836 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 50.001 ms
Loss rate: 53.06%
-- Flow 3:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 50.126 ms
Loss rate: 27.09%
```
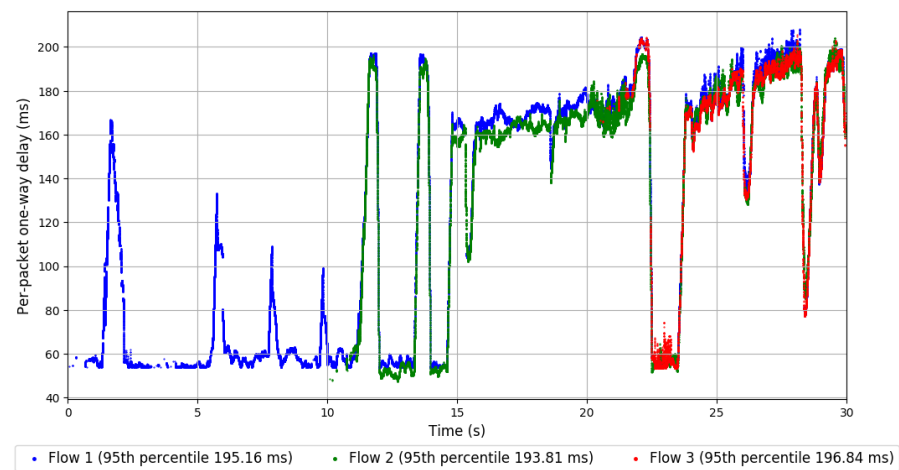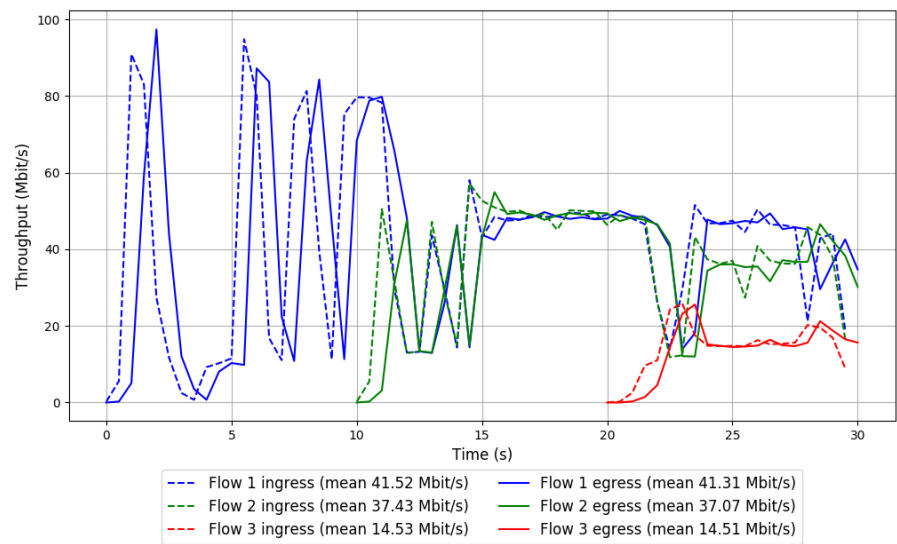
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-03-19 04:24:00
End at: 2019-03-19 04:24:30
Local clock offset: -1.025 ms
Remote clock offset: -18.497 ms


# Below is generated by plot.py at 2019-03-19 04:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 48.213 ms
Loss rate: 55.25%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 47.527 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 48.192 ms
Loss rate: 53.94%
-- Flow 3:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 48.292 ms
Loss rate: 60.24%
```
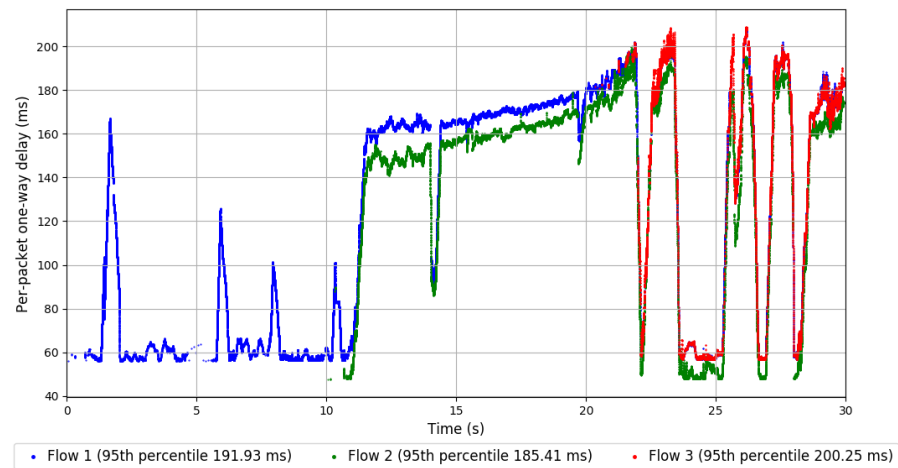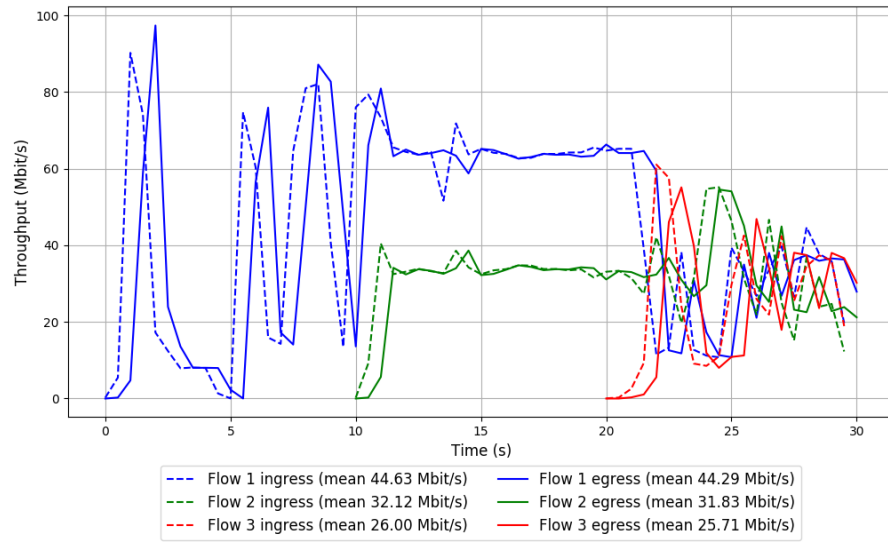
Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-03-19 02:36:01
End at: 2019-03-19 02:36:31
Local clock offset: -1.975 ms
Remote clock offset: -24.628 ms


# Below is generated by plot.py at 2019-03-19 04:56:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.15 Mbit/s
95th percentile per-packet one-way delay: 193.795 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 40.82 Mbit/s
95th percentile per-packet one-way delay: 188.970 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 34.70 Mbit/s
95th percentile per-packet one-way delay: 197.997 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 16.65 Mbit/s
95th percentile per-packet one-way delay: 191.241 ms
Loss rate: 0.34%
```
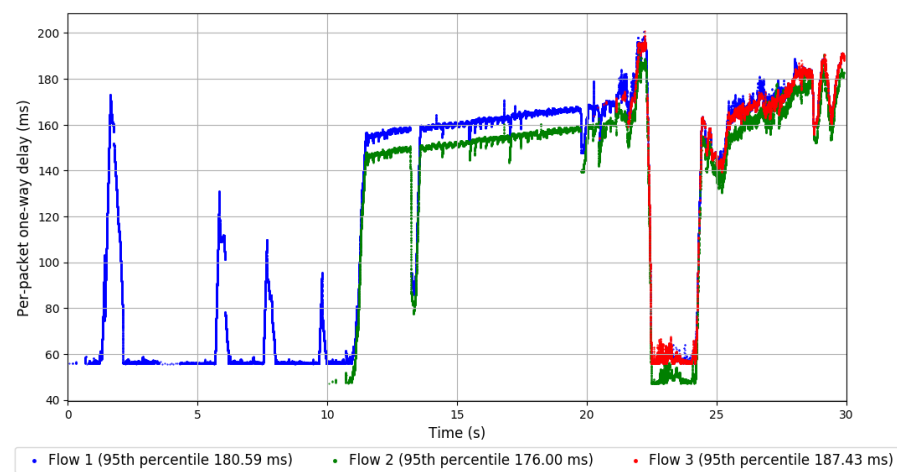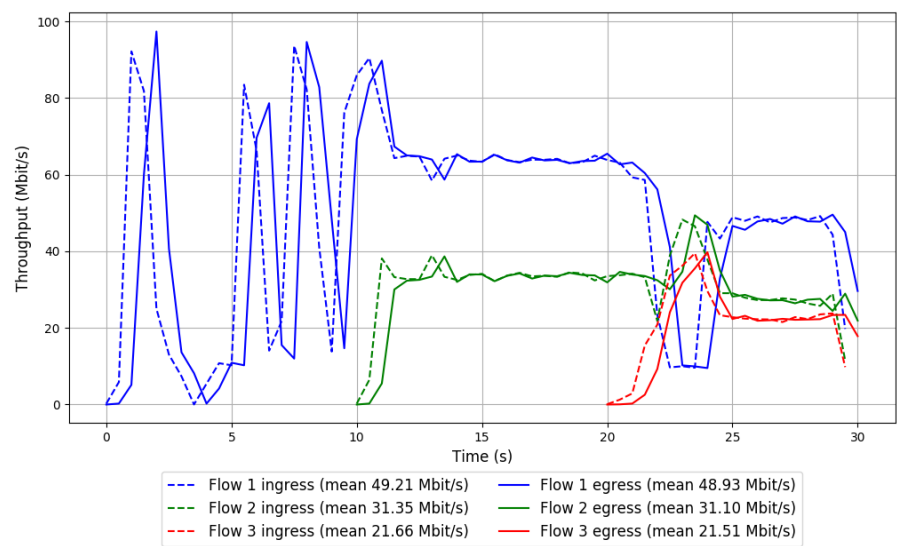
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-03-19 03:05:21
End at: 2019-03-19 03:05:51
Local clock offset: -0.896 ms
Remote clock offset: -9.654 ms


# Below is generated by plot.py at 2019-03-19 04:56:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.53 Mbit/s
95th percentile per-packet one-way delay: 194.781 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 41.31 Mbit/s
95th percentile per-packet one-way delay: 195.164 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.07 Mbit/s
95th percentile per-packet one-way delay: 193.807 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 196.843 ms
Loss rate: 0.41%
```
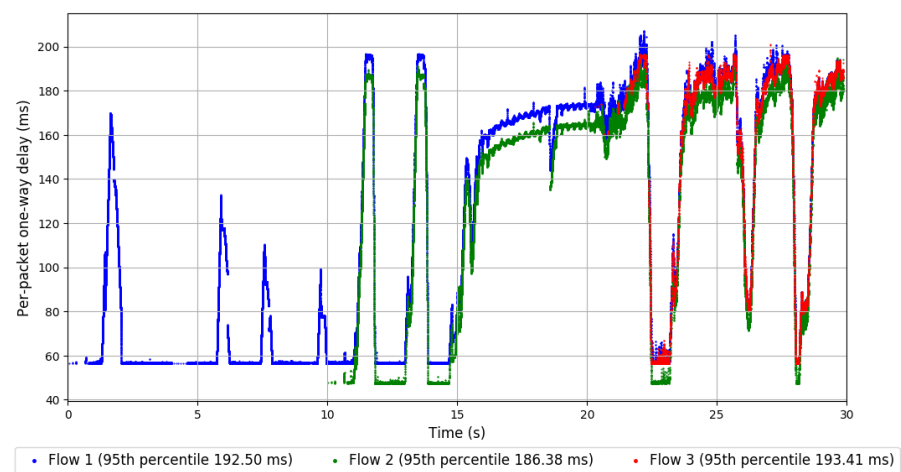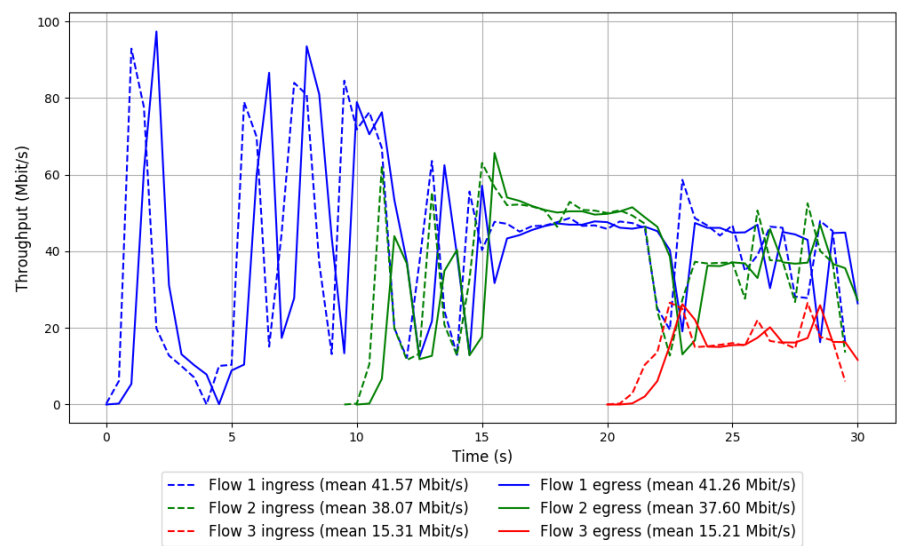
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 41.52 Mbit/s) — Flow 1 egress (mean 41.31 Mbit/s)
Flow 2 ingress (mean 37.43 Mbit/s) — Flow 2 egress (mean 37.07 Mbit/s)
Flow 3 ingress (mean 14.53 Mbit/s) — Flow 3 egress (mean 14.51 Mbit/s)

Flow 1 (95th percentile 195.16 ms) · Flow 2 (95th percentile 193.81 ms) · Flow 3 (95th percentile 196.84 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-03-19 03:32:12
End at: 2019-03-19 03:32:42
Local clock offset: -1.113 ms
Remote clock offset: -7.171 ms


# Below is generated by plot.py at 2019-03-19 04:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.64 Mbit/s
95th percentile per-packet one-way delay: 193.418 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 44.29 Mbit/s
95th percentile per-packet one-way delay: 191.926 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 185.412 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 25.71 Mbit/s
95th percentile per-packet one-way delay: 200.246 ms
Loss rate: 1.10%
```

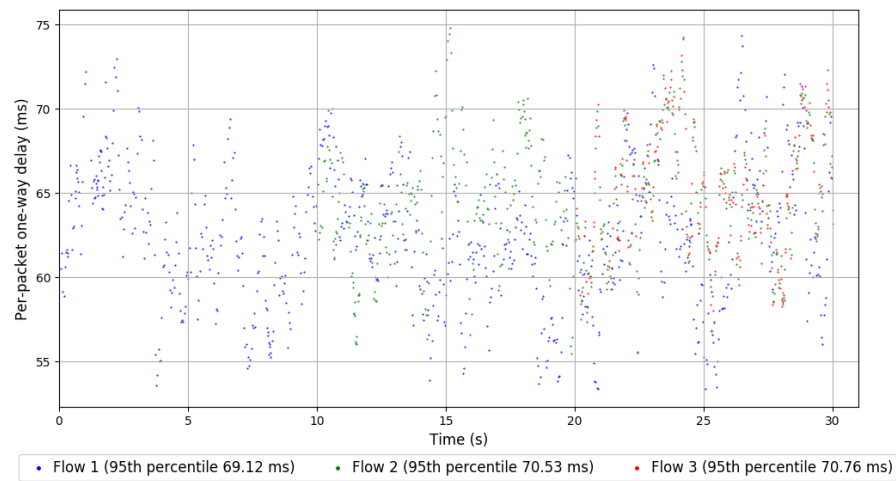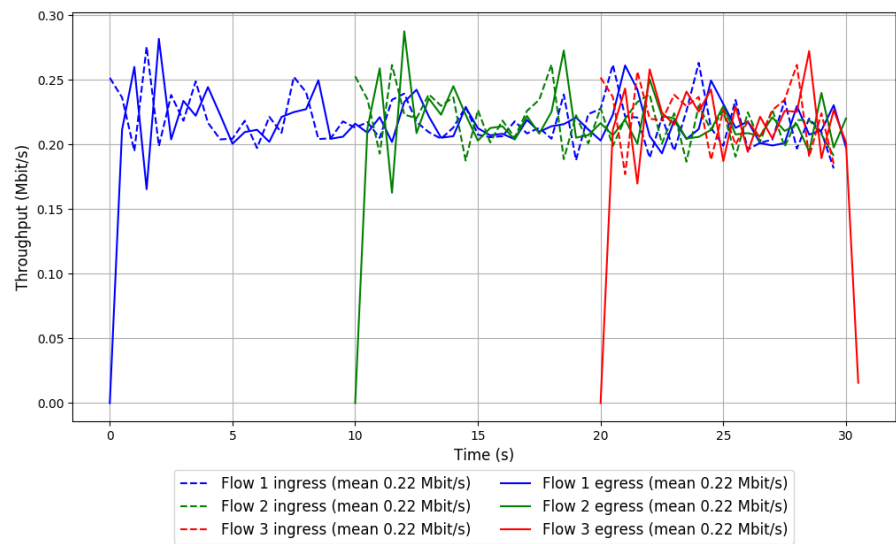Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 44.63 Mbit/s) --- Flow 1 egress (mean 44.29 Mbit/s)
Flow 2 ingress (mean 32.12 Mbit/s) --- Flow 2 egress (mean 31.83 Mbit/s)
Flow 3 ingress (mean 26.00 Mbit/s) --- Flow 3 egress (mean 25.71 Mbit/s)

Flow 1 (95th percentile 191.93 ms) · Flow 2 (95th percentile 185.41 ms) · Flow 3 (95th percentile 200.25 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-03-19 03:58:56
End at: 2019-03-19 03:59:26
Local clock offset: -1.711 ms
Remote clock offset: -17.647 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.42 Mbit/s
95th percentile per-packet one-way delay: 181.082 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 180.586 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 175.999 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 21.51 Mbit/s
95th percentile per-packet one-way delay: 187.432 ms
Loss rate: 0.46%
```

