Pantheon Report

Generated at 2017-11-16 17:26:22 (UTC).

Data path: AWS Brazil 1 Ethernet (*local*) →Brazil Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

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

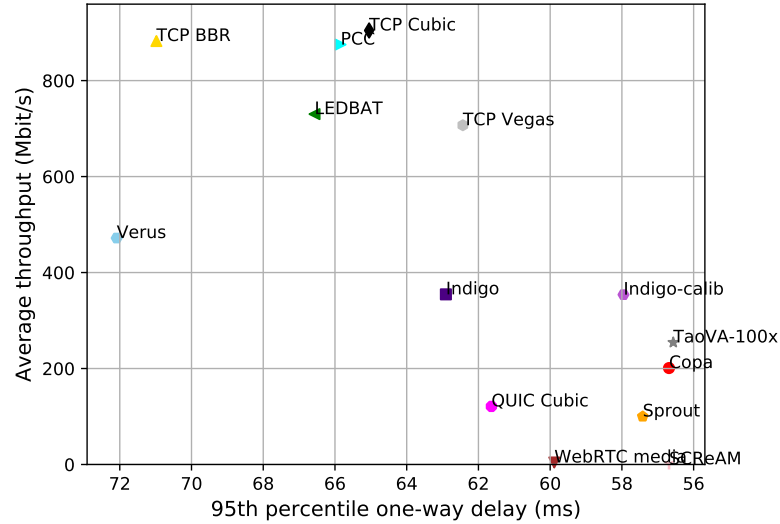Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

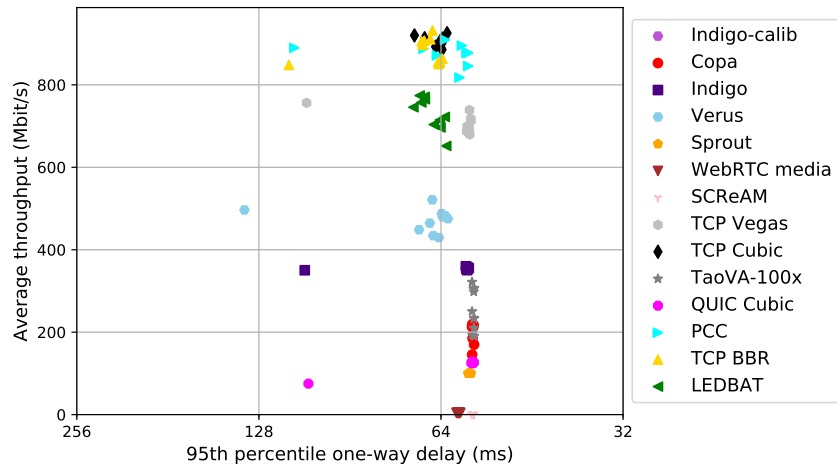NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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

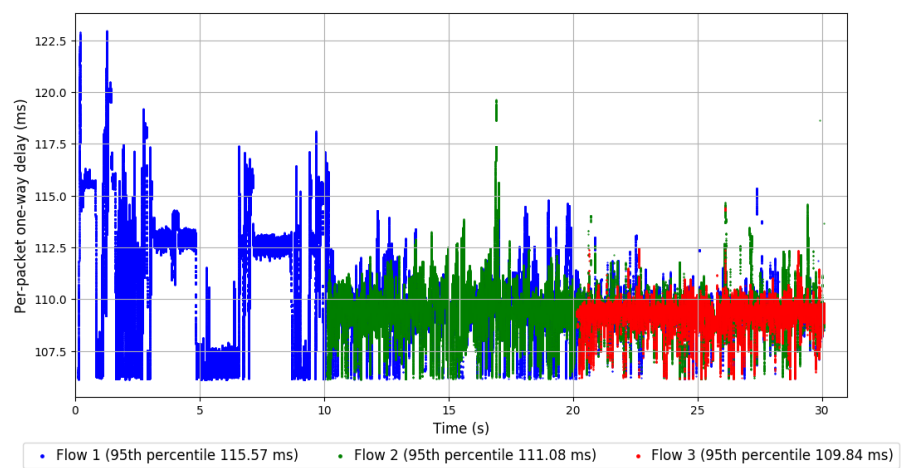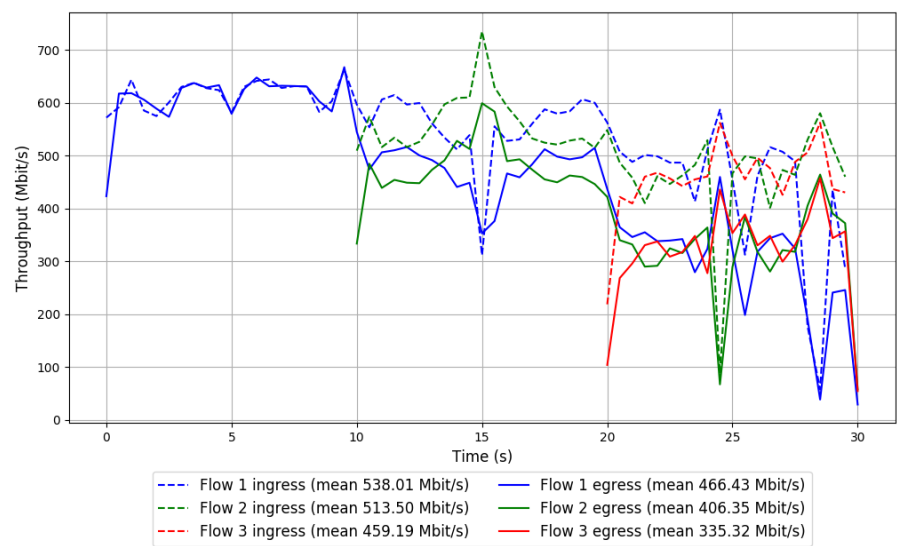| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	505.51	402.64	330.91	72.65	67.39	65.59	13.16	22.08	28.33
TCP Cubic	10	534.11	390.88	331.28	67.64	59.46	59.44	0.02	0.02	0.02
LEDBAT	10	406.71	347.98	276.53	68.50	64.97	59.47	0.06	0.08	0.14
PCC	10	730.81	160.92	113.28	67.43	58.02	58.25	0.07	0.05	0.06
QUIC Cubic	10	61.23	63.35	54.23	61.59	61.68	62.91	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	56.69	56.68	56.69	0.00	0.02	0.00
WebRTC media	10	2.32	1.44	0.36	59.57	59.83	60.98	0.00	0.00	0.00
Sprout	10	50.22	50.15	49.90	57.42	57.42	57.45	0.00	0.00	0.00
TaoVA-100x	10	125.77	142.76	130.26	56.57	56.57	56.58	0.00	0.00	0.00
TCP Vegas	10	393.77	330.64	279.88	62.63	62.48	62.28	0.00	0.00	0.00
Verus	10	270.69	208.97	187.93	65.81	64.04	80.90	1.82	2.67	4.50
Copa	10	105.57	103.32	107.40	56.68	56.69	56.75	0.00	0.00	0.00
Indigo	10	186.20	175.13	160.41	62.61	63.02	63.40	0.00	0.00	0.01
Indigo-calib	8	182.98	176.26	166.73	57.56	58.09	58.53	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-16 10:42:24
End at: 2017-11-16 10:42:54
Local clock offset: -0.212 ms
Remote clock offset: 85.139 ms


# Below is generated by plot.py at 2017-11-16 15:46:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 848.35 Mbit/s
95th percentile per-packet one-way delay: 114.184 ms
Loss rate: 17.81%
-- Flow 1:
Average throughput: 466.43 Mbit/s
95th percentile per-packet one-way delay: 115.573 ms
Loss rate: 13.30%
-- Flow 2:
Average throughput: 406.35 Mbit/s
95th percentile per-packet one-way delay: 111.081 ms
Loss rate: 20.84%
-- Flow 3:
Average throughput: 335.32 Mbit/s
95th percentile per-packet one-way delay: 109.840 ms
Loss rate: 26.98%
```
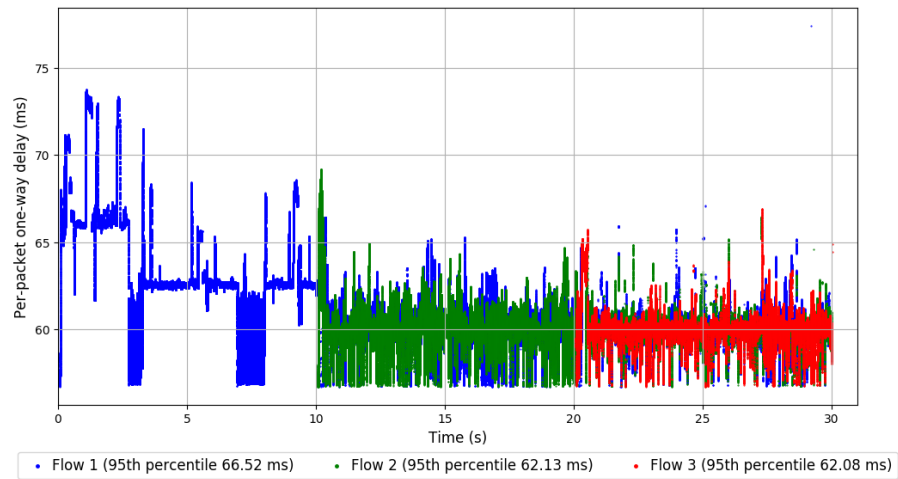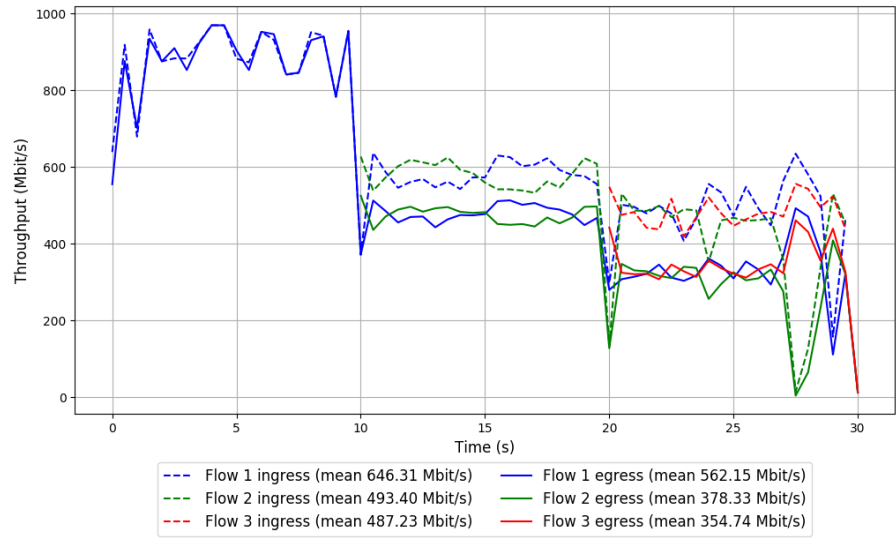
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-11-16 11:01:57
End at: 2017-11-16 11:02:27
Local clock offset: -0.215 ms
Remote clock offset: 35.03 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 931.86 Mbit/s
95th percentile per-packet one-way delay: 66.107 ms
Loss rate: 18.00%
-- Flow 1:
Average throughput: 562.15 Mbit/s
95th percentile per-packet one-way delay: 66.521 ms
Loss rate: 13.01%
-- Flow 2:
Average throughput: 378.33 Mbit/s
95th percentile per-packet one-way delay: 62.135 ms
Loss rate: 23.31%
-- Flow 3:
Average throughput: 354.74 Mbit/s
95th percentile per-packet one-way delay: 62.081 ms
Loss rate: 27.14%
```

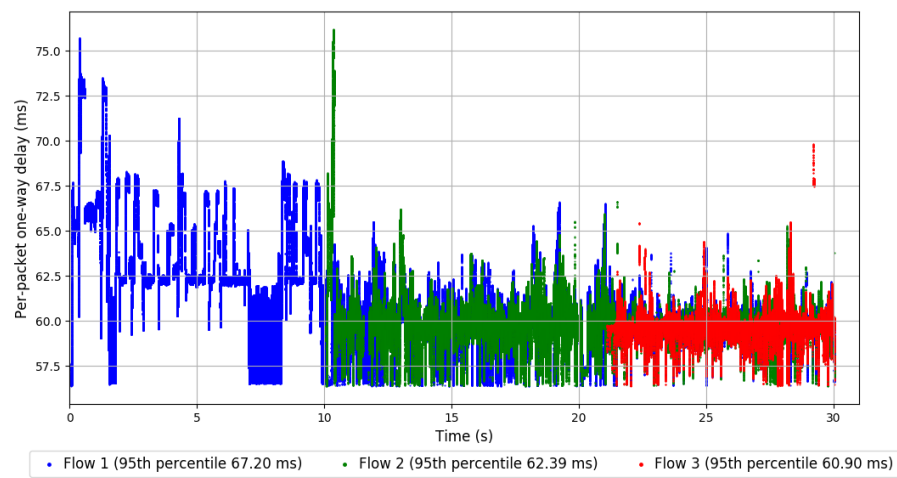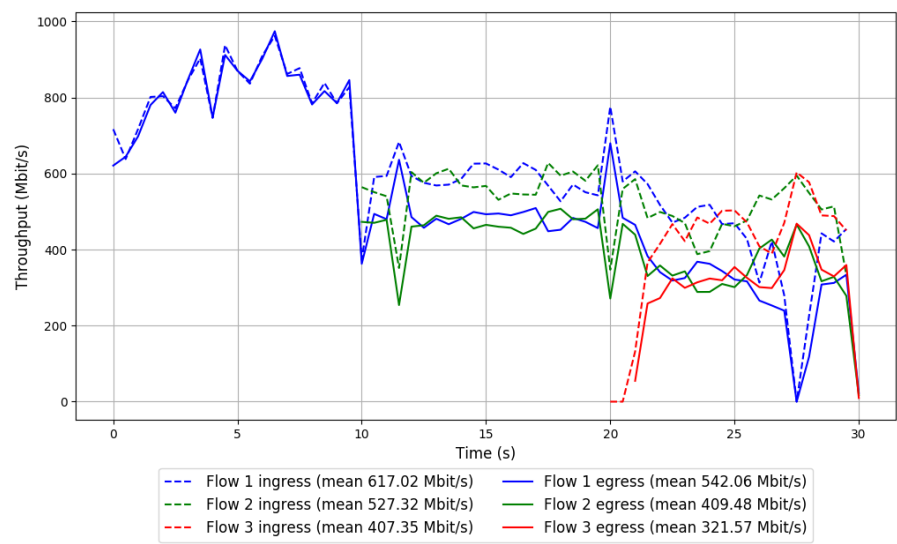Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-11-16 11:21:31
End at: 2017-11-16 11:22:01
Local clock offset: -0.103 ms
Remote clock offset: 34.056 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 910.61 Mbit/s
95th percentile per-packet one-way delay: 66.668 ms
Loss rate: 17.47%
-- Flow 1:
Average throughput: 542.06 Mbit/s
95th percentile per-packet one-way delay: 67.198 ms
Loss rate: 12.14%
-- Flow 2:
Average throughput: 409.48 Mbit/s
95th percentile per-packet one-way delay: 62.389 ms
Loss rate: 22.32%
-- Flow 3:
Average throughput: 321.57 Mbit/s
95th percentile per-packet one-way delay: 60.897 ms
Loss rate: 29.16%
```
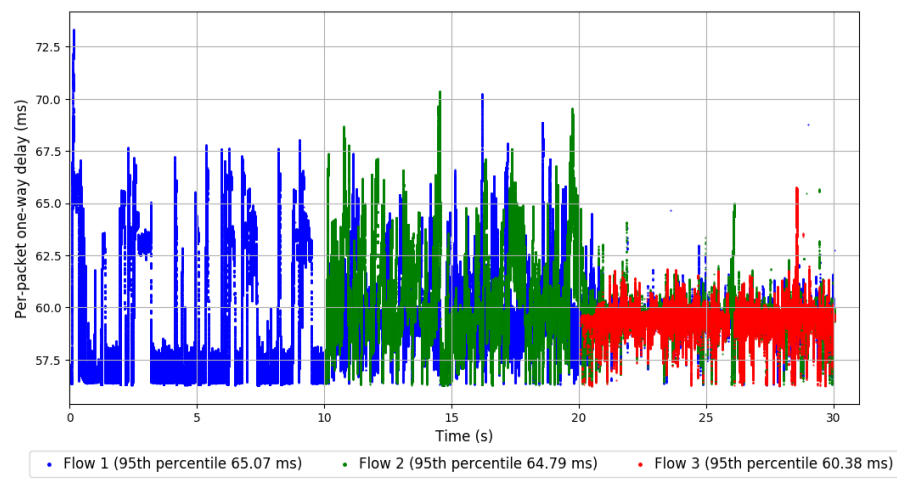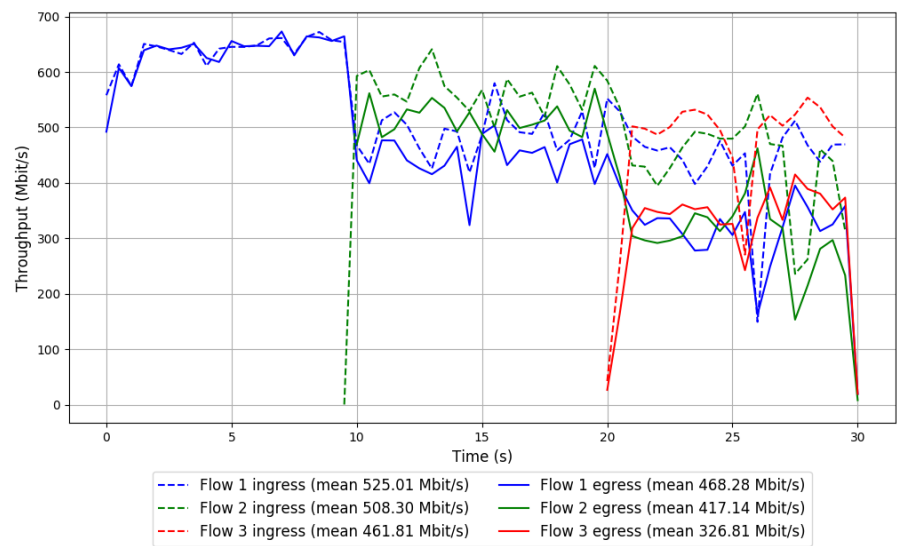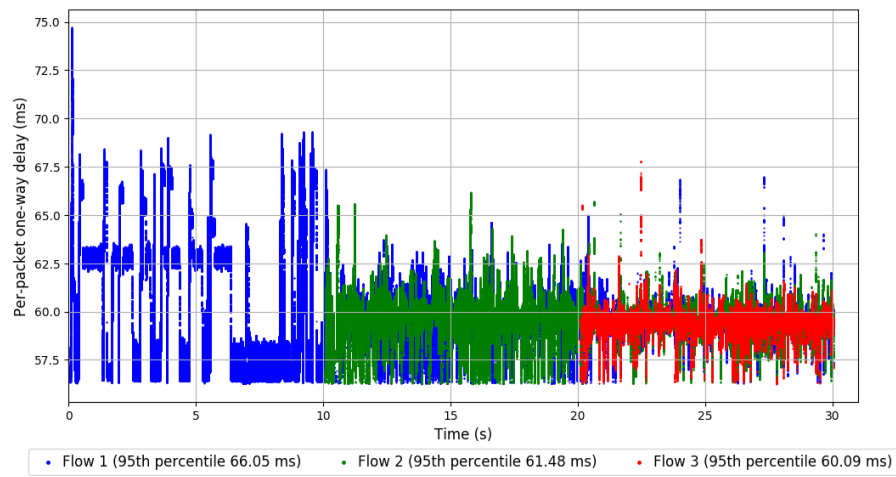
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 617.02 Mbit/s) — — — Flow 1 egress (mean 542.06 Mbit/s)
Flow 2 ingress (mean 527.32 Mbit/s) — — — Flow 2 egress (mean 409.48 Mbit/s)
Flow 3 ingress (mean 407.35 Mbit/s) — — — Flow 3 egress (mean 321.57 Mbit/s)

Flow 1 (95th percentile 67.20 ms)   Flow 2 (95th percentile 62.39 ms)   Flow 3 (95th percentile 60.90 ms)

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```
Run 4: Statistics of TCP BBR

Start at: 2017-11-16 11:41:21
End at: 2017-11-16 11:41:51
Local clock offset: -0.069 ms
Remote clock offset: 34.591 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 854.87 Mbit/s
95th percentile per-packet one-way delay: 64.710 ms
Loss rate: 15.94%
-- Flow 1:
Average throughput: 468.28 Mbit/s
95th percentile per-packet one-way delay: 65.067 ms
Loss rate: 10.79%
-- Flow 2:
Average throughput: 417.14 Mbit/s
95th percentile per-packet one-way delay: 64.788 ms
Loss rate: 17.92%
-- Flow 3:
Average throughput: 326.81 Mbit/s
95th percentile per-packet one-way delay: 60.378 ms
Loss rate: 29.22%
```
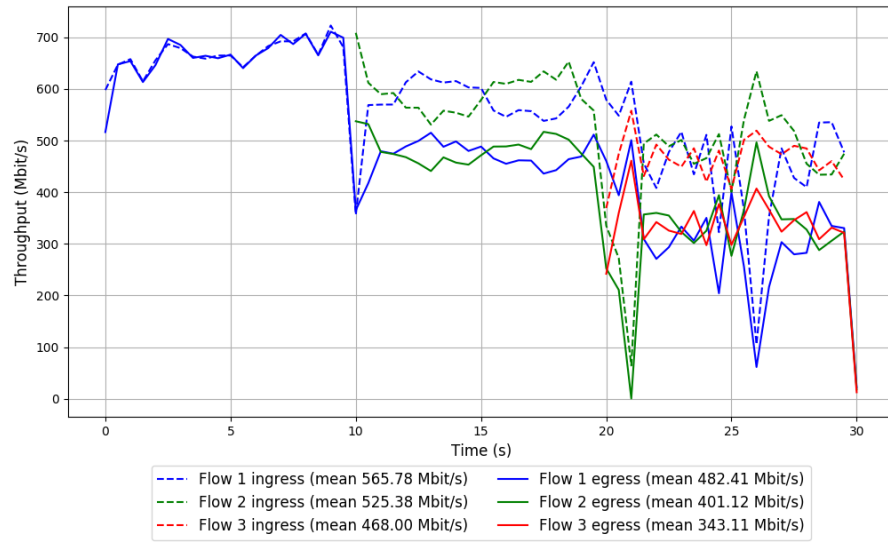
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 525.01 Mbit/s) --- Flow 1 egress (mean 468.28 Mbit/s)
Flow 2 ingress (mean 508.30 Mbit/s) --- Flow 2 egress (mean 417.14 Mbit/s)
Flow 3 ingress (mean 461.81 Mbit/s) --- Flow 3 egress (mean 326.81 Mbit/s)

Flow 1 (95th percentile 65.07 ms)   Flow 2 (95th percentile 64.79 ms)   Flow 3 (95th percentile 60.38 ms)
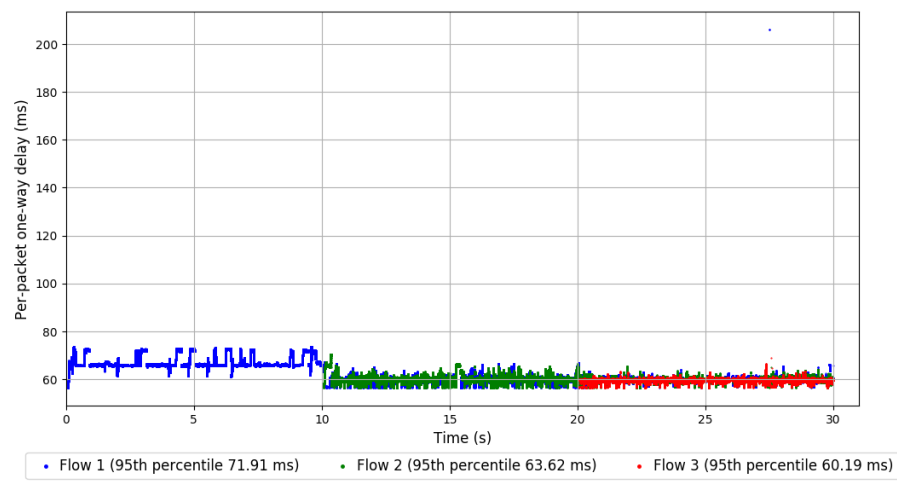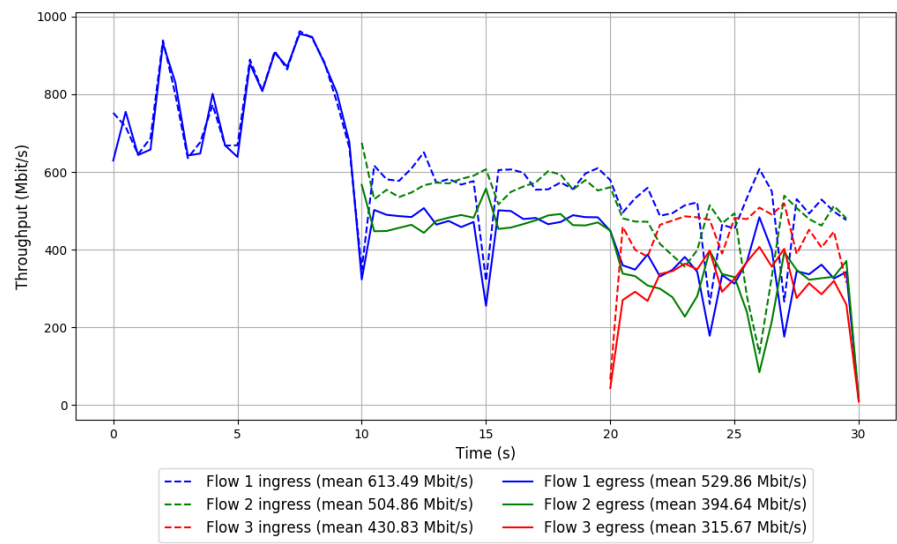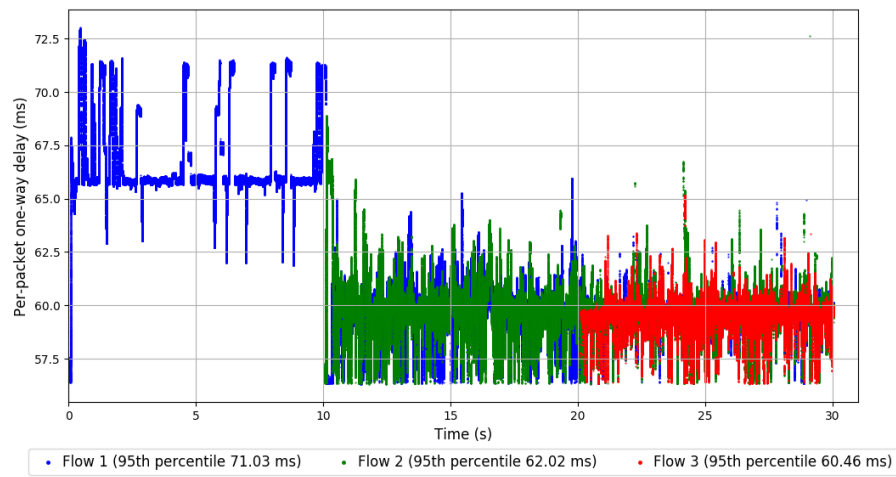
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```
Run 5: Statistics of TCP BBR

Start at: 2017-11-16 12:01:02
End at: 2017-11-16 12:01:32
Local clock offset: 0.007 ms
Remote clock offset: 36.672 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 863.44 Mbit/s
95th percentile per-packet one-way delay: 63.656 ms
Loss rate: 19.38%
-- Flow 1:
Average throughput: 482.41 Mbit/s
95th percentile per-packet one-way delay: 66.046 ms
Loss rate: 14.73%
-- Flow 2:
Average throughput: 401.12 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 23.65%
-- Flow 3:
Average throughput: 343.11 Mbit/s
95th percentile per-packet one-way delay: 60.092 ms
Loss rate: 26.70%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 565.78 Mbit/s)   Flow 1 egress (mean 482.41 Mbit/s)
Flow 2 ingress (mean 525.38 Mbit/s)   Flow 2 egress (mean 401.12 Mbit/s)
Flow 3 ingress (mean 468.00 Mbit/s)   Flow 3 egress (mean 343.11 Mbit/s)

Flow 1 (95th percentile 66.05 ms)   Flow 2 (95th percentile 61.48 ms)   Flow 3 (95th percentile 60.09 ms)
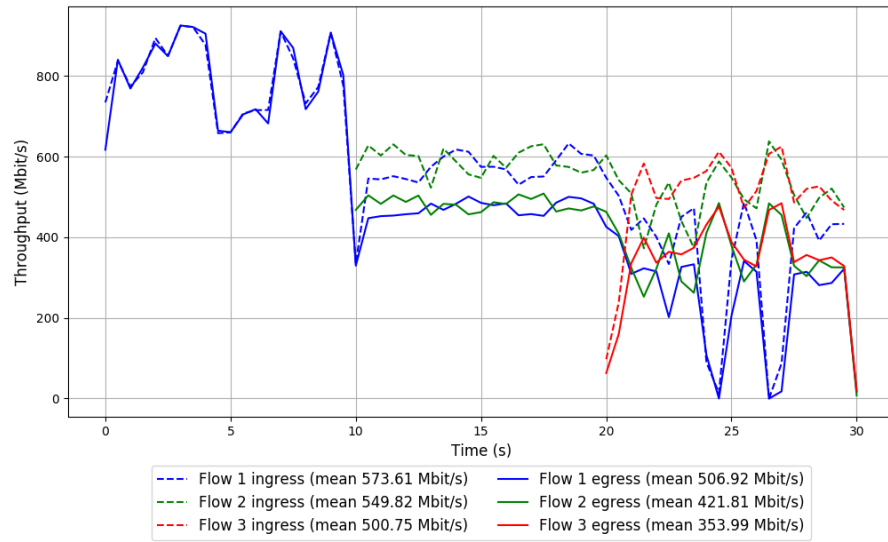
13

```
Run 6: Statistics of TCP BBR

Start at: 2017-11-16 12:20:39
End at: 2017-11-16 12:21:09
Local clock offset: 0.01 ms
Remote clock offset: 36.817 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 897.39 Mbit/s
95th percentile per-packet one-way delay: 68.647 ms
Loss rate: 17.85%
-- Flow 1:
Average throughput: 529.86 Mbit/s
95th percentile per-packet one-way delay: 71.906 ms
Loss rate: 13.61%
-- Flow 2:
Average throughput: 394.64 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 21.82%
-- Flow 3:
Average throughput: 315.67 Mbit/s
95th percentile per-packet one-way delay: 60.185 ms
Loss rate: 26.72%
```
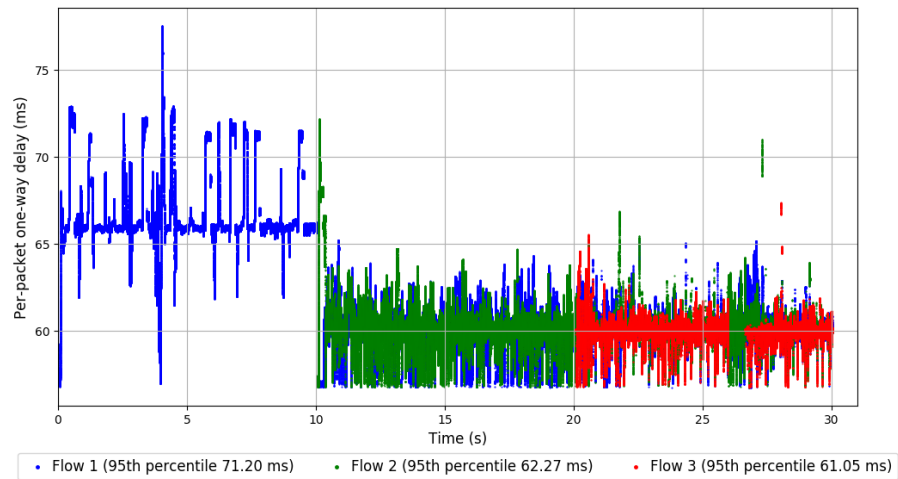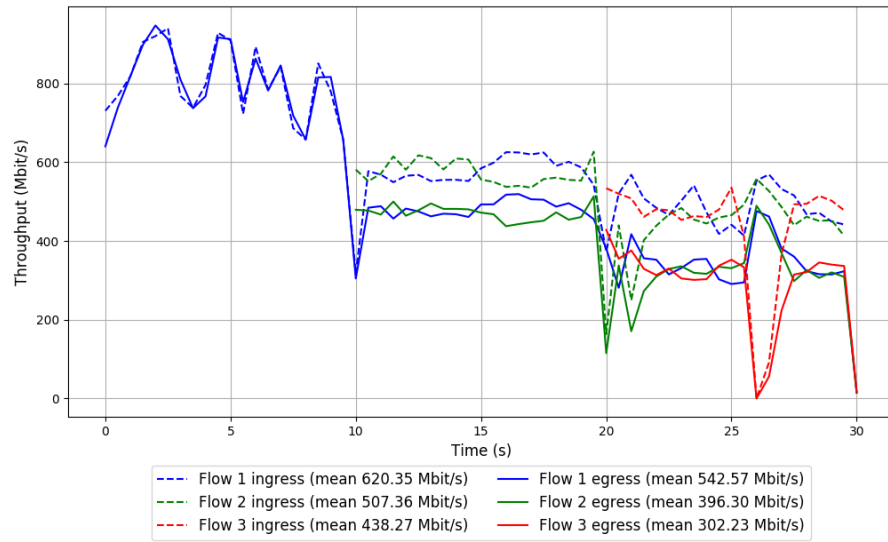
Run 6: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 613.49 Mbit/s) ——— Flow 1 egress (mean 529.86 Mbit/s)
- - - Flow 2 ingress (mean 504.86 Mbit/s) ——— Flow 2 egress (mean 394.64 Mbit/s)
- - - Flow 3 ingress (mean 430.83 Mbit/s) ——— Flow 3 egress (mean 315.67 Mbit/s)

• Flow 1 (95th percentile 71.91 ms)   • Flow 2 (95th percentile 63.62 ms)   • Flow 3 (95th percentile 60.19 ms)
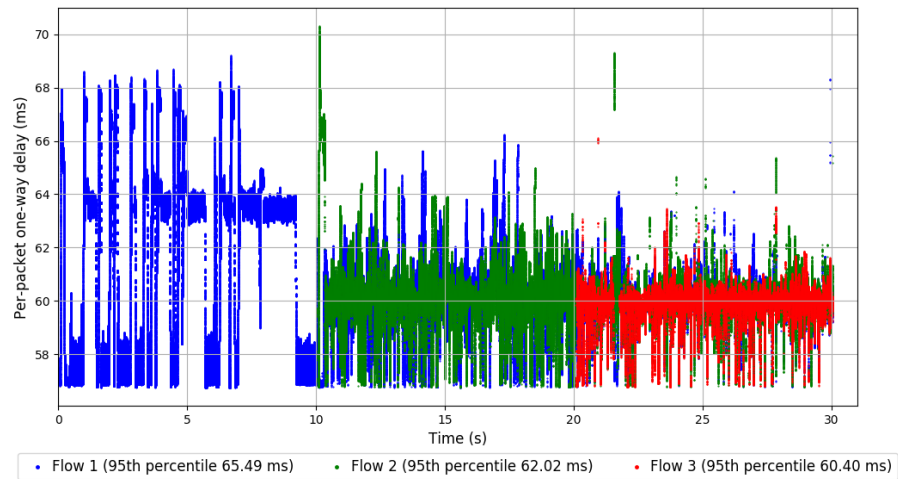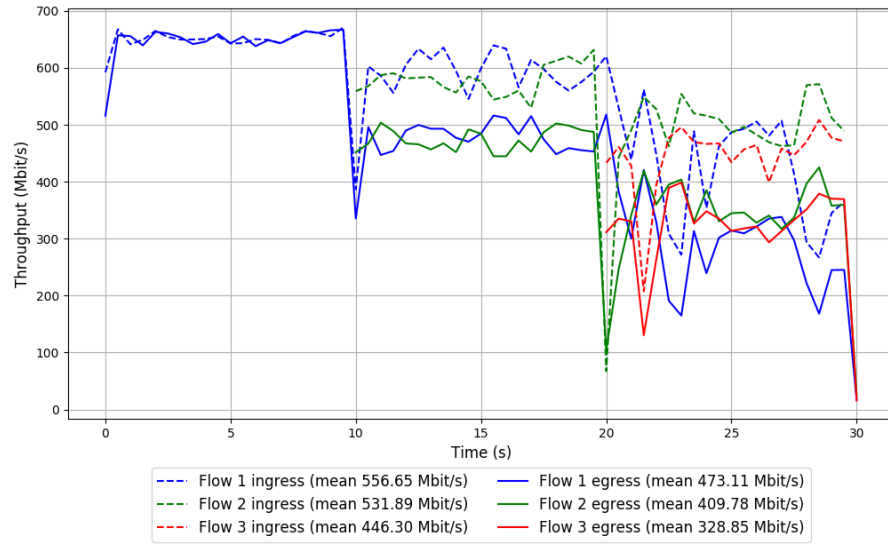
```
Run 7: Statistics of TCP BBR

Start at: 2017-11-16 12:40:24
End at: 2017-11-16 12:40:54
Local clock offset: 0.019 ms
Remote clock offset: 35.916 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.42 Mbit/s
95th percentile per-packet one-way delay: 68.888 ms
Loss rate: 18.13%
-- Flow 1:
Average throughput: 506.92 Mbit/s
95th percentile per-packet one-way delay: 71.032 ms
Loss rate: 11.62%
-- Flow 2:
Average throughput: 421.81 Mbit/s
95th percentile per-packet one-way delay: 62.025 ms
Loss rate: 23.27%
-- Flow 3:
Average throughput: 353.99 Mbit/s
95th percentile per-packet one-way delay: 60.460 ms
Loss rate: 29.30%
```
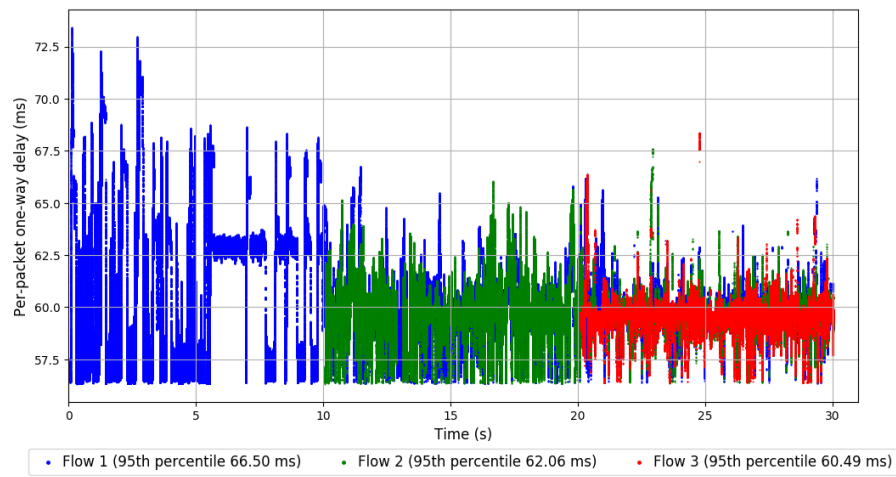
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 573.61 Mbit/s)   Flow 1 egress (mean 506.92 Mbit/s)
Flow 2 ingress (mean 549.82 Mbit/s)   Flow 2 egress (mean 421.81 Mbit/s)
Flow 3 ingress (mean 500.75 Mbit/s)   Flow 3 egress (mean 353.99 Mbit/s)

Flow 1 (95th percentile 71.03 ms)   Flow 2 (95th percentile 62.02 ms)   Flow 3 (95th percentile 60.46 ms)
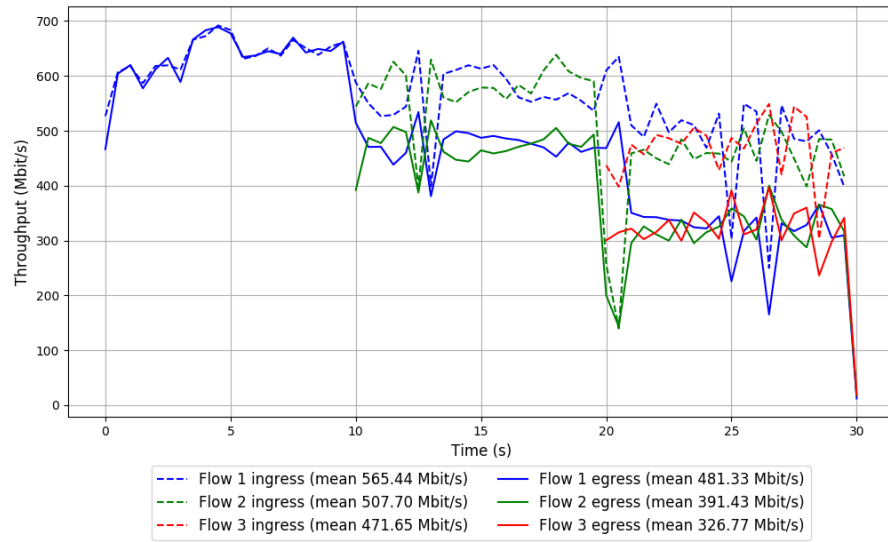
17

```
Run 8: Statistics of TCP BBR

Start at: 2017-11-16 13:00:02
End at: 2017-11-16 13:00:32
Local clock offset: -0.014 ms
Remote clock offset: 37.401 ms


# Below is generated by plot.py at 2017-11-16 15:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 907.01 Mbit/s
95th percentile per-packet one-way delay: 68.200 ms
Loss rate: 17.83%
-- Flow 1:
Average throughput: 542.57 Mbit/s
95th percentile per-packet one-way delay: 71.202 ms
Loss rate: 12.53%
-- Flow 2:
Average throughput: 396.30 Mbit/s
95th percentile per-packet one-way delay: 62.265 ms
Loss rate: 21.88%
-- Flow 3:
Average throughput: 302.23 Mbit/s
95th percentile per-packet one-way delay: 61.053 ms
Loss rate: 31.02%
```
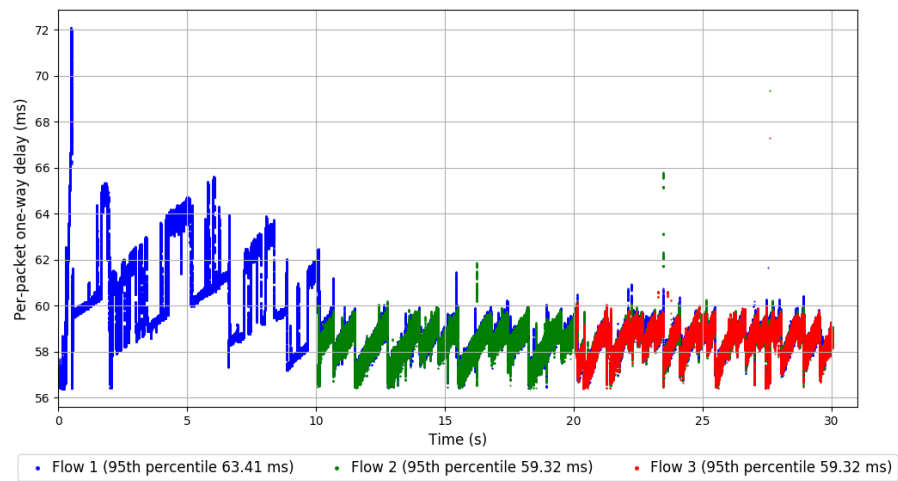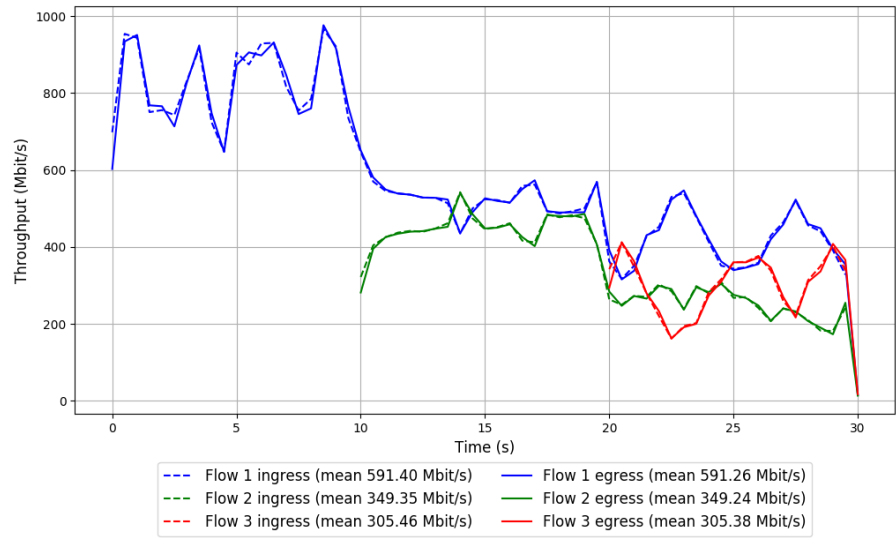
Run 8: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 620.35 Mbit/s) —— Flow 1 egress (mean 542.57 Mbit/s)
- - - Flow 2 ingress (mean 507.36 Mbit/s) —— Flow 2 egress (mean 396.30 Mbit/s)
- - - Flow 3 ingress (mean 438.27 Mbit/s) —— Flow 3 egress (mean 302.23 Mbit/s)

• Flow 1 (95th percentile 71.20 ms)   • Flow 2 (95th percentile 62.27 ms)   • Flow 3 (95th percentile 61.05 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2017-11-16 13:19:47
End at: 2017-11-16 13:20:17
Local clock offset: 0.032 ms
Remote clock offset: 36.719 ms


# Below is generated by plot.py at 2017-11-16 15:59:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.25 Mbit/s
95th percentile per-packet one-way delay: 64.203 ms
Loss rate: 19.24%
-- Flow 1:
Average throughput: 473.11 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 15.00%
-- Flow 2:
Average throughput: 409.78 Mbit/s
95th percentile per-packet one-way delay: 62.018 ms
Loss rate: 22.93%
-- Flow 3:
Average throughput: 328.85 Mbit/s
95th percentile per-packet one-way delay: 60.404 ms
Loss rate: 26.32%
```

Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2017-11-16 13:39:30
End at: 2017-11-16 13:40:00
Local clock offset: 0.06 ms
Remote clock offset: 35.456 ms


# Below is generated by plot.py at 2017-11-16 15:59:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 850.51 Mbit/s
95th percentile per-packet one-way delay: 64.522 ms
Loss rate: 19.77%
-- Flow 1:
Average throughput: 481.33 Mbit/s
95th percentile per-packet one-way delay: 66.504 ms
Loss rate: 14.87%
-- Flow 2:
Average throughput: 391.43 Mbit/s
95th percentile per-packet one-way delay: 62.058 ms
Loss rate: 22.89%
-- Flow 3:
Average throughput: 326.77 Mbit/s
95th percentile per-packet one-way delay: 60.486 ms
Loss rate: 30.71%
```
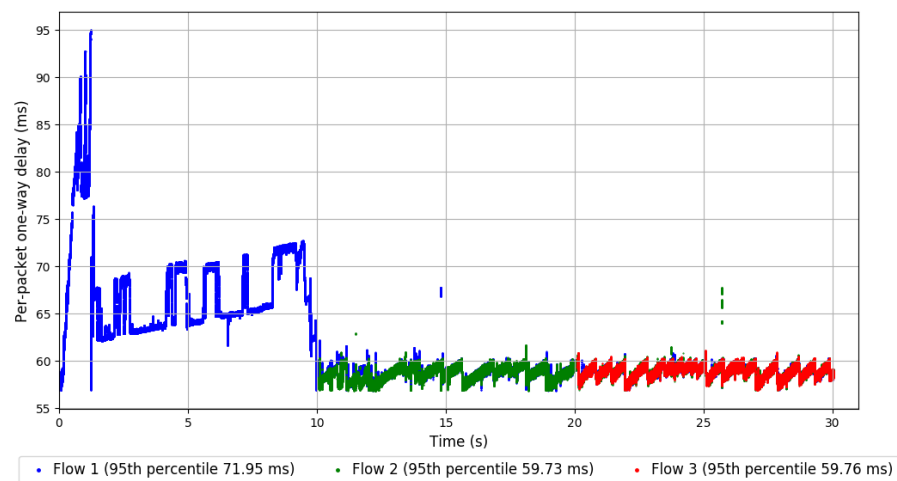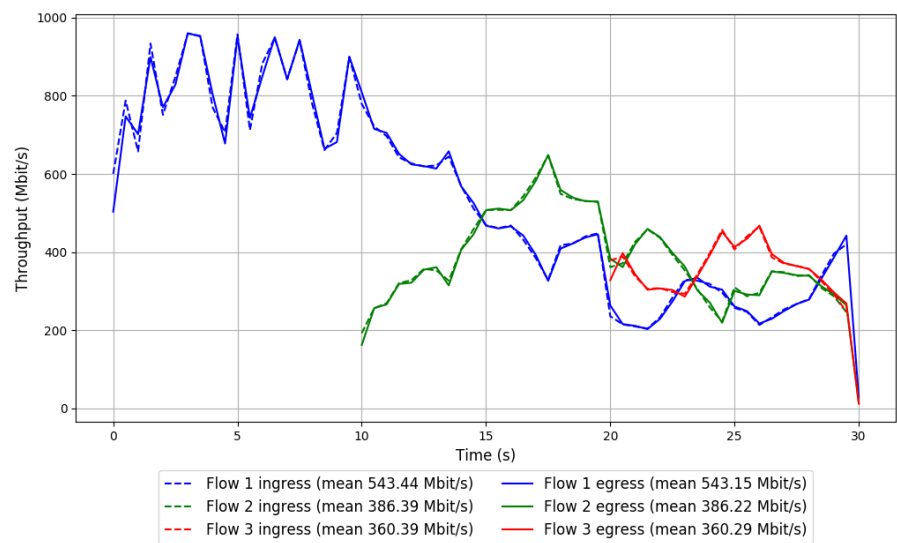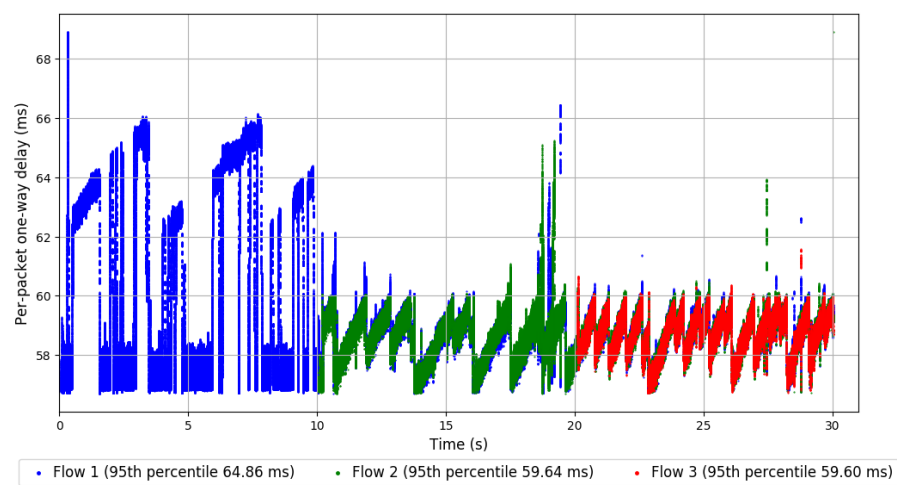
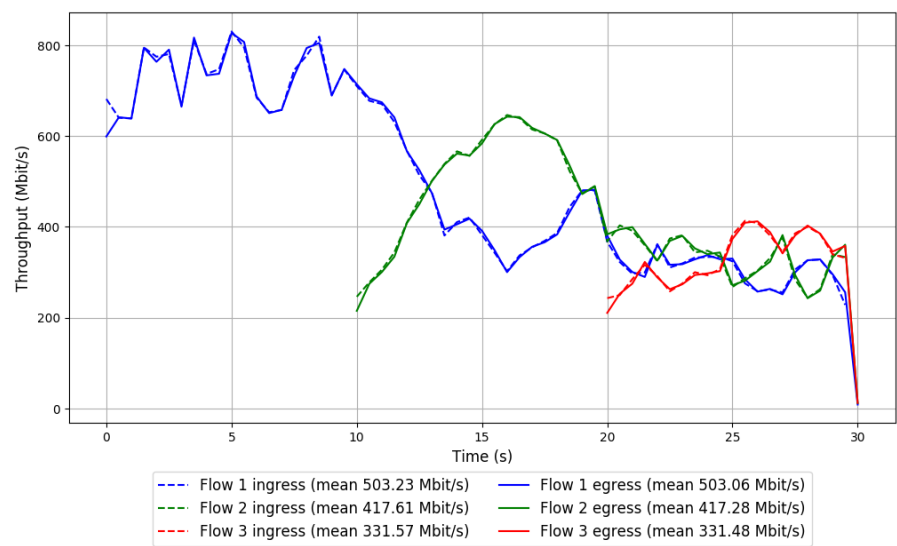Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 10:45:33
End at: 2017-11-16 10:46:03
Local clock offset: -0.208 ms
Remote clock offset: 35.286 ms


# Below is generated by plot.py at 2017-11-16 16:00:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 925.29 Mbit/s
95th percentile per-packet one-way delay: 62.528 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 591.26 Mbit/s
95th percentile per-packet one-way delay: 63.407 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 349.24 Mbit/s
95th percentile per-packet one-way delay: 59.317 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 305.38 Mbit/s
95th percentile per-packet one-way delay: 59.323 ms
Loss rate: 0.02%
```
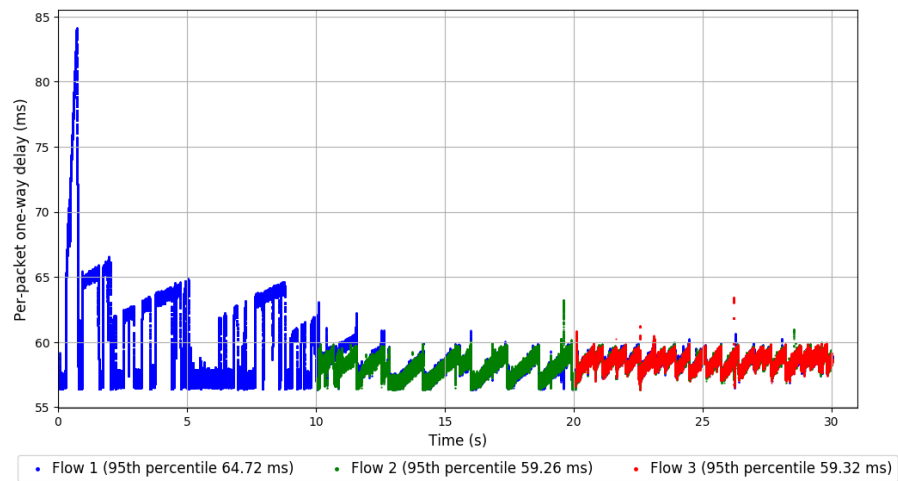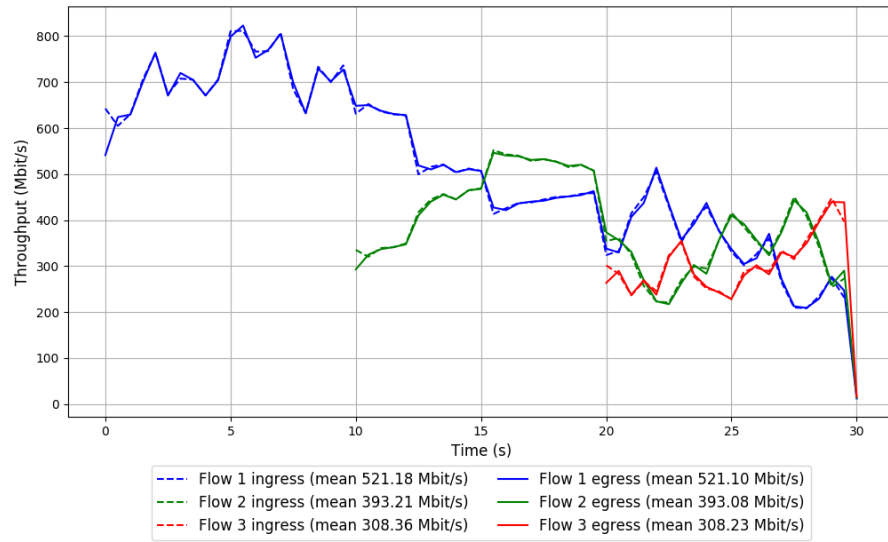
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 591.40 Mbit/s) --- Flow 1 egress (mean 591.26 Mbit/s)
Flow 2 ingress (mean 349.35 Mbit/s) --- Flow 2 egress (mean 349.24 Mbit/s)
Flow 3 ingress (mean 305.46 Mbit/s) --- Flow 3 egress (mean 305.38 Mbit/s)

Flow 1 (95th percentile 63.41 ms) Flow 2 (95th percentile 59.32 ms) Flow 3 (95th percentile 59.32 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 11:05:06
End at: 2017-11-16 11:05:36
Local clock offset: -0.222 ms
Remote clock offset: 34.97 ms


# Below is generated by plot.py at 2017-11-16 16:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 919.89 Mbit/s
95th percentile per-packet one-way delay: 70.802 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 543.15 Mbit/s
95th percentile per-packet one-way delay: 71.948 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 386.22 Mbit/s
95th percentile per-packet one-way delay: 59.725 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 360.29 Mbit/s
95th percentile per-packet one-way delay: 59.757 ms
Loss rate: 0.04%
```
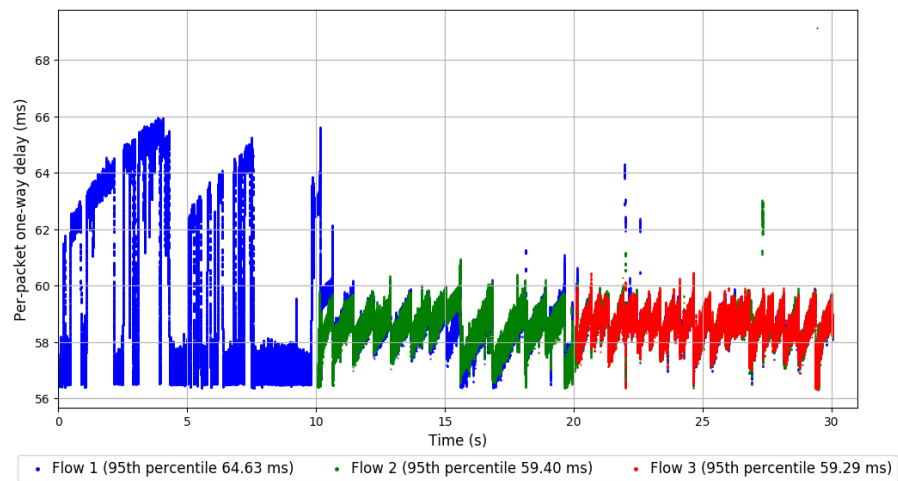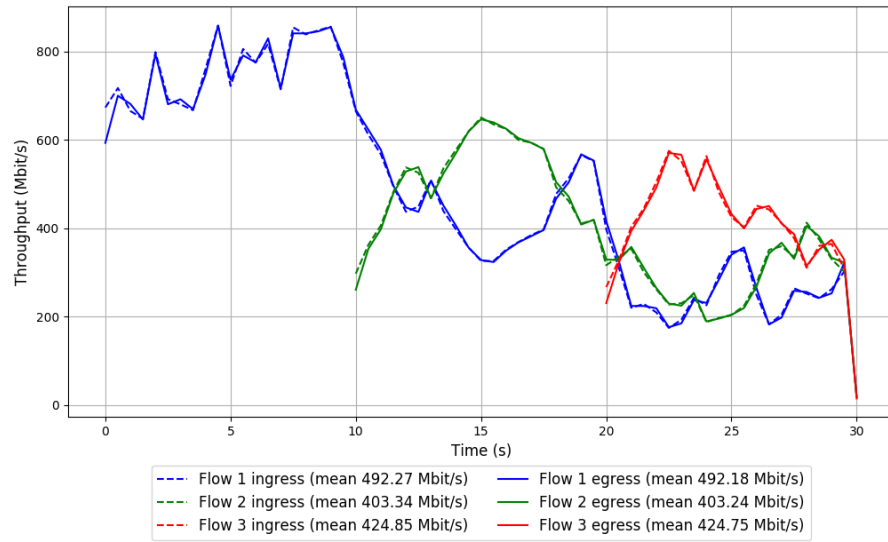
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 11:24:43
End at: 2017-11-16 11:25:13
Local clock offset: -0.126 ms
Remote clock offset: 34.238 ms


# Below is generated by plot.py at 2017-11-16 16:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 890.86 Mbit/s
95th percentile per-packet one-way delay: 64.024 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 503.06 Mbit/s
95th percentile per-packet one-way delay: 64.858 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 417.28 Mbit/s
95th percentile per-packet one-way delay: 59.644 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 331.48 Mbit/s
95th percentile per-packet one-way delay: 59.599 ms
Loss rate: 0.02%
```
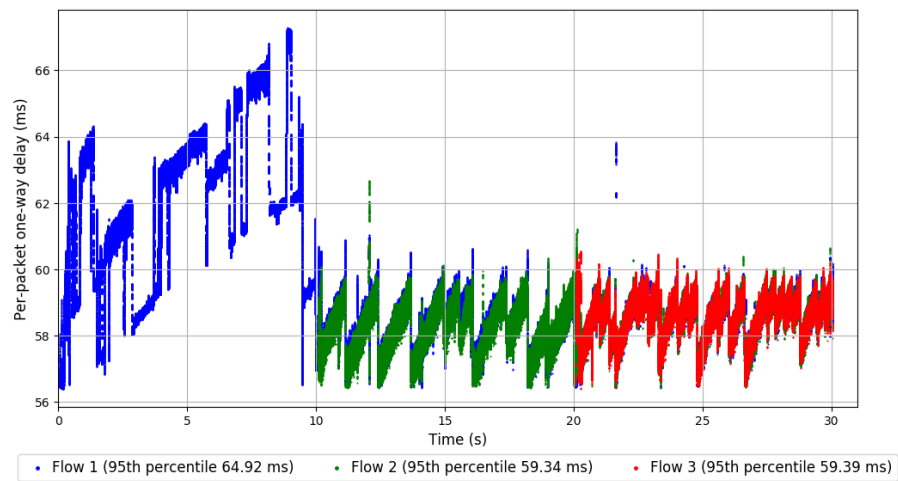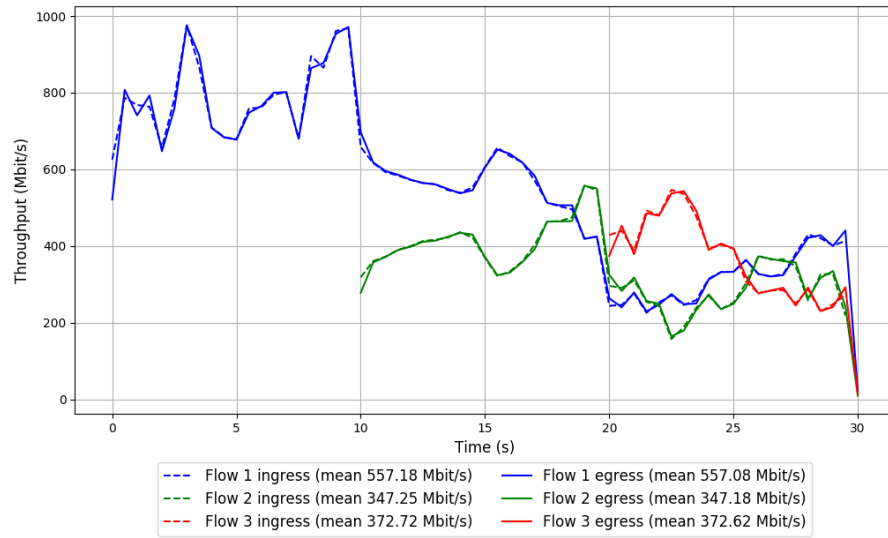
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 503.23 Mbit/s) ---- Flow 1 egress (mean 503.06 Mbit/s) ——
Flow 2 ingress (mean 417.61 Mbit/s) ---- Flow 2 egress (mean 417.28 Mbit/s) ——
Flow 3 ingress (mean 331.57 Mbit/s) ---- Flow 3 egress (mean 331.48 Mbit/s) ——

• Flow 1 (95th percentile 64.86 ms)   • Flow 2 (95th percentile 59.64 ms)   • Flow 3 (95th percentile 59.60 ms)

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```
Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 11:44:30
End at: 2017-11-16 11:45:00
Local clock offset: -0.055 ms
Remote clock offset: 35.049 ms

# Below is generated by plot.py at 2017-11-16 16:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 885.20 Mbit/s
95th percentile per-packet one-way delay: 63.740 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 521.10 Mbit/s
95th percentile per-packet one-way delay: 64.717 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 393.08 Mbit/s
95th percentile per-packet one-way delay: 59.263 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 308.23 Mbit/s
95th percentile per-packet one-way delay: 59.323 ms
Loss rate: 0.02%
```

