Pantheon Report

Generated at 2017-08-21 05:07:07 (UTC).

Data path: GCE Sydney Ethernet (*remote*) →GCE Iowa Ethernet (*local*).

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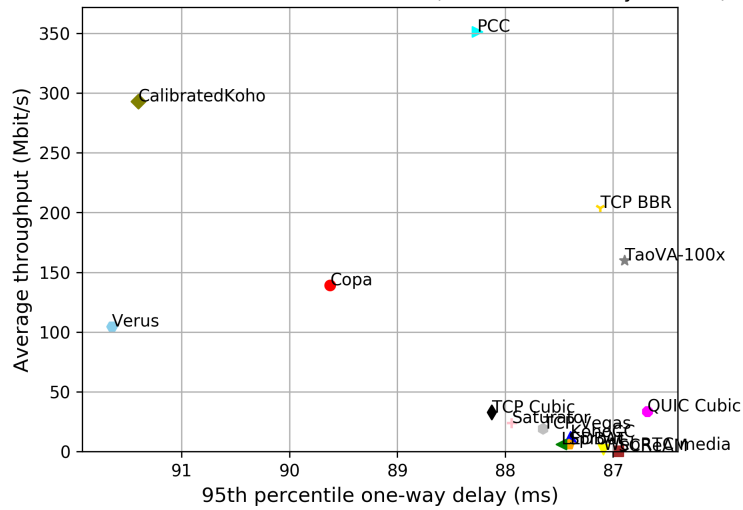
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

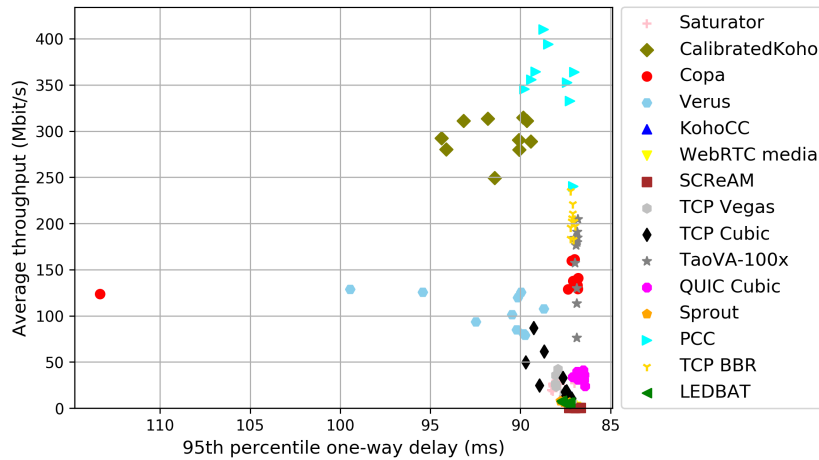Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

```
Git summary:
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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 GCE Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

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

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	108.96	98.28	90.07	87.10	87.12	87.31	1.16	1.96	3.51
CalibratedKoho	10	208.59	105.76	44.29	92.05	89.66	87.97	1.60	10.54	15.68
Copa	10	85.66	62.81	37.04	91.21	86.94	87.10	0.81	0.65	2.05
TCP Cubic	10	14.95	15.61	22.82	87.67	88.19	87.99	1.82	2.54	3.45
KohoCC	9	6.34	6.01	6.14	87.39	87.40	87.29	5.23	9.02	5.05
LEDBAT	9	2.76	3.54	3.08	87.44	87.45	87.34	1.91	1.86	3.25
PCC	9	245.95	116.60	86.72	88.43	87.47	87.38	8.97	6.42	7.78
QUIC Cubic	10	0.06	34.06	33.94	86.84	86.57	86.50	0.00	0.76	1.81
Saturator	10	12.81	12.23	12.27	87.89	88.02	87.98	3.31	5.61	6.43
SCReAM	10	0.22	0.22	0.22	86.80	86.82	86.72	0.54	0.88	1.53
Sprout	10	3.27	3.10	2.65	87.42	87.39	87.19	2.93	3.42	4.24
TaoVA-100x	10	149.14	115.01	109.32	86.90	86.92	86.97	0.13	0.49	1.34
TCP Vegas	10	9.28	8.85	12.67	87.50	87.38	87.71	1.58	2.31	3.53
Verus	10	61.40	48.27	35.24	92.90	90.42	89.47	23.88	5.22	11.95
WebRTC media	10	0.32	1.31	0.30	87.18	87.02	87.32	0.18	1.35	6.57

```
Run 1: Statistics of TCP BBR

Start at: 2017-08-20 23:53:25
End at: 2017-08-20 23:53:55

# Below is generated by plot.py at 2017-08-21 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.03 Mbit/s
95th percentile per-packet one-way delay: 87.019 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 113.64 Mbit/s
95th percentile per-packet one-way delay: 87.028 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 108.23 Mbit/s
95th percentile per-packet one-way delay: 87.018 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 86.728 ms
Loss rate: 8.43%
```
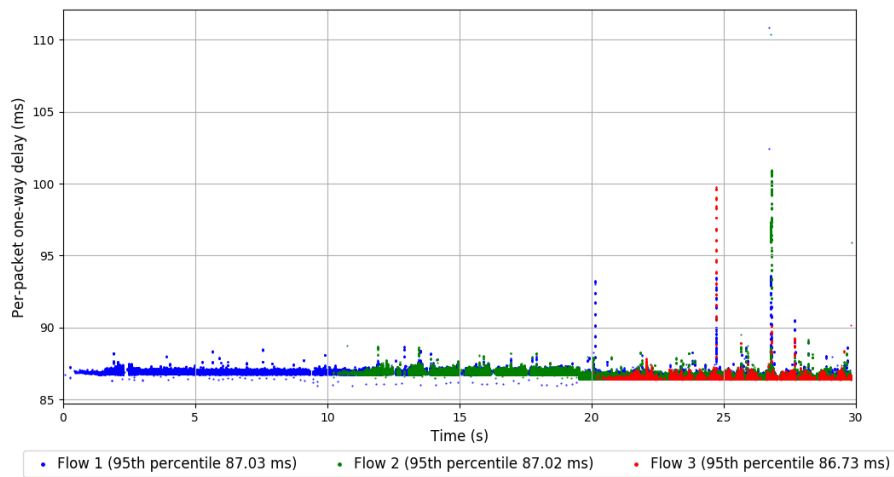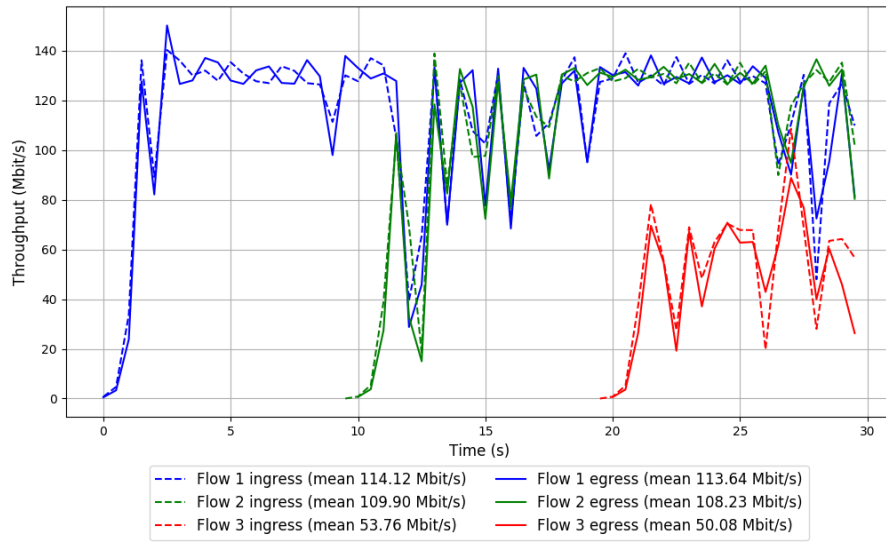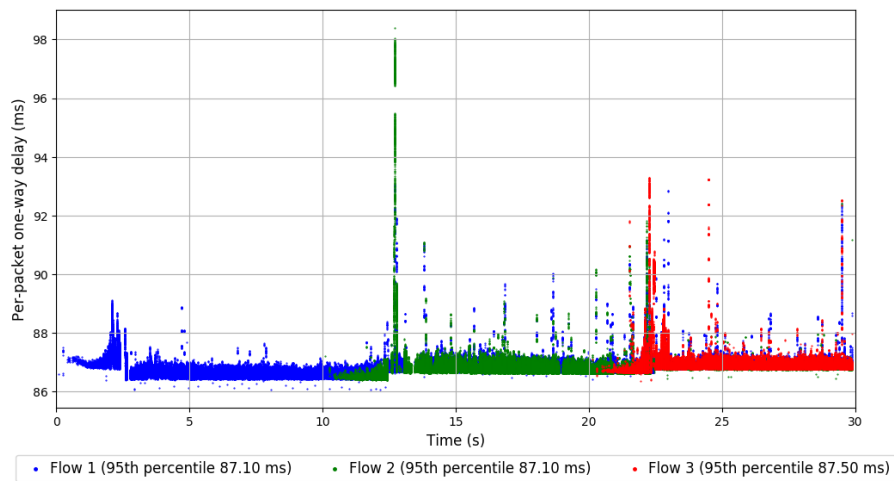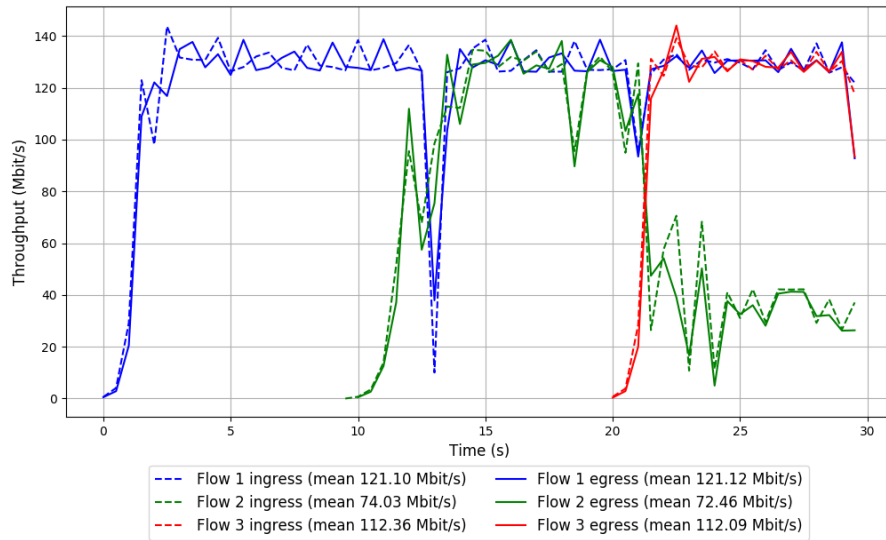
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 114.12 Mbit/s) ----   Flow 1 egress (mean 113.64 Mbit/s) ——
Flow 2 ingress (mean 109.90 Mbit/s) ----   Flow 2 egress (mean 108.23 Mbit/s) ——
Flow 3 ingress (mean 53.76 Mbit/s) ----   Flow 3 egress (mean 50.08 Mbit/s) ——

Flow 1 (95th percentile 87.03 ms)   Flow 2 (95th percentile 87.02 ms)   Flow 3 (95th percentile 86.73 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2017-08-21 00:06:32
End at: 2017-08-21 00:07:02

# Below is generated by plot.py at 2017-08-21 04:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.91 Mbit/s
95th percentile per-packet one-way delay: 87.140 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 121.12 Mbit/s
95th percentile per-packet one-way delay: 87.101 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 72.46 Mbit/s
95th percentile per-packet one-way delay: 87.100 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 112.09 Mbit/s
95th percentile per-packet one-way delay: 87.498 ms
Loss rate: 2.01%
```
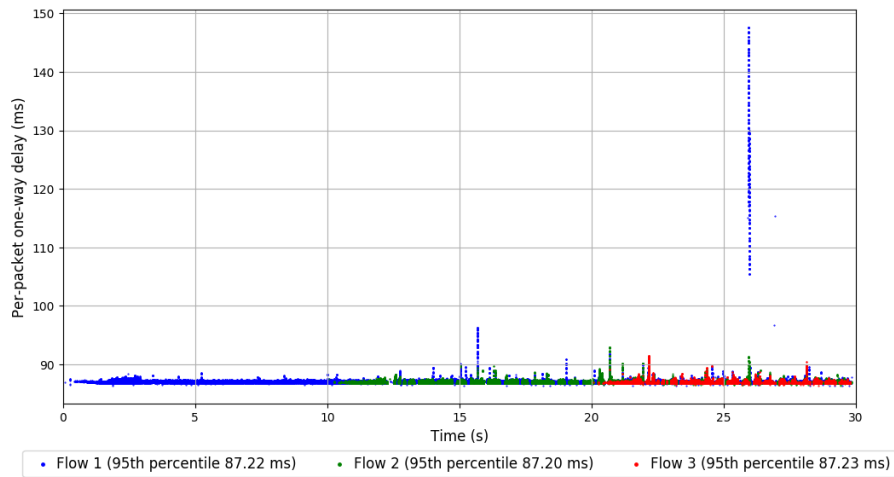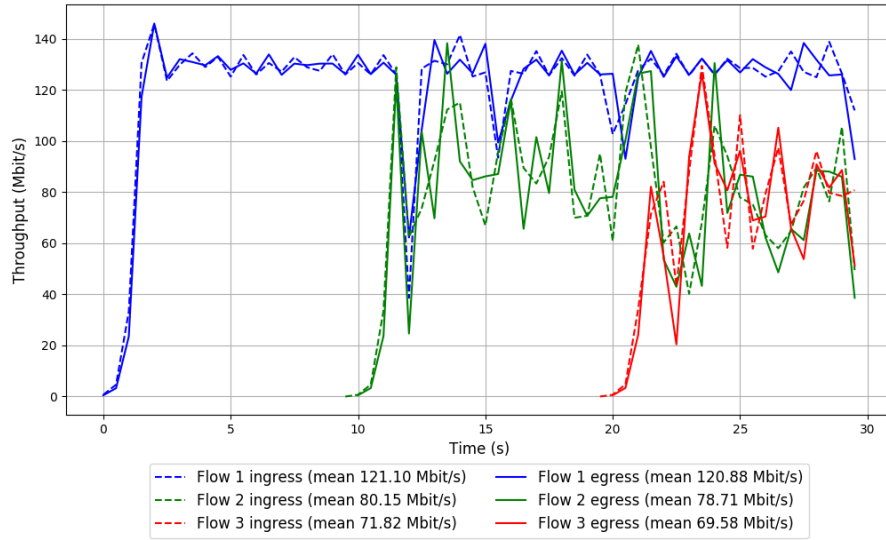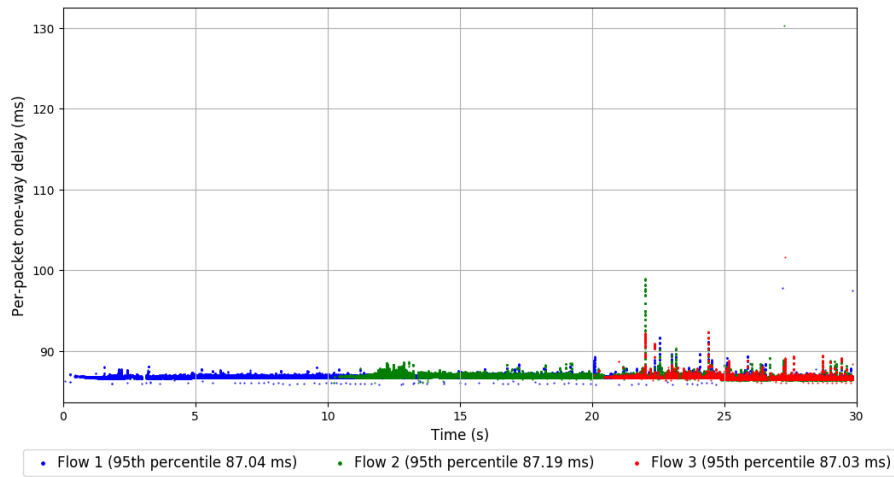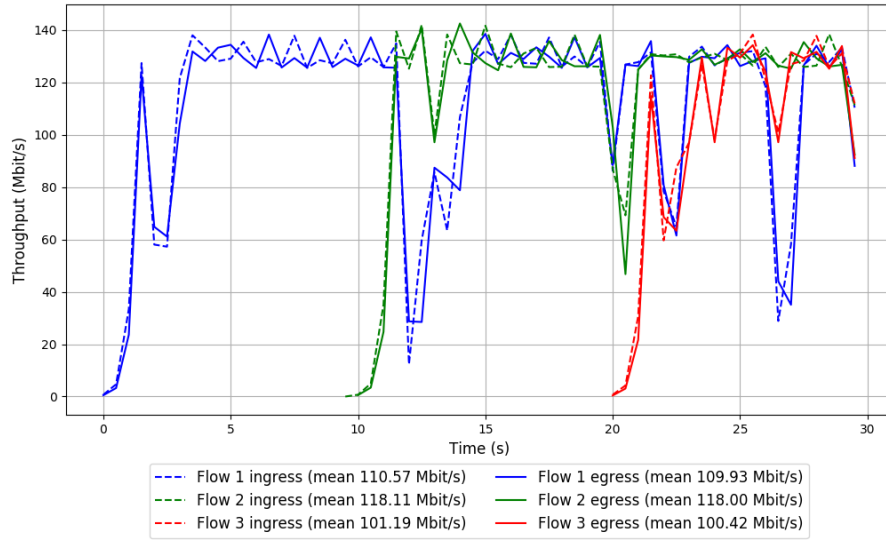
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 121.10 Mbit/s) --- Flow 1 egress (mean 121.12 Mbit/s)
Flow 2 ingress (mean 74.03 Mbit/s) --- Flow 2 egress (mean 72.46 Mbit/s)
Flow 3 ingress (mean 112.36 Mbit/s) --- Flow 3 egress (mean 112.09 Mbit/s)

Flow 1 (95th percentile 87.10 ms)   Flow 2 (95th percentile 87.10 ms)   Flow 3 (95th percentile 87.50 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-08-21 00:19:44
End at: 2017-08-21 00:20:14

# Below is generated by plot.py at 2017-08-21 04:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.79 Mbit/s
95th percentile per-packet one-way delay: 87.215 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 120.88 Mbit/s
95th percentile per-packet one-way delay: 87.219 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 78.71 Mbit/s
95th percentile per-packet one-way delay: 87.202 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 87.227 ms
Loss rate: 5.68%
```
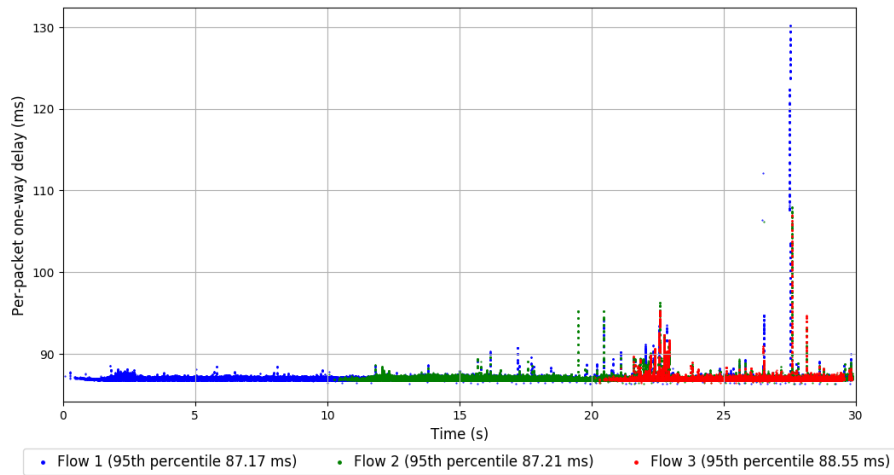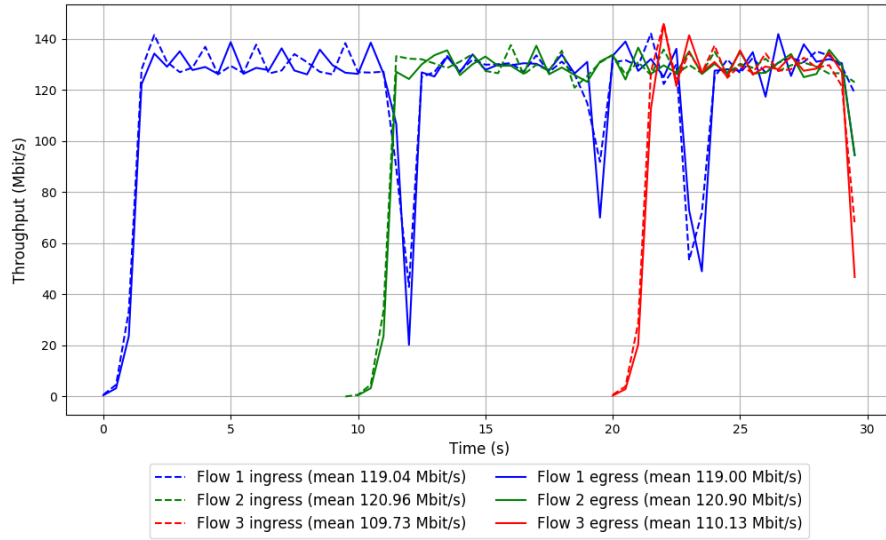
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 121.10 Mbit/s)   Flow 1 egress (mean 120.88 Mbit/s)
Flow 2 ingress (mean 80.15 Mbit/s)   Flow 2 egress (mean 78.71 Mbit/s)
Flow 3 ingress (mean 71.82 Mbit/s)   Flow 3 egress (mean 69.58 Mbit/s)

Flow 1 (95th percentile 87.22 ms)   Flow 2 (95th percentile 87.20 ms)   Flow 3 (95th percentile 87.23 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2017-08-21 00:32:59
End at: 2017-08-21 00:33:29

# Below is generated by plot.py at 2017-08-21 04:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.07 Mbit/s
95th percentile per-packet one-way delay: 87.094 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 109.93 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 118.00 Mbit/s
95th percentile per-packet one-way delay: 87.189 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 100.42 Mbit/s
95th percentile per-packet one-way delay: 87.029 ms
Loss rate: 2.61%
```
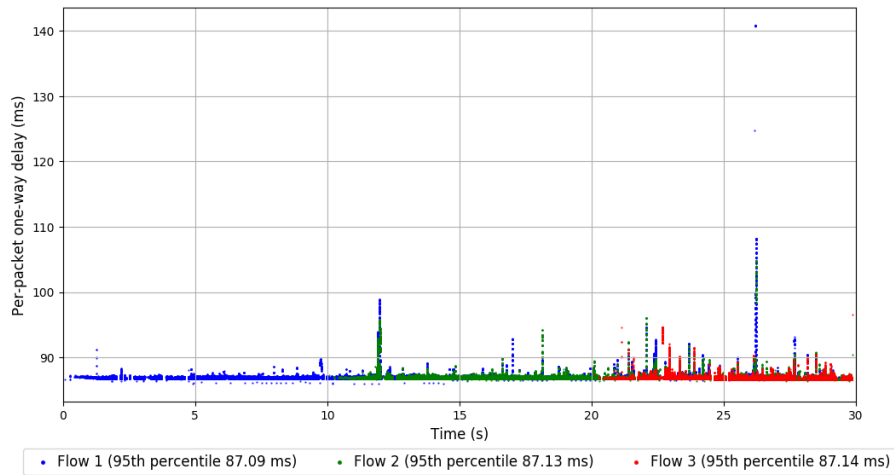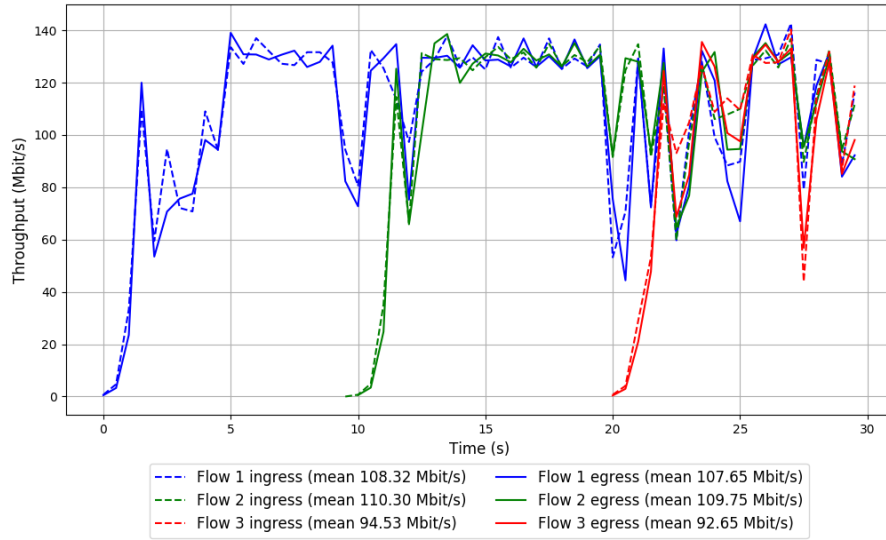
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2017-08-21 00:45:45
End at: 2017-08-21 00:46:15


# Below is generated by plot.py at 2017-08-21 04:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.16 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 119.00 Mbit/s
95th percentile per-packet one-way delay: 87.165 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 120.90 Mbit/s
95th percentile per-packet one-way delay: 87.207 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 110.13 Mbit/s
95th percentile per-packet one-way delay: 88.548 ms
Loss rate: 1.62%
```
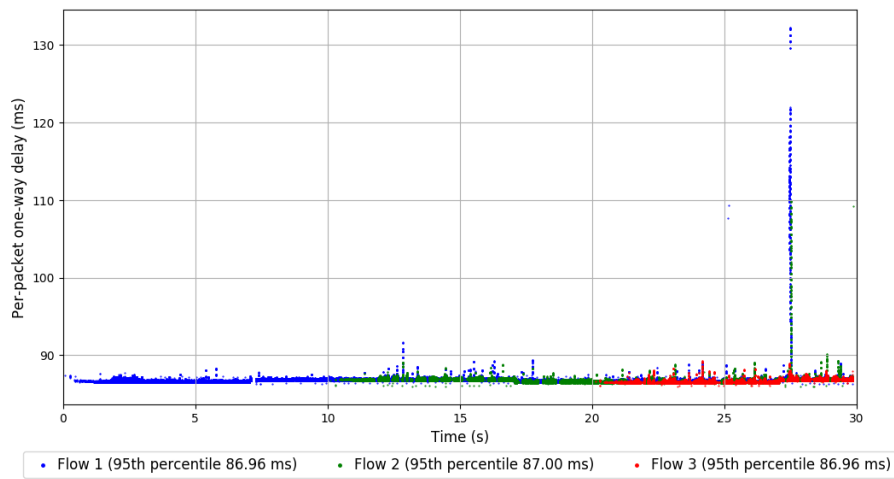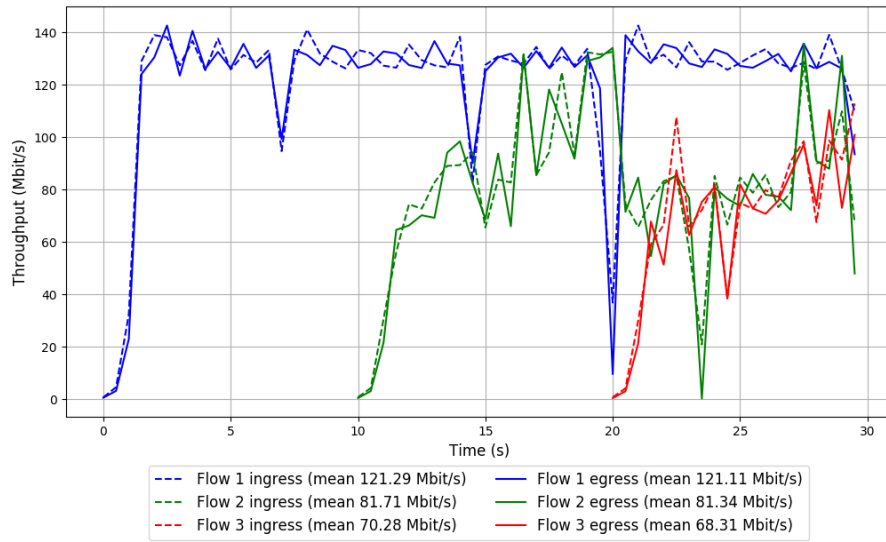
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2017-08-21 00:58:30
End at: 2017-08-21 00:59:00

# Below is generated by plot.py at 2017-08-21 04:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.85 Mbit/s
95th percentile per-packet one-way delay: 87.105 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 107.65 Mbit/s
95th percentile per-packet one-way delay: 87.087 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 109.75 Mbit/s
95th percentile per-packet one-way delay: 87.127 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 87.140 ms
Loss rate: 3.67%
```
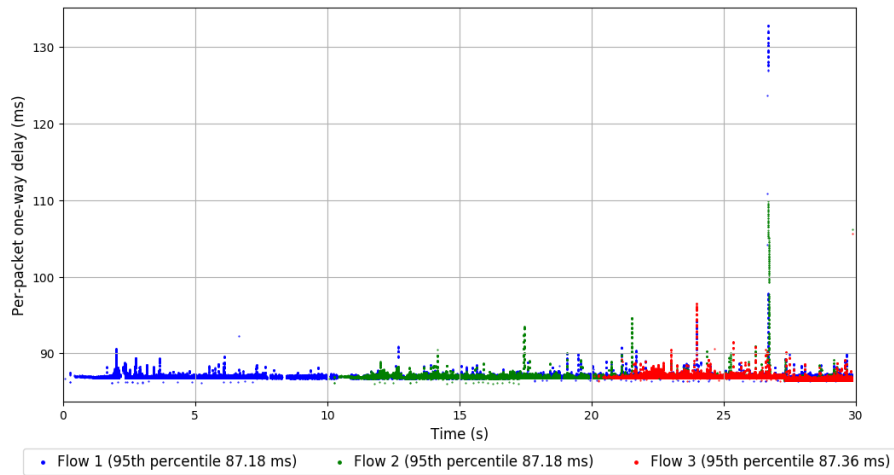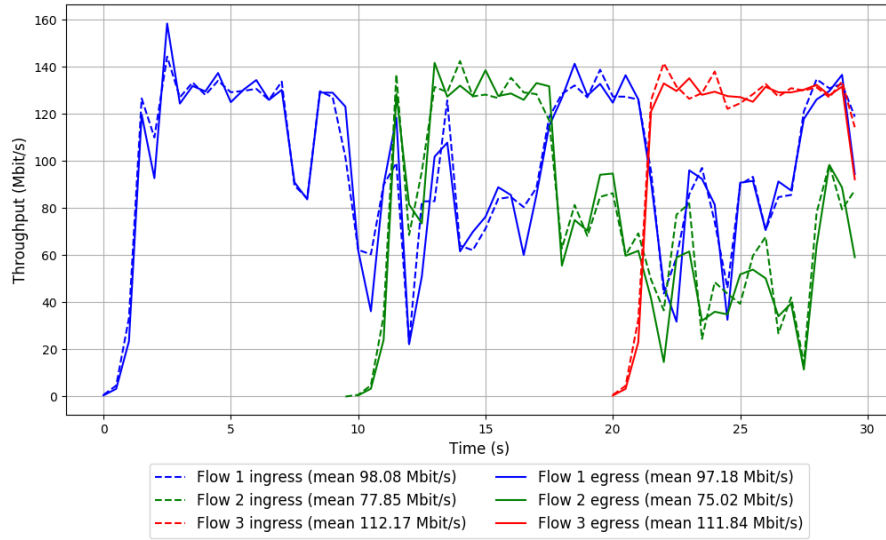
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 108.32 Mbit/s) — — — — Flow 1 egress (mean 107.65 Mbit/s)
Flow 2 ingress (mean 110.30 Mbit/s) — — — — Flow 2 egress (mean 109.75 Mbit/s)
Flow 3 ingress (mean 94.53 Mbit/s) — — — — Flow 3 egress (mean 92.65 Mbit/s)

Flow 1 (95th percentile 87.09 ms) · Flow 2 (95th percentile 87.13 ms) · Flow 3 (95th percentile 87.14 ms)

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```
Run 7: Statistics of TCP BBR

Start at: 2017-08-21 01:11:27
End at: 2017-08-21 01:11:57


# Below is generated by plot.py at 2017-08-21 04:44:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.34 Mbit/s
95th percentile per-packet one-way delay: 86.969 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 121.11 Mbit/s
95th percentile per-packet one-way delay: 86.958 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 81.34 Mbit/s
95th percentile per-packet one-way delay: 86.998 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 86.961 ms
Loss rate: 4.30%
```
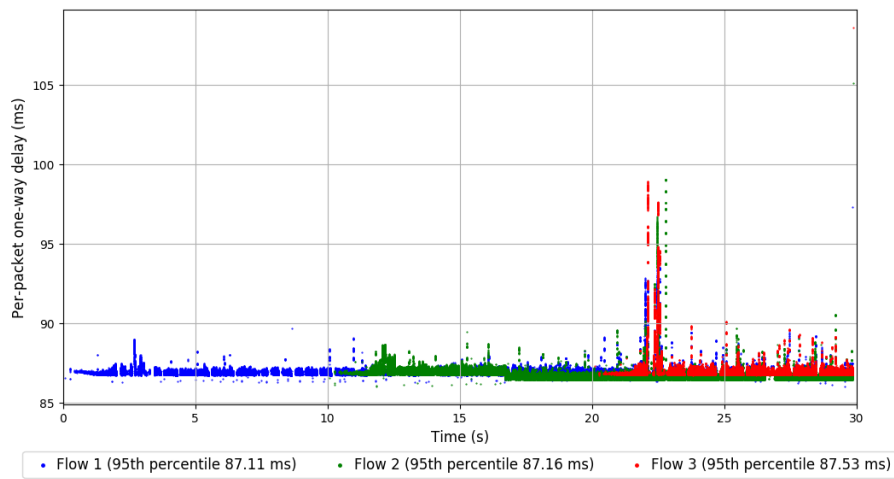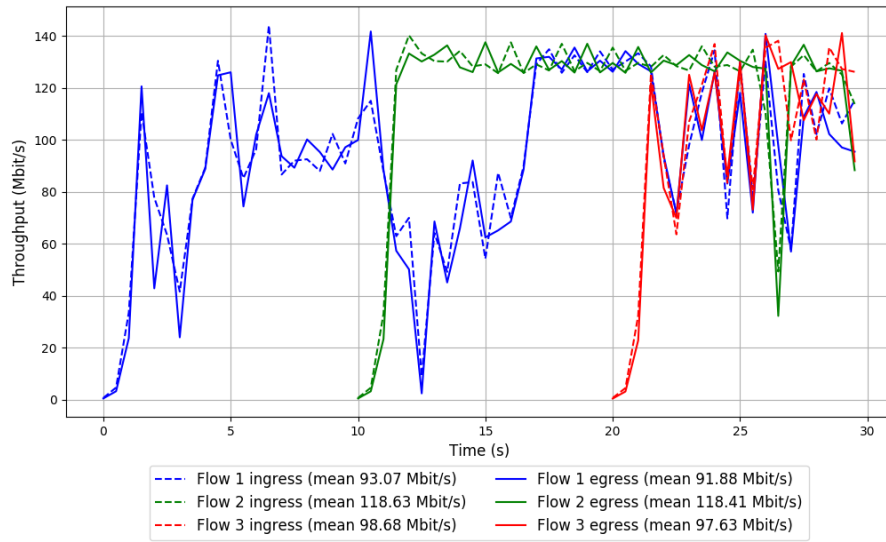
Run 7: Report of TCP BBR — Data Link

```
Run 8: Statistics of TCP BBR

Start at: 2017-08-21 01:24:57
End at: 2017-08-21 01:25:27


# Below is generated by plot.py at 2017-08-21 04:44:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 183.65 Mbit/s
95th percentile per-packet one-way delay: 87.213 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 87.180 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 75.02 Mbit/s
95th percentile per-packet one-way delay: 87.176 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 111.84 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 2.03%
```
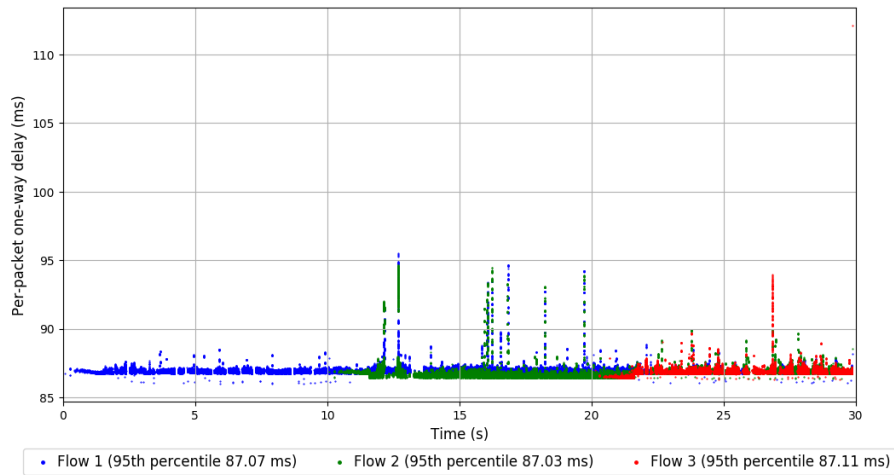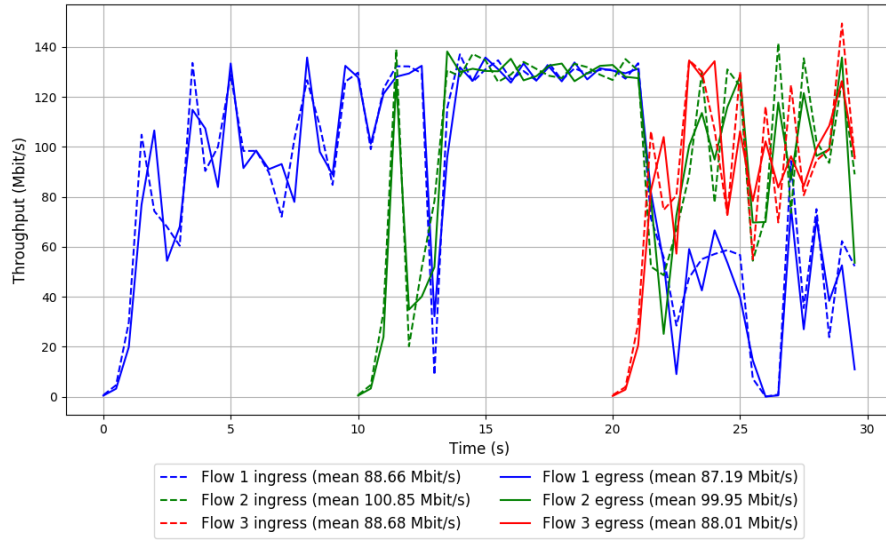
Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2017-08-21 01:38:08
End at: 2017-08-21 01:38:38

# Below is generated by plot.py at 2017-08-21 04:45:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.53 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 1.83%
-- Flow 2:
Average throughput: 118.41 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 97.63 Mbit/s
95th percentile per-packet one-way delay: 87.525 ms
Loss rate: 2.72%
```
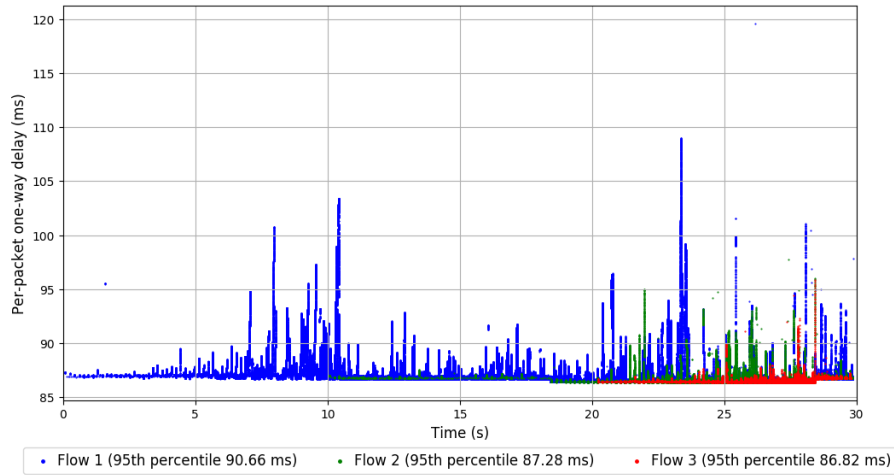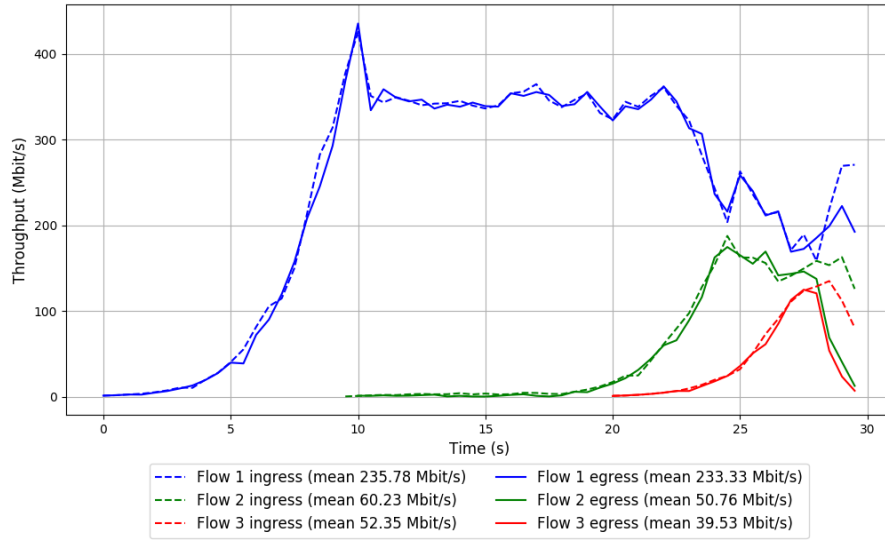
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 93.07 Mbit/s) — Flow 1 egress (mean 91.88 Mbit/s)
Flow 2 ingress (mean 118.63 Mbit/s) — Flow 2 egress (mean 118.41 Mbit/s)
Flow 3 ingress (mean 98.68 Mbit/s) — Flow 3 egress (mean 97.63 Mbit/s)

Flow 1 (95th percentile 87.11 ms) • Flow 2 (95th percentile 87.16 ms) • Flow 3 (95th percentile 87.53 ms)

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```
Run 10: Statistics of TCP BBR

Start at: 2017-08-21 01:51:03
End at: 2017-08-21 01:51:33


# Below is generated by plot.py at 2017-08-21 04:45:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.28 Mbit/s
95th percentile per-packet one-way delay: 87.064 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 87.068 ms
Loss rate: 2.22%
-- Flow 2:
Average throughput: 99.95 Mbit/s
95th percentile per-packet one-way delay: 87.025 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 88.01 Mbit/s
95th percentile per-packet one-way delay: 87.108 ms
Loss rate: 2.01%
```
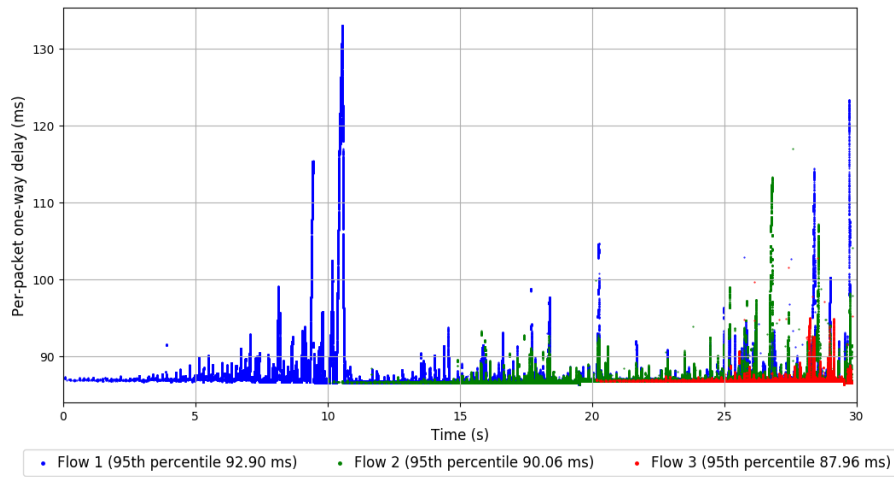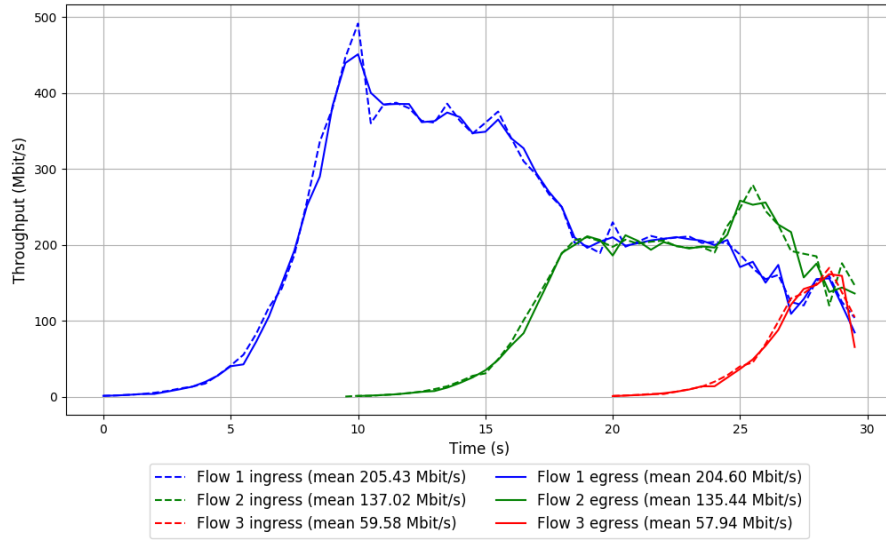
Run 10: Report of TCP BBR — Data Link

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```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-20 23:43:46
End at: 2017-08-20 23:44:16

# Below is generated by plot.py at 2017-08-21 04:46:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.71 Mbit/s
95th percentile per-packet one-way delay: 90.072 ms
Loss rate: 5.07%
-- Flow 1:
Average throughput: 233.33 Mbit/s
95th percentile per-packet one-way delay: 90.664 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 50.76 Mbit/s
95th percentile per-packet one-way delay: 87.280 ms
Loss rate: 16.47%
-- Flow 3:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 86.821 ms
Loss rate: 26.21%
```
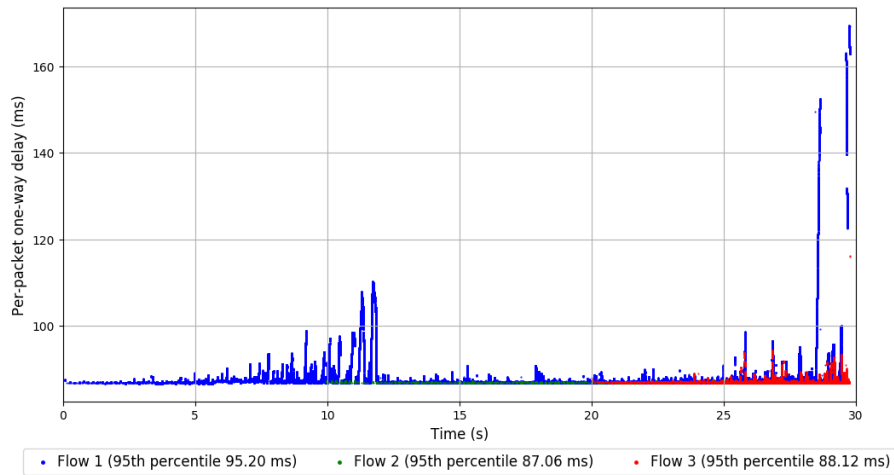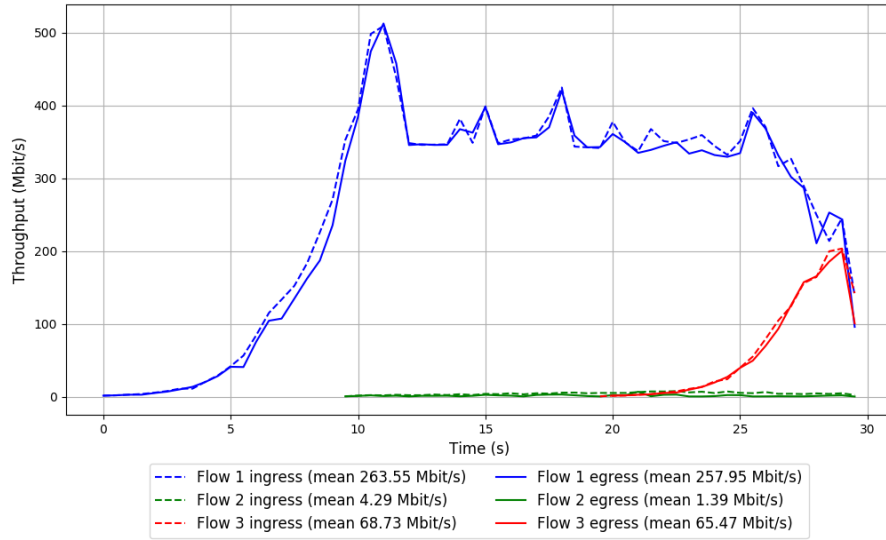
Run 1: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 235.78 Mbit/s)   Flow 1 egress (mean 233.33 Mbit/s)
Flow 2 ingress (mean 60.23 Mbit/s)   Flow 2 egress (mean 50.76 Mbit/s)
Flow 3 ingress (mean 52.35 Mbit/s)   Flow 3 egress (mean 39.53 Mbit/s)

Flow 1 (95th percentile 90.66 ms)   Flow 2 (95th percentile 87.28 ms)   Flow 3 (95th percentile 86.82 ms)

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-08-20 23:57:05
End at: 2017-08-20 23:57:35

# Below is generated by plot.py at 2017-08-21 04:46:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.37 Mbit/s
95th percentile per-packet one-way delay: 91.808 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 204.60 Mbit/s
95th percentile per-packet one-way delay: 92.901 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 135.44 Mbit/s
95th percentile per-packet one-way delay: 90.058 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 57.94 Mbit/s
95th percentile per-packet one-way delay: 87.956 ms
Loss rate: 4.43%
```
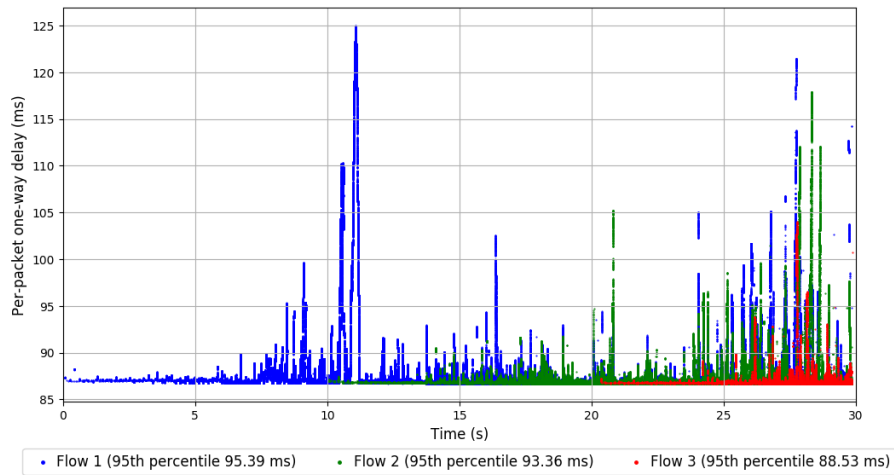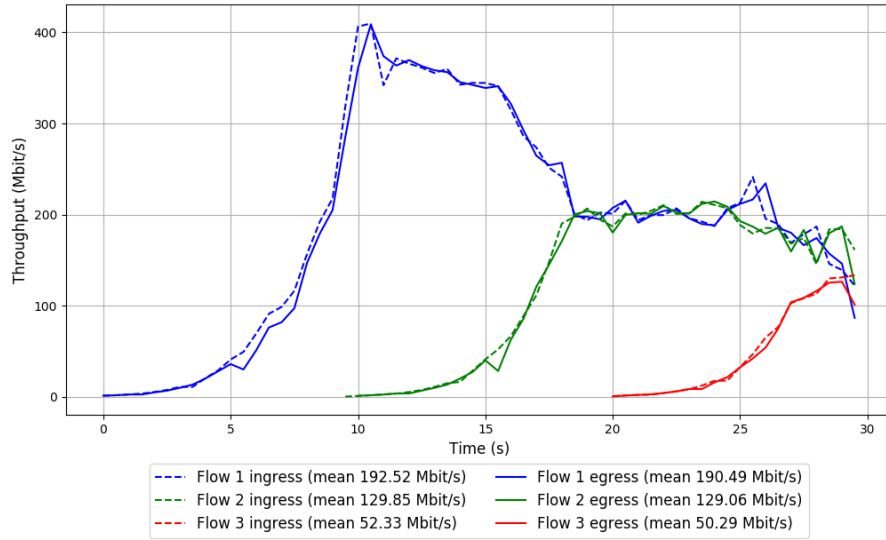
Run 2: Report of CalibratedKoho — Data Link

```
Run 3: Statistics of CalibratedKoho

Start at: 2017-08-21 00:10:08
End at: 2017-08-21 00:10:38

# Below is generated by plot.py at 2017-08-21 04:46:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.34 Mbit/s
95th percentile per-packet one-way delay: 94.127 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 257.95 Mbit/s
95th percentile per-packet one-way delay: 95.203 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 87.058 ms
Loss rate: 67.84%
-- Flow 3:
Average throughput: 65.47 Mbit/s
95th percentile per-packet one-way delay: 88.120 ms
Loss rate: 6.19%
```
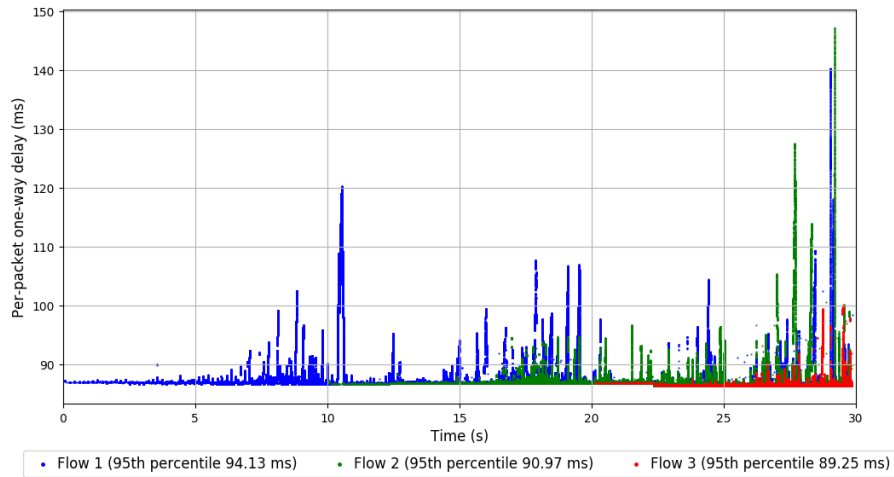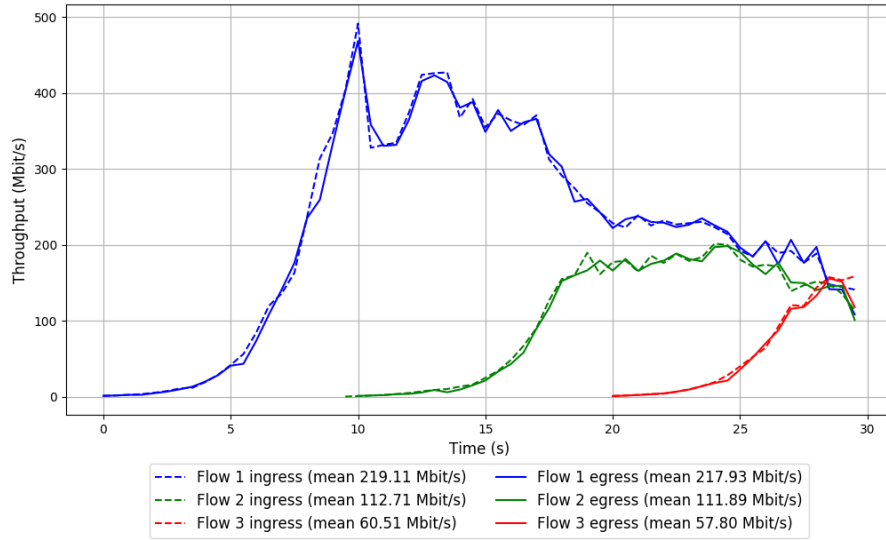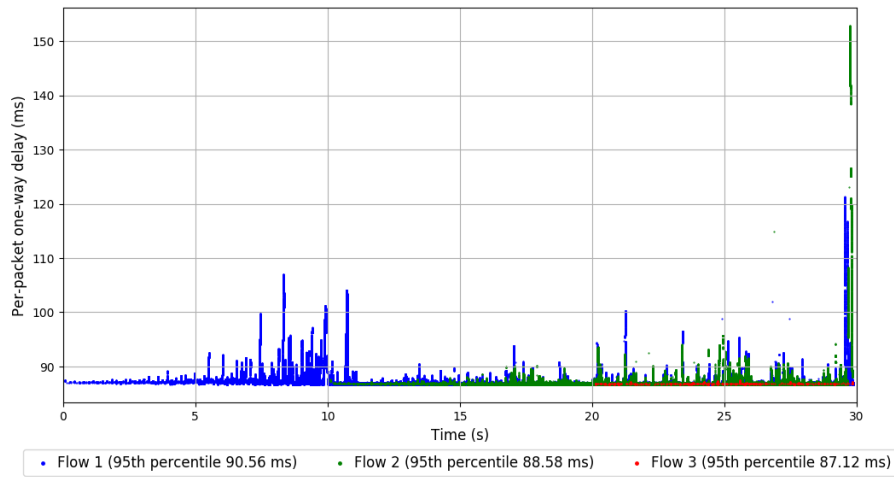
Run 3: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 263.55 Mbit/s)   Flow 1 egress (mean 257.95 Mbit/s)
Flow 2 ingress (mean 4.29 Mbit/s)   Flow 2 egress (mean 1.39 Mbit/s)
Flow 3 ingress (mean 68.73 Mbit/s)   Flow 3 egress (mean 65.47 Mbit/s)

Flow 1 (95th percentile 95.20 ms)   Flow 2 (95th percentile 87.06 ms)   Flow 3 (95th percentile 88.12 ms)

29

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-08-21 00:23:22
End at: 2017-08-21 00:23:52


# Below is generated by plot.py at 2017-08-21 04:47:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.21 Mbit/s
95th percentile per-packet one-way delay: 94.378 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 190.49 Mbit/s
95th percentile per-packet one-way delay: 95.385 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 129.06 Mbit/s
95th percentile per-packet one-way delay: 93.361 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 88.526 ms
Loss rate: 5.62%
```
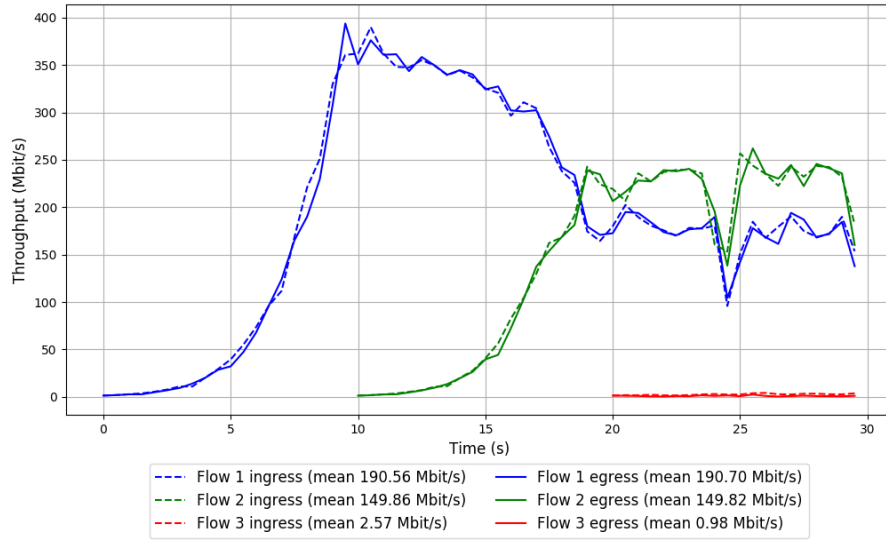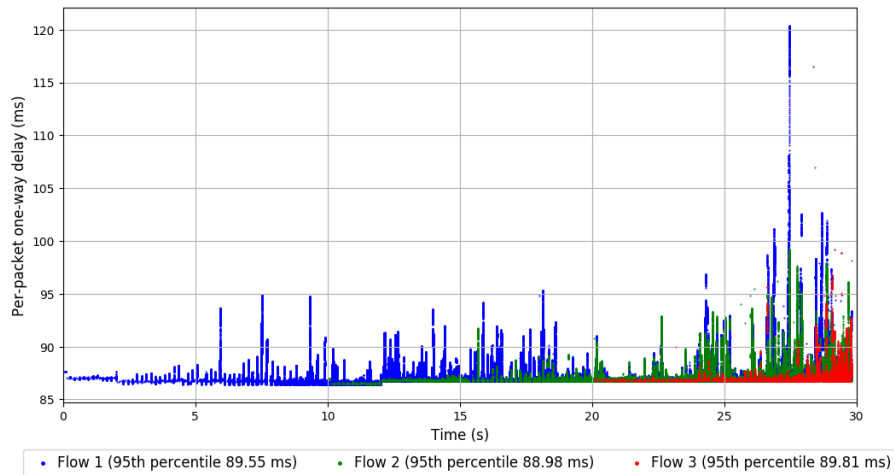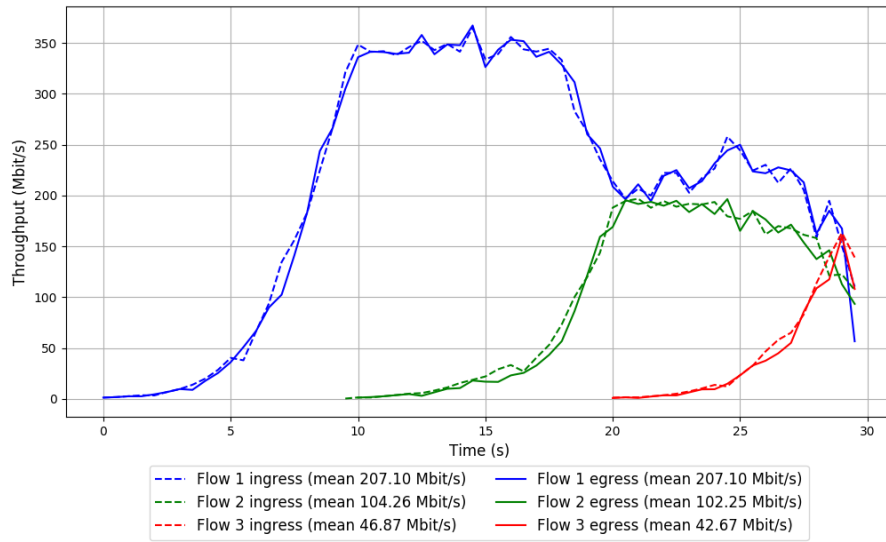
Run 4: Report of CalibratedKoho — Data Link

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-08-21 00:36:32
End at: 2017-08-21 00:37:02


