Pantheon Report

Generated at 2019-01-22 01:58:33 (UTC).

Data path: India cellular on `ppp0` (*remote*) →AWS India 1 on `ens5` (*local*).

Repeated the test of 21 congestion control schemes 3 times.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.
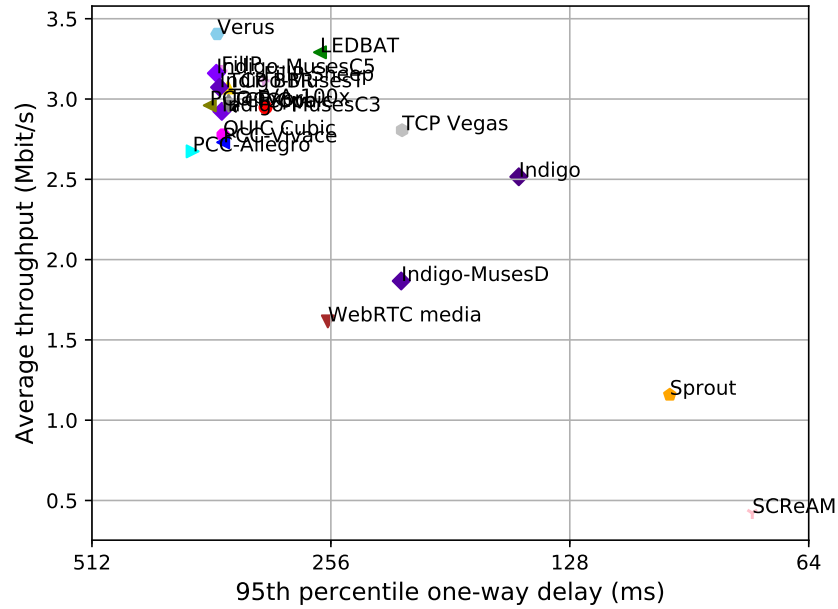
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```
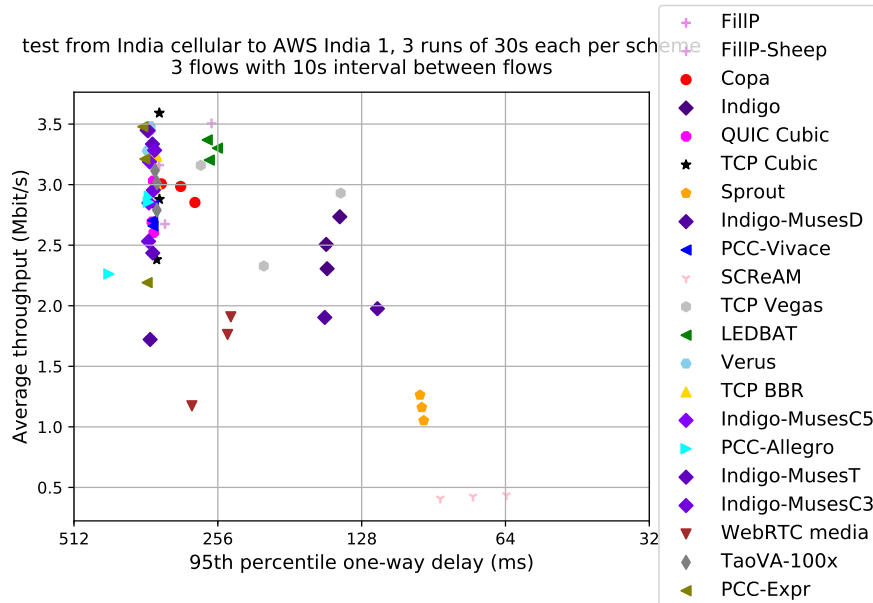
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

test from India cellular to AWS India 1, 3 runs of 30s each per scheme
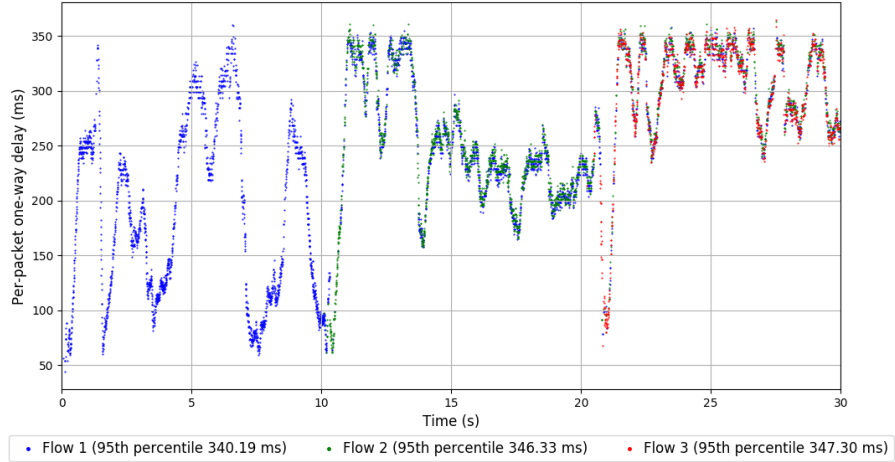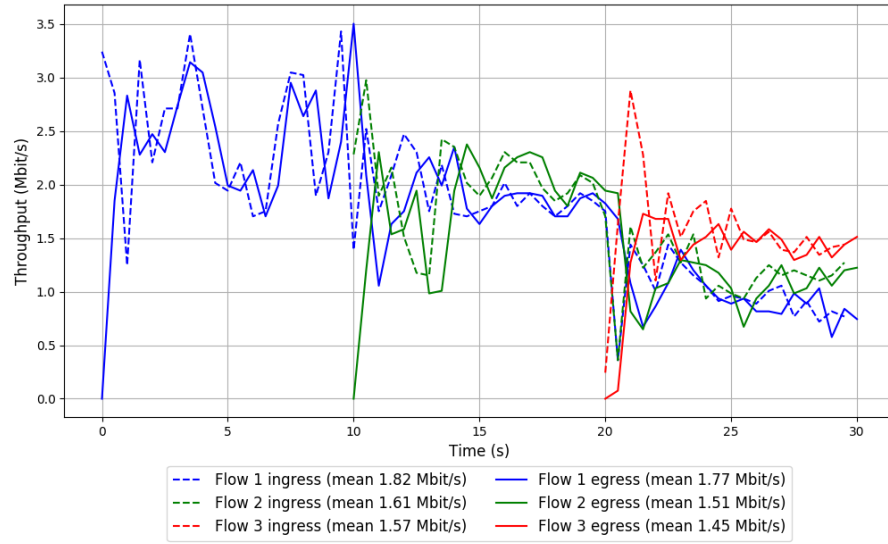3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	1.67	1.37	1.51	342.40	347.01	346.55	3.48	7.98	9.16
Copa	3	1.69	1.39	1.01	297.38	314.11	325.32	0.55	0.89	2.50
TCP Cubic	3	2.02	0.86	1.11	339.16	341.64	341.48	2.16	4.12	6.92
FillP	3	1.85	1.42	1.18	348.34	351.20	356.99	11.38	22.07	39.70
FillP-Sheep	3	1.71	1.37	1.50	284.81	314.05	339.16	1.25	3.71	10.22
Indigo	3	1.36	1.22	1.05	138.02	147.10	186.22	0.89	1.20	0.85
Indigo-MusesC3	3	1.59	1.55	1.15	345.28	353.31	354.91	3.84	13.40	31.75
Indigo-MusesC5	3	1.68	1.97	0.81	352.72	359.96	355.94	32.77	46.88	31.70
Indigo-MusesD	3	0.98	0.92	0.99	193.09	212.78	228.71	2.19	4.30	8.57
Indigo-MusesT	3	1.92	1.24	1.29	351.01	350.32	353.93	14.08	16.26	27.16
LEDBAT	3	1.84	1.68	1.19	244.16	280.05	269.73	0.08	1.02	3.24
PCC-Allegro	3	1.42	1.30	1.29	352.74	386.62	751.82	28.53	42.20	78.30
PCC-Expr	3	1.53	1.39	1.71	358.12	357.50	485.27	50.02	65.63	72.77
QUIC Cubic	3	1.83	0.97	0.98	349.39	350.18	348.82	4.85	9.25	11.22
SCReAM	3	0.21	0.22	0.21	76.57	75.25	72.90	0.24	0.37	1.44
Sprout	3	0.61	0.54	0.59	91.49	99.59	98.91	0.42	0.45	0.89
TaoVA-100x	3	1.85	1.36	0.70	337.80	343.20	378.58	5.88	10.47	44.14
TCP Vegas	3	1.54	1.20	1.41	197.69	176.68	183.31	0.32	0.45	0.92
Verus	3	2.94	0.39	0.66	352.18	375.85	482.65	22.71	63.71	63.47
PCC-Vivace	3	1.56	1.24	1.05	345.16	351.46	354.19	8.73	14.33	27.04
WebRTC media	3	1.05	0.38	0.20	201.68	278.90	295.49	0.52	0.81	1.40

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-22 00:59:54
End at: 2019-01-22 01:00:24
Local clock offset: -0.711 ms
Remote clock offset: -3.404 ms


# Below is generated by plot.py at 2019-01-22 01:57:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 343.910 ms
Loss rate: 5.28%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 340.193 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 346.335 ms
Loss rate: 6.97%
-- Flow 3:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 347.296 ms
Loss rate: 9.68%
```
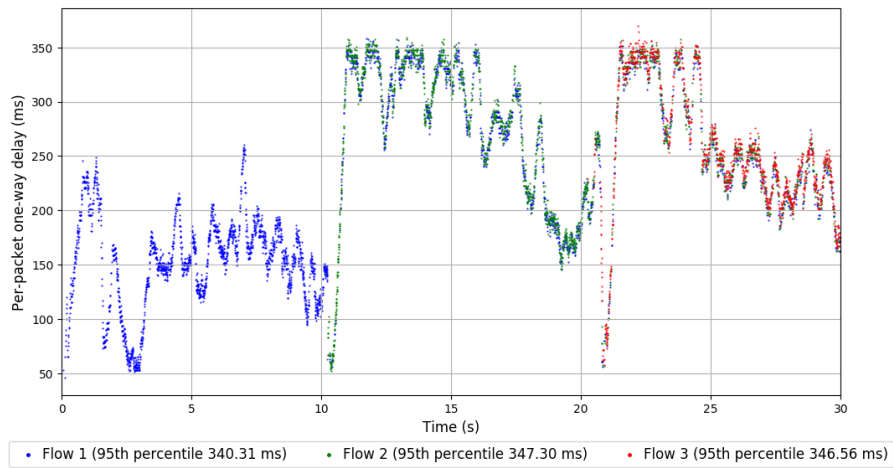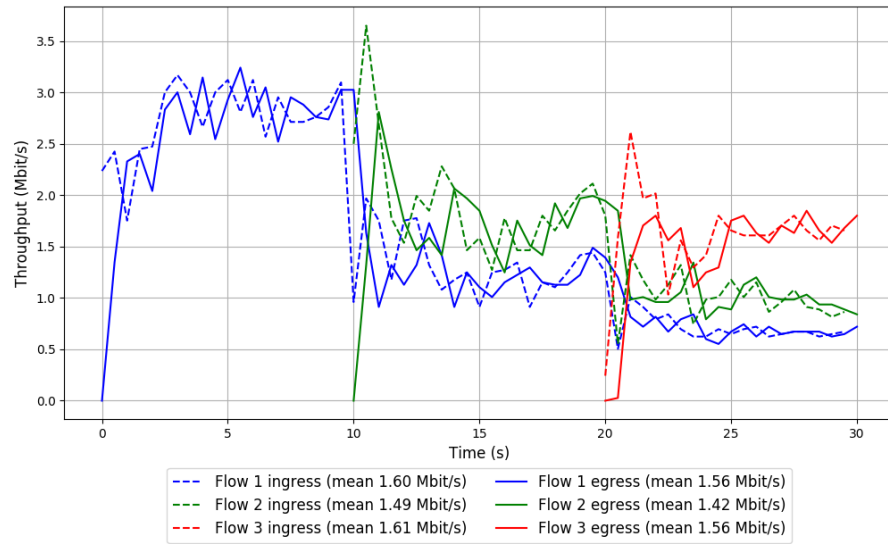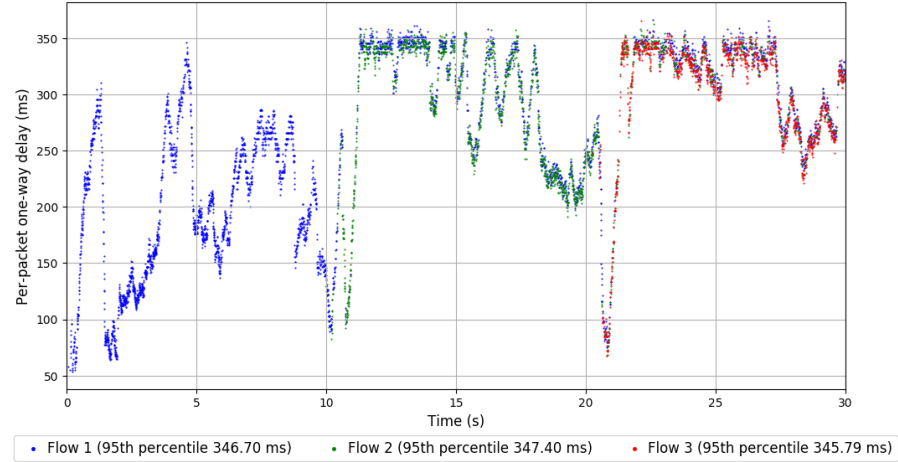
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-22 01:24:21
End at: 2019-01-22 01:24:51
Local clock offset: -0.445 ms
Remote clock offset: -5.447 ms


# Below is generated by plot.py at 2019-01-22 01:57:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 344.474 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 340.307 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 347.296 ms
Loss rate: 5.88%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 346.560 ms
Loss rate: 5.46%
```
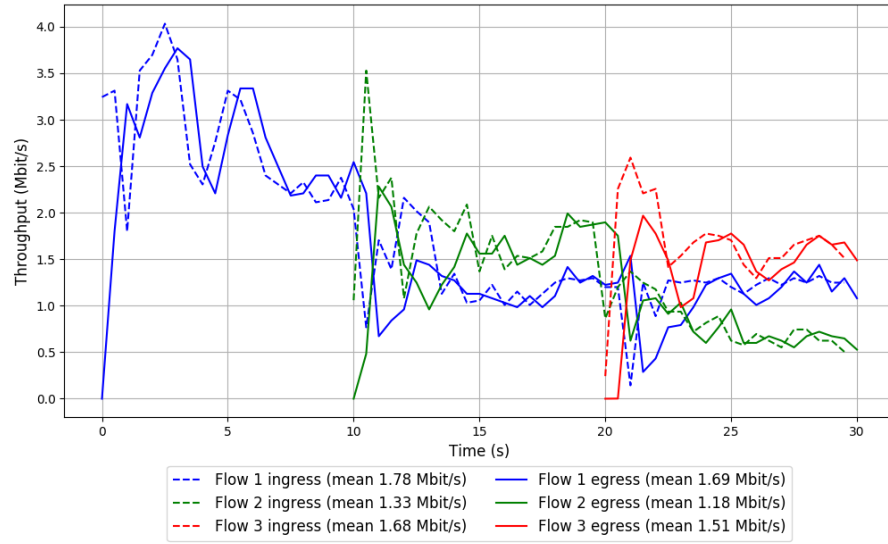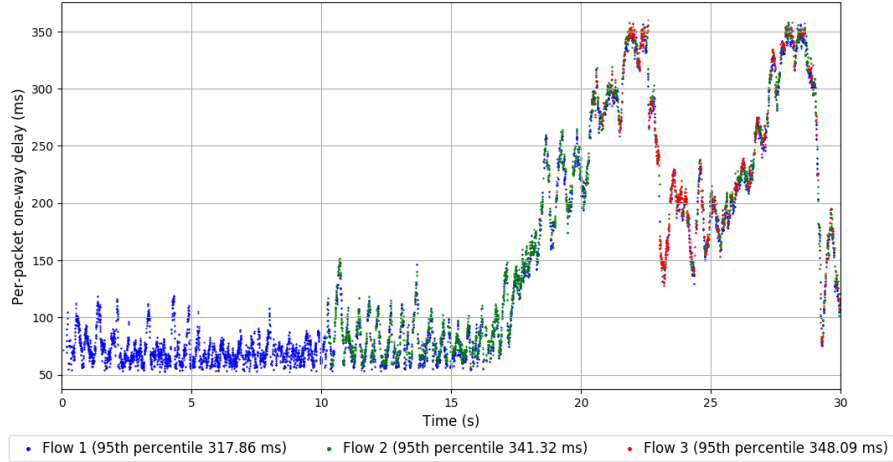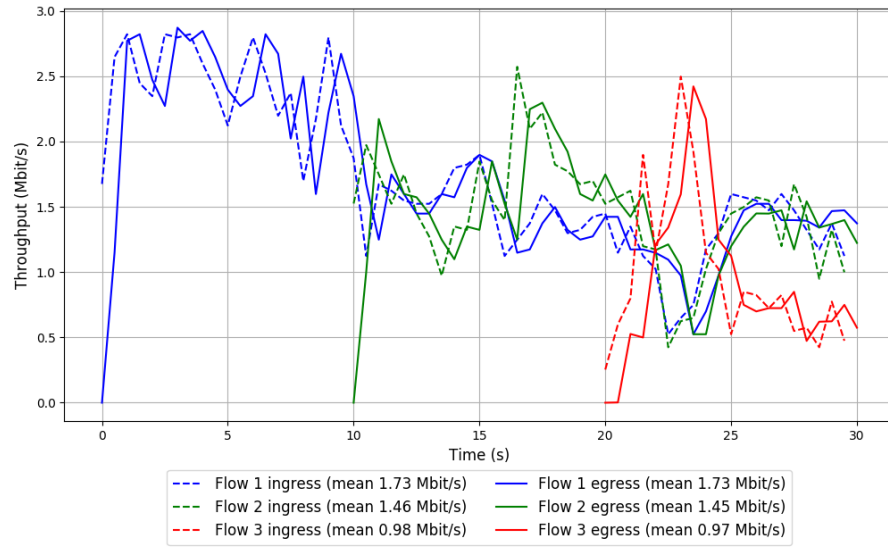
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 1.60 Mbit/s) ---- Flow 1 egress (mean 1.56 Mbit/s)
Flow 2 ingress (mean 1.49 Mbit/s) ---- Flow 2 egress (mean 1.42 Mbit/s)
Flow 3 ingress (mean 1.61 Mbit/s) ---- Flow 3 egress (mean 1.56 Mbit/s)

Flow 1 (95th percentile 340.31 ms)   Flow 2 (95th percentile 347.30 ms)   Flow 3 (95th percentile 346.56 ms)
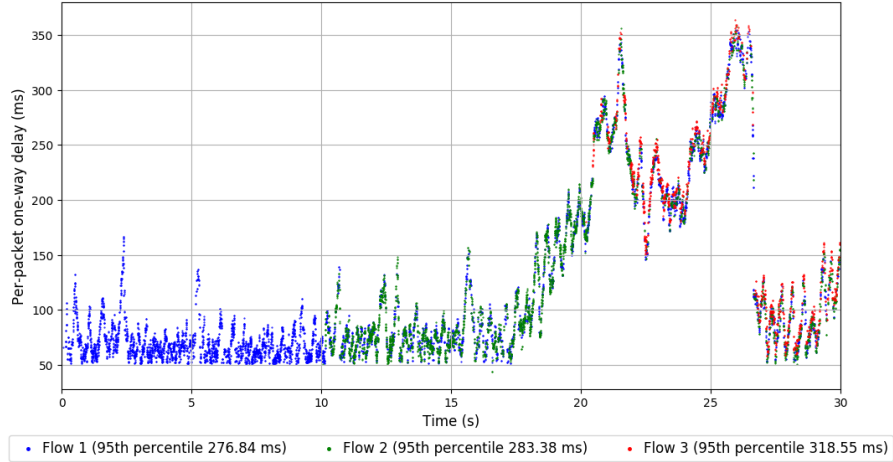
```
Run 3: Statistics of TCP BBR

Start at: 2019-01-22 01:48:43
End at: 2019-01-22 01:49:13
Local clock offset: -1.278 ms
Remote clock offset: -4.459 ms


# Below is generated by plot.py at 2019-01-22 01:57:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 346.801 ms
Loss rate: 7.98%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 346.703 ms
Loss rate: 5.06%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 347.404 ms
Loss rate: 11.10%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 345.794 ms
Loss rate: 12.34%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 1.78 Mbit/s) --- Flow 1 egress (mean 1.69 Mbit/s)
Flow 2 ingress (mean 1.33 Mbit/s) --- Flow 2 egress (mean 1.18 Mbit/s)
Flow 3 ingress (mean 1.68 Mbit/s) --- Flow 3 egress (mean 1.51 Mbit/s)

• Flow 1 (95th percentile 346.70 ms)   • Flow 2 (95th percentile 347.40 ms)   • Flow 3 (95th percentile 345.79 ms)
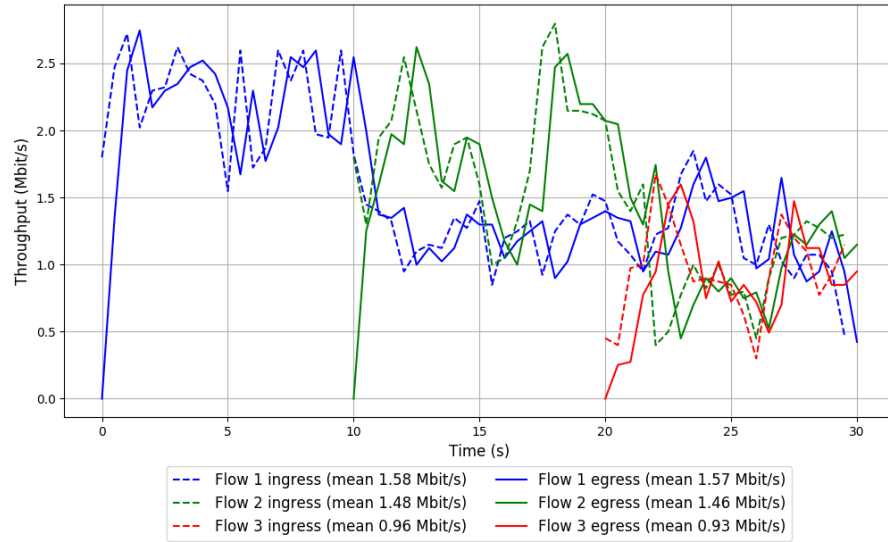
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```
Run 1: Statistics of Copa

Start at: 2019-01-22 00:49:25
End at: 2019-01-22 00:49:55
Local clock offset: 0.26 ms
Remote clock offset: -5.501 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 336.113 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 317.858 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 341.318 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 348.093 ms
Loss rate: 2.95%
```
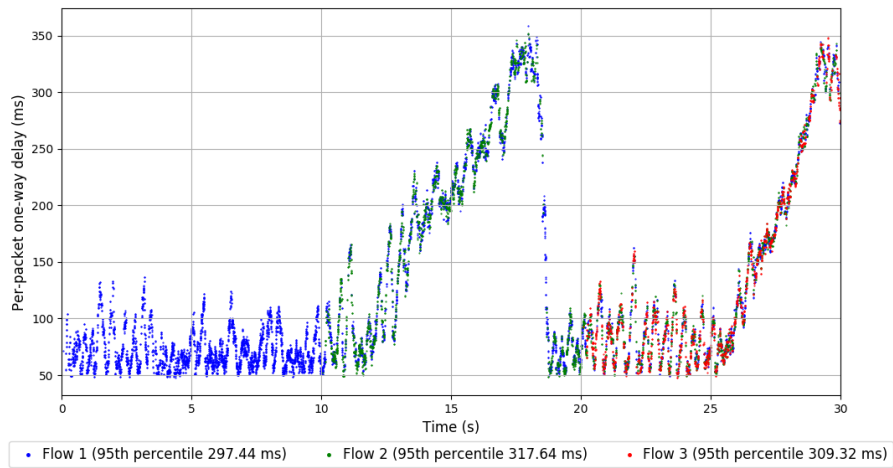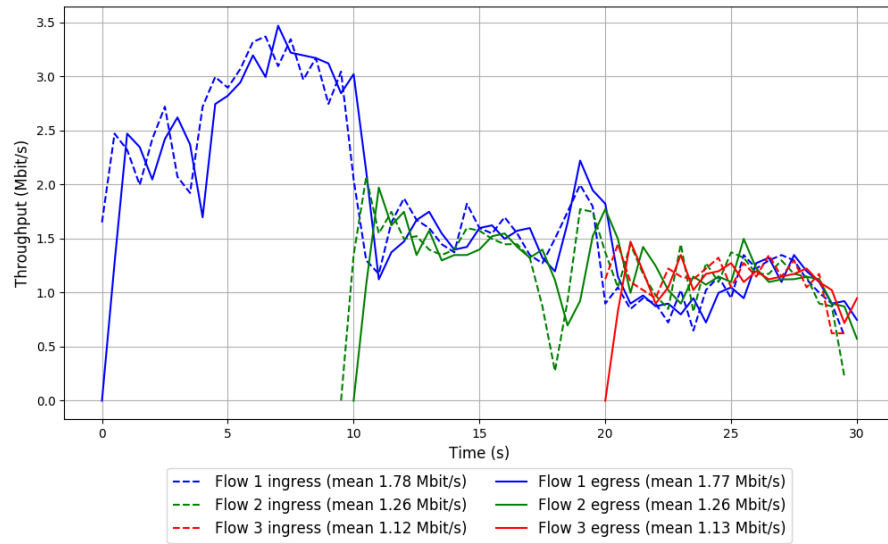
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 1.73 Mbit/s)
Flow 1 egress (mean 1.73 Mbit/s)
Flow 2 ingress (mean 1.46 Mbit/s)
Flow 2 egress (mean 1.45 Mbit/s)
Flow 3 ingress (mean 0.98 Mbit/s)
Flow 3 egress (mean 0.97 Mbit/s)