Run 4: Report of QUIC Cubic — Data Link
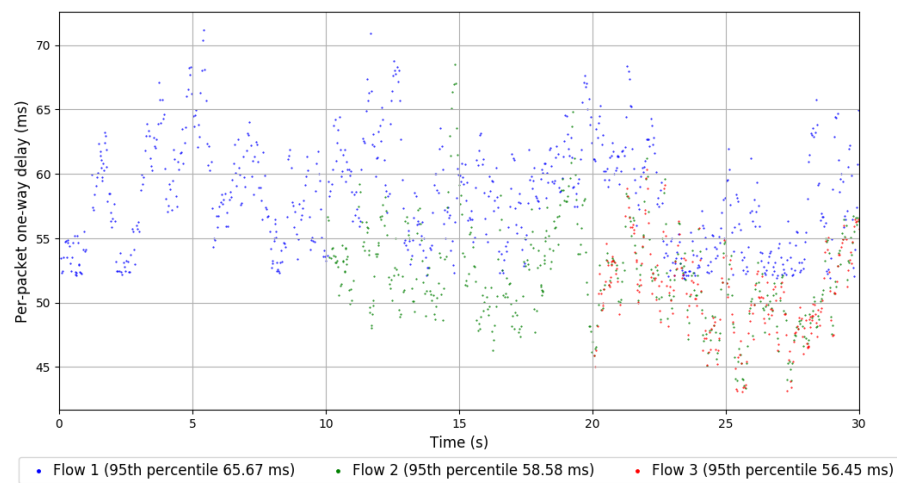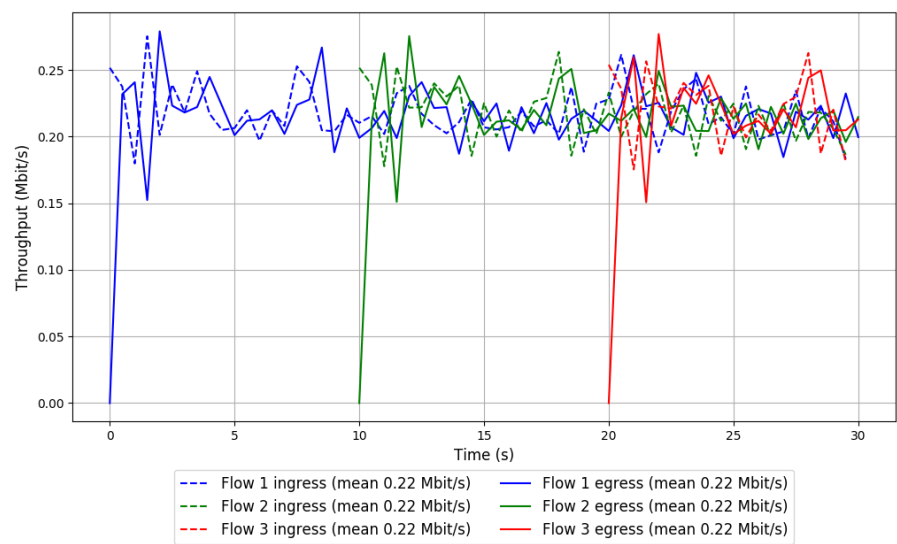

Flow 1 ingress (mean 49.21 Mbit/s) — Flow 1 egress (mean 48.93 Mbit/s)
Flow 2 ingress (mean 31.35 Mbit/s) — Flow 2 egress (mean 31.10 Mbit/s)
Flow 3 ingress (mean 21.66 Mbit/s) — Flow 3 egress (mean 21.51 Mbit/s)

Flow 1 (95th percentile 180.59 ms) • Flow 2 (95th percentile 176.00 ms) • Flow 3 (95th percentile 187.43 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-03-19 04:26:28
End at: 2019-03-19 04:26:58
Local clock offset: -0.837 ms
Remote clock offset: -18.189 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 190.291 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: 192.505 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 186.376 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 15.21 Mbit/s
95th percentile per-packet one-way delay: 193.408 ms
Loss rate: 0.45%
```

Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 41.57 Mbit/s)   Flow 1 egress (mean 41.26 Mbit/s)
Flow 2 ingress (mean 38.07 Mbit/s)   Flow 2 egress (mean 37.60 Mbit/s)
Flow 3 ingress (mean 15.31 Mbit/s)   Flow 3 egress (mean 15.21 Mbit/s)

Flow 1 (95th percentile 192.50 ms)   Flow 2 (95th percentile 186.38 ms)   Flow 3 (95th percentile 193.41 ms)
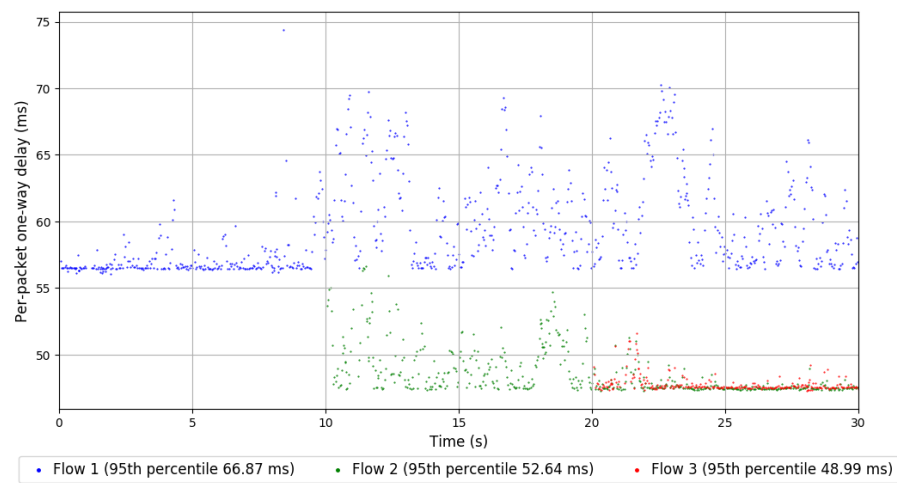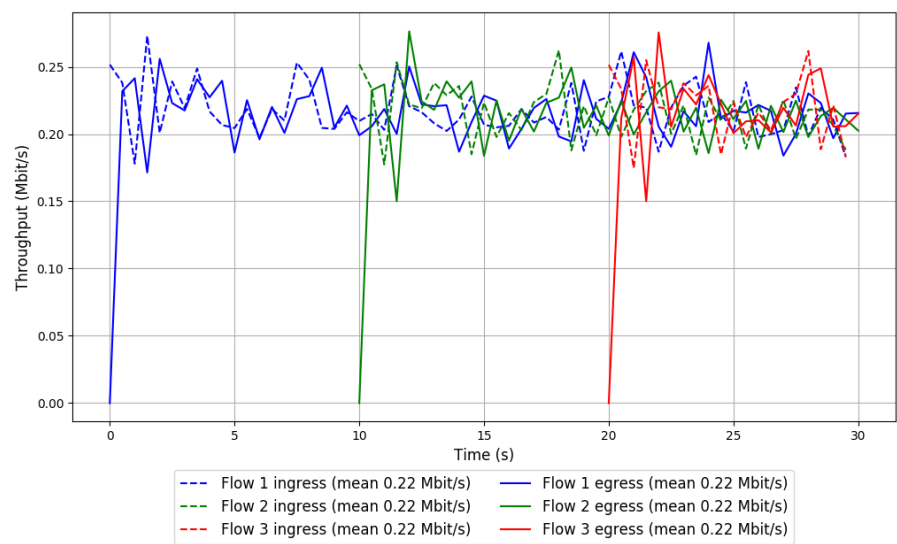
```
Run 1: Statistics of SCReAM

Start at: 2019-03-19 02:37:22
End at: 2019-03-19 02:37:52
Local clock offset: -1.99 ms
Remote clock offset: -20.533 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 70.177 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.120 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.530 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.761 ms
Loss rate: 0.00%
```
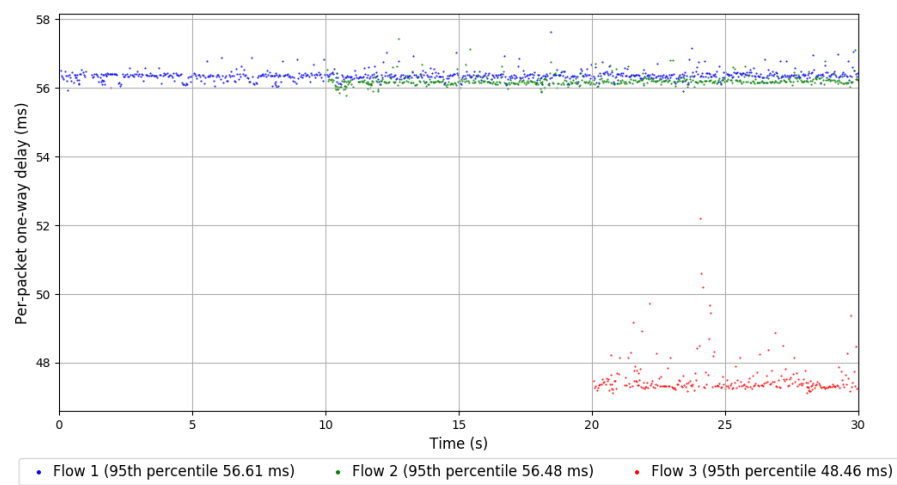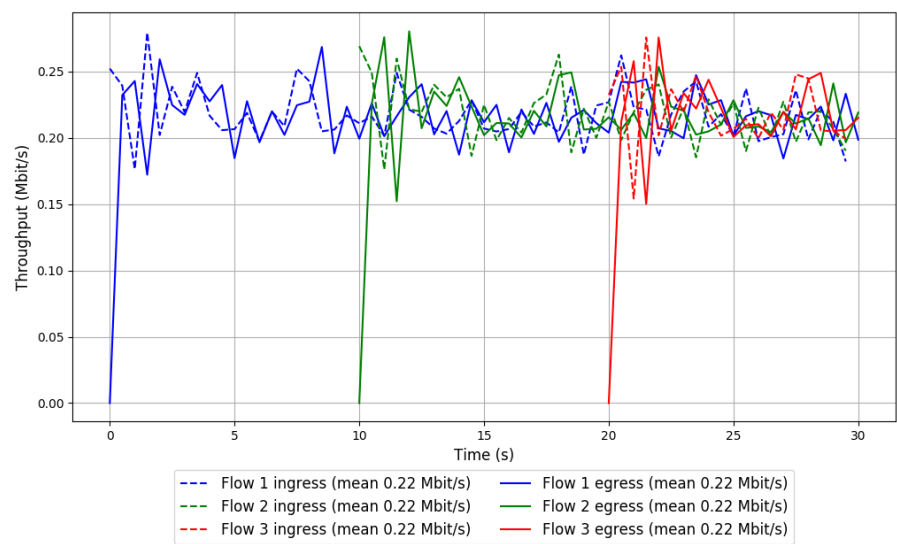
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-03-19 03:06:39
End at: 2019-03-19 03:07:09
Local clock offset: -0.962 ms
Remote clock offset: -10.901 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.576 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.446 ms
Loss rate: 0.00%
```

