Pantheon Report

Generated at 2018-10-03 02:20:05 (UTC).

Data path: GCE Iowa on ens4 (*local*) →GCE Tokyo on ens4 (*remote*).

Repeated the test of 18 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.
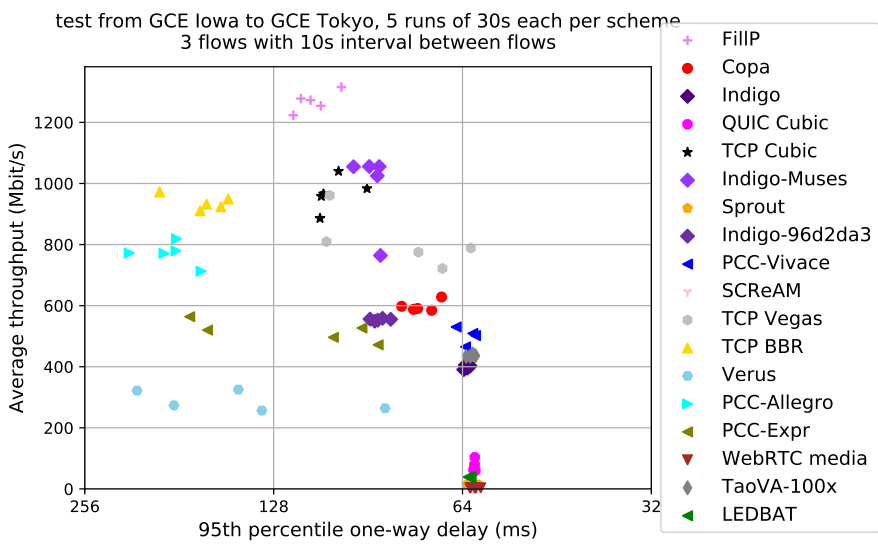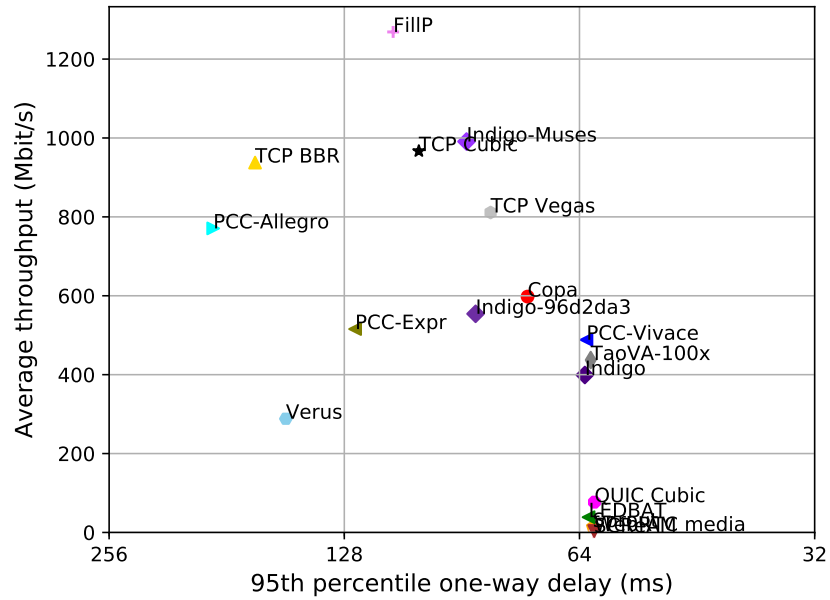
```
System info:
Linux 4.15.0-1019-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
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 Iowa to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

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

3

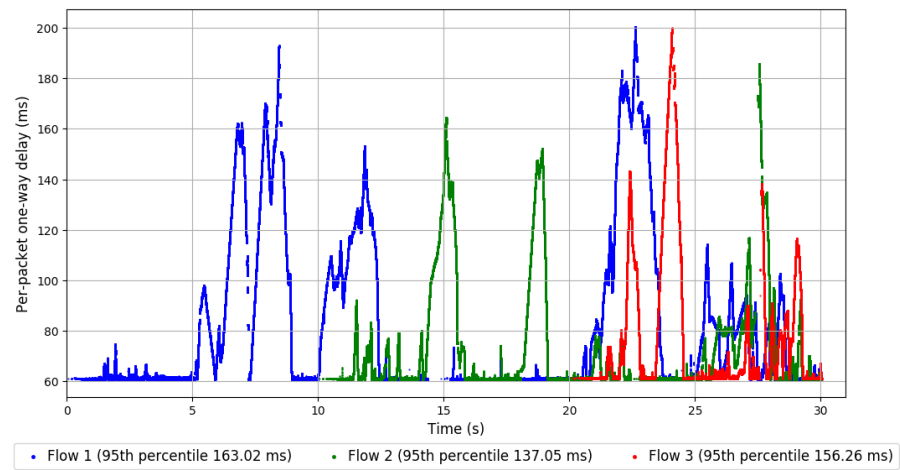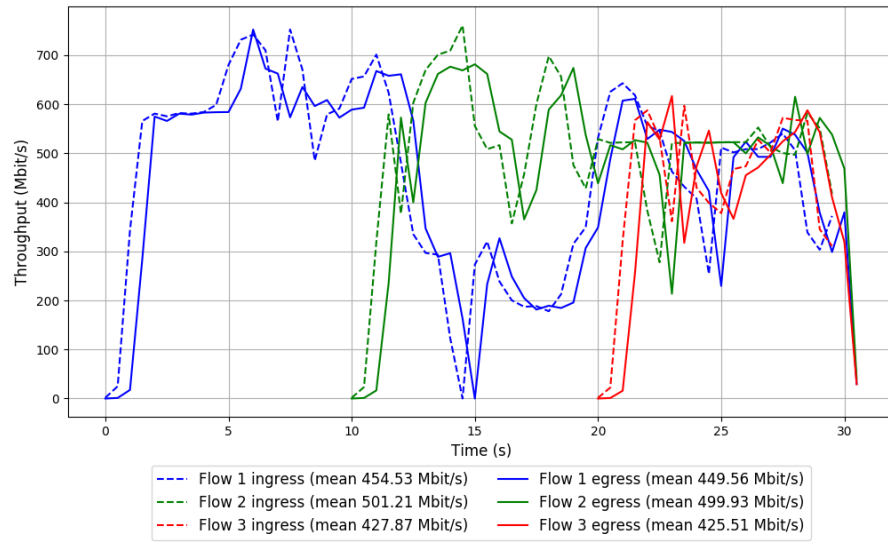| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	475.19	476.44	436.76	165.44	161.76	139.11	0.92	0.75	0.69
Copa	5	308.97	298.97	269.78	76.05	72.78	78.00	0.00	0.02	0.00
TCP Cubic	5	501.17	490.83	416.86	88.32	104.30	92.79	0.00	0.05	0.13
FillP	5	704.26	611.99	472.27	114.43	103.04	78.69	0.35	0.32	0.00
Indigo	5	210.66	201.24	170.38	62.94	63.12	62.92	0.00	0.00	0.00
Indigo-96d2da3	5	286.85	280.91	249.28	87.28	85.82	88.78	0.09	0.04	0.00
LEDBAT	5	24.91	16.60	8.25	62.43	62.13	61.65	0.00	0.00	0.00
Indigo-Muses	5	524.07	508.87	400.08	88.54	93.41	82.35	0.05	0.07	0.22
PCC-Allegro	5	432.63	373.85	272.02	181.10	161.11	94.18	3.20	4.32	0.05
PCC-Expr	5	293.95	249.66	168.37	110.28	103.73	103.28	0.53	0.99	0.96
QUIC Cubic	5	39.62	42.72	27.03	61.08	61.16	61.30	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	61.30	61.33	61.26	0.00	0.04	0.00
Sprout	5	7.00	6.88	6.63	61.54	61.54	61.58	0.00	0.00	0.00
TaoVA-100x	5	225.67	214.70	205.92	61.75	62.28	61.86	0.00	0.00	0.00
TCP Vegas	5	343.90	485.85	430.86	65.75	85.14	80.12	0.00	0.06	0.14
Verus	5	162.46	123.12	134.80	130.21	111.54	151.08	1.10	0.04	1.31
PCC-Vivace	5	284.90	249.95	113.07	62.84	62.55	62.09	0.00	0.00	0.00
WebRTC media	5	1.90	1.25	0.48	61.25	61.17	61.20	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-10-02 20:49:13
End at: 2018-10-02 20:49:43
Local clock offset: -0.074 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-10-02 23:50:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.00 Mbit/s
95th percentile per-packet one-way delay: 155.332 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 449.56 Mbit/s
95th percentile per-packet one-way delay: 163.017 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 499.93 Mbit/s
95th percentile per-packet one-way delay: 137.052 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 425.51 Mbit/s
95th percentile per-packet one-way delay: 156.265 ms
Loss rate: 0.55%
```
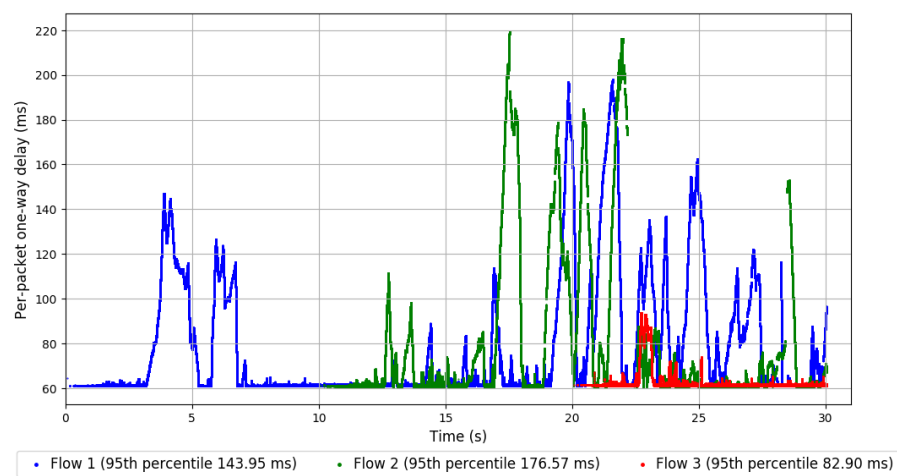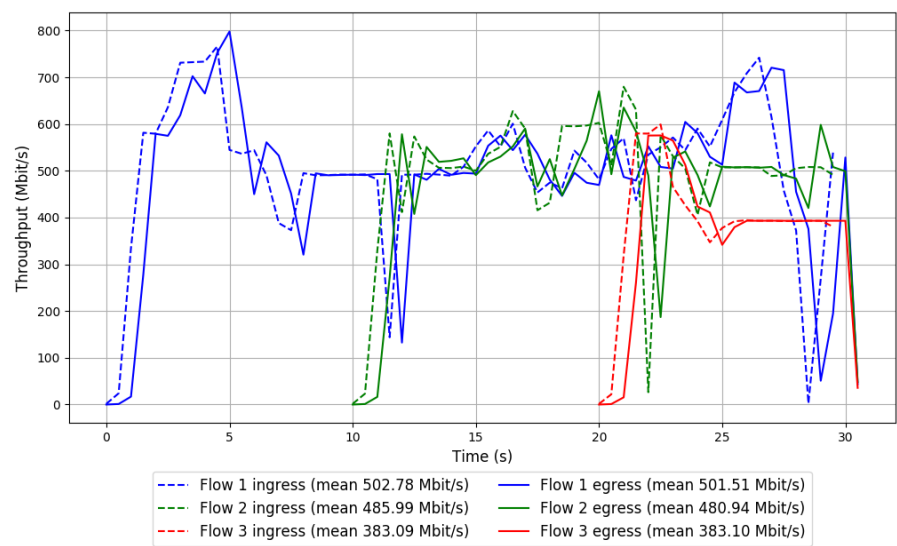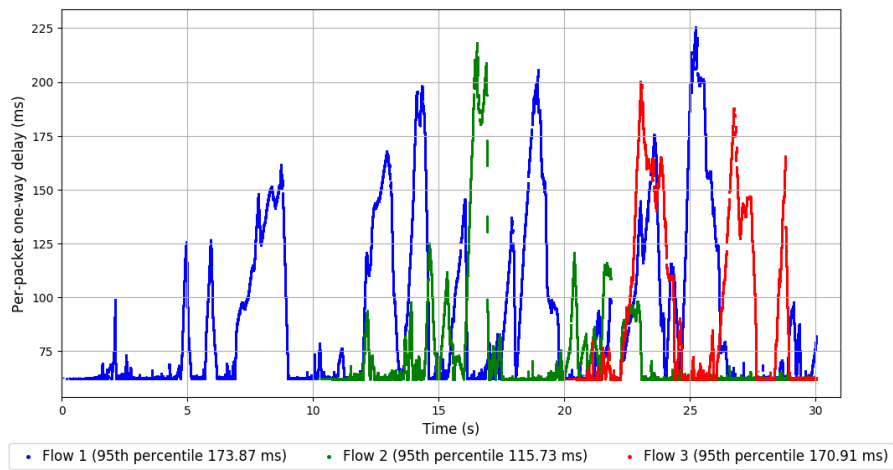
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-10-02 21:20:29
End at: 2018-10-02 21:20:59
Local clock offset: -0.0 ms
Remote clock offset: 0.248 ms


# Below is generated by plot.py at 2018-10-02 23:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 949.22 Mbit/s
95th percentile per-packet one-way delay: 151.257 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 501.51 Mbit/s
95th percentile per-packet one-way delay: 143.951 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 480.94 Mbit/s
95th percentile per-packet one-way delay: 176.569 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 383.10 Mbit/s
95th percentile per-packet one-way delay: 82.904 ms
Loss rate: 0.00%
```
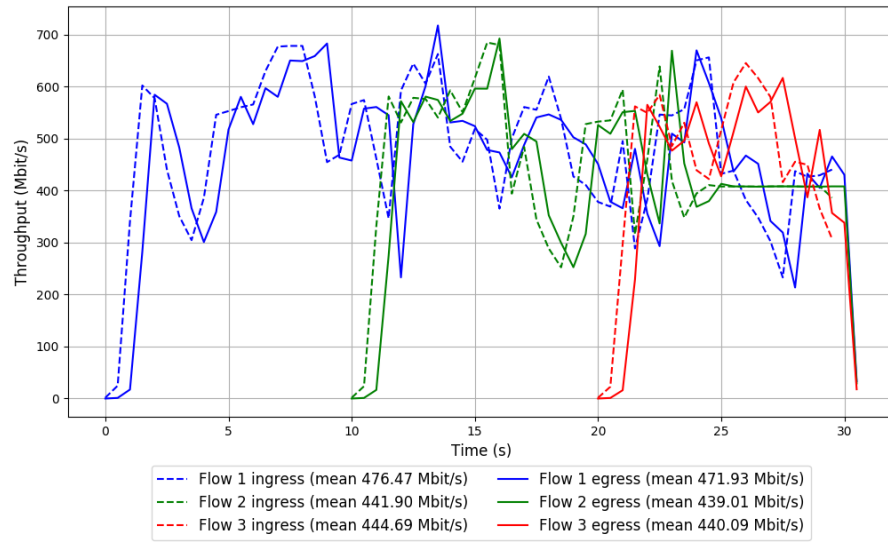
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-10-02 21:51:40
End at: 2018-10-02 21:52:10
Local clock offset: 0.007 ms
Remote clock offset: 1.181 ms


# Below is generated by plot.py at 2018-10-02 23:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 910.57 Mbit/s
95th percentile per-packet one-way delay: 167.663 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 471.93 Mbit/s
95th percentile per-packet one-way delay: 173.865 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 439.01 Mbit/s
95th percentile per-packet one-way delay: 115.732 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 440.09 Mbit/s
95th percentile per-packet one-way delay: 170.906 ms
Loss rate: 1.04%
```
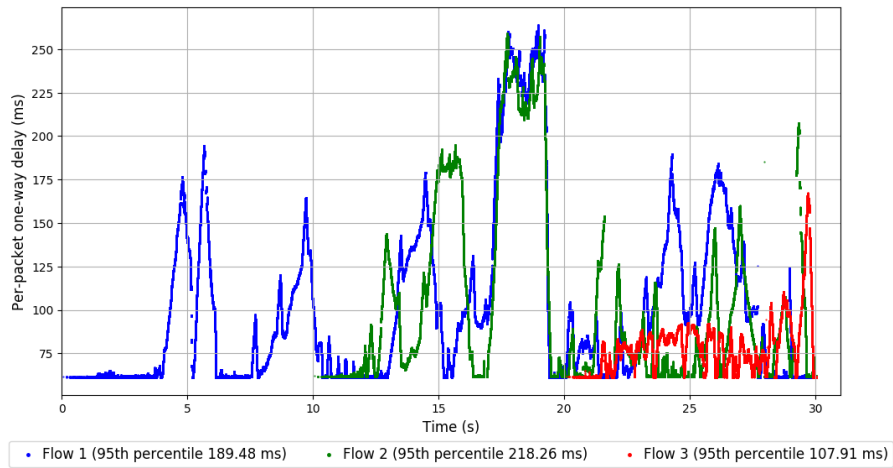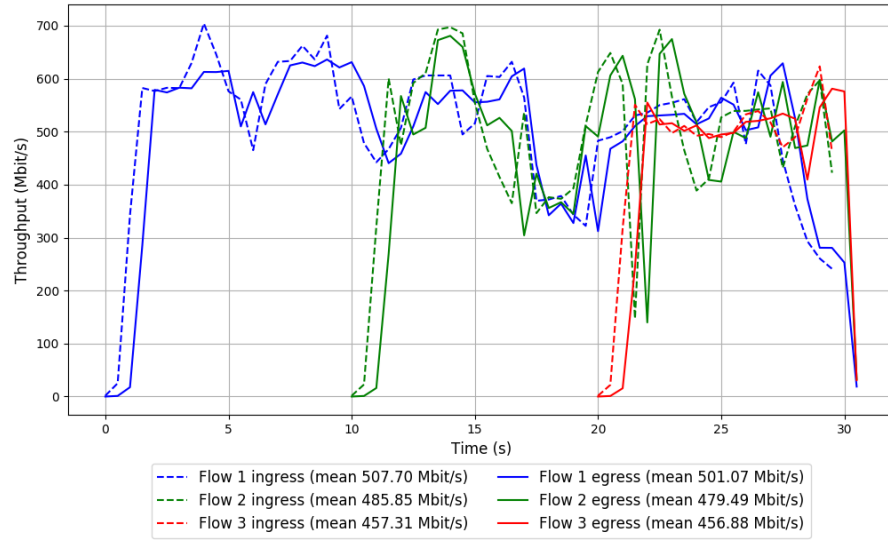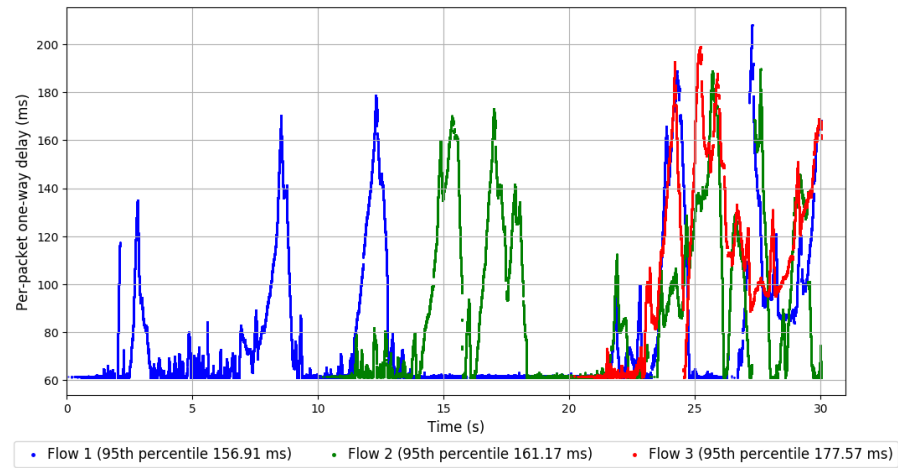
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 476.47 Mbit/s) --- Flow 1 egress (mean 471.93 Mbit/s)
Flow 2 ingress (mean 441.90 Mbit/s) --- Flow 2 egress (mean 439.01 Mbit/s)
Flow 3 ingress (mean 444.69 Mbit/s) --- Flow 3 egress (mean 440.09 Mbit/s)

Flow 1 (95th percentile 173.87 ms)   Flow 2 (95th percentile 115.73 ms)   Flow 3 (95th percentile 170.91 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2018-10-02 22:22:43
End at: 2018-10-02 22:23:13
Local clock offset: -0.055 ms
Remote clock offset: 0.462 ms

# Below is generated by plot.py at 2018-10-02 23:51:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 972.03 Mbit/s
95th percentile per-packet one-way delay: 194.528 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 501.07 Mbit/s
95th percentile per-packet one-way delay: 189.477 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 479.49 Mbit/s
95th percentile per-packet one-way delay: 218.256 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 456.88 Mbit/s
95th percentile per-packet one-way delay: 107.905 ms
Loss rate: 0.10%
```
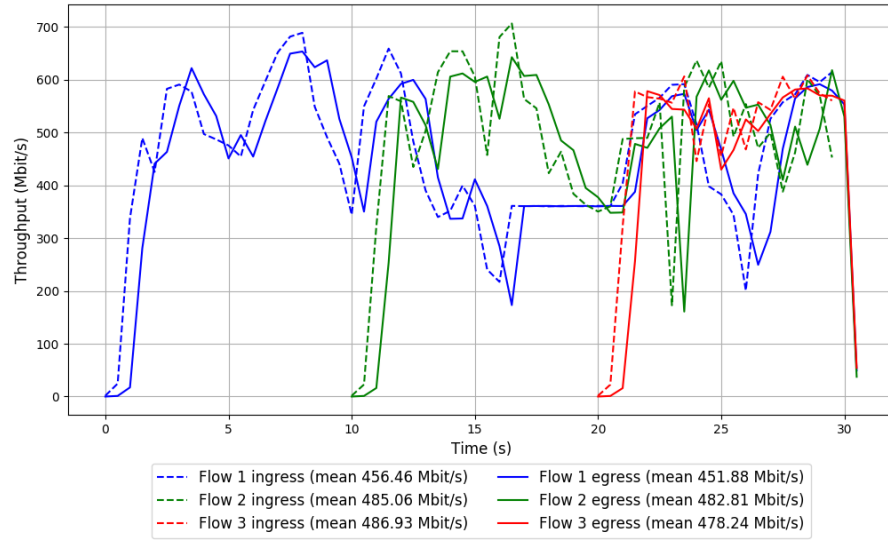
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-10-02 22:54:12
End at: 2018-10-02 22:54:42
Local clock offset: -0.088 ms
Remote clock offset: 0.388 ms

# Below is generated by plot.py at 2018-10-02 23:51:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 932.47 Mbit/s
95th percentile per-packet one-way delay: 163.719 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 451.88 Mbit/s
95th percentile per-packet one-way delay: 156.909 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 482.81 Mbit/s
95th percentile per-packet one-way delay: 161.167 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 478.24 Mbit/s
95th percentile per-packet one-way delay: 177.574 ms
Loss rate: 1.78%
```
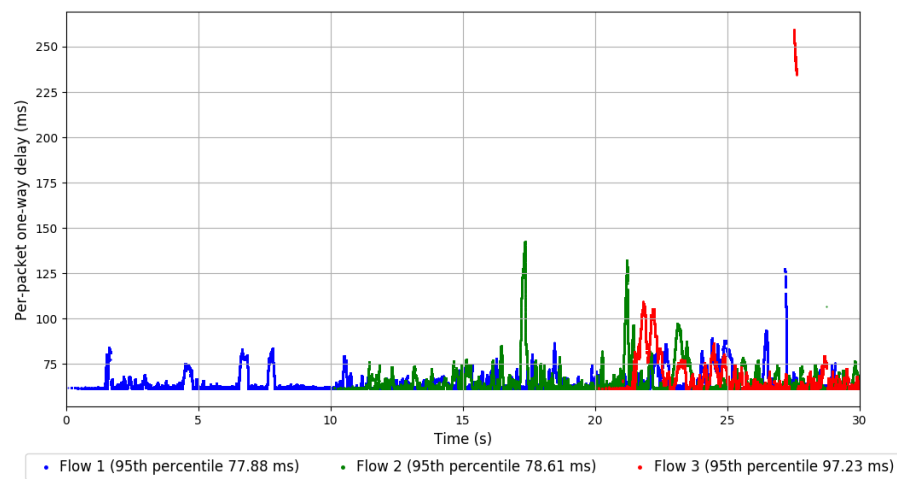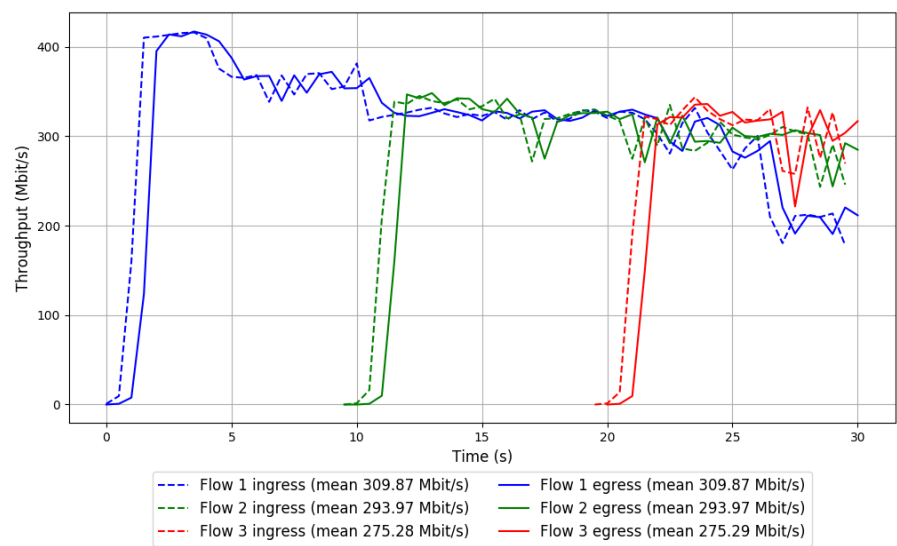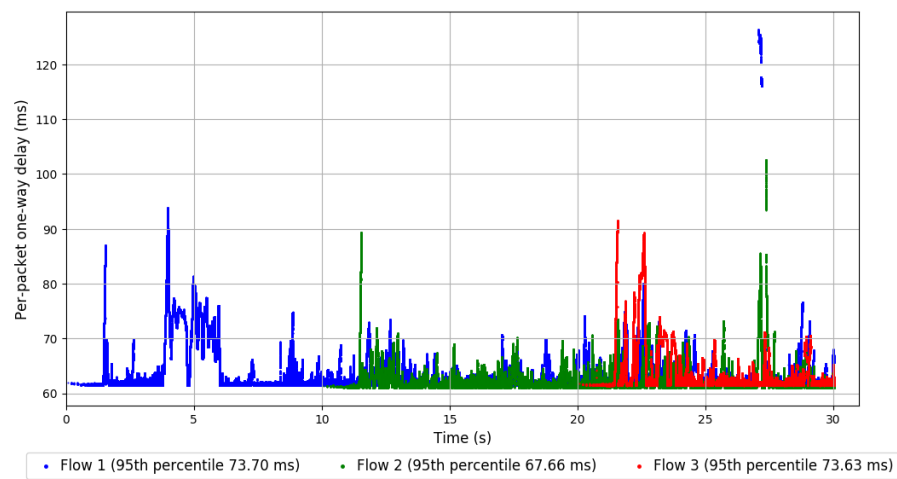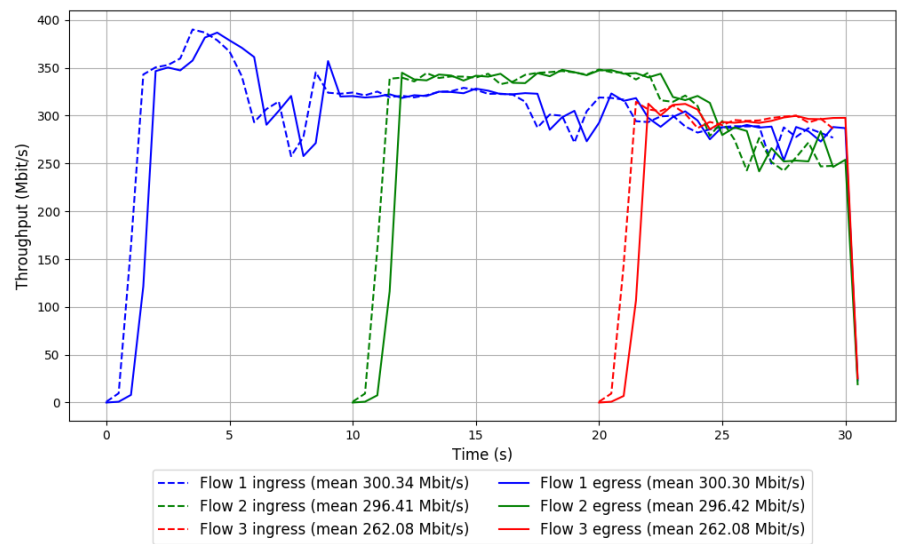
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 456.46 Mbit/s)   Flow 1 egress (mean 451.88 Mbit/s)
Flow 2 ingress (mean 485.06 Mbit/s)   Flow 2 egress (mean 482.81 Mbit/s)
Flow 3 ingress (mean 486.93 Mbit/s)   Flow 3 egress (mean 478.24 Mbit/s)

Flow 1 (95th percentile 156.91 ms)   Flow 2 (95th percentile 161.17 ms)   Flow 3 (95th percentile 177.57 ms)
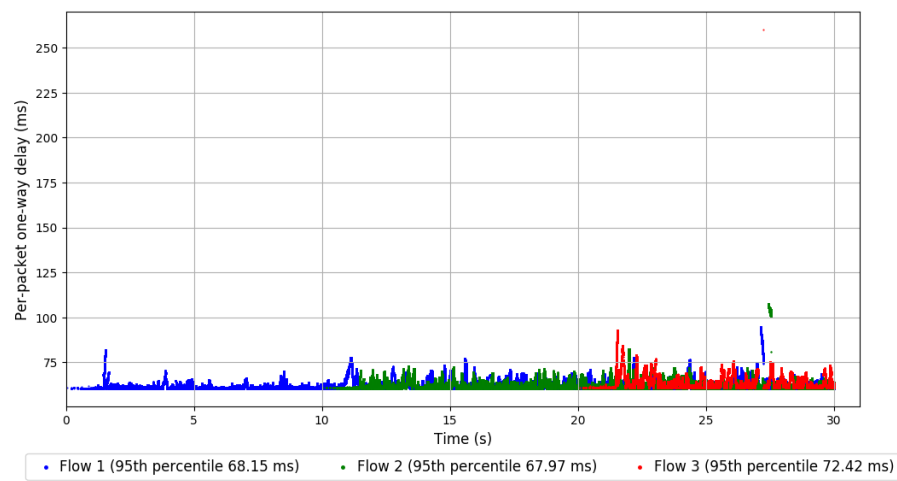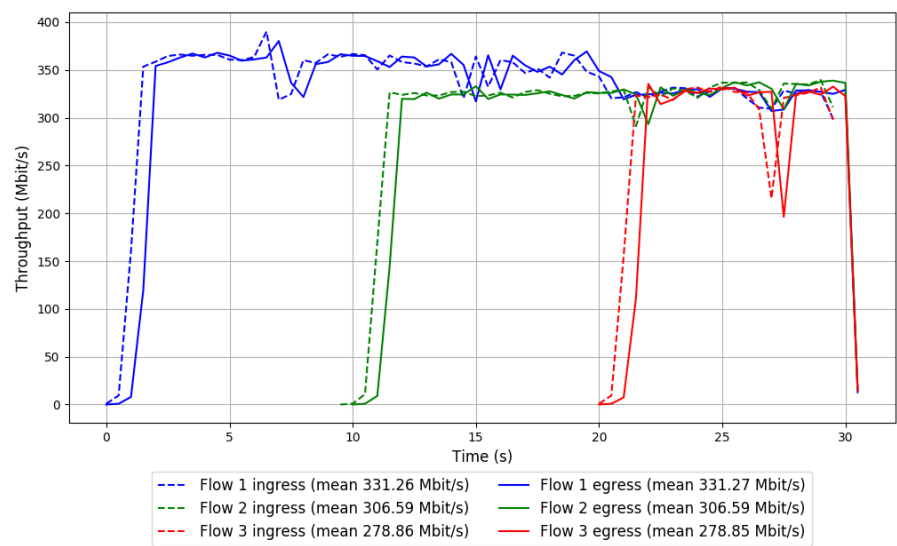
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```
Run 1: Statistics of Copa

Start at: 2018-10-02 21:03:02
End at: 2018-10-02 21:03:32
Local clock offset: -0.073 ms
Remote clock offset: 0.444 ms


# Below is generated by plot.py at 2018-10-02 23:53:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.76 Mbit/s
95th percentile per-packet one-way delay: 80.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 309.87 Mbit/s
95th percentile per-packet one-way delay: 77.877 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 293.97 Mbit/s
95th percentile per-packet one-way delay: 78.608 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 275.29 Mbit/s
95th percentile per-packet one-way delay: 97.230 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-10-02 21:34:13
End at: 2018-10-02 21:34:43
Local clock offset: 0.021 ms
Remote clock offset: 0.389 ms


# Below is generated by plot.py at 2018-10-02 23:53:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.85 Mbit/s
95th percentile per-packet one-way delay: 71.672 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 300.30 Mbit/s
95th percentile per-packet one-way delay: 73.705 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 296.42 Mbit/s
95th percentile per-packet one-way delay: 67.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 262.08 Mbit/s
95th percentile per-packet one-way delay: 73.626 ms
Loss rate: 0.00%
```
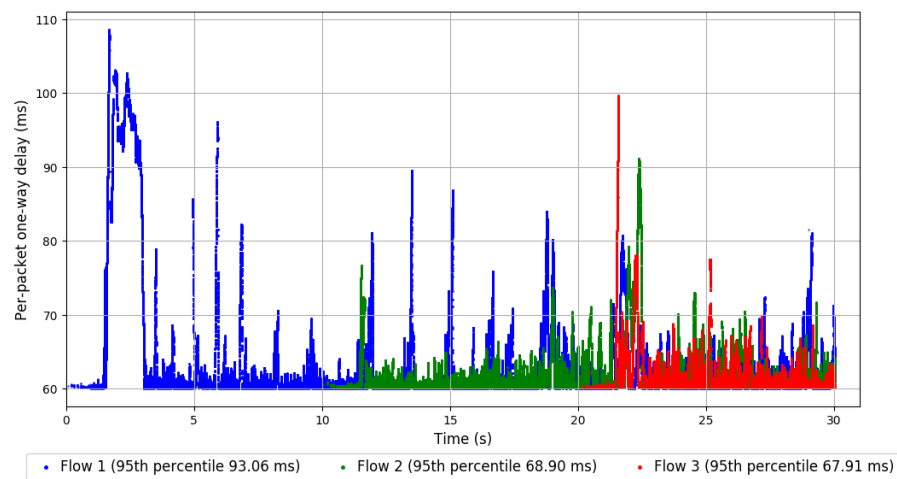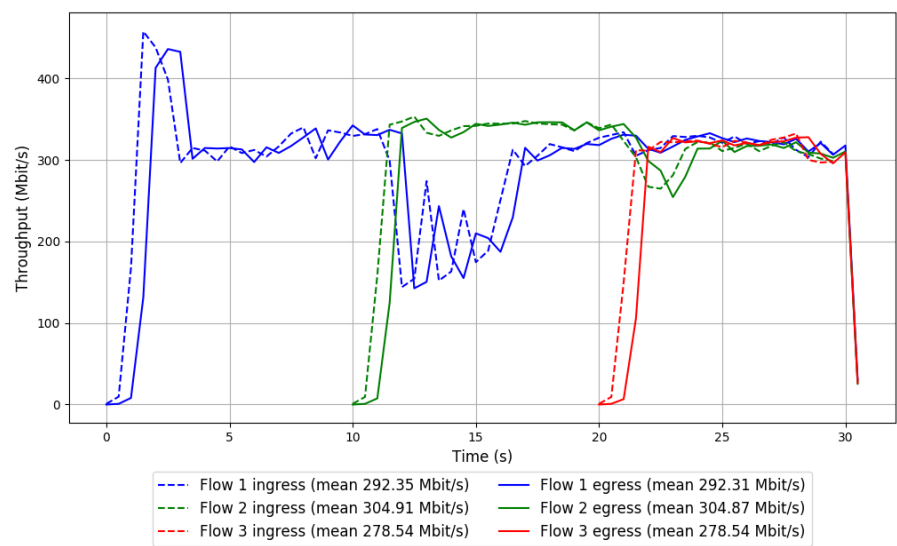
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 300.34 Mbit/s) — Flow 1 egress (mean 300.30 Mbit/s)
Flow 2 ingress (mean 296.41 Mbit/s) — Flow 2 egress (mean 296.42 Mbit/s)
Flow 3 ingress (mean 262.08 Mbit/s) — Flow 3 egress (mean 262.08 Mbit/s)

Flow 1 (95th percentile 73.70 ms)   Flow 2 (95th percentile 67.66 ms)   Flow 3 (95th percentile 73.63 ms)

```
Run 3: Statistics of Copa

Start at: 2018-10-02 22:05:23
End at: 2018-10-02 22:05:53
Local clock offset: -0.049 ms
Remote clock offset: -0.414 ms