Flow 1 (95th percentile 317.86 ms)
Flow 2 (95th percentile 341.32 ms)
Flow 3 (95th percentile 348.09 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-22 01:13:52
End at: 2019-01-22 01:14:22
Local clock offset: 2.786 ms
Remote clock offset: -4.216 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 285.876 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 276.837 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 283.385 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 318.546 ms
Loss rate: 3.64%
```
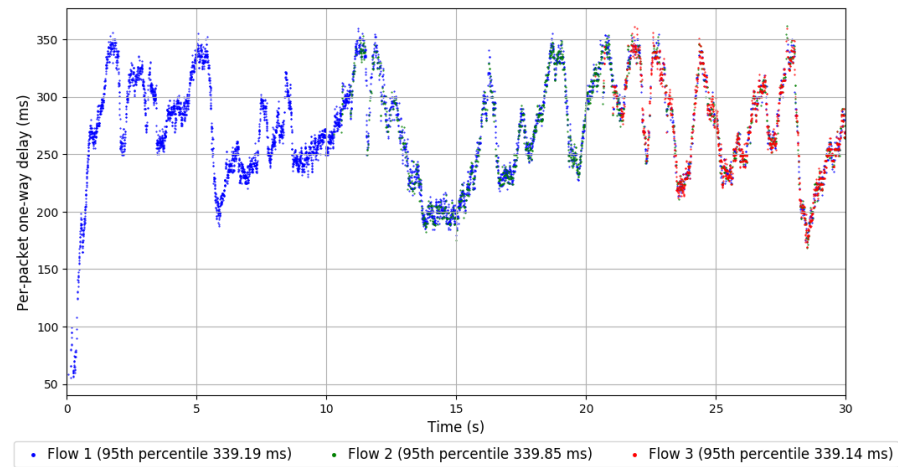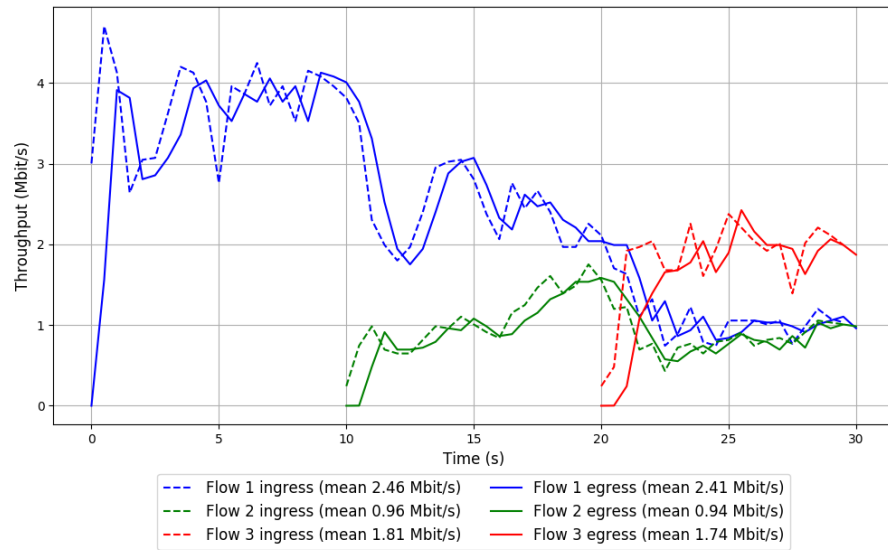
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 1.58 Mbit/s) —— Flow 1 egress (mean 1.57 Mbit/s)
Flow 2 ingress (mean 1.48 Mbit/s) —— Flow 2 egress (mean 1.46 Mbit/s)
Flow 3 ingress (mean 0.96 Mbit/s) —— Flow 3 egress (mean 0.93 Mbit/s)

• Flow 1 (95th percentile 276.84 ms)   • Flow 2 (95th percentile 283.38 ms)   • Flow 3 (95th percentile 318.55 ms)

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```
Run 3: Statistics of Copa

Start at: 2019-01-22 01:38:15
End at: 2019-01-22 01:38:45
Local clock offset: -2.298 ms
Remote clock offset: -4.109 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 306.179 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 297.437 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 317.640 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 309.322 ms
Loss rate: 0.92%
```
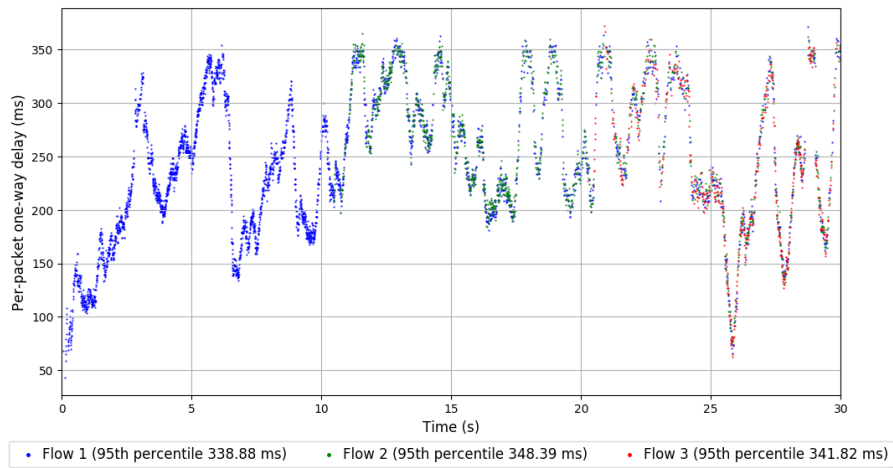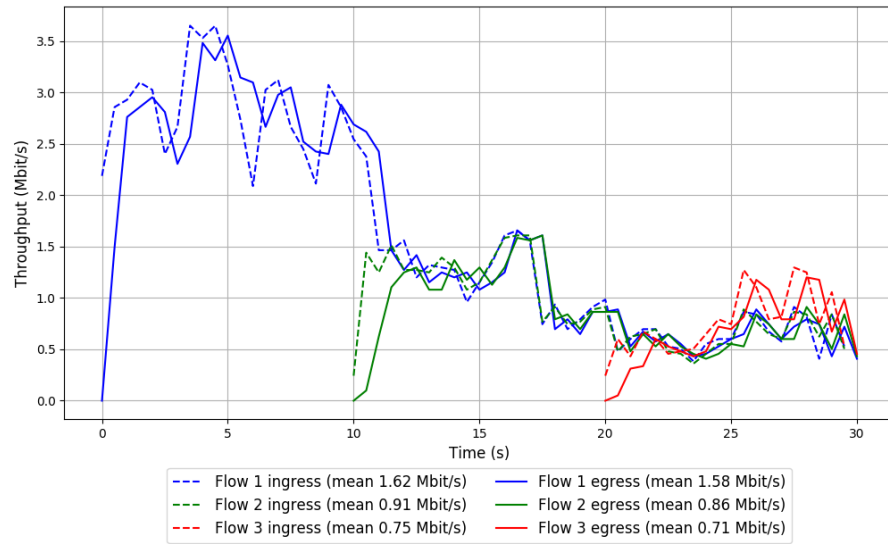
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 1.78 Mbit/s)   Flow 1 egress (mean 1.77 Mbit/s)
Flow 2 ingress (mean 1.26 Mbit/s)   Flow 2 egress (mean 1.26 Mbit/s)
Flow 3 ingress (mean 1.12 Mbit/s)   Flow 3 egress (mean 1.13 Mbit/s)

Flow 1 (95th percentile 297.44 ms)   Flow 2 (95th percentile 317.64 ms)   Flow 3 (95th percentile 309.32 ms)
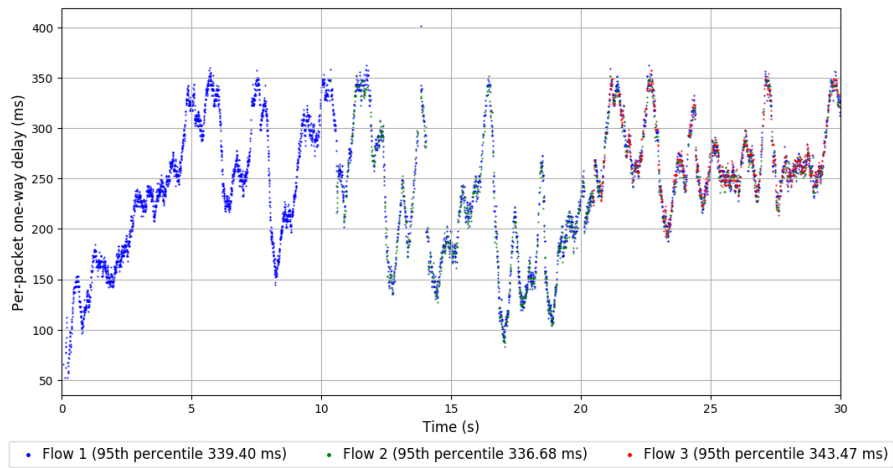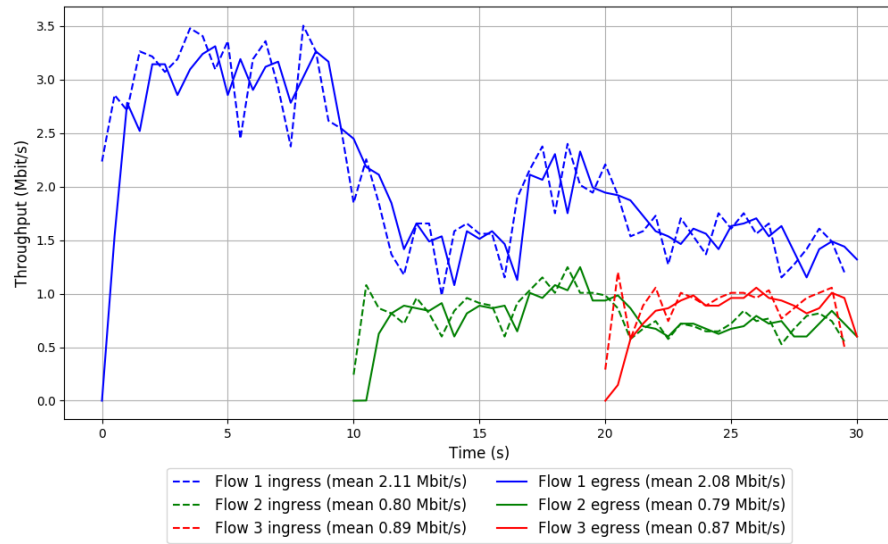
```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-22 01:08:03
End at: 2019-01-22 01:08:33
Local clock offset: -0.347 ms
Remote clock offset: -5.63 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 339.314 ms
Loss rate: 3.26%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 339.185 ms
Loss rate: 2.21%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 339.854 ms
Loss rate: 3.37%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 339.142 ms
Loss rate: 7.45%
```

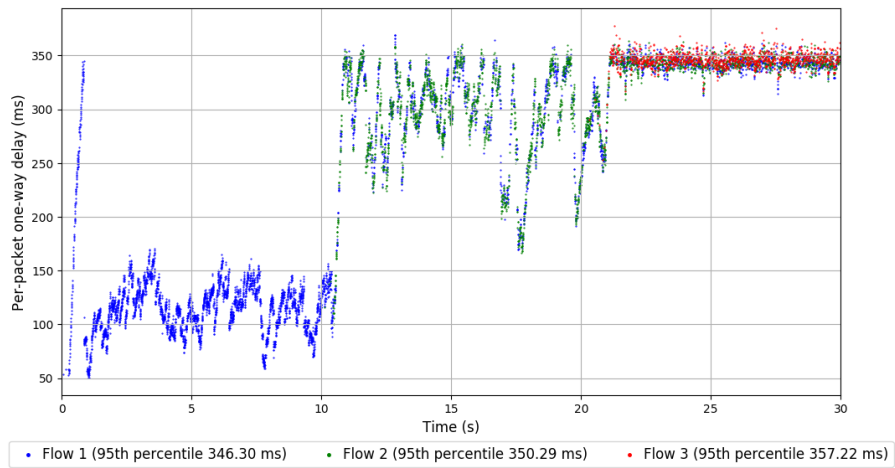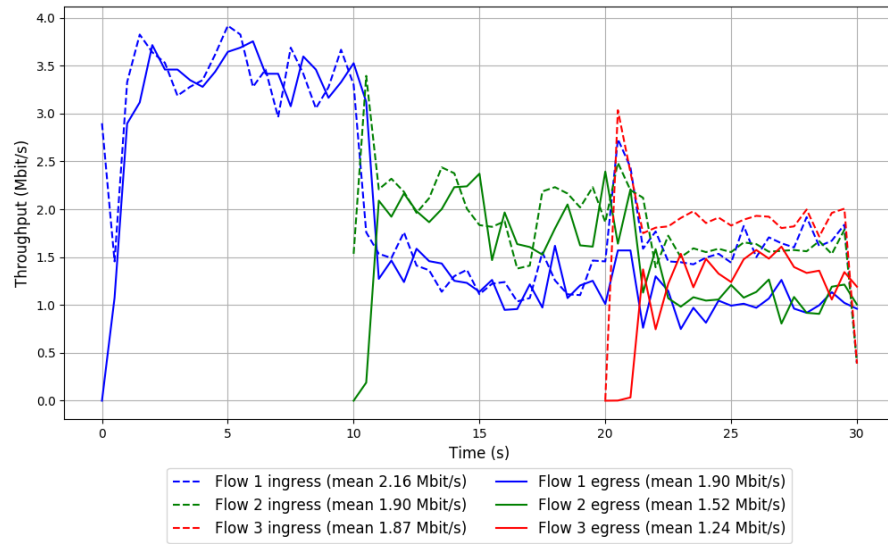Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-22 01:32:28
End at: 2019-01-22 01:32:58
Local clock offset: 0.046 ms
Remote clock offset: -3.42 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 343.564 ms
Loss rate: 4.12%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 338.879 ms
Loss rate: 2.66%
-- Flow 2:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 348.388 ms
Loss rate: 6.30%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 341.821 ms
Loss rate: 8.31%
```

Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 1.62 Mbit/s)   Flow 1 egress (mean 1.58 Mbit/s)
Flow 2 ingress (mean 0.91 Mbit/s)   Flow 2 egress (mean 0.86 Mbit/s)
Flow 3 ingress (mean 0.75 Mbit/s)   Flow 3 egress (mean 0.71 Mbit/s)

• Flow 1 (95th percentile 338.88 ms)   • Flow 2 (95th percentile 348.39 ms)   • Flow 3 (95th percentile 341.82 ms)
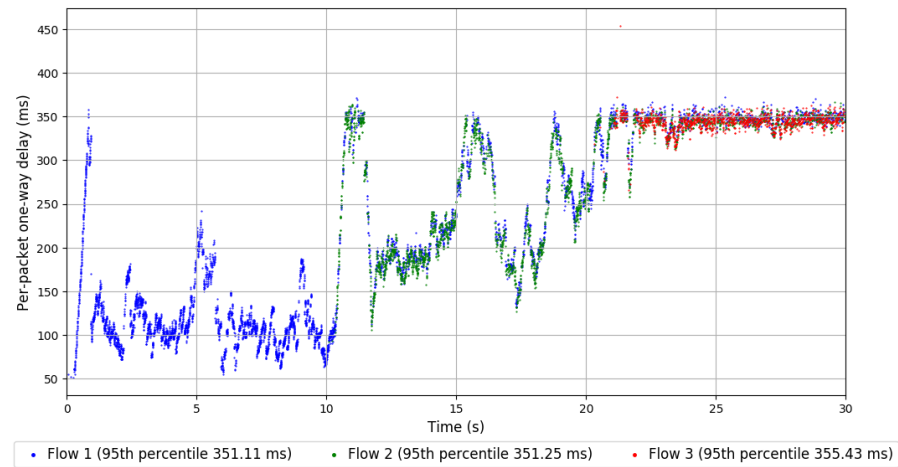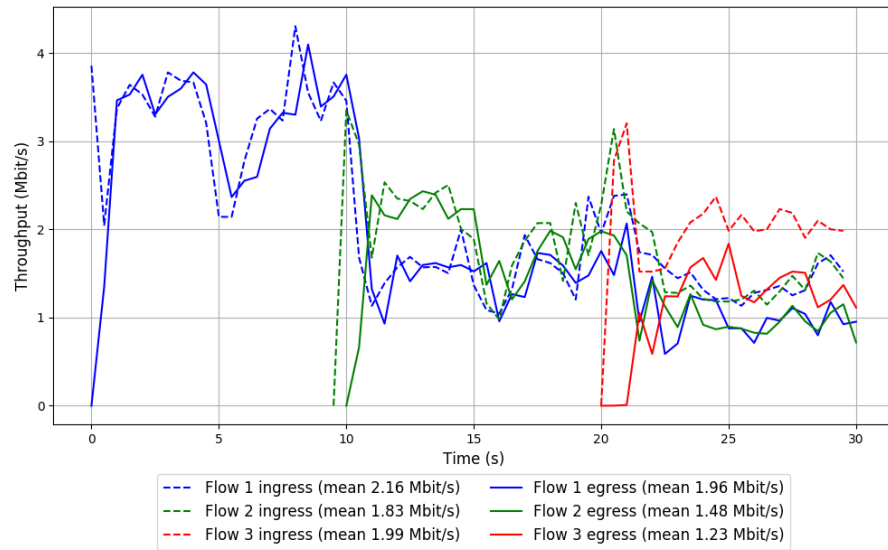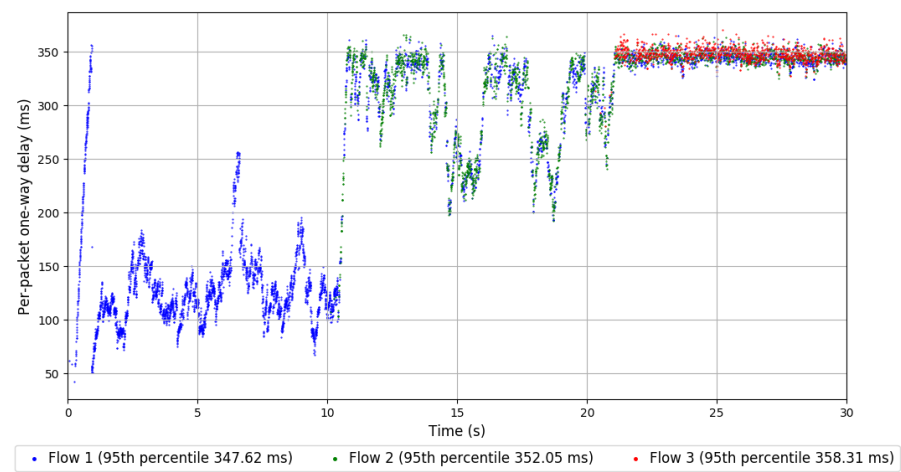
```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-22 01:56:51
End at: 2019-01-22 01:57:21
Local clock offset: -0.849 ms
Remote clock offset: -5.705 ms


# Below is generated by plot.py at 2019-01-22 01:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.88 Mbit/s
95th percentile per-packet one-way delay: 339.156 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 339.405 ms
Loss rate: 1.62%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 336.681 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 343.467 ms
Loss rate: 5.01%
```

Run 3: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 2.11 Mbit/s) —— Flow 1 egress (mean 2.08 Mbit/s)
- - - - Flow 2 ingress (mean 0.80 Mbit/s) —— Flow 2 egress (mean 0.79 Mbit/s)
- - - - Flow 3 ingress (mean 0.89 Mbit/s) —— Flow 3 egress (mean 0.87 Mbit/s)

- Flow 1 (95th percentile 339.40 ms)   - Flow 2 (95th percentile 336.68 ms)   - Flow 3 (95th percentile 343.47 ms)
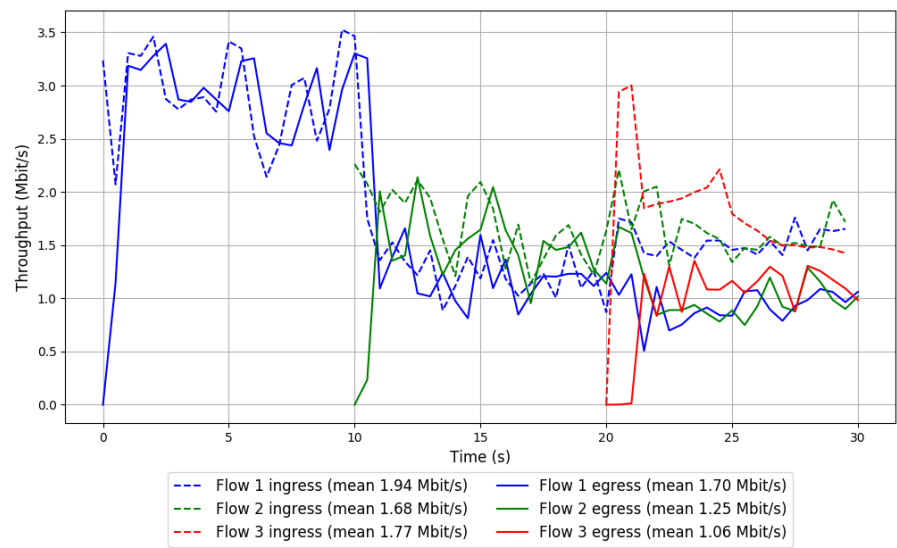
```
Run 1: Statistics of FillP

Start at: 2019-01-22 00:45:50
End at: 2019-01-22 00:46:20
Local clock offset: 1.111 ms
Remote clock offset: -6.112 ms


# Below is generated by plot.py at 2019-01-22 01:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 350.878 ms
Loss rate: 18.69%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 346.301 ms
Loss rate: 12.28%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 350.290 ms
Loss rate: 20.79%
-- Flow 3:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 357.223 ms
Loss rate: 36.47%
```
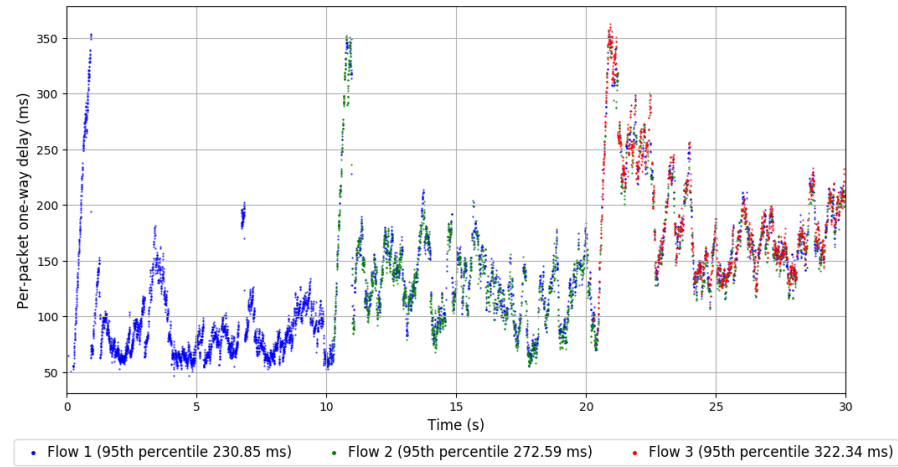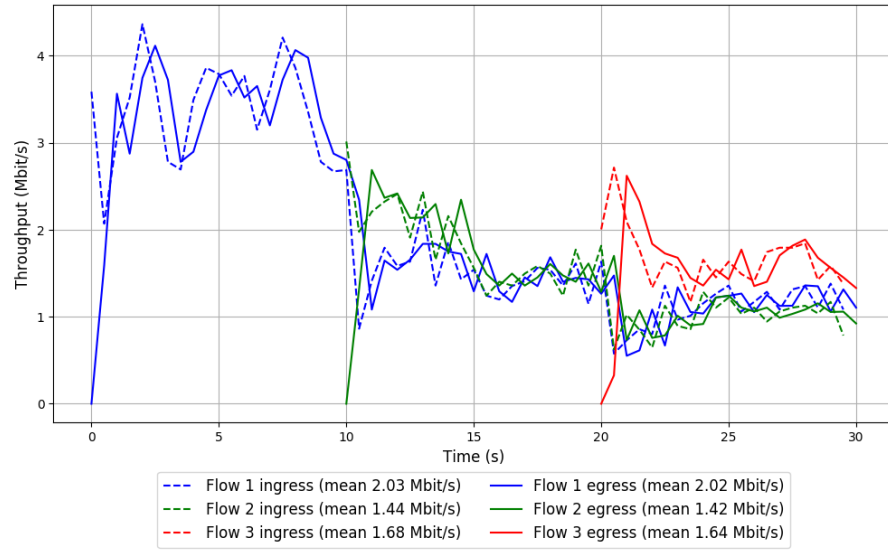
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 2.16 Mbit/s)   Flow 1 egress (mean 1.90 Mbit/s)
Flow 2 ingress (mean 1.90 Mbit/s)   Flow 2 egress (mean 1.52 Mbit/s)
Flow 3 ingress (mean 1.87 Mbit/s)   Flow 3 egress (mean 1.24 Mbit/s)

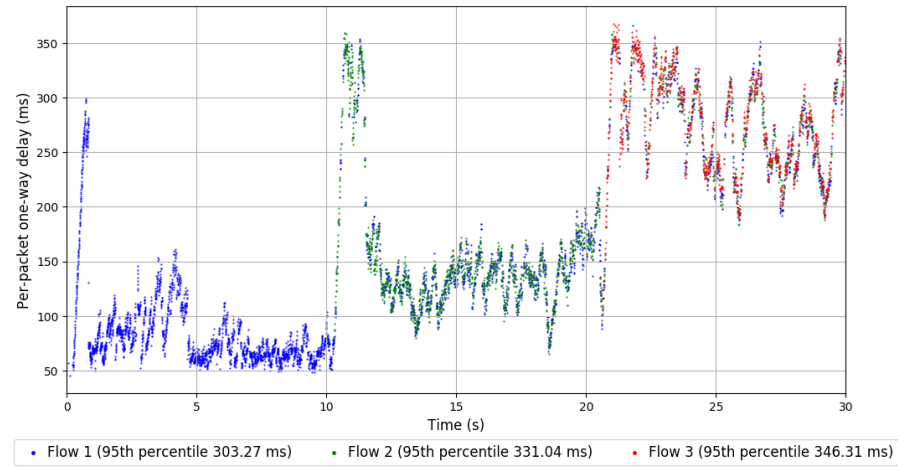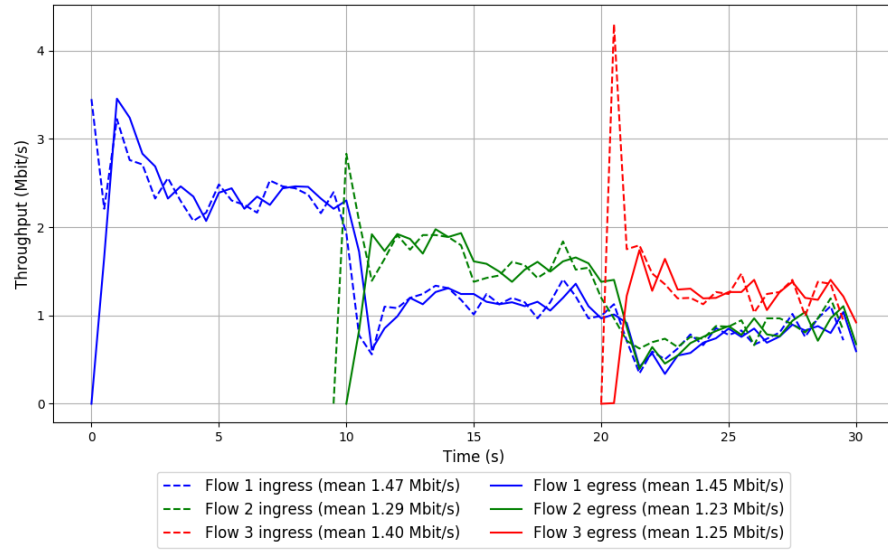Flow 1 (95th percentile 346.30 ms)   Flow 2 (95th percentile 350.29 ms)   Flow 3 (95th percentile 357.22 ms)

```
Run 2: Statistics of FillP

Start at: 2019-01-22 01:10:24
End at: 2019-01-22 01:10:54
Local clock offset: 0.498 ms
Remote clock offset: -5.194 ms


# Below is generated by plot.py at 2019-01-22 01:57:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 352.110 ms
Loss rate: 17.44%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 351.108 ms
Loss rate: 9.29%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 351.252 ms
Loss rate: 19.49%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 355.430 ms
Loss rate: 40.25%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 2.16 Mbit/s)   Flow 1 egress (mean 1.96 Mbit/s)
Flow 2 ingress (mean 1.83 Mbit/s)   Flow 2 egress (mean 1.48 Mbit/s)
Flow 3 ingress (mean 1.99 Mbit/s)   Flow 3 egress (mean 1.23 Mbit/s)

