Pantheon Report

Generated at 2019-03-27 15:58:50 (UTC).

Data path: GCE London on `ens4` (*remote*) →GCE Sydney on `ens4` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.
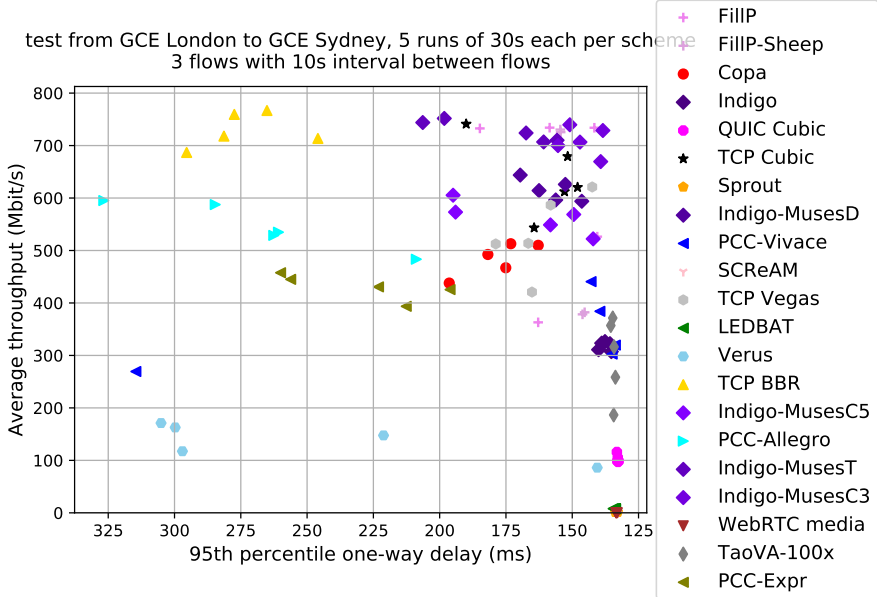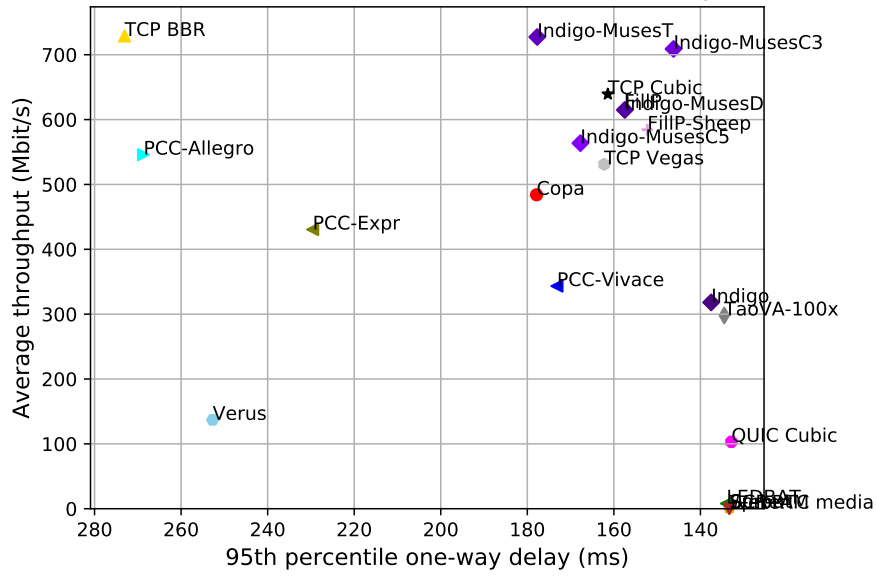
```
System info:
Linux 4.15.0-1028-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

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 GCE London to GCE Sydney, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from GCE London to GCE Sydney, 5 runs of 30s each per scheme
3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	409.49	355.23	257.05	263.35	264.82	251.58	3.42	4.52	7.39
Copa	5	251.74	253.12	197.52	161.62	188.26	172.28	1.01	1.57	3.87
TCP Cubic	5	343.86	325.72	243.21	147.56	165.43	185.33	0.95	1.63	4.34
FillP	5	338.32	316.84	214.66	168.86	136.36	135.41	1.22	1.14	3.32
FillP-Sheep	5	309.43	304.12	226.66	159.09	141.23	136.31	0.44	1.24	3.12
Indigo	5	163.54	162.78	143.78	135.93	138.24	145.01	0.84	1.30	3.15
Indigo-MusesC3	5	421.12	349.22	243.64	147.80	144.25	139.96	0.74	1.25	4.62
Indigo-MusesC5	5	339.33	314.70	88.24	171.57	161.35	133.43	0.68	1.44	5.15
Indigo-MusesD	5	384.71	326.89	78.04	151.82	170.90	133.70	0.96	1.59	4.82
Indigo-MusesT	5	462.38	380.82	91.15	182.37	162.88	133.91	0.82	1.62	4.63
LEDBAT	5	5.19	3.43	1.66	134.02	133.93	133.97	1.64	2.68	5.40
PCC-Allegro	5	296.66	269.54	219.37	253.86	239.66	296.17	5.65	4.94	7.73
PCC-Expr	5	265.00	179.43	144.18	236.52	161.54	231.16	4.29	1.97	4.85
QUIC Cubic	5	59.44	46.38	38.25	132.83	132.78	132.62	1.17	2.15	3.07
SCReAM	5	0.15	0.15	0.16	133.13	132.83	132.70	0.88	1.39	2.38
Sprout	5	0.63	0.63	0.66	133.27	133.12	133.09	0.84	1.54	3.12
TaoVA-100x	5	156.42	146.06	137.61	134.06	134.54	134.75	1.00	1.66	3.29
TCP Vegas	5	266.51	275.10	251.30	144.49	173.41	162.85	0.83	1.34	4.02
Verus	5	65.13	90.31	37.72	217.39	215.73	169.66	3.71	2.57	5.46
PCC-Vivace	5	202.97	160.69	104.83	176.01	143.48	146.22	1.26	2.53	4.27
WebRTC media	5	0.05	0.05	0.05	132.93	133.29	133.46	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-03-27 10:37:05
End at: 2019-03-27 10:37:35
Local clock offset: -0.353 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-03-27 13:58:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.41 Mbit/s
95th percentile per-packet one-way delay: 277.446 ms
Loss rate: 4.78%
-- Flow 1:
Average throughput: 421.84 Mbit/s
95th percentile per-packet one-way delay: 253.454 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 383.11 Mbit/s
95th percentile per-packet one-way delay: 284.342 ms
Loss rate: 7.51%
-- Flow 3:
Average throughput: 255.86 Mbit/s
95th percentile per-packet one-way delay: 246.142 ms
Loss rate: 6.19%
```
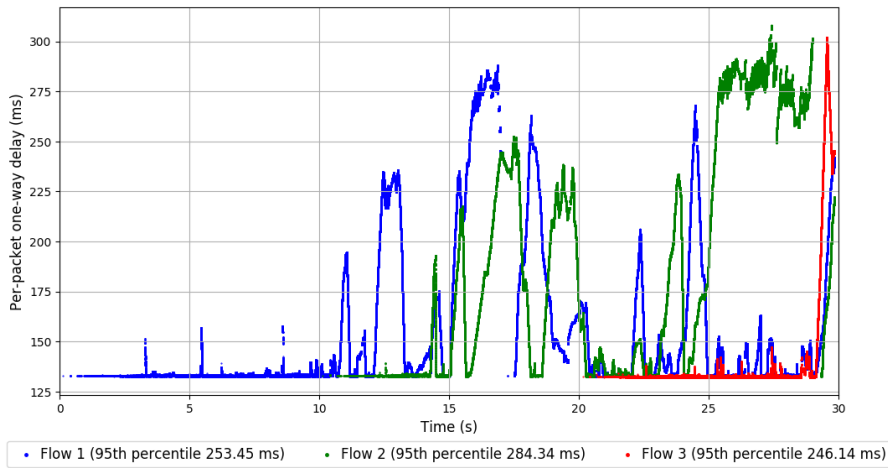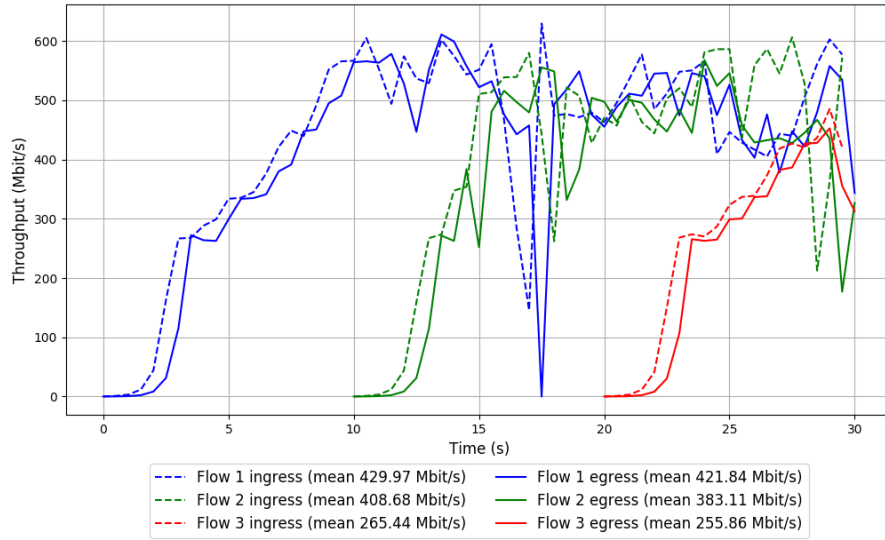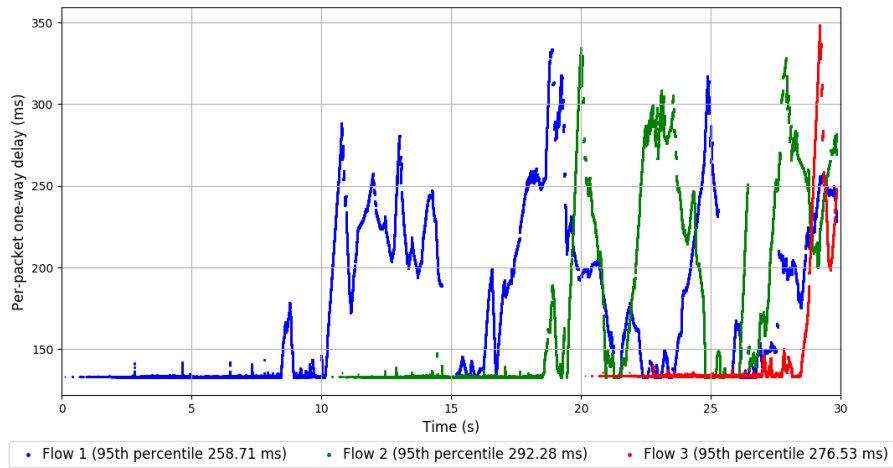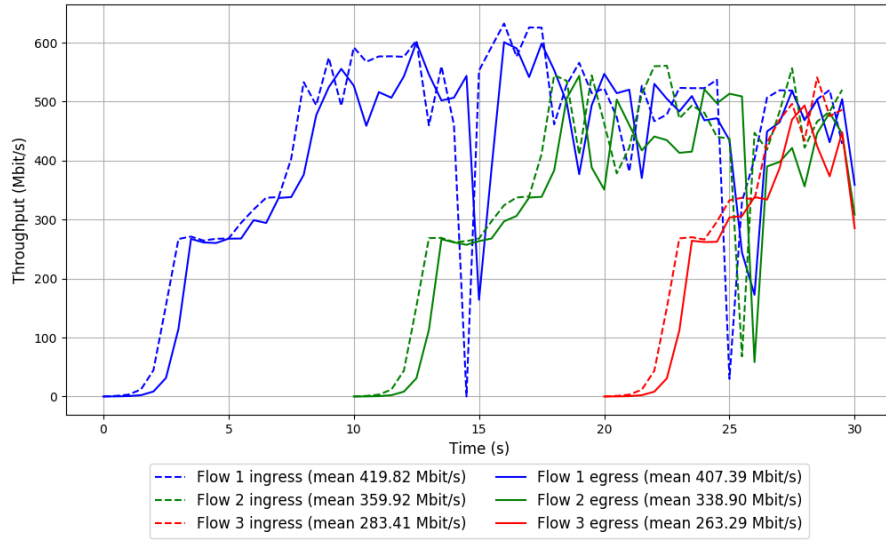
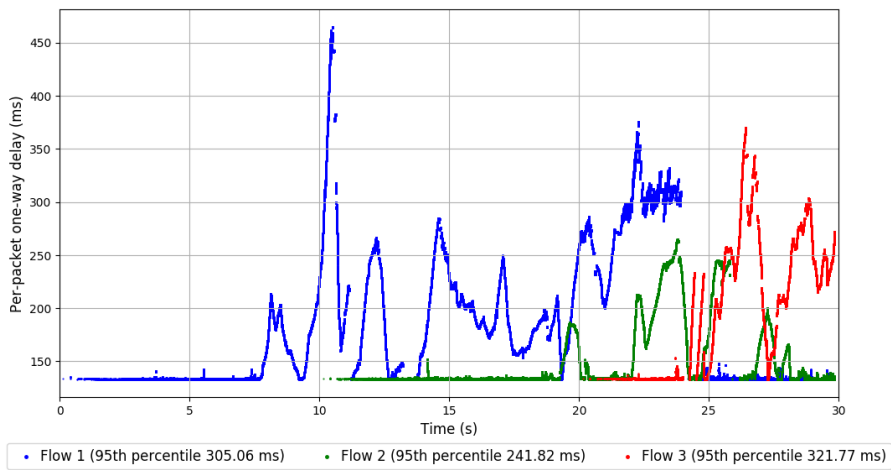Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-03-27 11:18:31
End at: 2019-03-27 11:19:01
Local clock offset: 0.307 ms
Remote clock offset: -0.147 ms


# Below is generated by plot.py at 2019-03-27 13:58:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 718.04 Mbit/s
95th percentile per-packet one-way delay: 281.364 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 407.39 Mbit/s
95th percentile per-packet one-way delay: 258.714 ms
Loss rate: 3.83%
-- Flow 2:
Average throughput: 338.90 Mbit/s
95th percentile per-packet one-way delay: 292.281 ms
Loss rate: 7.10%
-- Flow 3:
Average throughput: 263.29 Mbit/s
95th percentile per-packet one-way delay: 276.530 ms
Loss rate: 9.59%
```

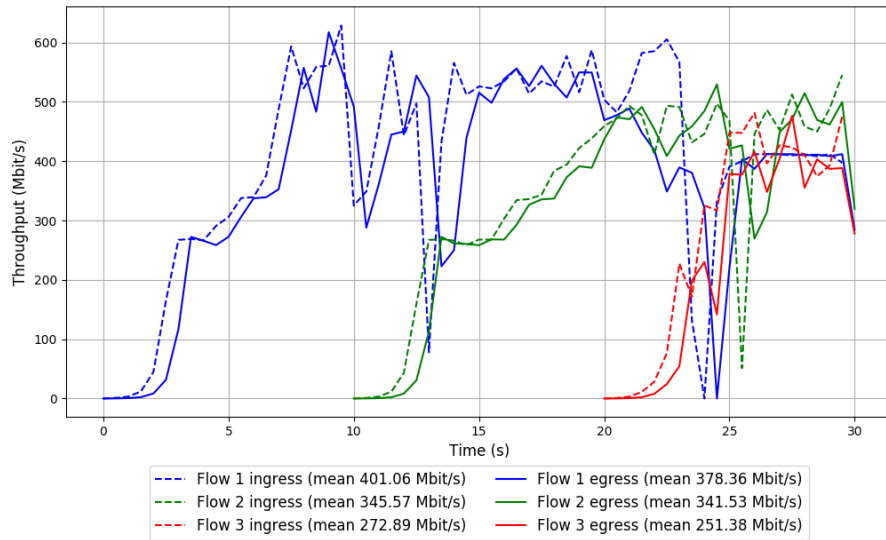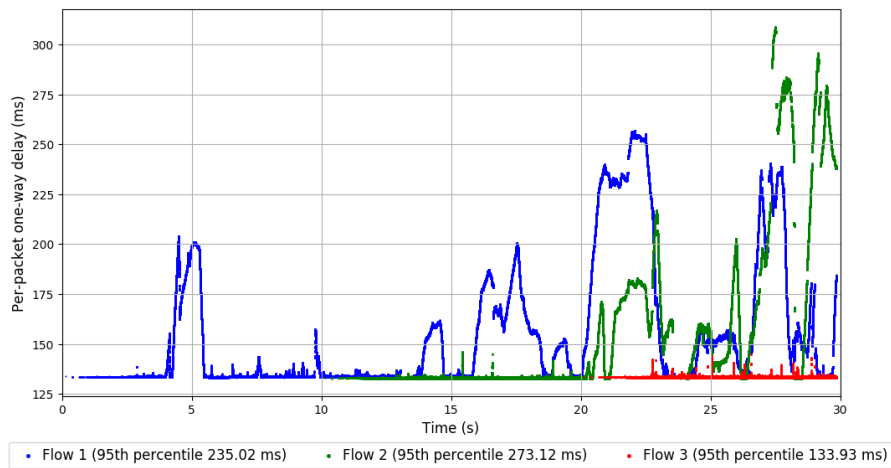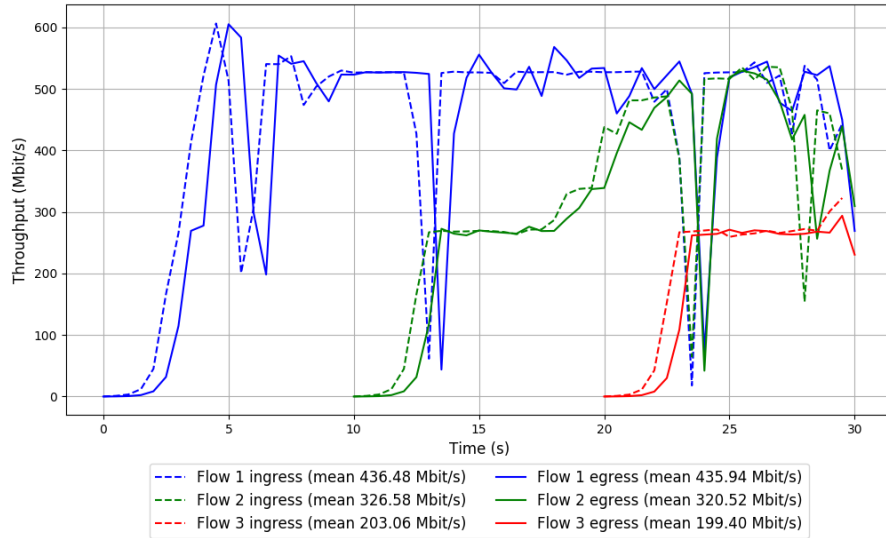Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 419.82 Mbit/s) --- Flow 1 egress (mean 407.39 Mbit/s)
Flow 2 ingress (mean 359.92 Mbit/s) --- Flow 2 egress (mean 338.90 Mbit/s)
Flow 3 ingress (mean 283.41 Mbit/s) --- Flow 3 egress (mean 263.29 Mbit/s)

Flow 1 (95th percentile 258.71 ms)   Flow 2 (95th percentile 292.28 ms)   Flow 3 (95th percentile 276.53 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2019-03-27 12:00:50
End at: 2019-03-27 12:01:20
Local clock offset: 0.28 ms
Remote clock offset: -0.148 ms


# Below is generated by plot.py at 2019-03-27 13:58:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.86 Mbit/s
95th percentile per-packet one-way delay: 295.425 ms
Loss rate: 5.72%
-- Flow 1:
Average throughput: 378.36 Mbit/s
95th percentile per-packet one-way delay: 305.065 ms
Loss rate: 6.51%
-- Flow 2:
Average throughput: 341.53 Mbit/s
95th percentile per-packet one-way delay: 241.816 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 251.38 Mbit/s
95th percentile per-packet one-way delay: 321.773 ms
Loss rate: 10.39%
```

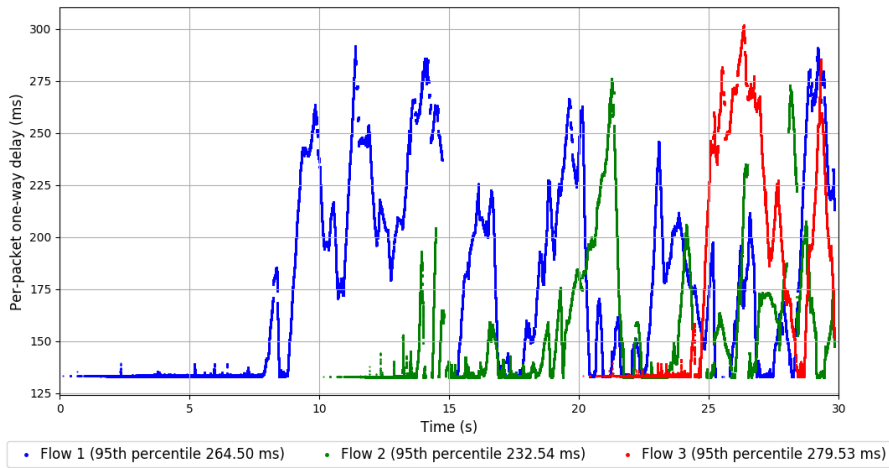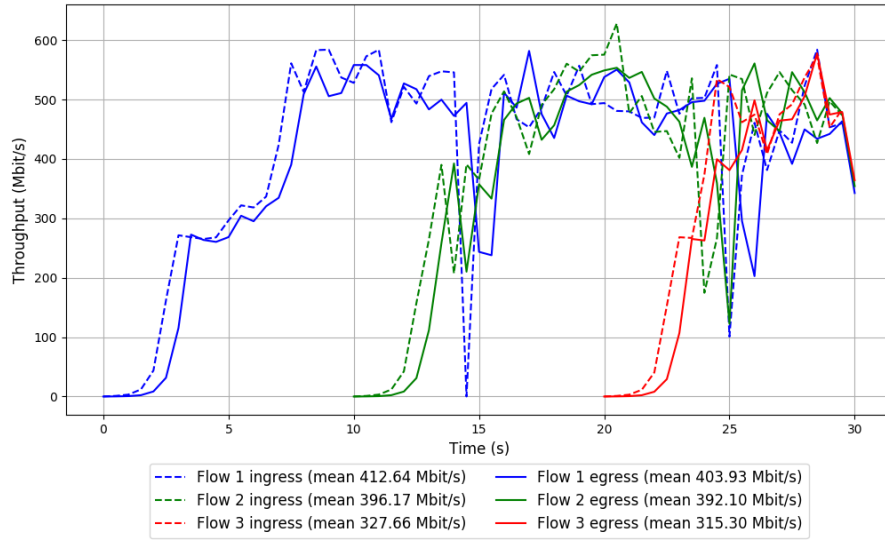Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 401.06 Mbit/s) --- Flow 1 egress (mean 378.36 Mbit/s) ---
Flow 2 ingress (mean 345.57 Mbit/s) --- Flow 2 egress (mean 341.53 Mbit/s) ---
Flow 3 ingress (mean 272.89 Mbit/s) --- Flow 3 egress (mean 251.38 Mbit/s) ---

Flow 1 (95th percentile 305.06 ms) • Flow 2 (95th percentile 241.82 ms) • Flow 3 (95th percentile 321.77 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-03-27 12:44:35
End at: 2019-03-27 12:45:05
Local clock offset: 0.215 ms
Remote clock offset: -0.141 ms


# Below is generated by plot.py at 2019-03-27 13:58:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 713.54 Mbit/s
95th percentile per-packet one-way delay: 245.920 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 435.94 Mbit/s
95th percentile per-packet one-way delay: 235.018 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 320.52 Mbit/s
95th percentile per-packet one-way delay: 273.116 ms
Loss rate: 3.16%
-- Flow 3:
Average throughput: 199.40 Mbit/s
95th percentile per-packet one-way delay: 133.934 ms
Loss rate: 4.44%
```

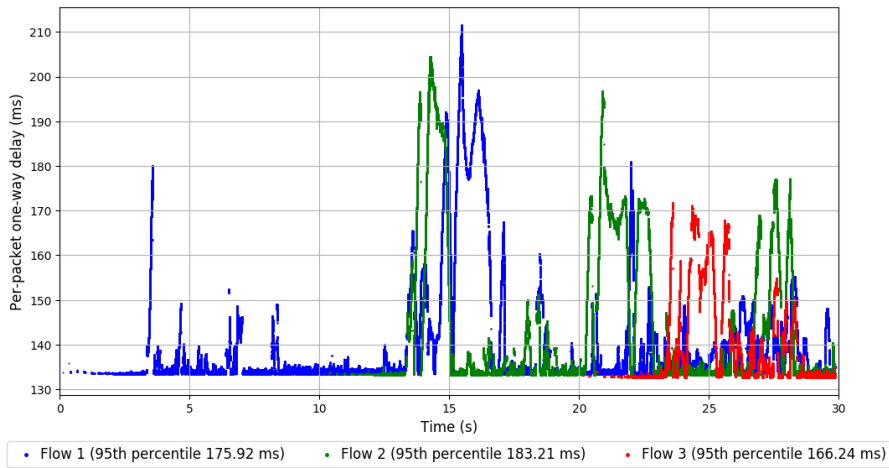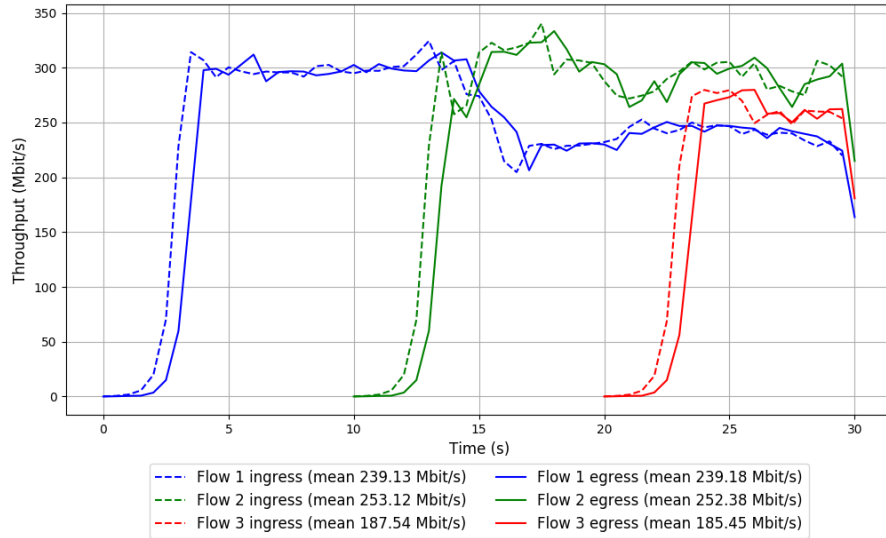Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 436.48 Mbit/s) --- Flow 1 egress (mean 435.94 Mbit/s)
Flow 2 ingress (mean 326.58 Mbit/s) --- Flow 2 egress (mean 320.52 Mbit/s)
Flow 3 ingress (mean 203.06 Mbit/s) --- Flow 3 egress (mean 199.40 Mbit/s)

Flow 1 (95th percentile 235.02 ms)   Flow 2 (95th percentile 273.12 ms)   Flow 3 (95th percentile 133.93 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-03-27 13:27:35
End at: 2019-03-27 13:28:05
Local clock offset: 0.029 ms
Remote clock offset: -0.192 ms


# Below is generated by plot.py at 2019-03-27 13:59:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 766.85 Mbit/s
95th percentile per-packet one-way delay: 265.127 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 403.93 Mbit/s
95th percentile per-packet one-way delay: 264.505 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 392.10 Mbit/s
95th percentile per-packet one-way delay: 232.545 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 315.30 Mbit/s
95th percentile per-packet one-way delay: 279.526 ms
Loss rate: 6.36%
```
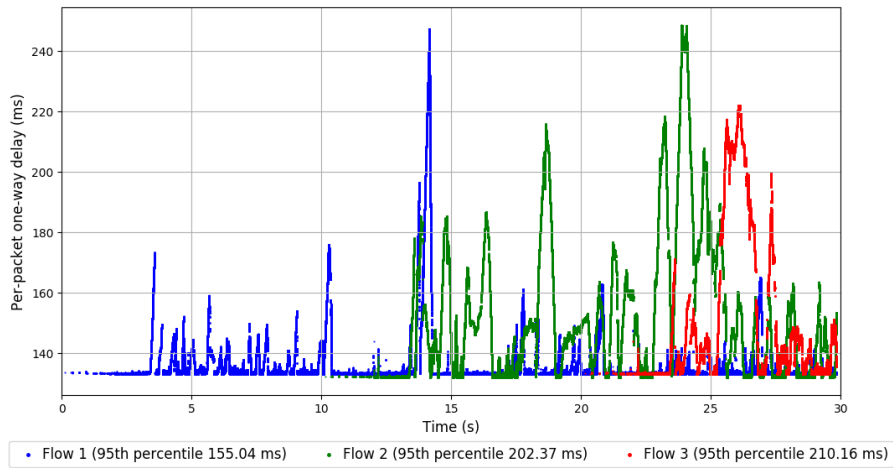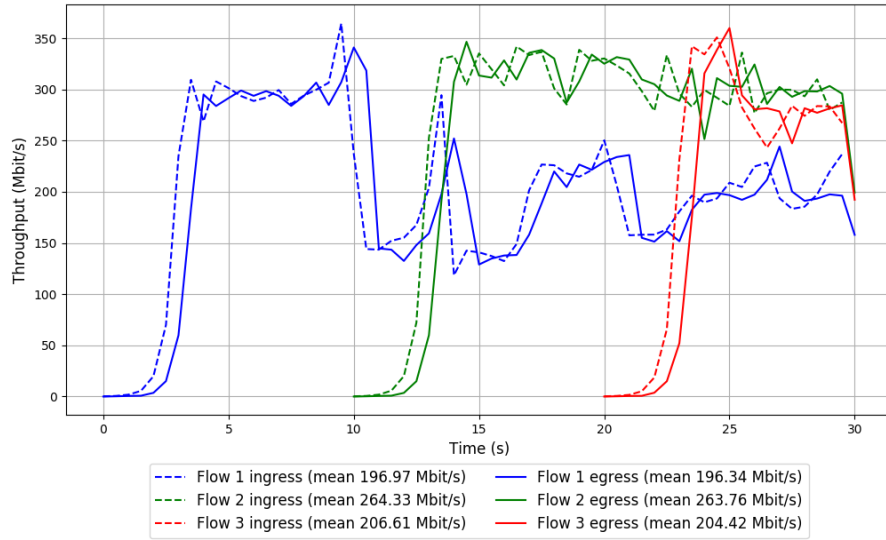
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 412.64 Mbit/s) — Flow 1 egress (mean 403.93 Mbit/s)
Flow 2 ingress (mean 396.17 Mbit/s) — Flow 2 egress (mean 392.10 Mbit/s)
Flow 3 ingress (mean 327.66 Mbit/s) — Flow 3 egress (mean 315.30 Mbit/s)

Flow 1 (95th percentile 264.50 ms)   Flow 2 (95th percentile 232.54 ms)   Flow 3 (95th percentile 279.53 ms)

```
Run 1: Statistics of Copa

Start at: 2019-03-27 10:16:17
End at: 2019-03-27 10:16:47
Local clock offset: 0.316 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2019-03-27 14:00:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.06 Mbit/s
95th percentile per-packet one-way delay: 175.071 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 239.18 Mbit/s
95th percentile per-packet one-way delay: 175.919 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 252.38 Mbit/s
95th percentile per-packet one-way delay: 183.209 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 185.45 Mbit/s
95th percentile per-packet one-way delay: 166.236 ms
Loss rate: 3.75%
```
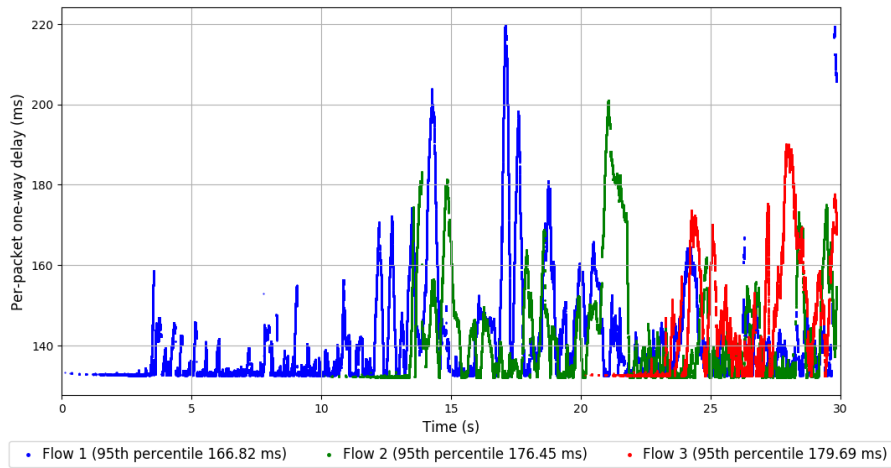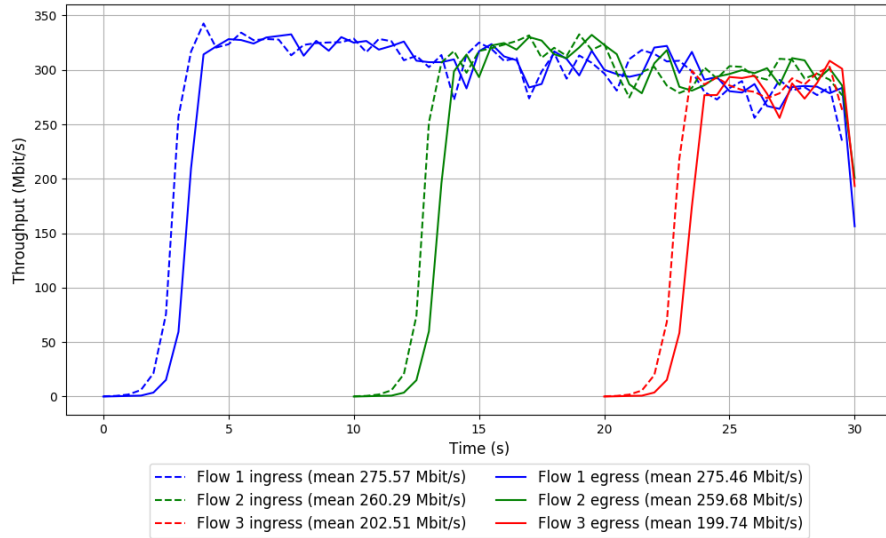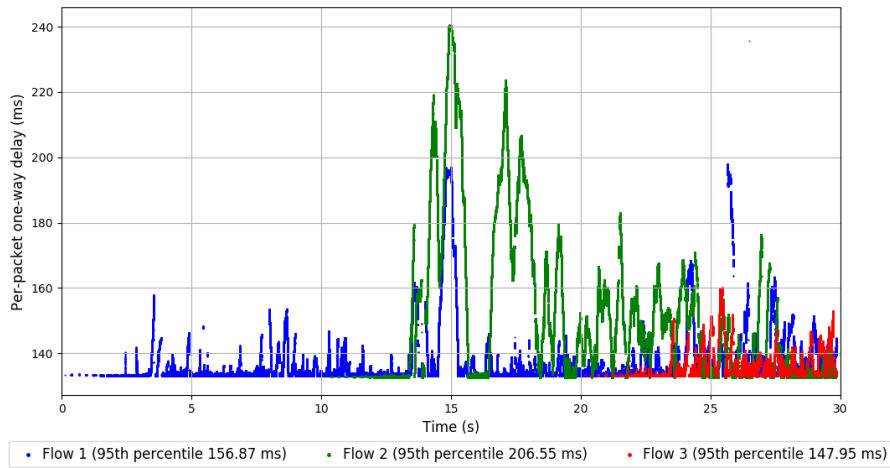
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-03-27 10:58:43
End at: 2019-03-27 10:59:13
Local clock offset: -0.117 ms
Remote clock offset: -0.108 ms


# Below is generated by plot.py at 2019-03-27 14:00:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.92 Mbit/s
95th percentile per-packet one-way delay: 196.389 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 196.34 Mbit/s
95th percentile per-packet one-way delay: 155.042 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 263.76 Mbit/s
95th percentile per-packet one-way delay: 202.372 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 204.42 Mbit/s
95th percentile per-packet one-way delay: 210.155 ms
Loss rate: 3.71%
```
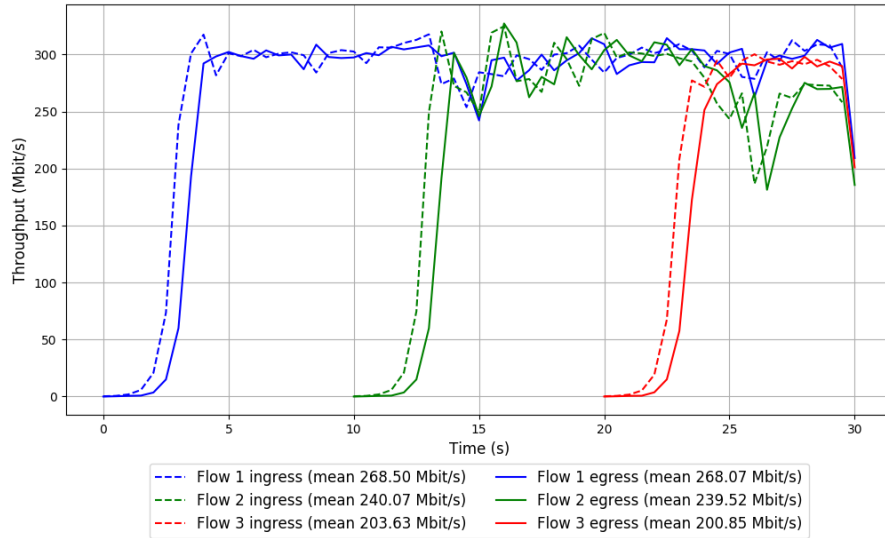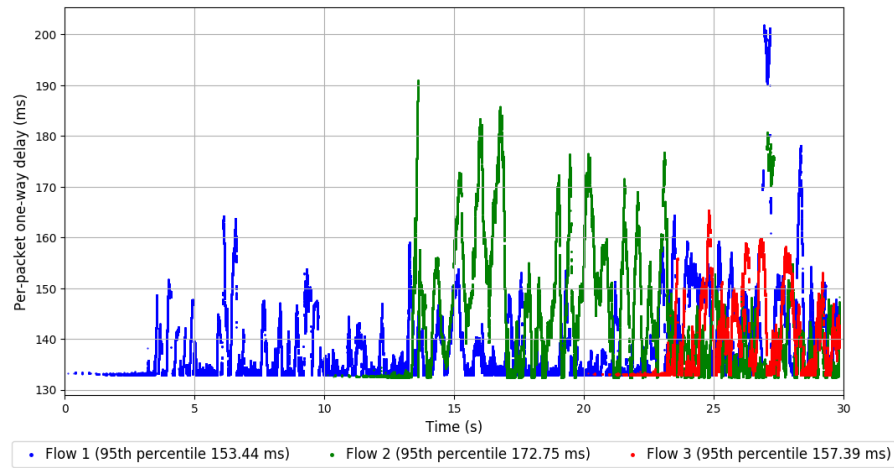
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 196.97 Mbit/s) — — — Flow 1 egress (mean 196.34 Mbit/s)
Flow 2 ingress (mean 264.33 Mbit/s) — — — Flow 2 egress (mean 263.76 Mbit/s)
Flow 3 ingress (mean 206.61 Mbit/s) — — — Flow 3 egress (mean 204.42 Mbit/s)

Flow 1 (95th percentile 155.04 ms)　Flow 2 (95th percentile 202.37 ms)　Flow 3 (95th percentile 210.16 ms)

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```
Run 3: Statistics of Copa

Start at: 2019-03-27 11:40:26
End at: 2019-03-27 11:40:56
Local clock offset: -0.343 ms
Remote clock offset: -0.173 ms


# Below is generated by plot.py at 2019-03-27 14:02:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.88 Mbit/s
95th percentile per-packet one-way delay: 173.183 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 275.46 Mbit/s
95th percentile per-packet one-way delay: 166.816 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 259.68 Mbit/s
95th percentile per-packet one-way delay: 176.446 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 199.74 Mbit/s
95th percentile per-packet one-way delay: 179.685 ms
Loss rate: 4.01%
```
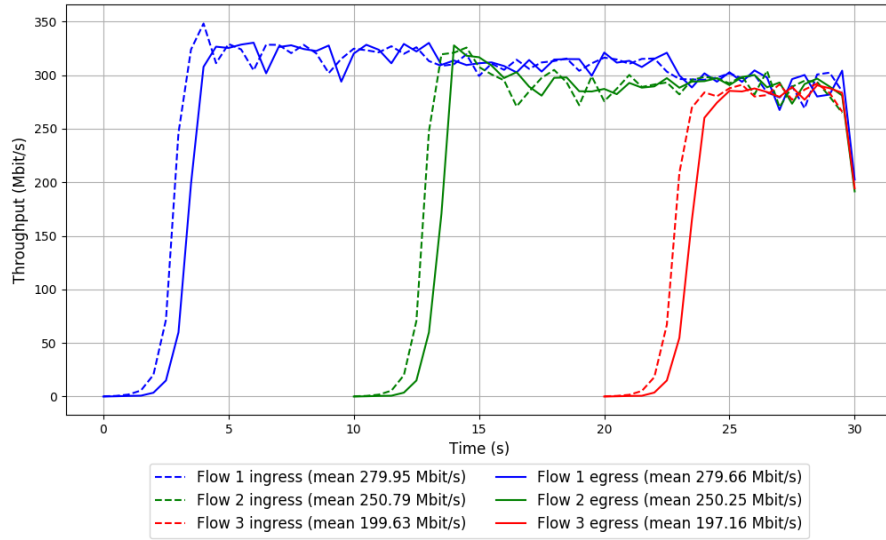
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 275.57 Mbit/s) --- Flow 1 egress (mean 275.46 Mbit/s)
Flow 2 ingress (mean 260.29 Mbit/s) --- Flow 2 egress (mean 259.68 Mbit/s)
Flow 3 ingress (mean 202.51 Mbit/s) --- Flow 3 egress (mean 199.74 Mbit/s)

Flow 1 (95th percentile 166.82 ms)   Flow 2 (95th percentile 176.45 ms)   Flow 3 (95th percentile 179.69 ms)

```
Run 4: Statistics of Copa

Start at: 2019-03-27 12:23:30
End at: 2019-03-27 12:24:00
Local clock offset: 0.279 ms
Remote clock offset: -0.119 ms


# Below is generated by plot.py at 2019-03-27 14:15:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.40 Mbit/s
95th percentile per-packet one-way delay: 181.821 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 268.07 Mbit/s
95th percentile per-packet one-way delay: 156.866 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 239.52 Mbit/s
95th percentile per-packet one-way delay: 206.551 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 200.85 Mbit/s
95th percentile per-packet one-way delay: 147.949 ms
Loss rate: 4.00%
```
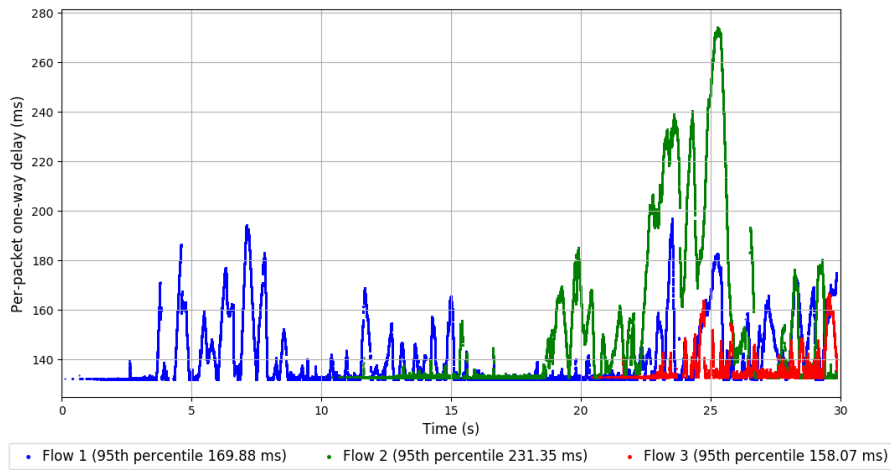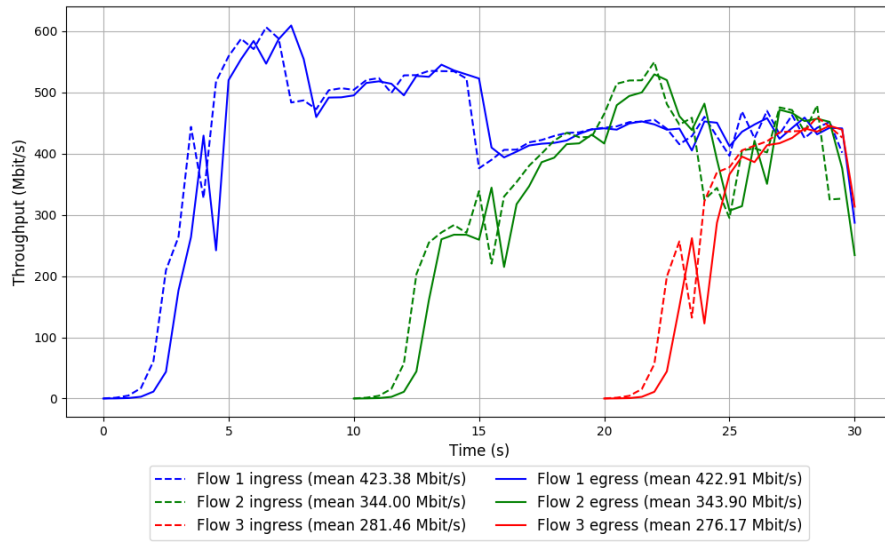
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 268.50 Mbit/s)   Flow 1 egress (mean 268.07 Mbit/s)
Flow 2 ingress (mean 240.07 Mbit/s)   Flow 2 egress (mean 239.52 Mbit/s)
Flow 3 ingress (mean 203.63 Mbit/s)   Flow 3 egress (mean 200.85 Mbit/s)

