Pantheon Report

Generated at 2017-09-18 08:54:00 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) →Colombia Ethernet (*remote*).

Repeated the test of 15 congestion control schemes 10 times.

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

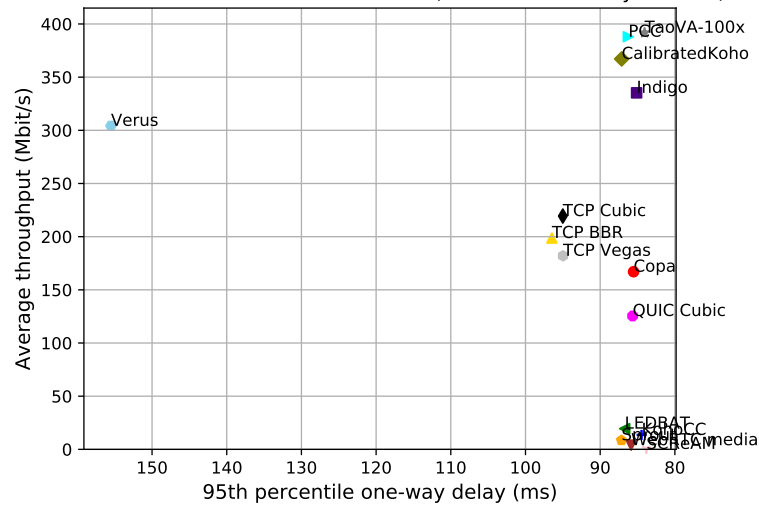Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

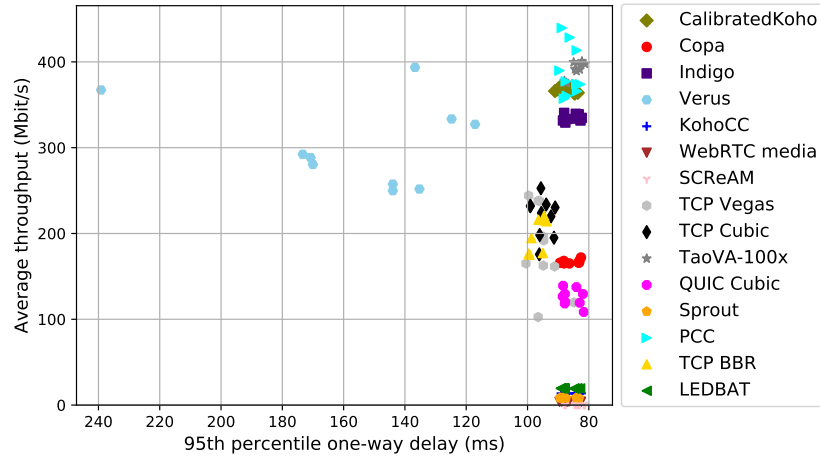NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
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 2 Ethernet to Colombia 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 2 Ethernet to Colombia Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

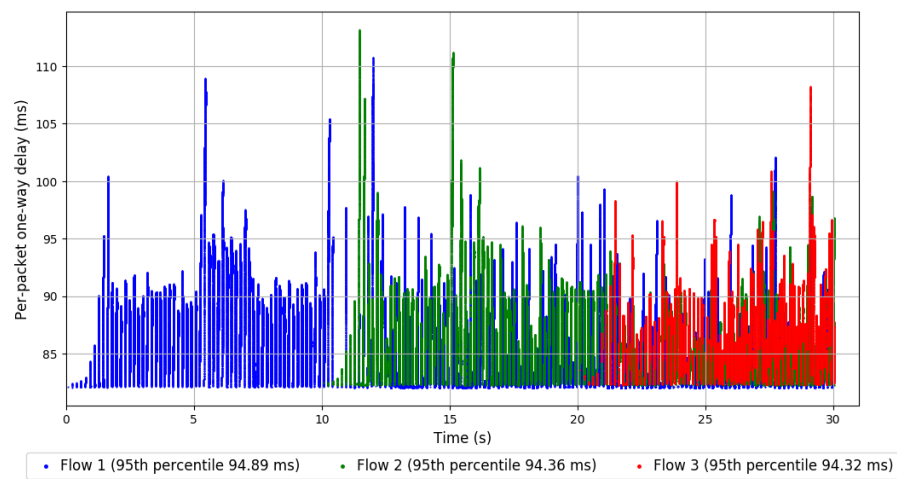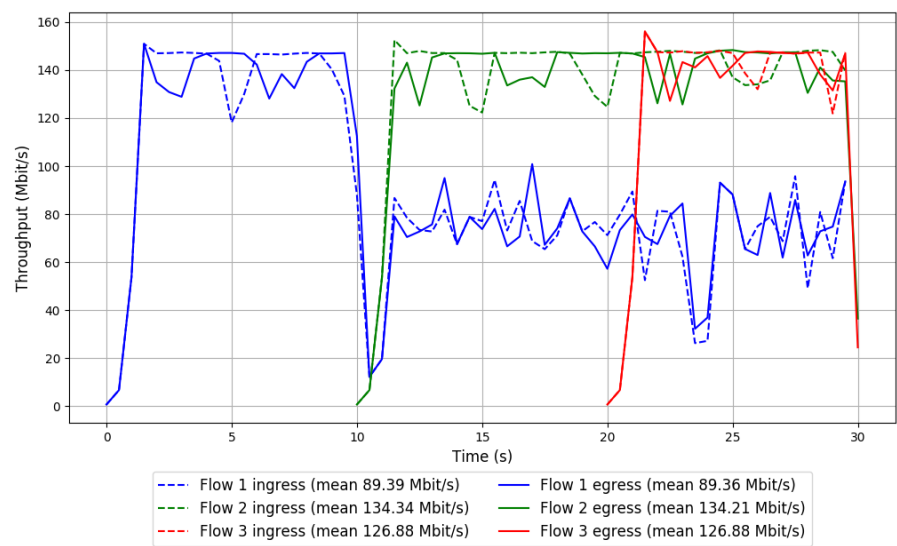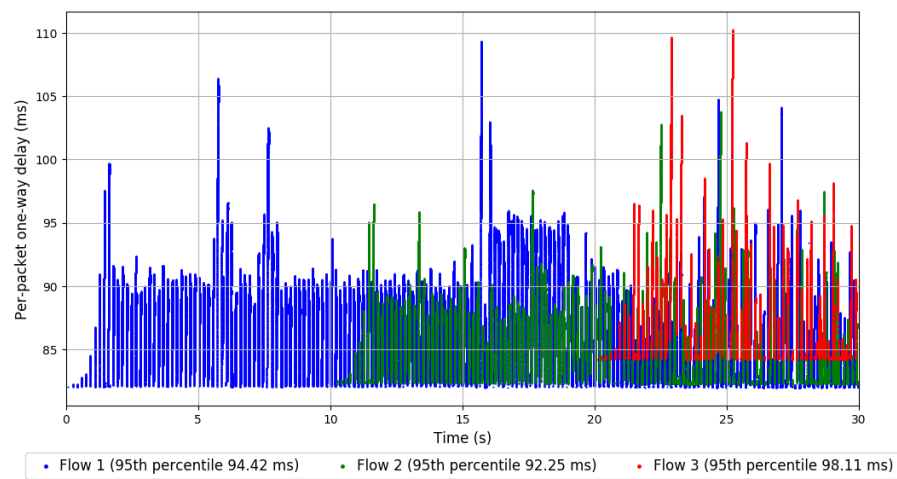| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	8	98.38	103.49	95.72	95.78	96.50	97.45	0.02	0.05	0.13
CalibratedKoho	10	320.03	68.78	4.07	86.93	86.47	85.93	36.50	51.60	51.54
Copa	8	88.68	82.77	88.84	84.79	84.29	85.11	0.00	0.00	0.00
TCP Cubic	10	116.98	112.26	83.65	94.59	94.80	92.92	0.02	0.06	0.03
Indigo	10	176.74	167.90	144.95	84.64	84.50	84.46	1.82	2.82	6.52
KohoCC	10	6.90	6.83	6.56	83.78	83.70	84.21	0.03	0.06	0.01
LEDBAT	10	12.58	8.38	4.09	86.06	85.82	85.70	0.00	0.00	0.00
PCC	10	291.93	94.24	103.09	85.73	85.46	85.87	10.64	12.77	14.83
QUIC Cubic	9	66.82	60.20	56.77	84.75	84.99	85.04	0.00	0.00	0.00
SCReAM	10	0.21	0.22	0.22	83.32	83.31	82.83	0.04	0.00	0.00
Sprout	10	4.53	4.13	3.84	86.86	86.23	86.67	0.00	0.00	0.00
TaoVA-100x	10	229.32	201.14	117.58	83.40	83.62	83.36	1.35	2.32	5.54
TCP Vegas	10	95.79	90.81	77.90	92.81	94.64	94.59	0.00	0.01	0.01
Verus	10	193.79	127.19	81.49	165.56	128.37	145.42	9.42	14.49	20.79
WebRTC media	9	2.19	1.33	0.43	84.93	85.54	85.31	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-18 03:05:49
End at: 2017-09-18 03:06:19
Local clock offset: -1.449 ms
Remote clock offset: -6.233 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.65 Mbit/s
95th percentile per-packet one-way delay: 94.563 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 94.891 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 134.21 Mbit/s
95th percentile per-packet one-way delay: 94.355 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 94.321 ms
Loss rate: 0.00%
```

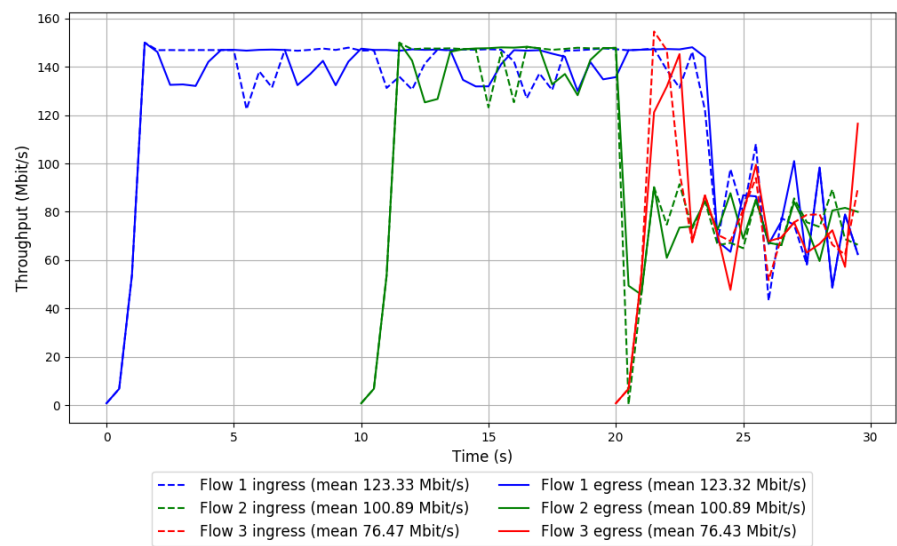Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-09-18 03:27:51
End at: 2017-09-18 03:28:21
Local clock offset: -1.269 ms
Remote clock offset: -6.397 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.38 Mbit/s
95th percentile per-packet one-way delay: 94.312 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 123.32 Mbit/s
95th percentile per-packet one-way delay: 94.418 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 100.89 Mbit/s
95th percentile per-packet one-way delay: 92.250 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.43 Mbit/s
95th percentile per-packet one-way delay: 98.108 ms
Loss rate: 0.00%
```

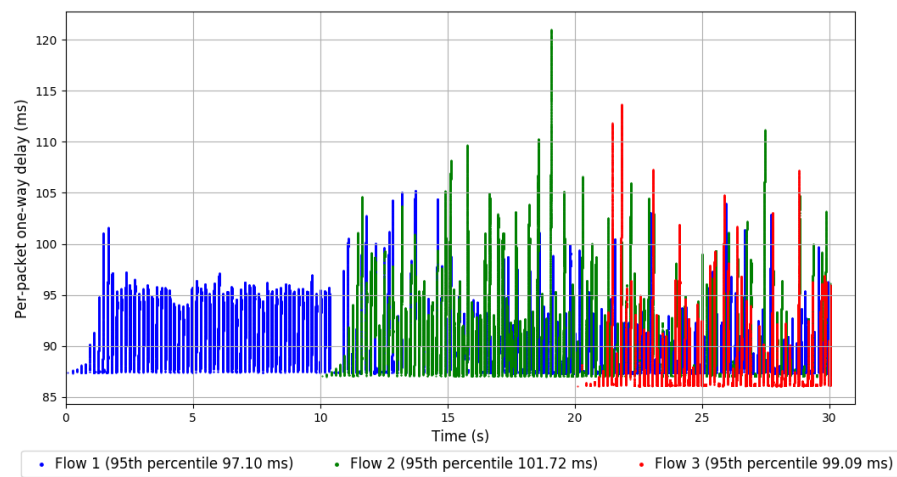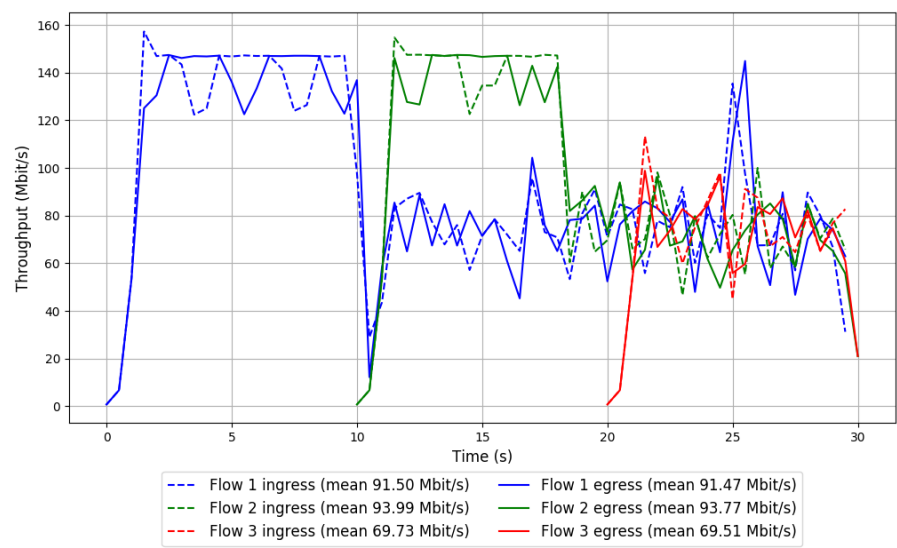Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-09-18 03:49:56
End at: 2017-09-18 03:50:26
Local clock offset: -1.174 ms
Remote clock offset: -3.172 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.68 Mbit/s
95th percentile per-packet one-way delay: 99.536 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 97.099 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 101.721 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 99.091 ms
Loss rate: 0.23%
```
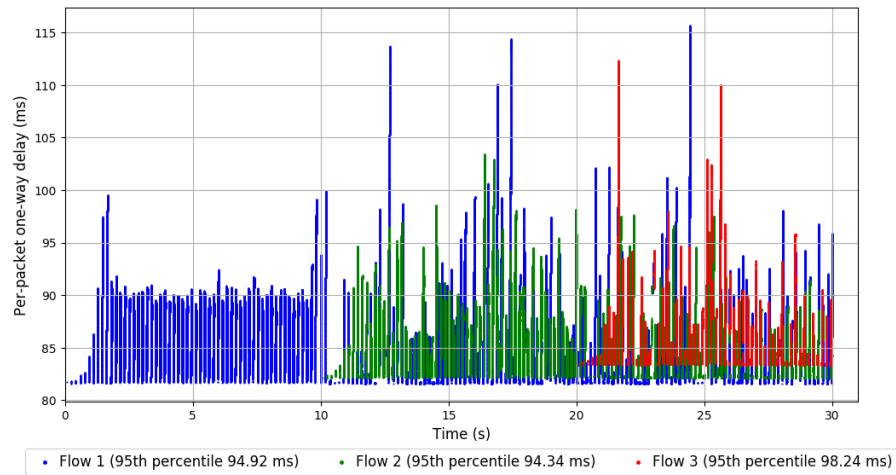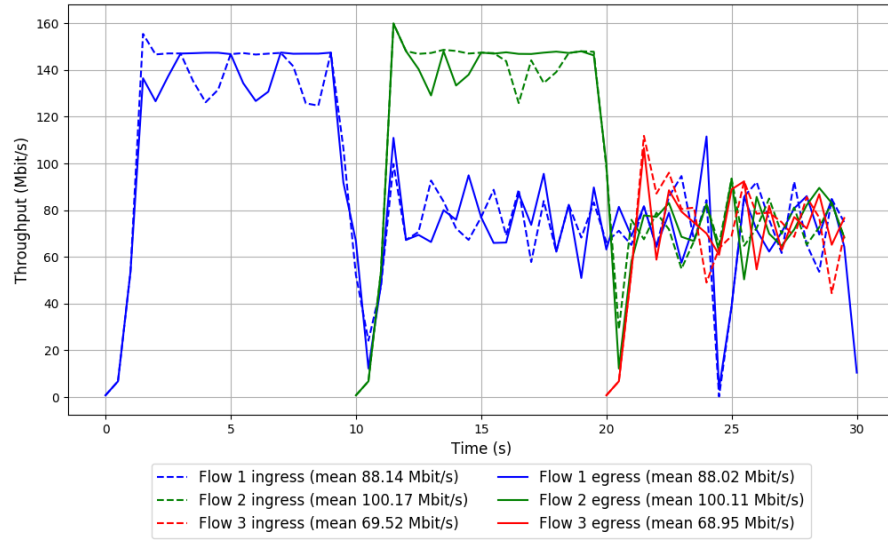
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 91.50 Mbit/s) --- Flow 1 egress (mean 91.47 Mbit/s)
Flow 2 ingress (mean 93.99 Mbit/s) --- Flow 2 egress (mean 93.77 Mbit/s)
Flow 3 ingress (mean 69.73 Mbit/s) --- Flow 3 egress (mean 69.51 Mbit/s)

Flow 1 (95th percentile 97.10 ms)   Flow 2 (95th percentile 101.72 ms)   Flow 3 (95th percentile 99.09 ms)

9

```
Run 4: Statistics of TCP BBR

Start at: 2017-09-18 04:11:41
End at: 2017-09-18 04:12:11
Local clock offset: -0.875 ms
Remote clock offset: -6.938 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.17 Mbit/s
95th percentile per-packet one-way delay: 94.979 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 94.915 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 100.11 Mbit/s
95th percentile per-packet one-way delay: 94.339 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 68.95 Mbit/s
95th percentile per-packet one-way delay: 98.237 ms
Loss rate: 0.76%
```
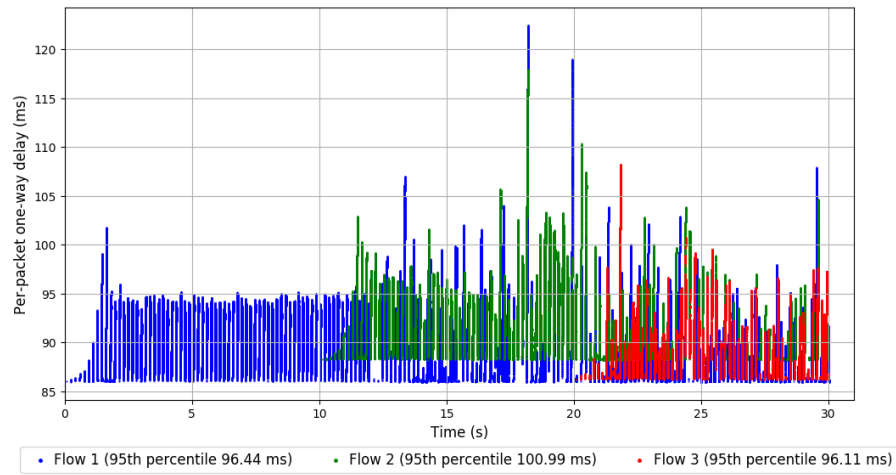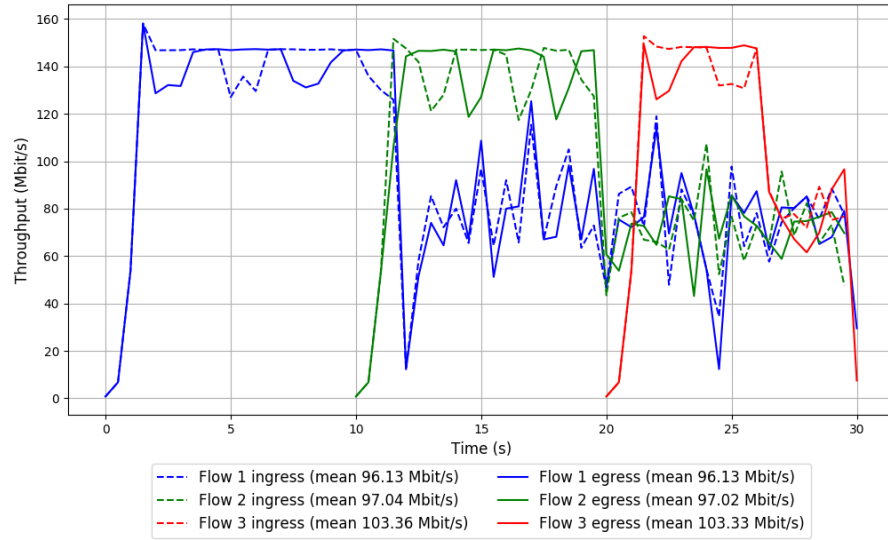
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 88.14 Mbit/s) Flow 1 egress (mean 88.02 Mbit/s)
Flow 2 ingress (mean 100.17 Mbit/s) Flow 2 egress (mean 100.11 Mbit/s)
Flow 3 ingress (mean 69.52 Mbit/s) Flow 3 egress (mean 68.95 Mbit/s)

Flow 1 (95th percentile 94.92 ms) Flow 2 (95th percentile 94.34 ms) Flow 3 (95th percentile 98.24 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-09-18 04:33:29
End at: 2017-09-18 04:33:59
Local clock offset: -0.676 ms
Remote clock offset: -1.324 ms
```

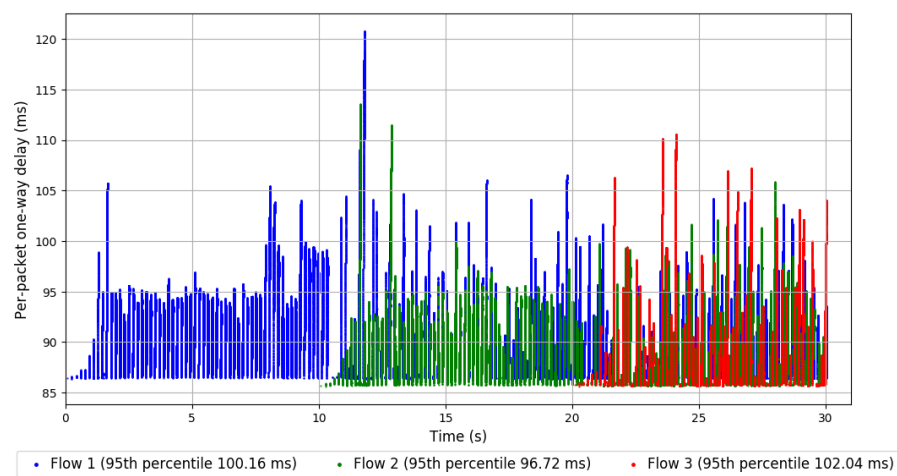Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2017-09-18 04:55:23
End at: 2017-09-18 04:55:53
Local clock offset: -0.377 ms
Remote clock offset: -2.996 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 194.63 Mbit/s
95th percentile per-packet one-way delay: 98.732 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 96.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 100.988 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 103.33 Mbit/s
95th percentile per-packet one-way delay: 96.111 ms
Loss rate: 0.02%
```

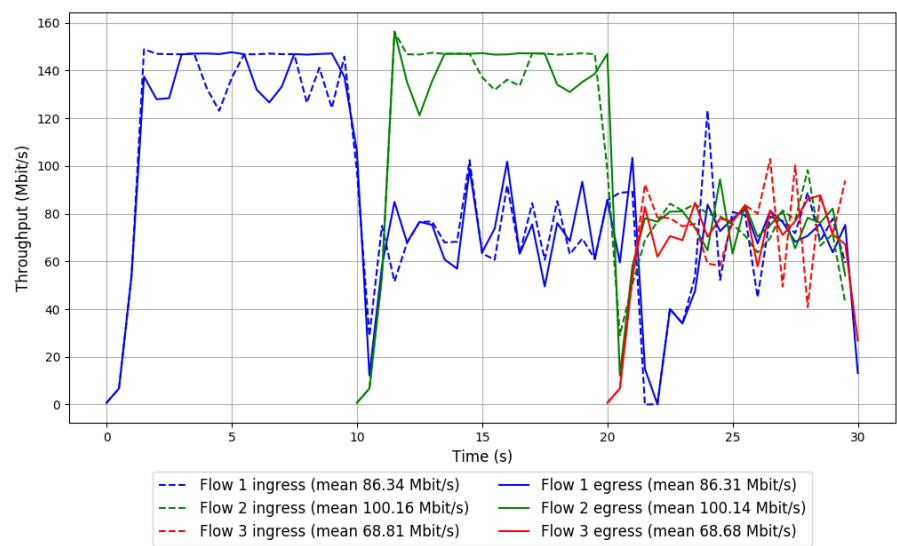Run 6: Report of TCP BBR — Data Link
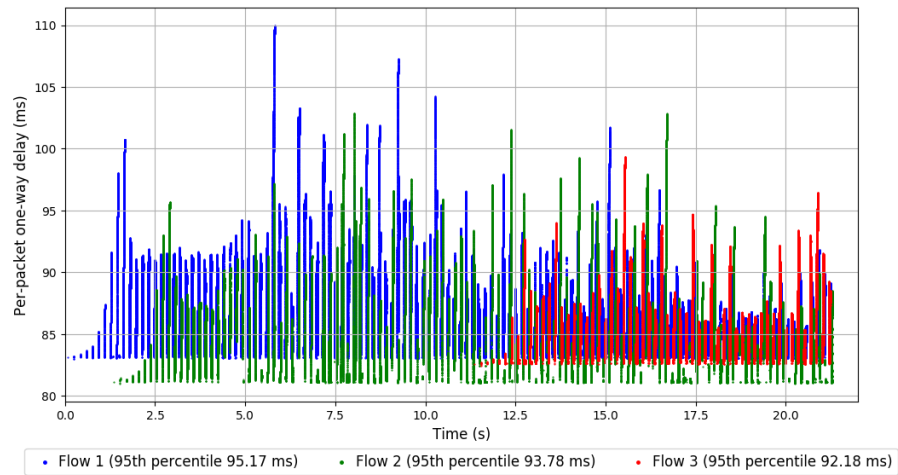
```
Run 7: Statistics of TCP BBR

Start at: 2017-09-18 05:17:08
End at: 2017-09-18 05:17:38
Local clock offset: -0.175 ms
Remote clock offset: -3.554 ms


# Below is generated by plot.py at 2017-09-18 08:01:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.30 Mbit/s
95th percentile per-packet one-way delay: 99.370 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.31 Mbit/s
95th percentile per-packet one-way delay: 100.164 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 100.14 Mbit/s
95th percentile per-packet one-way delay: 96.725 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 68.68 Mbit/s
95th percentile per-packet one-way delay: 102.036 ms
Loss rate: 0.00%
```
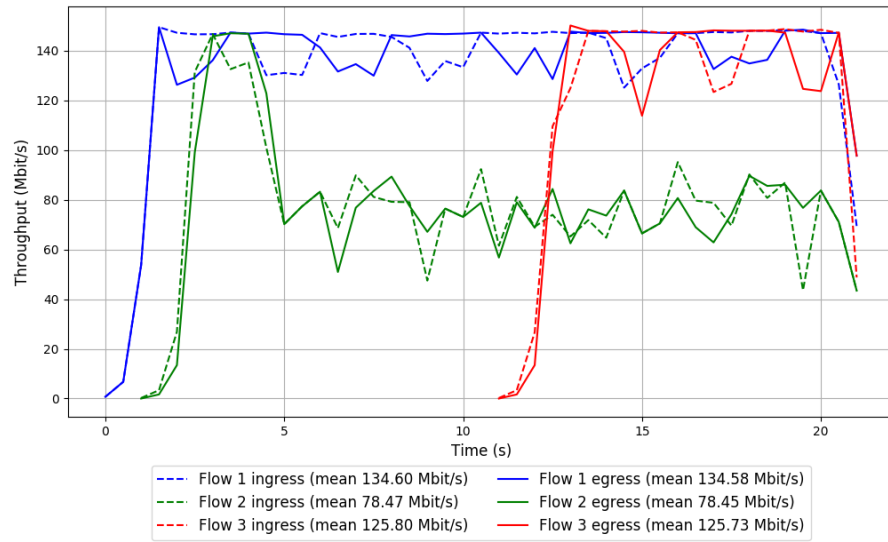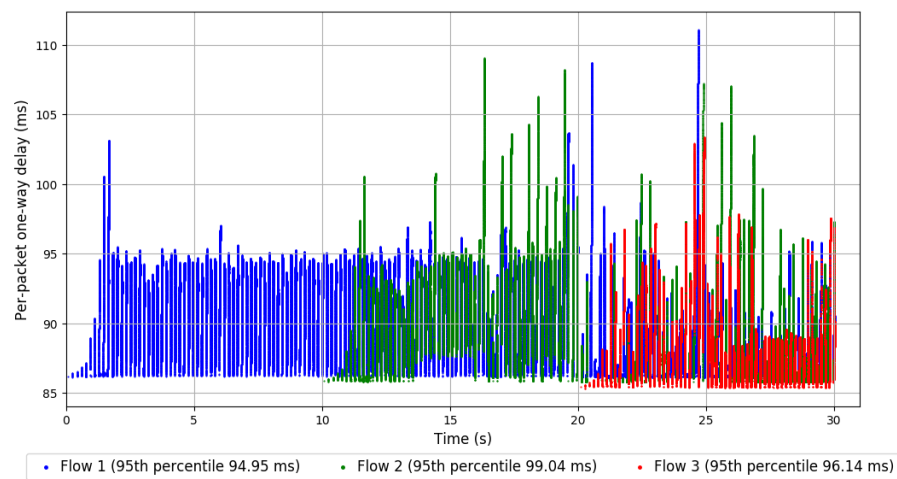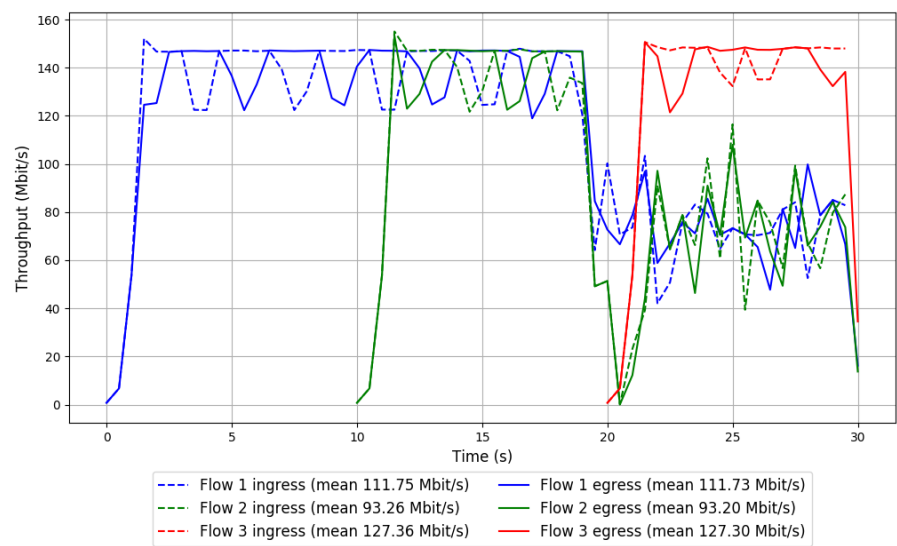
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.34 Mbit/s) --- Flow 1 egress (mean 86.31 Mbit/s)
Flow 2 ingress (mean 100.16 Mbit/s) --- Flow 2 egress (mean 100.14 Mbit/s)
Flow 3 ingress (mean 68.81 Mbit/s) --- Flow 3 egress (mean 68.68 Mbit/s)

Flow 1 (95th percentile 100.16 ms)   Flow 2 (95th percentile 96.72 ms)   Flow 3 (95th percentile 102.04 ms)

17

```
Run 8: Statistics of TCP BBR

Start at: 2017-09-18 05:38:58
End at: 2017-09-18 05:39:28
Local clock offset: 0.013 ms
Remote clock offset: -8.032 ms
```

Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2017-09-18 06:00:39
End at: 2017-09-18 06:01:09
Local clock offset: 0.112 ms
Remote clock offset: -3.252 ms


# Below is generated by plot.py at 2017-09-18 08:02:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.96 Mbit/s
95th percentile per-packet one-way delay: 96.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.73 Mbit/s
95th percentile per-packet one-way delay: 94.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 93.20 Mbit/s
95th percentile per-packet one-way delay: 99.043 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 127.30 Mbit/s
95th percentile per-packet one-way delay: 96.137 ms
Loss rate: 0.00%
```

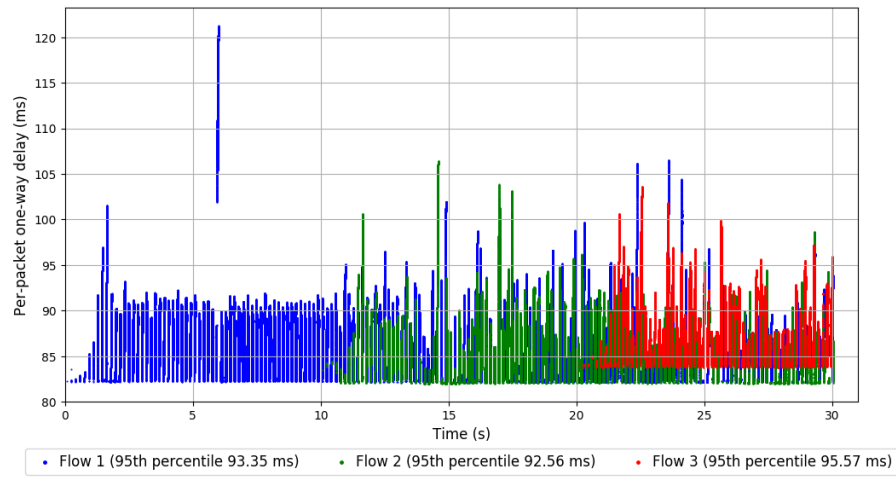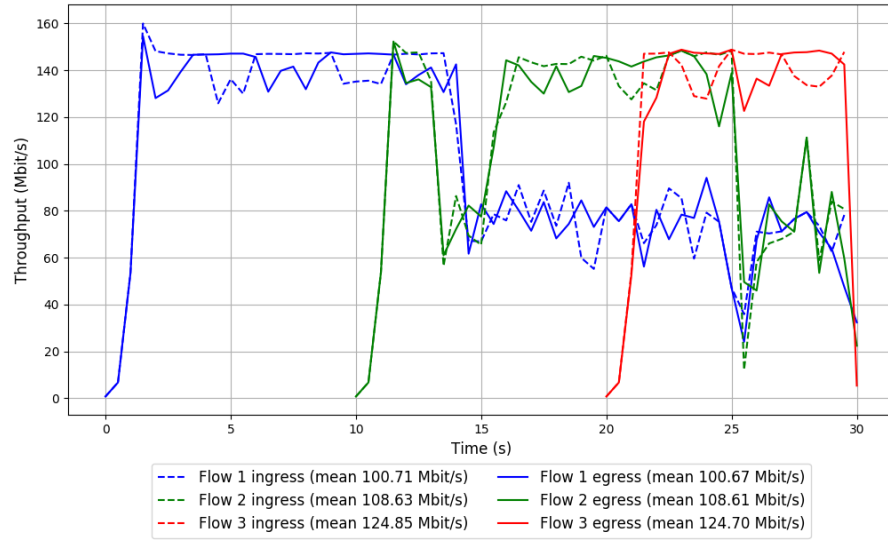# Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2017-09-18 06:22:39
End at: 2017-09-18 06:23:09
Local clock offset: 0.221 ms
Remote clock offset: -6.238 ms


# Below is generated by plot.py at 2017-09-18 08:03:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.20 Mbit/s
95th percentile per-packet one-way delay: 93.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 100.67 Mbit/s
95th percentile per-packet one-way delay: 93.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.61 Mbit/s
95th percentile per-packet one-way delay: 92.559 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 124.70 Mbit/s
95th percentile per-packet one-way delay: 95.566 ms
Loss rate: 0.00%
```

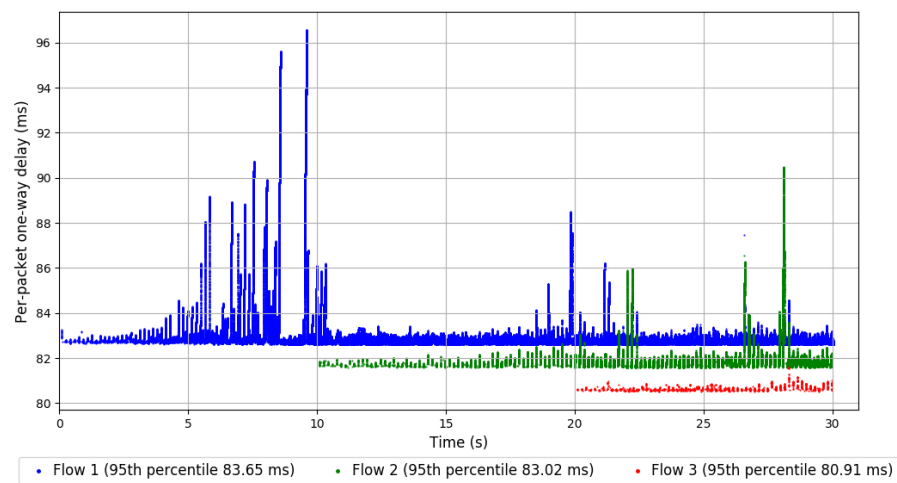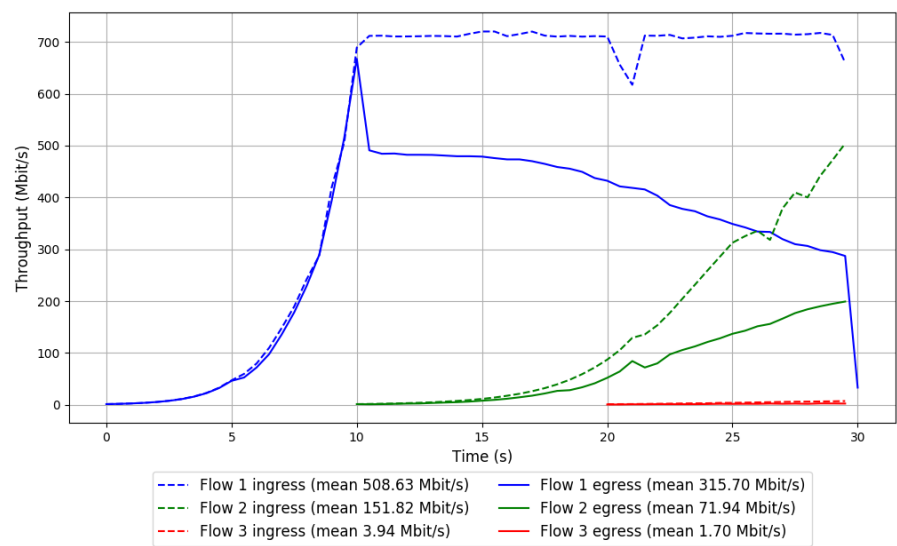Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of CalibratedKoho

Start at: 2017-09-18 03:15:27
End at: 2017-09-18 03:15:57
Local clock offset: -1.494 ms
Remote clock offset: -7.616 ms


# Below is generated by plot.py at 2017-09-18 08:06:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.98 Mbit/s
95th percentile per-packet one-way delay: 83.588 ms
Loss rate: 40.42%
-- Flow 1:
Average throughput: 315.70 Mbit/s
95th percentile per-packet one-way delay: 83.648 ms
Loss rate: 37.93%
-- Flow 2:
Average throughput: 71.94 Mbit/s
95th percentile per-packet one-way delay: 83.016 ms
Loss rate: 52.73%
-- Flow 3:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 80.911 ms
Loss rate: 57.04%
```

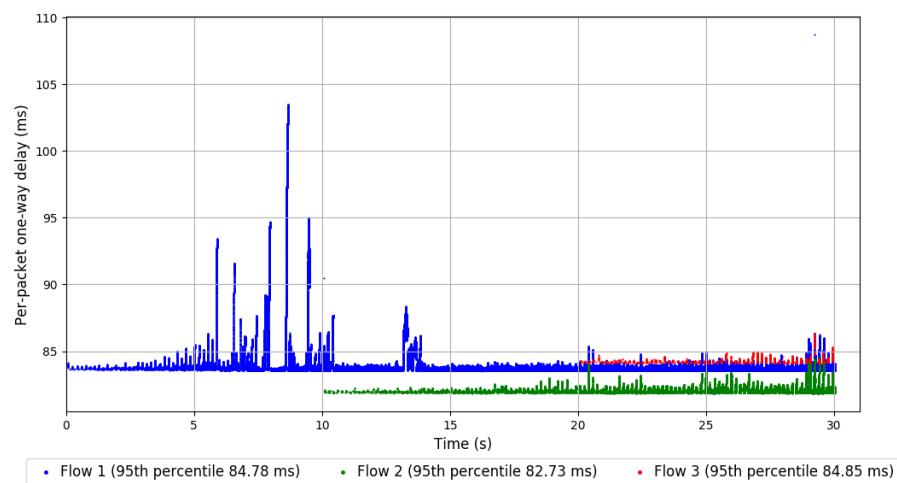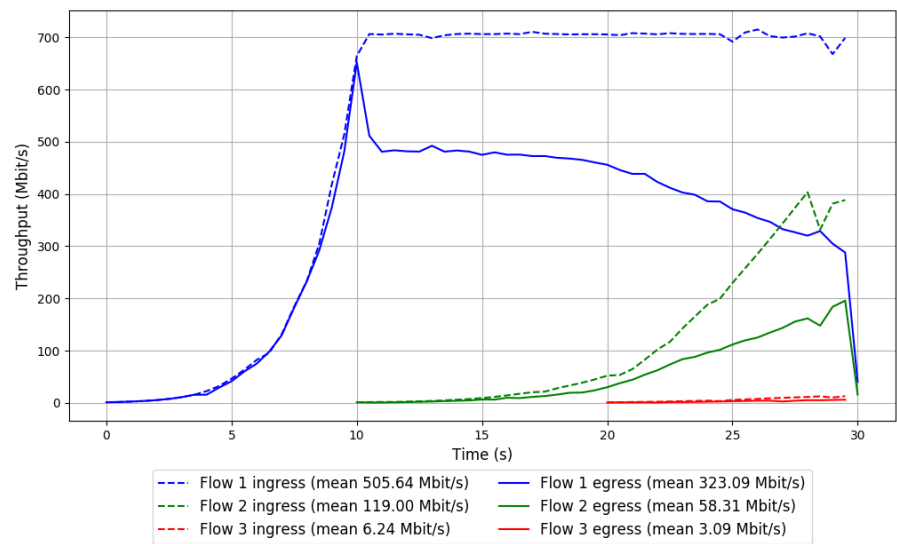Run 1: Report of CalibratedKoho — Data Link

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-09-18 03:37:29
End at: 2017-09-18 03:37:59
Local clock offset: -1.162 ms
Remote clock offset: -6.776 ms


# Below is generated by plot.py at 2017-09-18 08:06:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.93 Mbit/s
95th percentile per-packet one-way delay: 84.619 ms
Loss rate: 38.17%
-- Flow 1:
Average throughput: 323.09 Mbit/s
95th percentile per-packet one-way delay: 84.784 ms
Loss rate: 36.10%
-- Flow 2:
Average throughput: 58.31 Mbit/s
95th percentile per-packet one-way delay: 82.731 ms
Loss rate: 51.00%
-- Flow 3:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 84.854 ms
Loss rate: 50.97%
```

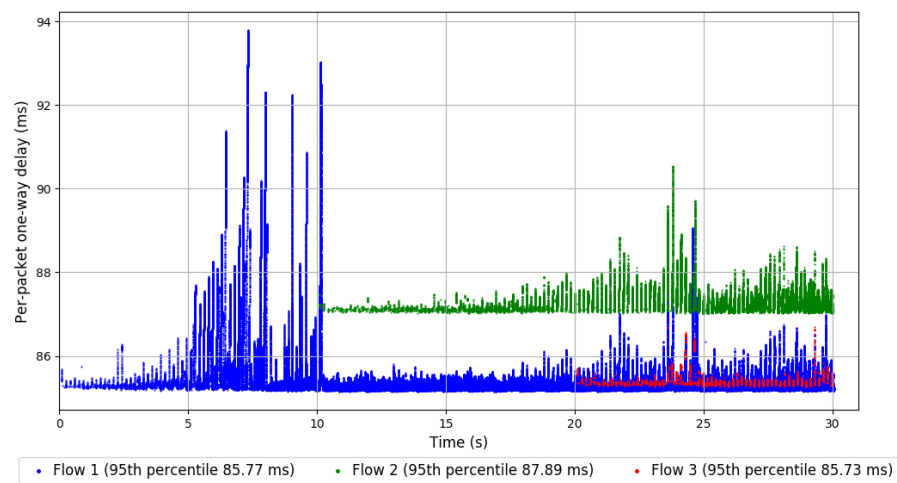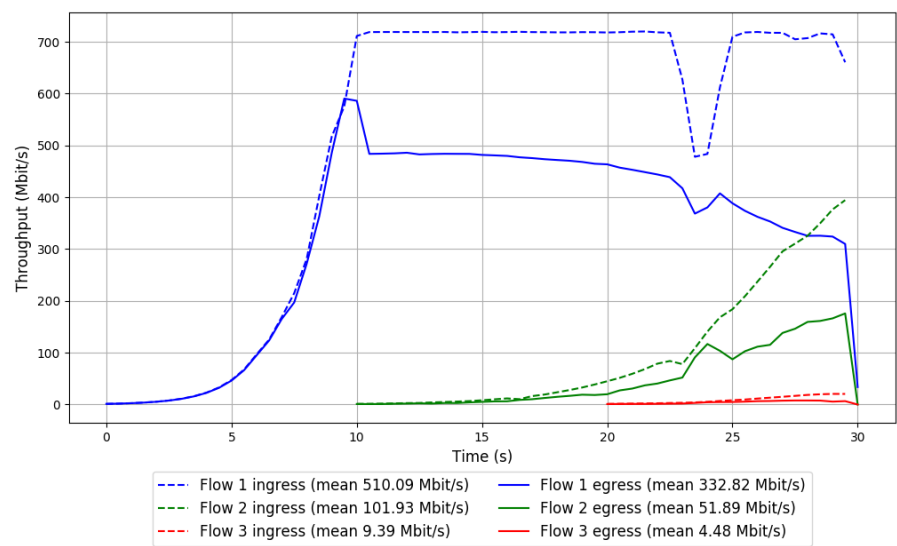Run 2: Report of CalibratedKoho — Data Link

```
Run 3: Statistics of CalibratedKoho

Start at: 2017-09-18 03:59:27
End at: 2017-09-18 03:59:57
Local clock offset: -1.017 ms
Remote clock offset: -3.444 ms

# Below is generated by plot.py at 2017-09-18 08:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.85 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 36.52%
-- Flow 1:
Average throughput: 332.82 Mbit/s
95th percentile per-packet one-way delay: 85.765 ms
Loss rate: 34.75%
-- Flow 2:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 87.891 ms
Loss rate: 49.09%
-- Flow 3:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 85.733 ms
Loss rate: 52.25%
```

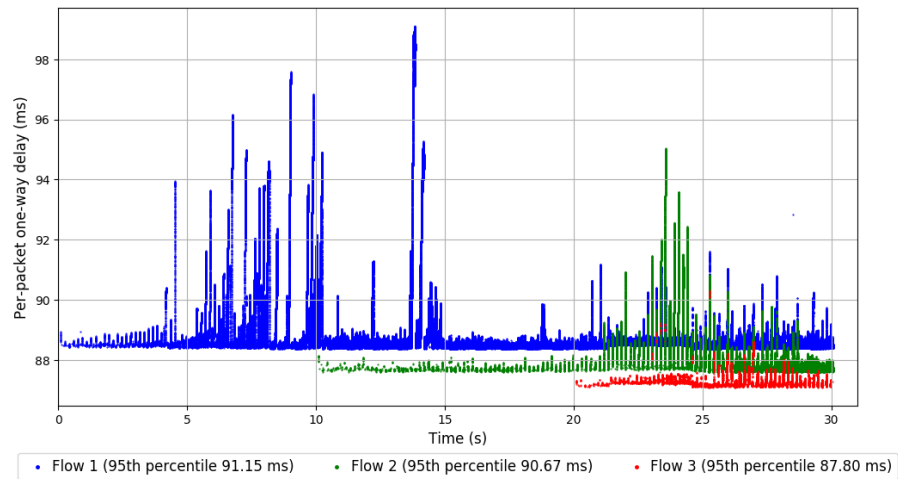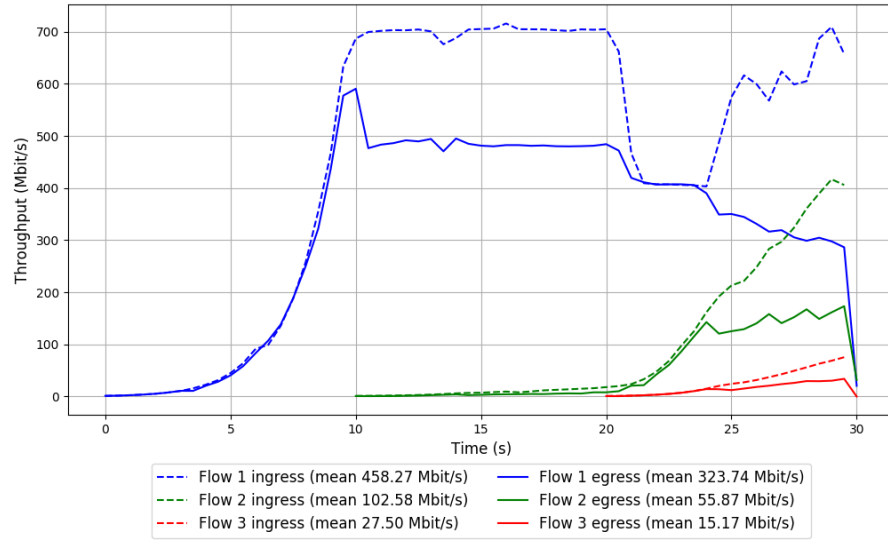Run 3: Report of CalibratedKoho — Data Link

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-09-18 04:21:18
End at: 2017-09-18 04:21:48
Local clock offset: -0.774 ms
Remote clock offset: -1.611 ms

# Below is generated by plot.py at 2017-09-18 08:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.98 Mbit/s
95th percentile per-packet one-way delay: 91.027 ms
Loss rate: 31.68%
-- Flow 1:
Average throughput: 323.74 Mbit/s
95th percentile per-packet one-way delay: 91.149 ms
Loss rate: 29.36%
-- Flow 2:
Average throughput: 55.87 Mbit/s
95th percentile per-packet one-way delay: 90.668 ms
Loss rate: 45.53%
-- Flow 3:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 87.802 ms
Loss rate: 44.82%
```

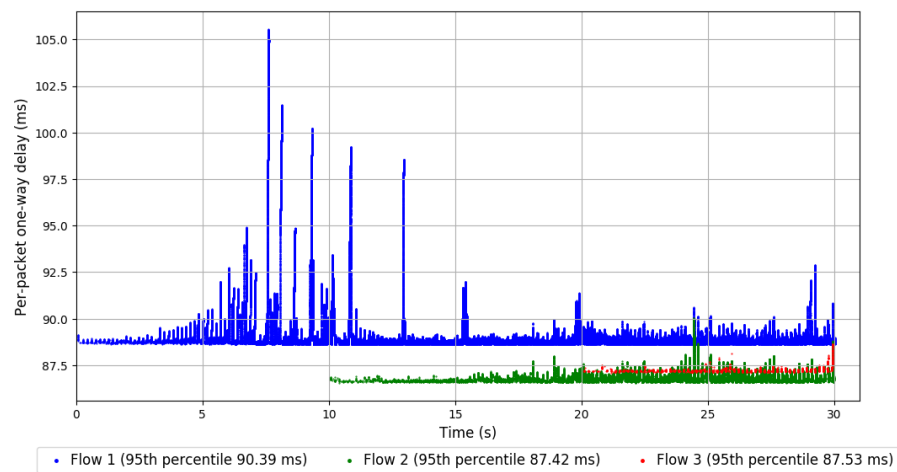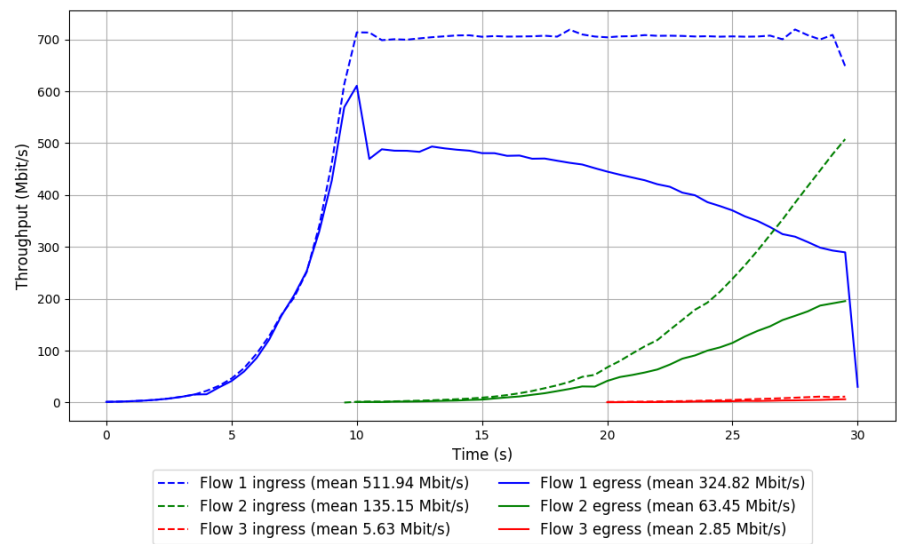Run 4: Report of CalibratedKoho — Data Link

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-09-18 04:42:57
End at: 2017-09-18 04:43:27
Local clock offset: -0.539 ms
Remote clock offset: -1.868 ms

# Below is generated by plot.py at 2017-09-18 08:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.91 Mbit/s
95th percentile per-packet one-way delay: 90.098 ms
Loss rate: 39.05%
-- Flow 1:
Average throughput: 324.82 Mbit/s
95th percentile per-packet one-way delay: 90.391 ms
Loss rate: 36.55%
-- Flow 2:
Average throughput: 63.45 Mbit/s
95th percentile per-packet one-way delay: 87.418 ms
Loss rate: 53.05%
-- Flow 3:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 87.534 ms
Loss rate: 49.65%
```

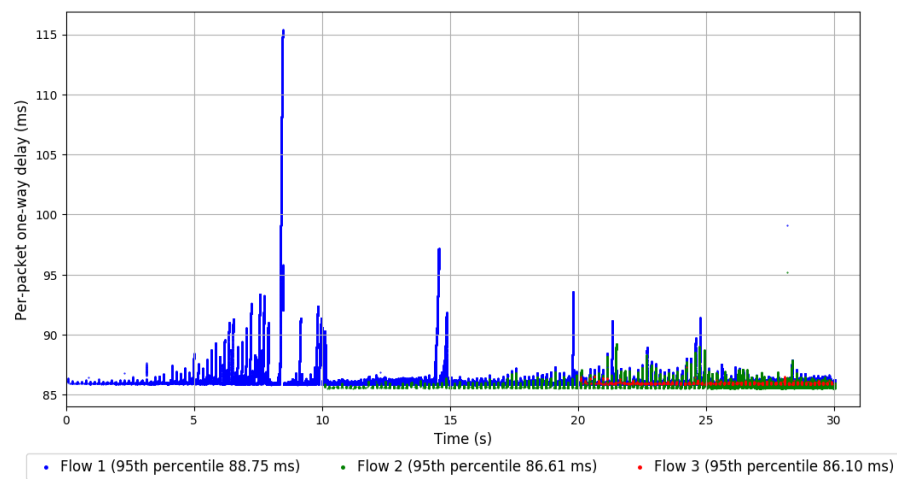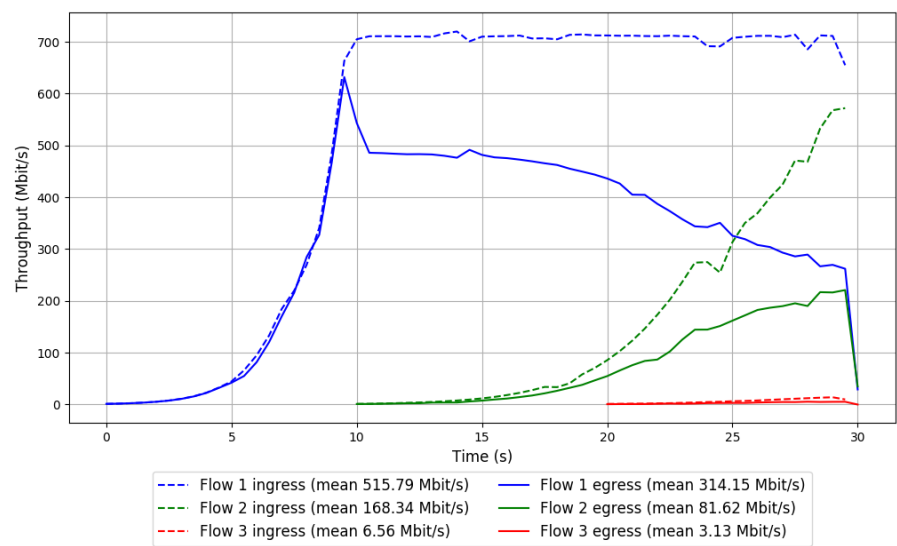Run 5: Report of CalibratedKoho — Data Link

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-09-18 05:04:56
End at: 2017-09-18 05:05:26
Local clock offset: -0.204 ms
Remote clock offset: -3.438 ms


# Below is generated by plot.py at 2017-09-18 08:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.55 Mbit/s
95th percentile per-packet one-way delay: 88.181 ms
Loss rate: 41.35%
-- Flow 1:
Average throughput: 314.15 Mbit/s
95th percentile per-packet one-way delay: 88.755 ms
Loss rate: 39.09%
-- Flow 2:
Average throughput: 81.62 Mbit/s
95th percentile per-packet one-way delay: 86.609 ms
Loss rate: 51.51%
-- Flow 3:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 86.103 ms
Loss rate: 52.28%
```

Run 6: Report of CalibratedKoho — Data Link

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-09-18 05:26:39
End at: 2017-09-18 05:27:09
Local clock offset: -0.054 ms
Remote clock offset: -7.22 ms

# Below is generated by plot.py at 2017-09-18 08:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.98 Mbit/s
95th percentile per-packet one-way delay: 84.535 ms
Loss rate: 41.09%
-- Flow 1:
Average throughput: 309.76 Mbit/s
95th percentile per-packet one-way delay: 85.071 ms
Loss rate: 37.40%
-- Flow 2:
Average throughput: 83.80 Mbit/s
95th percentile per-packet one-way delay: 83.579 ms
Loss rate: 55.51%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 84.008 ms
Loss rate: 56.96%
```
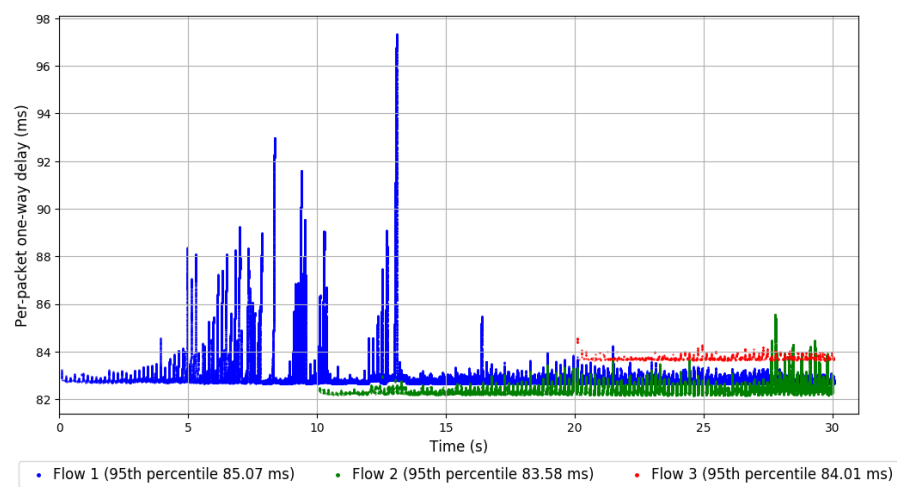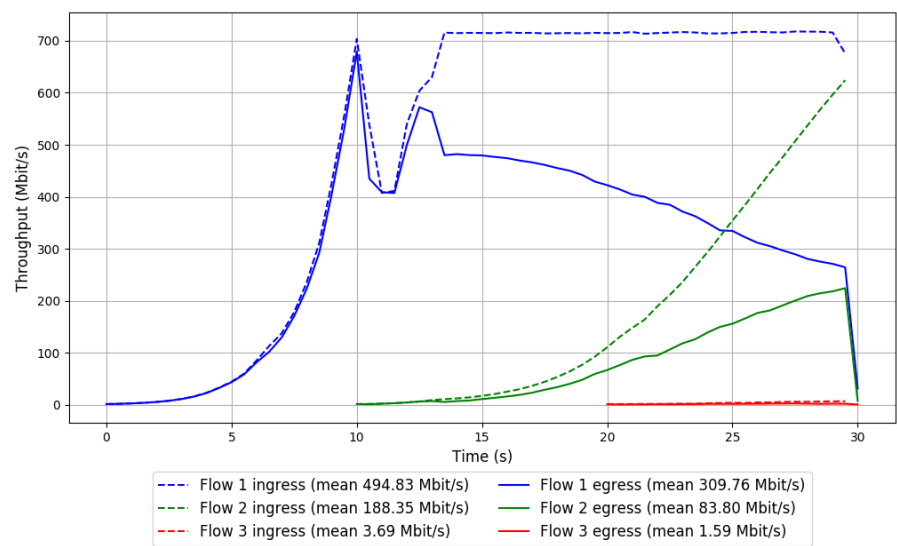
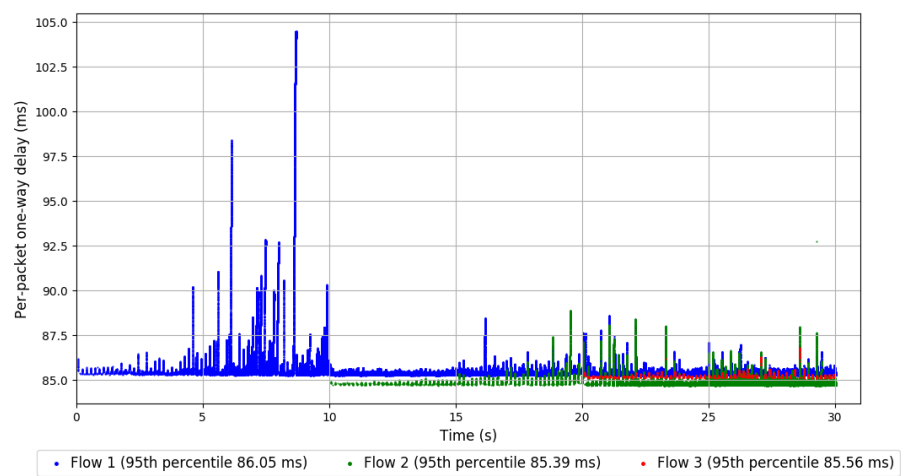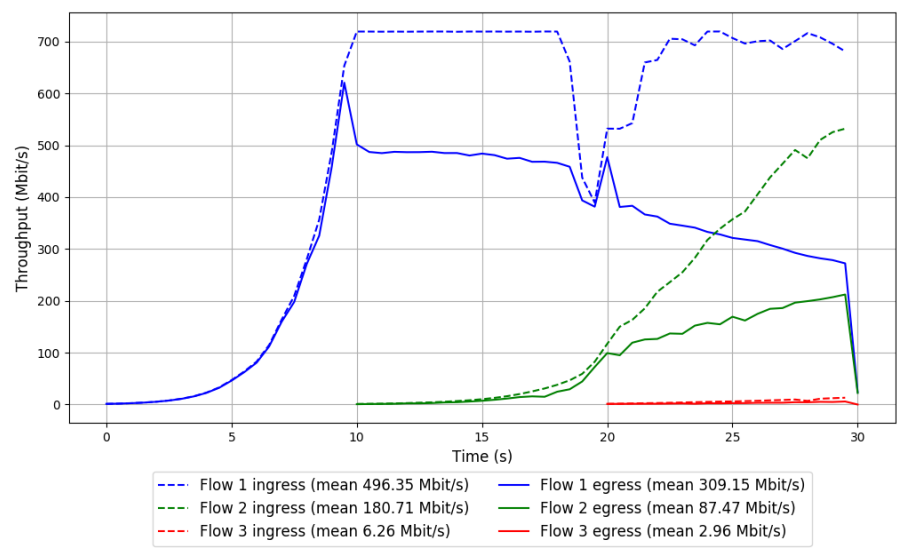Run 7: Report of CalibratedKoho — Data Link

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-09-18 05:48:28
End at: 2017-09-18 05:48:58
Local clock offset: 0.075 ms
Remote clock offset: -3.813 ms


# Below is generated by plot.py at 2017-09-18 08:09:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.40 Mbit/s
95th percentile per-packet one-way delay: 85.958 ms
Loss rate: 40.47%
-- Flow 1:
Average throughput: 309.15 Mbit/s
95th percentile per-packet one-way delay: 86.046 ms
Loss rate: 37.71%
-- Flow 2:
Average throughput: 87.47 Mbit/s
95th percentile per-packet one-way delay: 85.392 ms
Loss rate: 51.60%
-- Flow 3:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 85.563 ms
Loss rate: 52.66%
```

