Pantheon Report

Generated at 2018-09-06 11:08:51 (UTC).

Data path: AWS India 1 on `ens5` (*local*) →India on `em1` (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

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

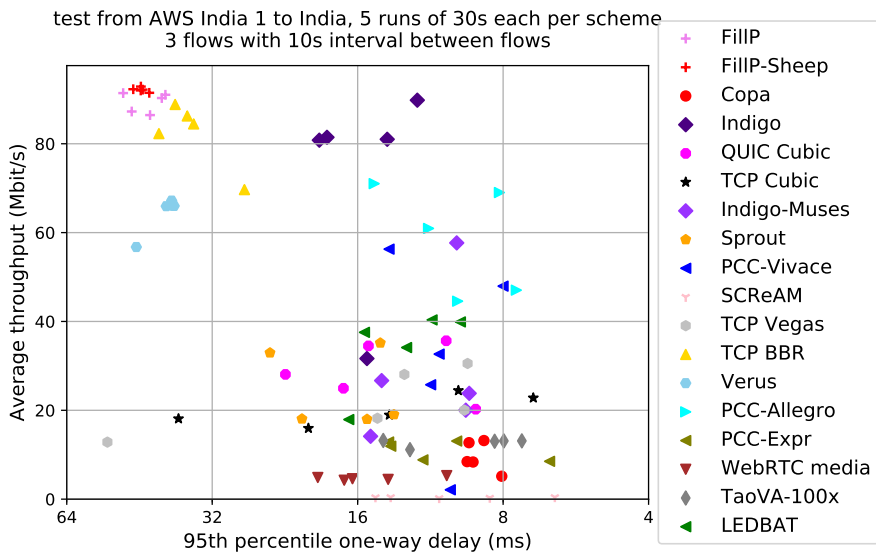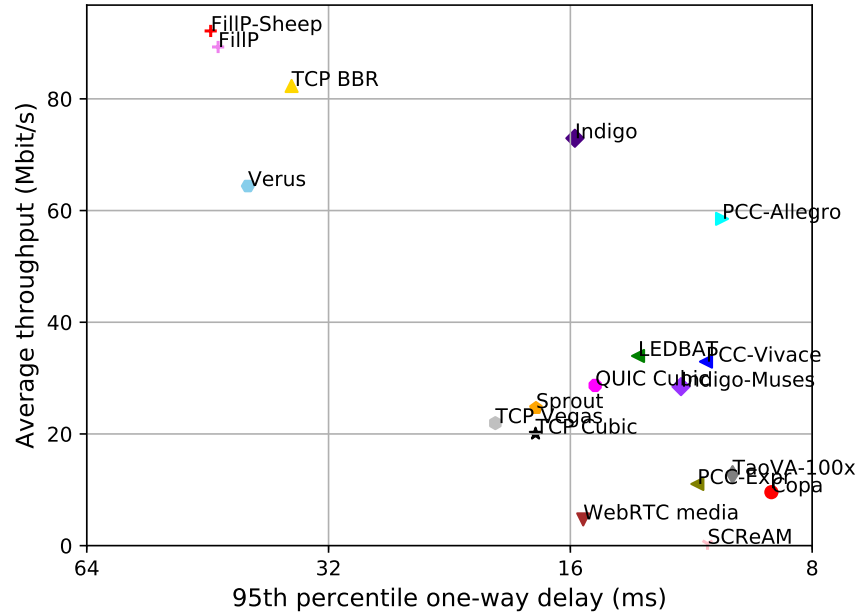NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
System info:
Linux 4.15.0-1020-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
net.ipv4.tcp_mem = 536870912 536870912 536870912
```

```
Git summary:
branch: muses @ f392ce15d580343f4432c3d7e068b3290f03eb4a
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ a28d20fb82a95a965a3da65fd1eb71b8994e9b84
third_party/pantheon-tunnel @ cbfce6db5ff5740dafe1771f813cd646339e1952
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 AWS India 1 to India, 5 runs of 30s each per scheme
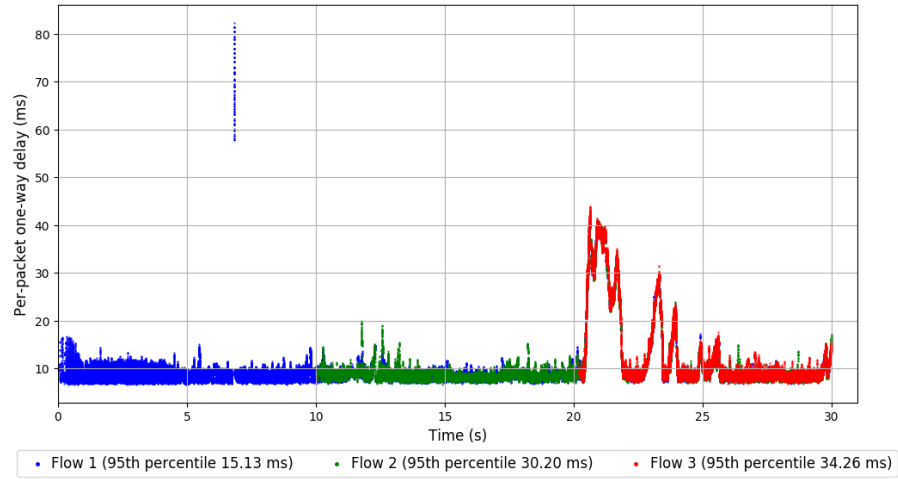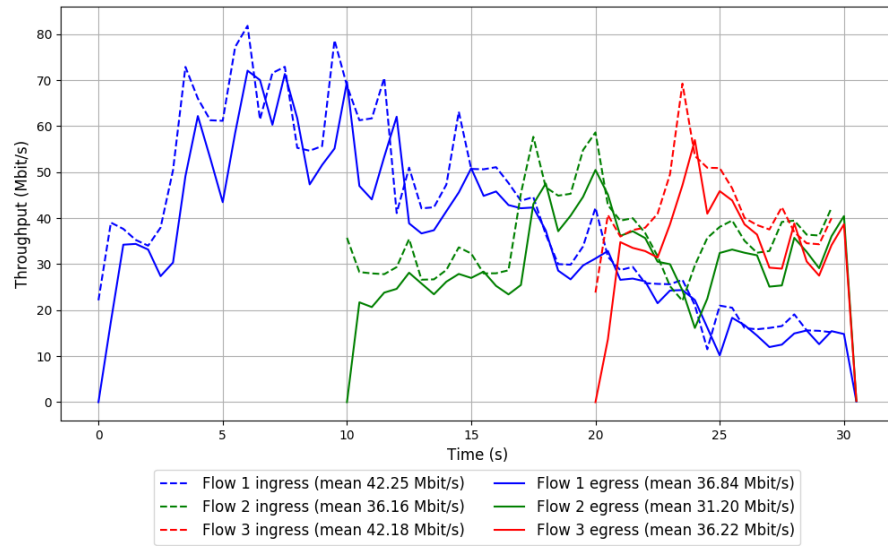3 flows with 10s interval between flows (mean of all runs by scheme)

test from AWS India 1 to India, 5 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	5	46.96	36.96	32.25	32.08	36.84	38.89	11.61	12.03	14.34
Copa	5	3.83	7.78	4.68	9.40	8.92	9.90	82.45	43.37	55.07
TCP Cubic	5	8.71	9.96	14.14	16.48	15.60	21.08	1.24	0.57	1.11
FillP	5	54.49	38.95	26.81	43.39	44.55	43.46	24.75	31.81	34.00
FillP-Sheep	5	54.22	40.12	33.88	43.21	45.30	46.73	19.65	25.63	32.01
Indigo	5	41.15	33.61	30.33	14.28	15.99	16.28	7.68	9.21	10.19