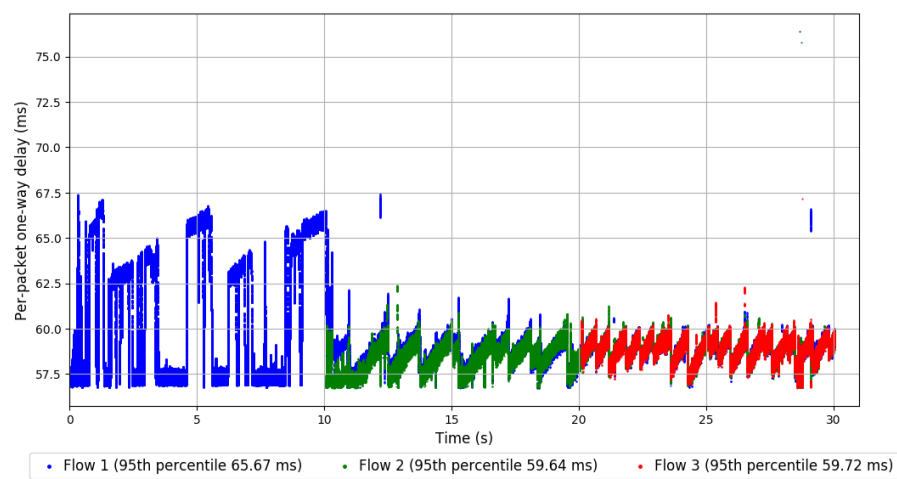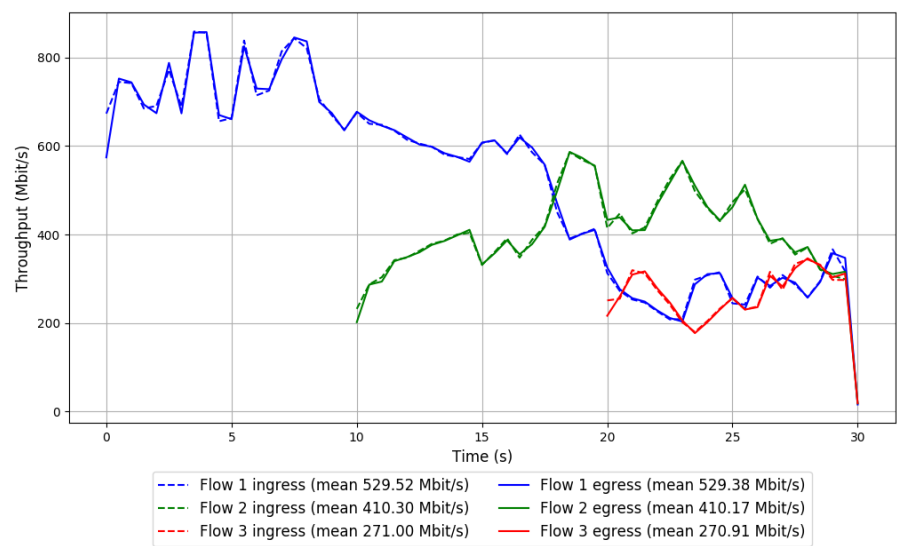Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 12:04:10
End at: 2017-11-16 12:04:40
Local clock offset: -0.091 ms
Remote clock offset: 36.932 ms


# Below is generated by plot.py at 2017-11-16 16:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 901.81 Mbit/s
95th percentile per-packet one-way delay: 63.741 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 492.18 Mbit/s
95th percentile per-packet one-way delay: 64.626 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 403.24 Mbit/s
95th percentile per-packet one-way delay: 59.395 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 424.75 Mbit/s
95th percentile per-packet one-way delay: 59.288 ms
Loss rate: 0.02%
```
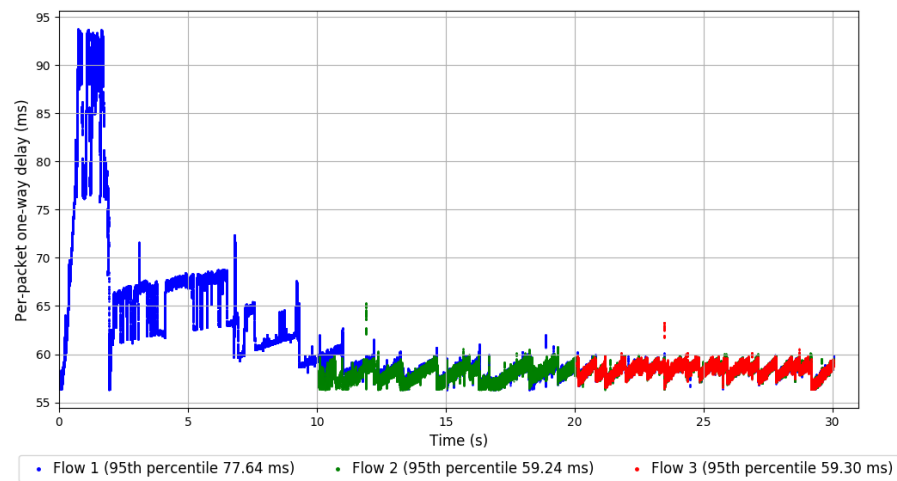
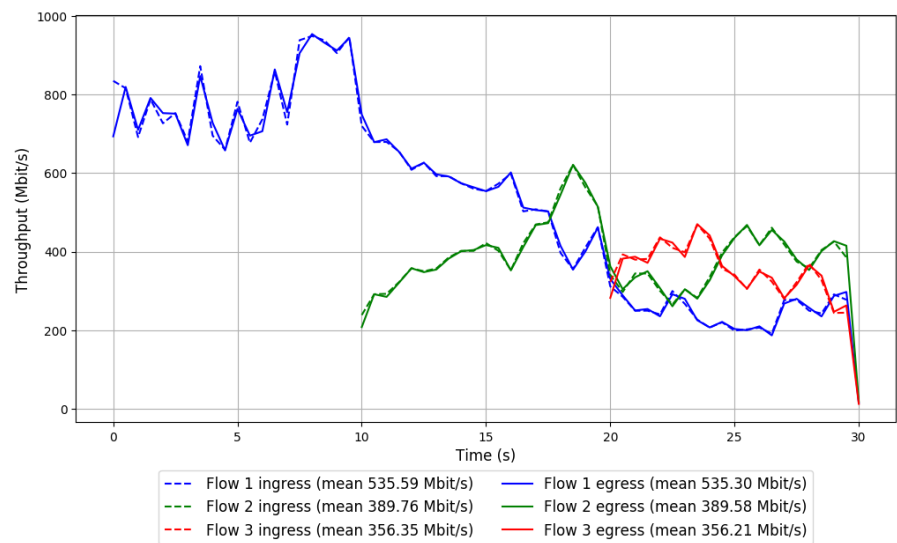Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 12:23:51
End at: 2017-11-16 12:24:21
Local clock offset: -0.006 ms
Remote clock offset: 36.649 ms


# Below is generated by plot.py at 2017-11-16 16:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 912.07 Mbit/s
95th percentile per-packet one-way delay: 63.659 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 557.08 Mbit/s
95th percentile per-packet one-way delay: 64.923 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 347.18 Mbit/s
95th percentile per-packet one-way delay: 59.338 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 372.62 Mbit/s
95th percentile per-packet one-way delay: 59.389 ms
Loss rate: 0.01%
```

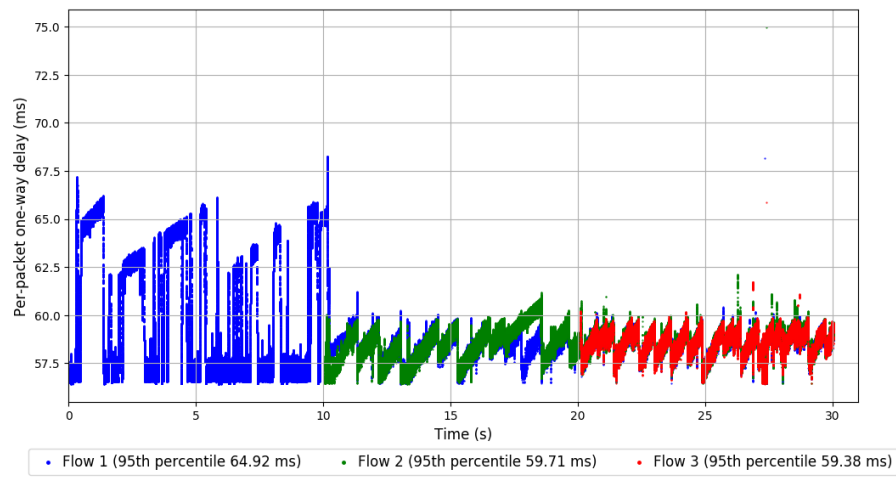Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 12:43:35
End at: 2017-11-16 12:44:05
Local clock offset: 0.022 ms
Remote clock offset: 36.214 ms


# Below is generated by plot.py at 2017-11-16 16:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 892.51 Mbit/s
95th percentile per-packet one-way delay: 65.333 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 529.38 Mbit/s
95th percentile per-packet one-way delay: 65.672 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 410.17 Mbit/s
95th percentile per-packet one-way delay: 59.642 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 270.91 Mbit/s
95th percentile per-packet one-way delay: 59.719 ms
Loss rate: 0.02%
```
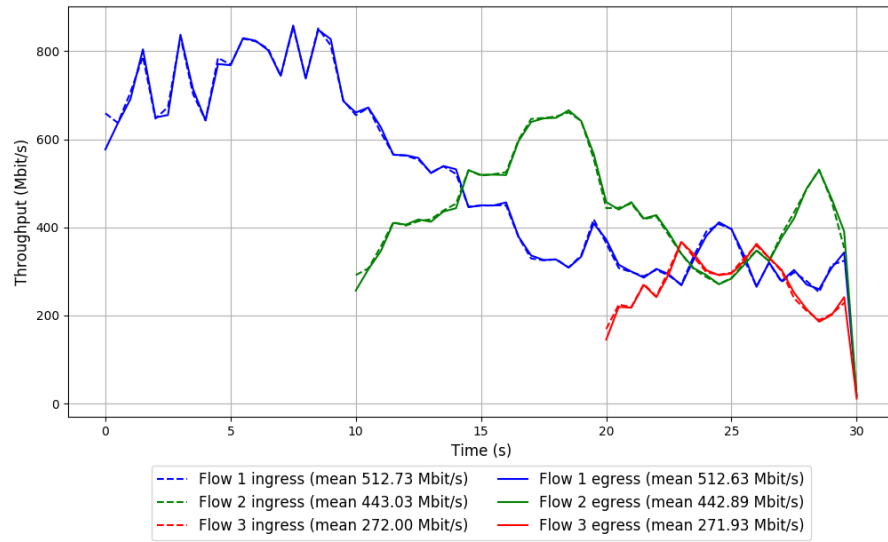
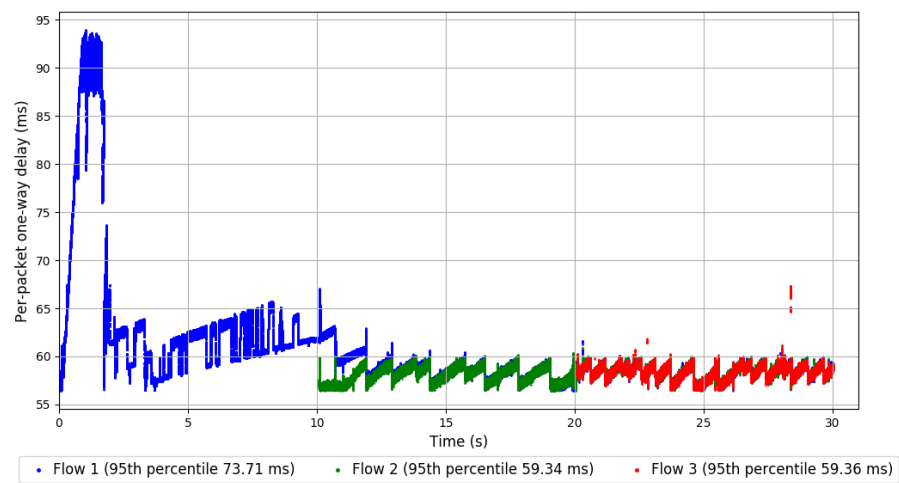Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 13:03:14
End at: 2017-11-16 13:03:44
Local clock offset: 0.051 ms
Remote clock offset: 36.998 ms


# Below is generated by plot.py at 2017-11-16 16:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 913.10 Mbit/s
95th percentile per-packet one-way delay: 68.120 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 535.30 Mbit/s
95th percentile per-packet one-way delay: 77.638 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 389.58 Mbit/s
95th percentile per-packet one-way delay: 59.245 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 356.21 Mbit/s
95th percentile per-packet one-way delay: 59.297 ms
Loss rate: 0.03%
```

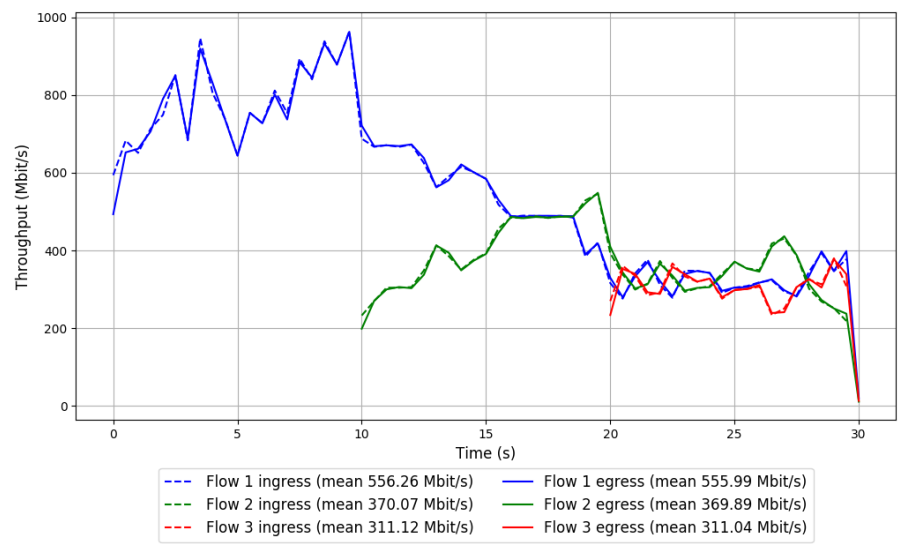Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 13:22:56
End at: 2017-11-16 13:23:26
Local clock offset: 0.067 ms
Remote clock offset: 36.281 ms


# Below is generated by plot.py at 2017-11-16 16:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 897.93 Mbit/s
95th percentile per-packet one-way delay: 64.312 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 512.63 Mbit/s
95th percentile per-packet one-way delay: 64.925 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 442.89 Mbit/s
95th percentile per-packet one-way delay: 59.712 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 271.93 Mbit/s
95th percentile per-packet one-way delay: 59.375 ms
Loss rate: 0.02%
```
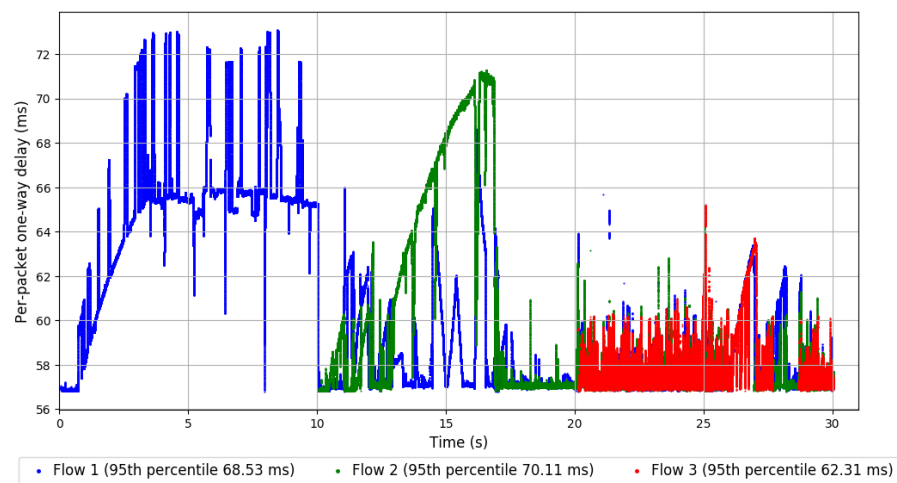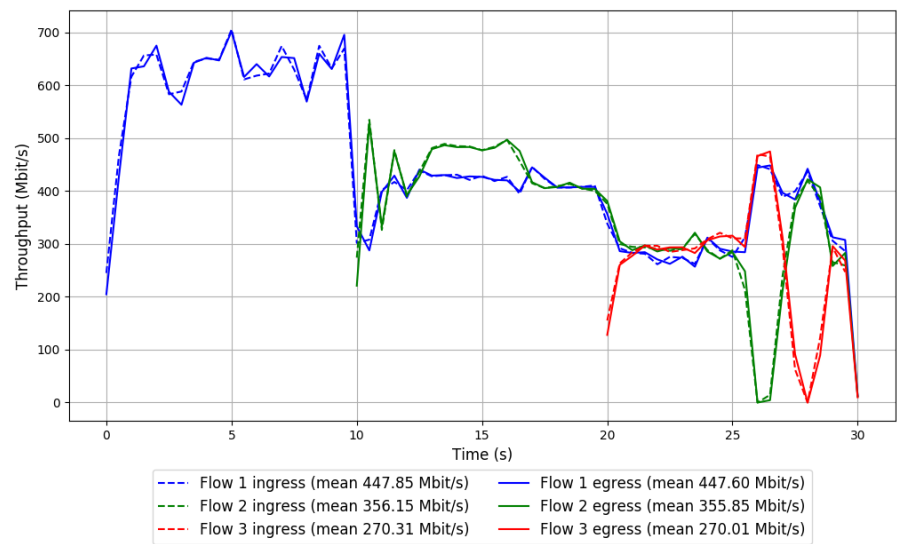
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 512.73 Mbit/s)   Flow 1 egress (mean 512.63 Mbit/s)
Flow 2 ingress (mean 443.03 Mbit/s)   Flow 2 egress (mean 442.89 Mbit/s)
Flow 3 ingress (mean 272.00 Mbit/s)   Flow 3 egress (mean 271.93 Mbit/s)

Flow 1 (95th percentile 64.92 ms)   Flow 2 (95th percentile 59.71 ms)   Flow 3 (95th percentile 59.38 ms)

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```
Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 13:42:35
End at: 2017-11-16 13:43:05
Local clock offset: 0.002 ms
Remote clock offset: 35.198 ms


# Below is generated by plot.py at 2017-11-16 16:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.57 Mbit/s
95th percentile per-packet one-way delay: 64.222 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 555.99 Mbit/s
95th percentile per-packet one-way delay: 73.710 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 369.89 Mbit/s
95th percentile per-packet one-way delay: 59.343 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 311.04 Mbit/s
95th percentile per-packet one-way delay: 59.359 ms
Loss rate: 0.02%
```
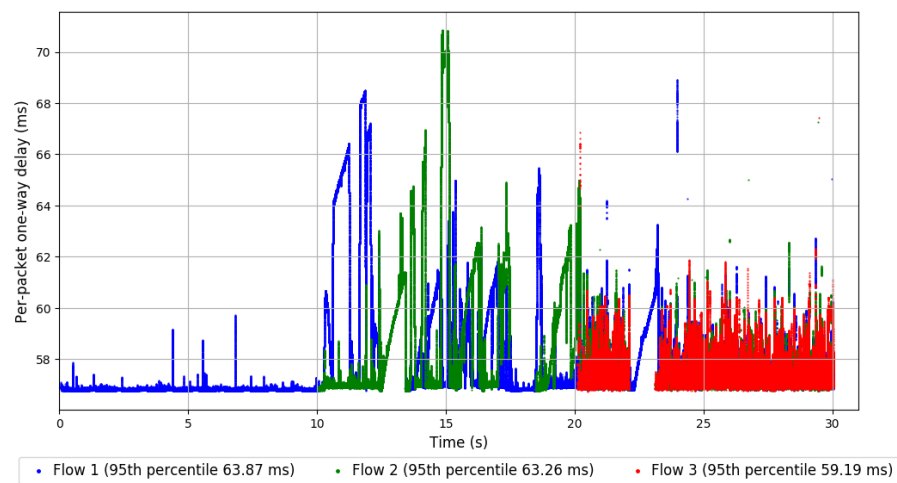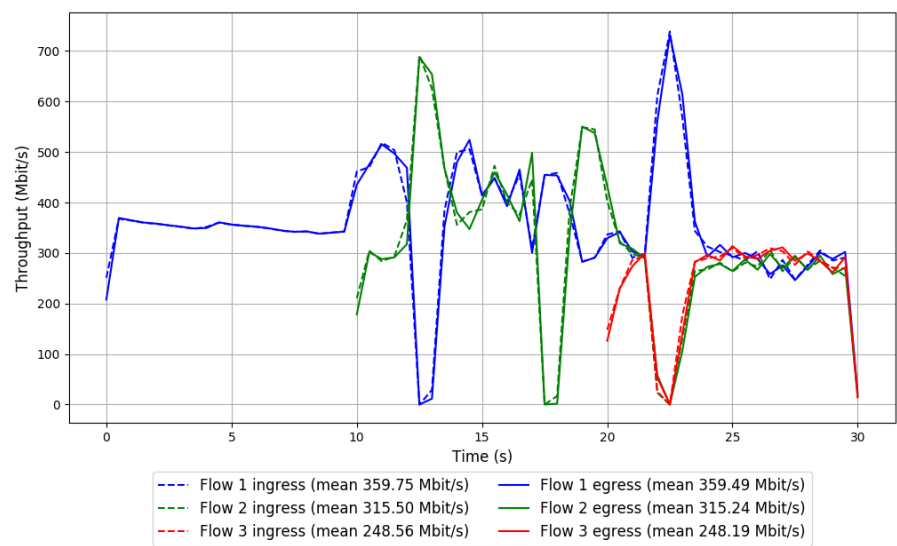
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 10:40:38
End at: 2017-11-16 10:41:08
Local clock offset: -0.3 ms
Remote clock offset: 35.791 ms

# Below is generated by plot.py at 2017-11-16 16:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 774.06 Mbit/s
95th percentile per-packet one-way delay: 69.416 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 447.60 Mbit/s
95th percentile per-packet one-way delay: 68.530 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 355.85 Mbit/s
95th percentile per-packet one-way delay: 70.105 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 270.01 Mbit/s
95th percentile per-packet one-way delay: 62.310 ms
Loss rate: 0.11%
```
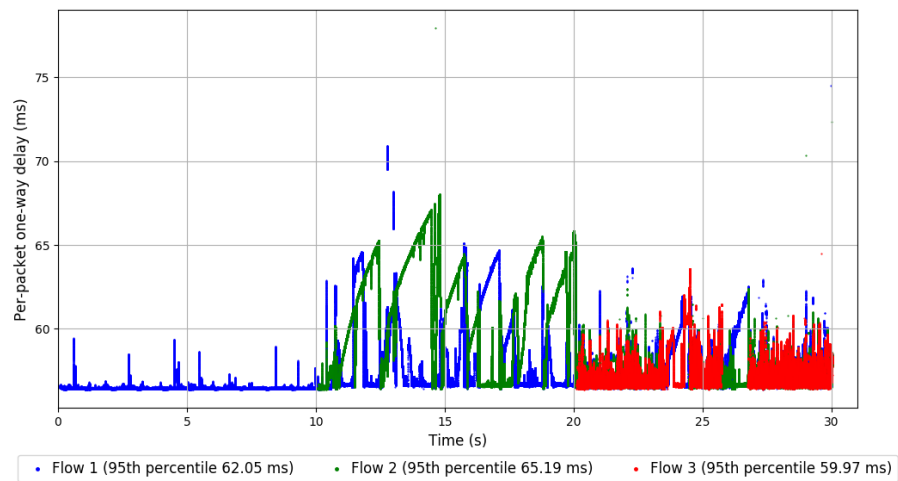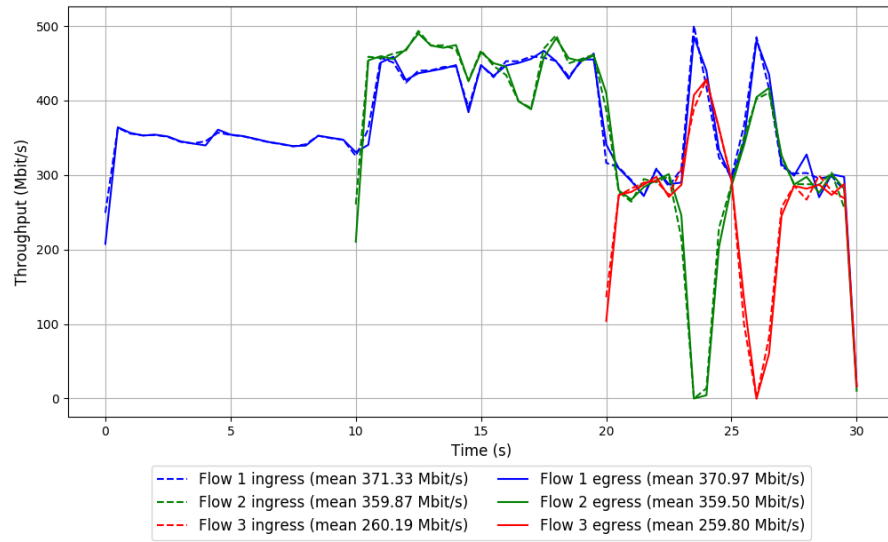
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-11-16 11:00:18
End at: 2017-11-16 11:00:48
Local clock offset: -0.254 ms
Remote clock offset: 35.089 ms


# Below is generated by plot.py at 2017-11-16 16:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 651.86 Mbit/s
95th percentile per-packet one-way delay: 62.735 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 359.49 Mbit/s
95th percentile per-packet one-way delay: 63.872 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 315.24 Mbit/s
95th percentile per-packet one-way delay: 63.263 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 248.19 Mbit/s
95th percentile per-packet one-way delay: 59.190 ms
Loss rate: 0.15%
```

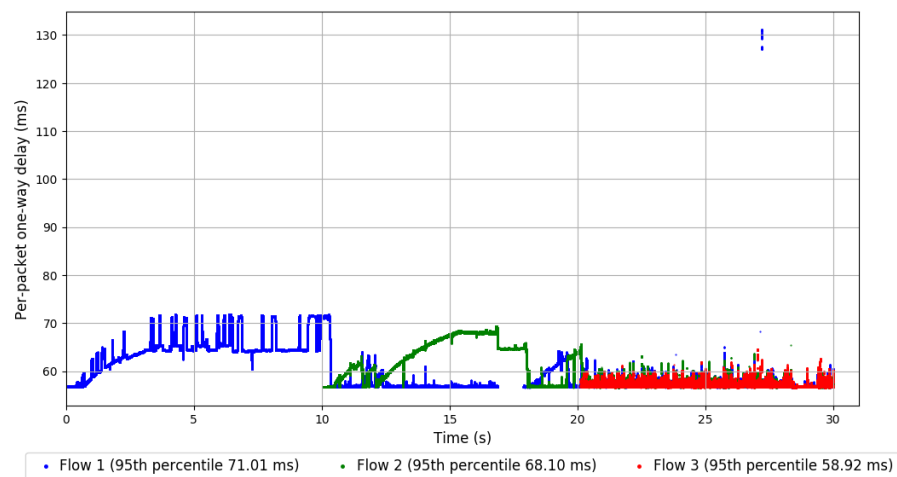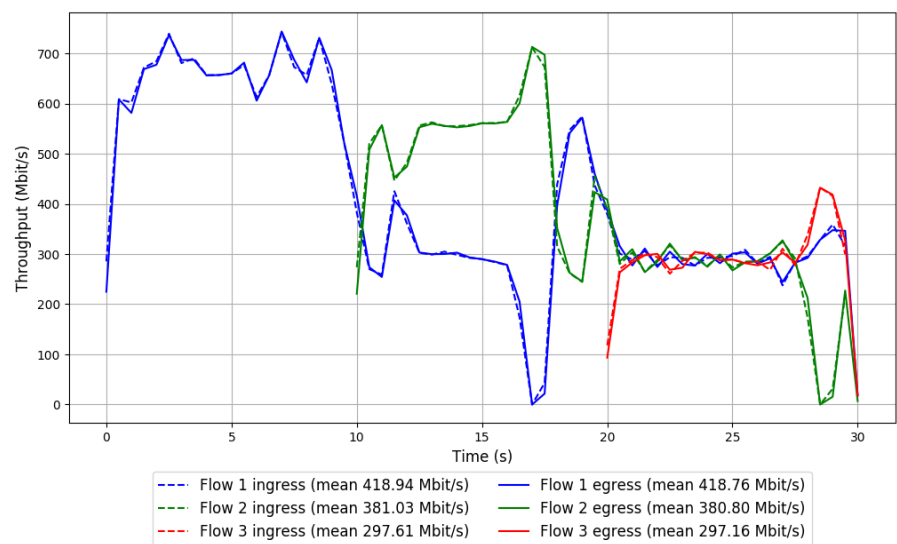# Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-11-16 11:19:49
End at: 2017-11-16 11:20:19
Local clock offset: -0.106 ms
Remote clock offset: 34.083 ms

# Below is generated by plot.py at 2017-11-16 16:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 696.52 Mbit/s
95th percentile per-packet one-way delay: 64.134 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 370.97 Mbit/s
95th percentile per-packet one-way delay: 62.053 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 359.50 Mbit/s
95th percentile per-packet one-way delay: 65.195 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 259.80 Mbit/s
95th percentile per-packet one-way delay: 59.970 ms
Loss rate: 0.14%
```
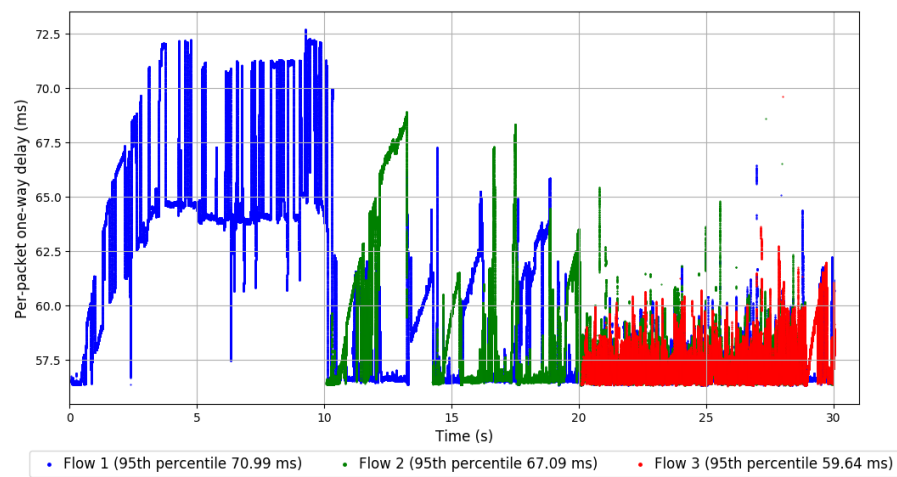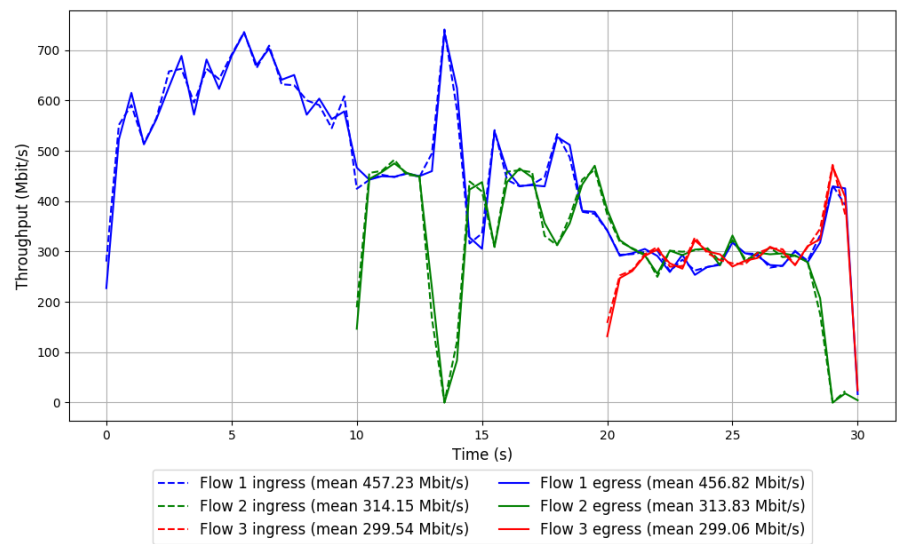
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 371.33 Mbit/s)   Flow 1 egress (mean 370.97 Mbit/s)
Flow 2 ingress (mean 359.87 Mbit/s)   Flow 2 egress (mean 359.50 Mbit/s)
Flow 3 ingress (mean 260.19 Mbit/s)   Flow 3 egress (mean 259.80 Mbit/s)

Flow 1 (95th percentile 62.05 ms)   Flow 2 (95th percentile 65.19 ms)   Flow 3 (95th percentile 59.97 ms)

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```
Run 4: Statistics of LEDBAT

Start at: 2017-11-16 11:39:35
End at: 2017-11-16 11:40:05
Local clock offset: -0.064 ms
Remote clock offset: 34.744 ms


# Below is generated by plot.py at 2017-11-16 16:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 770.87 Mbit/s
95th percentile per-packet one-way delay: 68.124 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 418.76 Mbit/s
95th percentile per-packet one-way delay: 71.013 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 380.80 Mbit/s
95th percentile per-packet one-way delay: 68.096 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 297.16 Mbit/s
95th percentile per-packet one-way delay: 58.923 ms
Loss rate: 0.13%
```
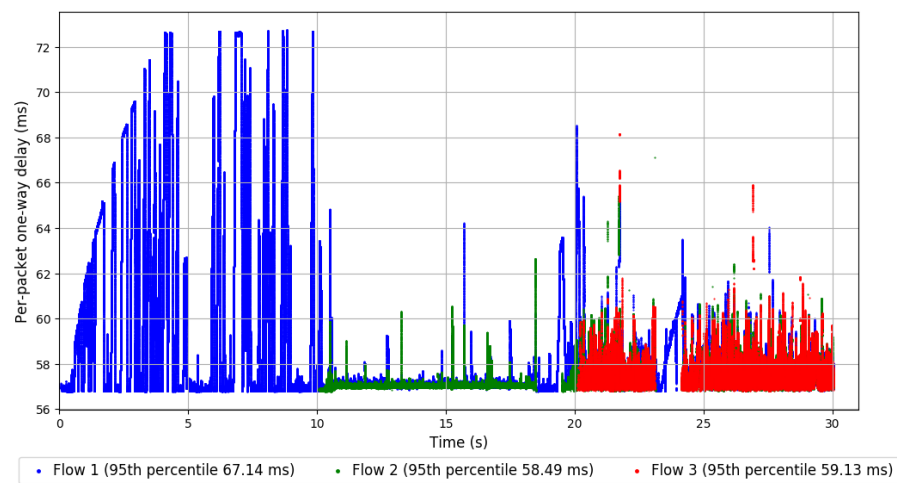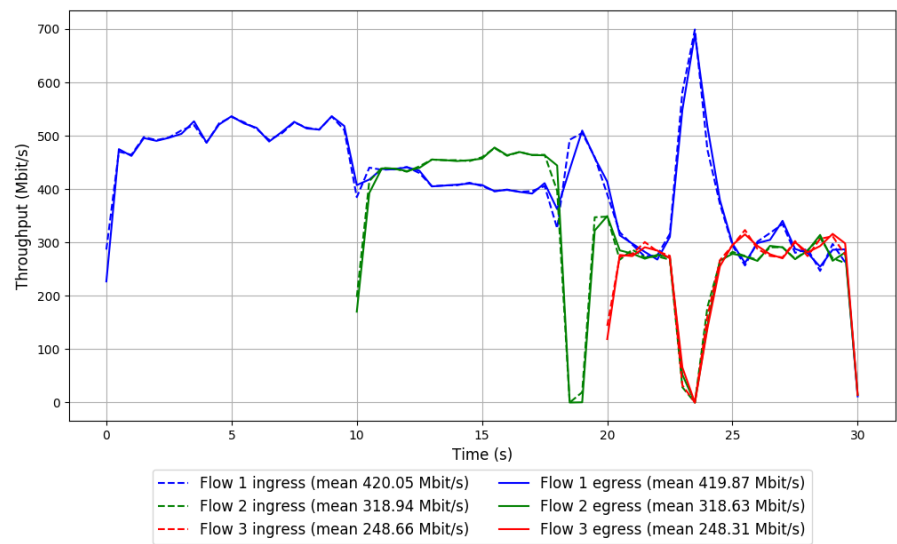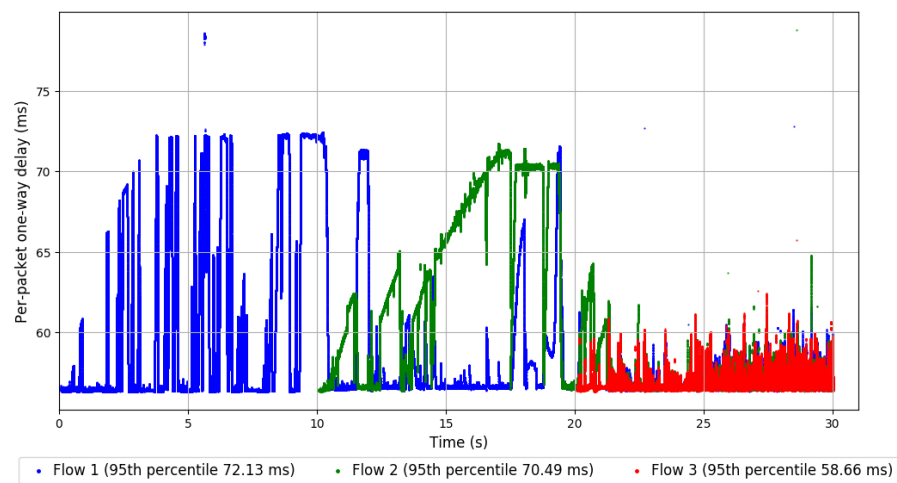
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 418.94 Mbit/s) --- Flow 1 egress (mean 418.76 Mbit/s)
Flow 2 ingress (mean 381.03 Mbit/s) --- Flow 2 egress (mean 380.80 Mbit/s)
Flow 3 ingress (mean 297.61 Mbit/s) --- Flow 3 egress (mean 297.16 Mbit/s)

Flow 1 (95th percentile 71.01 ms) • Flow 2 (95th percentile 68.10 ms) • Flow 3 (95th percentile 58.92 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-11-16 11:59:17
End at: 2017-11-16 11:59:47
Local clock offset: 0.001 ms
Remote clock offset: 36.588 ms


# Below is generated by plot.py at 2017-11-16 16:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 765.01 Mbit/s
95th percentile per-packet one-way delay: 68.051 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 456.82 Mbit/s
95th percentile per-packet one-way delay: 70.986 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 313.83 Mbit/s
95th percentile per-packet one-way delay: 67.095 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 299.06 Mbit/s
95th percentile per-packet one-way delay: 59.636 ms
Loss rate: 0.13%
```
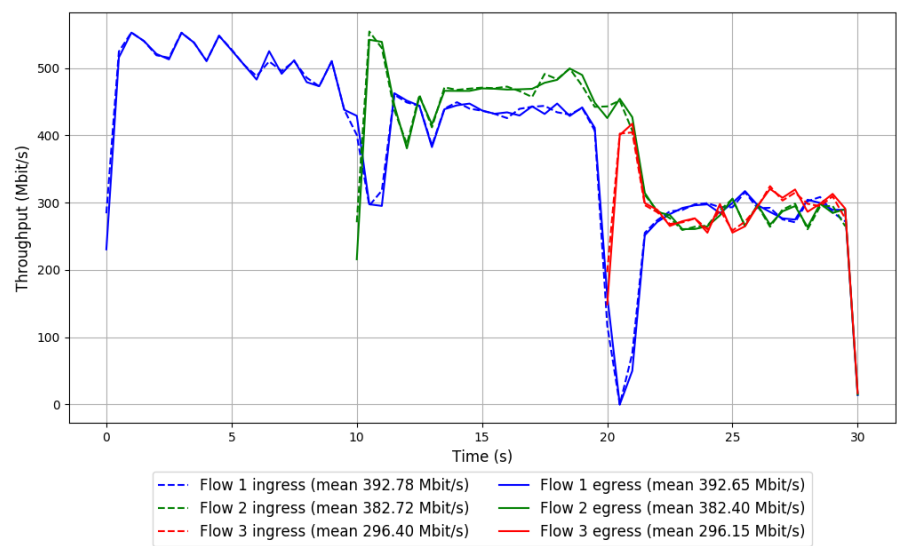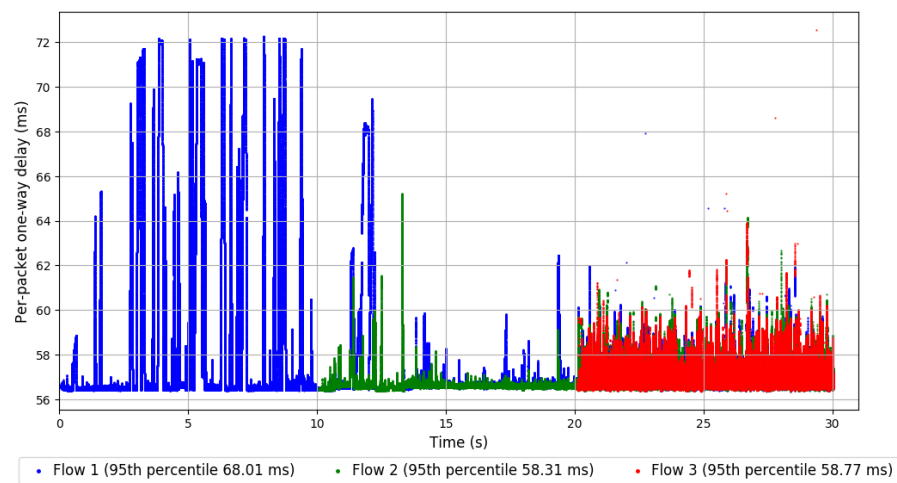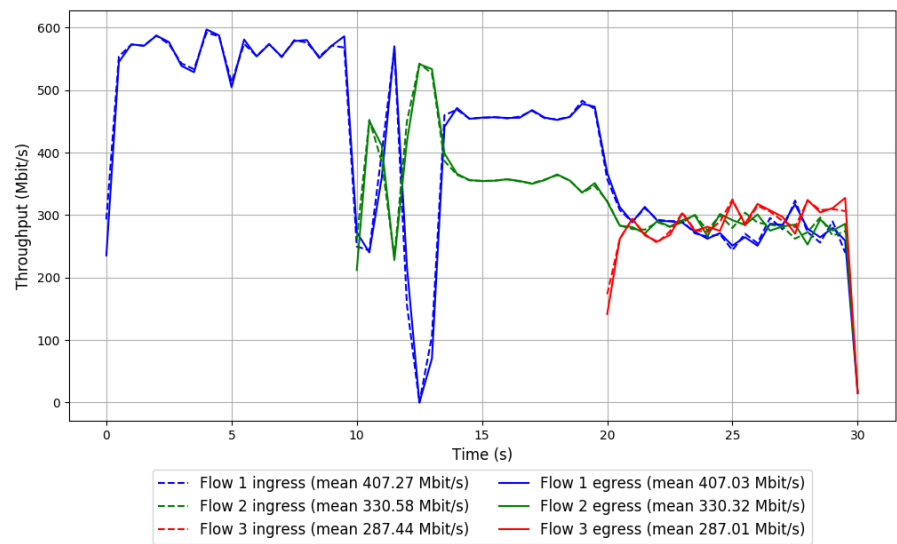
Run 5: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 457.23 Mbit/s) ——— Flow 1 egress (mean 456.82 Mbit/s)
- - - - Flow 2 ingress (mean 314.15 Mbit/s) ——— Flow 2 egress (mean 313.83 Mbit/s)
- - - - Flow 3 ingress (mean 299.54 Mbit/s) ——— Flow 3 egress (mean 299.06 Mbit/s)

• Flow 1 (95th percentile 70.99 ms)   • Flow 2 (95th percentile 67.09 ms)   • Flow 3 (95th percentile 59.64 ms)
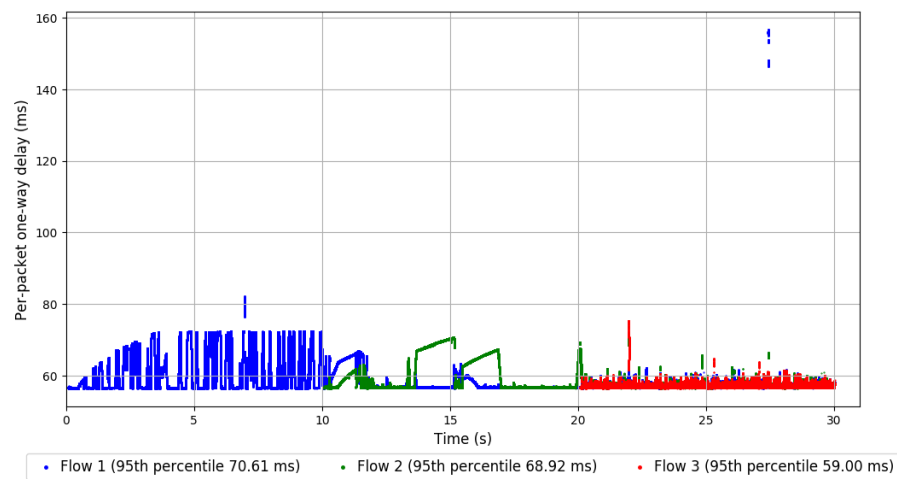
```
Run 6: Statistics of LEDBAT

Start at: 2017-11-16 12:18:57
End at: 2017-11-16 12:19:27
Local clock offset: -0.042 ms
Remote clock offset: 37.23 ms

# Below is generated by plot.py at 2017-11-16 16:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 714.35 Mbit/s
95th percentile per-packet one-way delay: 64.304 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 419.87 Mbit/s
95th percentile per-packet one-way delay: 67.138 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 318.63 Mbit/s
95th percentile per-packet one-way delay: 58.494 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 248.31 Mbit/s
95th percentile per-packet one-way delay: 59.131 ms
Loss rate: 0.14%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 420.05 Mbit/s)   Flow 1 egress (mean 419.87 Mbit/s)
Flow 2 ingress (mean 318.94 Mbit/s)   Flow 2 egress (mean 318.63 Mbit/s)
Flow 3 ingress (mean 248.66 Mbit/s)   Flow 3 egress (mean 248.31 Mbit/s)

Flow 1 (95th percentile 67.14 ms)   Flow 2 (95th percentile 58.49 ms)   Flow 3 (95th percentile 59.13 ms)
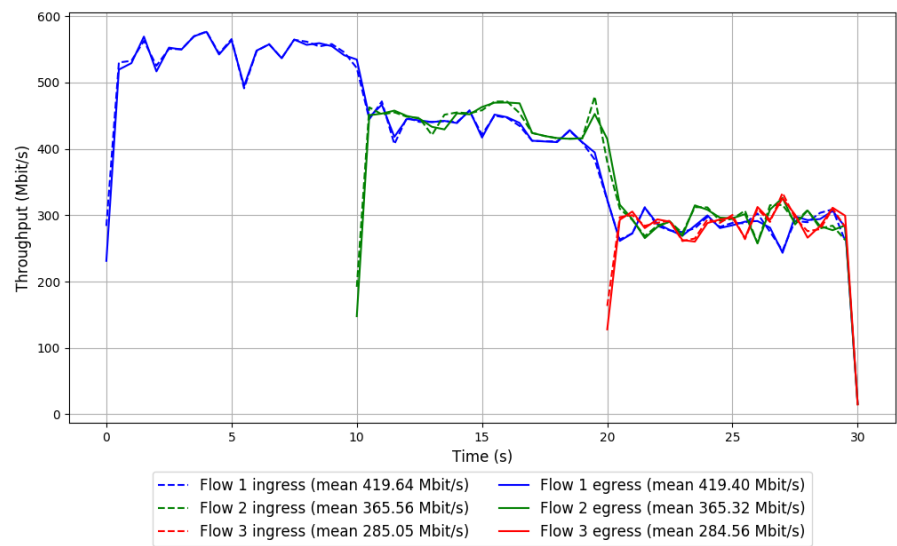
```
Run 7: Statistics of LEDBAT

Start at: 2017-11-16 12:38:40
End at: 2017-11-16 12:39:10
Local clock offset: 0.025 ms
Remote clock offset: 35.983 ms

# Below is generated by plot.py at 2017-11-16 16:21:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.67 Mbit/s
95th percentile per-packet one-way delay: 71.093 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 392.65 Mbit/s
95th percentile per-packet one-way delay: 72.129 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 382.40 Mbit/s
95th percentile per-packet one-way delay: 70.490 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 296.15 Mbit/s
95th percentile per-packet one-way delay: 58.660 ms
Loss rate: 0.08%
```
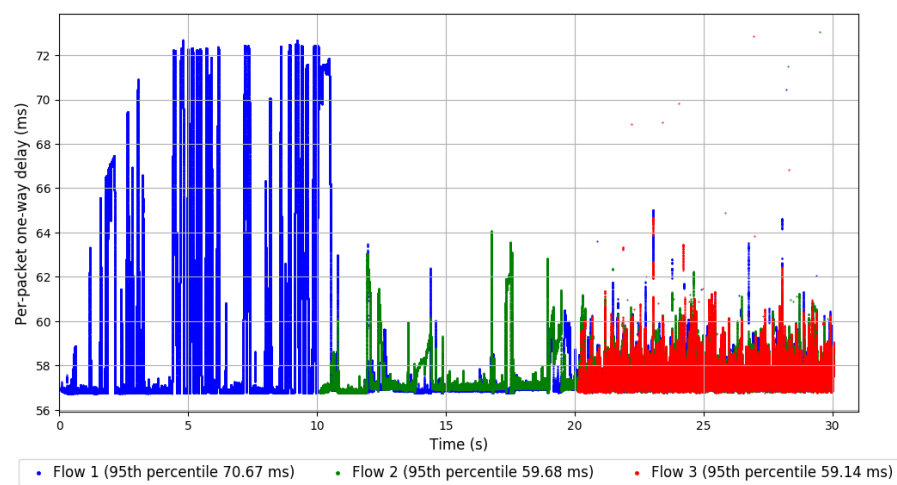
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2017-11-16 12:58:20
End at: 2017-11-16 12:58:50
Local clock offset: 0.024 ms
Remote clock offset: 36.954 ms


# Below is generated by plot.py at 2017-11-16 16:22:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 722.27 Mbit/s
95th percentile per-packet one-way delay: 63.085 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 407.03 Mbit/s
95th percentile per-packet one-way delay: 68.012 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 330.32 Mbit/s
95th percentile per-packet one-way delay: 58.309 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 287.01 Mbit/s
95th percentile per-packet one-way delay: 58.773 ms
Loss rate: 0.15%
```
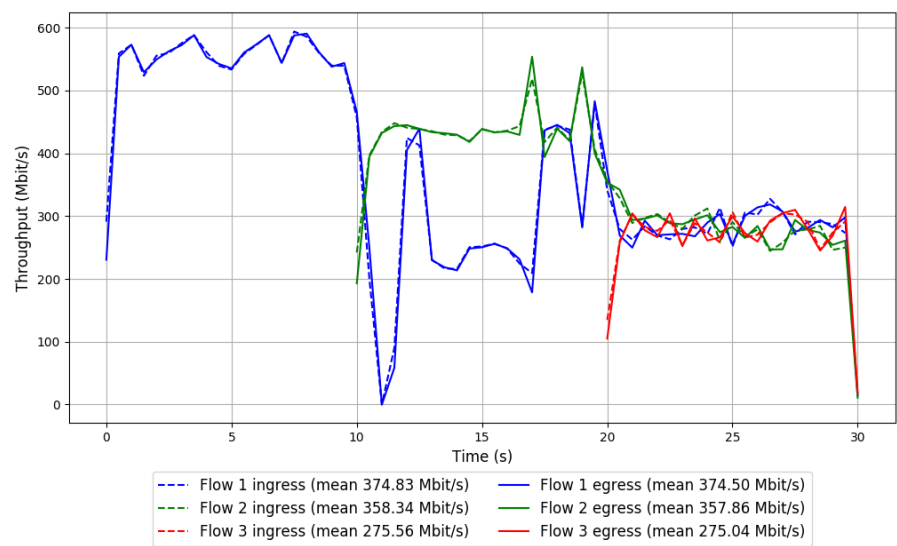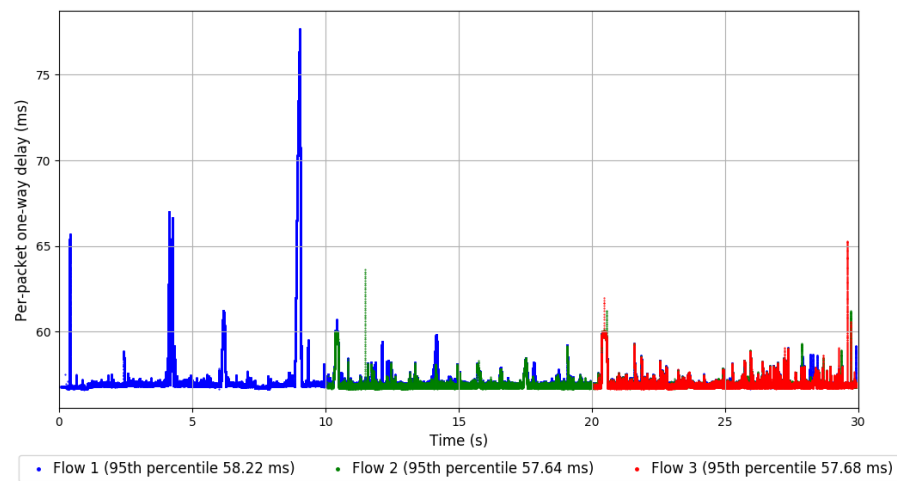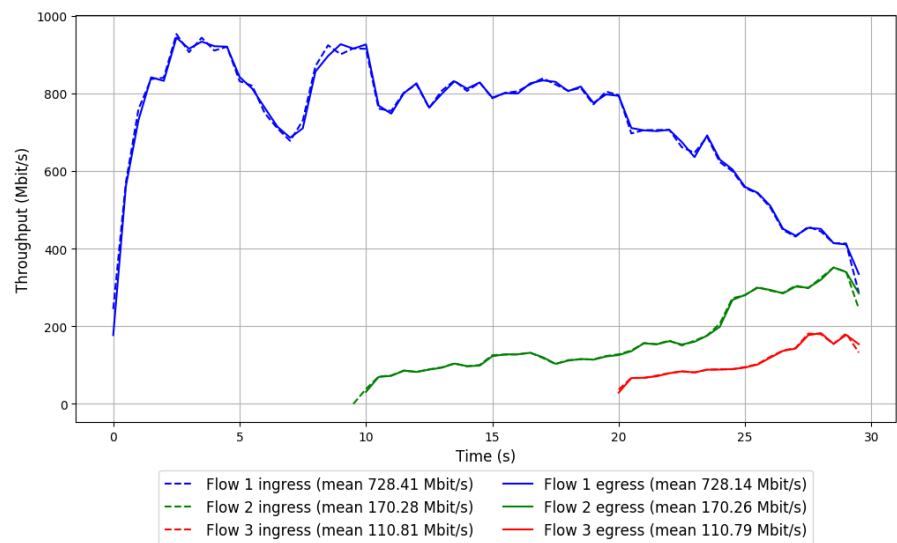
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 407.27 Mbit/s) --- Flow 1 egress (mean 407.03 Mbit/s)
Flow 2 ingress (mean 330.58 Mbit/s) --- Flow 2 egress (mean 330.32 Mbit/s)
Flow 3 ingress (mean 287.44 Mbit/s) --- Flow 3 egress (mean 287.01 Mbit/s)

Flow 1 (95th percentile 68.01 ms)   Flow 2 (95th percentile 58.31 ms)   Flow 3 (95th percentile 58.77 ms)
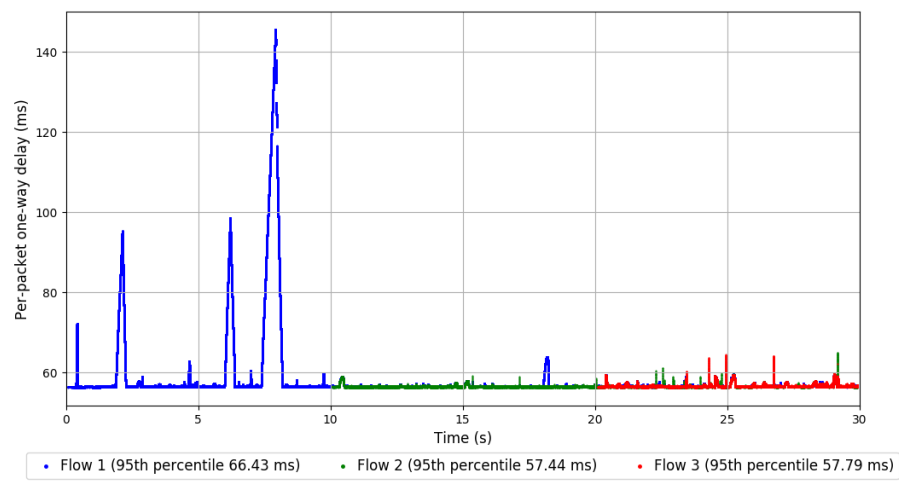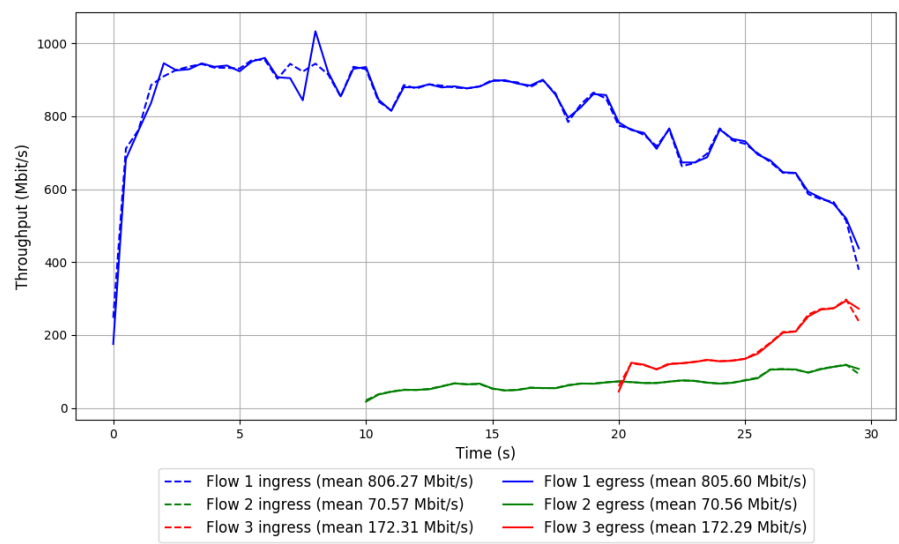
```
Run 9: Statistics of LEDBAT

Start at: 2017-11-16 13:18:02
End at: 2017-11-16 13:18:32
Local clock offset: -0.022 ms
Remote clock offset: 36.434 ms

# Below is generated by plot.py at 2017-11-16 16:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 757.19 Mbit/s
95th percentile per-packet one-way delay: 68.975 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 419.40 Mbit/s
95th percentile per-packet one-way delay: 70.614 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 365.32 Mbit/s
95th percentile per-packet one-way delay: 68.923 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 284.56 Mbit/s
95th percentile per-packet one-way delay: 59.000 ms
Loss rate: 0.16%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 419.64 Mbit/s)   Flow 1 egress (mean 419.40 Mbit/s)
Flow 2 ingress (mean 365.56 Mbit/s)   Flow 2 egress (mean 365.32 Mbit/s)
Flow 3 ingress (mean 285.05 Mbit/s)   Flow 3 egress (mean 284.56 Mbit/s)

Flow 1 (95th percentile 70.61 ms)   Flow 2 (95th percentile 68.92 ms)   Flow 3 (95th percentile 59.00 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-11-16 13:37:48
End at: 2017-11-16 13:38:18
Local clock offset: 0.07 ms
Remote clock offset: 36.01 ms