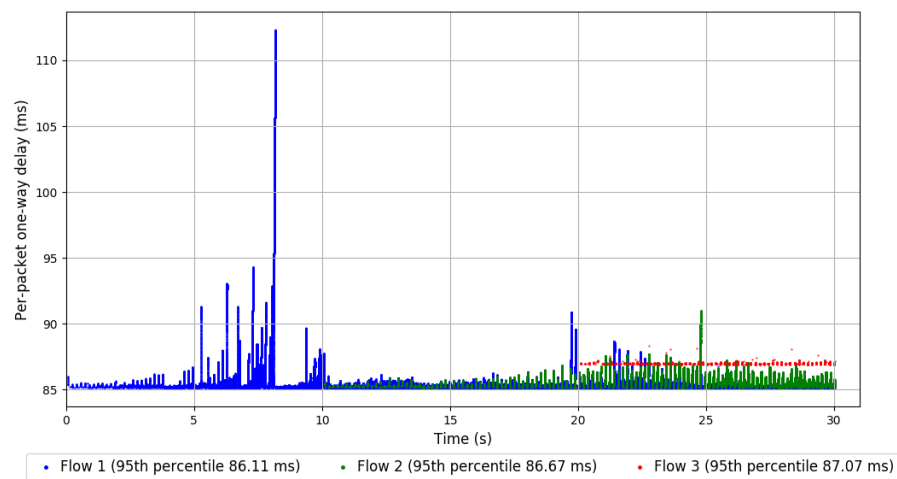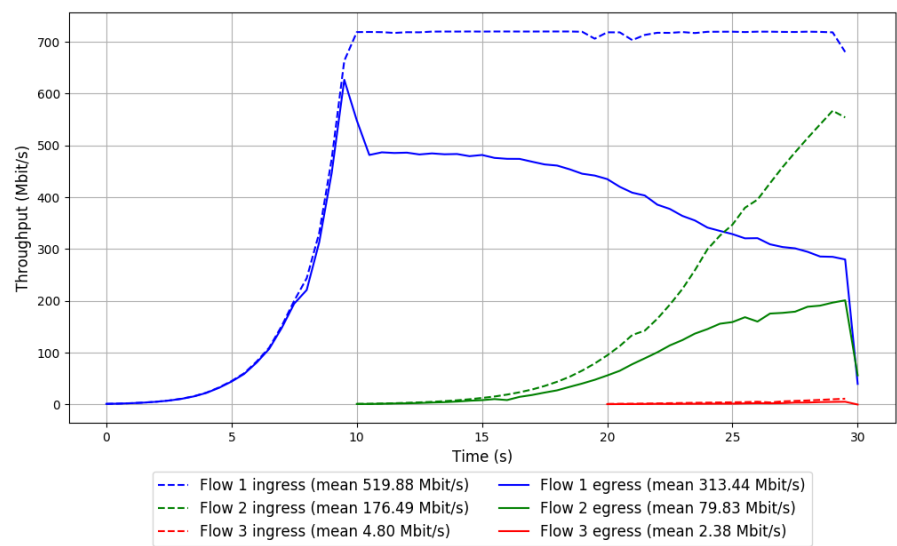Run 8: Report of CalibratedKoho — Data Link

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-09-18 06:10:19
End at: 2017-09-18 06:10:49
Local clock offset: 0.213 ms
Remote clock offset: -3.289 ms


# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.40 Mbit/s
95th percentile per-packet one-way delay: 86.368 ms
Loss rate: 42.51%
-- Flow 1:
Average throughput: 313.44 Mbit/s
95th percentile per-packet one-way delay: 86.110 ms
Loss rate: 39.71%
-- Flow 2:
Average throughput: 79.83 Mbit/s
95th percentile per-packet one-way delay: 86.671 ms
Loss rate: 54.77%
-- Flow 3:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 87.073 ms
Loss rate: 50.40%
```

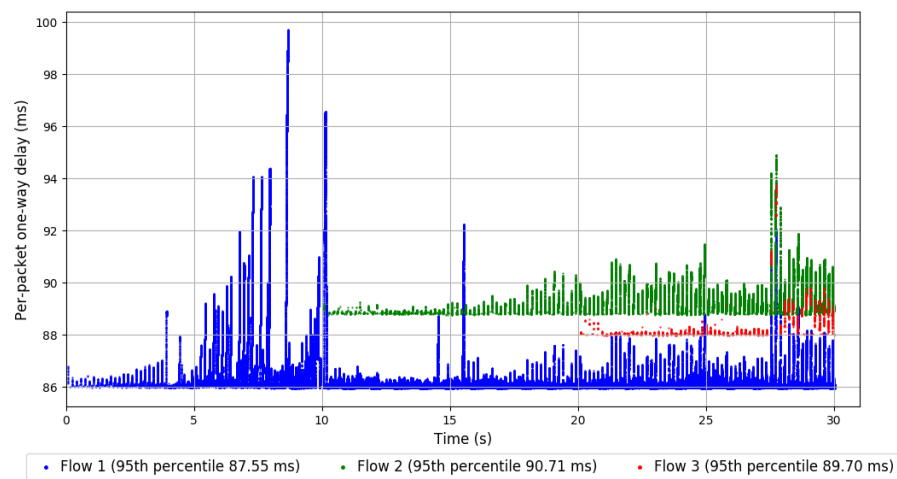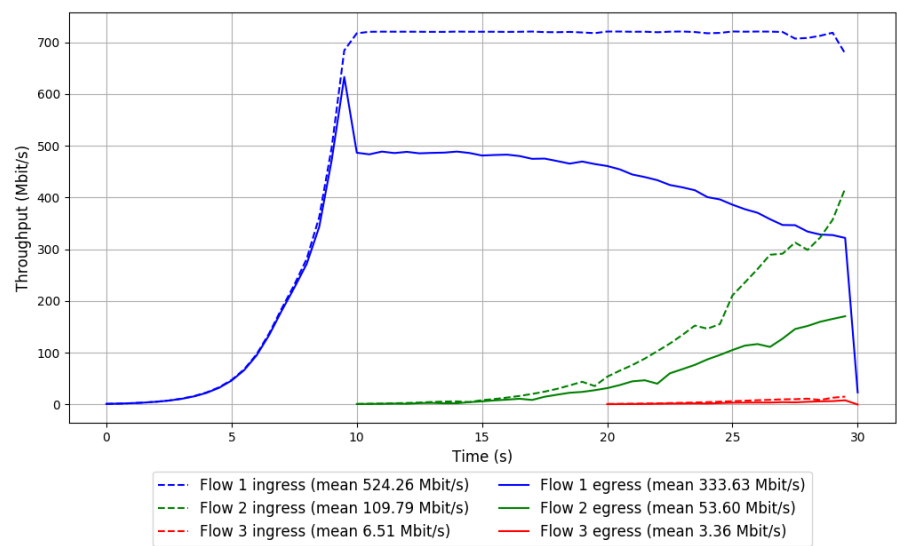Run 9: Report of CalibratedKoho — Data Link

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-09-18 06:32:06
End at: 2017-09-18 06:32:36
Local clock offset: 0.269 ms
Remote clock offset: -1.963 ms


# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.35 Mbit/s
95th percentile per-packet one-way delay: 89.536 ms
Loss rate: 38.21%
-- Flow 1:
Average throughput: 333.63 Mbit/s
95th percentile per-packet one-way delay: 87.550 ms
Loss rate: 36.36%
-- Flow 2:
Average throughput: 53.60 Mbit/s
95th percentile per-packet one-way delay: 90.713 ms
Loss rate: 51.18%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 89.702 ms
Loss rate: 48.41%
```

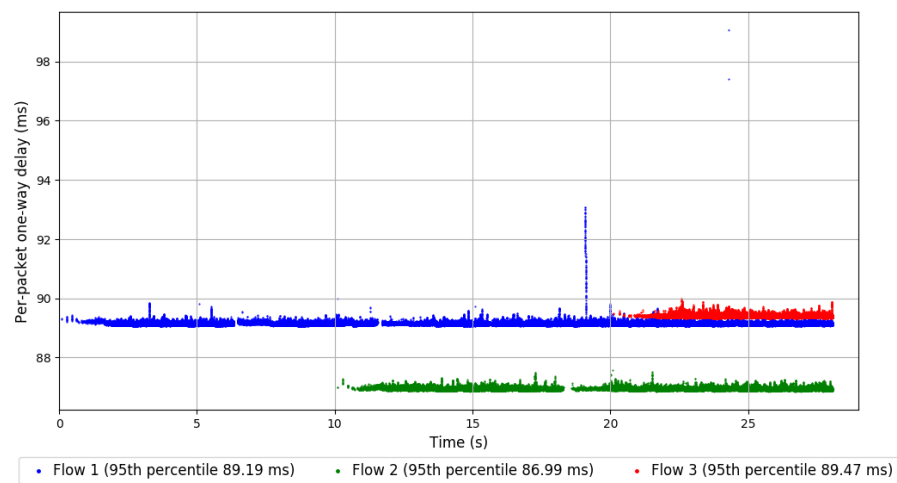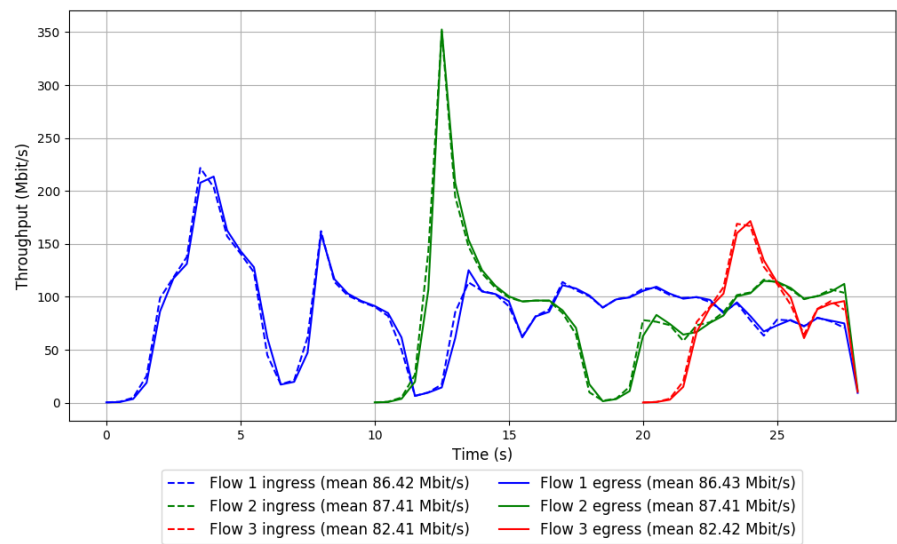Run 10: Report of CalibratedKoho — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-09-18 03:12:39
End at: 2017-09-18 03:13:09
Local clock offset: -1.446 ms
Remote clock offset: -1.472 ms

# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.91 Mbit/s
95th percentile per-packet one-way delay: 89.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.43 Mbit/s
95th percentile per-packet one-way delay: 89.192 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 87.41 Mbit/s
95th percentile per-packet one-way delay: 86.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.42 Mbit/s
95th percentile per-packet one-way delay: 89.466 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 86.42 Mbit/s) — Flow 1 egress (mean 86.43 Mbit/s)
Flow 2 ingress (mean 87.41 Mbit/s) — Flow 2 egress (mean 87.41 Mbit/s)
Flow 3 ingress (mean 82.41 Mbit/s) — Flow 3 egress (mean 82.42 Mbit/s)

Flow 1 (95th percentile 89.19 ms)   Flow 2 (95th percentile 86.99 ms)   Flow 3 (95th percentile 89.47 ms)

```
Run 2: Statistics of Copa

Start at: 2017-09-18 03:34:44
End at: 2017-09-18 03:35:14
Local clock offset: -1.246 ms
Remote clock offset: -6.99 ms


# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.90 Mbit/s
95th percentile per-packet one-way delay: 83.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 81.591 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 82.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.09 Mbit/s
95th percentile per-packet one-way delay: 83.353 ms
Loss rate: 0.00%
```
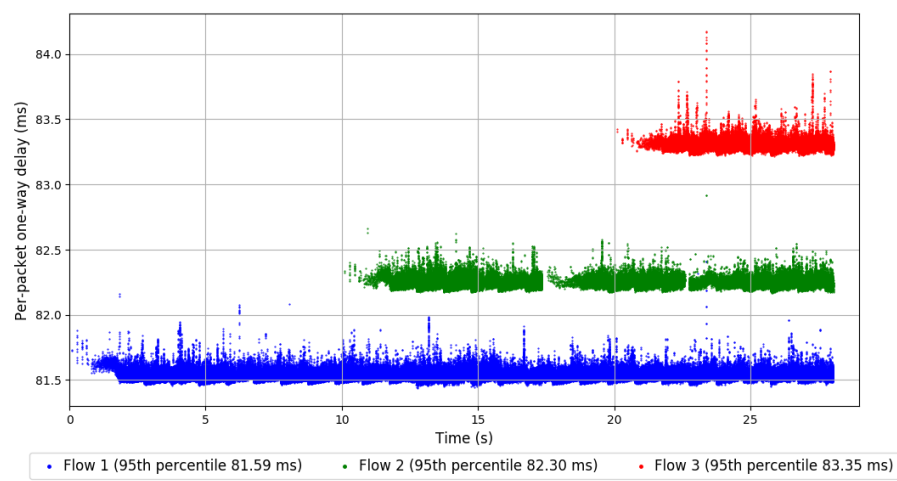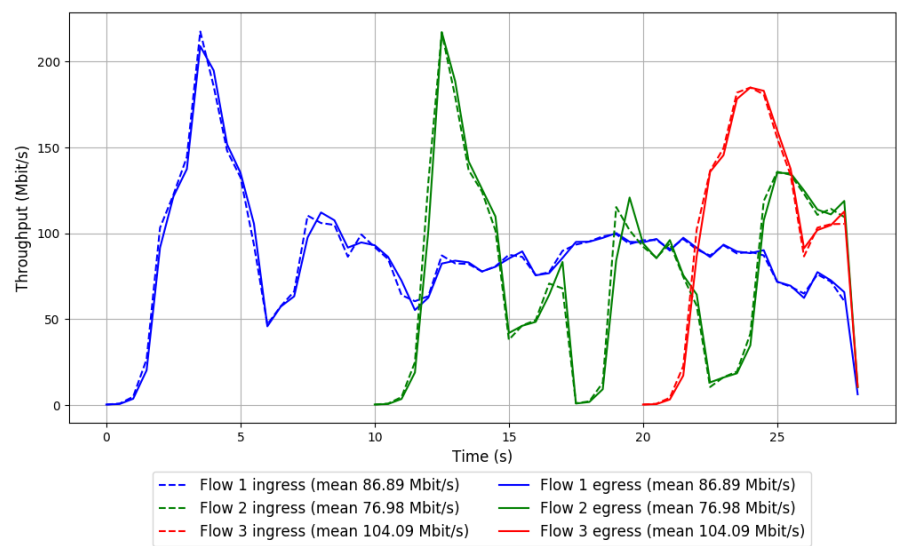
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 86.89 Mbit/s) --- Flow 1 egress (mean 86.89 Mbit/s)
Flow 2 ingress (mean 76.98 Mbit/s) --- Flow 2 egress (mean 76.98 Mbit/s)
Flow 3 ingress (mean 104.09 Mbit/s) --- Flow 3 egress (mean 104.09 Mbit/s)

Flow 1 (95th percentile 81.59 ms) • Flow 2 (95th percentile 82.30 ms) • Flow 3 (95th percentile 83.35 ms)

```
Run 3: Statistics of Copa

Start at: 2017-09-18 03:56:43
End at: 2017-09-18 03:57:13
Local clock offset: -1.079 ms
Remote clock offset: -2.0 ms


# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.14 Mbit/s
95th percentile per-packet one-way delay: 88.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.09 Mbit/s
95th percentile per-packet one-way delay: 88.098 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.26 Mbit/s
95th percentile per-packet one-way delay: 86.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 86.566 ms
Loss rate: 0.00%
```
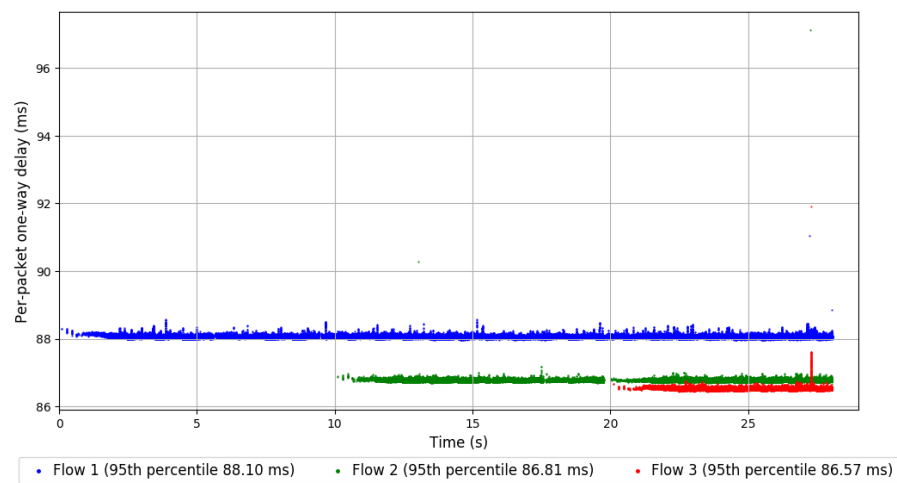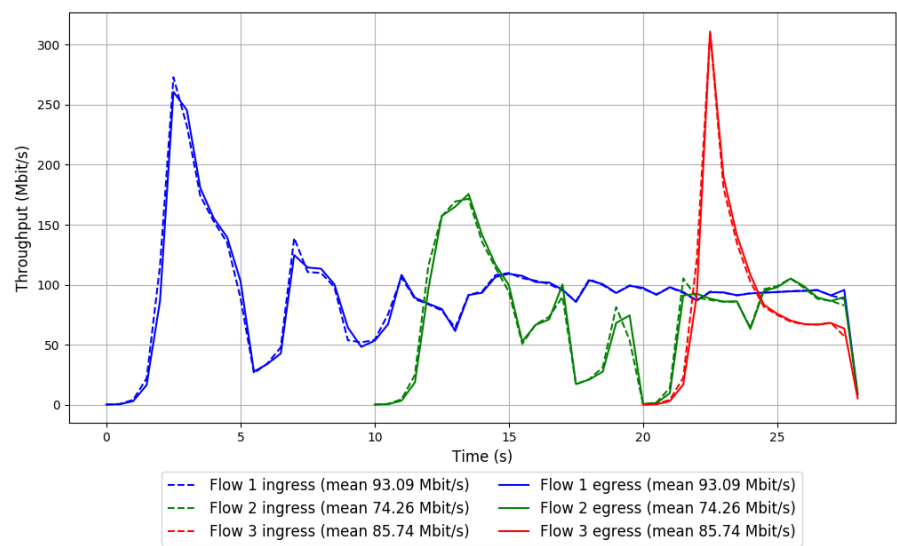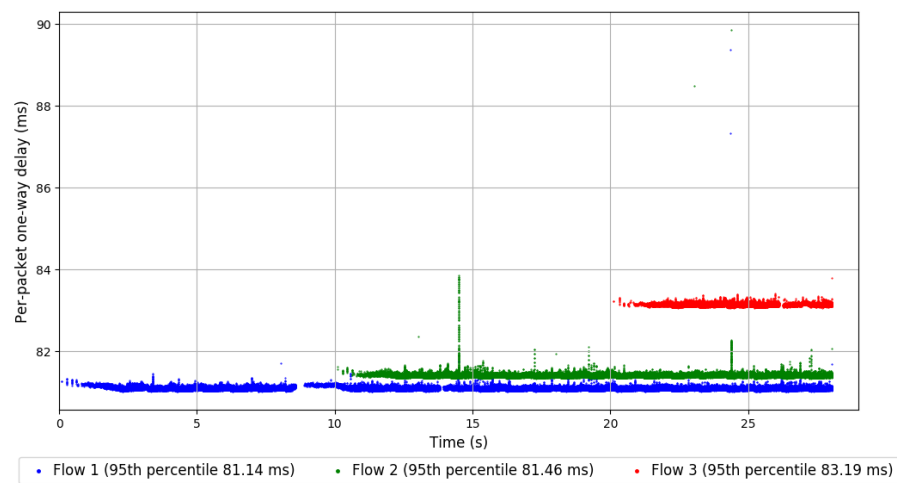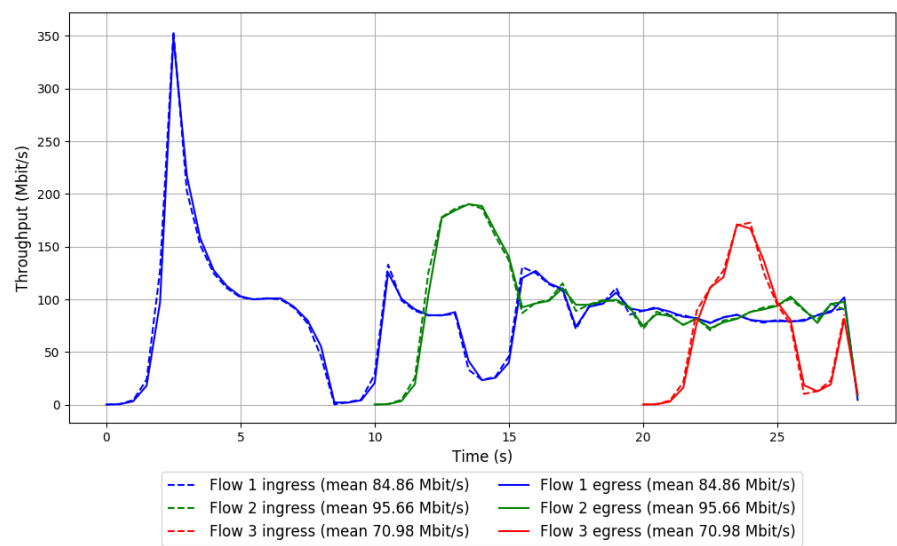
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2017-09-18 04:18:26
End at: 2017-09-18 04:18:56
Local clock offset: -0.81 ms
Remote clock offset: -7.426 ms

# Below is generated by plot.py at 2017-09-18 08:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 166.41 Mbit/s
95th percentile per-packet one-way delay: 83.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 81.139 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 81.456 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.98 Mbit/s
95th percentile per-packet one-way delay: 83.186 ms
Loss rate: 0.00%
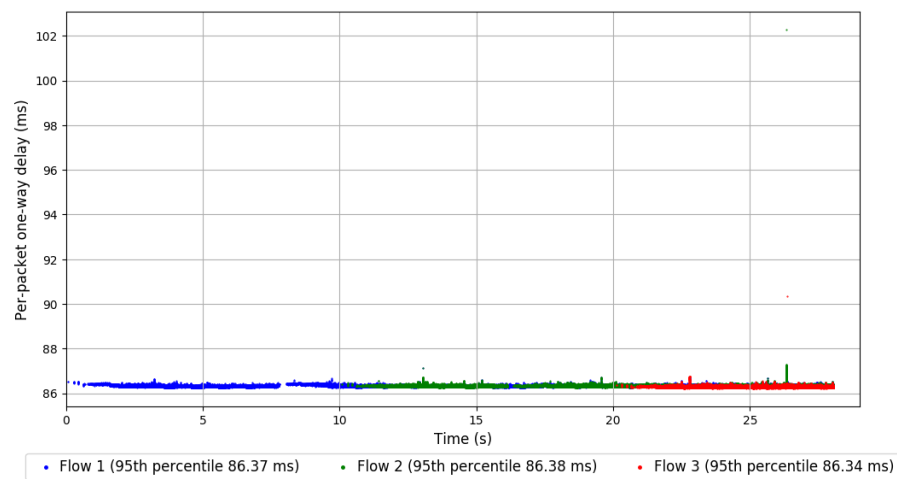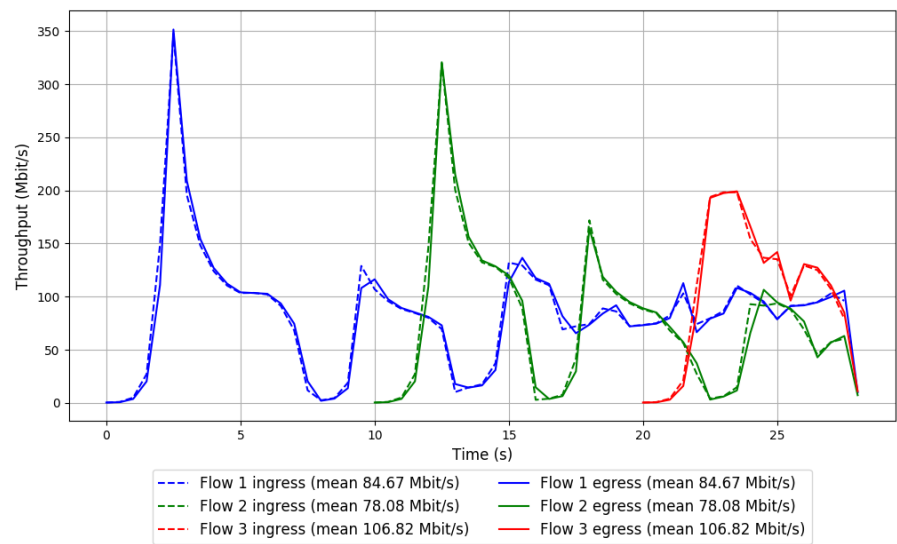```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-09-18 04:40:13
End at: 2017-09-18 04:40:43
Local clock offset: -0.568 ms
Remote clock offset: -2.429 ms

# Below is generated by plot.py at 2017-09-18 08:12:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.11 Mbit/s
95th percentile per-packet one-way delay: 86.371 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 84.67 Mbit/s
95th percentile per-packet one-way delay: 86.372 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 78.08 Mbit/s
95th percentile per-packet one-way delay: 86.375 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 106.82 Mbit/s
95th percentile per-packet one-way delay: 86.338 ms
Loss rate: 0.03%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 84.67 Mbit/s)   Flow 1 egress (mean 84.67 Mbit/s)
Flow 2 ingress (mean 78.08 Mbit/s)   Flow 2 egress (mean 78.08 Mbit/s)
Flow 3 ingress (mean 106.82 Mbit/s)   Flow 3 egress (mean 106.82 Mbit/s)

Flow 1 (95th percentile 86.37 ms)   Flow 2 (95th percentile 86.38 ms)   Flow 3 (95th percentile 86.34 ms)
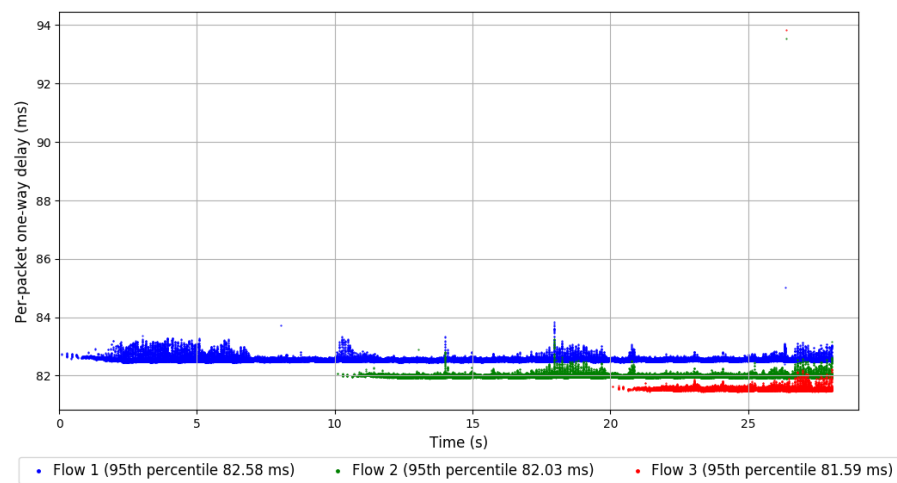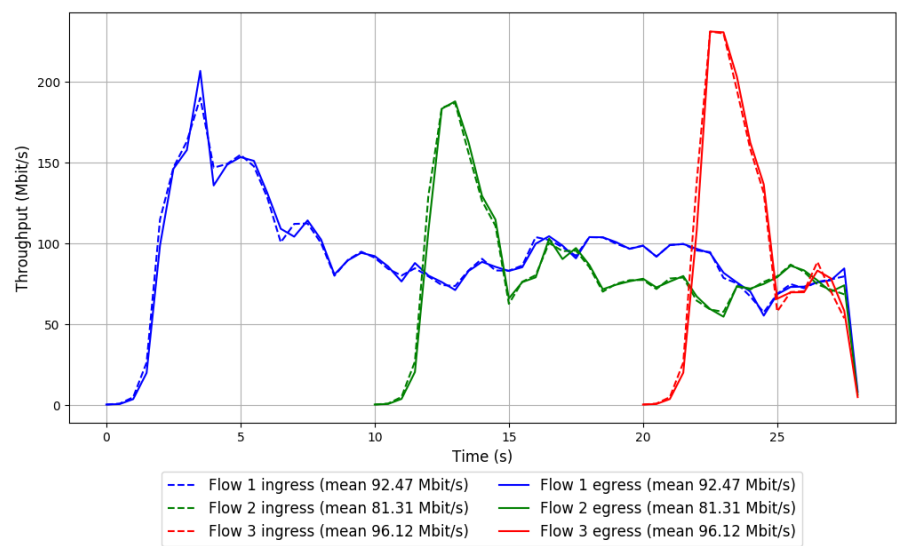
```
Run 6: Statistics of Copa

Start at: 2017-09-18 05:02:11
End at: 2017-09-18 05:02:41
Local clock offset: -0.318 ms
Remote clock offset: -7.368 ms


# Below is generated by plot.py at 2017-09-18 08:13:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.00 Mbit/s
95th percentile per-packet one-way delay: 82.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.47 Mbit/s
95th percentile per-packet one-way delay: 82.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 82.027 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 81.586 ms
Loss rate: 0.00%
```

Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 92.47 Mbit/s)   Flow 1 egress (mean 92.47 Mbit/s)
Flow 2 ingress (mean 81.31 Mbit/s)   Flow 2 egress (mean 81.31 Mbit/s)
Flow 3 ingress (mean 96.12 Mbit/s)   Flow 3 egress (mean 96.12 Mbit/s)

Flow 1 (95th percentile 82.58 ms)   Flow 2 (95th percentile 82.03 ms)   Flow 3 (95th percentile 81.59 ms)
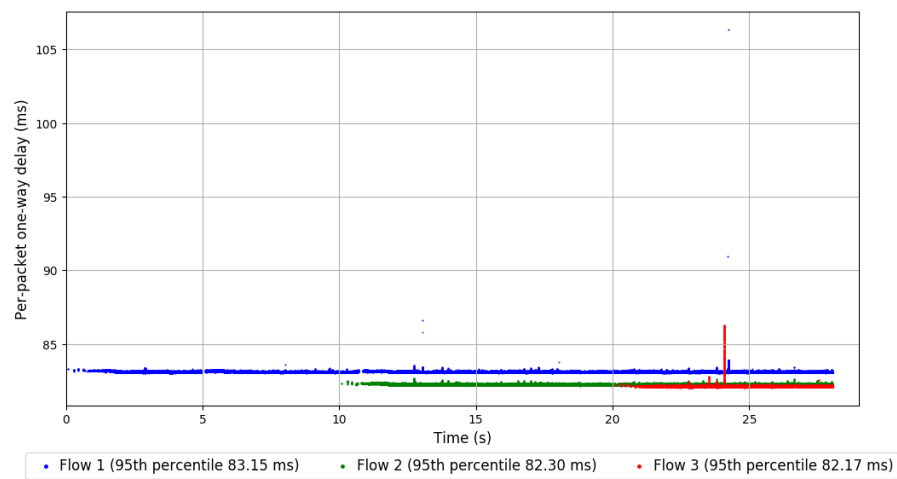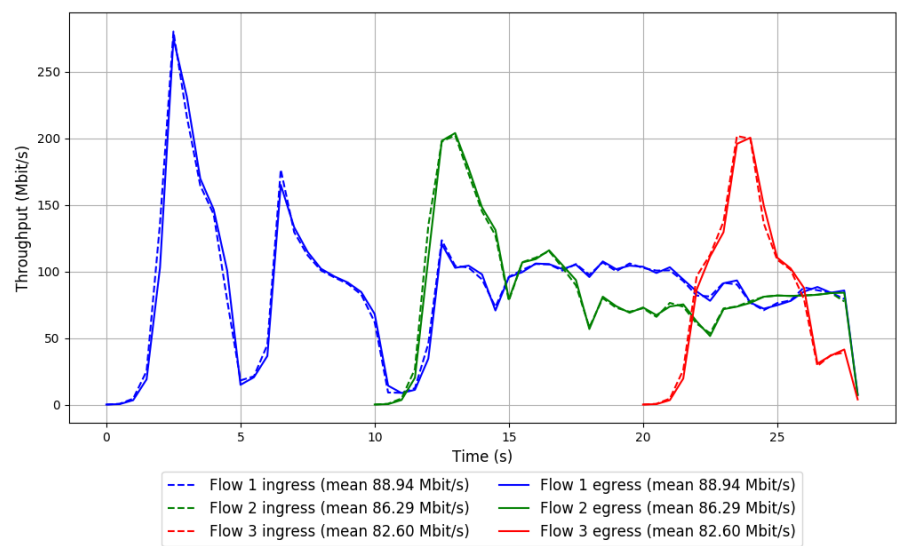
55

```
Run 7: Statistics of Copa

Start at: 2017-09-18 05:23:54
End at: 2017-09-18 05:24:24
Local clock offset: -0.077 ms
Remote clock offset: -6.816 ms


# Below is generated by plot.py at 2017-09-18 08:14:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.83 Mbit/s
95th percentile per-packet one-way delay: 83.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.94 Mbit/s
95th percentile per-packet one-way delay: 83.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.29 Mbit/s
95th percentile per-packet one-way delay: 82.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.60 Mbit/s
95th percentile per-packet one-way delay: 82.171 ms
Loss rate: 0.00%
```
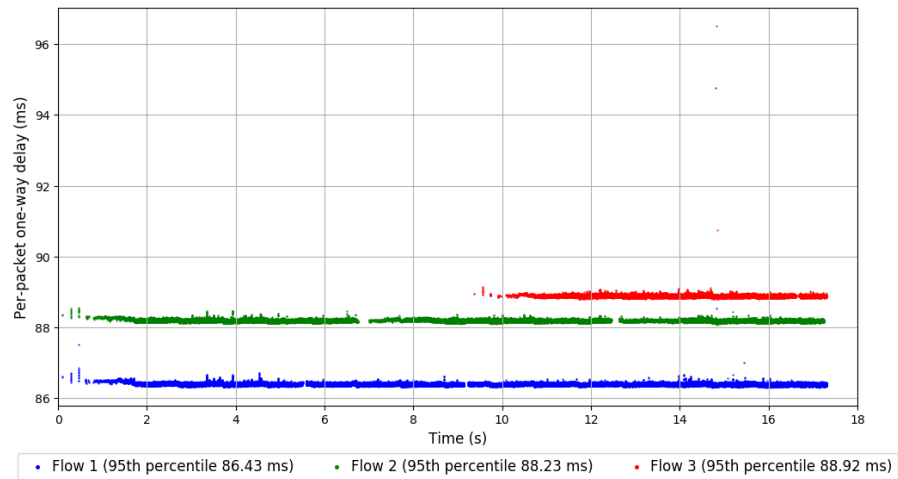
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 88.94 Mbit/s) ---- Flow 1 egress (mean 88.94 Mbit/s)
Flow 2 ingress (mean 86.29 Mbit/s) ---- Flow 2 egress (mean 86.29 Mbit/s)
Flow 3 ingress (mean 82.60 Mbit/s) ---- Flow 3 egress (mean 82.60 Mbit/s)

• Flow 1 (95th percentile 83.15 ms)   • Flow 2 (95th percentile 82.30 ms)   • Flow 3 (95th percentile 82.17 ms)
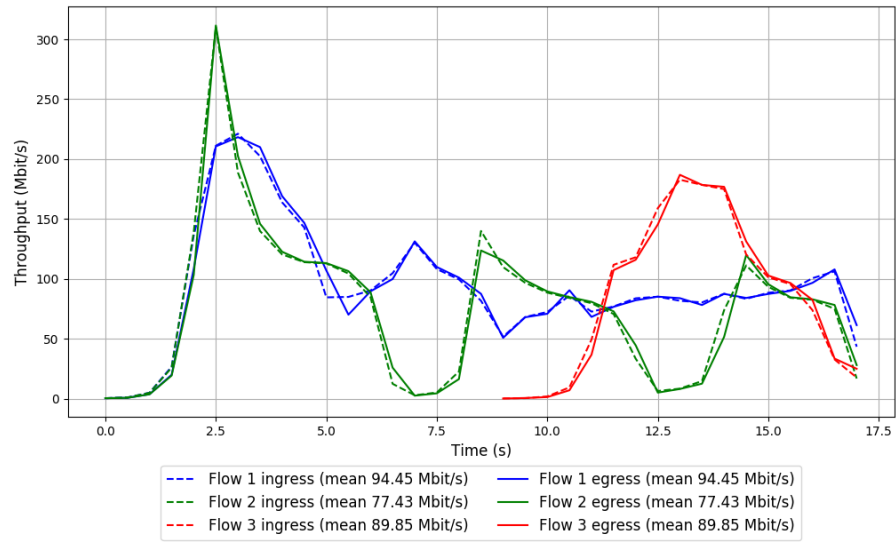
```
Run 8: Statistics of Copa

Start at: 2017-09-18 05:45:45
End at: 2017-09-18 05:46:15
Local clock offset: -0.033 ms
Remote clock offset: -2.684 ms
```
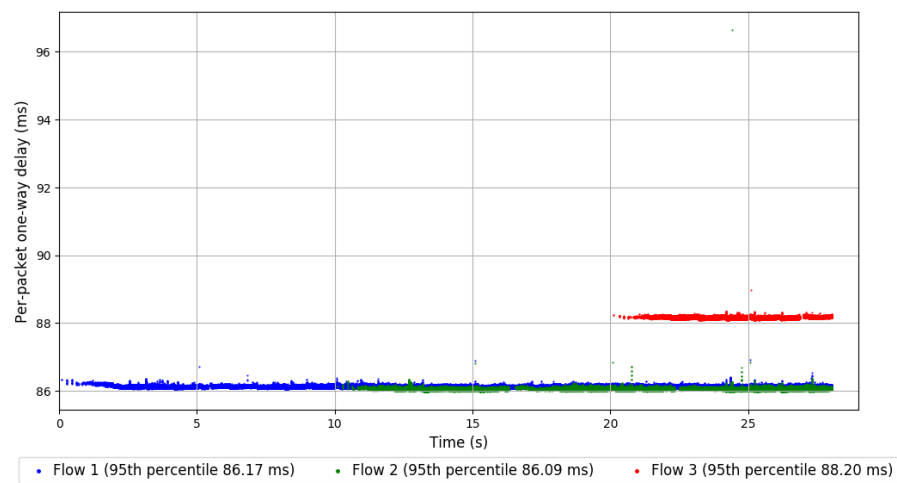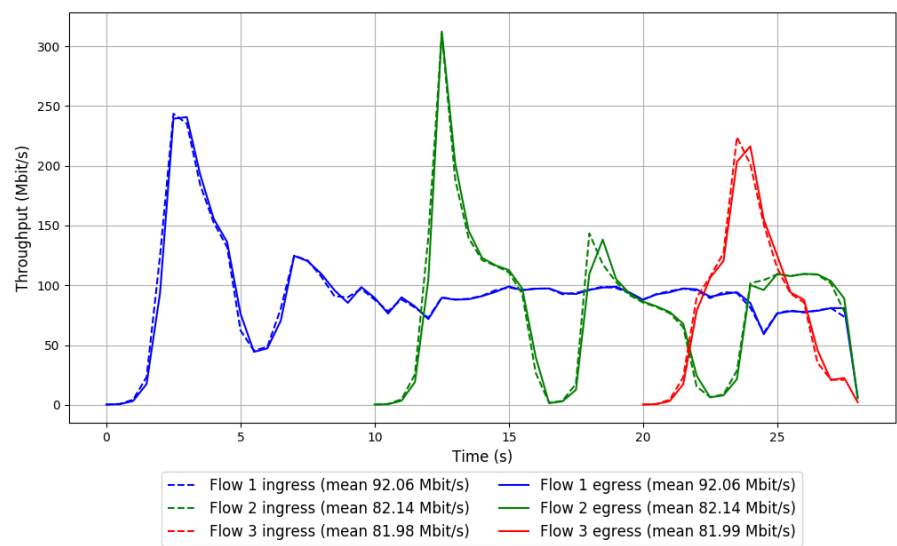
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 94.45 Mbit/s) — Flow 1 egress (mean 94.45 Mbit/s)
Flow 2 ingress (mean 77.43 Mbit/s) — Flow 2 egress (mean 77.43 Mbit/s)
Flow 3 ingress (mean 89.85 Mbit/s) — Flow 3 egress (mean 89.85 Mbit/s)

Flow 1 (95th percentile 86.43 ms)   Flow 2 (95th percentile 88.23 ms)   Flow 3 (95th percentile 88.92 ms)

```
Run 9: Statistics of Copa

Start at: 2017-09-18 06:07:35
End at: 2017-09-18 06:08:05
Local clock offset: 0.233 ms
Remote clock offset: -2.509 ms


# Below is generated by plot.py at 2017-09-18 08:14:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 168.00 Mbit/s
95th percentile per-packet one-way delay: 88.170 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 86.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 82.14 Mbit/s
95th percentile per-packet one-way delay: 86.094 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.99 Mbit/s
95th percentile per-packet one-way delay: 88.201 ms
Loss rate: 0.00%
```
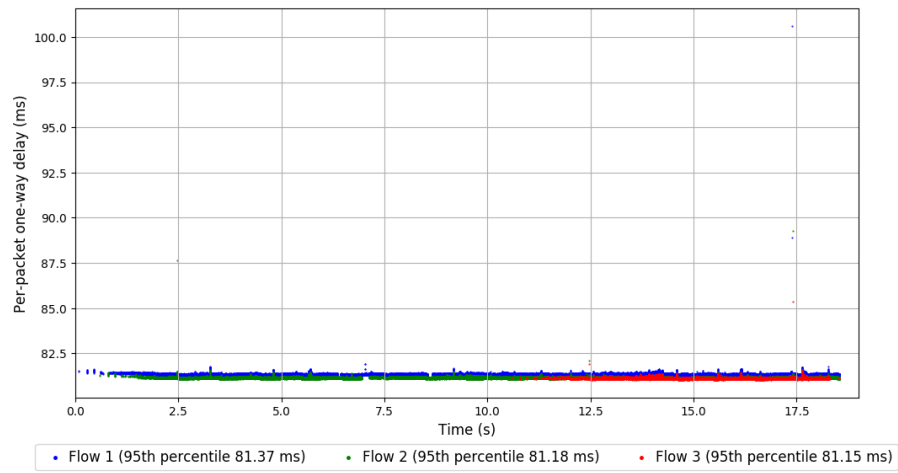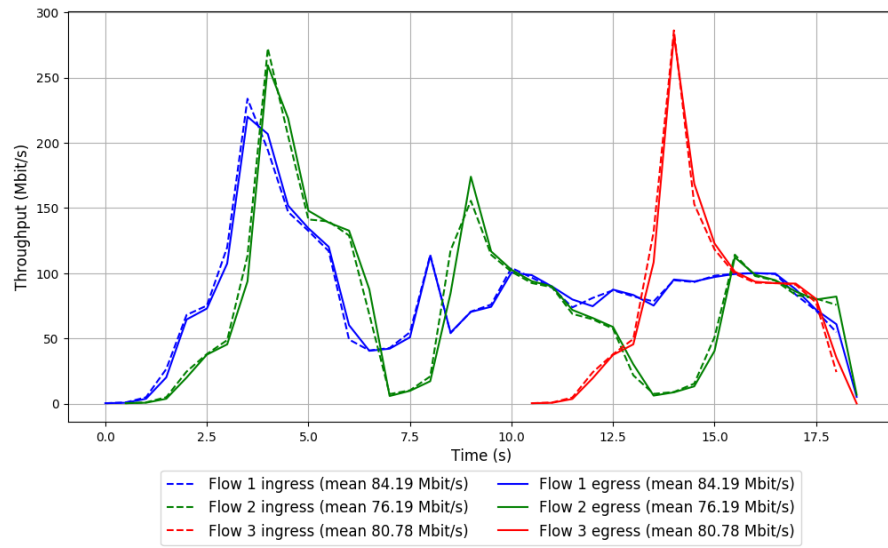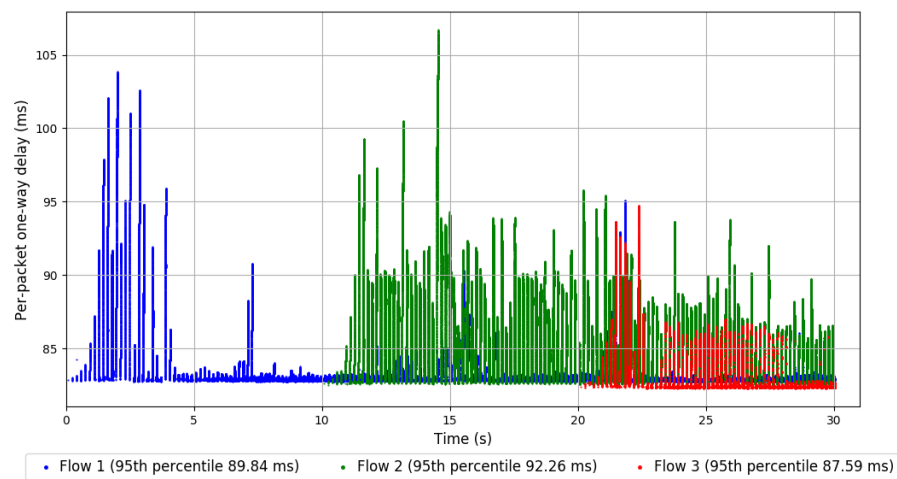
Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 92.06 Mbit/s) — — — — Flow 1 egress (mean 92.06 Mbit/s)
Flow 2 ingress (mean 82.14 Mbit/s) — — — — Flow 2 egress (mean 82.14 Mbit/s)
Flow 3 ingress (mean 81.98 Mbit/s) — — — — Flow 3 egress (mean 81.99 Mbit/s)

Flow 1 (95th percentile 86.17 ms)   Flow 2 (95th percentile 86.09 ms)   Flow 3 (95th percentile 88.20 ms)

Run 10: Statistics of Copa

Start at: 2017-09-18 06:29:26
End at: 2017-09-18 06:29:56
Local clock offset: 0.297 ms
Remote clock offset: -7.094 ms

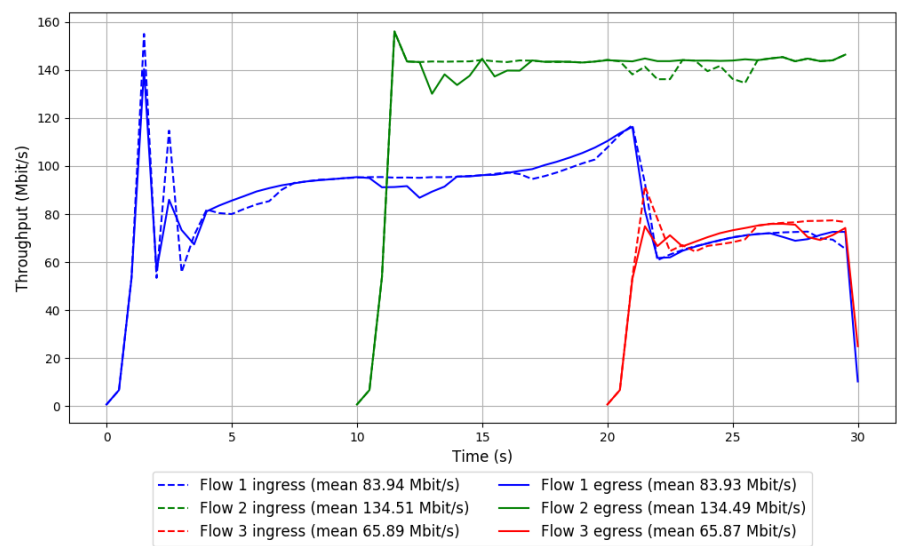Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-18 03:20:53
End at: 2017-09-18 03:21:23
Local clock offset: -1.346 ms
Remote clock offset: -6.017 ms


# Below is generated by plot.py at 2017-09-18 08:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.03 Mbit/s
95th percentile per-packet one-way delay: 91.366 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 83.93 Mbit/s
95th percentile per-packet one-way delay: 89.843 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 134.49 Mbit/s
95th percentile per-packet one-way delay: 92.259 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.87 Mbit/s
95th percentile per-packet one-way delay: 87.590 ms
Loss rate: 0.02%
```

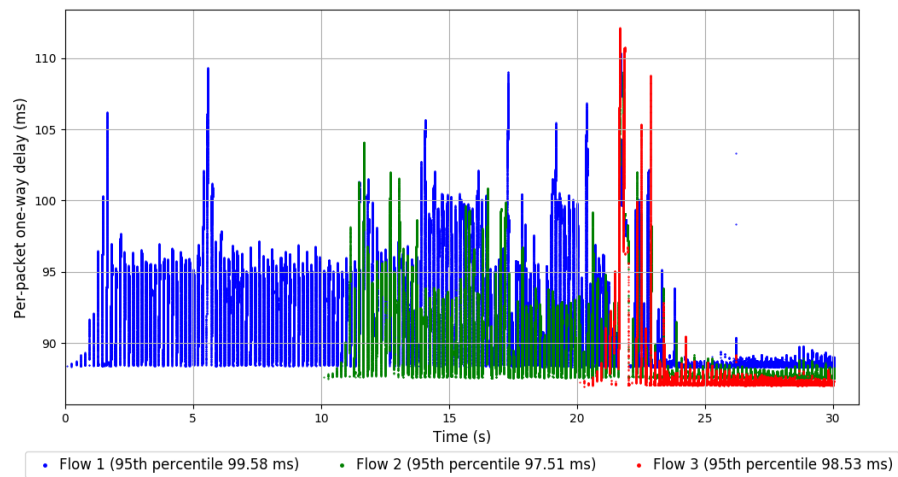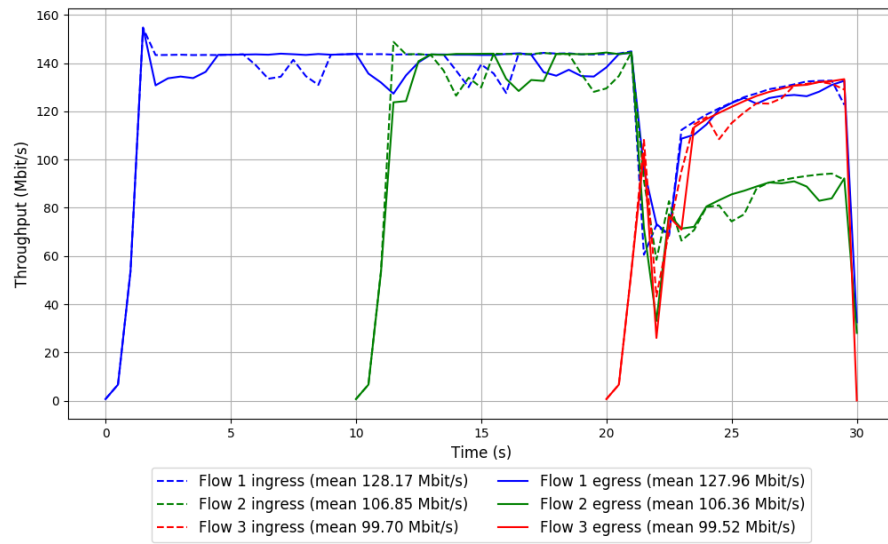Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-18 03:42:40
End at: 2017-09-18 03:43:10
Local clock offset: -1.15 ms
Remote clock offset: -1.605 ms


# Below is generated by plot.py at 2017-09-18 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.80 Mbit/s
95th percentile per-packet one-way delay: 99.112 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 127.96 Mbit/s
95th percentile per-packet one-way delay: 99.576 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 106.36 Mbit/s
95th percentile per-packet one-way delay: 97.507 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 99.52 Mbit/s
95th percentile per-packet one-way delay: 98.527 ms
Loss rate: 0.18%
```

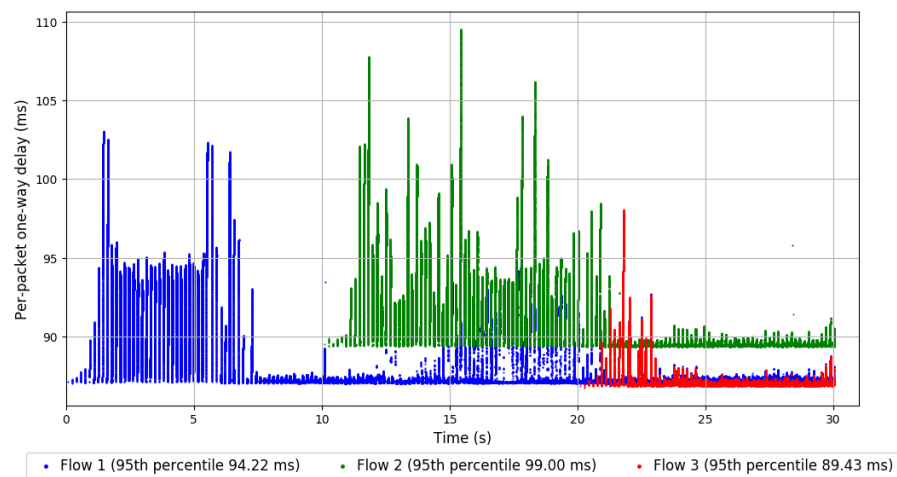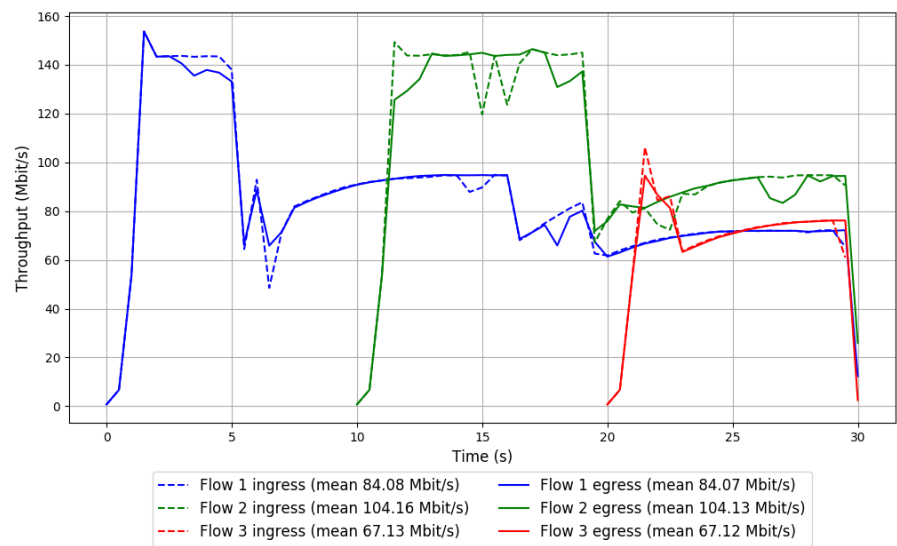Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-18 04:04:48
End at: 2017-09-18 04:05:18
Local clock offset: -0.957 ms
Remote clock offset: -1.646 ms


# Below is generated by plot.py at 2017-09-18 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.68 Mbit/s
95th percentile per-packet one-way delay: 96.145 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 84.07 Mbit/s
95th percentile per-packet one-way delay: 94.215 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 104.13 Mbit/s
95th percentile per-packet one-way delay: 99.003 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 89.429 ms
Loss rate: 0.00%
```
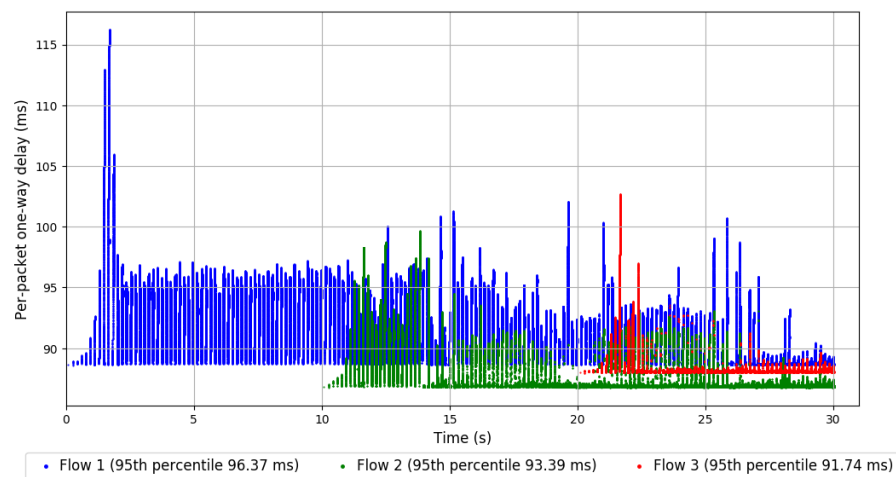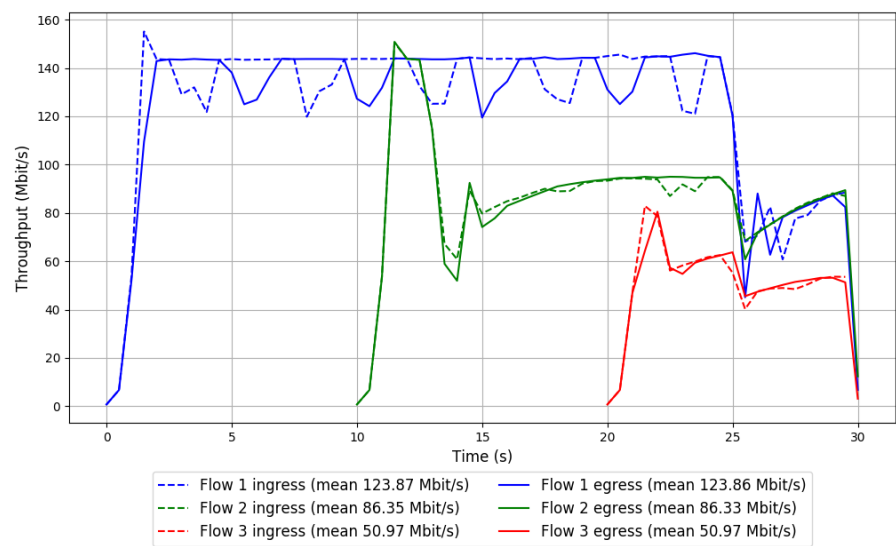
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 84.08 Mbit/s) --- Flow 1 egress (mean 84.07 Mbit/s)
Flow 2 ingress (mean 104.16 Mbit/s) --- Flow 2 egress (mean 104.13 Mbit/s)
Flow 3 ingress (mean 67.13 Mbit/s) --- Flow 3 egress (mean 67.12 Mbit/s)

Flow 1 (95th percentile 94.22 ms) • Flow 2 (95th percentile 99.00 ms) • Flow 3 (95th percentile 89.43 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-18 04:26:32
End at: 2017-09-18 04:27:02
Local clock offset: -0.74 ms
Remote clock offset: -2.168 ms


# Below is generated by plot.py at 2017-09-18 08:16:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.22 Mbit/s
95th percentile per-packet one-way delay: 96.031 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 123.86 Mbit/s
95th percentile per-packet one-way delay: 96.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 93.394 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 50.97 Mbit/s
95th percentile per-packet one-way delay: 91.743 ms
Loss rate: 0.00%
```
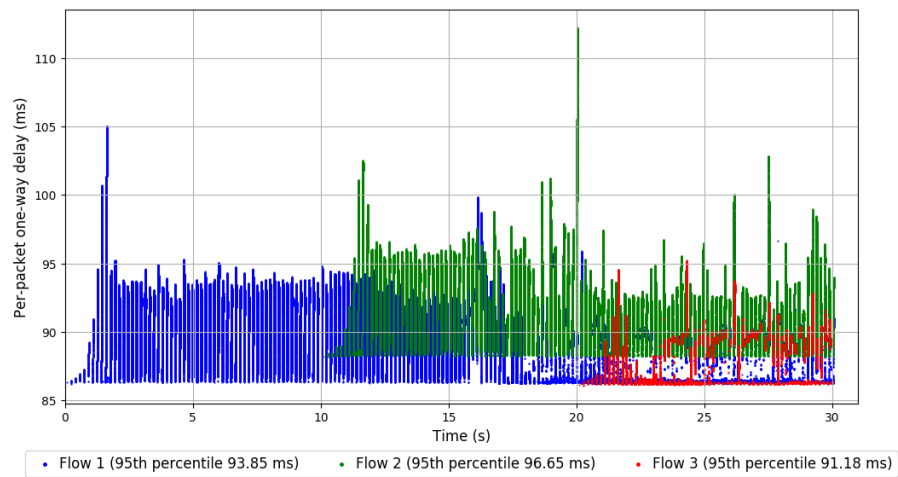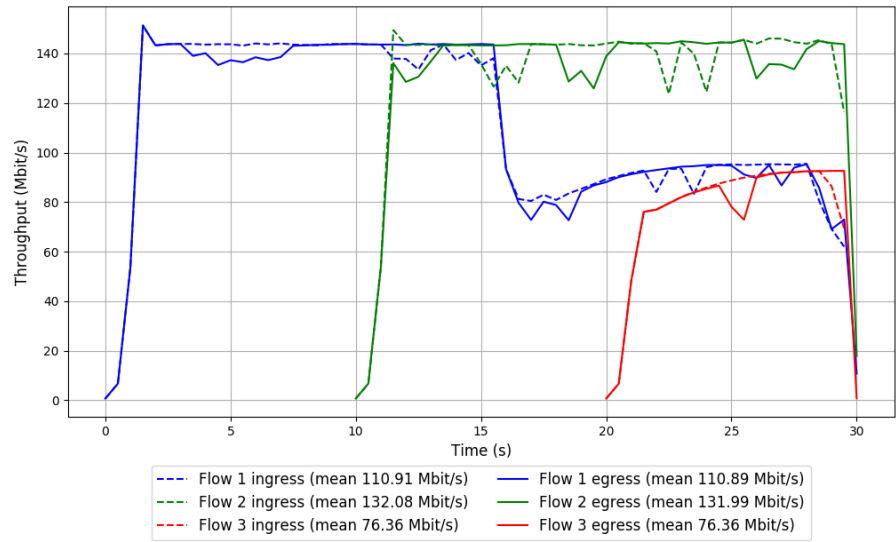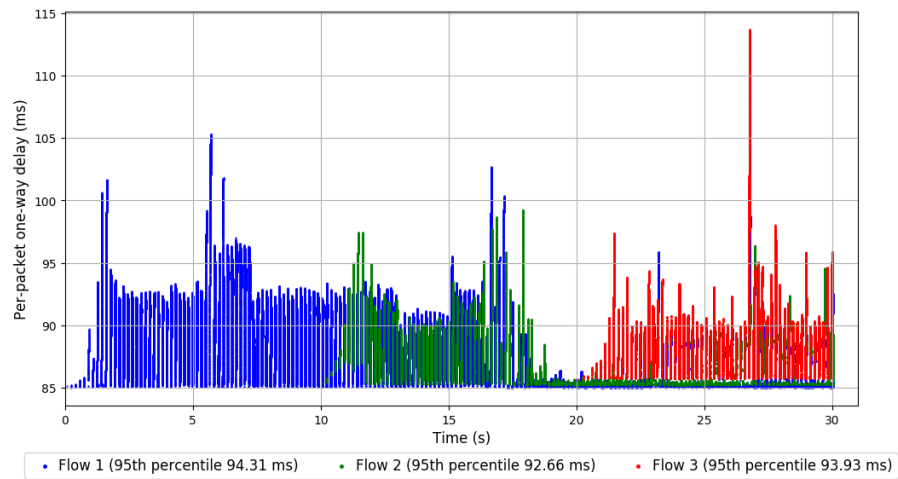
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 123.87 Mbit/s) --- Flow 1 egress (mean 123.86 Mbit/s)
Flow 2 ingress (mean 86.35 Mbit/s) --- Flow 2 egress (mean 86.33 Mbit/s)
Flow 3 ingress (mean 50.97 Mbit/s) --- Flow 3 egress (mean 50.97 Mbit/s)

Flow 1 (95th percentile 96.37 ms) • Flow 2 (95th percentile 93.39 ms) • Flow 3 (95th percentile 91.74 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-18 04:48:12
End at: 2017-09-18 04:48:42
Local clock offset: -0.49 ms
Remote clock offset: -2.864 ms