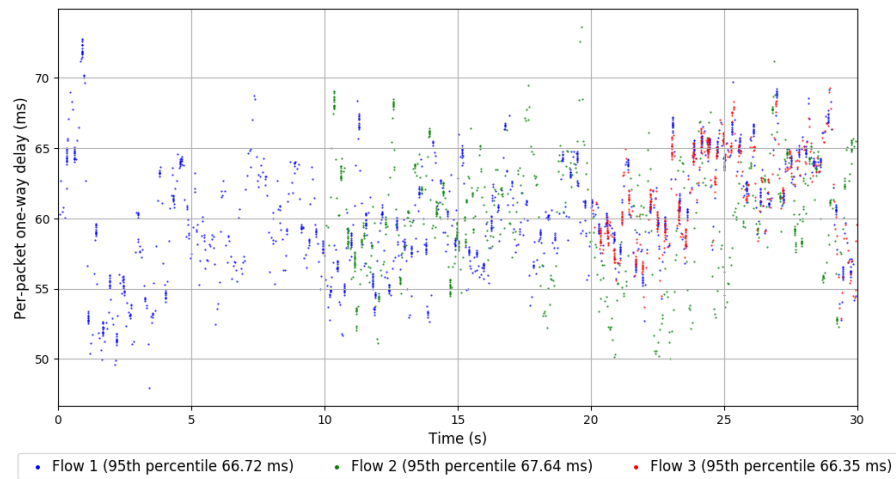# Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-03-19 03:33:30
End at: 2019-03-19 03:34:00
Local clock offset: -0.978 ms
Remote clock offset: -8.845 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.137 ms
Loss rate: 0.00%
```
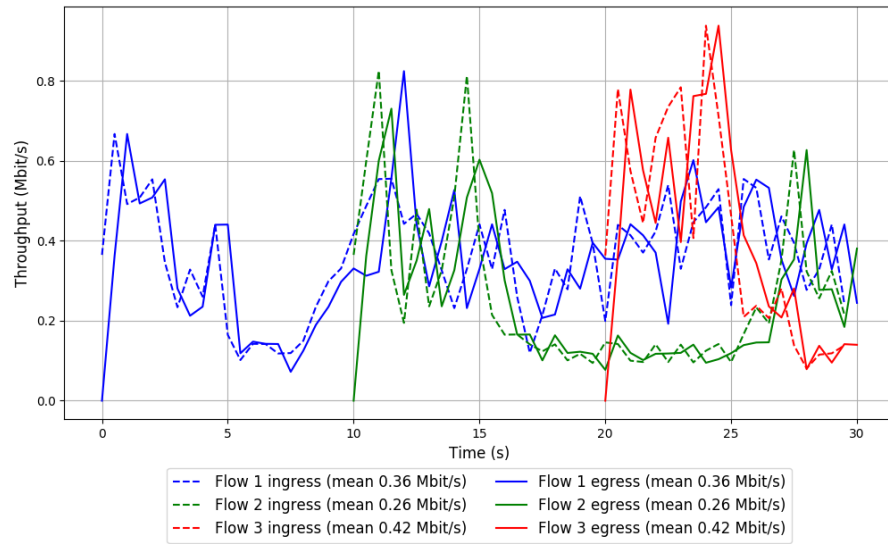
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-03-19 04:00:15
End at: 2019-03-19 04:00:45
Local clock offset: -1.754 ms
Remote clock offset: -17.457 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 64.750 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.992 ms
Loss rate: 0.00%
```
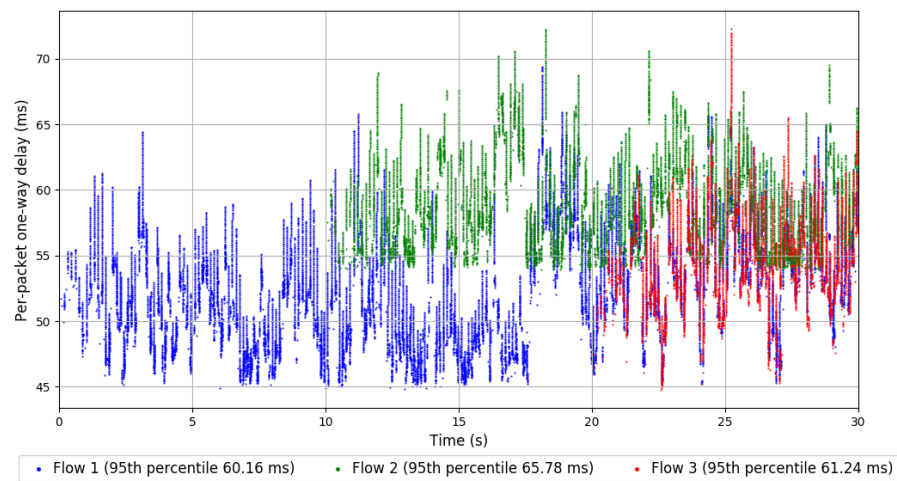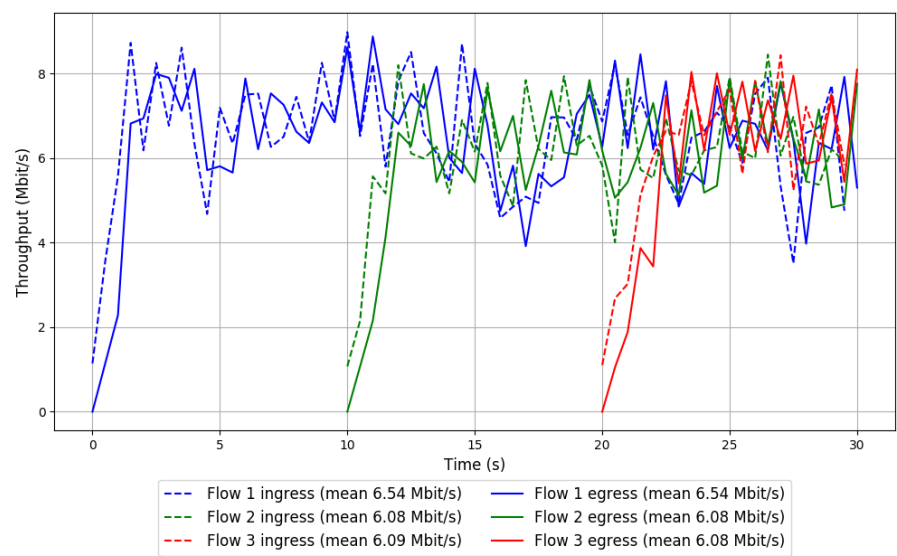
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-03-19 04:27:46
End at: 2019-03-19 04:28:16
Local clock offset: -0.759 ms
Remote clock offset: -18.538 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 56.527 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.606 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.475 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.462 ms
Loss rate: 0.00%
```
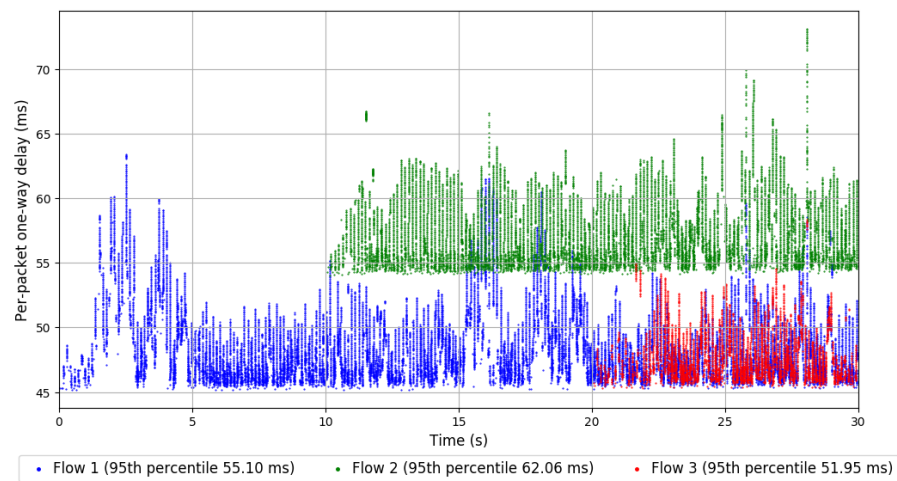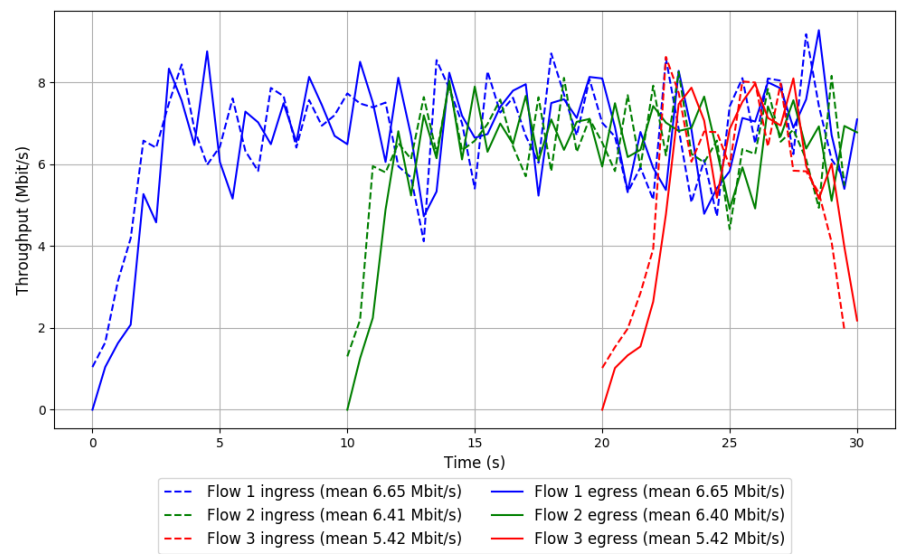
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-03-19 02:44:44
End at: 2019-03-19 02:45:14
Local clock offset: -1.995 ms
Remote clock offset: -23.643 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 66.791 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 66.723 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 67.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 66.347 ms
Loss rate: 0.00%
```
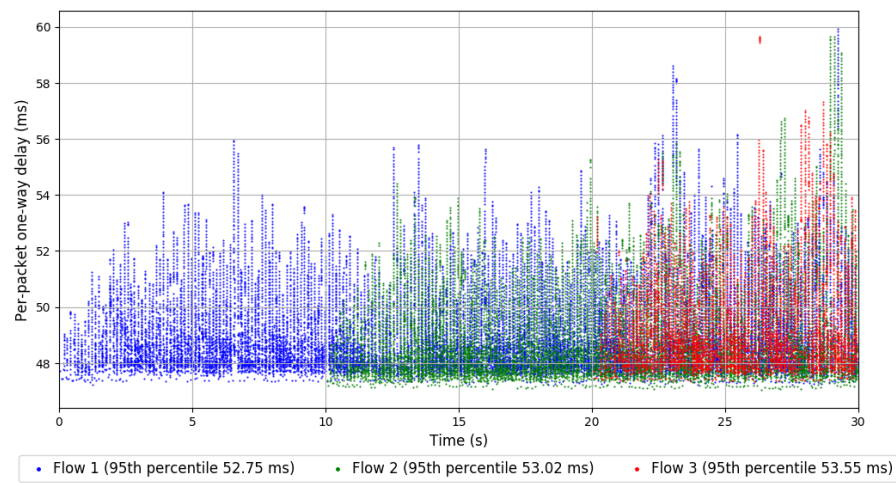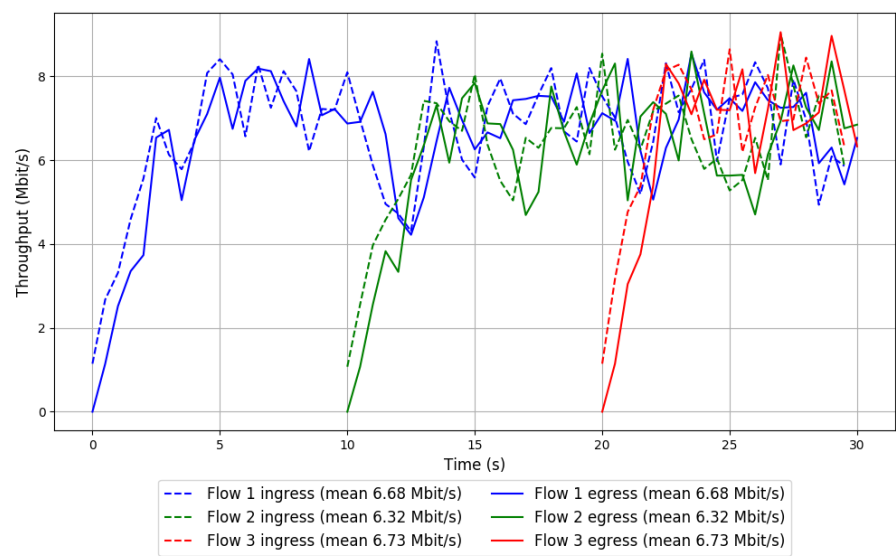
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-03-19 03:12:55
End at: 2019-03-19 03:13:25
Local clock offset: -0.893 ms
Remote clock offset: -6.593 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.60 Mbit/s
95th percentile per-packet one-way delay: 63.556 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 60.160 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 65.782 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 61.243 ms
Loss rate: 0.00%
```
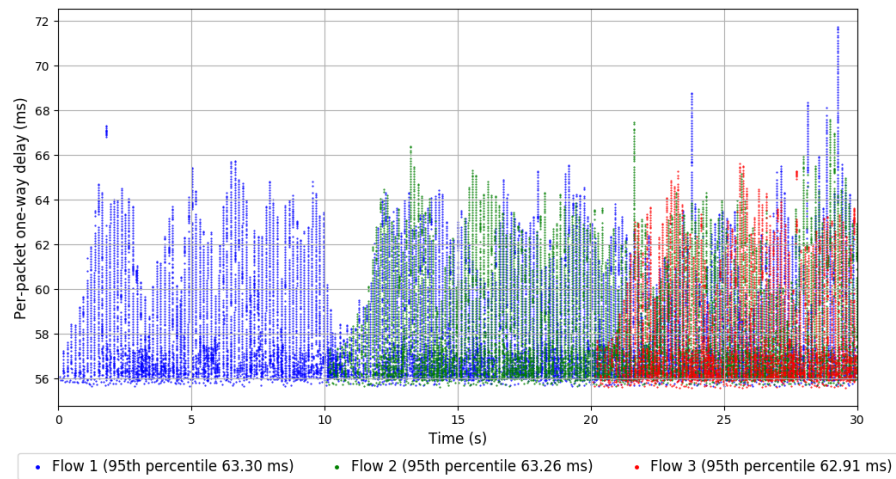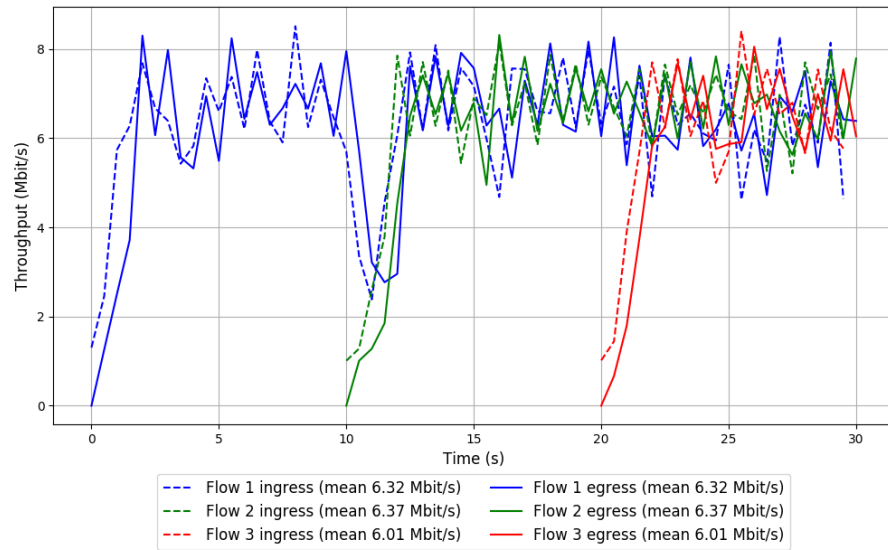
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-03-19 03:39:49
End at: 2019-03-19 03:40:19
Local clock offset: -0.988 ms
Remote clock offset: -15.506 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: 60.310 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 55.102 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 62.059 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 51.946 ms
Loss rate: 0.00%
```
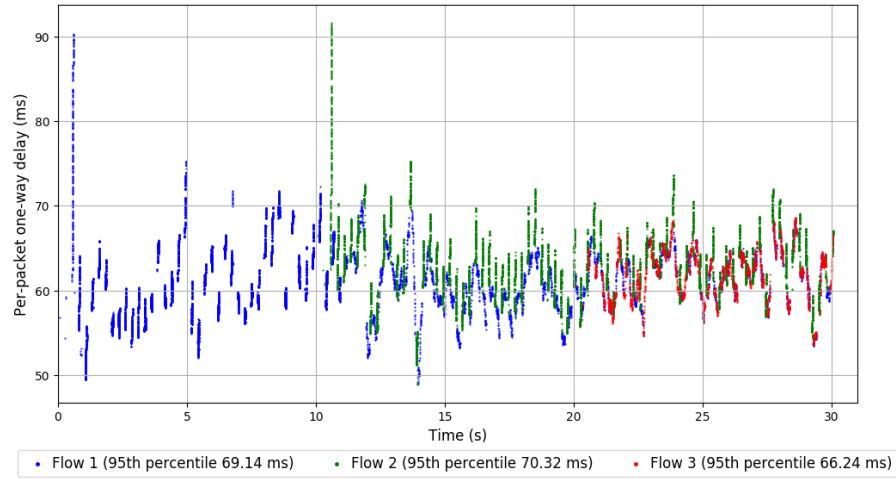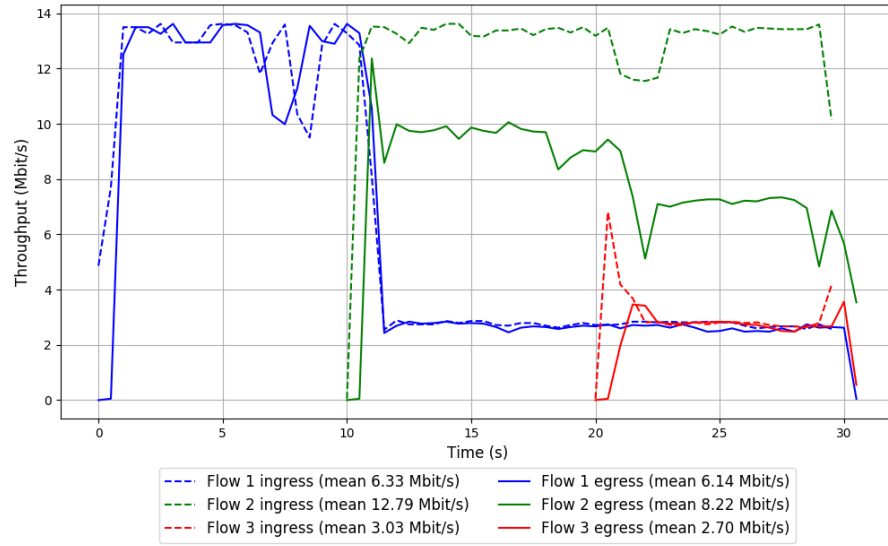
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 6.65 Mbit/s) — — —   Flow 1 egress (mean 6.65 Mbit/s)
Flow 2 ingress (mean 6.41 Mbit/s) — — —   Flow 2 egress (mean 6.40 Mbit/s)
Flow 3 ingress (mean 5.42 Mbit/s) — — —   Flow 3 egress (mean 5.42 Mbit/s)