# Below is generated by plot.py at 2017-08-21 04:47:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.10 Mbit/s
95th percentile per-packet one-way delay: 93.164 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 217.93 Mbit/s
95th percentile per-packet one-way delay: 94.130 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 111.89 Mbit/s
95th percentile per-packet one-way delay: 90.969 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 57.80 Mbit/s
95th percentile per-packet one-way delay: 89.251 ms
Loss rate: 6.14%
```
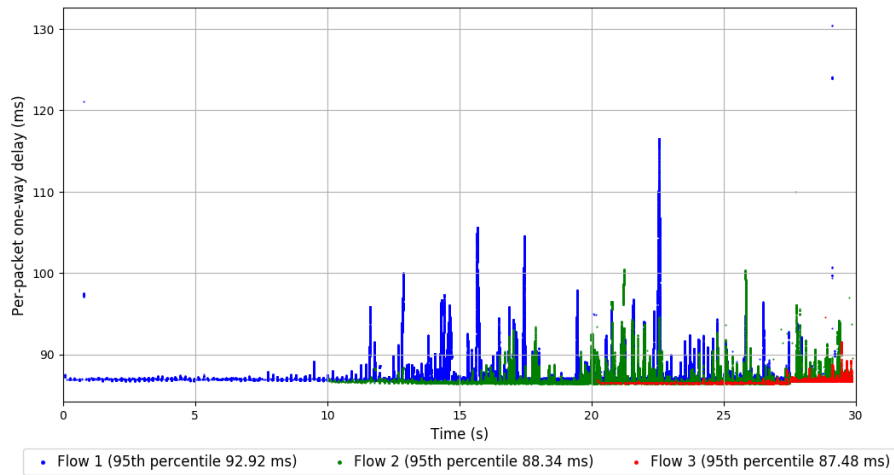
Run 5: Report of CalibratedKoho — Data Link

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-08-21 00:49:10
End at: 2017-08-21 00:49:40


# Below is generated by plot.py at 2017-08-21 04:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.41 Mbit/s
95th percentile per-packet one-way delay: 90.091 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 190.70 Mbit/s
95th percentile per-packet one-way delay: 90.563 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 149.82 Mbit/s
95th percentile per-packet one-way delay: 88.577 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 87.116 ms
Loss rate: 62.45%
```
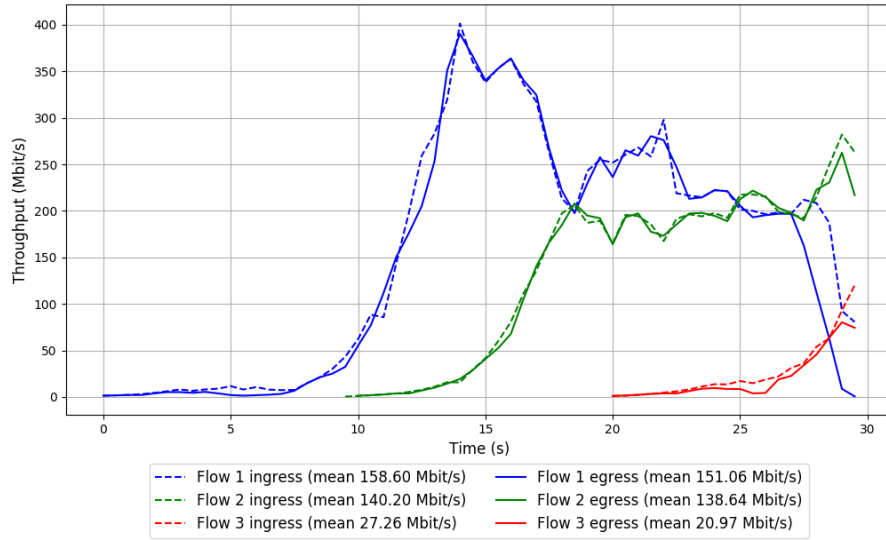
Run 6: Report of CalibratedKoho — Data Link

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 01:02:02
End at: 2017-08-21 01:02:32


# Below is generated by plot.py at 2017-08-21 04:48:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.89 Mbit/s
95th percentile per-packet one-way delay: 89.438 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 207.10 Mbit/s
95th percentile per-packet one-way delay: 89.545 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 102.25 Mbit/s
95th percentile per-packet one-way delay: 88.981 ms
Loss rate: 2.82%
-- Flow 3:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 89.806 ms
Loss rate: 10.61%
```
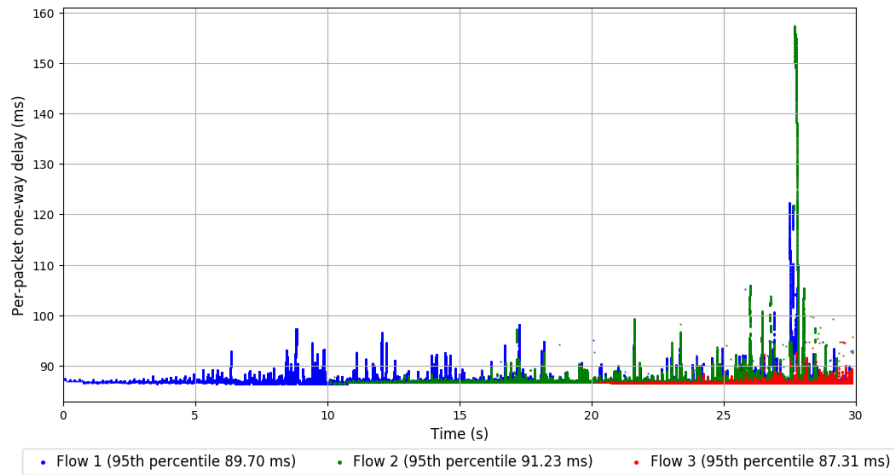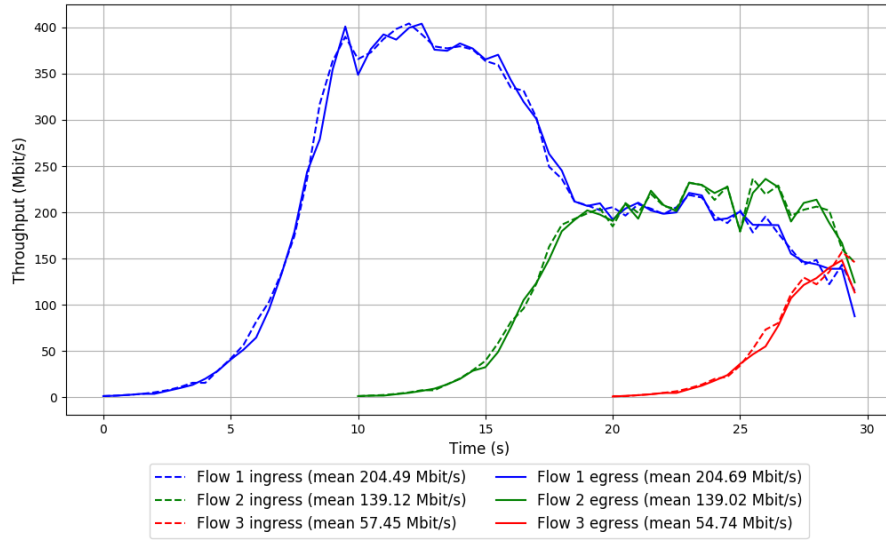
Run 7: Report of CalibratedKoho — Data Link

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-08-21 01:14:57
End at: 2017-08-21 01:15:27

# Below is generated by plot.py at 2017-08-21 04:48:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.15 Mbit/s
95th percentile per-packet one-way delay: 91.434 ms
Loss rate: 5.07%
-- Flow 1:
Average throughput: 151.06 Mbit/s
95th percentile per-packet one-way delay: 92.921 ms
Loss rate: 5.80%
-- Flow 2:
Average throughput: 138.64 Mbit/s
95th percentile per-packet one-way delay: 88.340 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 20.97 Mbit/s
95th percentile per-packet one-way delay: 87.478 ms
Loss rate: 24.48%
```
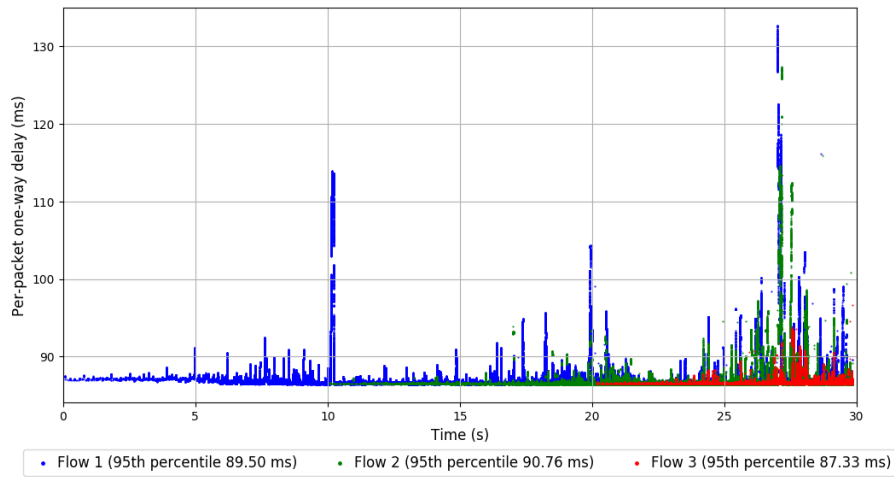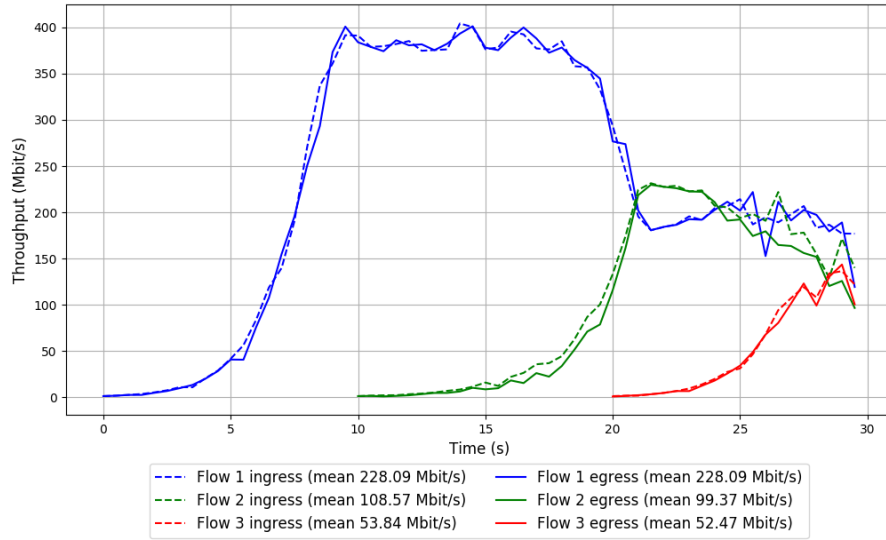
Run 8: Report of CalibratedKoho — Data Link

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-08-21 01:28:34
End at: 2017-08-21 01:29:04

# Below is generated by plot.py at 2017-08-21 04:49:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.57 Mbit/s
95th percentile per-packet one-way delay: 89.853 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 204.69 Mbit/s
95th percentile per-packet one-way delay: 89.696 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 139.02 Mbit/s
95th percentile per-packet one-way delay: 91.235 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 54.74 Mbit/s
95th percentile per-packet one-way delay: 87.311 ms
Loss rate: 6.43%
```
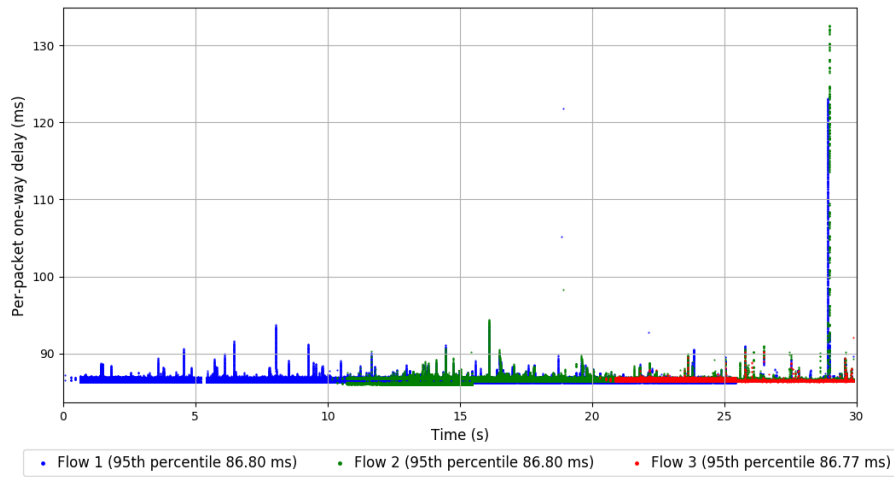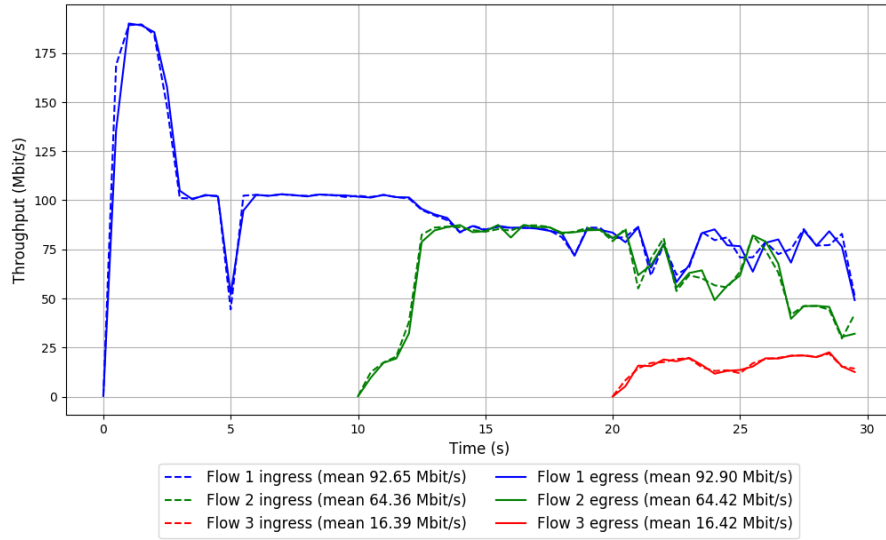
Run 9: Report of CalibratedKoho — Data Link

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 01:41:38
End at: 2017-08-21 01:42:09


# Below is generated by plot.py at 2017-08-21 04:49:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.00 Mbit/s
95th percentile per-packet one-way delay: 89.642 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 228.09 Mbit/s
95th percentile per-packet one-way delay: 89.495 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 99.37 Mbit/s
95th percentile per-packet one-way delay: 90.764 ms
Loss rate: 9.25%
-- Flow 3:
Average throughput: 52.47 Mbit/s
95th percentile per-packet one-way delay: 87.335 ms
Loss rate: 4.29%
```
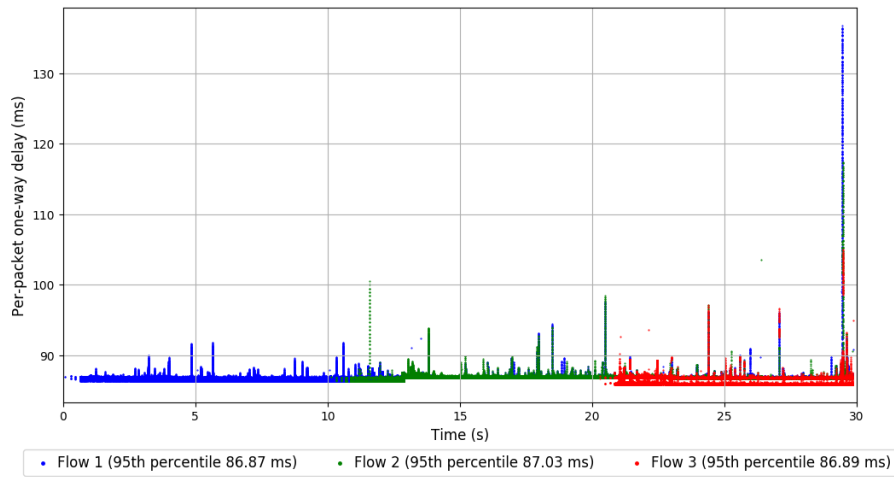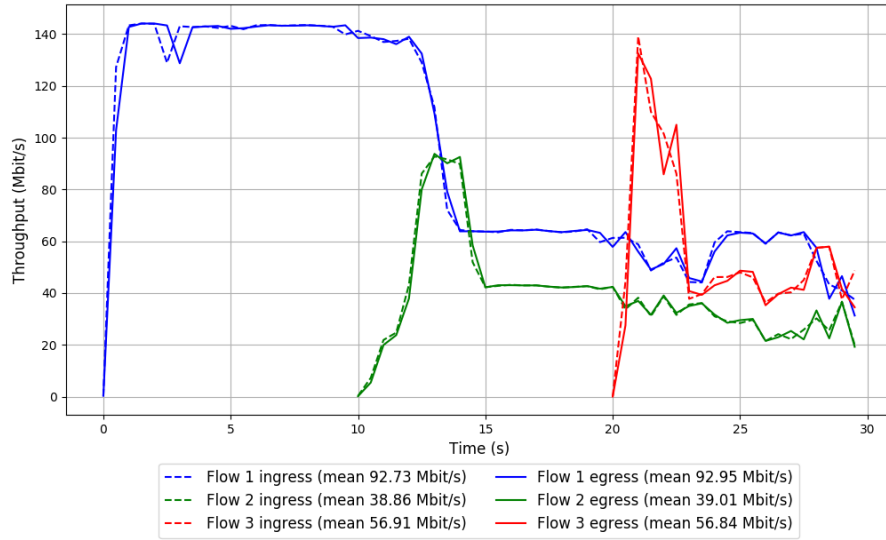
Run 10: Report of CalibratedKoho — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-08-20 23:47:29
End at: 2017-08-20 23:47:59


# Below is generated by plot.py at 2017-08-21 04:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.80 Mbit/s
95th percentile per-packet one-way delay: 86.801 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 86.802 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 16.42 Mbit/s
95th percentile per-packet one-way delay: 86.773 ms
Loss rate: 1.50%
```
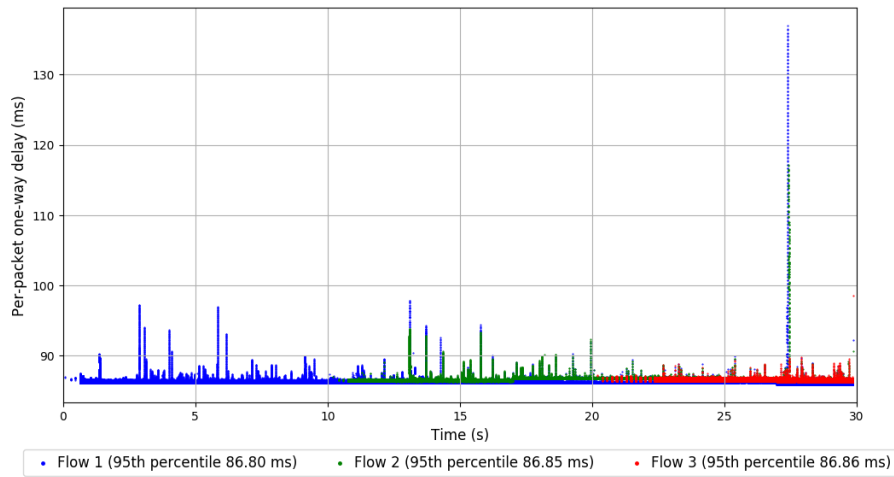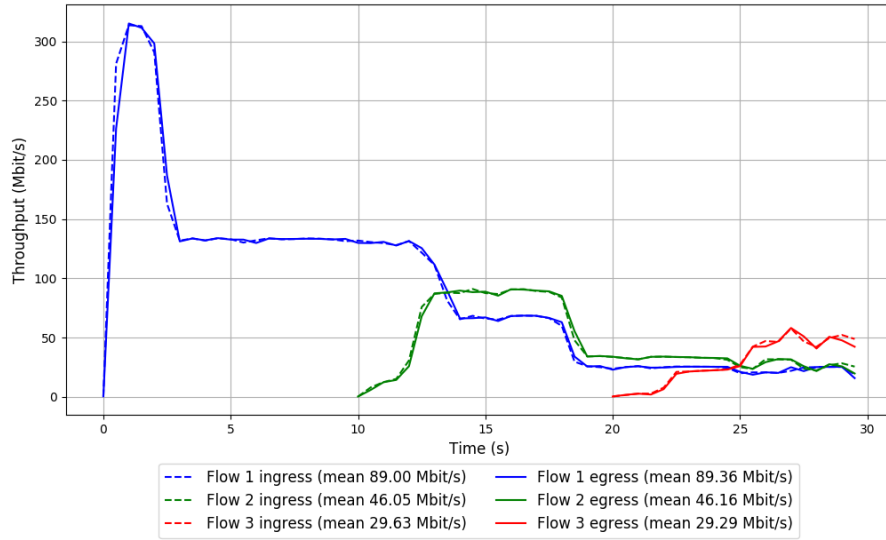
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 92.65 Mbit/s)   Flow 1 egress (mean 92.90 Mbit/s)
Flow 2 ingress (mean 64.36 Mbit/s)   Flow 2 egress (mean 64.42 Mbit/s)
Flow 3 ingress (mean 16.39 Mbit/s)   Flow 3 egress (mean 16.42 Mbit/s)

Flow 1 (95th percentile 86.80 ms)   Flow 2 (95th percentile 86.80 ms)   Flow 3 (95th percentile 86.77 ms)

```
Run 2: Statistics of Copa

Start at: 2017-08-21 00:00:31
End at: 2017-08-21 00:01:01


# Below is generated by plot.py at 2017-08-21 04:50:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.04 Mbit/s
95th percentile per-packet one-way delay: 86.993 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 86.868 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 87.033 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 56.84 Mbit/s
95th percentile per-packet one-way delay: 86.885 ms
Loss rate: 1.82%
```
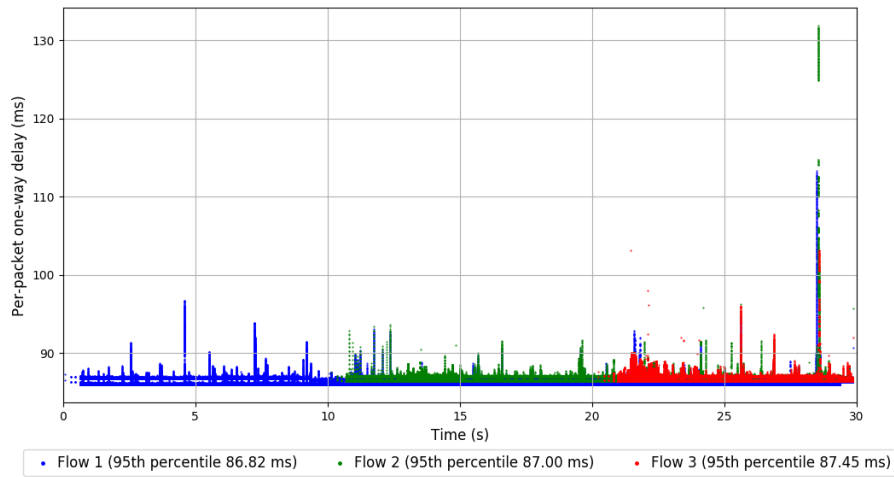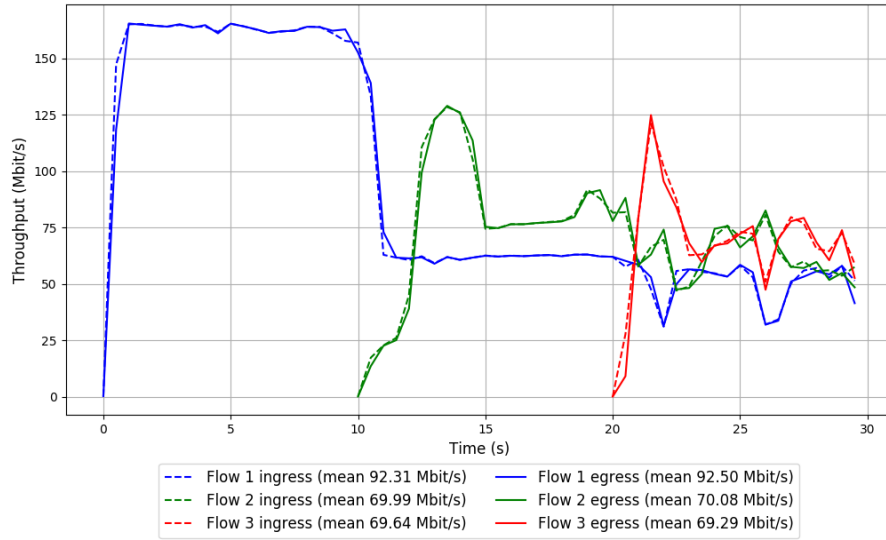
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 92.73 Mbit/s) — — — — Flow 1 egress (mean 92.95 Mbit/s)
Flow 2 ingress (mean 38.86 Mbit/s) — — — — Flow 2 egress (mean 39.01 Mbit/s)
Flow 3 ingress (mean 56.91 Mbit/s) — — — — Flow 3 egress (mean 56.84 Mbit/s)

Flow 1 (95th percentile 86.87 ms) Flow 2 (95th percentile 87.03 ms) Flow 3 (95th percentile 86.89 ms)

```
Run 3: Statistics of Copa

Start at: 2017-08-21 00:13:47
End at: 2017-08-21 00:14:17

# Below is generated by plot.py at 2017-08-21 04:50:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.33 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 46.16 Mbit/s
95th percentile per-packet one-way delay: 86.850 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 86.863 ms
Loss rate: 2.83%
```
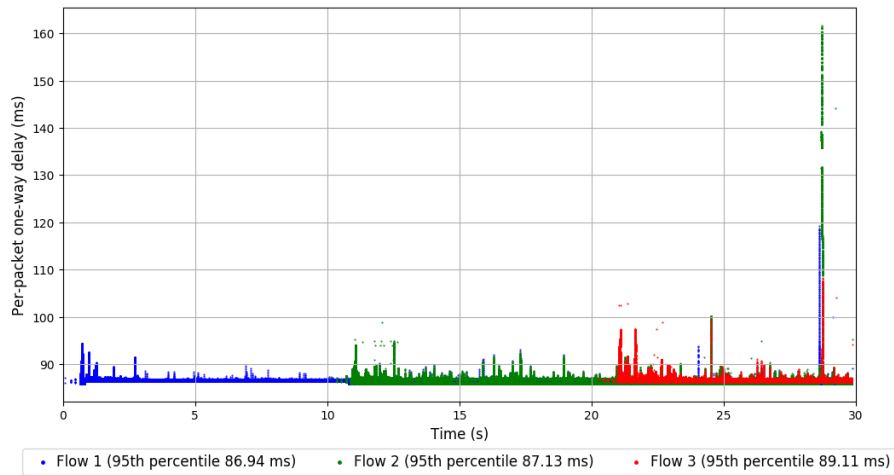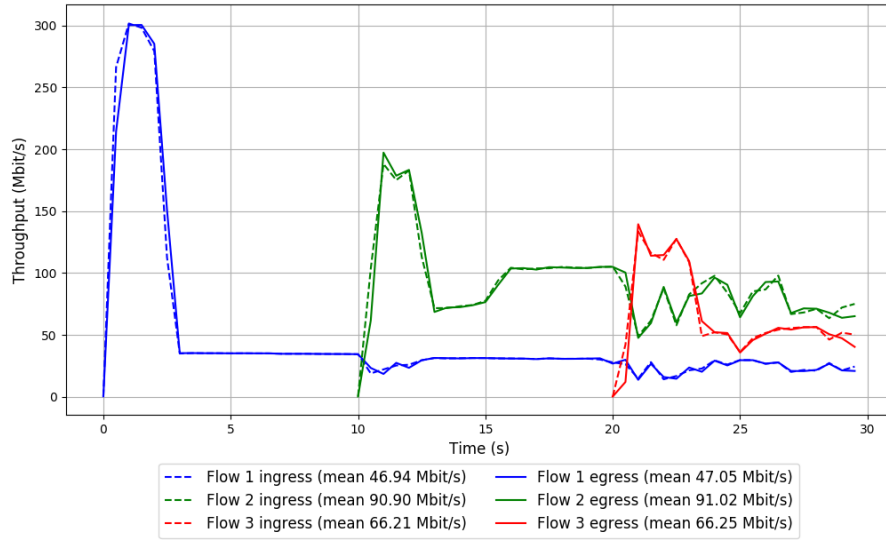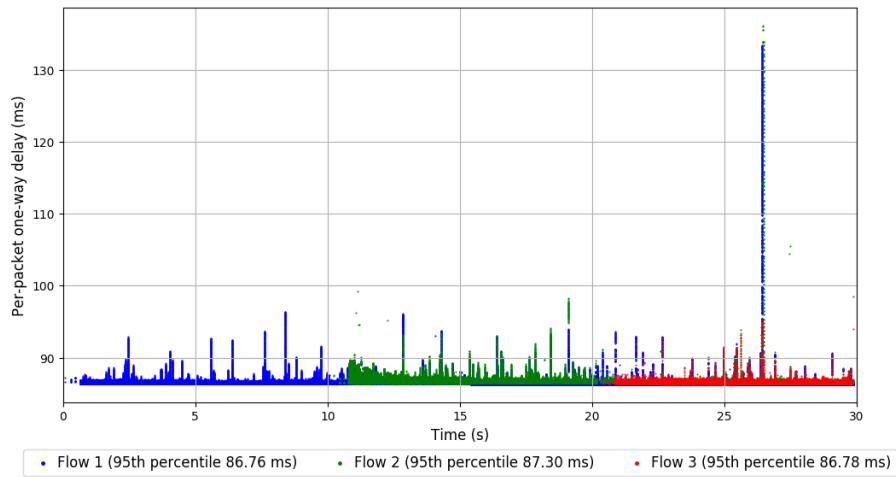
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 89.00 Mbit/s) Flow 1 egress (mean 89.36 Mbit/s)
Flow 2 ingress (mean 46.05 Mbit/s) Flow 2 egress (mean 46.16 Mbit/s)
Flow 3 ingress (mean 29.63 Mbit/s) Flow 3 egress (mean 29.29 Mbit/s)

Flow 1 (95th percentile 86.80 ms) Flow 2 (95th percentile 86.85 ms) Flow 3 (95th percentile 86.86 ms)

49

```
Run 4: Statistics of Copa

Start at: 2017-08-21 00:26:55
End at: 2017-08-21 00:27:25


# Below is generated by plot.py at 2017-08-21 04:51:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.29 Mbit/s
95th percentile per-packet one-way delay: 86.996 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 92.50 Mbit/s
95th percentile per-packet one-way delay: 86.822 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 70.08 Mbit/s
95th percentile per-packet one-way delay: 87.004 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 87.451 ms
Loss rate: 2.22%
```
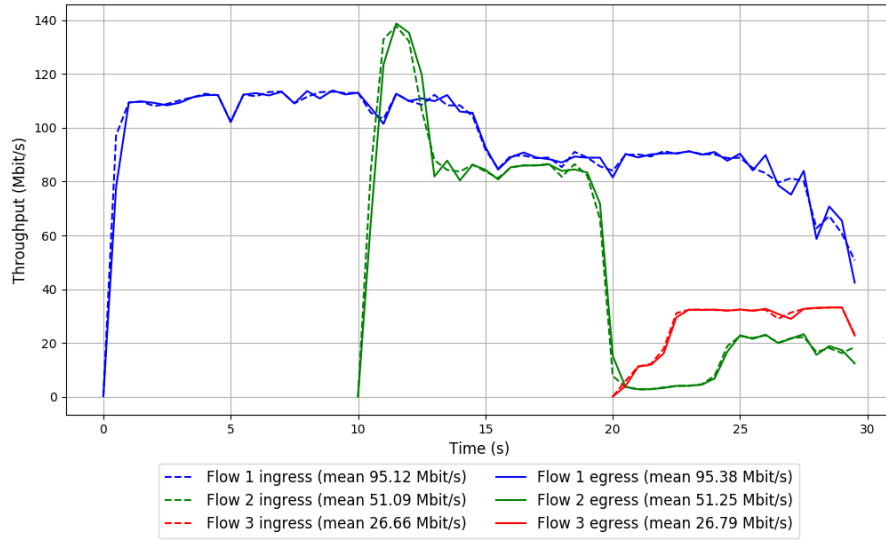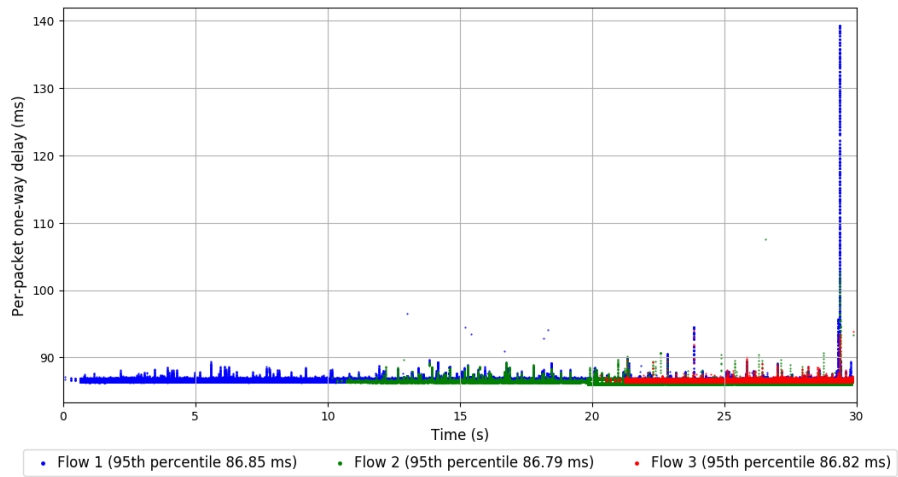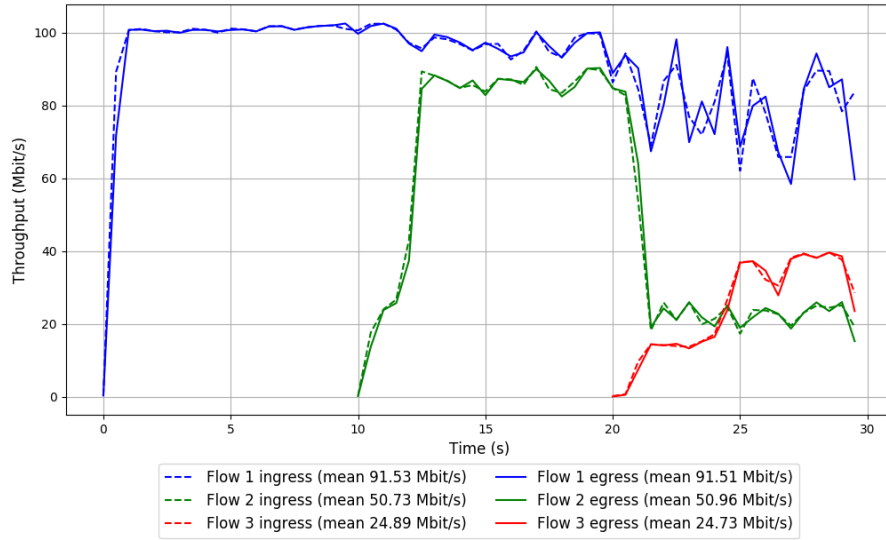
Run 4: Report of Copa — Data Link

- - - - Flow 1 ingress (mean 92.31 Mbit/s)   —— Flow 1 egress (mean 92.50 Mbit/s)
- - - - Flow 2 ingress (mean 69.99 Mbit/s)   —— Flow 2 egress (mean 70.08 Mbit/s)
- - - - Flow 3 ingress (mean 69.64 Mbit/s)   —— Flow 3 egress (mean 69.29 Mbit/s)

- Flow 1 (95th percentile 86.82 ms)   • Flow 2 (95th percentile 87.00 ms)   • Flow 3 (95th percentile 87.45 ms)

51

```
Run 5: Statistics of Copa

Start at: 2017-08-21 00:39:54
End at: 2017-08-21 00:40:24


# Below is generated by plot.py at 2017-08-21 04:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.73 Mbit/s
95th percentile per-packet one-way delay: 87.353 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 86.945 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 91.02 Mbit/s
95th percentile per-packet one-way delay: 87.128 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 66.25 Mbit/s
95th percentile per-packet one-way delay: 89.110 ms
Loss rate: 1.65%
```
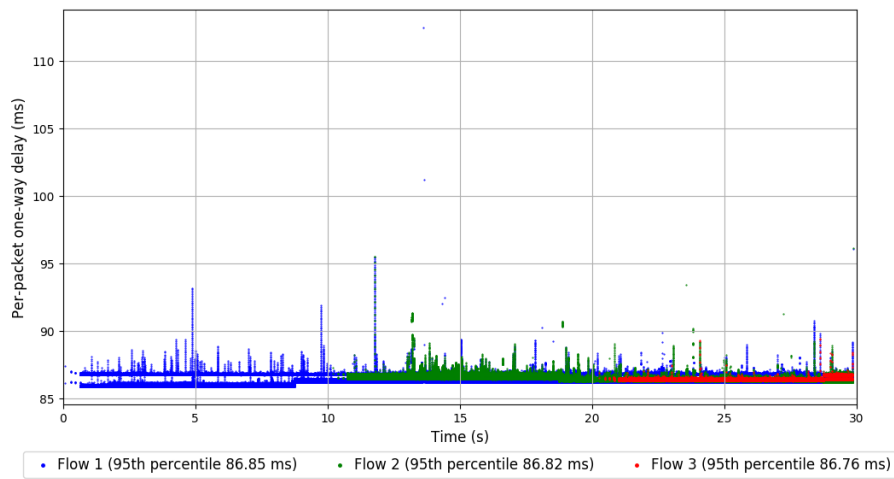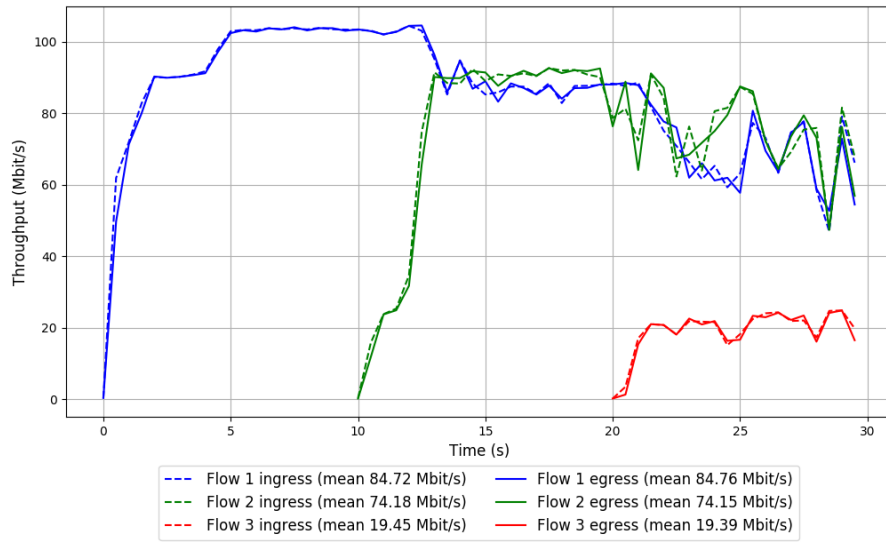
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2017-08-21 00:52:29
End at: 2017-08-21 00:52:59


# Below is generated by plot.py at 2017-08-21 04:51:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.78 Mbit/s
95th percentile per-packet one-way delay: 87.073 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 95.38 Mbit/s
95th percentile per-packet one-way delay: 86.760 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 51.25 Mbit/s
95th percentile per-packet one-way delay: 87.296 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 26.79 Mbit/s
95th percentile per-packet one-way delay: 86.775 ms
Loss rate: 1.17%
```
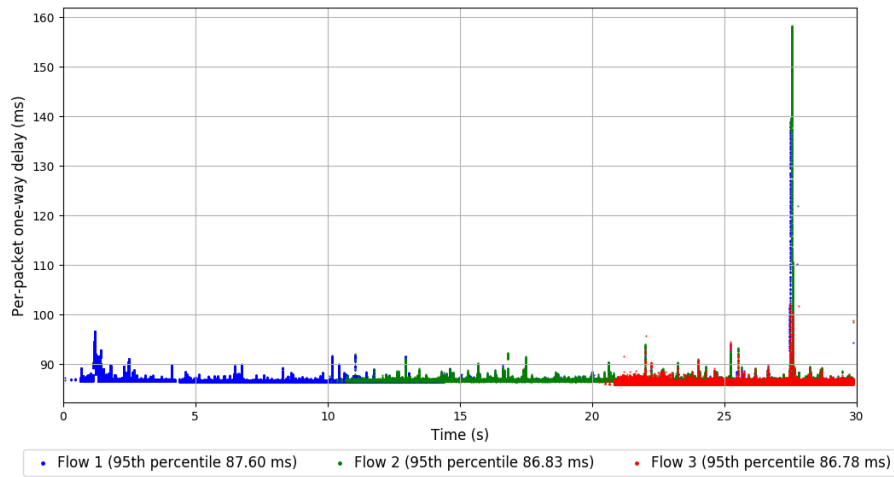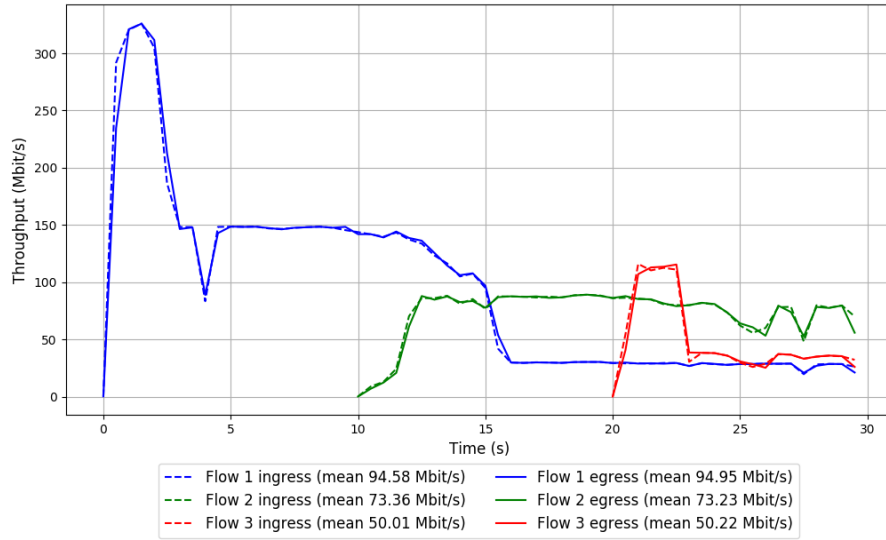
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 95.12 Mbit/s)   Flow 1 egress (mean 95.38 Mbit/s)
Flow 2 ingress (mean 51.09 Mbit/s)   Flow 2 egress (mean 51.25 Mbit/s)
Flow 3 ingress (mean 26.66 Mbit/s)   Flow 3 egress (mean 26.79 Mbit/s)

Flow 1 (95th percentile 86.76 ms)   Flow 2 (95th percentile 87.30 ms)   Flow 3 (95th percentile 86.78 ms)

```
Run 7: Statistics of Copa

Start at: 2017-08-21 01:05:25
End at: 2017-08-21 01:05:55


# Below is generated by plot.py at 2017-08-21 04:52:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.15 Mbit/s
95th percentile per-packet one-way delay: 86.843 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.51 Mbit/s
95th percentile per-packet one-way delay: 86.852 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 50.96 Mbit/s
95th percentile per-packet one-way delay: 86.787 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 2.30%
```
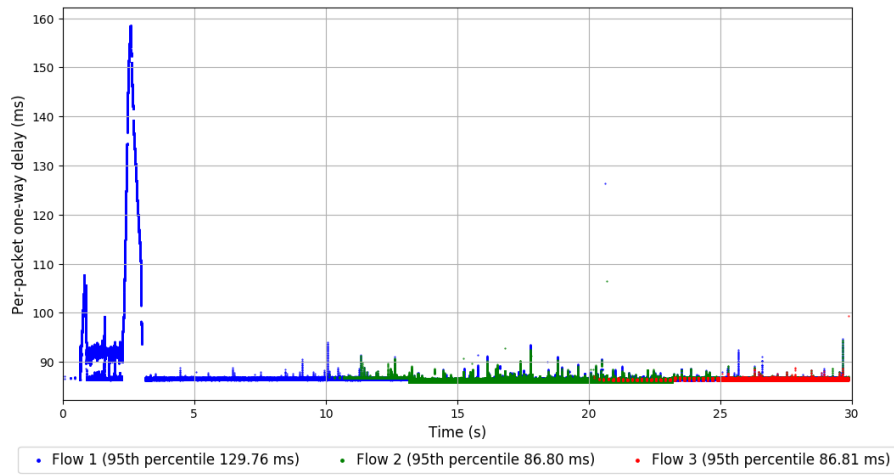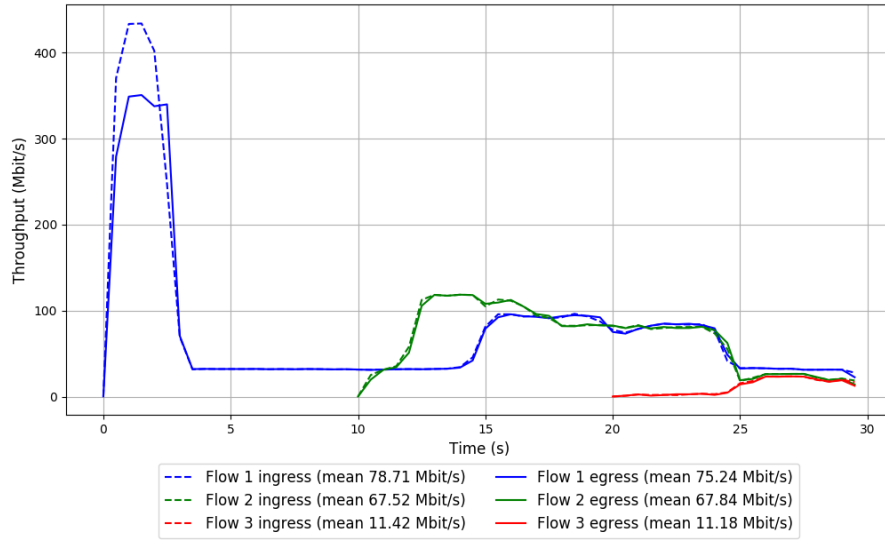
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2017-08-21 01:18:26
End at: 2017-08-21 01:18:56


# Below is generated by plot.py at 2017-08-21 04:52:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.98 Mbit/s
95th percentile per-packet one-way delay: 86.849 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 84.76 Mbit/s
95th percentile per-packet one-way delay: 86.854 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 74.15 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 86.763 ms
Loss rate: 2.02%
```
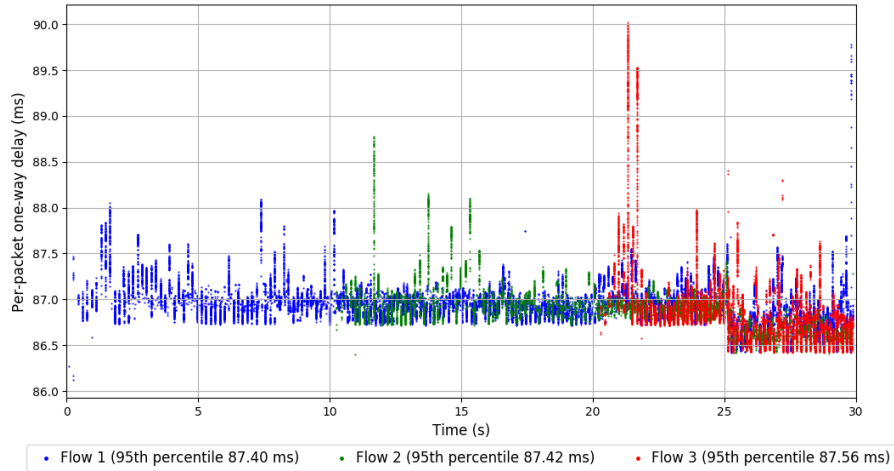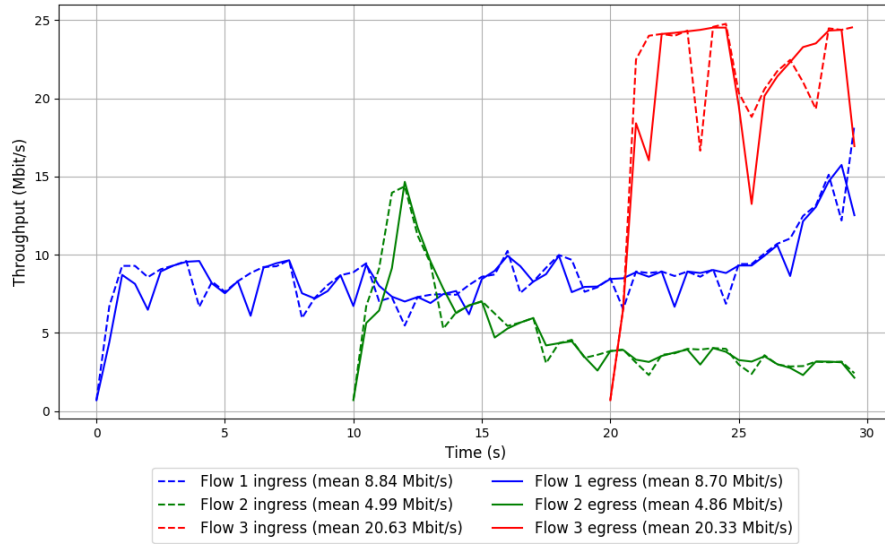
Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2017-08-21 01:32:00
End at: 2017-08-21 01:32:30


# Below is generated by plot.py at 2017-08-21 04:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.65 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 87.602 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 73.23 Mbit/s
95th percentile per-packet one-way delay: 86.832 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 86.779 ms
Loss rate: 1.25%
```
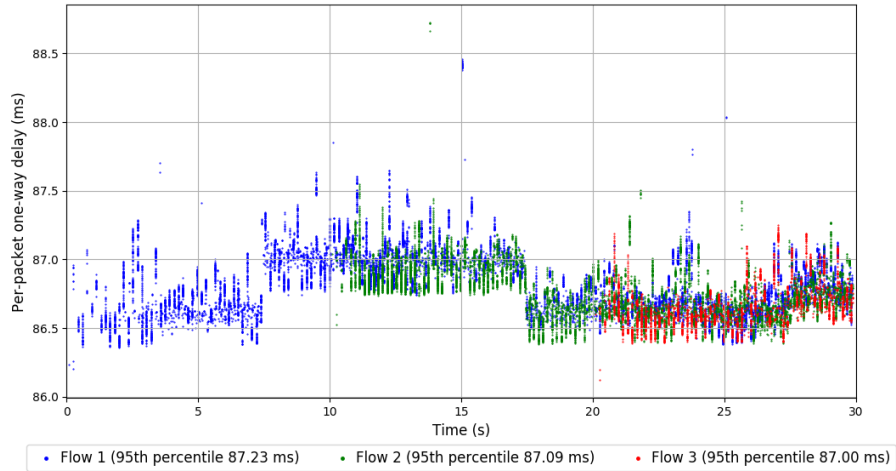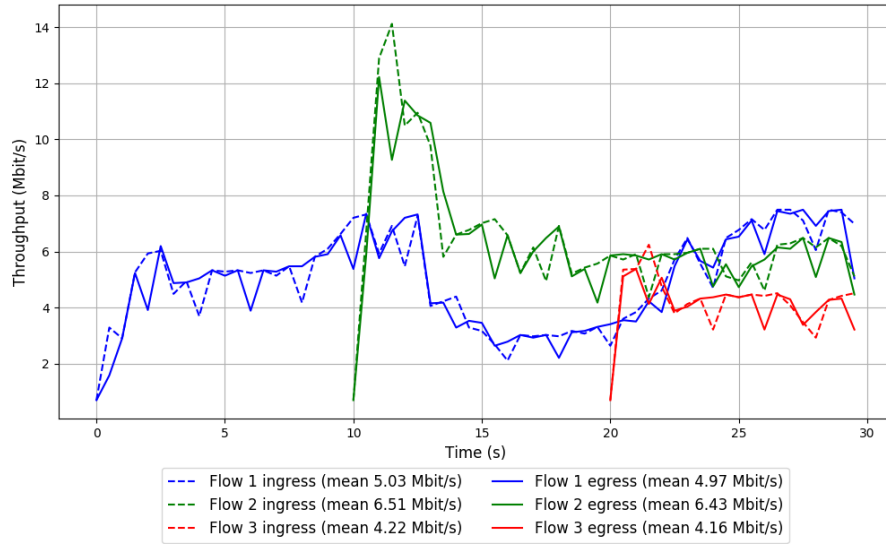
Run 9: Report of Copa — Data Link

- - - - Flow 1 ingress (mean 94.58 Mbit/s) ——— Flow 1 egress (mean 94.95 Mbit/s)
- - - - Flow 2 ingress (mean 73.36 Mbit/s) ——— Flow 2 egress (mean 73.23 Mbit/s)
- - - - Flow 3 ingress (mean 50.01 Mbit/s) ——— Flow 3 egress (mean 50.22 Mbit/s)

- Flow 1 (95th percentile 87.60 ms)　　• Flow 2 (95th percentile 86.83 ms)　　• Flow 3 (95th percentile 86.78 ms)

61

```
Run 10: Statistics of Copa

Start at: 2017-08-21 01:45:01
End at: 2017-08-21 01:45:31


# Below is generated by plot.py at 2017-08-21 04:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.80 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 129.763 ms
Loss rate: 4.98%
-- Flow 2:
Average throughput: 67.84 Mbit/s
95th percentile per-packet one-way delay: 86.796 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.18 Mbit/s
95th percentile per-packet one-way delay: 86.809 ms
Loss rate: 3.71%
```
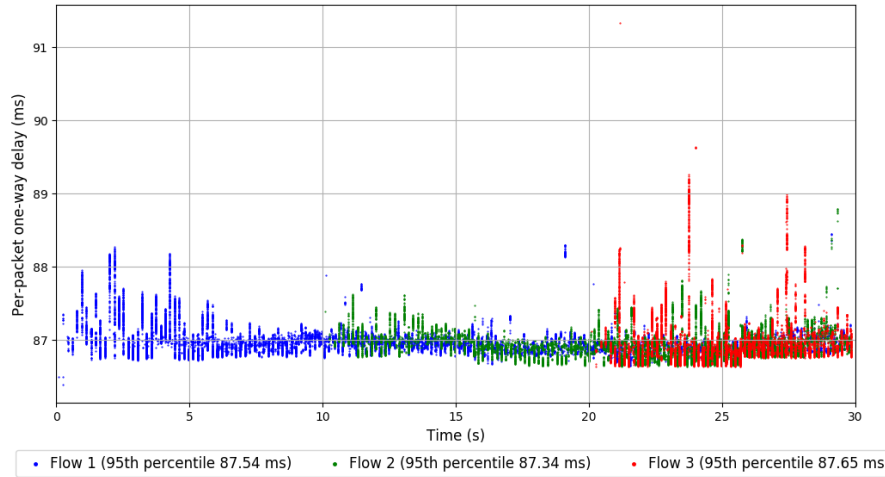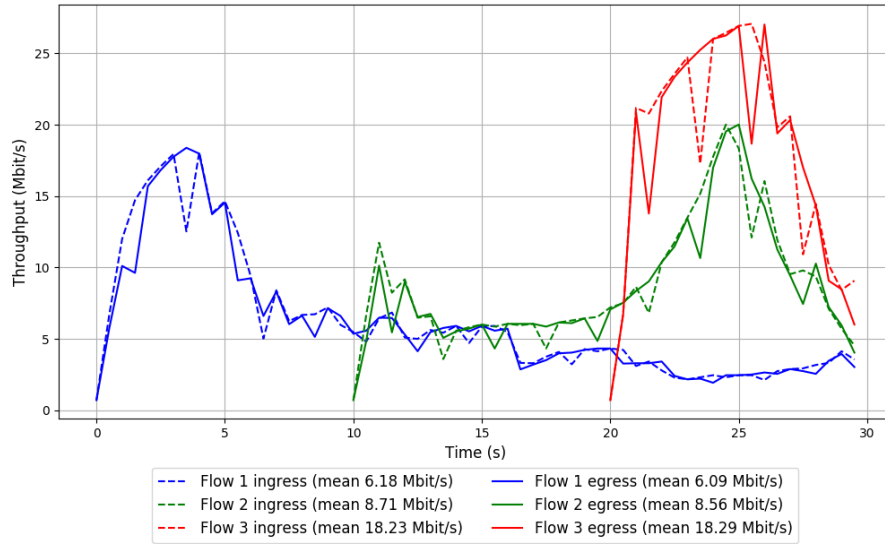
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-20 23:52:39
End at: 2017-08-20 23:53:09


# Below is generated by plot.py at 2017-08-21 04:53:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.59 Mbit/s
95th percentile per-packet one-way delay: 87.442 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 8.70 Mbit/s
95th percentile per-packet one-way delay: 87.401 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 87.422 ms
Loss rate: 3.49%
-- Flow 3:
Average throughput: 20.33 Mbit/s
95th percentile per-packet one-way delay: 87.555 ms
Loss rate: 3.20%
```
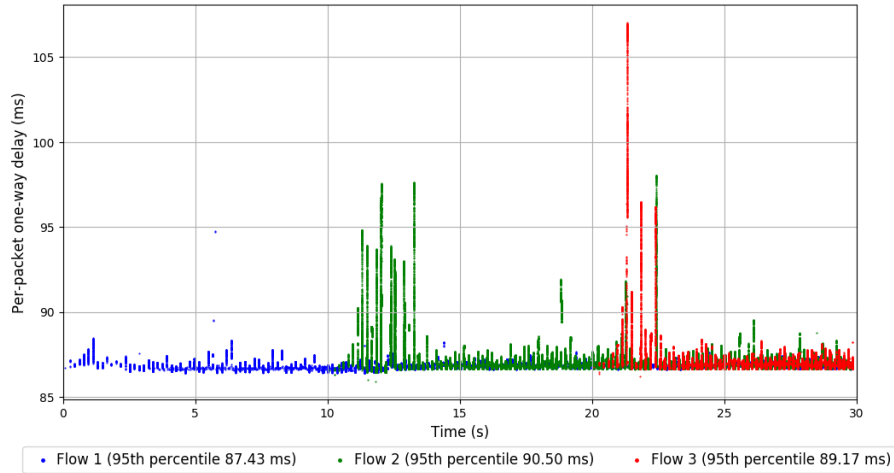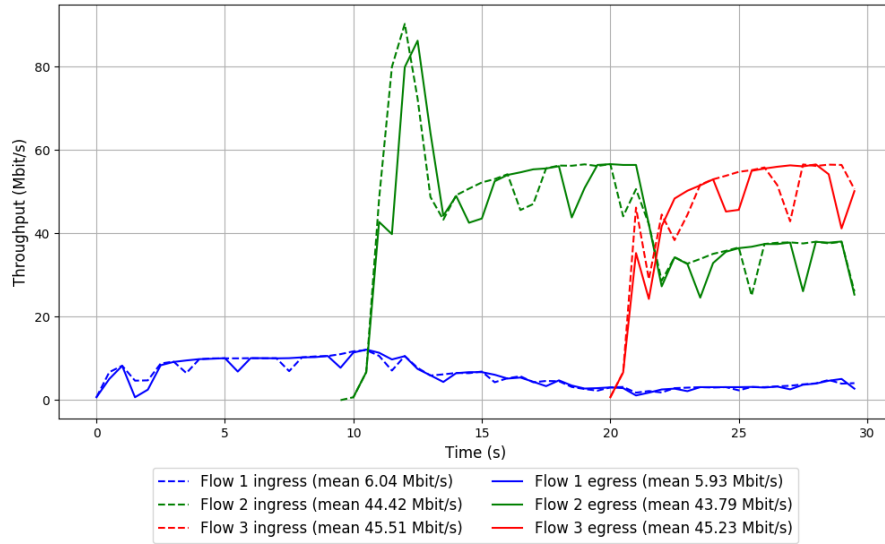
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 00:05:47
End at: 2017-08-21 00:06:17


# Below is generated by plot.py at 2017-08-21 04:53:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.61 Mbit/s
95th percentile per-packet one-way delay: 87.154 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 87.229 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 87.091 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 87.000 ms
Loss rate: 2.98%
```
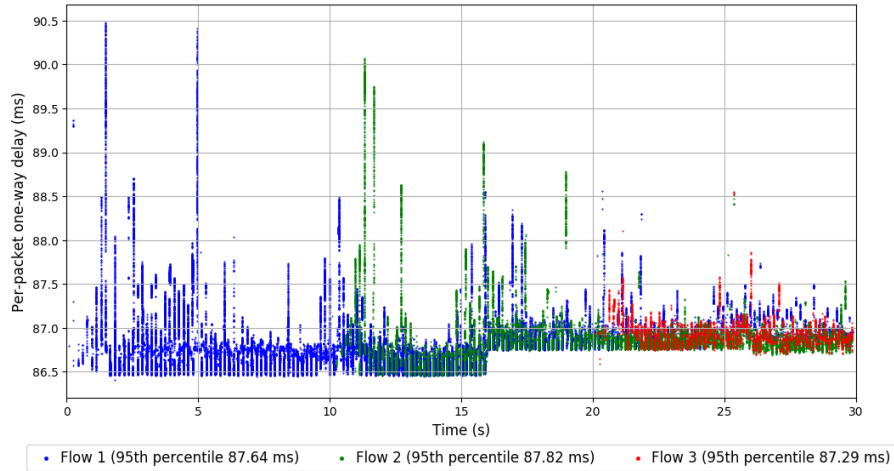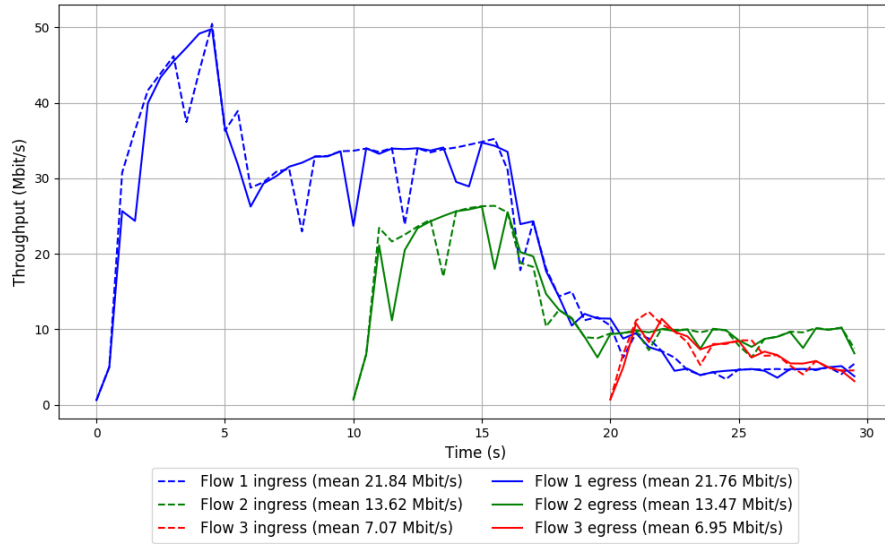
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-08-21 00:18:59
End at: 2017-08-21 00:19:29


