Pantheon Report

Generated at 2019-05-30 14:08:44 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

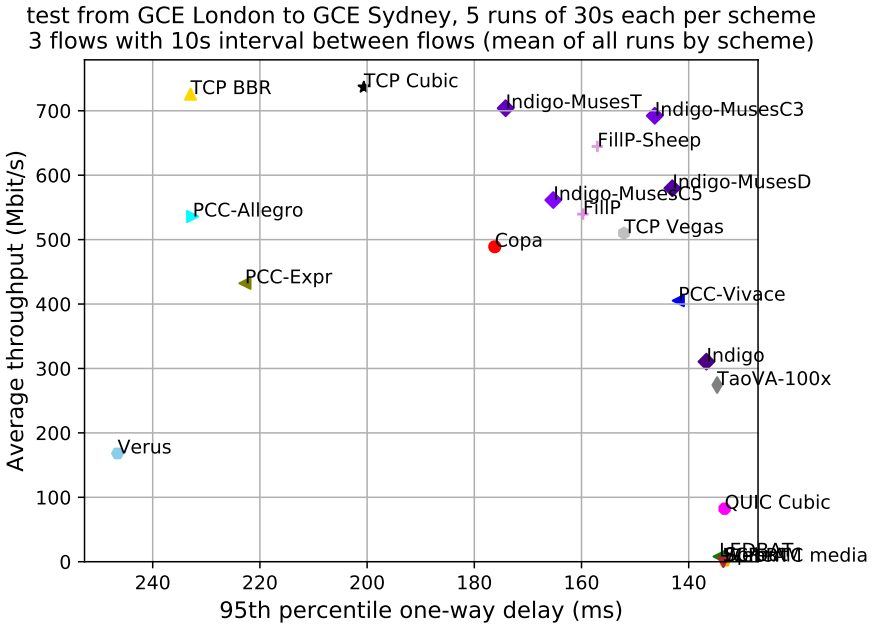
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

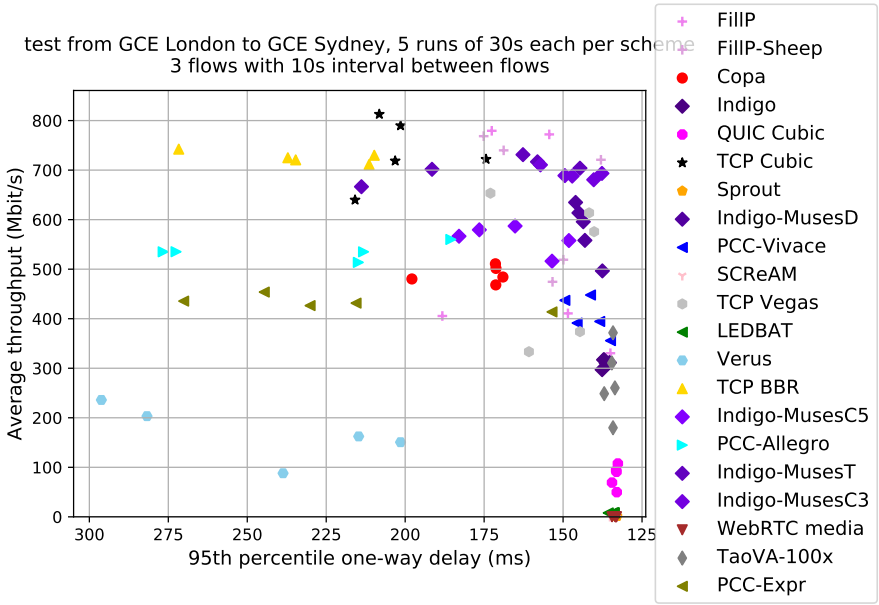
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
System info:
Linux 4.15.0-1029-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)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
TCP BBR
TCP Cubic
Indigo-MusesT
Indigo-MusesC3
FillP-Sheep
Indigo-MusesD
Indigo-MusesC5
FillP
PCC-Allegro
TCP Vegas
Copa
PCC-Expr
PCC-Vivace
Indigo
TaoVA-100x
Verus
QUIC Cubic
WebRTC media


test from GCE London to GCE Sydney, 5 runs of 30s each per scheme
3 flows with 10s interval between flows
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
FillP
FillP-Sheep
Copa
Indigo
QUIC Cubic
TCP Cubic
Sprout
Indigo-MusesD
PCC-Vivace
SCReAM
TCP Vegas
LEDBAT
Verus
TCP BBR
Indigo-MusesC5
PCC-Allegro
Indigo-MusesT
Indigo-MusesC3
WebRTC media
TaoVA-100x
PCC-Expr

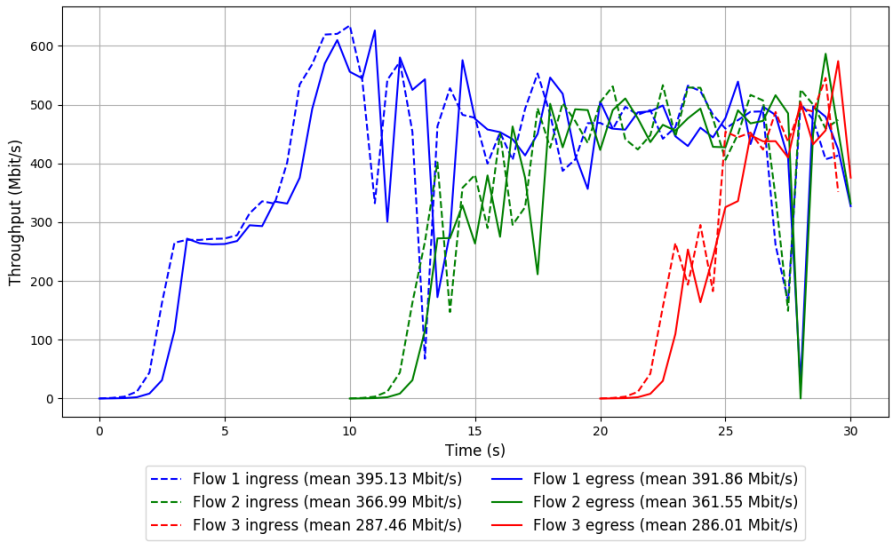
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	402.72	367.82	242.95	223.07	239.62	180.39	1.56	2.35	4.99
Copa	5	258.48	249.03	200.59	160.33	177.31	181.29	0.93	1.59	4.03
TCP Cubic	5	413.68	355.24	267.74	178.22	213.39	176.43	0.95	1.92	5.40
FillP	5	243.62	331.94	234.64	166.79	136.32	135.15	0.97	1.26	3.00
FillP-Sheep	5	358.14	319.34	230.50	167.75	138.06	137.62	0.57	1.21	3.05
Indigo	5	166.42	153.31	132.94	135.68	136.87	143.16	0.86	1.36	3.36
Indigo-MusesC3	5	410.71	340.13	245.93	154.64	141.85	138.72	0.70	1.59	4.55
Indigo-MusesC5	5	343.68	305.21	87.09	173.08	155.05	133.44	0.67	1.51	5.22
Indigo-MusesD	5	365.40	305.58	76.94	145.19	140.08	133.42	0.95	1.81	5.11
Indigo-MusesT	5	442.05	363.11	118.64	168.66	188.06	133.96	0.80	1.58	4.70
LEDBAT	5	5.21	3.42	1.66	134.37	134.12	133.37	1.78	2.69	5.40
PCC-Allegro	5	297.49	272.72	179.25	191.64	236.11	224.40	2.48	5.57	4.31
PCC-Expr	5	250.23	209.02	134.54	216.53	183.45	180.22	2.98	3.64	3.89
QUIC Cubic	5	45.68	37.05	36.15	133.04	133.08	132.88	1.30	1.71	3.33
SCReAM	5	0.18	0.15	0.17	133.37	133.20	133.47	0.89	1.39	2.46
Sprout	5	0.56	0.59	0.55	132.93	133.17	133.29	1.12	1.60	3.22
TaoVA-100x	5	155.20	114.15	132.82	134.15	133.46	135.53	0.96	1.54	3.27
TCP Vegas	5	245.73	292.89	214.63	143.49	170.37	155.52	0.82	1.66	4.03
Verus	5	86.06	95.15	59.84	245.14	219.79	161.40	1.87	0.97	3.41
PCC-Vivace	5	259.04	180.19	83.18	150.90	136.19	135.45	0.98	1.80	4.37
WebRTC media	5	0.05	0.05	0.05	133.58	133.27	133.67	0.00	0.01	0.01

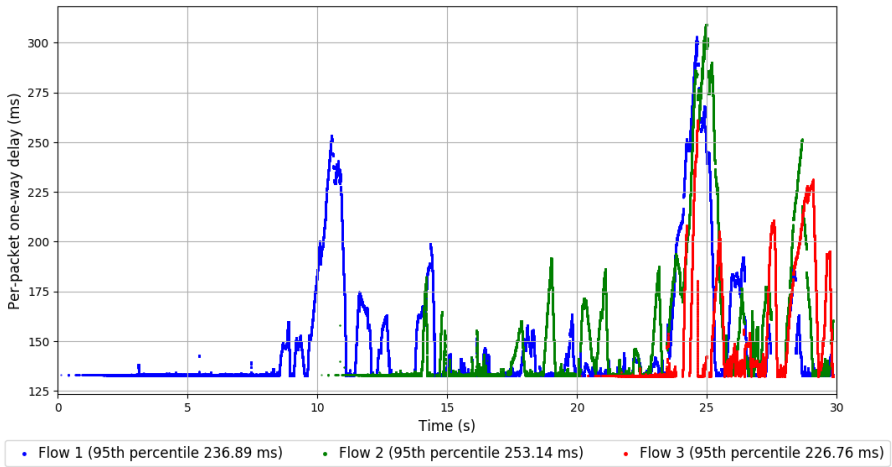
```
Run 1: Statistics of TCP BBR

Start at: 2019-05-30 08:47:59
End at: 2019-05-30 08:48:29
Local clock offset: 0.059 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-05-30 12:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 724.99 Mbit/s
95th percentile per-packet one-way delay: 237.145 ms
Loss rate: 2.26%
-- Flow 1:
Average throughput: 391.86 Mbit/s
95th percentile per-packet one-way delay: 236.889 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 361.55 Mbit/s
95th percentile per-packet one-way delay: 253.144 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 286.01 Mbit/s
95th percentile per-packet one-way delay: 226.764 ms
Loss rate: 3.16%
```

Run 1: Report of TCP BBR — Data Link



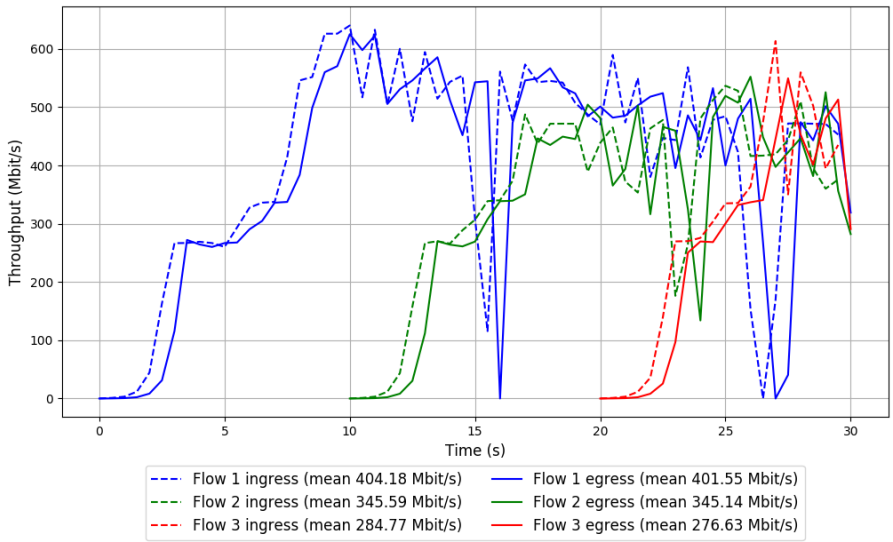


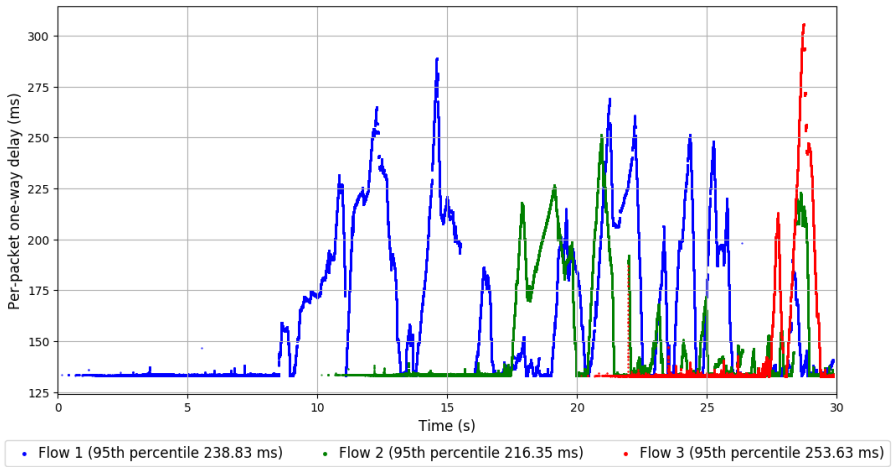
```
Run 2: Statistics of TCP BBR

Start at: 2019-05-30 09:25:48
End at: 2019-05-30 09:26:18
Local clock offset: 0.362 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2019-05-30 12:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.72 Mbit/s
95th percentile per-packet one-way delay: 234.673 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 401.55 Mbit/s
95th percentile per-packet one-way delay: 238.831 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 345.14 Mbit/s
95th percentile per-packet one-way delay: 216.347 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 276.63 Mbit/s
95th percentile per-packet one-way delay: 253.630 ms
Loss rate: 5.45%
```

Run 2: Report of TCP BBR — Data Link



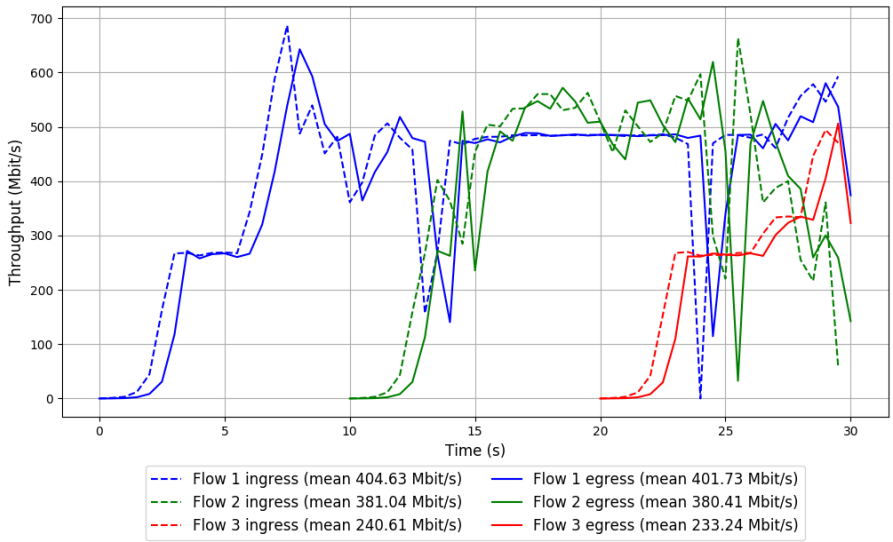


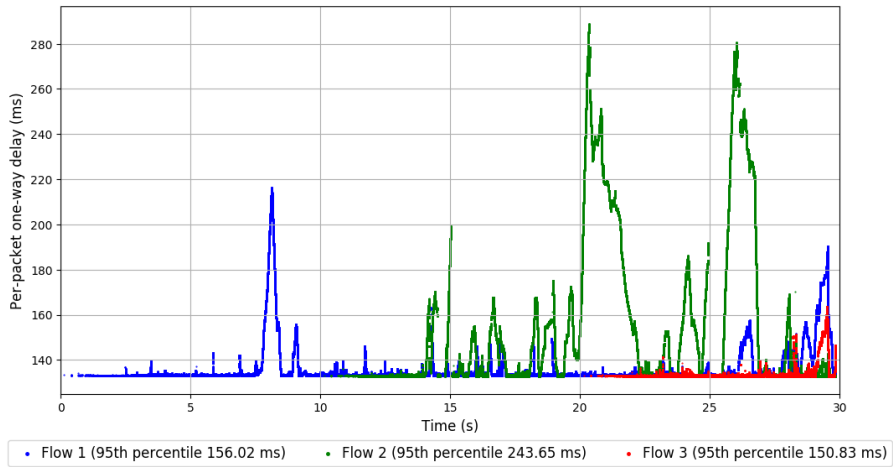
```
Run 3: Statistics of TCP BBR

Start at: 2019-05-30 10:02:59
End at: 2019-05-30 10:03:29
Local clock offset: -0.163 ms
Remote clock offset: -0.496 ms

# Below is generated by plot.py at 2019-05-30 12:16:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 730.03 Mbit/s
95th percentile per-packet one-way delay: 209.777 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 401.73 Mbit/s
95th percentile per-packet one-way delay: 156.018 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 380.41 Mbit/s
95th percentile per-packet one-way delay: 243.647 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 233.24 Mbit/s
95th percentile per-packet one-way delay: 150.828 ms
Loss rate: 5.67%
```

Run 3: Report of TCP BBR — Data Link



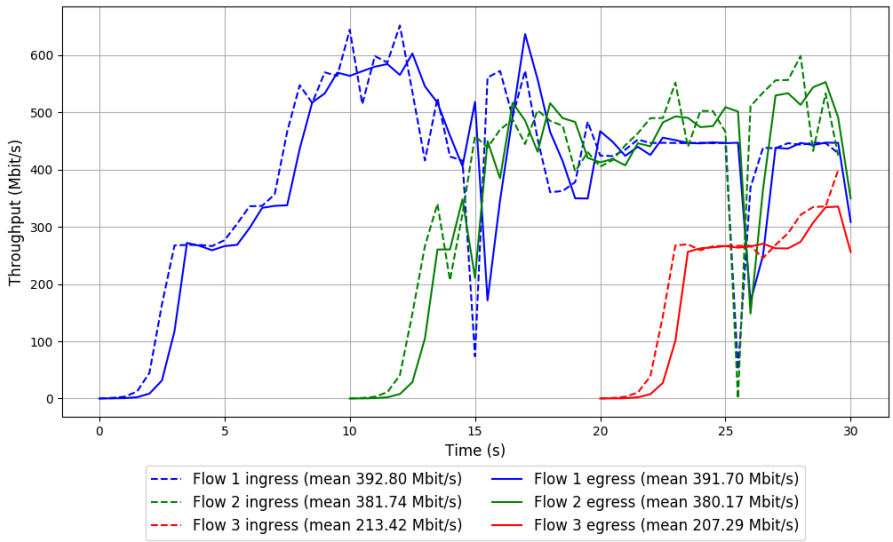


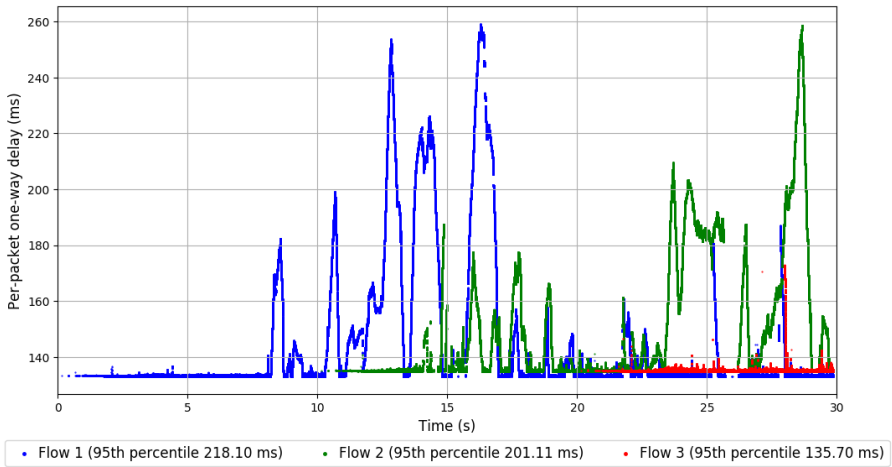
```
Run 4: Statistics of TCP BBR

Start at: 2019-05-30 10:41:15
End at: 2019-05-30 10:41:45
Local clock offset: 0.012 ms
Remote clock offset: -0.759 ms

# Below is generated by plot.py at 2019-05-30 12:16:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 711.34 Mbit/s
95th percentile per-packet one-way delay: 211.423 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 391.70 Mbit/s
95th percentile per-packet one-way delay: 218.101 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 380.17 Mbit/s
95th percentile per-packet one-way delay: 201.114 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 207.29 Mbit/s
95th percentile per-packet one-way delay: 135.701 ms
Loss rate: 5.50%
```

Run 4: Report of TCP BBR — Data Link



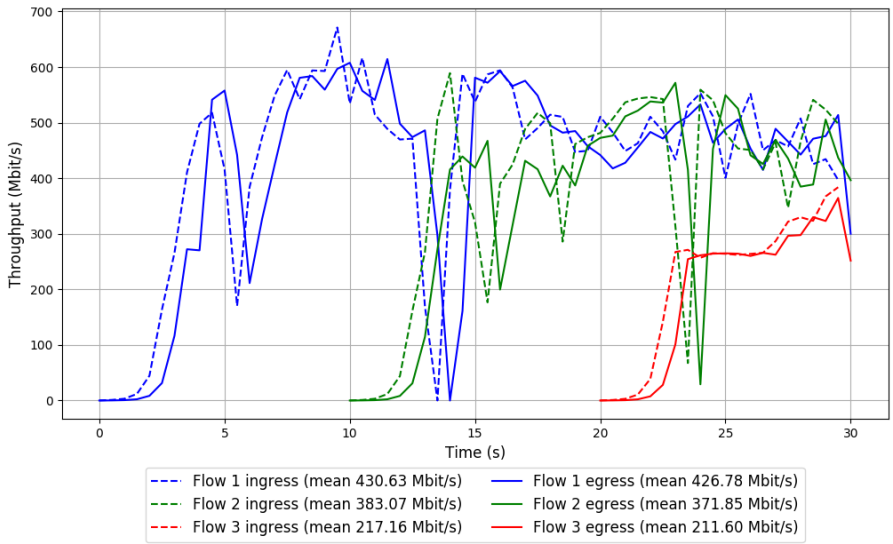


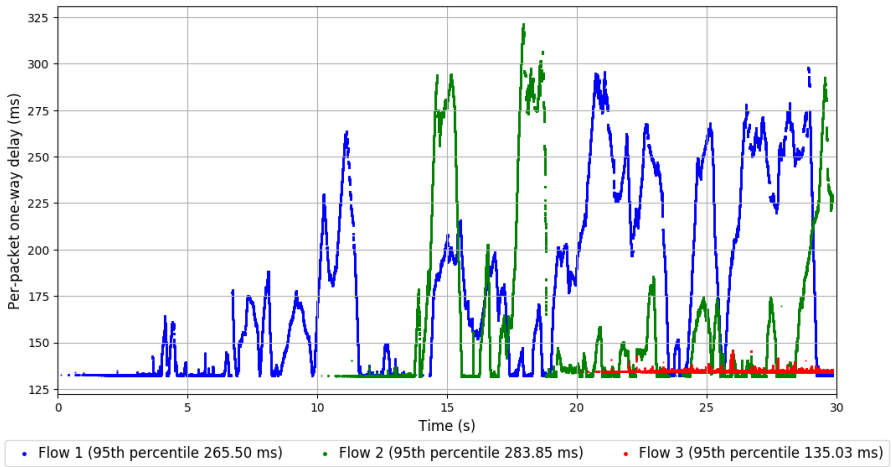
```
Run 5: Statistics of TCP BBR

Start at: 2019-05-30 11:19:03
End at: 2019-05-30 11:19:33
Local clock offset: -0.454 ms
Remote clock offset: -0.972 ms

# Below is generated by plot.py at 2019-05-30 12:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 742.37 Mbit/s
95th percentile per-packet one-way delay: 271.700 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 426.78 Mbit/s
95th percentile per-packet one-way delay: 265.504 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 371.85 Mbit/s
95th percentile per-packet one-way delay: 283.853 ms
Loss rate: 4.22%
-- Flow 3:
Average throughput: 211.60 Mbit/s
95th percentile per-packet one-way delay: 135.035 ms
Loss rate: 5.19%
```

Run 5: Report of TCP BBR — Data Link



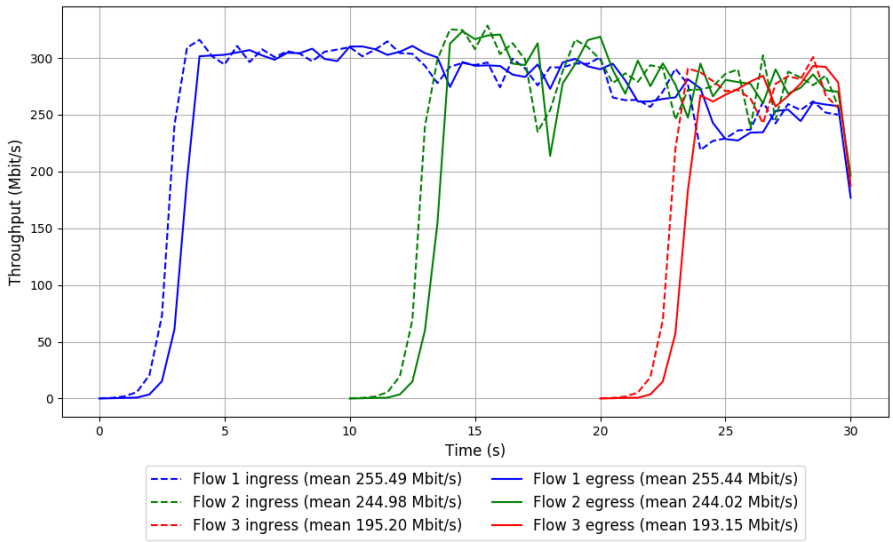


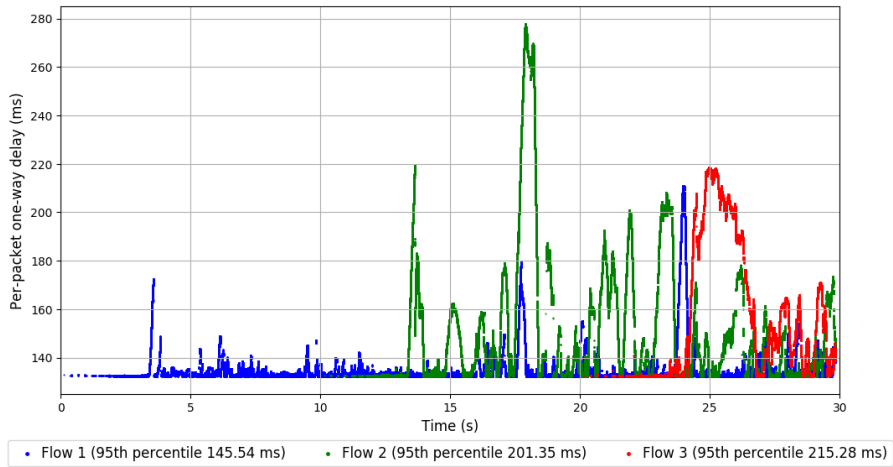
```
Run 1: Statistics of Copa

Start at: 2019-05-30 08:50:09
End at: 2019-05-30 08:50:39
Local clock offset: -0.308 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2019-05-30 12:19:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.25 Mbit/s
95th percentile per-packet one-way delay: 197.871 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 255.44 Mbit/s
95th percentile per-packet one-way delay: 145.540 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 244.02 Mbit/s
95th percentile per-packet one-way delay: 201.350 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 193.15 Mbit/s
95th percentile per-packet one-way delay: 215.280 ms
Loss rate: 3.69%
```

Run 1: Report of Copa — Data Link



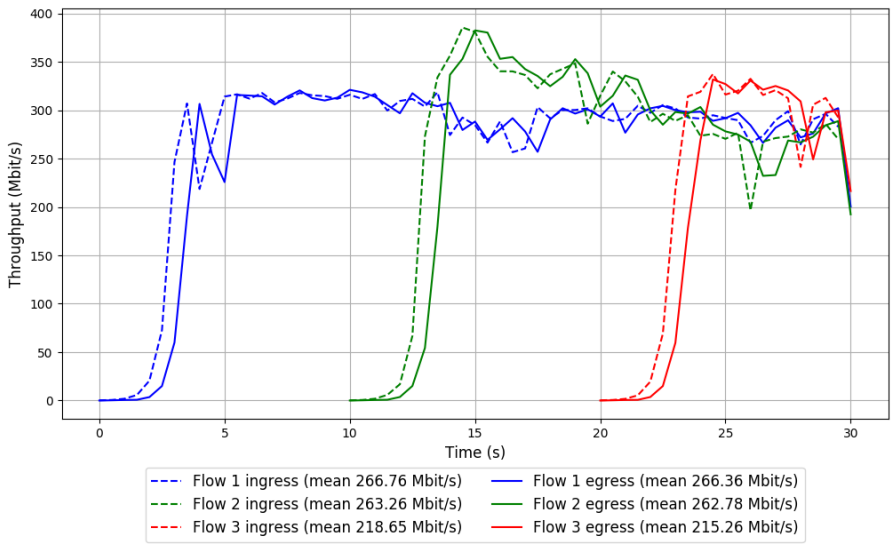


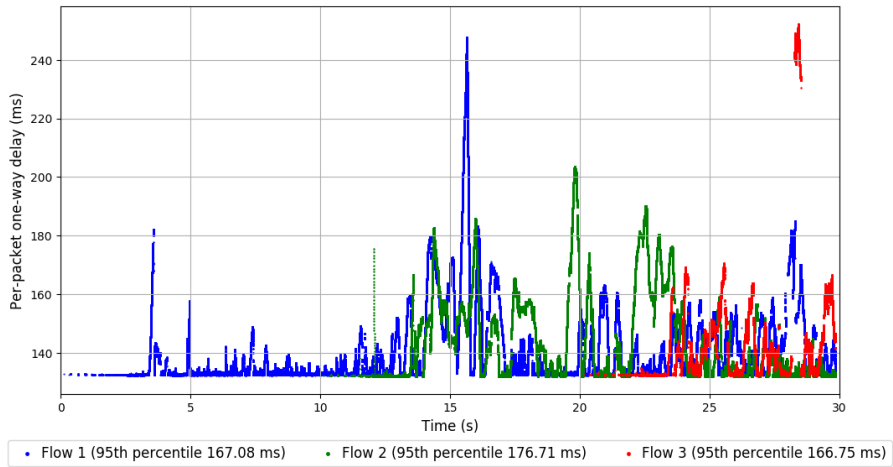
```
Run 2: Statistics of Copa

Start at: 2019-05-30 09:27:58
End at: 2019-05-30 09:28:28
Local clock offset: -0.068 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-05-30 12:21:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.84 Mbit/s
95th percentile per-packet one-way delay: 171.422 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 266.36 Mbit/s
95th percentile per-packet one-way delay: 167.077 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 262.78 Mbit/s
95th percentile per-packet one-way delay: 176.712 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 215.26 Mbit/s
95th percentile per-packet one-way delay: 166.746 ms
Loss rate: 4.19%
```

Run 2: Report of Copa — Data Link



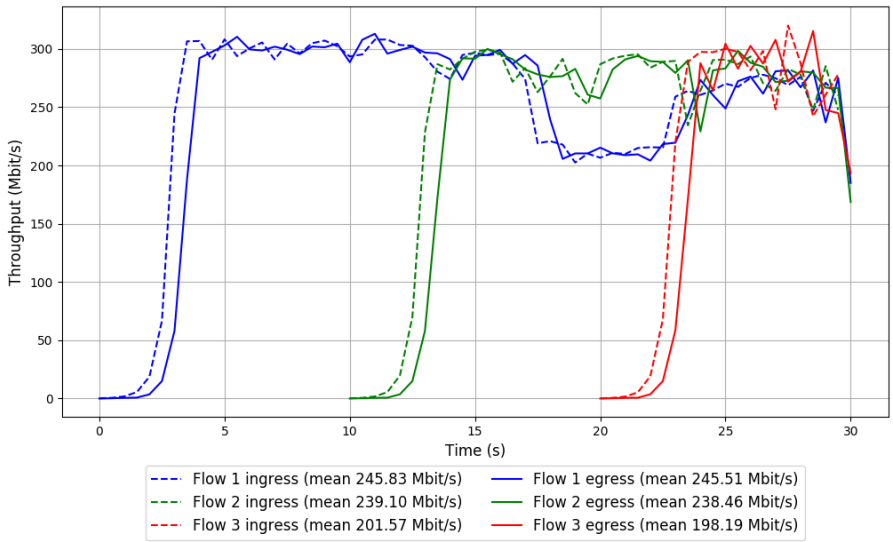


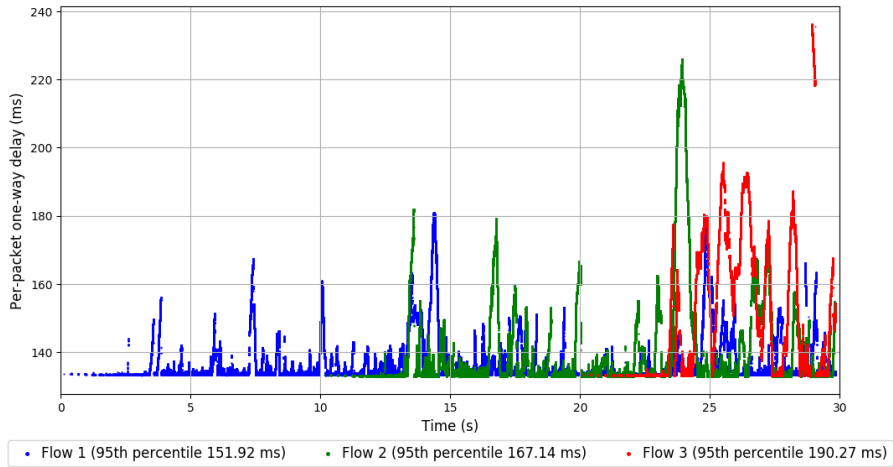
```
Run 3: Statistics of Copa

Start at: 2019-05-30 10:05:08
End at: 2019-05-30 10:05:38
Local clock offset: 0.003 ms
Remote clock offset: -0.55 ms

# Below is generated by plot.py at 2019-05-30 12:21:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.26 Mbit/s
95th percentile per-packet one-way delay: 171.312 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 245.51 Mbit/s
95th percentile per-packet one-way delay: 151.923 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 238.46 Mbit/s
95th percentile per-packet one-way delay: 167.139 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 198.19 Mbit/s
95th percentile per-packet one-way delay: 190.272 ms
Loss rate: 4.30%
```

Run 3: Report of Copa — Data Link



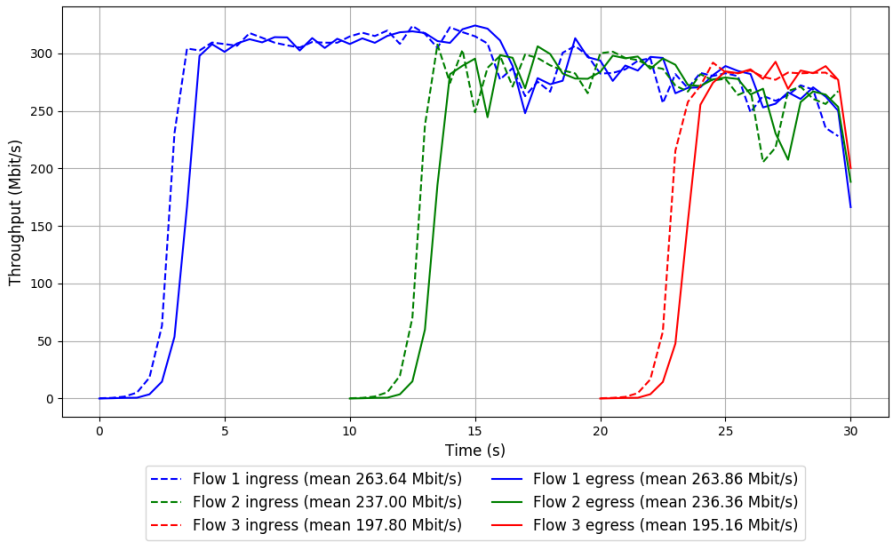


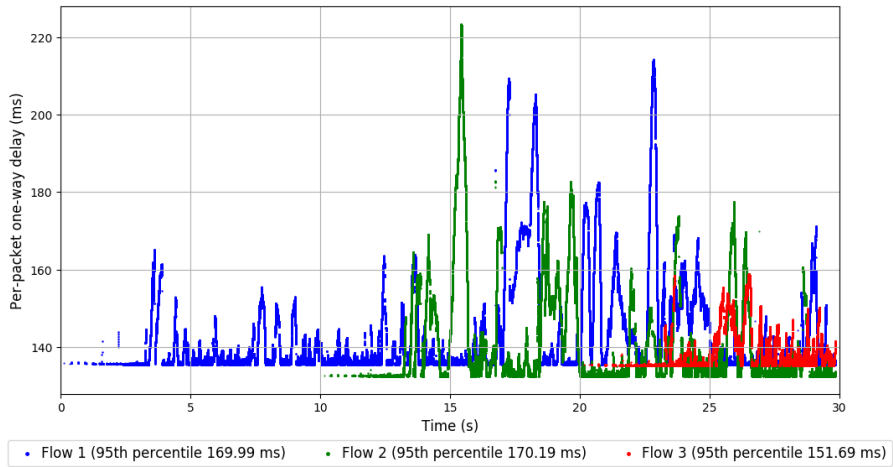
```
Run 4: Statistics of Copa

Start at: 2019-05-30 10:43:24
End at: 2019-05-30 10:43:54
Local clock offset: 0.031 ms
Remote clock offset: -0.752 ms

# Below is generated by plot.py at 2019-05-30 12:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.16 Mbit/s
95th percentile per-packet one-way delay: 169.052 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 263.86 Mbit/s
95th percentile per-packet one-way delay: 169.992 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 236.36 Mbit/s
95th percentile per-packet one-way delay: 170.194 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 195.16 Mbit/s
95th percentile per-packet one-way delay: 151.690 ms
Loss rate: 4.01%
```

Run 4: Report of Copa — Data Link



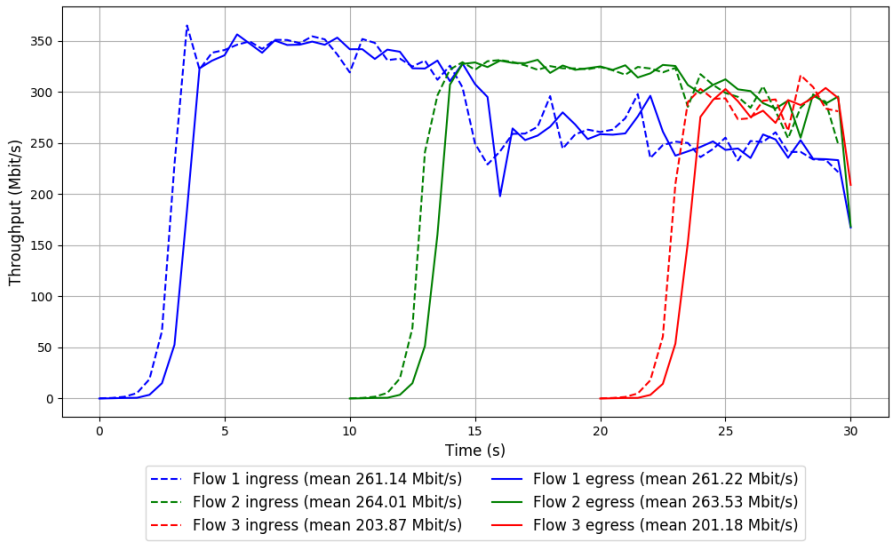


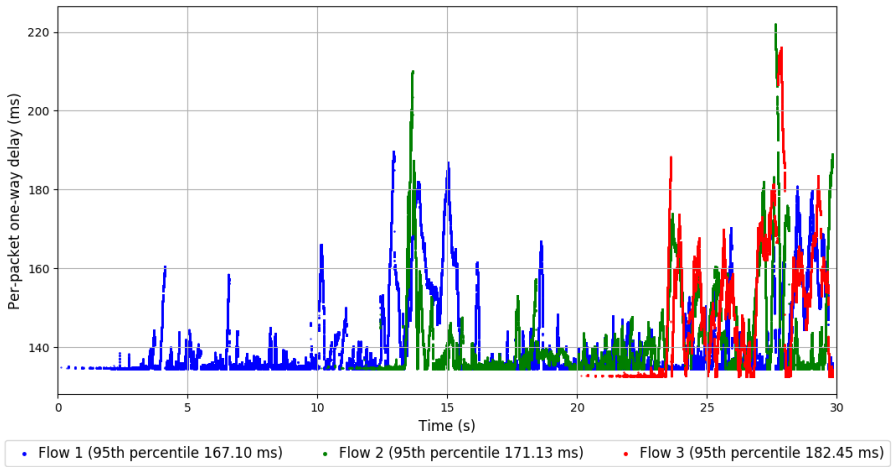
```
Run 5: Statistics of Copa

Start at: 2019-05-30 11:21:14
End at: 2019-05-30 11:21:44
Local clock offset: -0.094 ms
Remote clock offset: -1.004 ms

# Below is generated by plot.py at 2019-05-30 12:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 501.59 Mbit/s
95th percentile per-packet one-way delay: 171.252 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 261.22 Mbit/s
95th percentile per-packet one-way delay: 167.104 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 263.53 Mbit/s
95th percentile per-packet one-way delay: 171.133 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 201.18 Mbit/s
95th percentile per-packet one-way delay: 182.451 ms
Loss rate: 3.95%
```

Run 5: Report of Copa — Data Link



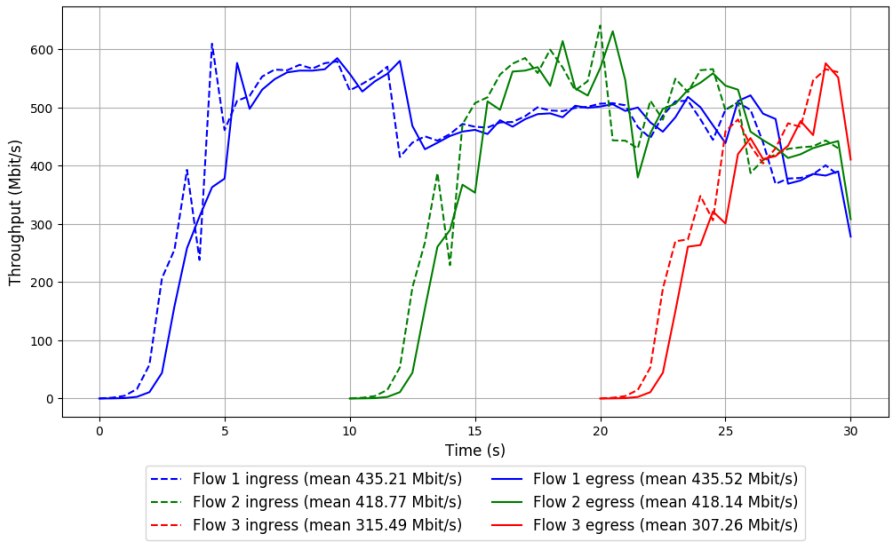


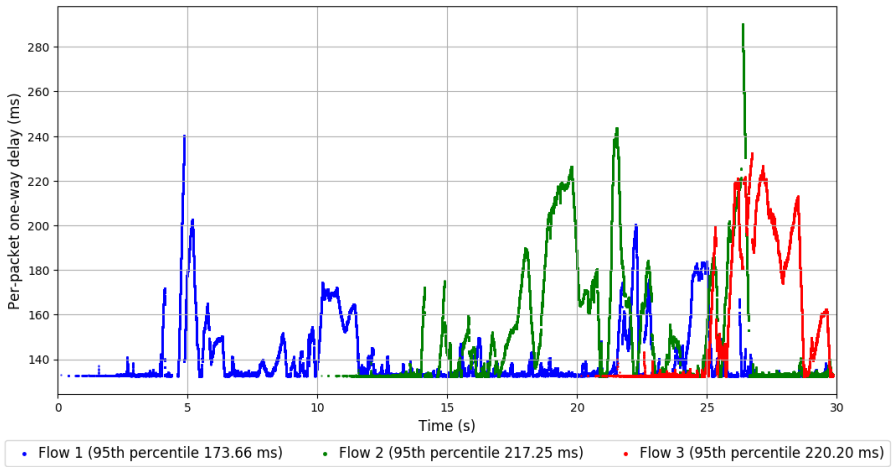
```
Run 1: Statistics of TCP Cubic

Start at: 2019-05-30 08:40:24
End at: 2019-05-30 08:40:54
Local clock offset: -0.194 ms
Remote clock offset: -0.17 ms

# Below is generated by plot.py at 2019-05-30 12:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 812.86 Mbit/s
95th percentile per-packet one-way delay: 208.190 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 435.52 Mbit/s
95th percentile per-packet one-way delay: 173.656 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 418.14 Mbit/s
95th percentile per-packet one-way delay: 217.250 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 307.26 Mbit/s
95th percentile per-packet one-way delay: 220.201 ms
Loss rate: 5.21%
```