# Below is generated by plot.py at 2018-10-02 23:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 628.27 Mbit/s
95th percentile per-packet one-way delay: 69.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 331.27 Mbit/s
95th percentile per-packet one-way delay: 68.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 306.59 Mbit/s
95th percentile per-packet one-way delay: 67.967 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 278.85 Mbit/s
95th percentile per-packet one-way delay: 72.418 ms
Loss rate: 0.00%
```
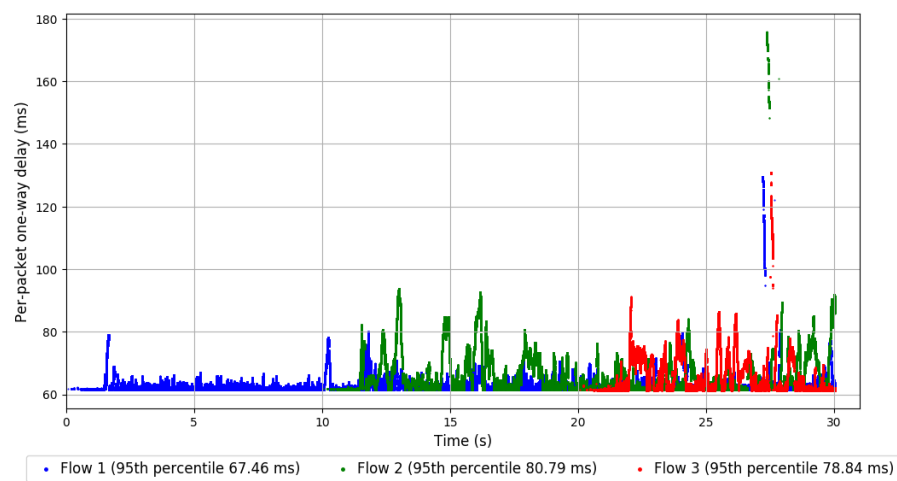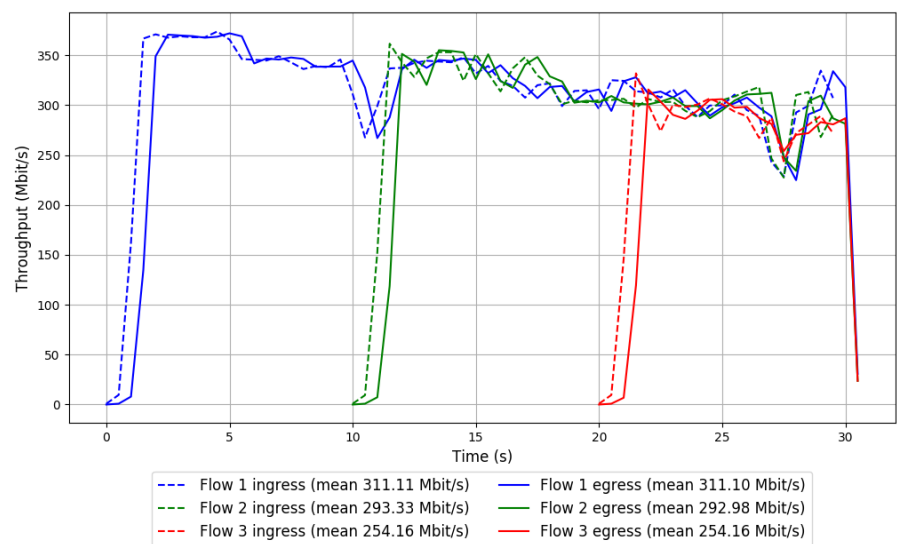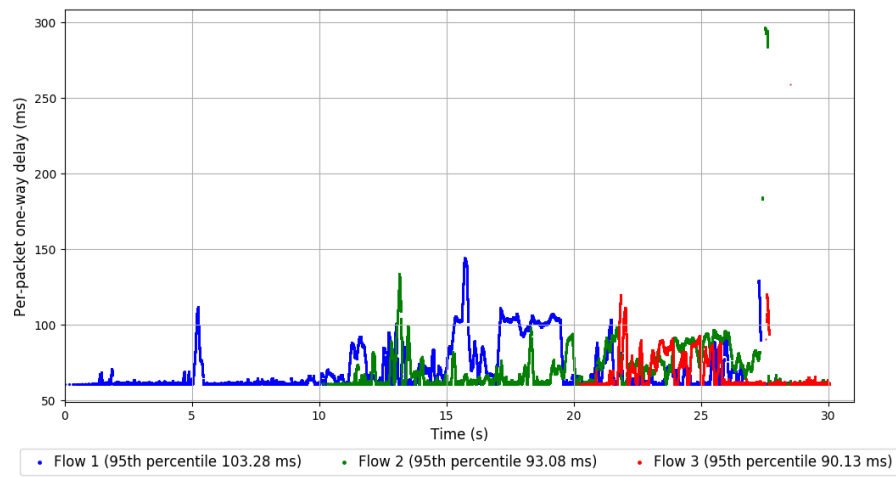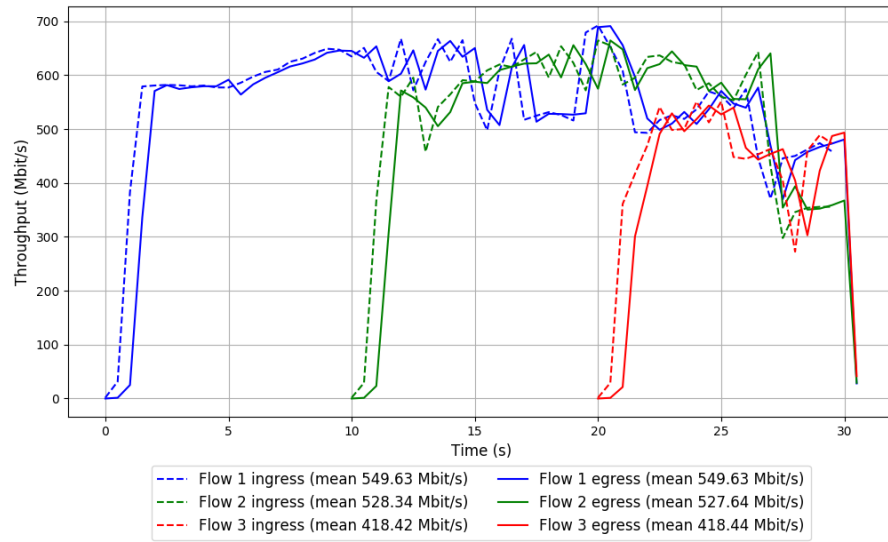
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-10-02 22:36:36
End at: 2018-10-02 22:37:06
Local clock offset: -0.103 ms
Remote clock offset: -0.64 ms

# Below is generated by plot.py at 2018-10-03 00:13:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.93 Mbit/s
95th percentile per-packet one-way delay: 76.614 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 292.31 Mbit/s
95th percentile per-packet one-way delay: 93.062 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 304.87 Mbit/s
95th percentile per-packet one-way delay: 68.900 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 278.54 Mbit/s
95th percentile per-packet one-way delay: 67.905 ms
Loss rate: 0.00%
```
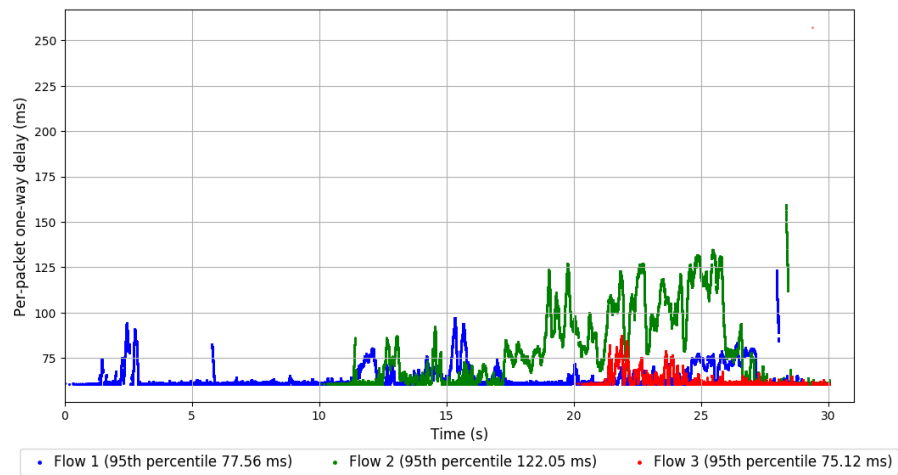
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-10-02 23:08:05
End at: 2018-10-02 23:08:35
Local clock offset: -0.137 ms
Remote clock offset: 0.558 ms


# Below is generated by plot.py at 2018-10-03 00:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.68 Mbit/s
95th percentile per-packet one-way delay: 75.478 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 311.10 Mbit/s
95th percentile per-packet one-way delay: 67.458 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 292.98 Mbit/s
95th percentile per-packet one-way delay: 80.790 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 254.16 Mbit/s
95th percentile per-packet one-way delay: 78.841 ms
Loss rate: 0.00%
```
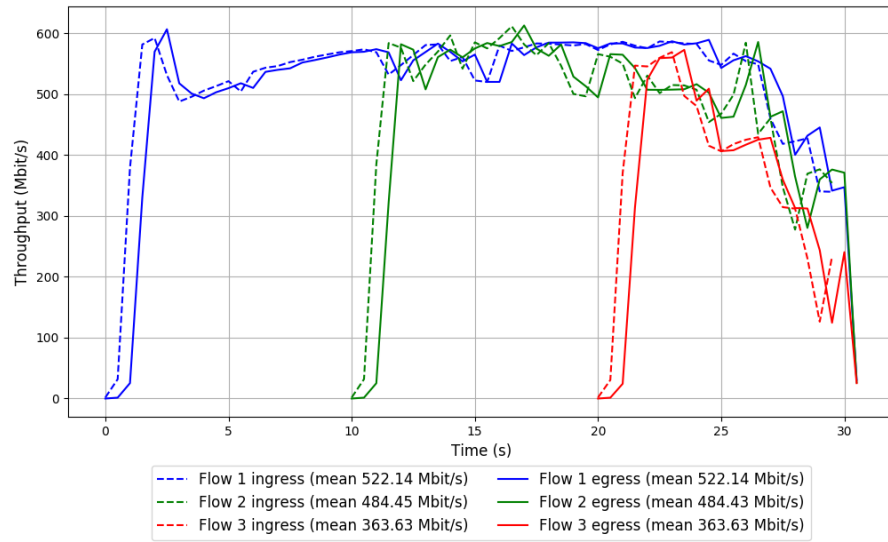
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 311.11 Mbit/s)   Flow 1 egress (mean 311.10 Mbit/s)
Flow 2 ingress (mean 293.33 Mbit/s)   Flow 2 egress (mean 292.98 Mbit/s)
Flow 3 ingress (mean 254.16 Mbit/s)   Flow 3 egress (mean 254.16 Mbit/s)

Flow 1 (95th percentile 67.46 ms)   Flow 2 (95th percentile 80.79 ms)   Flow 3 (95th percentile 78.84 ms)
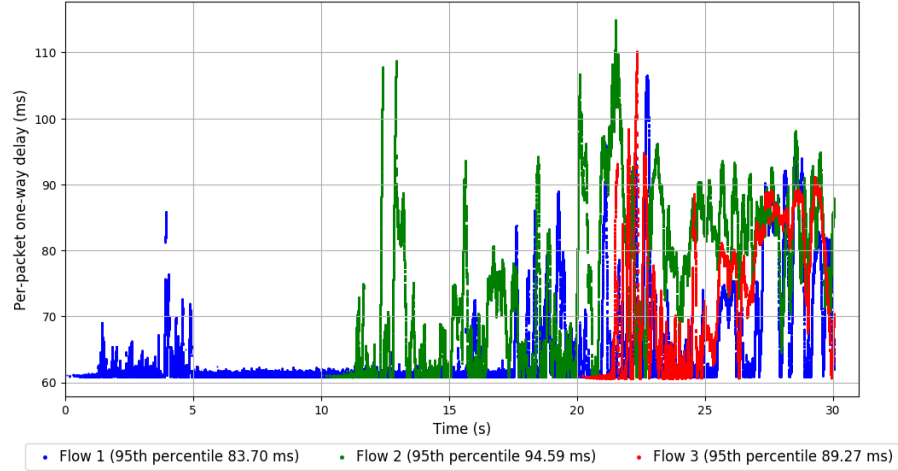
24

```
Run 1: Statistics of TCP Cubic

Start at: 2018-10-02 20:51:16
End at: 2018-10-02 20:51:46
Local clock offset: -0.066 ms
Remote clock offset: -0.072 ms


# Below is generated by plot.py at 2018-10-03 00:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1040.15 Mbit/s
95th percentile per-packet one-way delay: 100.873 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 549.63 Mbit/s
95th percentile per-packet one-way delay: 103.280 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 527.64 Mbit/s
95th percentile per-packet one-way delay: 93.076 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 418.44 Mbit/s
95th percentile per-packet one-way delay: 90.131 ms
Loss rate: 0.00%
```

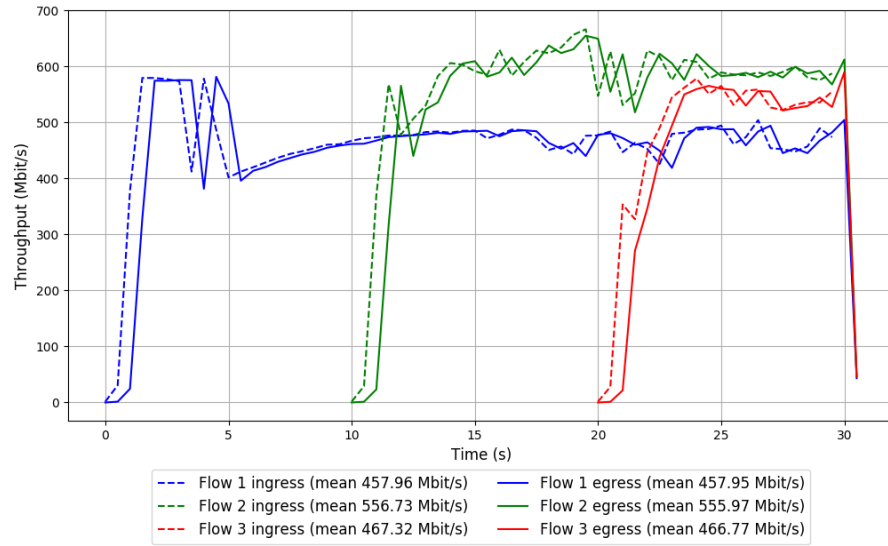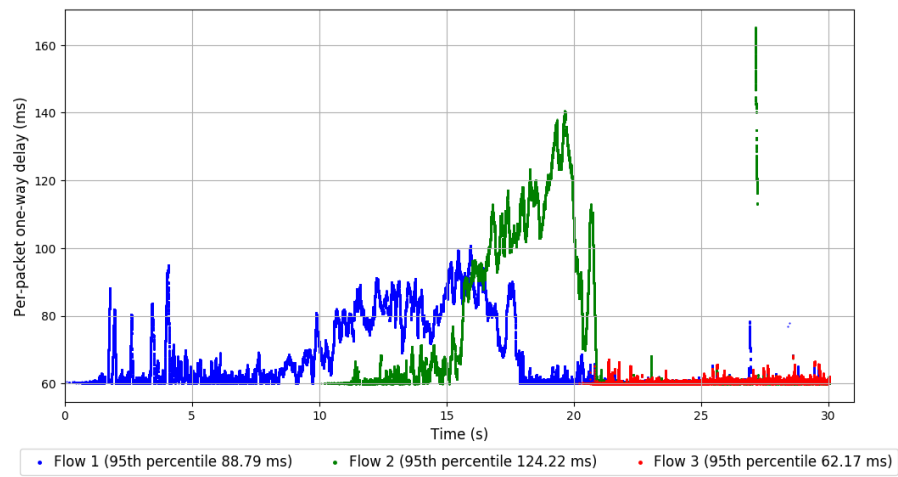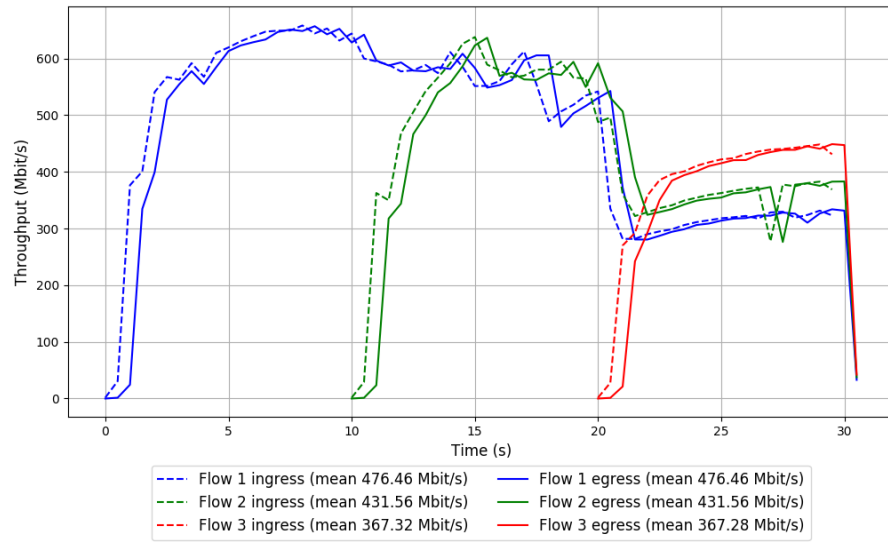Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-10-02 21:22:33
End at: 2018-10-02 21:23:03
Local clock offset: -0.018 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2018-10-03 00:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 966.00 Mbit/s
95th percentile per-packet one-way delay: 106.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 522.14 Mbit/s
95th percentile per-packet one-way delay: 77.561 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 484.43 Mbit/s
95th percentile per-packet one-way delay: 122.047 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 363.63 Mbit/s
95th percentile per-packet one-way delay: 75.118 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 522.14 Mbit/s)
Flow 1 egress (mean 522.14 Mbit/s)
Flow 2 ingress (mean 484.45 Mbit/s)
Flow 2 egress (mean 484.43 Mbit/s)
Flow 3 ingress (mean 363.63 Mbit/s)
Flow 3 egress (mean 363.63 Mbit/s)

Flow 1 (95th percentile 77.56 ms)
Flow 2 (95th percentile 122.05 ms)
Flow 3 (95th percentile 75.12 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-10-02 21:53:44
End at: 2018-10-02 21:54:14
Local clock offset: -0.006 ms
Remote clock offset: -0.311 ms


# Below is generated by plot.py at 2018-10-03 00:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 983.33 Mbit/s
95th percentile per-packet one-way delay: 90.858 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 457.95 Mbit/s
95th percentile per-packet one-way delay: 83.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 555.97 Mbit/s
95th percentile per-packet one-way delay: 94.592 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 466.77 Mbit/s
95th percentile per-packet one-way delay: 89.274 ms
Loss rate: 0.11%
```
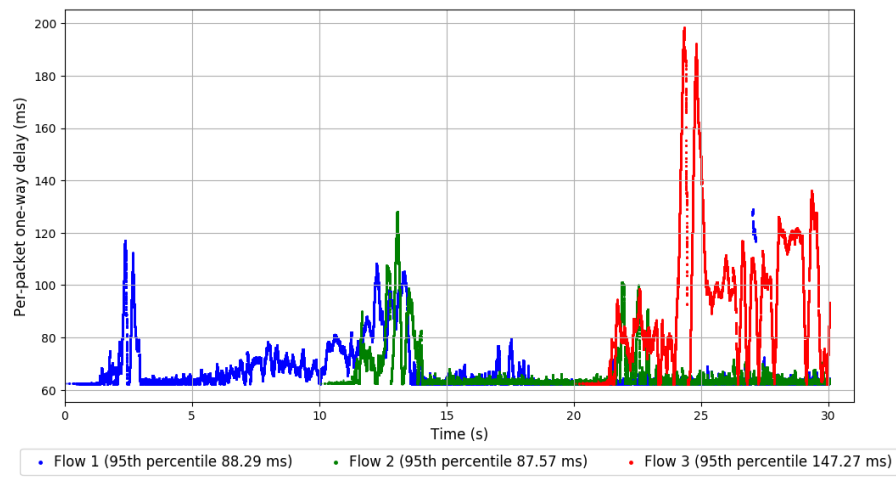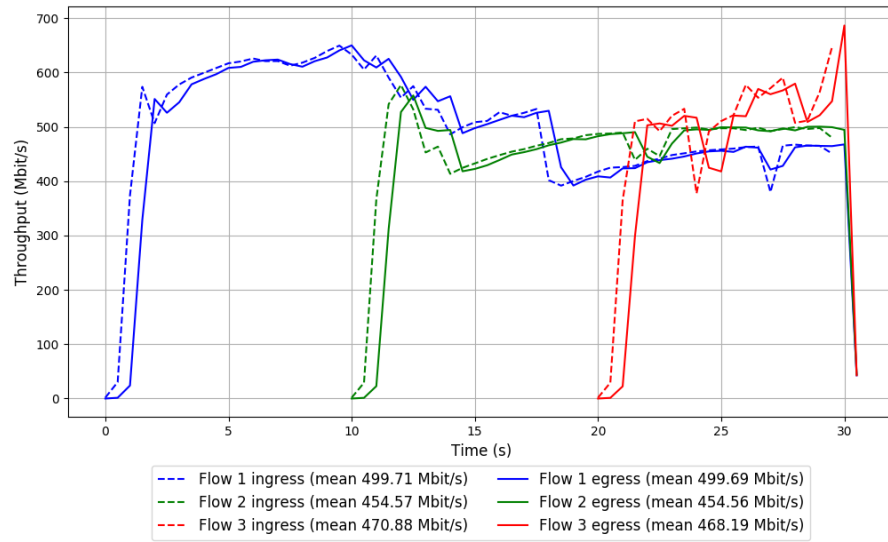
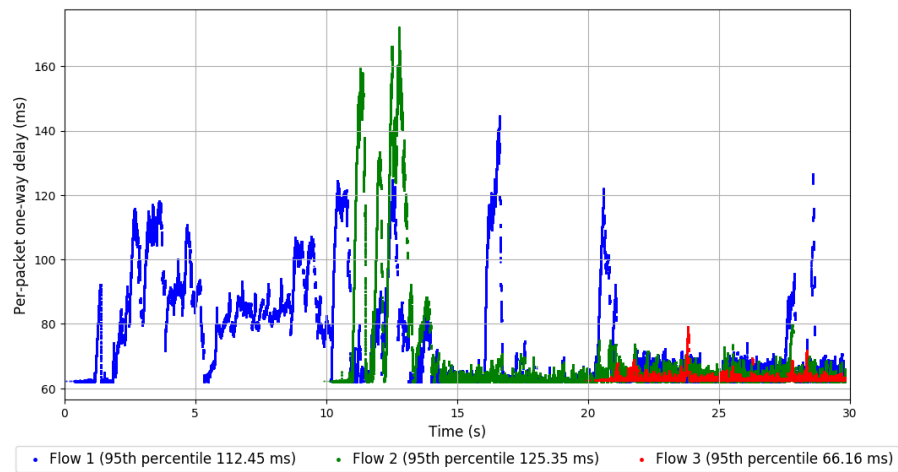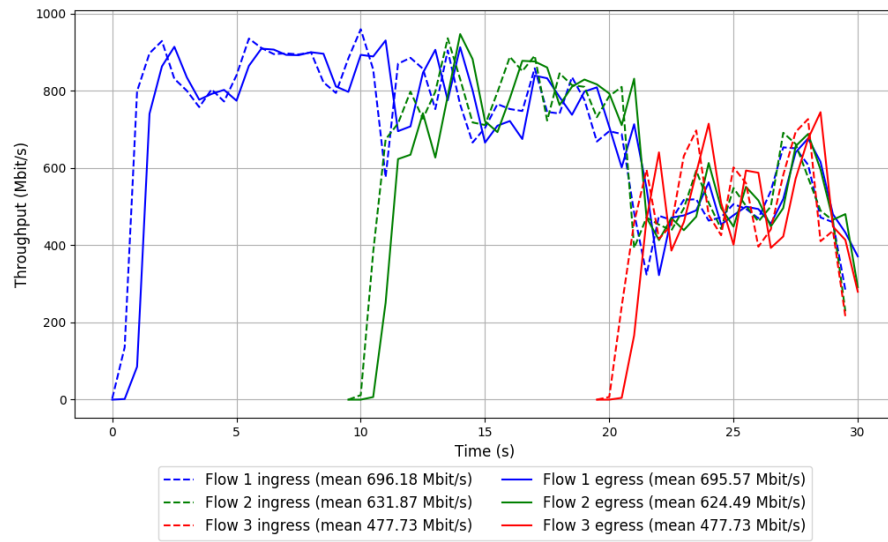Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 457.96 Mbit/s)   Flow 1 egress (mean 457.95 Mbit/s)
Flow 2 ingress (mean 556.73 Mbit/s)   Flow 2 egress (mean 555.97 Mbit/s)
Flow 3 ingress (mean 467.32 Mbit/s)   Flow 3 egress (mean 466.77 Mbit/s)

Flow 1 (95th percentile 83.70 ms)   Flow 2 (95th percentile 94.59 ms)   Flow 3 (95th percentile 89.27 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-10-02 22:24:49
End at: 2018-10-02 22:25:19
Local clock offset: -0.107 ms
Remote clock offset: -0.968 ms


# Below is generated by plot.py at 2018-10-03 00:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 885.97 Mbit/s
95th percentile per-packet one-way delay: 107.973 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 476.46 Mbit/s
95th percentile per-packet one-way delay: 88.788 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 431.56 Mbit/s
95th percentile per-packet one-way delay: 124.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 367.28 Mbit/s
95th percentile per-packet one-way delay: 62.167 ms
Loss rate: 0.00%
```

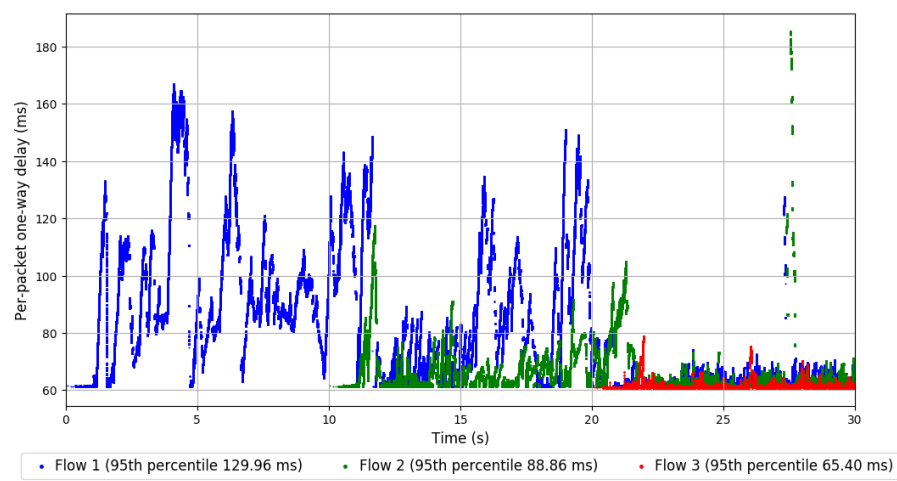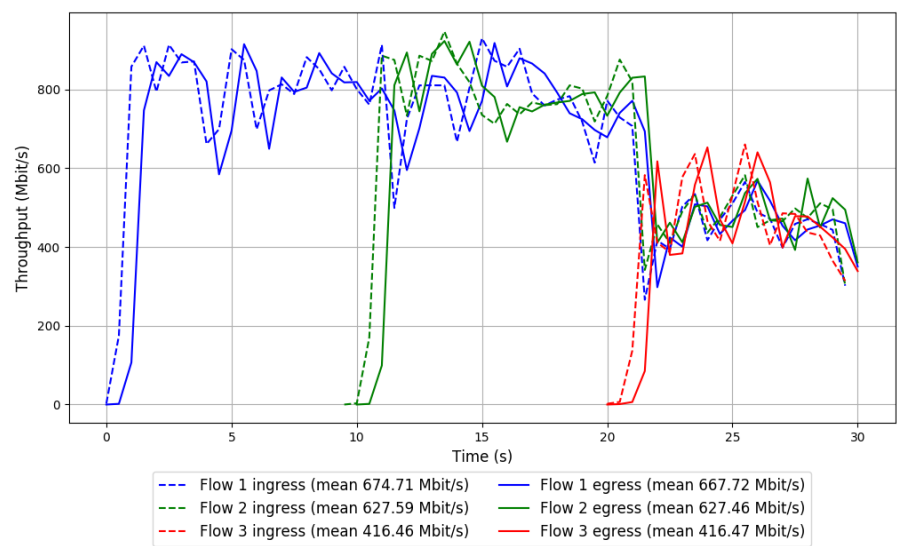Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 476.46 Mbit/s) --- Flow 1 egress (mean 476.46 Mbit/s)
Flow 2 ingress (mean 431.56 Mbit/s) --- Flow 2 egress (mean 431.56 Mbit/s)
Flow 3 ingress (mean 367.32 Mbit/s) --- Flow 3 egress (mean 367.28 Mbit/s)

Flow 1 (95th percentile 88.79 ms)   •   Flow 2 (95th percentile 124.22 ms)   •   Flow 3 (95th percentile 62.17 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-10-02 22:56:17
End at: 2018-10-02 22:56:47
Local clock offset: -0.173 ms
Remote clock offset: 1.198 ms


# Below is generated by plot.py at 2018-10-03 00:14:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 958.19 Mbit/s
95th percentile per-packet one-way delay: 107.476 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 499.69 Mbit/s
95th percentile per-packet one-way delay: 88.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 454.56 Mbit/s
95th percentile per-packet one-way delay: 87.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 468.19 Mbit/s
95th percentile per-packet one-way delay: 147.270 ms
Loss rate: 0.56%
```
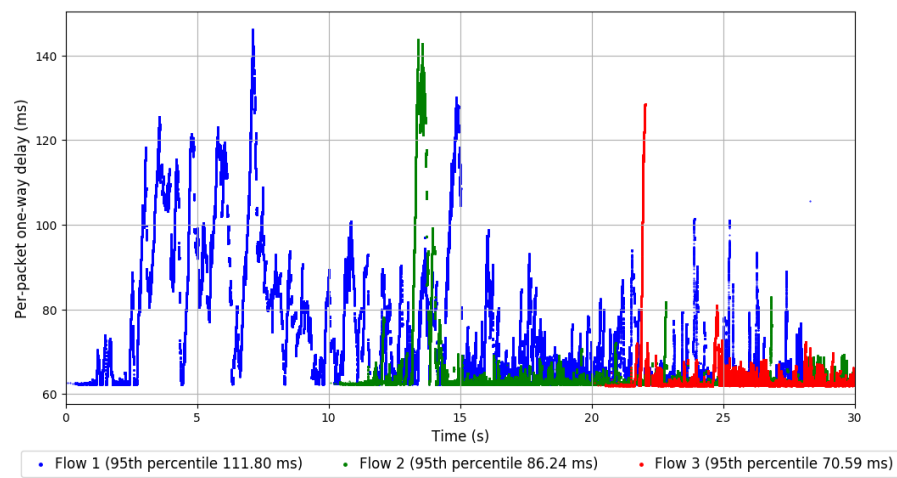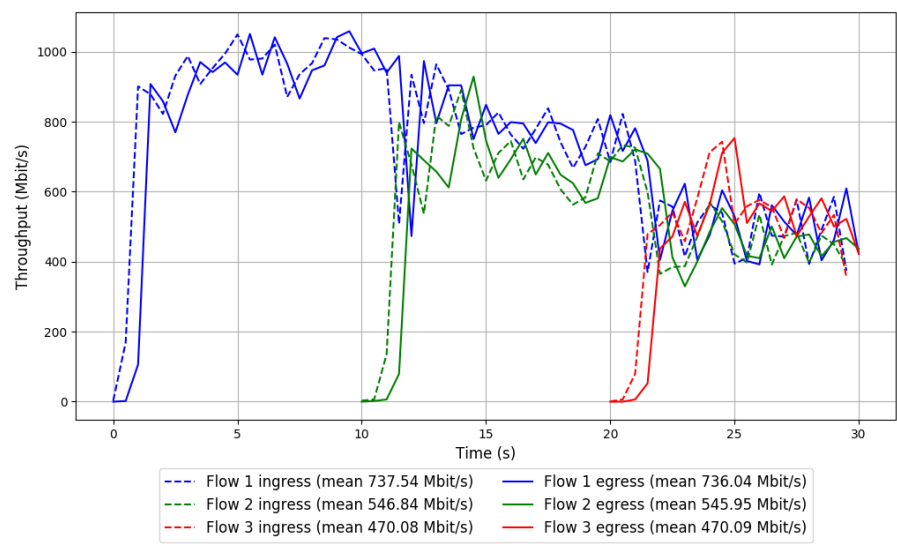
Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-10-02 20:37:20
End at: 2018-10-02 20:37:50
Local clock offset: -0.035 ms
Remote clock offset: 1.28 ms


# Below is generated by plot.py at 2018-10-03 00:28:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1272.76 Mbit/s
95th percentile per-packet one-way delay: 111.811 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 695.57 Mbit/s
95th percentile per-packet one-way delay: 112.452 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 624.49 Mbit/s
95th percentile per-packet one-way delay: 125.351 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 477.73 Mbit/s
95th percentile per-packet one-way delay: 66.157 ms
Loss rate: 0.00%
```
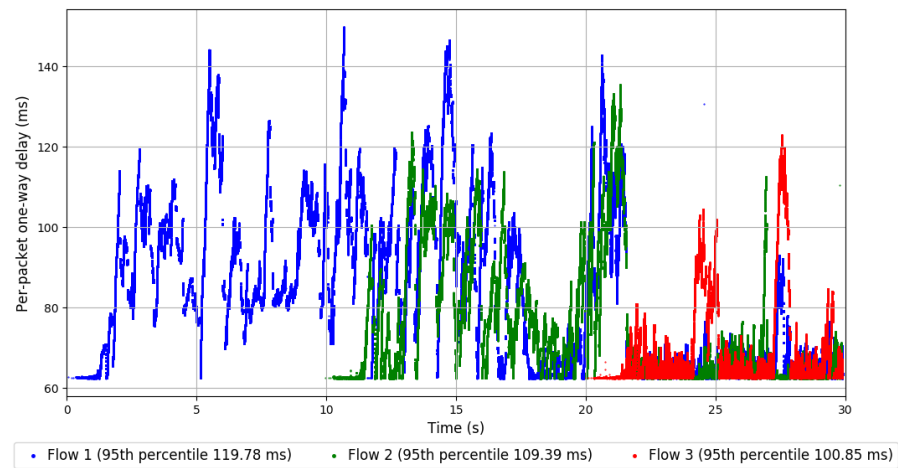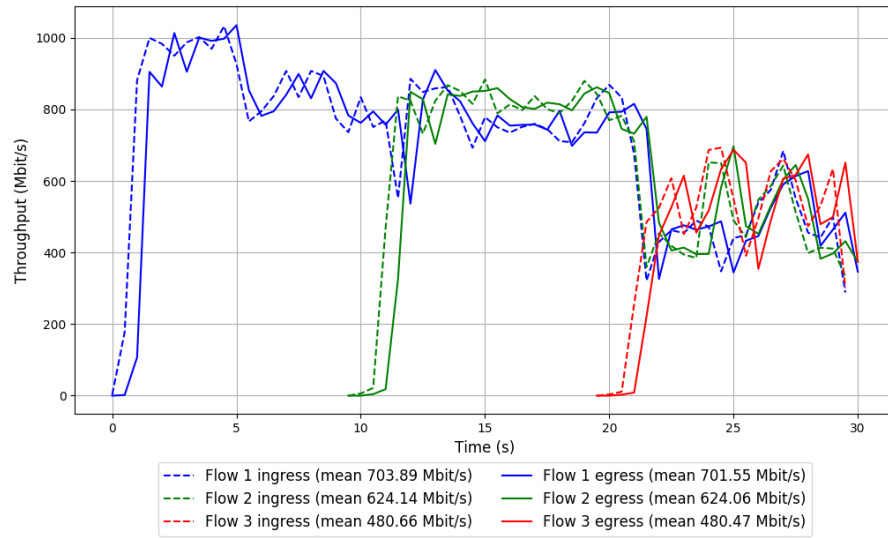
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-10-02 21:08:14
End at: 2018-10-02 21:08:44
Local clock offset: -0.036 ms
Remote clock offset: 0.153 ms


# Below is generated by plot.py at 2018-10-03 00:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1223.40 Mbit/s
95th percentile per-packet one-way delay: 119.076 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 667.72 Mbit/s
95th percentile per-packet one-way delay: 129.957 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 627.46 Mbit/s
95th percentile per-packet one-way delay: 88.860 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 416.47 Mbit/s
95th percentile per-packet one-way delay: 65.396 ms
Loss rate: 0.00%
```
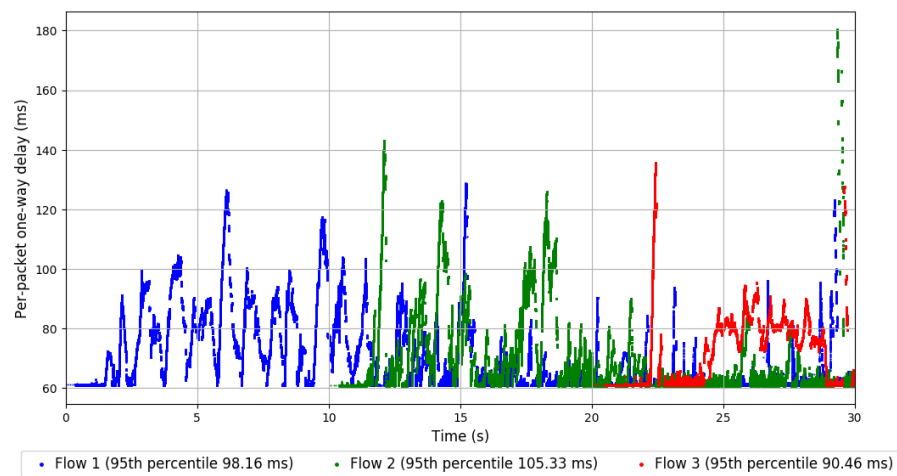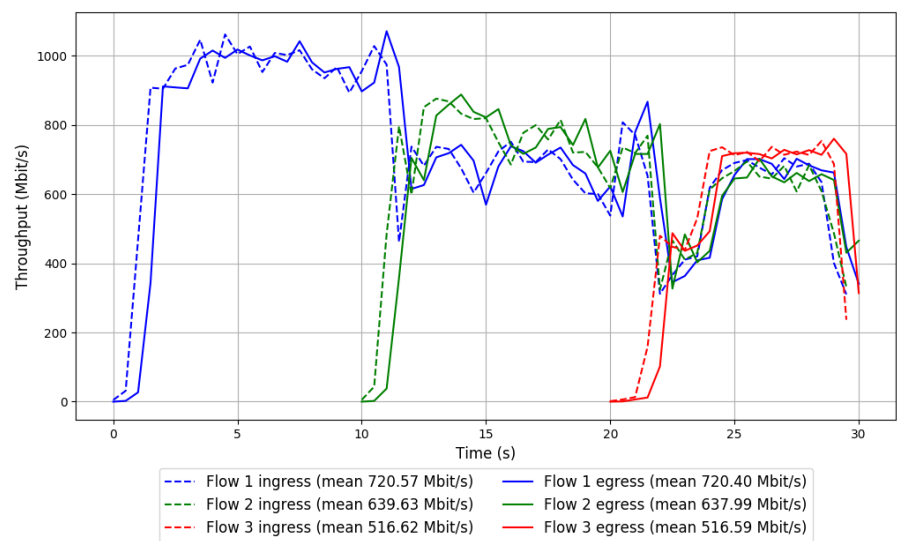
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-10-02 21:39:26
End at: 2018-10-02 21:39:56
Local clock offset: -0.014 ms
Remote clock offset: 1.196 ms


# Below is generated by plot.py at 2018-10-03 00:46:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1254.09 Mbit/s
95th percentile per-packet one-way delay: 107.655 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 736.04 Mbit/s
95th percentile per-packet one-way delay: 111.803 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 545.95 Mbit/s
95th percentile per-packet one-way delay: 86.244 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 470.09 Mbit/s
95th percentile per-packet one-way delay: 70.595 ms
Loss rate: 0.00%
```
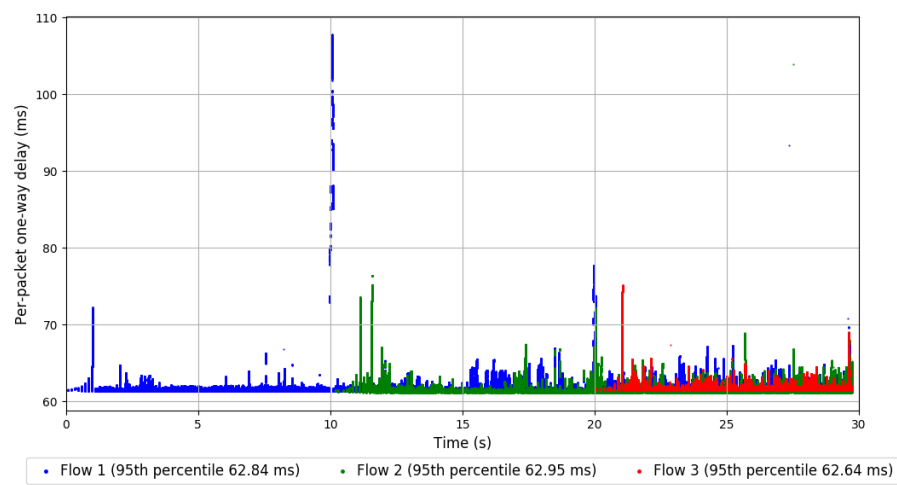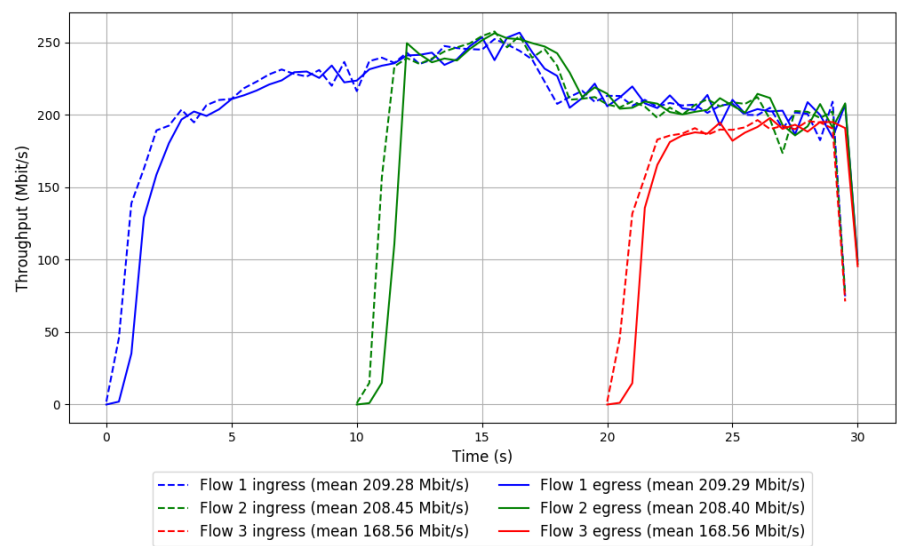
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-10-02 22:10:37
End at: 2018-10-02 22:11:07
Local clock offset: -0.039 ms
Remote clock offset: 1.223 ms


# Below is generated by plot.py at 2018-10-03 00:47:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1277.93 Mbit/s
95th percentile per-packet one-way delay: 115.823 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 701.55 Mbit/s
95th percentile per-packet one-way delay: 119.785 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 624.06 Mbit/s
95th percentile per-packet one-way delay: 109.392 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 480.47 Mbit/s
95th percentile per-packet one-way delay: 100.847 ms
Loss rate: 0.00%
```

Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-10-02 22:41:48
End at: 2018-10-02 22:42:18
Local clock offset: -0.11 ms
Remote clock offset: -0.175 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1315.78 Mbit/s
95th percentile per-packet one-way delay: 99.823 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 720.40 Mbit/s
95th percentile per-packet one-way delay: 98.164 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 637.99 Mbit/s
95th percentile per-packet one-way delay: 105.334 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 516.59 Mbit/s
95th percentile per-packet one-way delay: 90.462 ms
Loss rate: 0.00%
```
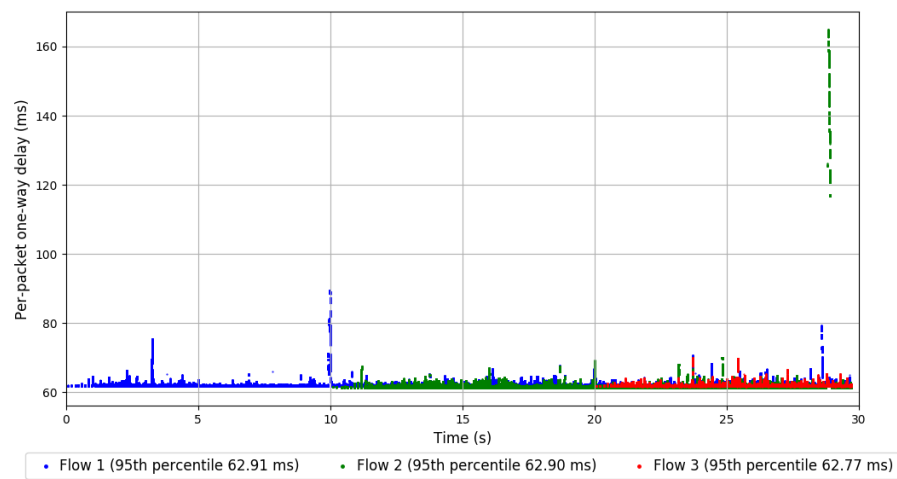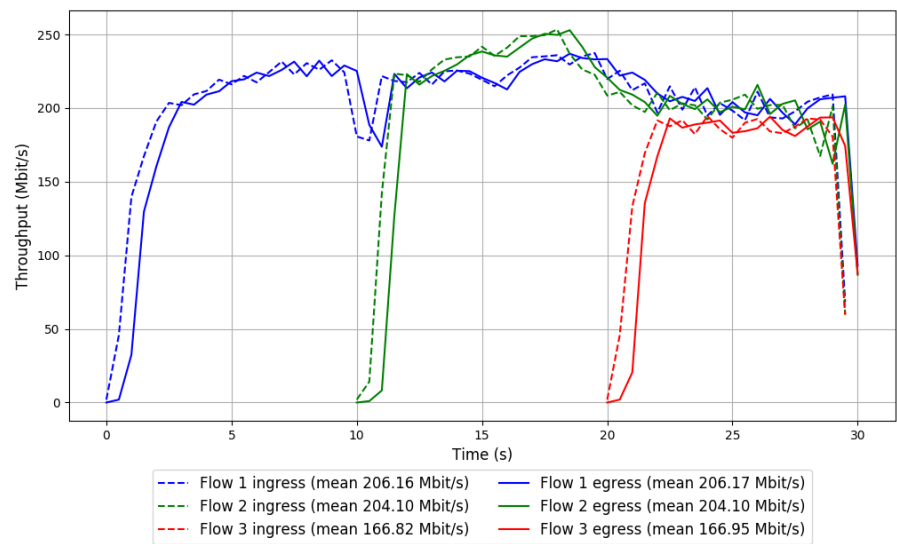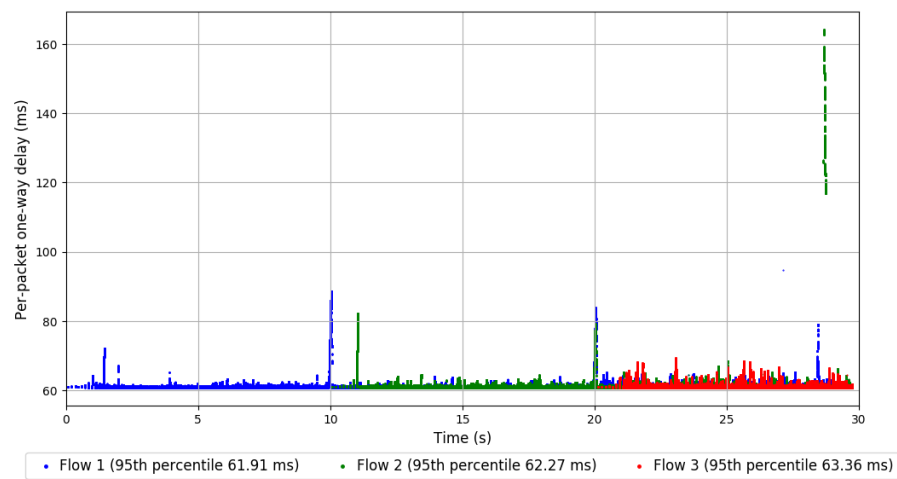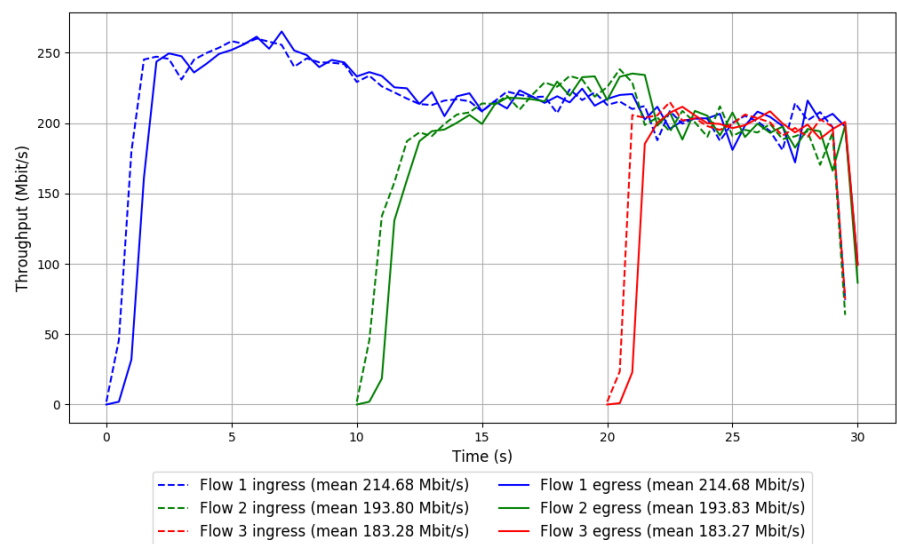
Run 5: Report of FillP — Data Link

- - - - Flow 1 ingress (mean 720.57 Mbit/s)   —— Flow 1 egress (mean 720.40 Mbit/s)
- - - - Flow 2 ingress (mean 639.63 Mbit/s)   —— Flow 2 egress (mean 637.99 Mbit/s)
- - - - Flow 3 ingress (mean 516.62 Mbit/s)   —— Flow 3 egress (mean 516.59 Mbit/s)

• Flow 1 (95th percentile 98.16 ms)   • Flow 2 (95th percentile 105.33 ms)   • Flow 3 (95th percentile 90.46 ms)

44

```
Run 1: Statistics of Indigo

Start at: 2018-10-02 20:53:22
End at: 2018-10-02 20:53:52
Local clock offset: -0.037 ms
Remote clock offset: 0.378 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.51 Mbit/s
95th percentile per-packet one-way delay: 62.837 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 209.29 Mbit/s
95th percentile per-packet one-way delay: 62.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.40 Mbit/s
95th percentile per-packet one-way delay: 62.945 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 168.56 Mbit/s
95th percentile per-packet one-way delay: 62.642 ms
Loss rate: 0.00%
```
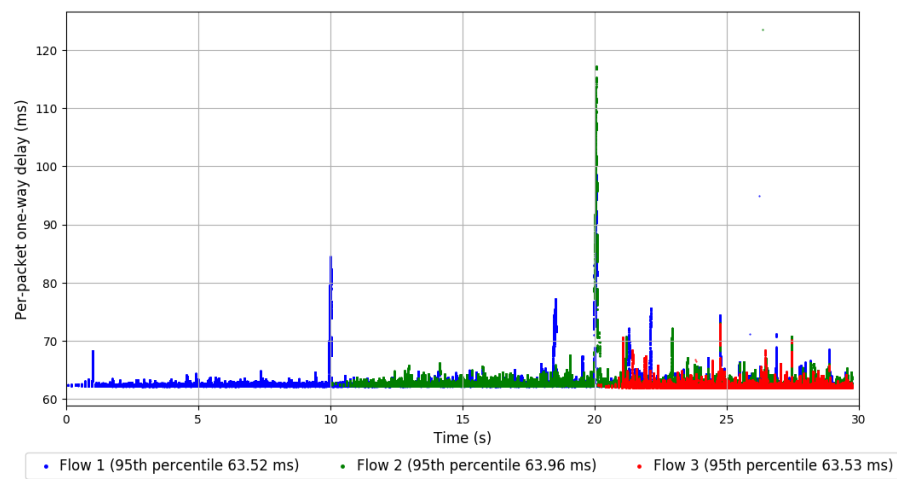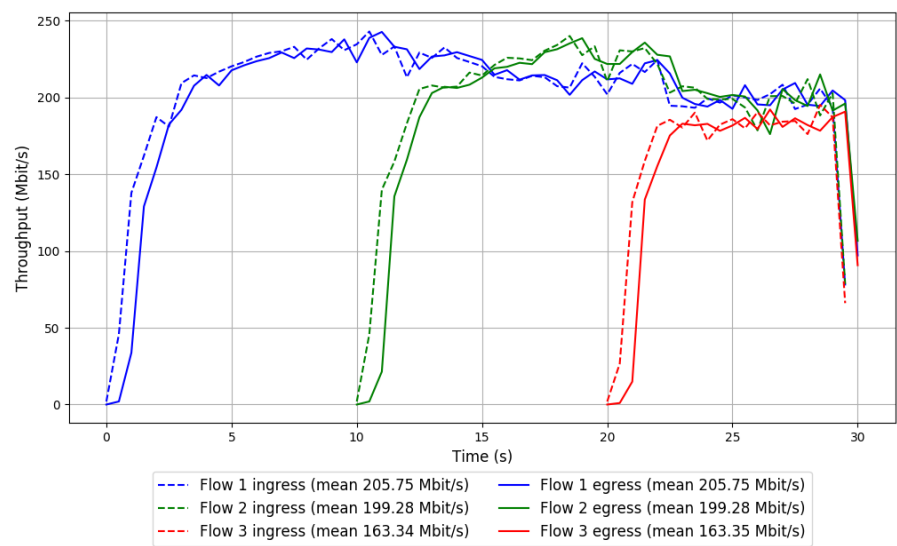
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-10-02 21:24:36
End at: 2018-10-02 21:25:06
Local clock offset: 0.056 ms
Remote clock offset: 0.717 ms

# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.52 Mbit/s
95th percentile per-packet one-way delay: 62.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.17 Mbit/s
95th percentile per-packet one-way delay: 62.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.10 Mbit/s
95th percentile per-packet one-way delay: 62.897 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.95 Mbit/s
95th percentile per-packet one-way delay: 62.768 ms
Loss rate: 0.00%
```
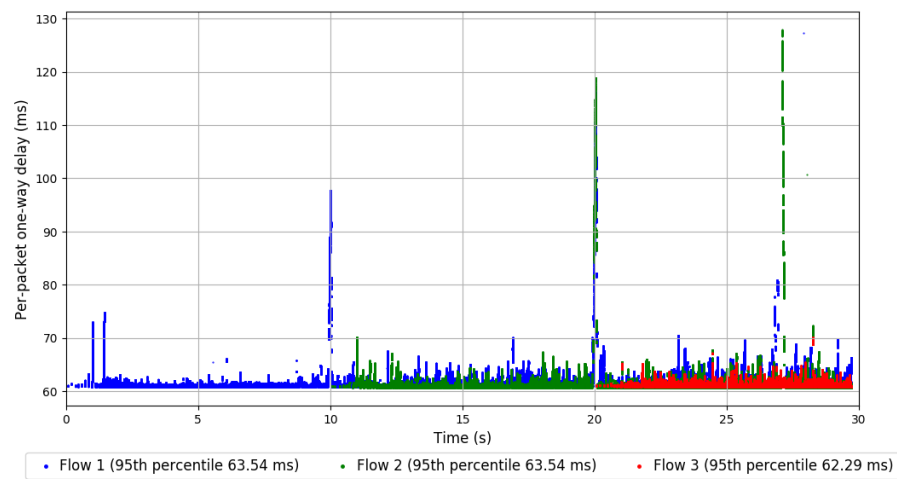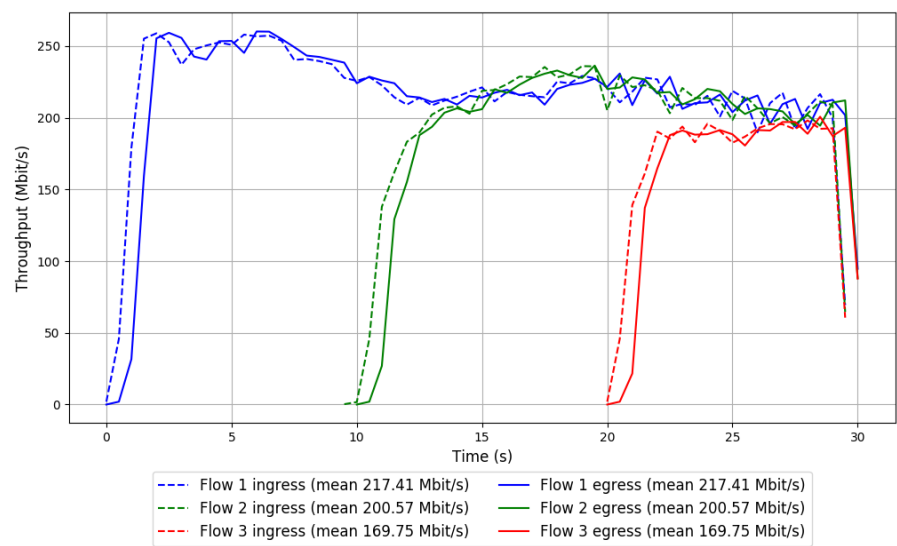
Run 2: Report of Indigo — Data Link

48

```
Run 3: Statistics of Indigo

Start at: 2018-10-02 21:55:47
End at: 2018-10-02 21:56:17
Local clock offset: 0.022 ms
Remote clock offset: -0.209 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 402.31 Mbit/s
95th percentile per-packet one-way delay: 62.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.68 Mbit/s
95th percentile per-packet one-way delay: 61.913 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.83 Mbit/s
95th percentile per-packet one-way delay: 62.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 183.27 Mbit/s
95th percentile per-packet one-way delay: 63.361 ms
Loss rate: 0.00%
```
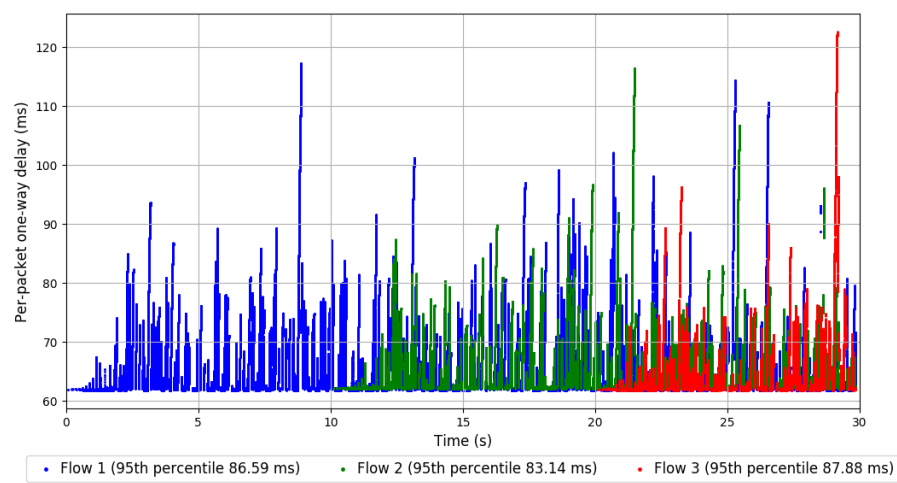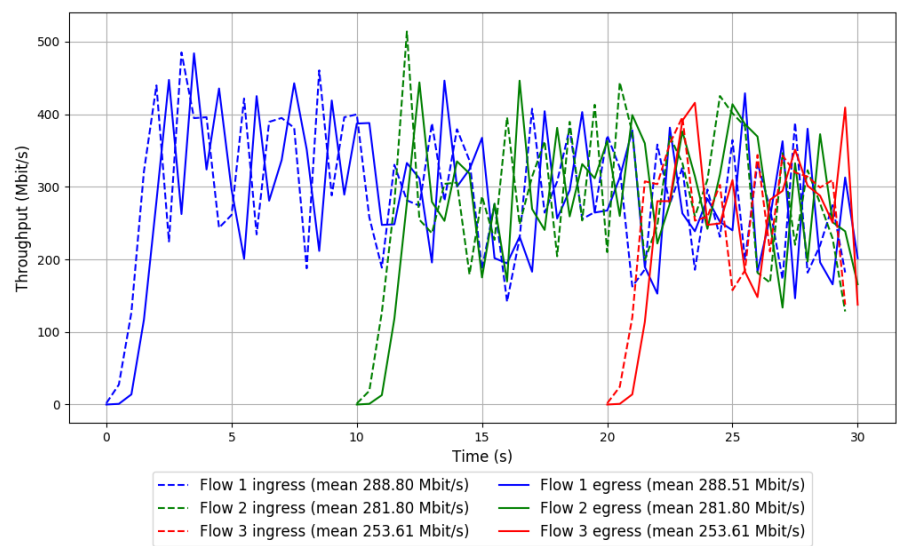
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 214.68 Mbit/s) — — — Flow 1 egress (mean 214.68 Mbit/s)
Flow 2 ingress (mean 193.80 Mbit/s) — — — Flow 2 egress (mean 193.83 Mbit/s)
Flow 3 ingress (mean 183.28 Mbit/s) — — — Flow 3 egress (mean 183.27 Mbit/s)

Flow 1 (95th percentile 61.91 ms) • Flow 2 (95th percentile 62.27 ms) • Flow 3 (95th percentile 63.36 ms)

50

```
Run 4: Statistics of Indigo

Start at: 2018-10-02 22:26:48
End at: 2018-10-02 22:27:18
Local clock offset: -0.091 ms
Remote clock offset: 1.173 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.76 Mbit/s
95th percentile per-packet one-way delay: 63.704 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.75 Mbit/s
95th percentile per-packet one-way delay: 63.523 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.28 Mbit/s
95th percentile per-packet one-way delay: 63.957 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 163.35 Mbit/s
95th percentile per-packet one-way delay: 63.533 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-10-02 22:58:19
End at: 2018-10-02 22:58:49
Local clock offset: -0.153 ms
Remote clock offset: -0.125 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.60 Mbit/s
95th percentile per-packet one-way delay: 63.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.41 Mbit/s
95th percentile per-packet one-way delay: 63.541 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 200.57 Mbit/s
95th percentile per-packet one-way delay: 63.542 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.75 Mbit/s
95th percentile per-packet one-way delay: 62.289 ms
Loss rate: 0.00%
```
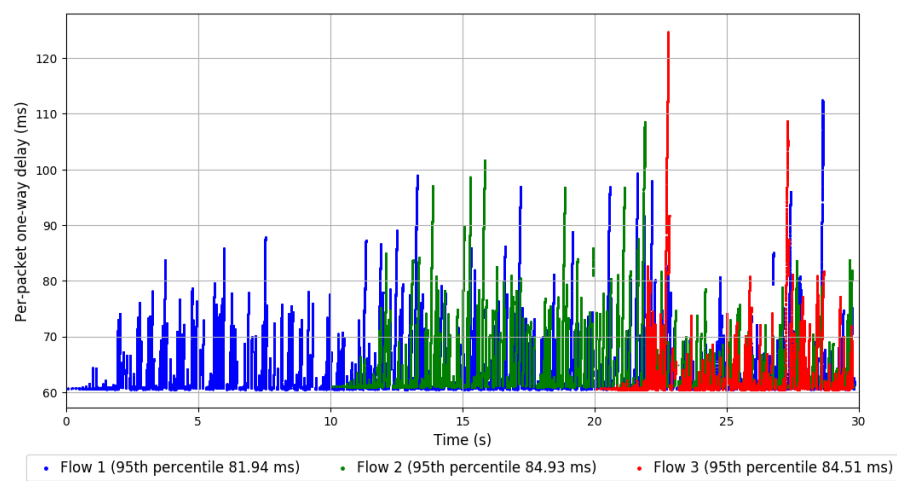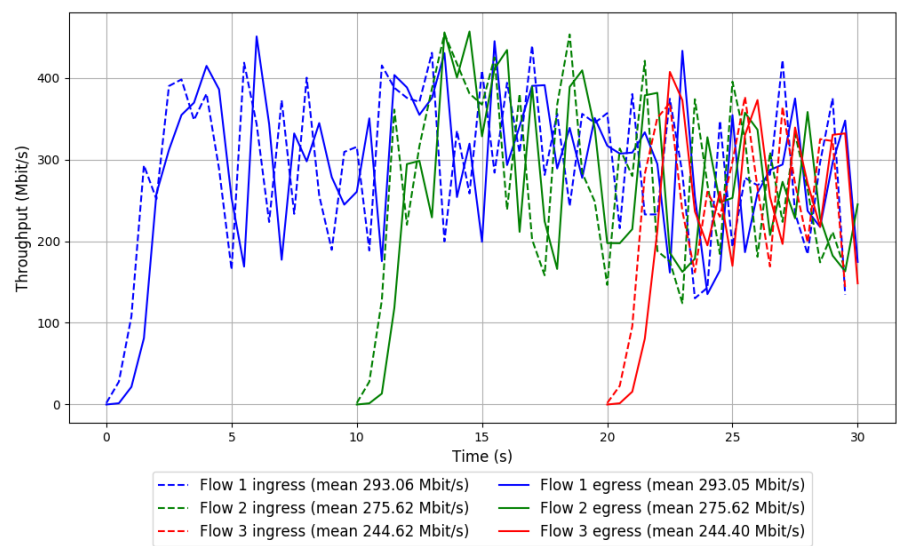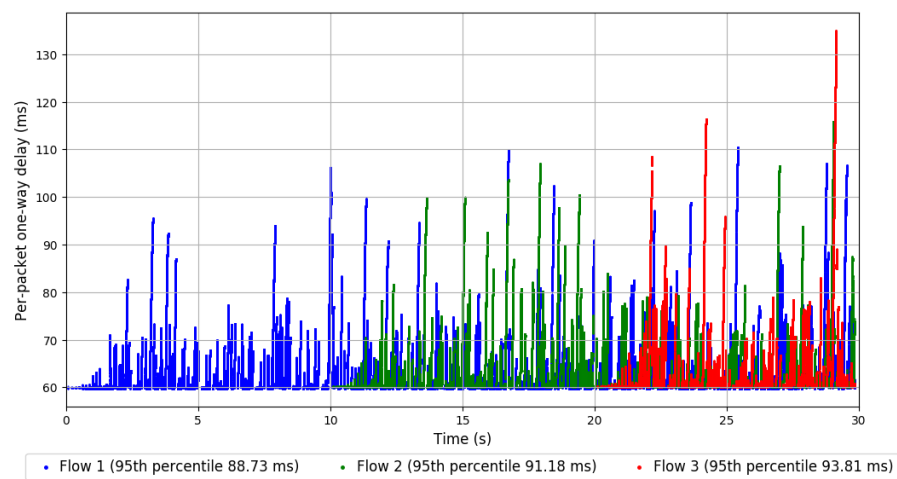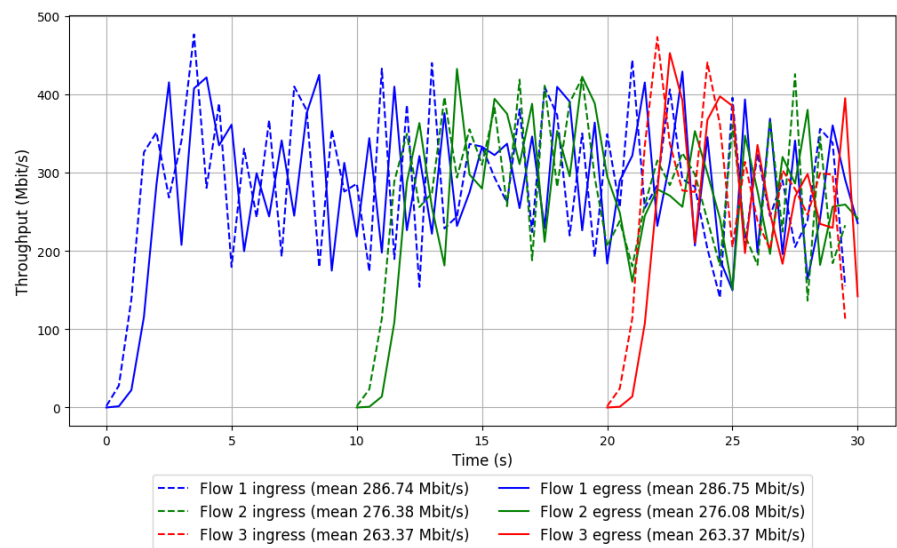
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-02 20:56:27
End at: 2018-10-02 20:56:57
Local clock offset: -0.077 ms
Remote clock offset: 0.97 ms


# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.48 Mbit/s
95th percentile per-packet one-way delay: 85.830 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 288.51 Mbit/s
95th percentile per-packet one-way delay: 86.587 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 281.80 Mbit/s
95th percentile per-packet one-way delay: 83.145 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 253.61 Mbit/s
95th percentile per-packet one-way delay: 87.876 ms
Loss rate: 0.00%
```
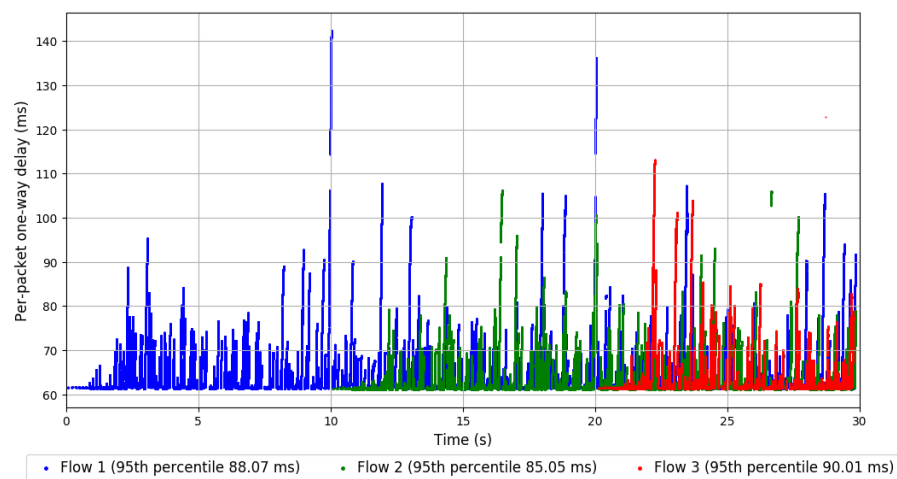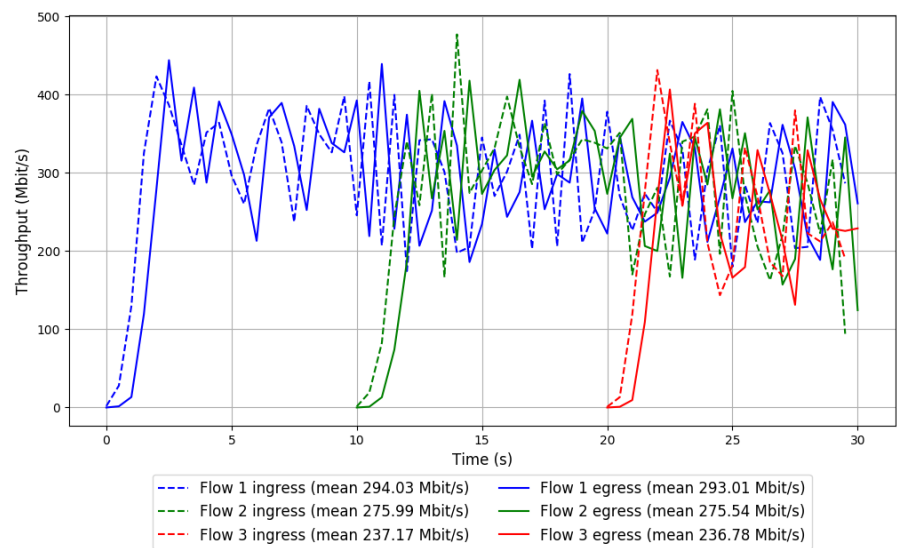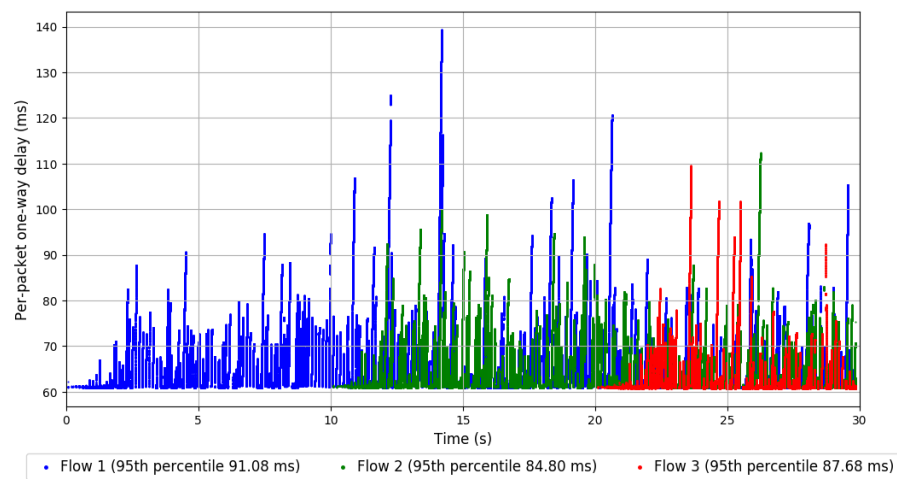
Run 1: Report of Indigo-96d2da3 — Data Link

```
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-02 21:27:39
End at: 2018-10-02 21:28:09
Local clock offset: -0.003 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2018-10-03 00:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.23 Mbit/s
95th percentile per-packet one-way delay: 83.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 293.05 Mbit/s
95th percentile per-packet one-way delay: 81.941 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 275.62 Mbit/s
95th percentile per-packet one-way delay: 84.933 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.40 Mbit/s
95th percentile per-packet one-way delay: 84.509 ms
Loss rate: 0.00%
```

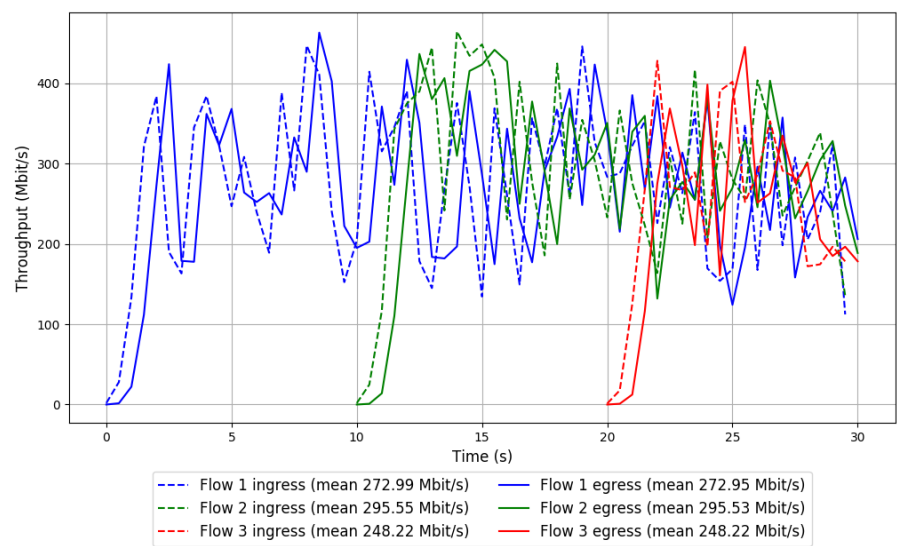Run 2: Report of Indigo-96d2da3 — Data Link

```
Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-02 21:58:52
End at: 2018-10-02 21:59:22
Local clock offset: -0.024 ms
Remote clock offset: -1.088 ms


# Below is generated by plot.py at 2018-10-03 00:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.92 Mbit/s
95th percentile per-packet one-way delay: 89.862 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 286.75 Mbit/s
95th percentile per-packet one-way delay: 88.727 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 276.08 Mbit/s
95th percentile per-packet one-way delay: 91.176 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 263.37 Mbit/s
95th percentile per-packet one-way delay: 93.807 ms
Loss rate: 0.00%
```

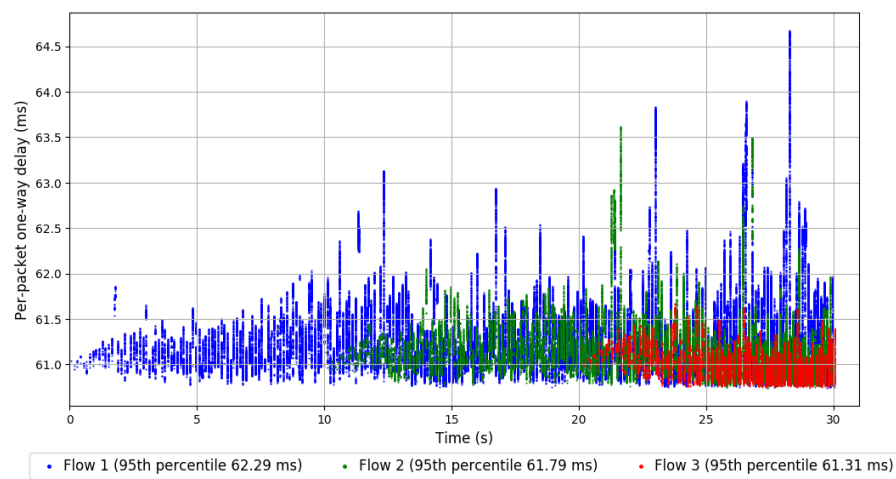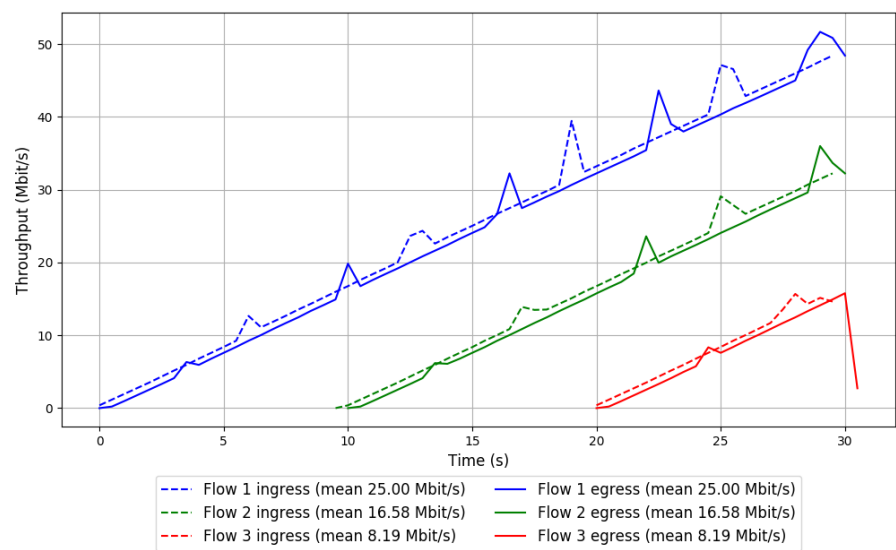Run 3: Report of Indigo-96d2da3 — Data Link

```
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-02 22:29:51
End at: 2018-10-02 22:30:21
Local clock offset: -0.081 ms
Remote clock offset: 0.282 ms


# Below is generated by plot.py at 2018-10-03 00:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 552.35 Mbit/s
95th percentile per-packet one-way delay: 87.353 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 293.01 Mbit/s
95th percentile per-packet one-way delay: 88.066 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 275.54 Mbit/s
95th percentile per-packet one-way delay: 85.054 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 236.78 Mbit/s
95th percentile per-packet one-way delay: 90.011 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-96d2da3 — Data Link
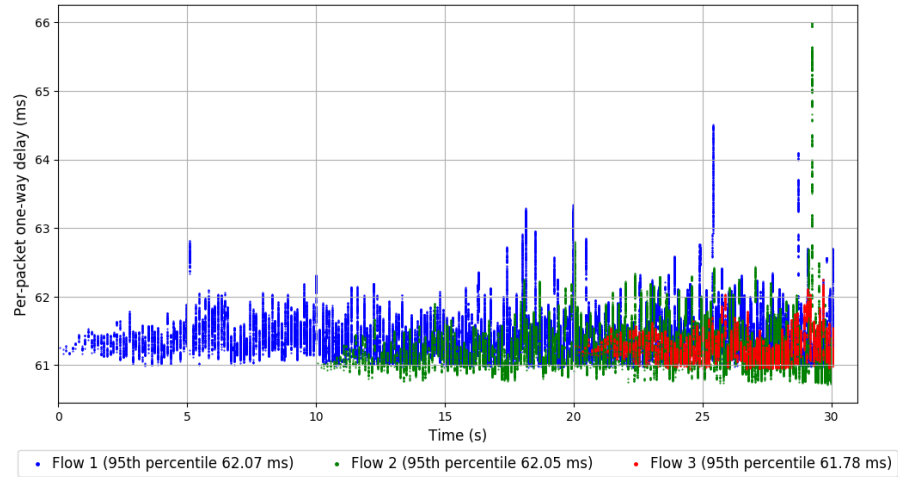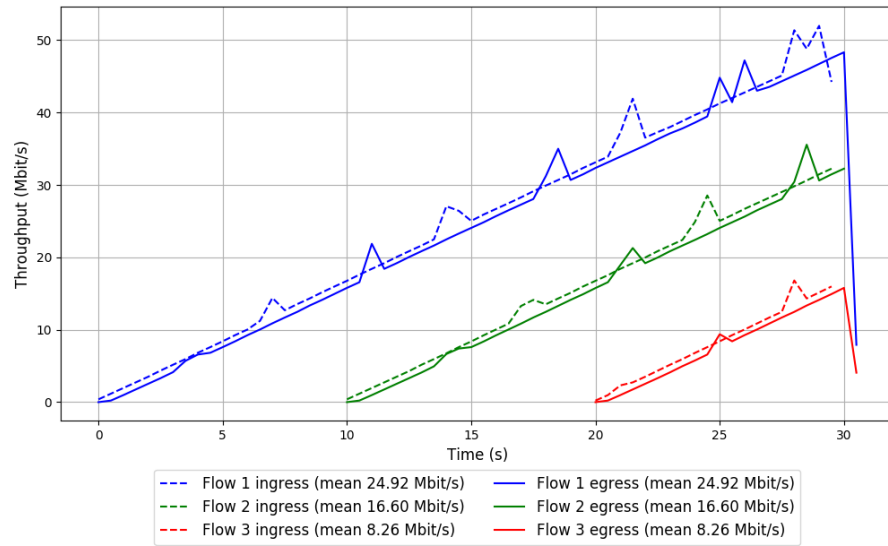
```
Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-02 23:01:24
End at: 2018-10-02 23:01:54
Local clock offset: -0.163 ms
Remote clock offset: -0.206 ms


# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 549.21 Mbit/s
95th percentile per-packet one-way delay: 88.324 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 272.95 Mbit/s
95th percentile per-packet one-way delay: 91.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 295.53 Mbit/s
95th percentile per-packet one-way delay: 84.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 248.22 Mbit/s
95th percentile per-packet one-way delay: 87.679 ms
Loss rate: 0.00%
```