LEDBAT	5	20.41	14.96	11.05	13.03	12.33	12.84	0.38	0.61	0.89
Indigo-Muses	5	13.15	11.22	24.04	11.20	11.65	12.18	3.18	3.48	4.57
PCC-Allegro	5	43.24	18.27	9.50	9.21	9.98	11.23	6.04	7.01	7.51
PCC-Expr	5	4.79	7.05	4.80	12.26	10.97	10.95	49.82	34.78	42.34
QUIC Cubic	5	16.06	12.93	12.23	11.97	14.77	13.88	2.56	2.55	2.89
SCReAM	5	0.17	0.17	0.19	8.38	10.14	10.83	0.57	0.34	0.52
Sprout	5	15.70	17.84	17.01	17.26	15.86	15.93	2.42	4.05	5.94
TaoVA-100x	5	7.69	7.20	3.61	10.11	10.19	14.95	83.58	87.86	87.14
TCP Vegas	5	10.89	11.44	10.30	17.99	17.28	17.68	0.63	1.82	1.60
Verus	5	39.84	29.20	18.65	37.89	42.77	38.18	22.80	44.10	33.94
PCC-Vivace	5	24.83	9.19	6.05	10.86	9.91	12.99	4.46	5.53	6.40
WebRTC media	5	2.50	1.74	0.47	15.61	14.40	15.32	1.42	1.70	0.91

```
Run 1: Statistics of TCP BBR

Start at: 2018-09-06 09:17:58
End at: 2018-09-06 09:18:28
Local clock offset: -0.426 ms
Remote clock offset: -1.481 ms


# Below is generated by plot.py at 2018-09-06 11:03:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.68 Mbit/s
95th percentile per-packet one-way delay: 27.444 ms
Loss rate: 13.30%
-- Flow 1:
Average throughput: 36.84 Mbit/s
95th percentile per-packet one-way delay: 15.132 ms
Loss rate: 12.81%
-- Flow 2:
Average throughput: 31.20 Mbit/s
95th percentile per-packet one-way delay: 30.199 ms
Loss rate: 13.71%
-- Flow 3:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 34.262 ms
Loss rate: 14.10%
```