# Below is generated by plot.py at 2017-09-18 08:16:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.03 Mbit/s
95th percentile per-packet one-way delay: 95.492 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 110.89 Mbit/s
95th percentile per-packet one-way delay: 93.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 131.99 Mbit/s
95th percentile per-packet one-way delay: 96.649 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 91.184 ms
Loss rate: 0.00%
```
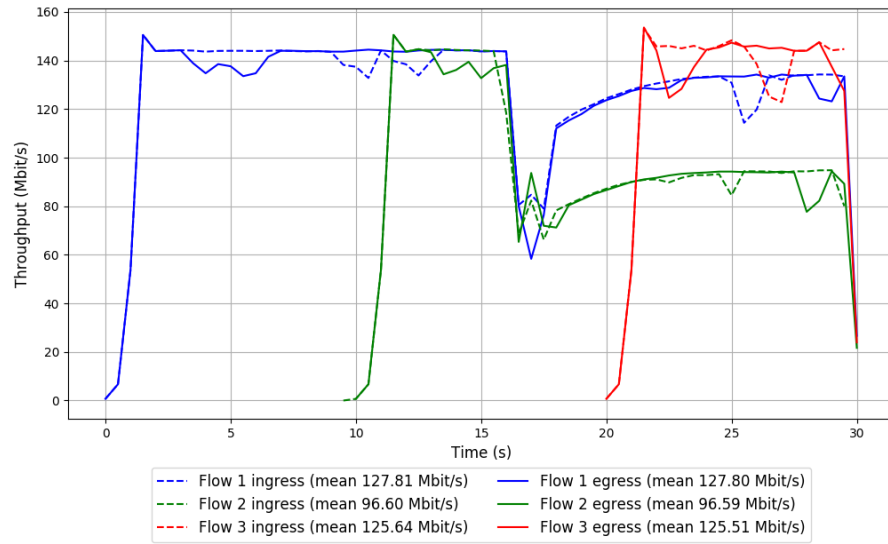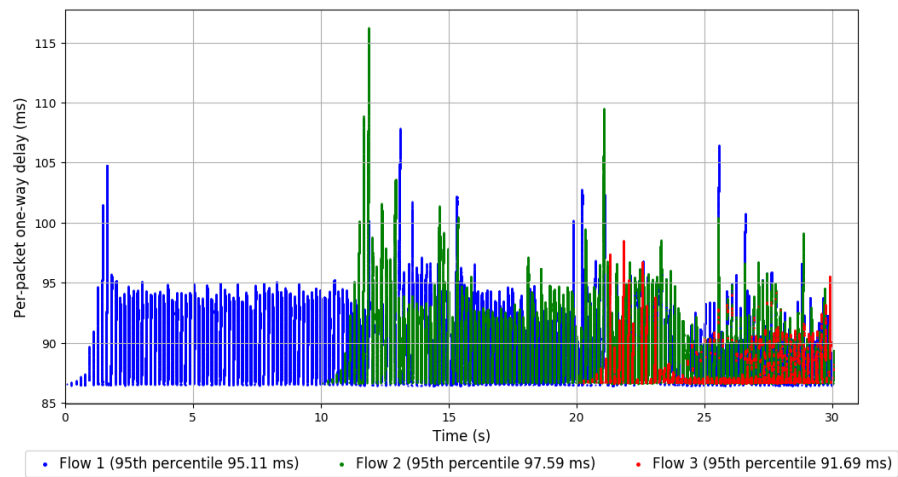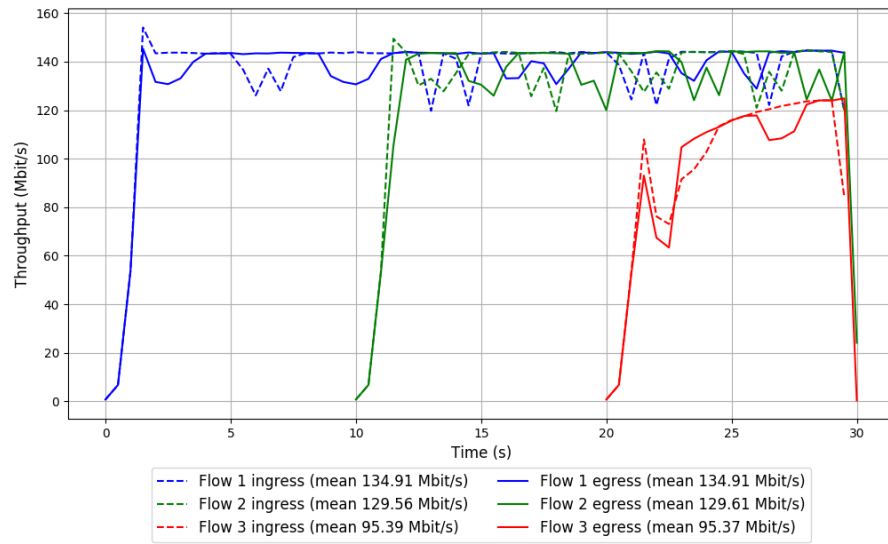
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 110.91 Mbit/s)   Flow 1 egress (mean 110.89 Mbit/s)
Flow 2 ingress (mean 132.08 Mbit/s)   Flow 2 egress (mean 131.99 Mbit/s)
Flow 3 ingress (mean 76.36 Mbit/s)   Flow 3 egress (mean 76.36 Mbit/s)

Flow 1 (95th percentile 93.85 ms)   Flow 2 (95th percentile 96.65 ms)   Flow 3 (95th percentile 91.18 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-18 05:10:06
End at: 2017-09-18 05:10:36
Local clock offset: -0.161 ms
Remote clock offset: -4.097 ms


# Below is generated by plot.py at 2017-09-18 08:17:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.75 Mbit/s
95th percentile per-packet one-way delay: 93.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 127.80 Mbit/s
95th percentile per-packet one-way delay: 94.311 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 96.59 Mbit/s
95th percentile per-packet one-way delay: 92.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.51 Mbit/s
95th percentile per-packet one-way delay: 93.931 ms
Loss rate: 0.00%
```
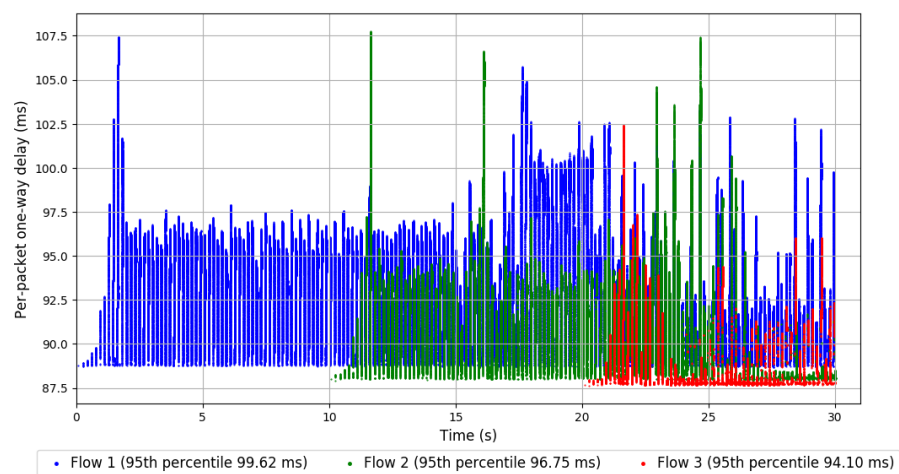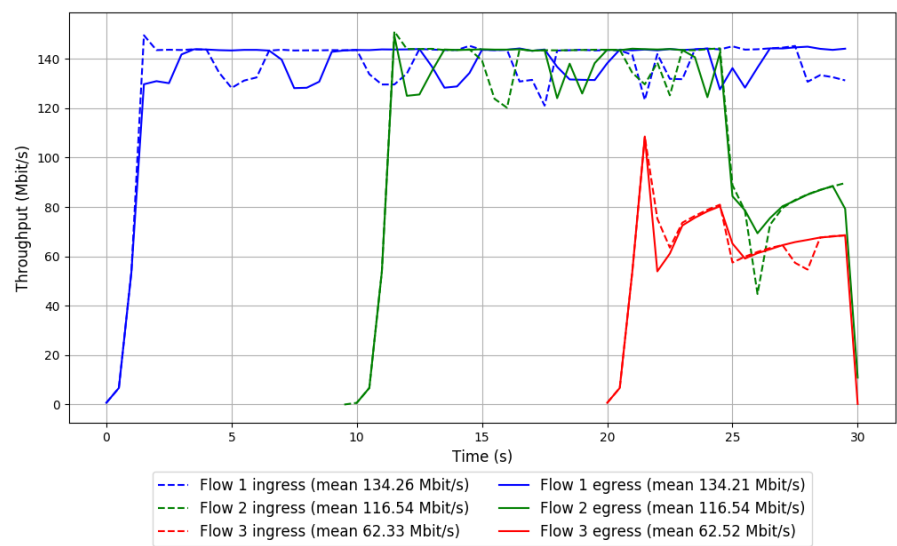
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 05:31:56
End at: 2017-09-18 05:32:26
Local clock offset: 0.004 ms
Remote clock offset: -4.446 ms


# Below is generated by plot.py at 2017-09-18 08:17:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.68 Mbit/s
95th percentile per-packet one-way delay: 95.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.91 Mbit/s
95th percentile per-packet one-way delay: 95.115 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.61 Mbit/s
95th percentile per-packet one-way delay: 97.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 91.694 ms
Loss rate: 0.00%
```
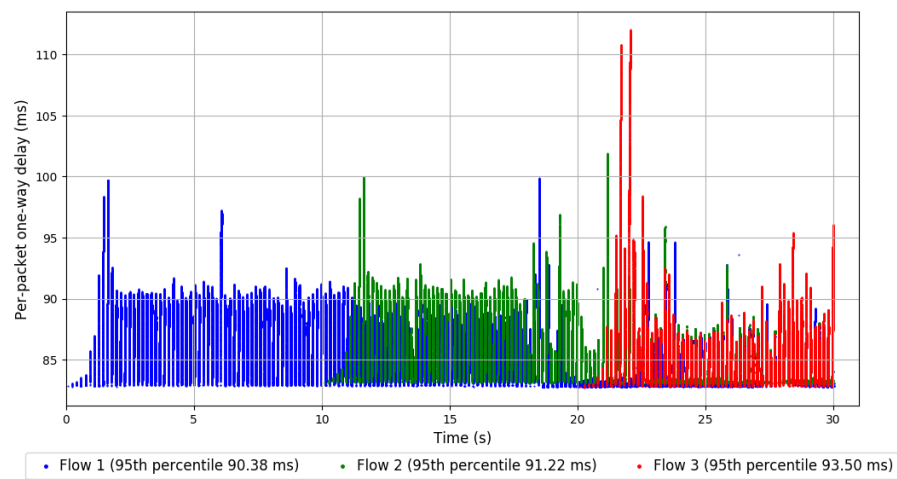
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 05:53:46
End at: 2017-09-18 05:54:16
Local clock offset: 0.089 ms
Remote clock offset: -2.829 ms


# Below is generated by plot.py at 2017-09-18 08:17:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.28 Mbit/s
95th percentile per-packet one-way delay: 99.049 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 134.21 Mbit/s
95th percentile per-packet one-way delay: 99.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 116.54 Mbit/s
95th percentile per-packet one-way delay: 96.751 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 62.52 Mbit/s
95th percentile per-packet one-way delay: 94.100 ms
Loss rate: 0.03%
```
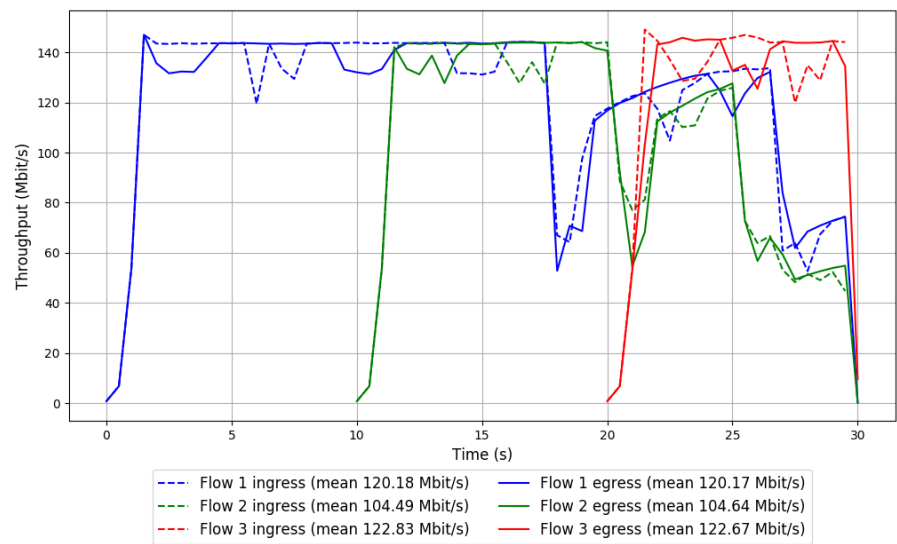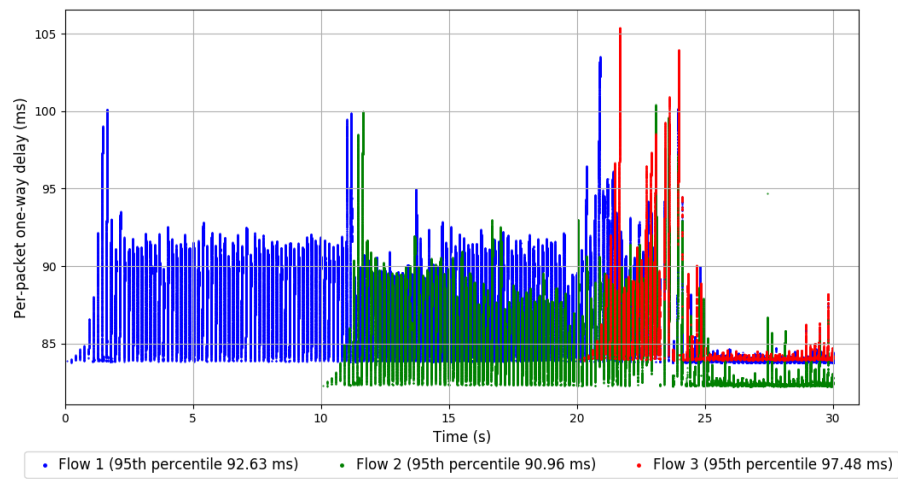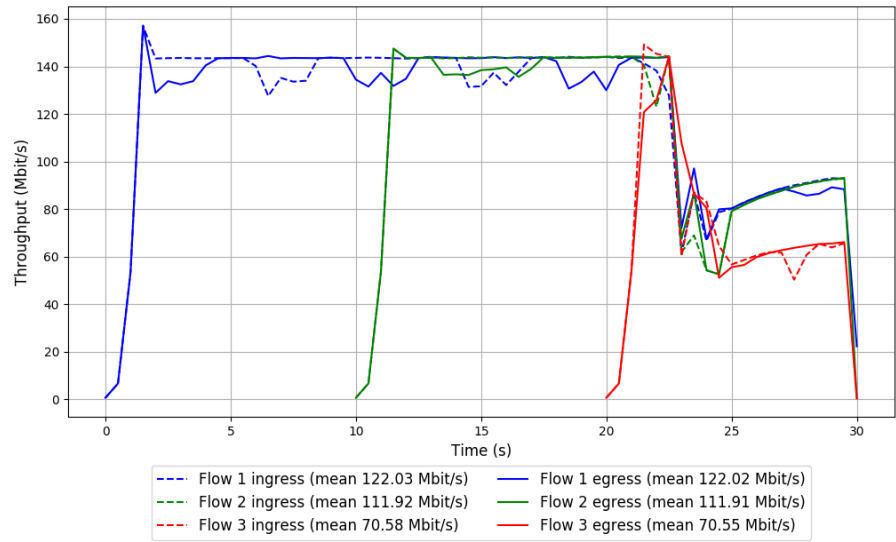
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 134.26 Mbit/s) --- Flow 1 egress (mean 134.21 Mbit/s)
Flow 2 ingress (mean 116.54 Mbit/s) --- Flow 2 egress (mean 116.54 Mbit/s)
Flow 3 ingress (mean 62.33 Mbit/s) --- Flow 3 egress (mean 62.52 Mbit/s)

Flow 1 (95th percentile 99.62 ms) • Flow 2 (95th percentile 96.75 ms) • Flow 3 (95th percentile 94.10 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 06:15:38
End at: 2017-09-18 06:16:08
Local clock offset: 0.227 ms
Remote clock offset: -7.196 ms


# Below is generated by plot.py at 2017-09-18 08:18:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.34 Mbit/s
95th percentile per-packet one-way delay: 90.977 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 120.17 Mbit/s
95th percentile per-packet one-way delay: 90.381 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 104.64 Mbit/s
95th percentile per-packet one-way delay: 91.217 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 122.67 Mbit/s
95th percentile per-packet one-way delay: 93.495 ms
Loss rate: 0.00%
```

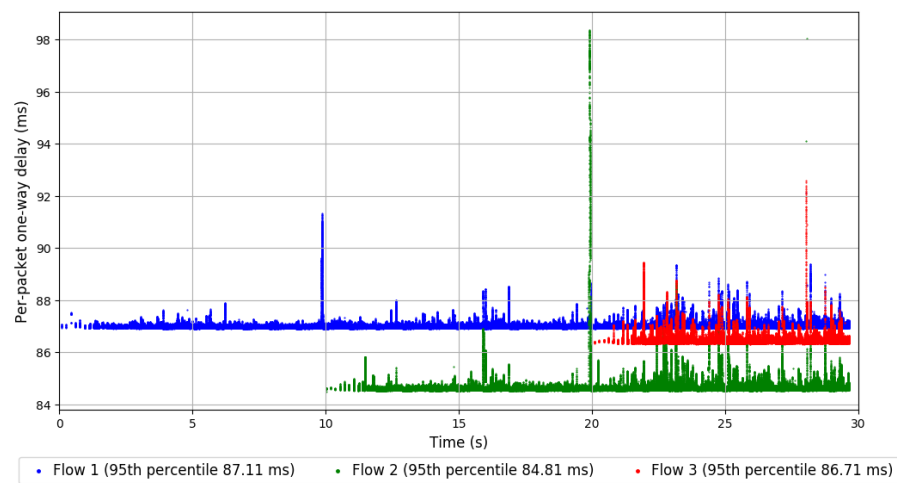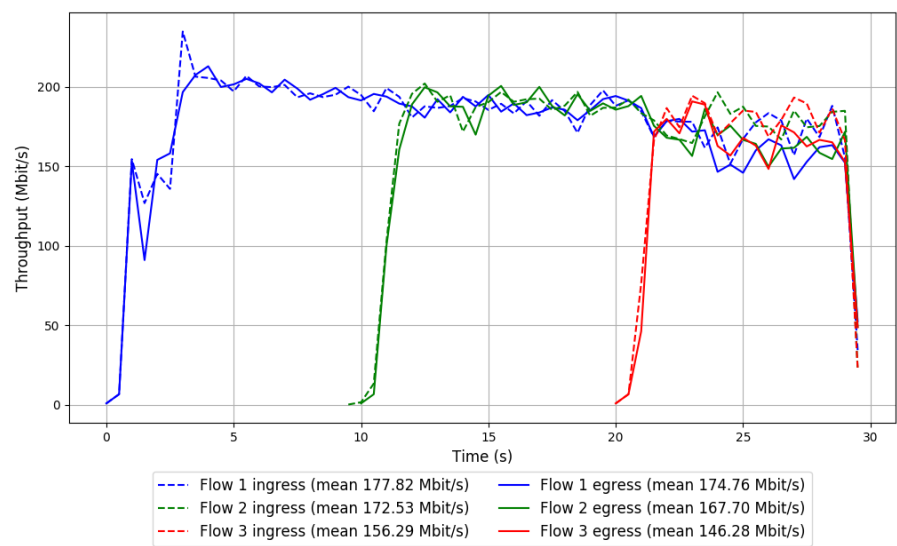Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 06:37:14
End at: 2017-09-18 06:37:44
Local clock offset: 0.212 ms
Remote clock offset: -6.304 ms


# Below is generated by plot.py at 2017-09-18 08:18:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.90 Mbit/s
95th percentile per-packet one-way delay: 92.345 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 122.02 Mbit/s
95th percentile per-packet one-way delay: 92.628 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 111.91 Mbit/s
95th percentile per-packet one-way delay: 90.961 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 70.55 Mbit/s
95th percentile per-packet one-way delay: 97.483 ms
Loss rate: 0.03%
```
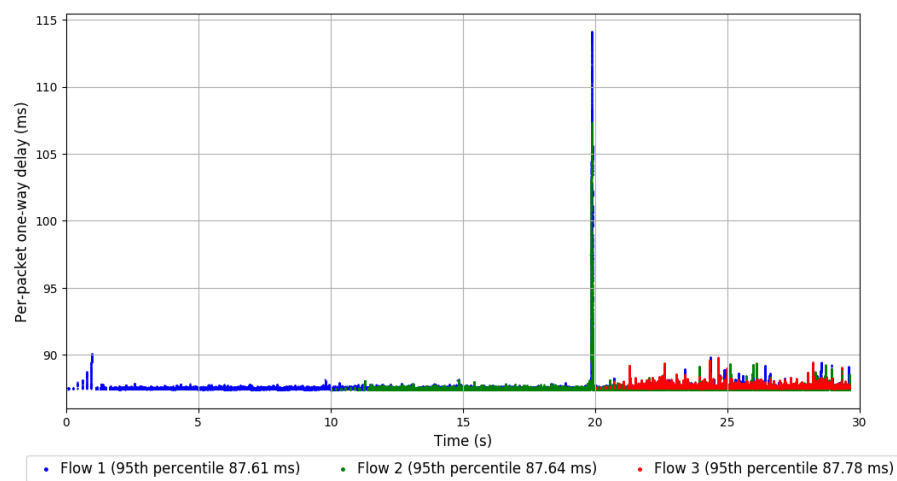
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 122.03 Mbit/s) --- Flow 1 egress (mean 122.02 Mbit/s)
Flow 2 ingress (mean 111.92 Mbit/s) --- Flow 2 egress (mean 111.91 Mbit/s)
Flow 3 ingress (mean 70.58 Mbit/s) --- Flow 3 egress (mean 70.55 Mbit/s)

Flow 1 (95th percentile 92.63 ms)   Flow 2 (95th percentile 90.96 ms)   Flow 3 (95th percentile 97.48 ms)
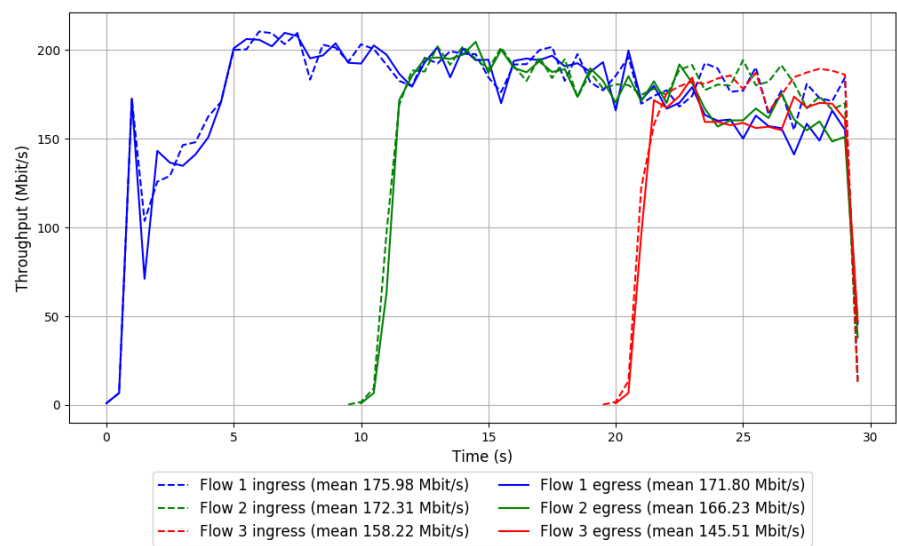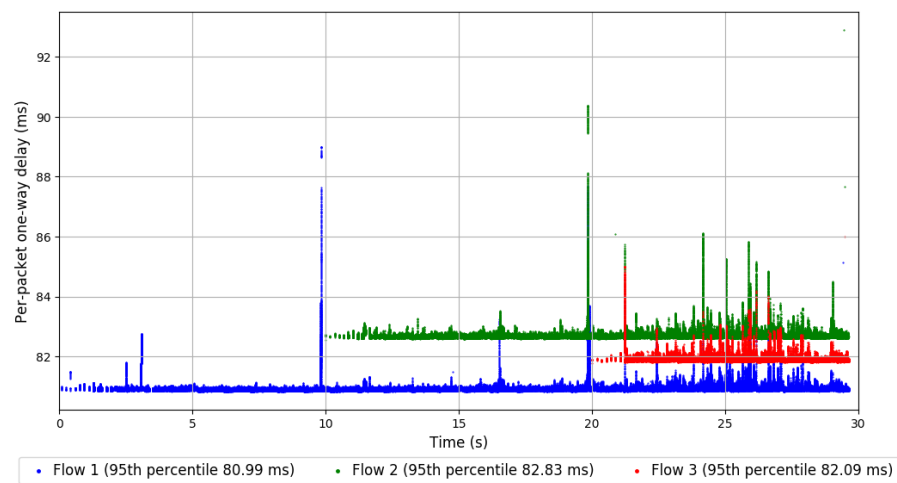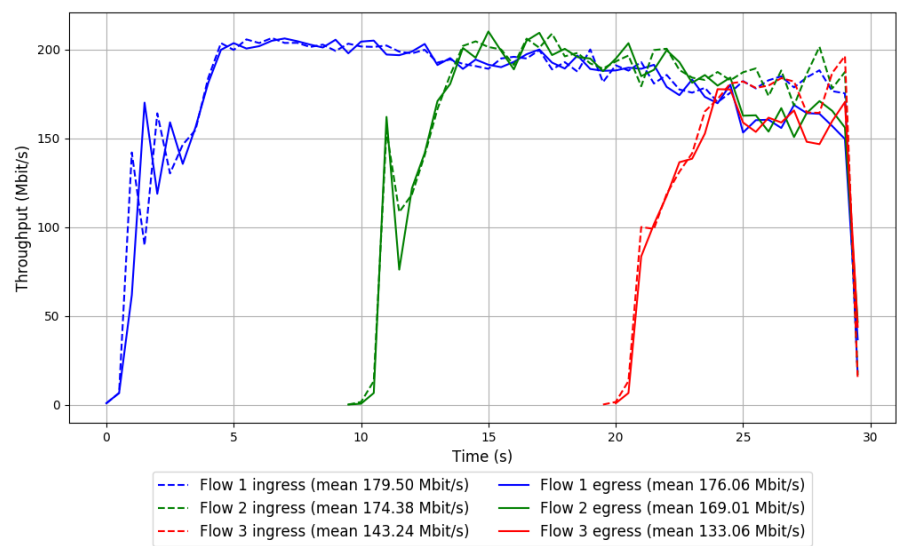
```
Run 1: Statistics of Indigo

Start at: 2017-09-18 03:10:59
End at: 2017-09-18 03:11:29
Local clock offset: -1.444 ms
Remote clock offset: -3.649 ms


# Below is generated by plot.py at 2017-09-18 08:20:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.43 Mbit/s
95th percentile per-packet one-way delay: 87.051 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 174.76 Mbit/s
95th percentile per-packet one-way delay: 87.106 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 167.70 Mbit/s
95th percentile per-packet one-way delay: 84.810 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 146.28 Mbit/s
95th percentile per-packet one-way delay: 86.708 ms
Loss rate: 6.40%
```

Run 1: Report of Indigo — Data Link

Flow 1 ingress (mean 177.82 Mbit/s)   Flow 1 egress (mean 174.76 Mbit/s)
Flow 2 ingress (mean 172.53 Mbit/s)   Flow 2 egress (mean 167.70 Mbit/s)
Flow 3 ingress (mean 156.29 Mbit/s)   Flow 3 egress (mean 146.28 Mbit/s)

Flow 1 (95th percentile 87.11 ms)   Flow 2 (95th percentile 84.81 ms)   Flow 3 (95th percentile 86.71 ms)

```
Run 2: Statistics of Indigo

Start at: 2017-09-18 03:33:01
End at: 2017-09-18 03:33:31
Local clock offset: -1.236 ms
Remote clock offset: -2.977 ms


# Below is generated by plot.py at 2017-09-18 08:20:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.27 Mbit/s
95th percentile per-packet one-way delay: 87.668 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 171.80 Mbit/s
95th percentile per-packet one-way delay: 87.612 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 166.23 Mbit/s
95th percentile per-packet one-way delay: 87.635 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 145.51 Mbit/s
95th percentile per-packet one-way delay: 87.778 ms
Loss rate: 8.03%
```
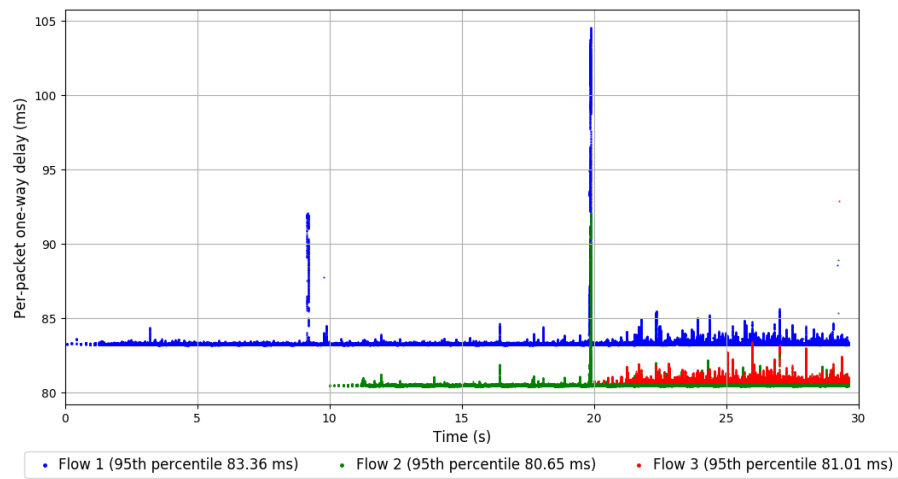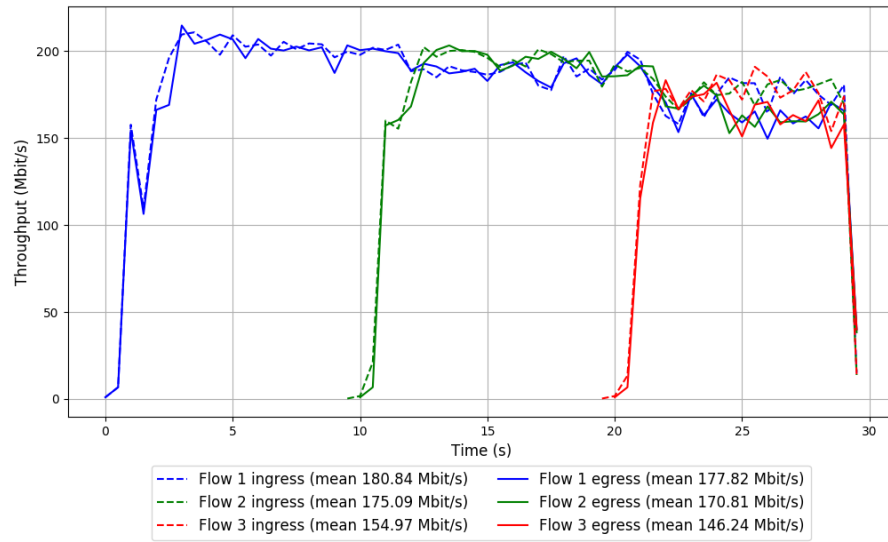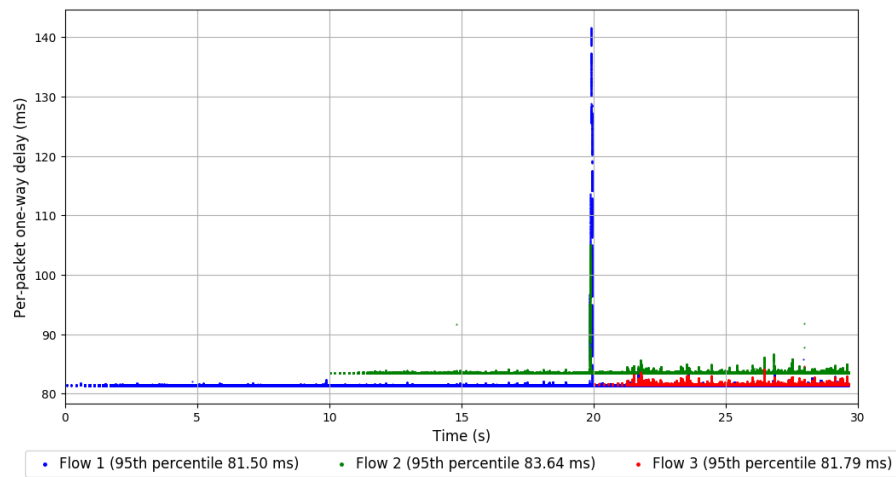
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 175.98 Mbit/s) — Flow 1 egress (mean 171.80 Mbit/s)
Flow 2 ingress (mean 172.31 Mbit/s) — Flow 2 egress (mean 166.23 Mbit/s)
Flow 3 ingress (mean 158.22 Mbit/s) — Flow 3 egress (mean 145.51 Mbit/s)

Flow 1 (95th percentile 87.61 ms)   Flow 2 (95th percentile 87.64 ms)   Flow 3 (95th percentile 87.78 ms)

```
Run 3: Statistics of Indigo

Start at: 2017-09-18 03:55:05
End at: 2017-09-18 03:55:35
Local clock offset: -1.138 ms
Remote clock offset: -7.435 ms


# Below is generated by plot.py at 2017-09-18 08:20:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.68 Mbit/s
95th percentile per-packet one-way delay: 82.714 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 176.06 Mbit/s
95th percentile per-packet one-way delay: 80.993 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 169.01 Mbit/s
95th percentile per-packet one-way delay: 82.828 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 133.06 Mbit/s
95th percentile per-packet one-way delay: 82.092 ms
Loss rate: 7.11%
```
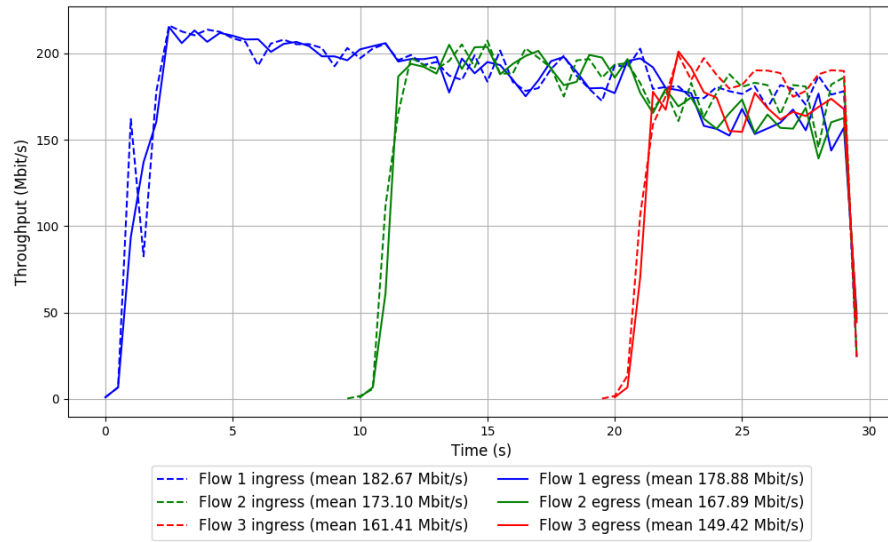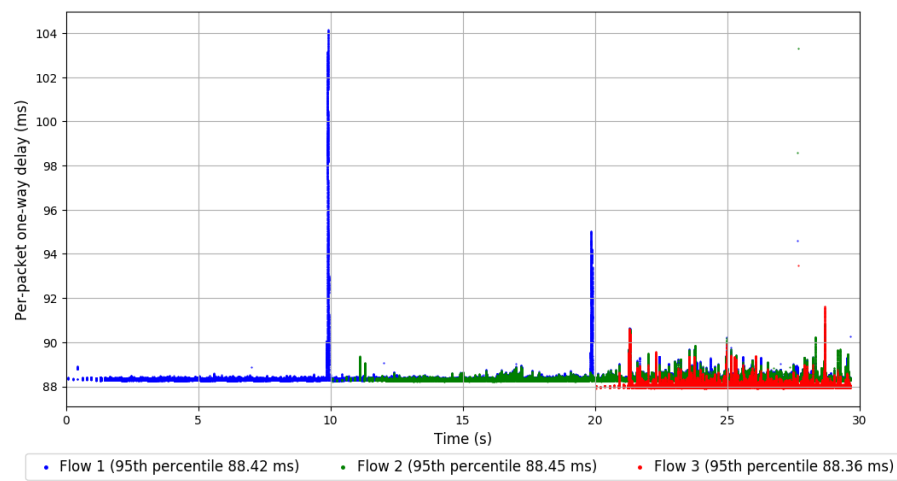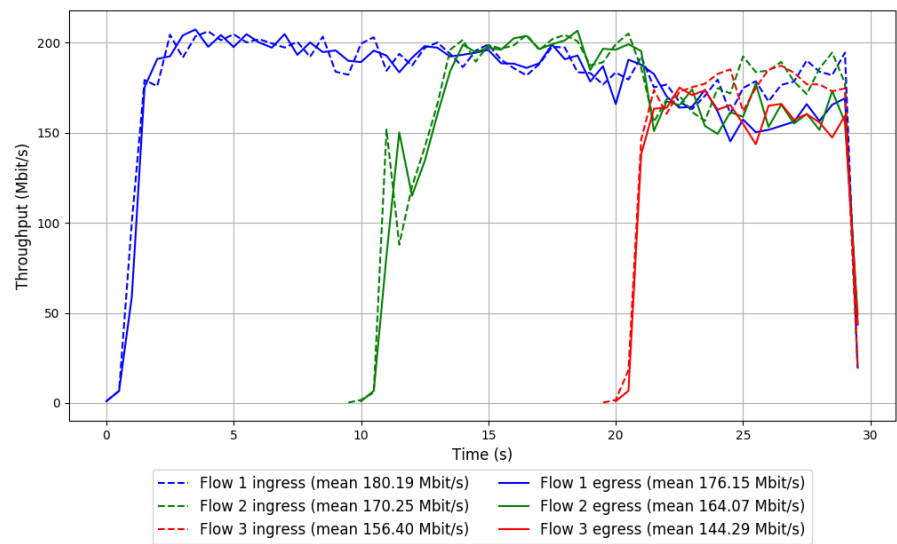
Run 3: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 179.50 Mbit/s) —— Flow 1 egress (mean 176.06 Mbit/s)
- - - Flow 2 ingress (mean 174.38 Mbit/s) —— Flow 2 egress (mean 169.01 Mbit/s)
- - - Flow 3 ingress (mean 143.24 Mbit/s) —— Flow 3 egress (mean 133.06 Mbit/s)

• Flow 1 (95th percentile 80.99 ms)   • Flow 2 (95th percentile 82.83 ms)   • Flow 3 (95th percentile 82.09 ms)

89

```
Run 4: Statistics of Indigo

Start at: 2017-09-18 04:16:49
End at: 2017-09-18 04:17:19
Local clock offset: -0.843 ms
Remote clock offset: -7.843 ms

# Below is generated by plot.py at 2017-09-18 08:21:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.88 Mbit/s
95th percentile per-packet one-way delay: 83.303 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 177.82 Mbit/s
95th percentile per-packet one-way delay: 83.356 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 170.81 Mbit/s
95th percentile per-packet one-way delay: 80.651 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 146.24 Mbit/s
95th percentile per-packet one-way delay: 81.012 ms
Loss rate: 5.68%
```
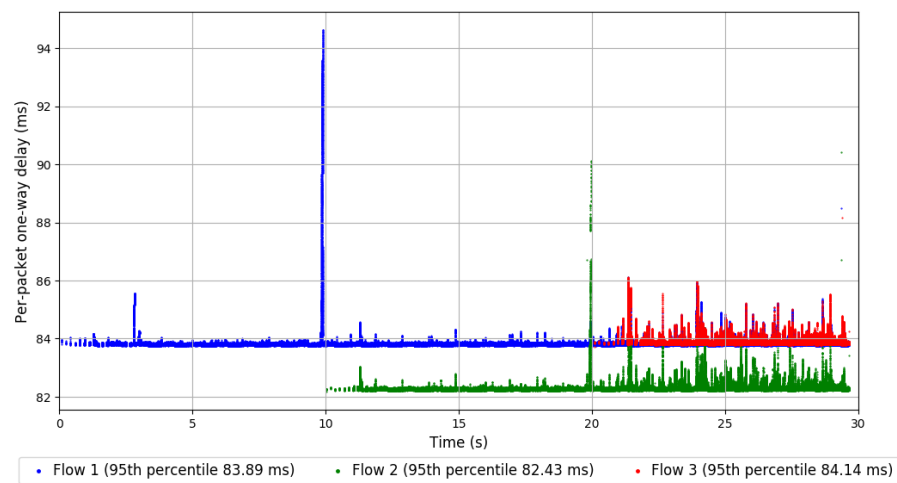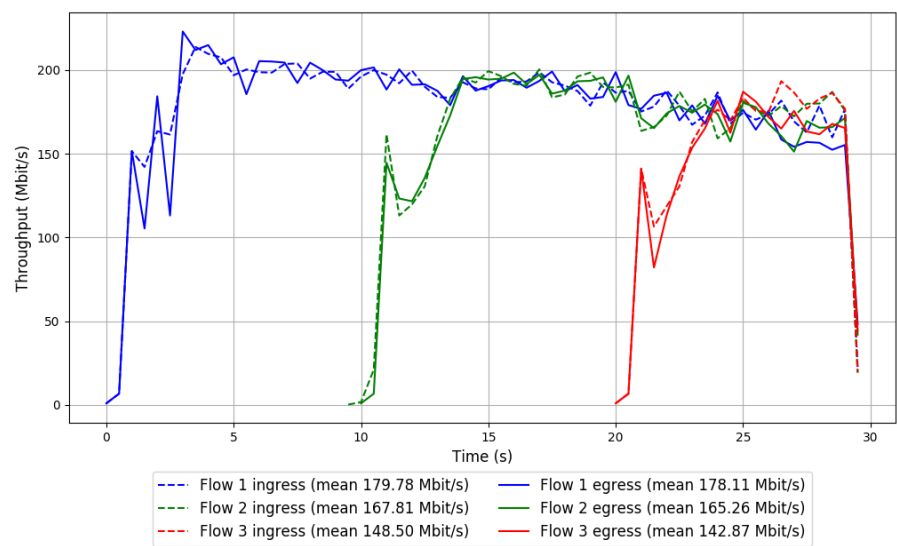
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-09-18 04:38:35
End at: 2017-09-18 04:39:06
Local clock offset: -0.572 ms
Remote clock offset: -6.961 ms


# Below is generated by plot.py at 2017-09-18 08:22:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.72 Mbit/s
95th percentile per-packet one-way delay: 83.551 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 178.88 Mbit/s
95th percentile per-packet one-way delay: 81.497 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 167.89 Mbit/s
95th percentile per-packet one-way delay: 83.638 ms
Loss rate: 3.04%
-- Flow 3:
Average throughput: 149.42 Mbit/s
95th percentile per-packet one-way delay: 81.786 ms
Loss rate: 7.43%
```

Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2017-09-18 05:00:34
End at: 2017-09-18 05:01:04
Local clock offset: -0.277 ms
Remote clock offset: -2.551 ms


# Below is generated by plot.py at 2017-09-18 08:22:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.71 Mbit/s
95th percentile per-packet one-way delay: 88.431 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 176.15 Mbit/s
95th percentile per-packet one-way delay: 88.425 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 164.07 Mbit/s
95th percentile per-packet one-way delay: 88.446 ms
Loss rate: 3.64%
-- Flow 3:
Average throughput: 144.29 Mbit/s
95th percentile per-packet one-way delay: 88.362 ms
Loss rate: 7.74%
```
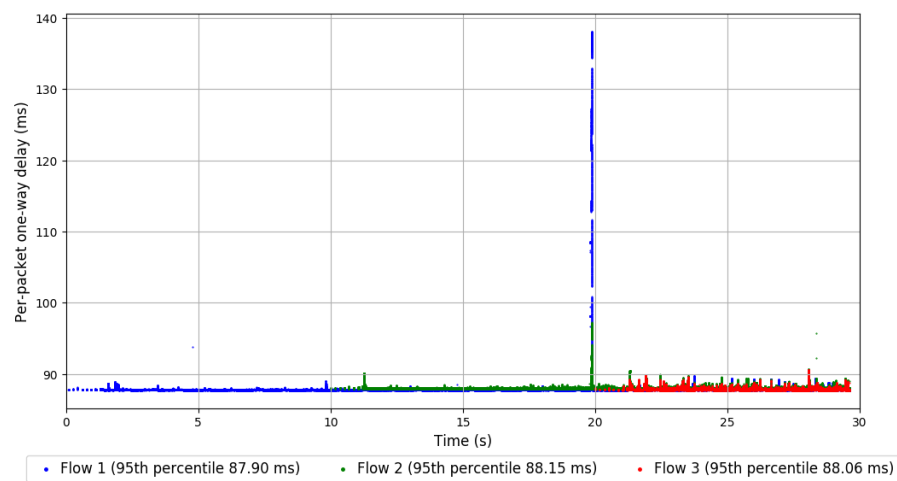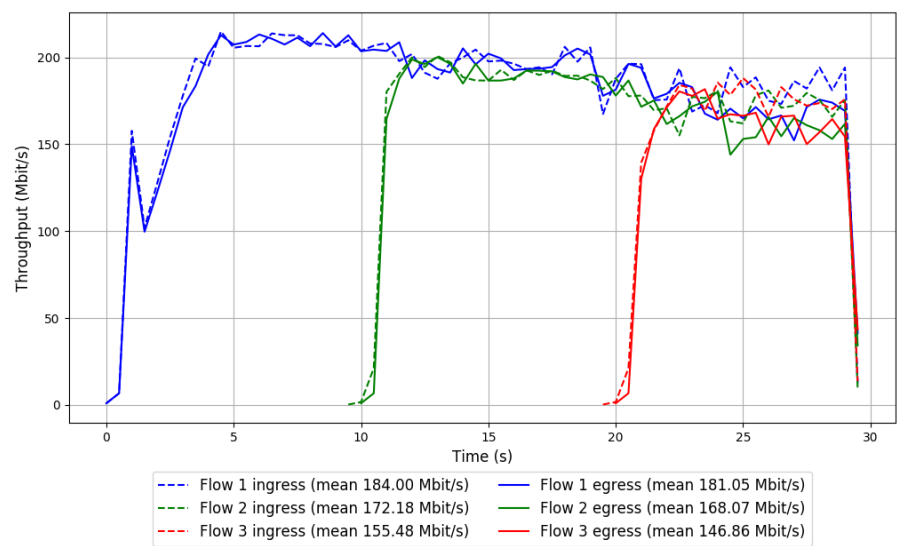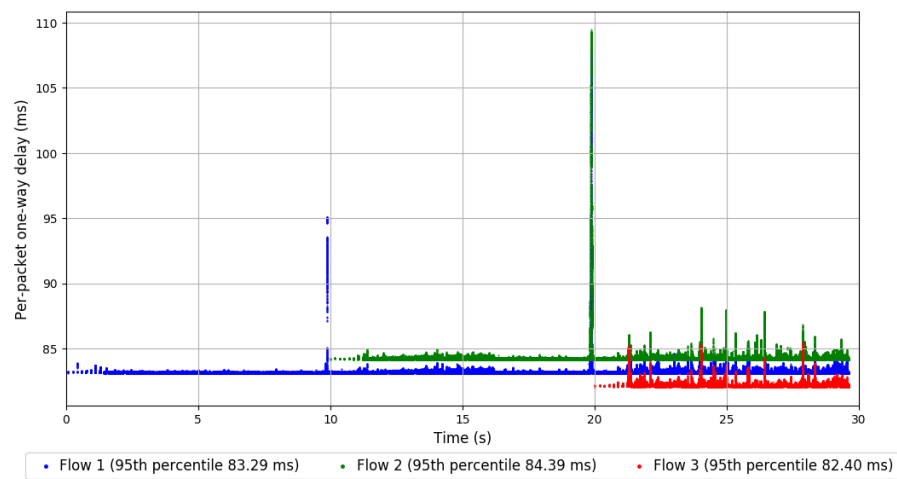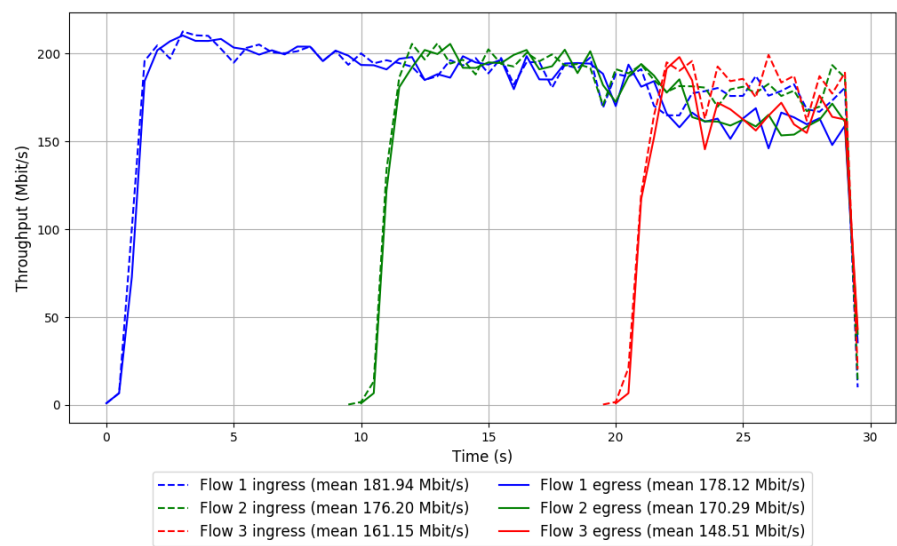
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2017-09-18 05:22:16
End at: 2017-09-18 05:22:46
Local clock offset: -0.044 ms
Remote clock offset: -7.143 ms

# Below is generated by plot.py at 2017-09-18 08:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.92 Mbit/s
95th percentile per-packet one-way delay: 83.902 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 178.11 Mbit/s
95th percentile per-packet one-way delay: 83.891 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 165.26 Mbit/s
95th percentile per-packet one-way delay: 82.434 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 142.87 Mbit/s
95th percentile per-packet one-way delay: 84.142 ms
Loss rate: 3.79%
```

Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2017-09-18 05:44:07
End at: 2017-09-18 05:44:37
Local clock offset: 0.03 ms
Remote clock offset: -3.04 ms


# Below is generated by plot.py at 2017-09-18 08:23:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.54 Mbit/s
95th percentile per-packet one-way delay: 88.043 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 181.05 Mbit/s
95th percentile per-packet one-way delay: 87.897 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 168.07 Mbit/s
95th percentile per-packet one-way delay: 88.148 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 146.86 Mbit/s
95th percentile per-packet one-way delay: 88.056 ms
Loss rate: 5.53%
```
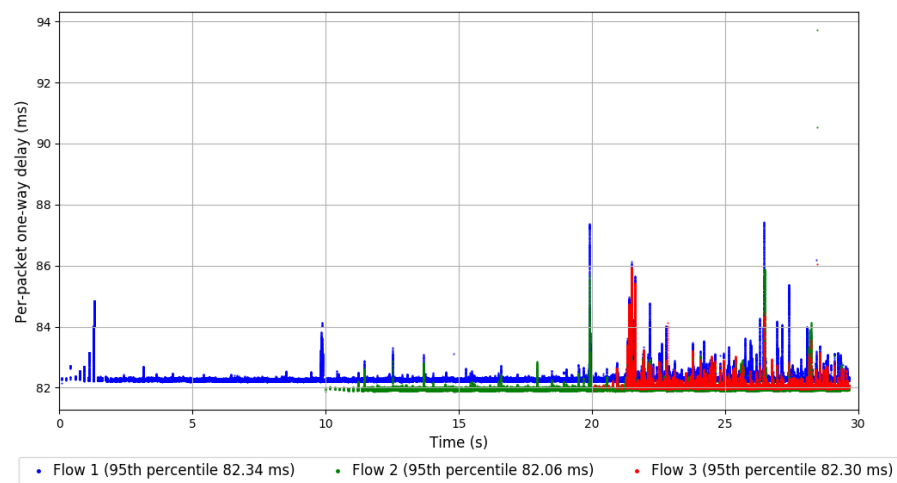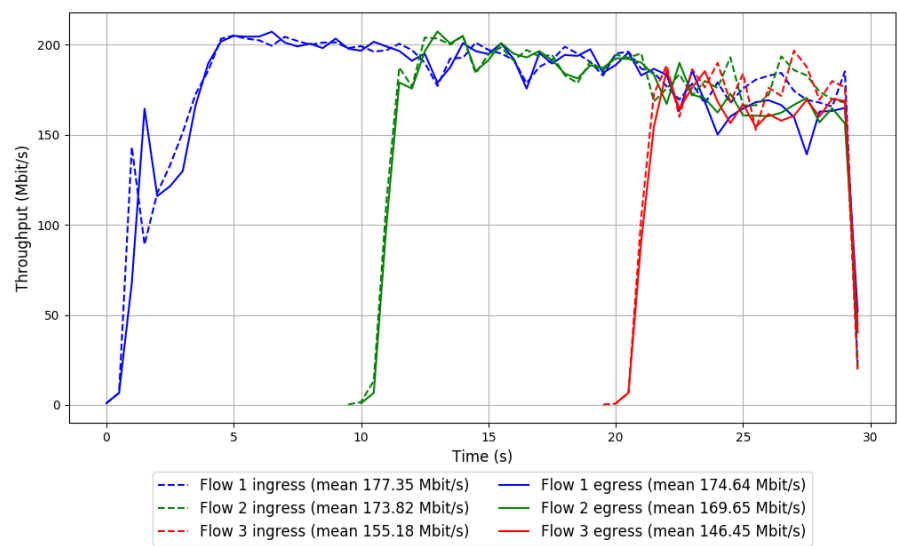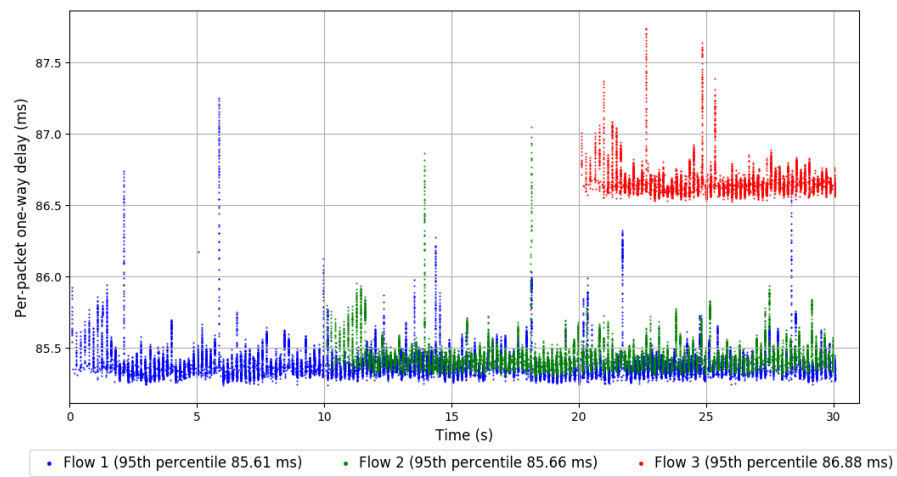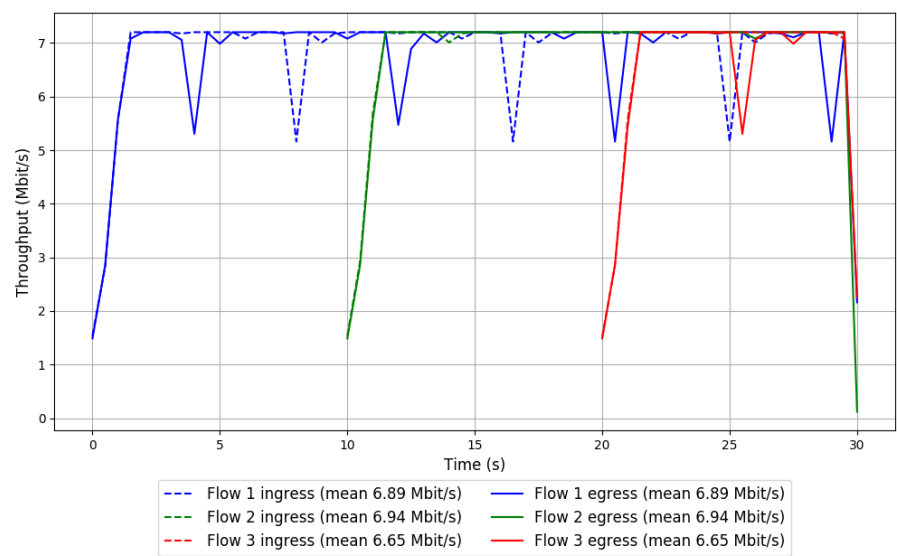
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 184.00 Mbit/s) --- Flow 1 egress (mean 181.05 Mbit/s)
Flow 2 ingress (mean 172.18 Mbit/s) --- Flow 2 egress (mean 168.07 Mbit/s)
Flow 3 ingress (mean 155.48 Mbit/s) --- Flow 3 egress (mean 146.86 Mbit/s)

Flow 1 (95th percentile 87.90 ms)   Flow 2 (95th percentile 88.15 ms)   Flow 3 (95th percentile 88.06 ms)

```
Run 9: Statistics of Indigo

Start at: 2017-09-18 06:05:53
End at: 2017-09-18 06:06:23
Local clock offset: 0.176 ms
Remote clock offset: -6.086 ms


# Below is generated by plot.py at 2017-09-18 08:25:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.47 Mbit/s
95th percentile per-packet one-way delay: 84.257 ms
Loss rate: 3.38%
-- Flow 1:
Average throughput: 178.12 Mbit/s
95th percentile per-packet one-way delay: 83.291 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 170.29 Mbit/s
95th percentile per-packet one-way delay: 84.391 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 148.51 Mbit/s
95th percentile per-packet one-way delay: 82.400 ms
Loss rate: 7.84%
```
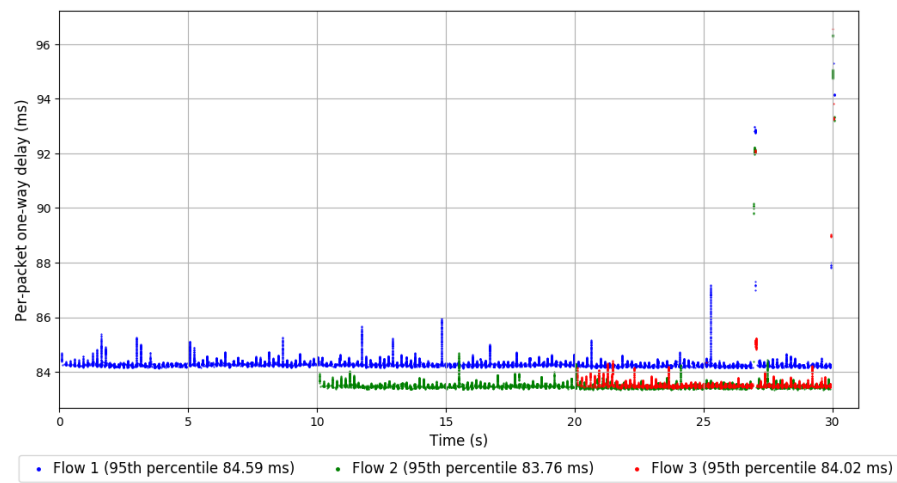
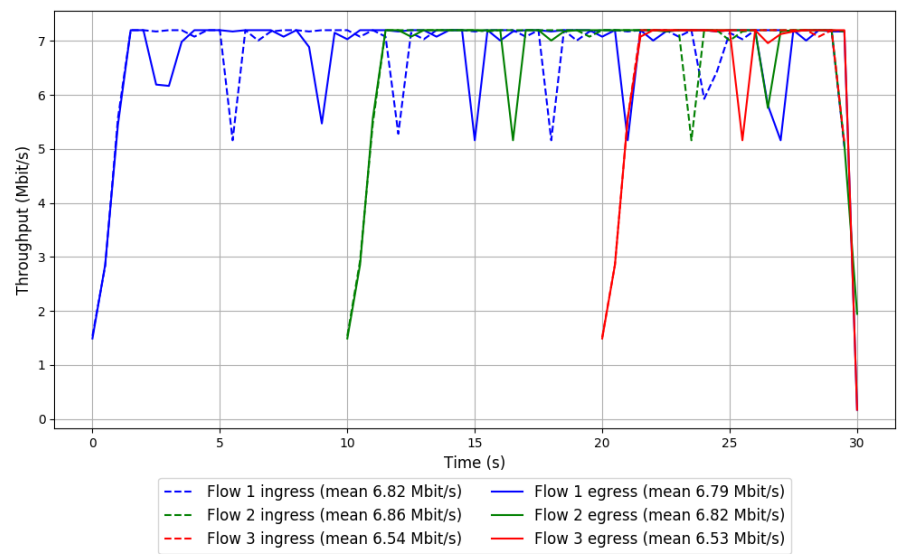# Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-09-18 06:27:49
End at: 2017-09-18 06:28:19
Local clock offset: 0.297 ms
Remote clock offset: -6.24 ms

# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.71 Mbit/s
95th percentile per-packet one-way delay: 82.319 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 174.64 Mbit/s
95th percentile per-packet one-way delay: 82.345 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 169.65 Mbit/s
95th percentile per-packet one-way delay: 82.061 ms
Loss rate: 2.40%
-- Flow 3:
Average throughput: 146.45 Mbit/s
95th percentile per-packet one-way delay: 82.303 ms
Loss rate: 5.62%
```

Run 10: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 177.35 Mbit/s) ——— Flow 1 egress (mean 174.64 Mbit/s)
- - - - Flow 2 ingress (mean 173.82 Mbit/s) ——— Flow 2 egress (mean 169.65 Mbit/s)
- - - - Flow 3 ingress (mean 155.18 Mbit/s) ——— Flow 3 egress (mean 146.45 Mbit/s)

- Flow 1 (95th percentile 82.34 ms)   • Flow 2 (95th percentile 82.06 ms)   • Flow 3 (95th percentile 82.30 ms)

```
Run 1: Statistics of KohoCC

Start at: 2017-09-18 03:22:17
End at: 2017-09-18 03:22:47
Local clock offset: -1.348 ms
Remote clock offset: -3.3 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.71 Mbit/s
95th percentile per-packet one-way delay: 86.680 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 85.606 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 85.655 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.00%
```
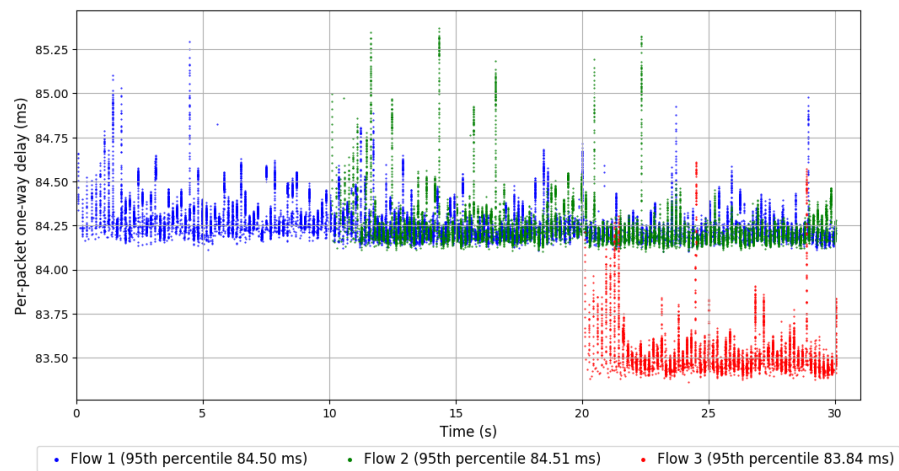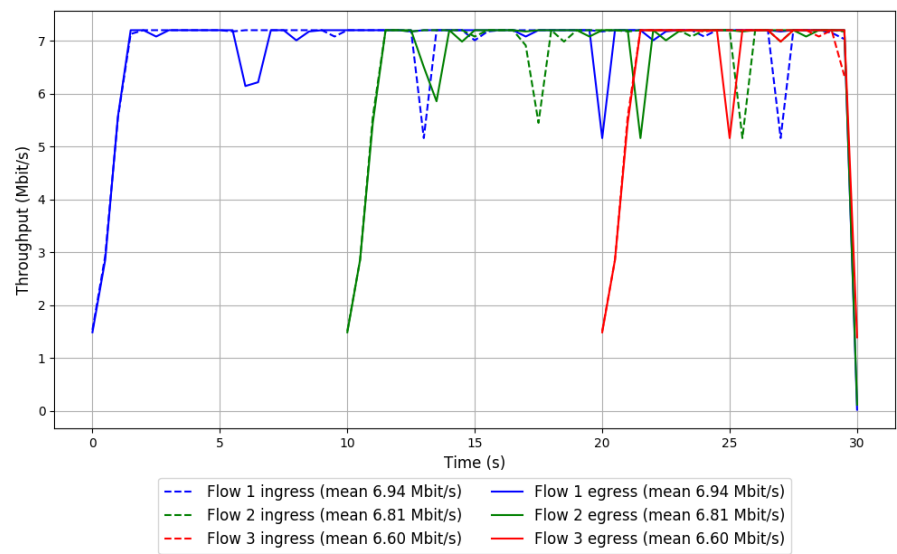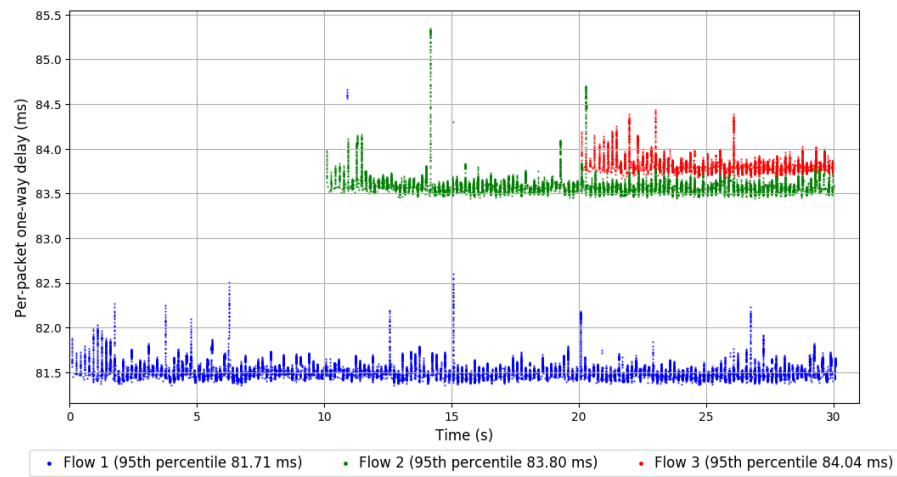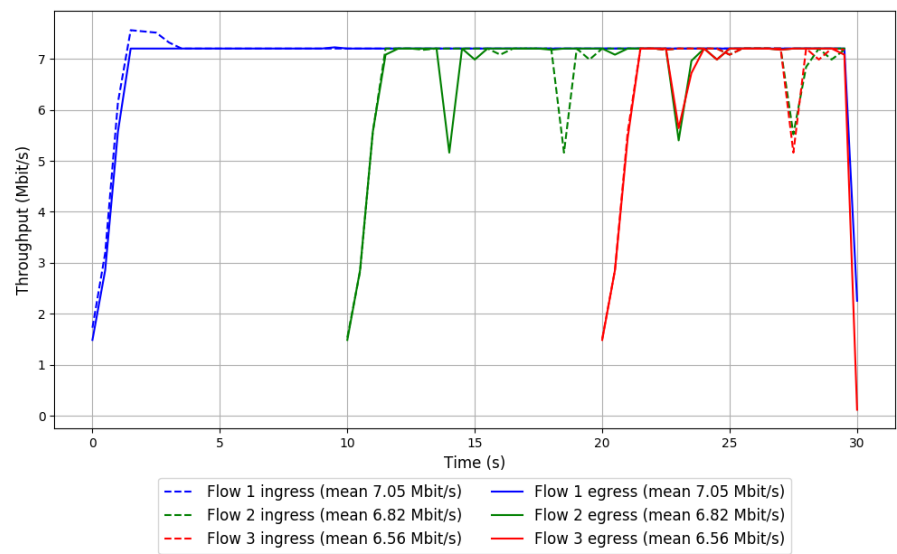
Run 1: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.89 Mbit/s) ---- Flow 1 egress (mean 6.89 Mbit/s)
Flow 2 ingress (mean 6.94 Mbit/s) ---- Flow 2 egress (mean 6.94 Mbit/s)
Flow 3 ingress (mean 6.65 Mbit/s) ---- Flow 3 egress (mean 6.65 Mbit/s)

• Flow 1 (95th percentile 85.61 ms)   • Flow 2 (95th percentile 85.66 ms)   • Flow 3 (95th percentile 86.88 ms)