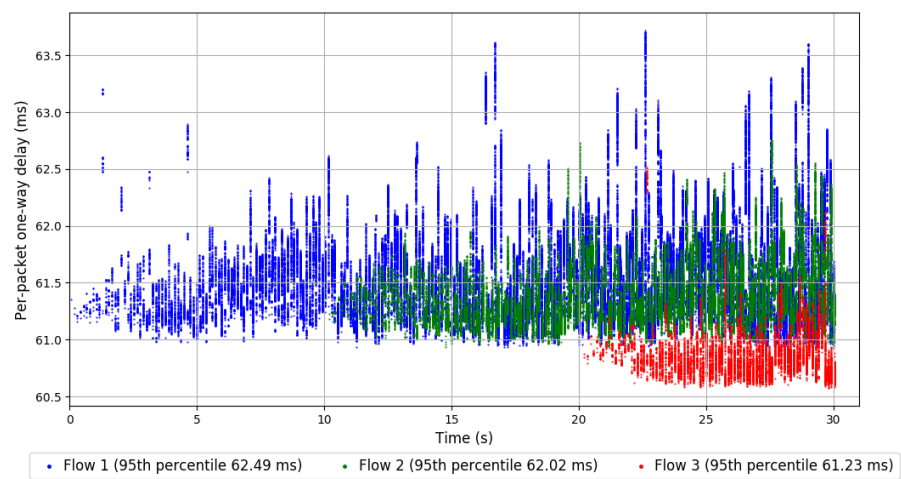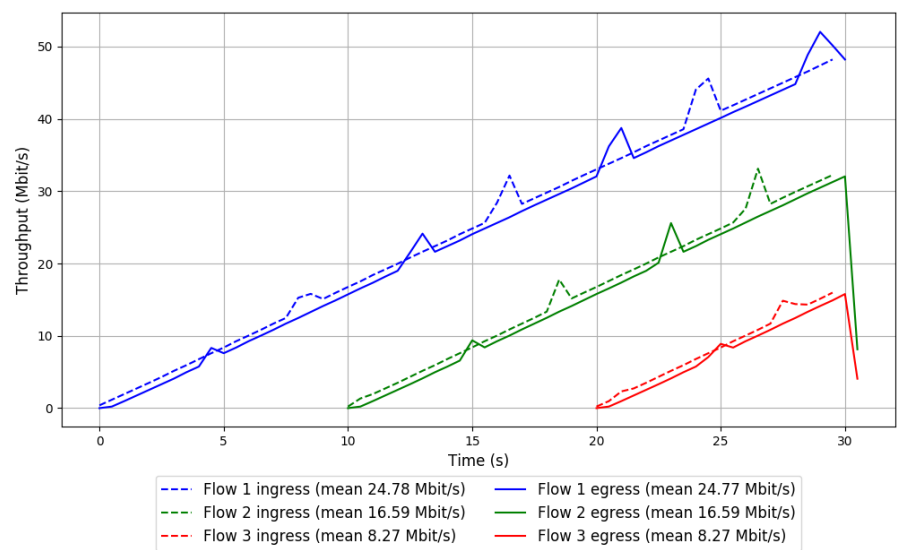Run 5: Report of Indigo-96d2da3 — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-10-02 20:55:11
End at: 2018-10-02 20:55:41
Local clock offset: -0.041 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 62.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.00 Mbit/s
95th percentile per-packet one-way delay: 62.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.58 Mbit/s
95th percentile per-packet one-way delay: 61.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 61.312 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-10-02 21:26:24
End at: 2018-10-02 21:26:54
Local clock offset: -0.048 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 62.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 62.072 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.60 Mbit/s
95th percentile per-packet one-way delay: 62.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 61.777 ms
Loss rate: 0.00%
```
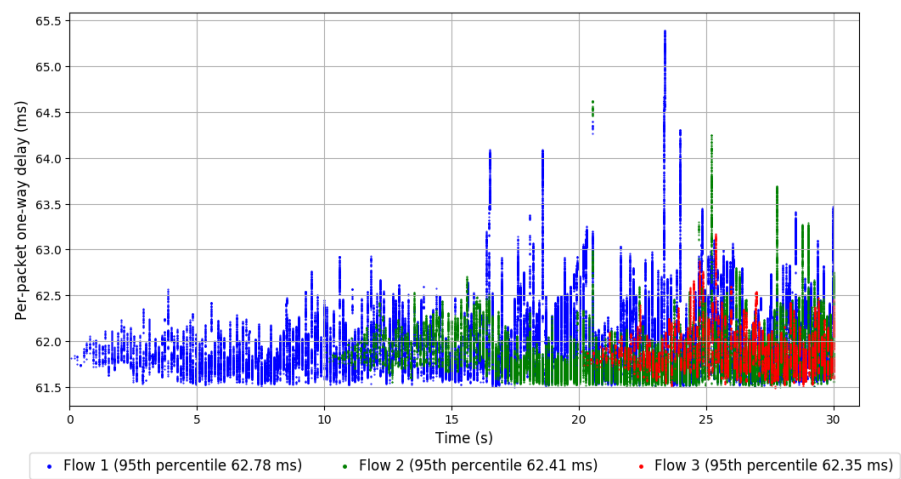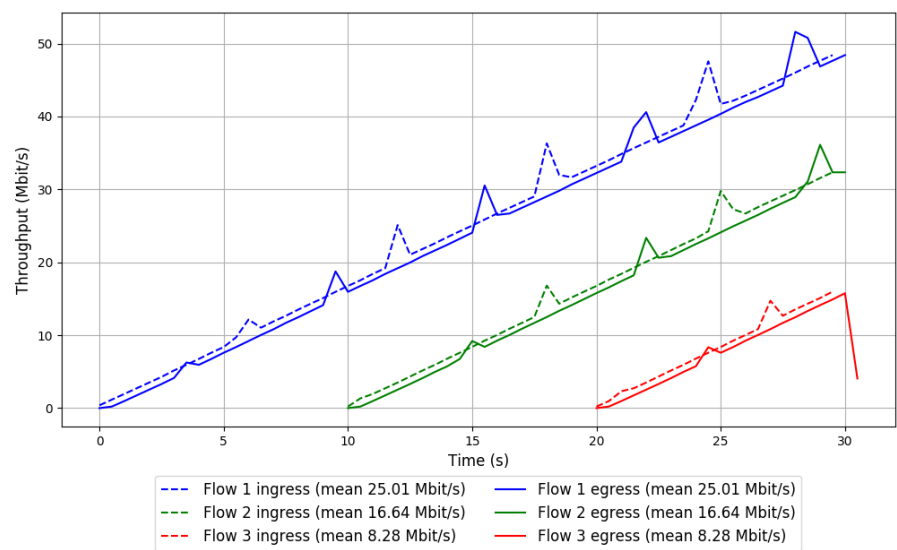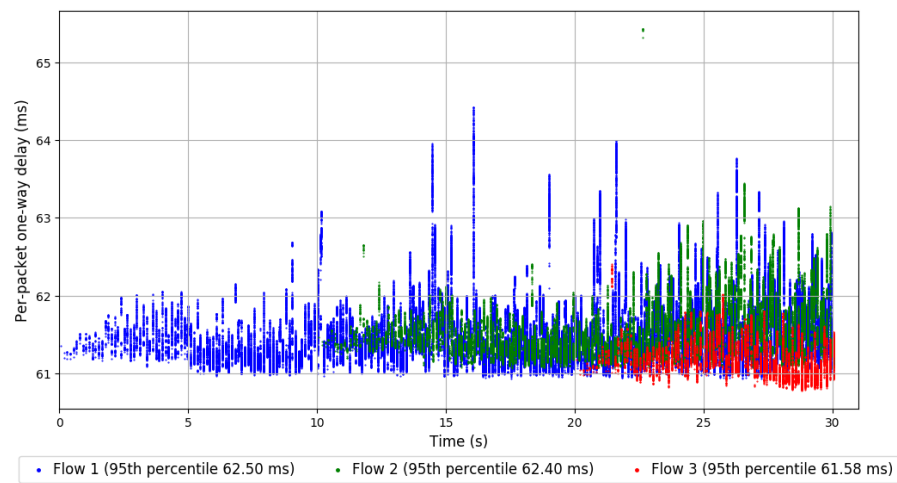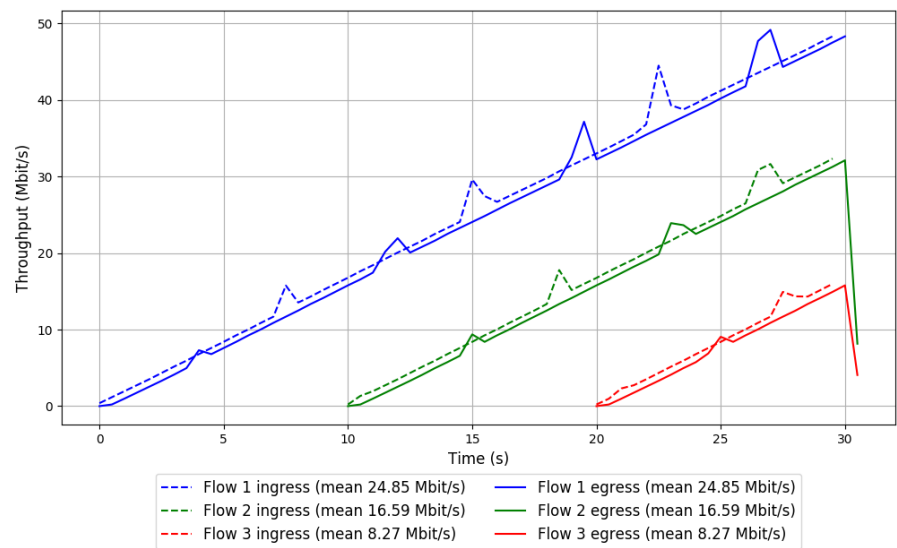
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-10-02 21:57:37
End at: 2018-10-02 21:58:07
Local clock offset: -0.075 ms
Remote clock offset: -0.154 ms


# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.53 Mbit/s
95th percentile per-packet one-way delay: 62.298 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 62.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 62.019 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 61.232 ms
Loss rate: 0.00%
```
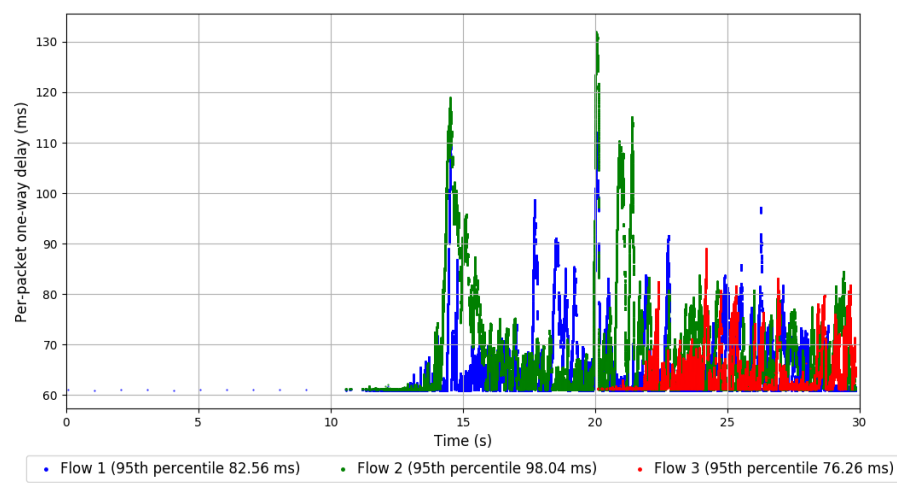
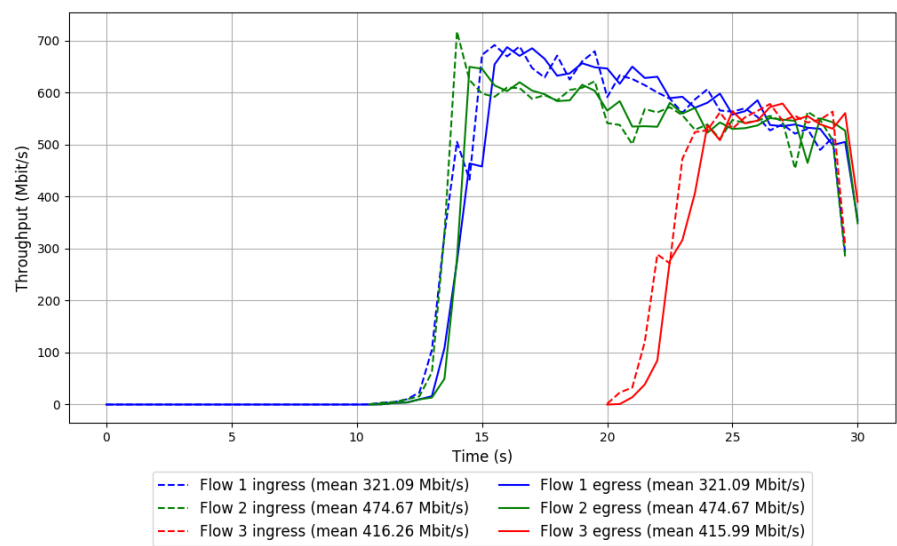## Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-10-02 22:28:36
End at: 2018-10-02 22:29:06
Local clock offset: -0.107 ms
Remote clock offset: 0.614 ms


# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 62.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 62.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 62.414 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 62.349 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-10-02 23:00:08
End at: 2018-10-02 23:00:38
Local clock offset: -0.148 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-10-03 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.58 Mbit/s
95th percentile per-packet one-way delay: 62.425 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 62.501 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 62.402 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 61.580 ms
Loss rate: 0.00%
```
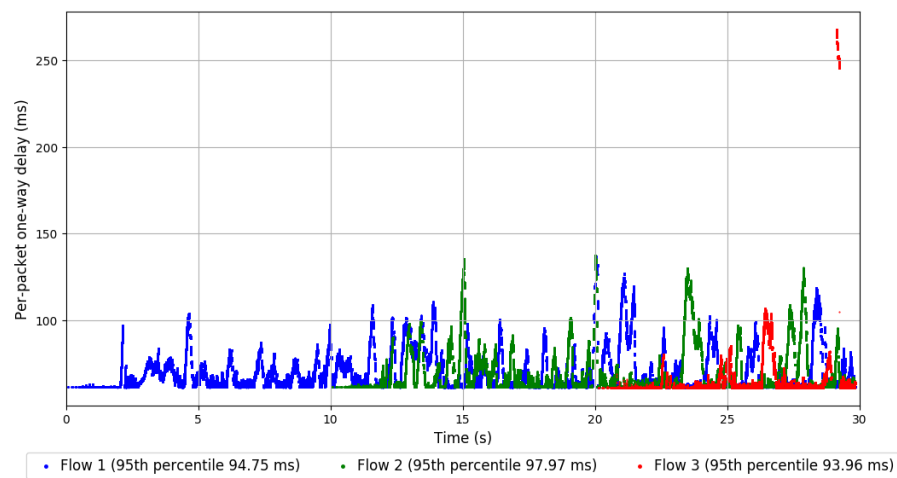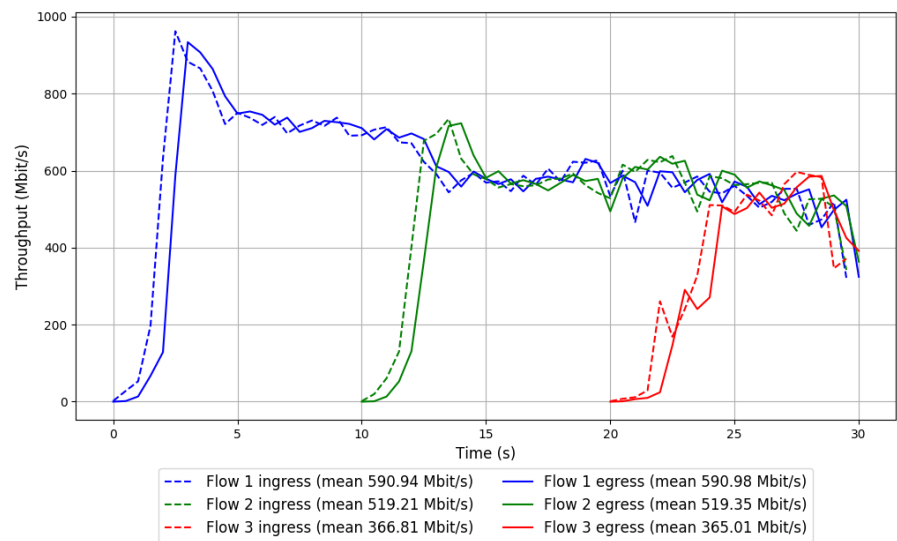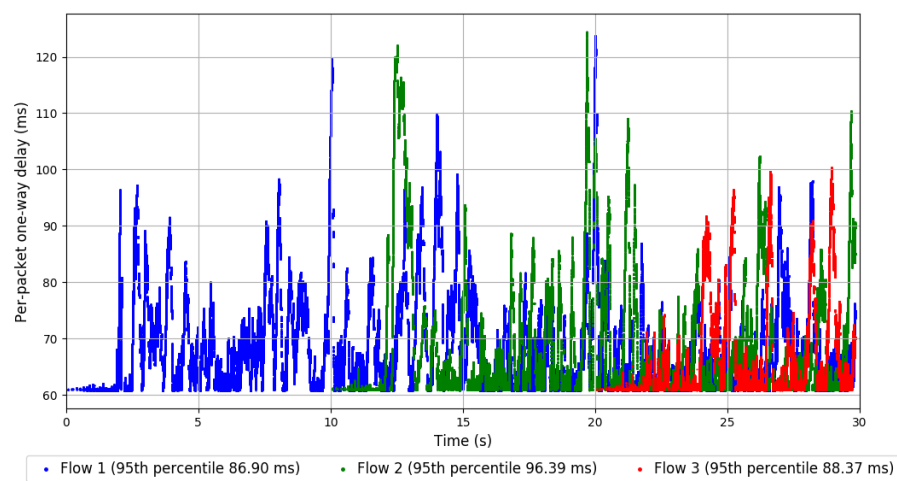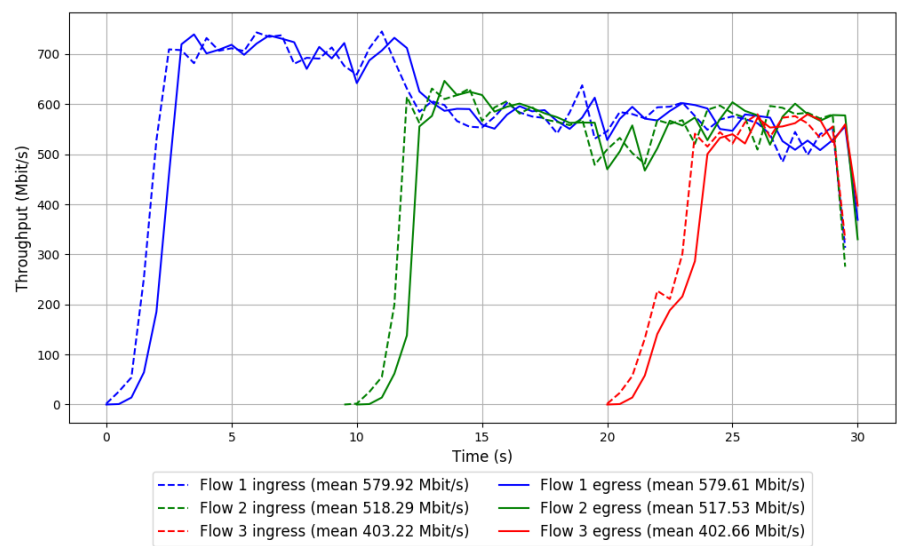
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Indigo-Muses

Start at: 2018-10-02 20:44:32
End at: 2018-10-02 20:45:02
Local clock offset: -0.038 ms
Remote clock offset: 0.101 ms


# Below is generated by plot.py at 2018-10-03 01:04:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.32 Mbit/s
95th percentile per-packet one-way delay: 86.495 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 321.09 Mbit/s
95th percentile per-packet one-way delay: 82.558 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 474.67 Mbit/s
95th percentile per-packet one-way delay: 98.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 415.99 Mbit/s
95th percentile per-packet one-way delay: 76.264 ms
Loss rate: 0.06%
```
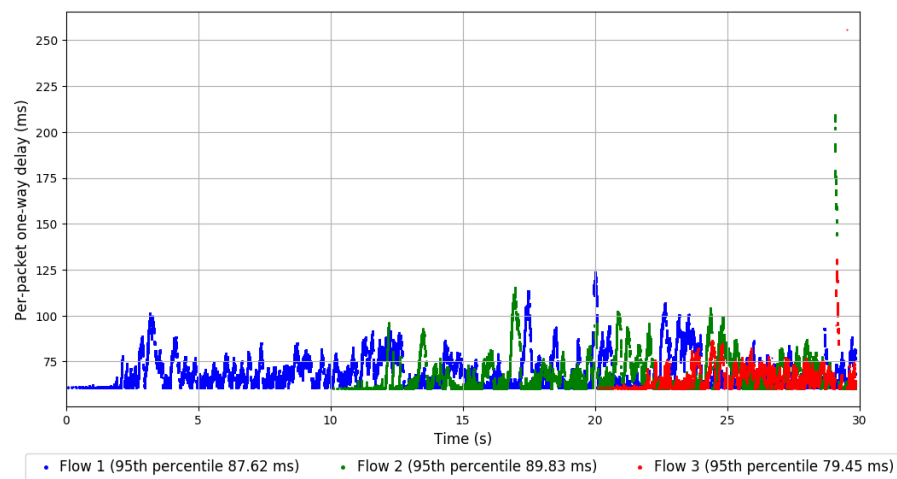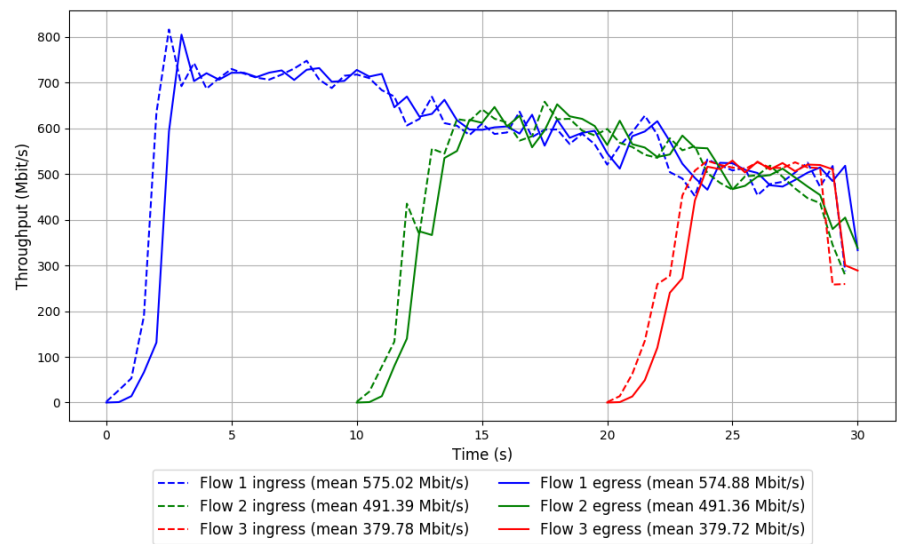
Run 1: Report of Indigo-Muses — Data Link

```
Run 2: Statistics of Indigo-Muses

Start at: 2018-10-02 21:15:25
End at: 2018-10-02 21:15:55
Local clock offset: -0.002 ms
Remote clock offset: 0.5 ms

# Below is generated by plot.py at 2018-10-03 01:10:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1054.81 Mbit/s
95th percentile per-packet one-way delay: 95.470 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 590.98 Mbit/s
95th percentile per-packet one-way delay: 94.754 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 519.35 Mbit/s
95th percentile per-packet one-way delay: 97.969 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 365.01 Mbit/s
95th percentile per-packet one-way delay: 93.964 ms
Loss rate: 0.90%
```
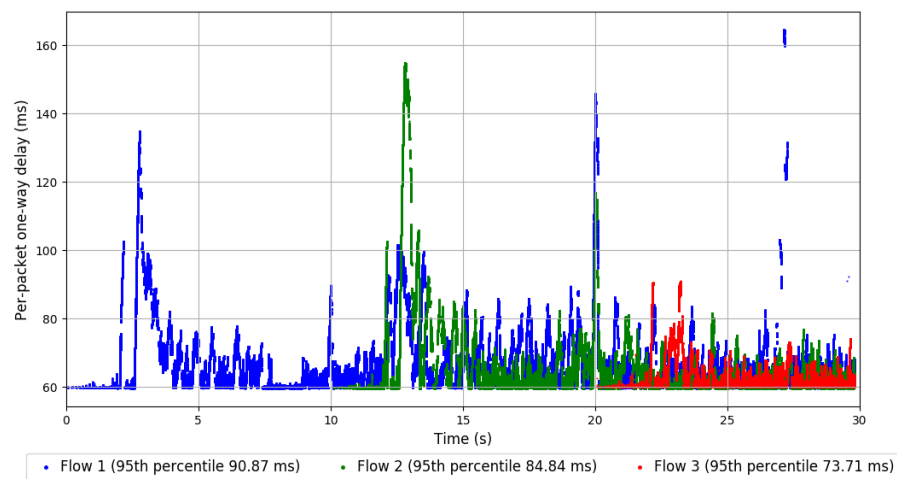
Run 2: Report of Indigo-Muses — Data Link

Flow 1 ingress (mean 590.94 Mbit/s) -- -- -- Flow 1 egress (mean 590.98 Mbit/s)
Flow 2 ingress (mean 519.21 Mbit/s) -- -- -- Flow 2 egress (mean 519.35 Mbit/s)
Flow 3 ingress (mean 366.81 Mbit/s) -- -- -- Flow 3 egress (mean 365.01 Mbit/s)

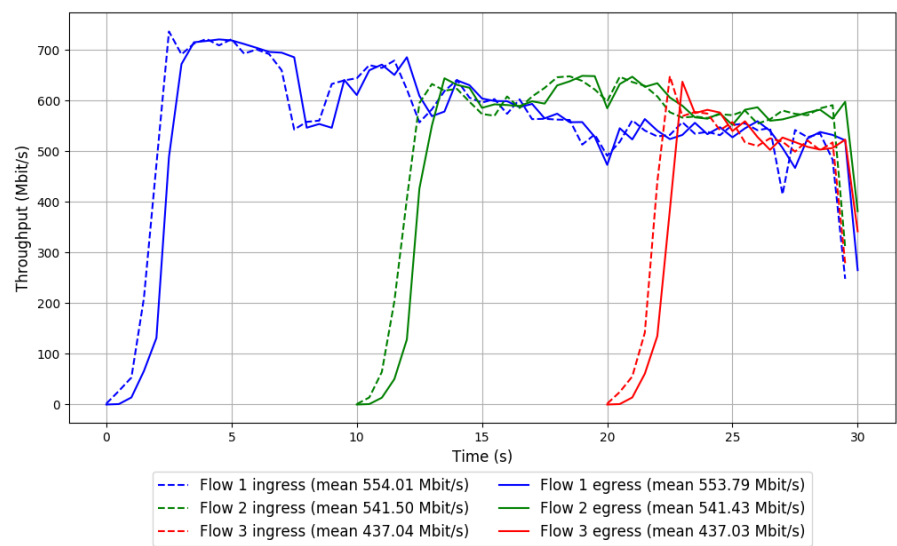Flow 1 (95th percentile 94.75 ms)   Flow 2 (95th percentile 97.97 ms)   Flow 3 (95th percentile 93.96 ms)

```
Run 3: Statistics of Indigo-Muses

Start at: 2018-10-02 21:46:40
End at: 2018-10-02 21:47:10
Local clock offset: -0.042 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2018-10-03 01:11:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1055.59 Mbit/s
95th percentile per-packet one-way delay: 90.101 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 579.61 Mbit/s
95th percentile per-packet one-way delay: 86.904 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 517.53 Mbit/s
95th percentile per-packet one-way delay: 96.386 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 402.66 Mbit/s
95th percentile per-packet one-way delay: 88.369 ms
Loss rate: 0.11%
```

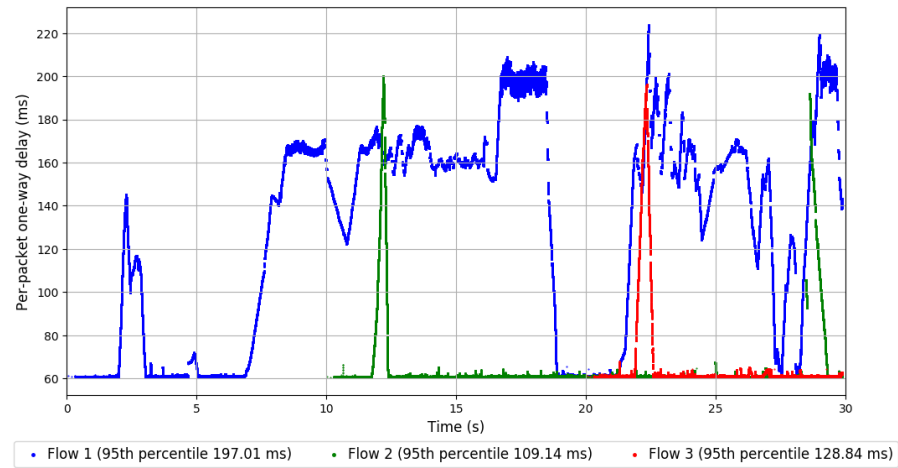Run 3: Report of Indigo-Muses — Data Link

```
Run 4: Statistics of Indigo-Muses

Start at: 2018-10-02 22:17:40
End at: 2018-10-02 22:18:10
Local clock offset: -0.105 ms
Remote clock offset: -0.458 ms


# Below is generated by plot.py at 2018-10-03 01:11:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1025.05 Mbit/s
95th percentile per-packet one-way delay: 87.500 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 574.88 Mbit/s
95th percentile per-packet one-way delay: 87.623 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 491.36 Mbit/s
95th percentile per-packet one-way delay: 89.833 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 379.72 Mbit/s
95th percentile per-packet one-way delay: 79.448 ms
Loss rate: 0.04%
```

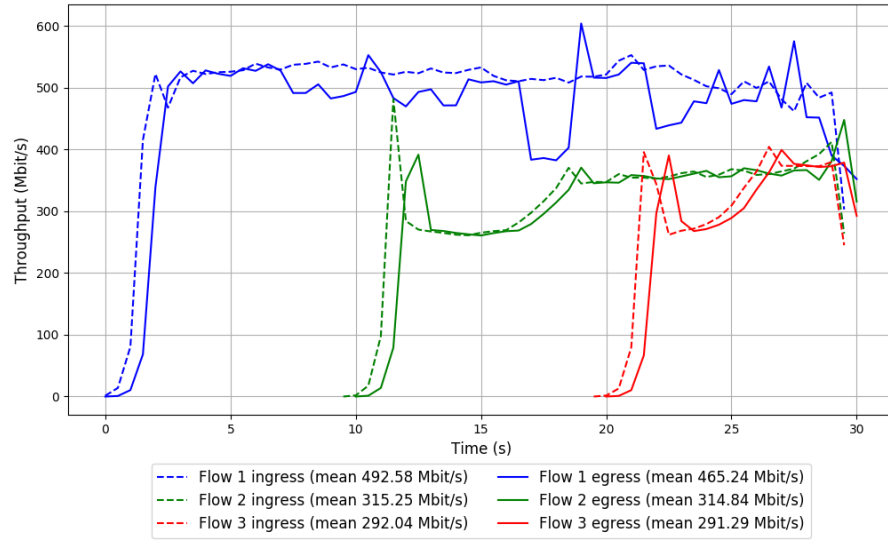Run 4: Report of Indigo-Muses — Data Link

```
Run 5: Statistics of Indigo-Muses

Start at: 2018-10-02 22:49:12
End at: 2018-10-02 22:49:42
Local clock offset: -0.148 ms
Remote clock offset: -1.105 ms


# Below is generated by plot.py at 2018-10-03 01:11:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1055.33 Mbit/s
95th percentile per-packet one-way delay: 86.877 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 553.79 Mbit/s
95th percentile per-packet one-way delay: 90.870 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 541.43 Mbit/s
95th percentile per-packet one-way delay: 84.839 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 437.03 Mbit/s
95th percentile per-packet one-way delay: 73.711 ms
Loss rate: 0.00%
```
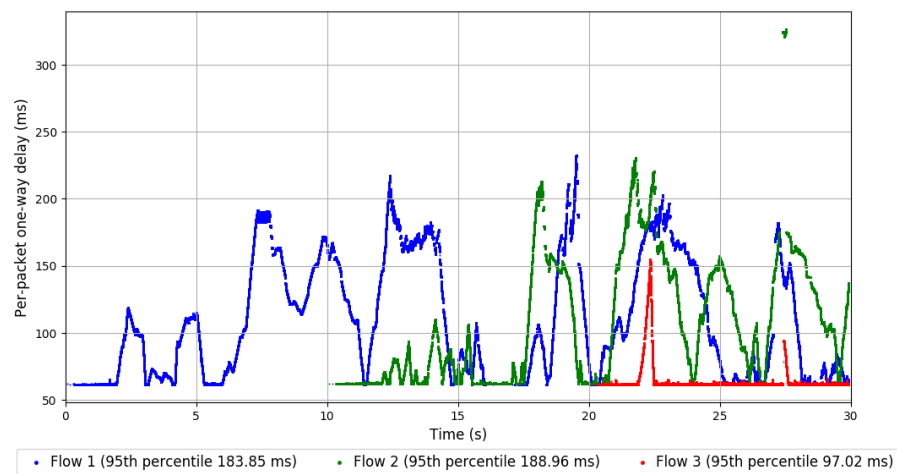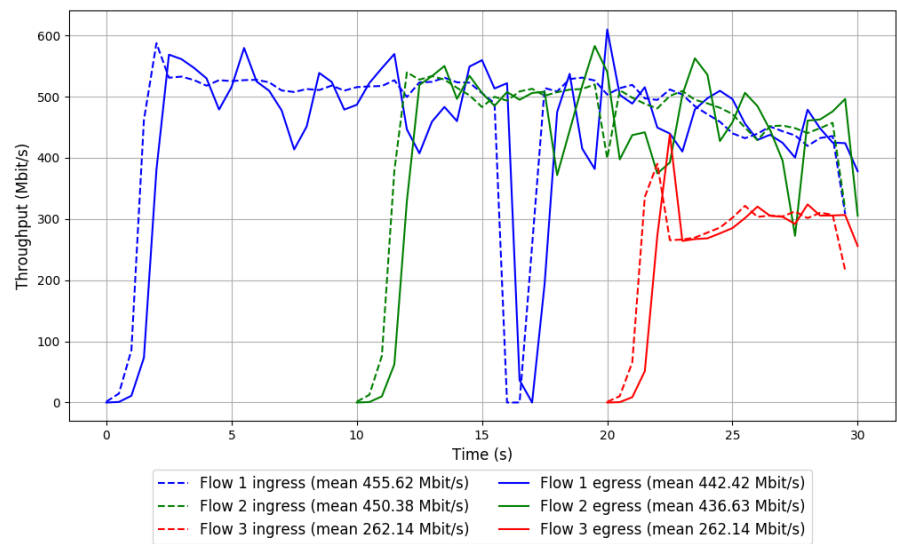
Run 5: Report of Indigo-Muses — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-02 20:40:36
End at: 2018-10-02 20:41:06
Local clock offset: -0.024 ms
Remote clock offset: -0.264 ms


# Below is generated by plot.py at 2018-10-03 01:28:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 770.86 Mbit/s
95th percentile per-packet one-way delay: 191.377 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 465.24 Mbit/s
95th percentile per-packet one-way delay: 197.007 ms
Loss rate: 5.54%
-- Flow 2:
Average throughput: 314.84 Mbit/s
95th percentile per-packet one-way delay: 109.143 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 291.29 Mbit/s
95th percentile per-packet one-way delay: 128.845 ms
Loss rate: 0.25%
```
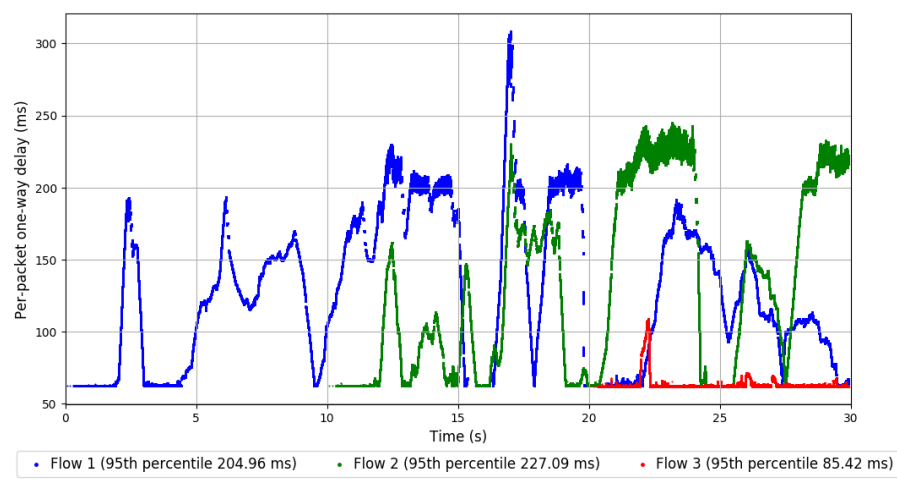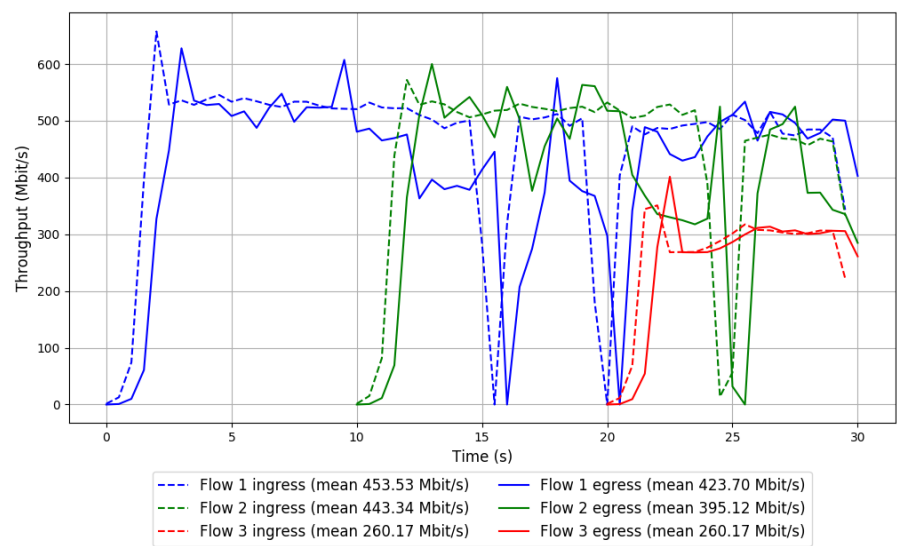
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-10-02 21:11:28
End at: 2018-10-02 21:11:58
Local clock offset: -0.04 ms
Remote clock offset: 0.725 ms


# Below is generated by plot.py at 2018-10-03 01:30:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 818.89 Mbit/s
95th percentile per-packet one-way delay: 182.773 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 442.42 Mbit/s
95th percentile per-packet one-way delay: 183.851 ms
Loss rate: 2.89%
-- Flow 2:
Average throughput: 436.63 Mbit/s
95th percentile per-packet one-way delay: 188.963 ms
Loss rate: 3.06%
-- Flow 3:
Average throughput: 262.14 Mbit/s
95th percentile per-packet one-way delay: 97.022 ms
Loss rate: 0.00%
```
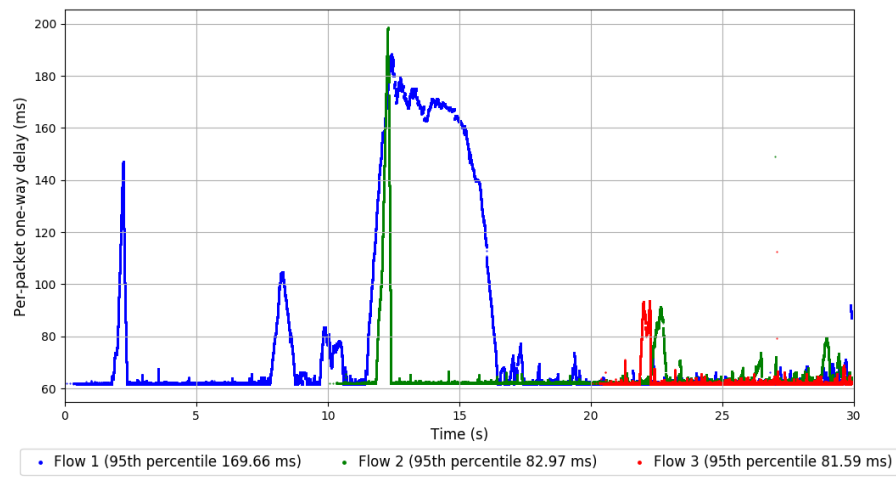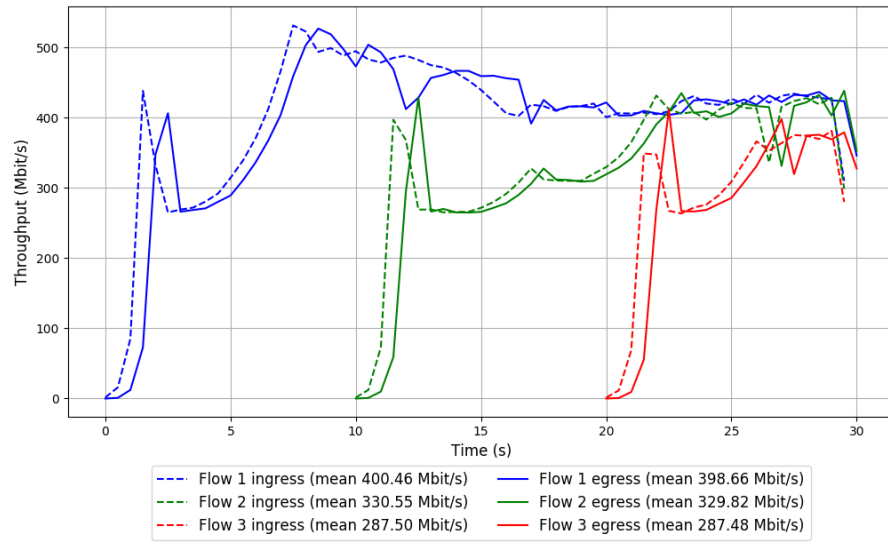
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-10-02 21:42:42
End at: 2018-10-02 21:43:12
Local clock offset: 0.022 ms
Remote clock offset: 1.256 ms


