Pantheon Report

Generated at 2018-06-19 14:38:27 (UTC).

Data path: China Ethernet (*remote*) →AWS Korea Ethernet (*local*).

Repeated the test of 16 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
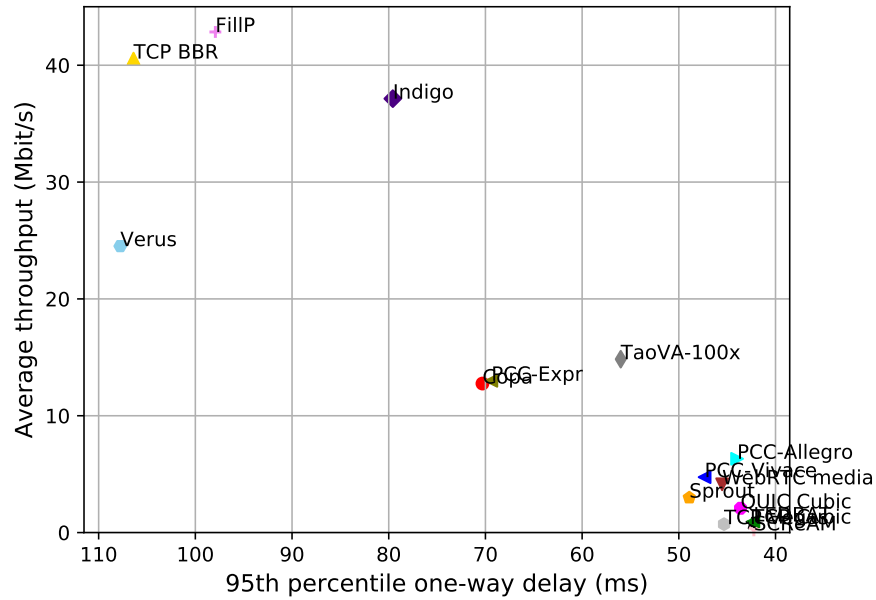
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.
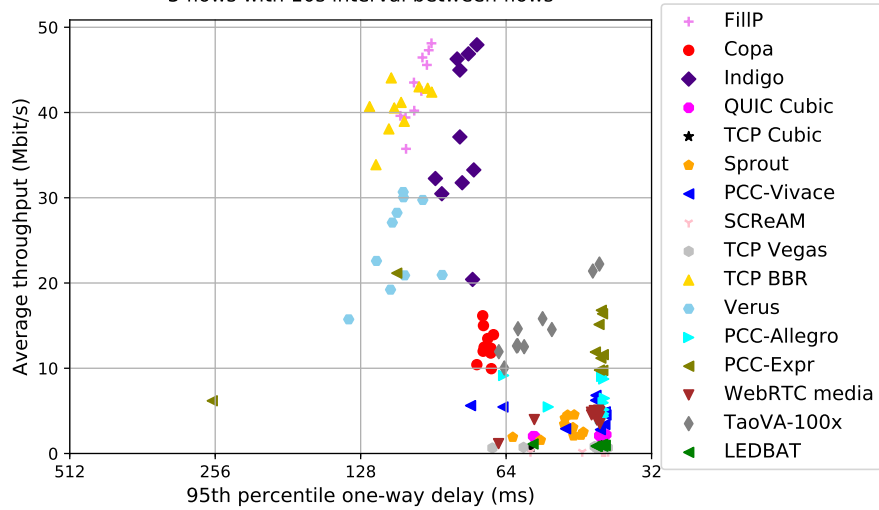
```
Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

test from China to AWS Korea, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

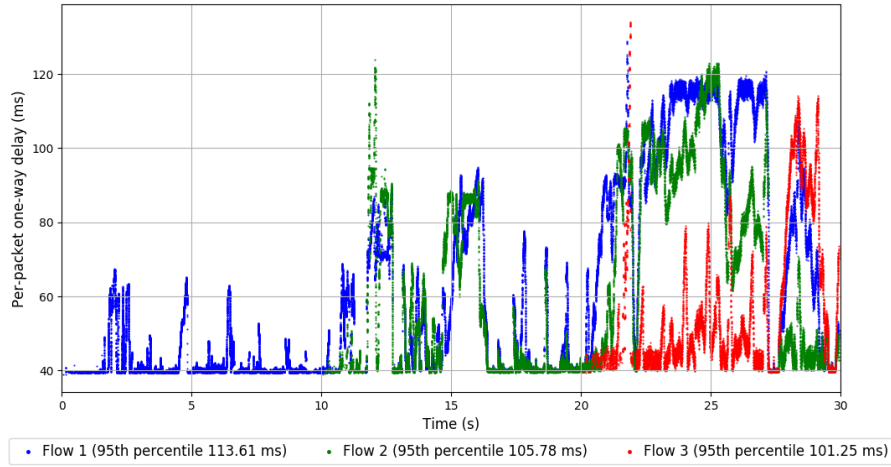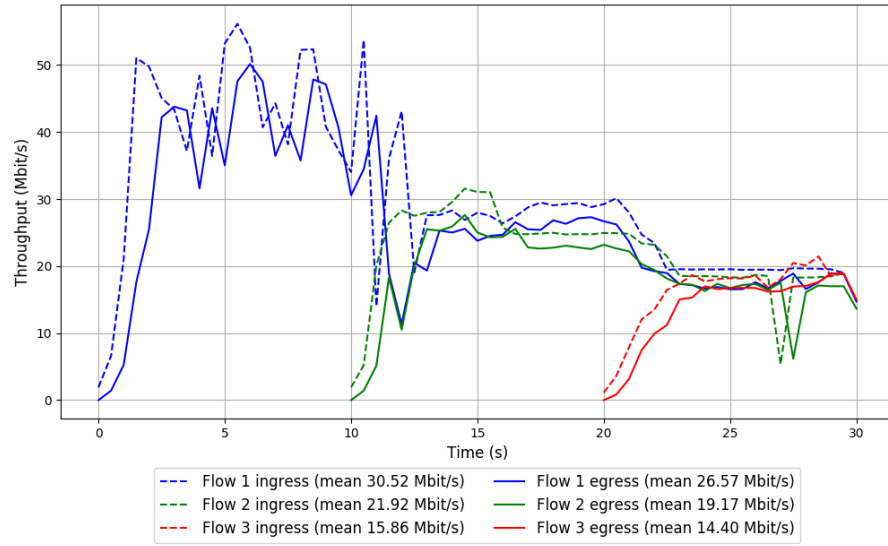| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	23.92	18.20	13.96	100.07	107.17	109.04	13.18	13.65	12.23
Copa	10	6.23	6.06	8.50	68.86	71.36	72.09	19.59	16.71	13.45
TCP Cubic	10	0.36	0.39	0.48	42.80	41.66	41.60	8.84	8.67	9.51
FillP	10	26.28	17.80	14.43	91.95	104.53	113.31	22.02	24.53	26.22
Indigo	10	26.44	10.62	11.18	80.83	63.27	78.03	38.14	8.73	13.22
LEDBAT	10	0.48	0.46	0.55	42.20	41.68	42.84	8.27	8.82	9.07
PCC-Allegro	10	3.59	2.84	2.56	43.77	43.98	43.79	8.49	8.57	8.92
PCC-Expr	10	6.35	6.85	6.41	71.02	64.16	79.03	10.05	11.85	14.62
QUIC Cubic	10	0.99	1.06	1.17	43.90	43.34	41.02	8.23	8.29	8.86
SCReAM	10	0.09	0.09	0.12	42.51	41.86	41.47	3.30	3.80	5.45
Sprout	10	1.48	1.34	1.89	49.11	47.02	46.37	8.31	7.97	8.51
TaoVA-100x	10	8.55	6.63	5.92	48.16	62.88	67.43	8.67	11.32	16.67
TCP Vegas	10	0.35	0.36	0.40	45.56	45.50	43.93	8.78	9.11	8.84
Verus	10	16.07	9.60	6.51	96.38	125.95	124.72	45.59	37.08	41.90
PCC-Vivace	10	2.32	2.79	1.74	47.64	46.88	45.56	8.19	8.14	8.75
WebRTC media	10	2.16	1.43	0.55	44.95	45.28	46.71	6.75	7.09	7.81

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-19 09:33:23
End at: 2018-06-19 09:33:53
Local clock offset: 2.58 ms
Remote clock offset: 20.406 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.06 Mbit/s
95th percentile per-packet one-way delay: 110.635 ms
Loss rate: 12.90%
-- Flow 1:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 113.614 ms
Loss rate: 13.27%
-- Flow 2:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 105.779 ms
Loss rate: 13.07%
-- Flow 3:
Average throughput: 14.40 Mbit/s
95th percentile per-packet one-way delay: 101.253 ms
Loss rate: 10.25%
```

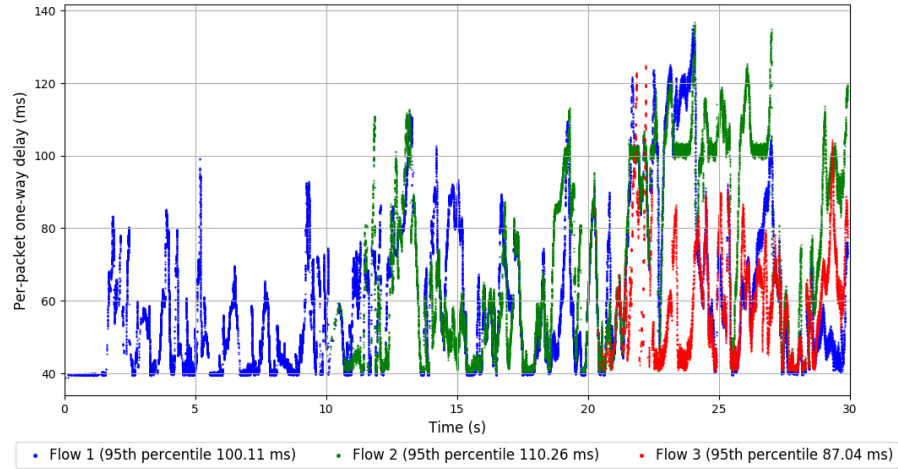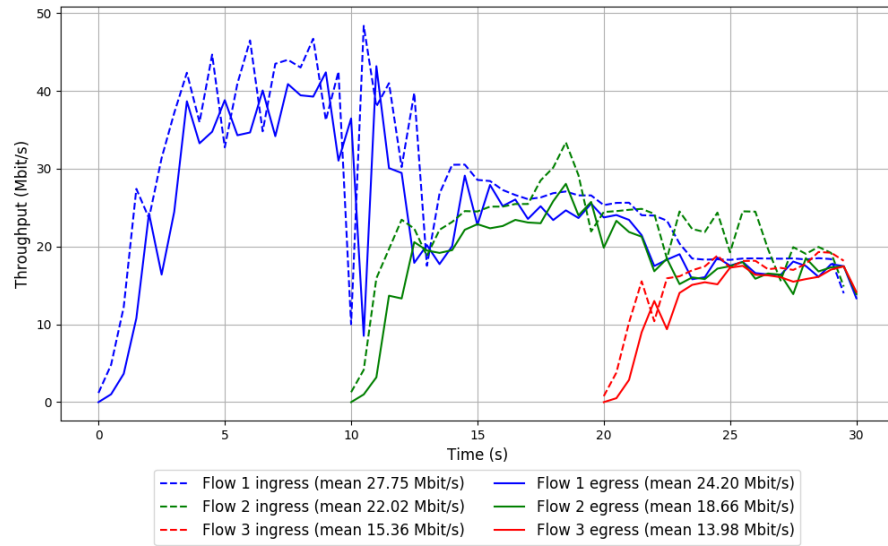Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-06-19 10:06:52
End at: 2018-06-19 10:07:22
Local clock offset: 1.931 ms
Remote clock offset: 16.599 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.19 Mbit/s
95th percentile per-packet one-way delay: 105.559 ms
Loss rate: 13.30%
-- Flow 1:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 100.111 ms
Loss rate: 12.79%
-- Flow 2:
Average throughput: 18.66 Mbit/s
95th percentile per-packet one-way delay: 110.260 ms
Loss rate: 15.32%
-- Flow 3:
Average throughput: 13.98 Mbit/s
95th percentile per-packet one-way delay: 87.043 ms
Loss rate: 10.29%
```

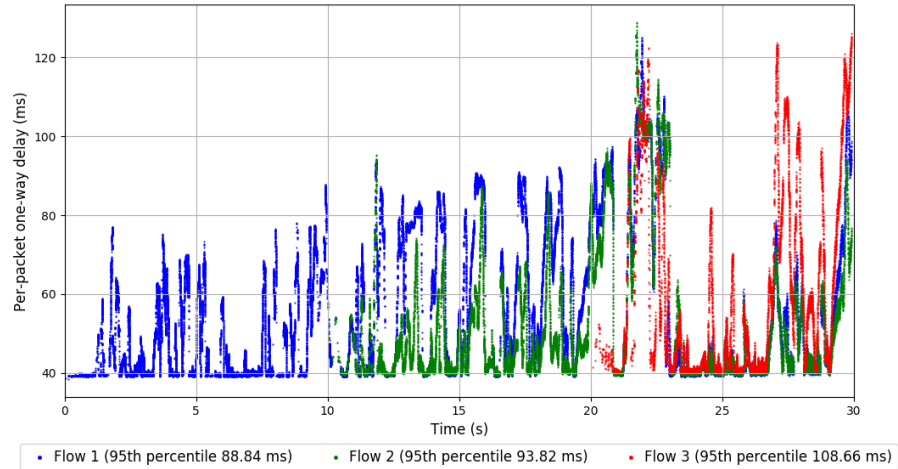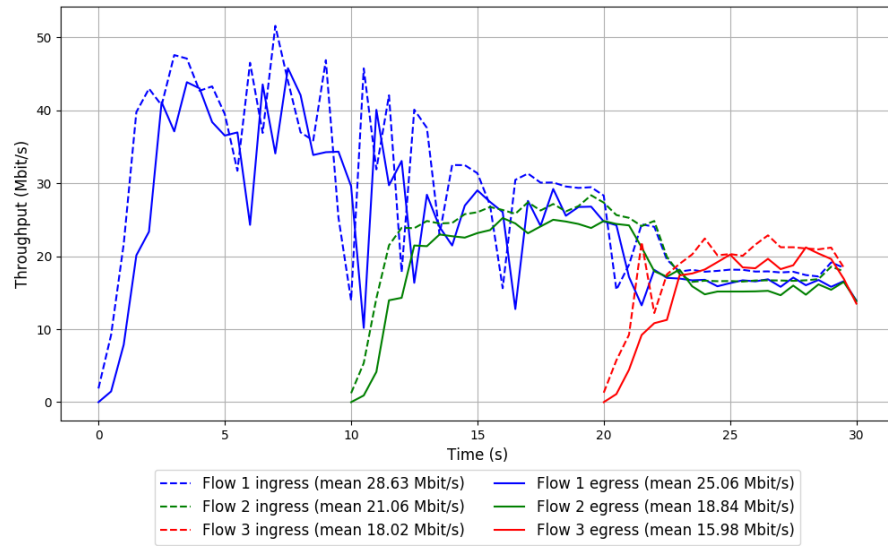Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-06-19 10:38:53
End at: 2018-06-19 10:39:23
Local clock offset: 2.033 ms
Remote clock offset: 17.598 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.85 Mbit/s
95th percentile per-packet one-way delay: 93.018 ms
Loss rate: 12.23%
-- Flow 1:
Average throughput: 25.06 Mbit/s
95th percentile per-packet one-way delay: 88.836 ms
Loss rate: 12.78%
-- Flow 2:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 93.820 ms
Loss rate: 11.07%
-- Flow 3:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 108.663 ms
Loss rate: 12.28%
```

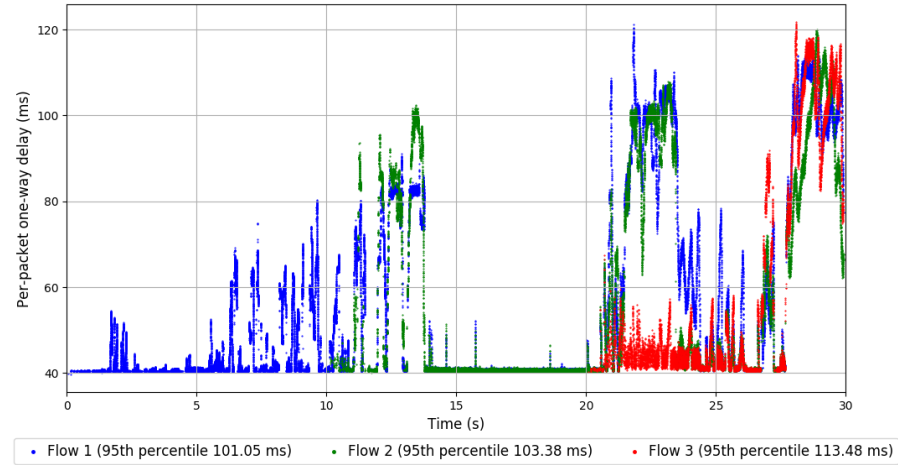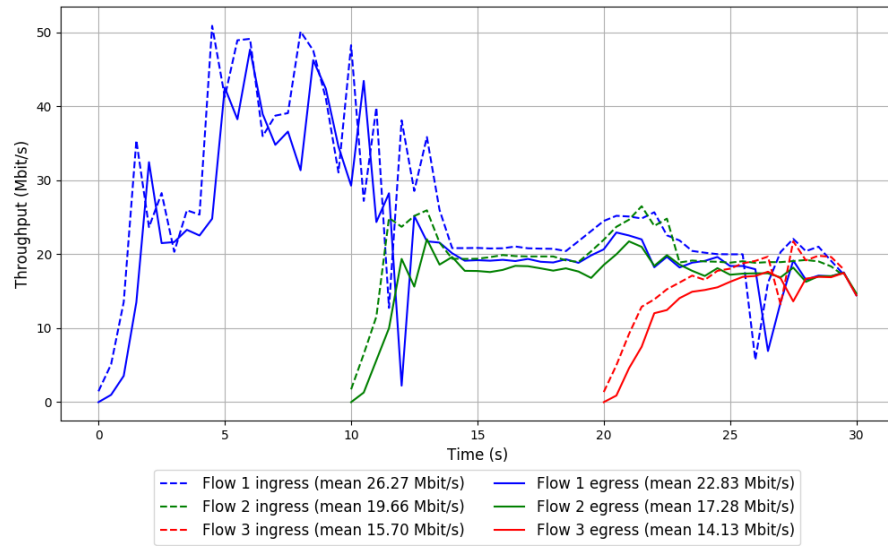Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-06-19 11:11:49
End at: 2018-06-19 11:12:19
Local clock offset: 6.232 ms
Remote clock offset: 41.635 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 103.981 ms
Loss rate: 12.87%
-- Flow 1:
Average throughput: 22.83 Mbit/s
95th percentile per-packet one-way delay: 101.046 ms
Loss rate: 13.40%
-- Flow 2:
Average throughput: 17.28 Mbit/s
95th percentile per-packet one-way delay: 103.384 ms
Loss rate: 12.55%
-- Flow 3:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 113.481 ms
Loss rate: 11.03%
```

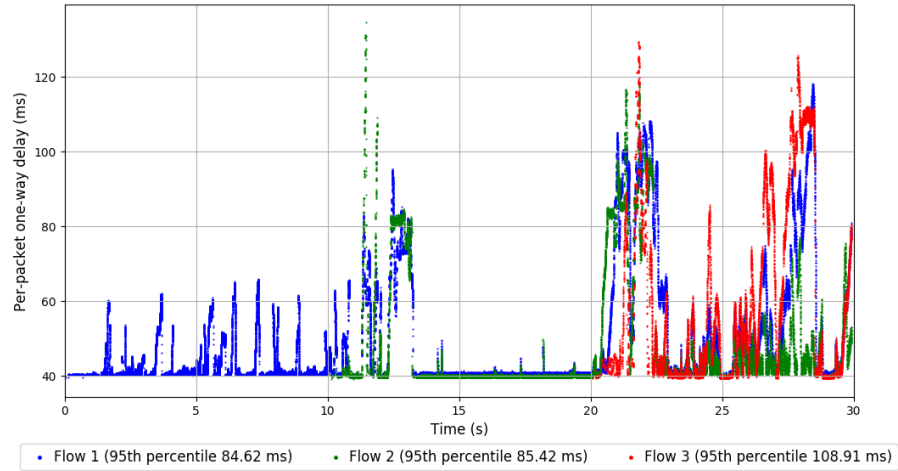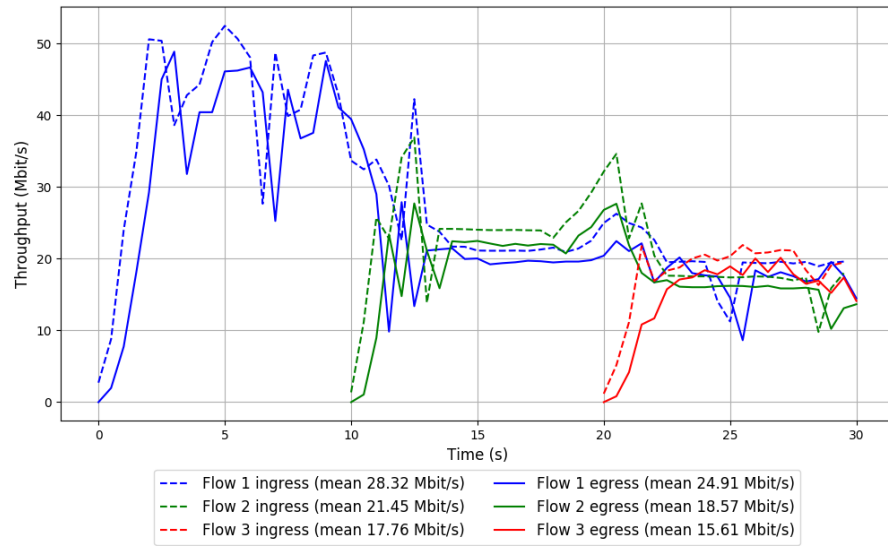Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-06-19 11:44:25
End at: 2018-06-19 11:44:55
Local clock offset: 7.89 ms
Remote clock offset: 52.283 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.40 Mbit/s
95th percentile per-packet one-way delay: 91.213 ms
Loss rate: 12.90%
-- Flow 1:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 84.623 ms
Loss rate: 12.35%
-- Flow 2:
Average throughput: 18.57 Mbit/s
95th percentile per-packet one-way delay: 85.421 ms
Loss rate: 13.91%
-- Flow 3:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 108.909 ms
Loss rate: 13.07%
```
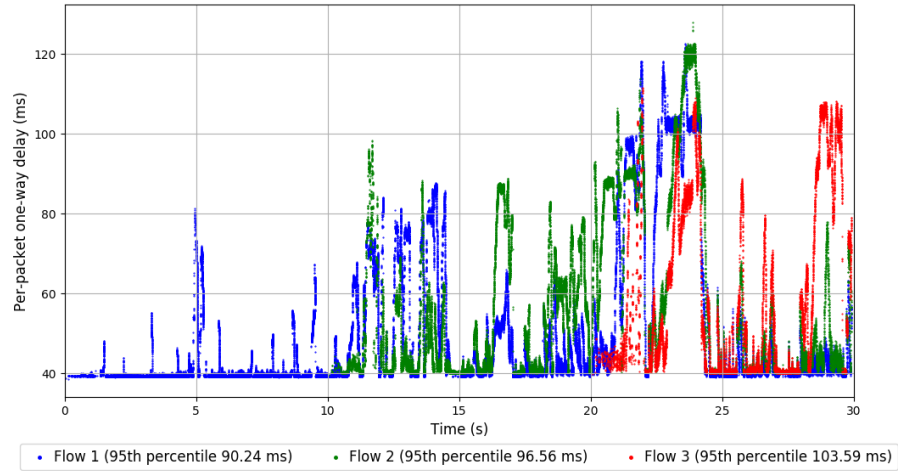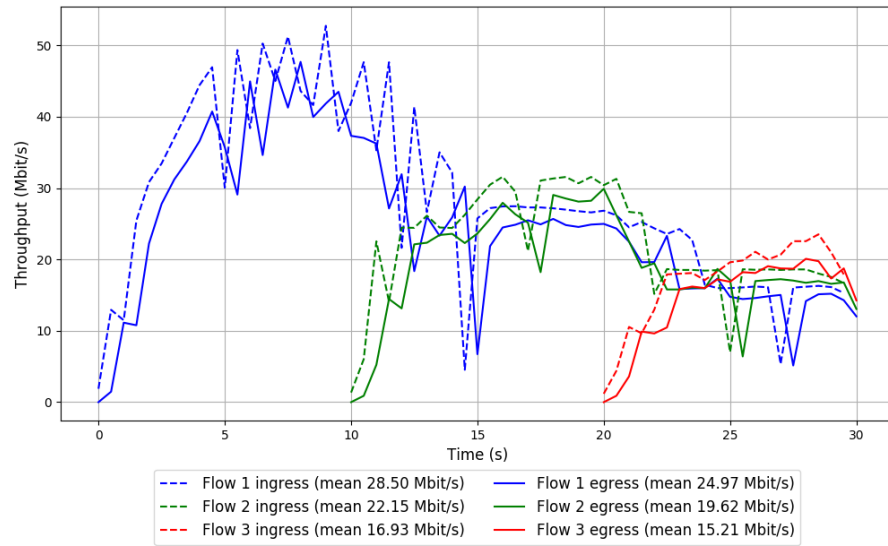
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 28.32 Mbit/s)   Flow 1 egress (mean 24.91 Mbit/s)
Flow 2 ingress (mean 21.45 Mbit/s)   Flow 2 egress (mean 18.57 Mbit/s)
Flow 3 ingress (mean 17.76 Mbit/s)   Flow 3 egress (mean 15.61 Mbit/s)

Flow 1 (95th percentile 84.62 ms)   Flow 2 (95th percentile 85.42 ms)   Flow 3 (95th percentile 108.91 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-06-19 12:17:38
End at: 2018-06-19 12:18:08
Local clock offset: 8.102 ms
Remote clock offset: 28.154 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.02 Mbit/s
95th percentile per-packet one-way delay: 96.897 ms
Loss rate: 12.28%
-- Flow 1:
Average throughput: 24.97 Mbit/s
95th percentile per-packet one-way delay: 90.241 ms
Loss rate: 12.71%
-- Flow 2:
Average throughput: 19.62 Mbit/s
95th percentile per-packet one-way delay: 96.556 ms
Loss rate: 11.92%
-- Flow 3:
Average throughput: 15.21 Mbit/s
95th percentile per-packet one-way delay: 103.593 ms
Loss rate: 11.08%
```
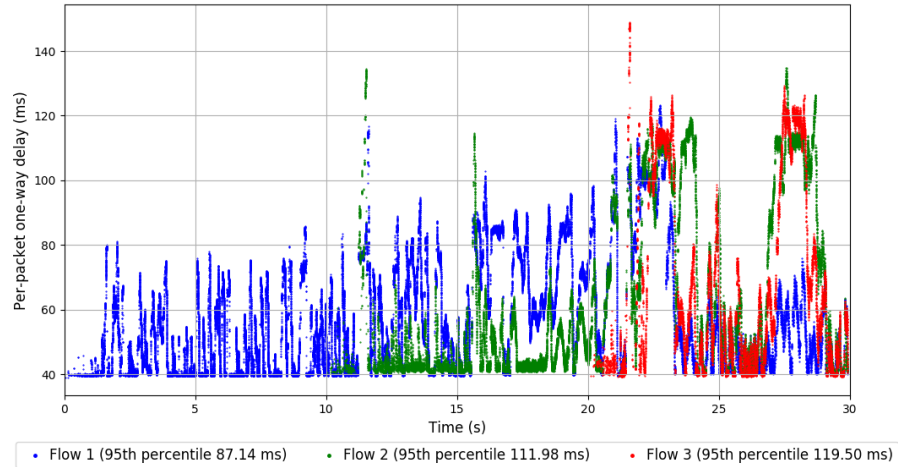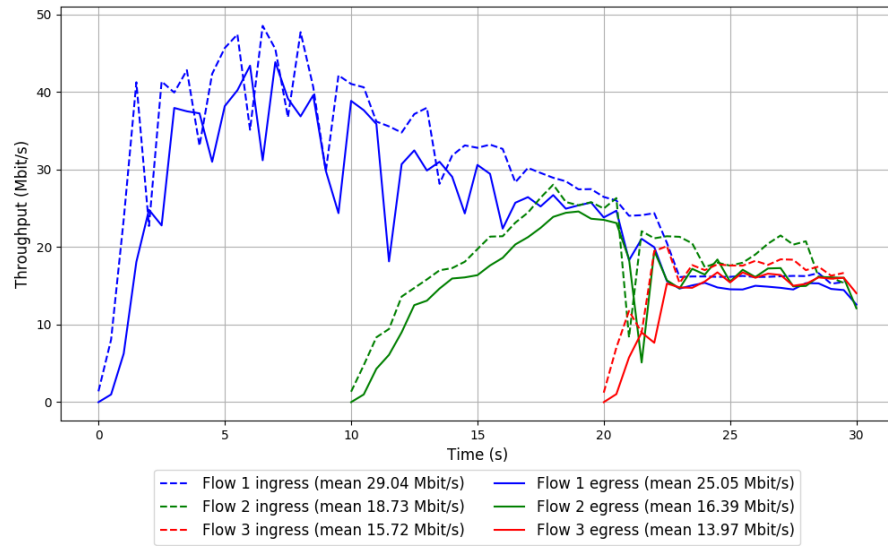
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 28.50 Mbit/s) --- Flow 1 egress (mean 24.97 Mbit/s) ---
Flow 2 ingress (mean 22.15 Mbit/s) --- Flow 2 egress (mean 19.62 Mbit/s) ---
Flow 3 ingress (mean 16.93 Mbit/s) --- Flow 3 egress (mean 15.21 Mbit/s) ---

Flow 1 (95th percentile 90.24 ms)   Flow 2 (95th percentile 96.56 ms)   Flow 3 (95th percentile 103.59 ms)

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```
Run 7: Statistics of TCP BBR

Start at: 2018-06-19 12:50:46
End at: 2018-06-19 12:51:16
Local clock offset: 7.387 ms
Remote clock offset: 37.161 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 109.063 ms
Loss rate: 13.54%
-- Flow 1:
Average throughput: 25.05 Mbit/s
95th percentile per-packet one-way delay: 87.143 ms
Loss rate: 14.05%
-- Flow 2:
Average throughput: 16.39 Mbit/s
95th percentile per-packet one-way delay: 111.985 ms
Loss rate: 12.95%
-- Flow 3:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 119.495 ms
Loss rate: 12.10%
```
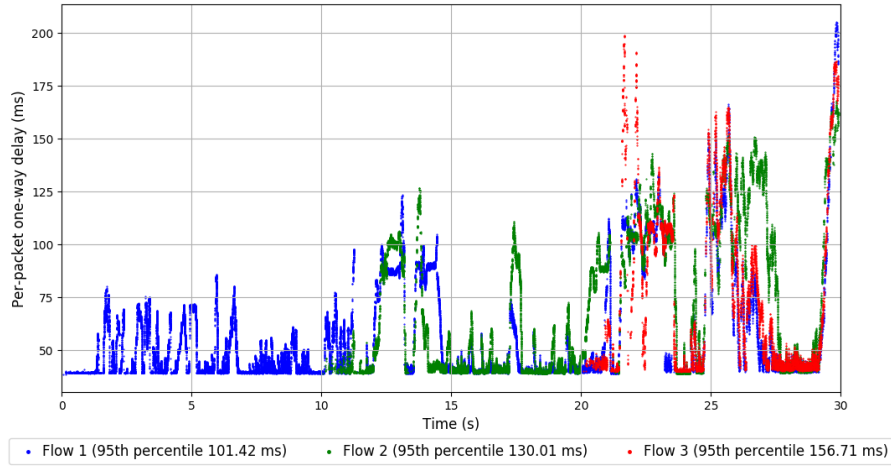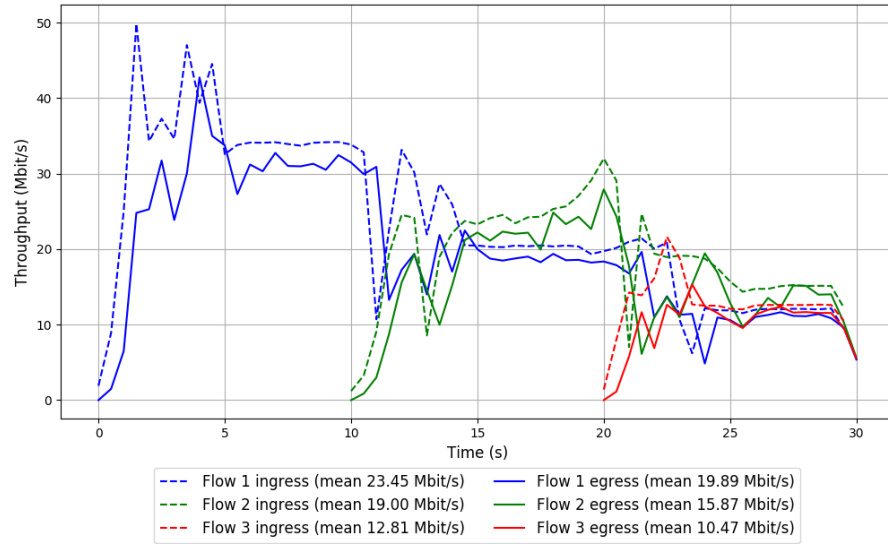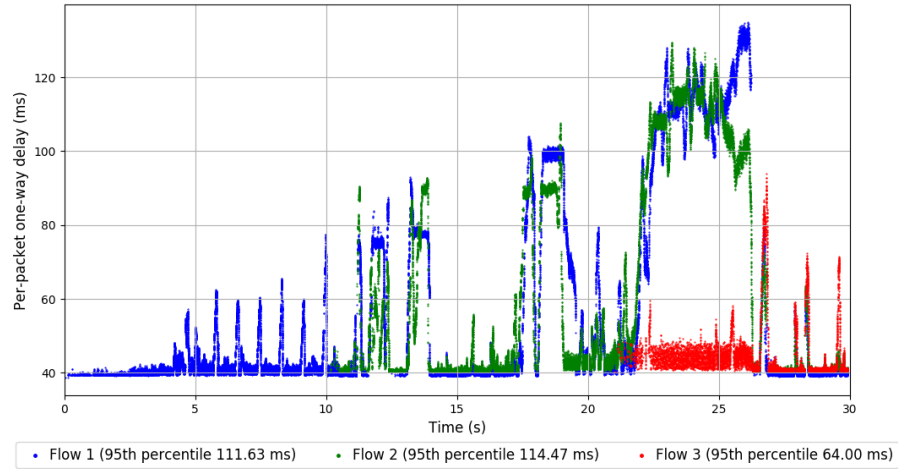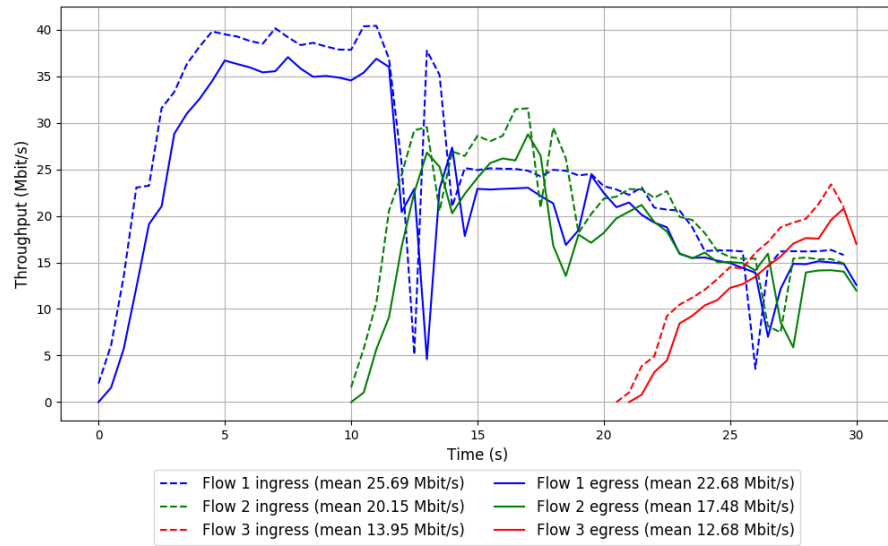
Run 7: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 29.04 Mbit/s) —— Flow 1 egress (mean 25.05 Mbit/s)
- - - Flow 2 ingress (mean 18.73 Mbit/s) —— Flow 2 egress (mean 16.39 Mbit/s)
- - - Flow 3 ingress (mean 15.72 Mbit/s) —— Flow 3 egress (mean 13.97 Mbit/s)

• Flow 1 (95th percentile 87.14 ms)   • Flow 2 (95th percentile 111.98 ms)   • Flow 3 (95th percentile 119.50 ms)

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```
Run 8: Statistics of TCP BBR

Start at: 2018-06-19 13:23:48
End at: 2018-06-19 13:24:18
Local clock offset: 5.657 ms
Remote clock offset: 12.131 ms


# Below is generated by plot.py at 2018-06-19 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 118.997 ms
Loss rate: 16.33%
-- Flow 1:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 101.420 ms
Loss rate: 15.51%
-- Flow 2:
Average throughput: 15.87 Mbit/s
95th percentile per-packet one-way delay: 130.007 ms
Loss rate: 16.90%
-- Flow 3:
Average throughput: 10.47 Mbit/s
95th percentile per-packet one-way delay: 156.713 ms
Loss rate: 19.19%
```

Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-06-19 13:55:43
End at: 2018-06-19 13:56:13
Local clock offset: 7.93 ms
Remote clock offset: -8.693 ms


# Below is generated by plot.py at 2018-06-19 14:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.08 Mbit/s
95th percentile per-packet one-way delay: 111.894 ms
Loss rate: 12.37%
-- Flow 1:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 111.628 ms
Loss rate: 12.02%
-- Flow 2:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 114.468 ms
Loss rate: 13.73%
-- Flow 3:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 64.001 ms
Loss rate: 10.20%
```
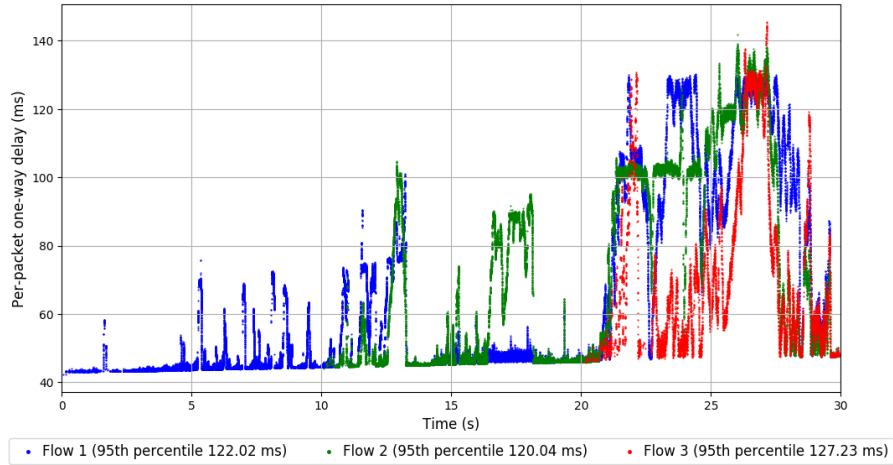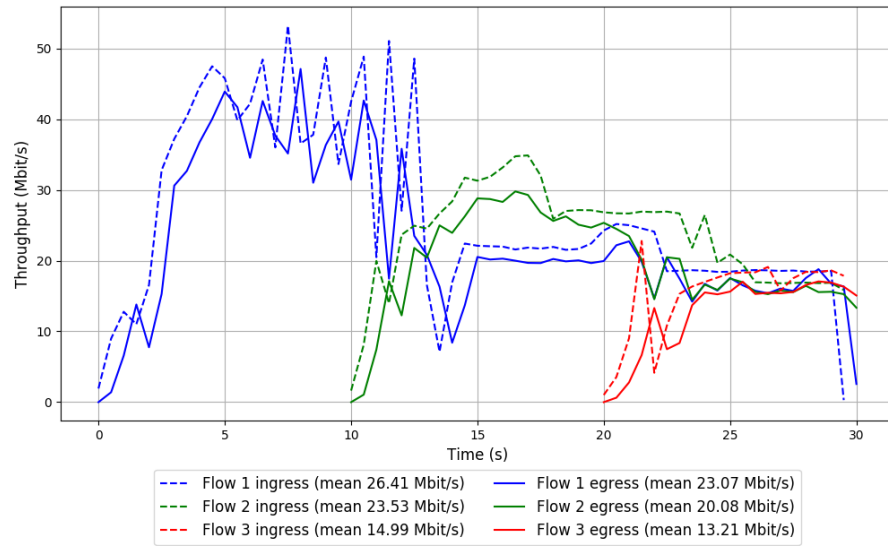
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-06-19 14:29:18
End at: 2018-06-19 14:29:48
Local clock offset: 8.597 ms
Remote clock offset: 1.12 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 122.666 ms
Loss rate: 13.64%
-- Flow 1:
Average throughput: 23.07 Mbit/s
95th percentile per-packet one-way delay: 122.019 ms
Loss rate: 12.94%
-- Flow 2:
Average throughput: 20.08 Mbit/s
95th percentile per-packet one-way delay: 120.036 ms
Loss rate: 15.09%
-- Flow 3:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 127.231 ms
Loss rate: 12.82%
```

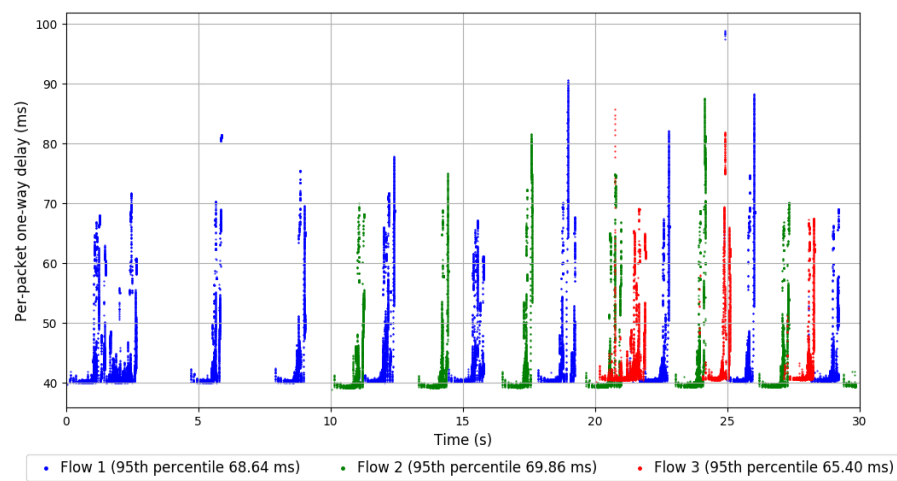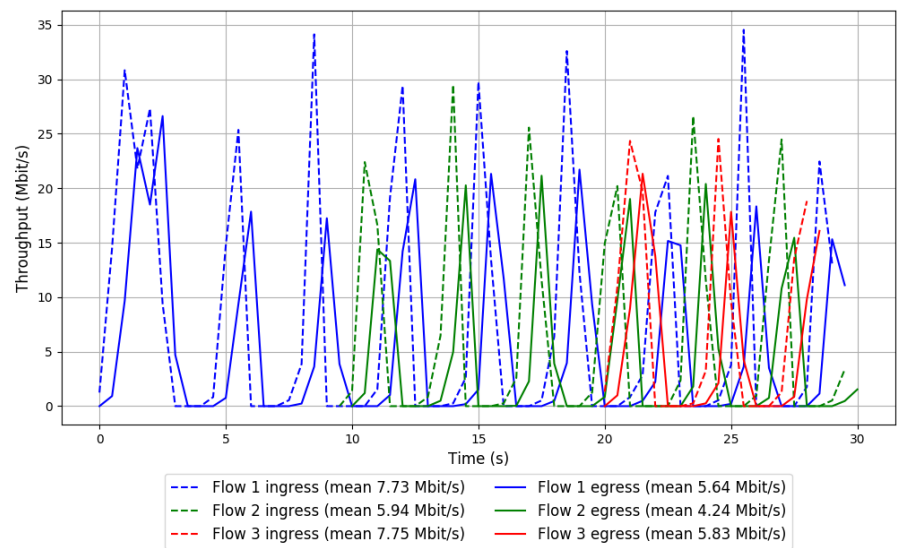## Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-06-19 09:21:05
End at: 2018-06-19 09:21:35
Local clock offset: 3.36 ms
Remote clock offset: 16.512 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 68.667 ms
Loss rate: 27.21%
-- Flow 1:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 68.638 ms
Loss rate: 27.03%
-- Flow 2:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 69.858 ms
Loss rate: 29.00%
-- Flow 3:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 65.401 ms
Loss rate: 24.50%
```
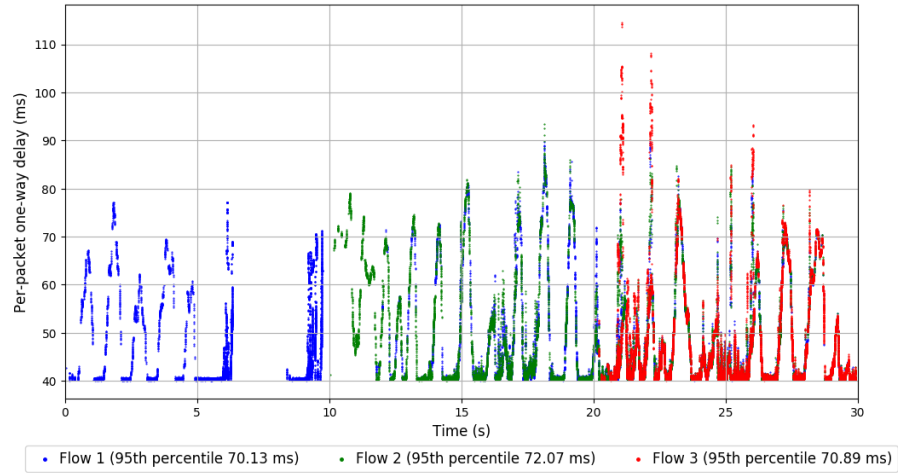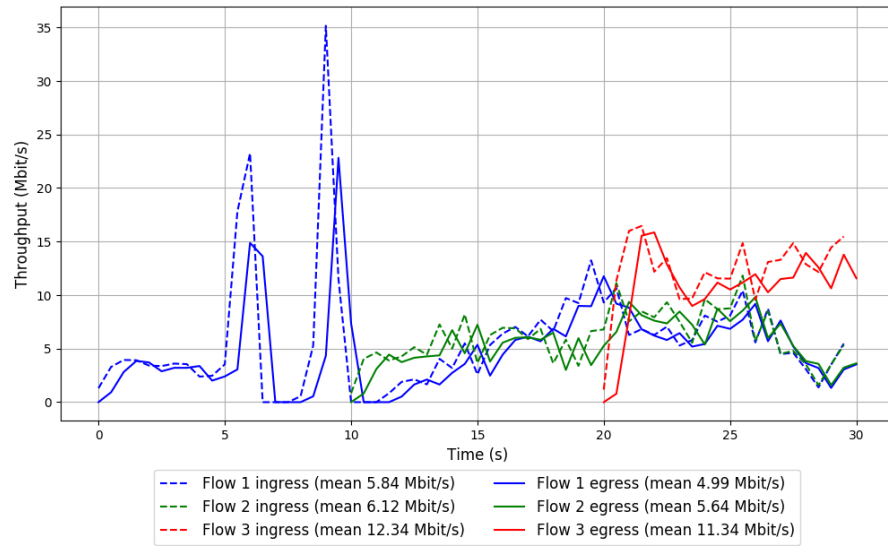
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-06-19 09:55:03
End at: 2018-06-19 09:55:33
Local clock offset: 1.651 ms
Remote clock offset: 15.919 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 71.075 ms
Loss rate: 11.33%
-- Flow 1:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 70.132 ms
Loss rate: 14.91%
-- Flow 2:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 72.074 ms
Loss rate: 8.31%
-- Flow 3:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 70.886 ms
Loss rate: 9.24%
```
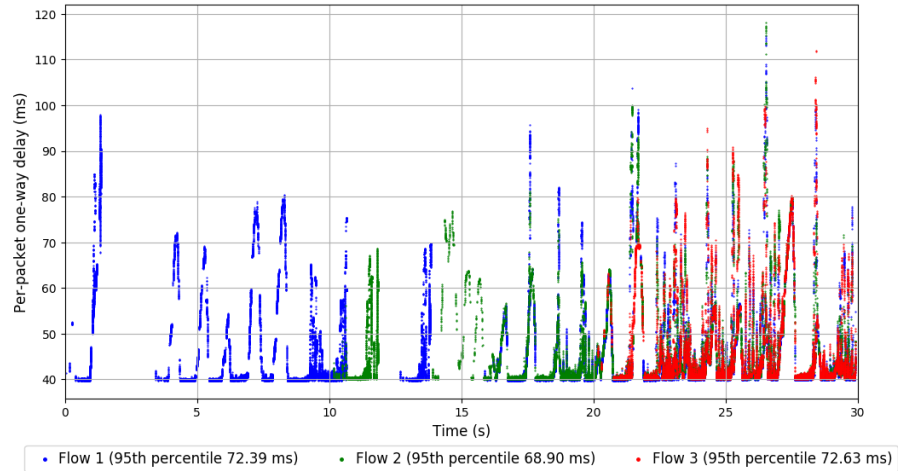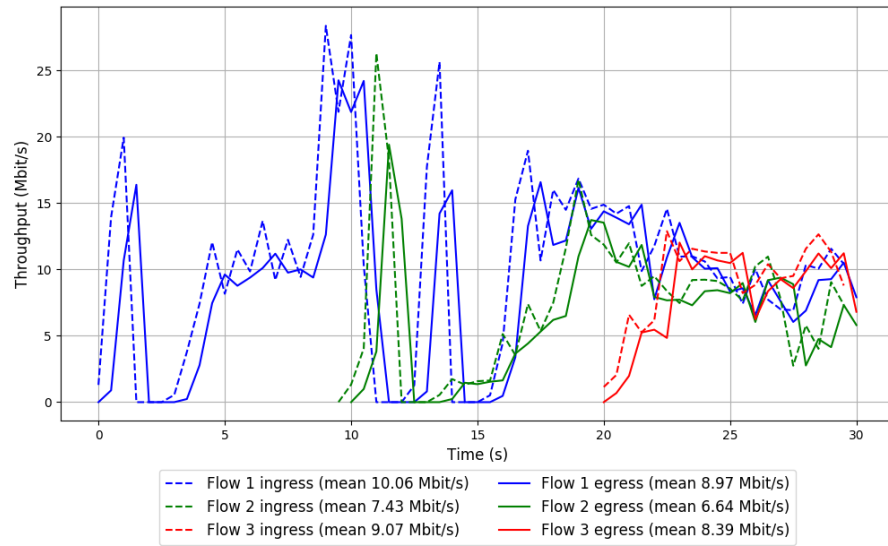
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-06-19 10:26:32
End at: 2018-06-19 10:27:02
Local clock offset: 1.868 ms
Remote clock offset: 16.769 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 71.549 ms
Loss rate: 10.67%
-- Flow 1:
Average throughput: 8.97 Mbit/s
95th percentile per-packet one-way delay: 72.393 ms
Loss rate: 11.15%
-- Flow 2:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 68.904 ms
Loss rate: 11.01%
-- Flow 3:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 72.626 ms
Loss rate: 8.54%
```
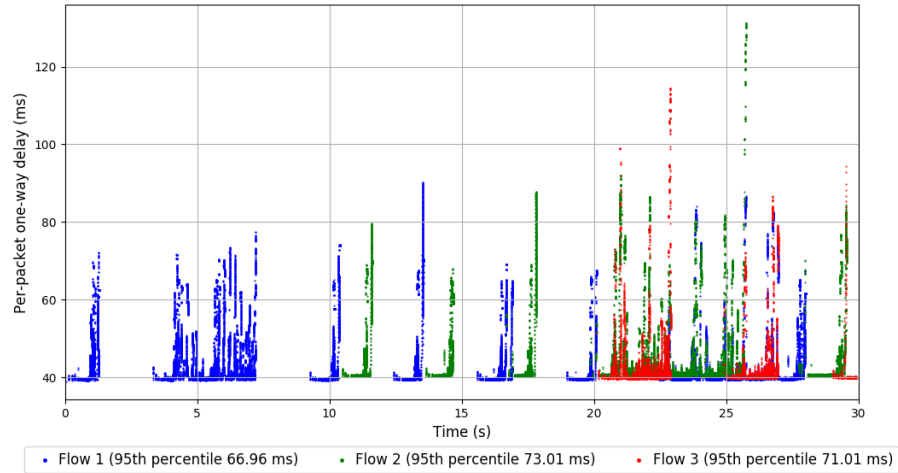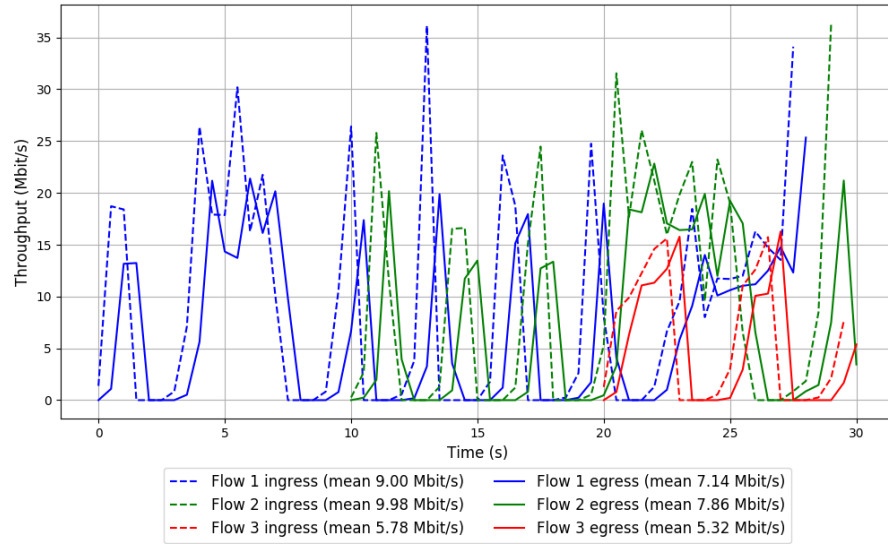
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-06-19 10:58:55
End at: 2018-06-19 10:59:25
Local clock offset: 2.223 ms
Remote clock offset: 35.028 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.48 Mbit/s
95th percentile per-packet one-way delay: 69.854 ms
Loss rate: 19.49%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 66.957 ms
Loss rate: 20.65%
-- Flow 2:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 73.011 ms
Loss rate: 21.12%
-- Flow 3:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 71.007 ms
Loss rate: 9.03%
```
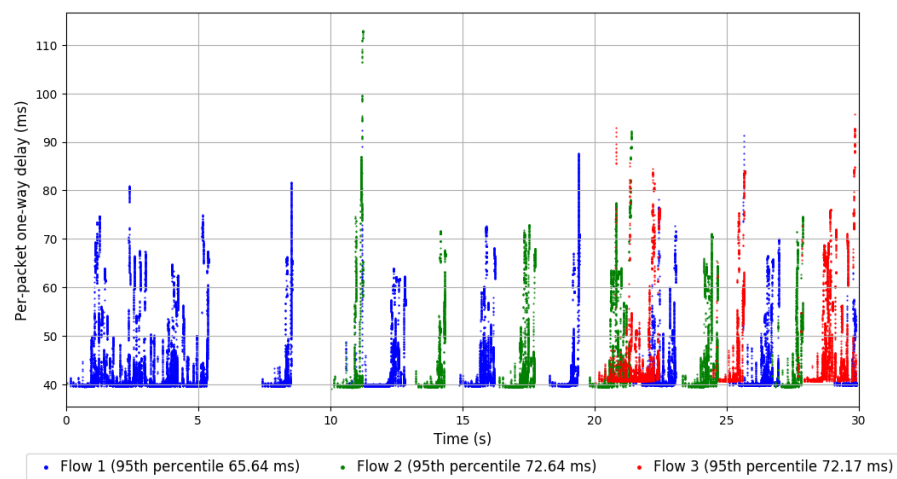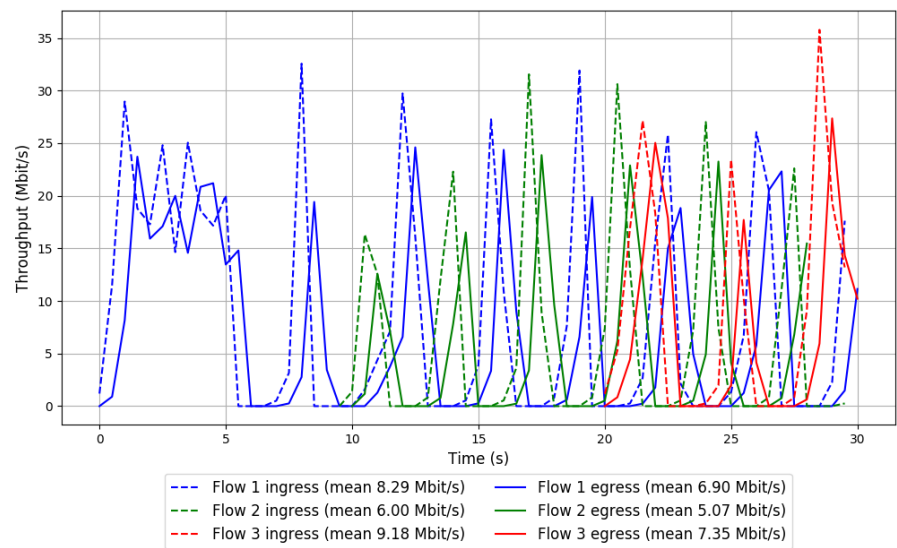
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-06-19 11:32:23
End at: 2018-06-19 11:32:53
Local clock offset: 8.716 ms
Remote clock offset: 48.485 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 68.810 ms
Loss rate: 19.75%
-- Flow 1:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 65.639 ms
Loss rate: 17.12%
-- Flow 2:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 72.639 ms
Loss rate: 24.27%
-- Flow 3:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 72.167 ms
Loss rate: 20.99%
```
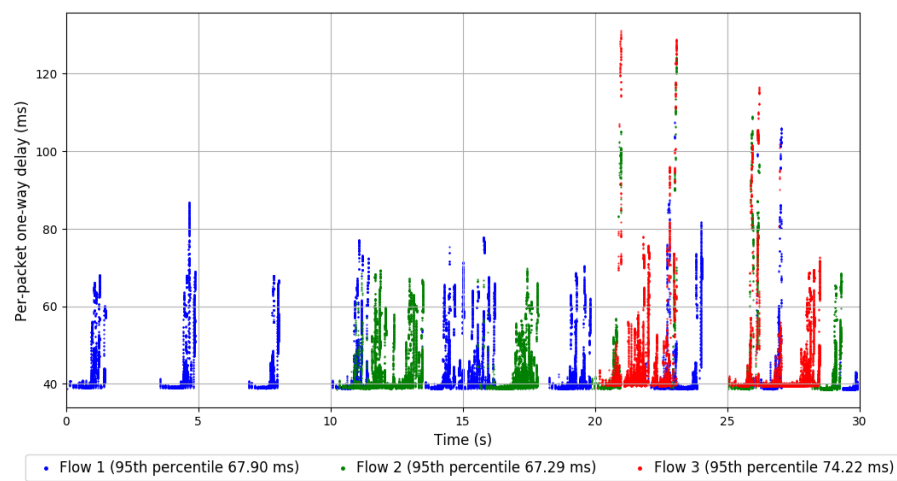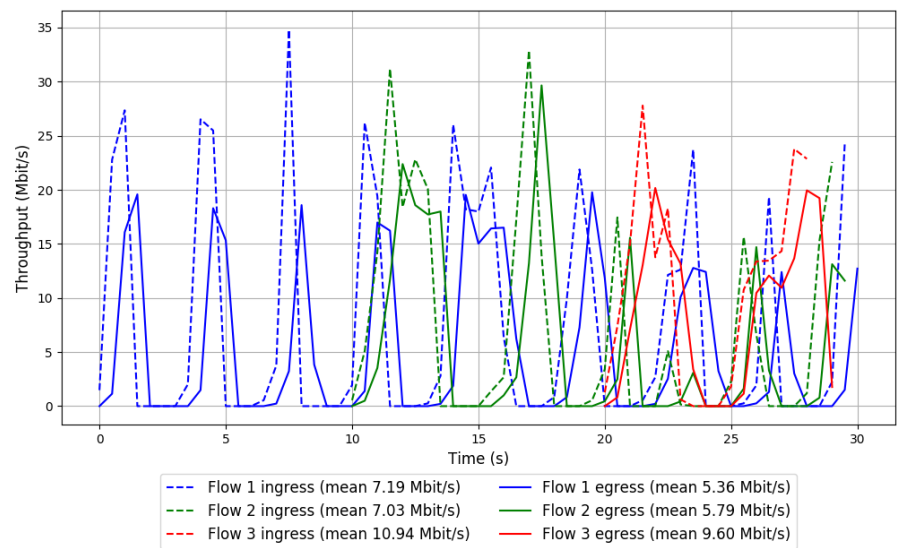
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-06-19 12:05:37
End at: 2018-06-19 12:06:07
Local clock offset: 7.981 ms
Remote clock offset: 34.475 ms


# Below is generated by plot.py at 2018-06-19 14:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 68.866 ms
Loss rate: 20.58%
-- Flow 1:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 67.901 ms
Loss rate: 25.66%
-- Flow 2:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 67.294 ms
Loss rate: 18.32%
-- Flow 3:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 74.215 ms
Loss rate: 12.01%
```
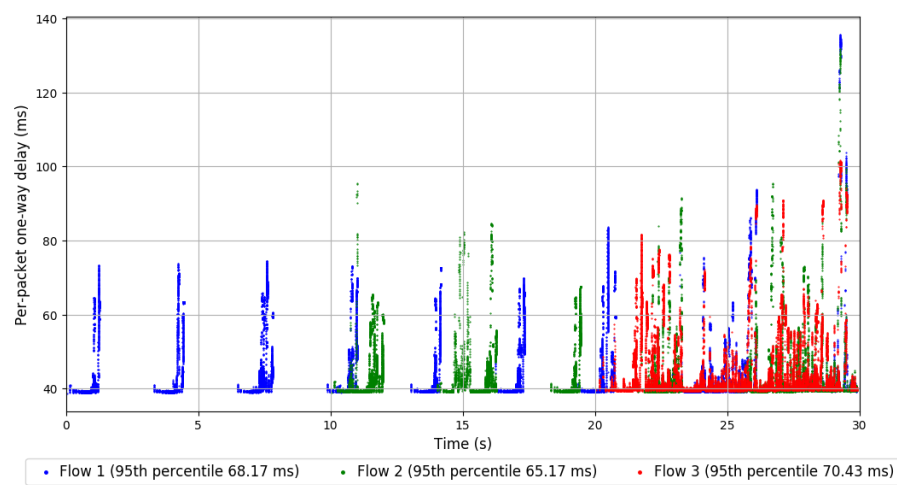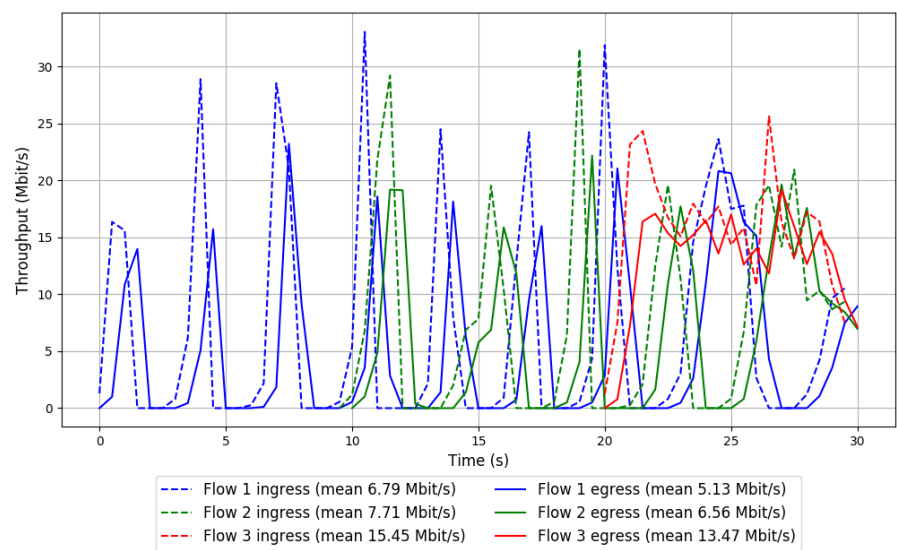
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-06-19 12:38:29
End at: 2018-06-19 12:38:59
Local clock offset: 7.725 ms
Remote clock offset: 33.971 ms


# Below is generated by plot.py at 2018-06-19 14:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 67.977 ms
Loss rate: 18.58%
-- Flow 1:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 68.165 ms
Loss rate: 24.70%
-- Flow 2:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 65.168 ms
Loss rate: 15.29%
-- Flow 3:
Average throughput: 13.47 Mbit/s
95th percentile per-packet one-way delay: 70.428 ms
Loss rate: 13.77%
```

Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 6.79 Mbit/s) --- Flow 1 egress (mean 5.13 Mbit/s)
Flow 2 ingress (mean 7.71 Mbit/s) --- Flow 2 egress (mean 6.56 Mbit/s)
Flow 3 ingress (mean 15.45 Mbit/s) --- Flow 3 egress (mean 13.47 Mbit/s)

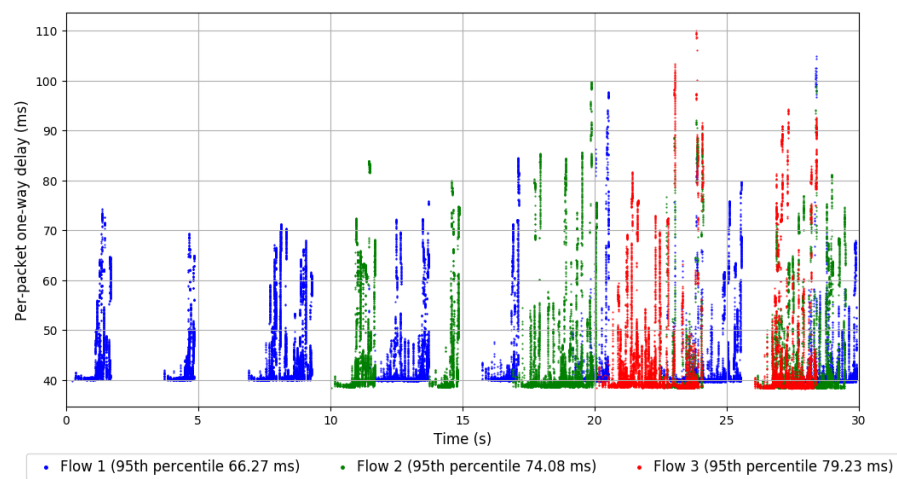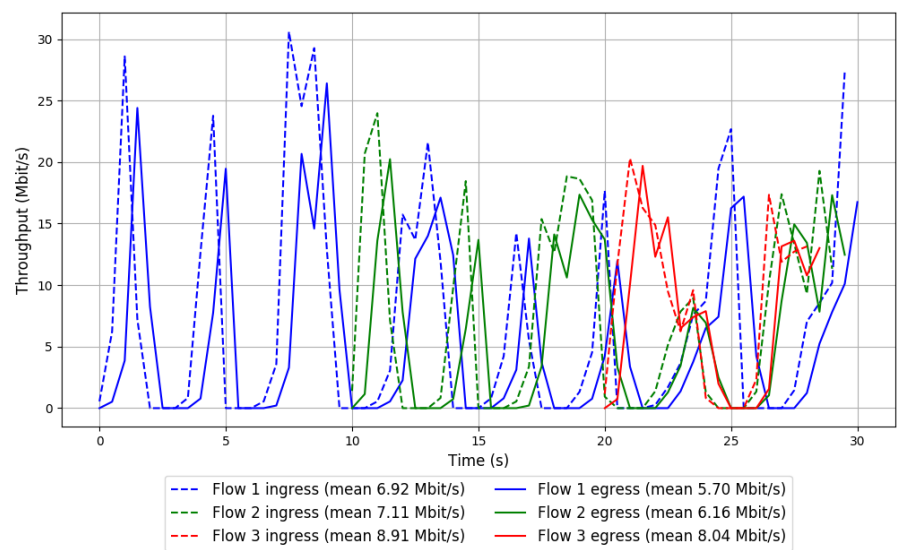Flow 1 (95th percentile 68.17 ms) • Flow 2 (95th percentile 65.17 ms) • Flow 3 (95th percentile 70.43 ms)

```
Run 8: Statistics of Copa

Start at: 2018-06-19 13:11:51
End at: 2018-06-19 13:12:21
Local clock offset: 6.453 ms
Remote clock offset: 20.662 ms


# Below is generated by plot.py at 2018-06-19 14:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 71.408 ms
Loss rate: 15.14%
-- Flow 1:
Average throughput: 5.70 Mbit/s
95th percentile per-packet one-way delay: 66.269 ms
Loss rate: 18.51%
-- Flow 2:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 74.075 ms
Loss rate: 13.24%
-- Flow 3:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 79.233 ms
Loss rate: 9.26%
```
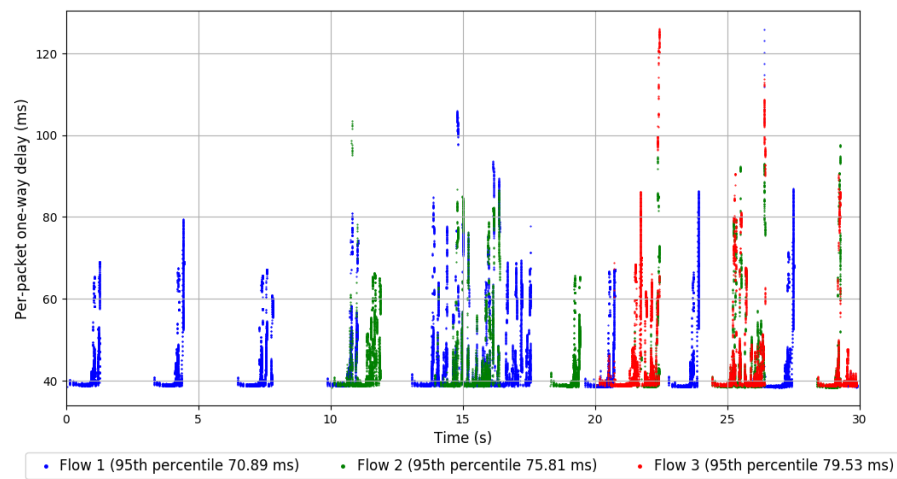
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 6.92 Mbit/s) --- Flow 1 egress (mean 5.70 Mbit/s)
Flow 2 ingress (mean 7.11 Mbit/s) --- Flow 2 egress (mean 6.16 Mbit/s)
Flow 3 ingress (mean 8.91 Mbit/s) --- Flow 3 egress (mean 8.04 Mbit/s)