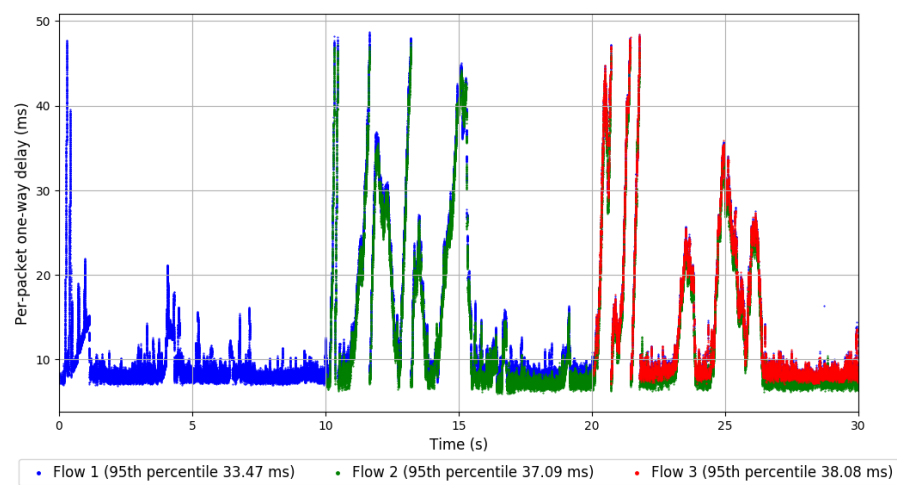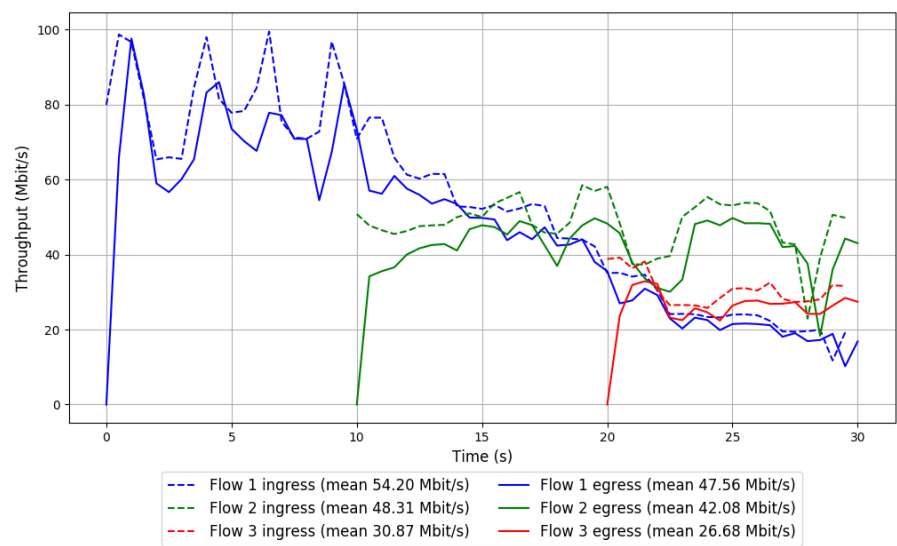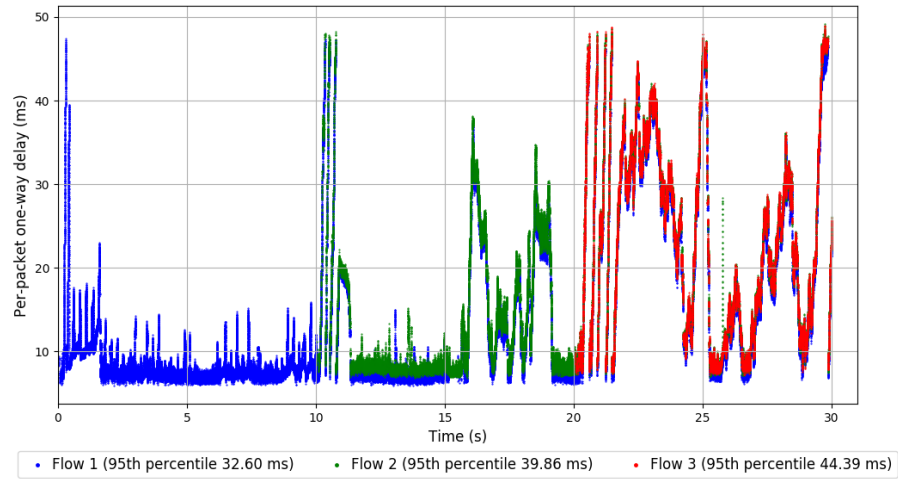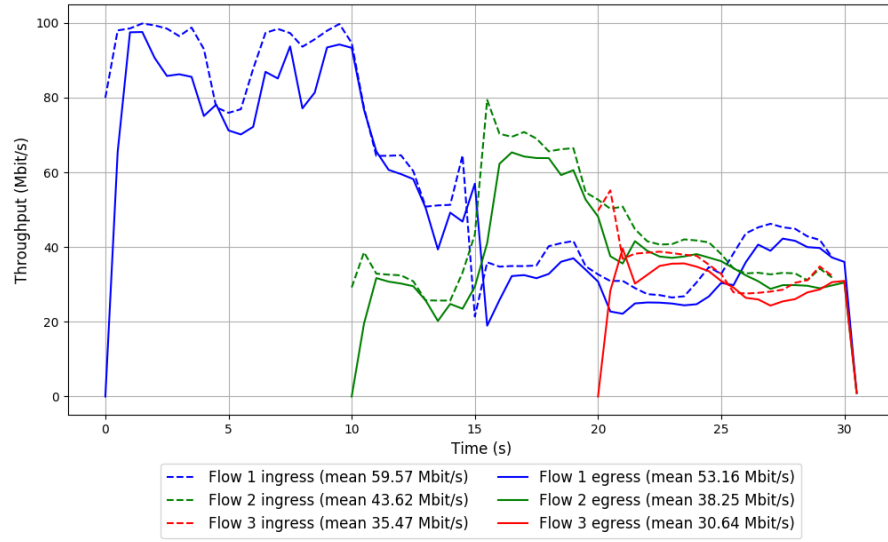
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-09-06 09:44:26
End at: 2018-09-06 09:44:56
Local clock offset: 1.581 ms
Remote clock offset: -2.006 ms


# Below is generated by plot.py at 2018-09-06 11:03:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.47 Mbit/s
95th percentile per-packet one-way delay: 34.959 ms
Loss rate: 12.60%
-- Flow 1:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 33.469 ms
Loss rate: 12.25%
-- Flow 2:
Average throughput: 42.08 Mbit/s
95th percentile per-packet one-way delay: 37.085 ms
Loss rate: 12.88%
-- Flow 3:
Average throughput: 26.68 Mbit/s
95th percentile per-packet one-way delay: 38.077 ms
Loss rate: 13.56%
```

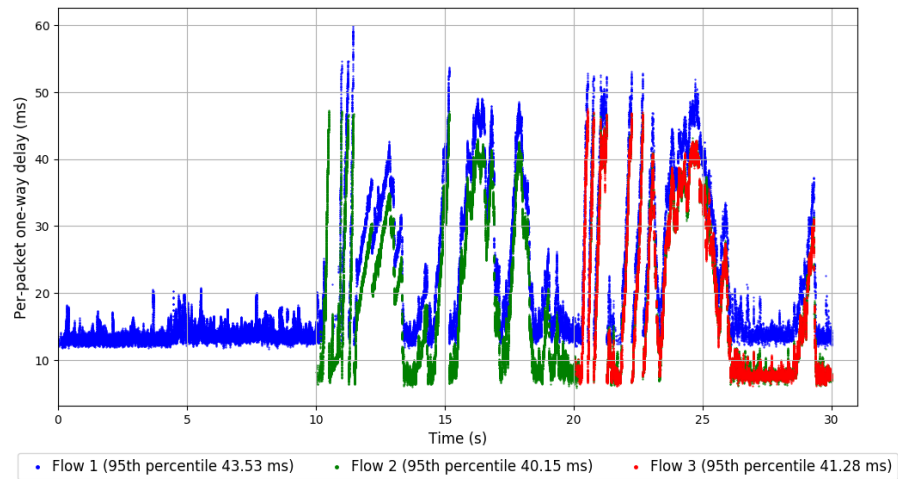Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-09-06 10:05:54
End at: 2018-09-06 10:06:24
Local clock offset: 1.564 ms
Remote clock offset: -1.895 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 38.184 ms
Loss rate: 11.48%
-- Flow 1:
Average throughput: 53.16 Mbit/s
95th percentile per-packet one-way delay: 32.603 ms
Loss rate: 10.71%
-- Flow 2:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 39.862 ms
Loss rate: 12.25%
-- Flow 3:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 44.391 ms
Loss rate: 13.48%
```