# Below is generated by plot.py at 2018-10-03 01:30:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 772.06 Mbit/s
95th percentile per-packet one-way delay: 217.461 ms
Loss rate: 7.42%
-- Flow 1:
Average throughput: 423.70 Mbit/s
95th percentile per-packet one-way delay: 204.964 ms
Loss rate: 6.58%
-- Flow 2:
Average throughput: 395.12 Mbit/s
95th percentile per-packet one-way delay: 227.089 ms
Loss rate: 10.87%
-- Flow 3:
Average throughput: 260.17 Mbit/s
95th percentile per-packet one-way delay: 85.423 ms
Loss rate: 0.00%
```
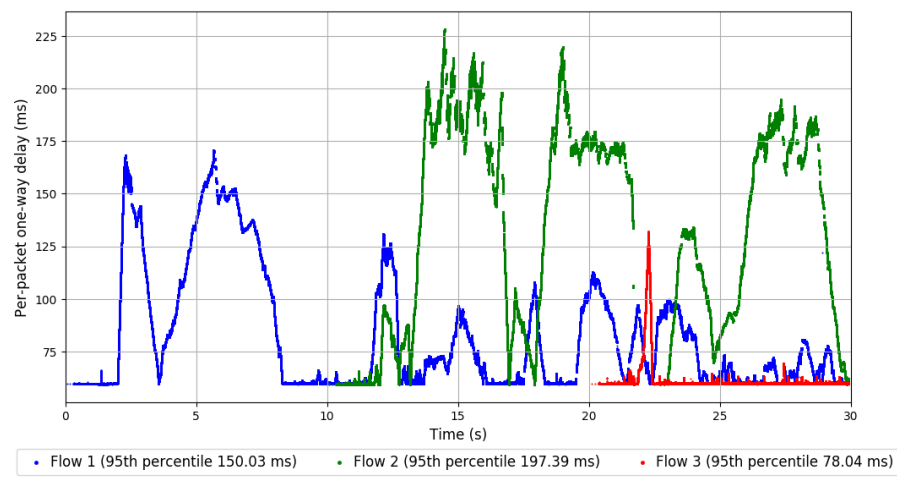
Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-10-02 22:13:53
End at: 2018-10-02 22:14:23
Local clock offset: -0.072 ms
Remote clock offset: 0.58 ms


# Below is generated by plot.py at 2018-10-03 01:36:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 712.62 Mbit/s
95th percentile per-packet one-way delay: 167.046 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 398.66 Mbit/s
95th percentile per-packet one-way delay: 169.663 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 329.82 Mbit/s
95th percentile per-packet one-way delay: 82.969 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 287.48 Mbit/s
95th percentile per-packet one-way delay: 81.591 ms
Loss rate: 0.00%
```
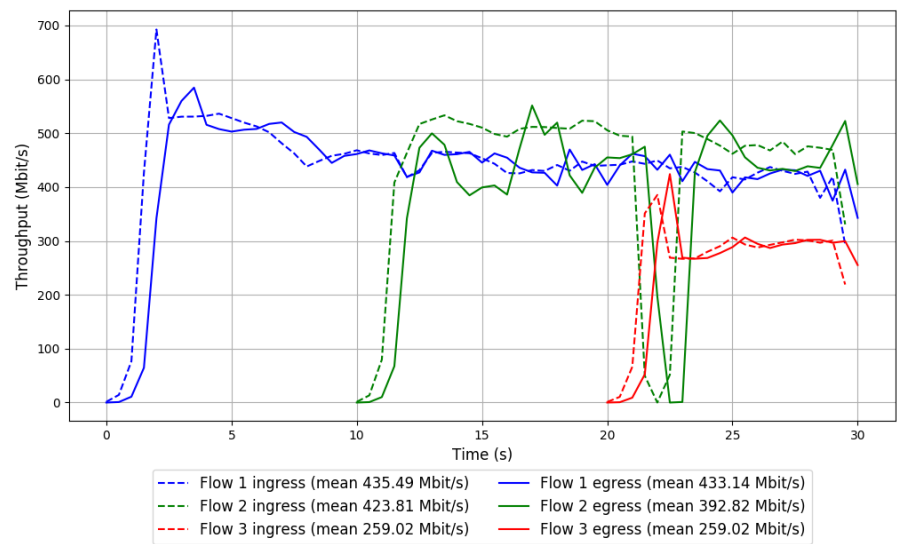
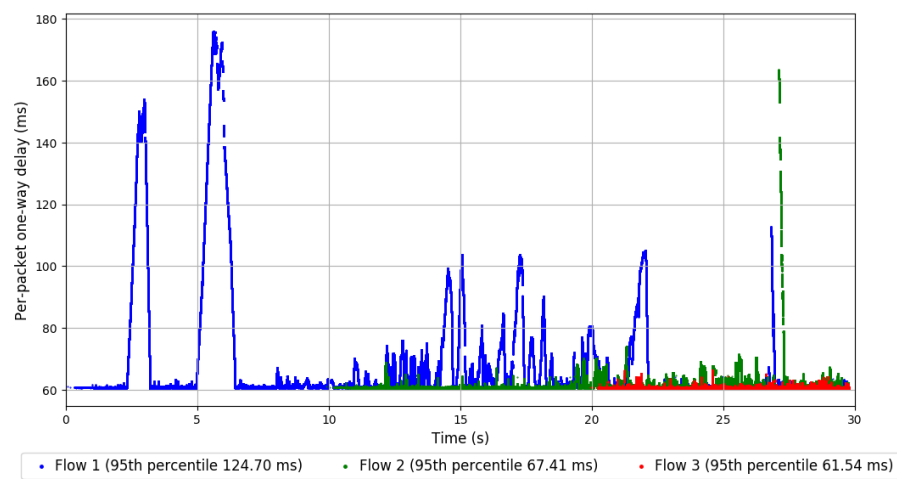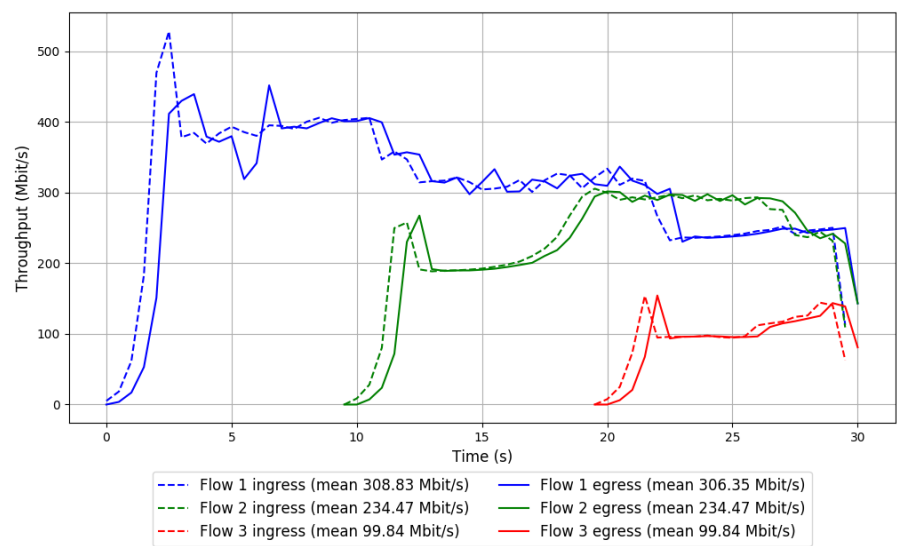# Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 400.46 Mbit/s) --- Flow 1 egress (mean 398.66 Mbit/s)
Flow 2 ingress (mean 330.55 Mbit/s) --- Flow 2 egress (mean 329.82 Mbit/s)
Flow 3 ingress (mean 287.50 Mbit/s) --- Flow 3 egress (mean 287.48 Mbit/s)

Flow 1 (95th percentile 169.66 ms) • Flow 2 (95th percentile 82.97 ms) • Flow 3 (95th percentile 81.59 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-10-02 22:45:06
End at: 2018-10-02 22:45:37
Local clock offset: -0.103 ms
Remote clock offset: -1.43 ms


# Below is generated by plot.py at 2018-10-03 01:44:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.39 Mbit/s
95th percentile per-packet one-way delay: 183.177 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 433.14 Mbit/s
95th percentile per-packet one-way delay: 150.030 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 392.82 Mbit/s
95th percentile per-packet one-way delay: 197.389 ms
Loss rate: 7.31%
-- Flow 3:
Average throughput: 259.02 Mbit/s
95th percentile per-packet one-way delay: 78.036 ms
Loss rate: 0.00%
```

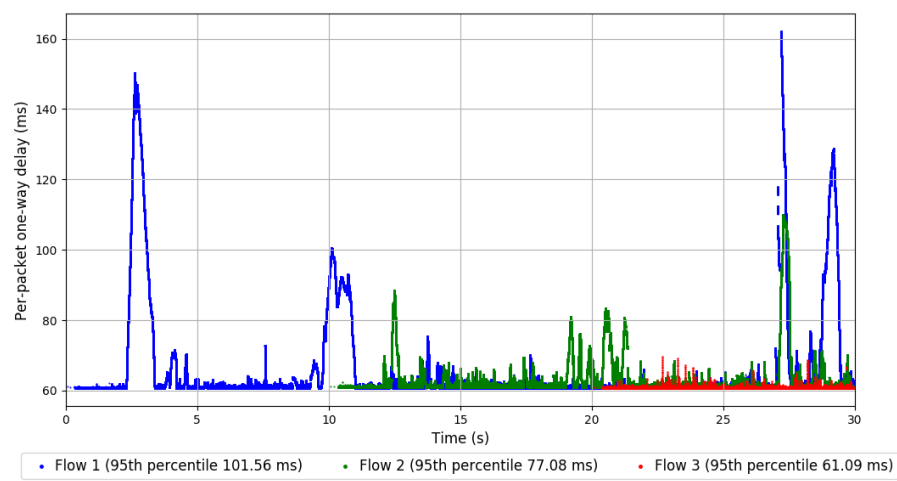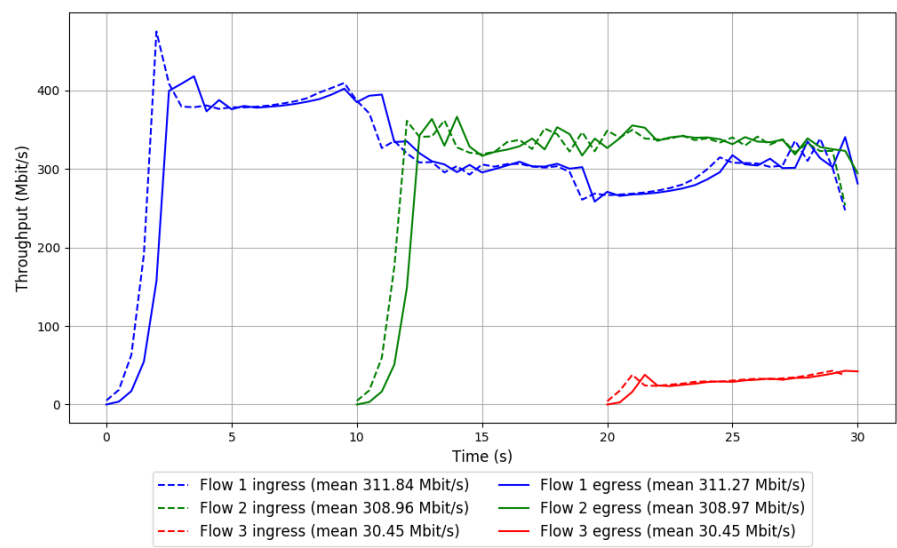Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-02 21:01:05
End at: 2018-10-02 21:01:35
Local clock offset: -0.09 ms
Remote clock offset: -0.383 ms


# Below is generated by plot.py at 2018-10-03 01:44:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.19 Mbit/s
95th percentile per-packet one-way delay: 102.821 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 306.35 Mbit/s
95th percentile per-packet one-way delay: 124.704 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 234.47 Mbit/s
95th percentile per-packet one-way delay: 67.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.84 Mbit/s
95th percentile per-packet one-way delay: 61.537 ms
Loss rate: 0.00%
```
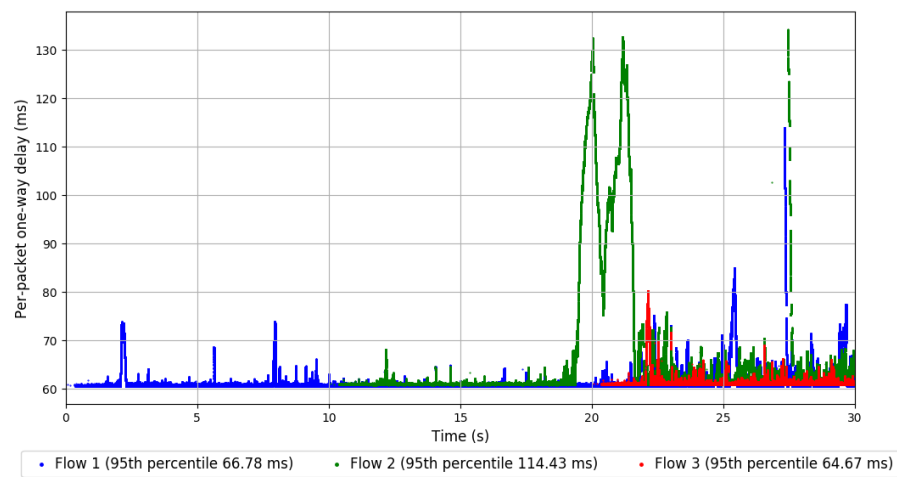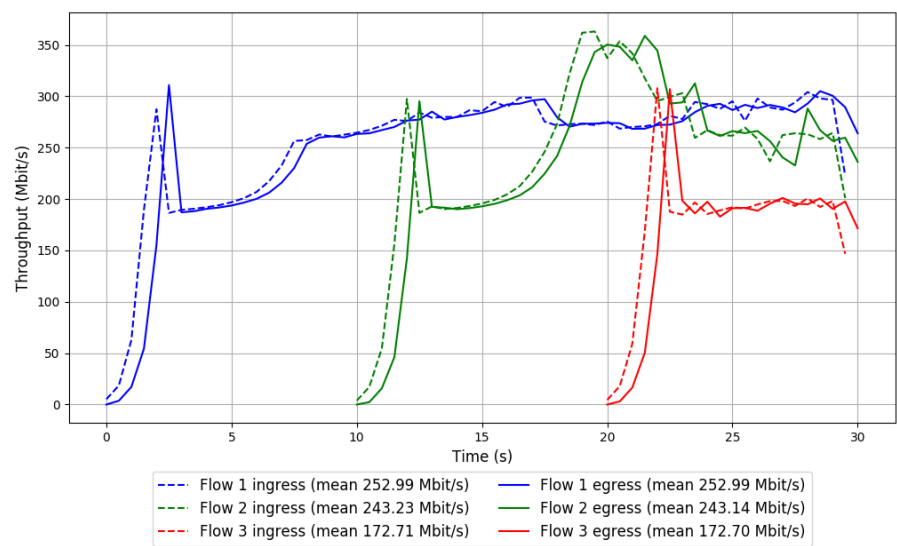
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-10-02 21:32:14
End at: 2018-10-02 21:32:44
Local clock offset: 0.014 ms
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2018-10-03 01:44:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.73 Mbit/s
95th percentile per-packet one-way delay: 92.571 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 311.27 Mbit/s
95th percentile per-packet one-way delay: 101.565 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 308.97 Mbit/s
95th percentile per-packet one-way delay: 77.079 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 61.092 ms
Loss rate: 0.00%
```

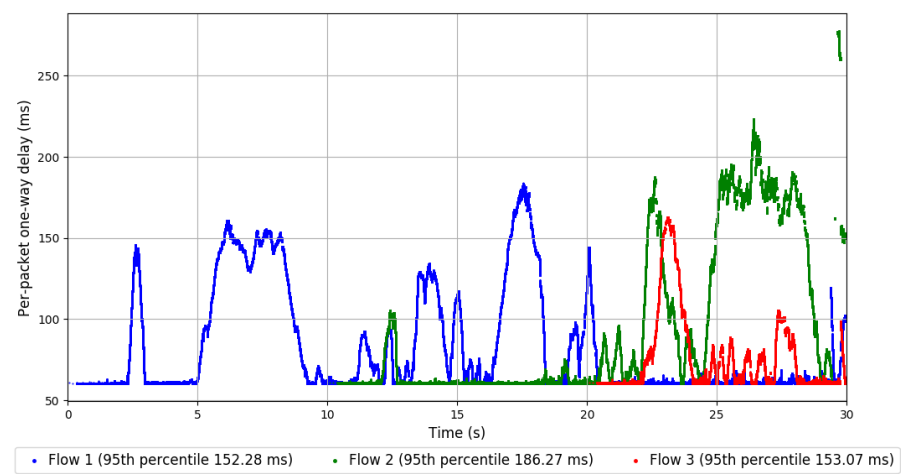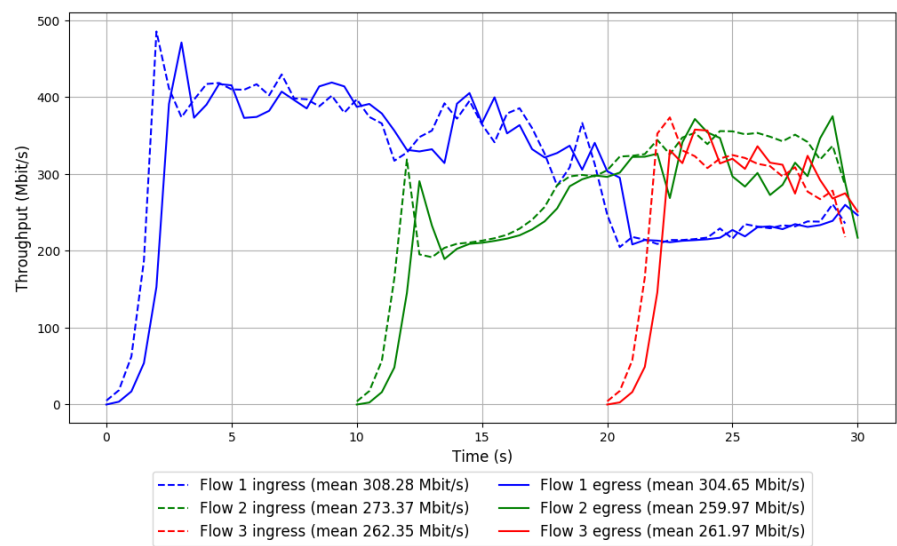Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-10-02 22:03:28
End at: 2018-10-02 22:03:58
Local clock offset: -0.041 ms
Remote clock offset: -0.302 ms


# Below is generated by plot.py at 2018-10-03 01:44:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.59 Mbit/s
95th percentile per-packet one-way delay: 87.223 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 252.99 Mbit/s
95th percentile per-packet one-way delay: 66.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 243.14 Mbit/s
95th percentile per-packet one-way delay: 114.434 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 172.70 Mbit/s
95th percentile per-packet one-way delay: 64.666 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-10-02 22:34:32
End at: 2018-10-02 22:35:02
Local clock offset: -0.092 ms
Remote clock offset: -0.385 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.83 Mbit/s
95th percentile per-packet one-way delay: 174.190 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 304.65 Mbit/s
95th percentile per-packet one-way delay: 152.276 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 259.97 Mbit/s
95th percentile per-packet one-way delay: 186.270 ms
Loss rate: 4.90%
-- Flow 3:
Average throughput: 261.97 Mbit/s
95th percentile per-packet one-way delay: 153.066 ms
Loss rate: 0.13%
```
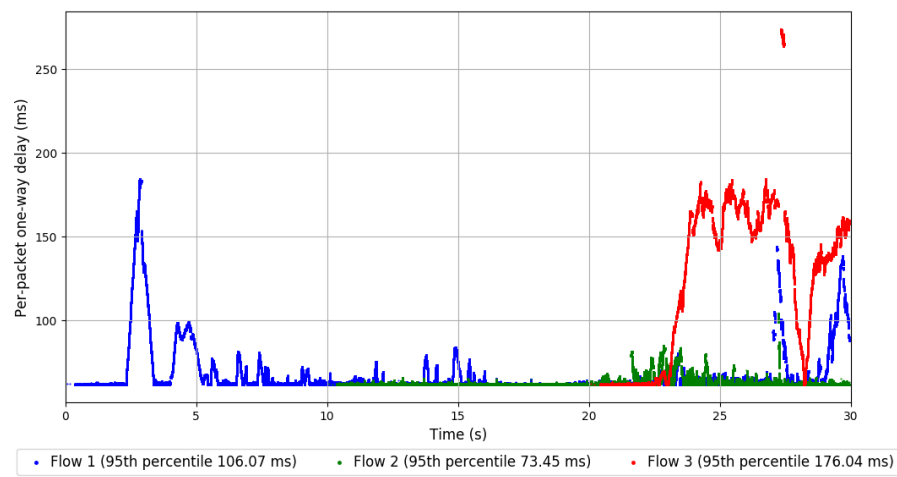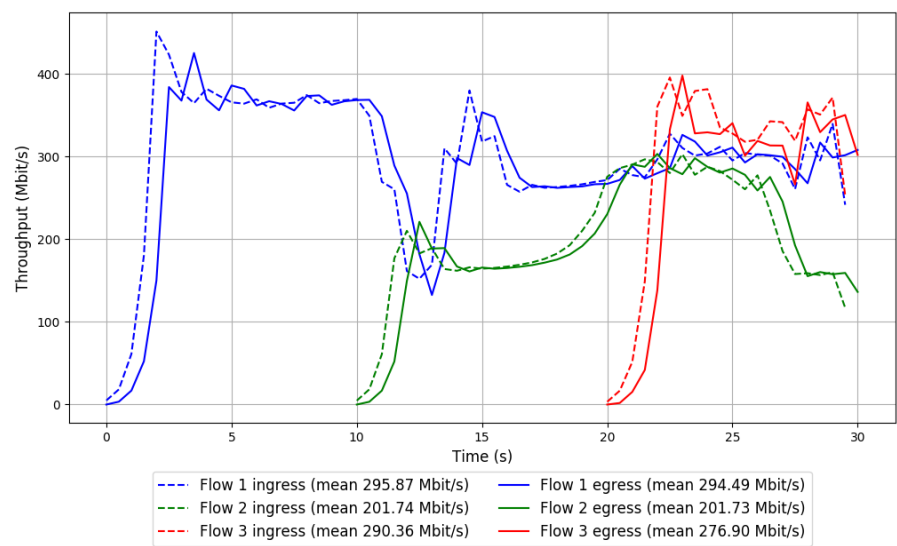
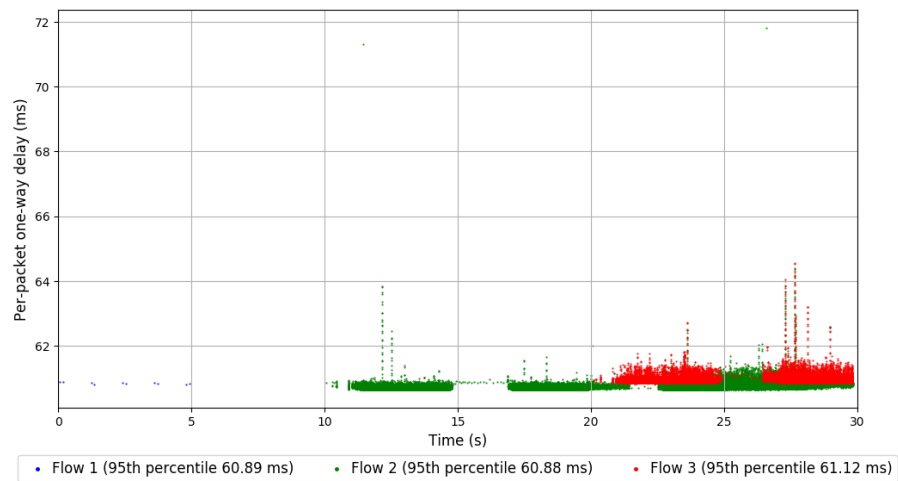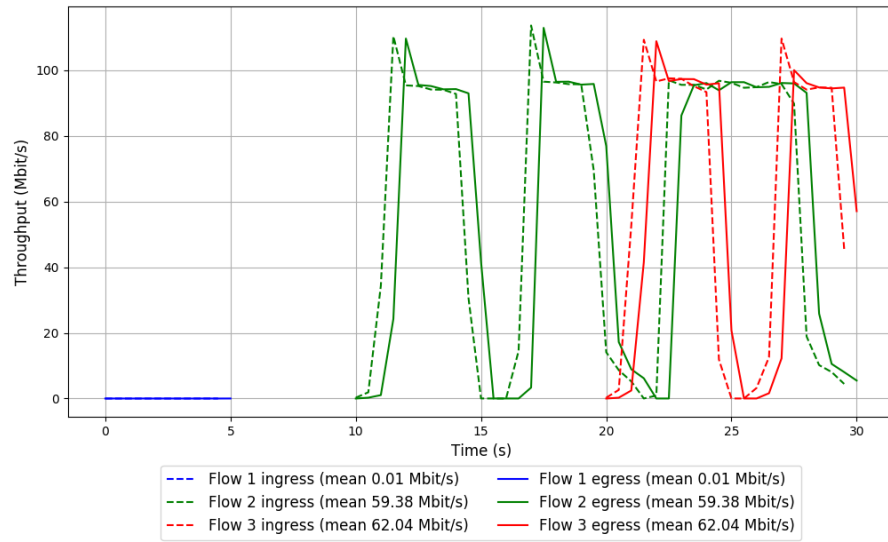Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-10-02 23:06:05
End at: 2018-10-02 23:06:35
Local clock offset: -0.182 ms
Remote clock offset: 0.812 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.95 Mbit/s
95th percentile per-packet one-way delay: 163.173 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 294.49 Mbit/s
95th percentile per-packet one-way delay: 106.067 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 201.73 Mbit/s
95th percentile per-packet one-way delay: 73.454 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 276.90 Mbit/s
95th percentile per-packet one-way delay: 176.039 ms
Loss rate: 4.65%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 295.87 Mbit/s) --- Flow 1 egress (mean 294.49 Mbit/s)
Flow 2 ingress (mean 201.74 Mbit/s) --- Flow 2 egress (mean 201.73 Mbit/s)
Flow 3 ingress (mean 290.36 Mbit/s) --- Flow 3 egress (mean 276.90 Mbit/s)