Flow 1 (95th percentile 66.27 ms)   Flow 2 (95th percentile 74.08 ms)   Flow 3 (95th percentile 79.23 ms)
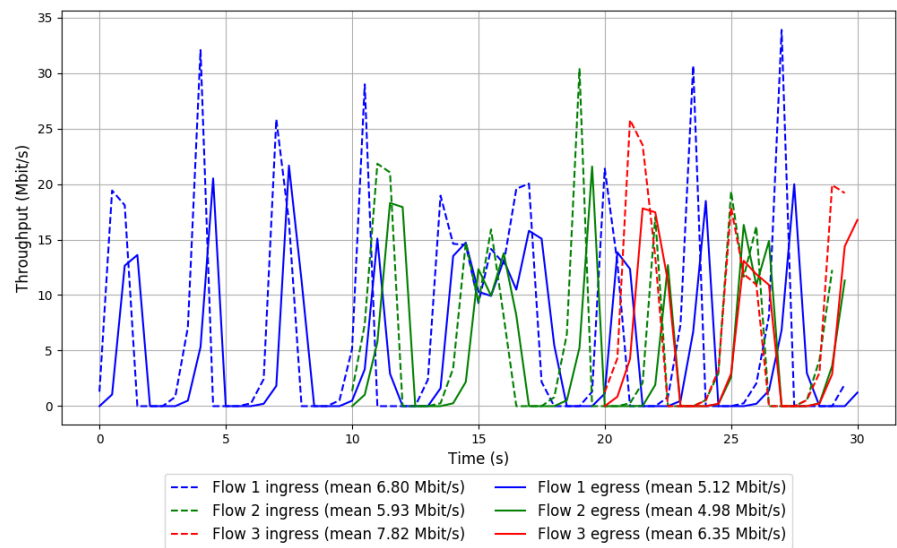
```
Run 9: Statistics of Copa

Start at: 2018-06-19 13:43:55
End at: 2018-06-19 13:44:25
Local clock offset: 7.263 ms
Remote clock offset: -0.995 ms


# Below is generated by plot.py at 2018-06-19 14:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 73.580 ms
Loss rate: 21.30%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 70.887 ms
Loss rate: 24.94%
-- Flow 2:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 75.814 ms
Loss rate: 15.92%
-- Flow 3:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 79.535 ms
Loss rate: 19.67%
```
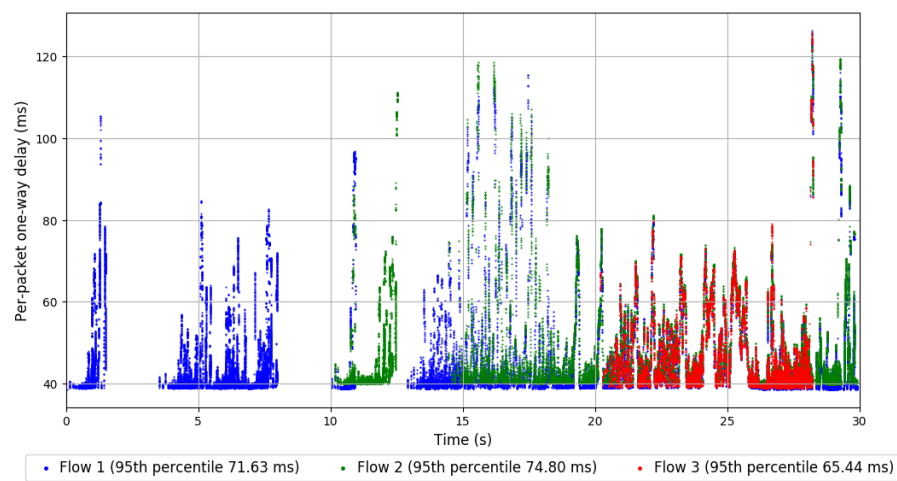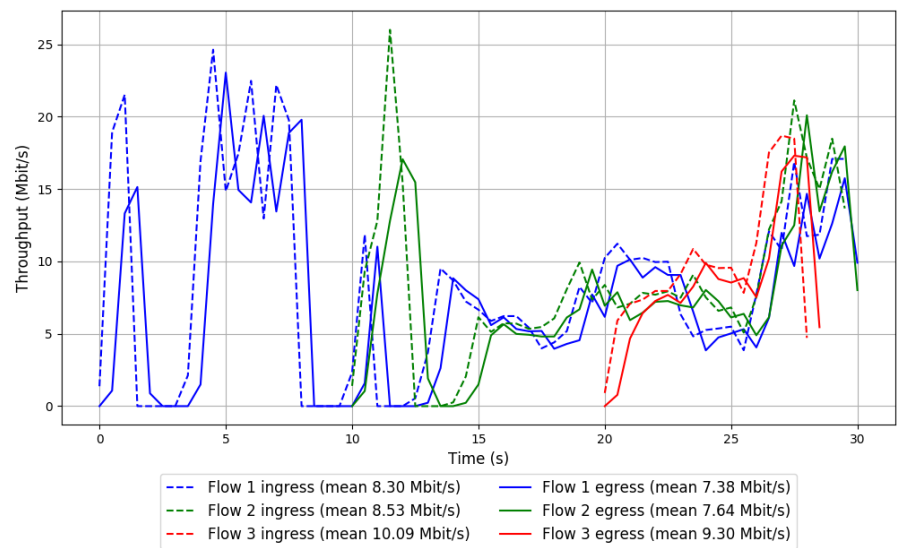
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-06-19 14:17:10
End at: 2018-06-19 14:17:41
Local clock offset: 8.196 ms
Remote clock offset: -18.961 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.01 Mbit/s
95th percentile per-packet one-way delay: 71.298 ms
Loss rate: 10.41%
-- Flow 1:
Average throughput: 7.38 Mbit/s
95th percentile per-packet one-way delay: 71.632 ms
Loss rate: 11.21%
-- Flow 2:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 74.795 ms
Loss rate: 10.63%
-- Flow 3:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 65.441 ms
Loss rate: 7.53%
```
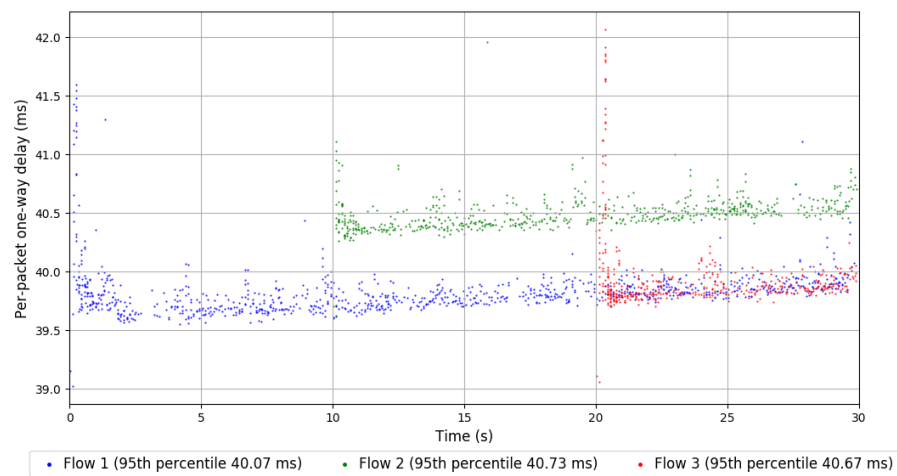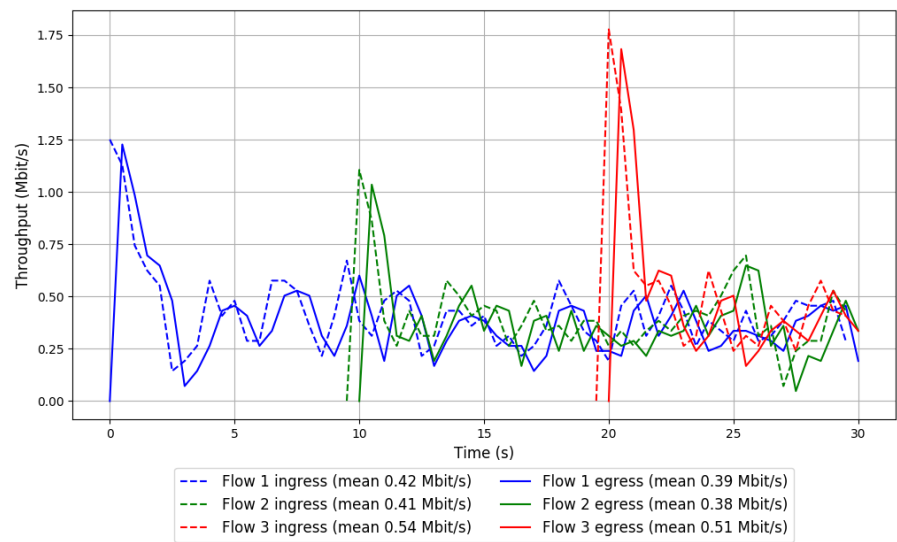
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 09:16:55
End at: 2018-06-19 09:17:25
Local clock offset: 3.62 ms
Remote clock offset: 14.727 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 40.638 ms
Loss rate: 8.22%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 40.066 ms
Loss rate: 8.32%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 40.727 ms
Loss rate: 8.77%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 40.672 ms
Loss rate: 7.13%
```

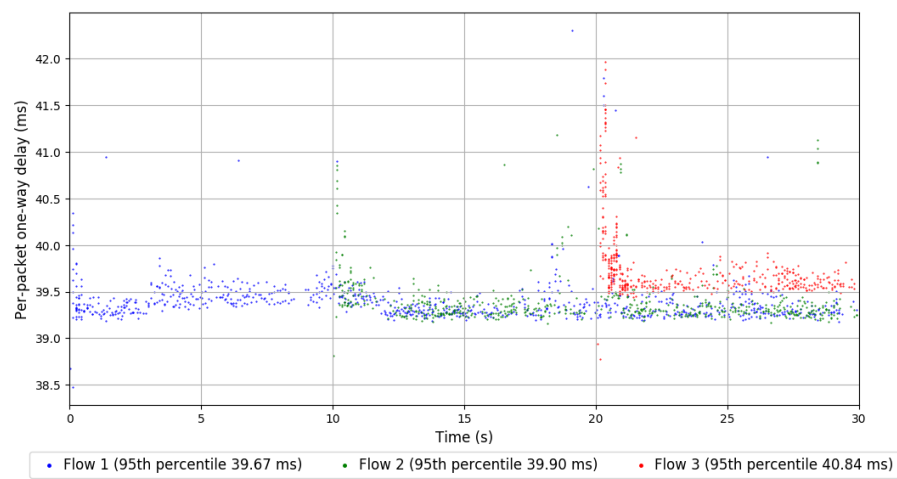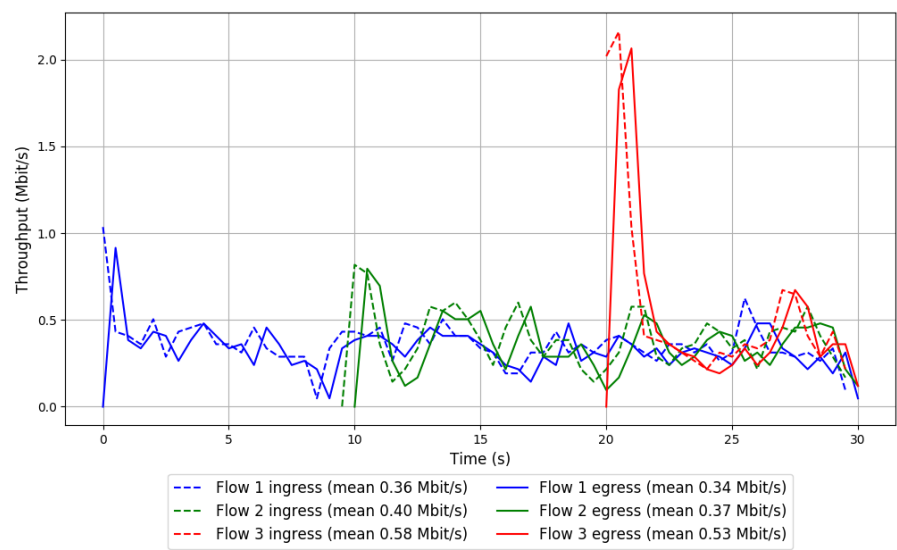Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-19 09:50:50
End at: 2018-06-19 09:51:20
Local clock offset: 1.954 ms
Remote clock offset: 16.197 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 40.048 ms
Loss rate: 8.54%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 39.670 ms
Loss rate: 8.35%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 39.896 ms
Loss rate: 8.17%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 40.837 ms
Loss rate: 9.39%
```

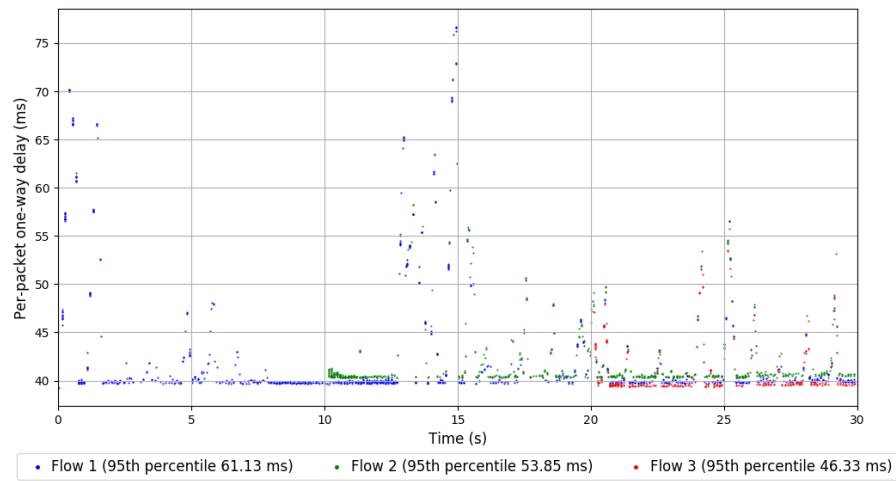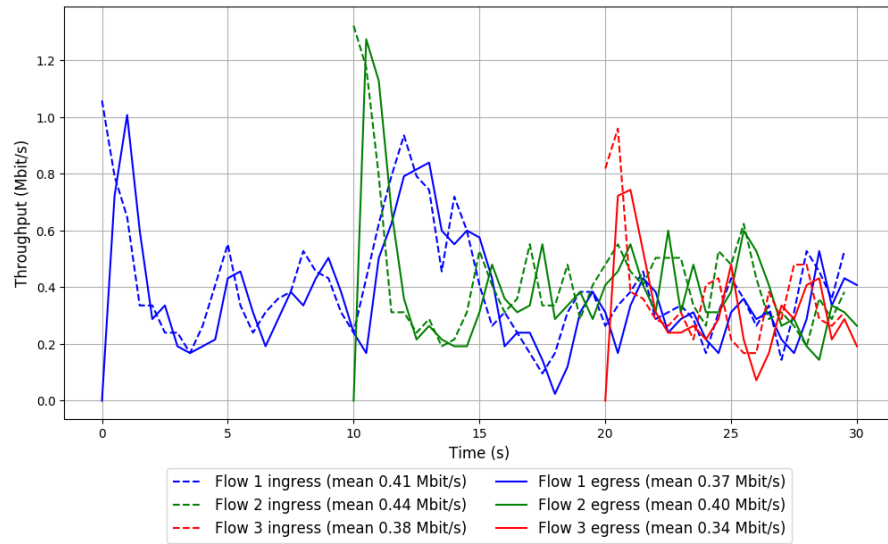Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-19 10:22:28
End at: 2018-06-19 10:22:58
Local clock offset: 2.122 ms
Remote clock offset: 16.534 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 56.802 ms
Loss rate: 8.40%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 61.127 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 53.849 ms
Loss rate: 7.48%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 46.333 ms
Loss rate: 11.21%
```
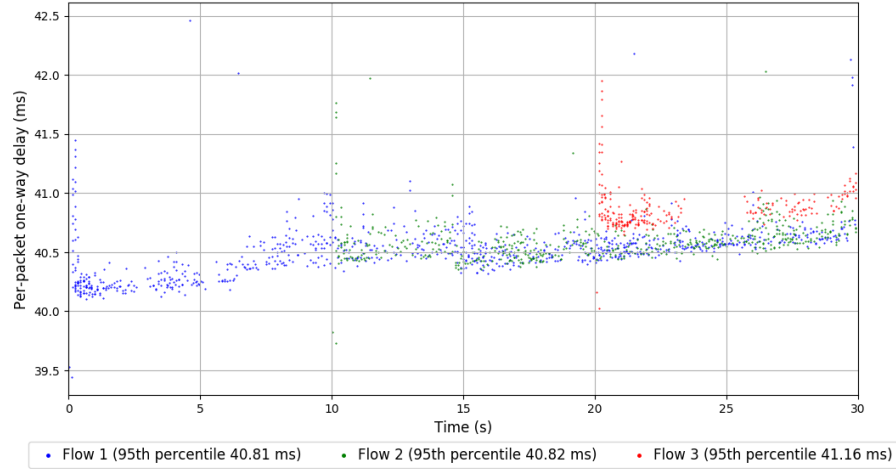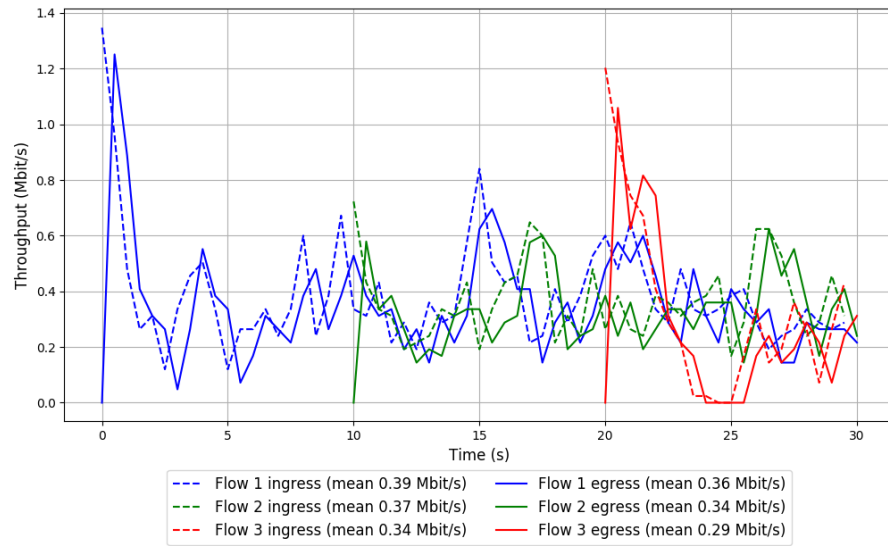
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 10:54:48
End at: 2018-06-19 10:55:19
Local clock offset: 2.0 ms
Remote clock offset: 31.784 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 40.958 ms
Loss rate: 9.83%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 40.808 ms
Loss rate: 8.81%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 40.824 ms
Loss rate: 9.61%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 41.164 ms
Loss rate: 13.87%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.39 Mbit/s)   Flow 1 egress (mean 0.36 Mbit/s)
Flow 2 ingress (mean 0.37 Mbit/s)   Flow 2 egress (mean 0.34 Mbit/s)
Flow 3 ingress (mean 0.34 Mbit/s)   Flow 3 egress (mean 0.29 Mbit/s)

Flow 1 (95th percentile 40.81 ms)   Flow 2 (95th percentile 40.82 ms)   Flow 3 (95th percentile 41.16 ms)
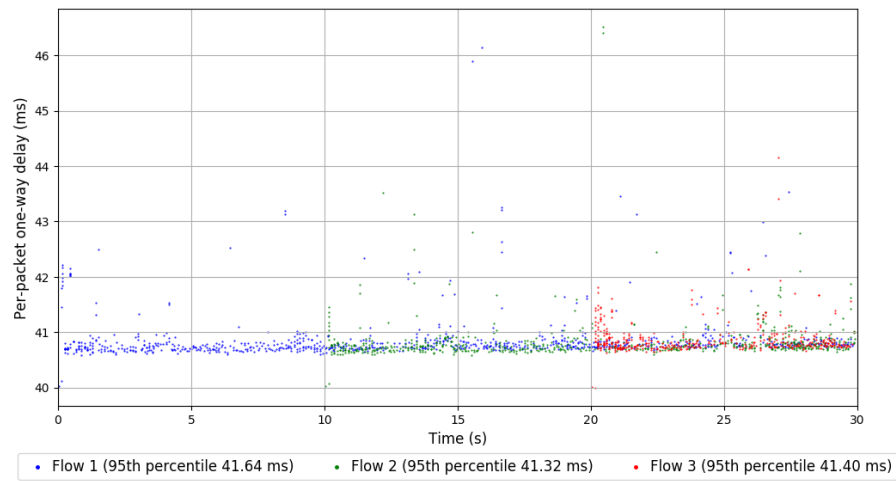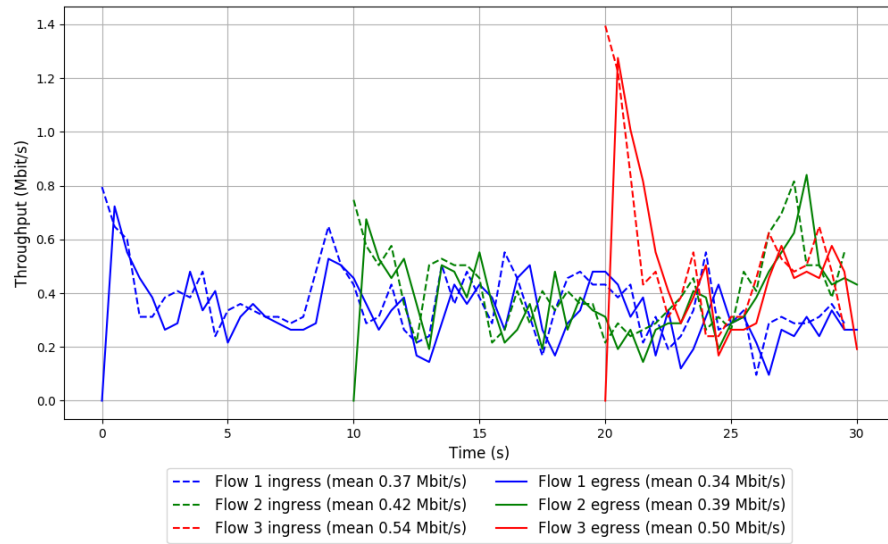
```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-19 11:28:08
End at: 2018-06-19 11:28:38
Local clock offset: 8.429 ms
Remote clock offset: 47.104 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 41.430 ms
Loss rate: 8.33%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 41.638 ms
Loss rate: 9.36%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 41.324 ms
Loss rate: 7.43%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 41.400 ms
Loss rate: 7.62%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.37 Mbit/s) — — — Flow 1 egress (mean 0.34 Mbit/s)
Flow 2 ingress (mean 0.42 Mbit/s) — — — Flow 2 egress (mean 0.39 Mbit/s)
Flow 3 ingress (mean 0.54 Mbit/s) — — — Flow 3 egress (mean 0.50 Mbit/s)

• Flow 1 (95th percentile 41.64 ms)   • Flow 2 (95th percentile 41.32 ms)   • Flow 3 (95th percentile 41.40 ms)
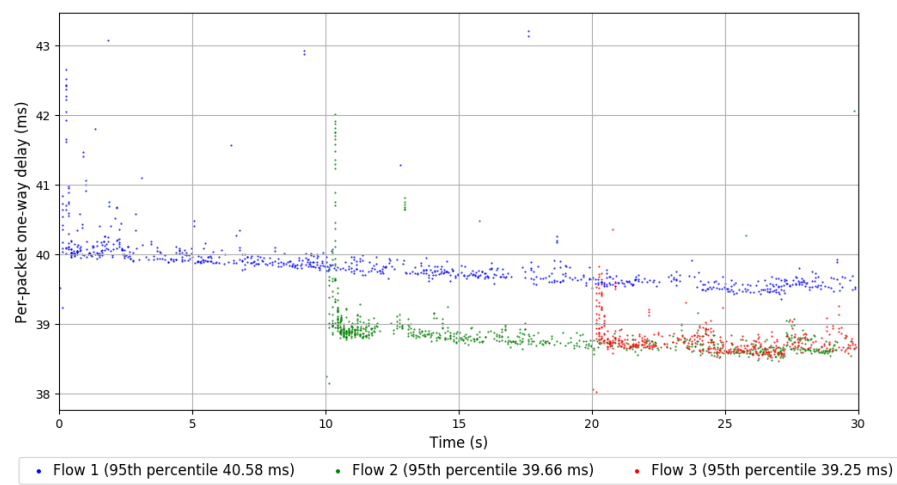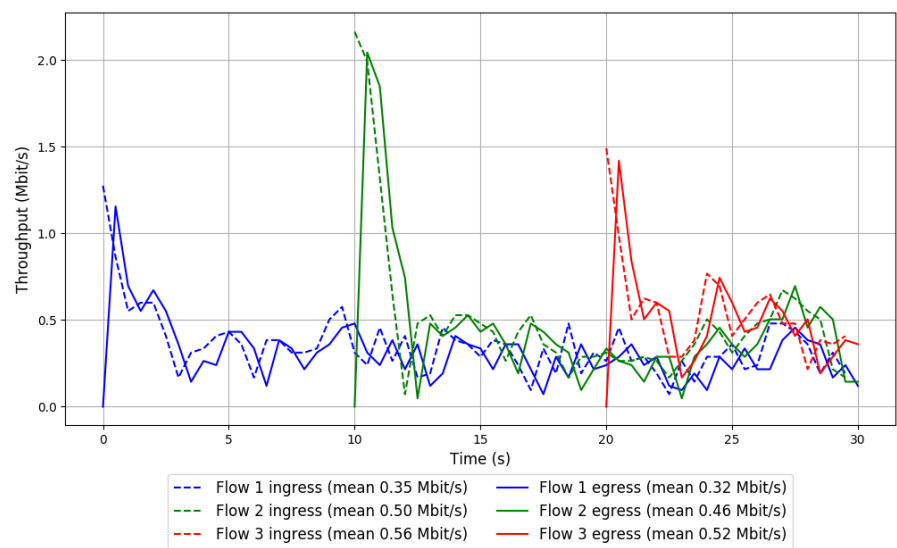
```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-19 12:01:29
End at: 2018-06-19 12:01:59
Local clock offset: 8.119 ms
Remote clock offset: 38.813 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 40.184 ms
Loss rate: 8.85%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 40.579 ms
Loss rate: 10.42%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 39.655 ms
Loss rate: 8.01%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 39.252 ms
Loss rate: 7.34%
```

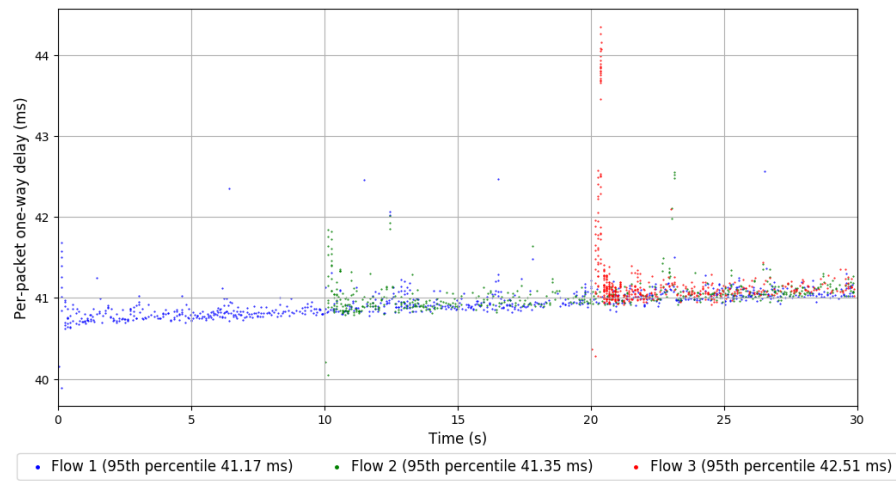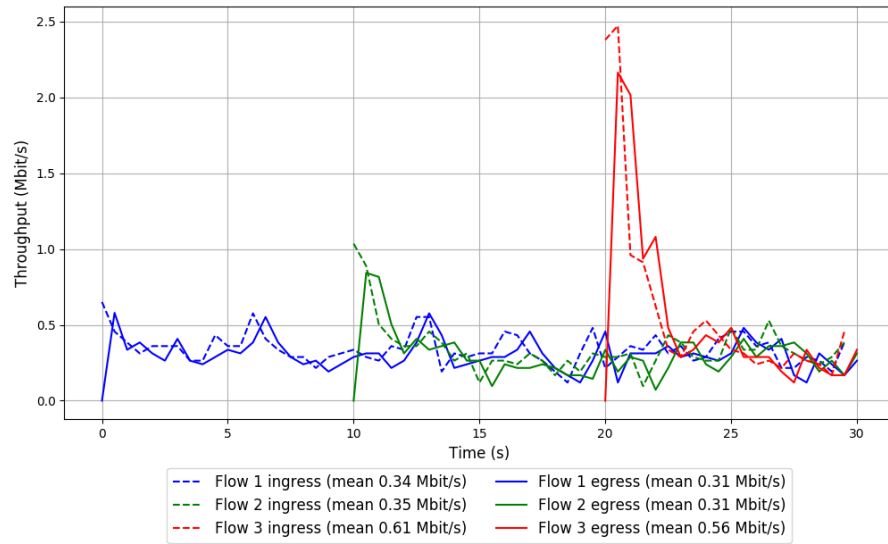Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-19 12:34:22
End at: 2018-06-19 12:34:52
Local clock offset: 8.087 ms
Remote clock offset: 31.716 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 41.407 ms
Loss rate: 10.50%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 41.171 ms
Loss rate: 9.75%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 41.355 ms
Loss rate: 12.19%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 42.511 ms
Loss rate: 9.84%
```
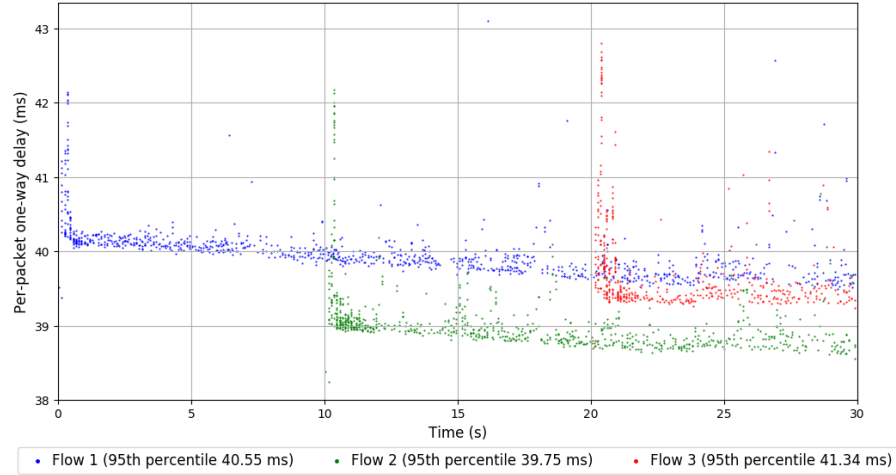
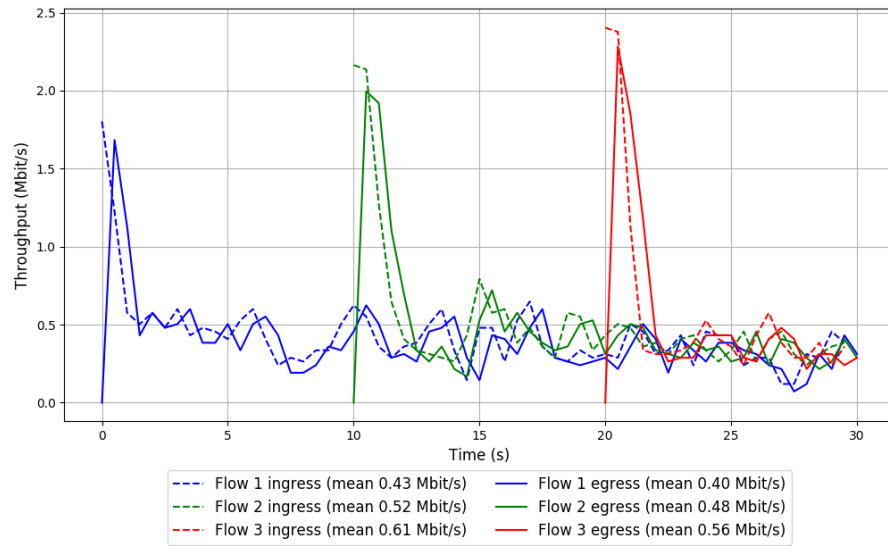Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-19 13:07:42
End at: 2018-06-19 13:08:12
Local clock offset: 6.773 ms
Remote clock offset: 26.318 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 40.574 ms
Loss rate: 7.71%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 40.546 ms
Loss rate: 7.90%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 39.748 ms
Loss rate: 7.21%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 41.343 ms
Loss rate: 8.15%
```

Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-19 13:39:44
End at: 2018-06-19 13:40:14
Local clock offset: 7.008 ms
Remote clock offset: 3.067 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 41.040 ms
Loss rate: 9.59%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 41.596 ms
Loss rate: 9.22%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 39.562 ms
Loss rate: 9.64%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 39.705 ms
Loss rate: 10.63%
```
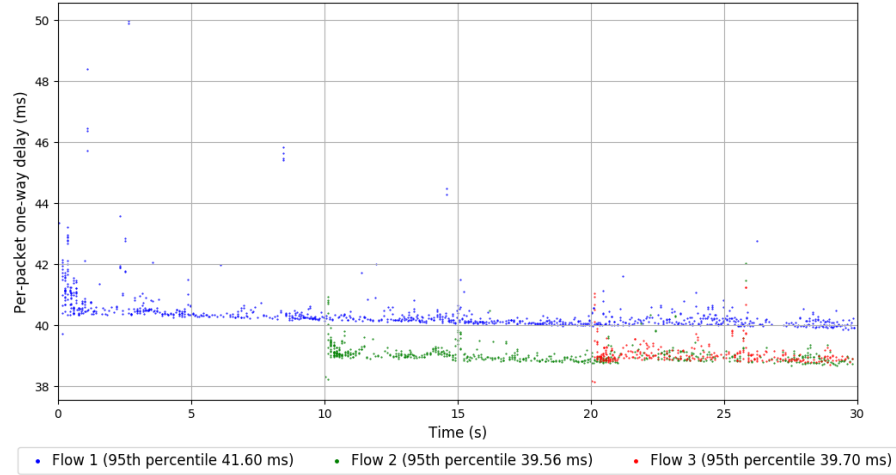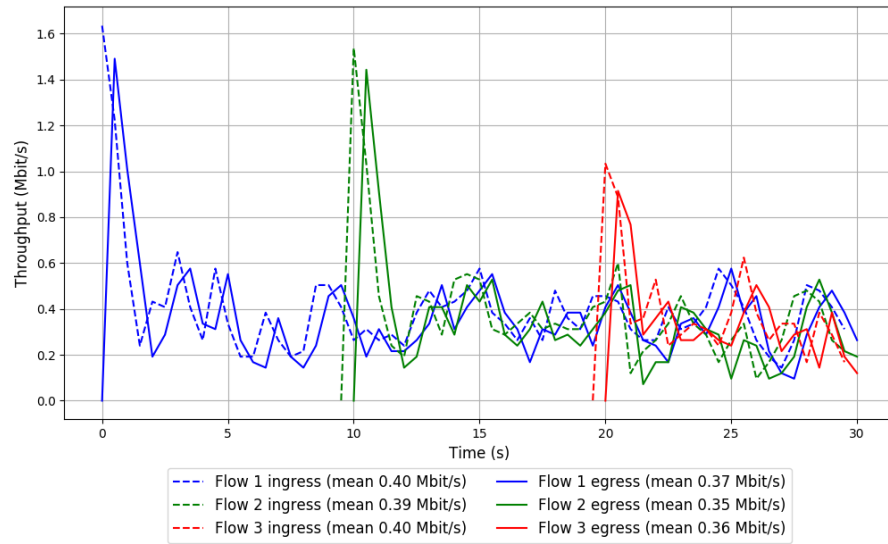
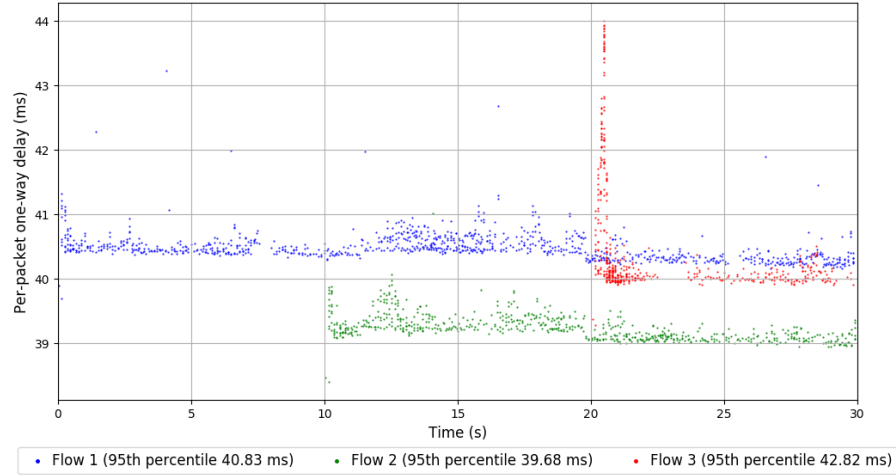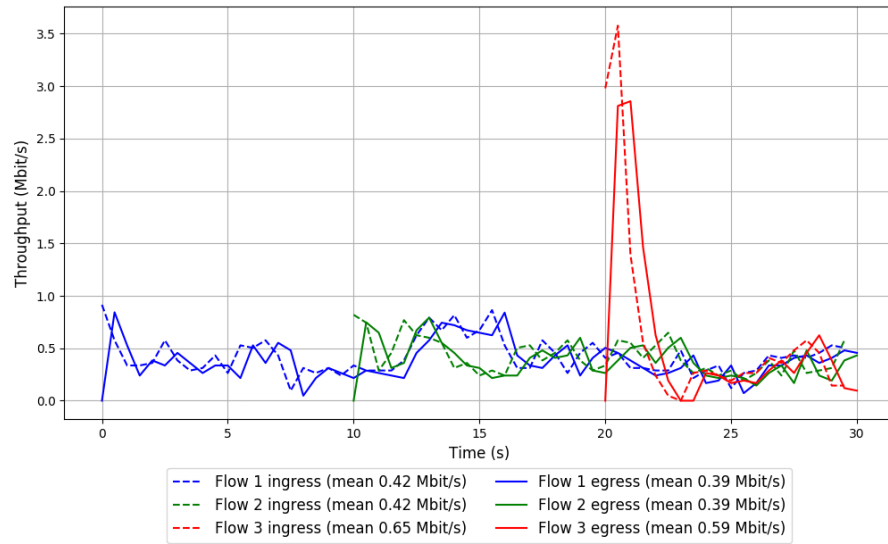Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-19 14:12:59
End at: 2018-06-19 14:13:29
Local clock offset: 8.166 ms
Remote clock offset: -17.111 ms


# Below is generated by plot.py at 2018-06-19 14:34:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 41.103 ms
Loss rate: 8.53%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 40.825 ms
Loss rate: 8.05%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 39.679 ms
Loss rate: 8.21%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 42.823 ms
Loss rate: 9.89%
```

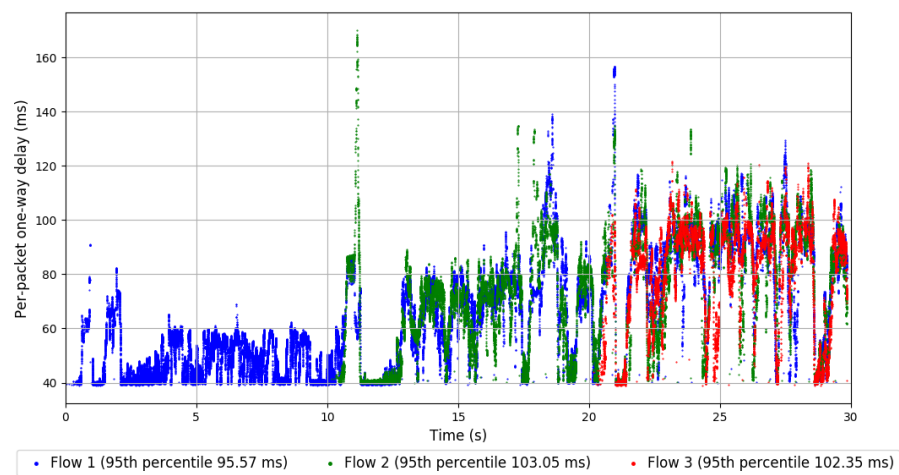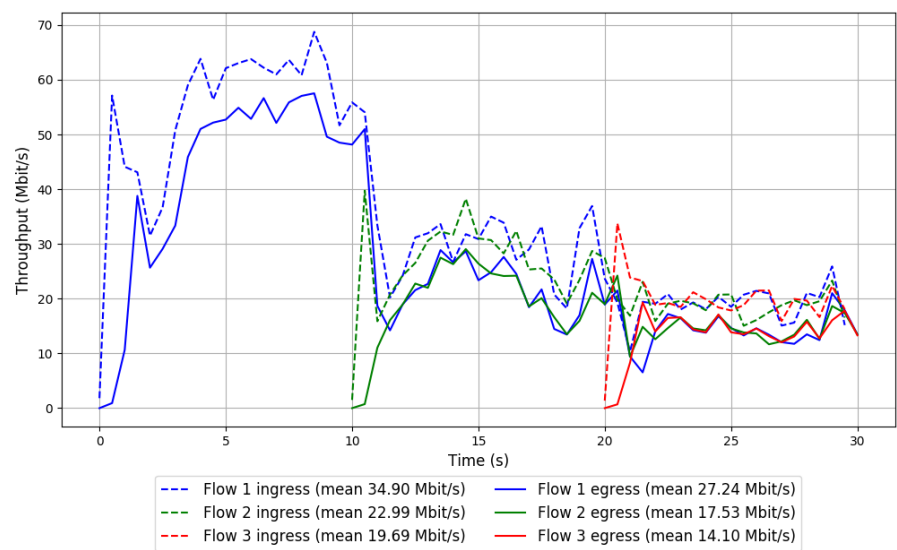Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-06-19 09:28:33
End at: 2018-06-19 09:29:03
Local clock offset: 2.784 ms
Remote clock offset: 19.032 ms

# Below is generated by plot.py at 2018-06-19 14:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.52 Mbit/s
95th percentile per-packet one-way delay: 99.301 ms
Loss rate: 23.54%
-- Flow 1:
Average throughput: 27.24 Mbit/s
95th percentile per-packet one-way delay: 95.569 ms
Loss rate: 22.22%
-- Flow 2:
Average throughput: 17.53 Mbit/s
95th percentile per-packet one-way delay: 103.054 ms
Loss rate: 24.15%
-- Flow 3:
Average throughput: 14.10 Mbit/s
95th percentile per-packet one-way delay: 102.353 ms
Loss rate: 29.15%
```
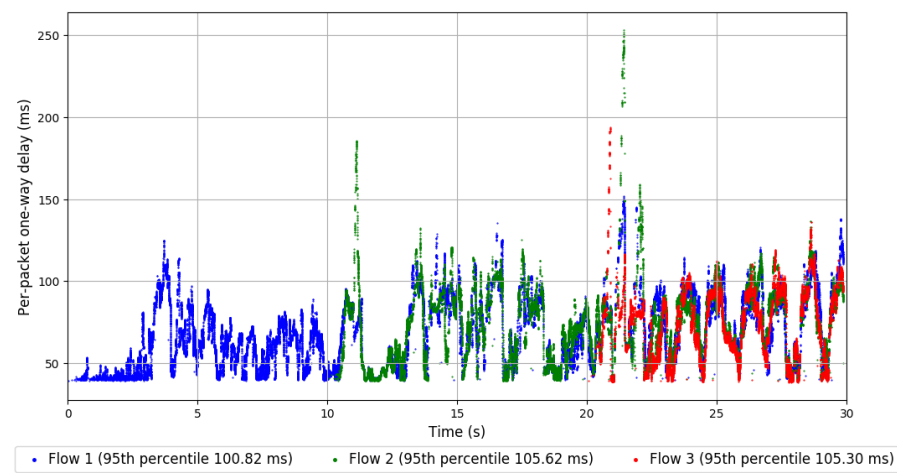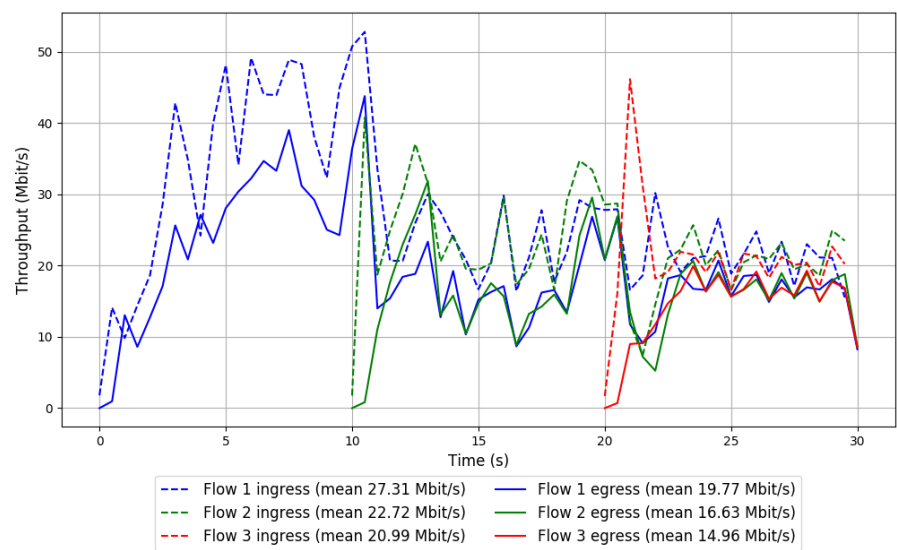
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-06-19 10:02:10
End at: 2018-06-19 10:02:40
Local clock offset: 1.461 ms
Remote clock offset: 16.381 ms

# Below is generated by plot.py at 2018-06-19 14:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 103.109 ms
Loss rate: 27.89%
-- Flow 1:
Average throughput: 19.77 Mbit/s
95th percentile per-packet one-way delay: 100.824 ms
Loss rate: 27.86%
-- Flow 2:
Average throughput: 16.63 Mbit/s
95th percentile per-packet one-way delay: 105.625 ms
Loss rate: 27.20%
-- Flow 3:
Average throughput: 14.96 Mbit/s
95th percentile per-packet one-way delay: 105.298 ms
Loss rate: 29.48%
```

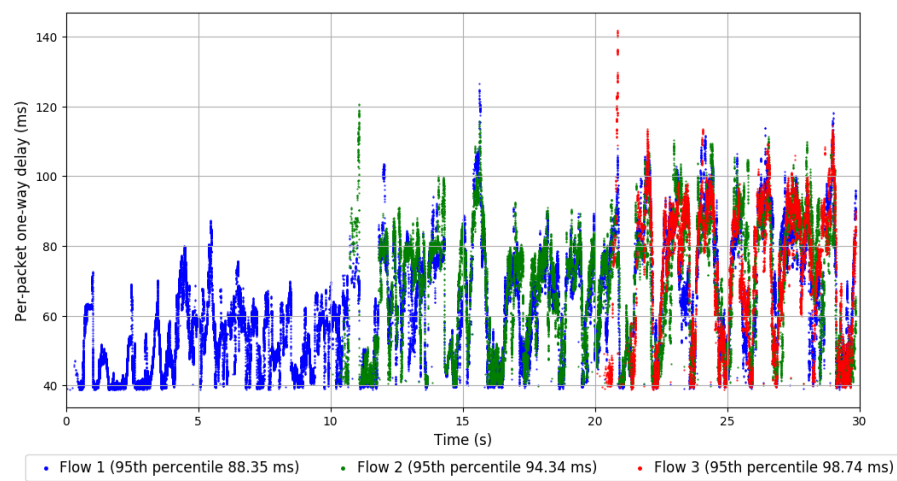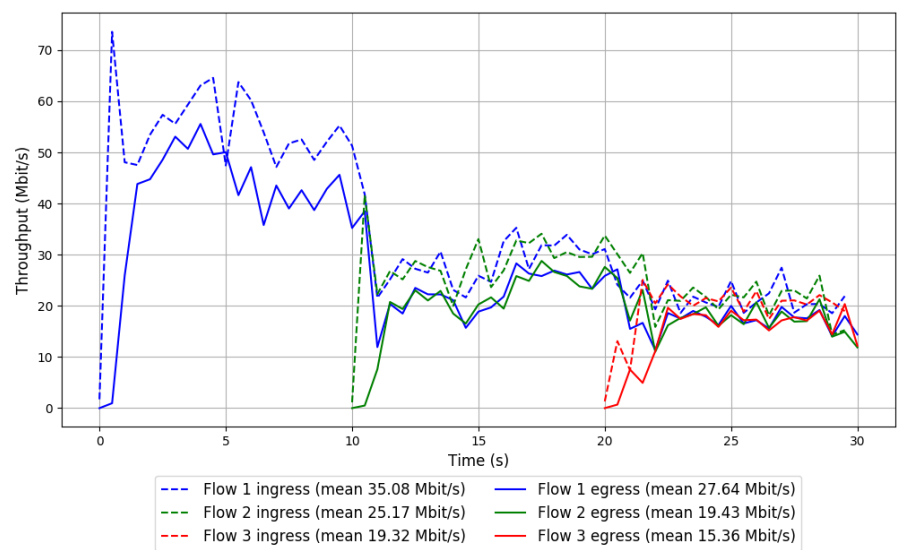## Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-06-19 10:33:49
End at: 2018-06-19 10:34:19
Local clock offset: 1.977 ms
Remote clock offset: 17.198 ms


# Below is generated by plot.py at 2018-06-19 14:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 93.350 ms
Loss rate: 21.98%
-- Flow 1:
Average throughput: 27.64 Mbit/s
95th percentile per-packet one-way delay: 88.352 ms
Loss rate: 21.48%
-- Flow 2:
Average throughput: 19.43 Mbit/s
95th percentile per-packet one-way delay: 94.337 ms
Loss rate: 23.26%
-- Flow 3:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 98.736 ms
Loss rate: 21.42%
```
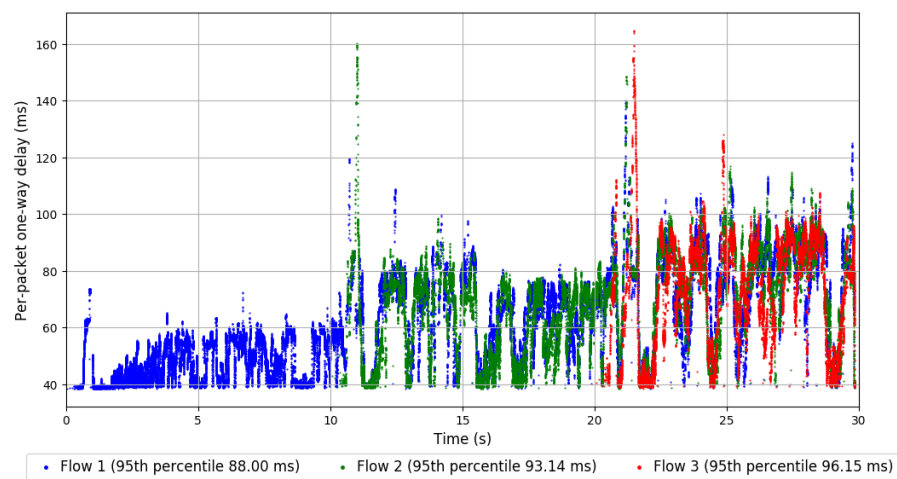
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-06-19 11:06:51
End at: 2018-06-19 11:07:21
Local clock offset: 4.622 ms
Remote clock offset: 39.394 ms


# Below is generated by plot.py at 2018-06-19 14:34:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 91.345 ms
Loss rate: 21.01%
-- Flow 1:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 87.997 ms
Loss rate: 19.72%
-- Flow 2:
Average throughput: 20.01 Mbit/s
95th percentile per-packet one-way delay: 93.138 ms
Loss rate: 23.04%
-- Flow 3:
Average throughput: 16.25 Mbit/s
95th percentile per-packet one-way delay: 96.149 ms
Loss rate: 22.78%
```

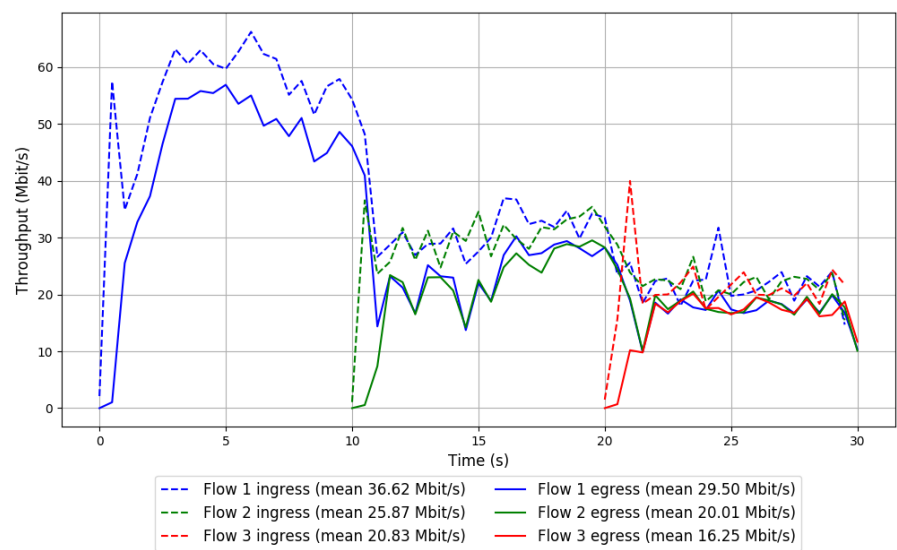Run 4: Report of FillP — Data Link

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```
Run 5: Statistics of FillP

Start at: 2018-06-19 11:39:30
End at: 2018-06-19 11:40:00
Local clock offset: 8.065 ms
Remote clock offset: 50.796 ms


# Below is generated by plot.py at 2018-06-19 14:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.31 Mbit/s
95th percentile per-packet one-way delay: 92.537 ms
Loss rate: 22.15%
-- Flow 1:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 87.395 ms
Loss rate: 23.49%
-- Flow 2:
Average throughput: 19.69 Mbit/s
95th percentile per-packet one-way delay: 93.398 ms
Loss rate: 19.01%
-- Flow 3:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 98.130 ms
Loss rate: 22.32%
```
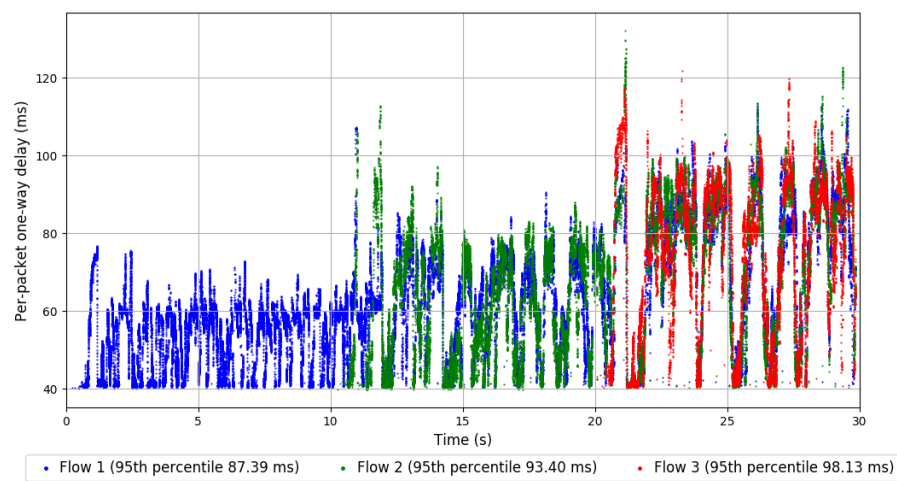
Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-06-19 12:12:44
End at: 2018-06-19 12:13:14
Local clock offset: 8.087 ms
Remote clock offset: 30.119 ms

# Below is generated by plot.py at 2018-06-19 14:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 95.845 ms
Loss rate: 19.16%
-- Flow 1:
Average throughput: 25.56 Mbit/s
95th percentile per-packet one-way delay: 88.872 ms
Loss rate: 17.85%
-- Flow 2:
Average throughput: 18.27 Mbit/s
95th percentile per-packet one-way delay: 98.816 ms
Loss rate: 19.92%
-- Flow 3:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 104.336 ms
Loss rate: 23.79%
```
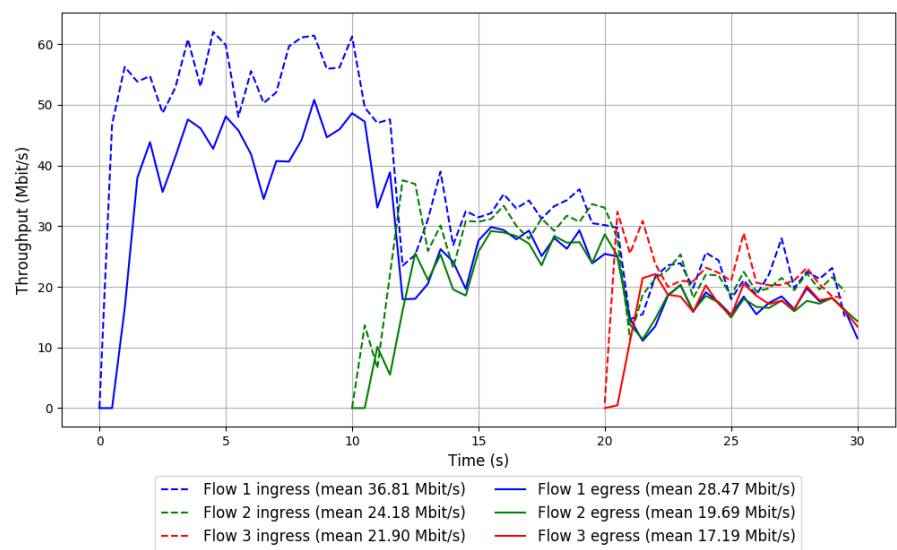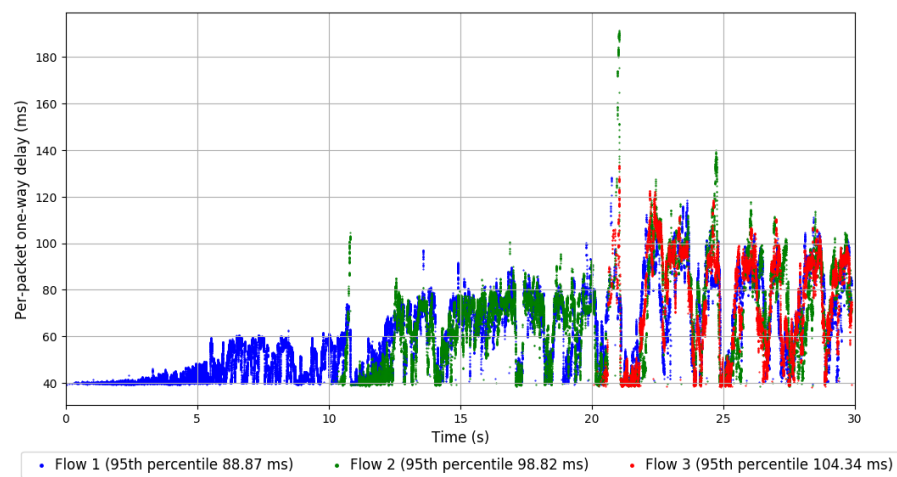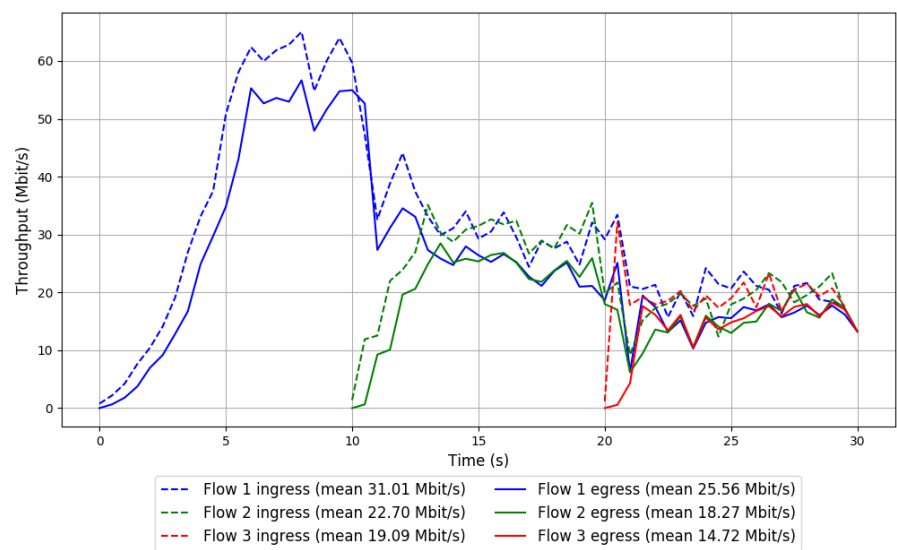
Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-06-19 12:45:46
End at: 2018-06-19 12:46:16
Local clock offset: 7.431 ms
Remote clock offset: 36.186 ms


# Below is generated by plot.py at 2018-06-19 14:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 99.153 ms
Loss rate: 27.37%
-- Flow 1:
Average throughput: 25.08 Mbit/s
95th percentile per-packet one-way delay: 94.200 ms
Loss rate: 25.70%
-- Flow 2:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 99.487 ms
Loss rate: 30.21%
-- Flow 3:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 110.016 ms
Loss rate: 29.46%
```
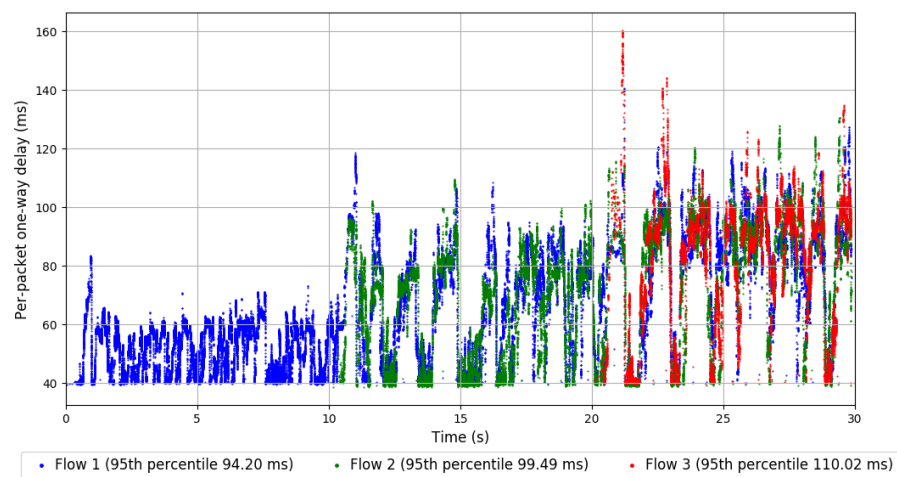
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 33.63 Mbit/s) — Flow 1 egress (mean 25.08 Mbit/s)
Flow 2 ingress (mean 22.89 Mbit/s) — Flow 2 egress (mean 16.05 Mbit/s)
Flow 3 ingress (mean 19.14 Mbit/s) — Flow 3 egress (mean 13.65 Mbit/s)

Flow 1 (95th percentile 94.20 ms) • Flow 2 (95th percentile 99.49 ms) • Flow 3 (95th percentile 110.02 ms)
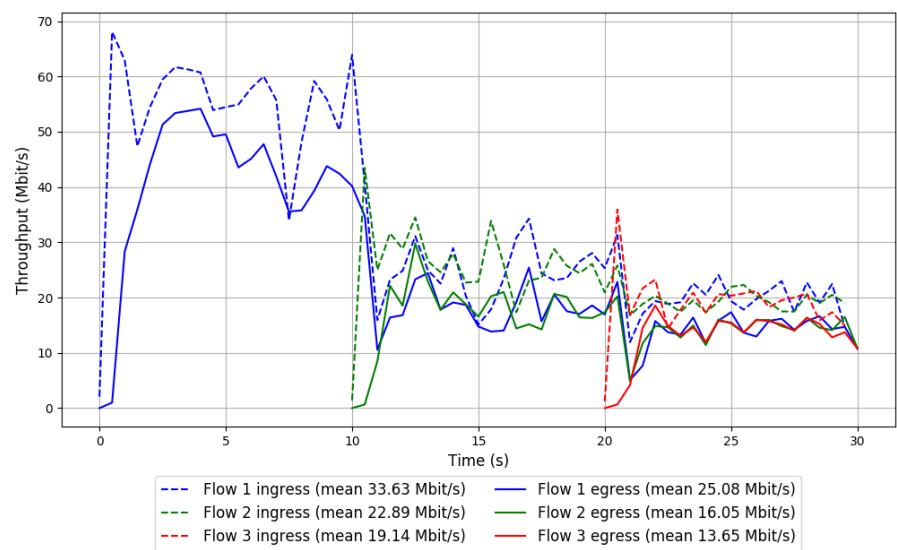
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```
Run 8: Statistics of FillP

Start at: 2018-06-19 13:18:48
End at: 2018-06-19 13:19:18
Local clock offset: 5.798 ms
Remote clock offset: 14.878 ms


# Below is generated by plot.py at 2018-06-19 14:34:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 103.348 ms
Loss rate: 28.06%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 97.153 ms
Loss rate: 24.99%
-- Flow 2:
Average throughput: 16.32 Mbit/s
95th percentile per-packet one-way delay: 105.936 ms
Loss rate: 31.08%
-- Flow 3:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 108.156 ms
Loss rate: 36.80%
```

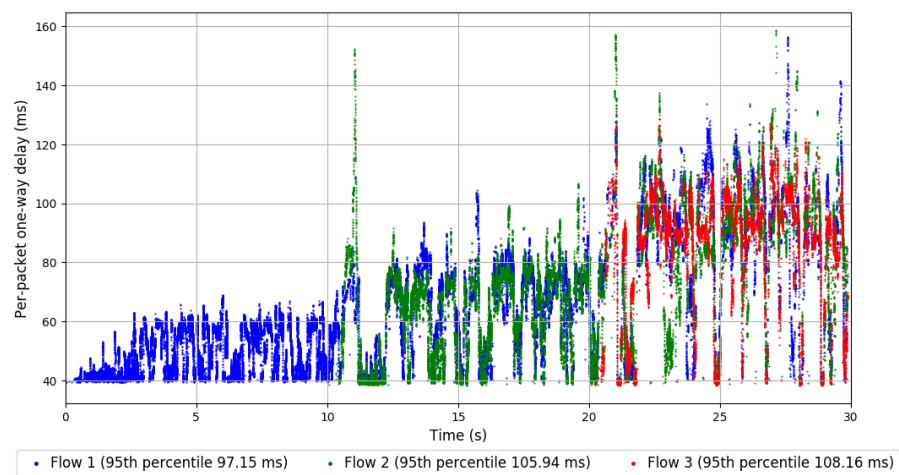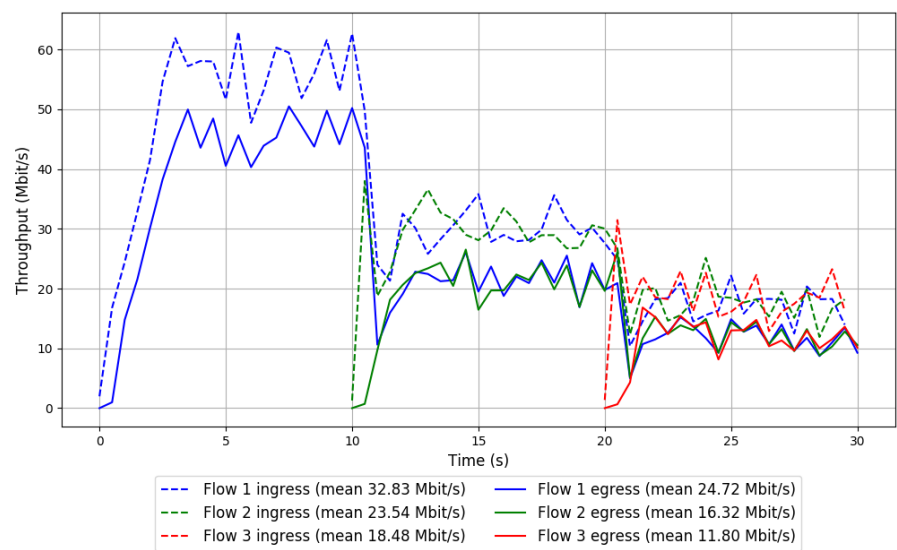## Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-06-19 13:50:55
End at: 2018-06-19 13:51:25
Local clock offset: 7.514 ms
Remote clock offset: -5.966 ms

# Below is generated by plot.py at 2018-06-19 14:35:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.61 Mbit/s
95th percentile per-packet one-way delay: 105.940 ms
Loss rate: 22.30%
-- Flow 1:
Average throughput: 25.48 Mbit/s
95th percentile per-packet one-way delay: 87.463 ms
Loss rate: 19.60%
-- Flow 2:
Average throughput: 15.79 Mbit/s
95th percentile per-packet one-way delay: 155.900 ms
Loss rate: 27.28%
-- Flow 3:
Average throughput: 11.10 Mbit/s
95th percentile per-packet one-way delay: 205.338 ms
Loss rate: 25.15%
```
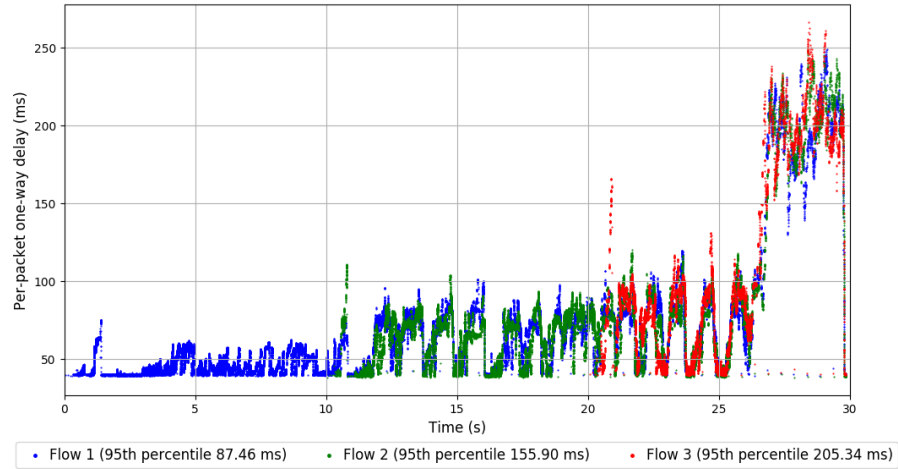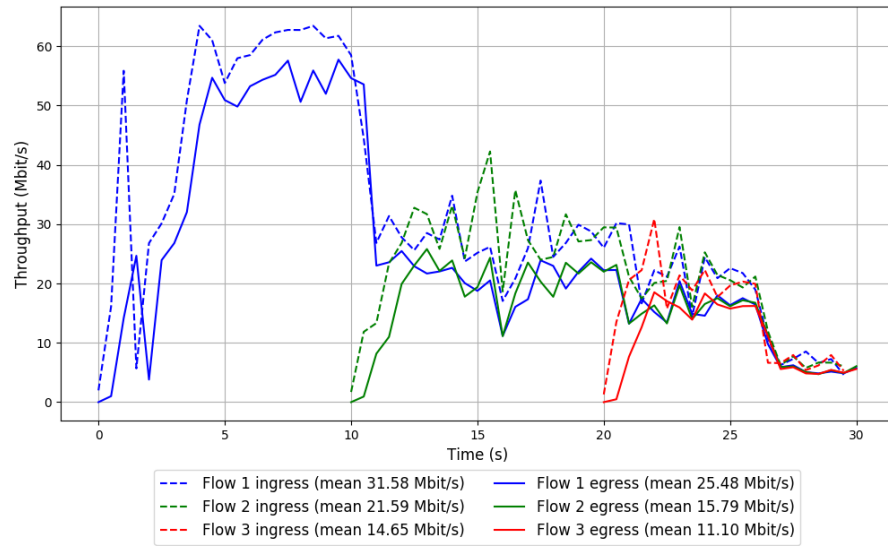
Run 9: Report of FillP — Data Link