# Below is generated by plot.py at 2017-11-16 16:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 703.66 Mbit/s
95th percentile per-packet one-way delay: 65.790 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 374.50 Mbit/s
95th percentile per-packet one-way delay: 70.673 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 357.86 Mbit/s
95th percentile per-packet one-way delay: 59.682 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 275.04 Mbit/s
95th percentile per-packet one-way delay: 59.138 ms
Loss rate: 0.18%
```
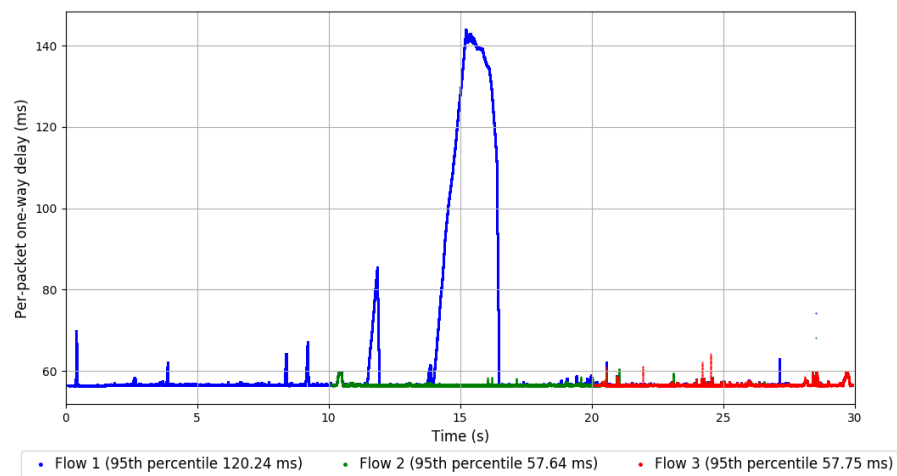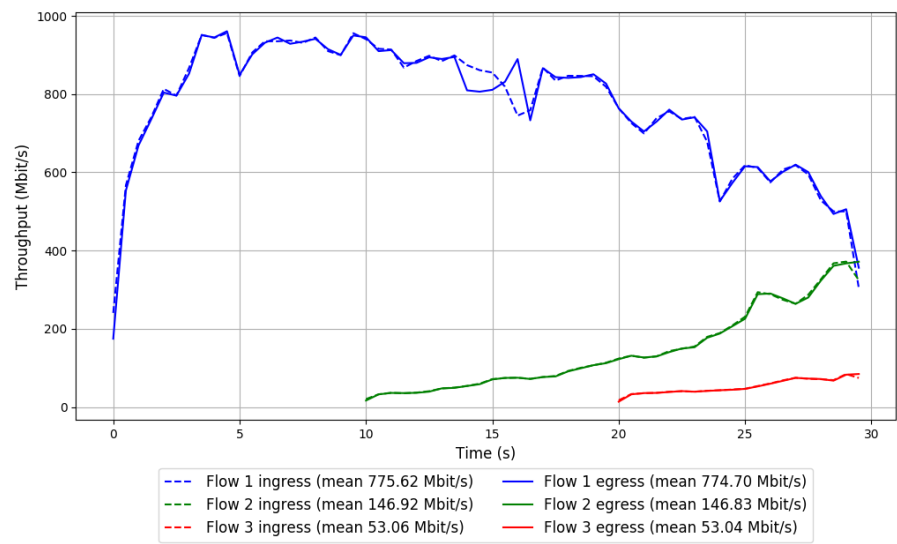
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 374.83 Mbit/s) ---- Flow 1 egress (mean 374.50 Mbit/s)
Flow 2 ingress (mean 358.34 Mbit/s) ---- Flow 2 egress (mean 357.86 Mbit/s)
Flow 3 ingress (mean 275.56 Mbit/s) ---- Flow 3 egress (mean 275.04 Mbit/s)

Flow 1 (95th percentile 70.67 ms)   Flow 2 (95th percentile 59.68 ms)   Flow 3 (95th percentile 59.14 ms)
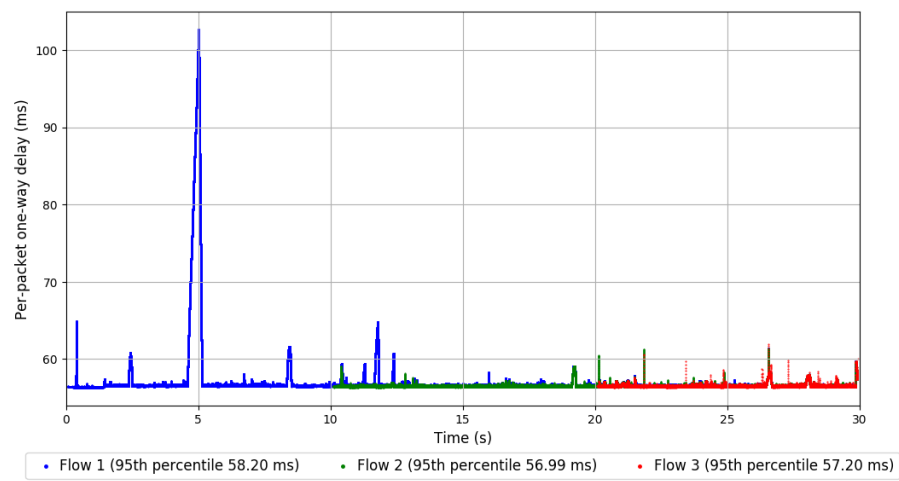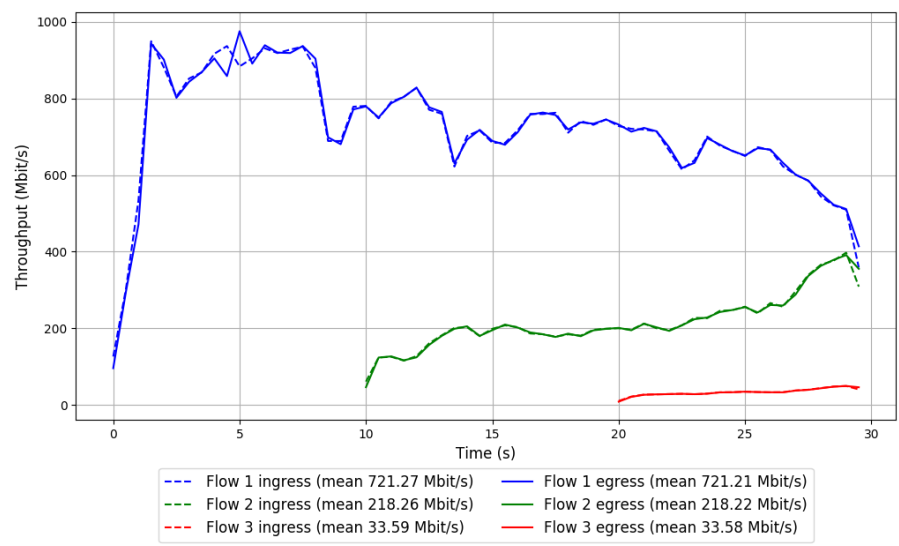
63

```
Run 1: Statistics of PCC

Start at: 2017-11-16 10:31:21
End at: 2017-11-16 10:31:51
Local clock offset: -0.218 ms
Remote clock offset: 35.651 ms

# Below is generated by plot.py at 2017-11-16 16:24:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.93 Mbit/s
95th percentile per-packet one-way delay: 58.057 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 728.14 Mbit/s
95th percentile per-packet one-way delay: 58.215 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 170.26 Mbit/s
95th percentile per-packet one-way delay: 57.636 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 110.79 Mbit/s
95th percentile per-packet one-way delay: 57.682 ms
Loss rate: 0.02%
```
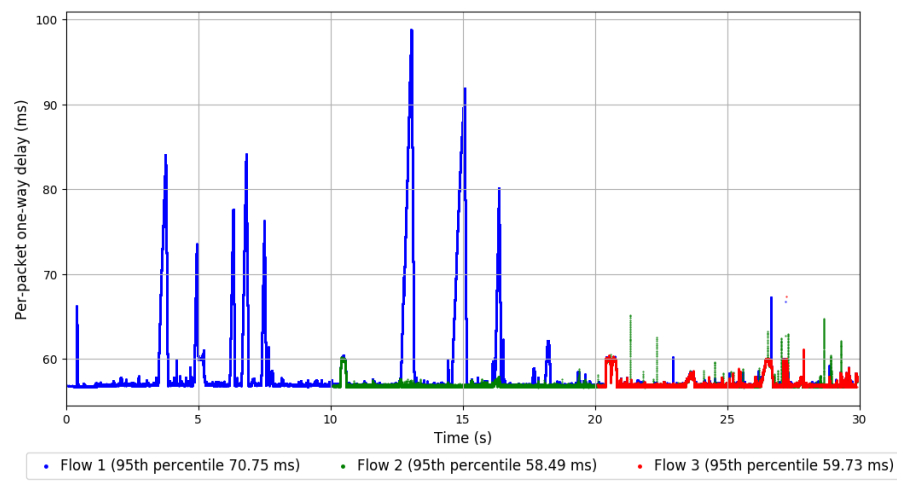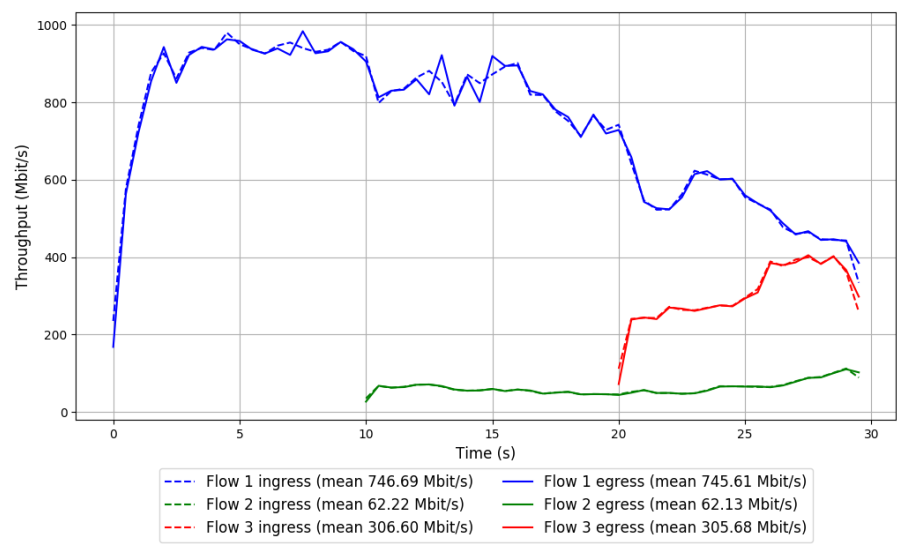
Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2017-11-16 10:51:02
End at: 2017-11-16 10:51:32
Local clock offset: -0.183 ms
Remote clock offset: 35.027 ms


# Below is generated by plot.py at 2017-11-16 16:25:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 909.19 Mbit/s
95th percentile per-packet one-way delay: 63.023 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 805.60 Mbit/s
95th percentile per-packet one-way delay: 66.431 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 70.56 Mbit/s
95th percentile per-packet one-way delay: 57.441 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 172.29 Mbit/s
95th percentile per-packet one-way delay: 57.791 ms
Loss rate: 0.01%
```
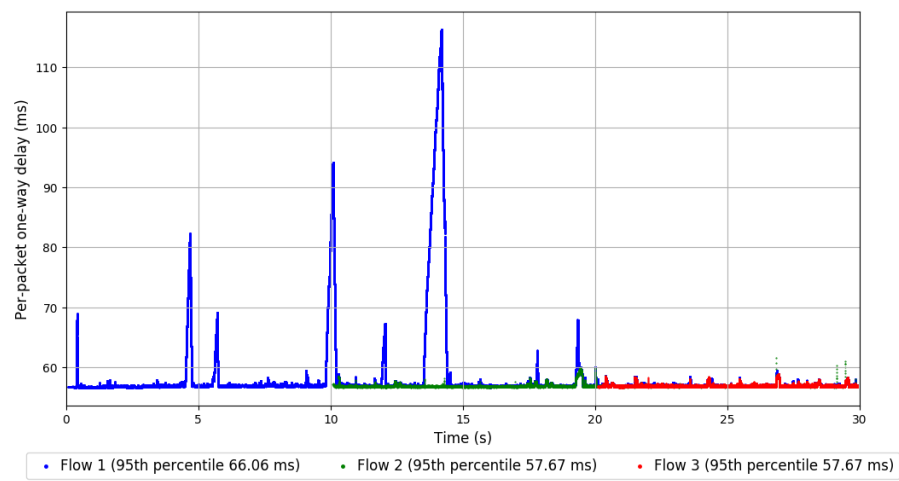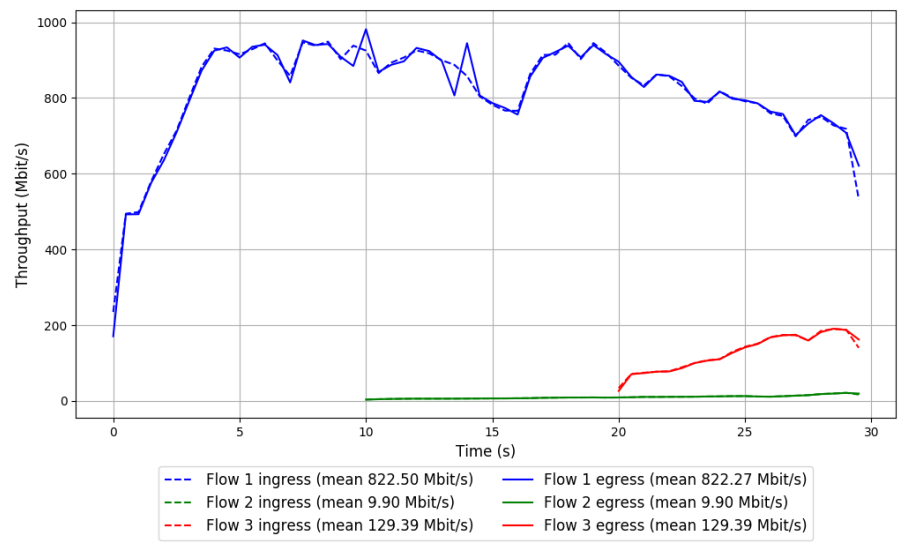
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-11-16 11:10:34
End at: 2017-11-16 11:11:04
Local clock offset: -0.12 ms
Remote clock offset: 34.419 ms

# Below is generated by plot.py at 2017-11-16 16:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 889.74 Mbit/s
95th percentile per-packet one-way delay: 111.826 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 774.70 Mbit/s
95th percentile per-packet one-way delay: 120.240 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 146.83 Mbit/s
95th percentile per-packet one-way delay: 57.641 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 53.04 Mbit/s
95th percentile per-packet one-way delay: 57.746 ms
Loss rate: 0.04%
```
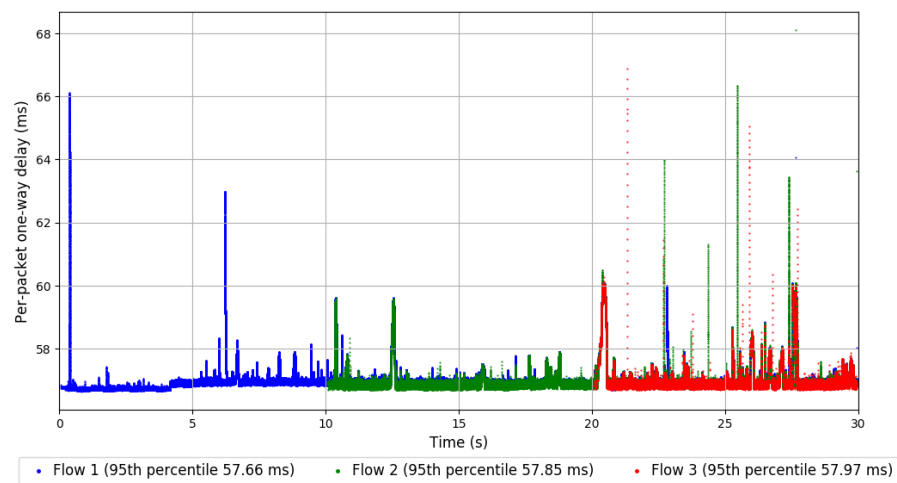
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 775.62 Mbit/s) Flow 1 egress (mean 774.70 Mbit/s)
Flow 2 ingress (mean 146.92 Mbit/s) Flow 2 egress (mean 146.83 Mbit/s)
Flow 3 ingress (mean 53.06 Mbit/s)   Flow 3 egress (mean 53.04 Mbit/s)

Flow 1 (95th percentile 120.24 ms)   Flow 2 (95th percentile 57.64 ms)   Flow 3 (95th percentile 57.75 ms)
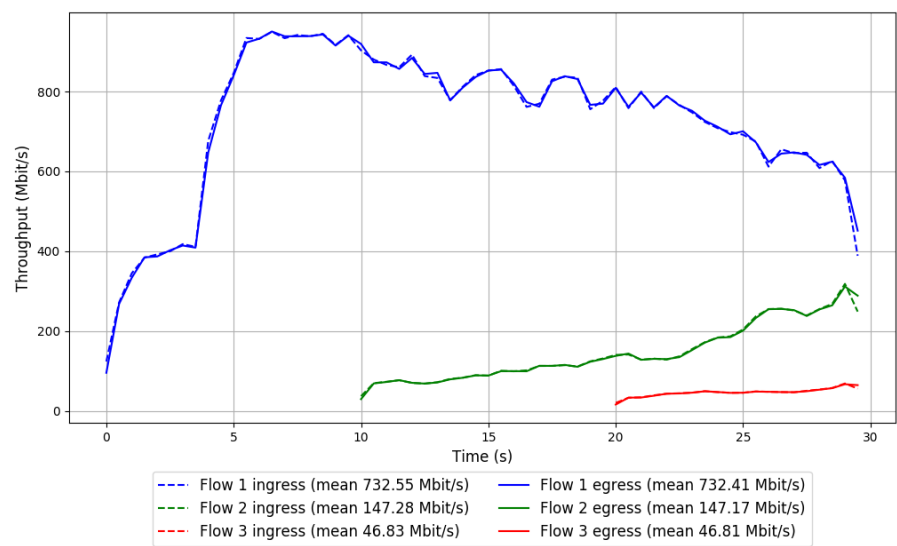
69

```
Run 4: Statistics of PCC

Start at: 2017-11-16 11:30:14
End at: 2017-11-16 11:30:44
Local clock offset: -0.089 ms
Remote clock offset: 33.713 ms

# Below is generated by plot.py at 2017-11-16 16:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.14 Mbit/s
95th percentile per-packet one-way delay: 57.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 721.21 Mbit/s
95th percentile per-packet one-way delay: 58.200 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.22 Mbit/s
95th percentile per-packet one-way delay: 56.993 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 57.205 ms
Loss rate: 0.01%
```
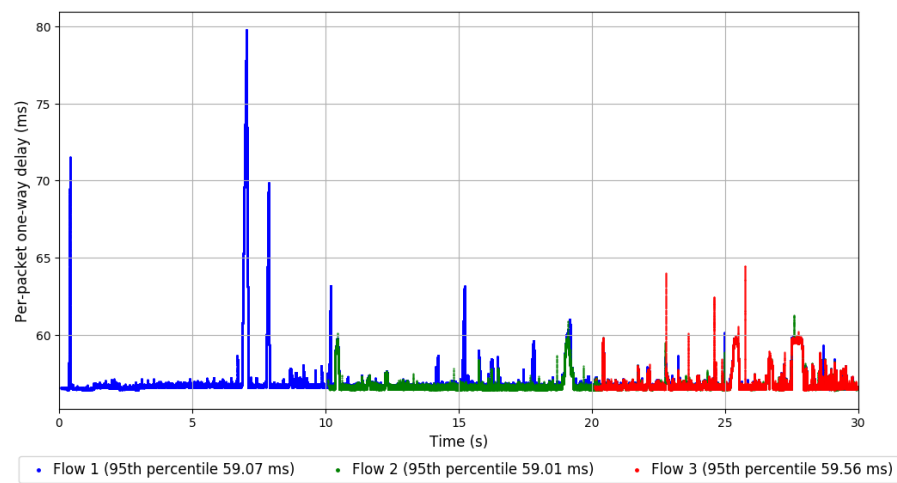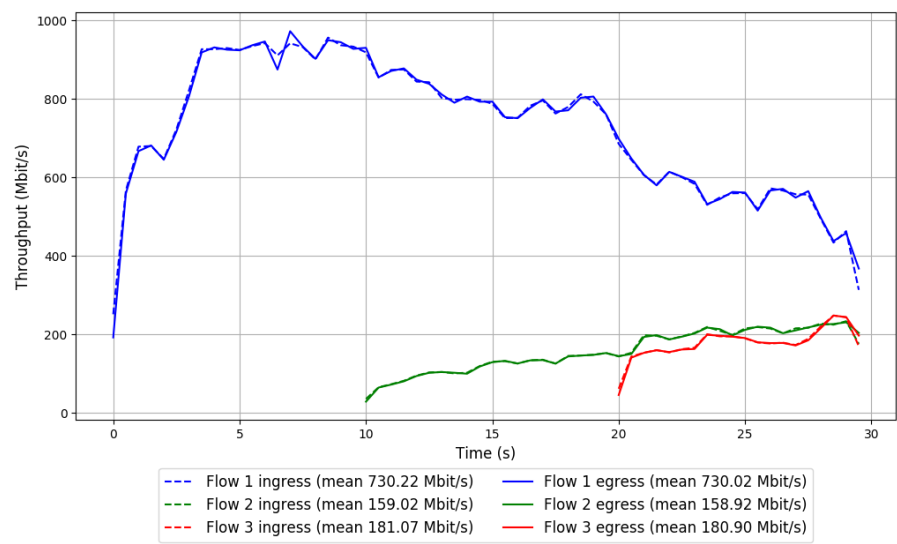
Run 4: Report of PCC — Data Link

```
Run 5: Statistics of PCC

Start at: 2017-11-16 11:49:59
End at: 2017-11-16 11:50:29
Local clock offset: -0.002 ms
Remote clock offset: 36.016 ms


# Below is generated by plot.py at 2017-11-16 16:34:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 887.53 Mbit/s
95th percentile per-packet one-way delay: 68.386 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 745.61 Mbit/s
95th percentile per-packet one-way delay: 70.747 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 58.489 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 305.68 Mbit/s
95th percentile per-packet one-way delay: 59.730 ms
Loss rate: 0.30%
```

Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 746.69 Mbit/s) --- Flow 1 egress (mean 745.61 Mbit/s)
Flow 2 ingress (mean 62.22 Mbit/s) --- Flow 2 egress (mean 62.13 Mbit/s)
Flow 3 ingress (mean 306.60 Mbit/s) --- Flow 3 egress (mean 305.68 Mbit/s)

Flow 1 (95th percentile 70.75 ms)   Flow 2 (95th percentile 58.49 ms)   Flow 3 (95th percentile 59.73 ms)
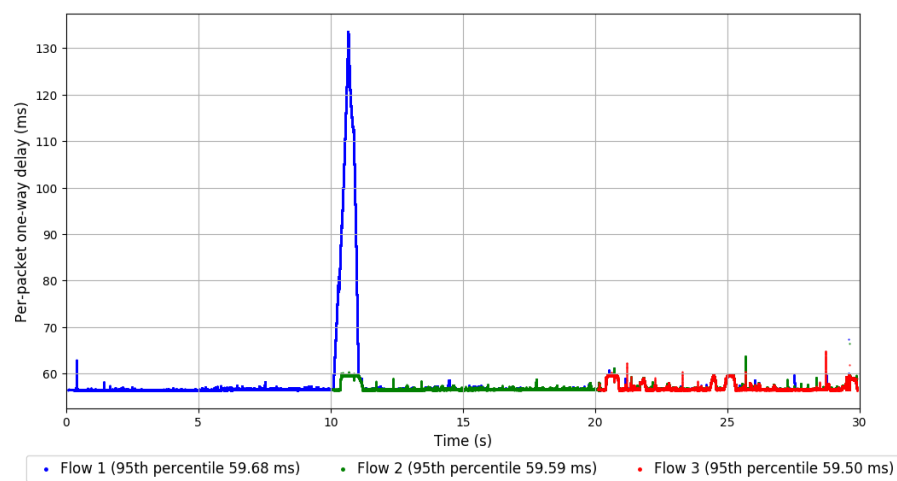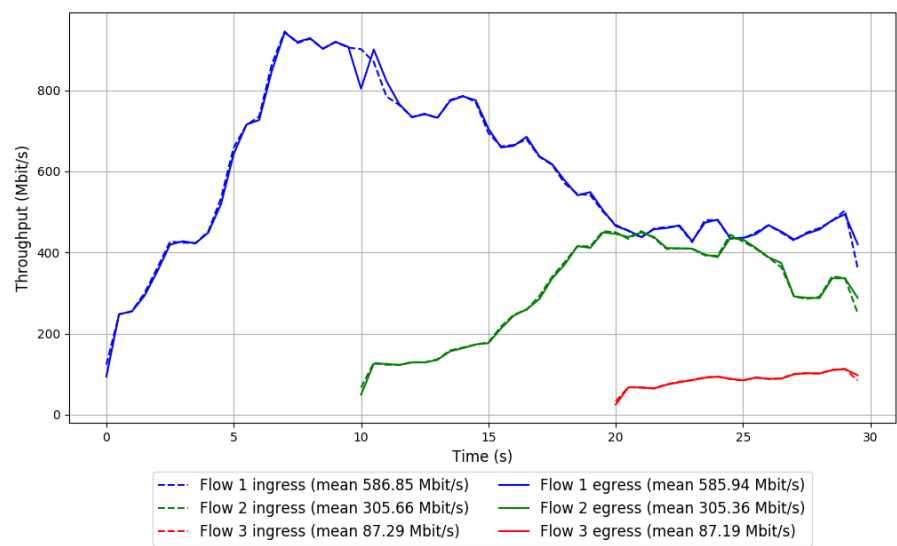
```
Run 6: Statistics of PCC

Start at: 2017-11-16 12:09:40
End at: 2017-11-16 12:10:10
Local clock offset: 0.01 ms
Remote clock offset: 37.599 ms


# Below is generated by plot.py at 2017-11-16 16:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 871.42 Mbit/s
95th percentile per-packet one-way delay: 64.997 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 822.27 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 57.668 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 129.39 Mbit/s
95th percentile per-packet one-way delay: 57.674 ms
Loss rate: 0.00%
```
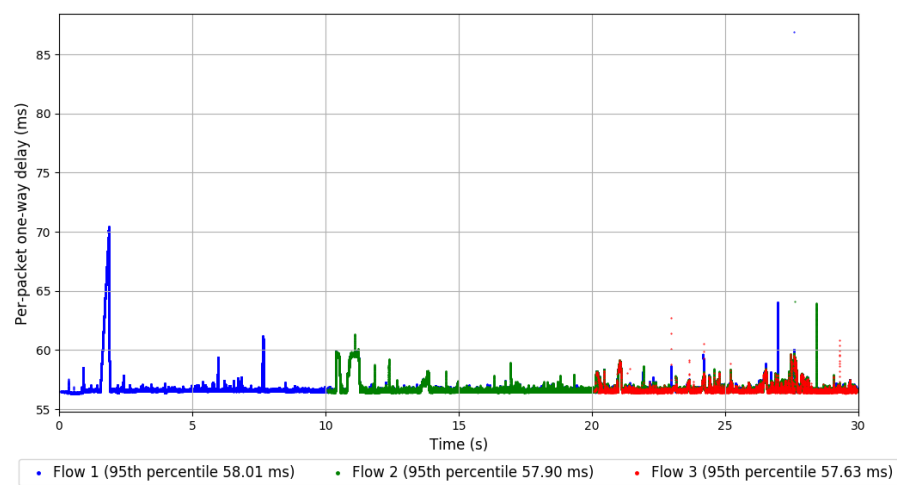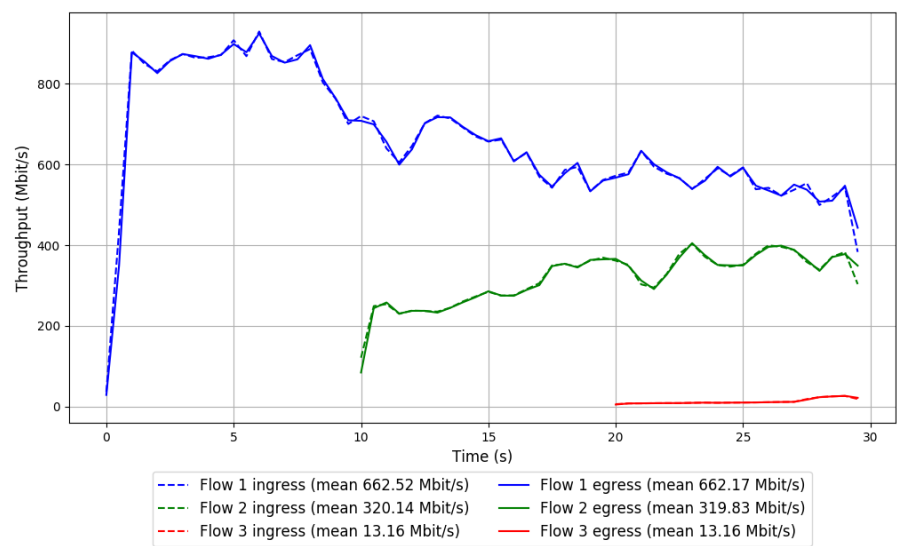
Run 6: Report of PCC — Data Link

```
Run 7: Statistics of PCC

Start at: 2017-11-16 12:29:19
End at: 2017-11-16 12:29:49
Local clock offset: 0.012 ms
Remote clock offset: 36.703 ms


# Below is generated by plot.py at 2017-11-16 16:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 845.59 Mbit/s
95th percentile per-packet one-way delay: 57.687 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 732.41 Mbit/s
95th percentile per-packet one-way delay: 57.663 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 147.17 Mbit/s
95th percentile per-packet one-way delay: 57.855 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 57.971 ms
Loss rate: 0.05%
```
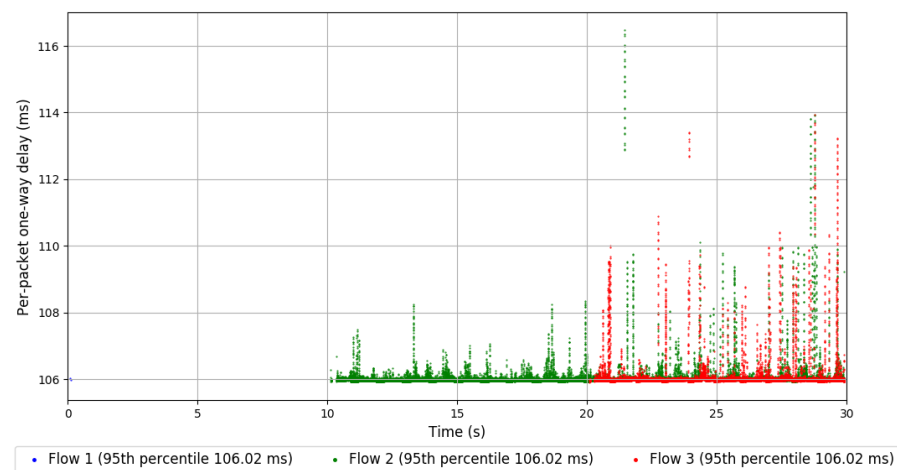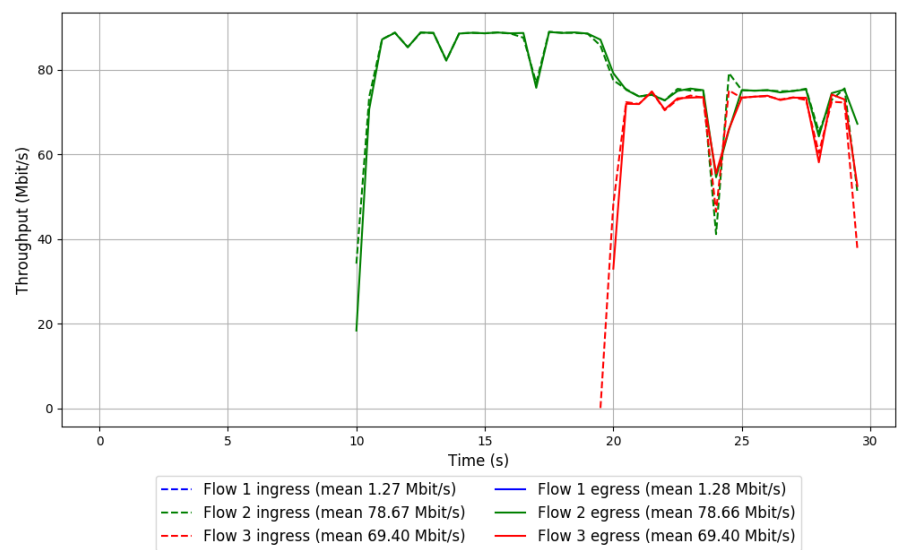
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 732.55 Mbit/s)　　Flow 1 egress (mean 732.41 Mbit/s)
Flow 2 ingress (mean 147.28 Mbit/s)　　Flow 2 egress (mean 147.17 Mbit/s)
Flow 3 ingress (mean 46.83 Mbit/s)　　Flow 3 egress (mean 46.81 Mbit/s)

Flow 1 (95th percentile 57.66 ms)　　Flow 2 (95th percentile 57.85 ms)　　Flow 3 (95th percentile 57.97 ms)

```
Run 8: Statistics of PCC

Start at: 2017-11-16 12:49:01
End at: 2017-11-16 12:49:31
Local clock offset: -0.063 ms
Remote clock offset: 36.241 ms


# Below is generated by plot.py at 2017-11-16 16:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.27 Mbit/s
95th percentile per-packet one-way delay: 59.119 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 730.02 Mbit/s
95th percentile per-packet one-way delay: 59.066 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 158.92 Mbit/s
95th percentile per-packet one-way delay: 59.008 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 180.90 Mbit/s
95th percentile per-packet one-way delay: 59.556 ms
Loss rate: 0.09%
```

Run 8: Report of PCC — Data Link

```
Run 9: Statistics of PCC

Start at: 2017-11-16 13:08:46
End at: 2017-11-16 13:09:16
Local clock offset: 0.057 ms
Remote clock offset: 36.842 ms


# Below is generated by plot.py at 2017-11-16 16:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 817.60 Mbit/s
95th percentile per-packet one-way delay: 59.638 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 585.94 Mbit/s
95th percentile per-packet one-way delay: 59.683 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 305.36 Mbit/s
95th percentile per-packet one-way delay: 59.589 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 59.499 ms
Loss rate: 0.09%
```
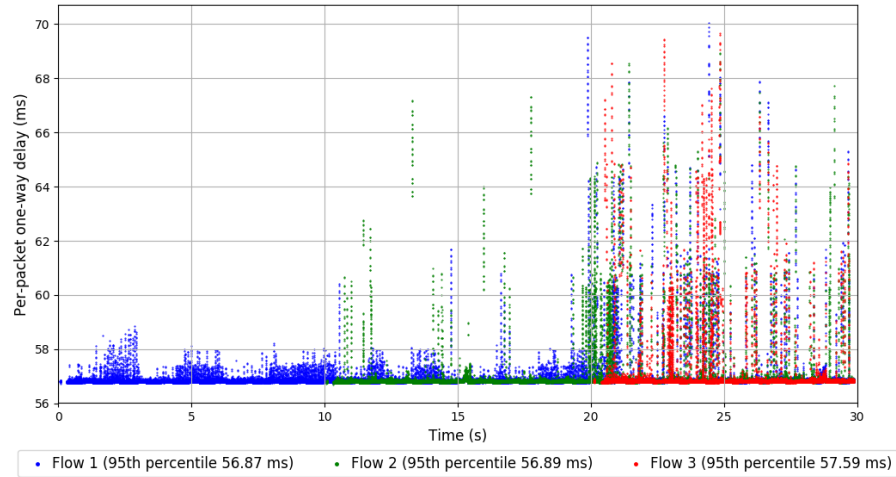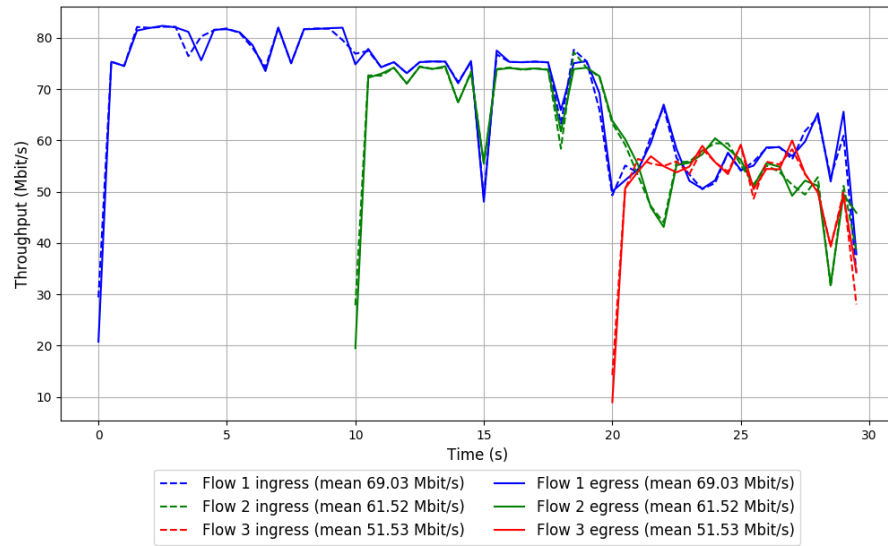
Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2017-11-16 13:28:32
End at: 2017-11-16 13:29:02
Local clock offset: 0.043 ms
Remote clock offset: 35.985 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 879.13 Mbit/s
95th percentile per-packet one-way delay: 57.975 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 662.17 Mbit/s
95th percentile per-packet one-way delay: 58.013 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 319.83 Mbit/s
95th percentile per-packet one-way delay: 57.904 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 13.16 Mbit/s
95th percentile per-packet one-way delay: 57.634 ms
Loss rate: 0.02%
```
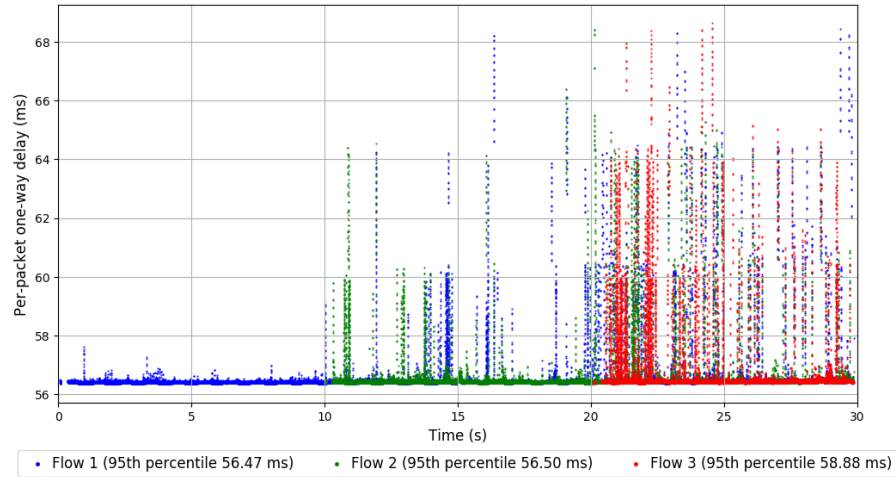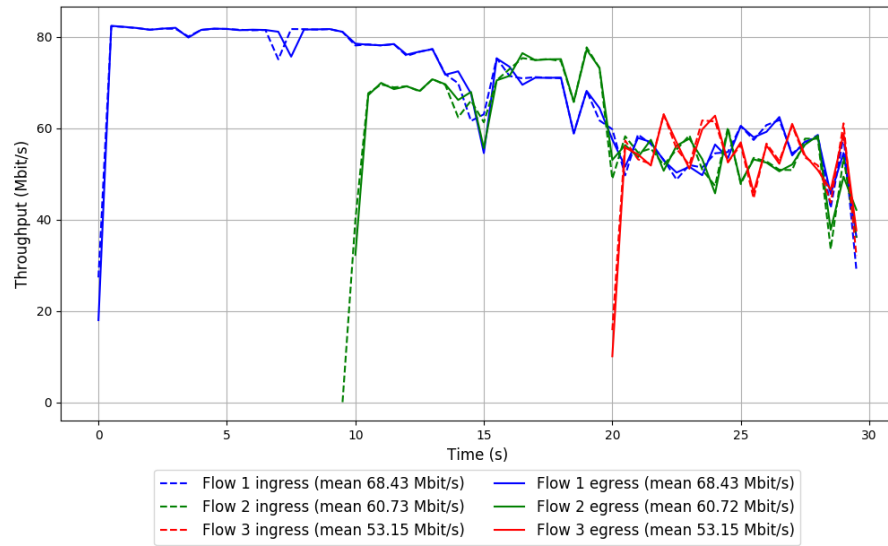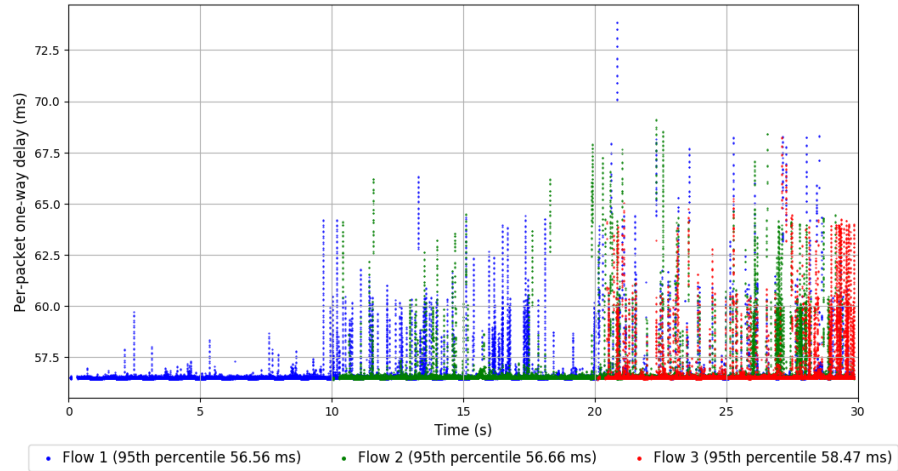
Run 10: Report of PCC — Data Link

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```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 10:32:52
End at: 2017-11-16 10:33:22
Local clock offset: -0.298 ms
Remote clock offset: 84.86 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.11 Mbit/s
95th percentile per-packet one-way delay: 106.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 106.019 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 106.021 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.40 Mbit/s
95th percentile per-packet one-way delay: 106.023 ms
Loss rate: 0.00%
```

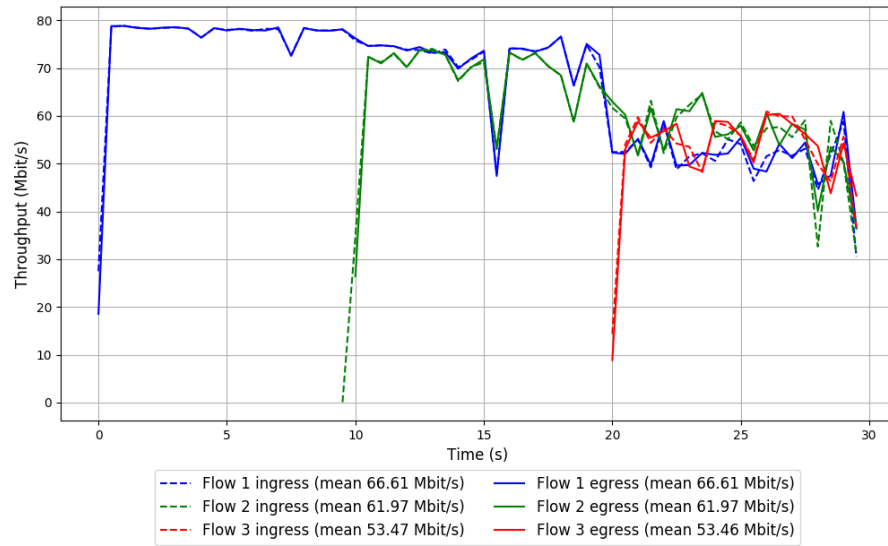Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 1.27 Mbit/s)   Flow 1 egress (mean 1.28 Mbit/s)
Flow 2 ingress (mean 78.67 Mbit/s)   Flow 2 egress (mean 78.66 Mbit/s)
Flow 3 ingress (mean 69.40 Mbit/s)   Flow 3 egress (mean 69.40 Mbit/s)

Flow 1 (95th percentile 106.02 ms)   Flow 2 (95th percentile 106.02 ms)   Flow 3 (95th percentile 106.02 ms)
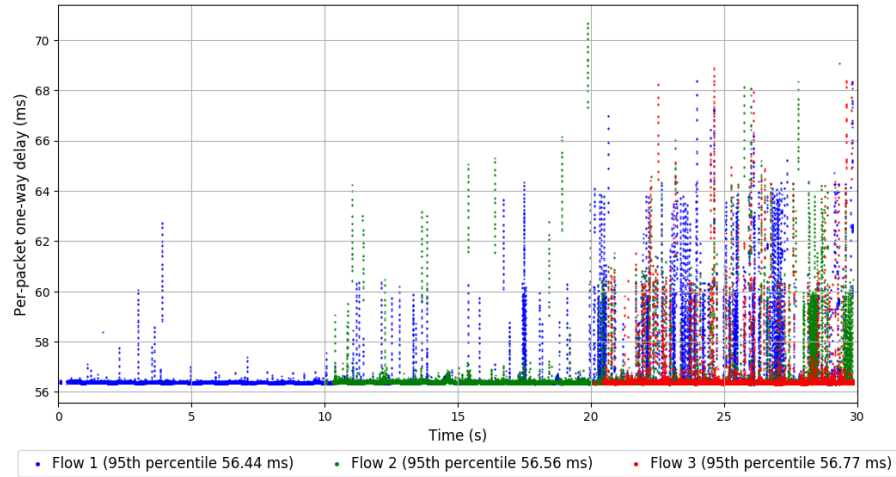
```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 10:52:33
End at: 2017-11-16 10:53:03
Local clock offset: -0.203 ms
Remote clock offset: 35.401 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.78 Mbit/s
95th percentile per-packet one-way delay: 56.889 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.03 Mbit/s
95th percentile per-packet one-way delay: 56.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.52 Mbit/s
95th percentile per-packet one-way delay: 56.893 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.53 Mbit/s
95th percentile per-packet one-way delay: 57.595 ms
Loss rate: 0.00%
```
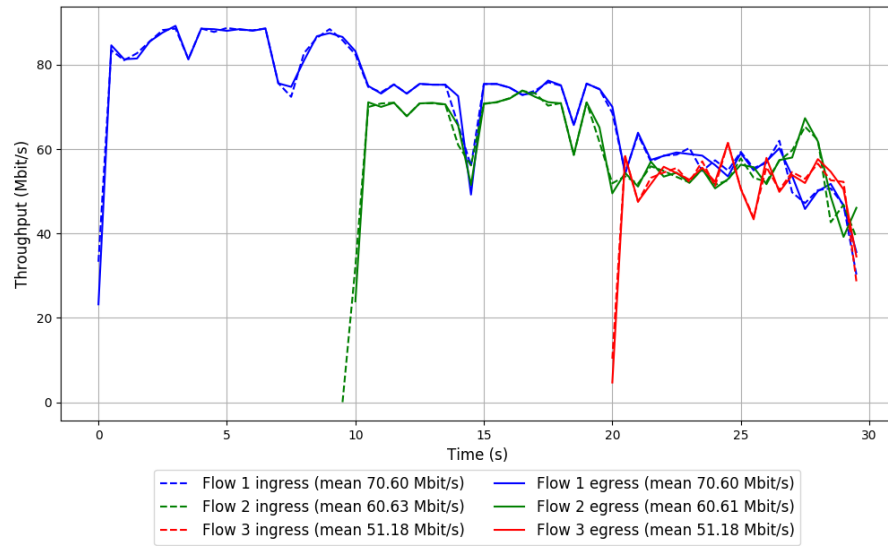
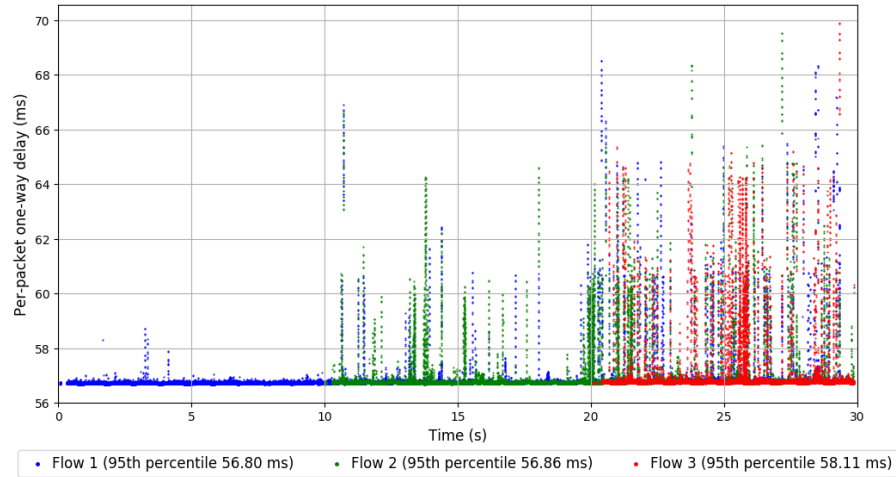Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 11:12:05
End at: 2017-11-16 11:12:35
Local clock offset: -0.129 ms
Remote clock offset: 34.341 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.27 Mbit/s
95th percentile per-packet one-way delay: 56.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.43 Mbit/s
95th percentile per-packet one-way delay: 56.470 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.72 Mbit/s
95th percentile per-packet one-way delay: 56.496 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 58.875 ms
Loss rate: 0.00%
```

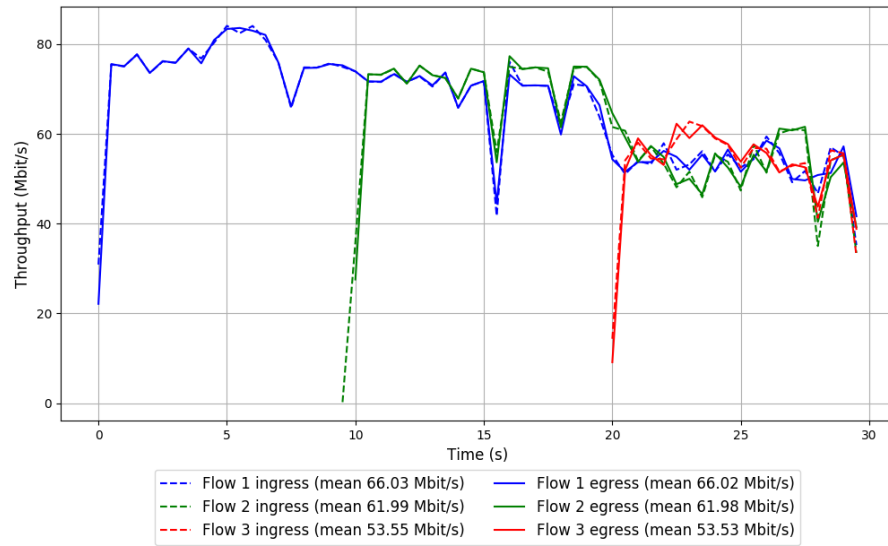Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.43 Mbit/s) — — — Flow 1 egress (mean 68.43 Mbit/s)
Flow 2 ingress (mean 60.73 Mbit/s) — — — Flow 2 egress (mean 60.72 Mbit/s)
Flow 3 ingress (mean 53.15 Mbit/s) — — — Flow 3 egress (mean 53.15 Mbit/s)

Flow 1 (95th percentile 56.47 ms)   • Flow 2 (95th percentile 56.50 ms)   • Flow 3 (95th percentile 58.88 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-11-16 11:31:45
End at: 2017-11-16 11:32:15
Local clock offset: -0.151 ms
Remote clock offset: 33.738 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.36 Mbit/s
95th percentile per-packet one-way delay: 56.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.61 Mbit/s
95th percentile per-packet one-way delay: 56.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.97 Mbit/s
95th percentile per-packet one-way delay: 56.657 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.46 Mbit/s
95th percentile per-packet one-way delay: 58.465 ms
Loss rate: 0.00%
```
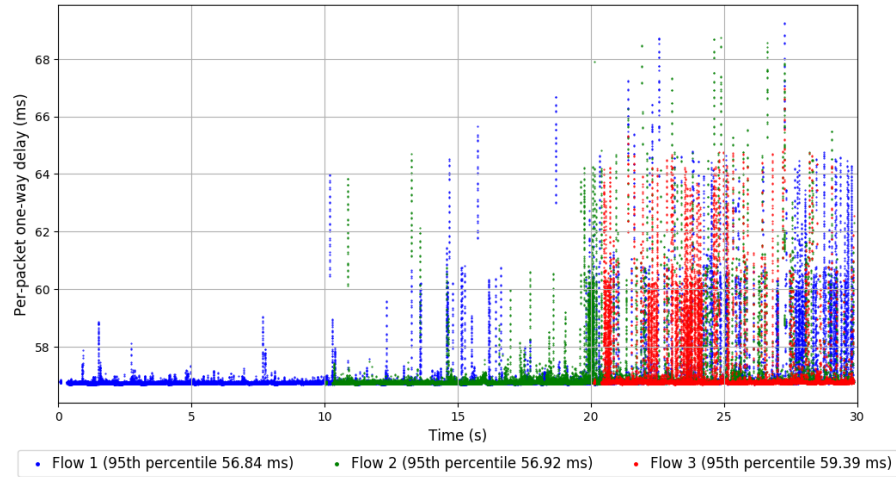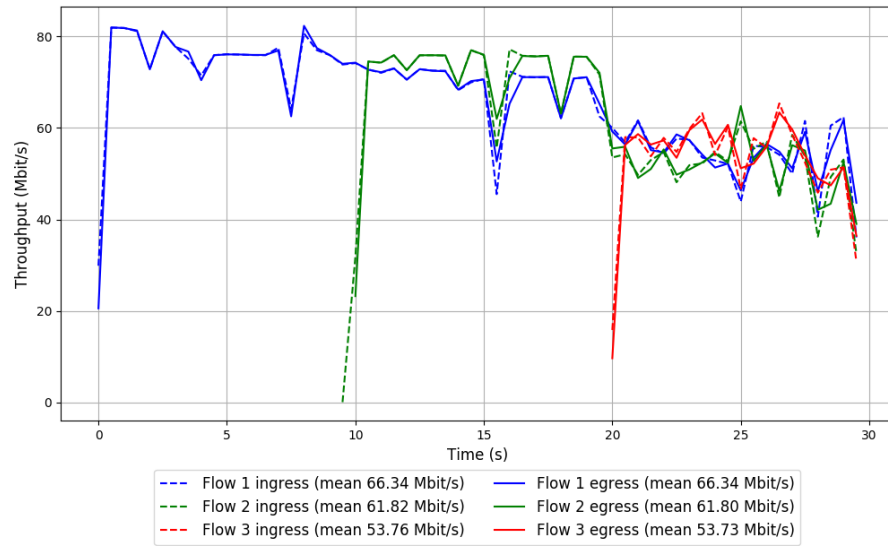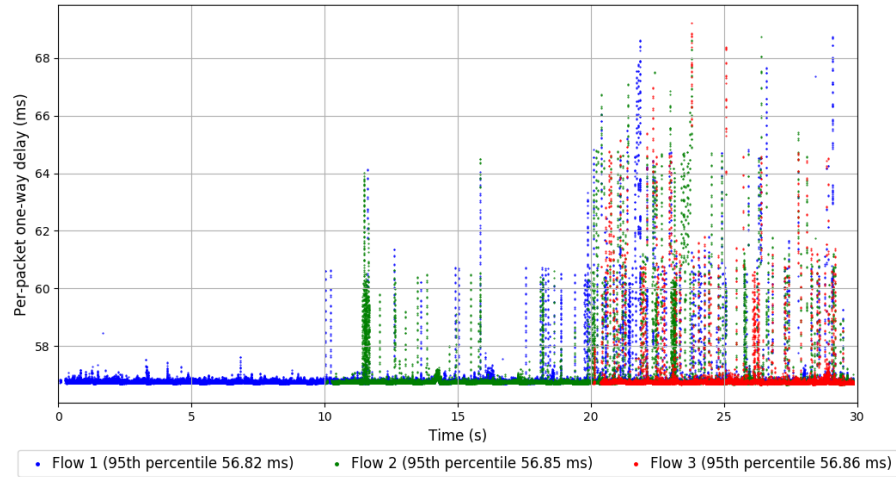
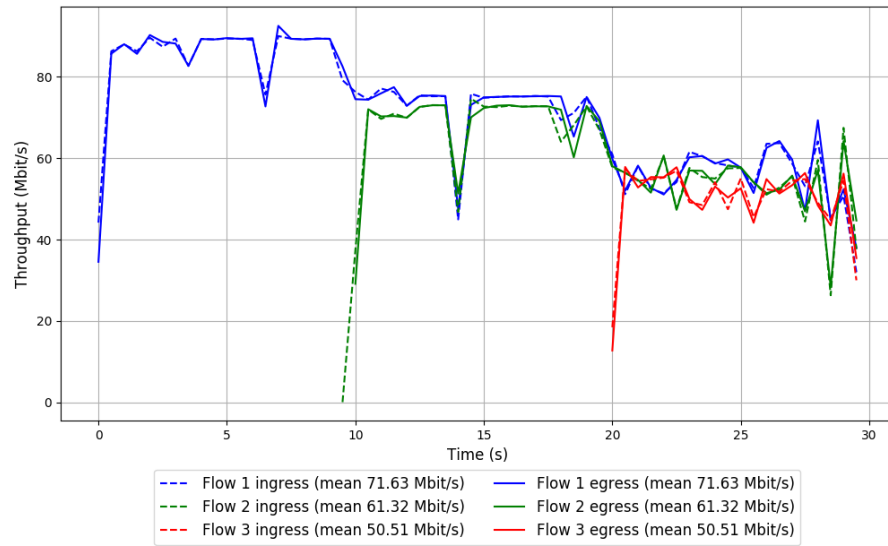Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 11:51:30
End at: 2017-11-16 11:52:00
Local clock offset: -0.069 ms
Remote clock offset: 35.749 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.70 Mbit/s
95th percentile per-packet one-way delay: 56.502 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.60 Mbit/s
95th percentile per-packet one-way delay: 56.437 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.61 Mbit/s
95th percentile per-packet one-way delay: 56.558 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 51.18 Mbit/s
95th percentile per-packet one-way delay: 56.767 ms
Loss rate: 0.00%
```
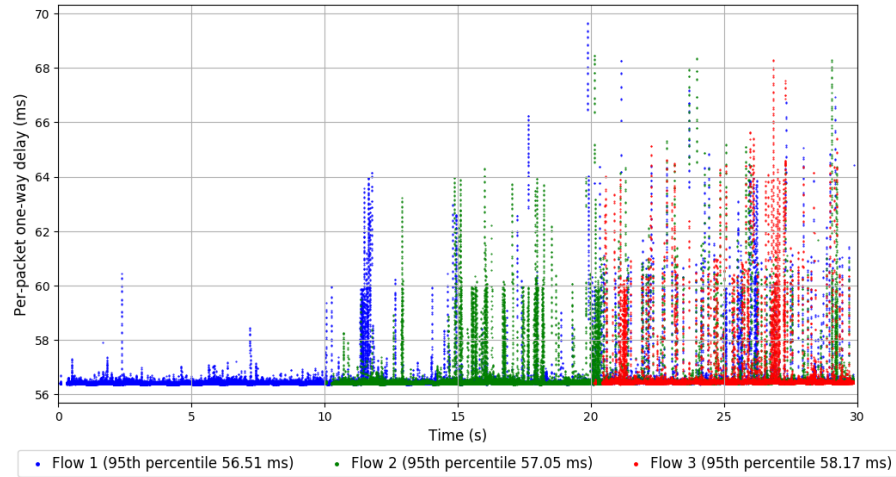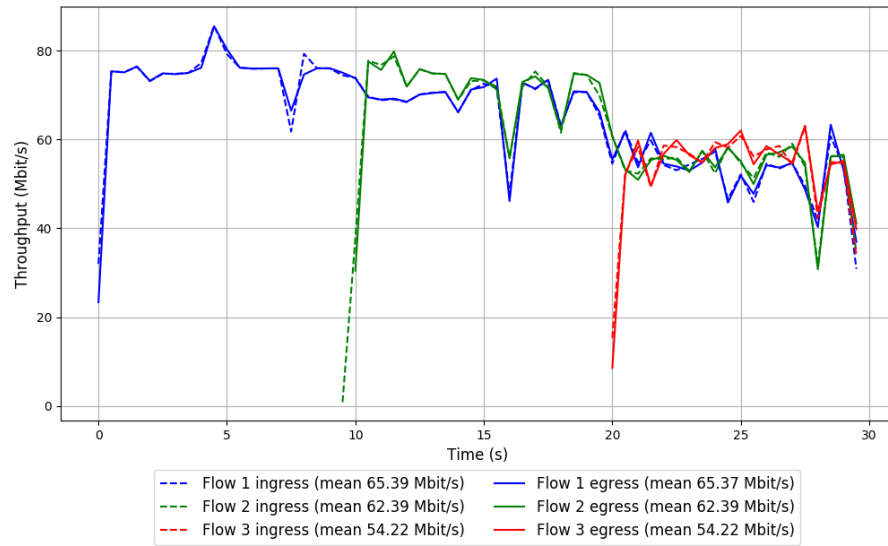
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 70.60 Mbit/s)   Flow 1 egress (mean 70.60 Mbit/s)
Flow 2 ingress (mean 60.63 Mbit/s)   Flow 2 egress (mean 60.61 Mbit/s)
Flow 3 ingress (mean 51.18 Mbit/s)   Flow 3 egress (mean 51.18 Mbit/s)