Flow 1 (95th percentile 55.10 ms)   Flow 2 (95th percentile 62.06 ms)   Flow 3 (95th percentile 51.95 ms)

```
Run 4: Statistics of Sprout

Start at: 2019-03-19 04:06:33
End at: 2019-03-19 04:07:03
Local clock offset: -1.928 ms
Remote clock offset: -17.781 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 52.987 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 52.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 53.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 53.553 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-03-19 04:34:02
End at: 2019-03-19 04:34:32
Local clock offset: -0.349 ms
Remote clock offset: -18.702 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 63.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 63.295 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 63.259 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 62.907 ms
Loss rate: 0.00%
```
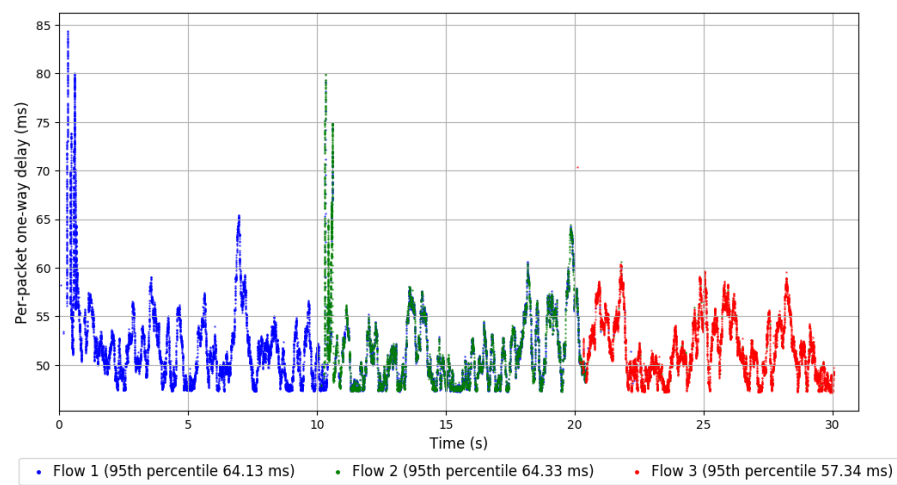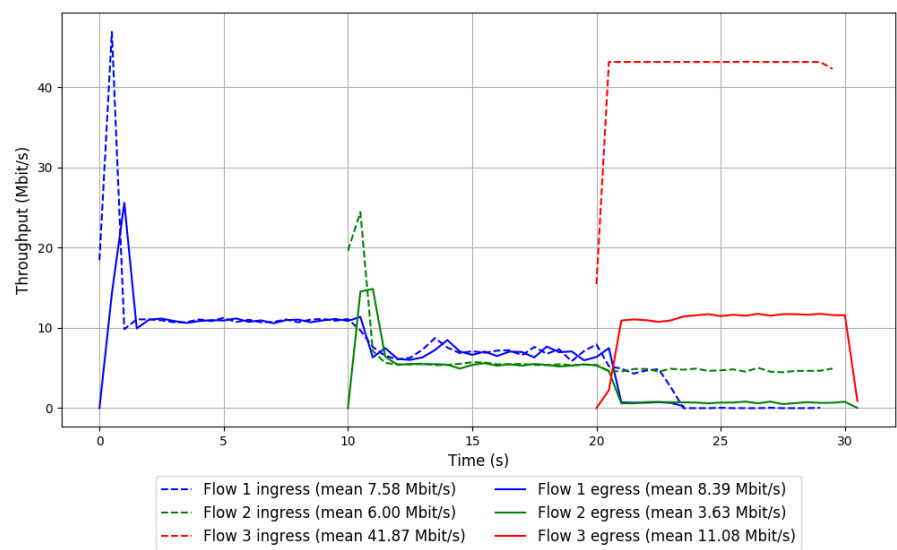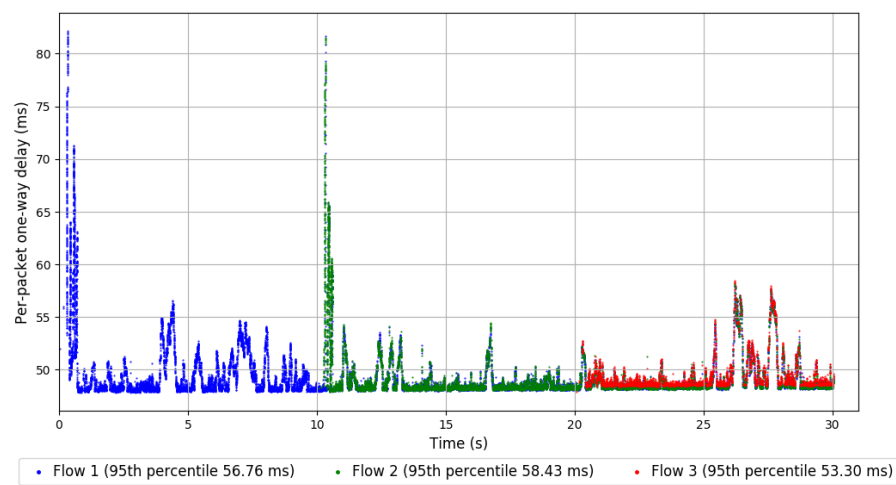
Run 5: Report of Sprout — Data Link

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

Start at: 2019-03-19 02:41:12
End at: 2019-03-19 02:41:42
Local clock offset: -2.082 ms
Remote clock offset: -25.889 ms

# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 69.624 ms
Loss rate: 21.08%
-- Flow 1:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 69.143 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 70.322 ms
Loss rate: 35.71%
-- Flow 3:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 66.237 ms
Loss rate: 10.85%
```
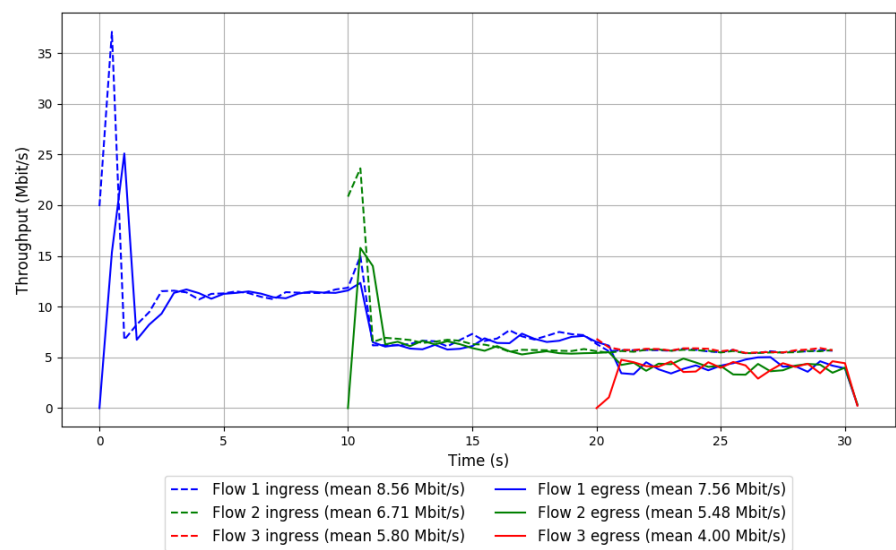
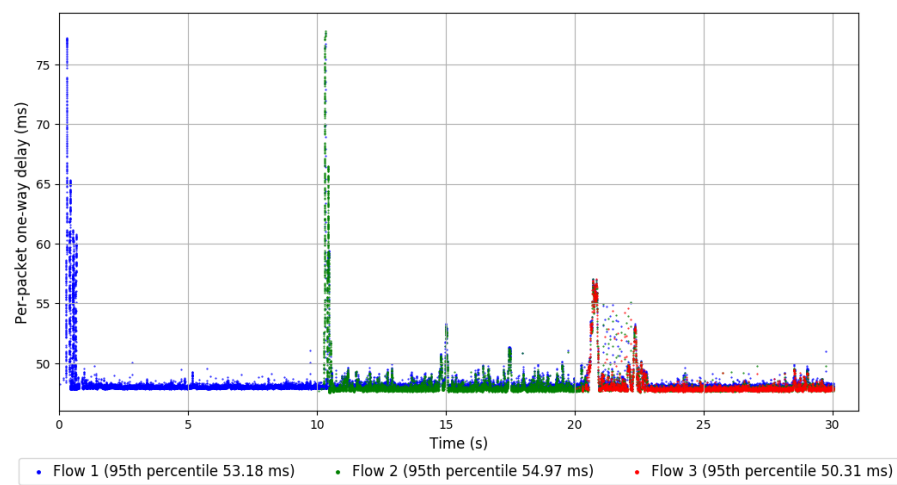Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-19 03:10:27
End at: 2019-03-19 03:10:57
Local clock offset: -0.806 ms
Remote clock offset: -5.413 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 61.677 ms
Loss rate: 50.37%
-- Flow 1:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 64.126 ms
Loss rate: 12.49%
-- Flow 2:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 64.327 ms
Loss rate: 39.51%
-- Flow 3:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 57.341 ms
Loss rate: 73.59%
```
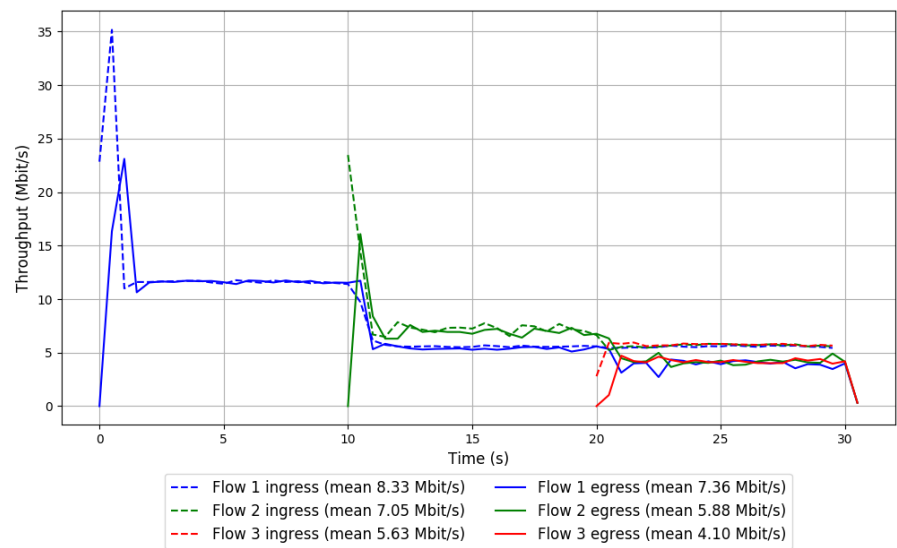
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-19 03:37:22
End at: 2019-03-19 03:37:52
Local clock offset: -1.094 ms
Remote clock offset: -11.764 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 56.669 ms
Loss rate: 16.16%
-- Flow 1:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 56.759 ms
Loss rate: 11.69%
-- Flow 2:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 58.434 ms
Loss rate: 18.30%
-- Flow 3:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 53.302 ms
Loss rate: 30.99%
```
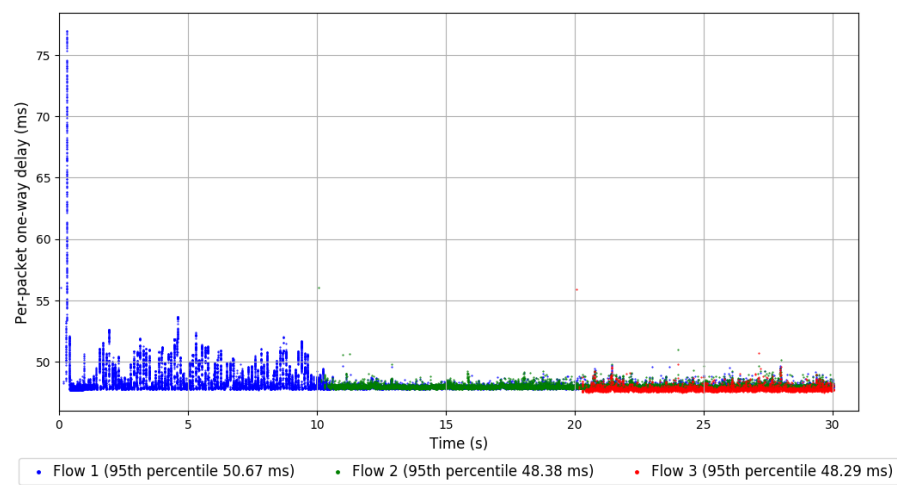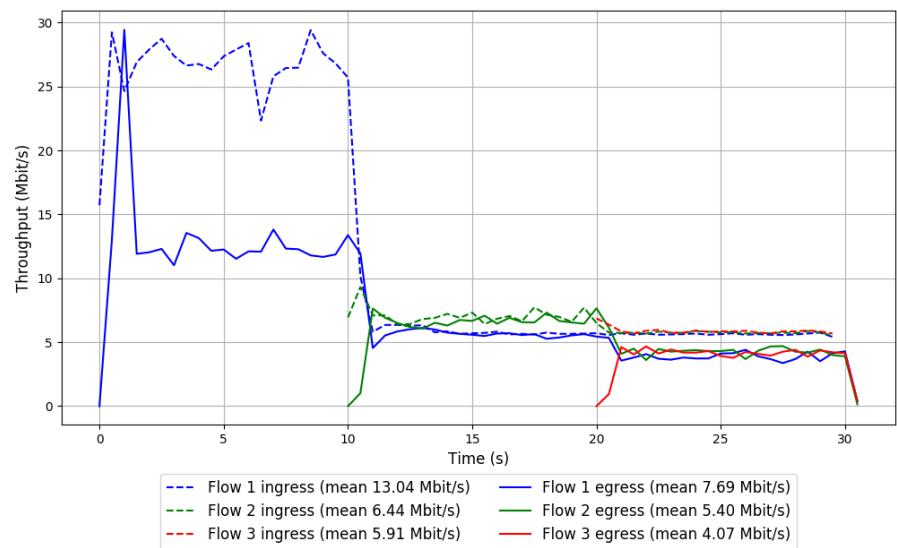
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-19 04:04:06
End at: 2019-03-19 04:04:36
Local clock offset: -2.089 ms
Remote clock offset: -17.732 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 53.106 ms
Loss rate: 15.16%
-- Flow 1:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 53.178 ms
Loss rate: 11.66%
-- Flow 2:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 54.965 ms
Loss rate: 16.57%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 50.310 ms
Loss rate: 27.20%
```
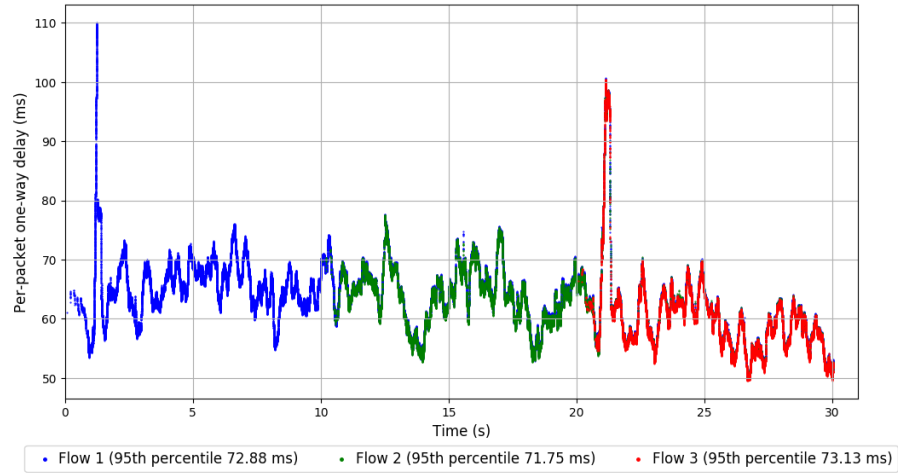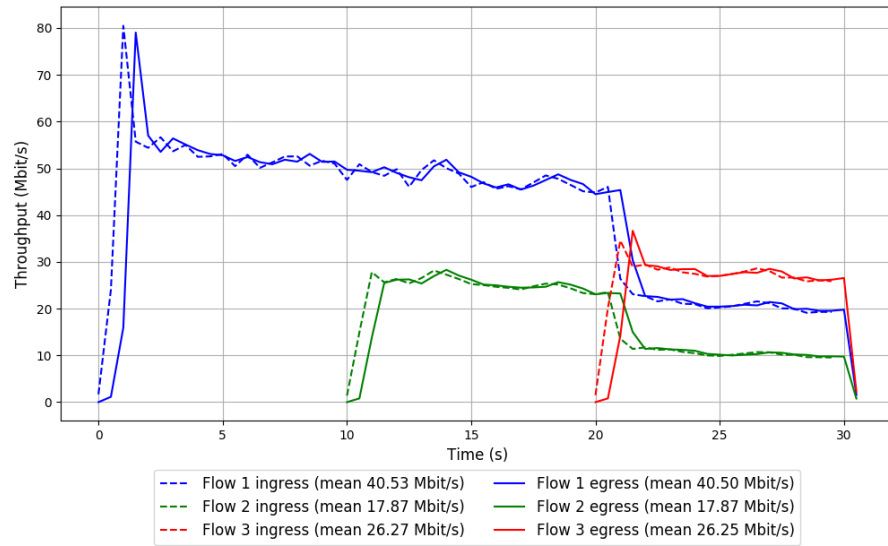
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-19 04:31:35
End at: 2019-03-19 04:32:05
Local clock offset: -0.612 ms
Remote clock offset: -18.504 ms