```
Run 2: Statistics of KohoCC

Start at: 2017-09-18 03:44:09
End at: 2017-09-18 03:44:39
Local clock offset: -1.142 ms
Remote clock offset: -6.778 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.50 Mbit/s
95th percentile per-packet one-way delay: 84.494 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 84.587 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 83.756 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 84.016 ms
Loss rate: 0.09%
```
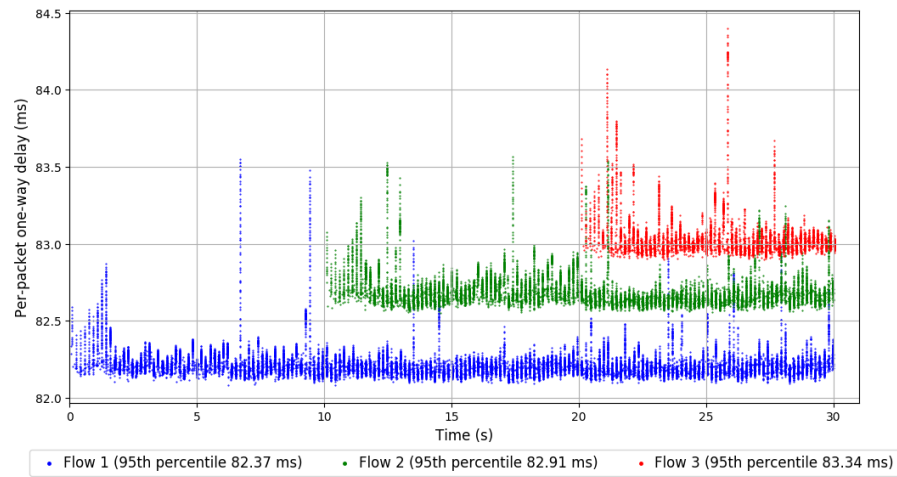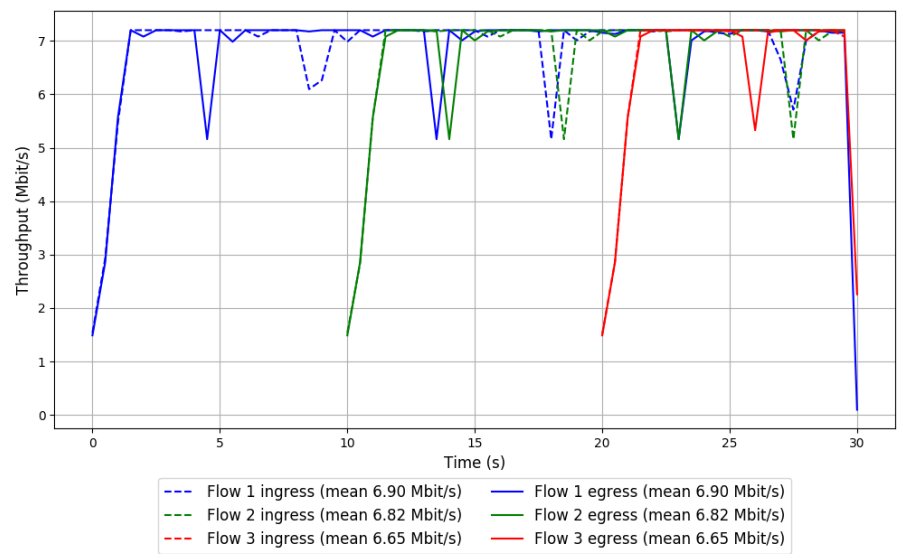
Run 2: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.82 Mbit/s)   Flow 1 egress (mean 6.79 Mbit/s)
Flow 2 ingress (mean 6.86 Mbit/s)   Flow 2 egress (mean 6.82 Mbit/s)
Flow 3 ingress (mean 6.54 Mbit/s)   Flow 3 egress (mean 6.53 Mbit/s)

Flow 1 (95th percentile 84.59 ms)   Flow 2 (95th percentile 83.76 ms)   Flow 3 (95th percentile 84.02 ms)

```
Run 3: Statistics of KohoCC

Start at: 2017-09-18 04:06:11
End at: 2017-09-18 04:06:41
Local clock offset: -0.93 ms
Remote clock offset: -6.137 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 84.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 84.504 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 84.511 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 83.837 ms
Loss rate: 0.00%
```
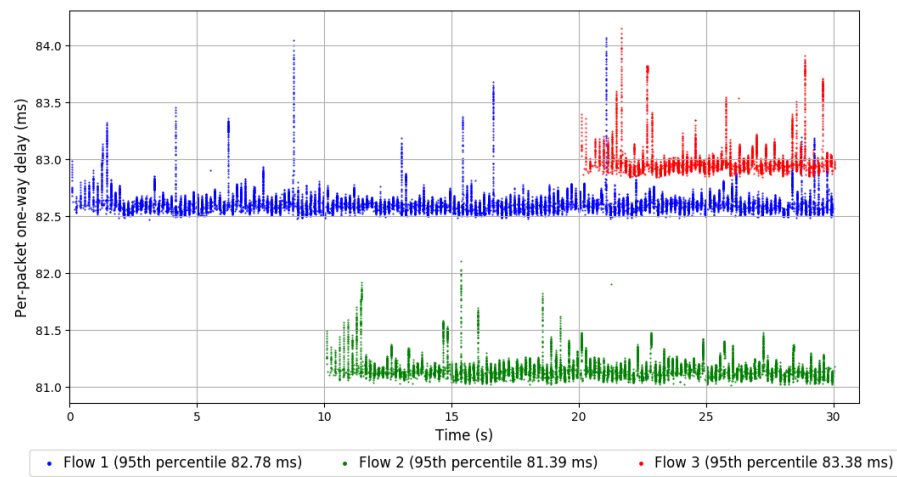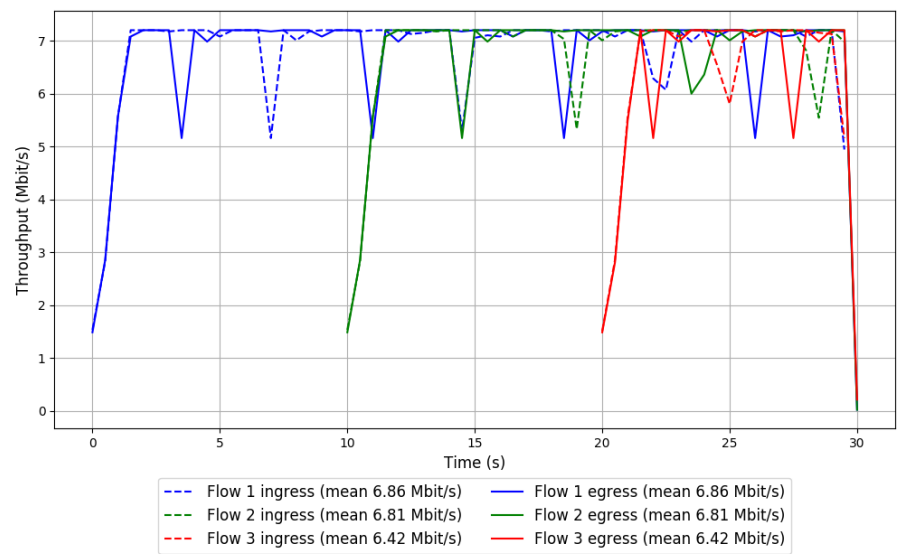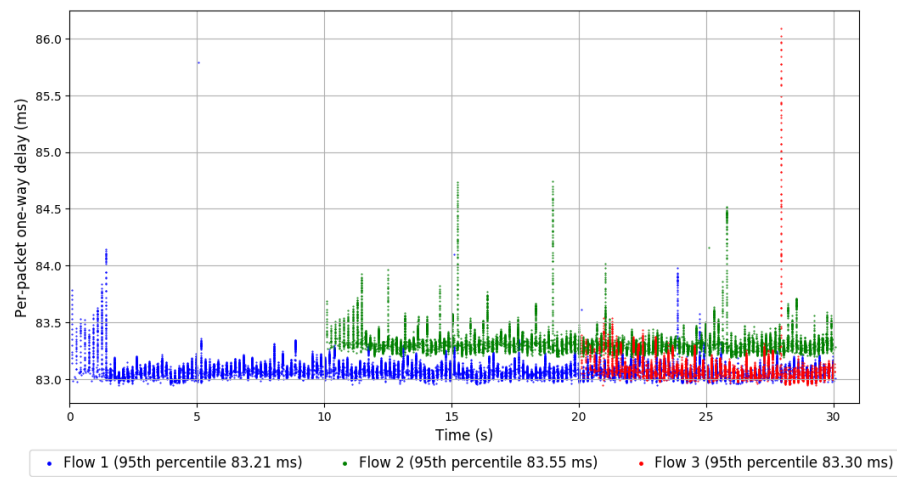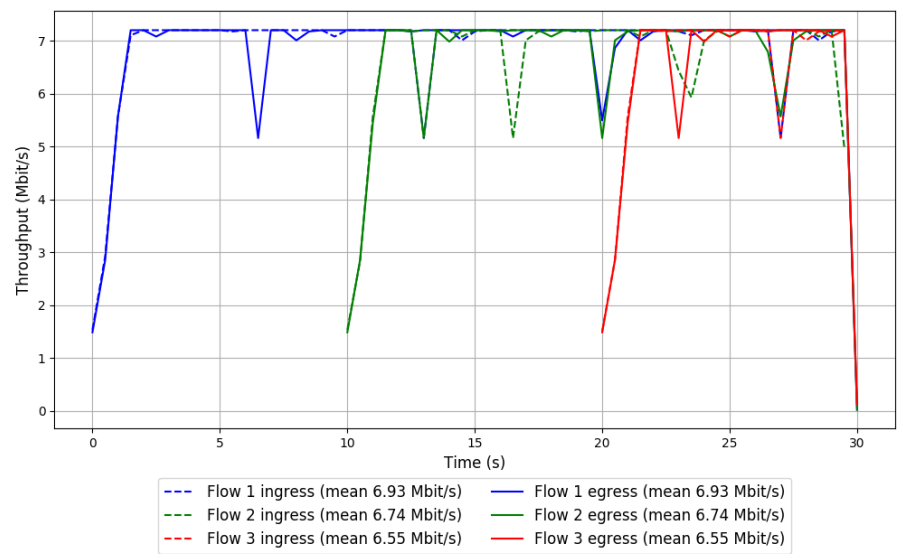
Run 3: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.94 Mbit/s) --- Flow 1 egress (mean 6.94 Mbit/s)
Flow 2 ingress (mean 6.81 Mbit/s) --- Flow 2 egress (mean 6.81 Mbit/s)
Flow 3 ingress (mean 6.60 Mbit/s) --- Flow 3 egress (mean 6.60 Mbit/s)

Flow 1 (95th percentile 84.50 ms) Flow 2 (95th percentile 84.51 ms) Flow 3 (95th percentile 83.84 ms)

```
Run 4: Statistics of KohoCC

Start at: 2017-09-18 04:27:57
End at: 2017-09-18 04:28:27
Local clock offset: -0.72 ms
Remote clock offset: -6.831 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 83.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 81.706 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 83.795 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 84.037 ms
Loss rate: 0.00%
```
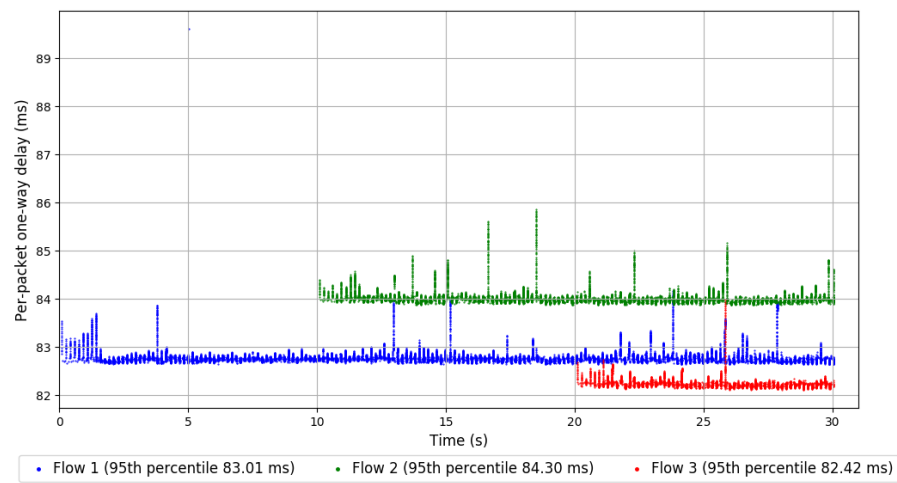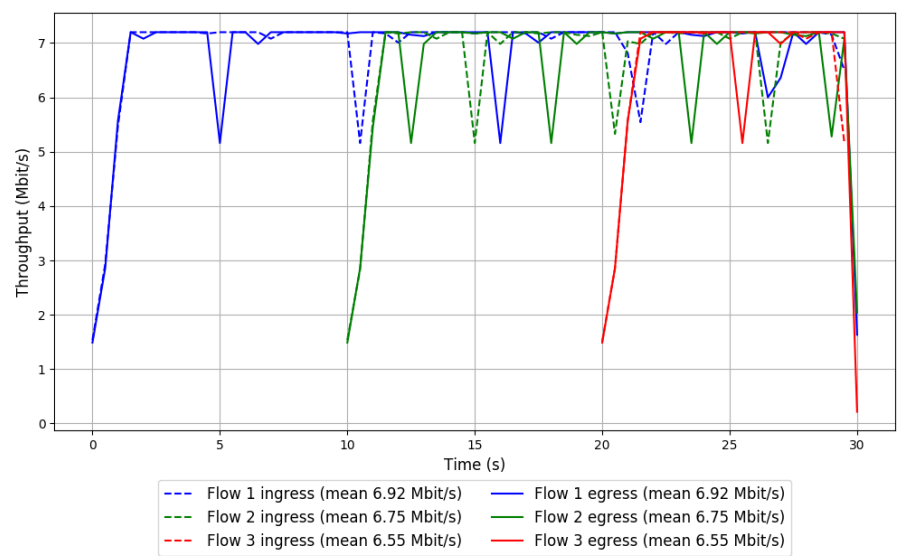
Run 4: Report of KohoCC — Data Link

Flow 1 ingress (mean 7.05 Mbit/s) --- Flow 1 egress (mean 7.05 Mbit/s)
Flow 2 ingress (mean 6.82 Mbit/s) --- Flow 2 egress (mean 6.82 Mbit/s)
Flow 3 ingress (mean 6.56 Mbit/s) --- Flow 3 egress (mean 6.56 Mbit/s)

• Flow 1 (95th percentile 81.71 ms)   • Flow 2 (95th percentile 83.80 ms)   • Flow 3 (95th percentile 84.04 ms)

```
Run 5: Statistics of KohoCC

Start at: 2017-09-18 04:49:38
End at: 2017-09-18 04:50:08
Local clock offset: -0.406 ms
Remote clock offset: -7.725 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 83.059 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 82.374 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 82.905 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 83.337 ms
Loss rate: 0.00%
```
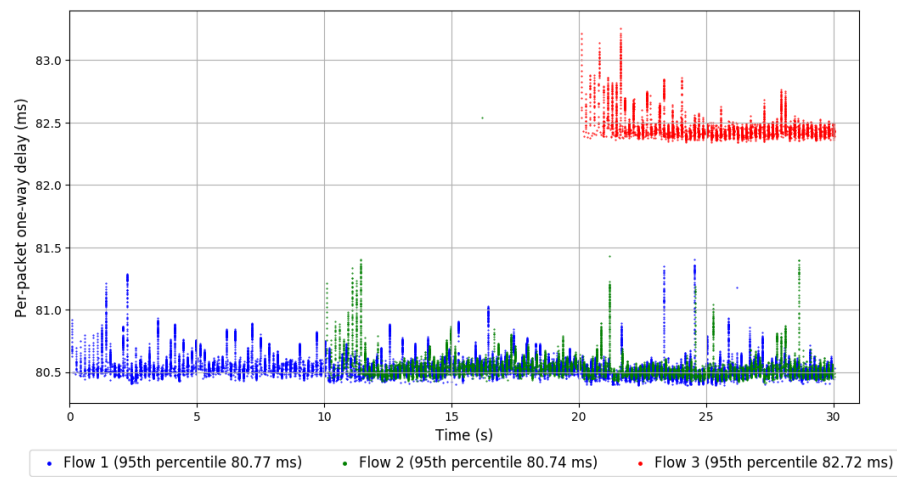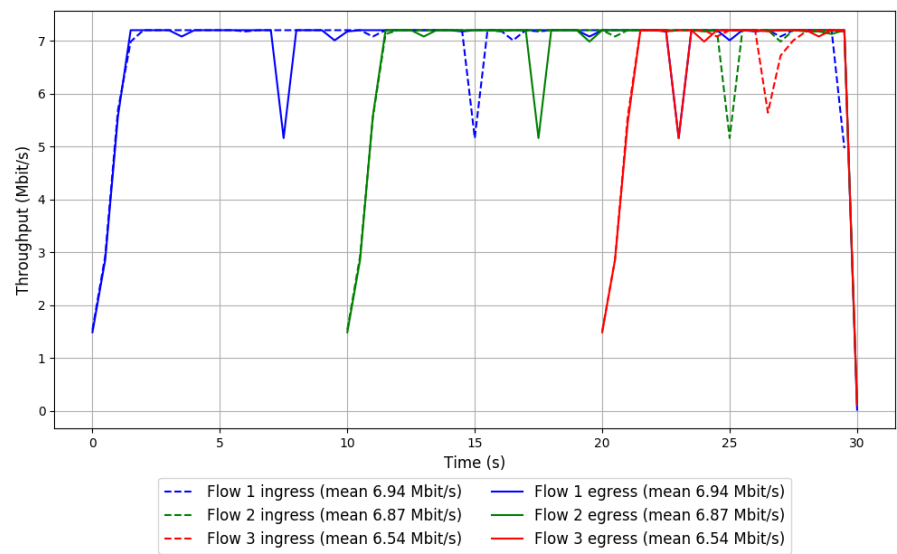
Run 5: Report of KohoCC — Data Link

```
Run 6: Statistics of KohoCC

Start at: 2017-09-18 05:11:33
End at: 2017-09-18 05:12:03
Local clock offset: -0.169 ms
Remote clock offset: -8.353 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.52 Mbit/s
95th percentile per-packet one-way delay: 83.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: 82.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 81.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 83.384 ms
Loss rate: 0.00%
```
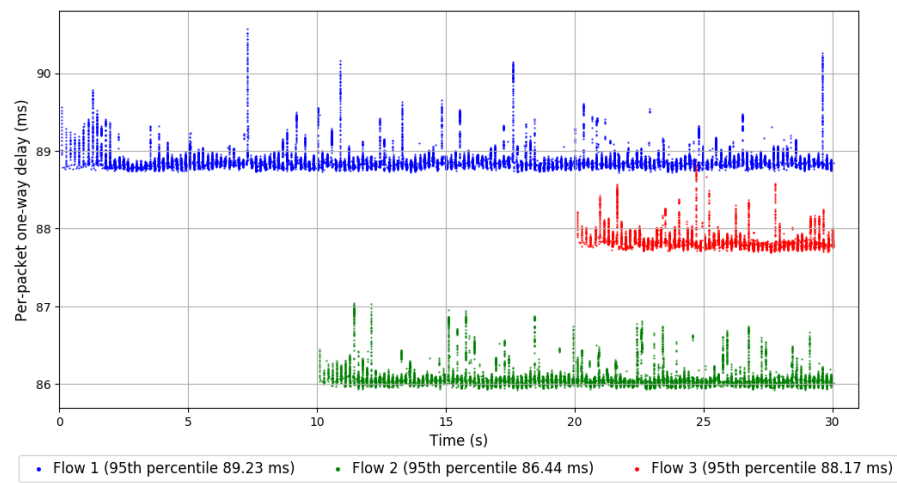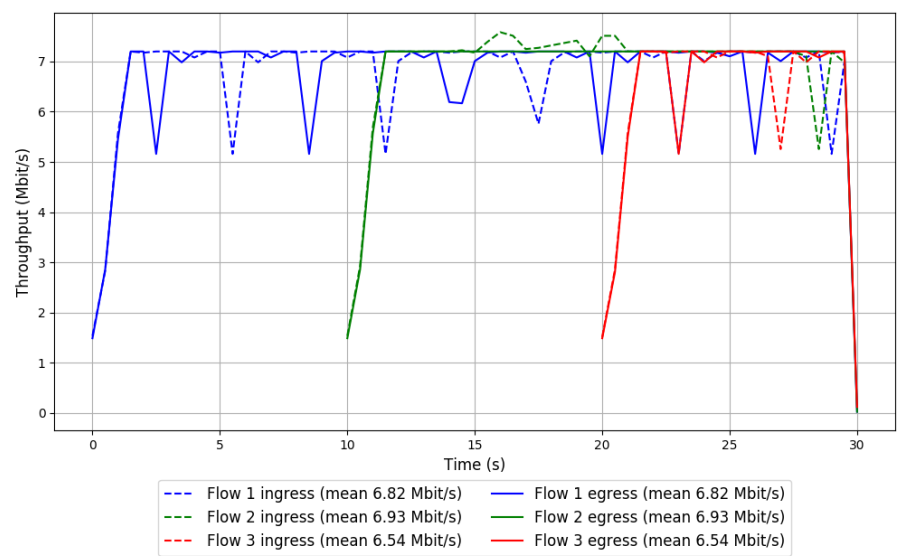
Run 6: Report of KohoCC — Data Link

```
Run 7: Statistics of KohoCC

Start at: 2017-09-18 05:33:26
End at: 2017-09-18 05:33:56
Local clock offset: -0.042 ms
Remote clock offset: -7.979 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 83.418 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 83.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 83.550 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 83.300 ms
Loss rate: 0.00%
```
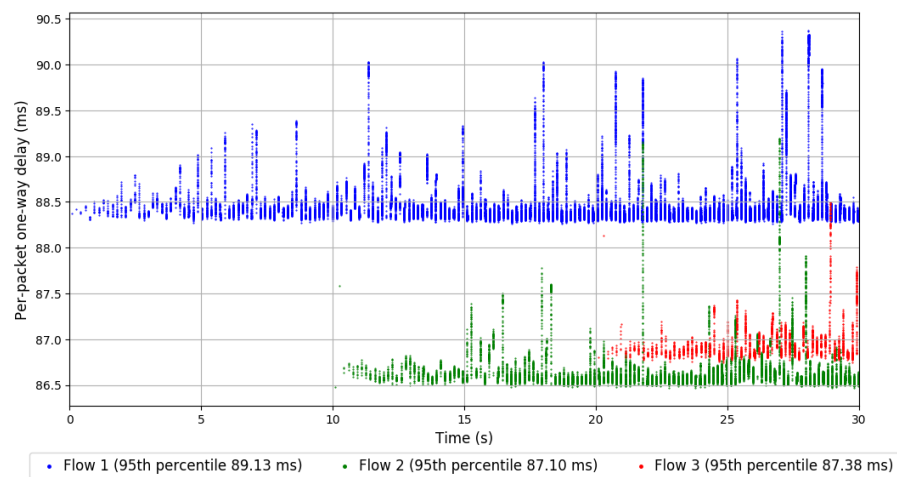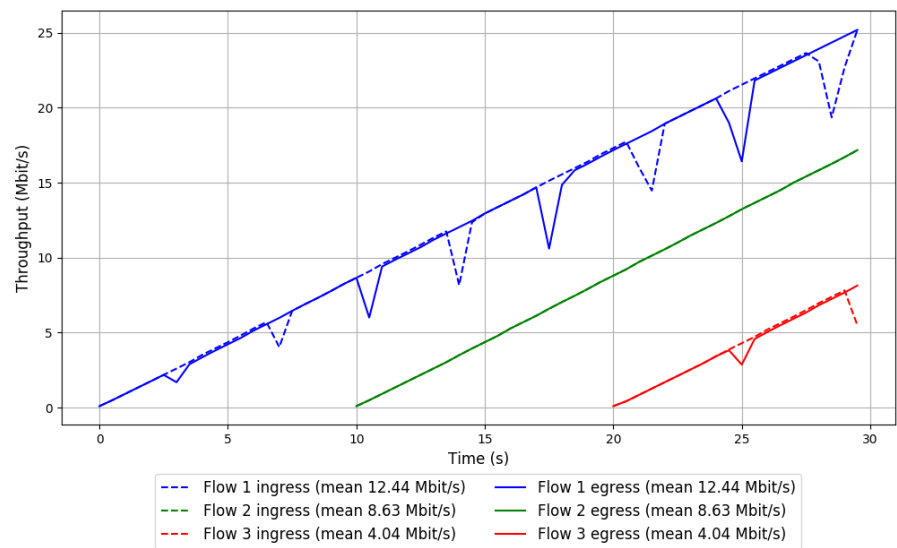
Run 7: Report of KohoCC — Data Link

```
Run 8: Statistics of KohoCC

Start at: 2017-09-18 05:55:12
End at: 2017-09-18 05:55:42
Local clock offset: 0.087 ms
Remote clock offset: -6.791 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.58 Mbit/s
95th percentile per-packet one-way delay: 84.090 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 83.014 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 84.300 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 82.416 ms
Loss rate: 0.00%
```

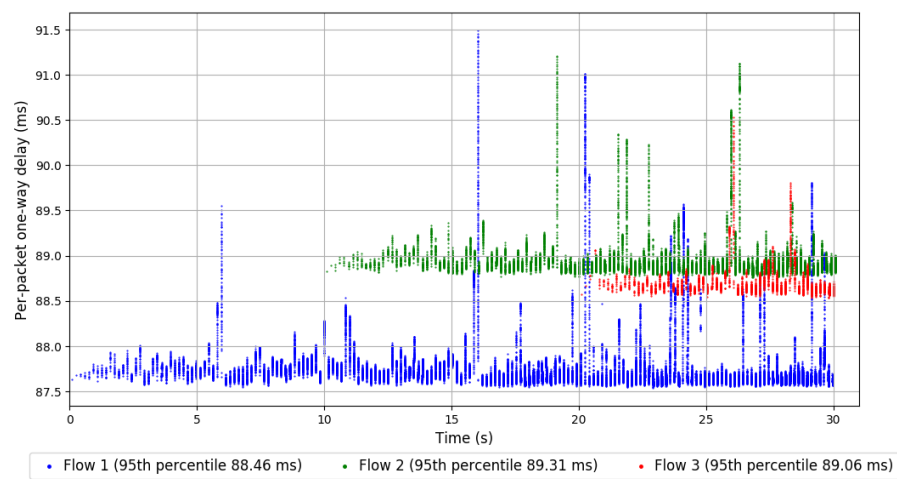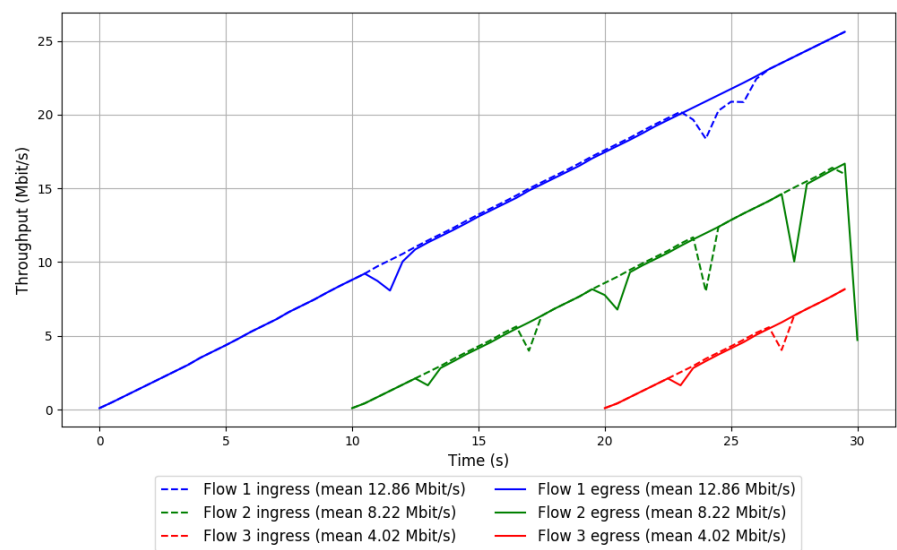## Run 8: Report of KohoCC — Data Link

```
Run 9: Statistics of KohoCC

Start at: 2017-09-18 06:17:05
End at: 2017-09-18 06:17:35
Local clock offset: 0.232 ms
Remote clock offset: -7.532 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.68 Mbit/s
95th percentile per-packet one-way delay: 82.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 80.773 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.87 Mbit/s
95th percentile per-packet one-way delay: 80.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 82.721 ms
Loss rate: 0.00%
```

Run 9: Report of KohoCC — Data Link

```
Run 10: Statistics of KohoCC

Start at: 2017-09-18 06:38:41
End at: 2017-09-18 06:39:11
Local clock offset: 0.172 ms
Remote clock offset: -2.358 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 89.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 89.226 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 86.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 88.171 ms
Loss rate: 0.00%
```

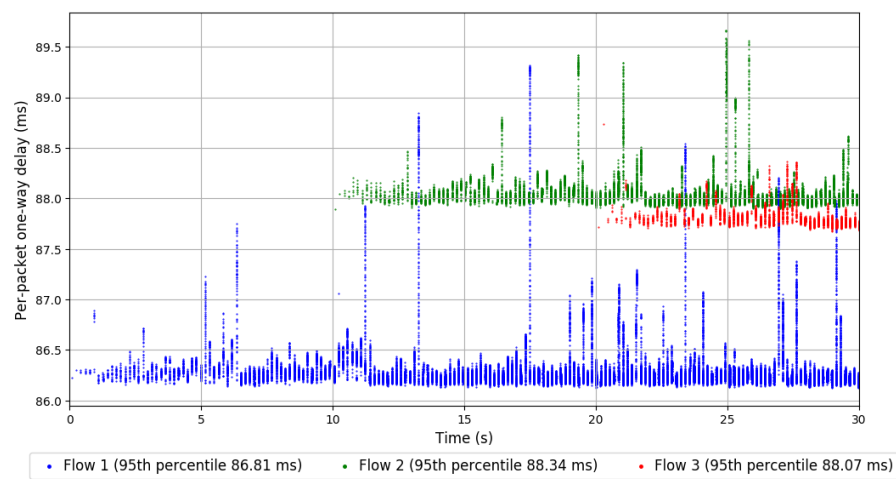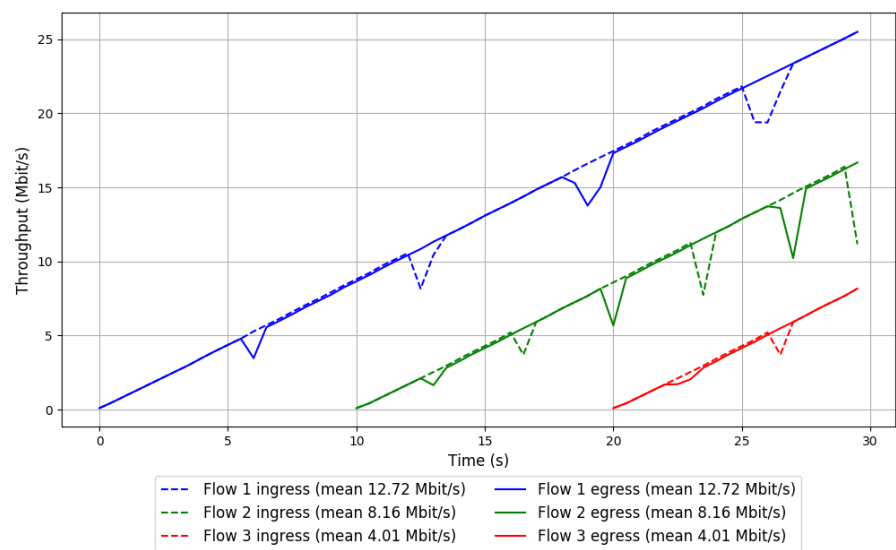# Run 10: Report of KohoCC — Data Link

123

```
Run 1: Statistics of LEDBAT

Start at: 2017-09-18 03:08:30
End at: 2017-09-18 03:09:00
Local clock offset: -1.408 ms
Remote clock offset: -1.782 ms

# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.51 Mbit/s
95th percentile per-packet one-way delay: 88.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 89.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 87.104 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 87.384 ms
Loss rate: 0.00%
```
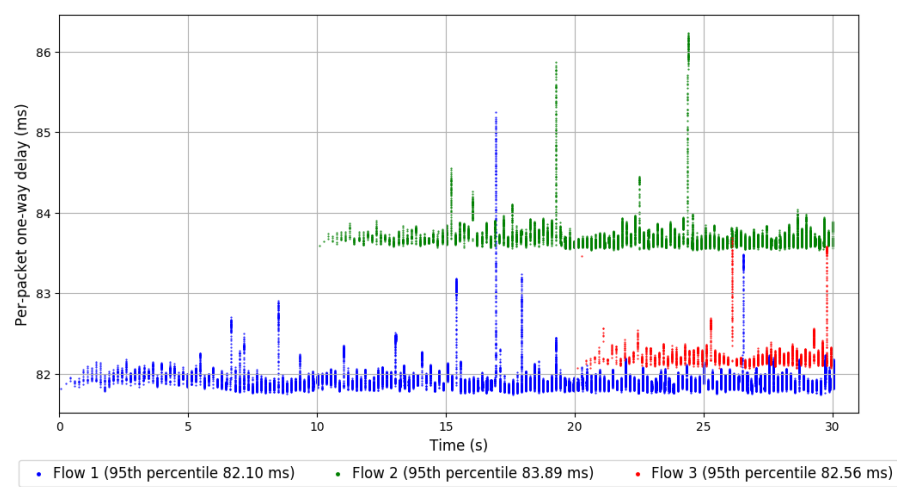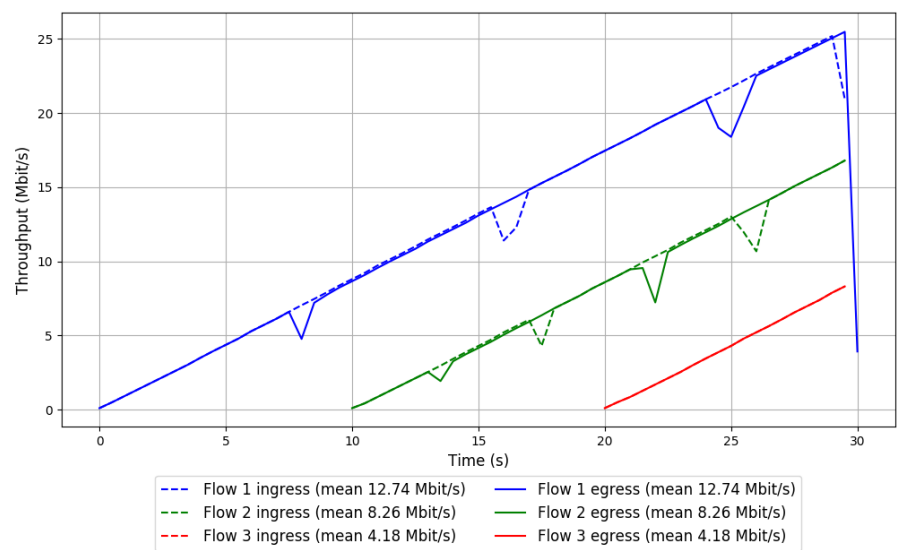
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-09-18 03:30:32
End at: 2017-09-18 03:31:02
Local clock offset: -1.224 ms
Remote clock offset: -1.584 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.62 Mbit/s
95th percentile per-packet one-way delay: 89.062 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 88.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 89.314 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 89.064 ms
Loss rate: 0.00%
```
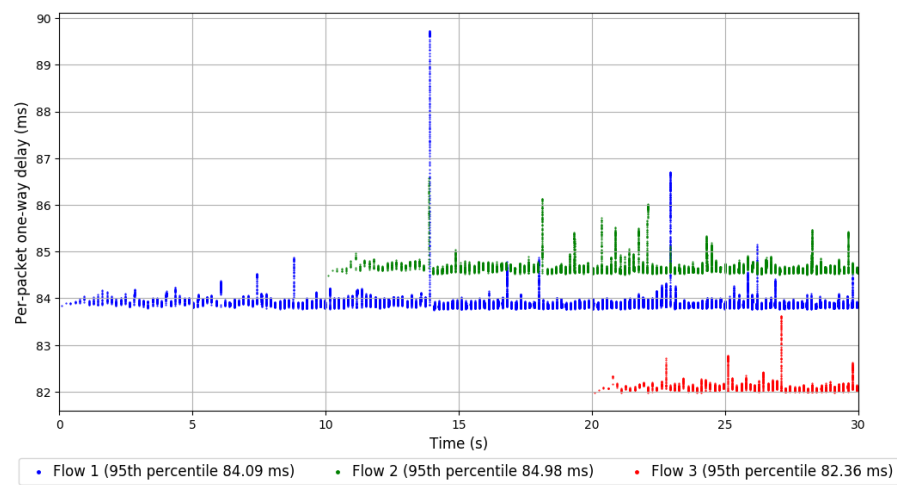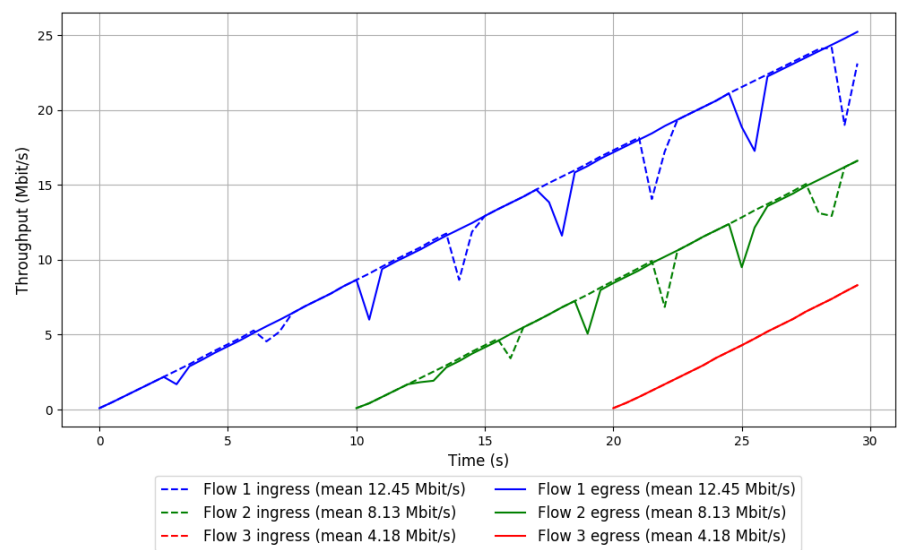
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-09-18 03:52:35
End at: 2017-09-18 03:53:05
Local clock offset: -1.06 ms
Remote clock offset: -2.498 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.44 Mbit/s
95th percentile per-packet one-way delay: 88.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 86.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 88.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 88.071 ms
Loss rate: 0.00%
```
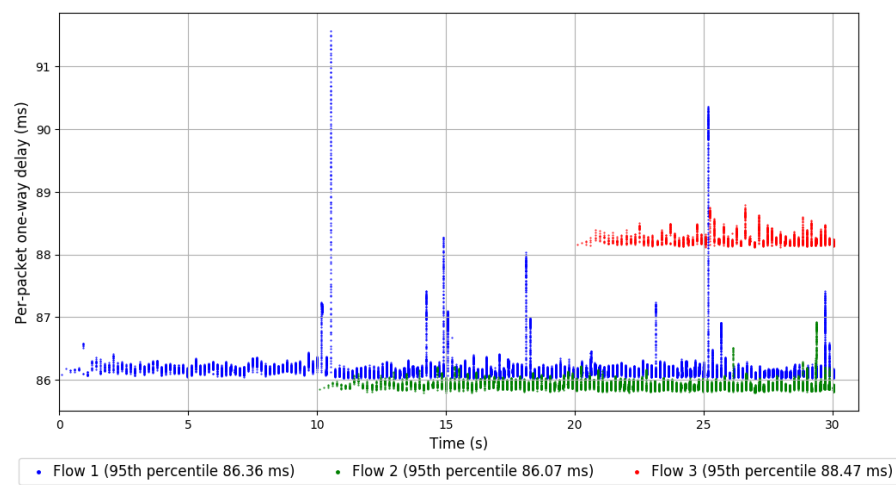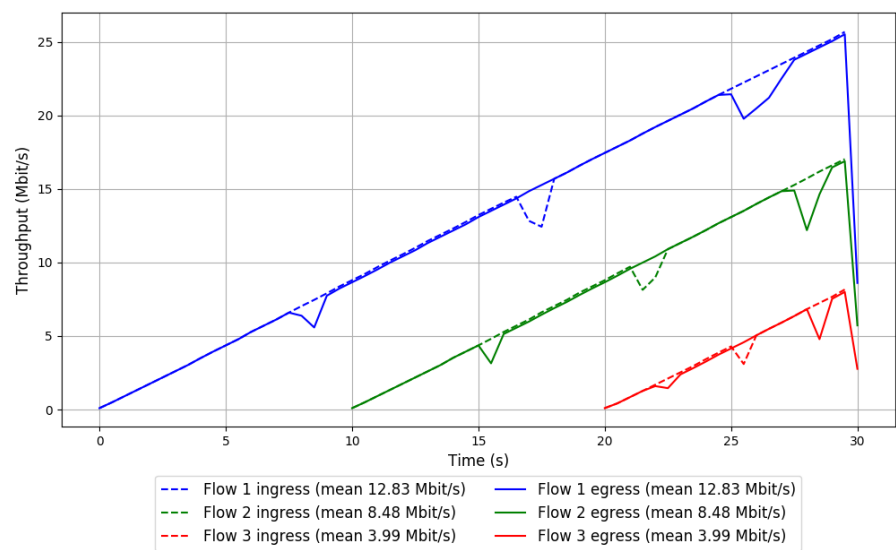
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-09-18 04:14:19
End at: 2017-09-18 04:14:49
Local clock offset: -0.914 ms
Remote clock offset: -6.832 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.61 Mbit/s
95th percentile per-packet one-way delay: 83.758 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 82.104 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 83.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 82.559 ms
Loss rate: 0.00%
```
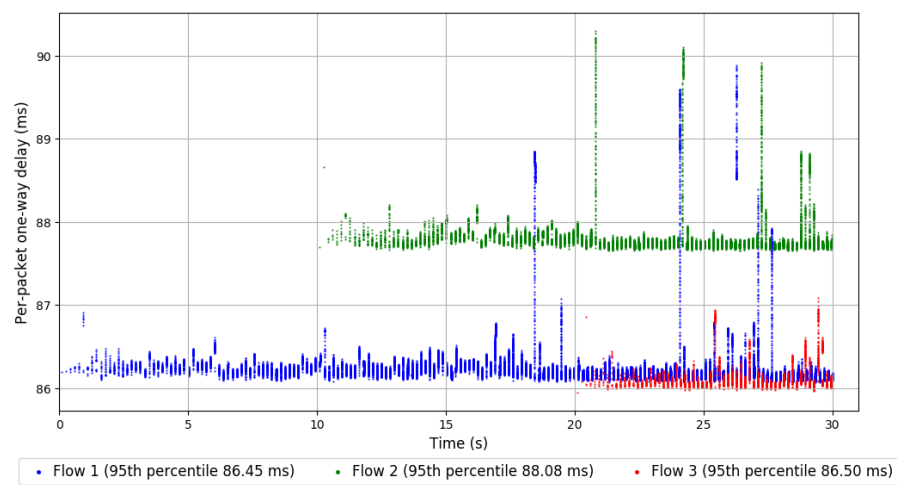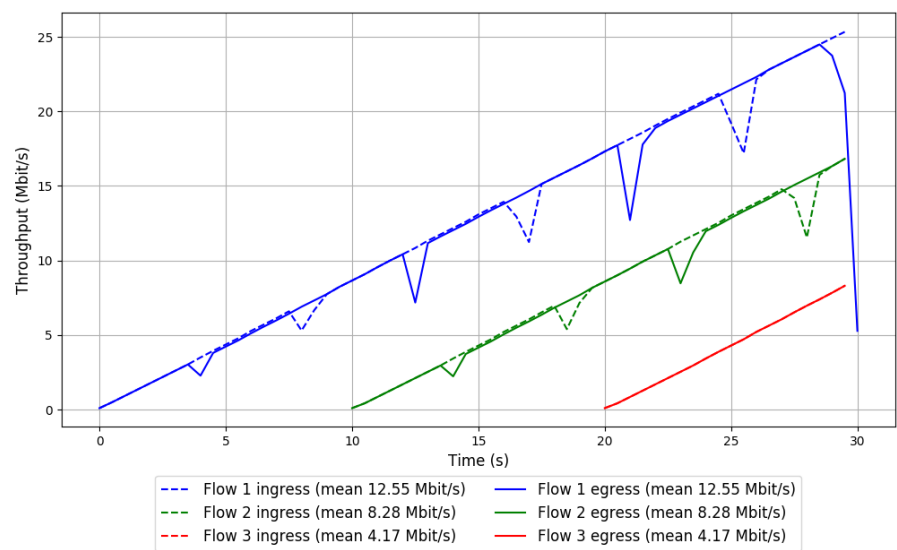
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2017-09-18 04:36:07
End at: 2017-09-18 04:36:37
Local clock offset: -0.628 ms
Remote clock offset: -6.563 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 84.720 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 84.086 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 84.979 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 82.363 ms
Loss rate: 0.00%
```
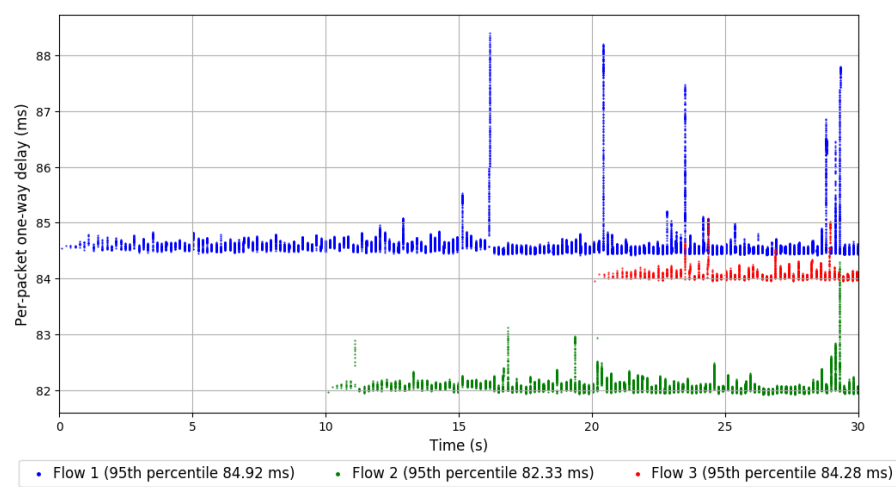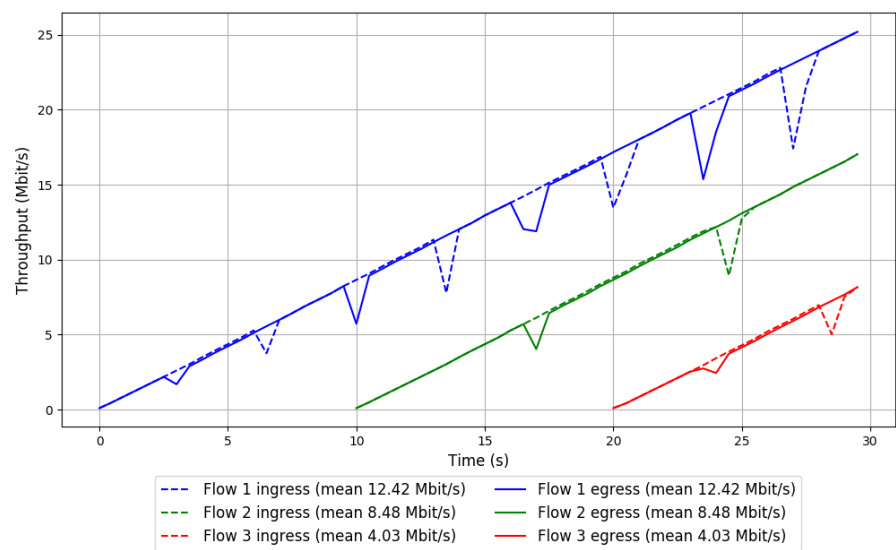
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2017-09-18 04:58:05
End at: 2017-09-18 04:58:35
Local clock offset: -0.303 ms
Remote clock offset: -3.363 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 88.192 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.83 Mbit/s
95th percentile per-packet one-way delay: 86.358 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 86.066 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 88.466 ms
Loss rate: 0.00%
```

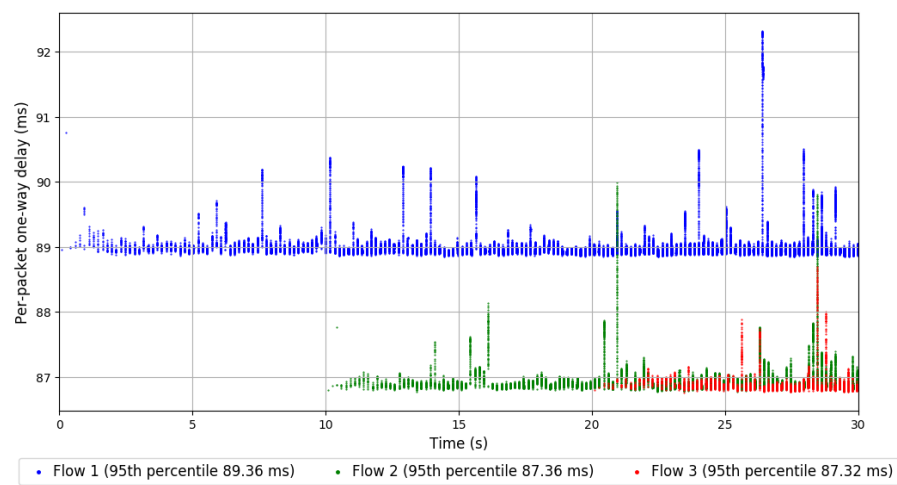# Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2017-09-18 05:19:47
End at: 2017-09-18 05:20:17
Local clock offset: -0.126 ms
Remote clock offset: -3.251 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.42 Mbit/s
95th percentile per-packet one-way delay: 87.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 86.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 88.081 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.00%
```
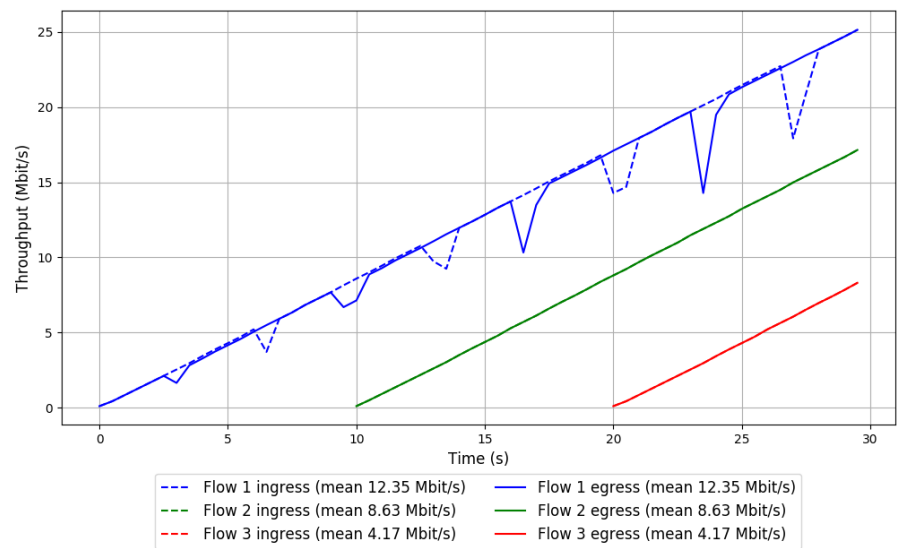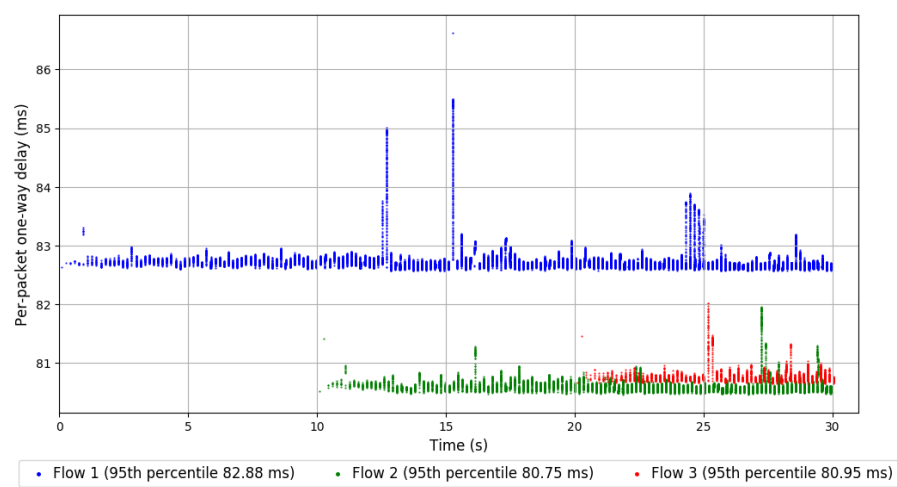
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2017-09-18 05:41:37
End at: 2017-09-18 05:42:07
Local clock offset: 0.008 ms
Remote clock offset: -7.105 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.38 Mbit/s
95th percentile per-packet one-way delay: 84.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 84.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 82.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 84.277 ms
Loss rate: 0.00%
```
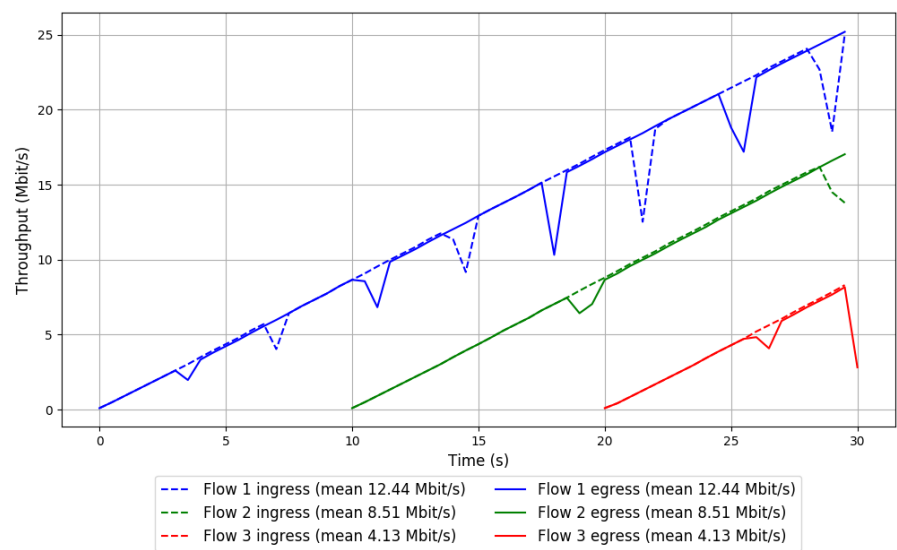
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-09-18 06:03:24
End at: 2017-09-18 06:03:54
Local clock offset: 0.115 ms
Remote clock offset: -1.759 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.46 Mbit/s
95th percentile per-packet one-way delay: 89.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 89.359 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 87.321 ms
Loss rate: 0.00%
```
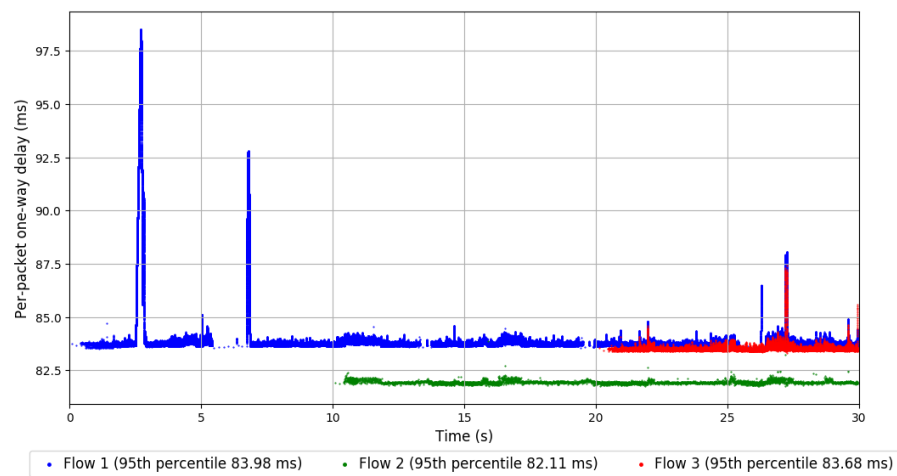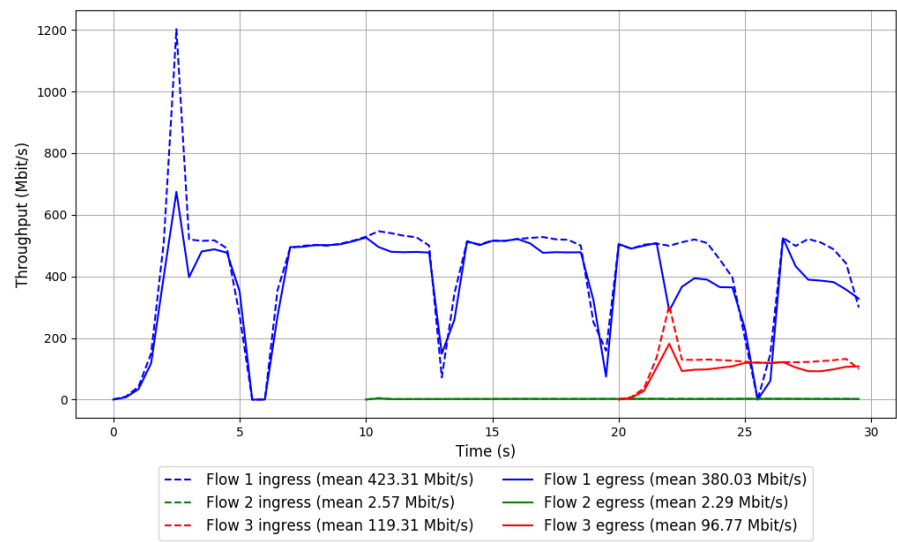
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2017-09-18 06:25:19
End at: 2017-09-18 06:25:49
Local clock offset: 0.233 ms
Remote clock offset: -7.437 ms


# Below is generated by plot.py at 2017-09-18 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 82.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 82.881 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 80.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 80.947 ms
Loss rate: 0.00%
```

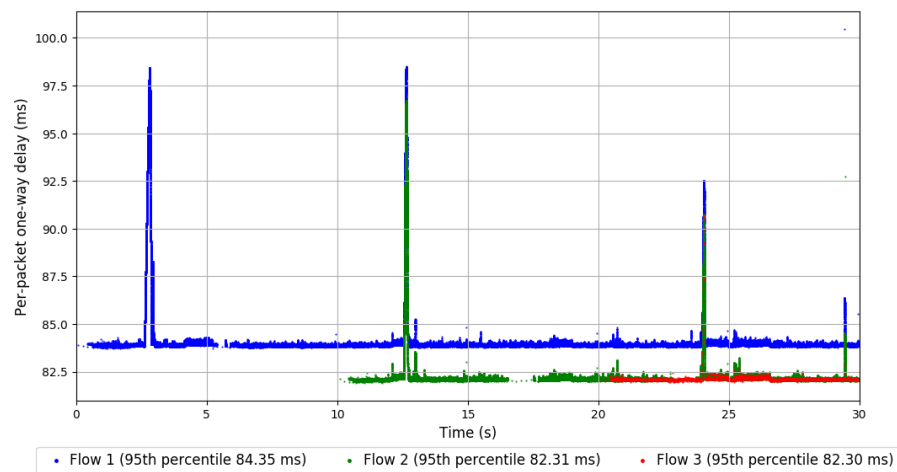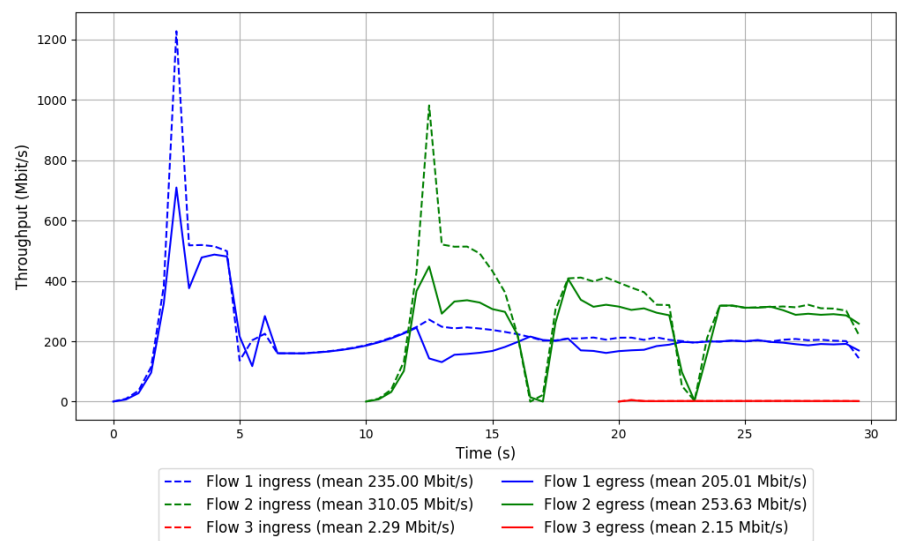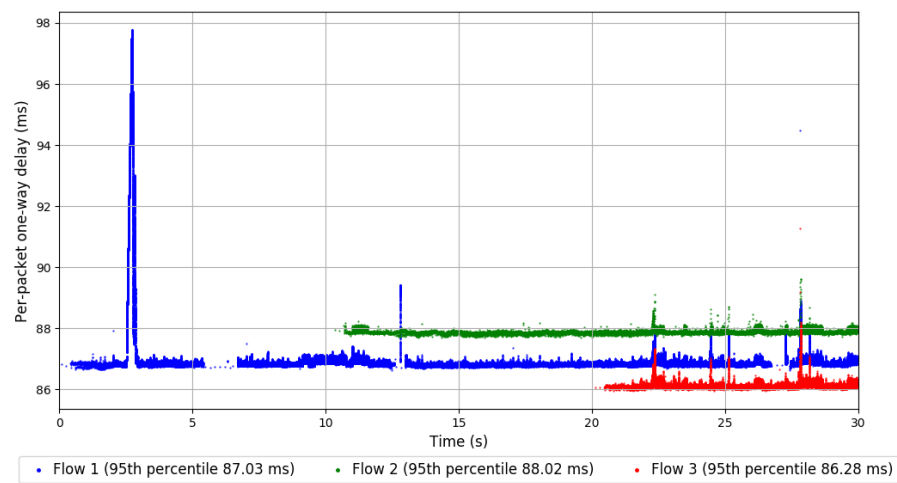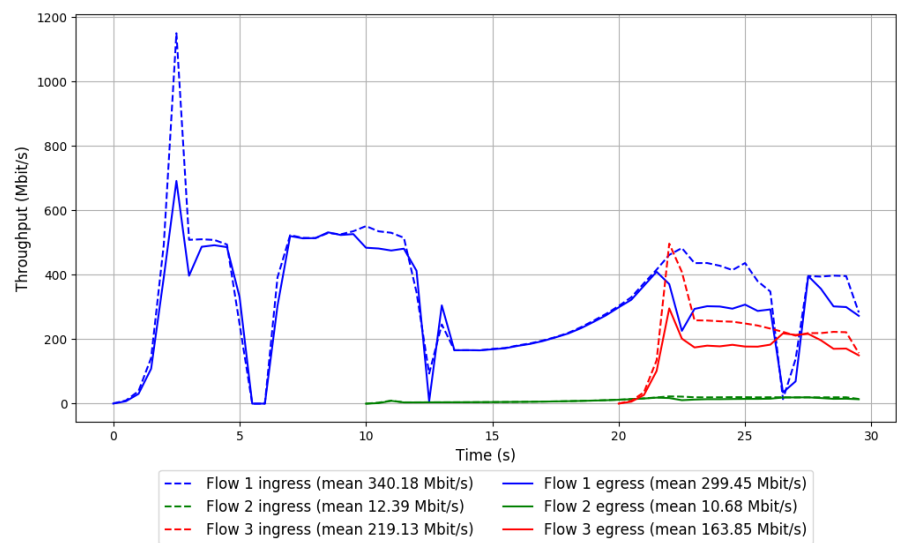Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-09-18 03:24:57
End at: 2017-09-18 03:25:27
Local clock offset: -1.302 ms
Remote clock offset: -6.708 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.40 Mbit/s
95th percentile per-packet one-way delay: 83.962 ms
Loss rate: 10.96%
-- Flow 1:
Average throughput: 380.03 Mbit/s
95th percentile per-packet one-way delay: 83.976 ms
Loss rate: 10.23%
-- Flow 2:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 82.114 ms
Loss rate: 10.86%
-- Flow 3:
Average throughput: 96.77 Mbit/s
95th percentile per-packet one-way delay: 83.683 ms
Loss rate: 18.89%
```

Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 423.31 Mbit/s)   Flow 1 egress (mean 380.03 Mbit/s)
Flow 2 ingress (mean 2.57 Mbit/s)   Flow 2 egress (mean 2.29 Mbit/s)
Flow 3 ingress (mean 119.31 Mbit/s)   Flow 3 egress (mean 96.77 Mbit/s)

Flow 1 (95th percentile 83.98 ms)   Flow 2 (95th percentile 82.11 ms)   Flow 3 (95th percentile 83.68 ms)