Flow 1 (95th percentile 351.11 ms)   Flow 2 (95th percentile 351.25 ms)   Flow 3 (95th percentile 355.43 ms)

```
Run 3: Statistics of FillP

Start at: 2019-01-22 01:34:48
End at: 2019-01-22 01:35:18
Local clock offset: -0.309 ms
Remote clock offset: -3.943 ms


# Below is generated by plot.py at 2019-01-22 01:57:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 352.289 ms
Loss rate: 21.50%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 347.621 ms
Loss rate: 12.57%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 352.045 ms
Loss rate: 25.92%
-- Flow 3:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 358.314 ms
Loss rate: 42.39%
```
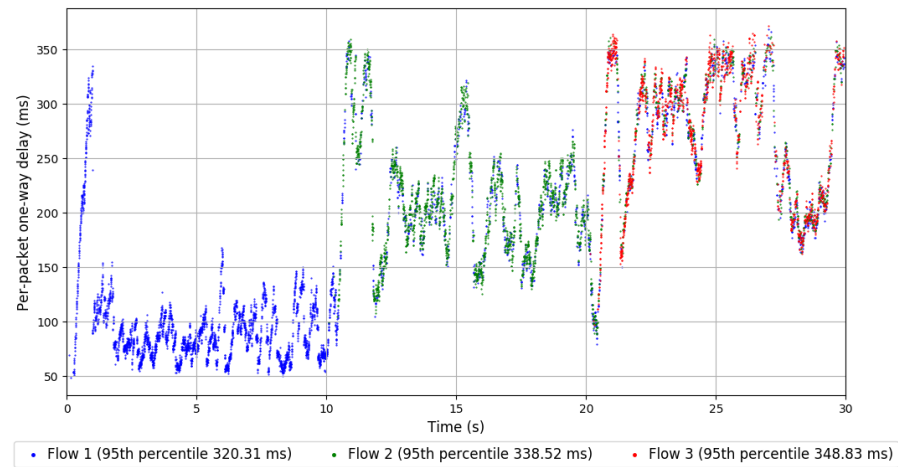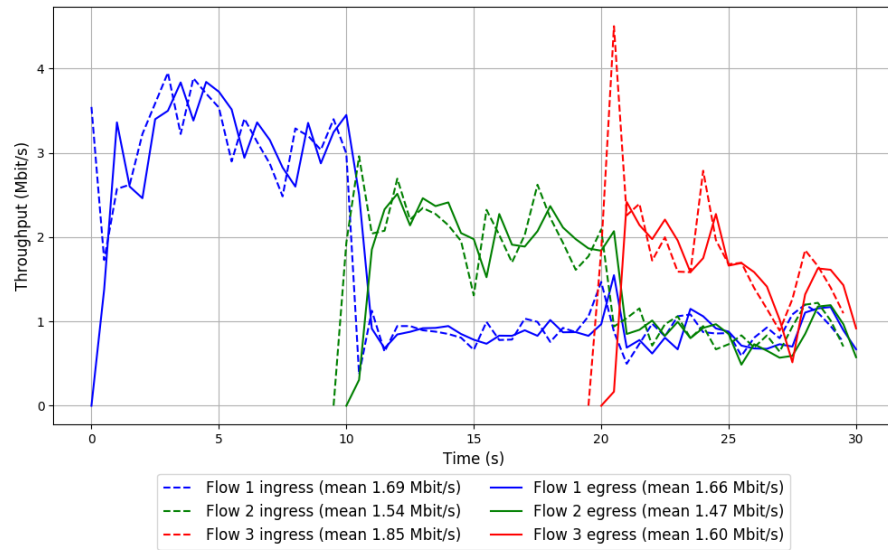
Run 3: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-22 01:02:14
End at: 2019-01-22 01:02:44
Local clock offset: 1.224 ms
Remote clock offset: -5.388 ms


# Below is generated by plot.py at 2019-01-22 01:57:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 263.831 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 230.851 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 272.586 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 322.336 ms
Loss rate: 3.70%
```
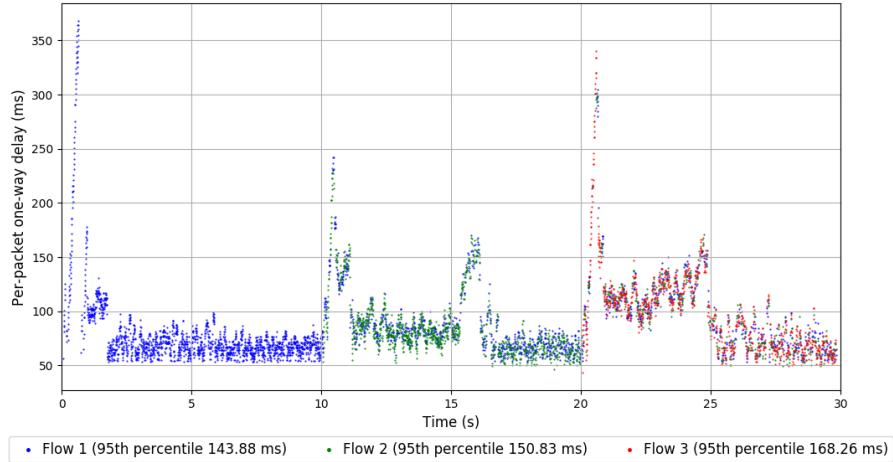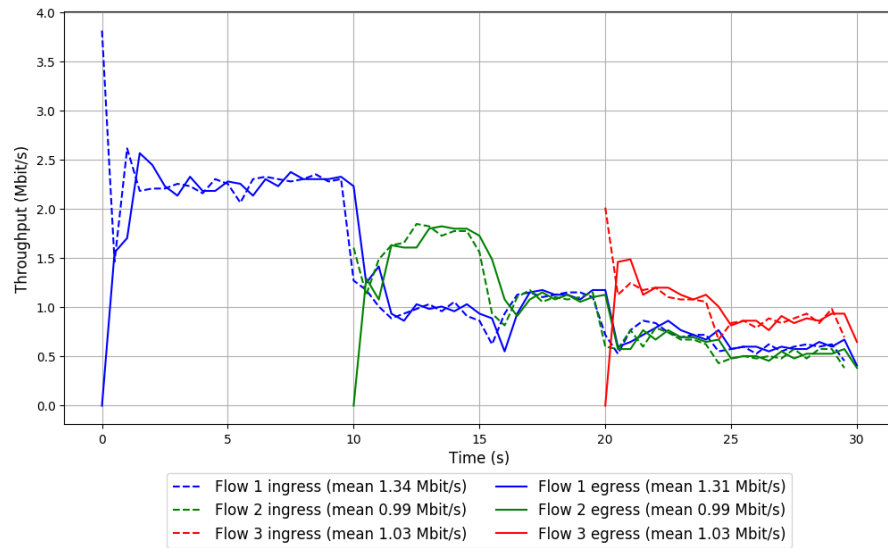
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-22 01:26:42
End at: 2019-01-22 01:27:12
Local clock offset: -0.427 ms
Remote clock offset: -5.064 ms


# Below is generated by plot.py at 2019-01-22 01:57:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 330.236 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 303.271 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 331.040 ms
Loss rate: 4.94%
-- Flow 3:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 346.309 ms
Loss rate: 12.13%
```
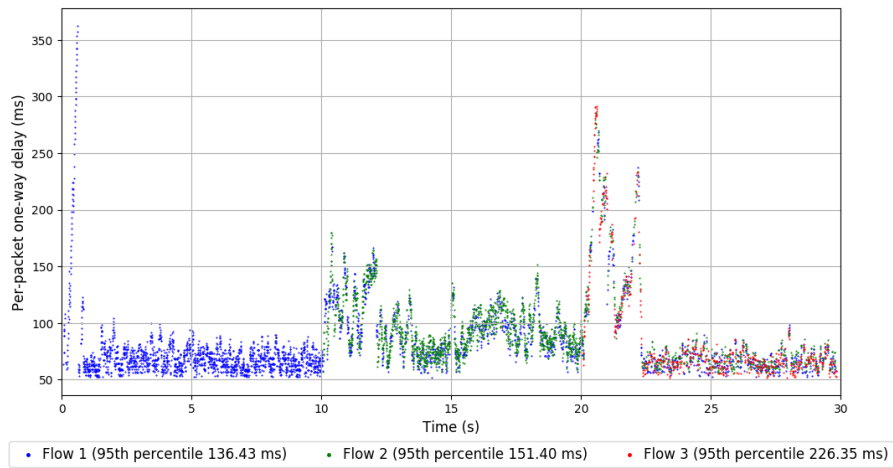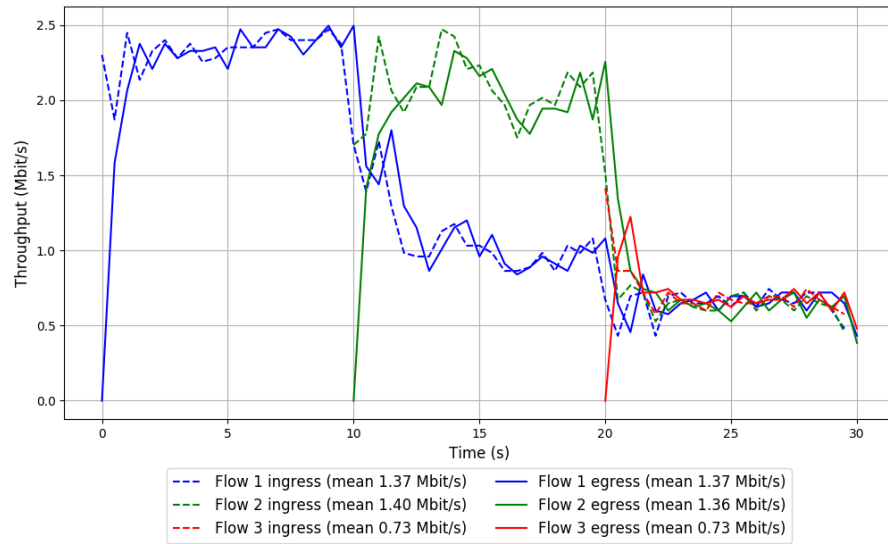
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-22 01:51:03
End at: 2019-01-22 01:51:33
Local clock offset: -0.269 ms
Remote clock offset: -6.596 ms


# Below is generated by plot.py at 2019-01-22 01:57:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 339.471 ms
Loss rate: 5.11%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 320.310 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 338.520 ms
Loss rate: 5.11%
-- Flow 3:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 348.834 ms
Loss rate: 14.83%
```
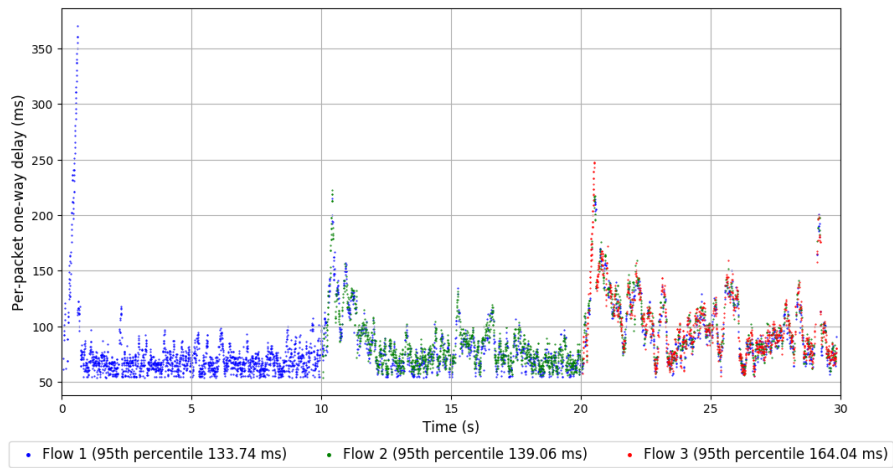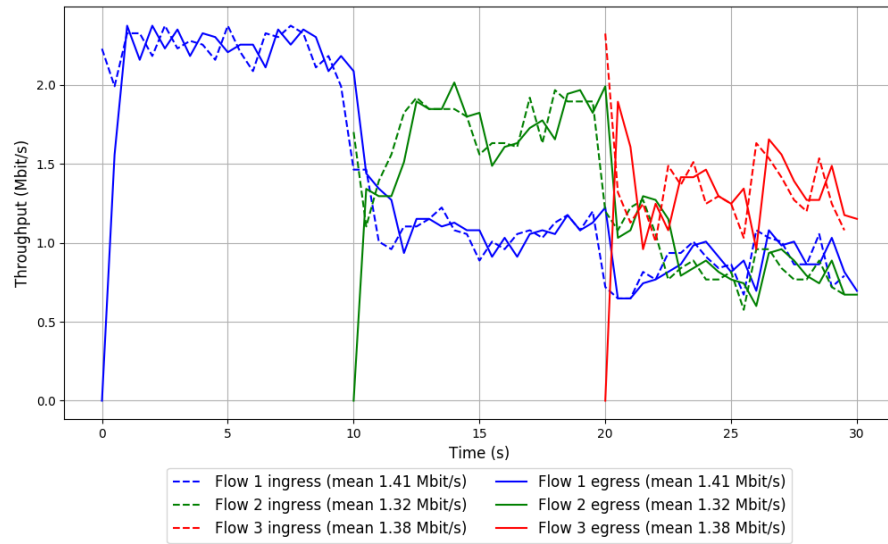
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 1.69 Mbit/s)
Flow 2 ingress (mean 1.54 Mbit/s)
Flow 3 ingress (mean 1.85 Mbit/s)
Flow 1 egress (mean 1.66 Mbit/s)
Flow 2 egress (mean 1.47 Mbit/s)
Flow 3 egress (mean 1.60 Mbit/s)

Flow 1 (95th percentile 320.31 ms)
Flow 2 (95th percentile 338.52 ms)
Flow 3 (95th percentile 348.83 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-01-22 00:55:17
End at: 2019-01-22 00:55:47
Local clock offset: -0.526 ms
Remote clock offset: -5.682 ms


# Below is generated by plot.py at 2019-01-22 01:57:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 151.175 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 143.883 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 150.834 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 168.258 ms
Loss rate: 0.83%
```
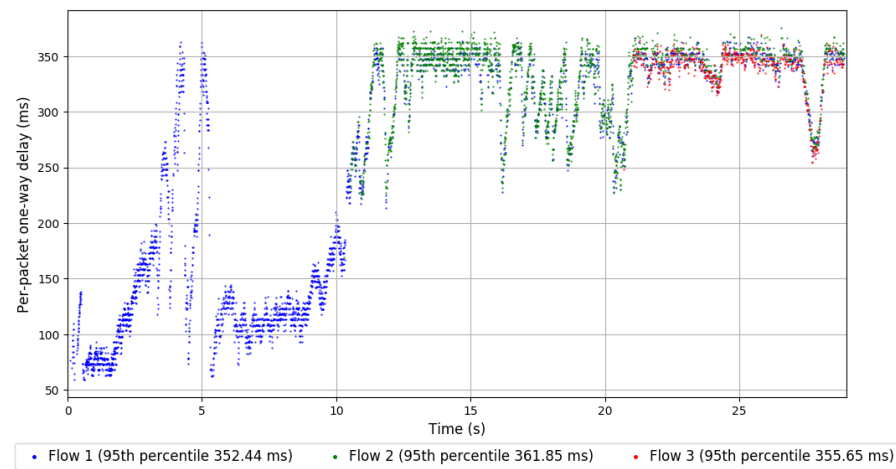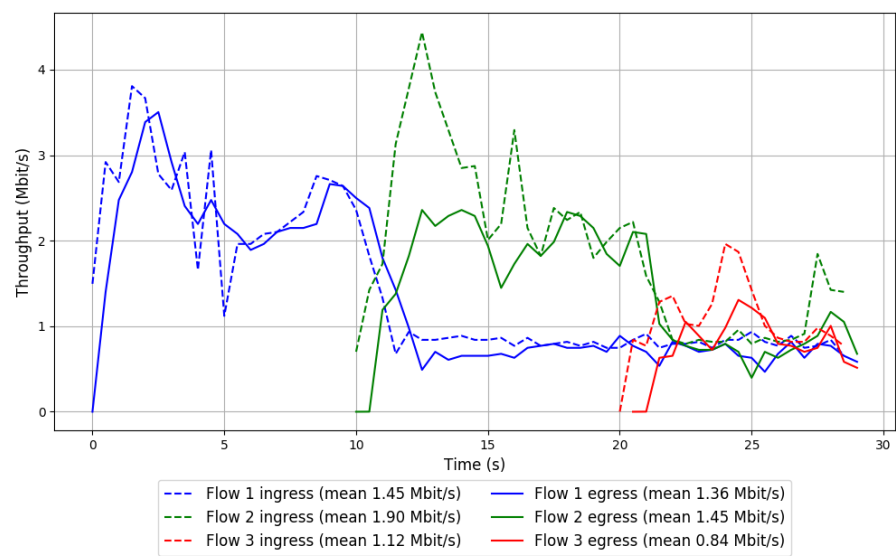
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-22 01:19:43
End at: 2019-01-22 01:20:13
Local clock offset: 0.505 ms
Remote clock offset: -4.057 ms


# Below is generated by plot.py at 2019-01-22 01:57:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 151.853 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 136.430 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 151.404 ms
Loss rate: 2.99%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 226.348 ms
Loss rate: 0.83%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-22 01:44:05
End at: 2019-01-22 01:44:35
Local clock offset: -1.346 ms
Remote clock offset: -5.997 ms

# Below is generated by plot.py at 2019-01-22 01:57:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 142.219 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 133.735 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 139.061 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 164.041 ms
Loss rate: 0.88%
```
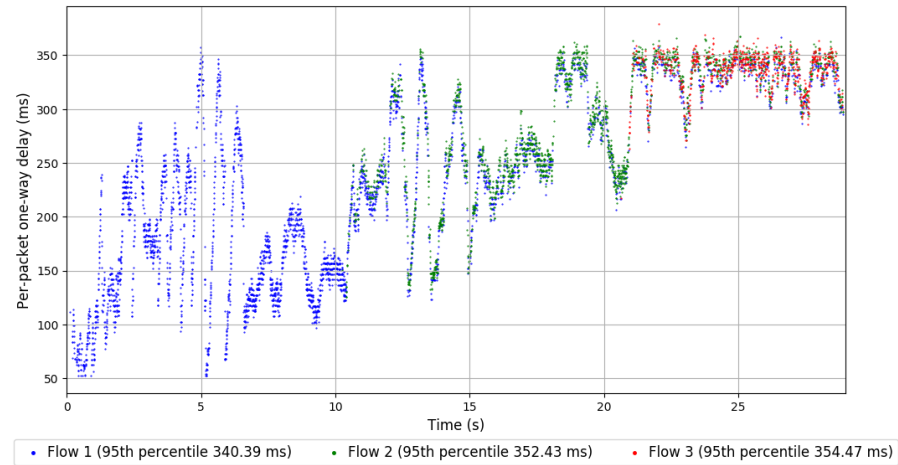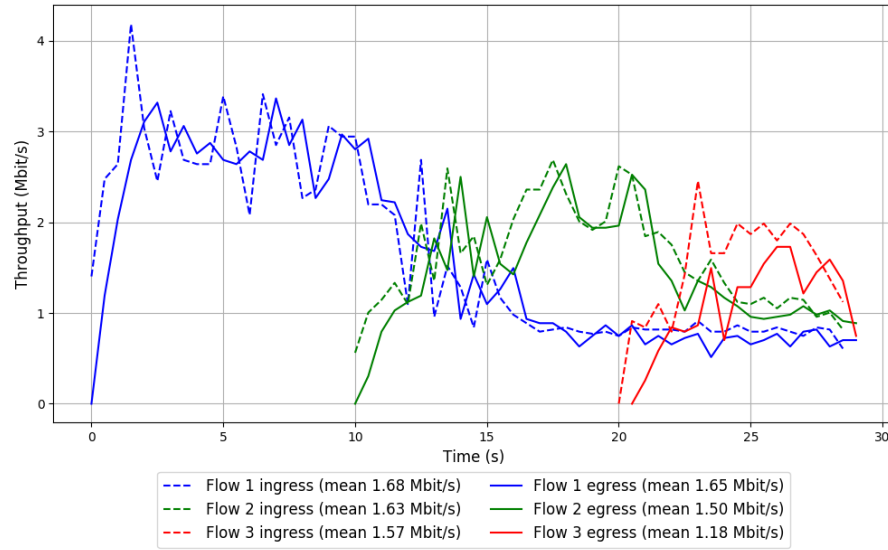
Run 3: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-22 00:50:37
End at: 2019-01-22 00:51:07
Local clock offset: 2.094 ms
Remote clock offset: -5.509 ms


# Below is generated by plot.py at 2019-01-22 01:57:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 357.494 ms
Loss rate: 16.07%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 352.444 ms
Loss rate: 6.15%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 361.849 ms
Loss rate: 24.54%
-- Flow 3:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 355.647 ms
Loss rate: 27.87%
```
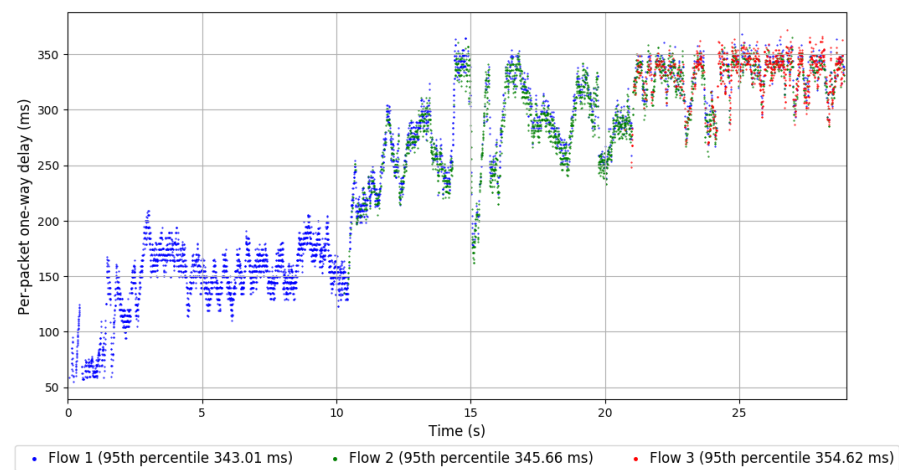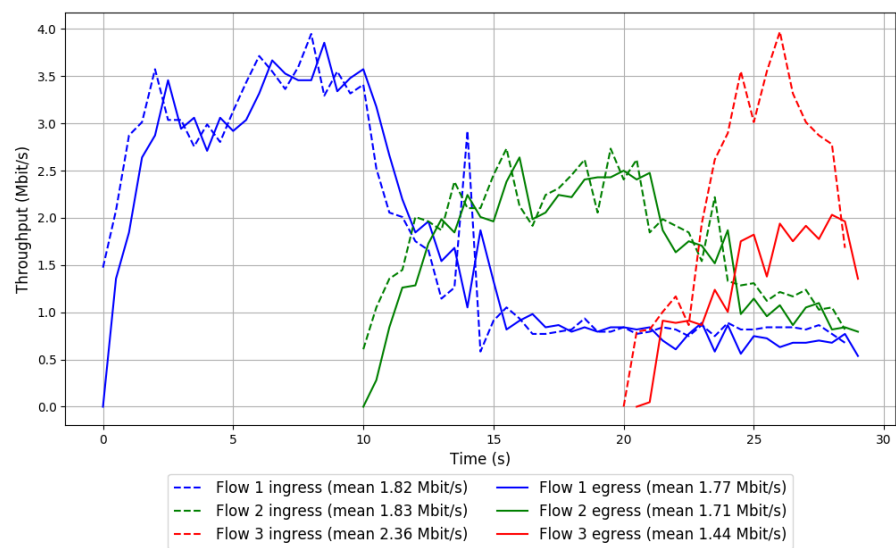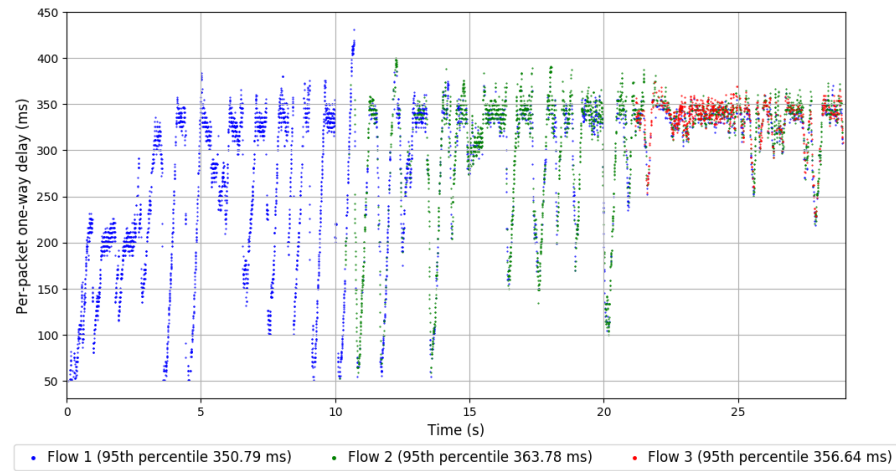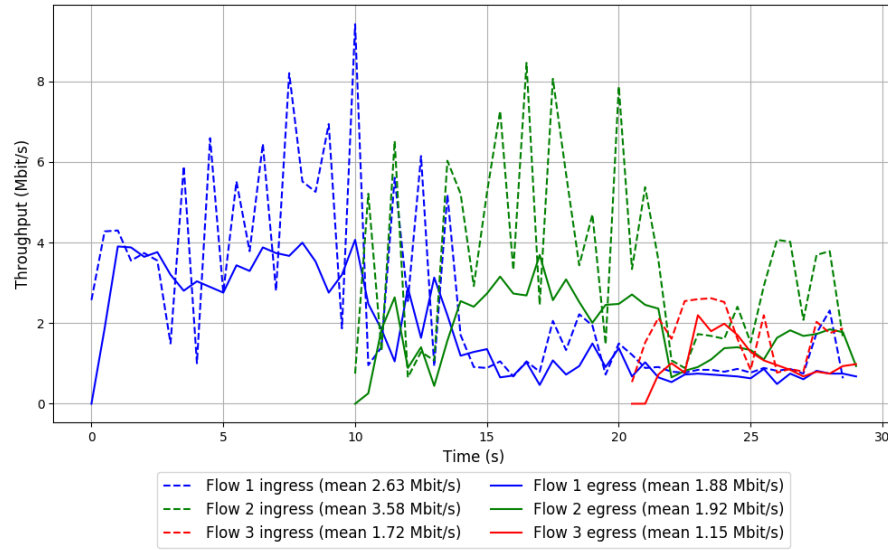
Run 1: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 1.45 Mbit/s) — Flow 1 egress (mean 1.36 Mbit/s)
Flow 2 ingress (mean 1.90 Mbit/s) — Flow 2 egress (mean 1.45 Mbit/s)
Flow 3 ingress (mean 1.12 Mbit/s) — Flow 3 egress (mean 0.84 Mbit/s)