Flow 1 (95th percentile 106.07 ms) Flow 2 (95th percentile 73.45 ms) Flow 3 (95th percentile 176.04 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-10-02 20:46:22
End at: 2018-10-02 20:46:52
Local clock offset: -0.122 ms
Remote clock offset: -0.221 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.70 Mbit/s
95th percentile per-packet one-way delay: 61.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 60.894 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 60.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 61.115 ms
Loss rate: 0.00%
```
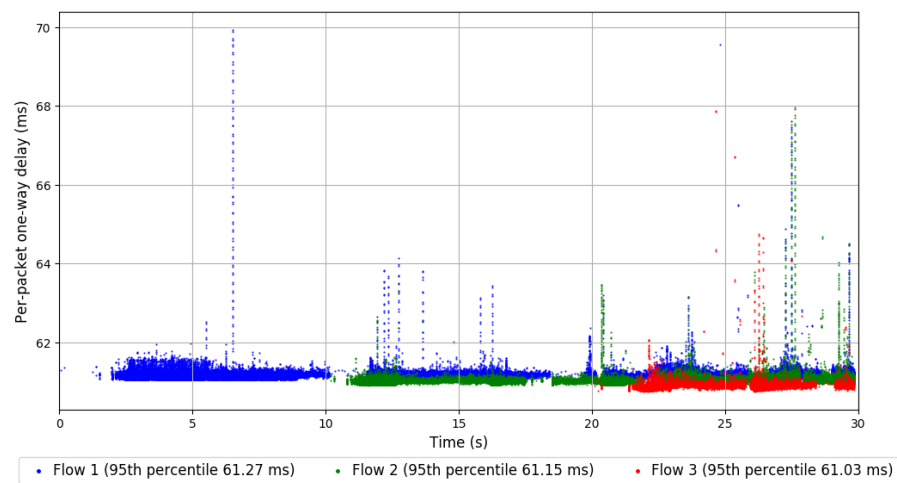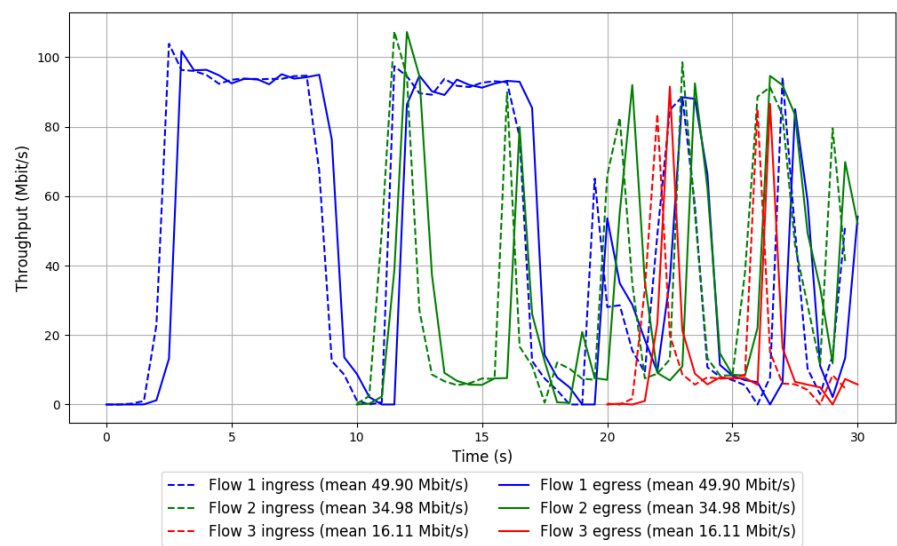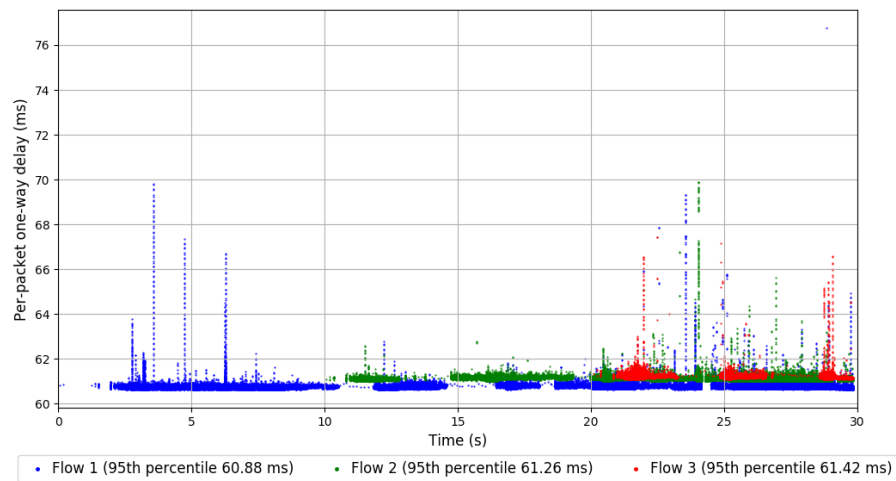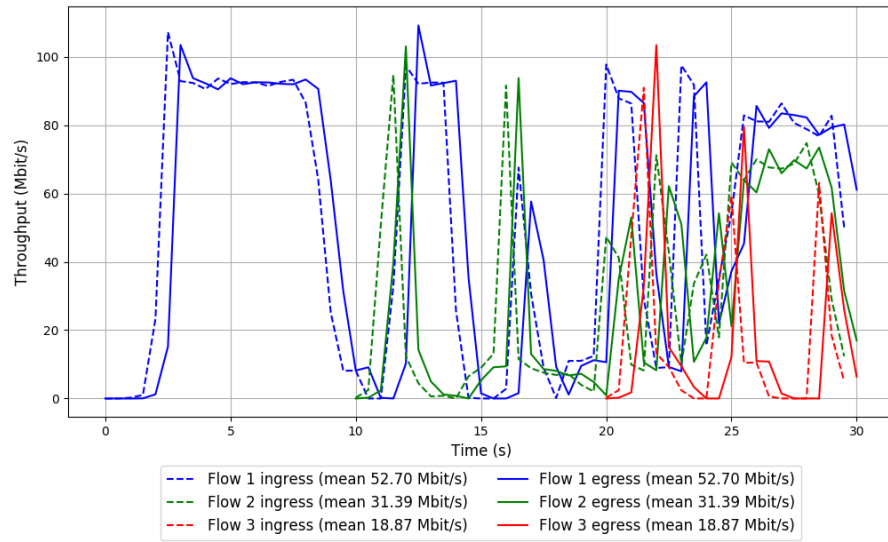
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-10-02 21:17:30
End at: 2018-10-02 21:18:00
Local clock offset: -0.011 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.41 Mbit/s
95th percentile per-packet one-way delay: 61.248 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 61.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 61.146 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.11 Mbit/s
95th percentile per-packet one-way delay: 61.031 ms
Loss rate: 0.00%
```
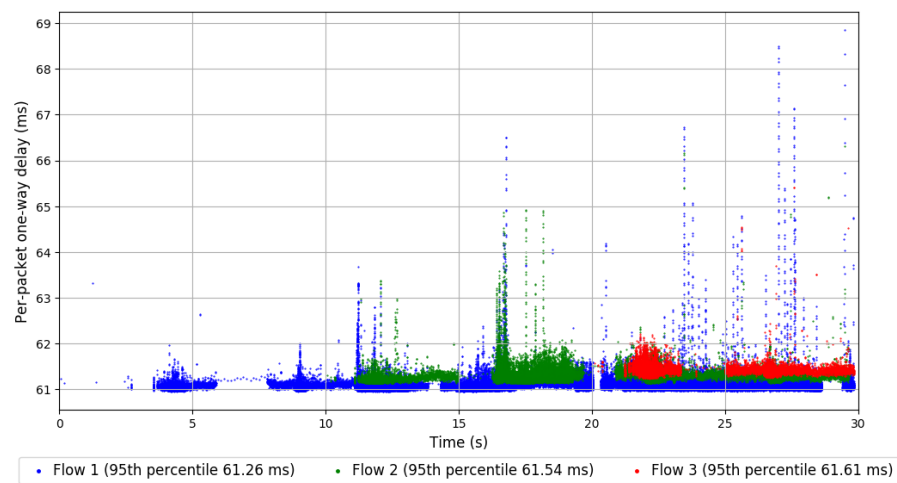
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-10-02 21:48:44
End at: 2018-10-02 21:49:14
Local clock offset: -0.072 ms
Remote clock offset: -0.101 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.71 Mbit/s
95th percentile per-packet one-way delay: 61.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.70 Mbit/s
95th percentile per-packet one-way delay: 60.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.39 Mbit/s
95th percentile per-packet one-way delay: 61.261 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.87 Mbit/s
95th percentile per-packet one-way delay: 61.422 ms
Loss rate: 0.00%
```
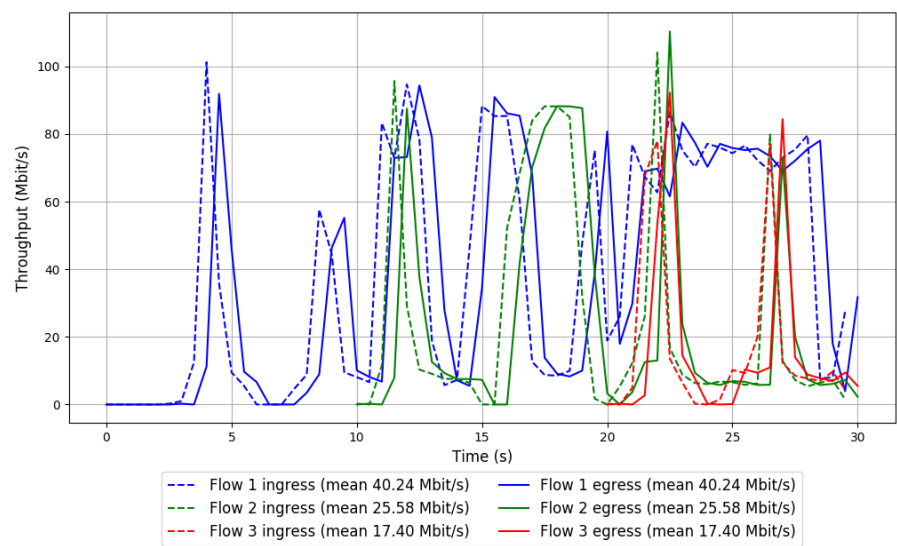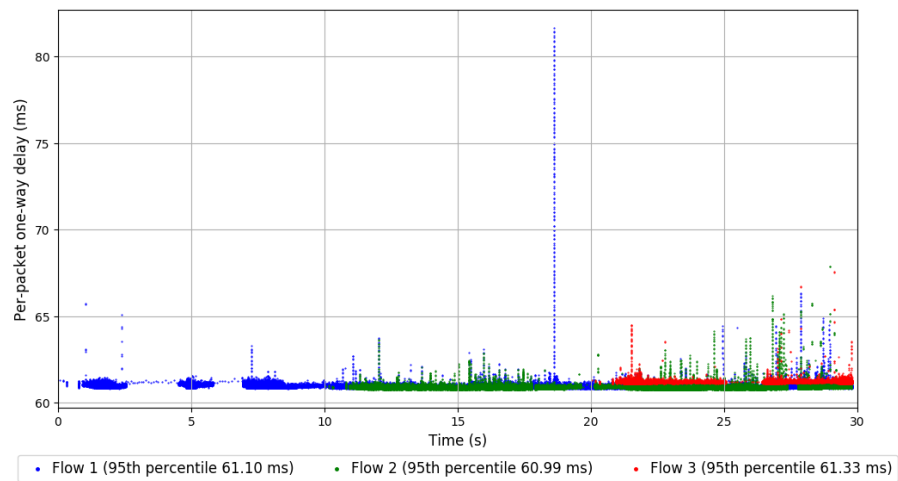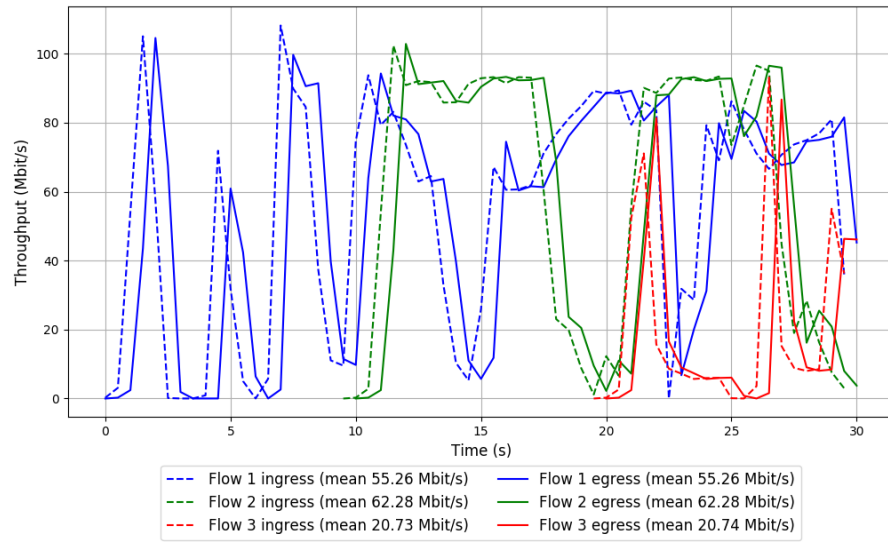
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 52.70 Mbit/s) Flow 1 egress (mean 52.70 Mbit/s)
Flow 2 ingress (mean 31.39 Mbit/s) Flow 2 egress (mean 31.39 Mbit/s)
Flow 3 ingress (mean 18.87 Mbit/s) Flow 3 egress (mean 18.87 Mbit/s)

Flow 1 (95th percentile 60.88 ms) Flow 2 (95th percentile 61.26 ms) Flow 3 (95th percentile 61.42 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-10-02 22:19:45
End at: 2018-10-02 22:20:15
Local clock offset: -0.104 ms
Remote clock offset: 0.059 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.88 Mbit/s
95th percentile per-packet one-way delay: 61.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 61.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.58 Mbit/s
95th percentile per-packet one-way delay: 61.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.40 Mbit/s
95th percentile per-packet one-way delay: 61.614 ms
Loss rate: 0.00%
```
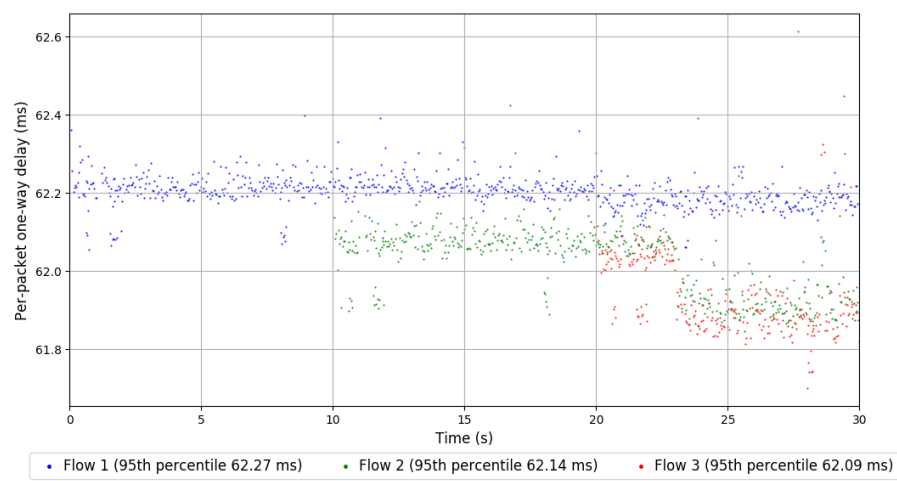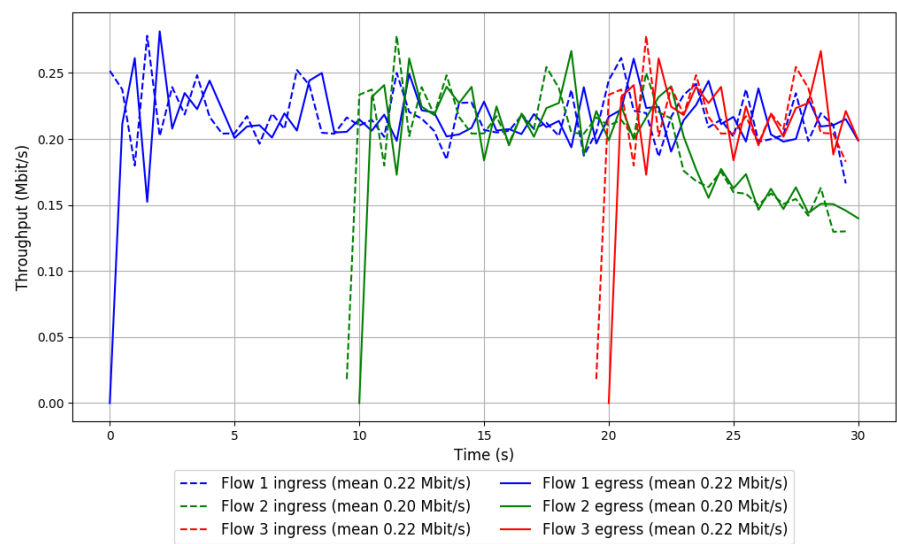
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-10-02 22:51:16
End at: 2018-10-02 22:51:46
Local clock offset: -0.151 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.43 Mbit/s
95th percentile per-packet one-way delay: 61.187 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 61.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.28 Mbit/s
95th percentile per-packet one-way delay: 60.989 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 61.330 ms
Loss rate: 0.01%
```

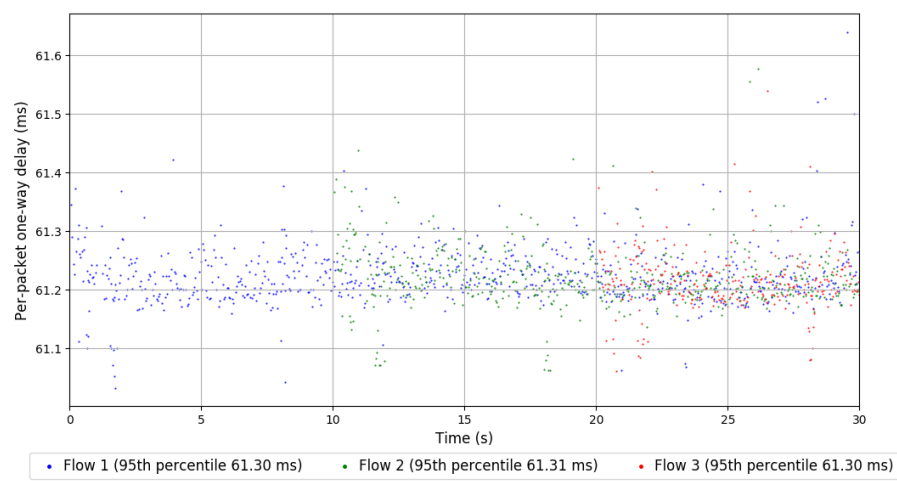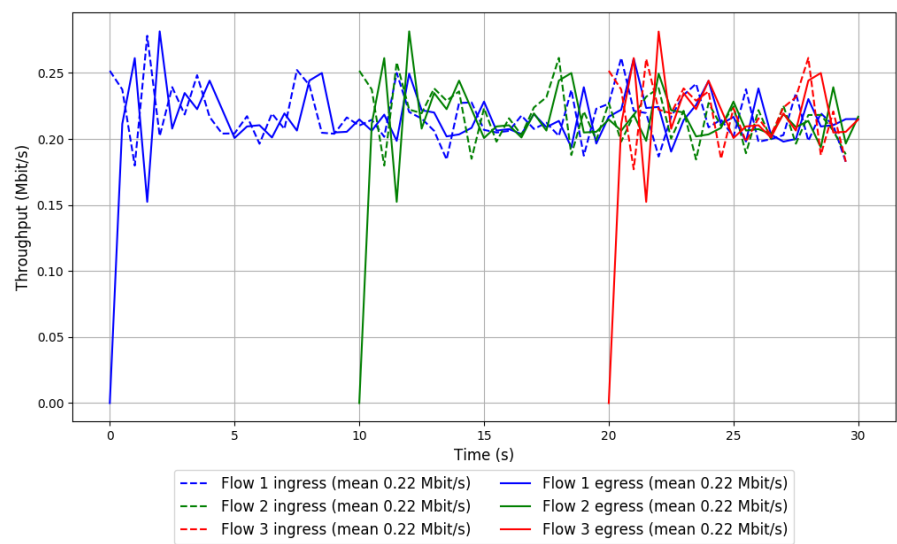Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-10-02 21:05:09
End at: 2018-10-02 21:05:39
Local clock offset: -0.056 ms
Remote clock offset: 0.998 ms

# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 62.249 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.268 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 62.136 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.092 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-10-02 21:36:20
End at: 2018-10-02 21:36:50
Local clock offset: 0.054 ms
Remote clock offset: -0.131 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.303 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.296 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.308 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.300 ms
Loss rate: 0.00%
```
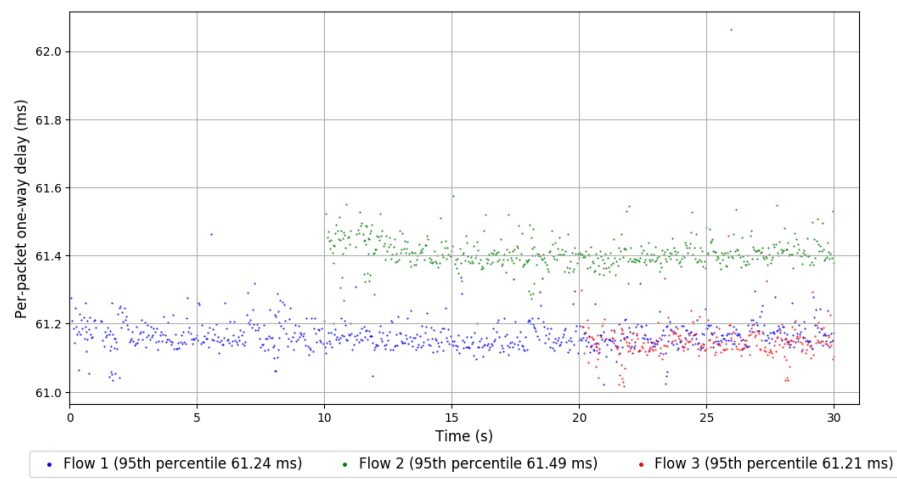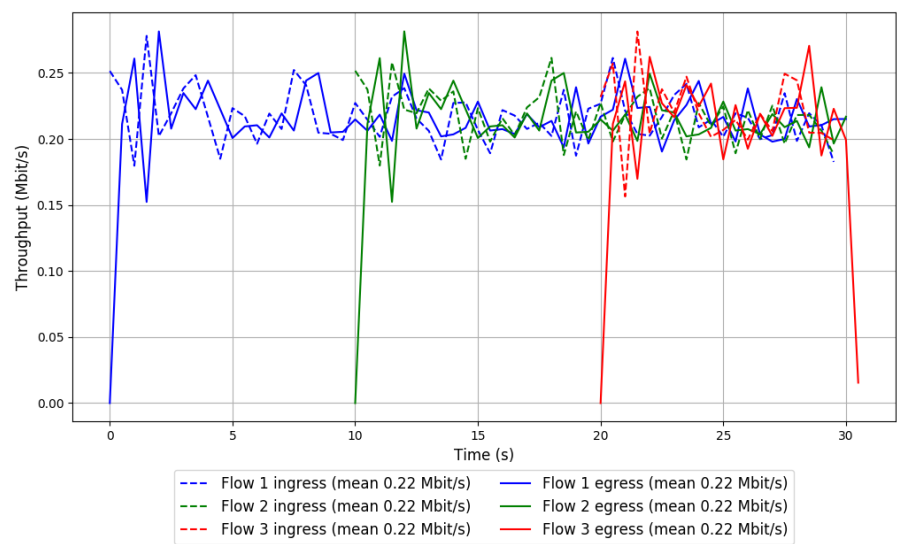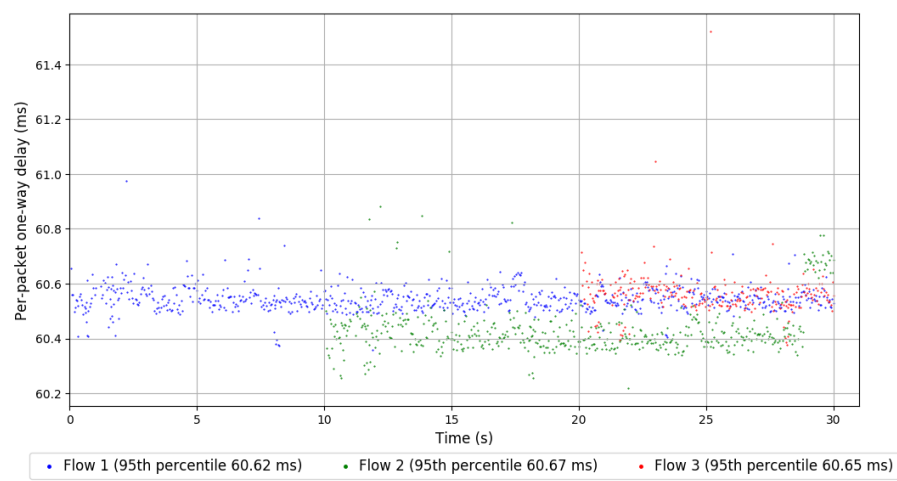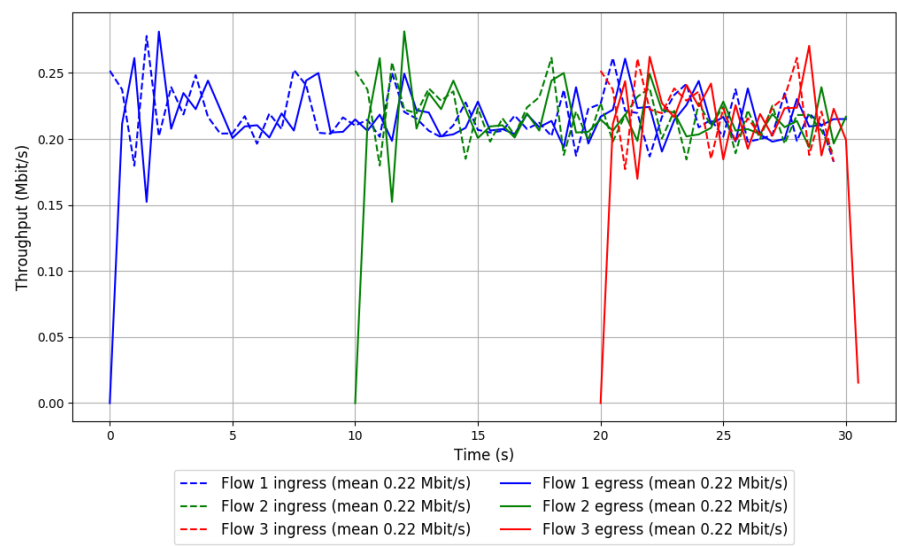
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-10-02 22:07:33
End at: 2018-10-02 22:08:03
Local clock offset: -0.042 ms
Remote clock offset: 0.095 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.449 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.486 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.209 ms
Loss rate: 0.00%
```
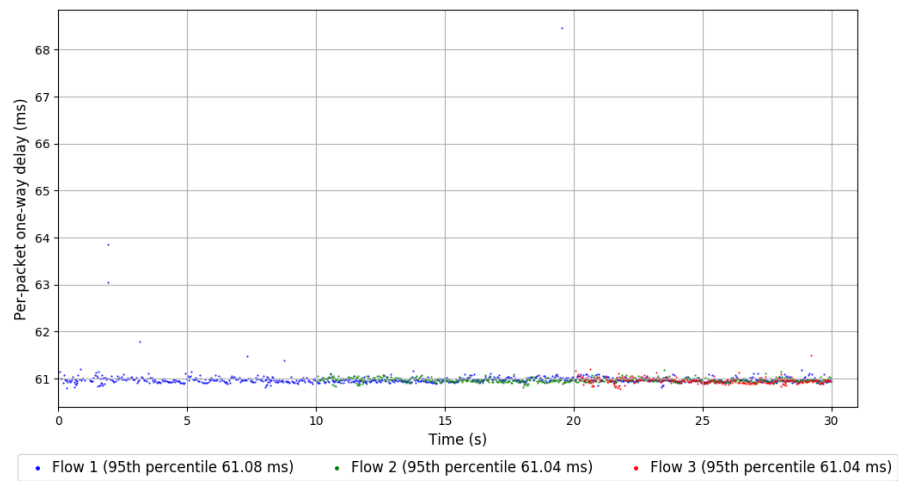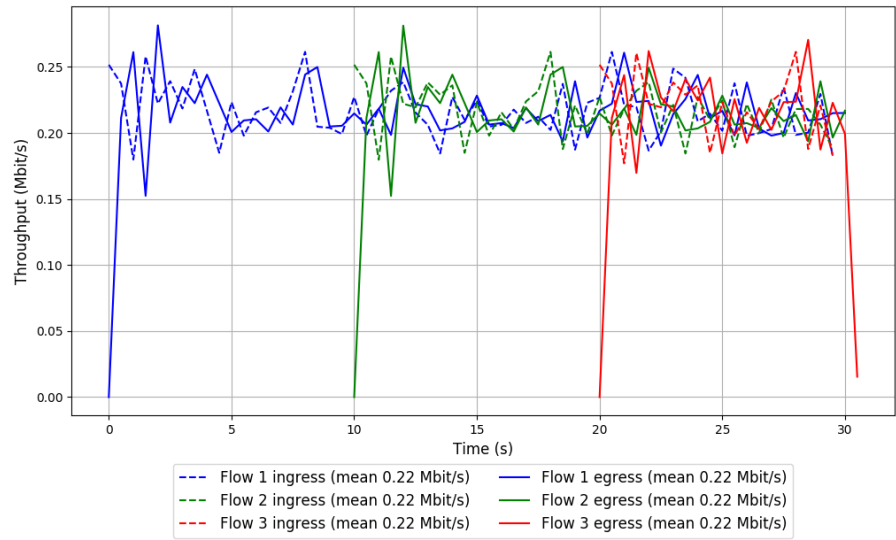
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-10-02 22:38:44
End at: 2018-10-02 22:39:14
Local clock offset: -0.139 ms
Remote clock offset: -0.588 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.673 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.647 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-10-02 23:10:13
End at: 2018-10-02 23:10:43
Local clock offset: -0.128 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.057 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.076 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.038 ms
Loss rate: 0.00%
```
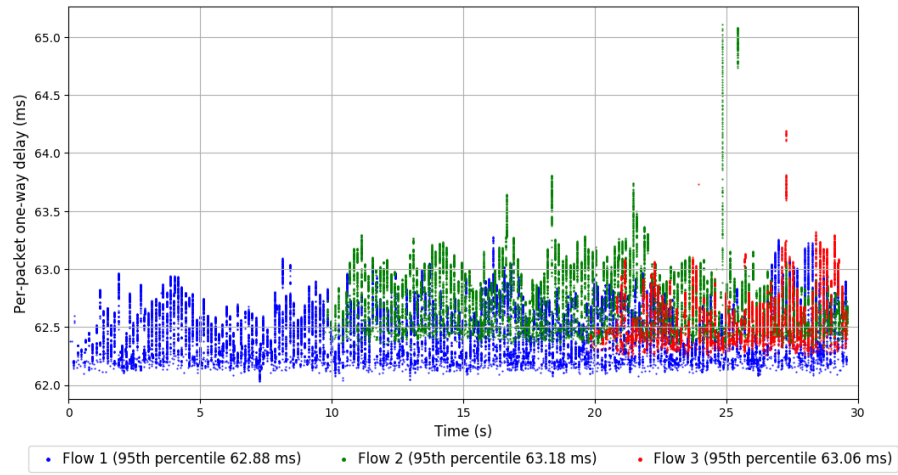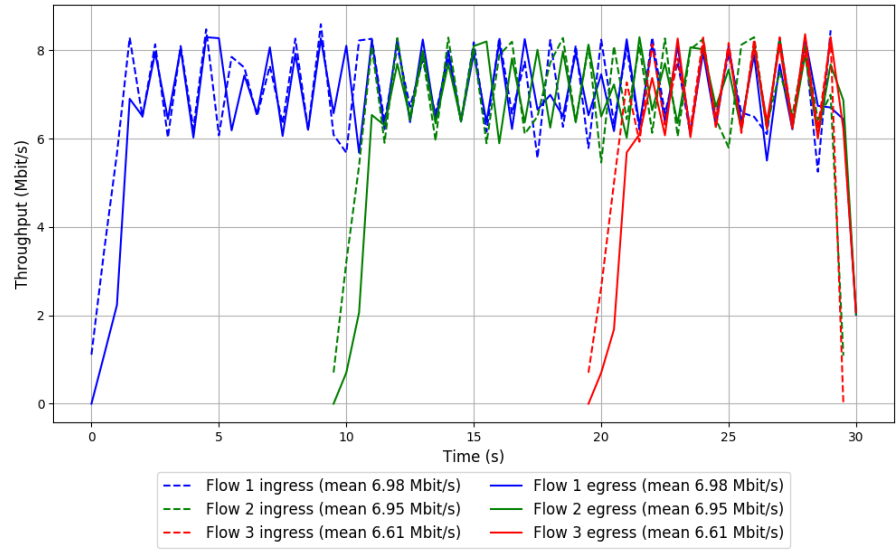
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-10-02 20:58:06
End at: 2018-10-02 20:58:36
Local clock offset: -0.078 ms
Remote clock offset: 1.13 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 63.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 62.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 63.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 63.056 ms
Loss rate: 0.00%
```
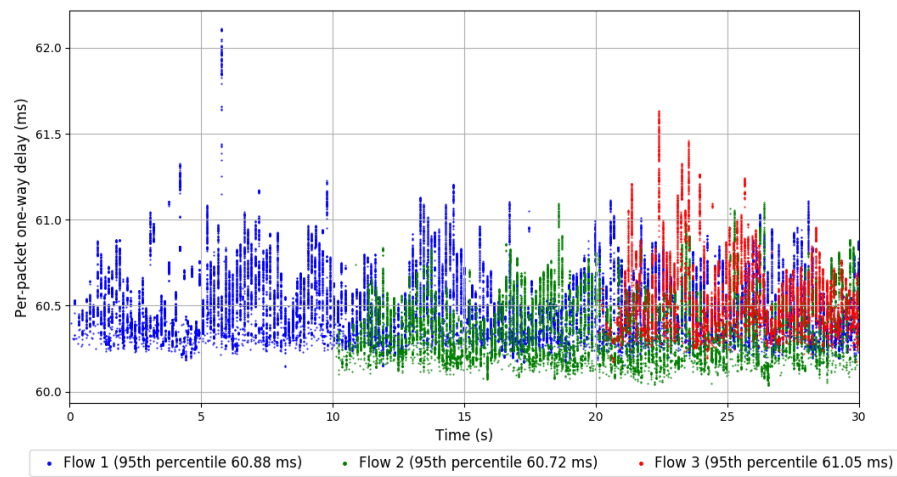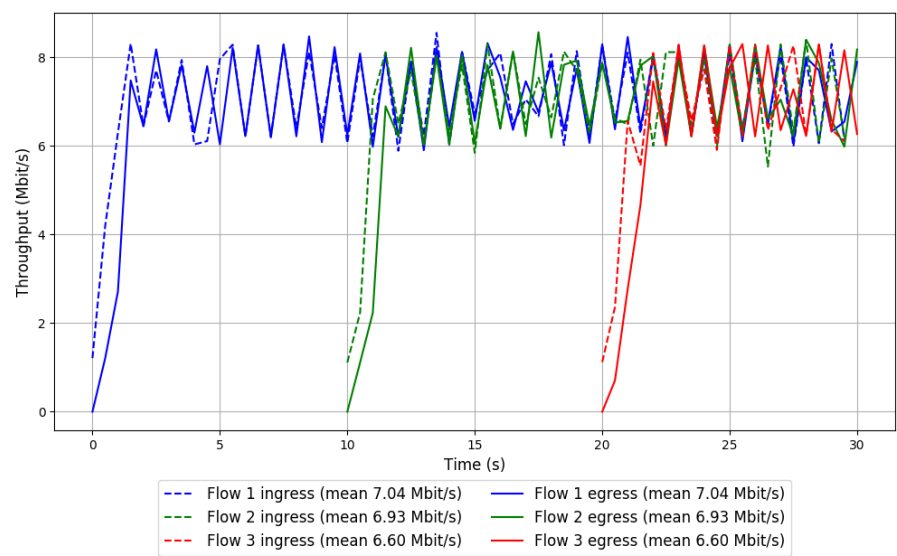
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-10-02 21:29:19
End at: 2018-10-02 21:29:49
Local clock offset: -0.007 ms
Remote clock offset: -0.966 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 60.868 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 60.884 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 60.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 61.047 ms
Loss rate: 0.00%
```
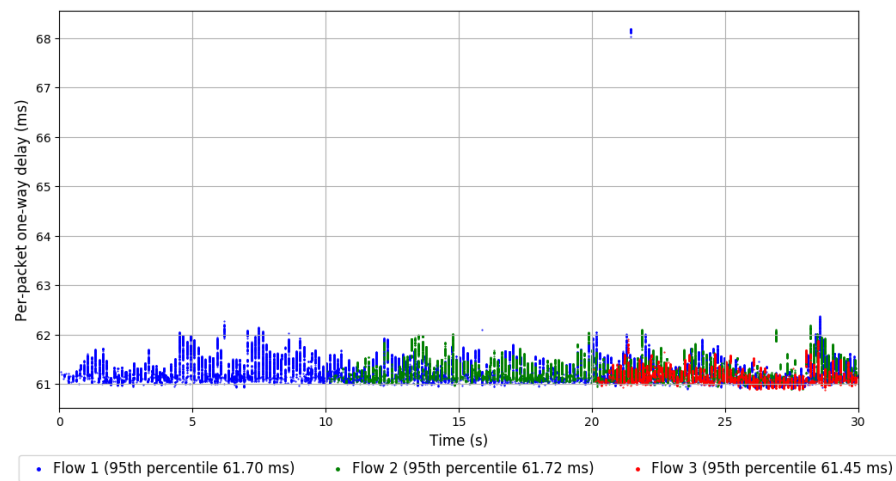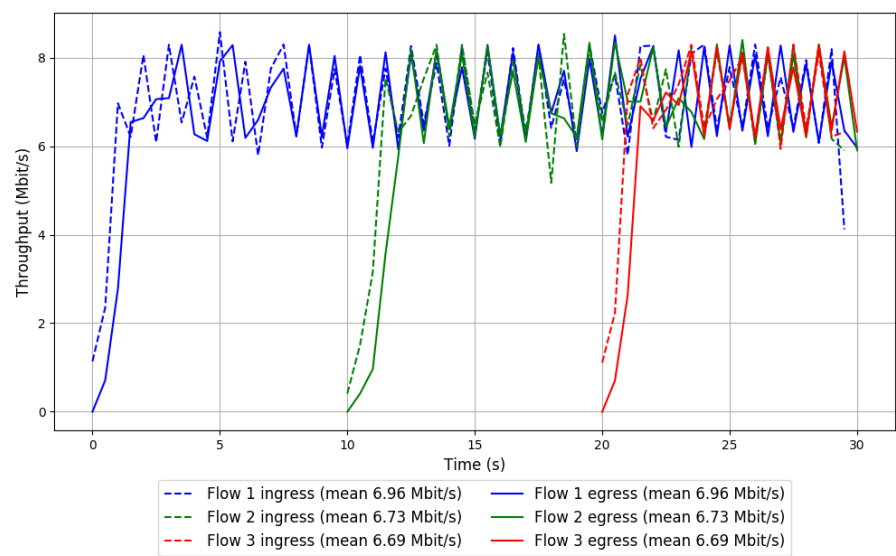
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-10-02 22:00:32
End at: 2018-10-02 22:01:02
Local clock offset: -0.065 ms
Remote clock offset: -0.227 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 61.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 61.705 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 61.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 61.455 ms
Loss rate: 0.00%
```
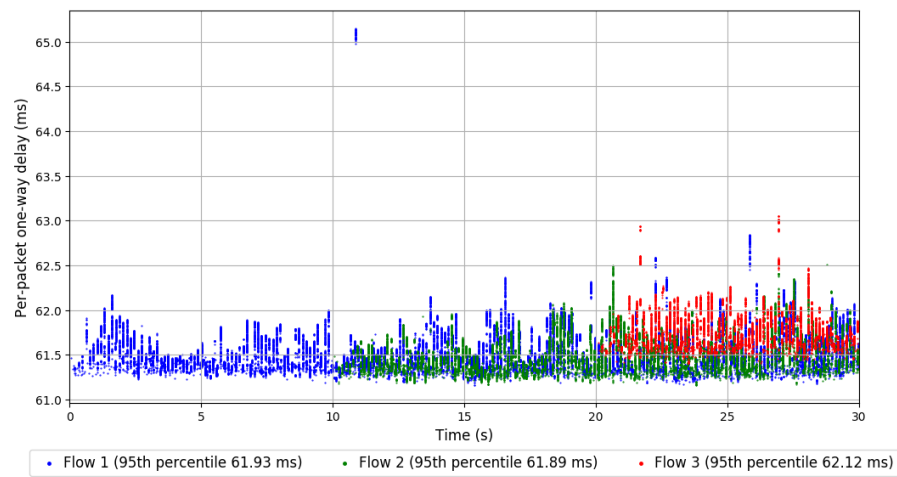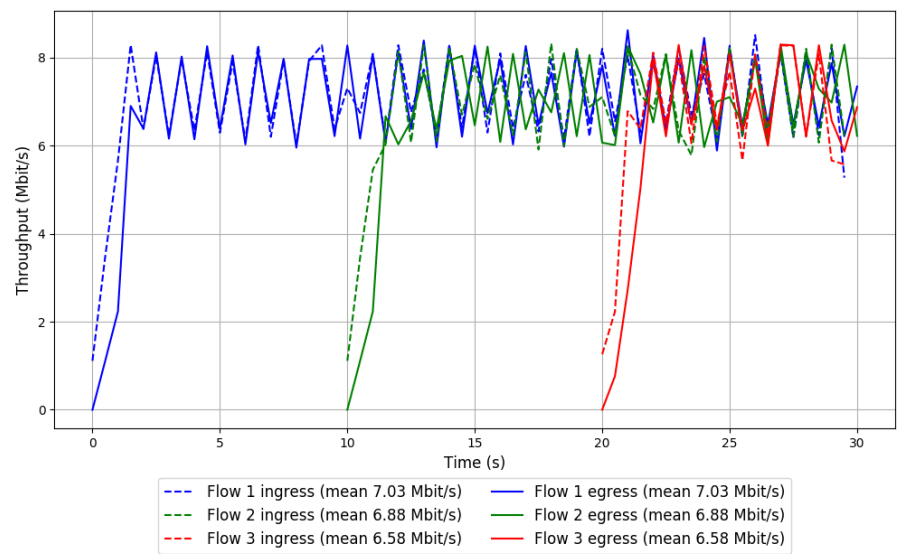
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-10-02 22:31:31
End at: 2018-10-02 22:32:01
Local clock offset: -0.093 ms
Remote clock offset: 0.259 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.77 Mbit/s
95th percentile per-packet one-way delay: 61.981 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 61.934 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 61.888 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 62.120 ms
Loss rate: 0.00%
```
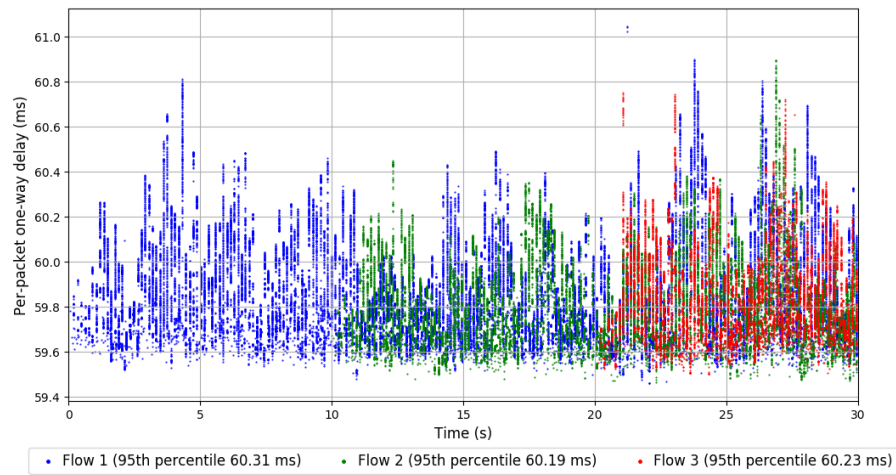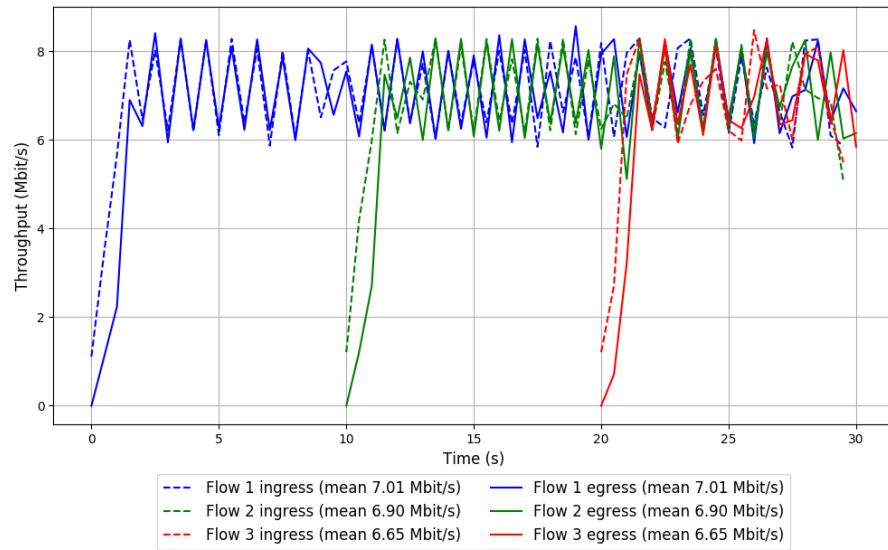
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-10-02 23:03:04
End at: 2018-10-02 23:03:34
Local clock offset: -0.104 ms
Remote clock offset: -1.41 ms


# Below is generated by plot.py at 2018-10-03 01:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.79 Mbit/s
95th percentile per-packet one-way delay: 60.260 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 60.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 60.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 60.233 ms
Loss rate: 0.00%
```
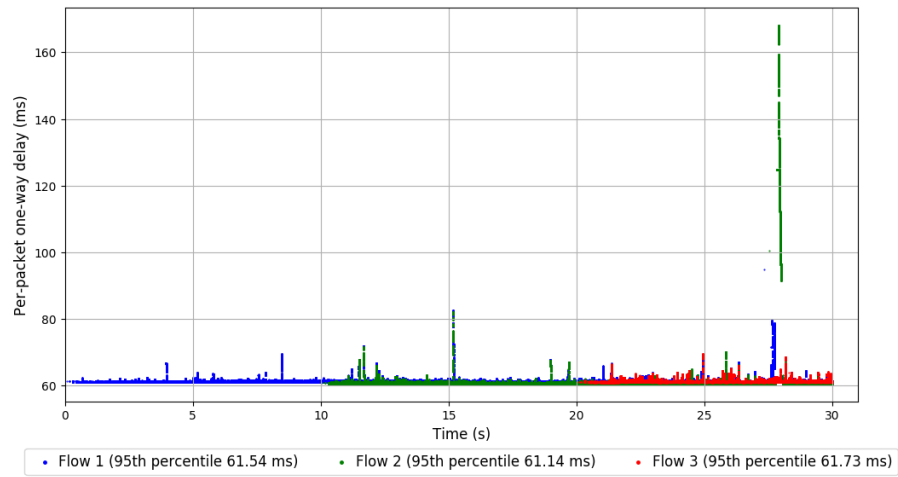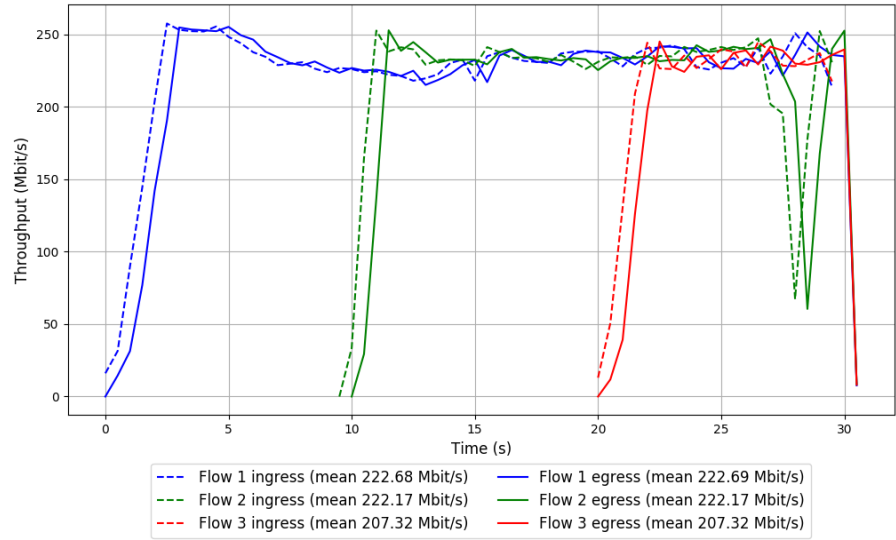
Run 5: Report of Sprout — Data Link

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

Start at: 2018-10-02 21:06:20
End at: 2018-10-02 21:06:50
Local clock offset: -0.034 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2018-10-03 01:53:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 439.68 Mbit/s
95th percentile per-packet one-way delay: 61.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.69 Mbit/s
95th percentile per-packet one-way delay: 61.543 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.17 Mbit/s
95th percentile per-packet one-way delay: 61.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.32 Mbit/s
95th percentile per-packet one-way delay: 61.733 ms
Loss rate: 0.00%
```

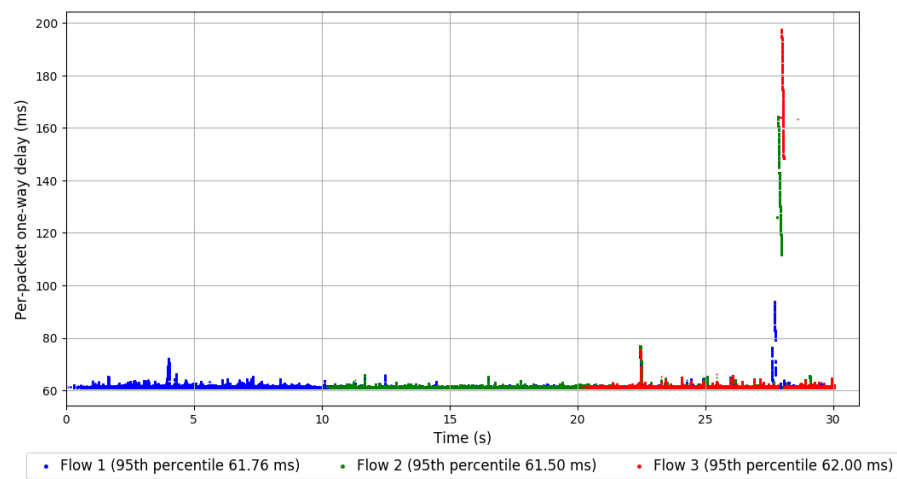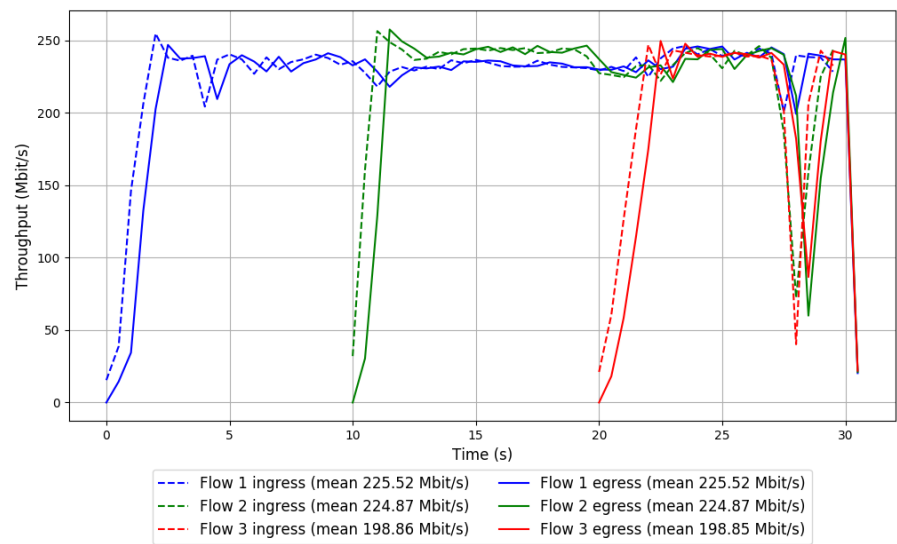# Run 1: Report of TaoVA-100x — Data Link