# Below is generated by plot.py at 2019-03-19 04:56:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 50.108 ms
Loss rate: 34.51%
-- Flow 1:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 50.666 ms
Loss rate: 41.06%
-- Flow 2:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 48.383 ms
Loss rate: 16.10%
-- Flow 3:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 48.286 ms
Loss rate: 31.25%
```
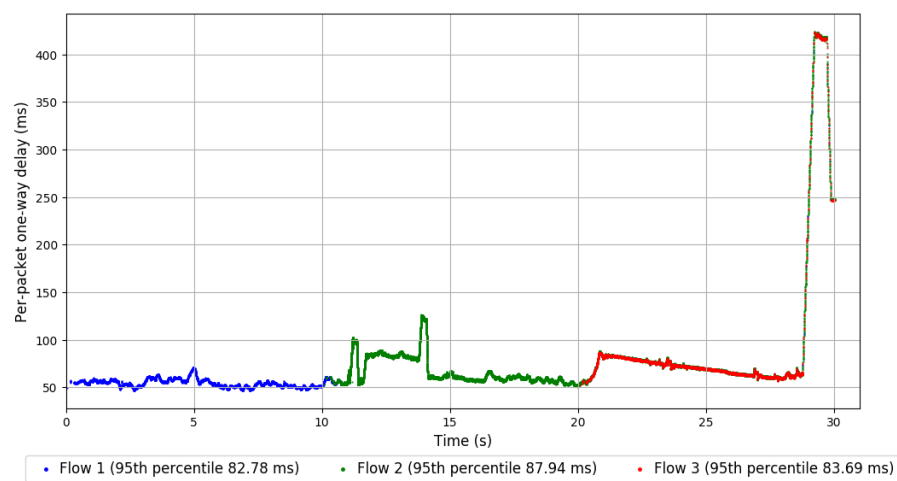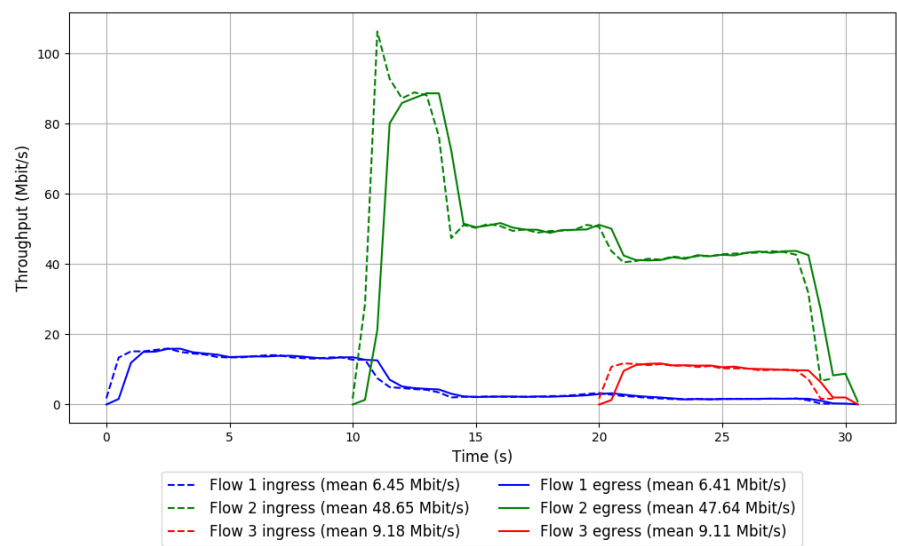
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 13.04 Mbit/s) --- Flow 1 egress (mean 7.69 Mbit/s)
Flow 2 ingress (mean 6.44 Mbit/s) --- Flow 2 egress (mean 5.40 Mbit/s)
Flow 3 ingress (mean 5.91 Mbit/s) --- Flow 3 egress (mean 4.07 Mbit/s)

Flow 1 (95th percentile 50.67 ms)   Flow 2 (95th percentile 48.38 ms)   Flow 3 (95th percentile 48.29 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2019-03-19 02:30:51
End at: 2019-03-19 02:31:21
Local clock offset: -2.005 ms
Remote clock offset: -24.376 ms

# Below is generated by plot.py at 2019-03-19 04:57:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 72.693 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 72.884 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 17.87 Mbit/s
95th percentile per-packet one-way delay: 71.754 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 26.25 Mbit/s
95th percentile per-packet one-way delay: 73.127 ms
Loss rate: 0.22%
```
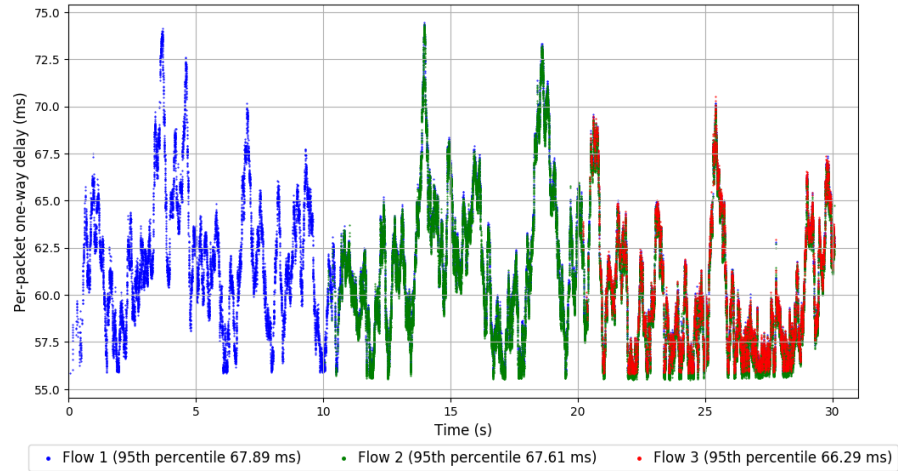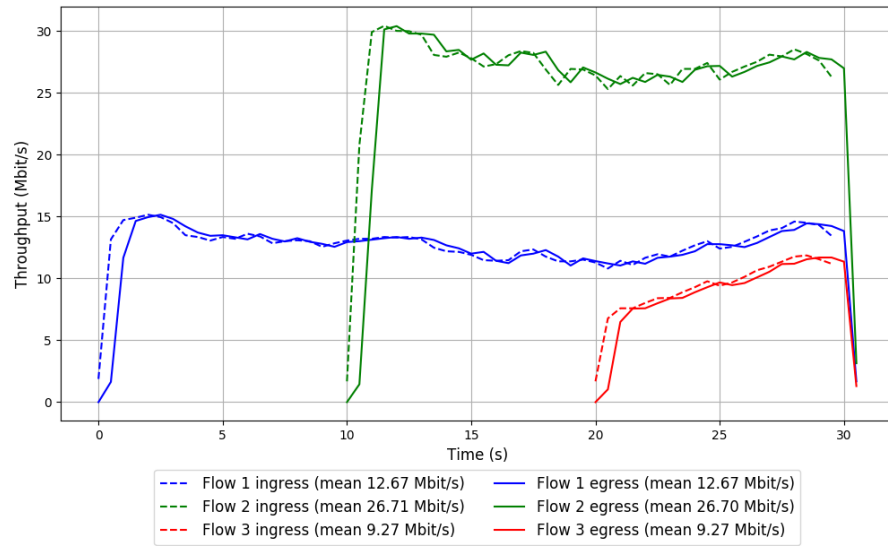
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-03-19 03:00:20
End at: 2019-03-19 03:00:50
Local clock offset: -1.141 ms
Remote clock offset: -15.179 ms


# Below is generated by plot.py at 2019-03-19 04:57:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.17 Mbit/s
95th percentile per-packet one-way delay: 87.275 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 82.783 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 47.64 Mbit/s
95th percentile per-packet one-way delay: 87.945 ms
Loss rate: 2.07%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 83.689 ms
Loss rate: 0.76%
```
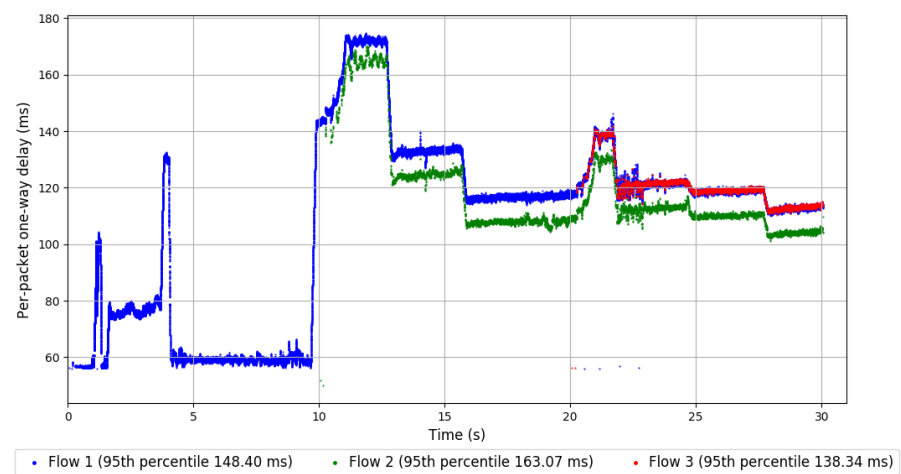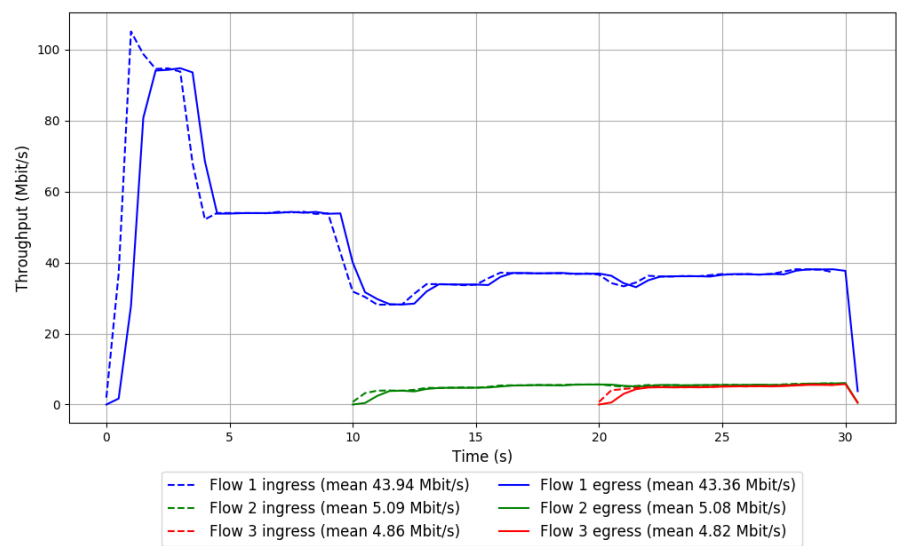
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-03-19 03:27:10
End at: 2019-03-19 03:27:40
Local clock offset: -0.881 ms
Remote clock offset: -0.323 ms


# Below is generated by plot.py at 2019-03-19 04:57:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 67.628 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 67.890 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.70 Mbit/s
95th percentile per-packet one-way delay: 67.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 66.290 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-03-19 03:53:54
End at: 2019-03-19 03:54:24
Local clock offset: -1.558 ms
Remote clock offset: -17.054 ms


# Below is generated by plot.py at 2019-03-19 04:57:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: 148.322 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 148.399 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 163.075 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 138.337 ms
Loss rate: 0.74%
```
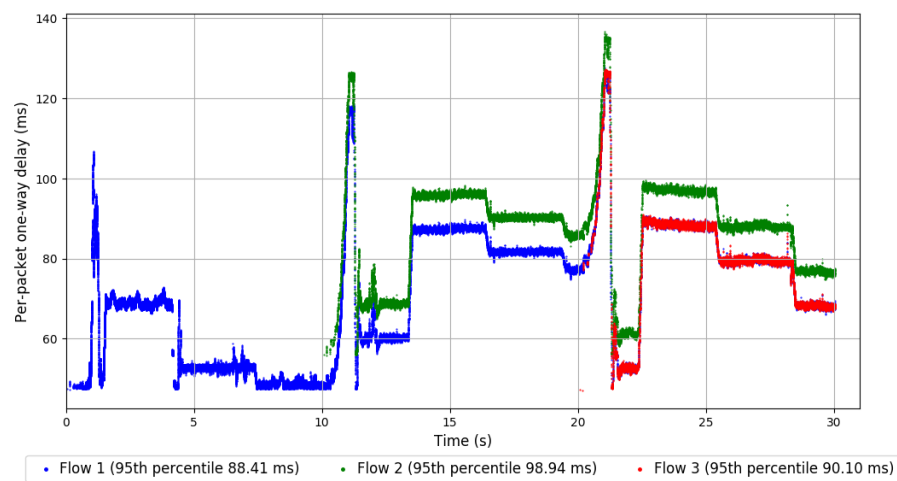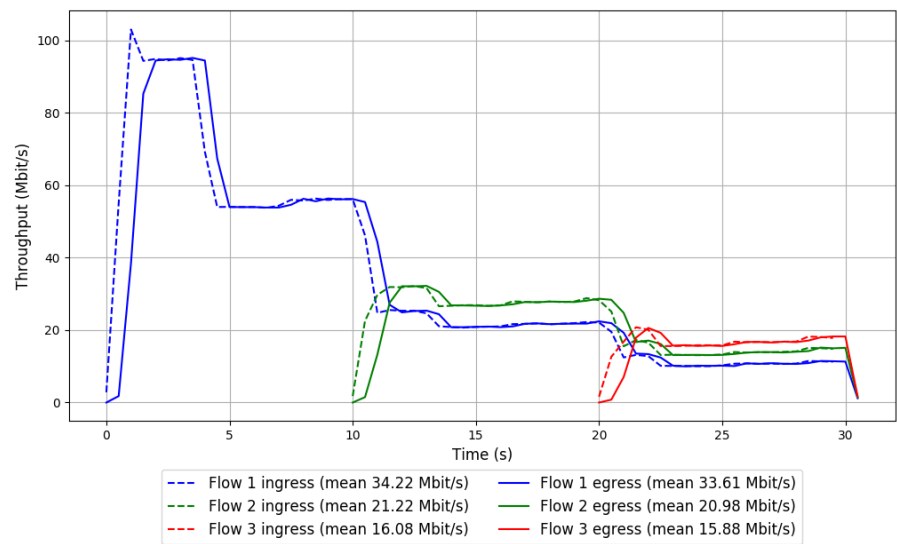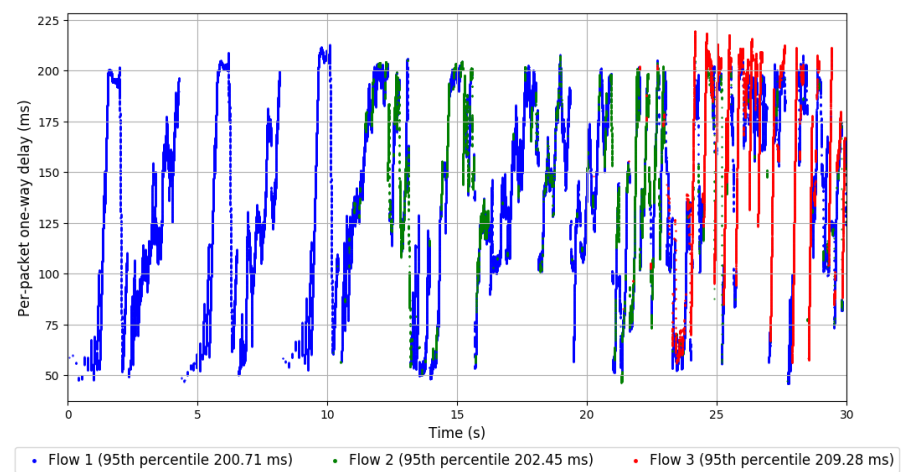
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-03-19 04:21:27
End at: 2019-03-19 04:21:57
Local clock offset: -1.326 ms
Remote clock offset: -18.5 ms