Flow 1 (95th percentile 352.44 ms) • Flow 2 (95th percentile 361.85 ms) • Flow 3 (95th percentile 355.65 ms)
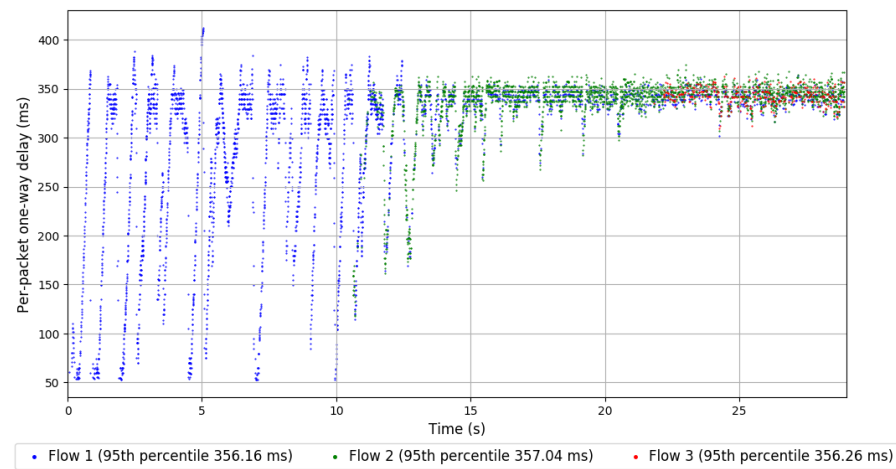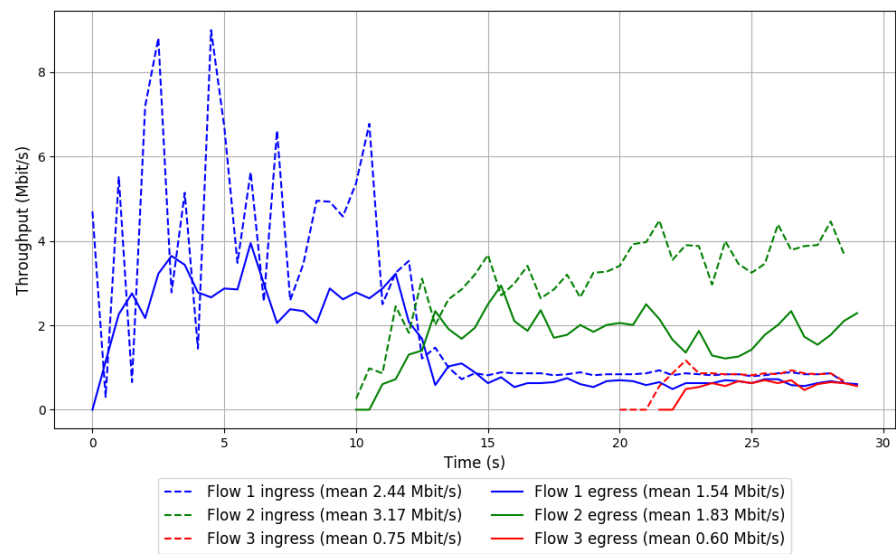
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```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-22 01:15:01
End at: 2019-01-22 01:15:31
Local clock offset: 1.558 ms
Remote clock offset: -4.871 ms


# Below is generated by plot.py at 2019-01-22 01:57:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 349.252 ms
Loss rate: 8.02%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 340.389 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 352.426 ms
Loss rate: 8.53%
-- Flow 3:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 354.474 ms
Loss rate: 26.48%
```

Run 2: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 1.68 Mbit/s)   Flow 1 egress (mean 1.65 Mbit/s)
Flow 2 ingress (mean 1.63 Mbit/s)   Flow 2 egress (mean 1.50 Mbit/s)
Flow 3 ingress (mean 1.57 Mbit/s)   Flow 3 egress (mean 1.18 Mbit/s)

Flow 1 (95th percentile 340.39 ms)   Flow 2 (95th percentile 352.43 ms)   Flow 3 (95th percentile 354.47 ms)
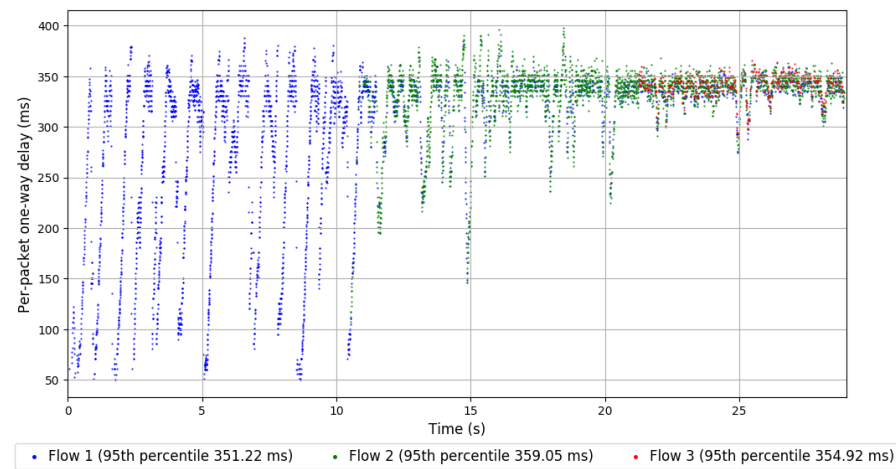
```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-22 01:39:25
End at: 2019-01-22 01:39:55
Local clock offset: -1.243 ms
Remote clock offset: -5.91 ms


# Below is generated by plot.py at 2019-01-22 01:57:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.28 Mbit/s
95th percentile per-packet one-way delay: 347.112 ms
Loss rate: 11.26%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 343.009 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 345.663 ms
Loss rate: 7.13%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 354.624 ms
Loss rate: 40.91%
```
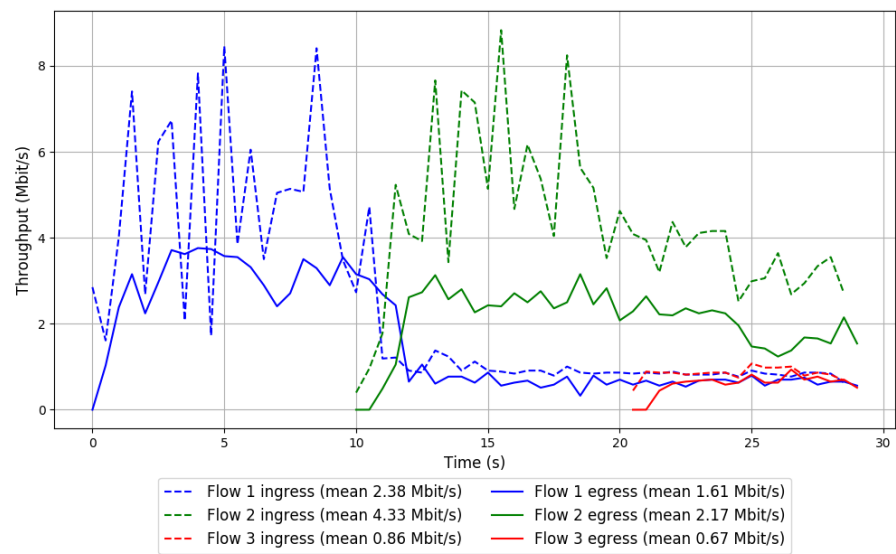
Run 3: Report of Indigo-MusesC3 — Data Link

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-22 01:03:23
End at: 2019-01-22 01:03:53
Local clock offset: 1.464 ms
Remote clock offset: -5.278 ms


# Below is generated by plot.py at 2019-01-22 01:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 358.133 ms
Loss rate: 36.89%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 350.789 ms
Loss rate: 28.51%
-- Flow 2:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 363.777 ms
Loss rate: 46.58%
-- Flow 3:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 356.640 ms
Loss rate: 35.85%
```

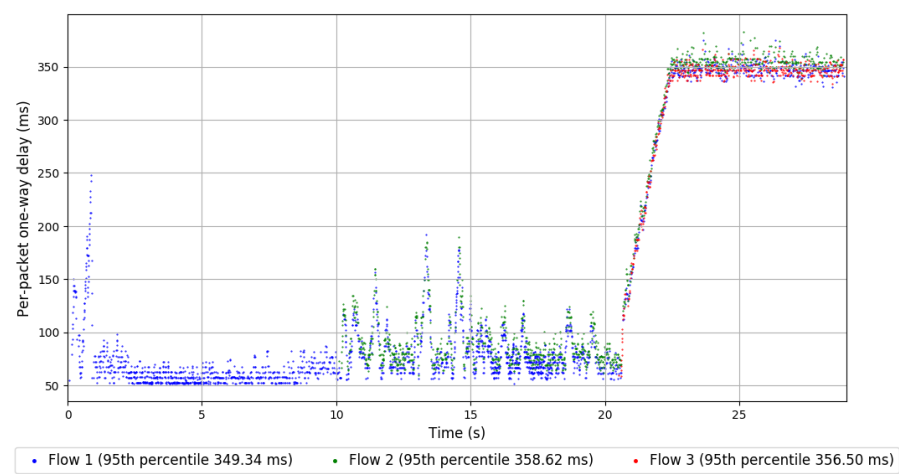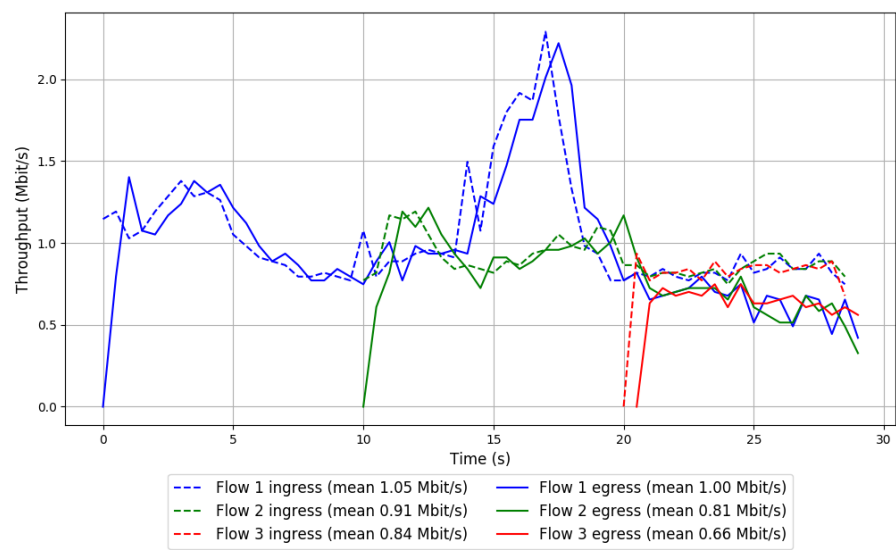Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-22 01:27:51
End at: 2019-01-22 01:28:21
Local clock offset: 1.052 ms
Remote clock offset: -4.597 ms


# Below is generated by plot.py at 2019-01-22 01:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 356.828 ms
Loss rate: 39.83%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 356.160 ms
Loss rate: 37.36%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 357.040 ms
Loss rate: 43.46%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 356.256 ms
Loss rate: 33.28%
```

Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-22 01:52:13
End at: 2019-01-22 01:52:43
Local clock offset: -1.847 ms
Remote clock offset: -7.197 ms

# Below is generated by plot.py at 2019-01-22 01:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 355.732 ms
Loss rate: 41.55%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 351.218 ms
Loss rate: 32.45%
-- Flow 2:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 359.052 ms
Loss rate: 50.60%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 354.922 ms
Loss rate: 25.97%
```
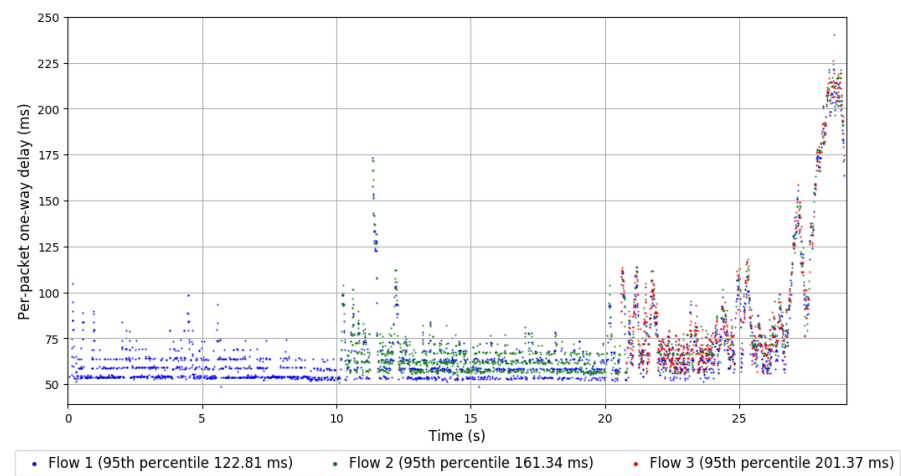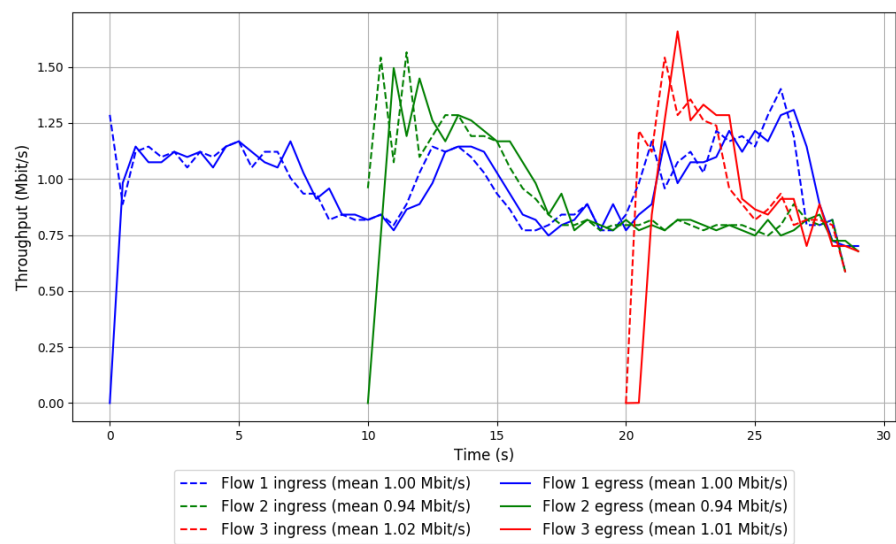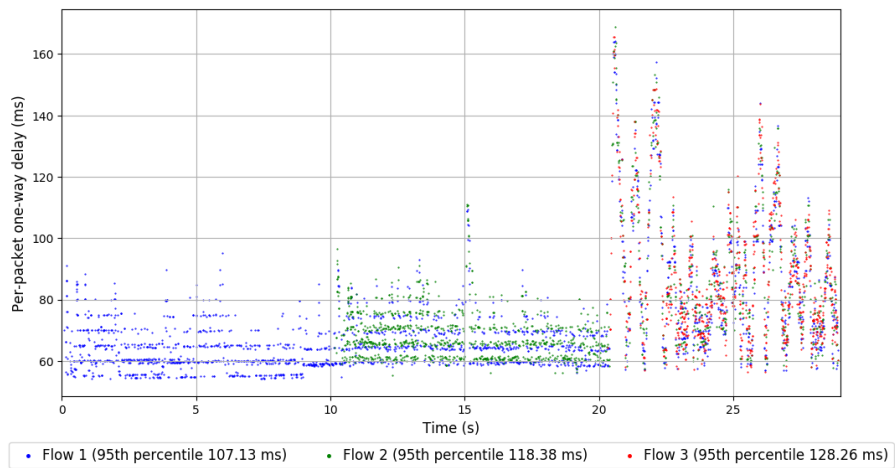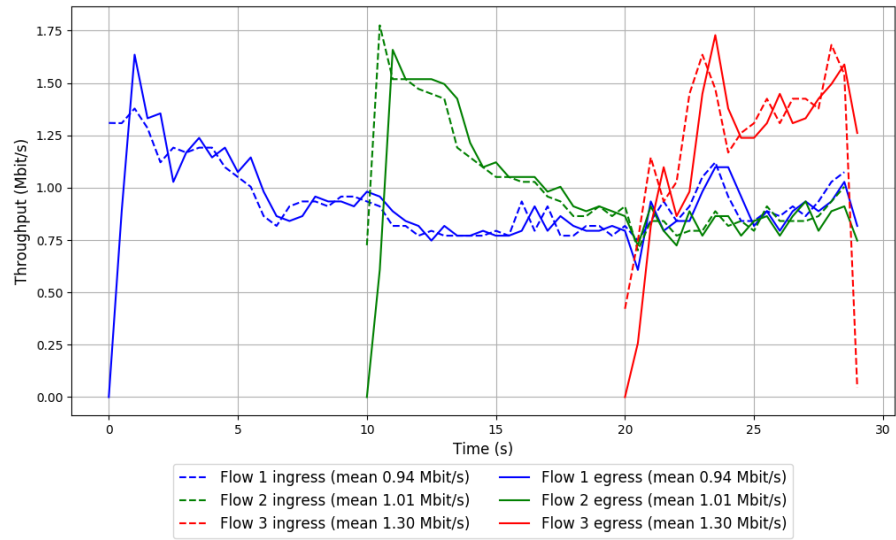
Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-22 01:04:34
End at: 2019-01-22 01:05:04
Local clock offset: 0.688 ms
Remote clock offset: -4.145 ms


# Below is generated by plot.py at 2019-01-22 01:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 354.710 ms
Loss rate: 9.33%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 349.339 ms
Loss rate: 5.45%
-- Flow 2:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 358.622 ms
Loss rate: 11.13%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 356.504 ms
Loss rate: 21.65%
```

Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 1.05 Mbit/s)   Flow 1 egress (mean 1.00 Mbit/s)
Flow 2 ingress (mean 0.91 Mbit/s)   Flow 2 egress (mean 0.81 Mbit/s)
Flow 3 ingress (mean 0.84 Mbit/s)   Flow 3 egress (mean 0.66 Mbit/s)

Flow 1 (95th percentile 349.34 ms)   Flow 2 (95th percentile 358.62 ms)   Flow 3 (95th percentile 356.50 ms)
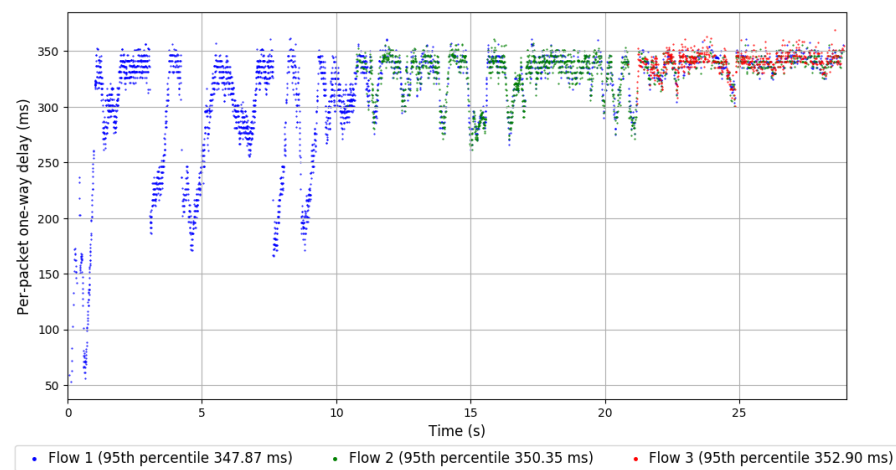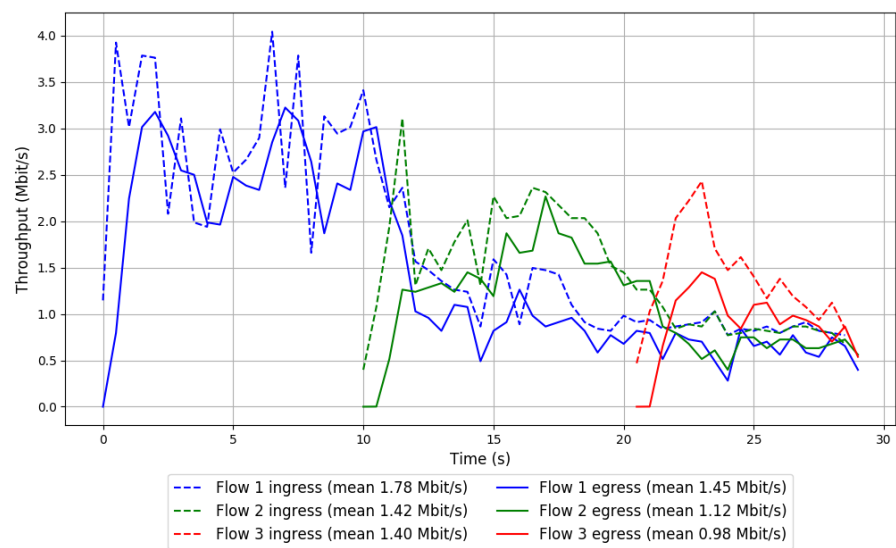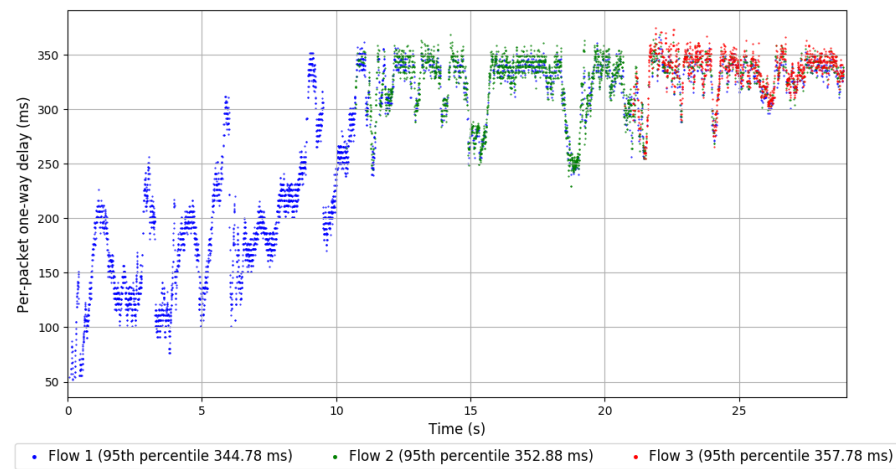
```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-22 01:29:01
End at: 2019-01-22 01:29:31
Local clock offset: -0.046 ms
Remote clock offset: -4.01 ms


# Below is generated by plot.py at 2019-01-22 01:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 152.894 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 122.813 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 161.335 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 201.371 ms
Loss rate: 1.49%
```

Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-22 01:53:23
End at: 2019-01-22 01:53:53
Local clock offset: 1.065 ms
Remote clock offset: -6.992 ms


# Below is generated by plot.py at 2019-01-22 01:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 118.652 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 107.128 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 118.381 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 128.256 ms
Loss rate: 2.56%
```
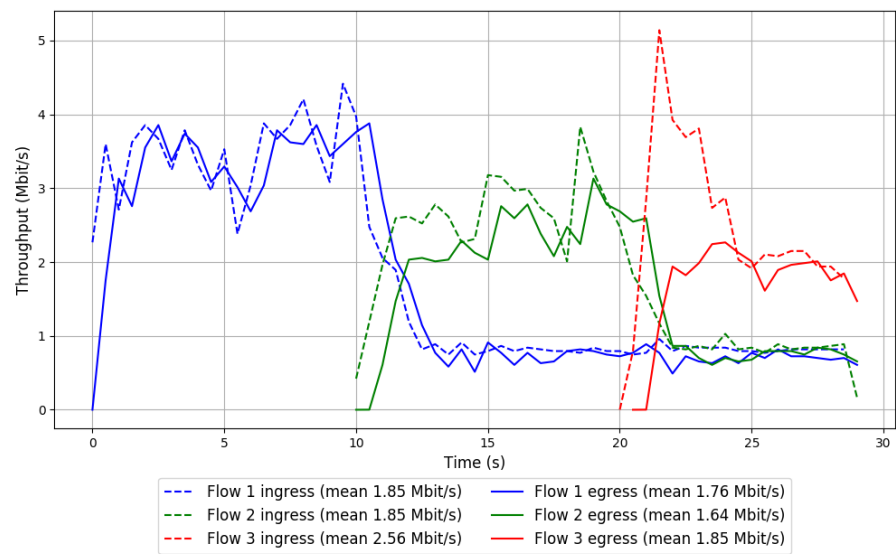
Run 3: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-22 00:57:35
End at: 2019-01-22 00:58:05
Local clock offset: 0.455 ms
Remote clock offset: -5.051 ms


# Below is generated by plot.py at 2019-01-22 01:57:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 350.267 ms
Loss rate: 21.76%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 347.874 ms
Loss rate: 18.78%
-- Flow 2:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 350.351 ms
Loss rate: 22.60%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 352.896 ms
Loss rate: 32.90%
```
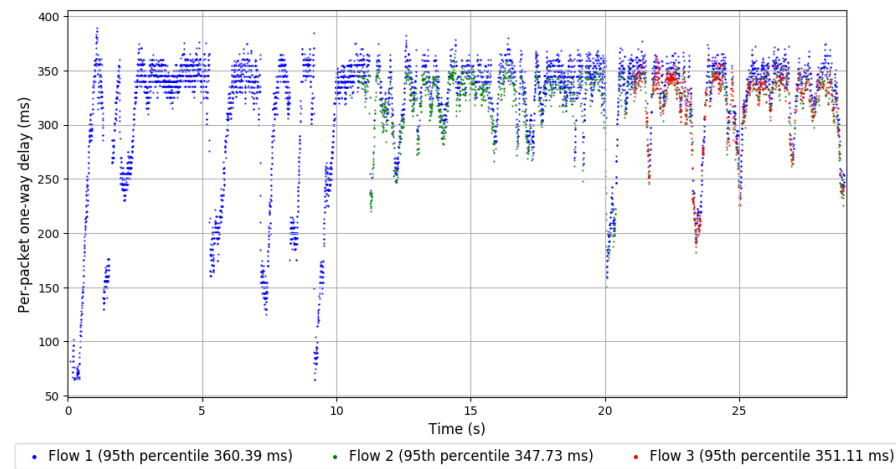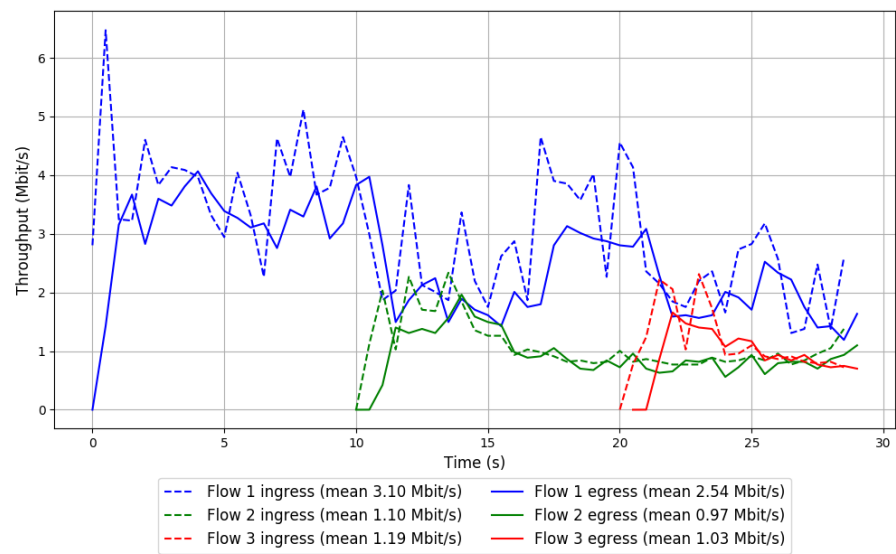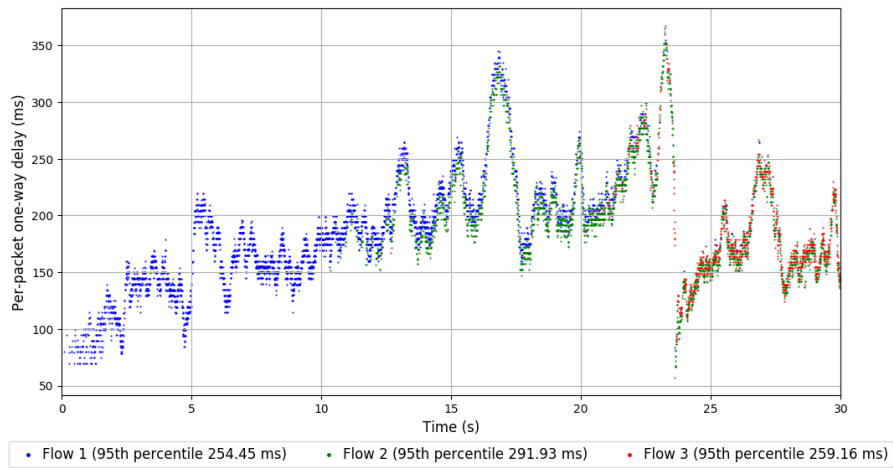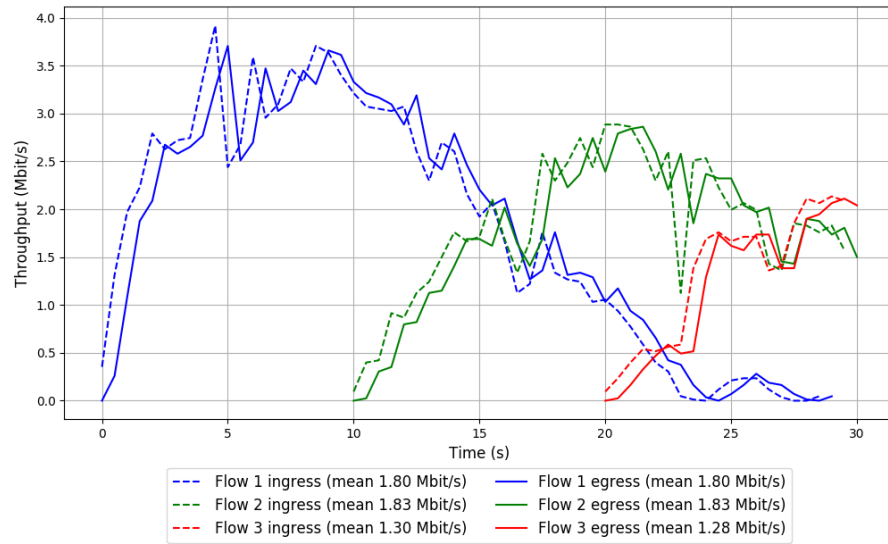
Run 1: Report of Indigo-MusesT — Data Link

- - - Flow 1 ingress (mean 1.78 Mbit/s) —— Flow 1 egress (mean 1.45 Mbit/s)
- - - Flow 2 ingress (mean 1.42 Mbit/s) —— Flow 2 egress (mean 1.12 Mbit/s)
- - - Flow 3 ingress (mean 1.40 Mbit/s) —— Flow 3 egress (mean 0.98 Mbit/s)

• Flow 1 (95th percentile 347.87 ms)   • Flow 2 (95th percentile 350.35 ms)   • Flow 3 (95th percentile 352.90 ms)

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-22 01:22:01
End at: 2019-01-22 01:22:31
Local clock offset: 0.408 ms
Remote clock offset: -5.538 ms


# Below is generated by plot.py at 2019-01-22 01:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 350.749 ms
Loss rate: 12.97%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 344.777 ms
Loss rate: 5.10%
-- Flow 2:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 352.881 ms
Loss rate: 13.44%
-- Flow 3:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 357.781 ms
Loss rate: 31.45%
```