```
Run 2: Statistics of PCC

Start at: 2017-09-18 03:46:58
End at: 2017-09-18 03:47:28
Local clock offset: -1.135 ms
Remote clock offset: -6.424 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 374.33 Mbit/s
95th percentile per-packet one-way delay: 84.092 ms
Loss rate: 15.28%
-- Flow 1:
Average throughput: 205.01 Mbit/s
95th percentile per-packet one-way delay: 84.354 ms
Loss rate: 12.76%
-- Flow 2:
Average throughput: 253.63 Mbit/s
95th percentile per-packet one-way delay: 82.307 ms
Loss rate: 18.20%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 82.295 ms
Loss rate: 6.14%
```
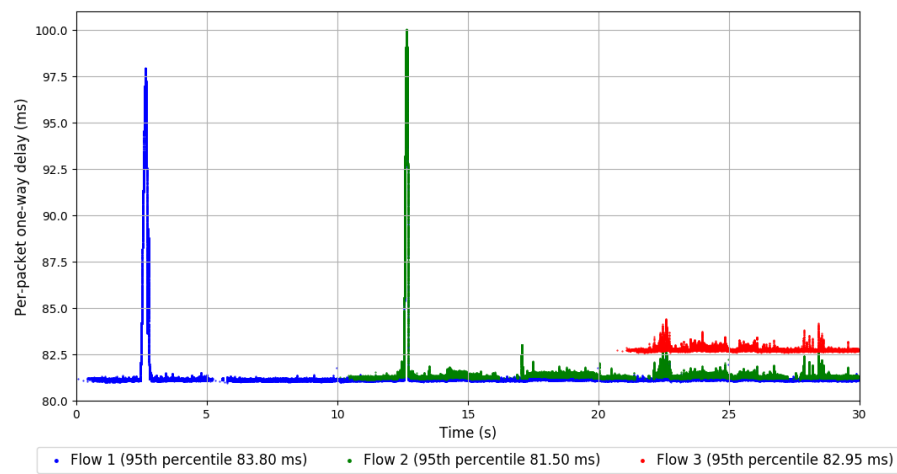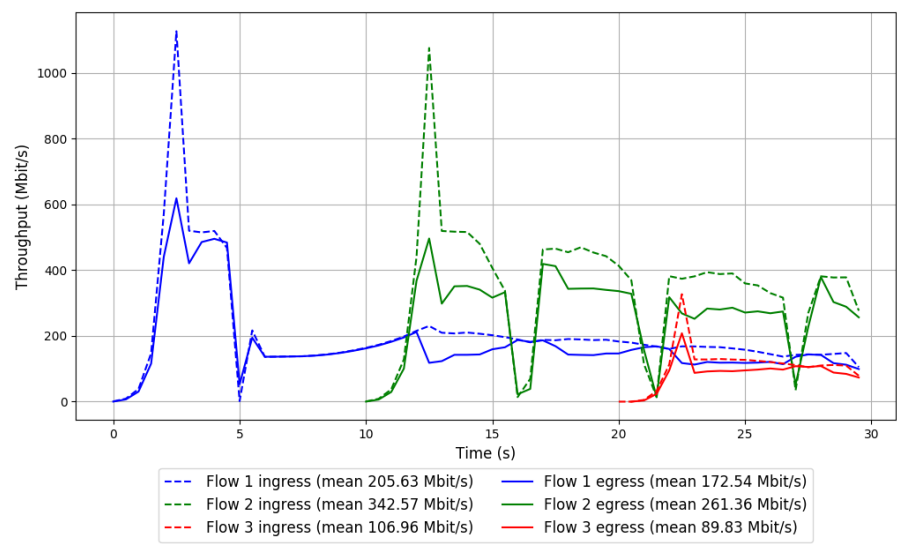
Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 235.00 Mbit/s)   Flow 1 egress (mean 205.01 Mbit/s)
Flow 2 ingress (mean 310.05 Mbit/s)   Flow 2 egress (mean 253.63 Mbit/s)
Flow 3 ingress (mean 2.29 Mbit/s)   Flow 3 egress (mean 2.15 Mbit/s)

Flow 1 (95th percentile 84.35 ms)   Flow 2 (95th percentile 82.31 ms)   Flow 3 (95th percentile 82.30 ms)
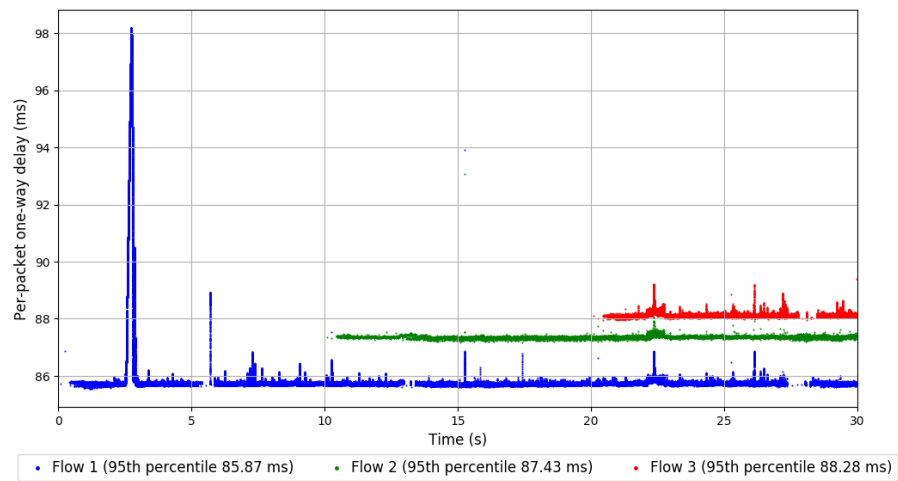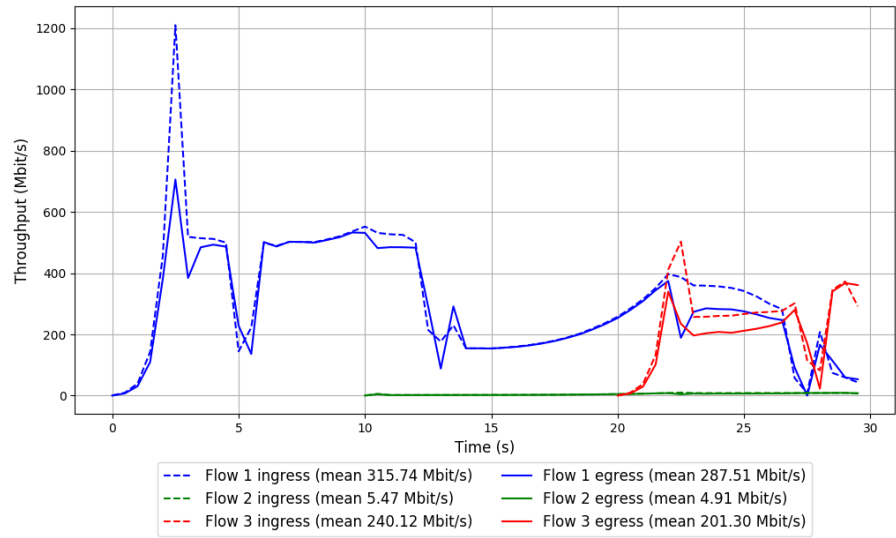
```
Run 3: Statistics of PCC

Start at: 2017-09-18 04:08:49
End at: 2017-09-18 04:09:19
Local clock offset: -0.944 ms
Remote clock offset: -2.569 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.37 Mbit/s
95th percentile per-packet one-way delay: 87.170 ms
Loss rate: 14.31%
-- Flow 1:
Average throughput: 299.45 Mbit/s
95th percentile per-packet one-way delay: 87.025 ms
Loss rate: 11.97%
-- Flow 2:
Average throughput: 10.68 Mbit/s
95th percentile per-packet one-way delay: 88.019 ms
Loss rate: 14.96%
-- Flow 3:
Average throughput: 163.85 Mbit/s
95th percentile per-packet one-way delay: 86.275 ms
Loss rate: 25.26%
```

Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 340.18 Mbit/s)
Flow 2 ingress (mean 12.39 Mbit/s)
Flow 3 ingress (mean 219.13 Mbit/s)
Flow 1 egress (mean 299.45 Mbit/s)
Flow 2 egress (mean 10.68 Mbit/s)
Flow 3 egress (mean 163.85 Mbit/s)

Flow 1 (95th percentile 87.03 ms)
Flow 2 (95th percentile 88.02 ms)
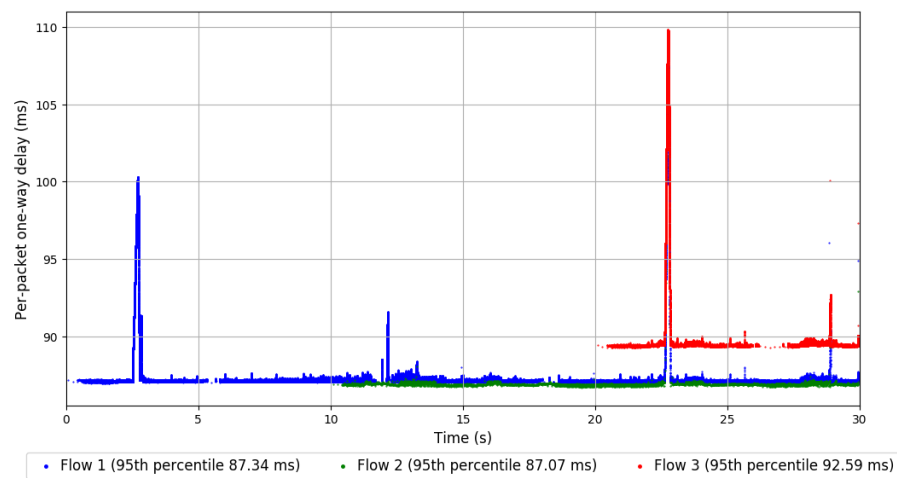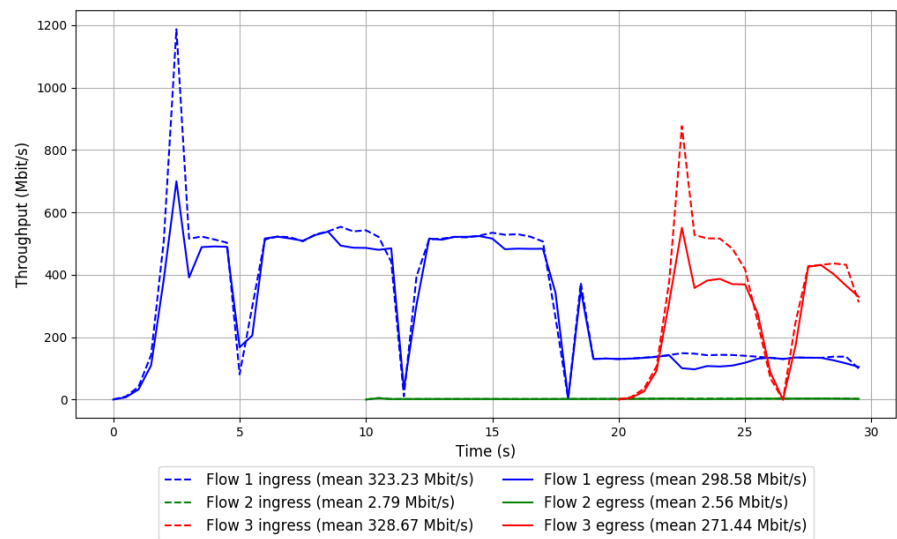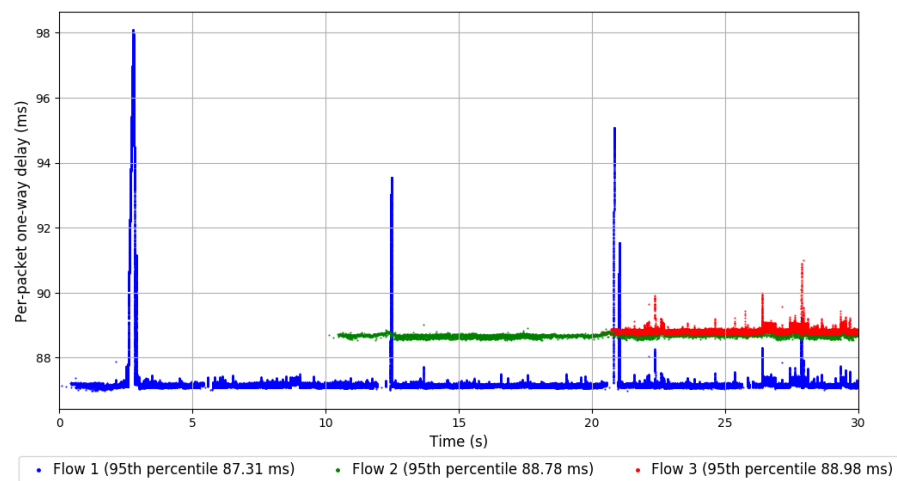Flow 3 (95th percentile 86.28 ms)

```
Run 4: Statistics of PCC

Start at: 2017-09-18 04:30:35
End at: 2017-09-18 04:31:05
Local clock offset: -0.725 ms
Remote clock offset: -7.346 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 373.91 Mbit/s
95th percentile per-packet one-way delay: 82.836 ms
Loss rate: 20.19%
-- Flow 1:
Average throughput: 172.54 Mbit/s
95th percentile per-packet one-way delay: 83.802 ms
Loss rate: 16.09%
-- Flow 2:
Average throughput: 261.36 Mbit/s
95th percentile per-packet one-way delay: 81.498 ms
Loss rate: 23.71%
-- Flow 3:
Average throughput: 89.83 Mbit/s
95th percentile per-packet one-way delay: 82.950 ms
Loss rate: 21.40%
```

Run 4: Report of PCC — Data Link

- Flow 1 ingress (mean 205.63 Mbit/s)
- Flow 2 ingress (mean 342.57 Mbit/s)
- Flow 3 ingress (mean 106.96 Mbit/s)
- Flow 1 egress (mean 172.54 Mbit/s)
- Flow 2 egress (mean 261.36 Mbit/s)
- Flow 3 egress (mean 89.83 Mbit/s)

- Flow 1 (95th percentile 83.80 ms)
- Flow 2 (95th percentile 81.50 ms)
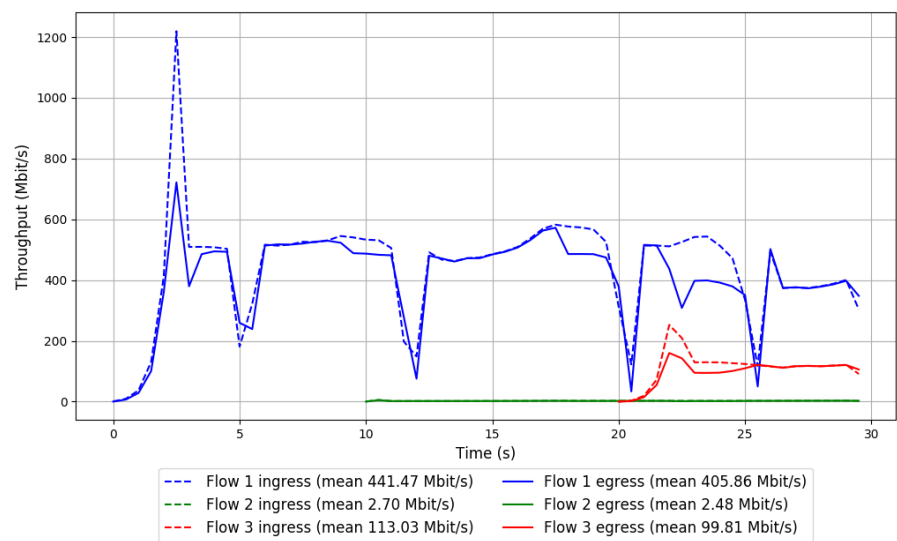- Flow 3 (95th percentile 82.95 ms)

```
Run 5: Statistics of PCC

Start at: 2017-09-18 04:52:20
End at: 2017-09-18 04:52:50
Local clock offset: -0.388 ms
Remote clock offset: -3.356 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.15 Mbit/s
95th percentile per-packet one-way delay: 88.143 ms
Loss rate: 10.39%
-- Flow 1:
Average throughput: 287.51 Mbit/s
95th percentile per-packet one-way delay: 85.874 ms
Loss rate: 8.94%
-- Flow 2:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 87.432 ms
Loss rate: 10.22%
-- Flow 3:
Average throughput: 201.30 Mbit/s
95th percentile per-packet one-way delay: 88.280 ms
Loss rate: 16.16%
```
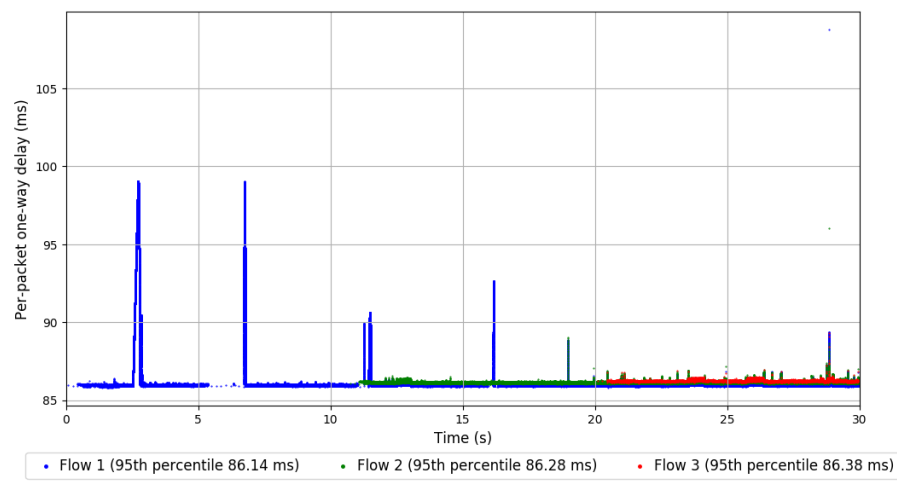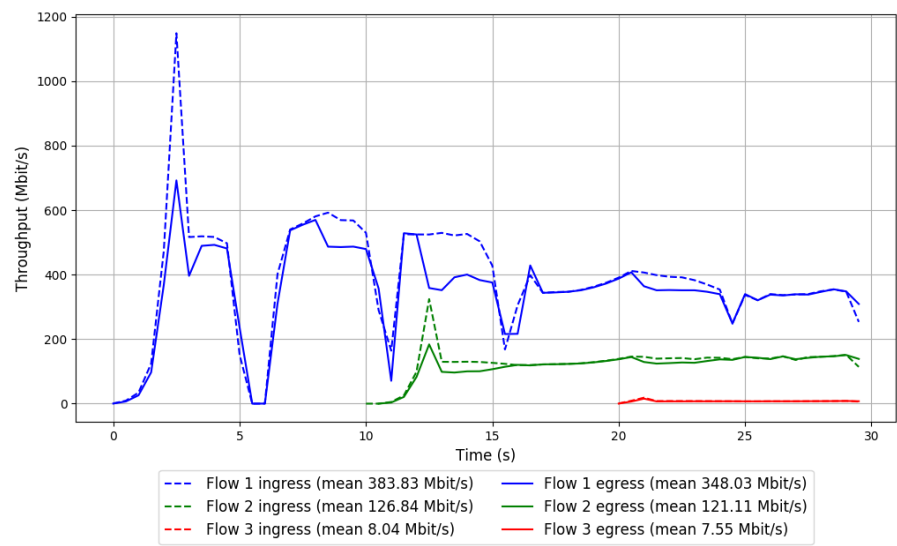
Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 315.74 Mbit/s)   Flow 1 egress (mean 287.51 Mbit/s)
Flow 2 ingress (mean 5.47 Mbit/s)   Flow 2 egress (mean 4.91 Mbit/s)
Flow 3 ingress (mean 240.12 Mbit/s)   Flow 3 egress (mean 201.30 Mbit/s)

Flow 1 (95th percentile 85.87 ms)   Flow 2 (95th percentile 87.43 ms)   Flow 3 (95th percentile 88.28 ms)
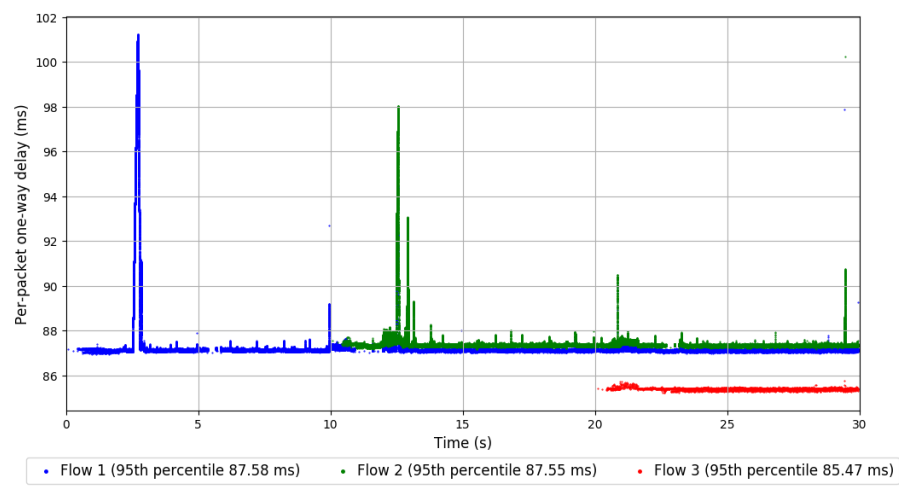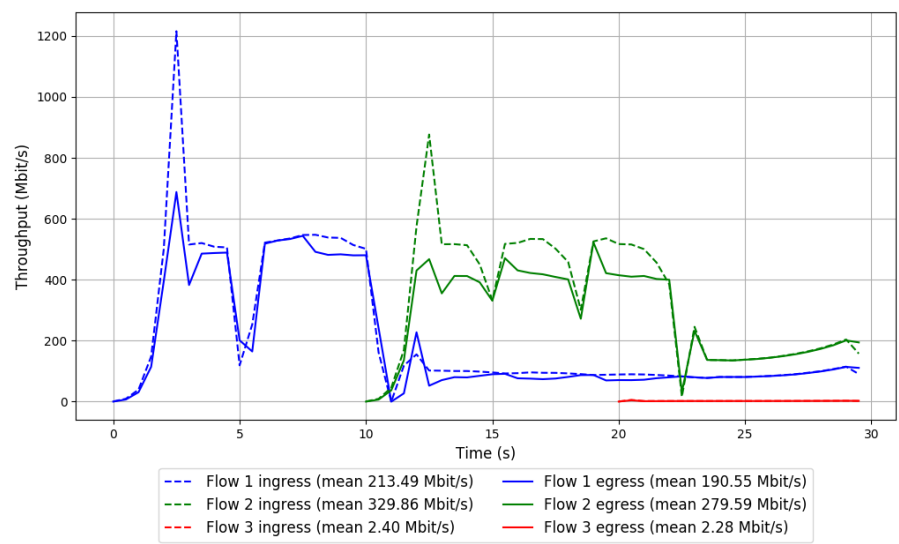
```
Run 6: Statistics of PCC

Start at: 2017-09-18 05:14:15
End at: 2017-09-18 05:14:45
Local clock offset: -0.115 ms
Remote clock offset: -2.297 ms


# Below is generated by plot.py at 2017-09-18 08:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.80 Mbit/s
95th percentile per-packet one-way delay: 89.599 ms
Loss rate: 10.08%
-- Flow 1:
Average throughput: 298.58 Mbit/s
95th percentile per-packet one-way delay: 87.341 ms
Loss rate: 7.62%
-- Flow 2:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 87.070 ms
Loss rate: 8.25%
-- Flow 3:
Average throughput: 271.44 Mbit/s
95th percentile per-packet one-way delay: 92.594 ms
Loss rate: 17.41%
```

Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 323.23 Mbit/s)   Flow 1 egress (mean 298.58 Mbit/s)
Flow 2 ingress (mean 2.79 Mbit/s)   Flow 2 egress (mean 2.56 Mbit/s)
Flow 3 ingress (mean 328.67 Mbit/s)   Flow 3 egress (mean 271.44 Mbit/s)

Flow 1 (95th percentile 87.34 ms)   Flow 2 (95th percentile 87.07 ms)   Flow 3 (95th percentile 92.59 ms)

```
Run 7: Statistics of PCC

Start at: 2017-09-18 05:36:01
End at: 2017-09-18 05:36:31
Local clock offset: -0.026 ms
Remote clock offset: -2.308 ms


# Below is generated by plot.py at 2017-09-18 08:31:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 439.54 Mbit/s
95th percentile per-packet one-way delay: 88.827 ms
Loss rate: 8.52%
-- Flow 1:
Average throughput: 405.86 Mbit/s
95th percentile per-packet one-way delay: 87.311 ms
Loss rate: 8.07%
-- Flow 2:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 88.780 ms
Loss rate: 8.15%
-- Flow 3:
Average throughput: 99.81 Mbit/s
95th percentile per-packet one-way delay: 88.983 ms
Loss rate: 13.97%
```
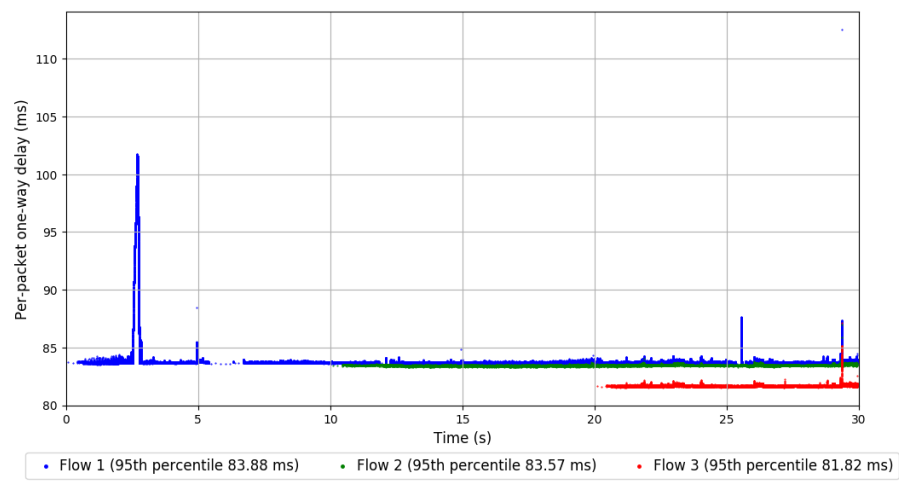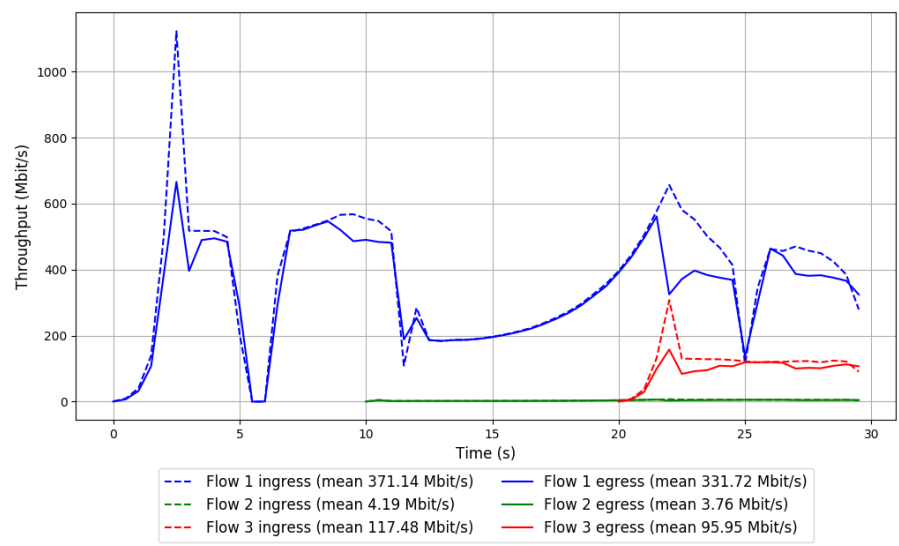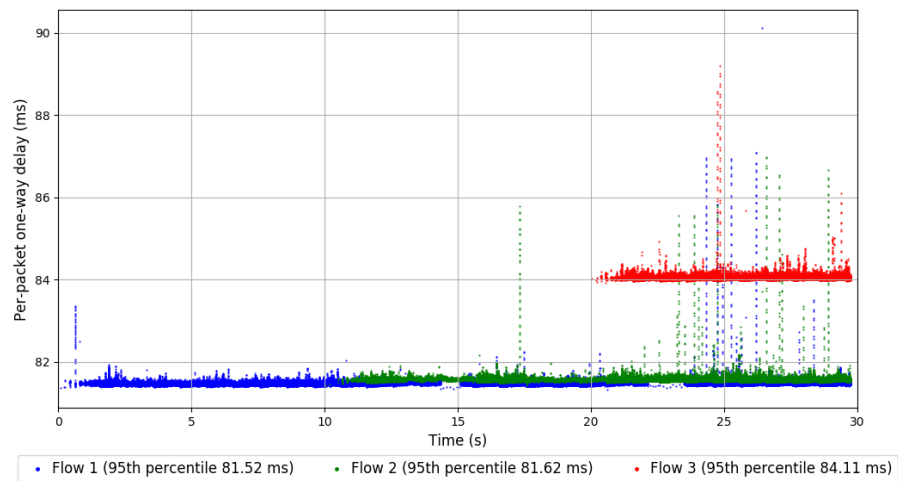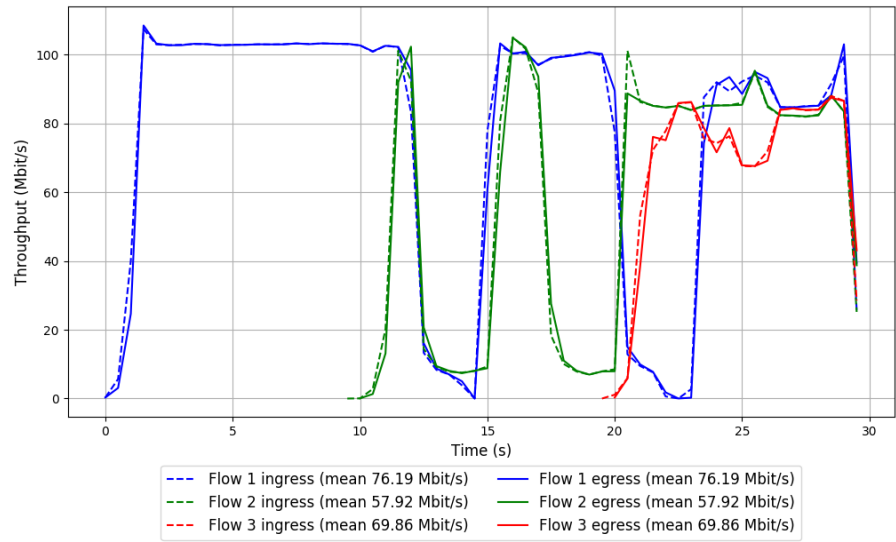
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 441.47 Mbit/s)   Flow 1 egress (mean 405.86 Mbit/s)
Flow 2 ingress (mean 2.70 Mbit/s)   Flow 2 egress (mean 2.48 Mbit/s)
Flow 3 ingress (mean 113.03 Mbit/s)   Flow 3 egress (mean 99.81 Mbit/s)

Flow 1 (95th percentile 87.31 ms)   Flow 2 (95th percentile 88.78 ms)   Flow 3 (95th percentile 88.98 ms)

157

```
Run 8: Statistics of PCC

Start at: 2017-09-18 05:57:47
End at: 2017-09-18 05:58:17
Local clock offset: 0.097 ms
Remote clock offset: -2.748 ms


# Below is generated by plot.py at 2017-09-18 08:31:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.41 Mbit/s
95th percentile per-packet one-way delay: 86.231 ms
Loss rate: 9.01%
-- Flow 1:
Average throughput: 348.03 Mbit/s
95th percentile per-packet one-way delay: 86.143 ms
Loss rate: 9.33%
-- Flow 2:
Average throughput: 121.11 Mbit/s
95th percentile per-packet one-way delay: 86.276 ms
Loss rate: 7.63%
-- Flow 3:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 86.379 ms
Loss rate: 6.08%
```
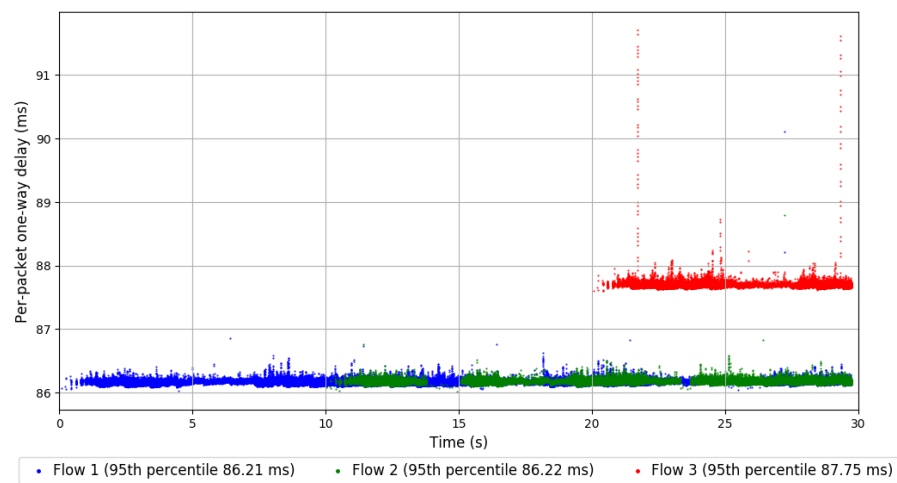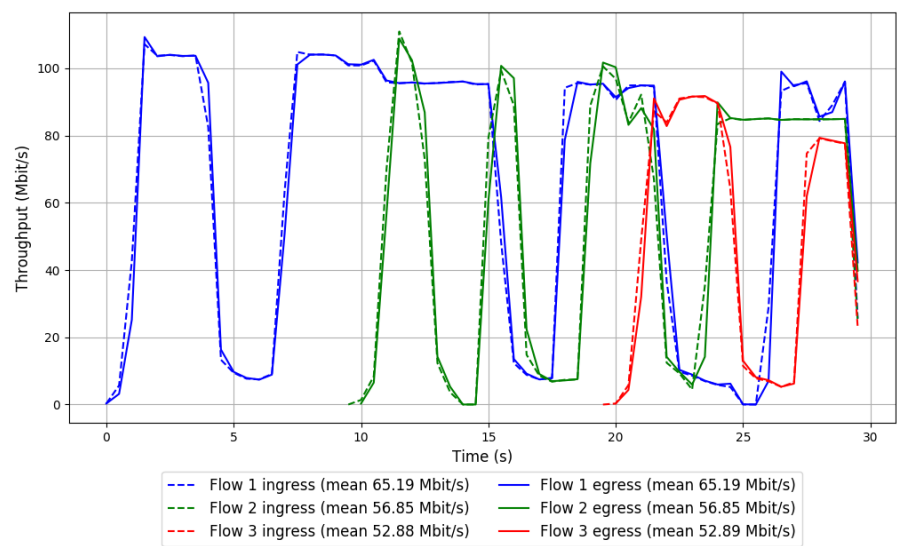
Run 8: Report of PCC — Data Link

Flow 1 ingress (mean 383.83 Mbit/s)
Flow 2 ingress (mean 126.84 Mbit/s)
Flow 3 ingress (mean 8.04 Mbit/s)
Flow 1 egress (mean 348.03 Mbit/s)
Flow 2 egress (mean 121.11 Mbit/s)
Flow 3 egress (mean 7.55 Mbit/s)

Flow 1 (95th percentile 86.14 ms)
Flow 2 (95th percentile 86.28 ms)
Flow 3 (95th percentile 86.38 ms)

```
Run 9: Statistics of PCC

Start at: 2017-09-18 06:19:47
End at: 2017-09-18 06:20:17
Local clock offset: 0.158 ms
Remote clock offset: -3.217 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.24 Mbit/s
95th percentile per-packet one-way delay: 87.552 ms
Loss rate: 13.00%
-- Flow 1:
Average throughput: 190.55 Mbit/s
95th percentile per-packet one-way delay: 87.579 ms
Loss rate: 10.74%
-- Flow 2:
Average throughput: 279.59 Mbit/s
95th percentile per-packet one-way delay: 87.551 ms
Loss rate: 15.24%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 85.465 ms
Loss rate: 4.64%
```
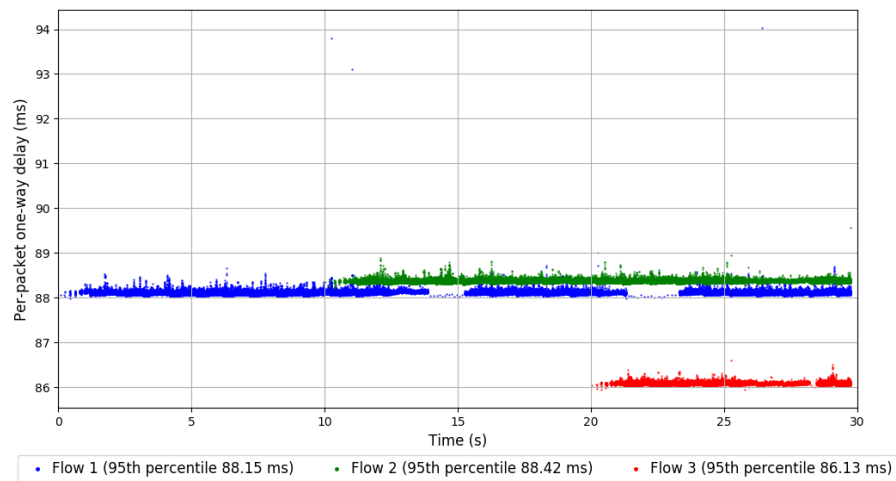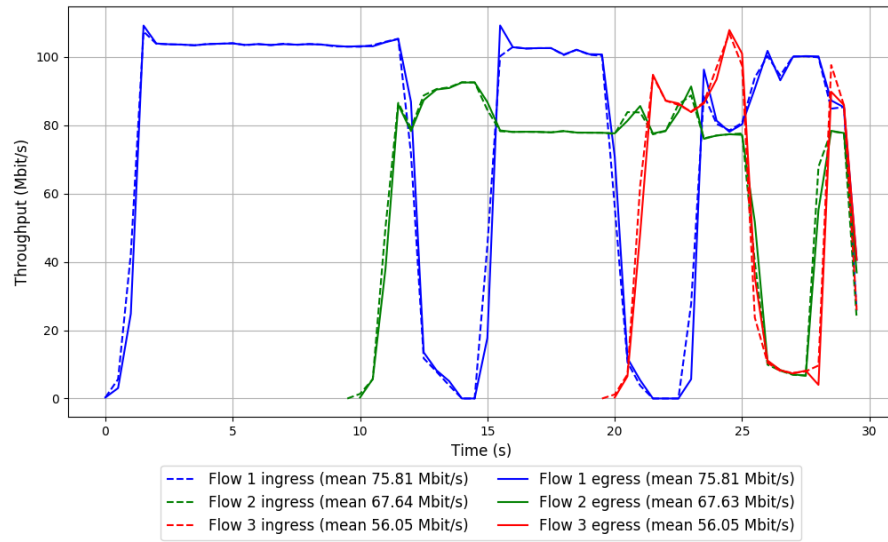
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 213.49 Mbit/s) — — — Flow 1 egress (mean 190.55 Mbit/s)
Flow 2 ingress (mean 329.86 Mbit/s) — — — Flow 2 egress (mean 279.59 Mbit/s)
Flow 3 ingress (mean 2.40 Mbit/s) — — — Flow 3 egress (mean 2.28 Mbit/s)

Flow 1 (95th percentile 87.58 ms)   Flow 2 (95th percentile 87.55 ms)   Flow 3 (95th percentile 85.47 ms)

```
Run 10: Statistics of PCC

Start at: 2017-09-18 06:41:18
End at: 2017-09-18 06:41:48
Local clock offset: 0.234 ms
Remote clock offset: -6.59 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.84 Mbit/s
95th percentile per-packet one-way delay: 83.868 ms
Loss rate: 11.34%
-- Flow 1:
Average throughput: 331.72 Mbit/s
95th percentile per-packet one-way delay: 83.877 ms
Loss rate: 10.62%
-- Flow 2:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 83.570 ms
Loss rate: 10.44%
-- Flow 3:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 81.823 ms
Loss rate: 18.33%
```
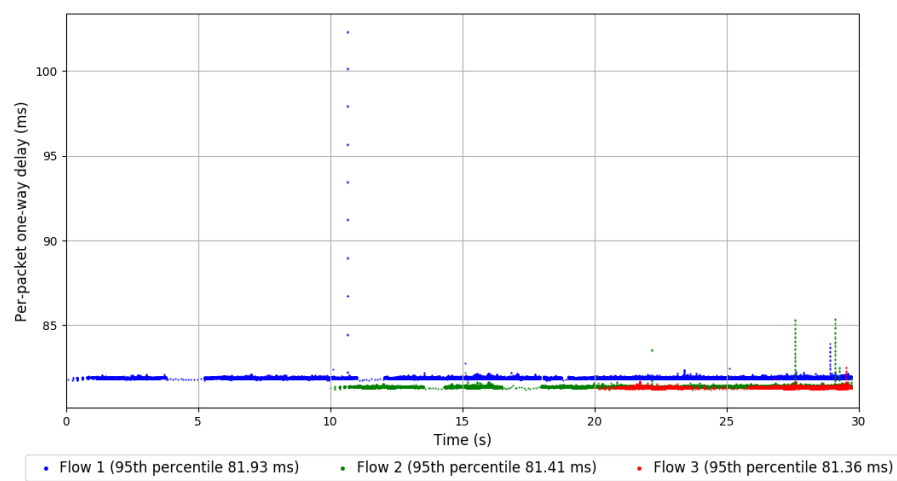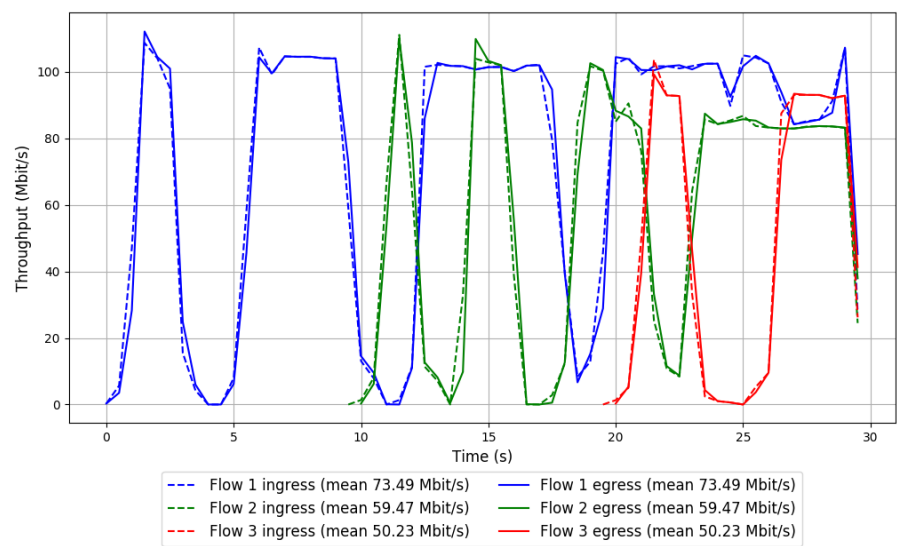
Run 10: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-18 03:04:26
End at: 2017-09-18 03:04:56
Local clock offset: -1.49 ms
Remote clock offset: -6.796 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.53 Mbit/s
95th percentile per-packet one-way delay: 84.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 81.519 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.92 Mbit/s
95th percentile per-packet one-way delay: 81.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.86 Mbit/s
95th percentile per-packet one-way delay: 84.111 ms
Loss rate: 0.01%
```
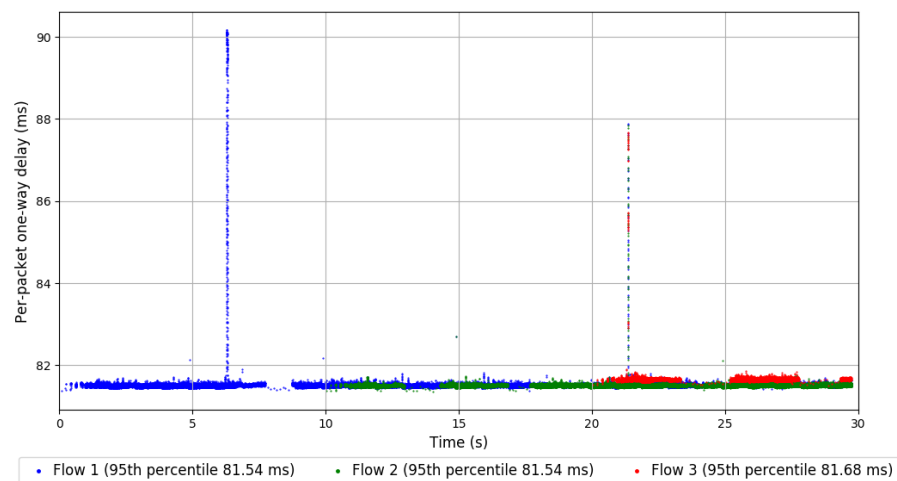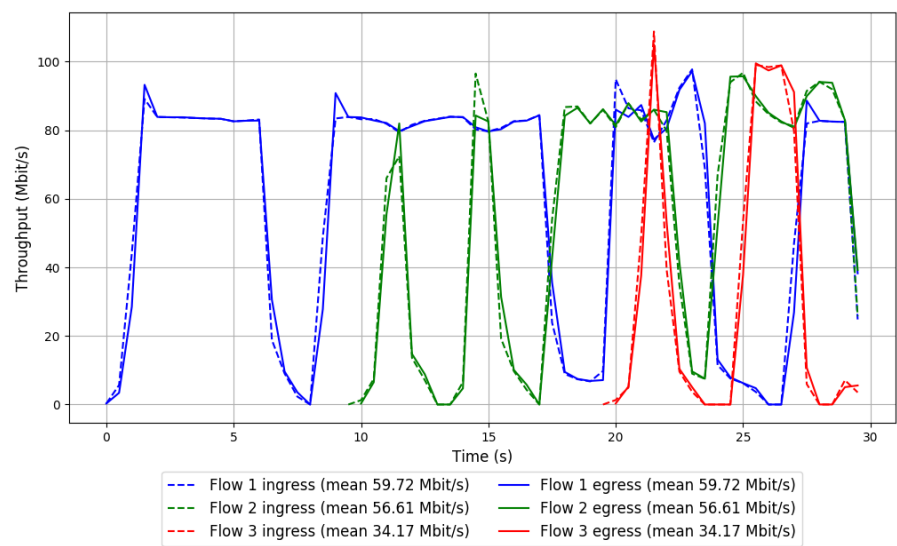
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-18 03:26:30
End at: 2017-09-18 03:27:00
Local clock offset: -1.276 ms
Remote clock offset: -2.477 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.27 Mbit/s
95th percentile per-packet one-way delay: 87.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 86.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.85 Mbit/s
95th percentile per-packet one-way delay: 86.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: 87.750 ms
Loss rate: 0.00%
```
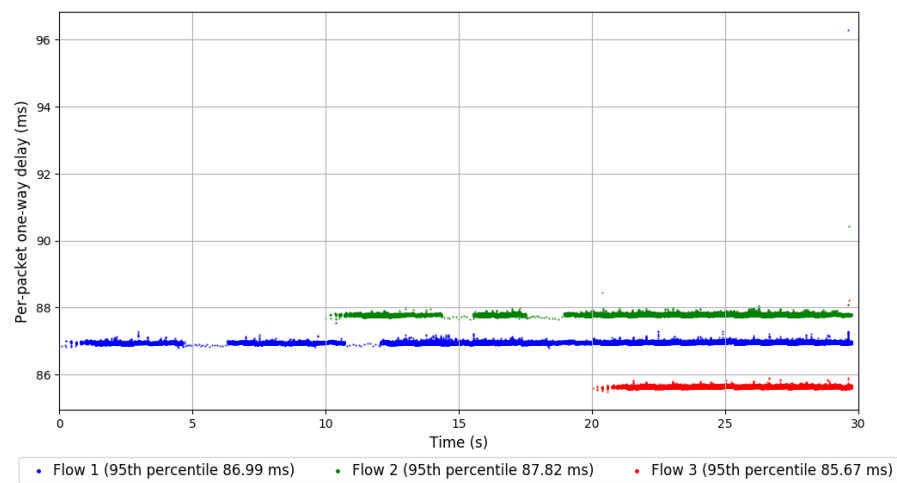
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-18 03:48:33
End at: 2017-09-18 03:49:03
Local clock offset: -1.217 ms
Remote clock offset: -2.513 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.12 Mbit/s
95th percentile per-packet one-way delay: 88.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.81 Mbit/s
95th percentile per-packet one-way delay: 88.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 88.417 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 86.127 ms
Loss rate: 0.00%
```
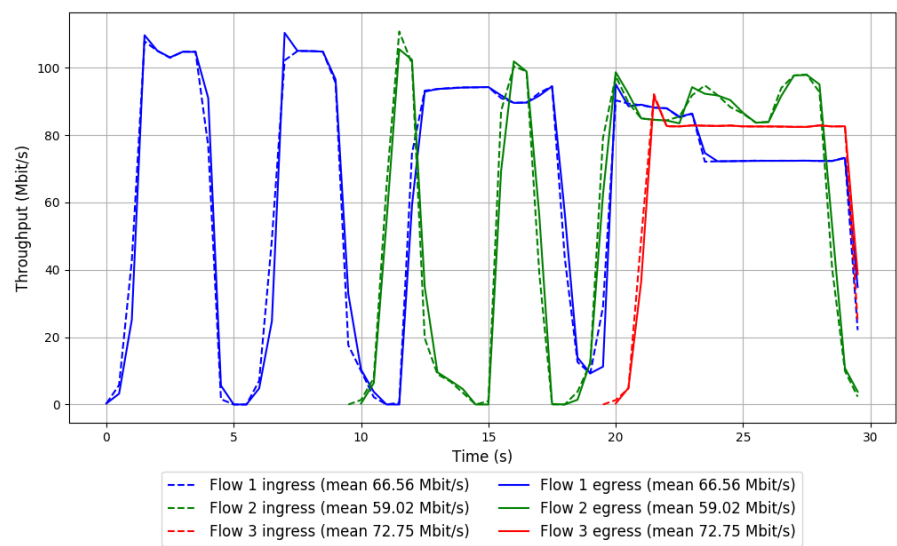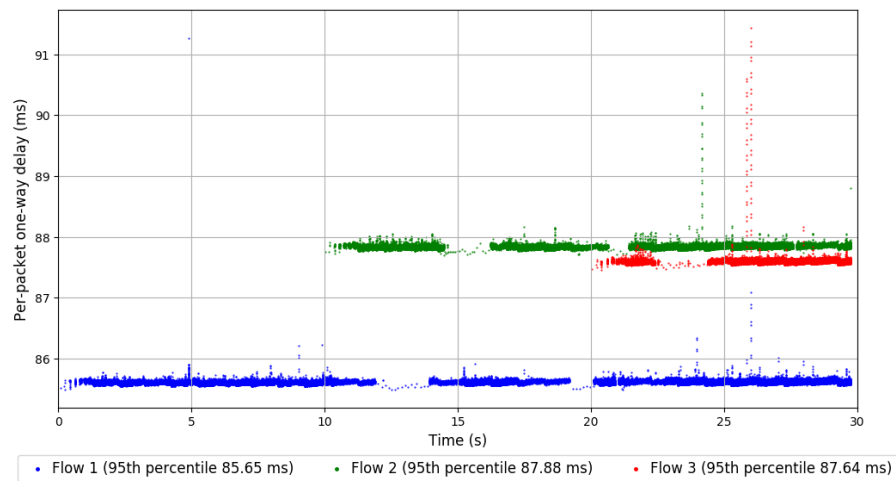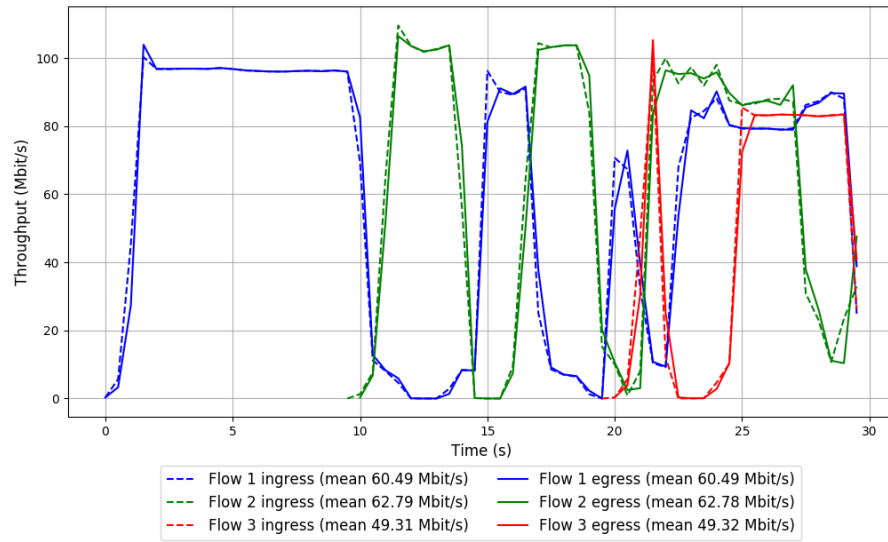
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 75.81 Mbit/s) — Flow 1 egress (mean 75.81 Mbit/s)
Flow 2 ingress (mean 67.64 Mbit/s) — Flow 2 egress (mean 67.63 Mbit/s)
Flow 3 ingress (mean 56.05 Mbit/s) — Flow 3 egress (mean 56.05 Mbit/s)

Flow 1 (95th percentile 88.15 ms) • Flow 2 (95th percentile 88.42 ms) • Flow 3 (95th percentile 86.13 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-18 04:10:19
End at: 2017-09-18 04:10:49
Local clock offset: -0.878 ms
Remote clock offset: -7.443 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.49 Mbit/s
95th percentile per-packet one-way delay: 81.921 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.49 Mbit/s
95th percentile per-packet one-way delay: 81.930 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.47 Mbit/s
95th percentile per-packet one-way delay: 81.410 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 81.359 ms
Loss rate: 0.00%
```

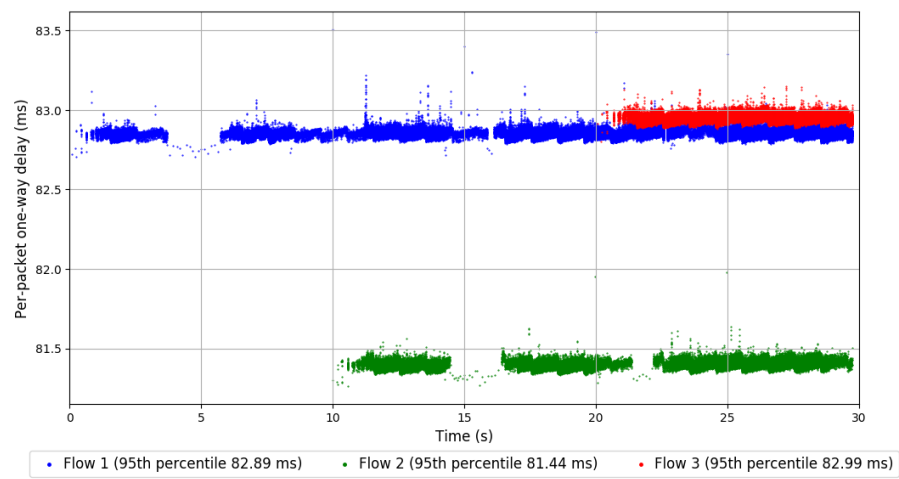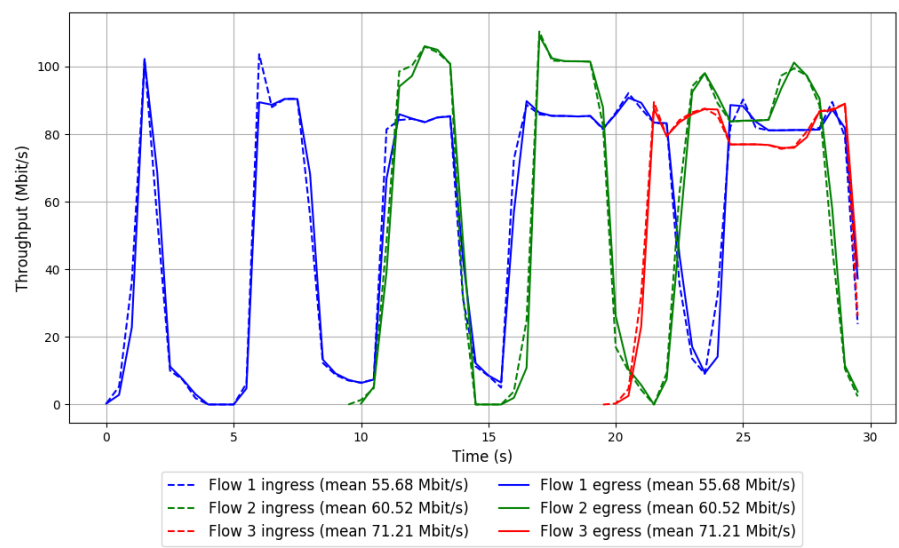Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-18 04:32:08
End at: 2017-09-18 04:32:38
Local clock offset: -0.654 ms
Remote clock offset: -7.009 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 108.53 Mbit/s
95th percentile per-packet one-way delay: 81.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.72 Mbit/s
95th percentile per-packet one-way delay: 81.539 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 56.61 Mbit/s
95th percentile per-packet one-way delay: 81.537 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 81.684 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-18 04:53:58
End at: 2017-09-18 04:54:28
Local clock offset: -0.382 ms
Remote clock offset: -3.0 ms

# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.62 Mbit/s
95th percentile per-packet one-way delay: 87.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.56 Mbit/s
95th percentile per-packet one-way delay: 86.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.02 Mbit/s
95th percentile per-packet one-way delay: 87.820 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 85.670 ms
Loss rate: 0.00%
```
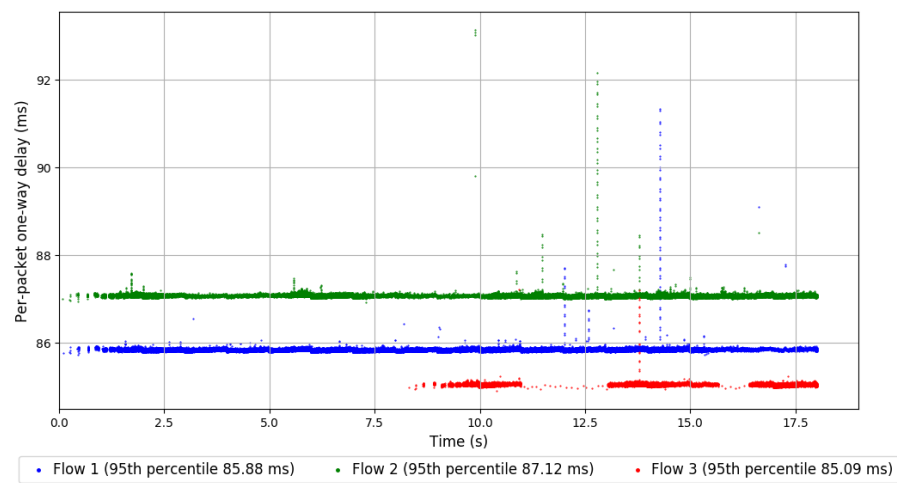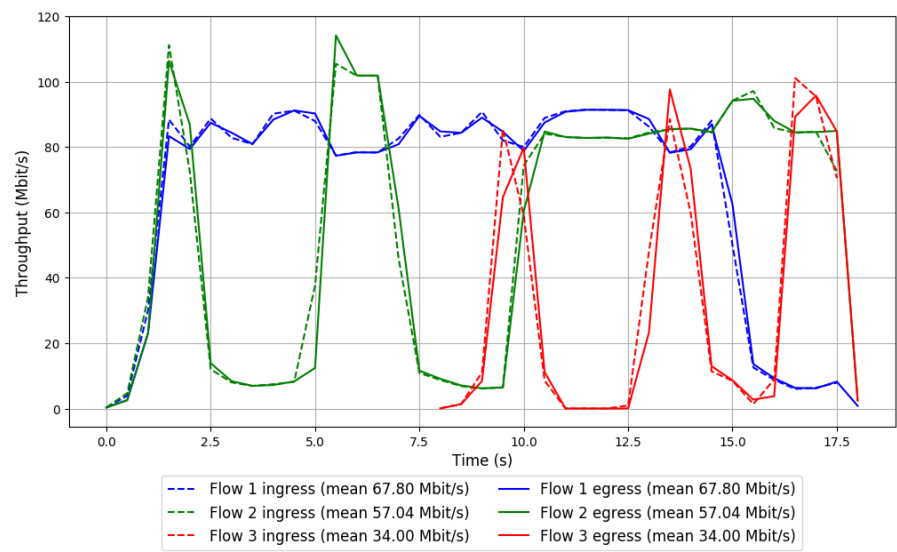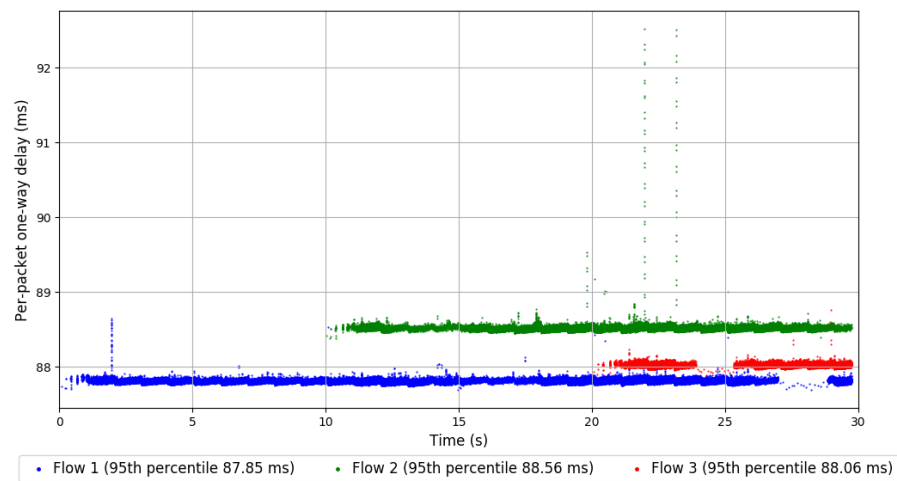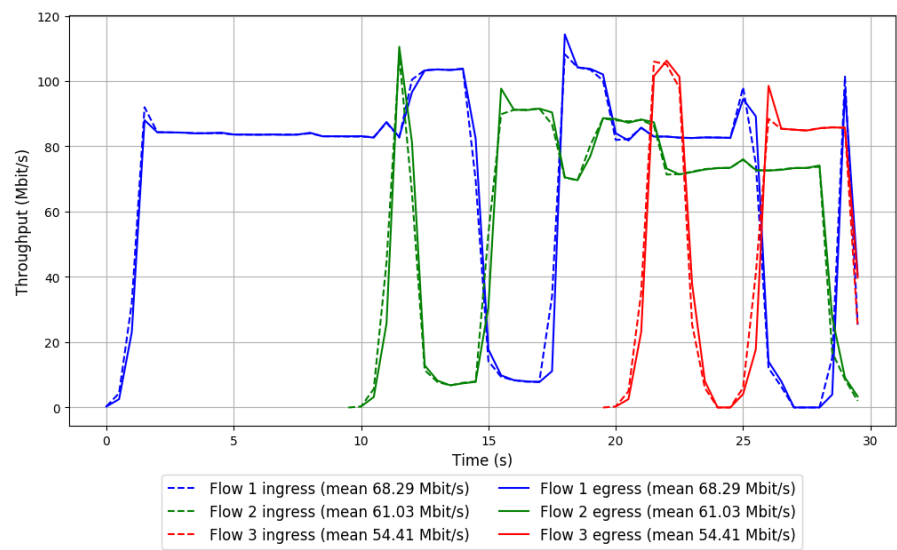
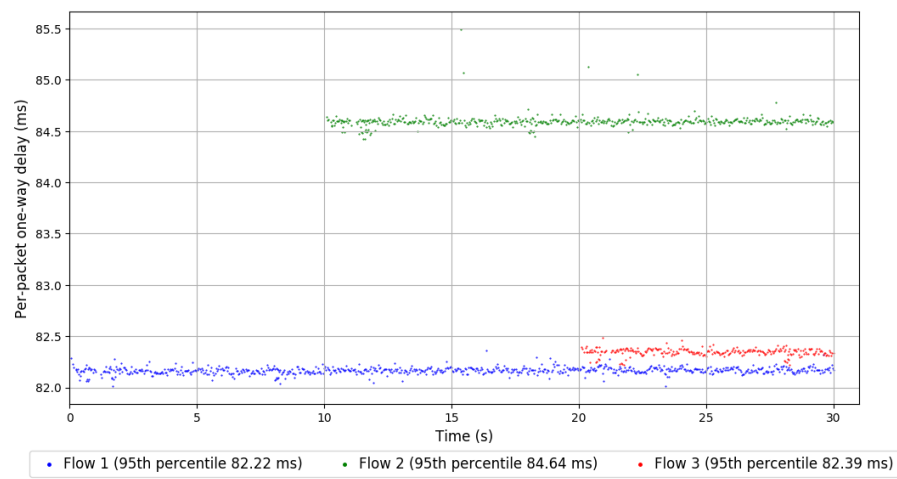# Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 05:15:46
End at: 2017-09-18 05:16:16
Local clock offset: -0.106 ms
Remote clock offset: -3.562 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.37 Mbit/s
95th percentile per-packet one-way delay: 87.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.49 Mbit/s
95th percentile per-packet one-way delay: 85.650 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.78 Mbit/s
95th percentile per-packet one-way delay: 87.877 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 87.637 ms
Loss rate: 0.00%
```
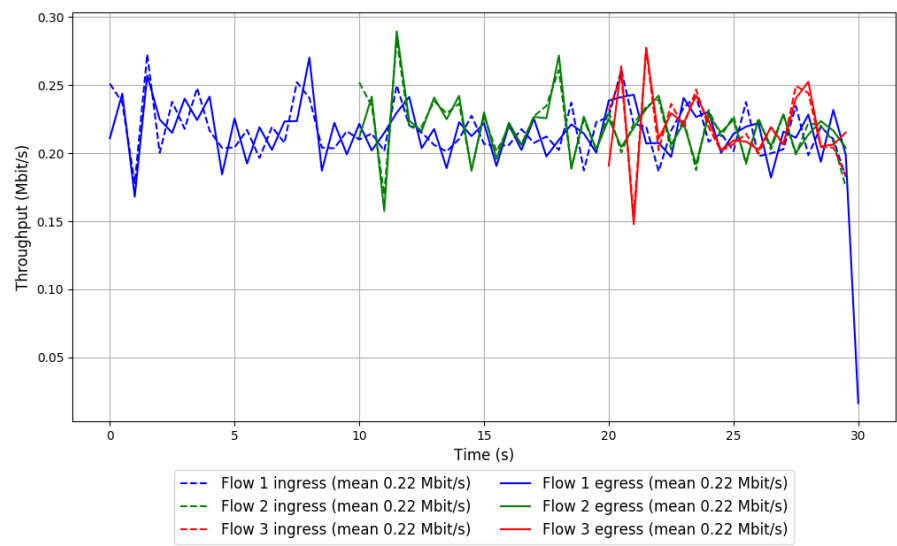
Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 05:37:36
End at: 2017-09-18 05:38:06
Local clock offset: -0.006 ms
Remote clock offset: -8.003 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.20 Mbit/s
95th percentile per-packet one-way delay: 82.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.68 Mbit/s
95th percentile per-packet one-way delay: 82.890 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.52 Mbit/s
95th percentile per-packet one-way delay: 81.437 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.21 Mbit/s
95th percentile per-packet one-way delay: 82.989 ms
Loss rate: 0.00%
```
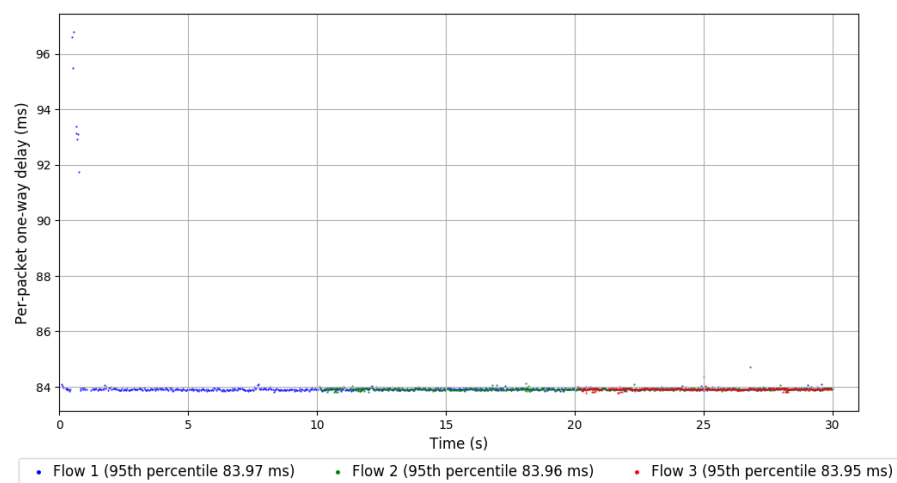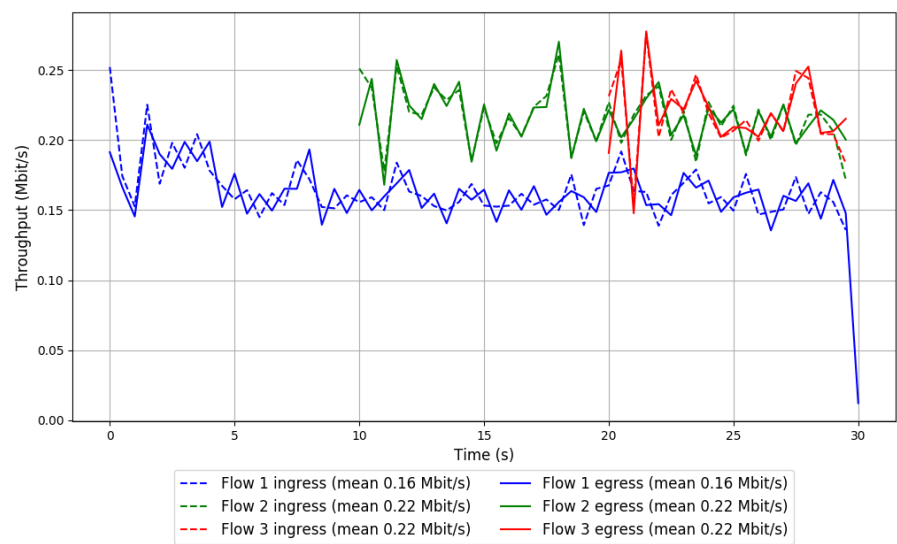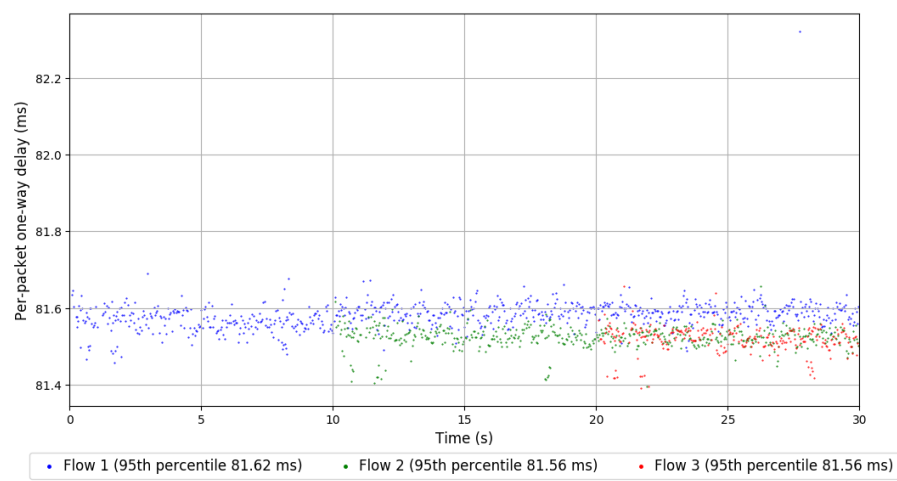
Run 8: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 55.68 Mbit/s) ——— Flow 1 egress (mean 55.68 Mbit/s)
- - - - Flow 2 ingress (mean 60.52 Mbit/s) ——— Flow 2 egress (mean 60.52 Mbit/s)
- - - - Flow 3 ingress (mean 71.21 Mbit/s) ——— Flow 3 egress (mean 71.21 Mbit/s)