# Below is generated by plot.py at 2017-08-21 04:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.76 Mbit/s
95th percentile per-packet one-way delay: 87.513 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 6.09 Mbit/s
95th percentile per-packet one-way delay: 87.539 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 87.341 ms
Loss rate: 2.65%
-- Flow 3:
Average throughput: 18.29 Mbit/s
95th percentile per-packet one-way delay: 87.648 ms
Loss rate: 1.43%
```
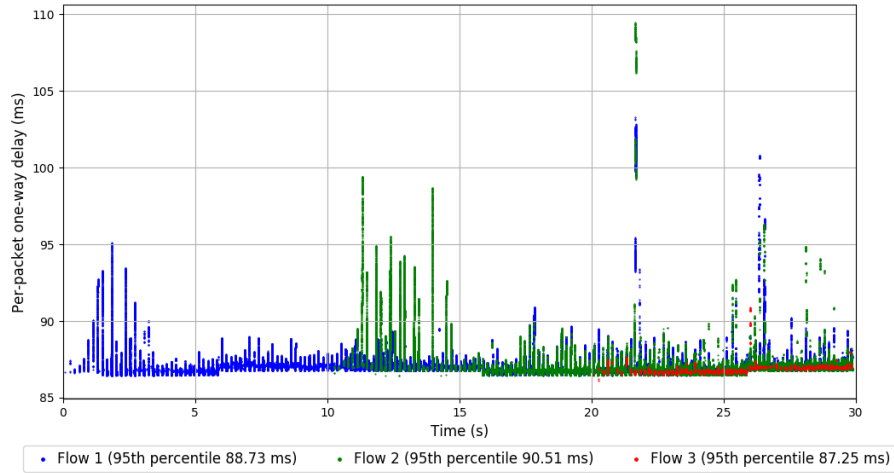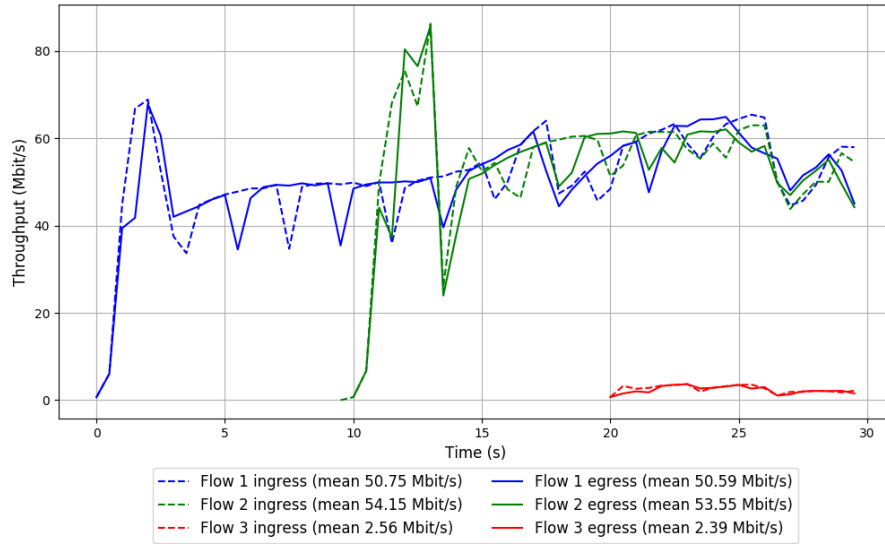
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 00:32:12
End at: 2017-08-21 00:32:42


# Below is generated by plot.py at 2017-08-21 04:53:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 89.714 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 87.430 ms
Loss rate: 2.29%
-- Flow 2:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 90.496 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 45.23 Mbit/s
95th percentile per-packet one-way delay: 89.171 ms
Loss rate: 2.35%
```
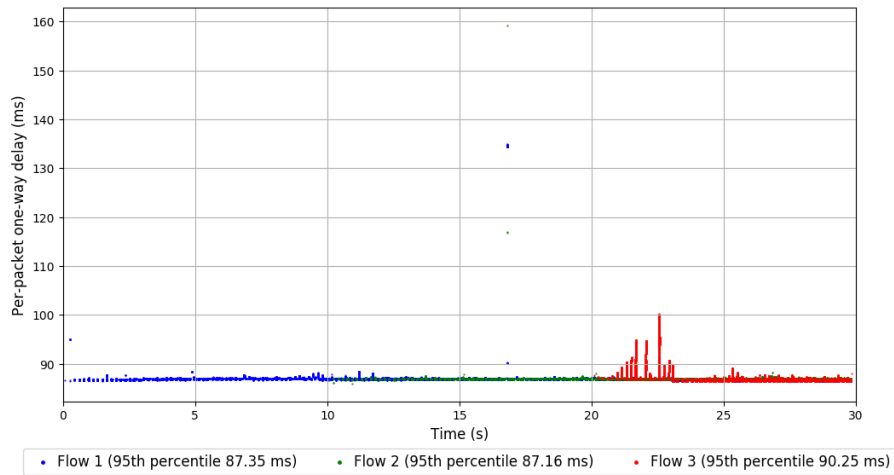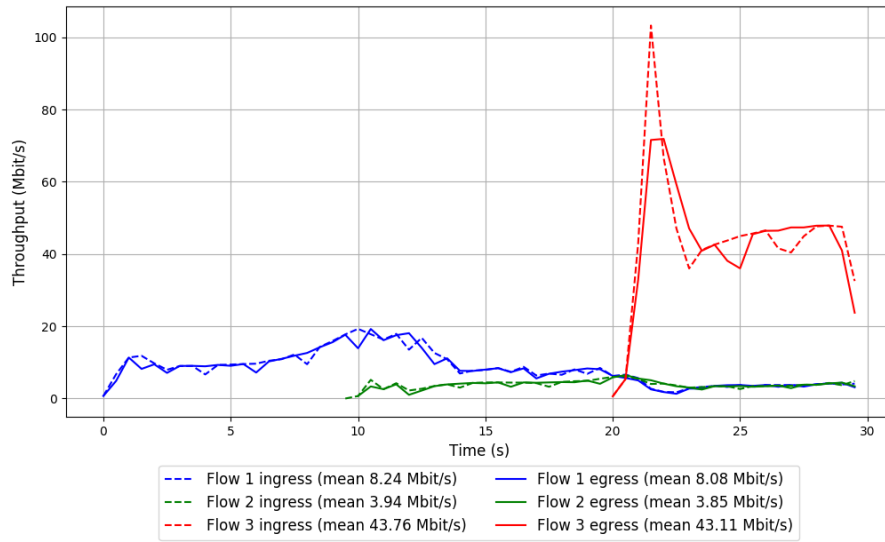
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 00:44:58
End at: 2017-08-21 00:45:28


# Below is generated by plot.py at 2017-08-21 04:53:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.96 Mbit/s
95th percentile per-packet one-way delay: 87.650 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 21.76 Mbit/s
95th percentile per-packet one-way delay: 87.638 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 13.47 Mbit/s
95th percentile per-packet one-way delay: 87.822 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 87.293 ms
Loss rate: 2.96%
```
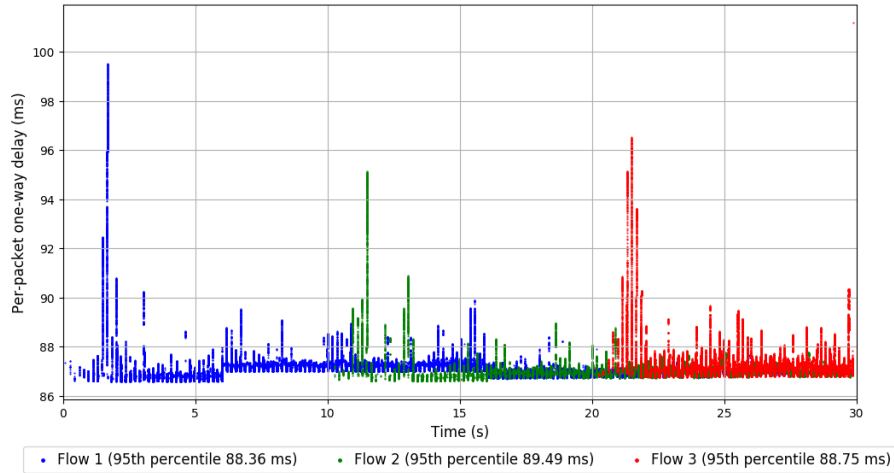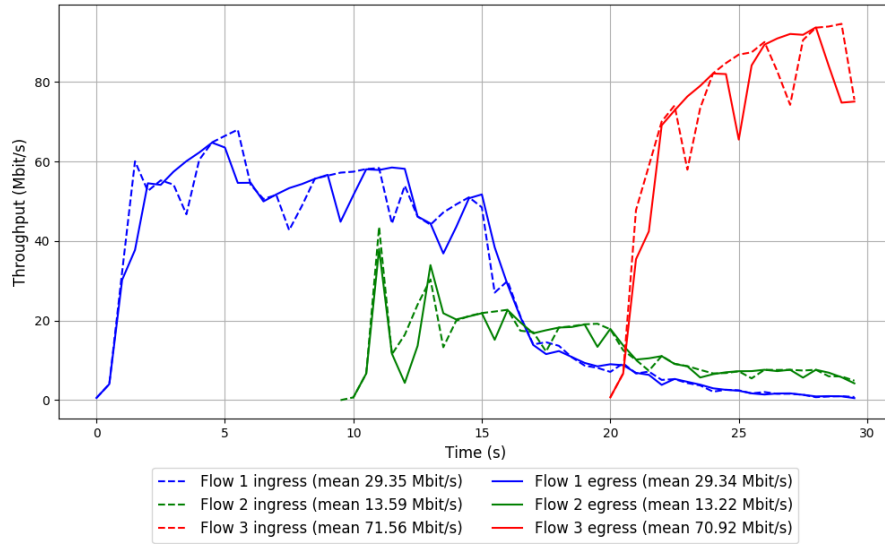
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 00:57:38
End at: 2017-08-21 00:58:08


# Below is generated by plot.py at 2017-08-21 04:53:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.94 Mbit/s
95th percentile per-packet one-way delay: 89.267 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 50.59 Mbit/s
95th percentile per-packet one-way delay: 88.735 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 53.55 Mbit/s
95th percentile per-packet one-way delay: 90.508 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 87.254 ms
Loss rate: 8.19%
```

Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 01:10:41
End at: 2017-08-21 01:11:11


# Below is generated by plot.py at 2017-08-21 04:53:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 88.937 ms
Loss rate: 3.09%
-- Flow 1:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 87.354 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 87.157 ms
Loss rate: 3.16%
-- Flow 3:
Average throughput: 43.11 Mbit/s
95th percentile per-packet one-way delay: 90.249 ms
Loss rate: 3.36%
```
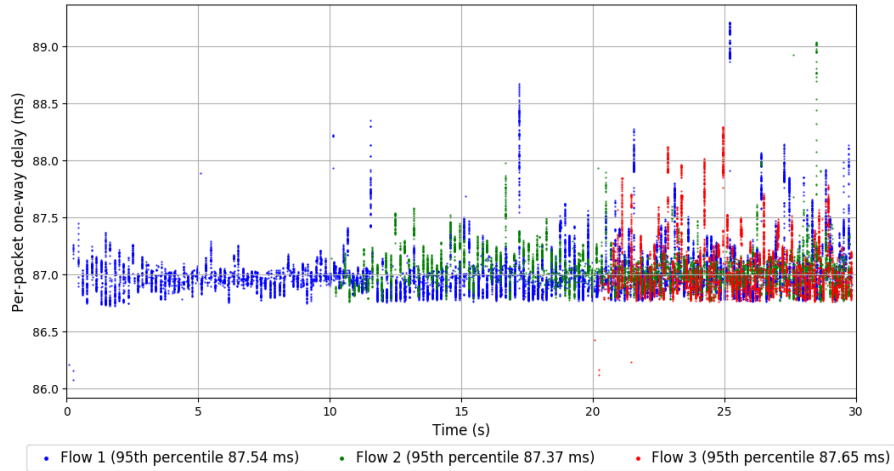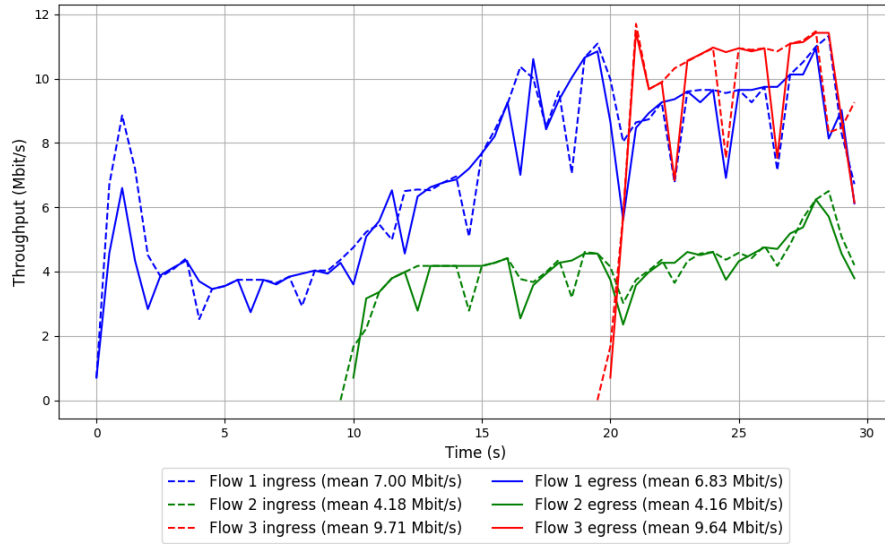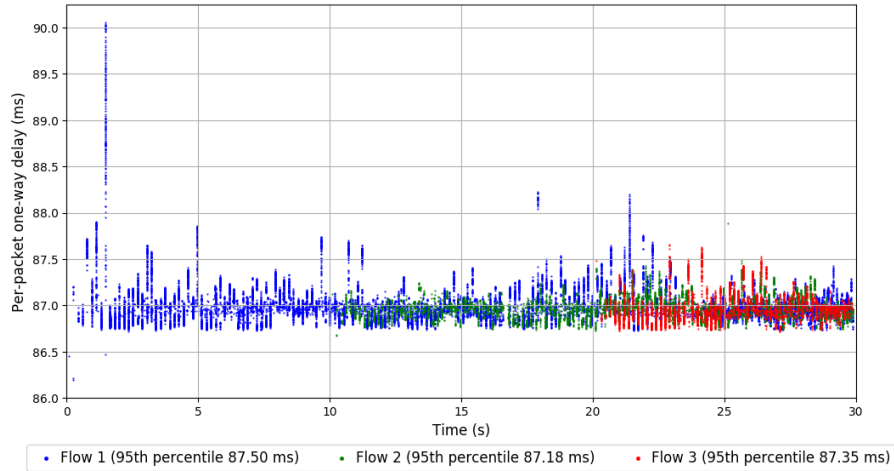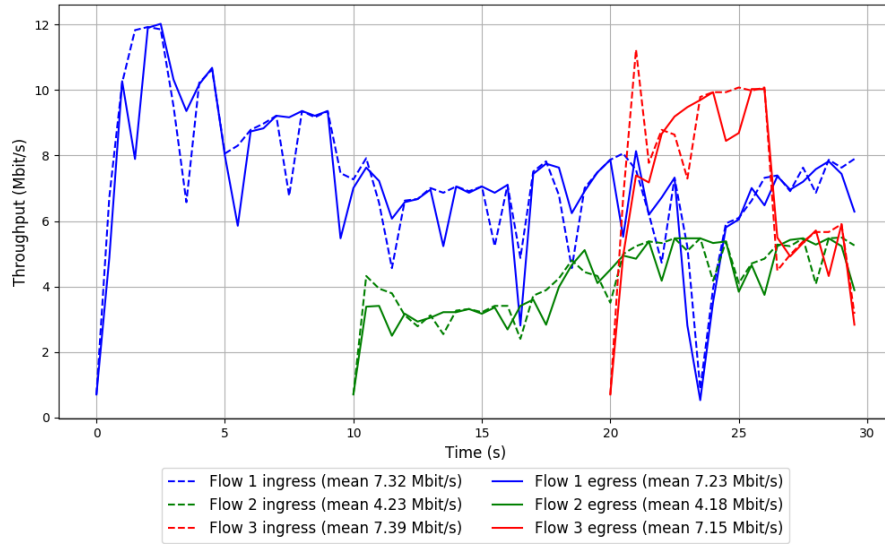
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 8.24 Mbit/s) --- Flow 1 egress (mean 8.08 Mbit/s)
Flow 2 ingress (mean 3.94 Mbit/s) --- Flow 2 egress (mean 3.85 Mbit/s)
Flow 3 ingress (mean 43.76 Mbit/s) --- Flow 3 egress (mean 43.11 Mbit/s)

Flow 1 (95th percentile 87.35 ms)   Flow 2 (95th percentile 87.16 ms)   Flow 3 (95th percentile 90.25 ms)

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```
Run 8: Statistics of TCP Cubic

Start at: 2017-08-21 01:24:08
End at: 2017-08-21 01:24:38


# Below is generated by plot.py at 2017-08-21 04:53:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.34 Mbit/s
95th percentile per-packet one-way delay: 88.694 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 29.34 Mbit/s
95th percentile per-packet one-way delay: 88.361 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 89.488 ms
Loss rate: 3.55%
-- Flow 3:
Average throughput: 70.92 Mbit/s
95th percentile per-packet one-way delay: 88.748 ms
Loss rate: 2.65%
```
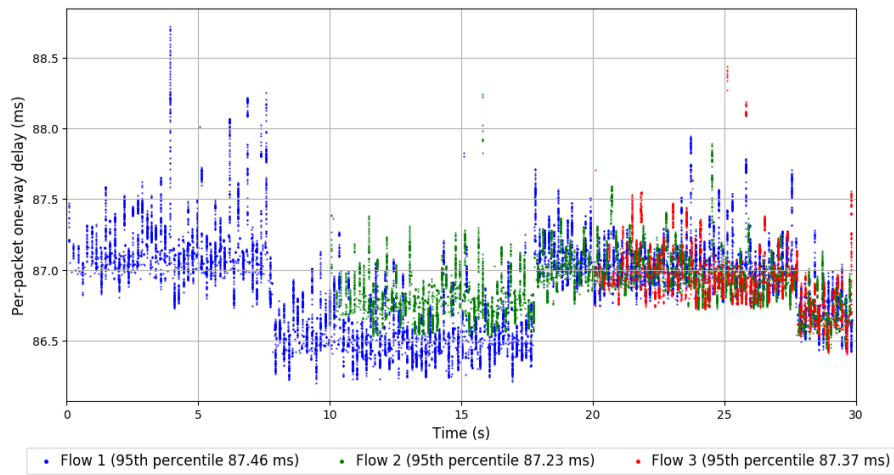
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 01:37:23
End at: 2017-08-21 01:37:53

# Below is generated by plot.py at 2017-08-21 04:53:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 87.526 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 87.543 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 87.374 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 87.650 ms
Loss rate: 2.41%
```
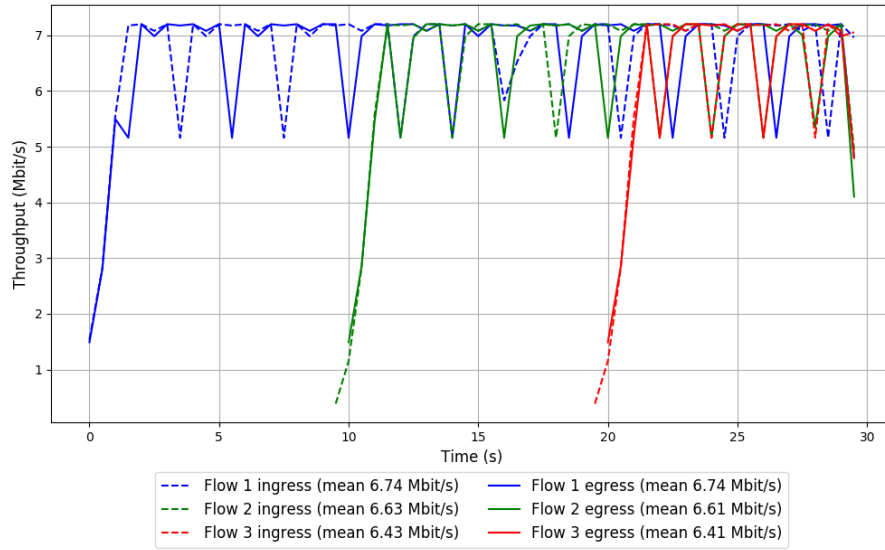
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 01:50:18
End at: 2017-08-21 01:50:48


# Below is generated by plot.py at 2017-08-21 04:53:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.34 Mbit/s
95th percentile per-packet one-way delay: 87.372 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 87.501 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 87.184 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 87.354 ms
Loss rate: 4.99%
```
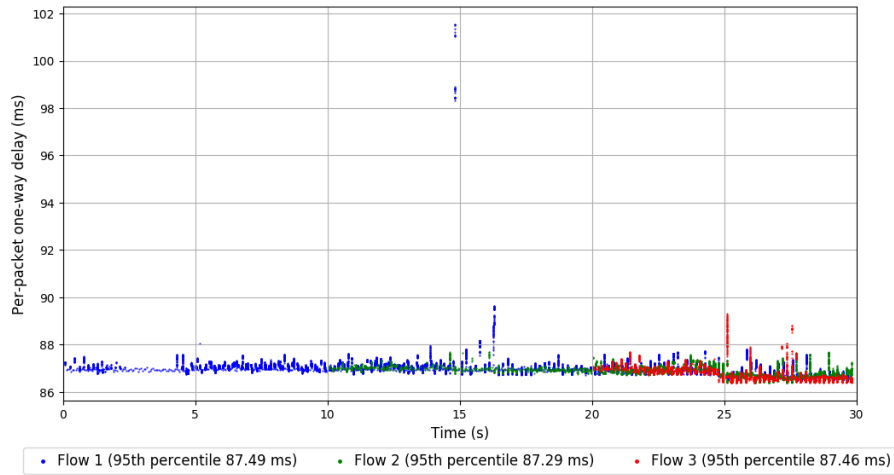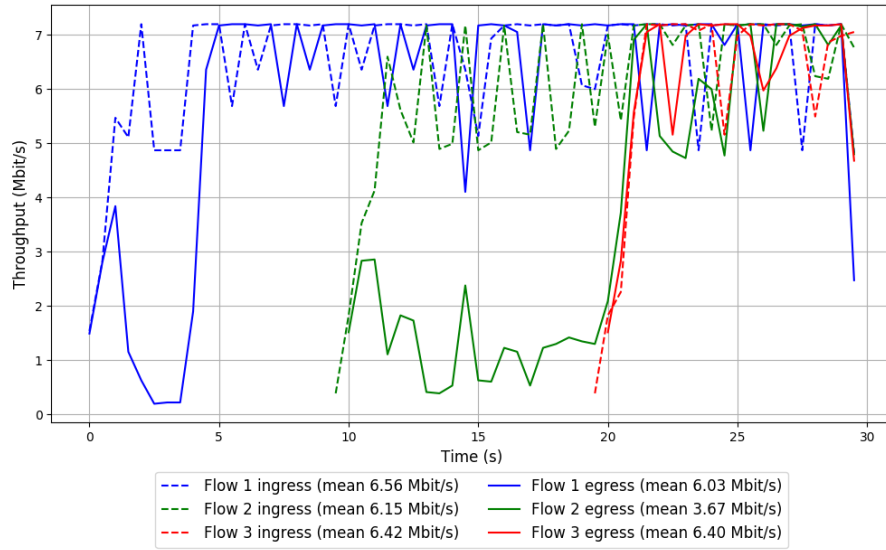
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of KohoCC

Start at: 2017-08-20 23:45:17
End at: 2017-08-20 23:45:47

# Below is generated by plot.py at 2017-08-21 04:53:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 87.385 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.462 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 87.234 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 87.367 ms
Loss rate: 2.13%
```
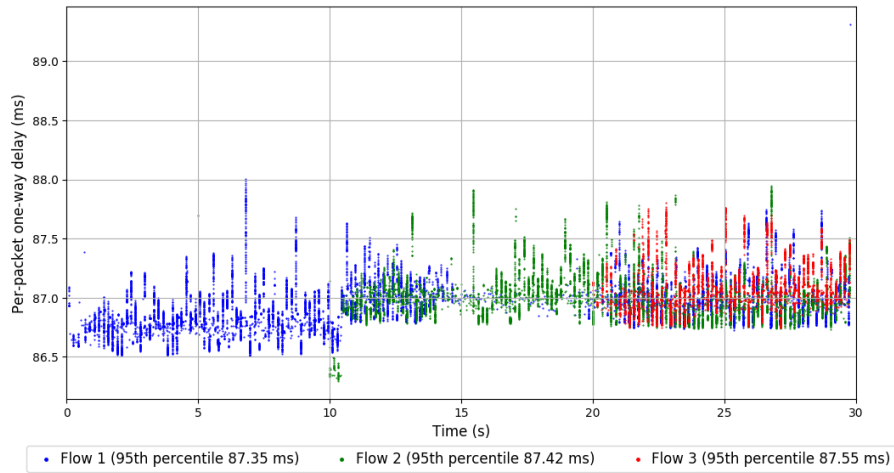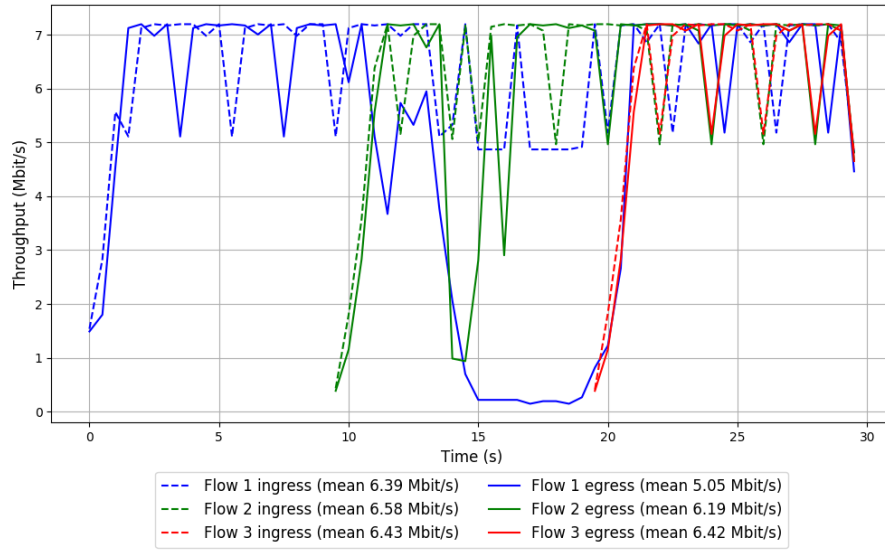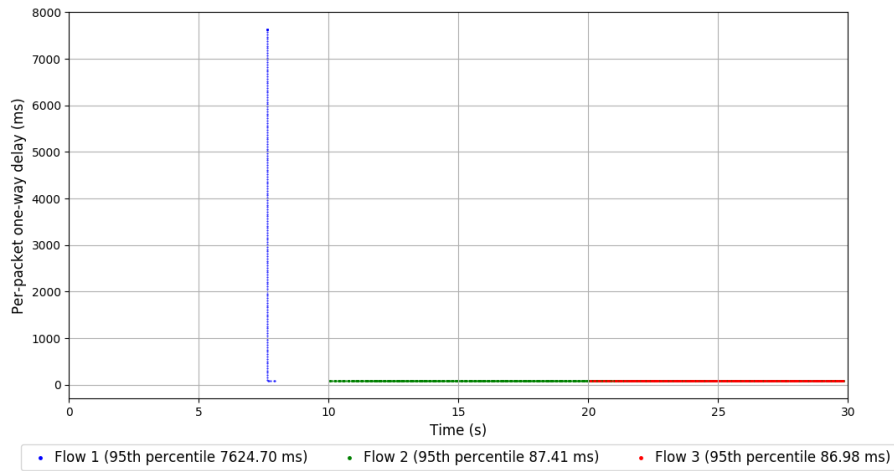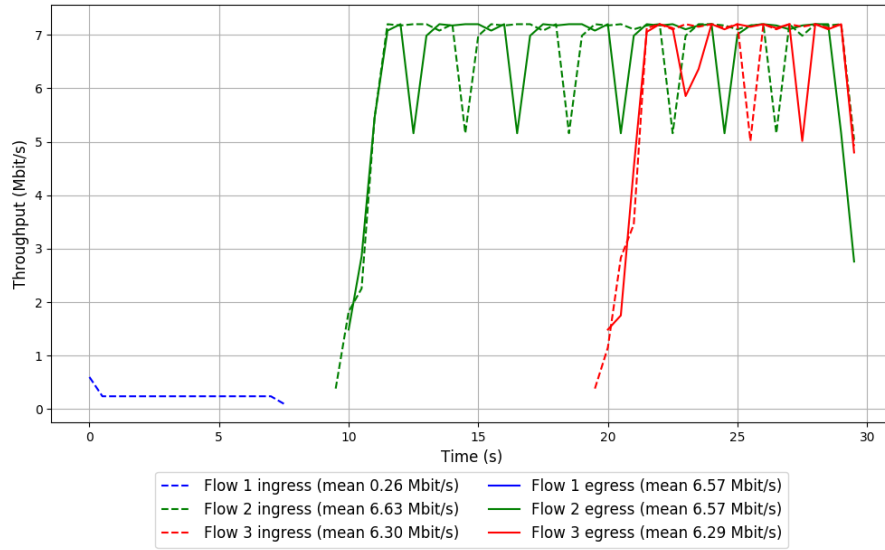
Run 1: Report of KohoCC — Data Link

```
Run 2: Statistics of KohoCC

Start at: 2017-08-20 23:58:20
End at: 2017-08-20 23:58:50

# Below is generated by plot.py at 2017-08-21 04:53:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 87.452 ms
Loss rate: 17.87%
-- Flow 1:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: 87.491 ms
Loss rate: 8.59%
-- Flow 2:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 87.291 ms
Loss rate: 40.91%
-- Flow 3:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 87.460 ms
Loss rate: 2.05%
```
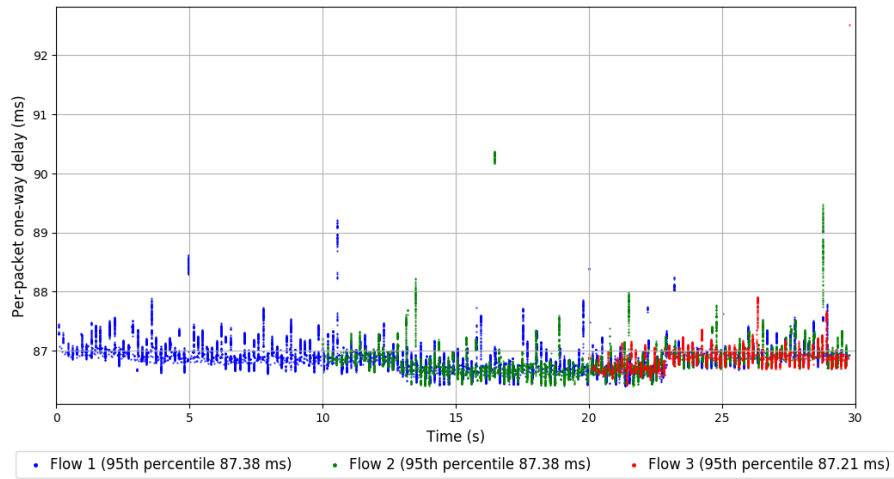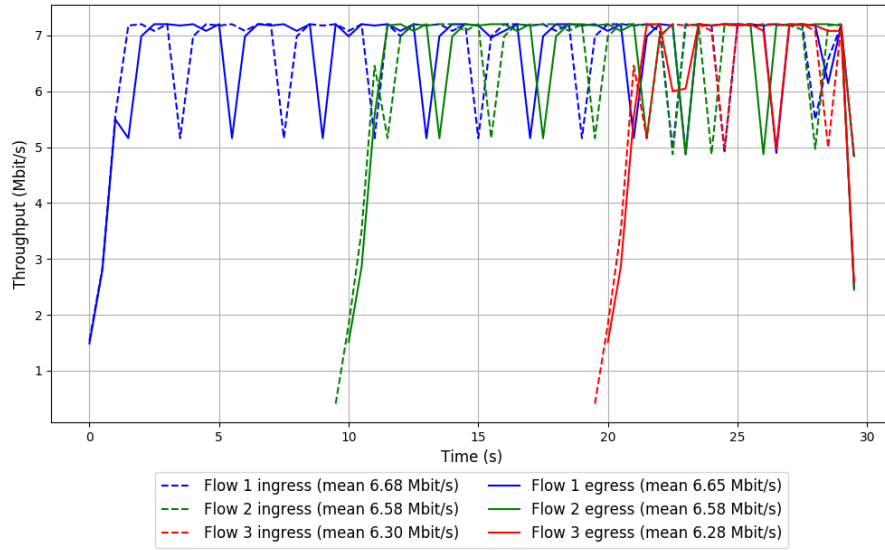
Run 2: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.56 Mbit/s)   Flow 1 egress (mean 6.03 Mbit/s)
Flow 2 ingress (mean 6.15 Mbit/s)   Flow 2 egress (mean 3.67 Mbit/s)
Flow 3 ingress (mean 6.42 Mbit/s)   Flow 3 egress (mean 6.40 Mbit/s)

• Flow 1 (95th percentile 87.49 ms)   • Flow 2 (95th percentile 87.29 ms)   • Flow 3 (95th percentile 87.46 ms)

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```
Run 3: Statistics of KohoCC

Start at: 2017-08-21 00:11:34
End at: 2017-08-21 00:12:04

# Below is generated by plot.py at 2017-08-21 04:53:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.27 Mbit/s
95th percentile per-packet one-way delay: 87.433 ms
Loss rate: 13.19%
-- Flow 1:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 87.353 ms
Loss rate: 21.39%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 87.424 ms
Loss rate: 6.78%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 87.547 ms
Loss rate: 1.88%
```
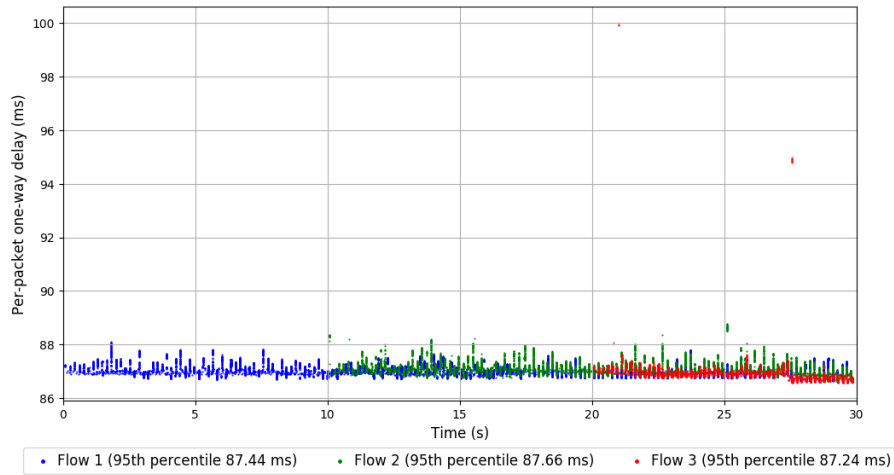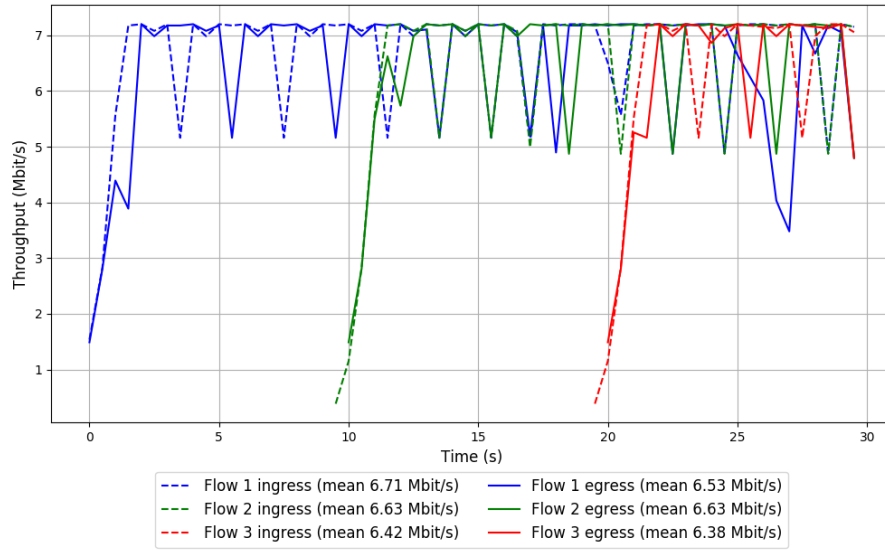
Run 3: Report of KohoCC — Data Link

Run 4: Statistics of KohoCC

Start at: 2017-08-21 00:24:43
End at: 2017-08-21 00:25:13

Run 4: Report of KohoCC — Data Link

```
Run 5: Statistics of KohoCC

Start at: 2017-08-21 00:37:41
End at: 2017-08-21 00:38:11

# Below is generated by plot.py at 2017-08-21 04:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 87.364 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 87.384 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 87.376 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 87.212 ms
Loss rate: 2.01%
```
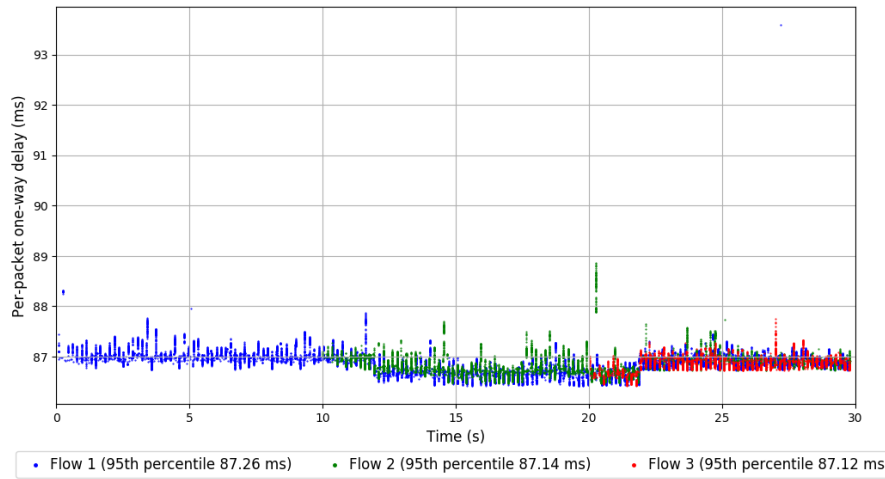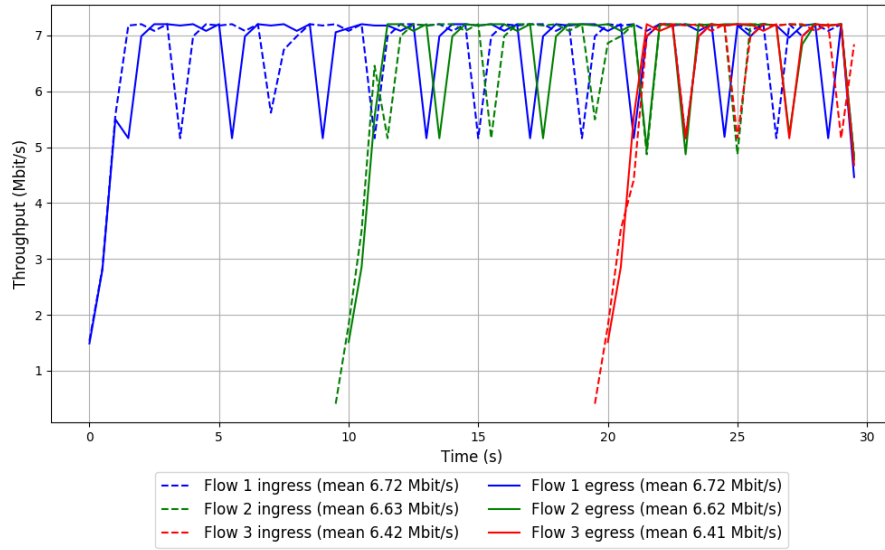
Run 5: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.68 Mbit/s)   Flow 1 egress (mean 6.65 Mbit/s)
Flow 2 ingress (mean 6.58 Mbit/s)   Flow 2 egress (mean 6.58 Mbit/s)
Flow 3 ingress (mean 6.30 Mbit/s)   Flow 3 egress (mean 6.28 Mbit/s)

Flow 1 (95th percentile 87.38 ms)   Flow 2 (95th percentile 87.38 ms)   Flow 3 (95th percentile 87.21 ms)

```
Run 6: Statistics of KohoCC

Start at: 2017-08-21 00:50:17
End at: 2017-08-21 00:50:47

# Below is generated by plot.py at 2017-08-21 04:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 87.515 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 87.436 ms
Loss rate: 3.25%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 87.663 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 6.38 Mbit/s
95th percentile per-packet one-way delay: 87.236 ms
Loss rate: 2.26%
```
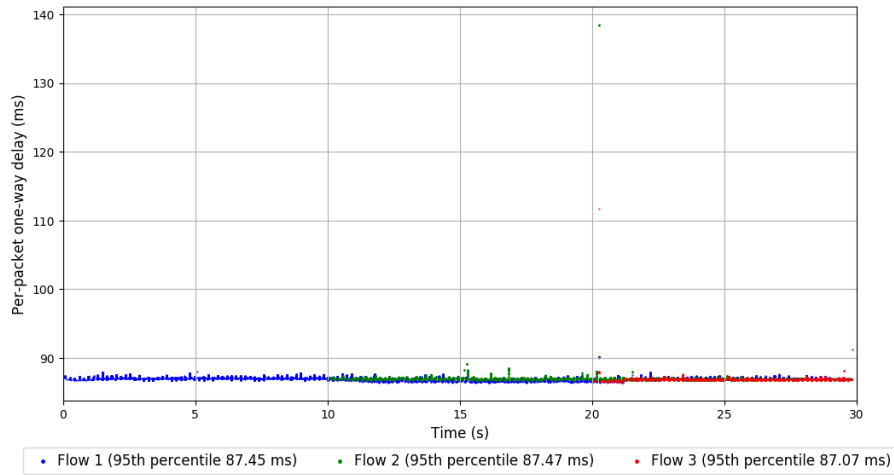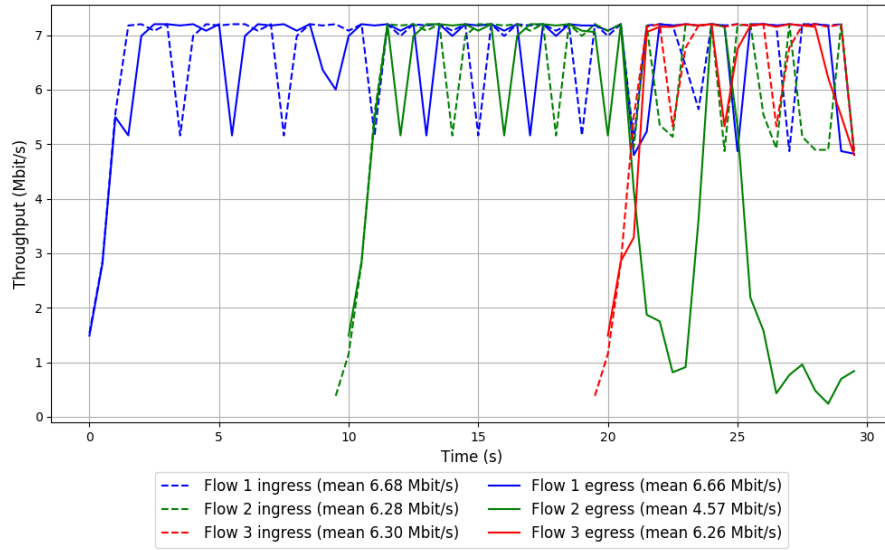
Run 6: Report of KohoCC — Data Link

```
Run 7: Statistics of KohoCC

Start at: 2017-08-21 01:03:12
End at: 2017-08-21 01:03:42


# Below is generated by plot.py at 2017-08-21 04:54:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 87.220 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 87.259 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 87.141 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 87.121 ms
Loss rate: 1.90%
```
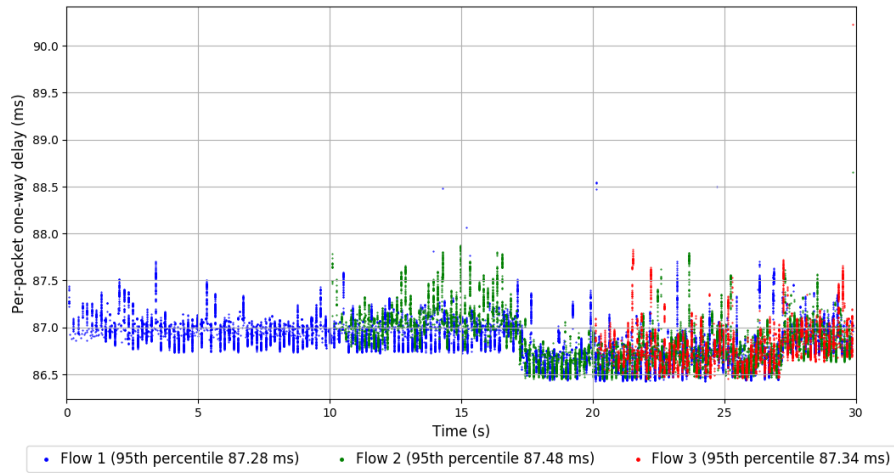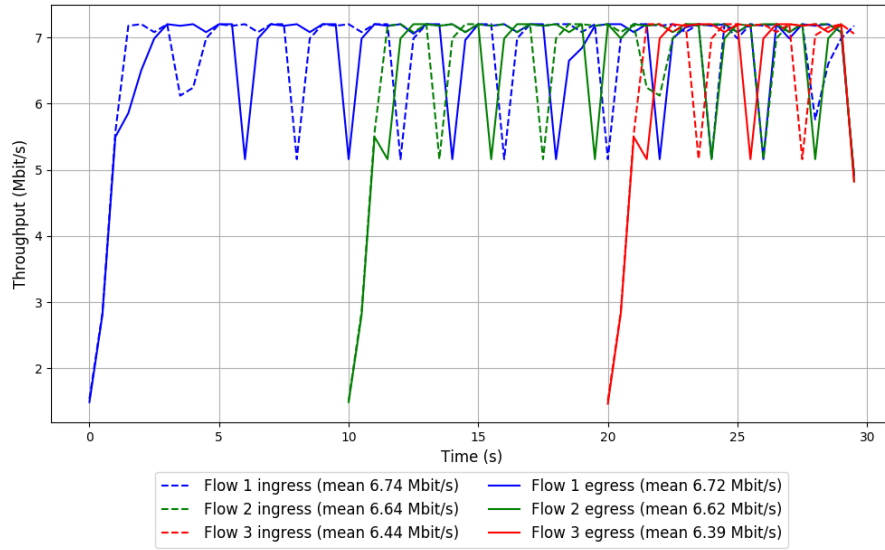
Run 7: Report of KohoCC — Data Link

```
Run 8: Statistics of KohoCC

Start at: 2017-08-21 01:16:13
End at: 2017-08-21 01:16:43

# Below is generated by plot.py at 2017-08-21 04:54:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 87.412 ms
Loss rate: 9.64%
-- Flow 1:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 87.447 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 87.470 ms
Loss rate: 27.73%
-- Flow 3:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 87.073 ms
Loss rate: 2.30%
```
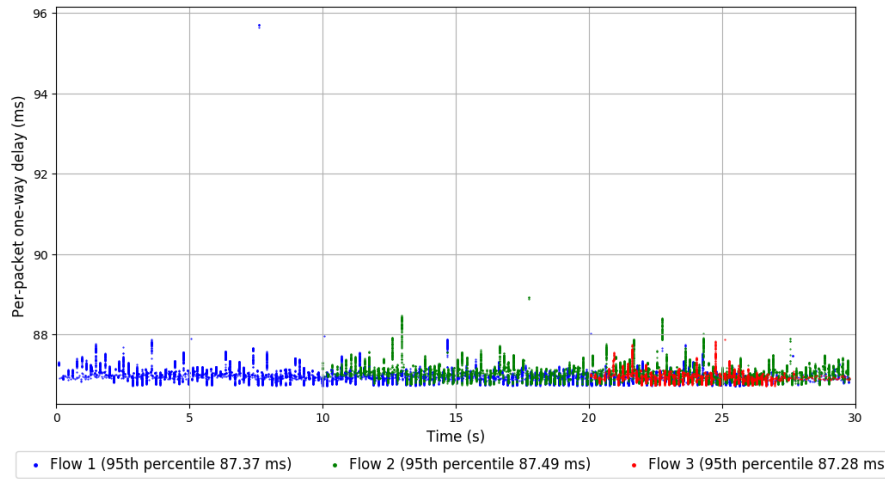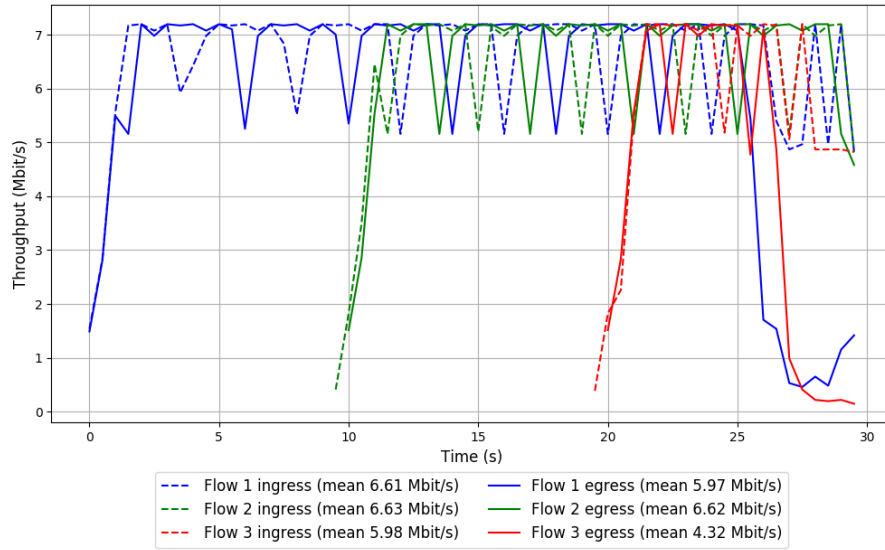
Run 8: Report of KohoCC — Data Link

```
Run 9: Statistics of KohoCC

Start at: 2017-08-21 01:29:47
End at: 2017-08-21 01:30:17


# Below is generated by plot.py at 2017-08-21 04:54:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 87.354 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 87.282 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 87.481 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 87.340 ms
Loss rate: 1.87%
```
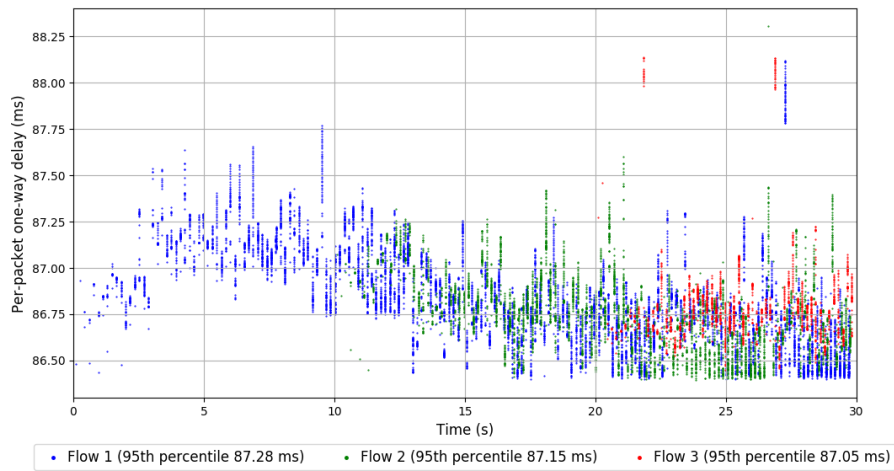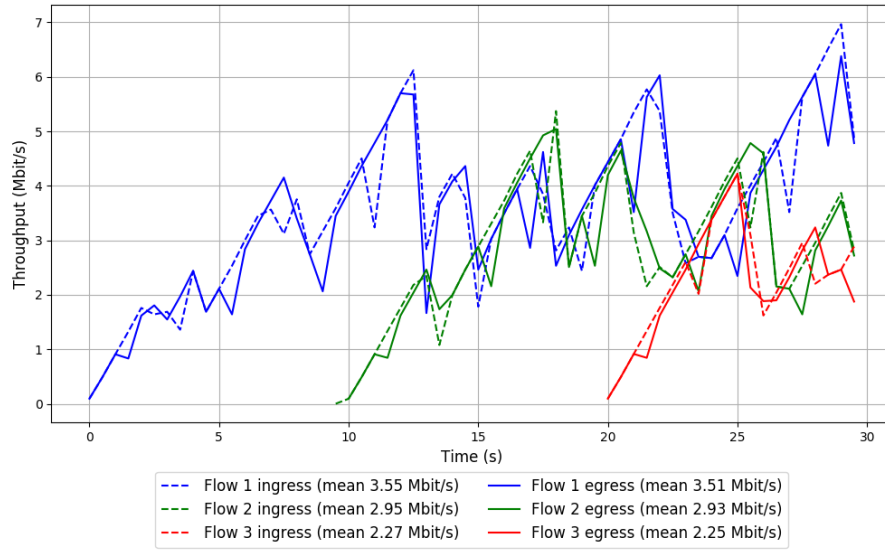
Run 9: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.74 Mbit/s) Flow 1 egress (mean 6.72 Mbit/s)
Flow 2 ingress (mean 6.64 Mbit/s) Flow 2 egress (mean 6.62 Mbit/s)
Flow 3 ingress (mean 6.44 Mbit/s) Flow 3 egress (mean 6.39 Mbit/s)

Flow 1 (95th percentile 87.28 ms)   Flow 2 (95th percentile 87.48 ms)   Flow 3 (95th percentile 87.34 ms)

```
Run 10: Statistics of KohoCC

Start at: 2017-08-21 01:42:49
End at: 2017-08-21 01:43:19

# Below is generated by plot.py at 2017-08-21 04:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 87.420 ms
Loss rate: 9.95%
-- Flow 1:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 87.370 ms
Loss rate: 10.28%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 87.489 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 87.277 ms
Loss rate: 29.06%
```
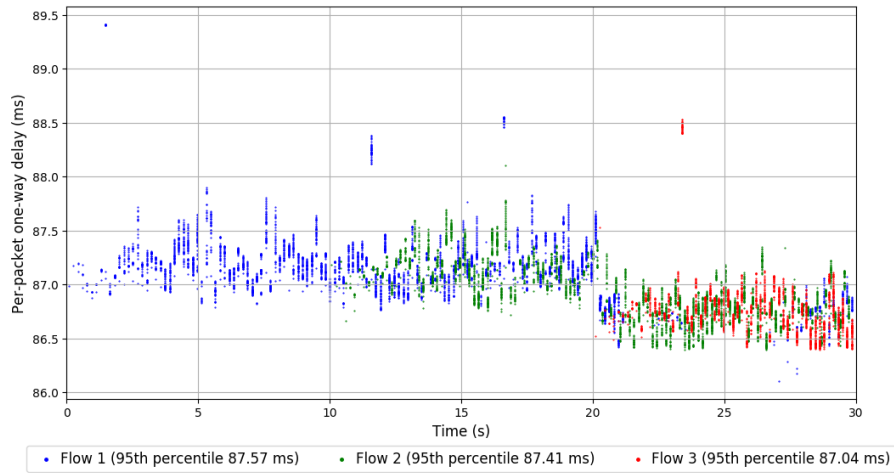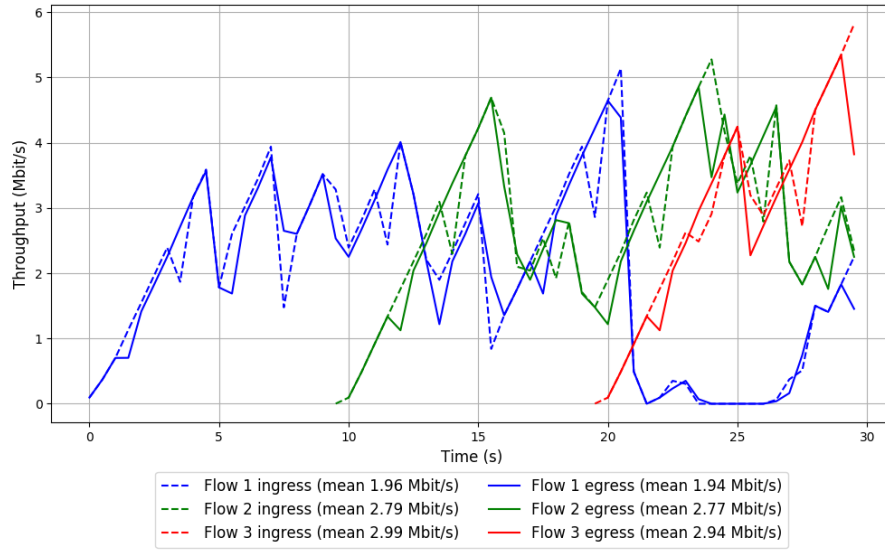
Run 10: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.61 Mbit/s) ---- Flow 1 egress (mean 5.97 Mbit/s)
Flow 2 ingress (mean 6.63 Mbit/s) ---- Flow 2 egress (mean 6.62 Mbit/s)
Flow 3 ingress (mean 5.98 Mbit/s) ---- Flow 3 egress (mean 4.32 Mbit/s)

Flow 1 (95th percentile 87.37 ms)   Flow 2 (95th percentile 87.49 ms)   Flow 3 (95th percentile 87.28 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2017-08-20 23:46:01
End at: 2017-08-20 23:46:31

# Below is generated by plot.py at 2017-08-21 04:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 87.240 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 87.282 ms
Loss rate: 1.85%
-- Flow 2:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 87.152 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 87.048 ms
Loss rate: 2.51%
```
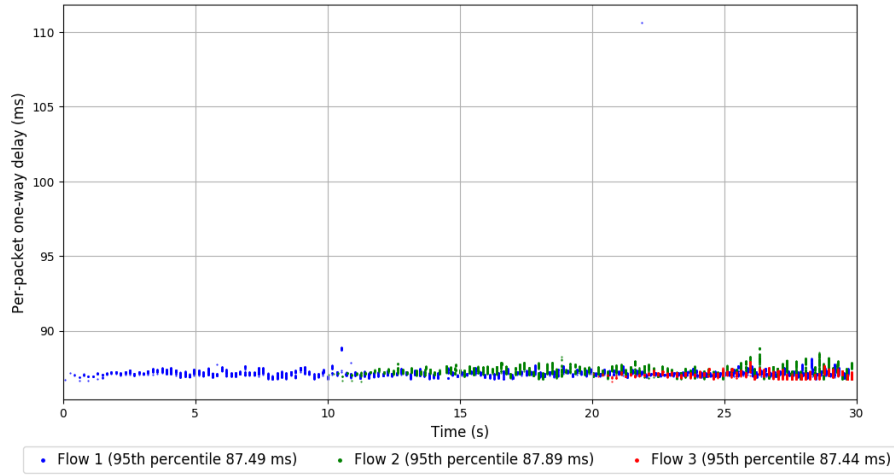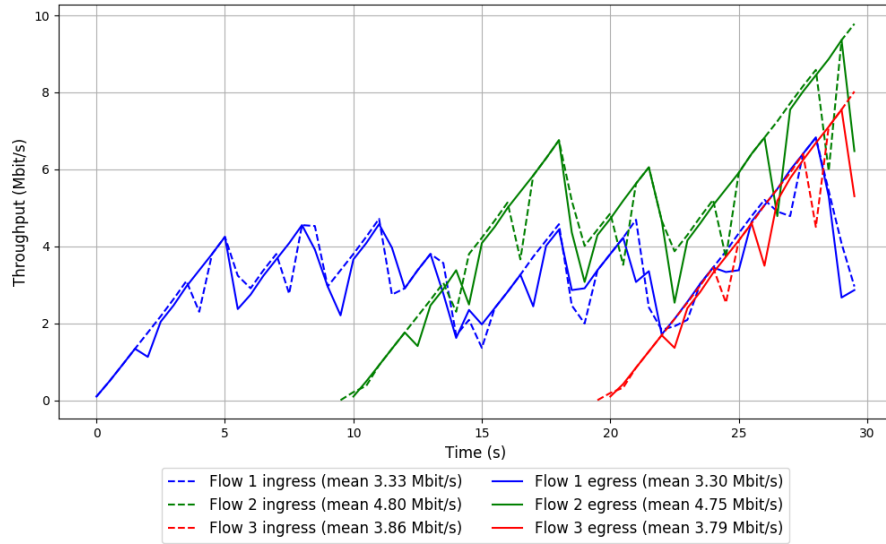
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-08-20 23:59:04
End at: 2017-08-20 23:59:34

# Below is generated by plot.py at 2017-08-21 04:54:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 87.466 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 87.571 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 87.413 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 87.037 ms
Loss rate: 3.48%
```
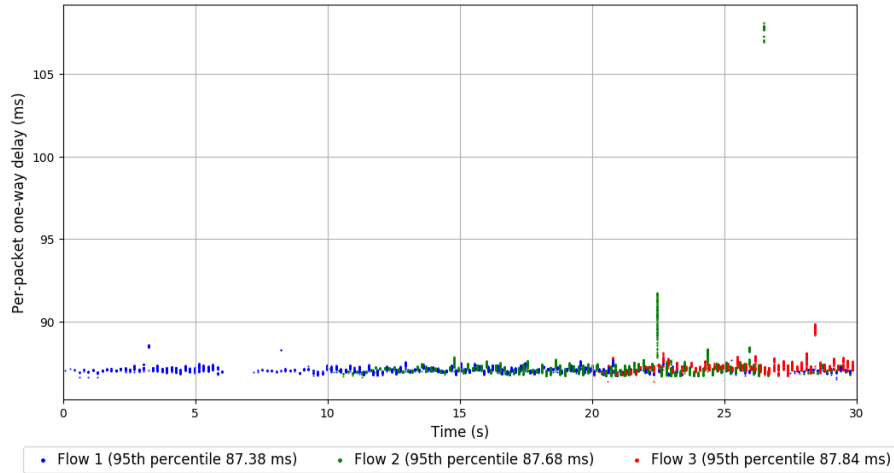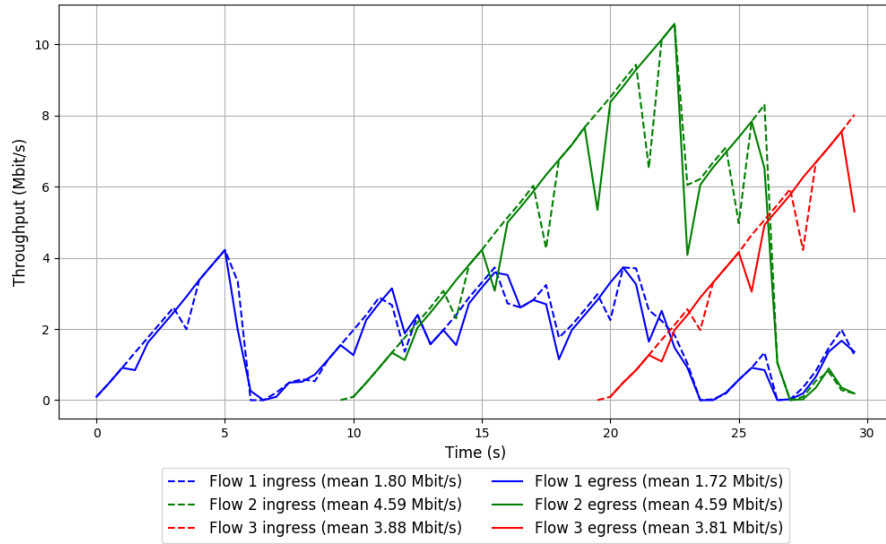
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-08-21 00:12:20
End at: 2017-08-21 00:12:50