Run 2: Report of Indigo-MusesT — Data Link
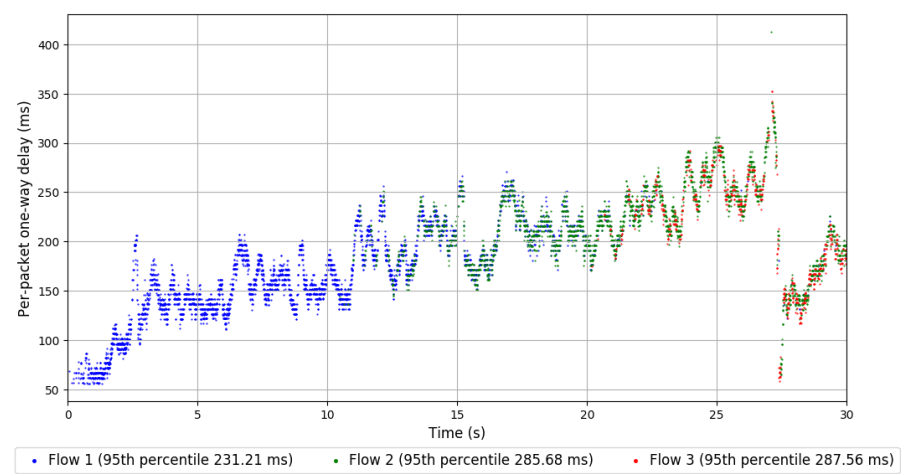
```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-22 01:46:24
End at: 2019-01-22 01:46:54
Local clock offset: -0.828 ms
Remote clock offset: -4.959 ms

# Below is generated by plot.py at 2019-01-22 01:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 359.822 ms
Loss rate: 17.30%
-- Flow 1:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 360.388 ms
Loss rate: 18.37%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 347.733 ms
Loss rate: 12.73%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 351.106 ms
Loss rate: 17.13%
```

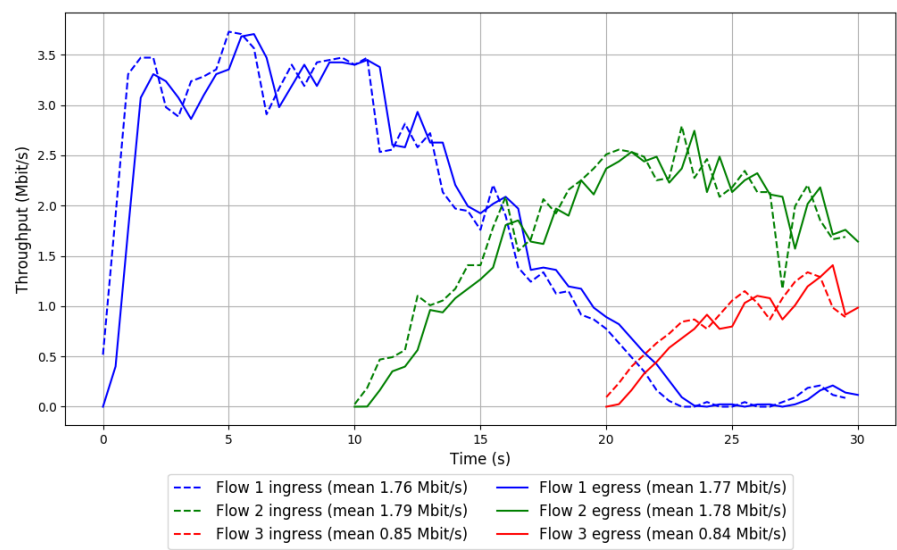Run 3: Report of Indigo-MusesT — Data Link

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```
Run 1: Statistics of LEDBAT

Start at: 2019-01-22 00:58:44
End at: 2019-01-22 00:59:14
Local clock offset: 1.119 ms
Remote clock offset: -6.084 ms


# Below is generated by plot.py at 2019-01-22 01:58:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 269.434 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 254.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 291.931 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 259.158 ms
Loss rate: 2.99%
```
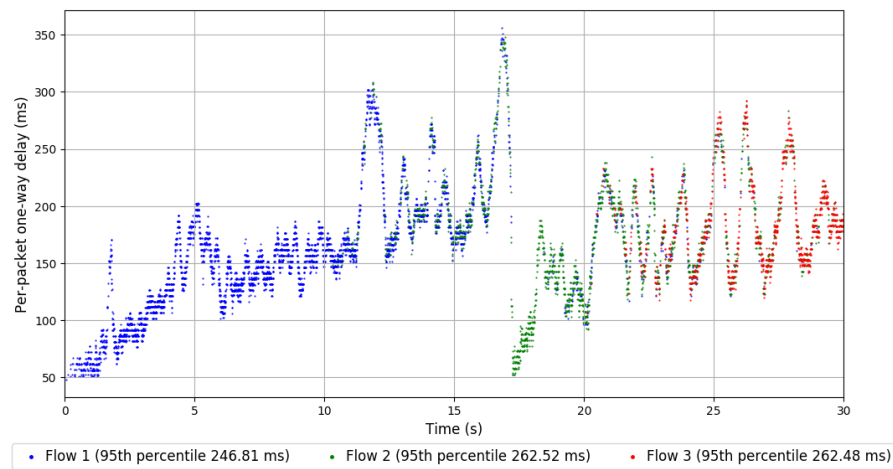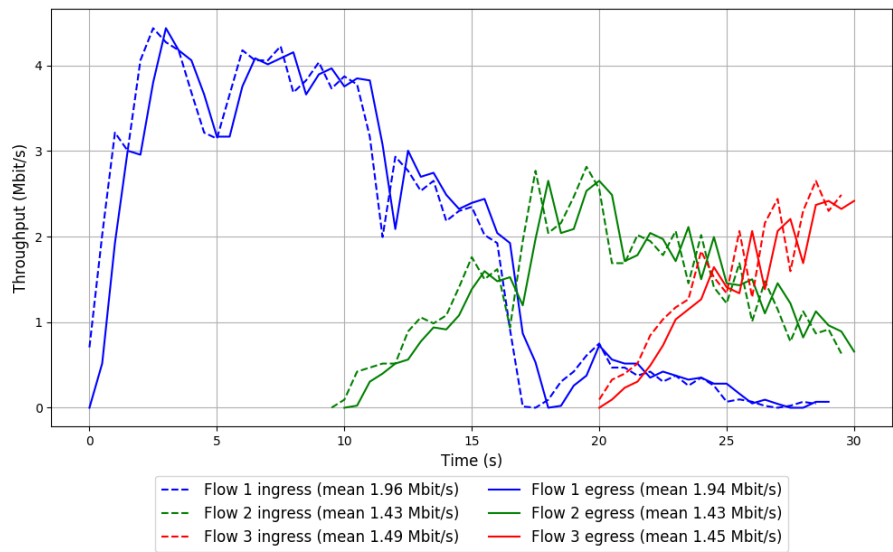
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.80 Mbit/s) --- Flow 1 egress (mean 1.80 Mbit/s)
Flow 2 ingress (mean 1.83 Mbit/s) --- Flow 2 egress (mean 1.83 Mbit/s)
Flow 3 ingress (mean 1.30 Mbit/s) --- Flow 3 egress (mean 1.28 Mbit/s)

Flow 1 (95th percentile 254.45 ms) • Flow 2 (95th percentile 291.93 ms) • Flow 3 (95th percentile 259.16 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-22 01:23:12
End at: 2019-01-22 01:23:42
Local clock offset: 1.551 ms
Remote clock offset: -5.124 ms


# Below is generated by plot.py at 2019-01-22 01:58:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 266.737 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 231.210 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 285.684 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 287.556 ms
Loss rate: 3.32%
```
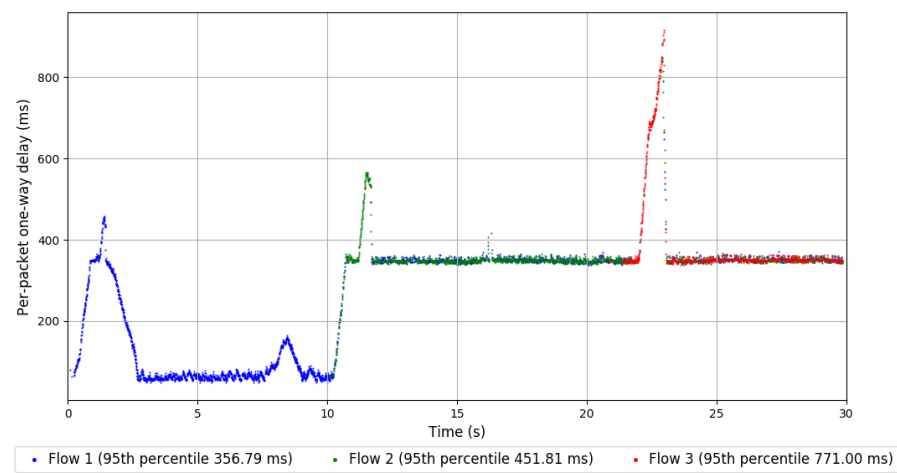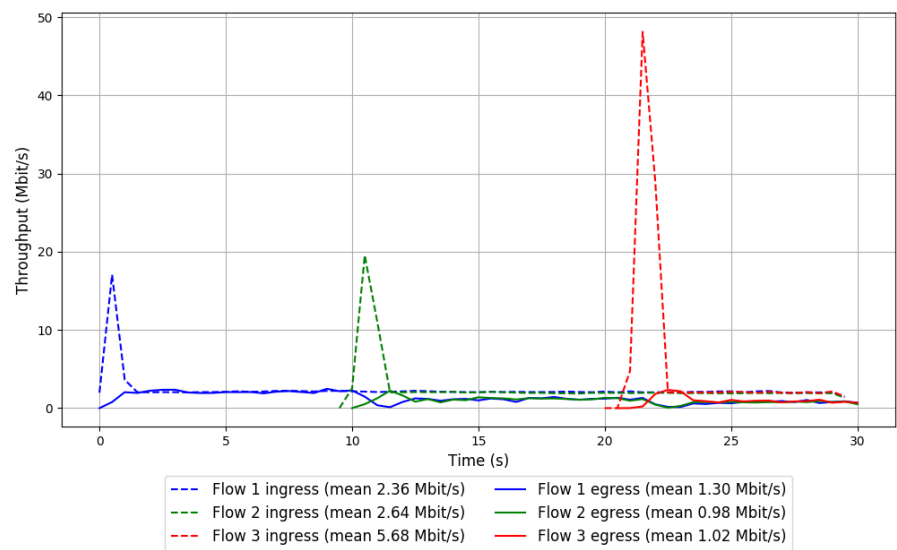
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.76 Mbit/s)   Flow 1 egress (mean 1.77 Mbit/s)
Flow 2 ingress (mean 1.79 Mbit/s)   Flow 2 egress (mean 1.78 Mbit/s)
Flow 3 ingress (mean 0.85 Mbit/s)   Flow 3 egress (mean 0.84 Mbit/s)

Flow 1 (95th percentile 231.21 ms)   Flow 2 (95th percentile 285.68 ms)   Flow 3 (95th percentile 287.56 ms)

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```
Run 3: Statistics of LEDBAT

Start at: 2019-01-22 01:47:33
End at: 2019-01-22 01:48:03
Local clock offset: -1.654 ms
Remote clock offset: -4.9 ms


# Below is generated by plot.py at 2019-01-22 01:58:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 256.450 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 246.814 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 262.522 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 262.484 ms
Loss rate: 3.40%
```
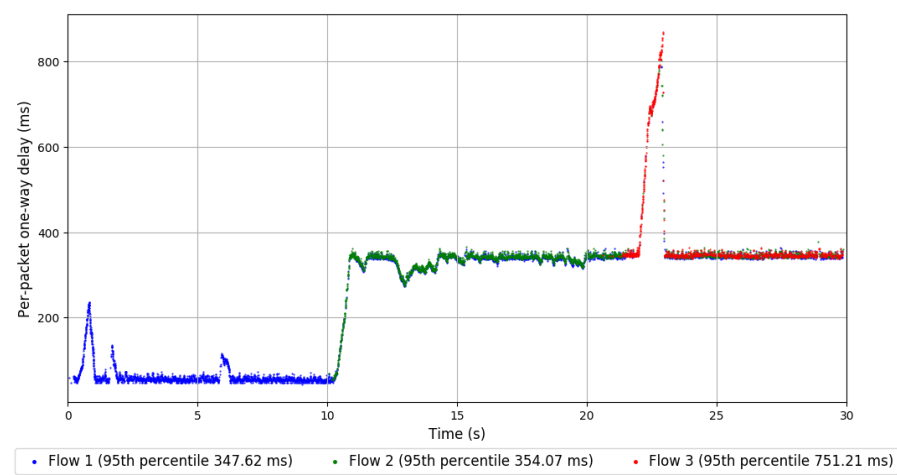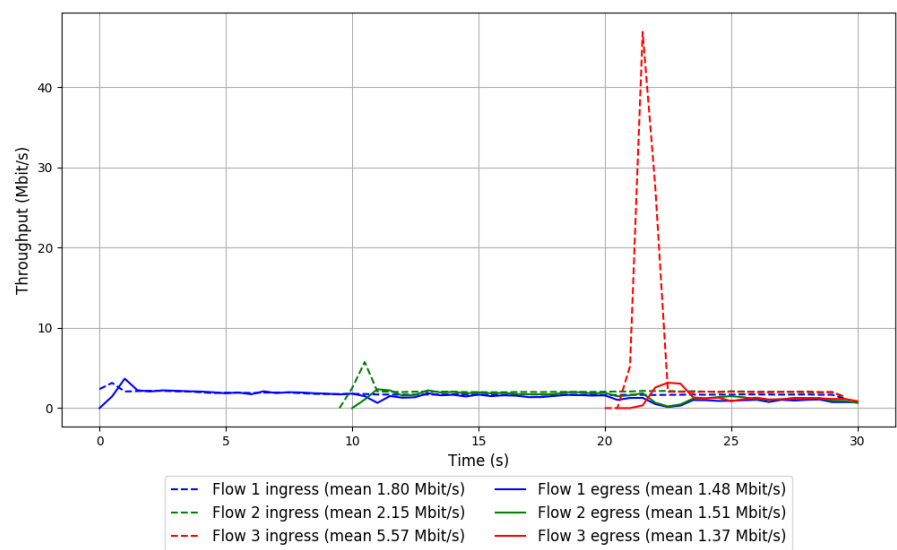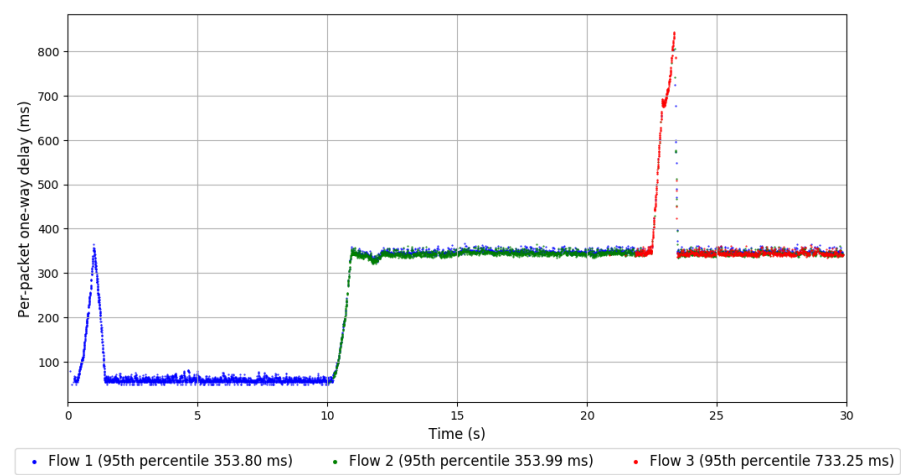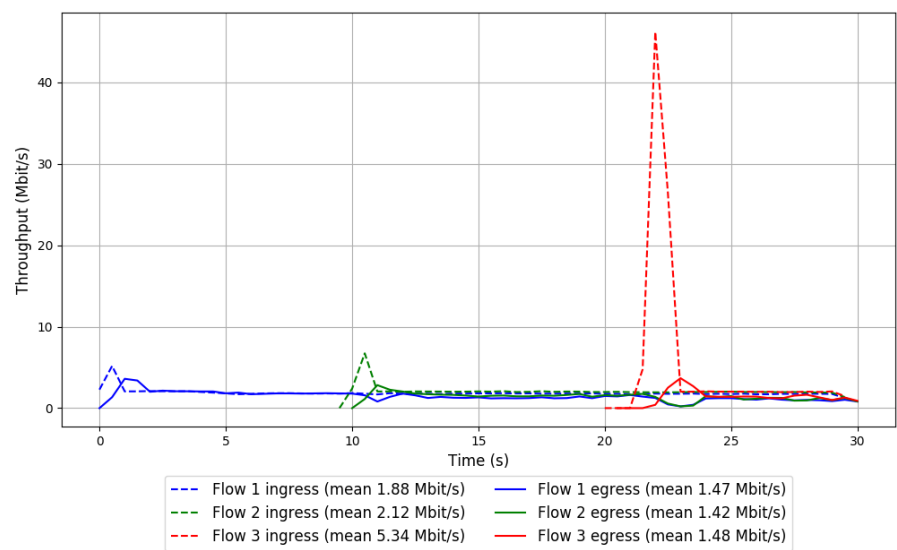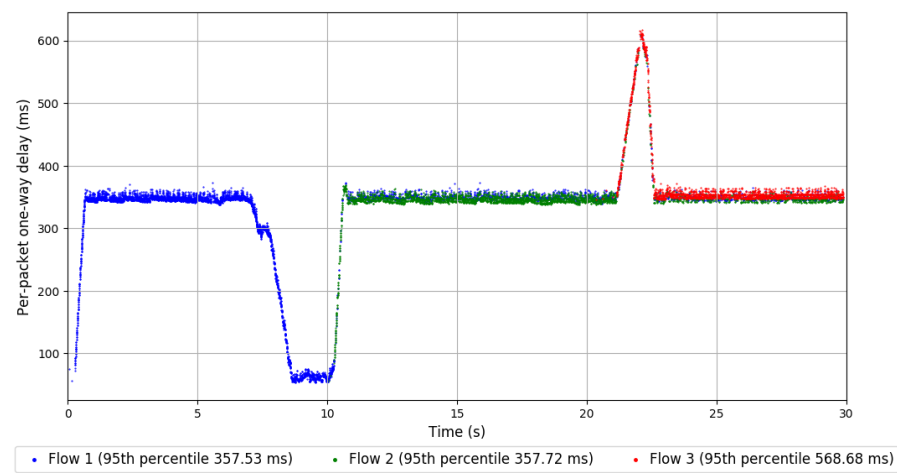
Run 3: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-22 00:51:47
End at: 2019-01-22 00:52:17
Local clock offset: 0.602 ms
Remote clock offset: -5.24 ms

# Below is generated by plot.py at 2019-01-22 01:58:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 432.782 ms
Loss rate: 62.35%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 356.792 ms
Loss rate: 45.37%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 451.808 ms
Loss rate: 63.01%
-- Flow 3:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 770.995 ms
Loss rate: 83.21%
```

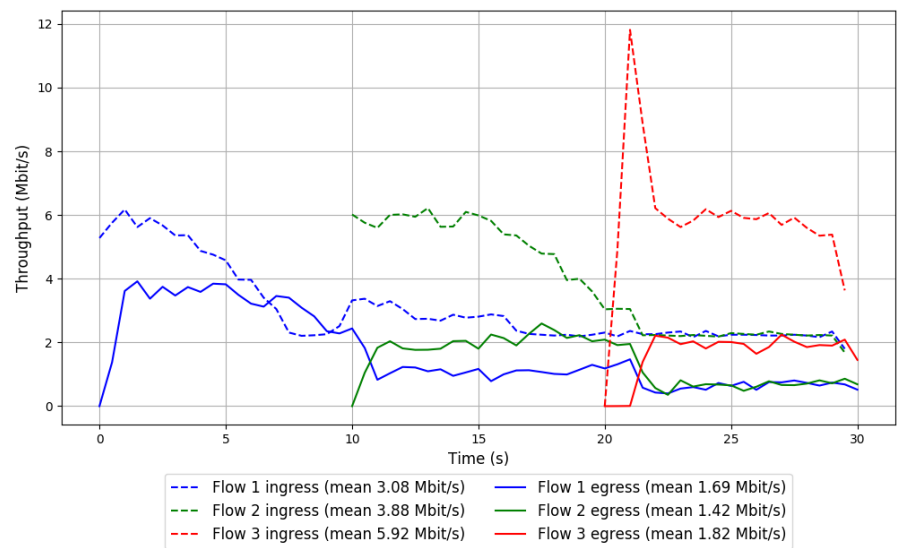Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-22 01:16:11
End at: 2019-01-22 01:16:41
Local clock offset: 0.846 ms
Remote clock offset: -4.97 ms


# Below is generated by plot.py at 2019-01-22 01:58:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 356.235 ms
Loss rate: 42.81%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 347.619 ms
Loss rate: 18.31%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 354.070 ms
Loss rate: 29.99%
-- Flow 3:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 751.209 ms
Loss rate: 76.91%
```
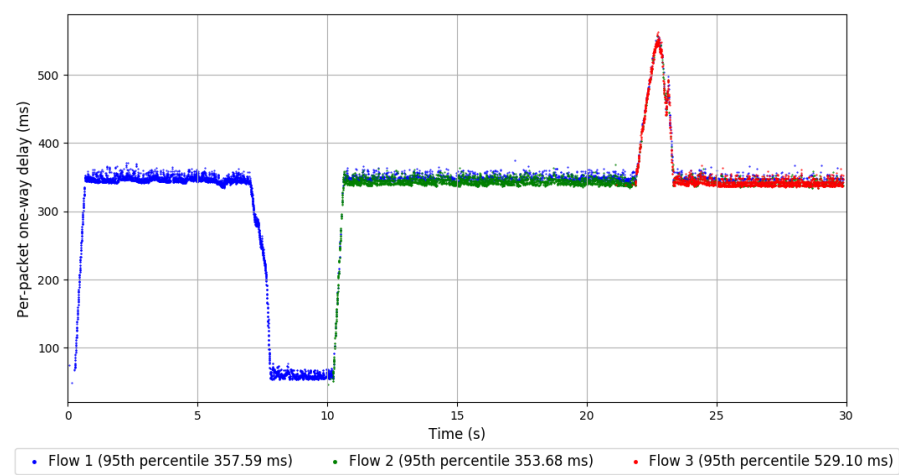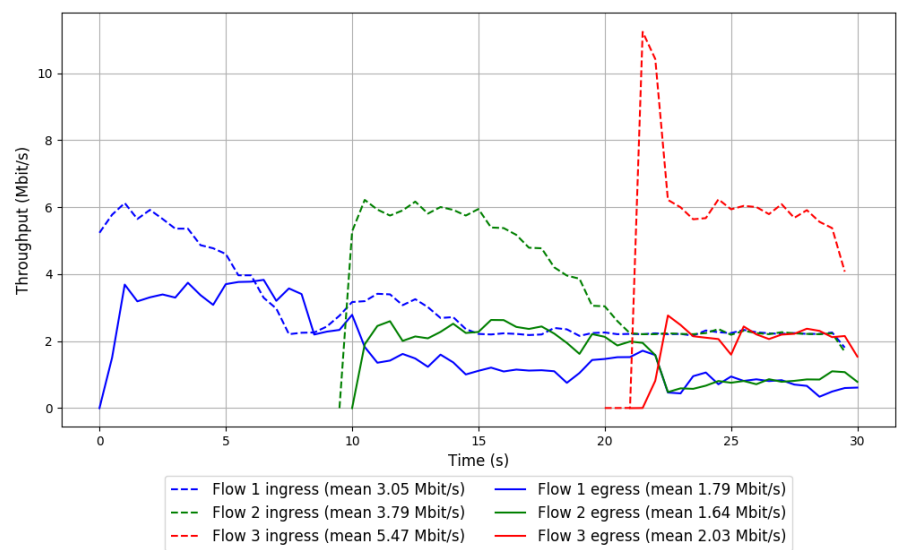
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 1.80 Mbit/s)   Flow 1 egress (mean 1.48 Mbit/s)
Flow 2 ingress (mean 2.15 Mbit/s)   Flow 2 egress (mean 1.51 Mbit/s)
Flow 3 ingress (mean 5.57 Mbit/s)   Flow 3 egress (mean 1.37 Mbit/s)

Flow 1 (95th percentile 347.62 ms)   Flow 2 (95th percentile 354.07 ms)   Flow 3 (95th percentile 751.21 ms)
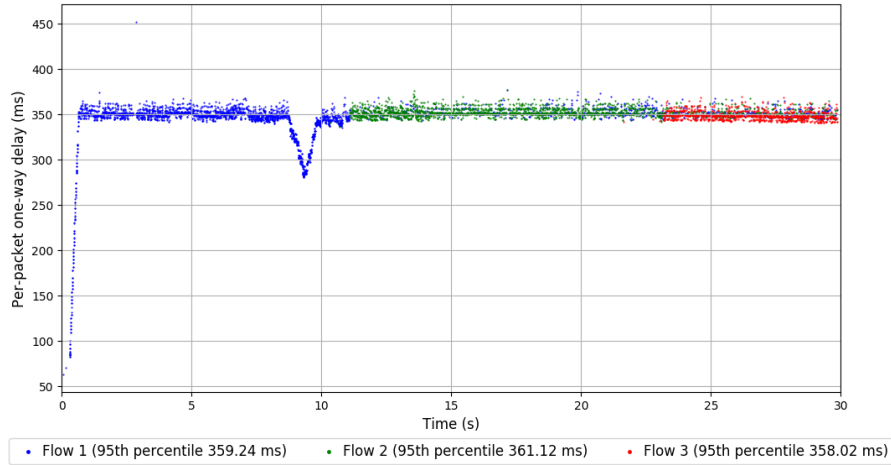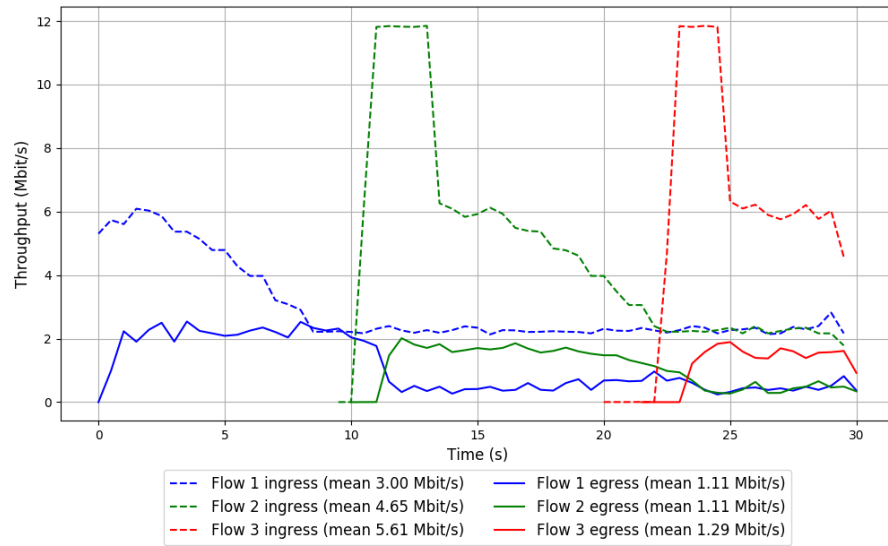
```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-22 01:40:36
End at: 2019-01-22 01:41:06
Local clock offset: 0.434 ms
Remote clock offset: -4.688 ms