Flow 1 (95th percentile 156.87 ms)   Flow 2 (95th percentile 206.55 ms)   Flow 3 (95th percentile 147.95 ms)

```
Run 5: Statistics of Copa

Start at: 2019-03-27 13:07:04
End at: 2019-03-27 13:07:34
Local clock offset: 0.013 ms
Remote clock offset: -0.104 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 509.86 Mbit/s
95th percentile per-packet one-way delay: 162.830 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 279.66 Mbit/s
95th percentile per-packet one-way delay: 153.436 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 250.25 Mbit/s
95th percentile per-packet one-way delay: 172.746 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 197.16 Mbit/s
95th percentile per-packet one-way delay: 157.392 ms
Loss rate: 3.88%
```
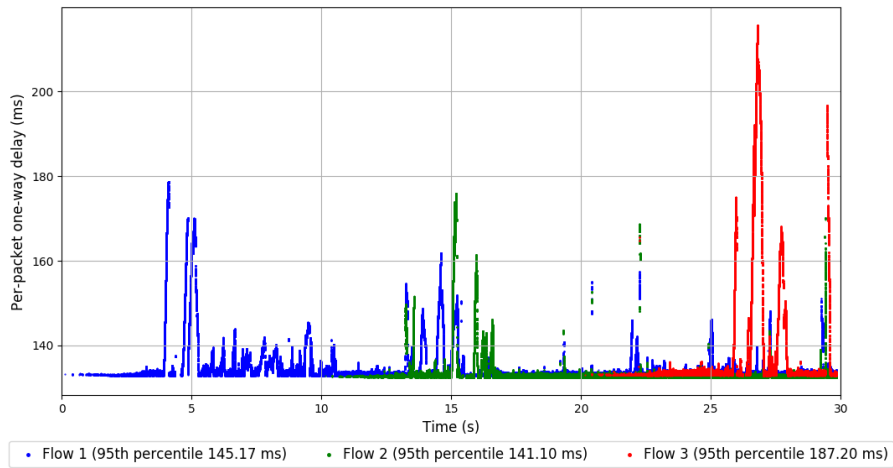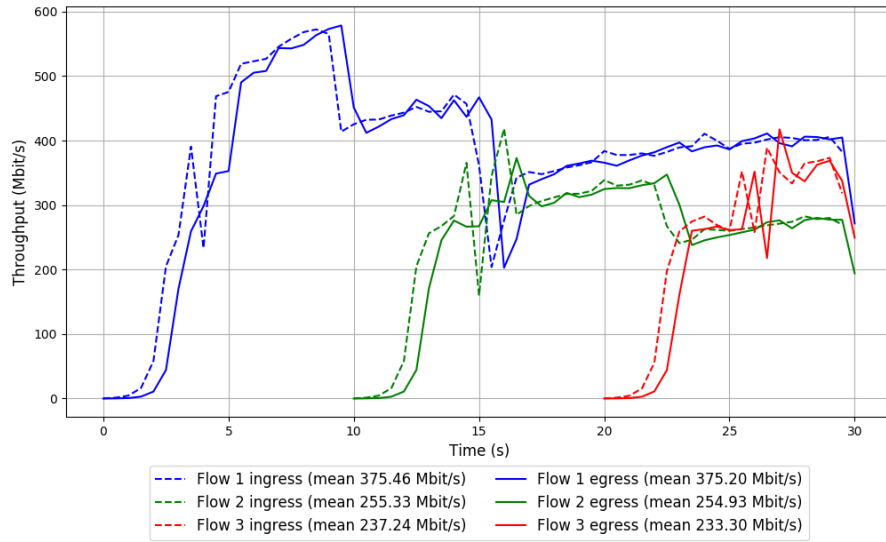
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-03-27 10:03:14
End at: 2019-03-27 10:03:44
Local clock offset: -0.064 ms
Remote clock offset: -0.089 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 741.10 Mbit/s
95th percentile per-packet one-way delay: 189.999 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 422.91 Mbit/s
95th percentile per-packet one-way delay: 169.876 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 343.90 Mbit/s
95th percentile per-packet one-way delay: 231.346 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 276.17 Mbit/s
95th percentile per-packet one-way delay: 158.073 ms
Loss rate: 4.49%
```
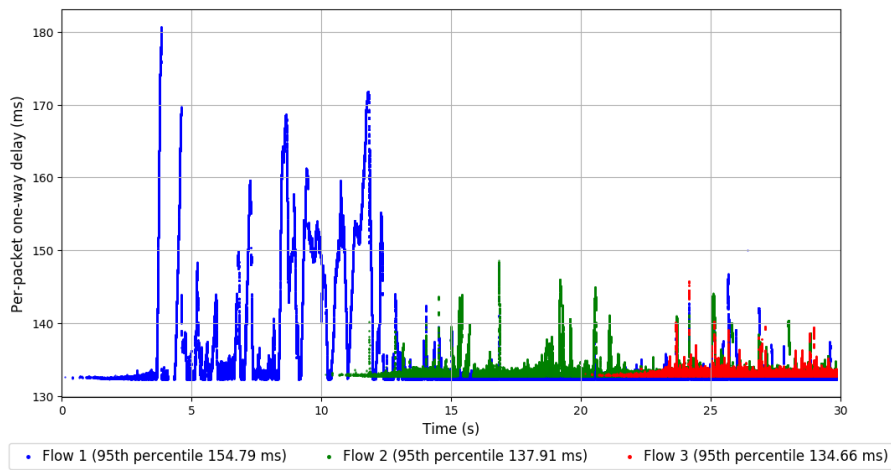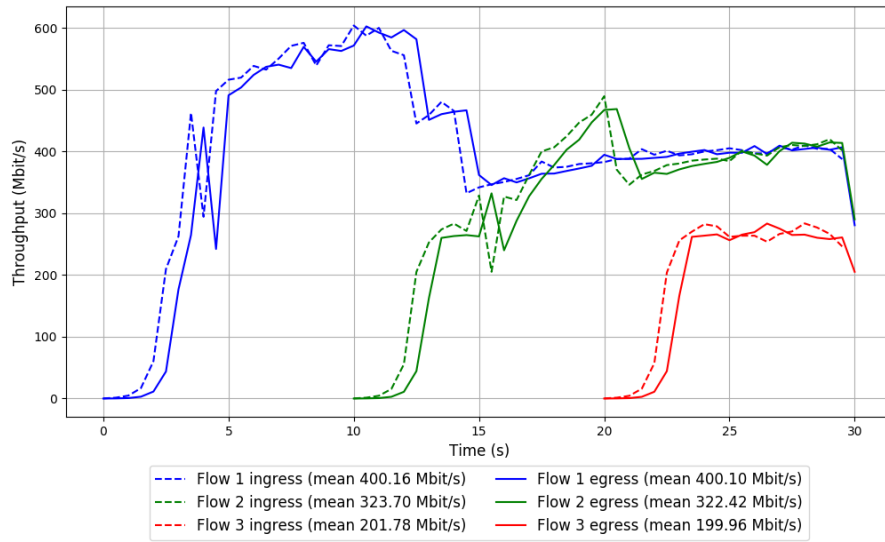
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-03-27 10:46:13
End at: 2019-03-27 10:46:43
Local clock offset: -0.132 ms
Remote clock offset: -0.2 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 620.41 Mbit/s
95th percentile per-packet one-way delay: 147.990 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 375.20 Mbit/s
95th percentile per-packet one-way delay: 145.167 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 254.93 Mbit/s
95th percentile per-packet one-way delay: 141.096 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 233.30 Mbit/s
95th percentile per-packet one-way delay: 187.202 ms
Loss rate: 4.29%
```
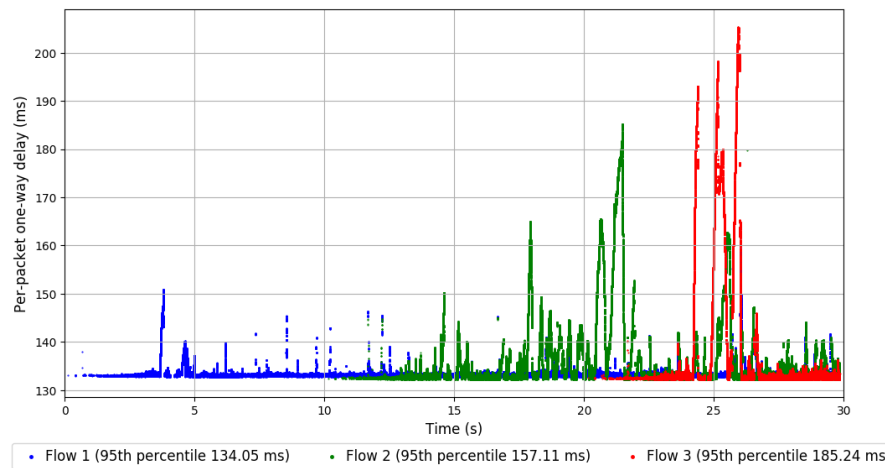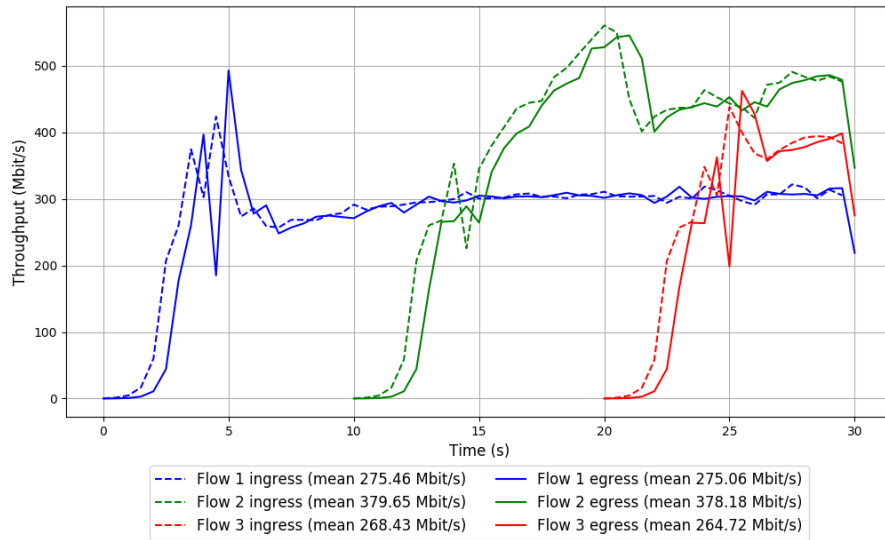
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-03-27 11:27:24
End at: 2019-03-27 11:27:54
Local clock offset: -0.15 ms
Remote clock offset: -0.139 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 679.21 Mbit/s
95th percentile per-packet one-way delay: 151.722 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 400.10 Mbit/s
95th percentile per-packet one-way delay: 154.790 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 322.42 Mbit/s
95th percentile per-packet one-way delay: 137.911 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 199.96 Mbit/s
95th percentile per-packet one-way delay: 134.663 ms
Loss rate: 3.54%
```
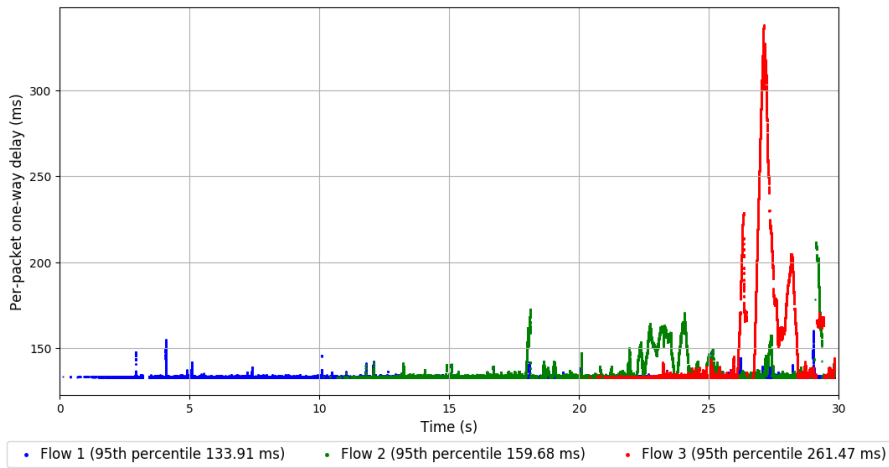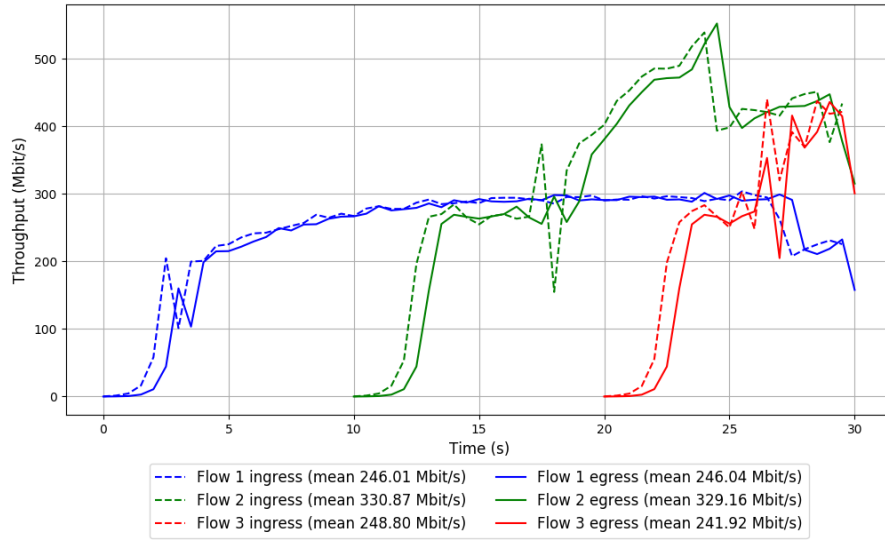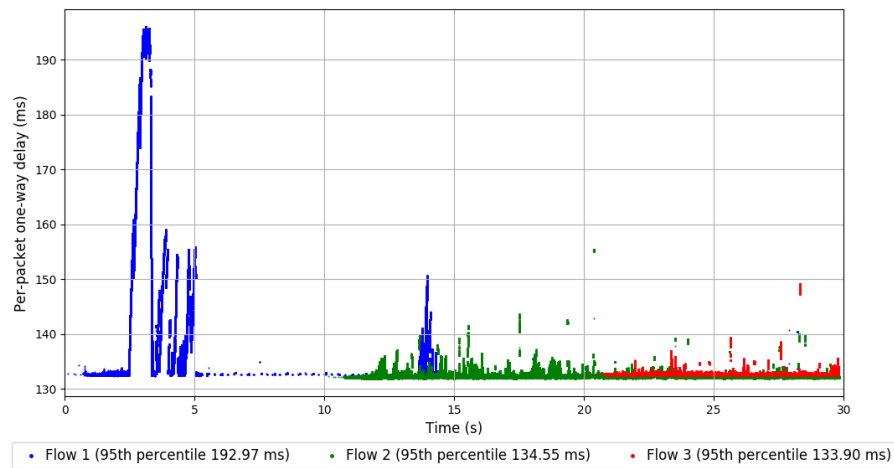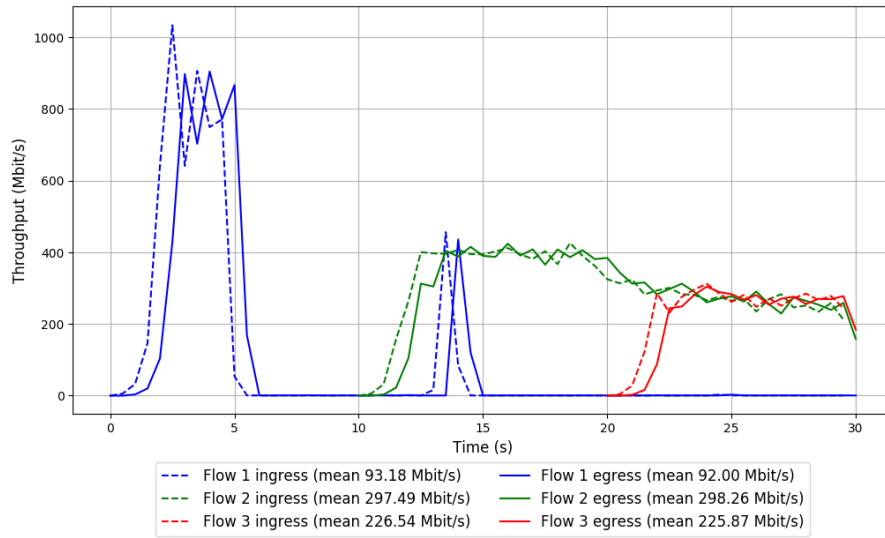
Run 3: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 400.16 Mbit/s) —— Flow 1 egress (mean 400.10 Mbit/s)
- - - Flow 2 ingress (mean 323.70 Mbit/s) —— Flow 2 egress (mean 322.42 Mbit/s)
- - - Flow 3 ingress (mean 201.78 Mbit/s) —— Flow 3 egress (mean 199.96 Mbit/s)

• Flow 1 (95th percentile 154.79 ms)   • Flow 2 (95th percentile 137.91 ms)   • Flow 3 (95th percentile 134.66 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-03-27 12:10:32
End at: 2019-03-27 12:11:02
Local clock offset: -0.163 ms
Remote clock offset: -0.167 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 612.16 Mbit/s
95th percentile per-packet one-way delay: 152.910 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 275.06 Mbit/s
95th percentile per-packet one-way delay: 134.046 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 378.18 Mbit/s
95th percentile per-packet one-way delay: 157.110 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 264.72 Mbit/s
95th percentile per-packet one-way delay: 185.236 ms
Loss rate: 4.01%
```

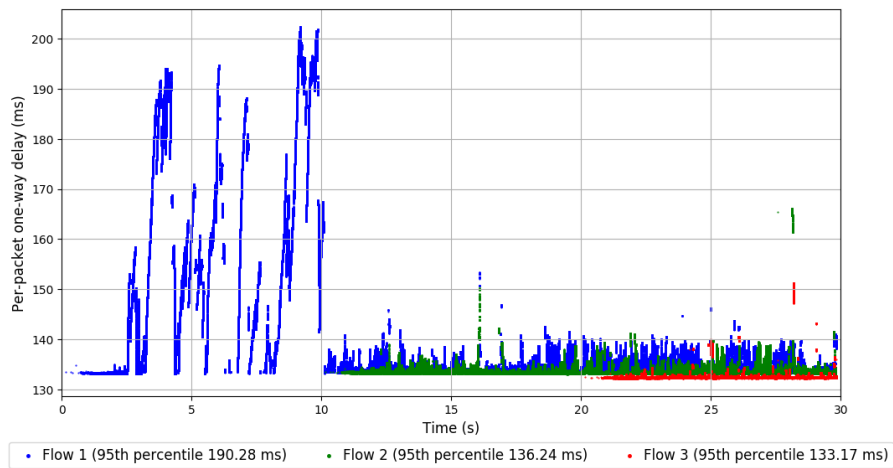Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 275.46 Mbit/s)   Flow 1 egress (mean 275.06 Mbit/s)
Flow 2 ingress (mean 379.65 Mbit/s)   Flow 2 egress (mean 378.18 Mbit/s)
Flow 3 ingress (mean 268.43 Mbit/s)   Flow 3 egress (mean 264.72 Mbit/s)

Flow 1 (95th percentile 134.05 ms)   Flow 2 (95th percentile 157.11 ms)   Flow 3 (95th percentile 185.24 ms)
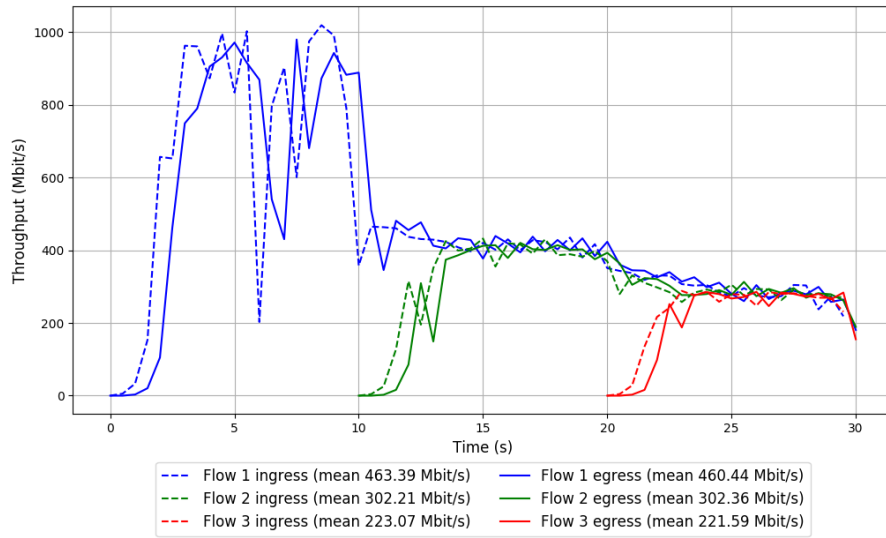
```
Run 5: Statistics of TCP Cubic

Start at: 2019-03-27 12:54:10
End at: 2019-03-27 12:54:40
Local clock offset: 0.046 ms
Remote clock offset: -0.121 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.30 Mbit/s
95th percentile per-packet one-way delay: 164.370 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 246.04 Mbit/s
95th percentile per-packet one-way delay: 133.911 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 329.16 Mbit/s
95th percentile per-packet one-way delay: 159.677 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 241.92 Mbit/s
95th percentile per-packet one-way delay: 261.468 ms
Loss rate: 5.36%
```
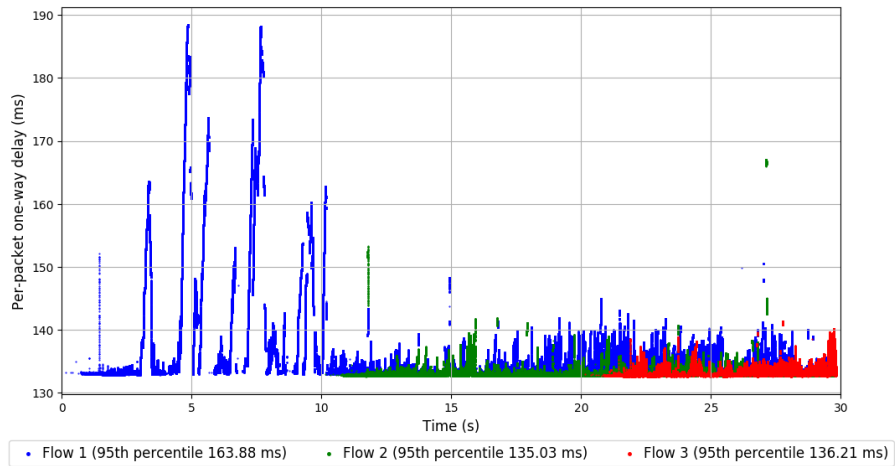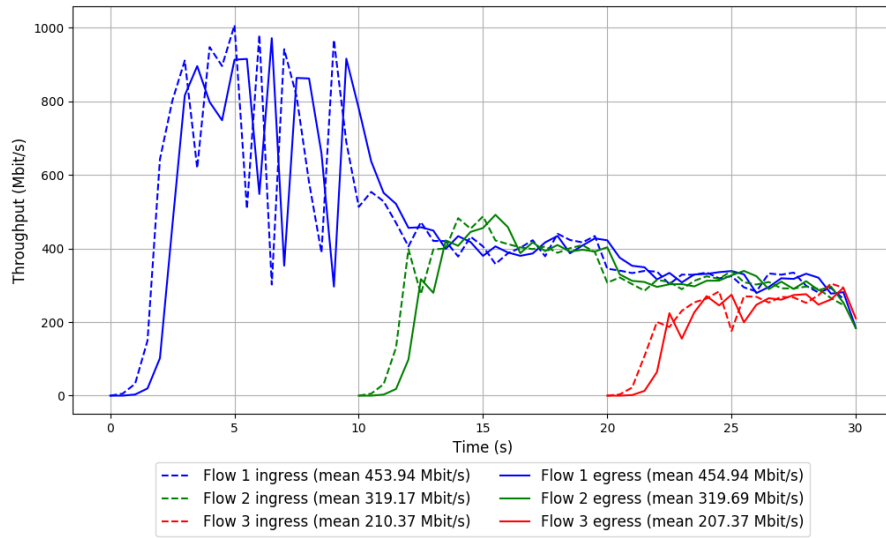
Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2019-03-27 10:22:20
End at: 2019-03-27 10:22:50
Local clock offset: -0.484 ms
Remote clock offset: -0.112 ms


# Below is generated by plot.py at 2019-03-27 14:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.06 Mbit/s
95th percentile per-packet one-way delay: 162.851 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 192.971 ms
Loss rate: 2.07%
-- Flow 2:
Average throughput: 298.26 Mbit/s
95th percentile per-packet one-way delay: 134.550 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 225.87 Mbit/s
95th percentile per-packet one-way delay: 133.901 ms
Loss rate: 3.10%
```
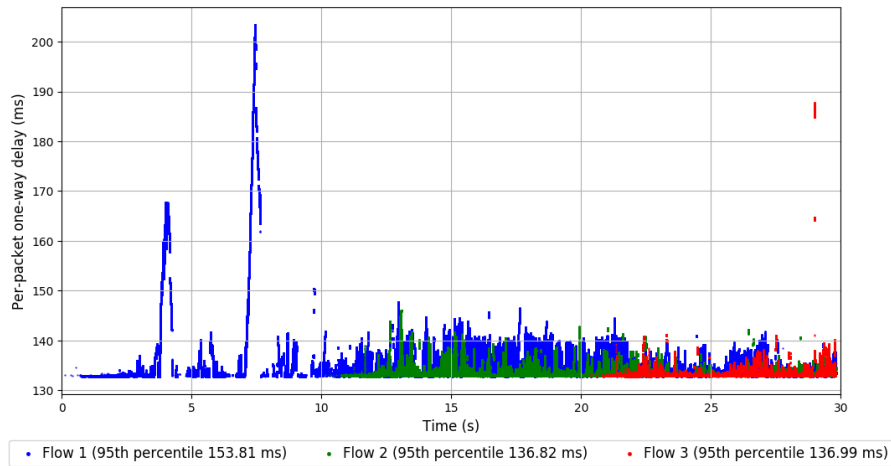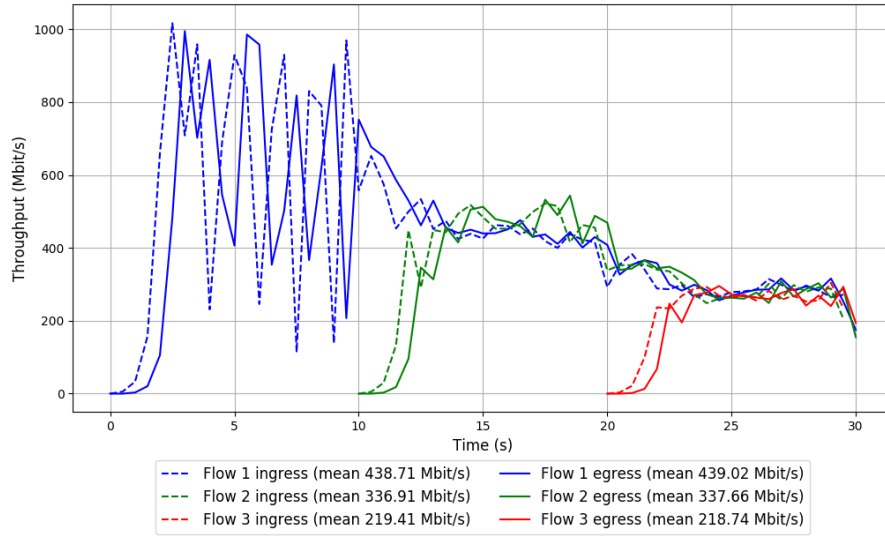
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-03-27 11:05:07
End at: 2019-03-27 11:05:38
Local clock offset: 0.142 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2019-03-27 14:29:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 732.69 Mbit/s
95th percentile per-packet one-way delay: 184.838 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 460.44 Mbit/s
95th percentile per-packet one-way delay: 190.280 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 302.36 Mbit/s
95th percentile per-packet one-way delay: 136.243 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 221.59 Mbit/s
95th percentile per-packet one-way delay: 133.172 ms
Loss rate: 3.20%
```

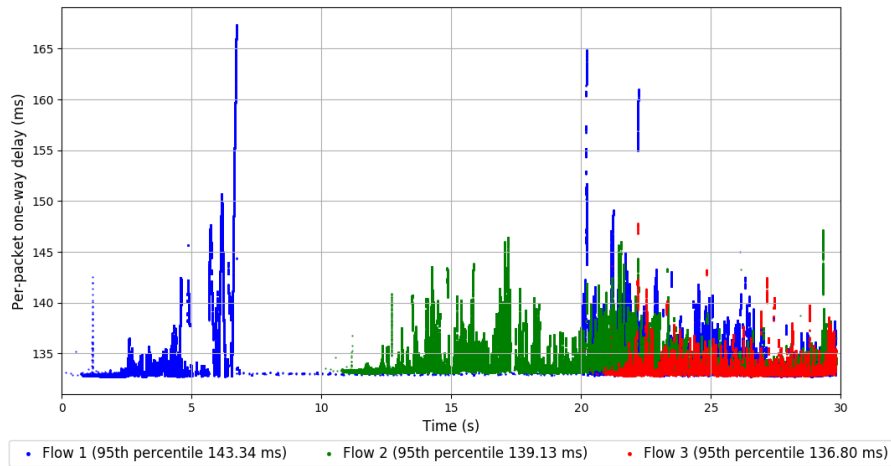## Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-03-27 11:46:19
End at: 2019-03-27 11:46:49
Local clock offset: -0.298 ms
Remote clock offset: -0.164 ms


# Below is generated by plot.py at 2019-03-27 14:29:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 734.09 Mbit/s
95th percentile per-packet one-way delay: 158.526 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 454.94 Mbit/s
95th percentile per-packet one-way delay: 163.884 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 319.69 Mbit/s
95th percentile per-packet one-way delay: 135.033 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 207.37 Mbit/s
95th percentile per-packet one-way delay: 136.210 ms
Loss rate: 4.07%
```
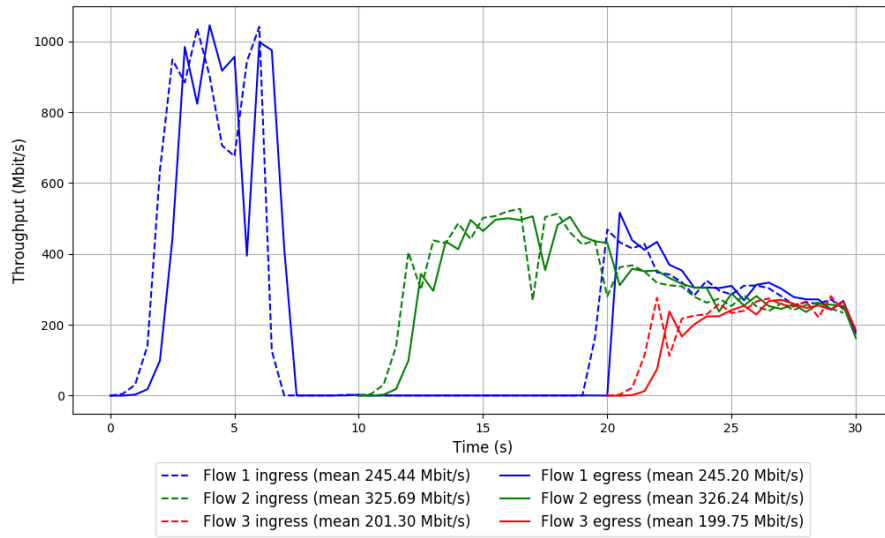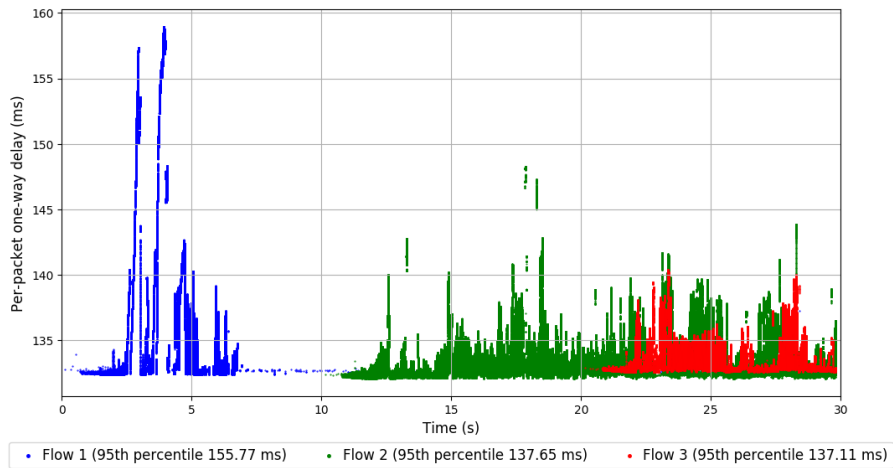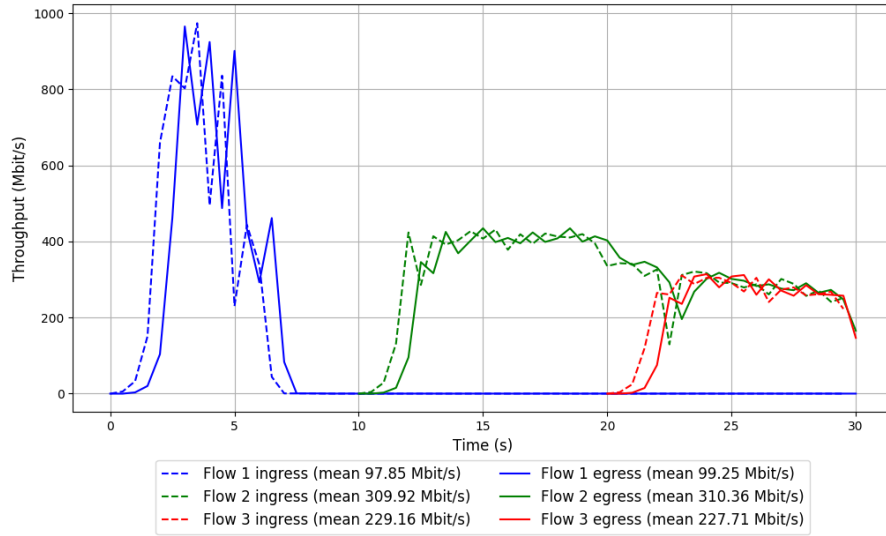
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 453.94 Mbit/s)   Flow 1 egress (mean 454.94 Mbit/s)
Flow 2 ingress (mean 319.17 Mbit/s)   Flow 2 egress (mean 319.69 Mbit/s)
Flow 3 ingress (mean 210.37 Mbit/s)   Flow 3 egress (mean 207.37 Mbit/s)

Flow 1 (95th percentile 163.88 ms)   Flow 2 (95th percentile 135.03 ms)   Flow 3 (95th percentile 136.21 ms)

40

```
Run 4: Statistics of FillP

Start at: 2019-03-27 12:29:53
End at: 2019-03-27 12:30:23
Local clock offset: -0.132 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2019-03-27 14:30:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 733.93 Mbit/s
95th percentile per-packet one-way delay: 141.659 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 439.02 Mbit/s
95th percentile per-packet one-way delay: 153.805 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 337.66 Mbit/s
95th percentile per-packet one-way delay: 136.825 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 218.74 Mbit/s
95th percentile per-packet one-way delay: 136.988 ms
Loss rate: 2.92%
```
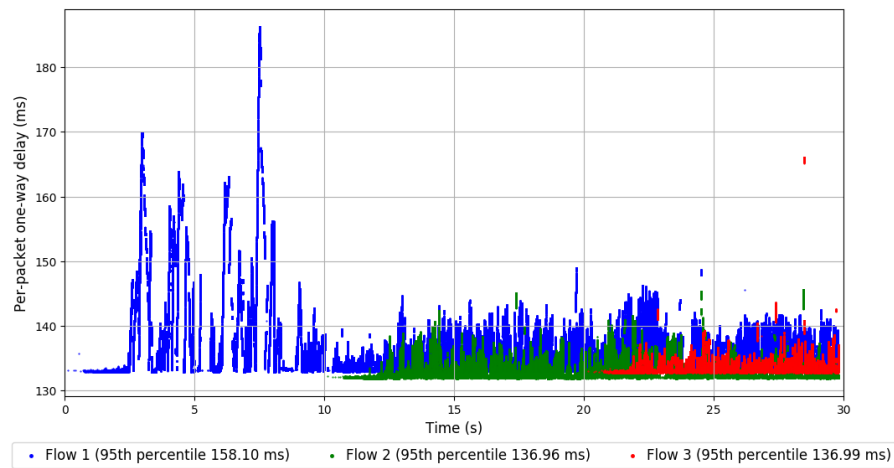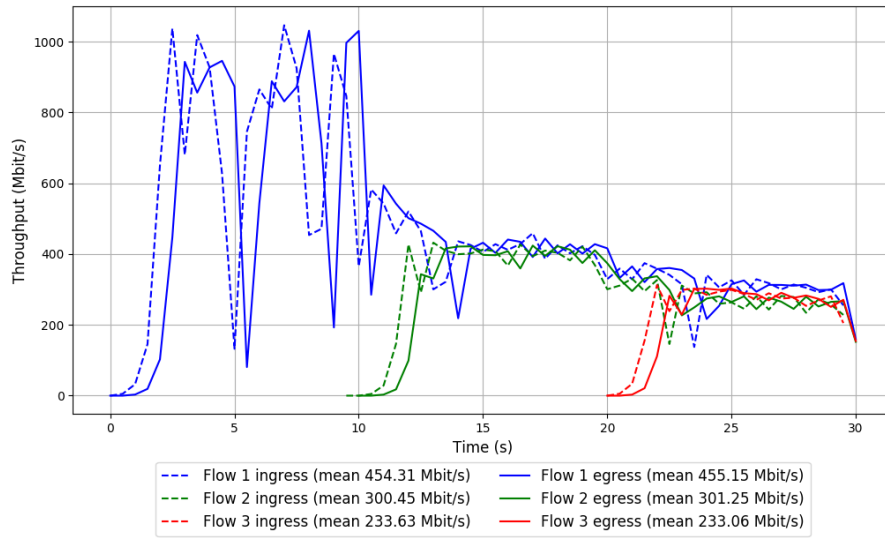
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-03-27 13:13:29
End at: 2019-03-27 13:13:59
Local clock offset: -0.189 ms
Remote clock offset: -0.178 ms


# Below is generated by plot.py at 2019-03-27 14:30:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.35 Mbit/s
95th percentile per-packet one-way delay: 140.557 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 245.20 Mbit/s
95th percentile per-packet one-way delay: 143.339 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 326.24 Mbit/s
95th percentile per-packet one-way delay: 139.134 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 199.75 Mbit/s
95th percentile per-packet one-way delay: 136.804 ms
Loss rate: 3.29%
```

Run 5: Report of FillP — Data Link

- - - - Flow 1 ingress (mean 245.44 Mbit/s)   —— Flow 1 egress (mean 245.20 Mbit/s)
- - - - Flow 2 ingress (mean 325.69 Mbit/s)   —— Flow 2 egress (mean 326.24 Mbit/s)
- - - - Flow 3 ingress (mean 201.30 Mbit/s)   —— Flow 3 egress (mean 199.75 Mbit/s)

- Flow 1 (95th percentile 143.34 ms)   • Flow 2 (95th percentile 139.13 ms)   • Flow 3 (95th percentile 136.80 ms)
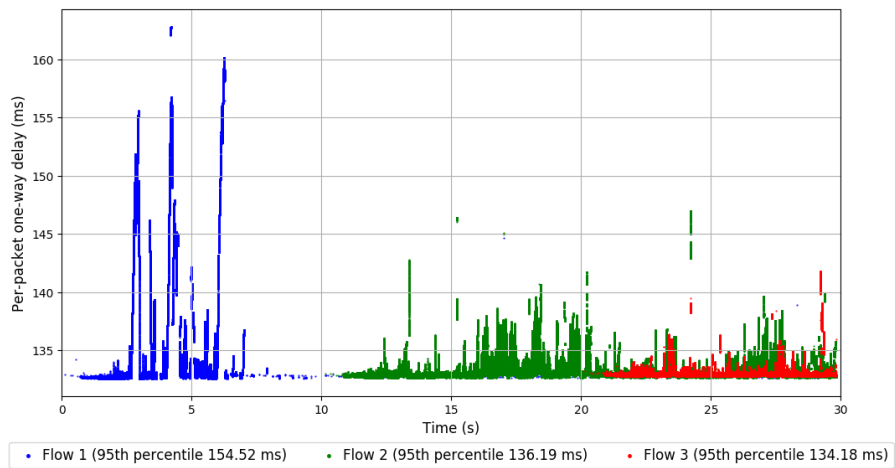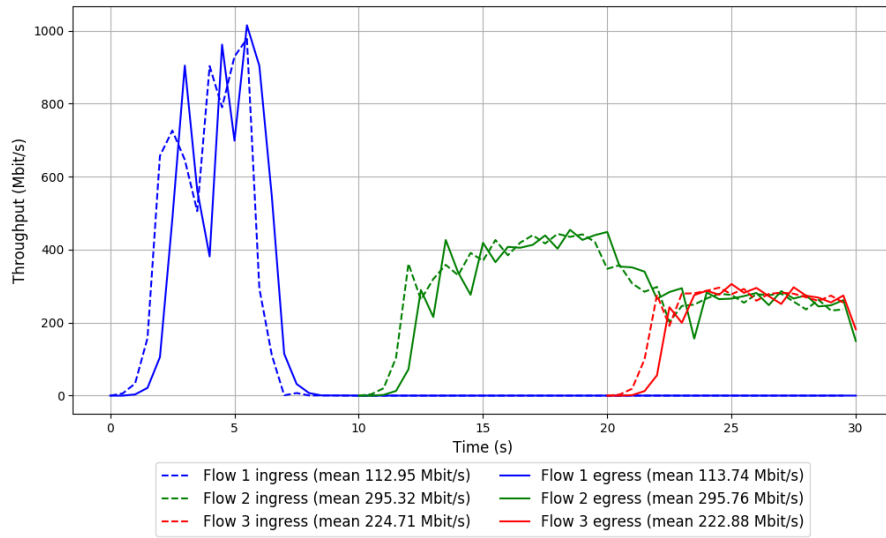
44

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-03-27 10:10:17
End at: 2019-03-27 10:10:47
Local clock offset: -0.282 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2019-03-27 14:30:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.30 Mbit/s
95th percentile per-packet one-way delay: 146.126 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 99.25 Mbit/s
95th percentile per-packet one-way delay: 155.772 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 310.36 Mbit/s
95th percentile per-packet one-way delay: 137.649 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 227.71 Mbit/s
95th percentile per-packet one-way delay: 137.113 ms
Loss rate: 3.28%
```

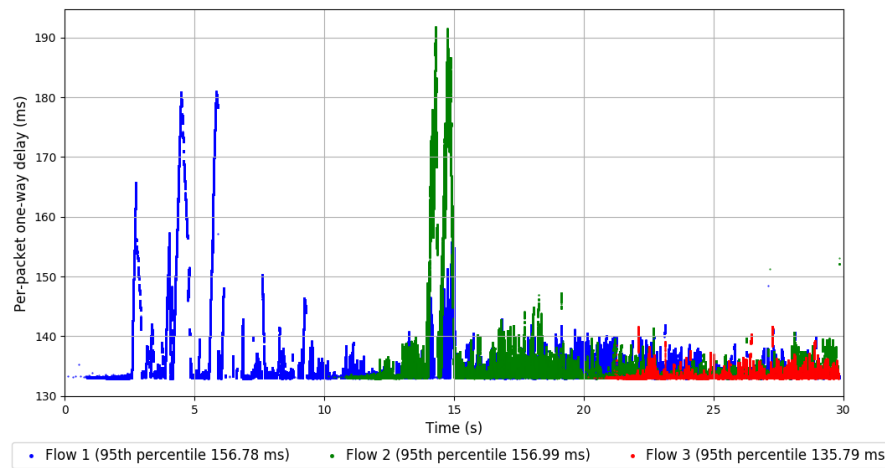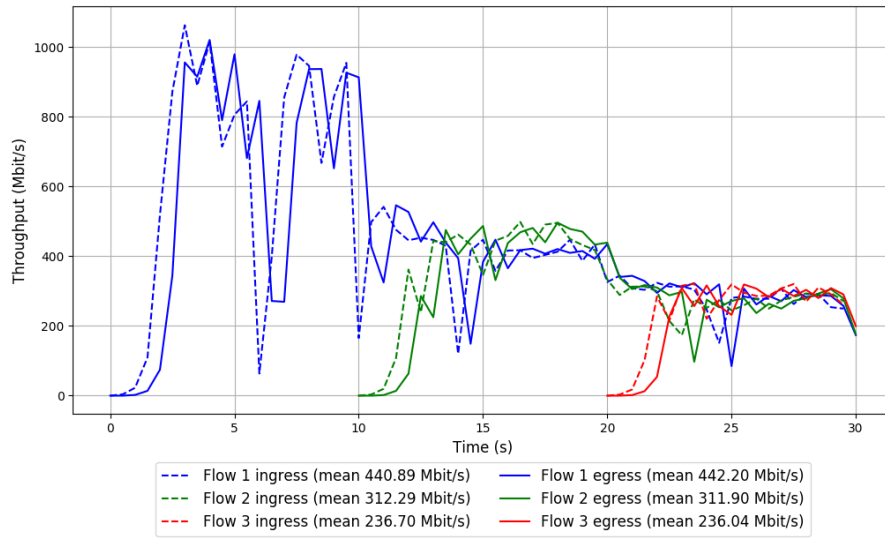Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-03-27 10:52:31
End at: 2019-03-27 10:53:01
Local clock offset: -0.17 ms
Remote clock offset: -0.162 ms


# Below is generated by plot.py at 2019-03-27 14:30:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 730.43 Mbit/s
95th percentile per-packet one-way delay: 154.489 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 455.15 Mbit/s
95th percentile per-packet one-way delay: 158.098 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 301.25 Mbit/s
95th percentile per-packet one-way delay: 136.956 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 233.06 Mbit/s
95th percentile per-packet one-way delay: 136.992 ms
Loss rate: 2.90%
```

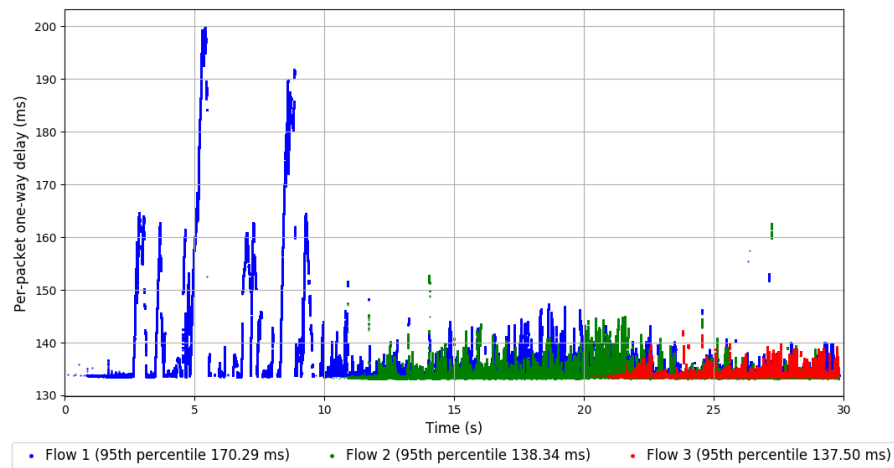Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-03-27 11:34:20
End at: 2019-03-27 11:34:50
Local clock offset: -0.154 ms
Remote clock offset: -0.115 ms