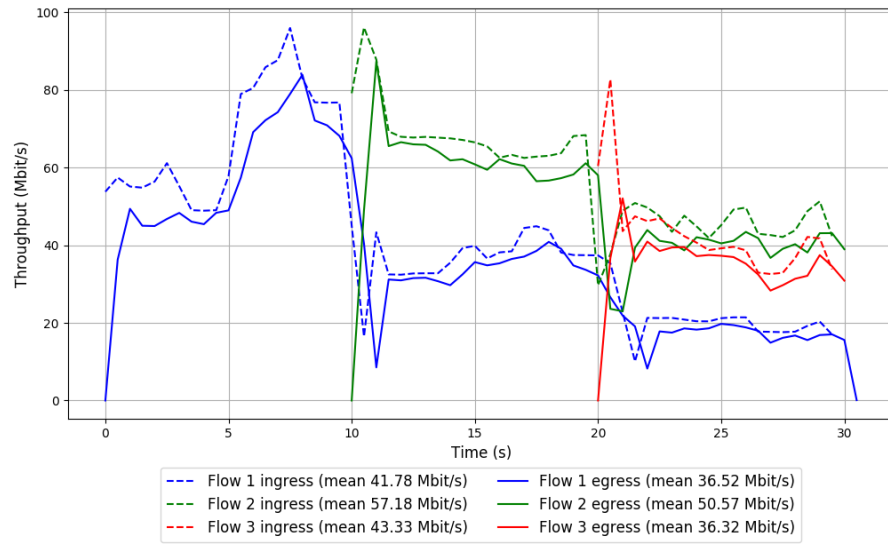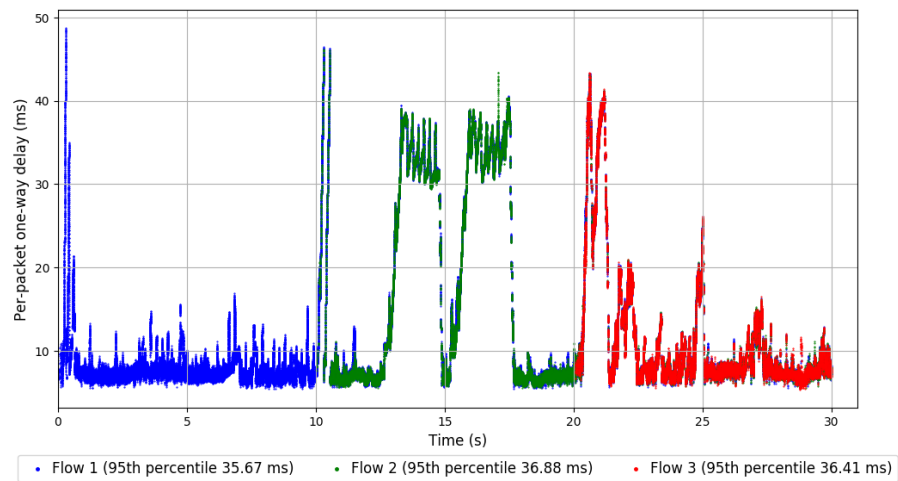Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-09-06 10:29:34
End at: 2018-09-06 10:30:04
Local clock offset: 1.985 ms
Remote clock offset: -0.782 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.29 Mbit/s
95th percentile per-packet one-way delay: 41.251 ms
Loss rate: 12.72%
-- Flow 1:
Average throughput: 36.52 Mbit/s
95th percentile per-packet one-way delay: 43.534 ms
Loss rate: 12.58%
-- Flow 2:
Average throughput: 50.57 Mbit/s
95th percentile per-packet one-way delay: 40.149 ms
Loss rate: 11.57%
-- Flow 3:
Average throughput: 36.32 Mbit/s
95th percentile per-packet one-way delay: 41.284 ms
Loss rate: 16.18%
```

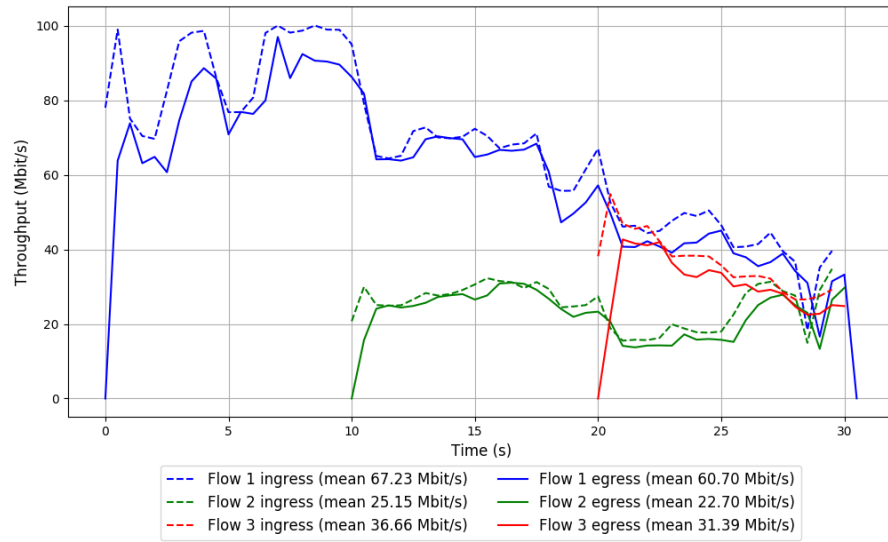Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-09-06 10:51:02
End at: 2018-09-06 10:51:32
Local clock offset: 1.756 ms
Remote clock offset: -1.959 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 36.038 ms
Loss rate: 10.31%
-- Flow 1:
Average throughput: 60.70 Mbit/s
95th percentile per-packet one-way delay: 35.671 ms
Loss rate: 9.72%
-- Flow 2:
Average throughput: 22.70 Mbit/s
95th percentile per-packet one-way delay: 36.885 ms
Loss rate: 9.73%
-- Flow 3:
Average throughput: 31.39 Mbit/s
95th percentile per-packet one-way delay: 36.412 ms
Loss rate: 14.40%
```

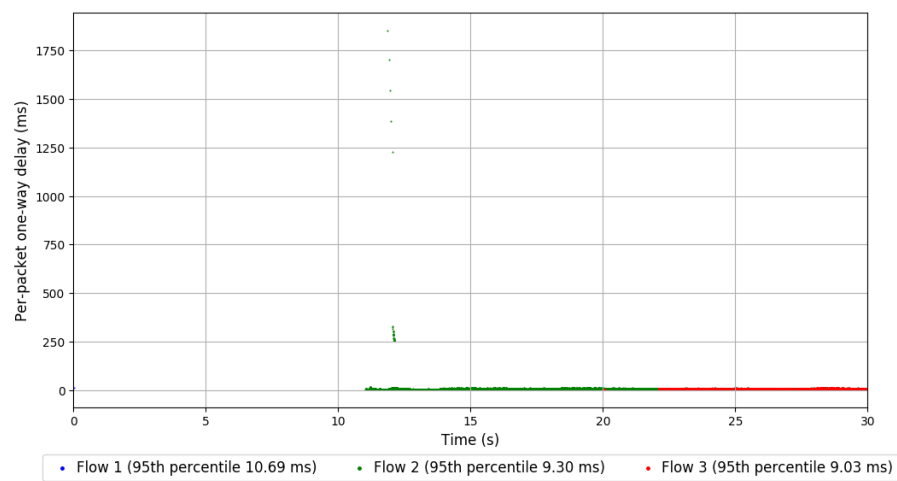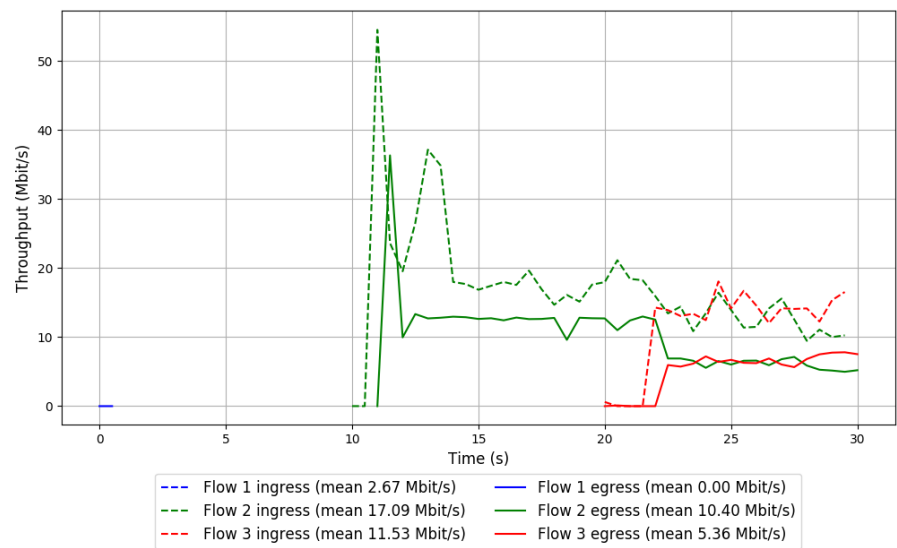Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-09-06 09:26:08