# Below is generated by plot.py at 2019-01-22 01:58:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 357.944 ms
Loss rate: 43.60%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 353.797 ms
Loss rate: 21.90%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 353.993 ms
Loss rate: 33.59%
-- Flow 3:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 733.248 ms
Loss rate: 74.77%
```

Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 1.88 Mbit/s) — Flow 1 egress (mean 1.47 Mbit/s)
Flow 2 ingress (mean 2.12 Mbit/s) — Flow 2 egress (mean 1.42 Mbit/s)
Flow 3 ingress (mean 5.34 Mbit/s) — Flow 3 egress (mean 1.48 Mbit/s)

Flow 1 (95th percentile 353.80 ms) — Flow 2 (95th percentile 353.99 ms) — Flow 3 (95th percentile 733.25 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-22 00:44:40
End at: 2019-01-22 00:45:10
Local clock offset: 2.053 ms
Remote clock offset: -5.335 ms

# Below is generated by plot.py at 2019-01-22 01:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 363.917 ms
Loss rate: 57.96%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 357.526 ms
Loss rate: 45.38%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 357.717 ms
Loss rate: 63.52%
-- Flow 3:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 568.682 ms
Loss rate: 70.46%
```
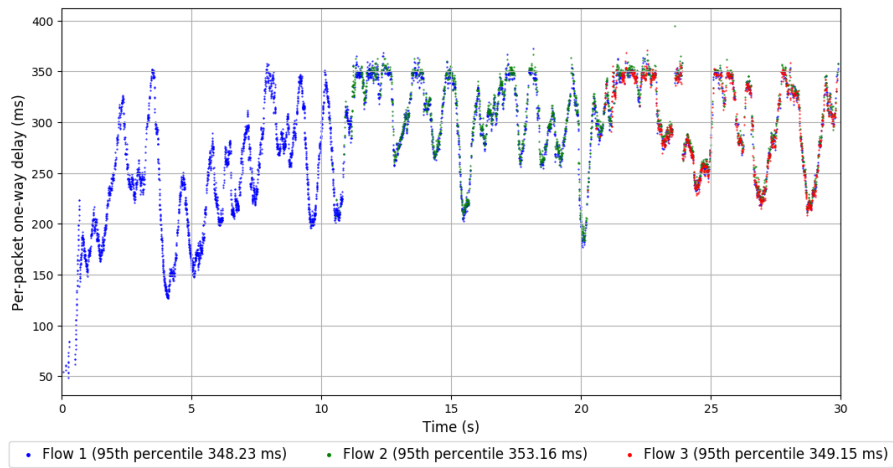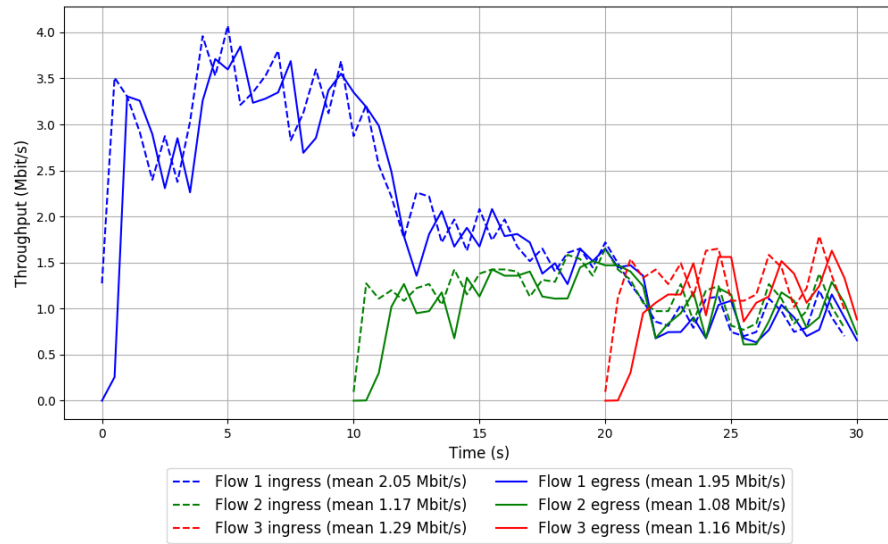
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-22 01:09:13
End at: 2019-01-22 01:09:43
Local clock offset: 2.007 ms
Remote clock offset: -3.745 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 367.476 ms
Loss rate: 52.98%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 357.589 ms
Loss rate: 41.54%
-- Flow 2:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 353.682 ms
Loss rate: 56.79%
-- Flow 3:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 529.104 ms
Loss rate: 67.01%
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-22 01:33:37
End at: 2019-01-22 01:34:07
Local clock offset: -1.586 ms
Remote clock offset: -4.256 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 359.943 ms
Loss rate: 72.50%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 359.239 ms
Loss rate: 63.13%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 361.116 ms
Loss rate: 76.59%
-- Flow 3:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 358.022 ms
Loss rate: 80.83%
```
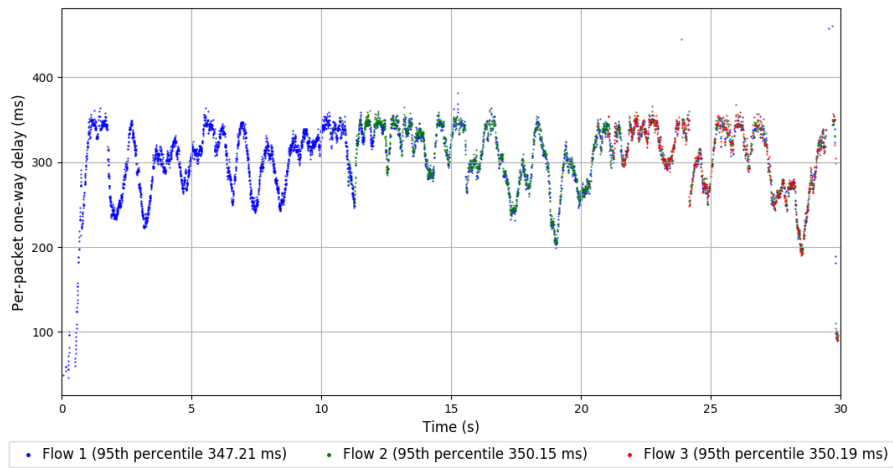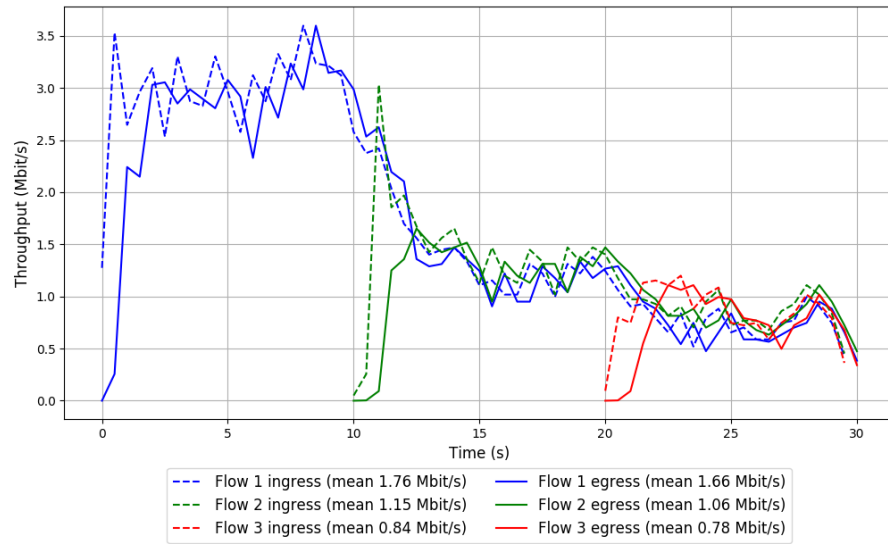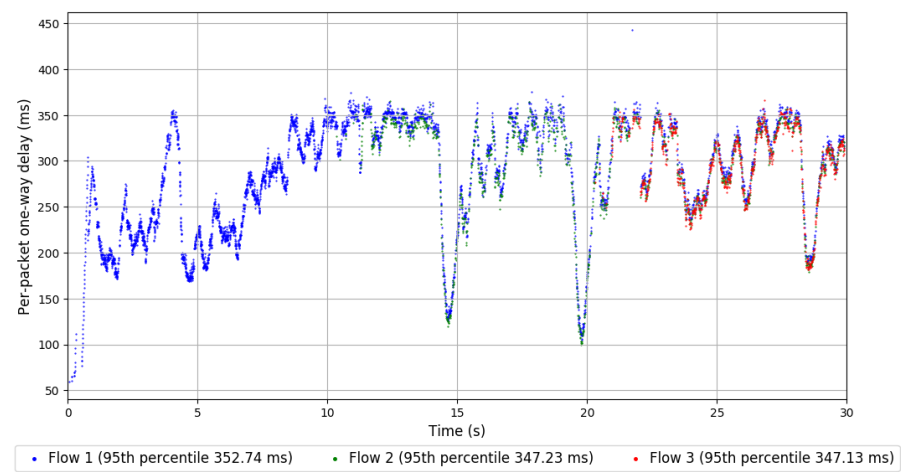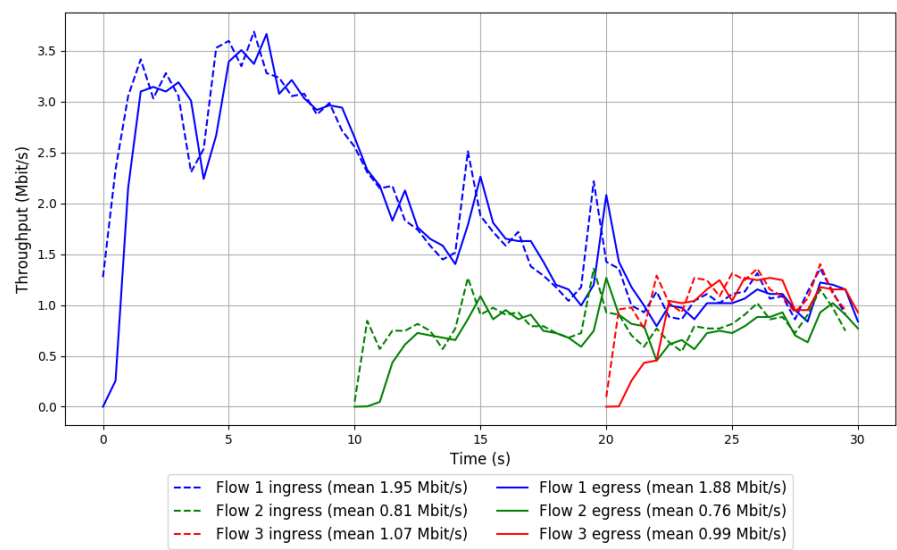
Run 3: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-22 01:06:52
End at: 2019-01-22 01:07:22
Local clock offset: 1.105 ms
Remote clock offset: -4.356 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 349.572 ms
Loss rate: 6.98%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 348.232 ms
Loss rate: 4.93%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 353.158 ms
Loss rate: 9.44%
-- Flow 3:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 349.151 ms
Loss rate: 12.37%
```

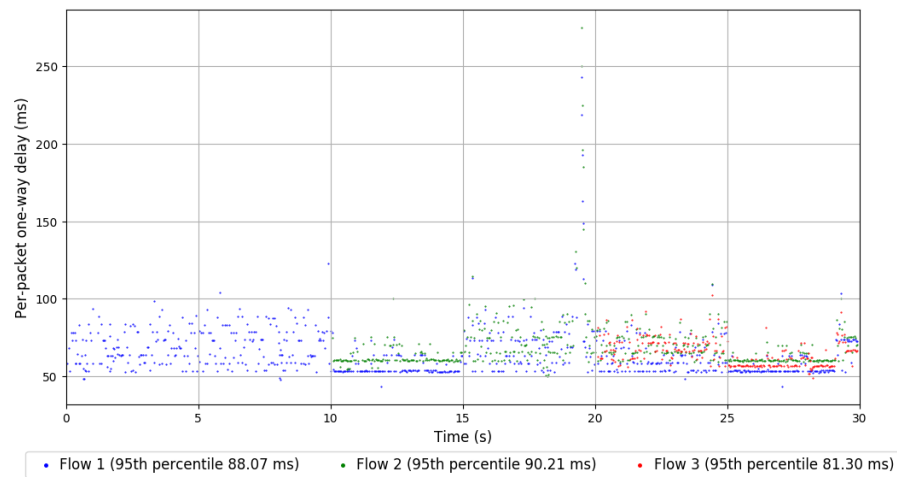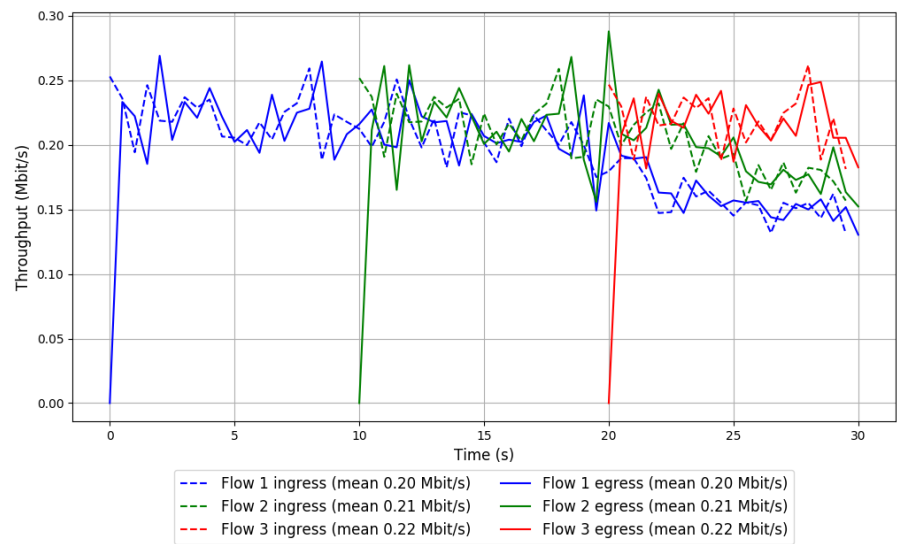Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-22 01:31:19
End at: 2019-01-22 01:31:49
Local clock offset: -0.347 ms
Remote clock offset: -3.83 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 348.637 ms
Loss rate: 7.48%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 347.214 ms
Loss rate: 5.91%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 350.150 ms
Loss rate: 9.87%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 350.192 ms
Loss rate: 10.84%
```

Run 2: Report of QUIC Cubic — Data Link
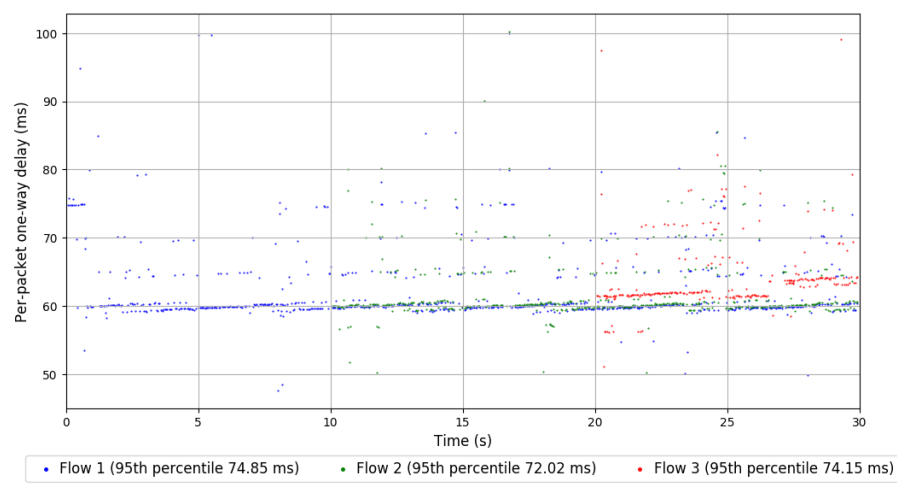
```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-22 01:55:42
End at: 2019-01-22 01:56:12
Local clock offset: -0.192 ms
Remote clock offset: -6.537 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 351.837 ms
Loss rate: 5.45%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 352.738 ms
Loss rate: 3.71%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 347.230 ms
Loss rate: 8.43%
-- Flow 3:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 347.131 ms
Loss rate: 10.44%
```
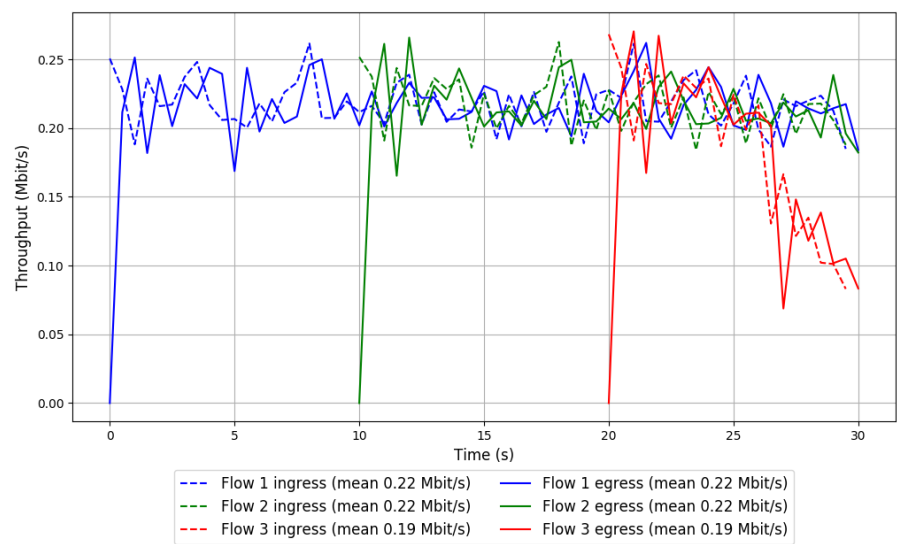
Run 3: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-01-22 00:56:26
End at: 2019-01-22 00:56:56
Local clock offset: 0.254 ms
Remote clock offset: -5.158 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 87.616 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 88.072 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 90.206 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.300 ms
Loss rate: 0.70%
```
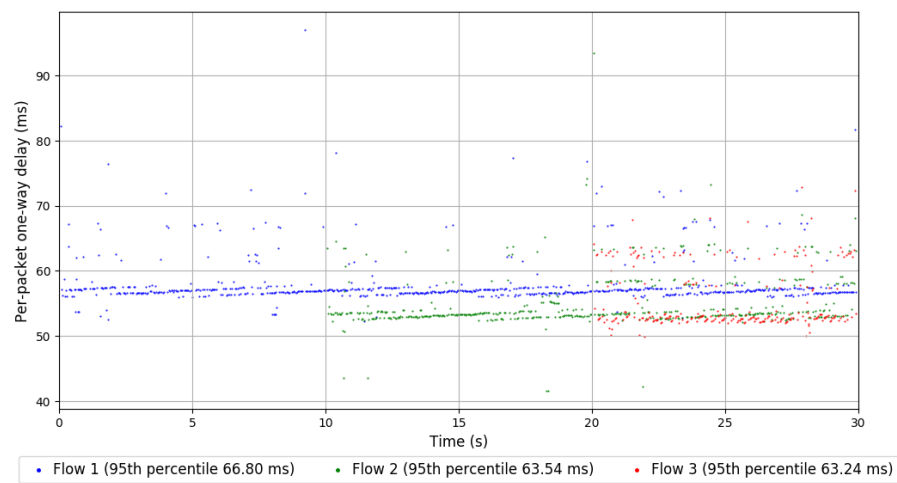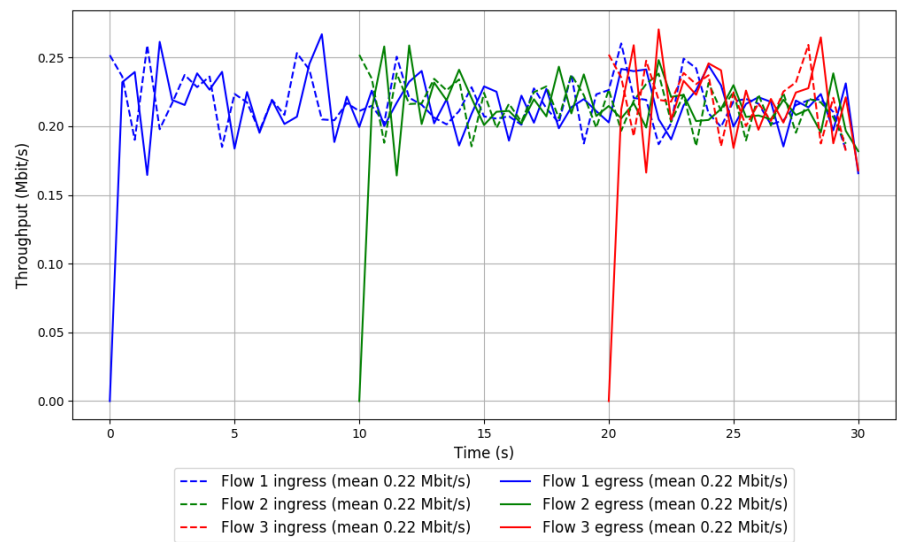
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-01-22 01:20:52
End at: 2019-01-22 01:21:22
Local clock offset: 1.266 ms
Remote clock offset: -4.052 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 74.845 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 74.847 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.019 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 74.149 ms
Loss rate: 2.93%
```
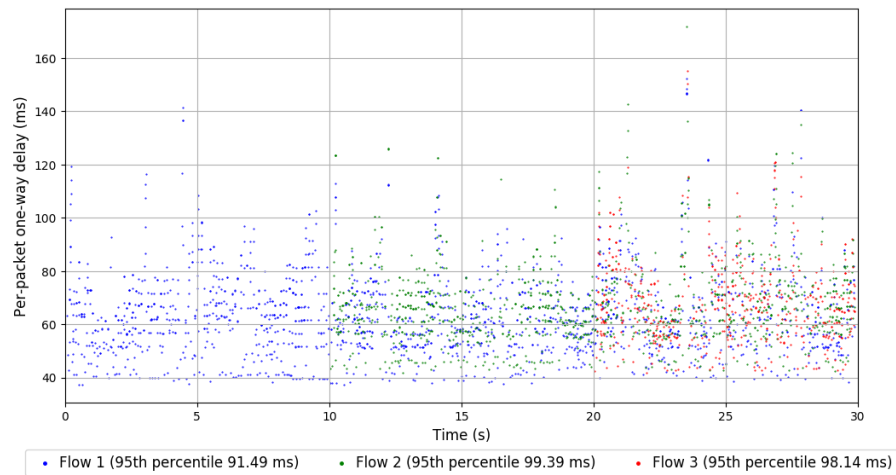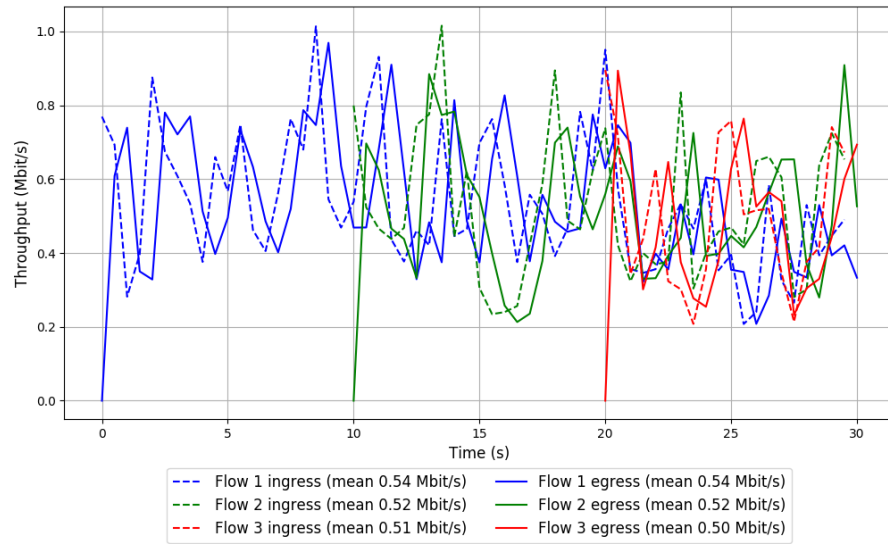
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-22 01:45:15
End at: 2019-01-22 01:45:45
Local clock offset: -0.316 ms
Remote clock offset: -4.866 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.700 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.799 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.240 ms
Loss rate: 0.69%
```
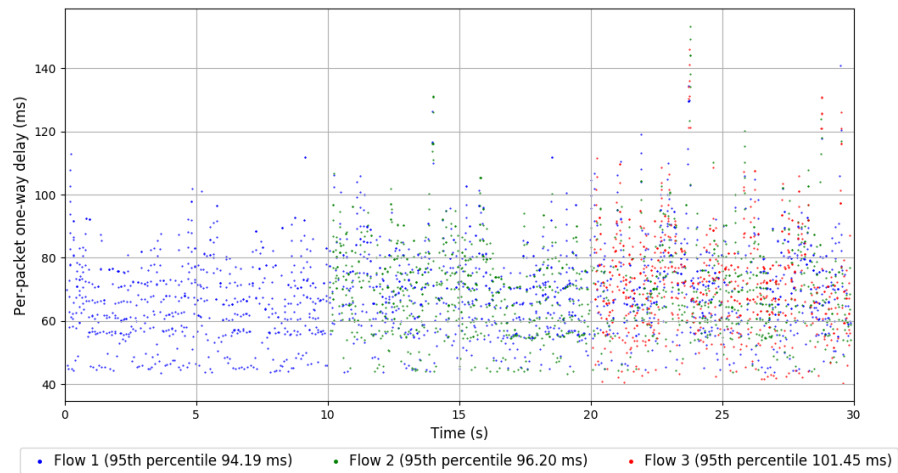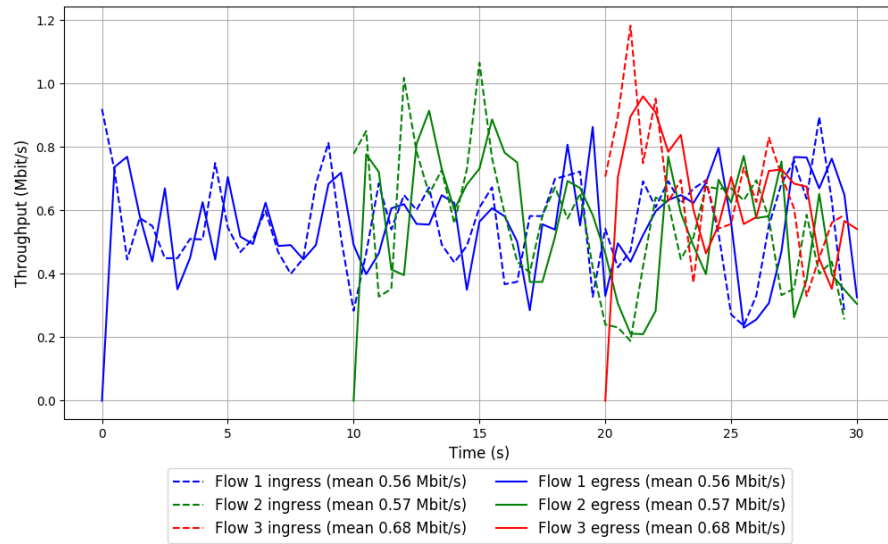
Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-22 01:05:43
End at: 2019-01-22 01:06:13
Local clock offset: 0.234 ms
Remote clock offset: -4.031 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 94.915 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 91.487 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 99.394 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 98.144 ms
Loss rate: 1.63%
```
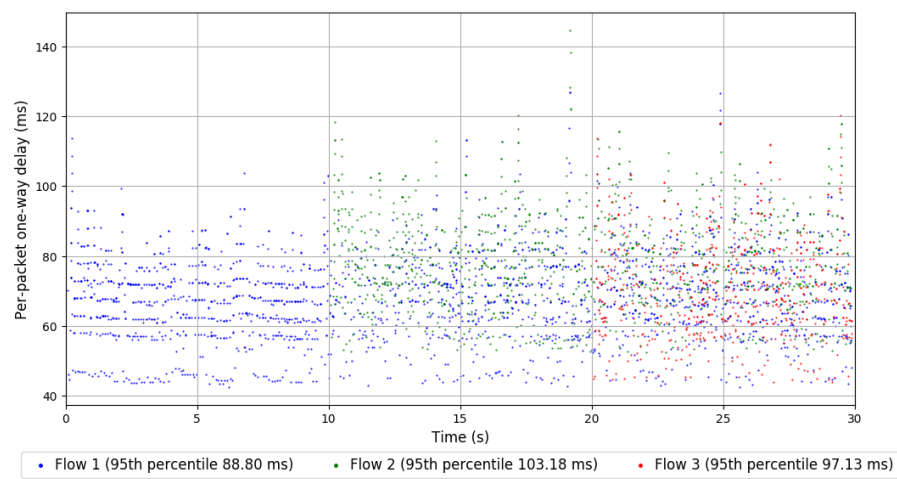
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-22 01:30:10
End at: 2019-01-22 01:30:40
Local clock offset: -0.994 ms
Remote clock offset: -4.268 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 95.777 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 94.189 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 96.197 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 101.454 ms
Loss rate: 1.03%
```
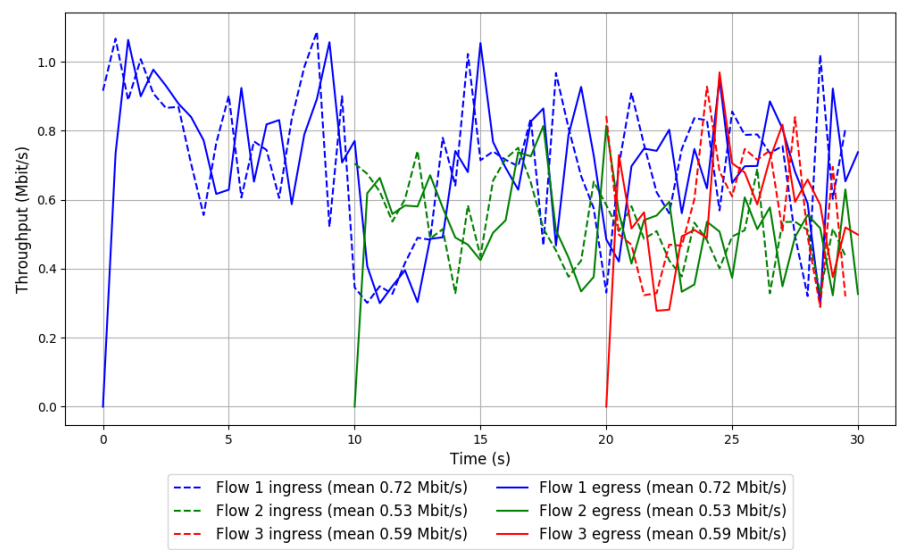
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-01-22 01:54:32
End at: 2019-01-22 01:55:02
Local clock offset: -0.391 ms
Remote clock offset: -6.63 ms