# Below is generated by plot.py at 2019-03-27 14:30:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.21 Mbit/s
95th percentile per-packet one-way delay: 145.320 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 113.74 Mbit/s
95th percentile per-packet one-way delay: 154.522 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 295.76 Mbit/s
95th percentile per-packet one-way delay: 136.192 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 222.88 Mbit/s
95th percentile per-packet one-way delay: 134.182 ms
Loss rate: 3.42%
```

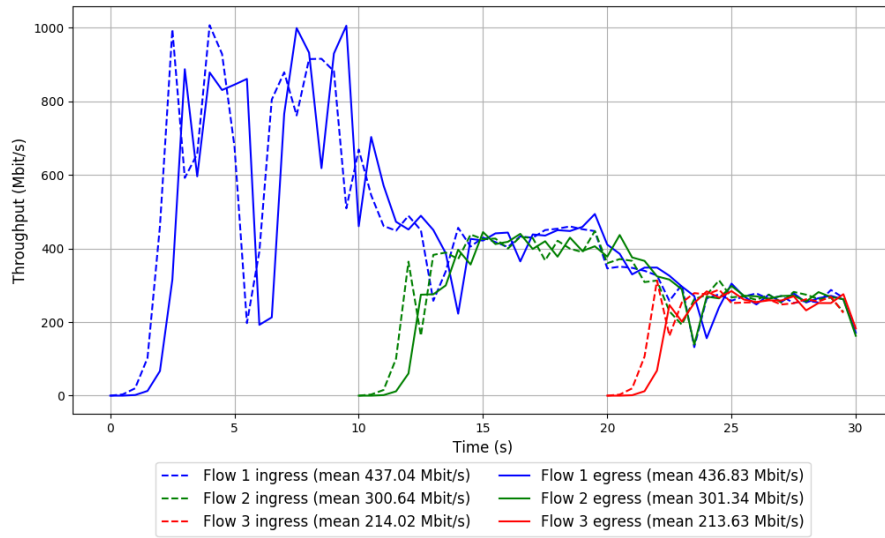# Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-03-27 12:17:26
End at: 2019-03-27 12:17:56
Local clock offset: 0.031 ms
Remote clock offset: -0.157 ms


# Below is generated by plot.py at 2019-03-27 14:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 725.56 Mbit/s
95th percentile per-packet one-way delay: 154.368 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 442.20 Mbit/s
95th percentile per-packet one-way delay: 156.775 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 311.90 Mbit/s
95th percentile per-packet one-way delay: 156.994 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 236.04 Mbit/s
95th percentile per-packet one-way delay: 135.788 ms
Loss rate: 3.21%
```

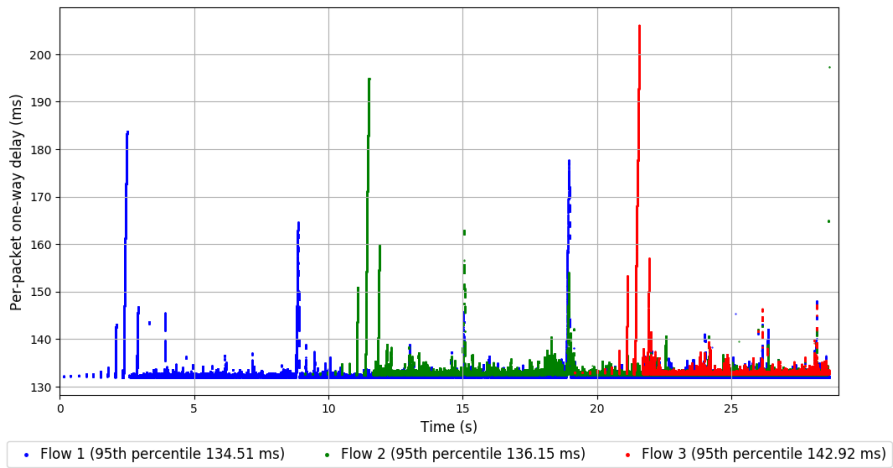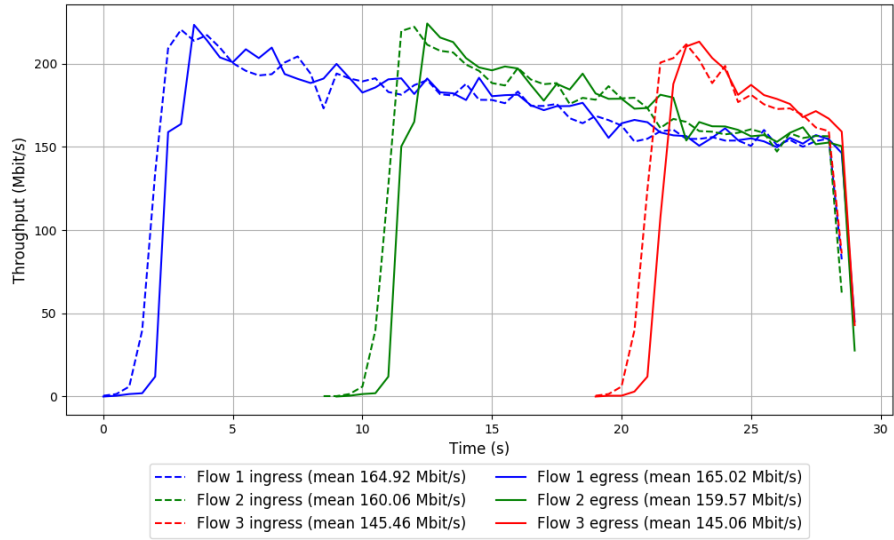Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 440.89 Mbit/s)   Flow 1 egress (mean 442.20 Mbit/s)
Flow 2 ingress (mean 312.29 Mbit/s)   Flow 2 egress (mean 311.90 Mbit/s)
Flow 3 ingress (mean 236.70 Mbit/s)   Flow 3 egress (mean 236.04 Mbit/s)

Flow 1 (95th percentile 156.78 ms)   Flow 2 (95th percentile 156.99 ms)   Flow 3 (95th percentile 135.79 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-03-27 13:01:00
End at: 2019-03-27 13:01:30
Local clock offset: 0.191 ms
Remote clock offset: -0.102 ms


# Below is generated by plot.py at 2019-03-27 14:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 705.57 Mbit/s
95th percentile per-packet one-way delay: 161.036 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 436.83 Mbit/s
95th percentile per-packet one-way delay: 170.292 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 301.34 Mbit/s
95th percentile per-packet one-way delay: 138.338 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 213.63 Mbit/s
95th percentile per-packet one-way delay: 137.496 ms
Loss rate: 2.80%
```
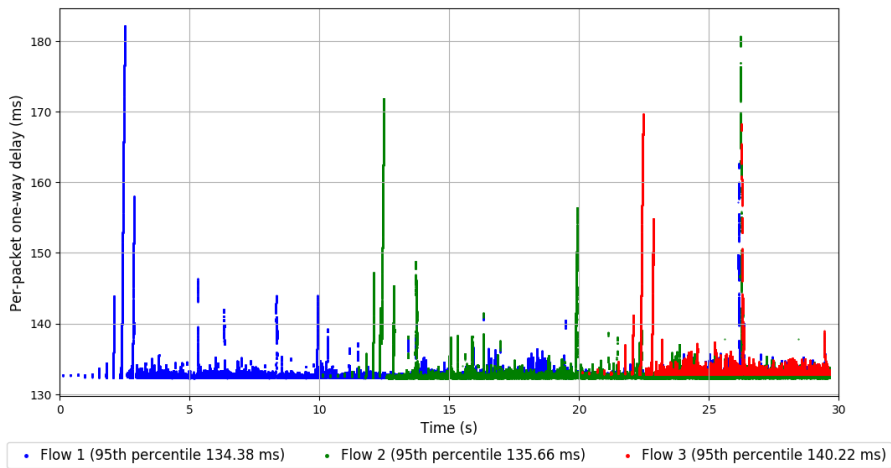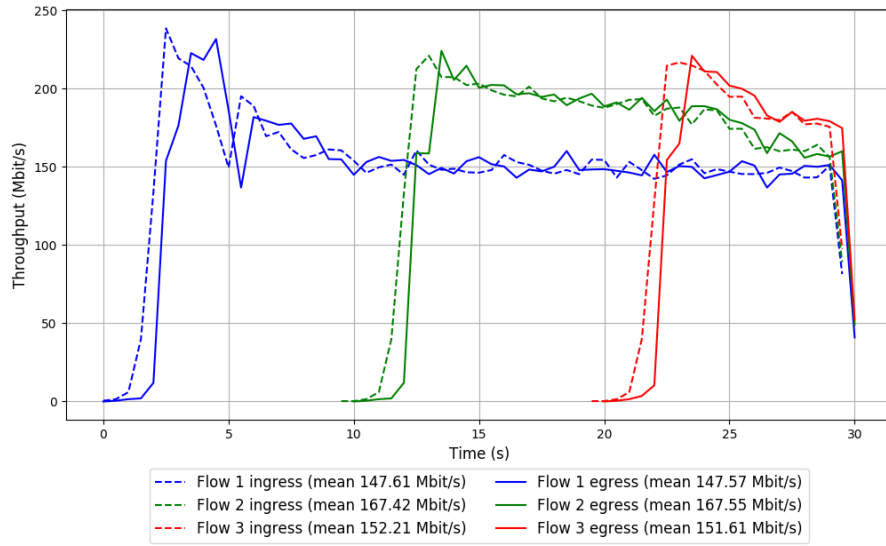
Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 437.04 Mbit/s) --- Flow 1 egress (mean 436.83 Mbit/s)
Flow 2 ingress (mean 300.64 Mbit/s) --- Flow 2 egress (mean 301.34 Mbit/s)
Flow 3 ingress (mean 214.02 Mbit/s) --- Flow 3 egress (mean 213.63 Mbit/s)

Flow 1 (95th percentile 170.29 ms)   Flow 2 (95th percentile 138.34 ms)   Flow 3 (95th percentile 137.50 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-03-27 10:08:10
End at: 2019-03-27 10:08:40
Local clock offset: -0.421 ms
Remote clock offset: -0.087 ms


# Below is generated by plot.py at 2019-03-27 14:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.40 Mbit/s
95th percentile per-packet one-way delay: 135.763 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 165.02 Mbit/s
95th percentile per-packet one-way delay: 134.510 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 159.57 Mbit/s
95th percentile per-packet one-way delay: 136.153 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 145.06 Mbit/s
95th percentile per-packet one-way delay: 142.922 ms
Loss rate: 3.02%
```
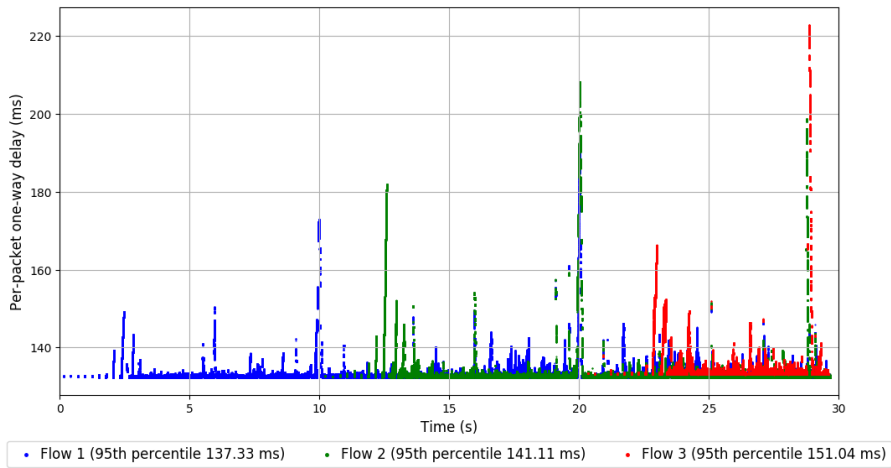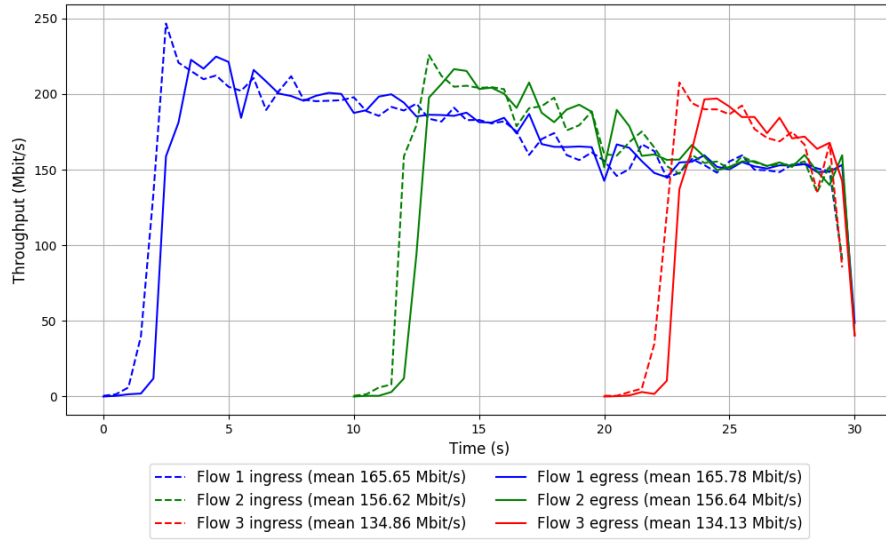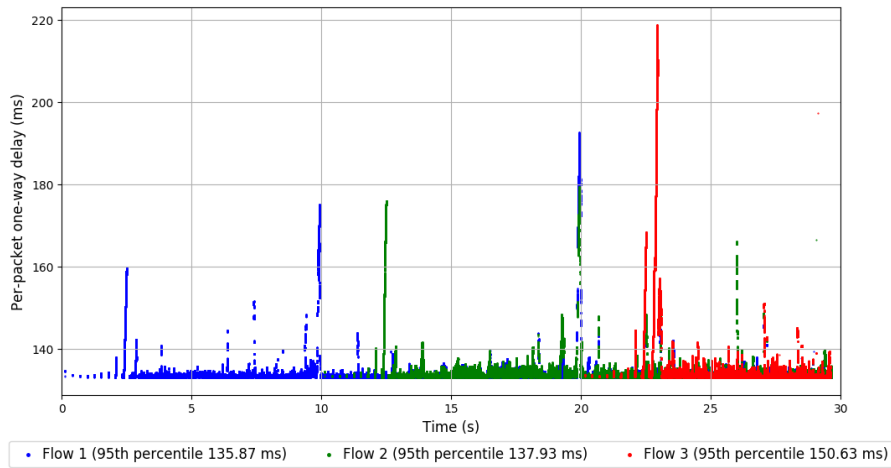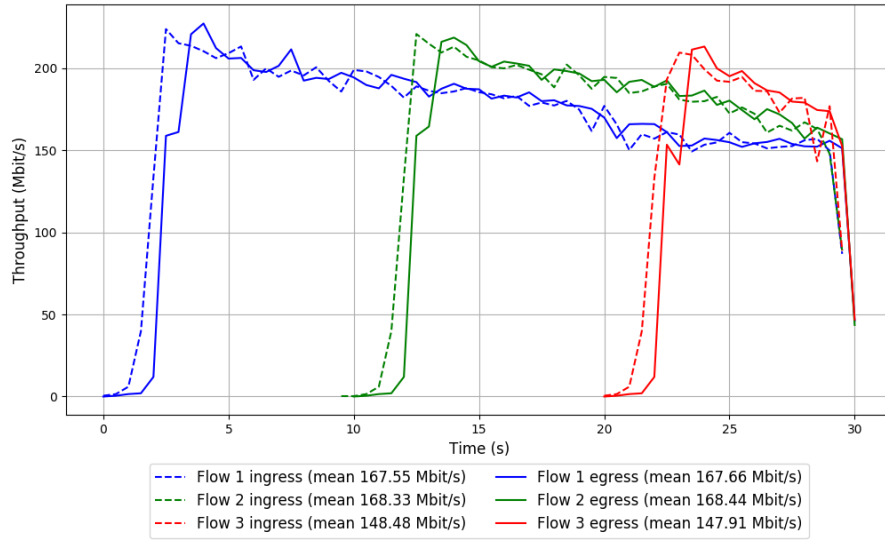
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-03-27 10:50:24
End at: 2019-03-27 10:50:54
Local clock offset: -0.157 ms
Remote clock offset: -0.12 ms


# Below is generated by plot.py at 2019-03-27 14:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.30 Mbit/s
95th percentile per-packet one-way delay: 135.255 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 147.57 Mbit/s
95th percentile per-packet one-way delay: 134.382 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 167.55 Mbit/s
95th percentile per-packet one-way delay: 135.660 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 151.61 Mbit/s
95th percentile per-packet one-way delay: 140.218 ms
Loss rate: 3.11%
```
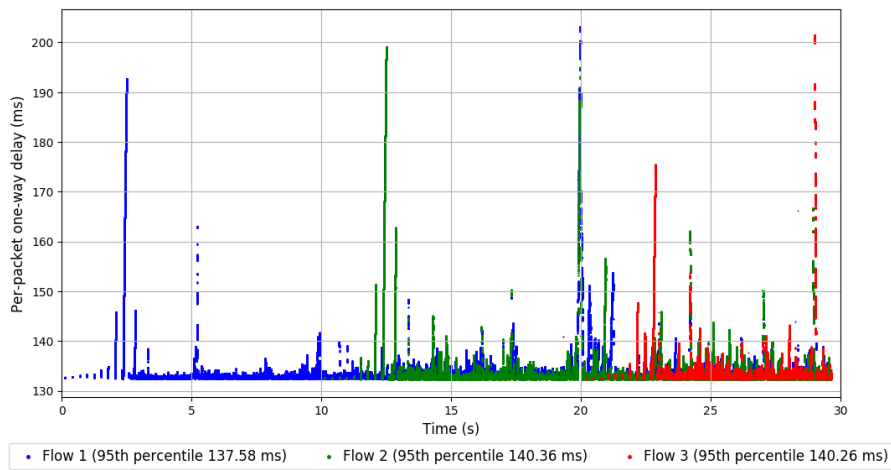
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-03-27 11:32:14
End at: 2019-03-27 11:32:44
Local clock offset: -0.12 ms
Remote clock offset: -0.18 ms


# Below is generated by plot.py at 2019-03-27 14:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.97 Mbit/s
95th percentile per-packet one-way delay: 140.070 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 165.78 Mbit/s
95th percentile per-packet one-way delay: 137.326 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 156.64 Mbit/s
95th percentile per-packet one-way delay: 141.113 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 134.13 Mbit/s
95th percentile per-packet one-way delay: 151.039 ms
Loss rate: 3.33%
```
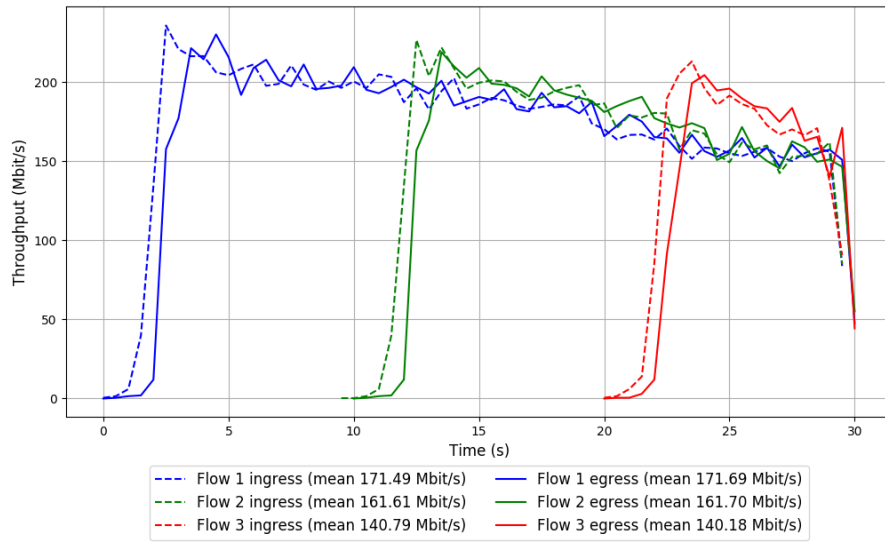
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-03-27 12:15:11
End at: 2019-03-27 12:15:41
Local clock offset: 0.235 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2019-03-27 14:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.44 Mbit/s
95th percentile per-packet one-way delay: 137.642 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 167.66 Mbit/s
95th percentile per-packet one-way delay: 135.873 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 168.44 Mbit/s
95th percentile per-packet one-way delay: 137.927 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 147.91 Mbit/s
95th percentile per-packet one-way delay: 150.629 ms
Loss rate: 3.12%
```
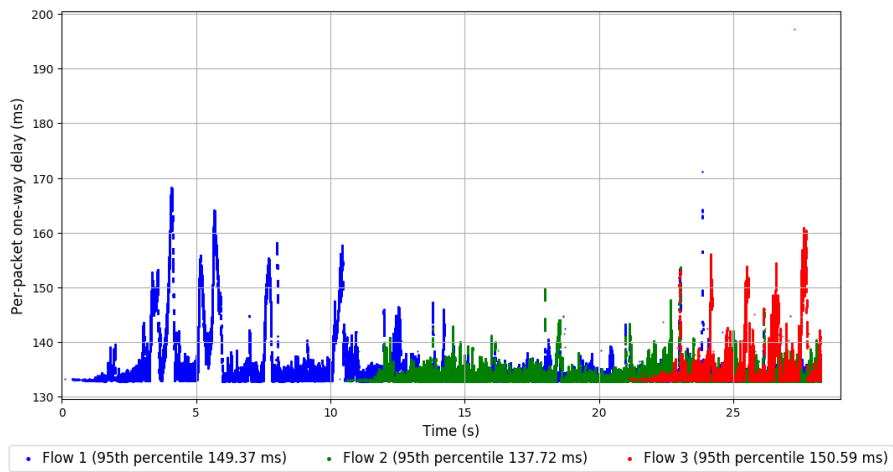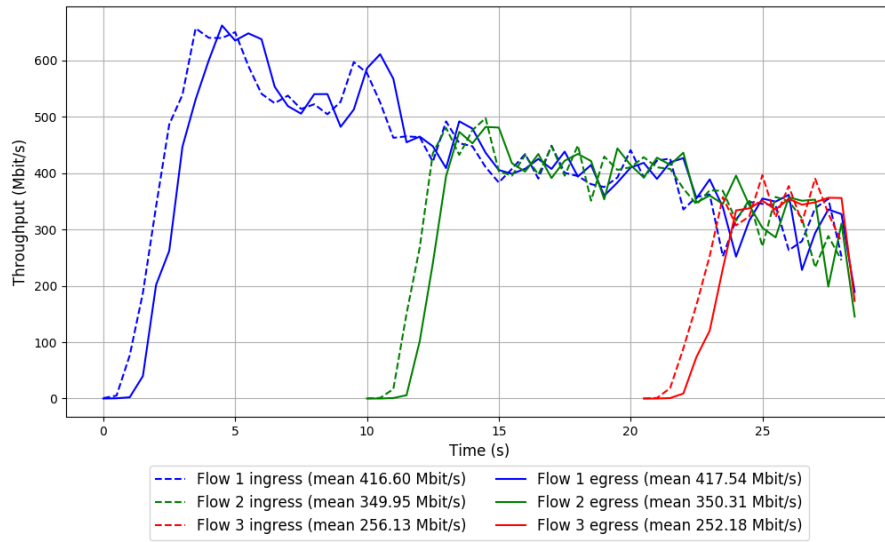
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-03-27 12:58:44
End at: 2019-03-27 12:59:14
Local clock offset: -0.601 ms
Remote clock offset: -0.085 ms


# Below is generated by plot.py at 2019-03-27 14:42:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.41 Mbit/s
95th percentile per-packet one-way delay: 138.896 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 171.69 Mbit/s
95th percentile per-packet one-way delay: 137.577 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 161.70 Mbit/s
95th percentile per-packet one-way delay: 140.363 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 140.18 Mbit/s
95th percentile per-packet one-way delay: 140.262 ms
Loss rate: 3.16%
```
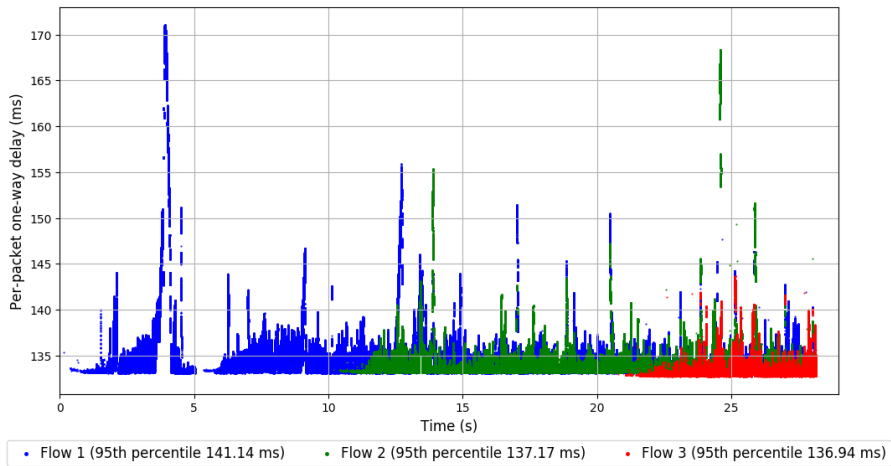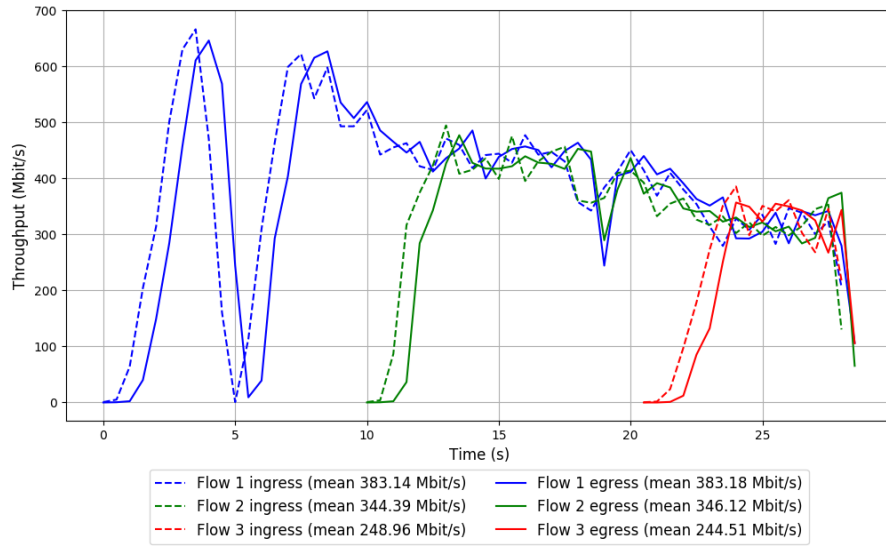
Run 5: Report of Indigo — Data Link

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```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-27 10:31:56
End at: 2019-03-27 10:32:26
Local clock offset: 0.082 ms
Remote clock offset: -0.136 ms


# Below is generated by plot.py at 2019-03-27 14:44:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 706.65 Mbit/s
95th percentile per-packet one-way delay: 147.086 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 417.54 Mbit/s
95th percentile per-packet one-way delay: 149.366 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 350.31 Mbit/s
95th percentile per-packet one-way delay: 137.719 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 252.18 Mbit/s
95th percentile per-packet one-way delay: 150.592 ms
Loss rate: 4.97%
```
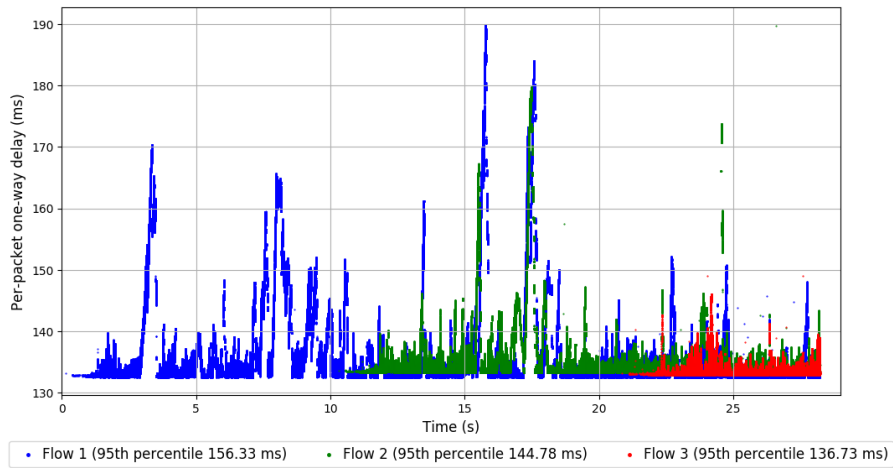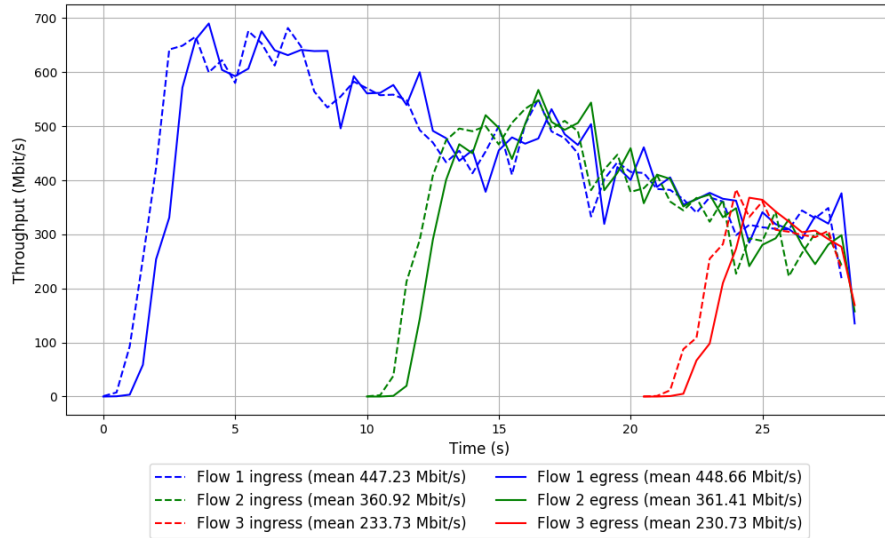
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-27 11:14:25
End at: 2019-03-27 11:14:55
Local clock offset: 0.305 ms
Remote clock offset: -0.145 ms


# Below is generated by plot.py at 2019-03-27 14:47:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 669.46 Mbit/s
95th percentile per-packet one-way delay: 139.265 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 383.18 Mbit/s
95th percentile per-packet one-way delay: 141.136 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 346.12 Mbit/s
95th percentile per-packet one-way delay: 137.173 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 244.51 Mbit/s
95th percentile per-packet one-way delay: 136.935 ms
Loss rate: 5.21%
```
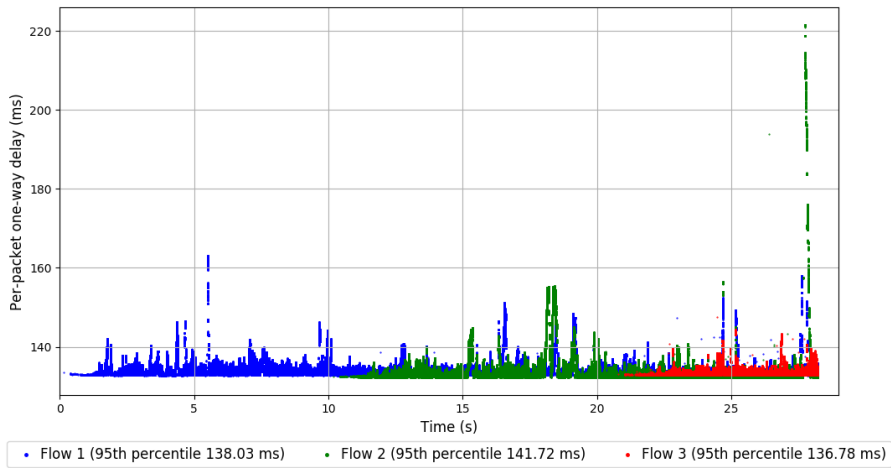
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-27 11:56:42
End at: 2019-03-27 11:57:12
Local clock offset: 0.12 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2019-03-27 14:51:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 739.62 Mbit/s
95th percentile per-packet one-way delay: 150.914 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 448.66 Mbit/s
95th percentile per-packet one-way delay: 156.330 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 361.41 Mbit/s
95th percentile per-packet one-way delay: 144.781 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 230.73 Mbit/s
95th percentile per-packet one-way delay: 136.734 ms
Loss rate: 4.77%
```
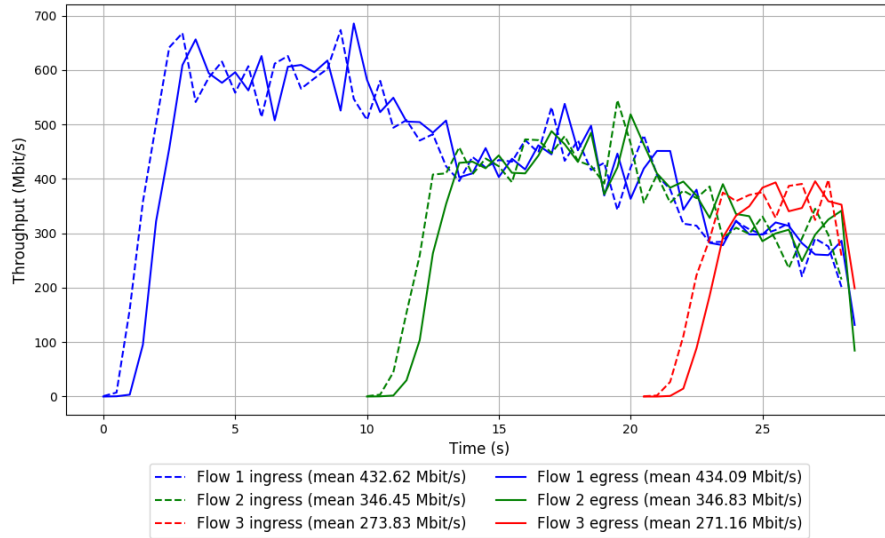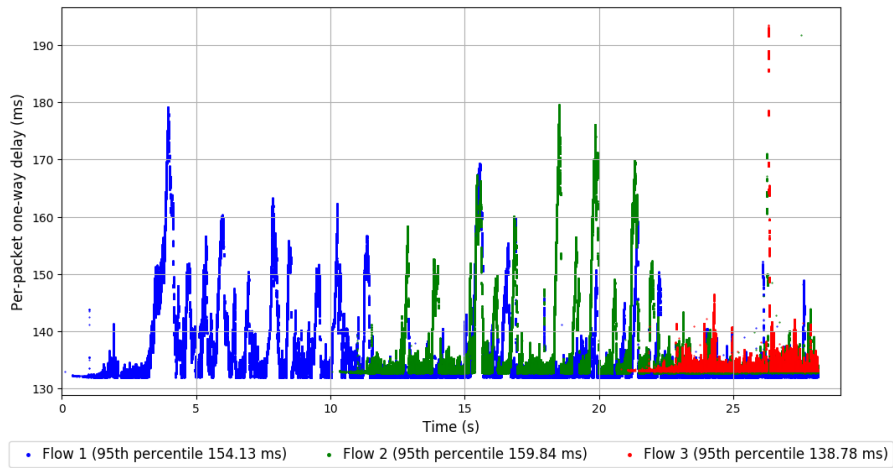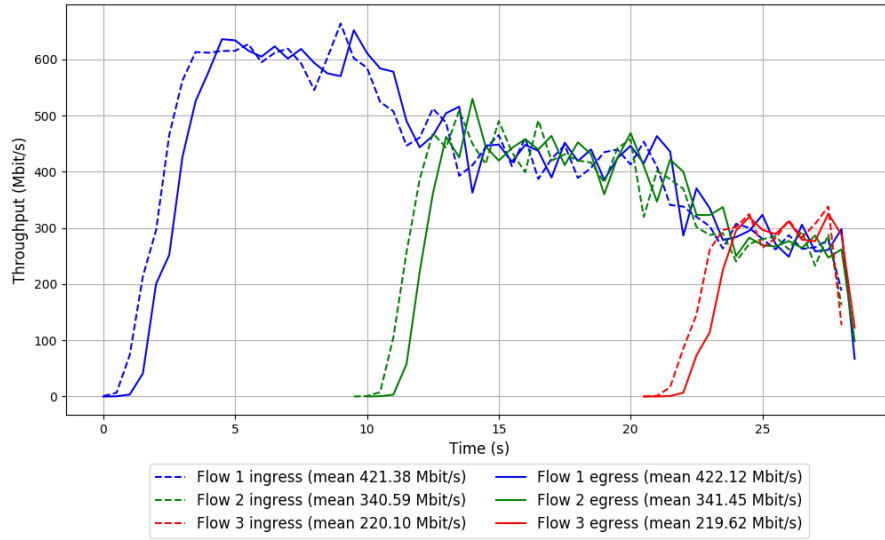
Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 447.23 Mbit/s)   Flow 1 egress (mean 448.66 Mbit/s)
Flow 2 ingress (mean 360.92 Mbit/s)   Flow 2 egress (mean 361.41 Mbit/s)
Flow 3 ingress (mean 233.73 Mbit/s)   Flow 3 egress (mean 230.73 Mbit/s)

Flow 1 (95th percentile 156.33 ms)   Flow 2 (95th percentile 144.78 ms)   Flow 3 (95th percentile 136.73 ms)

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-27 12:39:54
End at: 2019-03-27 12:40:24
Local clock offset: -0.146 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-03-27 14:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 728.71 Mbit/s
95th percentile per-packet one-way delay: 138.443 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 434.09 Mbit/s
95th percentile per-packet one-way delay: 138.026 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 346.83 Mbit/s
95th percentile per-packet one-way delay: 141.721 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 271.16 Mbit/s
95th percentile per-packet one-way delay: 136.778 ms
Loss rate: 4.40%
```
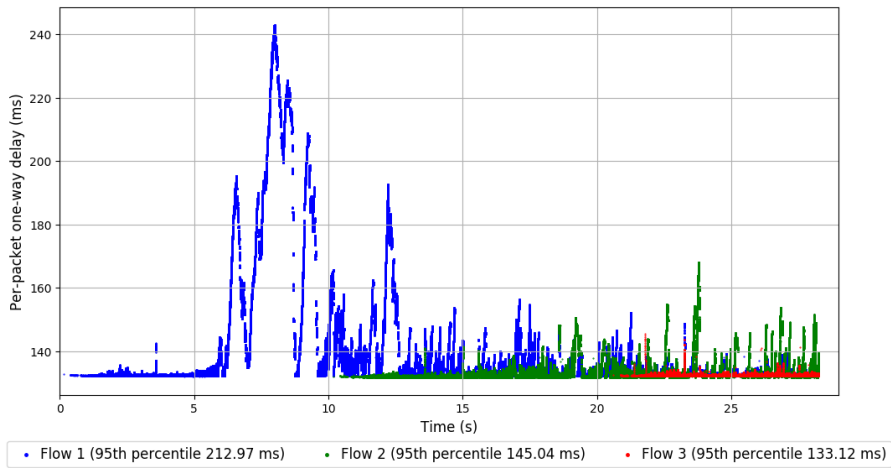
Run 4: Report of Indigo-MusesC3 — Data Link

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```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-27 13:23:01
End at: 2019-03-27 13:23:31
Local clock offset: -0.213 ms
Remote clock offset: -0.186 ms


# Below is generated by plot.py at 2019-03-27 14:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.93 Mbit/s
95th percentile per-packet one-way delay: 155.377 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 422.12 Mbit/s
95th percentile per-packet one-way delay: 154.127 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 341.45 Mbit/s
95th percentile per-packet one-way delay: 159.835 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 219.62 Mbit/s
95th percentile per-packet one-way delay: 138.781 ms
Loss rate: 3.73%
```
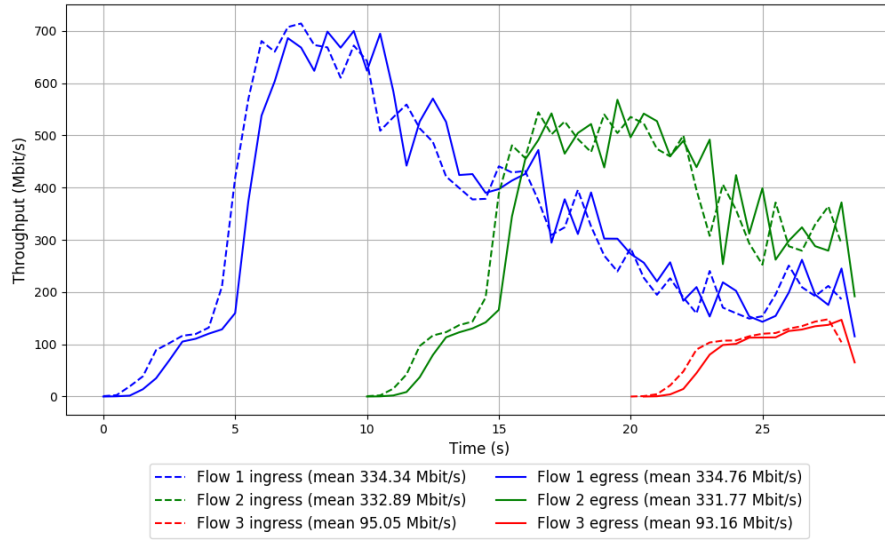
Run 5: Report of Indigo-MusesC3 — Data Link

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-27 10:28:15
End at: 2019-03-27 10:28:45
Local clock offset: -0.28 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2019-03-27 14:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.20 Mbit/s
95th percentile per-packet one-way delay: 194.016 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 334.76 Mbit/s
95th percentile per-packet one-way delay: 212.973 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 331.77 Mbit/s
95th percentile per-packet one-way delay: 145.043 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 93.16 Mbit/s
95th percentile per-packet one-way delay: 133.120 ms
Loss rate: 5.28%
```
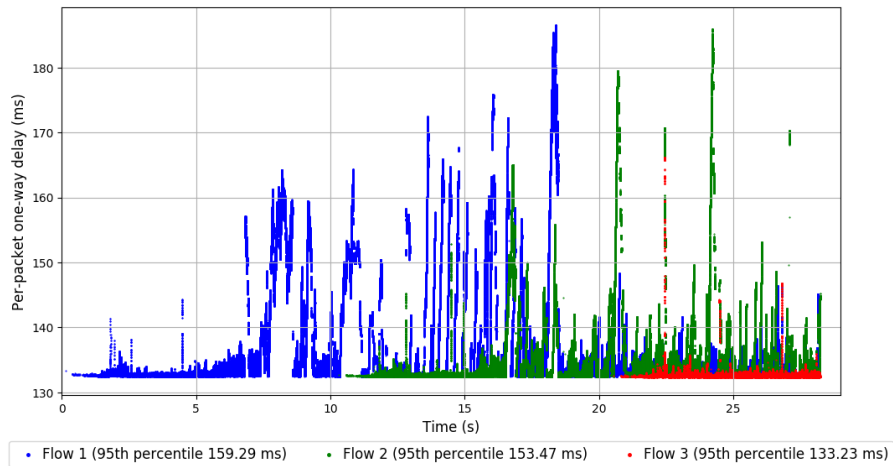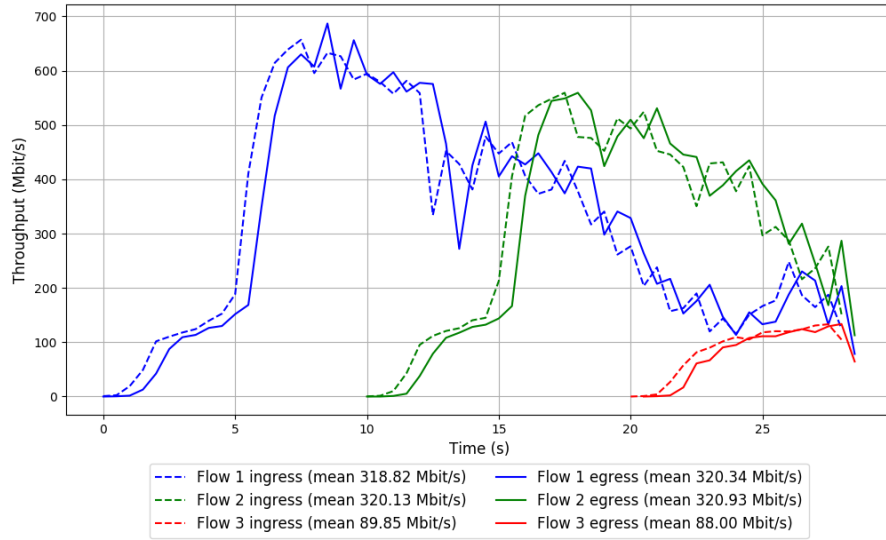
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-27 11:10:52
End at: 2019-03-27 11:11:22
Local clock offset: -0.537 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-03-27 14:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 548.80 Mbit/s
95th percentile per-packet one-way delay: 158.216 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 320.34 Mbit/s
95th percentile per-packet one-way delay: 159.295 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 320.93 Mbit/s
95th percentile per-packet one-way delay: 153.468 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 133.233 ms
Loss rate: 5.36%
```
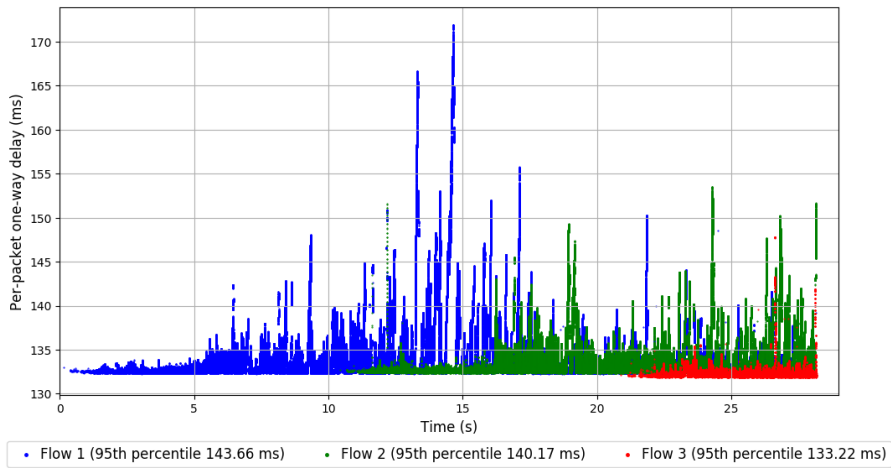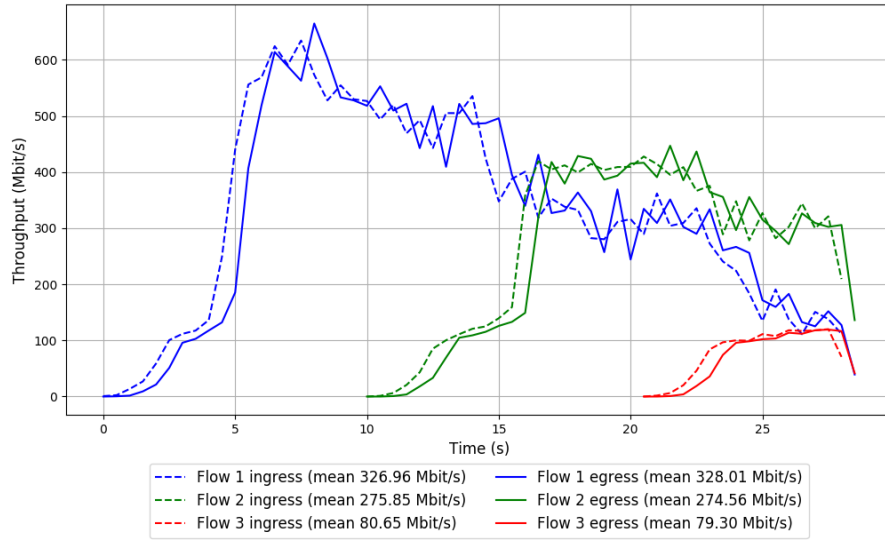
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-27 11:53:00
End at: 2019-03-27 11:53:30
Local clock offset: -0.501 ms
Remote clock offset: -0.156 ms


# Below is generated by plot.py at 2019-03-27 14:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 522.18 Mbit/s
95th percentile per-packet one-way delay: 142.099 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 328.01 Mbit/s
95th percentile per-packet one-way delay: 143.662 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 274.56 Mbit/s
95th percentile per-packet one-way delay: 140.174 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 79.30 Mbit/s
95th percentile per-packet one-way delay: 133.215 ms
Loss rate: 5.16%
```
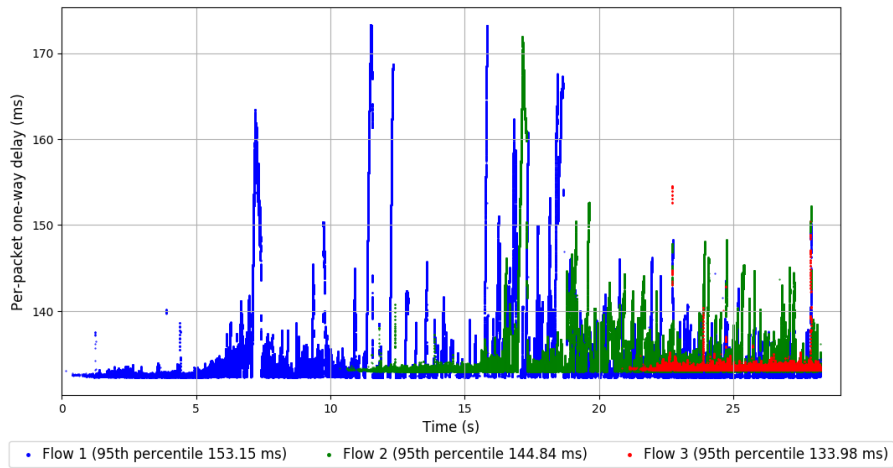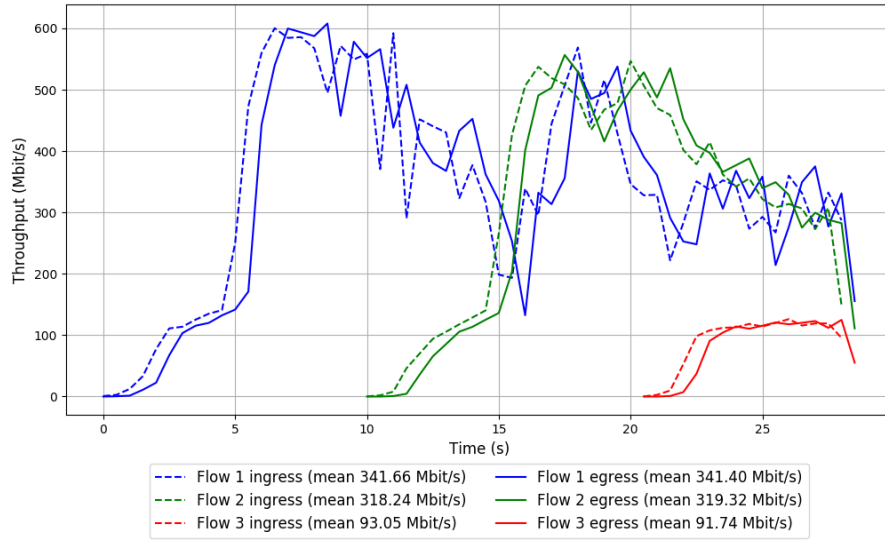
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 326.96 Mbit/s) — — — — Flow 1 egress (mean 328.01 Mbit/s)
Flow 2 ingress (mean 275.85 Mbit/s) — — — — Flow 2 egress (mean 274.56 Mbit/s)
Flow 3 ingress (mean 80.65 Mbit/s) — — — — Flow 3 egress (mean 79.30 Mbit/s)