# Below is generated by plot.py at 2019-03-19 04:57:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.87 Mbit/s
95th percentile per-packet one-way delay: 96.696 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 88.405 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 20.98 Mbit/s
95th percentile per-packet one-way delay: 98.943 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 15.88 Mbit/s
95th percentile per-packet one-way delay: 90.100 ms
Loss rate: 1.18%
```

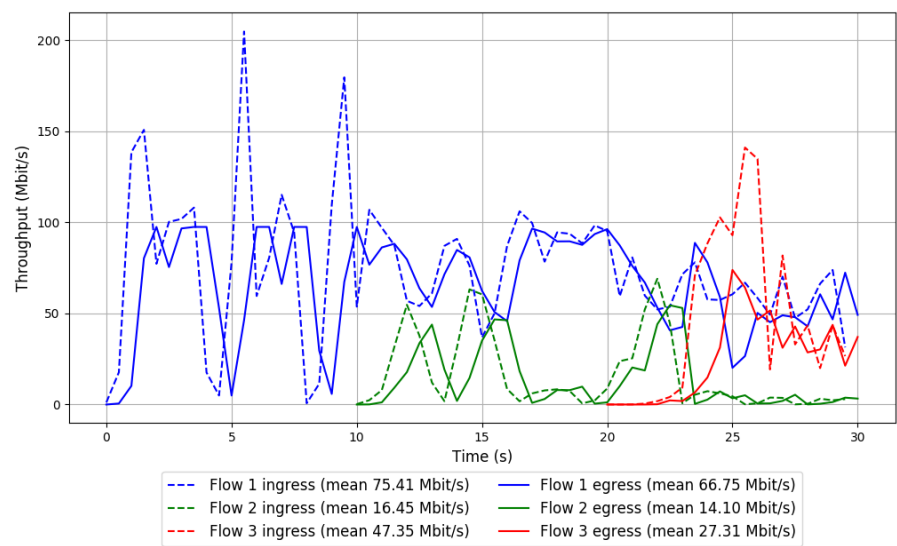Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-03-19 02:53:53
End at: 2019-03-19 02:54:23
Local clock offset: -1.509 ms
Remote clock offset: -17.976 ms


# Below is generated by plot.py at 2019-03-19 04:57:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.89 Mbit/s
95th percentile per-packet one-way delay: 202.985 ms
Loss rate: 16.24%
-- Flow 1:
Average throughput: 66.75 Mbit/s
95th percentile per-packet one-way delay: 200.709 ms
Loss rate: 11.29%
-- Flow 2:
Average throughput: 14.10 Mbit/s
95th percentile per-packet one-way delay: 202.453 ms
Loss rate: 14.01%
-- Flow 3:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 209.277 ms
Loss rate: 42.20%
```

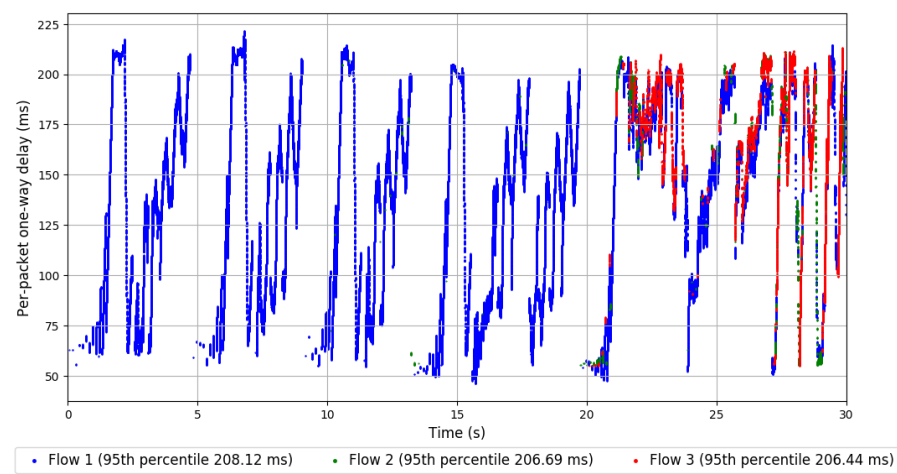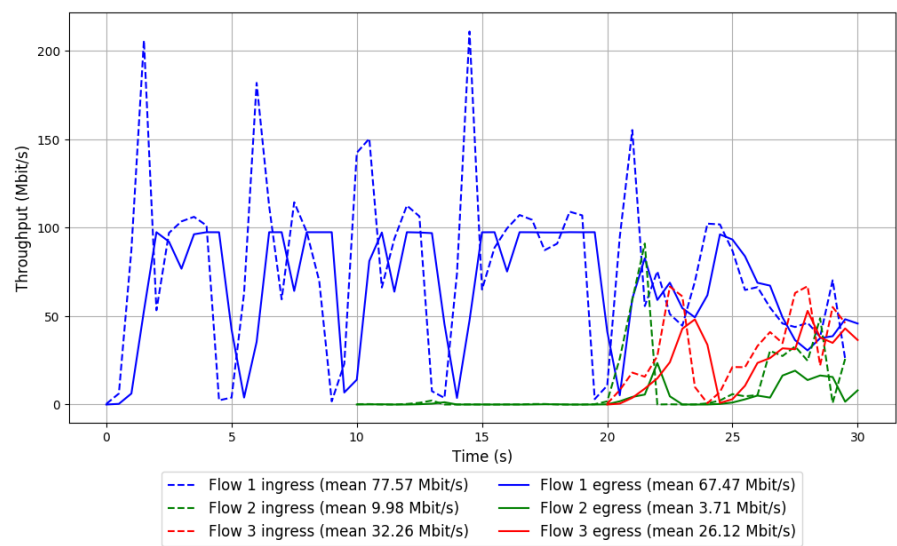Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-03-19 03:20:40
End at: 2019-03-19 03:21:10
Local clock offset: -0.951 ms
Remote clock offset: -2.828 ms


# Below is generated by plot.py at 2019-03-19 04:57:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 207.581 ms
Loss rate: 16.84%
-- Flow 1:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 208.116 ms
Loss rate: 12.82%
-- Flow 2:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 206.688 ms
Loss rate: 62.57%
-- Flow 3:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 206.445 ms
Loss rate: 17.80%
```

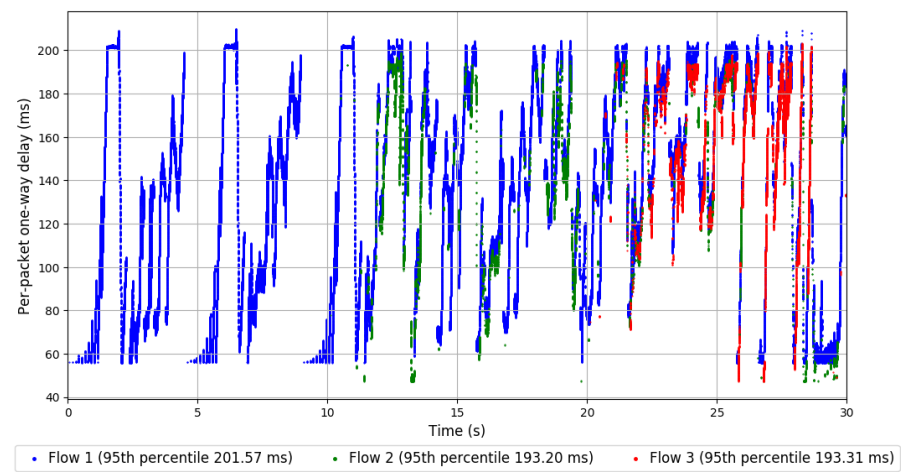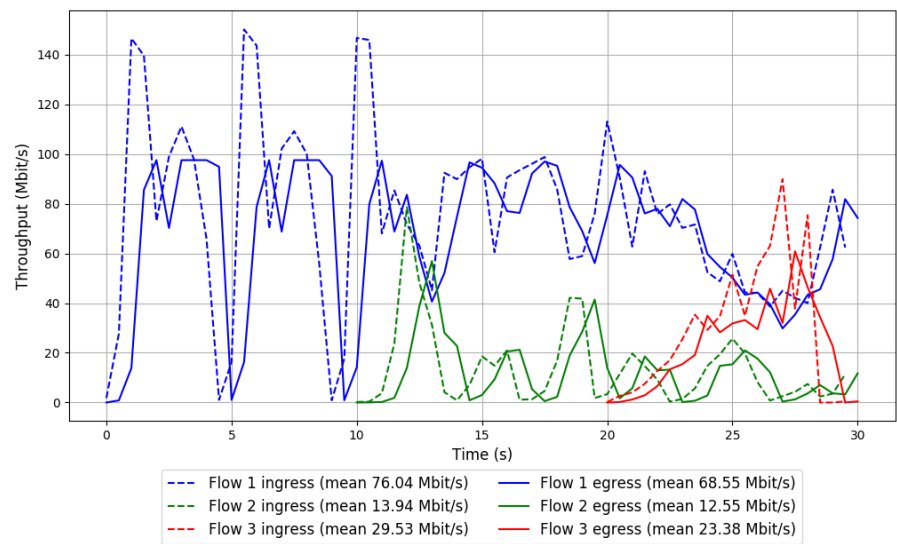## Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-03-19 03:47:27
End at: 2019-03-19 03:47:57
Local clock offset: -1.183 ms
Remote clock offset: -16.323 ms


# Below is generated by plot.py at 2019-03-19 04:57:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.53 Mbit/s
95th percentile per-packet one-way delay: 201.480 ms
Loss rate: 10.62%
-- Flow 1:
Average throughput: 68.55 Mbit/s
95th percentile per-packet one-way delay: 201.573 ms
Loss rate: 9.52%
-- Flow 2:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 193.197 ms
Loss rate: 9.45%
-- Flow 3:
Average throughput: 23.38 Mbit/s
95th percentile per-packet one-way delay: 193.313 ms
Loss rate: 20.36%
```
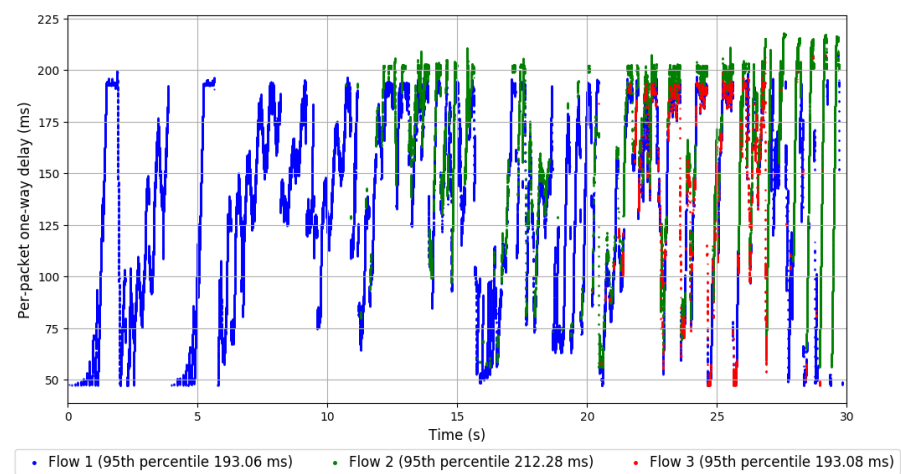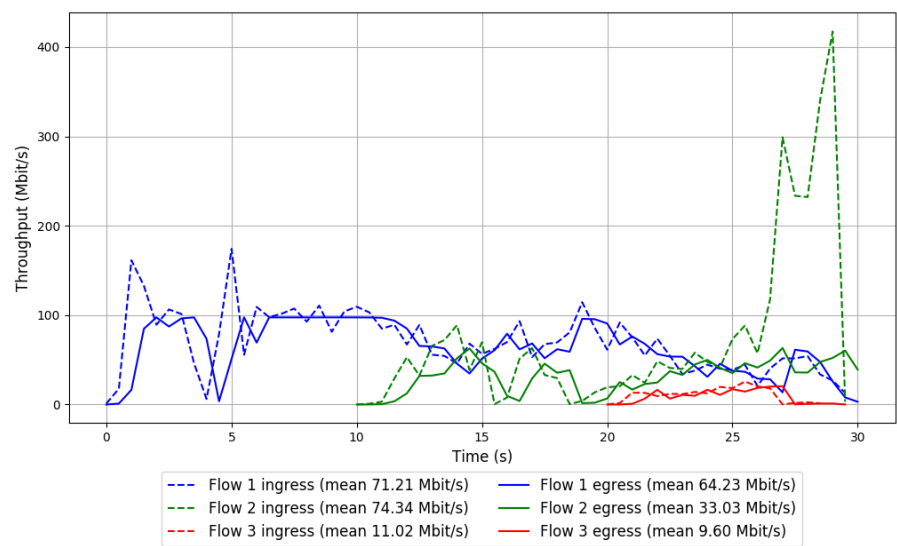
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 76.04 Mbit/s) --- Flow 1 egress (mean 68.55 Mbit/s)
Flow 2 ingress (mean 13.94 Mbit/s) --- Flow 2 egress (mean 12.55 Mbit/s)
Flow 3 ingress (mean 29.53 Mbit/s) --- Flow 3 egress (mean 23.38 Mbit/s)

Flow 1 (95th percentile 201.57 ms) Flow 2 (95th percentile 193.20 ms) Flow 3 (95th percentile 193.31 ms)

```
Run 4: Statistics of Verus

Start at: 2019-03-19 04:14:57
End at: 2019-03-19 04:15:27
Local clock offset: -2.16 ms
Remote clock offset: -18.206 ms


# Below is generated by plot.py at 2019-03-19 04:58:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 201.132 ms
Loss rate: 27.88%
-- Flow 1:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 193.064 ms
Loss rate: 9.81%
-- Flow 2:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 212.280 ms
Loss rate: 55.47%
-- Flow 3:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 193.083 ms
Loss rate: 11.87%
```

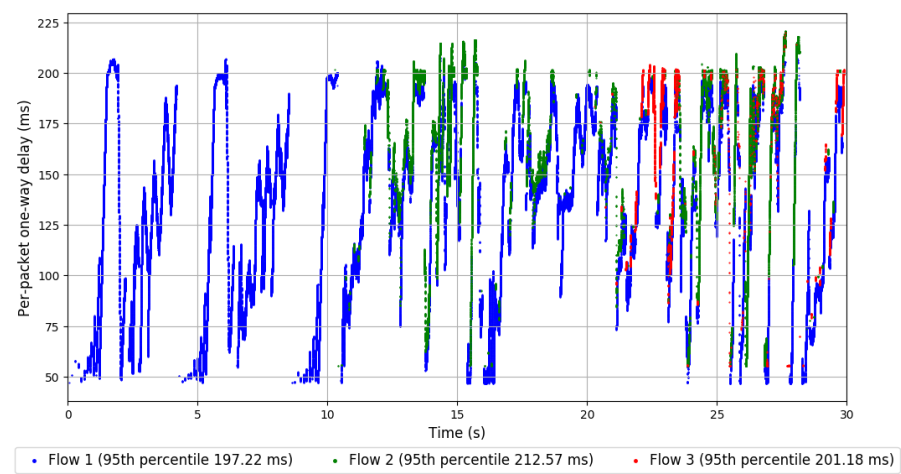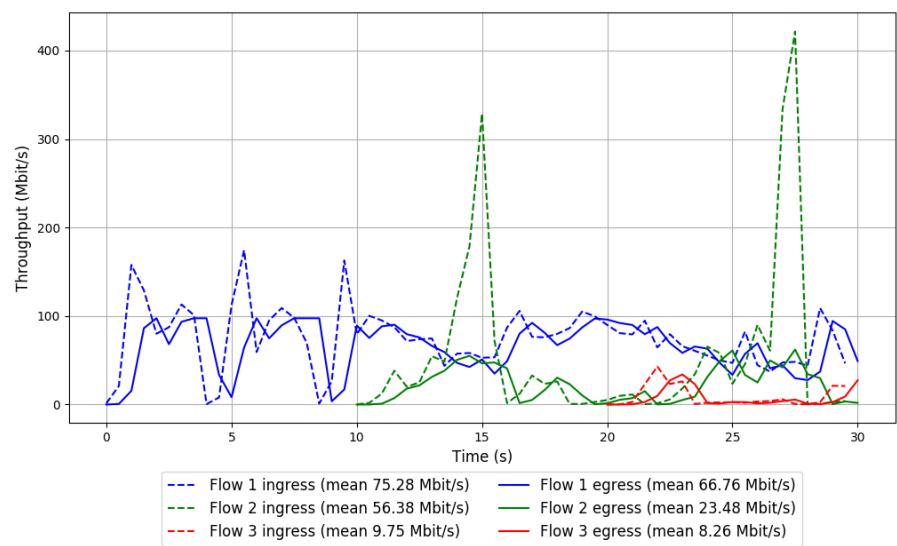Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-03-19 04:41:43
End at: 2019-03-19 04:42:13
Local clock offset: 0.016 ms
Remote clock offset: -12.135 ms