Run 1: Report of TCP Cubic — Data Link



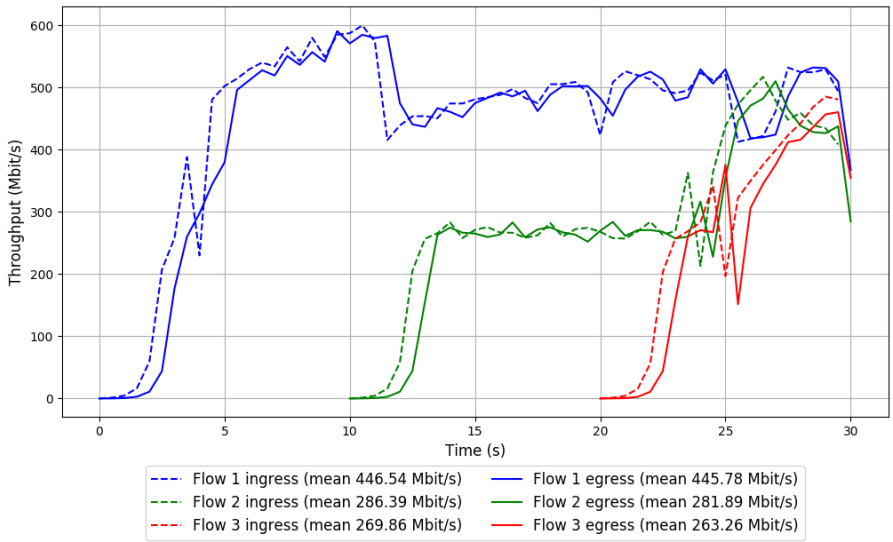


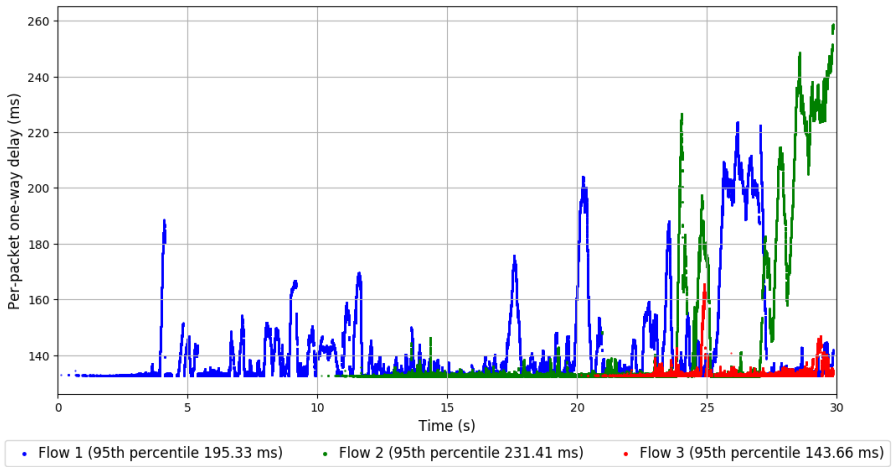
```
Run 2: Statistics of TCP Cubic

Start at: 2019-05-30 09:18:26
End at: 2019-05-30 09:18:56
Local clock offset: -0.38 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2019-05-30 12:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 718.65 Mbit/s
95th percentile per-packet one-way delay: 203.165 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 445.78 Mbit/s
95th percentile per-packet one-way delay: 195.334 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 281.89 Mbit/s
95th percentile per-packet one-way delay: 231.409 ms
Loss rate: 2.87%
-- Flow 3:
Average throughput: 263.26 Mbit/s
95th percentile per-packet one-way delay: 143.657 ms
Loss rate: 5.06%
```

Run 2: Report of TCP Cubic — Data Link



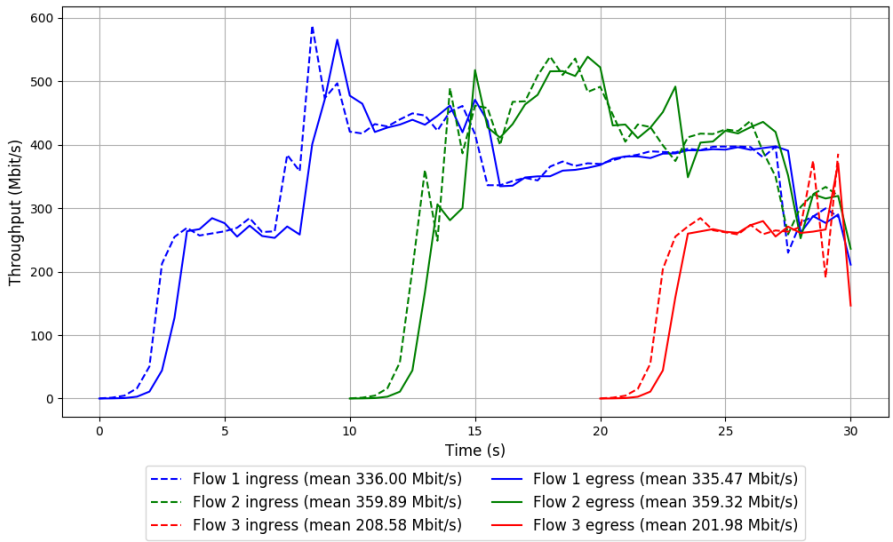


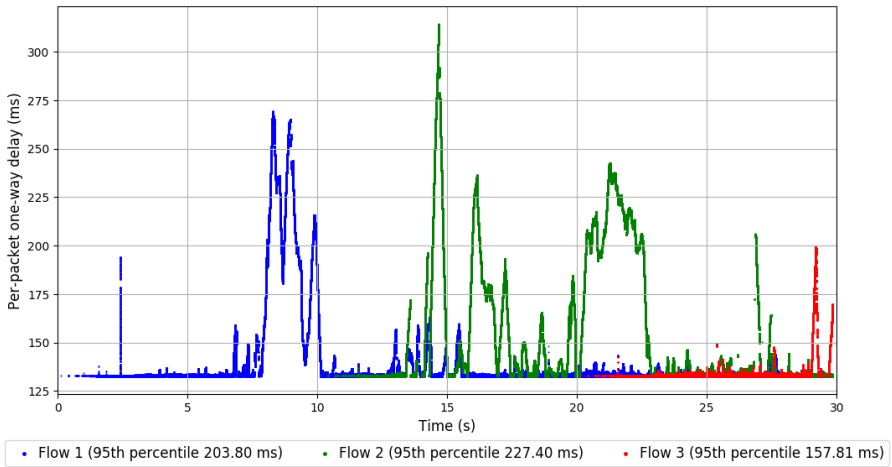
```
Run 3: Statistics of TCP Cubic

Start at: 2019-05-30 09:55:38
End at: 2019-05-30 09:56:08
Local clock offset: -0.538 ms
Remote clock offset: -0.482 ms

# Below is generated by plot.py at 2019-05-30 12:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 639.79 Mbit/s
95th percentile per-packet one-way delay: 215.870 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 335.47 Mbit/s
95th percentile per-packet one-way delay: 203.802 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 359.32 Mbit/s
95th percentile per-packet one-way delay: 227.402 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 201.98 Mbit/s
95th percentile per-packet one-way delay: 157.811 ms
Loss rate: 5.75%
```

Run 3: Report of TCP Cubic — Data Link



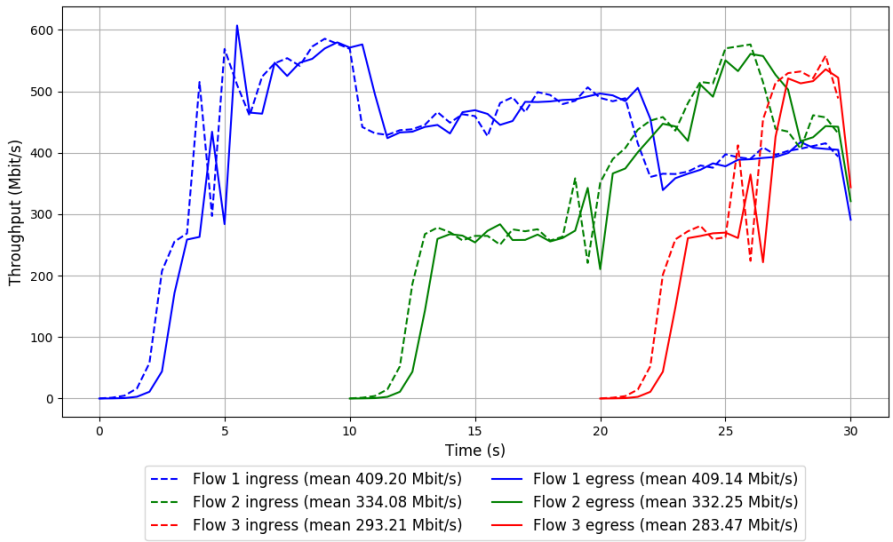


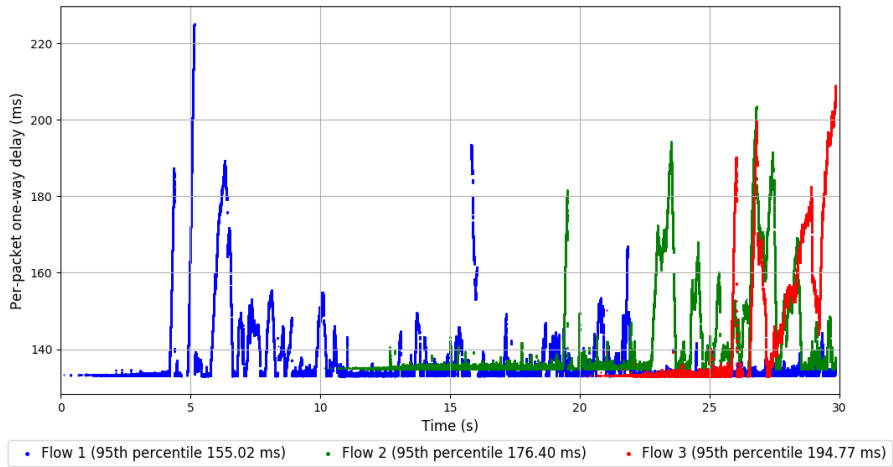
```
Run 4: Statistics of TCP Cubic

Start at: 2019-05-30 10:33:54
End at: 2019-05-30 10:34:24
Local clock offset: -0.011 ms
Remote clock offset: -0.756 ms

# Below is generated by plot.py at 2019-05-30 12:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 721.96 Mbit/s
95th percentile per-packet one-way delay: 174.389 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 409.14 Mbit/s
95th percentile per-packet one-way delay: 155.019 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 332.25 Mbit/s
95th percentile per-packet one-way delay: 176.403 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 283.47 Mbit/s
95th percentile per-packet one-way delay: 194.769 ms
Loss rate: 5.91%
```

Run 4: Report of TCP Cubic — Data Link



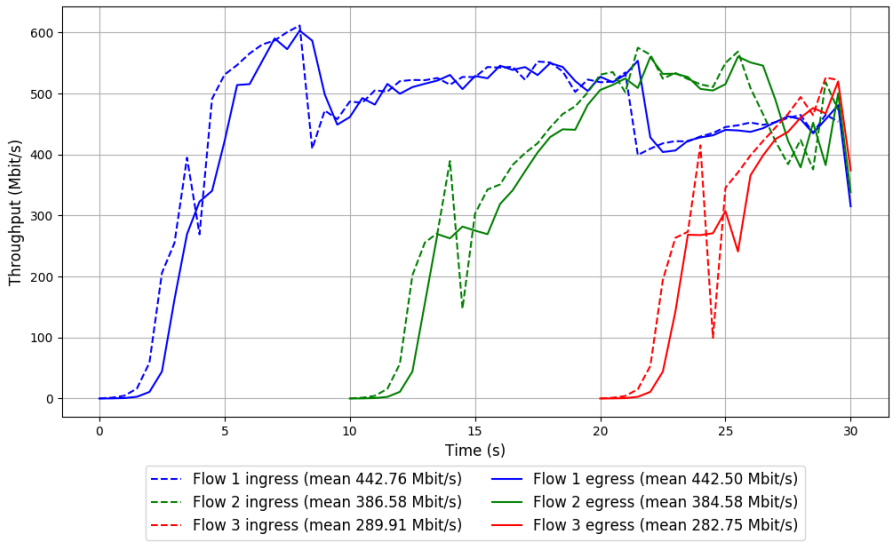


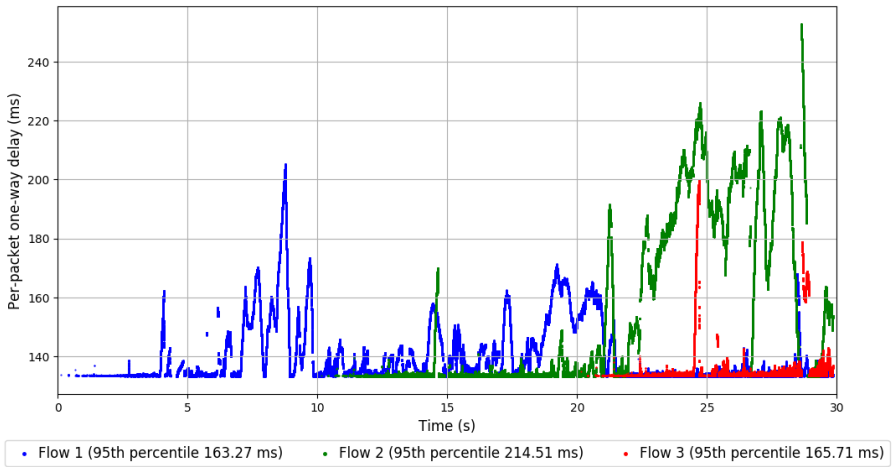
```
Run 5: Statistics of TCP Cubic

Start at: 2019-05-30 11:11:34
End at: 2019-05-30 11:12:04
Local clock offset: 0.328 ms
Remote clock offset: -0.99 ms

# Below is generated by plot.py at 2019-05-30 12:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 789.74 Mbit/s
95th percentile per-packet one-way delay: 201.457 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 442.50 Mbit/s
95th percentile per-packet one-way delay: 163.268 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 384.58 Mbit/s
95th percentile per-packet one-way delay: 214.506 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 282.75 Mbit/s
95th percentile per-packet one-way delay: 165.710 ms
Loss rate: 5.09%
```

Run 5: Report of TCP Cubic — Data Link



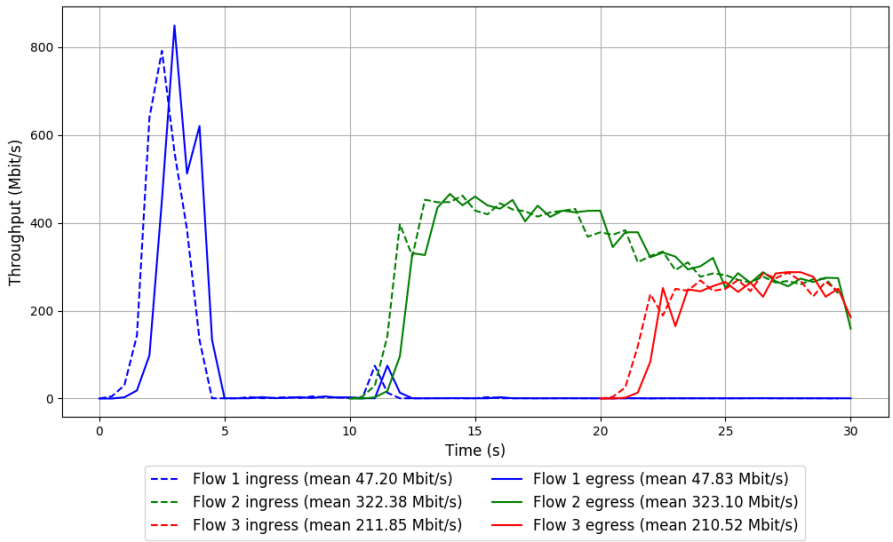


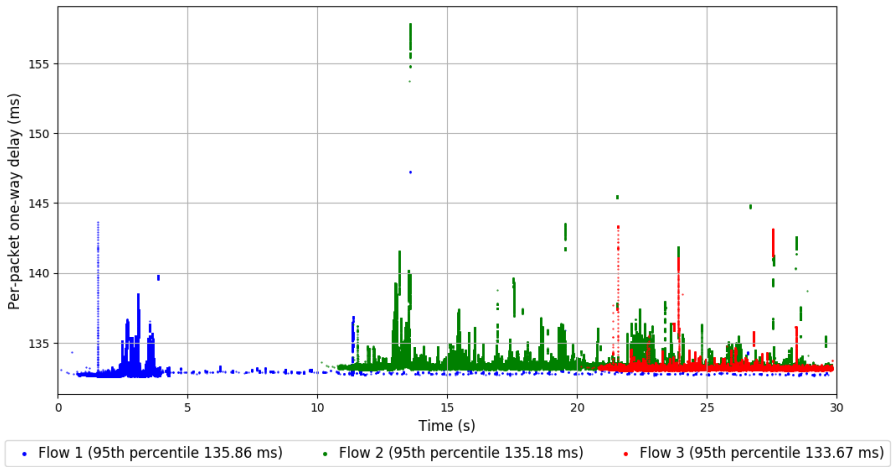
```
Run 1: Statistics of FillP

Start at: 2019-05-30 09:07:58
End at: 2019-05-30 09:08:28
Local clock offset: 0.297 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2019-05-30 12:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.30 Mbit/s
95th percentile per-packet one-way delay: 135.021 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 47.83 Mbit/s
95th percentile per-packet one-way delay: 135.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 323.10 Mbit/s
95th percentile per-packet one-way delay: 135.177 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 210.52 Mbit/s
95th percentile per-packet one-way delay: 133.666 ms
Loss rate: 3.16%
```

Run 1: Report of FillP — Data Link



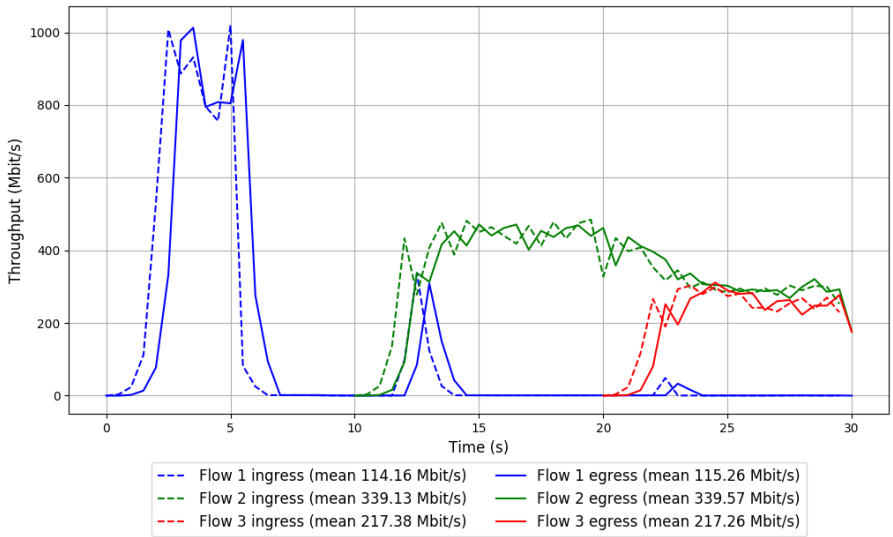


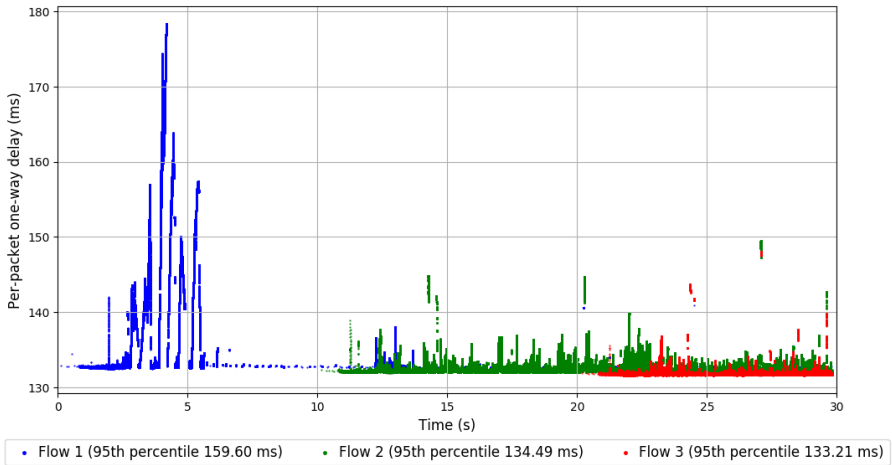
```
Run 2: Statistics of FillP

Start at: 2019-05-30 09:45:25
End at: 2019-05-30 09:45:55
Local clock offset: -0.101 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-05-30 12:37:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.74 Mbit/s
95th percentile per-packet one-way delay: 148.459 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 115.26 Mbit/s
95th percentile per-packet one-way delay: 159.599 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 339.57 Mbit/s
95th percentile per-packet one-way delay: 134.491 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 217.26 Mbit/s
95th percentile per-packet one-way delay: 133.212 ms
Loss rate: 2.68%
```

Run 2: Report of FillP — Data Link



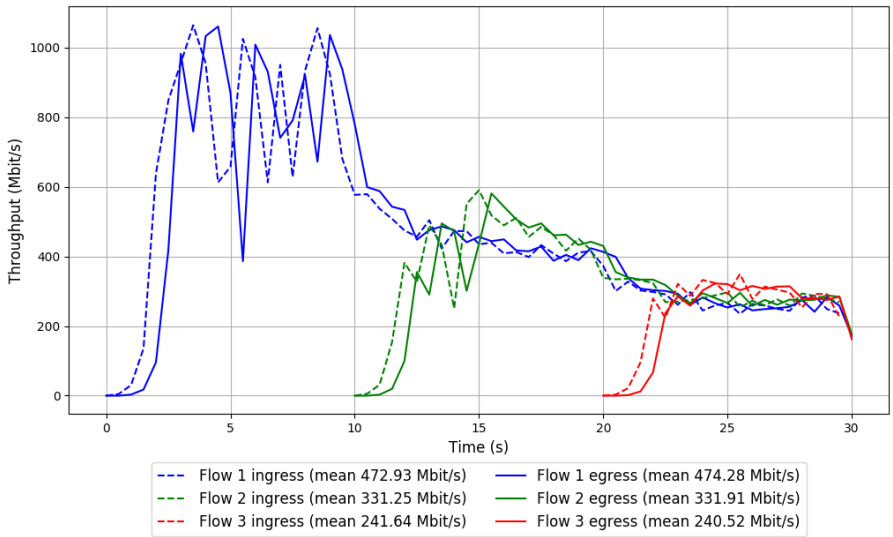


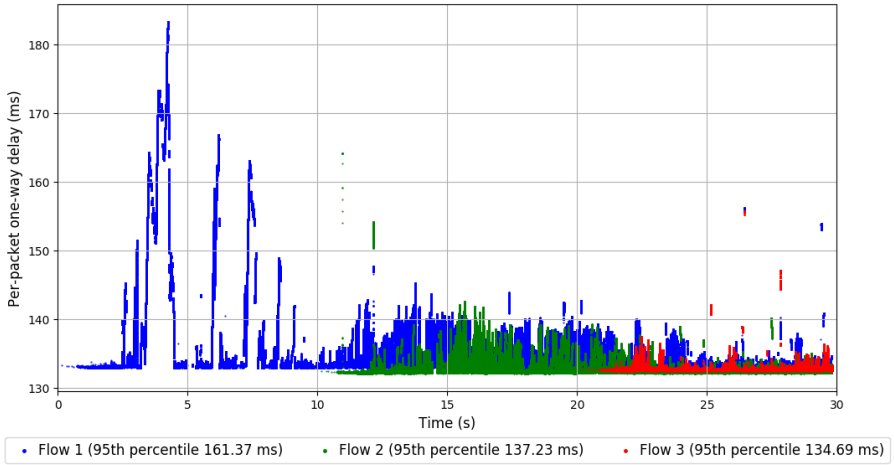
```
Run 3: Statistics of FillP

Start at: 2019-05-30 10:22:59
End at: 2019-05-30 10:23:29
Local clock offset: -0.053 ms
Remote clock offset: -0.632 ms

# Below is generated by plot.py at 2019-05-30 12:46:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 772.08 Mbit/s
95th percentile per-packet one-way delay: 154.375 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 474.28 Mbit/s
95th percentile per-packet one-way delay: 161.366 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 331.91 Mbit/s
95th percentile per-packet one-way delay: 137.234 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 240.52 Mbit/s
95th percentile per-packet one-way delay: 134.686 ms
Loss rate: 3.02%
```

Run 3: Report of FillP — Data Link



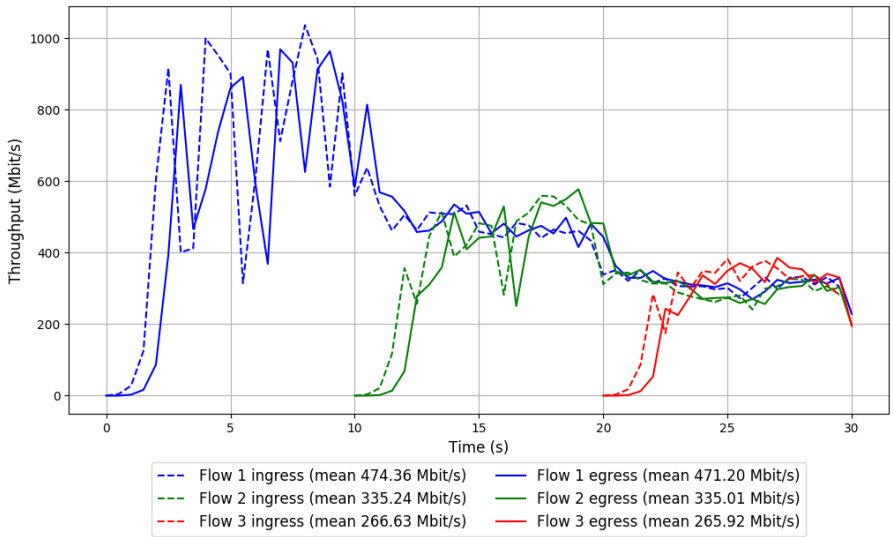


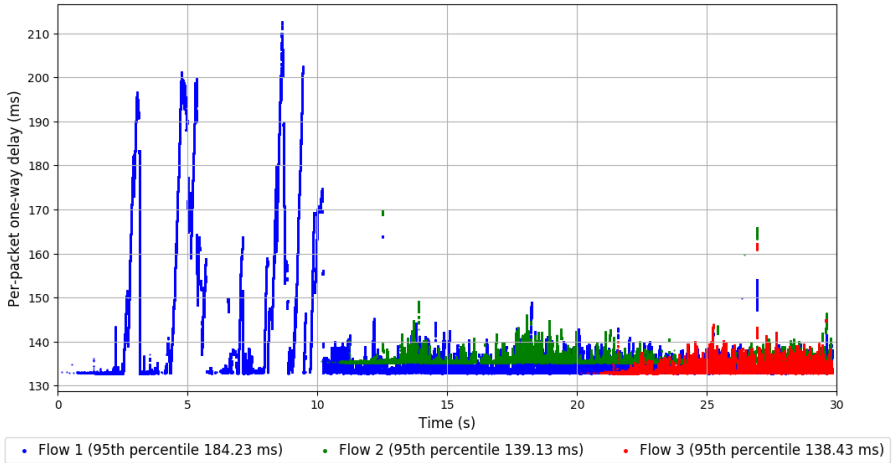
```
Run 4: Statistics of FillP

Start at: 2019-05-30 11:00:43
End at: 2019-05-30 11:01:13
Local clock offset: -0.114 ms
Remote clock offset: -0.874 ms

# Below is generated by plot.py at 2019-05-30 12:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.38 Mbit/s
95th percentile per-packet one-way delay: 172.583 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 471.20 Mbit/s
95th percentile per-packet one-way delay: 184.231 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 335.01 Mbit/s
95th percentile per-packet one-way delay: 139.134 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 265.92 Mbit/s
95th percentile per-packet one-way delay: 138.428 ms
Loss rate: 2.96%
```

Run 4: Report of FillP — Data Link



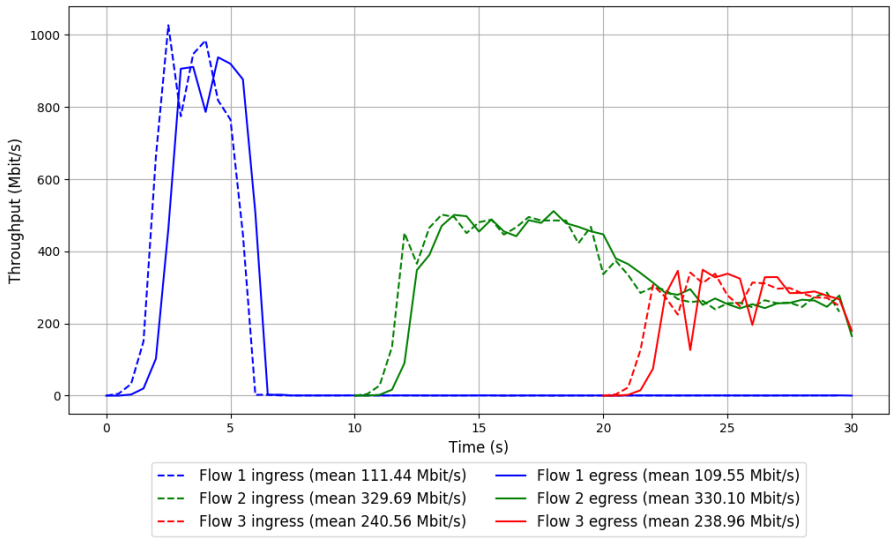


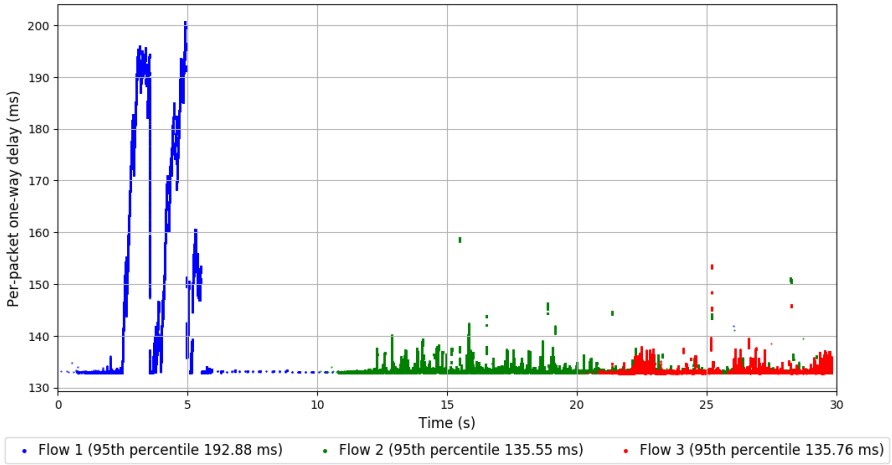
```
Run 5: Statistics of FillP

Start at: 2019-05-30 11:39:10
End at: 2019-05-30 11:39:40
Local clock offset: -0.133 ms
Remote clock offset: -1.111 ms

# Below is generated by plot.py at 2019-05-30 12:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.48 Mbit/s
95th percentile per-packet one-way delay: 188.230 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 109.55 Mbit/s
95th percentile per-packet one-way delay: 192.880 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 330.10 Mbit/s
95th percentile per-packet one-way delay: 135.546 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 238.96 Mbit/s
95th percentile per-packet one-way delay: 135.756 ms
Loss rate: 3.17%
```

Run 5: Report of FillP — Data Link



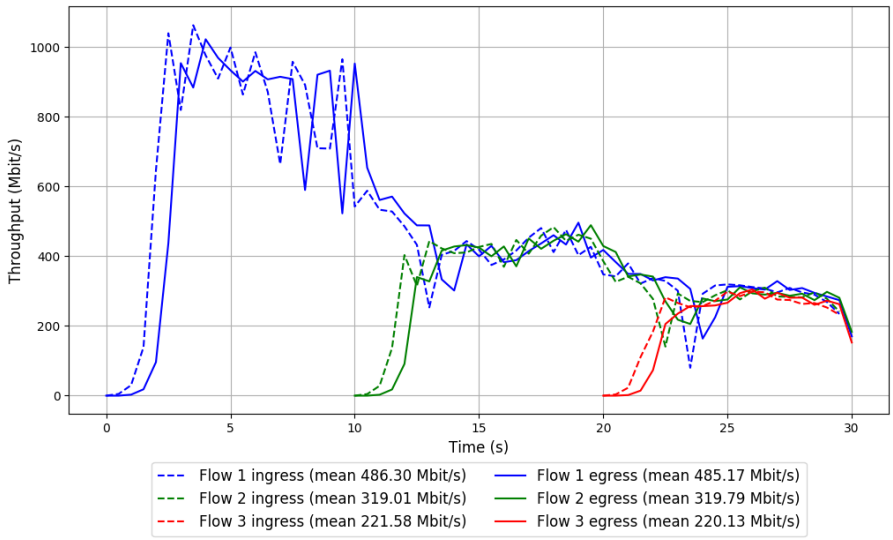


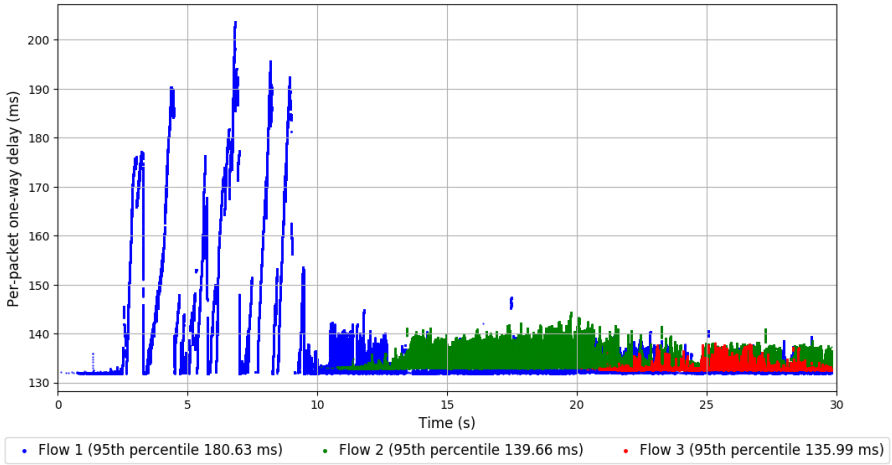
```
Run 1: Statistics of FillP-Sheep

Start at: 2019-05-30 09:14:50
End at: 2019-05-30 09:15:20
Local clock offset: -0.222 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2019-05-30 12:50:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 768.50 Mbit/s
95th percentile per-packet one-way delay: 175.143 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 485.17 Mbit/s
95th percentile per-packet one-way delay: 180.630 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 319.79 Mbit/s
95th percentile per-packet one-way delay: 139.661 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 220.13 Mbit/s
95th percentile per-packet one-way delay: 135.992 ms
Loss rate: 3.24%
```

Run 1: Report of FillP-Sheep — Data Link



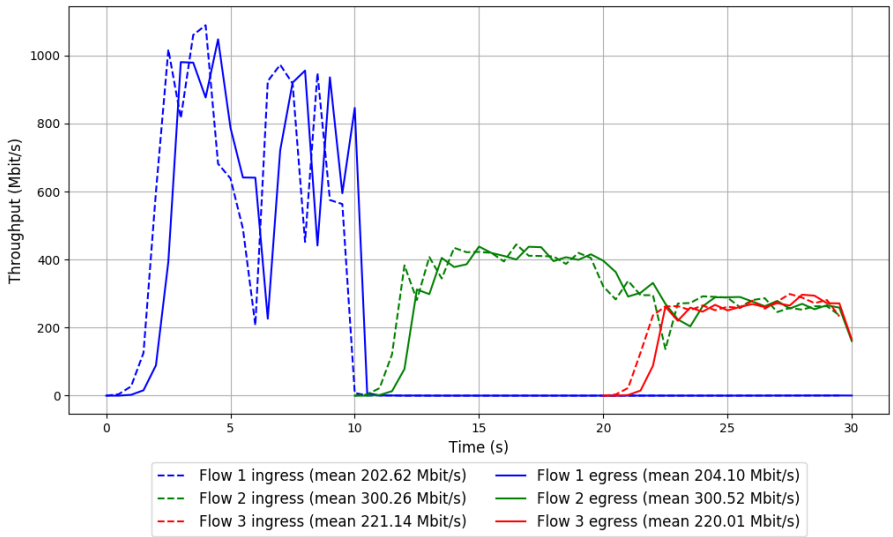


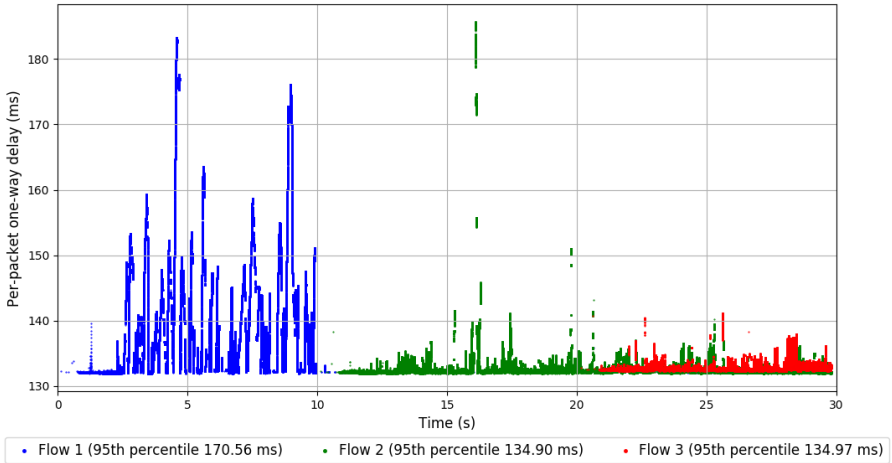
```
Run 2: Statistics of FillP-Sheep

Start at: 2019-05-30 09:52:24
End at: 2019-05-30 09:52:54
Local clock offset: -0.152 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2019-05-30 12:50:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.50 Mbit/s
95th percentile per-packet one-way delay: 153.347 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 204.10 Mbit/s
95th percentile per-packet one-way delay: 170.562 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 300.52 Mbit/s
95th percentile per-packet one-way delay: 134.899 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 220.01 Mbit/s
95th percentile per-packet one-way delay: 134.965 ms
Loss rate: 3.41%
```

Run 2: Report of FillP-Sheep — Data Link



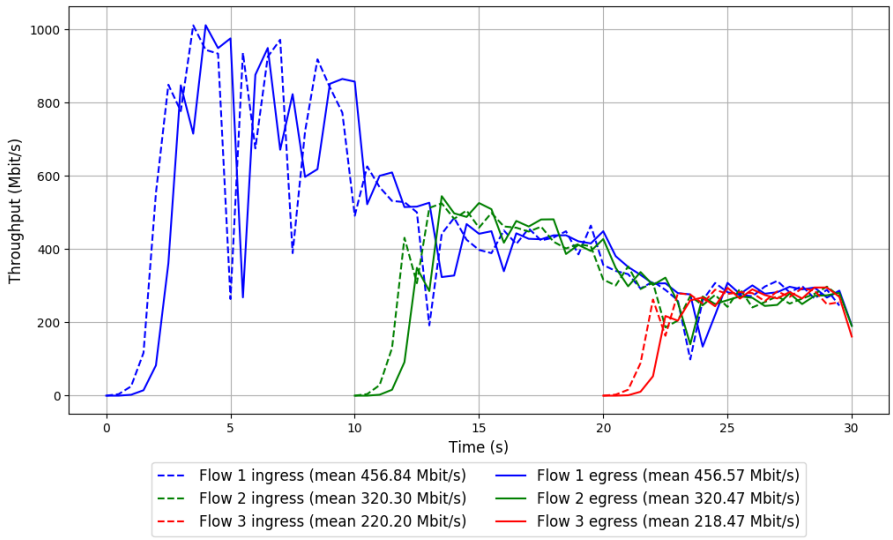


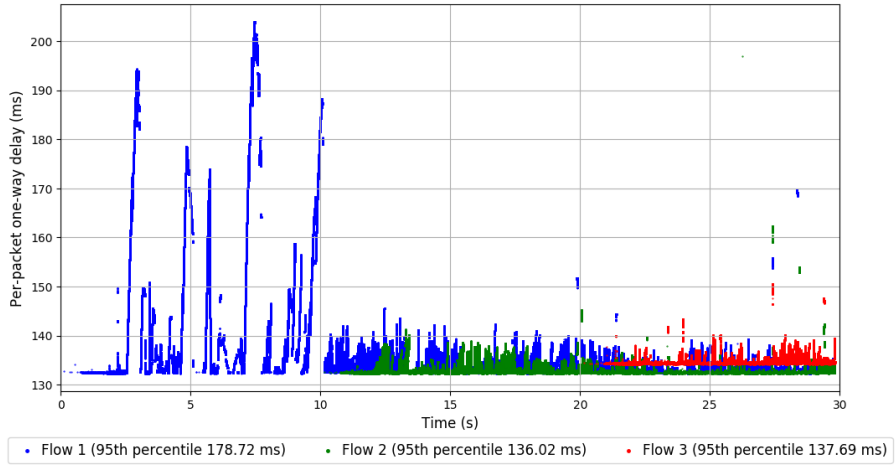
```
Run 3: Statistics of FillP-Sheep

Start at: 2019-05-30 10:30:19
End at: 2019-05-30 10:30:49
Local clock offset: -0.658 ms
Remote clock offset: -0.721 ms

# Below is generated by plot.py at 2019-05-30 12:51:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 739.88 Mbit/s
95th percentile per-packet one-way delay: 168.812 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 456.57 Mbit/s
95th percentile per-packet one-way delay: 178.721 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 320.47 Mbit/s
95th percentile per-packet one-way delay: 136.021 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 218.47 Mbit/s
95th percentile per-packet one-way delay: 137.688 ms
Loss rate: 3.38%
```

Run 3: Report of FillP-Sheep — Data Link



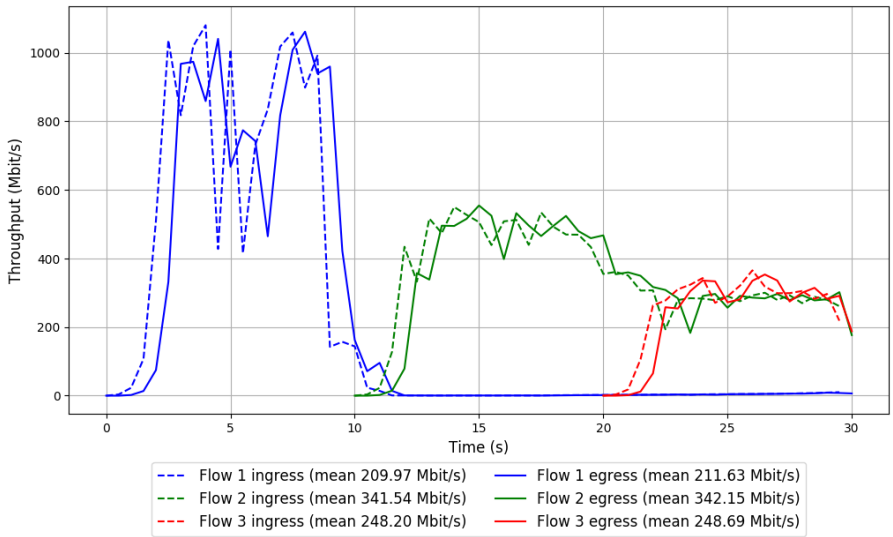


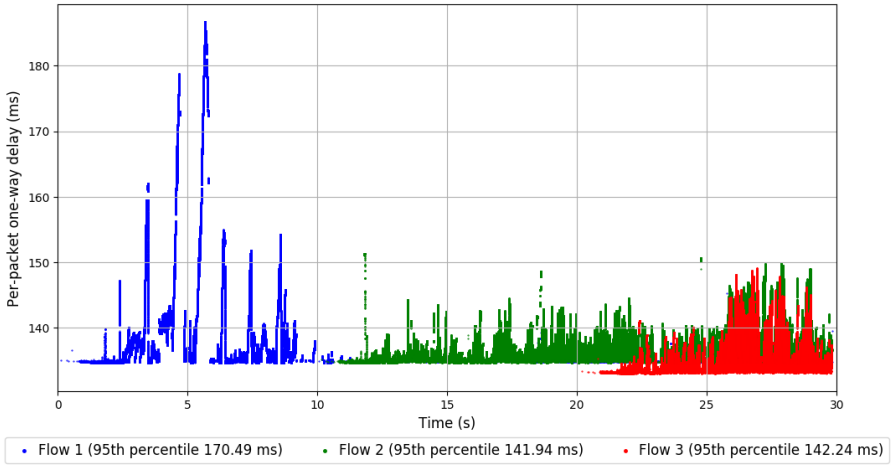
```
Run 4: Statistics of FillP-Sheep

Start at: 2019-05-30 11:08:01
End at: 2019-05-30 11:08:31
Local clock offset: 0.017 ms
Remote clock offset: -0.916 ms

# Below is generated by plot.py at 2019-05-30 12:51:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.06 Mbit/s
95th percentile per-packet one-way delay: 149.905 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 211.63 Mbit/s
95th percentile per-packet one-way delay: 170.489 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 342.15 Mbit/s
95th percentile per-packet one-way delay: 141.943 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 248.69 Mbit/s
95th percentile per-packet one-way delay: 142.243 ms
Loss rate: 2.41%
```