# Below is generated by plot.py at 2017-08-21 04:54:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 87.731 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 87.493 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 87.885 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 87.438 ms
Loss rate: 3.55%
```
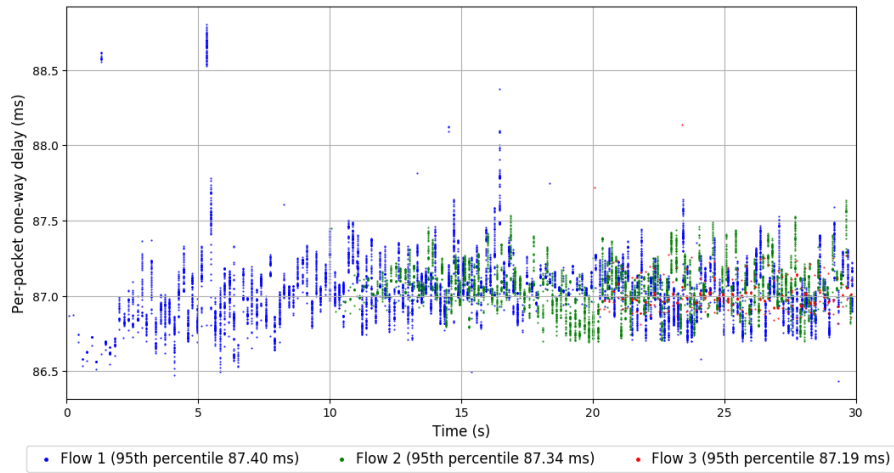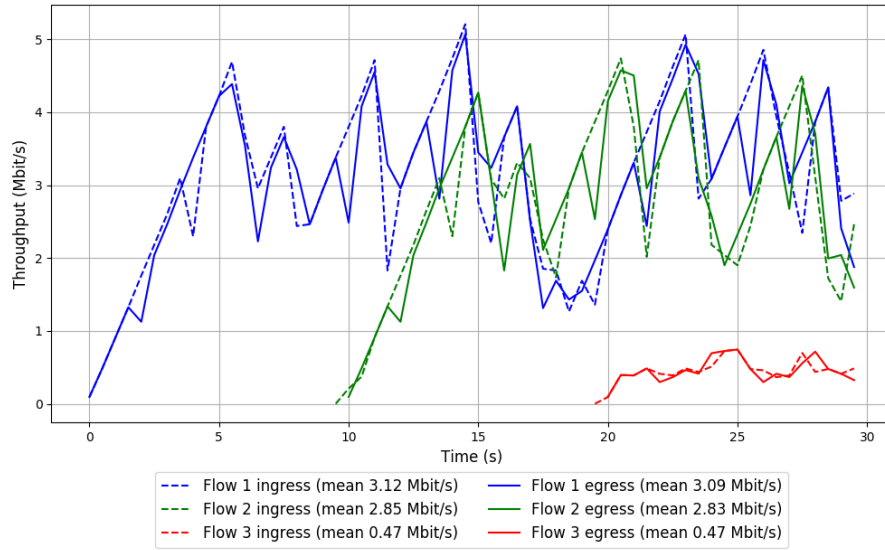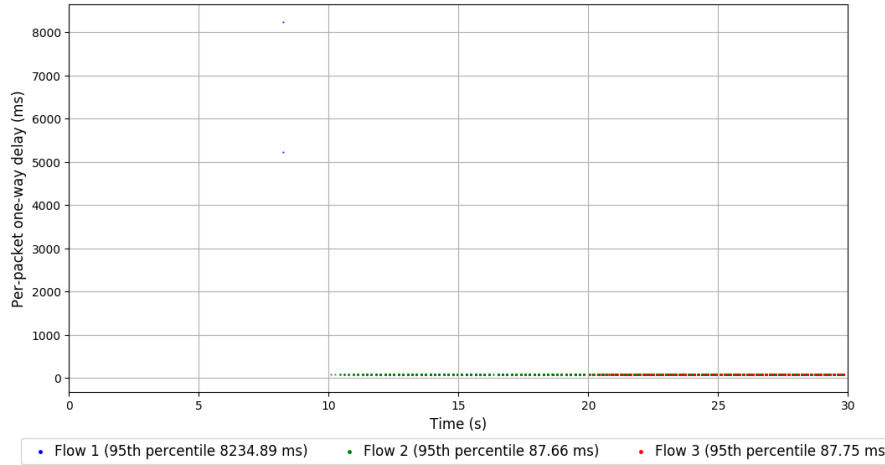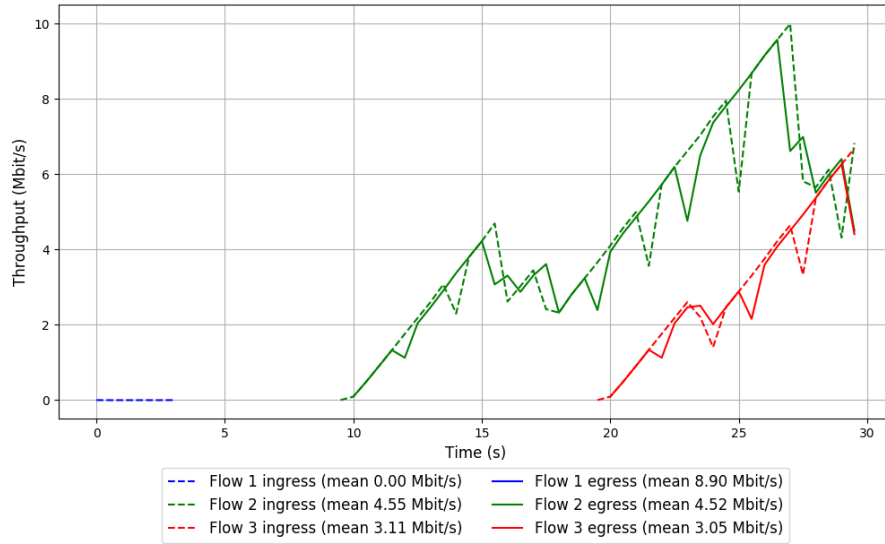
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 3.33 Mbit/s) --- Flow 1 egress (mean 3.30 Mbit/s)
Flow 2 ingress (mean 4.80 Mbit/s) --- Flow 2 egress (mean 4.75 Mbit/s)
Flow 3 ingress (mean 3.86 Mbit/s) --- Flow 3 egress (mean 3.79 Mbit/s)

Flow 1 (95th percentile 87.49 ms)   Flow 2 (95th percentile 87.89 ms)   Flow 3 (95th percentile 87.44 ms)

109

```
Run 4: Statistics of LEDBAT

Start at: 2017-08-21 00:25:27
End at: 2017-08-21 00:25:57

# Below is generated by plot.py at 2017-08-21 04:54:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 87.668 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 87.379 ms
Loss rate: 4.51%
-- Flow 2:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 87.678 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 87.842 ms
Loss rate: 3.54%
```
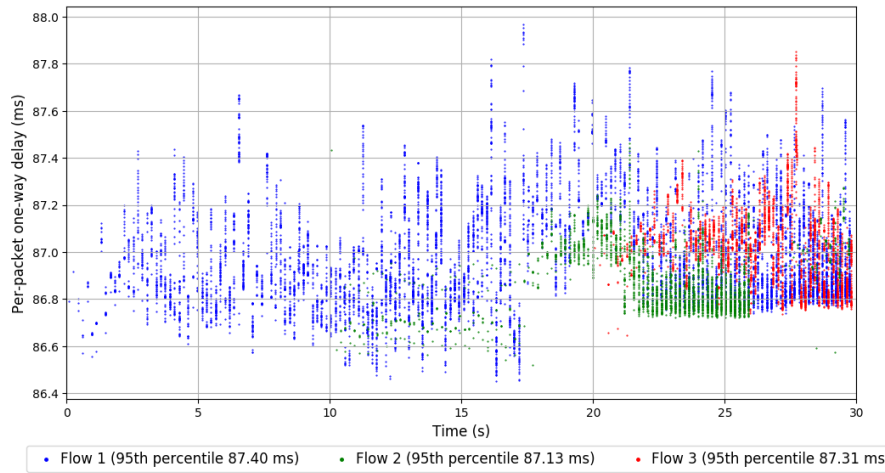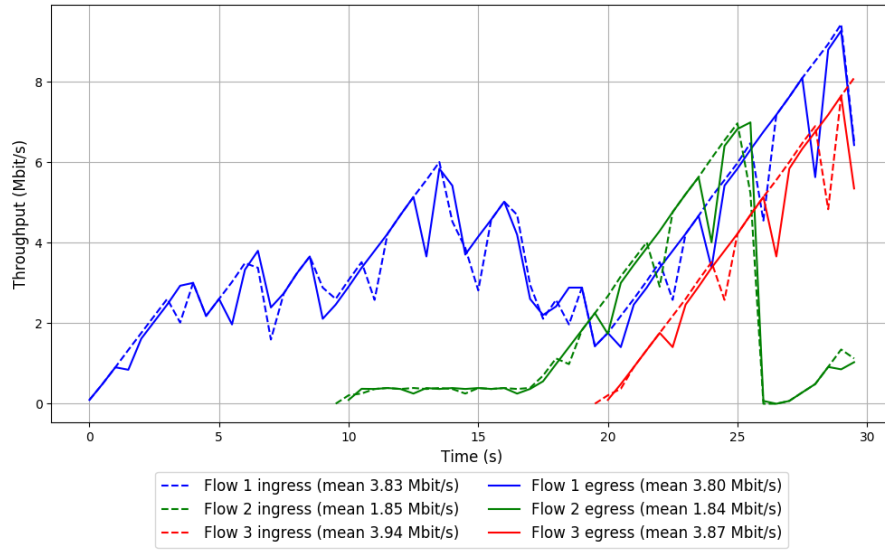
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.80 Mbit/s) Flow 1 egress (mean 1.72 Mbit/s)
Flow 2 ingress (mean 4.59 Mbit/s) Flow 2 egress (mean 4.59 Mbit/s)
Flow 3 ingress (mean 3.88 Mbit/s) Flow 3 egress (mean 3.81 Mbit/s)

Flow 1 (95th percentile 87.38 ms) Flow 2 (95th percentile 87.68 ms) Flow 3 (95th percentile 87.84 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-08-21 00:38:26
End at: 2017-08-21 00:38:56

# Below is generated by plot.py at 2017-08-21 04:54:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 87.372 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 87.399 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 87.341 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 87.190 ms
Loss rate: 1.74%
```
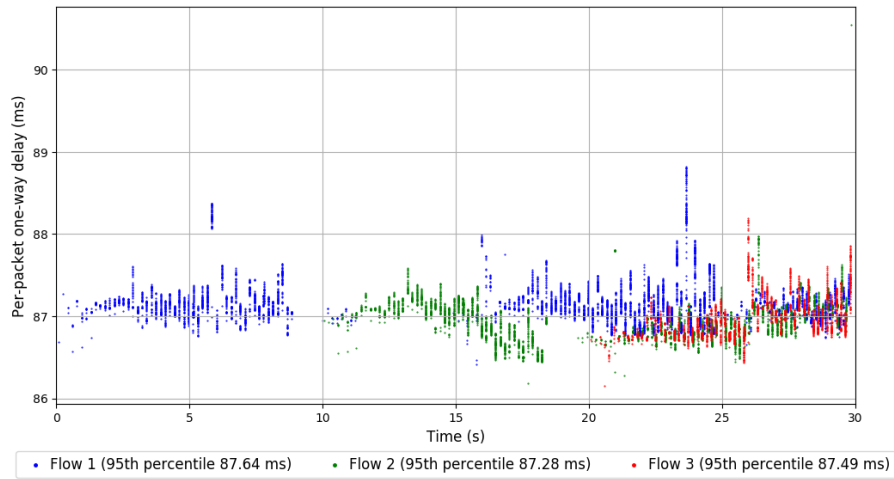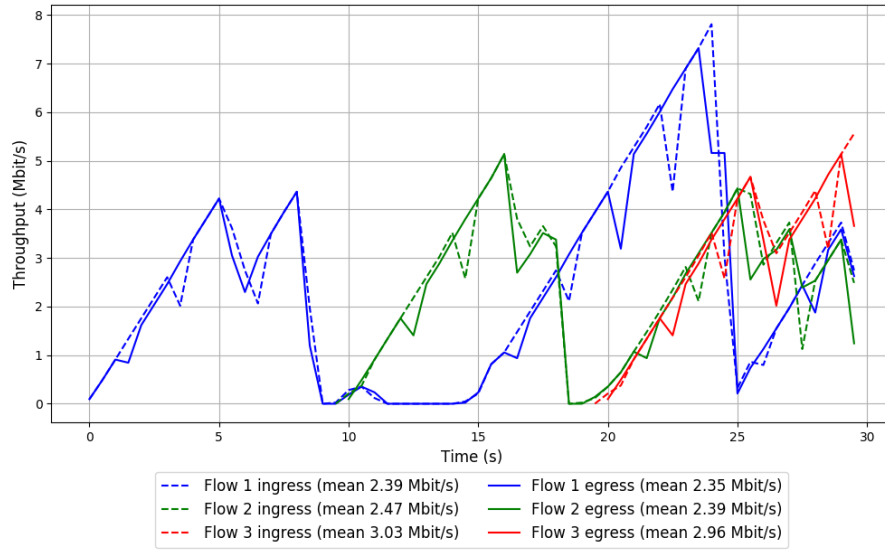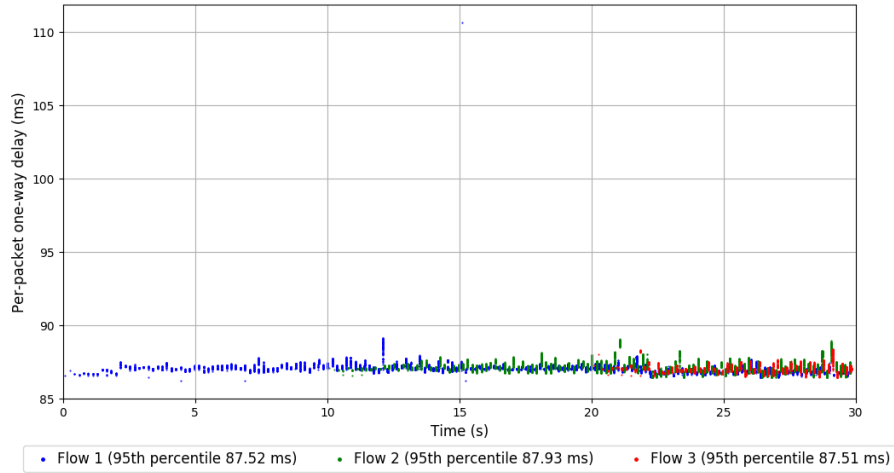
Run 5: Report of LEDBAT — Data Link

Run 6: Statistics of LEDBAT

Start at: 2017-08-21 00:51:02
End at: 2017-08-21 00:51:32

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.00 Mbit/s)   Flow 1 egress (mean 8.90 Mbit/s)
Flow 2 ingress (mean 4.55 Mbit/s)   Flow 2 egress (mean 4.52 Mbit/s)
Flow 3 ingress (mean 3.11 Mbit/s)   Flow 3 egress (mean 3.05 Mbit/s)

Flow 1 (95th percentile 8234.89 ms)   Flow 2 (95th percentile 87.66 ms)   Flow 3 (95th percentile 87.75 ms)

115

```
Run 7: Statistics of LEDBAT

Start at: 2017-08-21 01:03:57
End at: 2017-08-21 01:04:27


# Below is generated by plot.py at 2017-08-21 04:54:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 87.134 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 87.308 ms
Loss rate: 3.51%
```
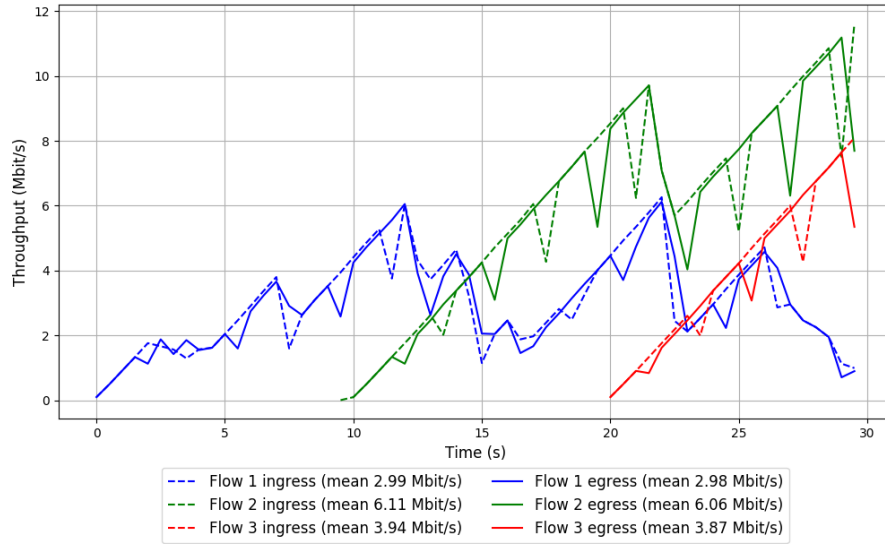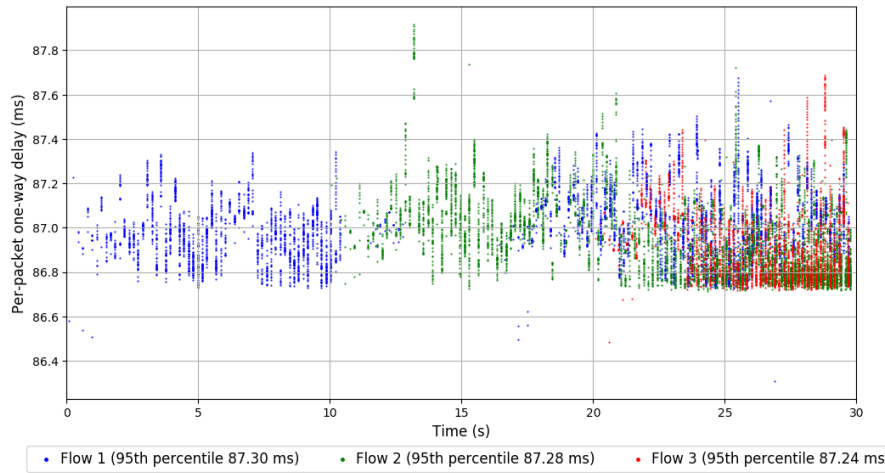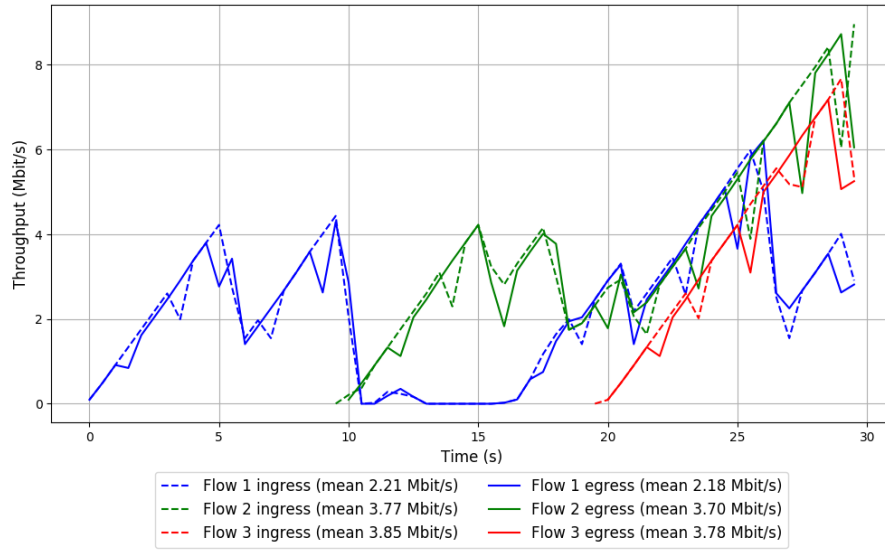
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 3.83 Mbit/s) --- Flow 1 egress (mean 3.80 Mbit/s)
Flow 2 ingress (mean 1.85 Mbit/s) --- Flow 2 egress (mean 1.84 Mbit/s)
Flow 3 ingress (mean 3.94 Mbit/s) --- Flow 3 egress (mean 3.87 Mbit/s)

• Flow 1 (95th percentile 87.40 ms)   • Flow 2 (95th percentile 87.13 ms)   • Flow 3 (95th percentile 87.31 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-08-21 01:16:58
End at: 2017-08-21 01:17:28

# Below is generated by plot.py at 2017-08-21 04:54:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 87.518 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 87.642 ms
Loss rate: 1.86%
-- Flow 2:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 87.283 ms
Loss rate: 3.24%
-- Flow 3:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 87.486 ms
Loss rate: 3.83%
```
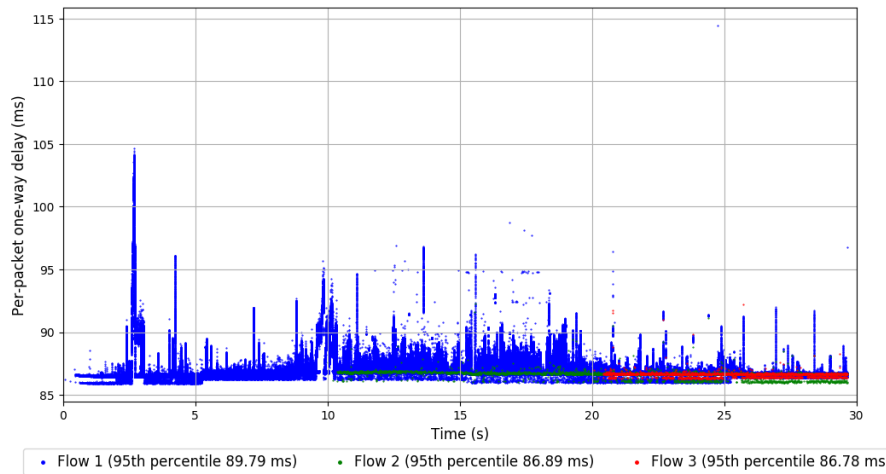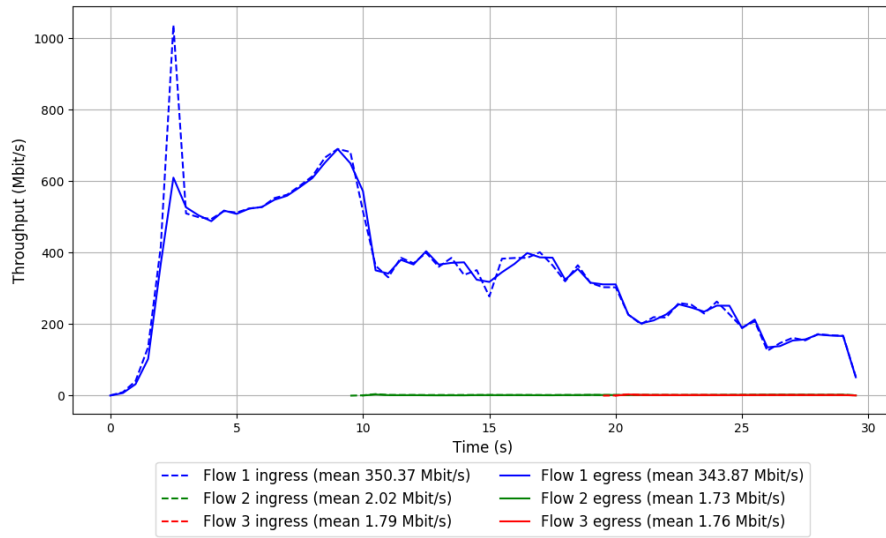
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-08-21 01:30:32
End at: 2017-08-21 01:31:02

# Below is generated by plot.py at 2017-08-21 04:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 87.701 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 87.520 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 87.928 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 87.507 ms
Loss rate: 3.51%
```
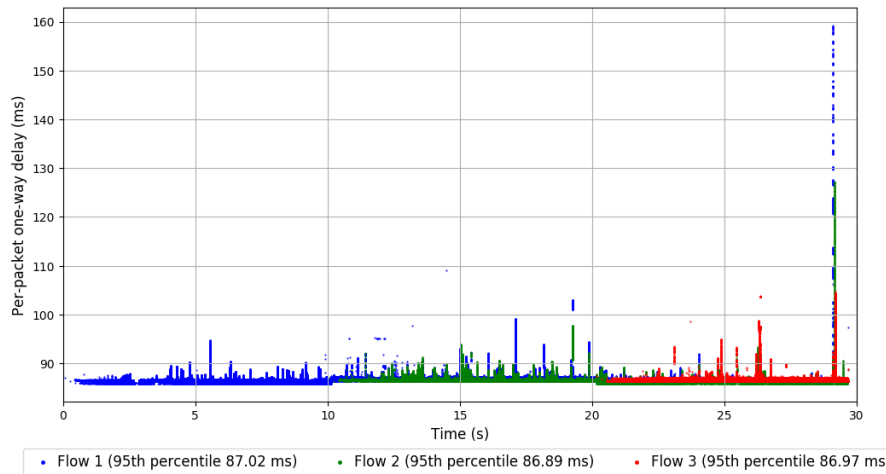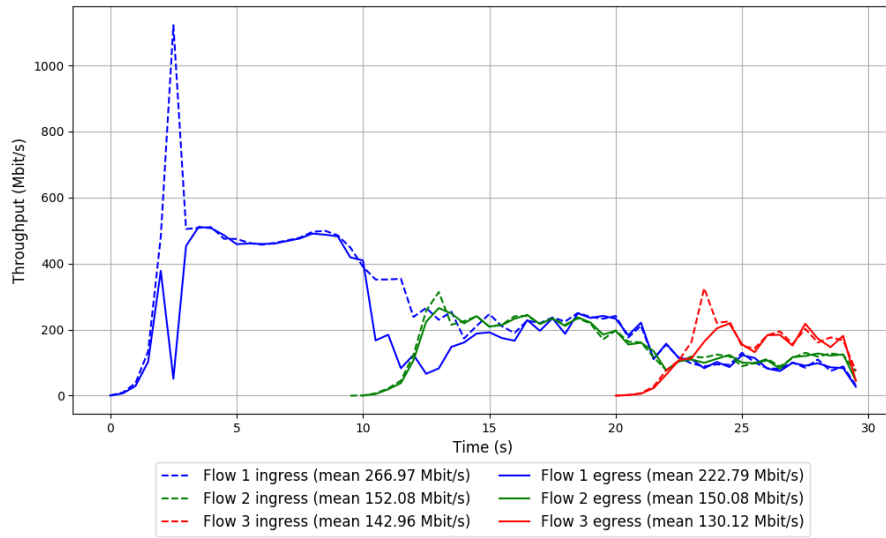
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2017-08-21 01:43:33
End at: 2017-08-21 01:44:03

# Below is generated by plot.py at 2017-08-21 04:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.85 Mbit/s
95th percentile per-packet one-way delay: 87.288 ms
Loss rate: 2.64%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 87.296 ms
Loss rate: 1.98%
-- Flow 2:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 87.279 ms
Loss rate: 2.75%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 87.236 ms
Loss rate: 3.58%
```
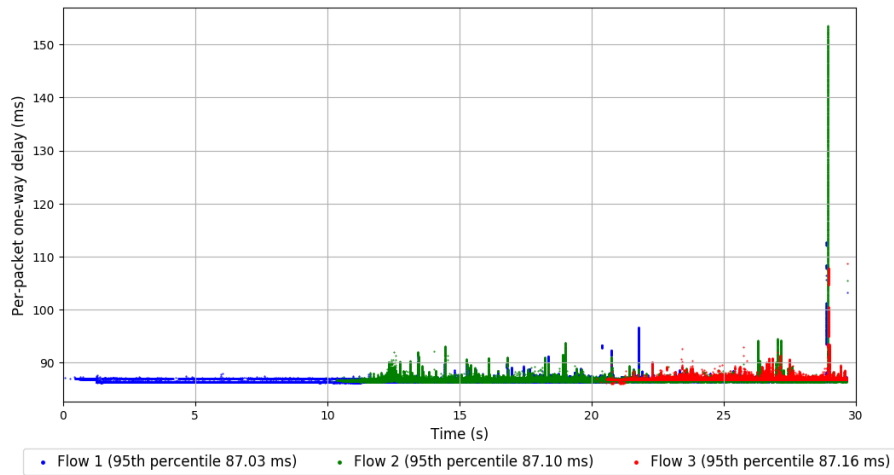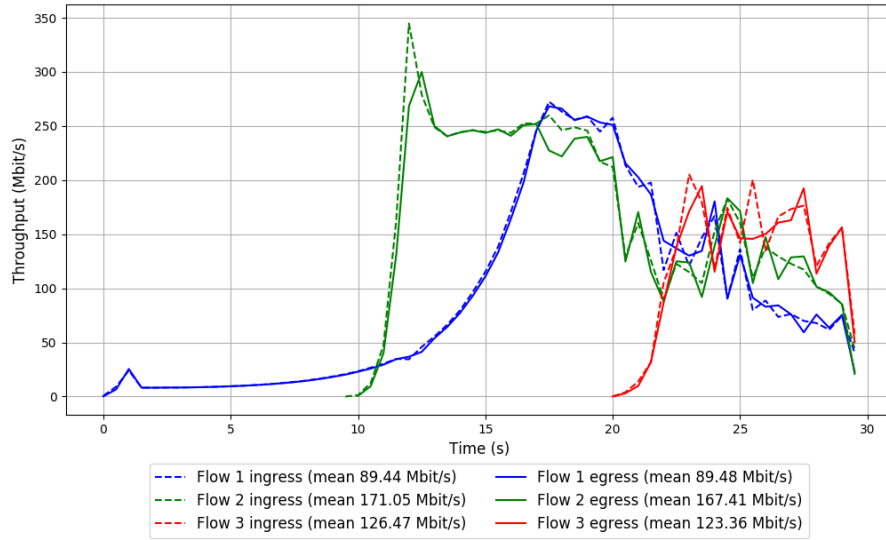
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 2.21 Mbit/s)   Flow 1 egress (mean 2.18 Mbit/s)
Flow 2 ingress (mean 3.77 Mbit/s)   Flow 2 egress (mean 3.70 Mbit/s)
Flow 3 ingress (mean 3.85 Mbit/s)   Flow 3 egress (mean 3.78 Mbit/s)

Flow 1 (95th percentile 87.30 ms)   Flow 2 (95th percentile 87.28 ms)   Flow 3 (95th percentile 87.24 ms)

```
Run 1: Statistics of PCC

Start at: 2017-08-20 23:51:39
End at: 2017-08-20 23:52:09


# Below is generated by plot.py at 2017-08-21 04:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.59 Mbit/s
95th percentile per-packet one-way delay: 89.790 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 343.87 Mbit/s
95th percentile per-packet one-way delay: 89.794 ms
Loss rate: 2.39%
-- Flow 2:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 86.891 ms
Loss rate: 15.31%
-- Flow 3:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 86.777 ms
Loss rate: 3.16%
```
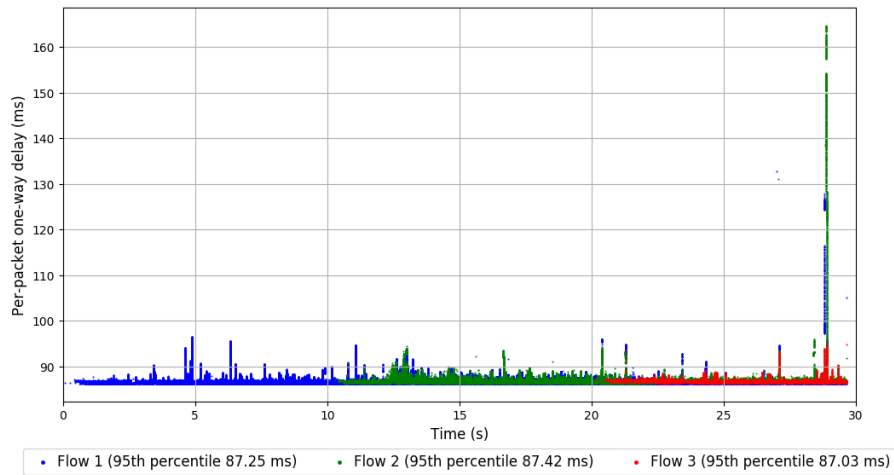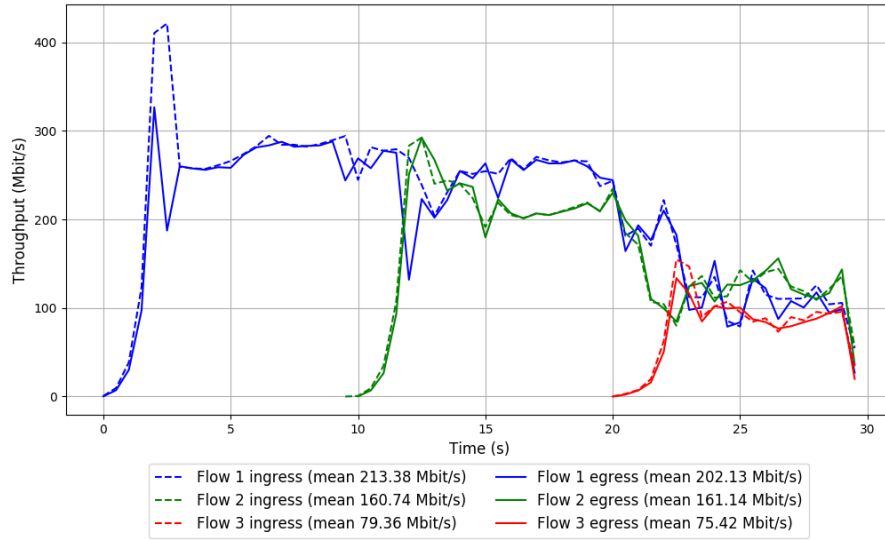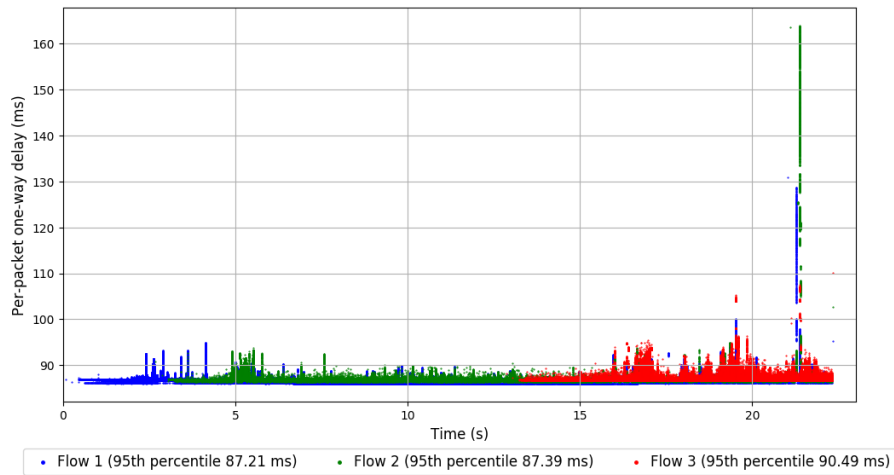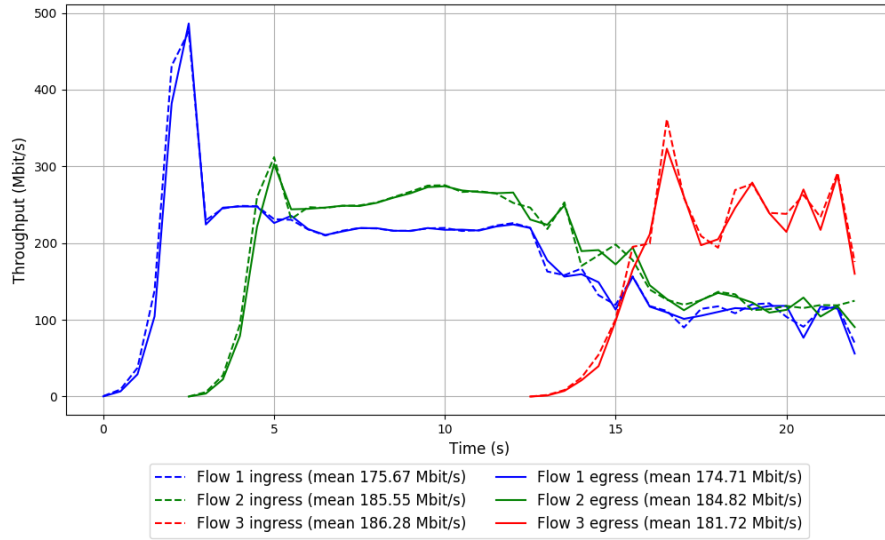
Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 350.37 Mbit/s)   Flow 1 egress (mean 343.87 Mbit/s)
Flow 2 ingress (mean 2.02 Mbit/s)   Flow 2 egress (mean 1.73 Mbit/s)
Flow 3 ingress (mean 1.79 Mbit/s)   Flow 3 egress (mean 1.76 Mbit/s)

Flow 1 (95th percentile 89.79 ms)   Flow 2 (95th percentile 86.89 ms)   Flow 3 (95th percentile 86.78 ms)

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```
Run 2: Statistics of PCC

Start at: 2017-08-21 00:04:44
End at: 2017-08-21 00:05:14


# Below is generated by plot.py at 2017-08-21 04:55:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 364.00 Mbit/s
95th percentile per-packet one-way delay: 87.014 ms
Loss rate: 12.66%
-- Flow 1:
Average throughput: 222.79 Mbit/s
95th percentile per-packet one-way delay: 87.021 ms
Loss rate: 16.99%
-- Flow 2:
Average throughput: 150.08 Mbit/s
95th percentile per-packet one-way delay: 86.889 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 130.12 Mbit/s
95th percentile per-packet one-way delay: 86.967 ms
Loss rate: 10.68%
```
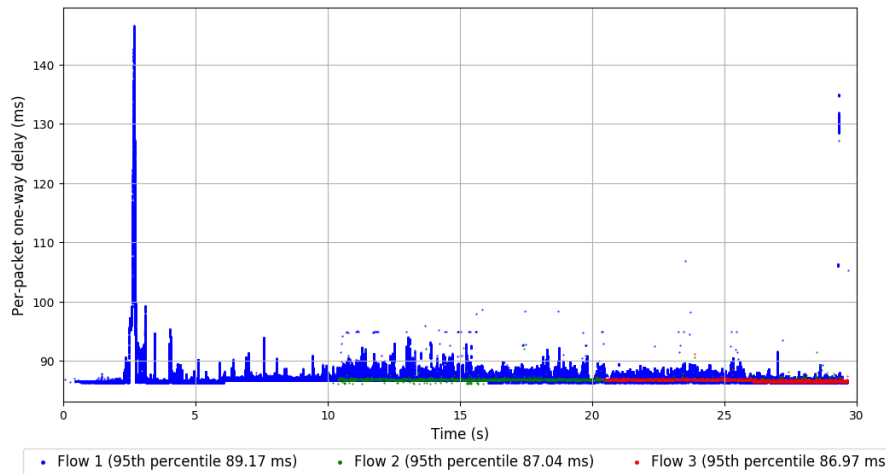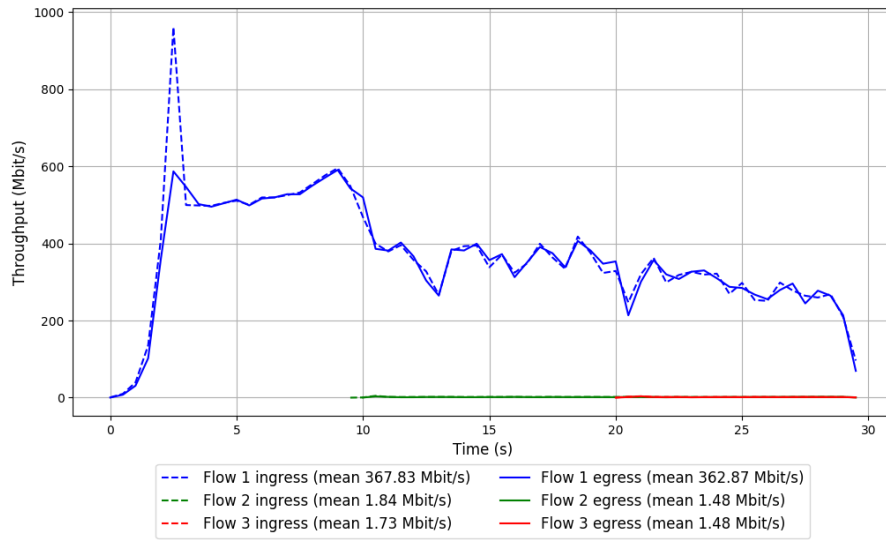
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-08-21 00:18:03
End at: 2017-08-21 00:18:33


# Below is generated by plot.py at 2017-08-21 04:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.24 Mbit/s
95th percentile per-packet one-way delay: 87.081 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 89.48 Mbit/s
95th percentile per-packet one-way delay: 87.032 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 167.41 Mbit/s
95th percentile per-packet one-way delay: 87.097 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 123.36 Mbit/s
95th percentile per-packet one-way delay: 87.156 ms
Loss rate: 4.10%
```
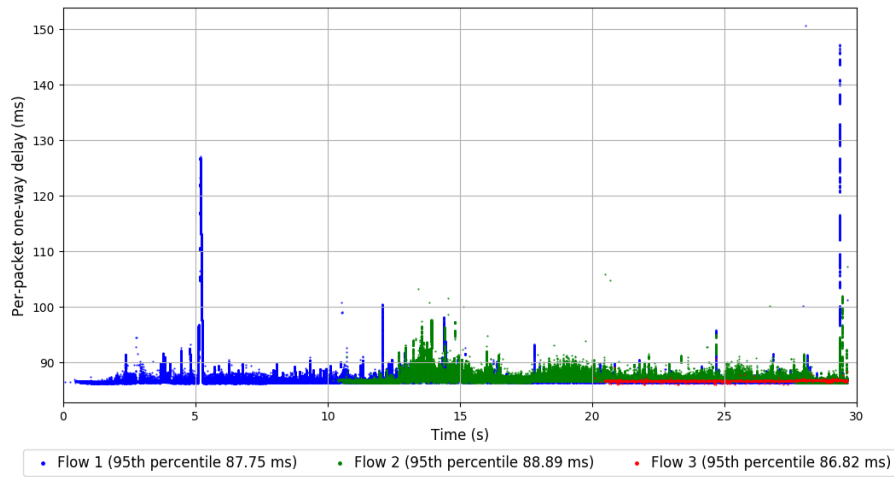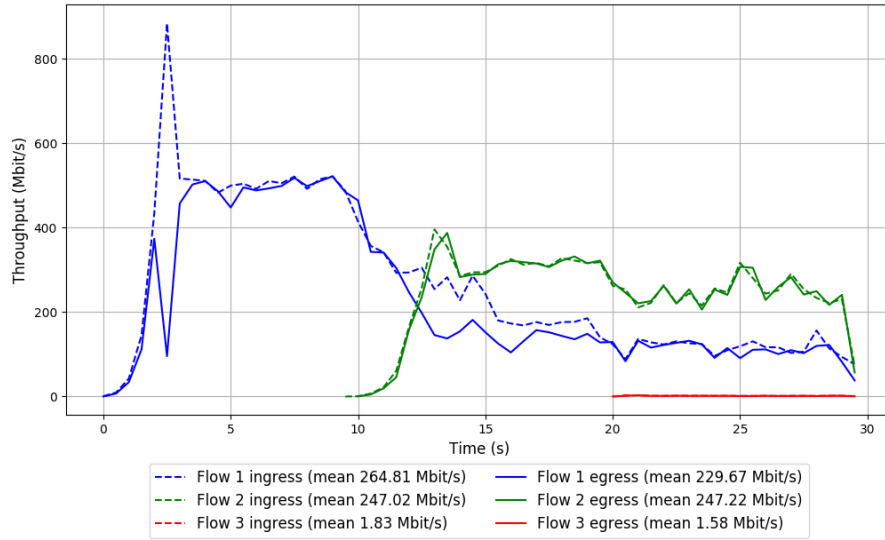
Run 3: Report of PCC — Data Link

```
Run 4: Statistics of PCC

Start at: 2017-08-21 00:31:12
End at: 2017-08-21 00:31:42

# Below is generated by plot.py at 2017-08-21 04:56:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.88 Mbit/s
95th percentile per-packet one-way delay: 87.259 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 202.13 Mbit/s
95th percentile per-packet one-way delay: 87.246 ms
Loss rate: 5.78%
-- Flow 2:
Average throughput: 161.14 Mbit/s
95th percentile per-packet one-way delay: 87.416 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 75.42 Mbit/s
95th percentile per-packet one-way delay: 87.025 ms
Loss rate: 6.64%
```
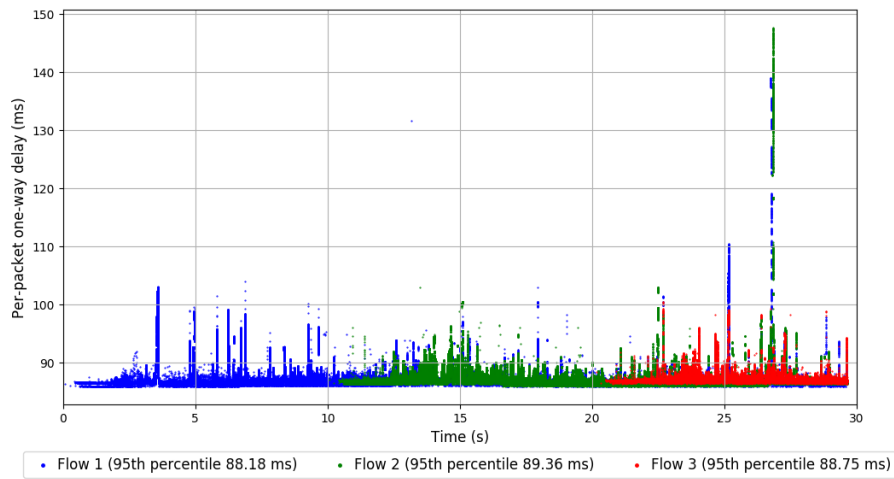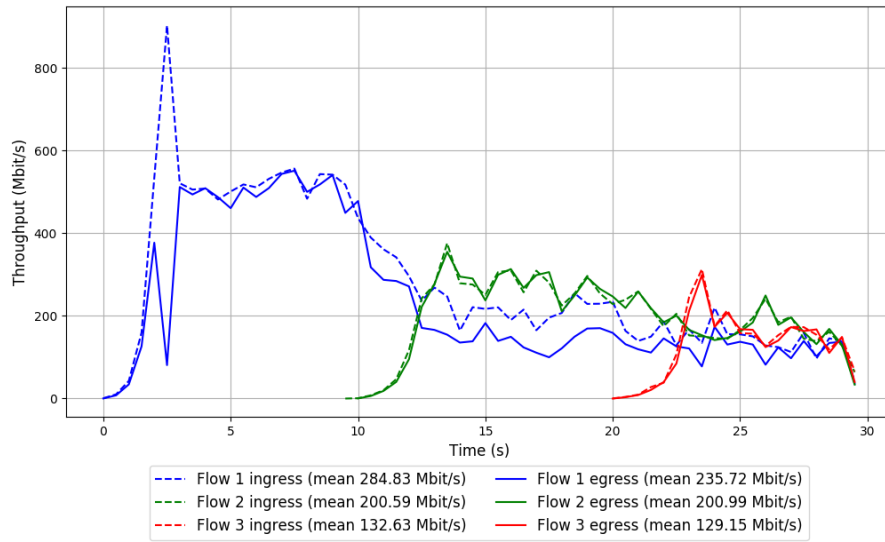
Run 4: Report of PCC — Data Link

- - - Flow 1 ingress (mean 213.38 Mbit/s) ——— Flow 1 egress (mean 202.13 Mbit/s)
- - - Flow 2 ingress (mean 160.74 Mbit/s) ——— Flow 2 egress (mean 161.14 Mbit/s)
- - - Flow 3 ingress (mean 79.36 Mbit/s) ——— Flow 3 egress (mean 75.42 Mbit/s)

• Flow 1 (95th percentile 87.25 ms) • Flow 2 (95th percentile 87.42 ms) • Flow 3 (95th percentile 87.03 ms)

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Run 5: Statistics of PCC

Start at: 2017-08-21 00:44:00
End at: 2017-08-21 00:44:30

Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 175.67 Mbit/s)   Flow 1 egress (mean 174.71 Mbit/s)
Flow 2 ingress (mean 185.55 Mbit/s)   Flow 2 egress (mean 184.82 Mbit/s)
Flow 3 ingress (mean 186.28 Mbit/s)   Flow 3 egress (mean 181.72 Mbit/s)

Flow 1 (95th percentile 87.21 ms)   Flow 2 (95th percentile 87.39 ms)   Flow 3 (95th percentile 90.49 ms)

```
Run 6: Statistics of PCC

Start at: 2017-08-21 00:56:38
End at: 2017-08-21 00:57:08

# Below is generated by plot.py at 2017-08-21 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 364.33 Mbit/s
95th percentile per-packet one-way delay: 89.166 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 362.87 Mbit/s
95th percentile per-packet one-way delay: 89.172 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 87.042 ms
Loss rate: 20.30%
-- Flow 3:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 86.968 ms
Loss rate: 15.85%
```
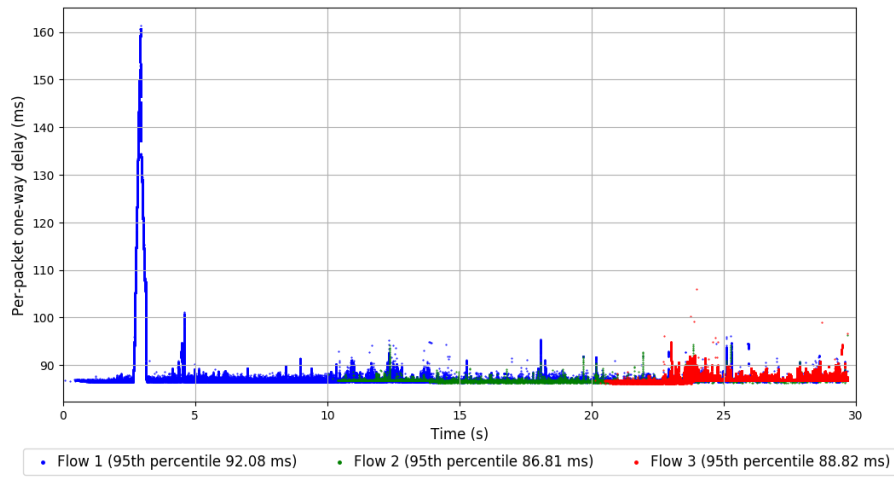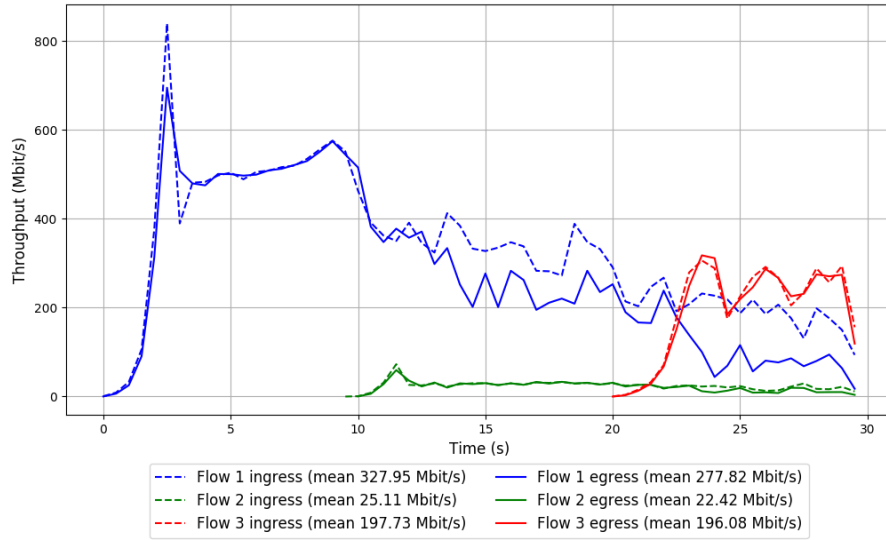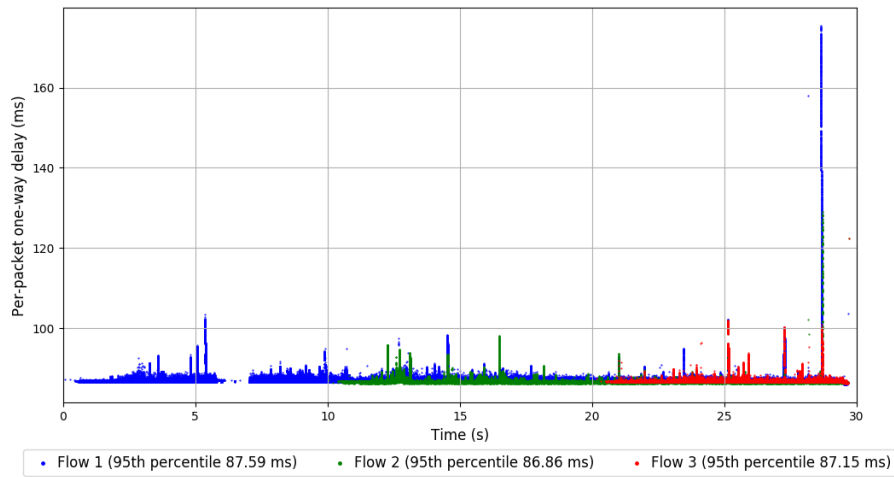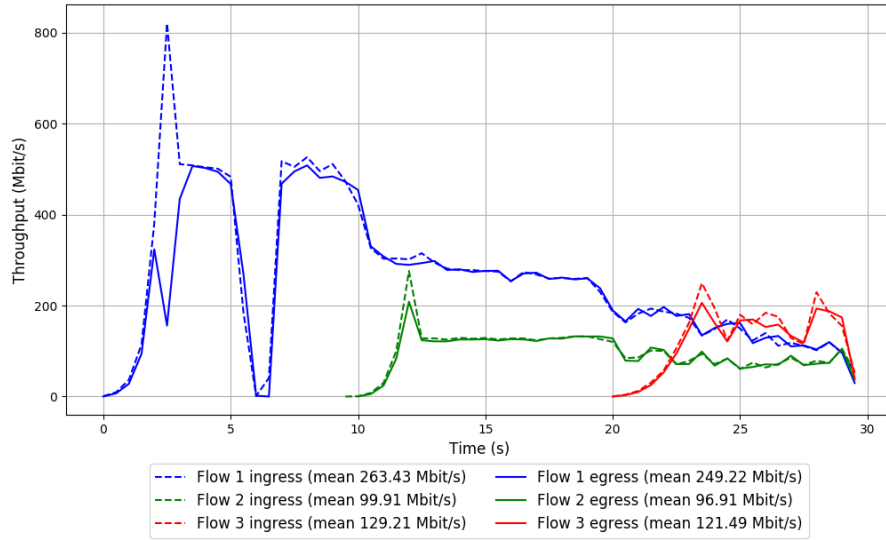
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 367.83 Mbit/s)   Flow 1 egress (mean 362.87 Mbit/s)
Flow 2 ingress (mean 1.84 Mbit/s)   Flow 2 egress (mean 1.48 Mbit/s)
Flow 3 ingress (mean 1.73 Mbit/s)   Flow 3 egress (mean 1.48 Mbit/s)

Flow 1 (95th percentile 89.17 ms)   Flow 2 (95th percentile 87.04 ms)   Flow 3 (95th percentile 86.97 ms)

```
Run 7: Statistics of PCC

Start at: 2017-08-21 01:09:36
End at: 2017-08-21 01:10:06


# Below is generated by plot.py at 2017-08-21 04:58:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 394.29 Mbit/s
95th percentile per-packet one-way delay: 88.473 ms
Loss rate: 8.75%
-- Flow 1:
Average throughput: 229.67 Mbit/s
95th percentile per-packet one-way delay: 87.750 ms
Loss rate: 13.73%
-- Flow 2:
Average throughput: 247.22 Mbit/s
95th percentile per-packet one-way delay: 88.893 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 86.824 ms
Loss rate: 15.34%
```
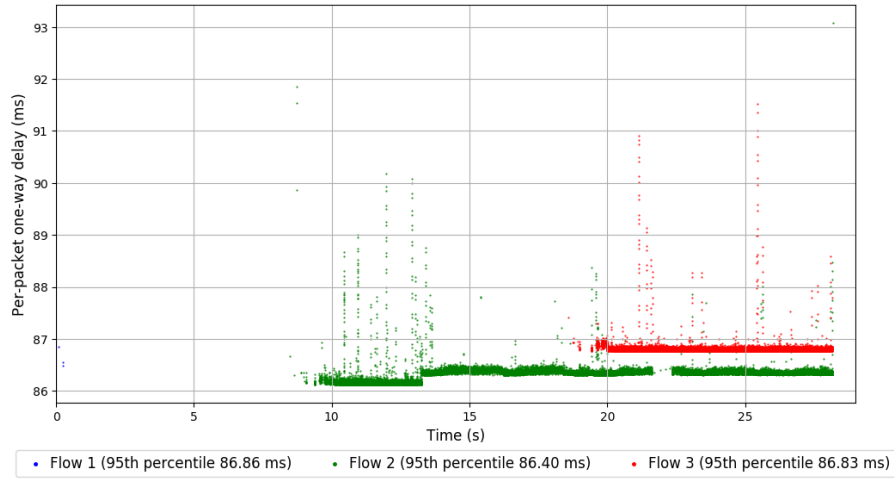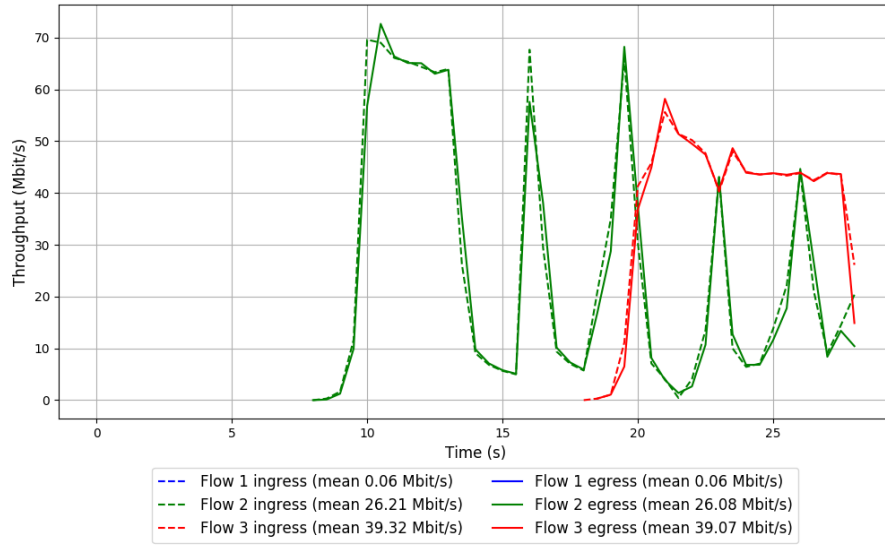
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 264.81 Mbit/s) — Flow 1 egress (mean 229.67 Mbit/s)
Flow 2 ingress (mean 247.02 Mbit/s) — Flow 2 egress (mean 247.22 Mbit/s)
Flow 3 ingress (mean 1.83 Mbit/s) — Flow 3 egress (mean 1.58 Mbit/s)

Flow 1 (95th percentile 87.75 ms) • Flow 2 (95th percentile 88.89 ms) • Flow 3 (95th percentile 86.82 ms)

```
Run 8: Statistics of PCC

Start at: 2017-08-21 01:22:58
End at: 2017-08-21 01:23:28


# Below is generated by plot.py at 2017-08-21 04:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.31 Mbit/s
95th percentile per-packet one-way delay: 88.734 ms
Loss rate: 11.54%
-- Flow 1:
Average throughput: 235.72 Mbit/s
95th percentile per-packet one-way delay: 88.179 ms
Loss rate: 17.72%
-- Flow 2:
Average throughput: 200.99 Mbit/s
95th percentile per-packet one-way delay: 89.365 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 129.15 Mbit/s
95th percentile per-packet one-way delay: 88.754 ms
Loss rate: 4.37%
```
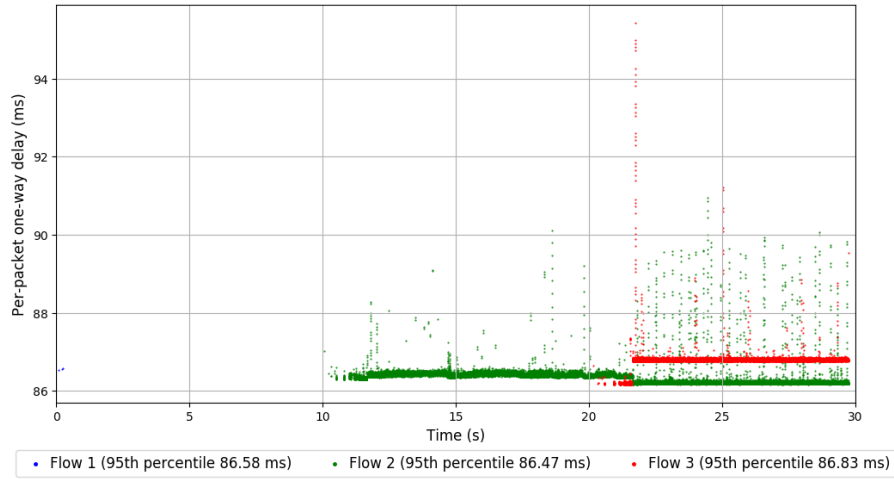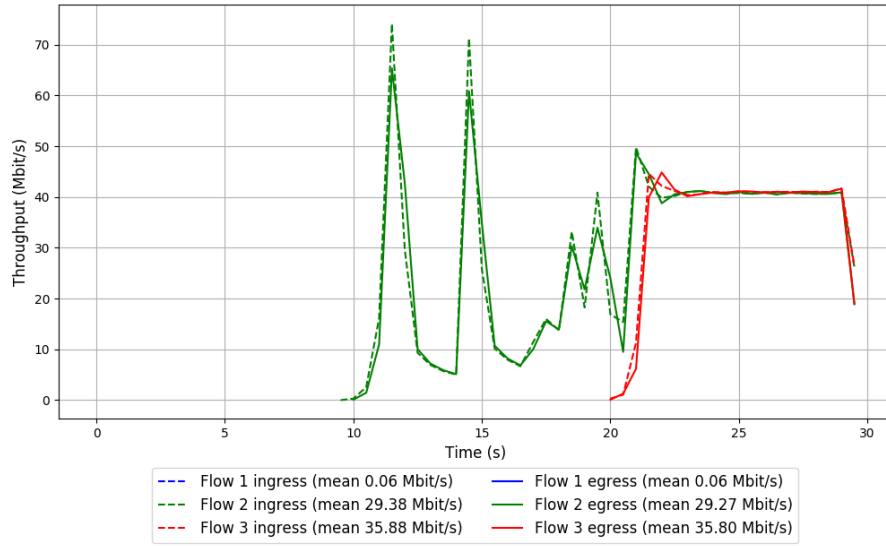
Run 8: Report of PCC — Data Link