- Flow 1 (95th percentile 82.89 ms) • Flow 2 (95th percentile 81.44 ms) • Flow 3 (95th percentile 82.99 ms)

179

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 05:59:20
End at: 2017-09-18 05:59:50
Local clock offset: 0.119 ms
Remote clock offset: -3.587 ms
```

Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 06:21:18
End at: 2017-09-18 06:21:48
Local clock offset: 0.156 ms
Remote clock offset: -2.296 ms

# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.63 Mbit/s
95th percentile per-packet one-way delay: 88.542 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.29 Mbit/s
95th percentile per-packet one-way delay: 87.846 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.03 Mbit/s
95th percentile per-packet one-way delay: 88.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.41 Mbit/s
95th percentile per-packet one-way delay: 88.062 ms
Loss rate: 0.00%
```

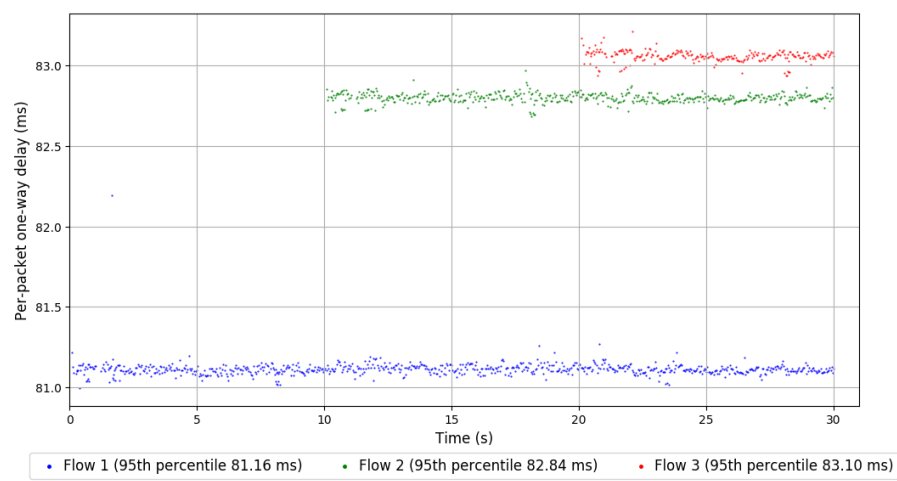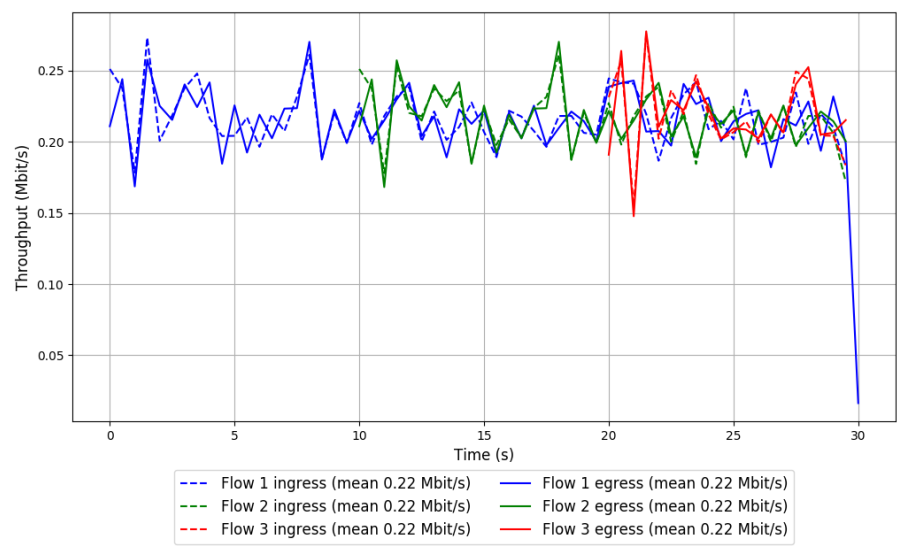Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2017-09-18 03:07:16
End at: 2017-09-18 03:07:46
Local clock offset: -1.414 ms
Remote clock offset: -6.233 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.616 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.394 ms
Loss rate: 0.00%
```
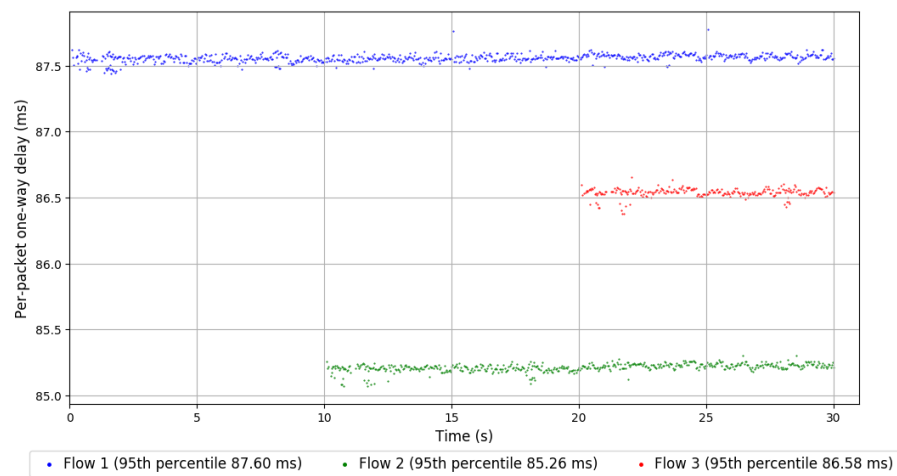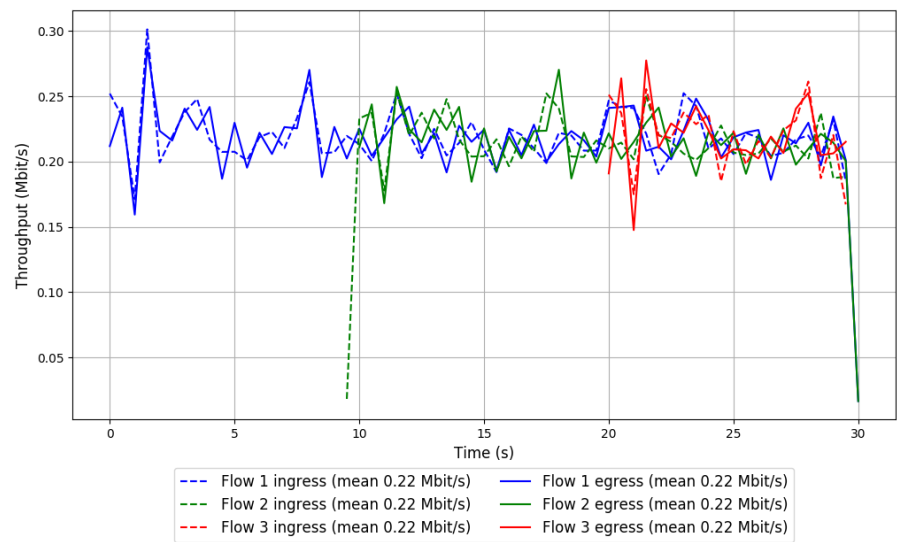
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-09-18 03:29:18
End at: 2017-09-18 03:29:48
Local clock offset: -1.243 ms
Remote clock offset: -6.302 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 83.964 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 83.973 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.960 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.950 ms
Loss rate: 0.00%
```
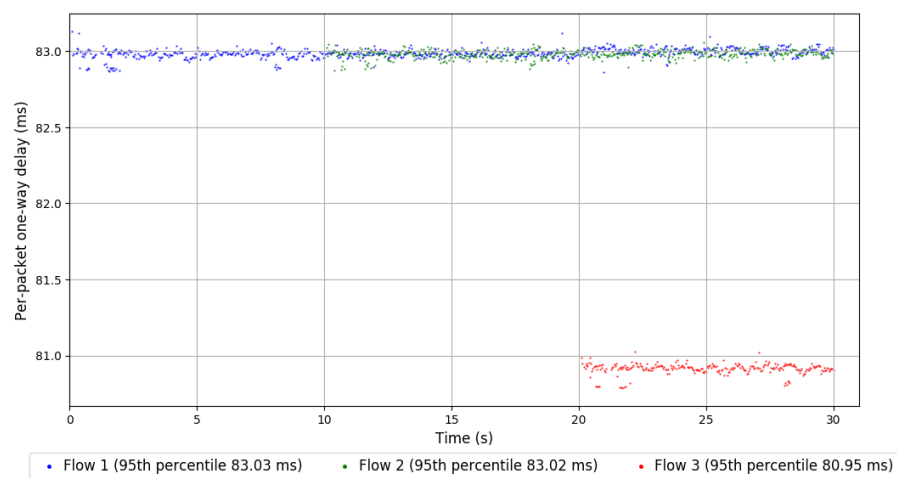
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-09-18 03:51:21
End at: 2017-09-18 03:51:51
Local clock offset: -1.074 ms
Remote clock offset: -6.952 ms

# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.615 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.557 ms
Loss rate: 0.00%
```
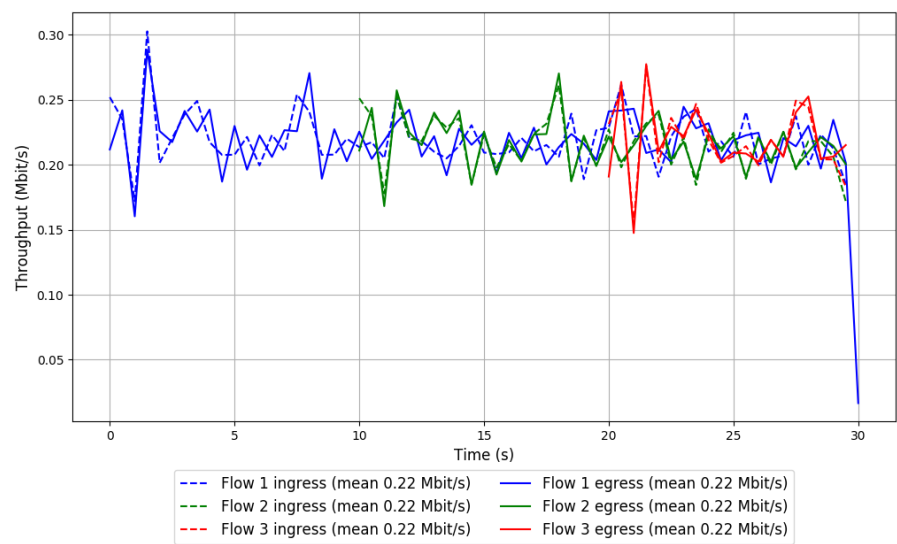
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-09-18 04:13:05
End at: 2017-09-18 04:13:35
Local clock offset: -0.824 ms
Remote clock offset: -7.488 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 83.074 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.157 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.844 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.101 ms
Loss rate: 0.00%
```
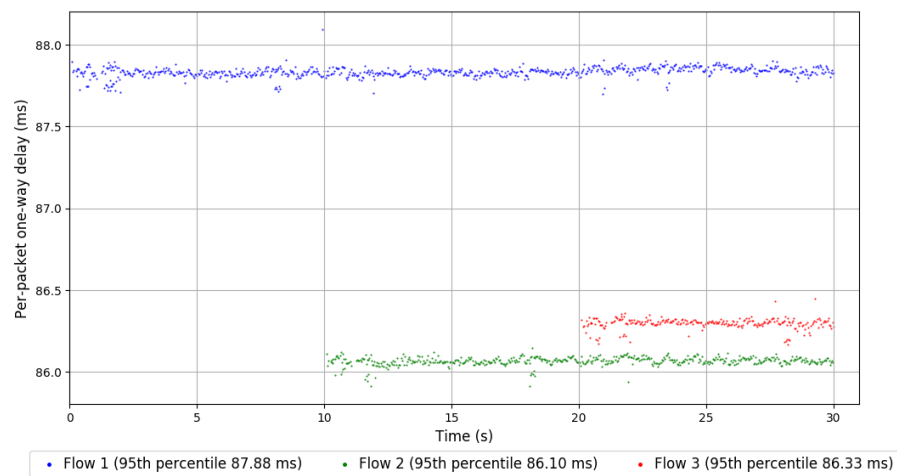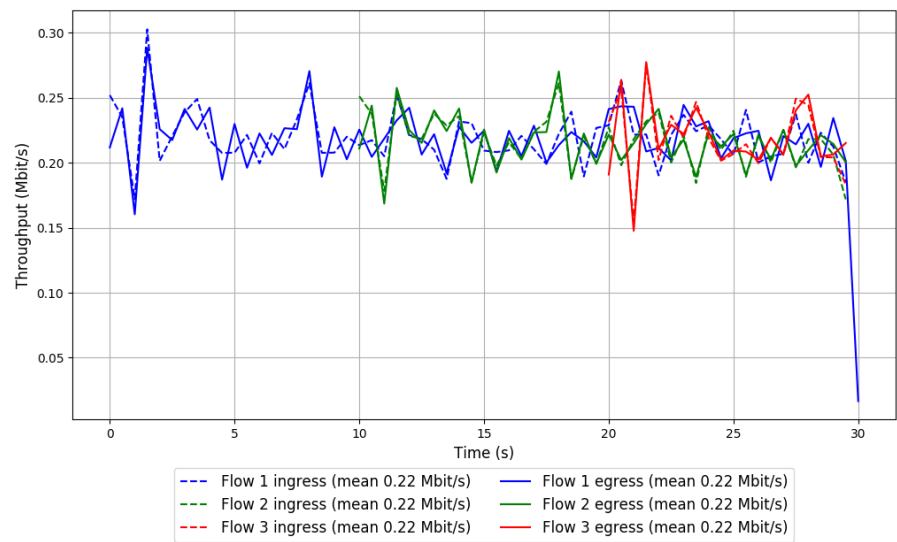
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-09-18 04:34:53
End at: 2017-09-18 04:35:23
Local clock offset: -0.701 ms
Remote clock offset: -3.935 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.256 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.579 ms
Loss rate: 0.00%
```
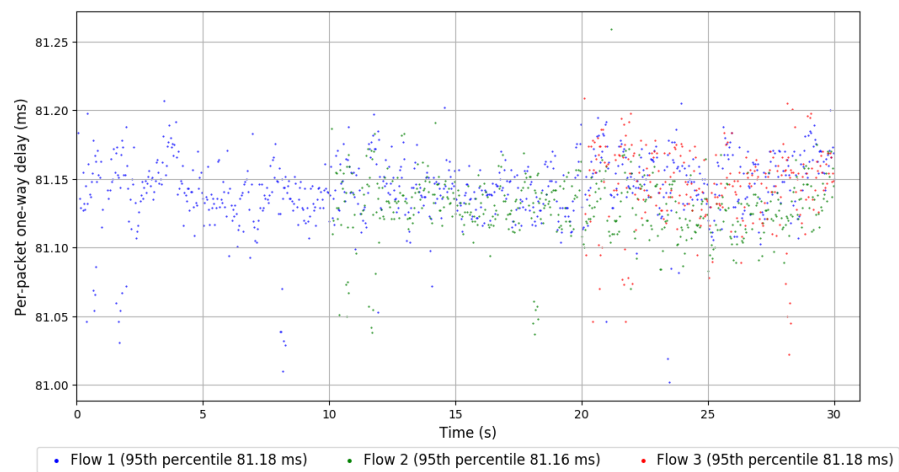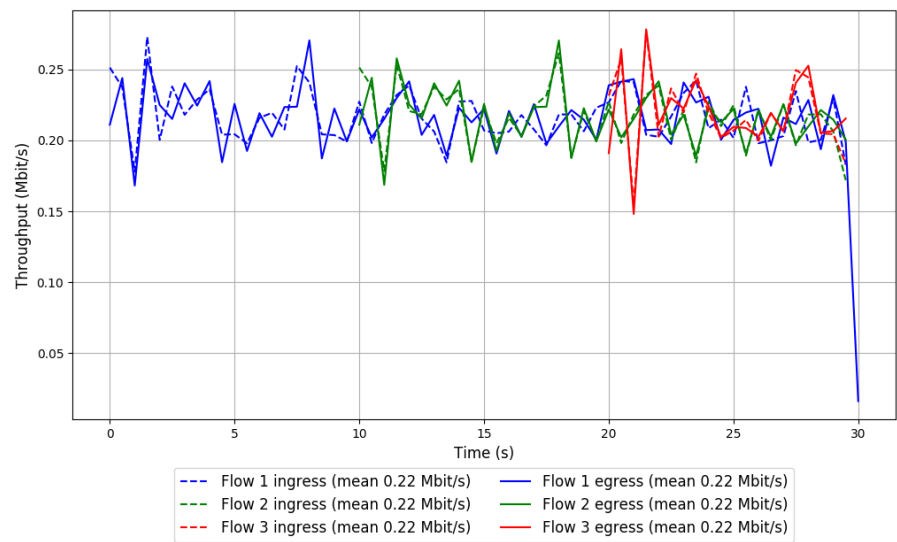
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-09-18 04:56:51
End at: 2017-09-18 04:57:21
Local clock offset: -0.379 ms
Remote clock offset: -7.882 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 83.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.030 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.955 ms
Loss rate: 0.00%
```
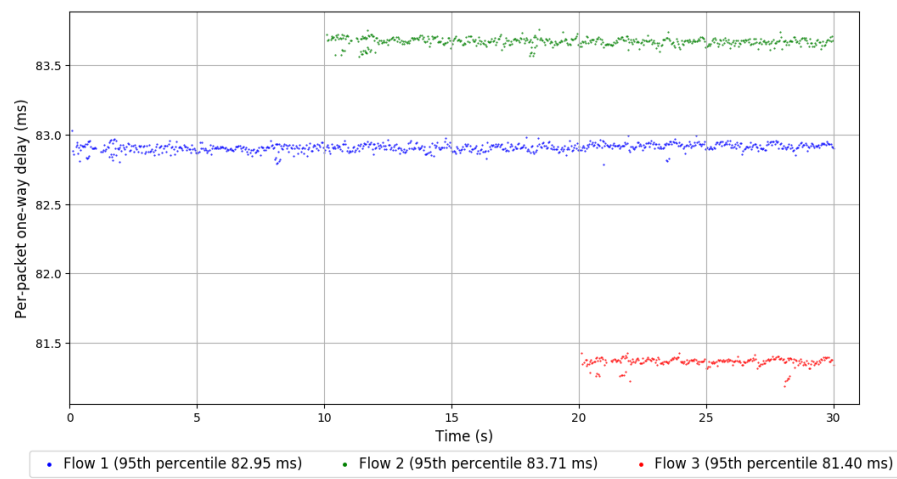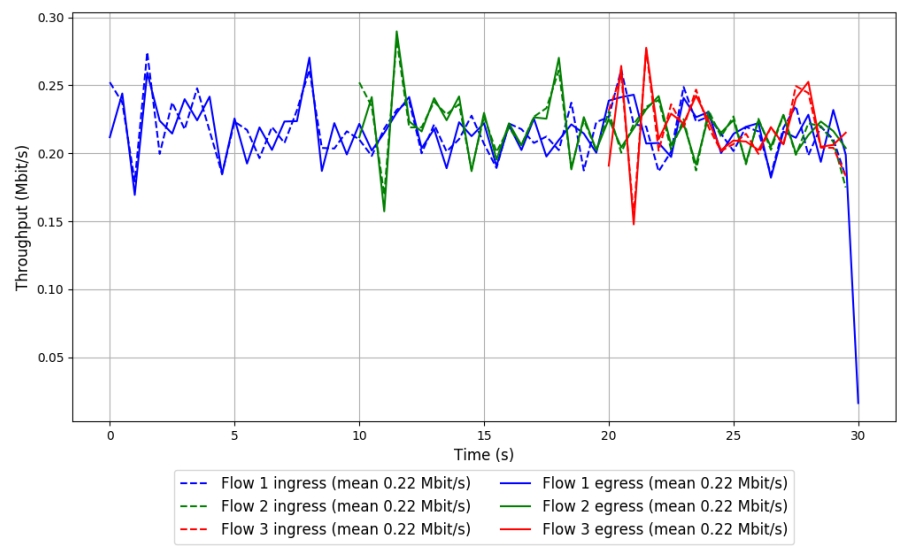
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-09-18 05:18:33
End at: 2017-09-18 05:19:03
Local clock offset: -0.113 ms
Remote clock offset: -3.184 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.868 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.876 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.332 ms
Loss rate: 0.00%
```
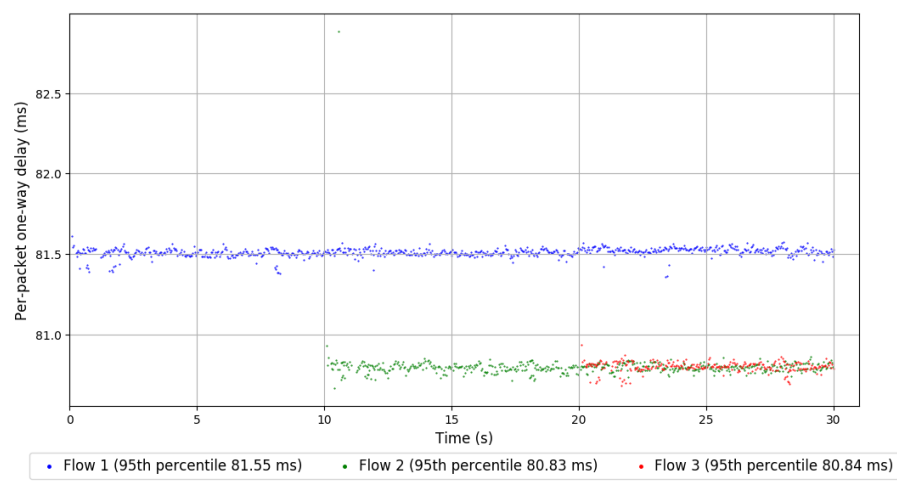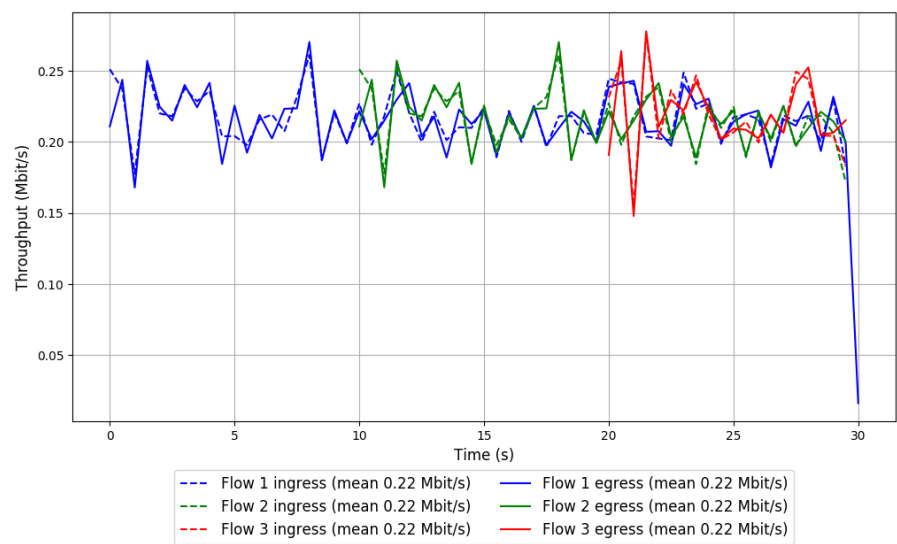
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-09-18 05:40:24
End at: 2017-09-18 05:40:54
Local clock offset: 0.049 ms
Remote clock offset: -7.978 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.178 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.164 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.184 ms
Loss rate: 0.00%
```
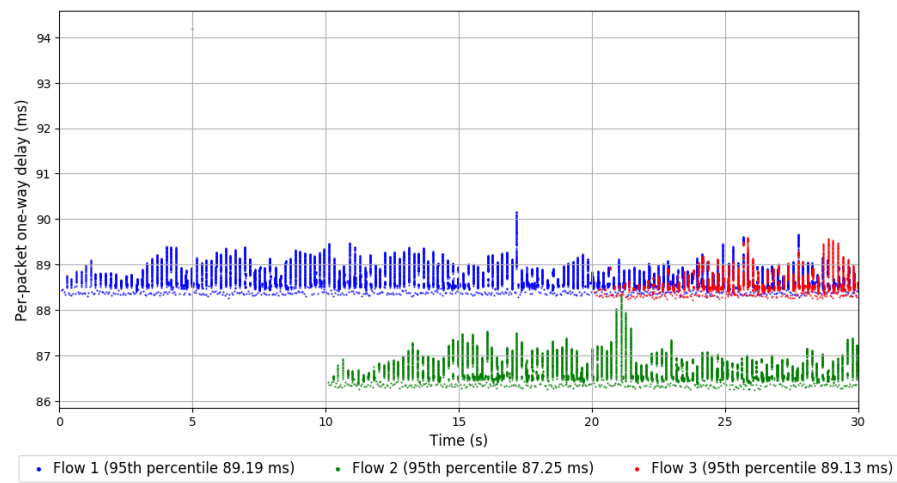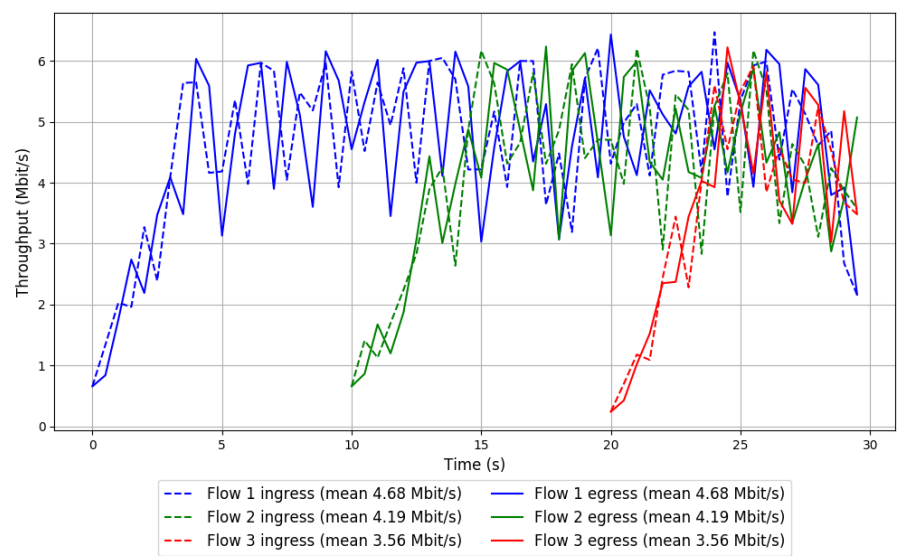
Run 8: Report of SCReAM — Data Link

199

```
Run 9: Statistics of SCReAM

Start at: 2017-09-18 06:02:10
End at: 2017-09-18 06:02:40
Local clock offset: 0.058 ms
Remote clock offset: -7.588 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 83.700 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.950 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.713 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.397 ms
Loss rate: 0.00%
```
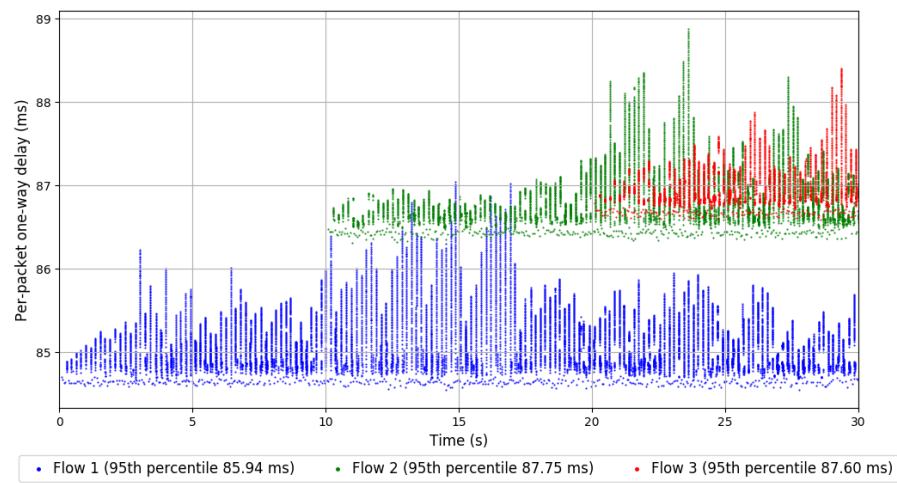
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2017-09-18 06:24:06
End at: 2017-09-18 06:24:36
Local clock offset: 0.257 ms
Remote clock offset: -7.521 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.540 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.547 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.833 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.842 ms
Loss rate: 0.00%
```
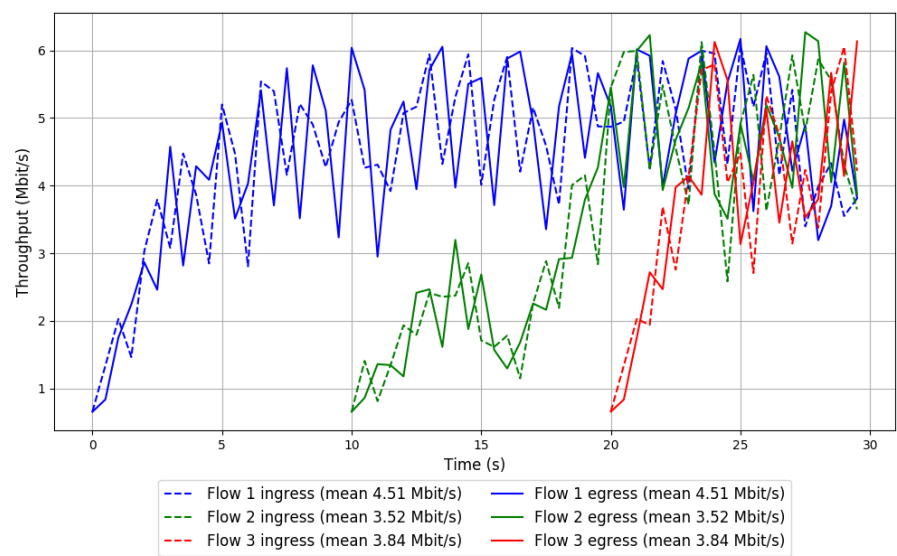
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-09-18 03:14:13
End at: 2017-09-18 03:14:43
Local clock offset: -1.484 ms
Remote clock offset: -2.067 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 89.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 89.192 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 87.252 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 89.133 ms
Loss rate: 0.00%
```
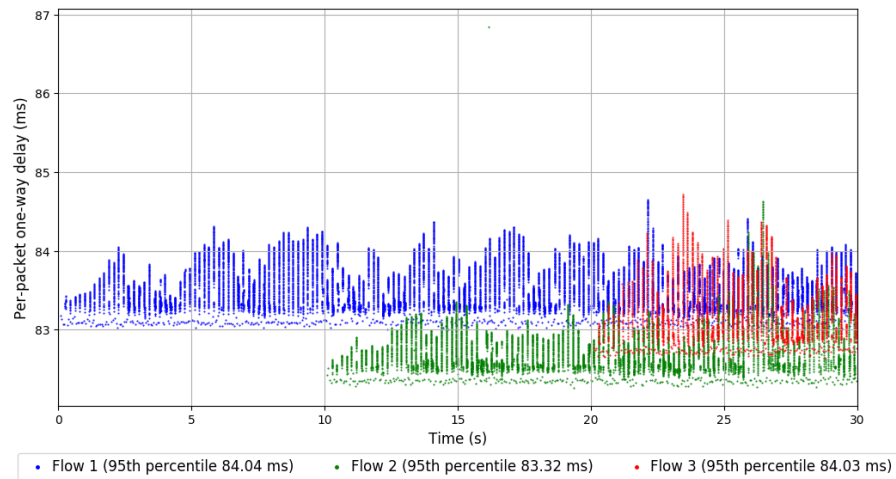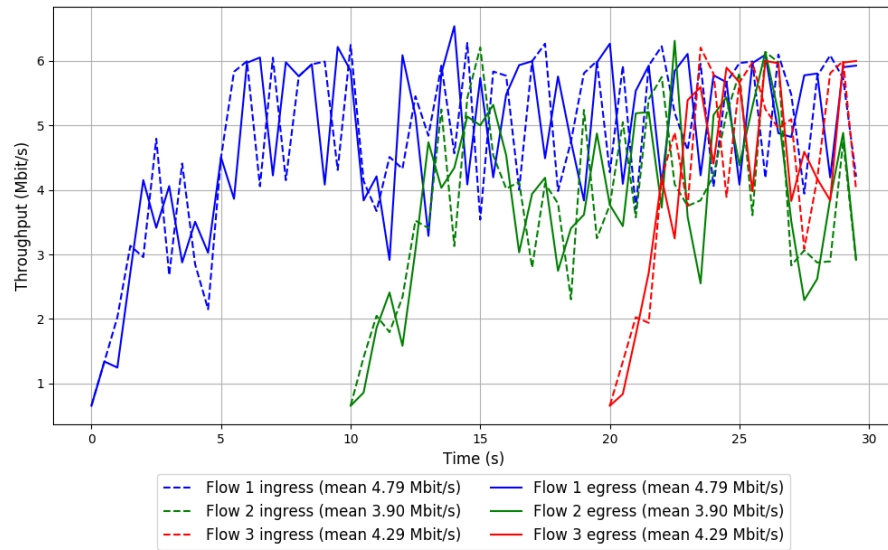
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-09-18 03:36:15
End at: 2017-09-18 03:36:45
Local clock offset: -1.22 ms
Remote clock offset: -3.689 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 85.941 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 87.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 87.600 ms
Loss rate: 0.00%
```
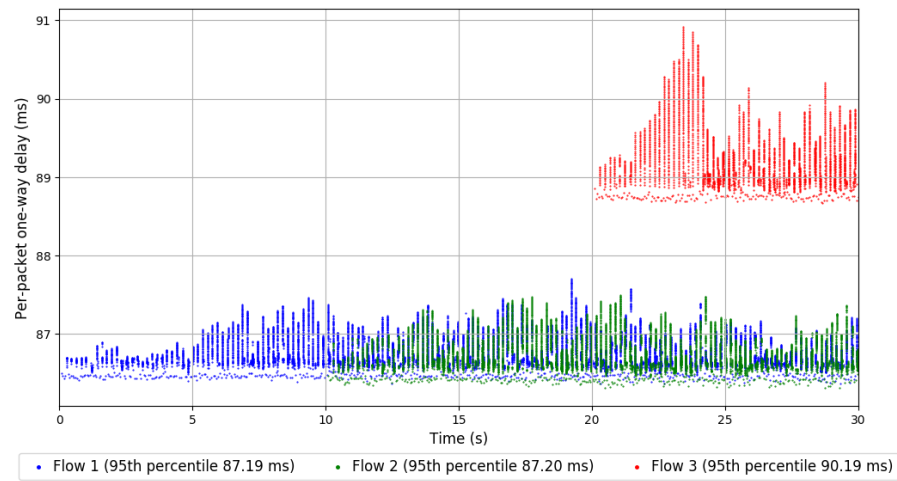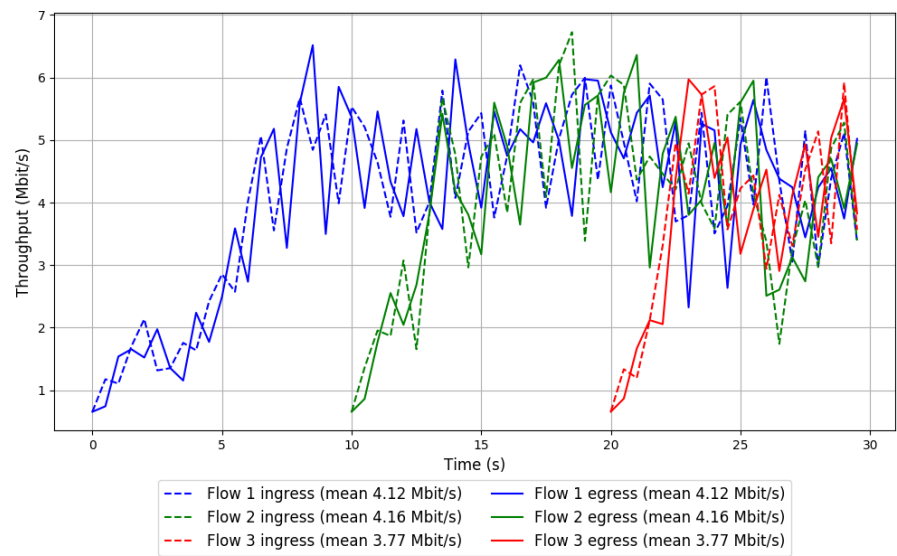
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-09-18 03:58:12
End at: 2017-09-18 03:58:42
Local clock offset: -1.026 ms
Remote clock offset: -6.105 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 83.999 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 84.044 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 83.316 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 84.031 ms
Loss rate: 0.00%
```
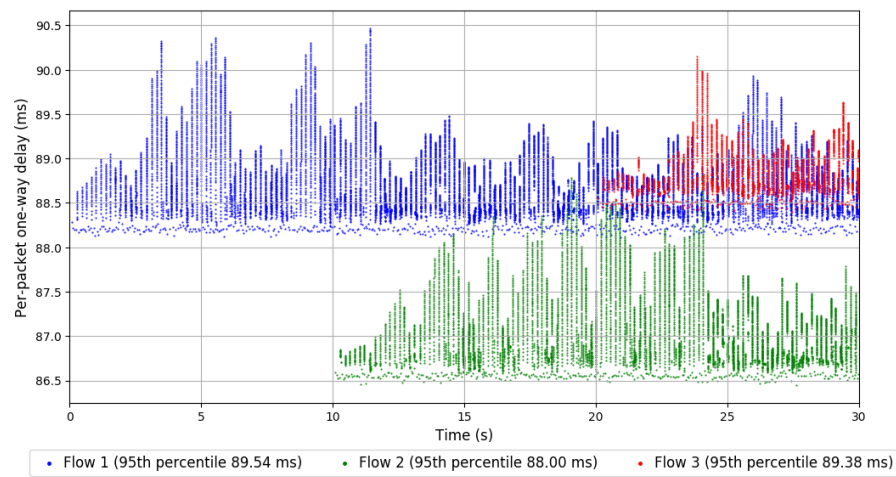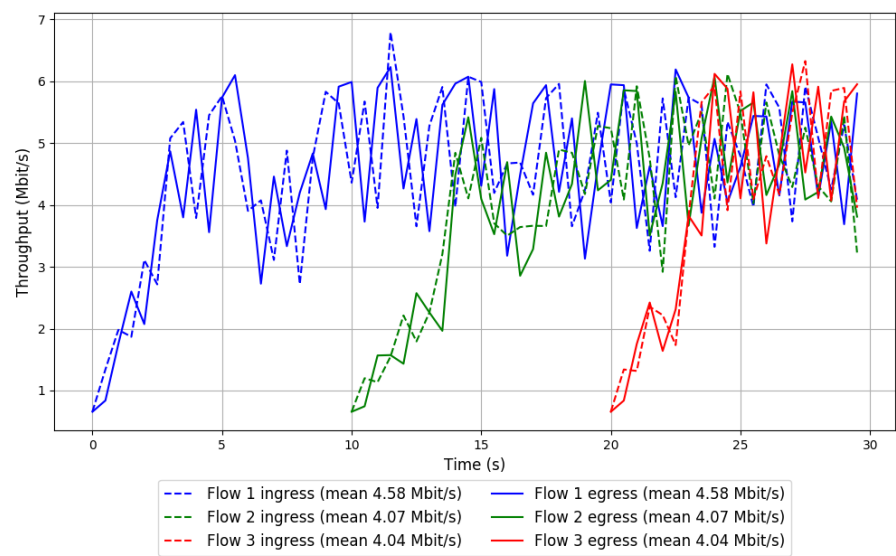
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-09-18 04:20:04
End at: 2017-09-18 04:20:34
Local clock offset: -0.795 ms
Remote clock offset: -2.261 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 89.413 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 87.190 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 87.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 90.194 ms
Loss rate: 0.00%
```
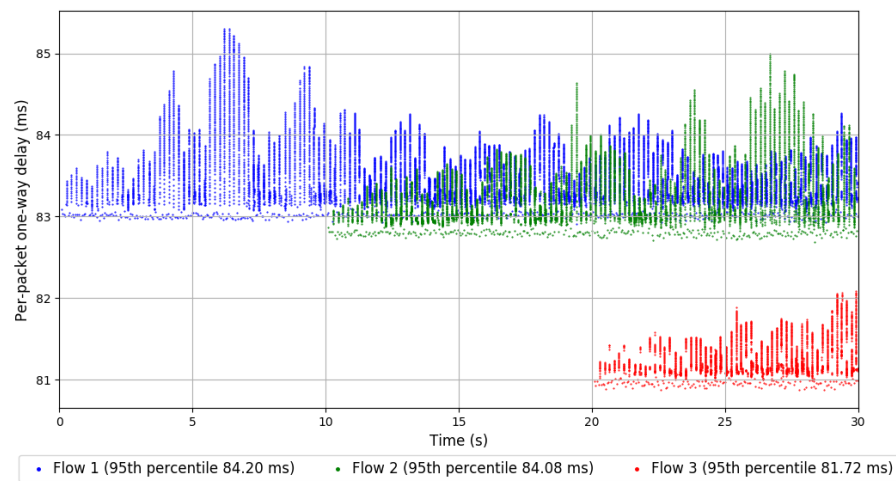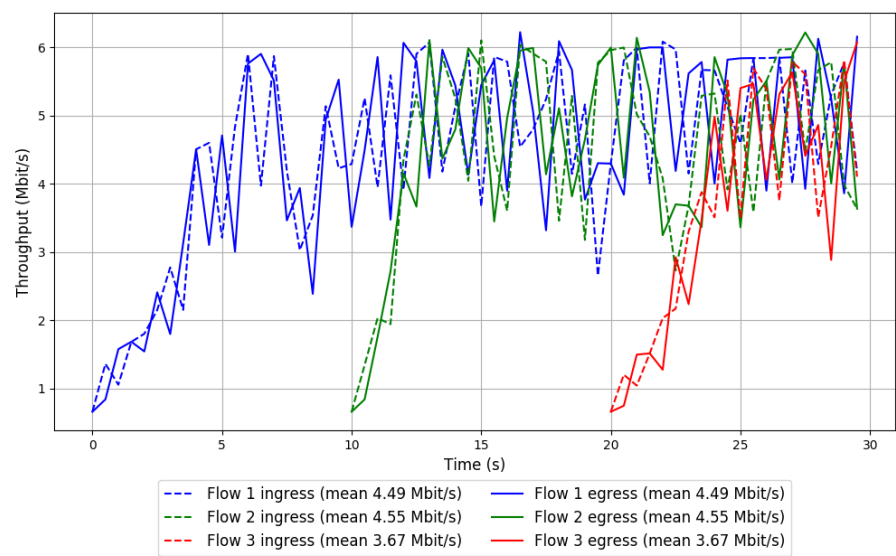
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-09-18 04:41:42
End at: 2017-09-18 04:42:12
Local clock offset: -0.637 ms
Remote clock offset: -2.273 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 89.360 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 89.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 88.001 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 89.375 ms
Loss rate: 0.00%
```
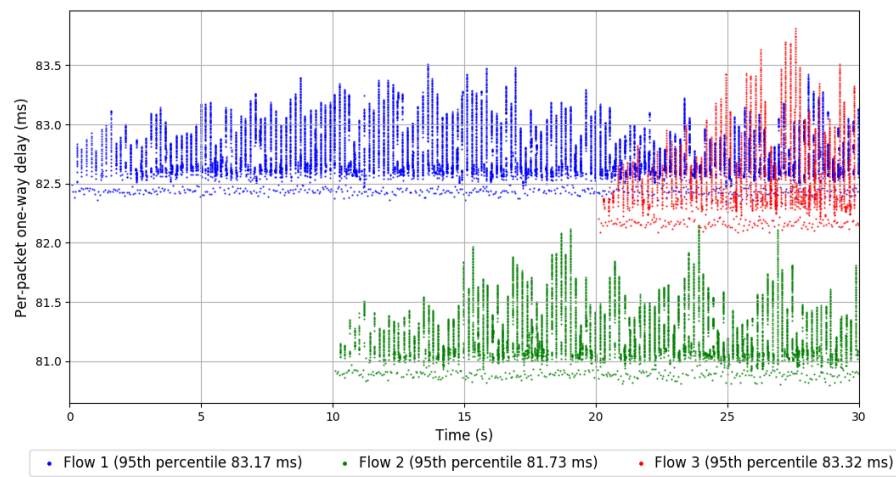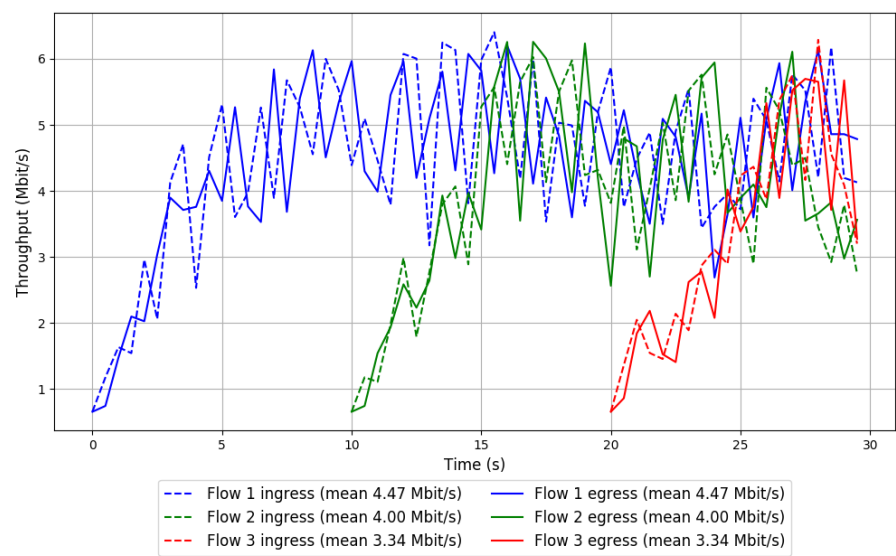
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-09-18 05:03:41
End at: 2017-09-18 05:04:11
Local clock offset: -0.217 ms
Remote clock offset: -8.017 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.73 Mbit/s
95th percentile per-packet one-way delay: 84.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 84.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 84.077 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 81.719 ms
Loss rate: 0.00%
```
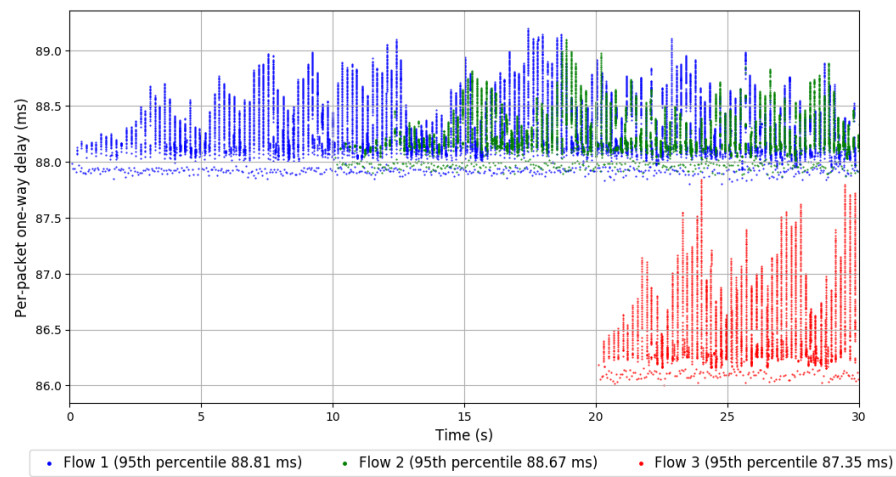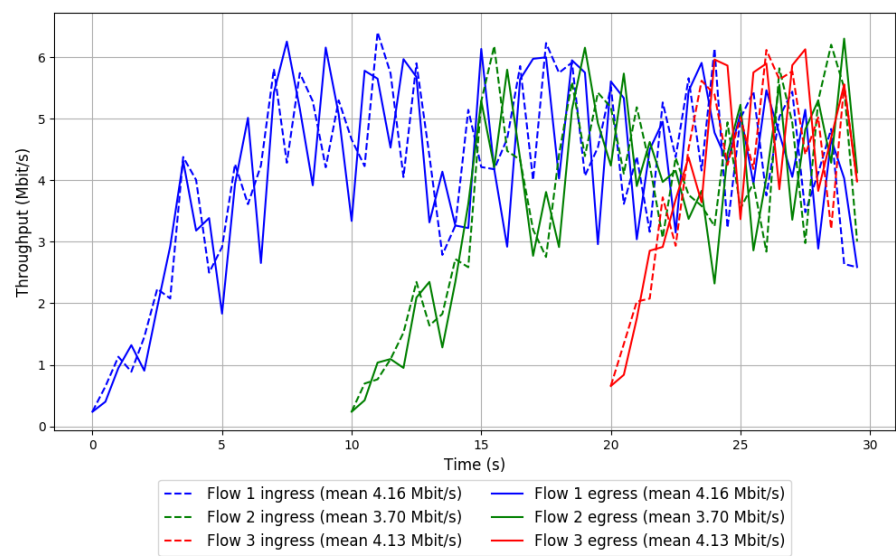
Run 6: Report of Sprout — Data Link

Run 7: Statistics of Sprout

Start at: 2017-09-18 05:25:25
End at: 2017-09-18 05:25:55
Local clock offset: -0.047 ms
Remote clock offset: -8.439 ms

Below is generated by plot.py at 2017-09-18 08:34:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 83.138 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 83.171 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 81.730 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 83.324 ms
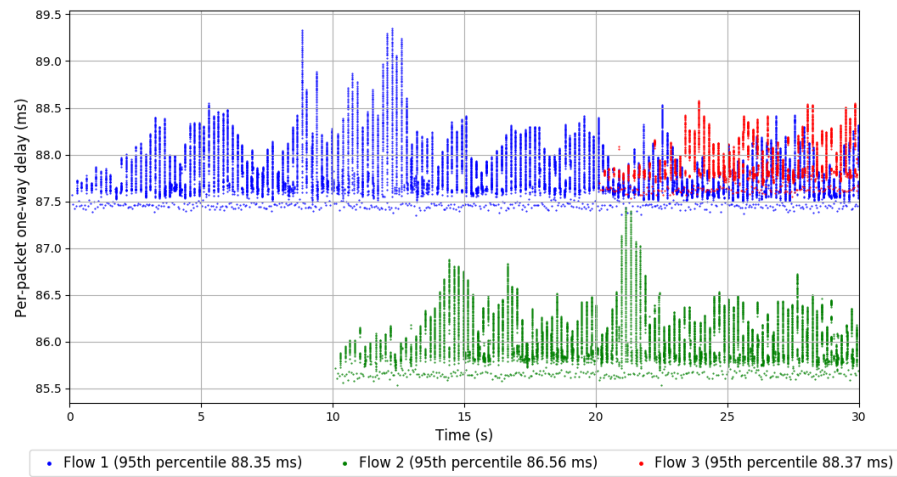Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-09-18 05:47:13
End at: 2017-09-18 05:47:43
Local clock offset: 0.062 ms
Remote clock offset: -2.667 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 88.746 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 88.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 88.668 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 87.346 ms
Loss rate: 0.00%
```
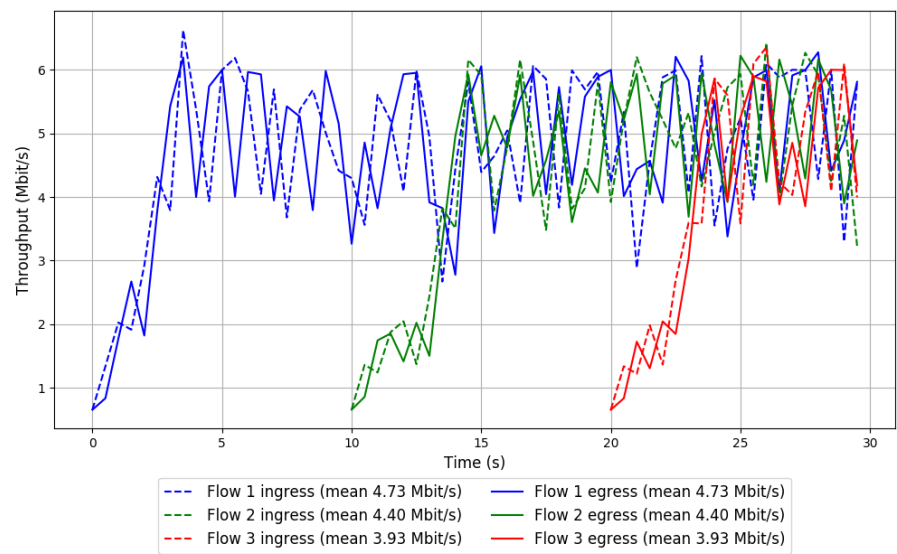
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2017-09-18 06:09:05
End at: 2017-09-18 06:09:35
Local clock offset: 0.164 ms
Remote clock offset: -2.761 ms


# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.95 Mbit/s
95th percentile per-packet one-way delay: 88.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 88.354 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 86.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 88.371 ms
Loss rate: 0.00%
```
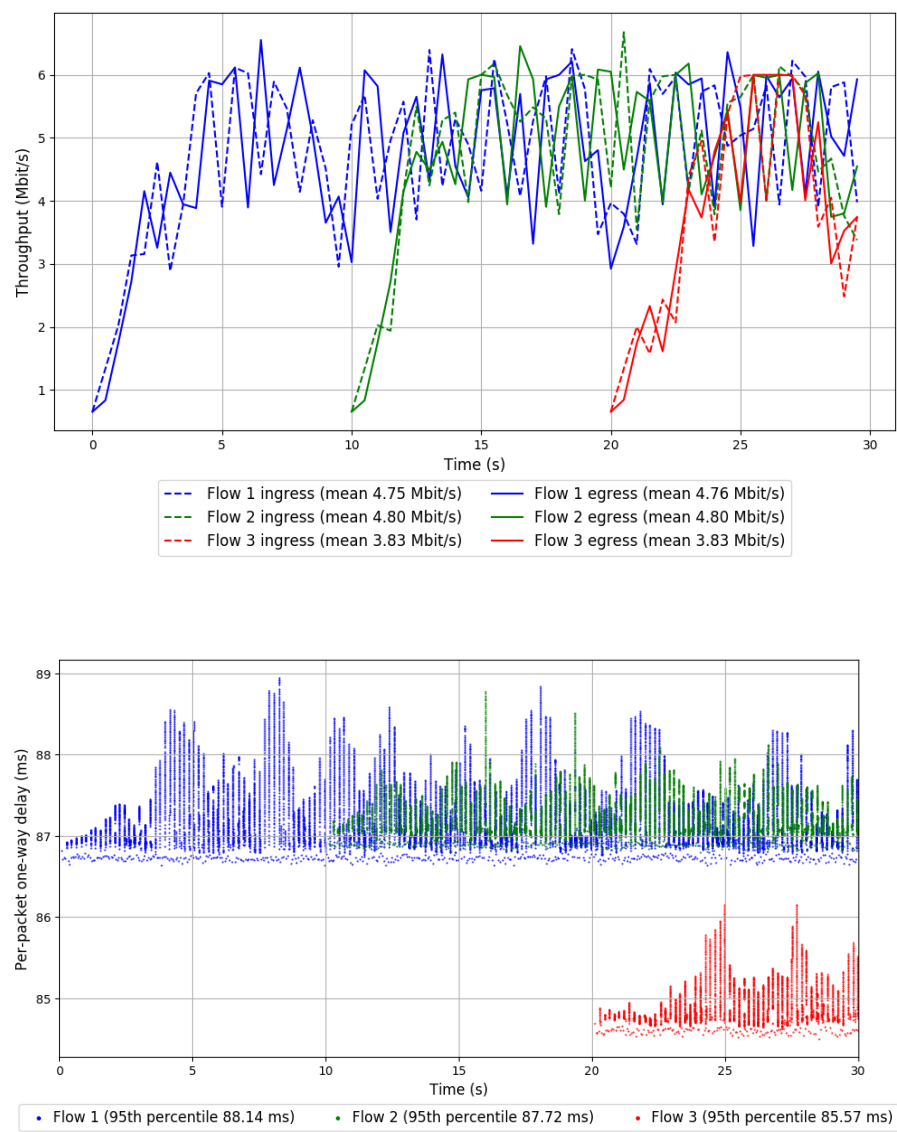
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-09-18 06:30:52
End at: 2017-09-18 06:31:22
Local clock offset: 0.254 ms
Remote clock offset: -3.513 ms

# Below is generated by plot.py at 2017-09-18 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.20 Mbit/s
95th percentile per-packet one-way delay: 87.954 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 88.139 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 87.721 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 85.569 ms
Loss rate: 0.00%
```
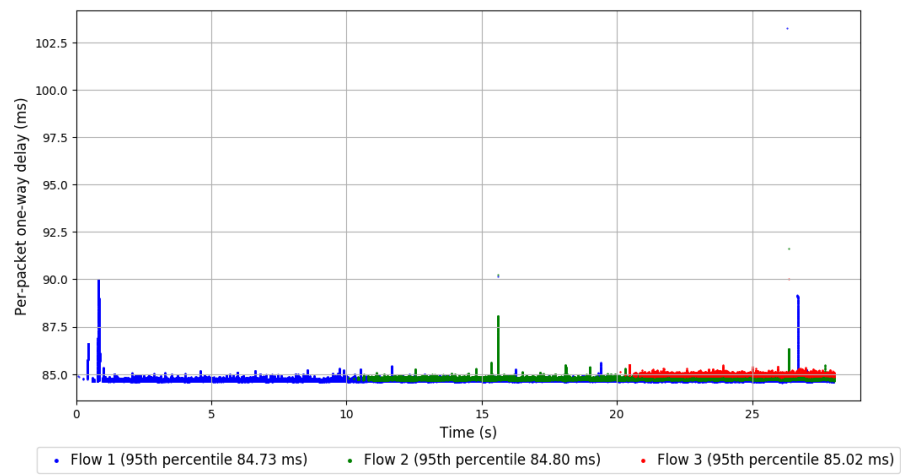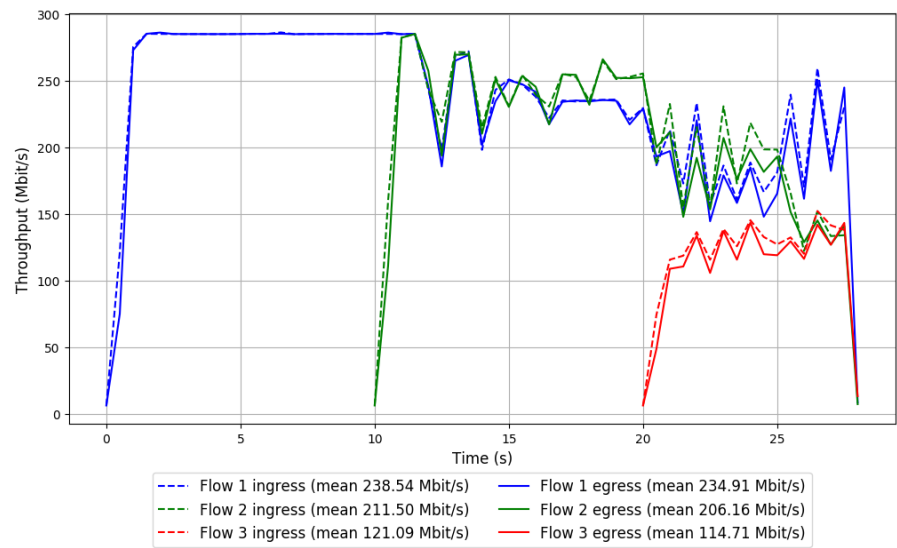
Run 10: Report of Sprout — Data Link

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

Start at: 2017-09-18 03:17:19
End at: 2017-09-18 03:17:49
Local clock offset: -1.419 ms
Remote clock offset: -3.667 ms