Legend:
- Flow 1 ingress (mean 31.58 Mbit/s) — Flow 1 egress (mean 25.48 Mbit/s)
- Flow 2 ingress (mean 21.59 Mbit/s) — Flow 2 egress (mean 15.79 Mbit/s)
- Flow 3 ingress (mean 14.65 Mbit/s) — Flow 3 egress (mean 11.10 Mbit/s)

Legend:
- Flow 1 (95th percentile 87.46 ms)
- Flow 2 (95th percentile 155.90 ms)
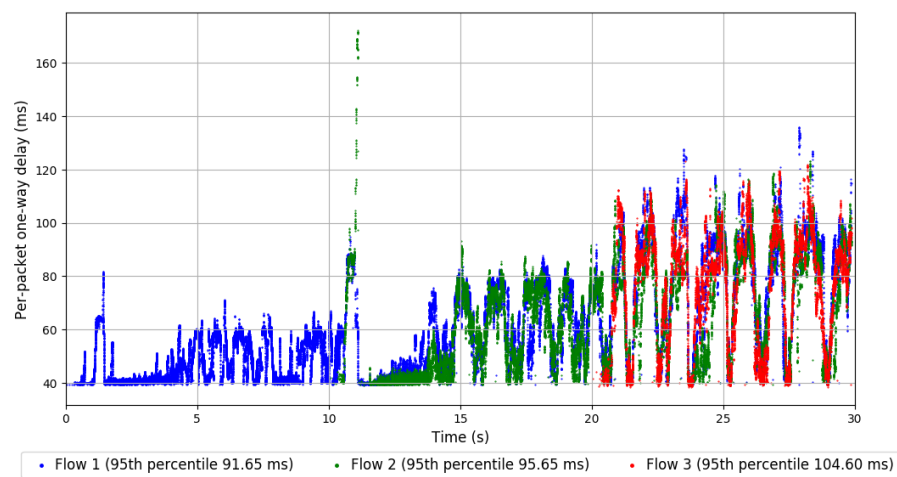- Flow 3 (95th percentile 205.34 ms)

```
Run 10: Statistics of FillP

Start at: 2018-06-19 14:24:27
End at: 2018-06-19 14:24:57
Local clock offset: 8.254 ms
Remote clock offset: -22.225 ms


# Below is generated by plot.py at 2018-06-19 14:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.45 Mbit/s
95th percentile per-packet one-way delay: 95.364 ms
Loss rate: 18.59%
-- Flow 1:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 91.647 ms
Loss rate: 17.31%
-- Flow 2:
Average throughput: 18.30 Mbit/s
95th percentile per-packet one-way delay: 95.654 ms
Loss rate: 20.19%
-- Flow 3:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 104.604 ms
Loss rate: 21.88%
```
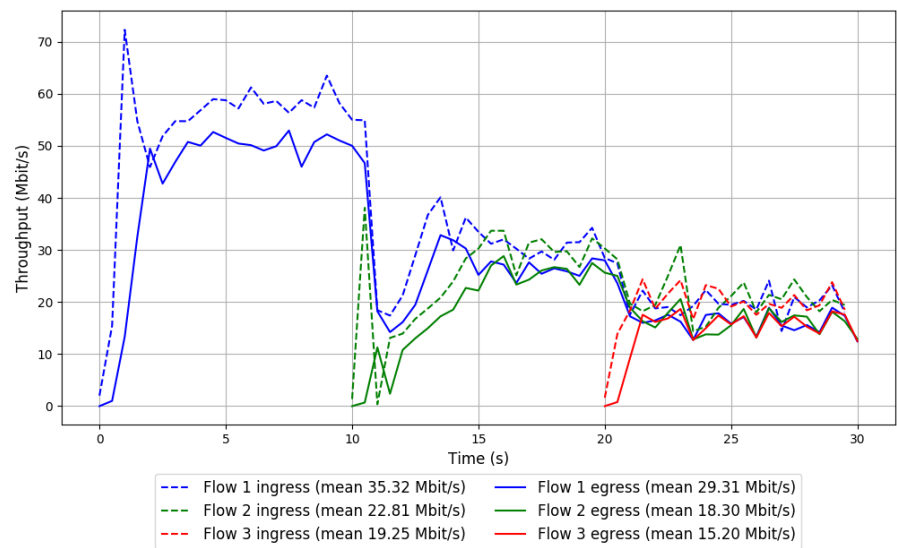
Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-06-19 09:04:18
End at: 2018-06-19 09:04:48
Local clock offset: 6.491 ms
Remote clock offset: 5.257 ms


# Below is generated by plot.py at 2018-06-19 14:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.27 Mbit/s
95th percentile per-packet one-way delay: 74.661 ms
Loss rate: 63.53%
-- Flow 1:
Average throughput: 25.20 Mbit/s
95th percentile per-packet one-way delay: 74.982 ms
Loss rate: 69.40%
-- Flow 2:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 57.394 ms
Loss rate: 8.65%
-- Flow 3:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 109.039 ms
Loss rate: 10.00%
```

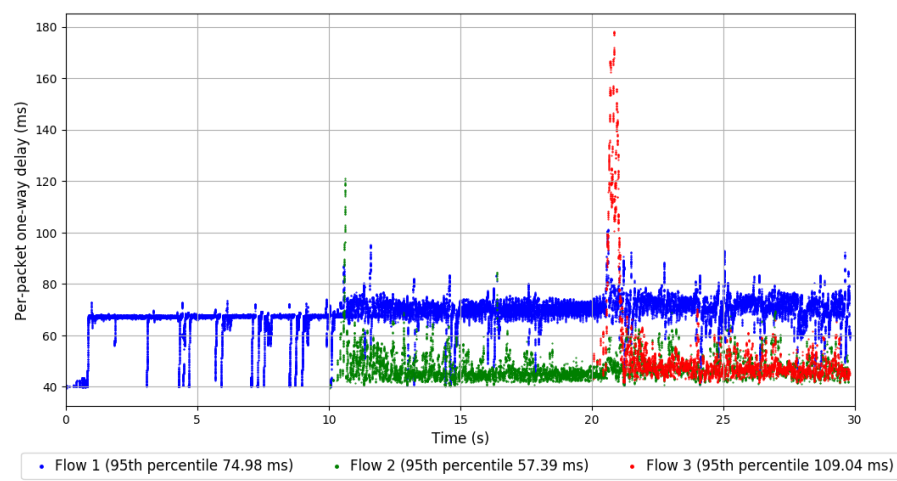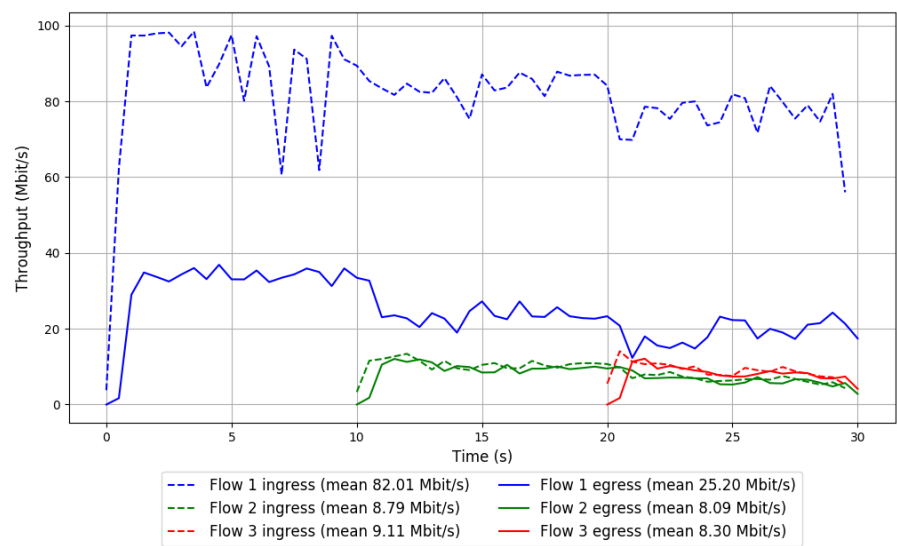# Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-06-19 09:38:23
End at: 2018-06-19 09:38:53
Local clock offset: 2.517 ms
Remote clock offset: 20.359 ms


# Below is generated by plot.py at 2018-06-19 14:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.13 Mbit/s
95th percentile per-packet one-way delay: 79.782 ms
Loss rate: 56.23%
-- Flow 1:
Average throughput: 26.44 Mbit/s
95th percentile per-packet one-way delay: 82.582 ms
Loss rate: 63.83%
-- Flow 2:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 54.000 ms
Loss rate: 8.56%
-- Flow 3:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 60.550 ms
Loss rate: 10.30%
```
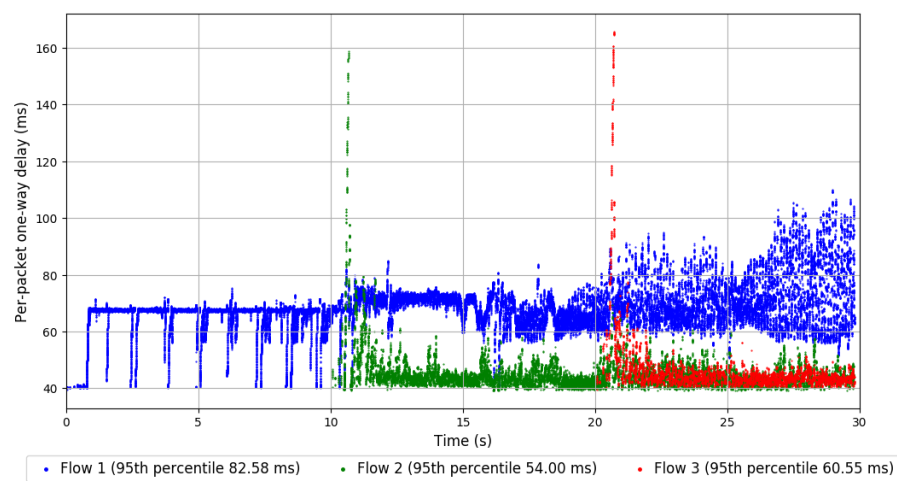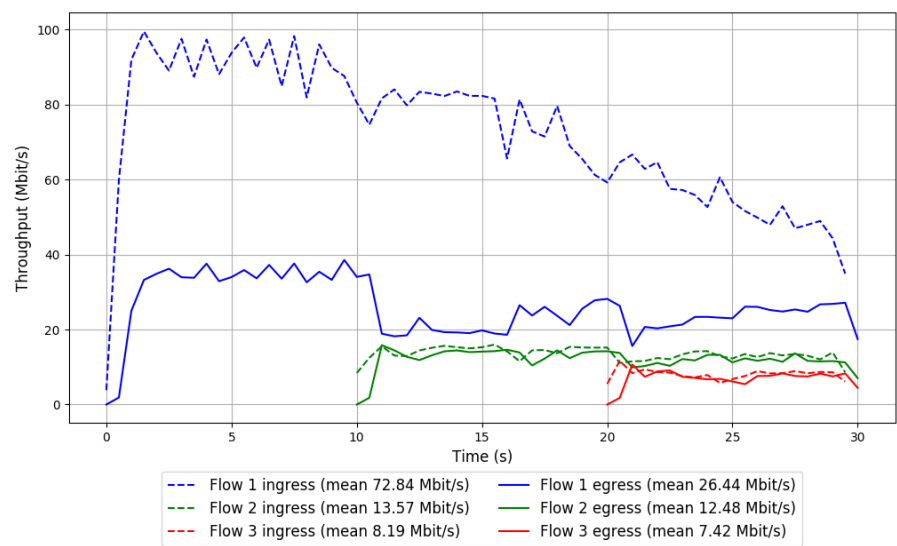
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 72.84 Mbit/s)   Flow 1 egress (mean 26.44 Mbit/s)
Flow 2 ingress (mean 13.57 Mbit/s)   Flow 2 egress (mean 12.48 Mbit/s)
Flow 3 ingress (mean 8.19 Mbit/s)   Flow 3 egress (mean 7.42 Mbit/s)

Flow 1 (95th percentile 82.58 ms)   Flow 2 (95th percentile 54.00 ms)   Flow 3 (95th percentile 60.55 ms)
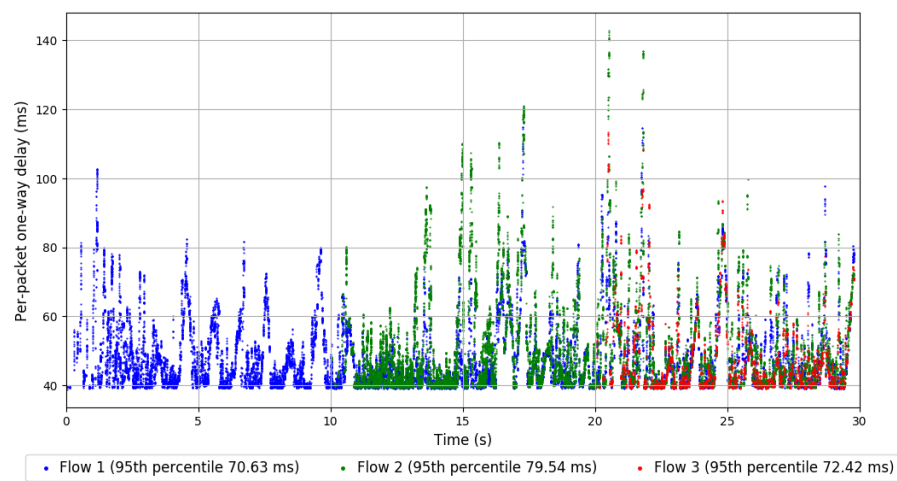
```
Run 3: Statistics of Indigo

Start at: 2018-06-19 10:11:53
End at: 2018-06-19 10:12:23
Local clock offset: 2.081 ms
Remote clock offset: 16.946 ms


# Below is generated by plot.py at 2018-06-19 14:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.42 Mbit/s
95th percentile per-packet one-way delay: 75.087 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 70.628 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 79.539 ms
Loss rate: 8.60%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 72.415 ms
Loss rate: 9.76%
```
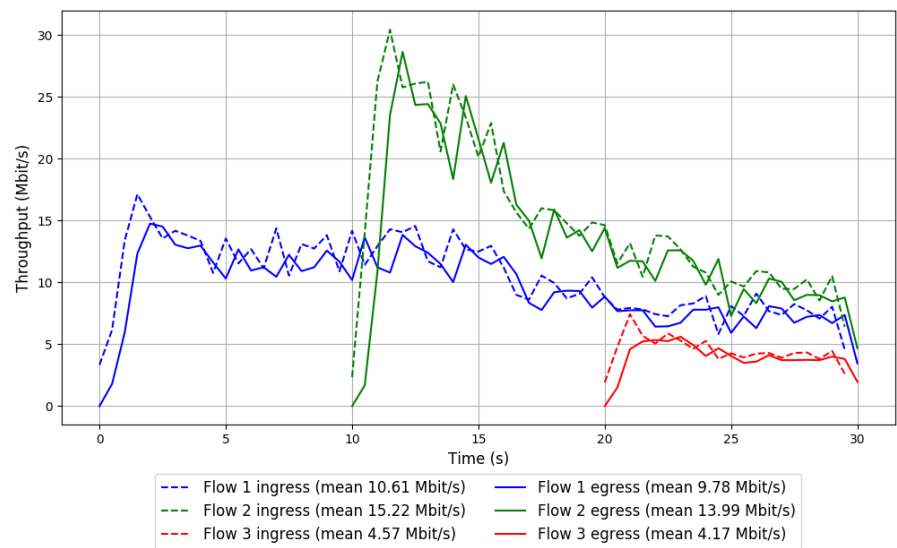
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-06-19 10:43:54
End at: 2018-06-19 10:44:24
Local clock offset: 2.176 ms
Remote clock offset: 17.886 ms


# Below is generated by plot.py at 2018-06-19 14:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.88 Mbit/s
95th percentile per-packet one-way delay: 76.596 ms
Loss rate: 11.47%
-- Flow 1:
Average throughput: 31.18 Mbit/s
95th percentile per-packet one-way delay: 79.969 ms
Loss rate: 12.79%
-- Flow 2:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 64.232 ms
Loss rate: 8.72%
-- Flow 3:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 70.379 ms
Loss rate: 8.78%
```
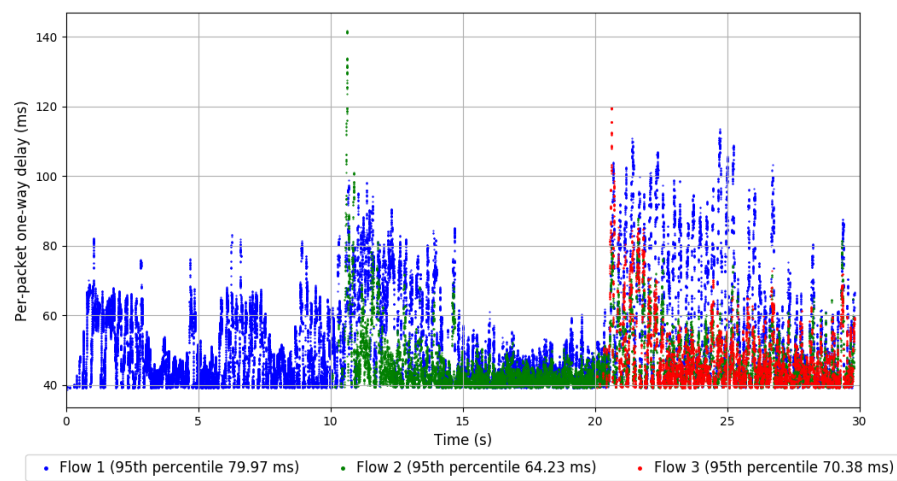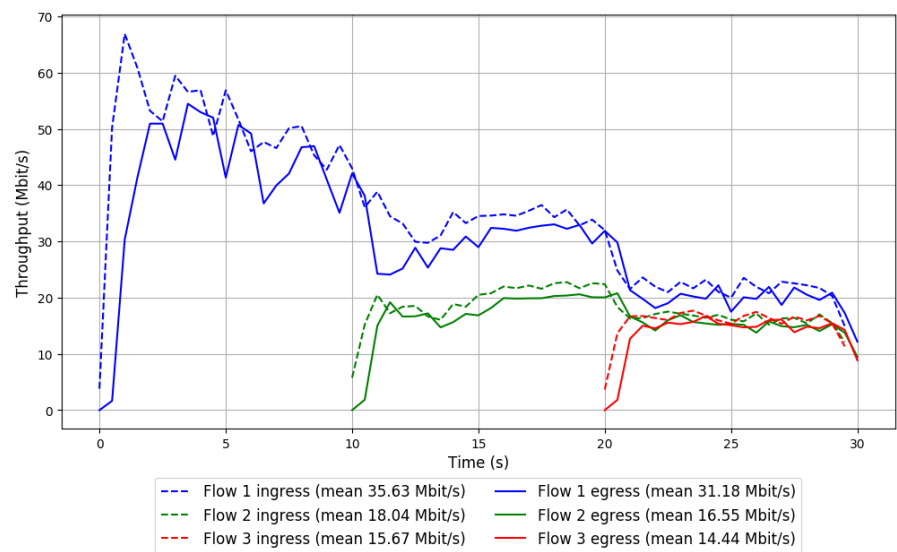
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 35.63 Mbit/s) — Flow 1 egress (mean 31.18 Mbit/s)
Flow 2 ingress (mean 18.04 Mbit/s) — Flow 2 egress (mean 16.55 Mbit/s)
Flow 3 ingress (mean 15.67 Mbit/s) — Flow 3 egress (mean 14.44 Mbit/s)

Flow 1 (95th percentile 79.97 ms)   Flow 2 (95th percentile 64.23 ms)   Flow 3 (95th percentile 70.38 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-06-19 11:16:38
End at: 2018-06-19 11:17:08
Local clock offset: 6.976 ms
Remote clock offset: 43.38 ms


# Below is generated by plot.py at 2018-06-19 14:35:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.98 Mbit/s
95th percentile per-packet one-way delay: 79.778 ms
Loss rate: 23.21%
-- Flow 1:
Average throughput: 32.37 Mbit/s
95th percentile per-packet one-way delay: 80.514 ms
Loss rate: 27.48%
-- Flow 2:
Average throughput: 13.05 Mbit/s
95th percentile per-packet one-way delay: 65.068 ms
Loss rate: 8.47%
-- Flow 3:
Average throughput: 12.12 Mbit/s
95th percentile per-packet one-way delay: 95.860 ms
Loss rate: 11.83%
```
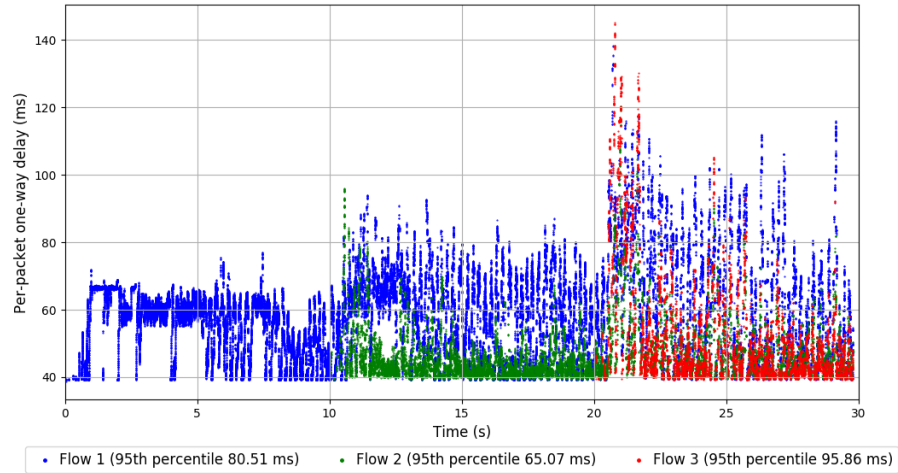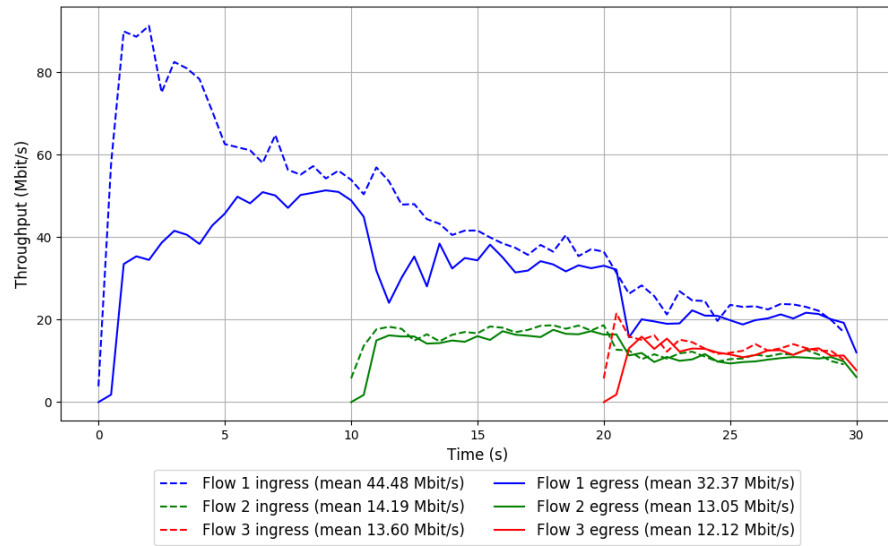
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-06-19 11:49:11
End at: 2018-06-19 11:49:41
Local clock offset: 7.974 ms
Remote clock offset: 53.786 ms


# Below is generated by plot.py at 2018-06-19 14:35:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.28 Mbit/s
95th percentile per-packet one-way delay: 80.822 ms
Loss rate: 30.01%
-- Flow 1:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 83.403 ms
Loss rate: 36.80%
-- Flow 2:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 59.094 ms
Loss rate: 8.76%
-- Flow 3:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 77.249 ms
Loss rate: 12.99%
```
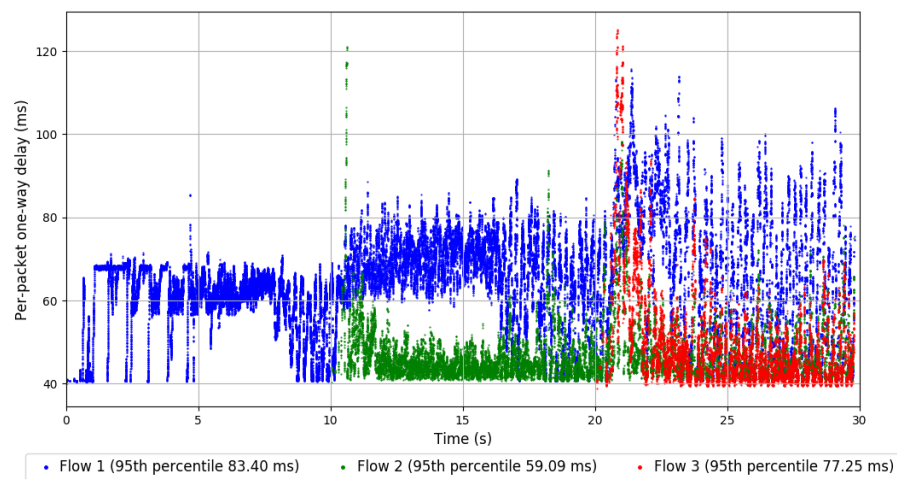
Run 6: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 49.08 Mbit/s) —— Flow 1 egress (mean 31.13 Mbit/s)
- - - - Flow 2 ingress (mean 16.74 Mbit/s) —— Flow 2 egress (mean 15.36 Mbit/s)
- - - - Flow 3 ingress (mean 17.21 Mbit/s) —— Flow 3 egress (mean 15.17 Mbit/s)

• Flow 1 (95th percentile 83.40 ms)   • Flow 2 (95th percentile 59.09 ms)   • Flow 3 (95th percentile 77.25 ms)
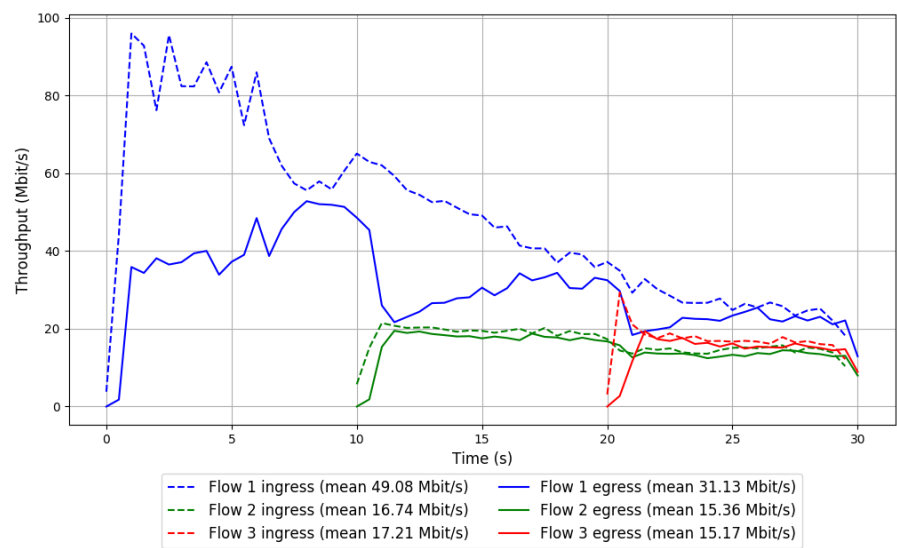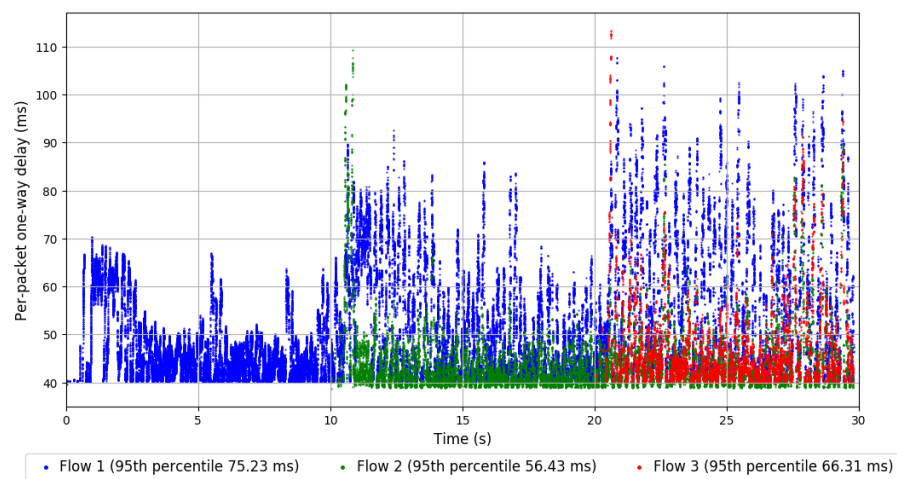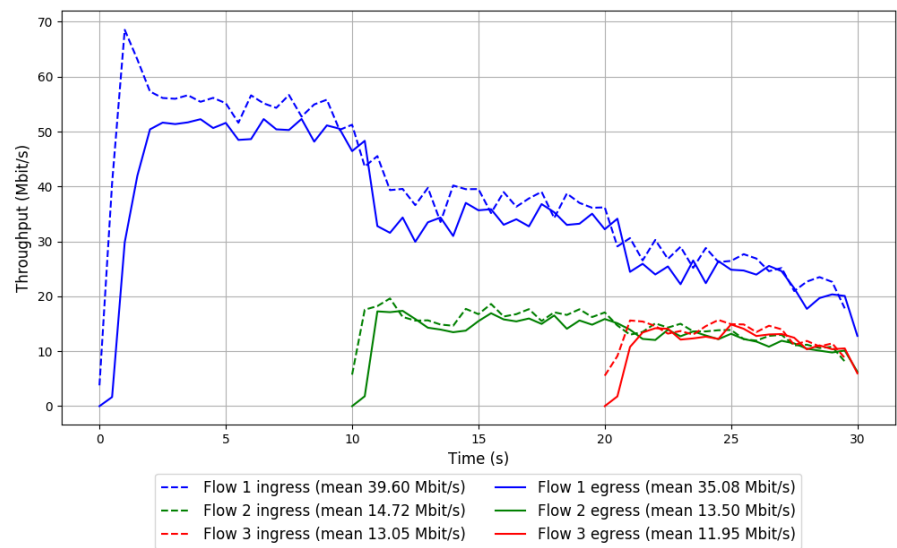
```
Run 7: Statistics of Indigo

Start at: 2018-06-19 12:22:33
End at: 2018-06-19 12:23:03
Local clock offset: 8.004 ms
Remote clock offset: 26.726 ms


# Below is generated by plot.py at 2018-06-19 14:35:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.94 Mbit/s
95th percentile per-packet one-way delay: 73.560 ms
Loss rate: 11.00%
-- Flow 1:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 75.228 ms
Loss rate: 11.72%
-- Flow 2:
Average throughput: 13.50 Mbit/s
95th percentile per-packet one-way delay: 56.427 ms
Loss rate: 8.78%
-- Flow 3:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 66.310 ms
Loss rate: 9.45%
```
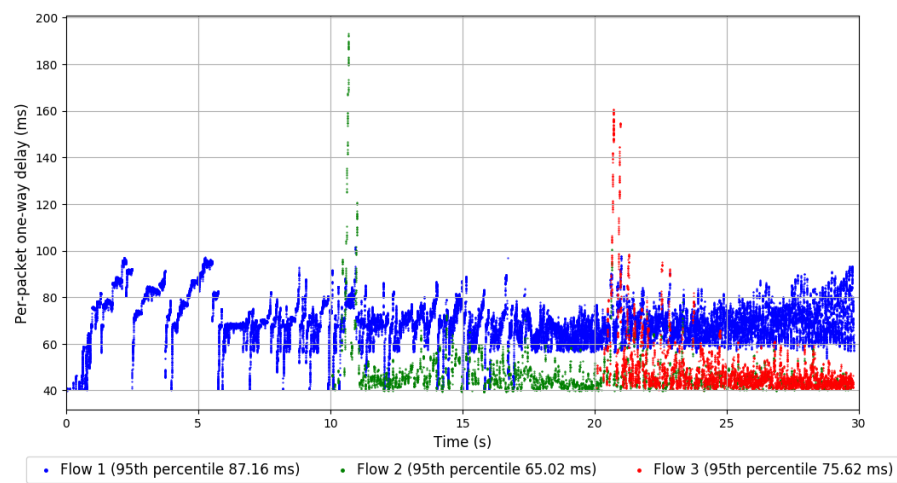
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-06-19 12:55:35
End at: 2018-06-19 12:56:05
Local clock offset: 7.349 ms
Remote clock offset: 37.881 ms


# Below is generated by plot.py at 2018-06-19 14:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.47 Mbit/s
95th percentile per-packet one-way delay: 86.950 ms
Loss rate: 62.53%
-- Flow 1:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 87.159 ms
Loss rate: 66.41%
-- Flow 2:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 65.021 ms
Loss rate: 9.18%
-- Flow 3:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 75.617 ms
Loss rate: 10.43%
```
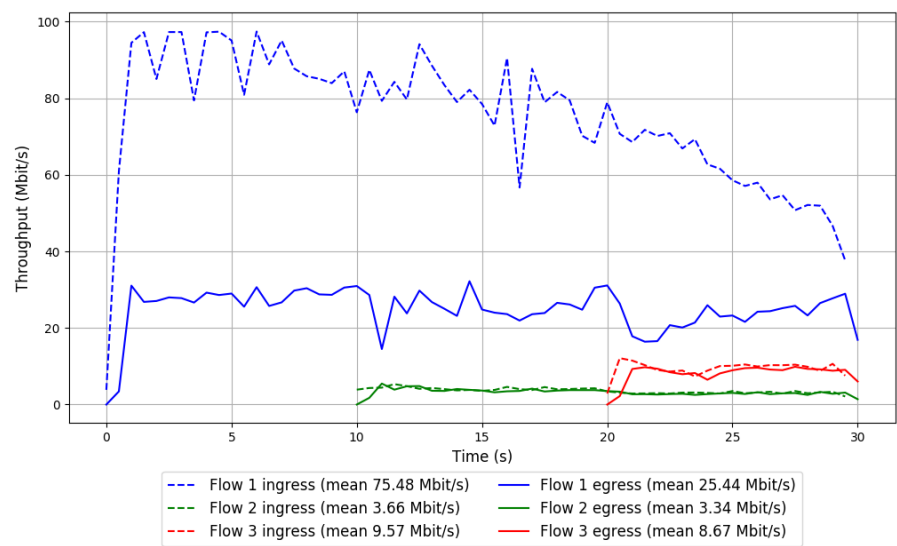
Run 8: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 75.48 Mbit/s) ——— Flow 1 egress (mean 25.44 Mbit/s)
- - - - Flow 2 ingress (mean 3.66 Mbit/s) ——— Flow 2 egress (mean 3.34 Mbit/s)
- - - - Flow 3 ingress (mean 9.57 Mbit/s) ——— Flow 3 egress (mean 8.67 Mbit/s)

• Flow 1 (95th percentile 87.16 ms) • Flow 2 (95th percentile 65.02 ms) • Flow 3 (95th percentile 75.62 ms)
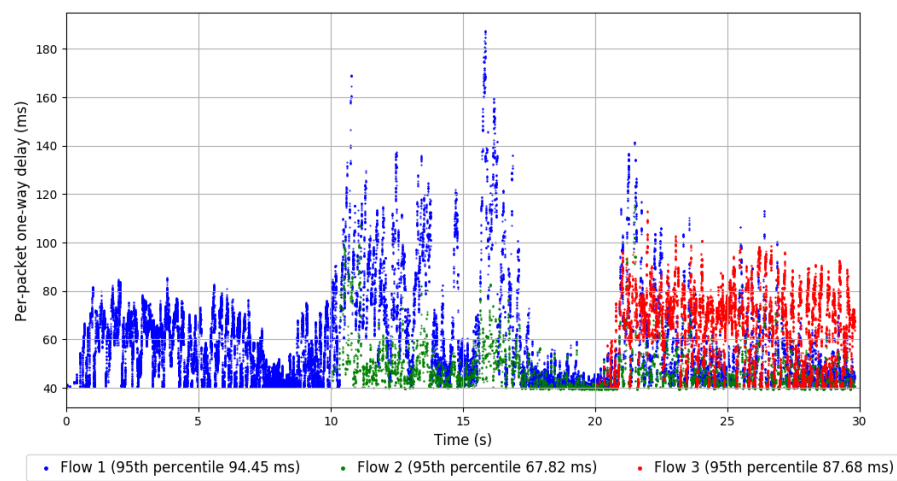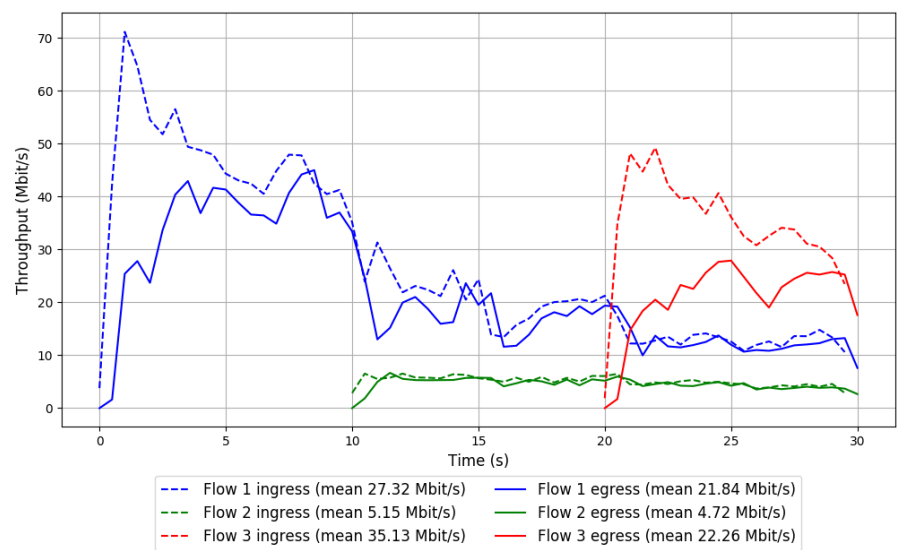
```
Run 9: Statistics of Indigo

Start at: 2018-06-19 13:28:18
End at: 2018-06-19 13:28:48
Local clock offset: 5.734 ms
Remote clock offset: 10.402 ms


# Below is generated by plot.py at 2018-06-19 14:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.26 Mbit/s
95th percentile per-packet one-way delay: 89.649 ms
Loss rate: 24.03%
-- Flow 1:
Average throughput: 21.84 Mbit/s
95th percentile per-packet one-way delay: 94.450 ms
Loss rate: 20.33%
-- Flow 2:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 67.816 ms
Loss rate: 8.59%
-- Flow 3:
Average throughput: 22.26 Mbit/s
95th percentile per-packet one-way delay: 87.683 ms
Loss rate: 37.31%
```
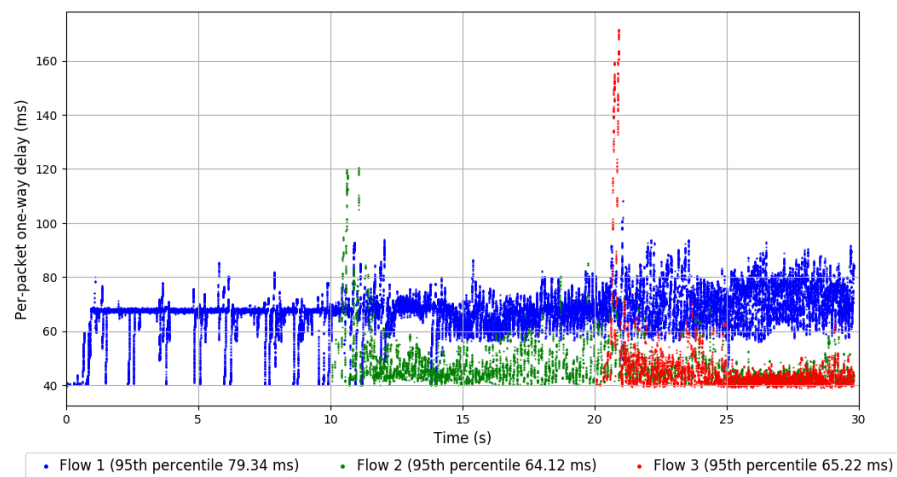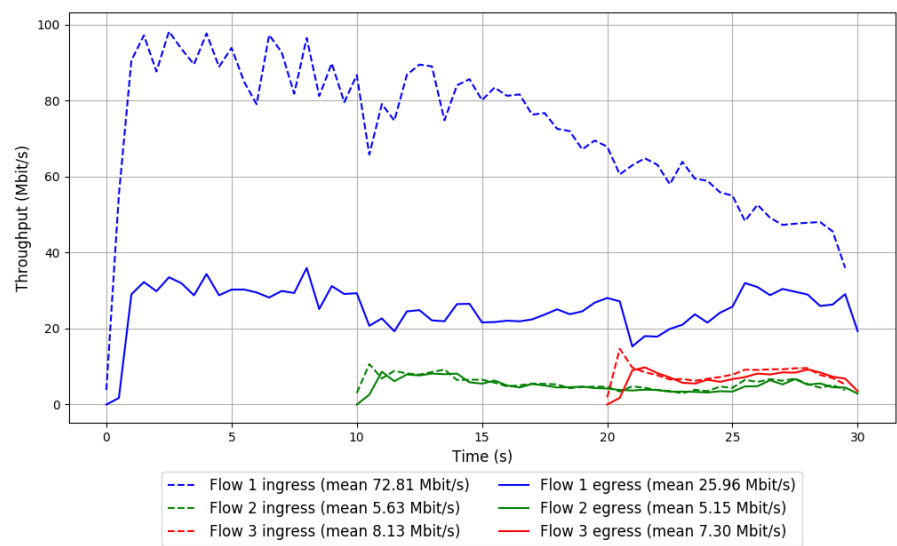
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-06-19 14:00:25
End at: 2018-06-19 14:00:55
Local clock offset: 7.857 ms
Remote clock offset: -11.136 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 78.896 ms
Loss rate: 60.06%
-- Flow 1:
Average throughput: 25.96 Mbit/s
95th percentile per-packet one-way delay: 79.345 ms
Loss rate: 64.48%
-- Flow 2:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 64.118 ms
Loss rate: 9.03%
-- Flow 3:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 65.217 ms
Loss rate: 11.32%
```
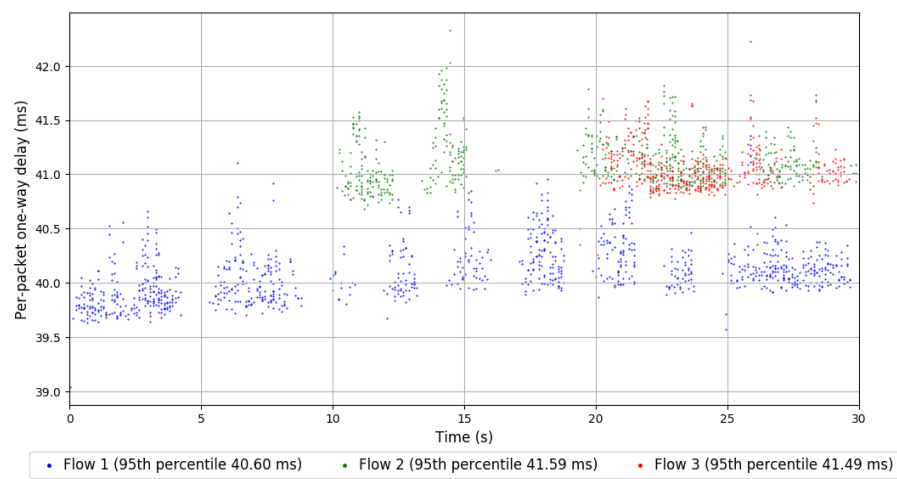
Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 09:15:35
End at: 2018-06-19 09:16:05
Local clock offset: 3.937 ms
Remote clock offset: 14.118 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 41.415 ms
Loss rate: 8.41%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 40.605 ms
Loss rate: 8.26%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 41.592 ms
Loss rate: 8.90%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 41.494 ms
Loss rate: 8.01%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.46 Mbit/s) --- Flow 1 egress (mean 0.42 Mbit/s)
Flow 2 ingress (mean 0.42 Mbit/s) --- Flow 2 egress (mean 0.39 Mbit/s)
Flow 3 ingress (mean 0.58 Mbit/s) --- Flow 3 egress (mean 0.54 Mbit/s)

Flow 1 (95th percentile 40.60 ms)   Flow 2 (95th percentile 41.59 ms)   Flow 3 (95th percentile 41.49 ms)
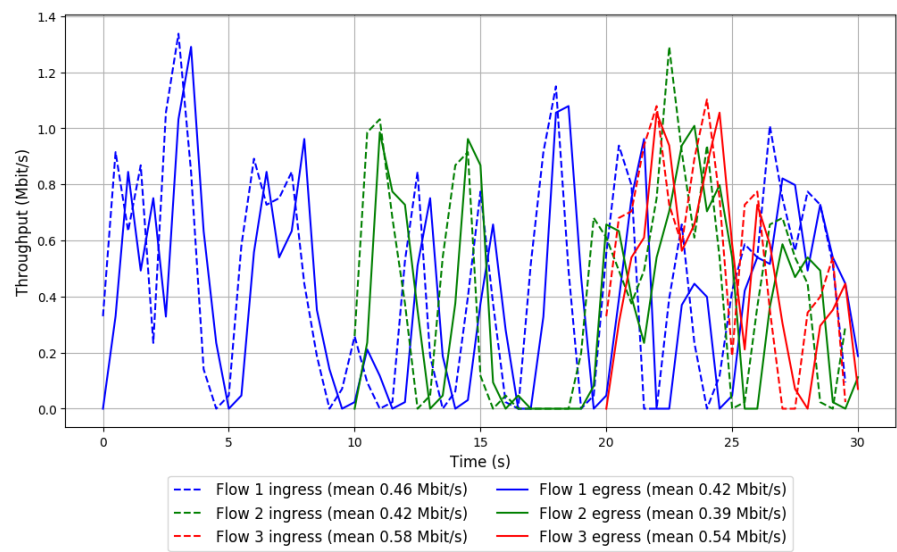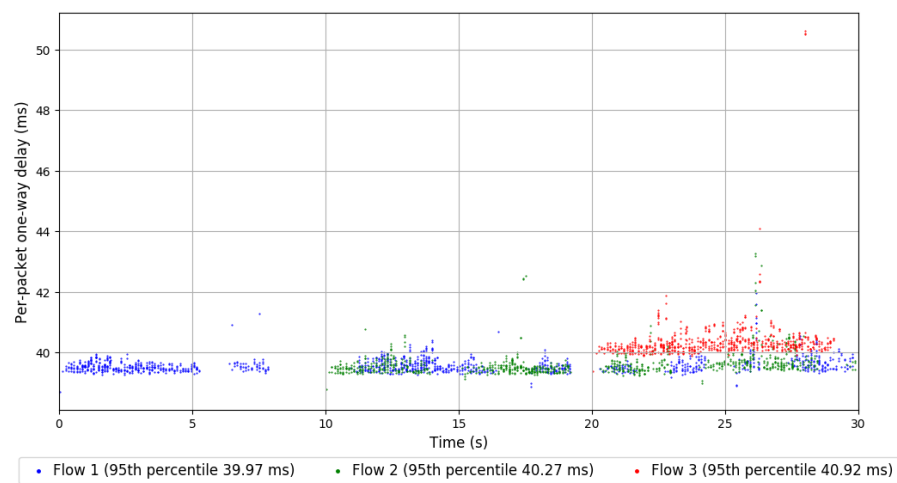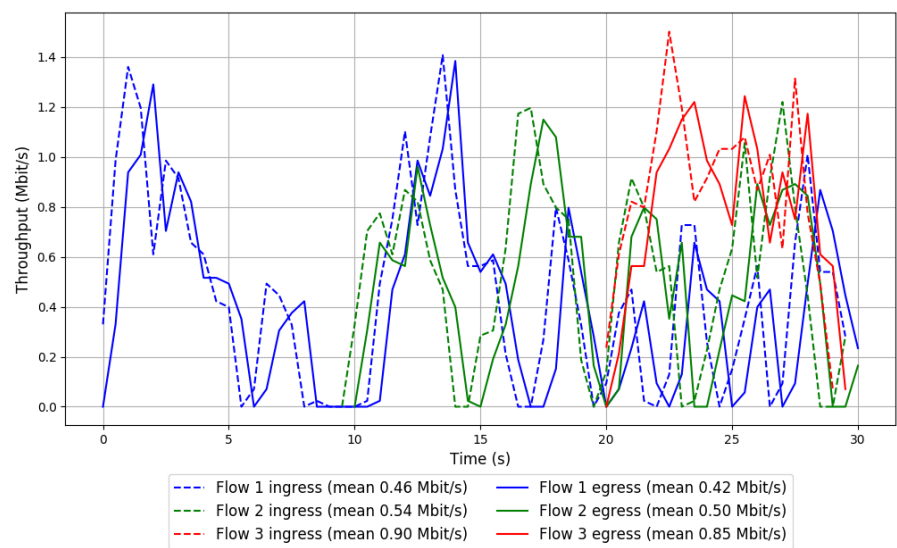
105

```
Run 2: Statistics of LEDBAT

Start at: 2018-06-19 09:49:29
End at: 2018-06-19 09:49:59
Local clock offset: 1.853 ms
Remote clock offset: 16.386 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 40.543 ms
Loss rate: 7.75%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 39.971 ms
Loss rate: 8.20%
-- Flow 2:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 40.275 ms
Loss rate: 8.48%
-- Flow 3:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 40.921 ms
Loss rate: 6.04%
```
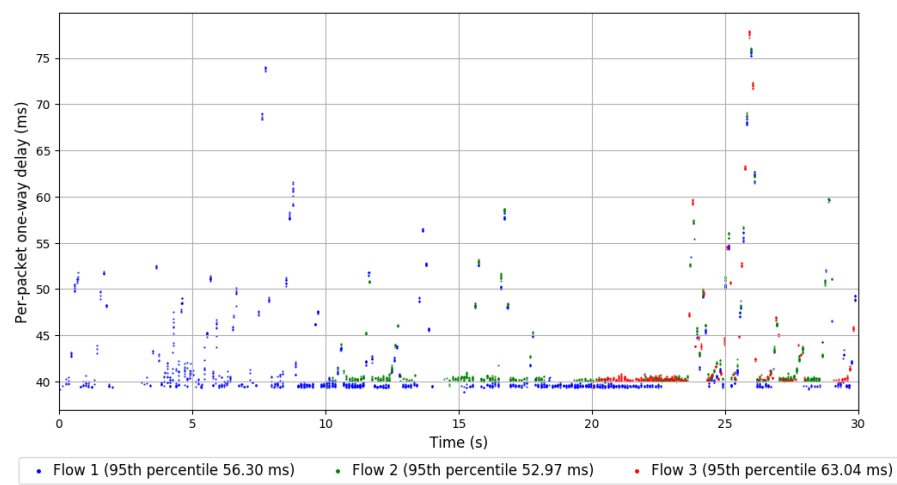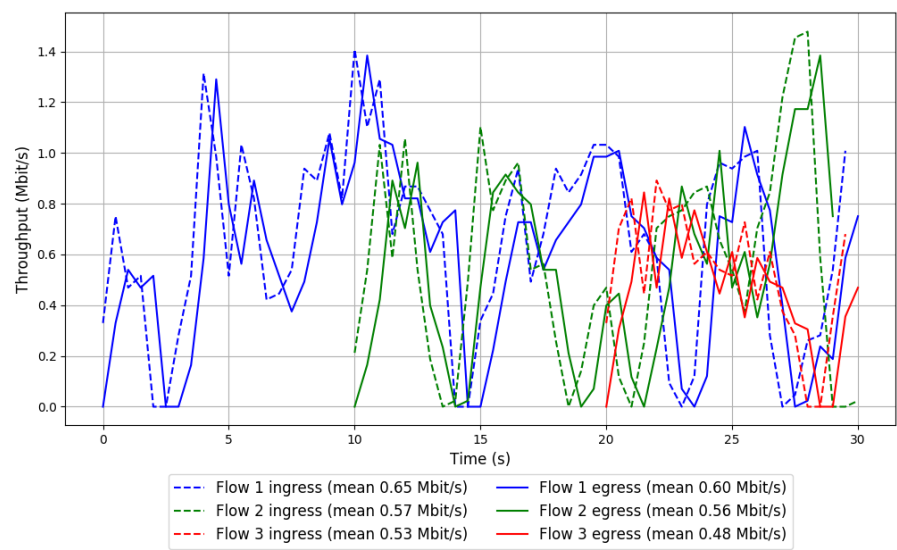
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-06-19 10:21:07
End at: 2018-06-19 10:21:37
Local clock offset: 1.985 ms
Remote clock offset: 16.638 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 56.295 ms
Loss rate: 7.97%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 56.295 ms
Loss rate: 7.41%
-- Flow 2:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 52.966 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 63.040 ms
Loss rate: 10.78%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.65 Mbit/s) Flow 1 egress (mean 0.60 Mbit/s)
Flow 2 ingress (mean 0.57 Mbit/s) Flow 2 egress (mean 0.56 Mbit/s)
Flow 3 ingress (mean 0.53 Mbit/s) Flow 3 egress (mean 0.48 Mbit/s)

Flow 1 (95th percentile 56.30 ms)   Flow 2 (95th percentile 52.97 ms)   Flow 3 (95th percentile 63.04 ms)
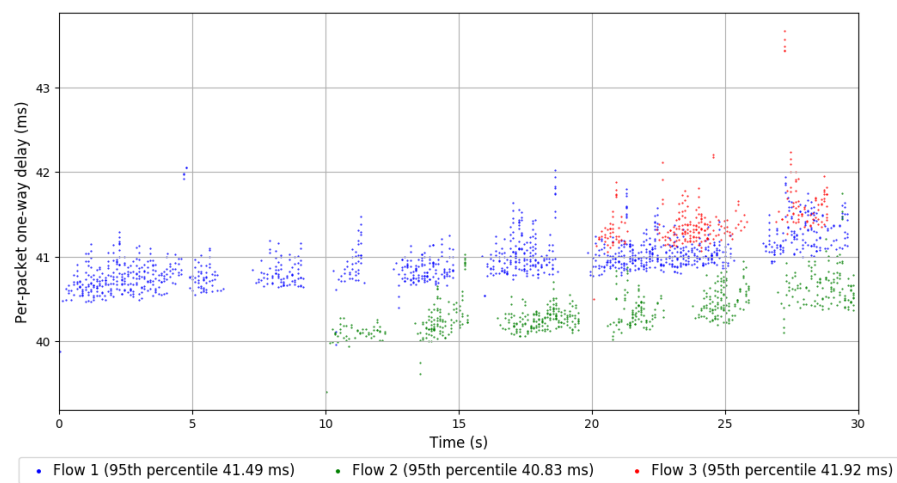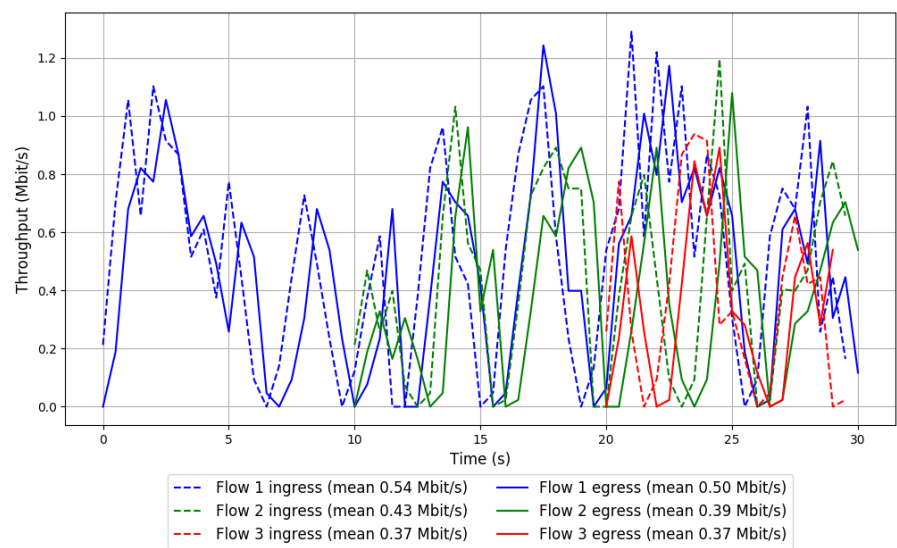
```
Run 4: Statistics of LEDBAT

Start at: 2018-06-19 10:53:28
End at: 2018-06-19 10:53:58
Local clock offset: 2.157 ms
Remote clock offset: 30.272 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 41.545 ms
Loss rate: 8.92%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 41.486 ms
Loss rate: 7.76%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 40.833 ms
Loss rate: 9.96%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 41.922 ms
Loss rate: 11.50%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.54 Mbit/s)   Flow 1 egress (mean 0.50 Mbit/s)
Flow 2 ingress (mean 0.43 Mbit/s)   Flow 2 egress (mean 0.39 Mbit/s)
Flow 3 ingress (mean 0.37 Mbit/s)   Flow 3 egress (mean 0.37 Mbit/s)

Flow 1 (95th percentile 41.49 ms)   Flow 2 (95th percentile 40.83 ms)   Flow 3 (95th percentile 41.92 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-06-19 11:26:49
End at: 2018-06-19 11:27:19
Local clock offset: 8.442 ms
Remote clock offset: 46.78 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 41.696 ms
Loss rate: 8.65%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 42.022 ms
Loss rate: 7.50%
-- Flow 2:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 41.548 ms
Loss rate: 8.63%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 40.668 ms
Loss rate: 11.63%
```
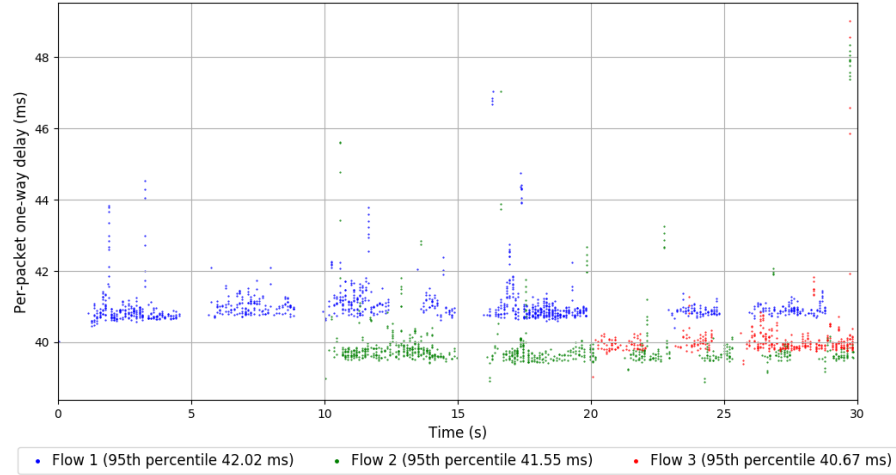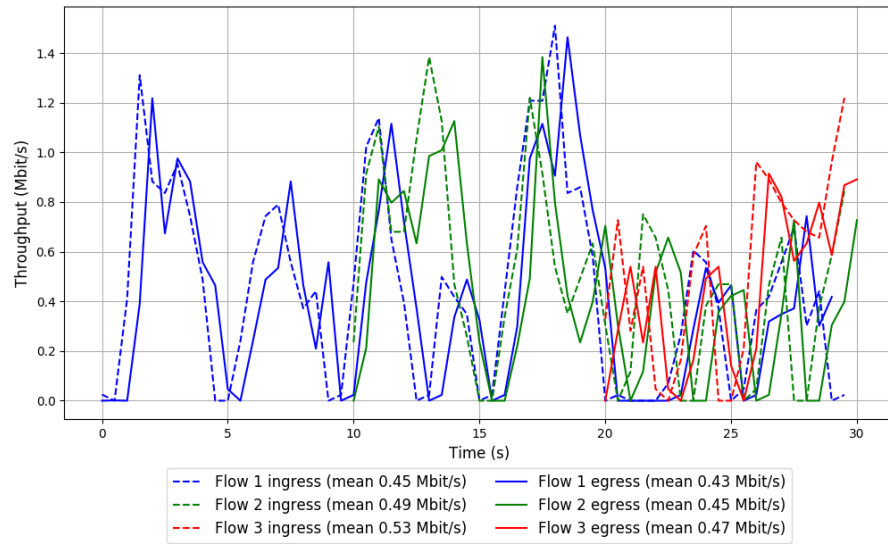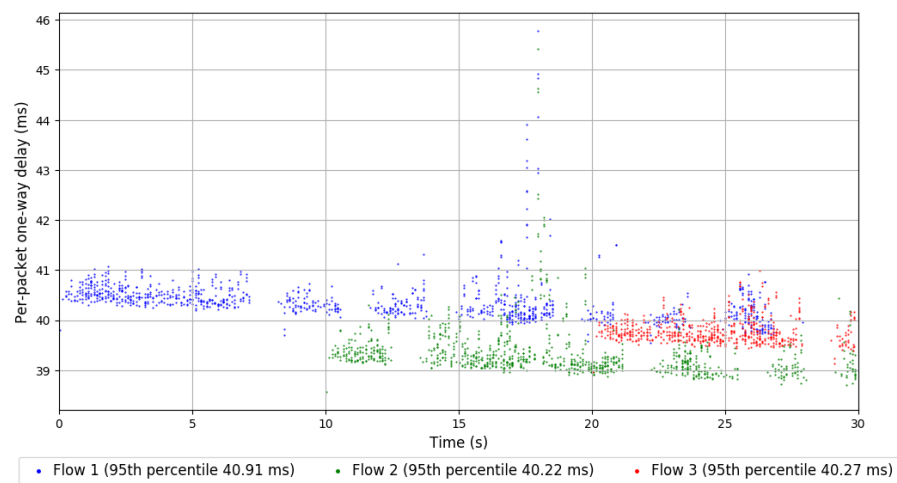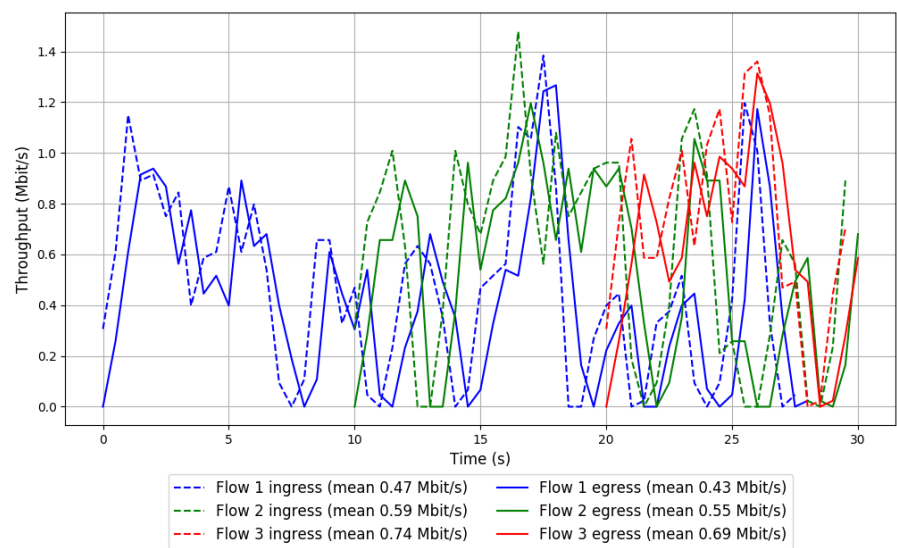
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-06-19 12:00:09
End at: 2018-06-19 12:00:39
Local clock offset: 8.313 ms
Remote clock offset: 40.754 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 40.764 ms
Loss rate: 8.26%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.912 ms
Loss rate: 8.79%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 40.216 ms
Loss rate: 7.82%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 40.275 ms
Loss rate: 8.02%
```
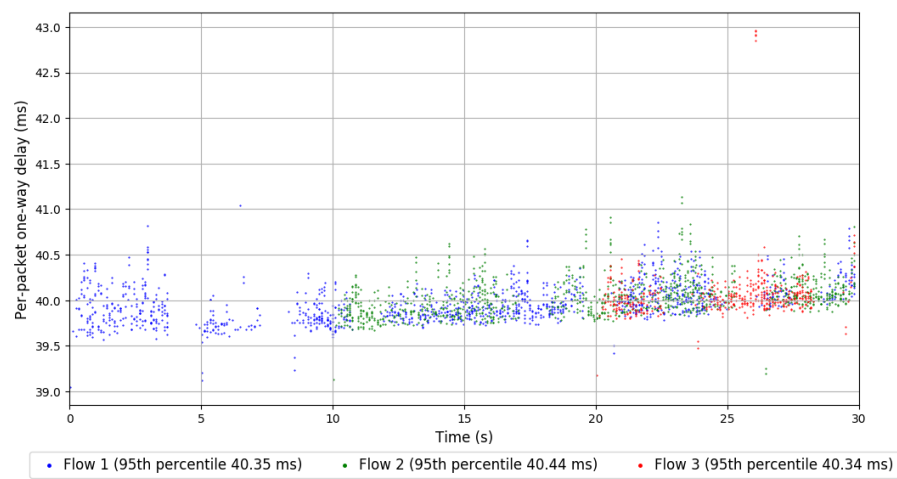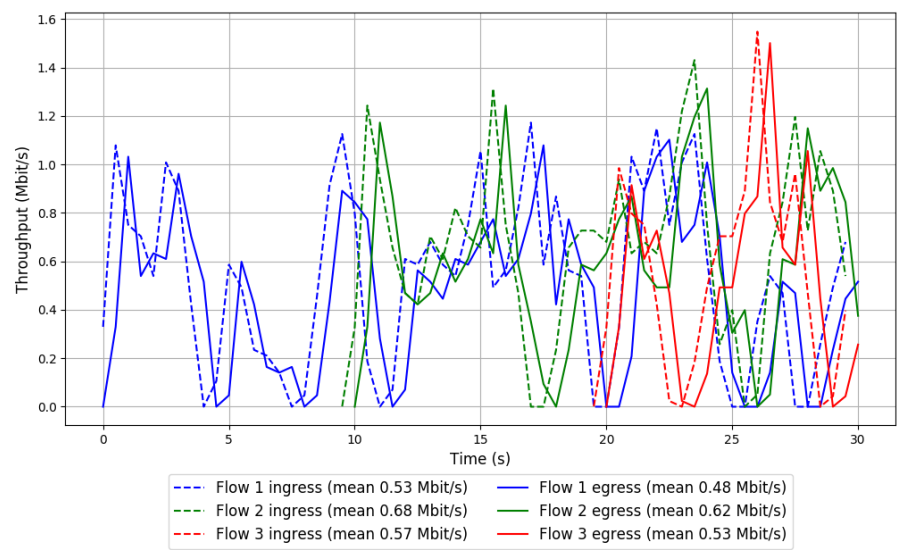
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-06-19 12:33:01
End at: 2018-06-19 12:33:31
Local clock offset: 8.058 ms
Remote clock offset: 30.834 ms

# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 40.387 ms
Loss rate: 8.41%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 40.351 ms
Loss rate: 9.12%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 40.436 ms
Loss rate: 8.03%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 40.339 ms
Loss rate: 7.31%
```
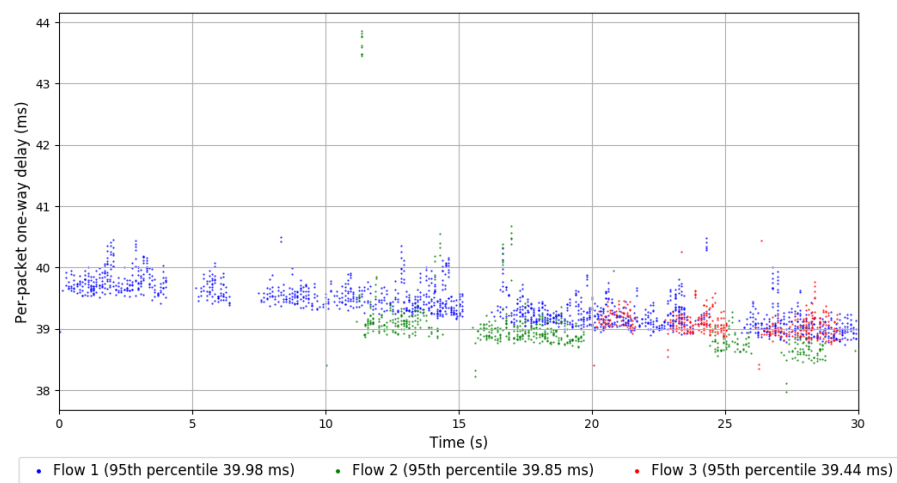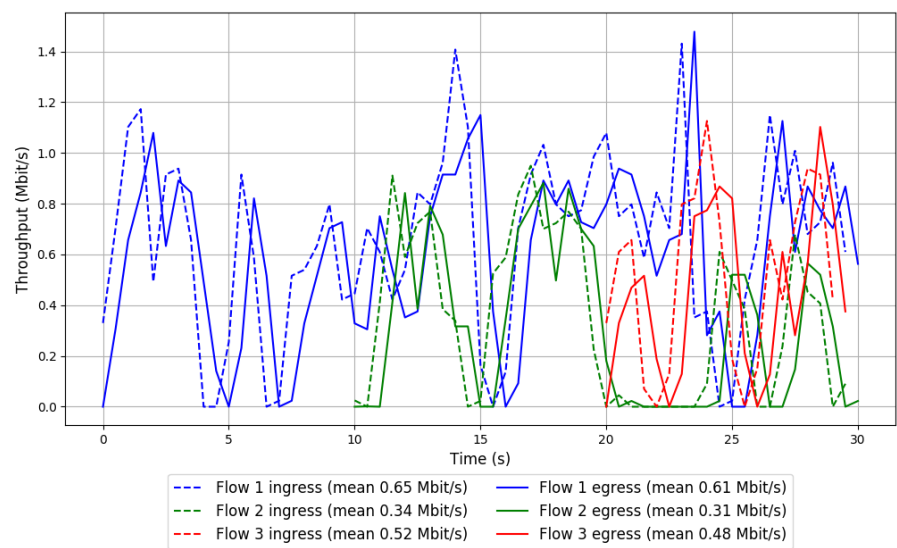
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-06-19 13:06:21
End at: 2018-06-19 13:06:51
Local clock offset: 6.895 ms
Remote clock offset: 28.174 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 39.939 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 39.981 ms
Loss rate: 7.14%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 39.851 ms
Loss rate: 9.76%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 39.443 ms
Loss rate: 7.99%
```

Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.65 Mbit/s)
Flow 1 egress (mean 0.61 Mbit/s)
Flow 2 ingress (mean 0.34 Mbit/s)
Flow 2 egress (mean 0.31 Mbit/s)
Flow 3 ingress (mean 0.52 Mbit/s)
Flow 3 egress (mean 0.48 Mbit/s)

Flow 1 (95th percentile 39.98 ms)
Flow 2 (95th percentile 39.85 ms)
Flow 3 (95th percentile 39.44 ms)