Run 4: Report of FillP-Sheep — Data Link



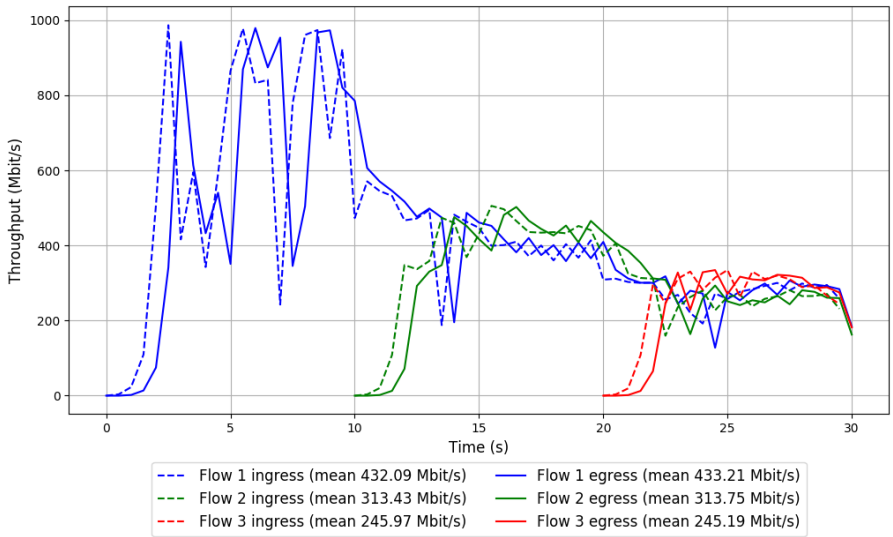


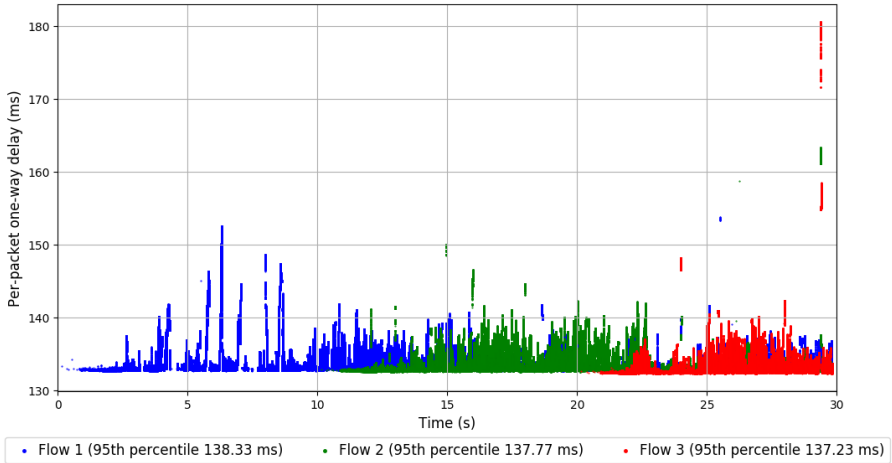
```
Run 5: Statistics of FillP-Sheep

Start at: 2019-05-30 11:46:11
End at: 2019-05-30 11:46:41
Local clock offset: -0.555 ms
Remote clock offset: -1.117 ms

# Below is generated by plot.py at 2019-05-30 12:55:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.84 Mbit/s
95th percentile per-packet one-way delay: 138.012 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 433.21 Mbit/s
95th percentile per-packet one-way delay: 138.332 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 313.75 Mbit/s
95th percentile per-packet one-way delay: 137.769 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 245.19 Mbit/s
95th percentile per-packet one-way delay: 137.234 ms
Loss rate: 2.82%
```

Run 5: Report of FillP-Sheep — Data Link



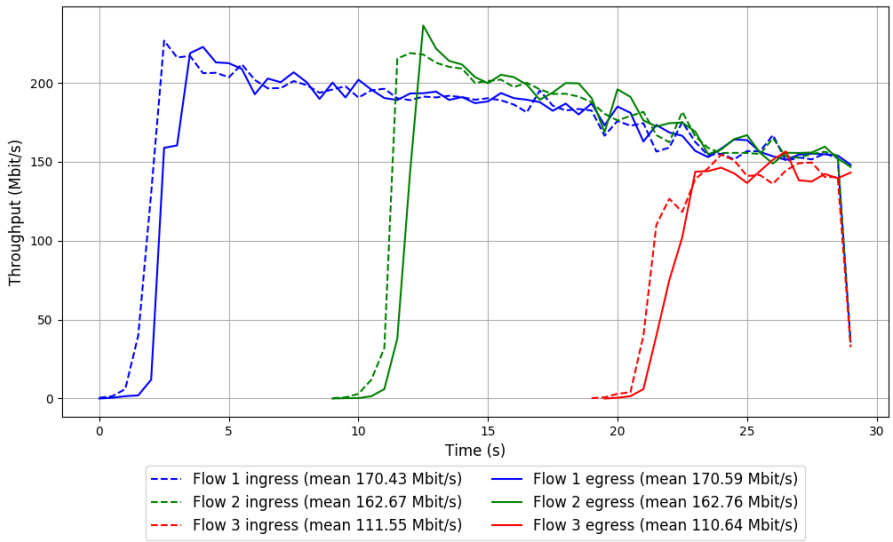


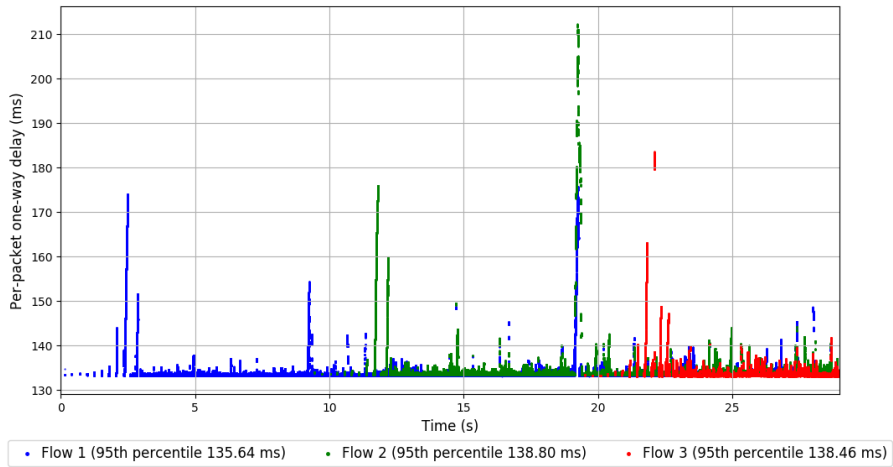
```
Run 1: Statistics of Indigo

Start at: 2019-05-30 08:54:17
End at: 2019-05-30 08:54:47
Local clock offset: 0.518 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2019-05-30 12:55:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.03 Mbit/s
95th percentile per-packet one-way delay: 137.000 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 170.59 Mbit/s
95th percentile per-packet one-way delay: 135.643 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 162.76 Mbit/s
95th percentile per-packet one-way delay: 138.799 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 110.64 Mbit/s
95th percentile per-packet one-way delay: 138.462 ms
Loss rate: 3.54%
```

Run 1: Report of Indigo — Data Link



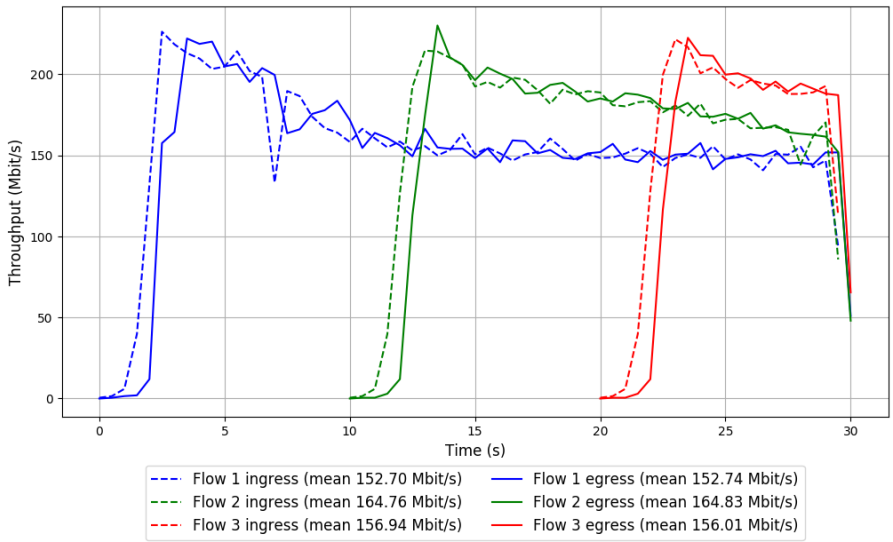


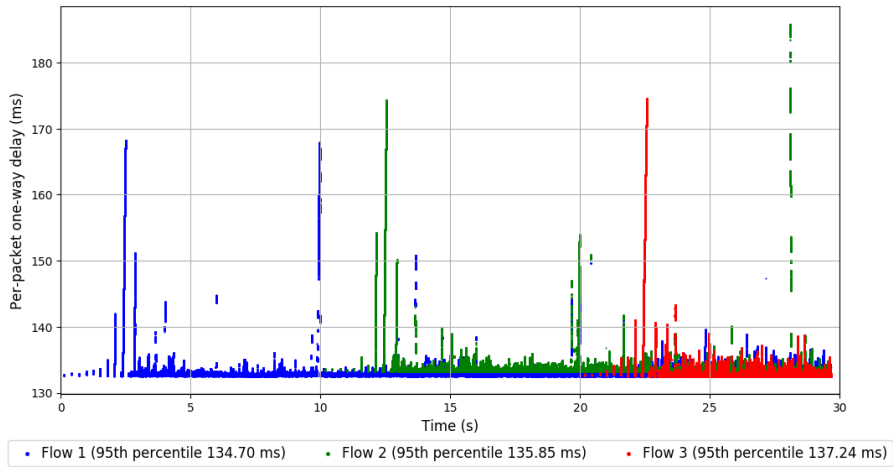
```
Run 2: Statistics of Indigo

Start at: 2019-05-30 09:31:56
End at: 2019-05-30 09:32:26
Local clock offset: 0.149 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-05-30 12:55:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.42 Mbit/s
95th percentile per-packet one-way delay: 135.324 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 152.74 Mbit/s
95th percentile per-packet one-way delay: 134.696 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 164.83 Mbit/s
95th percentile per-packet one-way delay: 135.846 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 156.01 Mbit/s
95th percentile per-packet one-way delay: 137.242 ms
Loss rate: 3.30%
```

Run 2: Report of Indigo — Data Link



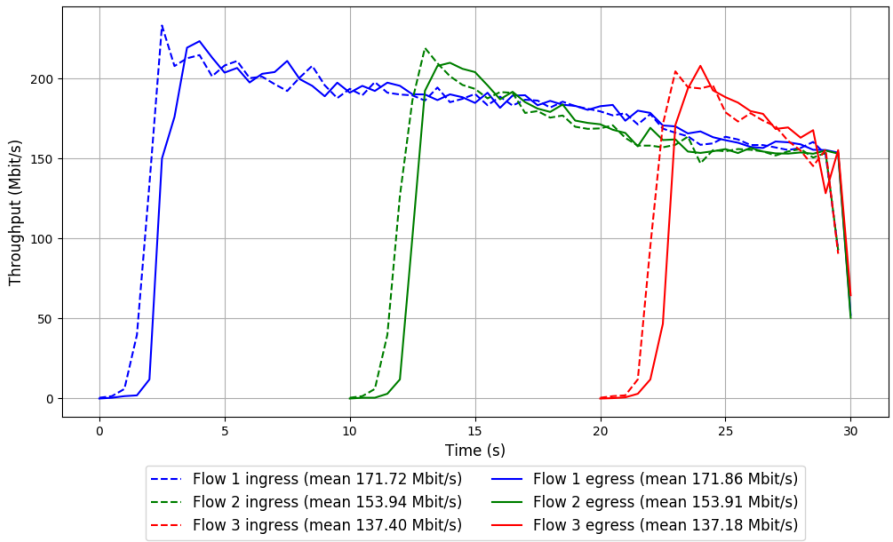


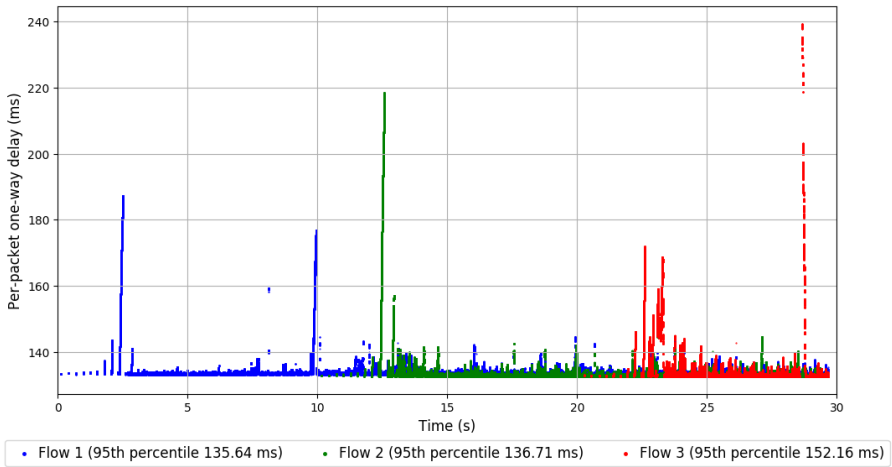
```
Run 3: Statistics of Indigo

Start at: 2019-05-30 10:09:22
End at: 2019-05-30 10:09:52
Local clock offset: 0.09 ms
Remote clock offset: -0.593 ms

# Below is generated by plot.py at 2019-05-30 12:57:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.13 Mbit/s
95th percentile per-packet one-way delay: 137.172 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 171.86 Mbit/s
95th percentile per-packet one-way delay: 135.641 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 153.91 Mbit/s
95th percentile per-packet one-way delay: 136.706 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 137.18 Mbit/s
95th percentile per-packet one-way delay: 152.155 ms
Loss rate: 2.91%
```

Run 3: Report of Indigo — Data Link



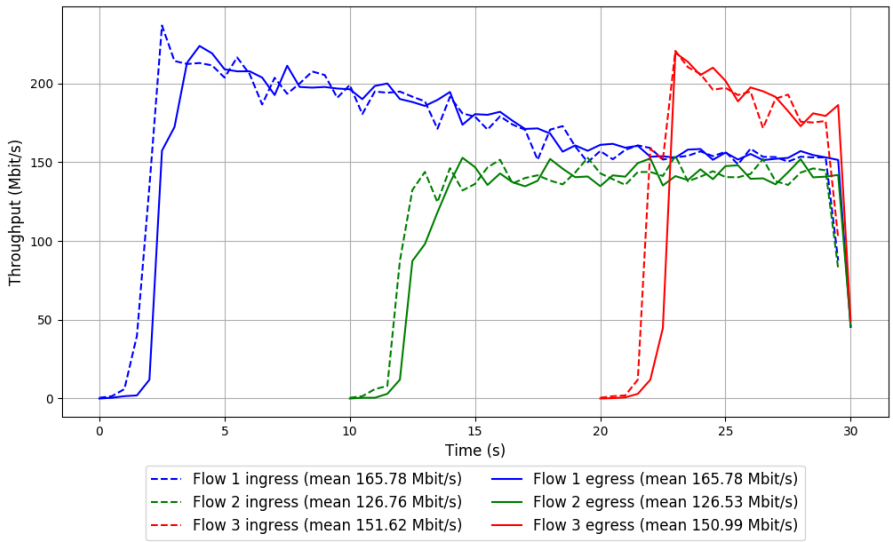


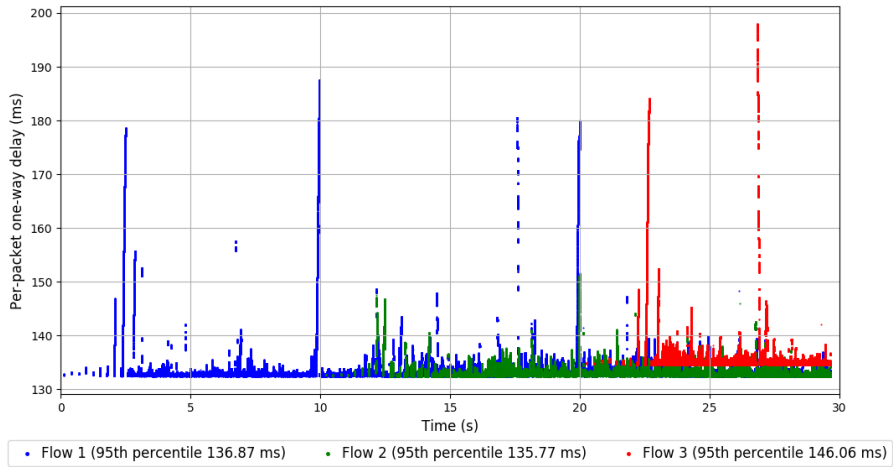
```
Run 4: Statistics of Indigo

Start at: 2019-05-30 10:47:22
End at: 2019-05-30 10:47:52
Local clock offset: -0.587 ms
Remote clock offset: -0.787 ms

# Below is generated by plot.py at 2019-05-30 12:57:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.13 Mbit/s
95th percentile per-packet one-way delay: 137.638 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 165.78 Mbit/s
95th percentile per-packet one-way delay: 136.865 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 126.53 Mbit/s
95th percentile per-packet one-way delay: 135.773 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 150.99 Mbit/s
95th percentile per-packet one-way delay: 146.060 ms
Loss rate: 3.19%
```

Run 4: Report of Indigo — Data Link



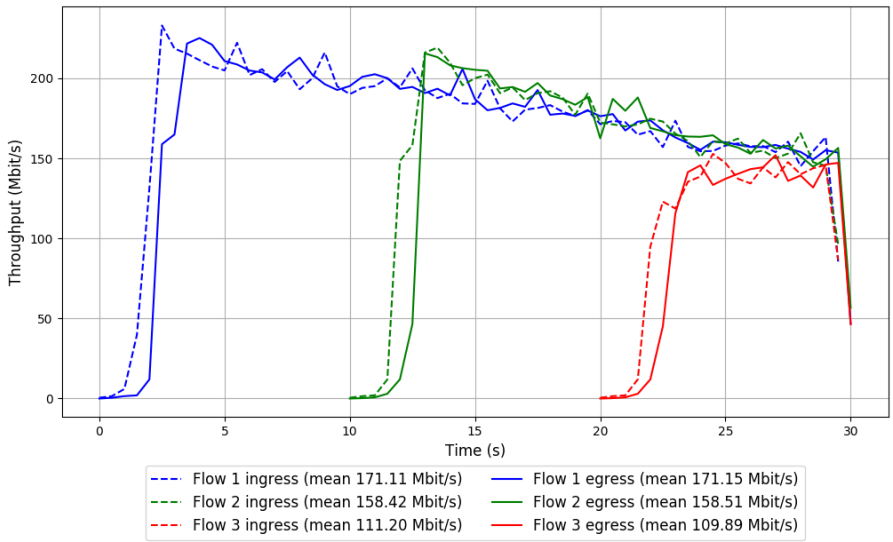


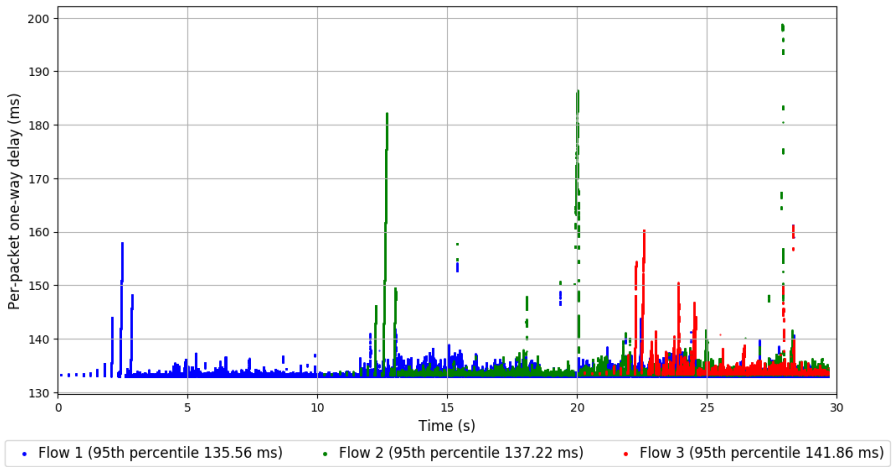
```
Run 5: Statistics of Indigo

Start at: 2019-05-30 11:25:27
End at: 2019-05-30 11:25:57
Local clock offset: 0.094 ms
Remote clock offset: -1.024 ms

# Below is generated by plot.py at 2019-05-30 12:58:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.17 Mbit/s
95th percentile per-packet one-way delay: 136.331 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 171.15 Mbit/s
95th percentile per-packet one-way delay: 135.562 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 158.51 Mbit/s
95th percentile per-packet one-way delay: 137.222 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 109.89 Mbit/s
95th percentile per-packet one-way delay: 141.863 ms
Loss rate: 3.88%
```

Run 5: Report of Indigo — Data Link



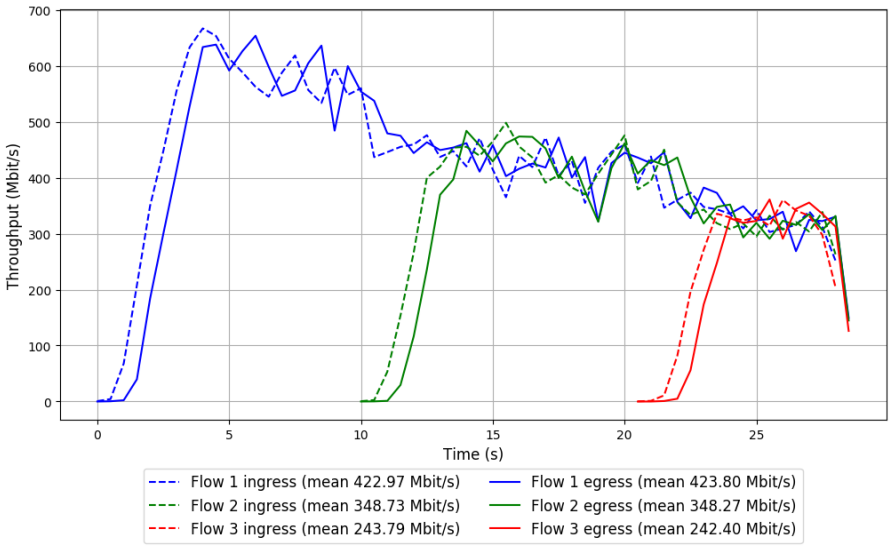


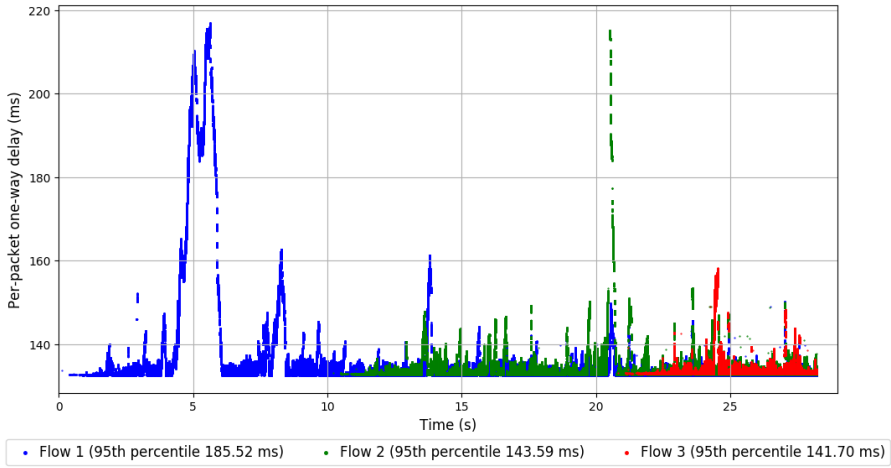
```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-05-30 09:12:50
End at: 2019-05-30 09:13:20
Local clock offset: -0.161 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-05-30 13:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.57 Mbit/s
95th percentile per-packet one-way delay: 157.169 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 423.80 Mbit/s
95th percentile per-packet one-way delay: 185.524 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 348.27 Mbit/s
95th percentile per-packet one-way delay: 143.586 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 242.40 Mbit/s
95th percentile per-packet one-way delay: 141.702 ms
Loss rate: 4.03%
```

Run 1: Report of Indigo-MusesC3 — Data Link



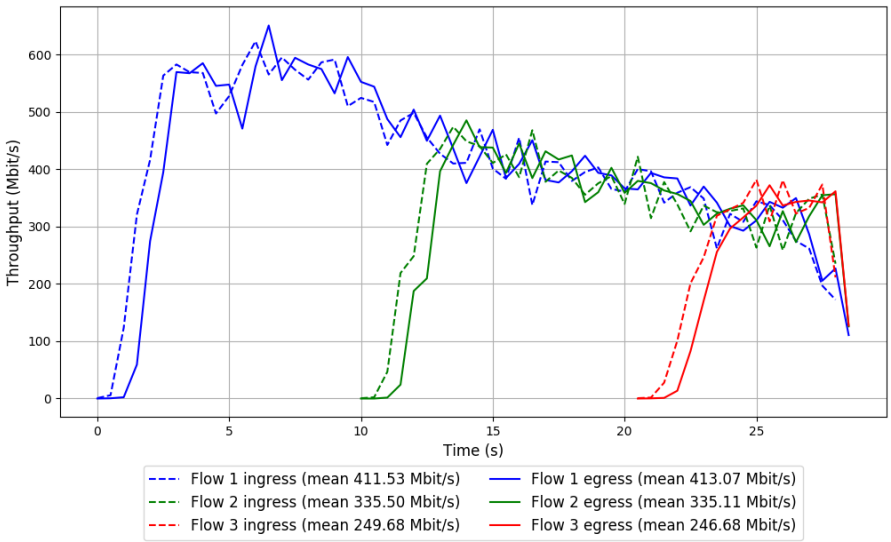


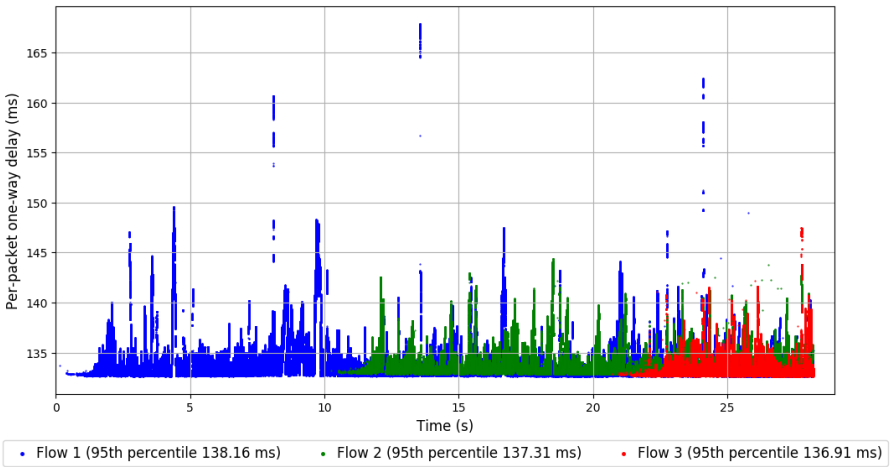
```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-05-30 09:50:25
End at: 2019-05-30 09:50:55
Local clock offset: -0.304 ms
Remote clock offset: -0.45 ms

# Below is generated by plot.py at 2019-05-30 13:03:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 693.36 Mbit/s
95th percentile per-packet one-way delay: 137.695 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 413.07 Mbit/s
95th percentile per-packet one-way delay: 138.158 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 335.11 Mbit/s
95th percentile per-packet one-way delay: 137.307 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 246.68 Mbit/s
95th percentile per-packet one-way delay: 136.911 ms
Loss rate: 4.60%
```

Run 2: Report of Indigo-MusesC3 — Data Link



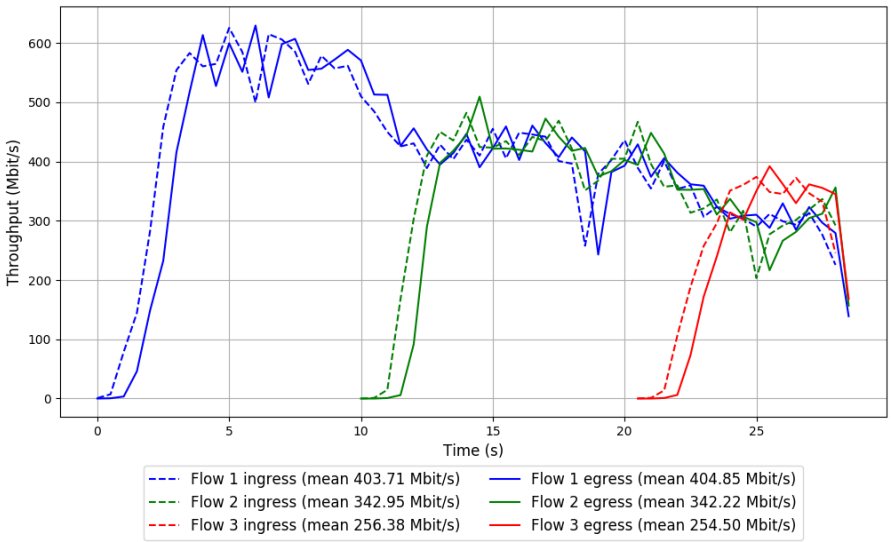


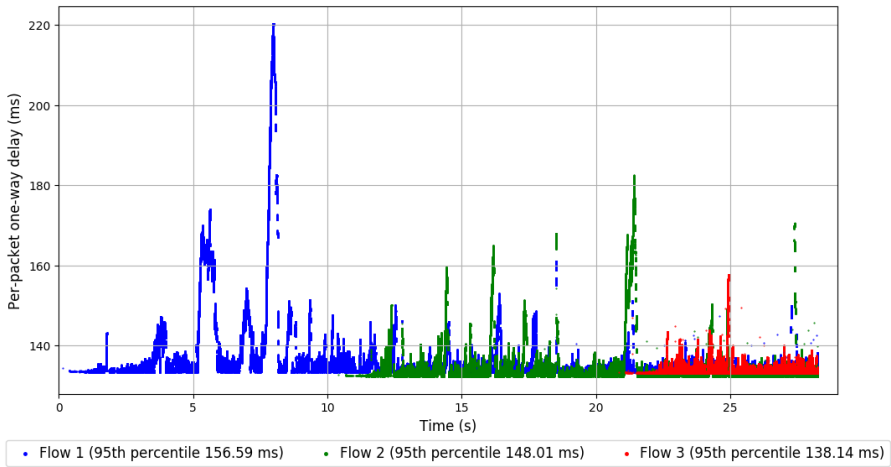
```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-05-30 10:28:20
End at: 2019-05-30 10:28:50
Local clock offset: 0.141 ms
Remote clock offset: -0.73 ms

# Below is generated by plot.py at 2019-05-30 13:05:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 688.89 Mbit/s
95th percentile per-packet one-way delay: 149.419 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 404.85 Mbit/s
95th percentile per-packet one-way delay: 156.594 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 342.22 Mbit/s
95th percentile per-packet one-way delay: 148.006 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 254.50 Mbit/s
95th percentile per-packet one-way delay: 138.138 ms
Loss rate: 4.23%
```

Run 3: Report of Indigo-MusesC3 — Data Link



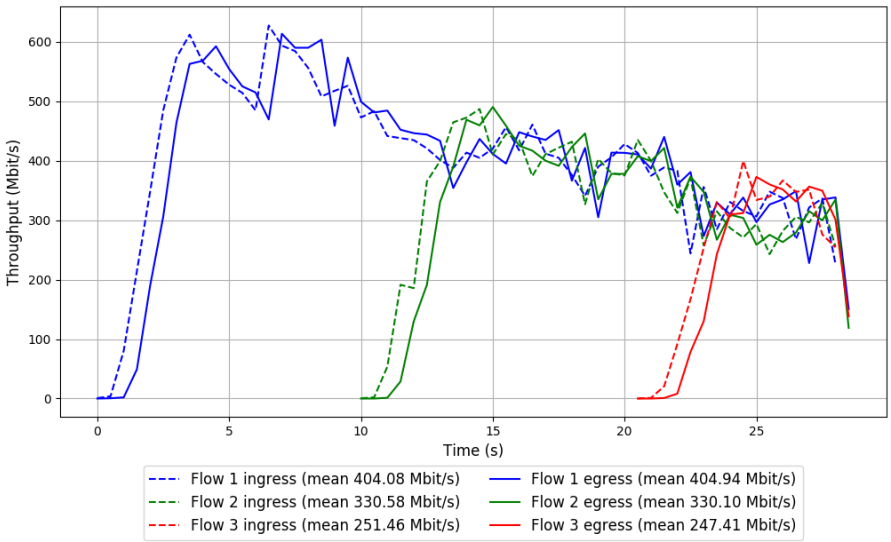


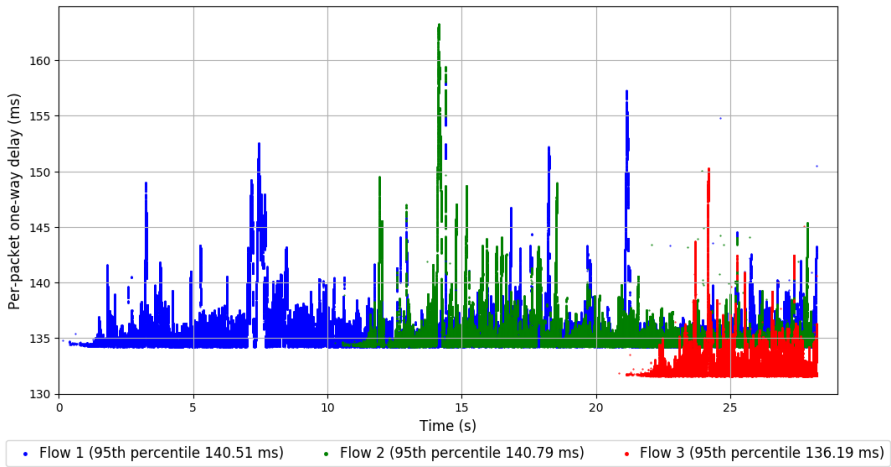
```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-05-30 11:06:03
End at: 2019-05-30 11:06:33
Local clock offset: -0.41 ms
Remote clock offset: -0.894 ms

# Below is generated by plot.py at 2019-05-30 13:07:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.53 Mbit/s
95th percentile per-packet one-way delay: 140.301 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 404.94 Mbit/s
95th percentile per-packet one-way delay: 140.507 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 330.10 Mbit/s
95th percentile per-packet one-way delay: 140.789 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 247.41 Mbit/s
95th percentile per-packet one-way delay: 136.188 ms
Loss rate: 5.05%
```

Run 4: Report of Indigo-MusesC3 — Data Link



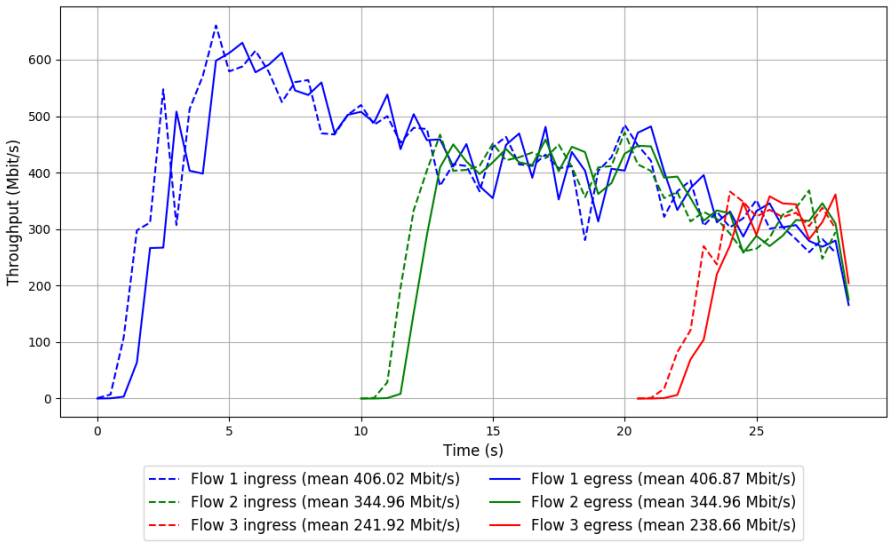


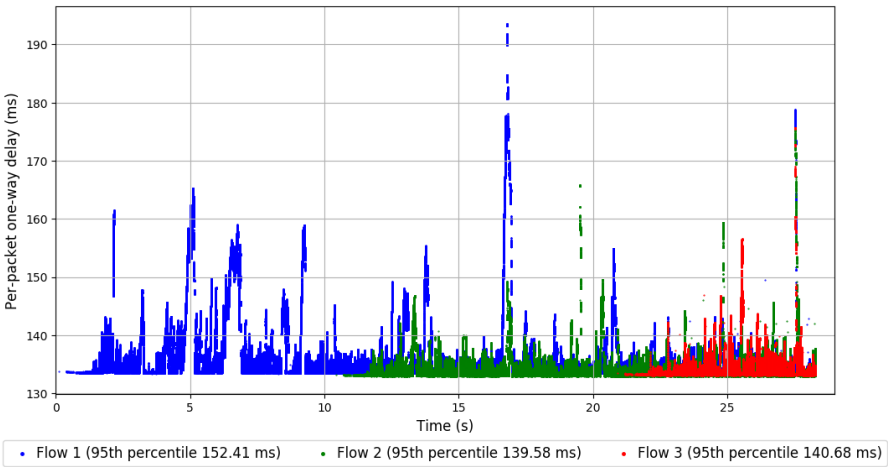
```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-05-30 11:44:11
End at: 2019-05-30 11:44:41
Local clock offset: 0.192 ms
Remote clock offset: -1.091 ms

# Below is generated by plot.py at 2019-05-30 13:08:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 687.88 Mbit/s
95th percentile per-packet one-way delay: 147.112 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 406.87 Mbit/s
95th percentile per-packet one-way delay: 152.415 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 344.96 Mbit/s
95th percentile per-packet one-way delay: 139.580 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 238.66 Mbit/s
95th percentile per-packet one-way delay: 140.675 ms
Loss rate: 4.84%
```

Run 5: Report of Indigo-MusesC3 — Data Link



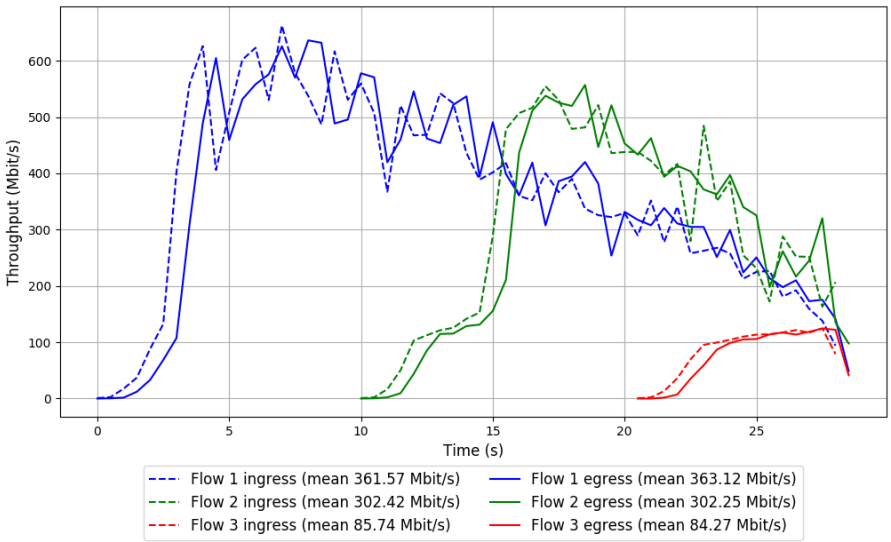


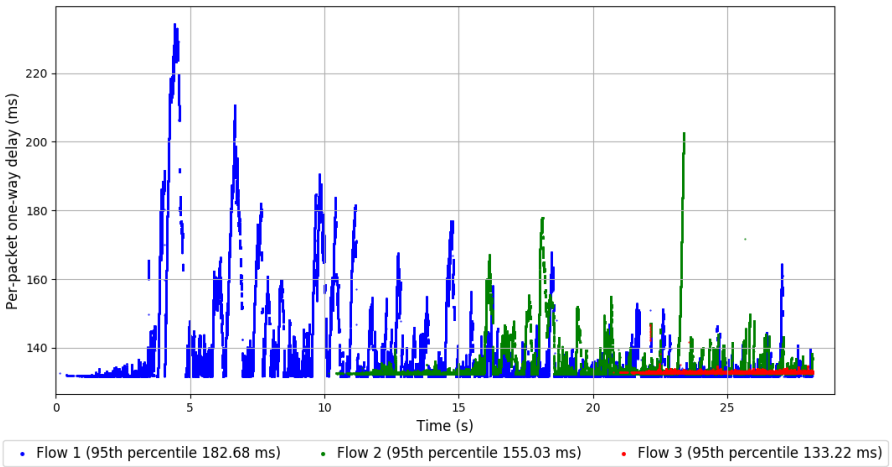
```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-05-30 09:06:05
End at: 2019-05-30 09:06:35
Local clock offset: -0.345 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-05-30 13:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.45 Mbit/s
95th percentile per-packet one-way delay: 176.515 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 363.12 Mbit/s
95th percentile per-packet one-way delay: 182.676 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 302.25 Mbit/s
95th percentile per-packet one-way delay: 155.034 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 84.27 Mbit/s
95th percentile per-packet one-way delay: 133.219 ms
Loss rate: 5.11%
```

Run 1: Report of Indigo-MusesC5 — Data Link



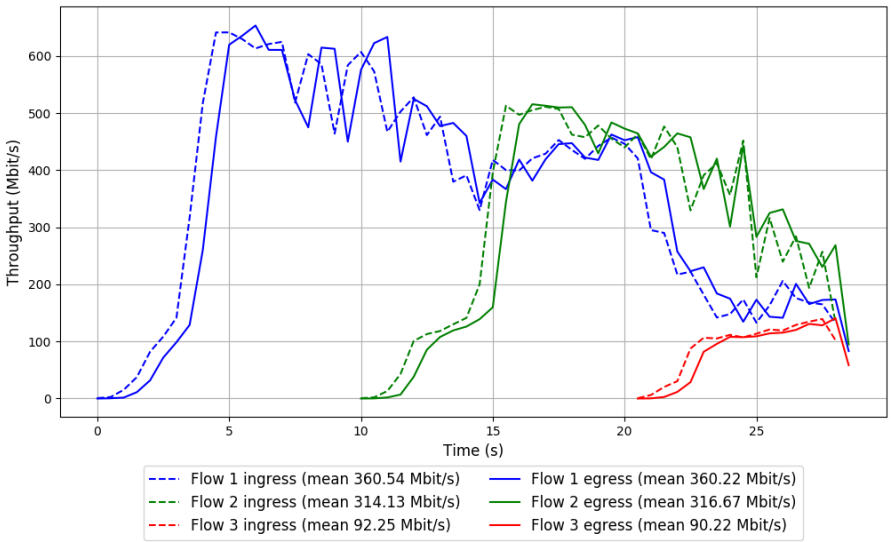


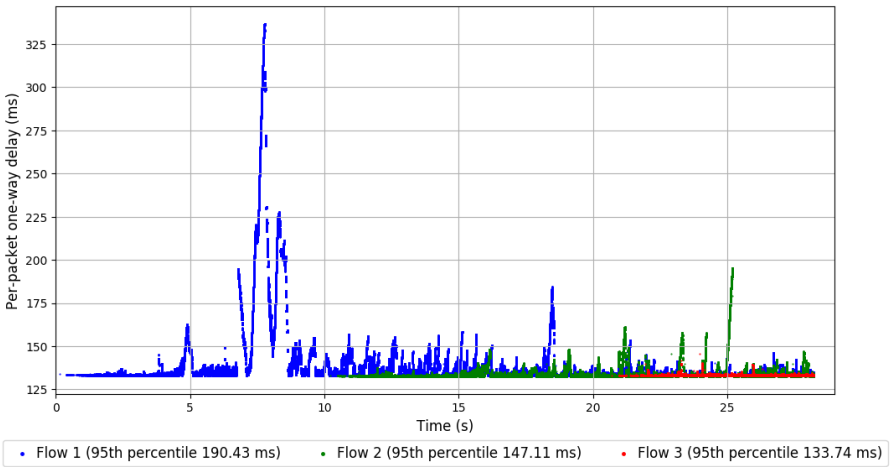
```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-05-30 09:43:32
End at: 2019-05-30 09:44:02
Local clock offset: 0.145 ms
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2019-05-30 13:08:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.09 Mbit/s
95th percentile per-packet one-way delay: 165.198 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 360.22 Mbit/s
95th percentile per-packet one-way delay: 190.425 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 316.67 Mbit/s
95th percentile per-packet one-way delay: 147.106 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 133.737 ms
Loss rate: 5.65%
```