Flow 1 (95th percentile 143.66 ms)　　Flow 2 (95th percentile 140.17 ms)　　Flow 3 (95th percentile 133.22 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-27 12:36:28
End at: 2019-03-27 12:36:58
Local clock offset: 0.146 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2019-03-27 14:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.66 Mbit/s
95th percentile per-packet one-way delay: 149.428 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 341.40 Mbit/s
95th percentile per-packet one-way delay: 153.154 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 319.32 Mbit/s
95th percentile per-packet one-way delay: 144.837 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 91.74 Mbit/s
95th percentile per-packet one-way delay: 133.980 ms
Loss rate: 4.96%
```
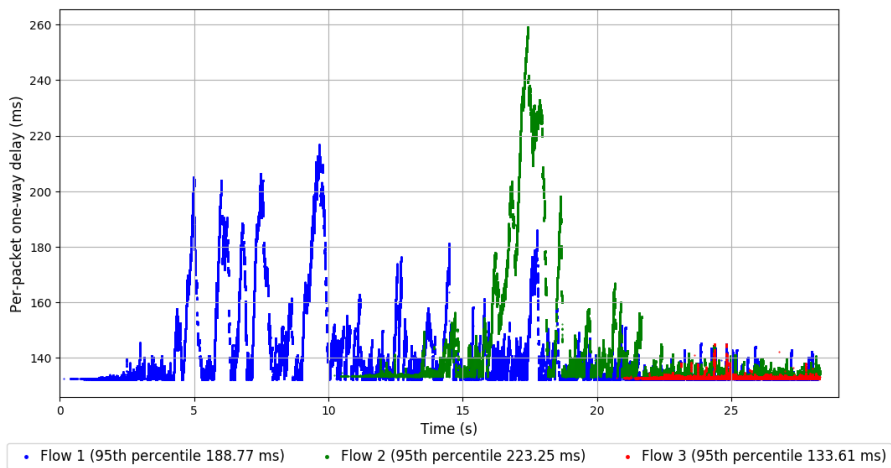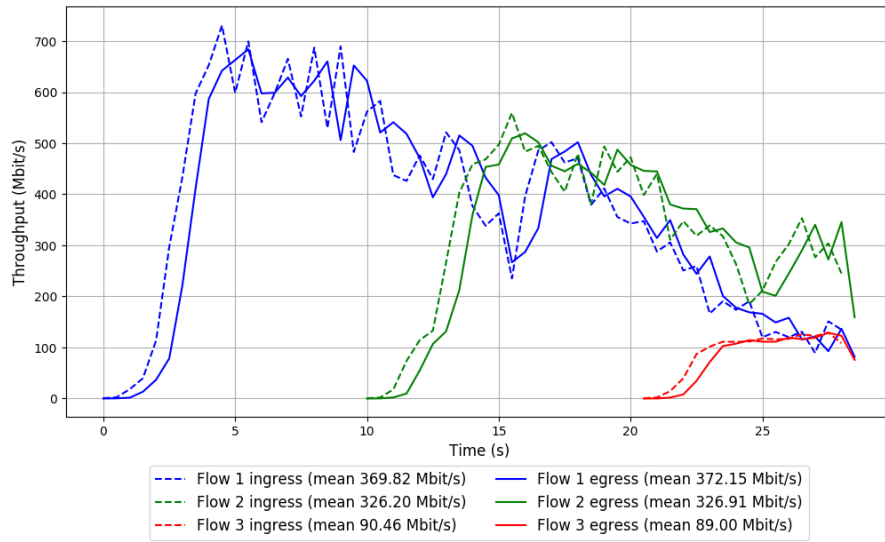
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-27 13:19:24
End at: 2019-03-27 13:19:54
Local clock offset: -0.015 ms
Remote clock offset: -0.167 ms


# Below is generated by plot.py at 2019-03-27 14:59:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.35 Mbit/s
95th percentile per-packet one-way delay: 194.933 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 372.15 Mbit/s
95th percentile per-packet one-way delay: 188.771 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 326.91 Mbit/s
95th percentile per-packet one-way delay: 223.247 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 89.00 Mbit/s
95th percentile per-packet one-way delay: 133.606 ms
Loss rate: 4.98%
```
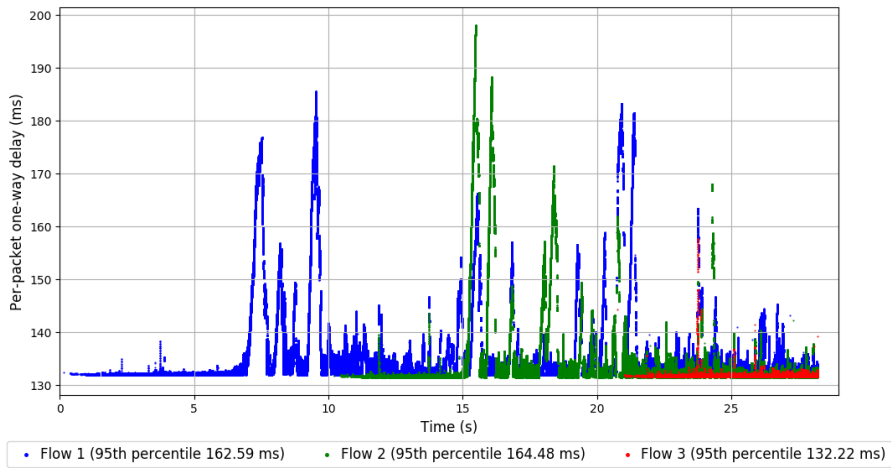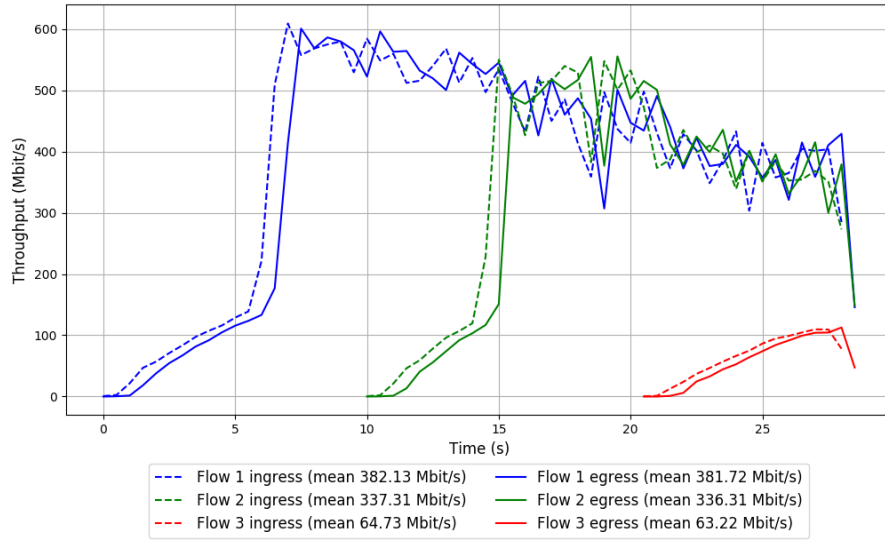
Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 369.82 Mbit/s) --- Flow 1 egress (mean 372.15 Mbit/s)
Flow 2 ingress (mean 326.20 Mbit/s) --- Flow 2 egress (mean 326.91 Mbit/s)
Flow 3 ingress (mean 90.46 Mbit/s) --- Flow 3 egress (mean 89.00 Mbit/s)

Flow 1 (95th percentile 188.77 ms) • Flow 2 (95th percentile 223.25 ms) • Flow 3 (95th percentile 133.61 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-27 10:34:50
End at: 2019-03-27 10:35:20
Local clock offset: -0.528 ms
Remote clock offset: 0.238 ms

# Below is generated by plot.py at 2019-03-27 15:03:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 614.21 Mbit/s
95th percentile per-packet one-way delay: 162.515 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 381.72 Mbit/s
95th percentile per-packet one-way delay: 162.589 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 336.31 Mbit/s
95th percentile per-packet one-way delay: 164.477 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 63.22 Mbit/s
95th percentile per-packet one-way delay: 132.216 ms
Loss rate: 5.86%
```

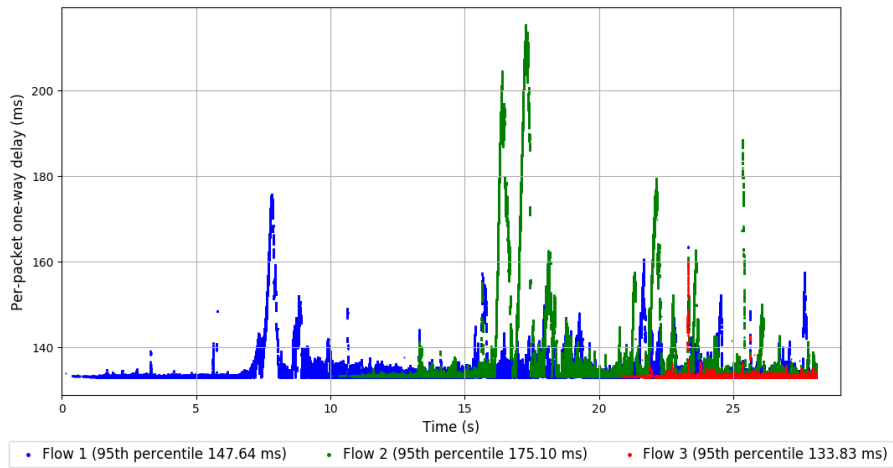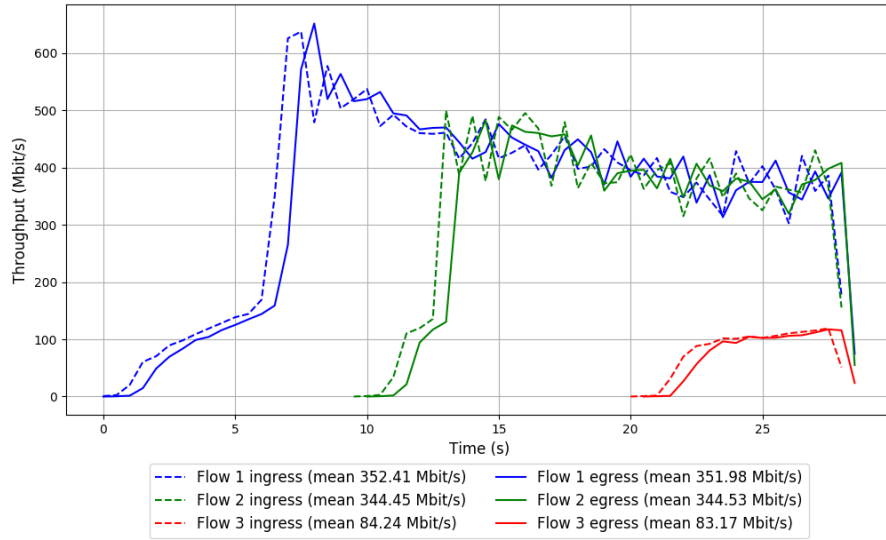Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-27 11:16:33
End at: 2019-03-27 11:17:03
Local clock offset: 0.09 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2019-03-27 15:03:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 596.31 Mbit/s
95th percentile per-packet one-way delay: 156.229 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 351.98 Mbit/s
95th percentile per-packet one-way delay: 147.637 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 344.53 Mbit/s
95th percentile per-packet one-way delay: 175.098 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 83.17 Mbit/s
95th percentile per-packet one-way delay: 133.827 ms
Loss rate: 4.67%
```

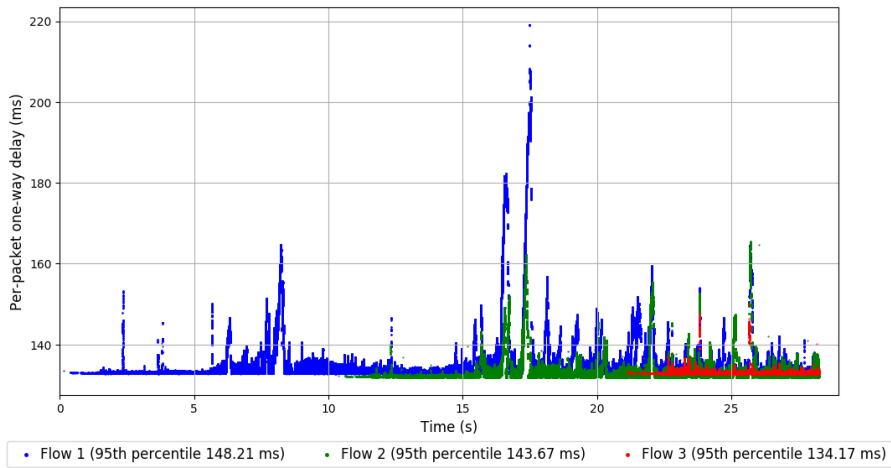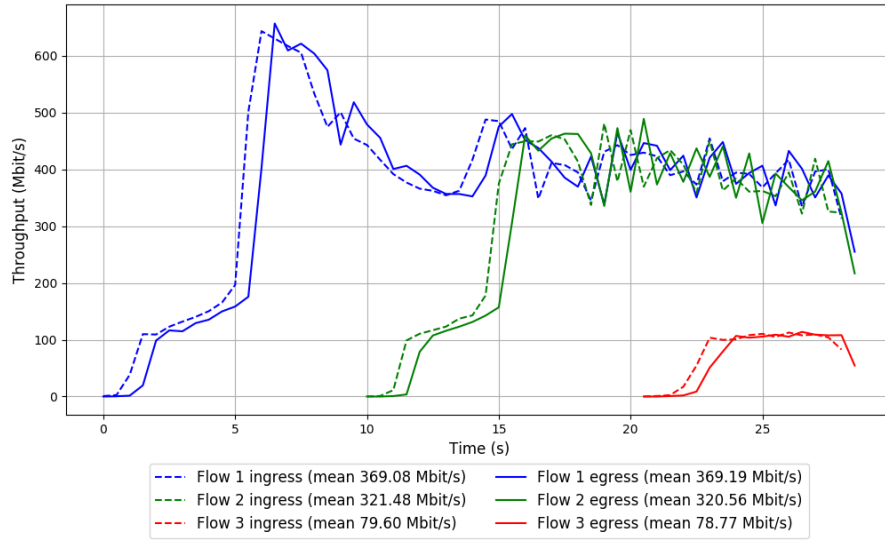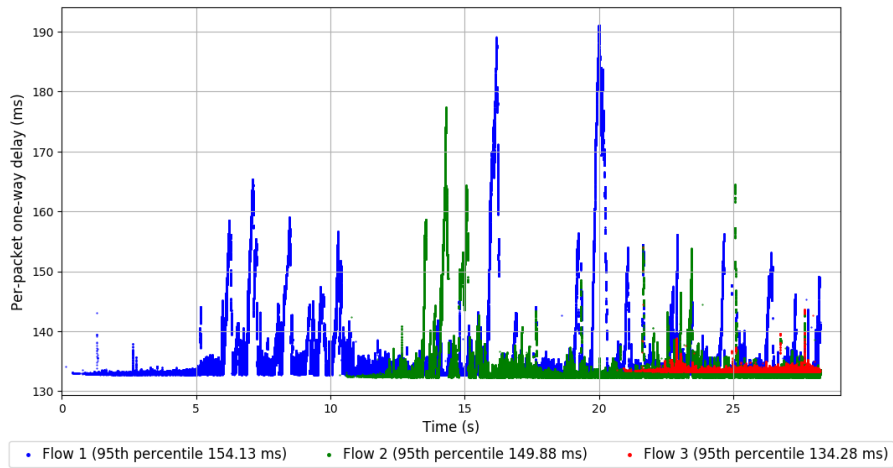# Run 2: Report of Indigo-MusesD — Data Link

- Flow 1 ingress (mean 352.41 Mbit/s) — Flow 1 egress (mean 351.98 Mbit/s)
- Flow 2 ingress (mean 344.45 Mbit/s) — Flow 2 egress (mean 344.53 Mbit/s)
- Flow 3 ingress (mean 84.24 Mbit/s) — Flow 3 egress (mean 83.17 Mbit/s)

- Flow 1 (95th percentile 147.64 ms)   • Flow 2 (95th percentile 175.10 ms)   • Flow 3 (95th percentile 133.83 ms)

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-27 11:58:48
End at: 2019-03-27 11:59:18
Local clock offset: -0.131 ms
Remote clock offset: -0.137 ms


# Below is generated by plot.py at 2019-03-27 15:04:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 593.82 Mbit/s
95th percentile per-packet one-way delay: 146.405 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 369.19 Mbit/s
95th percentile per-packet one-way delay: 148.209 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 320.56 Mbit/s
95th percentile per-packet one-way delay: 143.671 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 78.77 Mbit/s
95th percentile per-packet one-way delay: 134.174 ms
Loss rate: 4.48%
```
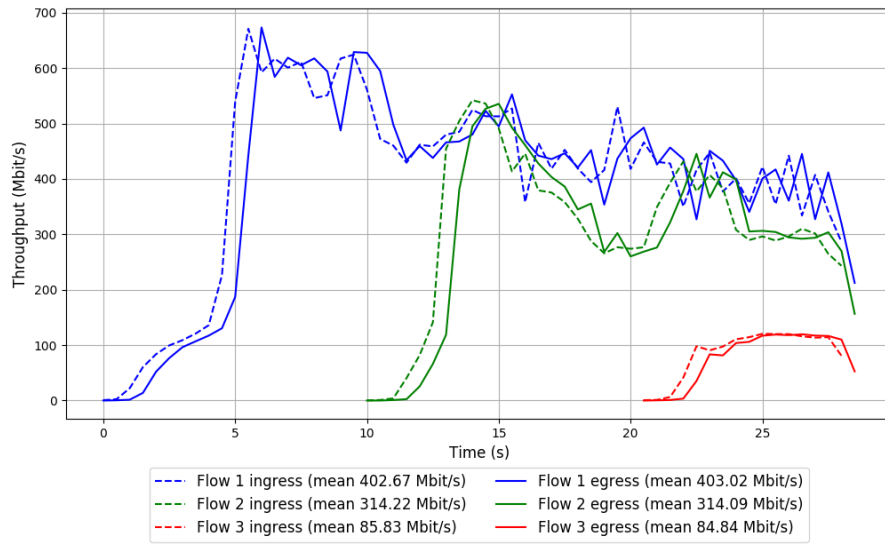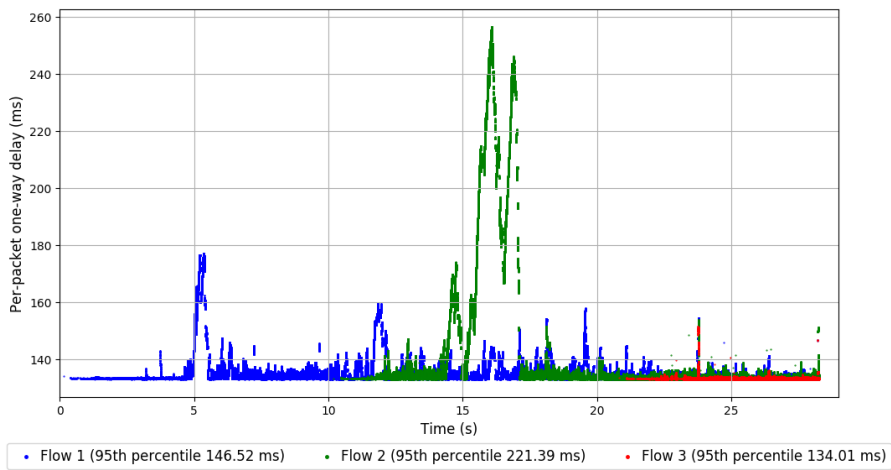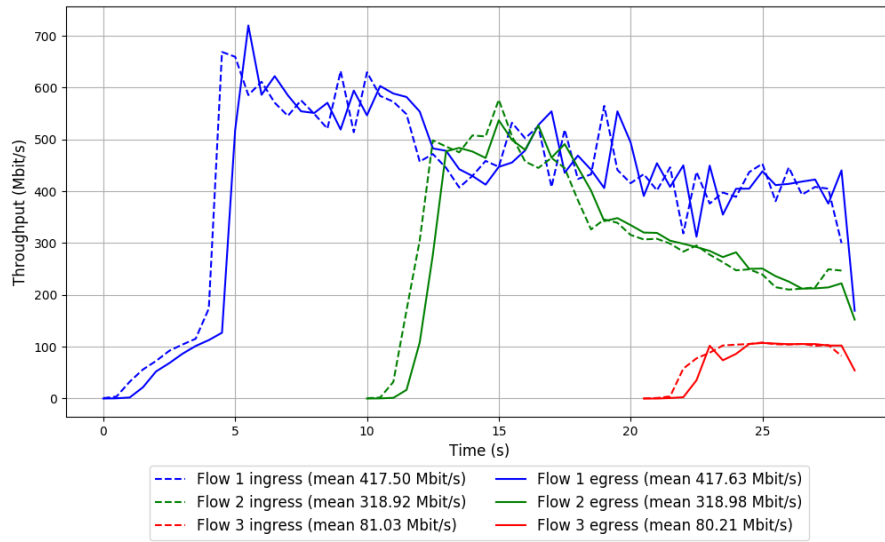
Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 369.08 Mbit/s) --- Flow 1 egress (mean 369.19 Mbit/s)
Flow 2 ingress (mean 321.48 Mbit/s) --- Flow 2 egress (mean 320.56 Mbit/s)
Flow 3 ingress (mean 79.60 Mbit/s) --- Flow 3 egress (mean 78.77 Mbit/s)

Flow 1 (95th percentile 148.21 ms) • Flow 2 (95th percentile 143.67 ms) • Flow 3 (95th percentile 134.17 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-27 12:42:11
End at: 2019-03-27 12:42:41
Local clock offset: 0.228 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2019-03-27 15:04:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 625.99 Mbit/s
95th percentile per-packet one-way delay: 152.599 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 403.02 Mbit/s
95th percentile per-packet one-way delay: 154.134 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 314.09 Mbit/s
95th percentile per-packet one-way delay: 149.875 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 84.84 Mbit/s
95th percentile per-packet one-way delay: 134.277 ms
Loss rate: 4.50%
```

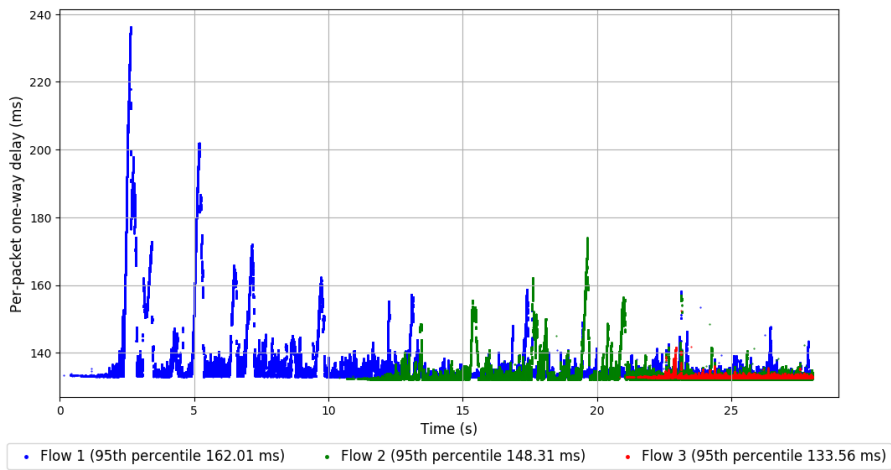Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-27 13:25:19
End at: 2019-03-27 13:25:49
Local clock offset: 0.191 ms
Remote clock offset: -0.176 ms


# Below is generated by plot.py at 2019-03-27 15:05:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 643.75 Mbit/s
95th percentile per-packet one-way delay: 169.612 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 417.63 Mbit/s
95th percentile per-packet one-way delay: 146.520 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 318.98 Mbit/s
95th percentile per-packet one-way delay: 221.394 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 80.21 Mbit/s
95th percentile per-packet one-way delay: 134.010 ms
Loss rate: 4.58%
```

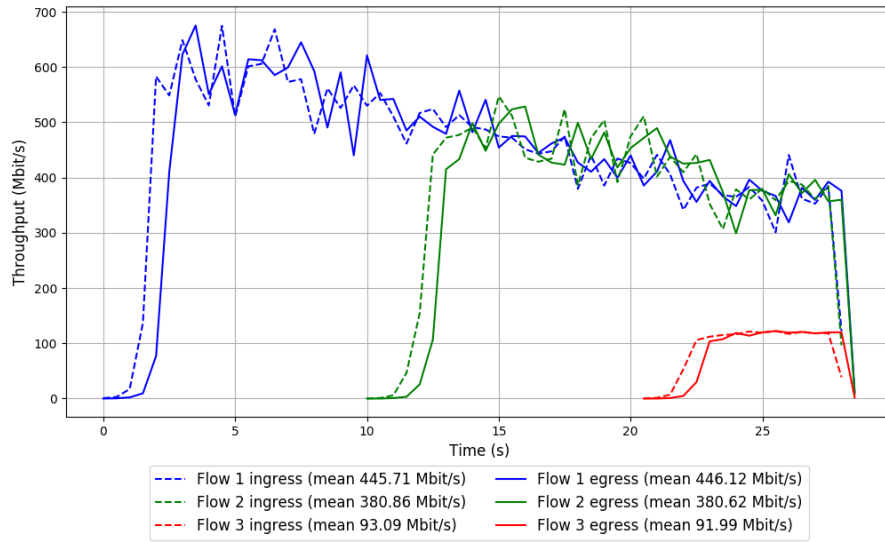Run 5: Report of Indigo-MusesD — Data Link

- - - - Flow 1 ingress (mean 417.50 Mbit/s) —— Flow 1 egress (mean 417.63 Mbit/s)
- - - - Flow 2 ingress (mean 318.92 Mbit/s) —— Flow 2 egress (mean 318.98 Mbit/s)
- - - - Flow 3 ingress (mean 81.03 Mbit/s) —— Flow 3 egress (mean 80.21 Mbit/s)

• Flow 1 (95th percentile 146.52 ms)   • Flow 2 (95th percentile 221.39 ms)   • Flow 3 (95th percentile 134.01 ms)
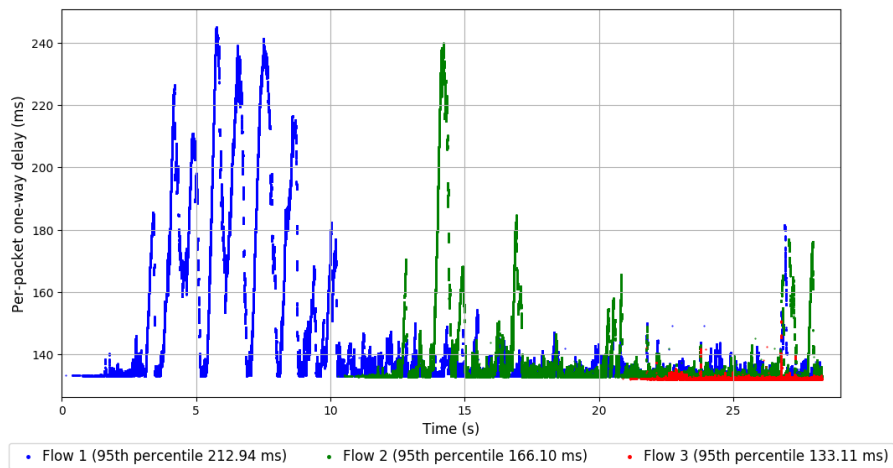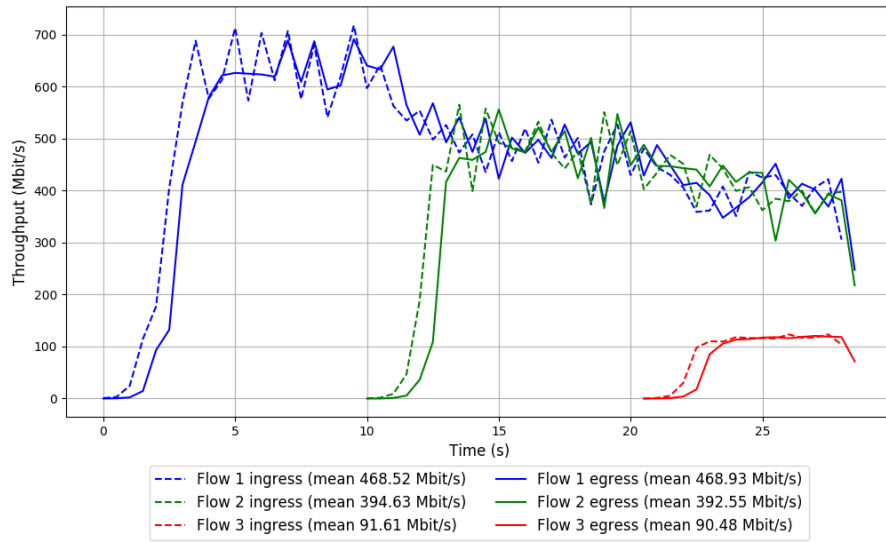
```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-27 09:57:09
End at: 2019-03-27 09:57:39
Local clock offset: -0.084 ms
Remote clock offset: -0.063 ms


# Below is generated by plot.py at 2019-03-27 15:06:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.10 Mbit/s
95th percentile per-packet one-way delay: 155.718 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 446.12 Mbit/s
95th percentile per-packet one-way delay: 162.013 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 380.62 Mbit/s
95th percentile per-packet one-way delay: 148.315 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 91.99 Mbit/s
95th percentile per-packet one-way delay: 133.565 ms
Loss rate: 4.79%
```
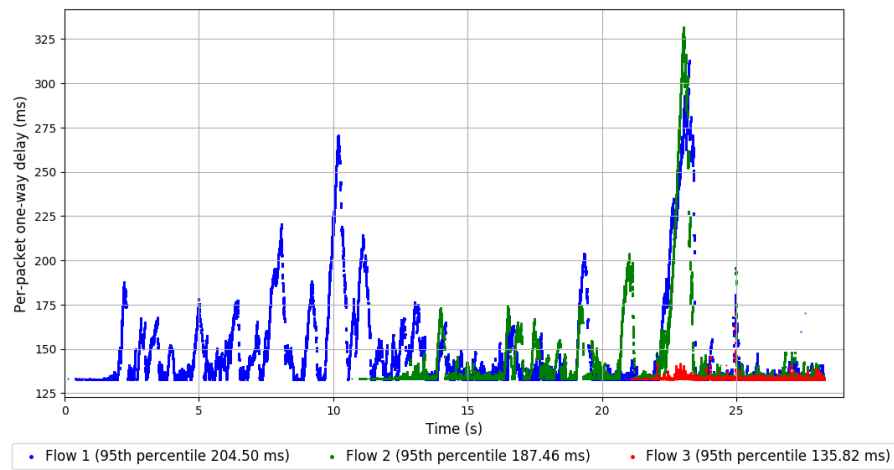
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-27 10:40:02
End at: 2019-03-27 10:40:32
Local clock offset: 0.045 ms
Remote clock offset: -0.087 ms


# Below is generated by plot.py at 2019-03-27 15:10:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 743.91 Mbit/s
95th percentile per-packet one-way delay: 206.375 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 468.93 Mbit/s
95th percentile per-packet one-way delay: 212.942 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 392.55 Mbit/s
95th percentile per-packet one-way delay: 166.104 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 133.113 ms
Loss rate: 4.66%
```
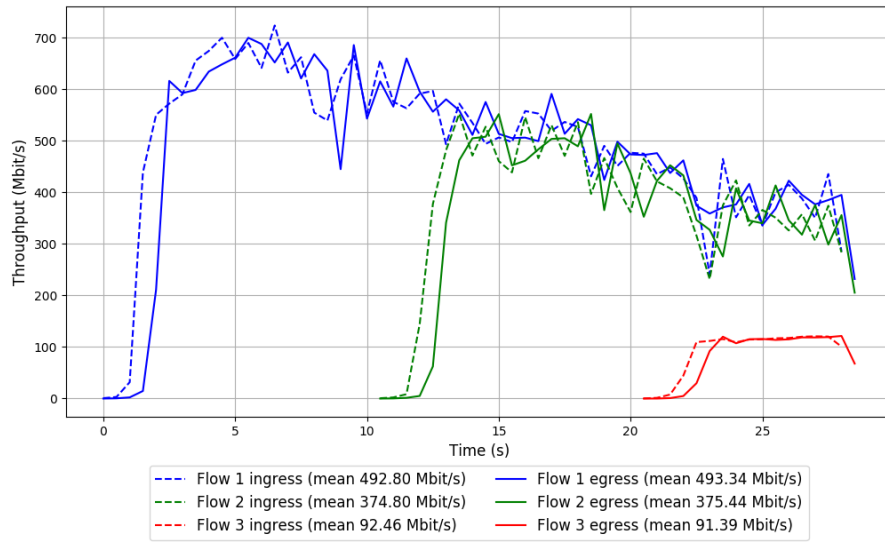
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-27 11:20:57
End at: 2019-03-27 11:21:27
Local clock offset: -0.083 ms
Remote clock offset: -0.143 ms


# Below is generated by plot.py at 2019-03-27 15:14:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 751.74 Mbit/s
95th percentile per-packet one-way delay: 198.259 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 493.34 Mbit/s
95th percentile per-packet one-way delay: 204.500 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 375.44 Mbit/s
95th percentile per-packet one-way delay: 187.462 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 135.816 ms
Loss rate: 4.59%
```
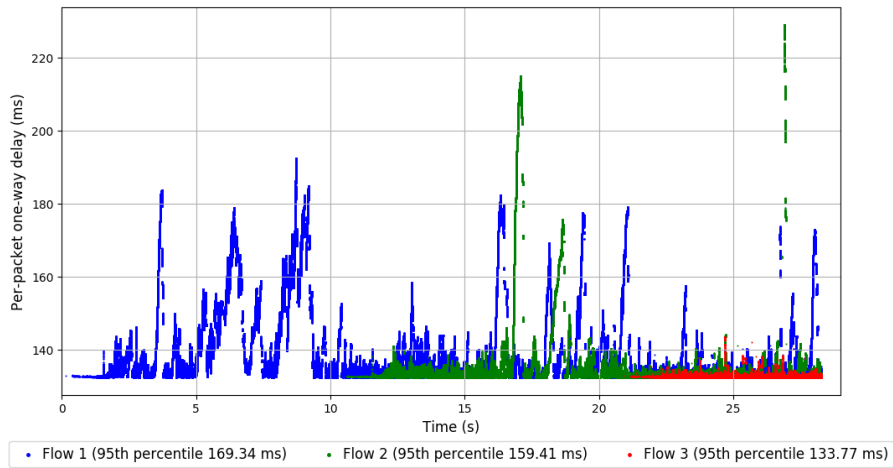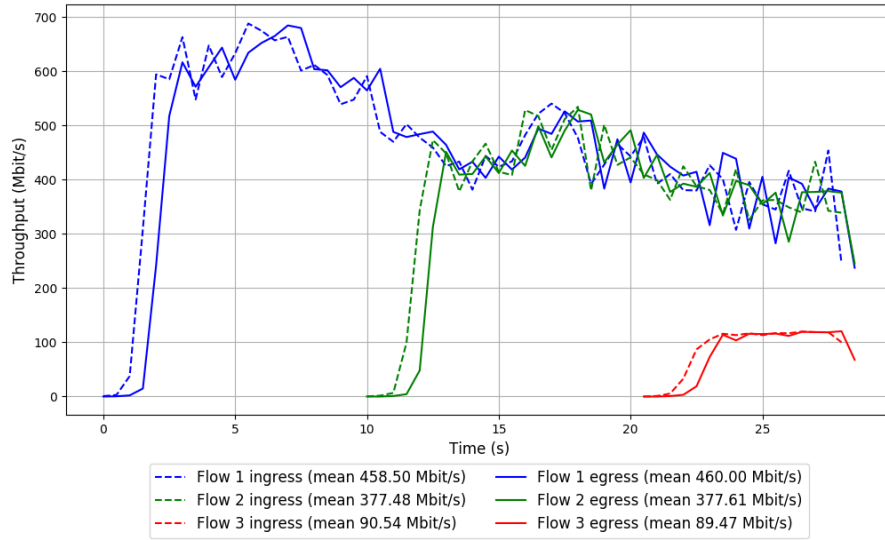
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 492.80 Mbit/s) ---- Flow 1 egress (mean 493.34 Mbit/s)
Flow 2 ingress (mean 374.80 Mbit/s) ---- Flow 2 egress (mean 375.44 Mbit/s)
Flow 3 ingress (mean 92.46 Mbit/s) ---- Flow 3 egress (mean 91.39 Mbit/s)

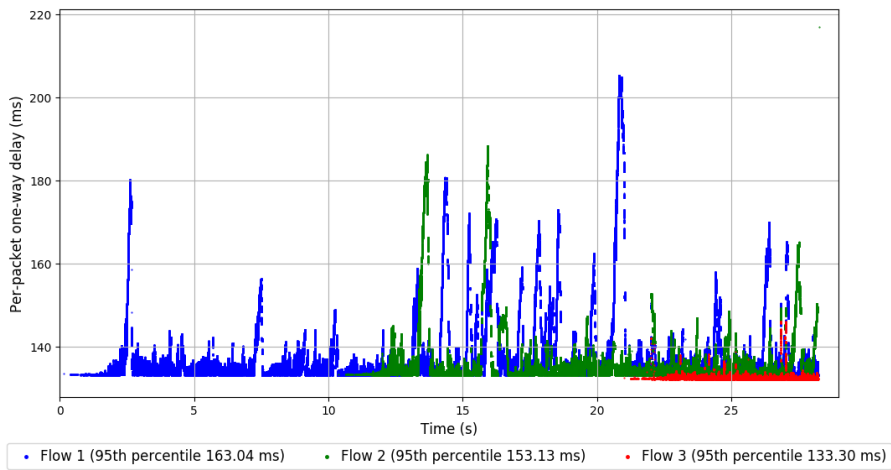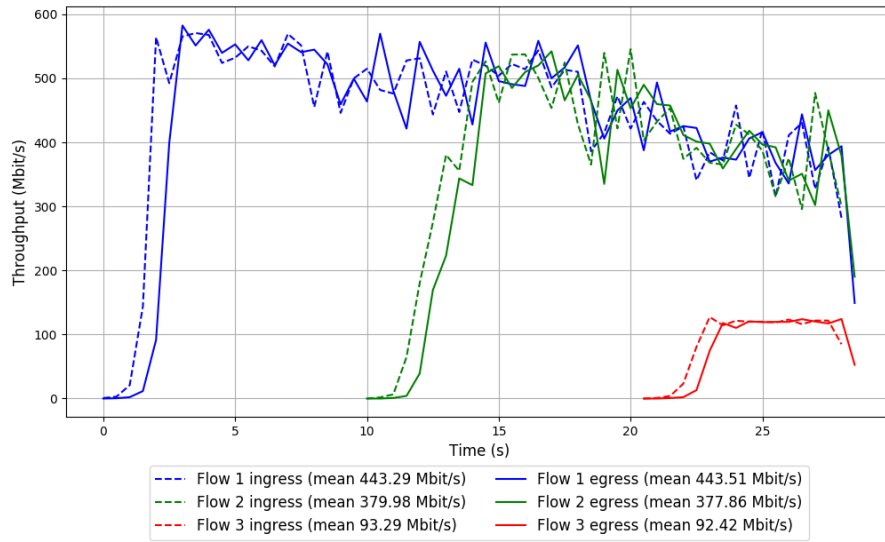Flow 1 (95th percentile 204.50 ms)   Flow 2 (95th percentile 187.46 ms)   Flow 3 (95th percentile 135.82 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-27 12:03:37
End at: 2019-03-27 12:04:07
Local clock offset: -0.107 ms
Remote clock offset: 0.209 ms


# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 723.97 Mbit/s
95th percentile per-packet one-way delay: 167.410 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 460.00 Mbit/s
95th percentile per-packet one-way delay: 169.339 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 377.61 Mbit/s
95th percentile per-packet one-way delay: 159.407 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 89.47 Mbit/s
95th percentile per-packet one-way delay: 133.772 ms
Loss rate: 4.65%
```

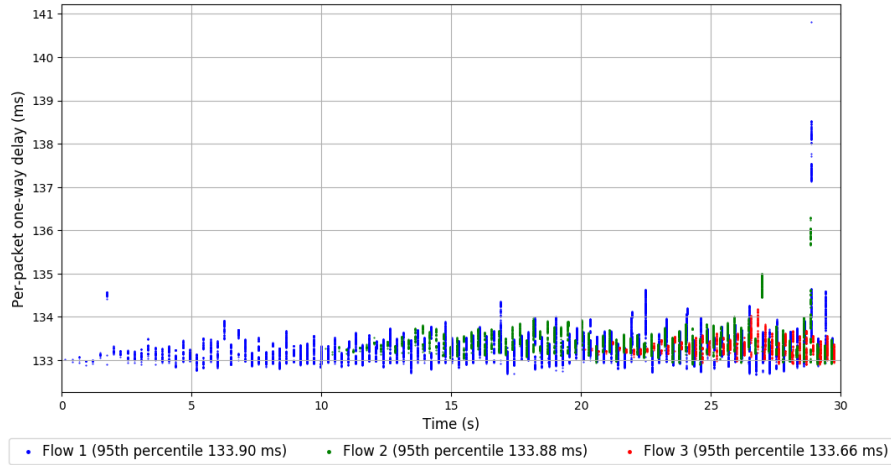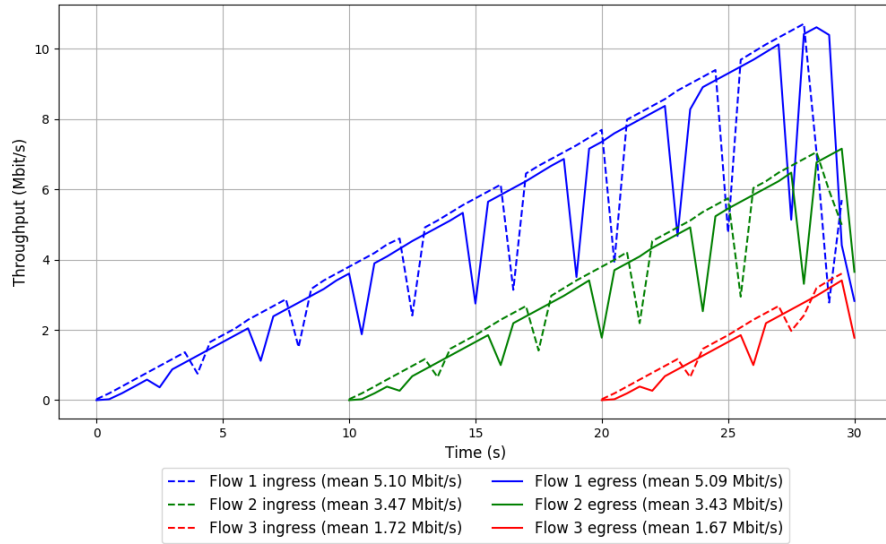Run 4: Report of Indigo-MusesT — Data Link