# Below is generated by plot.py at 2019-03-19 04:58:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.66 Mbit/s
95th percentile per-packet one-way delay: 200.702 ms
Loss rate: 26.33%
-- Flow 1:
Average throughput: 66.76 Mbit/s
95th percentile per-packet one-way delay: 197.218 ms
Loss rate: 11.14%
-- Flow 2:
Average throughput: 23.48 Mbit/s
95th percentile per-packet one-way delay: 212.574 ms
Loss rate: 58.35%
-- Flow 3:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 201.180 ms
Loss rate: 15.09%
```
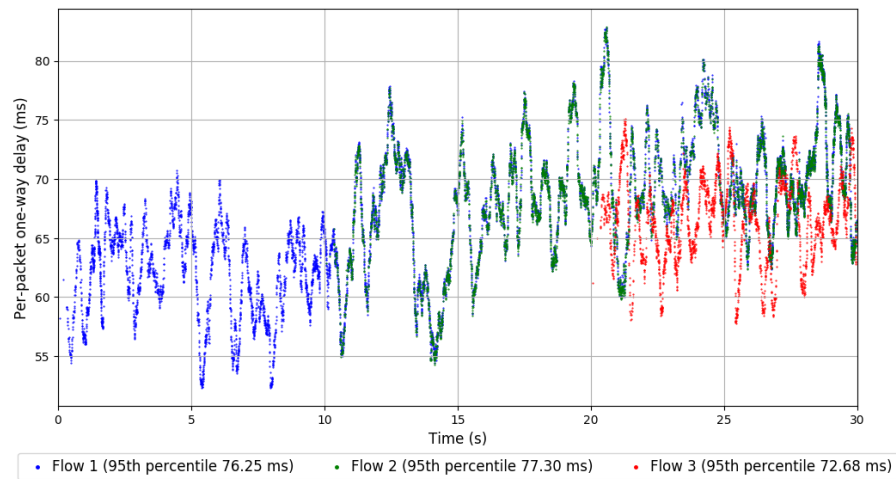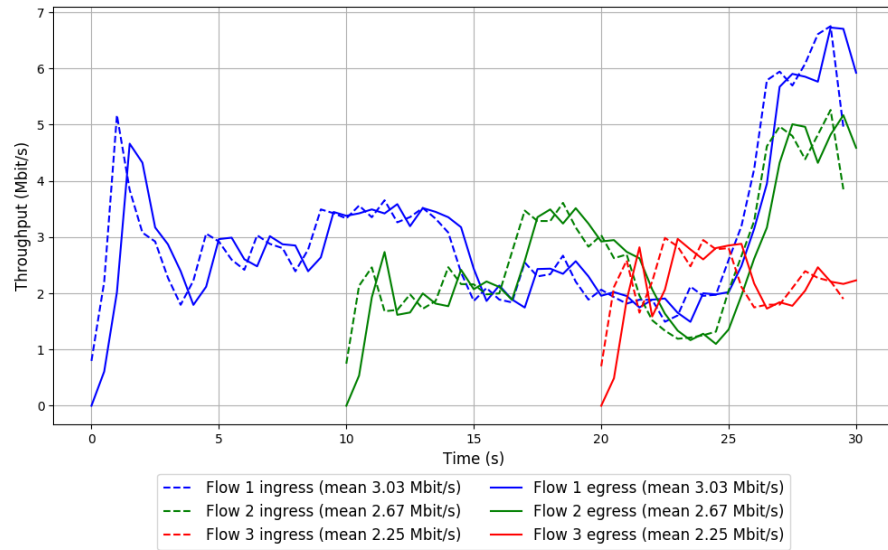
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 75.28 Mbit/s) --- Flow 1 egress (mean 66.76 Mbit/s)
Flow 2 ingress (mean 56.38 Mbit/s) --- Flow 2 egress (mean 23.48 Mbit/s)
Flow 3 ingress (mean 9.75 Mbit/s) --- Flow 3 egress (mean 8.26 Mbit/s)

Flow 1 (95th percentile 197.22 ms) · Flow 2 (95th percentile 212.57 ms) · Flow 3 (95th percentile 201.18 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-03-19 02:39:57
End at: 2019-03-19 02:40:27
Local clock offset: -2.049 ms
Remote clock offset: -21.484 ms


# Below is generated by plot.py at 2019-03-19 04:58:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 76.214 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 76.251 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 77.297 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 72.681 ms
Loss rate: 0.16%
```
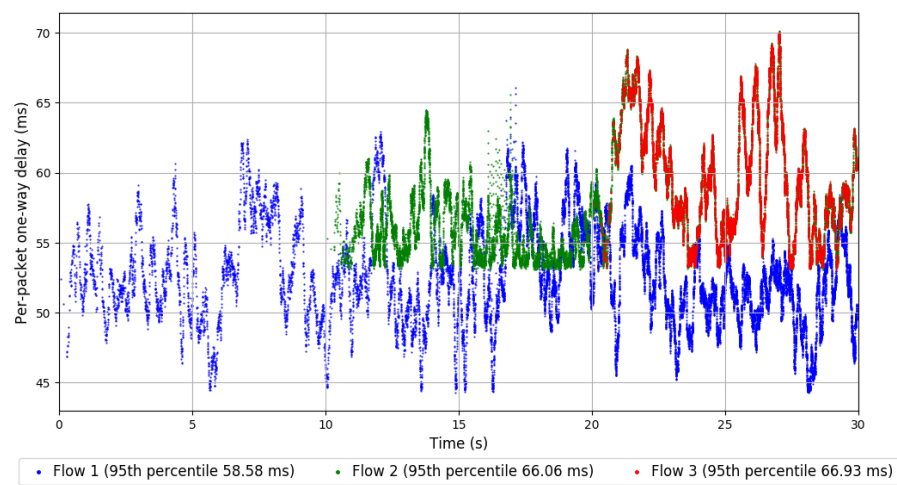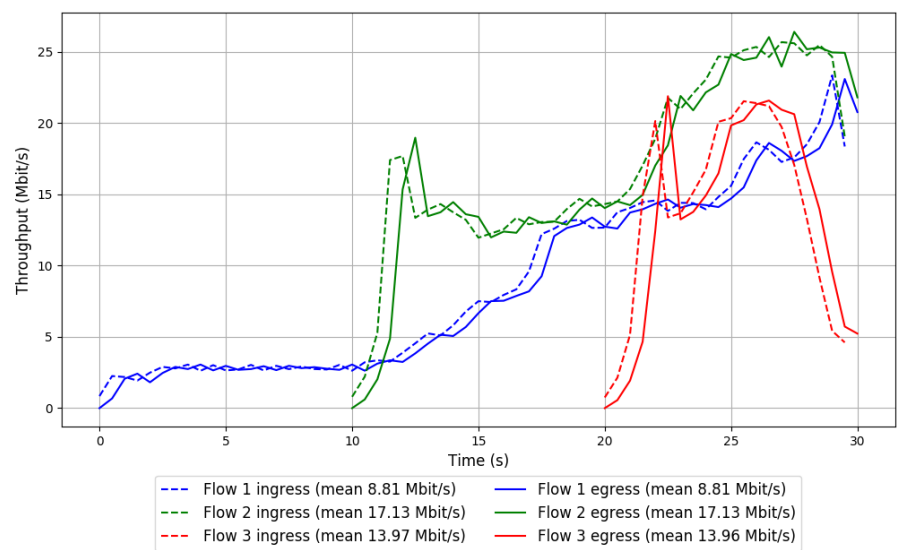
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-03-19 03:09:11
End at: 2019-03-19 03:09:41
Local clock offset: -0.979 ms
Remote clock offset: -8.36 ms


# Below is generated by plot.py at 2019-03-19 04:58:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 65.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 58.582 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.13 Mbit/s
95th percentile per-packet one-way delay: 66.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.96 Mbit/s
95th percentile per-packet one-way delay: 66.933 ms
Loss rate: 0.00%
```

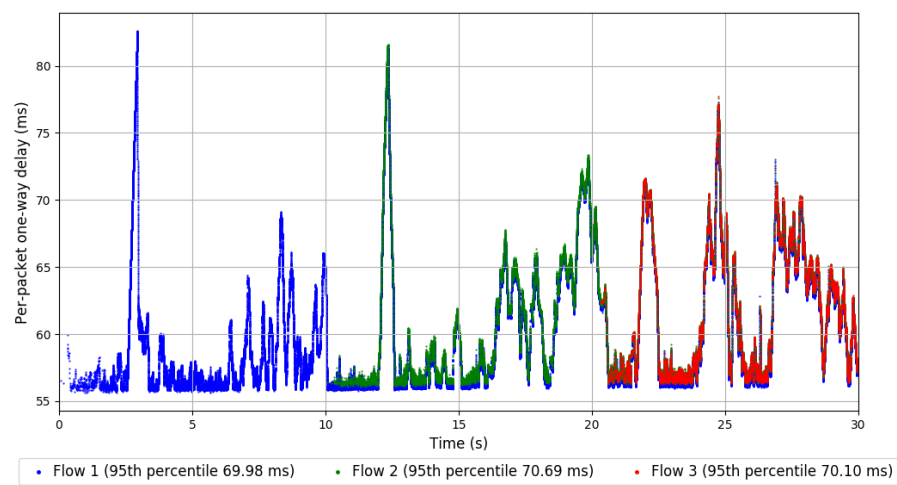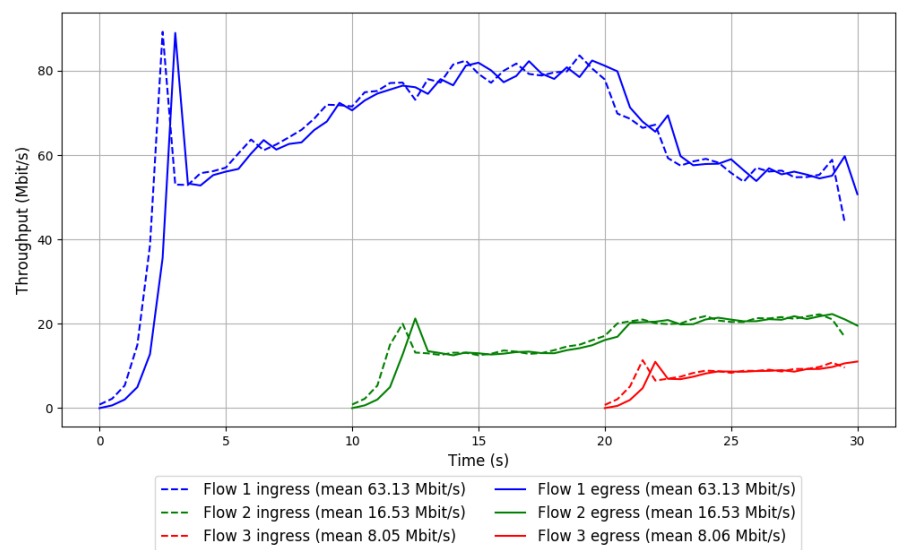Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-03-19 03:36:02
End at: 2019-03-19 03:36:32
Local clock offset: -1.045 ms
Remote clock offset: -11.243 ms


# Below is generated by plot.py at 2019-03-19 04:58:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.79 Mbit/s
95th percentile per-packet one-way delay: 70.120 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 69.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.53 Mbit/s
95th percentile per-packet one-way delay: 70.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 70.097 ms
Loss rate: 0.00%
```

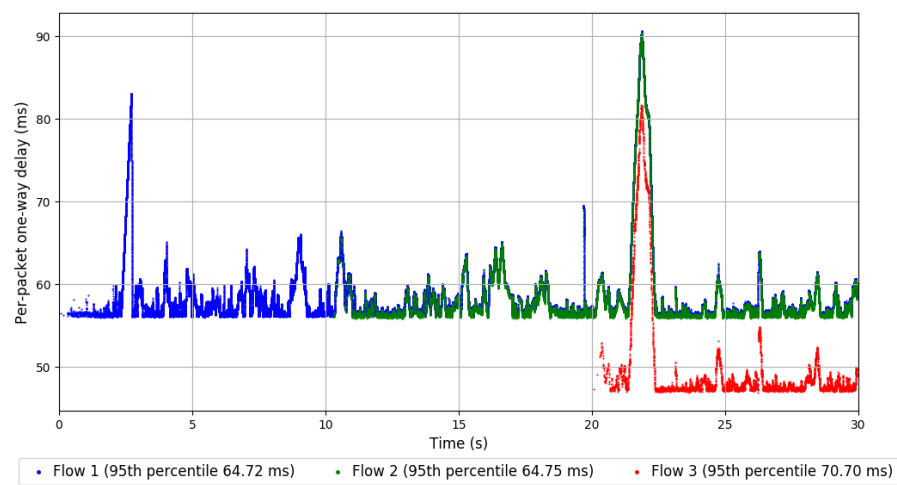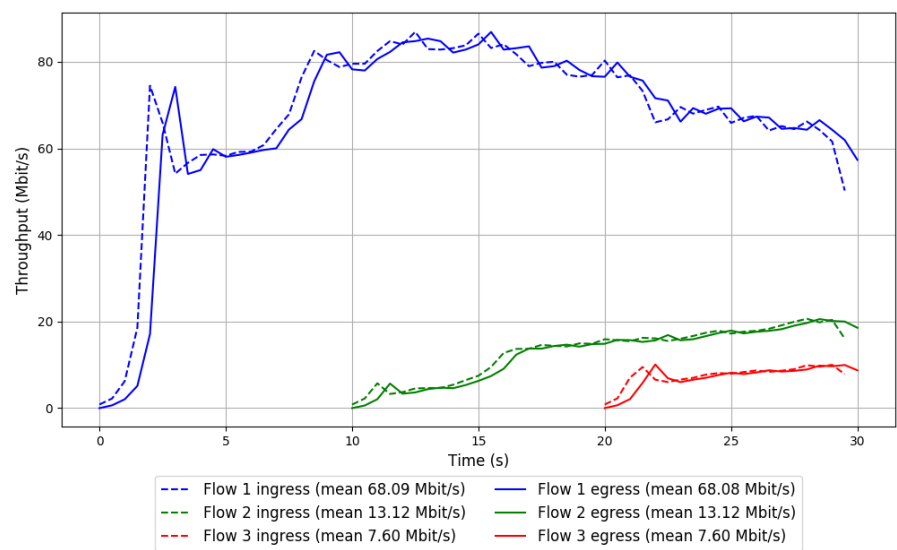Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-03-19 04:02:46
End at: 2019-03-19 04:03:16
Local clock offset: -1.843 ms
Remote clock offset: -17.85 ms