Run 2: Report of Indigo-MusesC5 — Data Link



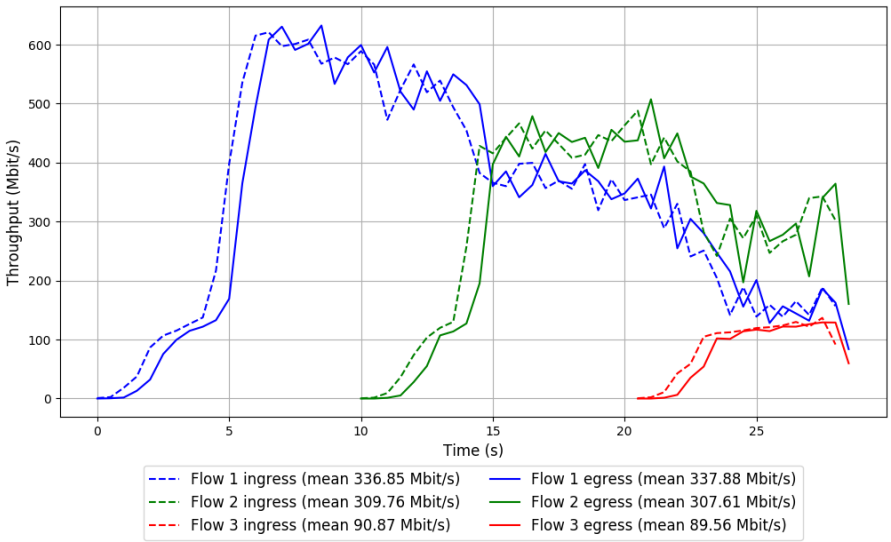


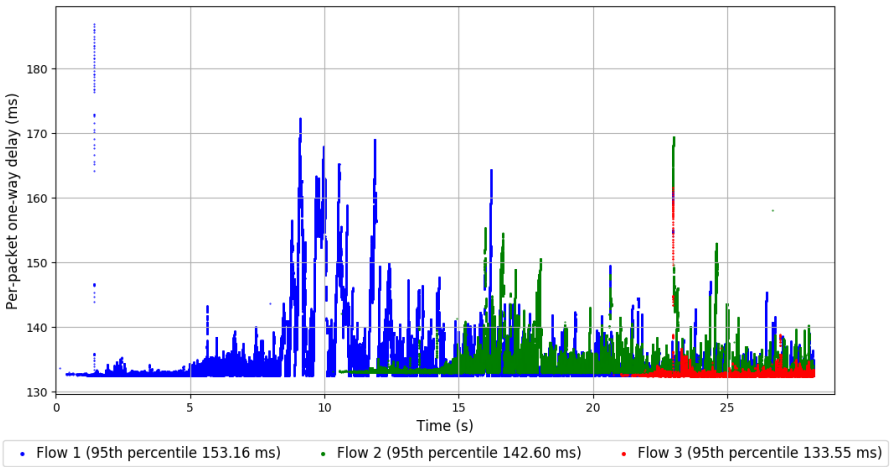
```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-05-30 10:21:07
End at: 2019-05-30 10:21:37
Local clock offset: -0.121 ms
Remote clock offset: -0.641 ms

# Below is generated by plot.py at 2019-05-30 13:09:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 557.79 Mbit/s
95th percentile per-packet one-way delay: 148.163 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 337.88 Mbit/s
95th percentile per-packet one-way delay: 153.158 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 307.61 Mbit/s
95th percentile per-packet one-way delay: 142.600 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 89.56 Mbit/s
95th percentile per-packet one-way delay: 133.546 ms
Loss rate: 4.99%
```

Run 3: Report of Indigo-MusesC5 — Data Link



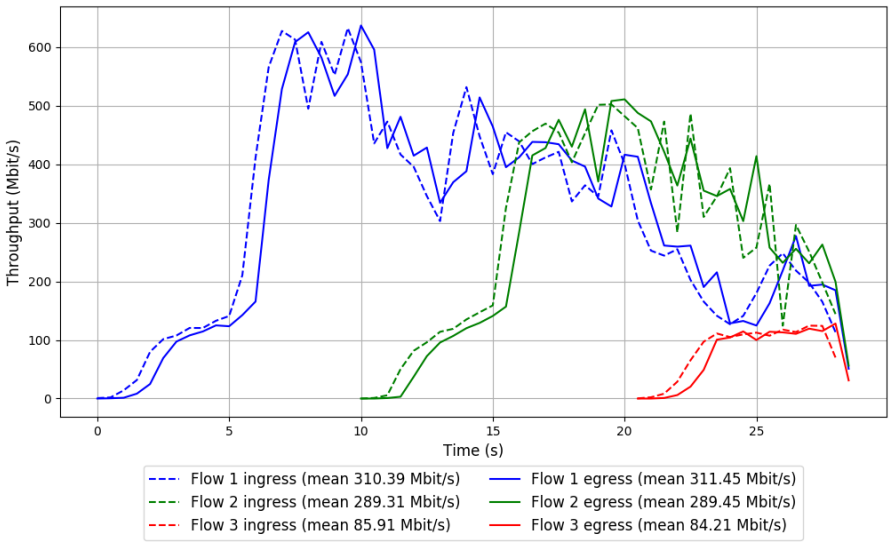


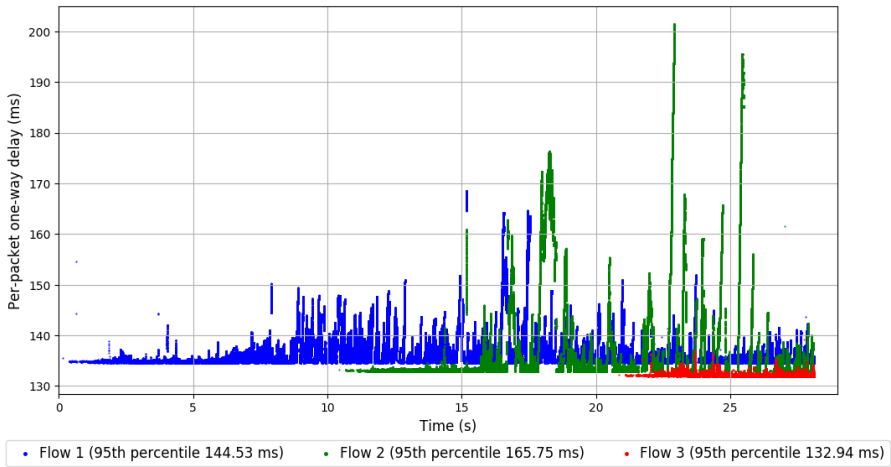
```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-05-30 10:58:53
End at: 2019-05-30 10:59:23
Local clock offset: -0.037 ms
Remote clock offset: -0.844 ms

# Below is generated by plot.py at 2019-05-30 13:12:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 516.17 Mbit/s
95th percentile per-packet one-way delay: 153.494 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 311.45 Mbit/s
95th percentile per-packet one-way delay: 144.528 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 289.45 Mbit/s
95th percentile per-packet one-way delay: 165.748 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 84.21 Mbit/s
95th percentile per-packet one-way delay: 132.941 ms
Loss rate: 5.44%
```

Run 4: Report of Indigo-MusesC5 — Data Link



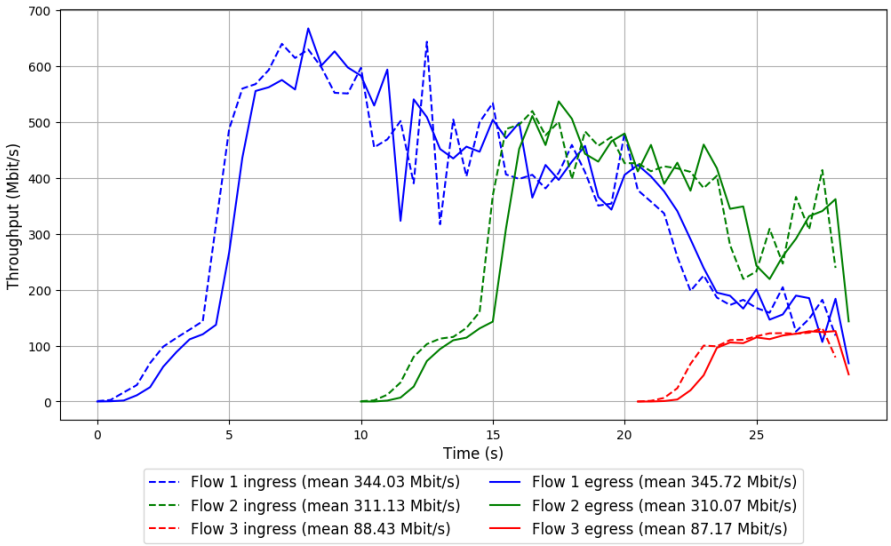


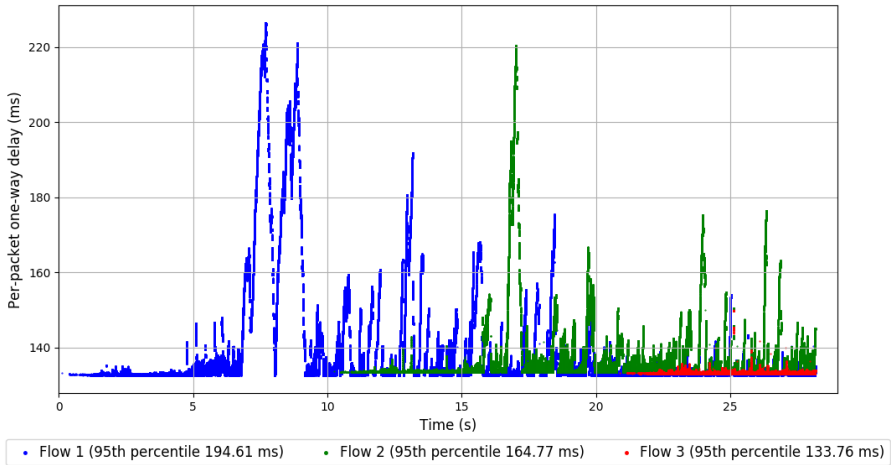
```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-05-30 11:37:18
End at: 2019-05-30 11:37:48
Local clock offset: 0.13 ms
Remote clock offset: -1.072 ms

# Below is generated by plot.py at 2019-05-30 13:13:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 566.50 Mbit/s
95th percentile per-packet one-way delay: 182.955 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 345.72 Mbit/s
95th percentile per-packet one-way delay: 194.611 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 310.07 Mbit/s
95th percentile per-packet one-way delay: 164.769 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 87.17 Mbit/s
95th percentile per-packet one-way delay: 133.761 ms
Loss rate: 4.93%
```

Run 5: Report of Indigo-MusesC5 — Data Link



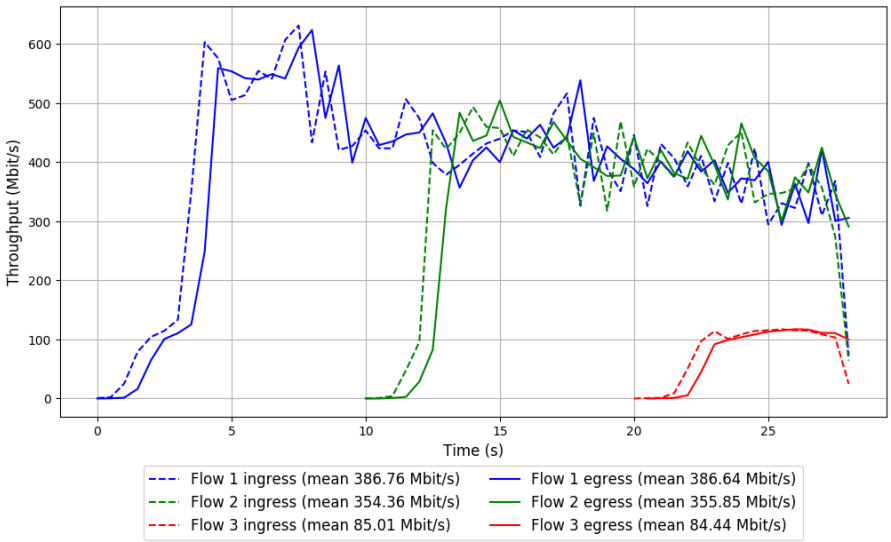


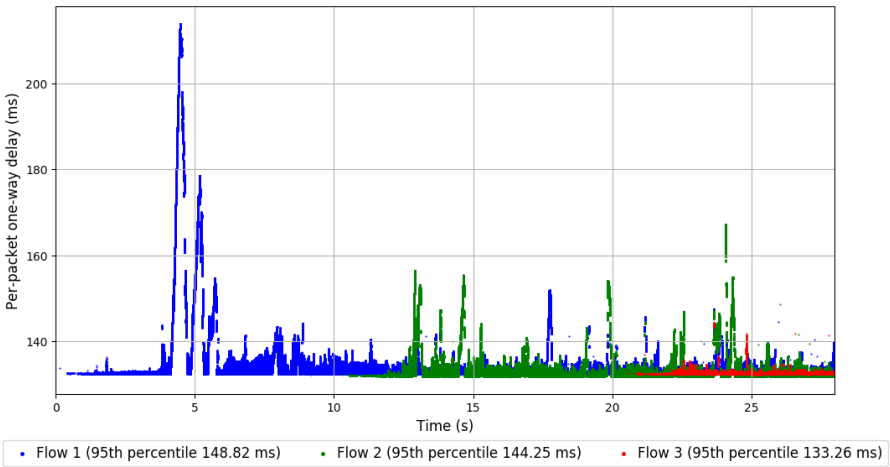
```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-05-30 08:42:34
End at: 2019-05-30 08:43:04
Local clock offset: -0.344 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2019-05-30 13:16:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 634.79 Mbit/s
95th percentile per-packet one-way delay: 146.041 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 386.64 Mbit/s
95th percentile per-packet one-way delay: 148.817 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 355.85 Mbit/s
95th percentile per-packet one-way delay: 144.247 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 84.44 Mbit/s
95th percentile per-packet one-way delay: 133.263 ms
Loss rate: 4.40%
```

Run 1: Report of Indigo-MusesD — Data Link



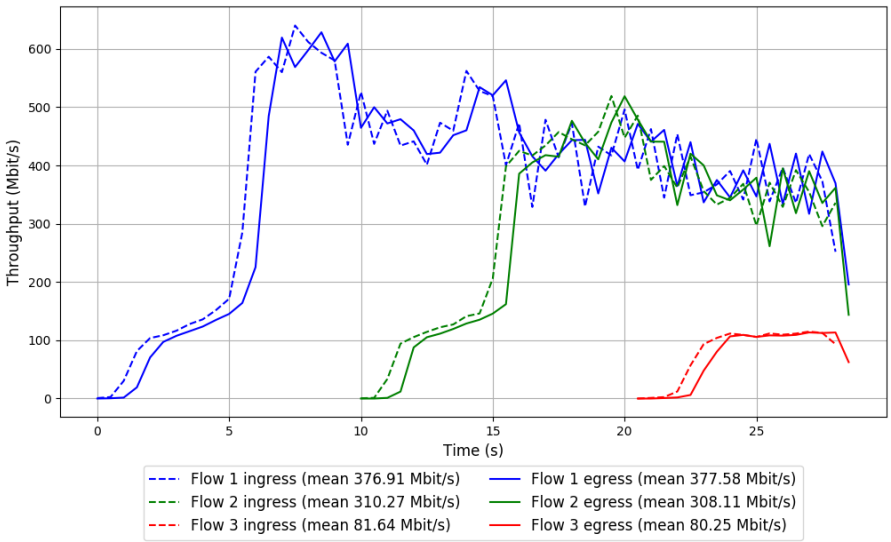


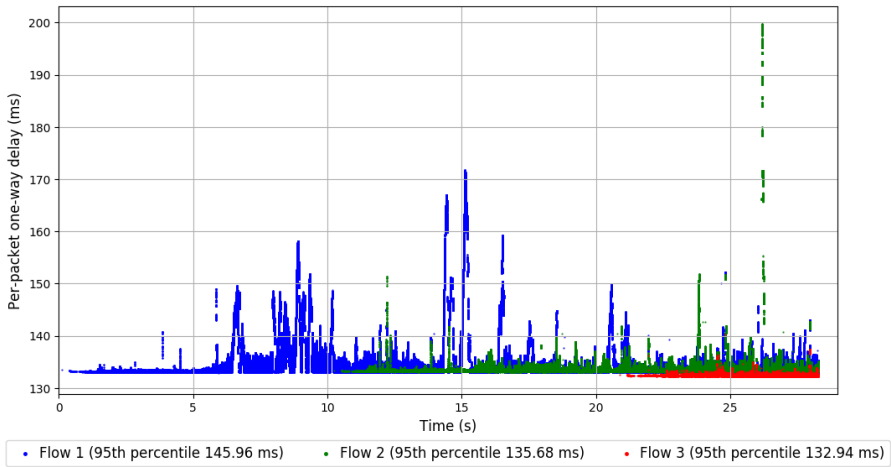
```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-05-30 09:20:29
End at: 2019-05-30 09:20:59
Local clock offset: 0.215 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2019-05-30 13:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.77 Mbit/s
95th percentile per-packet one-way delay: 143.607 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 377.58 Mbit/s
95th percentile per-packet one-way delay: 145.961 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 308.11 Mbit/s
95th percentile per-packet one-way delay: 135.676 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 80.25 Mbit/s
95th percentile per-packet one-way delay: 132.943 ms
Loss rate: 5.11%
```

Run 2: Report of Indigo-MusesD — Data Link



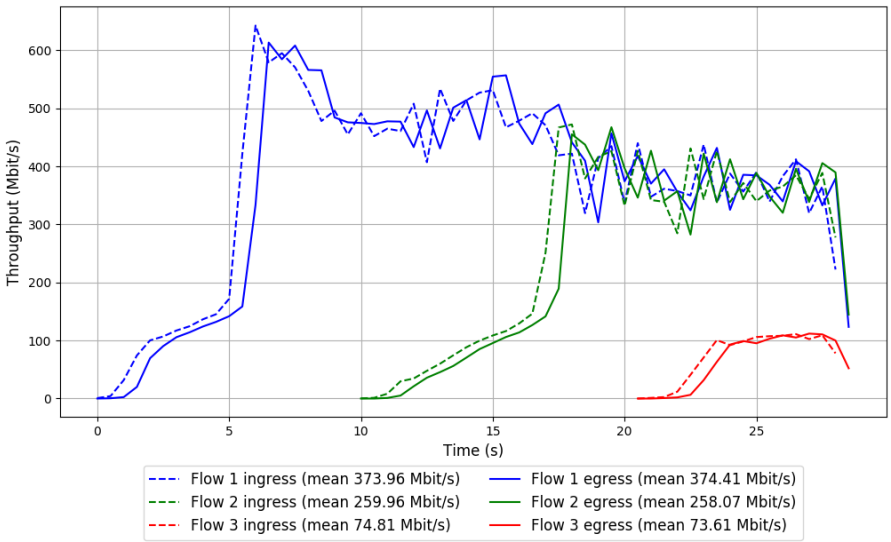


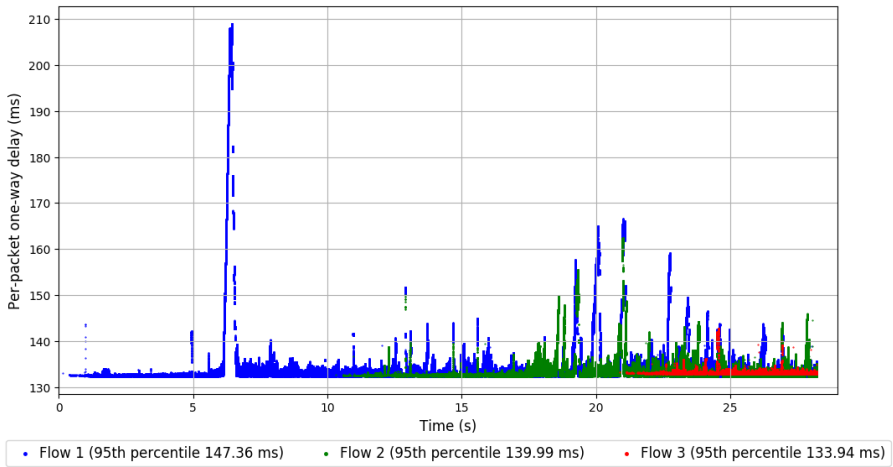
```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-05-30 09:57:38
End at: 2019-05-30 09:58:08
Local clock offset: -0.145 ms
Remote clock offset: -0.5 ms

# Below is generated by plot.py at 2019-05-30 13:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.13 Mbit/s
95th percentile per-packet one-way delay: 143.088 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 374.41 Mbit/s
95th percentile per-packet one-way delay: 147.358 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 258.07 Mbit/s
95th percentile per-packet one-way delay: 139.994 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 73.61 Mbit/s
95th percentile per-packet one-way delay: 133.938 ms
Loss rate: 5.01%
```

Run 3: Report of Indigo-MusesD — Data Link



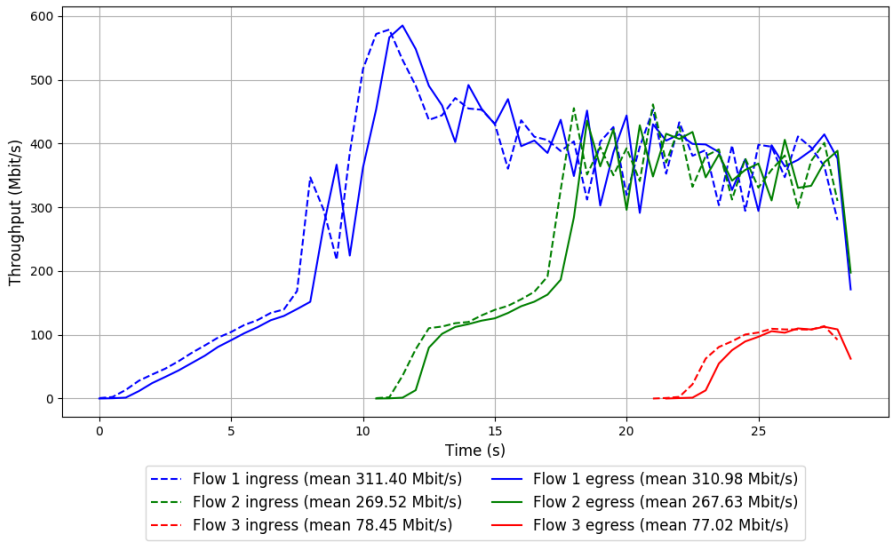


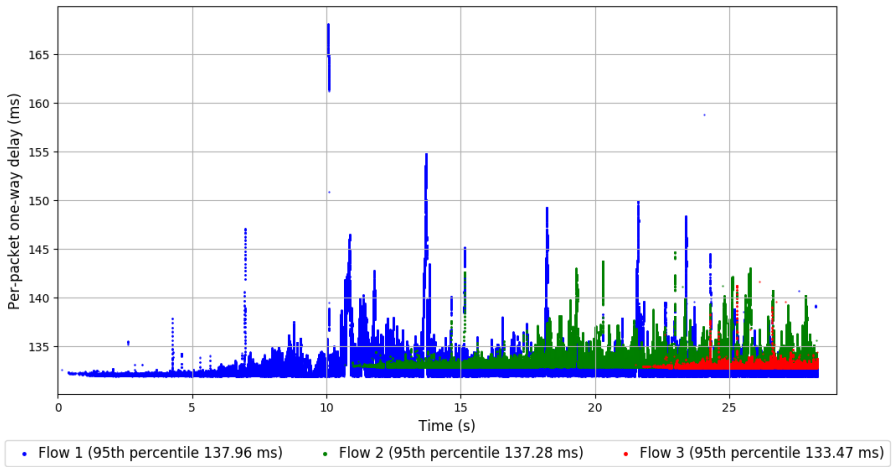
```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-05-30 10:35:59
End at: 2019-05-30 10:36:29
Local clock offset: 0.102 ms
Remote clock offset: -0.368 ms

# Below is generated by plot.py at 2019-05-30 13:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.52 Mbit/s
95th percentile per-packet one-way delay: 137.560 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 310.98 Mbit/s
95th percentile per-packet one-way delay: 137.959 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 267.63 Mbit/s
95th percentile per-packet one-way delay: 137.278 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 133.469 ms
Loss rate: 5.49%
```

Run 4: Report of Indigo-MusesD — Data Link



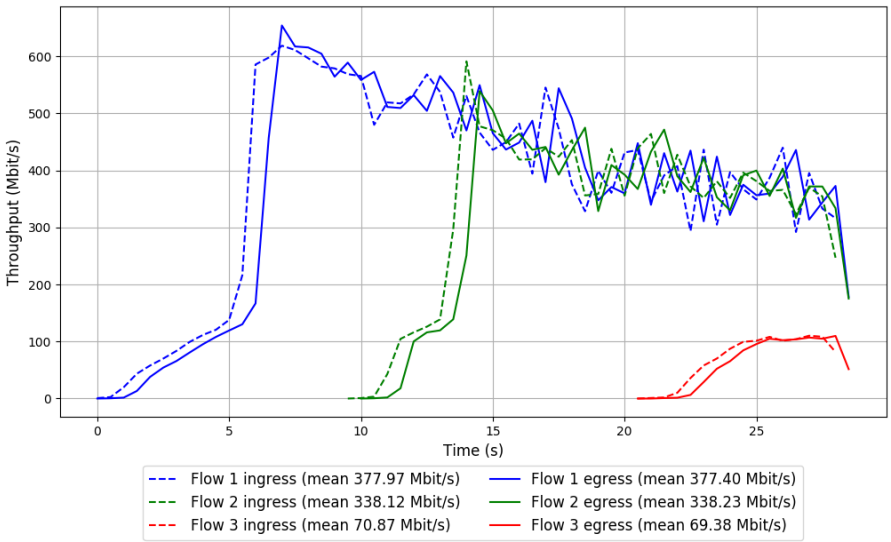


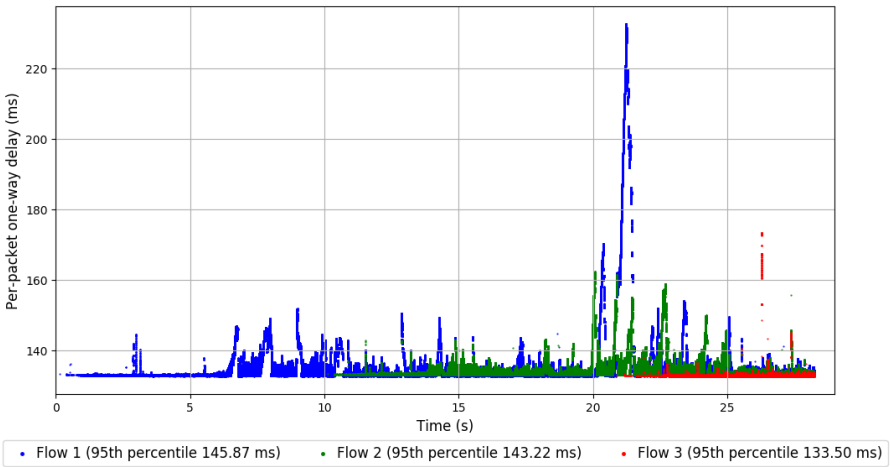
```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-05-30 11:13:42
End at: 2019-05-30 11:14:12
Local clock offset: 0.008 ms
Remote clock offset: -0.929 ms

# Below is generated by plot.py at 2019-05-30 13:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 613.61 Mbit/s
95th percentile per-packet one-way delay: 144.985 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 377.40 Mbit/s
95th percentile per-packet one-way delay: 145.872 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 338.23 Mbit/s
95th percentile per-packet one-way delay: 143.215 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 133.502 ms
Loss rate: 5.53%
```

Run 5: Report of Indigo-MusesD — Data Link



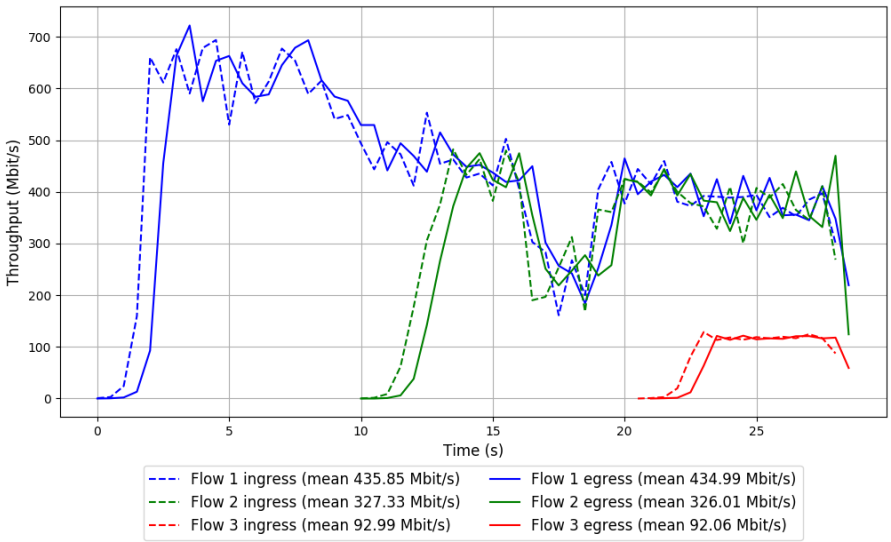


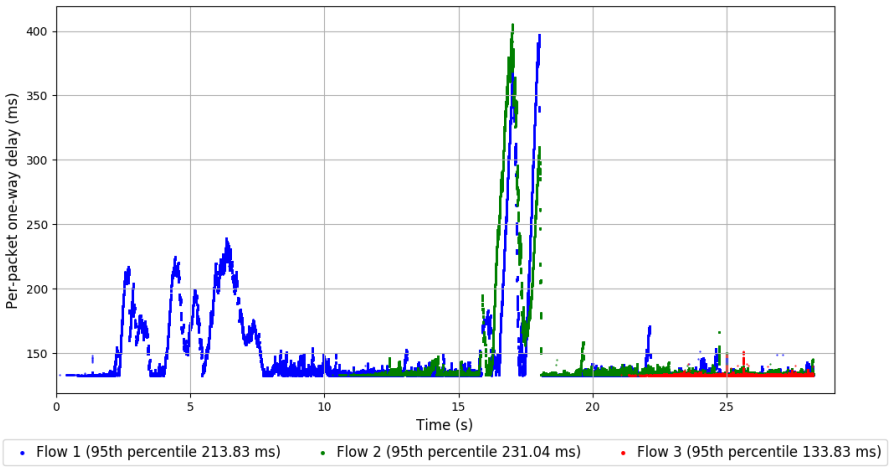
```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-05-30 09:10:53
End at: 2019-05-30 09:11:23
Local clock offset: -0.199 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-05-30 13:21:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 666.49 Mbit/s
95th percentile per-packet one-way delay: 213.845 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 434.99 Mbit/s
95th percentile per-packet one-way delay: 213.831 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 326.01 Mbit/s
95th percentile per-packet one-way delay: 231.036 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 133.827 ms
Loss rate: 4.62%
```

Run 1: Report of Indigo-MusesT — Data Link



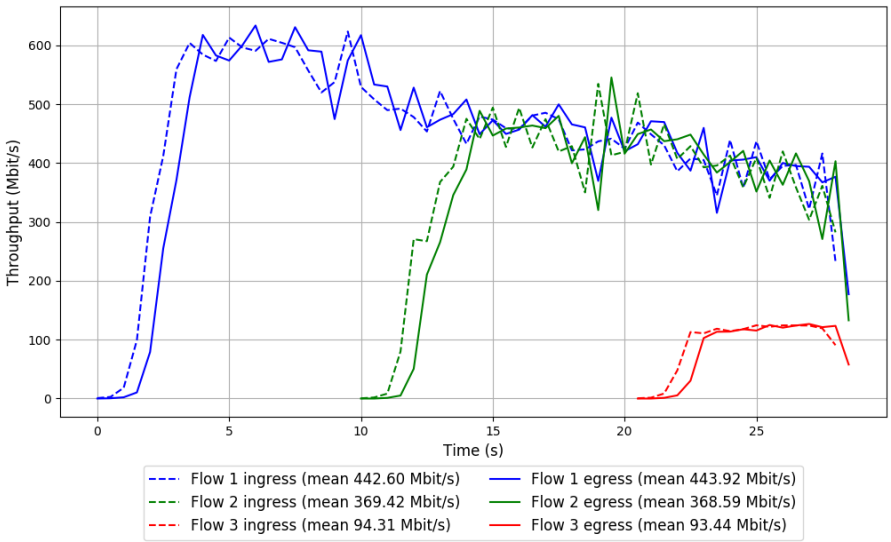


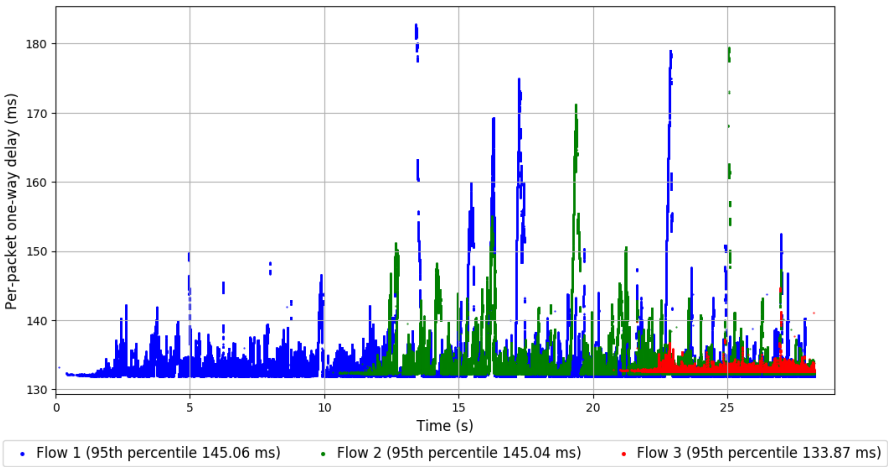
```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-05-30 09:48:25
End at: 2019-05-30 09:48:55
Local clock offset: -0.563 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2019-05-30 13:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 703.85 Mbit/s
95th percentile per-packet one-way delay: 144.657 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 443.92 Mbit/s
95th percentile per-packet one-way delay: 145.064 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 368.59 Mbit/s
95th percentile per-packet one-way delay: 145.044 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 133.873 ms
Loss rate: 4.34%
```

Run 2: Report of Indigo-MusesT — Data Link



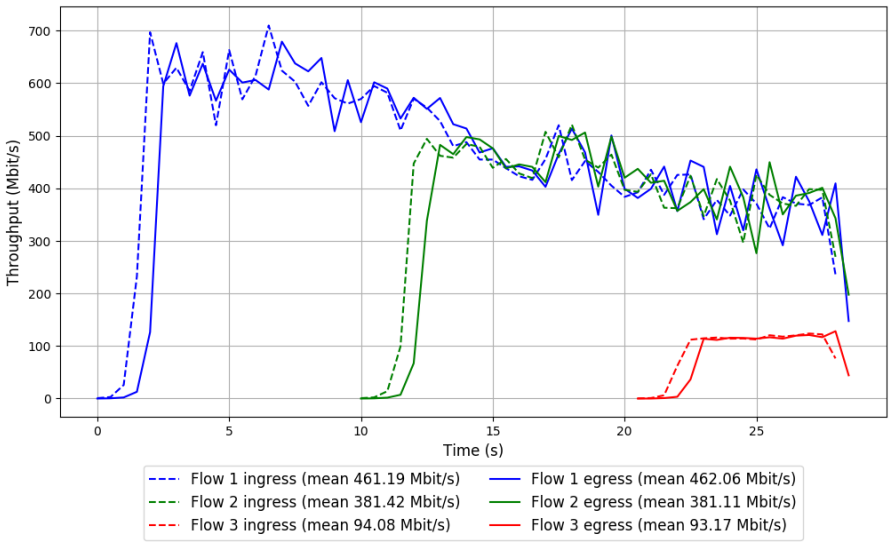


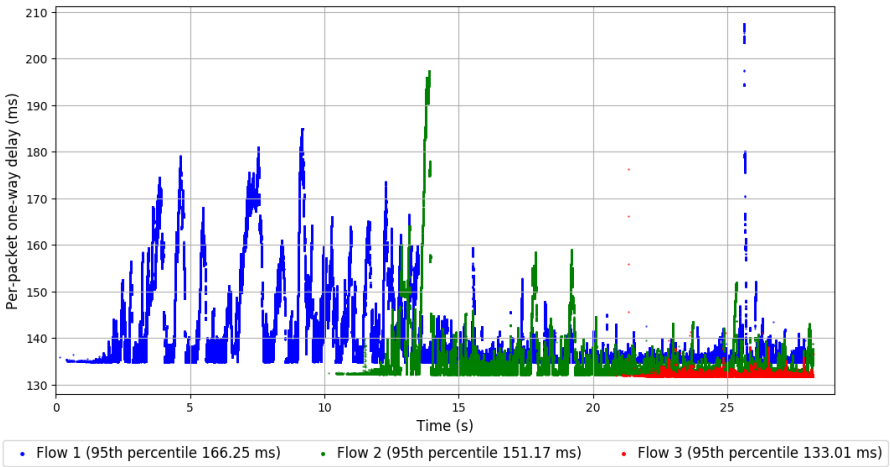
```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-05-30 10:26:17
End at: 2019-05-30 10:26:47
Local clock offset: -0.361 ms
Remote clock offset: -0.679 ms

# Below is generated by plot.py at 2019-05-30 13:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 731.20 Mbit/s
95th percentile per-packet one-way delay: 162.699 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 462.06 Mbit/s
95th percentile per-packet one-way delay: 166.251 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 381.11 Mbit/s
95th percentile per-packet one-way delay: 151.173 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 93.17 Mbit/s
95th percentile per-packet one-way delay: 133.011 ms
Loss rate: 4.35%
```

Run 3: Report of Indigo-MusesT — Data Link



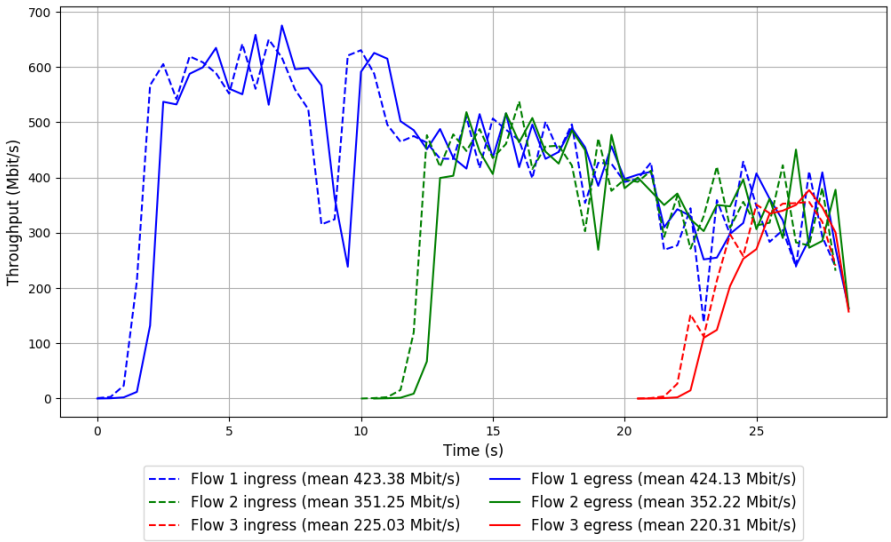


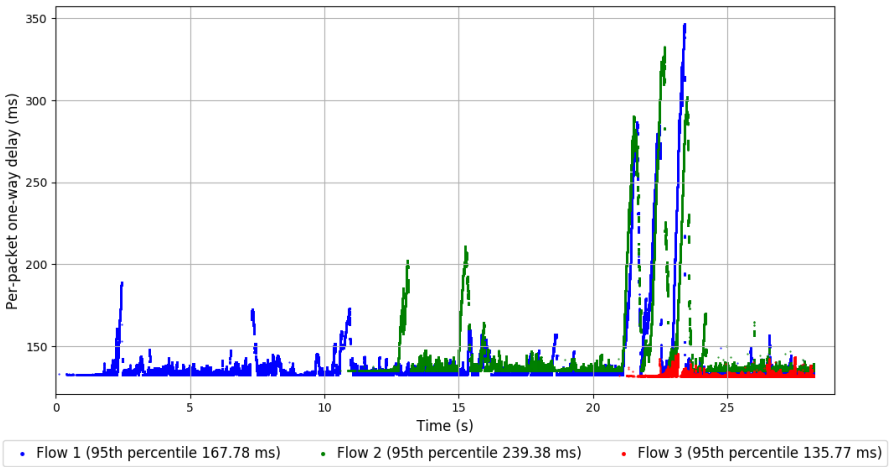
```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-05-30 11:04:01
End at: 2019-05-30 11:04:31
Local clock offset: -0.239 ms
Remote clock offset: -0.881 ms

# Below is generated by plot.py at 2019-05-30 13:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.64 Mbit/s
95th percentile per-packet one-way delay: 191.501 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 424.13 Mbit/s
95th percentile per-packet one-way delay: 167.779 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 352.22 Mbit/s
95th percentile per-packet one-way delay: 239.378 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 220.31 Mbit/s
95th percentile per-packet one-way delay: 135.767 ms
Loss rate: 5.58%
```

Run 4: Report of Indigo-MusesT — Data Link



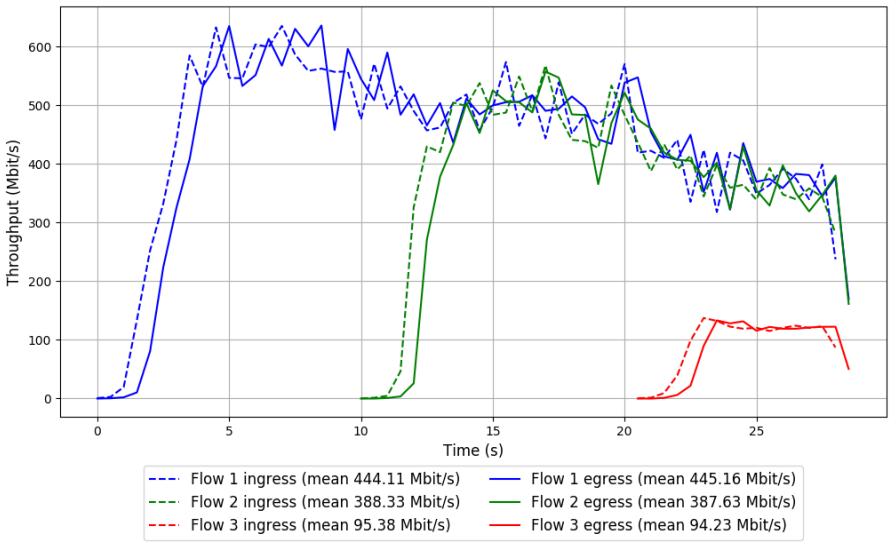


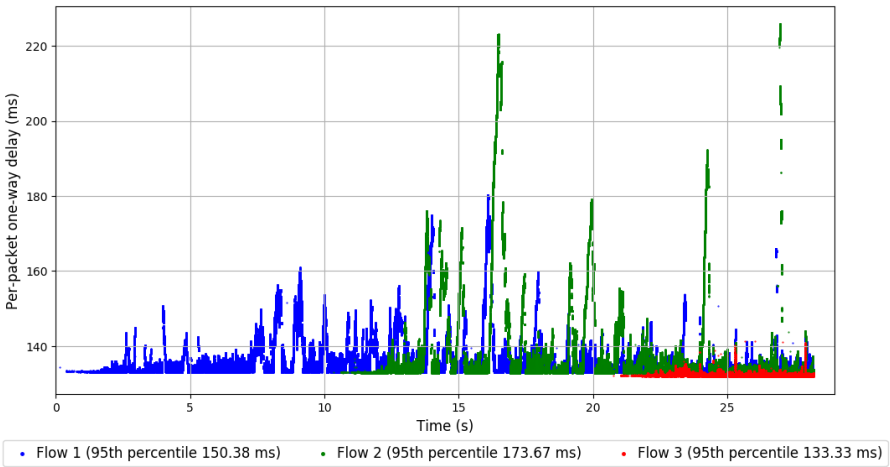
```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-05-30 11:42:10
End at: 2019-05-30 11:42:40
Local clock offset: -0.138 ms
Remote clock offset: -1.109 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 716.80 Mbit/s
95th percentile per-packet one-way delay: 158.111 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 445.16 Mbit/s
95th percentile per-packet one-way delay: 150.382 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 387.63 Mbit/s
95th percentile per-packet one-way delay: 173.668 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 94.23 Mbit/s
95th percentile per-packet one-way delay: 133.333 ms
Loss rate: 4.61%
```

Run 5: Report of Indigo-MusesT — Data Link



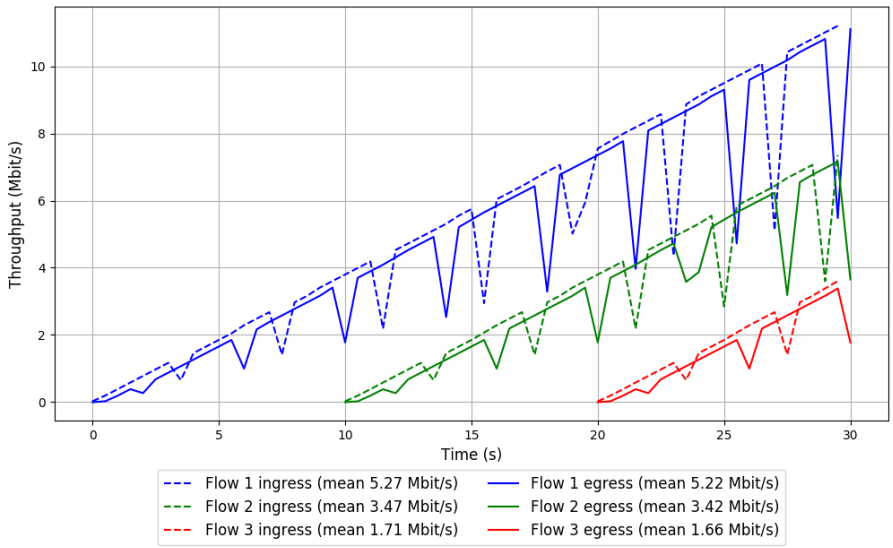


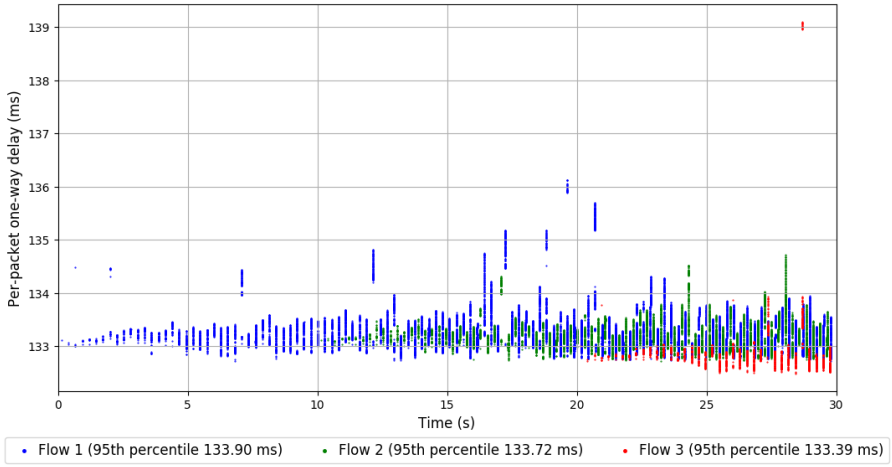
```
Run 1: Statistics of LEDBAT

Start at: 2019-05-30 08:46:39
End at: 2019-05-30 08:47:09
Local clock offset: -0.159 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 133.836 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 133.897 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 133.722 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.389 ms
Loss rate: 5.40%
```