119

```
Run 9: Statistics of LEDBAT

Start at: 2018-06-19 13:38:23
End at: 2018-06-19 13:38:53
Local clock offset: 6.731 ms
Remote clock offset: 4.937 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 40.368 ms
Loss rate: 9.69%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 40.626 ms
Loss rate: 10.09%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 39.441 ms
Loss rate: 8.84%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 40.219 ms
Loss rate: 10.29%
```
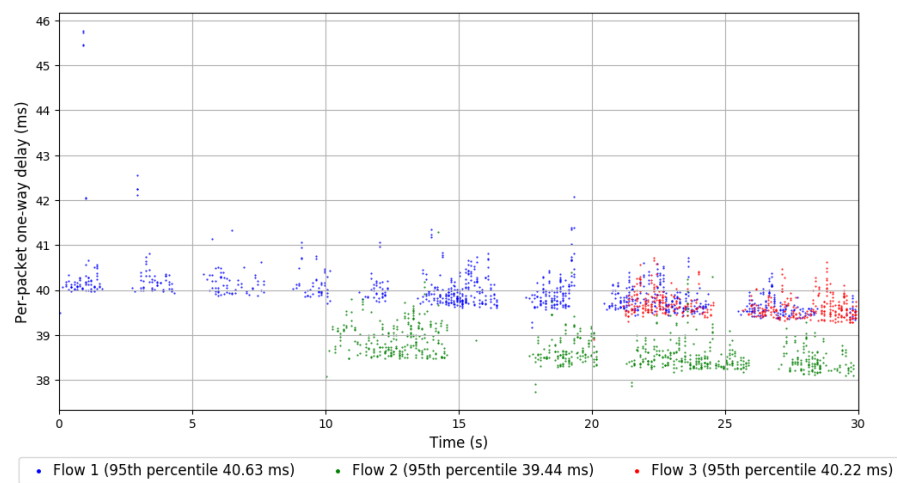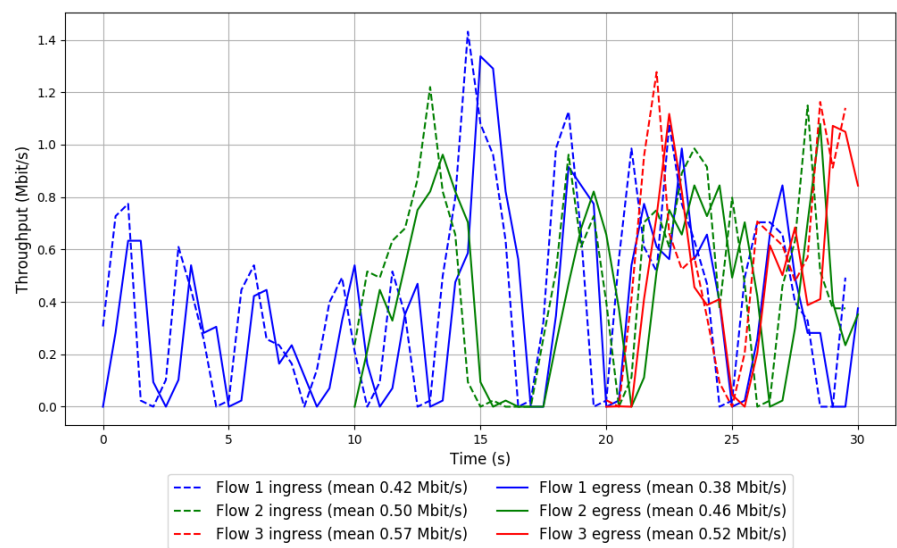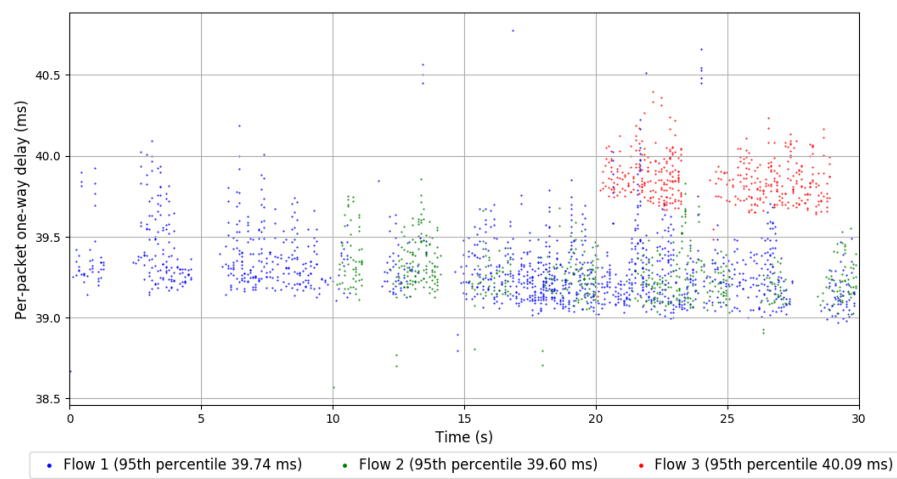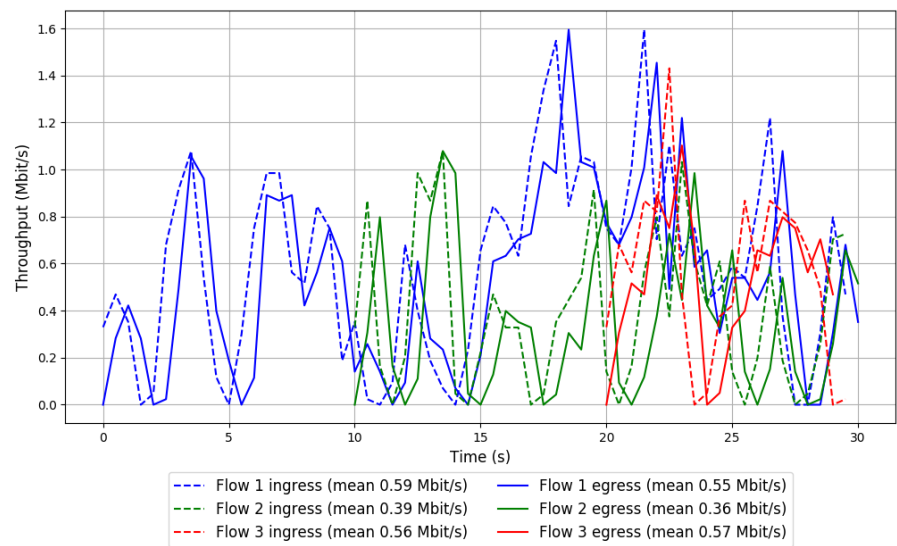
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-06-19 14:11:40
End at: 2018-06-19 14:12:10
Local clock offset: 8.011 ms
Remote clock offset: -16.371 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 39.958 ms
Loss rate: 8.98%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 39.742 ms
Loss rate: 8.44%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 39.602 ms
Loss rate: 10.13%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 40.090 ms
Loss rate: 9.11%
```

Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.59 Mbit/s) --- Flow 1 egress (mean 0.55 Mbit/s)
Flow 2 ingress (mean 0.39 Mbit/s) --- Flow 2 egress (mean 0.36 Mbit/s)
Flow 3 ingress (mean 0.56 Mbit/s) --- Flow 3 egress (mean 0.57 Mbit/s)

Flow 1 (95th percentile 39.74 ms)   Flow 2 (95th percentile 39.60 ms)   Flow 3 (95th percentile 40.09 ms)
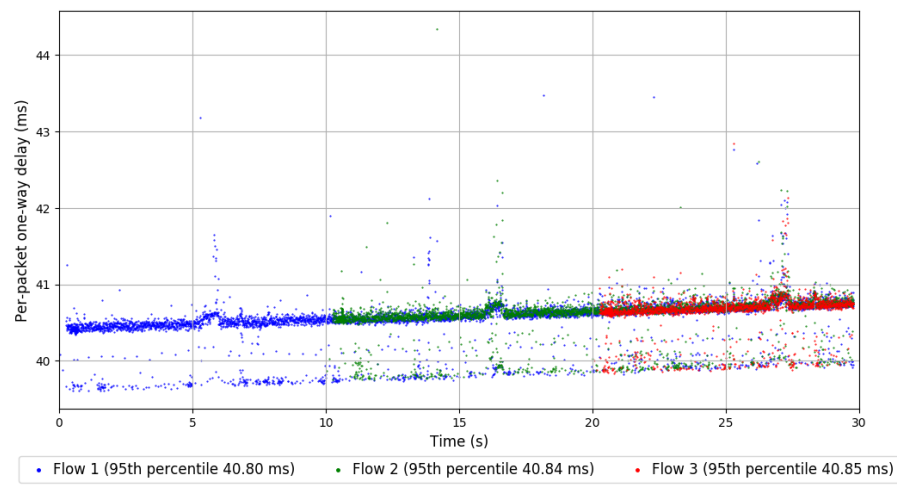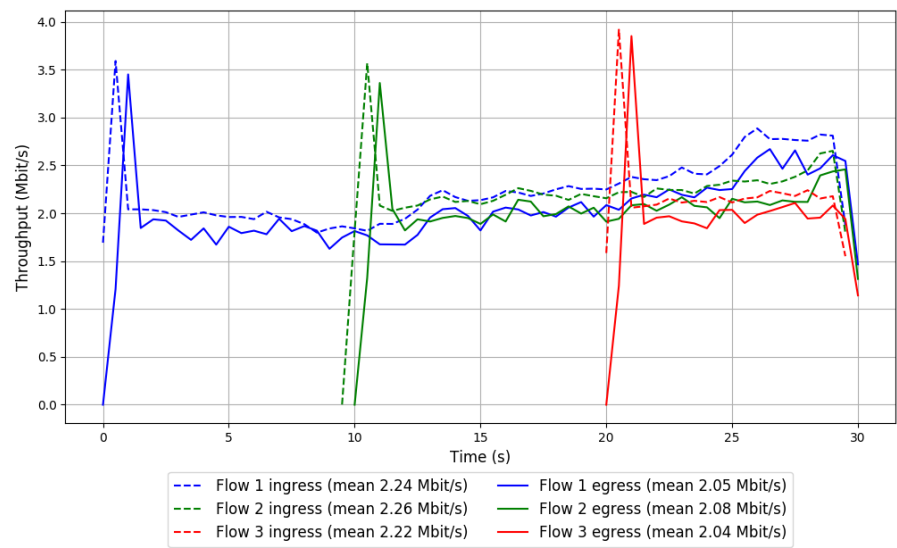
123

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 09:14:08
End at: 2018-06-19 09:14:38
Local clock offset: 3.992 ms
Remote clock offset: 13.402 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 40.823 ms
Loss rate: 8.50%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 40.799 ms
Loss rate: 8.46%
-- Flow 2:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 40.836 ms
Loss rate: 8.45%
-- Flow 3:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 40.846 ms
Loss rate: 8.76%
```

Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 2.24 Mbit/s) --- Flow 1 egress (mean 2.05 Mbit/s)
Flow 2 ingress (mean 2.26 Mbit/s) --- Flow 2 egress (mean 2.08 Mbit/s)
Flow 3 ingress (mean 2.22 Mbit/s) --- Flow 3 egress (mean 2.04 Mbit/s)

Flow 1 (95th percentile 40.80 ms)   Flow 2 (95th percentile 40.84 ms)   Flow 3 (95th percentile 40.85 ms)
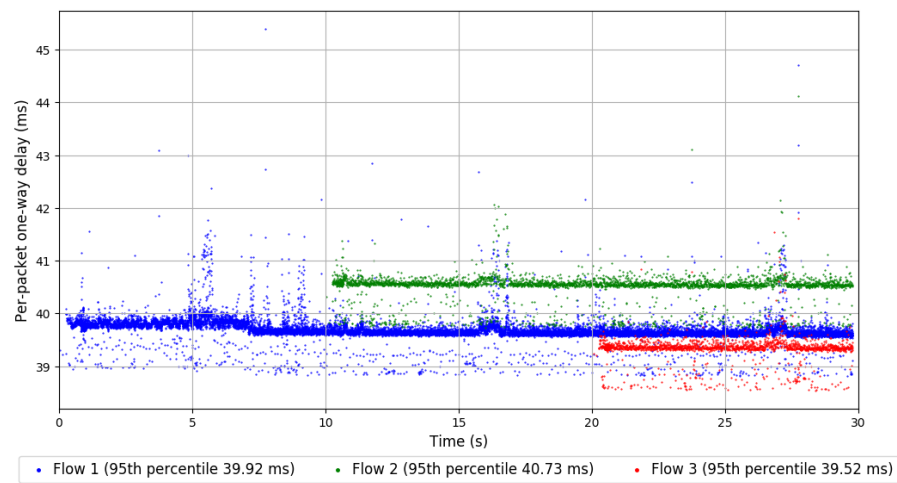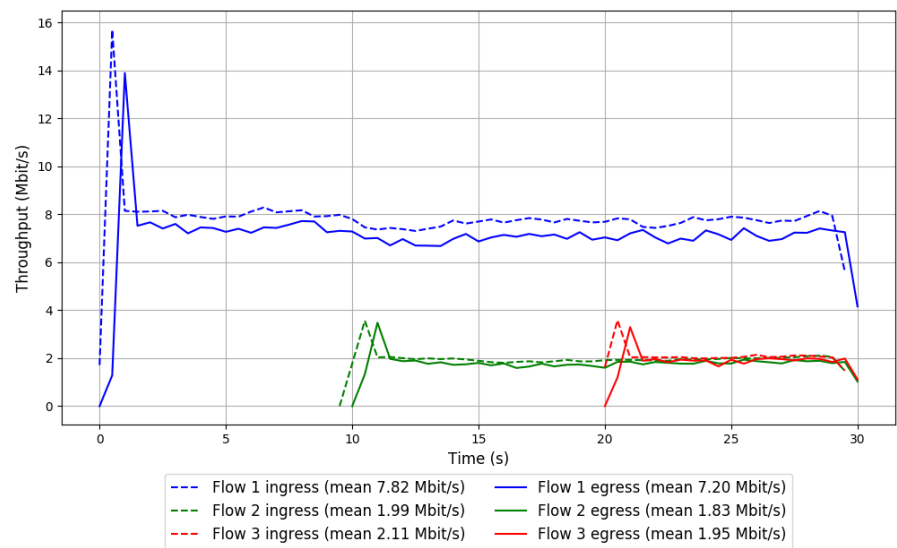
```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-19 09:47:55
End at: 2018-06-19 09:48:25
Local clock offset: 2.194 ms
Remote clock offset: 16.512 ms

# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.05 Mbit/s
95th percentile per-packet one-way delay: 40.587 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 39.922 ms
Loss rate: 8.35%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 40.726 ms
Loss rate: 8.60%
-- Flow 3:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 39.525 ms
Loss rate: 8.47%
```

Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 7.82 Mbit/s) --- Flow 1 egress (mean 7.20 Mbit/s)
Flow 2 ingress (mean 1.99 Mbit/s) --- Flow 2 egress (mean 1.83 Mbit/s)
Flow 3 ingress (mean 2.11 Mbit/s) --- Flow 3 egress (mean 1.95 Mbit/s)

Flow 1 (95th percentile 39.92 ms)   Flow 2 (95th percentile 40.73 ms)   Flow 3 (95th percentile 39.52 ms)
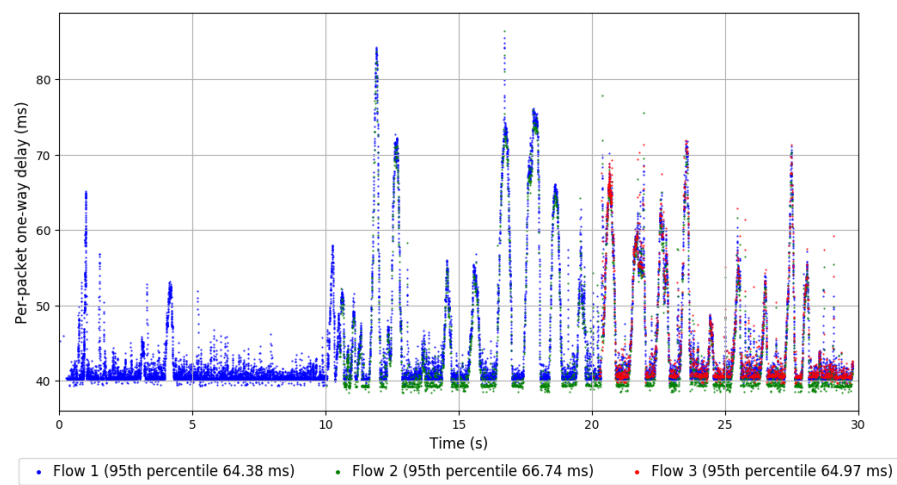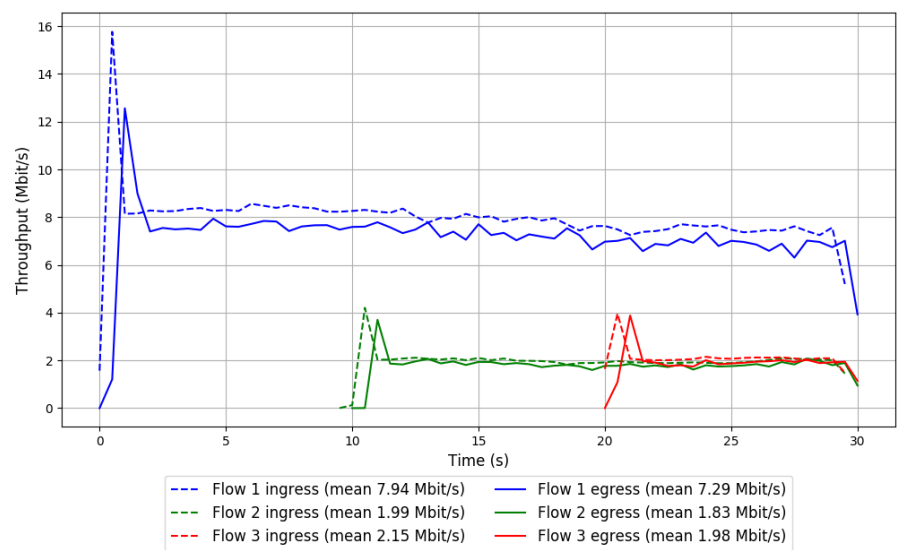
```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 10:19:35
End at: 2018-06-19 10:20:05
Local clock offset: 2.089 ms
Remote clock offset: 16.606 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 64.758 ms
Loss rate: 8.59%
-- Flow 1:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 64.375 ms
Loss rate: 8.58%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 66.738 ms
Loss rate: 8.43%
-- Flow 3:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 64.971 ms
Loss rate: 8.96%
```
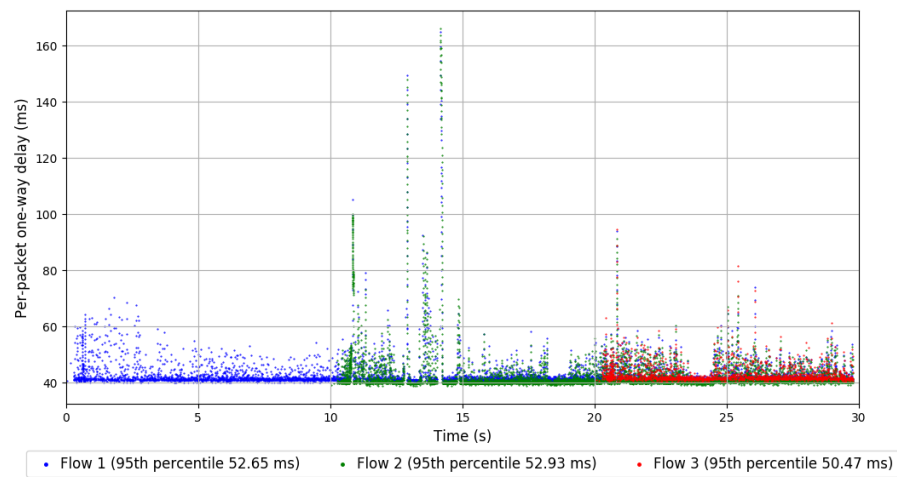
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 7.94 Mbit/s)   Flow 1 egress (mean 7.29 Mbit/s)
Flow 2 ingress (mean 1.99 Mbit/s)   Flow 2 egress (mean 1.83 Mbit/s)
Flow 3 ingress (mean 2.15 Mbit/s)   Flow 3 egress (mean 1.98 Mbit/s)

Flow 1 (95th percentile 64.38 ms)   Flow 2 (95th percentile 66.74 ms)   Flow 3 (95th percentile 64.97 ms)
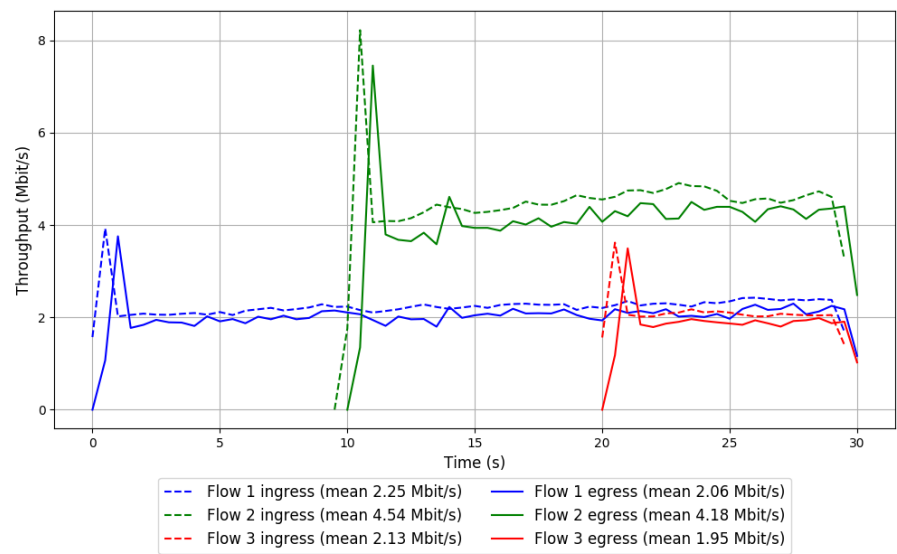
```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-19 10:51:58
End at: 2018-06-19 10:52:28
Local clock offset: 2.026 ms
Remote clock offset: 28.498 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 52.350 ms
Loss rate: 8.72%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 52.651 ms
Loss rate: 8.90%
-- Flow 2:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 52.928 ms
Loss rate: 8.41%
-- Flow 3:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.469 ms
Loss rate: 9.44%
```

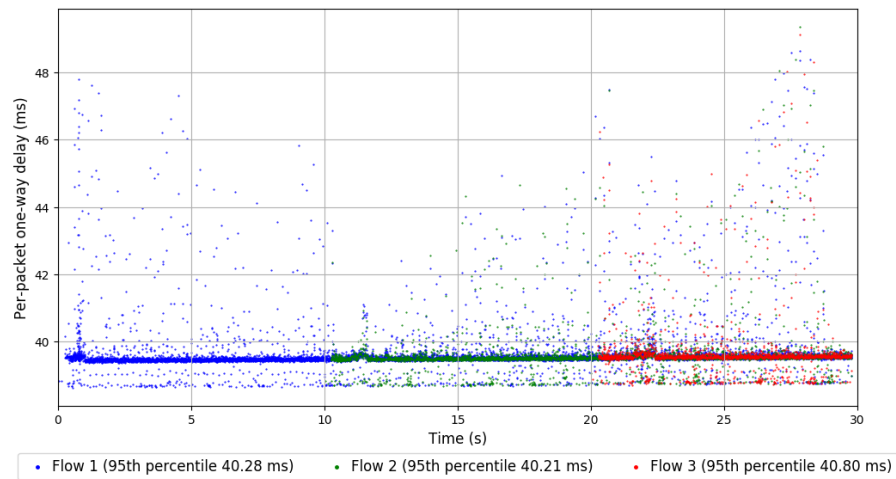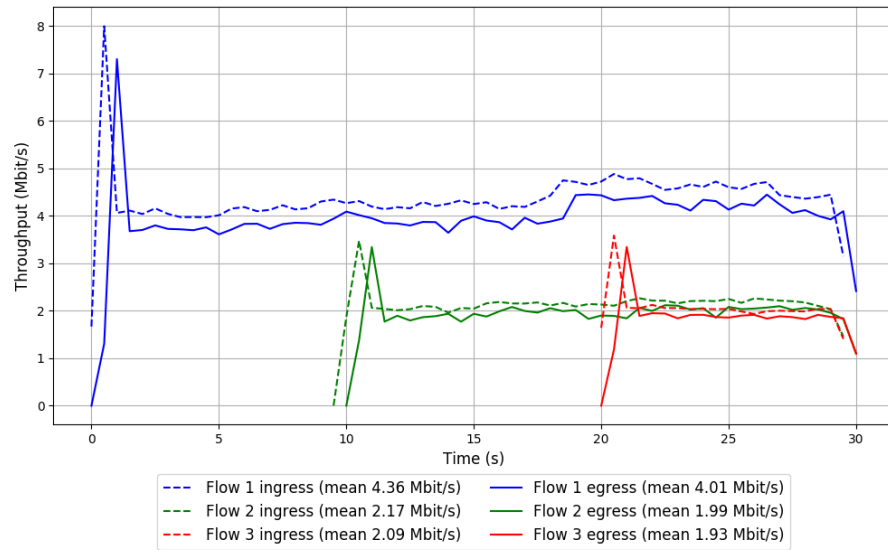Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-19 11:25:21
End at: 2018-06-19 11:25:51
Local clock offset: 8.19 ms
Remote clock offset: 46.423 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 40.306 ms
Loss rate: 8.53%
-- Flow 1:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 40.279 ms
Loss rate: 8.48%
-- Flow 2:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 40.210 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 40.795 ms
Loss rate: 8.39%
```

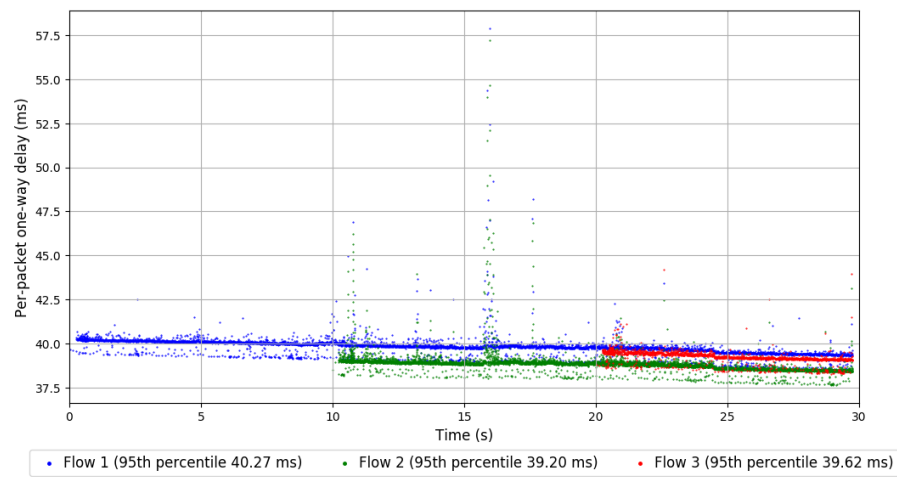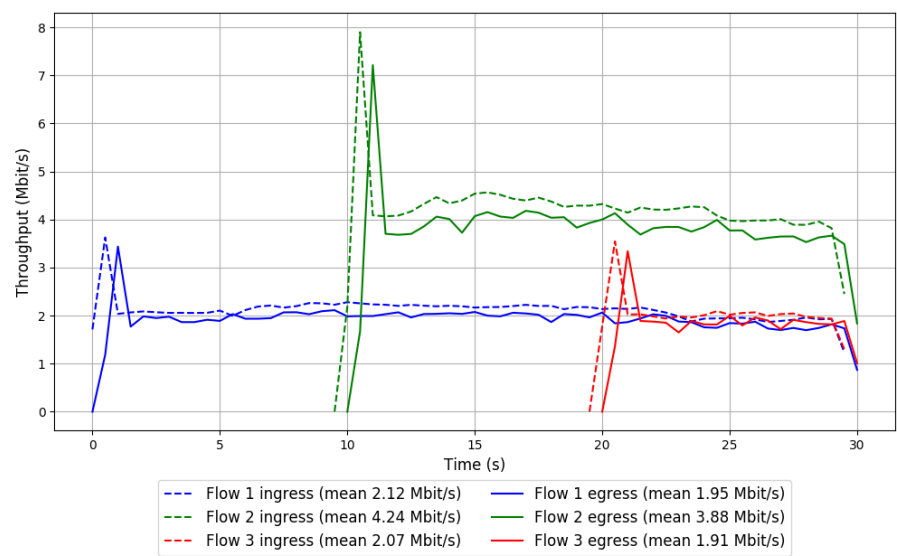Run 5: Report of PCC-Allegro — Data Link

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-19 11:58:41
End at: 2018-06-19 11:59:11
Local clock offset: 8.041 ms
Remote clock offset: 43.067 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 40.174 ms
Loss rate: 8.78%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 40.265 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 39.205 ms
Loss rate: 9.00%
-- Flow 3:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 39.618 ms
Loss rate: 8.70%
```

Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 2.12 Mbit/s)   Flow 1 egress (mean 1.95 Mbit/s)
Flow 2 ingress (mean 4.24 Mbit/s)   Flow 2 egress (mean 3.88 Mbit/s)
Flow 3 ingress (mean 2.07 Mbit/s)   Flow 3 egress (mean 1.91 Mbit/s)

Flow 1 (95th percentile 40.27 ms)   Flow 2 (95th percentile 39.20 ms)   Flow 3 (95th percentile 39.62 ms)

135

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-19 12:31:29
End at: 2018-06-19 12:31:59
Local clock offset: 8.347 ms
Remote clock offset: 29.67 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 40.190 ms
Loss rate: 8.94%
-- Flow 1:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 40.169 ms
Loss rate: 8.69%
-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 40.191 ms
Loss rate: 9.12%
-- Flow 3:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 40.259 ms
Loss rate: 9.00%
```
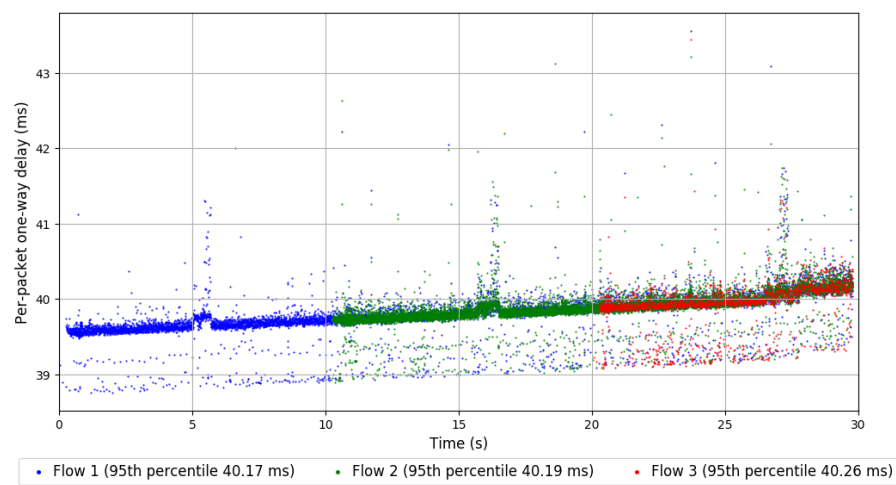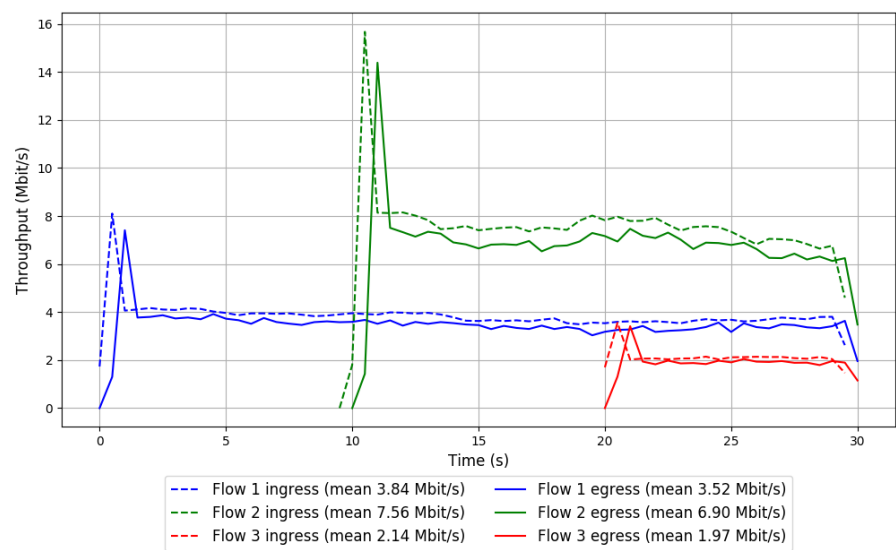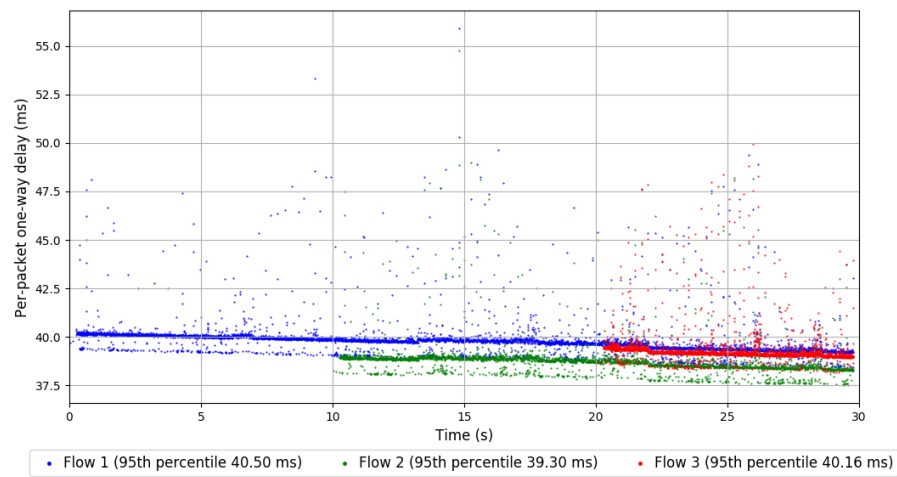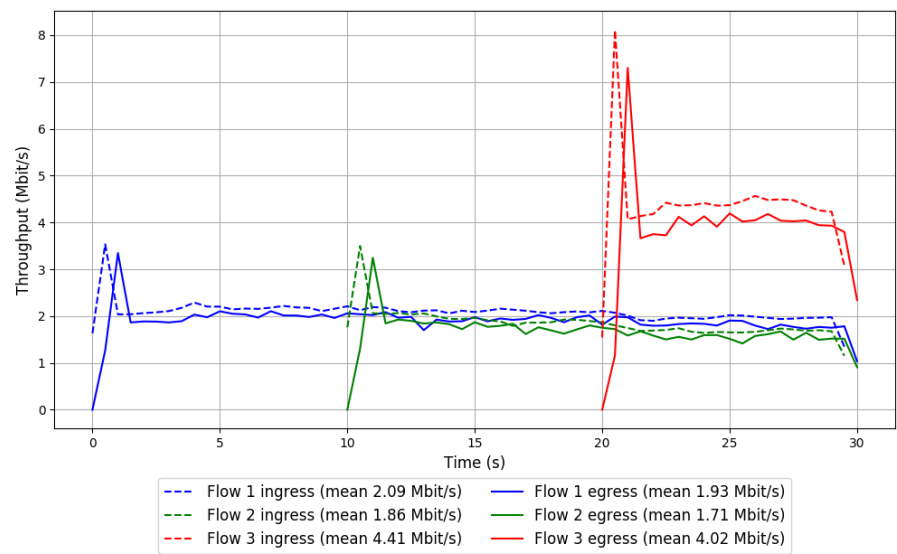
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 3.84 Mbit/s)   Flow 1 egress (mean 3.52 Mbit/s)
Flow 2 ingress (mean 7.56 Mbit/s)   Flow 2 egress (mean 6.90 Mbit/s)
Flow 3 ingress (mean 2.14 Mbit/s)   Flow 3 egress (mean 1.97 Mbit/s)

Flow 1 (95th percentile 40.17 ms)   Flow 2 (95th percentile 40.19 ms)   Flow 3 (95th percentile 40.26 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-19 13:04:52
End at: 2018-06-19 13:05:22
Local clock offset: 7.063 ms
Remote clock offset: 31.417 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 40.254 ms
Loss rate: 8.80%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 40.496 ms
Loss rate: 8.20%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 39.303 ms
Loss rate: 8.70%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 40.159 ms
Loss rate: 9.76%
```
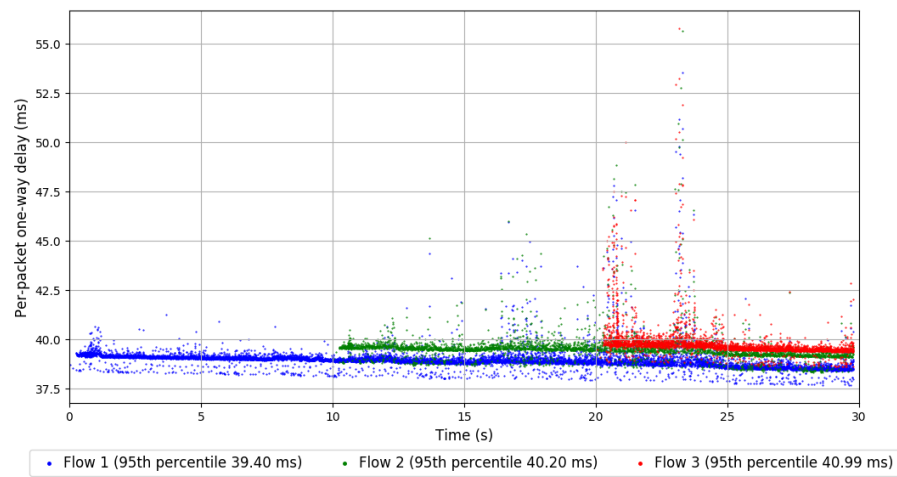
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-19 13:36:50
End at: 2018-06-19 13:37:20
Local clock offset: 6.379 ms
Remote clock offset: 6.615 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.47 Mbit/s
95th percentile per-packet one-way delay: 40.065 ms
Loss rate: 8.30%
-- Flow 1:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 39.400 ms
Loss rate: 8.34%
-- Flow 2:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 40.198 ms
Loss rate: 7.44%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 40.995 ms
Loss rate: 9.06%
```
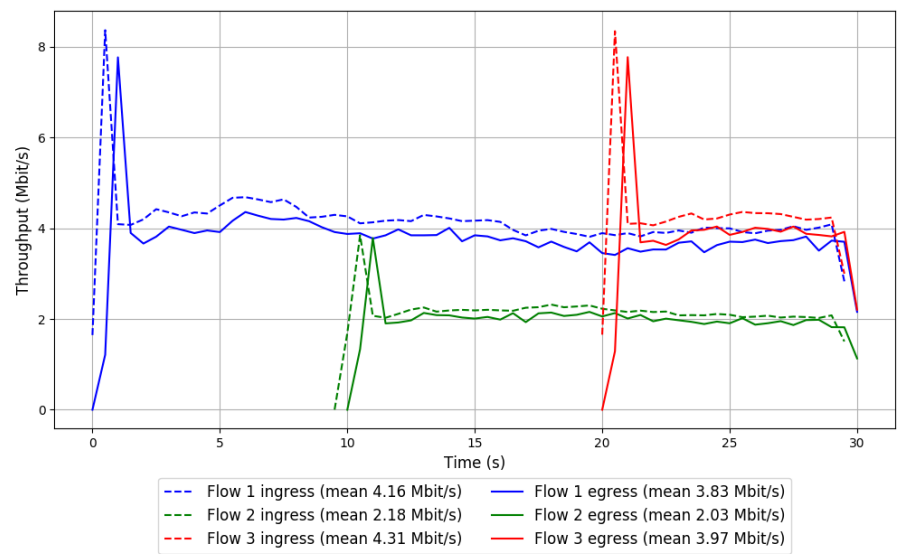
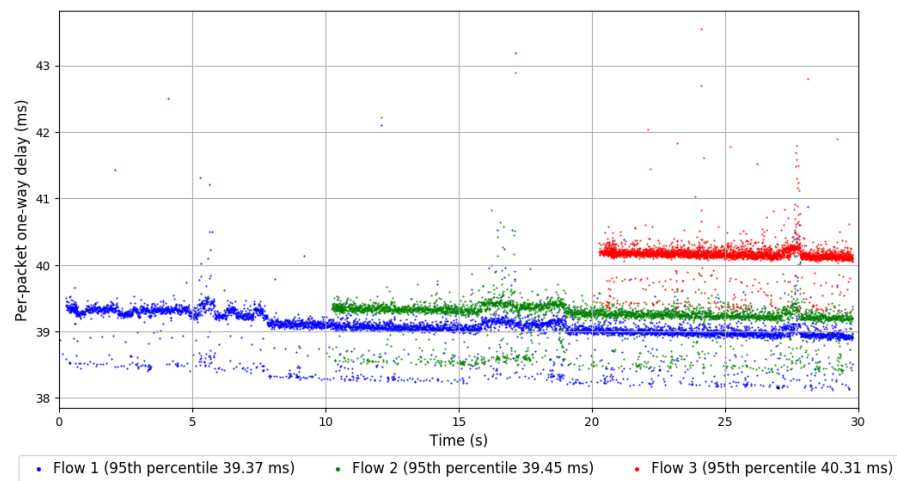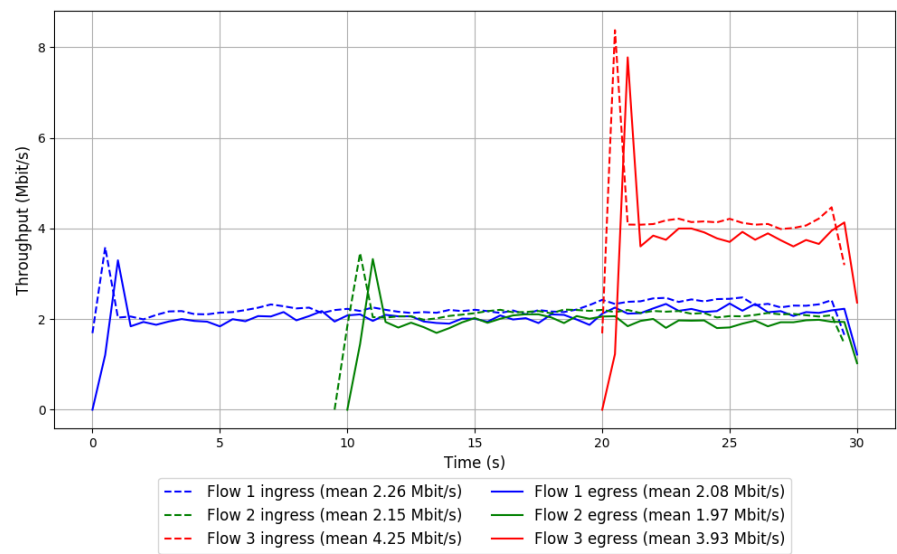## Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-19 14:10:11
End at: 2018-06-19 14:10:41
Local clock offset: 8.124 ms
Remote clock offset: -15.738 ms


# Below is generated by plot.py at 2018-06-19 14:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 40.216 ms
Loss rate: 8.58%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 39.365 ms
Loss rate: 8.37%
-- Flow 2:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 39.452 ms
Loss rate: 8.81%
-- Flow 3:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 40.308 ms
Loss rate: 8.67%
```

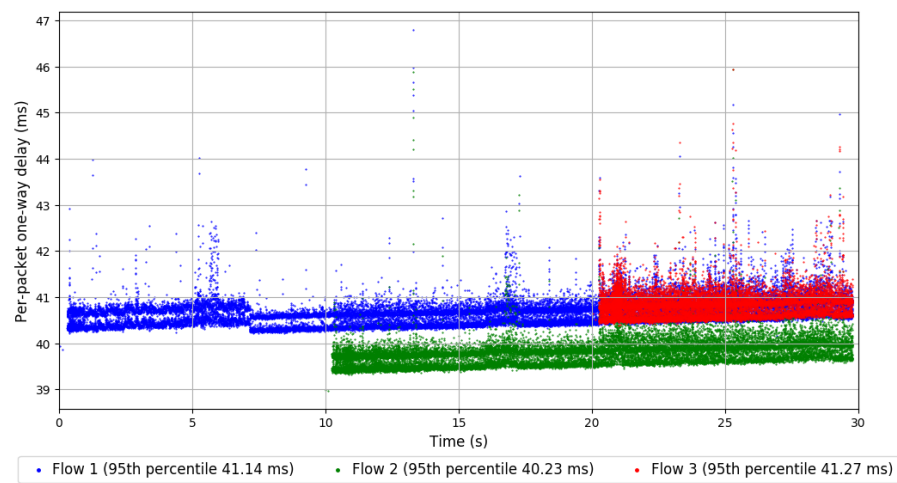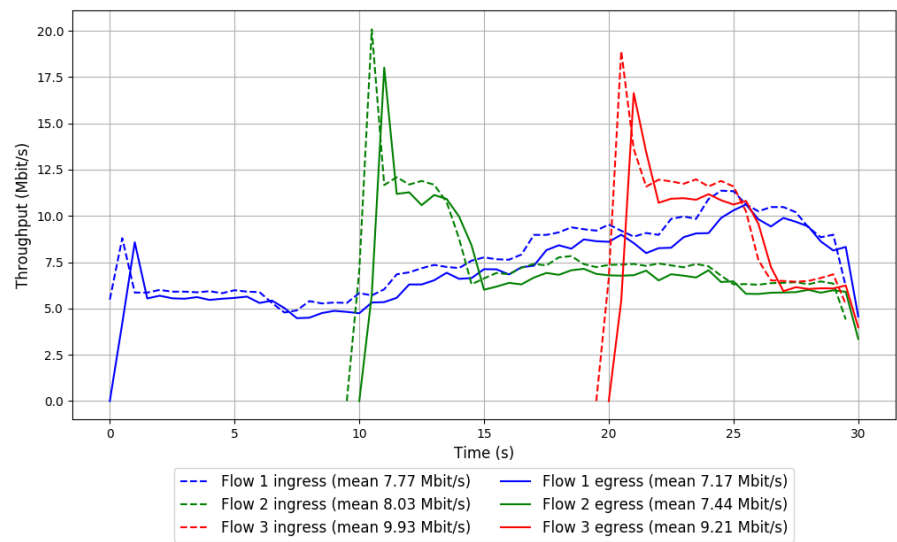Run 10: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-19 09:11:49
End at: 2018-06-19 09:12:19
Local clock offset: 4.656 ms
Remote clock offset: 12.012 ms

# Below is generated by plot.py at 2018-06-19 14:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 41.109 ms
Loss rate: 8.00%
-- Flow 1:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 41.138 ms
Loss rate: 8.02%
-- Flow 2:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 40.232 ms
Loss rate: 7.83%
-- Flow 3:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 41.274 ms
Loss rate: 8.21%
```

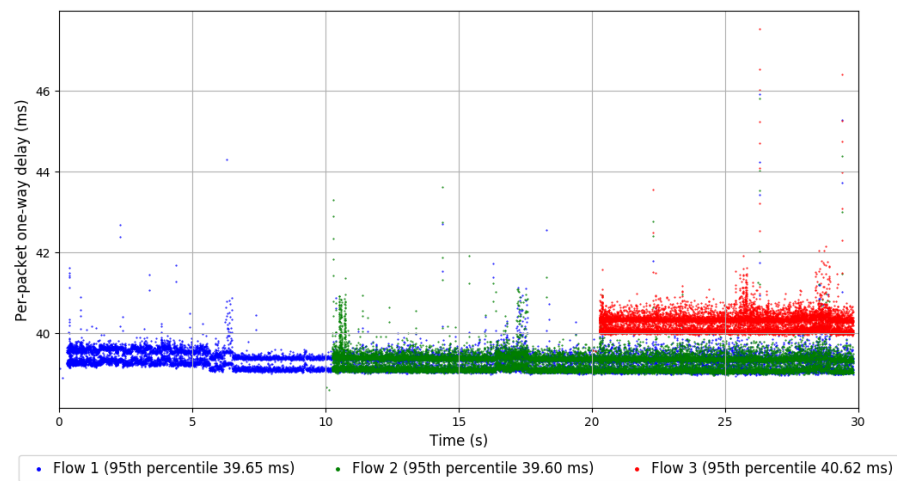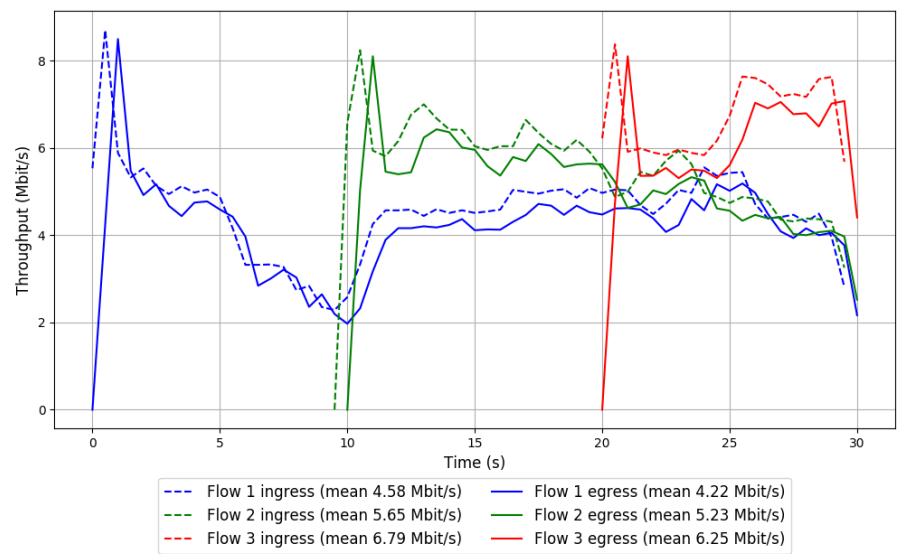# Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-19 09:45:56
End at: 2018-06-19 09:46:26
Local clock offset: 1.977 ms
Remote clock offset: 16.907 ms


# Below is generated by plot.py at 2018-06-19 14:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 40.379 ms
Loss rate: 8.20%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 39.648 ms
Loss rate: 8.10%
-- Flow 2:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 39.603 ms
Loss rate: 7.89%
-- Flow 3:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 40.621 ms
Loss rate: 8.91%
```
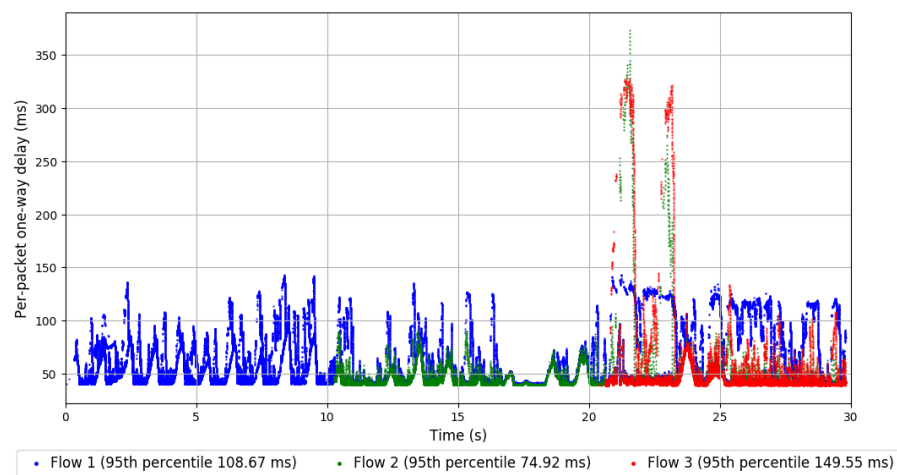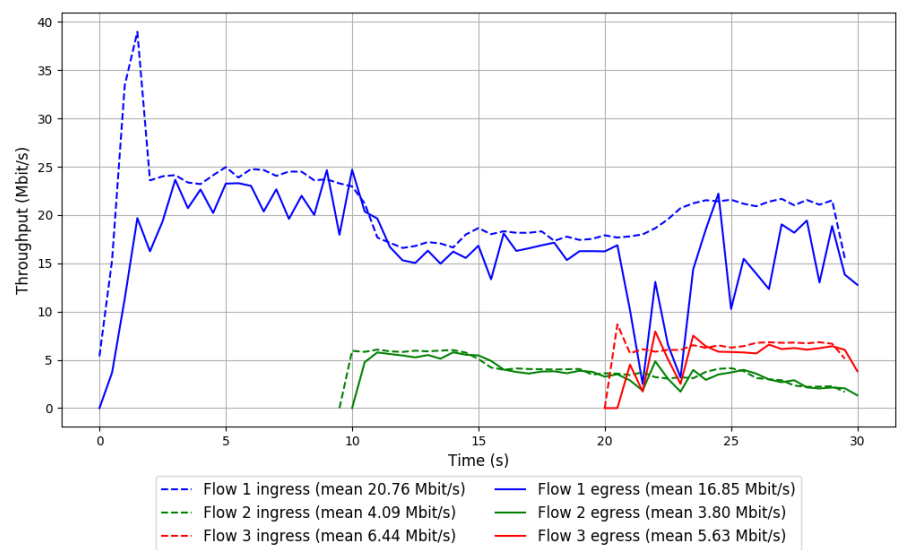
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 10:16:54
End at: 2018-06-19 10:17:24
Local clock offset: 2.119 ms
Remote clock offset: 16.527 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.15 Mbit/s
95th percentile per-packet one-way delay: 107.782 ms
Loss rate: 17.45%
-- Flow 1:
Average throughput: 16.85 Mbit/s
95th percentile per-packet one-way delay: 108.671 ms
Loss rate: 19.14%
-- Flow 2:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 74.921 ms
Loss rate: 7.59%
-- Flow 3:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 149.554 ms
Loss rate: 13.47%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 20.76 Mbit/s) --- Flow 1 egress (mean 16.85 Mbit/s)
Flow 2 ingress (mean 4.09 Mbit/s) --- Flow 2 egress (mean 3.80 Mbit/s)
Flow 3 ingress (mean 6.44 Mbit/s) --- Flow 3 egress (mean 5.63 Mbit/s)

Flow 1 (95th percentile 108.67 ms) • Flow 2 (95th percentile 74.92 ms) • Flow 3 (95th percentile 149.55 ms)
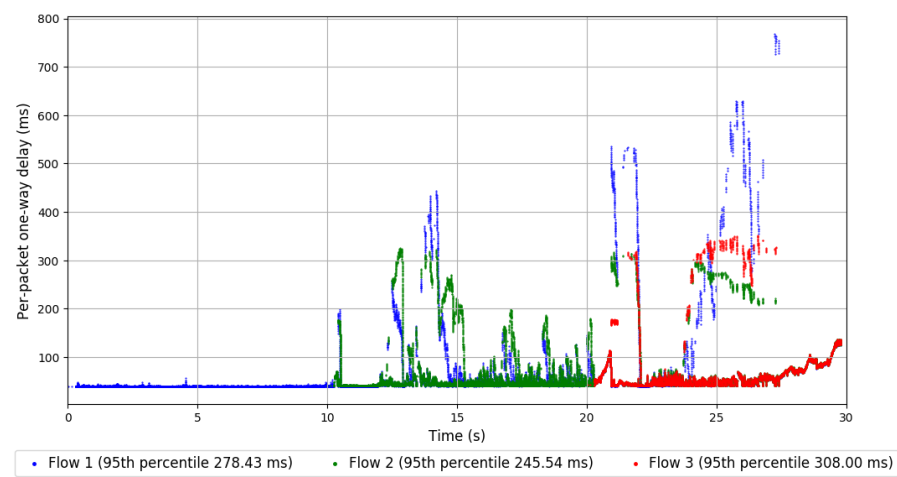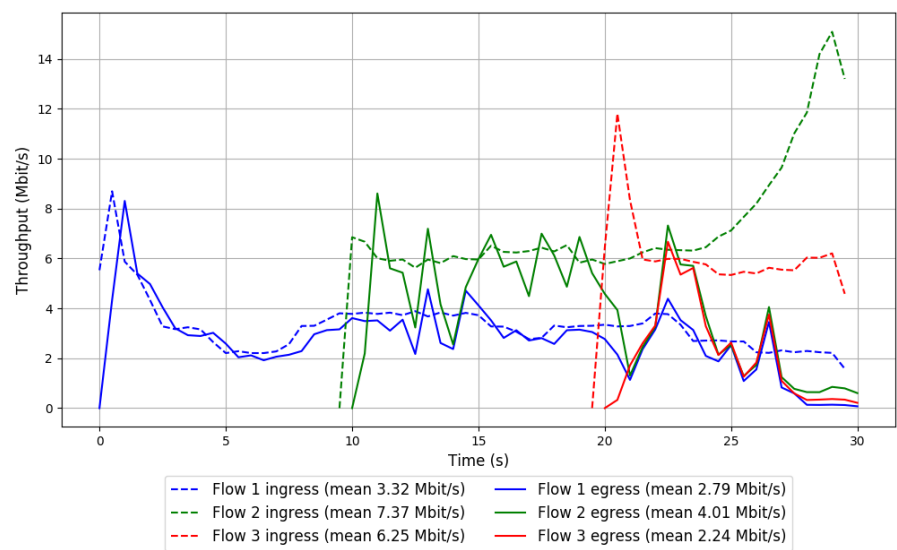
```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 10:50:00
End at: 2018-06-19 10:50:30
Local clock offset: 2.282 ms
Remote clock offset: 26.273 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: 259.659 ms
Loss rate: 40.09%
-- Flow 1:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 278.427 ms
Loss rate: 16.32%
-- Flow 2:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 245.540 ms
Loss rate: 45.91%
-- Flow 3:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 307.999 ms
Loss rate: 64.46%
```
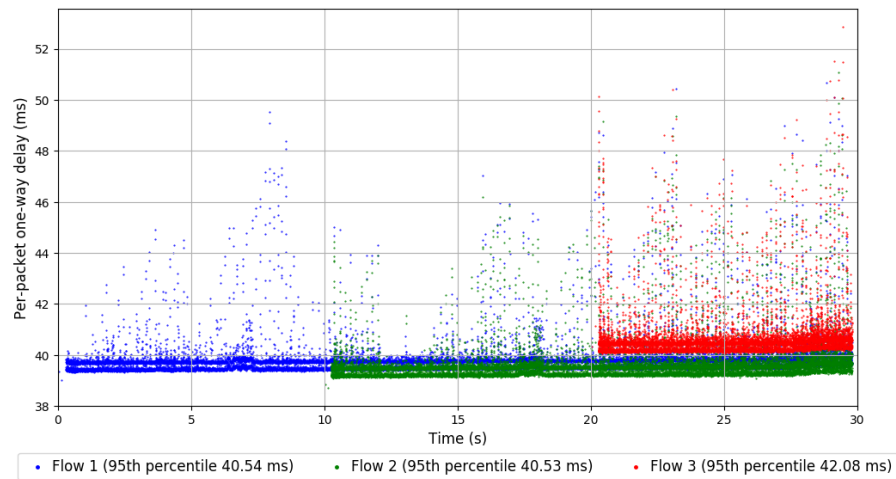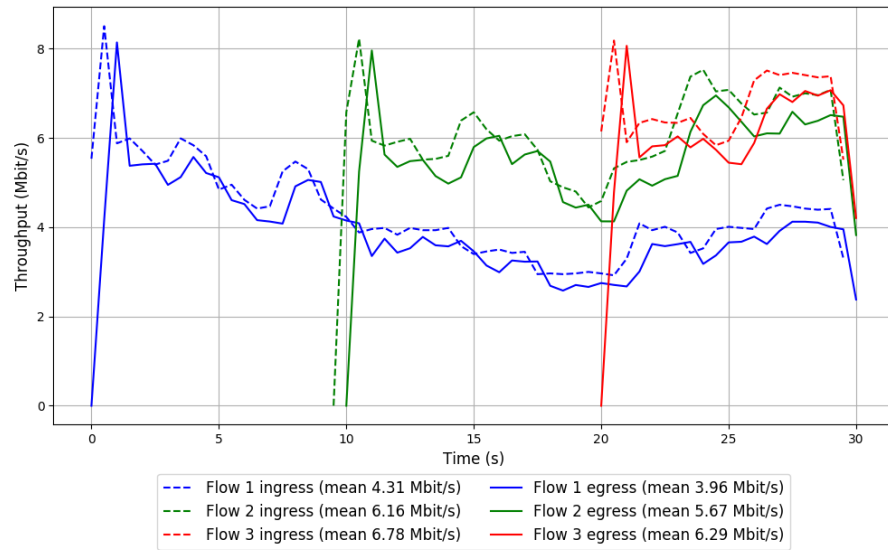
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 3.32 Mbit/s) --- Flow 1 egress (mean 2.79 Mbit/s)
Flow 2 ingress (mean 7.37 Mbit/s) --- Flow 2 egress (mean 4.01 Mbit/s)
Flow 3 ingress (mean 6.25 Mbit/s) --- Flow 3 egress (mean 2.24 Mbit/s)

Flow 1 (95th percentile 278.43 ms)   Flow 2 (95th percentile 245.54 ms)   Flow 3 (95th percentile 308.00 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-19 11:23:27
End at: 2018-06-19 11:23:57
Local clock offset: 8.1 ms
Remote clock offset: 45.678 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 41.034 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 40.538 ms
Loss rate: 8.50%
-- Flow 2:
Average throughput: 5.67 Mbit/s
95th percentile per-packet one-way delay: 40.531 ms
Loss rate: 8.37%
-- Flow 3:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 42.077 ms
Loss rate: 8.22%
```
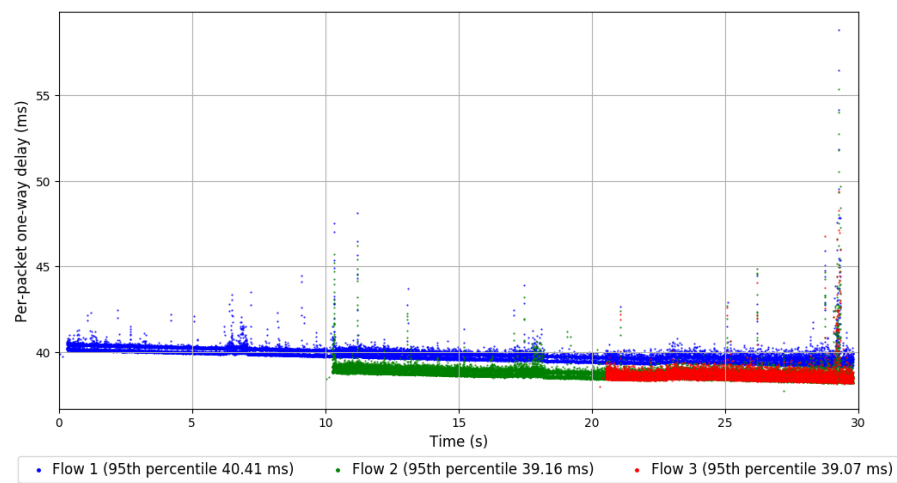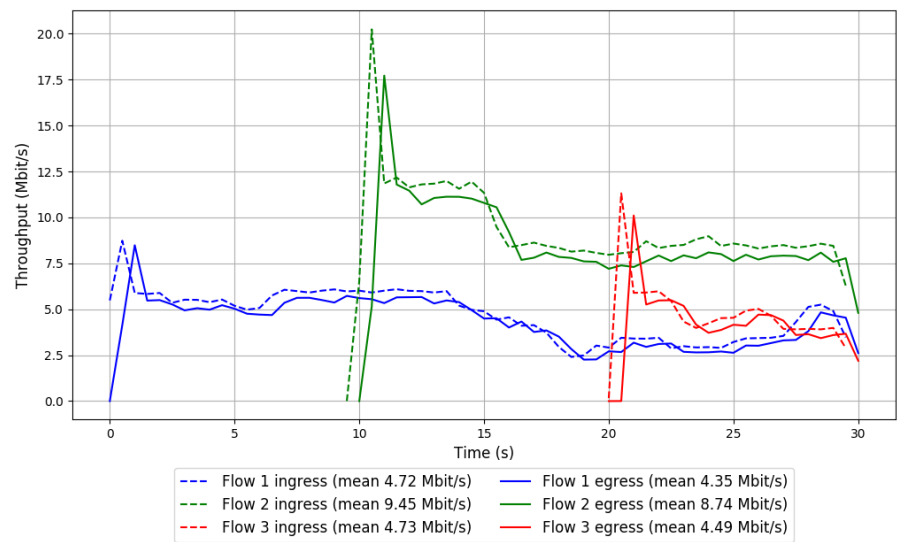
Run 5: Report of PCC-Expr — Data Link

Legend:
- Flow 1 ingress (mean 4.31 Mbit/s)
- Flow 1 egress (mean 3.96 Mbit/s)
- Flow 2 ingress (mean 6.16 Mbit/s)
- Flow 2 egress (mean 5.67 Mbit/s)
- Flow 3 ingress (mean 6.78 Mbit/s)
- Flow 3 egress (mean 6.29 Mbit/s)

- Flow 1 (95th percentile 40.54 ms)
- Flow 2 (95th percentile 40.53 ms)
- Flow 3 (95th percentile 42.08 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-19 11:56:34
End at: 2018-06-19 11:57:04
Local clock offset: 8.233 ms
Remote clock offset: 47.271 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.60 Mbit/s
95th percentile per-packet one-way delay: 40.284 ms
Loss rate: 8.11%
-- Flow 1:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 40.407 ms
Loss rate: 8.17%
-- Flow 2:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 39.163 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 39.074 ms
Loss rate: 8.58%
```
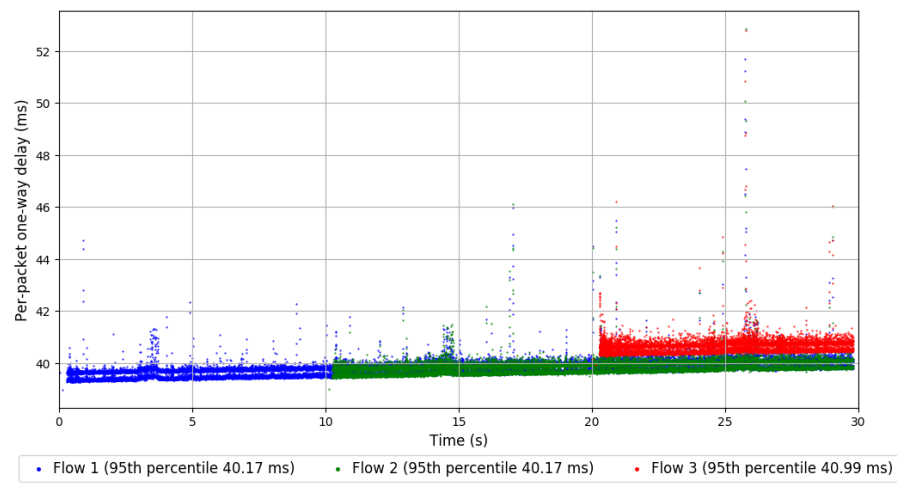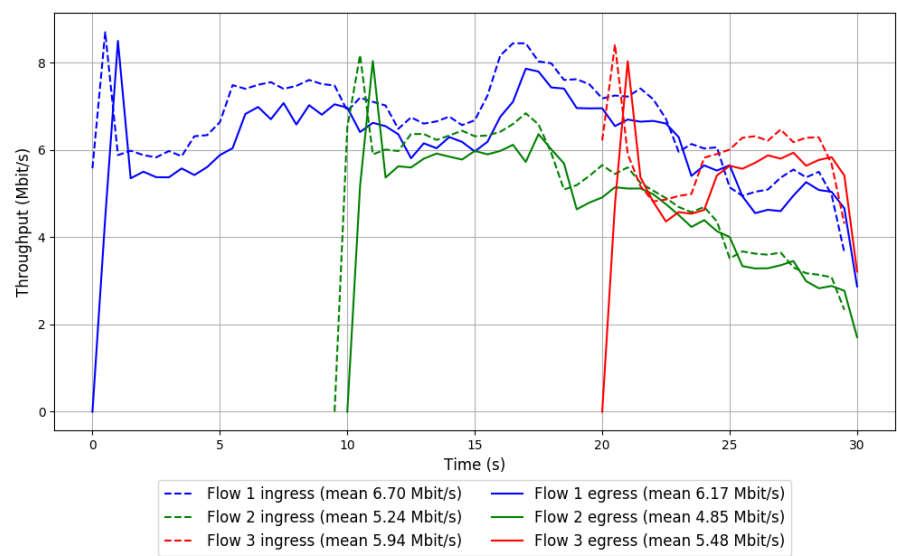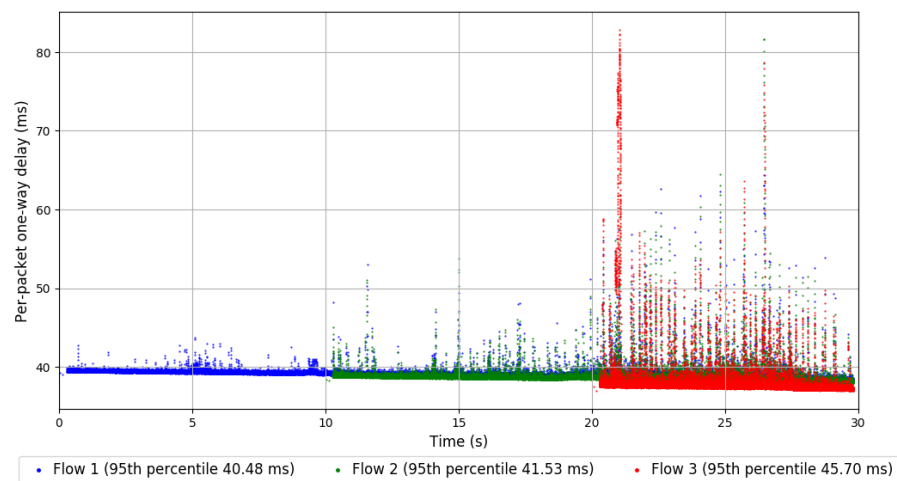
Run 6: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 4.72 Mbit/s) --- Flow 1 egress (mean 4.35 Mbit/s)
Flow 2 ingress (mean 9.45 Mbit/s) --- Flow 2 egress (mean 8.74 Mbit/s)
Flow 3 ingress (mean 4.73 Mbit/s) --- Flow 3 egress (mean 4.49 Mbit/s)

Flow 1 (95th percentile 40.41 ms)   Flow 2 (95th percentile 39.16 ms)   Flow 3 (95th percentile 39.07 ms)
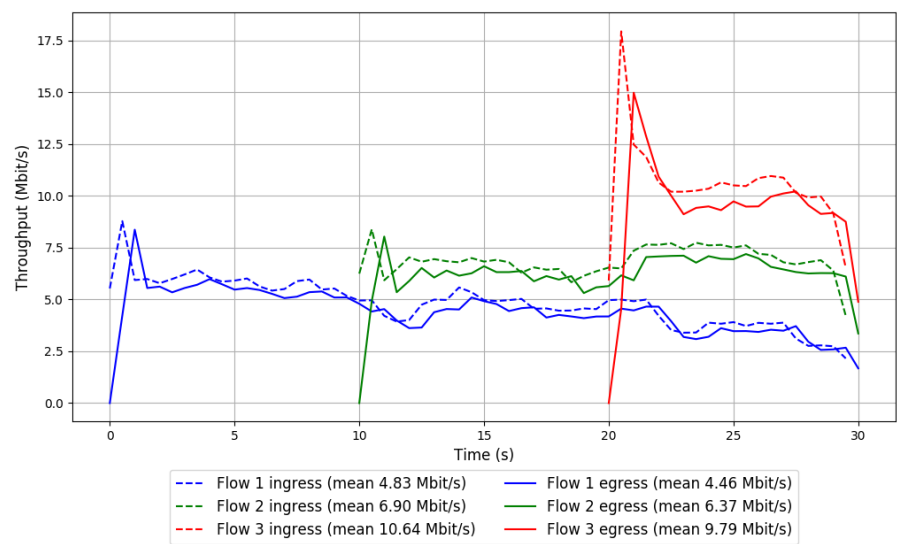
```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-19 12:29:22
End at: 2018-06-19 12:29:52
Local clock offset: 8.344 ms
Remote clock offset: 27.61 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.19 Mbit/s
95th percentile per-packet one-way delay: 40.751 ms
Loss rate: 8.23%
-- Flow 1:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 40.167 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 40.173 ms
Loss rate: 8.05%
-- Flow 3:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 40.990 ms
Loss rate: 8.71%
```