- - - Flow 1 ingress (mean 458.50 Mbit/s)   —— Flow 1 egress (mean 460.00 Mbit/s)
- - - Flow 2 ingress (mean 377.48 Mbit/s)   —— Flow 2 egress (mean 377.61 Mbit/s)
- - - Flow 3 ingress (mean 90.54 Mbit/s)   —— Flow 3 egress (mean 89.47 Mbit/s)

• Flow 1 (95th percentile 169.34 ms)   • Flow 2 (95th percentile 159.41 ms)   • Flow 3 (95th percentile 133.77 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-27 12:46:57
End at: 2019-03-27 12:47:27
Local clock offset: 0.002 ms
Remote clock offset: -0.155 ms


# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 706.89 Mbit/s
95th percentile per-packet one-way delay: 160.785 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 443.51 Mbit/s
95th percentile per-packet one-way delay: 163.045 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 377.86 Mbit/s
95th percentile per-packet one-way delay: 153.131 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 92.42 Mbit/s
95th percentile per-packet one-way delay: 133.303 ms
Loss rate: 4.46%
```

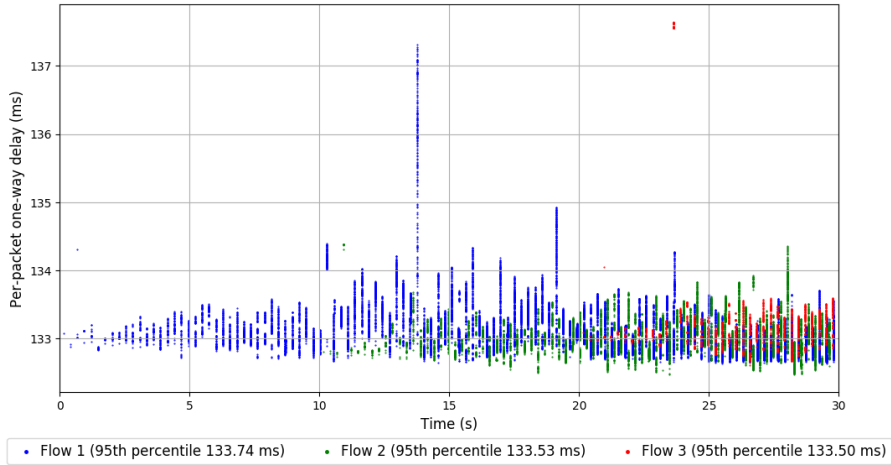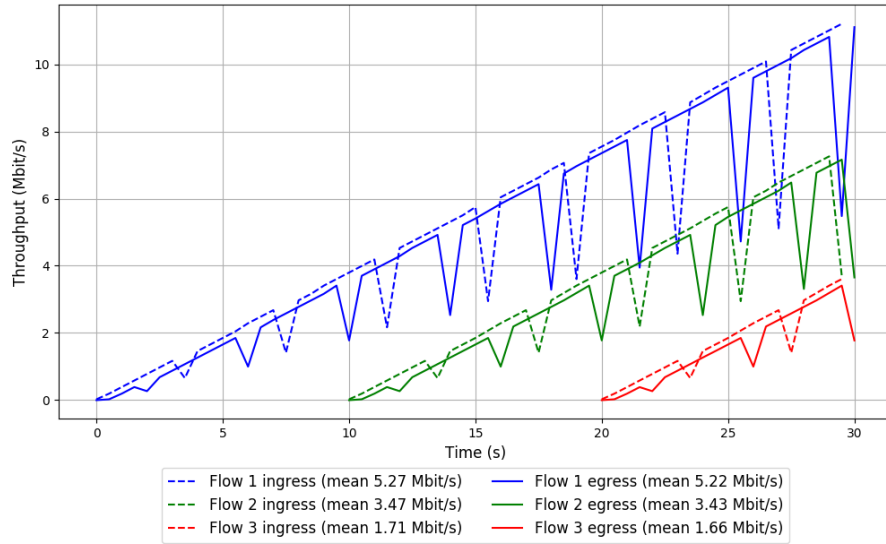Run 5: Report of Indigo-MusesT — Data Link

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```
Run 1: Statistics of LEDBAT

Start at: 2019-03-27 10:30:35
End at: 2019-03-27 10:31:05
Local clock offset: -0.094 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 133.878 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 133.895 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 133.877 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 133.659 ms
Loss rate: 5.40%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-03-27 11:13:05
End at: 2019-03-27 11:13:35
Local clock offset: -0.377 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 133.655 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 133.741 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 133.534 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.504 ms
Loss rate: 5.40%
```
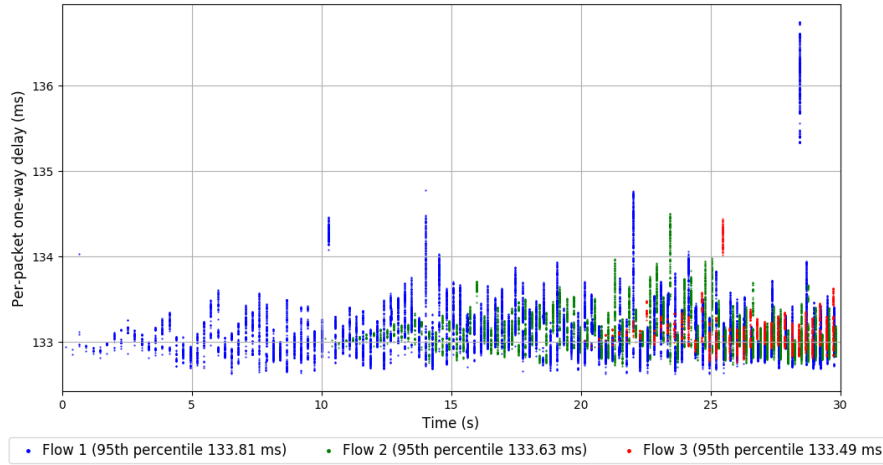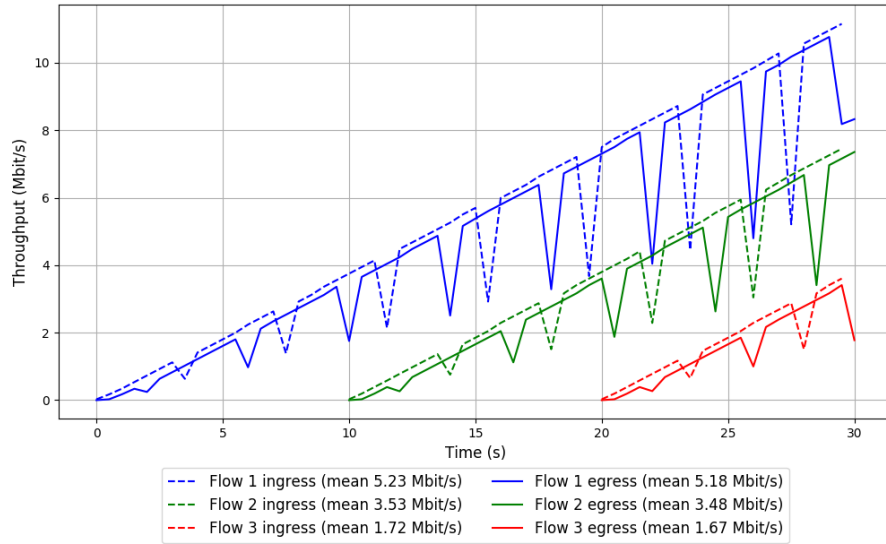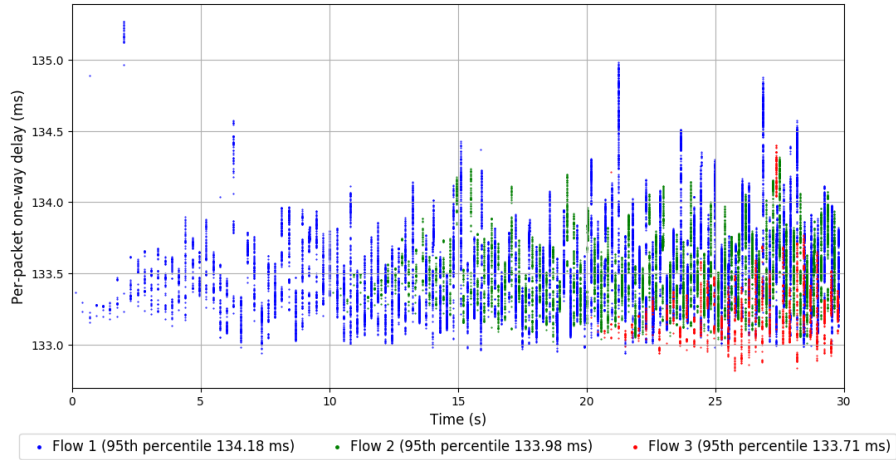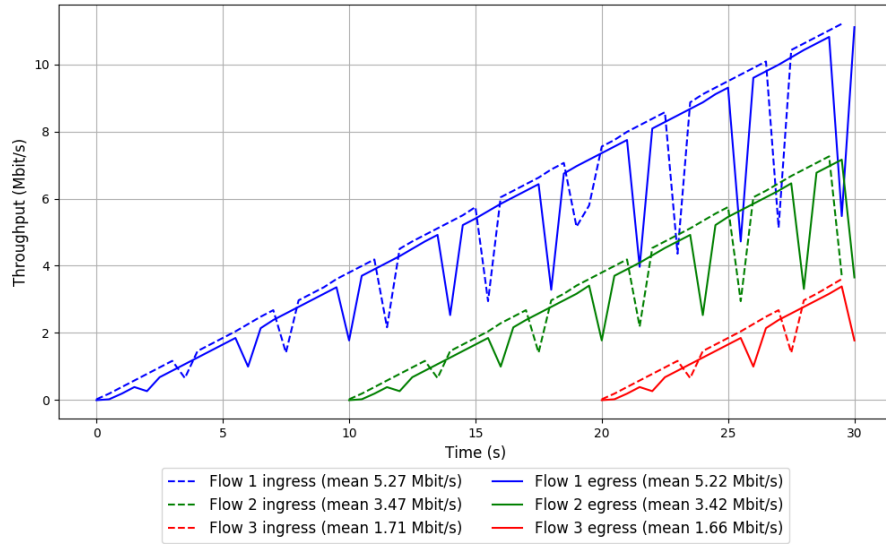
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.27 Mbit/s) Flow 1 egress (mean 5.22 Mbit/s)
Flow 2 ingress (mean 3.47 Mbit/s) Flow 2 egress (mean 3.43 Mbit/s)
Flow 3 ingress (mean 1.71 Mbit/s) Flow 3 egress (mean 1.66 Mbit/s)

Flow 1 (95th percentile 133.74 ms)   Flow 2 (95th percentile 133.53 ms)   Flow 3 (95th percentile 133.50 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-03-27 11:55:22
End at: 2019-03-27 11:55:52
Local clock offset: -0.122 ms
Remote clock offset: -0.14 ms


# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 133.710 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 133.815 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 133.629 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 133.492 ms
Loss rate: 5.40%
```
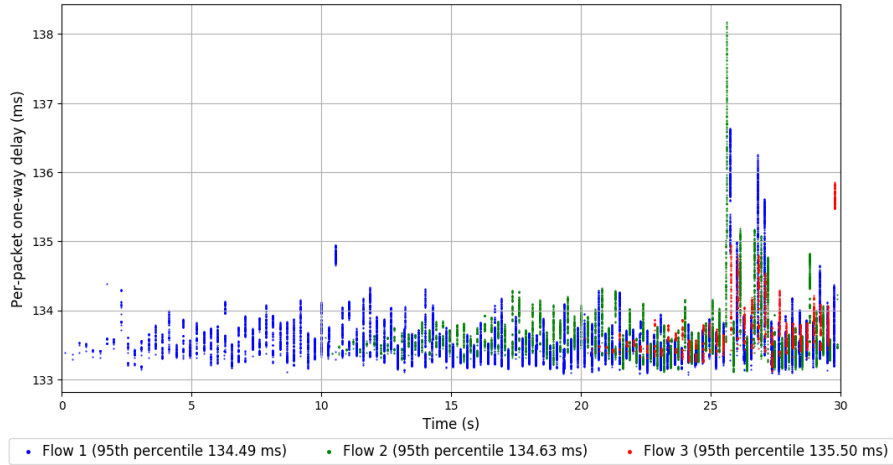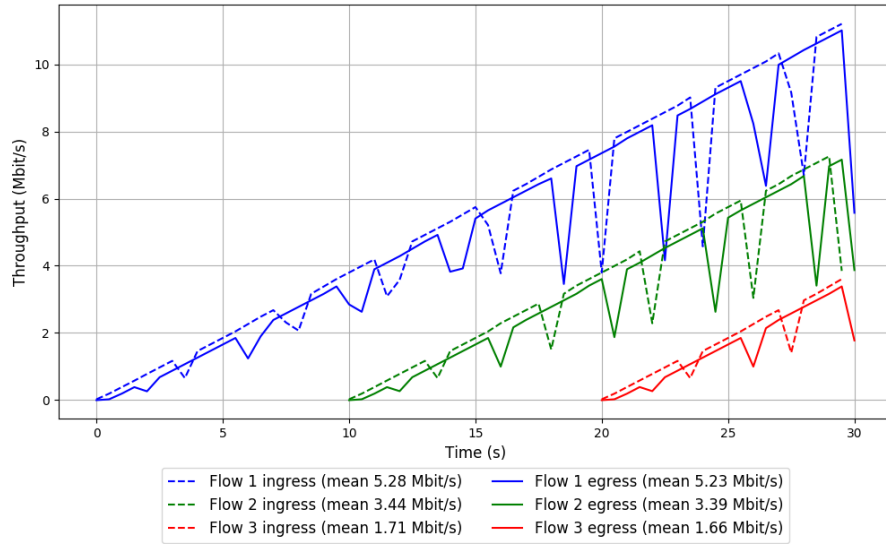
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-03-27 12:38:34
End at: 2019-03-27 12:39:04
Local clock offset: -0.016 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 134.102 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 134.177 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 133.978 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.706 ms
Loss rate: 5.41%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.27 Mbit/s)   Flow 1 egress (mean 5.22 Mbit/s)
Flow 2 ingress (mean 3.47 Mbit/s)   Flow 2 egress (mean 3.42 Mbit/s)
Flow 3 ingress (mean 1.71 Mbit/s)   Flow 3 egress (mean 1.66 Mbit/s)

Flow 1 (95th percentile 134.18 ms)   Flow 2 (95th percentile 133.98 ms)   Flow 3 (95th percentile 133.71 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-03-27 13:21:41
End at: 2019-03-27 13:22:11
Local clock offset: 0.177 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2019-03-27 15:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 134.592 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 134.488 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 134.634 ms
Loss rate: 2.64%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 135.495 ms
Loss rate: 5.41%
```
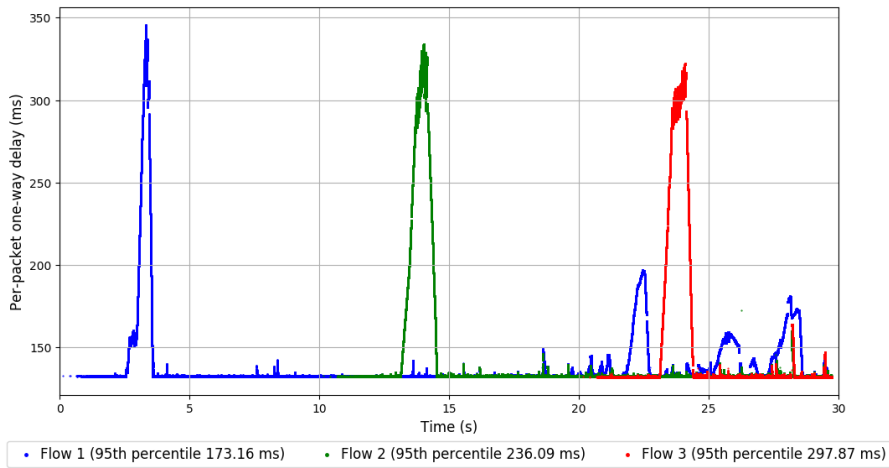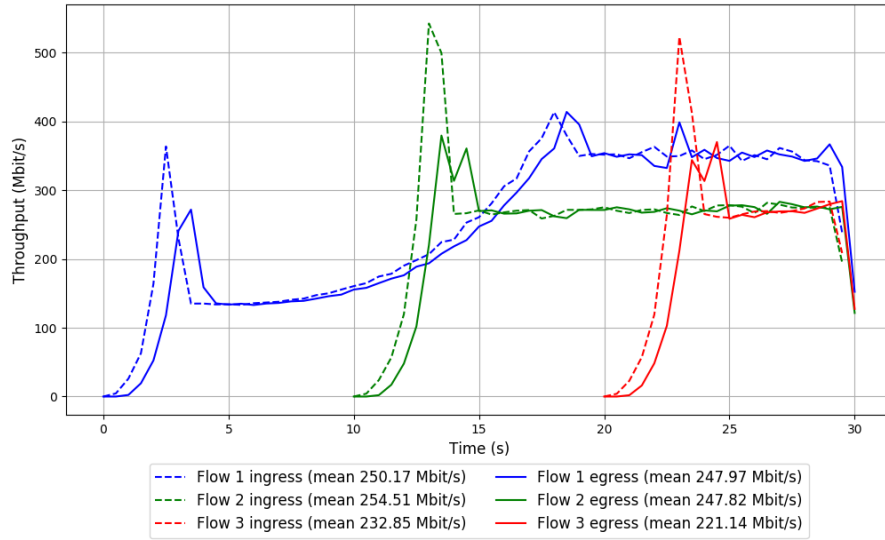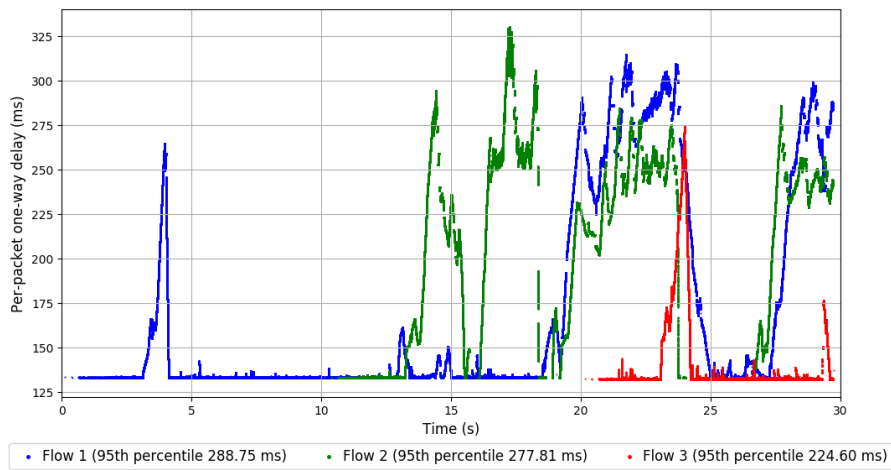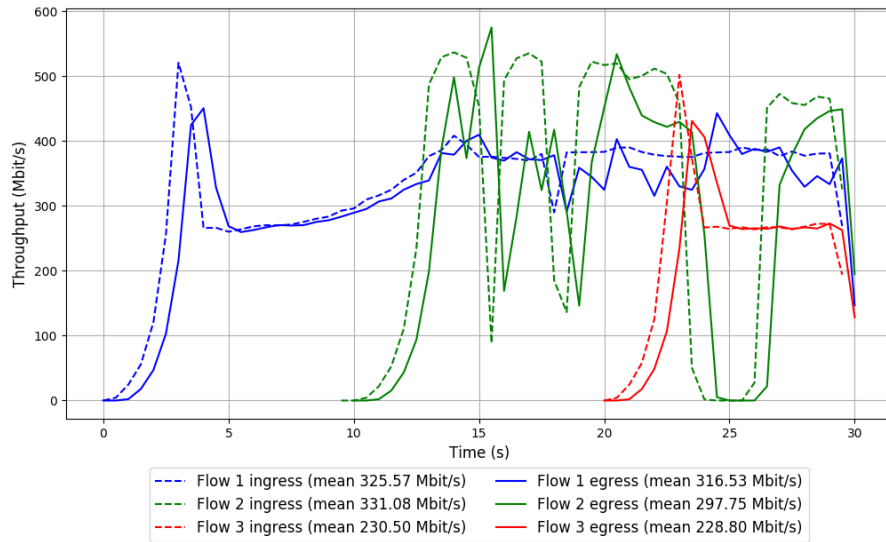
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-27 09:59:10
End at: 2019-03-27 09:59:40
Local clock offset: -0.316 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2019-03-27 15:22:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.35 Mbit/s
95th percentile per-packet one-way delay: 208.804 ms
Loss rate: 3.41%
-- Flow 1:
Average throughput: 247.97 Mbit/s
95th percentile per-packet one-way delay: 173.161 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 247.82 Mbit/s
95th percentile per-packet one-way delay: 236.095 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 221.14 Mbit/s
95th percentile per-packet one-way delay: 297.871 ms
Loss rate: 7.61%
```

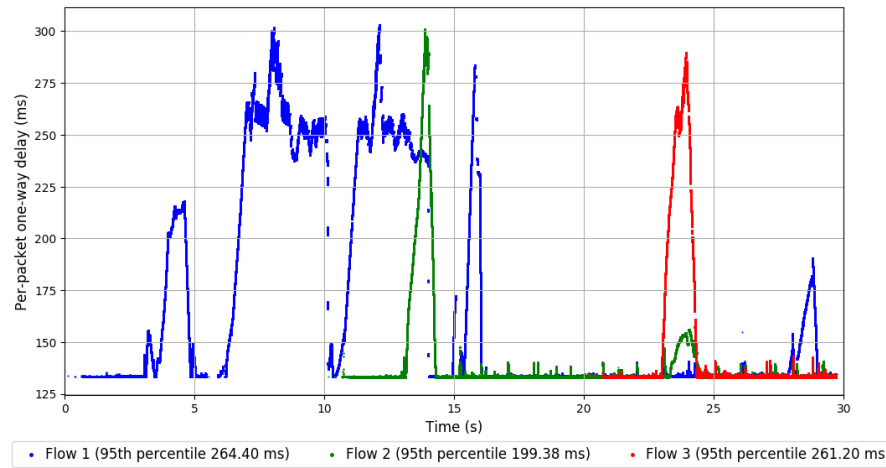Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-03-27 10:42:10
End at: 2019-03-27 10:42:40
Local clock offset: -0.354 ms
Remote clock offset: -0.125 ms


# Below is generated by plot.py at 2019-03-27 15:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.53 Mbit/s
95th percentile per-packet one-way delay: 284.630 ms
Loss rate: 6.32%
-- Flow 1:
Average throughput: 316.53 Mbit/s
95th percentile per-packet one-way delay: 288.755 ms
Loss rate: 3.65%
-- Flow 2:
Average throughput: 297.75 Mbit/s
95th percentile per-packet one-way delay: 277.805 ms
Loss rate: 11.28%
-- Flow 3:
Average throughput: 228.80 Mbit/s
95th percentile per-packet one-way delay: 224.601 ms
Loss rate: 3.38%
```
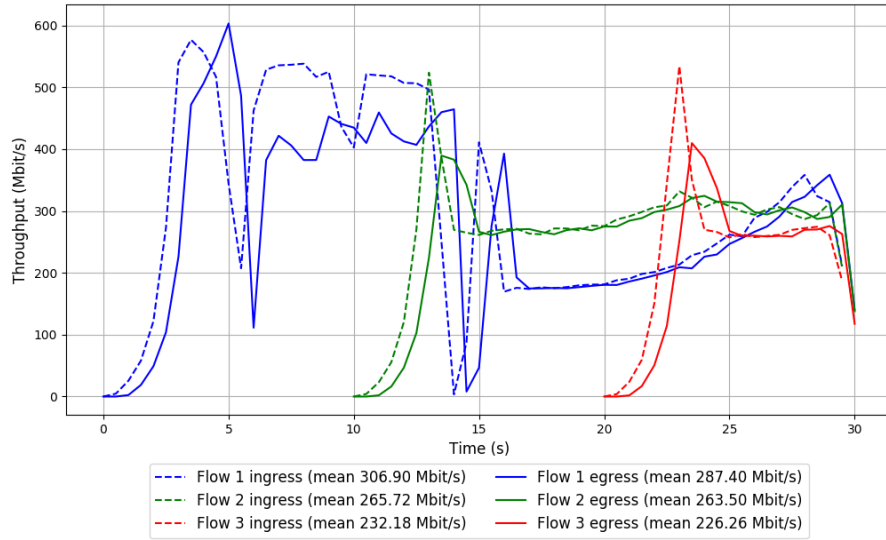
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-03-27 11:23:17
End at: 2019-03-27 11:23:47
Local clock offset: 0.063 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2019-03-27 15:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.89 Mbit/s
95th percentile per-packet one-way delay: 260.792 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 287.40 Mbit/s
95th percentile per-packet one-way delay: 264.397 ms
Loss rate: 7.19%
-- Flow 2:
Average throughput: 263.50 Mbit/s
95th percentile per-packet one-way delay: 199.385 ms
Loss rate: 2.17%
-- Flow 3:
Average throughput: 226.26 Mbit/s
95th percentile per-packet one-way delay: 261.196 ms
Loss rate: 5.20%
```

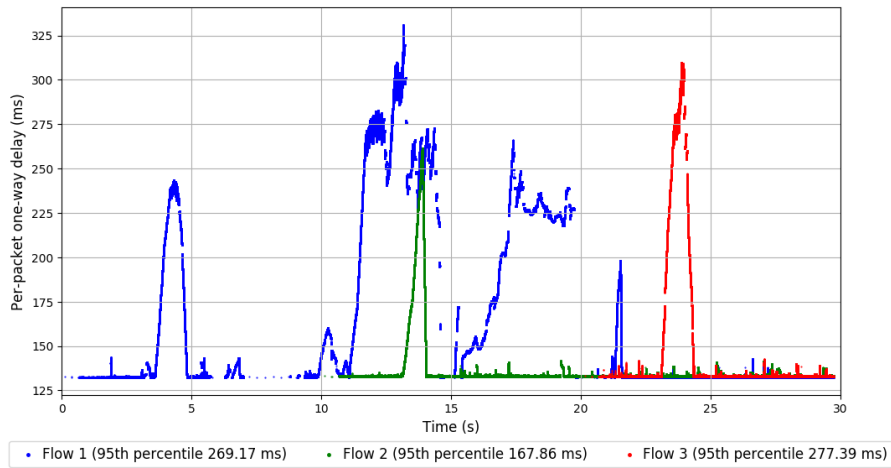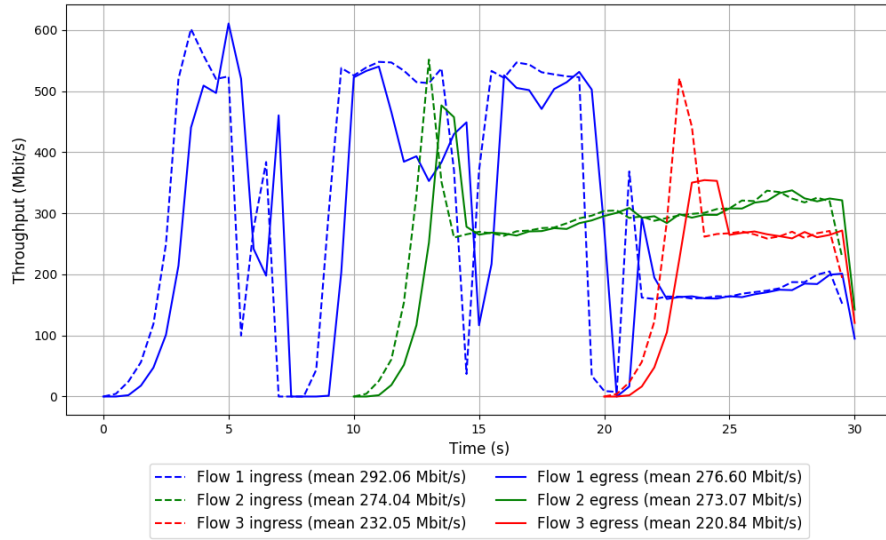## Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 306.90 Mbit/s)   Flow 1 egress (mean 287.40 Mbit/s)
Flow 2 ingress (mean 265.72 Mbit/s)   Flow 2 egress (mean 263.50 Mbit/s)
Flow 3 ingress (mean 232.18 Mbit/s)   Flow 3 egress (mean 226.26 Mbit/s)

Flow 1 (95th percentile 264.40 ms)   Flow 2 (95th percentile 199.38 ms)   Flow 3 (95th percentile 261.20 ms)
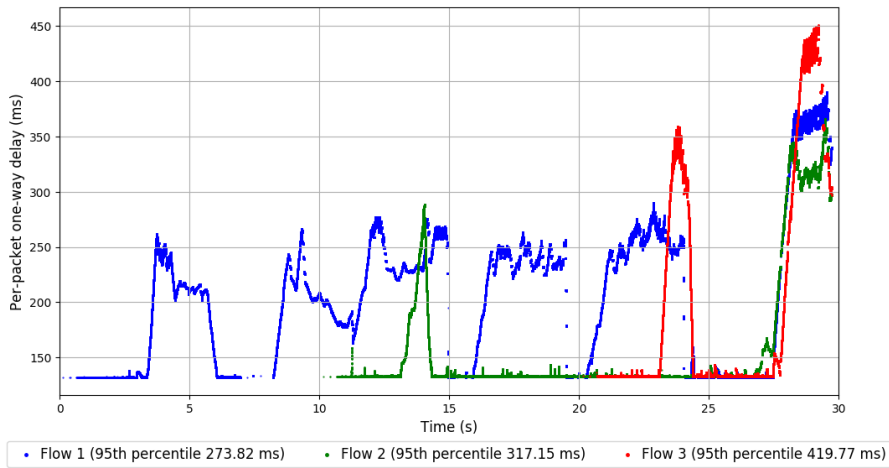
```
Run 4: Statistics of PCC-Allegro

Start at: 2019-03-27 12:05:48
End at: 2019-03-27 12:06:18
Local clock offset: -0.11 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-03-27 15:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.81 Mbit/s
95th percentile per-packet one-way delay: 262.551 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 276.60 Mbit/s
95th percentile per-packet one-way delay: 269.172 ms
Loss rate: 6.14%
-- Flow 2:
Average throughput: 273.07 Mbit/s
95th percentile per-packet one-way delay: 167.857 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 220.84 Mbit/s
95th percentile per-packet one-way delay: 277.388 ms
Loss rate: 7.42%
```

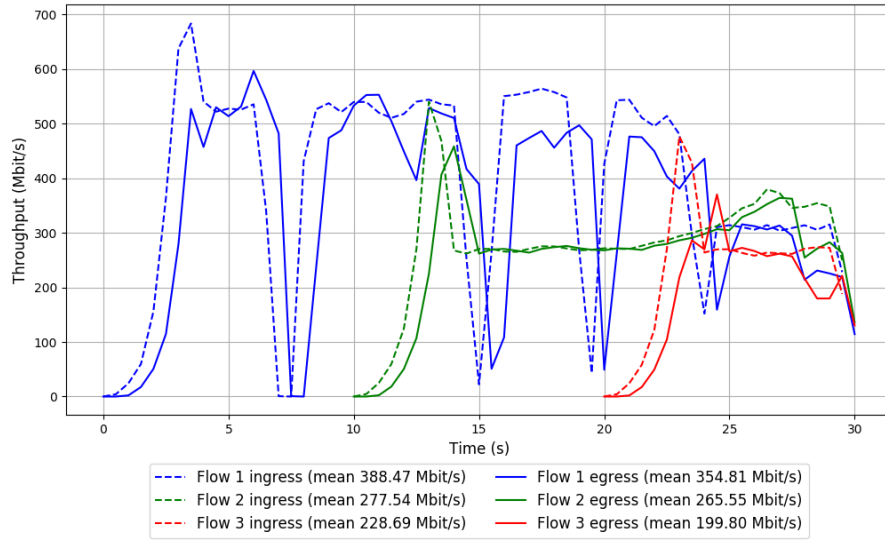Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-03-27 12:49:26
End at: 2019-03-27 12:49:56
Local clock offset: -0.179 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2019-03-27 15:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.17 Mbit/s
95th percentile per-packet one-way delay: 326.656 ms
Loss rate: 9.03%
-- Flow 1:
Average throughput: 354.81 Mbit/s
95th percentile per-packet one-way delay: 273.824 ms
Loss rate: 9.49%
-- Flow 2:
Average throughput: 265.55 Mbit/s
95th percentile per-packet one-way delay: 317.146 ms
Loss rate: 5.62%
-- Flow 3:
Average throughput: 199.80 Mbit/s
95th percentile per-packet one-way delay: 419.773 ms
Loss rate: 15.02%
```
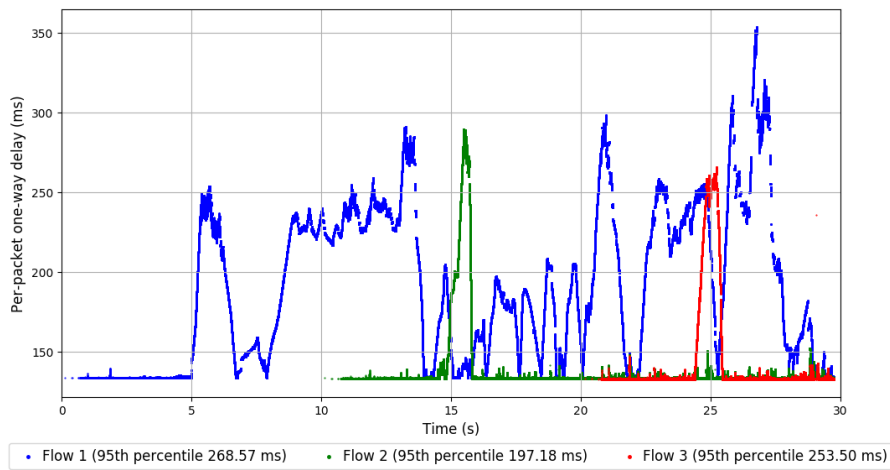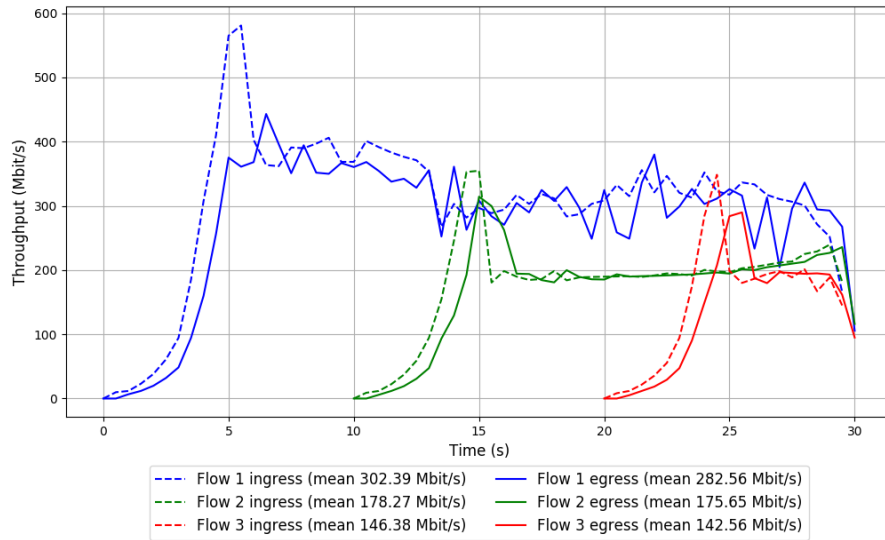
Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-27 10:05:48
End at: 2019-03-27 10:06:18
Local clock offset: 0.386 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-03-27 15:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.00 Mbit/s
95th percentile per-packet one-way delay: 256.196 ms
Loss rate: 6.02%
-- Flow 1:
Average throughput: 282.56 Mbit/s
95th percentile per-packet one-way delay: 268.568 ms
Loss rate: 7.40%
-- Flow 2:
Average throughput: 175.65 Mbit/s
95th percentile per-packet one-way delay: 197.181 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 142.56 Mbit/s
95th percentile per-packet one-way delay: 253.500 ms
Loss rate: 5.27%
```

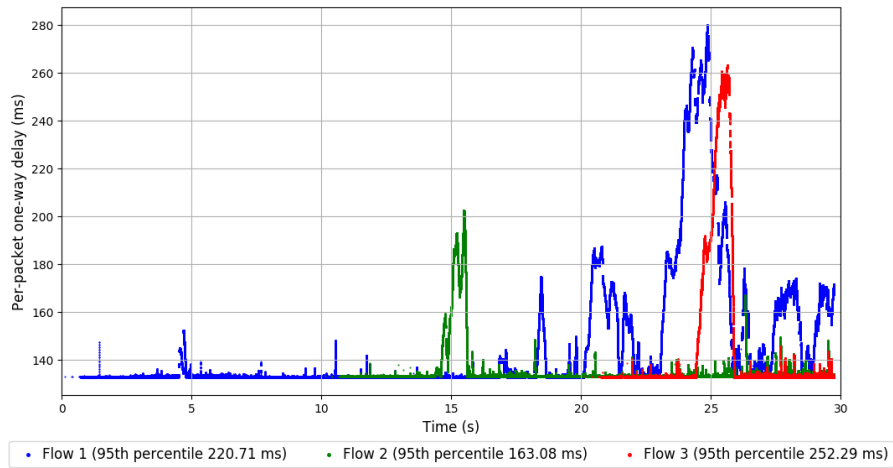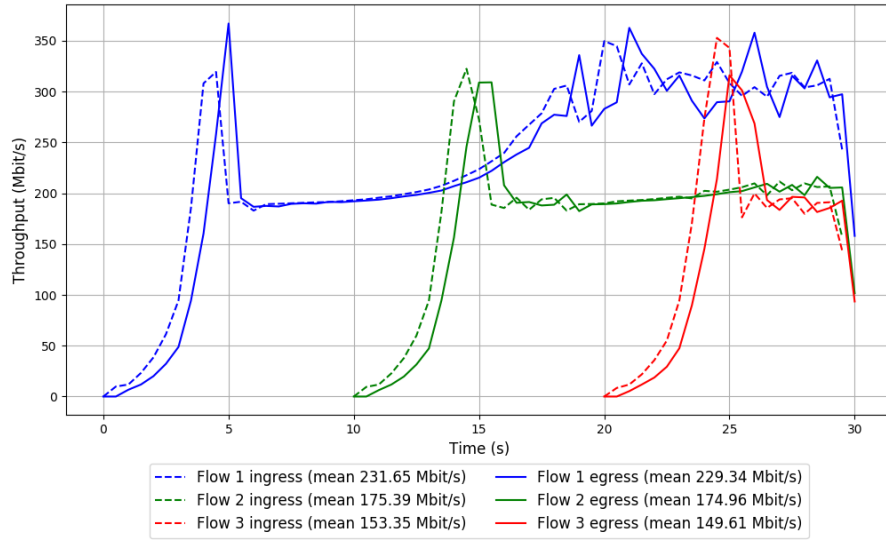## Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-03-27 10:48:20
End at: 2019-03-27 10:48:50
Local clock offset: -0.129 ms
Remote clock offset: -0.129 ms


# Below is generated by plot.py at 2019-03-27 15:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.60 Mbit/s
95th percentile per-packet one-way delay: 212.623 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 229.34 Mbit/s
95th percentile per-packet one-way delay: 220.709 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 174.96 Mbit/s
95th percentile per-packet one-way delay: 163.084 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 149.61 Mbit/s
95th percentile per-packet one-way delay: 252.291 ms
Loss rate: 5.07%
```

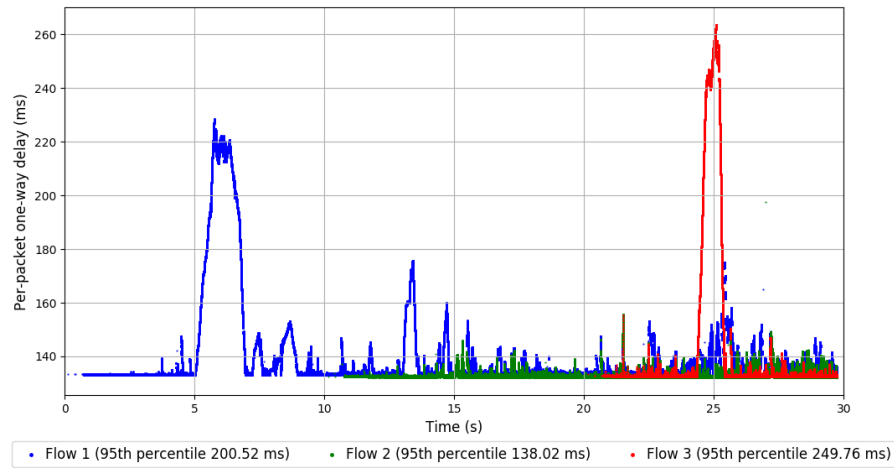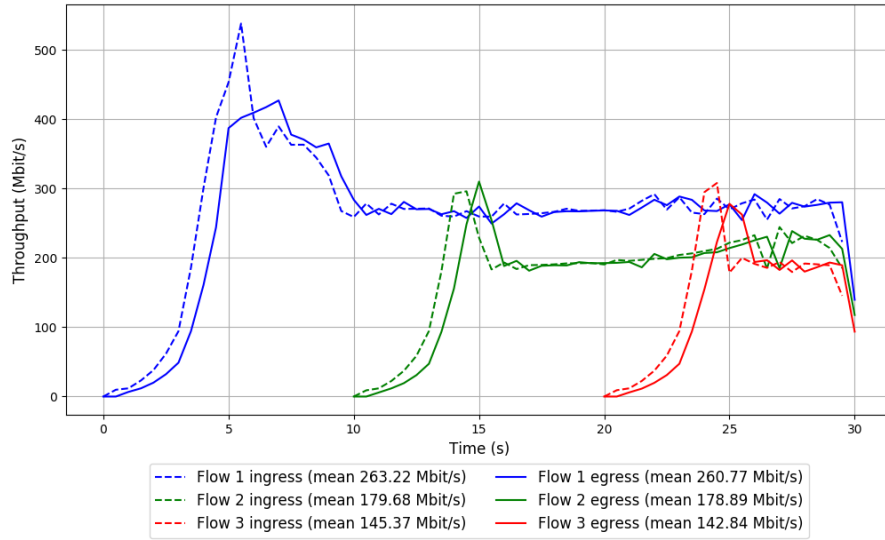# Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-03-27 11:29:43
End at: 2019-03-27 11:30:13
Local clock offset: -0.077 ms
Remote clock offset: -0.189 ms