```
Run 9: Statistics of PCC

Start at: 2017-08-21 01:36:20
End at: 2017-08-21 01:36:50


# Below is generated by plot.py at 2017-08-21 04:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.84 Mbit/s
95th percentile per-packet one-way delay: 89.402 ms
Loss rate: 13.51%
-- Flow 1:
Average throughput: 277.82 Mbit/s
95th percentile per-packet one-way delay: 92.077 ms
Loss rate: 15.77%
-- Flow 2:
Average throughput: 22.42 Mbit/s
95th percentile per-packet one-way delay: 86.811 ms
Loss rate: 11.45%
-- Flow 3:
Average throughput: 196.08 Mbit/s
95th percentile per-packet one-way delay: 88.819 ms
Loss rate: 2.54%
```
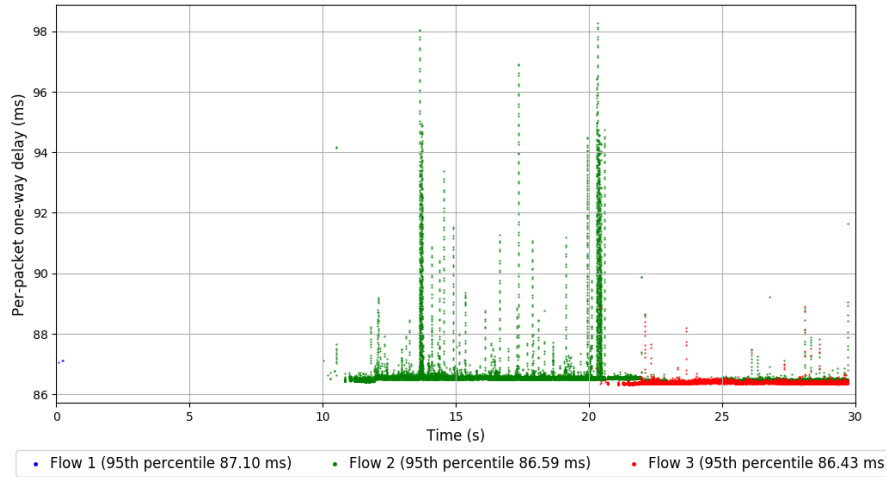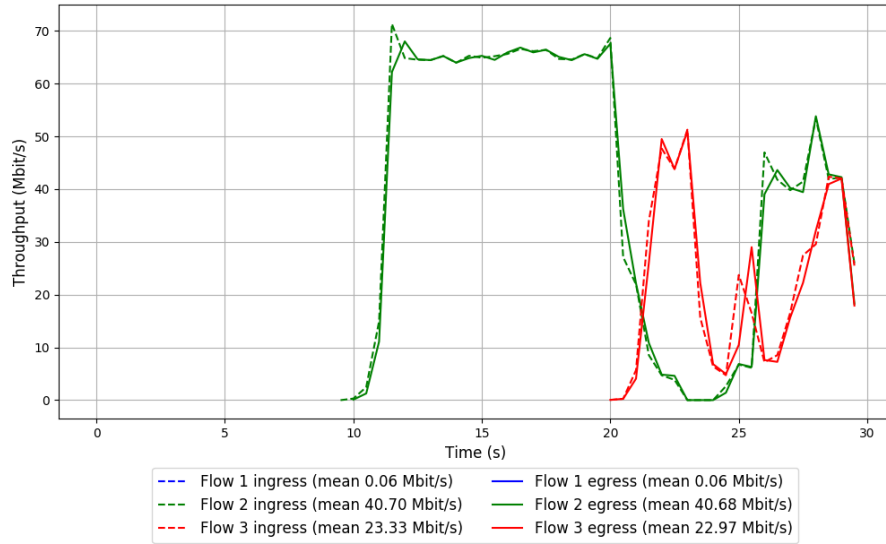
Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2017-08-21 01:49:15
End at: 2017-08-21 01:49:45


# Below is generated by plot.py at 2017-08-21 04:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.60 Mbit/s
95th percentile per-packet one-way delay: 87.427 ms
Loss rate: 5.70%
-- Flow 1:
Average throughput: 249.22 Mbit/s
95th percentile per-packet one-way delay: 87.593 ms
Loss rate: 5.95%
-- Flow 2:
Average throughput: 96.91 Mbit/s
95th percentile per-packet one-way delay: 86.862 ms
Loss rate: 3.69%
-- Flow 3:
Average throughput: 121.49 Mbit/s
95th percentile per-packet one-way delay: 87.151 ms
Loss rate: 7.31%
```
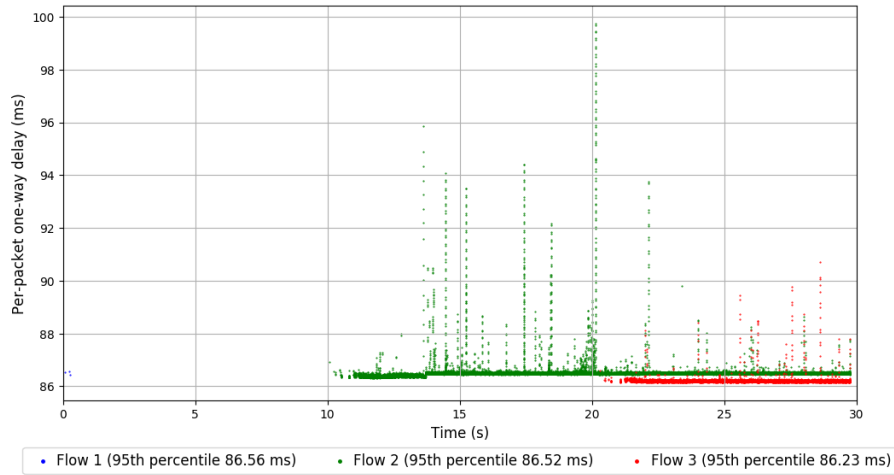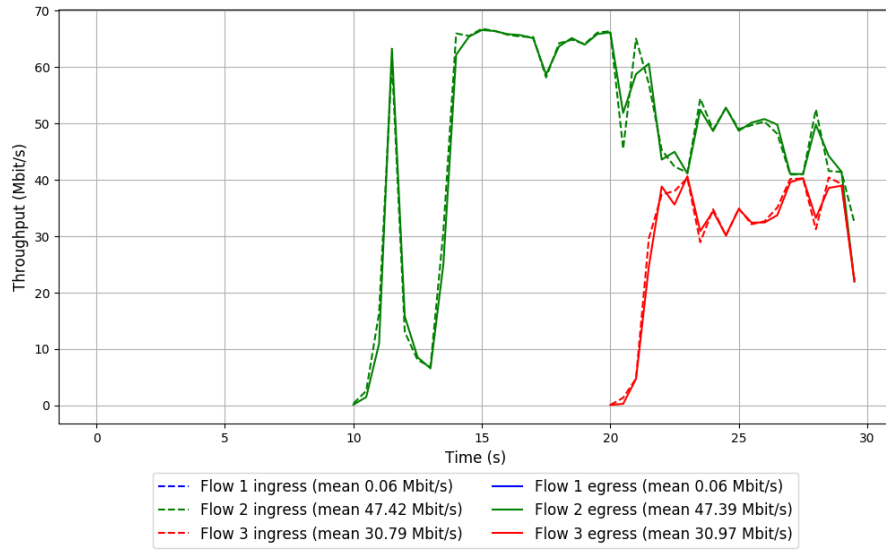
Run 10: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-20 23:48:29
End at: 2017-08-20 23:48:59

# Below is generated by plot.py at 2017-08-21 04:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.61 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.857 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.08 Mbit/s
95th percentile per-packet one-way delay: 86.403 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 39.07 Mbit/s
95th percentile per-packet one-way delay: 86.835 ms
Loss rate: 2.43%
```
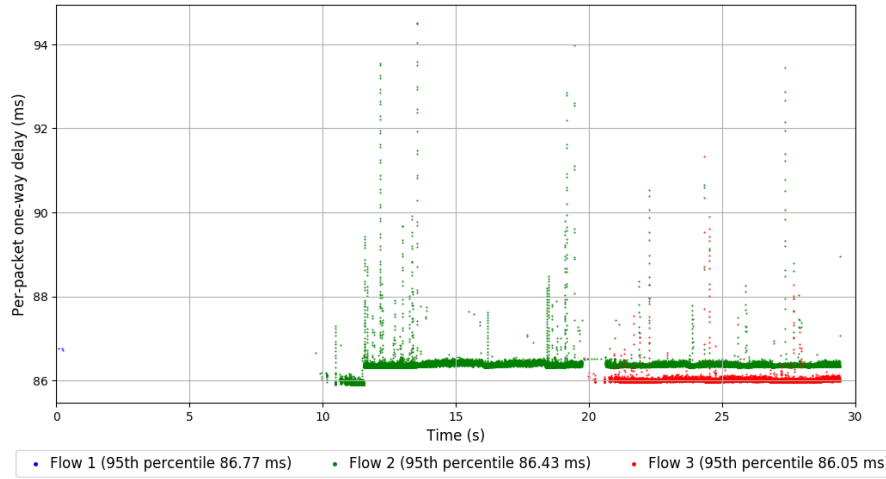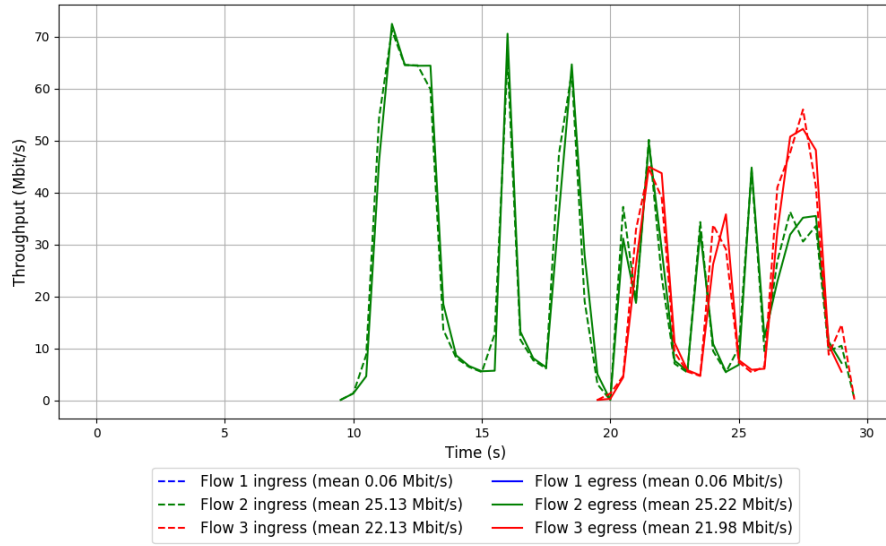
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-21 00:01:33
End at: 2017-08-21 00:02:03

# Below is generated by plot.py at 2017-08-21 04:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 86.817 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 86.465 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 35.80 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 2.09%
```
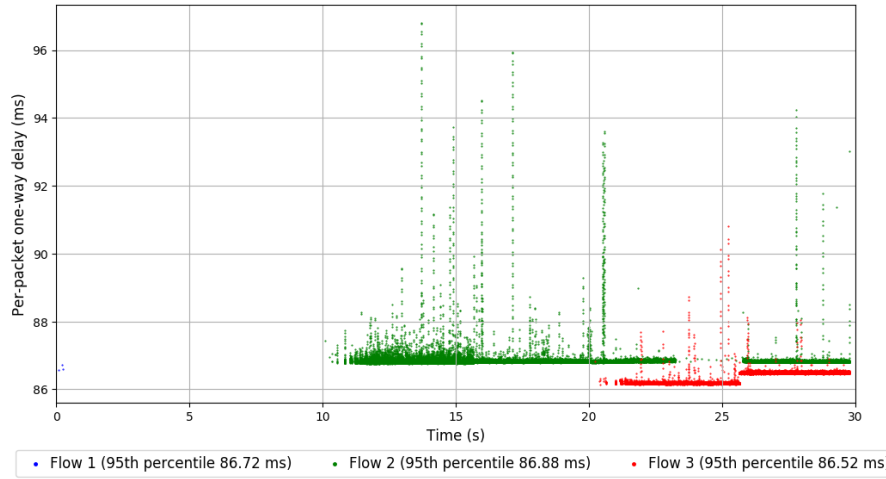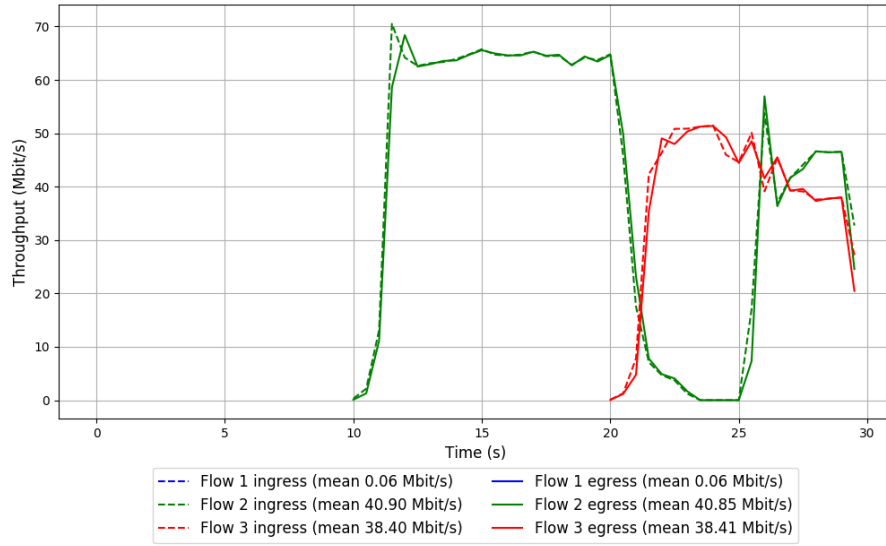
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 00:14:52
End at: 2017-08-21 00:15:22

# Below is generated by plot.py at 2017-08-21 04:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.33 Mbit/s
95th percentile per-packet one-way delay: 86.573 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.103 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.68 Mbit/s
95th percentile per-packet one-way delay: 86.595 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 86.428 ms
Loss rate: 3.32%
```
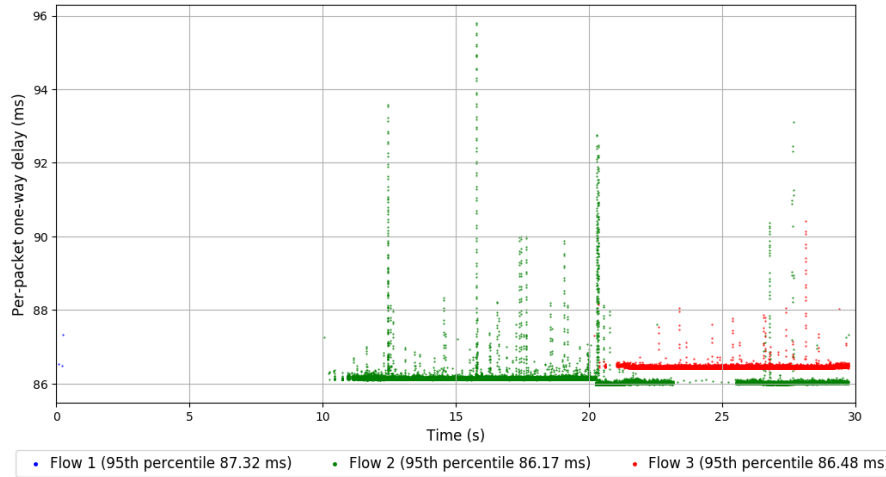
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 00:28:01
End at: 2017-08-21 00:28:31


# Below is generated by plot.py at 2017-08-21 04:59:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.29 Mbit/s
95th percentile per-packet one-way delay: 86.511 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.39 Mbit/s
95th percentile per-packet one-way delay: 86.516 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 86.226 ms
Loss rate: 1.24%
```
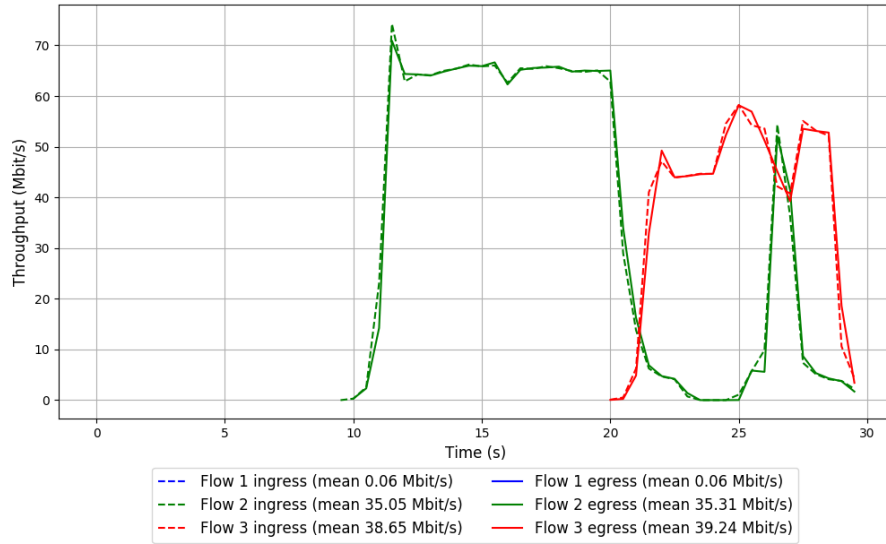
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 00:40:52
End at: 2017-08-21 00:41:22


# Below is generated by plot.py at 2017-08-21 04:59:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 86.416 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.771 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.22 Mbit/s
95th percentile per-packet one-way delay: 86.431 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 21.98 Mbit/s
95th percentile per-packet one-way delay: 86.049 ms
Loss rate: 2.43%
```
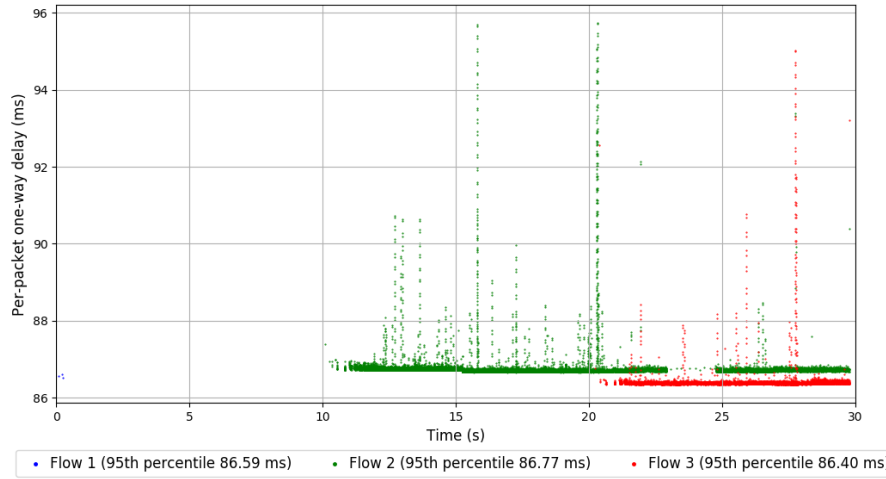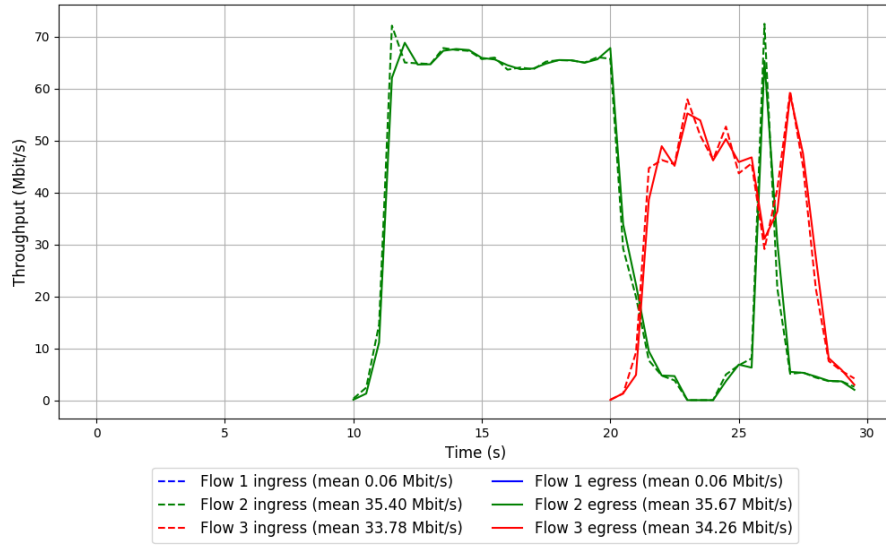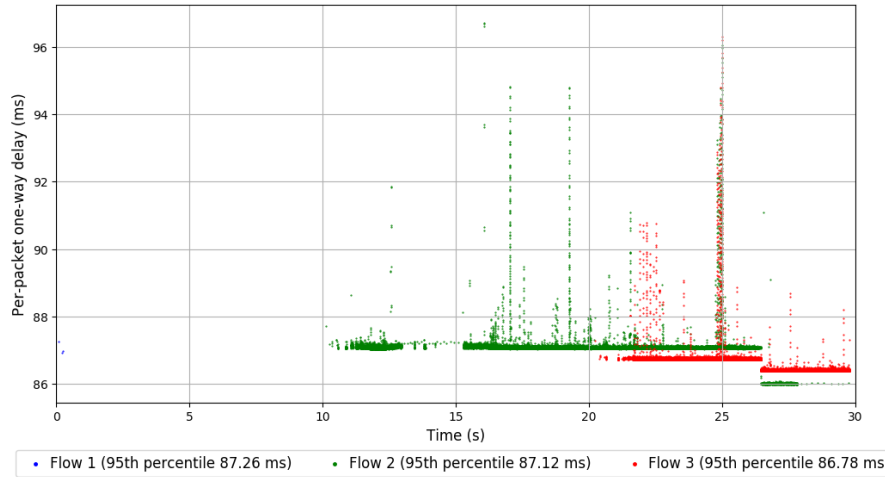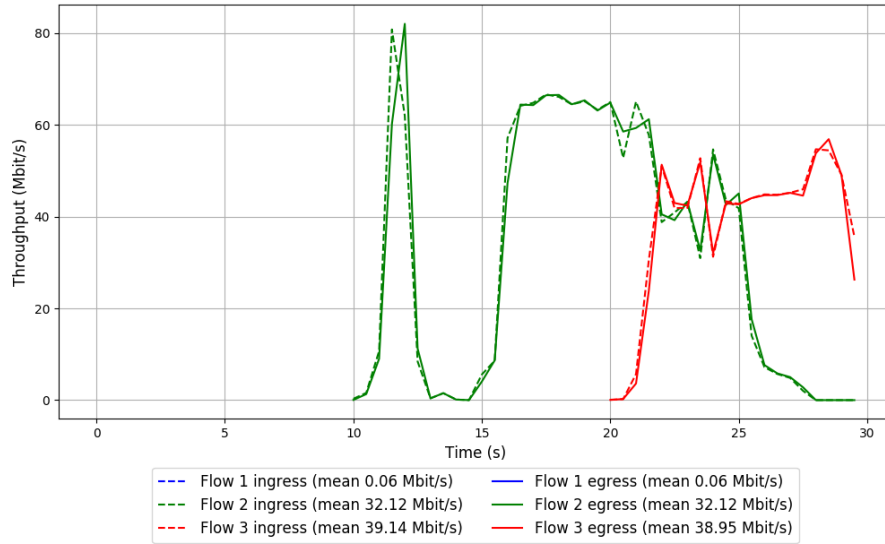
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.06 Mbit/s) --- Flow 1 egress (mean 0.06 Mbit/s)
Flow 2 ingress (mean 25.13 Mbit/s) --- Flow 2 egress (mean 25.22 Mbit/s)
Flow 3 ingress (mean 22.13 Mbit/s) --- Flow 3 egress (mean 21.98 Mbit/s)

Flow 1 (95th percentile 86.77 ms) Flow 2 (95th percentile 86.43 ms) Flow 3 (95th percentile 86.05 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 00:53:29
End at: 2017-08-21 00:53:59

# Below is generated by plot.py at 2017-08-21 04:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 86.858 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.722 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 38.41 Mbit/s
95th percentile per-packet one-way delay: 86.515 ms
Loss rate: 1.78%
```
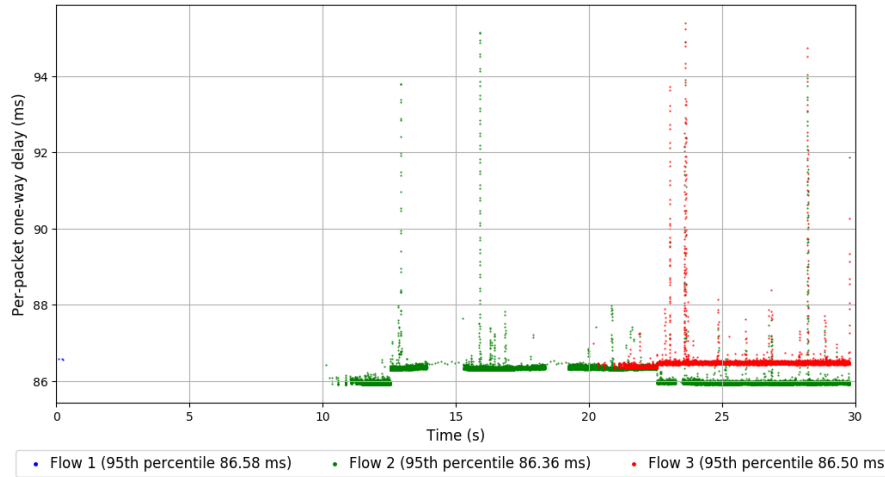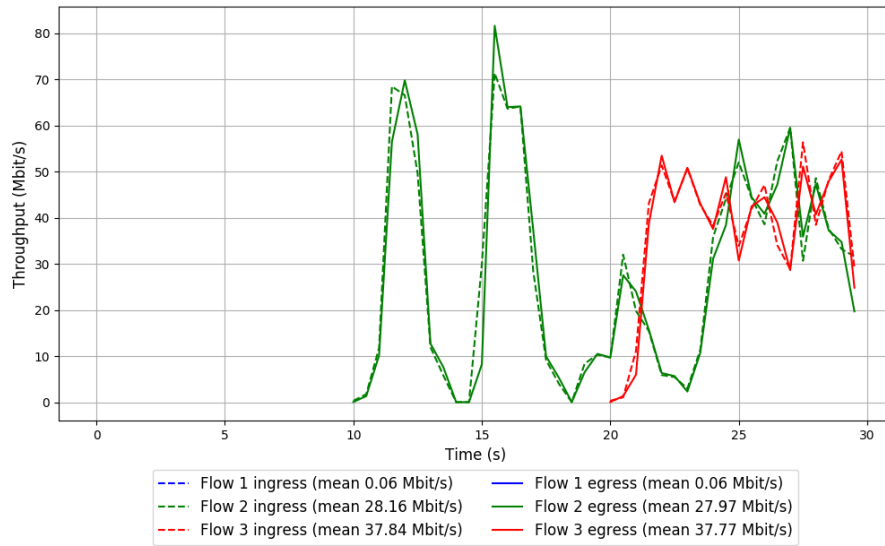
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 01:06:24
End at: 2017-08-21 01:06:54


# Below is generated by plot.py at 2017-08-21 04:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.05 Mbit/s
95th percentile per-packet one-way delay: 86.461 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.323 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 86.165 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 86.476 ms
Loss rate: 0.29%
```
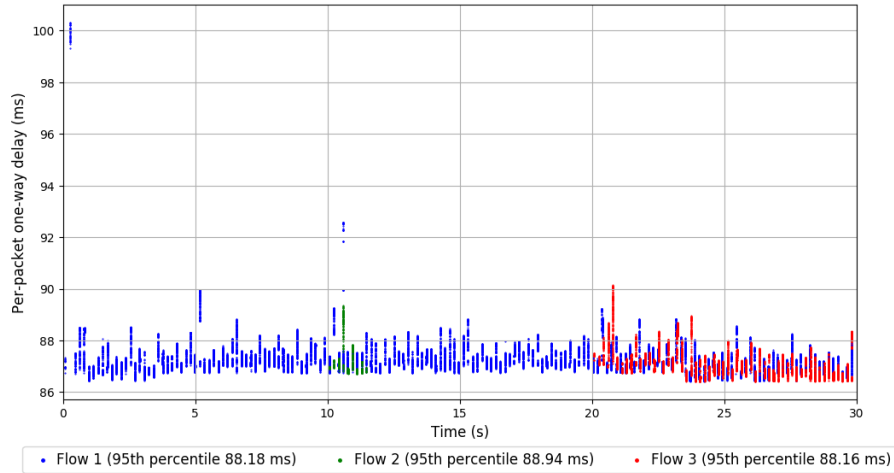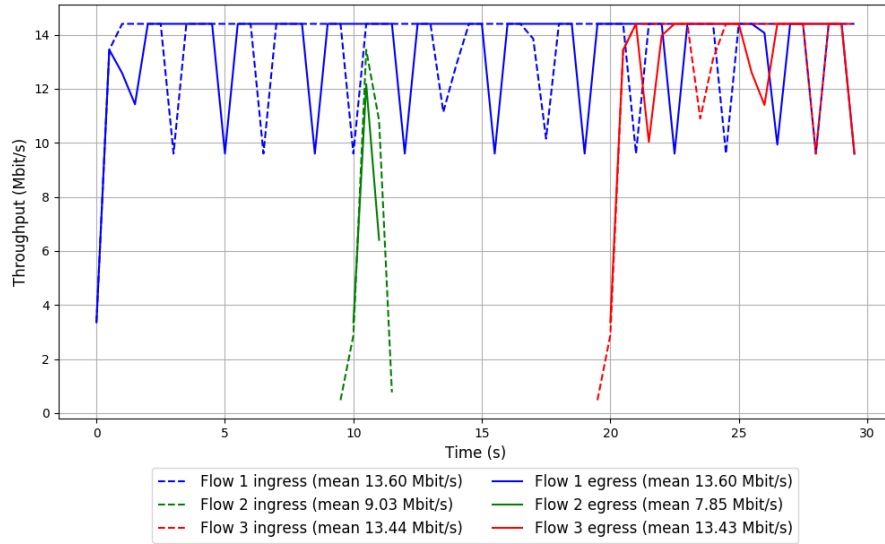
Run 7: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 0.06 Mbit/s)   —— Flow 1 egress (mean 0.06 Mbit/s)
- - - Flow 2 ingress (mean 35.05 Mbit/s)   —— Flow 2 egress (mean 35.31 Mbit/s)
- - - Flow 3 ingress (mean 38.65 Mbit/s)   —— Flow 3 egress (mean 39.24 Mbit/s)

- Flow 1 (95th percentile 87.32 ms)   • Flow 2 (95th percentile 86.17 ms)   • Flow 3 (95th percentile 86.48 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 01:19:39
End at: 2017-08-21 01:20:09

# Below is generated by plot.py at 2017-08-21 04:59:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.67 Mbit/s
95th percentile per-packet one-way delay: 86.758 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.67 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 86.403 ms
Loss rate: 0.32%
```
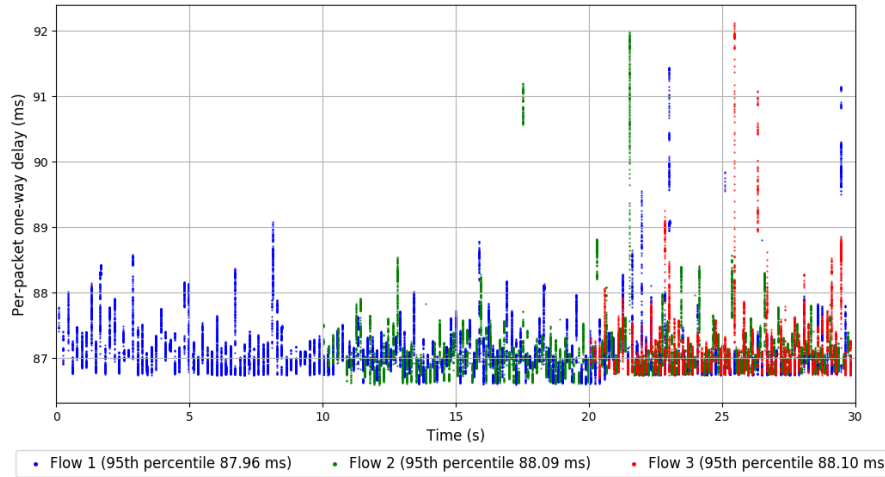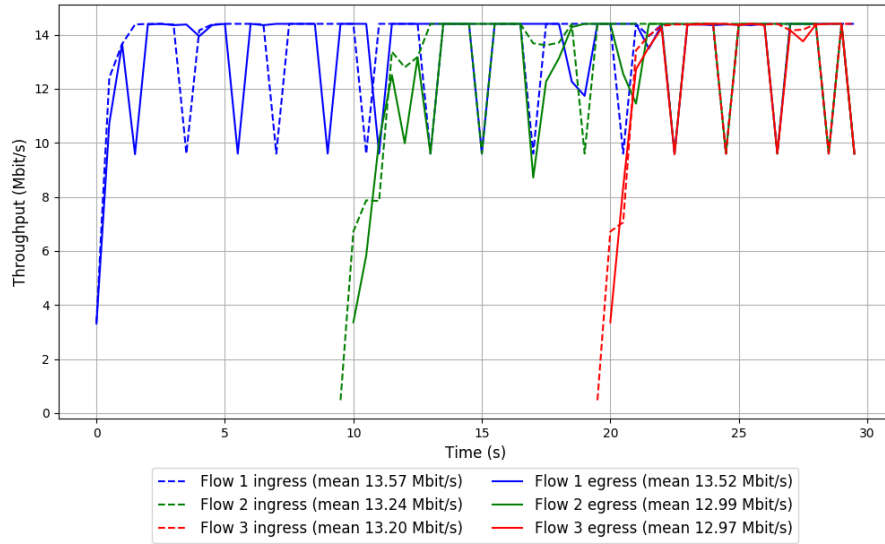
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 01:33:08
End at: 2017-08-21 01:33:38


# Below is generated by plot.py at 2017-08-21 04:59:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.74 Mbit/s
95th percentile per-packet one-way delay: 87.111 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.261 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.12 Mbit/s
95th percentile per-packet one-way delay: 87.122 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.95 Mbit/s
95th percentile per-packet one-way delay: 86.775 ms
Loss rate: 2.24%
```
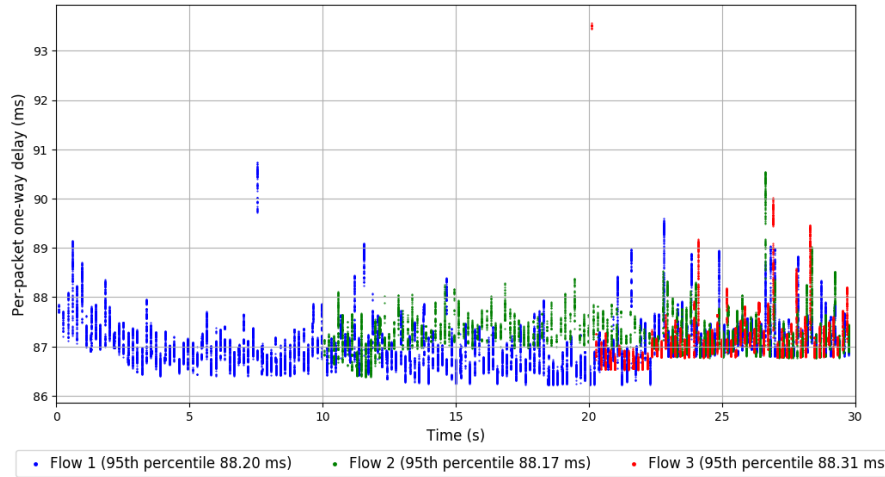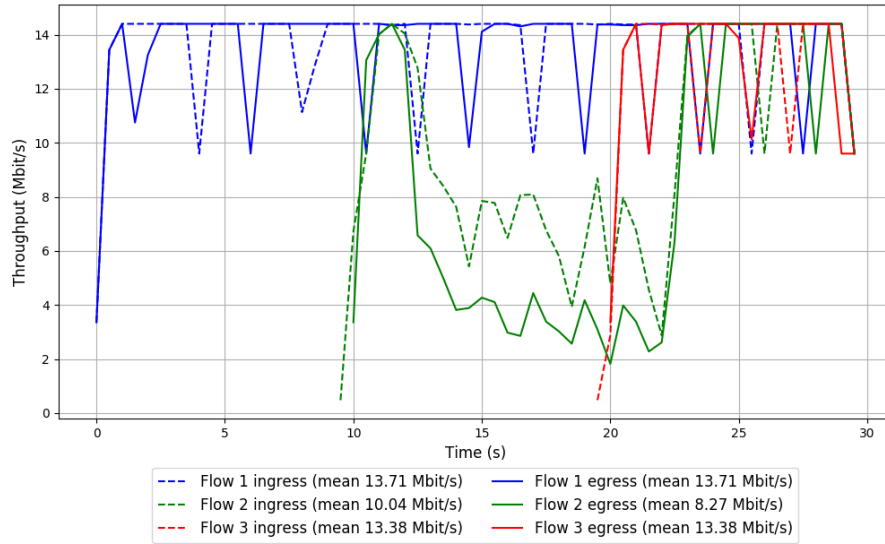
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.06 Mbit/s) --- Flow 1 egress (mean 0.06 Mbit/s)
Flow 2 ingress (mean 32.12 Mbit/s) --- Flow 2 egress (mean 32.12 Mbit/s)
Flow 3 ingress (mean 39.14 Mbit/s) --- Flow 3 egress (mean 38.95 Mbit/s)

Flow 1 (95th percentile 87.26 ms) • Flow 2 (95th percentile 87.12 ms) • Flow 3 (95th percentile 86.78 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 01:46:02
End at: 2017-08-21 01:46:32


# Below is generated by plot.py at 2017-08-21 04:59:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.72 Mbit/s
95th percentile per-packet one-way delay: 86.485 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.97 Mbit/s
95th percentile per-packet one-way delay: 86.356 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 37.77 Mbit/s
95th percentile per-packet one-way delay: 86.498 ms
Loss rate: 1.95%
```
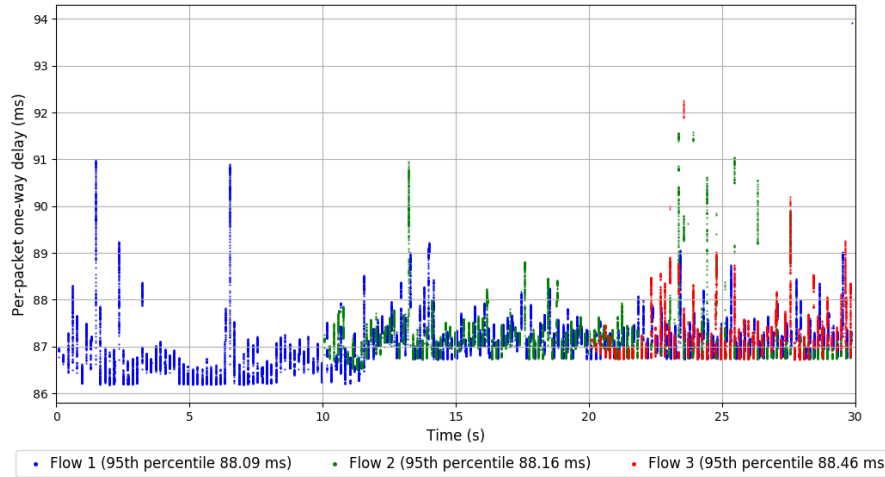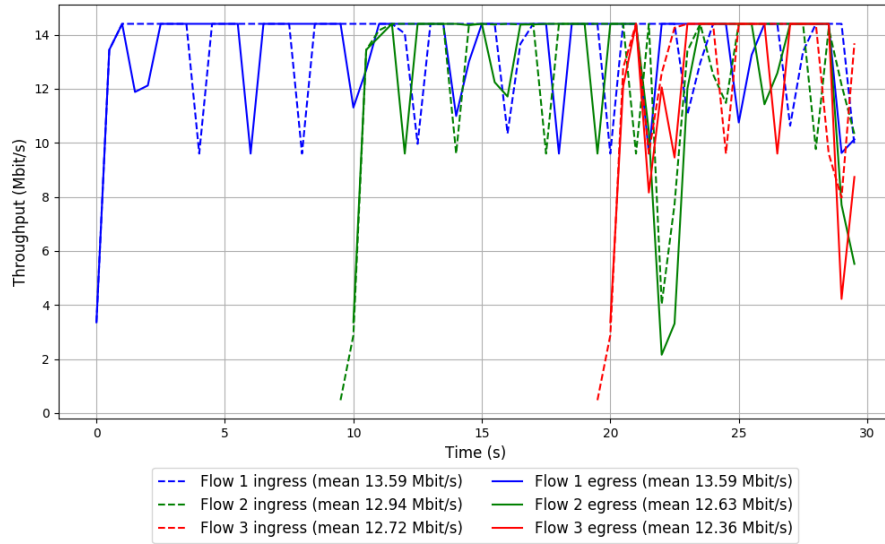
Run 10: Report of QUIC Cubic — Data Link

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```
Run 1: Statistics of Saturator

Start at: 2017-08-20 23:41:11
End at: 2017-08-20 23:41:41

# Below is generated by plot.py at 2017-08-21 04:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 88.198 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 88.179 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 88.944 ms
Loss rate: 22.74%
-- Flow 3:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 88.160 ms
Loss rate: 1.80%
```
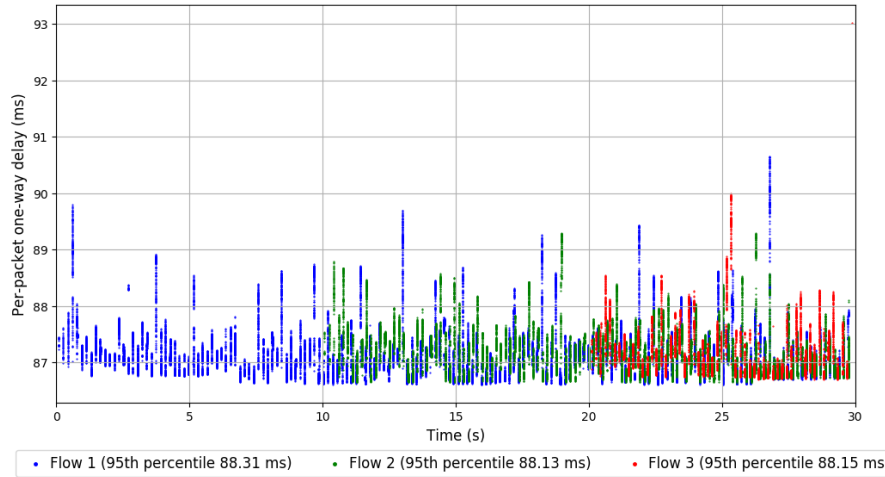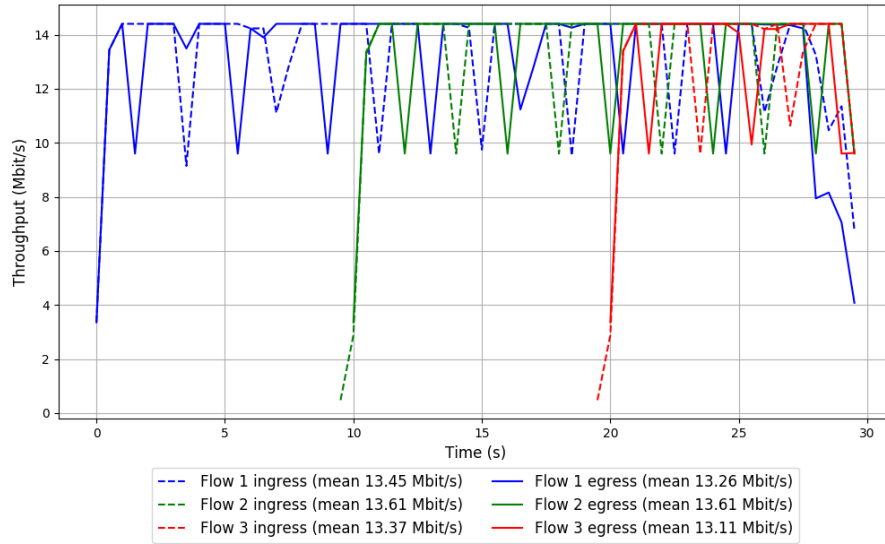
Run 1: Report of Saturator — Data Link

```
Run 2: Statistics of Saturator

Start at: 2017-08-20 23:54:24
End at: 2017-08-20 23:54:54

# Below is generated by plot.py at 2017-08-21 05:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.38 Mbit/s
95th percentile per-packet one-way delay: 88.008 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 13.52 Mbit/s
95th percentile per-packet one-way delay: 87.956 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 88.091 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 88.100 ms
Loss rate: 3.47%
```
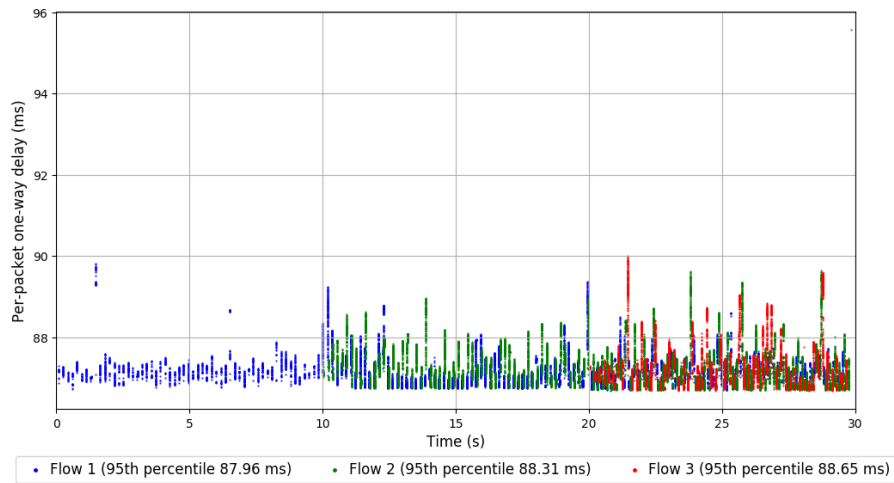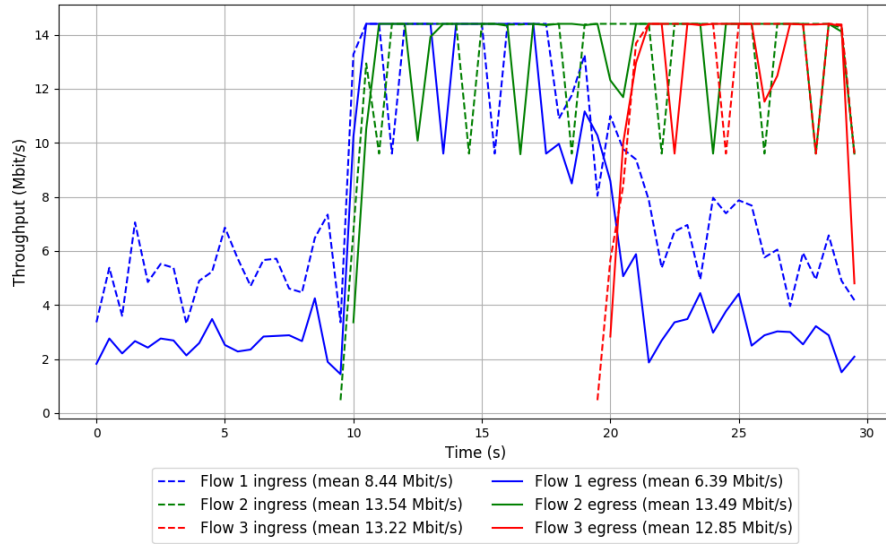
Run 2: Report of Saturator — Data Link

Flow 1 ingress (mean 13.57 Mbit/s)   Flow 1 egress (mean 13.52 Mbit/s)
Flow 2 ingress (mean 13.24 Mbit/s)   Flow 2 egress (mean 12.99 Mbit/s)
Flow 3 ingress (mean 13.20 Mbit/s)   Flow 3 egress (mean 12.97 Mbit/s)

Flow 1 (95th percentile 87.96 ms)   Flow 2 (95th percentile 88.09 ms)   Flow 3 (95th percentile 88.10 ms)

```
Run 3: Statistics of Saturator

Start at: 2017-08-21 00:07:32
End at: 2017-08-21 00:08:02

# Below is generated by plot.py at 2017-08-21 05:00:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 88.196 ms
Loss rate: 5.61%
-- Flow 1:
Average throughput: 13.71 Mbit/s
95th percentile per-packet one-way delay: 88.198 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 88.172 ms
Loss rate: 18.33%
-- Flow 3:
Average throughput: 13.38 Mbit/s
95th percentile per-packet one-way delay: 88.310 ms
Loss rate: 1.84%
```
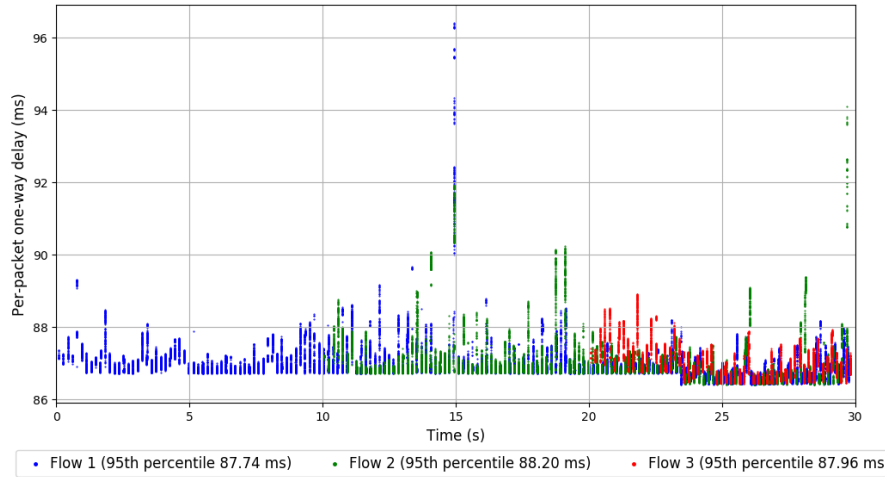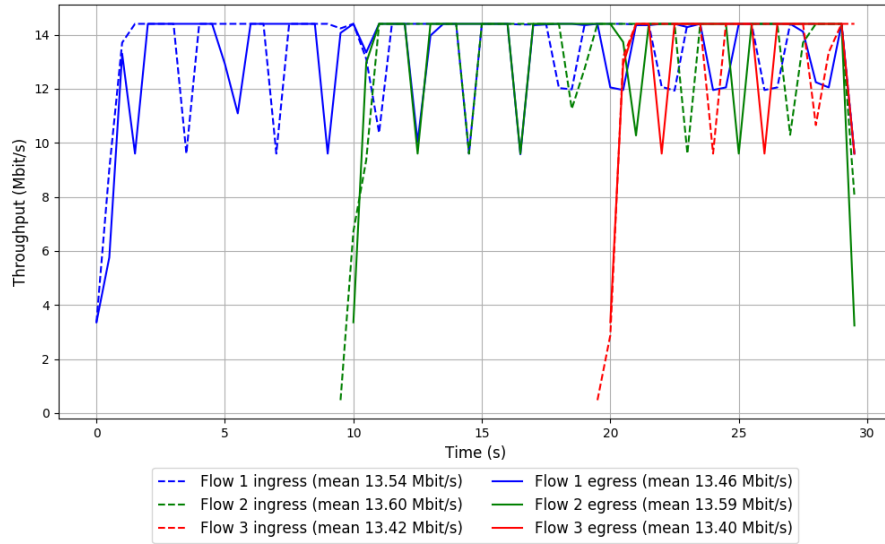
Run 3: Report of Saturator — Data Link

```
Run 4: Statistics of Saturator

Start at: 2017-08-21 00:20:43
End at: 2017-08-21 00:21:13


# Below is generated by plot.py at 2017-08-21 05:00:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.01 Mbit/s
95th percentile per-packet one-way delay: 88.217 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 88.092 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 88.164 ms
Loss rate: 3.19%
-- Flow 3:
Average throughput: 12.36 Mbit/s
95th percentile per-packet one-way delay: 88.456 ms
Loss rate: 4.50%
```
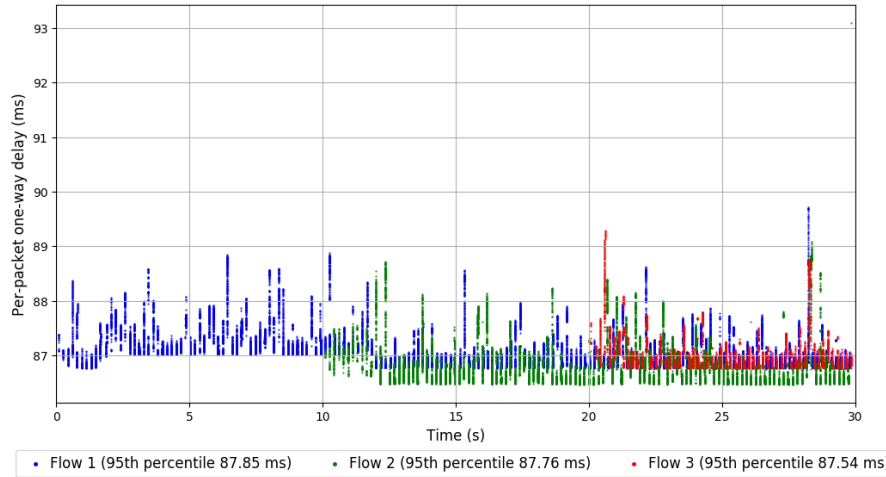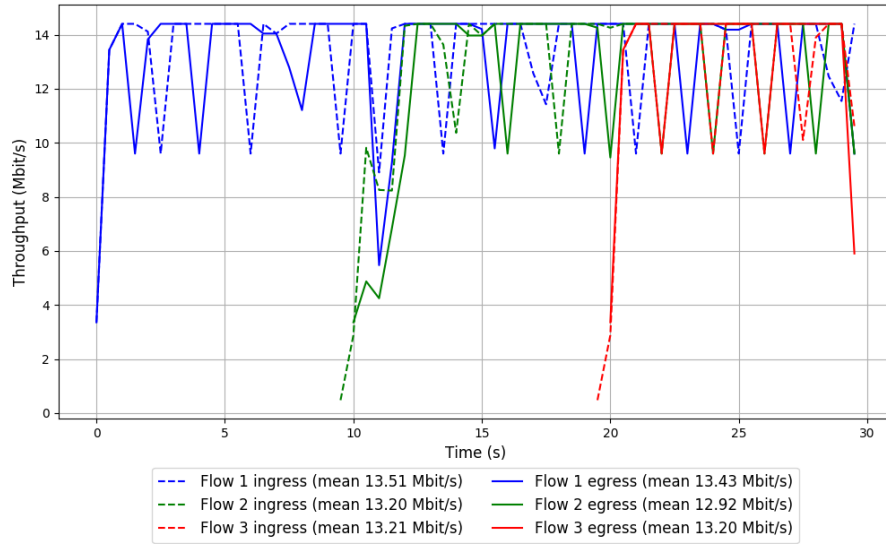
Run 4: Report of Saturator — Data Link

```
Run 5: Statistics of Saturator

Start at: 2017-08-21 00:33:58
End at: 2017-08-21 00:34:28


# Below is generated by plot.py at 2017-08-21 05:00:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.49 Mbit/s
95th percentile per-packet one-way delay: 88.211 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 88.313 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 88.126 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 13.11 Mbit/s
95th percentile per-packet one-way delay: 88.149 ms
Loss rate: 1.91%
```
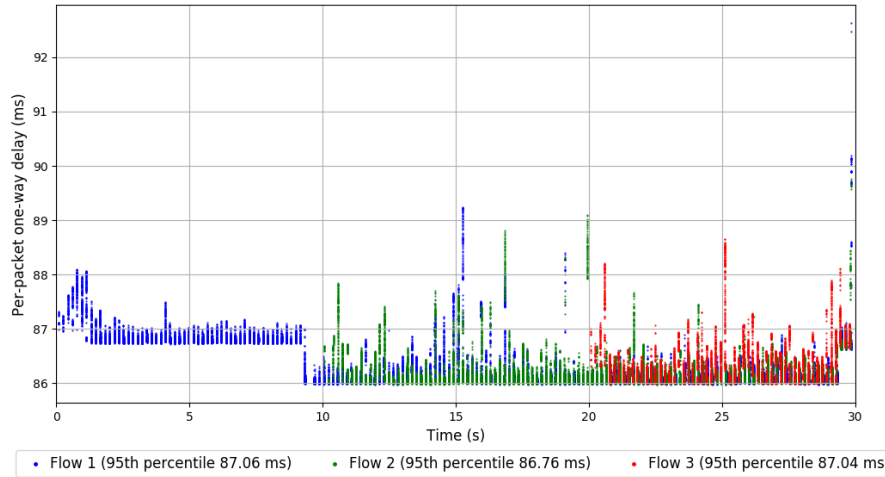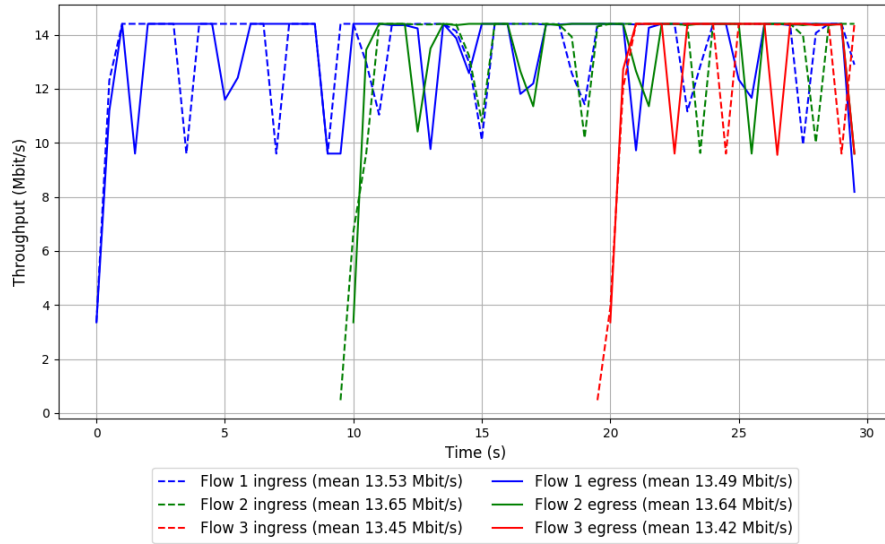
Run 5: Report of Saturator — Data Link

```
Run 6: Statistics of Saturator

Start at: 2017-08-21 00:46:44
End at: 2017-08-21 00:47:14


# Below is generated by plot.py at 2017-08-21 05:00:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 88.289 ms
Loss rate: 10.62%
-- Flow 1:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 87.963 ms
Loss rate: 24.71%
-- Flow 2:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 88.311 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 88.653 ms
Loss rate: 2.83%
```
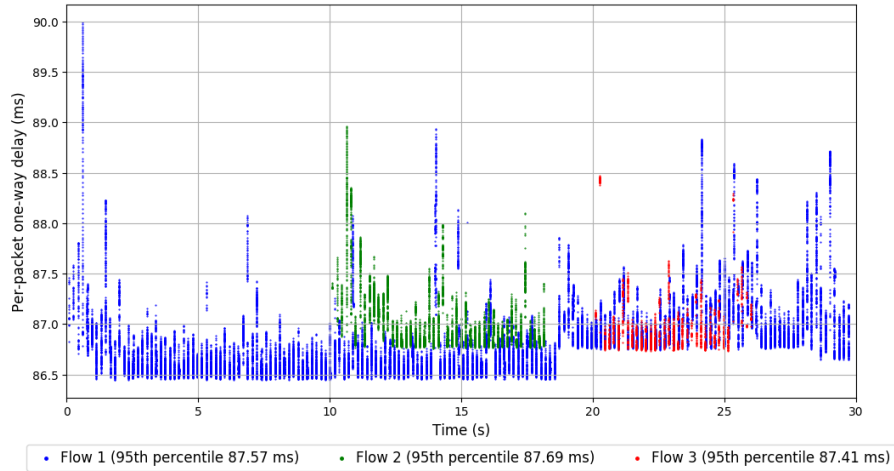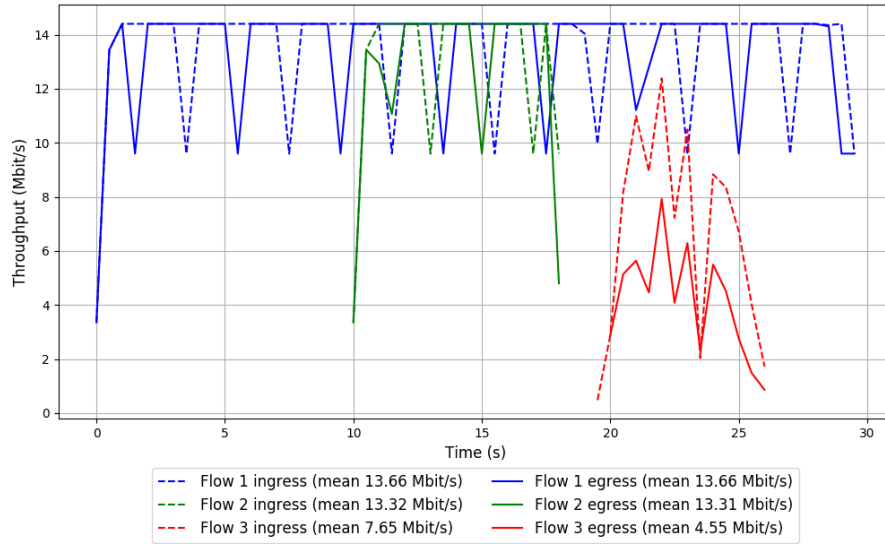
Run 6: Report of Saturator — Data Link

```
Run 7: Statistics of Saturator

Start at: 2017-08-21 00:59:31
End at: 2017-08-21 01:00:01


# Below is generated by plot.py at 2017-08-21 05:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.79 Mbit/s
95th percentile per-packet one-way delay: 87.900 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 13.46 Mbit/s
95th percentile per-packet one-way delay: 87.743 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 88.204 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 13.40 Mbit/s
95th percentile per-packet one-way delay: 87.957 ms
Loss rate: 1.90%
```
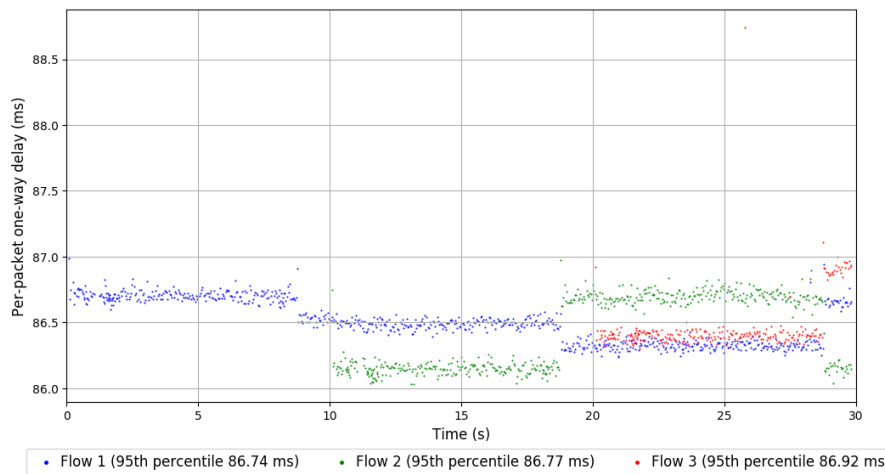
Run 7: Report of Saturator — Data Link

```
Run 8: Statistics of Saturator

Start at: 2017-08-21 01:12:32
End at: 2017-08-21 01:13:02


# Below is generated by plot.py at 2017-08-21 05:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.28 Mbit/s
95th percentile per-packet one-way delay: 87.792 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 87.851 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 87.759 ms
Loss rate: 3.00%
-- Flow 3:
Average throughput: 13.20 Mbit/s
95th percentile per-packet one-way delay: 87.542 ms
Loss rate: 1.79%
```
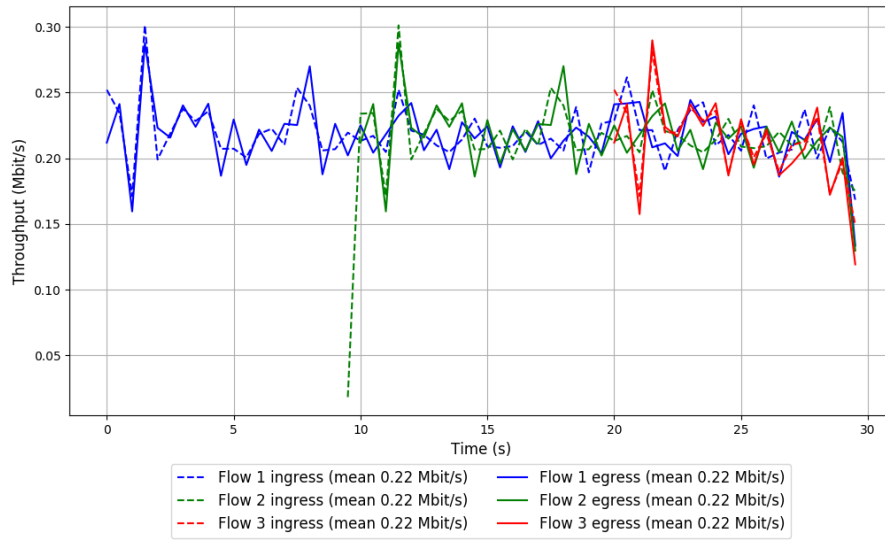
Run 8: Report of Saturator — Data Link