Run 7: Report of PCC-Expr — Data Link

```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-19 13:02:47
End at: 2018-06-19 13:03:17
Local clock offset: 7.263 ms
Remote clock offset: 36.684 ms


# Below is generated by plot.py at 2018-06-19 14:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 41.831 ms
Loss rate: 8.28%
-- Flow 1:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 40.484 ms
Loss rate: 7.93%
-- Flow 2:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 41.530 ms
Loss rate: 8.15%
-- Flow 3:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 45.697 ms
Loss rate: 8.93%
```
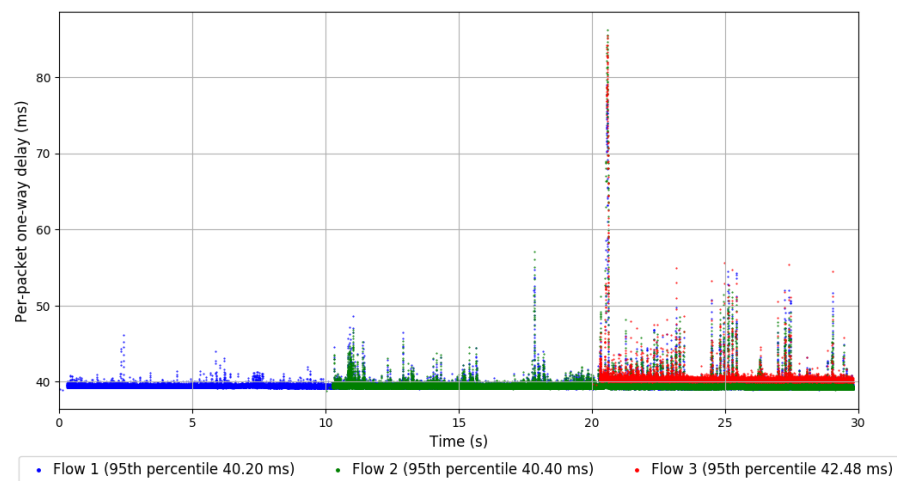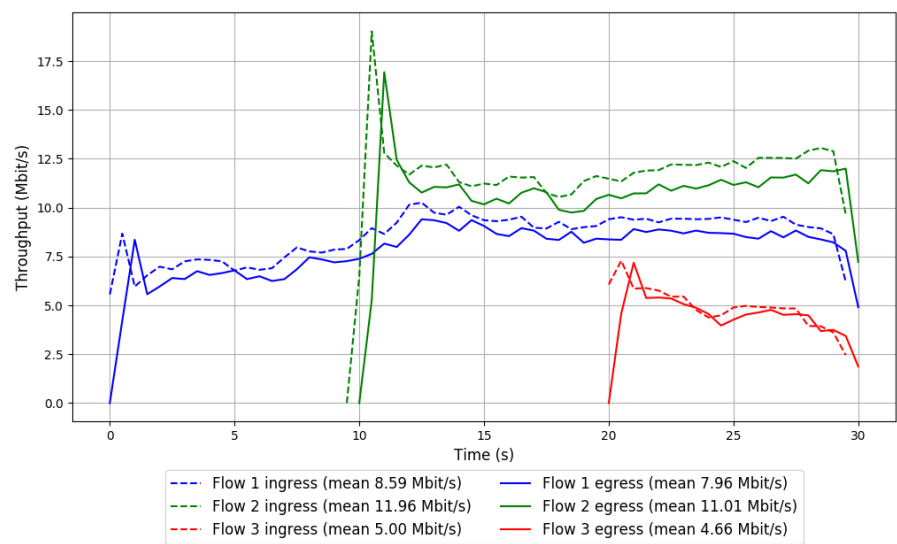
Run 8: Report of PCC-Expr — Data Link

```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-19 13:34:21
End at: 2018-06-19 13:34:51
Local clock offset: 6.231 ms
Remote clock offset: 8.227 ms

# Below is generated by plot.py at 2018-06-19 14:36:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 40.660 ms
Loss rate: 8.03%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 40.204 ms
Loss rate: 7.69%
-- Flow 2:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 40.396 ms
Loss rate: 8.41%
-- Flow 3:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 42.485 ms
Loss rate: 7.94%
```
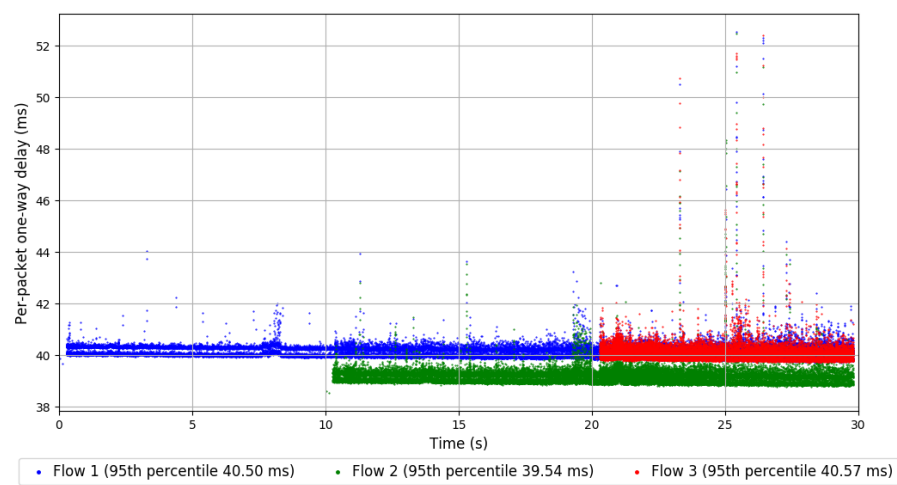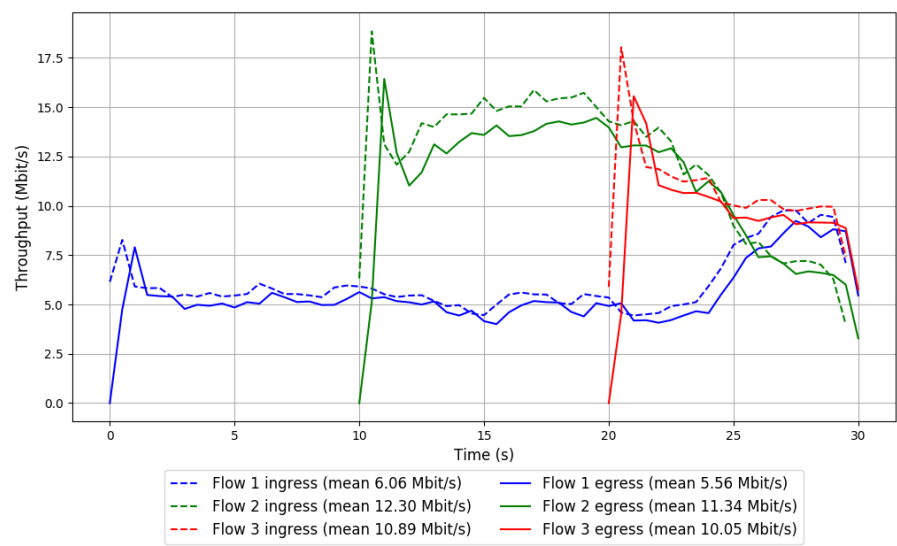
Run 9: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 8.59 Mbit/s) --- Flow 1 egress (mean 7.96 Mbit/s)
Flow 2 ingress (mean 11.96 Mbit/s) --- Flow 2 egress (mean 11.01 Mbit/s)
Flow 3 ingress (mean 5.00 Mbit/s) --- Flow 3 egress (mean 4.66 Mbit/s)

Flow 1 (95th percentile 40.20 ms) • Flow 2 (95th percentile 40.40 ms) • Flow 3 (95th percentile 42.48 ms)

```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-19 14:07:40
End at: 2018-06-19 14:08:10
Local clock offset: 8.008 ms
Remote clock offset: -14.587 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.39 Mbit/s
95th percentile per-packet one-way delay: 40.429 ms
Loss rate: 8.44%
-- Flow 1:
Average throughput: 5.56 Mbit/s
95th percentile per-packet one-way delay: 40.502 ms
Loss rate: 8.47%
-- Flow 2:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 39.536 ms
Loss rate: 8.30%
-- Flow 3:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 40.570 ms
Loss rate: 8.72%
```
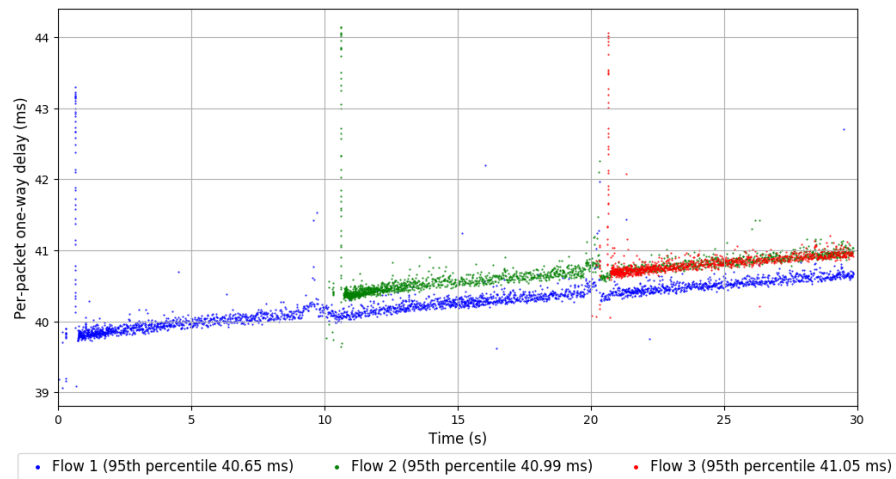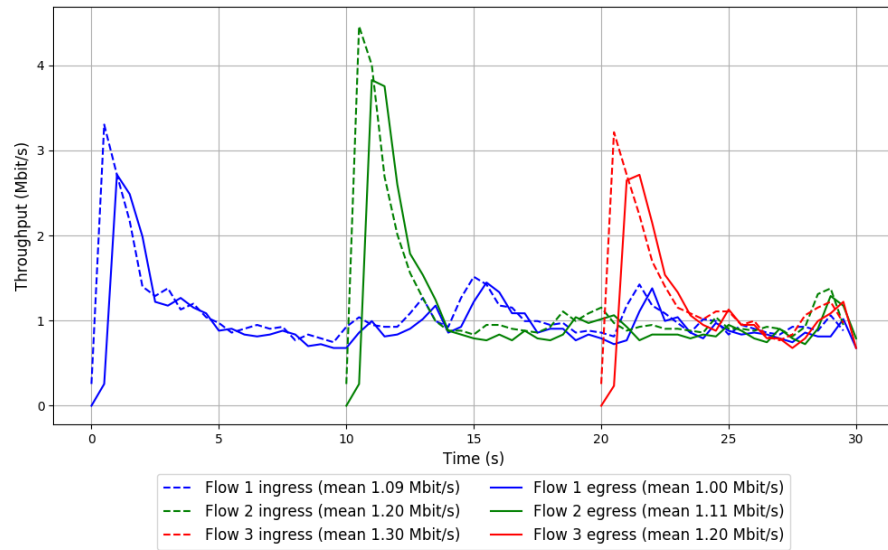
Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 6.06 Mbit/s)   Flow 1 egress (mean 5.56 Mbit/s)
Flow 2 ingress (mean 12.30 Mbit/s)   Flow 2 egress (mean 11.34 Mbit/s)
Flow 3 ingress (mean 10.89 Mbit/s)   Flow 3 egress (mean 10.05 Mbit/s)

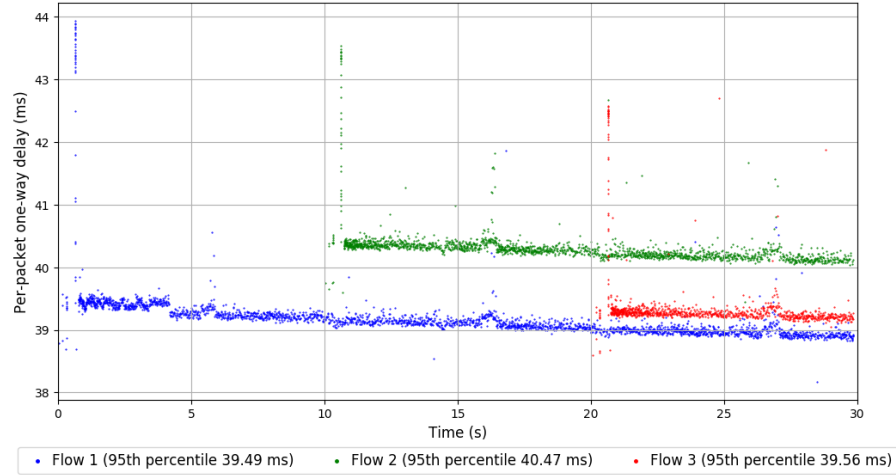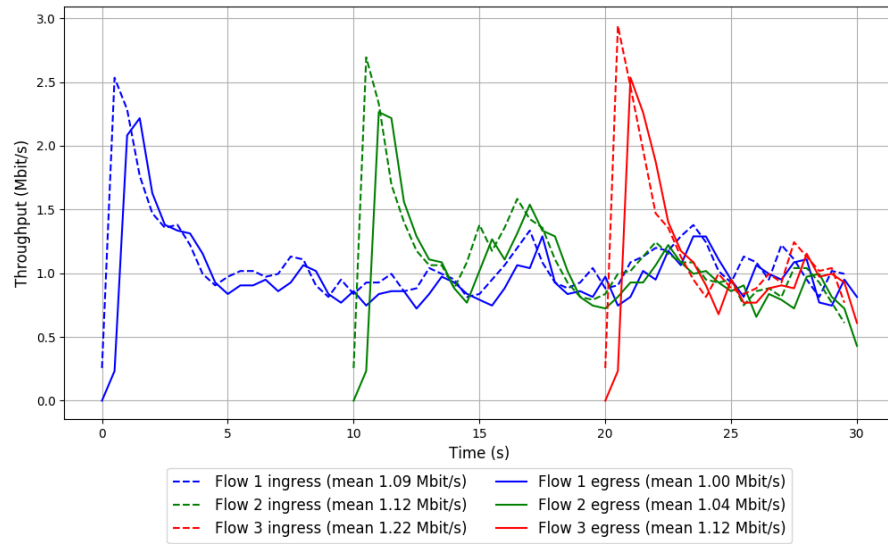Flow 1 (95th percentile 40.50 ms)   Flow 2 (95th percentile 39.54 ms)   Flow 3 (95th percentile 40.57 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 09:02:57
End at: 2018-06-19 09:03:27
Local clock offset: 7.204 ms
Remote clock offset: 3.564 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 40.968 ms
Loss rate: 8.58%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 8.74%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 40.990 ms
Loss rate: 8.41%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 41.047 ms
Loss rate: 8.51%
```
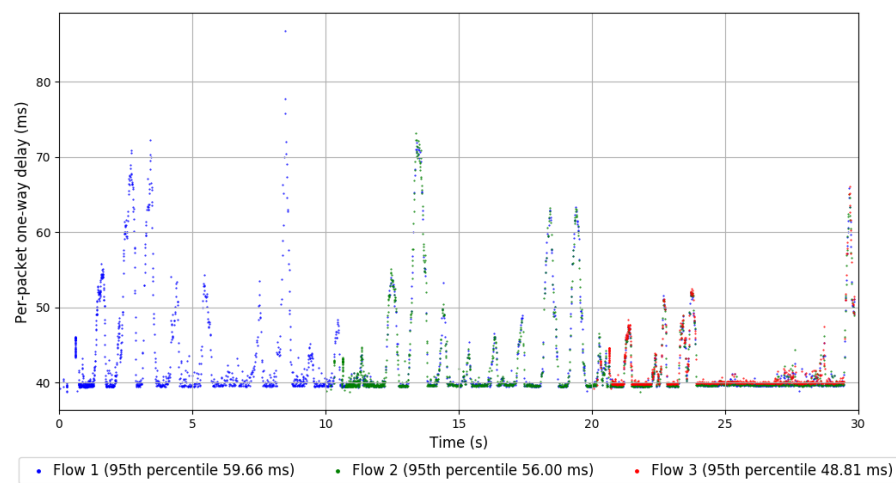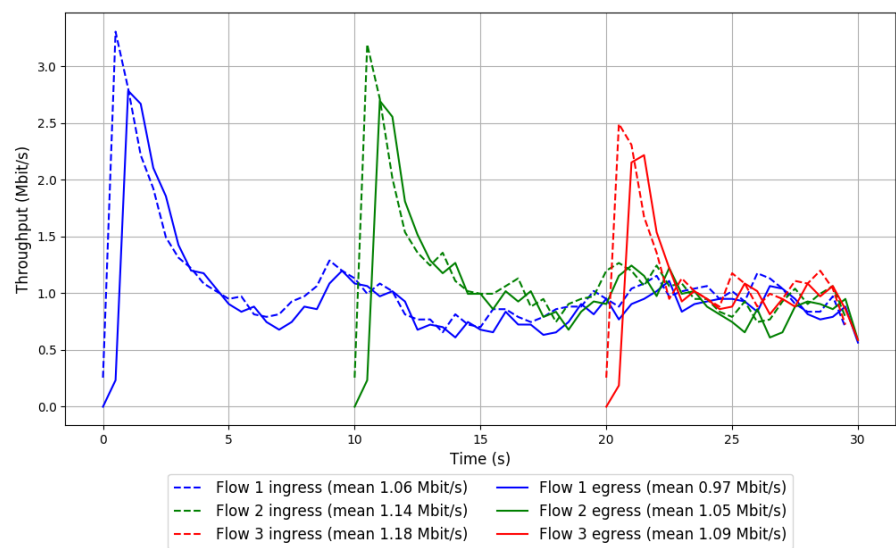
Run 1: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 1.09 Mbit/s) ———— Flow 1 egress (mean 1.00 Mbit/s)
- - - - Flow 2 ingress (mean 1.20 Mbit/s) ———— Flow 2 egress (mean 1.11 Mbit/s)
- - - - Flow 3 ingress (mean 1.30 Mbit/s) ———— Flow 3 egress (mean 1.20 Mbit/s)

- Flow 1 (95th percentile 40.65 ms)   • Flow 2 (95th percentile 40.99 ms)   • Flow 3 (95th percentile 41.05 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 09:36:58
End at: 2018-06-19 09:37:28
Local clock offset: 2.437 ms
Remote clock offset: 21.476 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 40.408 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 39.489 ms
Loss rate: 8.17%
-- Flow 2:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 40.465 ms
Loss rate: 7.55%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 39.557 ms
Loss rate: 8.74%
```
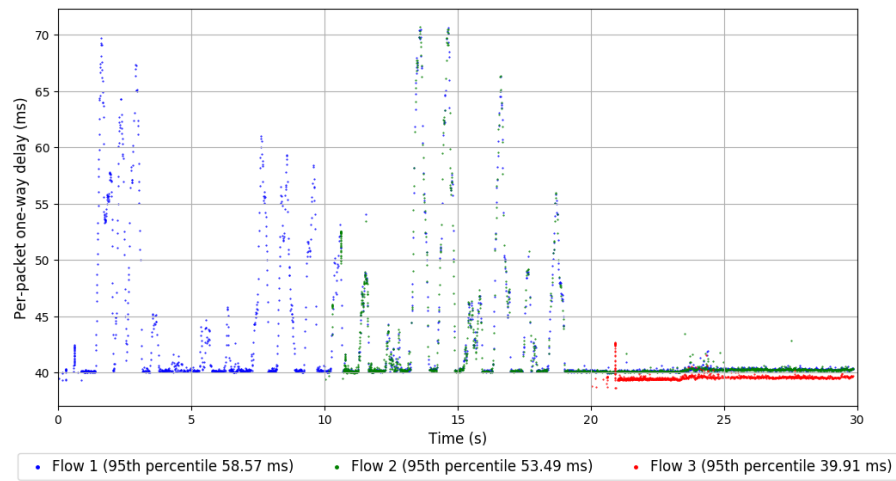
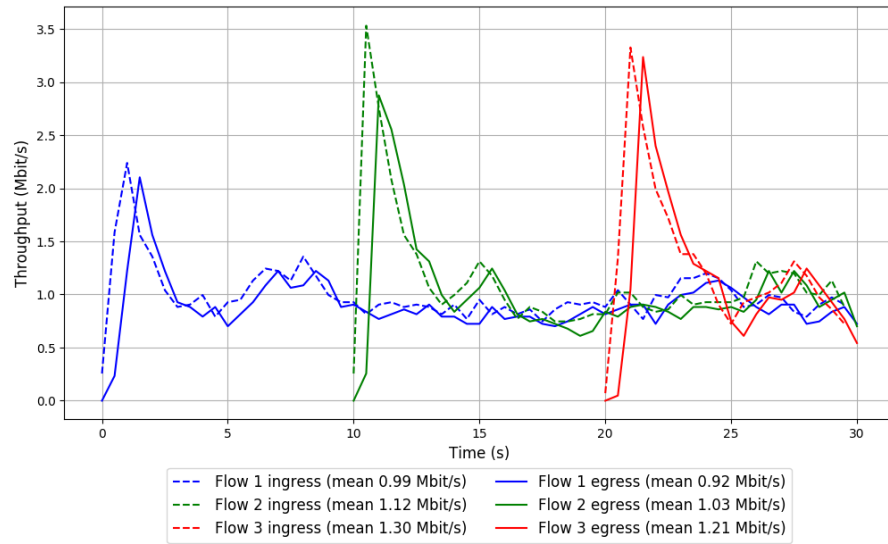Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 10:10:30
End at: 2018-06-19 10:11:00
Local clock offset: 2.195 ms
Remote clock offset: 16.988 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 56.260 ms
Loss rate: 8.31%
-- Flow 1:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 59.659 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 55.998 ms
Loss rate: 8.35%
-- Flow 3:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 48.808 ms
Loss rate: 8.56%
```
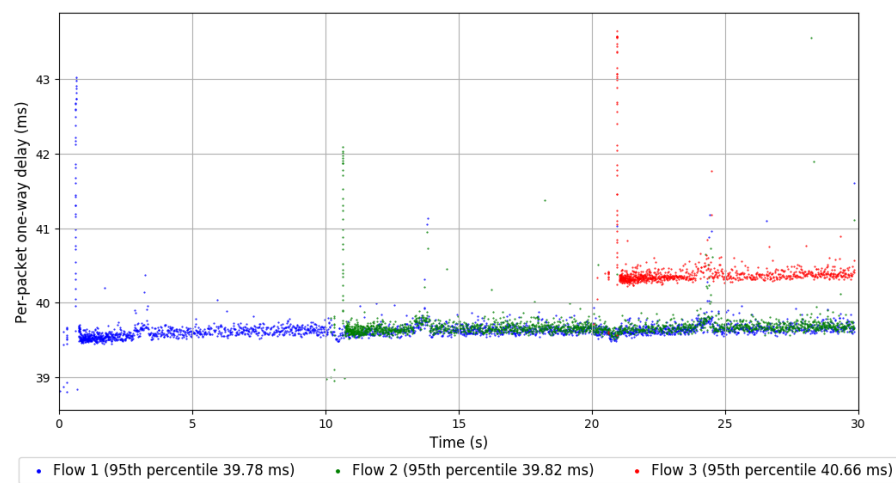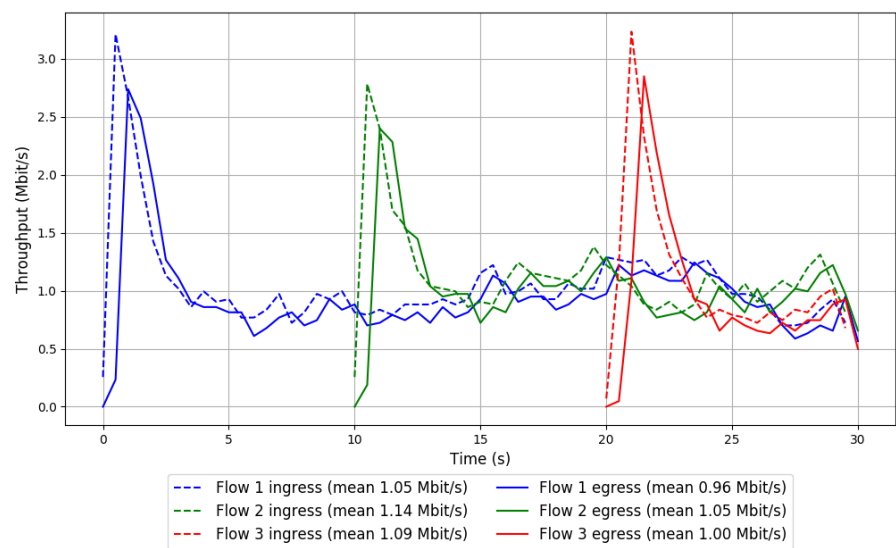
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 1.06 Mbit/s)   Flow 1 egress (mean 0.97 Mbit/s)
Flow 2 ingress (mean 1.14 Mbit/s)   Flow 2 egress (mean 1.05 Mbit/s)
Flow 3 ingress (mean 1.18 Mbit/s)   Flow 3 egress (mean 1.09 Mbit/s)

Flow 1 (95th percentile 59.66 ms)   Flow 2 (95th percentile 56.00 ms)   Flow 3 (95th percentile 48.81 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 10:42:31
End at: 2018-06-19 10:43:01
Local clock offset: 2.051 ms
Remote clock offset: 17.811 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 55.804 ms
Loss rate: 8.15%
-- Flow 1:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 58.569 ms
Loss rate: 7.90%
-- Flow 2:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 53.492 ms
Loss rate: 8.51%
-- Flow 3:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 39.915 ms
Loss rate: 8.10%
```
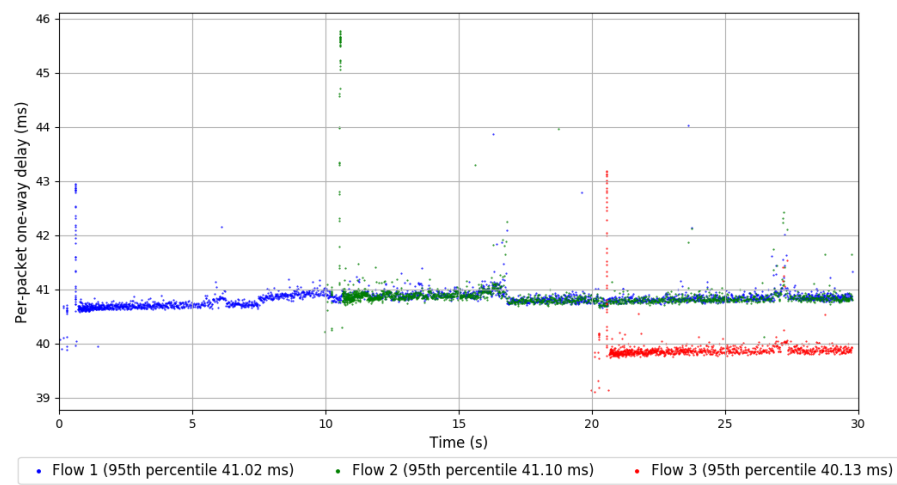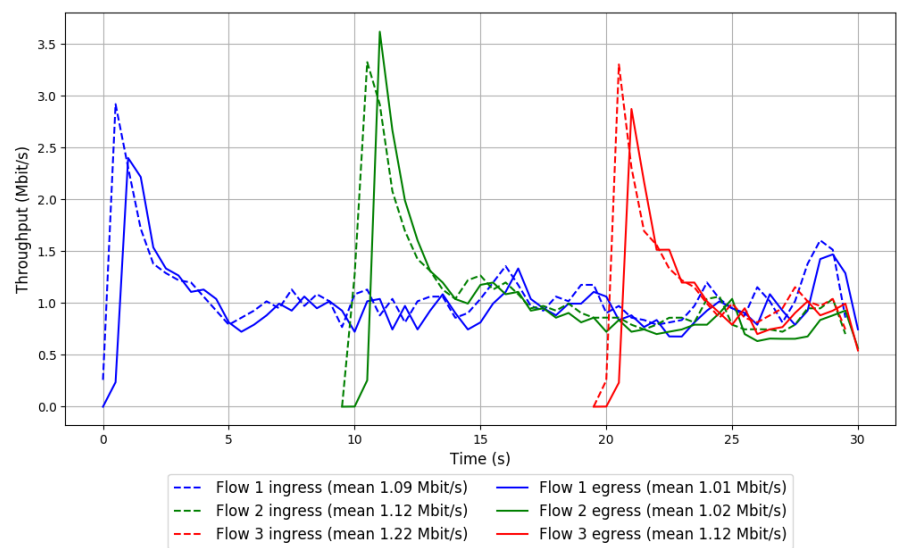
Run 4: Report of QUIC Cubic — Data Link

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```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-19 11:15:15
End at: 2018-06-19 11:15:45
Local clock offset: 6.979 ms
Remote clock offset: 42.948 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 40.419 ms
Loss rate: 8.74%
-- Flow 1:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 39.783 ms
Loss rate: 8.79%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 39.818 ms
Loss rate: 8.11%
-- Flow 3:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 40.664 ms
Loss rate: 9.92%
```
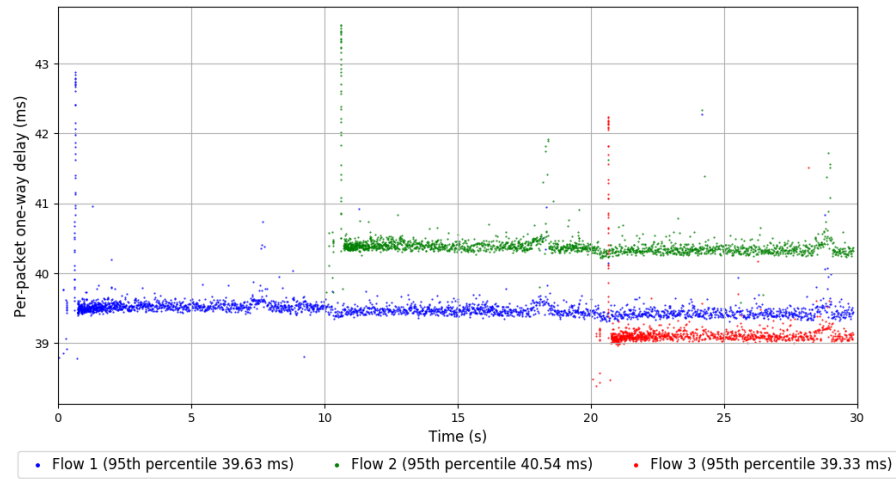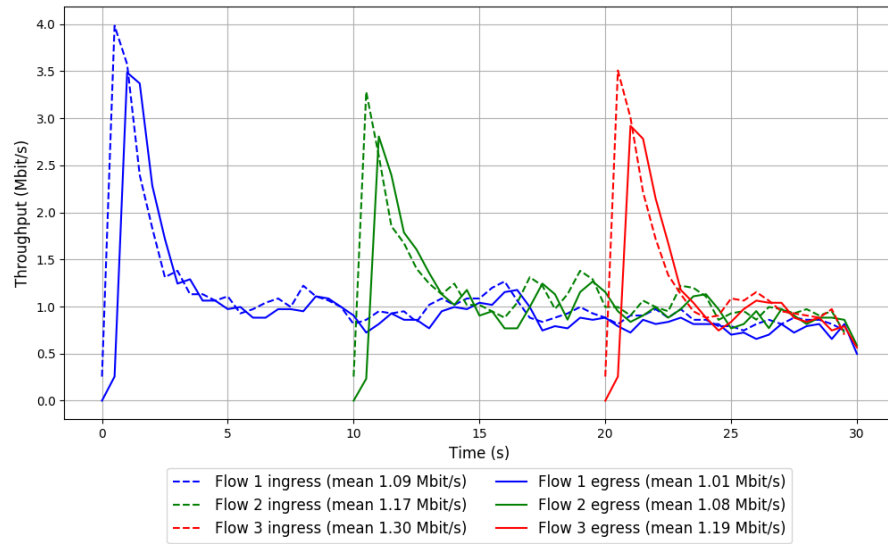
Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-19 11:47:47
End at: 2018-06-19 11:48:17
Local clock offset: 8.083 ms
Remote clock offset: 53.375 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 41.027 ms
Loss rate: 8.40%
-- Flow 1:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 41.018 ms
Loss rate: 7.49%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 41.101 ms
Loss rate: 9.18%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 40.129 ms
Loss rate: 9.38%
```
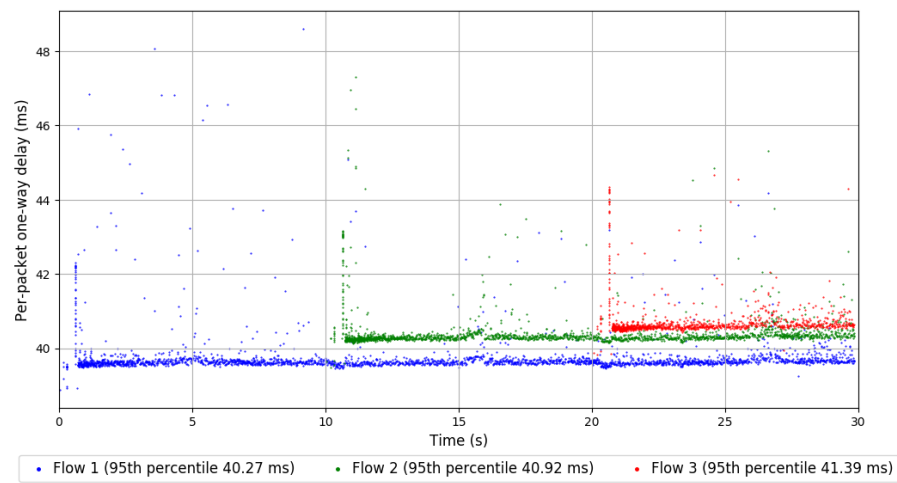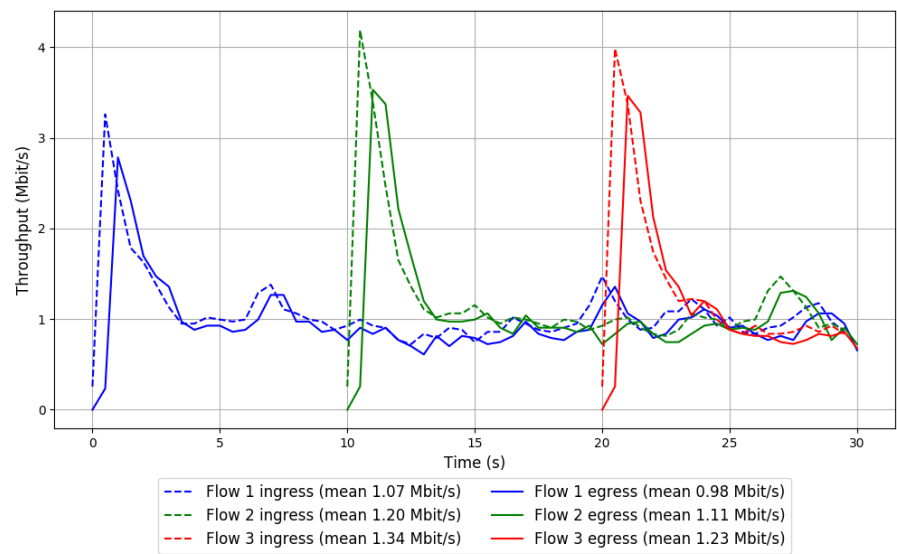
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 1.09 Mbit/s)   Flow 1 egress (mean 1.01 Mbit/s)
Flow 2 ingress (mean 1.12 Mbit/s)   Flow 2 egress (mean 1.02 Mbit/s)
Flow 3 ingress (mean 1.22 Mbit/s)   Flow 3 egress (mean 1.12 Mbit/s)

Flow 1 (95th percentile 41.02 ms)   Flow 2 (95th percentile 41.10 ms)   Flow 3 (95th percentile 40.13 ms)

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```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-19 12:21:11
End at: 2018-06-19 12:21:41
Local clock offset: 8.167 ms
Remote clock offset: 27.143 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 40.471 ms
Loss rate: 8.26%
-- Flow 1:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 39.632 ms
Loss rate: 8.12%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 40.544 ms
Loss rate: 8.00%
-- Flow 3:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 39.326 ms
Loss rate: 9.10%
```
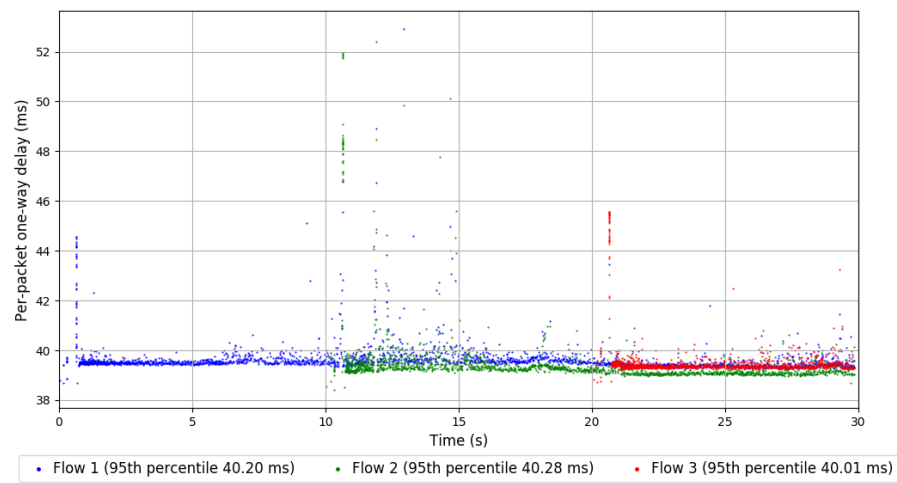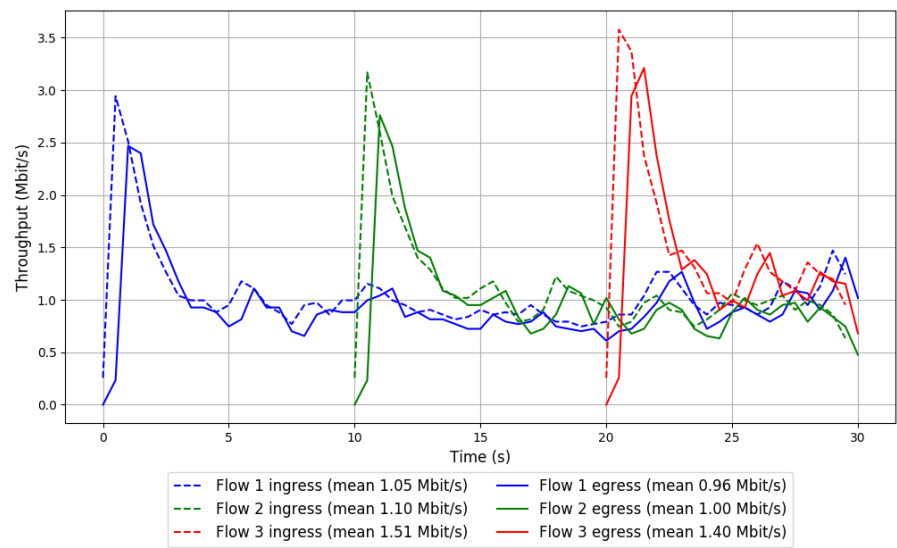
Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-19 12:54:12
End at: 2018-06-19 12:54:42
Local clock offset: 7.456 ms
Remote clock offset: 37.746 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 40.975 ms
Loss rate: 8.13%
-- Flow 1:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 40.271 ms
Loss rate: 8.25%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 40.923 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 41.386 ms
Loss rate: 8.72%
```
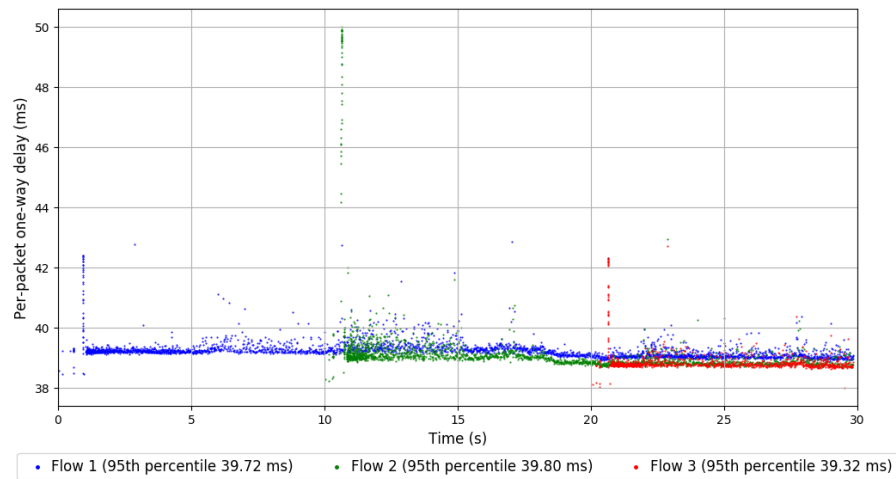
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-19 13:26:54
End at: 2018-06-19 13:27:24
Local clock offset: 5.527 ms
Remote clock offset: 10.785 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 40.170 ms
Loss rate: 8.90%
-- Flow 1:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 40.195 ms
Loss rate: 8.97%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 40.283 ms
Loss rate: 9.09%
-- Flow 3:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 40.013 ms
Loss rate: 8.47%
```
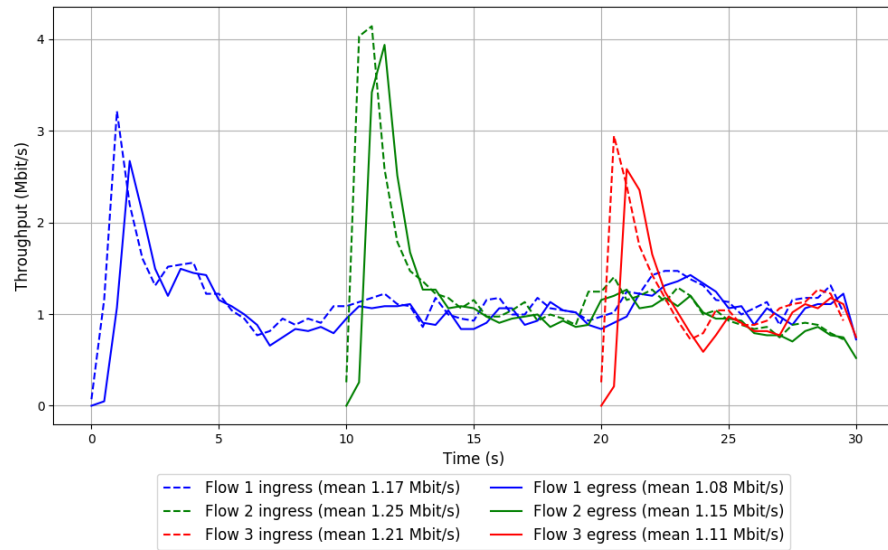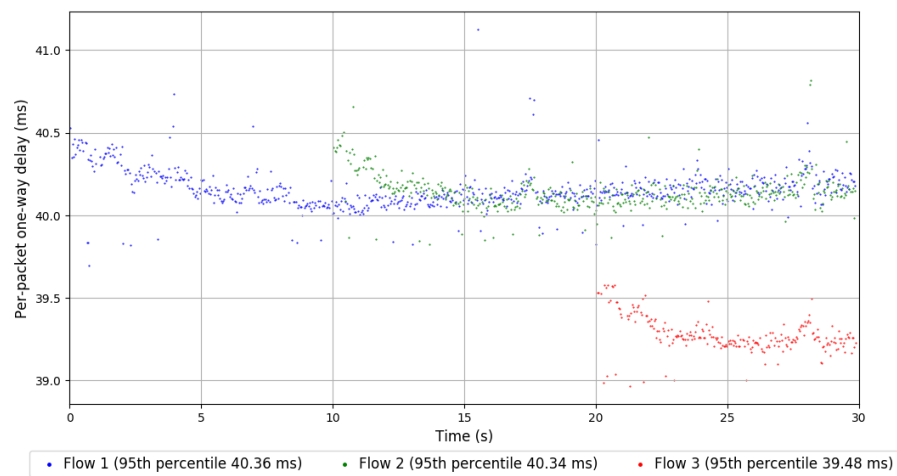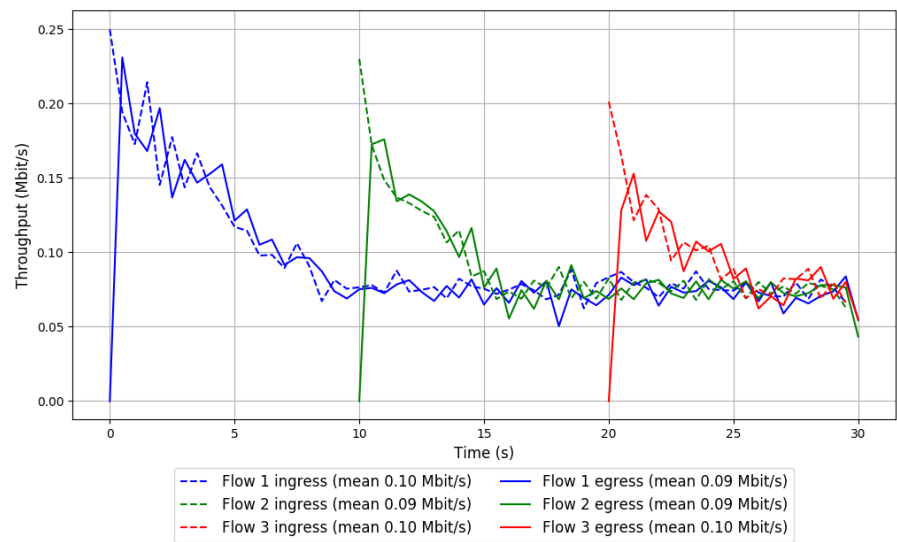
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-19 13:59:01
End at: 2018-06-19 13:59:31
Local clock offset: 7.756 ms
Remote clock offset: -10.322 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 39.720 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 39.724 ms
Loss rate: 7.70%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 39.801 ms
Loss rate: 8.10%
-- Flow 3:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 39.320 ms
Loss rate: 9.10%
```

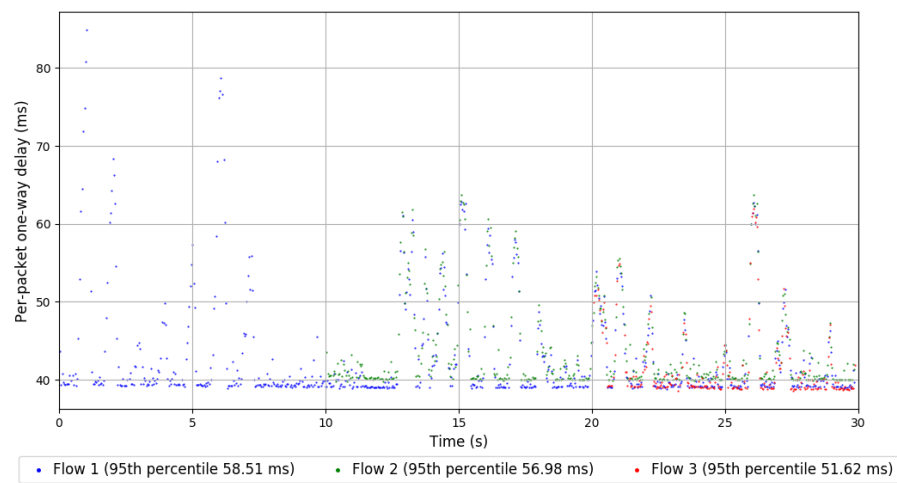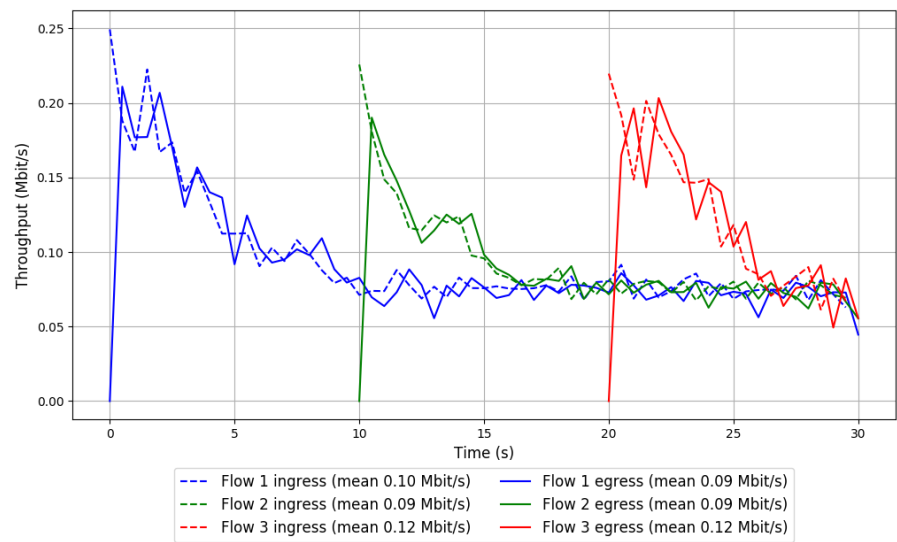## Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-06-19 09:27:13
End at: 2018-06-19 09:27:43
Local clock offset: 2.878 ms
Remote clock offset: 18.568 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 40.335 ms
Loss rate: 4.75%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.363 ms
Loss rate: 3.92%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.335 ms
Loss rate: 4.48%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 39.485 ms
Loss rate: 7.60%
```
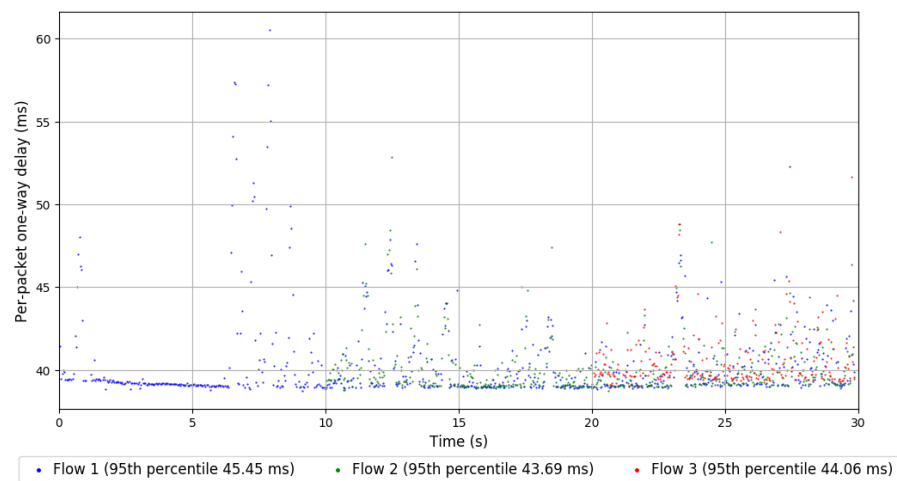
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-06-19 10:00:51
End at: 2018-06-19 10:01:21
Local clock offset: 1.393 ms
Remote clock offset: 16.143 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 56.984 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 58.509 ms
Loss rate: 3.90%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 56.984 ms
Loss rate: 3.45%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 51.615 ms
Loss rate: 5.04%
```
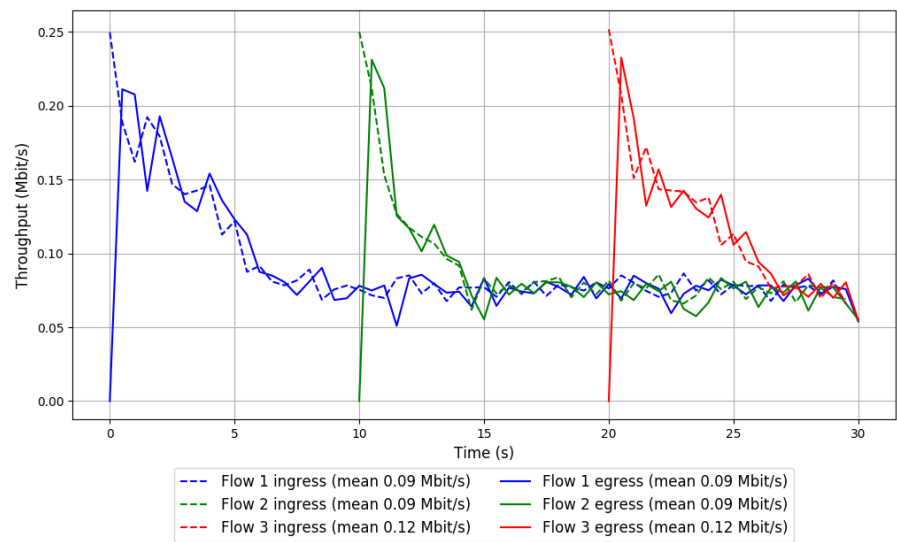
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-06-19 10:32:30
End at: 2018-06-19 10:33:00
Local clock offset: 2.122 ms
Remote clock offset: 17.068 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 44.529 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 45.454 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 43.689 ms
Loss rate: 4.72%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 44.064 ms
Loss rate: 5.57%
```
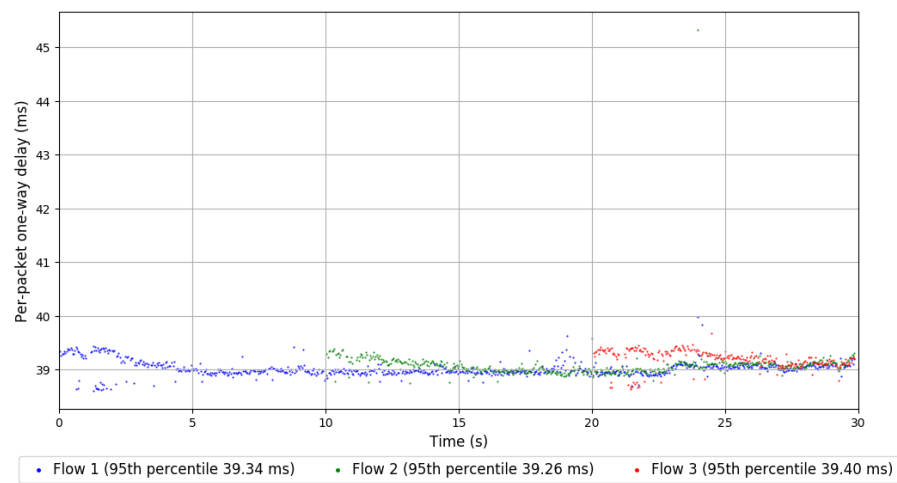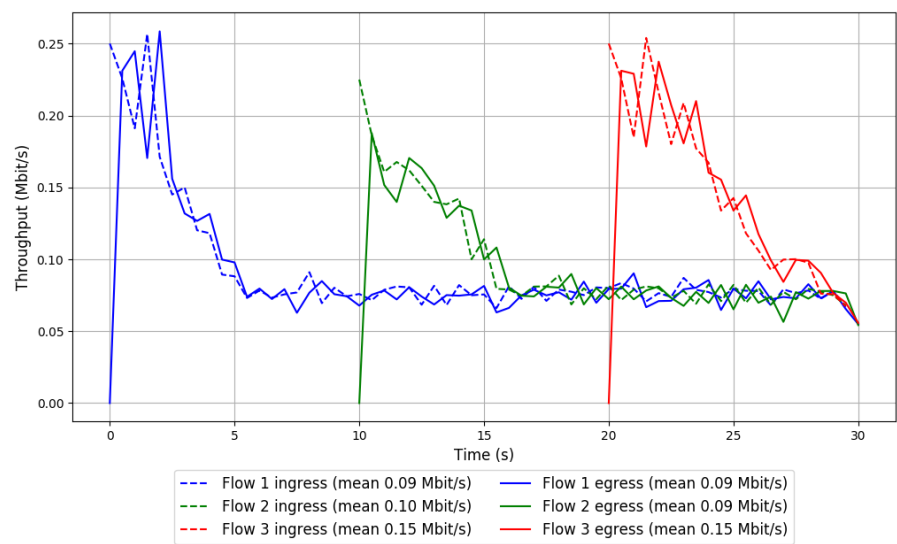
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-06-19 11:05:32
End at: 2018-06-19 11:06:02
Local clock offset: 4.044 ms
Remote clock offset: 38.855 ms

# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 39.358 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.336 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.256 ms
Loss rate: 4.31%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 39.403 ms
Loss rate: 3.81%
```
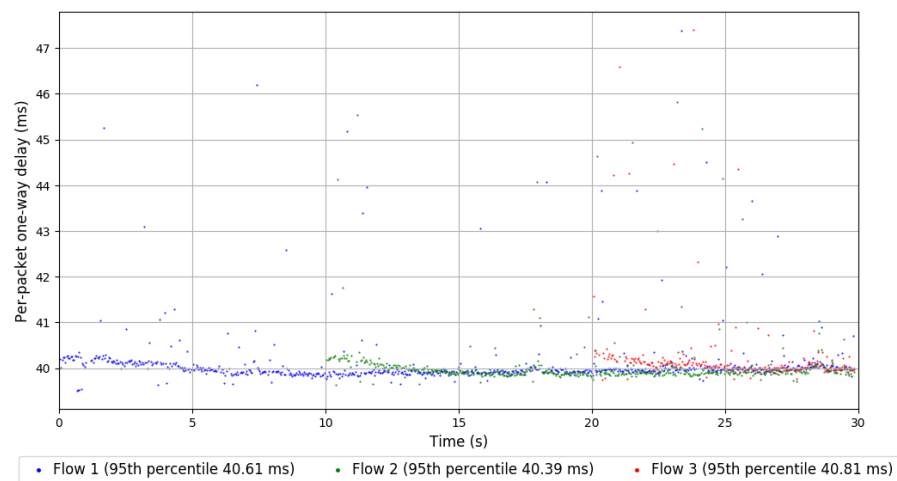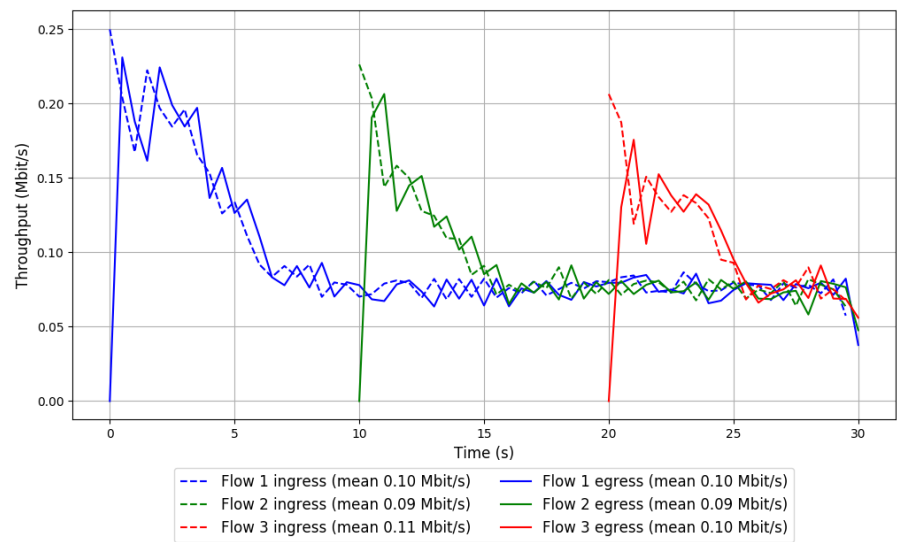
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-06-19 11:38:11
End at: 2018-06-19 11:38:41
Local clock offset: 8.115 ms
Remote clock offset: 50.463 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 40.513 ms
Loss rate: 3.73%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 40.613 ms
Loss rate: 2.67%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.392 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 40.813 ms
Loss rate: 6.94%
```
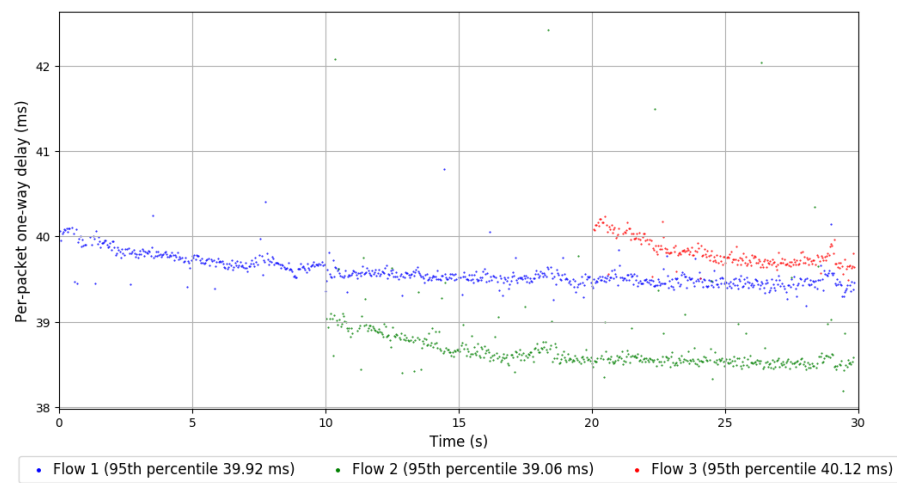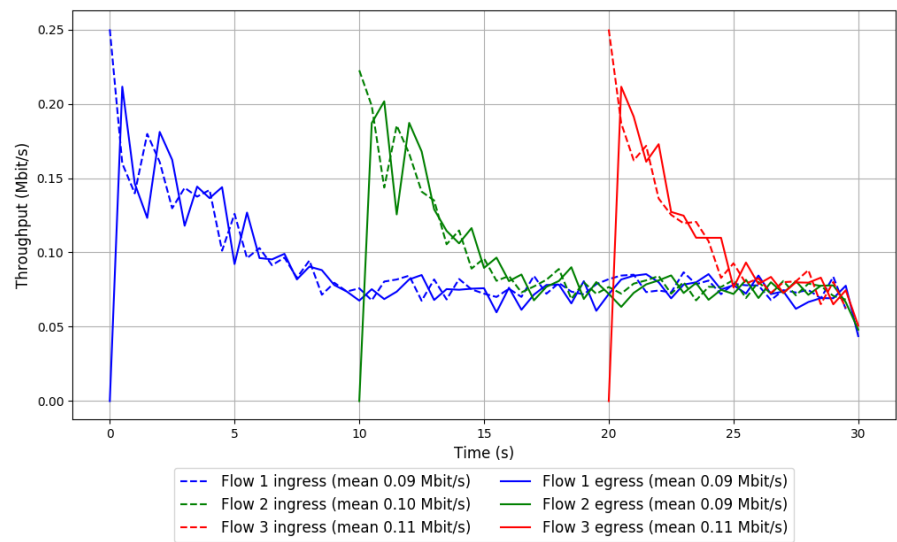
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-06-19 12:11:25
End at: 2018-06-19 12:11:55
Local clock offset: 7.952 ms
Remote clock offset: 30.599 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 39.972 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.919 ms
Loss rate: 3.63%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.061 ms
Loss rate: 3.27%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 40.123 ms
Loss rate: 4.03%
```

Run 6: Report of SCReAM — Data Link

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```
Run 7: Statistics of SCReAM

Start at: 2018-06-19 12:44:27
End at: 2018-06-19 12:44:57
Local clock offset: 7.476 ms
Remote clock offset: 35.98 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 40.242 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.242 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 39.553 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 40.314 ms
Loss rate: 3.61%
```
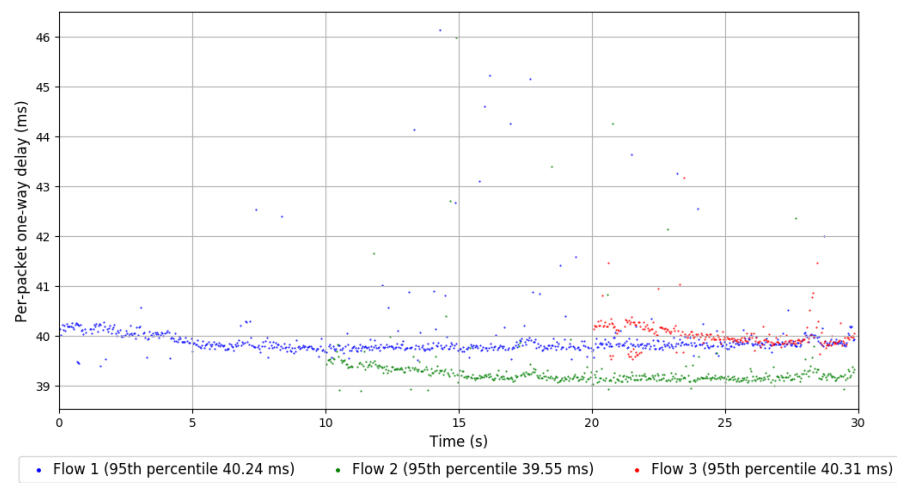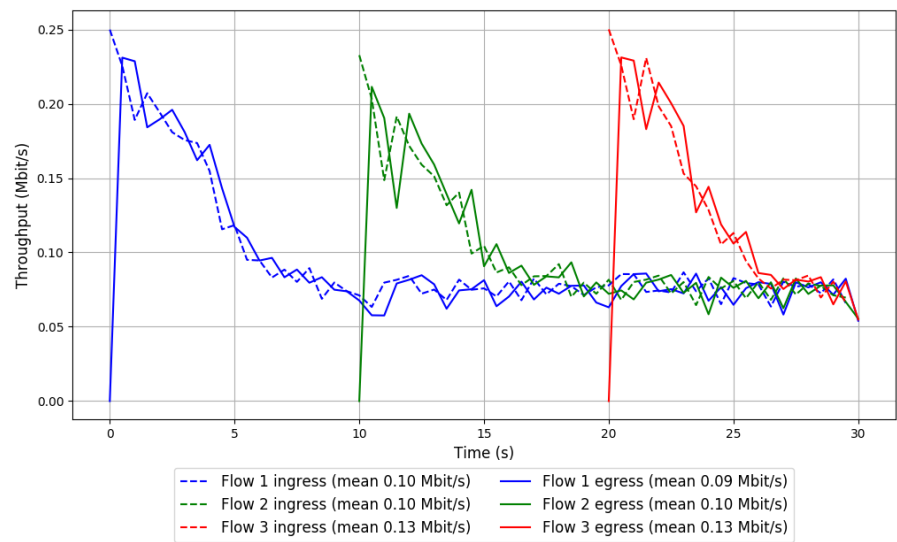
Run 7: Report of SCReAM — Data Link
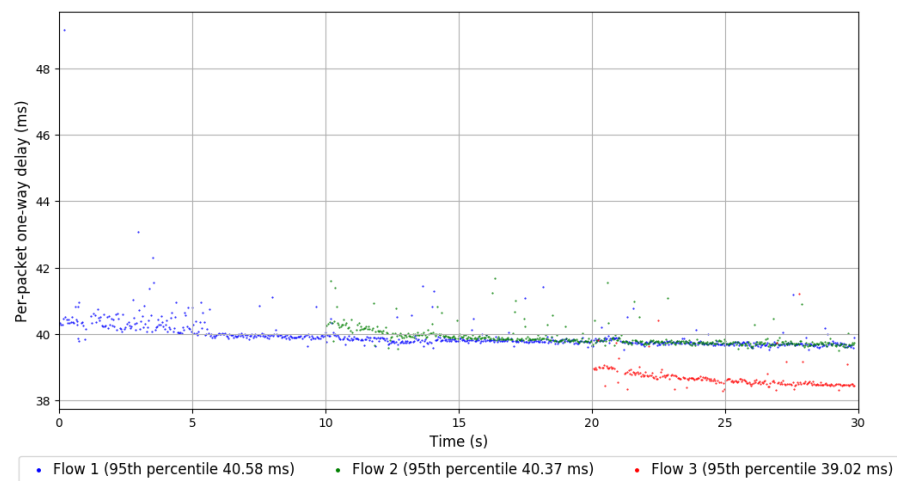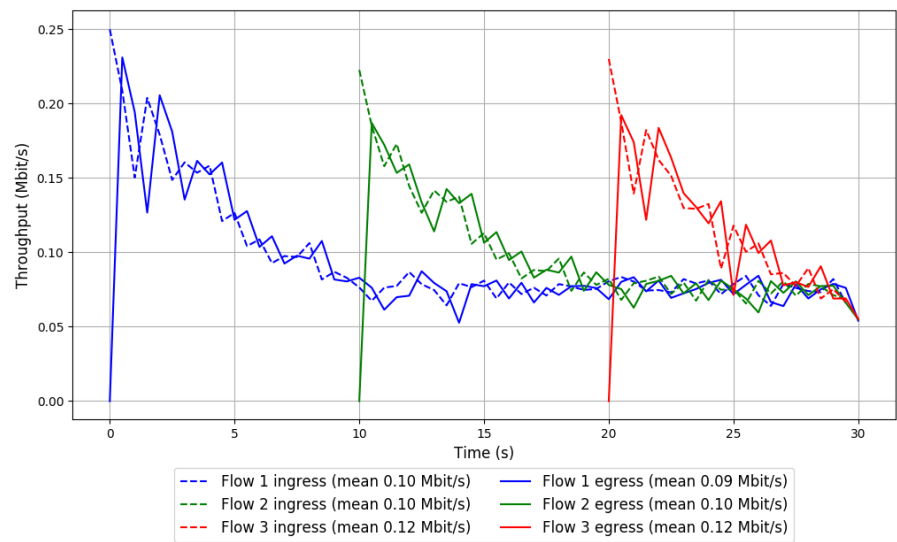

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```
Run 8: Statistics of SCReAM

Start at: 2018-06-19 13:17:29
End at: 2018-06-19 13:17:59
Local clock offset: 5.926 ms
Remote clock offset: 15.632 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 40.471 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.578 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 40.371 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 39.018 ms
Loss rate: 5.46%
```
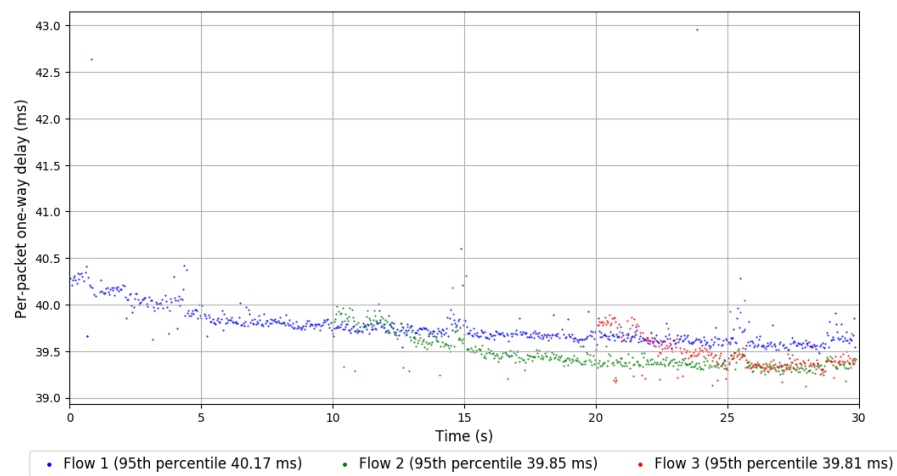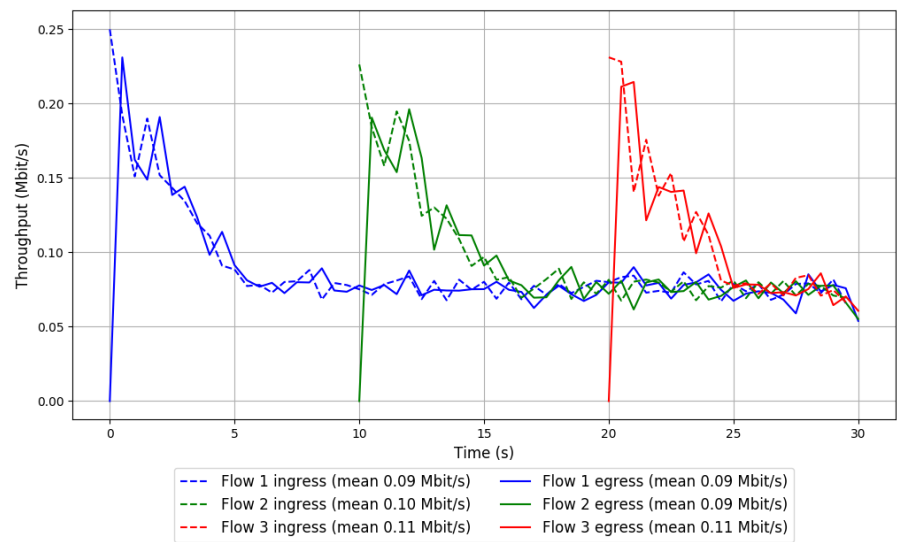
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-06-19 13:49:37
End at: 2018-06-19 13:50:07
Local clock offset: 7.584 ms
Remote clock offset: -5.078 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 40.057 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 40.166 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.855 ms
Loss rate: 3.76%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 39.811 ms
Loss rate: 6.35%
```
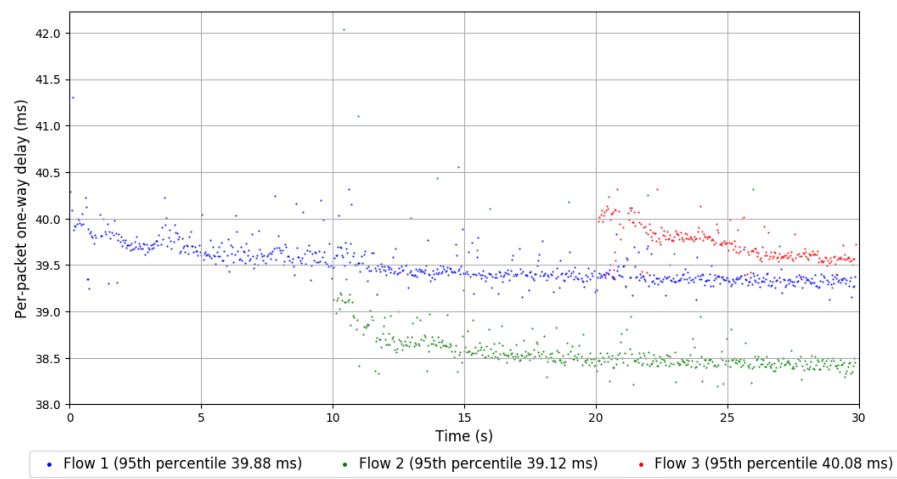
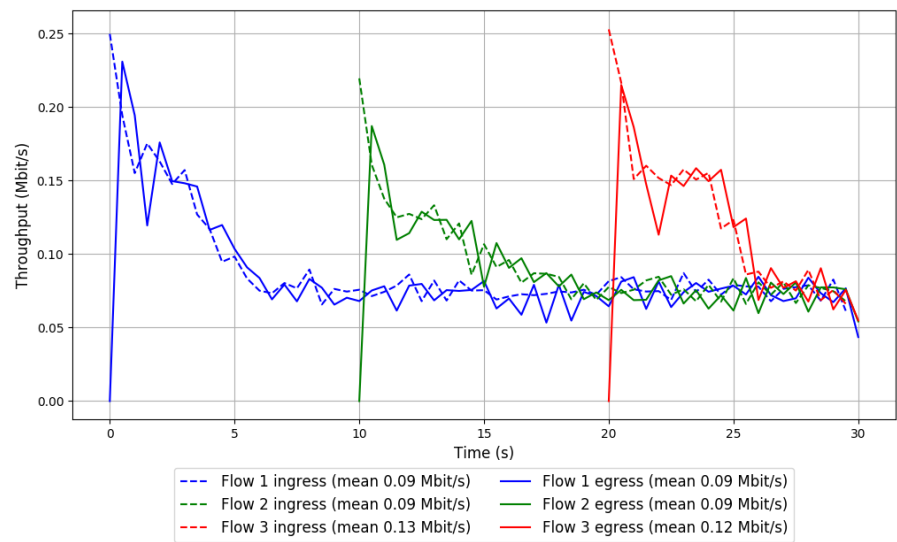# Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-06-19 14:23:08
End at: 2018-06-19 14:23:38
Local clock offset: 8.237 ms
Remote clock offset: -21.616 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 39.942 ms
Loss rate: 4.82%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.876 ms
Loss rate: 4.53%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 39.117 ms
Loss rate: 4.36%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 40.083 ms
Loss rate: 6.11%
```