Flow 1 (95th percentile 56.44 ms)   Flow 2 (95th percentile 56.56 ms)   Flow 3 (95th percentile 56.77 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-11-16 12:11:10
End at: 2017-11-16 12:11:40
Local clock offset: 0.03 ms
Remote clock offset: 37.569 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.84 Mbit/s
95th percentile per-packet one-way delay: 56.824 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 66.02 Mbit/s
95th percentile per-packet one-way delay: 56.799 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 56.864 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 53.53 Mbit/s
95th percentile per-packet one-way delay: 58.107 ms
Loss rate: 0.03%
```
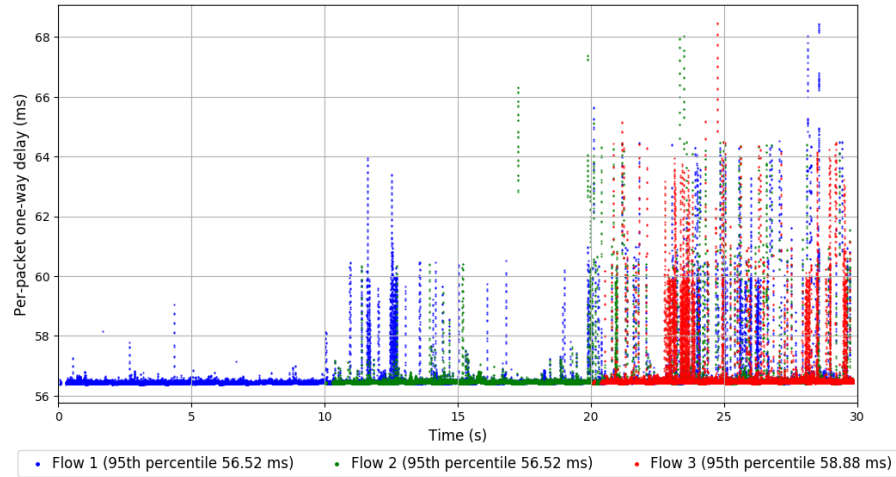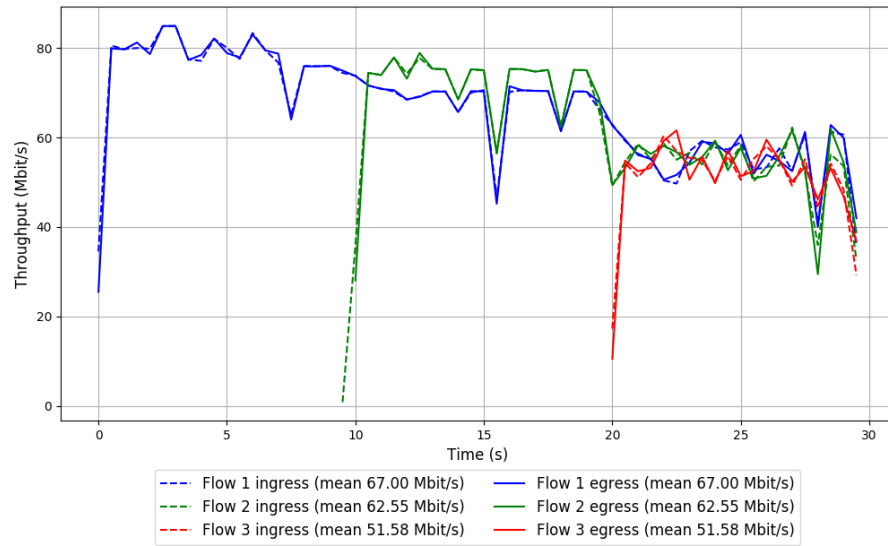
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.03 Mbit/s)   Flow 1 egress (mean 66.02 Mbit/s)
Flow 2 ingress (mean 61.99 Mbit/s)   Flow 2 egress (mean 61.98 Mbit/s)
Flow 3 ingress (mean 53.55 Mbit/s)   Flow 3 egress (mean 53.53 Mbit/s)

Flow 1 (95th percentile 56.80 ms)   Flow 2 (95th percentile 56.86 ms)   Flow 3 (95th percentile 58.11 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 12:30:49
End at: 2017-11-16 12:31:19
Local clock offset: -0.009 ms
Remote clock offset: 36.65 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.10 Mbit/s
95th percentile per-packet one-way delay: 57.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.34 Mbit/s
95th percentile per-packet one-way delay: 56.836 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.80 Mbit/s
95th percentile per-packet one-way delay: 56.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 59.388 ms
Loss rate: 0.00%
```
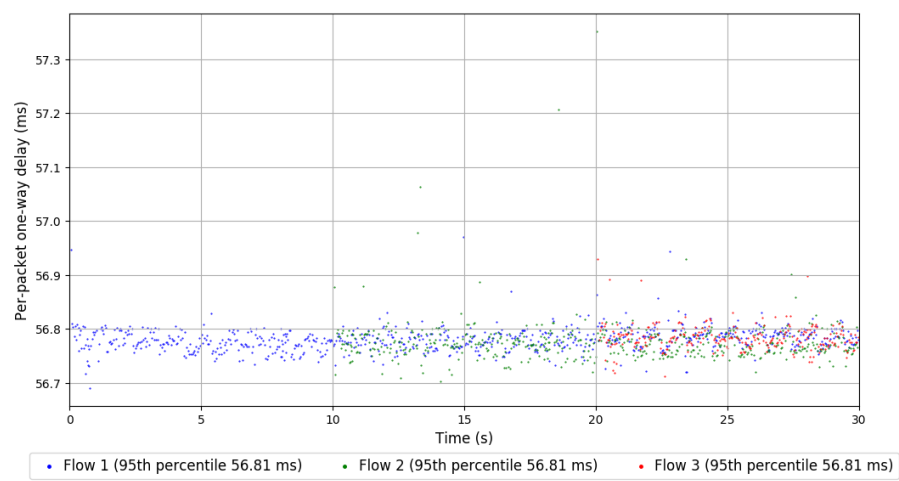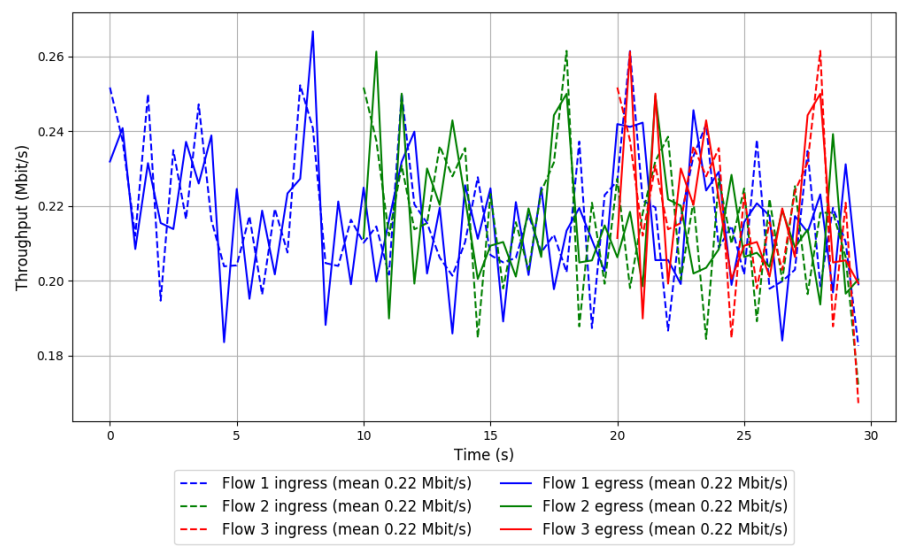
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.34 Mbit/s)   Flow 1 egress (mean 66.34 Mbit/s)
Flow 2 ingress (mean 61.82 Mbit/s)   Flow 2 egress (mean 61.80 Mbit/s)
Flow 3 ingress (mean 53.76 Mbit/s)   Flow 3 egress (mean 53.73 Mbit/s)

Flow 1 (95th percentile 56.84 ms)   Flow 2 (95th percentile 56.92 ms)   Flow 3 (95th percentile 59.39 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 12:50:33
End at: 2017-11-16 12:51:03
Local clock offset: 0.024 ms
Remote clock offset: 36.717 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.98 Mbit/s
95th percentile per-packet one-way delay: 56.828 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.63 Mbit/s
95th percentile per-packet one-way delay: 56.823 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.32 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 50.51 Mbit/s
95th percentile per-packet one-way delay: 56.864 ms
Loss rate: 0.01%
```
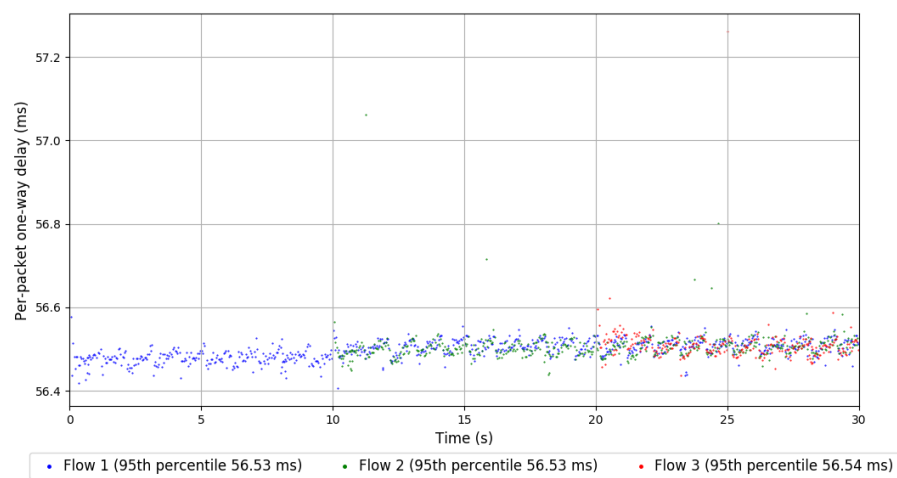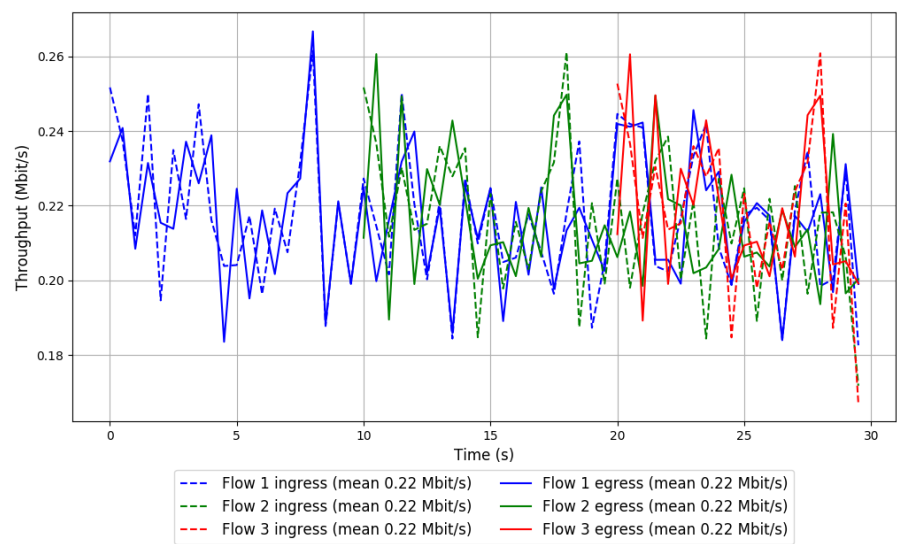
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 13:10:15
End at: 2017-11-16 13:10:45
Local clock offset: 0.037 ms
Remote clock offset: 36.733 ms


# Below is generated by plot.py at 2017-11-16 16:38:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.65 Mbit/s
95th percentile per-packet one-way delay: 56.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.37 Mbit/s
95th percentile per-packet one-way delay: 56.514 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.39 Mbit/s
95th percentile per-packet one-way delay: 57.055 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.22 Mbit/s
95th percentile per-packet one-way delay: 58.170 ms
Loss rate: 0.00%
```
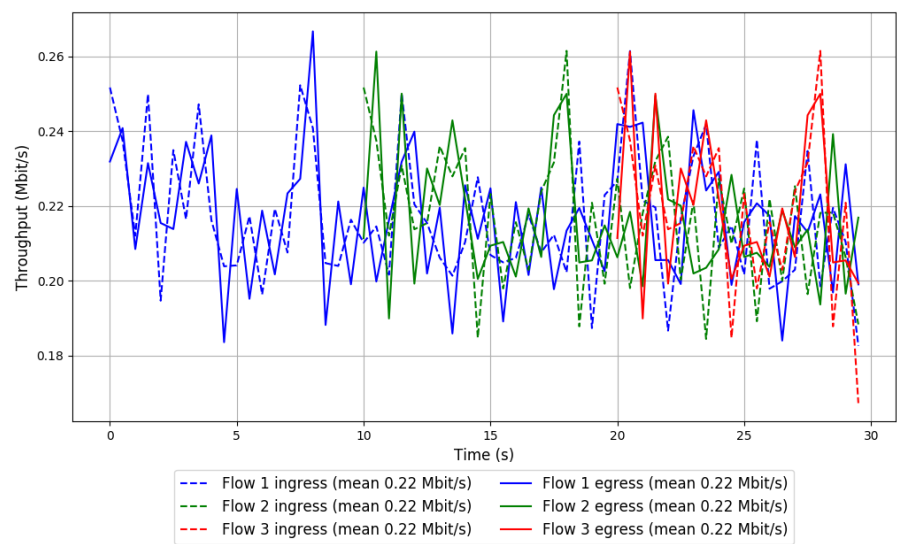
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 65.39 Mbit/s) — Flow 1 egress (mean 65.37 Mbit/s)
Flow 2 ingress (mean 62.39 Mbit/s) — Flow 2 egress (mean 62.39 Mbit/s)
Flow 3 ingress (mean 54.22 Mbit/s) — Flow 3 egress (mean 54.22 Mbit/s)

Flow 1 (95th percentile 56.51 ms)   Flow 2 (95th percentile 57.05 ms)   Flow 3 (95th percentile 58.17 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 13:30:02
End at: 2017-11-16 13:30:32
Local clock offset: 0.061 ms
Remote clock offset: 35.999 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.61 Mbit/s
95th percentile per-packet one-way delay: 56.554 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.00 Mbit/s
95th percentile per-packet one-way delay: 56.519 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.55 Mbit/s
95th percentile per-packet one-way delay: 56.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.58 Mbit/s
95th percentile per-packet one-way delay: 58.882 ms
Loss rate: 0.00%
```

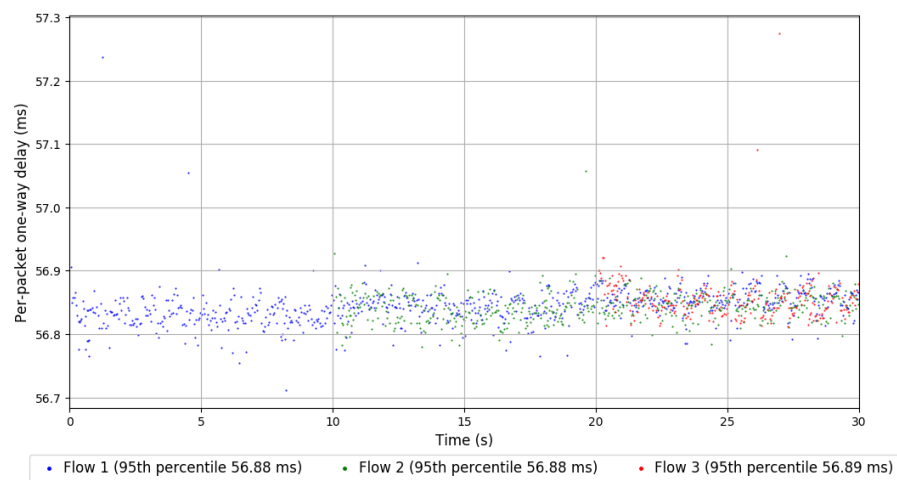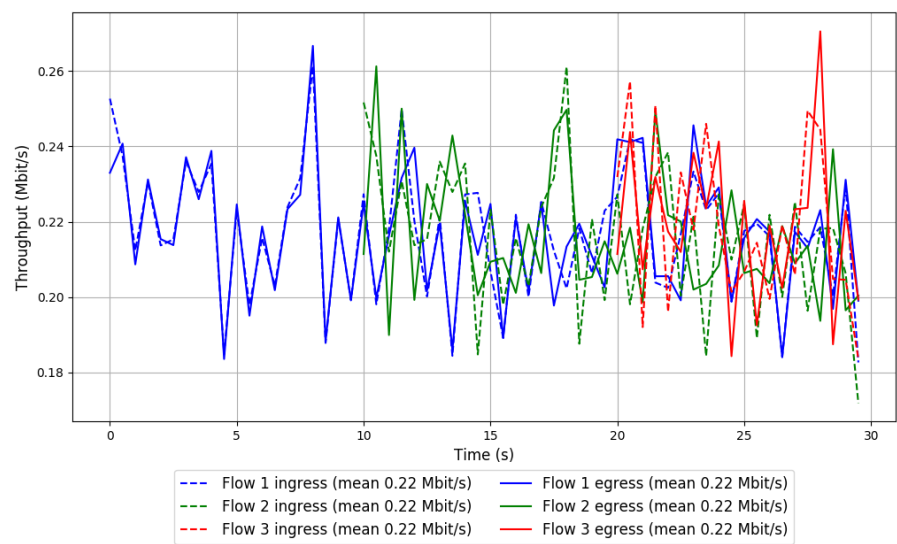Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 10:28:54
End at: 2017-11-16 10:29:24
Local clock offset: -0.213 ms
Remote clock offset: 35.633 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.811 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.815 ms
Loss rate: 0.00%
```
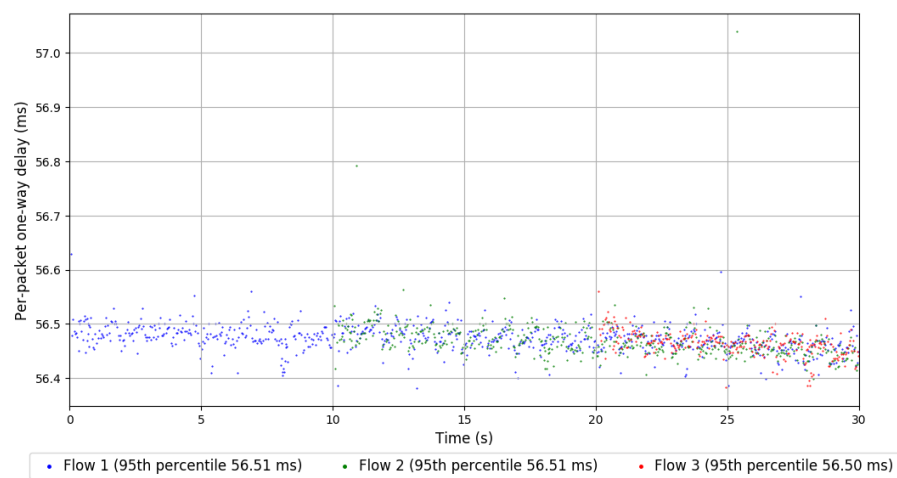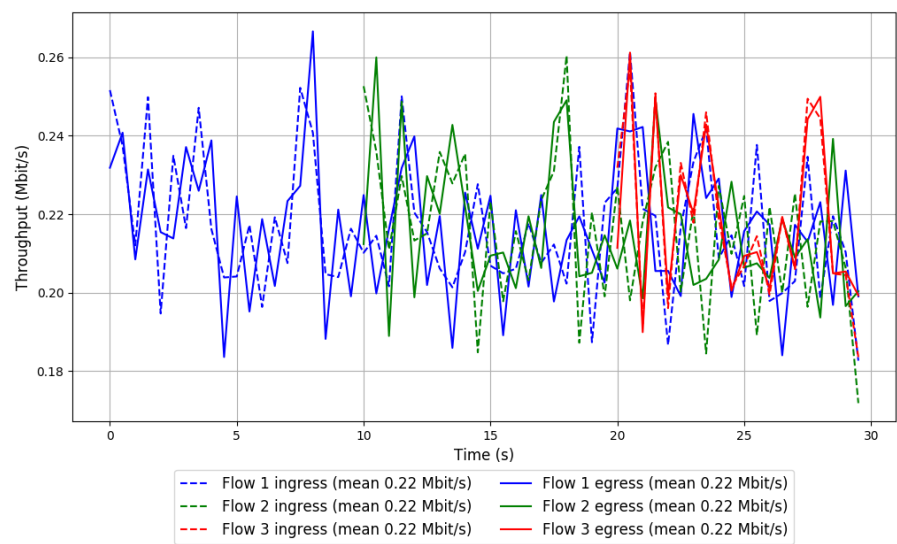
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-11-16 10:48:41
End at: 2017-11-16 10:49:11
Local clock offset: -0.28 ms
Remote clock offset: 35.096 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.530 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.531 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.542 ms
Loss rate: 0.00%
```
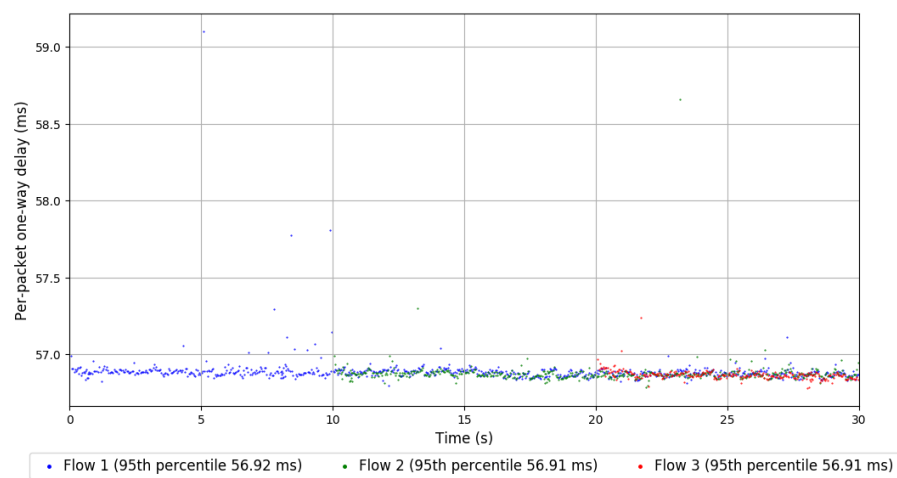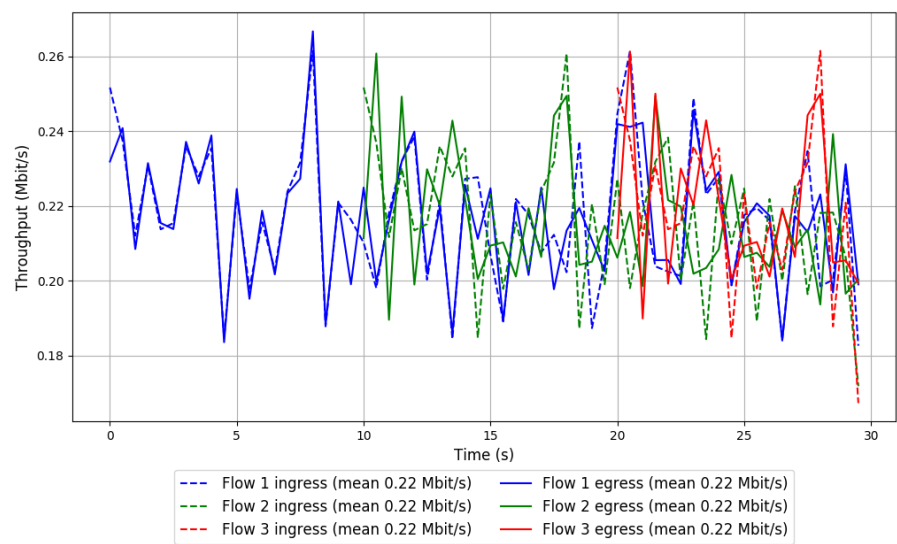
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-11-16 11:08:07
End at: 2017-11-16 11:08:37
Local clock offset: -0.127 ms
Remote clock offset: 34.427 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 56.446 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.438 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.444 ms
Loss rate: 0.00%
```
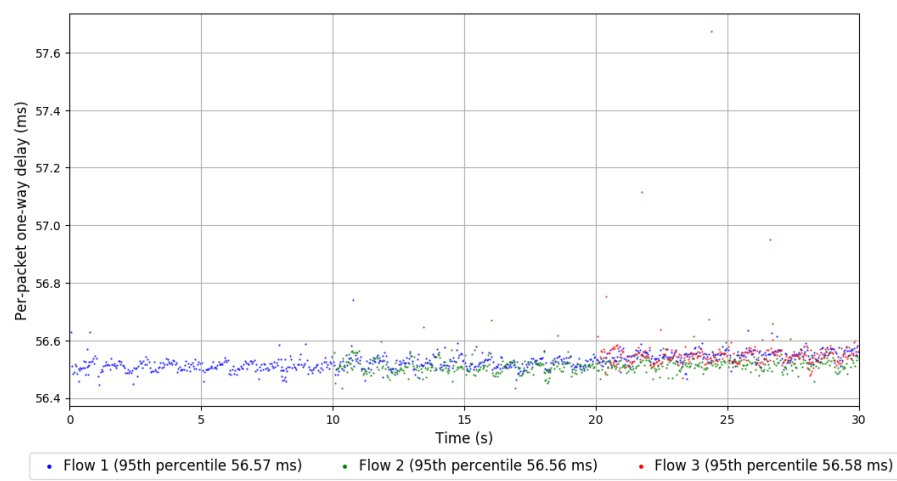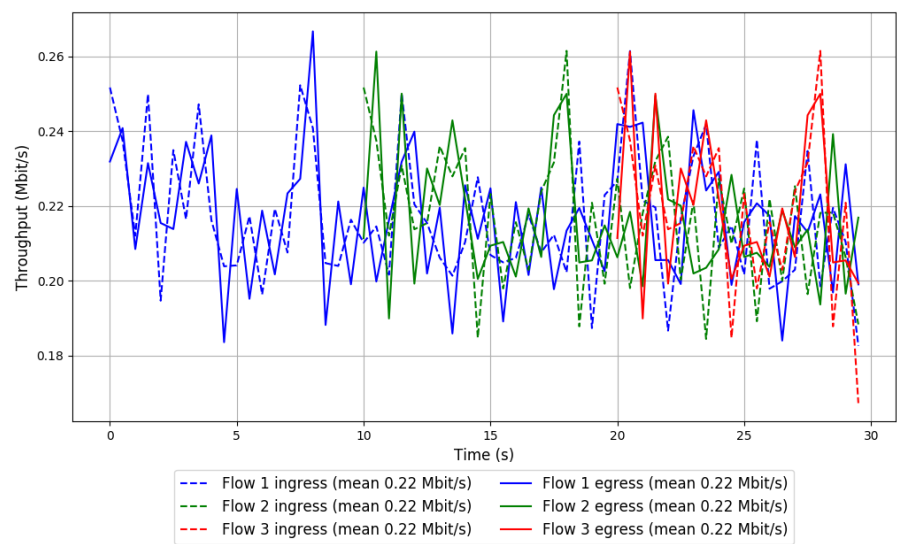
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-11-16 11:27:46
End at: 2017-11-16 11:28:16
Local clock offset: -0.081 ms
Remote clock offset: 34.216 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.880 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.877 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.892 ms
Loss rate: 0.00%
```
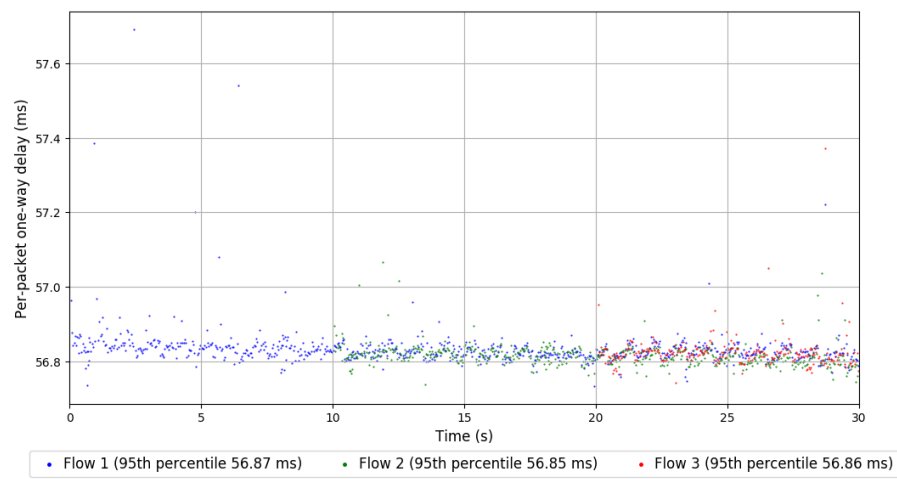
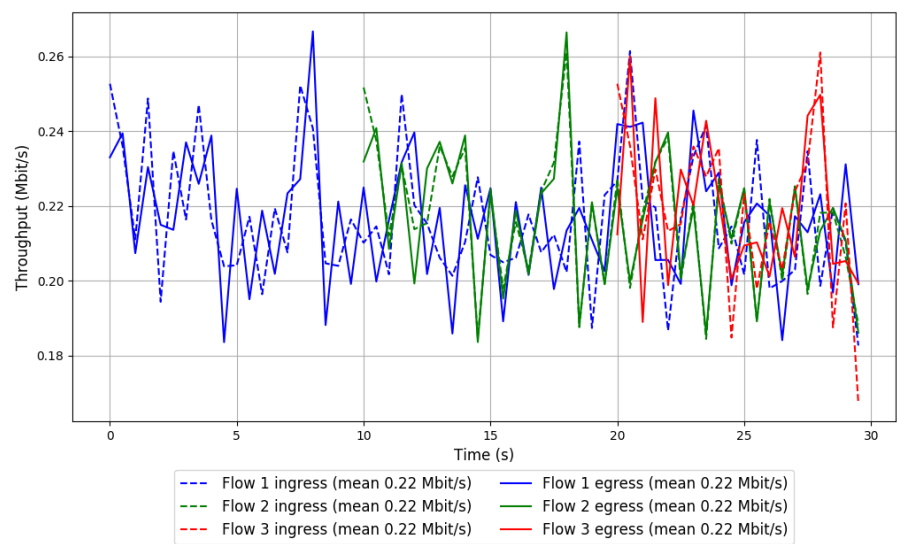# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-11-16 11:47:32
End at: 2017-11-16 11:48:02
Local clock offset: -0.091 ms
Remote clock offset: 35.354 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.509 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.500 ms
Loss rate: 0.00%
```
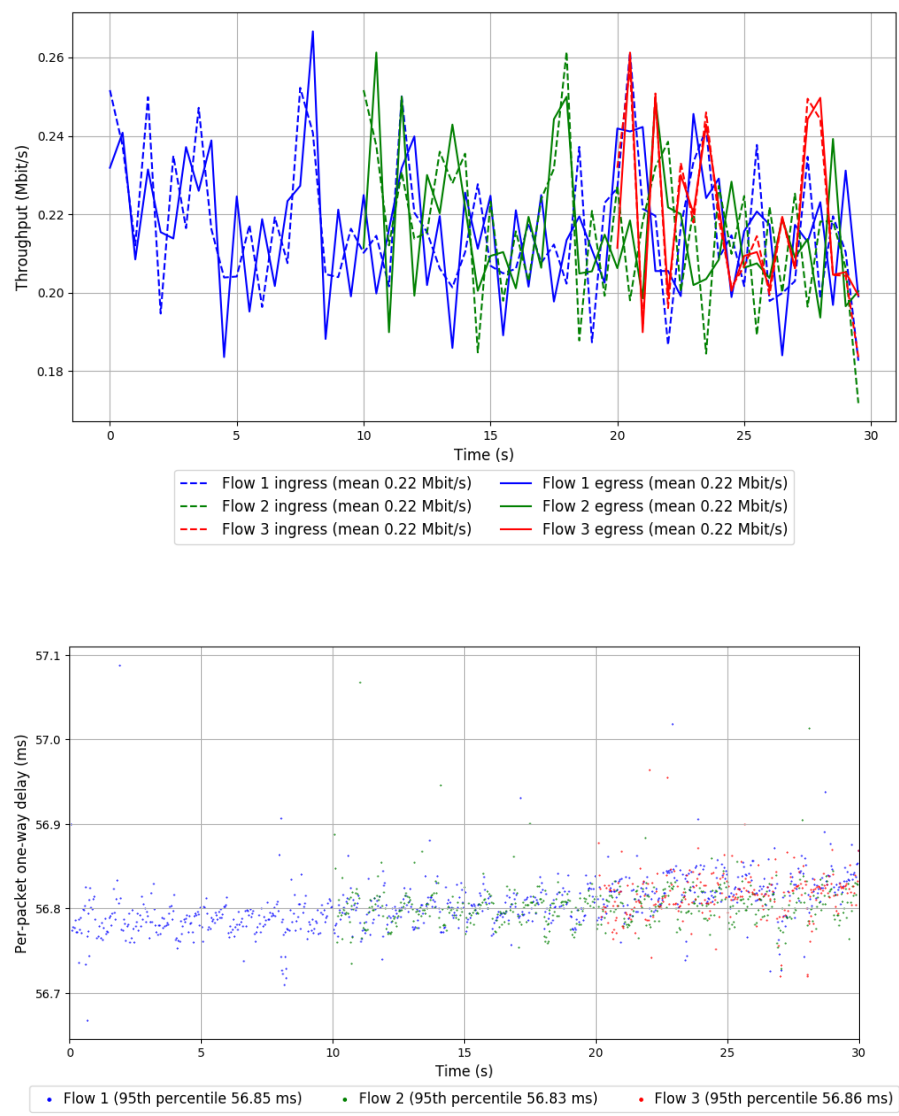
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-11-16 12:07:12
End at: 2017-11-16 12:07:42
Local clock offset: -0.07 ms
Remote clock offset: 37.607 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.917 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.910 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.908 ms
Loss rate: 0.00%
```

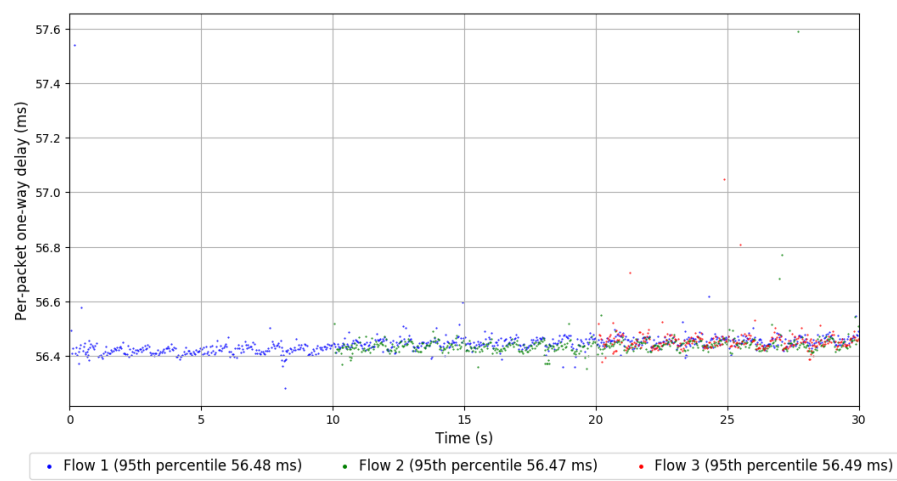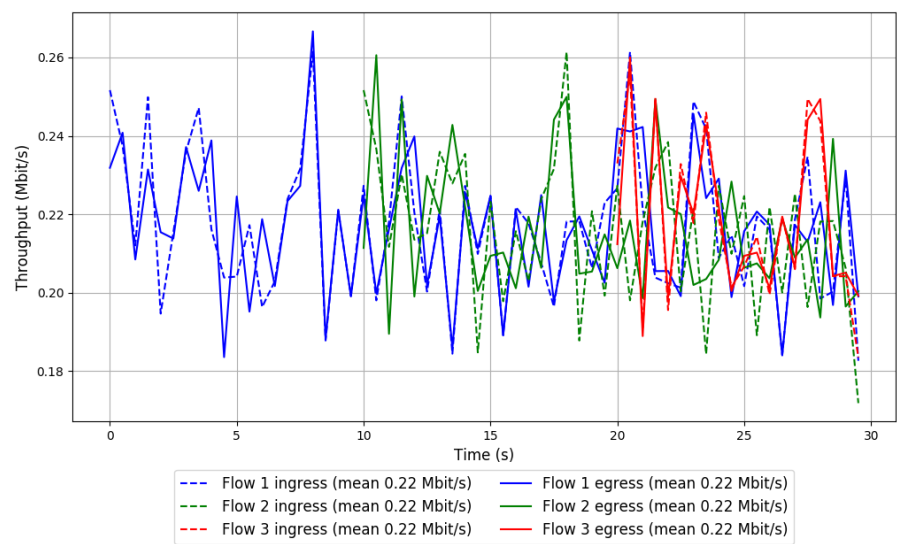# Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-11-16 12:26:52
End at: 2017-11-16 12:27:22
Local clock offset: 0.003 ms
Remote clock offset: 36.529 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 56.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.571 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.558 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.580 ms
Loss rate: 0.00%
```

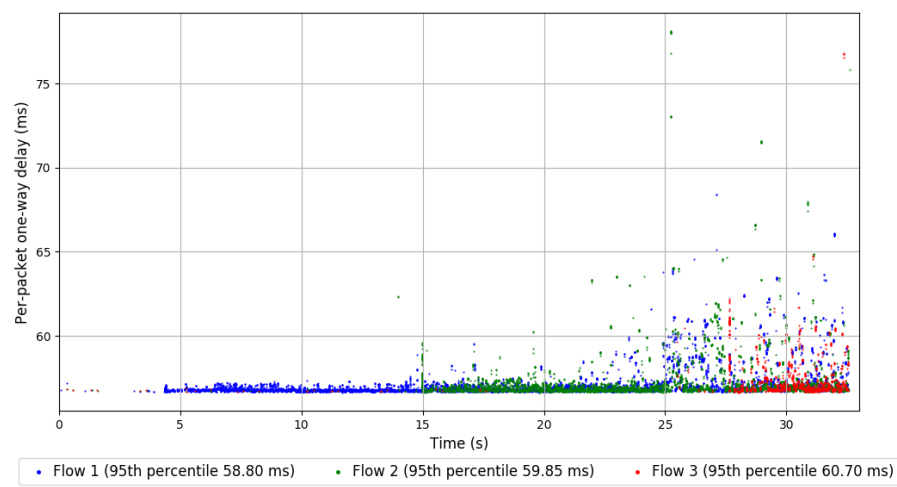# Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-11-16 12:46:34
End at: 2017-11-16 12:47:04
Local clock offset: 0.011 ms
Remote clock offset: 36.394 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.864 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.868 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.862 ms
Loss rate: 0.00%
```
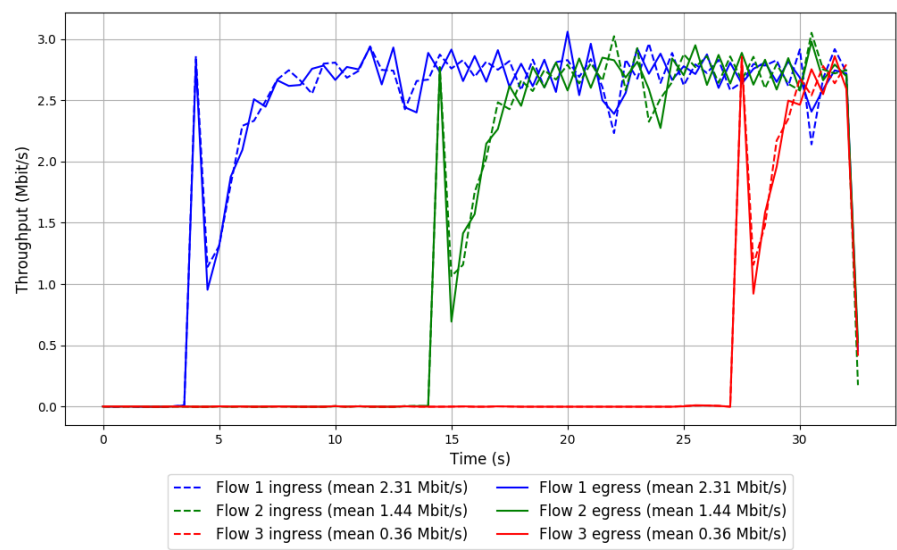
Run 8: Report of SCReAM — Data Link

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```
Run 9: Statistics of SCReAM

Start at: 2017-11-16 13:06:23
End at: 2017-11-16 13:06:53
Local clock offset: 0.051 ms
Remote clock offset: 37.228 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.832 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.856 ms
Loss rate: 0.00%
```
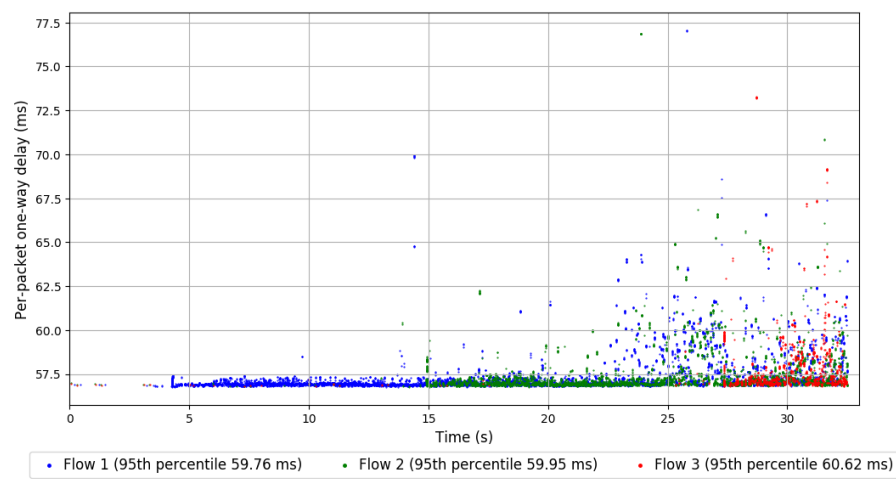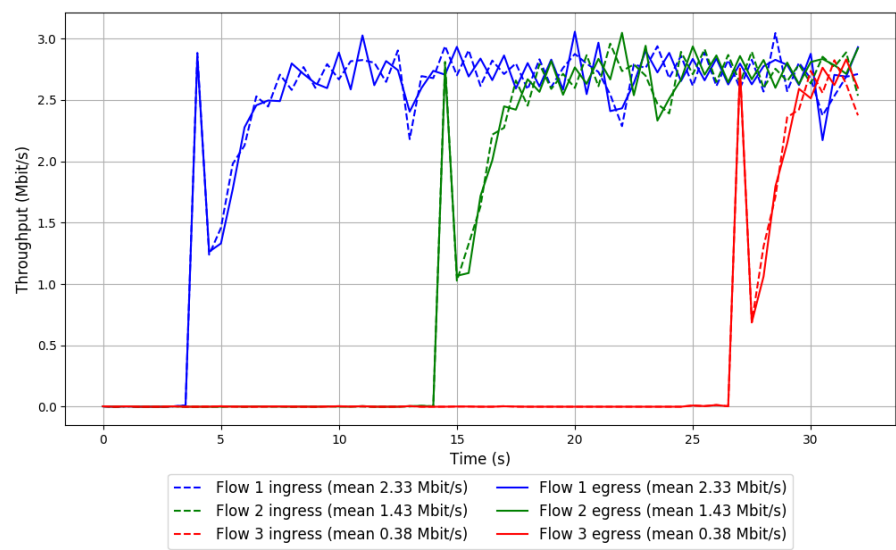
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2017-11-16 13:26:04
End at: 2017-11-16 13:26:34
Local clock offset: 0.057 ms
Remote clock offset: 36.067 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.469 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.489 ms
Loss rate: 0.00%
```
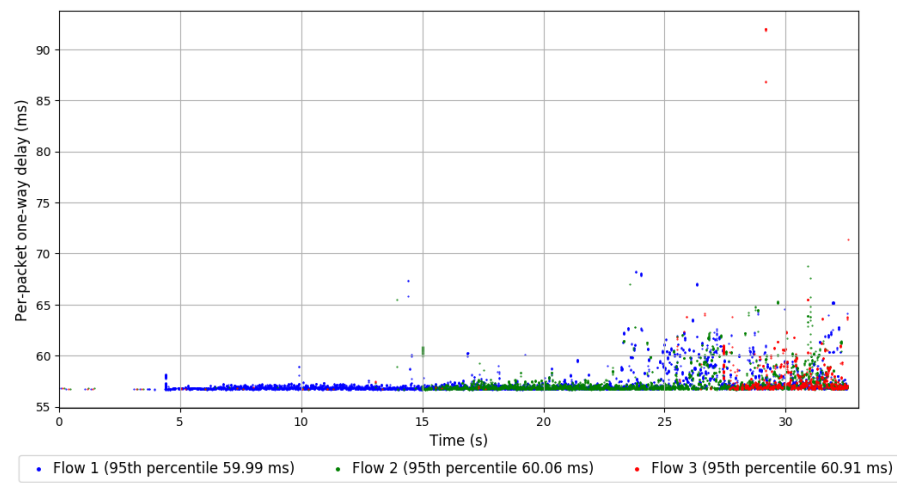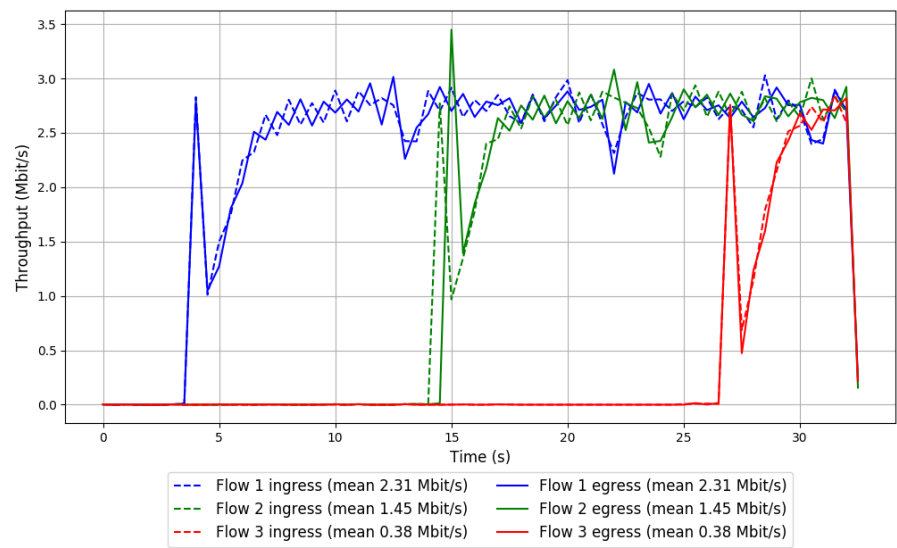
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 10:39:34
End at: 2017-11-16 10:40:04
Local clock offset: -0.218 ms
Remote clock offset: 35.696 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 59.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 58.805 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 59.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 60.703 ms
Loss rate: 0.00%
```
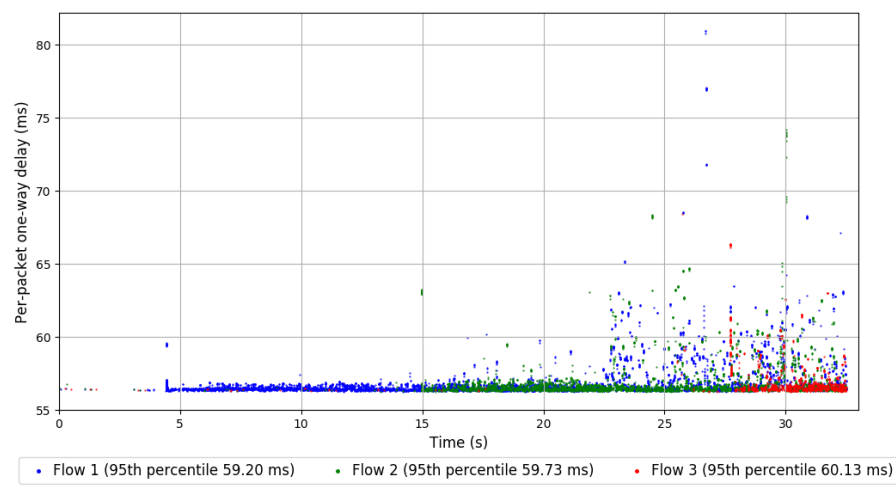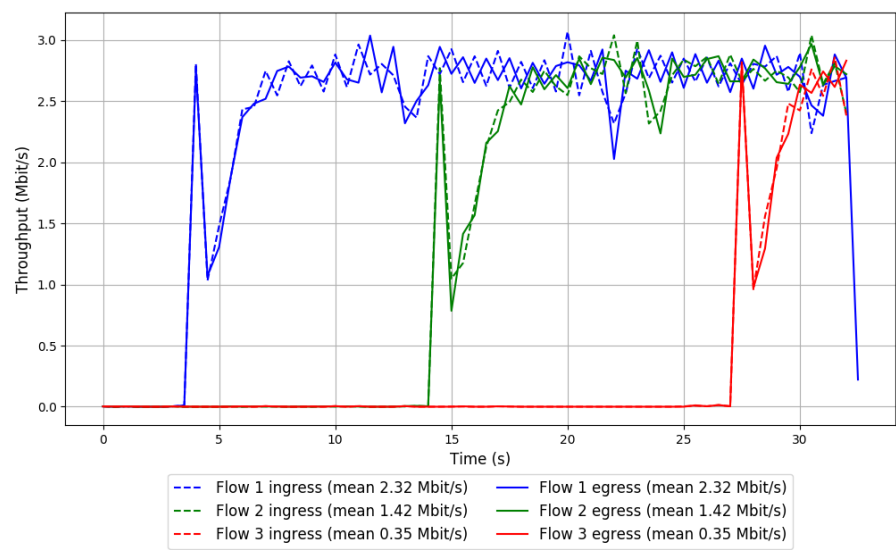
Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.31 Mbit/s)

```
Run 2: Statistics of WebRTC media

Start at: 2017-11-16 10:59:14
End at: 2017-11-16 10:59:44
Local clock offset: -0.23 ms
Remote clock offset: 35.196 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 59.917 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 59.761 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 59.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 60.623 ms
Loss rate: 0.01%
```
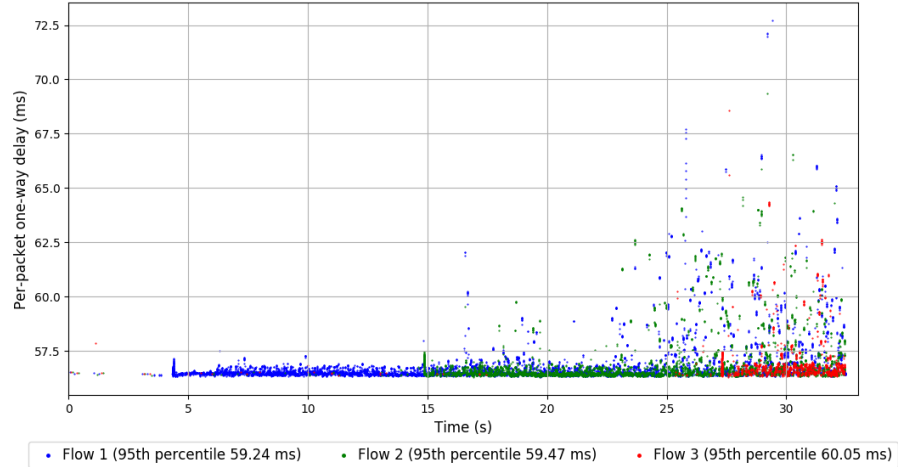
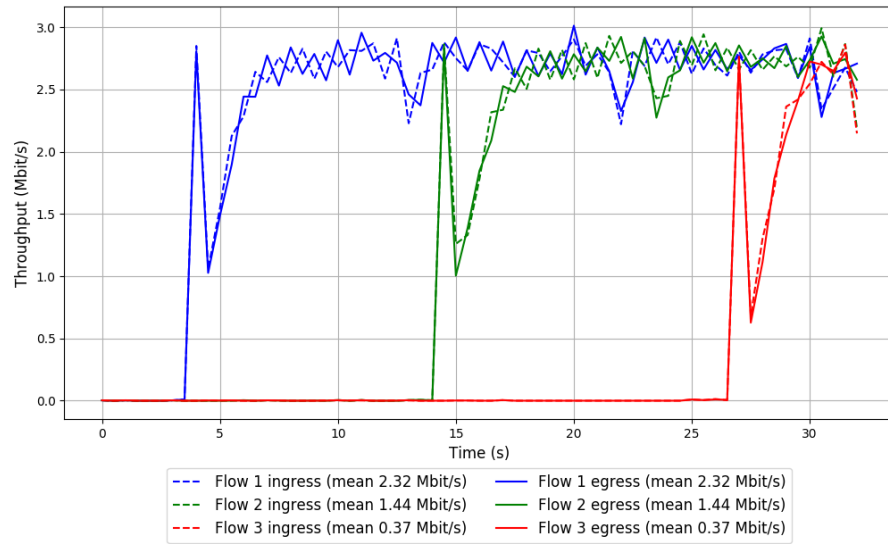Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-11-16 11:18:45
End at: 2017-11-16 11:19:15
Local clock offset: -0.12 ms
Remote clock offset: 34.412 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 60.305 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 59.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 60.057 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 60.907 ms
Loss rate: 0.00%
```

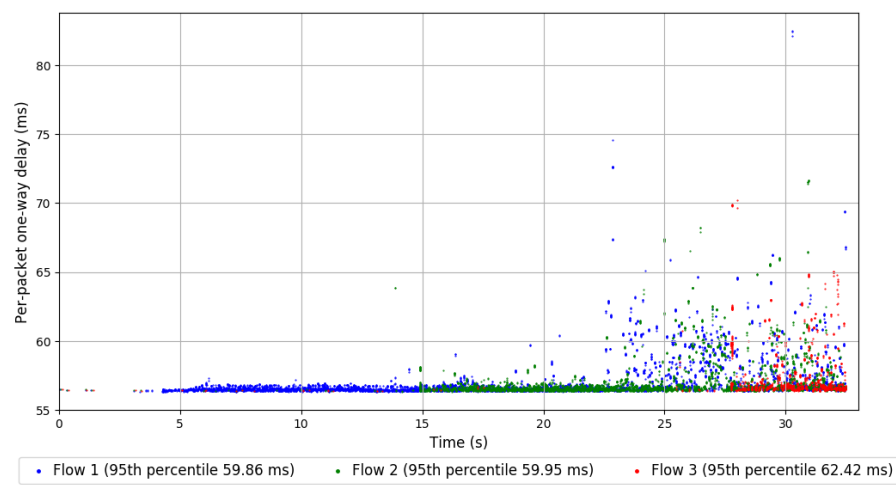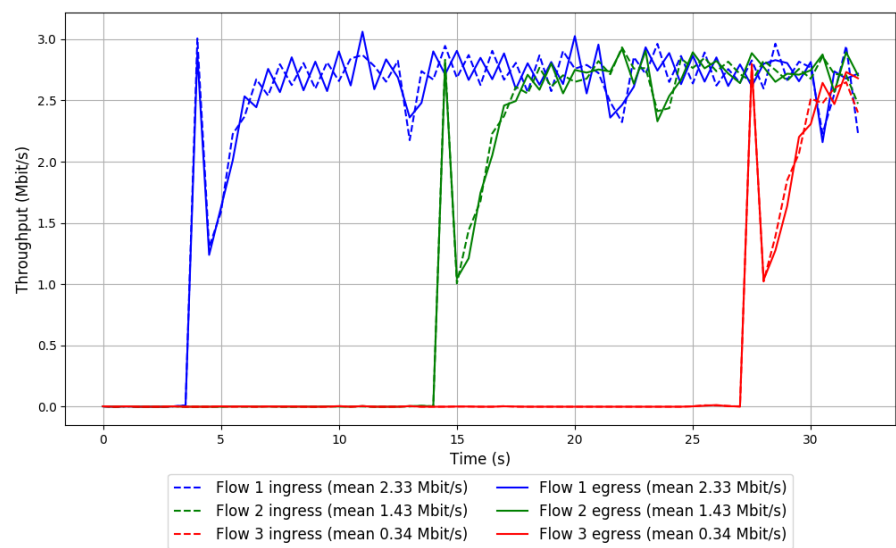Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-11-16 11:38:31
End at: 2017-11-16 11:39:01
Local clock offset: -0.122 ms
Remote clock offset: 34.219 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 59.613 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 59.203 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 59.729 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 60.134 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.32 Mbit/s)   Flow 1 egress (mean 2.32 Mbit/s)
Flow 2 ingress (mean 1.42 Mbit/s)   Flow 2 egress (mean 1.42 Mbit/s)
Flow 3 ingress (mean 0.35 Mbit/s)   Flow 3 egress (mean 0.35 Mbit/s)

Flow 1 (95th percentile 59.20 ms)   Flow 2 (95th percentile 59.73 ms)   Flow 3 (95th percentile 60.13 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2017-11-16 11:58:13
End at: 2017-11-16 11:58:43
Local clock offset: -0.006 ms
Remote clock offset: 36.466 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 59.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 59.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 59.468 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 60.047 ms
Loss rate: 0.00%
```
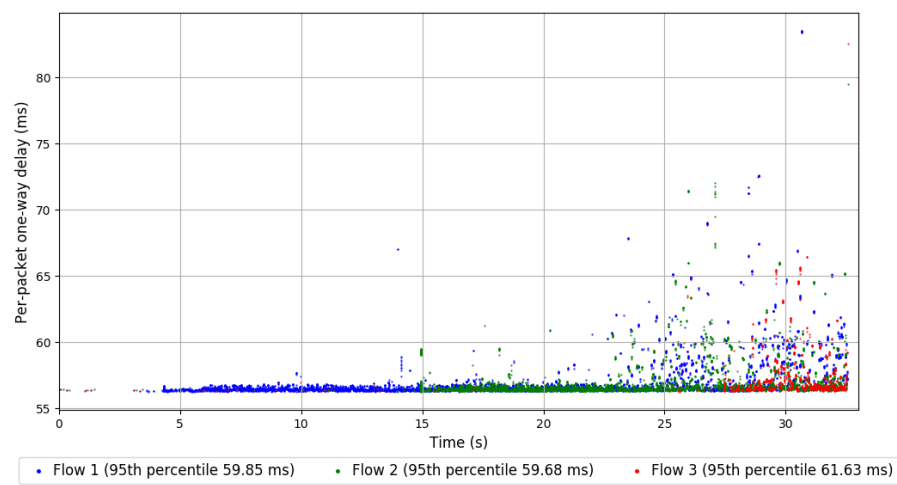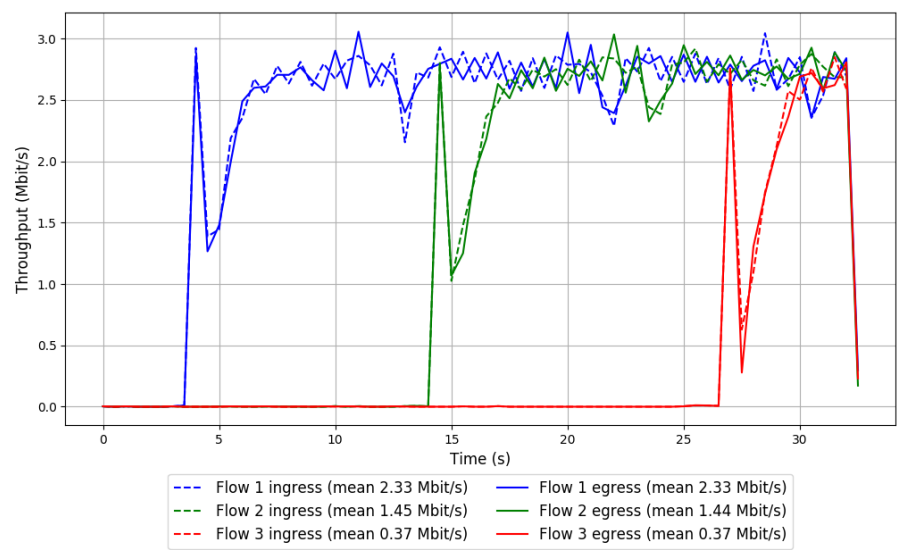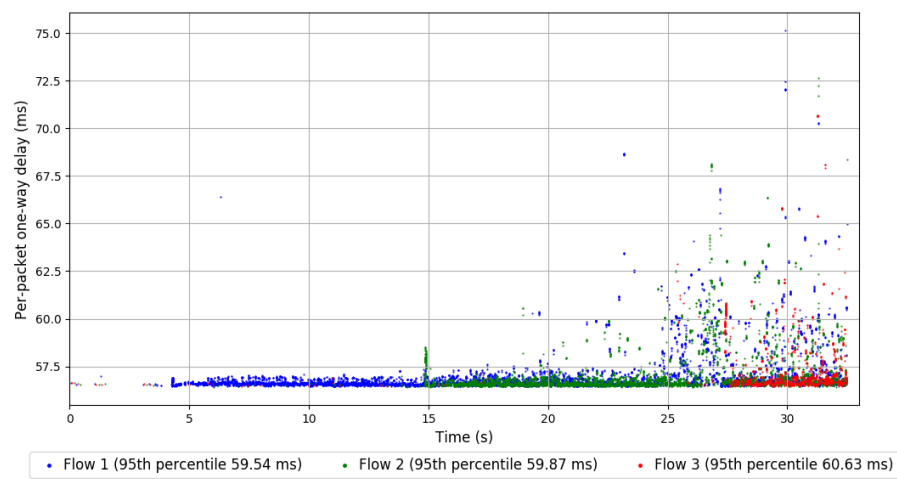
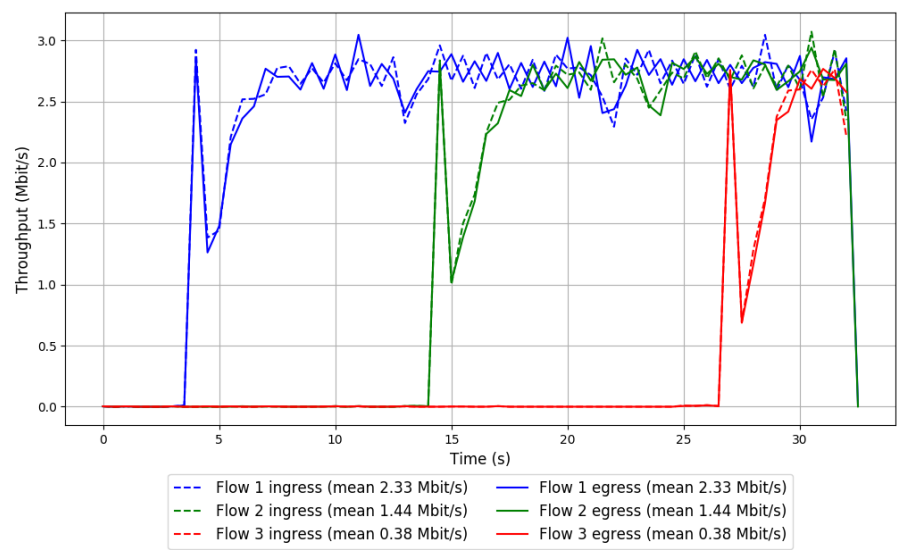Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-11-16 12:17:52
End at: 2017-11-16 12:18:22
Local clock offset: 0.0 ms
Remote clock offset: 36.866 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 60.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 59.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 59.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 62.424 ms
Loss rate: 0.00%
```

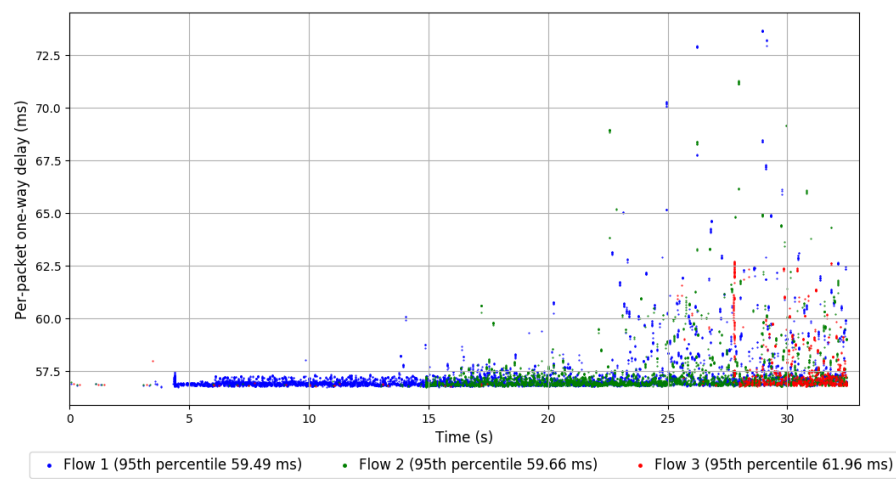Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-11-16 12:37:36
End at: 2017-11-16 12:38:06
Local clock offset: 0.027 ms
Remote clock offset: 36.0 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 59.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 59.851 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 59.682 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 61.633 ms
Loss rate: 0.00%
```