# Below is generated by plot.py at 2017-09-18 08:42:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.51 Mbit/s
95th percentile per-packet one-way delay: 84.961 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 234.91 Mbit/s
95th percentile per-packet one-way delay: 84.727 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 206.16 Mbit/s
95th percentile per-packet one-way delay: 84.801 ms
Loss rate: 2.52%
-- Flow 3:
Average throughput: 114.71 Mbit/s
95th percentile per-packet one-way delay: 85.018 ms
Loss rate: 5.27%
```

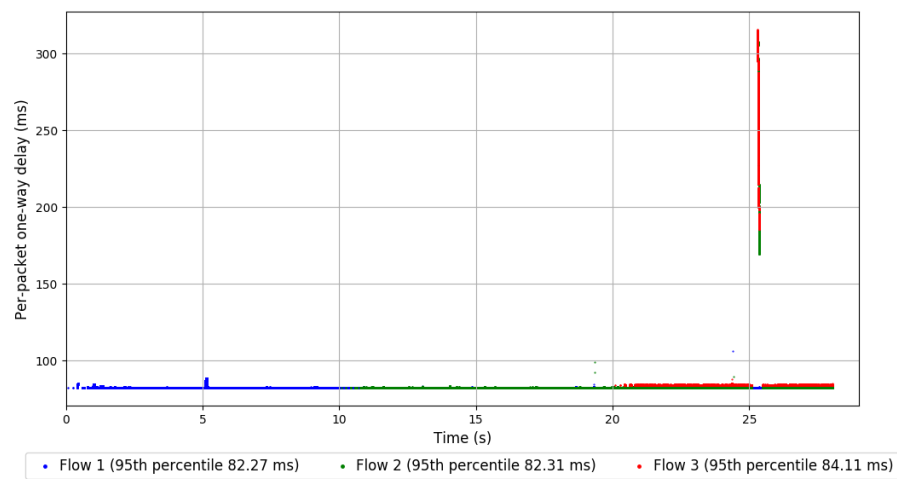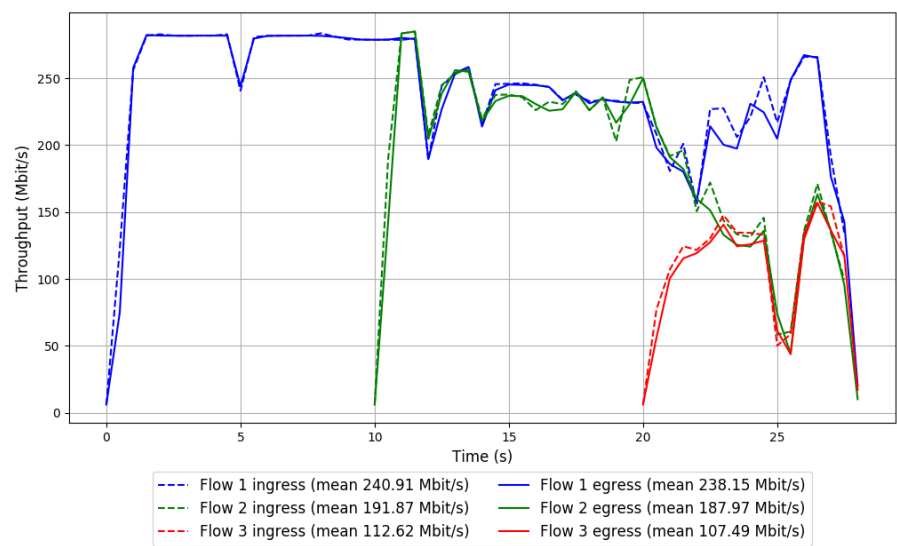# Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 238.54 Mbit/s)   Flow 1 egress (mean 234.91 Mbit/s)
Flow 2 ingress (mean 211.50 Mbit/s)   Flow 2 egress (mean 206.16 Mbit/s)
Flow 3 ingress (mean 121.09 Mbit/s)   Flow 3 egress (mean 114.71 Mbit/s)

Flow 1 (95th percentile 84.73 ms)   Flow 2 (95th percentile 84.80 ms)   Flow 3 (95th percentile 85.02 ms)
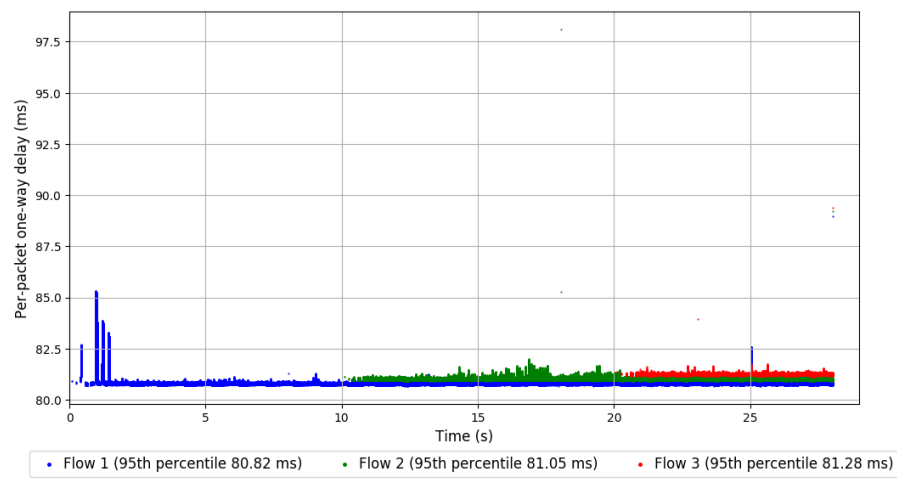
225

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

Start at: 2017-09-18 03:39:13
End at: 2017-09-18 03:39:43
Local clock offset: -1.174 ms
Remote clock offset: -6.433 ms

# Below is generated by plot.py at 2017-09-18 08:42:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.35 Mbit/s
95th percentile per-packet one-way delay: 84.018 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 238.15 Mbit/s
95th percentile per-packet one-way delay: 82.269 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 187.97 Mbit/s
95th percentile per-packet one-way delay: 82.312 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 107.49 Mbit/s
95th percentile per-packet one-way delay: 84.107 ms
Loss rate: 4.56%
```

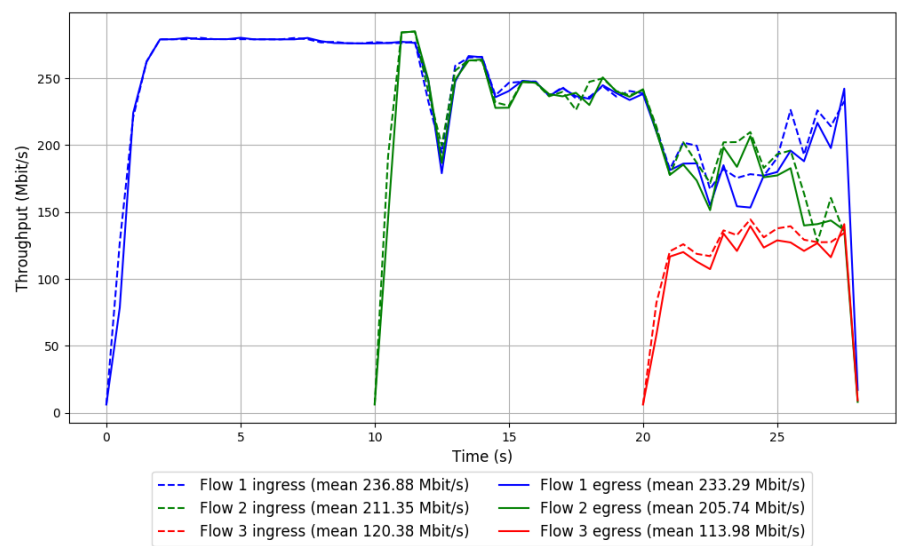Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 04:01:09
End at: 2017-09-18 04:01:39
Local clock offset: -0.988 ms
Remote clock offset: -7.736 ms


# Below is generated by plot.py at 2017-09-18 08:42:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.71 Mbit/s
95th percentile per-packet one-way delay: 81.238 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 233.29 Mbit/s
95th percentile per-packet one-way delay: 80.824 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 205.74 Mbit/s
95th percentile per-packet one-way delay: 81.048 ms
Loss rate: 2.65%
-- Flow 3:
Average throughput: 113.98 Mbit/s
95th percentile per-packet one-way delay: 81.282 ms
Loss rate: 5.32%
```

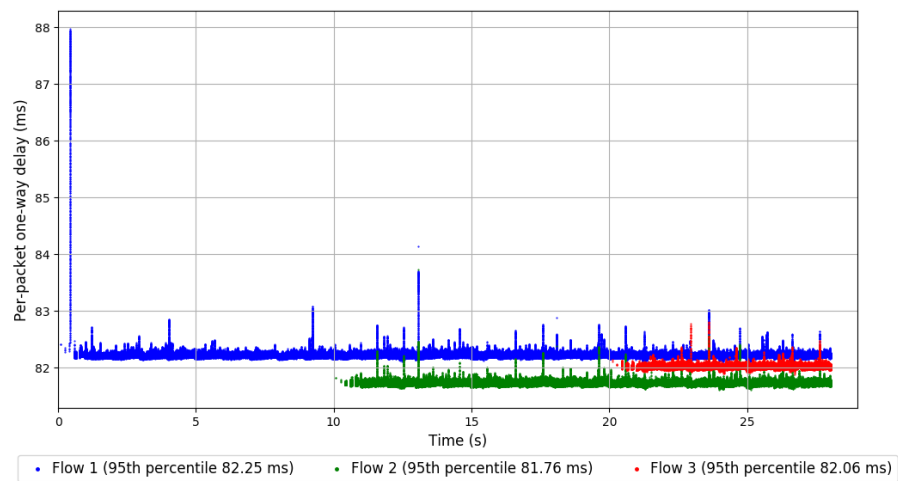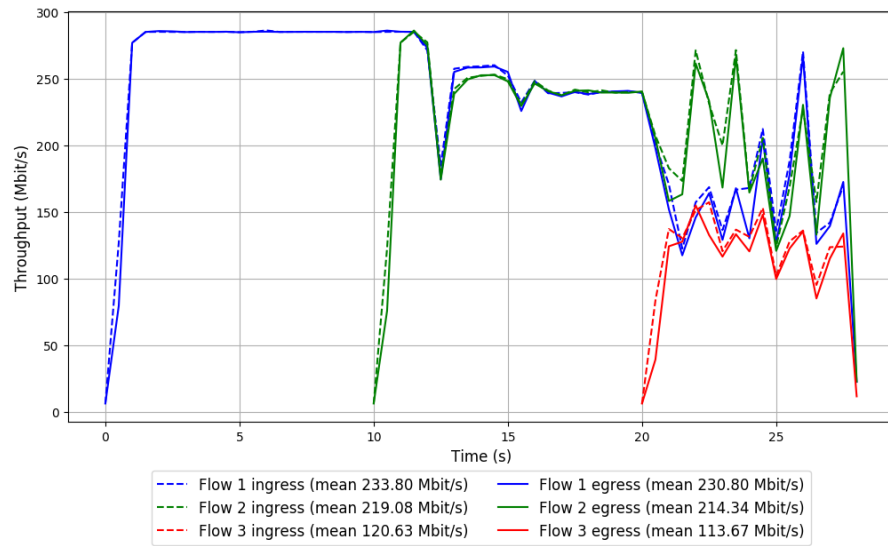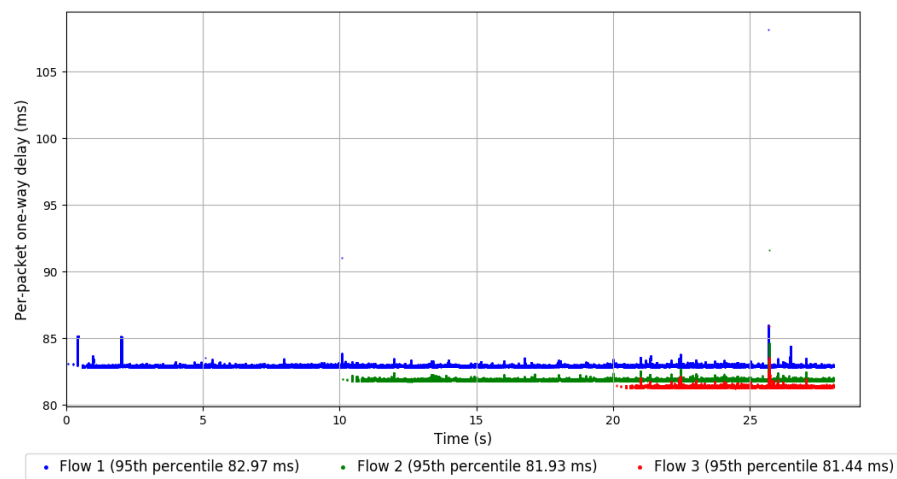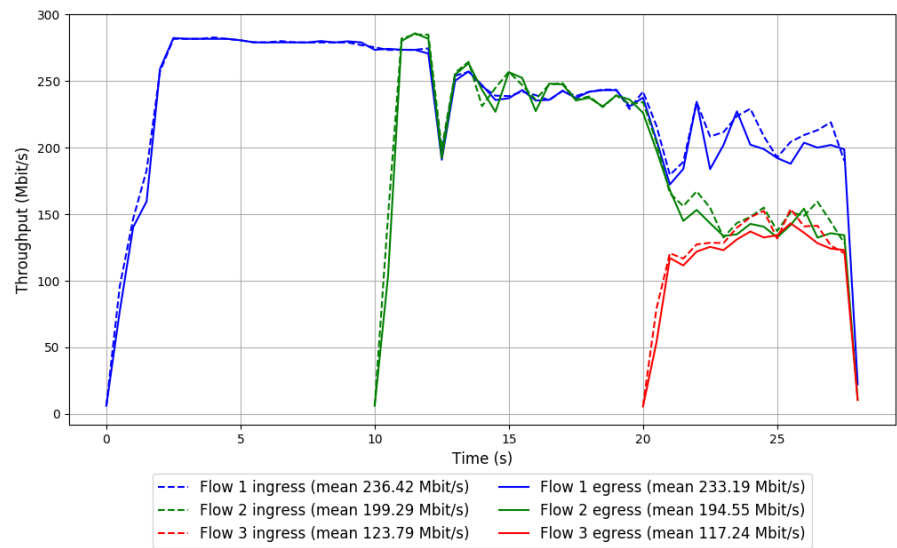Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 236.88 Mbit/s) --- Flow 1 egress (mean 233.29 Mbit/s)
Flow 2 ingress (mean 211.35 Mbit/s) --- Flow 2 egress (mean 205.74 Mbit/s)
Flow 3 ingress (mean 120.38 Mbit/s) --- Flow 3 egress (mean 113.98 Mbit/s)

Flow 1 (95th percentile 80.82 ms)   Flow 2 (95th percentile 81.05 ms)   Flow 3 (95th percentile 81.28 ms)

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

Start at: 2017-09-18 04:23:05
End at: 2017-09-18 04:23:35
Local clock offset: -0.713 ms
Remote clock offset: -6.484 ms

# Below is generated by plot.py at 2017-09-18 08:43:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.70 Mbit/s
95th percentile per-packet one-way delay: 82.247 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 230.80 Mbit/s
95th percentile per-packet one-way delay: 82.255 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 214.34 Mbit/s
95th percentile per-packet one-way delay: 81.763 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 113.67 Mbit/s
95th percentile per-packet one-way delay: 82.062 ms
Loss rate: 5.77%
```

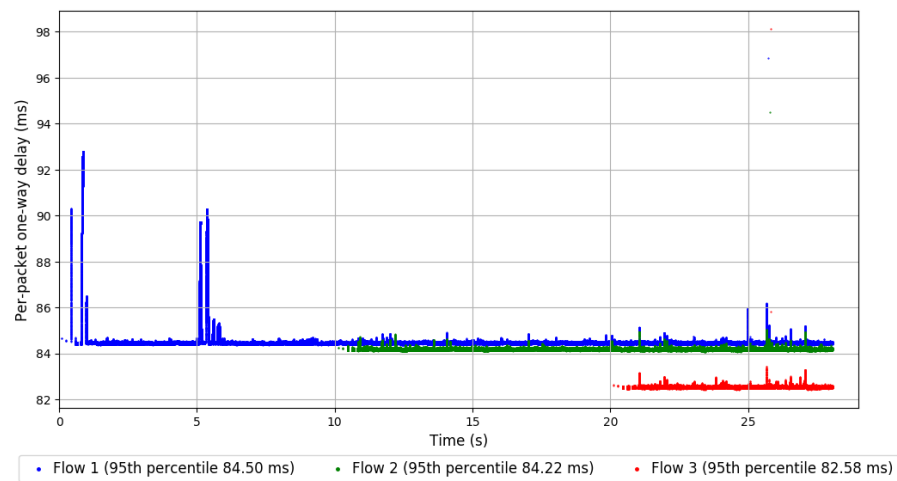Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 04:44:51
End at: 2017-09-18 04:45:21
Local clock offset: -0.524 ms
Remote clock offset: -7.657 ms


# Below is generated by plot.py at 2017-09-18 08:43:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.19 Mbit/s
95th percentile per-packet one-way delay: 82.963 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 233.19 Mbit/s
95th percentile per-packet one-way delay: 82.974 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 194.55 Mbit/s
95th percentile per-packet one-way delay: 81.934 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 117.24 Mbit/s
95th percentile per-packet one-way delay: 81.439 ms
Loss rate: 5.29%
```

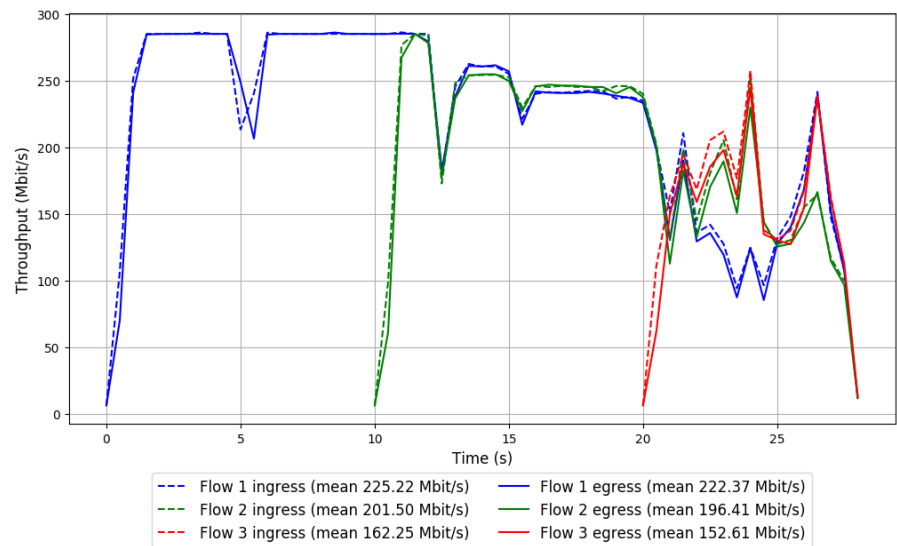## Run 5: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 236.42 Mbit/s)
- Flow 1 egress (mean 233.19 Mbit/s)
- Flow 2 ingress (mean 199.29 Mbit/s)
- Flow 2 egress (mean 194.55 Mbit/s)
- Flow 3 ingress (mean 123.79 Mbit/s)
- Flow 3 egress (mean 117.24 Mbit/s)

- Flow 1 (95th percentile 82.97 ms)
- Flow 2 (95th percentile 81.93 ms)
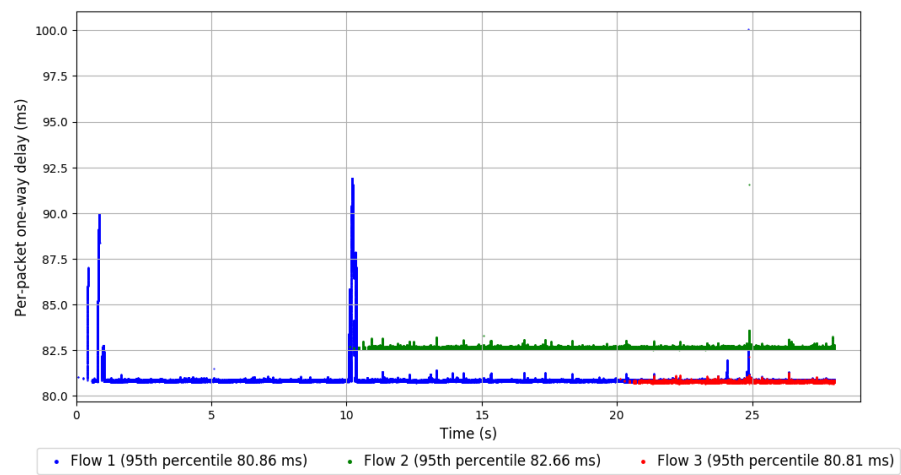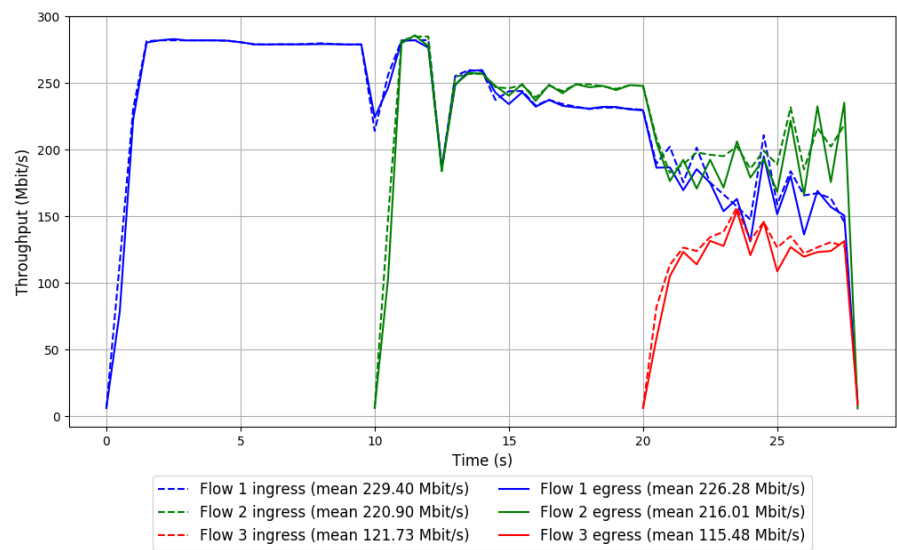- Flow 3 (95th percentile 81.44 ms)

233

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

Start at: 2017-09-18 05:06:39
End at: 2017-09-18 05:07:09
Local clock offset: -0.262 ms
Remote clock offset: -6.744 ms


# Below is generated by plot.py at 2017-09-18 08:43:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.65 Mbit/s
95th percentile per-packet one-way delay: 84.490 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 222.37 Mbit/s
95th percentile per-packet one-way delay: 84.500 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 196.41 Mbit/s
95th percentile per-packet one-way delay: 84.224 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 152.61 Mbit/s
95th percentile per-packet one-way delay: 82.580 ms
Loss rate: 5.94%
```

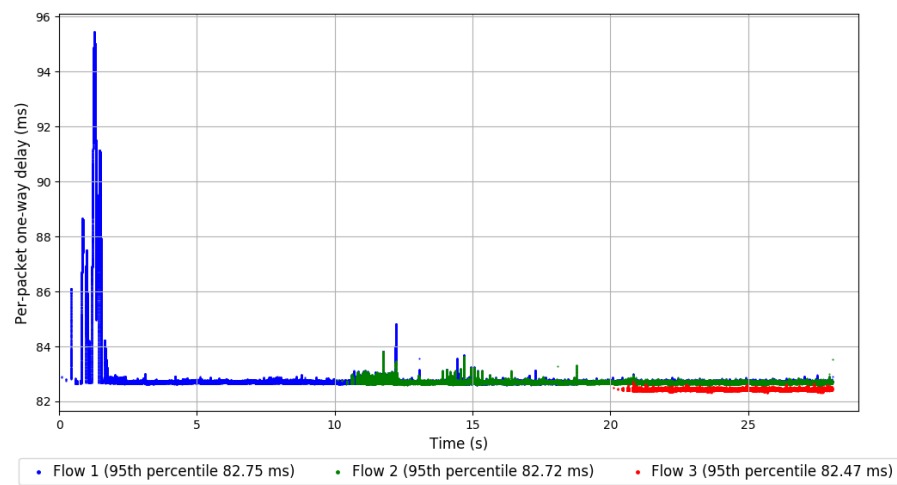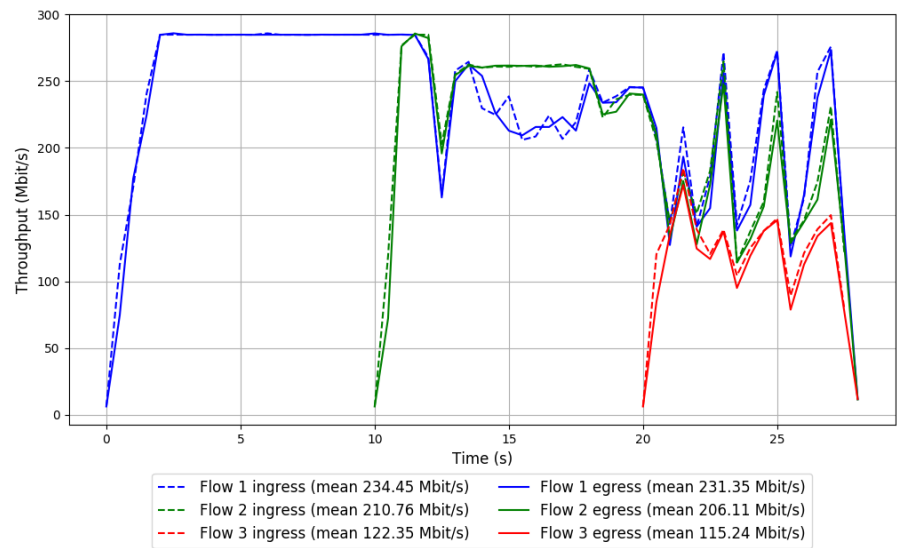Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 225.22 Mbit/s) --- Flow 1 egress (mean 222.37 Mbit/s)
Flow 2 ingress (mean 201.50 Mbit/s) --- Flow 2 egress (mean 196.41 Mbit/s)
Flow 3 ingress (mean 162.25 Mbit/s) --- Flow 3 egress (mean 152.61 Mbit/s)

Flow 1 (95th percentile 84.50 ms)   Flow 2 (95th percentile 84.22 ms)   Flow 3 (95th percentile 82.58 ms)

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

Start at: 2017-09-18 05:28:26
End at: 2017-09-18 05:28:56
Local clock offset: -0.057 ms
Remote clock offset: -8.378 ms

# Below is generated by plot.py at 2017-09-18 08:43:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.51 Mbit/s
95th percentile per-packet one-way delay: 82.647 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 226.28 Mbit/s
95th percentile per-packet one-way delay: 80.858 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 216.01 Mbit/s
95th percentile per-packet one-way delay: 82.659 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 115.48 Mbit/s
95th percentile per-packet one-way delay: 80.811 ms
Loss rate: 5.14%
```
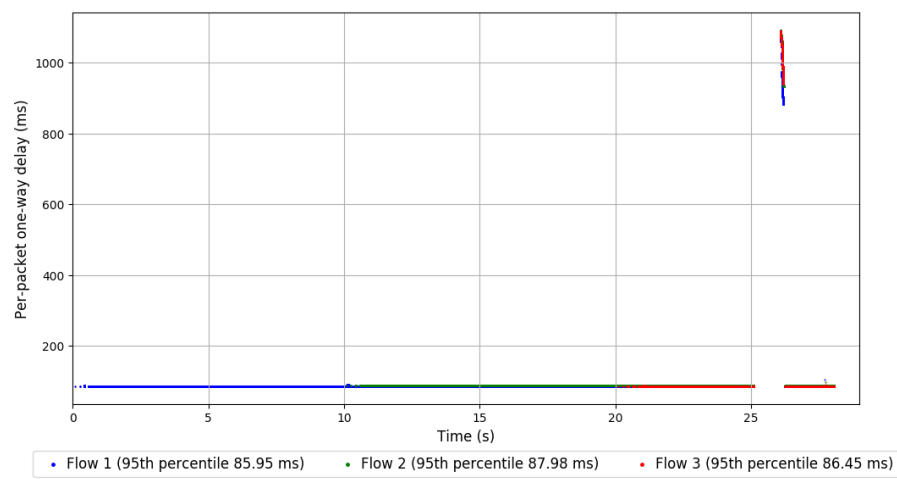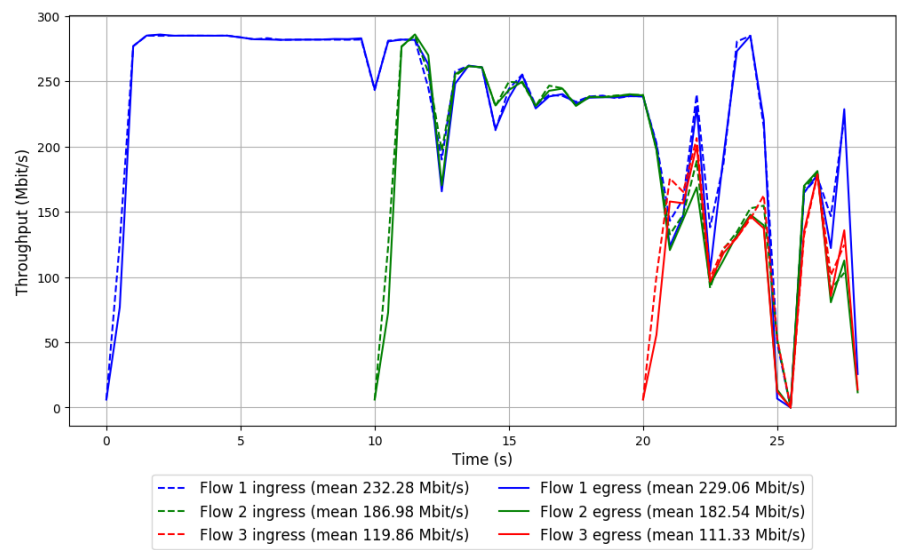
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 05:50:15
End at: 2017-09-18 05:50:45
Local clock offset: 0.103 ms
Remote clock offset: -8.159 ms

# Below is generated by plot.py at 2017-09-18 08:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.41 Mbit/s
95th percentile per-packet one-way delay: 82.735 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 231.35 Mbit/s
95th percentile per-packet one-way delay: 82.746 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 206.11 Mbit/s
95th percentile per-packet one-way delay: 82.723 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 115.24 Mbit/s
95th percentile per-packet one-way delay: 82.469 ms
Loss rate: 5.81%
```
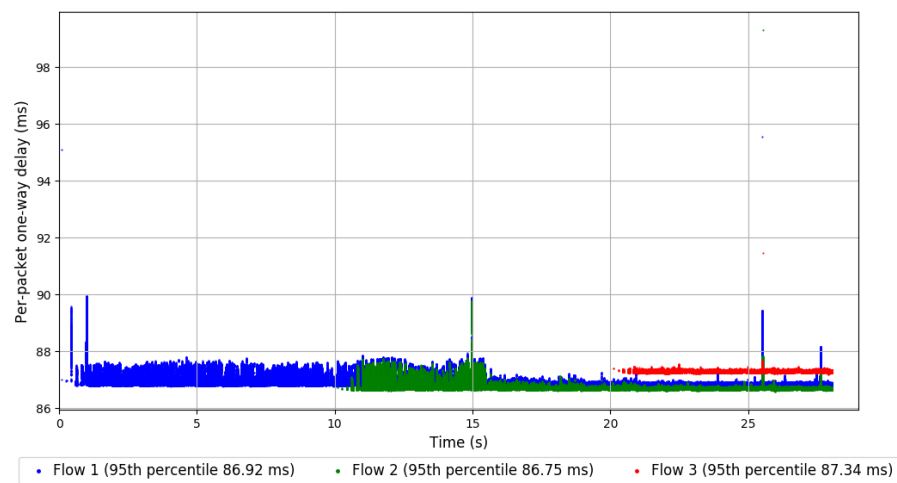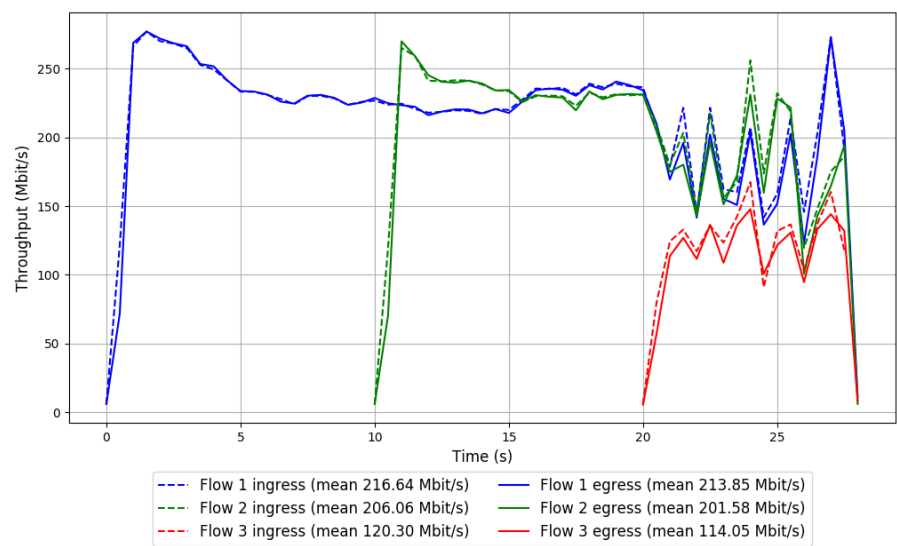
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 06:12:04
End at: 2017-09-18 06:12:34
Local clock offset: 0.249 ms
Remote clock offset: -2.435 ms

# Below is generated by plot.py at 2017-09-18 08:51:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.86 Mbit/s
95th percentile per-packet one-way delay: 87.965 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 229.06 Mbit/s
95th percentile per-packet one-way delay: 85.953 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 182.54 Mbit/s
95th percentile per-packet one-way delay: 87.979 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 111.33 Mbit/s
95th percentile per-packet one-way delay: 86.446 ms
Loss rate: 7.12%
```
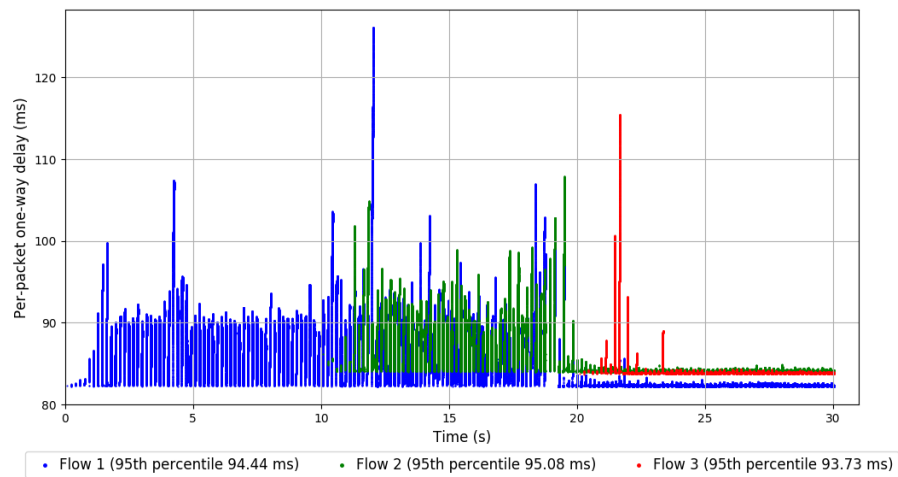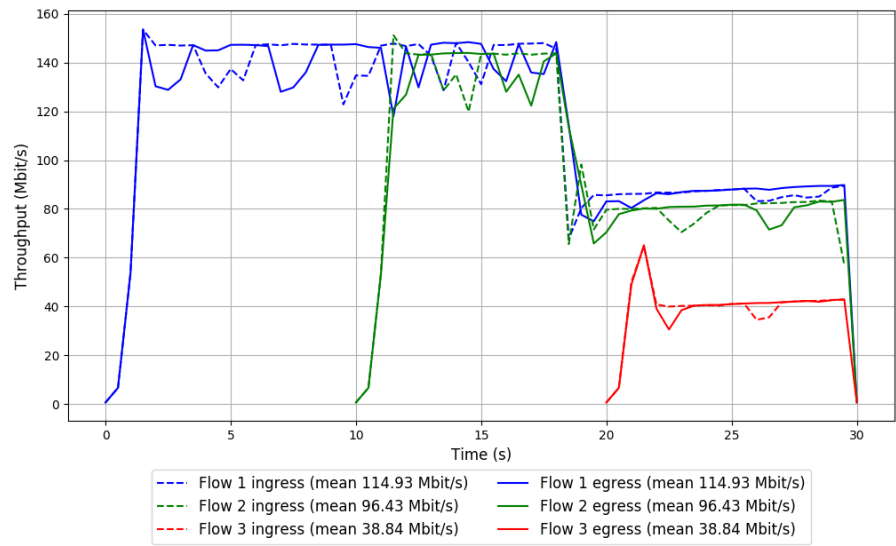
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 232.28 Mbit/s) --- Flow 1 egress (mean 229.06 Mbit/s)
Flow 2 ingress (mean 186.98 Mbit/s) --- Flow 2 egress (mean 182.54 Mbit/s)
Flow 3 ingress (mean 119.86 Mbit/s) --- Flow 3 egress (mean 111.33 Mbit/s)

Flow 1 (95th percentile 85.95 ms) · Flow 2 (95th percentile 87.98 ms) · Flow 3 (95th percentile 86.45 ms)

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

Start at: 2017-09-18 06:33:49
End at: 2017-09-18 06:34:19
Local clock offset: 0.274 ms
Remote clock offset: -3.207 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.70 Mbit/s
95th percentile per-packet one-way delay: 87.309 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 213.85 Mbit/s
95th percentile per-packet one-way delay: 86.925 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 201.58 Mbit/s
95th percentile per-packet one-way delay: 86.749 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 114.05 Mbit/s
95th percentile per-packet one-way delay: 87.344 ms
Loss rate: 5.20%
```

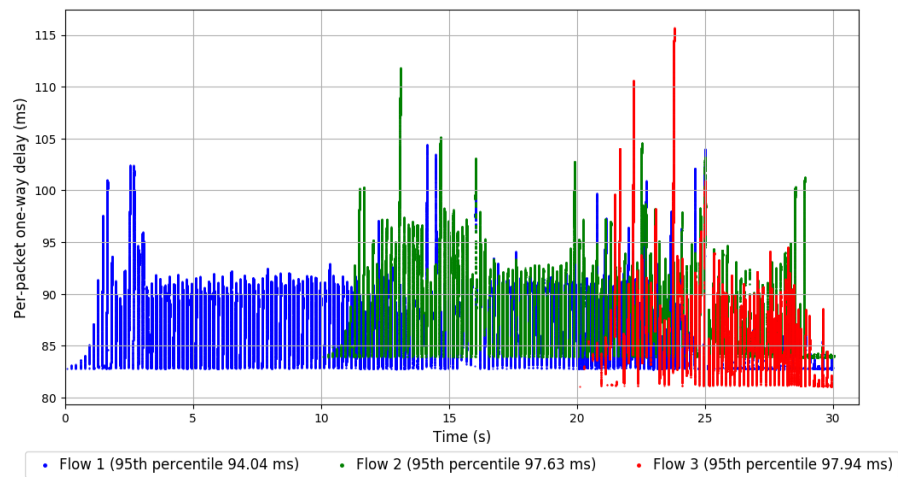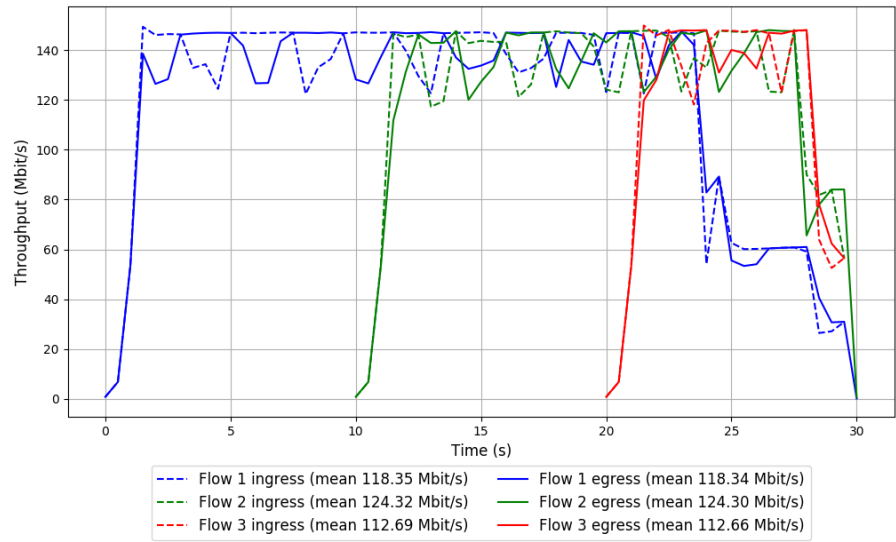Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-18 03:23:32
End at: 2017-09-18 03:24:02
Local clock offset: -1.354 ms
Remote clock offset: -6.378 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 192.00 Mbit/s
95th percentile per-packet one-way delay: 94.738 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 114.93 Mbit/s
95th percentile per-packet one-way delay: 94.435 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 95.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 93.726 ms
Loss rate: 0.00%
```

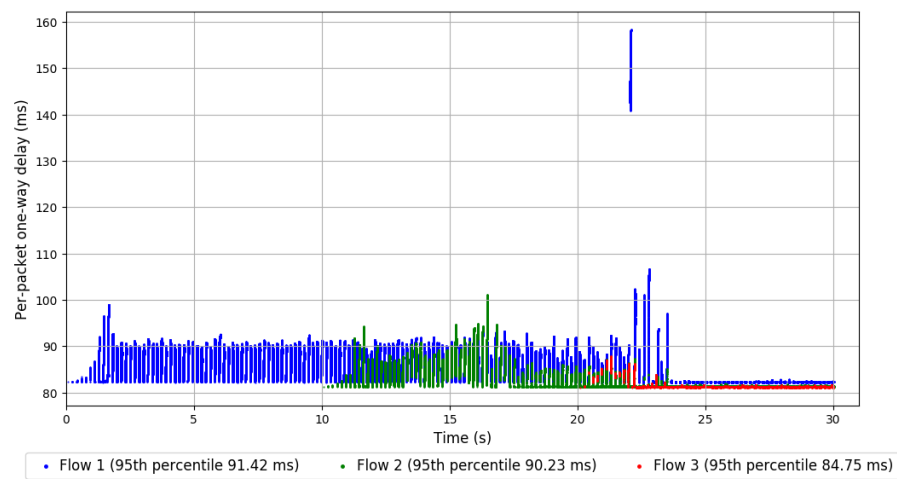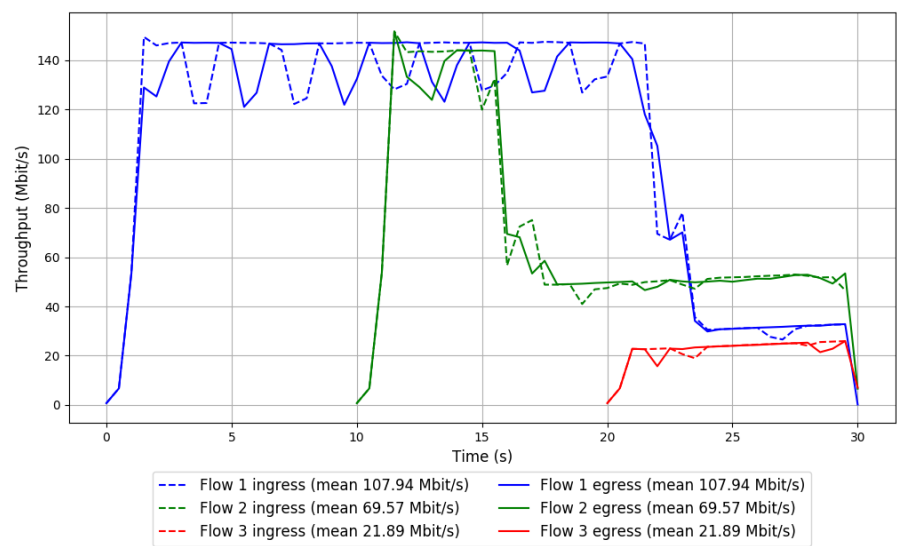Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-18 03:45:24
End at: 2017-09-18 03:45:54
Local clock offset: -1.138 ms
Remote clock offset: -7.337 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.20 Mbit/s
95th percentile per-packet one-way delay: 96.532 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 118.34 Mbit/s
95th percentile per-packet one-way delay: 94.036 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 124.30 Mbit/s
95th percentile per-packet one-way delay: 97.629 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 112.66 Mbit/s
95th percentile per-packet one-way delay: 97.938 ms
Loss rate: 0.02%
```
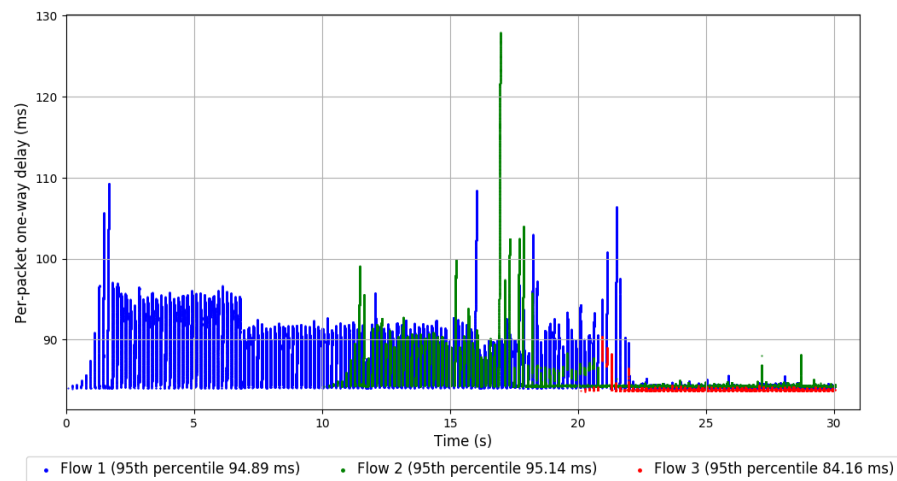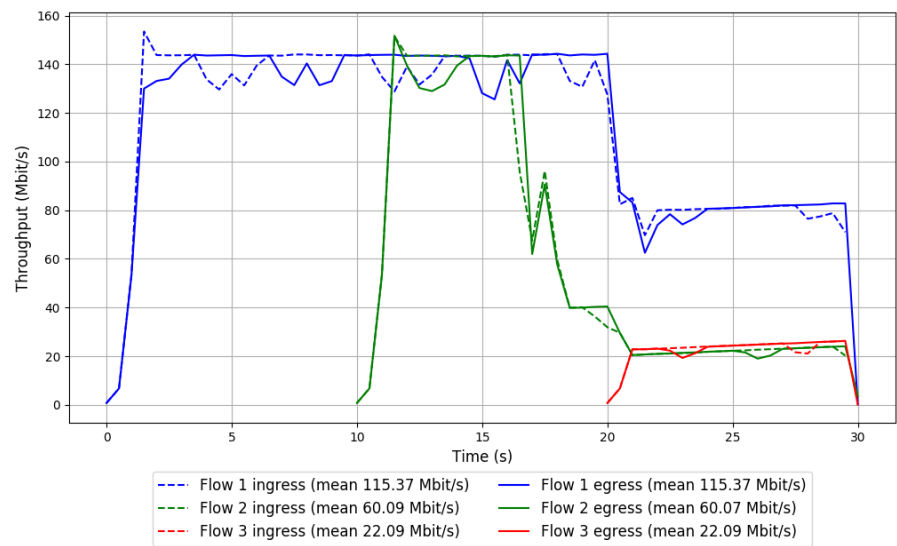
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 118.35 Mbit/s) --- Flow 1 egress (mean 118.34 Mbit/s)
Flow 2 ingress (mean 124.32 Mbit/s) --- Flow 2 egress (mean 124.30 Mbit/s)
Flow 3 ingress (mean 112.69 Mbit/s) --- Flow 3 egress (mean 112.66 Mbit/s)

Flow 1 (95th percentile 94.04 ms)   Flow 2 (95th percentile 97.63 ms)   Flow 3 (95th percentile 97.94 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-18 04:07:26
End at: 2017-09-18 04:07:56
Local clock offset: -0.965 ms
Remote clock offset: -7.101 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.48 Mbit/s
95th percentile per-packet one-way delay: 91.179 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 107.94 Mbit/s
95th percentile per-packet one-way delay: 91.424 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.57 Mbit/s
95th percentile per-packet one-way delay: 90.226 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.89 Mbit/s
95th percentile per-packet one-way delay: 84.745 ms
Loss rate: 0.00%
```
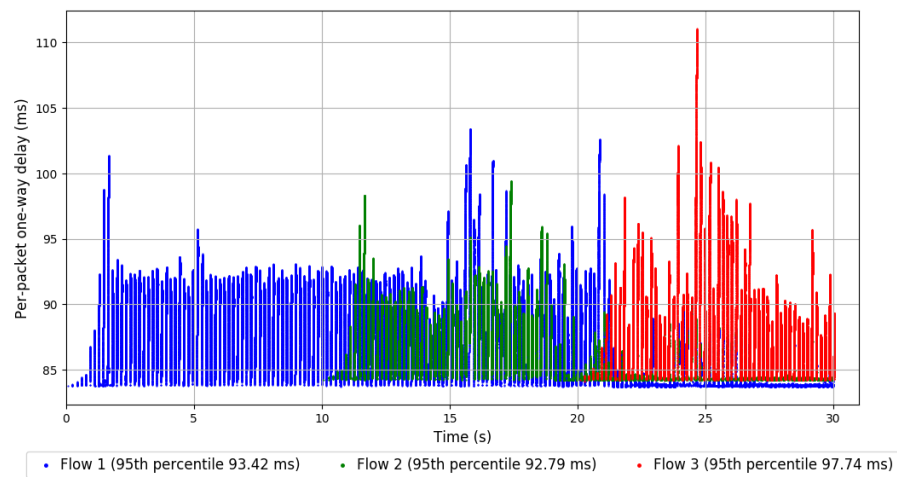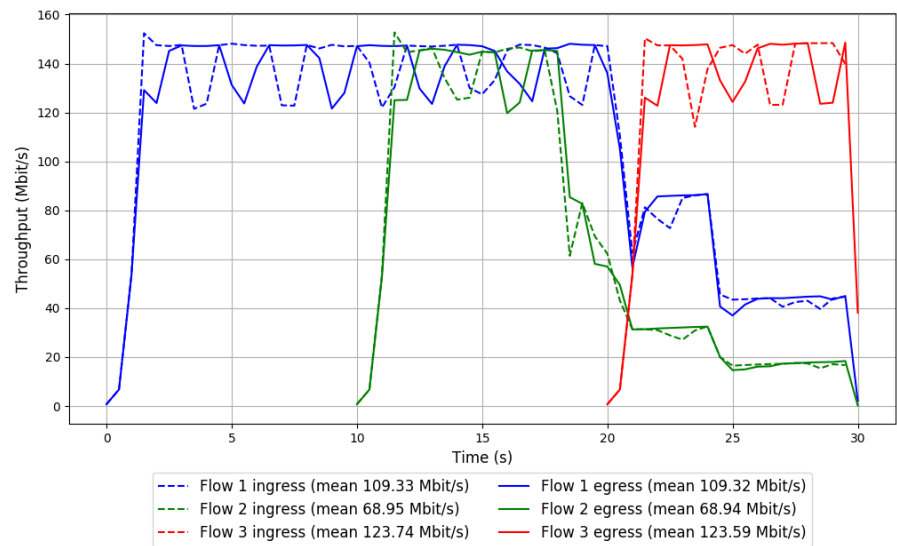
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-18 04:29:12
End at: 2017-09-18 04:29:42
Local clock offset: -0.749 ms
Remote clock offset: -6.504 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 162.59 Mbit/s
95th percentile per-packet one-way delay: 94.840 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 115.37 Mbit/s
95th percentile per-packet one-way delay: 94.888 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.07 Mbit/s
95th percentile per-packet one-way delay: 95.143 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 84.160 ms
Loss rate: 0.00%
```
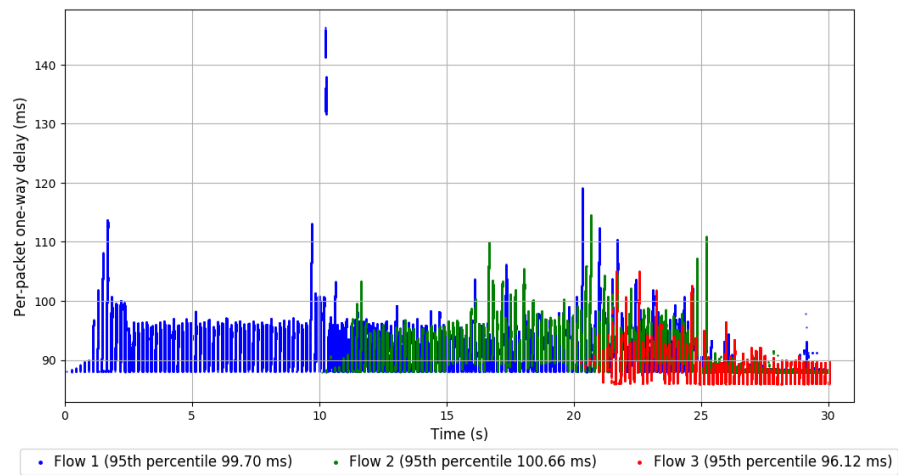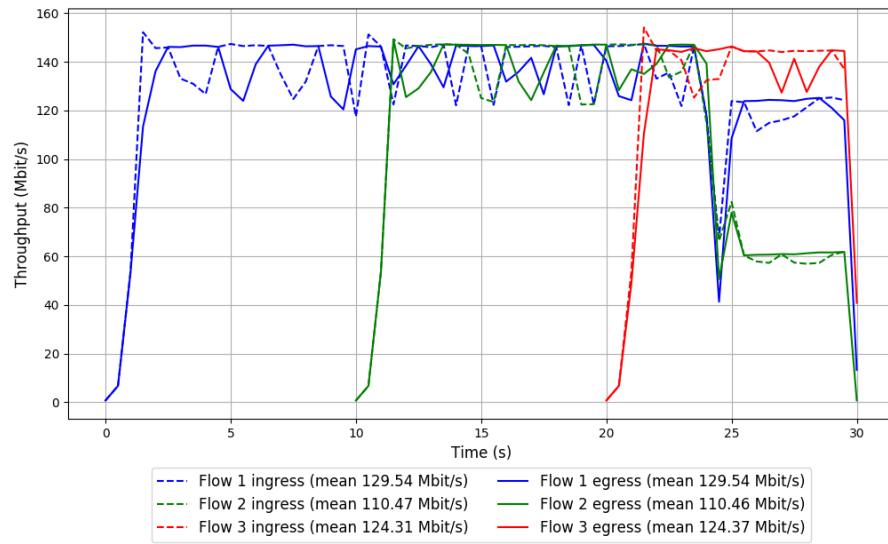
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 115.37 Mbit/s) — Flow 1 egress (mean 115.37 Mbit/s)
Flow 2 ingress (mean 60.09 Mbit/s) — Flow 2 egress (mean 60.07 Mbit/s)
Flow 3 ingress (mean 22.09 Mbit/s) — Flow 3 egress (mean 22.09 Mbit/s)

Flow 1 (95th percentile 94.89 ms) · Flow 2 (95th percentile 95.14 ms) · Flow 3 (95th percentile 84.16 ms)

251

```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-18 04:50:53
End at: 2017-09-18 04:51:23
Local clock offset: -0.384 ms
Remote clock offset: -7.141 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 196.25 Mbit/s
95th percentile per-packet one-way delay: 94.806 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 109.32 Mbit/s
95th percentile per-packet one-way delay: 93.422 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.94 Mbit/s
95th percentile per-packet one-way delay: 92.793 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 123.59 Mbit/s
95th percentile per-packet one-way delay: 97.741 ms
Loss rate: 0.09%
```

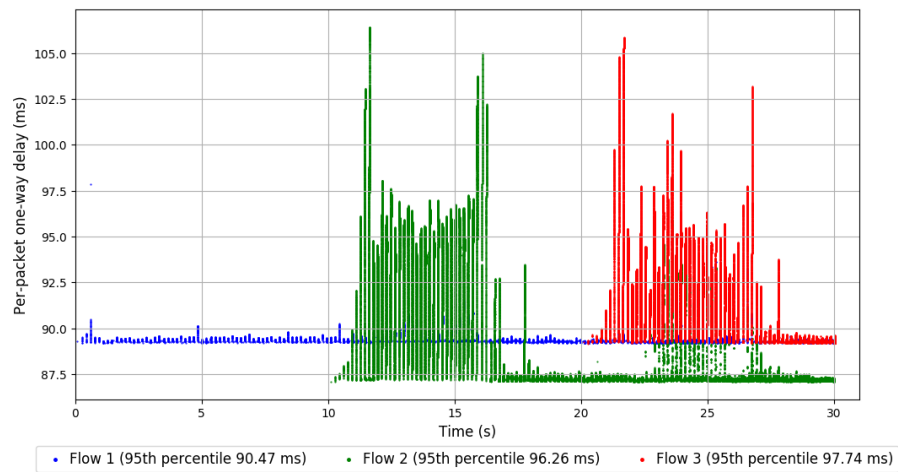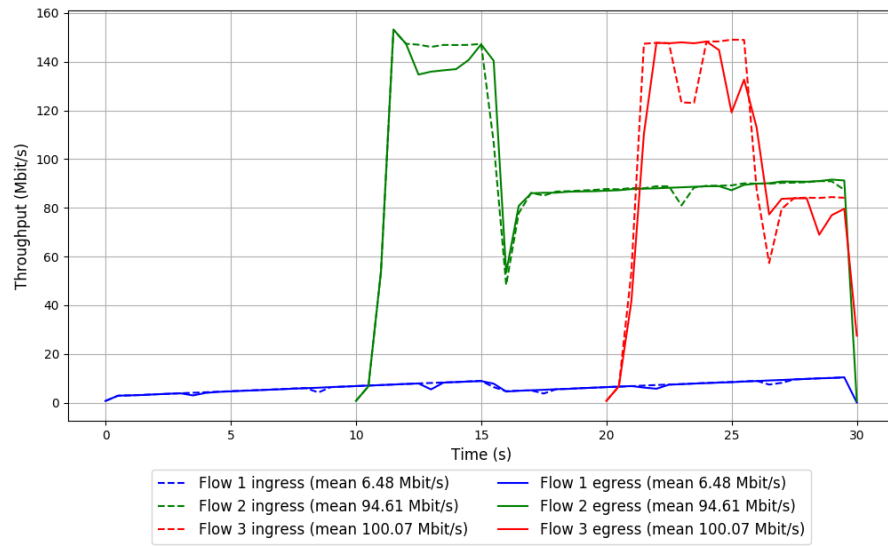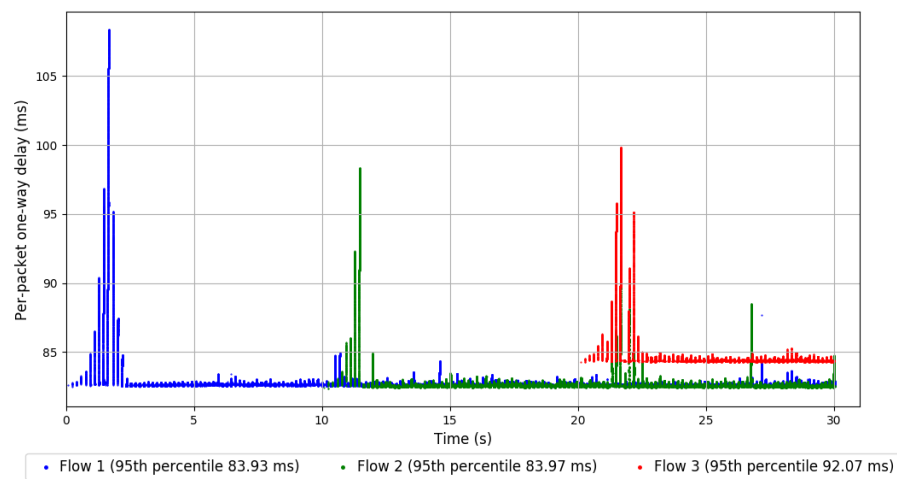Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 109.33 Mbit/s) --- Flow 1 egress (mean 109.32 Mbit/s)
Flow 2 ingress (mean 68.95 Mbit/s) --- Flow 2 egress (mean 68.94 Mbit/s)
Flow 3 ingress (mean 123.74 Mbit/s) --- Flow 3 egress (mean 123.59 Mbit/s)

Flow 1 (95th percentile 93.42 ms)   Flow 2 (95th percentile 92.79 ms)   Flow 3 (95th percentile 97.74 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 05:12:48
End at: 2017-09-18 05:13:18
Local clock offset: -0.151 ms
Remote clock offset: -3.19 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.19 Mbit/s
95th percentile per-packet one-way delay: 99.652 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 129.54 Mbit/s
95th percentile per-packet one-way delay: 99.699 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.46 Mbit/s
95th percentile per-packet one-way delay: 100.661 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.37 Mbit/s
95th percentile per-packet one-way delay: 96.117 ms
Loss rate: 0.00%
```

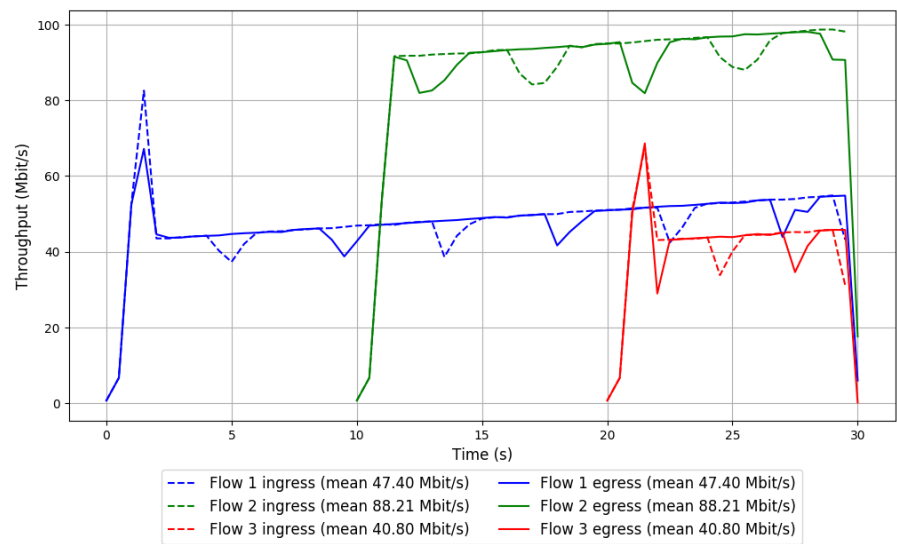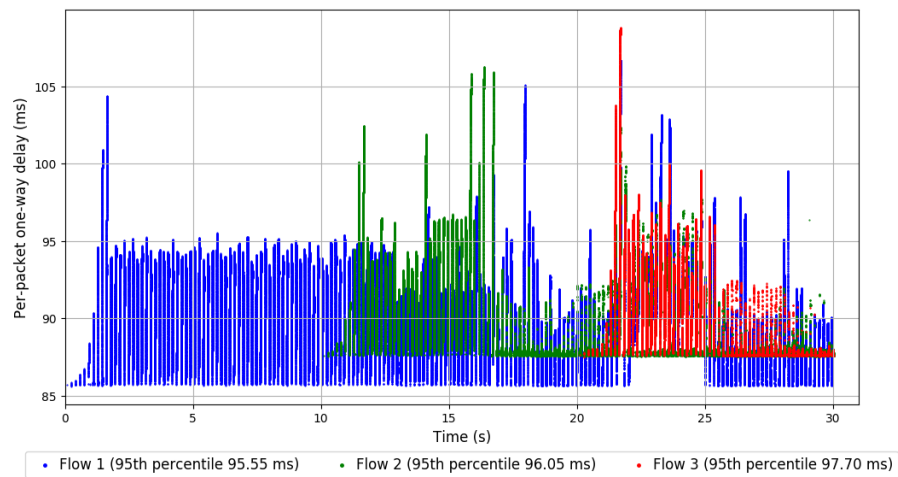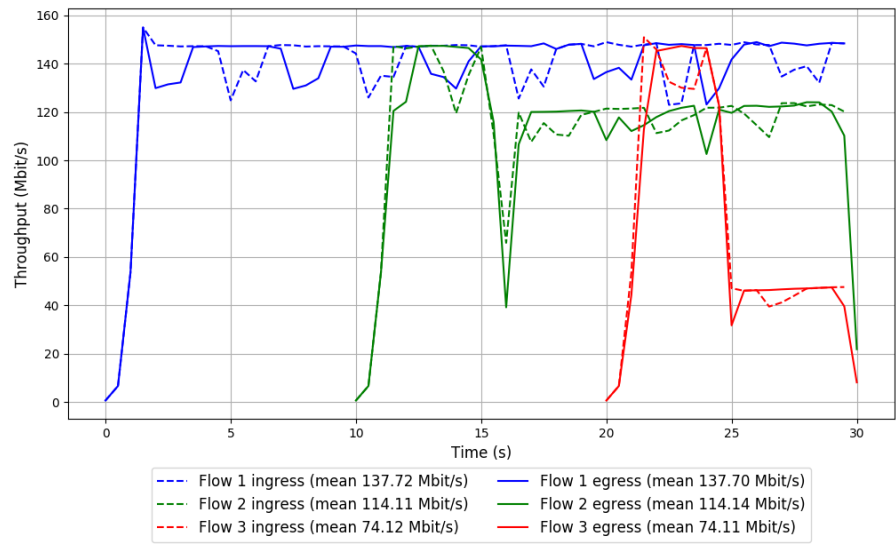Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 05:34:41
End at: 2017-09-18 05:35:11
Local clock offset: -0.004 ms
Remote clock offset: -1.938 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.62 Mbit/s
95th percentile per-packet one-way delay: 96.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.48 Mbit/s
95th percentile per-packet one-way delay: 90.465 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 94.61 Mbit/s
95th percentile per-packet one-way delay: 96.263 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.07 Mbit/s
95th percentile per-packet one-way delay: 97.738 ms
Loss rate: 0.01%
```