End at: 2018-09-06 09:26:38
Local clock offset: 3.196 ms
Remote clock offset: -1.814 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 9.233 ms
Loss rate: 45.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 10.687 ms
Loss rate: 98.84%
-- Flow 2:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 9.300 ms
Loss rate: 42.16%
-- Flow 3:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 9.033 ms
Loss rate: 53.54%
```
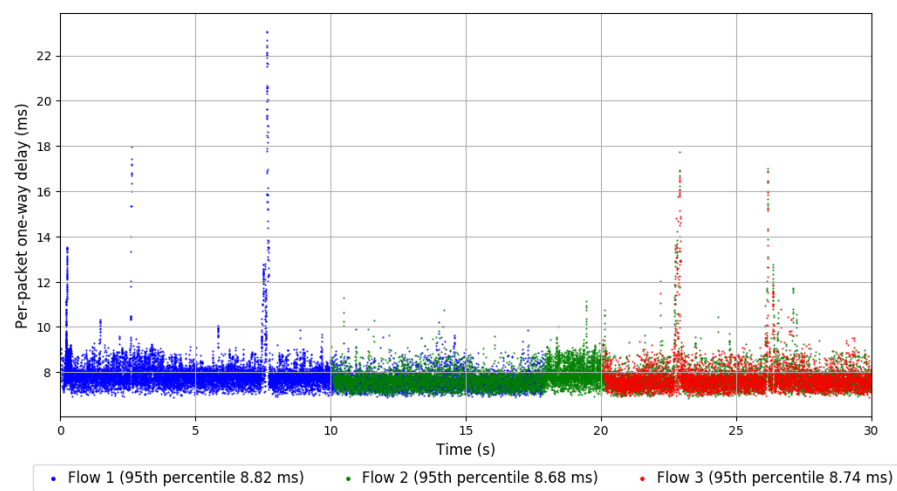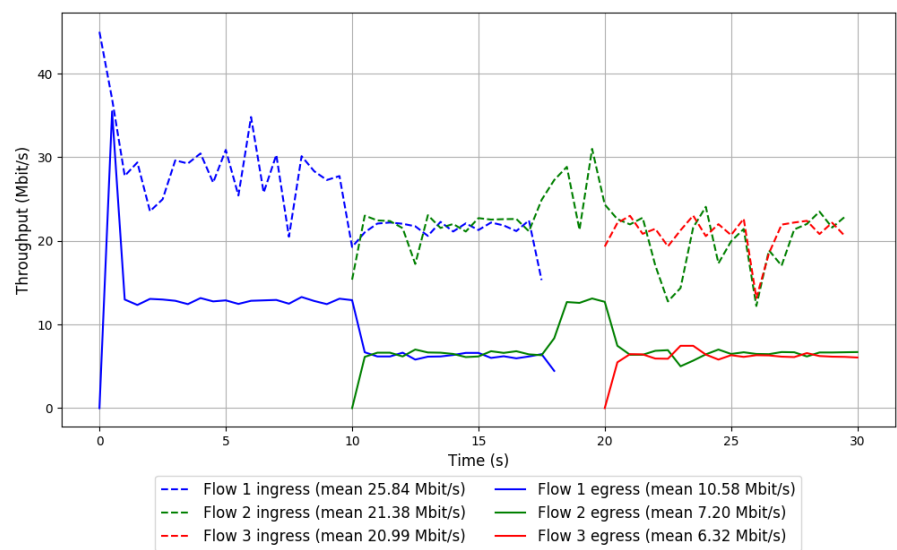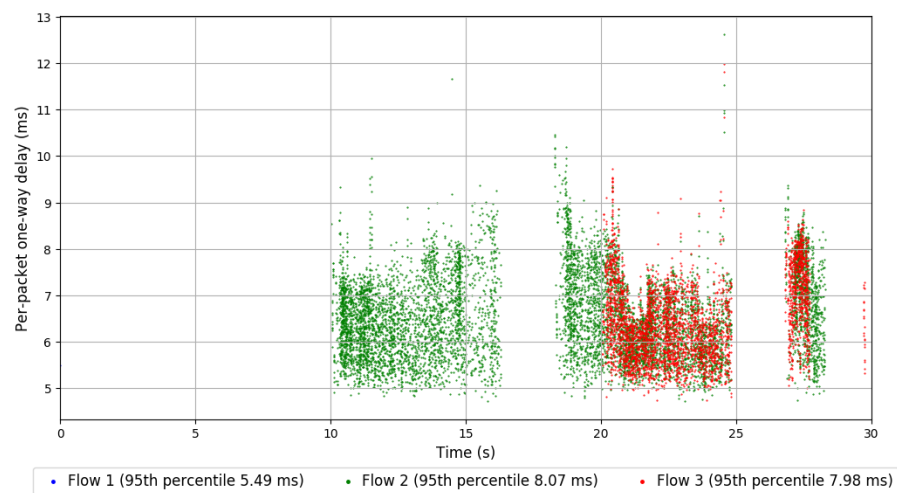
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 2.67 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 17.09 Mbit/s) --- Flow 2 egress (mean 10.40 Mbit/s)
Flow 3 ingress (mean 11.53 Mbit/s) --- Flow 3 egress (mean 5.36 Mbit/s)

Flow 1 (95th percentile 10.69 ms)   Flow 2 (95th percentile 9.30 ms)   Flow 3 (95th percentile 9.03 ms)

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```
Run 2: Statistics of Copa

Start at: 2018-09-06 09:53:02
End at: 2018-09-06 09:53:32
Local clock offset: 1.693 ms
Remote clock offset: -0.848 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 8.766 ms
Loss rate: 63.98%
-- Flow 1:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 8.822 ms
Loss rate: 59.11%
-- Flow 2:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 8.683 ms
Loss rate: 66.34%
-- Flow 3:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 8.737 ms