Run 1: Report of LEDBAT — Data Link



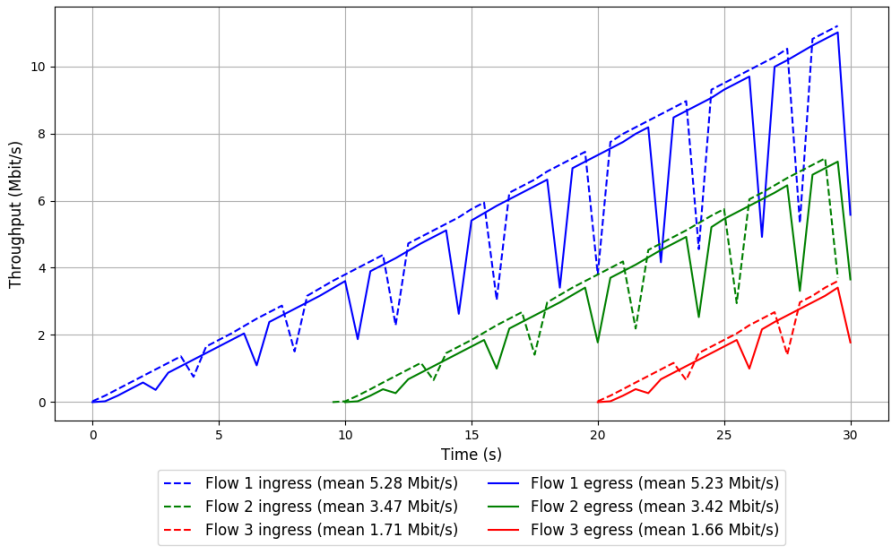


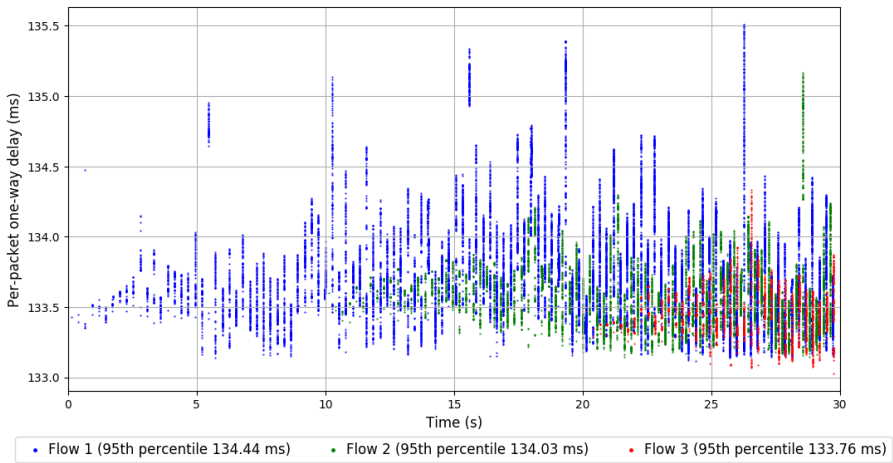
```
Run 2: Statistics of LEDBAT

Start at: 2019-05-30 09:24:28
End at: 2019-05-30 09:24:58
Local clock offset: 0.28 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 134.299 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 134.438 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 134.029 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.764 ms
Loss rate: 5.40%
```

Run 2: Report of LEDBAT — Data Link



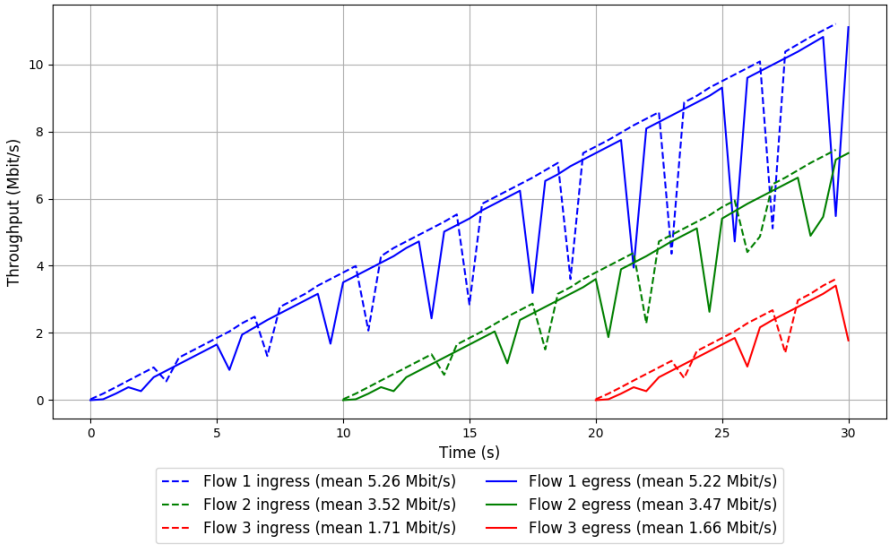


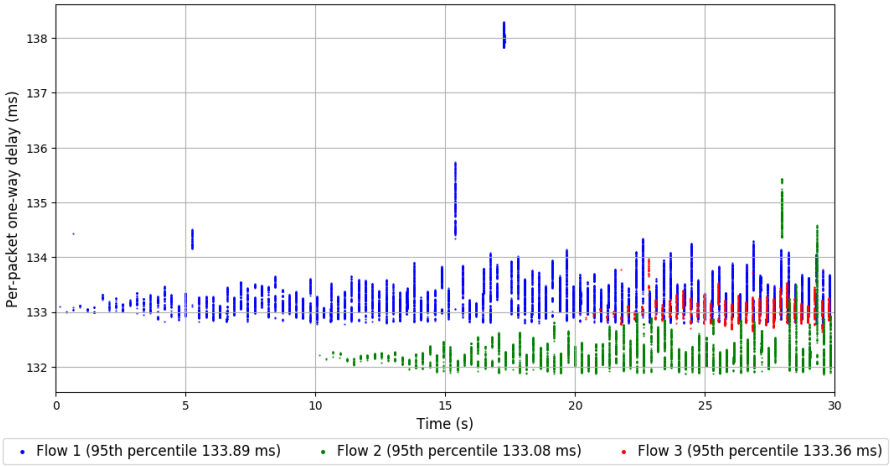
```
Run 3: Statistics of LEDBAT

Start at: 2019-05-30 10:01:38
End at: 2019-05-30 10:02:08
Local clock offset: -0.231 ms
Remote clock offset: -0.538 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 133.834 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 133.892 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.079 ms
Loss rate: 2.67%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.356 ms
Loss rate: 5.40%
```

Run 3: Report of LEDBAT — Data Link



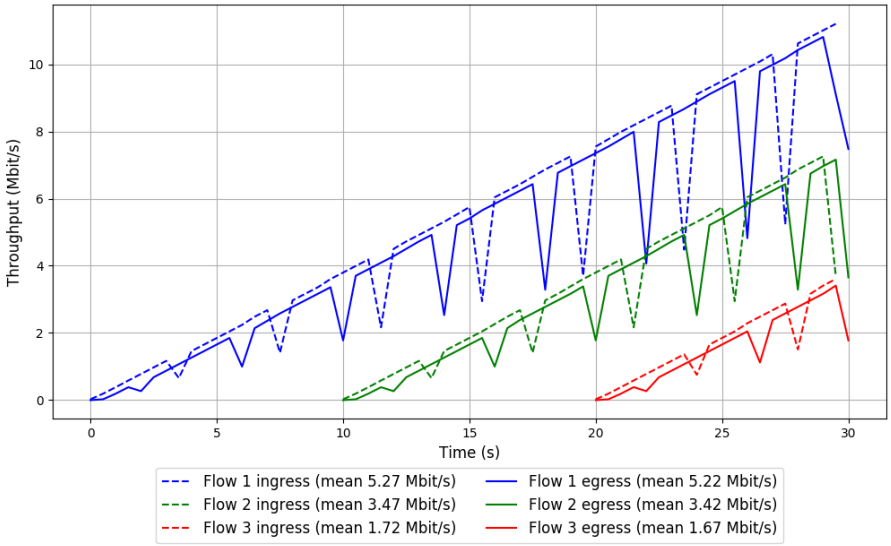


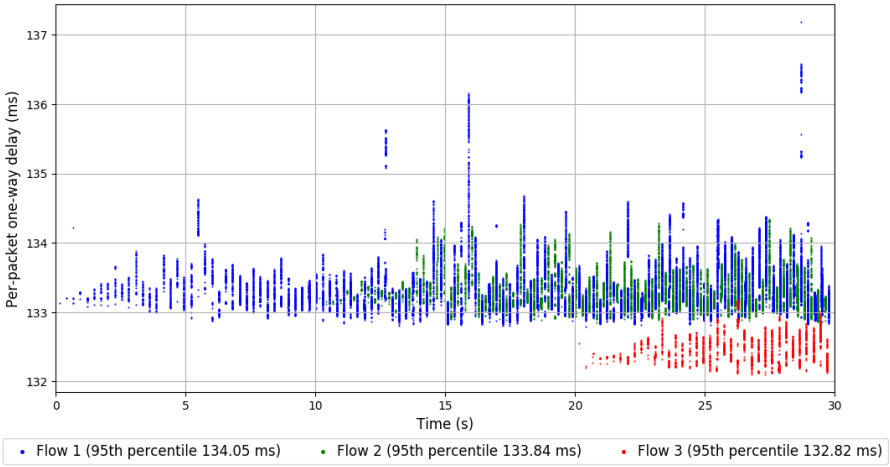
```
Run 4: Statistics of LEDBAT

Start at: 2019-05-30 10:39:55
End at: 2019-05-30 10:40:25
Local clock offset: -0.236 ms
Remote clock offset: -0.785 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 133.965 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 134.046 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 133.838 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 132.816 ms
Loss rate: 5.40%
```

Run 4: Report of LEDBAT — Data Link



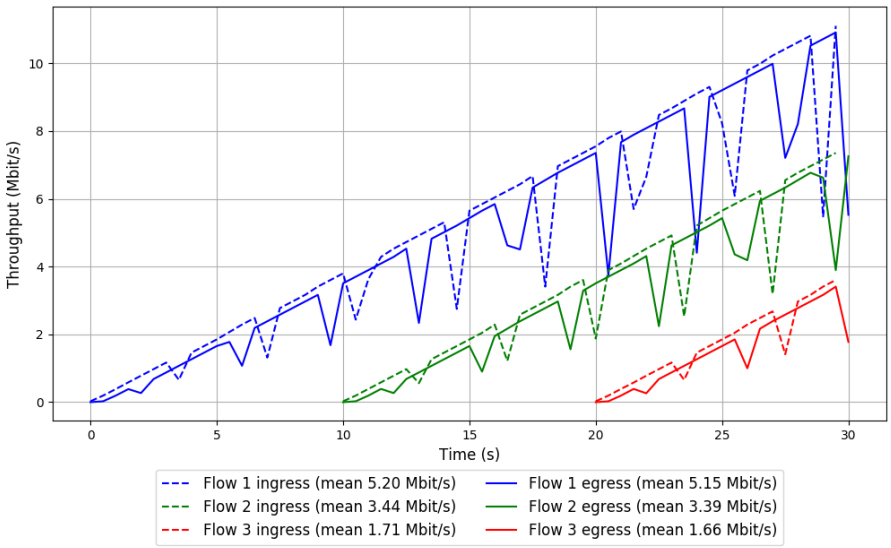


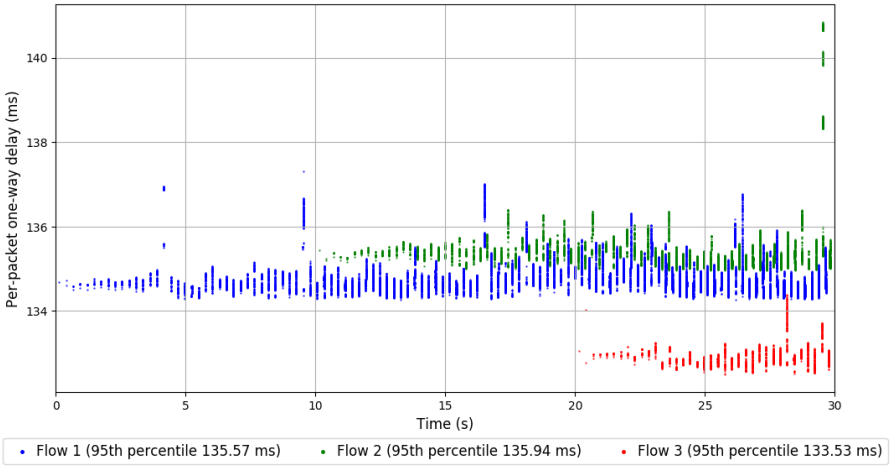
```
Run 5: Statistics of LEDBAT

Start at: 2019-05-30 11:17:43
End at: 2019-05-30 11:18:13
Local clock offset: -0.389 ms
Remote clock offset: -0.977 ms

# Below is generated by plot.py at 2019-05-30 13:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.91 Mbit/s
95th percentile per-packet one-way delay: 135.717 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 135.572 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 135.936 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.527 ms
Loss rate: 5.40%
```

Run 5: Report of LEDBAT — Data Link



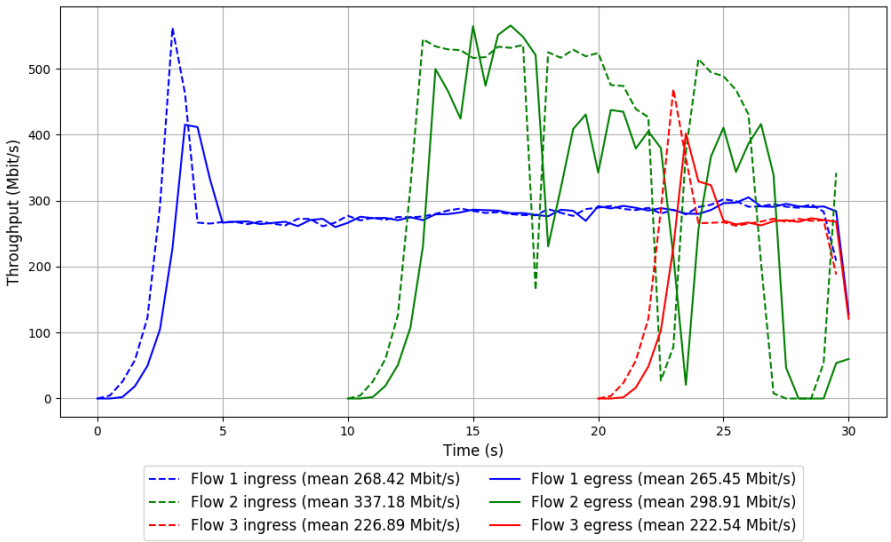


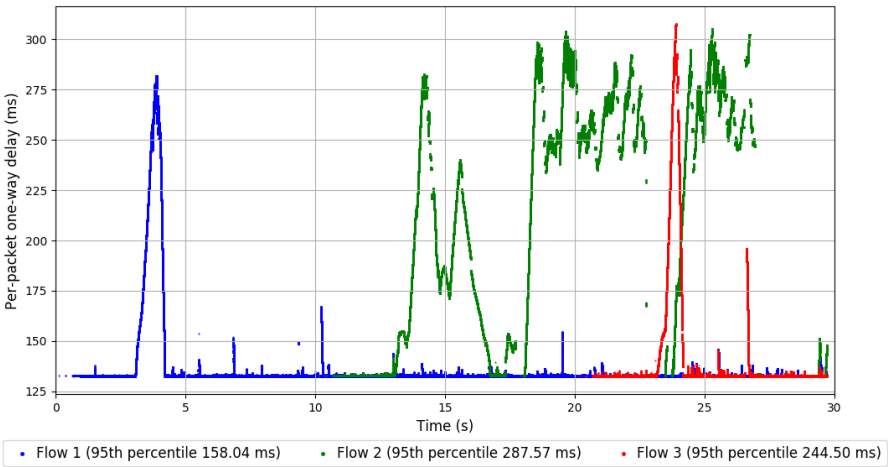
```
Run 1: Statistics of PCC-Allegro

Start at: 2019-05-30 08:57:30
End at: 2019-05-30 08:58:00
Local clock offset: -0.084 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2019-05-30 13:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.10 Mbit/s
95th percentile per-packet one-way delay: 276.624 ms
Loss rate: 6.50%
-- Flow 1:
Average throughput: 265.45 Mbit/s
95th percentile per-packet one-way delay: 158.036 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 298.91 Mbit/s
95th percentile per-packet one-way delay: 287.573 ms
Loss rate: 12.54%
-- Flow 3:
Average throughput: 222.54 Mbit/s
95th percentile per-packet one-way delay: 244.497 ms
Loss rate: 4.55%
```

Run 1: Report of PCC-Allegro — Data Link



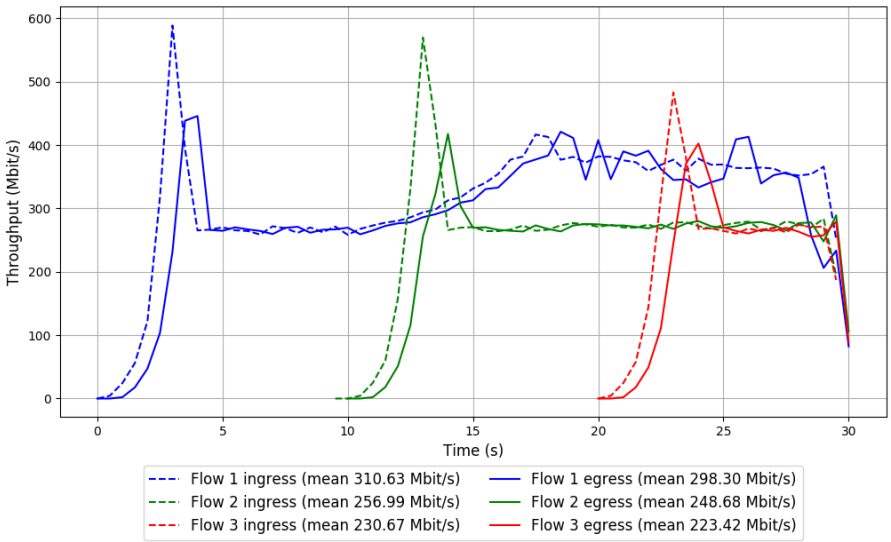


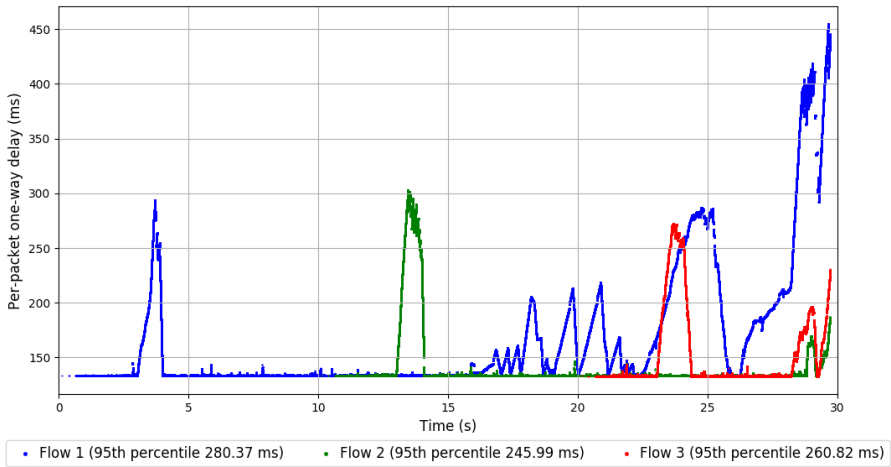
```
Run 2: Statistics of PCC-Allegro

Start at: 2019-05-30 09:35:09
End at: 2019-05-30 09:35:39
Local clock offset: 0.086 ms
Remote clock offset: -0.223 ms

# Below is generated by plot.py at 2019-05-30 13:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.25 Mbit/s
95th percentile per-packet one-way delay: 272.542 ms
Loss rate: 4.86%
-- Flow 1:
Average throughput: 298.30 Mbit/s
95th percentile per-packet one-way delay: 280.365 ms
Loss rate: 4.83%
-- Flow 2:
Average throughput: 248.68 Mbit/s
95th percentile per-packet one-way delay: 245.985 ms
Loss rate: 4.53%
-- Flow 3:
Average throughput: 223.42 Mbit/s
95th percentile per-packet one-way delay: 260.819 ms
Loss rate: 5.76%
```

Run 2: Report of PCC-Allegro — Data Link



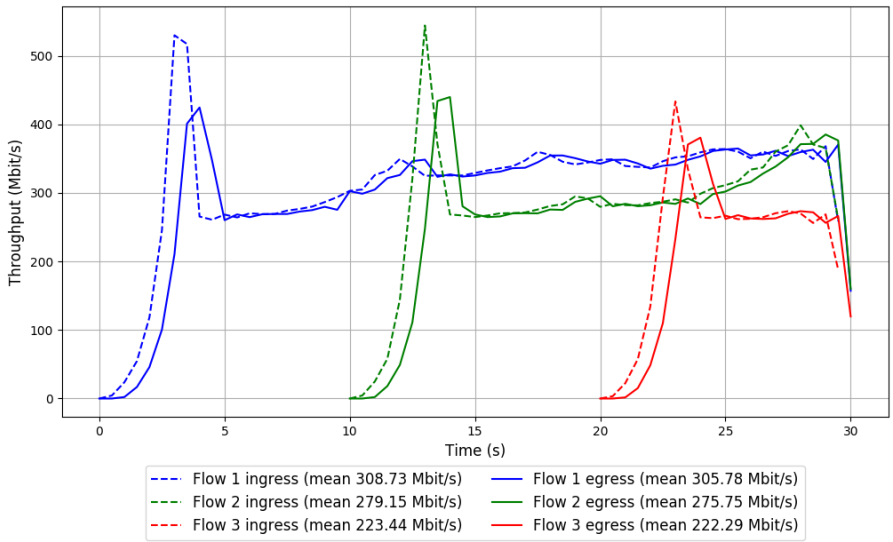


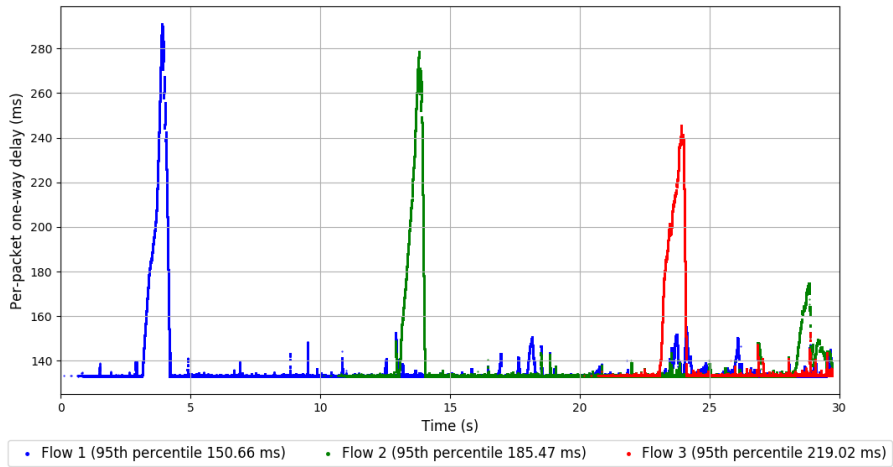
```
Run 3: Statistics of PCC-Allegro

Start at: 2019-05-30 10:12:36
End at: 2019-05-30 10:13:06
Local clock offset: -0.217 ms
Remote clock offset: -0.595 ms

# Below is generated by plot.py at 2019-05-30 13:40:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.02 Mbit/s
95th percentile per-packet one-way delay: 185.532 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 305.78 Mbit/s
95th percentile per-packet one-way delay: 150.661 ms
Loss rate: 1.84%
-- Flow 2:
Average throughput: 275.75 Mbit/s
95th percentile per-packet one-way delay: 185.469 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 222.29 Mbit/s
95th percentile per-packet one-way delay: 219.020 ms
Loss rate: 3.22%
```

Run 3: Report of PCC-Allegro — Data Link



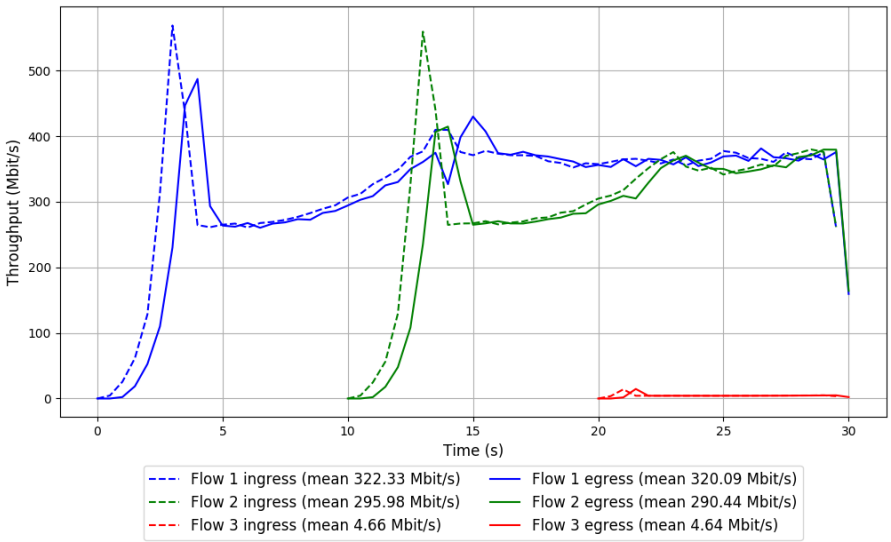


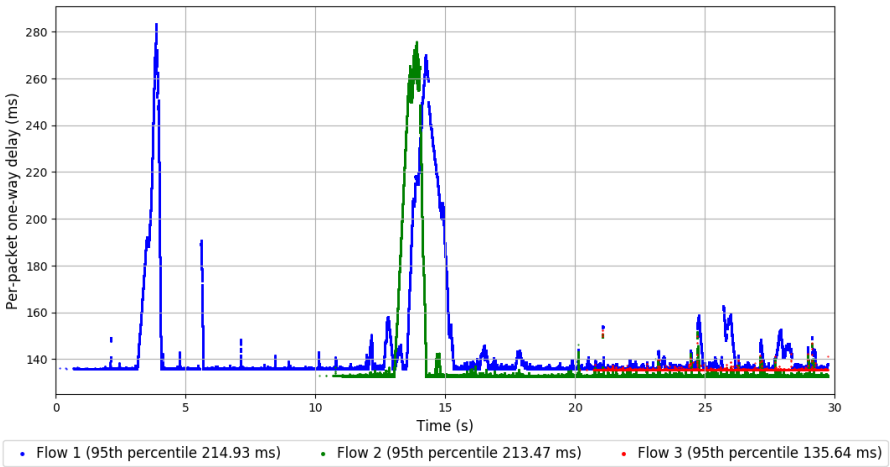
```
Run 4: Statistics of PCC-Allegro

Start at: 2019-05-30 10:50:35
End at: 2019-05-30 10:51:05
Local clock offset: 0.282 ms
Remote clock offset: -0.842 ms

# Below is generated by plot.py at 2019-05-30 13:40:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.68 Mbit/s
95th percentile per-packet one-way delay: 214.829 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 320.09 Mbit/s
95th percentile per-packet one-way delay: 214.927 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 290.44 Mbit/s
95th percentile per-packet one-way delay: 213.468 ms
Loss rate: 3.20%
-- Flow 3:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 135.640 ms
Loss rate: 3.14%
```

Run 4: Report of PCC-Allegro — Data Link



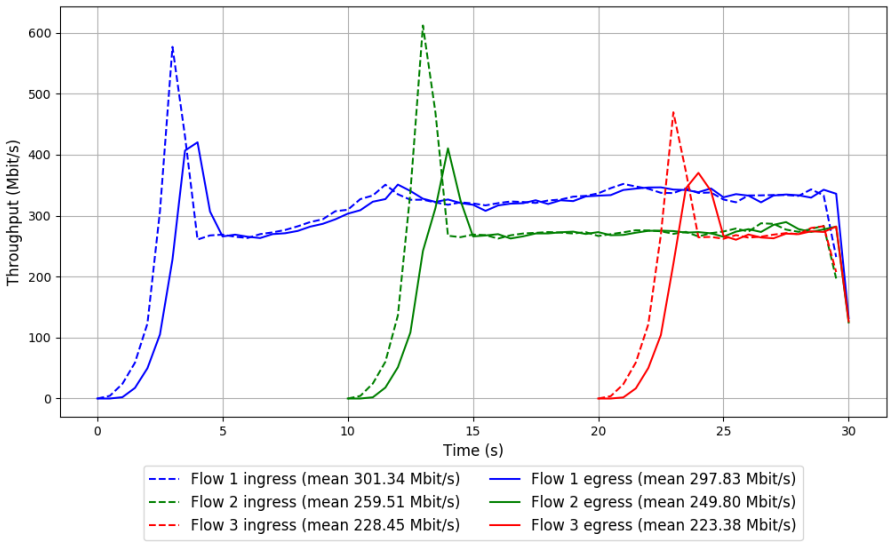


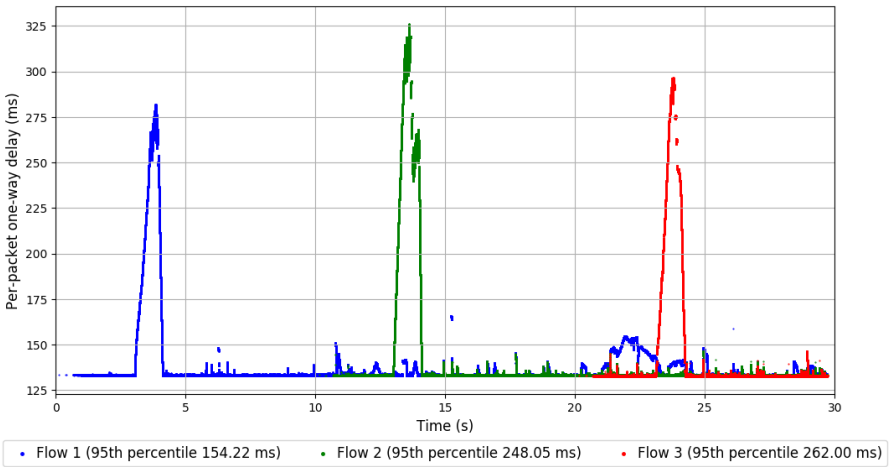
```
Run 5: Statistics of PCC-Allegro

Start at: 2019-05-30 11:28:40
End at: 2019-05-30 11:29:10
Local clock offset: -0.091 ms
Remote clock offset: -1.055 ms

# Below is generated by plot.py at 2019-05-30 13:45:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.02 Mbit/s
95th percentile per-packet one-way delay: 213.176 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 297.83 Mbit/s
95th percentile per-packet one-way delay: 154.216 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 249.80 Mbit/s
95th percentile per-packet one-way delay: 248.053 ms
Loss rate: 5.04%
-- Flow 3:
Average throughput: 223.38 Mbit/s
95th percentile per-packet one-way delay: 262.001 ms
Loss rate: 4.87%
```

Run 5: Report of PCC-Allegro — Data Link



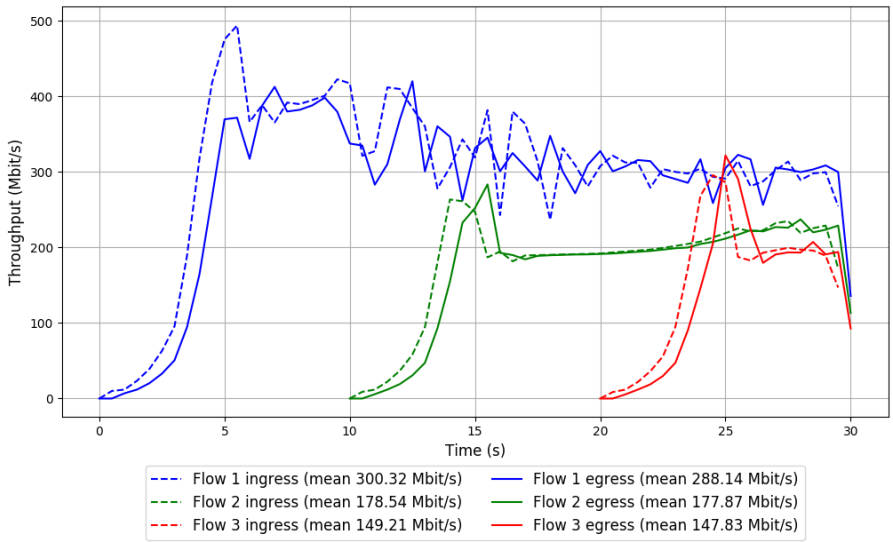


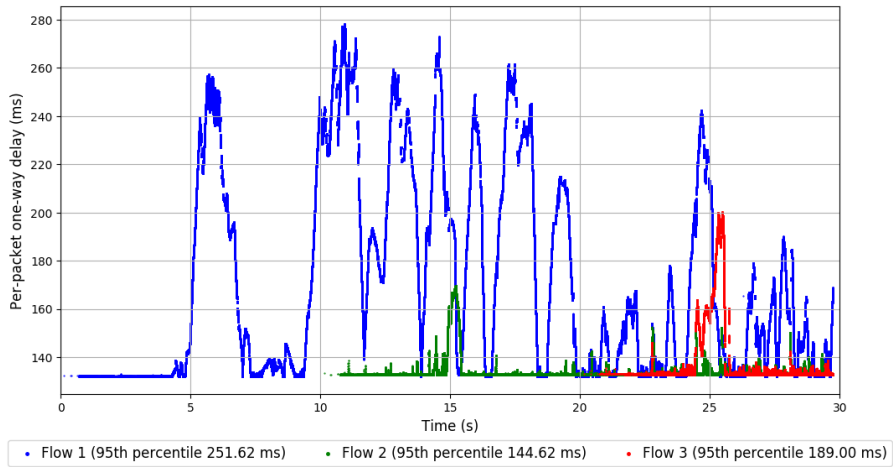
```
Run 1: Statistics of PCC-Expr

Start at: 2019-05-30 08:44:30
End at: 2019-05-30 08:45:00
Local clock offset: 0.079 ms
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2019-05-30 13:45:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.75 Mbit/s
95th percentile per-packet one-way delay: 244.631 ms
Loss rate: 3.96%
-- Flow 1:
Average throughput: 288.14 Mbit/s
95th percentile per-packet one-way delay: 251.624 ms
Loss rate: 4.91%
-- Flow 2:
Average throughput: 177.87 Mbit/s
95th percentile per-packet one-way delay: 144.618 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 147.83 Mbit/s
95th percentile per-packet one-way delay: 188.999 ms
Loss rate: 3.61%
```

Run 1: Report of PCC-Expr — Data Link



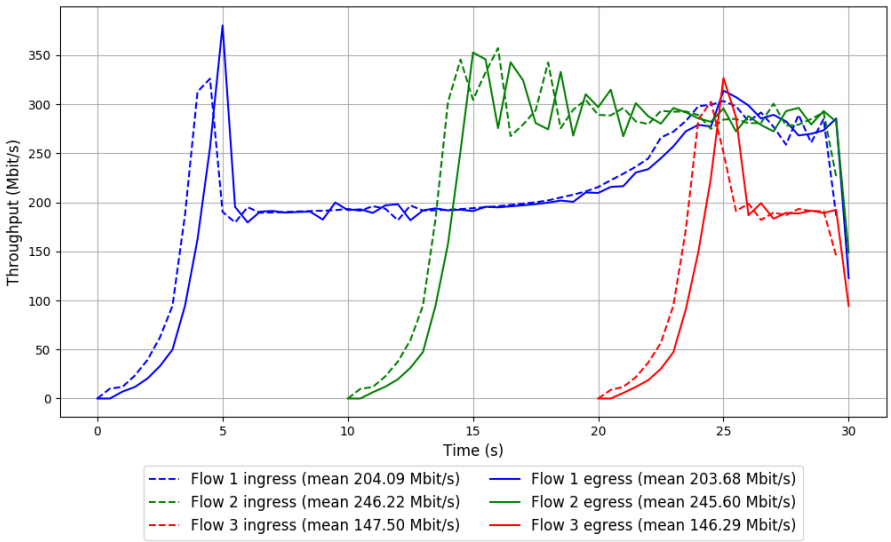


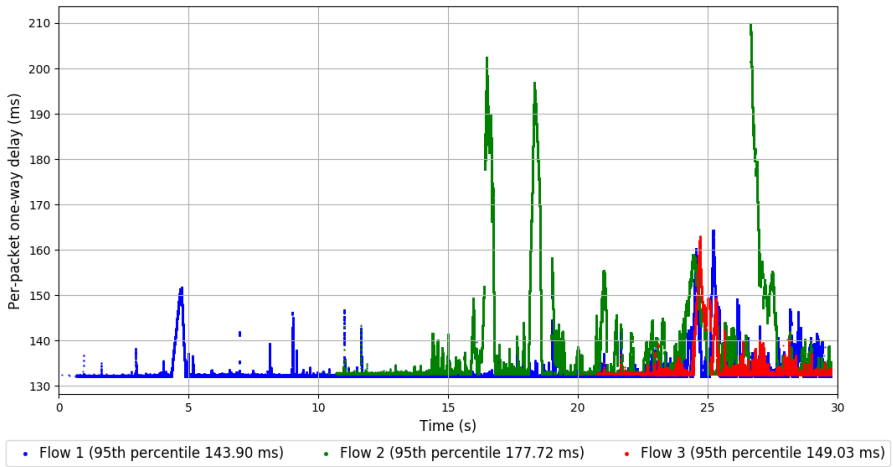
```
Run 2: Statistics of PCC-Expr

Start at: 2019-05-30 09:22:24
End at: 2019-05-30 09:22:54
Local clock offset: -0.228 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2019-05-30 13:45:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.73 Mbit/s
95th percentile per-packet one-way delay: 153.525 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 203.68 Mbit/s
95th percentile per-packet one-way delay: 143.896 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 245.60 Mbit/s
95th percentile per-packet one-way delay: 177.724 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 146.29 Mbit/s
95th percentile per-packet one-way delay: 149.035 ms
Loss rate: 3.51%
```

Run 2: Report of PCC-Expr — Data Link



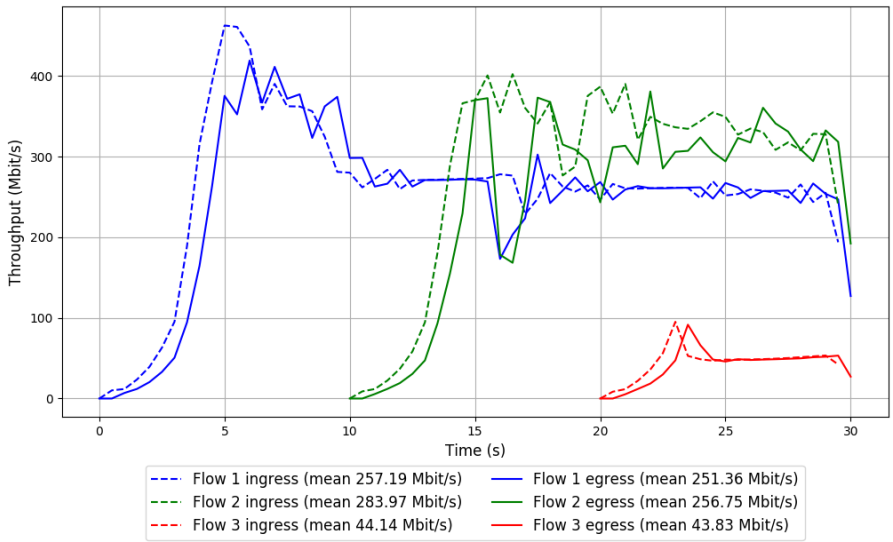


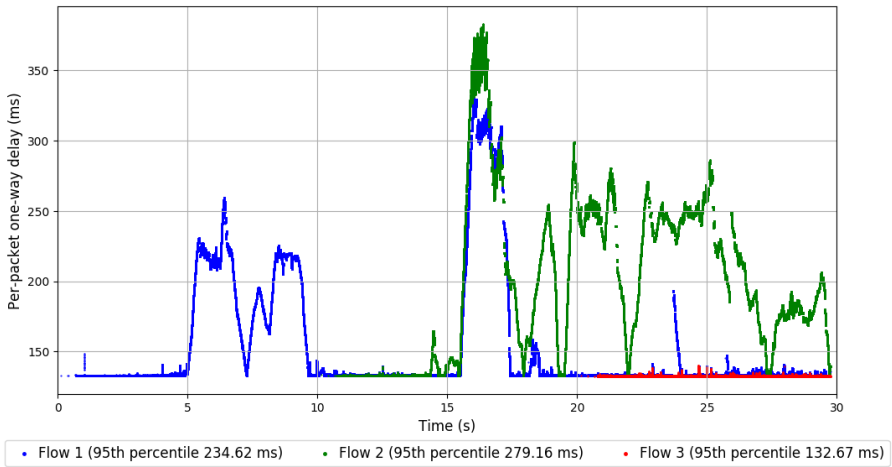
```
Run 3: Statistics of PCC-Expr

Start at: 2019-05-30 09:59:31
End at: 2019-05-30 10:00:01
Local clock offset: 0.268 ms
Remote clock offset: -0.503 ms

# Below is generated by plot.py at 2019-05-30 13:46:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.52 Mbit/s
95th percentile per-packet one-way delay: 270.148 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 251.36 Mbit/s
95th percentile per-packet one-way delay: 234.620 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 256.75 Mbit/s
95th percentile per-packet one-way delay: 279.163 ms
Loss rate: 10.80%
-- Flow 3:
Average throughput: 43.83 Mbit/s
95th percentile per-packet one-way delay: 132.667 ms
Loss rate: 3.37%
```

Run 3: Report of PCC-Expr — Data Link



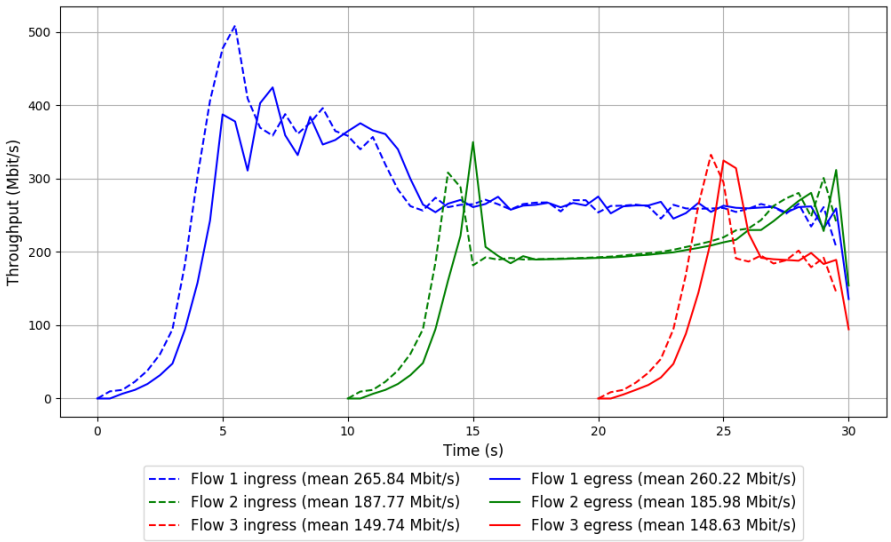


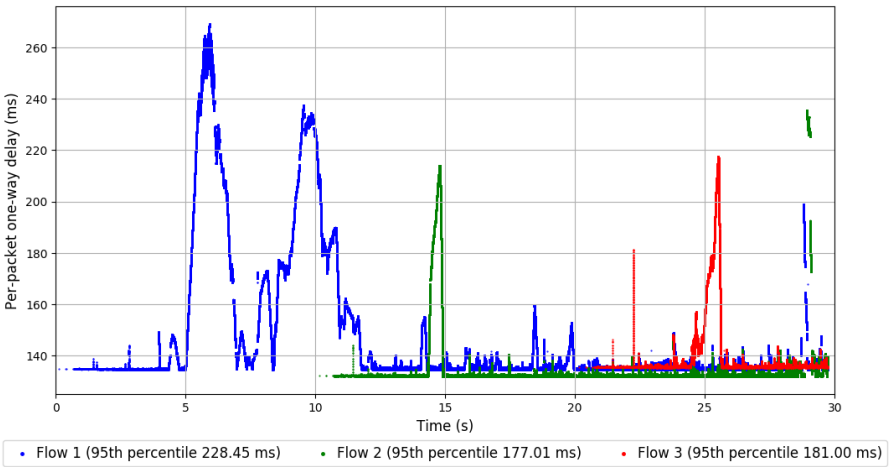
```
Run 4: Statistics of PCC-Expr

Start at: 2019-05-30 10:37:48
End at: 2019-05-30 10:38:18
Local clock offset: -0.241 ms
Remote clock offset: -0.732 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.44 Mbit/s
95th percentile per-packet one-way delay: 215.563 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 260.22 Mbit/s
95th percentile per-packet one-way delay: 228.449 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 185.98 Mbit/s
95th percentile per-packet one-way delay: 177.013 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 148.63 Mbit/s
95th percentile per-packet one-way delay: 181.002 ms
Loss rate: 3.46%
```