136

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

Start at: 2018-10-02 21:37:31
End at: 2018-10-02 21:38:01
Local clock offset: 0.02 ms
Remote clock offset: -0.004 ms


# Below is generated by plot.py at 2018-10-03 01:54:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 441.25 Mbit/s
95th percentile per-packet one-way delay: 61.703 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.52 Mbit/s
95th percentile per-packet one-way delay: 61.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.87 Mbit/s
95th percentile per-packet one-way delay: 61.503 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.85 Mbit/s
95th percentile per-packet one-way delay: 62.003 ms
Loss rate: 0.00%
```
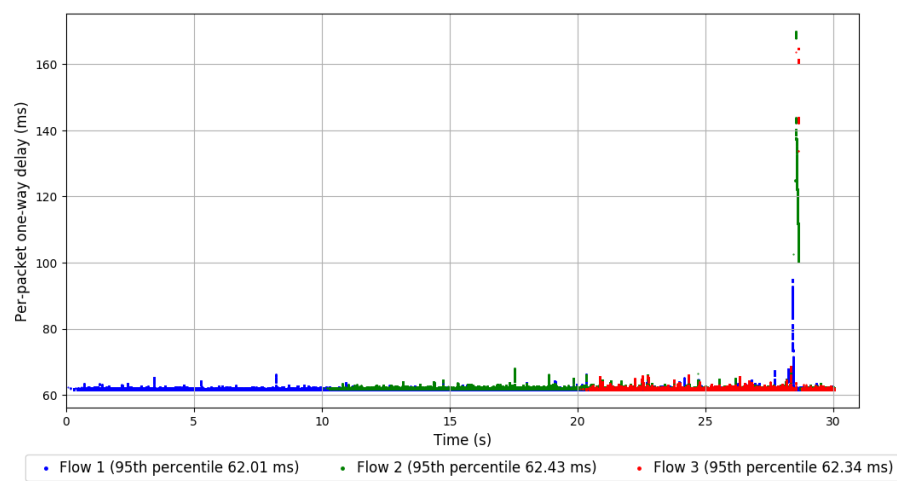
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 225.52 Mbit/s) --- Flow 1 egress (mean 225.52 Mbit/s)
Flow 2 ingress (mean 224.87 Mbit/s) --- Flow 2 egress (mean 224.87 Mbit/s)
Flow 3 ingress (mean 198.86 Mbit/s) --- Flow 3 egress (mean 198.85 Mbit/s)

Flow 1 (95th percentile 61.76 ms) · Flow 2 (95th percentile 61.50 ms) · Flow 3 (95th percentile 62.00 ms)

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

Start at: 2018-10-02 22:08:44
End at: 2018-10-02 22:09:14
Local clock offset: -0.049 ms
Remote clock offset: 0.767 ms


# Below is generated by plot.py at 2018-10-03 01:54:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.33 Mbit/s
95th percentile per-packet one-way delay: 62.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.88 Mbit/s
95th percentile per-packet one-way delay: 62.007 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 210.42 Mbit/s
95th percentile per-packet one-way delay: 62.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 196.92 Mbit/s
95th percentile per-packet one-way delay: 62.342 ms
Loss rate: 0.00%
```
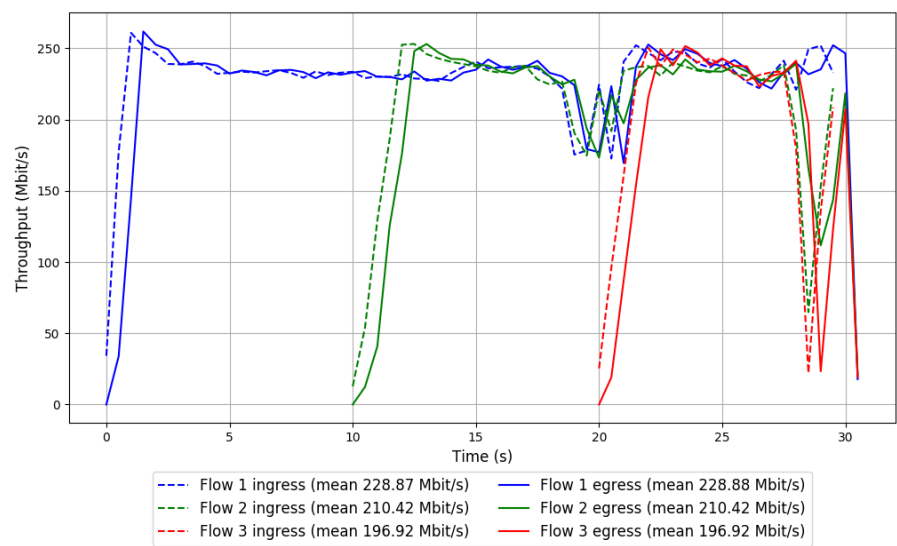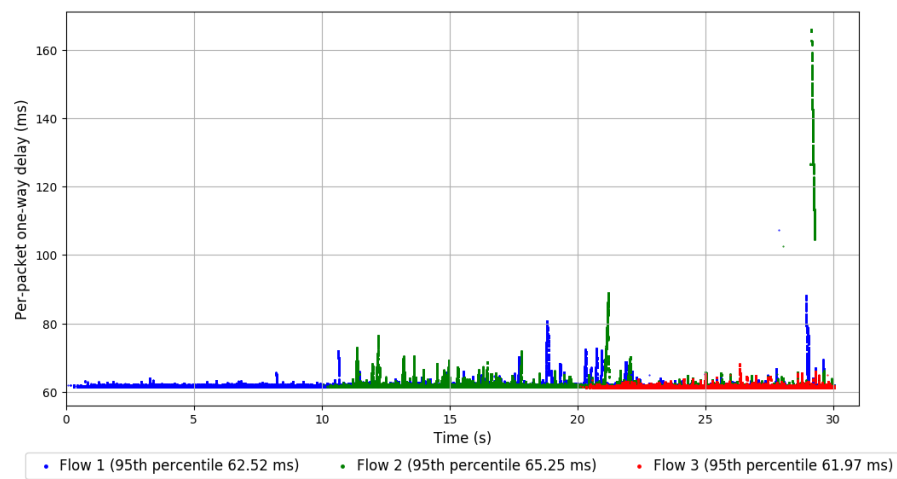
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-10-02 22:39:55
End at: 2018-10-02 22:40:25
Local clock offset: -0.108 ms
Remote clock offset: 0.427 ms


# Below is generated by plot.py at 2018-10-03 01:54:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.93 Mbit/s
95th percentile per-packet one-way delay: 63.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.18 Mbit/s
95th percentile per-packet one-way delay: 62.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 209.65 Mbit/s
95th percentile per-packet one-way delay: 65.251 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 214.46 Mbit/s
95th percentile per-packet one-way delay: 61.967 ms
Loss rate: 0.00%
```
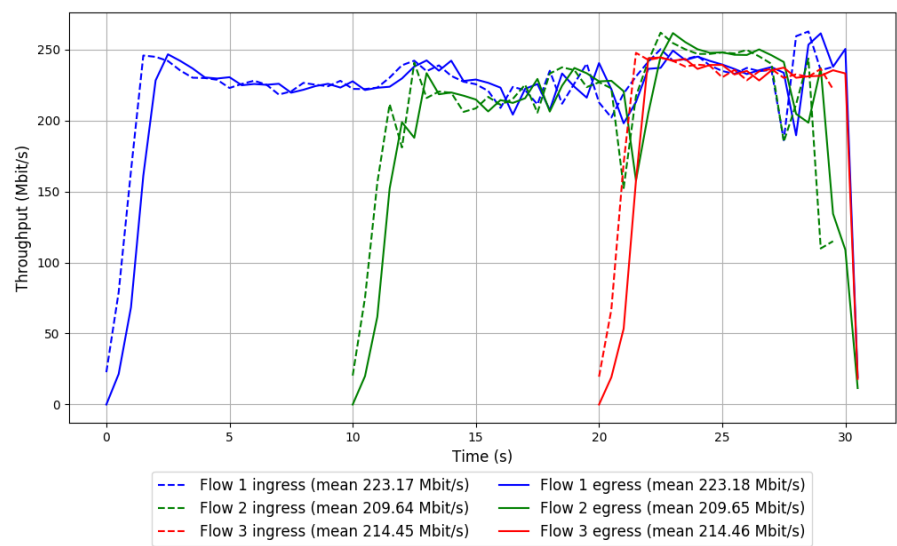
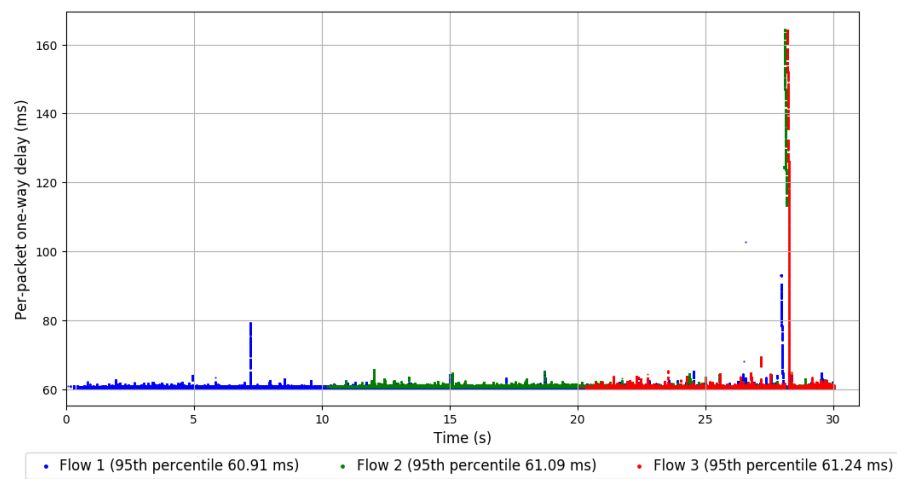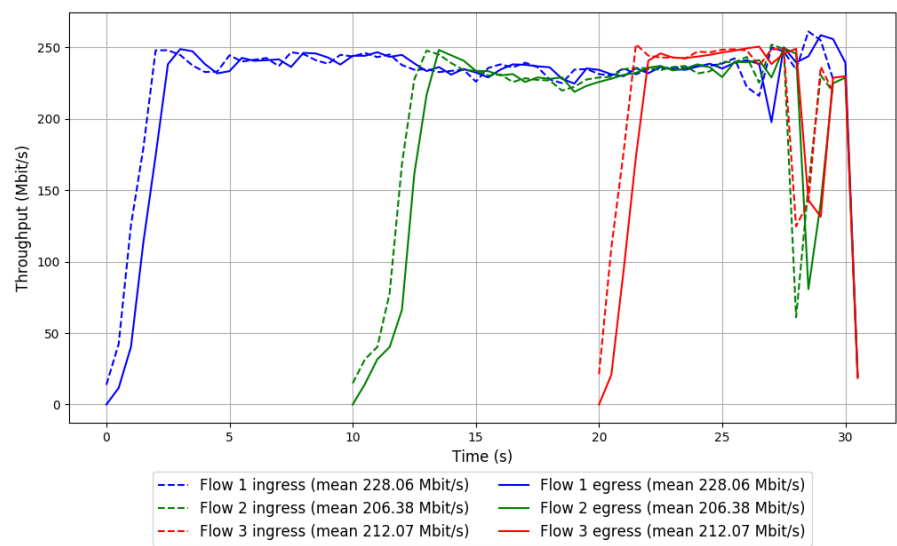# Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-10-02 23:11:24
End at: 2018-10-02 23:11:54
Local clock offset: -0.128 ms
Remote clock offset: -0.216 ms


# Below is generated by plot.py at 2018-10-03 01:54:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.00 Mbit/s
95th percentile per-packet one-way delay: 61.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 60.913 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 206.38 Mbit/s
95th percentile per-packet one-way delay: 61.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 212.07 Mbit/s
95th percentile per-packet one-way delay: 61.237 ms
Loss rate: 0.00%
```

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

```
Run 1: Statistics of TCP Vegas

Start at: 2018-10-02 20:42:40
End at: 2018-10-02 20:43:10
Local clock offset: -0.087 ms
Remote clock offset: -0.46 ms


# Below is generated by plot.py at 2018-10-03 02:04:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 788.39 Mbit/s
95th percentile per-packet one-way delay: 62.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 376.18 Mbit/s
95th percentile per-packet one-way delay: 61.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 412.45 Mbit/s
95th percentile per-packet one-way delay: 61.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 408.02 Mbit/s
95th percentile per-packet one-way delay: 62.923 ms
Loss rate: 0.00%
```
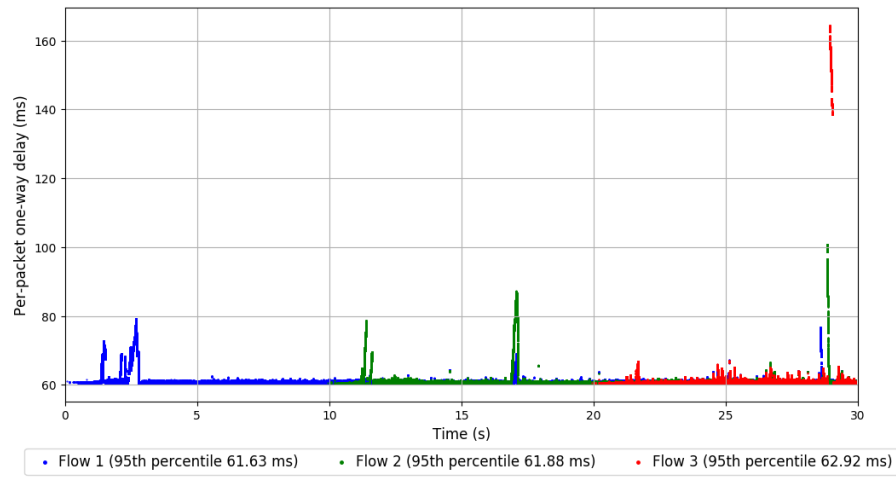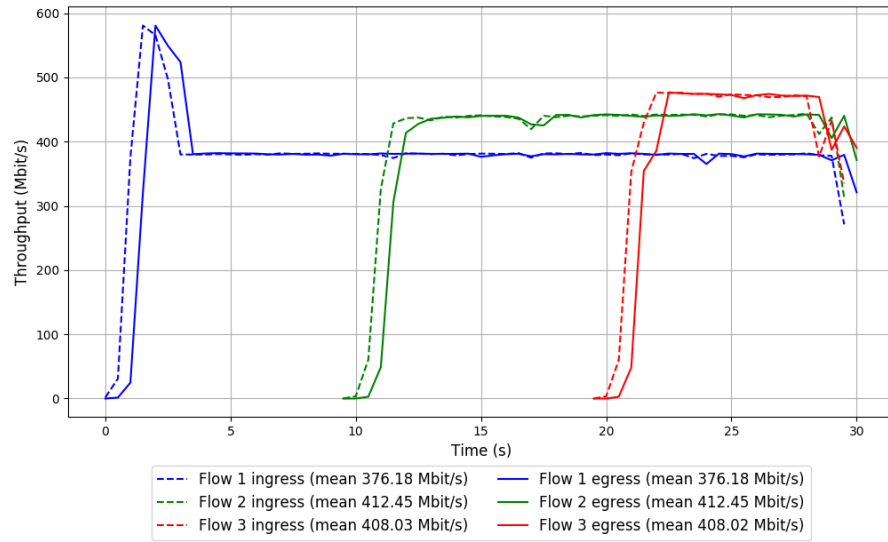
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-10-02 21:13:34
End at: 2018-10-02 21:14:04
Local clock offset: -0.027 ms
Remote clock offset: 1.1 ms


# Below is generated by plot.py at 2018-10-03 02:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 775.06 Mbit/s
95th percentile per-packet one-way delay: 75.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 366.54 Mbit/s
95th percentile per-packet one-way delay: 68.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 398.68 Mbit/s
95th percentile per-packet one-way delay: 71.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 430.20 Mbit/s
95th percentile per-packet one-way delay: 86.232 ms
Loss rate: 0.00%
```
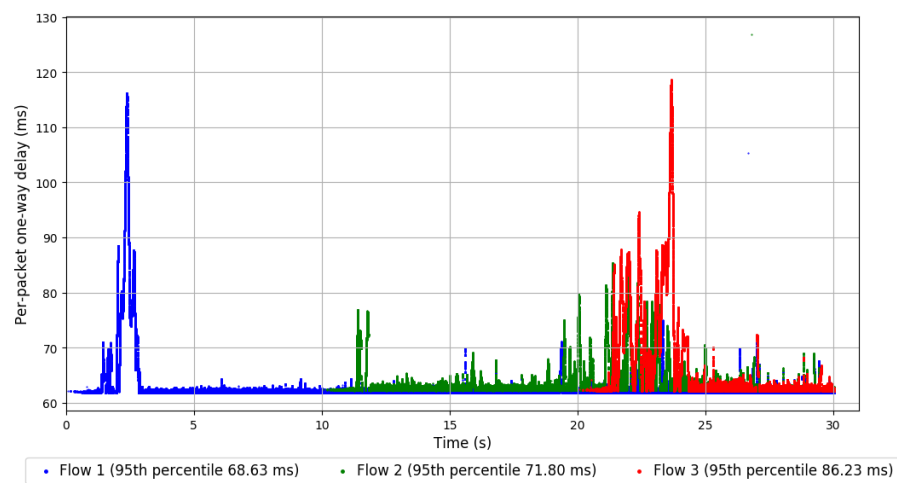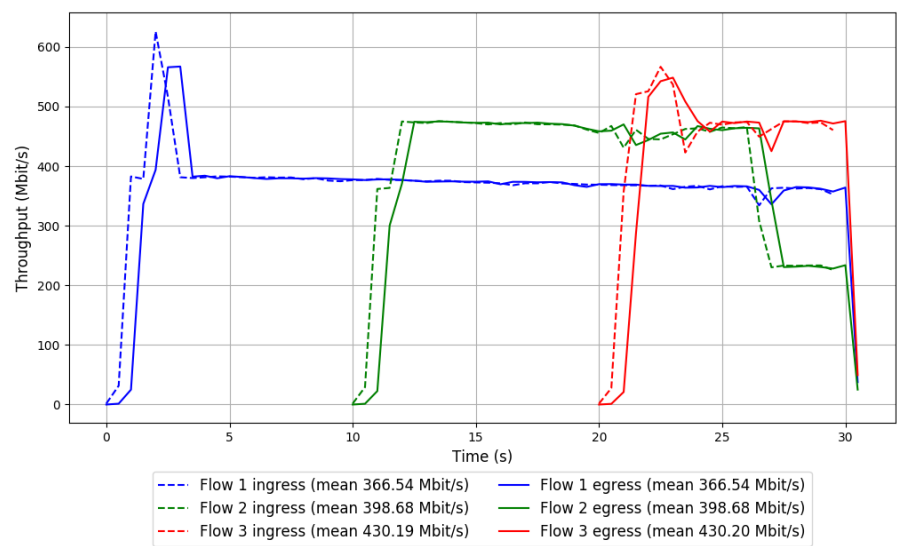
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-10-02 21:44:46
End at: 2018-10-02 21:45:16
Local clock offset: 0.002 ms
Remote clock offset: 0.194 ms

# Below is generated by plot.py at 2018-10-03 02:10:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 809.51 Mbit/s
95th percentile per-packet one-way delay: 105.439 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 274.39 Mbit/s
95th percentile per-packet one-way delay: 64.316 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 570.99 Mbit/s
95th percentile per-packet one-way delay: 111.569 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 466.03 Mbit/s
95th percentile per-packet one-way delay: 78.750 ms
Loss rate: 0.00%
```
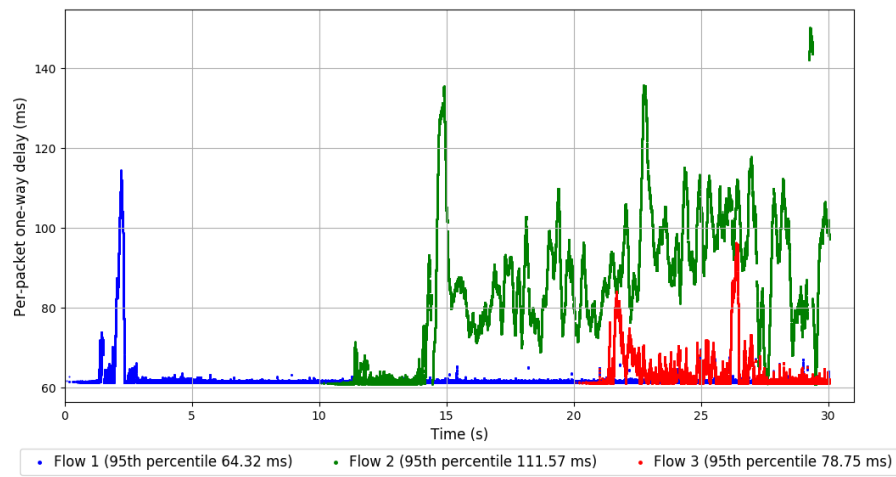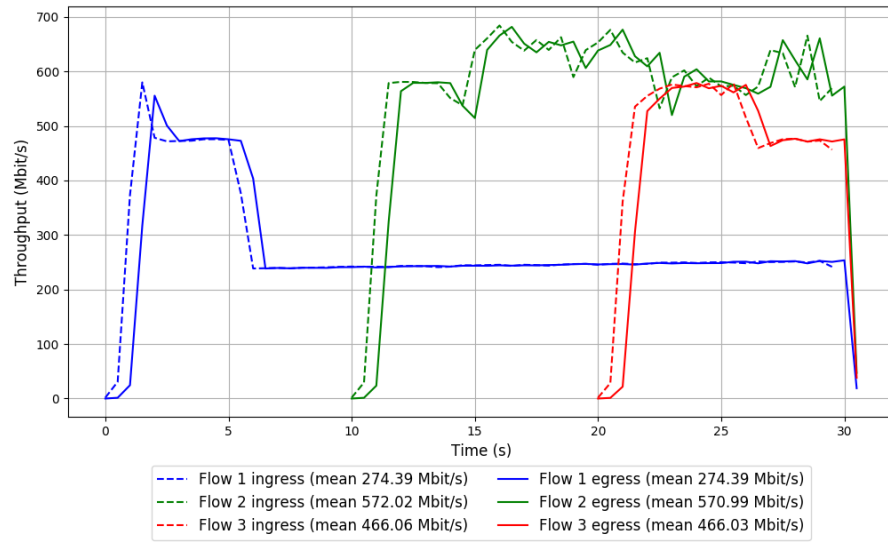
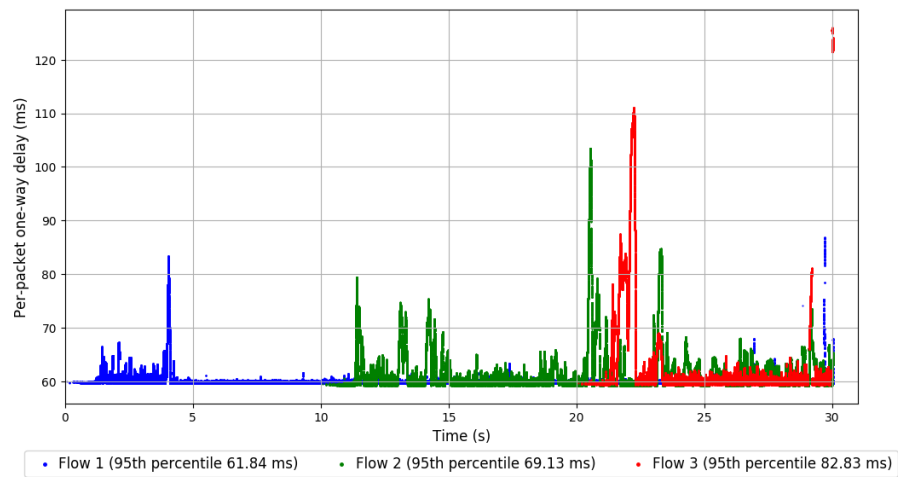Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 274.39 Mbit/s) --- Flow 1 egress (mean 274.39 Mbit/s)
Flow 2 ingress (mean 572.02 Mbit/s) --- Flow 2 egress (mean 570.99 Mbit/s)
Flow 3 ingress (mean 466.06 Mbit/s) --- Flow 3 egress (mean 466.03 Mbit/s)

Flow 1 (95th percentile 64.32 ms) • Flow 2 (95th percentile 111.57 ms) • Flow 3 (95th percentile 78.75 ms)
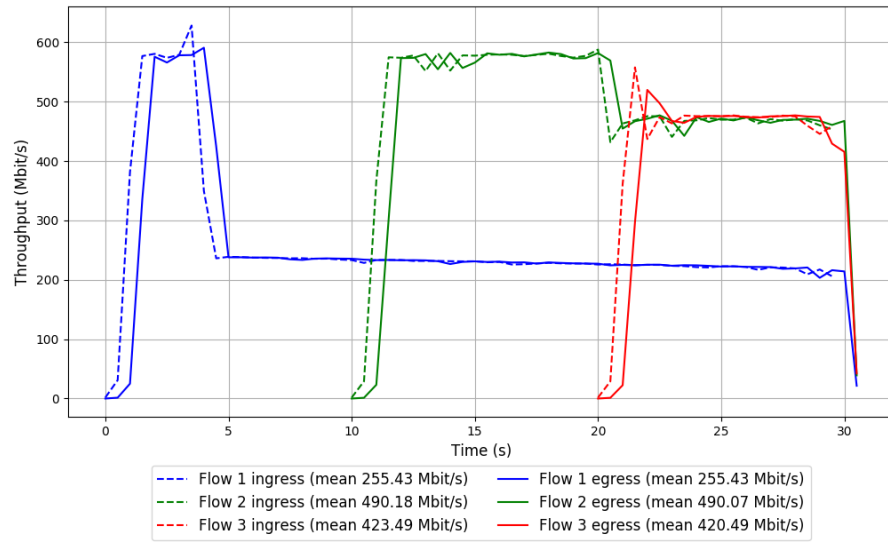
```
Run 4: Statistics of TCP Vegas

Start at: 2018-10-02 22:15:51
End at: 2018-10-02 22:16:21
Local clock offset: -0.07 ms
Remote clock offset: -1.519 ms


# Below is generated by plot.py at 2018-10-03 02:10:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 721.58 Mbit/s
95th percentile per-packet one-way delay: 68.896 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 255.43 Mbit/s
95th percentile per-packet one-way delay: 61.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 490.07 Mbit/s
95th percentile per-packet one-way delay: 69.128 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 420.49 Mbit/s
95th percentile per-packet one-way delay: 82.835 ms
Loss rate: 0.71%
```

Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-10-02 22:47:11
End at: 2018-10-02 22:47:41
Local clock offset: -0.136 ms
Remote clock offset: 0.107 ms


# Below is generated by plot.py at 2018-10-03 02:16:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 960.87 Mbit/s
95th percentile per-packet one-way delay: 104.191 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 446.94 Mbit/s
95th percentile per-packet one-way delay: 72.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 557.06 Mbit/s
95th percentile per-packet one-way delay: 111.338 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 429.58 Mbit/s
95th percentile per-packet one-way delay: 89.857 ms
Loss rate: 0.00%
```
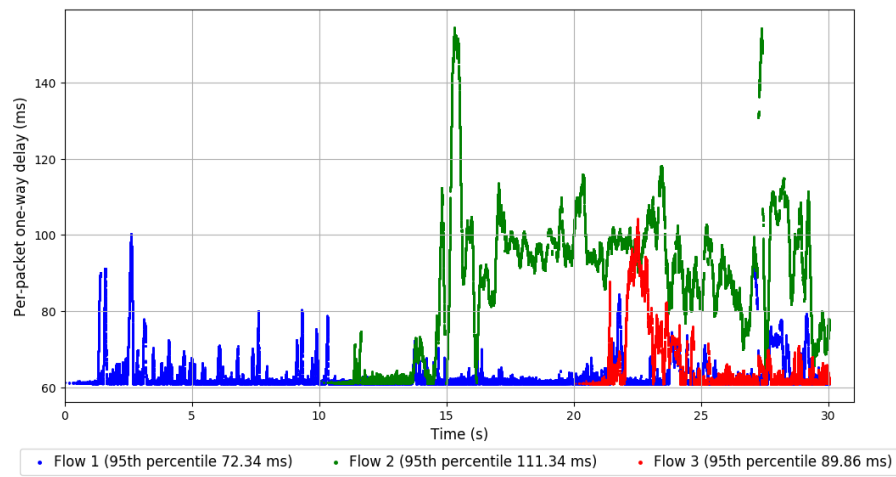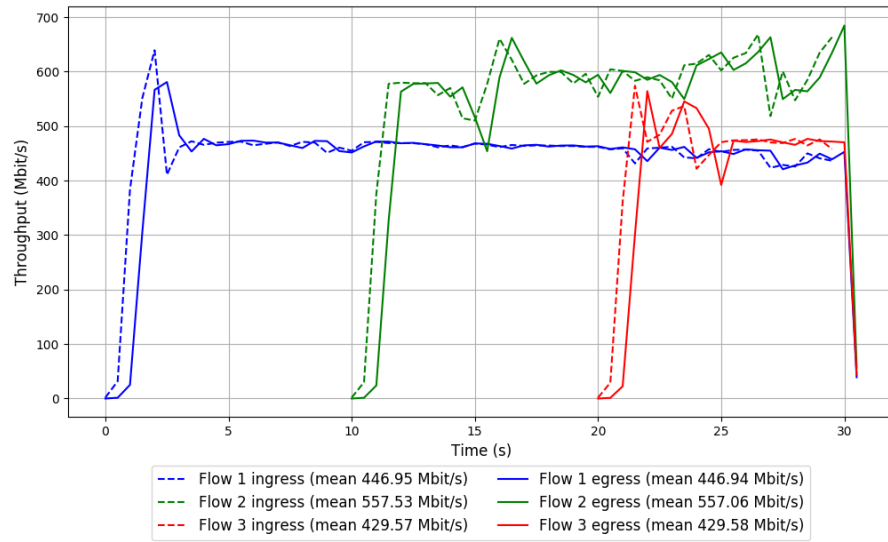
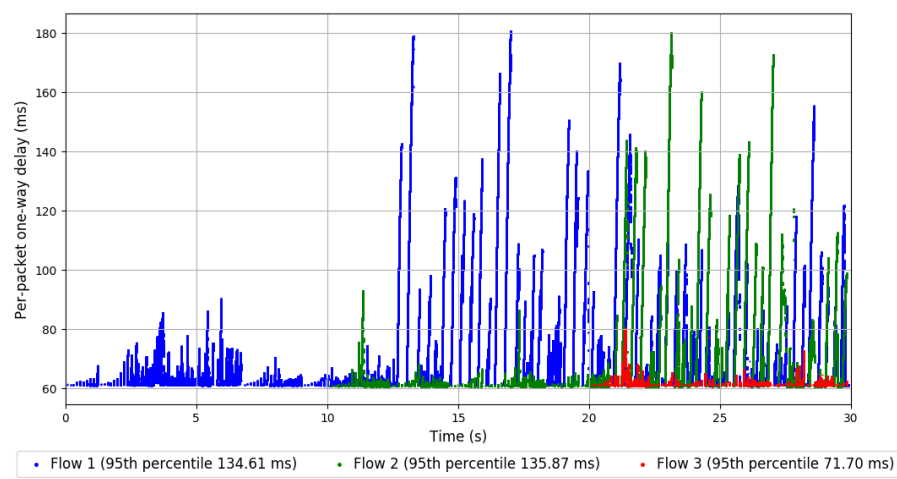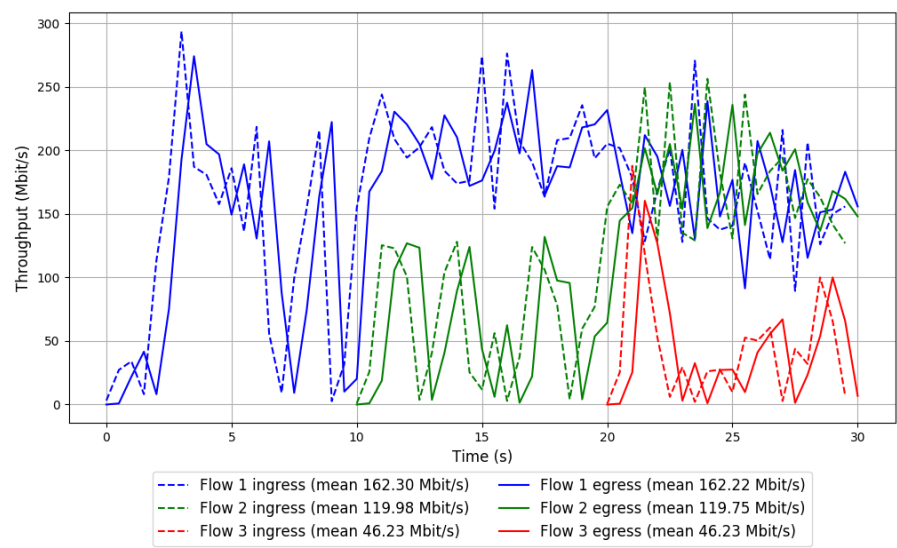Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-10-02 20:47:37
End at: 2018-10-02 20:48:07
Local clock offset: -0.035 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2018-10-03 02:16:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.65 Mbit/s
95th percentile per-packet one-way delay: 133.660 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 162.22 Mbit/s
95th percentile per-packet one-way delay: 134.609 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 119.75 Mbit/s
95th percentile per-packet one-way delay: 135.873 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 46.23 Mbit/s
95th percentile per-packet one-way delay: 71.703 ms
Loss rate: 0.00%
```
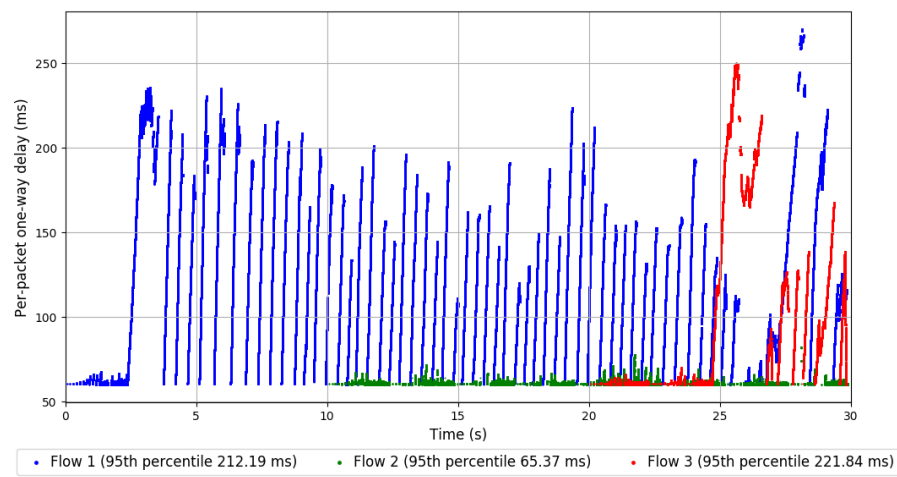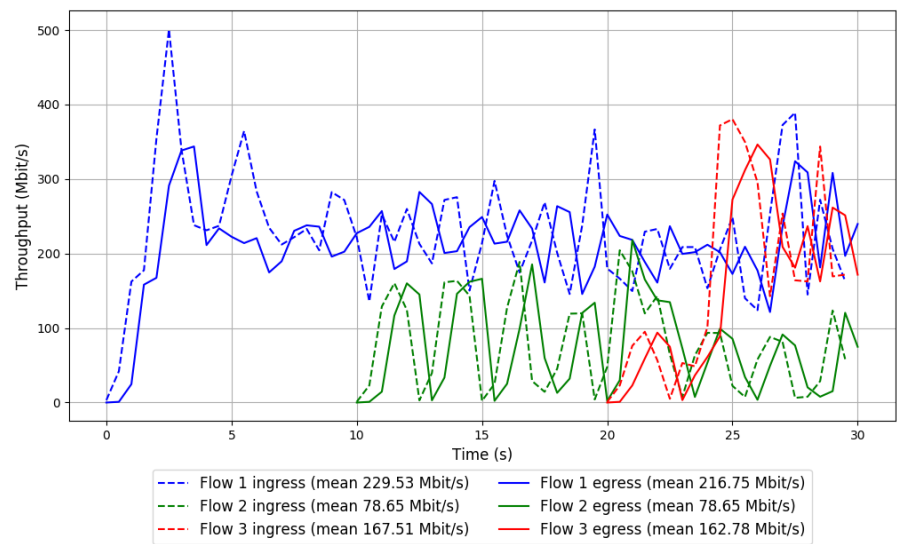
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 162.30 Mbit/s) — — — Flow 1 egress (mean 162.22 Mbit/s)
Flow 2 ingress (mean 119.98 Mbit/s) — — — Flow 2 egress (mean 119.75 Mbit/s)
Flow 3 ingress (mean 46.23 Mbit/s) — — — Flow 3 egress (mean 46.23 Mbit/s)

Flow 1 (95th percentile 134.61 ms)   Flow 2 (95th percentile 135.87 ms)   Flow 3 (95th percentile 71.70 ms)

```
Run 2: Statistics of Verus

Start at: 2018-10-02 21:18:46
End at: 2018-10-02 21:19:16
Local clock offset: -0.067 ms
Remote clock offset: -0.444 ms


# Below is generated by plot.py at 2018-10-03 02:16:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.92 Mbit/s
95th percentile per-packet one-way delay: 211.326 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 216.75 Mbit/s
95th percentile per-packet one-way delay: 212.190 ms
Loss rate: 5.39%
-- Flow 2:
Average throughput: 78.65 Mbit/s
95th percentile per-packet one-way delay: 65.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.78 Mbit/s
95th percentile per-packet one-way delay: 221.839 ms
Loss rate: 2.83%
```