# Below is generated by plot.py at 2019-03-27 15:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.48 Mbit/s
95th percentile per-packet one-way delay: 196.095 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 260.77 Mbit/s
95th percentile per-packet one-way delay: 200.522 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 178.89 Mbit/s
95th percentile per-packet one-way delay: 138.024 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 142.84 Mbit/s
95th percentile per-packet one-way delay: 249.759 ms
Loss rate: 4.40%
```

Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2019-03-27 12:12:47
End at: 2019-03-27 12:13:17
Local clock offset: -0.524 ms
Remote clock offset: -0.14 ms


# Below is generated by plot.py at 2019-03-27 15:40:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.65 Mbit/s
95th percentile per-packet one-way delay: 223.076 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 267.47 Mbit/s
95th percentile per-packet one-way delay: 226.775 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 177.60 Mbit/s
95th percentile per-packet one-way delay: 143.375 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 140.84 Mbit/s
95th percentile per-packet one-way delay: 256.074 ms
Loss rate: 5.81%
```
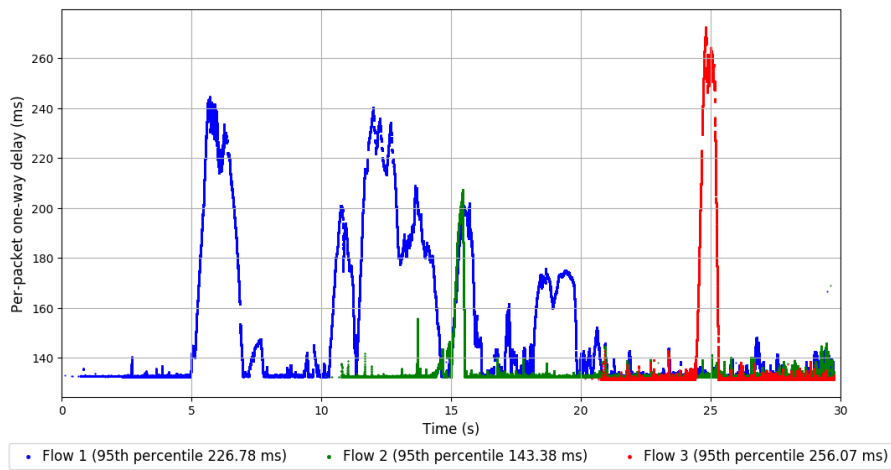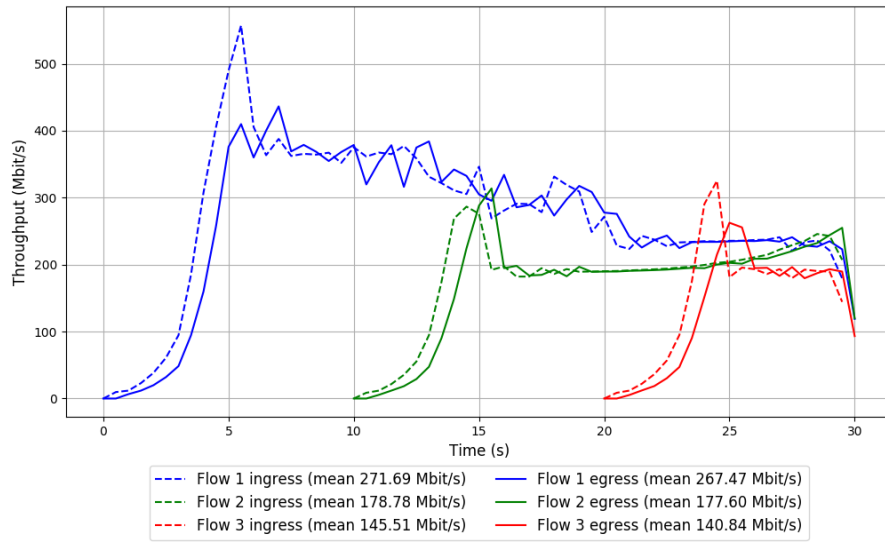
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-03-27 12:56:16
End at: 2019-03-27 12:56:46
Local clock offset: -0.181 ms
Remote clock offset: -0.108 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 457.63 Mbit/s
95th percentile per-packet one-way delay: 260.010 ms
Loss rate: 5.85%
-- Flow 1:
Average throughput: 284.86 Mbit/s
95th percentile per-packet one-way delay: 266.032 ms
Loss rate: 7.91%
-- Flow 2:
Average throughput: 190.05 Mbit/s
95th percentile per-packet one-way delay: 166.030 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 145.05 Mbit/s
95th percentile per-packet one-way delay: 144.157 ms
Loss rate: 3.70%
```
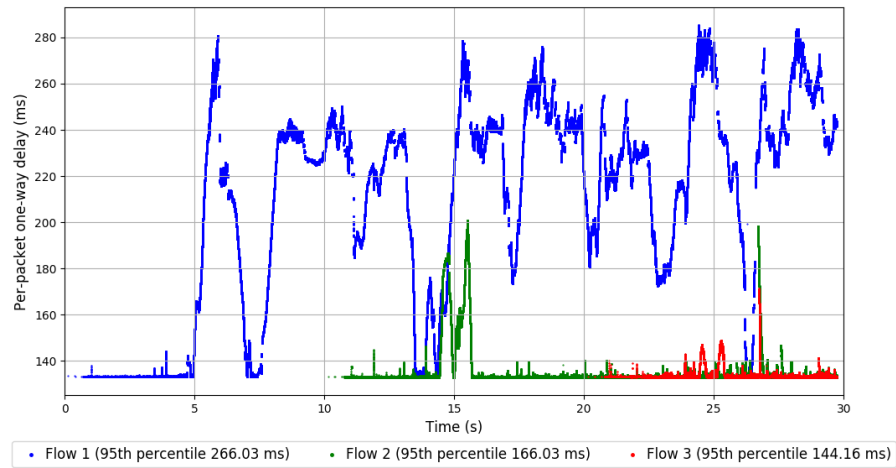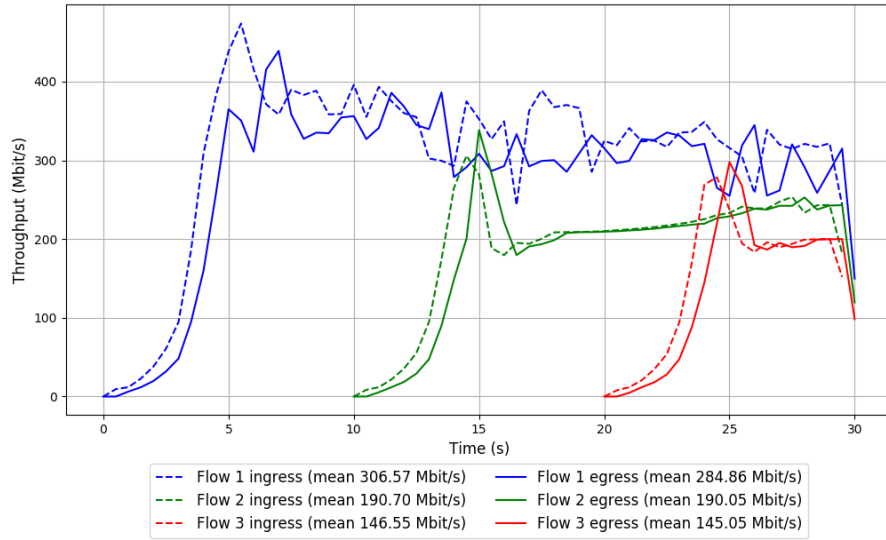
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 306.57 Mbit/s) --- Flow 1 egress (mean 284.86 Mbit/s)
Flow 2 ingress (mean 190.70 Mbit/s) --- Flow 2 egress (mean 190.05 Mbit/s)
Flow 3 ingress (mean 146.55 Mbit/s) --- Flow 3 egress (mean 145.05 Mbit/s)

Flow 1 (95th percentile 266.03 ms) • Flow 2 (95th percentile 166.03 ms) • Flow 3 (95th percentile 144.16 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-03-27 10:12:07
End at: 2019-03-27 10:12:37
Local clock offset: 0.111 ms
Remote clock offset: -0.122 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.93 Mbit/s
95th percentile per-packet one-way delay: 133.164 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 133.148 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 133.215 ms
Loss rate: 1.77%
-- Flow 3:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 133.141 ms
Loss rate: 3.30%
```
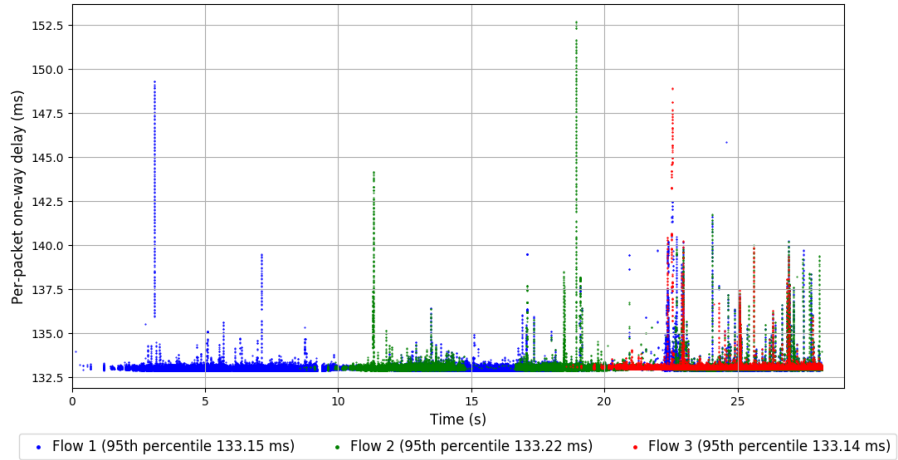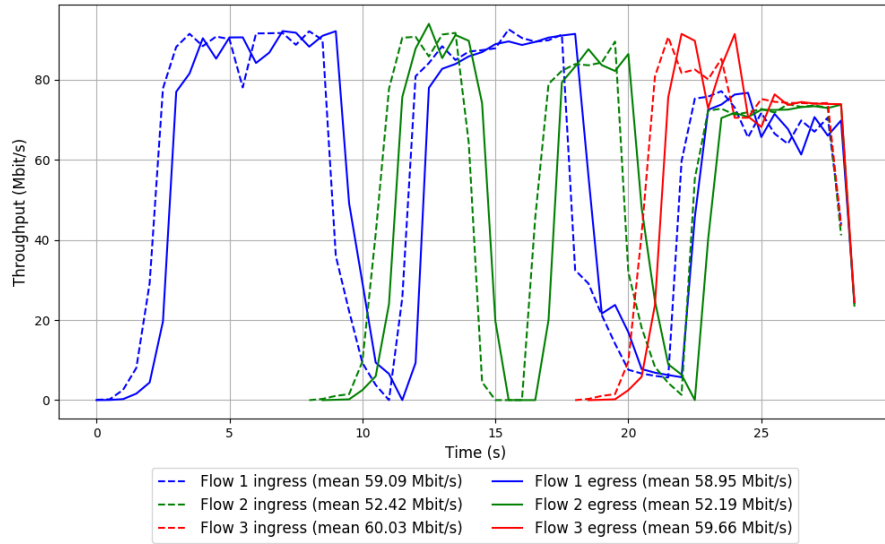
Run 1: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 59.09 Mbit/s)
- Flow 1 egress (mean 58.95 Mbit/s)
- Flow 2 ingress (mean 52.42 Mbit/s)
- Flow 2 egress (mean 52.19 Mbit/s)
- Flow 3 ingress (mean 60.03 Mbit/s)
- Flow 3 egress (mean 59.66 Mbit/s)

- Flow 1 (95th percentile 133.15 ms)
- Flow 2 (95th percentile 133.22 ms)
- Flow 3 (95th percentile 133.14 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-03-27 10:54:39
End at: 2019-03-27 10:55:09
Local clock offset: -0.518 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 132.720 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 54.54 Mbit/s
95th percentile per-packet one-way delay: 132.627 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 48.85 Mbit/s
95th percentile per-packet one-way delay: 132.803 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 132.139 ms
Loss rate: 3.42%
```
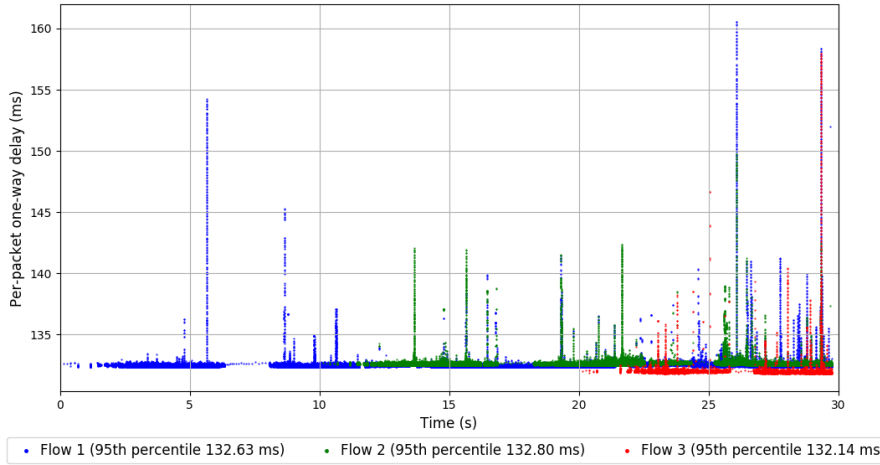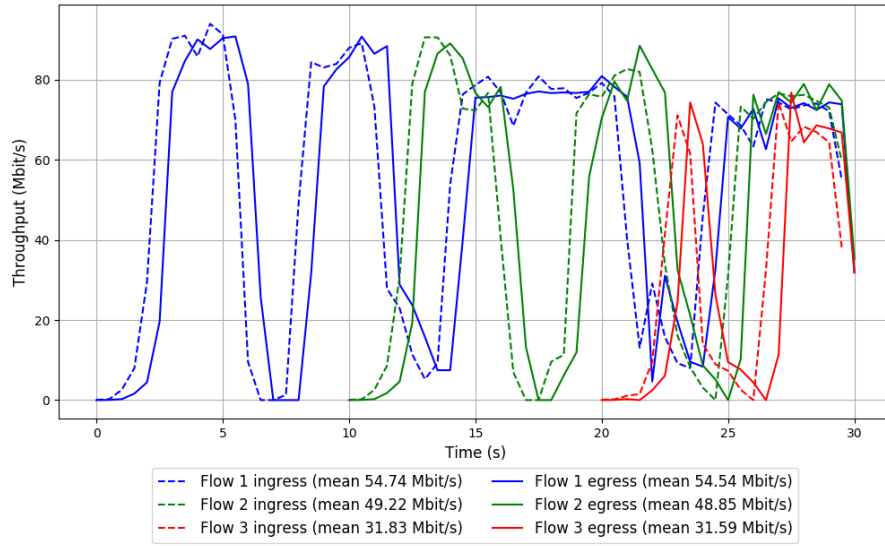
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-03-27 11:36:15
End at: 2019-03-27 11:36:45
Local clock offset: -0.149 ms
Remote clock offset: -0.166 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.70 Mbit/s
95th percentile per-packet one-way delay: 132.997 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 56.15 Mbit/s
95th percentile per-packet one-way delay: 133.007 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 46.97 Mbit/s
95th percentile per-packet one-way delay: 133.001 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 132.523 ms
Loss rate: 2.05%
```
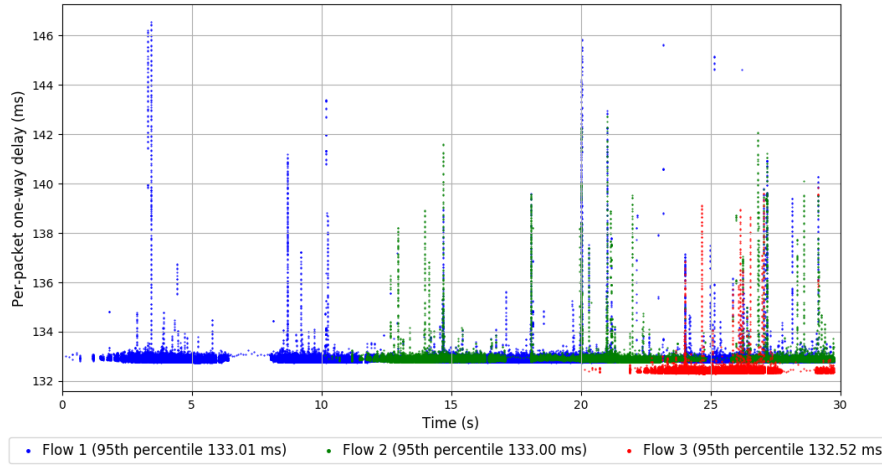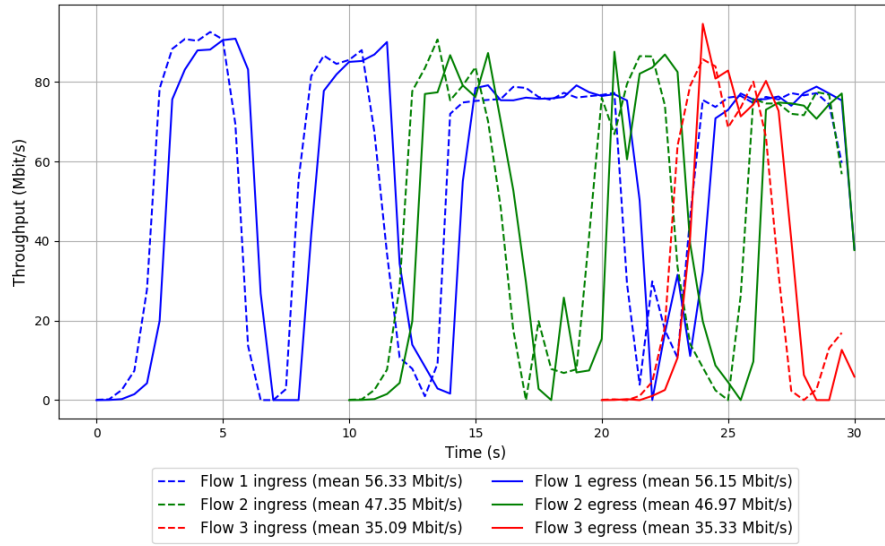
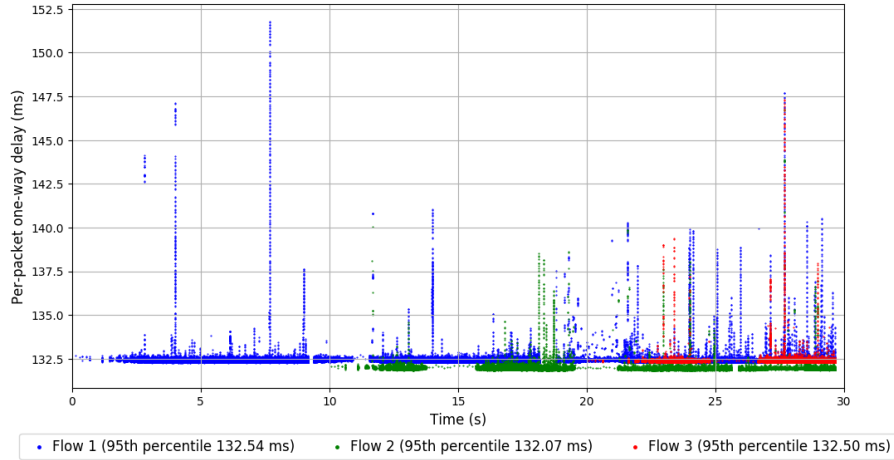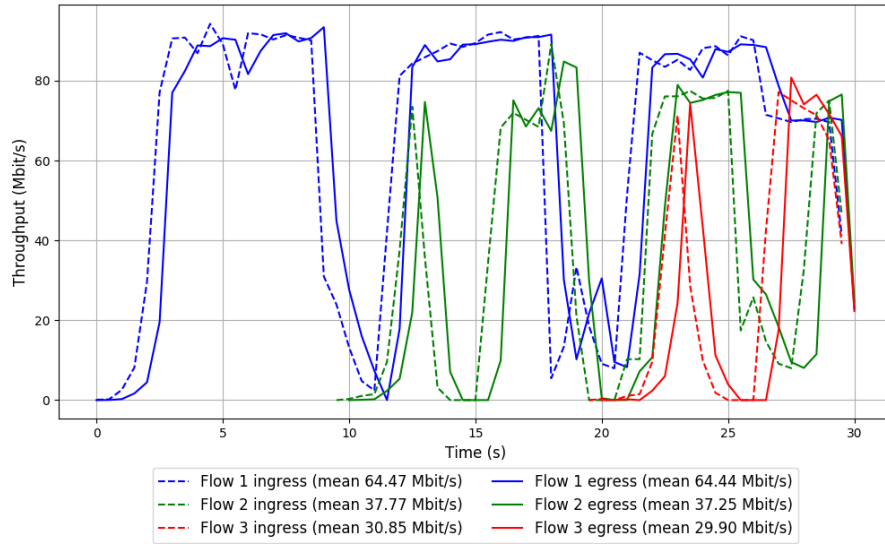# Run 3: Report of QUIC Cubic — Data Link

Legend:
- Flow 1 ingress (mean 56.33 Mbit/s)
- Flow 1 egress (mean 56.15 Mbit/s)
- Flow 2 ingress (mean 47.35 Mbit/s)
- Flow 2 egress (mean 46.97 Mbit/s)
- Flow 3 ingress (mean 35.09 Mbit/s)
- Flow 3 egress (mean 35.33 Mbit/s)

Legend:
- Flow 1 (95th percentile 133.01 ms)
- Flow 2 (95th percentile 133.00 ms)
- Flow 3 (95th percentile 132.52 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-03-27 12:19:26
End at: 2019-03-27 12:19:56
Local clock offset: -0.566 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.89 Mbit/s
95th percentile per-packet one-way delay: 132.512 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 64.44 Mbit/s
95th percentile per-packet one-way delay: 132.538 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 37.25 Mbit/s
95th percentile per-packet one-way delay: 132.075 ms
Loss rate: 2.72%
-- Flow 3:
Average throughput: 29.90 Mbit/s
95th percentile per-packet one-way delay: 132.495 ms
Loss rate: 5.68%
```

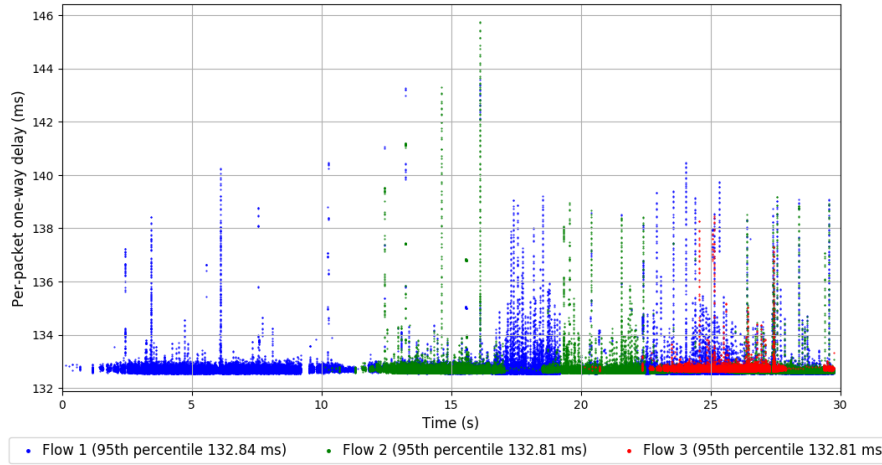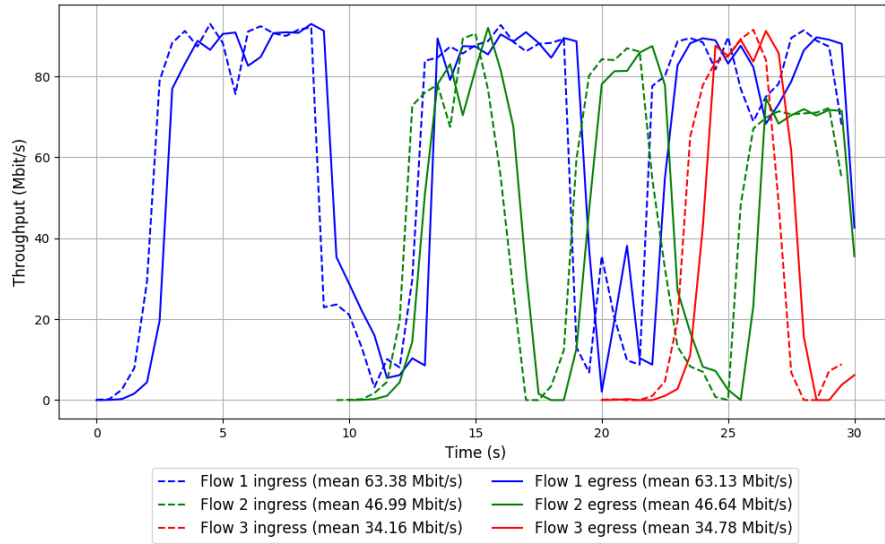## Run 4: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 64.47 Mbit/s) --- Flow 1 egress (mean 64.44 Mbit/s)
- Flow 2 ingress (mean 37.77 Mbit/s) --- Flow 2 egress (mean 37.25 Mbit/s)
- Flow 3 ingress (mean 30.85 Mbit/s) --- Flow 3 egress (mean 29.90 Mbit/s)

- Flow 1 (95th percentile 132.54 ms)
- Flow 2 (95th percentile 132.07 ms)
- Flow 3 (95th percentile 132.50 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-03-27 13:02:58
End at: 2019-03-27 13:03:28
Local clock offset: -0.358 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.29 Mbit/s
95th percentile per-packet one-way delay: 132.829 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 132.844 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 132.815 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 132.807 ms
Loss rate: 0.91%
```

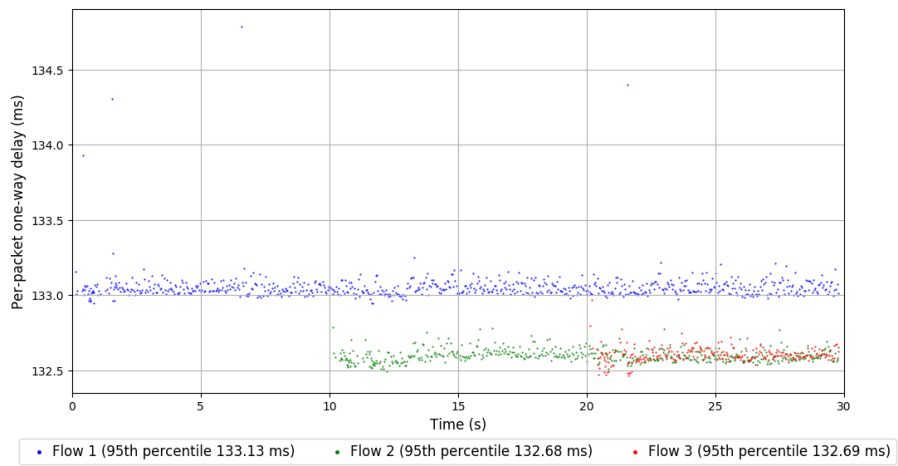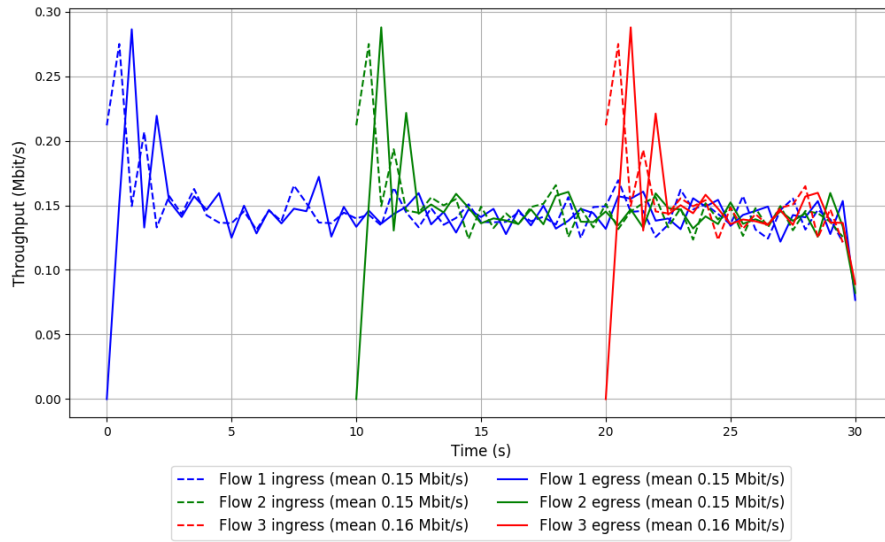## Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 63.38 Mbit/s)   Flow 1 egress (mean 63.13 Mbit/s)
Flow 2 ingress (mean 46.99 Mbit/s)   Flow 2 egress (mean 46.64 Mbit/s)
Flow 3 ingress (mean 34.16 Mbit/s)   Flow 3 egress (mean 34.78 Mbit/s)

Flow 1 (95th percentile 132.84 ms)   Flow 2 (95th percentile 132.81 ms)   Flow 3 (95th percentile 132.81 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-03-27 10:14:59
End at: 2019-03-27 10:15:29
Local clock offset: -0.143 ms
Remote clock offset: -0.146 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.104 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.134 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.680 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.686 ms
Loss rate: 2.44%
```
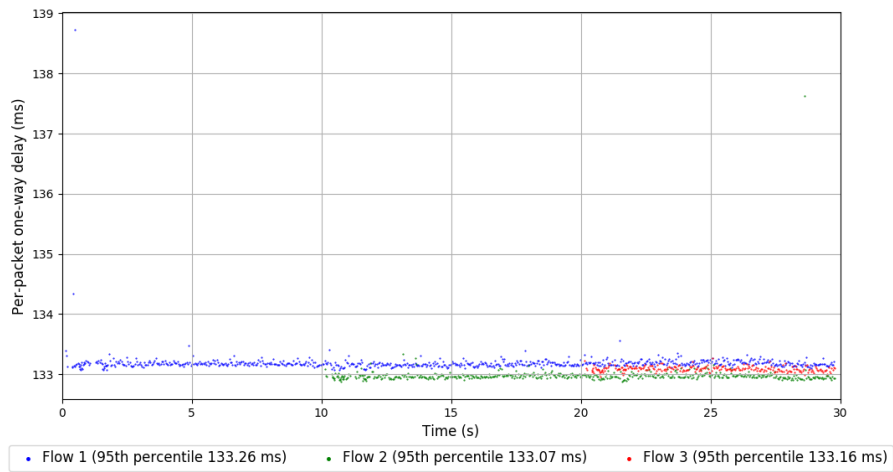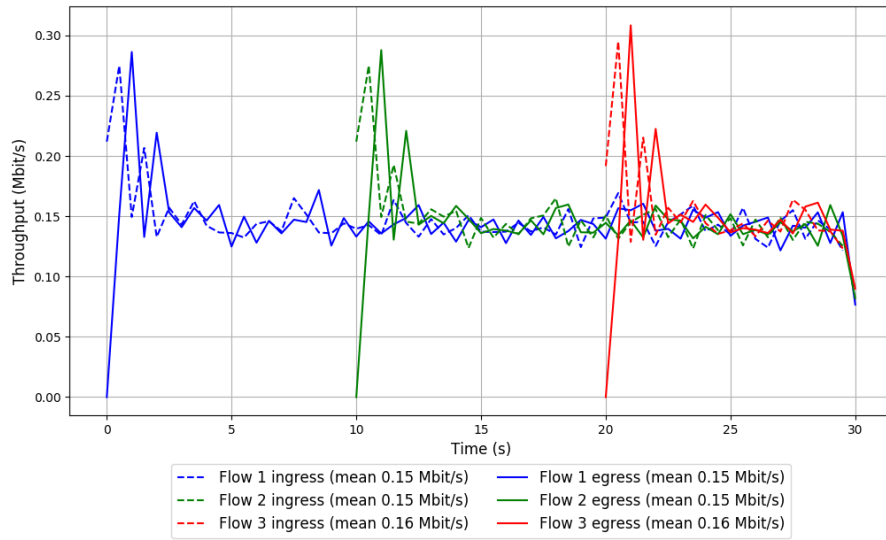
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-03-27 10:57:25
End at: 2019-03-27 10:57:55
Local clock offset: -0.113 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.239 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.261 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.066 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.157 ms
Loss rate: 2.13%
```
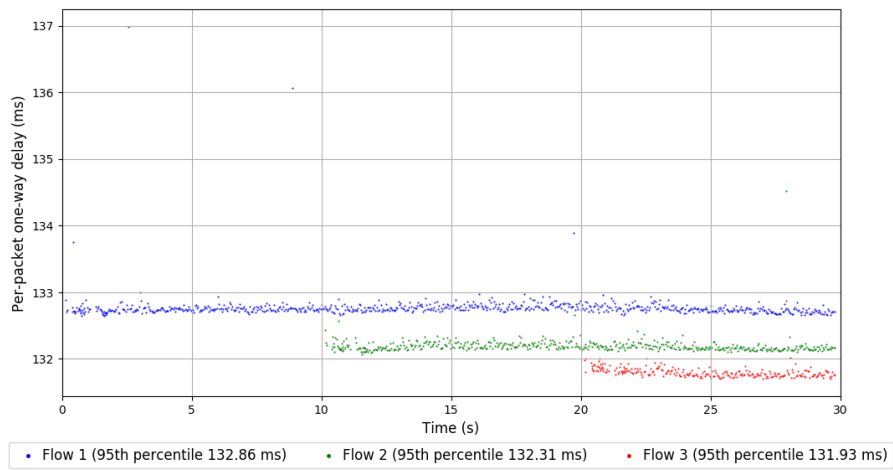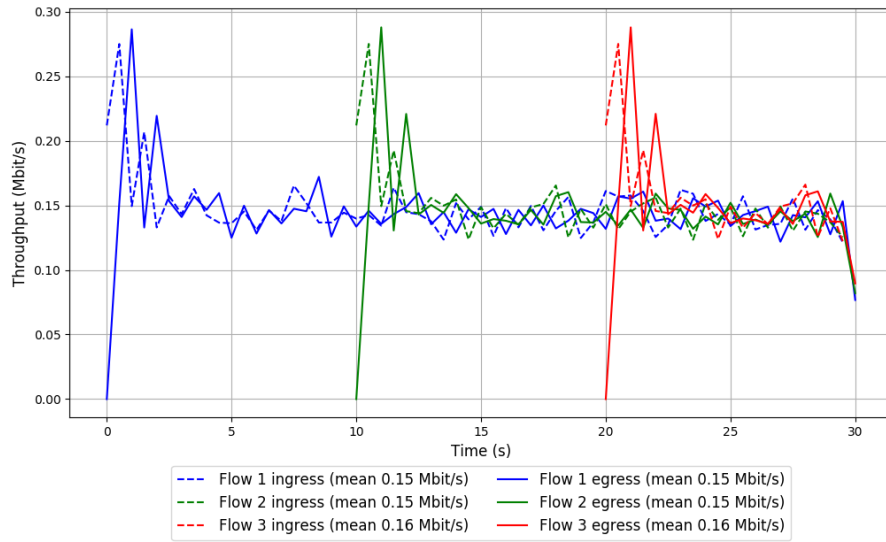
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-03-27 11:39:07
End at: 2019-03-27 11:39:38
Local clock offset: -0.471 ms
Remote clock offset: -0.149 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 132.829 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.857 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.306 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 131.928 ms
Loss rate: 2.45%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-03-27 12:22:12
End at: 2019-03-27 12:22:42
Local clock offset: -0.117 ms
Remote clock offset: -0.181 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.257 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.244 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.327 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.000 ms
Loss rate: 2.45%
```
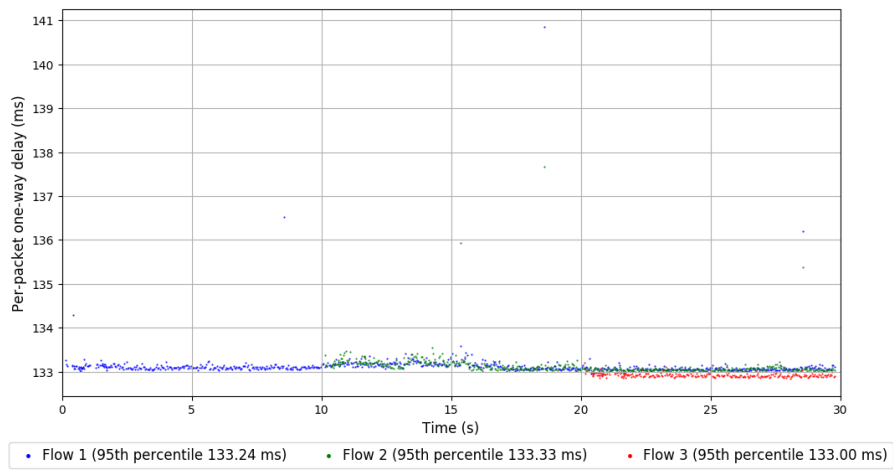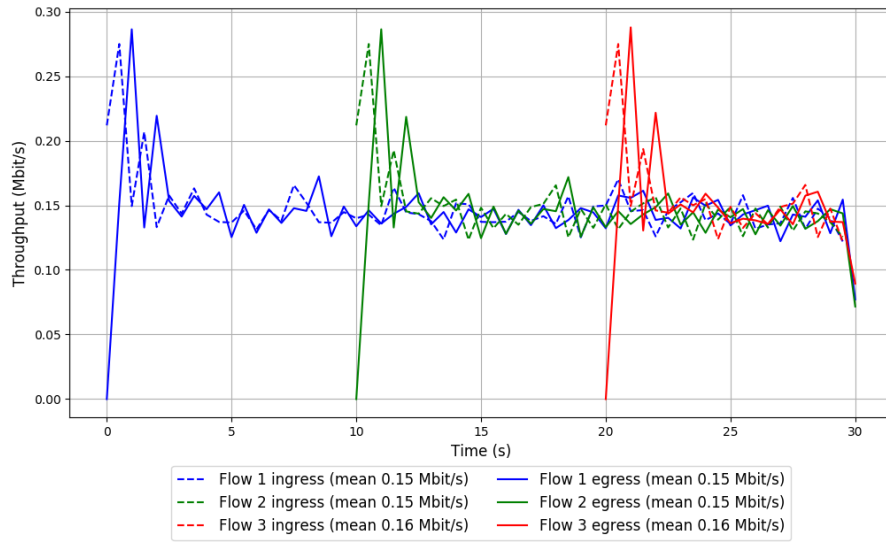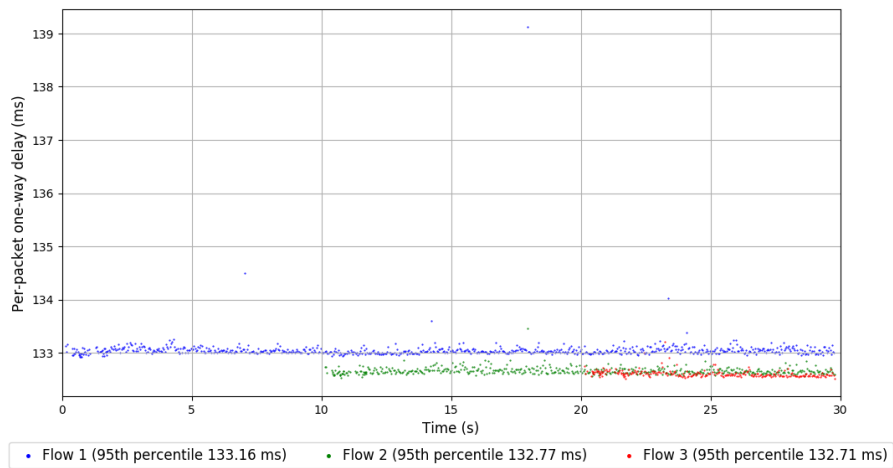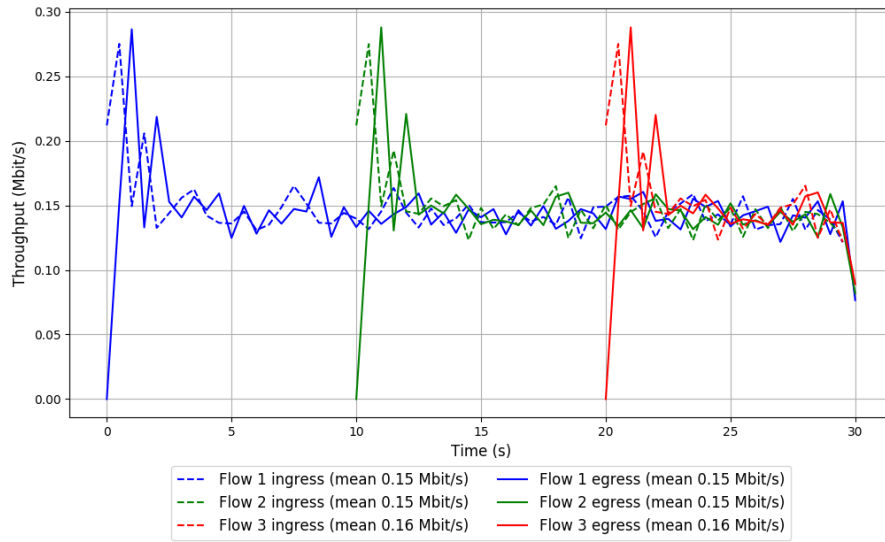
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-03-27 13:05:46
End at: 2019-03-27 13:06:16
Local clock offset: -0.149 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.118 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.155 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.768 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.710 ms
Loss rate: 2.45%
```
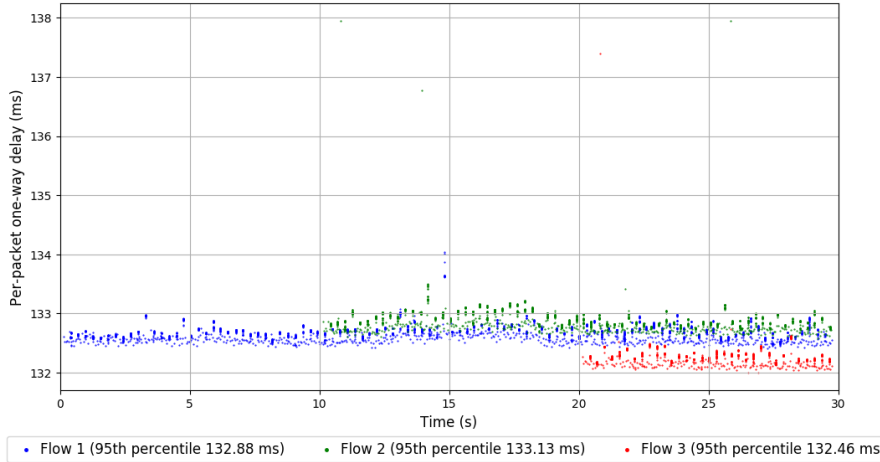
Run 5: Report of SCReAM — Data Link

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

- Flow 1 (95th percentile 133.16 ms)
- Flow 2 (95th percentile 132.77 ms)
- Flow 3 (95th percentile 132.71 ms)

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```
Run 1: Statistics of Sprout

Start at: 2019-03-27 10:13:40
End at: 2019-03-27 10:14:10
Local clock offset: -0.489 ms
Remote clock offset: -0.123 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 133.046 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 132.875 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 133.129 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 132.457 ms
Loss rate: 2.91%
```
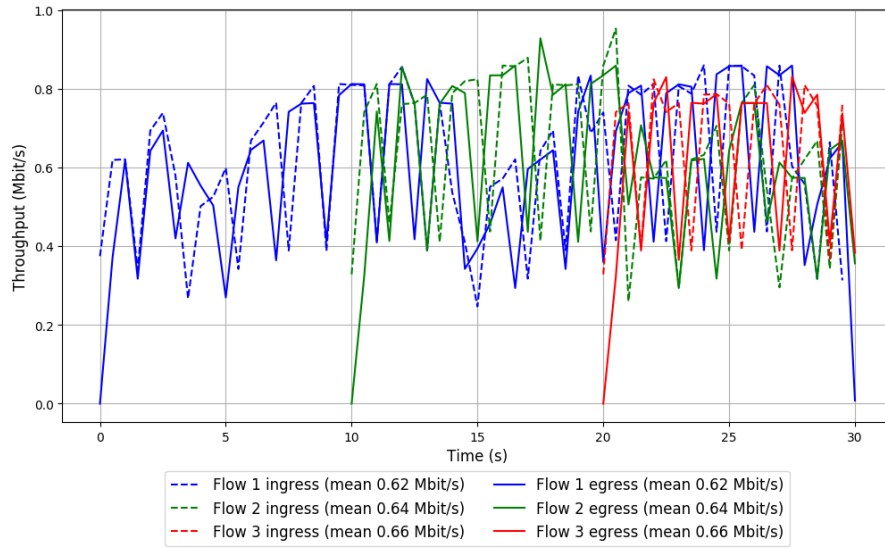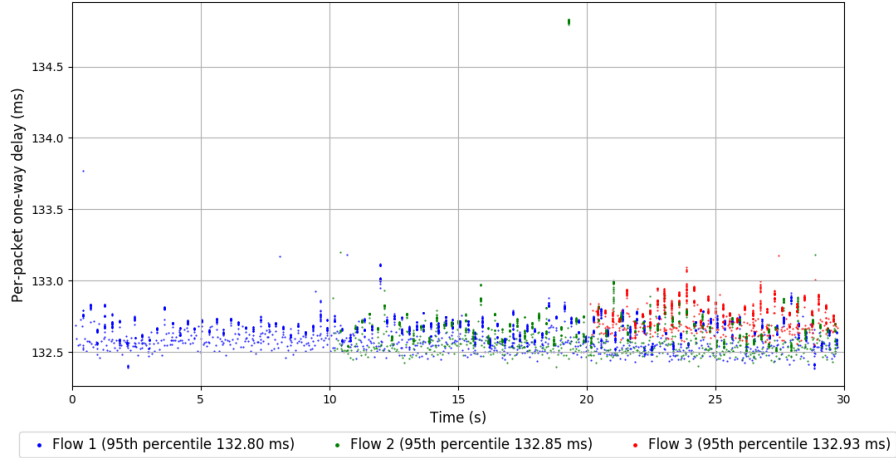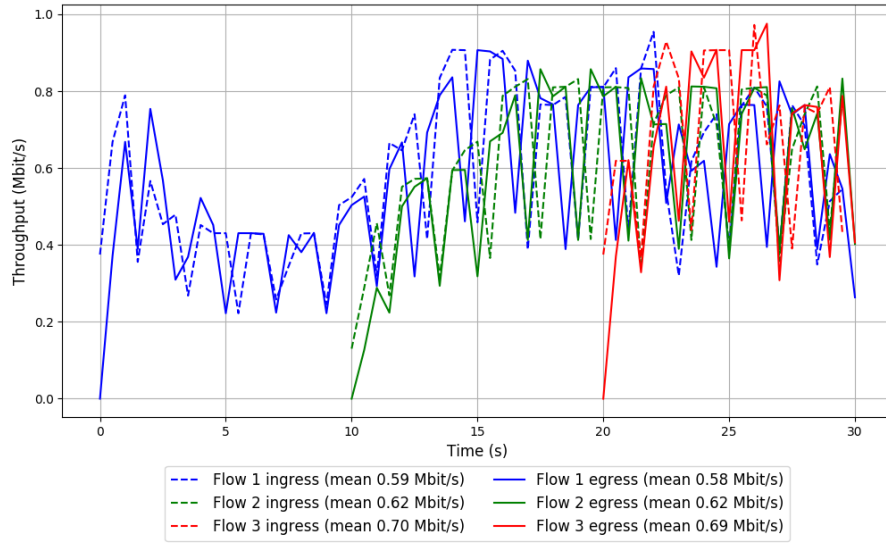
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-03-27 10:56:06
End at: 2019-03-27 10:56:36
Local clock offset: -0.517 ms
Remote clock offset: -0.13 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 132.871 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 132.800 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 132.855 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 132.930 ms
Loss rate: 3.12%
```
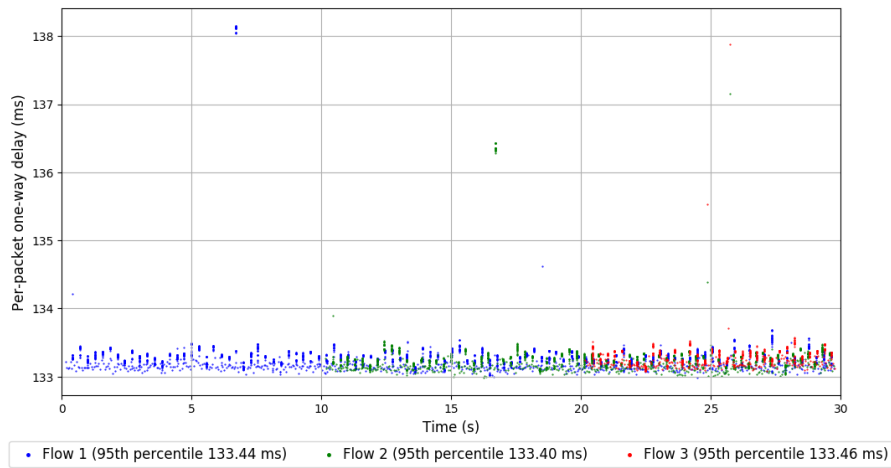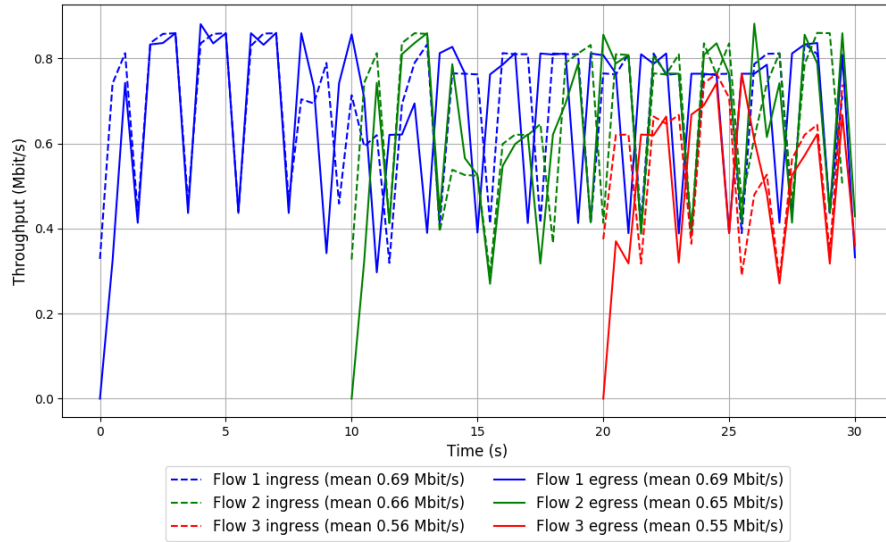
Run 2: Report of Sprout — Data Link