# Below is generated by plot.py at 2019-01-22 01:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 96.621 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 88.801 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 103.179 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 97.133 ms
Loss rate: 0.01%
```
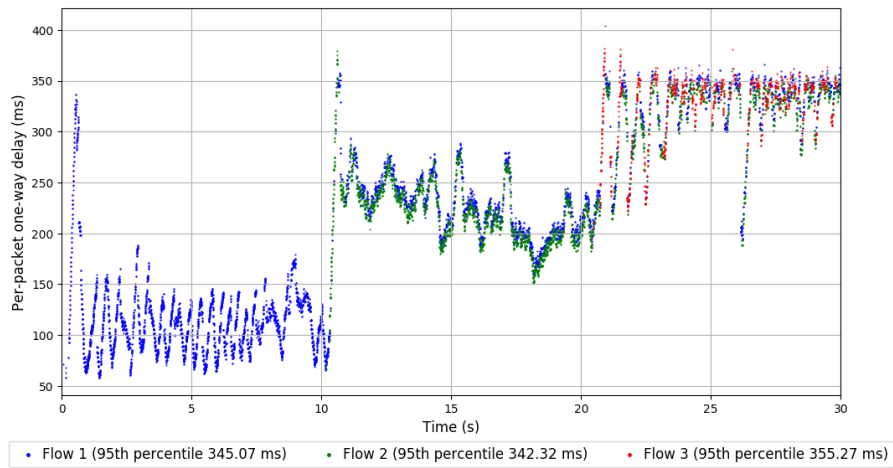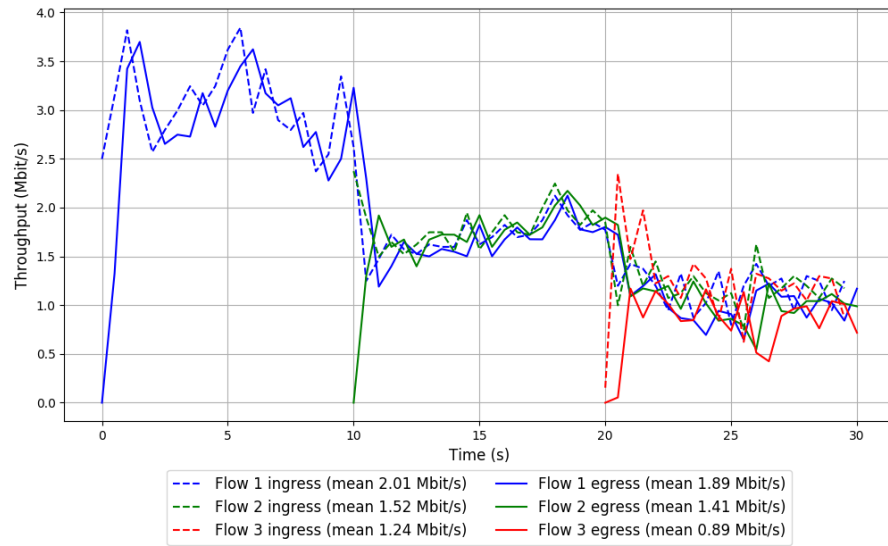
Run 3: Report of Sprout — Data Link

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

Start at: 2019-01-22 00:47:03
End at: 2019-01-22 00:47:33
Local clock offset: 0.678 ms
Remote clock offset: -4.566 ms


# Below is generated by plot.py at 2019-01-22 01:58:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 346.527 ms
Loss rate: 9.34%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 345.069 ms
Loss rate: 6.02%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 342.319 ms
Loss rate: 7.53%
-- Flow 3:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 355.272 ms
Loss rate: 30.04%
```

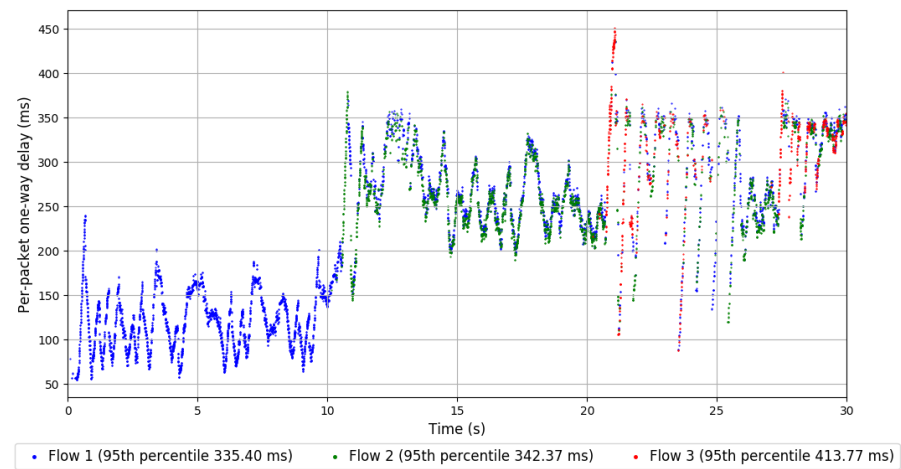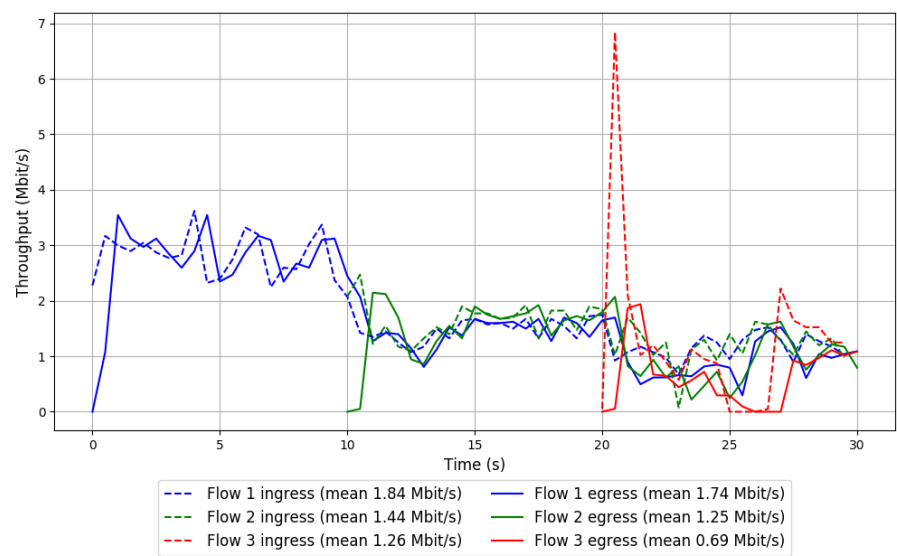Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-22 01:11:33
End at: 2019-01-22 01:12:03
Local clock offset: -0.607 ms
Remote clock offset: -5.205 ms


# Below is generated by plot.py at 2019-01-22 01:58:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 343.414 ms
Loss rate: 13.48%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 335.397 ms
Loss rate: 5.72%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 342.373 ms
Loss rate: 14.14%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 413.770 ms
Loss rate: 46.07%
```

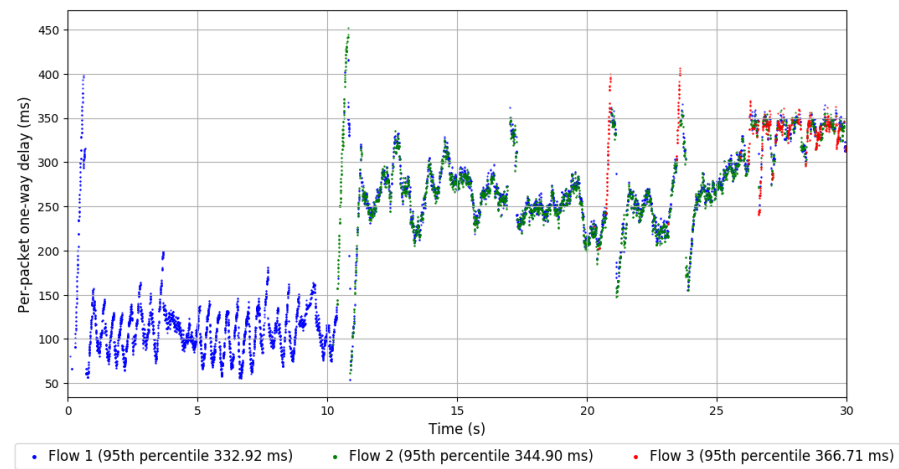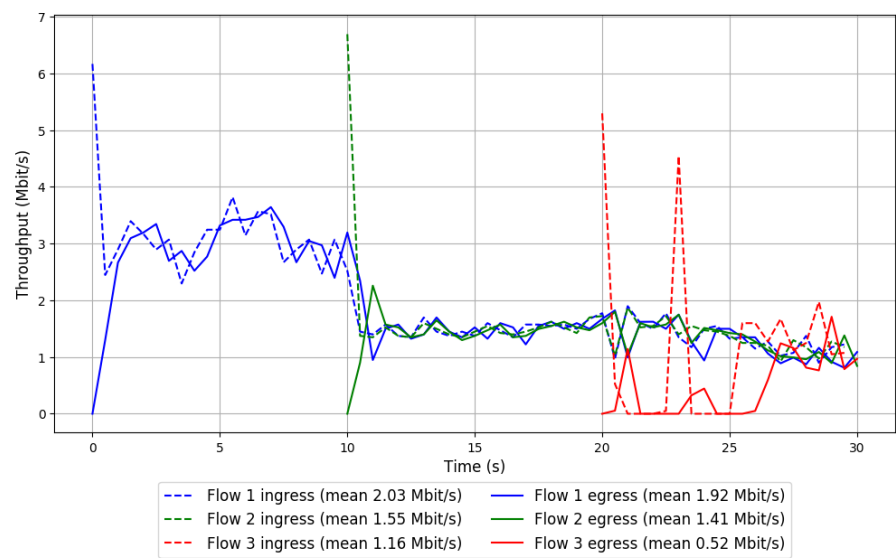Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-22 01:35:57
End at: 2019-01-22 01:36:27
Local clock offset: -0.006 ms
Remote clock offset: -3.894 ms


# Below is generated by plot.py at 2019-01-22 01:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 343.282 ms
Loss rate: 12.68%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 332.924 ms
Loss rate: 5.91%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 344.896 ms
Loss rate: 9.75%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 366.710 ms
Loss rate: 56.32%
```

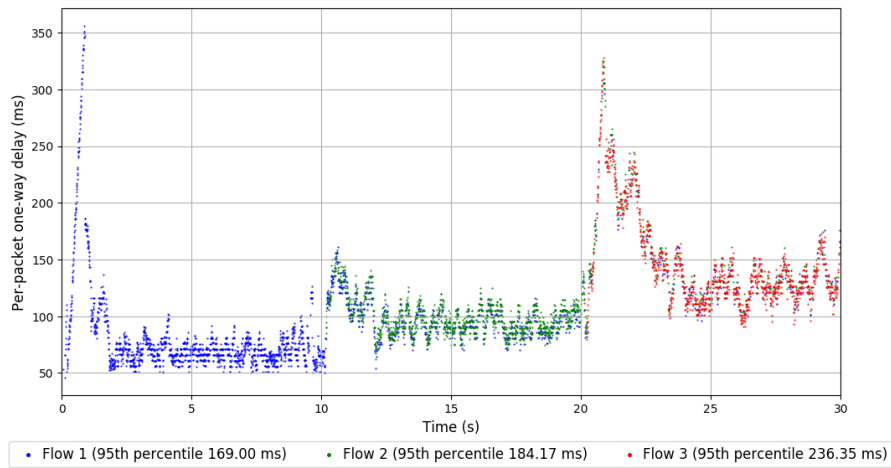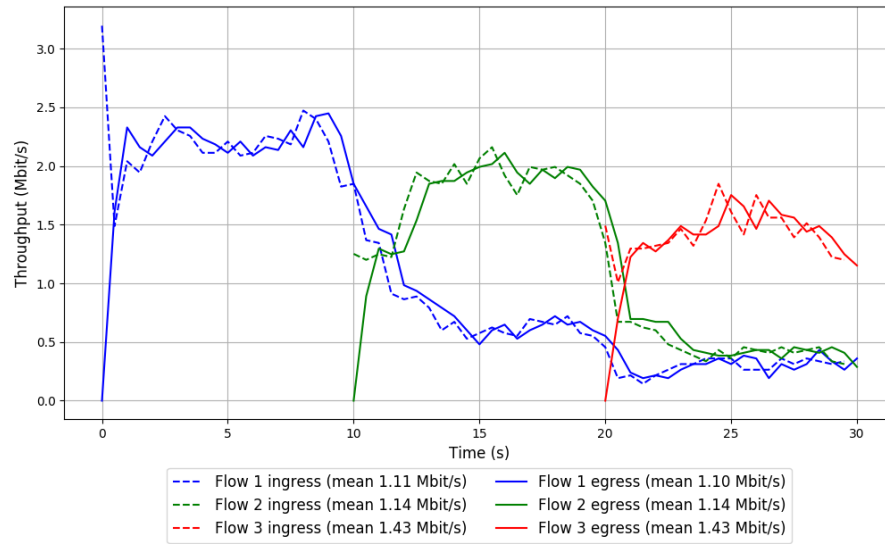Run 3: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-22 00:52:57
End at: 2019-01-22 00:53:27
Local clock offset: 1.919 ms
Remote clock offset: -5.358 ms


# Below is generated by plot.py at 2019-01-22 01:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 205.102 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 169.001 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 184.168 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 236.352 ms
Loss rate: 1.35%
```
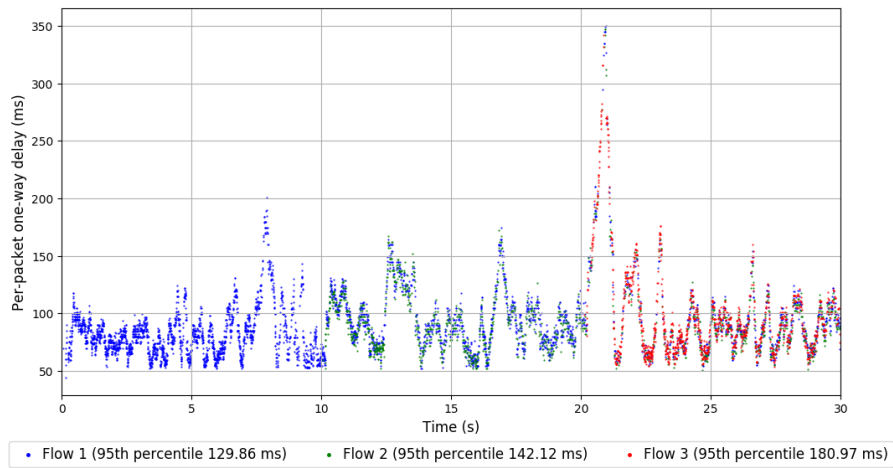
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 1.11 Mbit/s) — Flow 1 egress (mean 1.10 Mbit/s)
Flow 2 ingress (mean 1.14 Mbit/s) — Flow 2 egress (mean 1.14 Mbit/s)
Flow 3 ingress (mean 1.43 Mbit/s) — Flow 3 egress (mean 1.43 Mbit/s)

Flow 1 (95th percentile 169.00 ms)   Flow 2 (95th percentile 184.17 ms)   Flow 3 (95th percentile 236.35 ms)
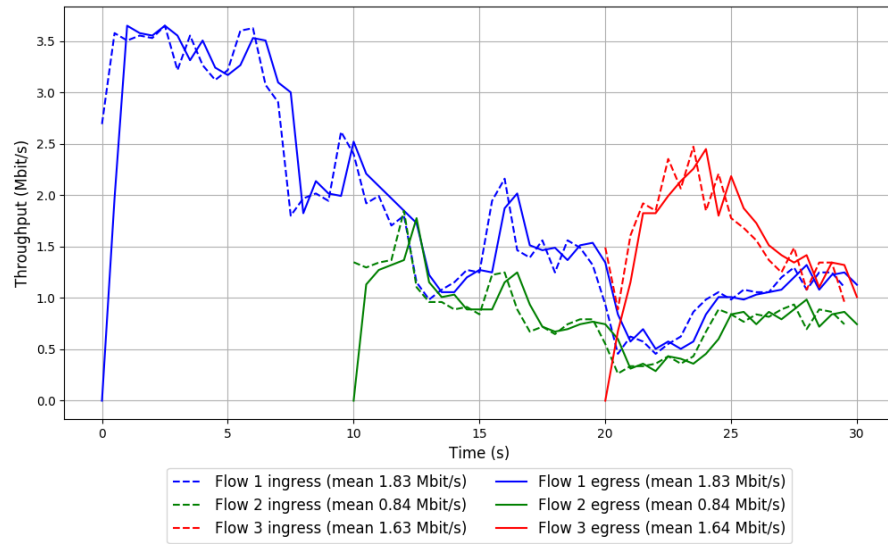
```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-22 01:17:22
End at: 2019-01-22 01:17:52
Local clock offset: 1.523 ms
Remote clock offset: -4.305 ms


# Below is generated by plot.py at 2019-01-22 01:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 141.619 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 129.862 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 142.116 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 180.972 ms
Loss rate: 0.59%
```

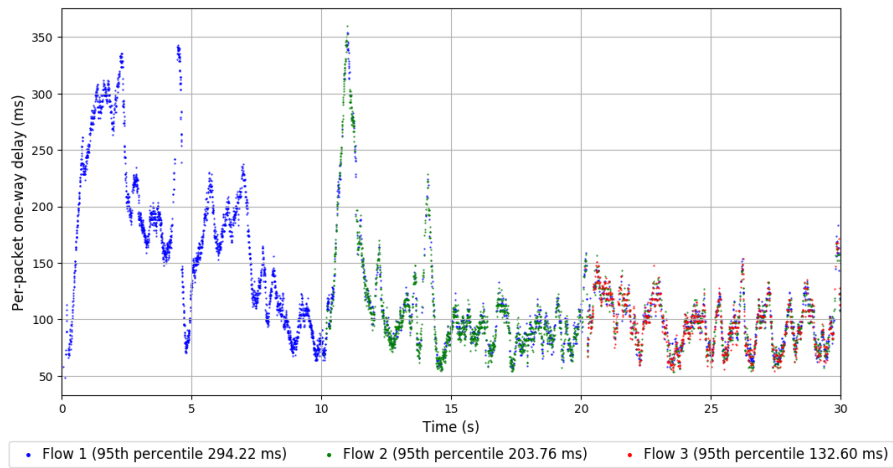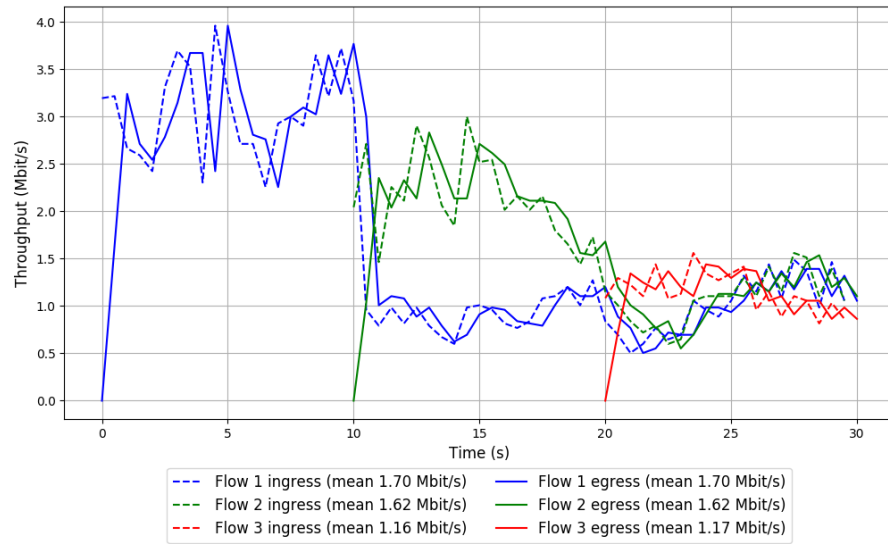Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-22 01:41:46
End at: 2019-01-22 01:42:16
Local clock offset: -1.482 ms
Remote clock offset: -6.439 ms


# Below is generated by plot.py at 2019-01-22 01:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 277.902 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 294.217 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 203.764 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 132.600 ms
Loss rate: 0.83%
```