Run 4: Report of PCC-Expr — Data Link



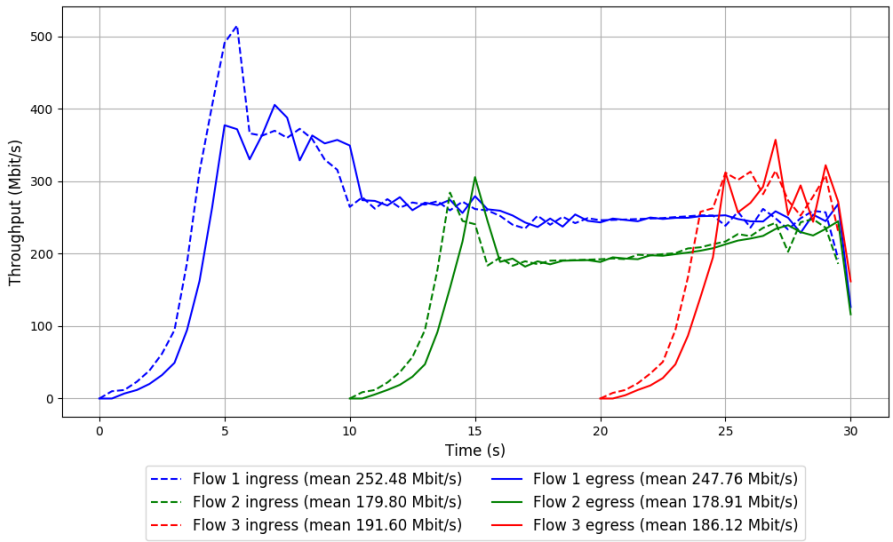


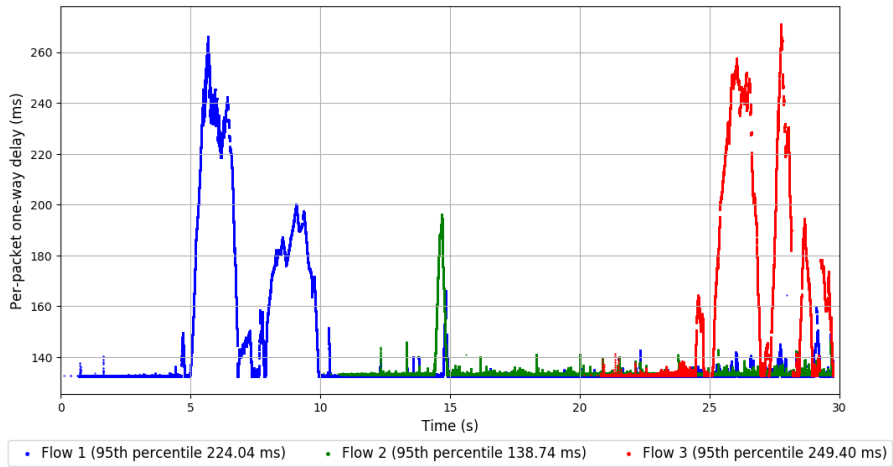
```
Run 5: Statistics of PCC-Expr

Start at: 2019-05-30 11:15:37
End at: 2019-05-30 11:16:07
Local clock offset: 0.402 ms
Remote clock offset: -0.97 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.47 Mbit/s
95th percentile per-packet one-way delay: 230.120 ms
Loss rate: 2.89%
-- Flow 1:
Average throughput: 247.76 Mbit/s
95th percentile per-packet one-way delay: 224.041 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 178.91 Mbit/s
95th percentile per-packet one-way delay: 138.743 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 186.12 Mbit/s
95th percentile per-packet one-way delay: 249.403 ms
Loss rate: 5.49%
```

Run 5: Report of PCC-Expr — Data Link



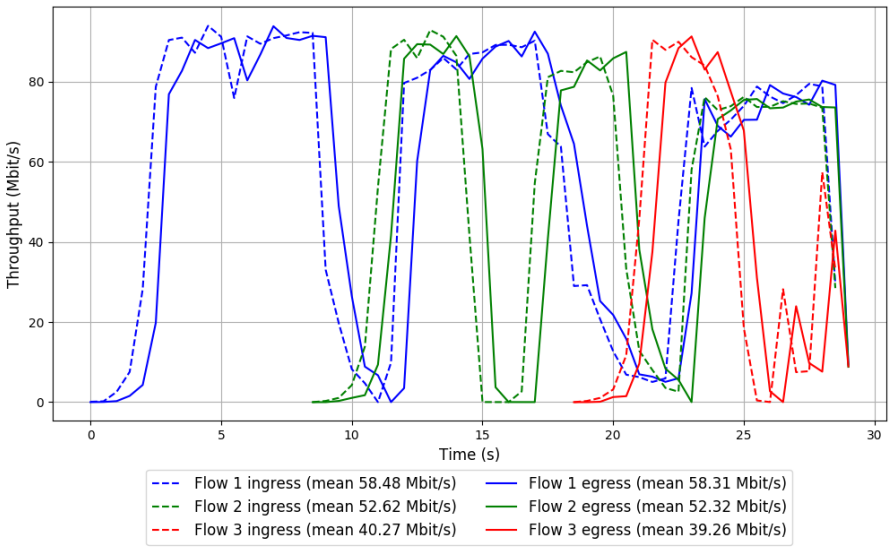


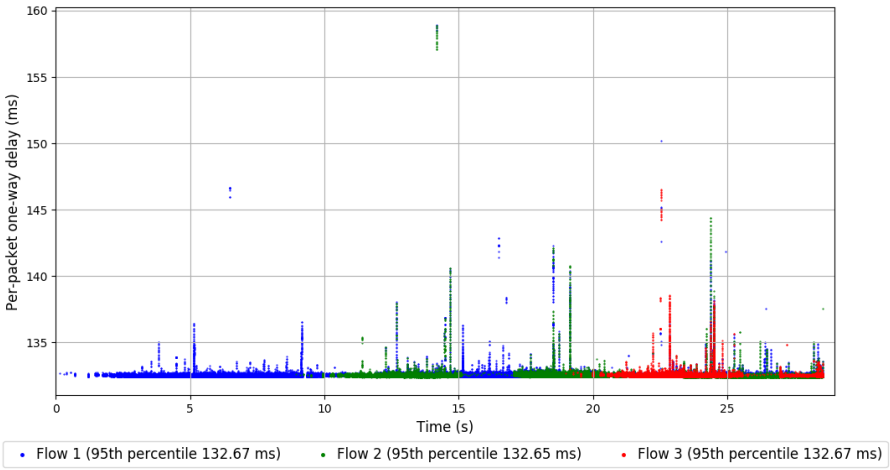
```
Run 1: Statistics of QUIC Cubic

Start at: 2019-05-30 09:04:39
End at: 2019-05-30 09:05:09
Local clock offset: -0.321 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 107.65 Mbit/s
95th percentile per-packet one-way delay: 132.660 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 58.31 Mbit/s
95th percentile per-packet one-way delay: 132.666 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 132.645 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 39.26 Mbit/s
95th percentile per-packet one-way delay: 132.668 ms
Loss rate: 5.15%
```

Run 1: Report of QUIC Cubic — Data Link



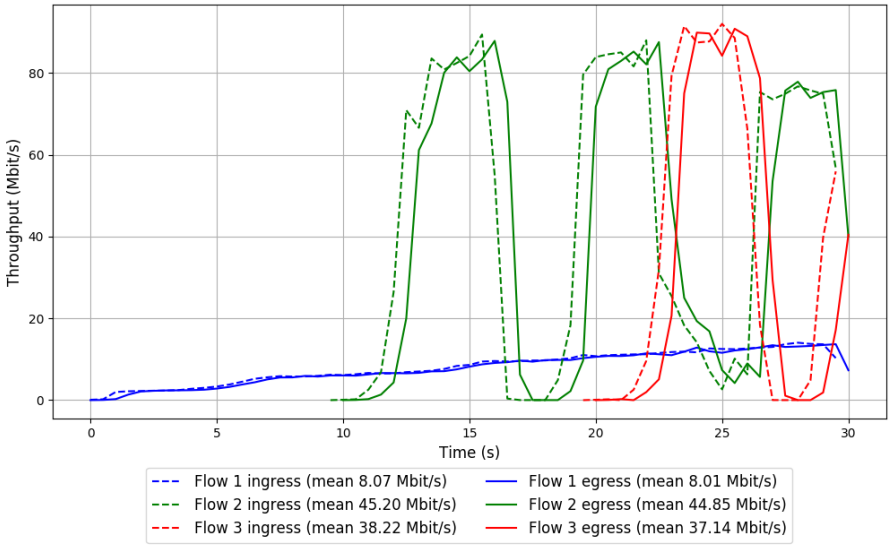


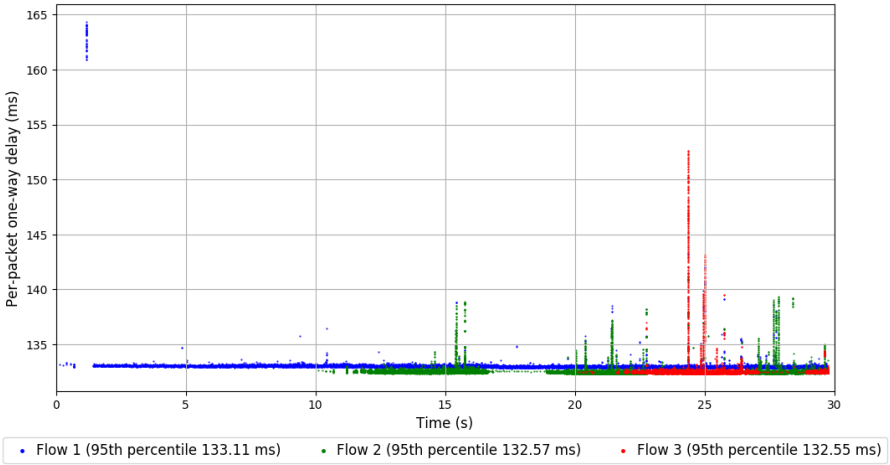
```
Run 2: Statistics of QUIC Cubic

Start at: 2019-05-30 09:42:09
End at: 2019-05-30 09:42:39
Local clock offset: -0.092 ms
Remote clock offset: -0.362 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.80 Mbit/s
95th percentile per-packet one-way delay: 133.005 ms
Loss rate: 2.85%
-- Flow 1:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 133.106 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 44.85 Mbit/s
95th percentile per-packet one-way delay: 132.572 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 132.550 ms
Loss rate: 5.44%
```

Run 2: Report of QUIC Cubic — Data Link



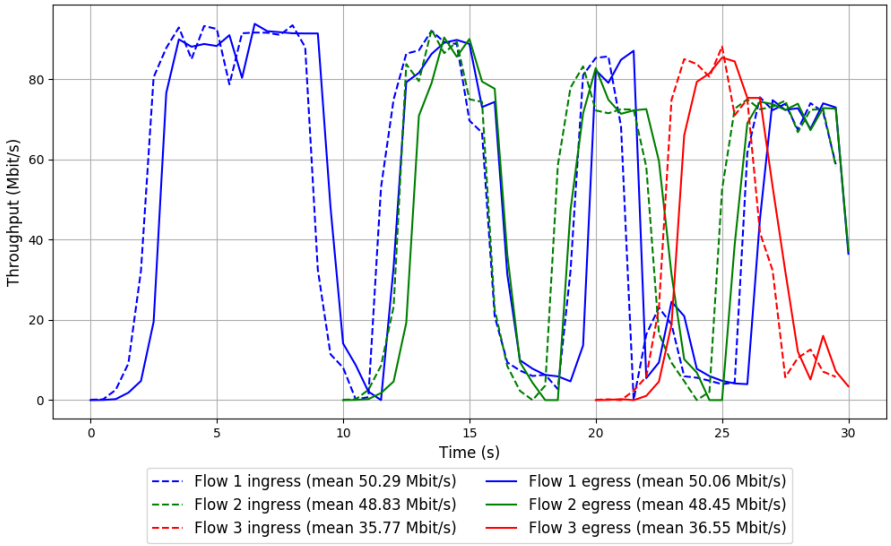


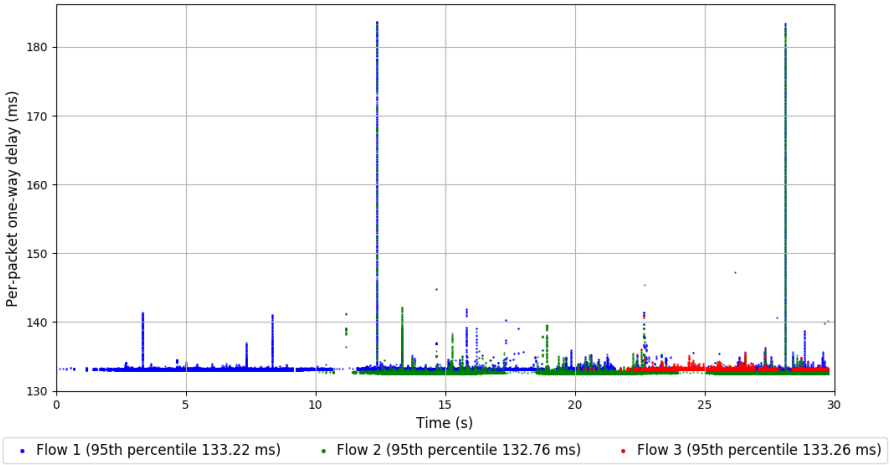
```
Run 3: Statistics of QUIC Cubic

Start at: 2019-05-30 10:19:42
End at: 2019-05-30 10:20:12
Local clock offset: 0.035 ms
Remote clock offset: -0.643 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 133.212 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 133.220 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 48.45 Mbit/s
95th percentile per-packet one-way delay: 132.756 ms
Loss rate: 2.07%
-- Flow 3:
Average throughput: 36.55 Mbit/s
95th percentile per-packet one-way delay: 133.257 ms
Loss rate: 0.60%
```

Run 3: Report of QUIC Cubic — Data Link



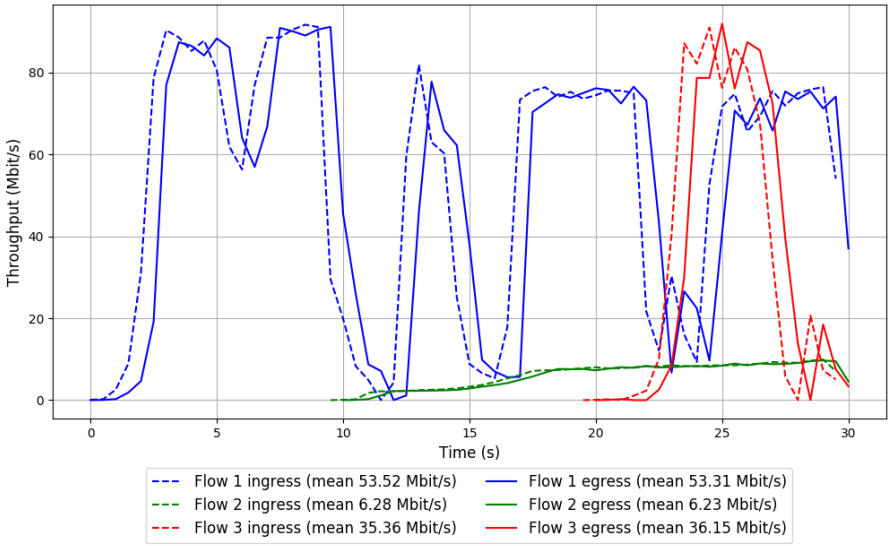


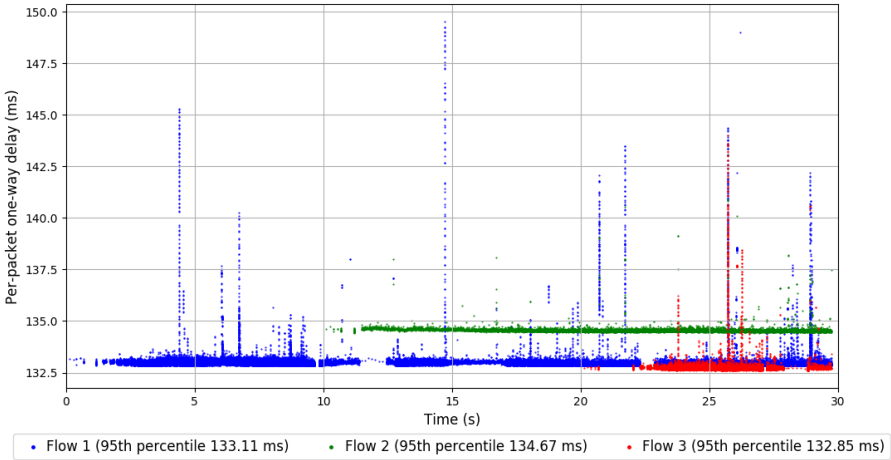
```
Run 4: Statistics of QUIC Cubic

Start at: 2019-05-30 10:57:29
End at: 2019-05-30 10:57:59
Local clock offset: -0.219 ms
Remote clock offset: -0.853 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 134.513 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 133.114 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 6.23 Mbit/s
95th percentile per-packet one-way delay: 134.667 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 36.15 Mbit/s
95th percentile per-packet one-way delay: 132.852 ms
Loss rate: 0.51%
```

Run 4: Report of QUIC Cubic — Data Link



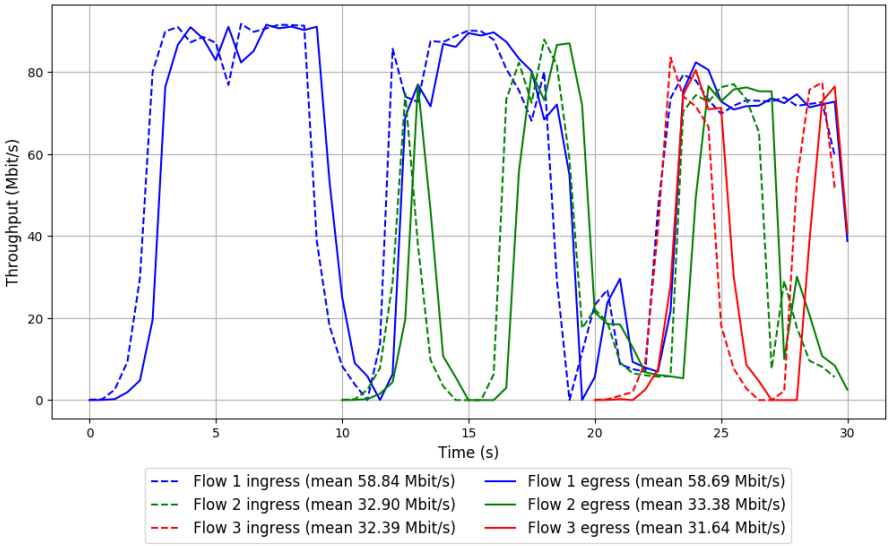


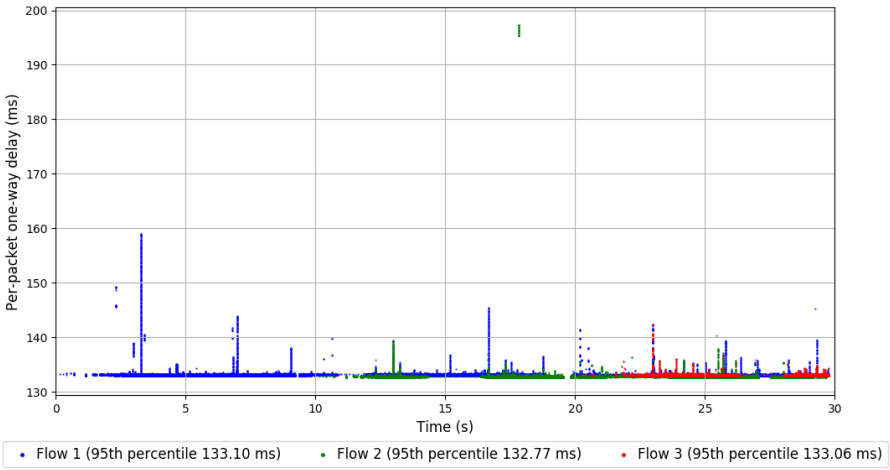
```
Run 5: Statistics of QUIC Cubic

Start at: 2019-05-30 11:35:52
End at: 2019-05-30 11:36:22
Local clock offset: -0.331 ms
Remote clock offset: -1.059 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 133.085 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 133.104 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: 132.774 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 133.064 ms
Loss rate: 4.95%
```

Run 5: Report of QUIC Cubic — Data Link



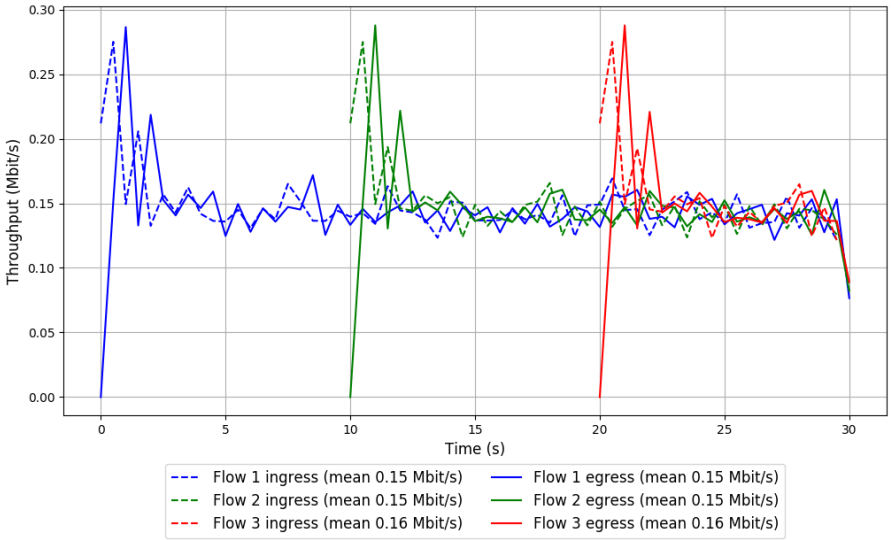


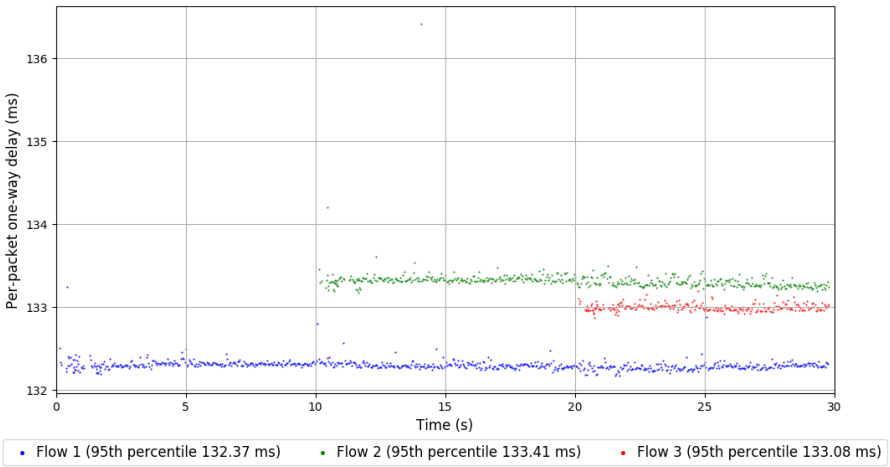
```
Run 1: Statistics of SCReAM

Start at: 2019-05-30 08:56:12
End at: 2019-05-30 08:56:42
Local clock offset: 0.134 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.362 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.371 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.406 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.080 ms
Loss rate: 2.44%
```

Run 1: Report of SCReAM — Data Link



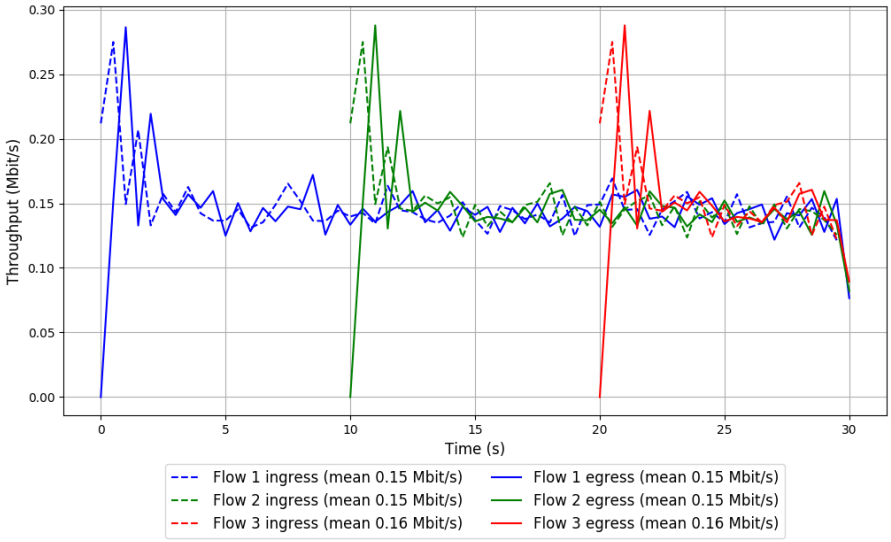


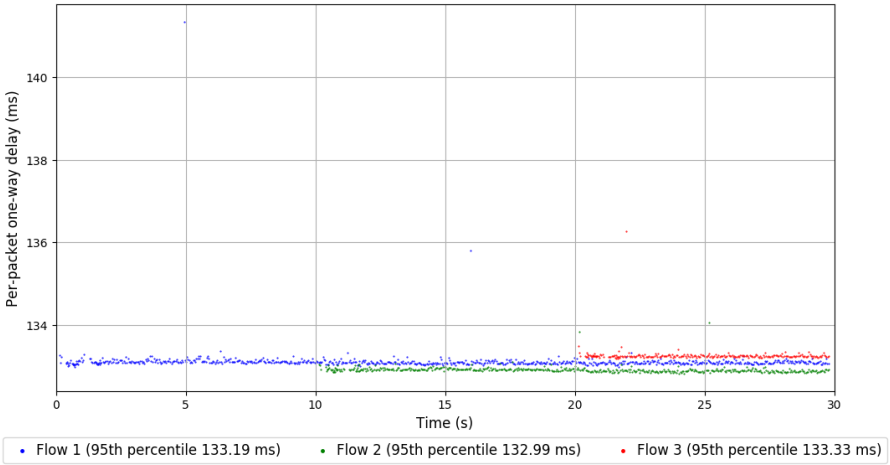
```
Run 2: Statistics of SCReAM

Start at: 2019-05-30 09:33:51
End at: 2019-05-30 09:34:21
Local clock offset: -0.088 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.261 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.193 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.986 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.326 ms
Loss rate: 2.45%
```

Run 2: Report of SCReAM — Data Link



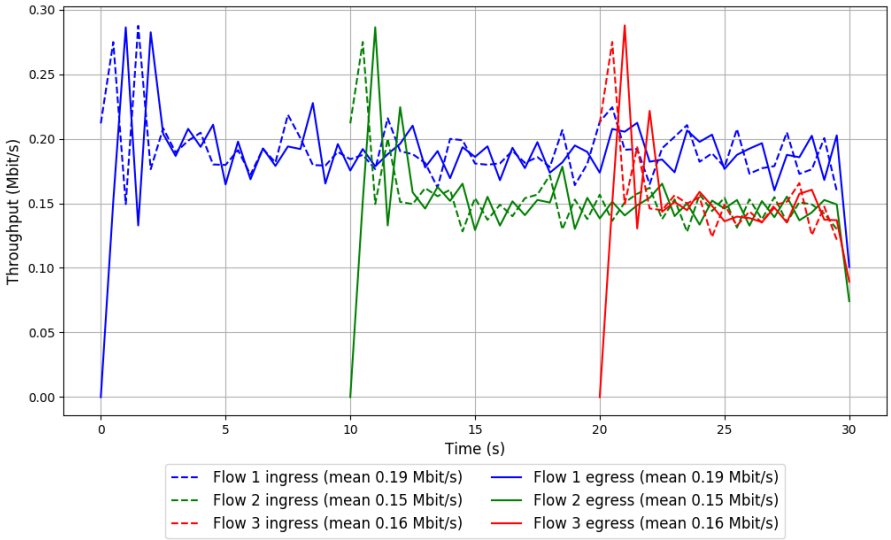


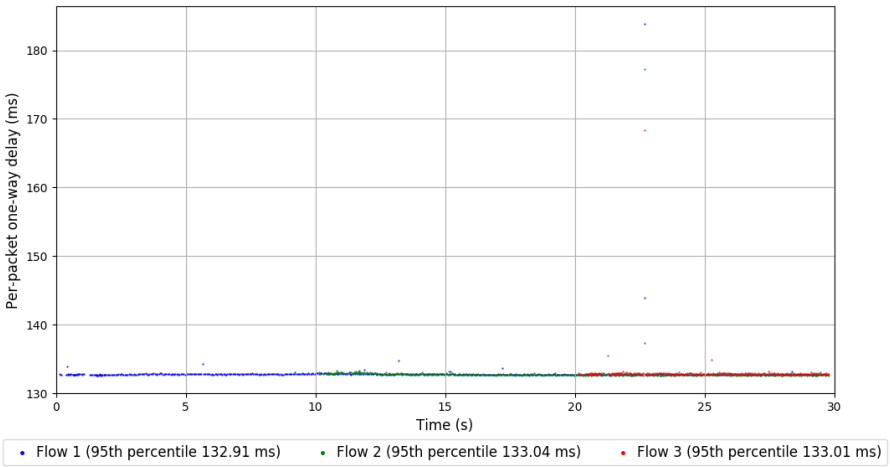
```
Run 3: Statistics of SCReAM

Start at: 2019-05-30 10:11:18
End at: 2019-05-30 10:11:48
Local clock offset: -0.441 ms
Remote clock offset: -0.622 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 132.992 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 132.914 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.041 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.015 ms
Loss rate: 2.45%
```

Run 3: Report of SCReAM — Data Link



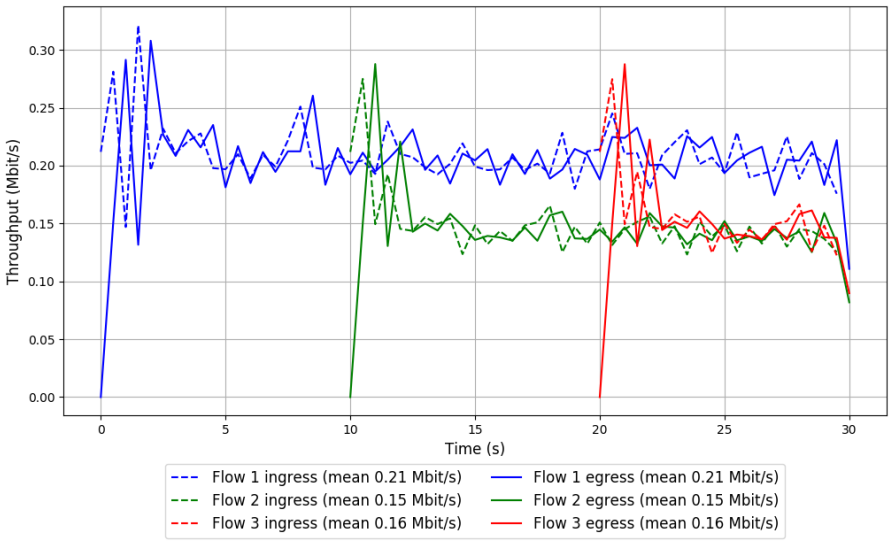


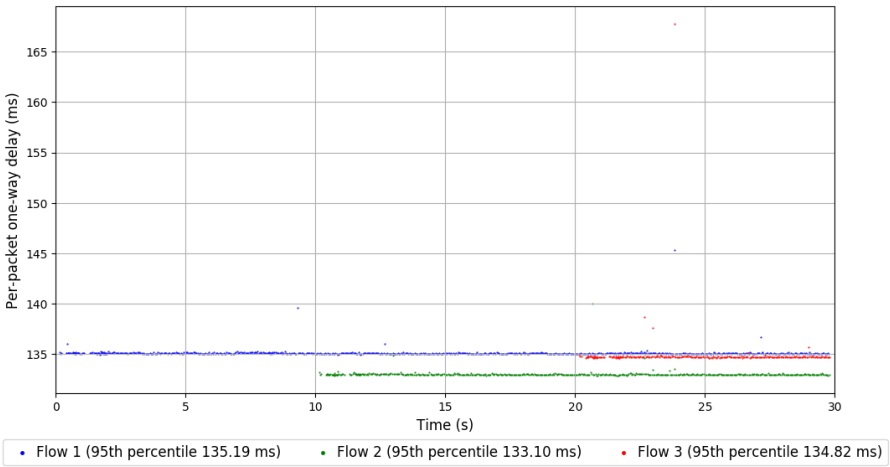
```
Run 4: Statistics of SCReAM

Start at: 2019-05-30 10:49:16
End at: 2019-05-30 10:49:46
Local clock offset: -0.262 ms
Remote clock offset: -0.805 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 135.158 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 135.188 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.103 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 134.821 ms
Loss rate: 2.44%
```

Run 4: Report of SCReAM — Data Link



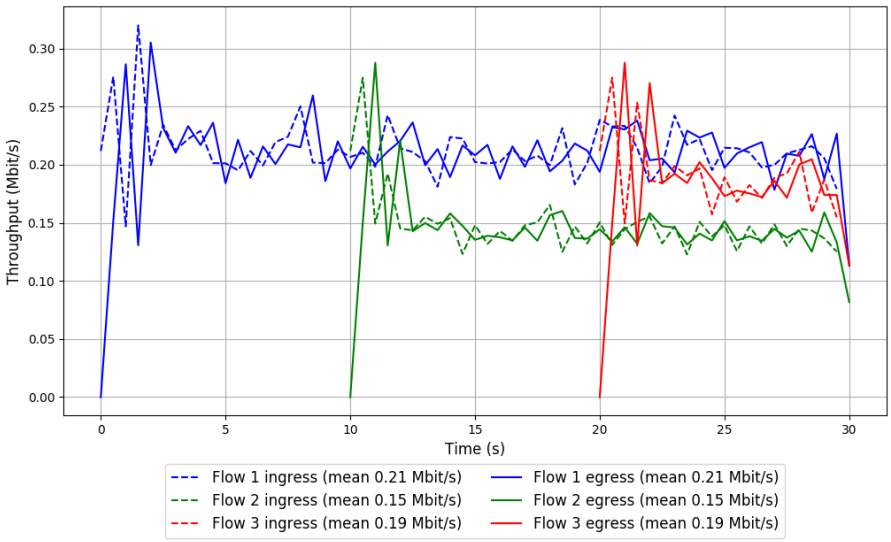


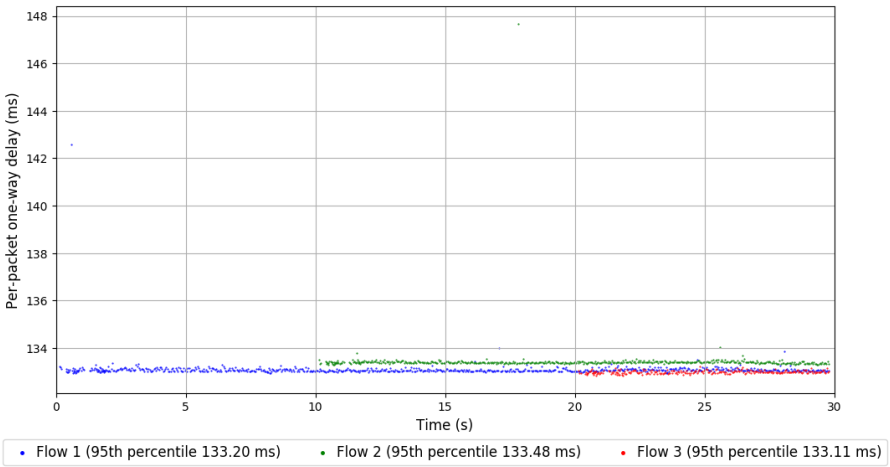
```
Run 5: Statistics of SCReAM

Start at: 2019-05-30 11:27:22
End at: 2019-05-30 11:27:52
Local clock offset: -0.06 ms
Remote clock offset: -1.005 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 133.441 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 133.199 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.484 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 133.106 ms
Loss rate: 2.54%
```

Run 5: Report of SCReAM — Data Link



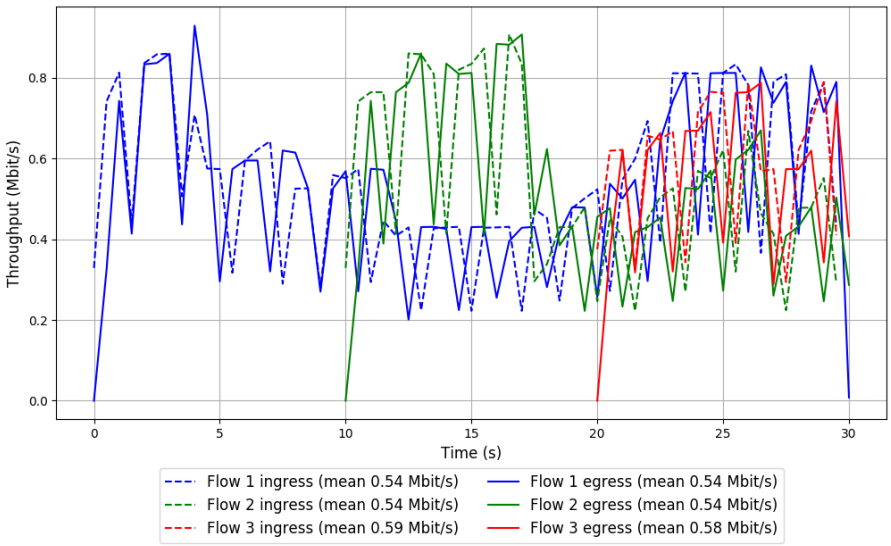


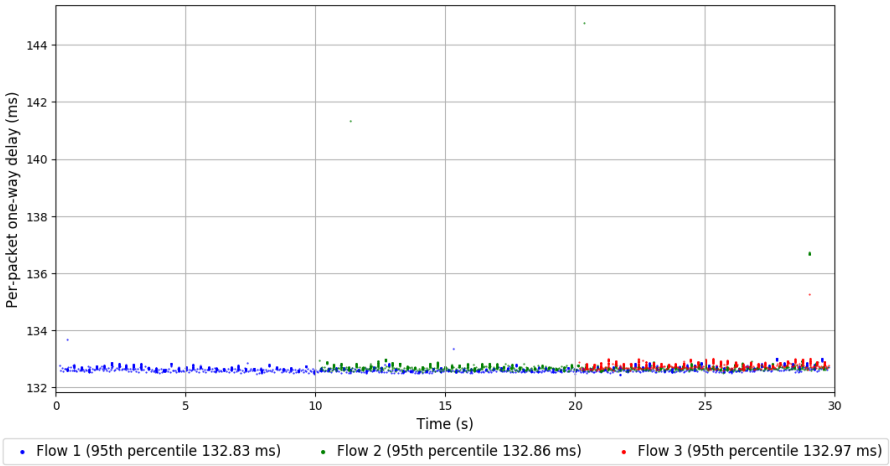
```
Run 1: Statistics of Sprout

Start at: 2019-05-30 09:09:34
End at: 2019-05-30 09:10:04
Local clock offset: -0.391 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 132.911 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 132.832 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 132.863 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 132.973 ms
Loss rate: 3.49%
```

Run 1: Report of Sprout — Data Link



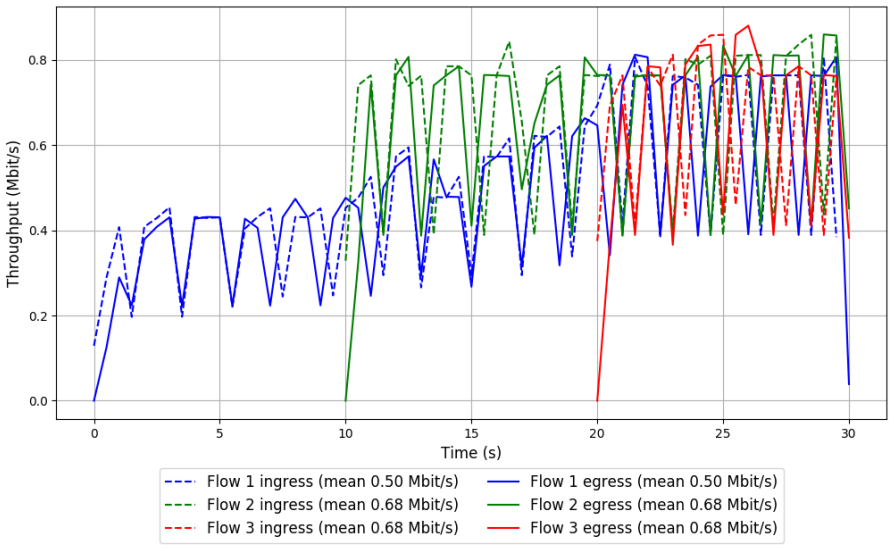


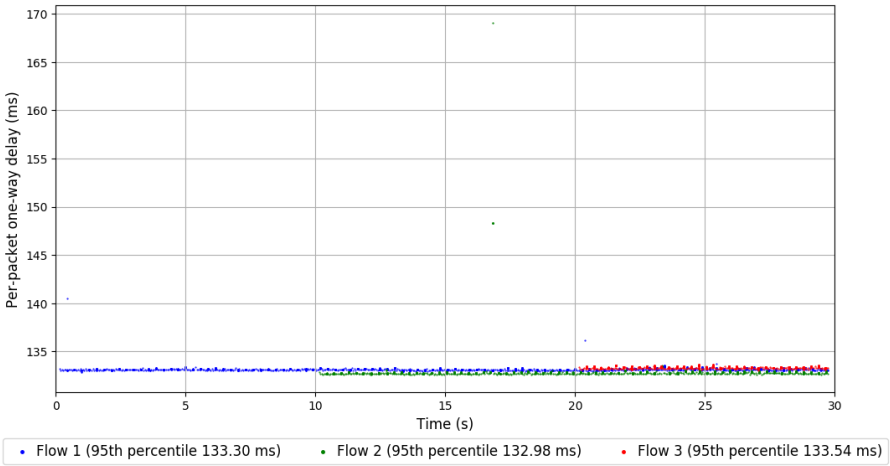
```
Run 2: Statistics of Sprout

Start at: 2019-05-30 09:47:06
End at: 2019-05-30 09:47:36
Local clock offset: 0.066 ms
Remote clock offset: -0.406 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 133.436 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 133.297 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 132.984 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 133.544 ms
Loss rate: 2.83%
```

Run 2: Report of Sprout — Data Link



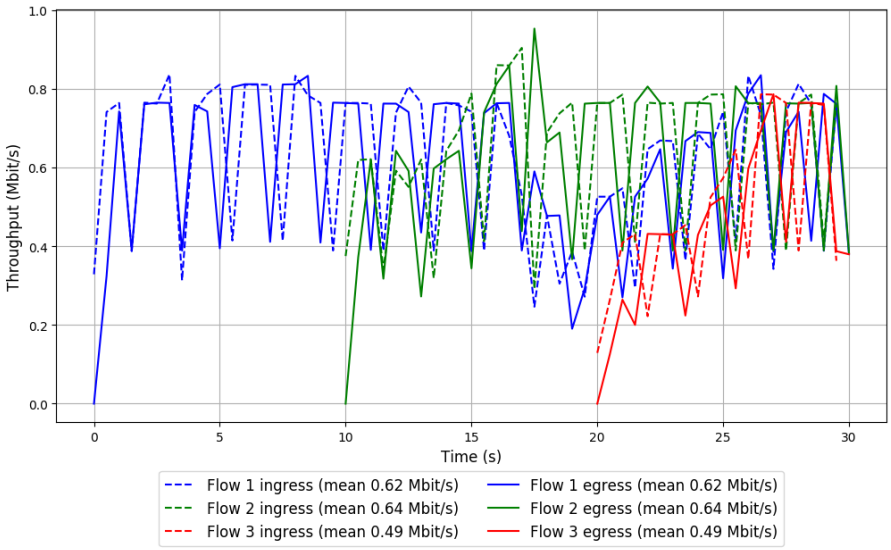


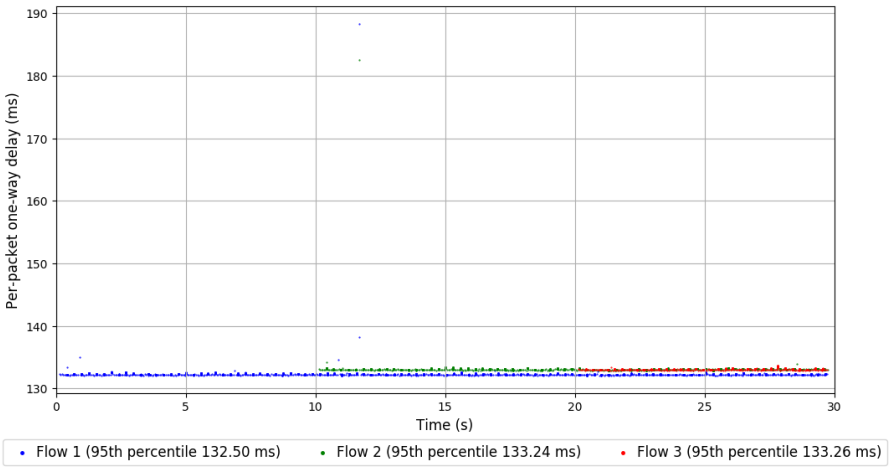
```
Run 3: Statistics of Sprout

Start at: 2019-05-30 10:24:58
End at: 2019-05-30 10:25:28
Local clock offset: -0.185 ms
Remote clock offset: -0.68 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 133.198 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 132.498 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 133.236 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 133.265 ms
Loss rate: 3.69%
```