```
Run 9: Statistics of Saturator

Start at: 2017-08-21 01:25:55
End at: 2017-08-21 01:26:25


# Below is generated by plot.py at 2017-08-21 05:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.94 Mbit/s
95th percentile per-packet one-way delay: 86.997 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 87.060 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 13.64 Mbit/s
95th percentile per-packet one-way delay: 86.756 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 87.043 ms
Loss rate: 1.97%
```
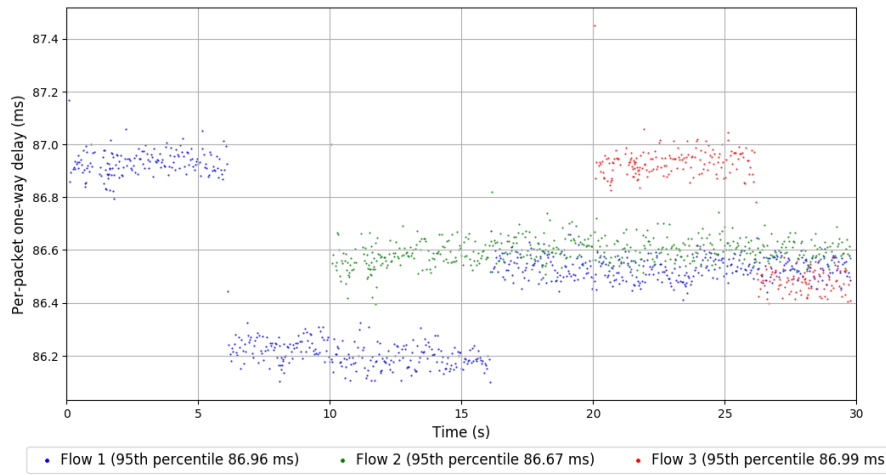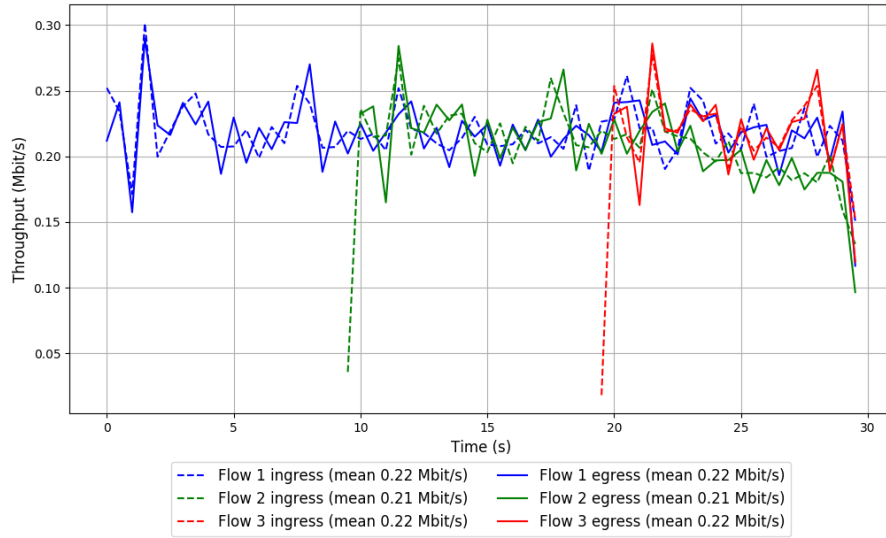
Run 9: Report of Saturator — Data Link

```
Run 10: Statistics of Saturator

Start at: 2017-08-21 01:39:06
End at: 2017-08-21 01:39:36

# Below is generated by plot.py at 2017-08-21 05:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.17 Mbit/s
95th percentile per-packet one-way delay: 87.585 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 87.574 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 87.687 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 87.412 ms
Loss rate: 42.28%
```
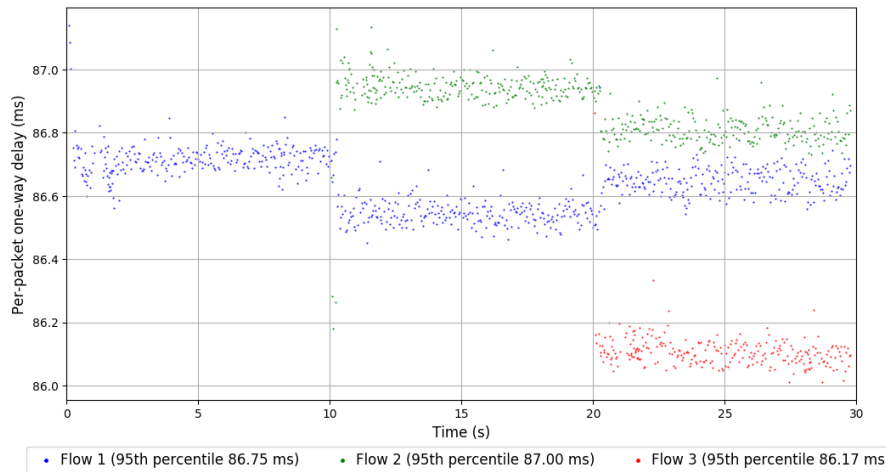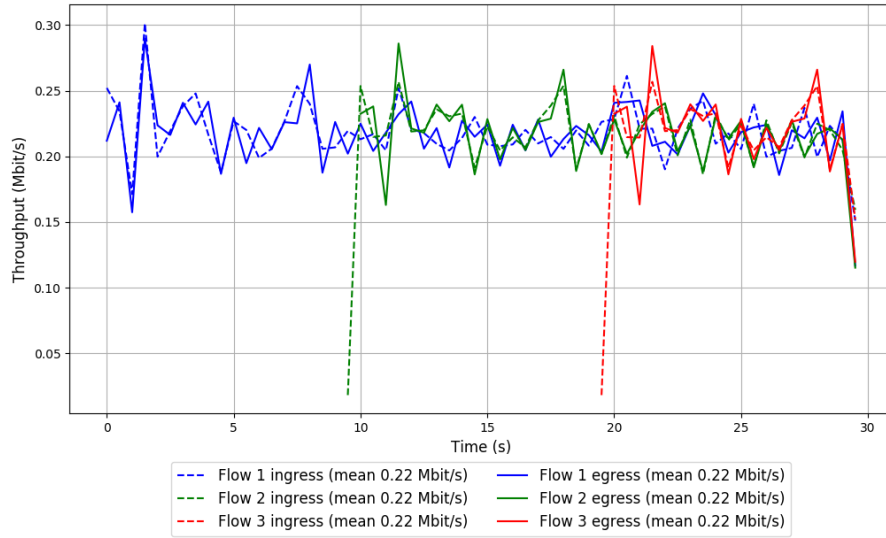
Run 10: Report of Saturator — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2017-08-20 23:46:46
End at: 2017-08-20 23:47:16

# Below is generated by plot.py at 2017-08-21 05:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.744 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.916 ms
Loss rate: 1.80%
```
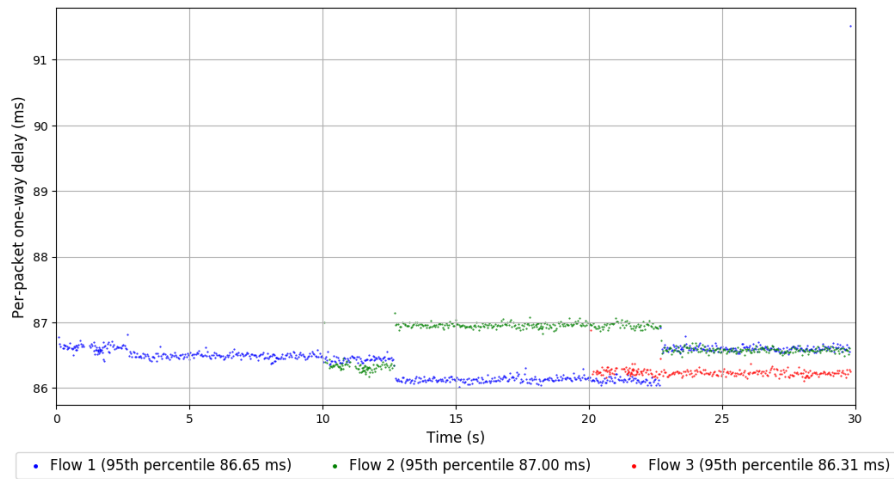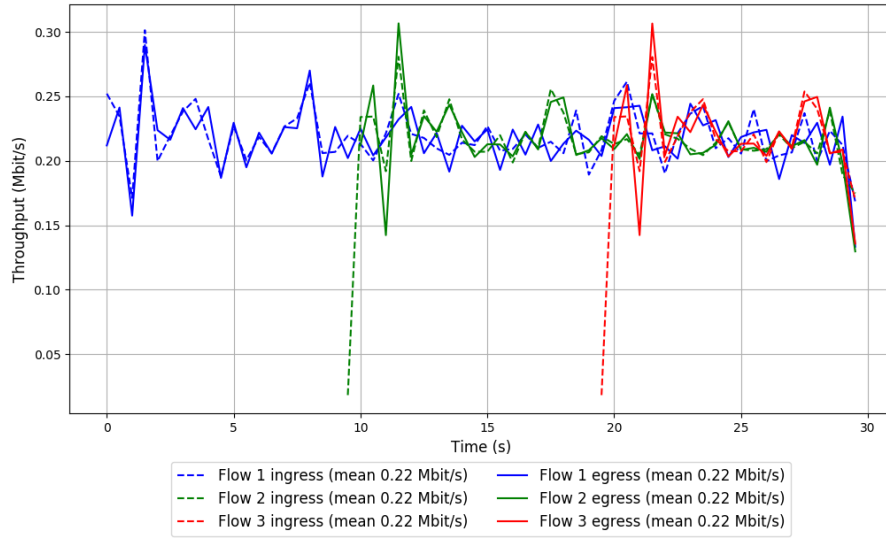
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-08-20 23:59:48
End at: 2017-08-21 00:00:18

# Below is generated by plot.py at 2017-08-21 05:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 86.961 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.961 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 86.669 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.991 ms
Loss rate: 1.50%
```
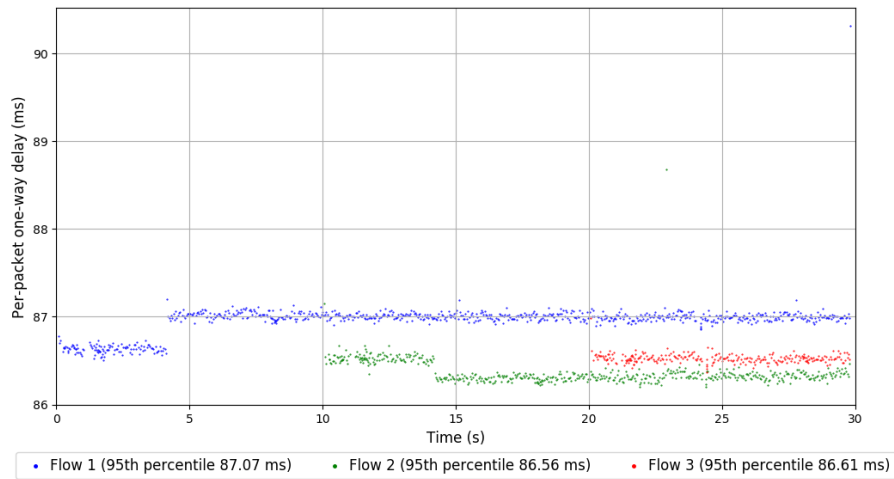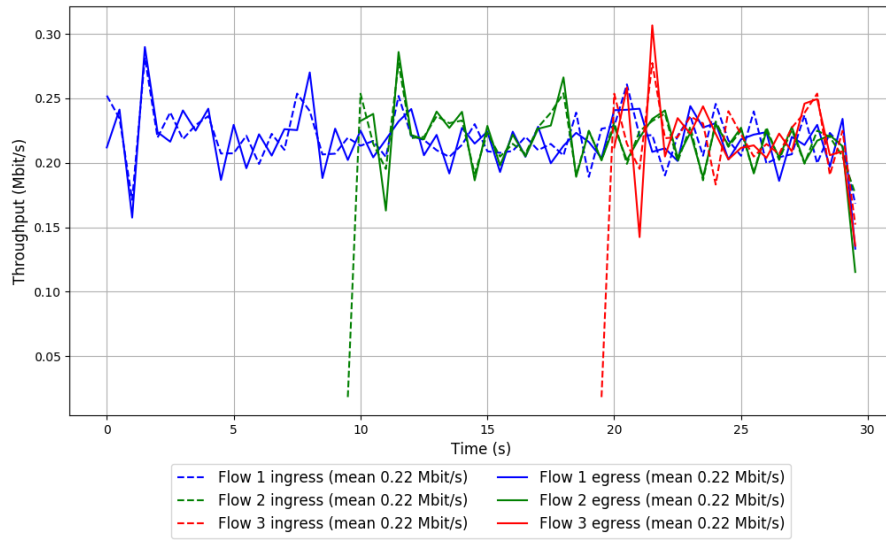
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-08-21 00:13:04
End at: 2017-08-21 00:13:34


# Below is generated by plot.py at 2017-08-21 05:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.965 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.996 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.171 ms
Loss rate: 1.50%
```
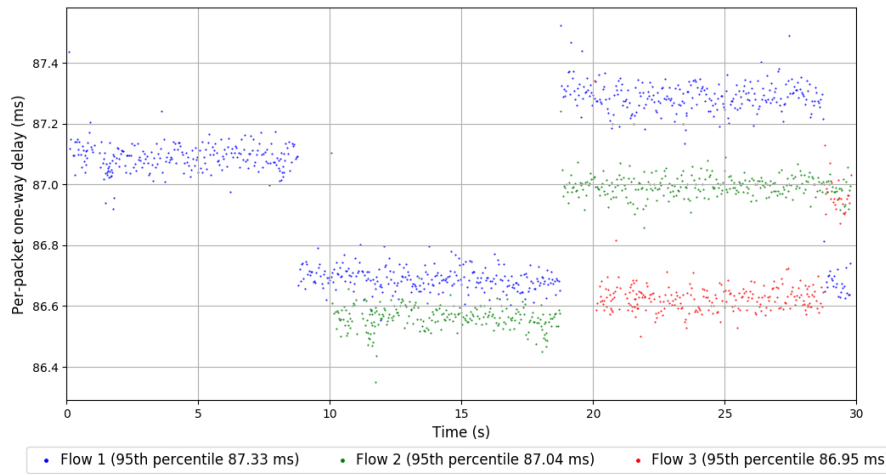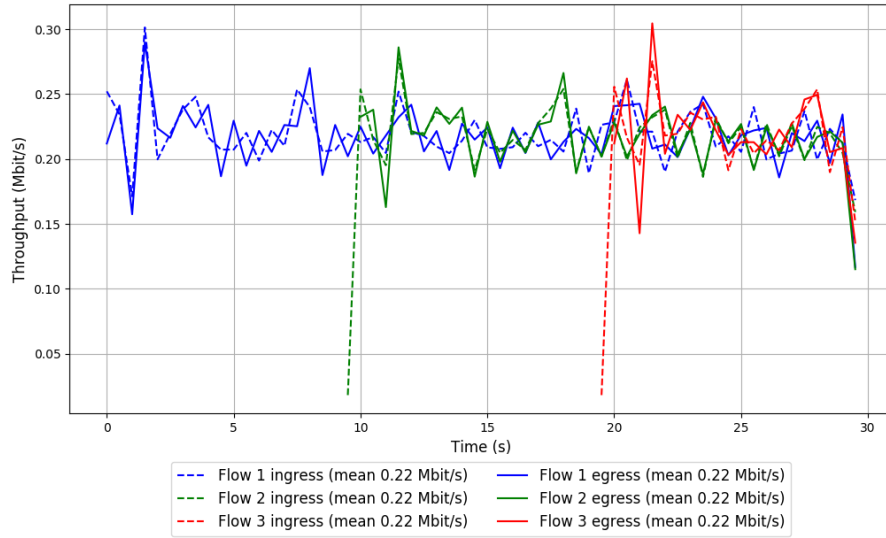
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-08-21 00:26:12
End at: 2017-08-21 00:26:42


# Below is generated by plot.py at 2017-08-21 05:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.976 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.652 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.999 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.313 ms
Loss rate: 1.50%
```
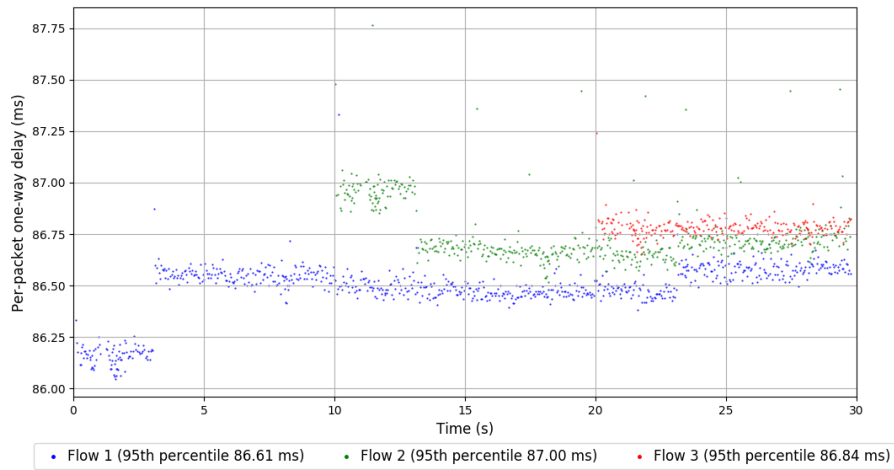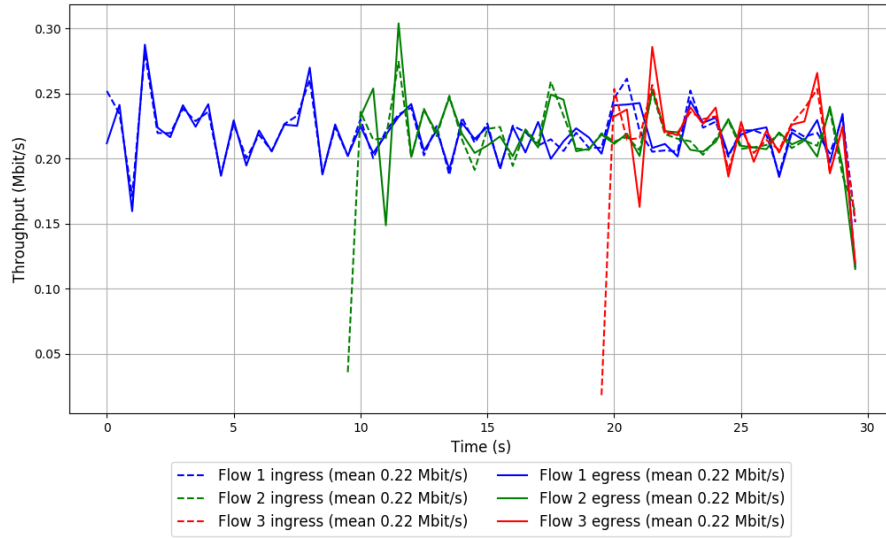
Run 4: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s)   Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s)   Flow 3 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 86.65 ms)   Flow 2 (95th percentile 87.00 ms)   Flow 3 (95th percentile 86.31 ms)

```
Run 5: Statistics of SCReAM

Start at: 2017-08-21 00:39:10
End at: 2017-08-21 00:39:40

# Below is generated by plot.py at 2017-08-21 05:00:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.056 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.070 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.605 ms
Loss rate: 1.50%
```
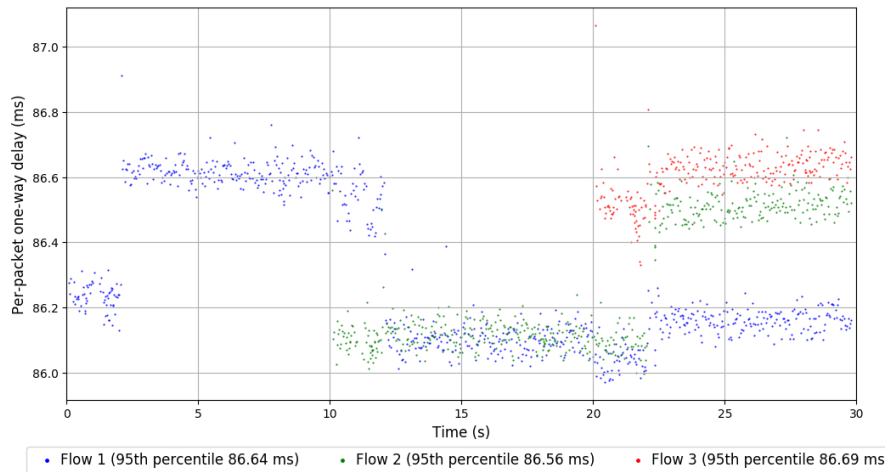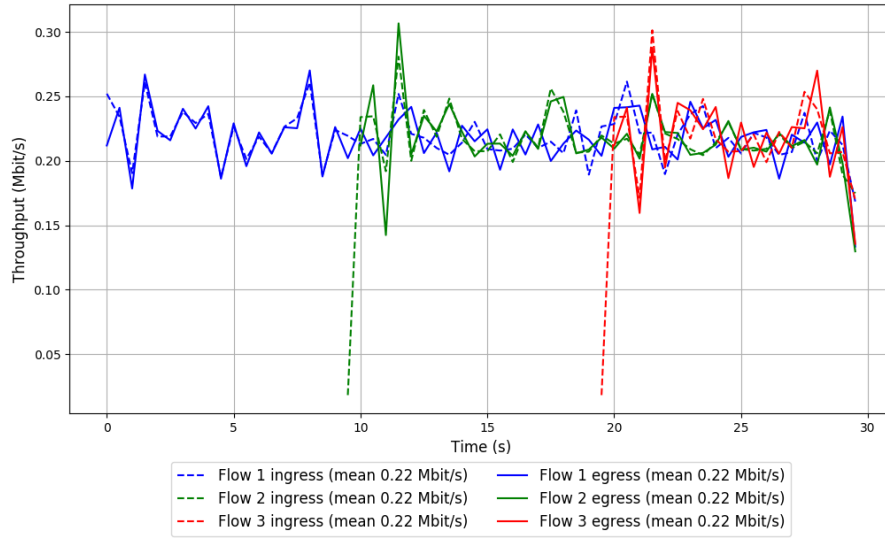
Run 5: Report of SCReAM — Data Link

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```
Run 6: Statistics of SCReAM

Start at: 2017-08-21 00:51:46
End at: 2017-08-21 00:52:16


# Below is generated by plot.py at 2017-08-21 05:00:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.311 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.953 ms
Loss rate: 1.50%
```
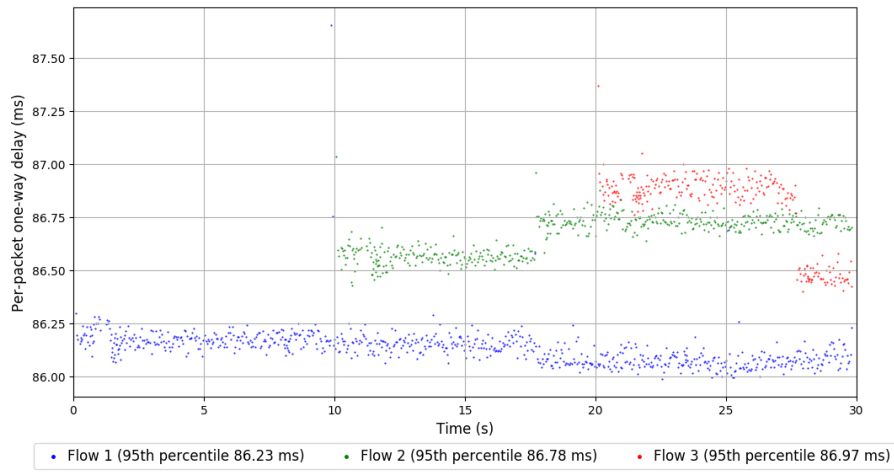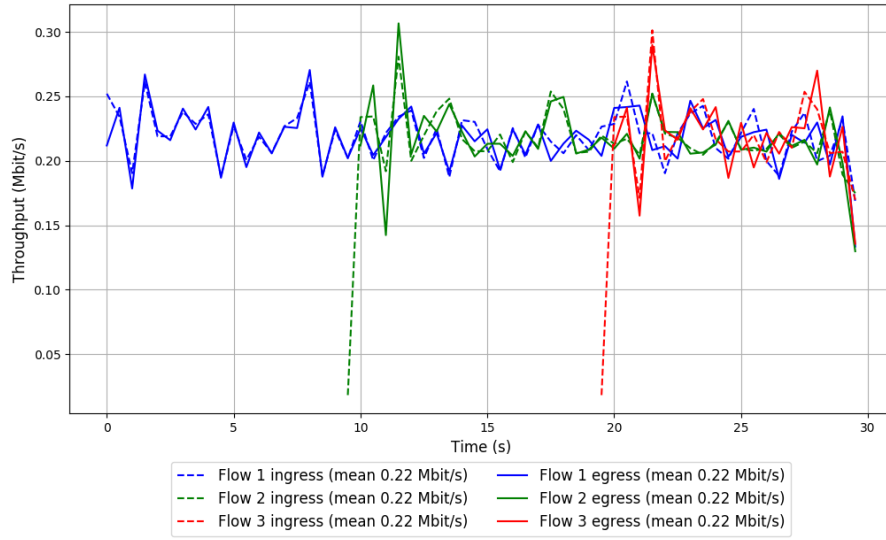
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-08-21 01:04:41
End at: 2017-08-21 01:05:11

# Below is generated by plot.py at 2017-08-21 05:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.933 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.608 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.004 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.836 ms
Loss rate: 1.50%
```
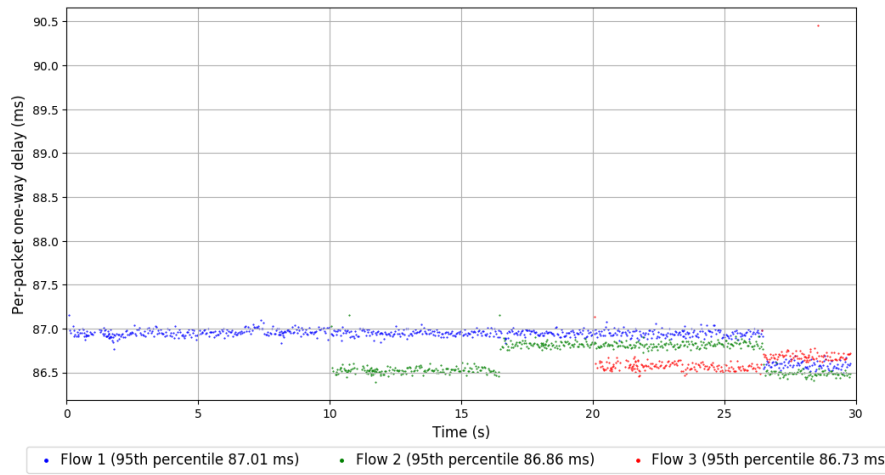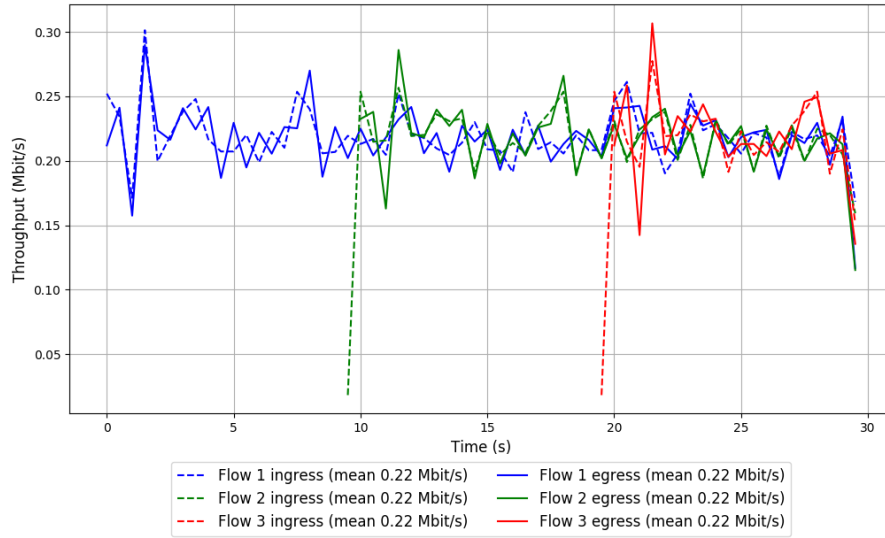
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-08-21 01:17:42
End at: 2017-08-21 01:18:12


# Below is generated by plot.py at 2017-08-21 05:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.660 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.644 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.559 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.691 ms
Loss rate: 1.50%
```
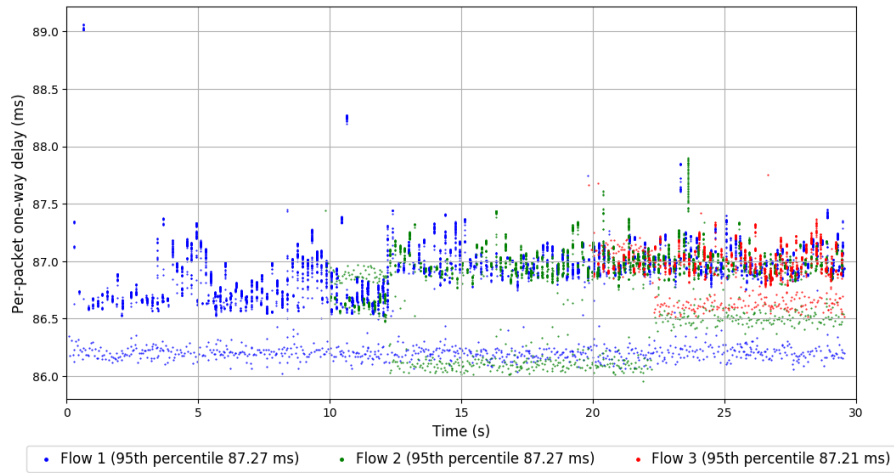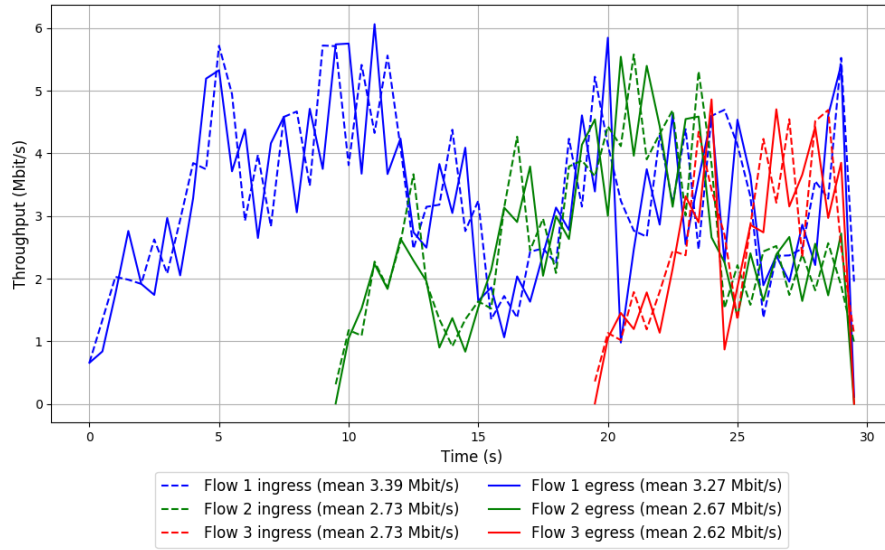
Run 8: Report of SCReAM — Data Link

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```
Run 9: Statistics of SCReAM

Start at: 2017-08-21 01:31:17
End at: 2017-08-21 01:31:47


# Below is generated by plot.py at 2017-08-21 05:00:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.915 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.226 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.781 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.966 ms
Loss rate: 1.50%
```
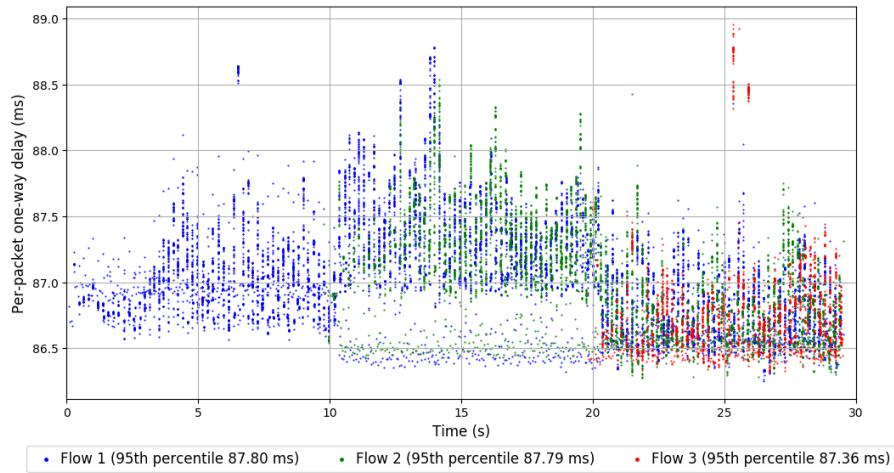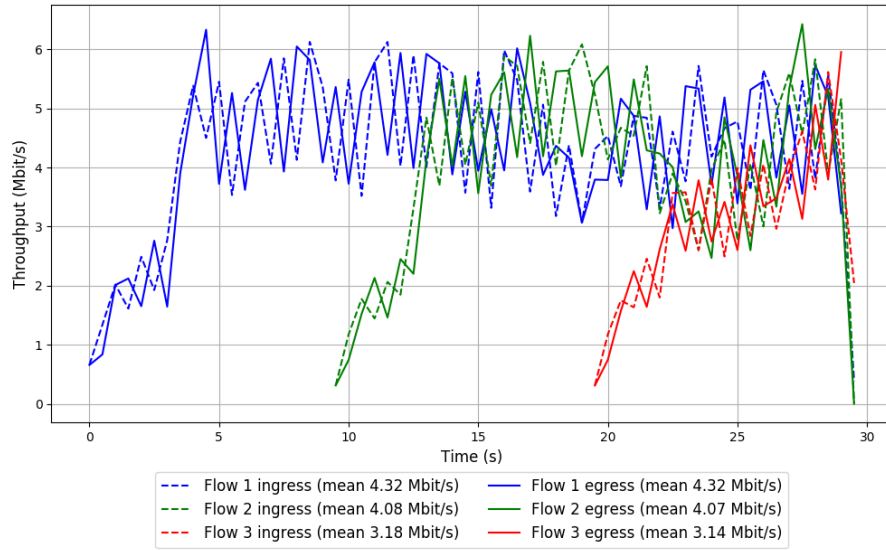
Run 9: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) --- Flow 1 egress (mean 0.22 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s) --- Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s) --- Flow 3 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 86.23 ms)   Flow 2 (95th percentile 86.78 ms)   Flow 3 (95th percentile 86.97 ms)

```
Run 10: Statistics of SCReAM

Start at: 2017-08-21 01:44:18
End at: 2017-08-21 01:44:48

# Below is generated by plot.py at 2017-08-21 05:00:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.997 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.010 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.858 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.726 ms
Loss rate: 1.50%
```
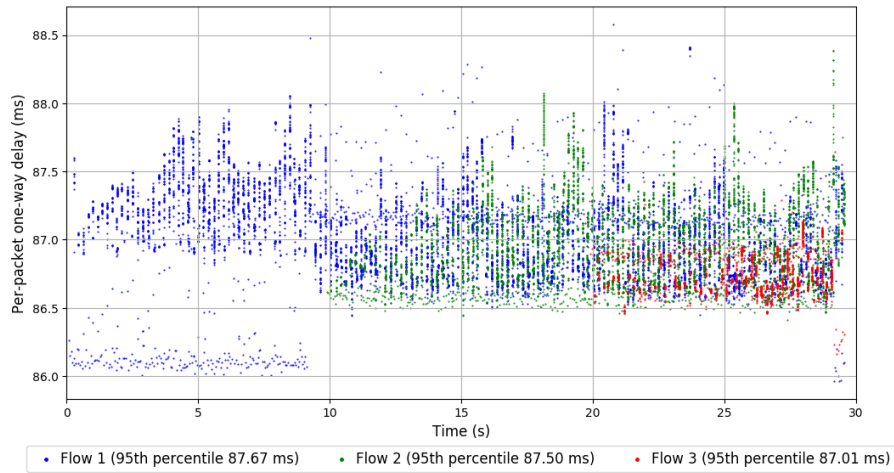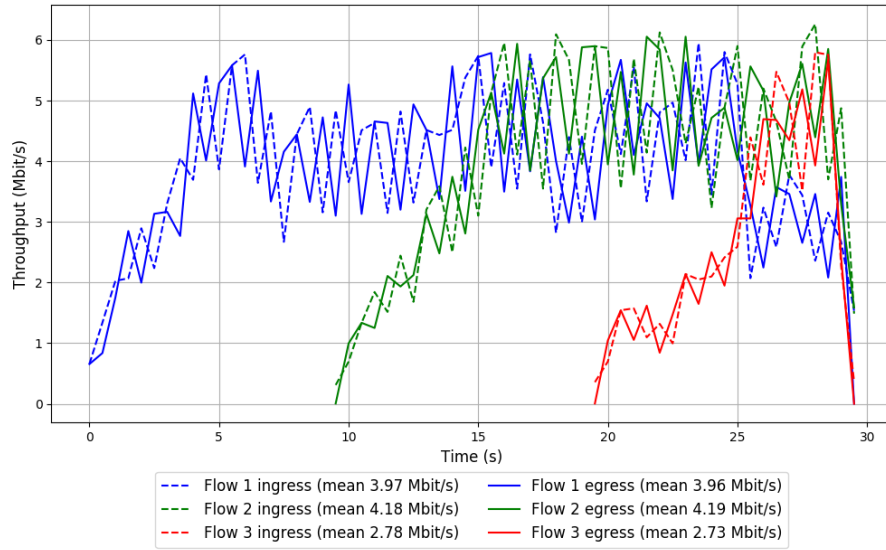
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-08-20 23:50:02
End at: 2017-08-20 23:50:32

# Below is generated by plot.py at 2017-08-21 05:00:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 87.251 ms
Loss rate: 4.15%
-- Flow 1:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 87.267 ms
Loss rate: 4.29%
-- Flow 2:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 87.267 ms
Loss rate: 3.24%
-- Flow 3:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 87.213 ms
Loss rate: 5.49%
```
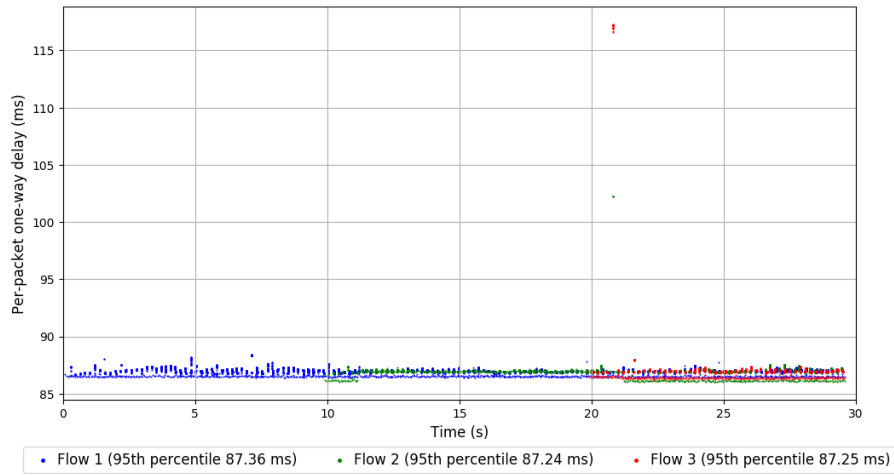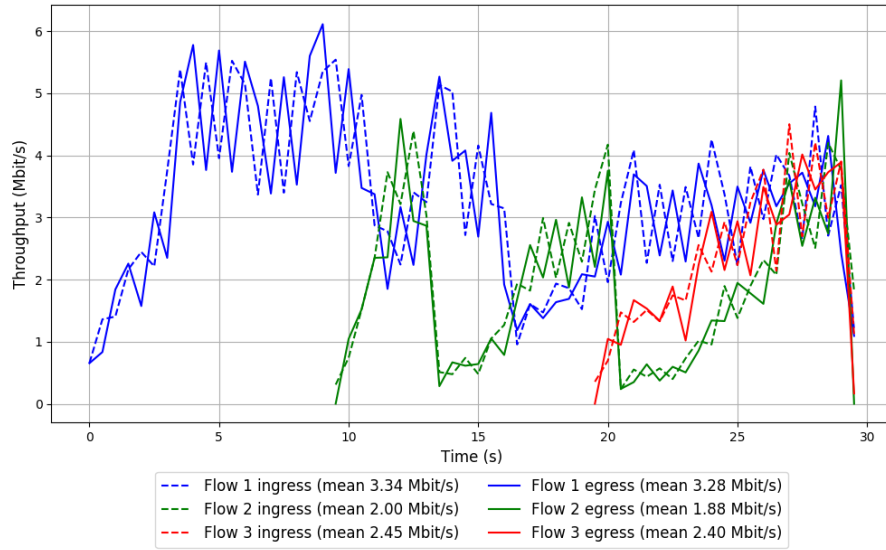
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-08-21 00:03:04
End at: 2017-08-21 00:03:34


# Below is generated by plot.py at 2017-08-21 05:00:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 87.787 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 87.801 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 87.787 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 3.14 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 3.32%
```
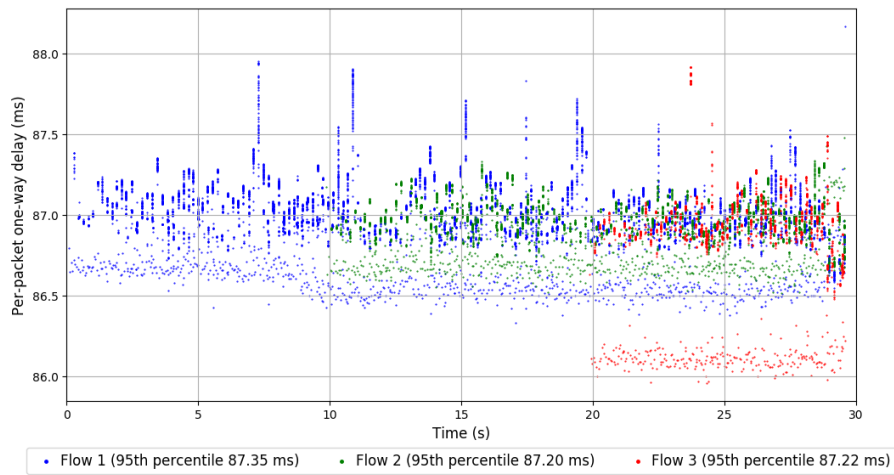
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-08-21 00:16:25
End at: 2017-08-21 00:16:55


# Below is generated by plot.py at 2017-08-21 05:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 87.581 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 87.673 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 87.497 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 87.007 ms
Loss rate: 3.94%
```
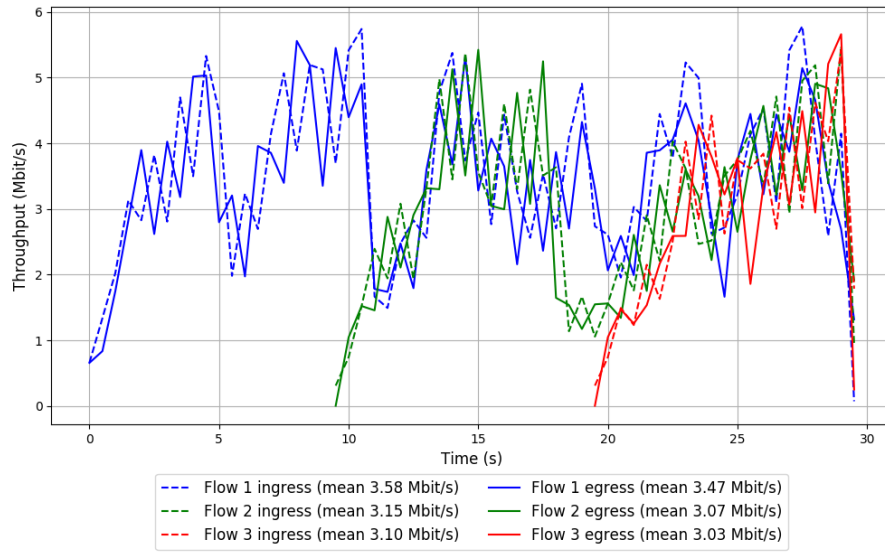
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-08-21 00:29:33
End at: 2017-08-21 00:30:03

# Below is generated by plot.py at 2017-08-21 05:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 87.334 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 3.28 Mbit/s
95th percentile per-packet one-way delay: 87.364 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 87.241 ms
Loss rate: 6.85%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 87.249 ms
Loss rate: 3.91%
```
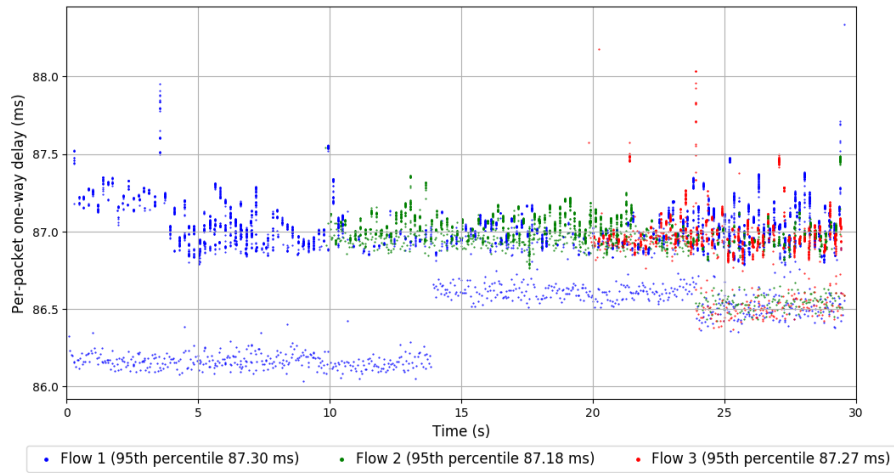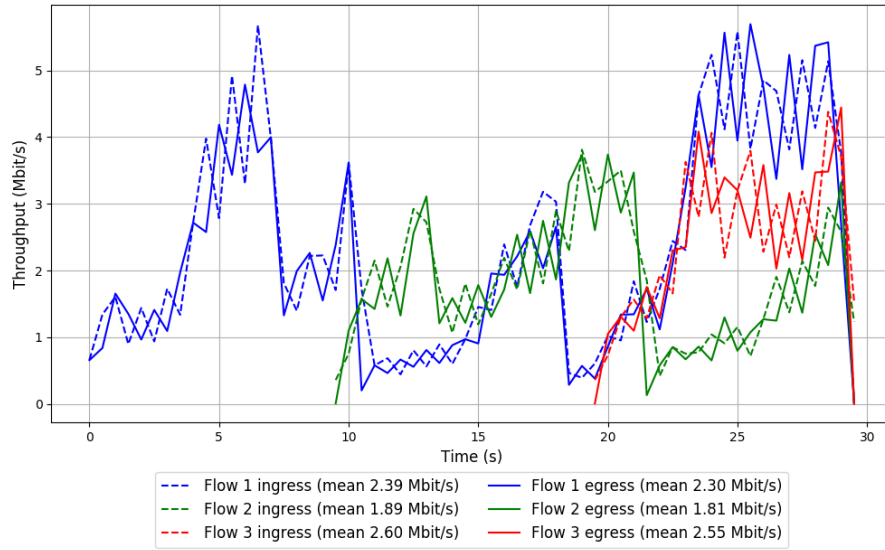
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-08-21 00:42:25
End at: 2017-08-21 00:42:55

# Below is generated by plot.py at 2017-08-21 05:00:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 87.282 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 87.353 ms
Loss rate: 3.54%
-- Flow 2:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 87.198 ms
Loss rate: 3.46%
-- Flow 3:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 4.19%
```
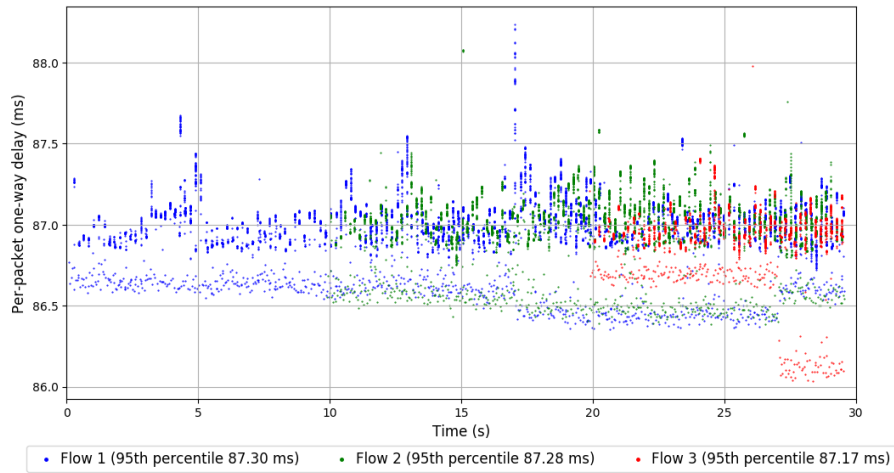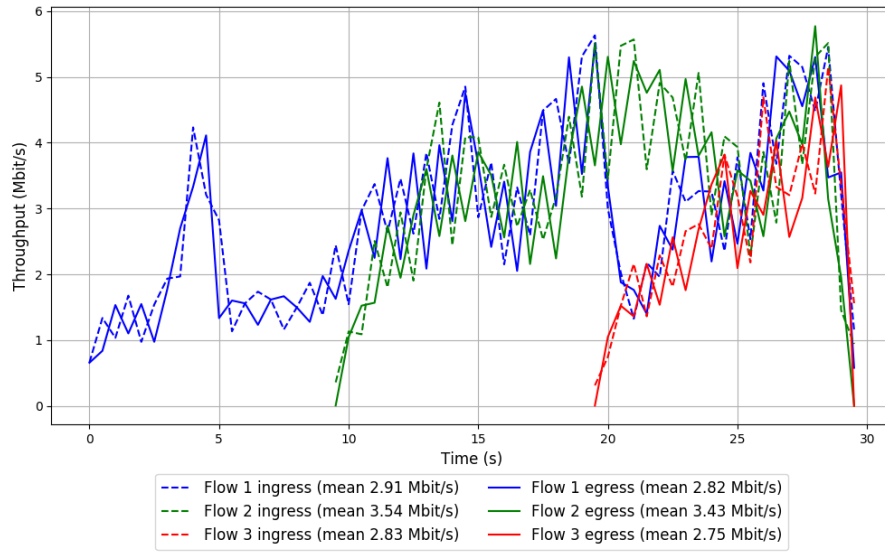
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-08-21 00:55:00
End at: 2017-08-21 00:55:30


# Below is generated by plot.py at 2017-08-21 05:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 87.278 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 87.304 ms
Loss rate: 4.28%
-- Flow 2:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 87.182 ms
Loss rate: 4.84%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 87.266 ms
Loss rate: 3.36%
```
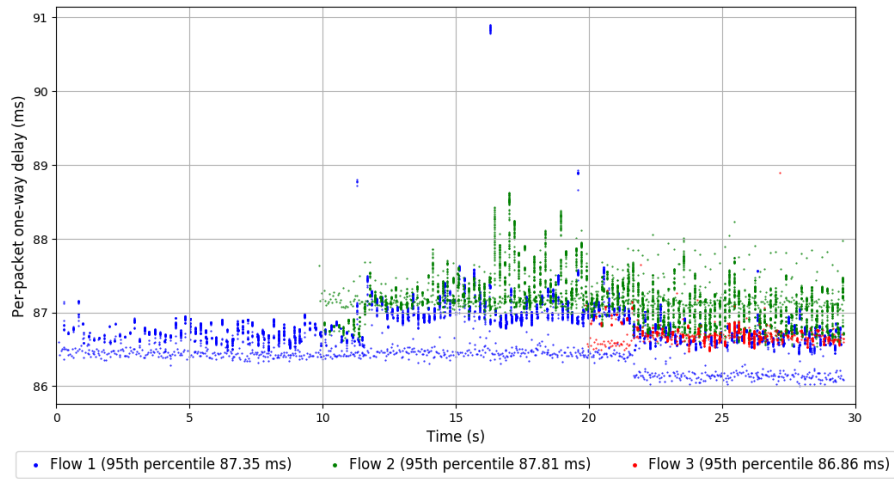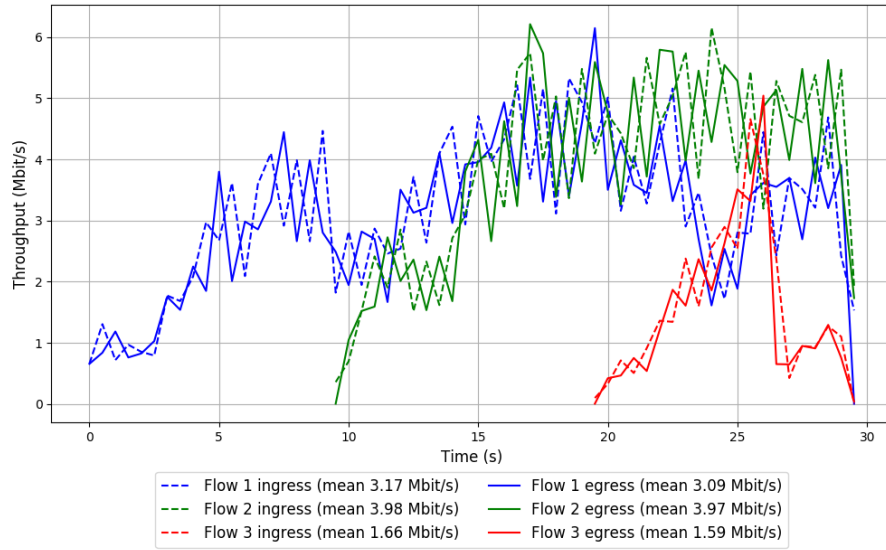
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-08-21 01:07:57
End at: 2017-08-21 01:08:27


# Below is generated by plot.py at 2017-08-21 05:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.02 Mbit/s
95th percentile per-packet one-way delay: 87.287 ms
Loss rate: 3.75%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 87.300 ms
Loss rate: 3.45%
-- Flow 2:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 87.284 ms
Loss rate: 3.73%
-- Flow 3:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 87.165 ms
Loss rate: 4.76%
```
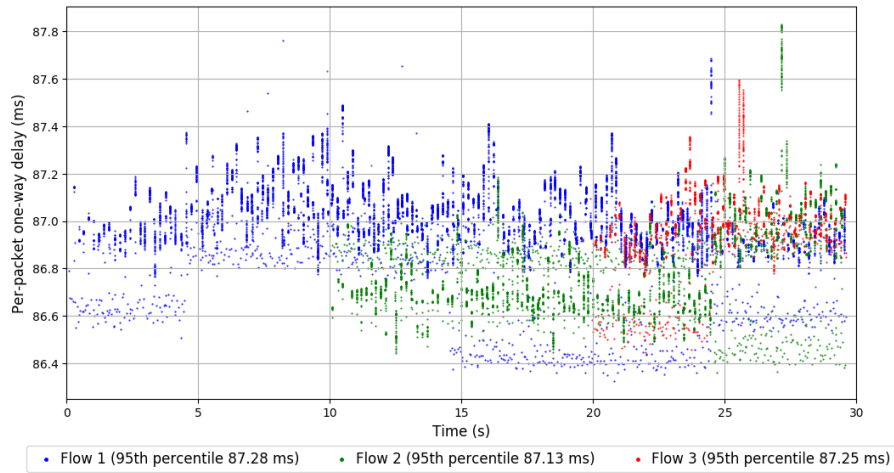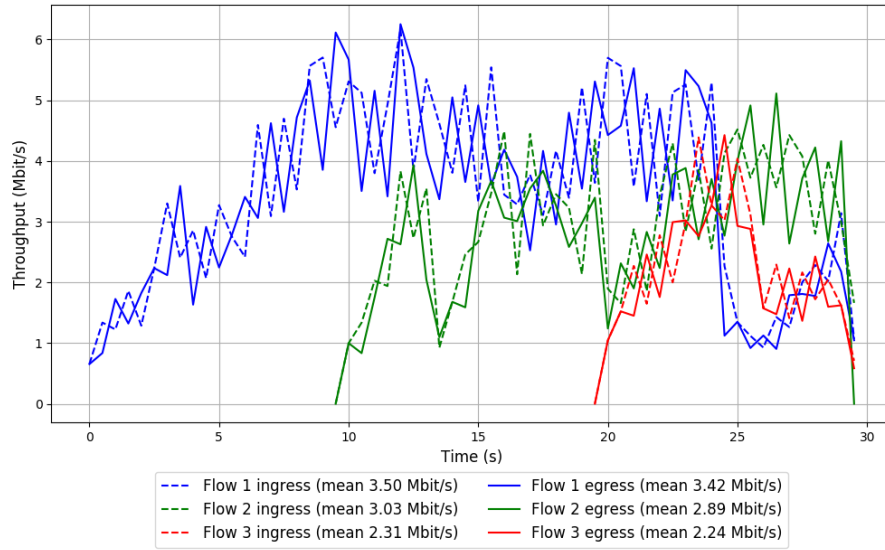
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-08-21 01:21:12
End at: 2017-08-21 01:21:42


# Below is generated by plot.py at 2017-08-21 05:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 87.583 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 87.353 ms
Loss rate: 3.19%
-- Flow 2:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 87.809 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 86.865 ms
Loss rate: 5.67%
```
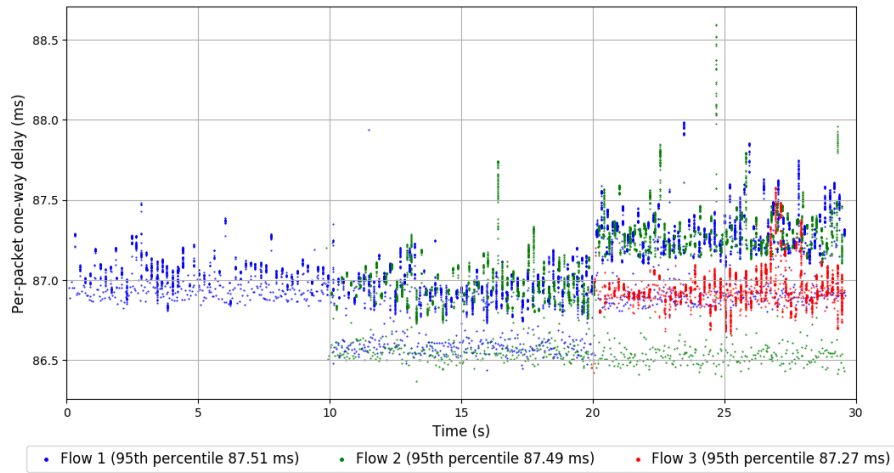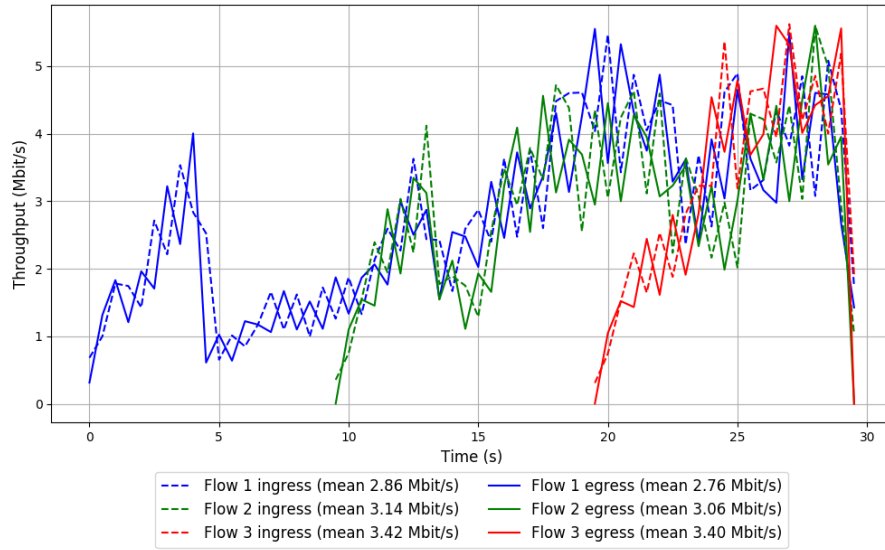
Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 3.17 Mbit/s)   Flow 1 egress (mean 3.09 Mbit/s)
Flow 2 ingress (mean 3.98 Mbit/s)   Flow 2 egress (mean 3.97 Mbit/s)
Flow 3 ingress (mean 1.66 Mbit/s)   Flow 3 egress (mean 1.59 Mbit/s)

Flow 1 (95th percentile 87.35 ms)   Flow 2 (95th percentile 87.81 ms)   Flow 3 (95th percentile 86.86 ms)

```
Run 9: Statistics of Sprout

Start at: 2017-08-21 01:34:40
End at: 2017-08-21 01:35:10


# Below is generated by plot.py at 2017-08-21 05:00:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 87.253 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 87.280 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 87.131 ms
Loss rate: 5.41%
-- Flow 3:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 87.253 ms
Loss rate: 4.89%
```
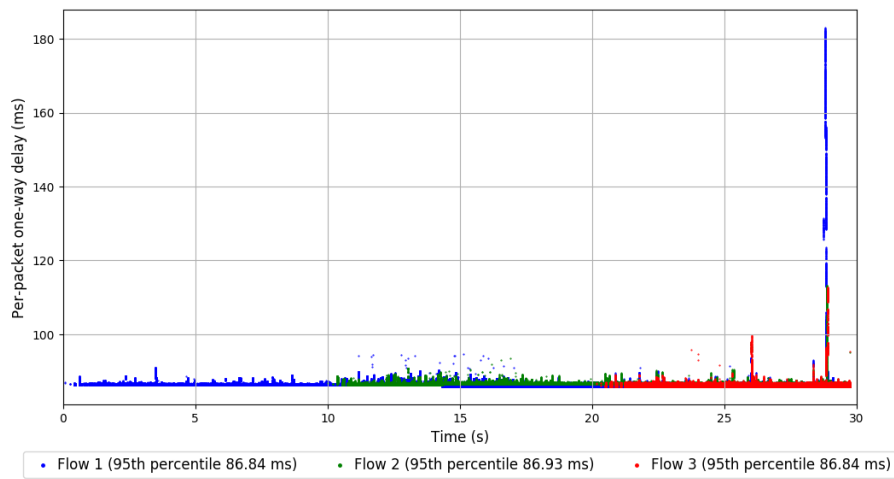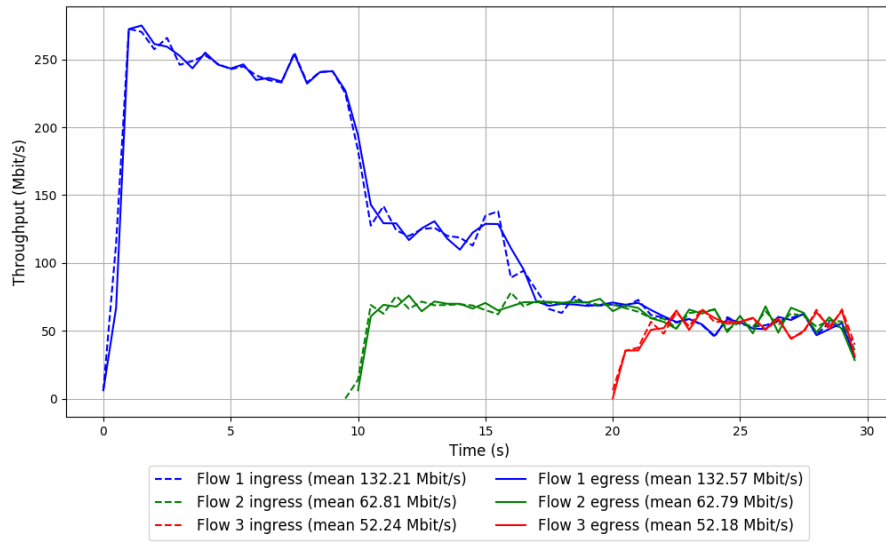
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-08-21 01:47:34
End at: 2017-08-21 01:48:04


# Below is generated by plot.py at 2017-08-21 05:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 87.472 ms
Loss rate: 3.71%
-- Flow 1:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 87.507 ms
Loss rate: 4.16%
-- Flow 2:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 87.491 ms
Loss rate: 3.58%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 87.269 ms
Loss rate: 2.82%
```
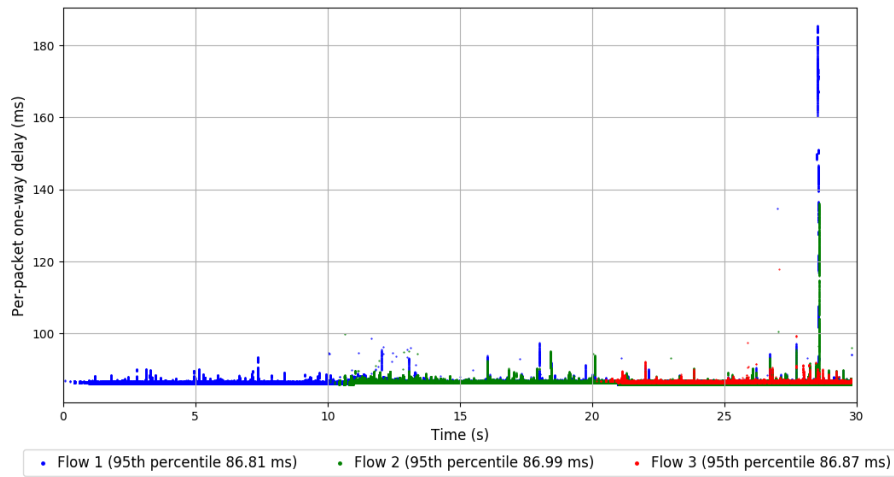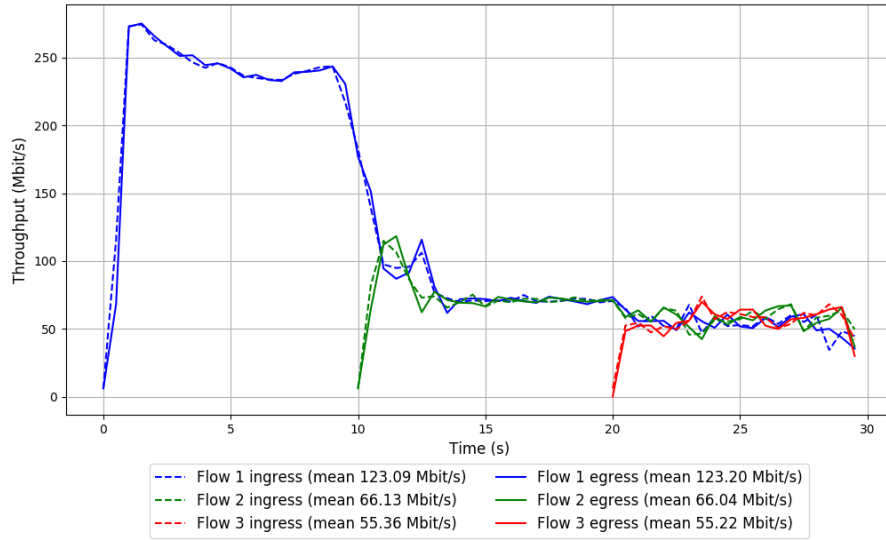
Run 10: Report of Sprout — Data Link