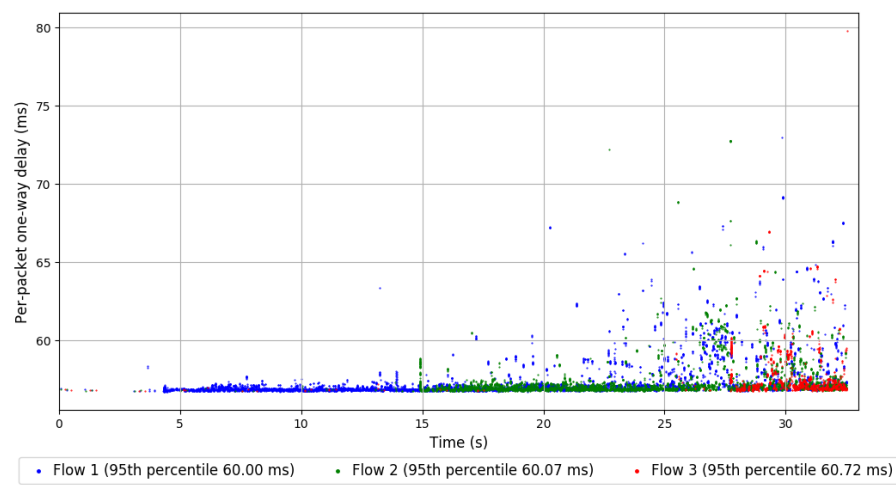Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-11-16 12:57:16
End at: 2017-11-16 12:57:46
Local clock offset: -0.056 ms
Remote clock offset: 36.871 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 59.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 59.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 59.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 60.634 ms
Loss rate: 0.00%
```
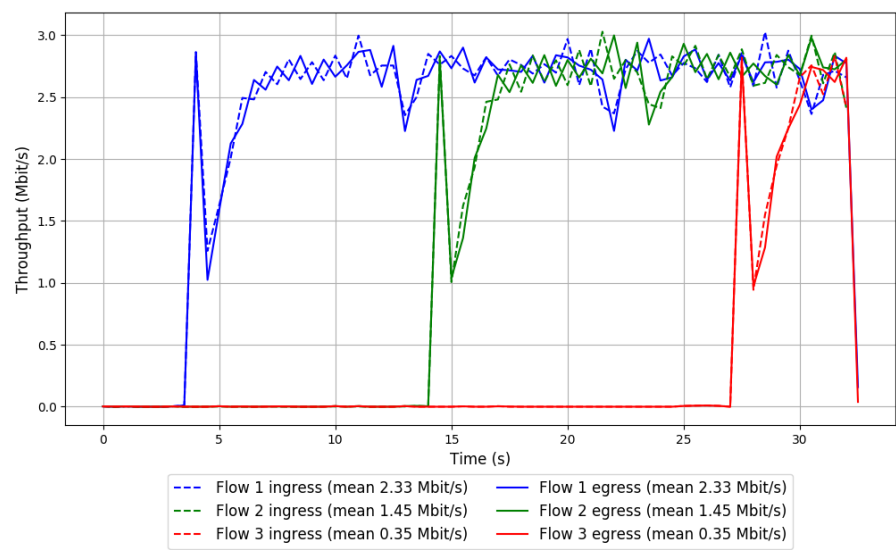
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-11-16 13:16:58
End at: 2017-11-16 13:17:28
Local clock offset: 0.033 ms
Remote clock offset: 36.848 ms

# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 59.850 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 59.492 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 59.661 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 61.960 ms
Loss rate: 0.00%
```
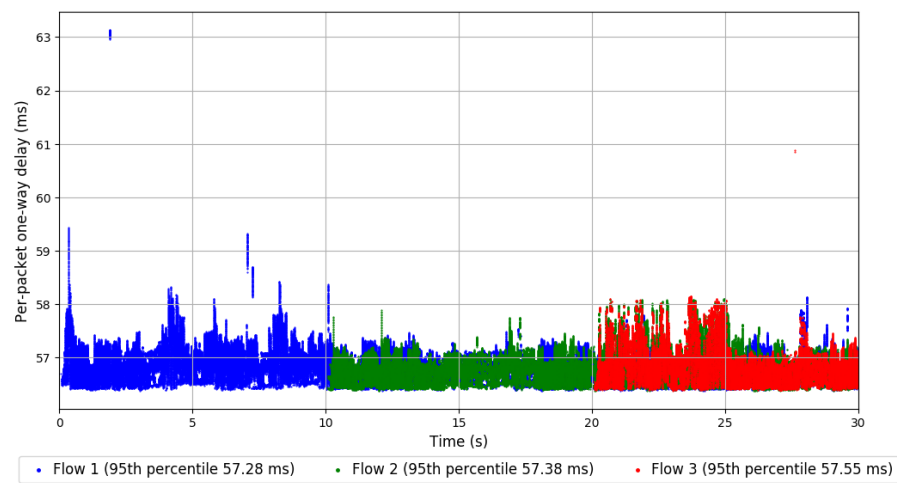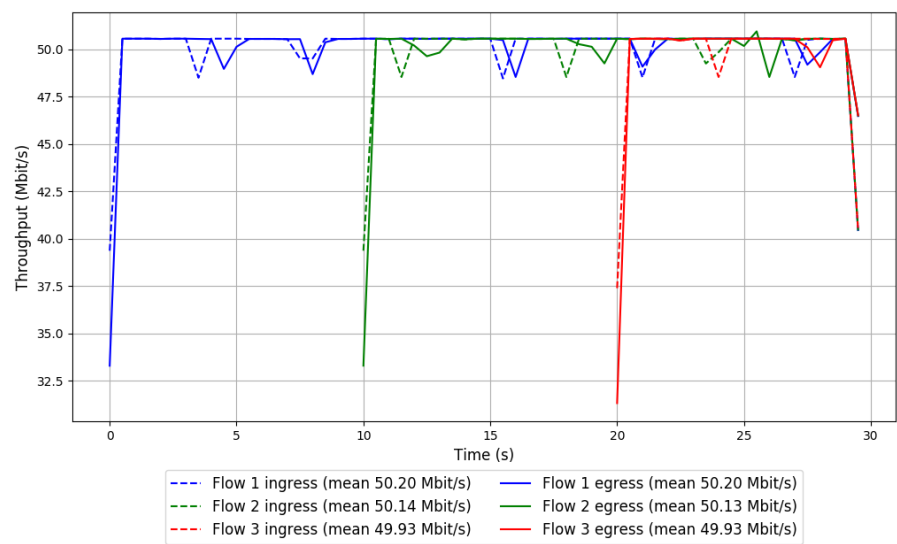
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-11-16 13:36:44
End at: 2017-11-16 13:37:14
Local clock offset: 0.044 ms
Remote clock offset: 36.058 ms


# Below is generated by plot.py at 2017-11-16 16:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 60.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 60.001 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 60.066 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 60.716 ms
Loss rate: 0.00%
```

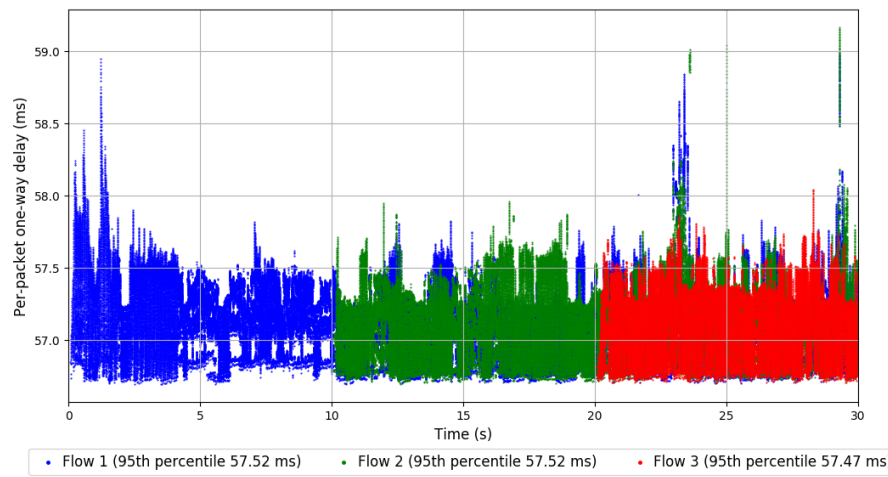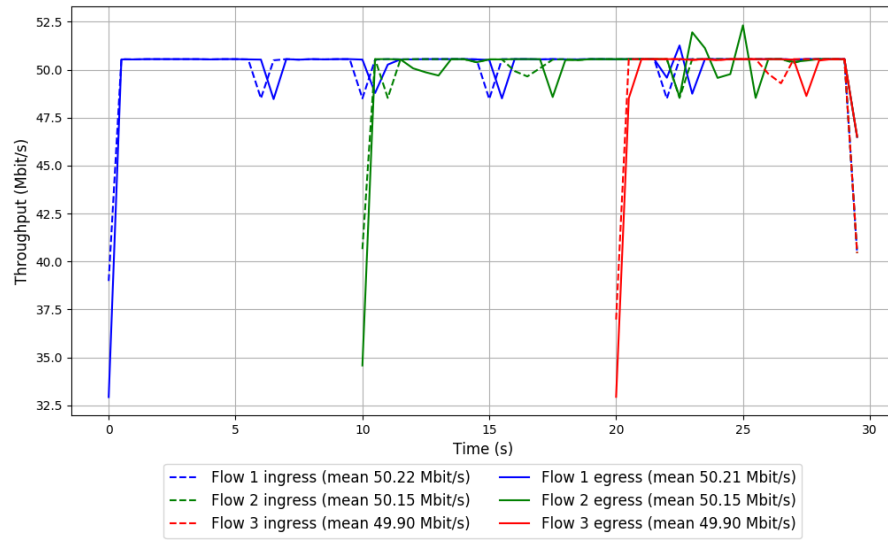## Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-11-16 10:38:27
End at: 2017-11-16 10:38:57
Local clock offset: -0.222 ms
Remote clock offset: 35.417 ms


# Below is generated by plot.py at 2017-11-16 16:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.03 Mbit/s
95th percentile per-packet one-way delay: 57.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 57.285 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 57.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.93 Mbit/s
95th percentile per-packet one-way delay: 57.552 ms
Loss rate: 0.00%
```
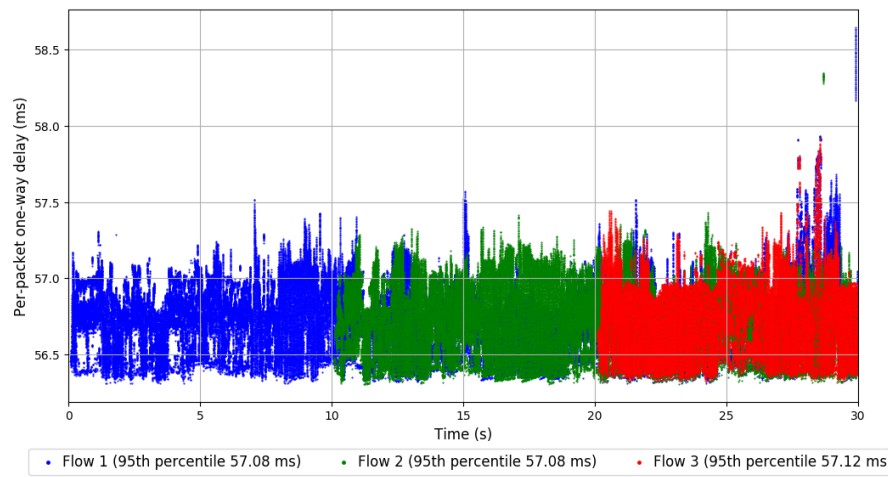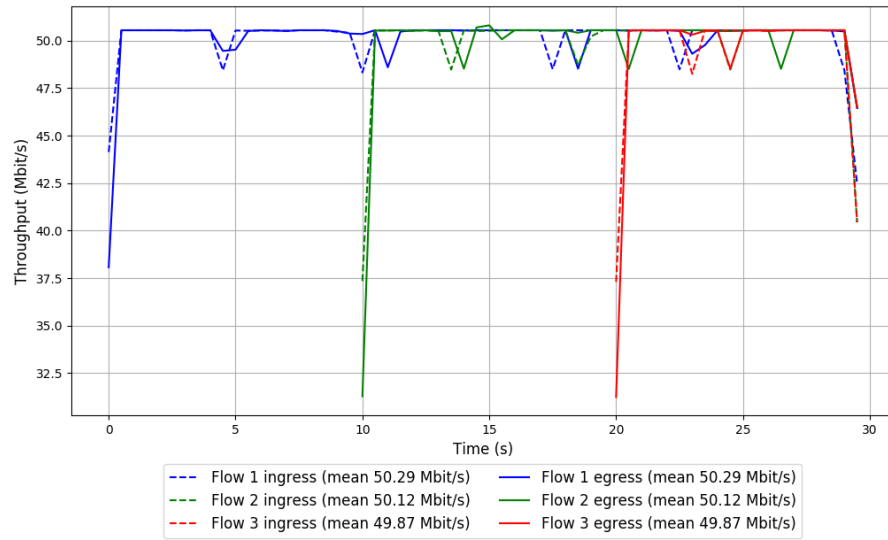
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-11-16 10:58:07
End at: 2017-11-16 10:58:37
Local clock offset: -0.197 ms
Remote clock offset: 35.167 ms


# Below is generated by plot.py at 2017-11-16 16:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.05 Mbit/s
95th percentile per-packet one-way delay: 57.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 57.524 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.15 Mbit/s
95th percentile per-packet one-way delay: 57.516 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 57.471 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-11-16 11:17:38
End at: 2017-11-16 11:18:08
Local clock offset: -0.11 ms
Remote clock offset: 34.091 ms


# Below is generated by plot.py at 2017-11-16 16:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.07 Mbit/s
95th percentile per-packet one-way delay: 57.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 57.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.12 Mbit/s
95th percentile per-packet one-way delay: 57.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.87 Mbit/s
95th percentile per-packet one-way delay: 57.119 ms
Loss rate: 0.00%
```
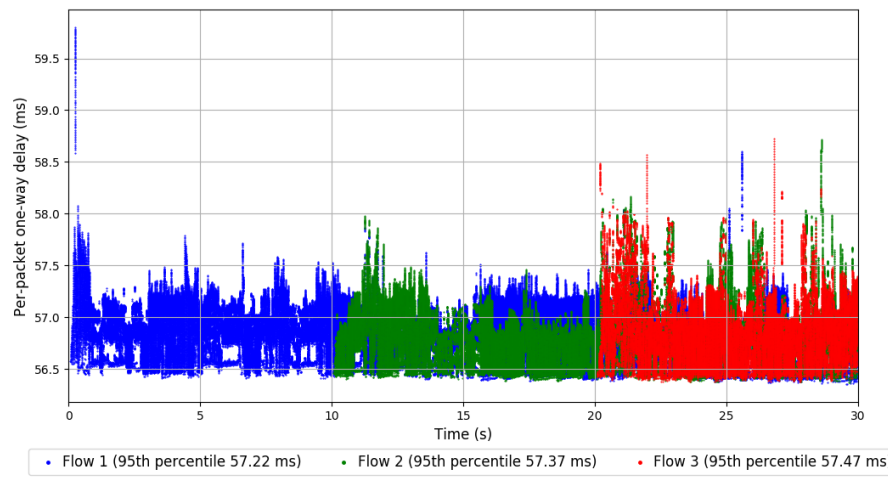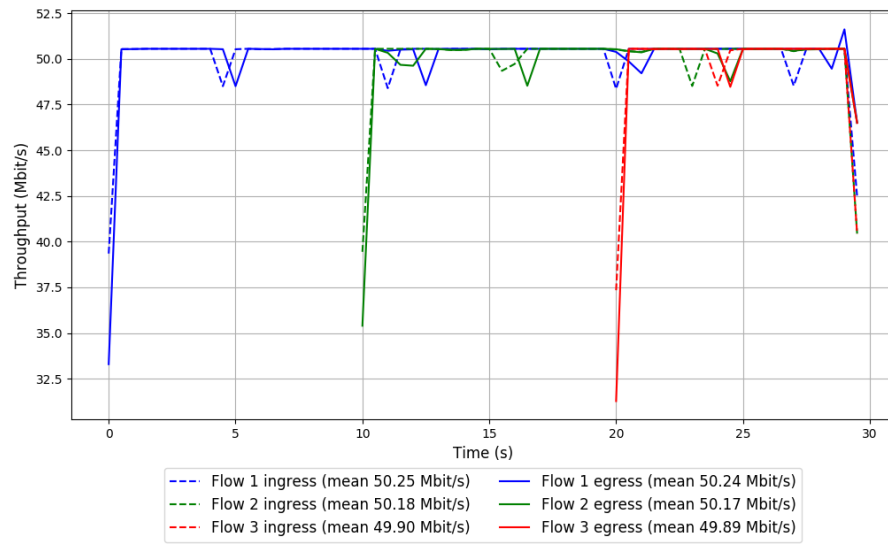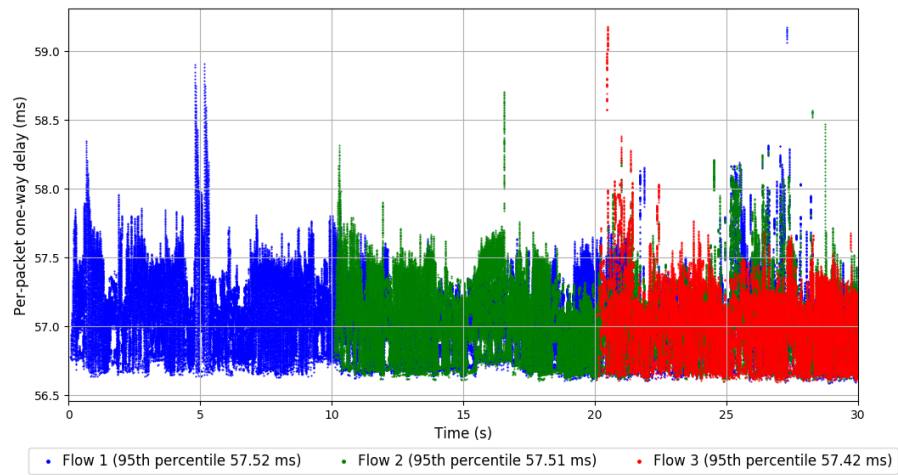
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-11-16 11:37:24
End at: 2017-11-16 11:37:54
Local clock offset: -0.165 ms
Remote clock offset: 34.139 ms


# Below is generated by plot.py at 2017-11-16 16:39:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.09 Mbit/s
95th percentile per-packet one-way delay: 57.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 57.220 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 57.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 57.466 ms
Loss rate: 0.00%
```

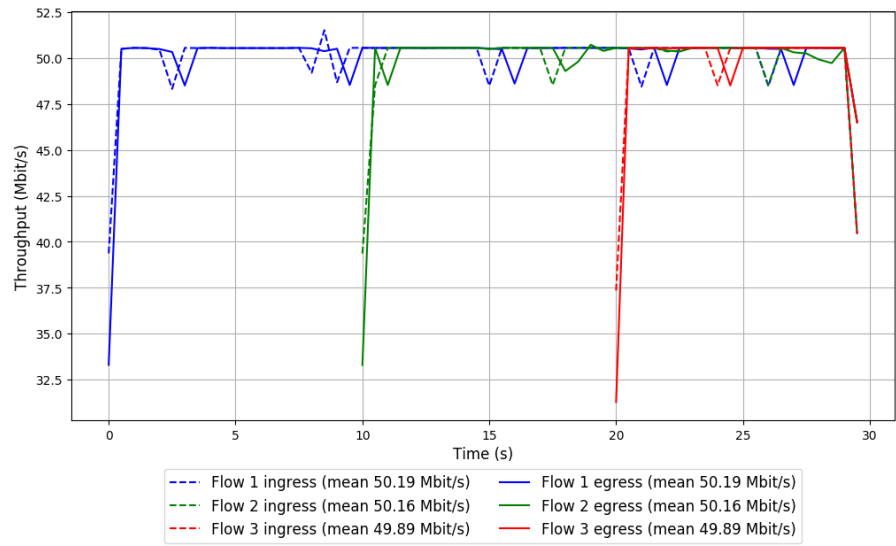Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-11-16 11:57:06
End at: 2017-11-16 11:57:36
Local clock offset: -0.003 ms
Remote clock offset: 36.651 ms


# Below is generated by plot.py at 2017-11-16 16:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 57.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 57.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 57.513 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 57.424 ms
Loss rate: 0.00%
```

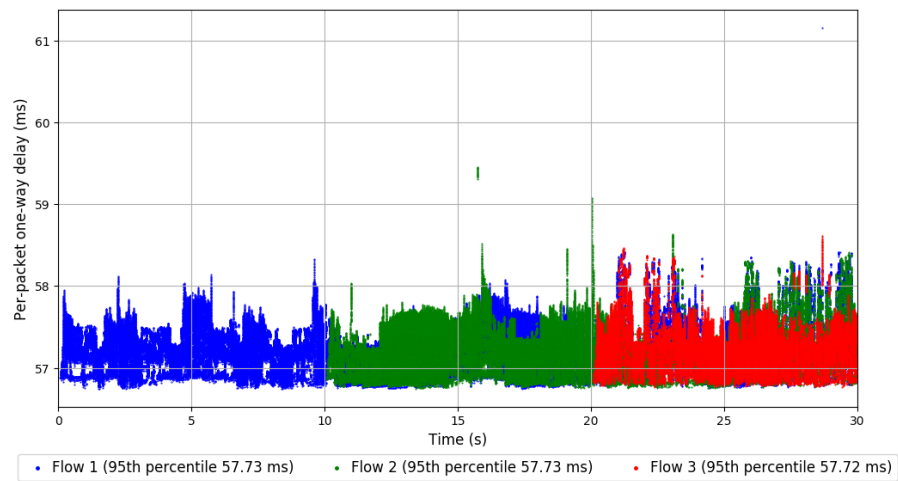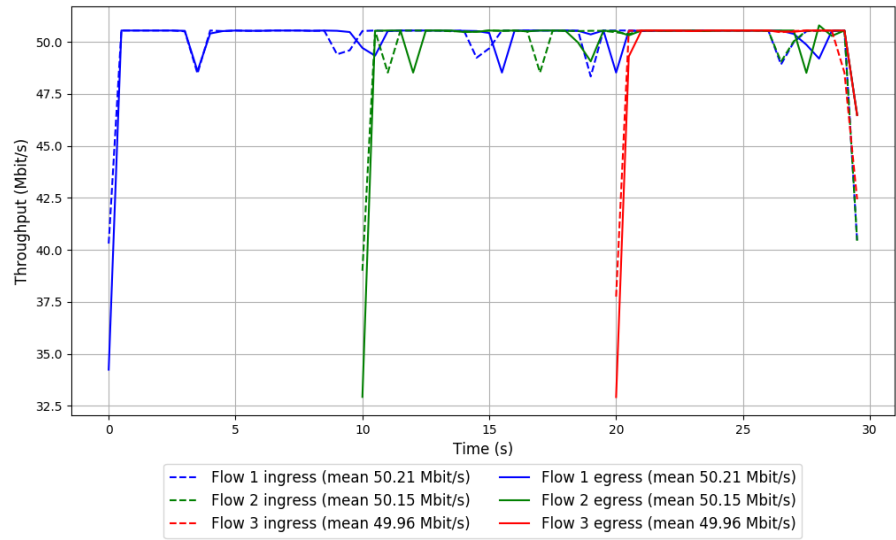Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-11-16 12:16:45
End at: 2017-11-16 12:17:15
Local clock offset: -0.01 ms
Remote clock offset: 37.317 ms


# Below is generated by plot.py at 2017-11-16 16:40:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.05 Mbit/s
95th percentile per-packet one-way delay: 57.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 57.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.15 Mbit/s
95th percentile per-packet one-way delay: 57.727 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 57.719 ms
Loss rate: 0.00%
```
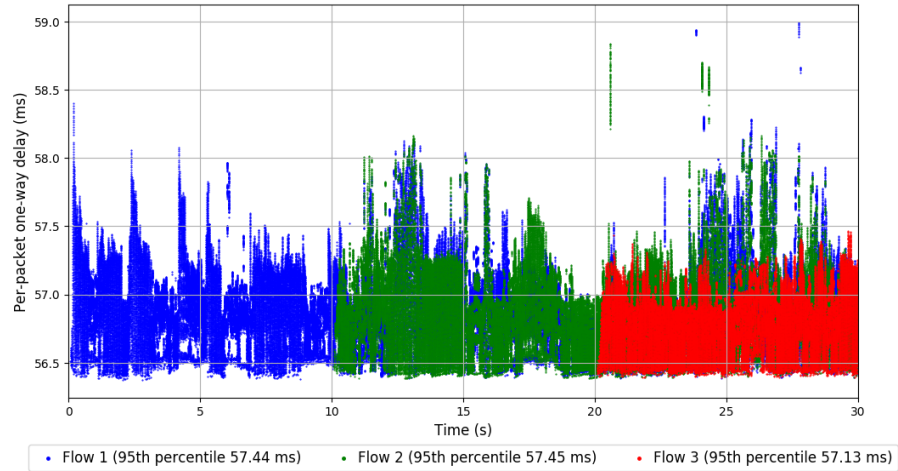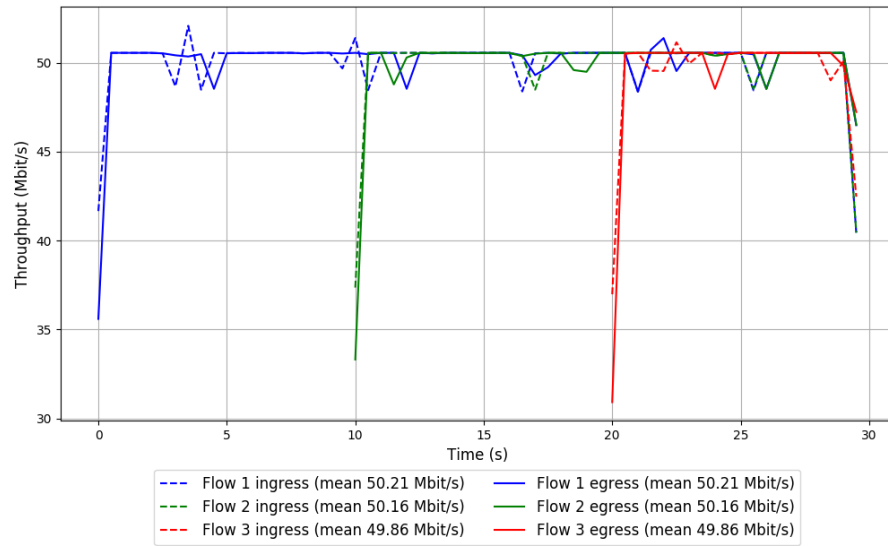
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-11-16 12:36:29
End at: 2017-11-16 12:36:59
Local clock offset: 0.032 ms
Remote clock offset: 36.136 ms

# Below is generated by plot.py at 2017-11-16 16:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 57.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 57.444 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 57.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.86 Mbit/s
95th percentile per-packet one-way delay: 57.128 ms
Loss rate: 0.00%
```
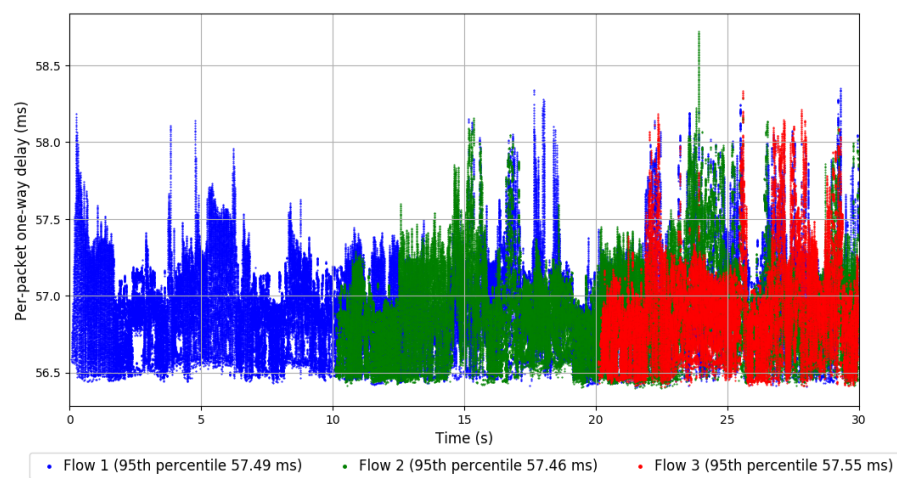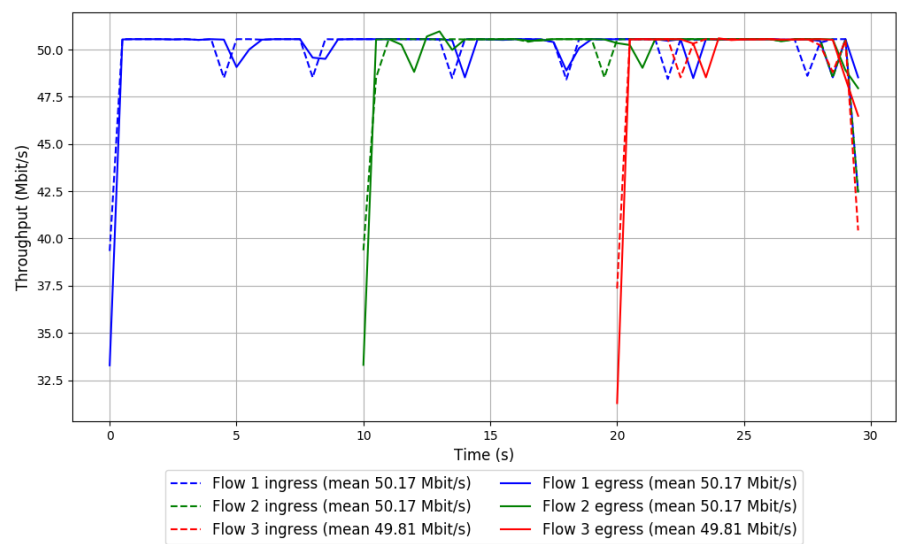
Run 7: Report of Sprout — Data Link

- - - Flow 1 ingress (mean 50.21 Mbit/s)   —— Flow 1 egress (mean 50.21 Mbit/s)
- - - Flow 2 ingress (mean 50.16 Mbit/s)   —— Flow 2 egress (mean 50.16 Mbit/s)
- - - Flow 3 ingress (mean 49.86 Mbit/s)   —— Flow 3 egress (mean 49.86 Mbit/s)

- Flow 1 (95th percentile 57.44 ms)   • Flow 2 (95th percentile 57.45 ms)   • Flow 3 (95th percentile 57.13 ms)

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```
Run 8: Statistics of Sprout

Start at: 2017-11-16 12:56:09
End at: 2017-11-16 12:56:39
Local clock offset: -0.05 ms
Remote clock offset: 36.767 ms


# Below is generated by plot.py at 2017-11-16 16:40:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.98 Mbit/s
95th percentile per-packet one-way delay: 57.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 57.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 57.461 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 57.545 ms
Loss rate: 0.00%
```

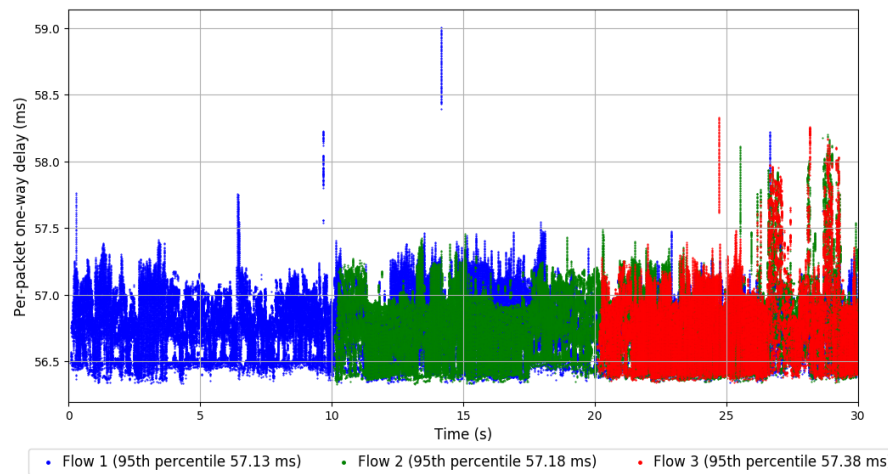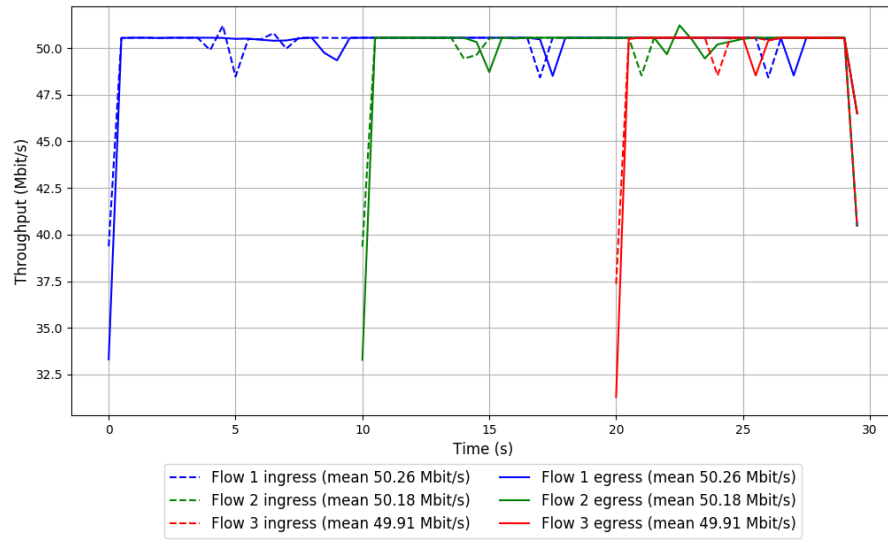## Run 8: Report of Sprout — Data Link

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```
Run 9: Statistics of Sprout

Start at: 2017-11-16 13:15:51
End at: 2017-11-16 13:16:21
Local clock offset: 0.057 ms
Remote clock offset: 36.473 ms


# Below is generated by plot.py at 2017-11-16 16:40:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.12 Mbit/s
95th percentile per-packet one-way delay: 57.165 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.26 Mbit/s
95th percentile per-packet one-way delay: 57.128 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.18 Mbit/s
95th percentile per-packet one-way delay: 57.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.91 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.00%
```

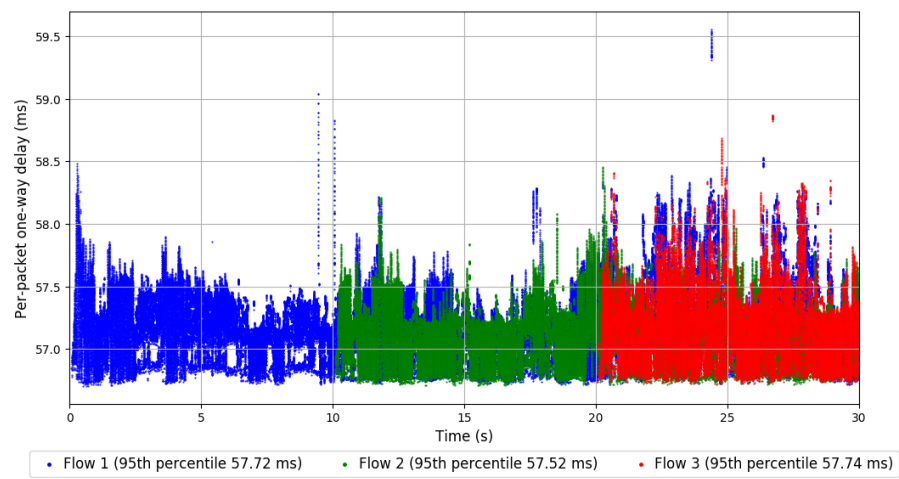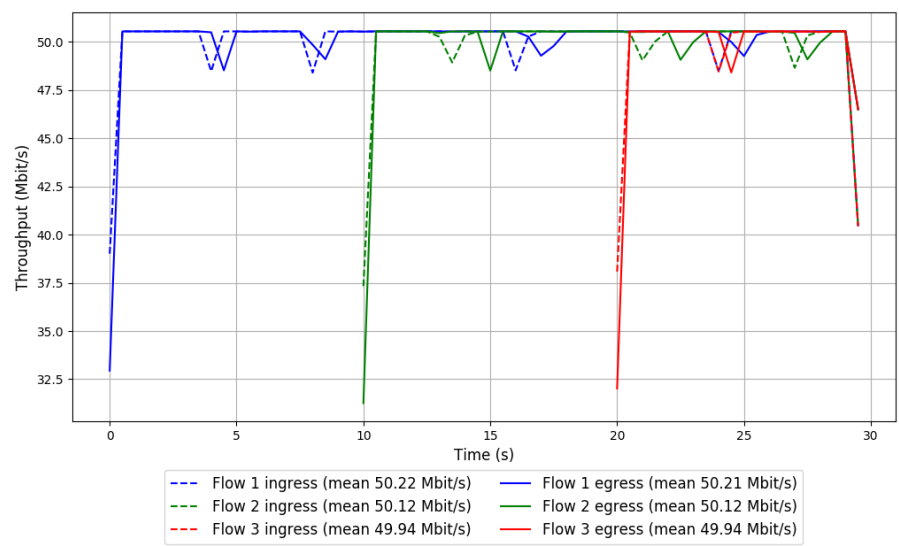## Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-11-16 13:35:37
End at: 2017-11-16 13:36:07
Local clock offset: 0.039 ms
Remote clock offset: 36.086 ms


# Below is generated by plot.py at 2017-11-16 16:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.02 Mbit/s
95th percentile per-packet one-way delay: 57.655 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 57.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.12 Mbit/s
95th percentile per-packet one-way delay: 57.521 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 57.743 ms
Loss rate: 0.00%
```

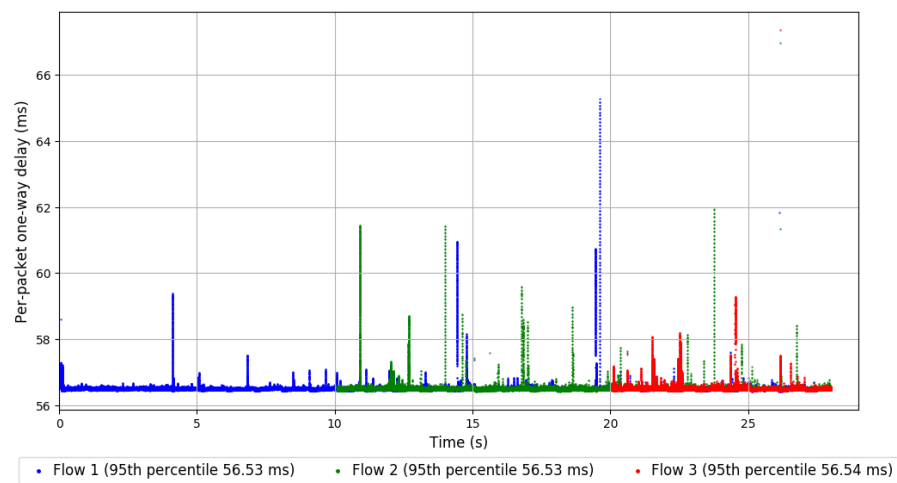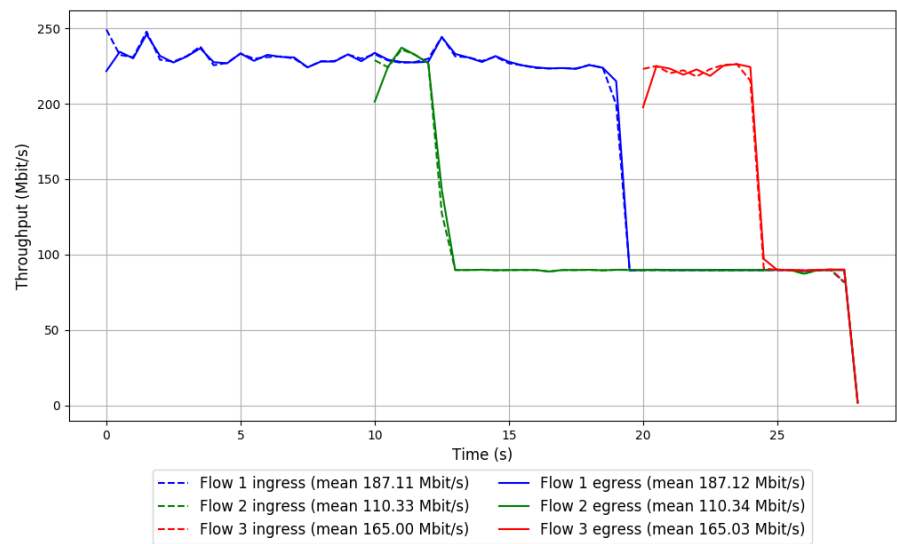Run 10: Report of Sprout — Data Link

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

Start at: 2017-11-16 10:27:28
End at: 2017-11-16 10:27:58
Local clock offset: -0.3 ms
Remote clock offset: 35.322 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.77 Mbit/s
95th percentile per-packet one-way delay: 56.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.12 Mbit/s
95th percentile per-packet one-way delay: 56.528 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.34 Mbit/s
95th percentile per-packet one-way delay: 56.535 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.03 Mbit/s
95th percentile per-packet one-way delay: 56.537 ms
Loss rate: 0.00%
```

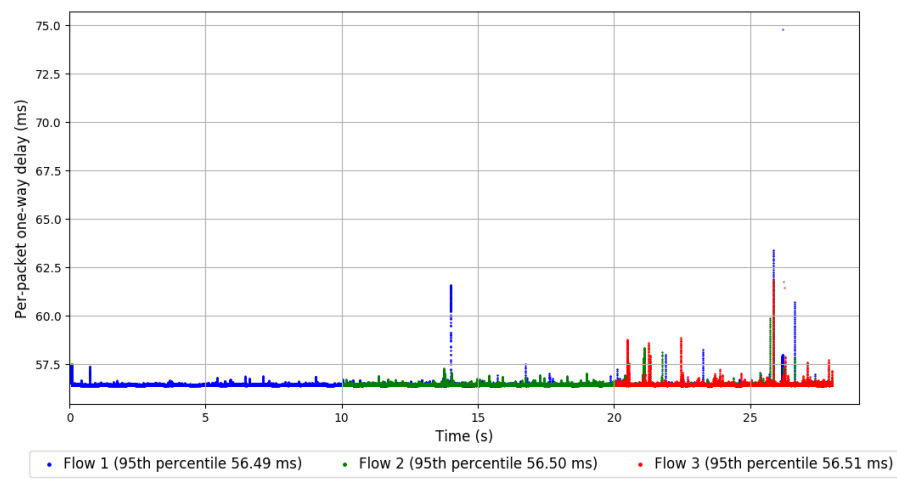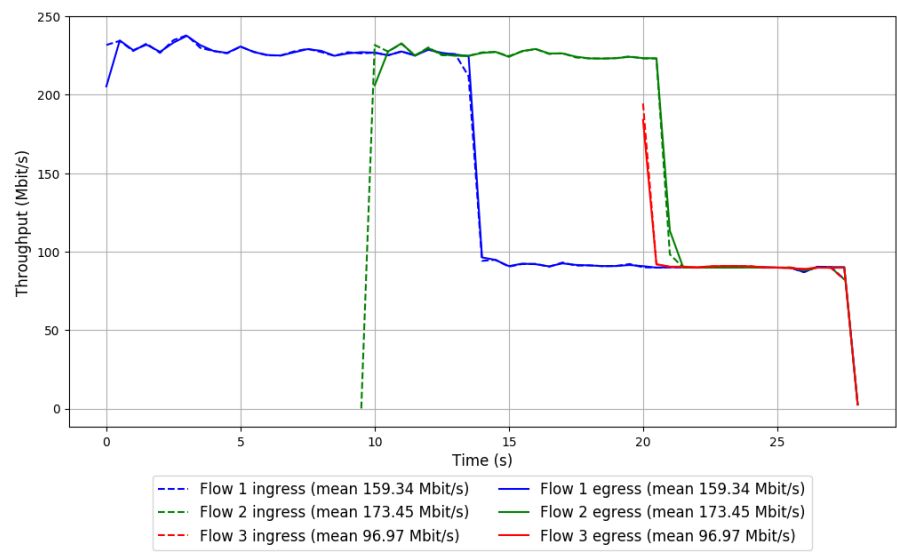Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 187.11 Mbit/s)   Flow 1 egress (mean 187.12 Mbit/s)
Flow 2 ingress (mean 110.33 Mbit/s)   Flow 2 egress (mean 110.34 Mbit/s)
Flow 3 ingress (mean 165.00 Mbit/s)   Flow 3 egress (mean 165.03 Mbit/s)

Flow 1 (95th percentile 56.53 ms)   Flow 2 (95th percentile 56.53 ms)   Flow 3 (95th percentile 56.54 ms)

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

Start at: 2017-11-16 10:47:16
End at: 2017-11-16 10:47:46
Local clock offset: -0.232 ms
Remote clock offset: 35.23 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.28 Mbit/s
95th percentile per-packet one-way delay: 56.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.34 Mbit/s
95th percentile per-packet one-way delay: 56.486 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.45 Mbit/s
95th percentile per-packet one-way delay: 56.497 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 56.508 ms
Loss rate: 0.00%
```

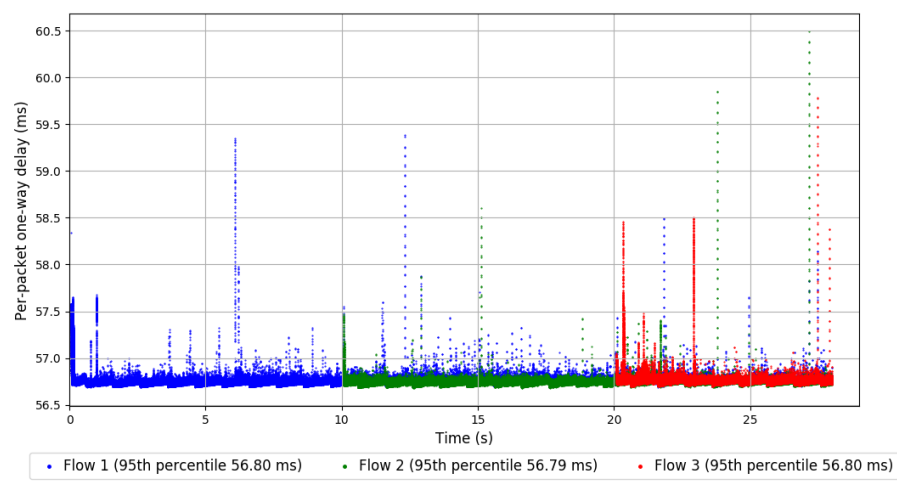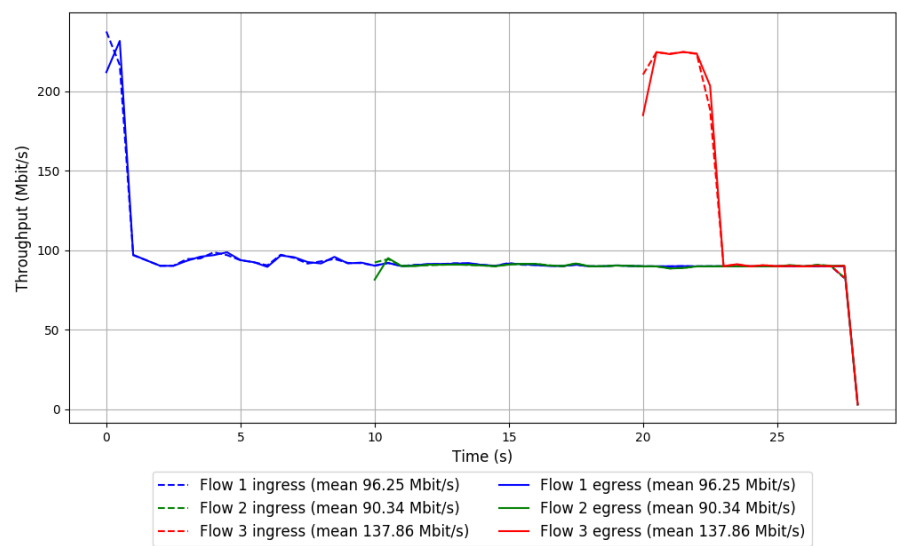Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-16 11:06:49
End at: 2017-11-16 11:07:19
Local clock offset: -0.178 ms
Remote clock offset: 34.845 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.39 Mbit/s
95th percentile per-packet one-way delay: 56.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 56.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.34 Mbit/s
95th percentile per-packet one-way delay: 56.789 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 137.86 Mbit/s
95th percentile per-packet one-way delay: 56.804 ms
Loss rate: 0.00%
```
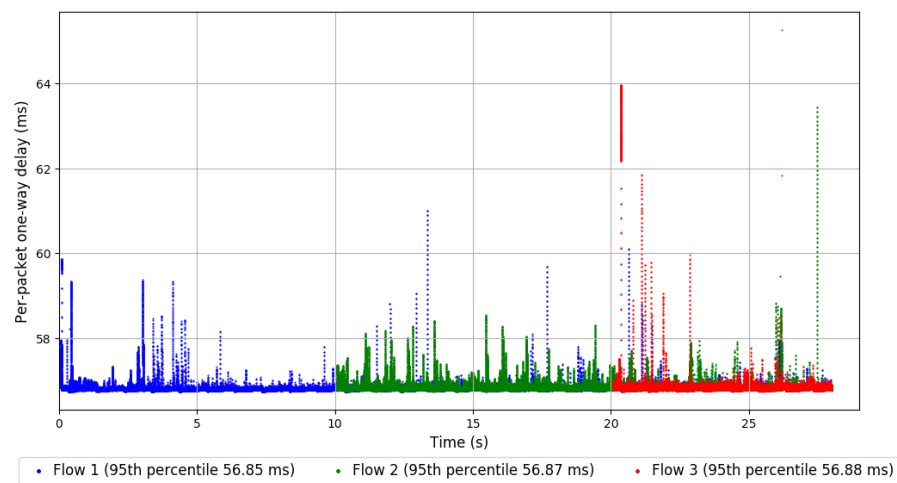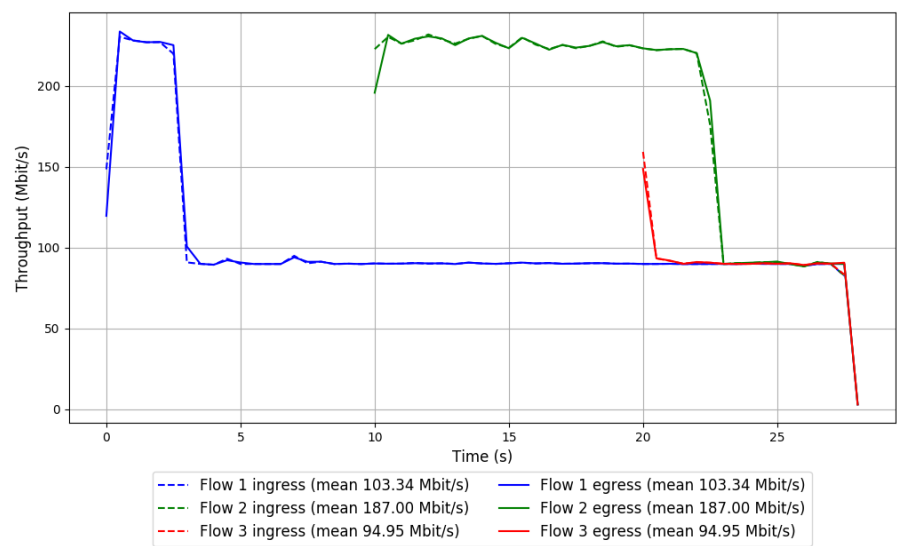
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 96.25 Mbit/s) --- Flow 1 egress (mean 96.25 Mbit/s)
Flow 2 ingress (mean 90.34 Mbit/s) --- Flow 2 egress (mean 90.34 Mbit/s)
Flow 3 ingress (mean 137.86 Mbit/s) --- Flow 3 egress (mean 137.86 Mbit/s)

Flow 1 (95th percentile 56.80 ms) • Flow 2 (95th percentile 56.79 ms) • Flow 3 (95th percentile 56.80 ms)

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

Start at: 2017-11-16 11:26:24
End at: 2017-11-16 11:26:54
Local clock offset: -0.099 ms
Remote clock offset: 34.28 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.31 Mbit/s
95th percentile per-packet one-way delay: 56.862 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.34 Mbit/s
95th percentile per-packet one-way delay: 56.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.00 Mbit/s
95th percentile per-packet one-way delay: 56.868 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 56.875 ms
Loss rate: 0.00%
```

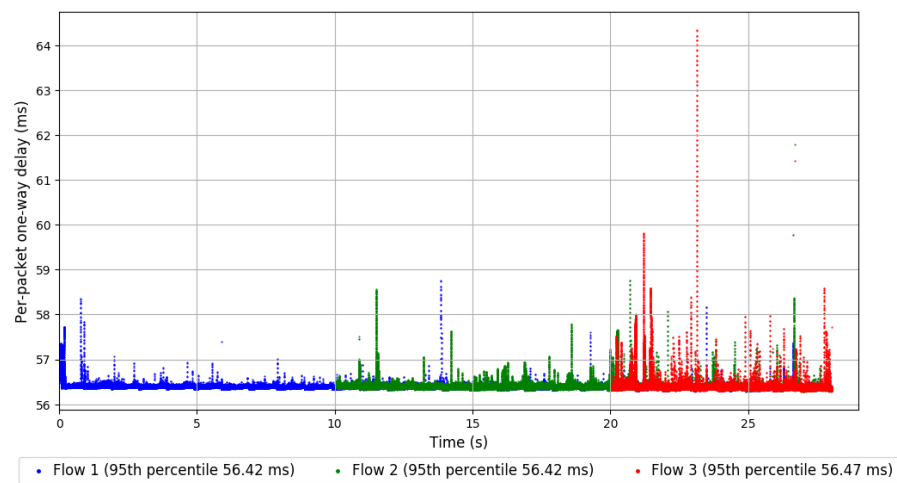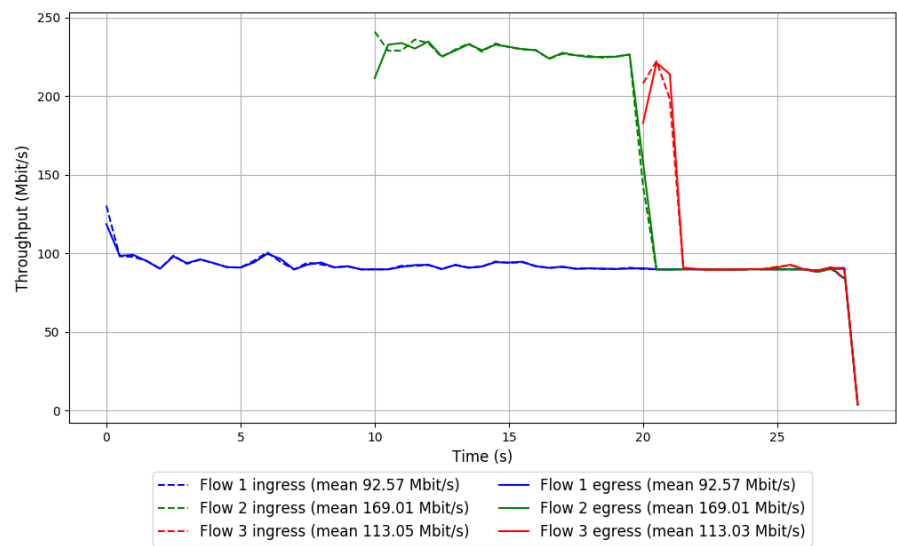Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-16 11:46:11
End at: 2017-11-16 11:46:41
Local clock offset: -0.048 ms
Remote clock offset: 35.238 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.15 Mbit/s
95th percentile per-packet one-way delay: 56.426 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.57 Mbit/s
95th percentile per-packet one-way delay: 56.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.01 Mbit/s
95th percentile per-packet one-way delay: 56.425 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 113.03 Mbit/s
95th percentile per-packet one-way delay: 56.468 ms
Loss rate: 0.00%
```

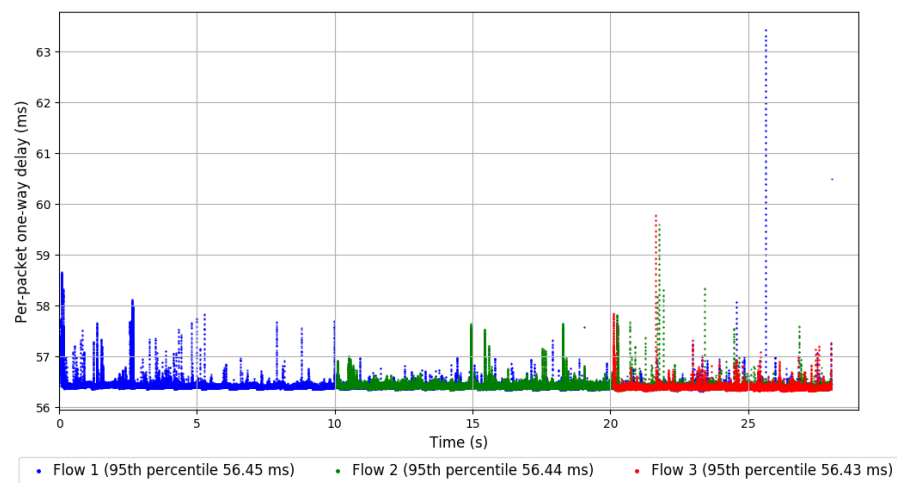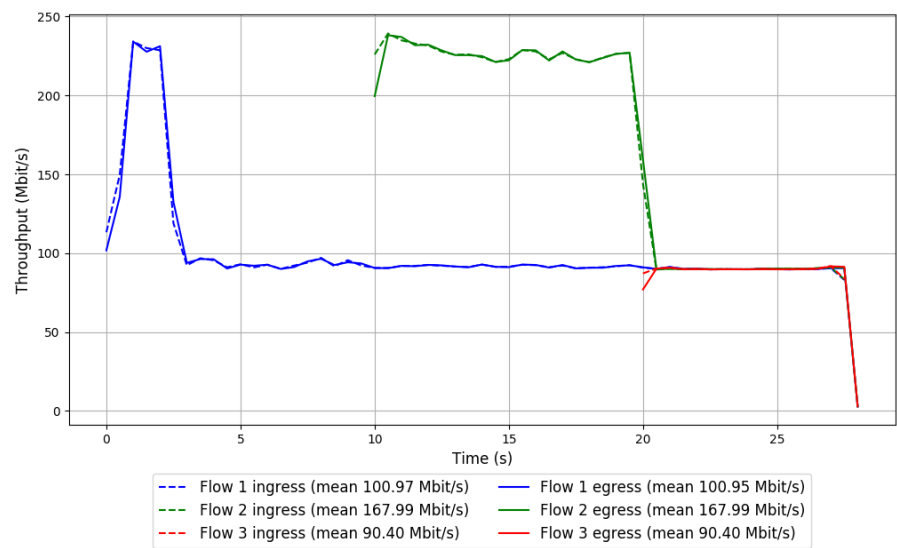Run 5: Report of TaoVA-100x — Data Link

```
Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 12:05:52
End at: 2017-11-16 12:06:22
Local clock offset: -0.075 ms
Remote clock offset: 37.088 ms


# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.34 Mbit/s
95th percentile per-packet one-way delay: 56.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 100.95 Mbit/s
95th percentile per-packet one-way delay: 56.448 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.99 Mbit/s
95th percentile per-packet one-way delay: 56.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.40 Mbit/s
95th percentile per-packet one-way delay: 56.430 ms
Loss rate: 0.00%
```

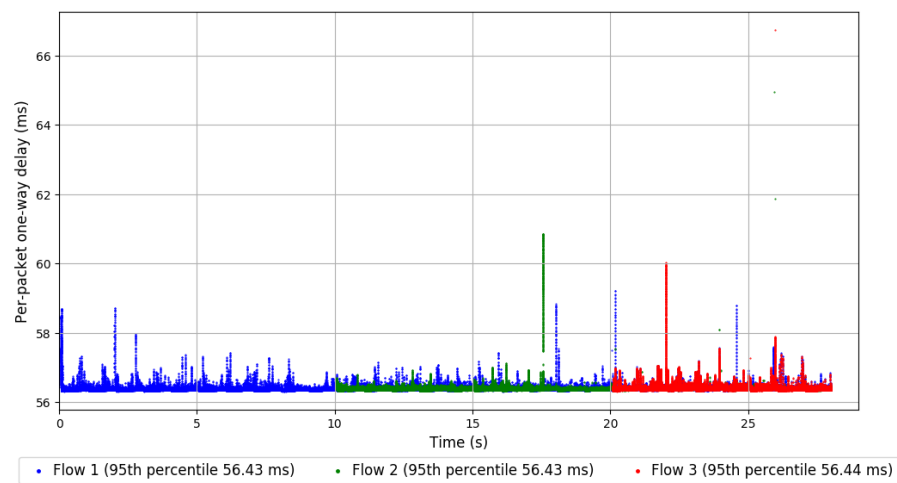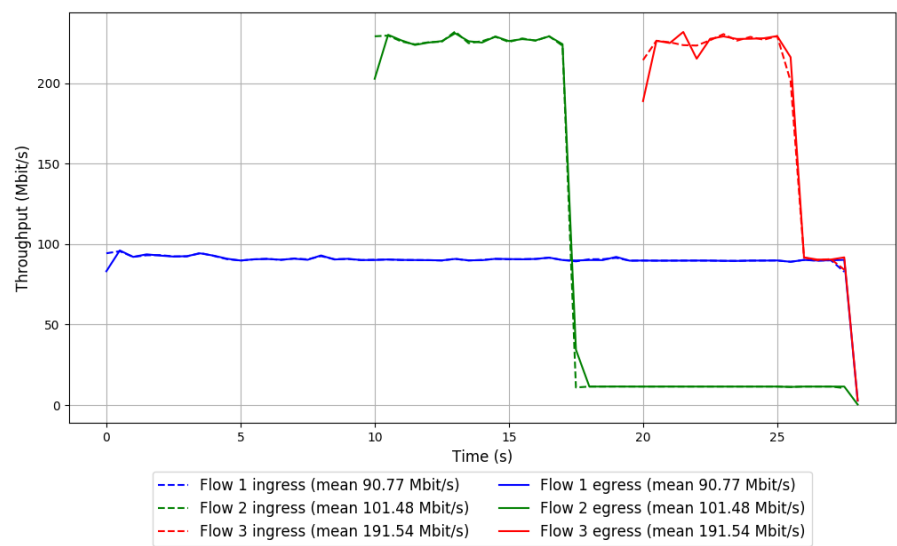# Run 6: Report of TaoVA-100x — Data Link

```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 12:25:33
End at: 2017-11-16 12:26:03
Local clock offset: 0.016 ms
Remote clock offset: 36.535 ms

# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.30 Mbit/s
95th percentile per-packet one-way delay: 56.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.77 Mbit/s
95th percentile per-packet one-way delay: 56.433 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 101.48 Mbit/s
95th percentile per-packet one-way delay: 56.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.54 Mbit/s
95th percentile per-packet one-way delay: 56.436 ms
Loss rate: 0.00%
```

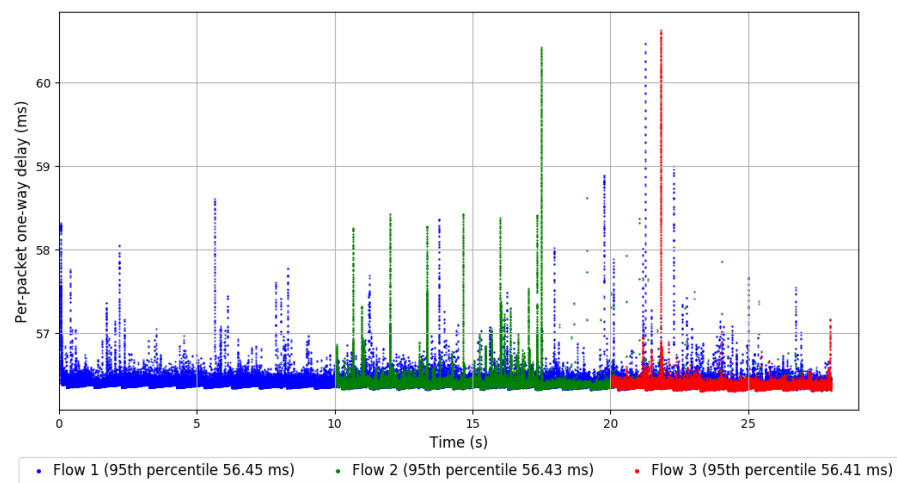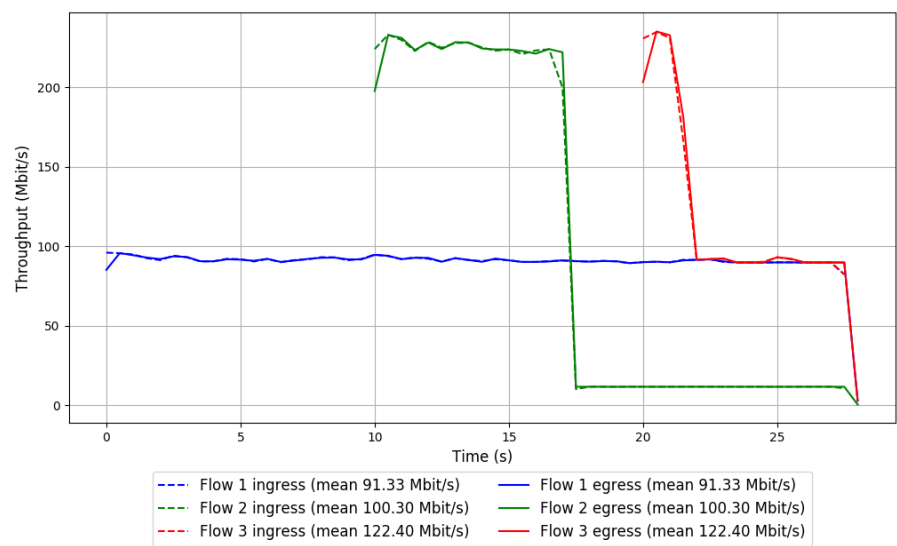Run 7: Report of TaoVA-100x — Data Link