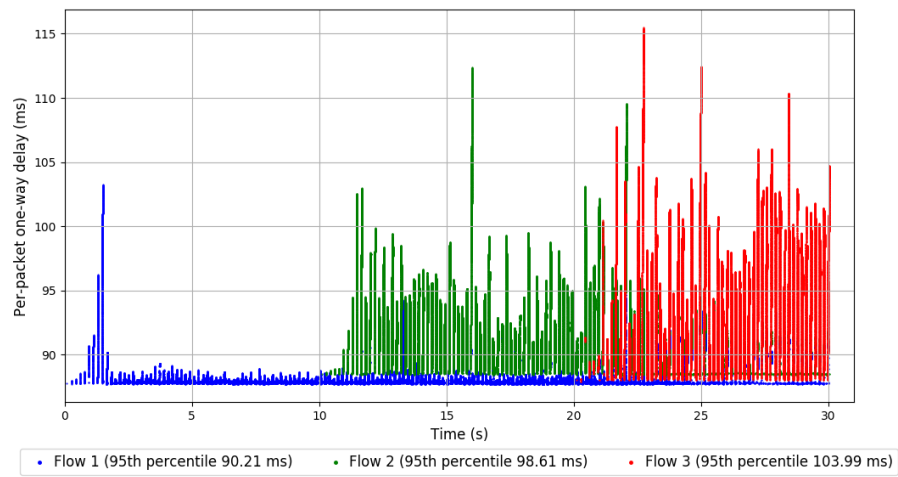Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 05:56:27
End at: 2017-09-18 05:56:57
Local clock offset: 0.084 ms
Remote clock offset: -6.397 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.66 Mbit/s
95th percentile per-packet one-way delay: 84.814 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.40 Mbit/s
95th percentile per-packet one-way delay: 83.928 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 83.972 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 92.068 ms
Loss rate: 0.00%
```
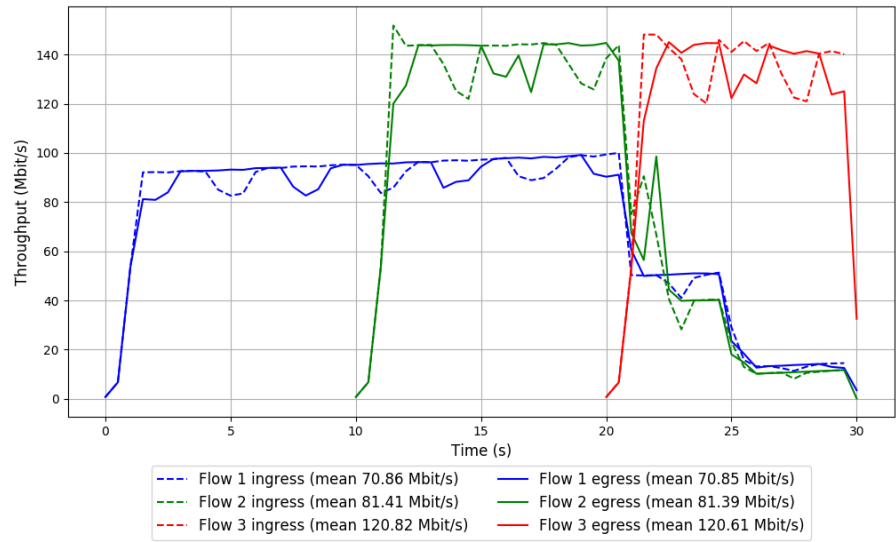
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 06:18:20
End at: 2017-09-18 06:18:50
Local clock offset: 0.161 ms
Remote clock offset: -2.675 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.93 Mbit/s
95th percentile per-packet one-way delay: 96.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 137.70 Mbit/s
95th percentile per-packet one-way delay: 95.551 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 114.14 Mbit/s
95th percentile per-packet one-way delay: 96.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.11 Mbit/s
95th percentile per-packet one-way delay: 97.705 ms
Loss rate: 0.00%
```
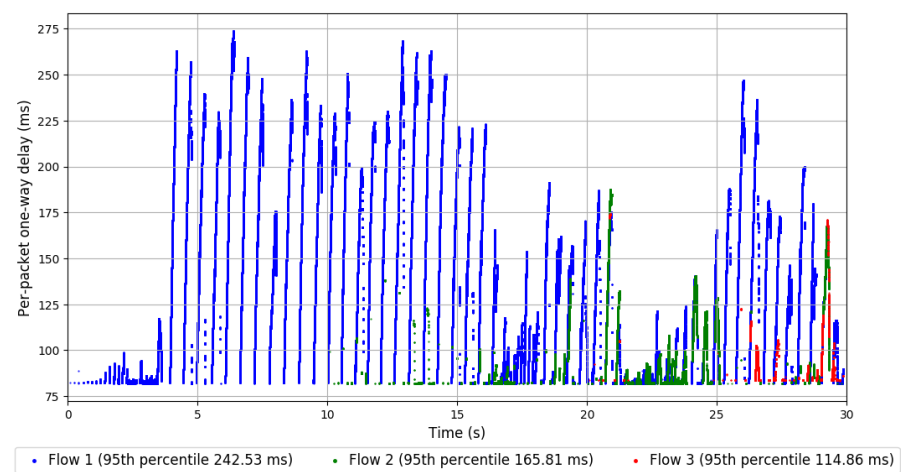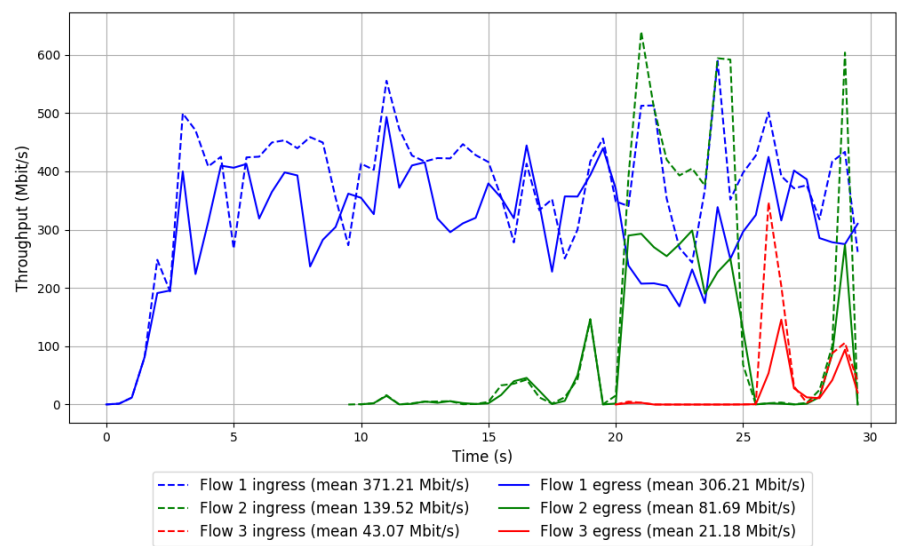
Run 9: Report of TCP Vegas — Data Link

261

```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 06:39:56
End at: 2017-09-18 06:40:26
Local clock offset: 0.238 ms
Remote clock offset: -2.024 ms


# Below is generated by plot.py at 2017-09-18 08:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.02 Mbit/s
95th percentile per-packet one-way delay: 100.518 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.85 Mbit/s
95th percentile per-packet one-way delay: 90.213 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 81.39 Mbit/s
95th percentile per-packet one-way delay: 98.615 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 120.61 Mbit/s
95th percentile per-packet one-way delay: 103.986 ms
Loss rate: 0.01%
```

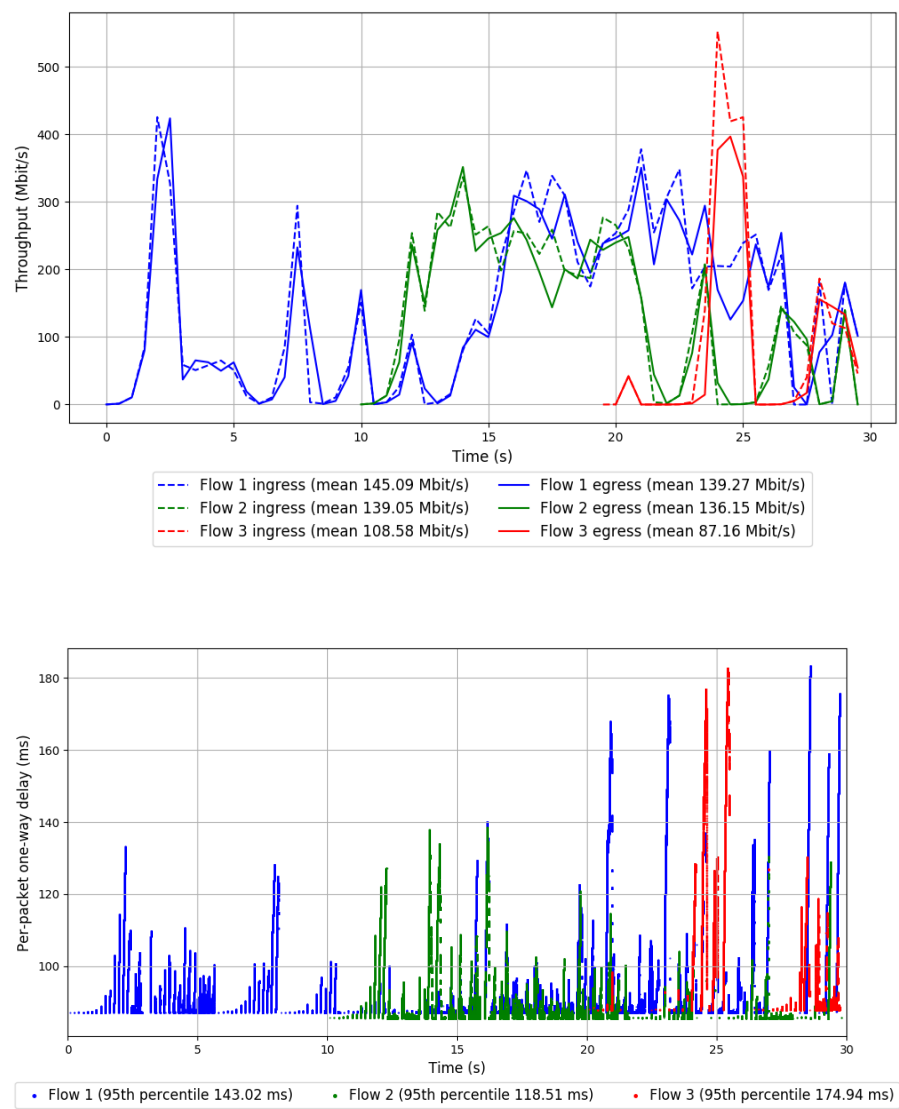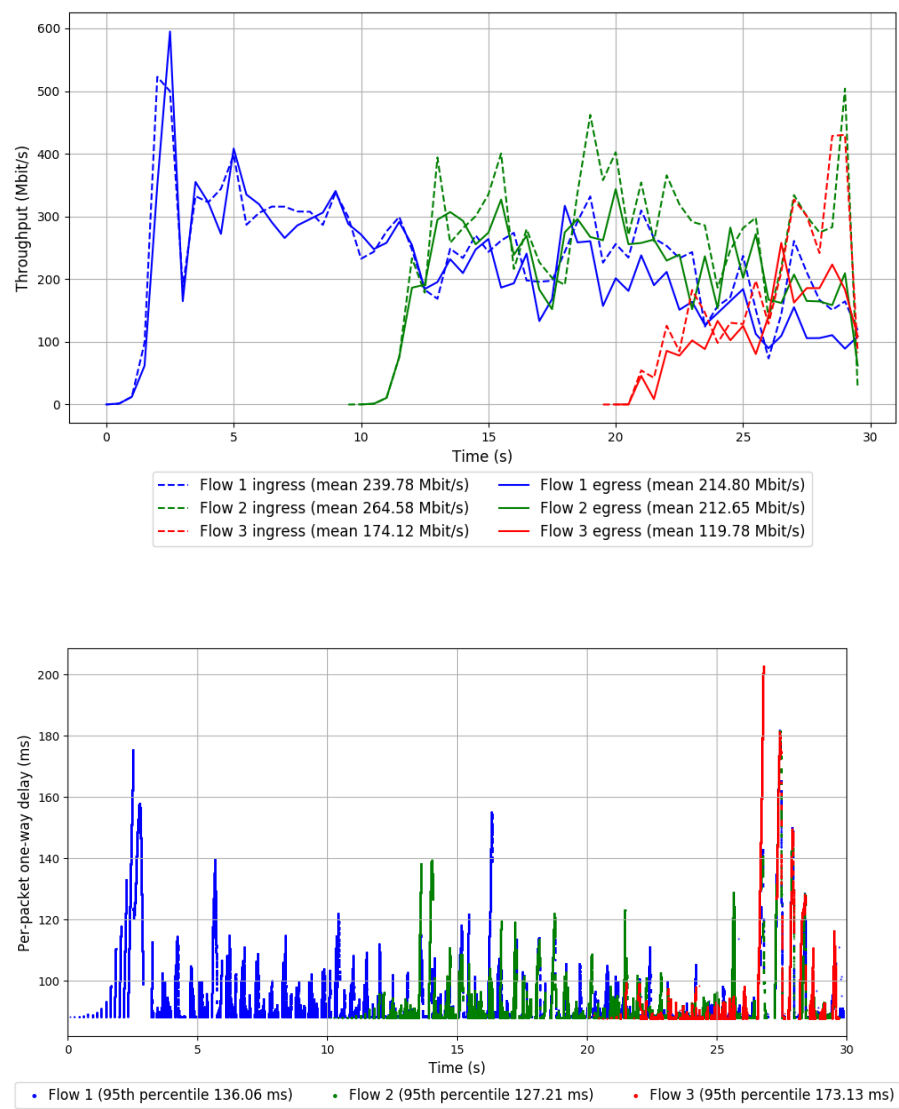Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-09-18 03:19:12
End at: 2017-09-18 03:19:42
Local clock offset: -1.425 ms
Remote clock offset: -6.373 ms


# Below is generated by plot.py at 2017-09-18 08:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.29 Mbit/s
95th percentile per-packet one-way delay: 239.154 ms
Loss rate: 23.13%
-- Flow 1:
Average throughput: 306.21 Mbit/s
95th percentile per-packet one-way delay: 242.528 ms
Loss rate: 17.50%
-- Flow 2:
Average throughput: 81.69 Mbit/s
95th percentile per-packet one-way delay: 165.814 ms
Loss rate: 41.50%
-- Flow 3:
Average throughput: 21.18 Mbit/s
95th percentile per-packet one-way delay: 114.861 ms
Loss rate: 50.81%
```
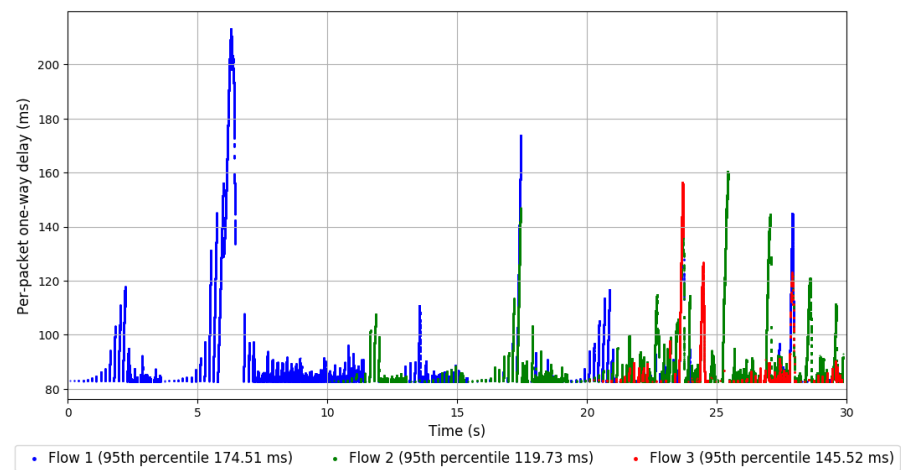
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-09-18 03:41:05
End at: 2017-09-18 03:41:35
Local clock offset: -1.177 ms
Remote clock offset: -3.084 ms


# Below is generated by plot.py at 2017-09-18 08:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.52 Mbit/s
95th percentile per-packet one-way delay: 143.959 ms
Loss rate: 5.24%
-- Flow 1:
Average throughput: 139.27 Mbit/s
95th percentile per-packet one-way delay: 143.020 ms
Loss rate: 3.72%
-- Flow 2:
Average throughput: 136.15 Mbit/s
95th percentile per-packet one-way delay: 118.507 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 174.938 ms
Loss rate: 19.72%
```
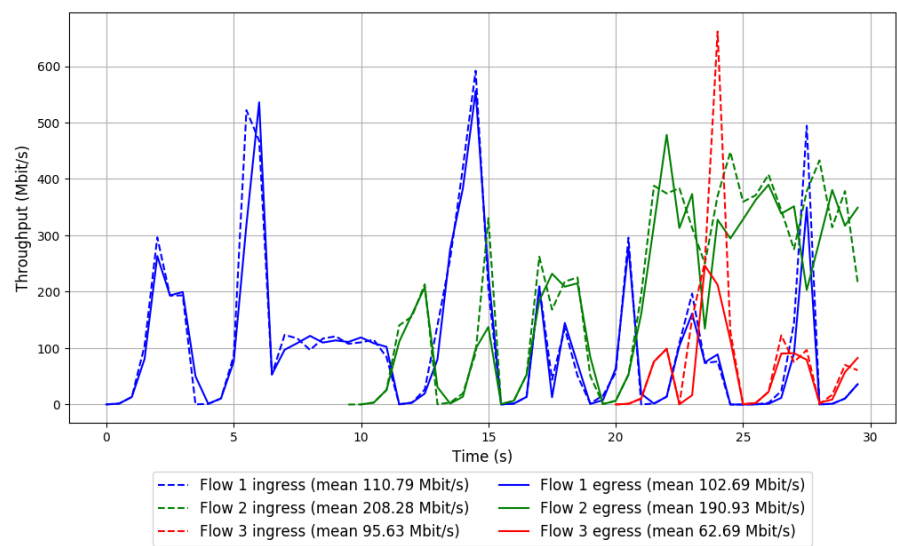
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-09-18 04:03:03
End at: 2017-09-18 04:03:33
Local clock offset: -1.06 ms
Remote clock offset: -2.573 ms


# Below is generated by plot.py at 2017-09-18 08:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.60 Mbit/s
95th percentile per-packet one-way delay: 136.712 ms
Loss rate: 16.32%
-- Flow 1:
Average throughput: 214.80 Mbit/s
95th percentile per-packet one-way delay: 136.061 ms
Loss rate: 10.42%
-- Flow 2:
Average throughput: 212.65 Mbit/s
95th percentile per-packet one-way delay: 127.211 ms
Loss rate: 19.63%
-- Flow 3:
Average throughput: 119.78 Mbit/s
95th percentile per-packet one-way delay: 173.131 ms
Loss rate: 31.21%
```

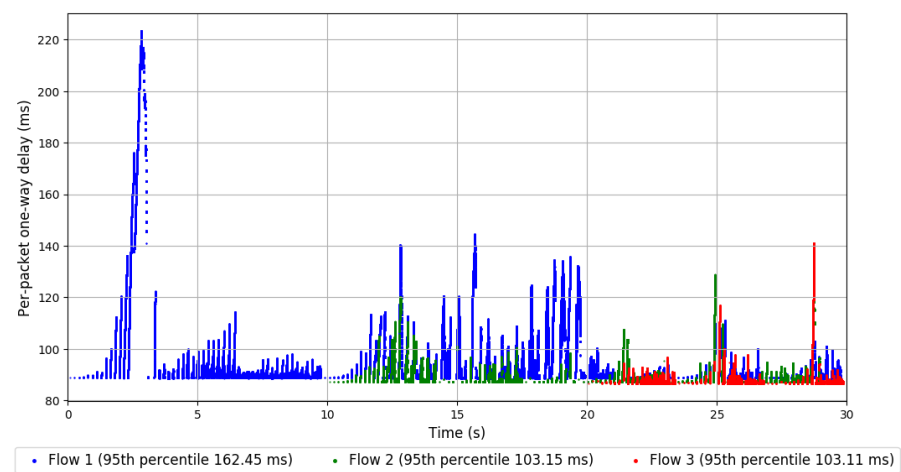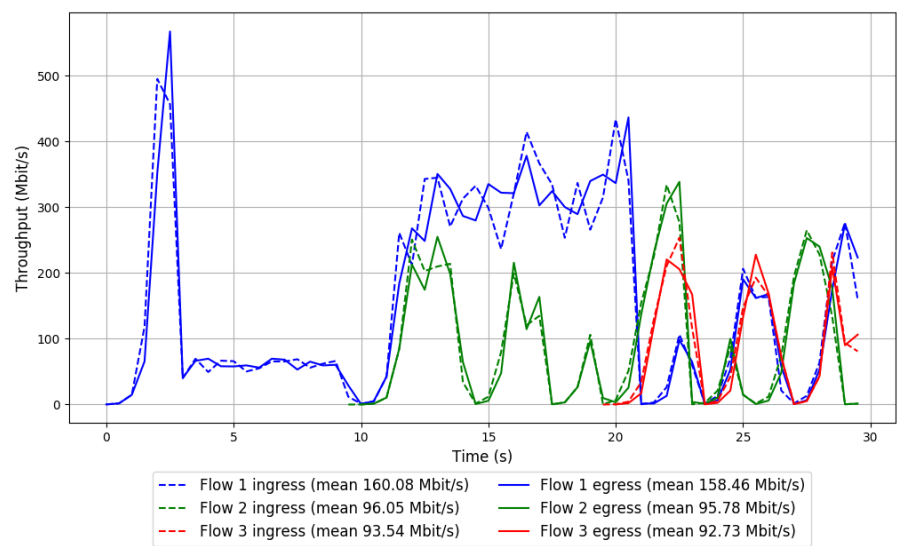Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-09-18 04:24:59
End at: 2017-09-18 04:25:29
Local clock offset: -0.719 ms
Remote clock offset: -7.396 ms


# Below is generated by plot.py at 2017-09-18 08:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.91 Mbit/s
95th percentile per-packet one-way delay: 143.944 ms
Loss rate: 10.80%
-- Flow 1:
Average throughput: 102.69 Mbit/s
95th percentile per-packet one-way delay: 174.513 ms
Loss rate: 7.29%
-- Flow 2:
Average throughput: 190.93 Mbit/s
95th percentile per-packet one-way delay: 119.734 ms
Loss rate: 8.29%
-- Flow 3:
Average throughput: 62.69 Mbit/s
95th percentile per-packet one-way delay: 145.519 ms
Loss rate: 34.45%
```

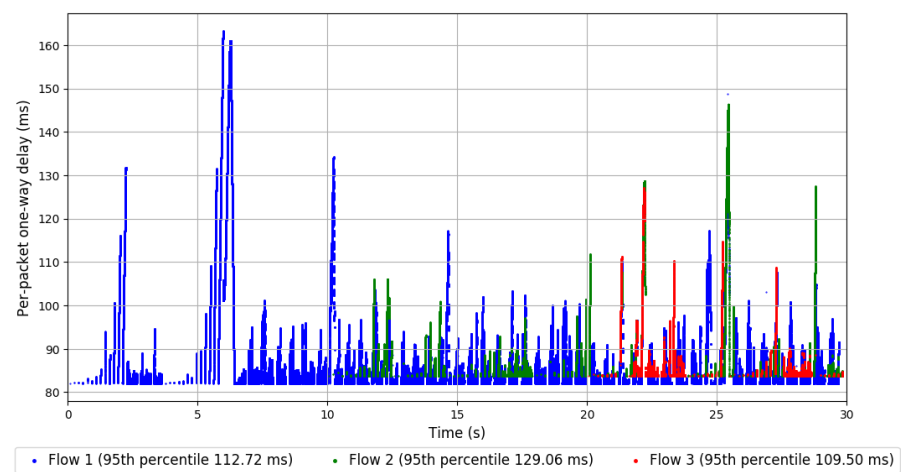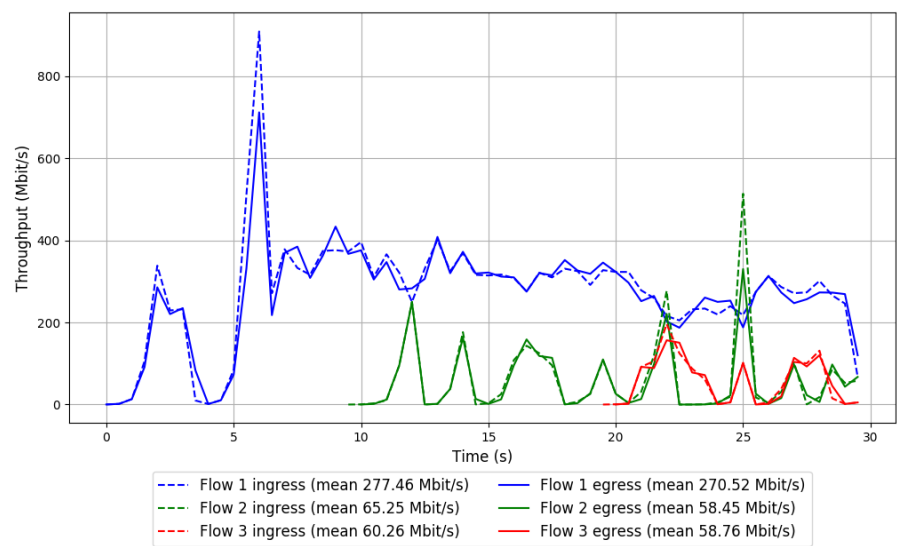# Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-09-18 04:46:40
End at: 2017-09-18 04:47:10
Local clock offset: -0.524 ms
Remote clock offset: -1.931 ms


# Below is generated by plot.py at 2017-09-18 08:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.82 Mbit/s
95th percentile per-packet one-way delay: 135.270 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 158.46 Mbit/s
95th percentile per-packet one-way delay: 162.450 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 103.148 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 103.112 ms
Loss rate: 0.87%
```
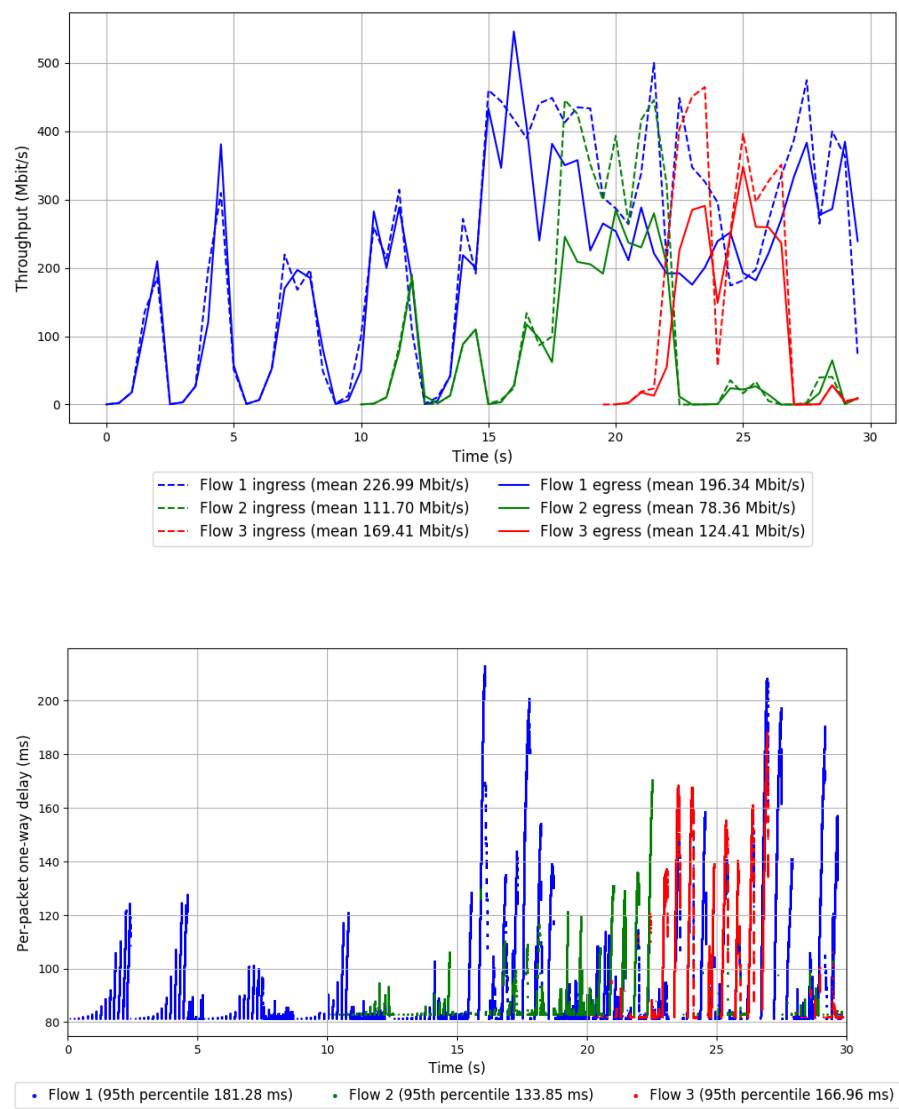
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-09-18 05:08:28
End at: 2017-09-18 05:08:58
Local clock offset: -0.18 ms
Remote clock offset: -7.128 ms


# Below is generated by plot.py at 2017-09-18 08:52:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.25 Mbit/s
95th percentile per-packet one-way delay: 117.105 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 270.52 Mbit/s
95th percentile per-packet one-way delay: 112.723 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 129.059 ms
Loss rate: 10.43%
-- Flow 3:
Average throughput: 58.76 Mbit/s
95th percentile per-packet one-way delay: 109.505 ms
Loss rate: 2.47%
```
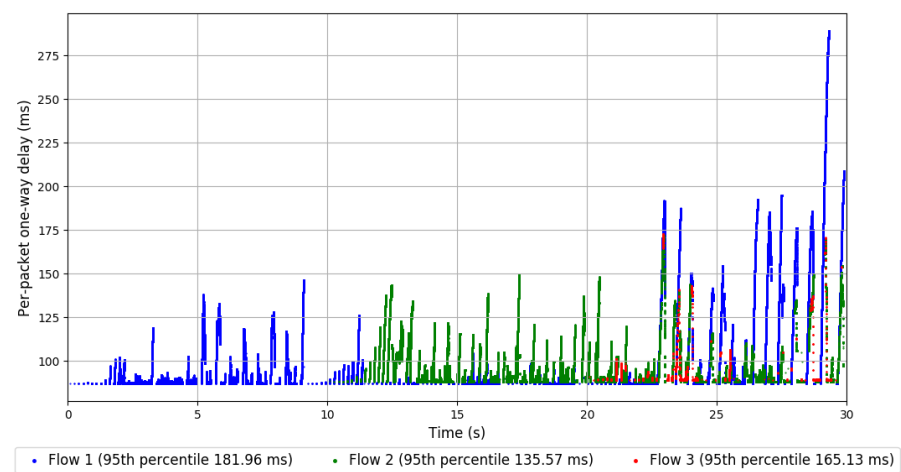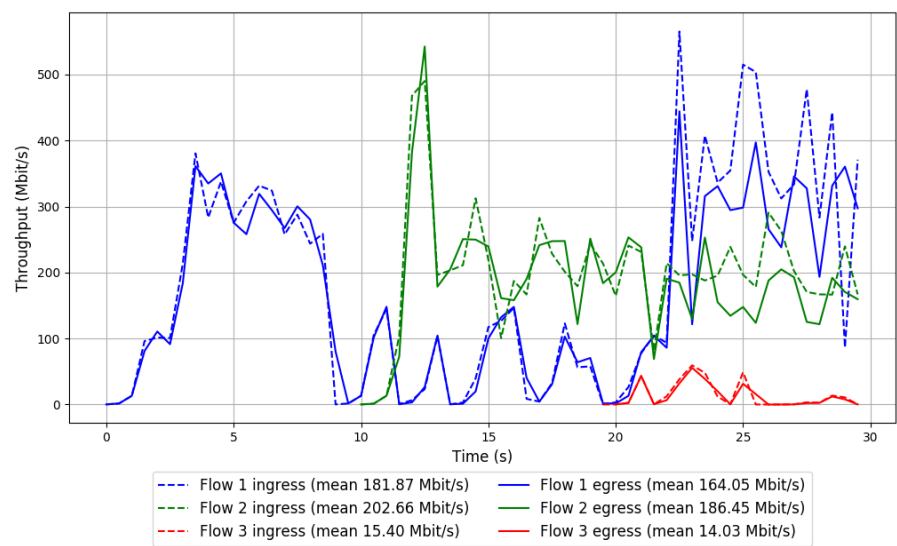
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-09-18 05:30:19
End at: 2017-09-18 05:30:49
Local clock offset: -0.048 ms
Remote clock offset: -8.028 ms


# Below is generated by plot.py at 2017-09-18 08:53:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.40 Mbit/s
95th percentile per-packet one-way delay: 170.772 ms
Loss rate: 18.94%
-- Flow 1:
Average throughput: 196.34 Mbit/s
95th percentile per-packet one-way delay: 181.283 ms
Loss rate: 13.50%
-- Flow 2:
Average throughput: 78.36 Mbit/s
95th percentile per-packet one-way delay: 133.848 ms
Loss rate: 29.85%
-- Flow 3:
Average throughput: 124.41 Mbit/s
95th percentile per-packet one-way delay: 166.957 ms
Loss rate: 26.57%
```

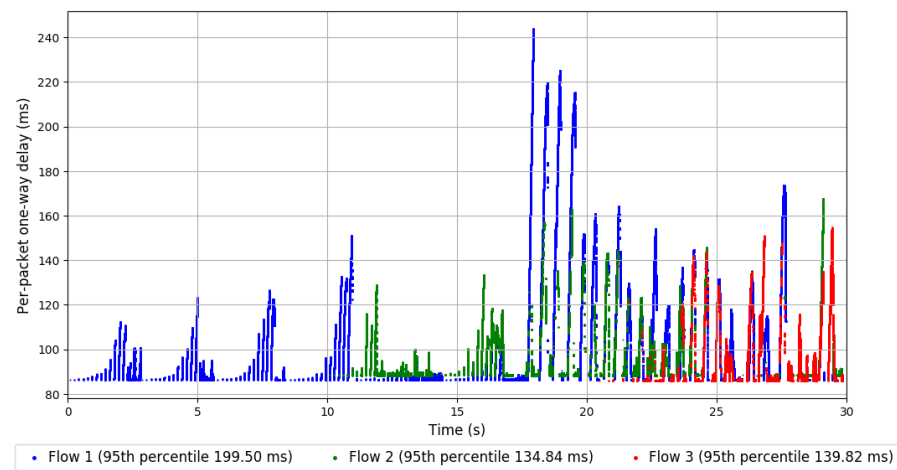# Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-09-18 05:52:10
End at: 2017-09-18 05:52:40
Local clock offset: 0.08 ms
Remote clock offset: -1.654 ms


# Below is generated by plot.py at 2017-09-18 08:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.32 Mbit/s
95th percentile per-packet one-way delay: 173.337 ms
Loss rate: 8.94%
-- Flow 1:
Average throughput: 164.05 Mbit/s
95th percentile per-packet one-way delay: 181.959 ms
Loss rate: 9.68%
-- Flow 2:
Average throughput: 186.45 Mbit/s
95th percentile per-packet one-way delay: 135.575 ms
Loss rate: 7.96%
-- Flow 3:
Average throughput: 14.03 Mbit/s
95th percentile per-packet one-way delay: 165.129 ms
Loss rate: 8.29%
```

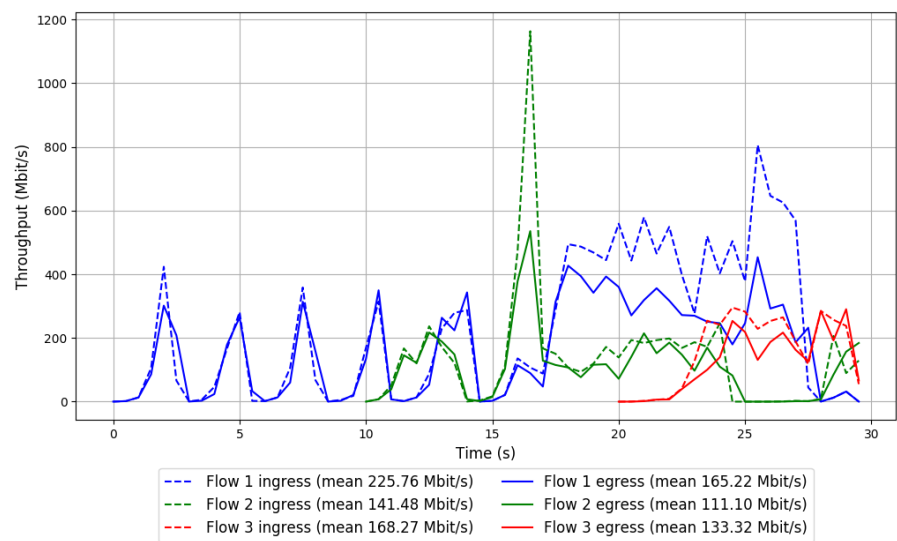Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-09-18 06:13:52
End at: 2017-09-18 06:14:22
Local clock offset: 0.17 ms
Remote clock offset: -1.986 ms


# Below is generated by plot.py at 2017-09-18 08:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.46 Mbit/s
95th percentile per-packet one-way delay: 170.030 ms
Loss rate: 24.61%
-- Flow 1:
Average throughput: 165.22 Mbit/s
95th percentile per-packet one-way delay: 199.499 ms
Loss rate: 26.82%
-- Flow 2:
Average throughput: 111.10 Mbit/s
95th percentile per-packet one-way delay: 134.835 ms
Loss rate: 21.46%
-- Flow 3:
Average throughput: 133.32 Mbit/s
95th percentile per-packet one-way delay: 139.821 ms
Loss rate: 20.76%
```

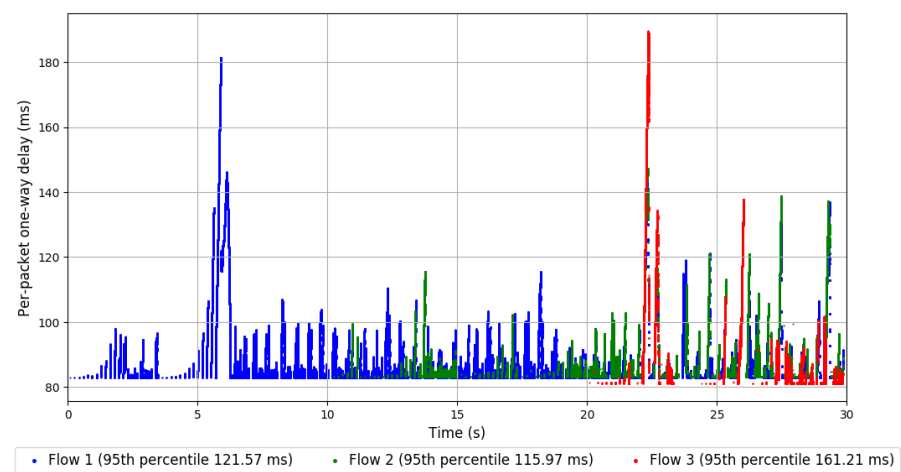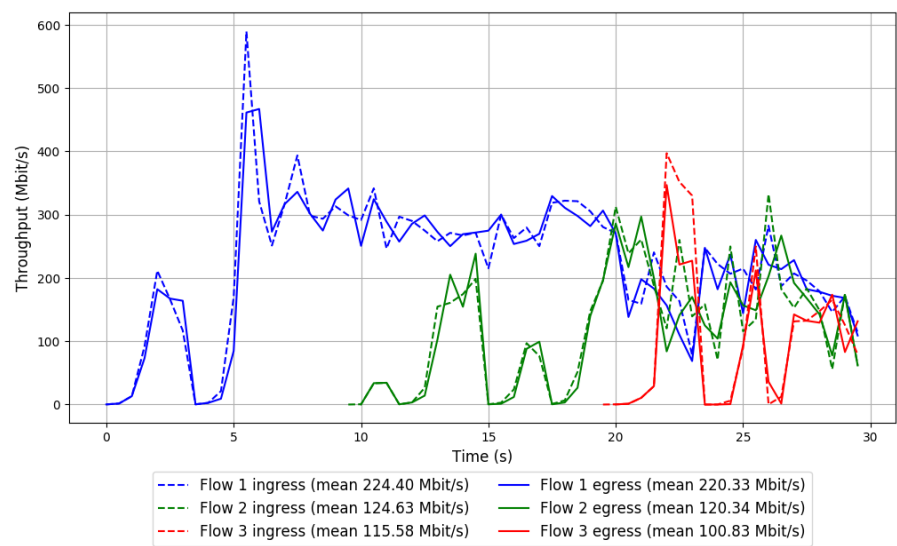# Run 9: Report of Verus — Data Link

281

```
Run 10: Statistics of Verus

Start at: 2017-09-18 06:35:37
End at: 2017-09-18 06:36:07
Local clock offset: 0.263 ms
Remote clock offset: -7.173 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.46 Mbit/s
95th percentile per-packet one-way delay: 124.777 ms
Loss rate: 3.38%
-- Flow 1:
Average throughput: 220.33 Mbit/s
95th percentile per-packet one-way delay: 121.567 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 120.34 Mbit/s
95th percentile per-packet one-way delay: 115.970 ms
Loss rate: 3.43%
-- Flow 3:
Average throughput: 100.83 Mbit/s
95th percentile per-packet one-way delay: 161.208 ms
Loss rate: 12.71%
```

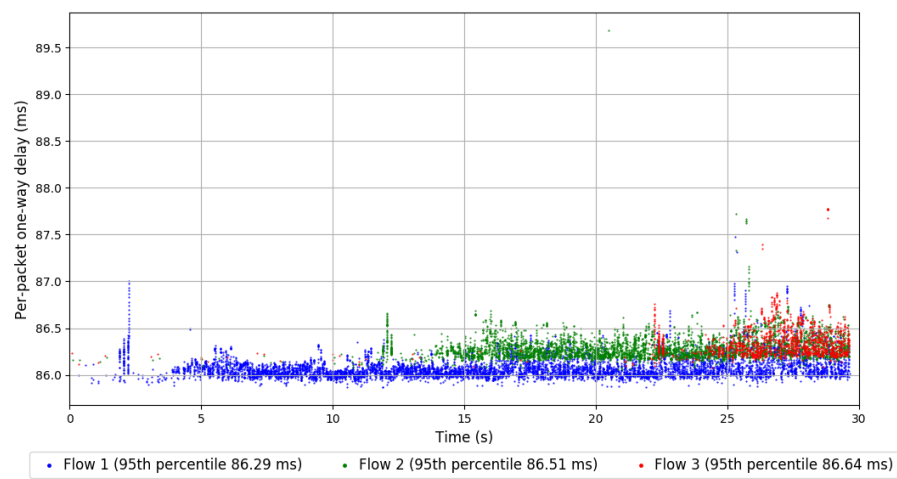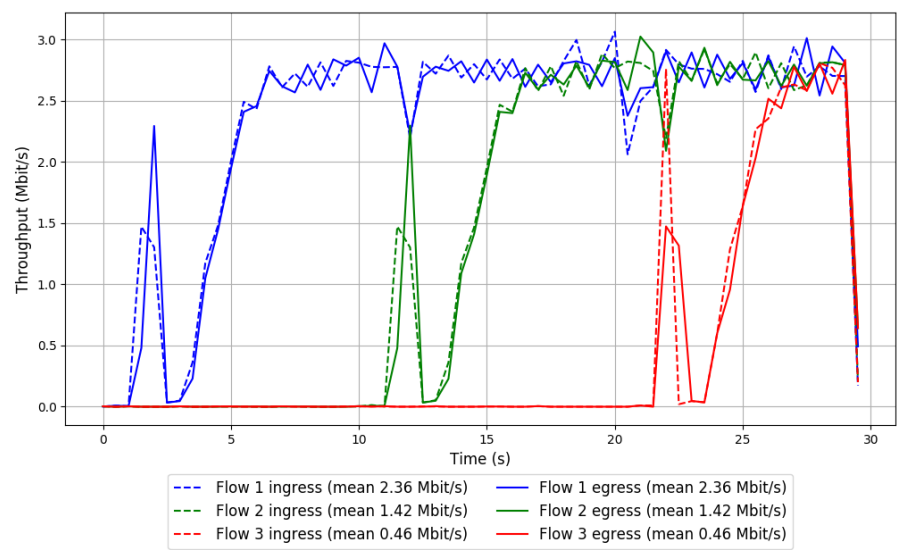Run 10: Report of Verus — Data Link

283

```
Run 1: Statistics of WebRTC media

Start at: 2017-09-18 03:09:45
End at: 2017-09-18 03:10:15
Local clock offset: -1.488 ms
Remote clock offset: -2.387 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 86.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 86.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 86.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 86.645 ms
Loss rate: 0.00%
```

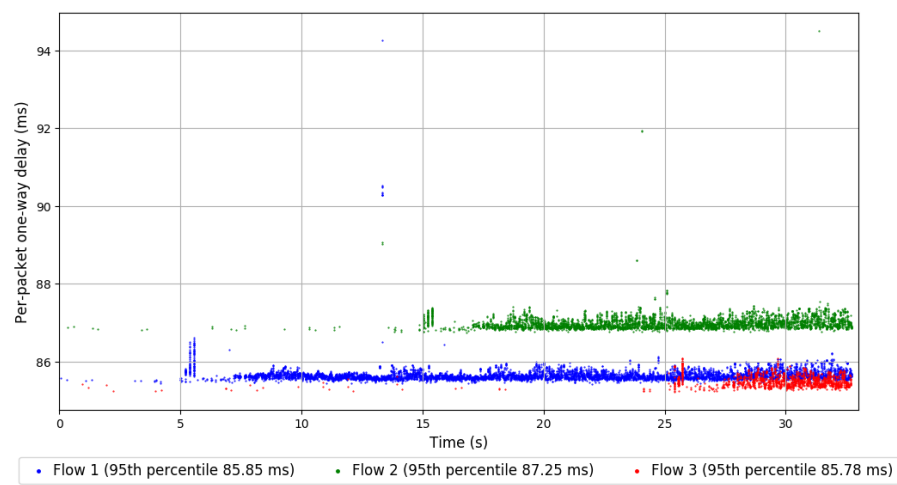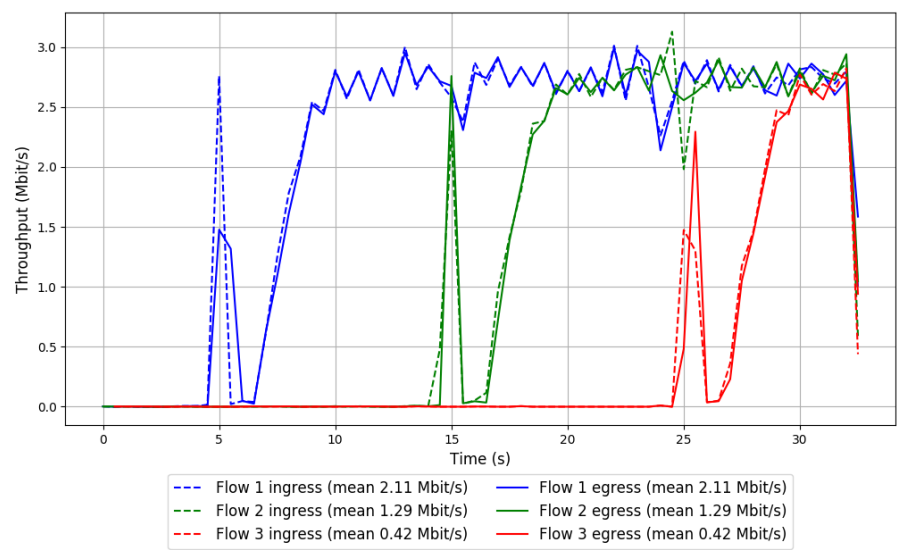Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-09-18 03:31:47
End at: 2017-09-18 03:32:17
Local clock offset: -1.219 ms
Remote clock offset: -3.346 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 87.127 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 85.852 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 87.252 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 85.777 ms
Loss rate: 0.00%
```

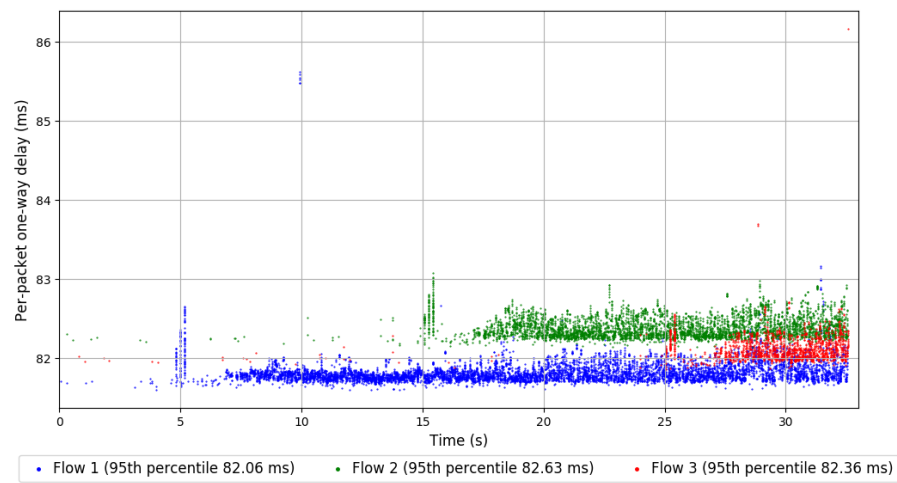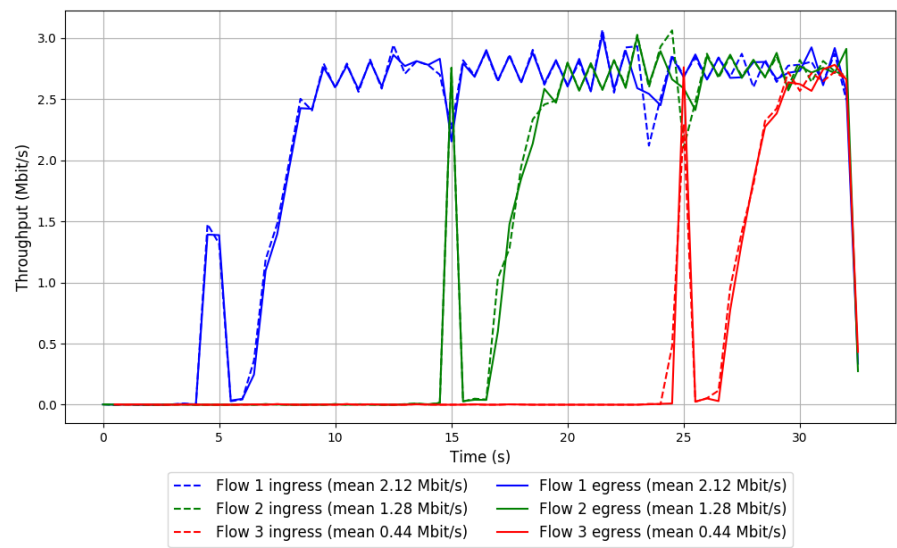Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-09-18 03:53:50
End at: 2017-09-18 03:54:20
Local clock offset: -1.11 ms
Remote clock offset: -6.506 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 82.539 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 82.060 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 82.634 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.357 ms
Loss rate: 0.00%
```

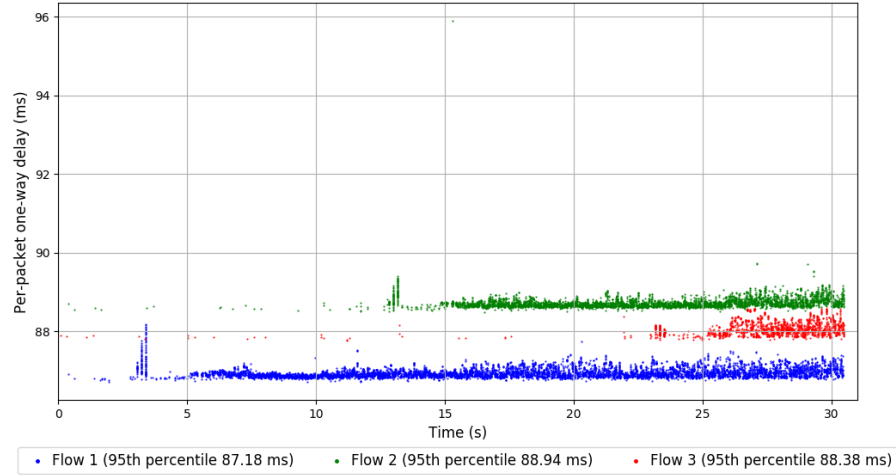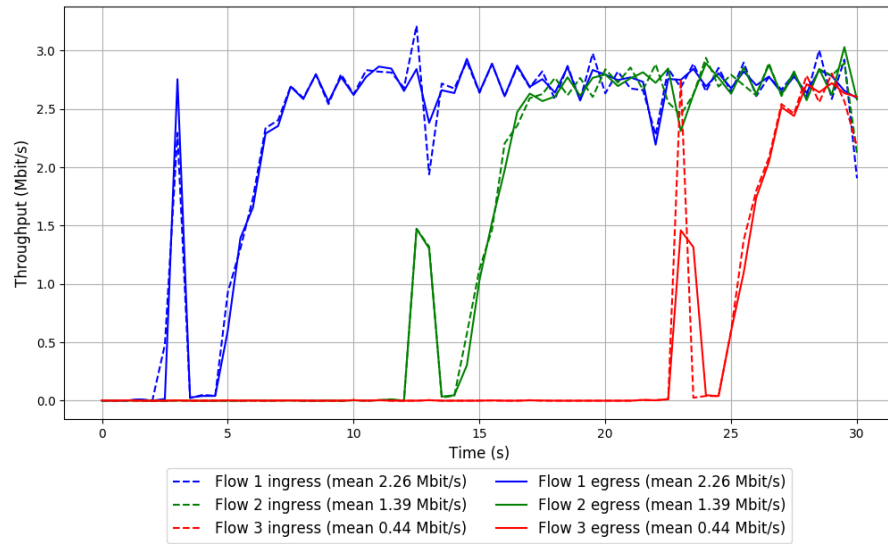Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-09-18 04:15:35
End at: 2017-09-18 04:16:05
Local clock offset: -0.83 ms
Remote clock offset: -1.707 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 88.817 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 87.183 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 88.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 88.376 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

Run 5: Statistics of WebRTC media

Start at: 2017-09-18 04:37:22
End at: 2017-09-18 04:37:52
Local clock offset: -0.611 ms
Remote clock offset: -6.946 ms

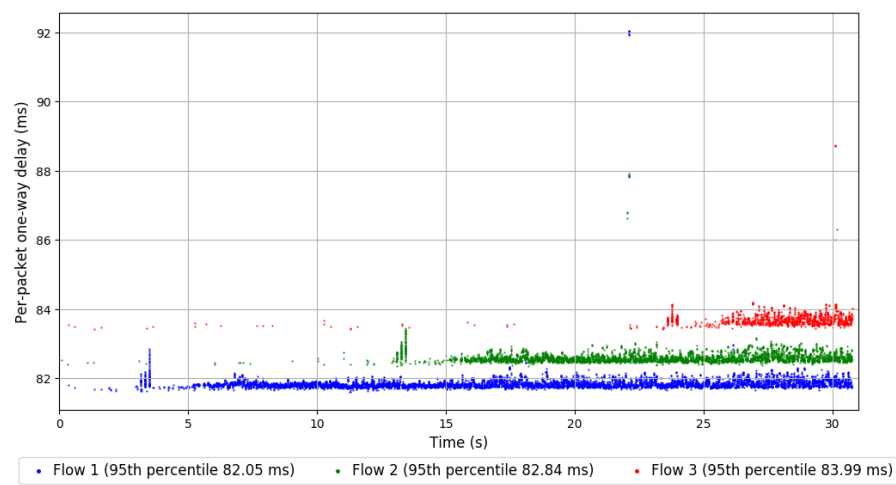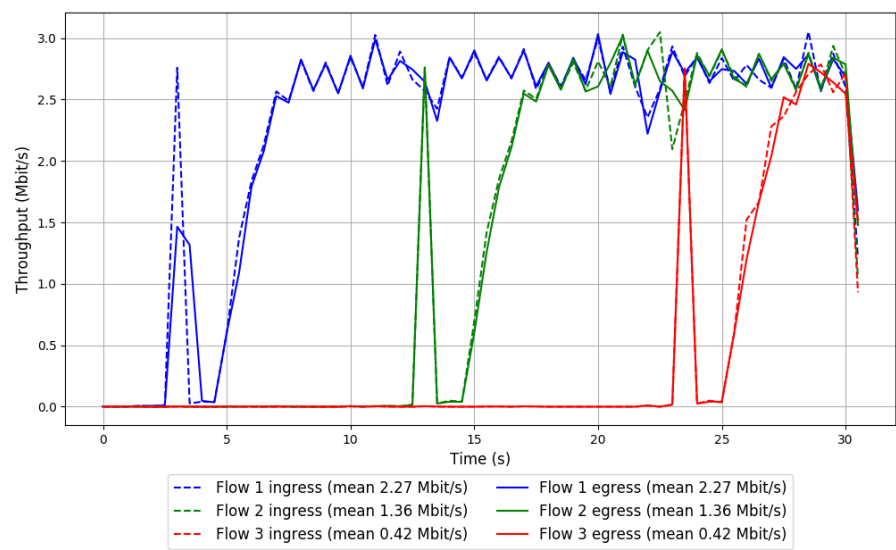Run 5: Report of WebRTC media — Data Link

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Figure is missing

```
Run 6: Statistics of WebRTC media

Start at: 2017-09-18 04:59:20
End at: 2017-09-18 04:59:50
Local clock offset: -0.322 ms
Remote clock offset: -7.323 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 83.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 82.045 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 82.840 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 83.993 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-09-18 05:21:02
End at: 2017-09-18 05:21:32
Local clock offset: -0.145 ms
Remote clock offset: -8.35 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 83.066 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 82.957 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 83.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 83.273 ms
Loss rate: 0.00%
```
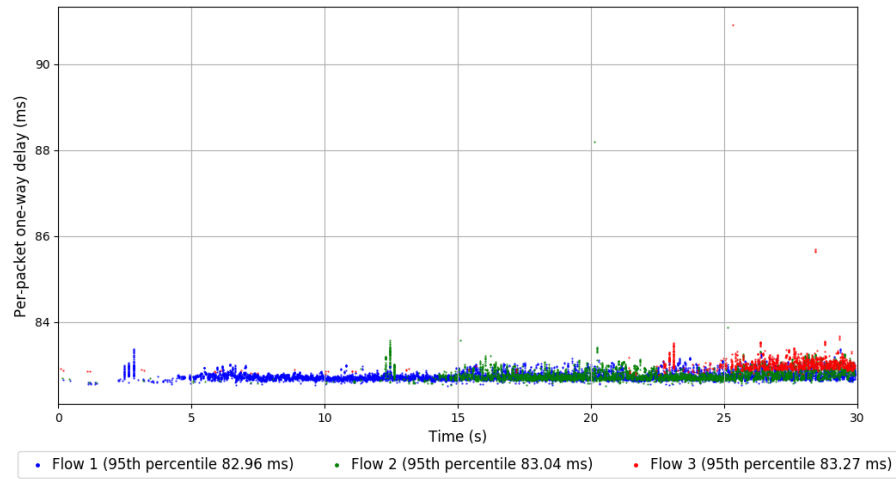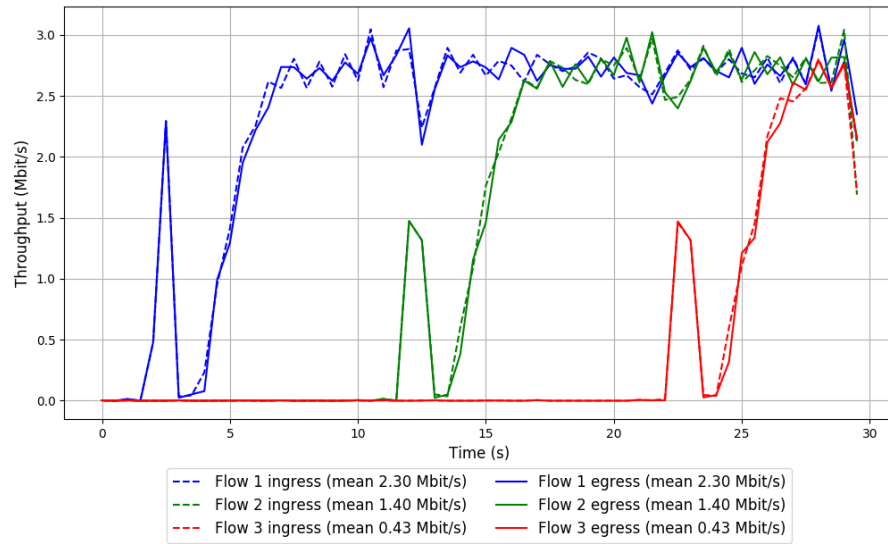
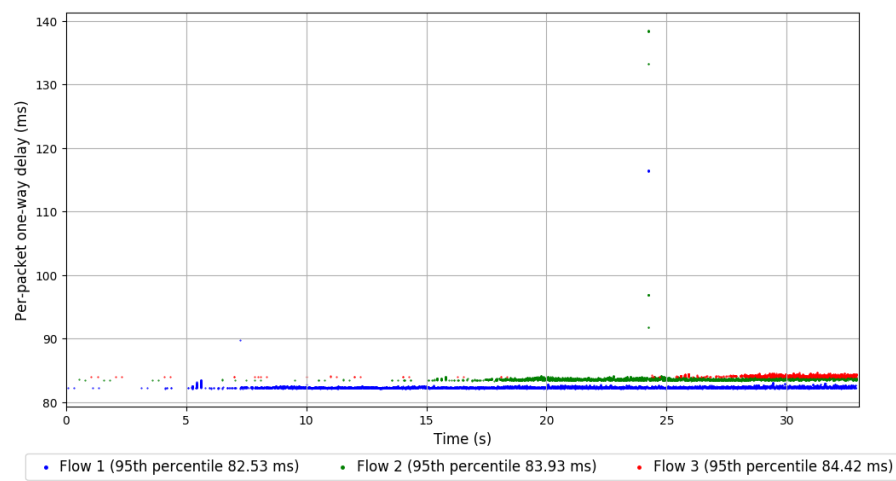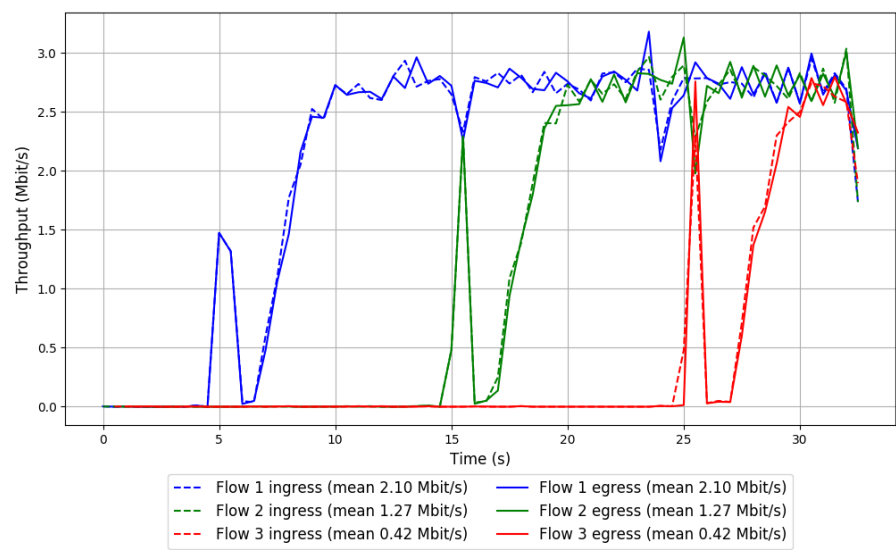Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-09-18 05:42:53
End at: 2017-09-18 05:43:23
Local clock offset: 0.044 ms
Remote clock offset: -7.045 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 84.160 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 82.529 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 83.929 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 84.420 ms
Loss rate: 0.00%
```

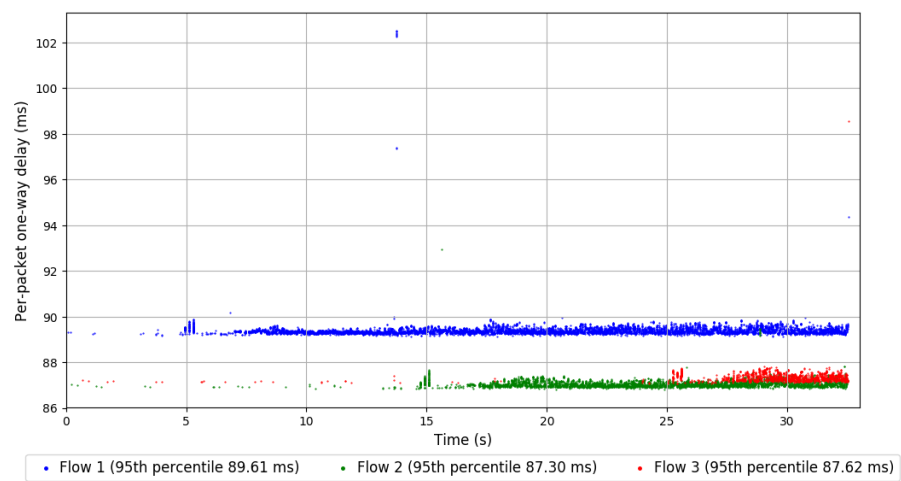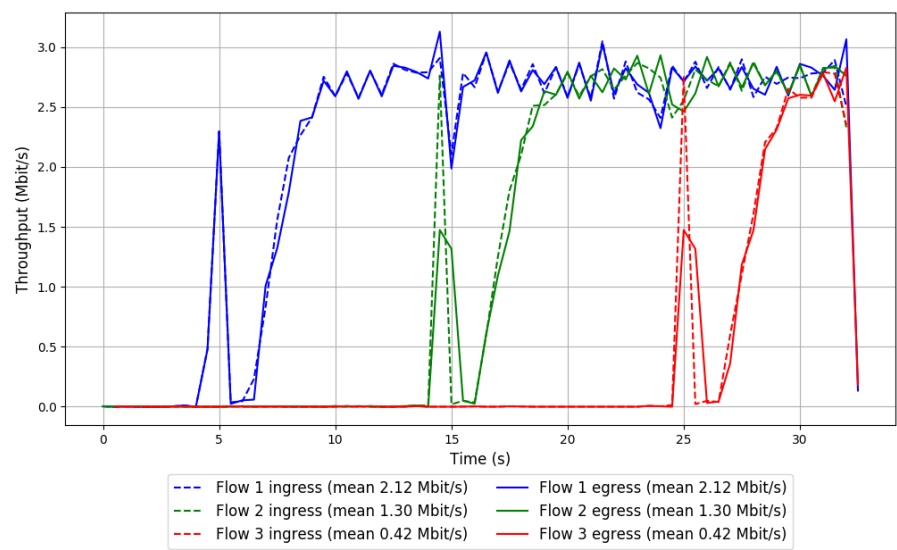Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-09-18 06:04:39
End at: 2017-09-18 06:05:09
Local clock offset: 0.136 ms
Remote clock offset: -1.337 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 89.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 89.606 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 87.296 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 87.619 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-09-18 06:26:35
End at: 2017-09-18 06:27:05
Local clock offset: 0.271 ms
Remote clock offset: -3.519 ms


# Below is generated by plot.py at 2017-09-18 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 87.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 85.844 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 87.421 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 85.375 ms
Loss rate: 0.01%
```

Run 10: Report of WebRTC media — Data Link

303