Run 3: Report of Sprout — Data Link



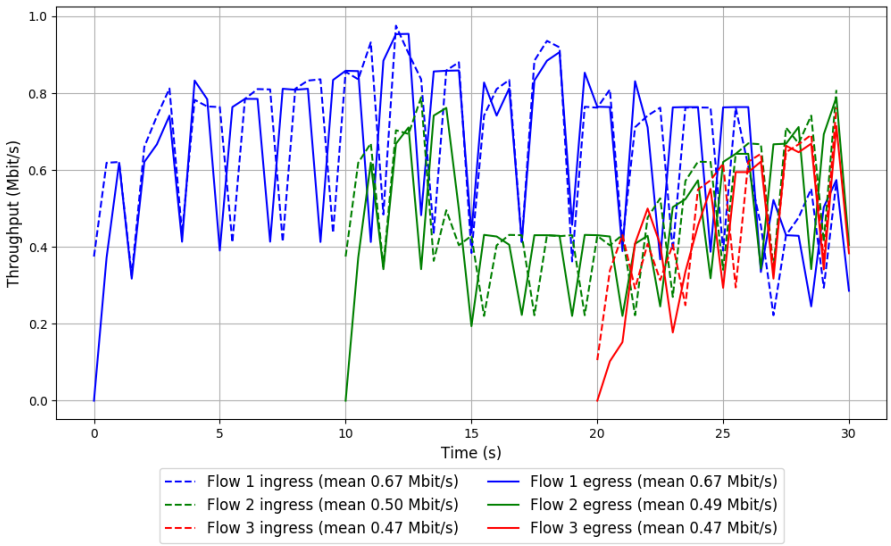


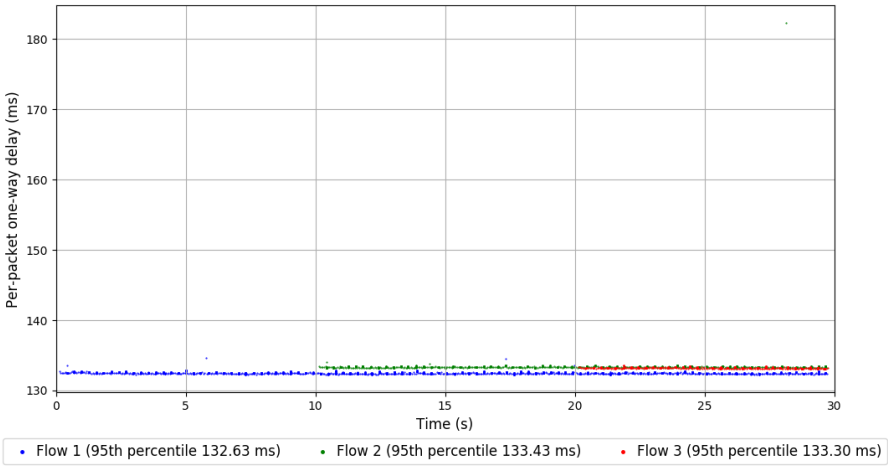
```
Run 4: Statistics of Sprout

Start at: 2019-05-30 11:02:42
End at: 2019-05-30 11:03:12
Local clock offset: 0.151 ms
Remote clock offset: -0.862 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 133.377 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 132.633 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 133.434 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 133.302 ms
Loss rate: 4.11%
```

Run 4: Report of Sprout — Data Link



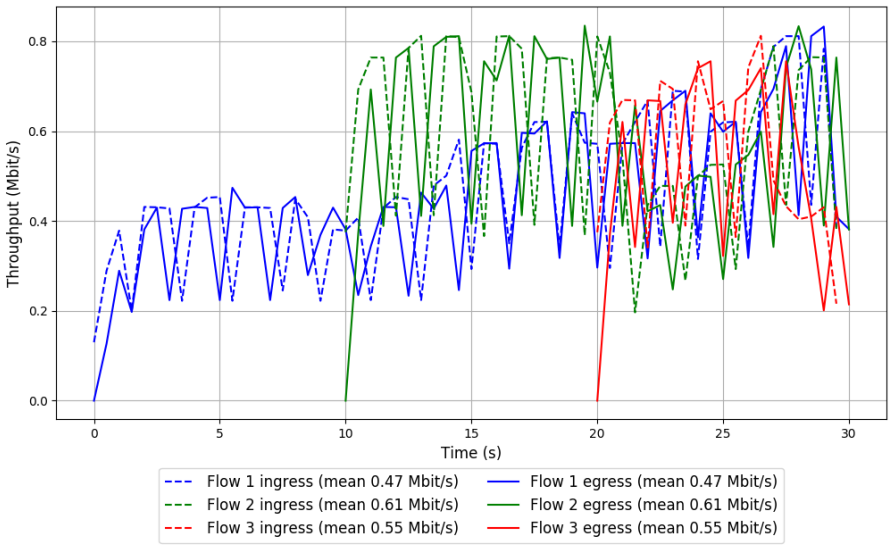


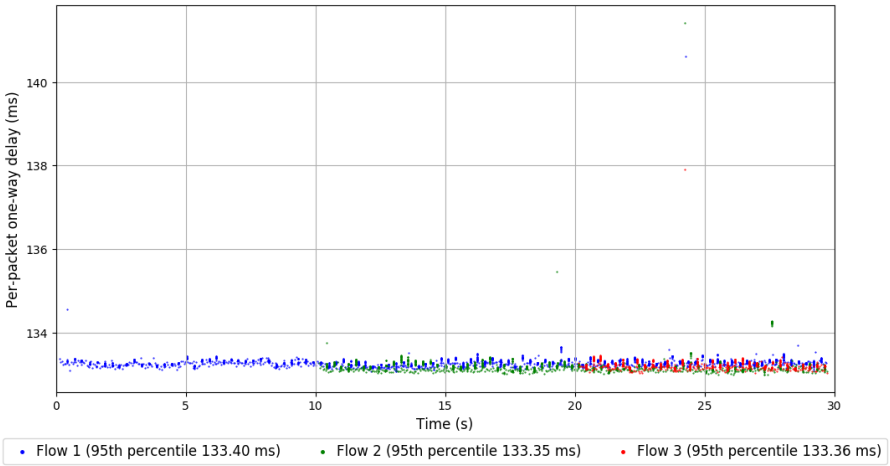
```
Run 5: Statistics of Sprout

Start at: 2019-05-30 11:40:51
End at: 2019-05-30 11:41:21
Local clock offset: 0.119 ms
Remote clock offset: -0.735 ms

# Below is generated by plot.py at 2019-05-30 13:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 133.387 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 133.402 ms
Loss rate: 1.37%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 133.353 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 133.358 ms
Loss rate: 1.96%
```

Run 5: Report of Sprout — Data Link



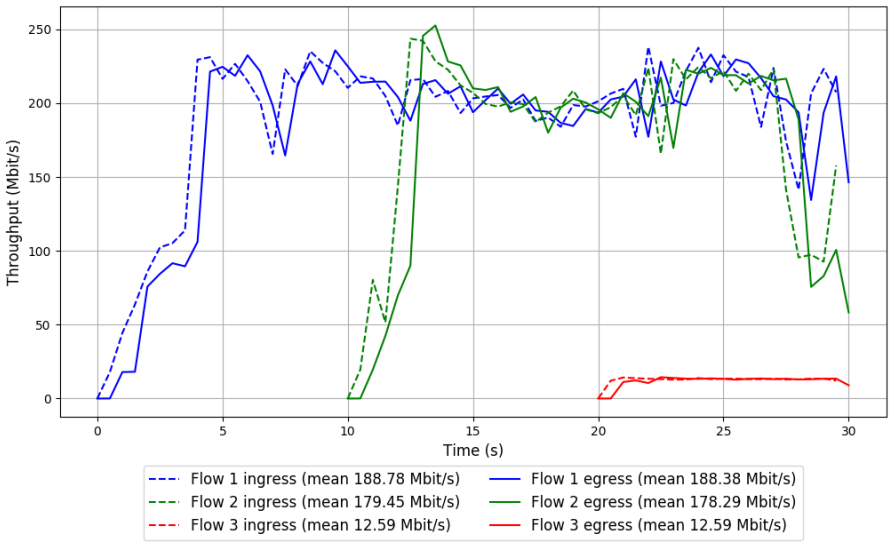


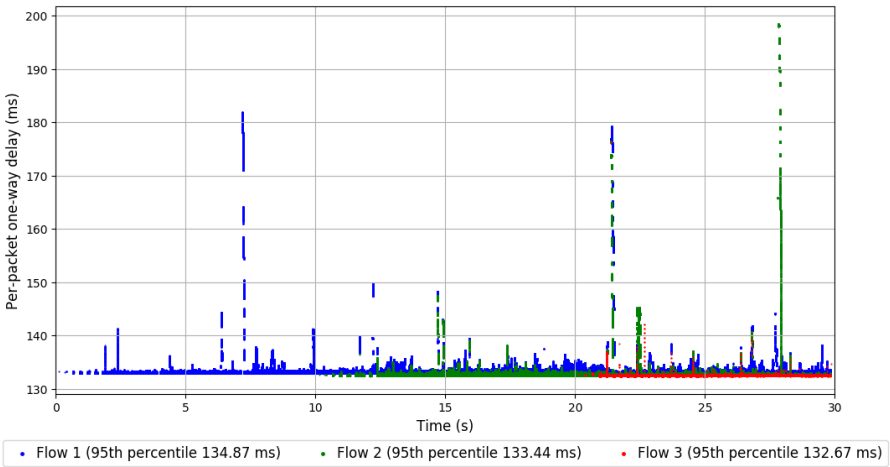
```
Run 1: Statistics of TaoVA-100x

Start at: 2019-05-30 08:59:33
End at: 2019-05-30 09:00:03
Local clock offset: 0.155 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2019-05-30 13:55:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.68 Mbit/s
95th percentile per-packet one-way delay: 134.558 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 188.38 Mbit/s
95th percentile per-packet one-way delay: 134.874 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 178.29 Mbit/s
95th percentile per-packet one-way delay: 133.442 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 132.673 ms
Loss rate: 2.68%
```

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



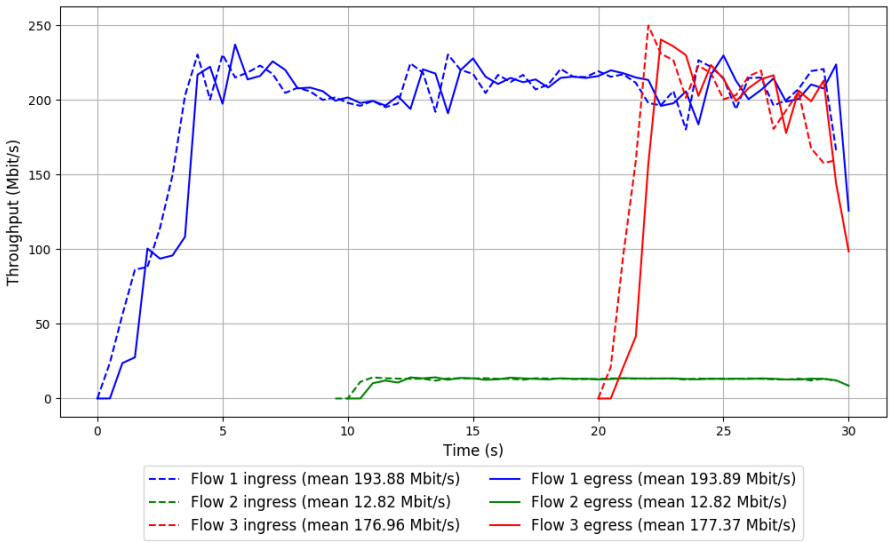


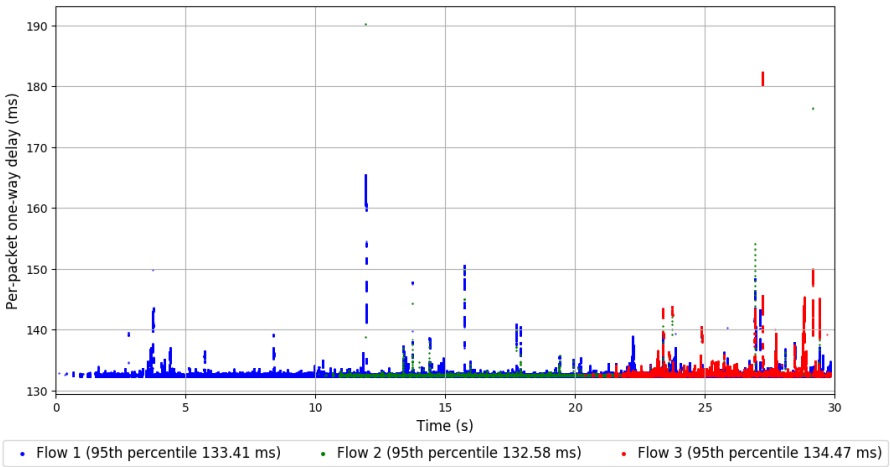
```
Run 2: Statistics of TaoVA-100x

Start at: 2019-05-30 09:37:11
End at: 2019-05-30 09:37:41
Local clock offset: -0.055 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2019-05-30 13:55:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.32 Mbit/s
95th percentile per-packet one-way delay: 133.588 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 193.89 Mbit/s
95th percentile per-packet one-way delay: 133.415 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 132.583 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 177.37 Mbit/s
95th percentile per-packet one-way delay: 134.473 ms
Loss rate: 2.46%
```

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



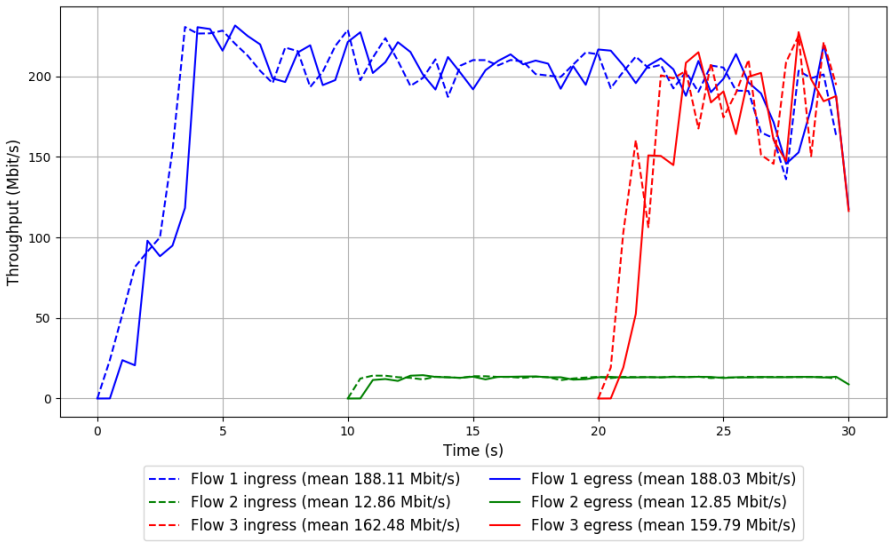


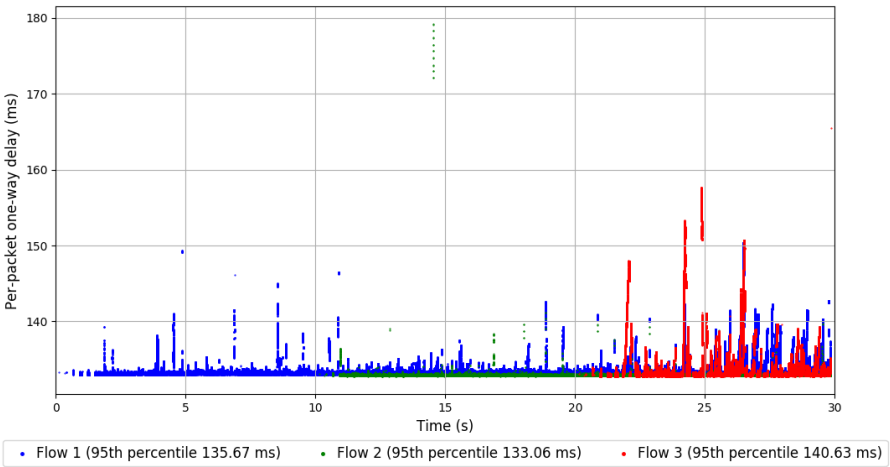
```
Run 3: Statistics of TaoVA-100x

Start at: 2019-05-30 10:14:40
End at: 2019-05-30 10:15:10
Local clock offset: -0.202 ms
Remote clock offset: -0.596 ms

# Below is generated by plot.py at 2019-05-30 13:55:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.68 Mbit/s
95th percentile per-packet one-way delay: 136.972 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 188.03 Mbit/s
95th percentile per-packet one-way delay: 135.674 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 133.062 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 159.79 Mbit/s
95th percentile per-packet one-way delay: 140.630 ms
Loss rate: 4.17%
```

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



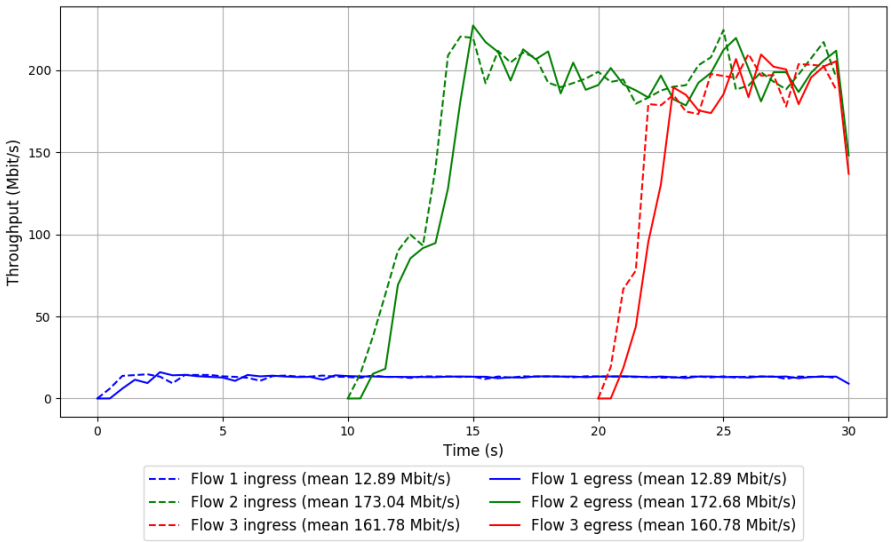


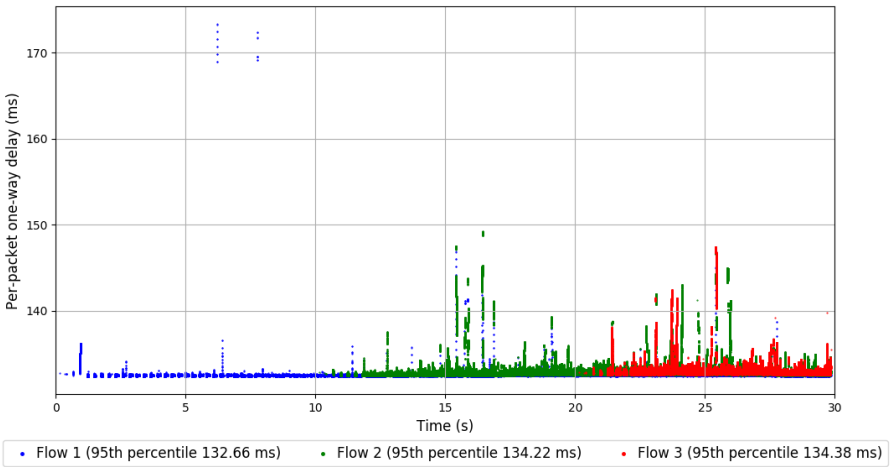
```
Run 4: Statistics of TaoVA-100x

Start at: 2019-05-30 10:52:34
End at: 2019-05-30 10:53:04
Local clock offset: -0.431 ms
Remote clock offset: -0.855 ms

# Below is generated by plot.py at 2019-05-30 13:55:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.85 Mbit/s
95th percentile per-packet one-way delay: 134.186 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 132.659 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 172.68 Mbit/s
95th percentile per-packet one-way delay: 134.224 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 160.78 Mbit/s
95th percentile per-packet one-way delay: 134.384 ms
Loss rate: 3.24%
```

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



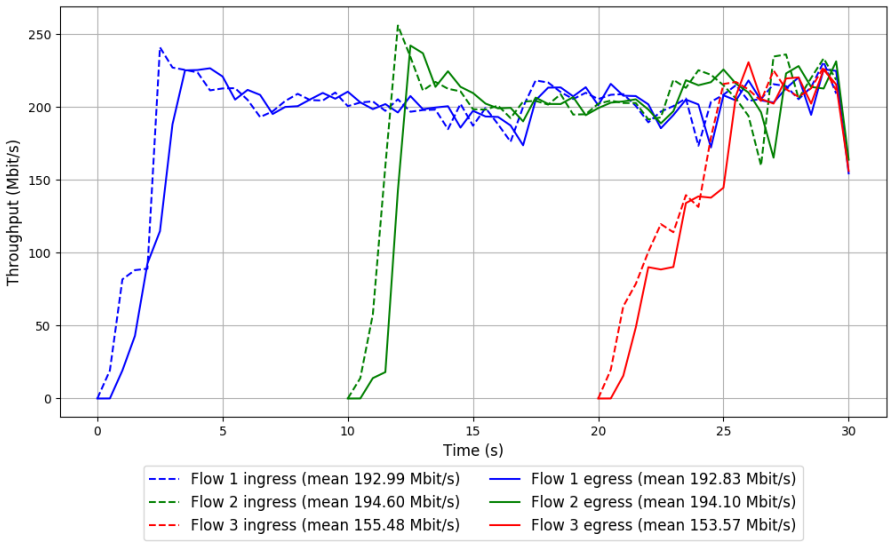


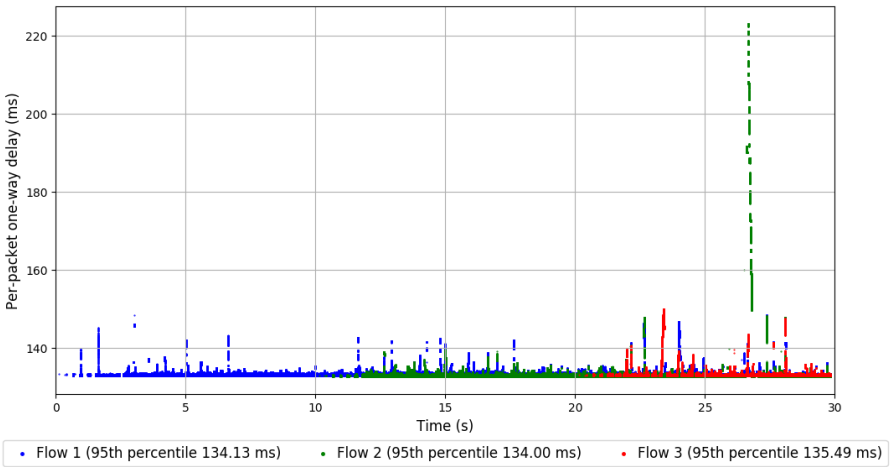
```
Run 5: Statistics of TaoVA-100x

Start at: 2019-05-30 11:30:43
End at: 2019-05-30 11:31:13
Local clock offset: -0.245 ms
Remote clock offset: -1.054 ms

# Below is generated by plot.py at 2019-05-30 13:59:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.58 Mbit/s
95th percentile per-packet one-way delay: 134.186 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 192.83 Mbit/s
95th percentile per-packet one-way delay: 134.130 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 194.10 Mbit/s
95th percentile per-packet one-way delay: 133.999 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 153.57 Mbit/s
95th percentile per-packet one-way delay: 135.490 ms
Loss rate: 3.78%
```

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



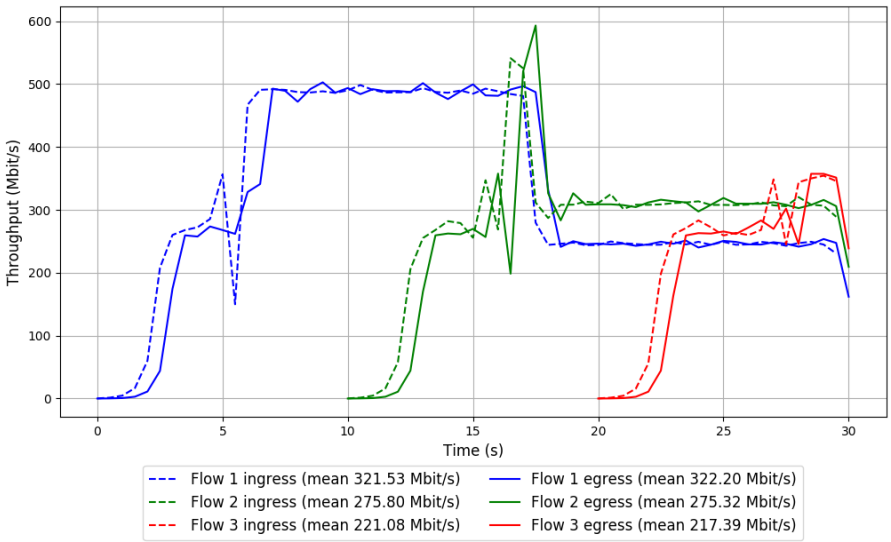


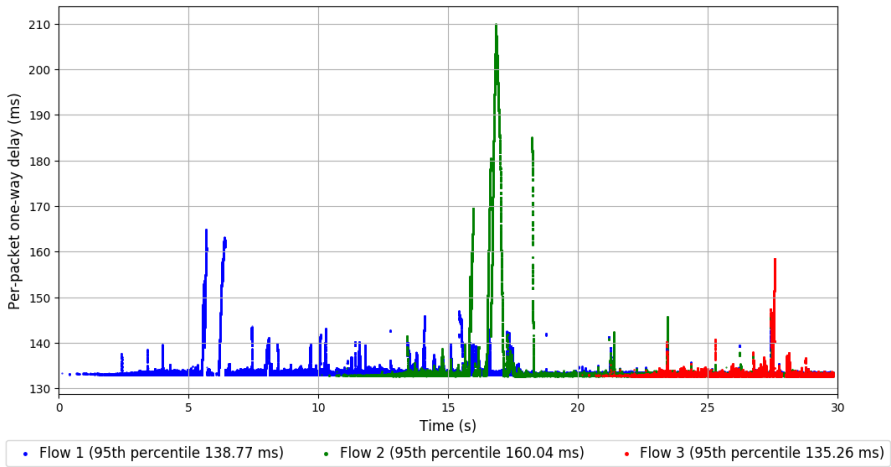
```
Run 1: Statistics of TCP Vegas

Start at: 2019-05-30 08:52:22
End at: 2019-05-30 08:52:52
Local clock offset: 0.127 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-05-30 13:59:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.69 Mbit/s
95th percentile per-packet one-way delay: 140.169 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 322.20 Mbit/s
95th percentile per-packet one-way delay: 138.767 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 275.32 Mbit/s
95th percentile per-packet one-way delay: 160.045 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 217.39 Mbit/s
95th percentile per-packet one-way delay: 135.259 ms
Loss rate: 4.30%
```

Run 1: Report of TCP Vegas — Data Link



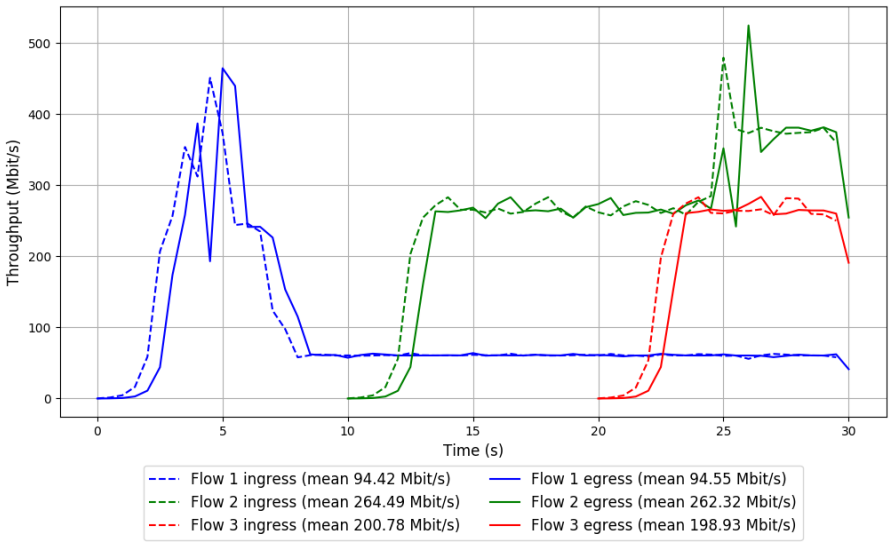


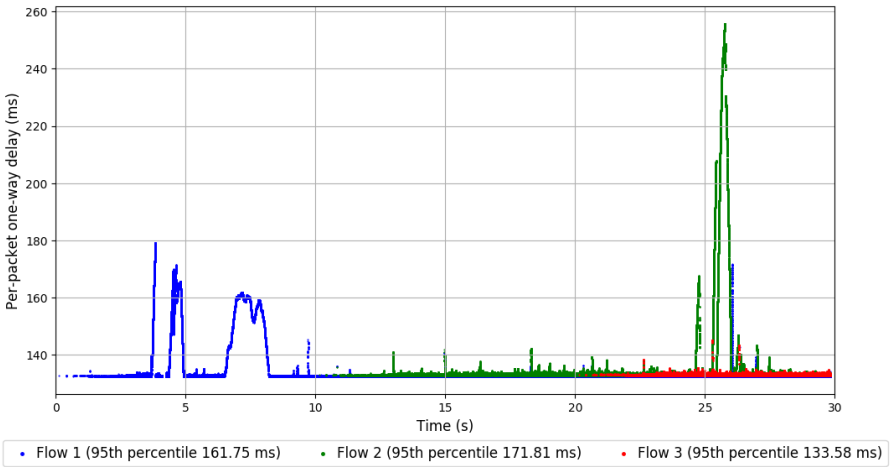
```
Run 2: Statistics of TCP Vegas

Start at: 2019-05-30 09:30:14
End at: 2019-05-30 09:30:44
Local clock offset: -0.433 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2019-05-30 13:59:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.40 Mbit/s
95th percentile per-packet one-way delay: 160.816 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 94.55 Mbit/s
95th percentile per-packet one-way delay: 161.748 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 262.32 Mbit/s
95th percentile per-packet one-way delay: 171.807 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 198.93 Mbit/s
95th percentile per-packet one-way delay: 133.583 ms
Loss rate: 3.56%
```

Run 2: Report of TCP Vegas — Data Link



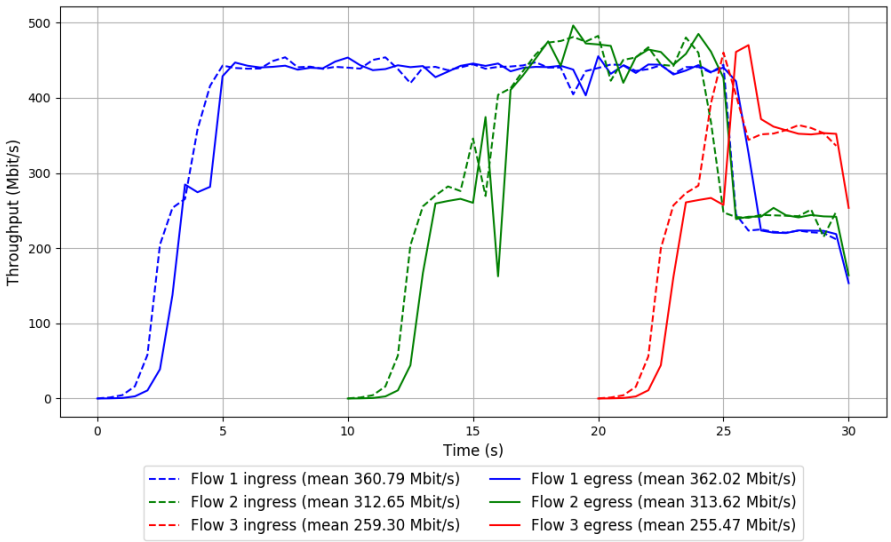


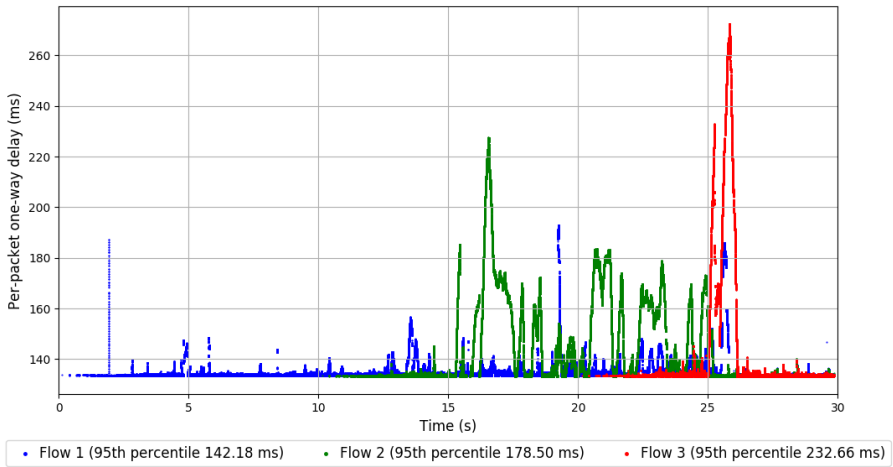
```
Run 3: Statistics of TCP Vegas

Start at: 2019-05-30 10:07:21
End at: 2019-05-30 10:07:51
Local clock offset: 0.202 ms
Remote clock offset: -0.568 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 653.36 Mbit/s
95th percentile per-packet one-way delay: 173.004 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 362.02 Mbit/s
95th percentile per-packet one-way delay: 142.183 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 313.62 Mbit/s
95th percentile per-packet one-way delay: 178.501 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 255.47 Mbit/s
95th percentile per-packet one-way delay: 232.664 ms
Loss rate: 4.10%
```

Run 3: Report of TCP Vegas — Data Link



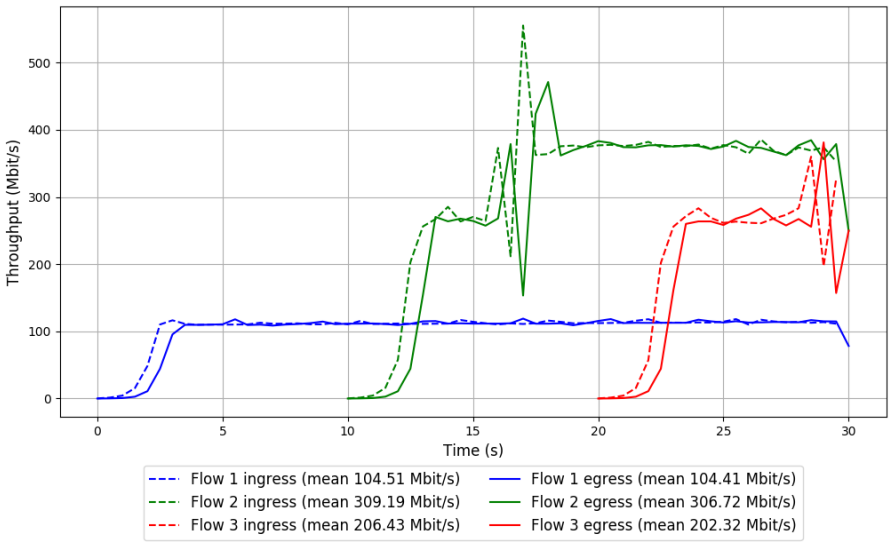


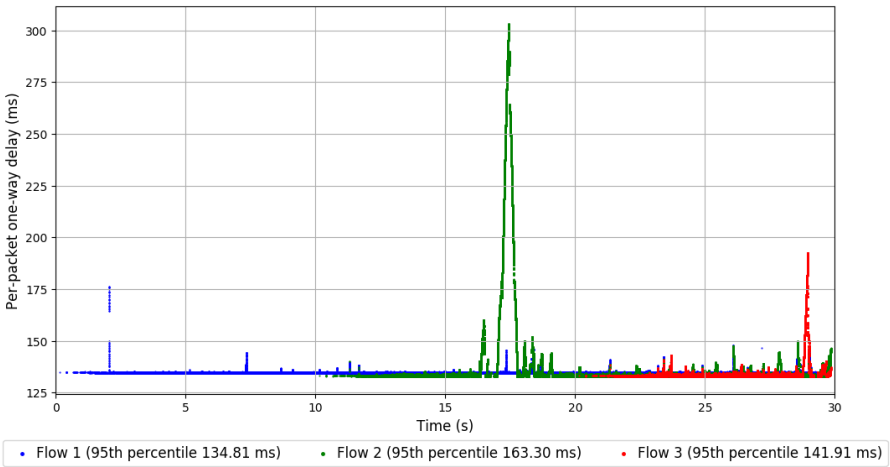
```
Run 4: Statistics of TCP Vegas

Start at: 2019-05-30 10:45:38
End at: 2019-05-30 10:46:08
Local clock offset: 0.045 ms
Remote clock offset: -0.747 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 373.90 Mbit/s
95th percentile per-packet one-way delay: 144.659 ms
Loss rate: 2.26%
-- Flow 1:
Average throughput: 104.41 Mbit/s
95th percentile per-packet one-way delay: 134.807 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 306.72 Mbit/s
95th percentile per-packet one-way delay: 163.303 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 202.32 Mbit/s
95th percentile per-packet one-way delay: 141.911 ms
Loss rate: 4.61%
```

Run 4: Report of TCP Vegas — Data Link



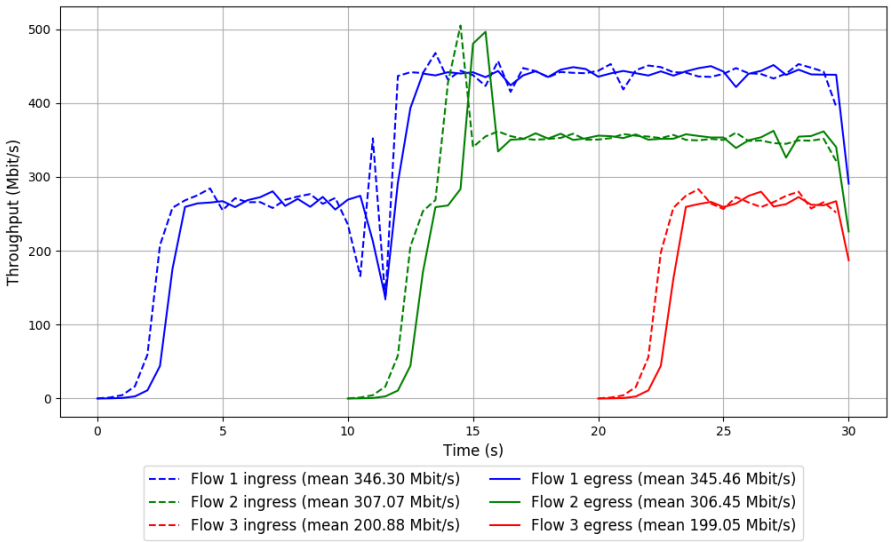


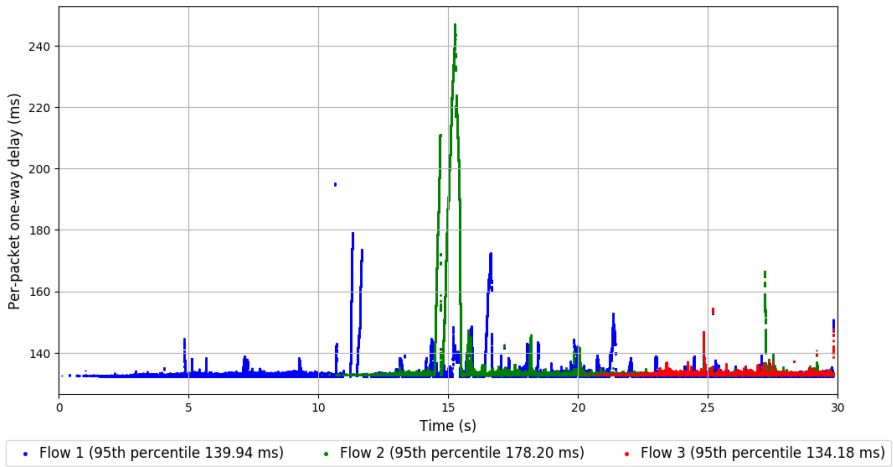
```
Run 5: Statistics of TCP Vegas

Start at: 2019-05-30 11:23:30
End at: 2019-05-30 11:24:00
Local clock offset: -0.117 ms
Remote clock offset: -0.989 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 613.70 Mbit/s
95th percentile per-packet one-way delay: 141.761 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 345.46 Mbit/s
95th percentile per-packet one-way delay: 139.944 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 306.45 Mbit/s
95th percentile per-packet one-way delay: 178.203 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 199.05 Mbit/s
95th percentile per-packet one-way delay: 134.176 ms
Loss rate: 3.57%
```

Run 5: Report of TCP Vegas — Data Link



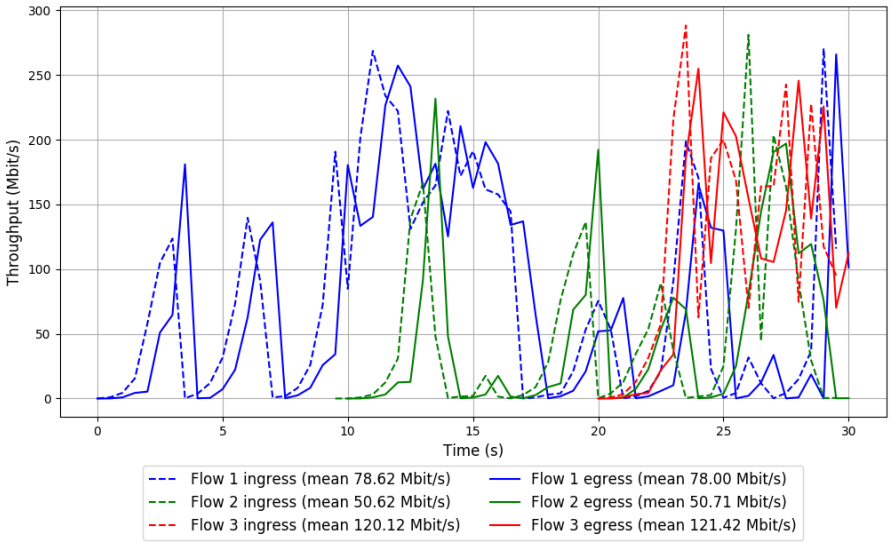


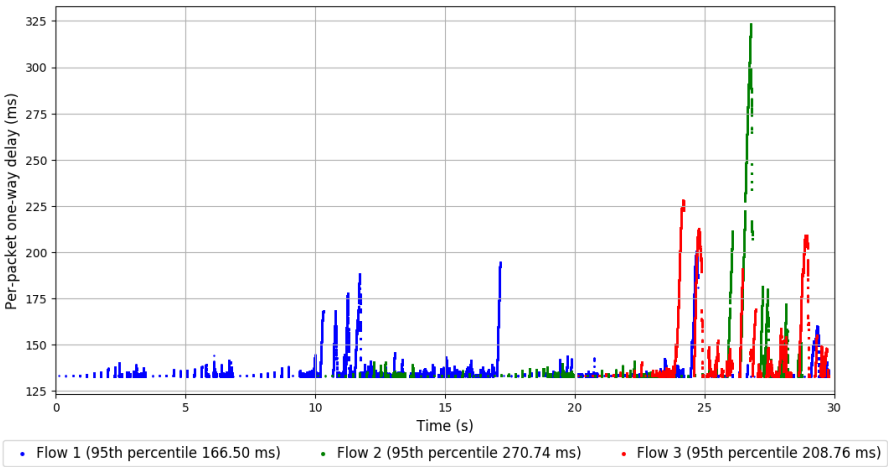
```
Run 1: Statistics of Verus

Start at: 2019-05-30 09:16:49
End at: 2019-05-30 09:17:19
Local clock offset: 0.156 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.70 Mbit/s
95th percentile per-packet one-way delay: 201.468 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 78.00 Mbit/s
95th percentile per-packet one-way delay: 166.495 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 50.71 Mbit/s
95th percentile per-packet one-way delay: 270.742 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 121.42 Mbit/s
95th percentile per-packet one-way delay: 208.765 ms
Loss rate: 1.77%
```