158

```
Run 3: Statistics of Sprout

Start at: 2019-03-27 11:37:49
End at: 2019-03-27 11:38:19
Local clock offset: 0.066 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 133.434 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 133.439 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 133.404 ms
Loss rate: 1.92%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 133.462 ms
Loss rate: 3.50%
```

Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-03-27 12:20:53
End at: 2019-03-27 12:21:23
Local clock offset: 0.288 ms
Remote clock offset: -0.173 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 133.745 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 133.777 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 133.600 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 133.230 ms
Loss rate: 3.08%
```
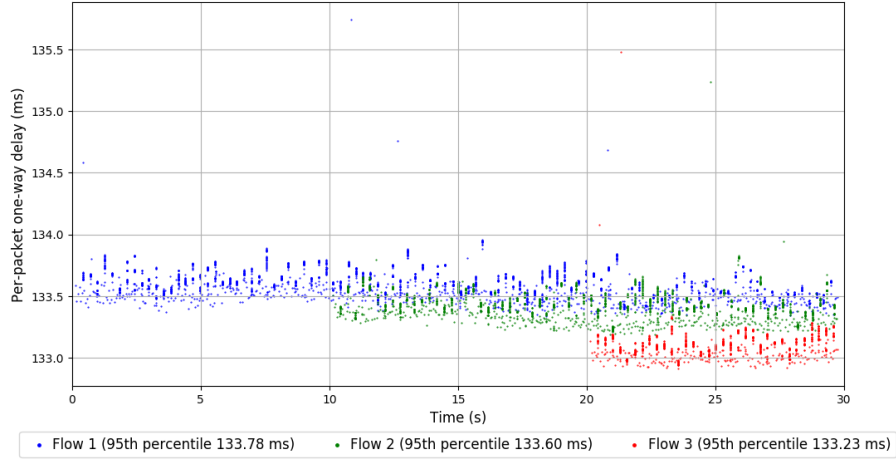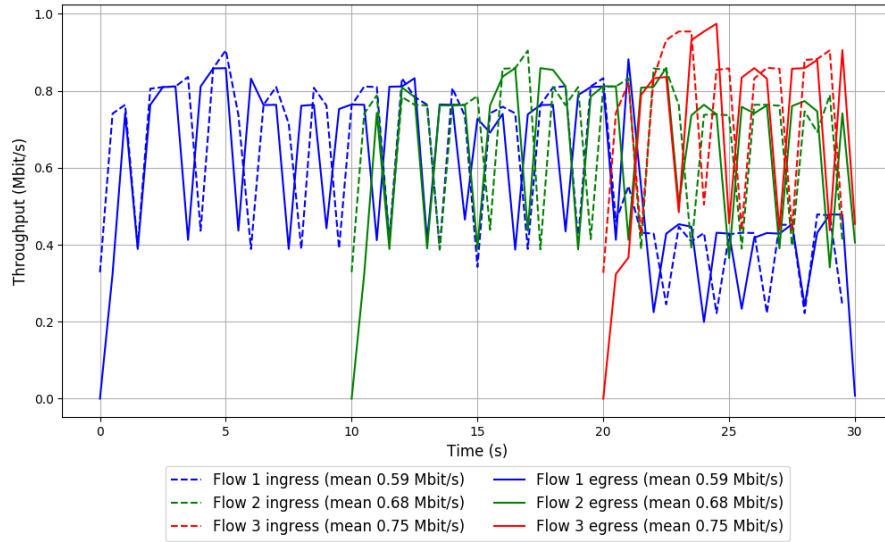
Run 4: Report of Sprout — Data Link

162

```
Run 5: Statistics of Sprout

Start at: 2019-03-27 13:04:27
End at: 2019-03-27 13:04:57
Local clock offset: -0.109 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2019-03-27 15:44:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 133.437 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 133.461 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 132.614 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 133.387 ms
Loss rate: 3.01%
```
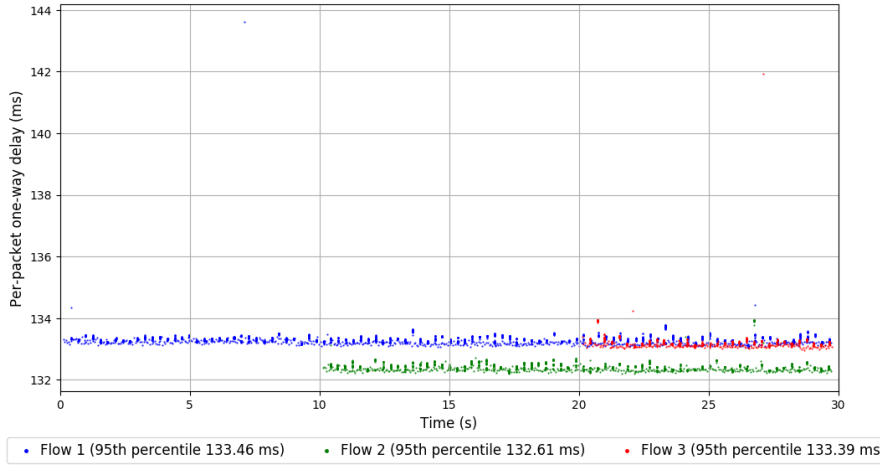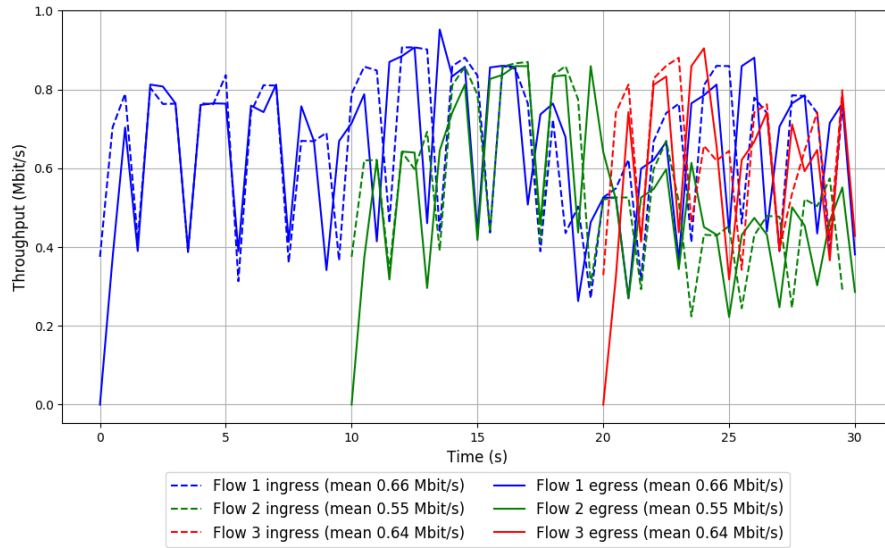
Run 5: Report of Sprout — Data Link

164

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

Start at: 2019-03-27 10:19:00
End at: 2019-03-27 10:19:30
Local clock offset: 0.096 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2019-03-27 15:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.32 Mbit/s
95th percentile per-packet one-way delay: 134.724 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 194.76 Mbit/s
95th percentile per-packet one-way delay: 134.032 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 176.08 Mbit/s
95th percentile per-packet one-way delay: 135.507 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 184.51 Mbit/s
95th percentile per-packet one-way delay: 136.404 ms
Loss rate: 3.18%
```
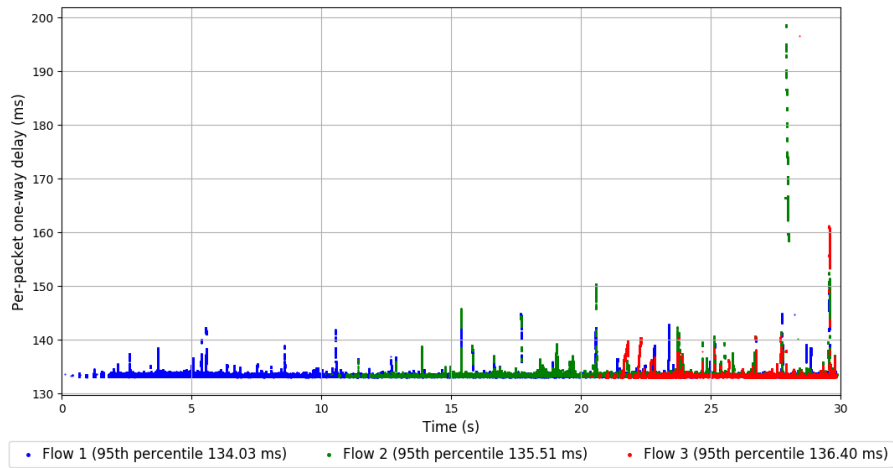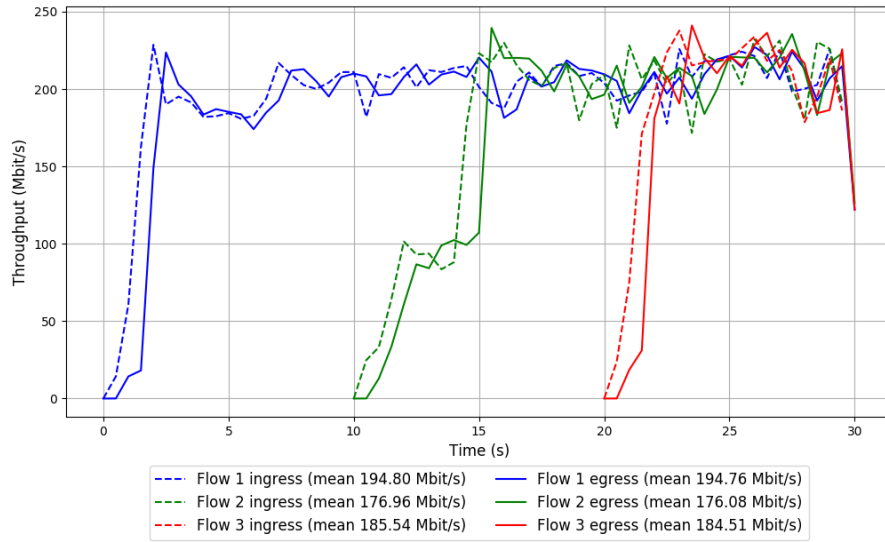
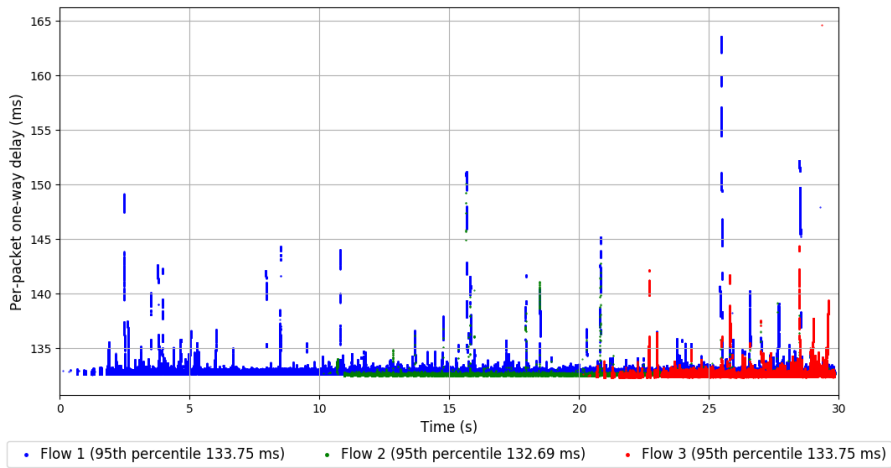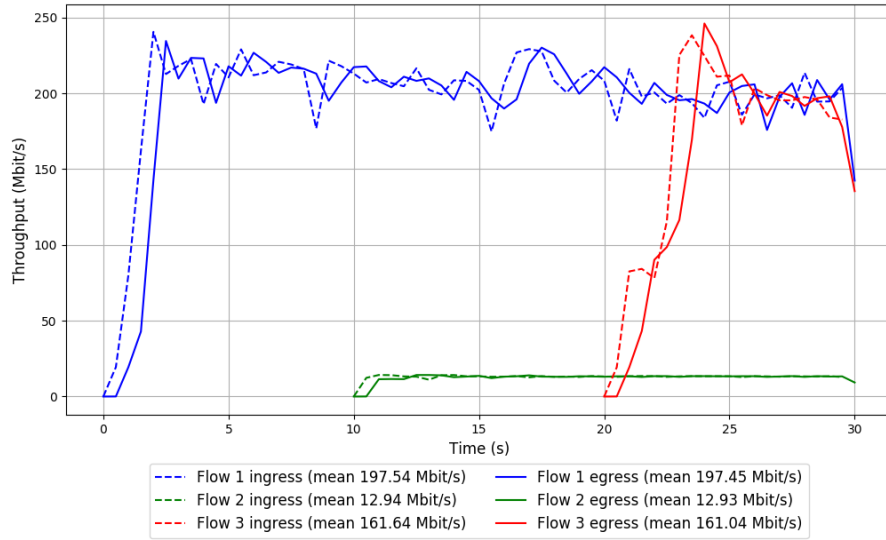# Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-27 11:01:40
End at: 2019-03-27 11:02:10
Local clock offset: -0.553 ms
Remote clock offset: -0.141 ms


# Below is generated by plot.py at 2019-03-27 15:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.49 Mbit/s
95th percentile per-packet one-way delay: 133.713 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 197.45 Mbit/s
95th percentile per-packet one-way delay: 133.753 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 132.694 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 161.04 Mbit/s
95th percentile per-packet one-way delay: 133.746 ms
Loss rate: 3.25%
```

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

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

Start at: 2019-03-27 11:43:06
End at: 2019-03-27 11:43:36
Local clock offset: 0.111 ms
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2019-03-27 15:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 186.61 Mbit/s
95th percentile per-packet one-way delay: 134.368 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 133.278 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 185.22 Mbit/s
95th percentile per-packet one-way delay: 134.530 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 157.29 Mbit/s
95th percentile per-packet one-way delay: 134.179 ms
Loss rate: 3.69%
```
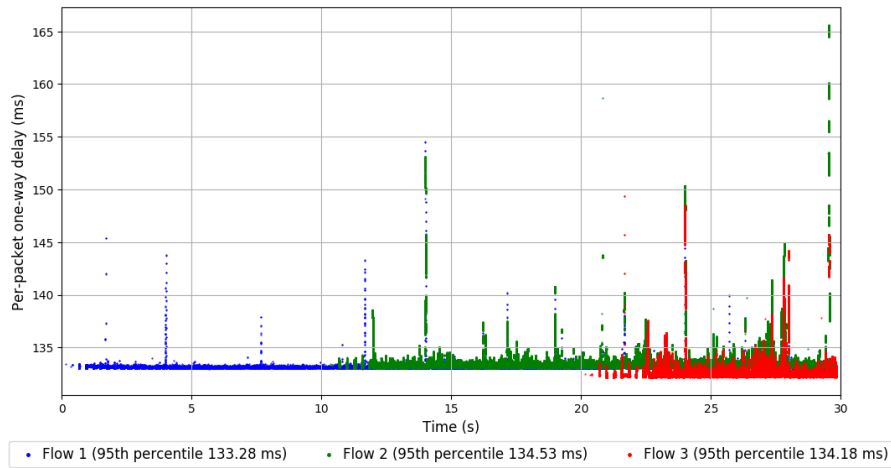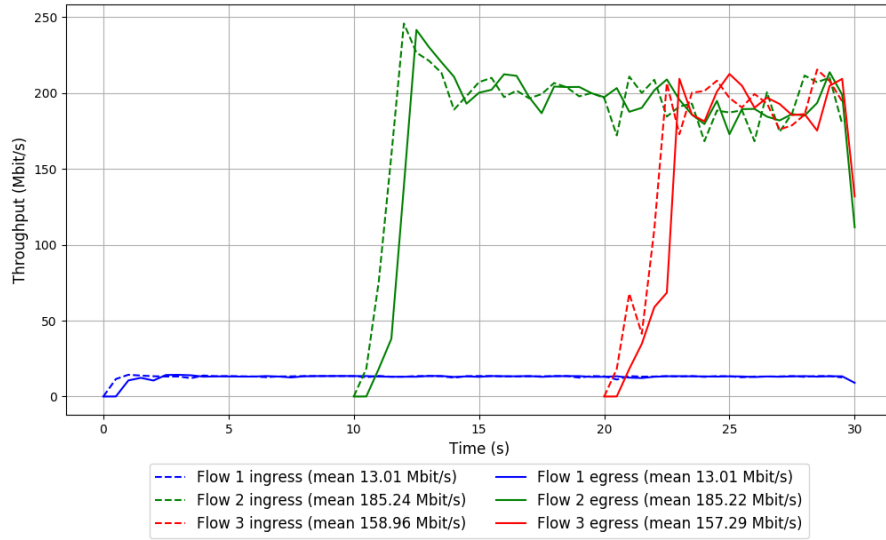
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 13.01 Mbit/s) --- Flow 1 egress (mean 13.01 Mbit/s)
Flow 2 ingress (mean 185.24 Mbit/s) --- Flow 2 egress (mean 185.22 Mbit/s)
Flow 3 ingress (mean 158.96 Mbit/s) --- Flow 3 egress (mean 157.29 Mbit/s)

Flow 1 (95th percentile 133.28 ms)   Flow 2 (95th percentile 134.53 ms)   Flow 3 (95th percentile 134.18 ms)
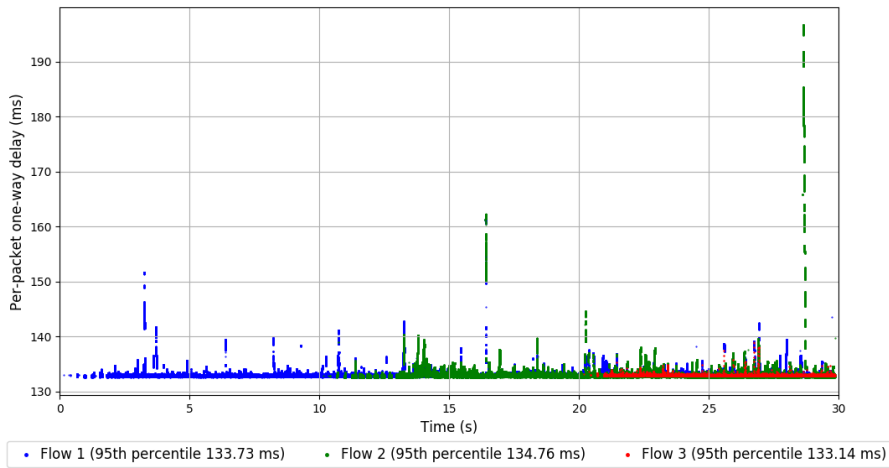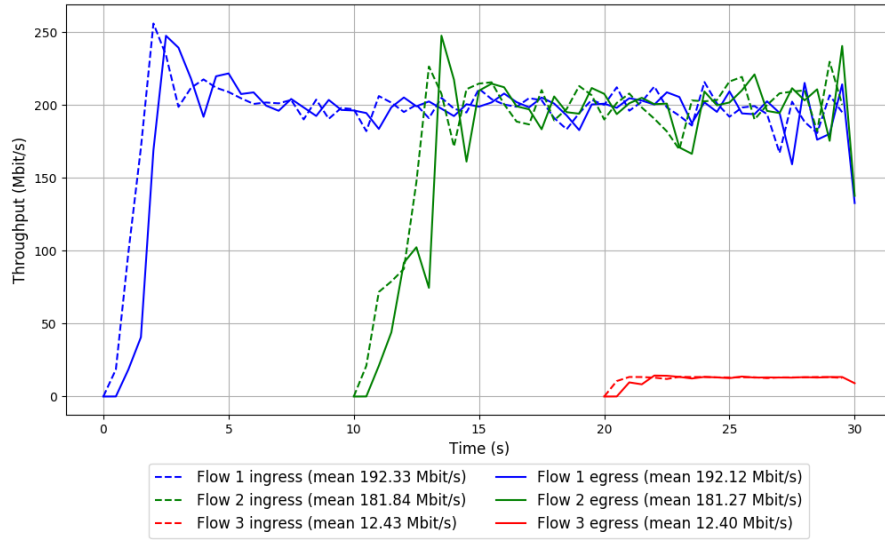
```
Run 4: Statistics of TaoVA-100x

Start at: 2019-03-27 12:25:57
End at: 2019-03-27 12:26:27
Local clock offset: -0.295 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2019-03-27 15:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.37 Mbit/s
95th percentile per-packet one-way delay: 134.219 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 192.12 Mbit/s
95th percentile per-packet one-way delay: 133.730 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 181.27 Mbit/s
95th percentile per-packet one-way delay: 134.760 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 133.137 ms
Loss rate: 2.86%
```

Run 4: Report of TaoVA-100x — Data Link

- - - - Flow 1 ingress (mean 192.33 Mbit/s) ——— Flow 1 egress (mean 192.12 Mbit/s)
- - - - Flow 2 ingress (mean 181.84 Mbit/s) ——— Flow 2 egress (mean 181.27 Mbit/s)
- - - - Flow 3 ingress (mean 12.43 Mbit/s) ——— Flow 3 egress (mean 12.40 Mbit/s)

- Flow 1 (95th percentile 133.73 ms)　　- Flow 2 (95th percentile 134.76 ms)　　- Flow 3 (95th percentile 133.14 ms)
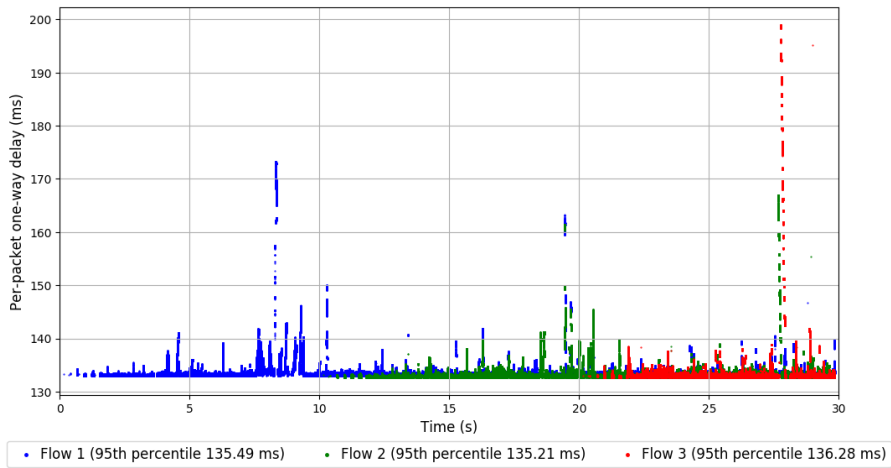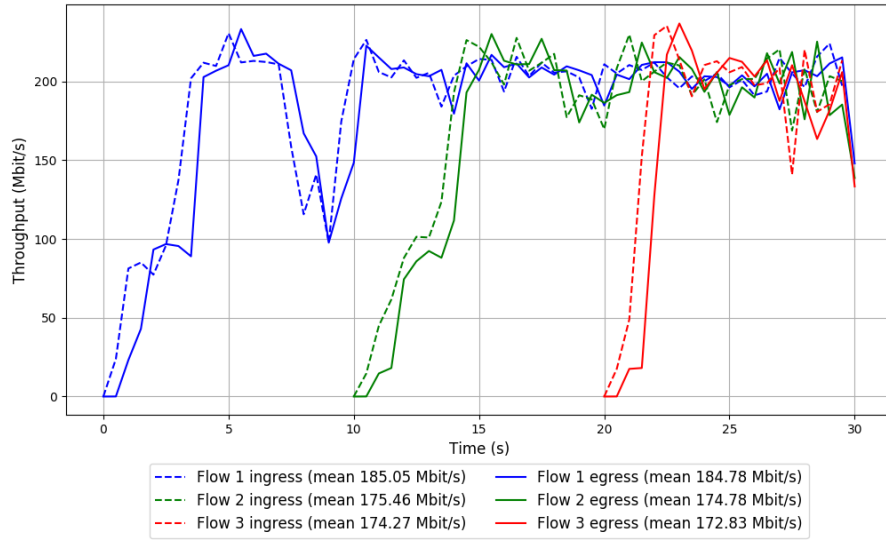
```
Run 5: Statistics of TaoVA-100x

Start at: 2019-03-27 13:09:54
End at: 2019-03-27 13:10:24
Local clock offset: -0.232 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2019-03-27 15:47:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.07 Mbit/s
95th percentile per-packet one-way delay: 135.451 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 184.78 Mbit/s
95th percentile per-packet one-way delay: 135.489 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 174.78 Mbit/s
95th percentile per-packet one-way delay: 135.207 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 172.83 Mbit/s
95th percentile per-packet one-way delay: 136.279 ms
Loss rate: 3.47%
```

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

Flow 1 ingress (mean 185.05 Mbit/s) — Flow 1 egress (mean 184.78 Mbit/s)
Flow 2 ingress (mean 175.46 Mbit/s) — Flow 2 egress (mean 174.78 Mbit/s)
Flow 3 ingress (mean 174.27 Mbit/s) — Flow 3 egress (mean 172.83 Mbit/s)

Flow 1 (95th percentile 135.49 ms)   Flow 2 (95th percentile 135.21 ms)   Flow 3 (95th percentile 136.28 ms)

174

```
Run 1: Statistics of TCP Vegas

Start at: 2019-03-27 10:24:08
End at: 2019-03-27 10:24:38
Local clock offset: -0.381 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-03-27 15:47:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.83 Mbit/s
95th percentile per-packet one-way delay: 165.190 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 233.28 Mbit/s
95th percentile per-packet one-way delay: 173.726 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 179.97 Mbit/s
95th percentile per-packet one-way delay: 162.505 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 208.60 Mbit/s
95th percentile per-packet one-way delay: 164.151 ms
Loss rate: 4.47%
```
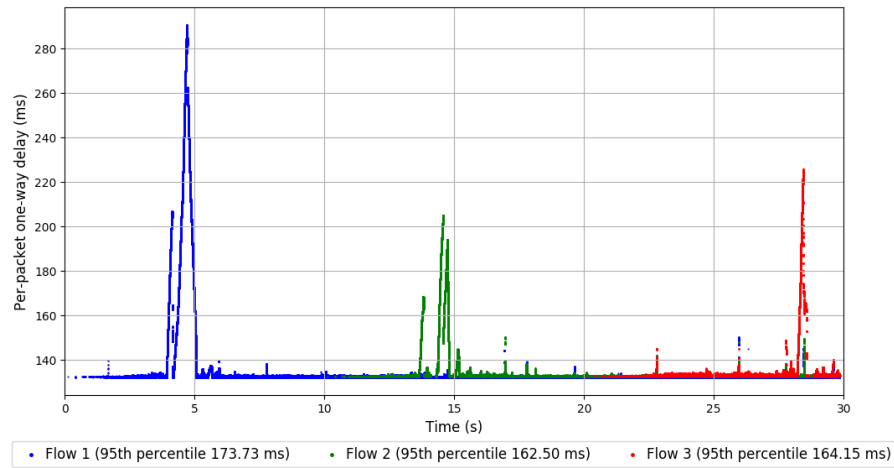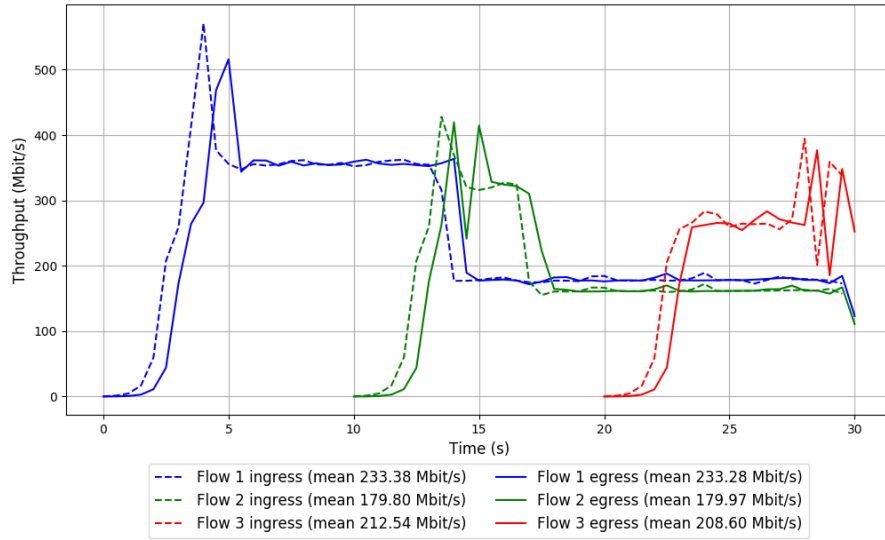
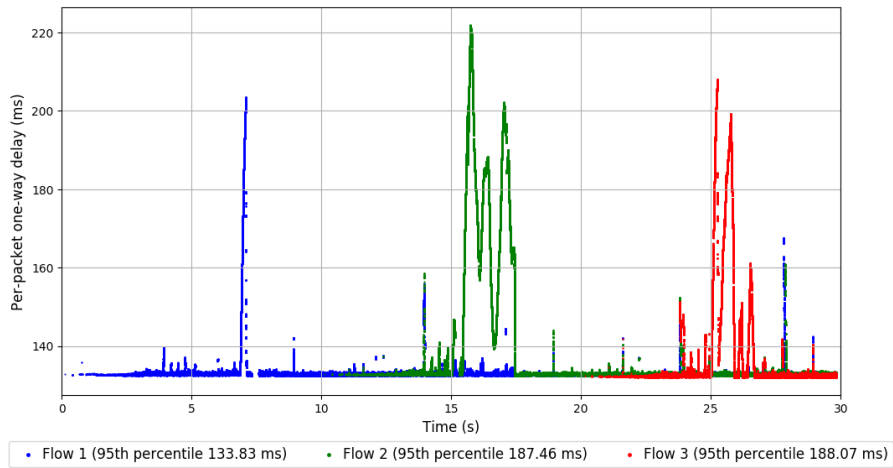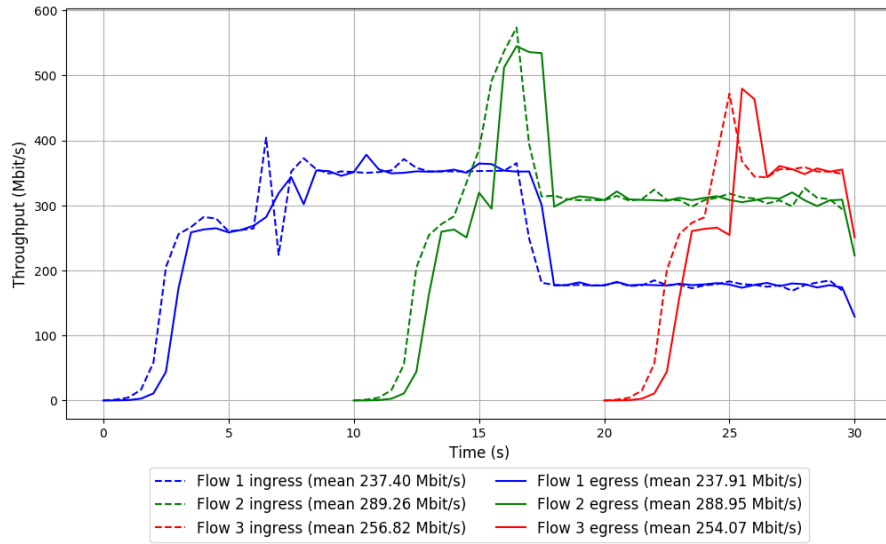Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-03-27 11:07:07
End at: 2019-03-27 11:07:37
Local clock offset: -0.373 ms
Remote clock offset: -0.146 ms


# Below is generated by plot.py at 2019-03-27 15:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.51 Mbit/s
95th percentile per-packet one-way delay: 178.853 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 237.91 Mbit/s
95th percentile per-packet one-way delay: 133.832 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 288.95 Mbit/s
95th percentile per-packet one-way delay: 187.455 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 254.07 Mbit/s
95th percentile per-packet one-way delay: 188.072 ms
Loss rate: 3.70%
```

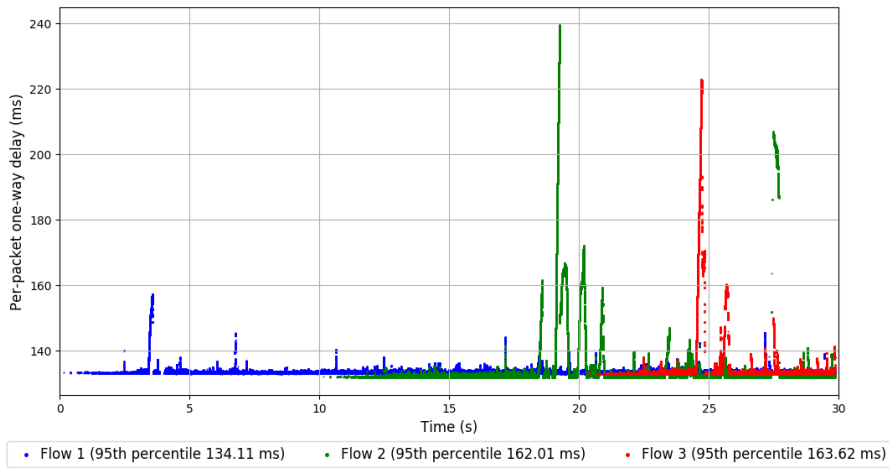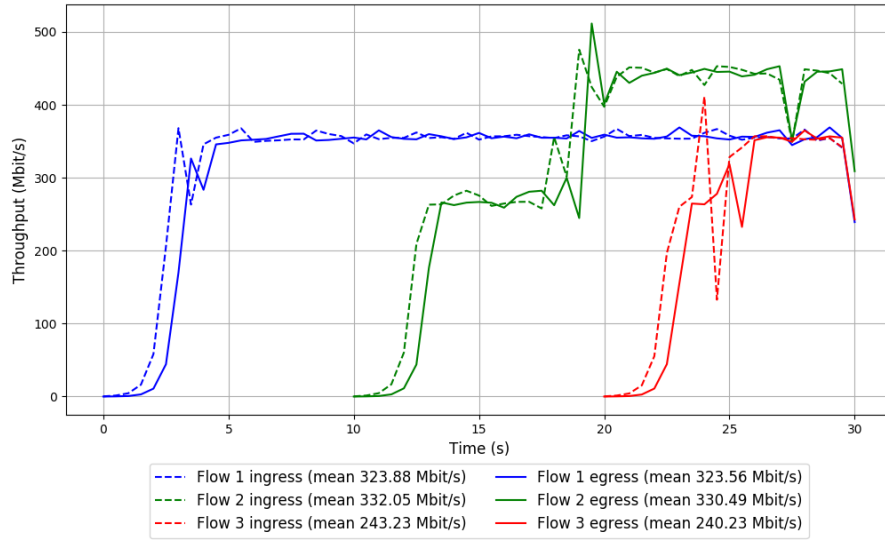Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-03-27 11:48:43
End at: 2019-03-27 11:49:13
Local clock offset: -0.317 ms
Remote clock offset: -0.177 ms


# Below is generated by plot.py at 2019-03-27 15:54:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 621.08 Mbit/s
95th percentile per-packet one-way delay: 142.465 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 323.56 Mbit/s
95th percentile per-packet one-way delay: 134.114 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 330.49 Mbit/s
95th percentile per-packet one-way delay: 162.014 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 240.23 Mbit/s
95th percentile per-packet one-way delay: 163.617 ms
Loss rate: 3.89%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 323.88 Mbit/s)   Flow 1 egress (mean 323.56 Mbit/s)
Flow 2 ingress (mean 332.05 Mbit/s)   Flow 2 egress (mean 330.49 Mbit/s)
Flow 3 ingress (mean 243.23 Mbit/s)   Flow 3 egress (mean 240.23 Mbit/s)

Flow 1 (95th percentile 134.11 ms)   Flow 2 (95th percentile 162.01 ms)   Flow 3 (95th percentile 163.62 ms)
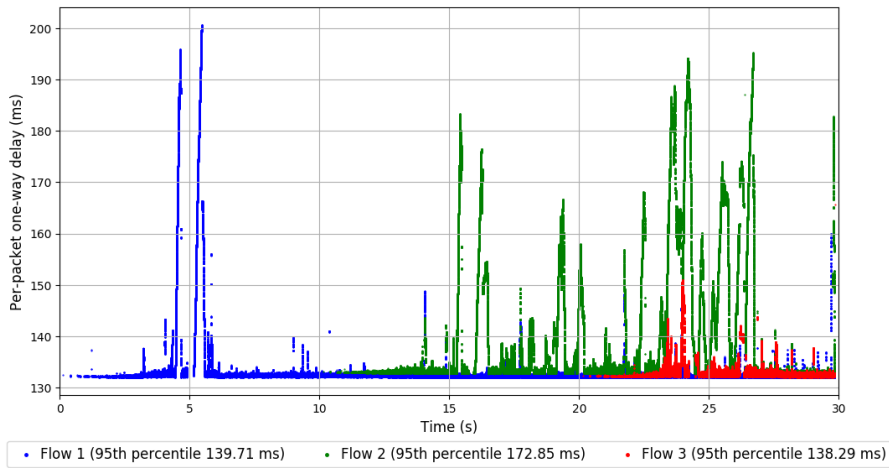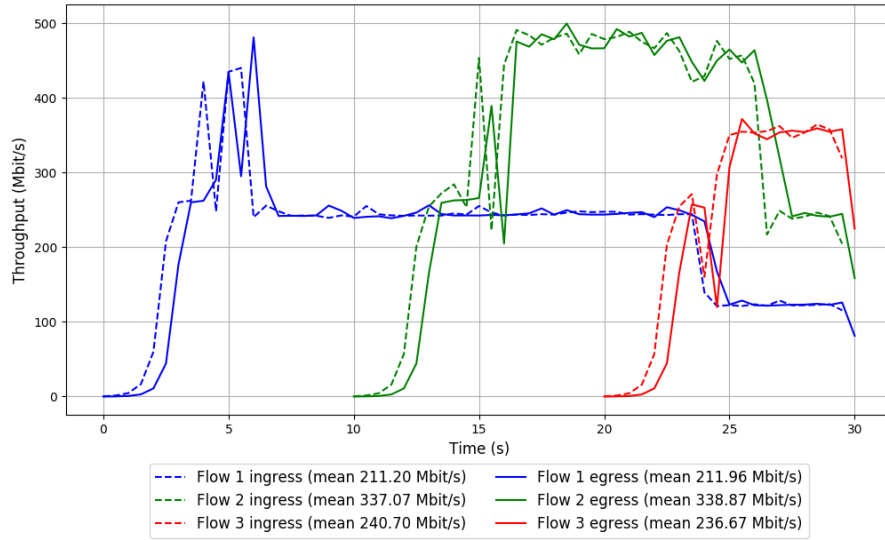
```
Run 4: Statistics of TCP Vegas

Start at: 2019-03-27 12:32:16
End at: 2019-03-27 12:32:46
Local clock offset: -0.402 ms
Remote clock offset: -0.121 ms


# Below is generated by plot.py at 2019-03-27 15:54:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.71 Mbit/s
95th percentile per-packet one-way delay: 166.572 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 211.96 Mbit/s
95th percentile per-packet one-way delay: 139.714 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 338.87 Mbit/s
95th percentile per-packet one-way delay: 172.855 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 236.67 Mbit/s
95th percentile per-packet one-way delay: 138.294 ms
Loss rate: 3.98%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 211.20 Mbit/s)   Flow 1 egress (mean 211.96 Mbit/s)
Flow 2 ingress (mean 337.07 Mbit/s)   Flow 2 egress (mean 338.87 Mbit/s)
Flow 3 ingress (mean 240.70 Mbit/s)   Flow 3 egress (mean 236.67 Mbit/s)

Flow 1 (95th percentile 139.71 ms)   Flow 2 (95th percentile 172.85 ms)   Flow 3 (95th percentile 138.29 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-03-27 13:15:19
End at: 2019-03-27 13:15:49
Local clock offset: 0.226 ms
Remote clock offset: -0.19 ms


# Below is generated by plot.py at 2019-03-27 15:56:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 586.62 Mbit/s
95th percentile per-packet one-way delay: 158.132 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 325.85 Mbit/s
95th percentile per-packet one-way delay: 141.082 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 237.22 Mbit/s
95th percentile per-packet one-way delay: 182.227 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 316.95 Mbit/s
95th percentile per-packet one-way delay: 160.118 ms
Loss rate: 4.06%
```
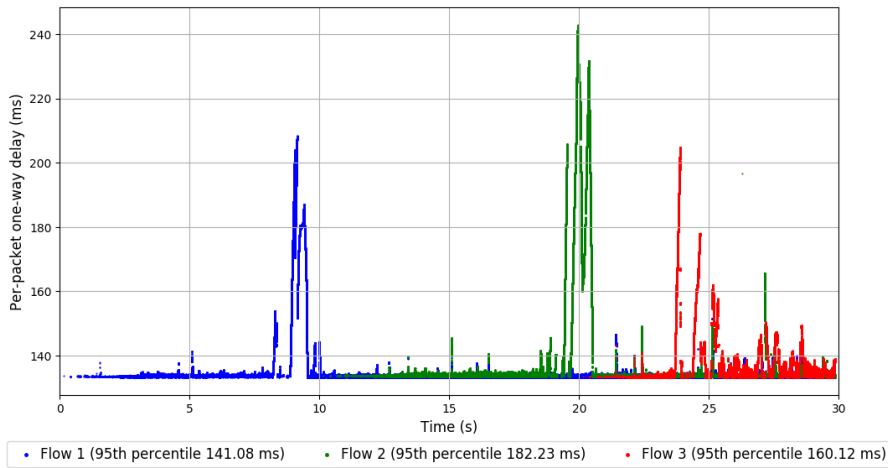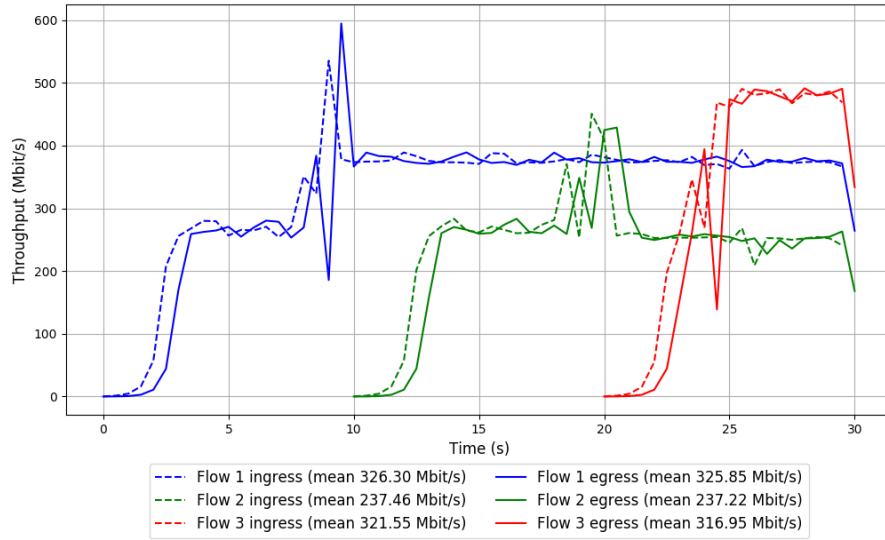
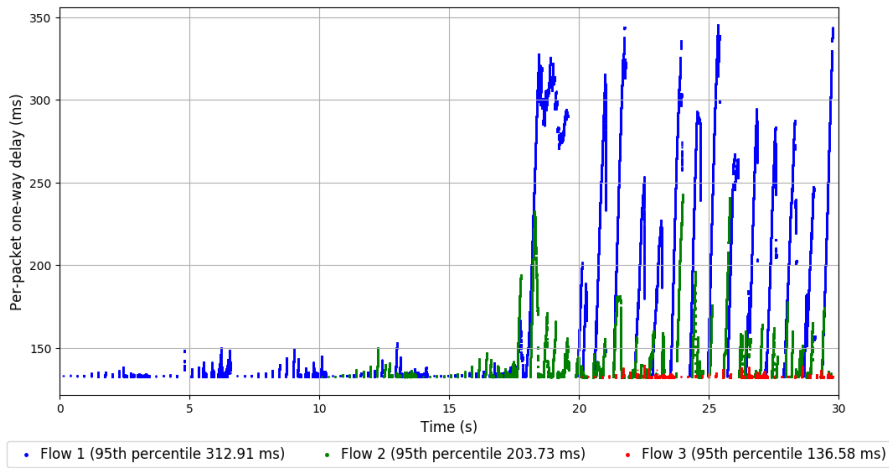# Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 326.30 Mbit/s)   Flow 1 egress (mean 325.85 Mbit/s)
Flow 2 ingress (mean 237.46 Mbit/s)   Flow 2 egress (mean 237.22 Mbit/s)
Flow 3 ingress (mean 321.55 Mbit/s)   Flow 3 egress (mean 316.95 Mbit/s)

Flow 1 (95th percentile 141.08 ms)   Flow 2 (95th percentile 182.23 ms)   Flow 3 (95th percentile 160.12 ms)
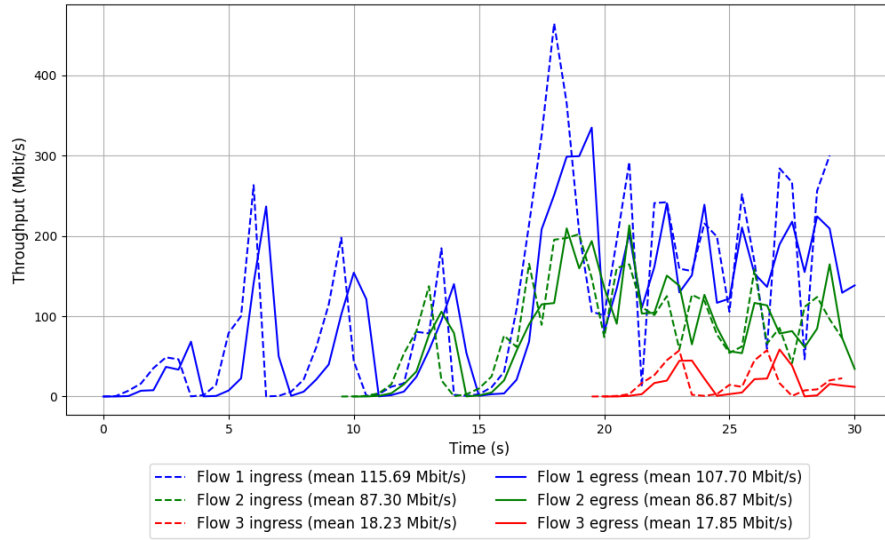
184