# Below is generated by plot.py at 2019-03-19 04:58:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.32 Mbit/s
95th percentile per-packet one-way delay: 64.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.08 Mbit/s
95th percentile per-packet one-way delay: 64.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 64.748 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 70.701 ms
Loss rate: 0.00%
```

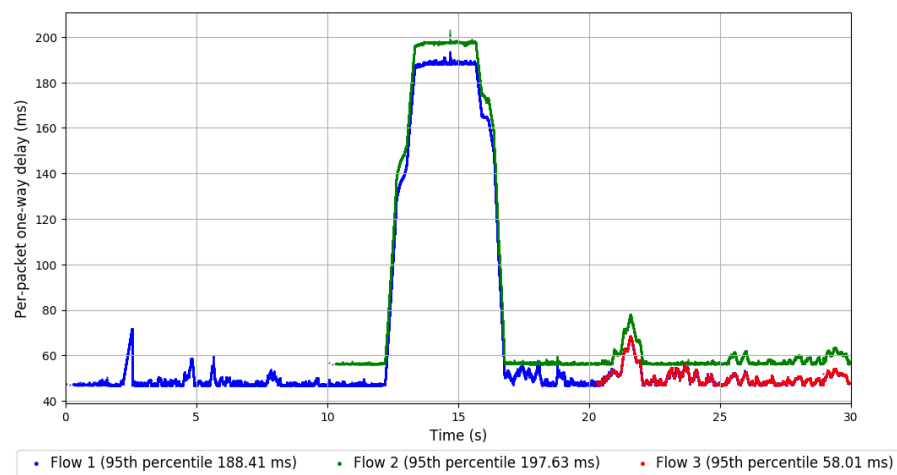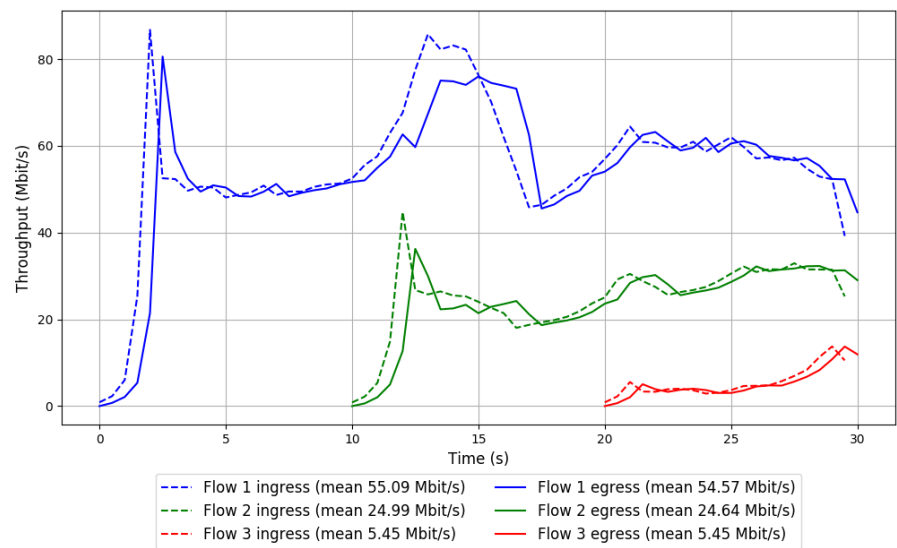Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-03-19 04:30:17
End at: 2019-03-19 04:30:47
Local clock offset: -0.513 ms
Remote clock offset: -18.525 ms


# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.73 Mbit/s
95th percentile per-packet one-way delay: 188.609 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 54.57 Mbit/s
95th percentile per-packet one-way delay: 188.415 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 197.627 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 58.011 ms
Loss rate: 0.00%
```
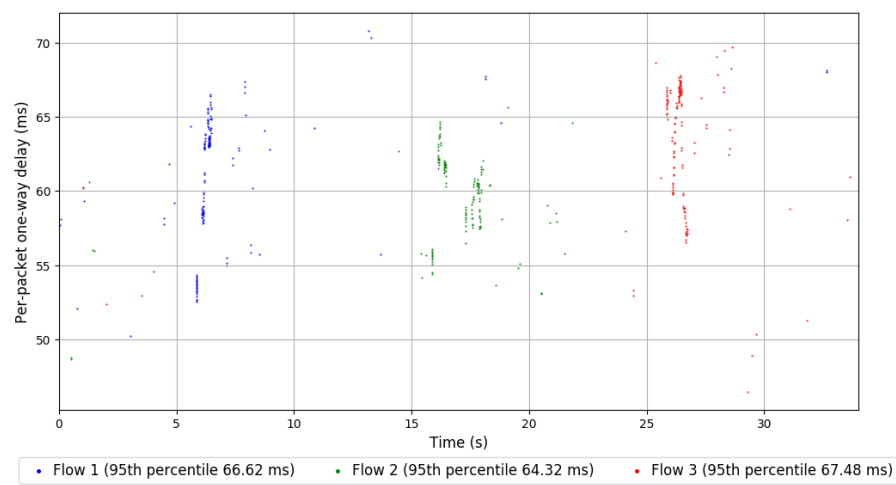
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 55.09 Mbit/s) --- Flow 1 egress (mean 54.57 Mbit/s)
Flow 2 ingress (mean 24.99 Mbit/s) --- Flow 2 egress (mean 24.64 Mbit/s)
Flow 3 ingress (mean 5.45 Mbit/s) --- Flow 3 egress (mean 5.45 Mbit/s)

Flow 1 (95th percentile 188.41 ms) • Flow 2 (95th percentile 197.63 ms) • Flow 3 (95th percentile 58.01 ms)
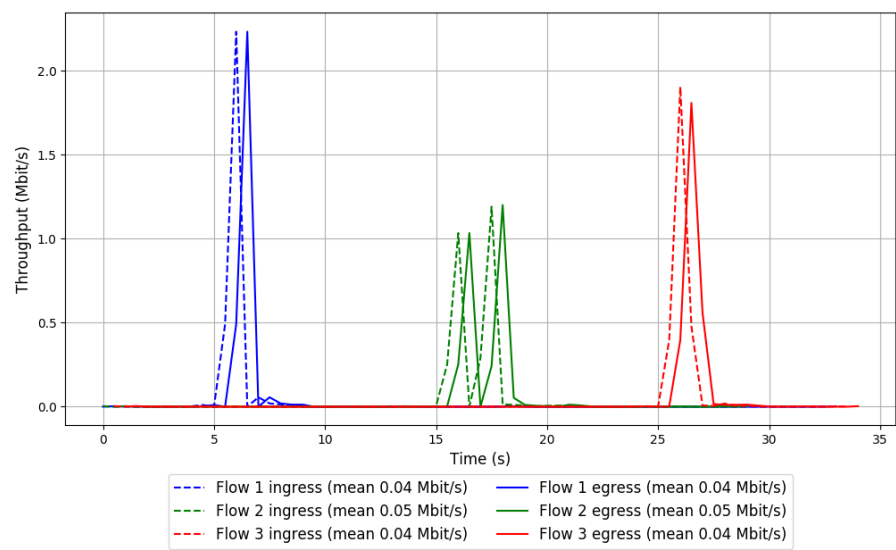
```
Run 1: Statistics of WebRTC media

Start at: 2019-03-19 02:43:18
End at: 2019-03-19 02:43:48
Local clock offset: -1.873 ms
Remote clock offset: -23.856 ms


# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 67.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 66.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.485 ms
Loss rate: 0.00%
```

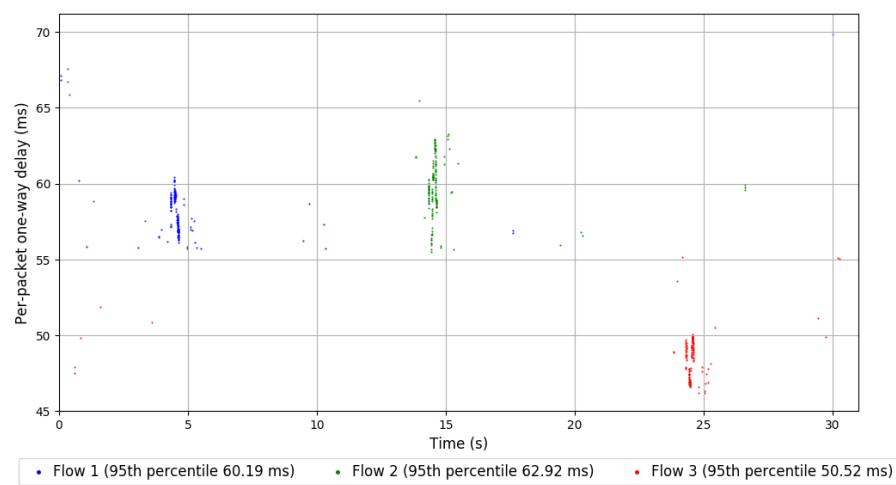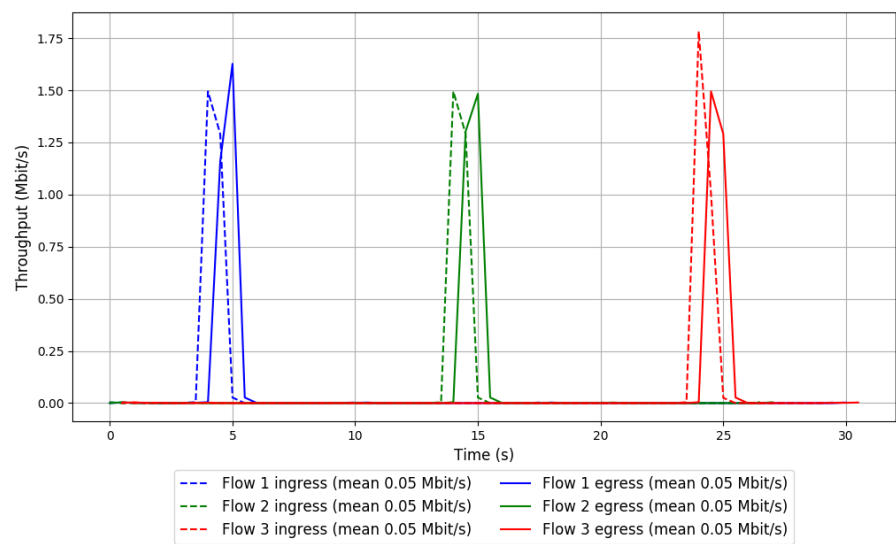Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-03-19 03:11:42
End at: 2019-03-19 03:12:12
Local clock offset: -0.918 ms
Remote clock offset: -5.394 ms


# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 62.294 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.188 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.920 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.521 ms
Loss rate: 0.00%
```

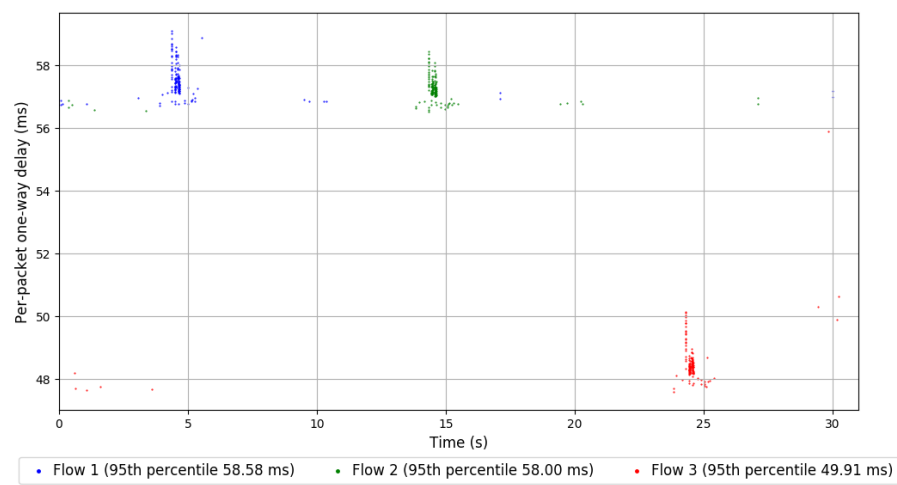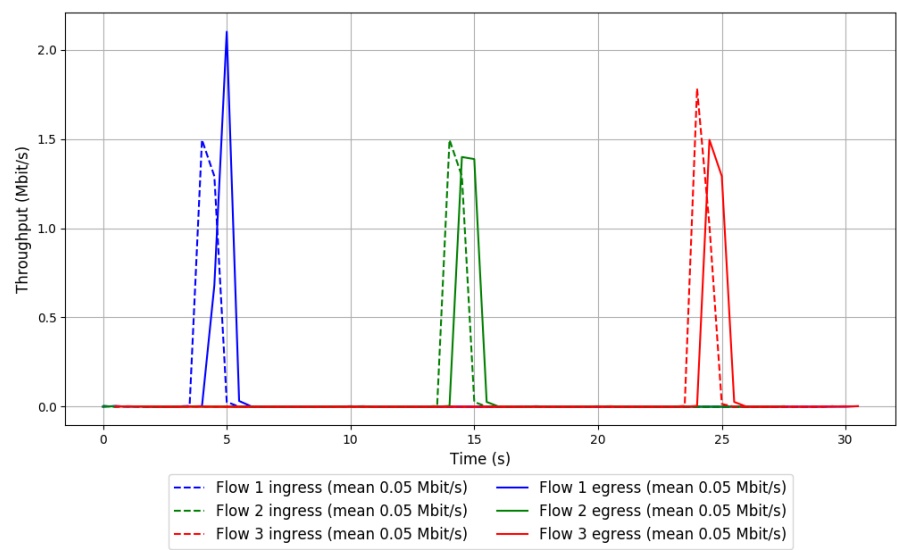Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-03-19 03:38:37
End at: 2019-03-19 03:39:07
Local clock offset: -1.003 ms
Remote clock offset: -12.229 ms


# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 58.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.004 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.907 ms
Loss rate: 0.00%
```
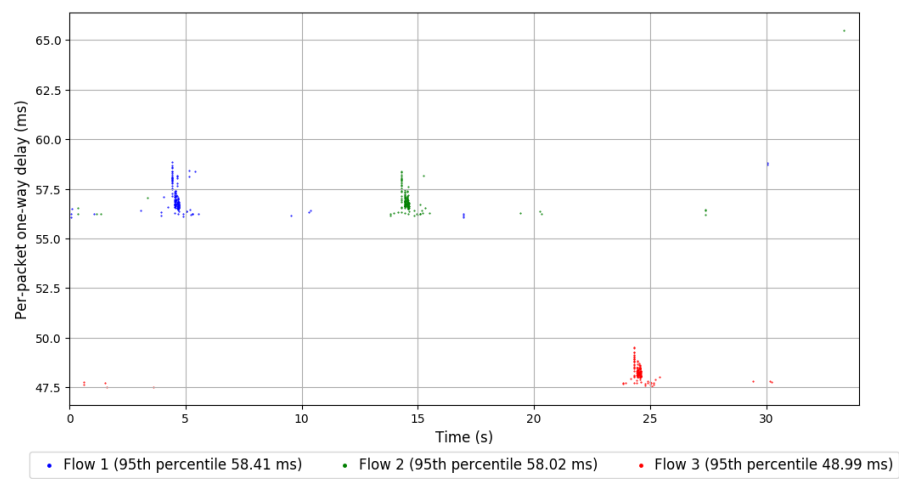
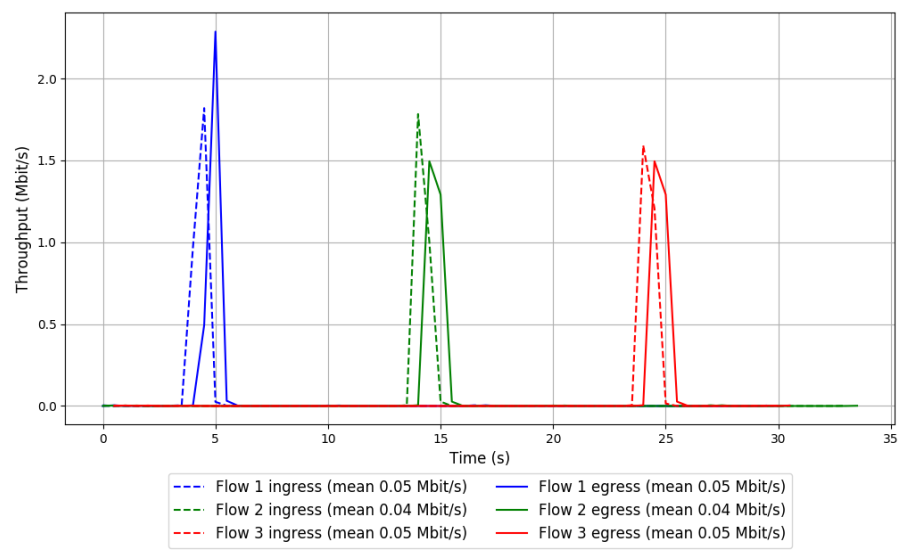Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-03-19 04:05:21
End at: 2019-03-19 04:05:51
Local clock offset: -1.88 ms
Remote clock offset: -17.716 ms

# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 58.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 58.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.995 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-03-19 04:32:50
End at: 2019-03-19 04:33:20
Local clock offset: -0.428 ms
Remote clock offset: -18.428 ms


# Below is generated by plot.py at 2019-03-19 04:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 57.684 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.525 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.819 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.525 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link