Loss rate: 69.90%
```
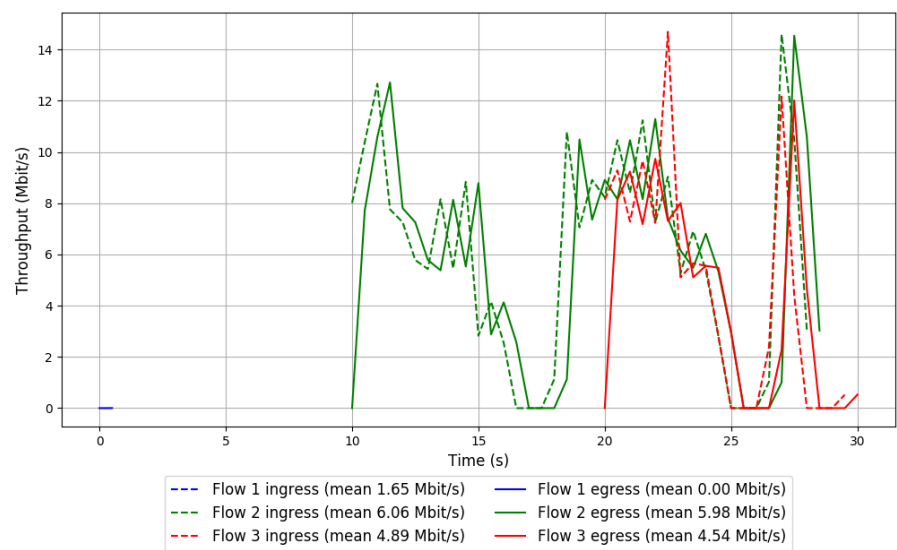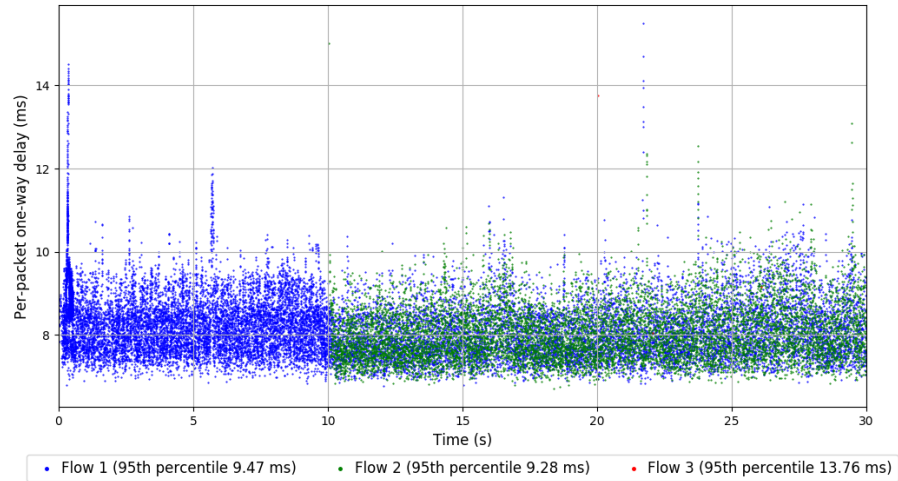
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-09-06 10:14:53
End at: 2018-09-06 10:15:23
Local clock offset: 2.817 ms
Remote clock offset: -1.762 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 8.052 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.487 ms
Loss rate: 98.39%
-- Flow 2:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 8.073 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 7.977 ms
Loss rate: 7.04%
```
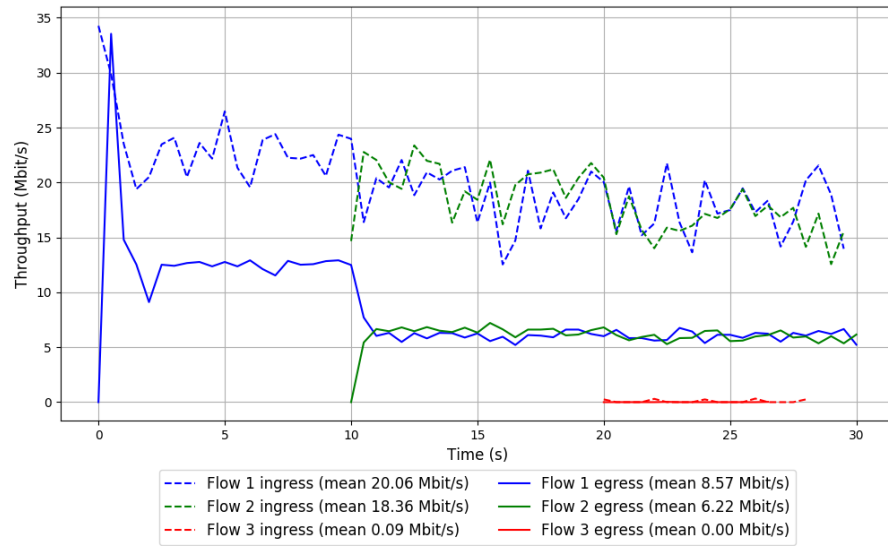
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-09-06 10:37:46
End at: 2018-09-06 10:38:16
Local clock offset: 0.141 ms
Remote clock offset: -1.456 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 9.412 ms
Loss rate: 60.65%
-- Flow 1:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 9.466 ms
Loss rate: 57.26%
-- Flow 2:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 9.279 ms
Loss rate: 66.14%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 13.763 ms
Loss rate: 96.22%
```
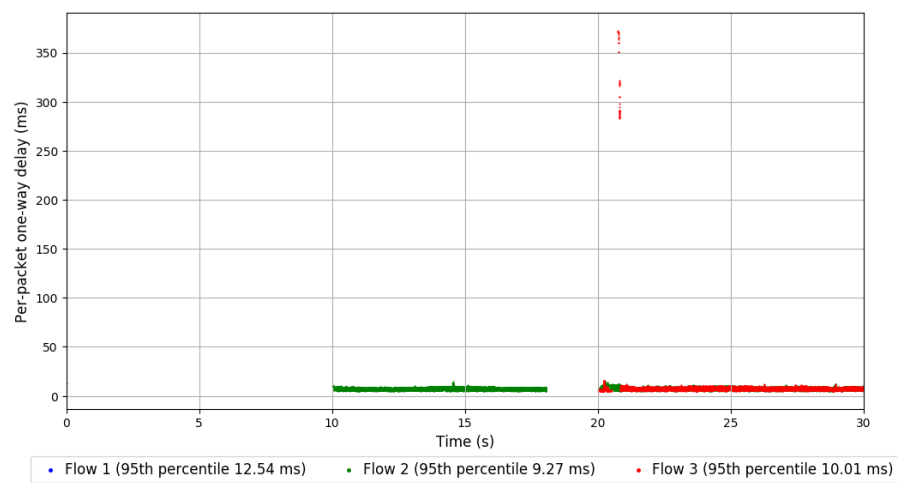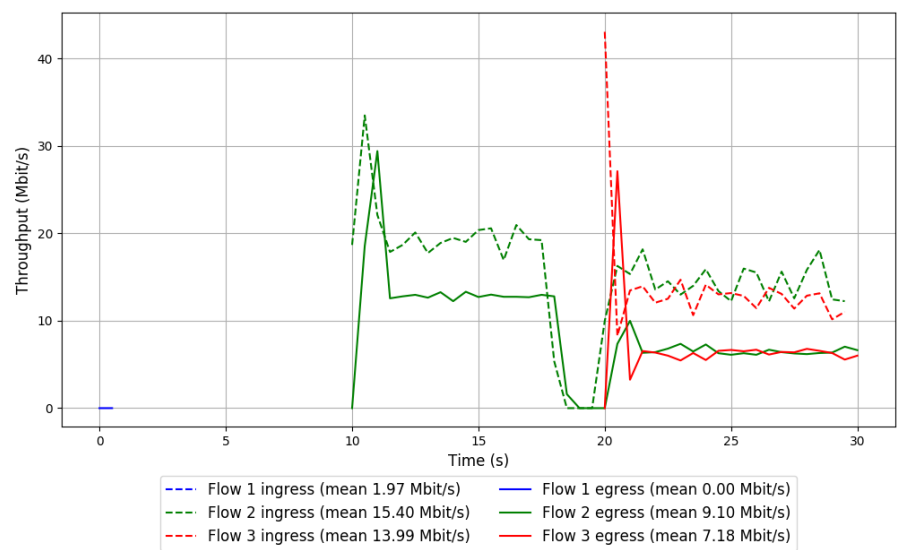
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-09-06 10:59:30
End at: 2018-09-06 11:00:00
Local clock offset: 2.977 ms
Remote clock offset: -1.533 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 9.498 ms