- - - Flow 1 ingress (mean 2.86 Mbit/s) ——— Flow 1 egress (mean 2.76 Mbit/s)
- - - Flow 2 ingress (mean 3.14 Mbit/s) ——— Flow 2 egress (mean 3.06 Mbit/s)
- - - Flow 3 ingress (mean 3.42 Mbit/s) ——— Flow 3 egress (mean 3.40 Mbit/s)

• Flow 1 (95th percentile 87.51 ms)   • Flow 2 (95th percentile 87.49 ms)   • Flow 3 (95th percentile 87.27 ms)

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

Start at: 2017-08-20 23:42:40
End at: 2017-08-20 23:43:10

# Below is generated by plot.py at 2017-08-21 05:01:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 191.18 Mbit/s
95th percentile per-packet one-way delay: 86.870 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 132.57 Mbit/s
95th percentile per-packet one-way delay: 86.844 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 62.79 Mbit/s
95th percentile per-packet one-way delay: 86.932 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 86.837 ms
Loss rate: 1.74%
```
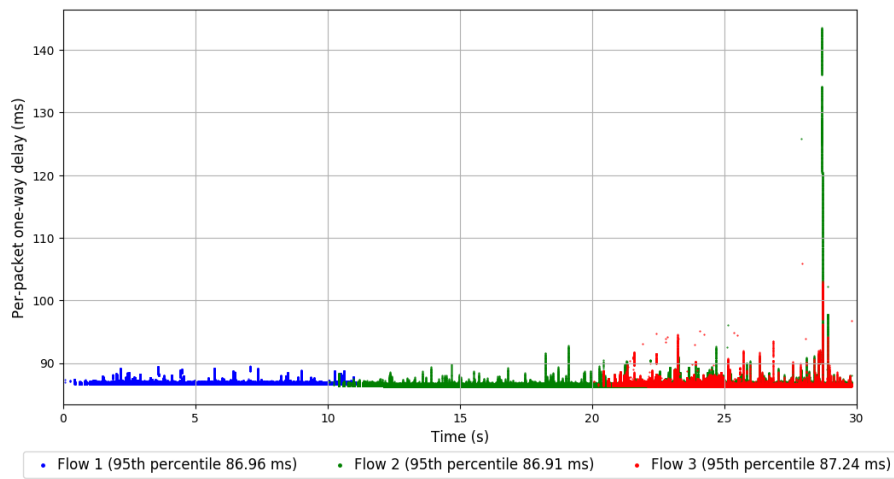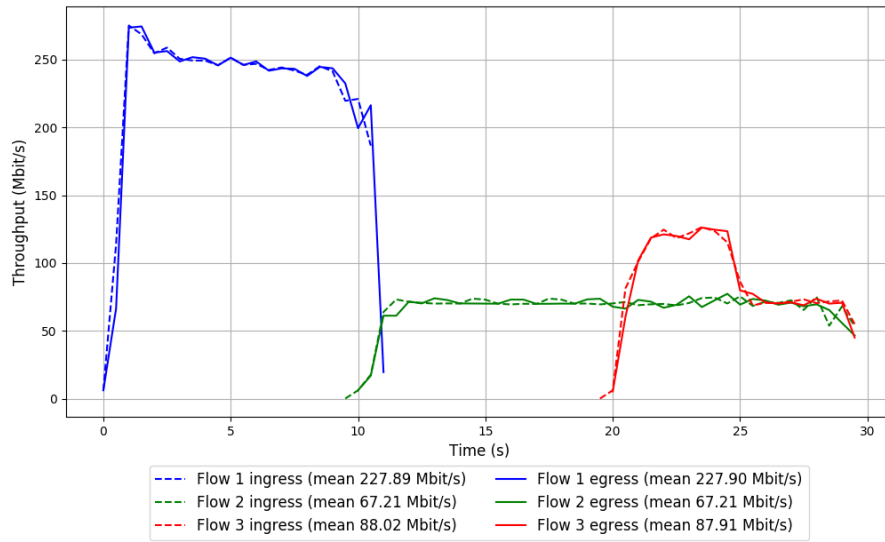
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-20 23:55:53
End at: 2017-08-20 23:56:23

# Below is generated by plot.py at 2017-08-21 05:01:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.88 Mbit/s
95th percentile per-packet one-way delay: 86.837 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 123.20 Mbit/s
95th percentile per-packet one-way delay: 86.811 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 66.04 Mbit/s
95th percentile per-packet one-way delay: 86.993 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 55.22 Mbit/s
95th percentile per-packet one-way delay: 86.866 ms
Loss rate: 2.09%
```
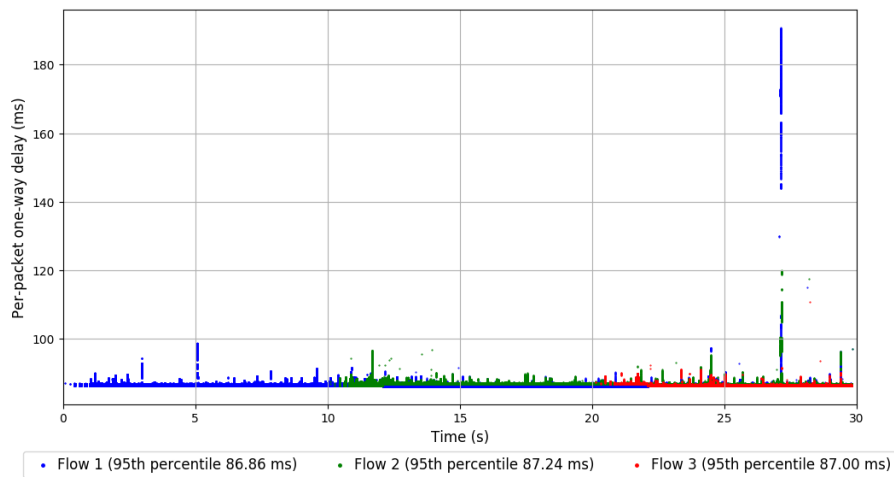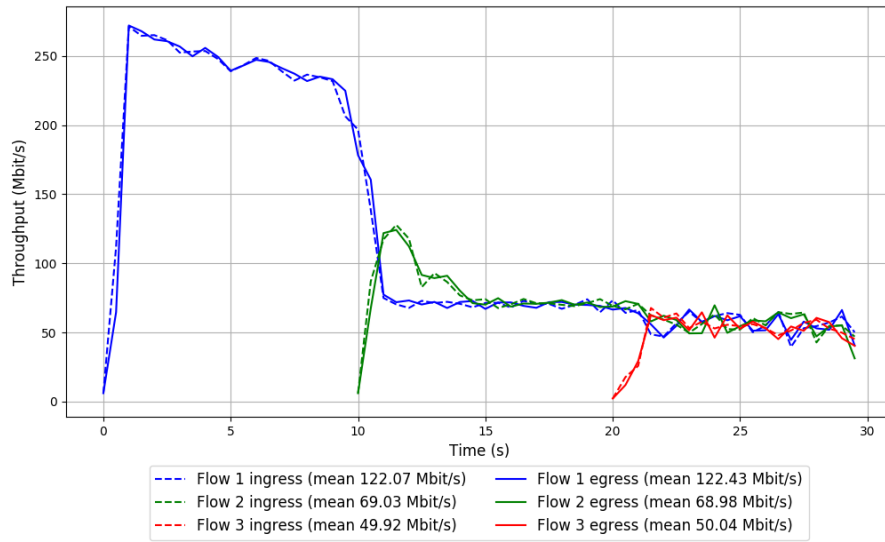
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-21 00:09:02
End at: 2017-08-21 00:09:32

# Below is generated by plot.py at 2017-08-21 05:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.53 Mbit/s
95th percentile per-packet one-way delay: 86.984 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 227.90 Mbit/s
95th percentile per-packet one-way delay: 86.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 86.914 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 87.91 Mbit/s
95th percentile per-packet one-way delay: 87.237 ms
Loss rate: 1.73%
```
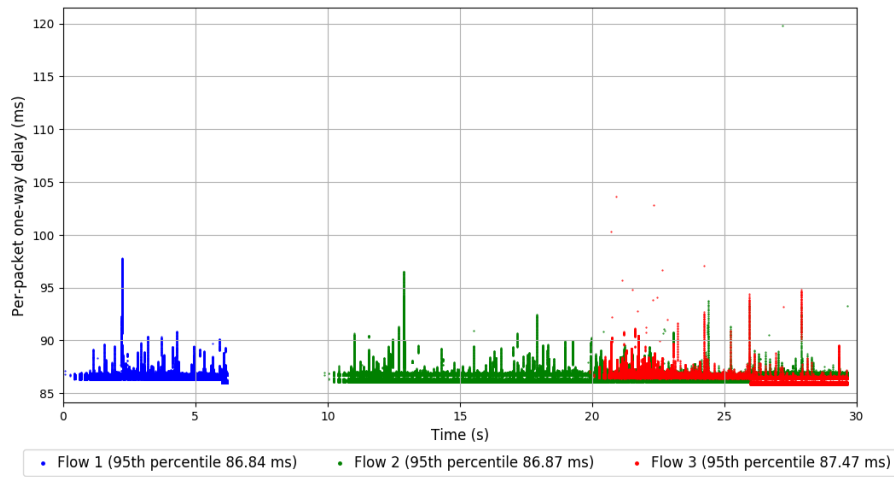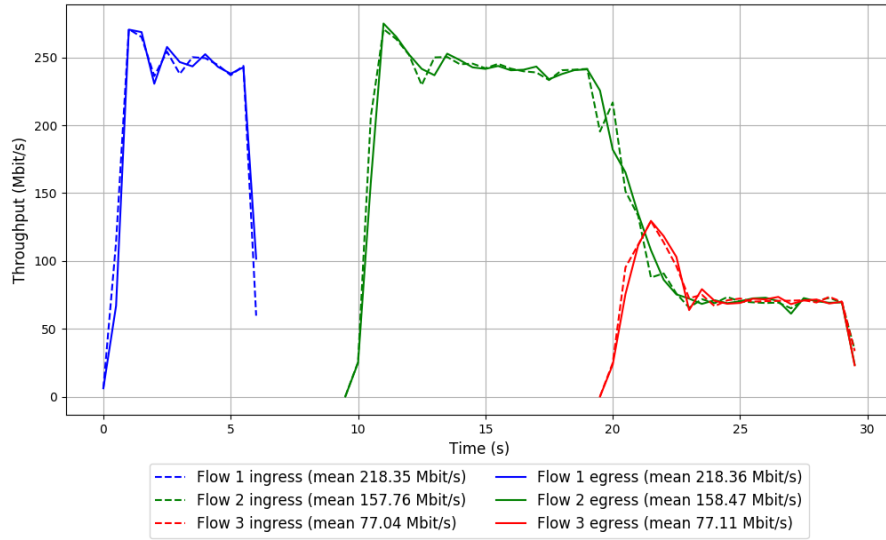
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-21 00:22:12
End at: 2017-08-21 00:22:42


# Below is generated by plot.py at 2017-08-21 05:02:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.50 Mbit/s
95th percentile per-packet one-way delay: 87.013 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 122.43 Mbit/s
95th percentile per-packet one-way delay: 86.862 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 68.98 Mbit/s
95th percentile per-packet one-way delay: 87.241 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 86.997 ms
Loss rate: 1.56%
```
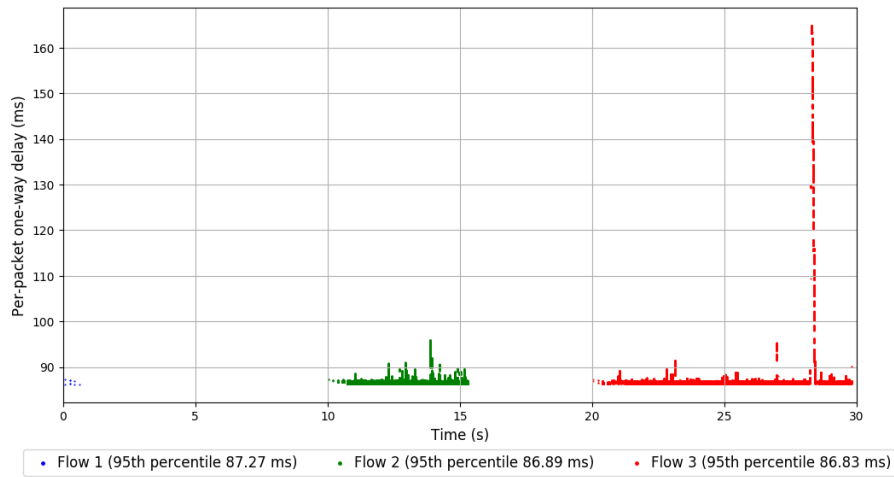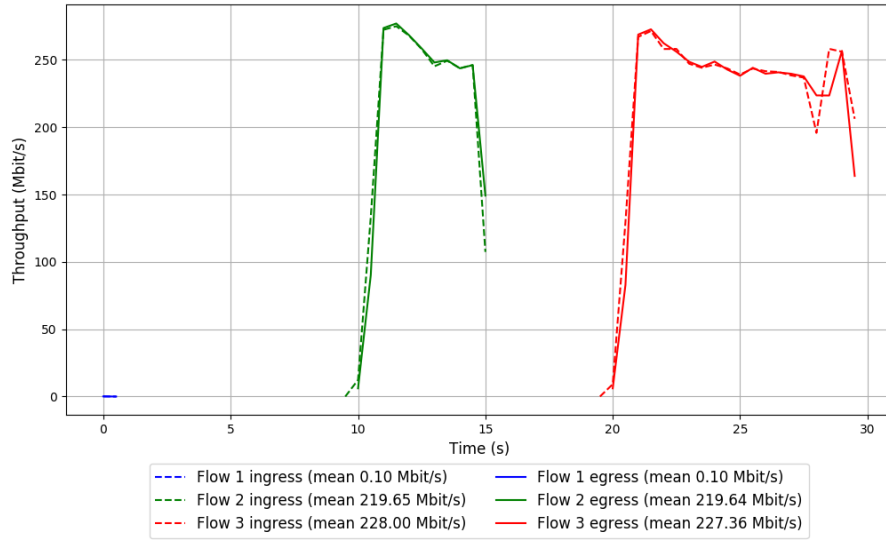
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 122.07 Mbit/s) --- Flow 1 egress (mean 122.43 Mbit/s)
Flow 2 ingress (mean 69.03 Mbit/s) --- Flow 2 egress (mean 68.98 Mbit/s)
Flow 3 ingress (mean 49.92 Mbit/s) --- Flow 3 egress (mean 50.04 Mbit/s)

Flow 1 (95th percentile 86.86 ms)   Flow 2 (95th percentile 87.24 ms)   Flow 3 (95th percentile 87.00 ms)

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

Start at: 2017-08-21 00:35:28
End at: 2017-08-21 00:35:58


# Below is generated by plot.py at 2017-08-21 05:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.55 Mbit/s
95th percentile per-packet one-way delay: 86.913 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 218.36 Mbit/s
95th percentile per-packet one-way delay: 86.838 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 158.47 Mbit/s
95th percentile per-packet one-way delay: 86.867 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 77.11 Mbit/s
95th percentile per-packet one-way delay: 87.472 ms
Loss rate: 1.69%
```
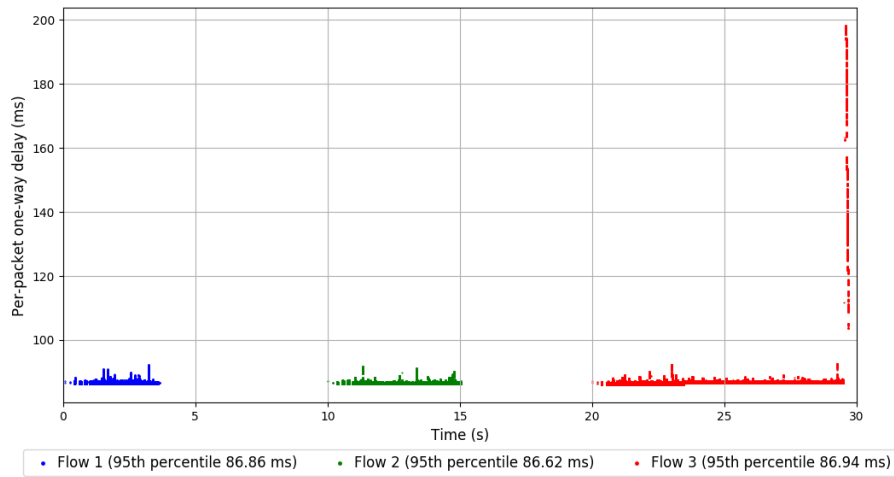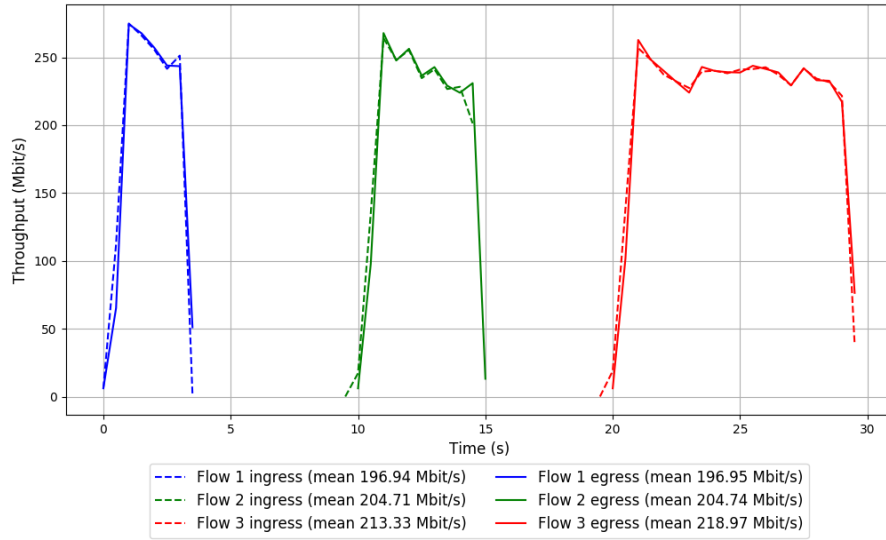
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-21 00:48:14
End at: 2017-08-21 00:48:44

# Below is generated by plot.py at 2017-08-21 05:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.55 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 87.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.64 Mbit/s
95th percentile per-packet one-way delay: 86.892 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 227.36 Mbit/s
95th percentile per-packet one-way delay: 86.829 ms
Loss rate: 1.99%
```
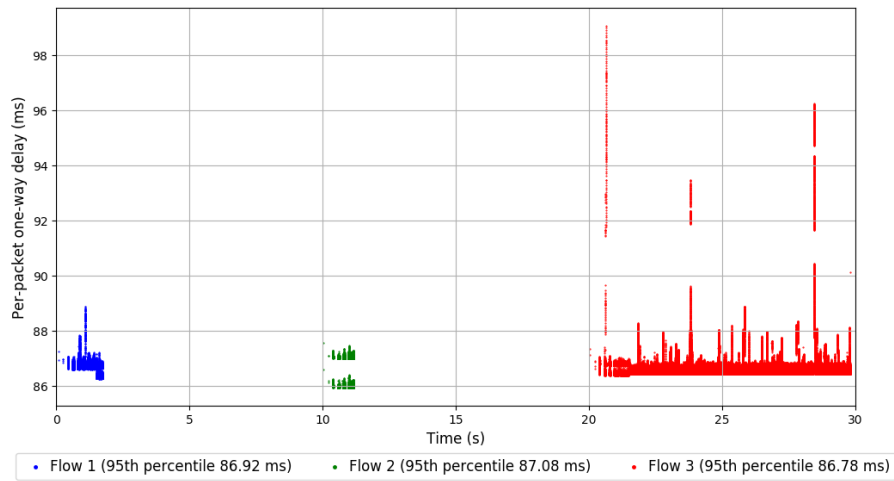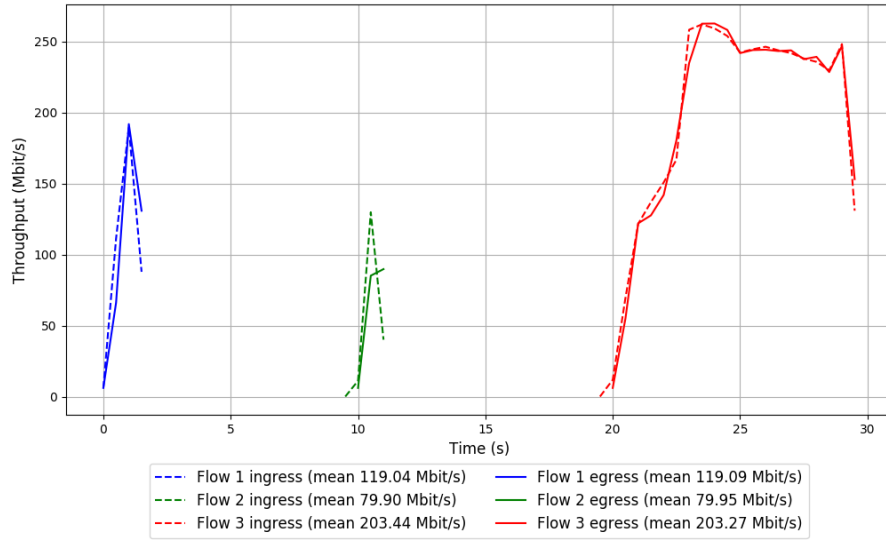
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.10 Mbit/s) --- Flow 1 egress (mean 0.10 Mbit/s)
Flow 2 ingress (mean 219.65 Mbit/s) --- Flow 2 egress (mean 219.64 Mbit/s)
Flow 3 ingress (mean 228.00 Mbit/s) --- Flow 3 egress (mean 227.36 Mbit/s)

Flow 1 (95th percentile 87.27 ms) Flow 2 (95th percentile 86.89 ms) Flow 3 (95th percentile 86.83 ms)

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

Start at: 2017-08-21 01:01:01
End at: 2017-08-21 01:01:31


# Below is generated by plot.py at 2017-08-21 05:03:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.96 Mbit/s
95th percentile per-packet one-way delay: 86.874 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 196.95 Mbit/s
95th percentile per-packet one-way delay: 86.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.74 Mbit/s
95th percentile per-packet one-way delay: 86.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 218.97 Mbit/s
95th percentile per-packet one-way delay: 86.943 ms
Loss rate: 0.14%
```
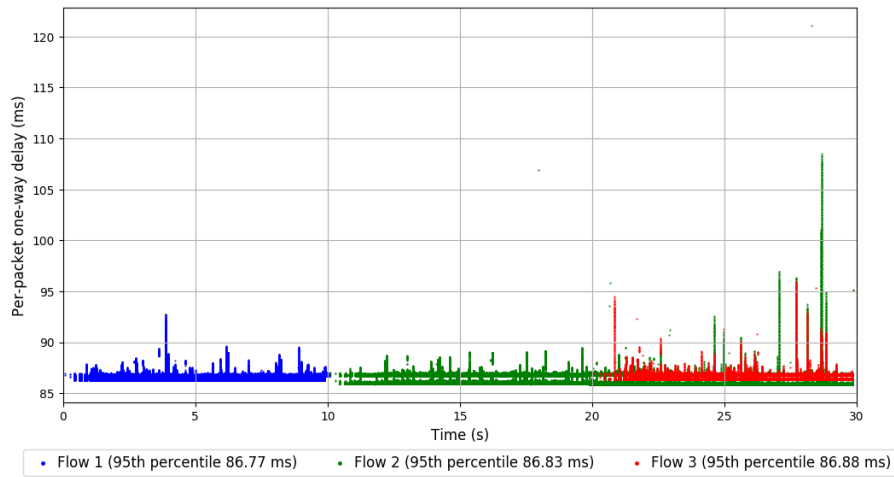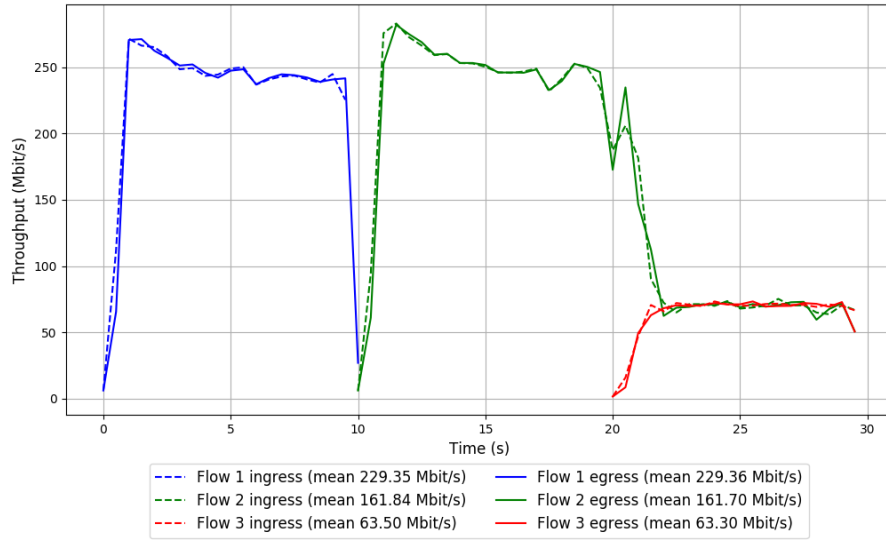
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-21 01:14:03
End at: 2017-08-21 01:14:33

# Below is generated by plot.py at 2017-08-21 05:03:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.49 Mbit/s
95th percentile per-packet one-way delay: 86.888 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 119.09 Mbit/s
95th percentile per-packet one-way delay: 86.917 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 87.083 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.27 Mbit/s
95th percentile per-packet one-way delay: 86.783 ms
Loss rate: 0.46%
```
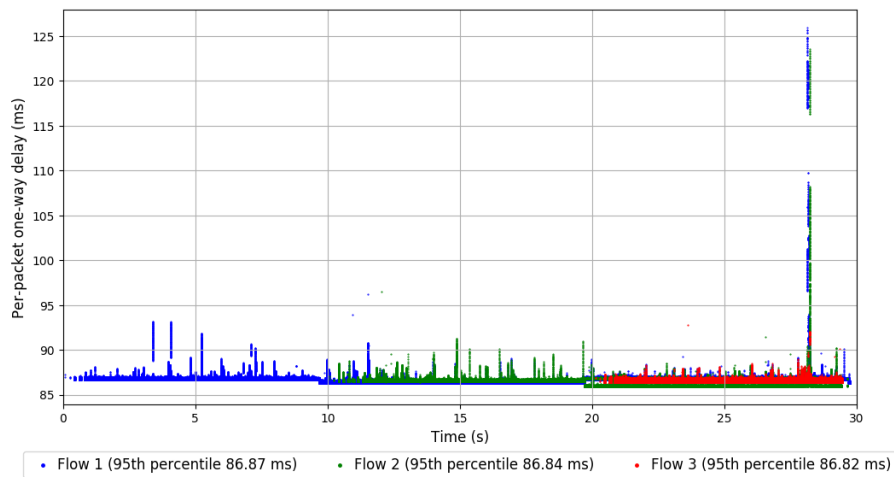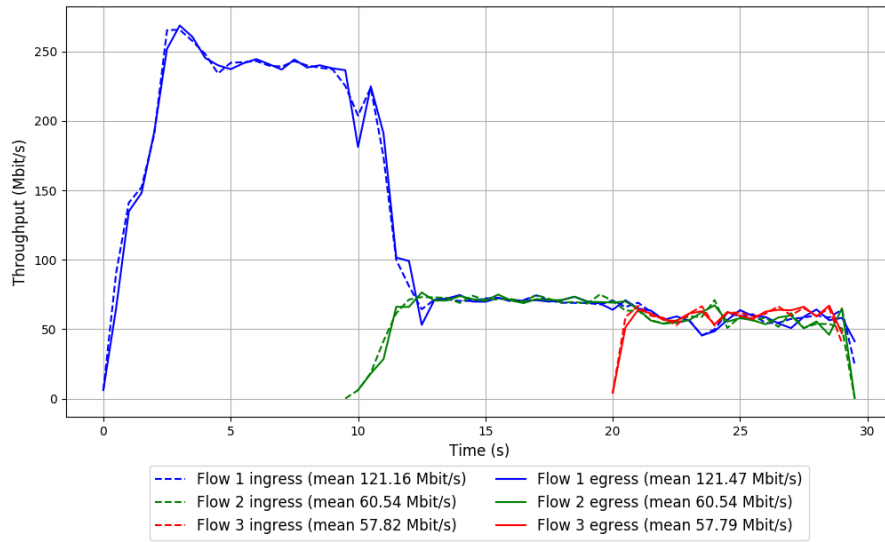
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 119.04 Mbit/s)   Flow 1 egress (mean 119.09 Mbit/s)
Flow 2 ingress (mean 79.90 Mbit/s)   Flow 2 egress (mean 79.95 Mbit/s)
Flow 3 ingress (mean 203.44 Mbit/s)   Flow 3 egress (mean 203.27 Mbit/s)

Flow 1 (95th percentile 86.92 ms)   Flow 2 (95th percentile 87.08 ms)   Flow 3 (95th percentile 86.78 ms)

239

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

Start at: 2017-08-21 01:27:24
End at: 2017-08-21 01:27:54

# Below is generated by plot.py at 2017-08-21 05:04:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.81 Mbit/s
95th percentile per-packet one-way delay: 86.828 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 229.36 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.70 Mbit/s
95th percentile per-packet one-way delay: 86.835 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 63.30 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 1.99%
```
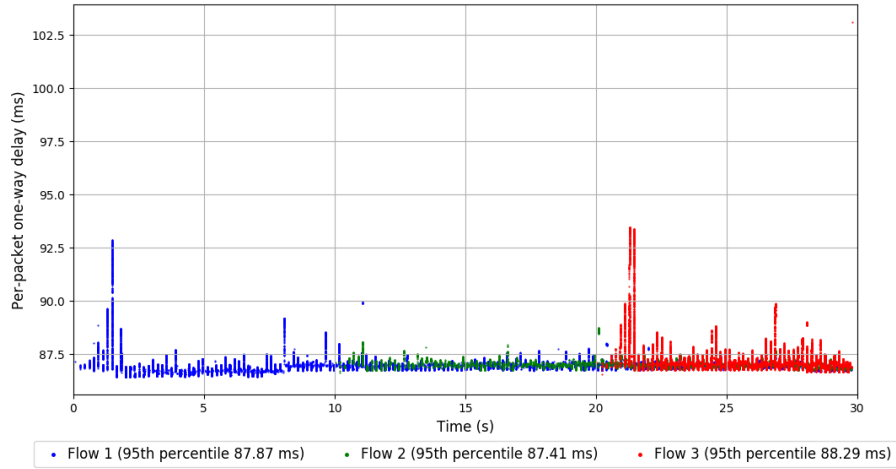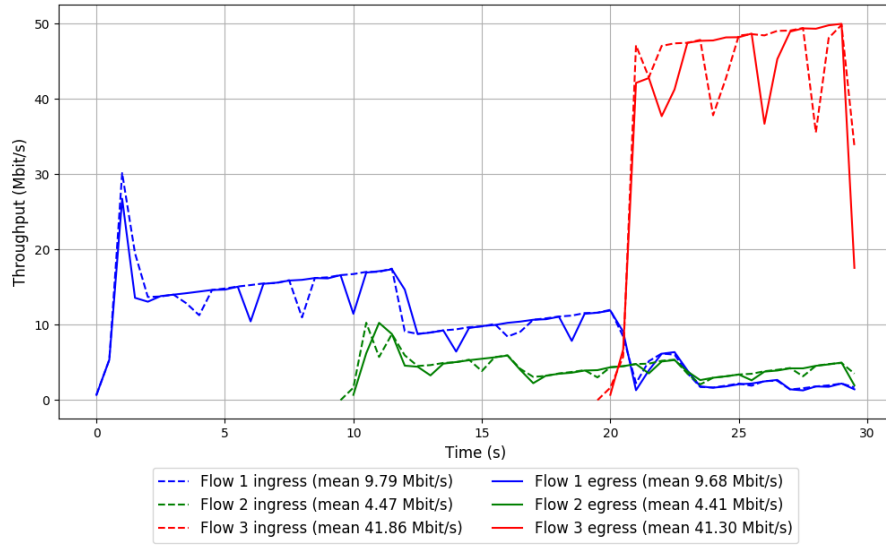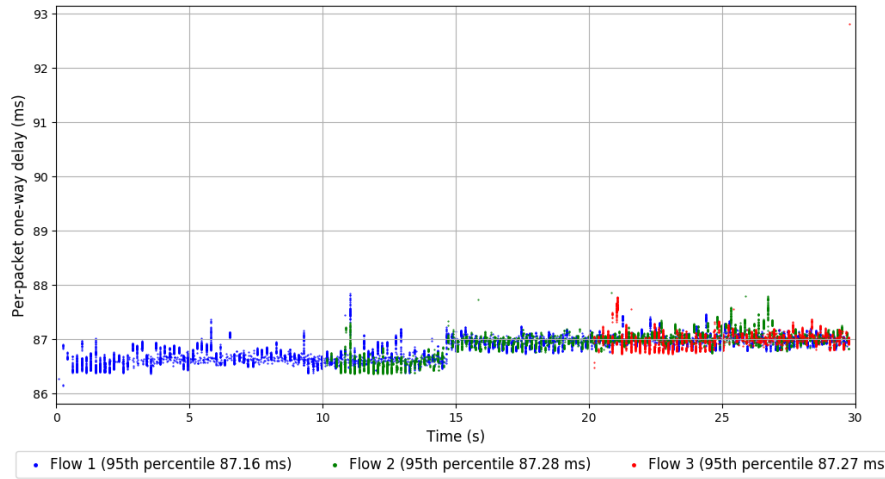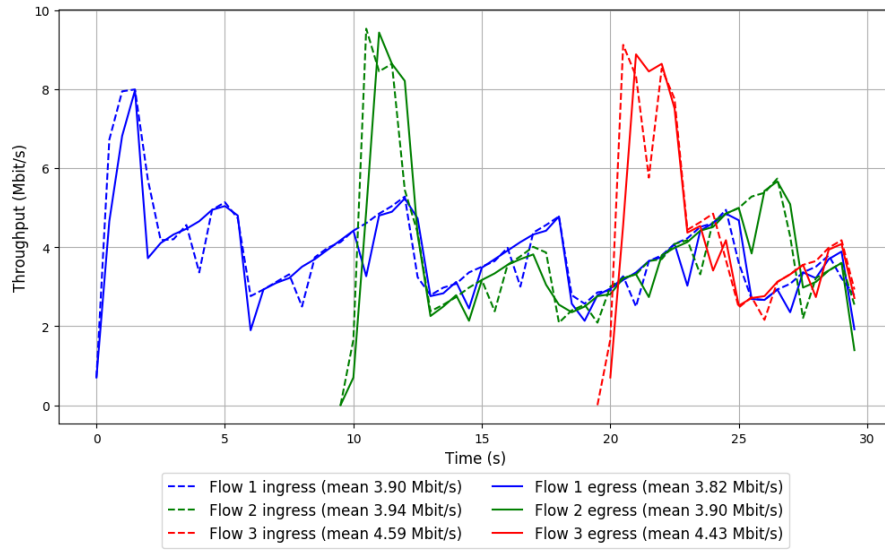
Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-21 01:40:35
End at: 2017-08-21 01:41:05


# Below is generated by plot.py at 2017-08-21 05:04:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.65 Mbit/s
95th percentile per-packet one-way delay: 86.860 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 121.47 Mbit/s
95th percentile per-packet one-way delay: 86.872 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 60.54 Mbit/s
95th percentile per-packet one-way delay: 86.842 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.79 Mbit/s
95th percentile per-packet one-way delay: 86.823 ms
Loss rate: 0.06%
```

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

```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-20 23:49:16
End at: 2017-08-20 23:49:46

# Below is generated by plot.py at 2017-08-21 05:04:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.16 Mbit/s
95th percentile per-packet one-way delay: 88.058 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 87.871 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 87.414 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 88.291 ms
Loss rate: 2.62%
```
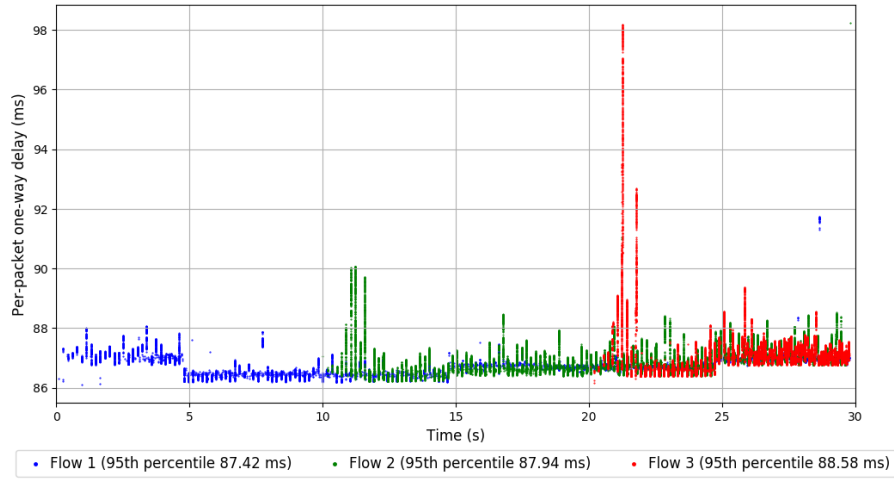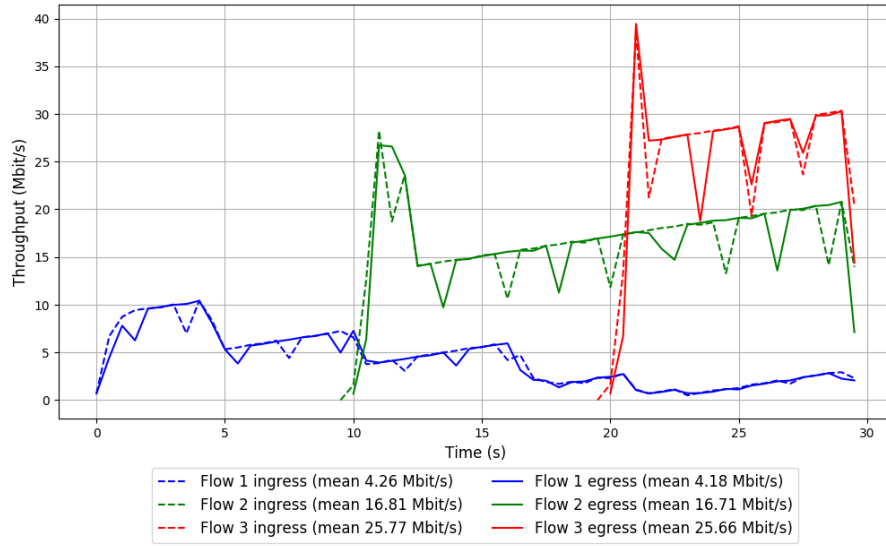
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-08-21 00:02:20
End at: 2017-08-21 00:02:50

# Below is generated by plot.py at 2017-08-21 05:04:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 87.240 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 87.159 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 87.285 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 87.273 ms
Loss rate: 4.57%
```
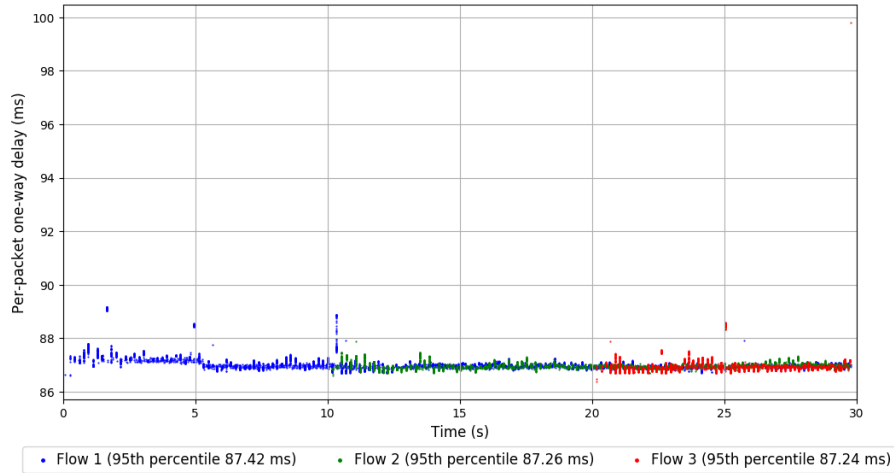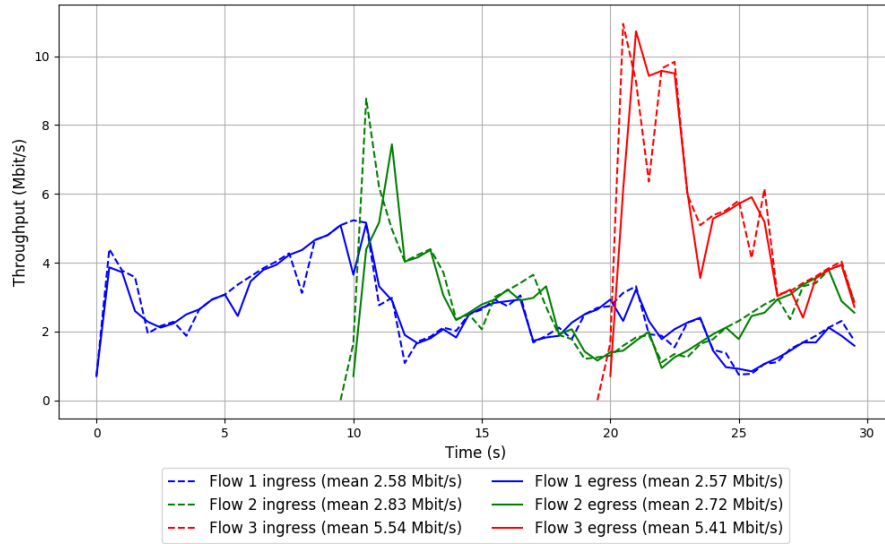
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 00:15:40
End at: 2017-08-21 00:16:10


# Below is generated by plot.py at 2017-08-21 05:05:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 88.021 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 87.423 ms
Loss rate: 2.51%
-- Flow 2:
Average throughput: 16.71 Mbit/s
95th percentile per-packet one-way delay: 87.940 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 25.66 Mbit/s
95th percentile per-packet one-way delay: 88.582 ms
Loss rate: 2.16%
```
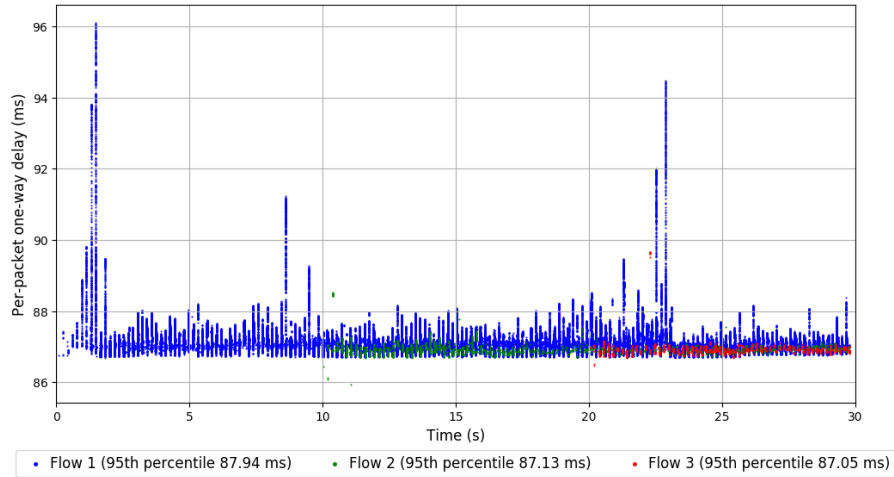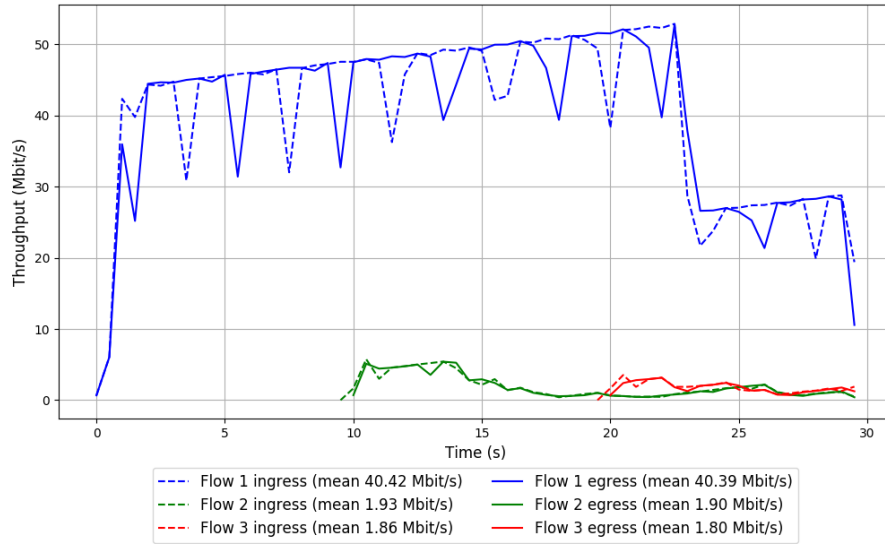
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 00:28:49
End at: 2017-08-21 00:29:19

# Below is generated by plot.py at 2017-08-21 05:05:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 87.325 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 87.421 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 87.264 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 87.237 ms
Loss rate: 3.52%
```
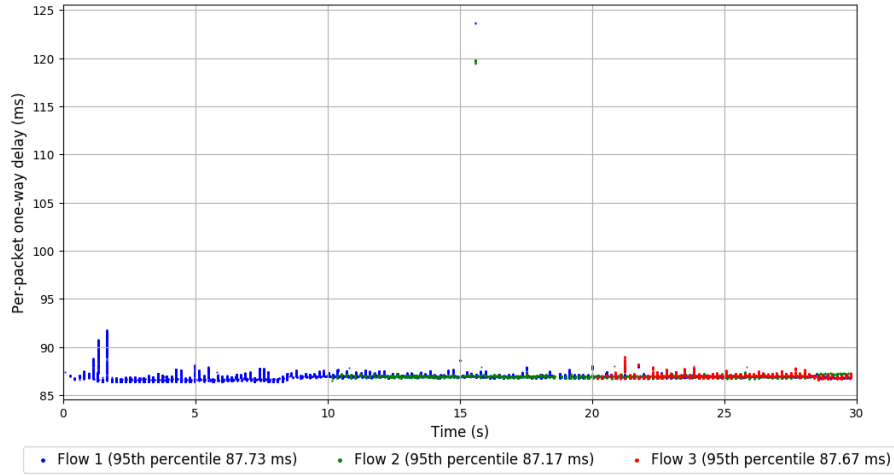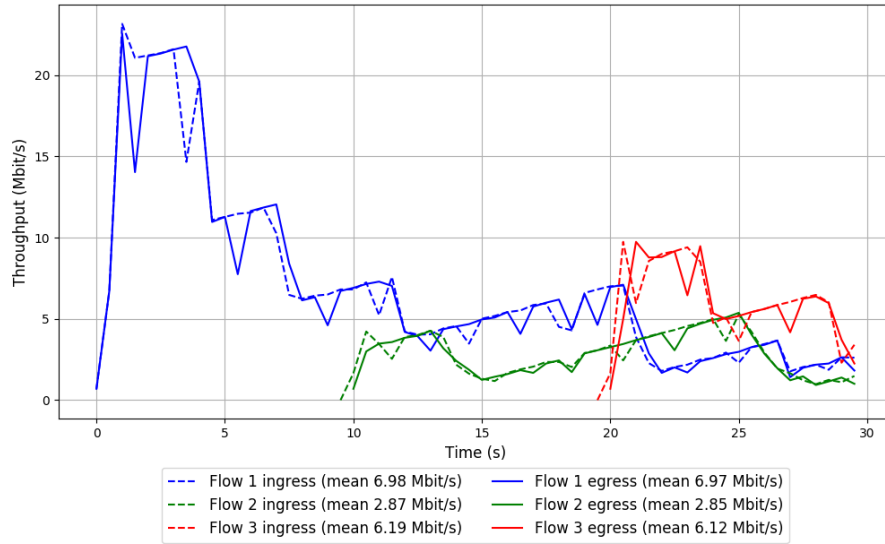
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 00:41:39
End at: 2017-08-21 00:42:09

# Below is generated by plot.py at 2017-08-21 05:05:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 87.915 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 87.940 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 87.127 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 87.054 ms
Loss rate: 5.33%
```
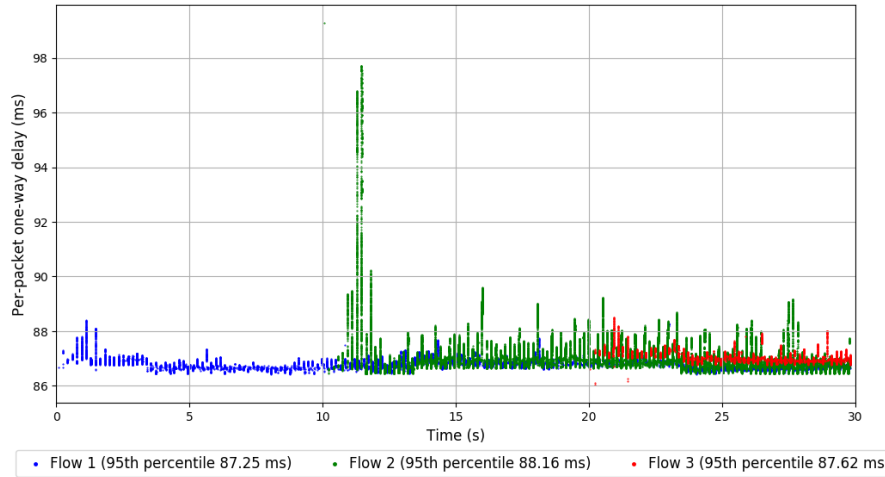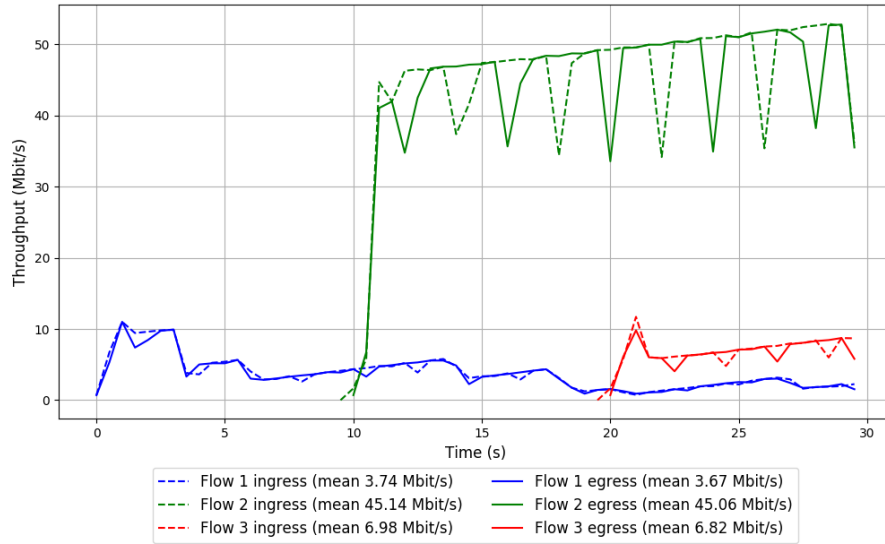
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 00:54:16
End at: 2017-08-21 00:54:46

# Below is generated by plot.py at 2017-08-21 05:05:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 87.618 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 87.730 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 87.169 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 87.675 ms
Loss rate: 2.99%
```
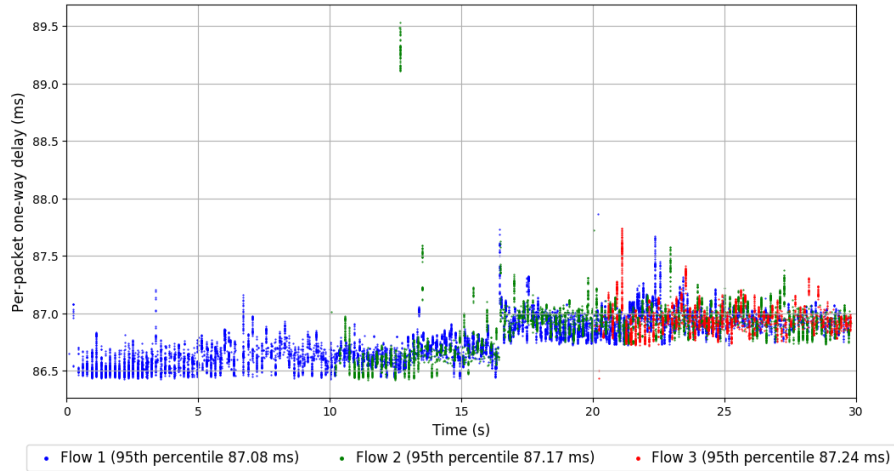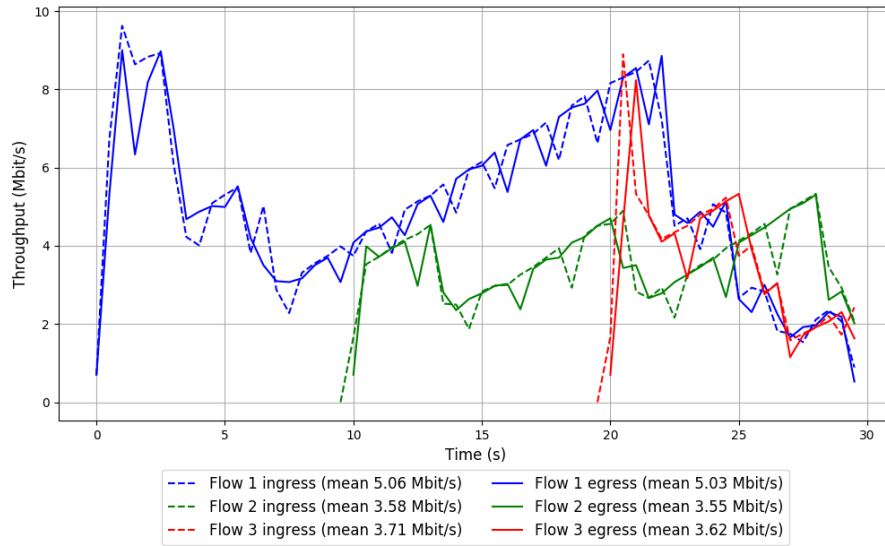
Run 6: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 6.98 Mbit/s)   —— Flow 1 egress (mean 6.97 Mbit/s)
- - - Flow 2 ingress (mean 2.87 Mbit/s)   —— Flow 2 egress (mean 2.85 Mbit/s)
- - - Flow 3 ingress (mean 6.19 Mbit/s)   —— Flow 3 egress (mean 6.12 Mbit/s)

- Flow 1 (95th percentile 87.73 ms)   • Flow 2 (95th percentile 87.17 ms)   • Flow 3 (95th percentile 87.67 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 01:07:11
End at: 2017-08-21 01:07:41


# Below is generated by plot.py at 2017-08-21 05:05:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 88.052 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 87.249 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 45.06 Mbit/s
95th percentile per-packet one-way delay: 88.163 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 87.623 ms
Loss rate: 4.00%
```
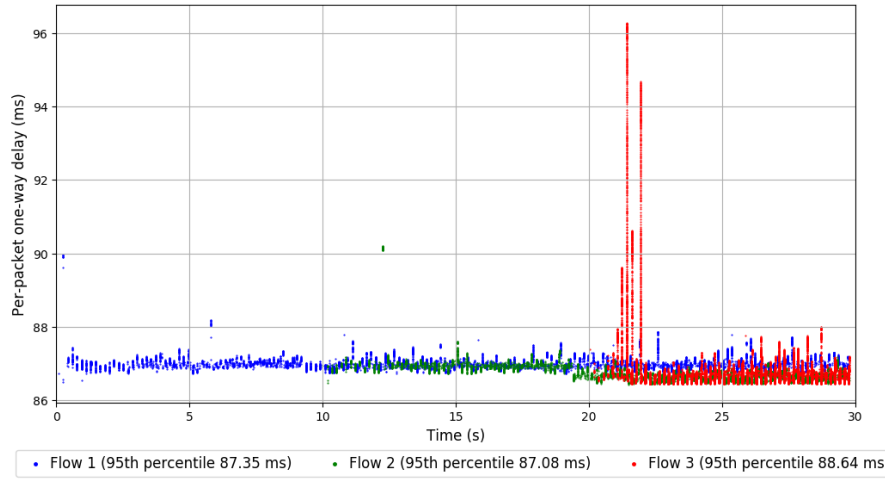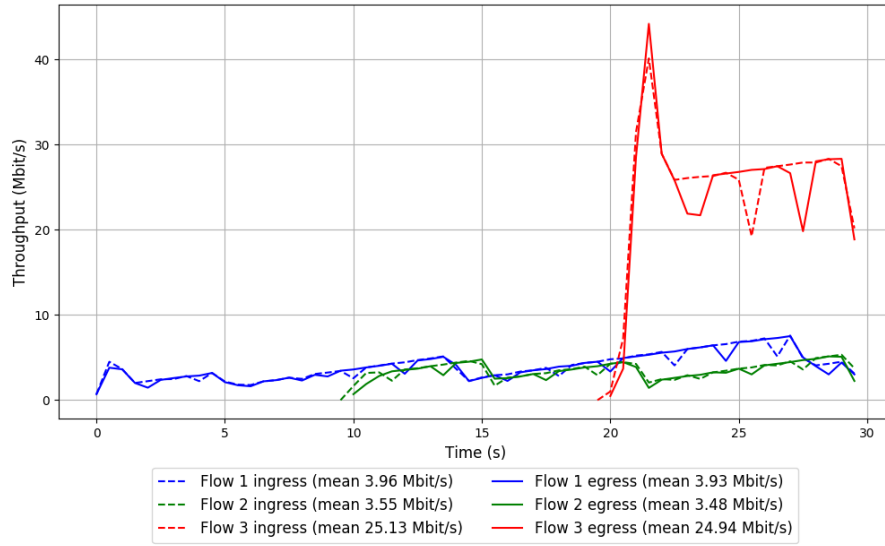
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 01:20:28
End at: 2017-08-21 01:20:58