```
Run 1: Statistics of Verus

Start at: 2019-03-27 10:01:16
End at: 2019-03-27 10:01:46
Local clock offset: -0.467 ms
Remote clock offset: -0.102 ms


# Below is generated by plot.py at 2019-03-27 15:56:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.13 Mbit/s
95th percentile per-packet one-way delay: 305.077 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 107.70 Mbit/s
95th percentile per-packet one-way delay: 312.913 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 203.727 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 17.85 Mbit/s
95th percentile per-packet one-way delay: 136.581 ms
Loss rate: 4.75%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-03-27 10:44:40
End at: 2019-03-27 10:45:10
Local clock offset: -0.137 ms
Remote clock offset: -0.12 ms


# Below is generated by plot.py at 2019-03-27 15:56:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.11 Mbit/s
95th percentile per-packet one-way delay: 140.574 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 48.82 Mbit/s
95th percentile per-packet one-way delay: 142.943 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 138.482 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 138.458 ms
Loss rate: 6.32%
```
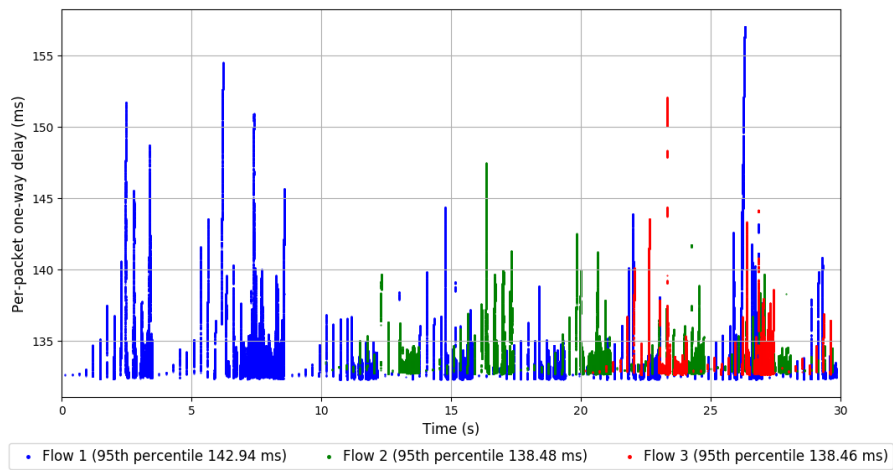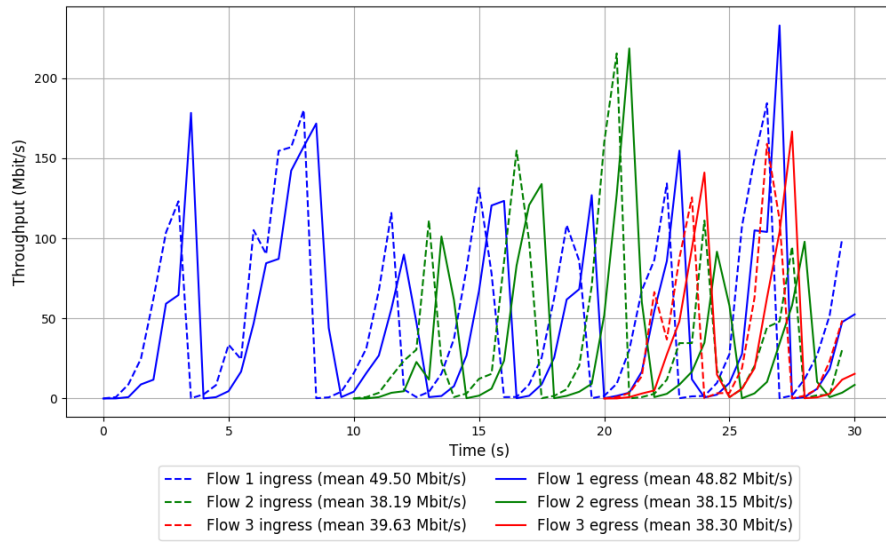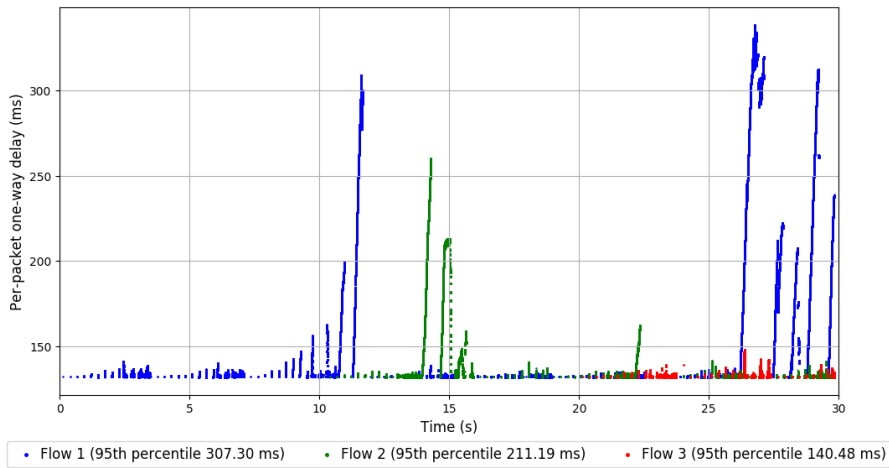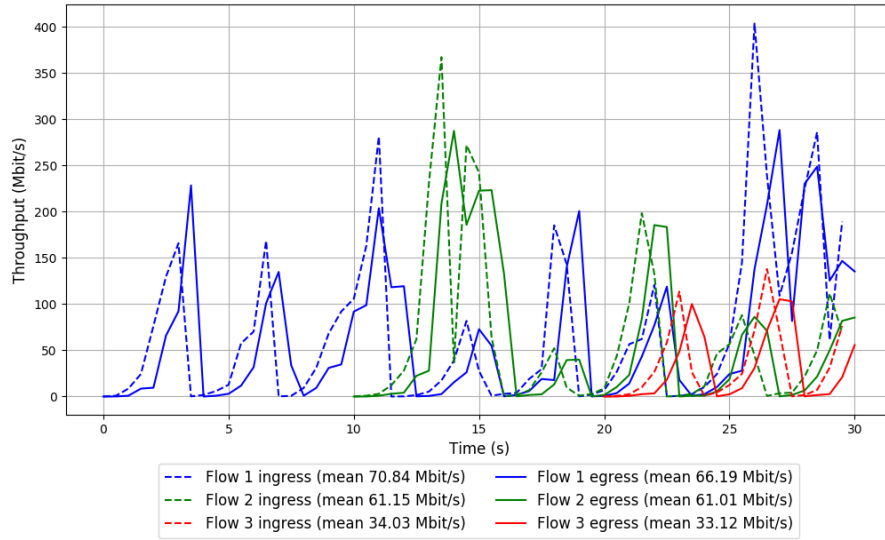
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-03-27 11:25:43
End at: 2019-03-27 11:26:13
Local clock offset: -0.548 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2019-03-27 15:56:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.41 Mbit/s
95th percentile per-packet one-way delay: 297.016 ms
Loss rate: 4.59%
-- Flow 1:
Average throughput: 66.19 Mbit/s
95th percentile per-packet one-way delay: 307.296 ms
Loss rate: 6.77%
-- Flow 2:
Average throughput: 61.01 Mbit/s
95th percentile per-packet one-way delay: 211.193 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 140.482 ms
Loss rate: 5.24%
```

Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-03-27 12:08:25
End at: 2019-03-27 12:08:55
Local clock offset: 0.2 ms
Remote clock offset: -0.15 ms


# Below is generated by plot.py at 2019-03-27 15:56:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 162.79 Mbit/s
95th percentile per-packet one-way delay: 299.739 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 47.79 Mbit/s
95th percentile per-packet one-way delay: 150.852 ms
Loss rate: 3.03%
-- Flow 2:
Average throughput: 161.60 Mbit/s
95th percentile per-packet one-way delay: 308.678 ms
Loss rate: 7.52%
-- Flow 3:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 138.584 ms
Loss rate: 0.08%
```
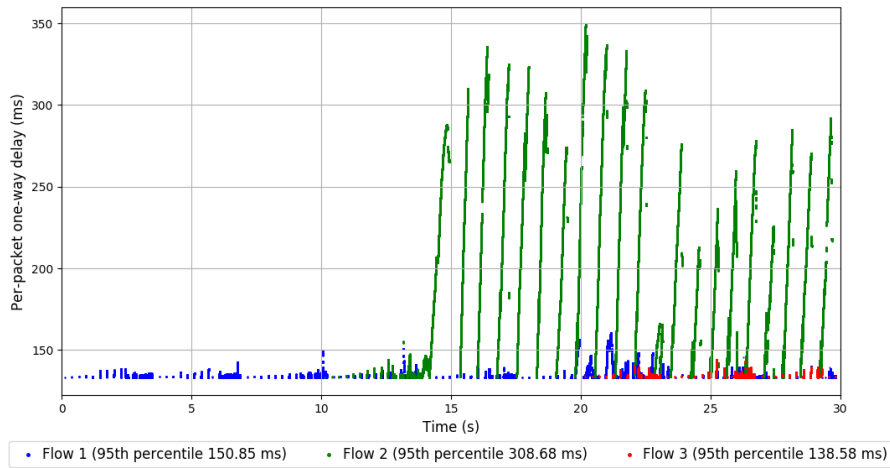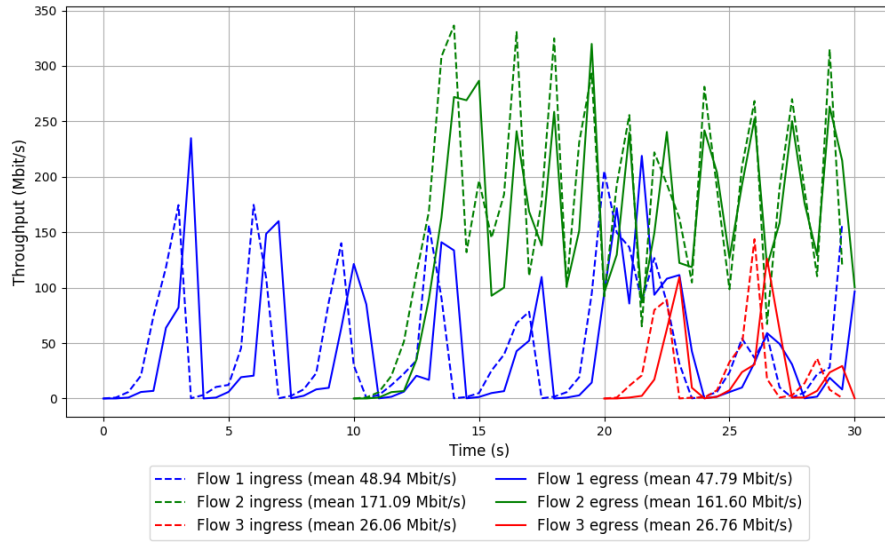
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-03-27 12:52:17
End at: 2019-03-27 12:52:47
Local clock offset: -0.015 ms
Remote clock offset: -0.12 ms


# Below is generated by plot.py at 2019-03-27 15:56:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.59 Mbit/s
95th percentile per-packet one-way delay: 221.162 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 55.16 Mbit/s
95th percentile per-packet one-way delay: 172.960 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 103.93 Mbit/s
95th percentile per-packet one-way delay: 216.580 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 72.56 Mbit/s
95th percentile per-packet one-way delay: 294.170 ms
Loss rate: 10.91%
```
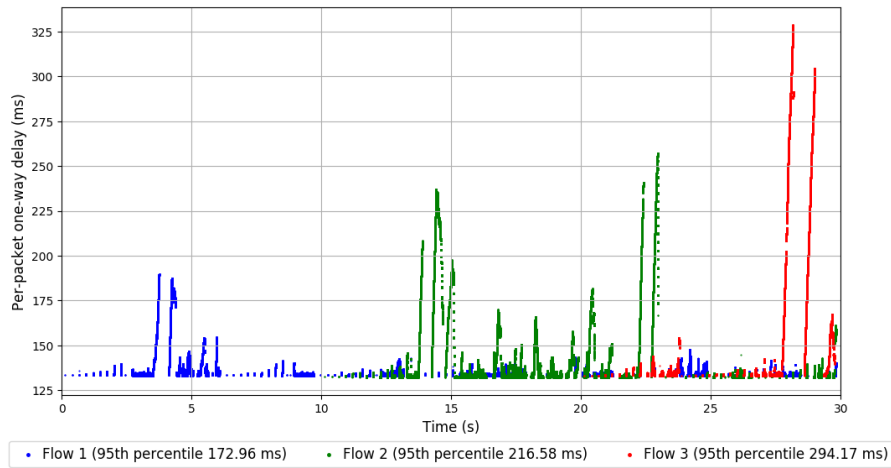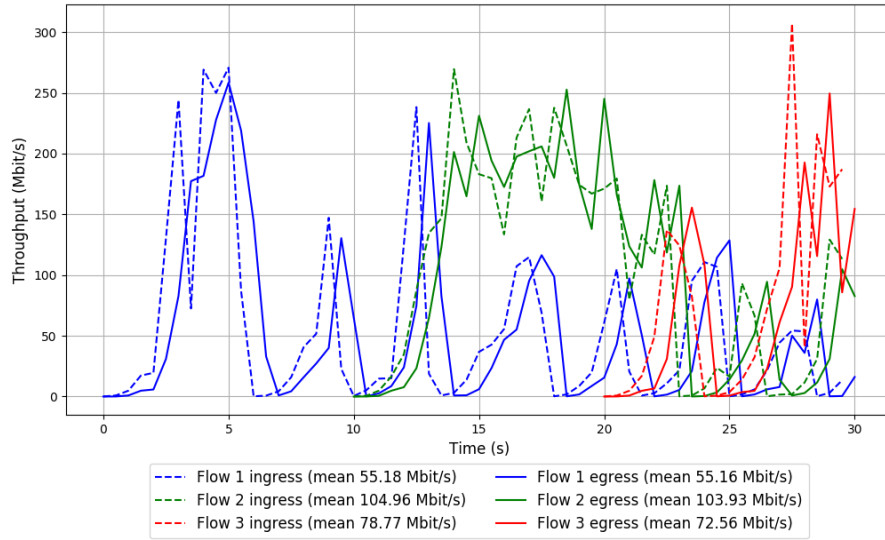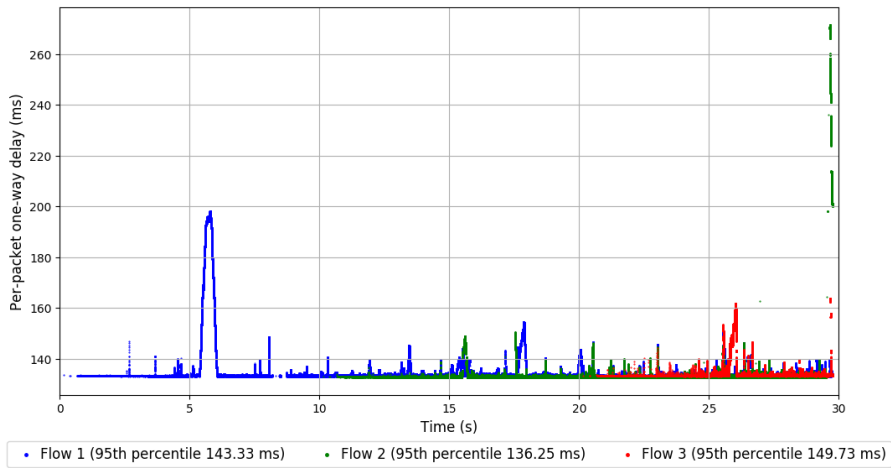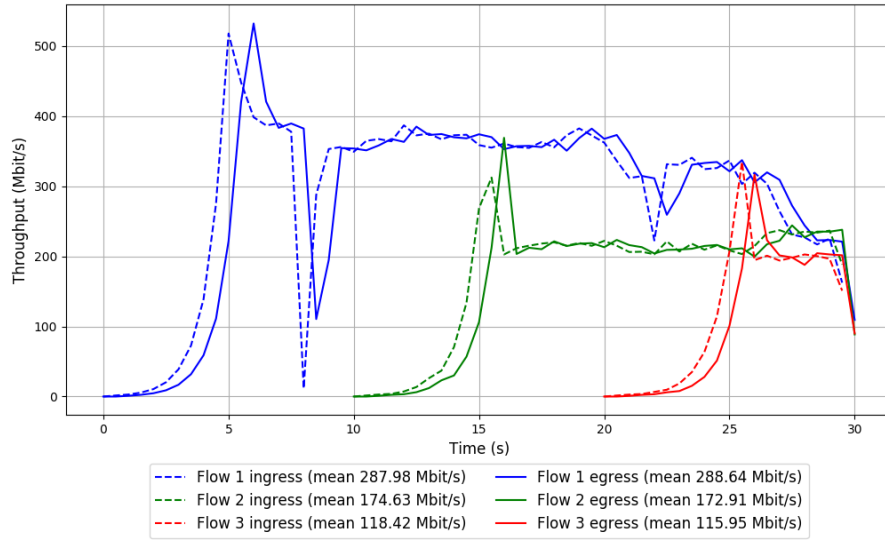
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-03-27 10:26:05
End at: 2019-03-27 10:26:35
Local clock offset: 0.245 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-03-27 15:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.69 Mbit/s
95th percentile per-packet one-way delay: 142.913 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 288.64 Mbit/s
95th percentile per-packet one-way delay: 143.333 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 172.91 Mbit/s
95th percentile per-packet one-way delay: 136.248 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 115.95 Mbit/s
95th percentile per-packet one-way delay: 149.730 ms
Loss rate: 4.75%
```

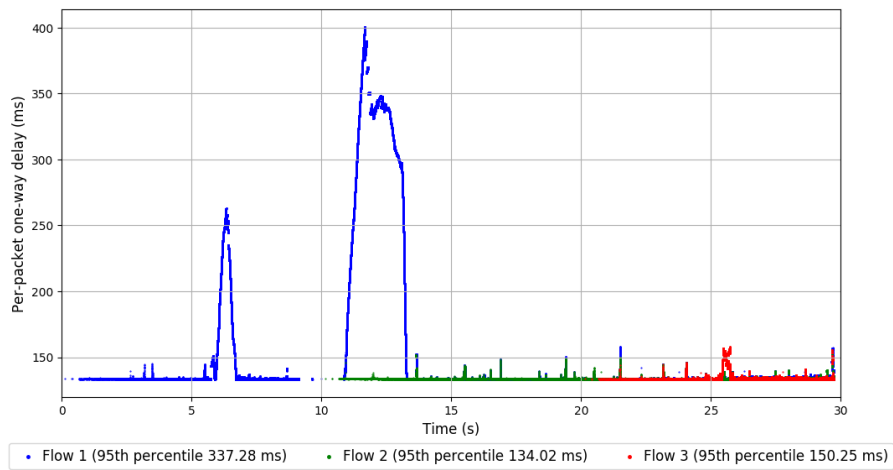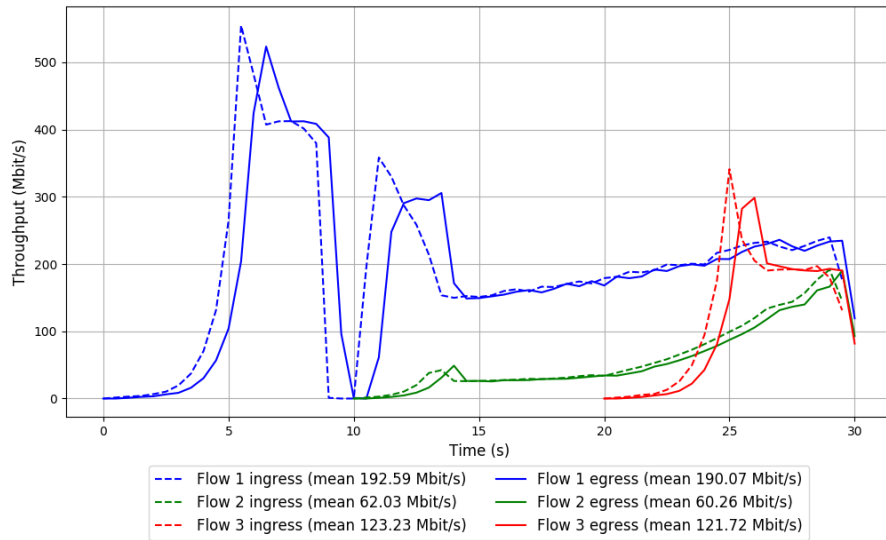# Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-03-27 11:09:05
End at: 2019-03-27 11:09:35
Local clock offset: 0.307 ms
Remote clock offset: -0.164 ms


# Below is generated by plot.py at 2019-03-27 15:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.39 Mbit/s
95th percentile per-packet one-way delay: 314.587 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 190.07 Mbit/s
95th percentile per-packet one-way delay: 337.277 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 60.26 Mbit/s
95th percentile per-packet one-way delay: 134.023 ms
Loss rate: 4.16%
-- Flow 3:
Average throughput: 121.72 Mbit/s
95th percentile per-packet one-way delay: 150.247 ms
Loss rate: 3.89%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 192.59 Mbit/s) --- Flow 1 egress (mean 190.07 Mbit/s)
Flow 2 ingress (mean 62.03 Mbit/s --- Flow 2 egress (mean 60.26 Mbit/s)
Flow 3 ingress (mean 123.23 Mbit/s) --- Flow 3 egress (mean 121.72 Mbit/s)

Flow 1 (95th percentile 337.28 ms)   Flow 2 (95th percentile 134.02 ms)   Flow 3 (95th percentile 150.25 ms)
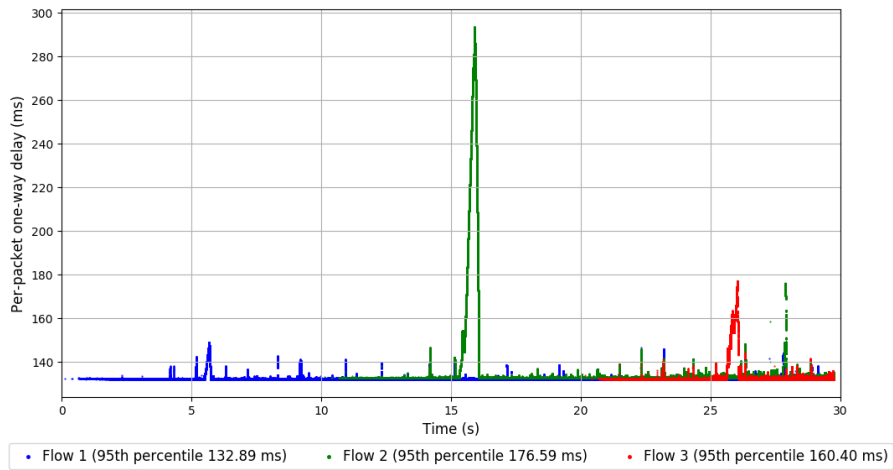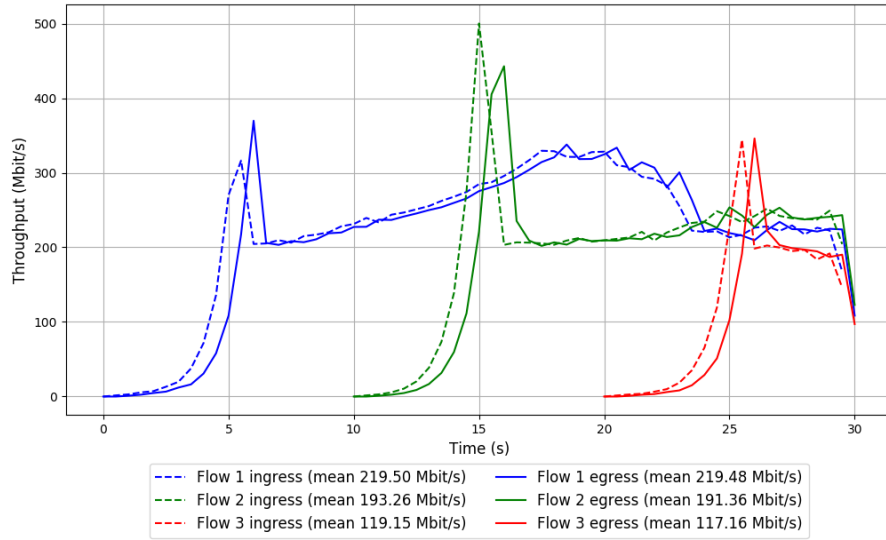
```
Run 3: Statistics of PCC-Vivace

Start at: 2019-03-27 11:50:51
End at: 2019-03-27 11:51:21
Local clock offset: -0.375 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2019-03-27 15:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 384.10 Mbit/s
95th percentile per-packet one-way delay: 139.579 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 219.48 Mbit/s
95th percentile per-packet one-way delay: 132.888 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 191.36 Mbit/s
95th percentile per-packet one-way delay: 176.592 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 117.16 Mbit/s
95th percentile per-packet one-way delay: 160.404 ms
Loss rate: 4.35%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 219.50 Mbit/s)   Flow 1 egress (mean 219.48 Mbit/s)
Flow 2 ingress (mean 193.26 Mbit/s)   Flow 2 egress (mean 191.36 Mbit/s)
Flow 3 ingress (mean 119.15 Mbit/s)   Flow 3 egress (mean 117.16 Mbit/s)

Flow 1 (95th percentile 132.89 ms)   Flow 2 (95th percentile 176.59 ms)   Flow 3 (95th percentile 160.40 ms)
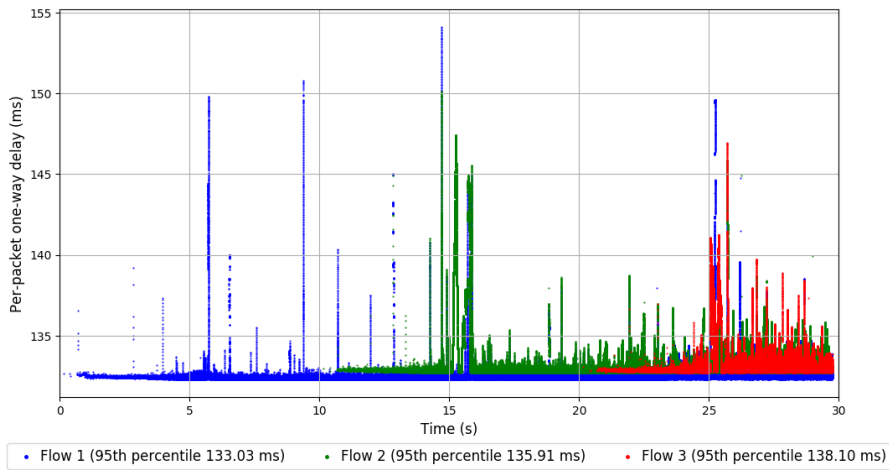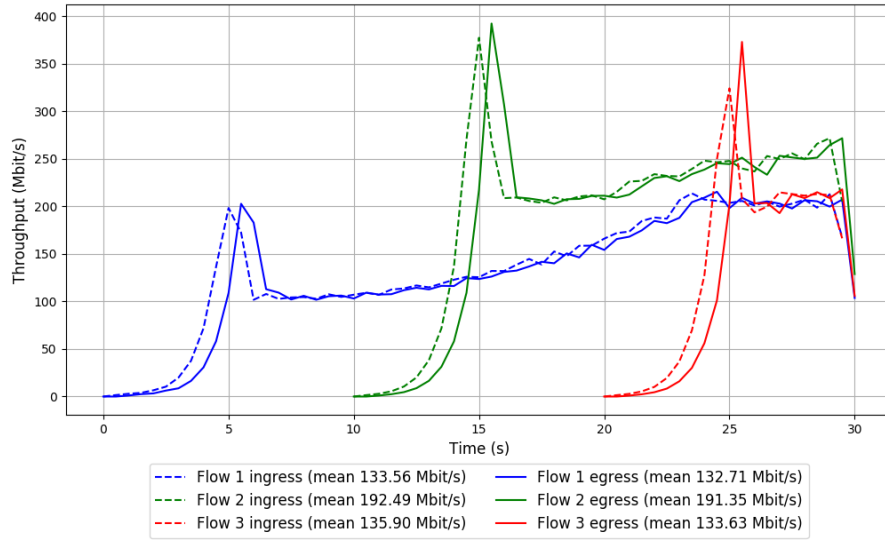
```
Run 4: Statistics of PCC-Vivace

Start at: 2019-03-27 12:34:35
End at: 2019-03-27 12:35:05
Local clock offset: -0.178 ms
Remote clock offset: -0.105 ms


# Below is generated by plot.py at 2019-03-27 15:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.60 Mbit/s
95th percentile per-packet one-way delay: 134.960 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 132.71 Mbit/s
95th percentile per-packet one-way delay: 133.033 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 191.35 Mbit/s
95th percentile per-packet one-way delay: 135.908 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 133.63 Mbit/s
95th percentile per-packet one-way delay: 138.100 ms
Loss rate: 4.32%
```

Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 133.56 Mbit/s)   Flow 1 egress (mean 132.71 Mbit/s)
Flow 2 ingress (mean 192.49 Mbit/s)   Flow 2 egress (mean 191.35 Mbit/s)
Flow 3 ingress (mean 135.90 Mbit/s)   Flow 3 egress (mean 133.63 Mbit/s)

Flow 1 (95th percentile 133.03 ms)   Flow 2 (95th percentile 135.91 ms)   Flow 3 (95th percentile 138.10 ms)
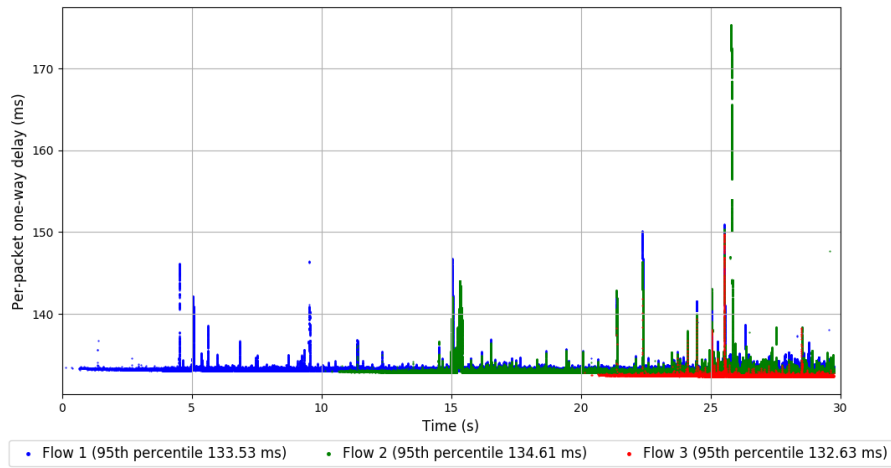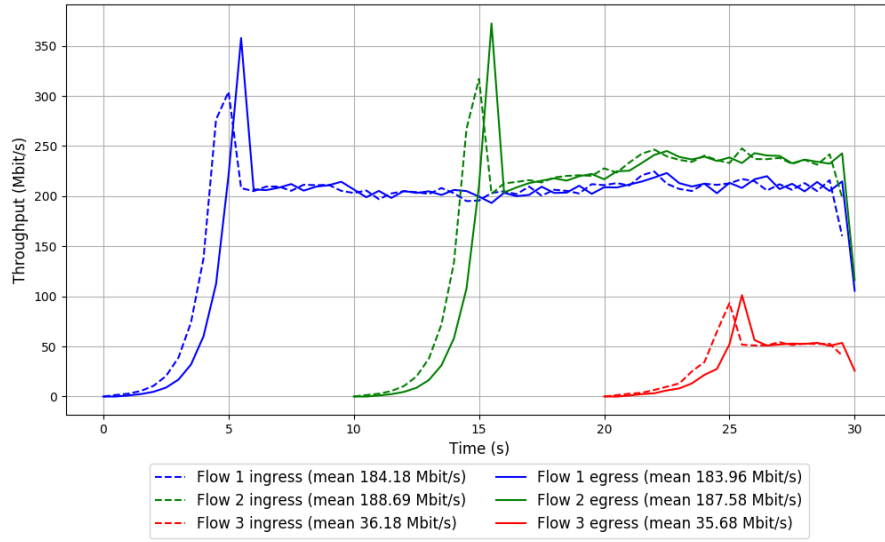
```
Run 5: Statistics of PCC-Vivace

Start at: 2019-03-27 13:17:29
End at: 2019-03-27 13:17:59
Local clock offset: -0.175 ms
Remote clock offset: -0.153 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.70 Mbit/s
95th percentile per-packet one-way delay: 133.757 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 183.96 Mbit/s
95th percentile per-packet one-way delay: 133.535 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 187.58 Mbit/s
95th percentile per-packet one-way delay: 134.610 ms
Loss rate: 1.92%
-- Flow 3:
Average throughput: 35.68 Mbit/s
95th percentile per-packet one-way delay: 132.631 ms
Loss rate: 4.05%
```

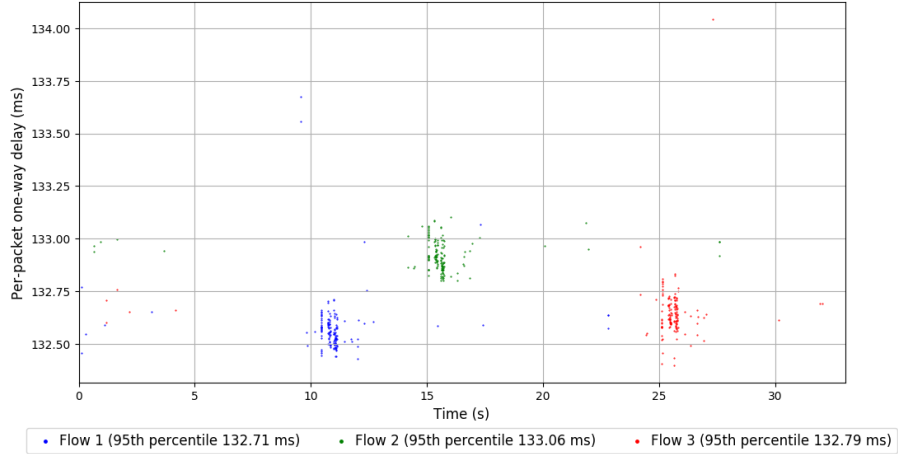## Run 5: Report of PCC-Vivace — Data Link

- - - - Flow 1 ingress (mean 184.18 Mbit/s) ———— Flow 1 egress (mean 183.96 Mbit/s)
- - - - Flow 2 ingress (mean 188.69 Mbit/s) ———— Flow 2 egress (mean 187.58 Mbit/s)
- - - - Flow 3 ingress (mean 36.18 Mbit/s) ———— Flow 3 egress (mean 35.68 Mbit/s)

- Flow 1 (95th percentile 133.53 ms)   • Flow 2 (95th percentile 134.61 ms)   • Flow 3 (95th percentile 132.63 ms)
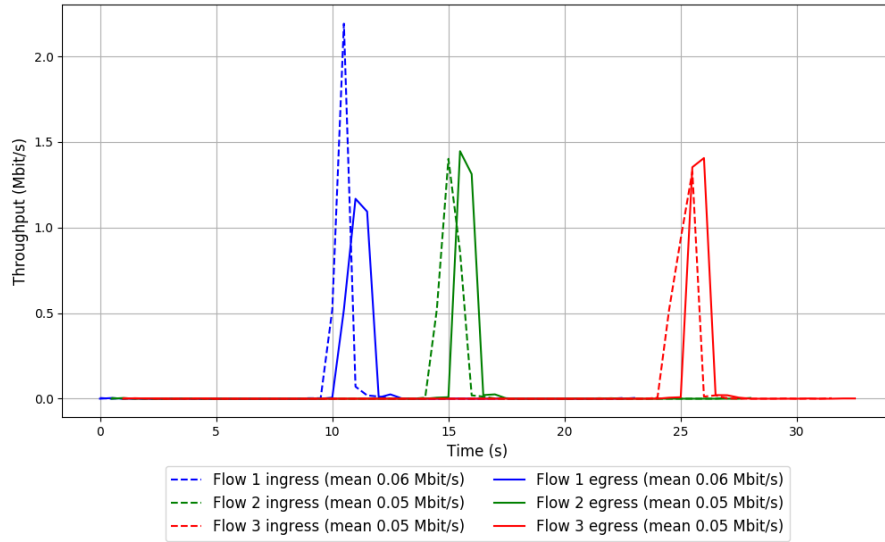
```
Run 1: Statistics of WebRTC media

Start at: 2019-03-27 10:21:02
End at: 2019-03-27 10:21:32
Local clock offset: -0.106 ms
Remote clock offset: -0.152 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.007 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 132.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.057 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.786 ms
Loss rate: 0.00%
```

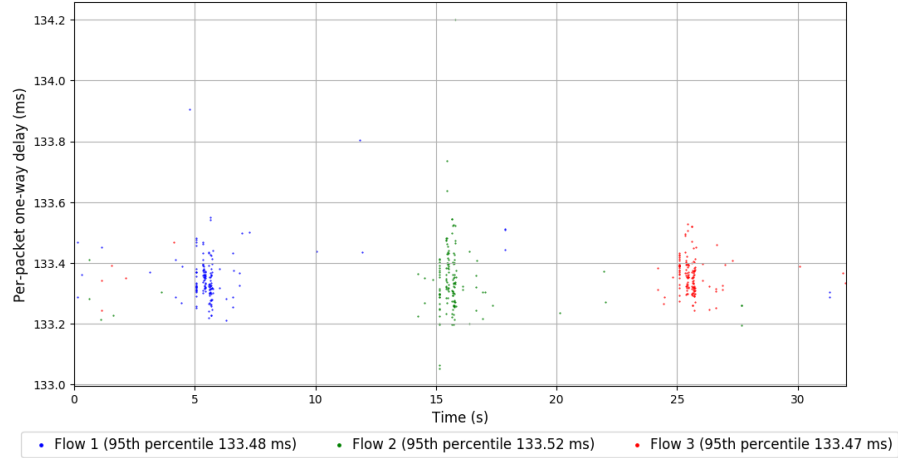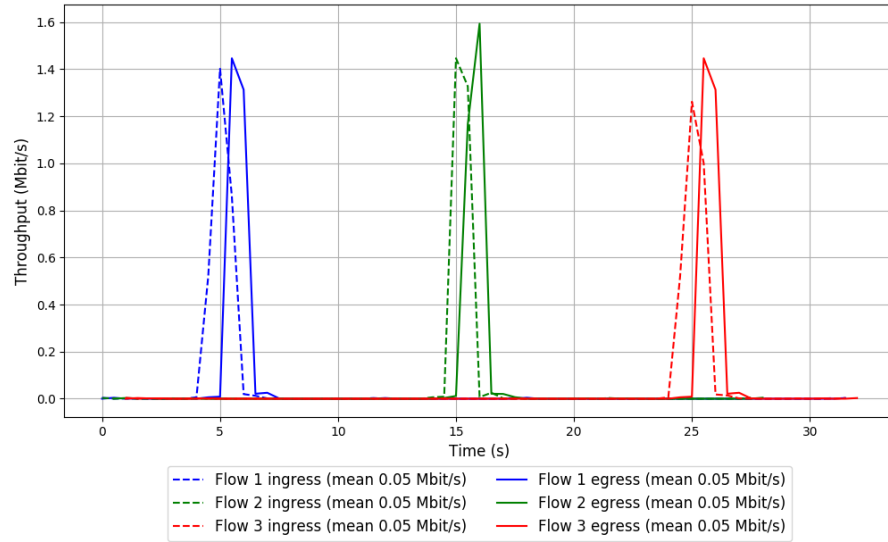Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-03-27 11:03:49
End at: 2019-03-27 11:04:19
Local clock offset: 0.13 ms
Remote clock offset: -0.148 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.522 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.468 ms
Loss rate: 0.00%
```

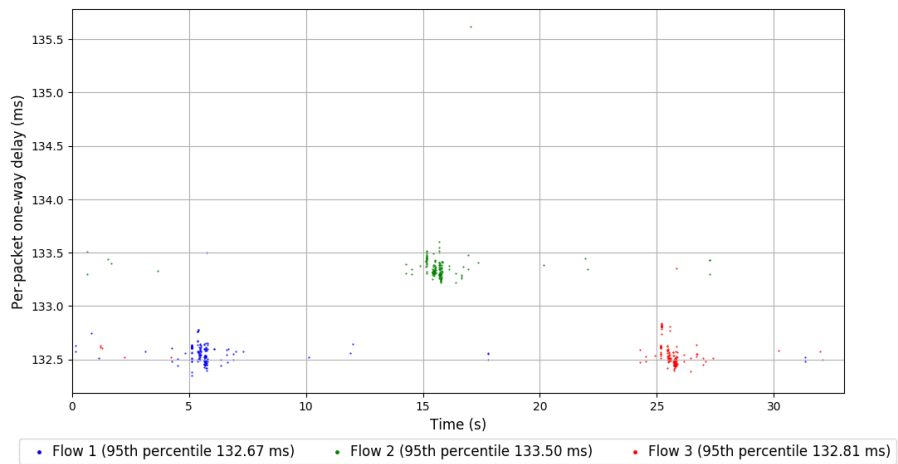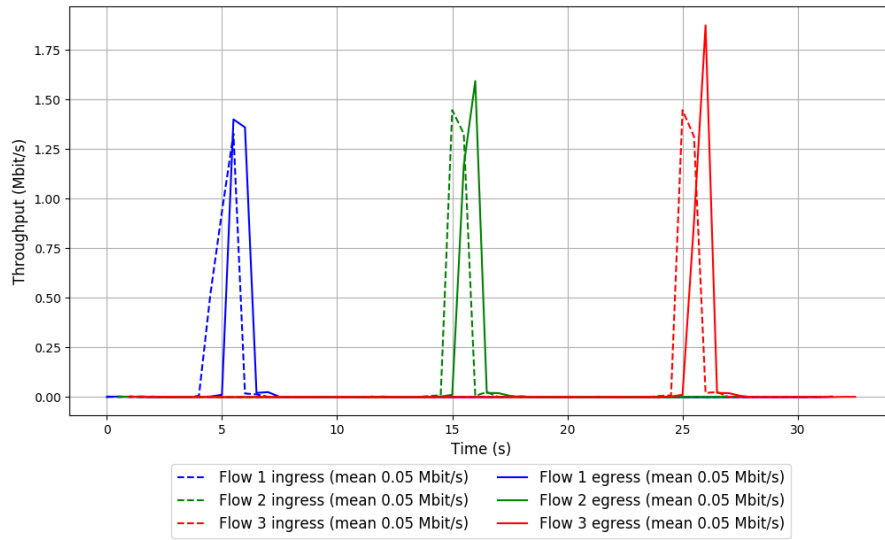Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-03-27 11:45:00
End at: 2019-03-27 11:45:30
Local clock offset: 0.254 ms
Remote clock offset: -0.139 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.442 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.668 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.503 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.811 ms
Loss rate: 0.00%
```
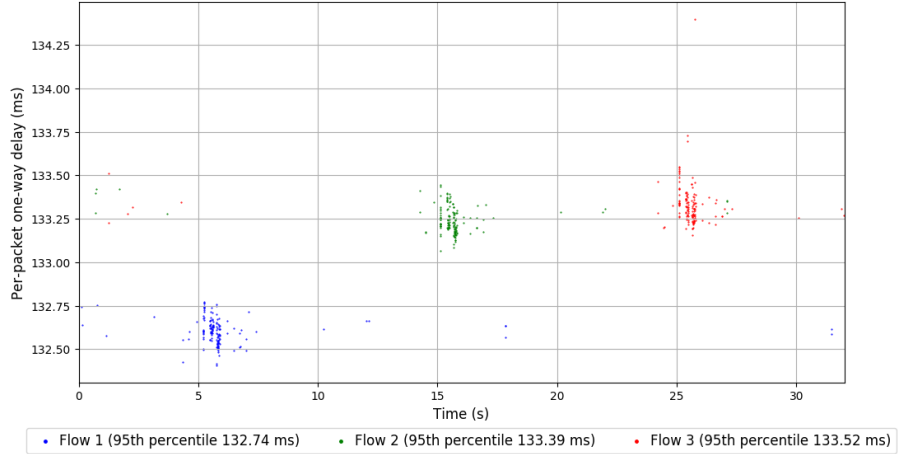
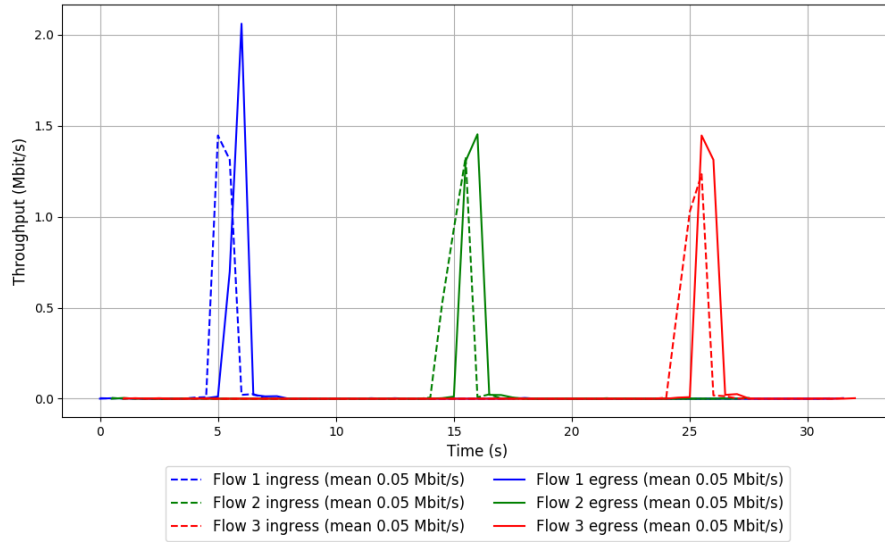# Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-03-27 12:28:35
End at: 2019-03-27 12:29:05
Local clock offset: -0.136 ms
Remote clock offset: -0.164 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.743 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.520 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-03-27 13:12:11
End at: 2019-03-27 13:12:41
Local clock offset: -0.592 ms
Remote clock offset: -0.125 ms


# Below is generated by plot.py at 2019-03-27 15:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.971 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.717 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link