Loss rate: 43.34%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 12.539 ms
Loss rate: 98.65%
-- Flow 2:
Average throughput: 9.10 Mbit/s
95th percentile per-packet one-way delay: 9.266 ms
Loss rate: 40.93%
-- Flow 3:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 10.011 ms
Loss rate: 48.64%
```
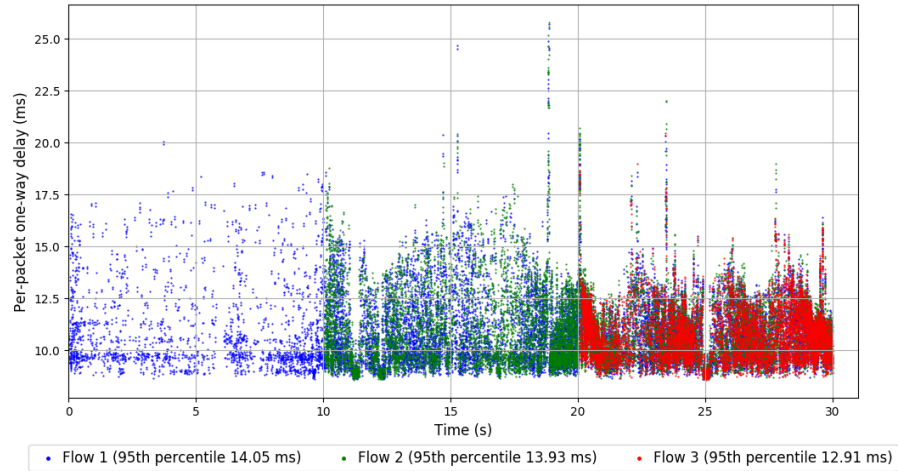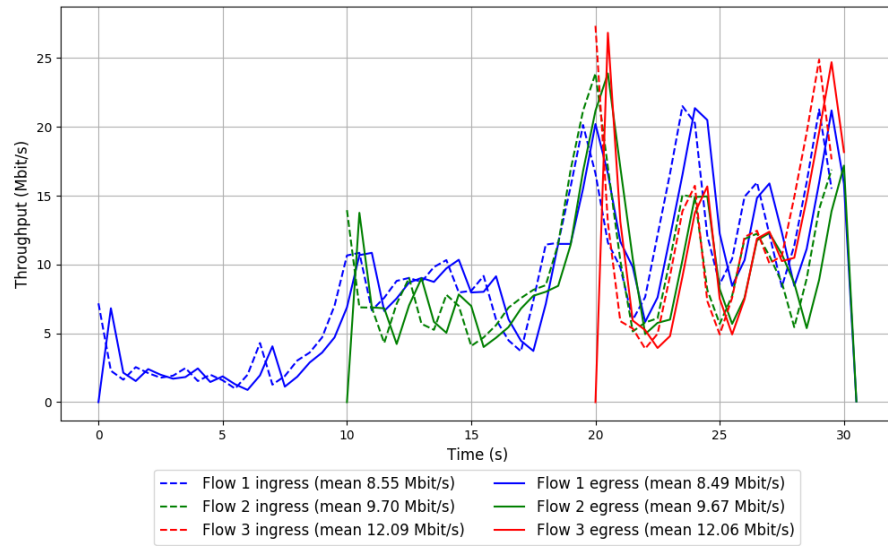
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-09-06 09:14:27
End at: 2018-09-06 09:14:57
Local clock offset: -3.0 ms
Remote clock offset: -1.172 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.94 Mbit/s
95th percentile per-packet one-way delay: 13.759 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 14.053 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 13.930 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 12.912 ms
Loss rate: 0.29%
```

Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-09-06 09:40:58
End at: 2018-09-06 09:41:28
Local clock offset: 1.925 ms
Remote clock offset: -2.331 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 9.900 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 9.795 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 11.400 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 9.444 ms
Loss rate: 0.11%
```
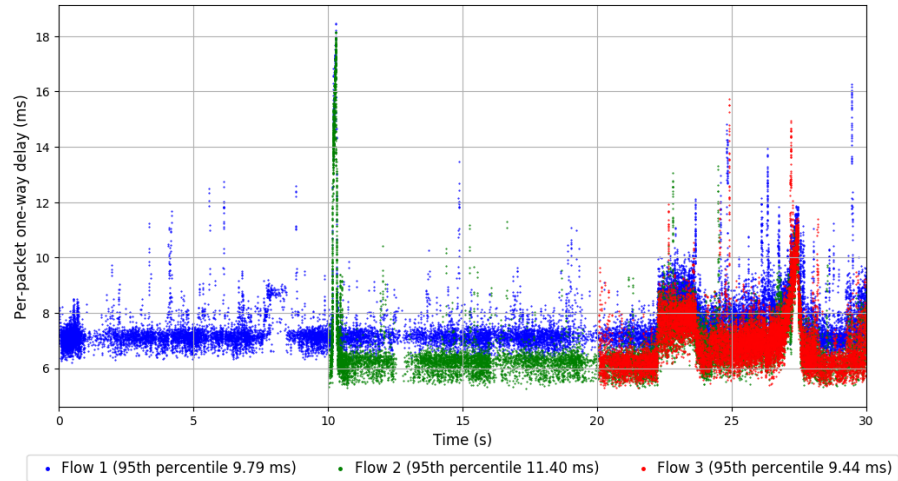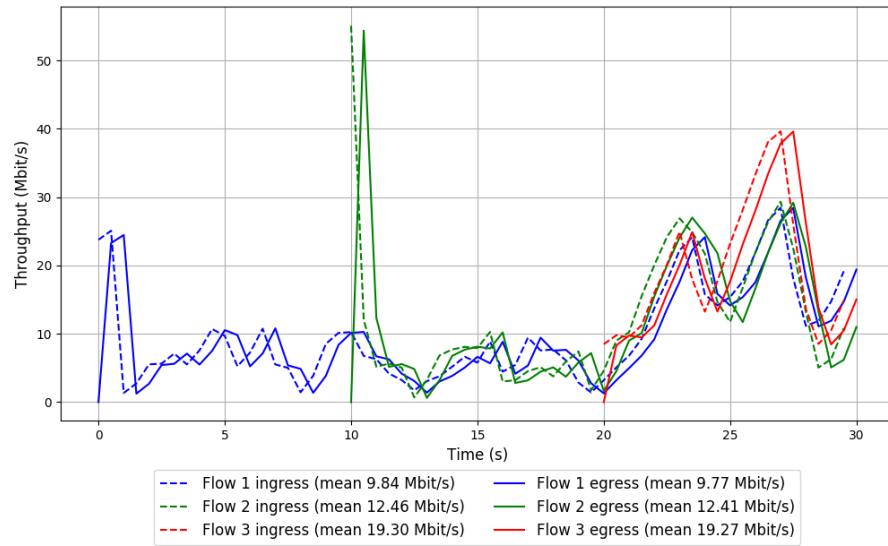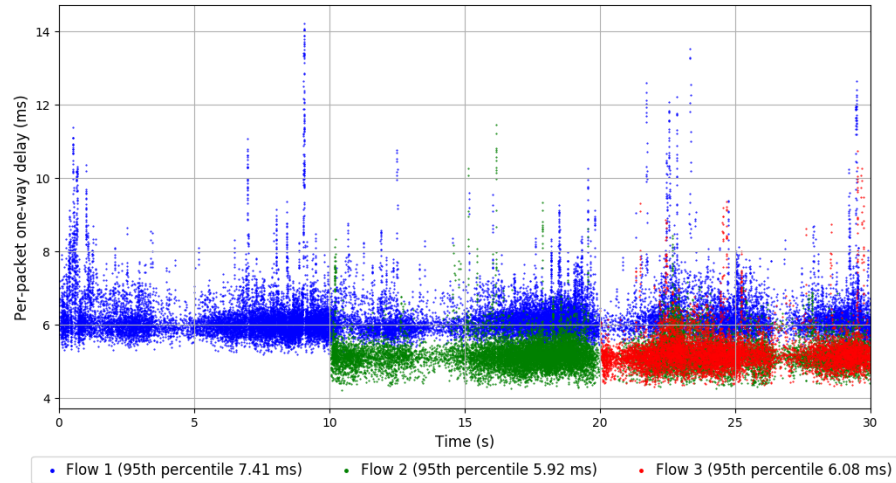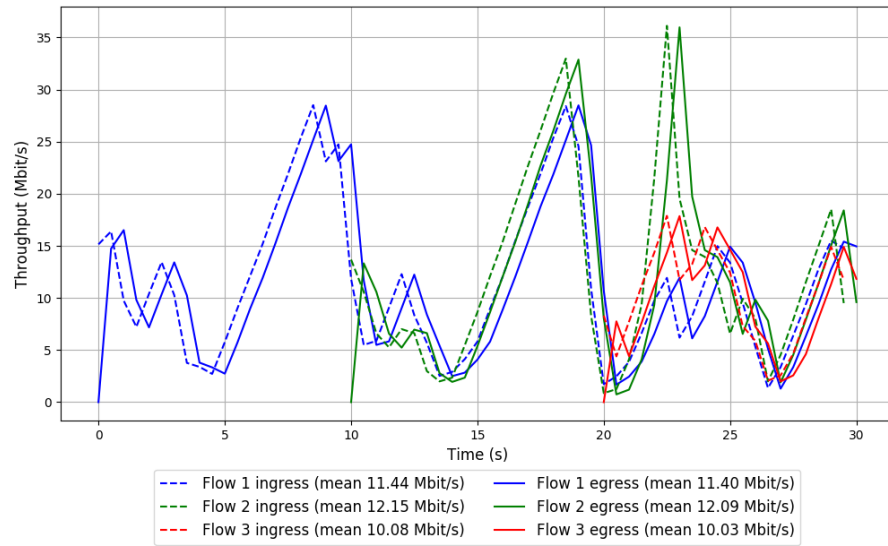