Run 1: Report of Verus — Data Link



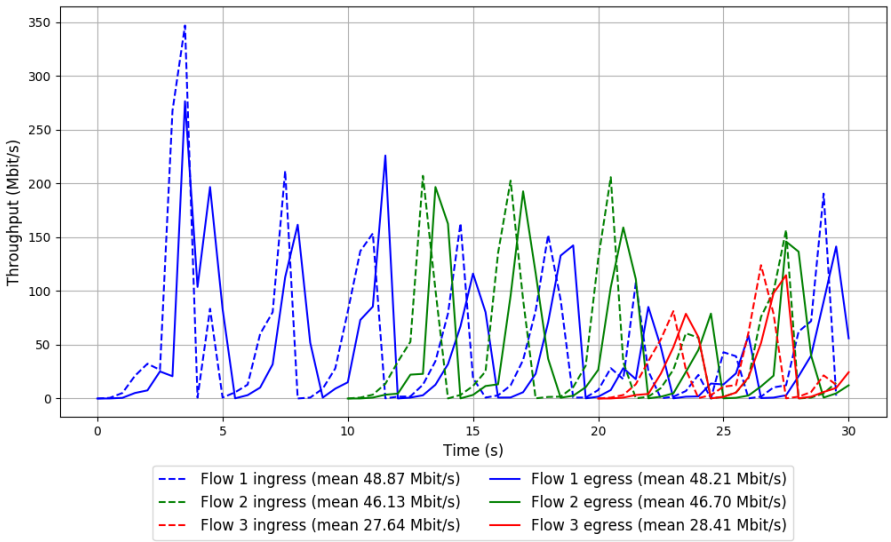


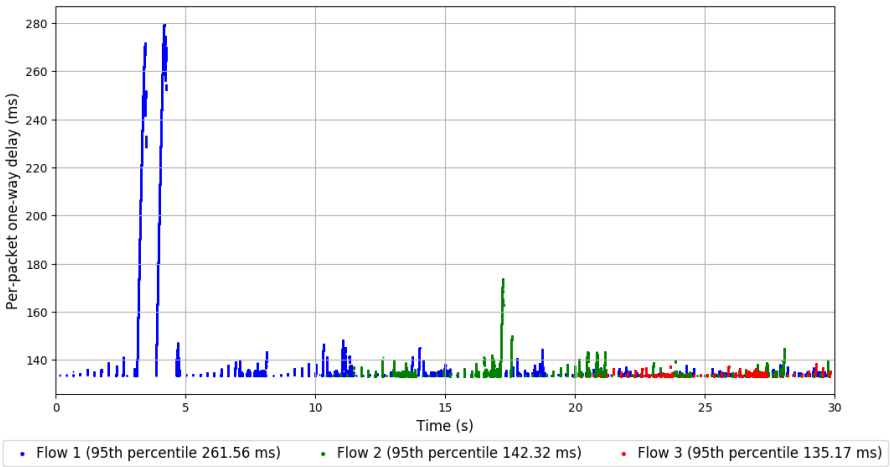
```
Run 2: Statistics of Verus

Start at: 2019-05-30 09:54:08
End at: 2019-05-30 09:54:38
Local clock offset: 0.25 ms
Remote clock offset: -0.464 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 238.662 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 261.559 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 142.322 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 135.168 ms
Loss rate: 0.01%
```

Run 2: Report of Verus — Data Link



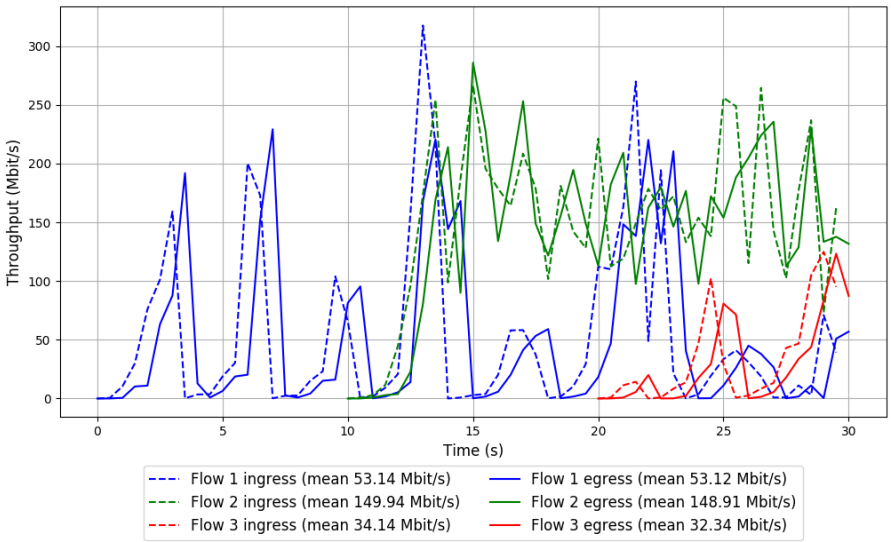


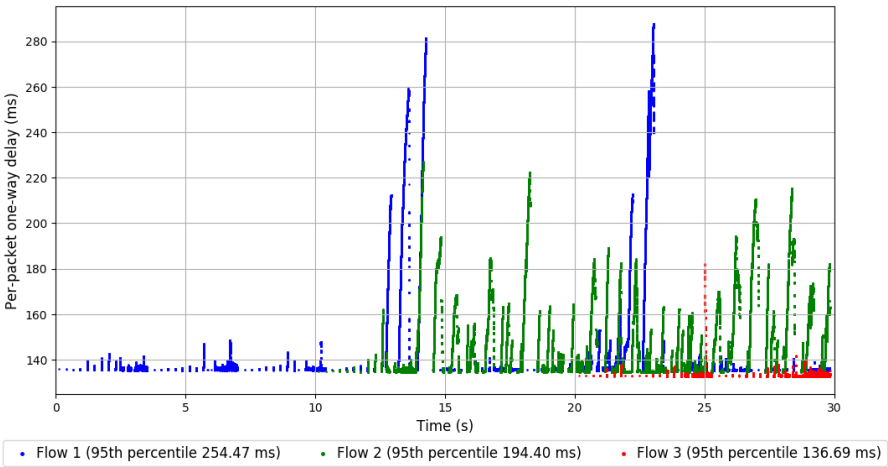
```
Run 3: Statistics of Verus

Start at: 2019-05-30 10:32:15
End at: 2019-05-30 10:32:45
Local clock offset: -0.256 ms
Remote clock offset: -0.692 ms

# Below is generated by plot.py at 2019-05-30 14:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 162.39 Mbit/s
95th percentile per-packet one-way delay: 214.720 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 53.12 Mbit/s
95th percentile per-packet one-way delay: 254.466 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 148.91 Mbit/s
95th percentile per-packet one-way delay: 194.403 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 136.686 ms
Loss rate: 6.43%
```

Run 3: Report of Verus — Data Link



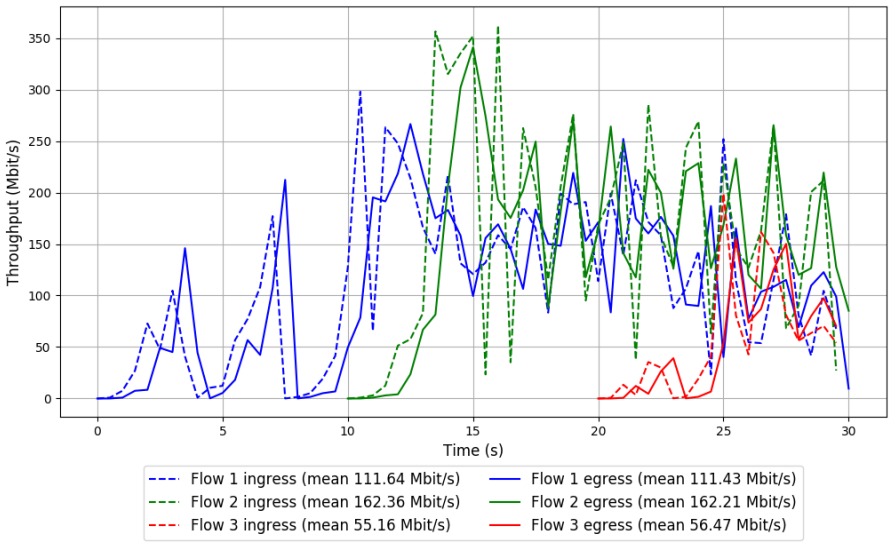


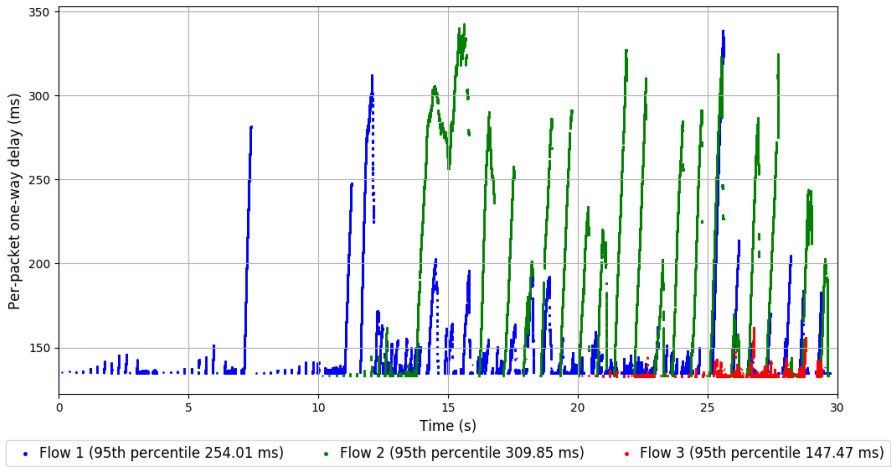
```
Run 4: Statistics of Verus

Start at: 2019-05-30 11:09:47
End at: 2019-05-30 11:10:17
Local clock offset: 0.221 ms
Remote clock offset: -0.894 ms

# Below is generated by plot.py at 2019-05-30 14:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.99 Mbit/s
95th percentile per-packet one-way delay: 296.195 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 111.43 Mbit/s
95th percentile per-packet one-way delay: 254.008 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 162.21 Mbit/s
95th percentile per-packet one-way delay: 309.847 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 56.47 Mbit/s
95th percentile per-packet one-way delay: 147.465 ms
Loss rate: 4.94%
```

Run 4: Report of Verus — Data Link



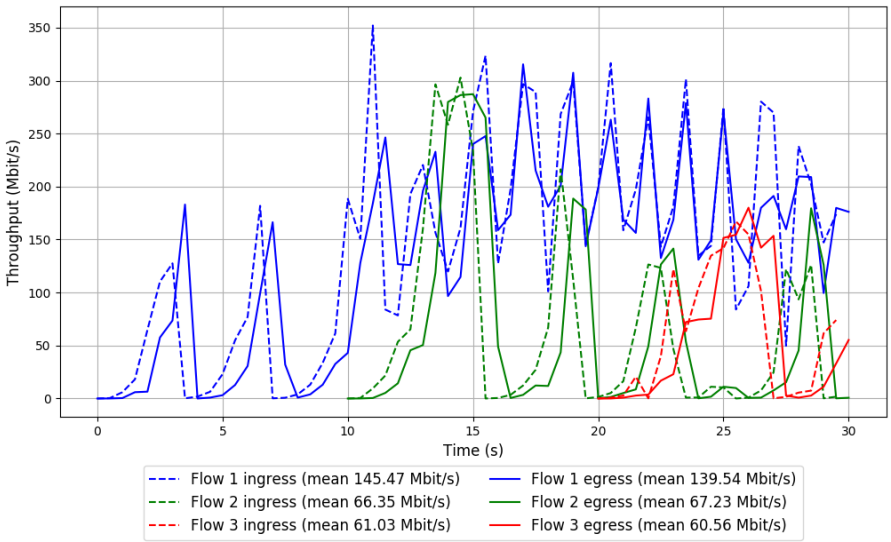


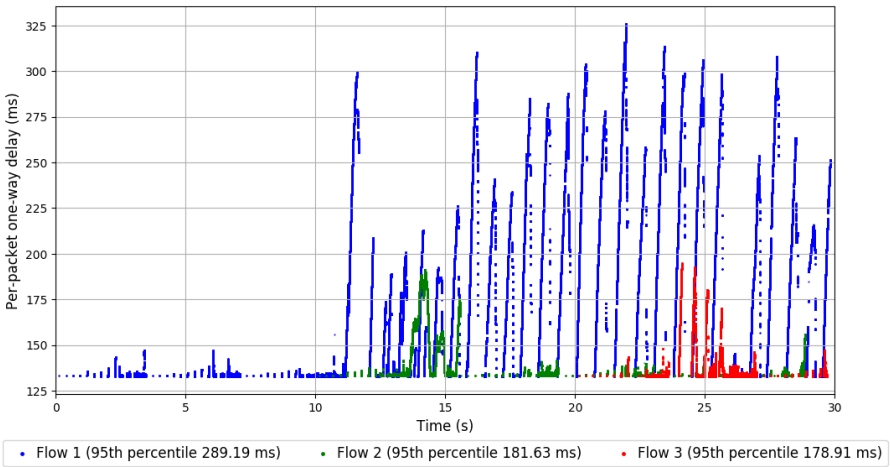
```
Run 5: Statistics of Verus

Start at: 2019-05-30 11:48:06
End at: 2019-05-30 11:48:36
Local clock offset: -0.081 ms
Remote clock offset: -1.131 ms

# Below is generated by plot.py at 2019-05-30 14:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.28 Mbit/s
95th percentile per-packet one-way delay: 281.745 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 139.54 Mbit/s
95th percentile per-packet one-way delay: 289.185 ms
Loss rate: 4.51%
-- Flow 2:
Average throughput: 67.23 Mbit/s
95th percentile per-packet one-way delay: 181.628 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 178.911 ms
Loss rate: 3.92%
```

Run 5: Report of Verus — Data Link



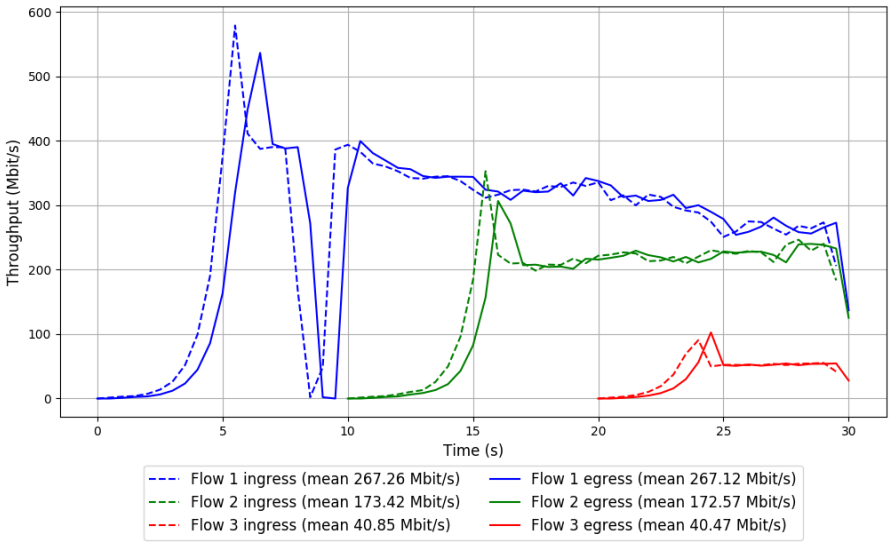


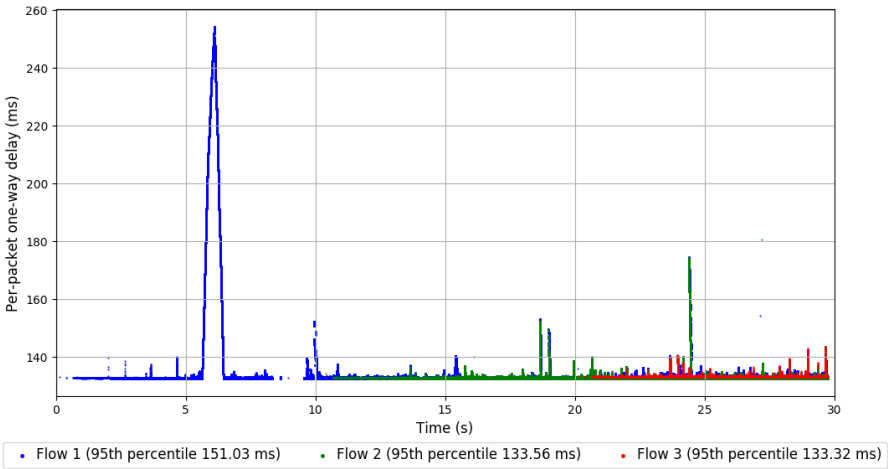
```
Run 1: Statistics of PCC-Vivace

Start at: 2019-05-30 09:02:46
End at: 2019-05-30 09:03:16
Local clock offset: 0.329 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2019-05-30 14:07:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 394.45 Mbit/s
95th percentile per-packet one-way delay: 138.408 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 267.12 Mbit/s
95th percentile per-packet one-way delay: 151.032 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 172.57 Mbit/s
95th percentile per-packet one-way delay: 133.560 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 133.317 ms
Loss rate: 3.64%
```

Run 1: Report of PCC-Vivace — Data Link



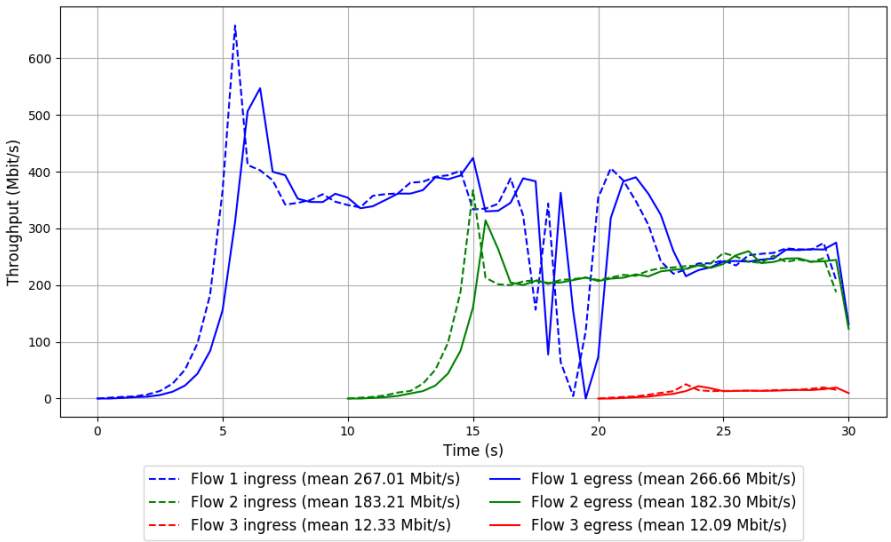


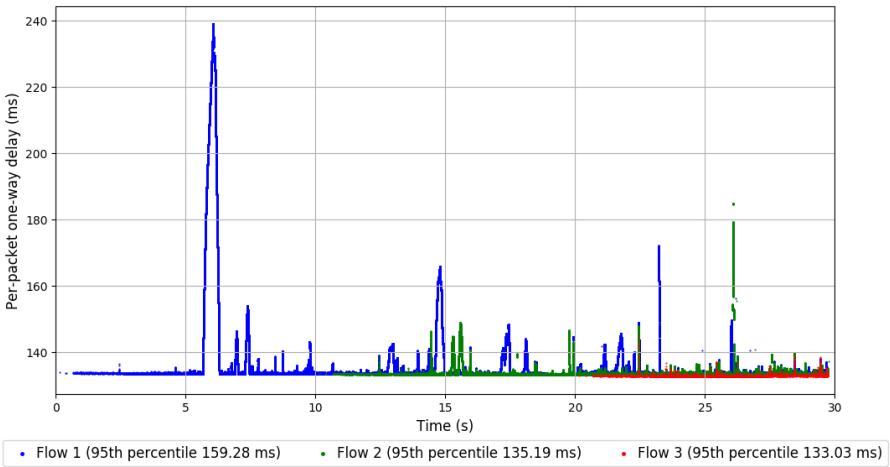
```
Run 2: Statistics of PCC-Vivace

Start at: 2019-05-30 09:40:17
End at: 2019-05-30 09:40:47
Local clock offset: 0.302 ms
Remote clock offset: -0.346 ms

# Below is generated by plot.py at 2019-05-30 14:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.25 Mbit/s
95th percentile per-packet one-way delay: 145.567 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 266.66 Mbit/s
95th percentile per-packet one-way delay: 159.281 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 182.30 Mbit/s
95th percentile per-packet one-way delay: 135.189 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 133.025 ms
Loss rate: 4.58%
```

Run 2: Report of PCC-Vivace — Data Link



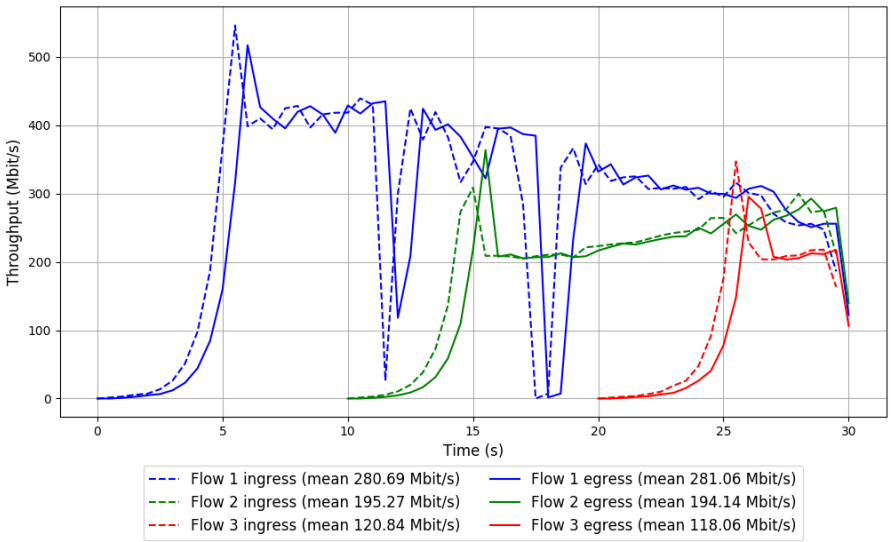


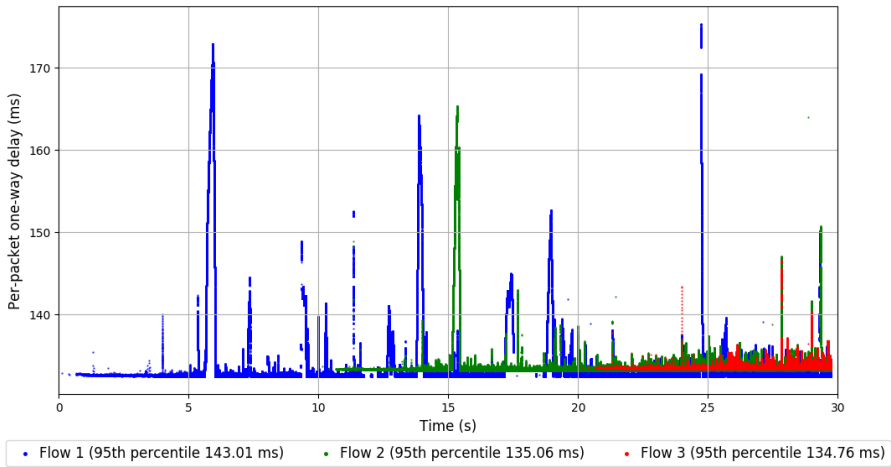
```
Run 3: Statistics of PCC-Vivace

Start at: 2019-05-30 10:17:45
End at: 2019-05-30 10:18:15
Local clock offset: 0.257 ms
Remote clock offset: -0.657 ms

# Below is generated by plot.py at 2019-05-30 14:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.82 Mbit/s
95th percentile per-packet one-way delay: 141.324 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 281.06 Mbit/s
95th percentile per-packet one-way delay: 143.015 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 194.14 Mbit/s
95th percentile per-packet one-way delay: 135.061 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 118.06 Mbit/s
95th percentile per-packet one-way delay: 134.759 ms
Loss rate: 4.94%
```

Run 3: Report of PCC-Vivace — Data Link



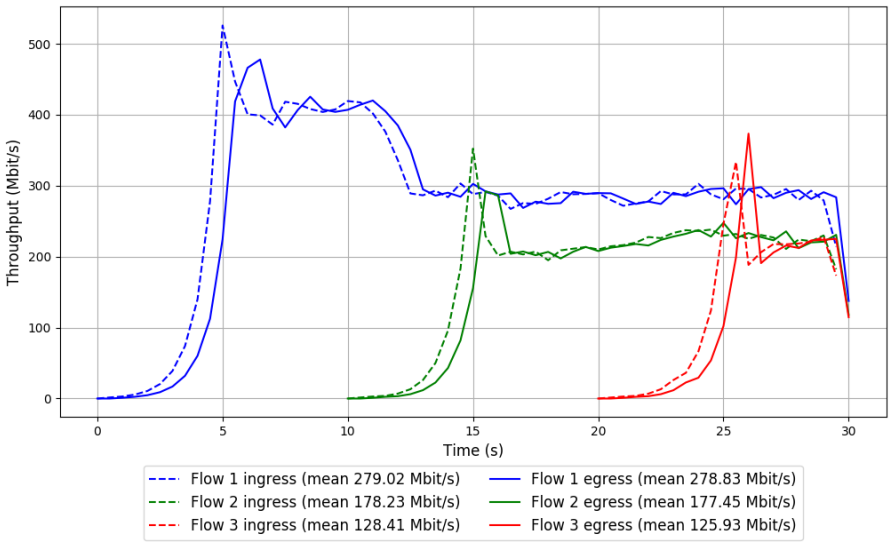


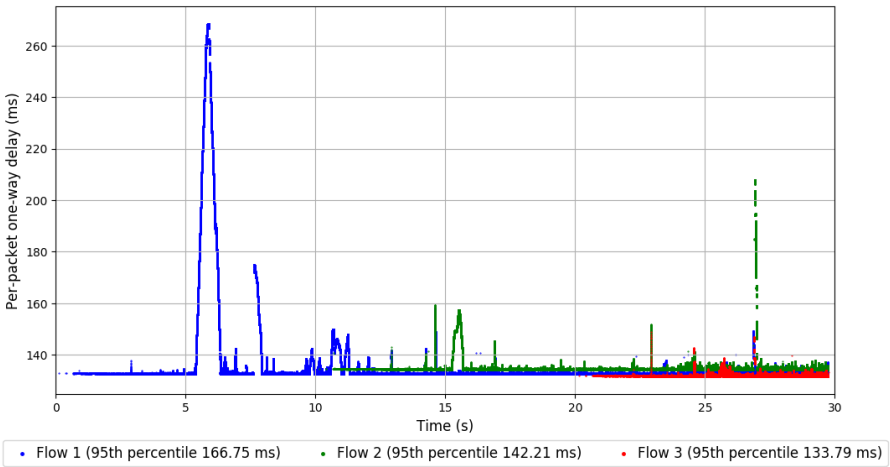
```
Run 4: Statistics of PCC-Vivace

Start at: 2019-05-30 10:55:32
End at: 2019-05-30 10:56:02
Local clock offset: -0.415 ms
Remote clock offset: -0.845 ms

# Below is generated by plot.py at 2019-05-30 14:08:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.04 Mbit/s
95th percentile per-packet one-way delay: 149.444 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 278.83 Mbit/s
95th percentile per-packet one-way delay: 166.750 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 177.45 Mbit/s
95th percentile per-packet one-way delay: 142.207 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 125.93 Mbit/s
95th percentile per-packet one-way delay: 133.786 ms
Loss rate: 4.56%
```

Run 4: Report of PCC-Vivace — Data Link



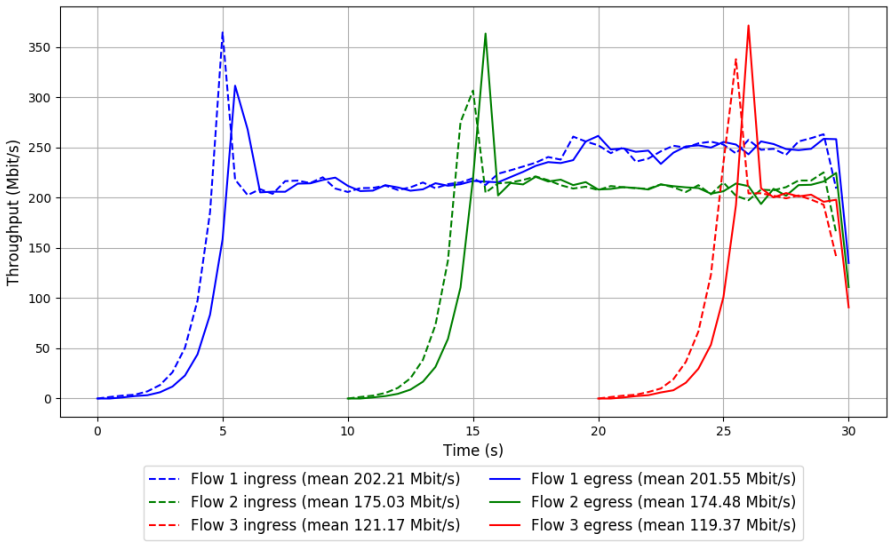


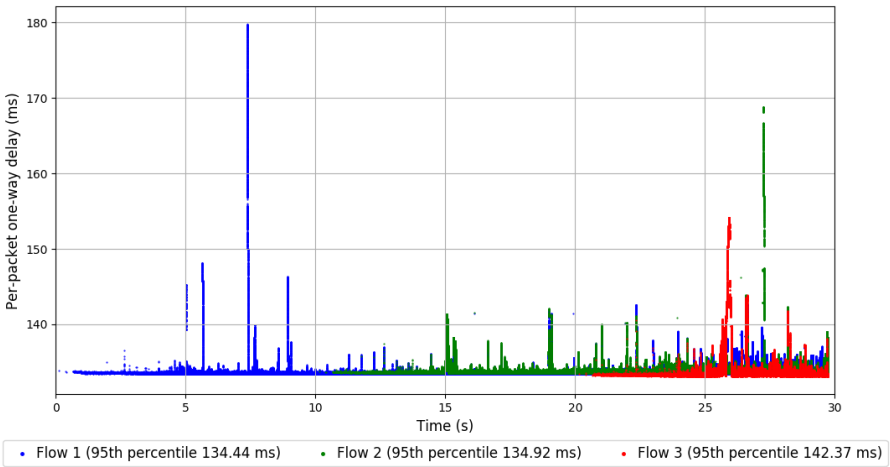
```
Run 5: Statistics of PCC-Vivace

Start at: 2019-05-30 11:34:03
End at: 2019-05-30 11:34:33
Local clock offset: 0.227 ms
Remote clock offset: -1.07 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.75 Mbit/s
95th percentile per-packet one-way delay: 134.996 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 201.55 Mbit/s
95th percentile per-packet one-way delay: 134.443 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 174.48 Mbit/s
95th percentile per-packet one-way delay: 134.916 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 119.37 Mbit/s
95th percentile per-packet one-way delay: 142.368 ms
Loss rate: 4.15%
```

Run 5: Report of PCC-Vivace — Data Link



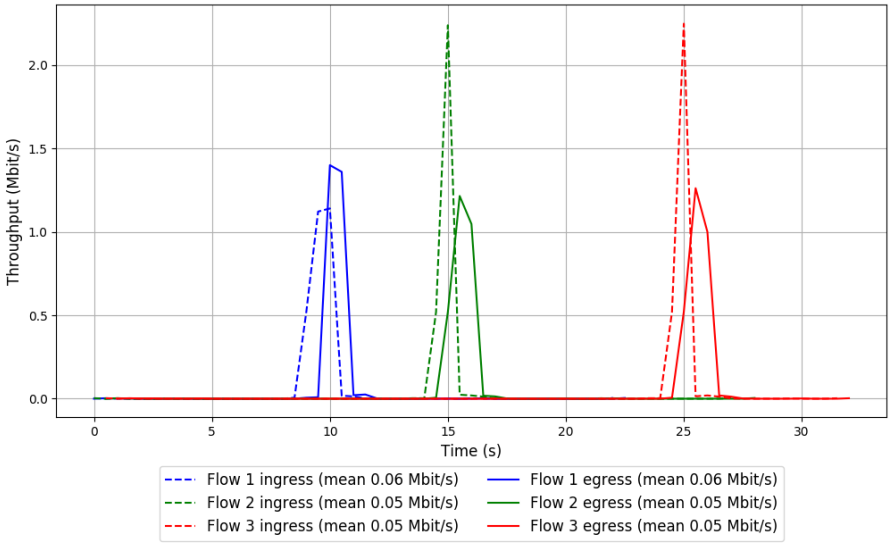


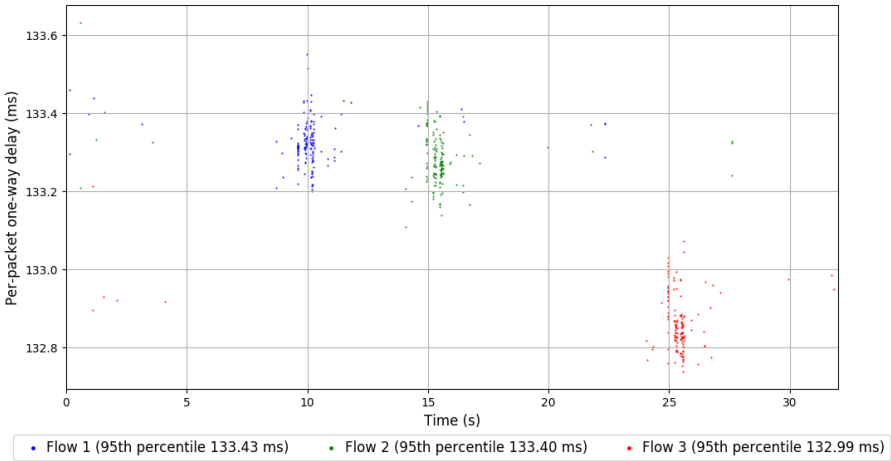
```
Run 1: Statistics of WebRTC media

Start at: 2019-05-30 09:01:28
End at: 2019-05-30 09:01:58
Local clock offset: 0.421 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.402 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 133.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.994 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



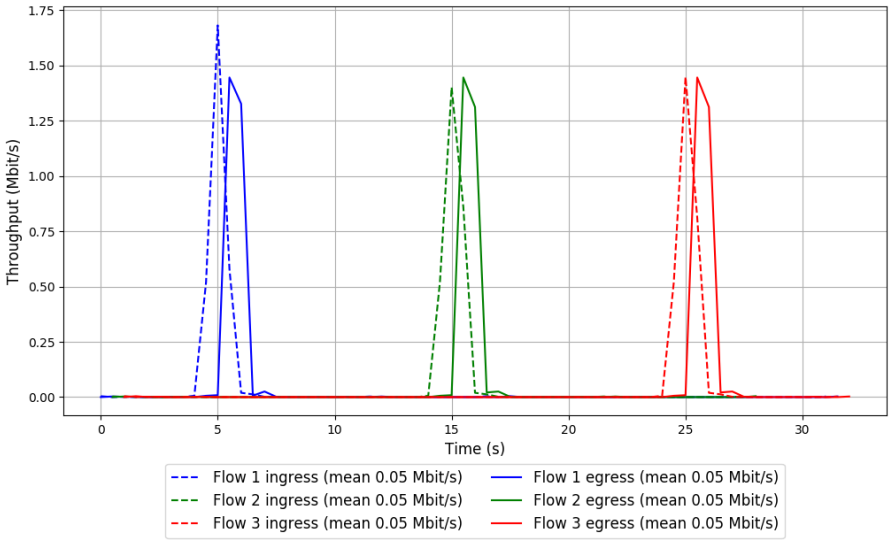


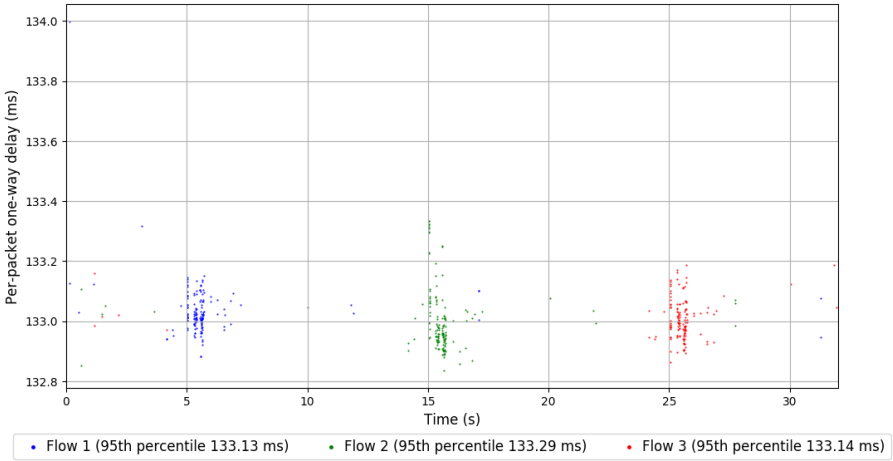
```
Run 2: Statistics of WebRTC media

Start at: 2019-05-30 09:38:59
End at: 2019-05-30 09:39:29
Local clock offset: -0.144 ms
Remote clock offset: -0.27 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.137 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



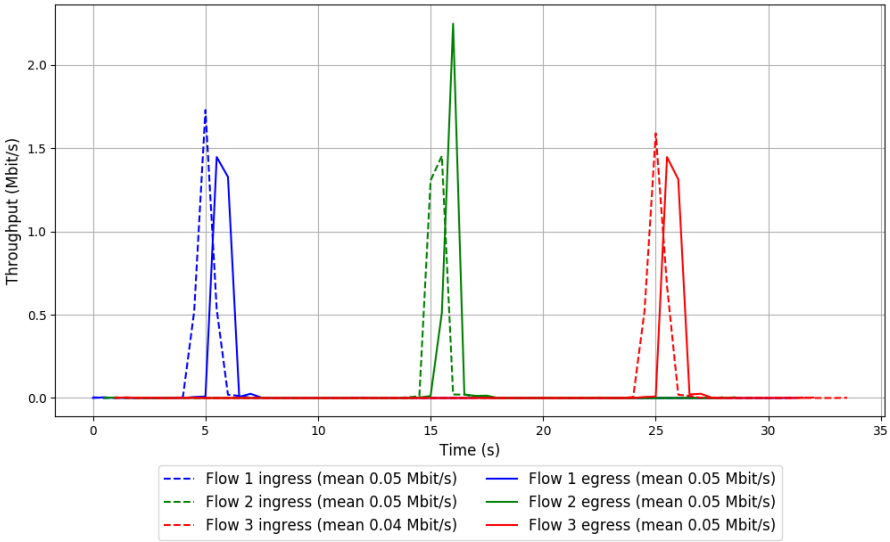


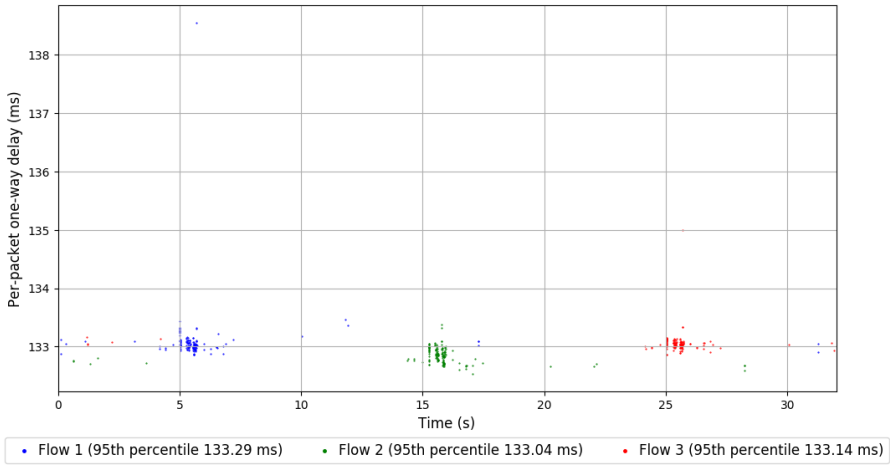
```
Run 3: Statistics of WebRTC media

Start at: 2019-05-30 10:16:27
End at: 2019-05-30 10:16:57
Local clock offset: -0.117 ms
Remote clock offset: -0.604 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.162 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.287 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.139 ms
Loss rate: 0.05%
```

Run 3: Report of WebRTC media — Data Link



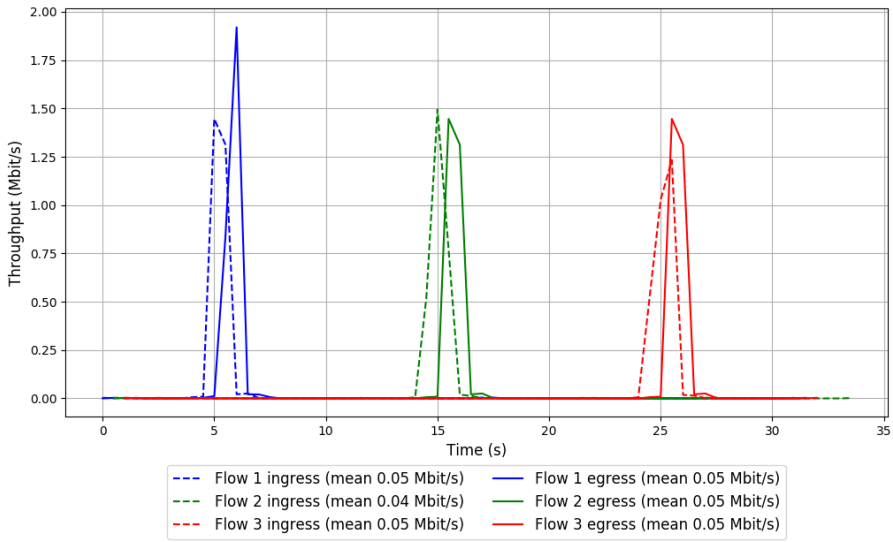


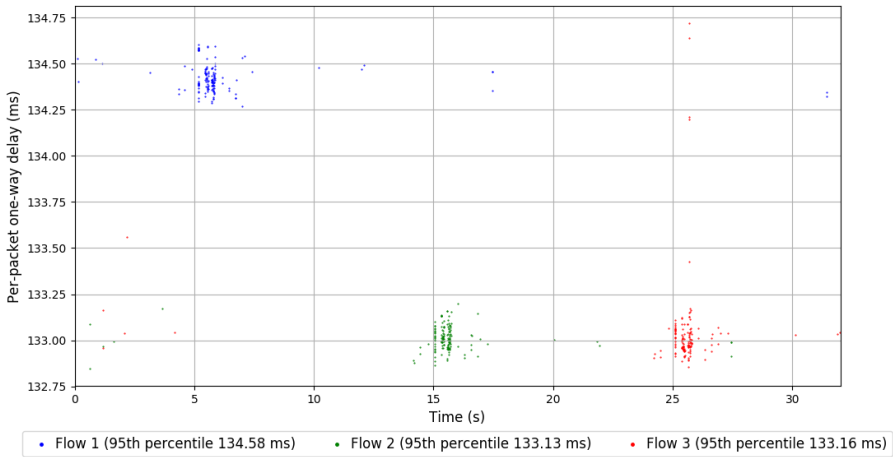
```
Run 4: Statistics of WebRTC media

Start at: 2019-05-30 10:54:15
End at: 2019-05-30 10:54:45
Local clock offset: -0.188 ms
Remote clock offset: -0.826 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 134.491 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.578 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.134 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.164 ms
Loss rate: 0.00%
```

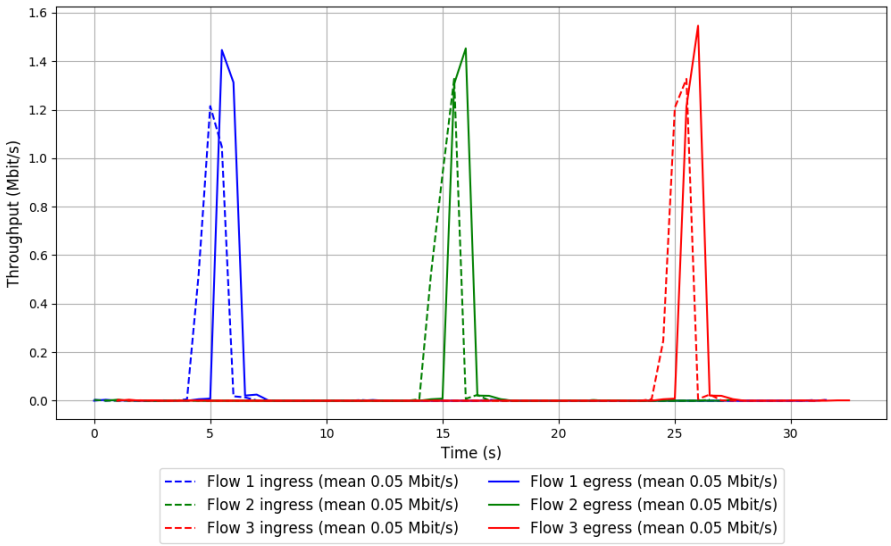
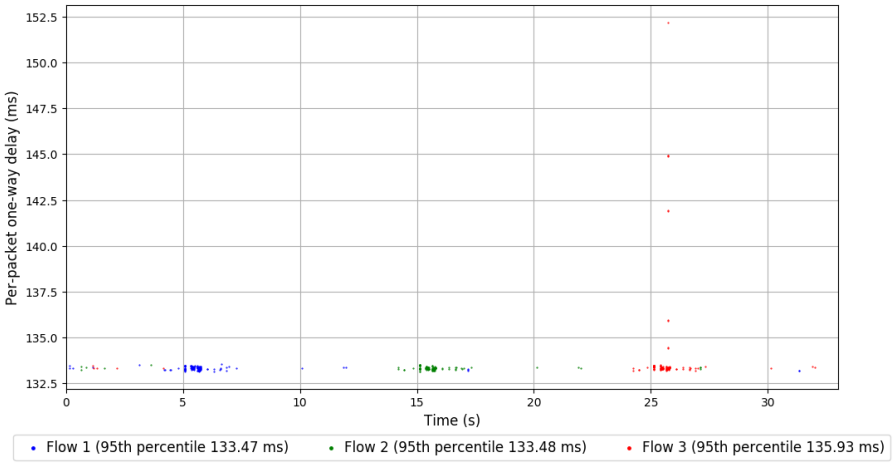
Run 4: Report of WebRTC media — Data Link





```
Run 5: Statistics of WebRTC media

Start at: 2019-05-30 11:32:45
End at: 2019-05-30 11:33:15
Local clock offset: 0.168 ms
Remote clock offset: -1.049 ms

# Below is generated by plot.py at 2019-05-30 14:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.472 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.477 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 135.932 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link