Run 10: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.09 Mbit/s)   Flow 1 egress (mean 0.09 Mbit/s)
Flow 2 ingress (mean 0.09 Mbit/s)   Flow 2 egress (mean 0.09 Mbit/s)
Flow 3 ingress (mean 0.13 Mbit/s)   Flow 3 egress (mean 0.12 Mbit/s)

Flow 1 (95th percentile 39.88 ms)   Flow 2 (95th percentile 39.12 ms)   Flow 3 (95th percentile 40.08 ms)
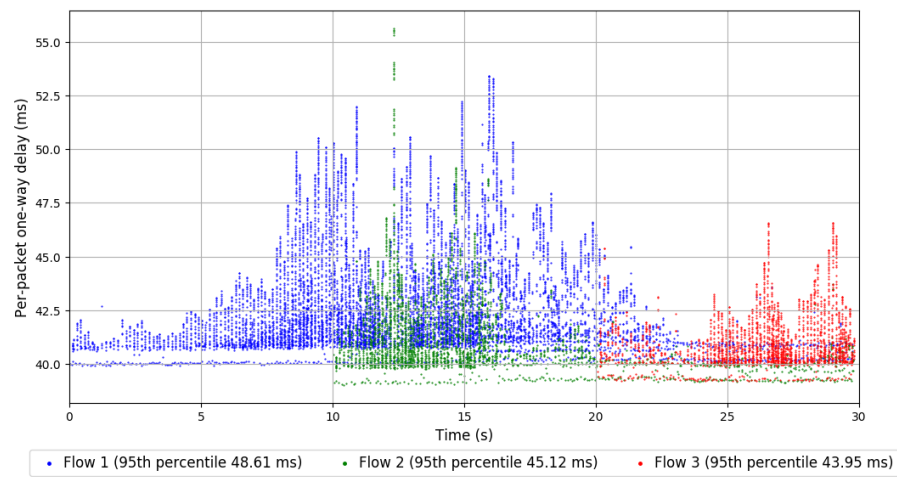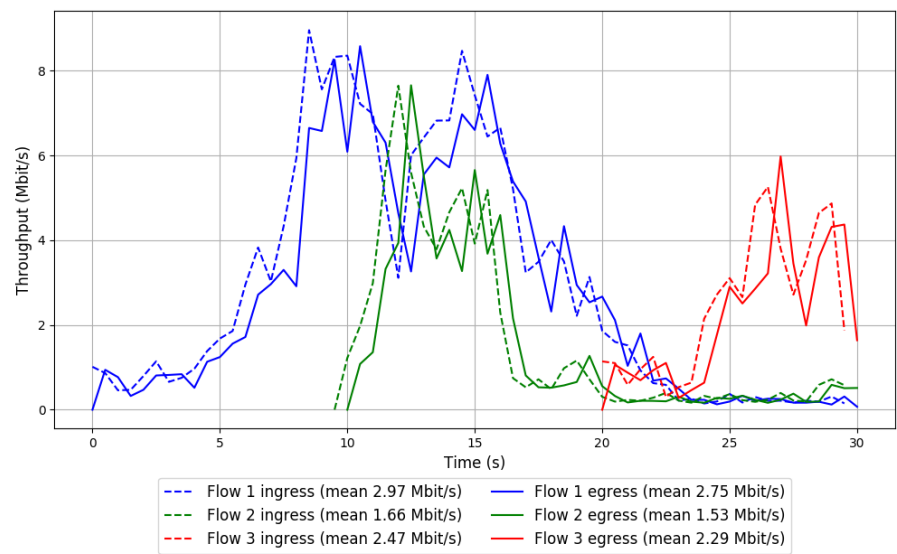
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```
Run 1: Statistics of Sprout

Start at: 2018-06-19 09:19:33
End at: 2018-06-19 09:20:03
Local clock offset: 3.494 ms
Remote clock offset: 15.884 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 47.744 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 48.609 ms
Loss rate: 7.93%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 45.117 ms
Loss rate: 8.33%
-- Flow 3:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 43.953 ms
Loss rate: 8.27%
```
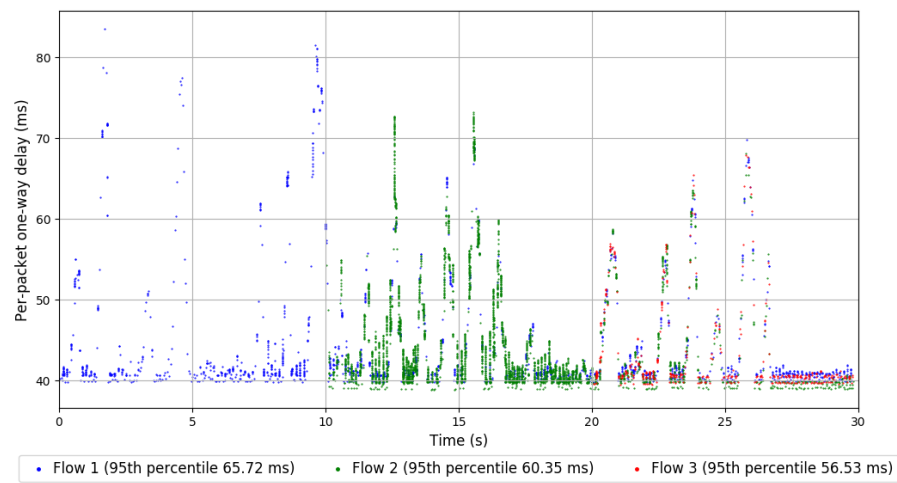
Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 2.97 Mbit/s) — — —   Flow 1 egress (mean 2.75 Mbit/s) ———
Flow 2 ingress (mean 1.66 Mbit/s) — — —   Flow 2 egress (mean 1.53 Mbit/s) ———
Flow 3 ingress (mean 2.47 Mbit/s) — — —   Flow 3 egress (mean 2.29 Mbit/s) ———

• Flow 1 (95th percentile 48.61 ms)   • Flow 2 (95th percentile 45.12 ms)   • Flow 3 (95th percentile 43.95 ms)
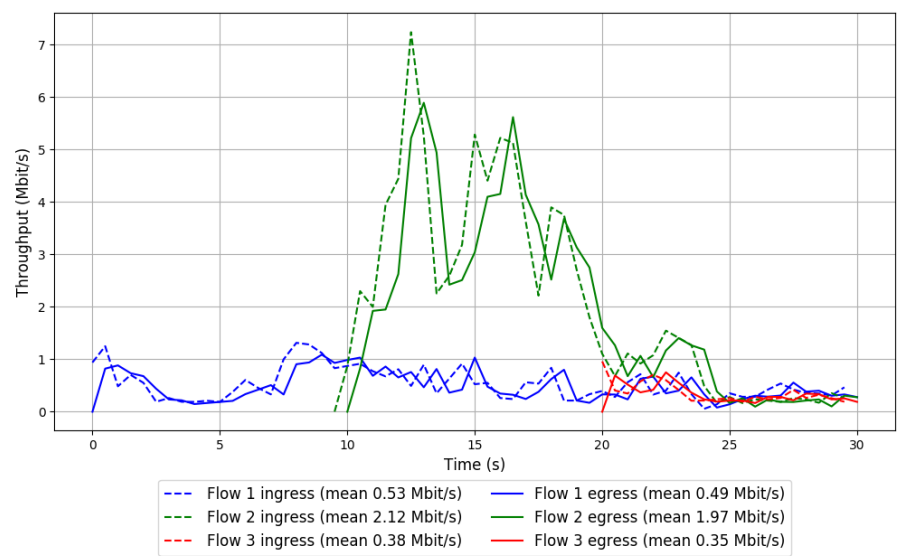
```
Run 2: Statistics of Sprout

Start at: 2018-06-19 09:53:31
End at: 2018-06-19 09:54:01
Local clock offset: 1.865 ms
Remote clock offset: 16.023 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 62.008 ms
Loss rate: 7.52%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 65.719 ms
Loss rate: 7.72%
-- Flow 2:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 60.350 ms
Loss rate: 7.48%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 56.528 ms
Loss rate: 7.20%
```
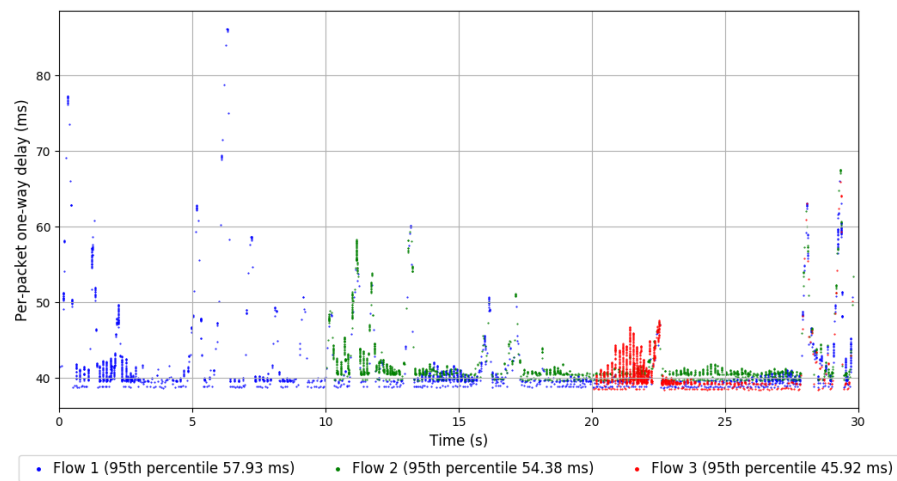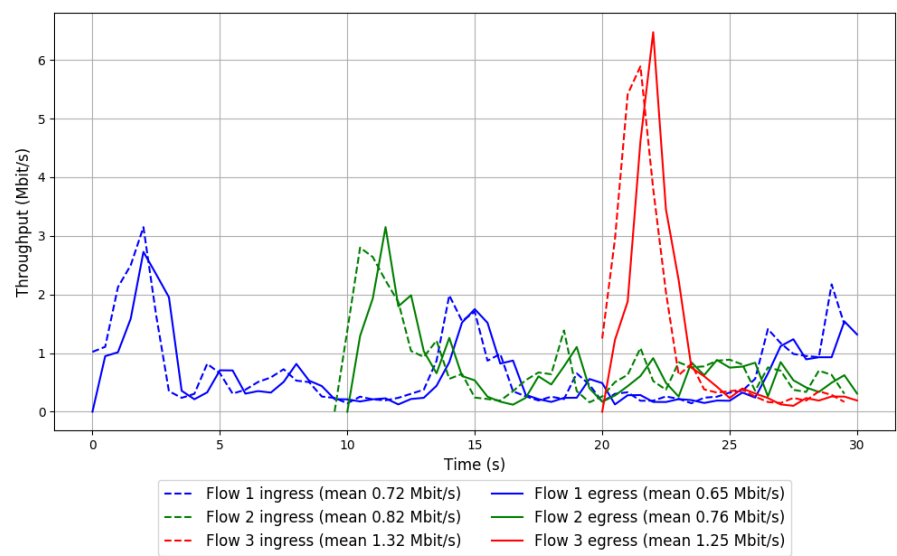
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-06-19 10:25:08
End at: 2018-06-19 10:25:38
Local clock offset: 1.953 ms
Remote clock offset: 16.67 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 54.301 ms
Loss rate: 7.98%
-- Flow 1:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 57.928 ms
Loss rate: 8.86%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 54.379 ms
Loss rate: 7.63%
-- Flow 3:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 45.920 ms
Loss rate: 6.97%
```
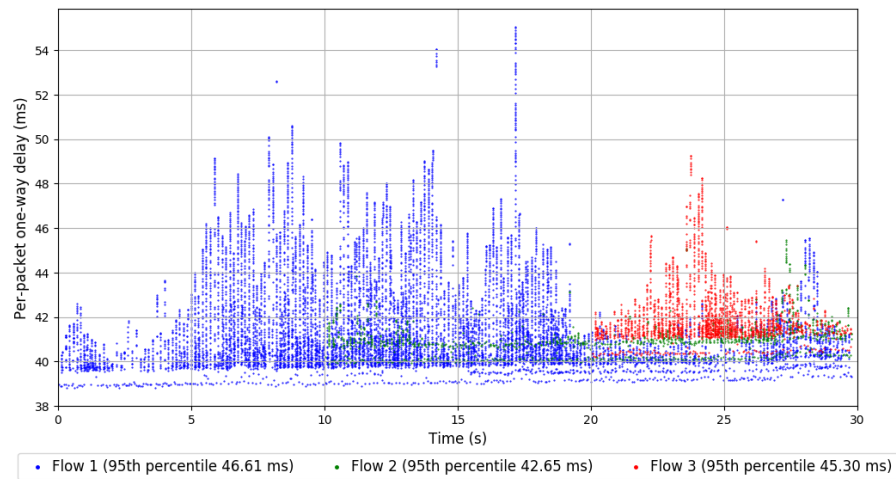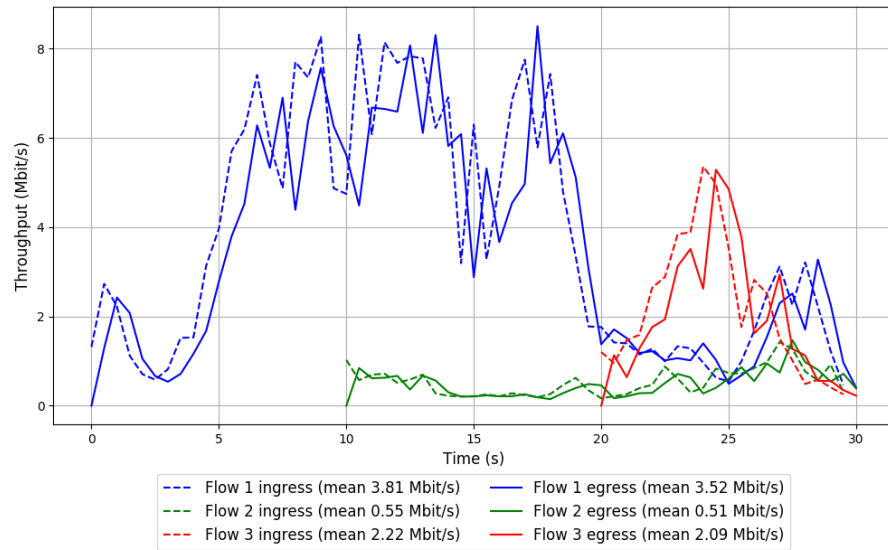
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-06-19 10:57:28
End at: 2018-06-19 10:57:58
Local clock offset: 2.219 ms
Remote clock offset: 33.897 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 46.265 ms
Loss rate: 7.82%
-- Flow 1:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 46.610 ms
Loss rate: 7.94%
-- Flow 2:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 42.648 ms
Loss rate: 7.46%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 45.302 ms
Loss rate: 7.34%
```
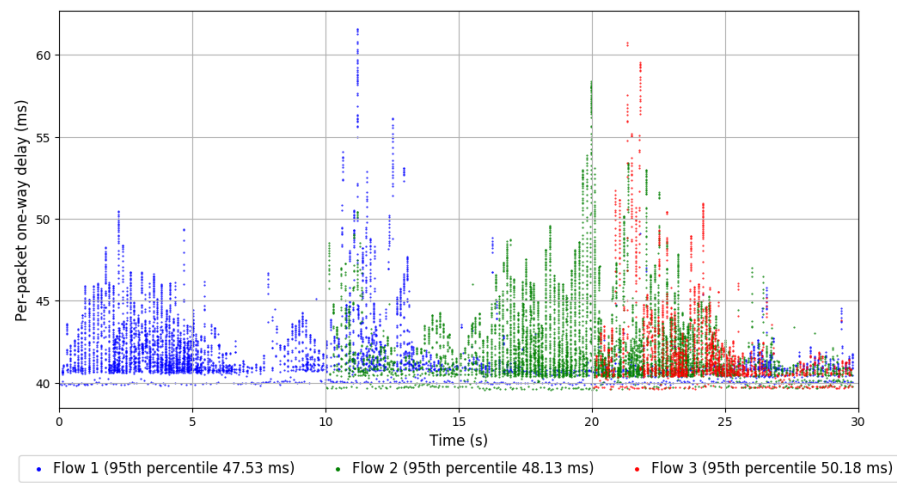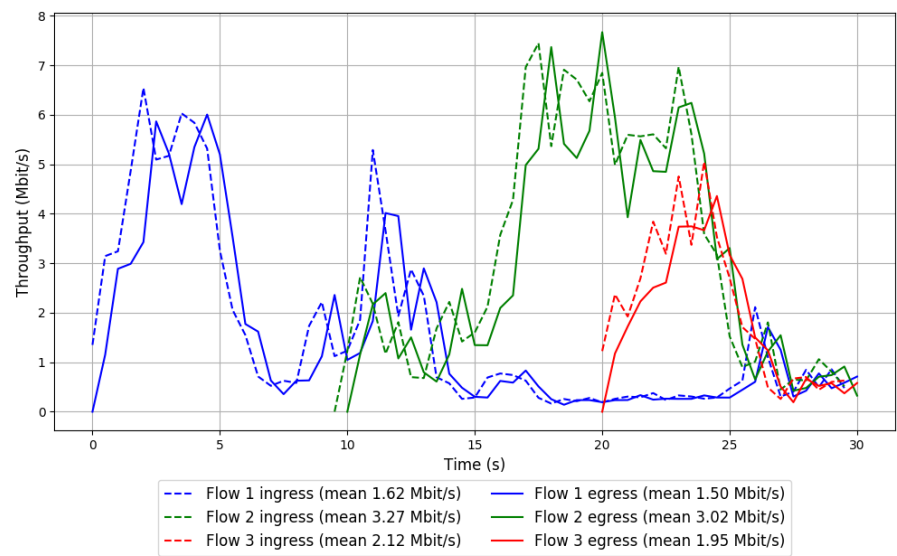
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-06-19 11:30:47
End at: 2018-06-19 11:31:17
Local clock offset: 8.629 ms
Remote clock offset: 48.003 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 48.341 ms
Loss rate: 8.00%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 47.528 ms
Loss rate: 7.61%
-- Flow 2:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 48.129 ms
Loss rate: 7.87%
-- Flow 3:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.183 ms
Loss rate: 9.29%
```

Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-06-19 12:04:09
End at: 2018-06-19 12:04:39
Local clock offset: 8.167 ms
Remote clock offset: 35.87 ms

# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 44.809 ms
Loss rate: 8.72%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 41.109 ms
Loss rate: 8.11%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 43.051 ms
Loss rate: 8.76%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 45.600 ms
Loss rate: 8.89%
```
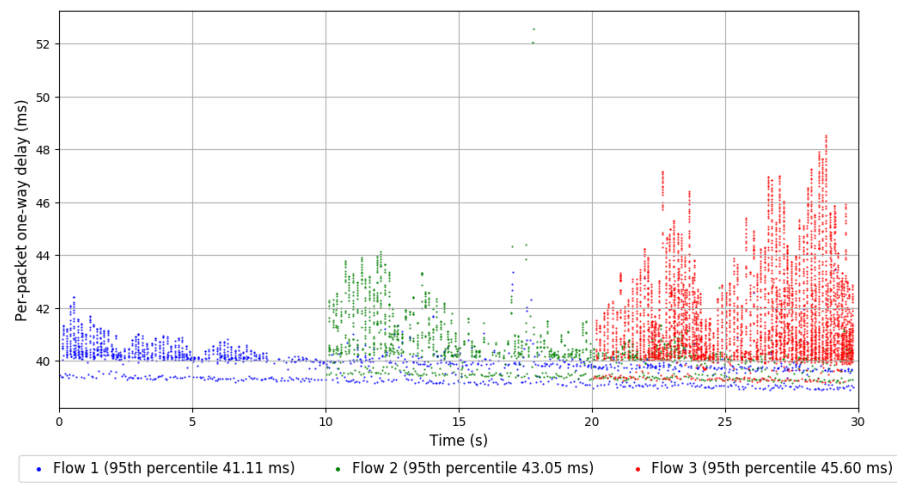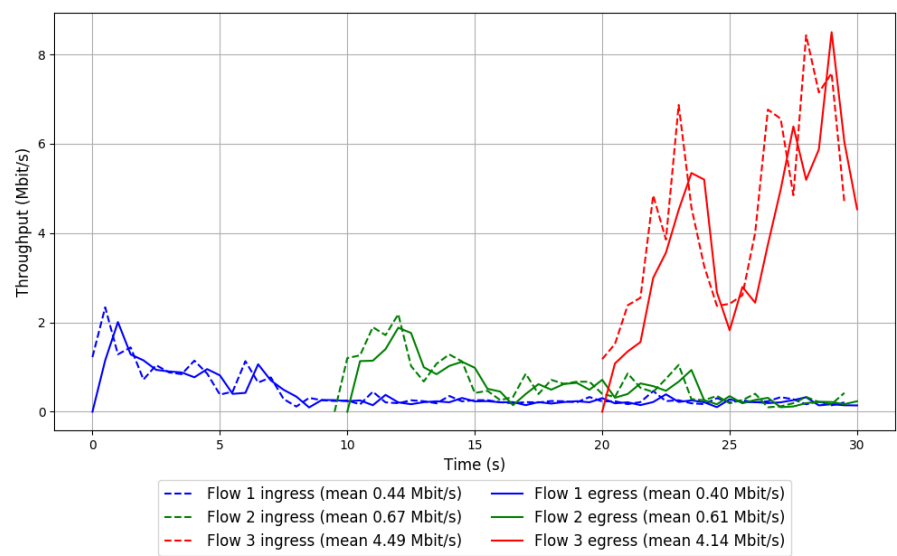
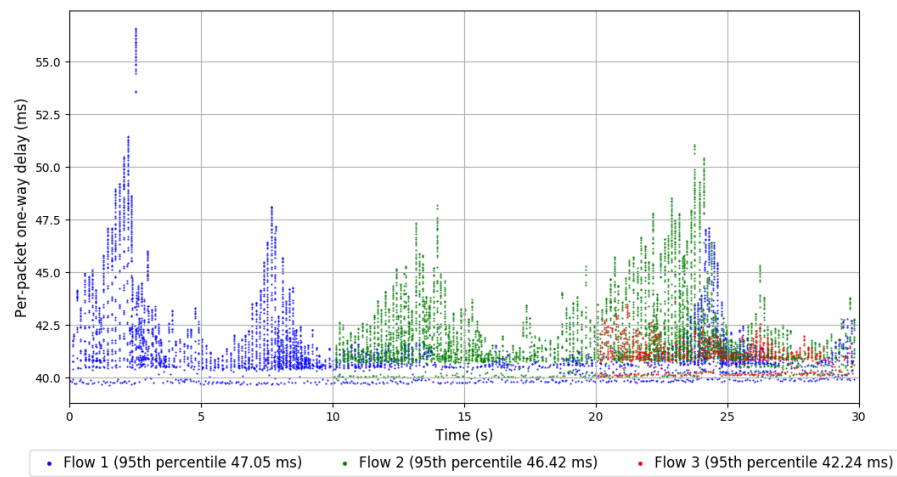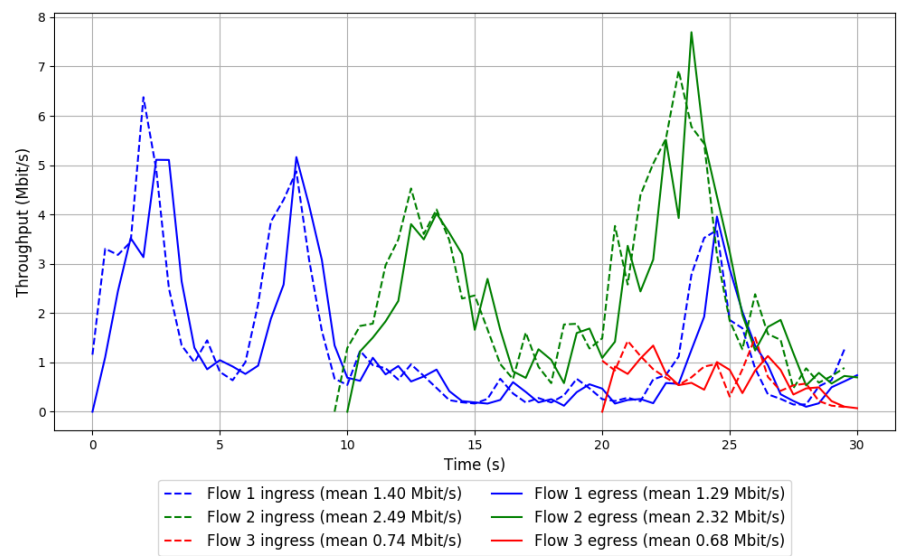## Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-06-19 12:37:00
End at: 2018-06-19 12:37:30
Local clock offset: 7.839 ms
Remote clock offset: 33.275 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 46.538 ms
Loss rate: 7.88%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 47.052 ms
Loss rate: 8.12%
-- Flow 2:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 46.419 ms
Loss rate: 7.56%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 42.238 ms
Loss rate: 8.64%
```

Run 7: Report of Sprout — Data Link

Flow 1 ingress (mean 1.40 Mbit/s)   Flow 1 egress (mean 1.29 Mbit/s)
Flow 2 ingress (mean 2.49 Mbit/s)   Flow 2 egress (mean 2.32 Mbit/s)
Flow 3 ingress (mean 0.74 Mbit/s)   Flow 3 egress (mean 0.68 Mbit/s)

Flow 1 (95th percentile 47.05 ms)   Flow 2 (95th percentile 46.42 ms)   Flow 3 (95th percentile 42.24 ms)
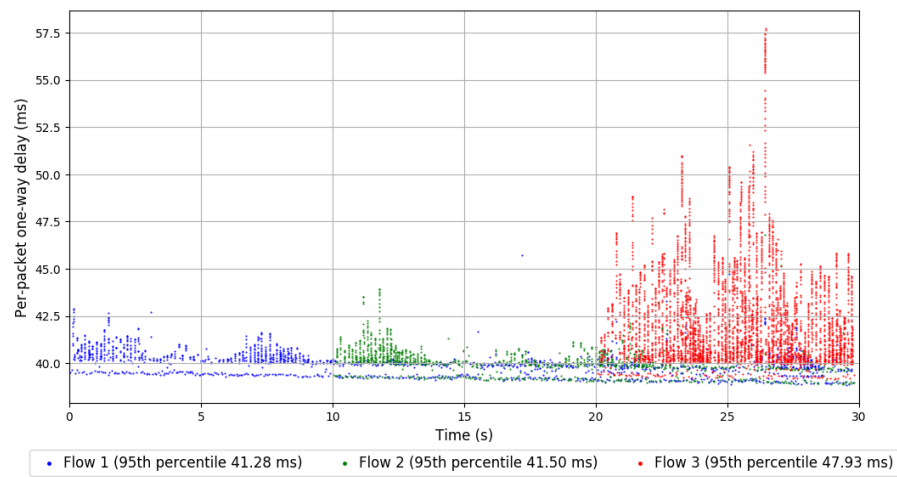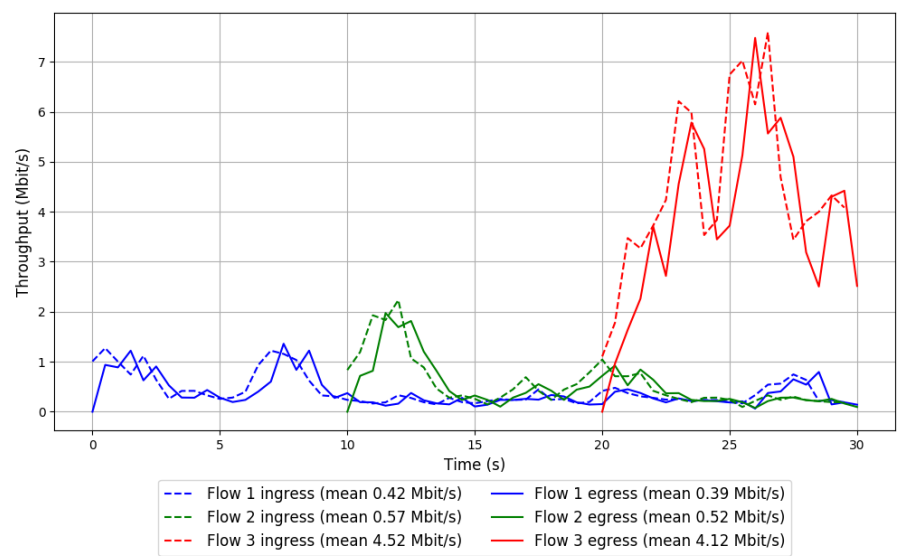
```
Run 8: Statistics of Sprout

Start at: 2018-06-19 13:10:23
End at: 2018-06-19 13:10:53
Local clock offset: 6.424 ms
Remote clock offset: 22.125 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 46.396 ms
Loss rate: 9.68%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 41.281 ms
Loss rate: 9.10%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 41.496 ms
Loss rate: 9.18%
-- Flow 3:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 47.929 ms
Loss rate: 9.98%
```

Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-06-19 13:42:24
End at: 2018-06-19 13:42:54
Local clock offset: 7.152 ms
Remote clock offset: 0.627 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 48.494 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 49.708 ms
Loss rate: 8.73%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 45.069 ms
Loss rate: 7.13%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 42.040 ms
Loss rate: 9.96%
```
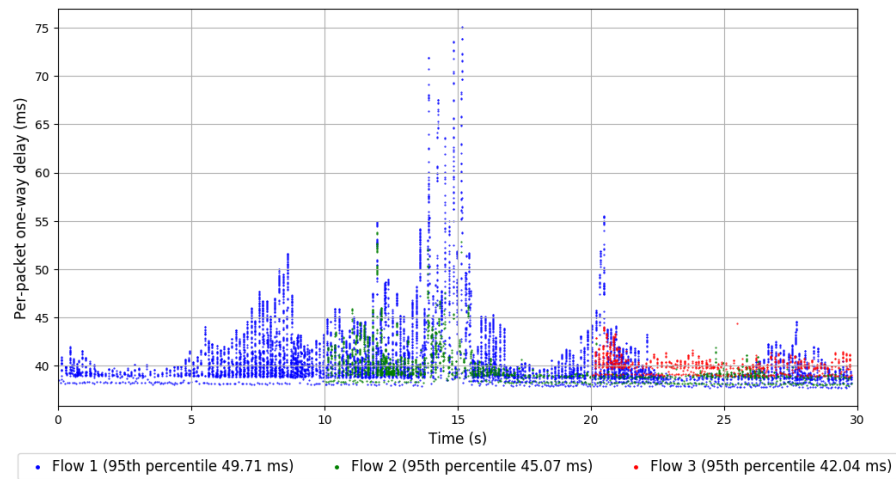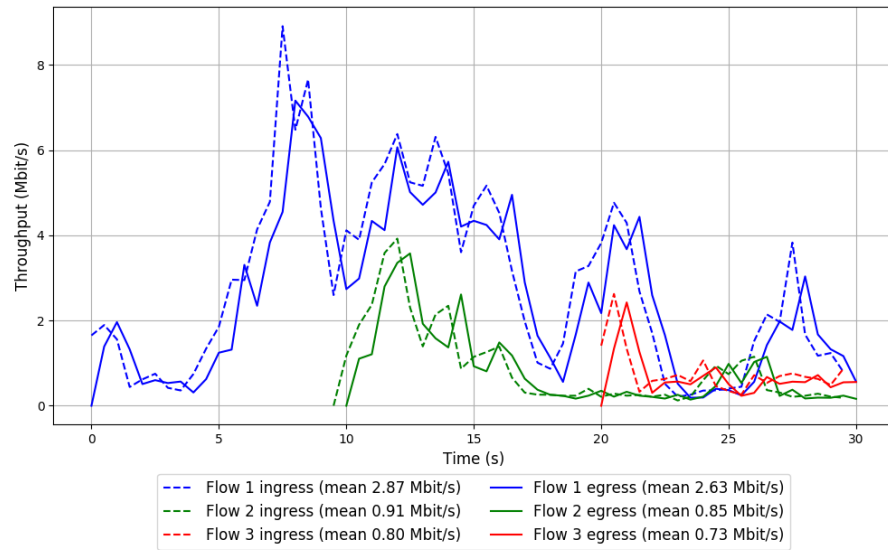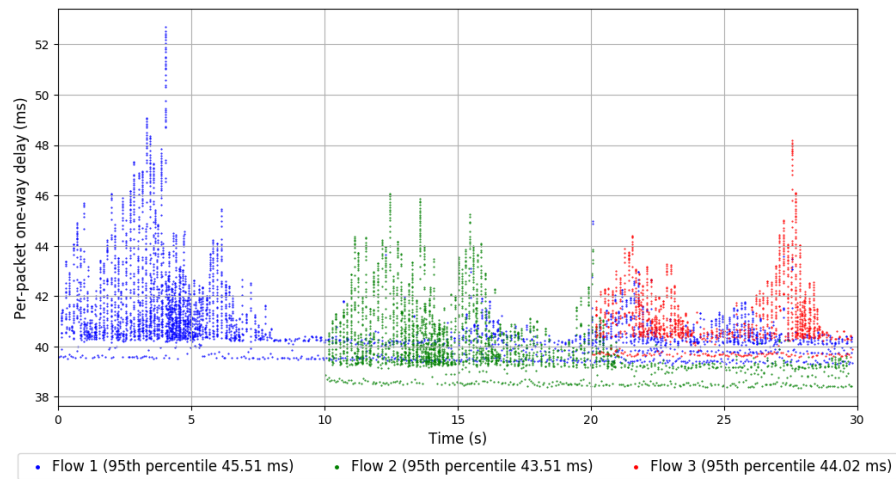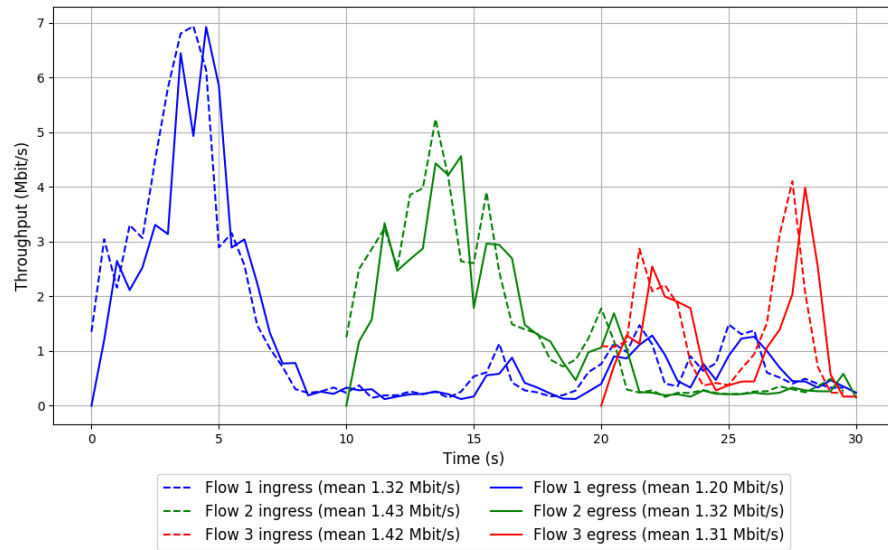
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-06-19 14:15:39
End at: 2018-06-19 14:16:09
Local clock offset: 8.347 ms
Remote clock offset: -18.279 ms


# Below is generated by plot.py at 2018-06-19 14:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 44.299 ms
Loss rate: 8.67%
-- Flow 1:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 45.514 ms
Loss rate: 8.95%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 43.509 ms
Loss rate: 8.32%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 44.021 ms
Loss rate: 8.58%
```

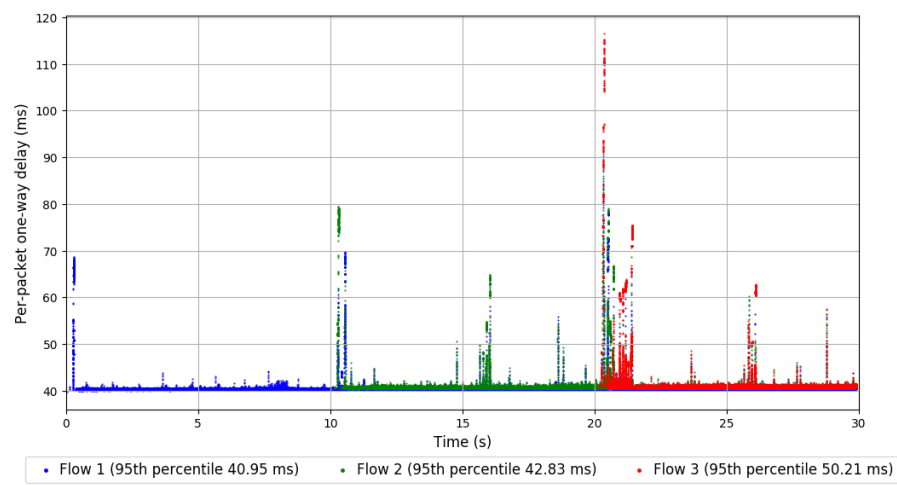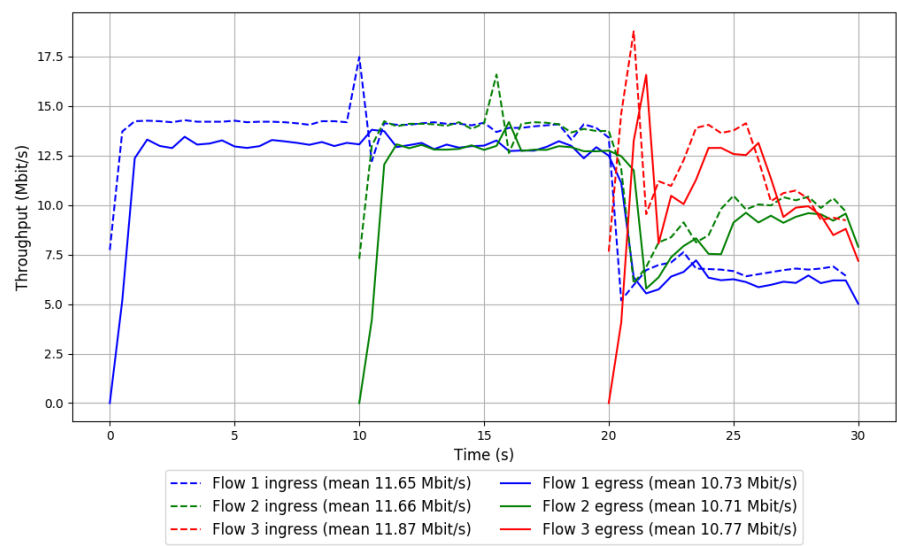## Run 10: Report of Sprout — Data Link

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

Start at: 2018-06-19 09:23:07
End at: 2018-06-19 09:23:37
Local clock offset: 3.299 ms
Remote clock offset: 17.334 ms


# Below is generated by plot.py at 2018-06-19 14:37:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.40 Mbit/s
95th percentile per-packet one-way delay: 42.344 ms
Loss rate: 8.68%
-- Flow 1:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 40.951 ms
Loss rate: 8.21%
-- Flow 2:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 42.832 ms
Loss rate: 8.58%
-- Flow 3:
Average throughput: 10.77 Mbit/s
95th percentile per-packet one-way delay: 50.209 ms
Loss rate: 10.25%
```

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

- - - - Flow 1 ingress (mean 11.65 Mbit/s) —— Flow 1 egress (mean 10.73 Mbit/s)
- - - - Flow 2 ingress (mean 11.66 Mbit/s) —— Flow 2 egress (mean 10.71 Mbit/s)
- - - - Flow 3 ingress (mean 11.87 Mbit/s) —— Flow 3 egress (mean 10.77 Mbit/s)

- Flow 1 (95th percentile 40.95 ms) • Flow 2 (95th percentile 42.83 ms) • Flow 3 (95th percentile 50.21 ms)

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

Start at: 2018-06-19 09:57:12
End at: 2018-06-19 09:57:42
Local clock offset: 1.589 ms
Remote clock offset: 16.05 ms


# Below is generated by plot.py at 2018-06-19 14:37:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.62 Mbit/s
95th percentile per-packet one-way delay: 60.847 ms
Loss rate: 9.11%
-- Flow 1:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 59.299 ms
Loss rate: 8.10%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 60.969 ms
Loss rate: 8.70%
-- Flow 3:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 72.709 ms
Loss rate: 13.37%
```
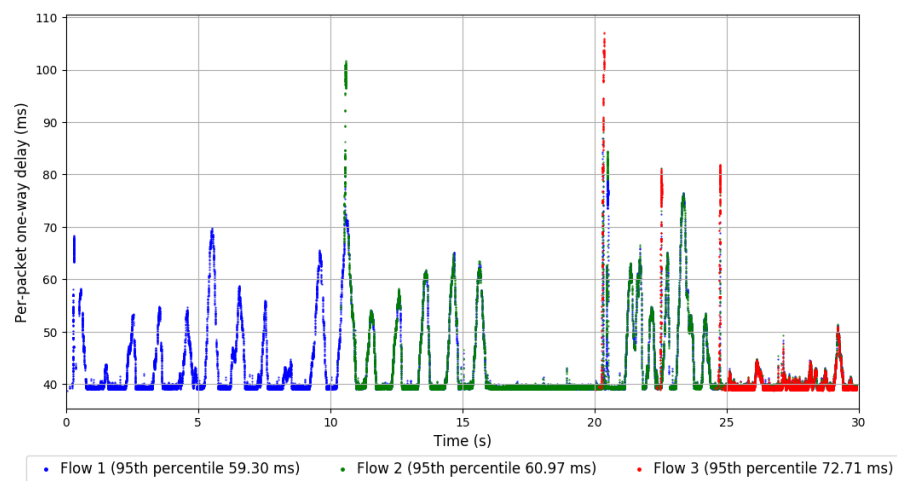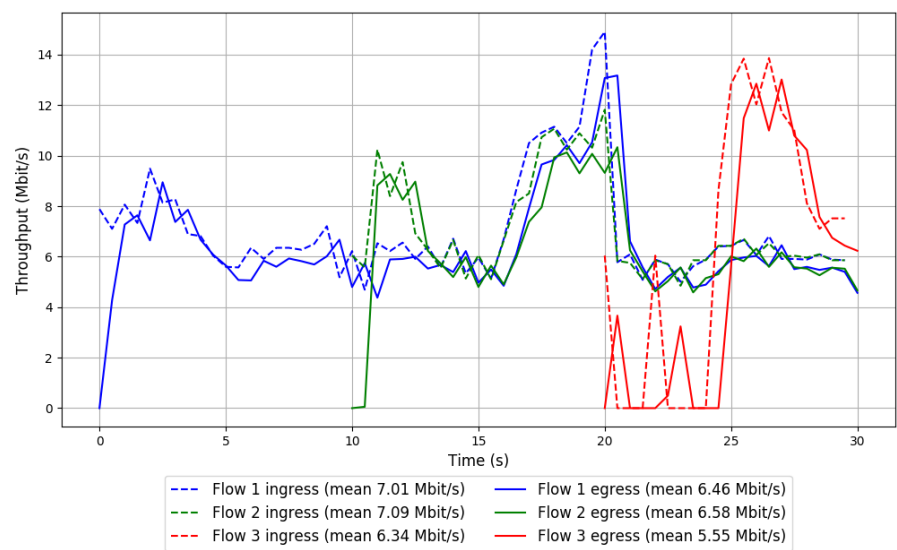
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 7.01 Mbit/s) --- Flow 1 egress (mean 6.46 Mbit/s)
Flow 2 ingress (mean 7.09 Mbit/s) --- Flow 2 egress (mean 6.58 Mbit/s)
Flow 3 ingress (mean 6.34 Mbit/s) --- Flow 3 egress (mean 5.55 Mbit/s)

Flow 1 (95th percentile 59.30 ms) Flow 2 (95th percentile 60.97 ms) Flow 3 (95th percentile 72.71 ms)
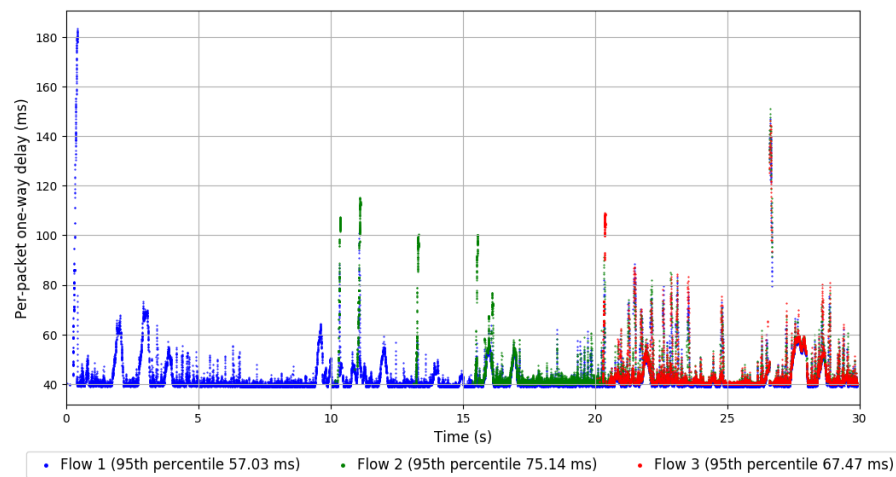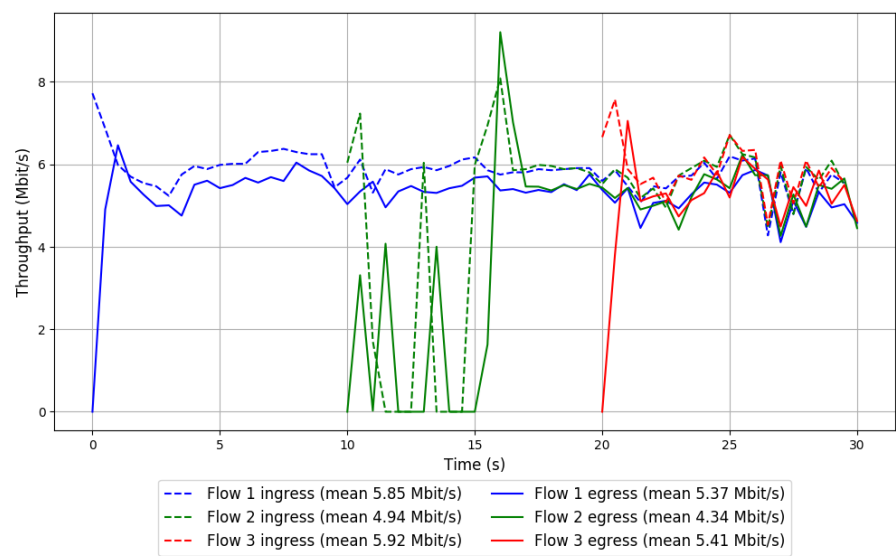
```
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 10:28:57
End at: 2018-06-19 10:29:27
Local clock offset: 2.005 ms
Remote clock offset: 16.929 ms


# Below is generated by plot.py at 2018-06-19 14:37:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 64.542 ms
Loss rate: 9.94%
-- Flow 1:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: 57.027 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 75.141 ms
Loss rate: 12.62%
-- Flow 3:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 67.467 ms
Loss rate: 9.68%
```

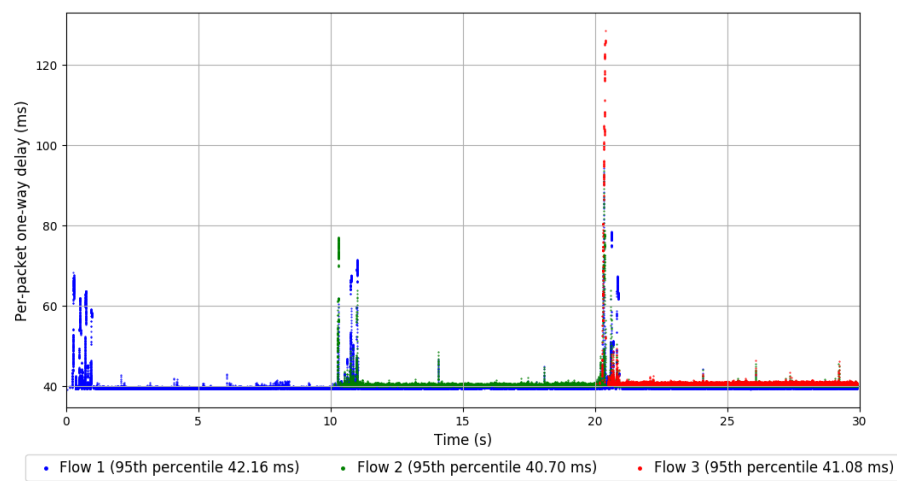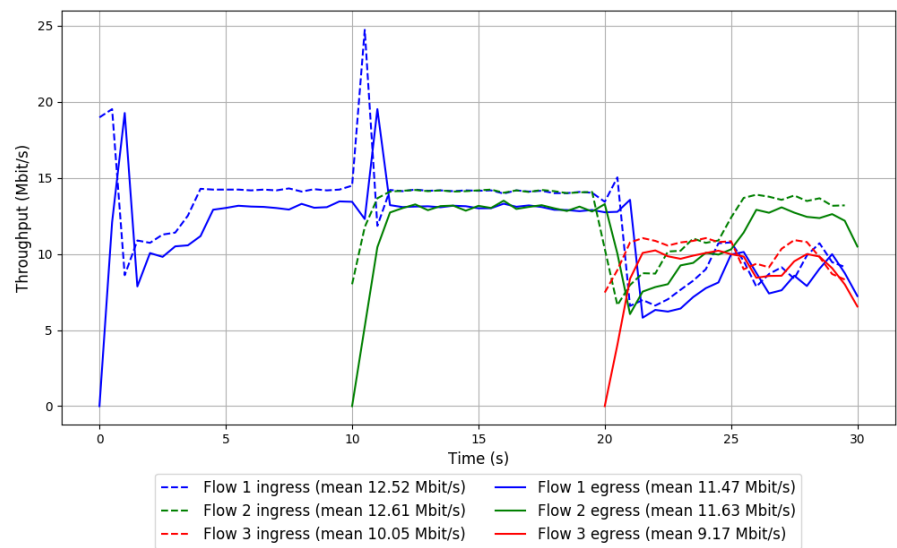## Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-19 11:01:09
End at: 2018-06-19 11:01:39
Local clock offset: 1.96 ms
Remote clock offset: 36.347 ms


# Below is generated by plot.py at 2018-06-19 14:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.22 Mbit/s
95th percentile per-packet one-way delay: 41.027 ms
Loss rate: 8.70%
-- Flow 1:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 42.162 ms
Loss rate: 8.72%
-- Flow 2:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 40.703 ms
Loss rate: 8.26%
-- Flow 3:
Average throughput: 9.17 Mbit/s
95th percentile per-packet one-way delay: 41.081 ms
Loss rate: 9.73%
```

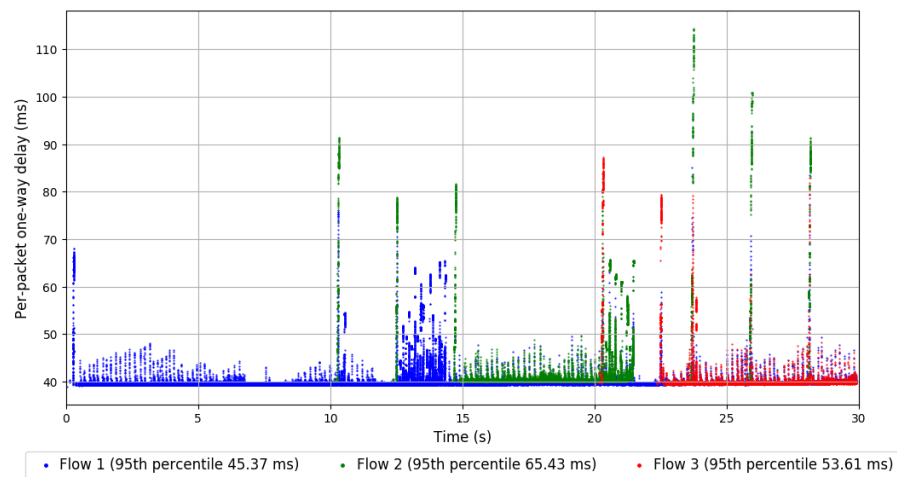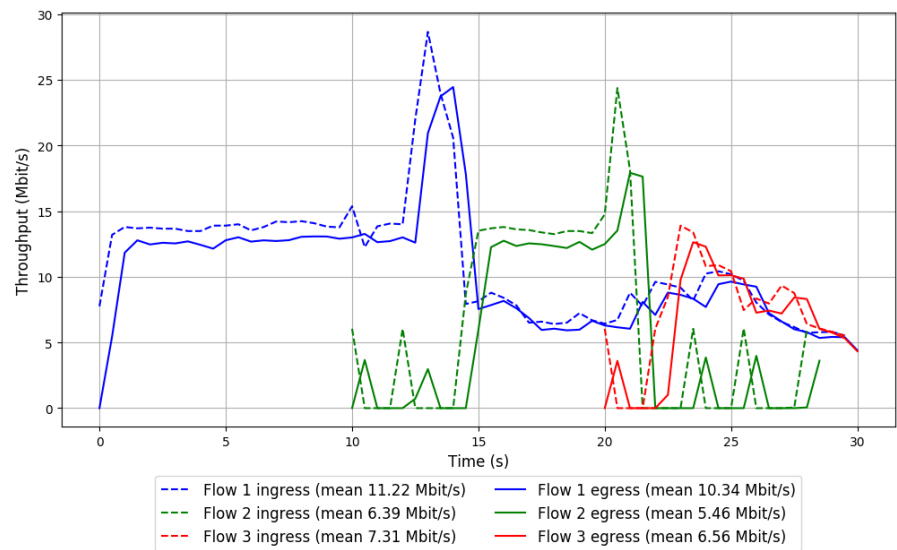Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-19 11:34:28
End at: 2018-06-19 11:34:58
Local clock offset: 8.221 ms
Remote clock offset: 49.145 ms


# Below is generated by plot.py at 2018-06-19 14:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 53.788 ms
Loss rate: 9.98%
-- Flow 1:
Average throughput: 10.34 Mbit/s
95th percentile per-packet one-way delay: 45.370 ms
Loss rate: 8.23%
-- Flow 2:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 65.429 ms
Loss rate: 14.37%
-- Flow 3:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 53.613 ms
Loss rate: 11.11%
```

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

Flow 1 ingress (mean 11.22 Mbit/s) — Flow 1 egress (mean 10.34 Mbit/s)
Flow 2 ingress (mean 6.39 Mbit/s) — Flow 2 egress (mean 5.46 Mbit/s)
Flow 3 ingress (mean 7.31 Mbit/s) — Flow 3 egress (mean 6.56 Mbit/s)

Flow 1 (95th percentile 45.37 ms) • Flow 2 (95th percentile 65.43 ms) • Flow 3 (95th percentile 53.61 ms)

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

Start at: 2018-06-19 12:07:39
End at: 2018-06-19 12:08:09
Local clock offset: 8.064 ms
Remote clock offset: 33.0 ms


# Below is generated by plot.py at 2018-06-19 14:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 60.482 ms
Loss rate: 10.29%
-- Flow 1:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 45.722 ms
Loss rate: 8.20%
-- Flow 2:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 67.044 ms
Loss rate: 11.28%
-- Flow 3:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 88.313 ms
Loss rate: 33.48%
```
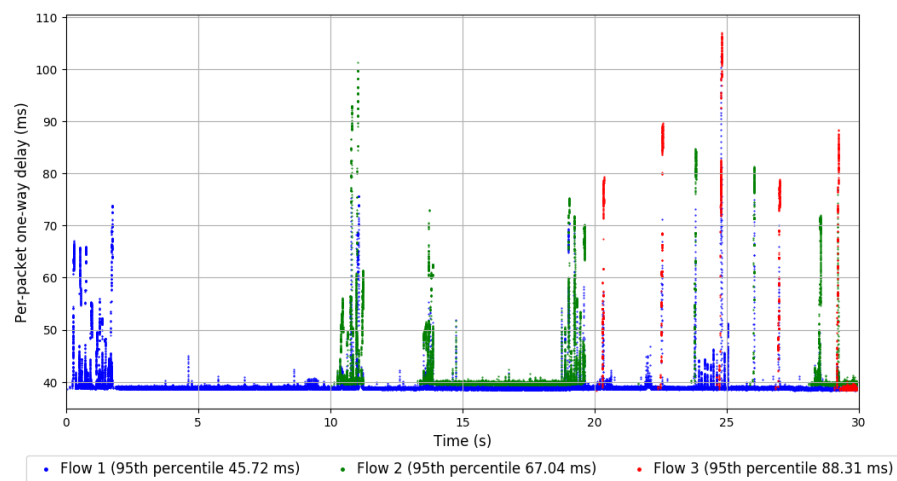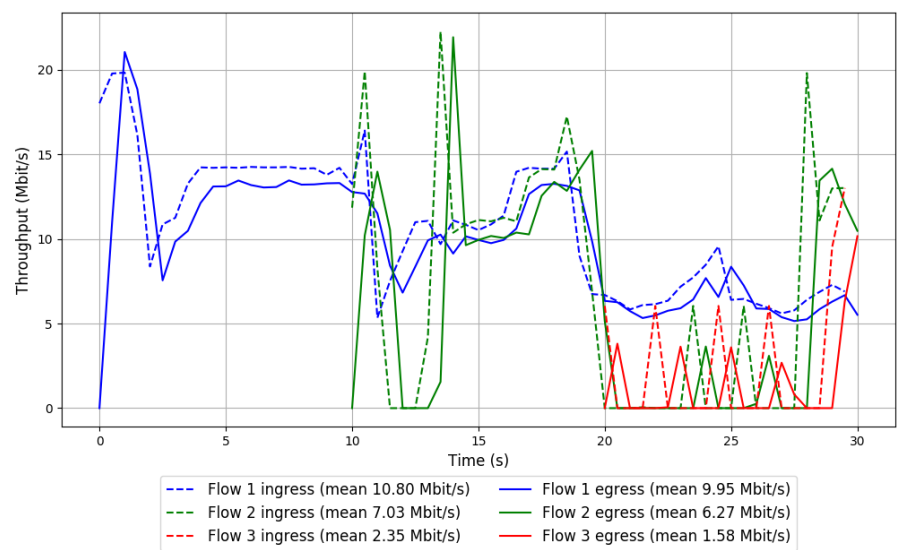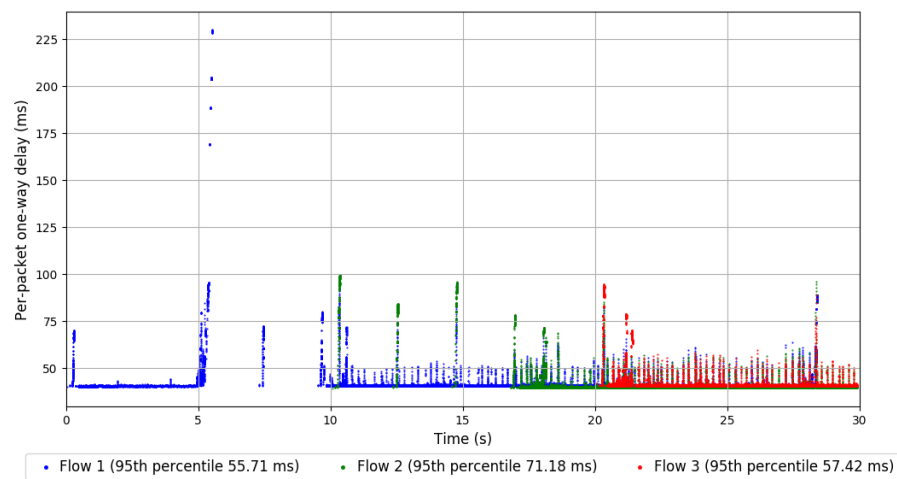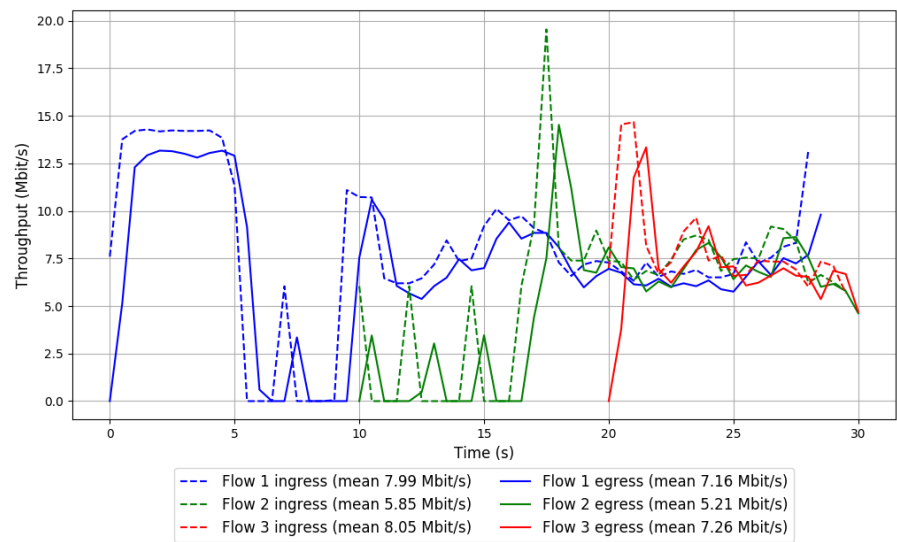
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 10.80 Mbit/s) —— Flow 1 egress (mean 9.95 Mbit/s)
Flow 2 ingress (mean 7.03 Mbit/s) —— Flow 2 egress (mean 6.27 Mbit/s)
Flow 3 ingress (mean 2.35 Mbit/s) —— Flow 3 egress (mean 1.58 Mbit/s)

Flow 1 (95th percentile 45.72 ms)   Flow 2 (95th percentile 67.04 ms)   Flow 3 (95th percentile 88.31 ms)

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

Start at: 2018-06-19 12:40:51
End at: 2018-06-19 12:41:21
Local clock offset: 7.743 ms
Remote clock offset: 34.822 ms


# Below is generated by plot.py at 2018-06-19 14:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 60.593 ms
Loss rate: 10.64%
-- Flow 1:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 55.712 ms
Loss rate: 10.18%
-- Flow 2:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 71.176 ms
Loss rate: 11.39%
-- Flow 3:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 57.424 ms
Loss rate: 10.87%
```

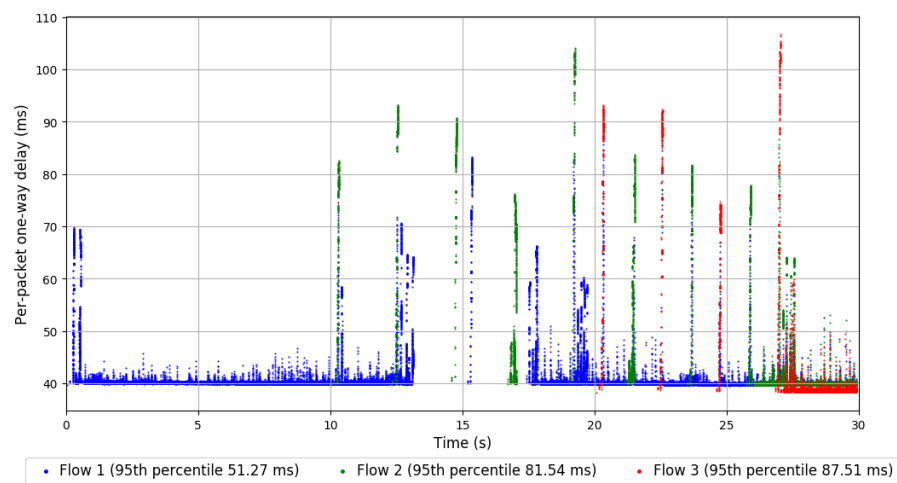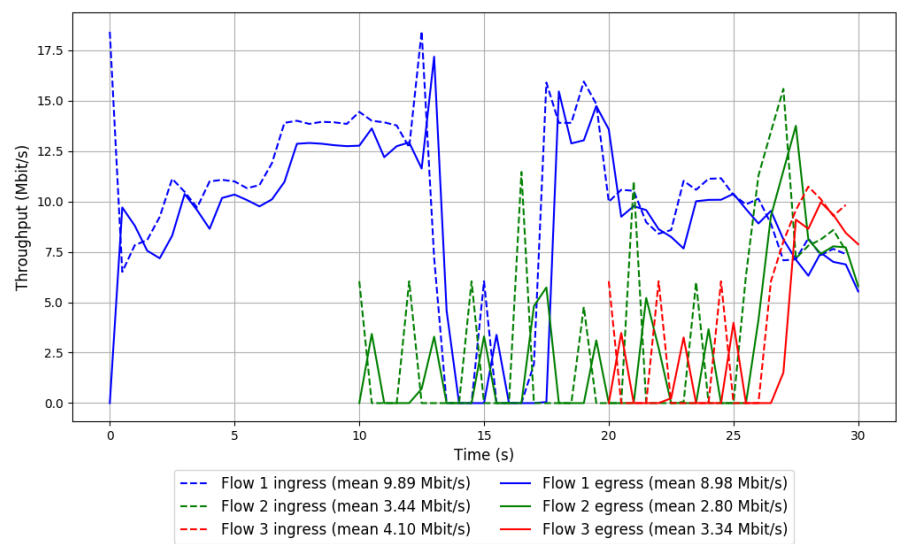# Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-19 13:13:52
End at: 2018-06-19 13:14:22
Local clock offset: 6.08 ms
Remote clock offset: 18.498 ms