```
Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 12:45:16
End at: 2017-11-16 12:45:46
Local clock offset: -0.048 ms
Remote clock offset: 35.857 ms

# Below is generated by plot.py at 2017-11-16 16:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.47 Mbit/s
95th percentile per-packet one-way delay: 56.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 56.453 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 100.30 Mbit/s
95th percentile per-packet one-way delay: 56.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.40 Mbit/s
95th percentile per-packet one-way delay: 56.415 ms
Loss rate: 0.00%
```
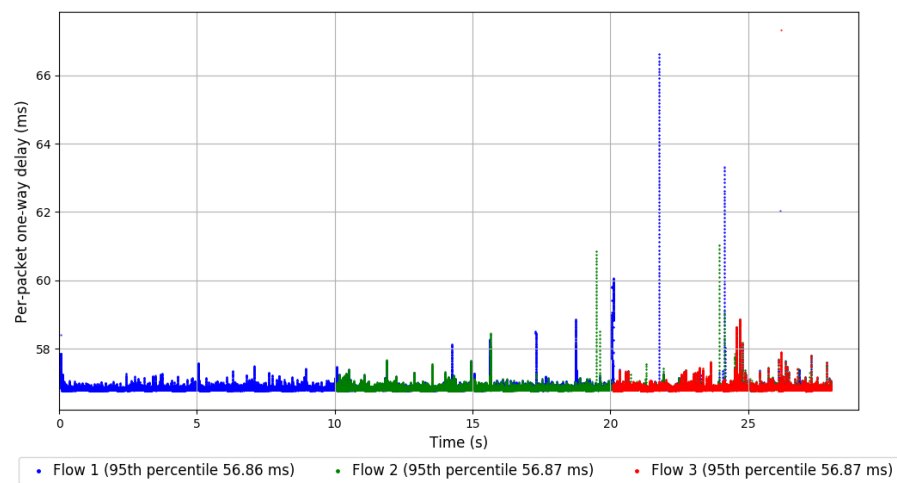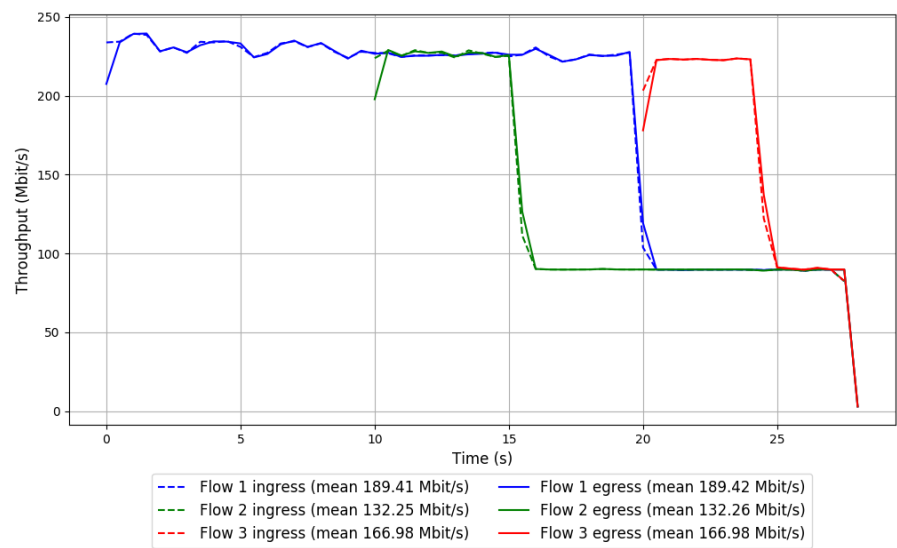
Run 8: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 91.33 Mbit/s)
- Flow 2 ingress (mean 100.30 Mbit/s)
- Flow 3 ingress (mean 122.40 Mbit/s)
- Flow 1 egress (mean 91.33 Mbit/s)
- Flow 2 egress (mean 100.30 Mbit/s)
- Flow 3 egress (mean 122.40 Mbit/s)

- Flow 1 (95th percentile 56.45 ms)
- Flow 2 (95th percentile 56.43 ms)
- Flow 3 (95th percentile 56.41 ms)

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```
Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 13:04:56
End at: 2017-11-16 13:05:26
Local clock offset: -0.033 ms
Remote clock offset: 37.292 ms


# Below is generated by plot.py at 2017-11-16 16:50:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.66 Mbit/s
95th percentile per-packet one-way delay: 56.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.42 Mbit/s
95th percentile per-packet one-way delay: 56.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 132.26 Mbit/s
95th percentile per-packet one-way delay: 56.868 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.98 Mbit/s
95th percentile per-packet one-way delay: 56.871 ms
Loss rate: 0.00%
```

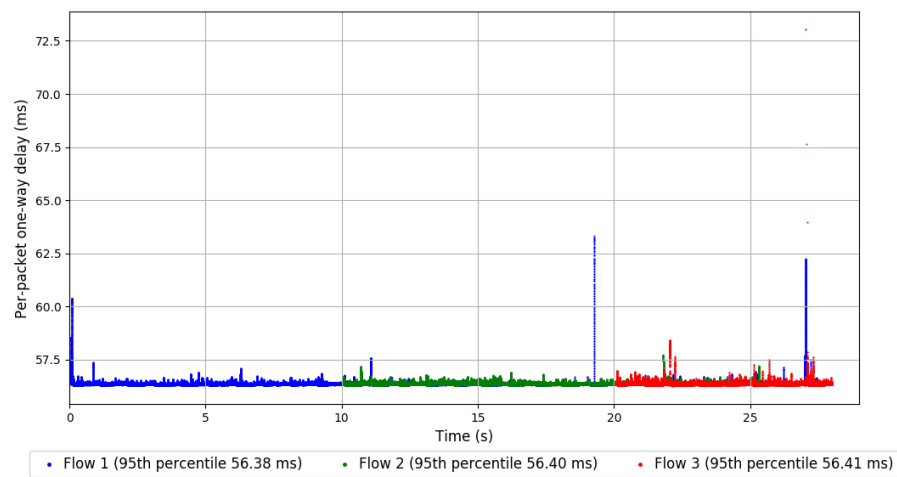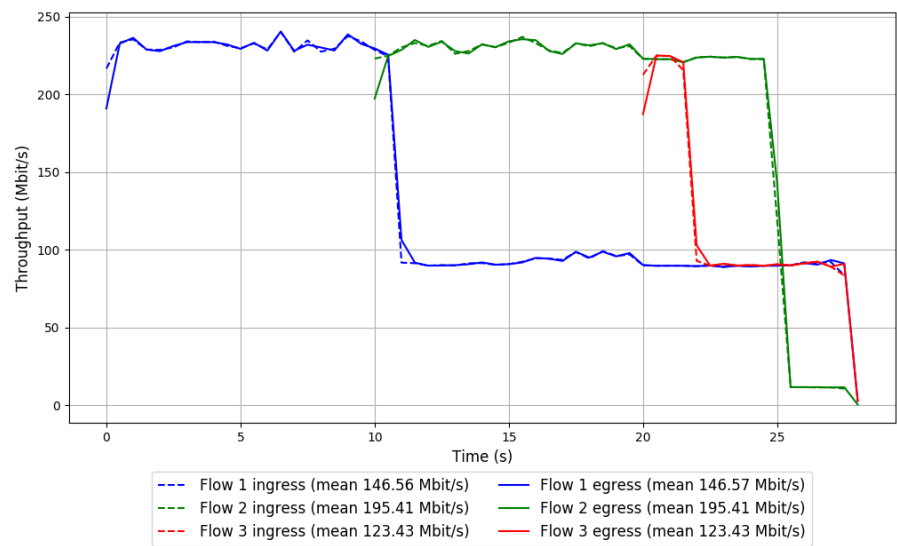Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 189.41 Mbit/s) — — — Flow 1 egress (mean 189.42 Mbit/s) ——
Flow 2 ingress (mean 132.25 Mbit/s) — — — Flow 2 egress (mean 132.26 Mbit/s) ——
Flow 3 ingress (mean 166.98 Mbit/s) — — — Flow 3 egress (mean 166.98 Mbit/s) ——

Flow 1 (95th percentile 56.86 ms)   Flow 2 (95th percentile 56.87 ms)   Flow 3 (95th percentile 56.87 ms)

```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 13:24:38
End at: 2017-11-16 13:25:08
Local clock offset: 0.084 ms
Remote clock offset: 36.125 ms


# Below is generated by plot.py at 2017-11-16 16:51:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.08 Mbit/s
95th percentile per-packet one-way delay: 56.391 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.57 Mbit/s
95th percentile per-packet one-way delay: 56.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.41 Mbit/s
95th percentile per-packet one-way delay: 56.395 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.43 Mbit/s
95th percentile per-packet one-way delay: 56.408 ms
Loss rate: 0.00%
```

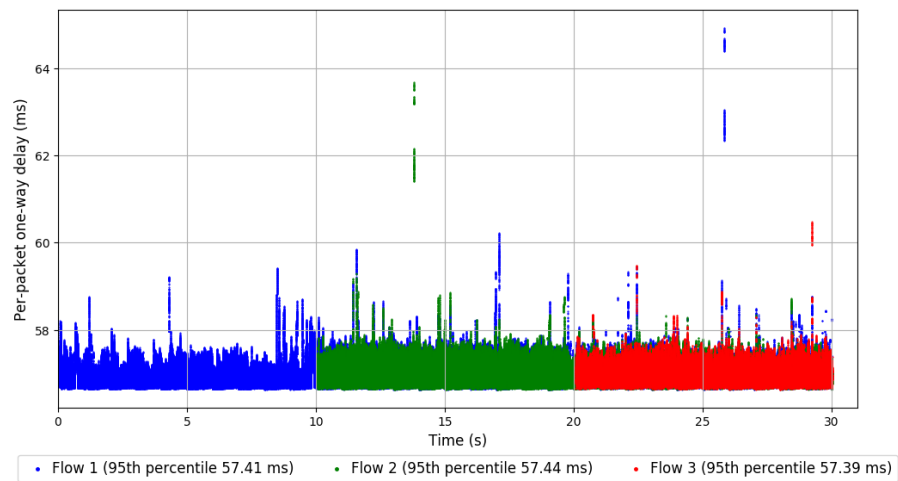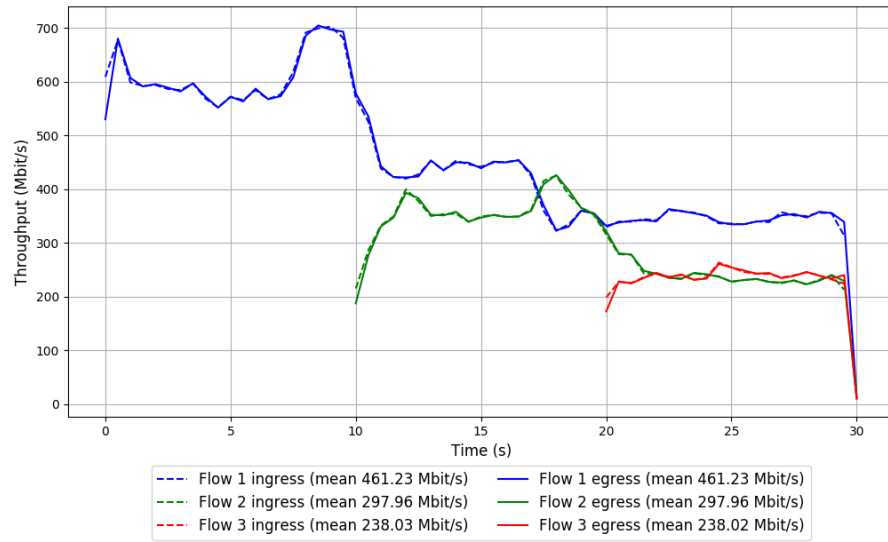# Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 10:36:53
End at: 2017-11-16 10:37:23
Local clock offset: -0.231 ms
Remote clock offset: 35.665 ms


# Below is generated by plot.py at 2017-11-16 16:55:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 738.75 Mbit/s
95th percentile per-packet one-way delay: 57.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 461.23 Mbit/s
95th percentile per-packet one-way delay: 57.406 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 297.96 Mbit/s
95th percentile per-packet one-way delay: 57.437 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 238.02 Mbit/s
95th percentile per-packet one-way delay: 57.386 ms
Loss rate: 0.00%
```

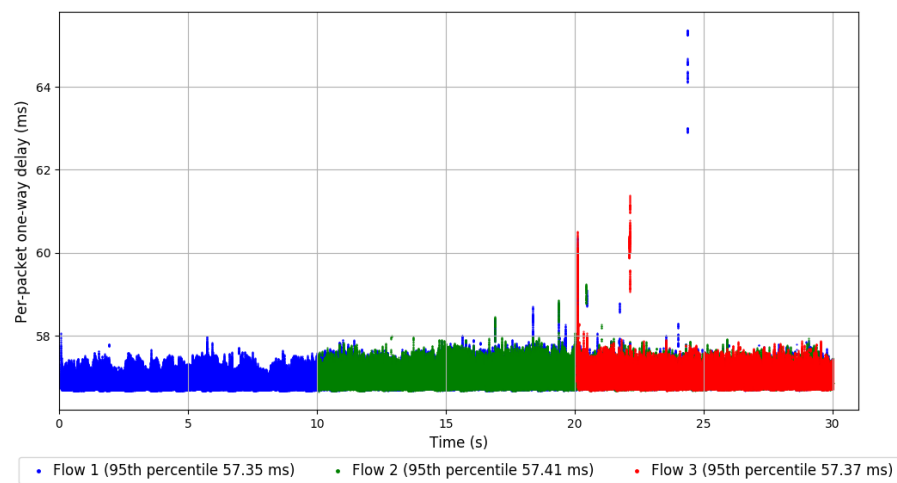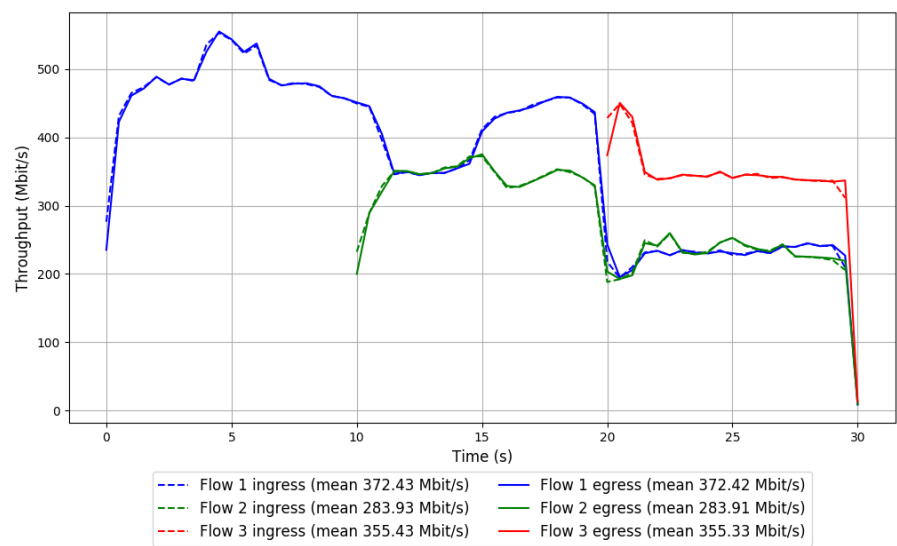Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 10:56:35
End at: 2017-11-16 10:57:05
Local clock offset: -0.183 ms
Remote clock offset: 35.216 ms


# Below is generated by plot.py at 2017-11-16 16:55:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 679.57 Mbit/s
95th percentile per-packet one-way delay: 57.374 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 372.42 Mbit/s
95th percentile per-packet one-way delay: 57.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 283.91 Mbit/s
95th percentile per-packet one-way delay: 57.415 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 355.33 Mbit/s
95th percentile per-packet one-way delay: 57.370 ms
Loss rate: 0.03%
```

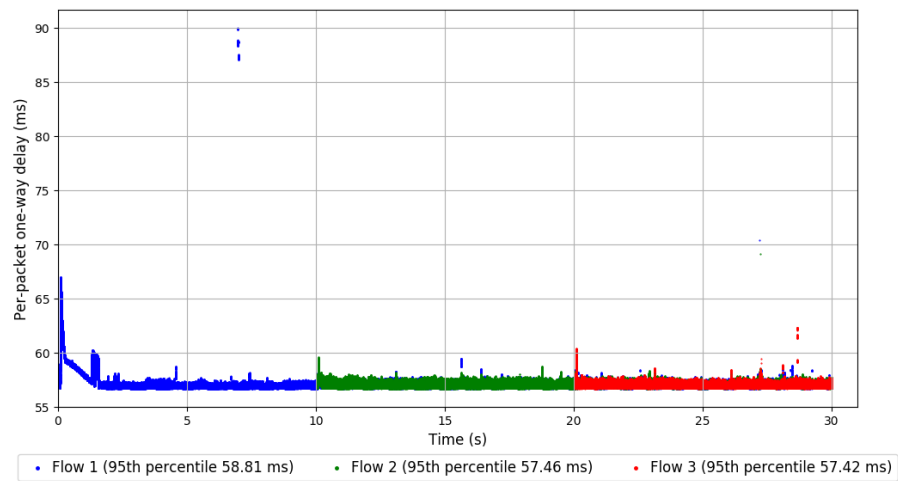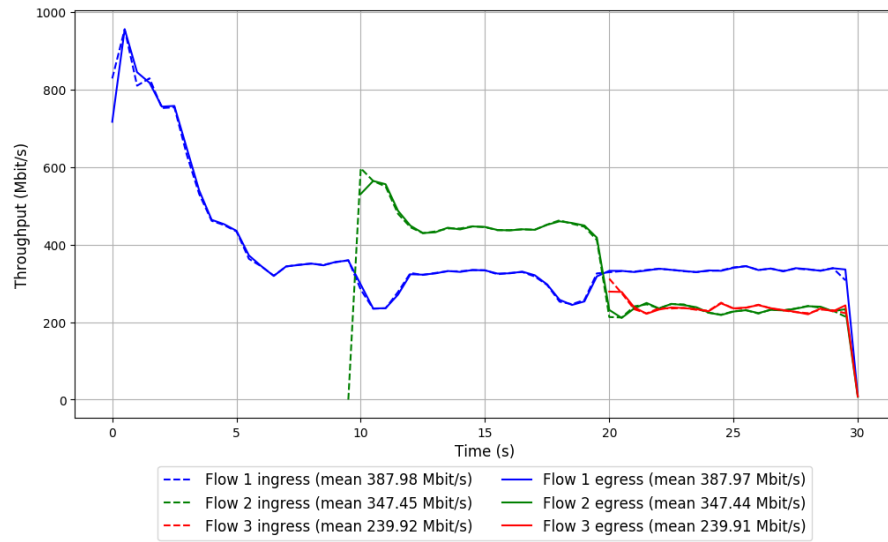Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 11:16:06
End at: 2017-11-16 11:16:36
Local clock offset: -0.095 ms
Remote clock offset: 34.537 ms


# Below is generated by plot.py at 2017-11-16 16:55:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.18 Mbit/s
95th percentile per-packet one-way delay: 57.931 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 387.97 Mbit/s
95th percentile per-packet one-way delay: 58.806 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 347.44 Mbit/s
95th percentile per-packet one-way delay: 57.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 239.91 Mbit/s
95th percentile per-packet one-way delay: 57.418 ms
Loss rate: 0.00%
```

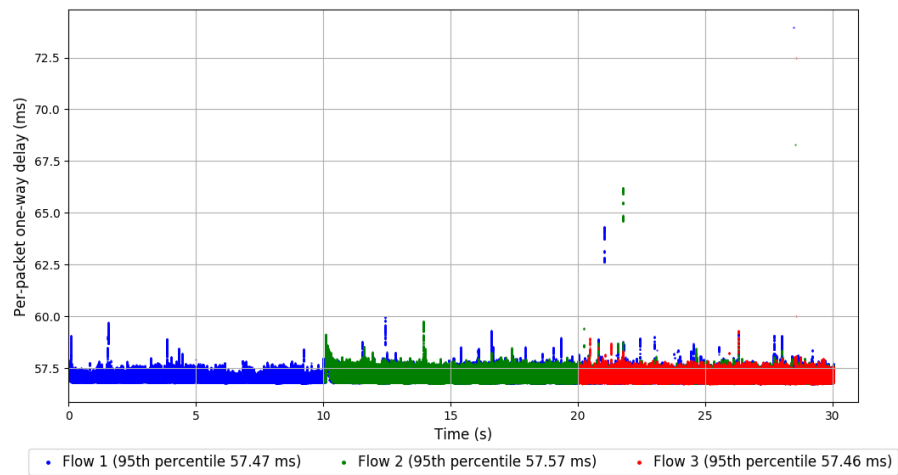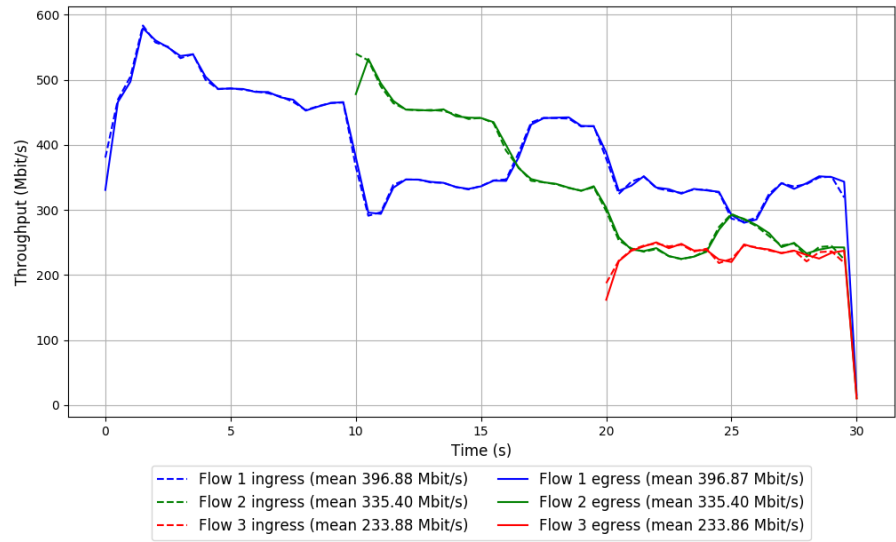Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 11:35:52
End at: 2017-11-16 11:36:22
Local clock offset: -0.16 ms
Remote clock offset: 34.312 ms


# Below is generated by plot.py at 2017-11-16 16:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.00 Mbit/s
95th percentile per-packet one-way delay: 57.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 396.87 Mbit/s
95th percentile per-packet one-way delay: 57.474 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 335.40 Mbit/s
95th percentile per-packet one-way delay: 57.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 233.86 Mbit/s
95th percentile per-packet one-way delay: 57.464 ms
Loss rate: 0.00%
```

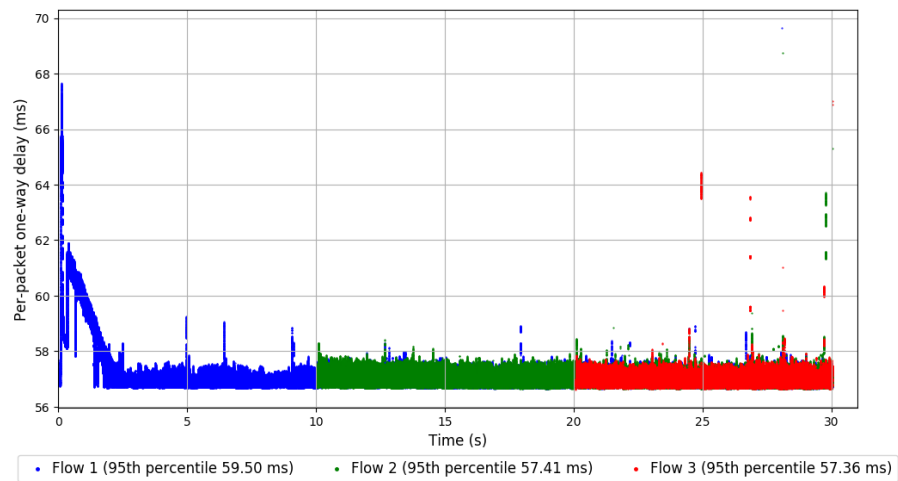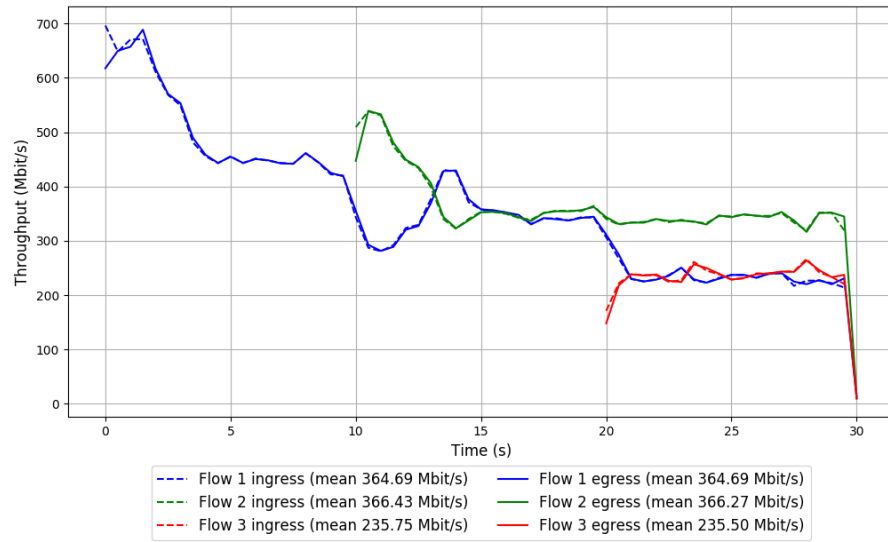Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 11:55:34
End at: 2017-11-16 11:56:04
Local clock offset: -0.022 ms
Remote clock offset: 36.543 ms


# Below is generated by plot.py at 2017-11-16 16:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.83 Mbit/s
95th percentile per-packet one-way delay: 58.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 364.69 Mbit/s
95th percentile per-packet one-way delay: 59.500 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 366.27 Mbit/s
95th percentile per-packet one-way delay: 57.412 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 235.50 Mbit/s
95th percentile per-packet one-way delay: 57.364 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 364.69 Mbit/s) --- Flow 1 egress (mean 364.69 Mbit/s)
Flow 2 ingress (mean 366.43 Mbit/s) --- Flow 2 egress (mean 366.27 Mbit/s)
Flow 3 ingress (mean 235.75 Mbit/s) --- Flow 3 egress (mean 235.50 Mbit/s)

Flow 1 (95th percentile 59.50 ms)   Flow 2 (95th percentile 57.41 ms)   Flow 3 (95th percentile 57.36 ms)
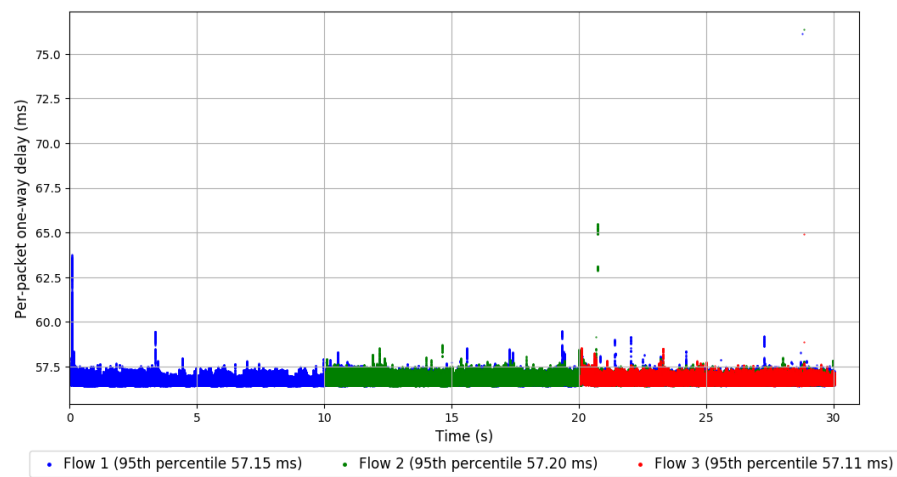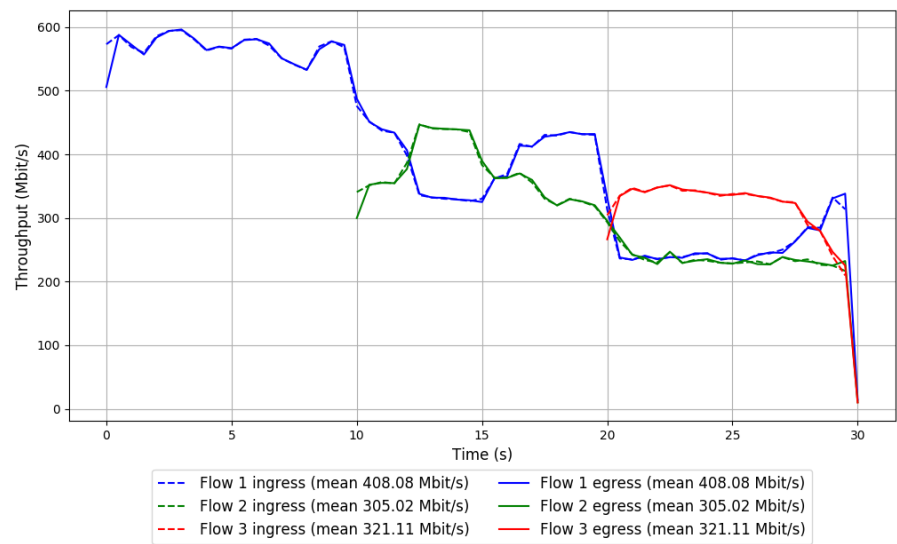
```
Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 12:15:12
End at: 2017-11-16 12:15:42
Local clock offset: -0.076 ms
Remote clock offset: 36.987 ms


# Below is generated by plot.py at 2017-11-16 16:56:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.97 Mbit/s
95th percentile per-packet one-way delay: 57.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 408.08 Mbit/s
95th percentile per-packet one-way delay: 57.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 305.02 Mbit/s
95th percentile per-packet one-way delay: 57.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 321.11 Mbit/s
95th percentile per-packet one-way delay: 57.114 ms
Loss rate: 0.00%
```
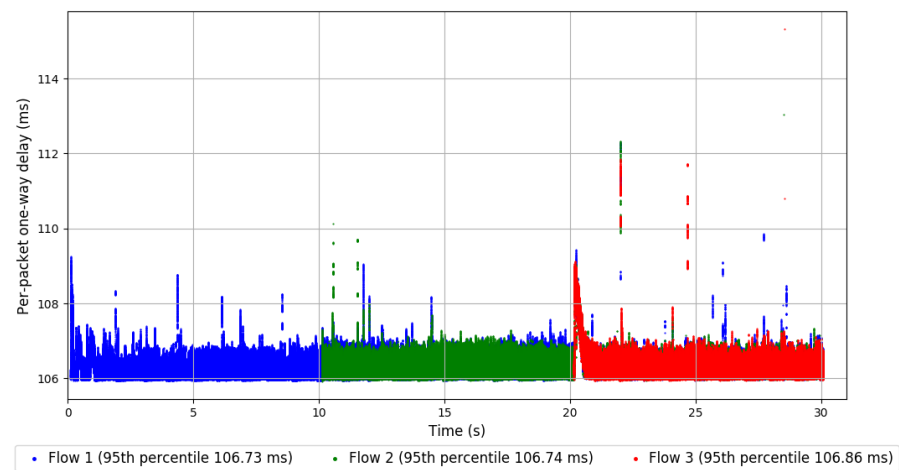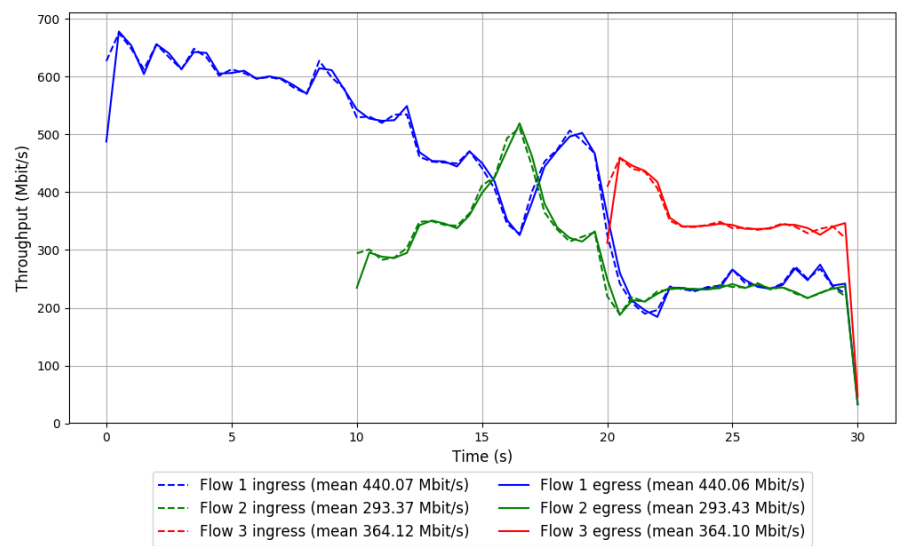
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 408.08 Mbit/s) Flow 1 egress (mean 408.08 Mbit/s)
Flow 2 ingress (mean 305.02 Mbit/s) Flow 2 egress (mean 305.02 Mbit/s)
Flow 3 ingress (mean 321.11 Mbit/s) Flow 3 egress (mean 321.11 Mbit/s)

Flow 1 (95th percentile 57.15 ms) Flow 2 (95th percentile 57.20 ms) Flow 3 (95th percentile 57.11 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 12:34:54
End at: 2017-11-16 12:35:24
Local clock offset: -0.08 ms
Remote clock offset: 85.649 ms


# Below is generated by plot.py at 2017-11-16 17:02:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.29 Mbit/s
95th percentile per-packet one-way delay: 106.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 440.06 Mbit/s
95th percentile per-packet one-way delay: 106.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 293.43 Mbit/s
95th percentile per-packet one-way delay: 106.740 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 364.10 Mbit/s
95th percentile per-packet one-way delay: 106.858 ms
Loss rate: 0.00%
```

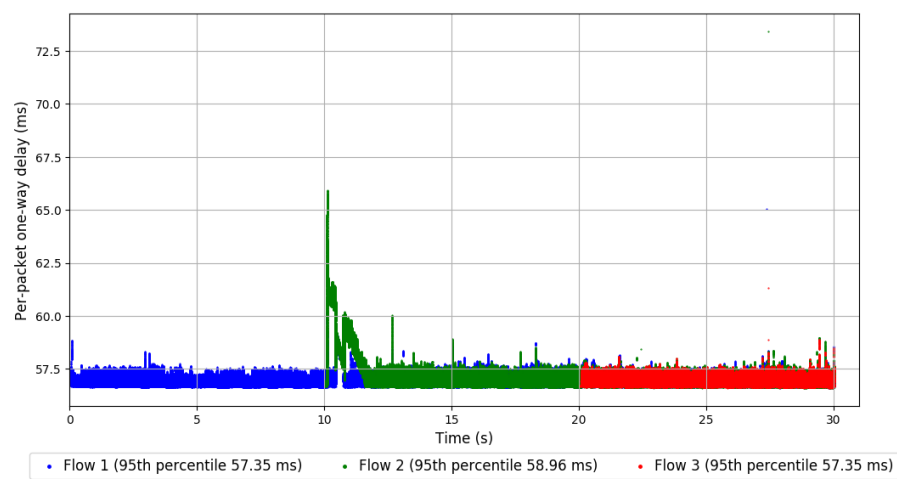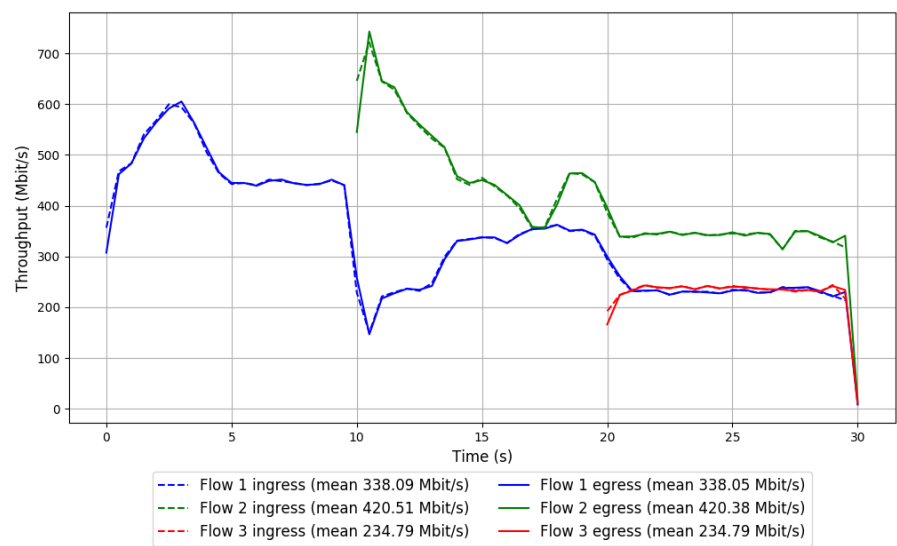Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 12:54:36
End at: 2017-11-16 12:55:06
Local clock offset: 0.031 ms
Remote clock offset: 36.957 ms


# Below is generated by plot.py at 2017-11-16 17:02:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 695.95 Mbit/s
95th percentile per-packet one-way delay: 57.657 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 338.05 Mbit/s
95th percentile per-packet one-way delay: 57.350 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 420.38 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 234.79 Mbit/s
95th percentile per-packet one-way delay: 57.346 ms
Loss rate: 0.00%
```

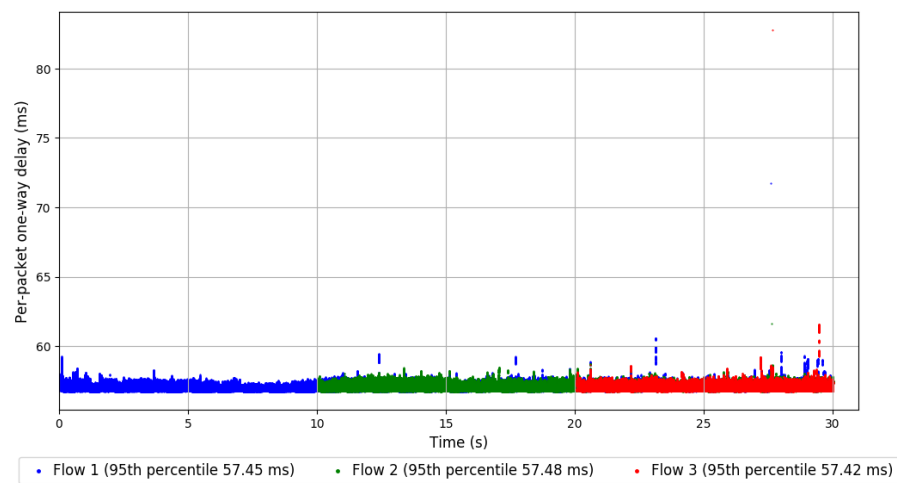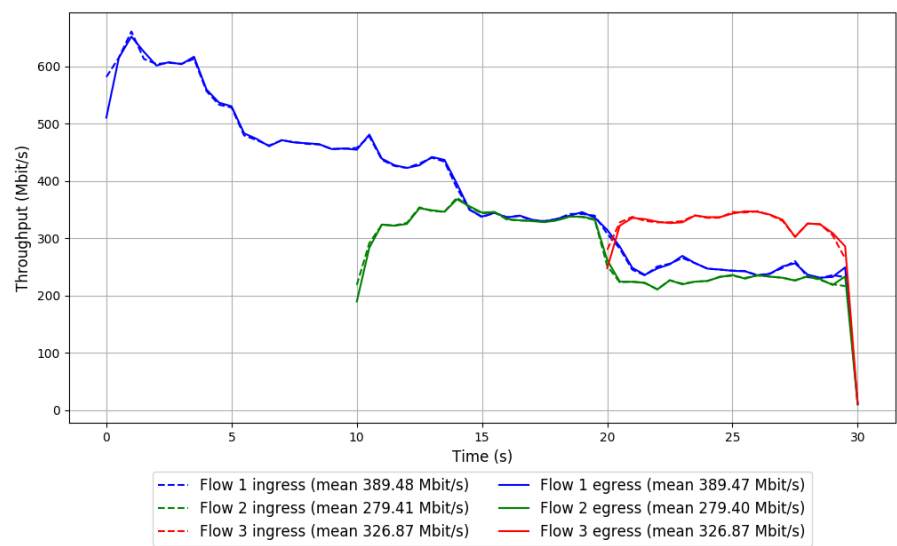## Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 13:14:19
End at: 2017-11-16 13:14:49
Local clock offset: 0.066 ms
Remote clock offset: 36.944 ms


# Below is generated by plot.py at 2017-11-16 17:04:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.12 Mbit/s
95th percentile per-packet one-way delay: 57.454 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 389.47 Mbit/s
95th percentile per-packet one-way delay: 57.445 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 279.40 Mbit/s
95th percentile per-packet one-way delay: 57.484 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 326.87 Mbit/s
95th percentile per-packet one-way delay: 57.425 ms
Loss rate: 0.00%
```

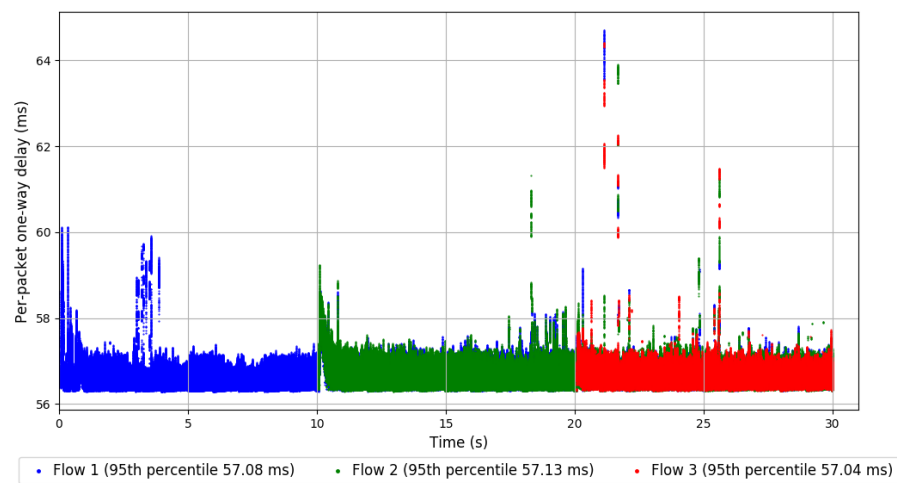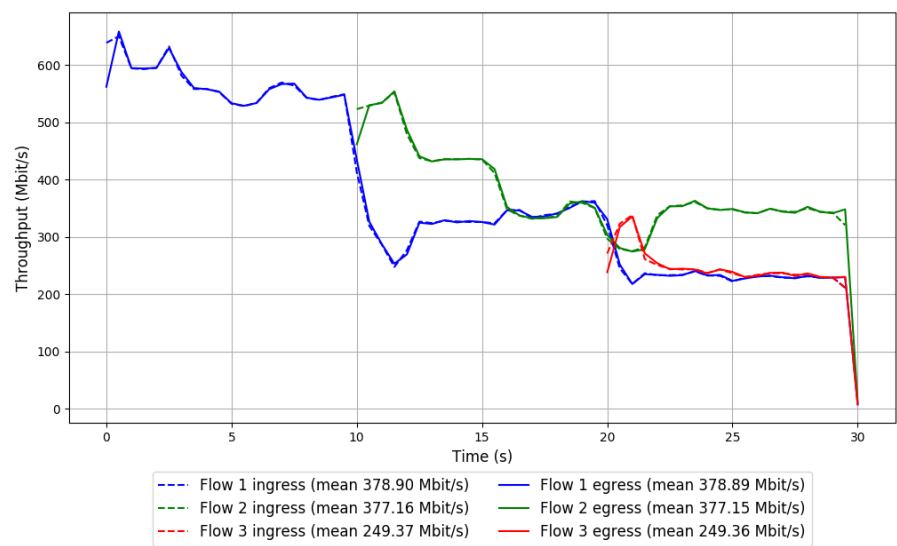Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 13:34:03
End at: 2017-11-16 13:34:33
Local clock offset: 0.091 ms
Remote clock offset: 35.792 ms


# Below is generated by plot.py at 2017-11-16 17:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 712.91 Mbit/s
95th percentile per-packet one-way delay: 57.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 378.89 Mbit/s
95th percentile per-packet one-way delay: 57.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 377.15 Mbit/s
95th percentile per-packet one-way delay: 57.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 249.36 Mbit/s
95th percentile per-packet one-way delay: 57.037 ms
Loss rate: 0.00%
```

Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-11-16 10:34:00
End at: 2017-11-16 10:34:30
Local clock offset: -0.188 ms
Remote clock offset: 35.4 ms


# Below is generated by plot.py at 2017-11-16 17:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.32 Mbit/s
95th percentile per-packet one-way delay: 62.346 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 274.46 Mbit/s
95th percentile per-packet one-way delay: 61.086 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 216.48 Mbit/s
95th percentile per-packet one-way delay: 62.344 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 171.97 Mbit/s
95th percentile per-packet one-way delay: 71.252 ms
Loss rate: 3.64%
```
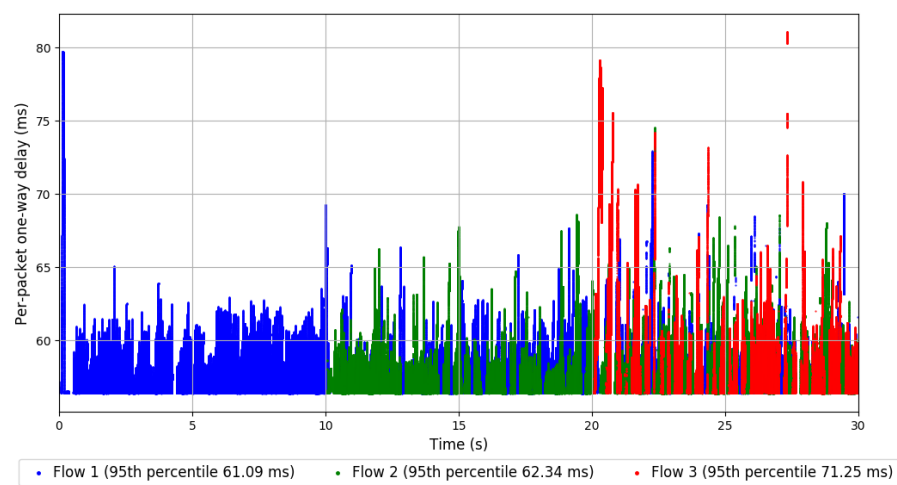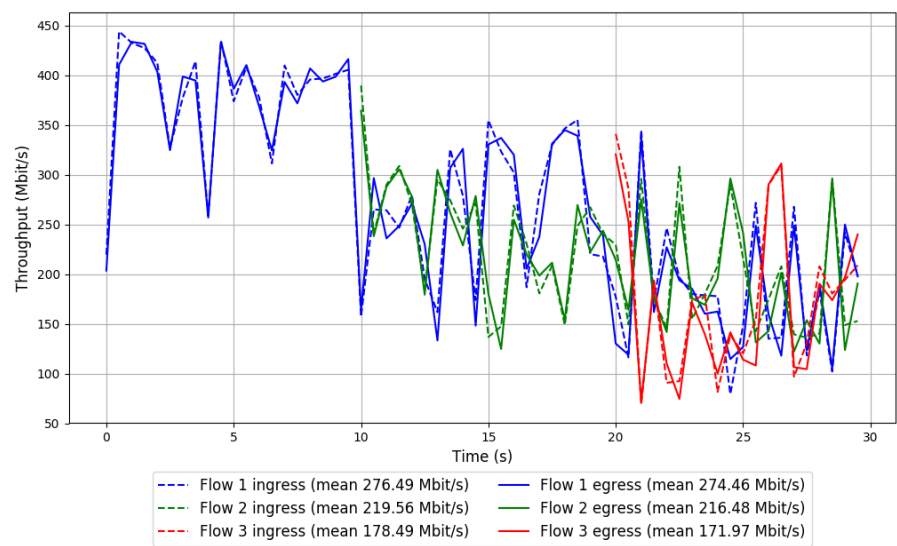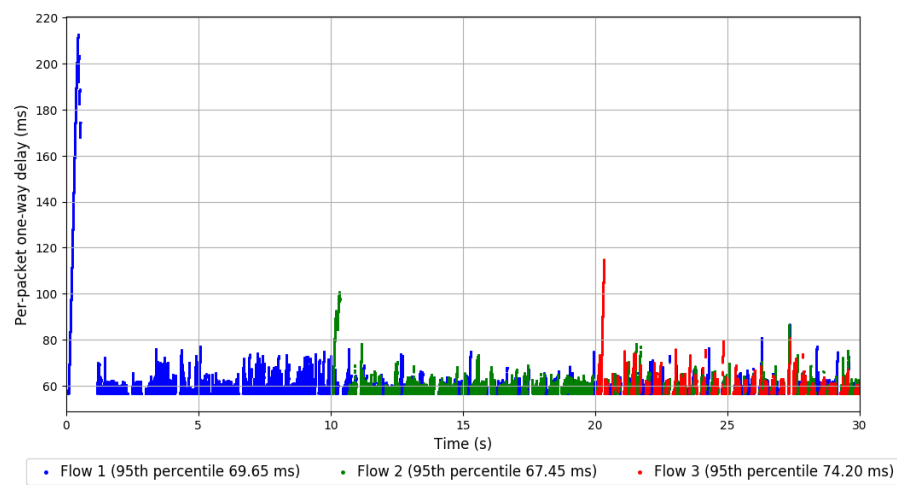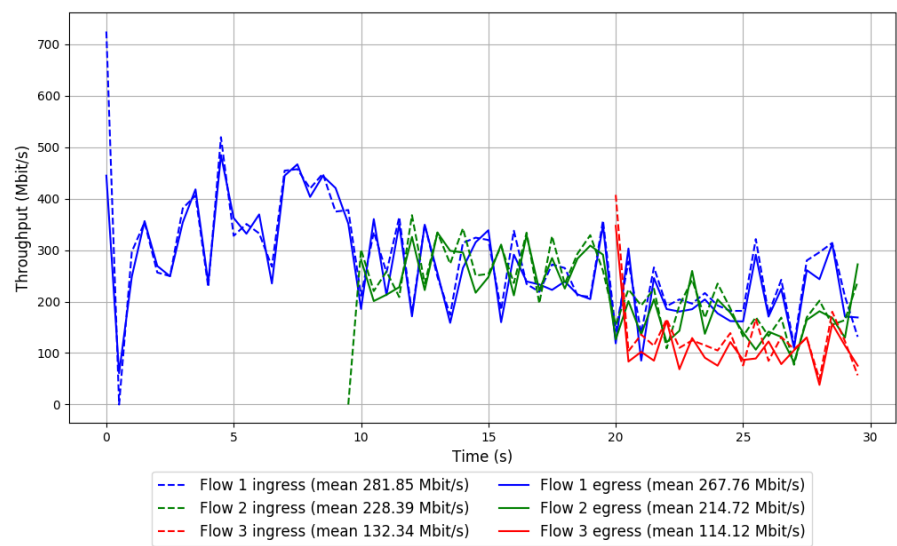
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-11-16 10:53:43
End at: 2017-11-16 10:54:13
Local clock offset: -0.257 ms
Remote clock offset: 35.299 ms


# Below is generated by plot.py at 2017-11-16 17:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.54 Mbit/s
95th percentile per-packet one-way delay: 69.555 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 267.76 Mbit/s
95th percentile per-packet one-way delay: 69.654 ms
Loss rate: 4.99%
-- Flow 2:
Average throughput: 214.72 Mbit/s
95th percentile per-packet one-way delay: 67.449 ms
Loss rate: 5.97%
-- Flow 3:
Average throughput: 114.12 Mbit/s
95th percentile per-packet one-way delay: 74.204 ms
Loss rate: 13.76%
```
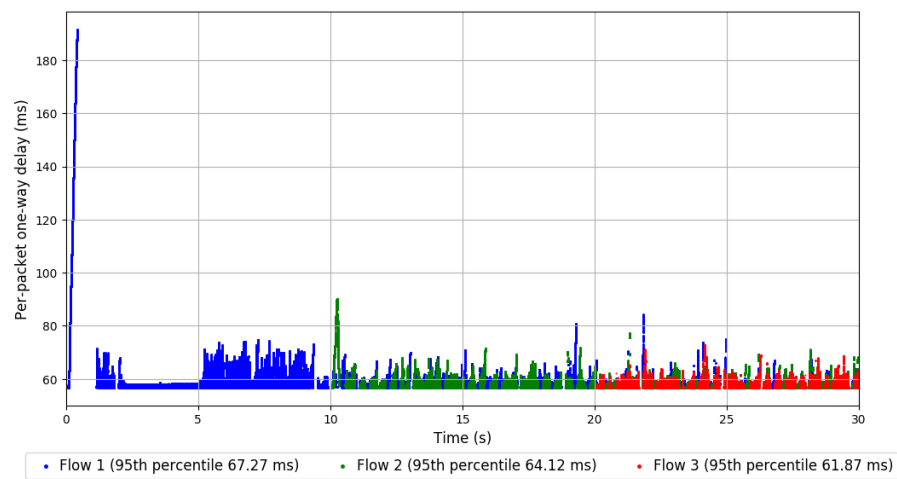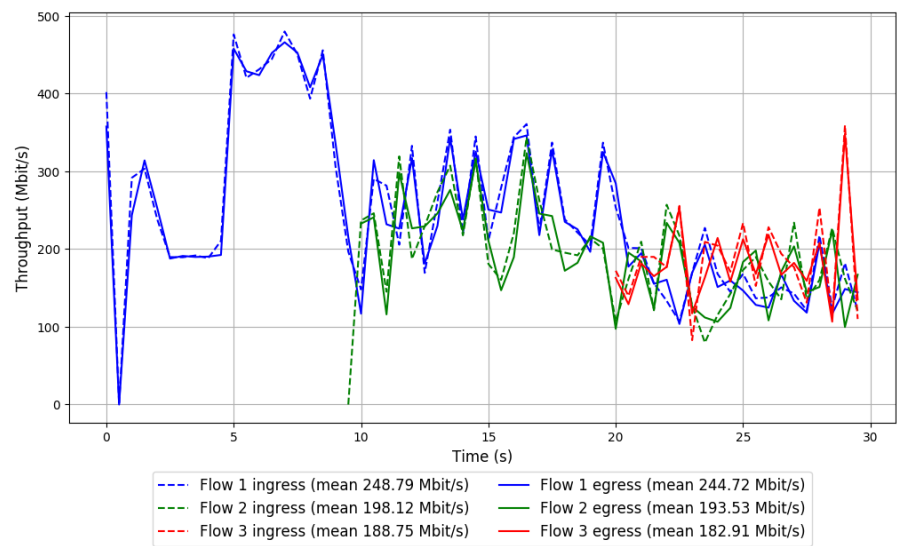
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-11-16 11:13:14
End at: 2017-11-16 11:13:44
Local clock offset: -0.141 ms
Remote clock offset: 34.651 ms


# Below is generated by plot.py at 2017-11-16 17:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.06 Mbit/s
95th percentile per-packet one-way delay: 65.929 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 244.72 Mbit/s
95th percentile per-packet one-way delay: 67.266 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 193.53 Mbit/s
95th percentile per-packet one-way delay: 64.122 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 182.91 Mbit/s
95th percentile per-packet one-way delay: 61.868 ms
Loss rate: 3.08%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 248.79 Mbit/s) --- Flow 1 egress (mean 244.72 Mbit/s)
Flow 2 ingress (mean 198.12 Mbit/s) --- Flow 2 egress (mean 193.53 Mbit/s)
Flow 3 ingress (mean 188.75 Mbit/s) --- Flow 3 egress (mean 182.91 Mbit/s)

Flow 1 (95th percentile 67.27 ms)   Flow 2 (95th percentile 64.12 ms)   Flow 3 (95th percentile 61.87 ms)
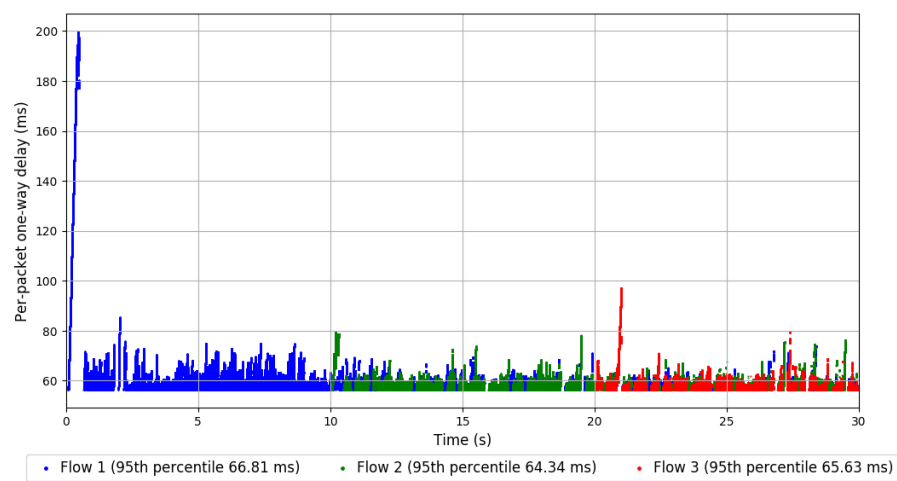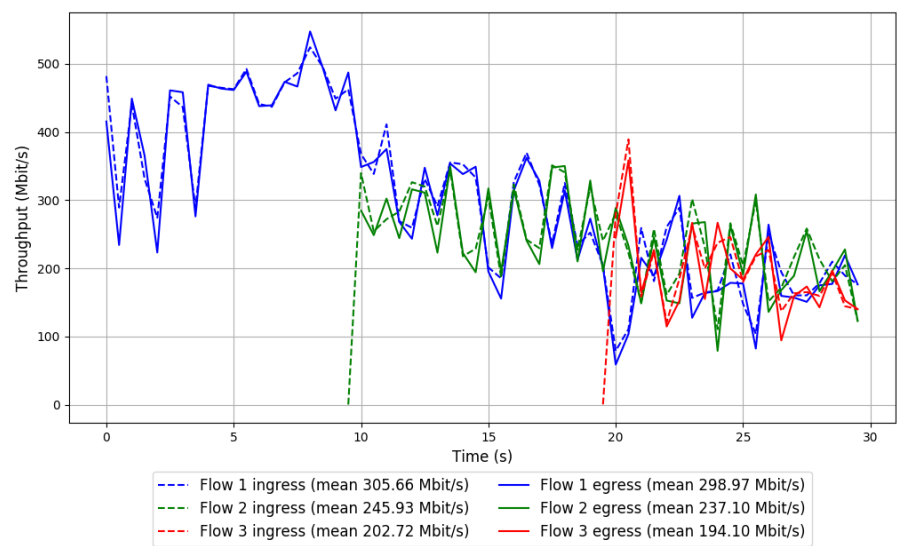
209

```
Run 4: Statistics of Verus

Start at: 2017-11-16 11:32:54
End at: 2017-11-16 11:33:24
Local clock offset: -0.085 ms
Remote clock offset: 33.7 ms


# Below is generated by plot.py at 2017-11-16 17:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.09 Mbit/s
95th percentile per-packet one-way delay: 66.154 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 298.97 Mbit/s
95th percentile per-packet one-way delay: 66.812 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 237.10 Mbit/s
95th percentile per-packet one-way delay: 64.336 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 194.10 Mbit/s
95th percentile per-packet one-way delay: 65.631 ms
Loss rate: 4.24%
```
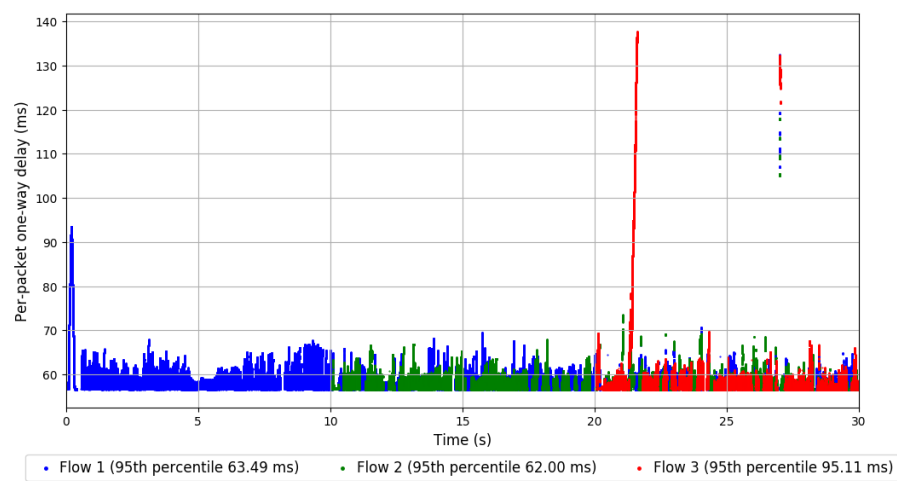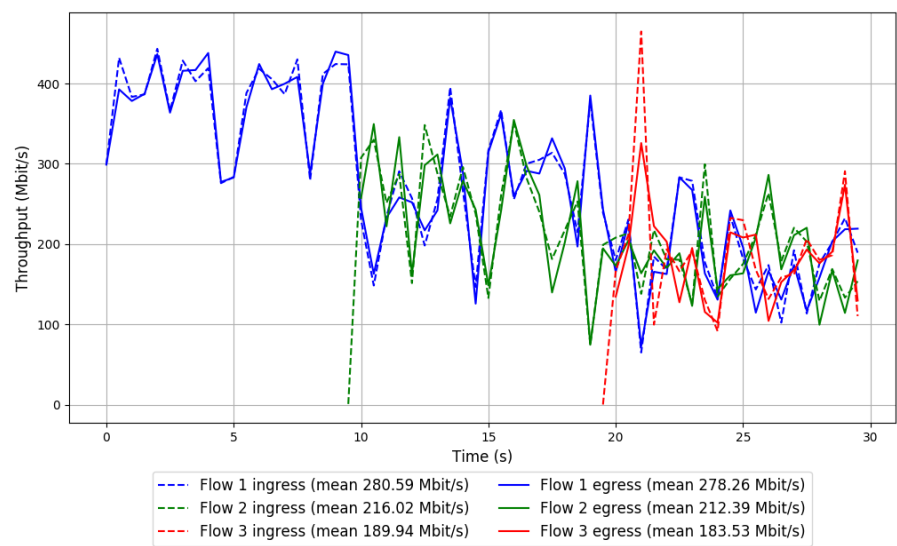
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-11-16 11:52:39
End at: 2017-11-16 11:53:09
Local clock offset: -0.017 ms
Remote clock offset: 36.2 ms


# Below is generated by plot.py at 2017-11-16 17:08:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.81 Mbit/s
95th percentile per-packet one-way delay: 63.614 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 278.26 Mbit/s
95th percentile per-packet one-way delay: 63.492 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 212.39 Mbit/s
95th percentile per-packet one-way delay: 61.996 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 183.53 Mbit/s
95th percentile per-packet one-way delay: 95.109 ms
Loss rate: 3.37%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 280.59 Mbit/s) — Flow 1 egress (mean 278.26 Mbit/s)
Flow 2 ingress (mean 216.02 Mbit/s) — Flow 2 egress (mean 212.39 Mbit/s)
Flow 3 ingress (mean 189.94 Mbit/s) — Flow 3 egress (mean 183.53 Mbit/s)