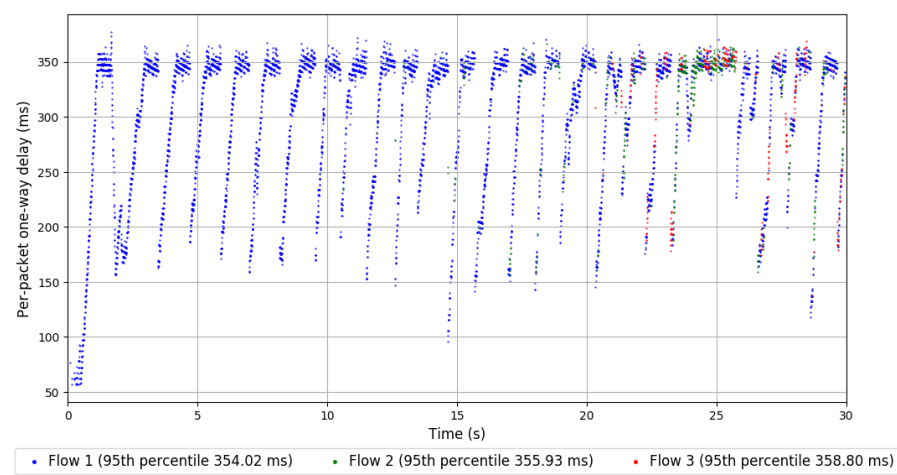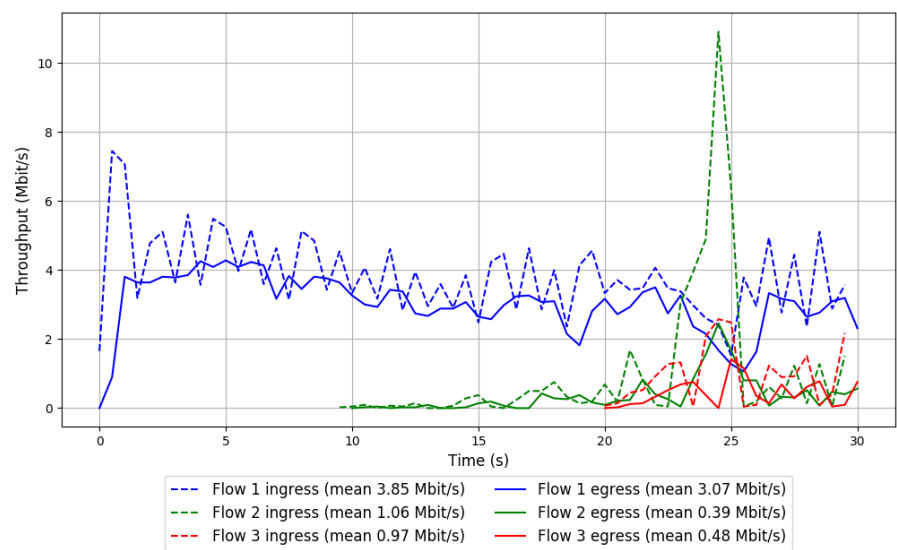Run 3: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-01-22 01:01:04
End at: 2019-01-22 01:01:34
Local clock offset: -0.463 ms
Remote clock offset: -4.346 ms


# Below is generated by plot.py at 2019-01-22 01:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 354.431 ms
Loss rate: 28.66%
-- Flow 1:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 354.016 ms
Loss rate: 20.31%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 355.926 ms
Loss rate: 63.90%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 358.795 ms
Loss rate: 51.78%
```

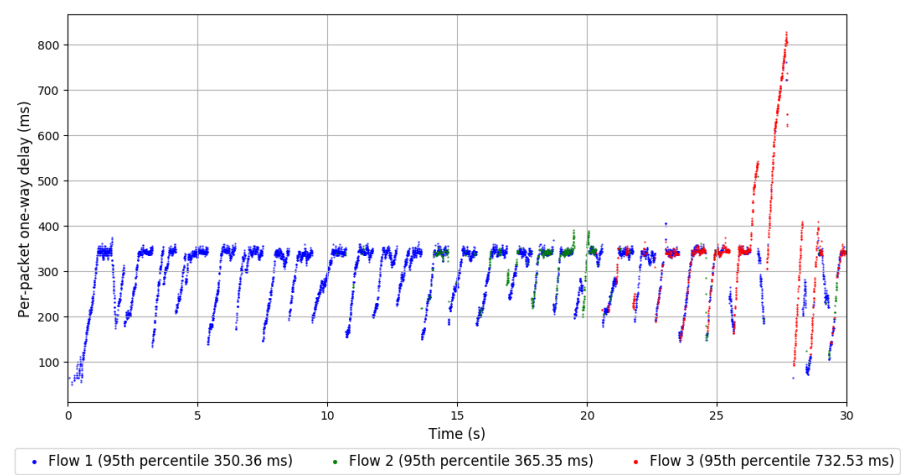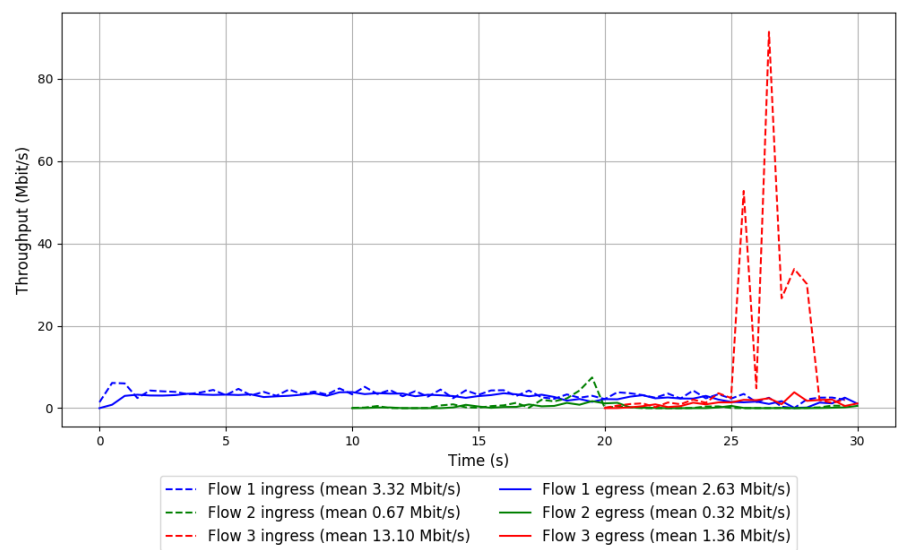Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-22 01:25:31
End at: 2019-01-22 01:26:01
Local clock offset: 0.033 ms
Remote clock offset: -5.123 ms


# Below is generated by plot.py at 2019-01-22 01:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.28 Mbit/s
95th percentile per-packet one-way delay: 359.506 ms
Loss rate: 59.59%
-- Flow 1:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 350.360 ms
Loss rate: 20.94%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 365.354 ms
Loss rate: 52.13%
-- Flow 3:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 732.531 ms
Loss rate: 89.96%
```
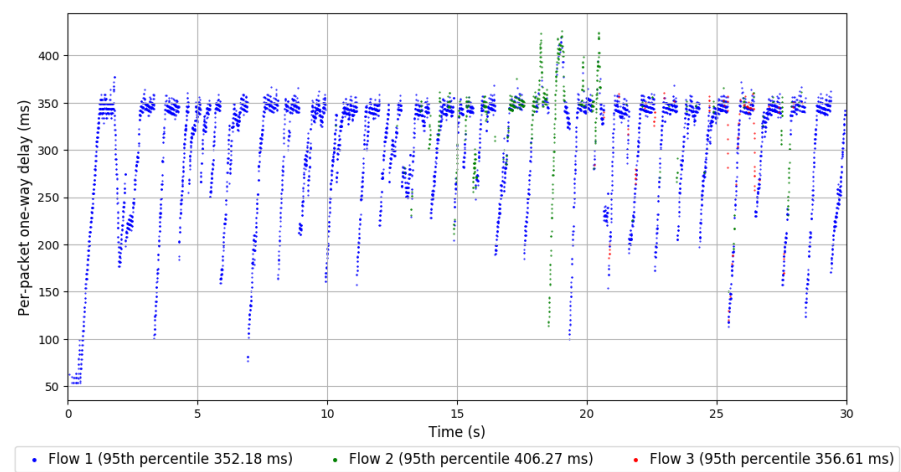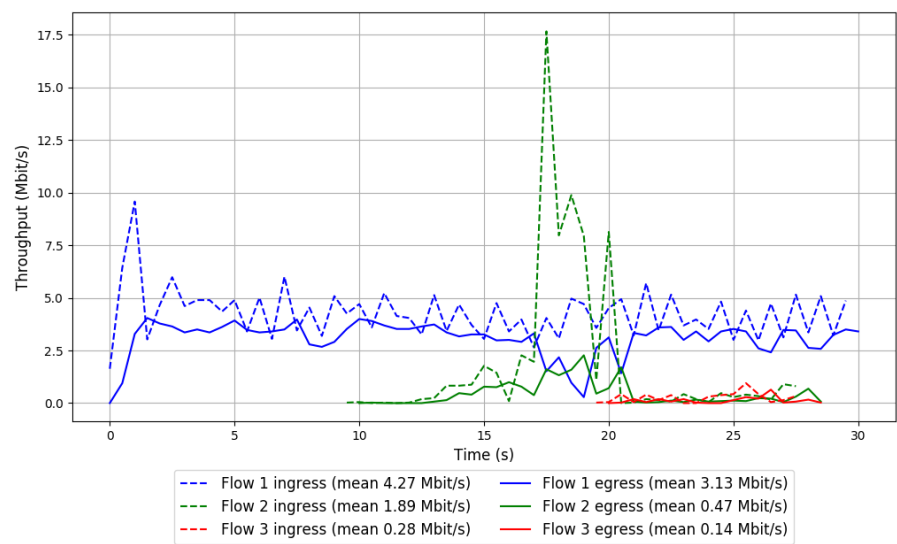
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-22 01:49:52
End at: 2019-01-22 01:50:22
Local clock offset: -0.381 ms
Remote clock offset: -4.254 ms


# Below is generated by plot.py at 2019-01-22 01:58:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 354.022 ms
Loss rate: 37.14%
-- Flow 1:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 352.178 ms
Loss rate: 26.88%
-- Flow 2:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 406.274 ms
Loss rate: 75.11%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 356.614 ms
Loss rate: 48.68%
```

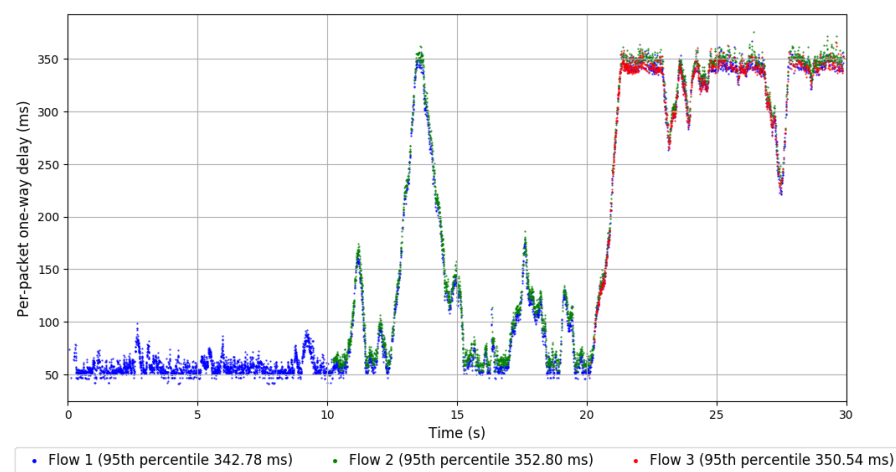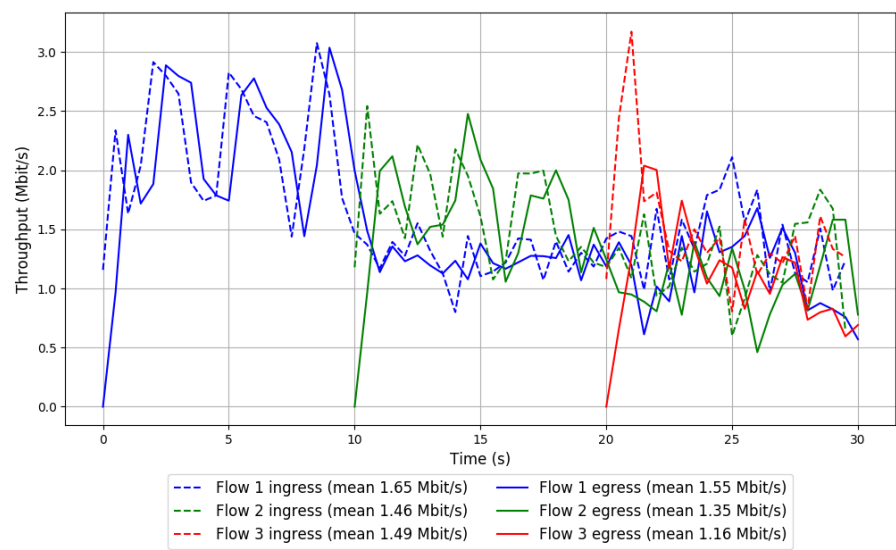## Run 3: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-22 00:48:14
End at: 2019-01-22 00:48:44
Local clock offset: 1.05 ms
Remote clock offset: -5.502 ms

# Below is generated by plot.py at 2019-01-22 01:58:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 349.329 ms
Loss rate: 9.31%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 342.782 ms
Loss rate: 6.21%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 352.796 ms
Loss rate: 7.61%
-- Flow 3:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 350.538 ms
Loss rate: 22.97%
```

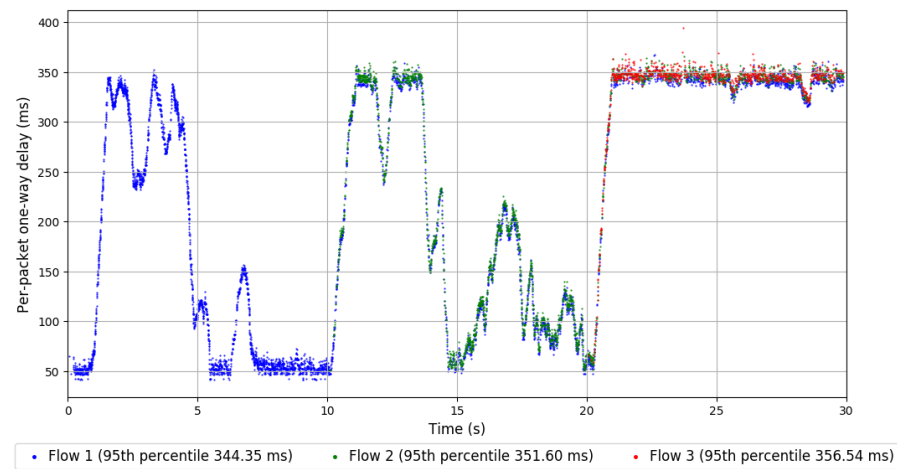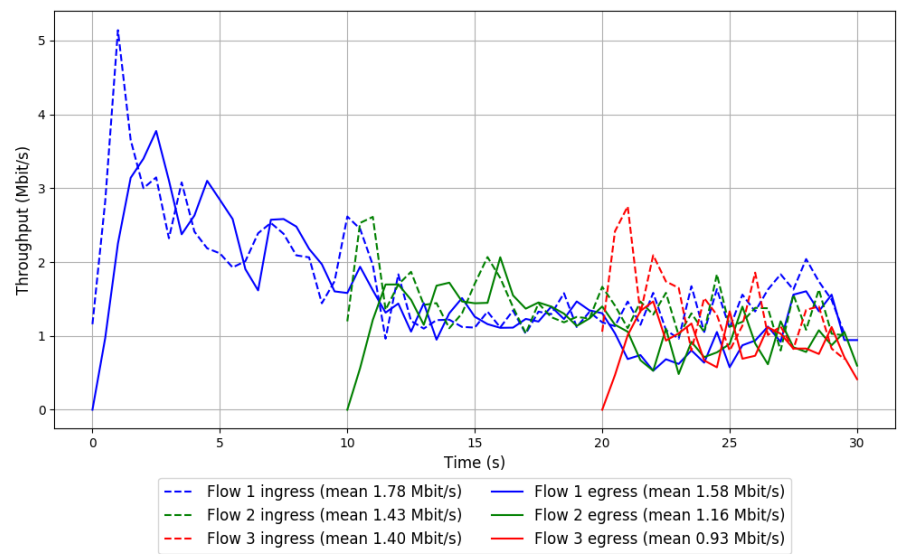Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-22 01:12:43
End at: 2019-01-22 01:13:13
Local clock offset: 0.173 ms
Remote clock offset: -4.675 ms


# Below is generated by plot.py at 2019-01-22 01:58:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 349.860 ms
Loss rate: 16.81%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 344.345 ms
Loss rate: 11.26%
-- Flow 2:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 351.600 ms
Loss rate: 18.81%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 356.543 ms
Loss rate: 34.05%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.78 Mbit/s) --- Flow 1 egress (mean 1.58 Mbit/s)
Flow 2 ingress (mean 1.43 Mbit/s) --- Flow 2 egress (mean 1.16 Mbit/s)
Flow 3 ingress (mean 1.40 Mbit/s) --- Flow 3 egress (mean 0.93 Mbit/s)

Flow 1 (95th percentile 344.35 ms)   Flow 2 (95th percentile 351.60 ms)   Flow 3 (95th percentile 356.54 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-22 01:37:06
End at: 2019-01-22 01:37:36
Local clock offset: 1.441 ms
Remote clock offset: -4.66 ms


# Below is generated by plot.py at 2019-01-22 01:58:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 350.531 ms
Loss rate: 13.40%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 348.346 ms
Loss rate: 8.72%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 349.981 ms
Loss rate: 16.56%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 355.481 ms
Loss rate: 24.09%
```
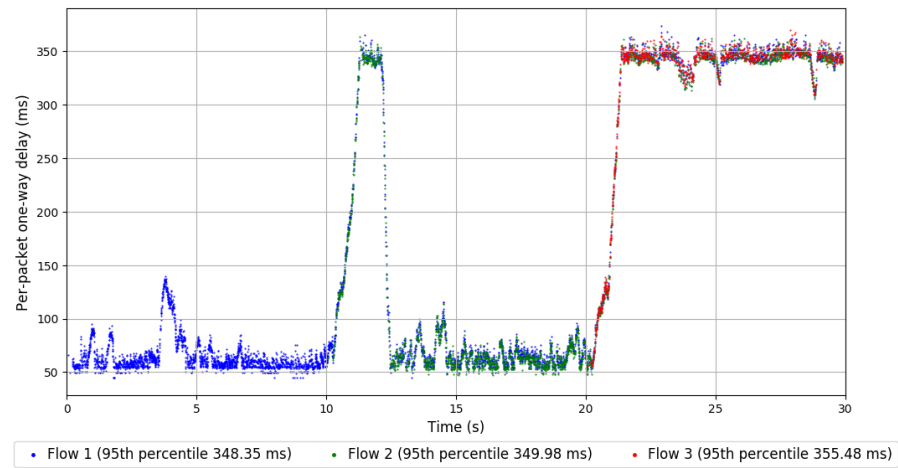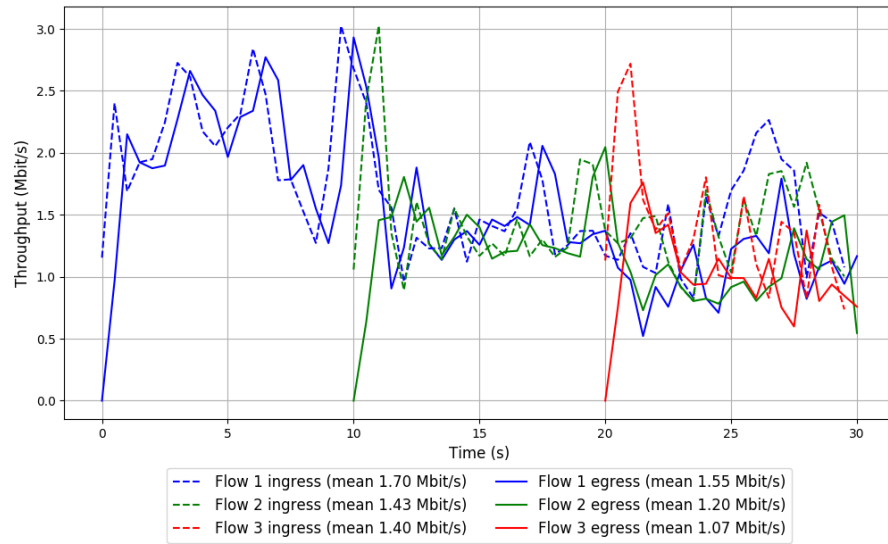
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.70 Mbit/s)   Flow 1 egress (mean 1.55 Mbit/s)
Flow 2 ingress (mean 1.43 Mbit/s)   Flow 2 egress (mean 1.20 Mbit/s)
Flow 3 ingress (mean 1.40 Mbit/s)   Flow 3 egress (mean 1.07 Mbit/s)

Flow 1 (95th percentile 348.35 ms)   Flow 2 (95th percentile 349.98 ms)   Flow 3 (95th percentile 355.48 ms)
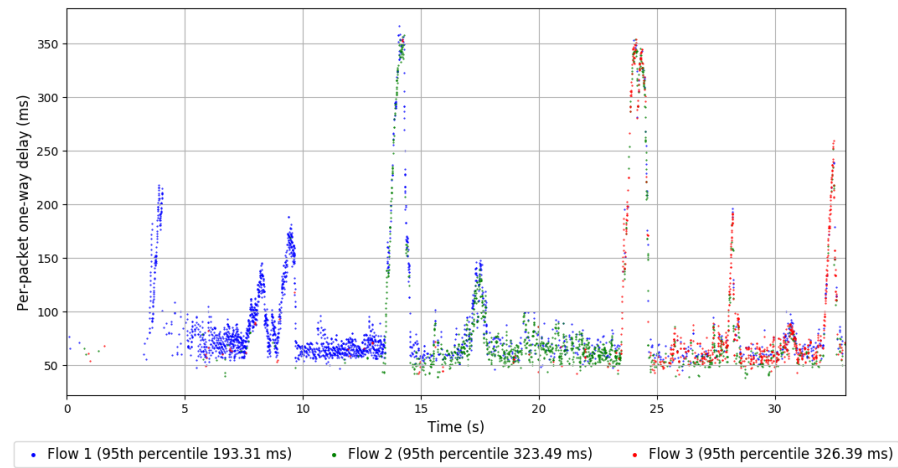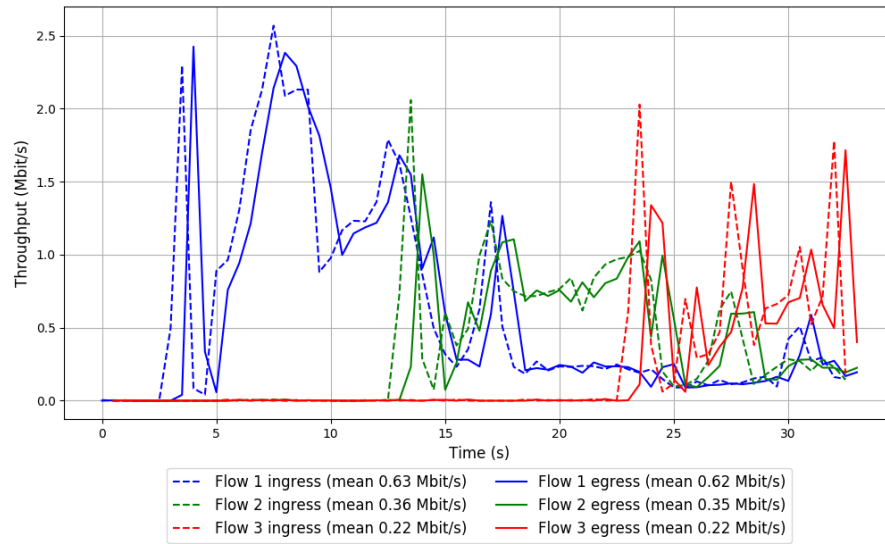
```
Run 1: Statistics of WebRTC media

Start at: 2019-01-22 00:54:07
End at: 2019-01-22 00:54:37
Local clock offset: 1.397 ms
Remote clock offset: -3.633 ms


# Below is generated by plot.py at 2019-01-22 01:58:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 290.052 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 193.312 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 323.488 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 326.391 ms
Loss rate: 2.21%
```

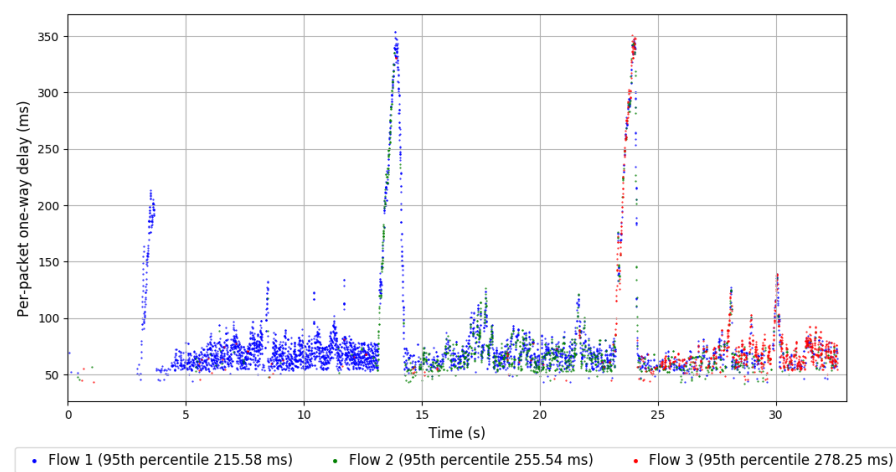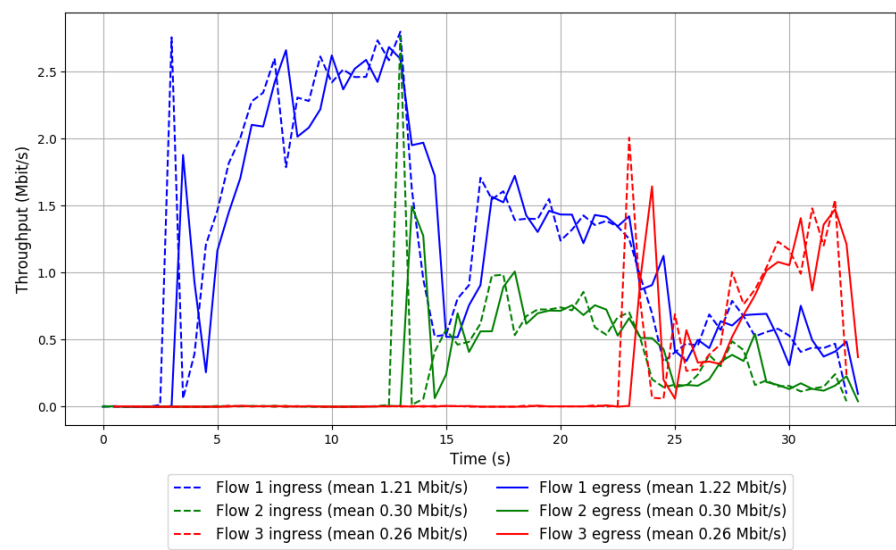Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-22 01:18:33
End at: 2019-01-22 01:19:03
Local clock offset: -5.553 ms
Remote clock offset: -11.638 ms


# Below is generated by plot.py at 2019-01-22 01:58:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 244.264 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 215.577 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 255.541 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 278.249 ms
Loss rate: 1.33%
```

Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-22 01:42:55
End at: 2019-01-22 01:43:25
Local clock offset: 0.339 ms
Remote clock offset: -6.781 ms


# Below is generated by plot.py at 2019-01-22 01:58:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 240.453 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 196.138 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 257.684 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 281.840 ms
Loss rate: 0.66%
```

Run 3: Report of WebRTC media — Data Link