# Below is generated by plot.py at 2018-06-19 14:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 66.267 ms
Loss rate: 12.09%
-- Flow 1:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 51.275 ms
Loss rate: 9.52%
-- Flow 2:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 81.538 ms
Loss rate: 18.81%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 87.509 ms
Loss rate: 19.44%
```
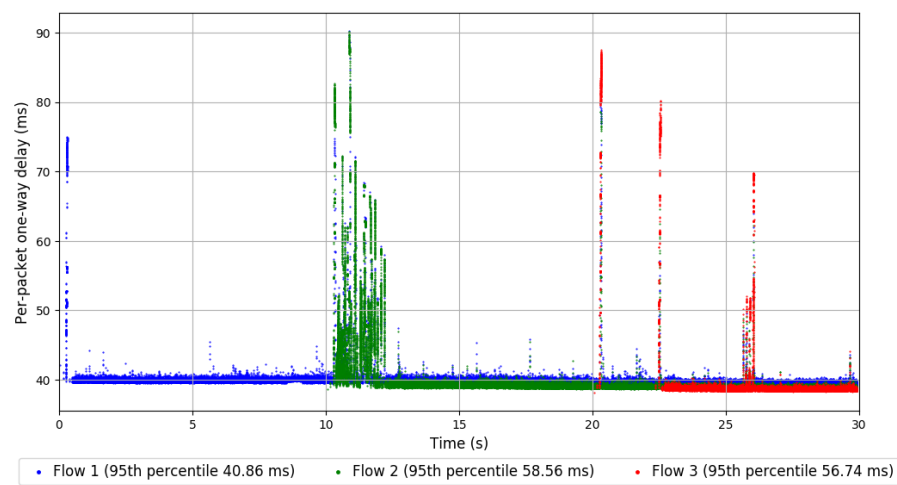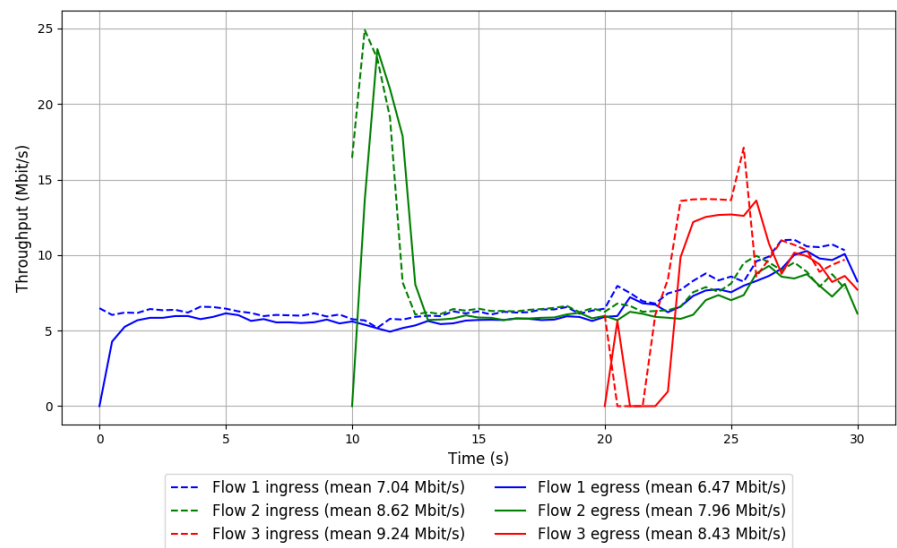
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 9.89 Mbit/s) — — —   Flow 1 egress (mean 8.98 Mbit/s) ———
Flow 2 ingress (mean 3.44 Mbit/s) — — —   Flow 2 egress (mean 2.80 Mbit/s) ———
Flow 3 ingress (mean 4.10 Mbit/s) — — —   Flow 3 egress (mean 3.34 Mbit/s) ———

Flow 1 (95th percentile 51.27 ms)   Flow 2 (95th percentile 81.54 ms)   Flow 3 (95th percentile 87.51 ms)

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

Start at: 2018-06-19 13:45:58
End at: 2018-06-19 13:46:28
Local clock offset: 7.26 ms
Remote clock offset: -2.587 ms


# Below is generated by plot.py at 2018-06-19 14:37:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.54 Mbit/s
95th percentile per-packet one-way delay: 51.463 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 6.47 Mbit/s
95th percentile per-packet one-way delay: 40.859 ms
Loss rate: 8.46%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 58.562 ms
Loss rate: 8.11%
-- Flow 3:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 56.739 ms
Loss rate: 9.70%
```
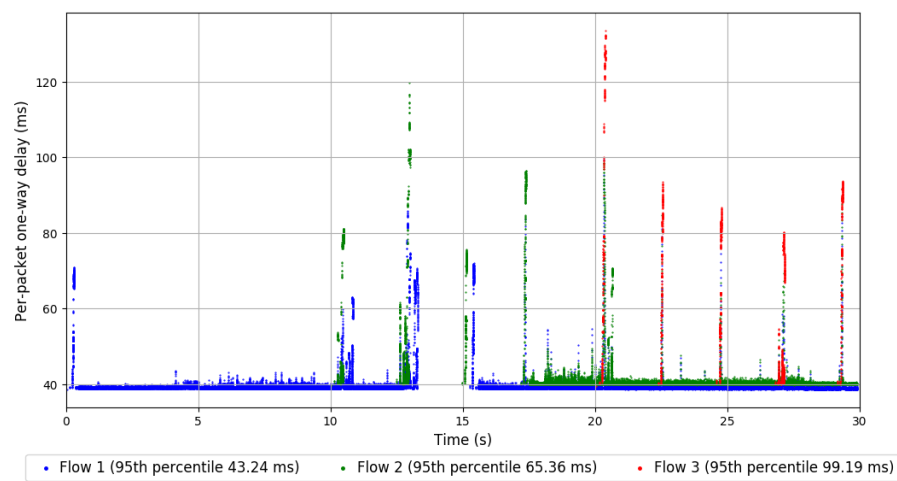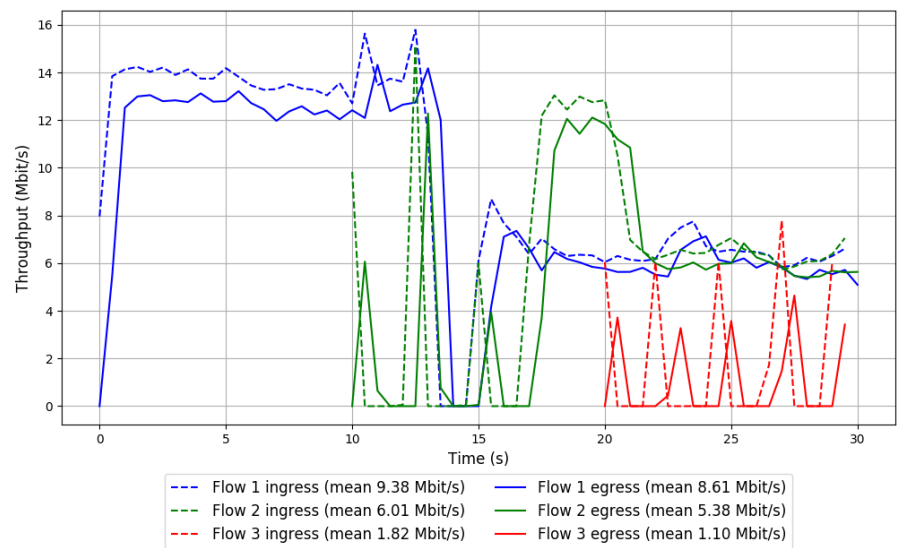
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 7.04 Mbit/s)   Flow 1 egress (mean 6.47 Mbit/s)
Flow 2 ingress (mean 8.62 Mbit/s)   Flow 2 egress (mean 7.96 Mbit/s)
Flow 3 ingress (mean 9.24 Mbit/s)   Flow 3 egress (mean 8.43 Mbit/s)

Flow 1 (95th percentile 40.86 ms)   Flow 2 (95th percentile 58.56 ms)   Flow 3 (95th percentile 56.74 ms)

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

Start at: 2018-06-19 14:19:27
End at: 2018-06-19 14:19:57
Local clock offset: 8.318 ms
Remote clock offset: -20.062 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 58.723 ms
Loss rate: 10.48%
-- Flow 1:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 43.241 ms
Loss rate: 8.51%
-- Flow 2:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 65.365 ms
Loss rate: 11.08%
-- Flow 3:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 99.192 ms
Loss rate: 39.03%
```

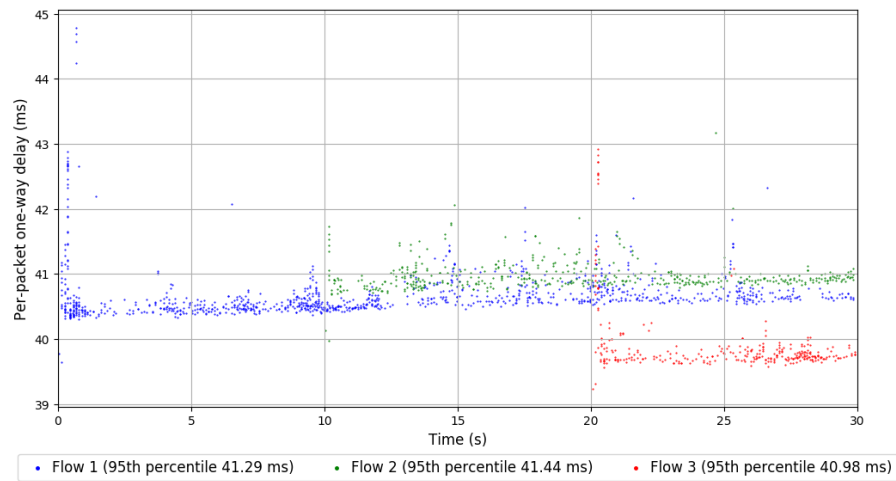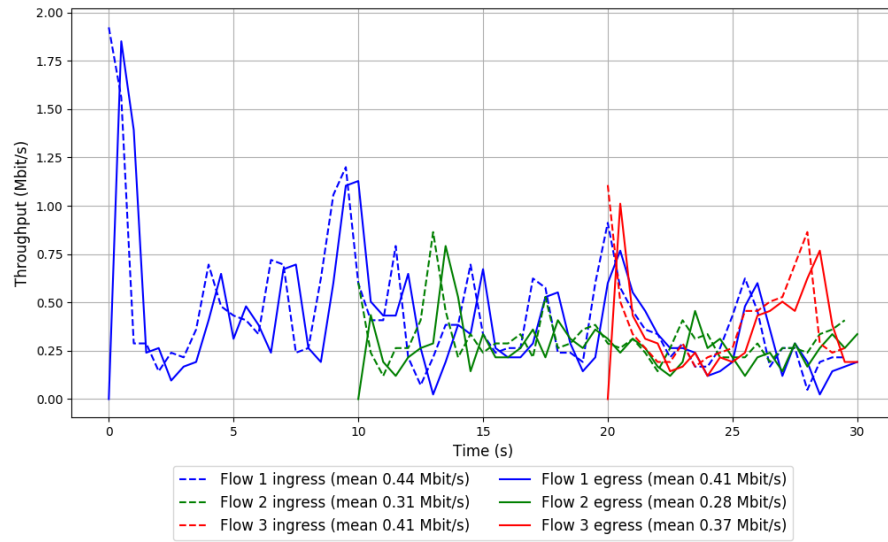Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 9.38 Mbit/s)   Flow 1 egress (mean 8.61 Mbit/s)
Flow 2 ingress (mean 6.01 Mbit/s)   Flow 2 egress (mean 5.38 Mbit/s)
Flow 3 ingress (mean 1.82 Mbit/s)   Flow 3 egress (mean 1.10 Mbit/s)

Flow 1 (95th percentile 43.24 ms)   Flow 2 (95th percentile 65.36 ms)   Flow 3 (95th percentile 99.19 ms)
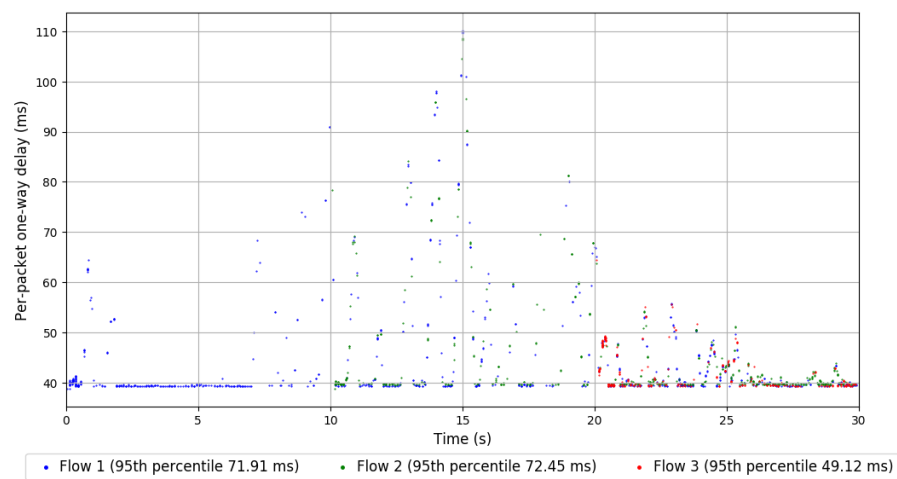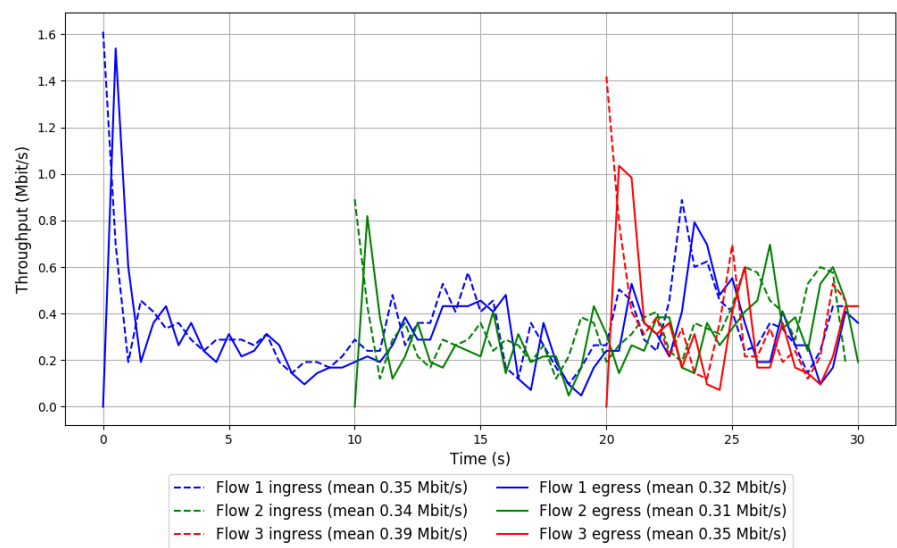
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```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-19 09:18:14
End at: 2018-06-19 09:18:44
Local clock offset: 3.62 ms
Remote clock offset: 15.324 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 41.348 ms
Loss rate: 8.86%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 41.289 ms
Loss rate: 7.96%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 41.436 ms
Loss rate: 10.92%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 40.981 ms
Loss rate: 8.63%
```

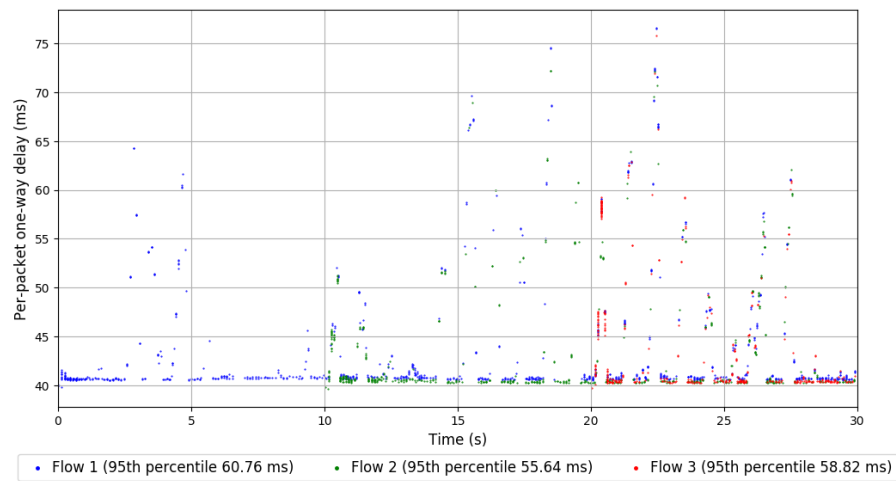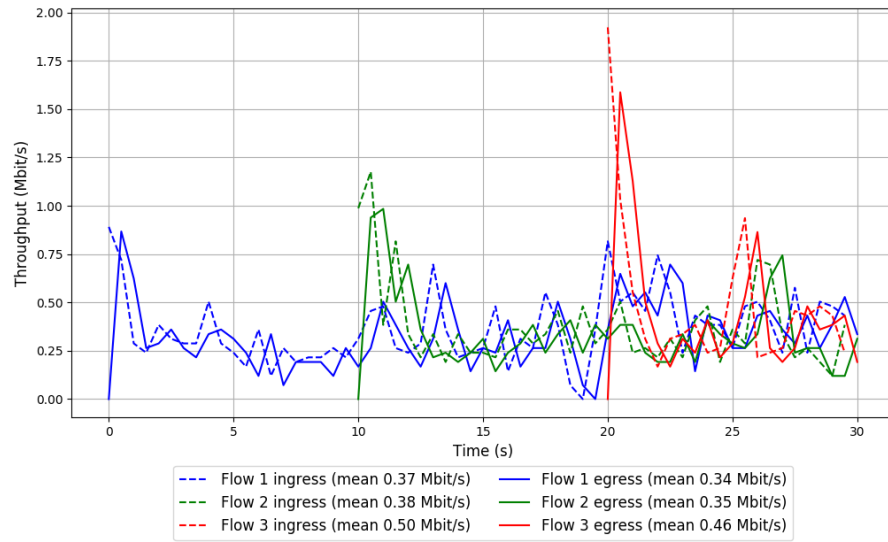Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 09:52:11
End at: 2018-06-19 09:52:41
Local clock offset: 2.008 ms
Remote clock offset: 16.161 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 68.340 ms
Loss rate: 9.41%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 71.913 ms
Loss rate: 9.15%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 72.455 ms
Loss rate: 9.14%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 49.125 ms
Loss rate: 10.59%
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.35 Mbit/s) --- Flow 1 egress (mean 0.32 Mbit/s)
Flow 2 ingress (mean 0.34 Mbit/s) --- Flow 2 egress (mean 0.31 Mbit/s)
Flow 3 ingress (mean 0.39 Mbit/s) --- Flow 3 egress (mean 0.35 Mbit/s)

Flow 1 (95th percentile 71.91 ms) • Flow 2 (95th percentile 72.45 ms) • Flow 3 (95th percentile 49.12 ms)
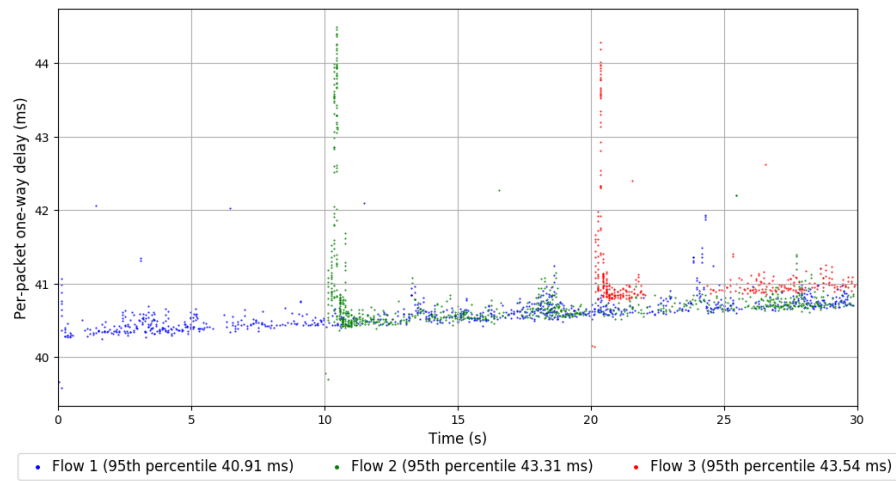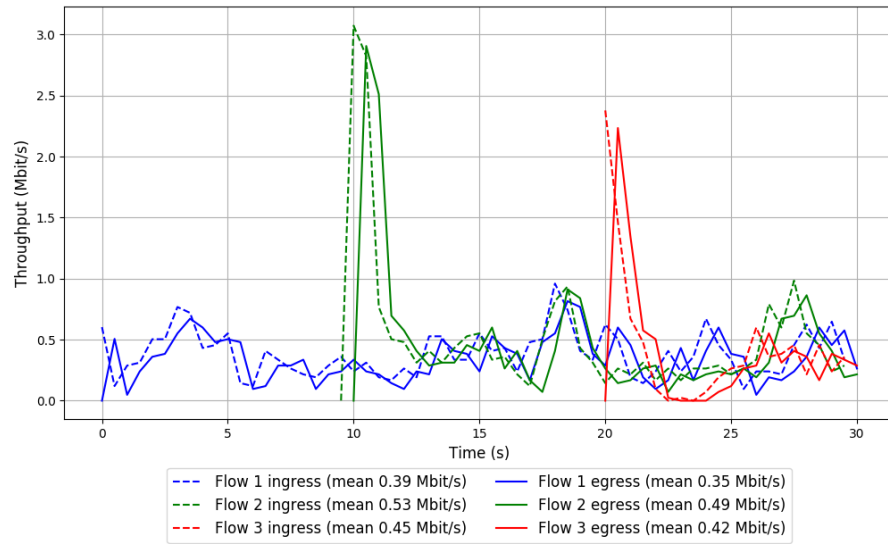
```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 10:23:48
End at: 2018-06-19 10:24:18
Local clock offset: 2.168 ms
Remote clock offset: 16.681 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 58.895 ms
Loss rate: 8.28%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 60.761 ms
Loss rate: 9.04%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 55.638 ms
Loss rate: 7.65%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 58.817 ms
Loss rate: 7.56%
```
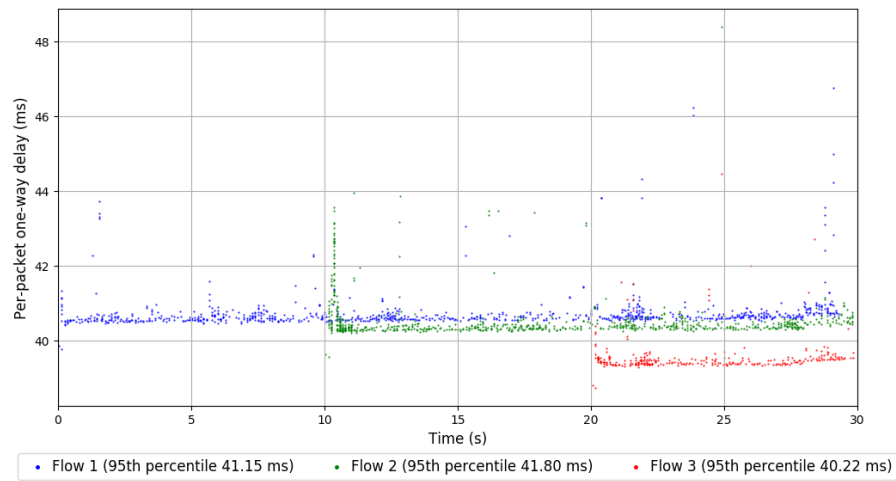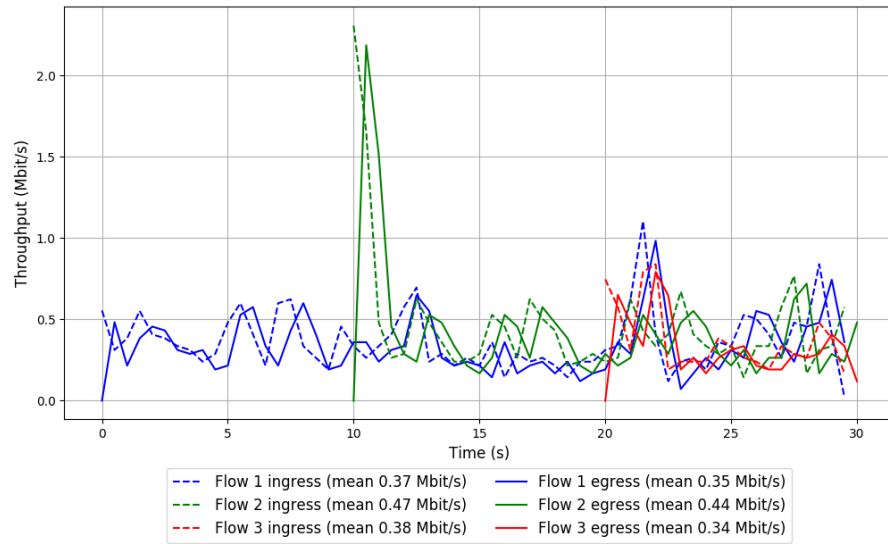
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 10:56:08
End at: 2018-06-19 10:56:38
Local clock offset: 2.042 ms
Remote clock offset: 32.843 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 41.976 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 40.905 ms
Loss rate: 9.10%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 43.315 ms
Loss rate: 8.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 43.544 ms
Loss rate: 8.53%
```

Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-19 11:29:27
End at: 2018-06-19 11:29:57
Local clock offset: 8.574 ms
Remote clock offset: 47.686 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 41.280 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 41.148 ms
Loss rate: 8.46%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 41.804 ms
Loss rate: 7.58%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 40.224 ms
Loss rate: 10.22%
```
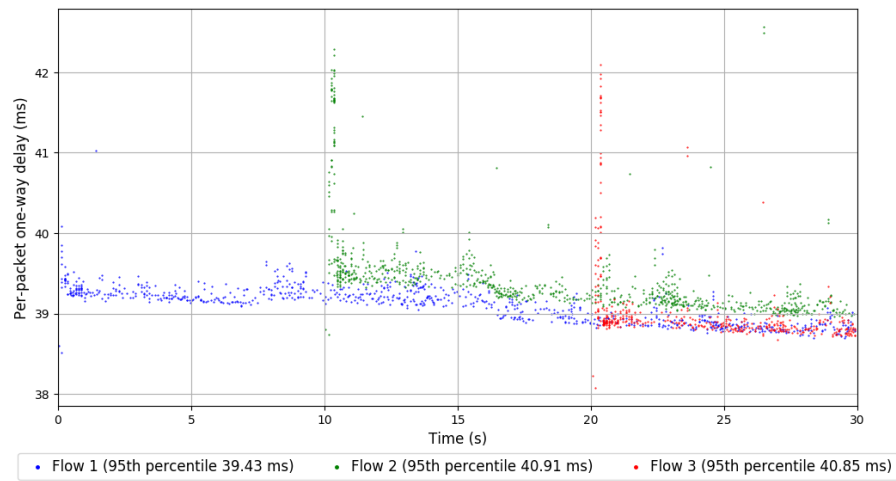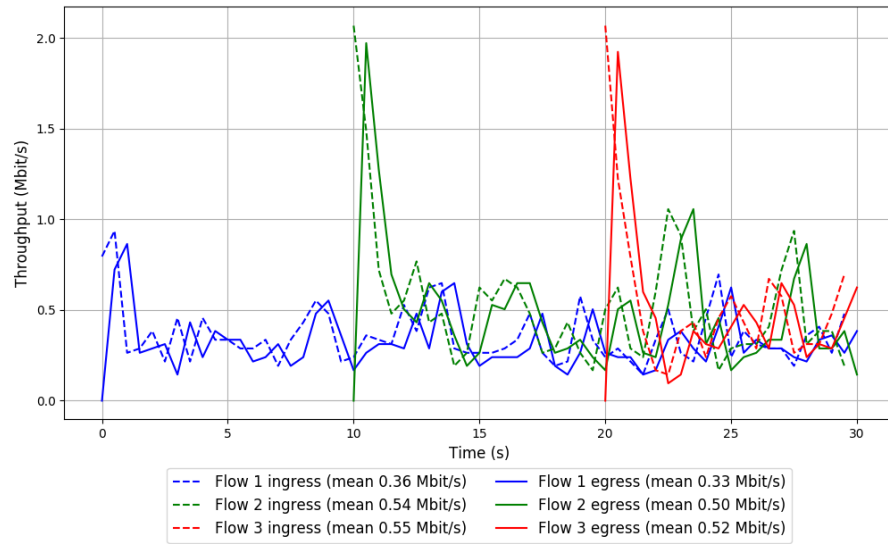
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-19 12:02:49
End at: 2018-06-19 12:03:19
Local clock offset: 8.218 ms
Remote clock offset: 37.2 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 39.922 ms
Loss rate: 7.89%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 39.432 ms
Loss rate: 8.90%
-- Flow 2:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 40.905 ms
Loss rate: 7.54%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 40.851 ms
Loss rate: 6.61%
```
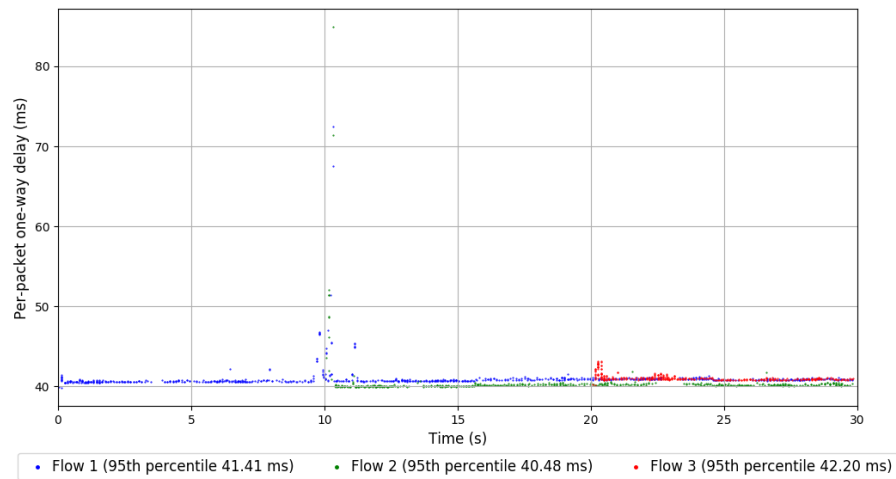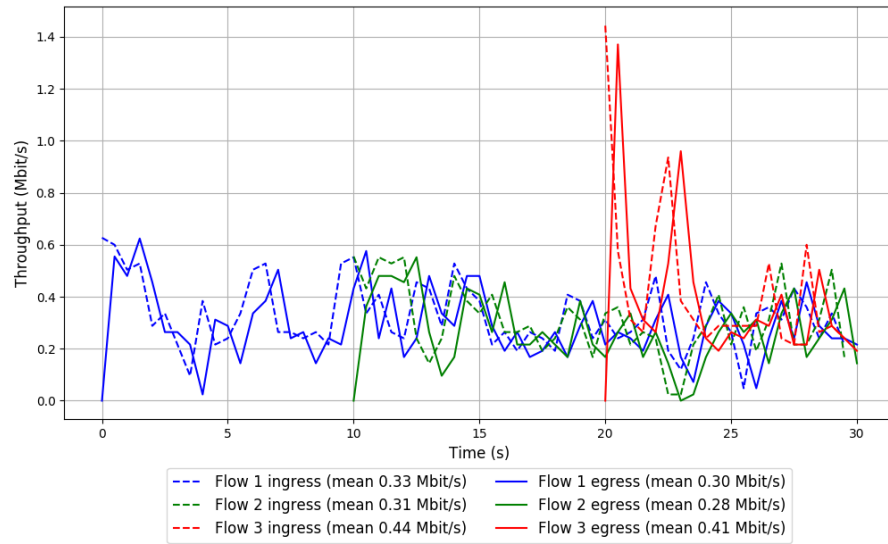
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-19 12:35:41
End at: 2018-06-19 12:36:11
Local clock offset: 8.052 ms
Remote clock offset: 32.491 ms

# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 41.537 ms
Loss rate: 9.95%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 41.407 ms
Loss rate: 10.08%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 40.481 ms
Loss rate: 10.70%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 42.201 ms
Loss rate: 8.58%
```

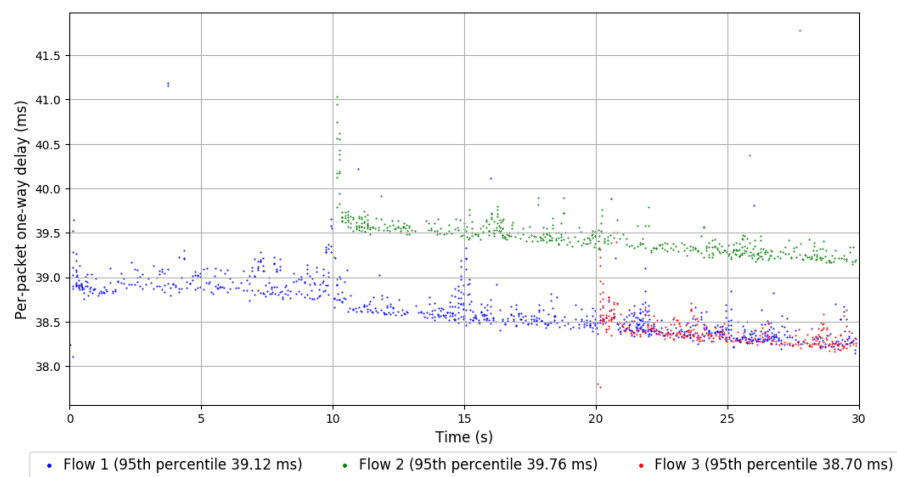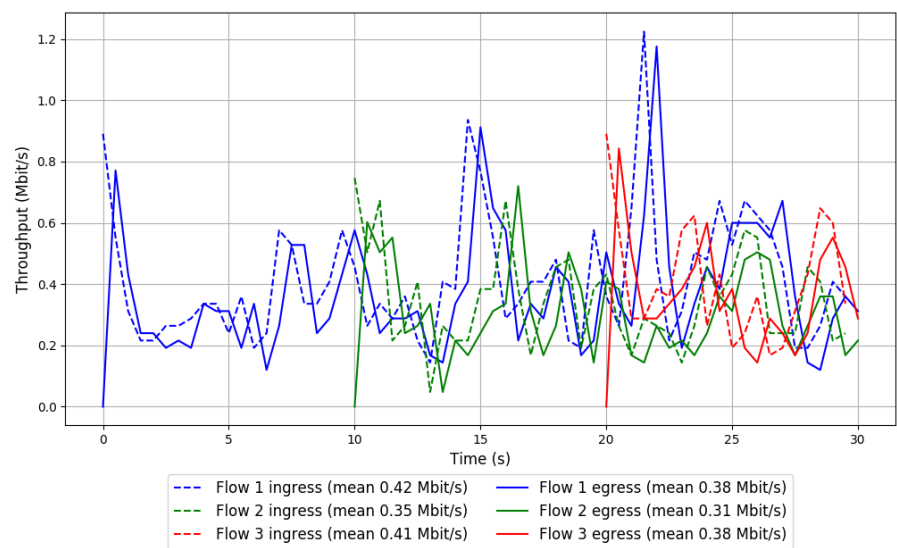# Run 7: Report of TCP Vegas — Data Link

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```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-19 13:09:04
End at: 2018-06-19 13:09:34
Local clock offset: 6.364 ms
Remote clock offset: 24.117 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 39.618 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 39.123 ms
Loss rate: 8.00%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 39.761 ms
Loss rate: 10.38%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 38.697 ms
Loss rate: 8.82%
```
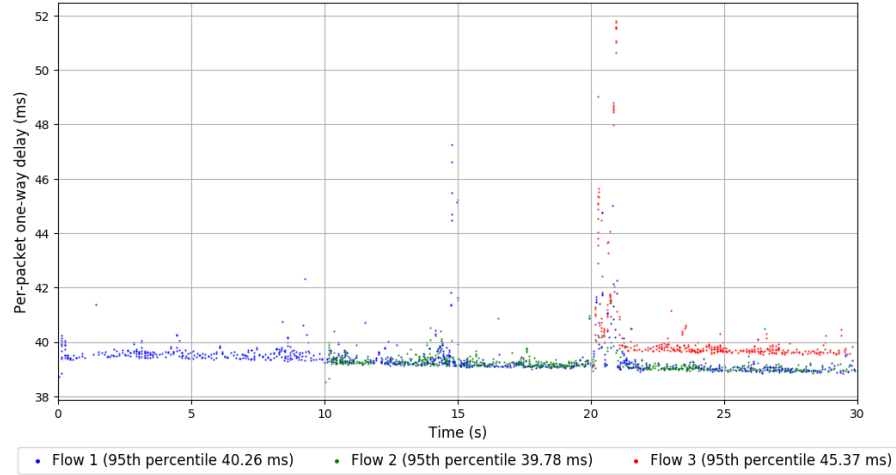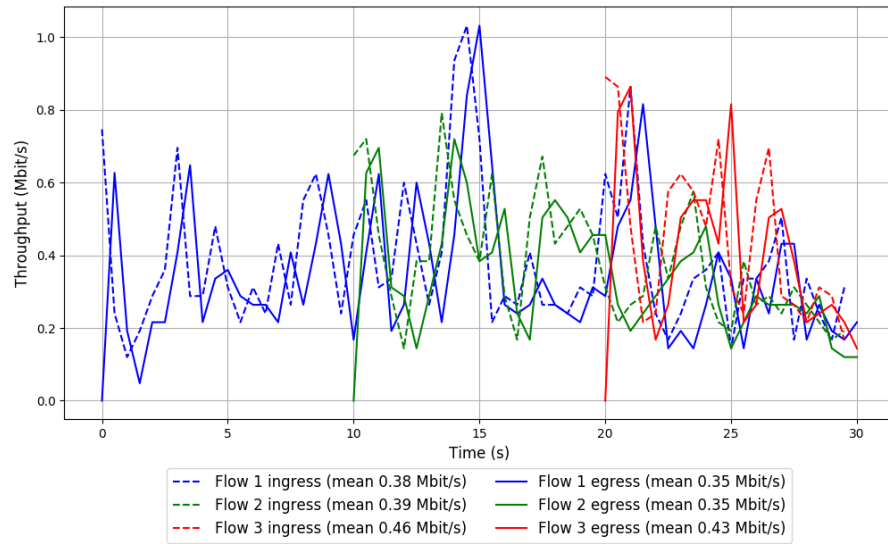
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.42 Mbit/s)   Flow 1 egress (mean 0.38 Mbit/s)
Flow 2 ingress (mean 0.35 Mbit/s)   Flow 2 egress (mean 0.31 Mbit/s)
Flow 3 ingress (mean 0.41 Mbit/s)   Flow 3 egress (mean 0.38 Mbit/s)

Flow 1 (95th percentile 39.12 ms)   Flow 2 (95th percentile 39.76 ms)   Flow 3 (95th percentile 38.70 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-19 13:41:04
End at: 2018-06-19 13:41:34
Local clock offset: 6.998 ms
Remote clock offset: 1.612 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 40.879 ms
Loss rate: 8.50%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 40.263 ms
Loss rate: 8.12%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 39.782 ms
Loss rate: 9.51%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 45.366 ms
Loss rate: 7.73%
```
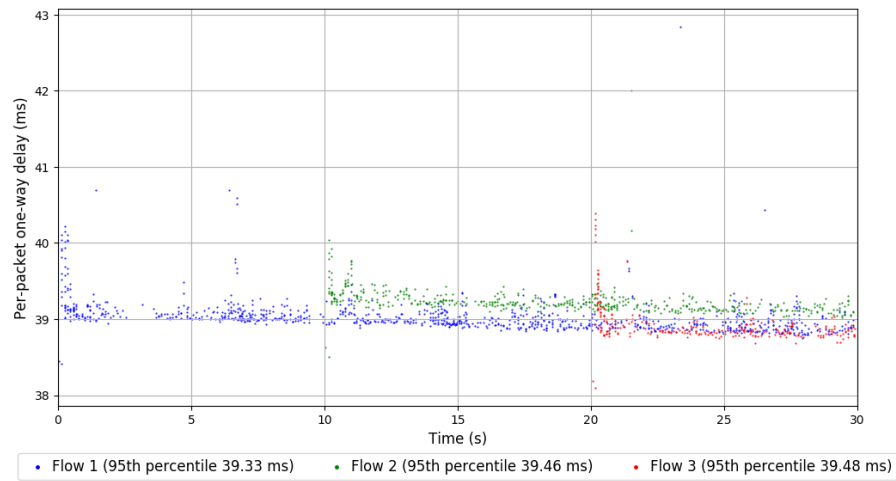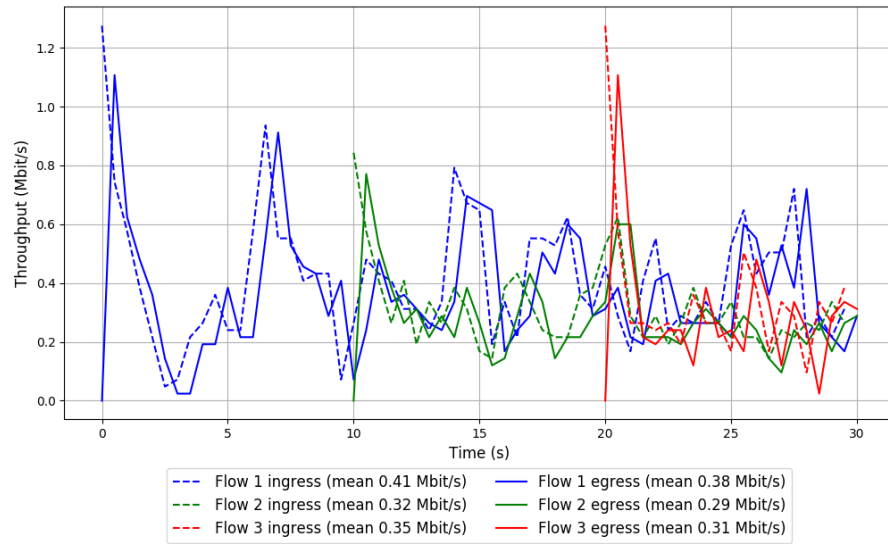
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-19 14:14:20
End at: 2018-06-19 14:14:50
Local clock offset: 8.051 ms
Remote clock offset: -17.643 ms


# Below is generated by plot.py at 2018-06-19 14:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 39.429 ms
Loss rate: 9.53%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 39.327 ms
Loss rate: 9.00%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 39.461 ms
Loss rate: 9.68%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 39.480 ms
Loss rate: 11.15%
```
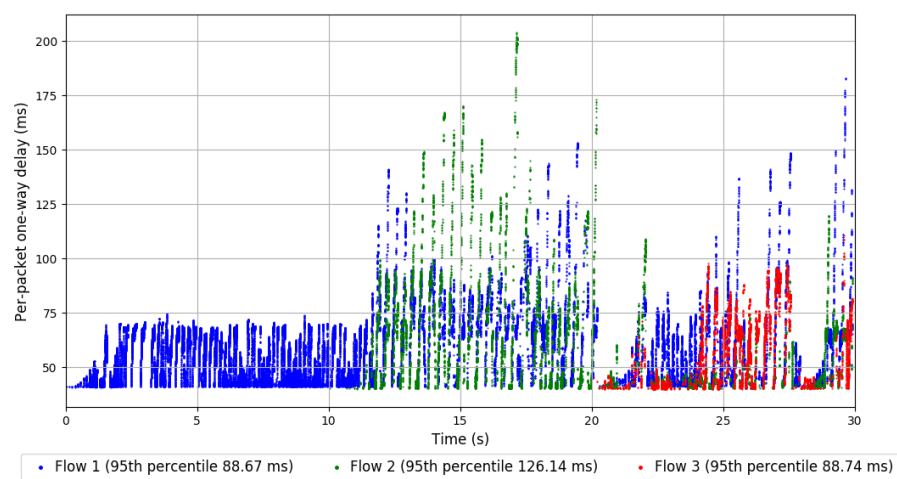
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-06-19 09:08:35
End at: 2018-06-19 09:09:05
Local clock offset: 5.149 ms
Remote clock offset: 9.469 ms


# Below is generated by plot.py at 2018-06-19 14:37:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.74 Mbit/s
95th percentile per-packet one-way delay: 95.202 ms
Loss rate: 33.93%
-- Flow 1:
Average throughput: 21.52 Mbit/s
95th percentile per-packet one-way delay: 88.674 ms
Loss rate: 30.10%
-- Flow 2:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 126.141 ms
Loss rate: 44.42%
-- Flow 3:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 88.737 ms
Loss rate: 38.03%
```
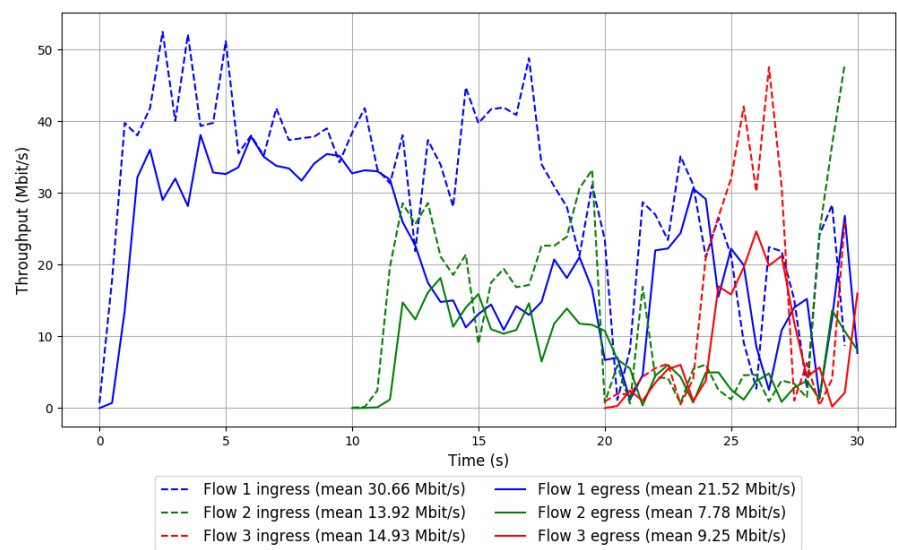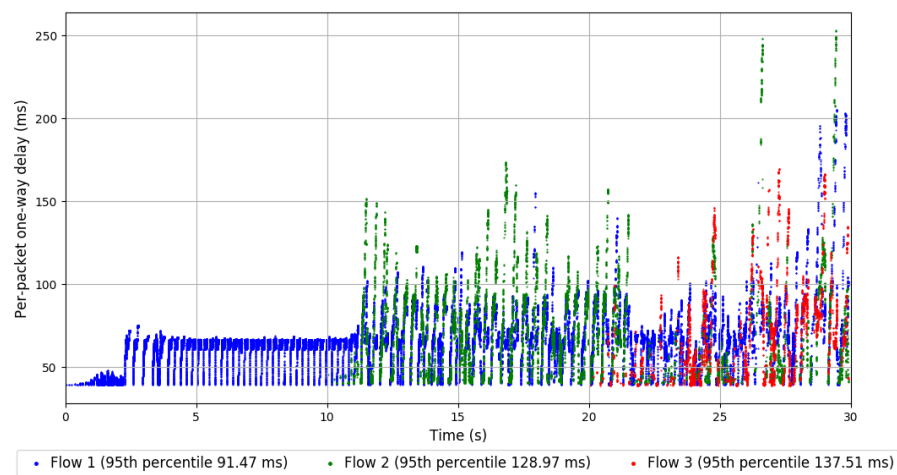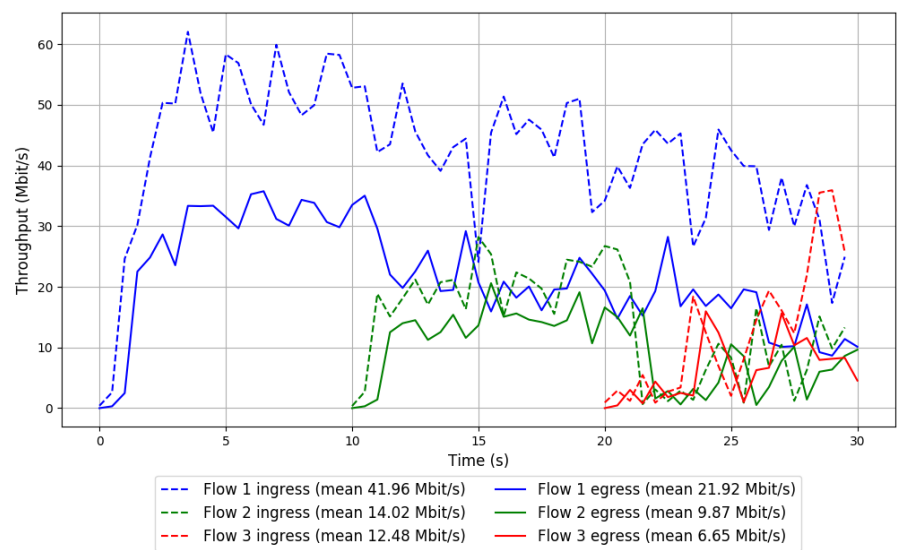
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-06-19 09:42:33
End at: 2018-06-19 09:43:03
Local clock offset: 2.118 ms
Remote clock offset: 18.06 ms

# Below is generated by plot.py at 2018-06-19 14:37:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 104.511 ms
Loss rate: 44.83%
-- Flow 1:
Average throughput: 21.92 Mbit/s
95th percentile per-packet one-way delay: 91.475 ms
Loss rate: 47.92%
-- Flow 2:
Average throughput: 9.87 Mbit/s
95th percentile per-packet one-way delay: 128.969 ms
Loss rate: 30.02%
-- Flow 3:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 137.510 ms
Loss rate: 46.93%
```

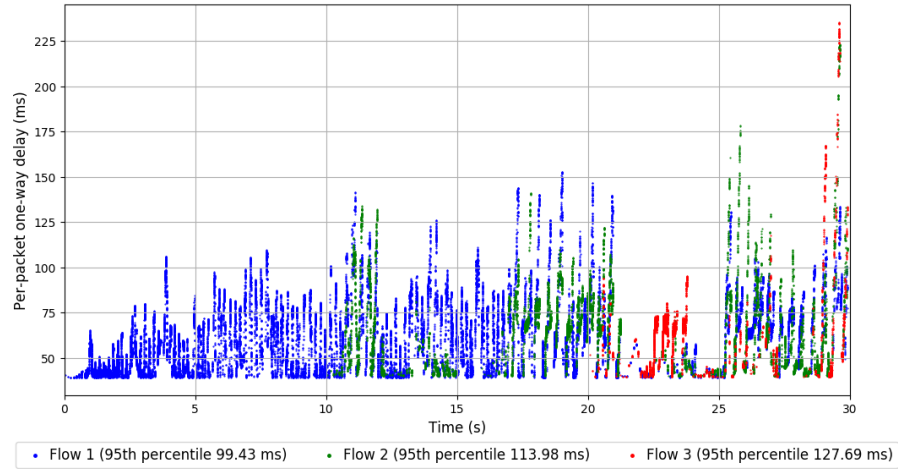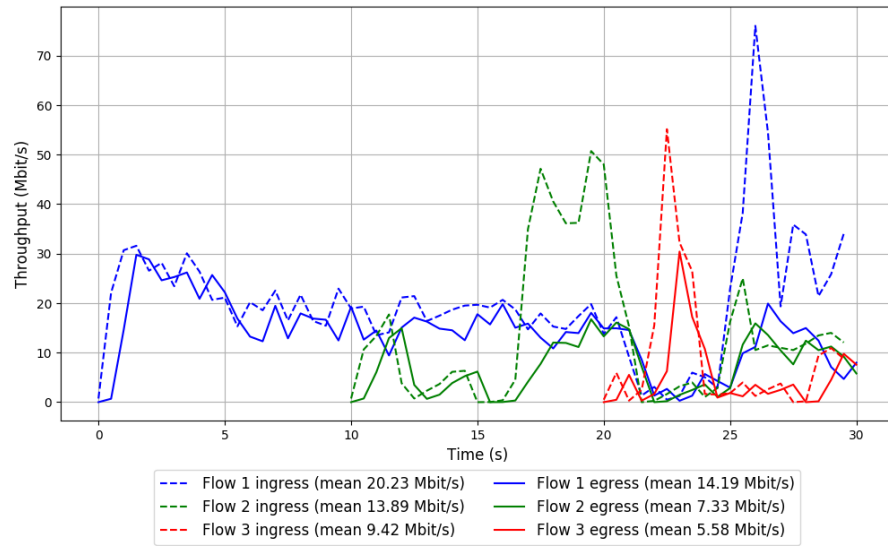Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-06-19 10:14:16
End at: 2018-06-19 10:14:46
Local clock offset: 2.114 ms
Remote clock offset: 16.812 ms


# Below is generated by plot.py at 2018-06-19 14:37:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.90 Mbit/s
95th percentile per-packet one-way delay: 103.812 ms
Loss rate: 35.99%
-- Flow 1:
Average throughput: 14.19 Mbit/s
95th percentile per-packet one-way delay: 99.429 ms
Loss rate: 30.05%
-- Flow 2:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 113.981 ms
Loss rate: 47.50%
-- Flow 3:
Average throughput: 5.58 Mbit/s
95th percentile per-packet one-way delay: 127.695 ms
Loss rate: 40.47%
```
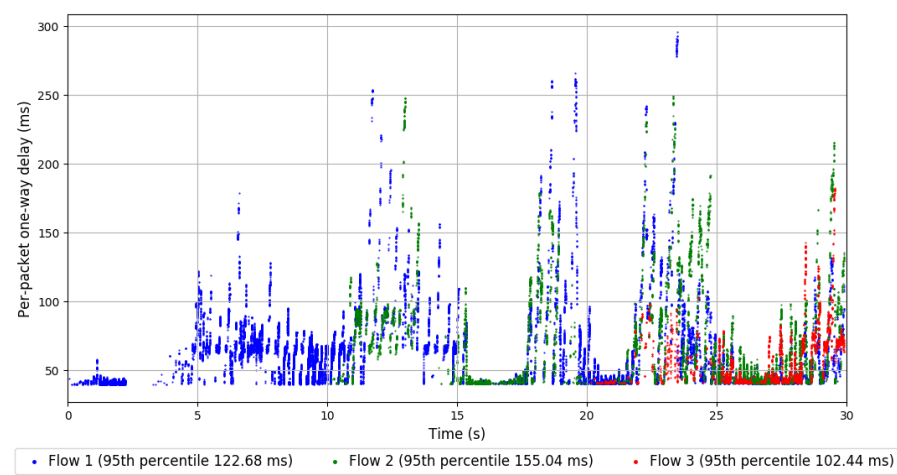
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 20.23 Mbit/s) Flow 1 egress (mean 14.19 Mbit/s)
Flow 2 ingress (mean 13.89 Mbit/s) Flow 2 egress (mean 7.33 Mbit/s)
Flow 3 ingress (mean 9.42 Mbit/s) Flow 3 egress (mean 5.58 Mbit/s)

Flow 1 (95th percentile 99.43 ms) Flow 2 (95th percentile 113.98 ms) Flow 3 (95th percentile 127.69 ms)

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```
Run 4: Statistics of Verus

Start at: 2018-06-19 10:47:28
End at: 2018-06-19 10:47:58
Local clock offset: 2.181 ms
Remote clock offset: 22.13 ms


# Below is generated by plot.py at 2018-06-19 14:37:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.74 Mbit/s
95th percentile per-packet one-way delay: 135.505 ms
Loss rate: 52.09%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 122.679 ms
Loss rate: 51.75%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 155.040 ms
Loss rate: 49.30%
-- Flow 3:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 102.436 ms
Loss rate: 60.19%
```
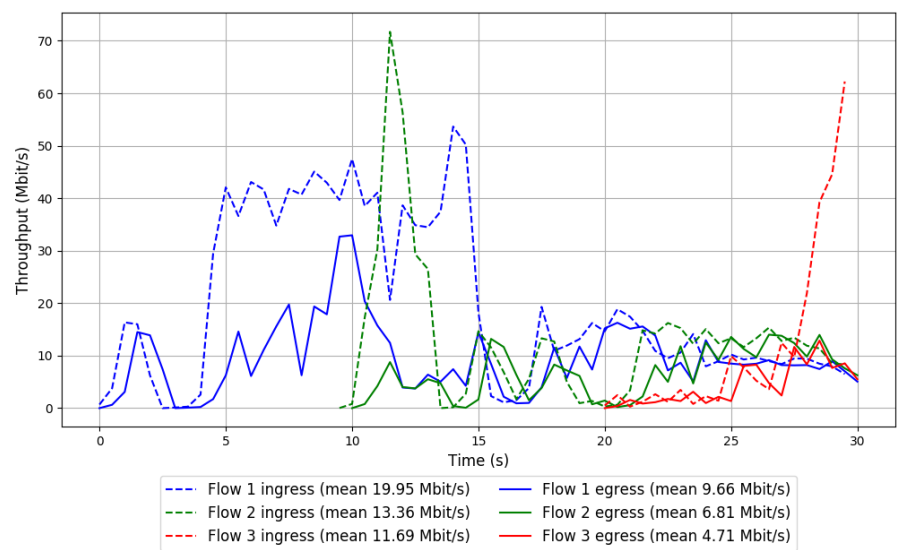
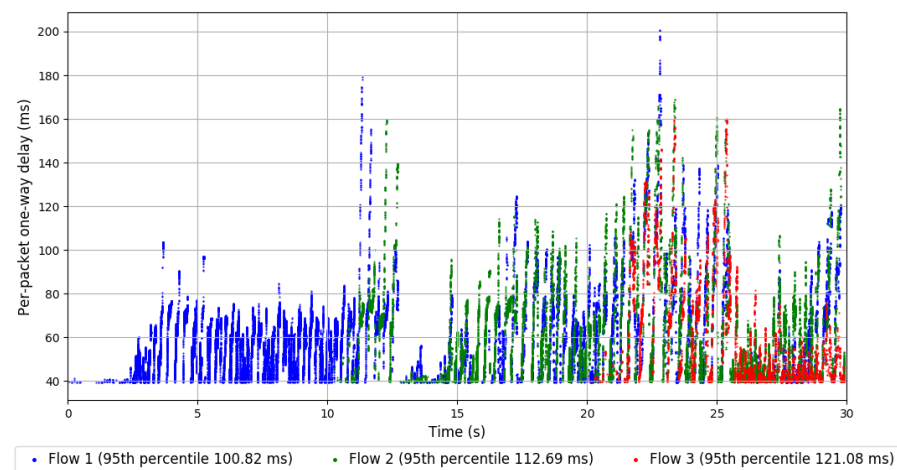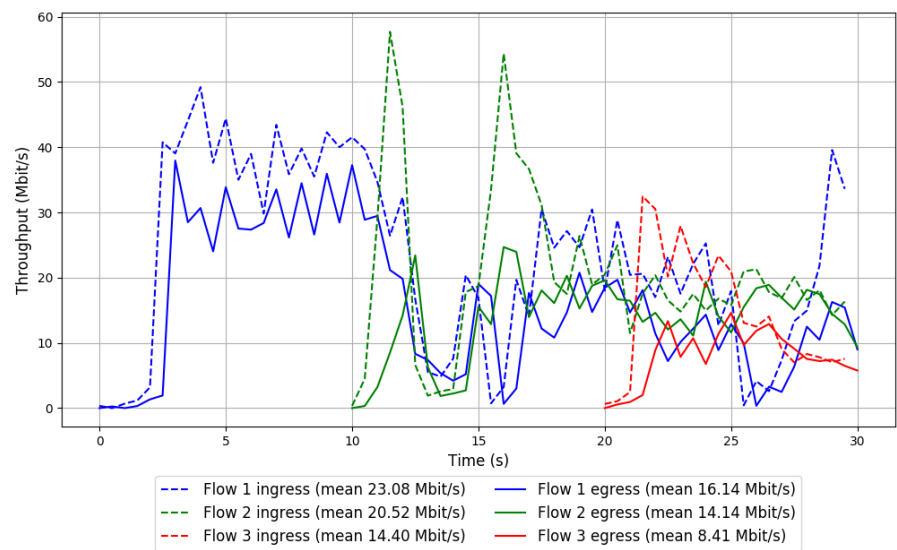Run 4: Report of Verus — Data Link

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```
Run 5: Statistics of Verus

Start at: 2018-06-19 11:20:25
End at: 2018-06-19 11:20:55
Local clock offset: 7.634 ms
Remote clock offset: 44.693 ms


# Below is generated by plot.py at 2018-06-19 14:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 107.649 ms
Loss rate: 32.26%
-- Flow 1:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 100.819 ms
Loss rate: 30.71%
-- Flow 2:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 112.693 ms
Loss rate: 31.37%
-- Flow 3:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 121.083 ms
Loss rate: 42.25%
```

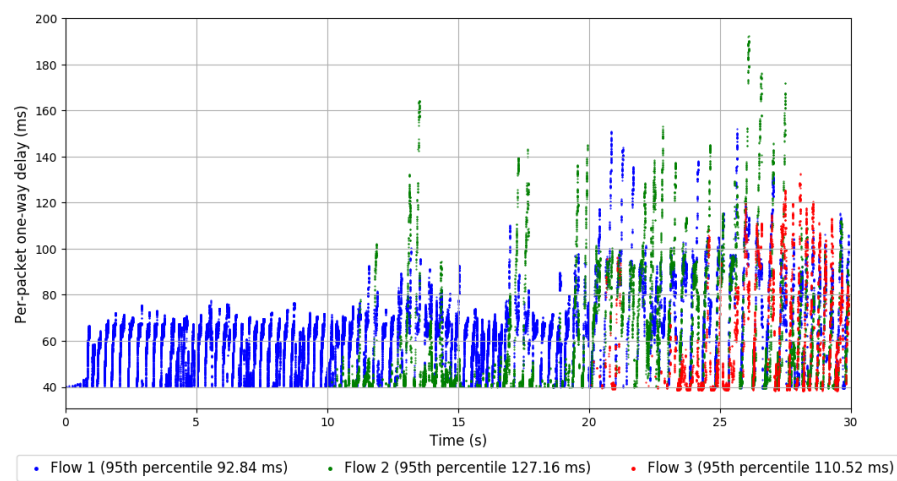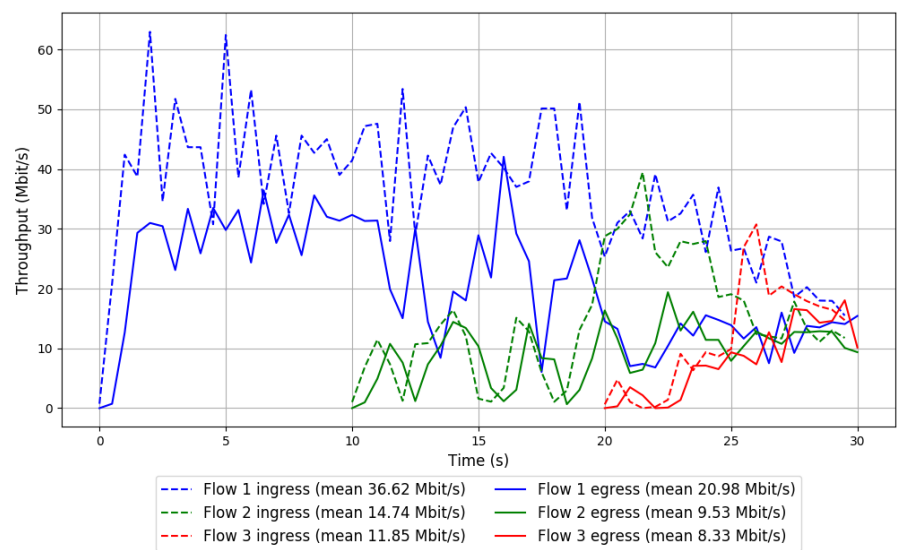## Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-06-19 11:53:18
End at: 2018-06-19 11:53:48
Local clock offset: 8.058 ms
Remote clock offset: 55.023 ms


# Below is generated by plot.py at 2018-06-19 14:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 104.375 ms
Loss rate: 40.29%
-- Flow 1:
Average throughput: 20.98 Mbit/s
95th percentile per-packet one-way delay: 92.836 ms
Loss rate: 42.65%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 127.158 ms
Loss rate: 35.72%
-- Flow 3:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 110.524 ms
Loss rate: 29.74%
```

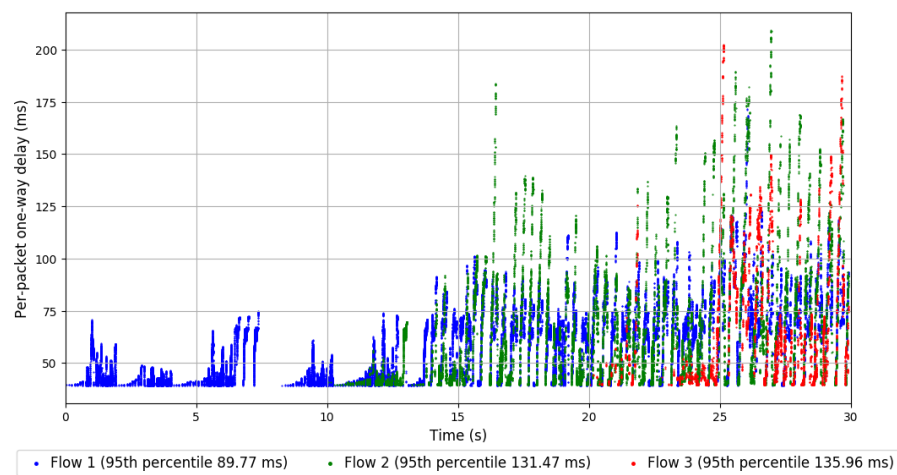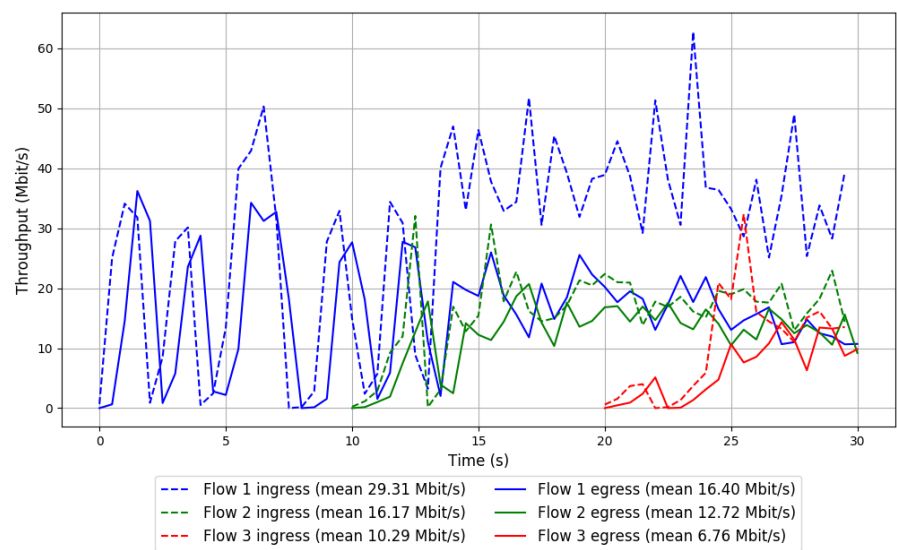Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-06-19 12:26:20
End at: 2018-06-19 12:26:50
Local clock offset: 8.384 ms
Remote clock offset: 25.834 ms


# Below is generated by plot.py at 2018-06-19 14:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.09 Mbit/s
95th percentile per-packet one-way delay: 110.072 ms
Loss rate: 37.86%
-- Flow 1:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 89.774 ms
Loss rate: 44.21%
-- Flow 2:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 131.465 ms
Loss rate: 21.42%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 135.964 ms
Loss rate: 35.05%
```

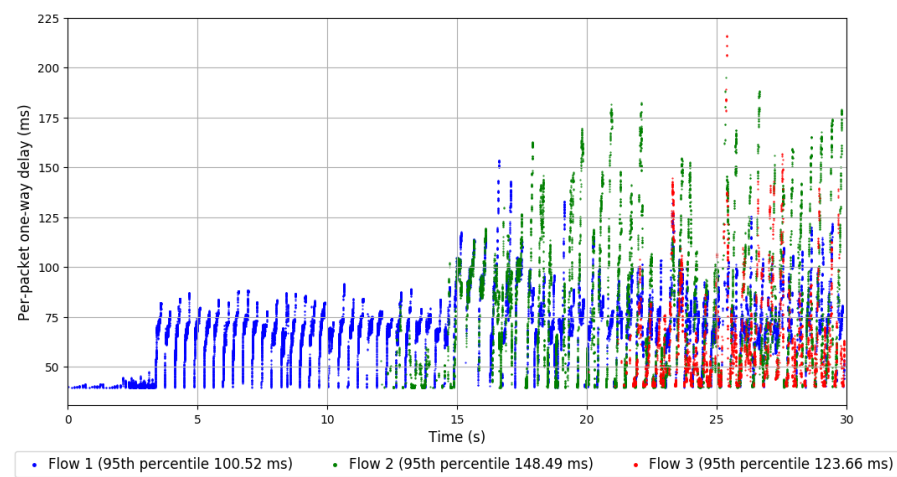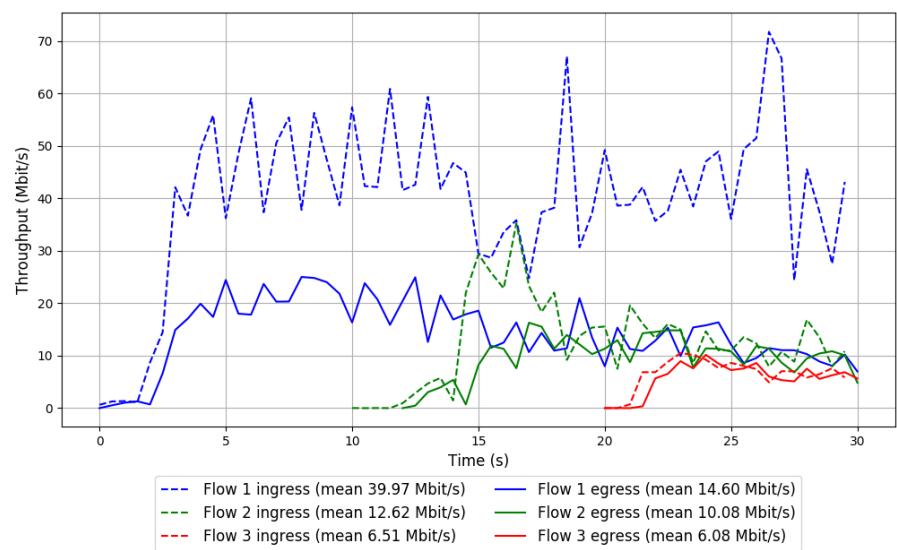Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-06-19 12:59:43
End at: 2018-06-19 13:00:13
Local clock offset: 7.474 ms
Remote clock offset: 38.323 ms