Flow 1 (95th percentile 63.49 ms) · Flow 2 (95th percentile 62.00 ms) · Flow 3 (95th percentile 95.11 ms)
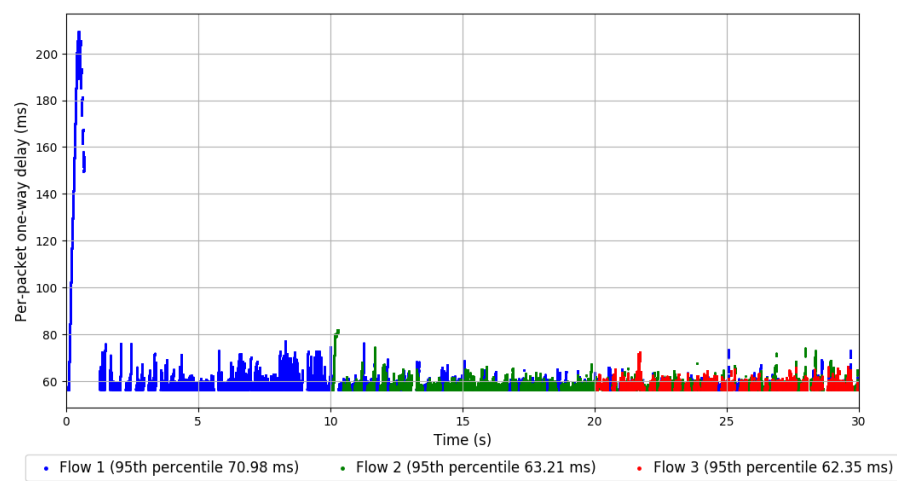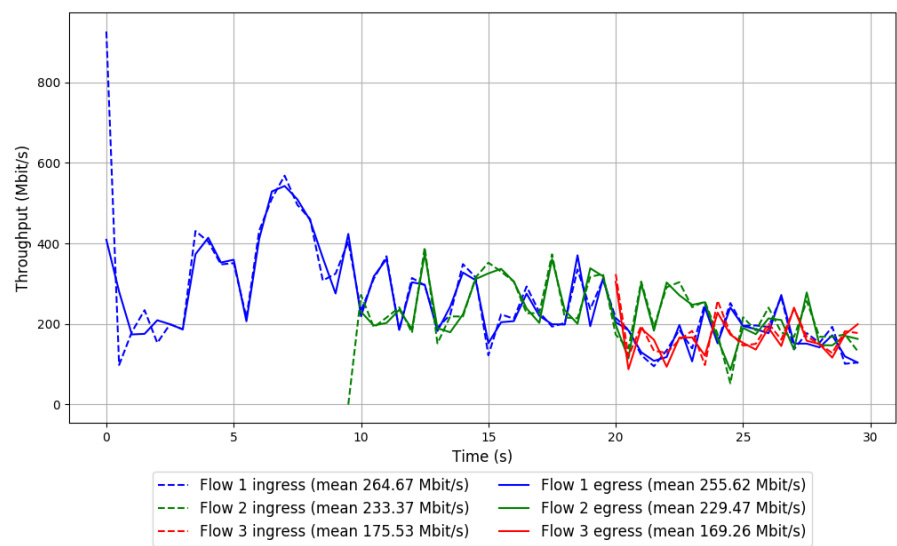
213

```
Run 6: Statistics of Verus

Start at: 2017-11-16 12:12:19
End at: 2017-11-16 12:12:49
Local clock offset: -0.023 ms
Remote clock offset: 37.126 ms


# Below is generated by plot.py at 2017-11-16 17:08:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.57 Mbit/s
95th percentile per-packet one-way delay: 66.773 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 255.62 Mbit/s
95th percentile per-packet one-way delay: 70.985 ms
Loss rate: 3.41%
-- Flow 2:
Average throughput: 229.47 Mbit/s
95th percentile per-packet one-way delay: 63.210 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 169.26 Mbit/s
95th percentile per-packet one-way delay: 62.355 ms
Loss rate: 3.57%
```

Run 6: Report of Verus — Data Link

Flow 1 ingress (mean 264.67 Mbit/s) ---- Flow 1 egress (mean 255.62 Mbit/s)
Flow 2 ingress (mean 233.37 Mbit/s) ---- Flow 2 egress (mean 229.47 Mbit/s)
Flow 3 ingress (mean 175.53 Mbit/s) ---- Flow 3 egress (mean 169.26 Mbit/s)

Flow 1 (95th percentile 70.98 ms)   Flow 2 (95th percentile 63.21 ms)   Flow 3 (95th percentile 62.35 ms)
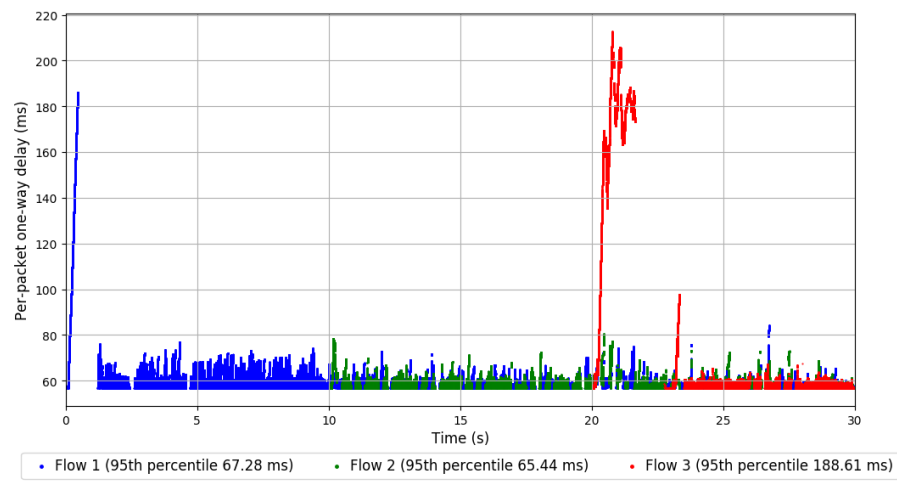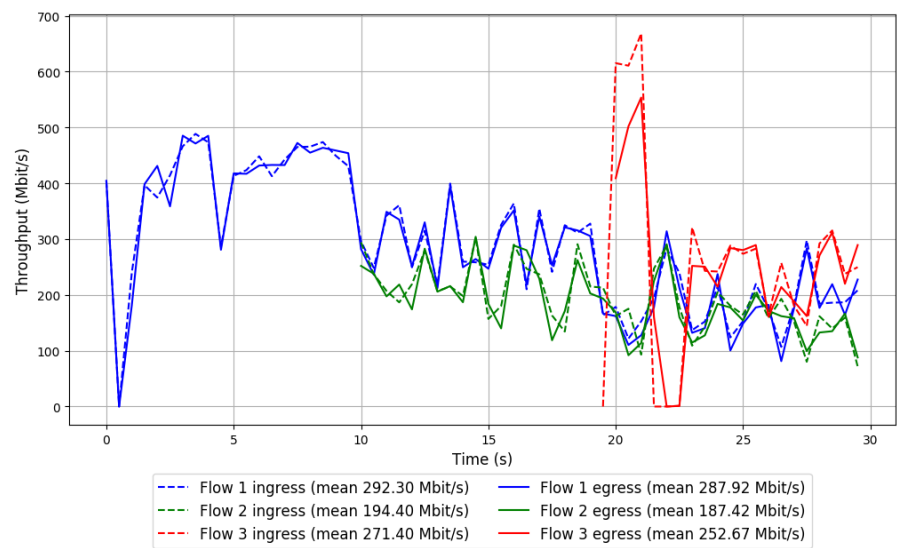
215

```
Run 7: Statistics of Verus

Start at: 2017-11-16 12:31:58
End at: 2017-11-16 12:32:28
Local clock offset: -0.075 ms
Remote clock offset: 36.597 ms


# Below is generated by plot.py at 2017-11-16 17:09:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.47 Mbit/s
95th percentile per-packet one-way delay: 135.262 ms
Loss rate: 2.98%
-- Flow 1:
Average throughput: 287.92 Mbit/s
95th percentile per-packet one-way delay: 67.280 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 187.42 Mbit/s
95th percentile per-packet one-way delay: 65.445 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 252.67 Mbit/s
95th percentile per-packet one-way delay: 188.608 ms
Loss rate: 6.92%
```

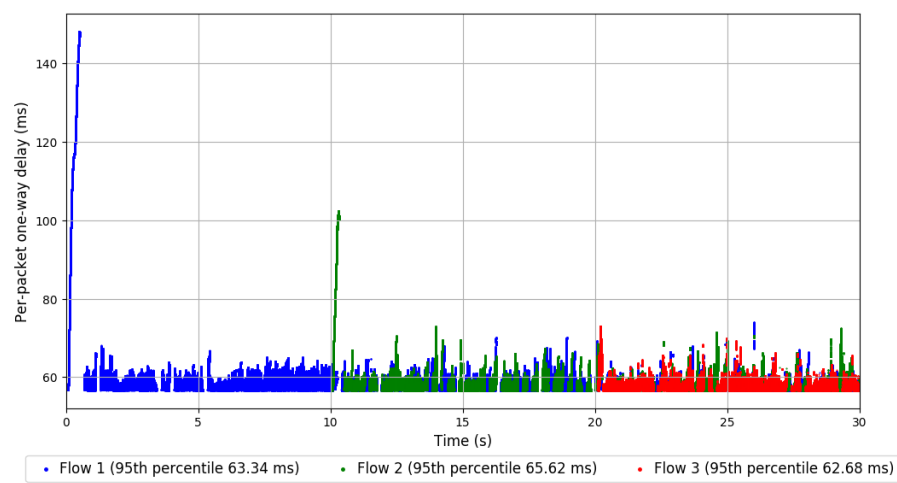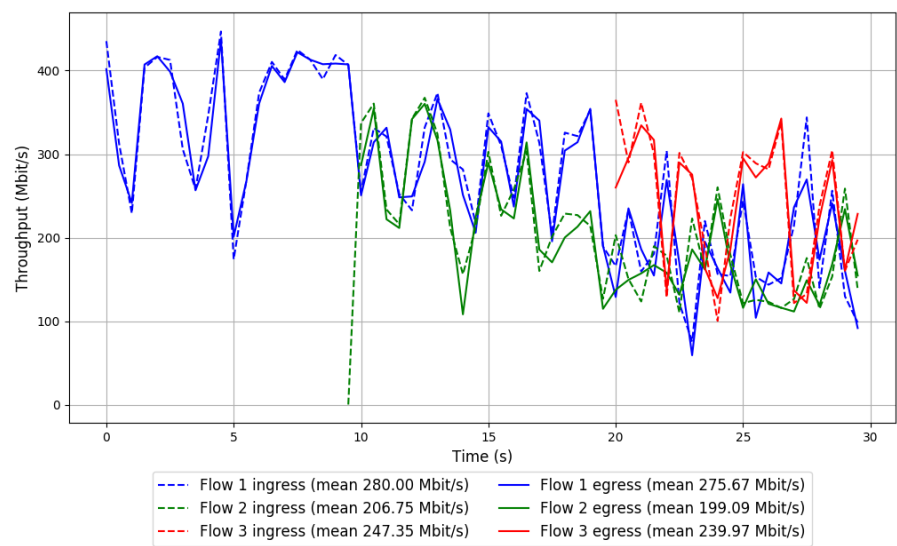Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-11-16 12:51:42
End at: 2017-11-16 12:52:12
Local clock offset: -0.016 ms
Remote clock offset: 36.735 ms


# Below is generated by plot.py at 2017-11-16 17:09:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.70 Mbit/s
95th percentile per-packet one-way delay: 63.846 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 275.67 Mbit/s
95th percentile per-packet one-way delay: 63.341 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 199.09 Mbit/s
95th percentile per-packet one-way delay: 65.620 ms
Loss rate: 3.70%
-- Flow 3:
Average throughput: 239.97 Mbit/s
95th percentile per-packet one-way delay: 62.676 ms
Loss rate: 3.02%
```

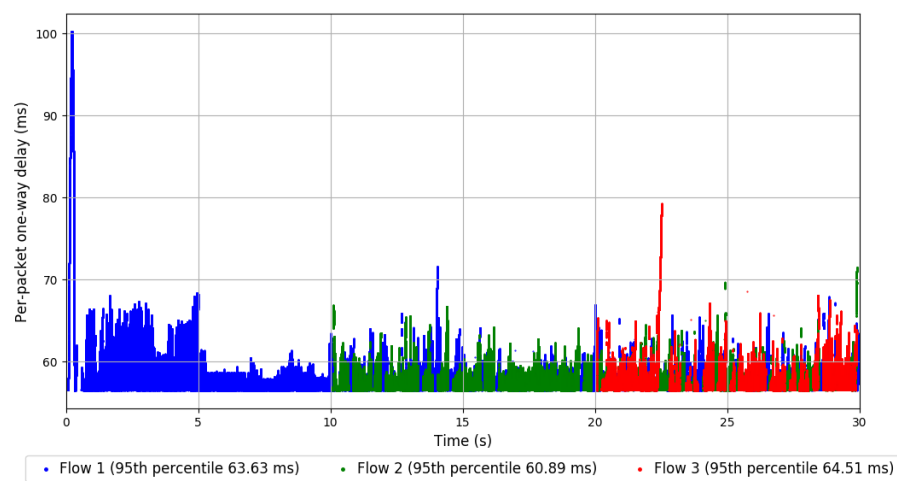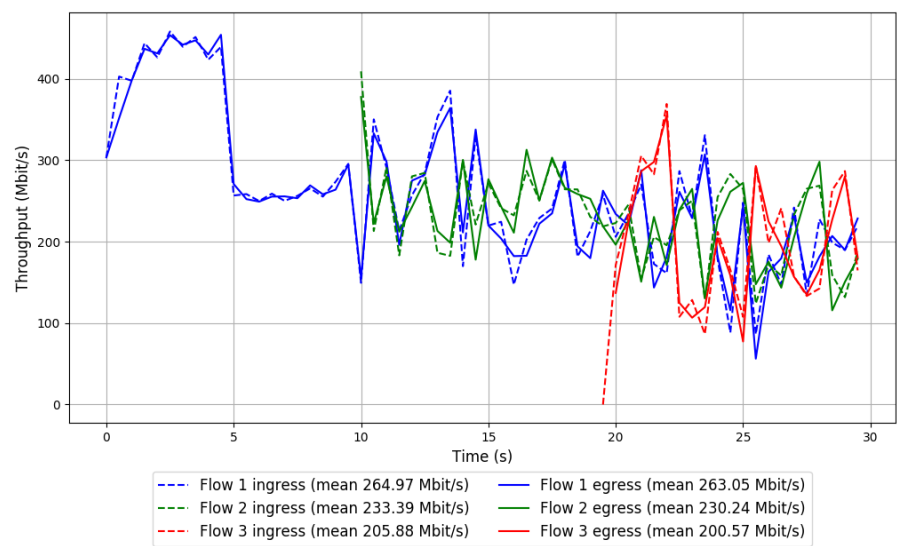Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-11-16 13:11:24
End at: 2017-11-16 13:11:54
Local clock offset: 0.009 ms
Remote clock offset: 36.718 ms


# Below is generated by plot.py at 2017-11-16 17:09:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.95 Mbit/s
95th percentile per-packet one-way delay: 62.893 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 263.05 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 230.24 Mbit/s
95th percentile per-packet one-way delay: 60.887 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 200.57 Mbit/s
95th percentile per-packet one-way delay: 64.511 ms
Loss rate: 2.51%
```
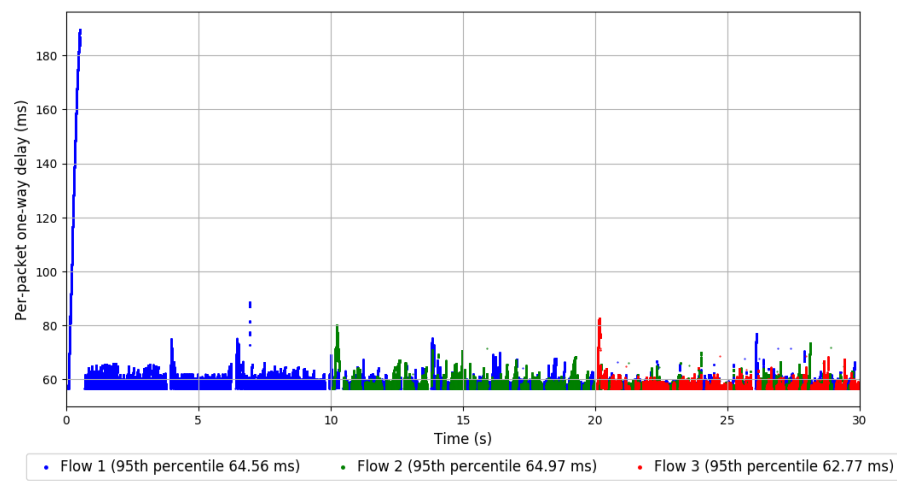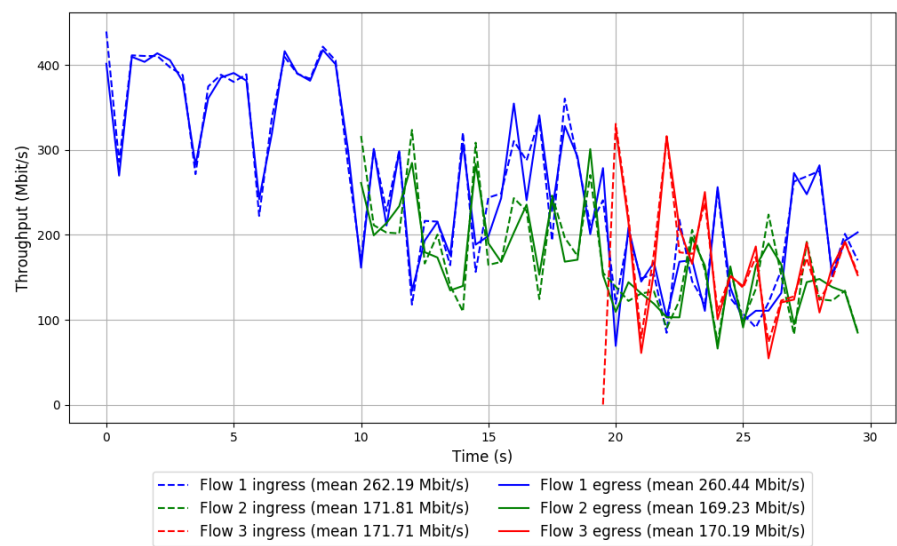
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-11-16 13:31:12
End at: 2017-11-16 13:31:42
Local clock offset: 0.094 ms
Remote clock offset: 36.292 ms


# Below is generated by plot.py at 2017-11-16 17:10:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.54 Mbit/s
95th percentile per-packet one-way delay: 64.495 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 260.44 Mbit/s
95th percentile per-packet one-way delay: 64.562 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 169.23 Mbit/s
95th percentile per-packet one-way delay: 64.967 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 170.19 Mbit/s
95th percentile per-packet one-way delay: 62.773 ms
Loss rate: 0.87%
```

Run 10: Report of Verus — Data Link

Flow 1 ingress (mean 262.19 Mbit/s)   Flow 1 egress (mean 260.44 Mbit/s)
Flow 2 ingress (mean 171.81 Mbit/s)   Flow 2 egress (mean 169.23 Mbit/s)
Flow 3 ingress (mean 171.71 Mbit/s)   Flow 3 egress (mean 170.19 Mbit/s)

Flow 1 (95th percentile 64.56 ms)   Flow 2 (95th percentile 64.97 ms)   Flow 3 (95th percentile 62.77 ms)

223

```
Run 1: Statistics of Copa

Start at: 2017-11-16 10:44:14
End at: 2017-11-16 10:44:44
Local clock offset: -0.215 ms
Remote clock offset: 35.68 ms


# Below is generated by plot.py at 2017-11-16 17:10:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 56.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 104.99 Mbit/s
95th percentile per-packet one-way delay: 56.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.59 Mbit/s
95th percentile per-packet one-way delay: 56.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.58 Mbit/s
95th percentile per-packet one-way delay: 56.835 ms
Loss rate: 0.00%
```
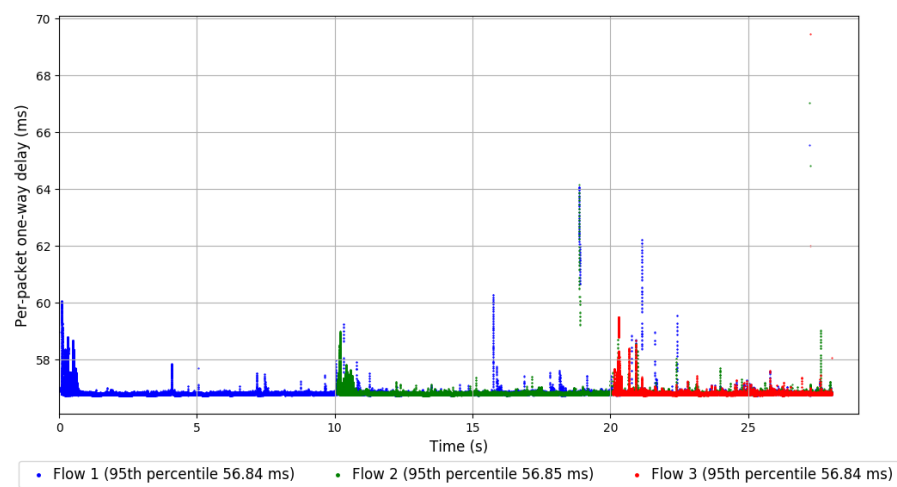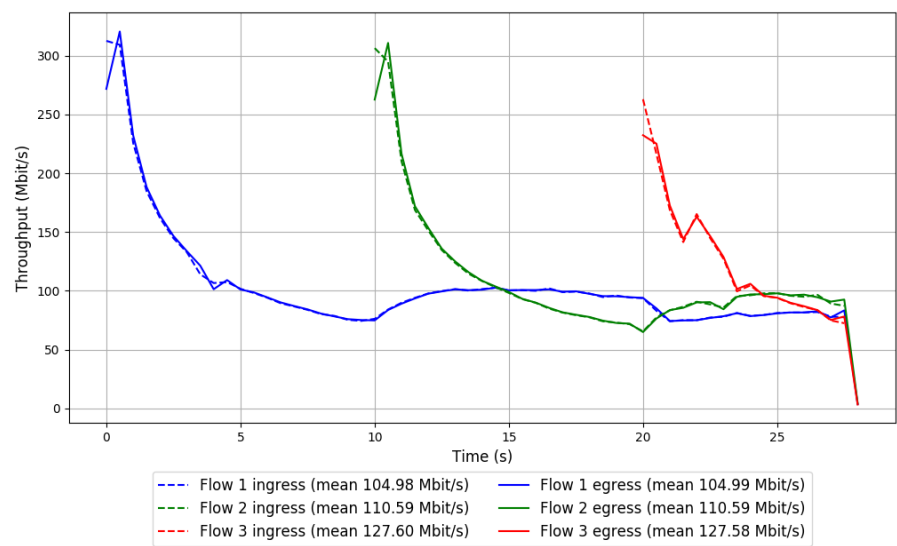
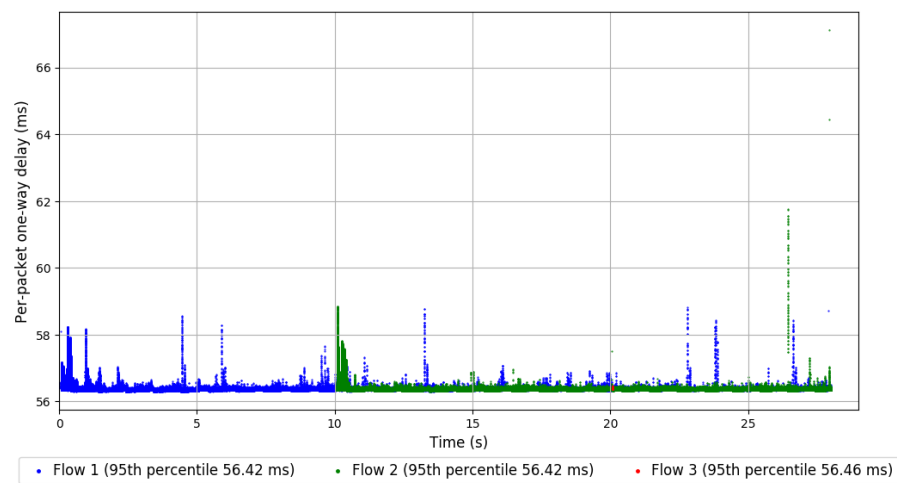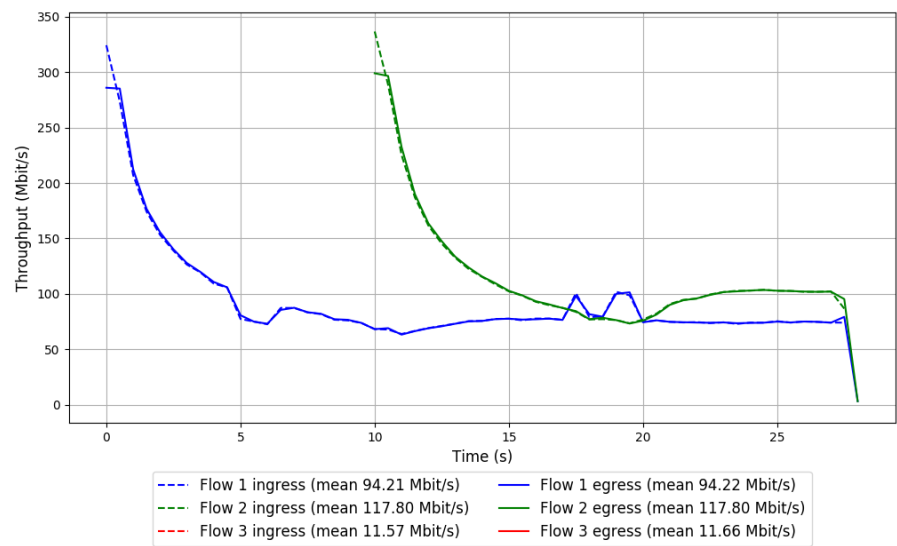Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2017-11-16 11:03:50
End at: 2017-11-16 11:04:20
Local clock offset: -0.163 ms
Remote clock offset: 34.596 ms


# Below is generated by plot.py at 2017-11-16 17:10:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 169.88 Mbit/s
95th percentile per-packet one-way delay: 56.420 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.22 Mbit/s
95th percentile per-packet one-way delay: 56.422 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.80 Mbit/s
95th percentile per-packet one-way delay: 56.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 56.460 ms
Loss rate: 0.00%
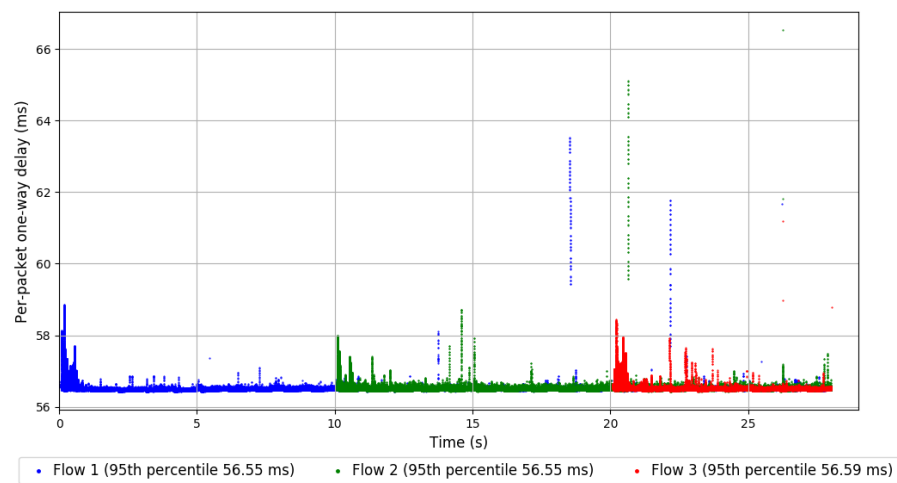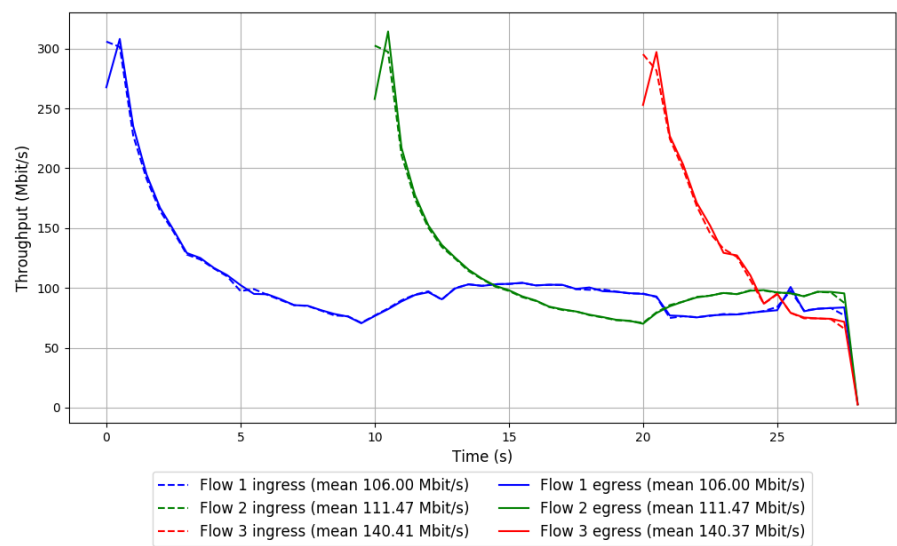```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-11-16 11:23:23
End at: 2017-11-16 11:23:53
Local clock offset: -0.162 ms
Remote clock offset: 33.994 ms

Below is generated by plot.py at 2017-11-16 17:14:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 217.44 Mbit/s
95th percentile per-packet one-way delay: 56.553 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.00 Mbit/s
95th percentile per-packet one-way delay: 56.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.47 Mbit/s
95th percentile per-packet one-way delay: 56.549 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.37 Mbit/s
95th percentile per-packet one-way delay: 56.592 ms
Loss rate: 0.00%
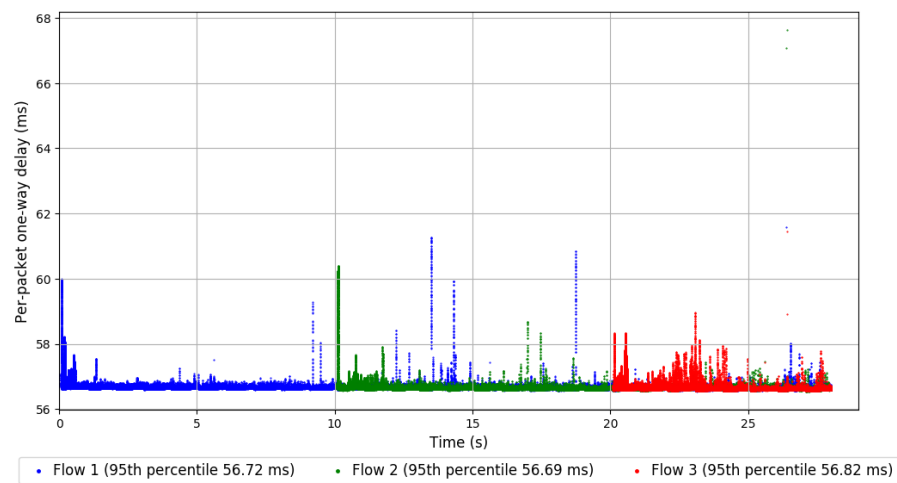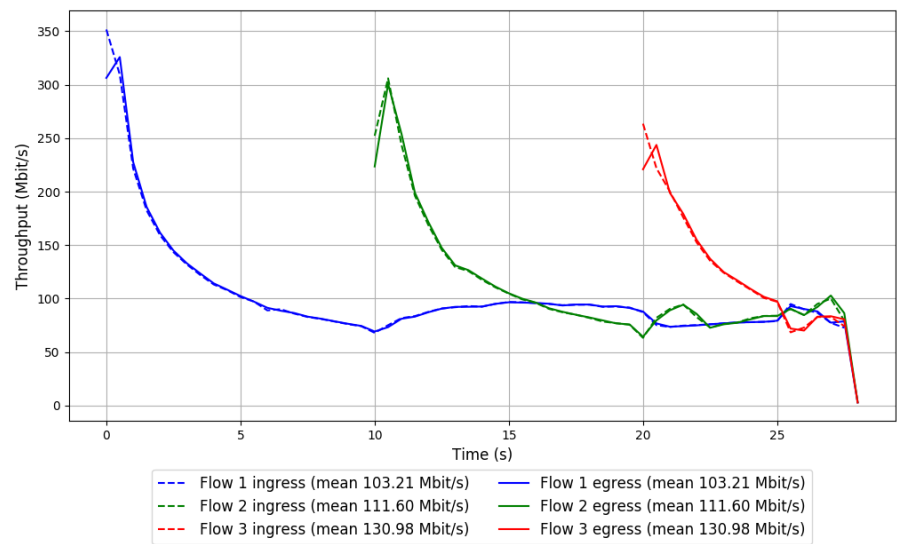```

Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2017-11-16 11:43:11
End at: 2017-11-16 11:43:41
Local clock offset: -0.042 ms
Remote clock offset: 35.169 ms


# Below is generated by plot.py at 2017-11-16 17:14:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 212.00 Mbit/s
95th percentile per-packet one-way delay: 56.714 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.21 Mbit/s
95th percentile per-packet one-way delay: 56.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.60 Mbit/s
95th percentile per-packet one-way delay: 56.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.98 Mbit/s
95th percentile per-packet one-way delay: 56.823 ms
Loss rate: 0.00%
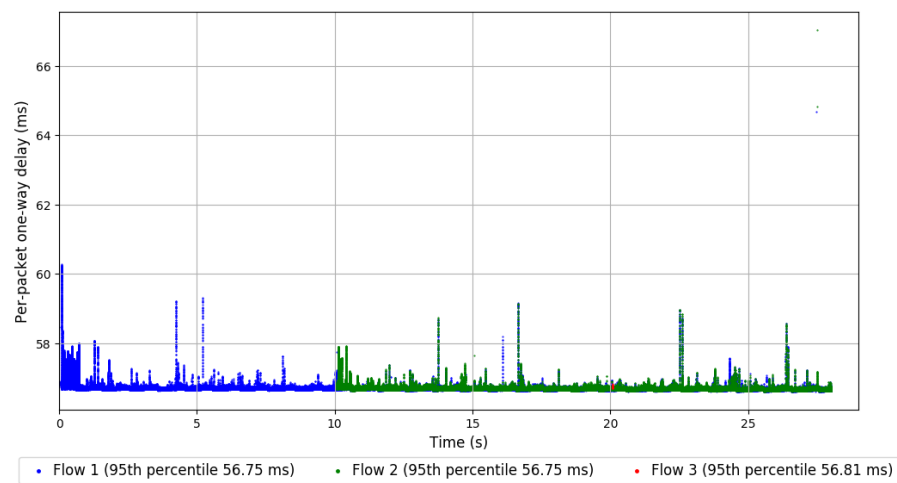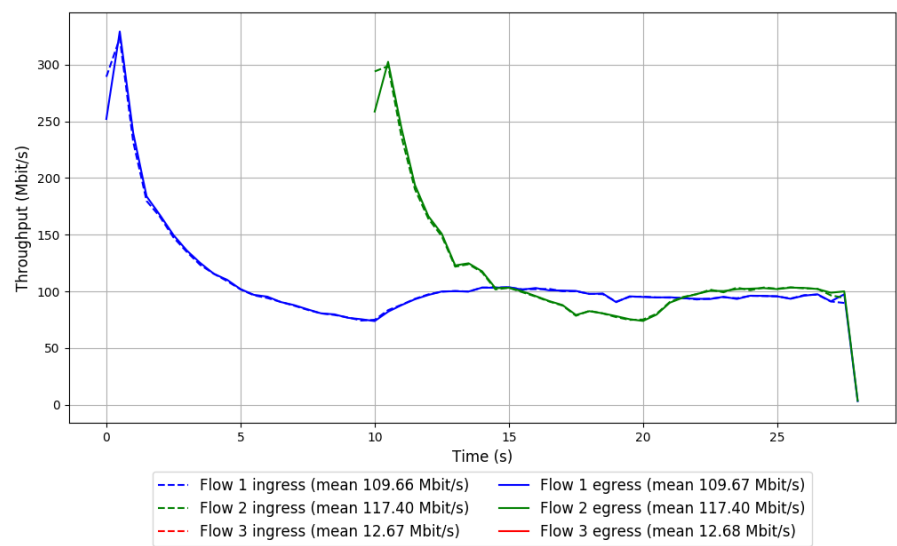```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-11-16 12:02:53
End at: 2017-11-16 12:03:23
Local clock offset: -0.02 ms
Remote clock offset: 37.193 ms

Below is generated by plot.py at 2017-11-16 17:14:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 185.07 Mbit/s
95th percentile per-packet one-way delay: 56.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.67 Mbit/s
95th percentile per-packet one-way delay: 56.748 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.40 Mbit/s
95th percentile per-packet one-way delay: 56.746 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 56.810 ms
Loss rate: 0.00%
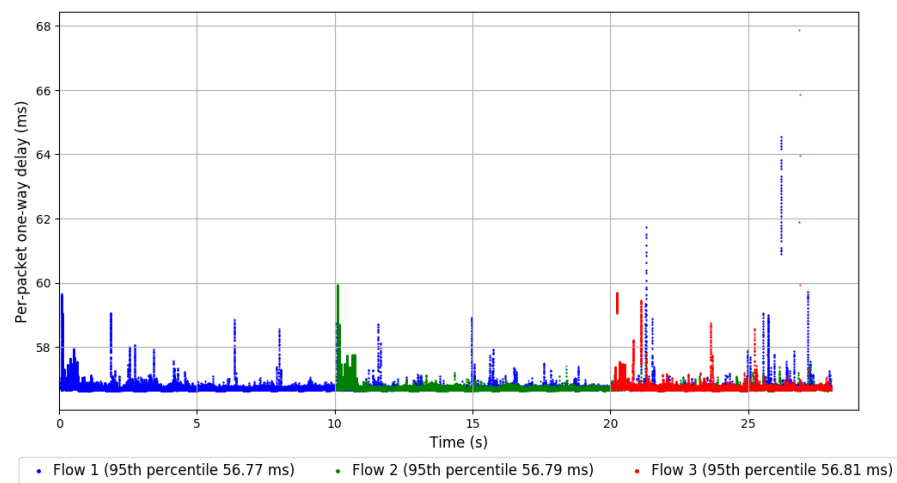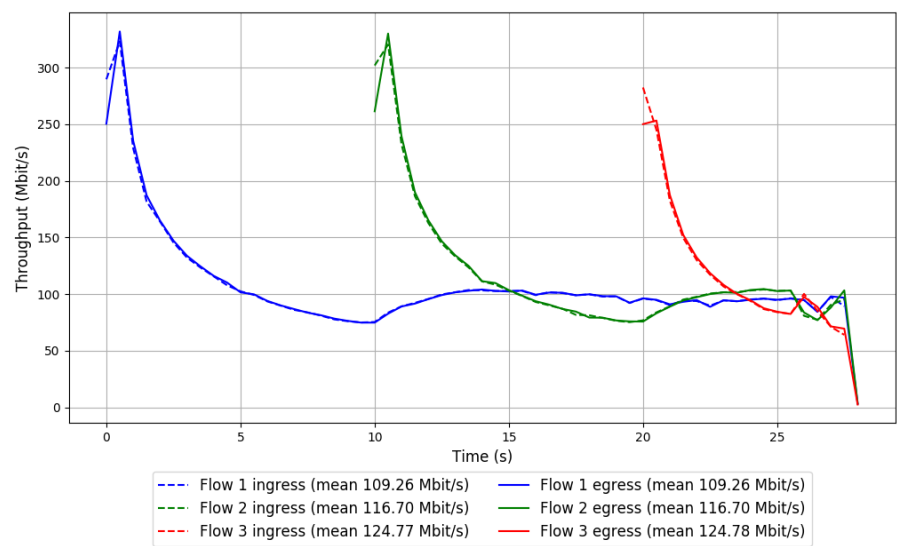```

Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2017-11-16 12:22:31
End at: 2017-11-16 12:23:01
Local clock offset: 0.016 ms
Remote clock offset: 36.987 ms


# Below is generated by plot.py at 2017-11-16 17:14:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.62 Mbit/s
95th percentile per-packet one-way delay: 56.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.26 Mbit/s
95th percentile per-packet one-way delay: 56.769 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 116.70 Mbit/s
95th percentile per-packet one-way delay: 56.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.78 Mbit/s
95th percentile per-packet one-way delay: 56.815 ms
Loss rate: 0.01%
```

Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 109.26 Mbit/s) --- Flow 1 egress (mean 109.26 Mbit/s)
Flow 2 ingress (mean 116.70 Mbit/s) --- Flow 2 egress (mean 116.70 Mbit/s)
Flow 3 ingress (mean 124.77 Mbit/s) --- Flow 3 egress (mean 124.78 Mbit/s)

Flow 1 (95th percentile 56.77 ms)   Flow 2 (95th percentile 56.79 ms)   Flow 3 (95th percentile 56.81 ms)
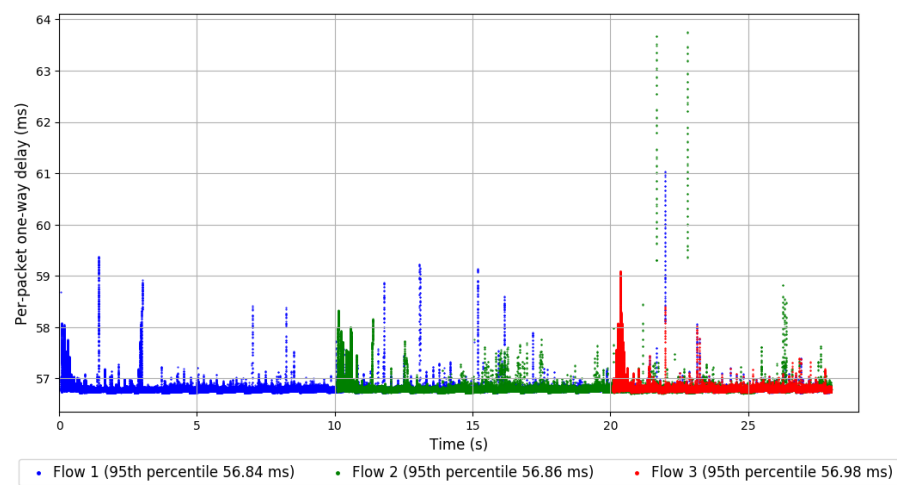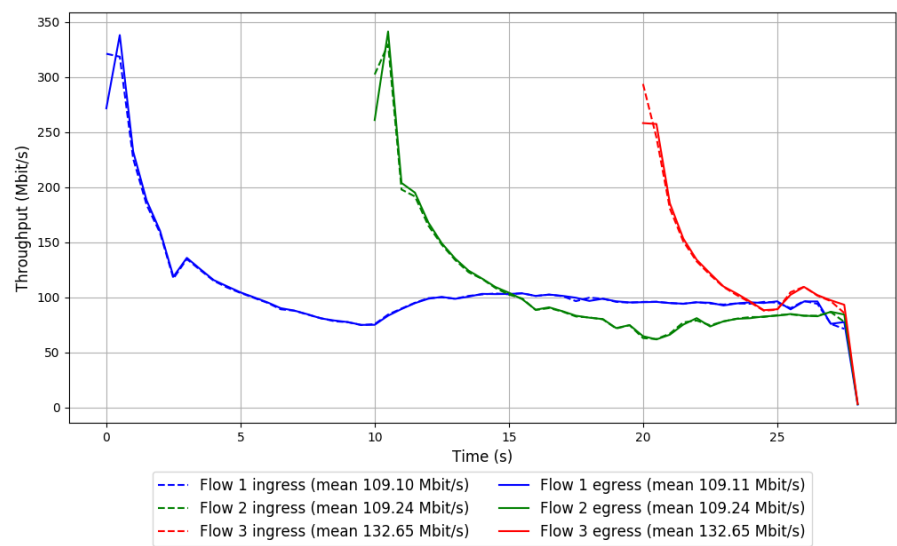
```
Run 7: Statistics of Copa

Start at: 2017-11-16 12:42:15
End at: 2017-11-16 12:42:45
Local clock offset: -0.026 ms
Remote clock offset: 36.216 ms


# Below is generated by plot.py at 2017-11-16 17:14:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.85 Mbit/s
95th percentile per-packet one-way delay: 56.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.11 Mbit/s
95th percentile per-packet one-way delay: 56.835 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 109.24 Mbit/s
95th percentile per-packet one-way delay: 56.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.65 Mbit/s
95th percentile per-packet one-way delay: 56.982 ms
Loss rate: 0.00%
```

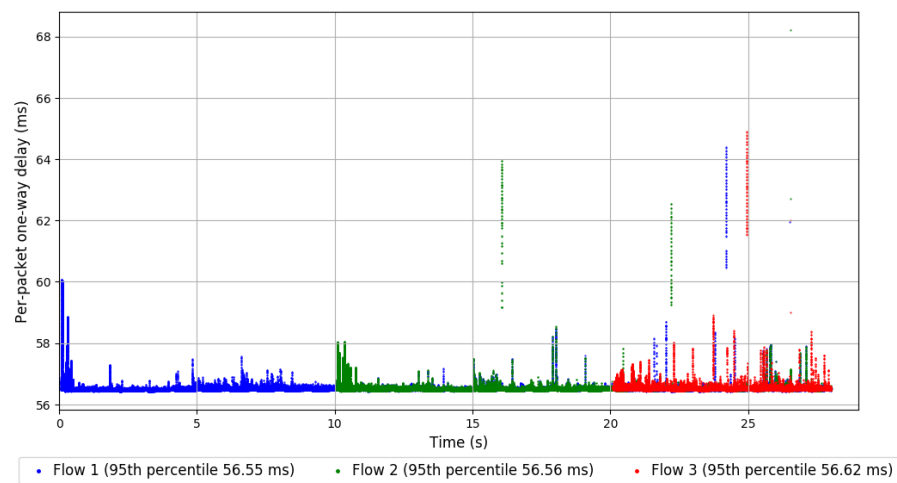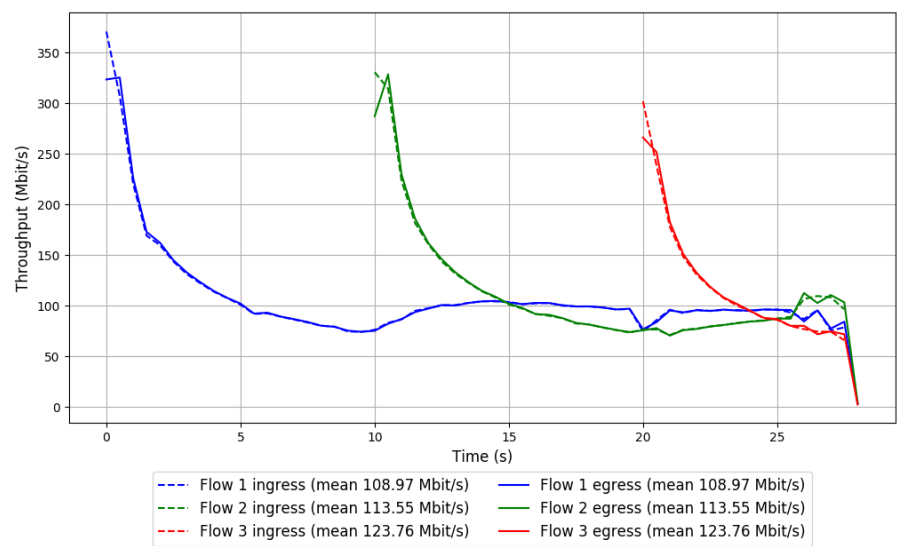# Run 7: Report of Copa — Data Link

237

```
Run 8: Statistics of Copa

Start at: 2017-11-16 13:01:55
End at: 2017-11-16 13:02:25
Local clock offset: -0.024 ms
Remote clock offset: 37.112 ms


# Below is generated by plot.py at 2017-11-16 17:15:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.95 Mbit/s
95th percentile per-packet one-way delay: 56.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 108.97 Mbit/s
95th percentile per-packet one-way delay: 56.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.55 Mbit/s
95th percentile per-packet one-way delay: 56.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.76 Mbit/s
95th percentile per-packet one-way delay: 56.620 ms
Loss rate: 0.00%
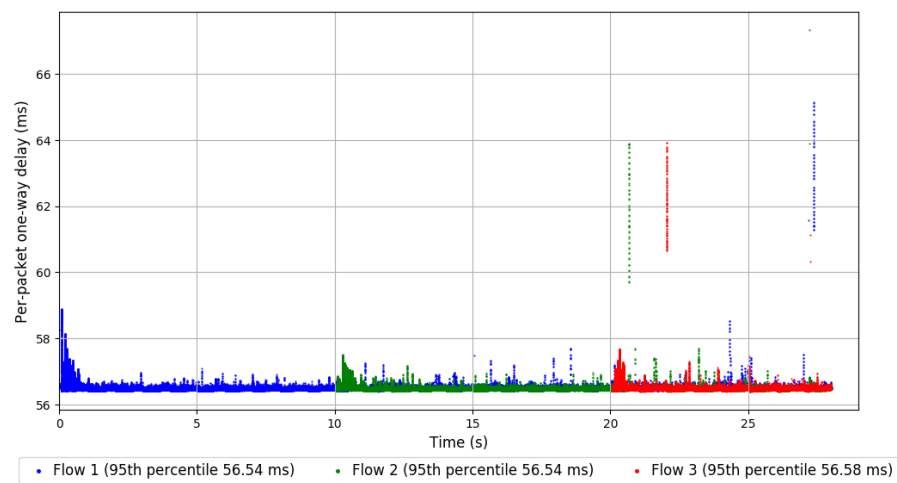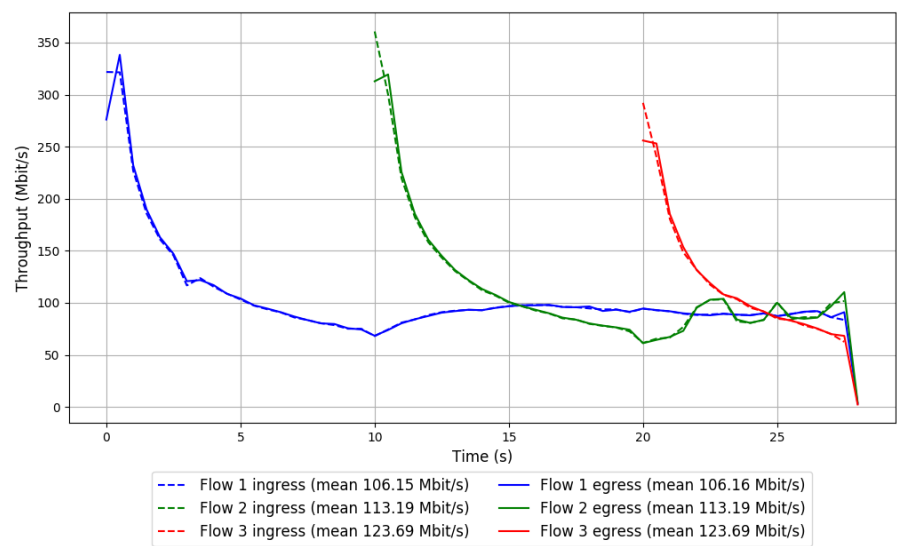```

Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2017-11-16 13:21:37
End at: 2017-11-16 13:22:07
Local clock offset: 0.058 ms
Remote clock offset: 36.338 ms

# Below is generated by plot.py at 2017-11-16 17:15:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.96 Mbit/s
95th percentile per-packet one-way delay: 56.544 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.16 Mbit/s
95th percentile per-packet one-way delay: 56.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.19 Mbit/s
95th percentile per-packet one-way delay: 56.543 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.69 Mbit/s
95th percentile per-packet one-way delay: 56.584 ms
Loss rate: 0.00%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 106.15 Mbit/s) --- Flow 1 egress (mean 106.16 Mbit/s)
Flow 2 ingress (mean 113.19 Mbit/s) --- Flow 2 egress (mean 113.19 Mbit/s)
Flow 3 ingress (mean 123.69 Mbit/s) --- Flow 3 egress (mean 123.69 Mbit/s)

Flow 1 (95th percentile 56.54 ms) • Flow 2 (95th percentile 56.54 ms) • Flow 3 (95th percentile 56.58 ms)
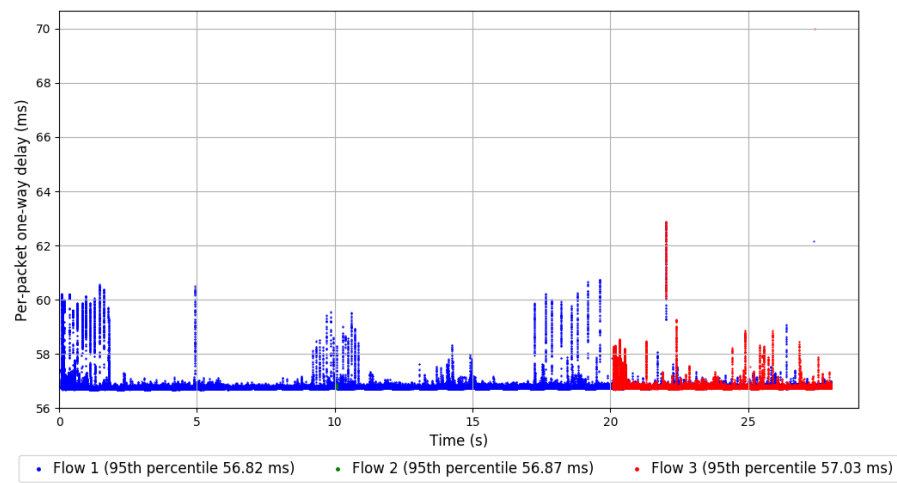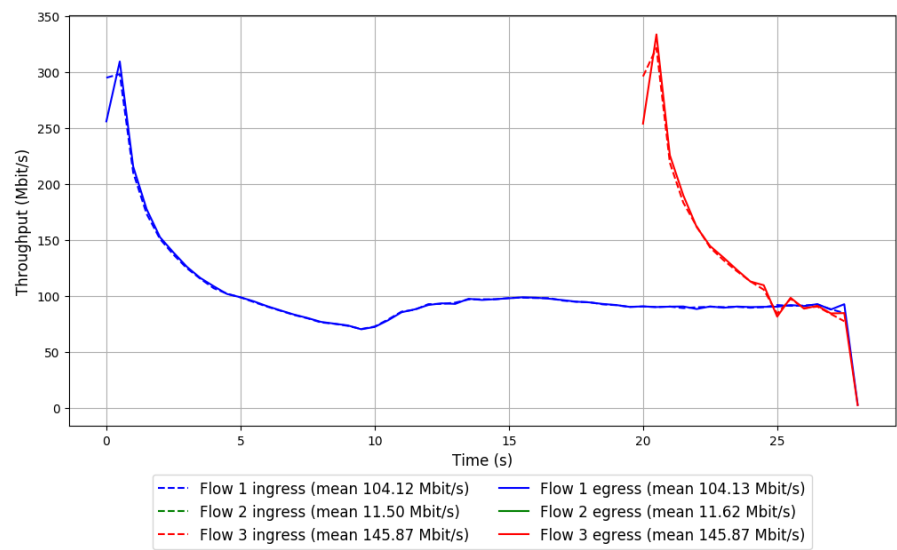
```
Run 10: Statistics of Copa

Start at: 2017-11-16 13:41:20
End at: 2017-11-16 13:41:50
Local clock offset: 0.068 ms
Remote clock offset: 35.658 ms


# Below is generated by plot.py at 2017-11-16 17:15:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.59 Mbit/s
95th percentile per-packet one-way delay: 56.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 104.13 Mbit/s
95th percentile per-packet one-way delay: 56.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 56.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.87 Mbit/s
95th percentile per-packet one-way delay: 57.028 ms
Loss rate: 0.00%
```

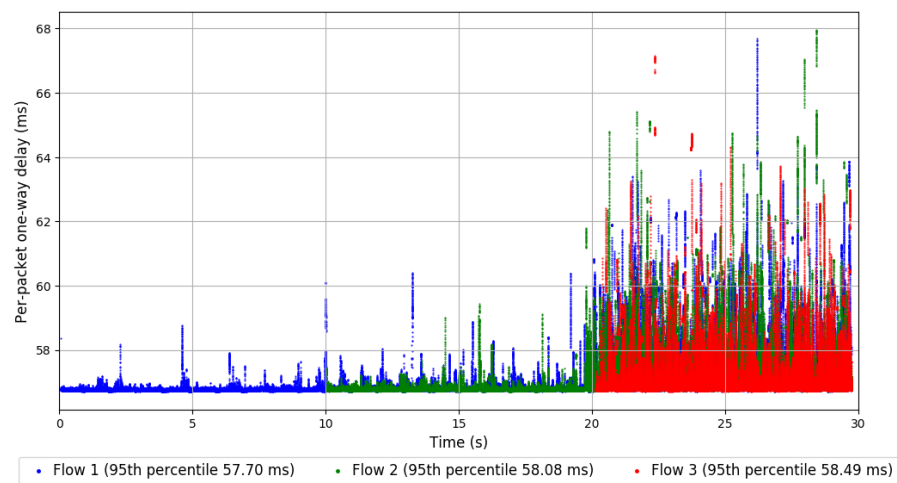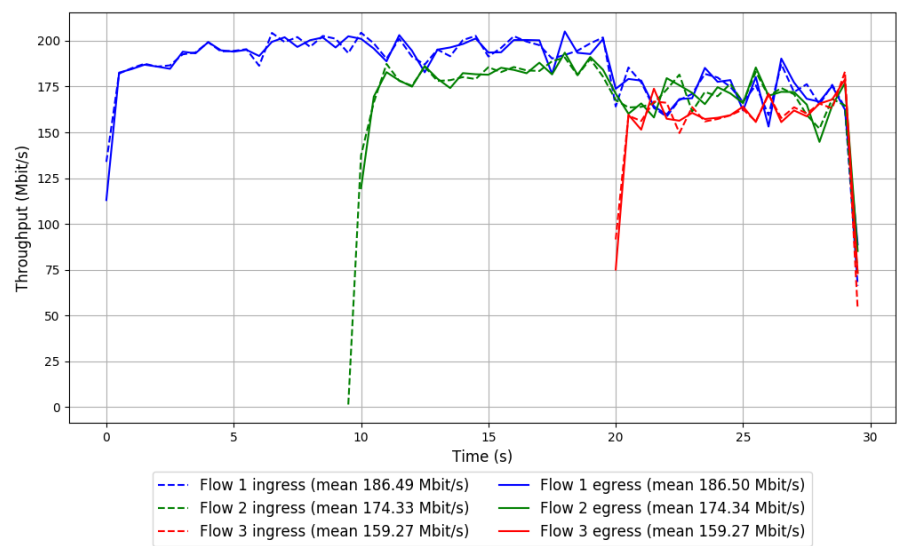## Run 10: Report of Copa — Data Link

```
Run 1: Statistics of Indigo

Start at: 2017-11-16 10:35:30
End at: 2017-11-16 10:36:00
Local clock offset: -0.212 ms
Remote clock offset: 35.743 ms


# Below is generated by plot.py at 2017-11-16 17:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.88 Mbit/s
95th percentile per-packet one-way delay: 57.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.50 Mbit/s
95th percentile per-packet one-way delay: 57.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.34 Mbit/s
95th percentile per-packet one-way delay: 58.082 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.27 Mbit/s
95th percentile per-packet one-way delay: 58.492 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 186.49 Mbit/s) —— Flow 1 egress (mean 186.50 Mbit/s)
- - - Flow 2 ingress (mean 174.33 Mbit/s) —— Flow 2 egress (mean 174.34 Mbit/s)
- - - Flow 3 ingress (mean 159.27 Mbit/s) —— Flow 3 egress (mean 159.27 Mbit/s)

- Flow 1 (95th percentile 57.70 ms)   - Flow 2 (95th percentile 58.08 ms)   - Flow 3 (95th percentile 58.49 ms)
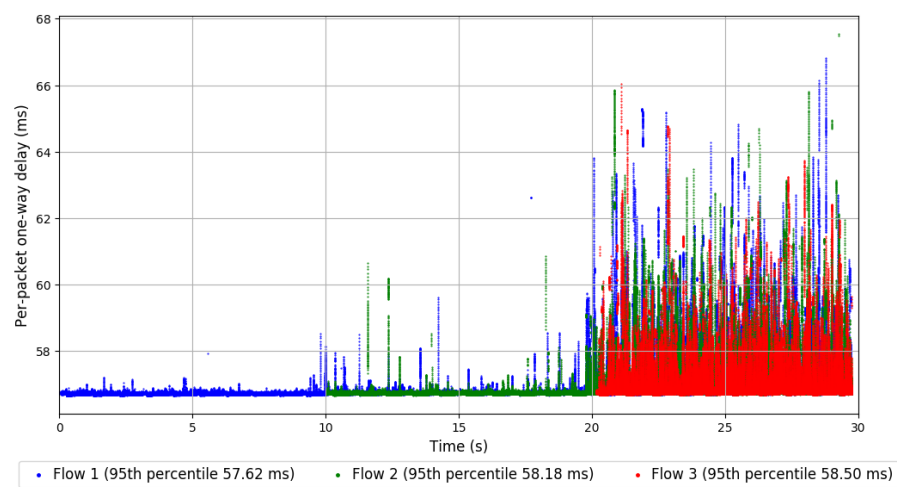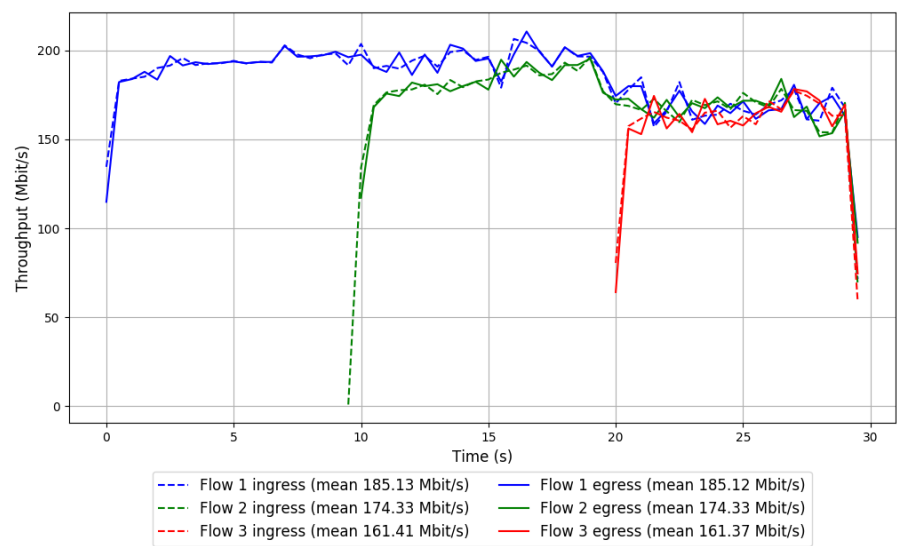
```
Run 2: Statistics of Indigo

Start at: 2017-11-16 10:55:12
End at: 2017-11-16 10:55:42
Local clock offset: -0.194 ms
Remote clock offset: 35.258 ms

# Below is generated by plot.py at 2017-11-16 17:18:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.01 Mbit/s
95th percentile per-packet one-way delay: 57.994 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.12 Mbit/s
95th percentile per-packet one-way delay: 57.619 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.33 Mbit/s
95th percentile per-packet one-way delay: 58.183 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.37 Mbit/s
95th percentile per-packet one-way delay: 58.501 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 185.13 Mbit/s)   Flow 1 egress (mean 185.12 Mbit/s)
Flow 2 ingress (mean 174.33 Mbit/s)   Flow 2 egress (mean 174.33 Mbit/s)
Flow 3 ingress (mean 161.41 Mbit/s)   Flow 3 egress (mean 161.37 Mbit/s)

Flow 1 (95th percentile 57.62 ms)   Flow 2 (95th percentile 58.18 ms)   Flow 3 (95th percentile 58.50 ms)
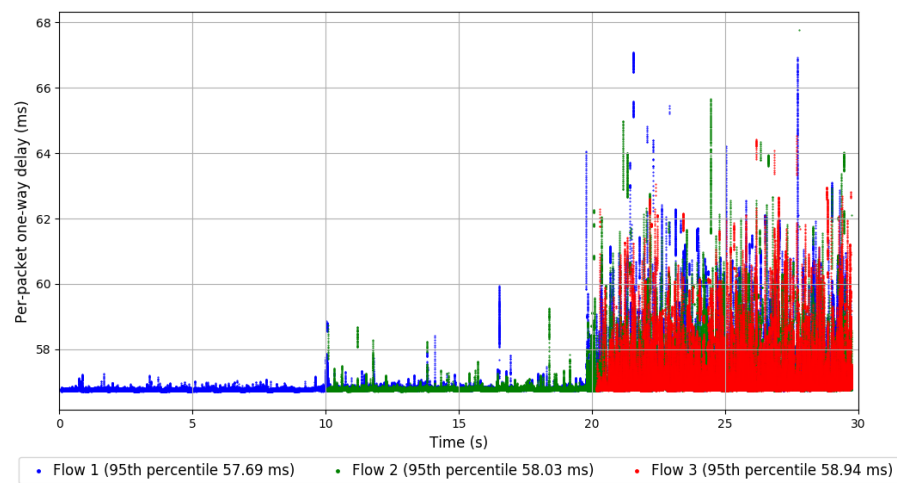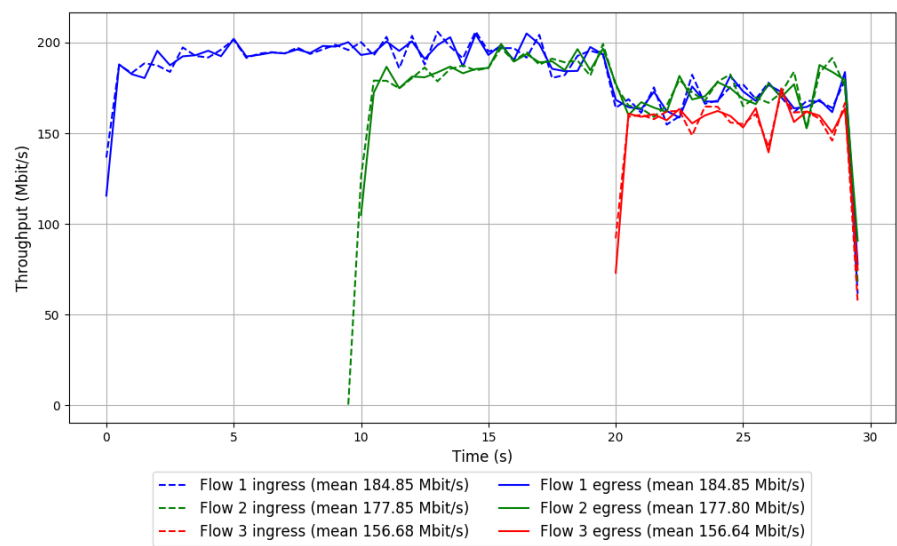
```
Run 3: Statistics of Indigo