# Below is generated by plot.py at 2017-08-21 05:05:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 87.133 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 87.085 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 87.166 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 87.238 ms
Loss rate: 4.58%
```
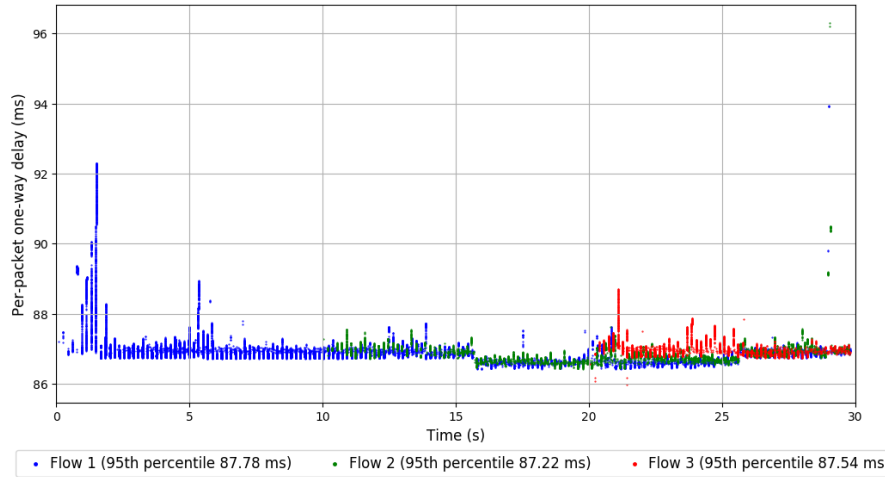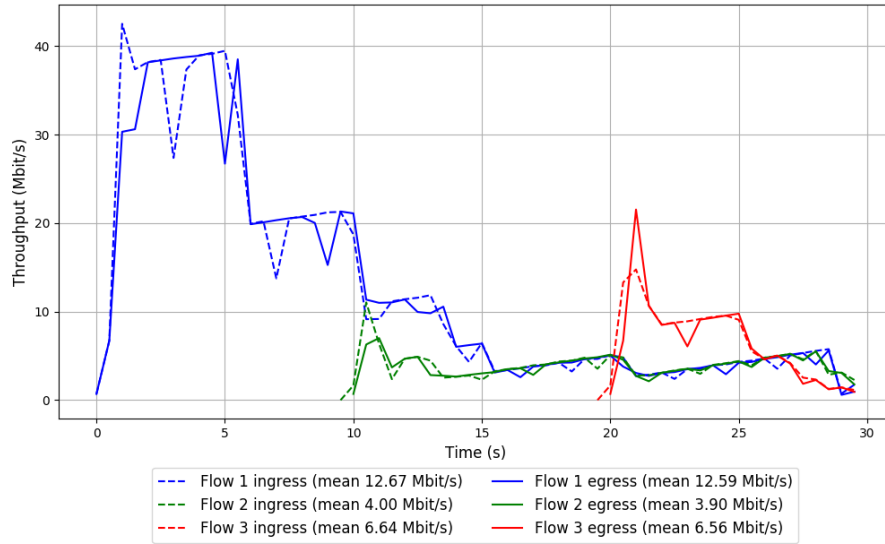
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 01:33:55
End at: 2017-08-21 01:34:25


# Below is generated by plot.py at 2017-08-21 05:05:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 87.592 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 87.081 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 88.637 ms
Loss rate: 2.52%
```
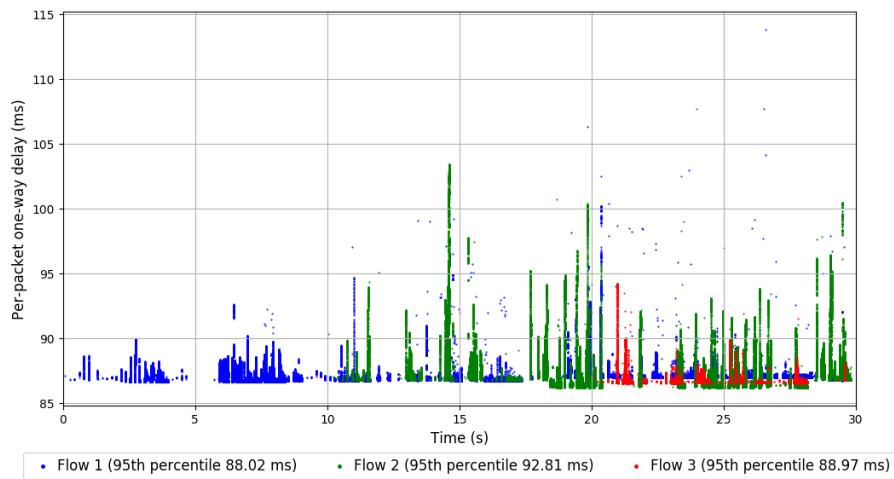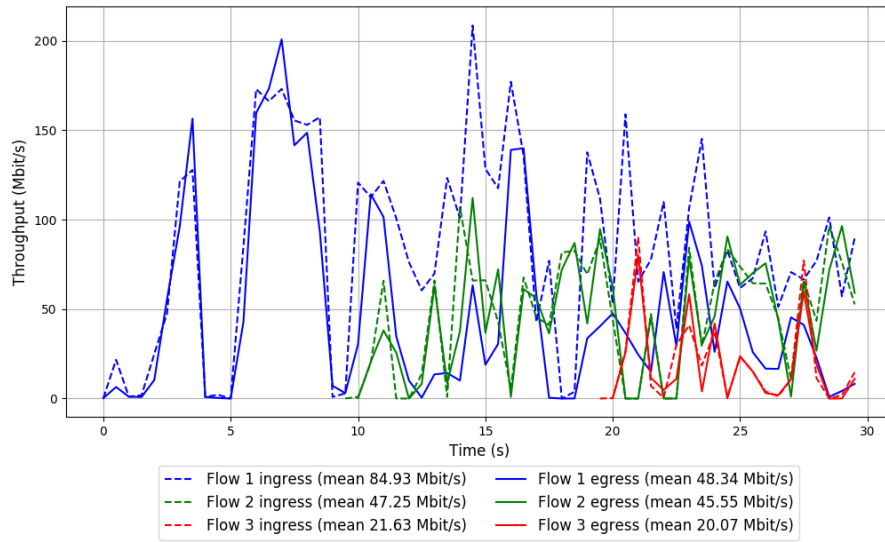
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 01:46:49
End at: 2017-08-21 01:47:19


# Below is generated by plot.py at 2017-08-21 05:05:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.33 Mbit/s
95th percentile per-packet one-way delay: 87.552 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 87.779 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 87.217 ms
Loss rate: 3.57%
-- Flow 3:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 87.539 ms
Loss rate: 2.98%
```
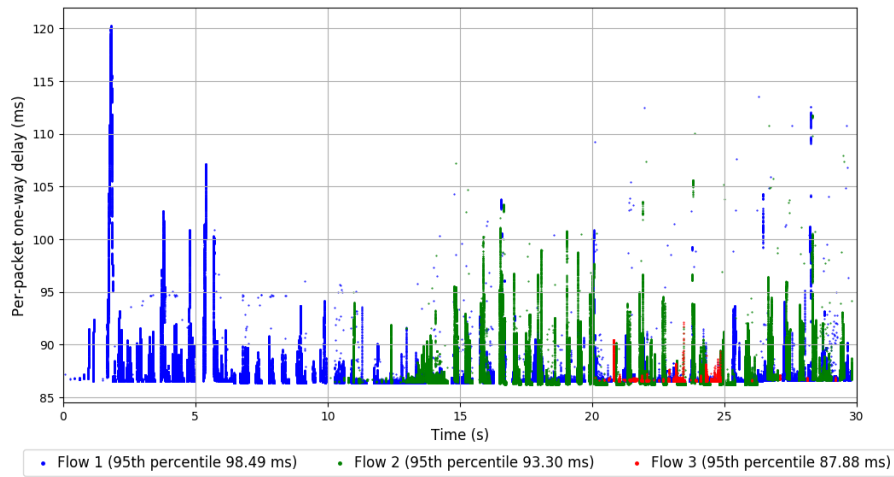
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-08-20 23:50:46
End at: 2017-08-20 23:51:16


# Below is generated by plot.py at 2017-08-21 05:05:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 90.203 ms
Loss rate: 31.39%
-- Flow 1:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: 88.019 ms
Loss rate: 43.44%
-- Flow 2:
Average throughput: 45.55 Mbit/s
95th percentile per-packet one-way delay: 92.805 ms
Loss rate: 4.08%
-- Flow 3:
Average throughput: 20.07 Mbit/s
95th percentile per-packet one-way delay: 88.968 ms
Loss rate: 7.23%
```
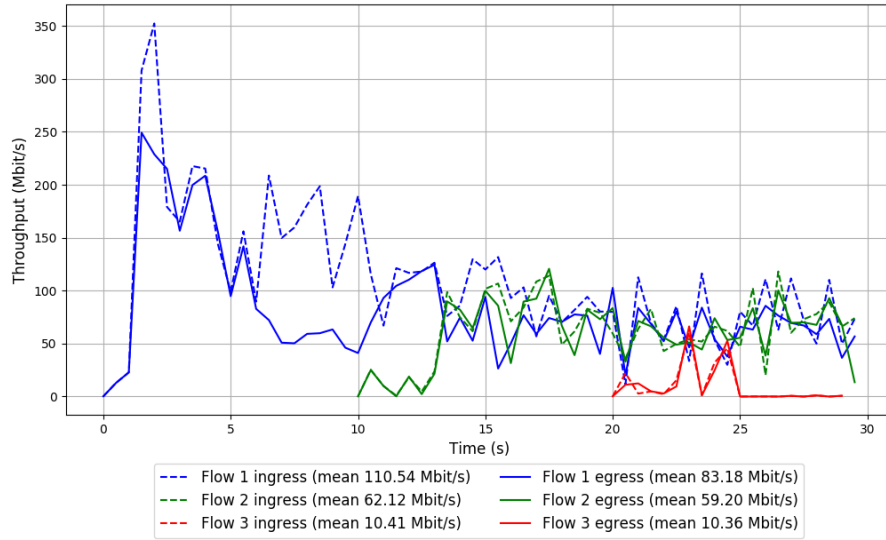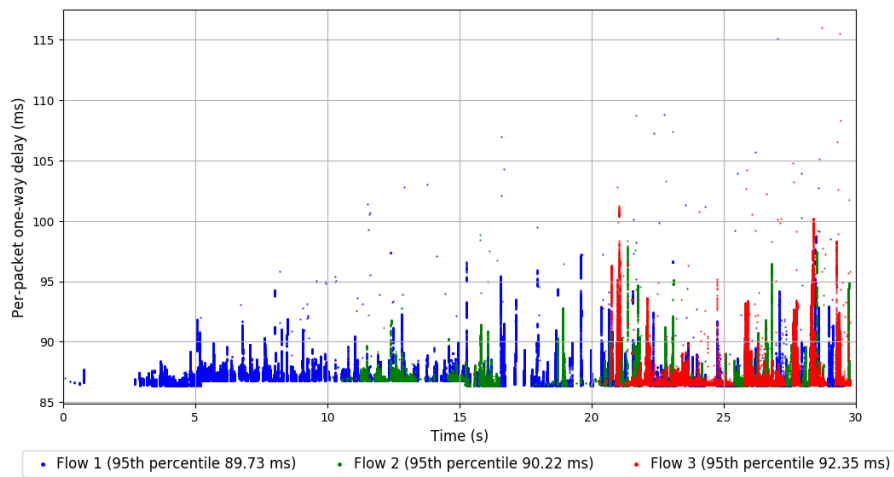
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-08-21 00:03:48
End at: 2017-08-21 00:04:18


# Below is generated by plot.py at 2017-08-21 05:05:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.53 Mbit/s
95th percentile per-packet one-way delay: 95.435 ms
Loss rate: 19.51%
-- Flow 1:
Average throughput: 83.18 Mbit/s
95th percentile per-packet one-way delay: 98.494 ms
Loss rate: 25.28%
-- Flow 2:
Average throughput: 59.20 Mbit/s
95th percentile per-packet one-way delay: 93.295 ms
Loss rate: 5.53%
-- Flow 3:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 87.880 ms
Loss rate: 0.45%
```
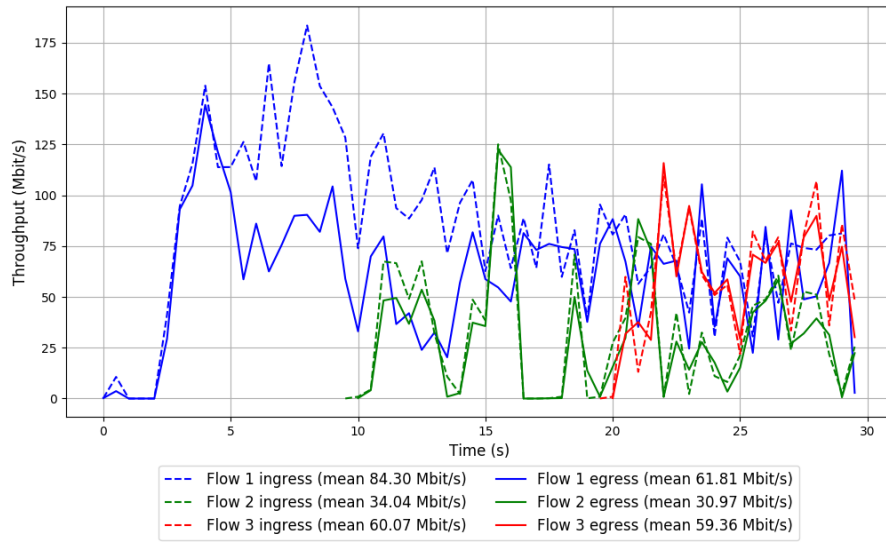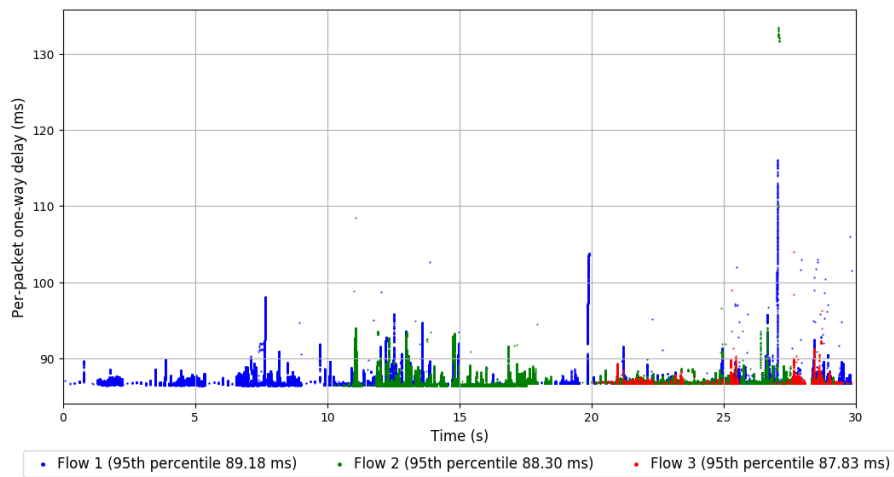
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-08-21 00:17:09
End at: 2017-08-21 00:17:39


# Below is generated by plot.py at 2017-08-21 05:05:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.32 Mbit/s
95th percentile per-packet one-way delay: 90.472 ms
Loss rate: 19.88%
-- Flow 1:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 89.731 ms
Loss rate: 26.67%
-- Flow 2:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 90.225 ms
Loss rate: 9.81%
-- Flow 3:
Average throughput: 59.36 Mbit/s
95th percentile per-packet one-way delay: 92.352 ms
Loss rate: 3.04%
```
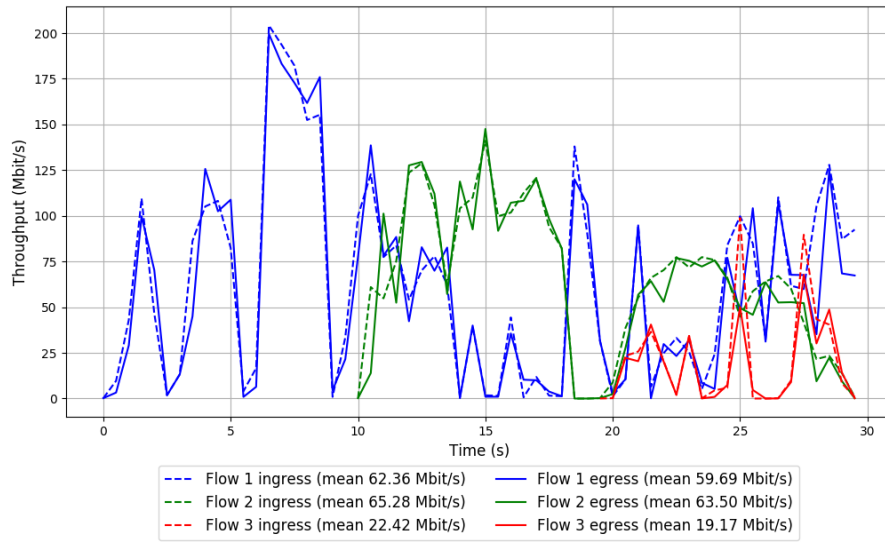
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-08-21 00:30:17
End at: 2017-08-21 00:30:47


# Below is generated by plot.py at 2017-08-21 05:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 107.79 Mbit/s
95th percentile per-packet one-way delay: 88.703 ms
Loss rate: 5.09%
-- Flow 1:
Average throughput: 59.69 Mbit/s
95th percentile per-packet one-way delay: 89.183 ms
Loss rate: 4.82%
-- Flow 2:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 88.298 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 16.09%
```
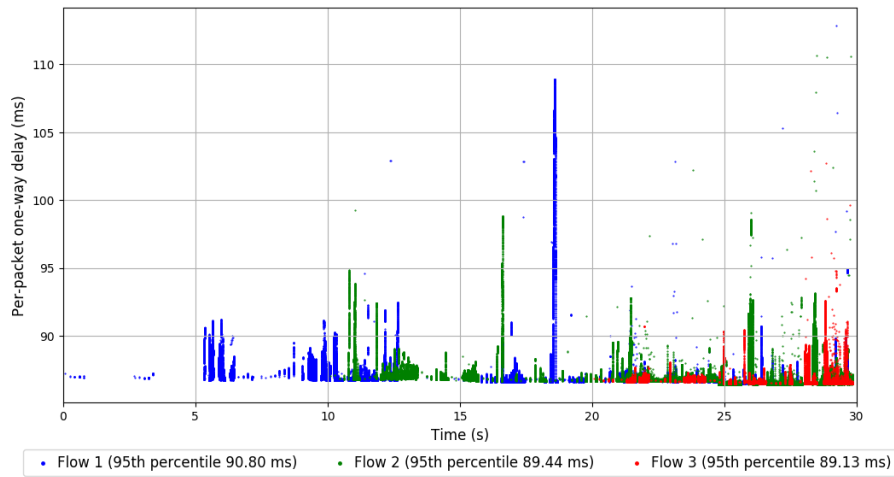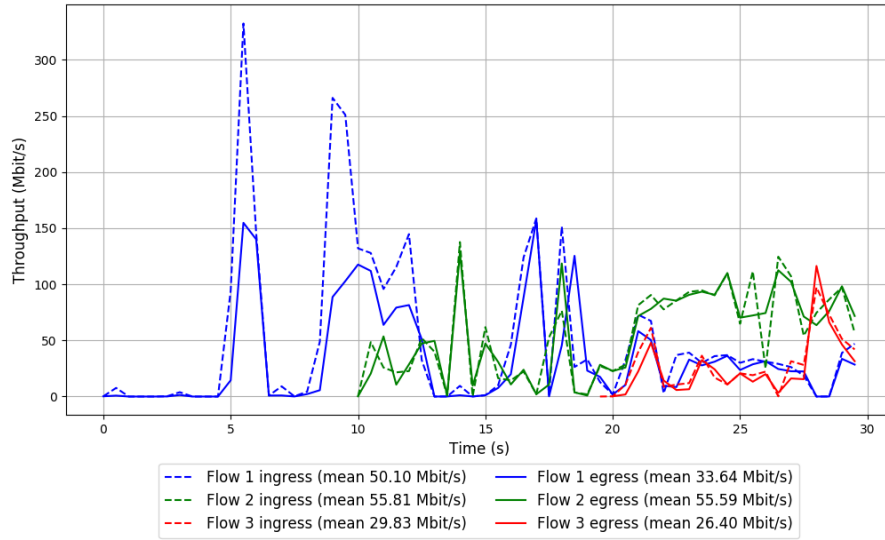
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 62.36 Mbit/s) — — — Flow 1 egress (mean 59.69 Mbit/s)
Flow 2 ingress (mean 65.28 Mbit/s) — — — Flow 2 egress (mean 63.50 Mbit/s)
Flow 3 ingress (mean 22.42 Mbit/s) — — — Flow 3 egress (mean 19.17 Mbit/s)

Flow 1 (95th percentile 89.18 ms) • Flow 2 (95th percentile 88.30 ms) • Flow 3 (95th percentile 87.83 ms)

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```
Run 5: Statistics of Verus

Start at: 2017-08-21 00:43:10
End at: 2017-08-21 00:43:40


# Below is generated by plot.py at 2017-08-21 05:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.97 Mbit/s
95th percentile per-packet one-way delay: 89.757 ms
Loss rate: 18.94%
-- Flow 1:
Average throughput: 33.64 Mbit/s
95th percentile per-packet one-way delay: 90.803 ms
Loss rate: 33.69%
-- Flow 2:
Average throughput: 55.59 Mbit/s
95th percentile per-packet one-way delay: 89.439 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 26.40 Mbit/s
95th percentile per-packet one-way delay: 89.131 ms
Loss rate: 13.01%
```
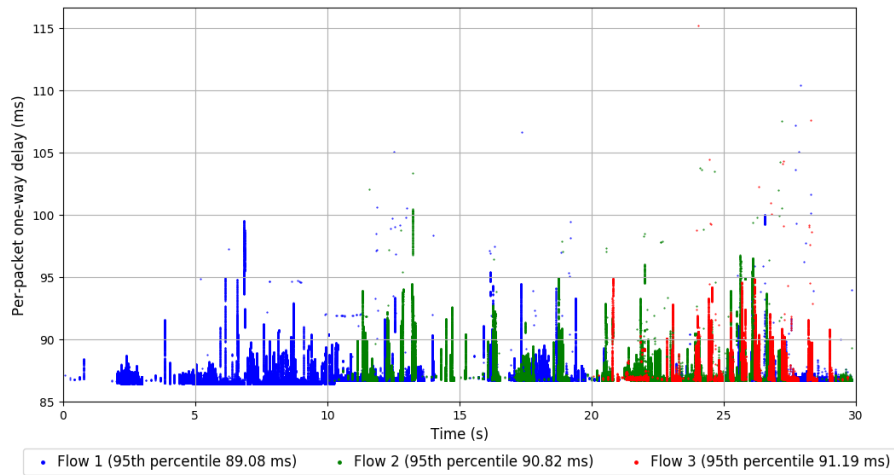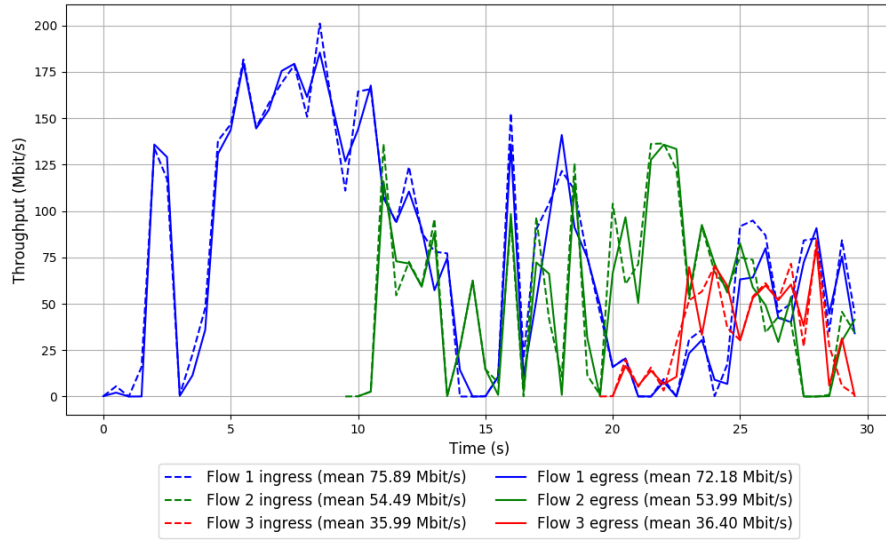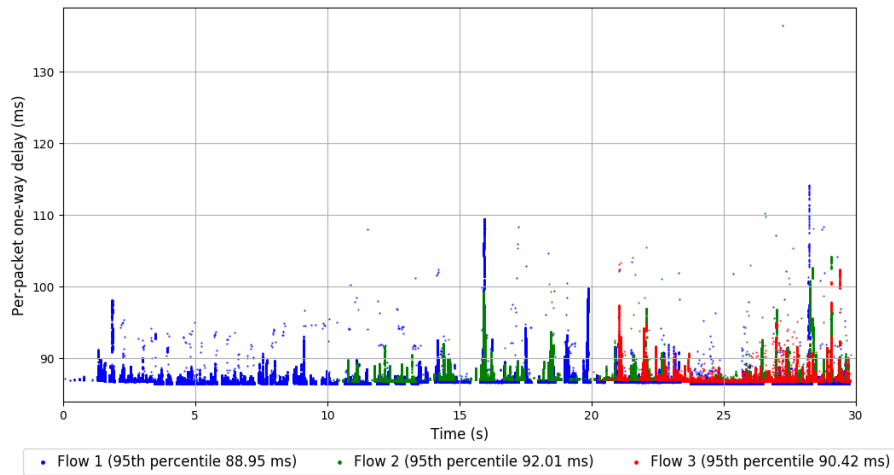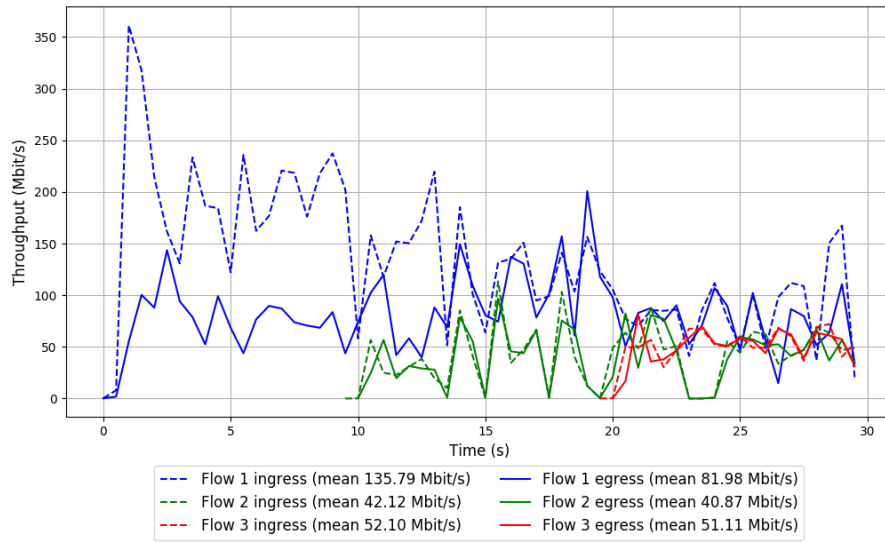
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-08-21 00:55:44
End at: 2017-08-21 00:56:14


# Below is generated by plot.py at 2017-08-21 05:06:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.76 Mbit/s
95th percentile per-packet one-way delay: 90.158 ms
Loss rate: 3.79%
-- Flow 1:
Average throughput: 72.18 Mbit/s
95th percentile per-packet one-way delay: 89.079 ms
Loss rate: 5.44%
-- Flow 2:
Average throughput: 53.99 Mbit/s
95th percentile per-packet one-way delay: 90.823 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 36.40 Mbit/s
95th percentile per-packet one-way delay: 91.187 ms
Loss rate: 0.67%
```
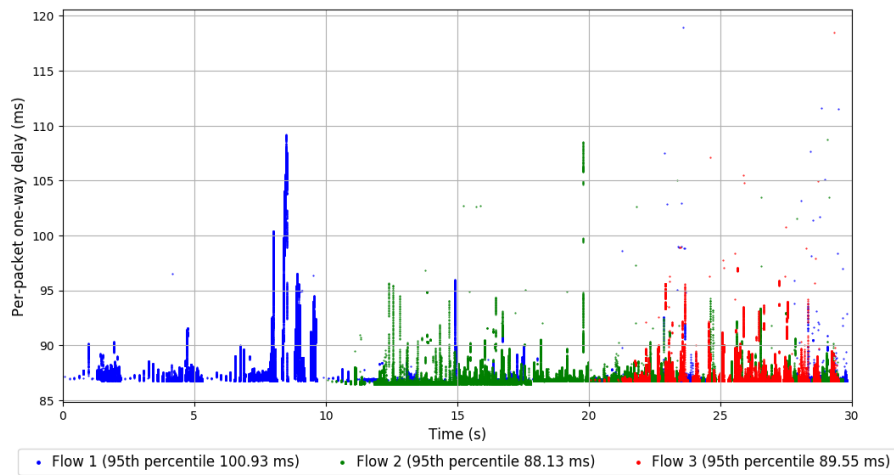
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-08-21 01:08:41
End at: 2017-08-21 01:09:11


# Below is generated by plot.py at 2017-08-21 05:06:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.62 Mbit/s
95th percentile per-packet one-way delay: 89.973 ms
Loss rate: 30.60%
-- Flow 1:
Average throughput: 81.98 Mbit/s
95th percentile per-packet one-way delay: 88.950 ms
Loss rate: 39.63%
-- Flow 2:
Average throughput: 40.87 Mbit/s
95th percentile per-packet one-way delay: 92.013 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 90.425 ms
Loss rate: 3.71%
```
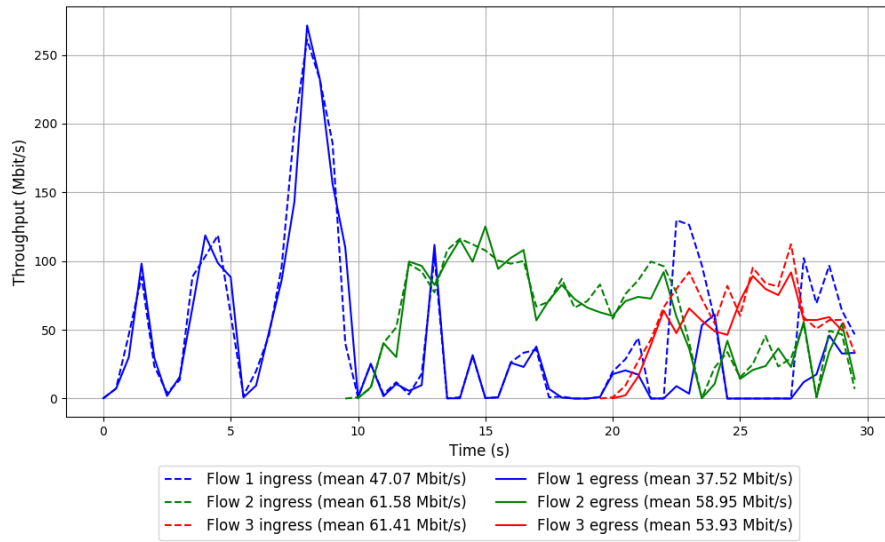
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-08-21 01:21:57
End at: 2017-08-21 01:22:27


# Below is generated by plot.py at 2017-08-21 05:06:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 92.487 ms
Loss rate: 14.15%
-- Flow 1:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 100.930 ms
Loss rate: 20.74%
-- Flow 2:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 88.133 ms
Loss rate: 5.35%
-- Flow 3:
Average throughput: 53.93 Mbit/s
95th percentile per-packet one-way delay: 89.548 ms
Loss rate: 16.55%
```
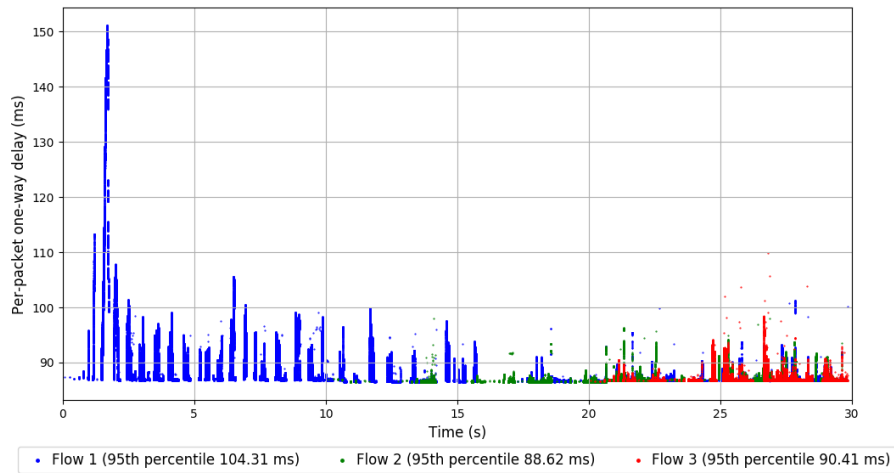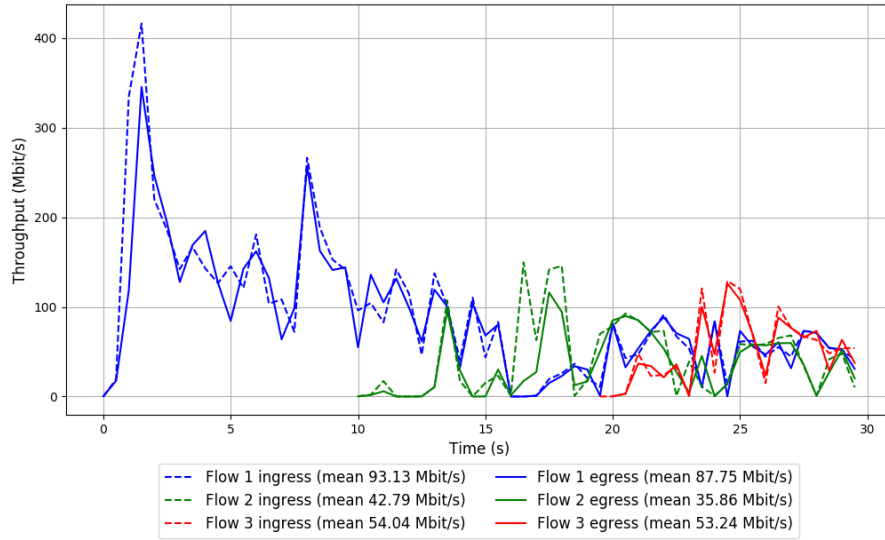
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-08-21 01:35:24
End at: 2017-08-21 01:35:54


# Below is generated by plot.py at 2017-08-21 05:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.83 Mbit/s
95th percentile per-packet one-way delay: 99.448 ms
Loss rate: 8.08%
-- Flow 1:
Average throughput: 87.75 Mbit/s
95th percentile per-packet one-way delay: 104.308 ms
Loss rate: 6.31%
-- Flow 2:
Average throughput: 35.86 Mbit/s
95th percentile per-packet one-way delay: 88.620 ms
Loss rate: 16.92%
-- Flow 3:
Average throughput: 53.24 Mbit/s
95th percentile per-packet one-way delay: 90.407 ms
Loss rate: 3.29%
```
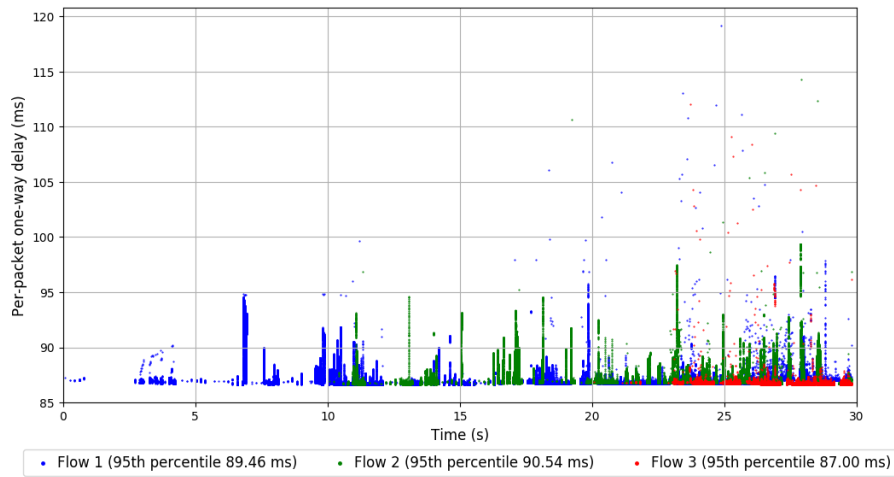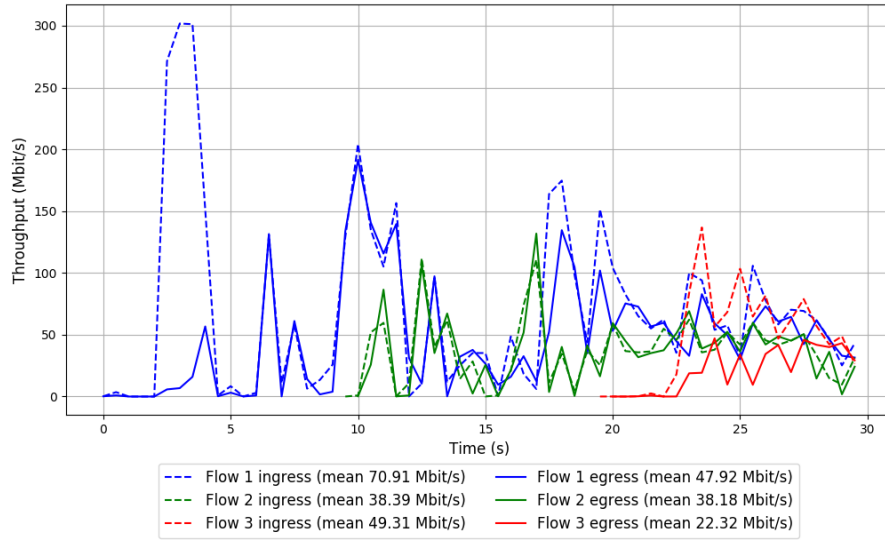
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-08-21 01:48:18
End at: 2017-08-21 01:48:48


# Below is generated by plot.py at 2017-08-21 05:06:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.60 Mbit/s
95th percentile per-packet one-way delay: 89.823 ms
Loss rate: 28.97%
-- Flow 1:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 89.459 ms
Loss rate: 32.82%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 90.542 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 22.32 Mbit/s
95th percentile per-packet one-way delay: 87.000 ms
Loss rate: 55.49%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-08-20 23:41:56
End at: 2017-08-20 23:42:26

# Below is generated by plot.py at 2017-08-21 05:06:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 87.165 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 87.061 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 87.171 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 87.301 ms
Loss rate: 13.49%
```
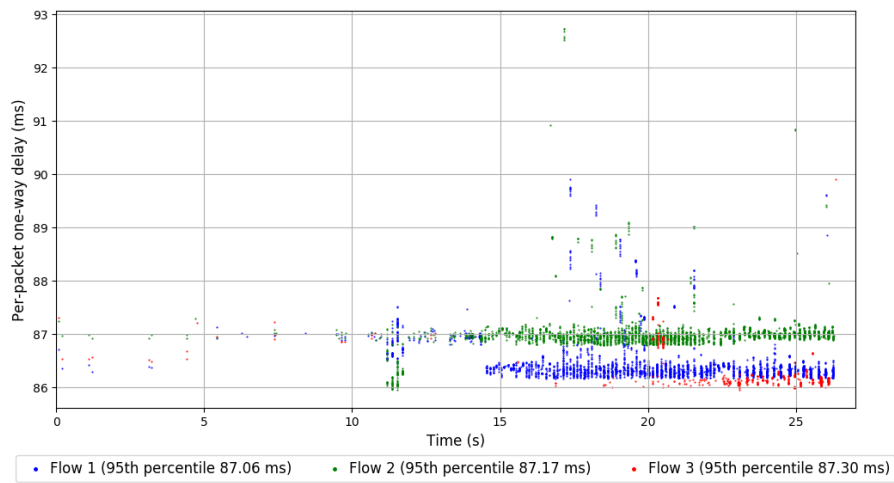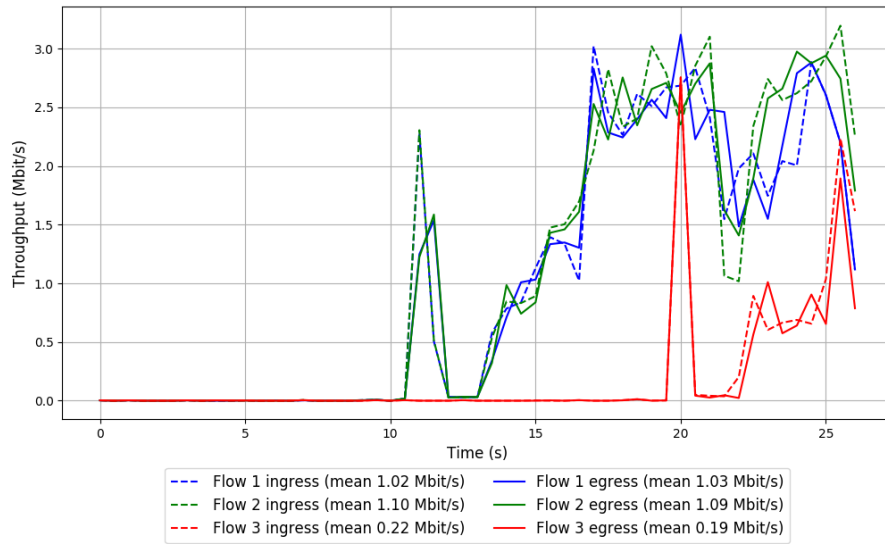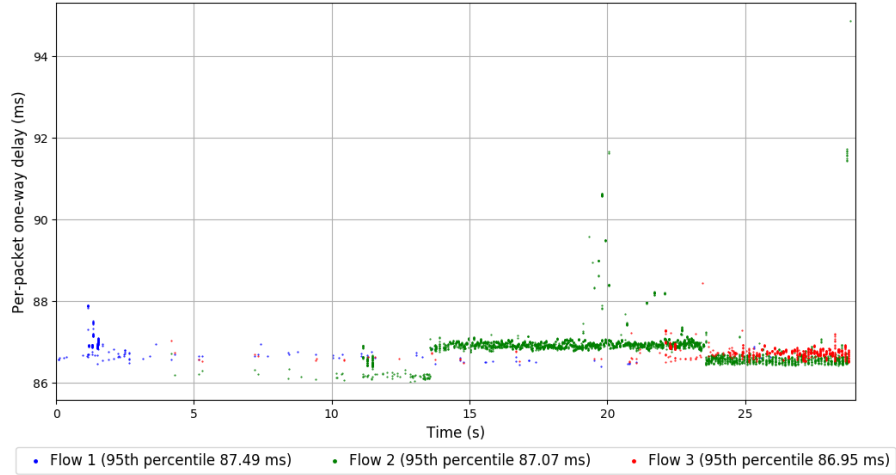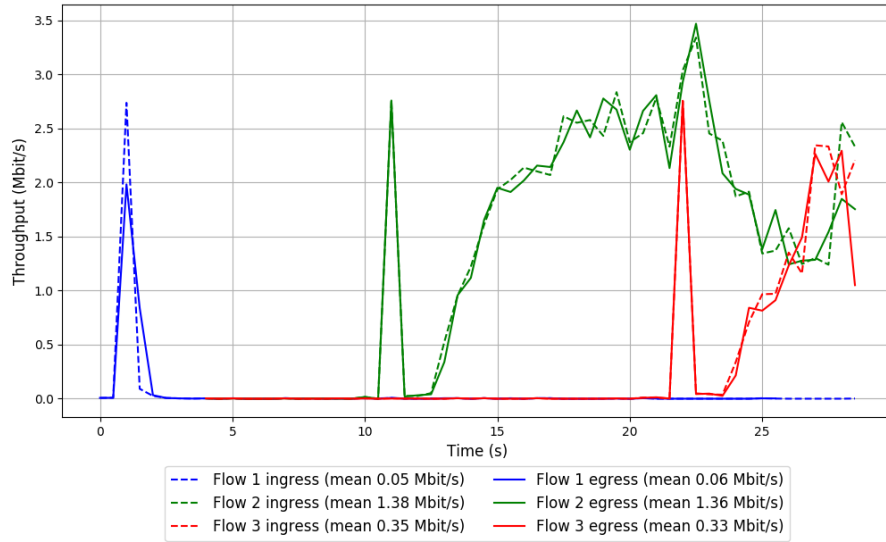
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-08-20 23:55:10
End at: 2017-08-20 23:55:40

# Below is generated by plot.py at 2017-08-21 05:06:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 87.072 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.491 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 87.071 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 86.948 ms
Loss rate: 6.73%
```
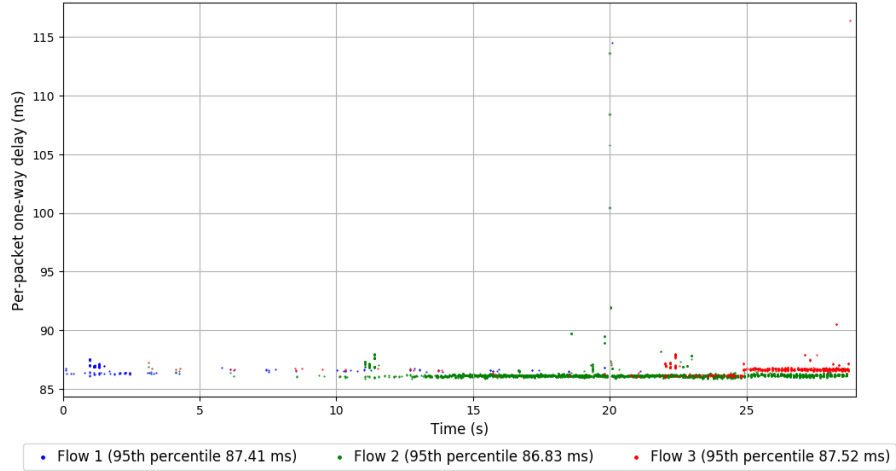
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-08-21 00:08:18
End at: 2017-08-21 00:08:48

# Below is generated by plot.py at 2017-08-21 05:06:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 87.030 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.410 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 87.517 ms
Loss rate: 4.06%
```
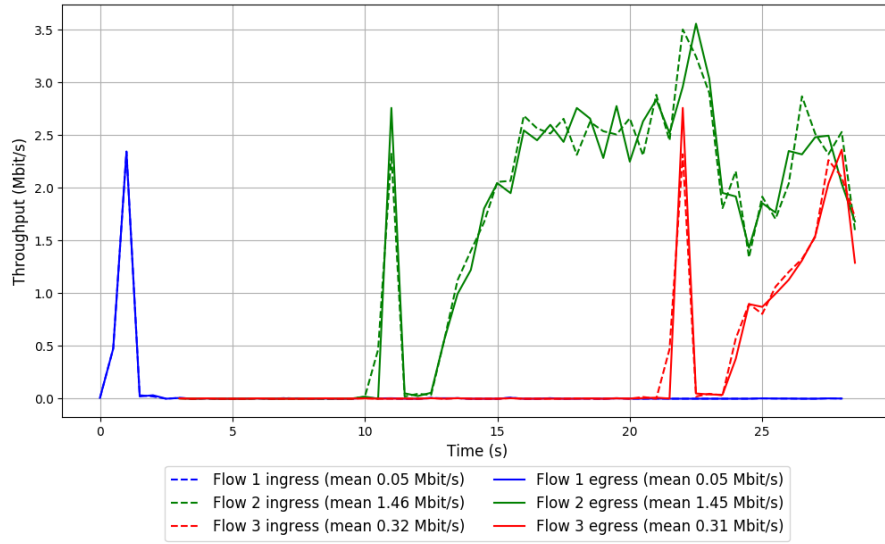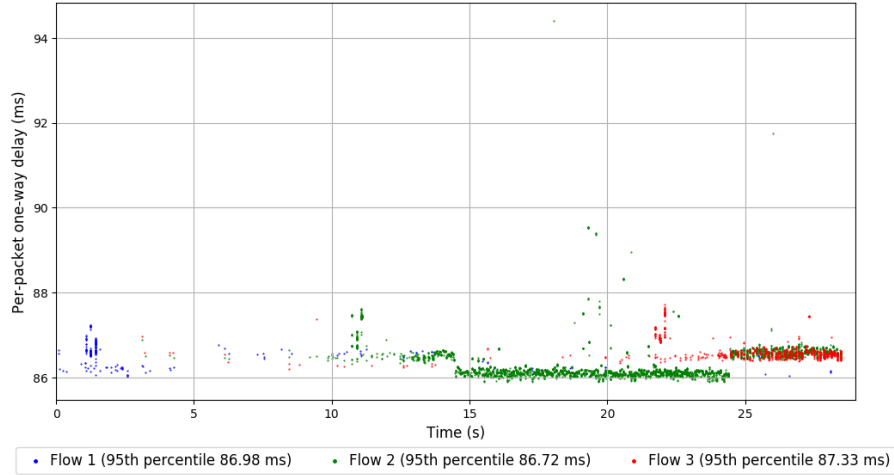
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-08-21 00:21:29
End at: 2017-08-21 00:21:59


# Below is generated by plot.py at 2017-08-21 05:06:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 86.917 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.978 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 86.725 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 87.327 ms
Loss rate: 3.43%
```
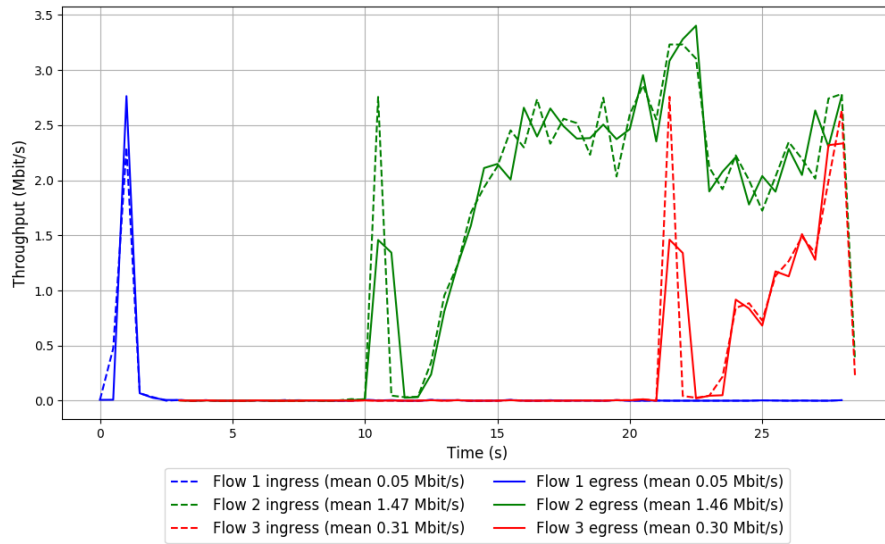
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2017-08-21 00:34:44
End at: 2017-08-21 00:35:14


# Below is generated by plot.py at 2017-08-21 05:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 87.128 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 87.130 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 87.204 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 87.002 ms
Loss rate: 8.85%
```
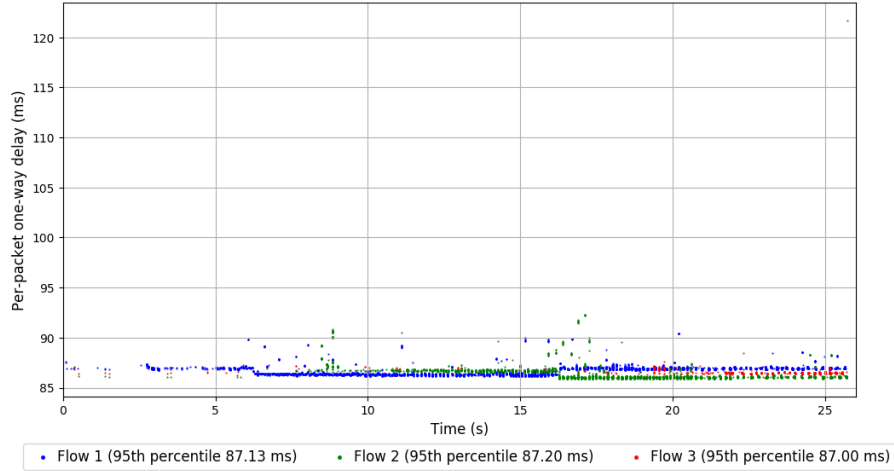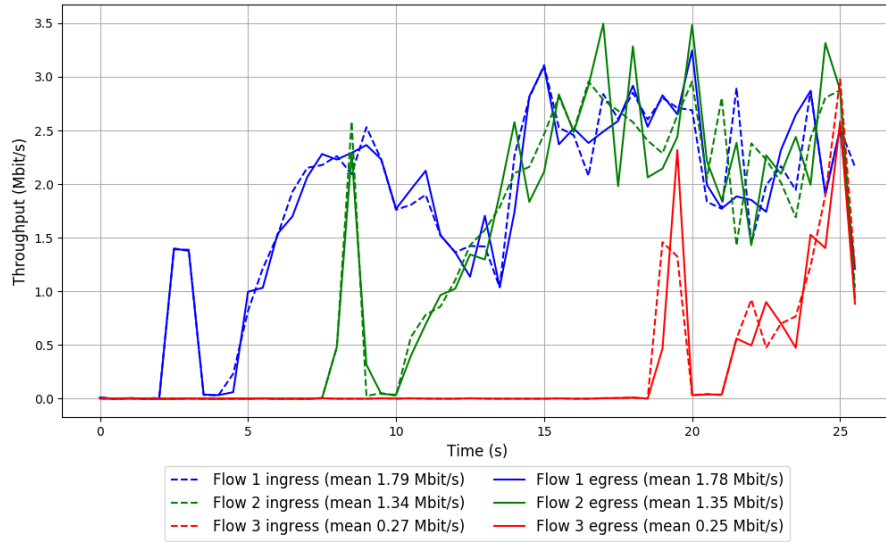
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-08-21 00:47:30
End at: 2017-08-21 00:48:00

# Below is generated by plot.py at 2017-08-21 05:07:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 87.080 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.948 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 87.065 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 87.312 ms
Loss rate: 4.27%
```
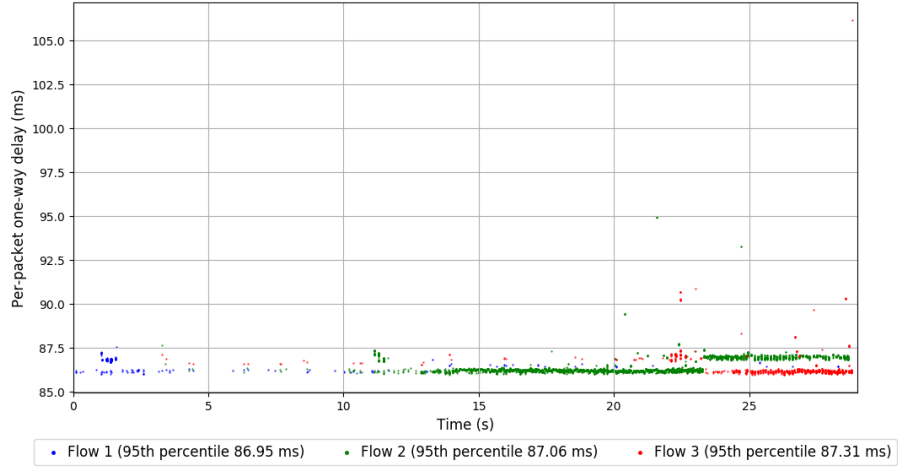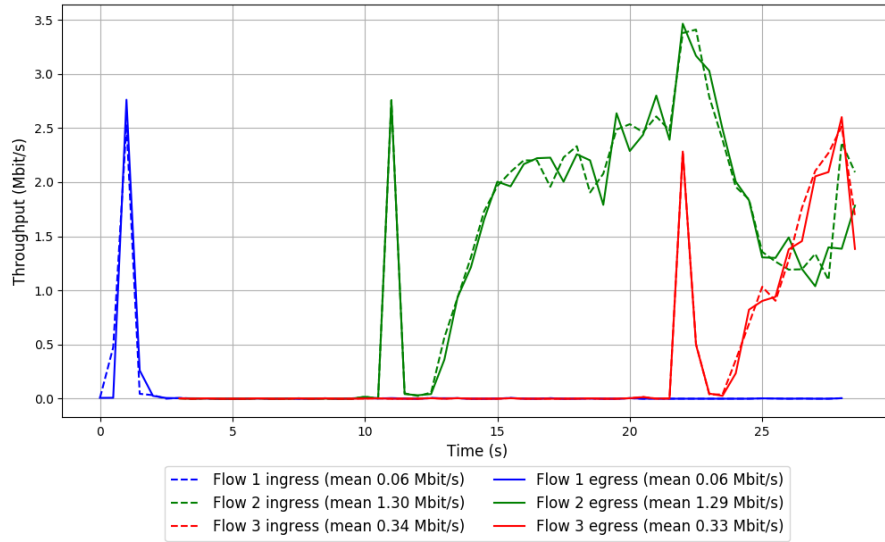
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-08-21 01:00:17
End at: 2017-08-21 01:00:47


# Below is generated by plot.py at 2017-08-21 05:07:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 87.217 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 87.276 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 87.181 ms
Loss rate: 5.66%
```
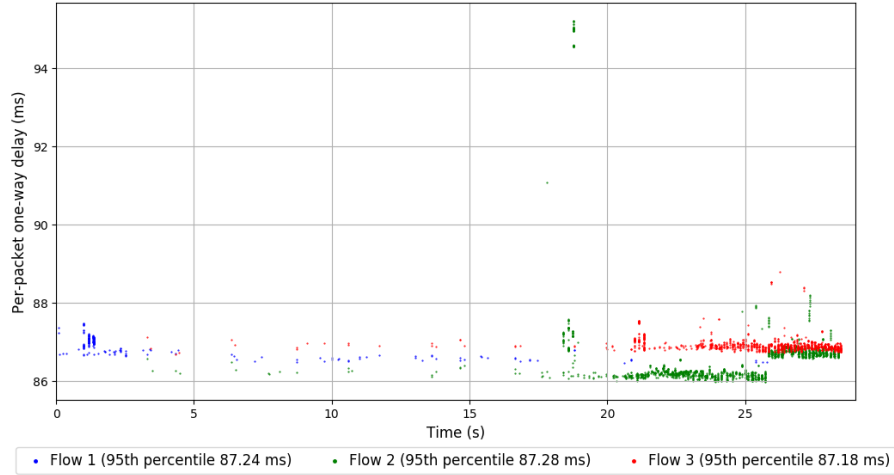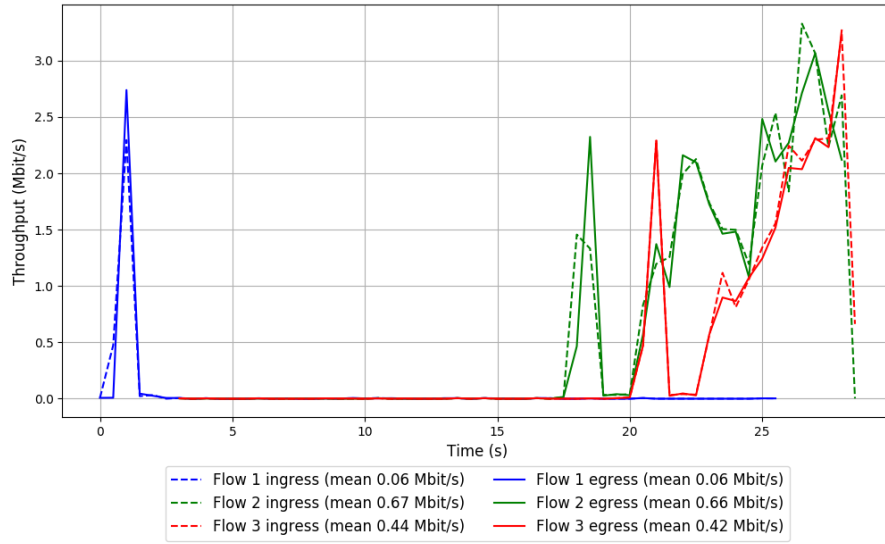
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-08-21 01:13:19
End at: 2017-08-21 01:13:49


# Below is generated by plot.py at 2017-08-21 05:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 87.005 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 86.995 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 87.040 ms
Loss rate: 8.00%
```
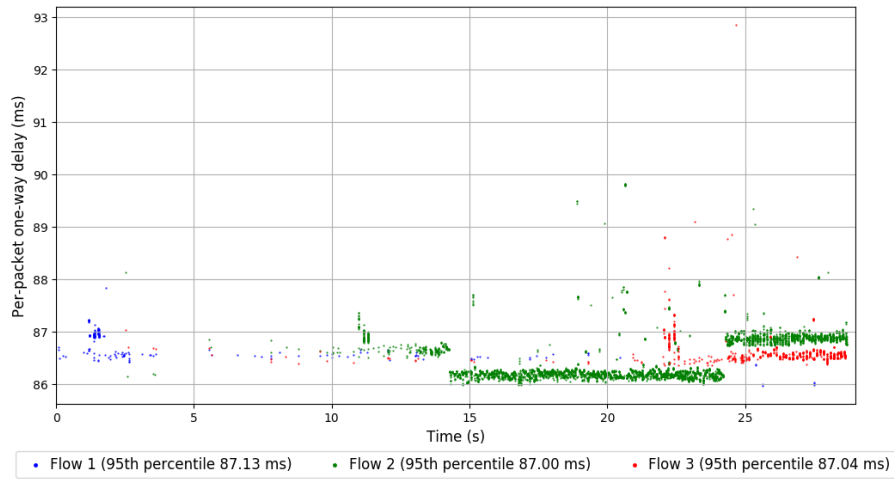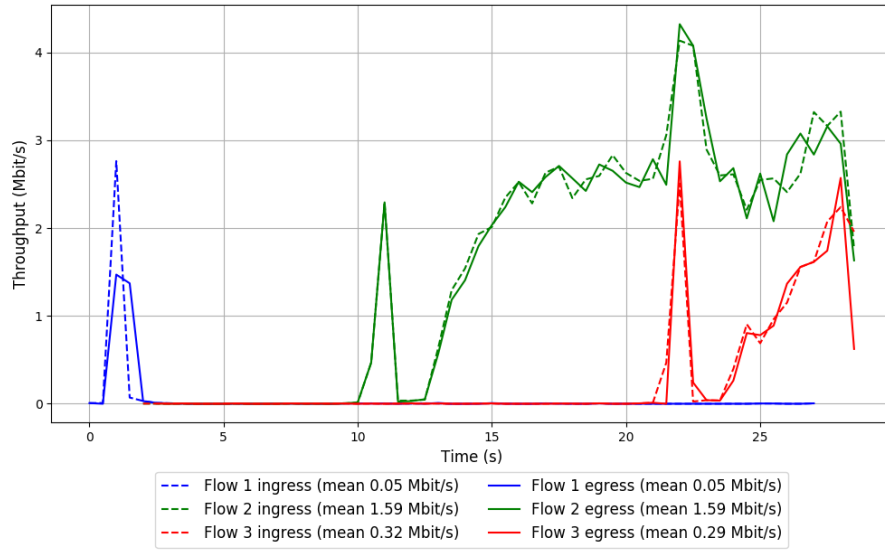
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-08-21 01:26:41
End at: 2017-08-21 01:27:11

# Below is generated by plot.py at 2017-08-21 05:07:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 87.256 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.233 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 87.057 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 88.278 ms
Loss rate: 4.93%
```
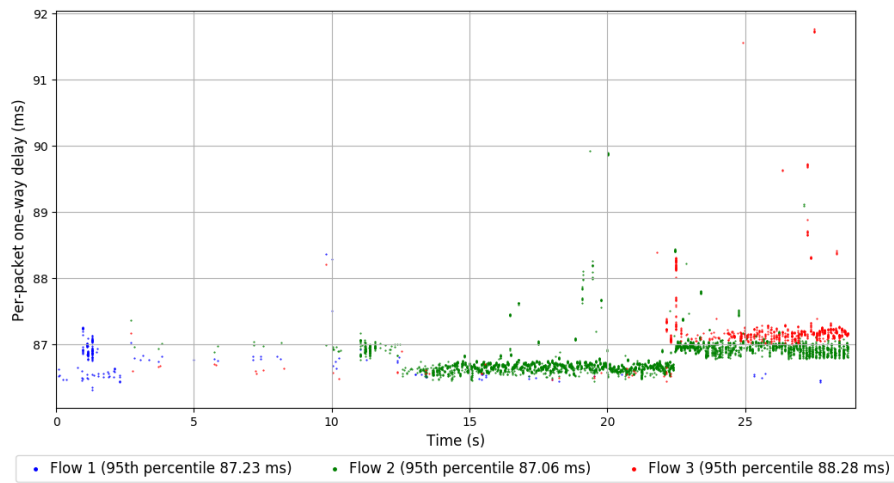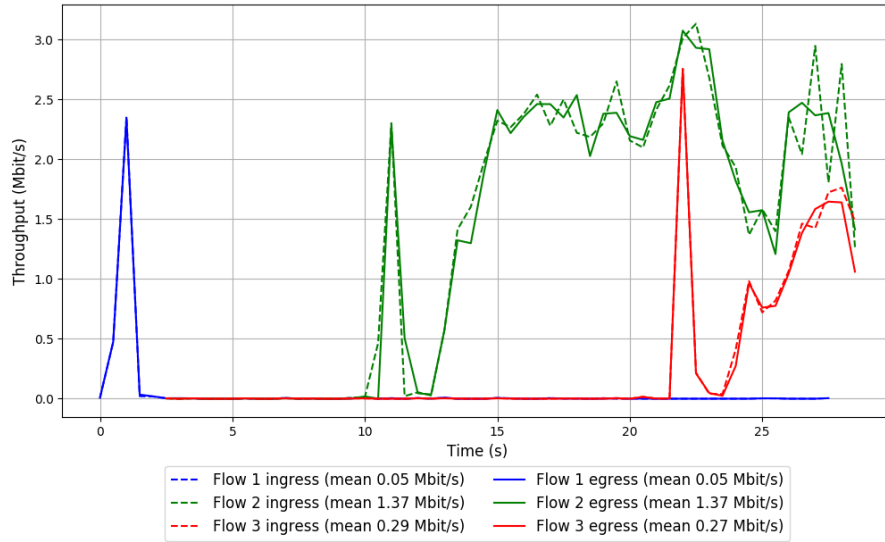
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-08-21 01:39:51
End at: 2017-08-21 01:40:21


# Below is generated by plot.py at 2017-08-21 05:07:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 87.038 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.200 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 86.832 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 87.246 ms
Loss rate: 6.27%
```

Run 10: Report of WebRTC media — Data Link