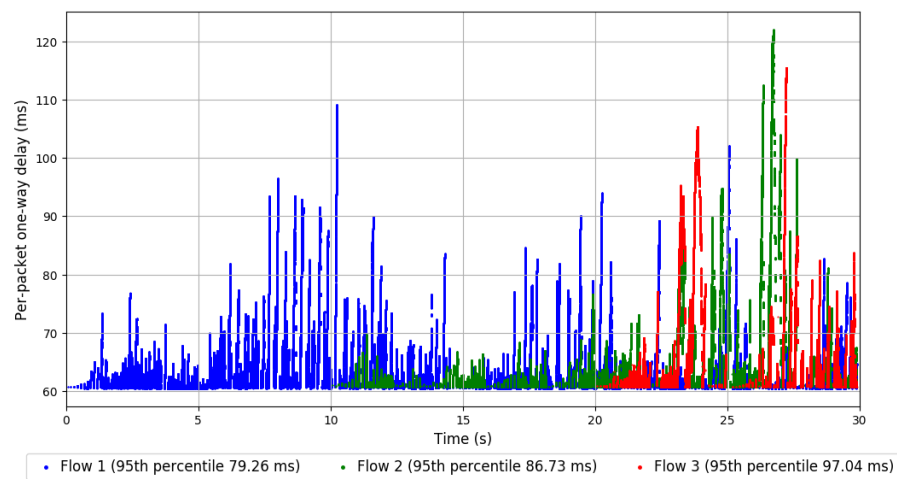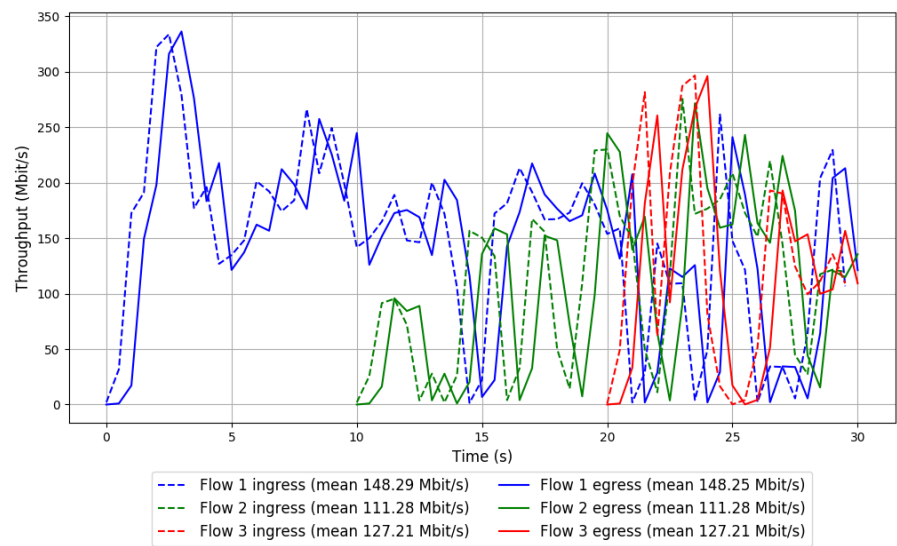Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-10-02 21:50:02
End at: 2018-10-02 21:50:32
Local clock offset: -0.012 ms
Remote clock offset: -0.323 ms


# Below is generated by plot.py at 2018-10-03 02:16:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.08 Mbit/s
95th percentile per-packet one-way delay: 85.044 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 148.25 Mbit/s
95th percentile per-packet one-way delay: 79.257 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 111.28 Mbit/s
95th percentile per-packet one-way delay: 86.733 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.21 Mbit/s
95th percentile per-packet one-way delay: 97.044 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-10-02 22:21:00
End at: 2018-10-02 22:21:30
Local clock offset: -0.062 ms
Remote clock offset: -0.46 ms


# Below is generated by plot.py at 2018-10-03 02:18:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.12 Mbit/s
95th percentile per-packet one-way delay: 145.718 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 182.14 Mbit/s
95th percentile per-packet one-way delay: 153.832 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 139.16 Mbit/s
95th percentile per-packet one-way delay: 100.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.52 Mbit/s
95th percentile per-packet one-way delay: 137.657 ms
Loss rate: 0.00%
```
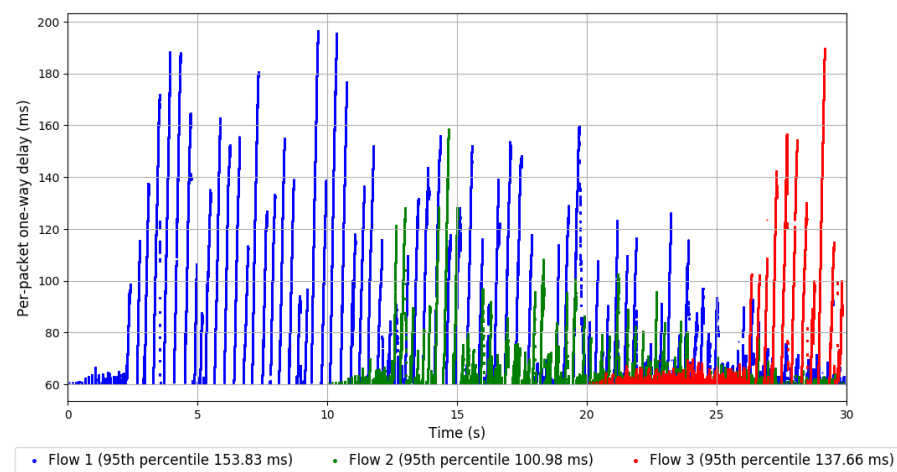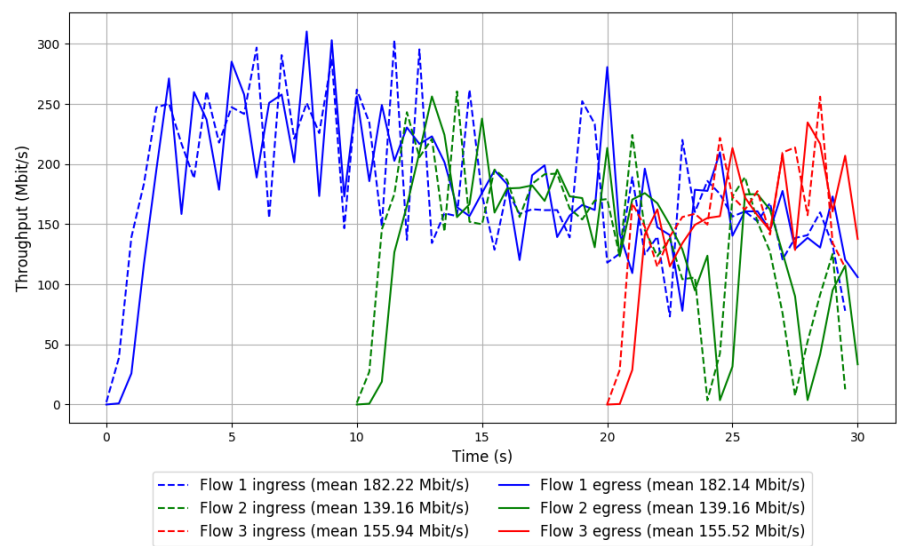
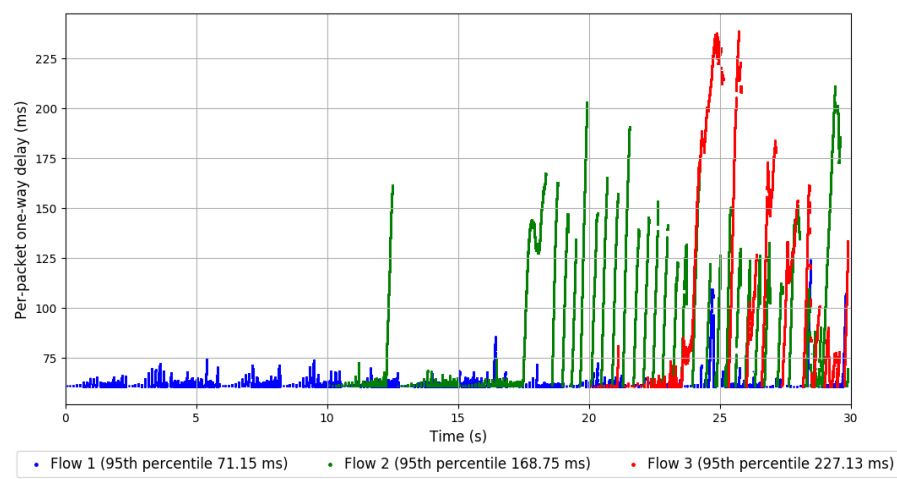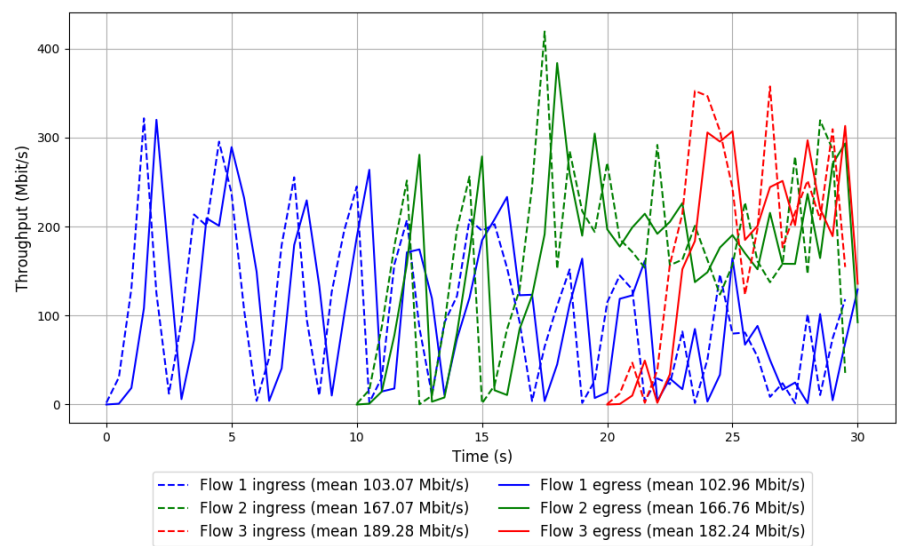Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-10-02 22:52:34
End at: 2018-10-02 22:53:04
Local clock offset: -0.144 ms
Remote clock offset: -0.138 ms


# Below is generated by plot.py at 2018-10-03 02:18:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.47 Mbit/s
95th percentile per-packet one-way delay: 184.556 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 102.96 Mbit/s
95th percentile per-packet one-way delay: 71.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 166.76 Mbit/s
95th percentile per-packet one-way delay: 168.754 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 182.24 Mbit/s
95th percentile per-packet one-way delay: 227.134 ms
Loss rate: 3.73%
```

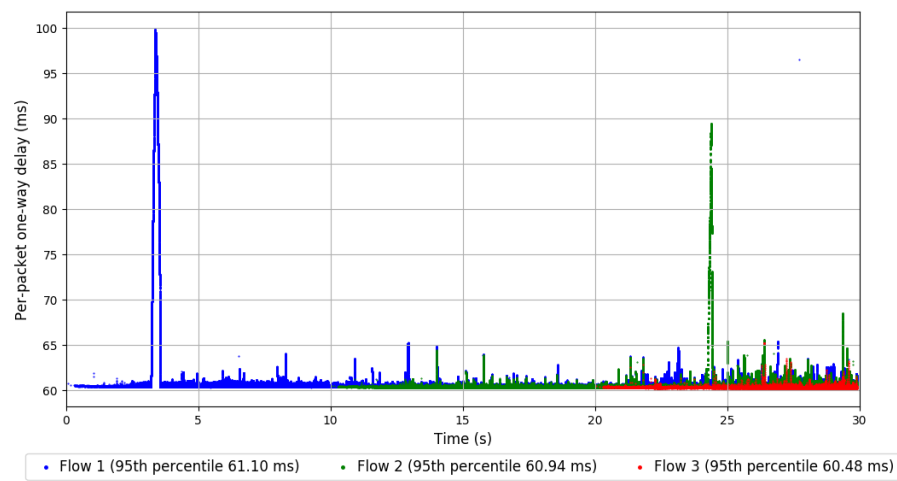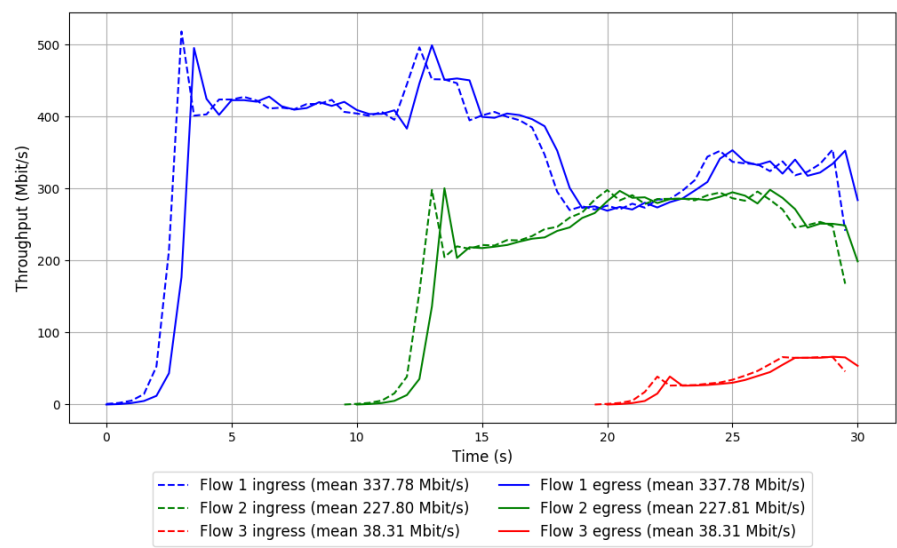Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-10-02 20:59:19
End at: 2018-10-02 20:59:49
Local clock offset: -0.011 ms
Remote clock offset: -0.676 ms


# Below is generated by plot.py at 2018-10-03 02:18:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.13 Mbit/s
95th percentile per-packet one-way delay: 61.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 337.78 Mbit/s
95th percentile per-packet one-way delay: 61.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 227.81 Mbit/s
95th percentile per-packet one-way delay: 60.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 60.476 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-10-02 21:30:31
End at: 2018-10-02 21:31:01
Local clock offset: 0.031 ms
Remote clock offset: 0.145 ms


# Below is generated by plot.py at 2018-10-03 02:18:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.86 Mbit/s
95th percentile per-packet one-way delay: 62.071 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 238.59 Mbit/s
95th percentile per-packet one-way delay: 61.198 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 282.98 Mbit/s
95th percentile per-packet one-way delay: 62.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 61.017 ms
Loss rate: 0.00%
```
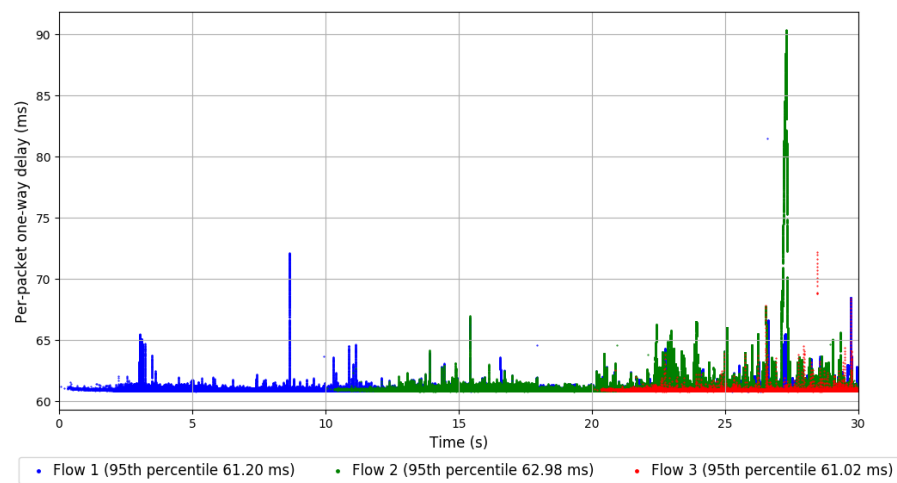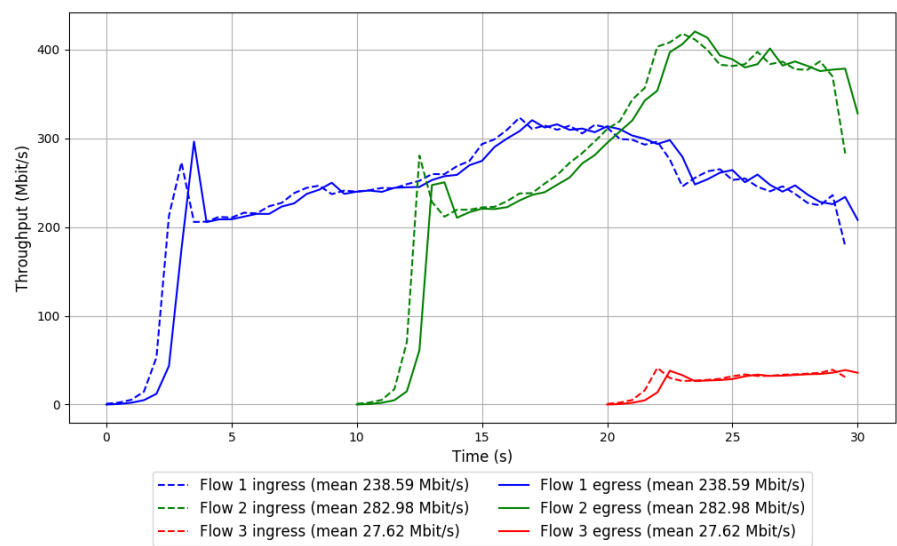
Run 2: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 238.59 Mbit/s)   —— Flow 1 egress (mean 238.59 Mbit/s)
- - - Flow 2 ingress (mean 282.98 Mbit/s)   —— Flow 2 egress (mean 282.98 Mbit/s)
- - - Flow 3 ingress (mean 27.62 Mbit/s)   —— Flow 3 egress (mean 27.62 Mbit/s)

• Flow 1 (95th percentile 61.20 ms)   • Flow 2 (95th percentile 62.98 ms)   • Flow 3 (95th percentile 61.02 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-10-02 22:01:44
End at: 2018-10-02 22:02:14
Local clock offset: -0.011 ms
Remote clock offset: 1.313 ms


# Below is generated by plot.py at 2018-10-03 02:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.03 Mbit/s
95th percentile per-packet one-way delay: 63.310 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 241.08 Mbit/s
95th percentile per-packet one-way delay: 63.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.53 Mbit/s
95th percentile per-packet one-way delay: 63.558 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.87 Mbit/s
95th percentile per-packet one-way delay: 63.243 ms
Loss rate: 0.00%
```
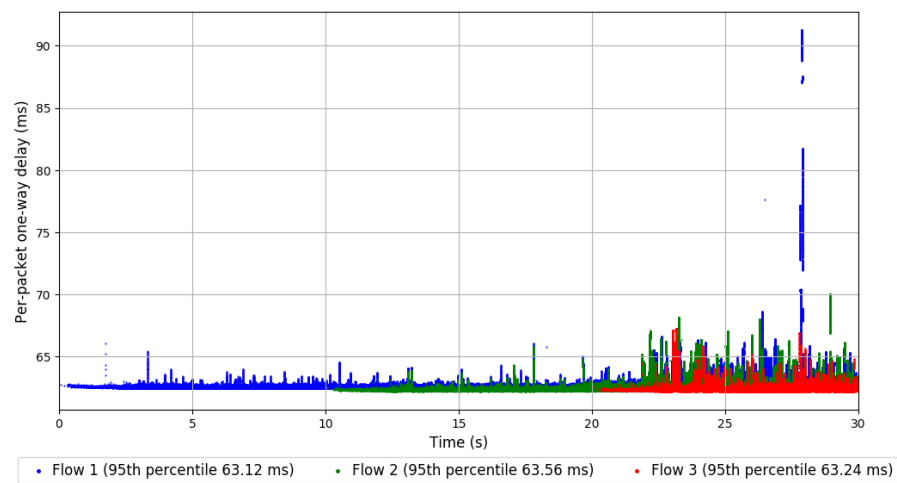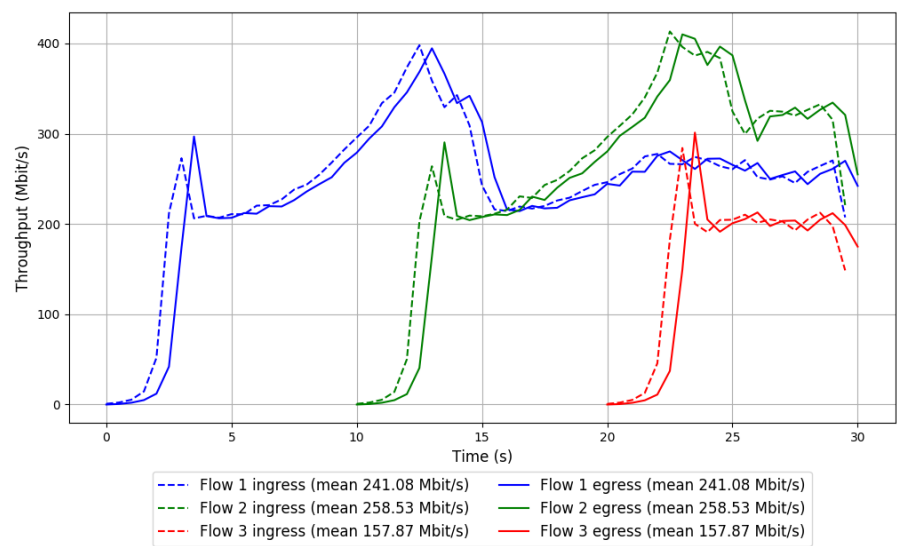
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-10-02 22:32:44
End at: 2018-10-02 22:33:14
Local clock offset: -0.086 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.21 Mbit/s
95th percentile per-packet one-way delay: 65.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 301.43 Mbit/s
95th percentile per-packet one-way delay: 67.335 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 264.46 Mbit/s
95th percentile per-packet one-way delay: 63.719 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.61 Mbit/s
95th percentile per-packet one-way delay: 62.528 ms
Loss rate: 0.00%
```
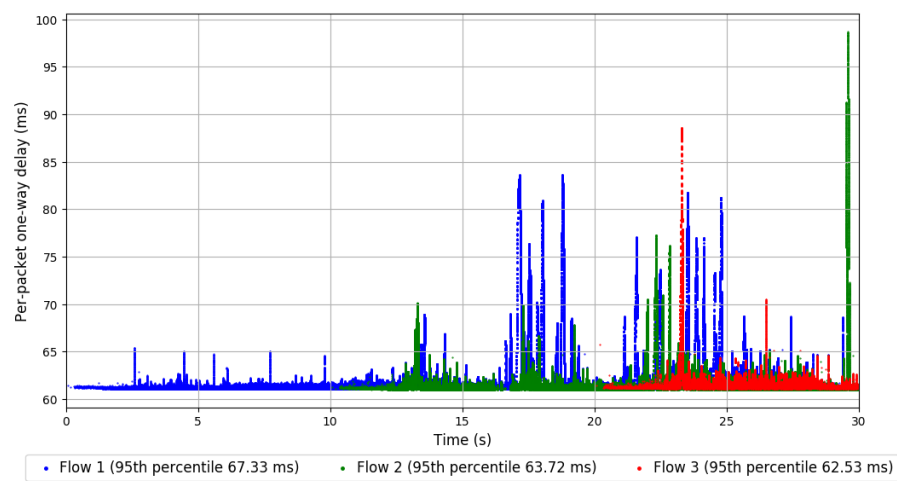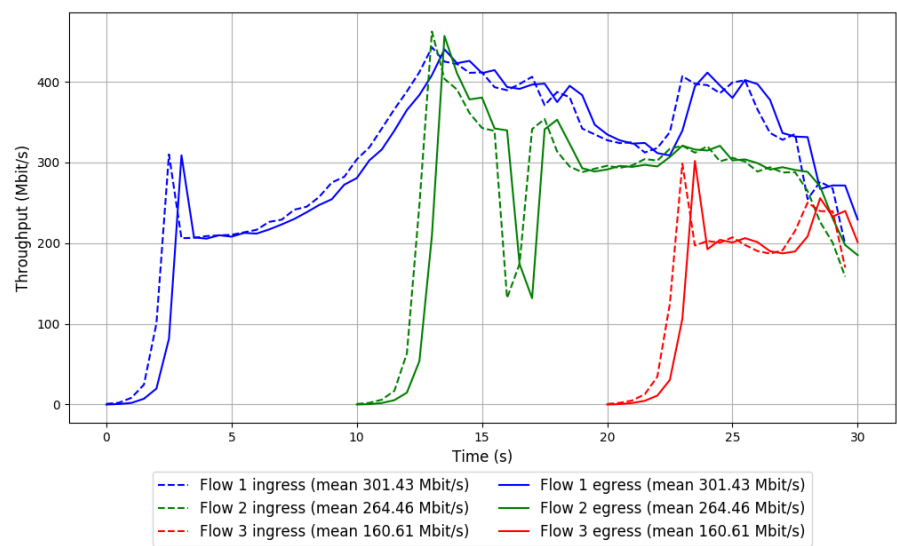
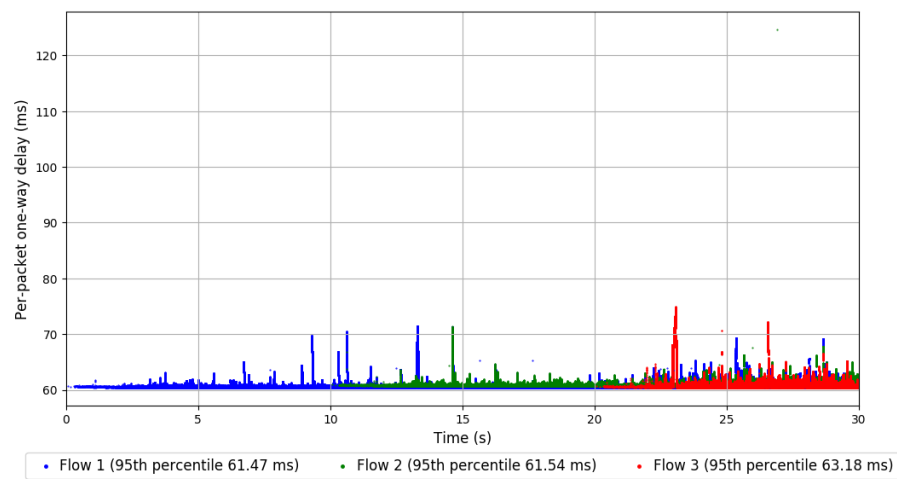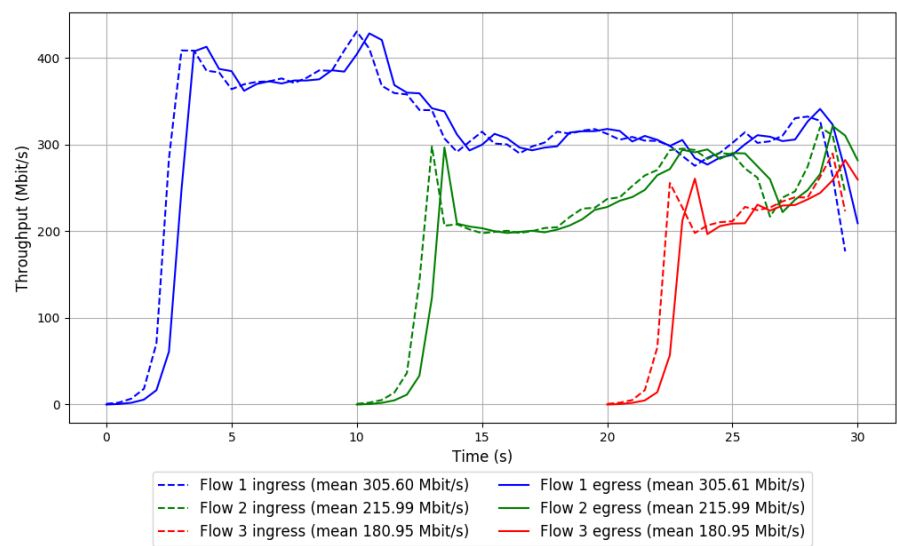Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-10-02 23:04:17
End at: 2018-10-02 23:04:47
Local clock offset: -0.147 ms
Remote clock offset: -0.345 ms

# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.95 Mbit/s
95th percentile per-packet one-way delay: 61.627 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 305.61 Mbit/s
95th percentile per-packet one-way delay: 61.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.99 Mbit/s
95th percentile per-packet one-way delay: 61.537 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.95 Mbit/s
95th percentile per-packet one-way delay: 63.183 ms
Loss rate: 0.00%
```

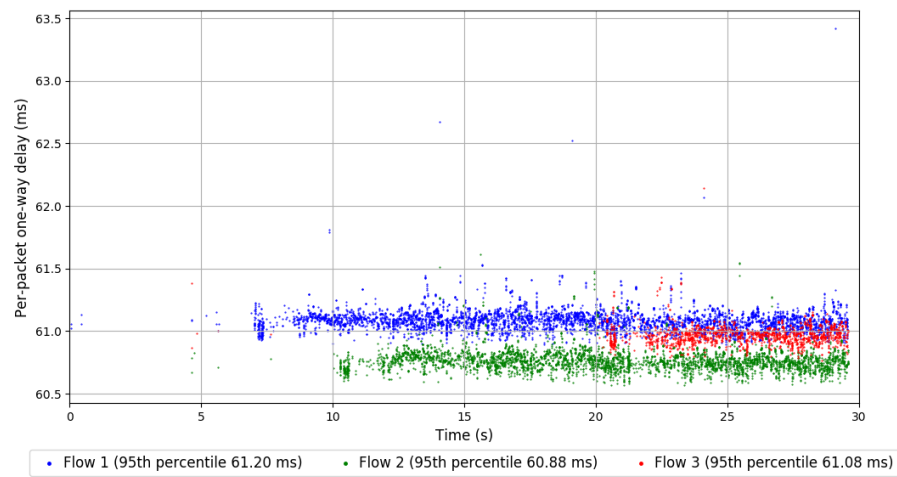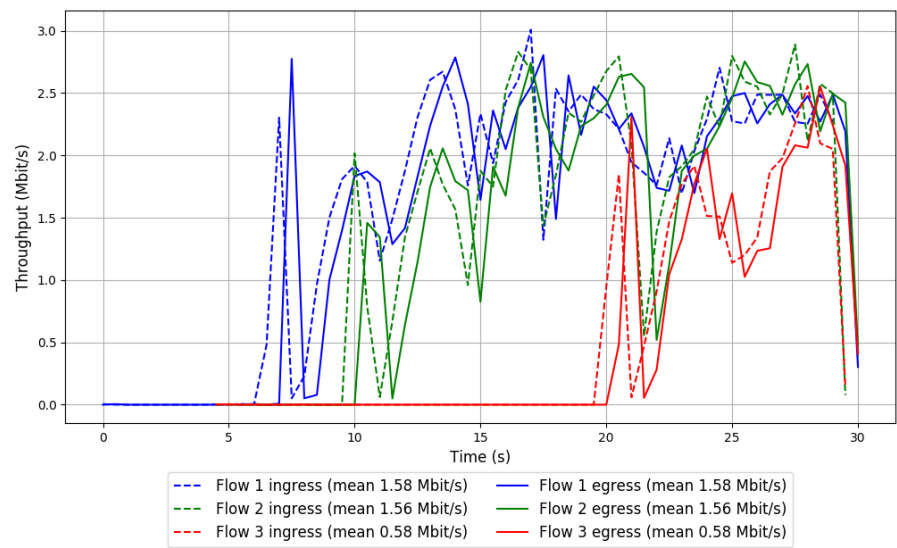Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-10-02 20:39:25
End at: 2018-10-02 20:39:55
Local clock offset: -0.036 ms
Remote clock offset: -0.215 ms


# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 61.167 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 61.204 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 60.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 61.076 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-10-02 21:10:16
End at: 2018-10-02 21:10:46
Local clock offset: -0.051 ms
Remote clock offset: -0.43 ms


# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 60.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 60.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 61.020 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 60.969 ms
Loss rate: 0.00%
```
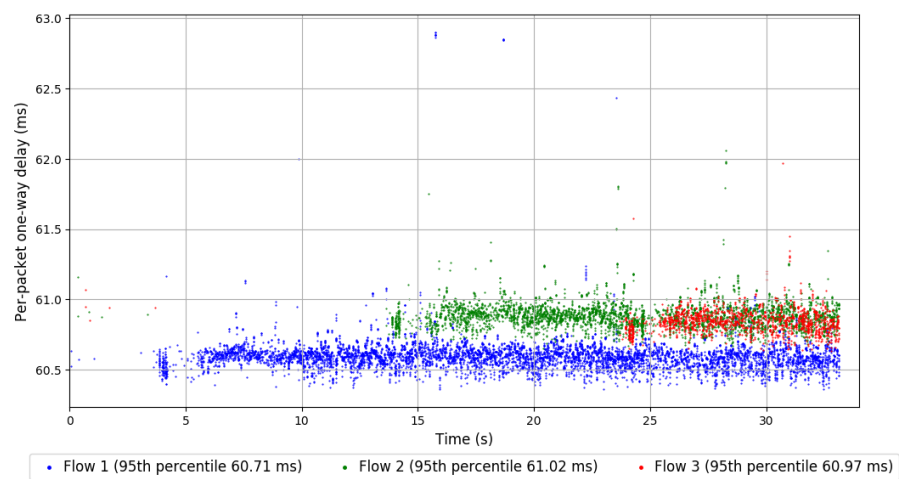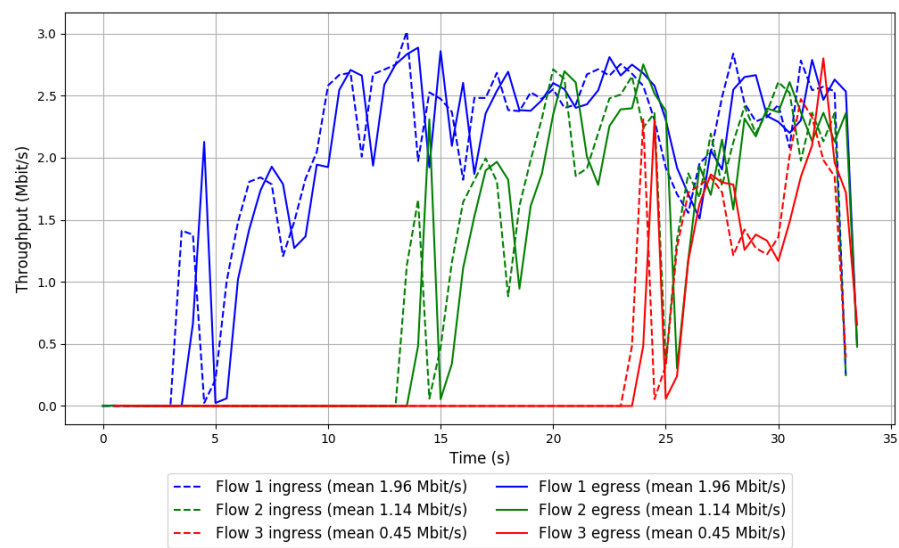
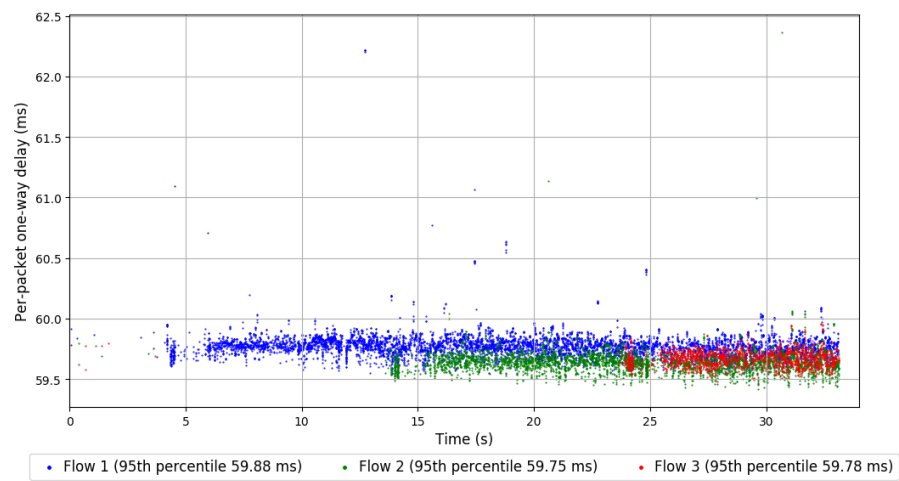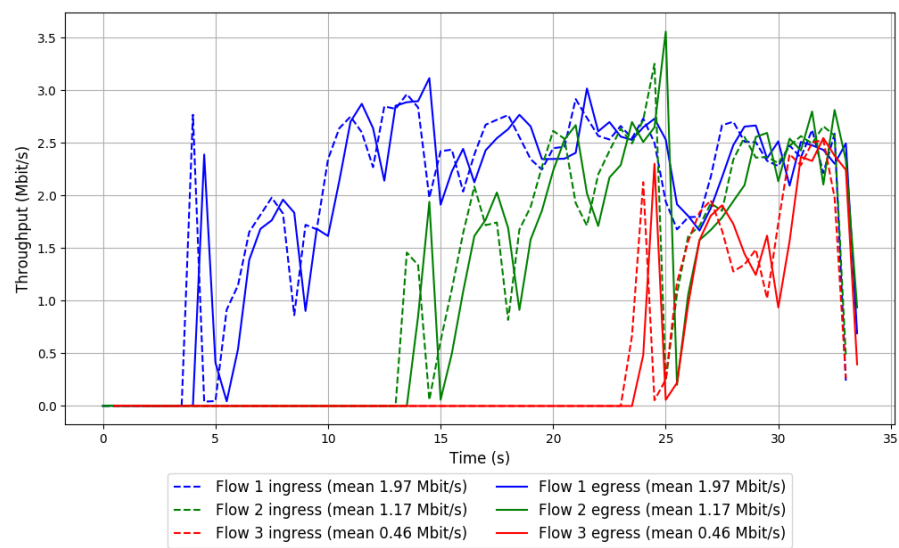Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-10-02 21:41:30
End at: 2018-10-02 21:42:00
Local clock offset: -0.003 ms
Remote clock offset: -1.405 ms


# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 59.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 59.883 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 59.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 59.777 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-10-02 22:12:41
End at: 2018-10-02 22:13:11
Local clock offset: -0.021 ms
Remote clock offset: 1.099 ms


# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 62.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 62.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 62.274 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 62.281 ms
Loss rate: 0.00%
```
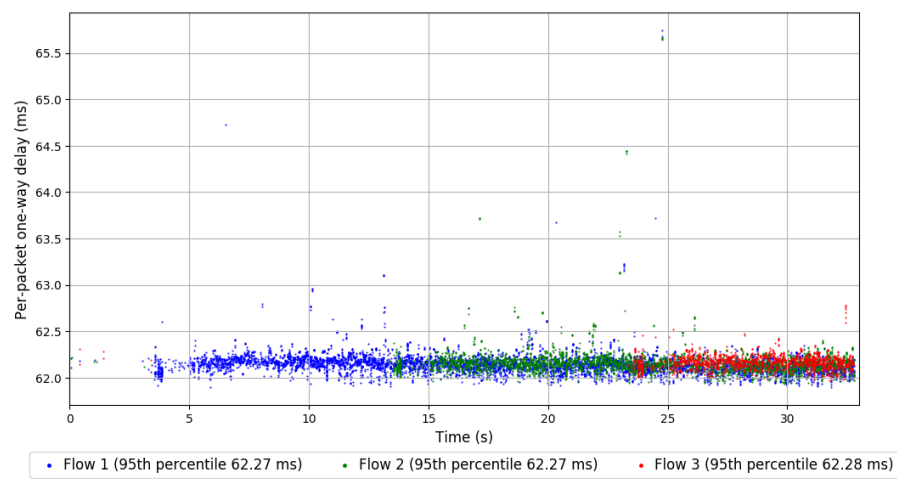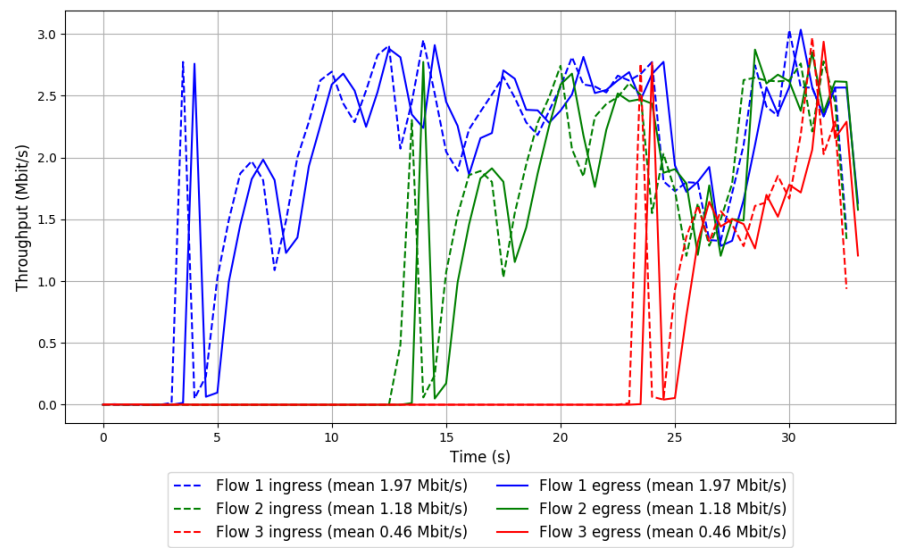
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-10-02 22:43:55
End at: 2018-10-02 22:44:25
Local clock offset: -0.115 ms
Remote clock offset: 0.7 ms


# Below is generated by plot.py at 2018-10-03 02:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 62.138 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 62.160 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 61.916 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 61.908 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link