Start at: 2017-11-16 11:14:42
End at: 2017-11-16 11:15:12
Local clock offset: -0.114 ms
Remote clock offset: 34.597 ms


# Below is generated by plot.py at 2017-11-16 17:18:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.44 Mbit/s
95th percentile per-packet one-way delay: 58.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.85 Mbit/s
95th percentile per-packet one-way delay: 57.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.80 Mbit/s
95th percentile per-packet one-way delay: 58.034 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.64 Mbit/s
95th percentile per-packet one-way delay: 58.944 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 184.85 Mbit/s) --- Flow 1 egress (mean 184.85 Mbit/s)
Flow 2 ingress (mean 177.85 Mbit/s) --- Flow 2 egress (mean 177.80 Mbit/s)
Flow 3 ingress (mean 156.68 Mbit/s) --- Flow 3 egress (mean 156.64 Mbit/s)

Flow 1 (95th percentile 57.69 ms) • Flow 2 (95th percentile 58.03 ms) • Flow 3 (95th percentile 58.94 ms)
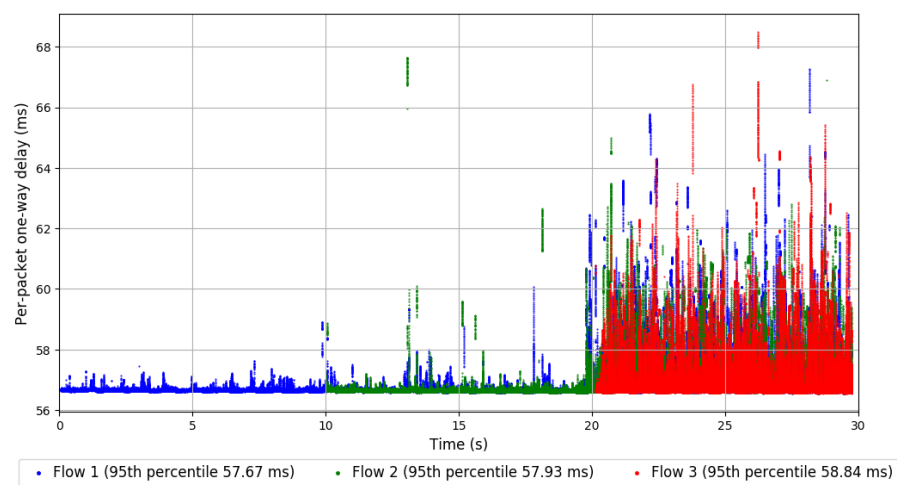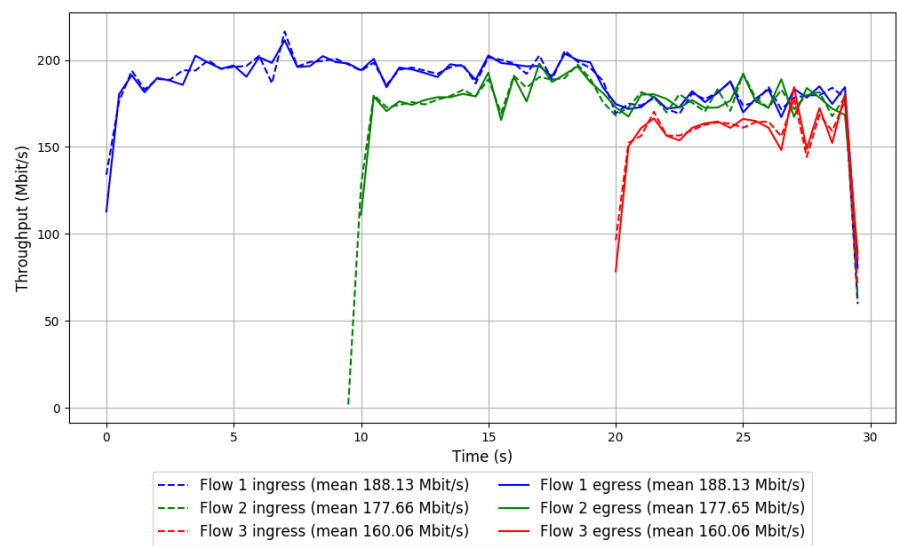
249

```
Run 4: Statistics of Indigo

Start at: 2017-11-16 11:34:28
End at: 2017-11-16 11:34:58
Local clock offset: -0.067 ms
Remote clock offset: 34.049 ms


# Below is generated by plot.py at 2017-11-16 17:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.02 Mbit/s
95th percentile per-packet one-way delay: 57.995 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.13 Mbit/s
95th percentile per-packet one-way delay: 57.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.65 Mbit/s
95th percentile per-packet one-way delay: 57.934 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.06 Mbit/s
95th percentile per-packet one-way delay: 58.845 ms
Loss rate: 0.00%
```

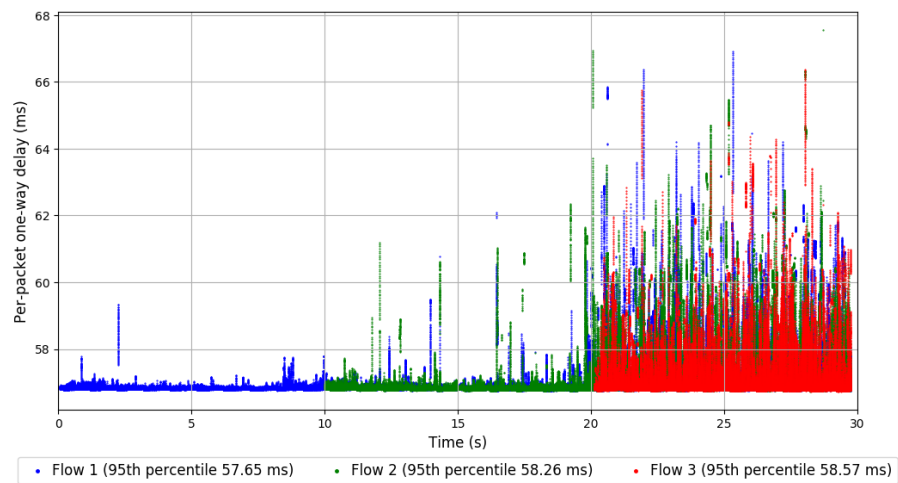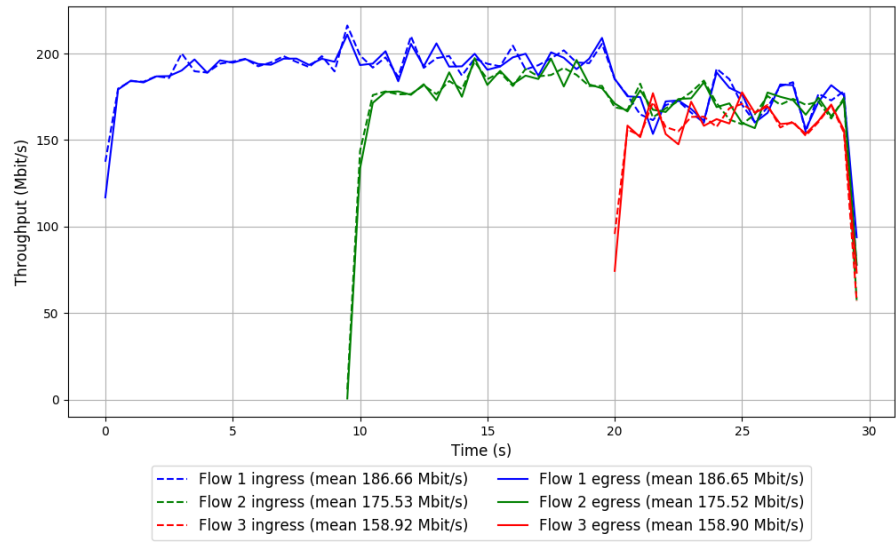Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-11-16 11:54:10
End at: 2017-11-16 11:54:40
Local clock offset: -0.096 ms
Remote clock offset: 36.427 ms

# Below is generated by plot.py at 2017-11-16 17:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.00 Mbit/s
95th percentile per-packet one-way delay: 58.038 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.65 Mbit/s
95th percentile per-packet one-way delay: 57.649 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.52 Mbit/s
95th percentile per-packet one-way delay: 58.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 58.574 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 186.66 Mbit/s)   —— Flow 1 egress (mean 186.65 Mbit/s)
- - - Flow 2 ingress (mean 175.53 Mbit/s)   —— Flow 2 egress (mean 175.52 Mbit/s)
- - - Flow 3 ingress (mean 158.92 Mbit/s)   —— Flow 3 egress (mean 158.90 Mbit/s)

- Flow 1 (95th percentile 57.65 ms)   • Flow 2 (95th percentile 58.26 ms)   • Flow 3 (95th percentile 58.57 ms)
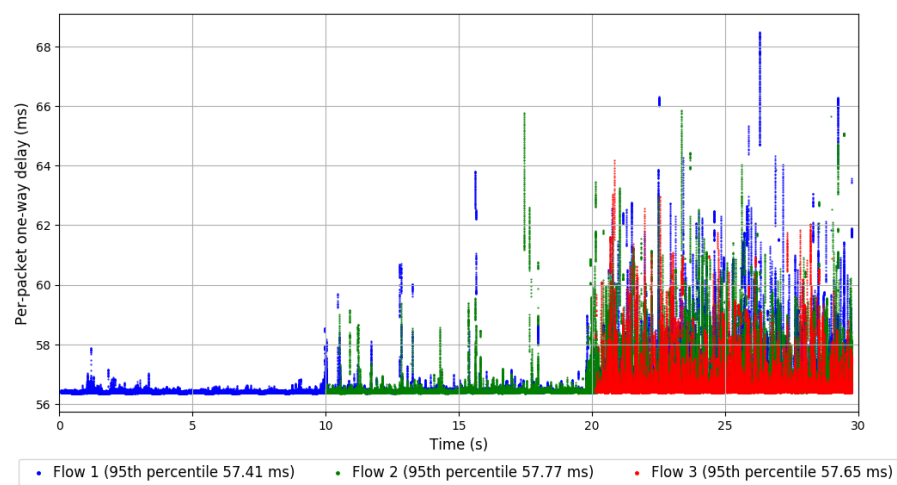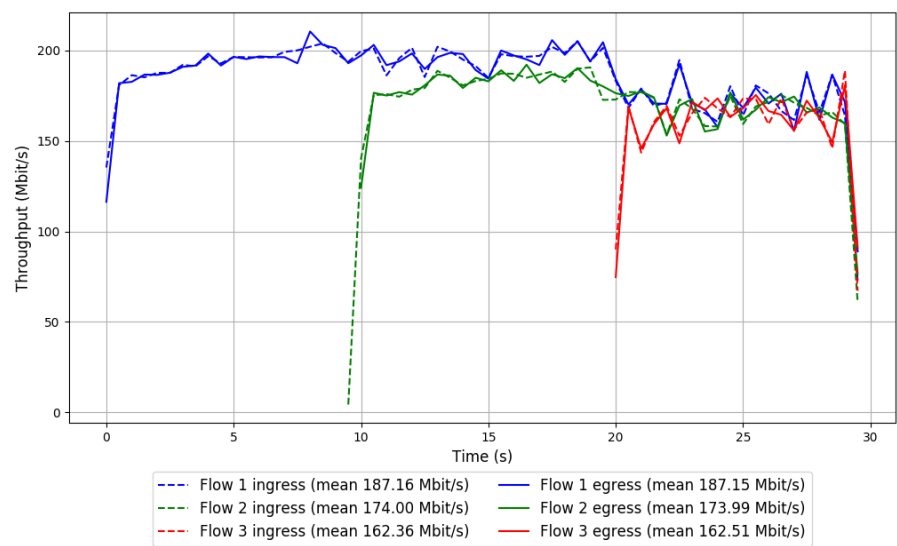
253

```
Run 6: Statistics of Indigo

Start at: 2017-11-16 12:13:49
End at: 2017-11-16 12:14:19
Local clock offset: 0.024 ms
Remote clock offset: 37.101 ms

# Below is generated by plot.py at 2017-11-16 17:19:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.50 Mbit/s
95th percentile per-packet one-way delay: 57.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.15 Mbit/s
95th percentile per-packet one-way delay: 57.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.99 Mbit/s
95th percentile per-packet one-way delay: 57.775 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 162.51 Mbit/s
95th percentile per-packet one-way delay: 57.647 ms
Loss rate: 0.00%
```
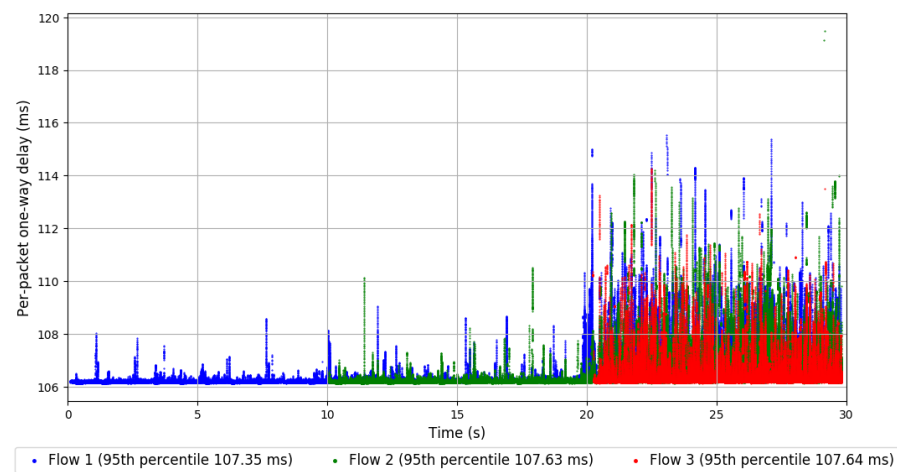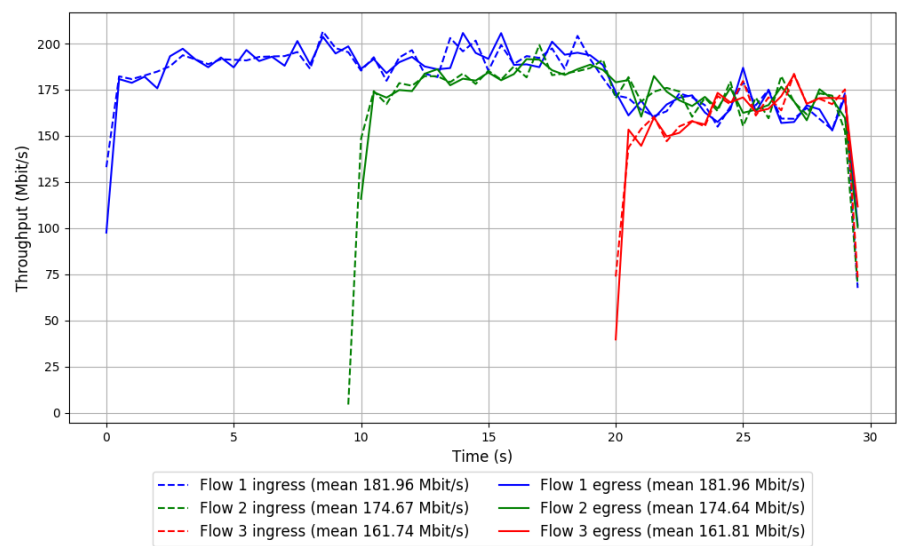
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 187.16 Mbit/s) --- Flow 1 egress (mean 187.15 Mbit/s) ———
Flow 2 ingress (mean 174.00 Mbit/s) --- Flow 2 egress (mean 173.99 Mbit/s) ———
Flow 3 ingress (mean 162.36 Mbit/s) --- Flow 3 egress (mean 162.51 Mbit/s) ———

Flow 1 (95th percentile 57.41 ms)   Flow 2 (95th percentile 57.77 ms)   Flow 3 (95th percentile 57.65 ms)

255

```
Run 7: Statistics of Indigo

Start at: 2017-11-16 12:33:30
End at: 2017-11-16 12:34:00
Local clock offset: 0.021 ms
Remote clock offset: 86.001 ms


# Below is generated by plot.py at 2017-11-16 17:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.23 Mbit/s
95th percentile per-packet one-way delay: 107.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.96 Mbit/s
95th percentile per-packet one-way delay: 107.351 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.64 Mbit/s
95th percentile per-packet one-way delay: 107.634 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.81 Mbit/s
95th percentile per-packet one-way delay: 107.645 ms
Loss rate: 0.00%
```
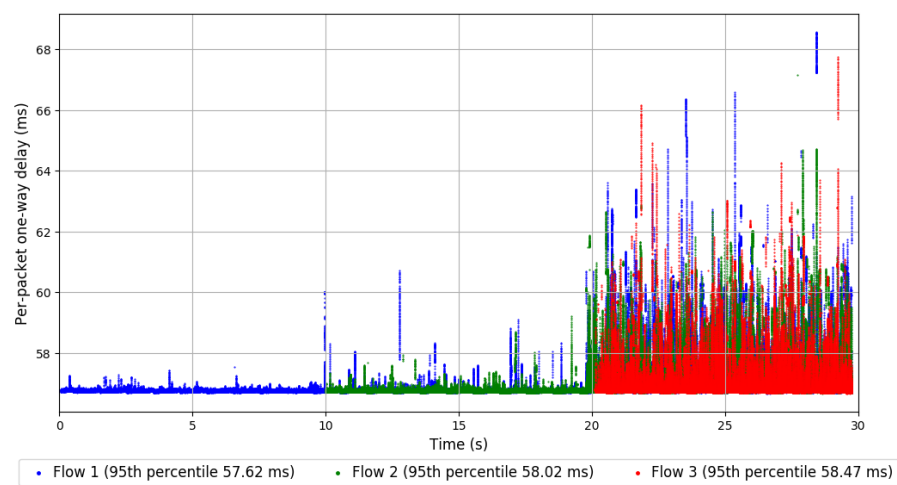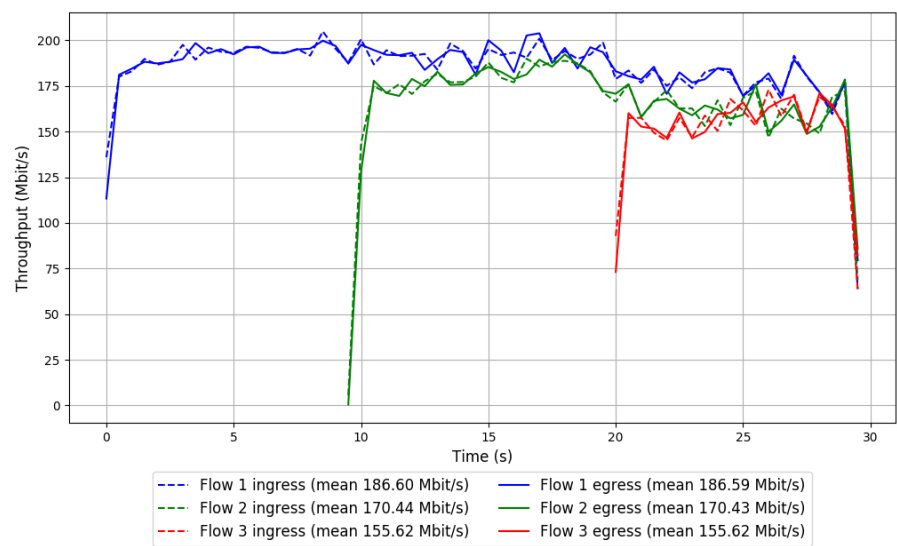
Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 181.96 Mbit/s) — Flow 1 egress (mean 181.96 Mbit/s)
Flow 2 ingress (mean 174.67 Mbit/s) — Flow 2 egress (mean 174.64 Mbit/s)
Flow 3 ingress (mean 161.74 Mbit/s) — Flow 3 egress (mean 161.81 Mbit/s)

Flow 1 (95th percentile 107.35 ms)   Flow 2 (95th percentile 107.63 ms)   Flow 3 (95th percentile 107.64 ms)

257

```
Run 8: Statistics of Indigo

Start at: 2017-11-16 12:53:13
End at: 2017-11-16 12:53:43
Local clock offset: -0.031 ms
Remote clock offset: 36.854 ms


# Below is generated by plot.py at 2017-11-16 17:20:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.49 Mbit/s
95th percentile per-packet one-way delay: 57.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.59 Mbit/s
95th percentile per-packet one-way delay: 57.620 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 170.43 Mbit/s
95th percentile per-packet one-way delay: 58.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.62 Mbit/s
95th percentile per-packet one-way delay: 58.473 ms
Loss rate: 0.00%
```

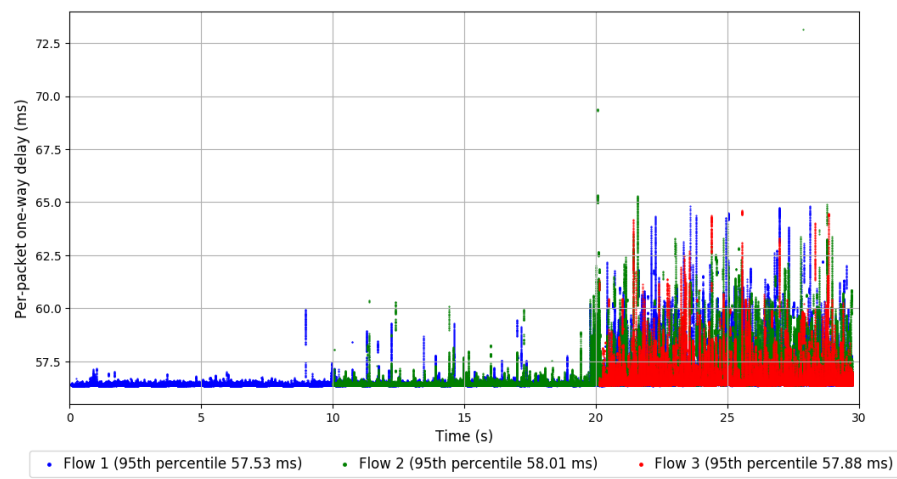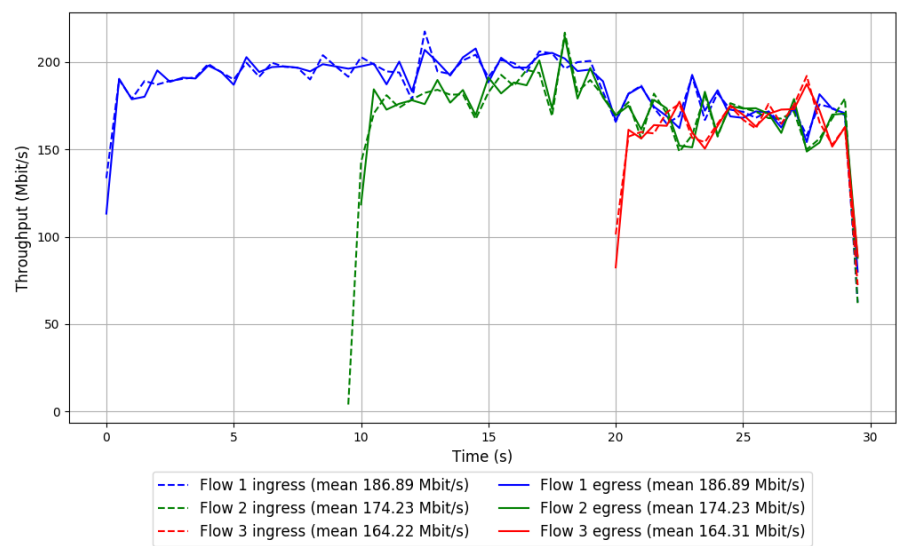Run 8: Report of Indigo — Data Link

259

```
Run 9: Statistics of Indigo

Start at: 2017-11-16 13:12:56
End at: 2017-11-16 13:13:26
Local clock offset: 0.054 ms
Remote clock offset: 36.613 ms


# Below is generated by plot.py at 2017-11-16 17:23:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.06 Mbit/s
95th percentile per-packet one-way delay: 57.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.89 Mbit/s
95th percentile per-packet one-way delay: 57.530 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.23 Mbit/s
95th percentile per-packet one-way delay: 58.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.31 Mbit/s
95th percentile per-packet one-way delay: 57.885 ms
Loss rate: 0.00%
```

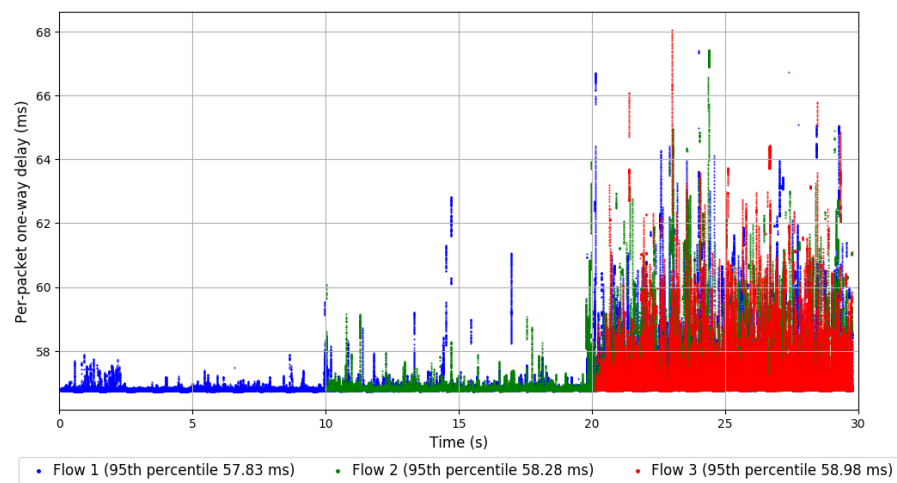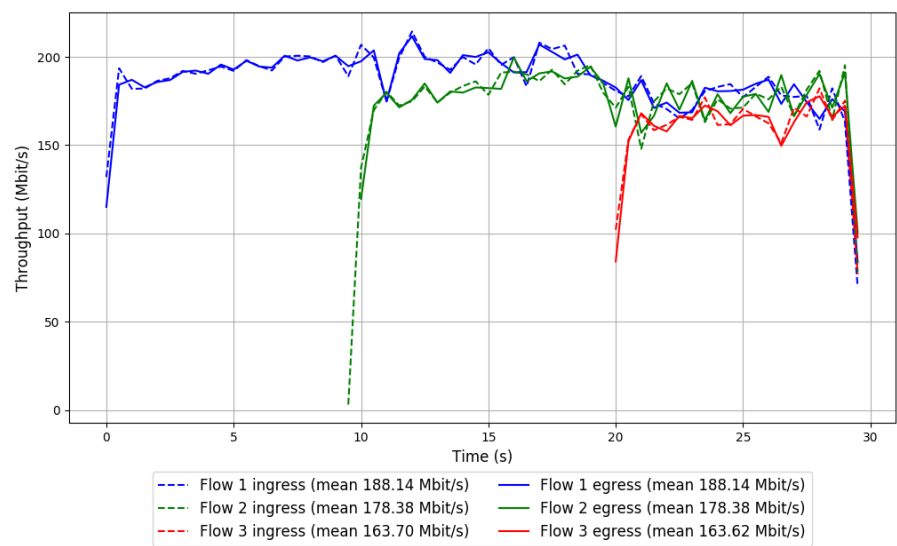## Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-11-16 13:32:40
End at: 2017-11-16 13:33:10
Local clock offset: 0.071 ms
Remote clock offset: 36.259 ms


# Below is generated by plot.py at 2017-11-16 17:23:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.90 Mbit/s
95th percentile per-packet one-way delay: 58.216 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 188.14 Mbit/s
95th percentile per-packet one-way delay: 57.832 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.38 Mbit/s
95th percentile per-packet one-way delay: 58.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 163.62 Mbit/s
95th percentile per-packet one-way delay: 58.978 ms
Loss rate: 0.04%
```

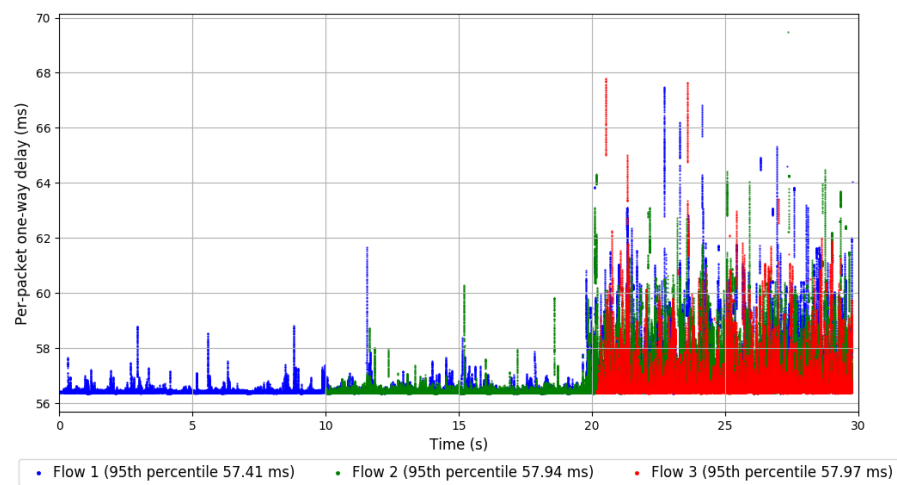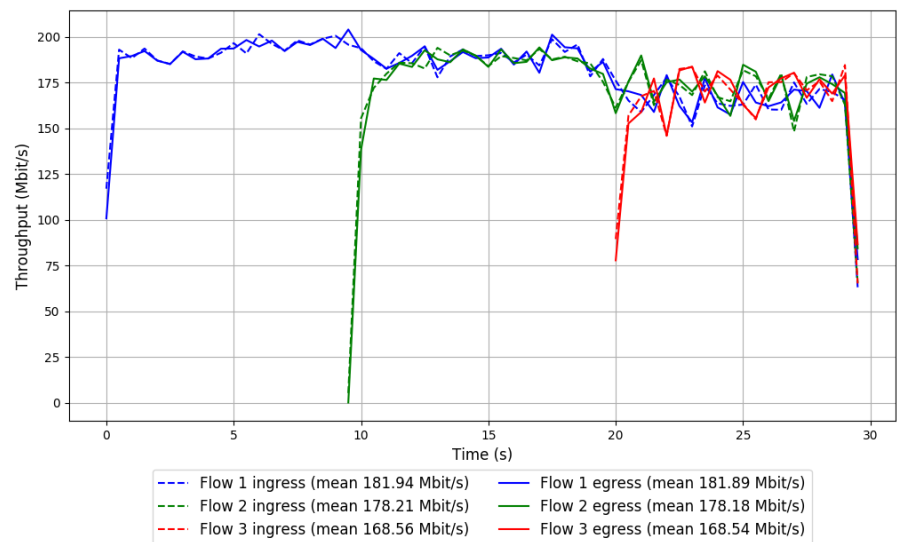# Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 10:29:58
End at: 2017-11-16 10:30:28
Local clock offset: -0.223 ms
Remote clock offset: 35.34 ms


# Below is generated by plot.py at 2017-11-16 17:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.78 Mbit/s
95th percentile per-packet one-way delay: 57.714 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 181.89 Mbit/s
95th percentile per-packet one-way delay: 57.414 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 178.18 Mbit/s
95th percentile per-packet one-way delay: 57.942 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.54 Mbit/s
95th percentile per-packet one-way delay: 57.971 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link
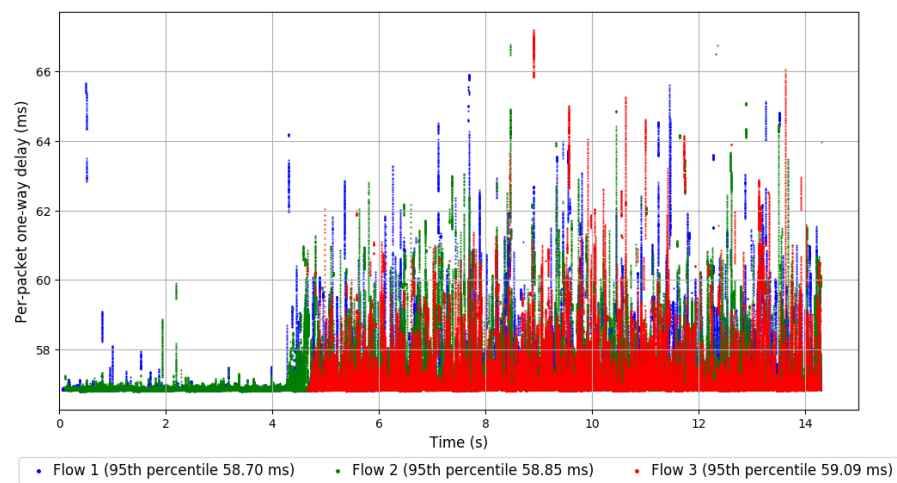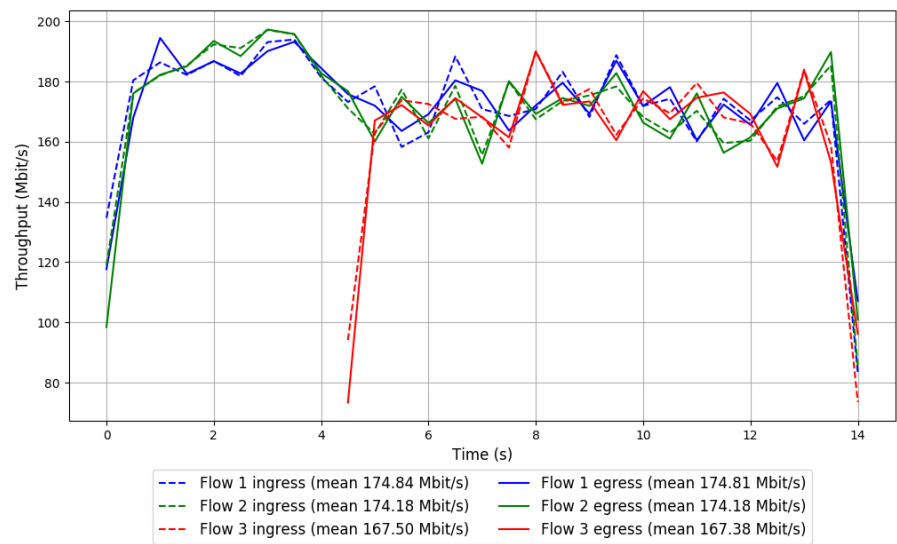
```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 10:49:45
End at: 2017-11-16 10:50:15
Local clock offset: -0.277 ms
Remote clock offset: 35.484 ms
```

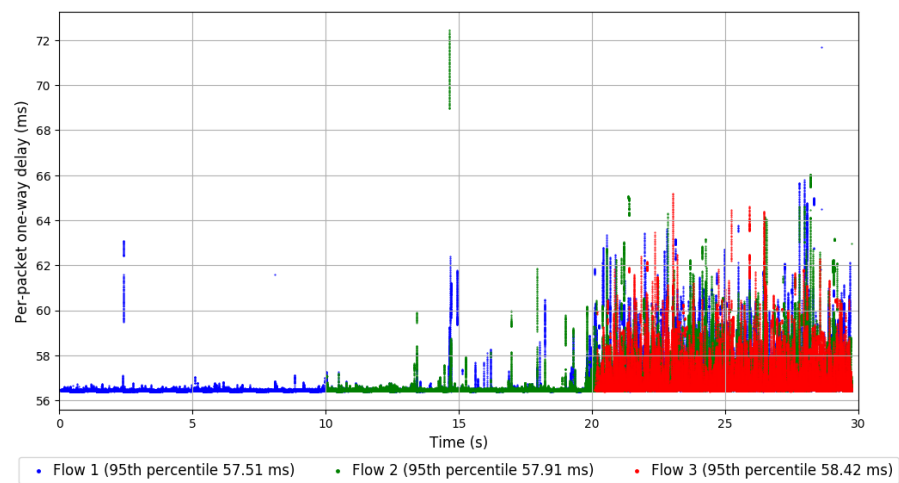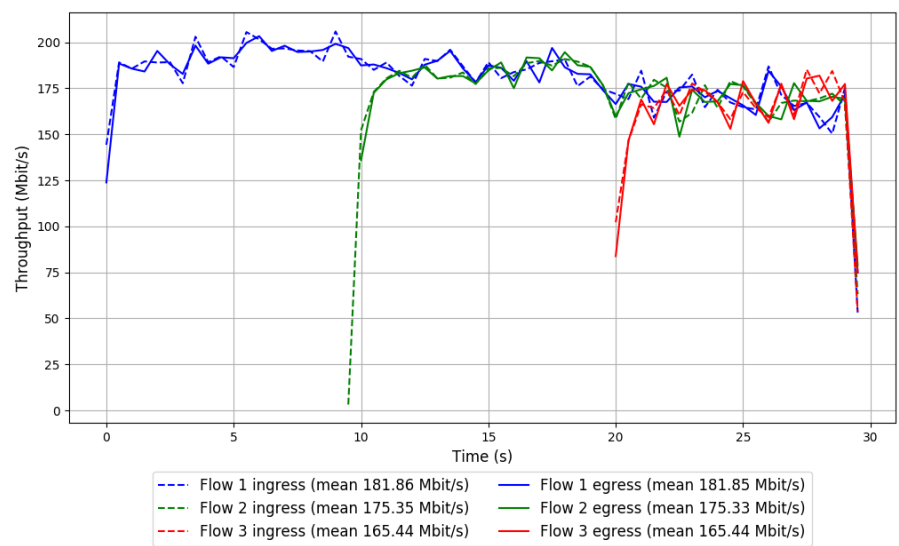Run 2: Report of Indigo-calib — Data Link

```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 11:09:11
End at: 2017-11-16 11:09:41
Local clock offset: -0.142 ms
Remote clock offset: 34.481 ms


# Below is generated by plot.py at 2017-11-16 17:24:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.99 Mbit/s
95th percentile per-packet one-way delay: 57.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.85 Mbit/s
95th percentile per-packet one-way delay: 57.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.33 Mbit/s
95th percentile per-packet one-way delay: 57.914 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.44 Mbit/s
95th percentile per-packet one-way delay: 58.416 ms
Loss rate: 0.00%
```
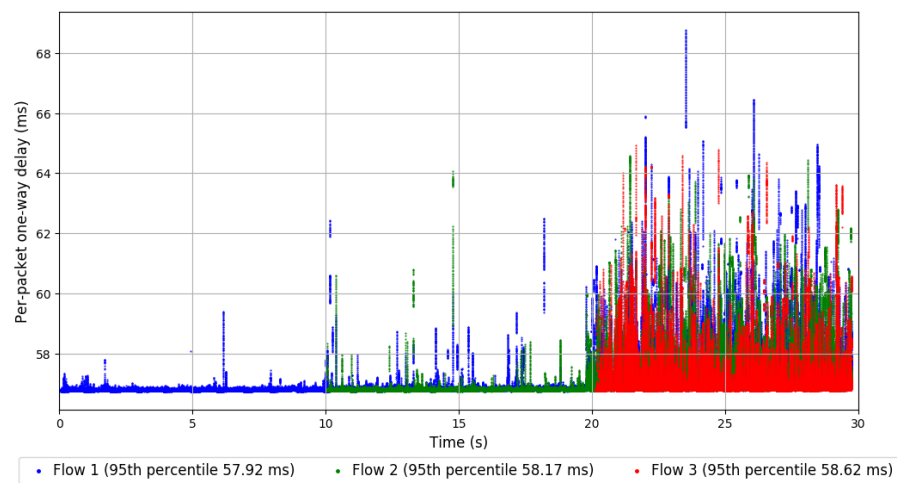
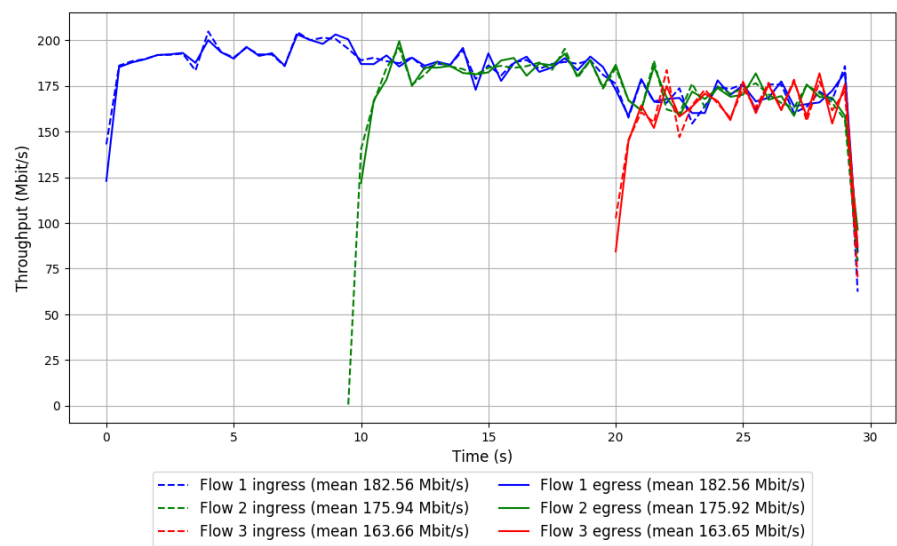# Run 3: Report of Indigo-calib — Data Link

```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 11:28:50
End at: 2017-11-16 11:29:20
Local clock offset: -0.093 ms
Remote clock offset: 34.187 ms


# Below is generated by plot.py at 2017-11-16 17:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.30 Mbit/s
95th percentile per-packet one-way delay: 58.134 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.56 Mbit/s
95th percentile per-packet one-way delay: 57.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.92 Mbit/s
95th percentile per-packet one-way delay: 58.173 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 163.65 Mbit/s
95th percentile per-packet one-way delay: 58.621 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 182.56 Mbit/s) — — — Flow 1 egress (mean 182.56 Mbit/s)
Flow 2 ingress (mean 175.94 Mbit/s) — — — Flow 2 egress (mean 175.92 Mbit/s)
Flow 3 ingress (mean 163.66 Mbit/s) — — — Flow 3 egress (mean 163.65 Mbit/s)

• Flow 1 (95th percentile 57.92 ms) • Flow 2 (95th percentile 58.17 ms) • Flow 3 (95th percentile 58.62 ms)
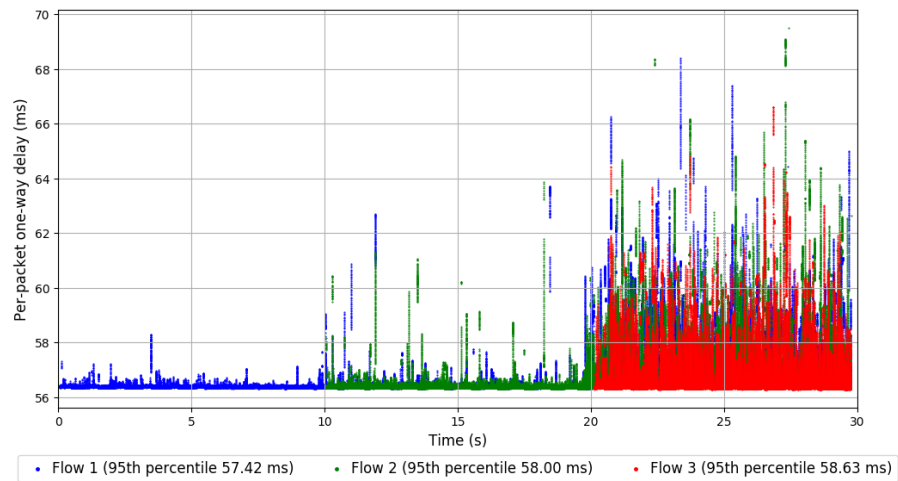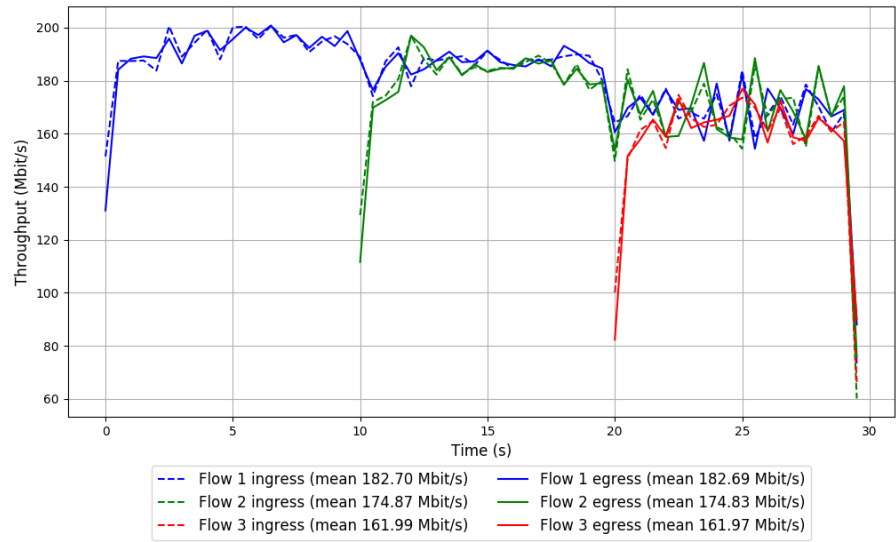
271

```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 11:48:36
End at: 2017-11-16 11:49:06
Local clock offset: -0.018 ms
Remote clock offset: 35.497 ms


# Below is generated by plot.py at 2017-11-16 17:24:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.01 Mbit/s
95th percentile per-packet one-way delay: 57.879 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 182.69 Mbit/s
95th percentile per-packet one-way delay: 57.419 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 174.83 Mbit/s
95th percentile per-packet one-way delay: 57.999 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.97 Mbit/s
95th percentile per-packet one-way delay: 58.628 ms
Loss rate: 0.01%
```

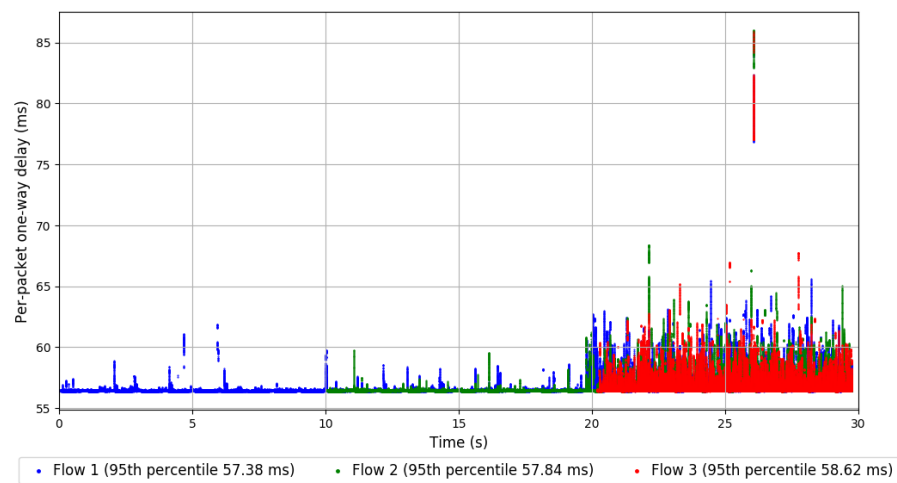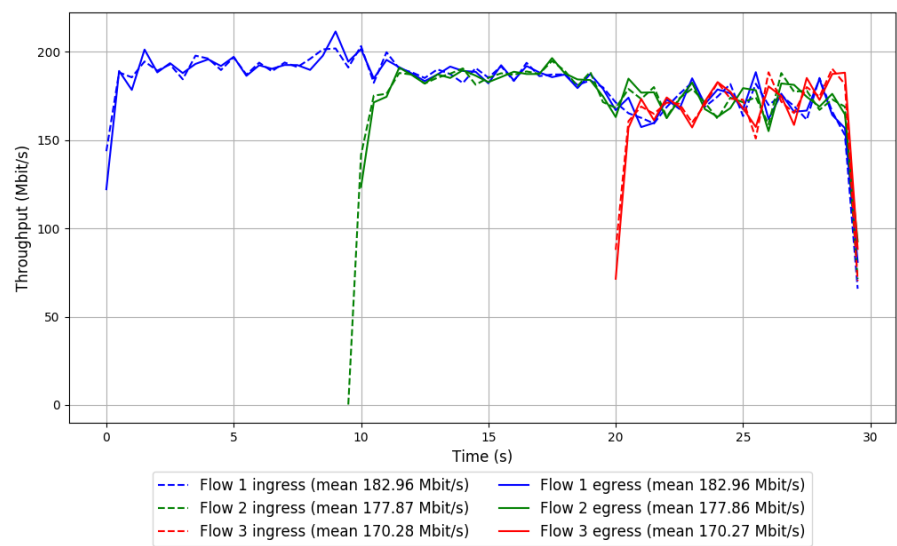Run 5: Report of Indigo-calib — Data Link

```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 12:08:16
End at: 2017-11-16 12:08:46
Local clock offset: -0.001 ms
Remote clock offset: 37.349 ms


# Below is generated by plot.py at 2017-11-16 17:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.78 Mbit/s
95th percentile per-packet one-way delay: 57.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.96 Mbit/s
95th percentile per-packet one-way delay: 57.381 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.86 Mbit/s
95th percentile per-packet one-way delay: 57.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 170.27 Mbit/s
95th percentile per-packet one-way delay: 58.618 ms
Loss rate: 0.00%
```

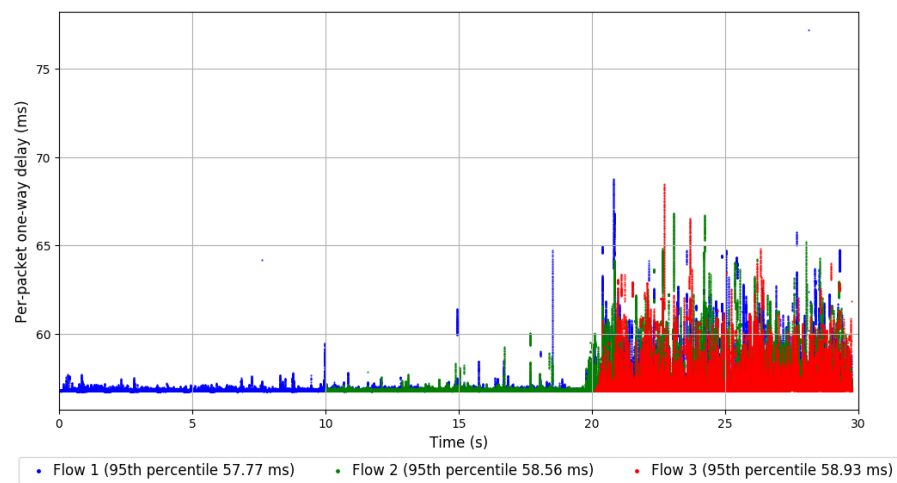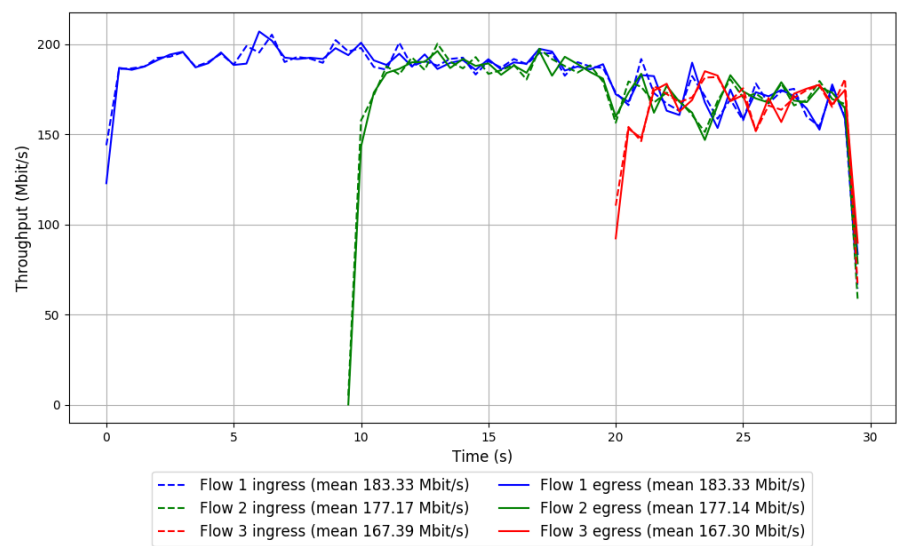# Run 6: Report of Indigo-calib — Data Link

```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 12:27:56
End at: 2017-11-16 12:28:26
Local clock offset: 0.018 ms
Remote clock offset: 36.843 ms


# Below is generated by plot.py at 2017-11-16 17:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.33 Mbit/s
95th percentile per-packet one-way delay: 58.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.33 Mbit/s
95th percentile per-packet one-way delay: 57.772 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.14 Mbit/s
95th percentile per-packet one-way delay: 58.557 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.30 Mbit/s
95th percentile per-packet one-way delay: 58.932 ms
Loss rate: 0.00%
```

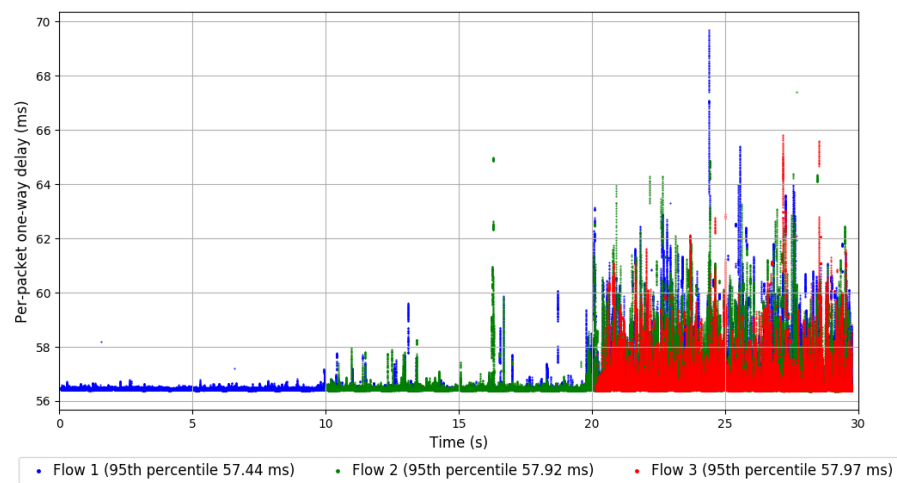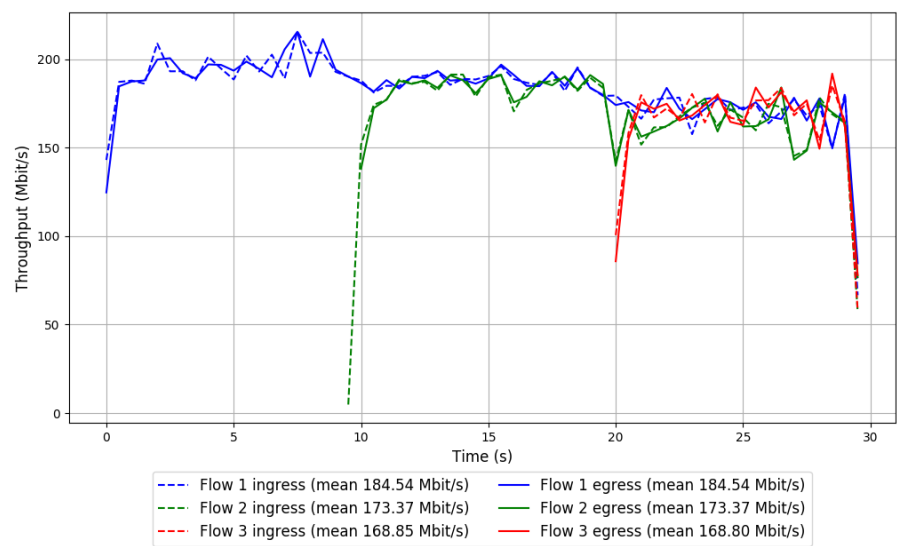# Run 7: Report of Indigo-calib — Data Link

```
Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 12:47:38
End at: 2017-11-16 12:48:08
Local clock offset: -0.037 ms
Remote clock offset: 36.099 ms


# Below is generated by plot.py at 2017-11-16 17:26:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.41 Mbit/s
95th percentile per-packet one-way delay: 57.709 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.54 Mbit/s
95th percentile per-packet one-way delay: 57.444 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.37 Mbit/s
95th percentile per-packet one-way delay: 57.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.80 Mbit/s
95th percentile per-packet one-way delay: 57.967 ms
Loss rate: 0.00%
```

Run 8: Report of Indigo-calib — Data Link
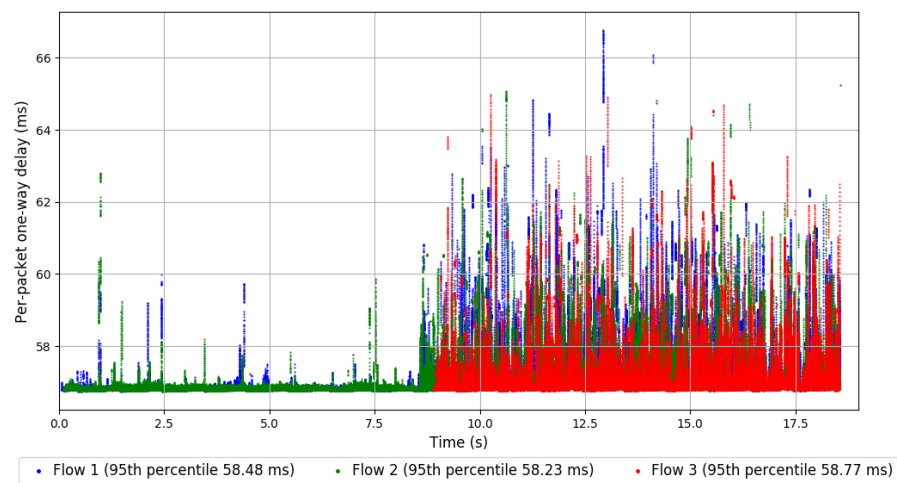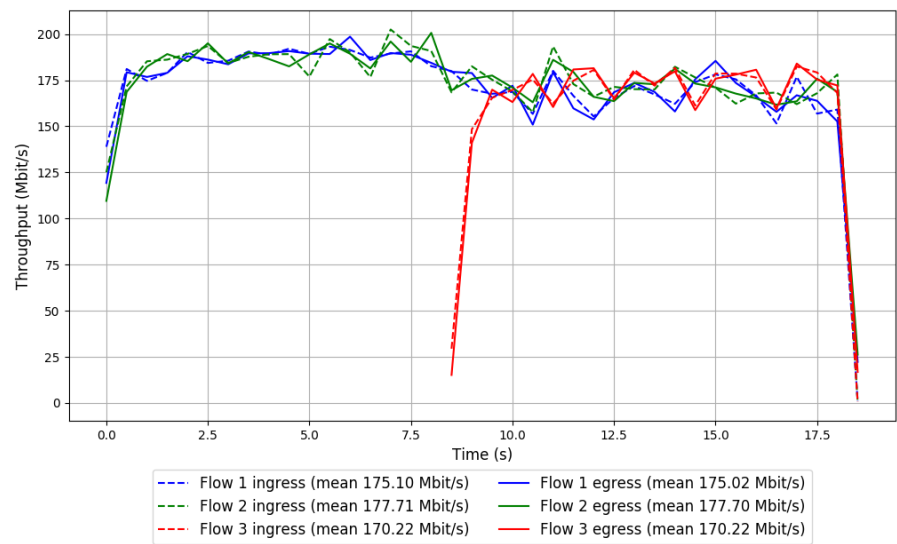
Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 13:07:27
End at: 2017-11-16 13:07:57
Local clock offset: 0.05 ms
Remote clock offset: 37.251 ms

Run 9: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 175.10 Mbit/s)   Flow 1 egress (mean 175.02 Mbit/s)
Flow 2 ingress (mean 177.71 Mbit/s)   Flow 2 egress (mean 177.70 Mbit/s)
Flow 3 ingress (mean 170.22 Mbit/s)   Flow 3 egress (mean 170.22 Mbit/s)

Flow 1 (95th percentile 58.48 ms)   Flow 2 (95th percentile 58.23 ms)   Flow 3 (95th percentile 58.77 ms)

```
Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 13:27:08
End at: 2017-11-16 13:27:38
Local clock offset: 0.057 ms
Remote clock offset: 36.477 ms


# Below is generated by plot.py at 2017-11-16 17:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.02 Mbit/s
95th percentile per-packet one-way delay: 58.248 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.03 Mbit/s
95th percentile per-packet one-way delay: 57.638 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.43 Mbit/s
95th percentile per-packet one-way delay: 58.416 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.85 Mbit/s
95th percentile per-packet one-way delay: 59.126 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo-calib — Data Link