# Below is generated by plot.py at 2018-06-19 14:38:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.59 Mbit/s
95th percentile per-packet one-way delay: 118.705 ms
Loss rate: 55.51%
-- Flow 1:
Average throughput: 14.60 Mbit/s
95th percentile per-packet one-way delay: 100.524 ms
Loss rate: 63.65%
-- Flow 2:
Average throughput: 10.08 Mbit/s
95th percentile per-packet one-way delay: 148.493 ms
Loss rate: 29.05%
-- Flow 3:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 123.657 ms
Loss rate: 7.83%
```

Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 39.97 Mbit/s) Flow 1 egress (mean 14.60 Mbit/s)
Flow 2 ingress (mean 12.62 Mbit/s) Flow 2 egress (mean 10.08 Mbit/s)
Flow 3 ingress (mean 6.51 Mbit/s) Flow 3 egress (mean 6.08 Mbit/s)

• Flow 1 (95th percentile 100.52 ms) • Flow 2 (95th percentile 148.49 ms) • Flow 3 (95th percentile 123.66 ms)

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```
Run 9: Statistics of Verus

Start at: 2018-06-19 13:31:19
End at: 2018-06-19 13:31:49
Local clock offset: 5.344 ms
Remote clock offset: 9.296 ms


# Below is generated by plot.py at 2018-06-19 14:38:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 111.019 ms
Loss rate: 61.52%
-- Flow 1:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 97.392 ms
Loss rate: 52.05%
-- Flow 2:
Average throughput: 13.73 Mbit/s
95th percentile per-packet one-way delay: 103.836 ms
Loss rate: 65.84%
-- Flow 3:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 154.846 ms
Loss rate: 68.71%
```
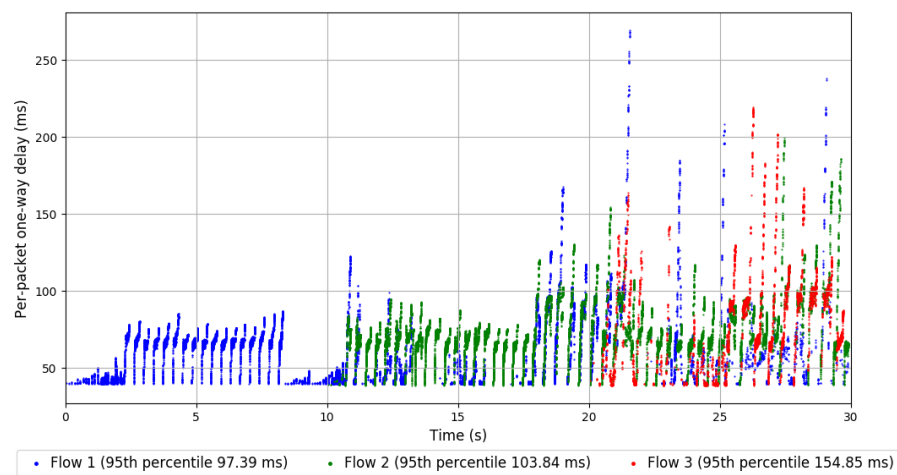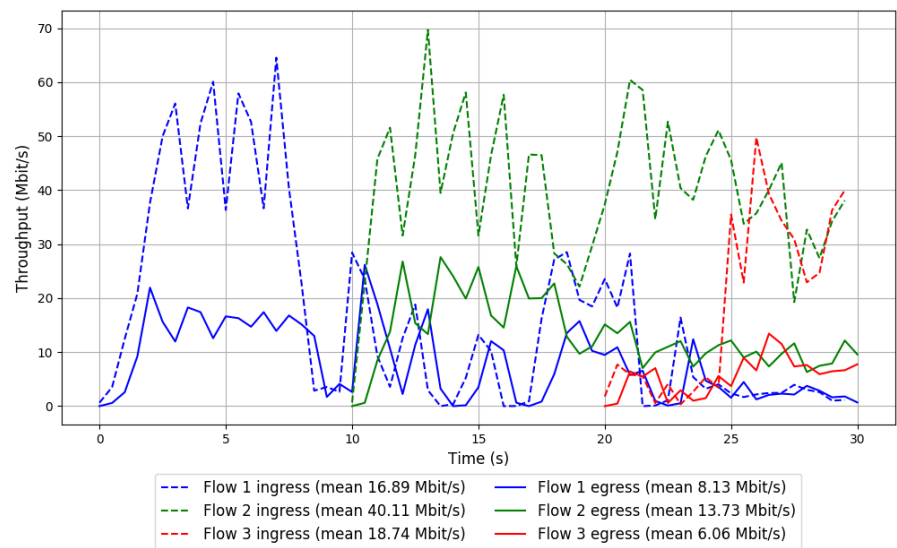
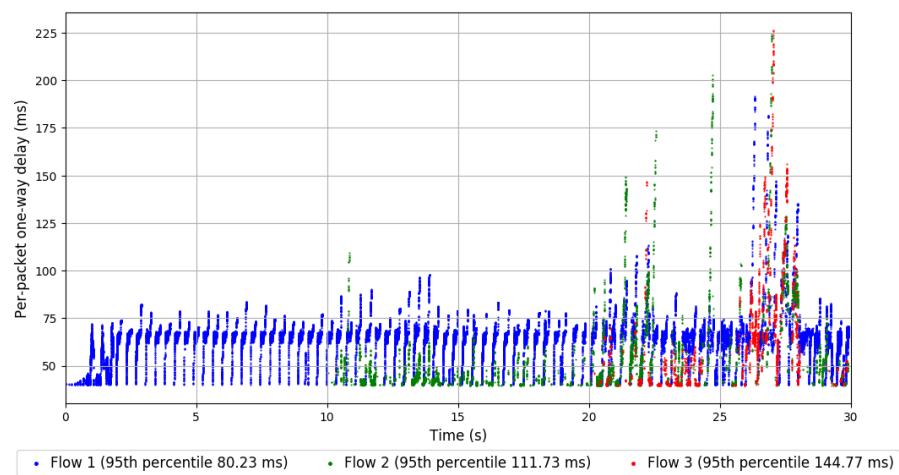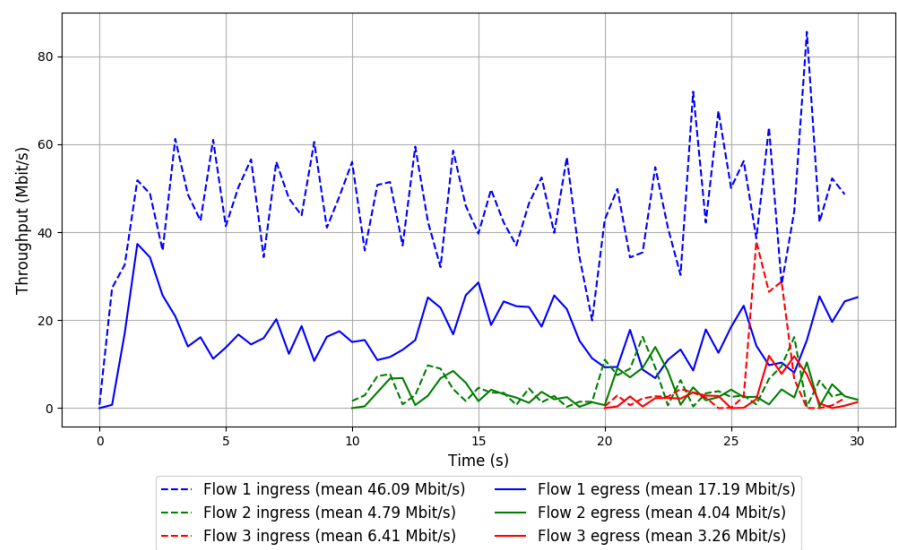## Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-06-19 14:04:28
End at: 2018-06-19 14:04:58
Local clock offset: 8.028 ms
Remote clock offset: -12.911 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.94 Mbit/s
95th percentile per-packet one-way delay: 86.798 ms
Loss rate: 59.34%
-- Flow 1:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 80.232 ms
Loss rate: 62.77%
-- Flow 2:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 111.734 ms
Loss rate: 16.15%
-- Flow 3:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 144.772 ms
Loss rate: 49.83%
```

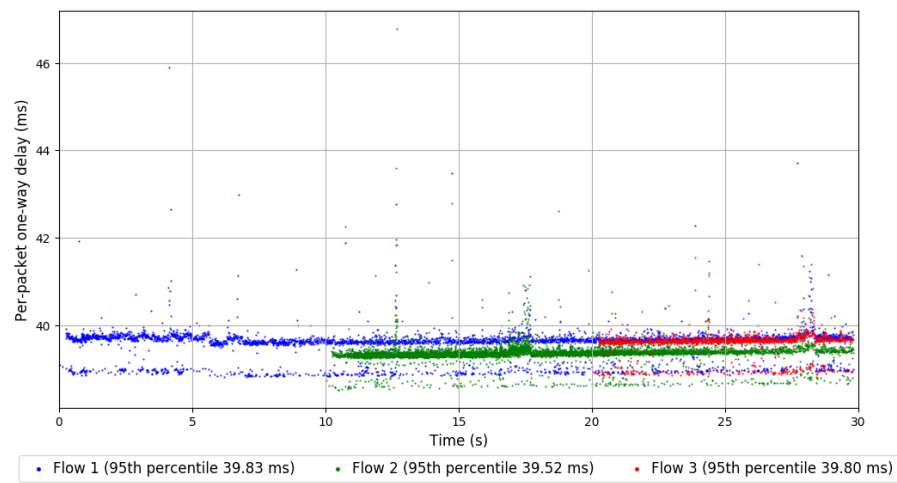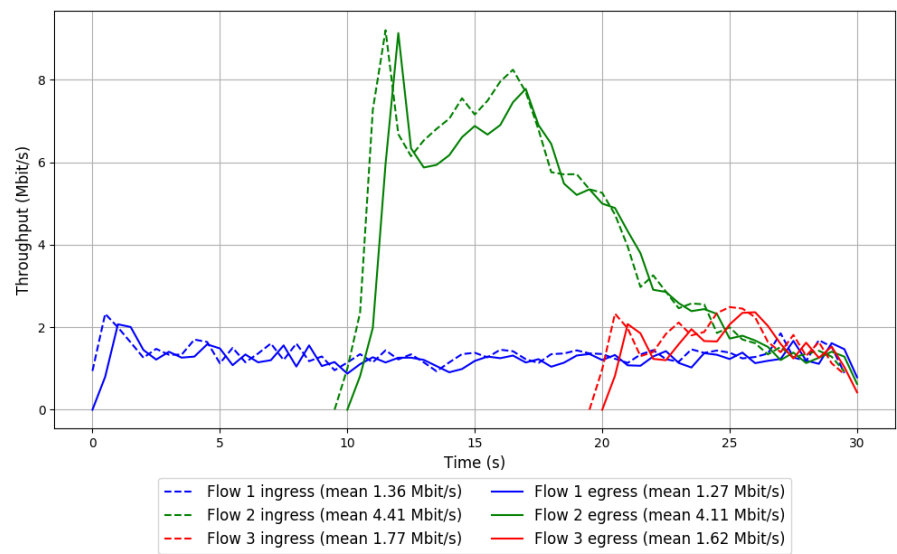# Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-19 09:31:52
End at: 2018-06-19 09:32:22
Local clock offset: 2.592 ms
Remote clock offset: 20.082 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 39.774 ms
Loss rate: 7.60%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 39.831 ms
Loss rate: 7.14%
-- Flow 2:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 39.516 ms
Loss rate: 7.40%
-- Flow 3:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 39.804 ms
Loss rate: 9.66%
```

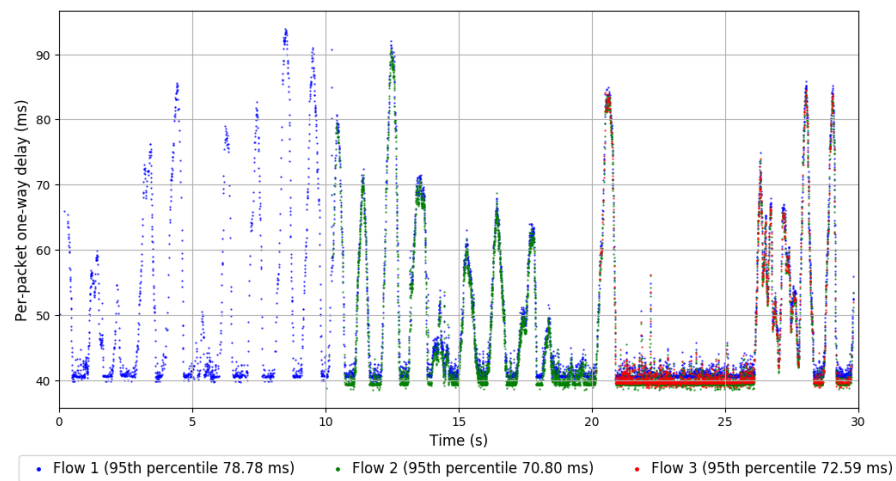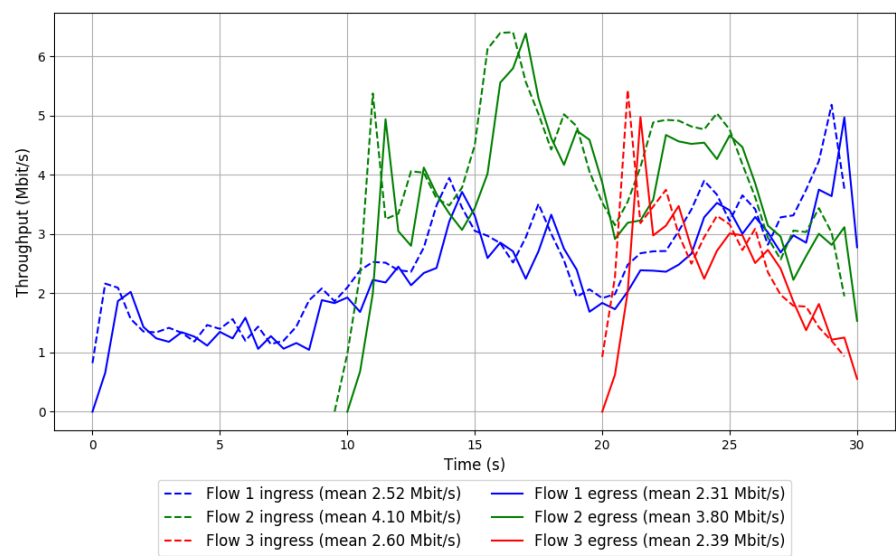# Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-19 10:05:18
End at: 2018-06-19 10:05:48
Local clock offset: 1.895 ms
Remote clock offset: 16.451 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 75.827 ms
Loss rate: 8.28%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 78.780 ms
Loss rate: 8.55%
-- Flow 2:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 70.798 ms
Loss rate: 7.85%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 72.590 ms
Loss rate: 8.86%
```

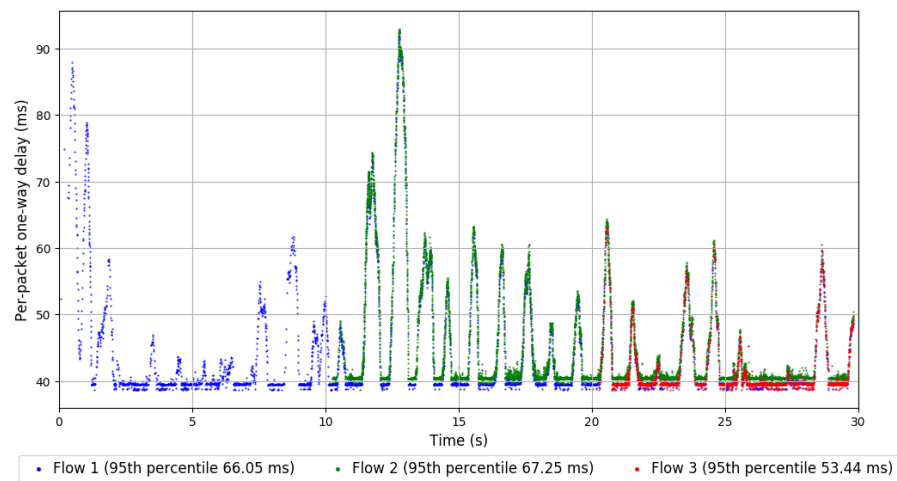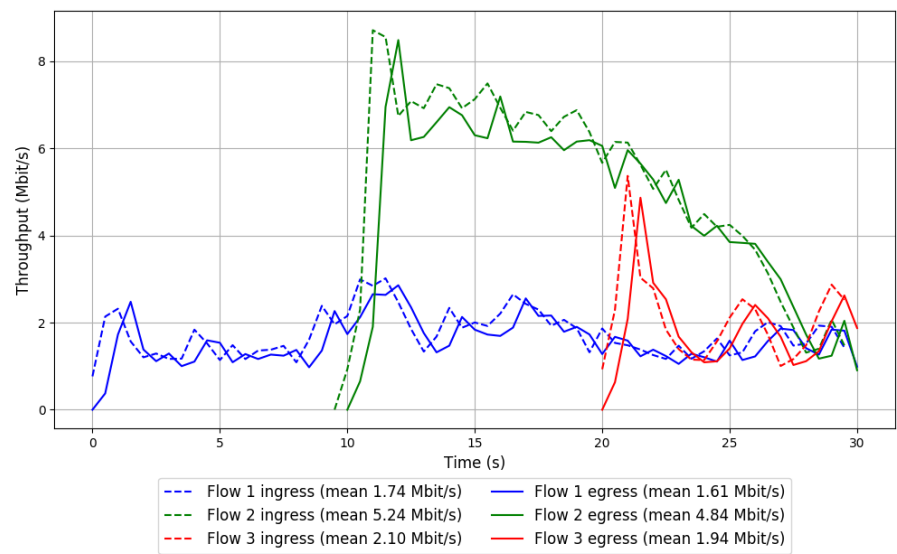Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 10:37:17
End at: 2018-06-19 10:37:47
Local clock offset: 2.161 ms
Remote clock offset: 17.472 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 64.986 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 66.050 ms
Loss rate: 8.13%
-- Flow 2:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 67.250 ms
Loss rate: 8.22%
-- Flow 3:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 53.440 ms
Loss rate: 8.87%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.74 Mbit/s) --- Flow 1 egress (mean 1.61 Mbit/s)
Flow 2 ingress (mean 5.24 Mbit/s) --- Flow 2 egress (mean 4.84 Mbit/s)
Flow 3 ingress (mean 2.10 Mbit/s) --- Flow 3 egress (mean 1.94 Mbit/s)

Flow 1 (95th percentile 66.05 ms) • Flow 2 (95th percentile 67.25 ms) • Flow 3 (95th percentile 53.44 ms)
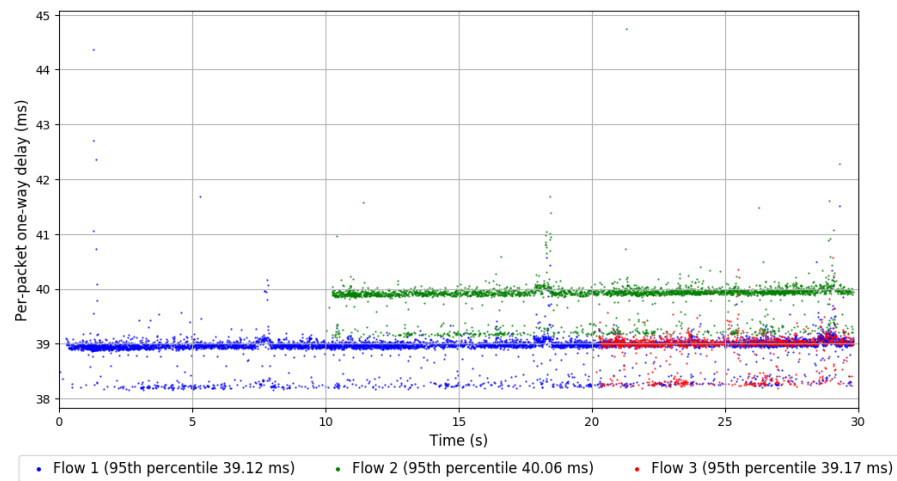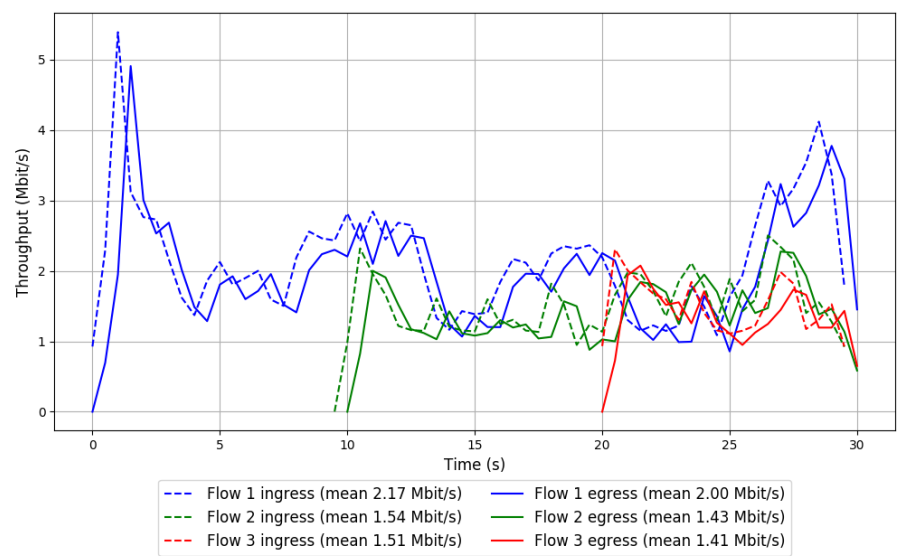
```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 11:10:22
End at: 2018-06-19 11:10:52
Local clock offset: 5.648 ms
Remote clock offset: 41.082 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 39.982 ms
Loss rate: 8.05%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 39.116 ms
Loss rate: 8.15%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 40.064 ms
Loss rate: 7.92%
-- Flow 3:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 39.167 ms
Loss rate: 7.85%
```

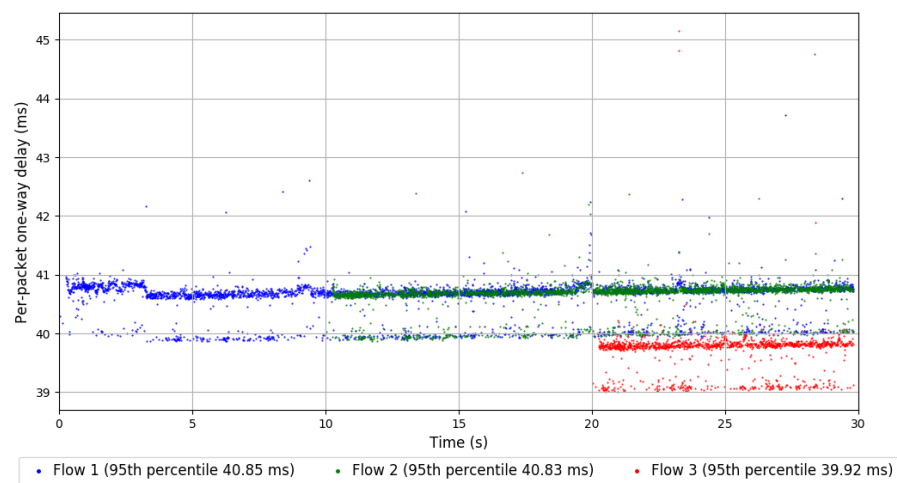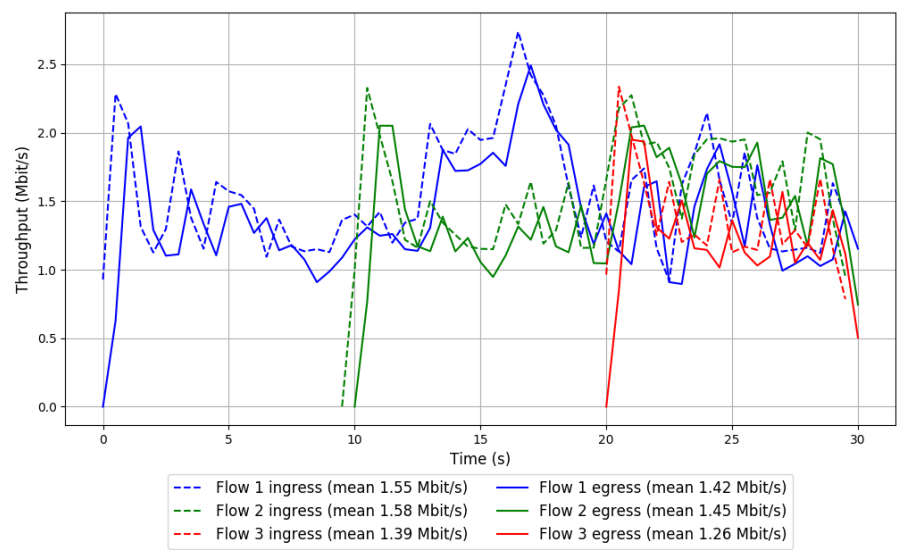Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-19 11:43:00
End at: 2018-06-19 11:43:30
Local clock offset: 8.096 ms
Remote clock offset: 51.893 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 40.838 ms
Loss rate: 8.95%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 40.851 ms
Loss rate: 8.78%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 40.833 ms
Loss rate: 8.64%
-- Flow 3:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 39.922 ms
Loss rate: 10.21%
```

Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-19 12:16:05
End at: 2018-06-19 12:16:35
Local clock offset: 8.09 ms
Remote clock offset: 28.7 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.89 Mbit/s
95th percentile per-packet one-way delay: 39.907 ms
Loss rate: 8.10%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 39.503 ms
Loss rate: 8.24%
-- Flow 2:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 39.402 ms
Loss rate: 7.93%
-- Flow 3:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 40.039 ms
Loss rate: 8.09%
```
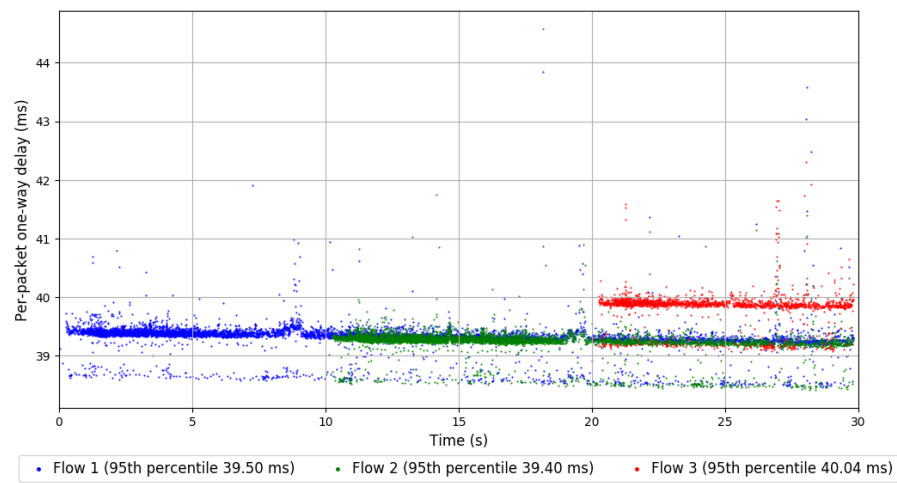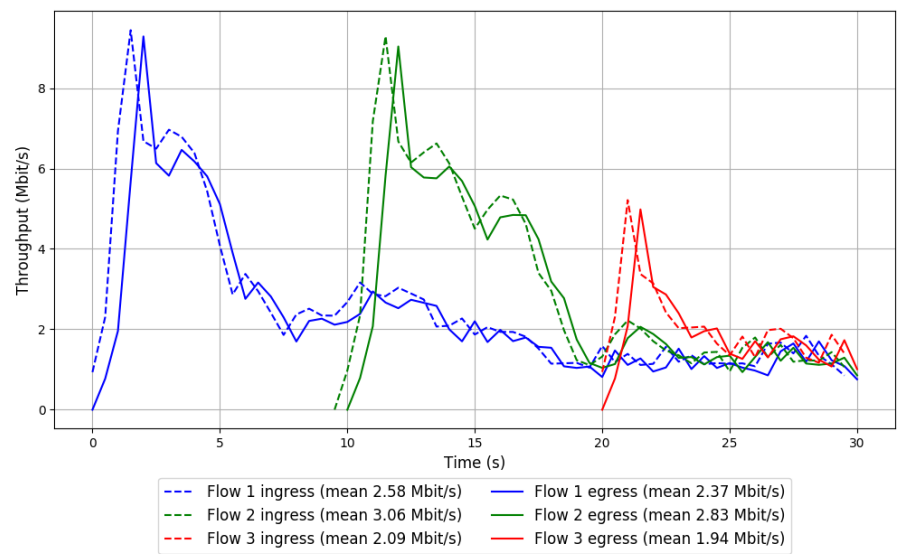
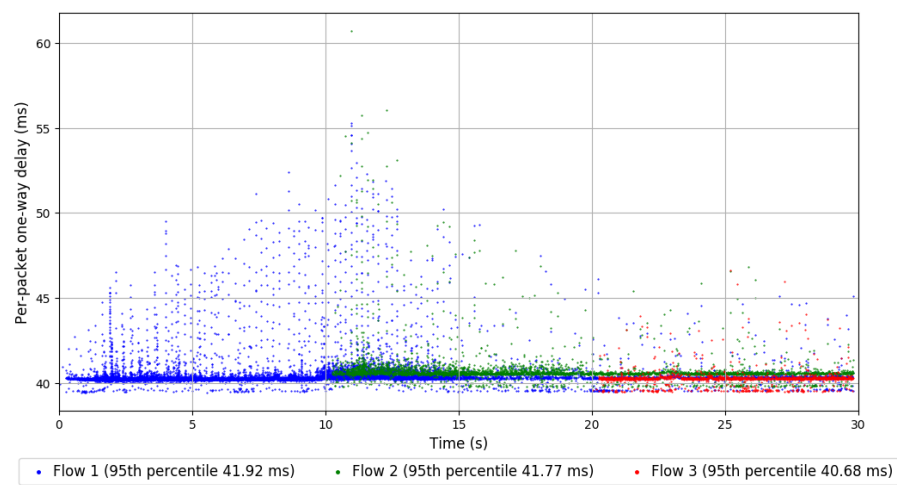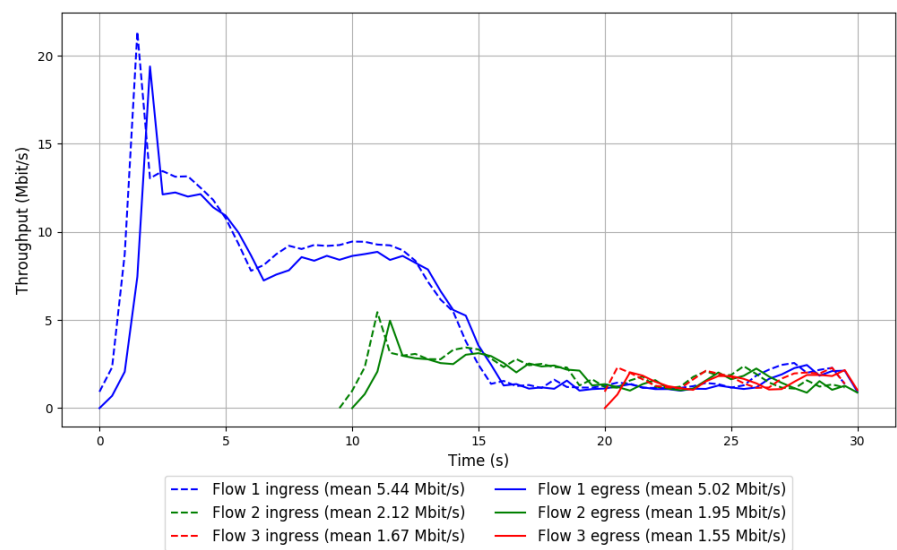Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-19 12:49:07
End at: 2018-06-19 12:49:37
Local clock offset: 7.452 ms
Remote clock offset: 36.897 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 41.719 ms
Loss rate: 8.20%
-- Flow 1:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 41.922 ms
Loss rate: 8.09%
-- Flow 2:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 41.775 ms
Loss rate: 8.52%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 40.680 ms
Loss rate: 8.42%
```

Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-19 13:22:09
End at: 2018-06-19 13:22:39
Local clock offset: 5.818 ms
Remote clock offset: 13.02 ms

# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 41.786 ms
Loss rate: 7.95%
-- Flow 1:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 42.496 ms
Loss rate: 8.10%
-- Flow 2:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 40.852 ms
Loss rate: 7.68%
-- Flow 3:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 41.005 ms
Loss rate: 8.67%
```
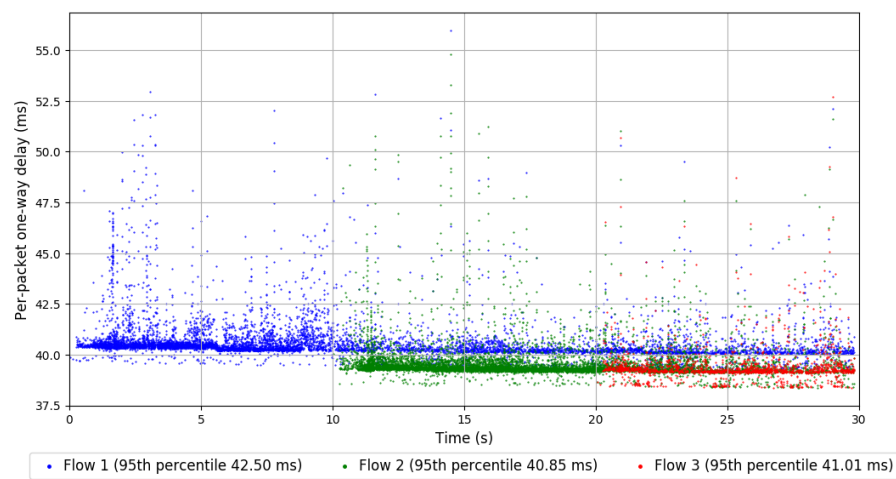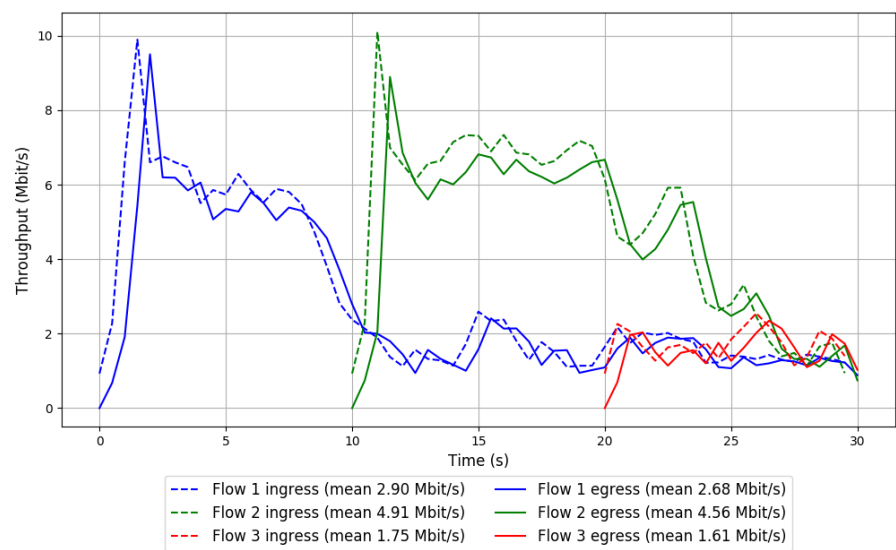
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 2.90 Mbit/s) ---- Flow 1 egress (mean 2.68 Mbit/s)
Flow 2 ingress (mean 4.91 Mbit/s) ---- Flow 2 egress (mean 4.56 Mbit/s)
Flow 3 ingress (mean 1.75 Mbit/s) ---- Flow 3 egress (mean 1.61 Mbit/s)

Flow 1 (95th percentile 42.50 ms)   Flow 2 (95th percentile 40.85 ms)   Flow 3 (95th percentile 41.01 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-19 13:54:08
End at: 2018-06-19 13:54:38
Local clock offset: 7.632 ms
Remote clock offset: -7.89 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 40.345 ms
Loss rate: 8.30%
-- Flow 1:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 40.339 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 40.398 ms
Loss rate: 8.86%
-- Flow 3:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 40.255 ms
Loss rate: 7.98%
```
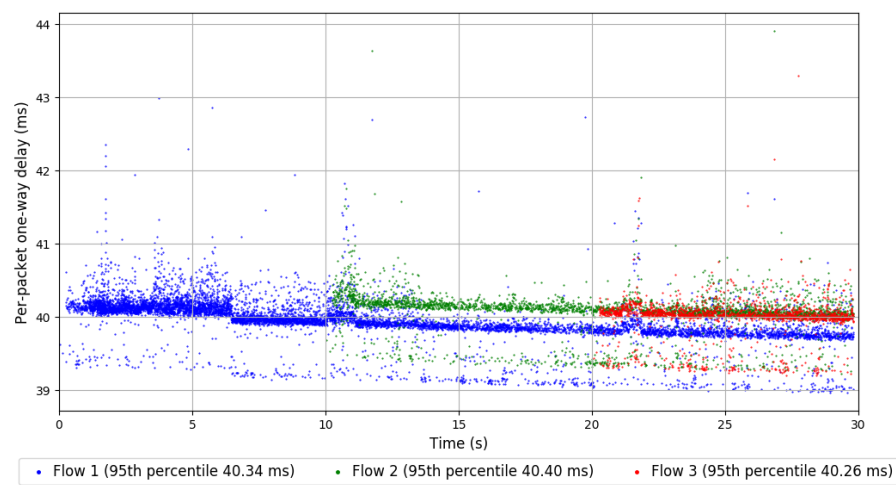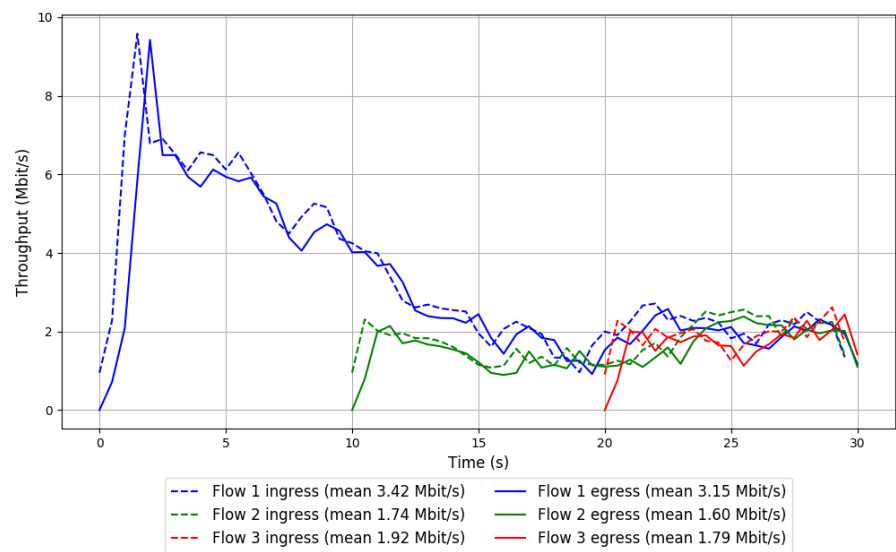
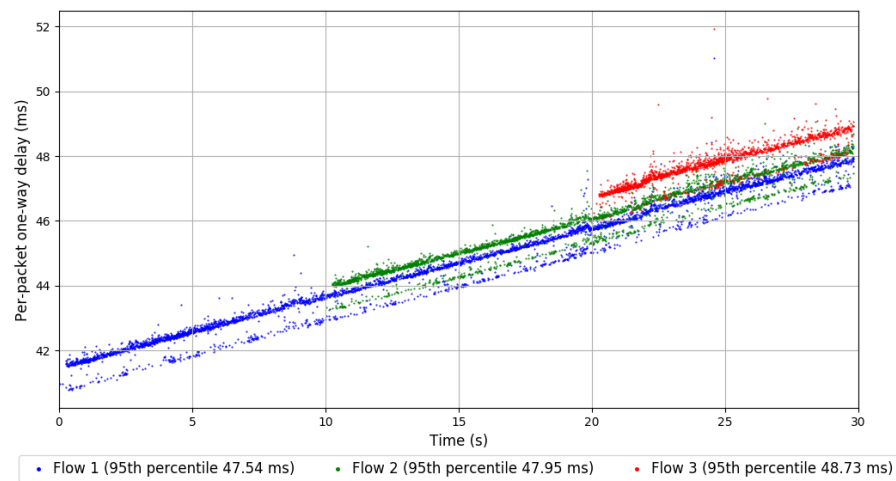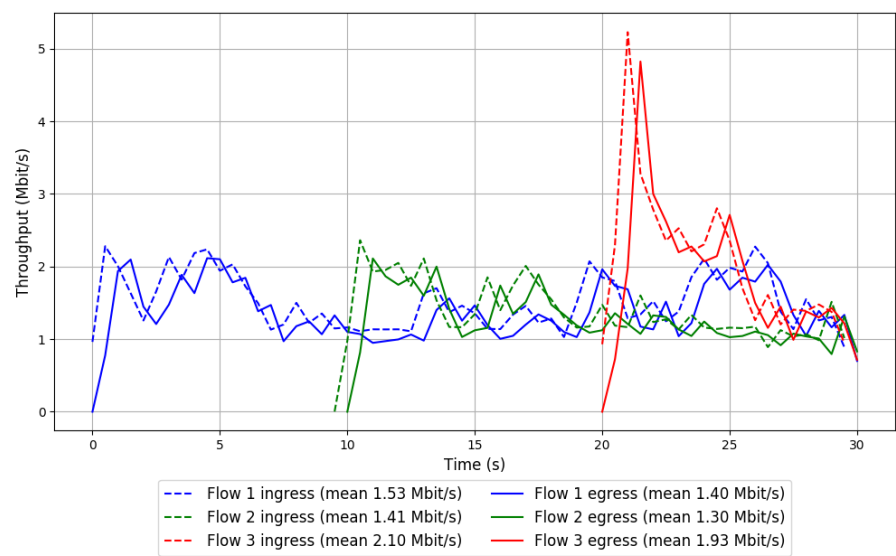Run 9: Report of PCC-Vivace — Data Link

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-19 14:27:49
End at: 2018-06-19 14:28:19
Local clock offset: 8.569 ms
Remote clock offset: -15.895 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 48.204 ms
Loss rate: 8.55%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 47.543 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 47.955 ms
Loss rate: 8.35%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 48.726 ms
Loss rate: 8.91%
```

Run 10: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 1.53 Mbit/s) ——— Flow 1 egress (mean 1.40 Mbit/s)
- - - Flow 2 ingress (mean 1.41 Mbit/s) ——— Flow 2 egress (mean 1.30 Mbit/s)
- - - Flow 3 ingress (mean 2.10 Mbit/s) ——— Flow 3 egress (mean 1.93 Mbit/s)

- Flow 1 (95th percentile 47.54 ms)   - Flow 2 (95th percentile 47.95 ms)   - Flow 3 (95th percentile 48.73 ms)
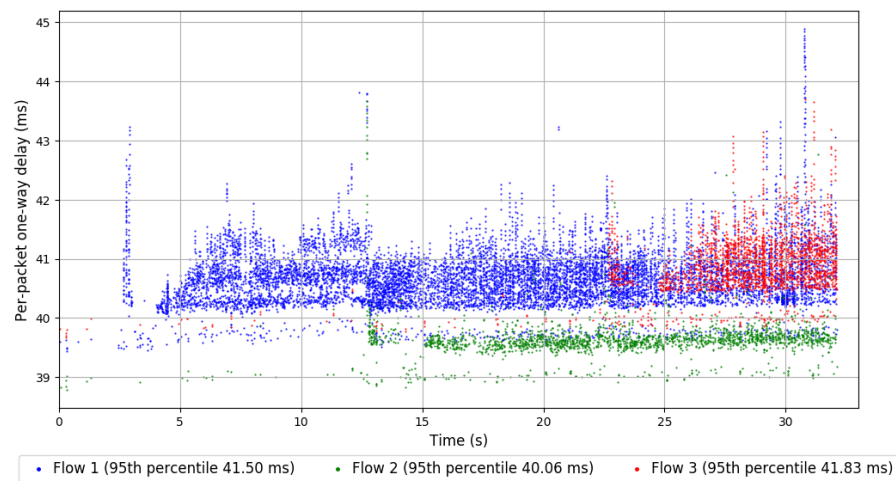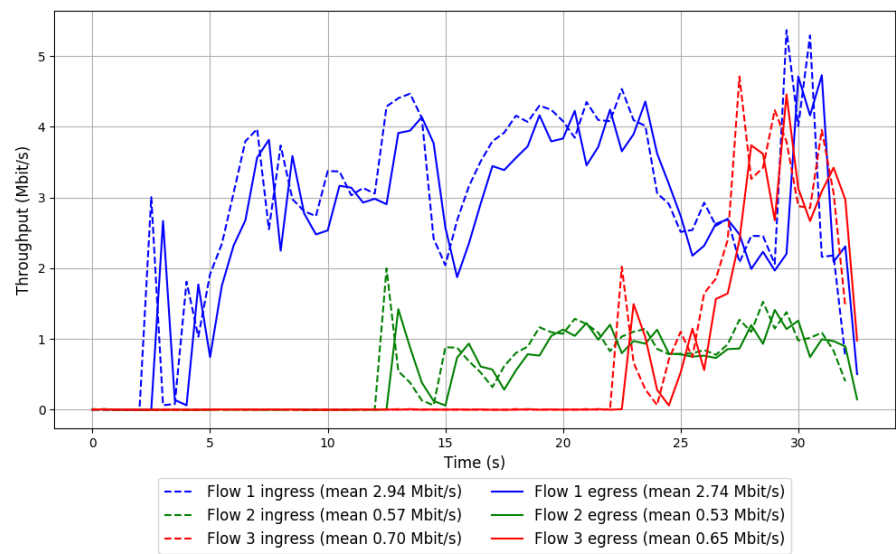
```
Run 1: Statistics of WebRTC media

Start at: 2018-06-19 09:25:46
End at: 2018-06-19 09:26:16
Local clock offset: 2.858 ms
Remote clock offset: 18.123 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 41.517 ms
Loss rate: 6.95%
-- Flow 1:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 41.501 ms
Loss rate: 6.71%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 40.062 ms
Loss rate: 6.78%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 41.830 ms
Loss rate: 8.12%
```

Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.94 Mbit/s) --- Flow 1 egress (mean 2.74 Mbit/s)
Flow 2 ingress (mean 0.57 Mbit/s) --- Flow 2 egress (mean 0.53 Mbit/s)
Flow 3 ingress (mean 0.70 Mbit/s) --- Flow 3 egress (mean 0.65 Mbit/s)

Flow 1 (95th percentile 41.50 ms)   Flow 2 (95th percentile 40.06 ms)   Flow 3 (95th percentile 41.83 ms)
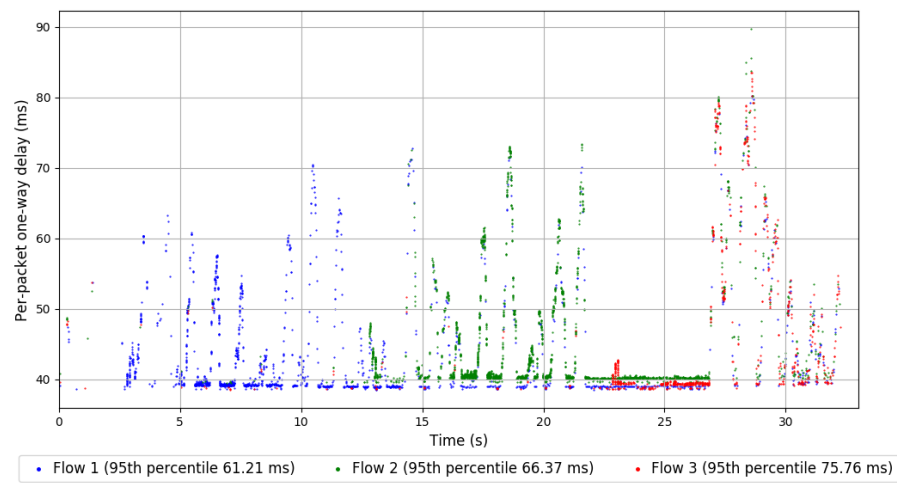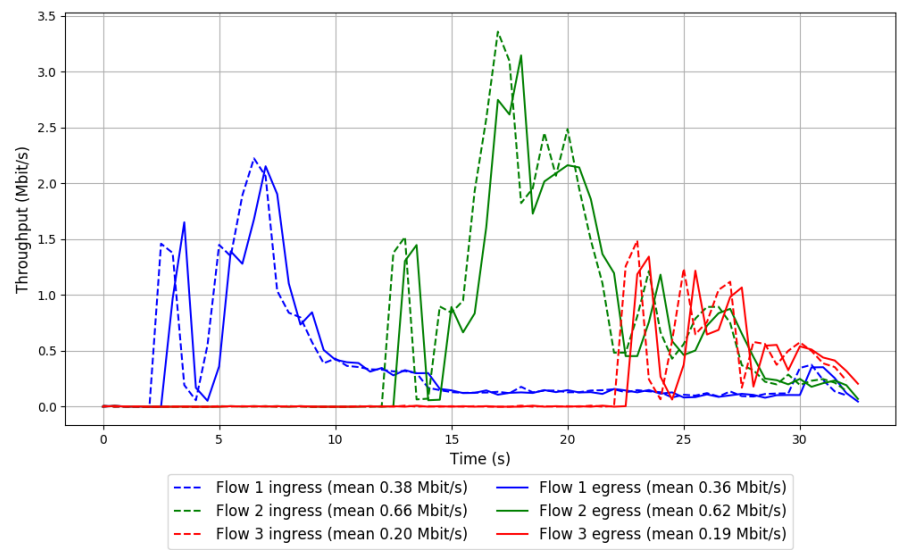
```
Run 2: Statistics of WebRTC media

Start at: 2018-06-19 09:59:29
End at: 2018-06-19 09:59:59
Local clock offset: 1.614 ms
Remote clock offset: 16.065 ms


# Below is generated by plot.py at 2018-06-19 14:38:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 66.346 ms
Loss rate: 6.22%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 61.209 ms
Loss rate: 5.82%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 6.41%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 75.760 ms
Loss rate: 6.37%
```
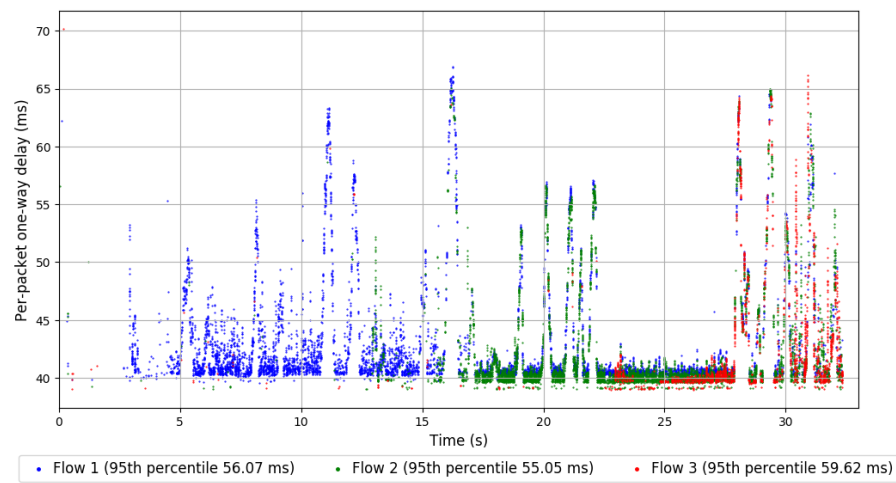
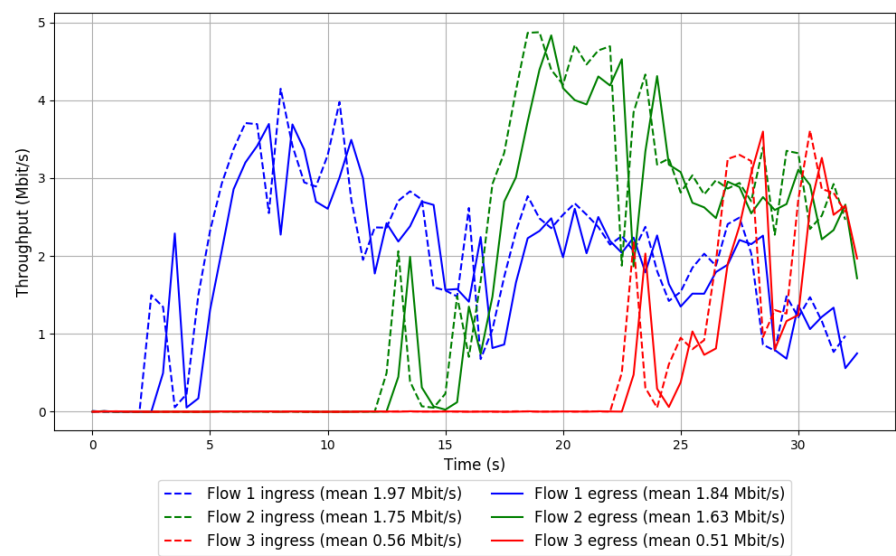Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-06-19 10:31:01
End at: 2018-06-19 10:31:31
Local clock offset: 2.102 ms
Remote clock offset: 16.943 ms


# Below is generated by plot.py at 2018-06-19 14:38:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 55.948 ms
Loss rate: 7.24%
-- Flow 1:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 56.068 ms
Loss rate: 6.75%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 55.046 ms
Loss rate: 7.33%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 59.616 ms
Loss rate: 8.62%
```

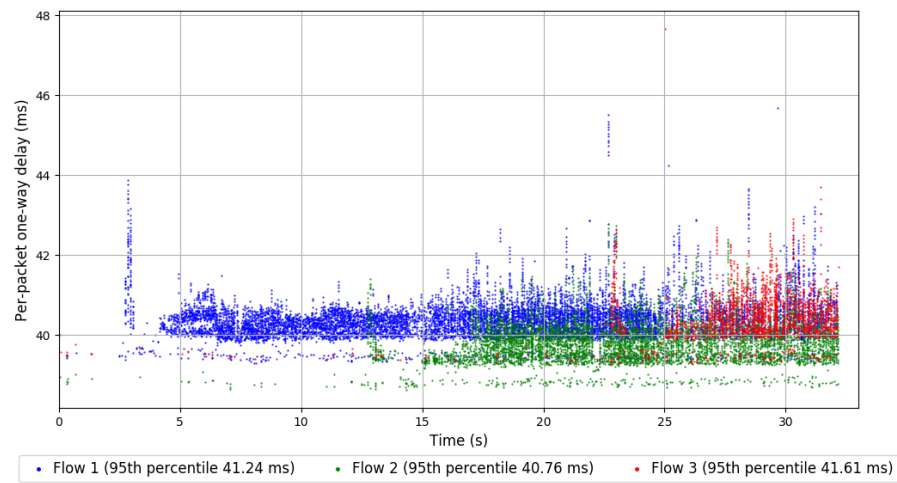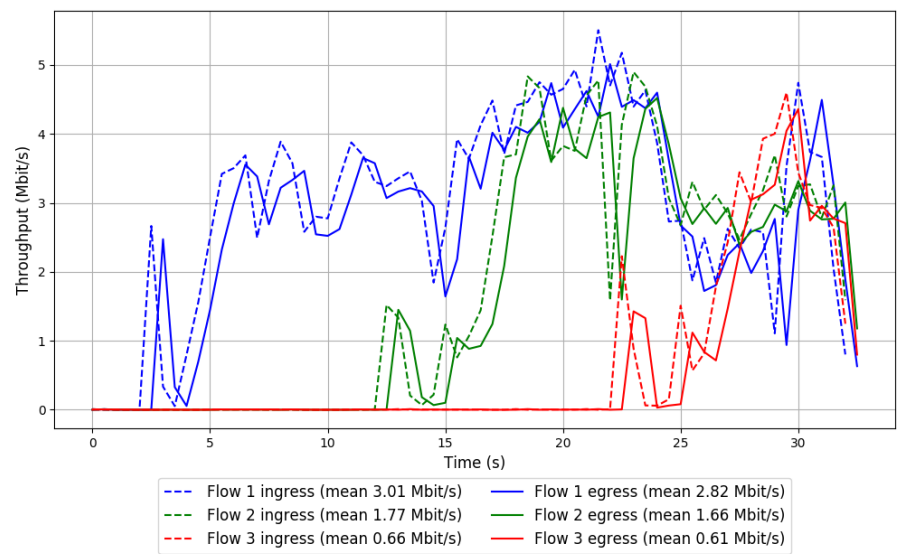Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-06-19 11:04:00
End at: 2018-06-19 11:04:30
Local clock offset: 3.365 ms
Remote clock offset: 37.977 ms


# Below is generated by plot.py at 2018-06-19 14:38:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 41.183 ms
Loss rate: 6.84%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 41.237 ms
Loss rate: 6.48%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 40.762 ms
Loss rate: 6.93%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 41.612 ms
Loss rate: 8.25%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 3.01 Mbit/s)   Flow 1 egress (mean 2.82 Mbit/s)
Flow 2 ingress (mean 1.77 Mbit/s)   Flow 2 egress (mean 1.66 Mbit/s)
Flow 3 ingress (mean 0.66 Mbit/s)   Flow 3 egress (mean 0.61 Mbit/s)

Flow 1 (95th percentile 41.24 ms)   Flow 2 (95th percentile 40.76 ms)   Flow 3 (95th percentile 41.61 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-06-19 11:36:43
End at: 2018-06-19 11:37:13
Local clock offset: 8.206 ms
Remote clock offset: 49.79 ms


# Below is generated by plot.py at 2018-06-19 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 42.612 ms
Loss rate: 6.91%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 42.365 ms
Loss rate: 6.33%
-- Flow 2:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 42.763 ms
Loss rate: 7.57%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 43.089 ms
Loss rate: 7.77%
```
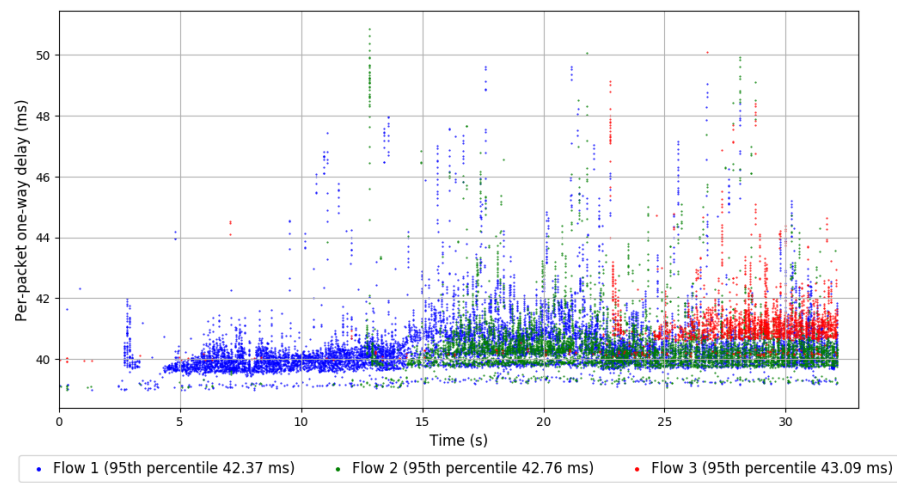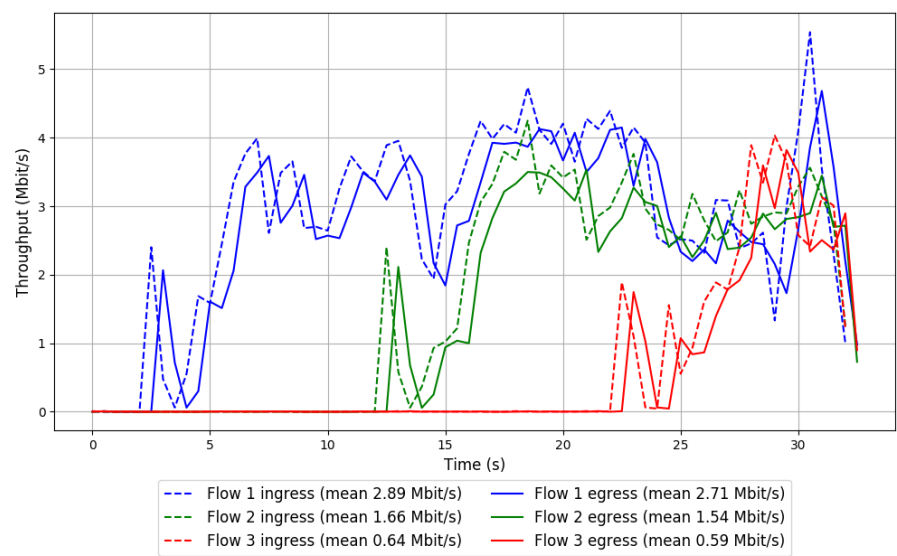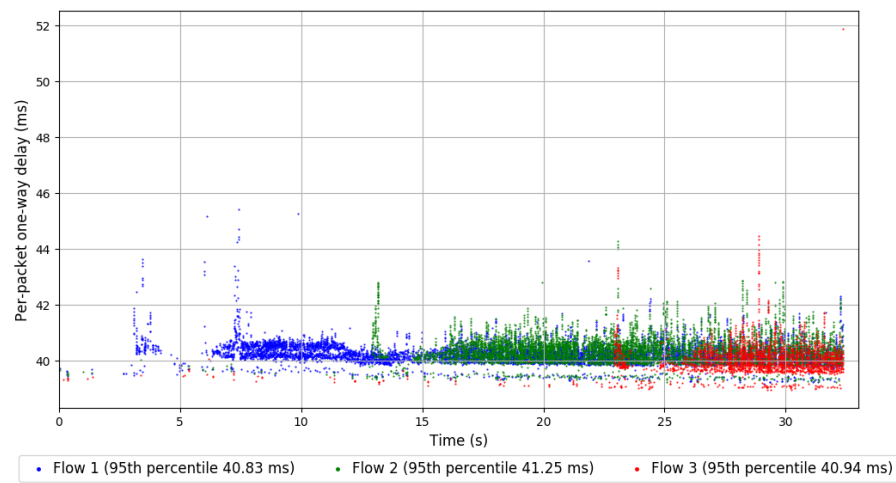
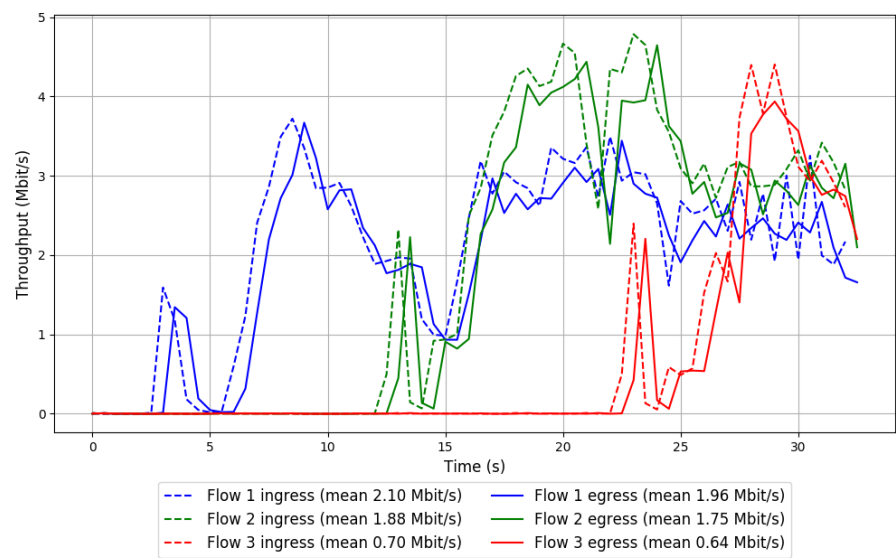Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-06-19 12:09:56
End at: 2018-06-19 12:10:26
Local clock offset: 8.047 ms
Remote clock offset: 31.546 ms


# Below is generated by plot.py at 2018-06-19 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 41.045 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 40.833 ms
Loss rate: 6.97%
-- Flow 2:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 41.250 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 40.938 ms
Loss rate: 7.81%
```

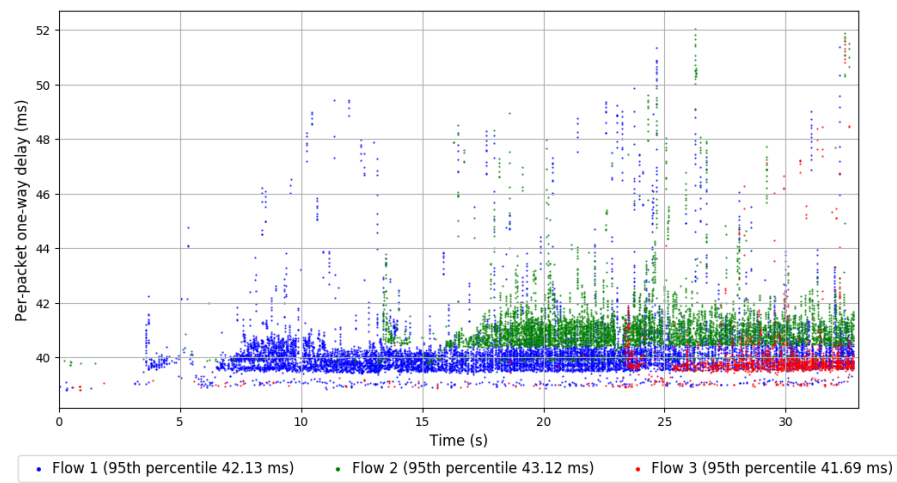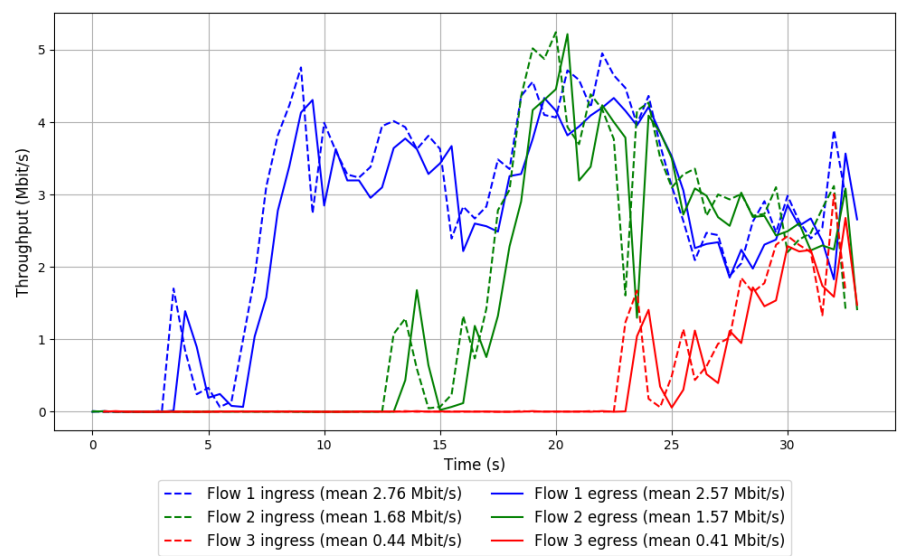Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-06-19 12:42:57
End at: 2018-06-19 12:43:27
Local clock offset: 7.69 ms
Remote clock offset: 35.403 ms

# Below is generated by plot.py at 2018-06-19 14:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 42.591 ms
Loss rate: 7.22%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 42.131 ms
Loss rate: 7.26%
-- Flow 2:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 43.118 ms
Loss rate: 7.07%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 41.692 ms
Loss rate: 7.55%
```

Run 7: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.76 Mbit/s) --- Flow 1 egress (mean 2.57 Mbit/s)
Flow 2 ingress (mean 1.68 Mbit/s) --- Flow 2 egress (mean 1.57 Mbit/s)
Flow 3 ingress (mean 0.44 Mbit/s) --- Flow 3 egress (mean 0.41 Mbit/s)

Flow 1 (95th percentile 42.13 ms) • Flow 2 (95th percentile 43.12 ms) • Flow 3 (95th percentile 41.69 ms)
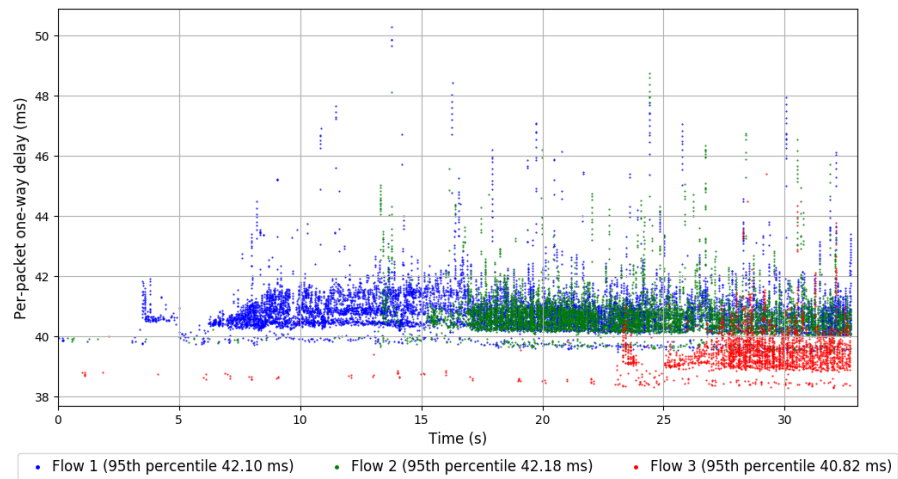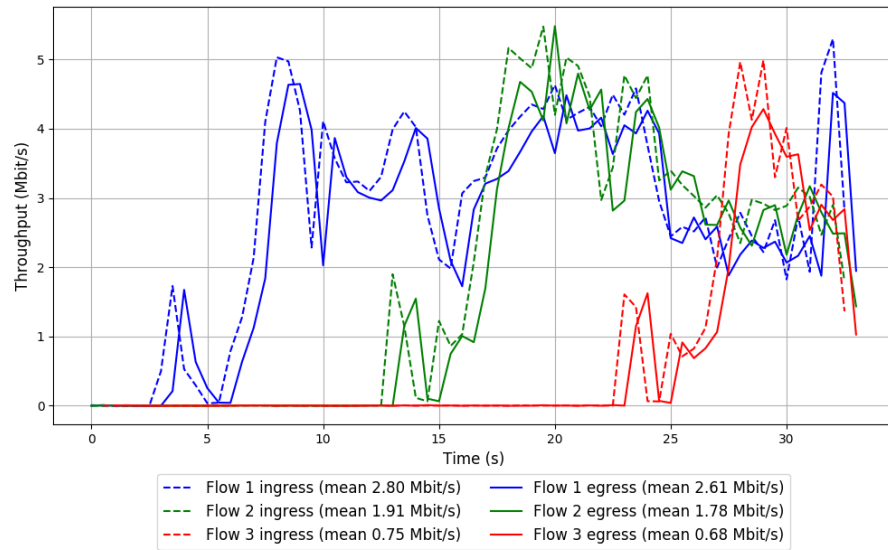
```
Run 8: Statistics of WebRTC media

Start at: 2018-06-19 13:16:00
End at: 2018-06-19 13:16:30
Local clock offset: 6.161 ms
Remote clock offset: 16.671 ms


# Below is generated by plot.py at 2018-06-19 14:38:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 42.038 ms
Loss rate: 7.25%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 42.102 ms
Loss rate: 6.98%
-- Flow 2:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 42.183 ms
Loss rate: 7.10%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 40.820 ms
Loss rate: 8.70%
```

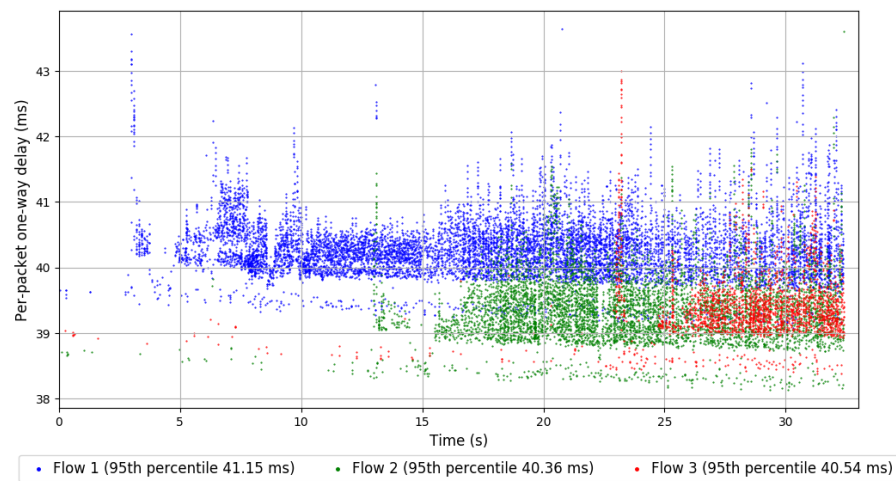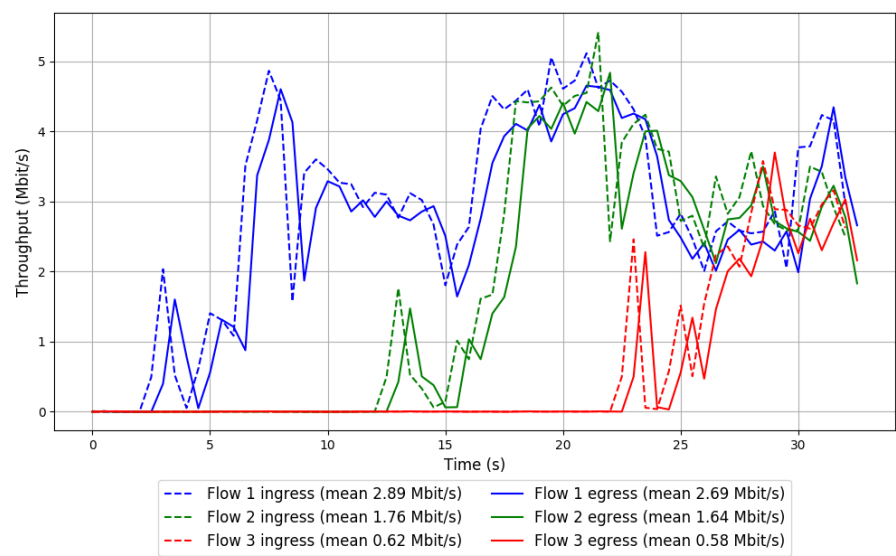Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-06-19 13:48:09
End at: 2018-06-19 13:48:39
Local clock offset: 7.659 ms
Remote clock offset: -4.093 ms


# Below is generated by plot.py at 2018-06-19 14:38:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 40.978 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 41.152 ms
Loss rate: 7.14%
-- Flow 2:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 40.358 ms
Loss rate: 7.13%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 40.540 ms
Loss rate: 7.78%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-06-19 14:21:41
End at: 2018-06-19 14:22:11
Local clock offset: 8.486 ms
Remote clock offset: -21.005 ms


# Below is generated by plot.py at 2018-06-19 14:38:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 40.946 ms
Loss rate: 7.19%
-- Flow 1:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 40.948 ms
Loss rate: 7.11%
-- Flow 2:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 40.860 ms
Loss rate: 7.28%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 41.182 ms
Loss rate: 7.17%
```

Run 10: Report of WebRTC media — Data Link