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 9.84 Mbit/s) --- Flow 1 egress (mean 9.77 Mbit/s)
Flow 2 ingress (mean 12.46 Mbit/s) --- Flow 2 egress (mean 12.41 Mbit/s)
Flow 3 ingress (mean 19.30 Mbit/s) --- Flow 3 egress (mean 19.27 Mbit/s)

Flow 1 (95th percentile 9.79 ms)   Flow 2 (95th percentile 11.40 ms)   Flow 3 (95th percentile 9.44 ms)

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```
Run 3: Statistics of TCP Cubic

Start at: 2018-09-06 10:02:23
End at: 2018-09-06 10:02:53
Local clock offset: 3.415 ms
Remote clock offset: -1.669 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.80 Mbit/s
95th percentile per-packet one-way delay: 6.928 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 11.40 Mbit/s
95th percentile per-packet one-way delay: 7.408 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 5.915 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 6.077 ms
Loss rate: 0.58%
```

Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-09-06 10:26:10
End at: 2018-09-06 10:26:40
Local clock offset: 1.849 ms
Remote clock offset: -1.645 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.95 Mbit/s
95th percentile per-packet one-way delay: 20.232 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 14.621 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 14.616 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 36.284 ms
Loss rate: 4.29%
```
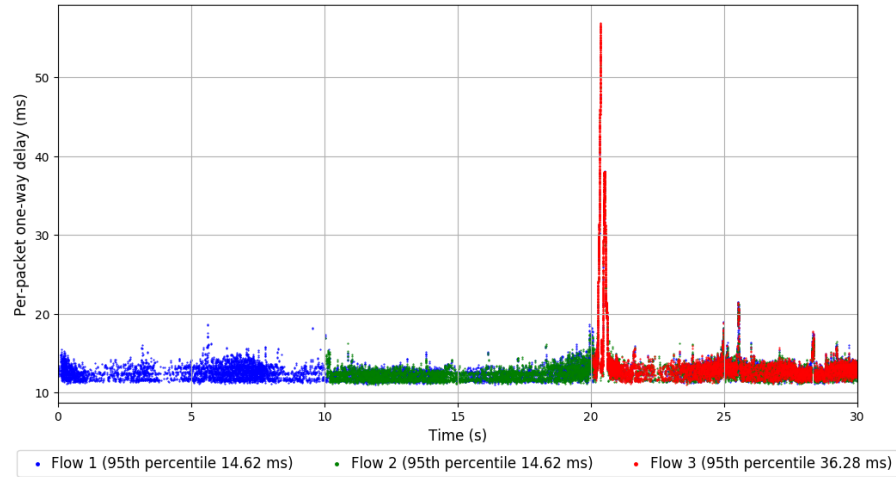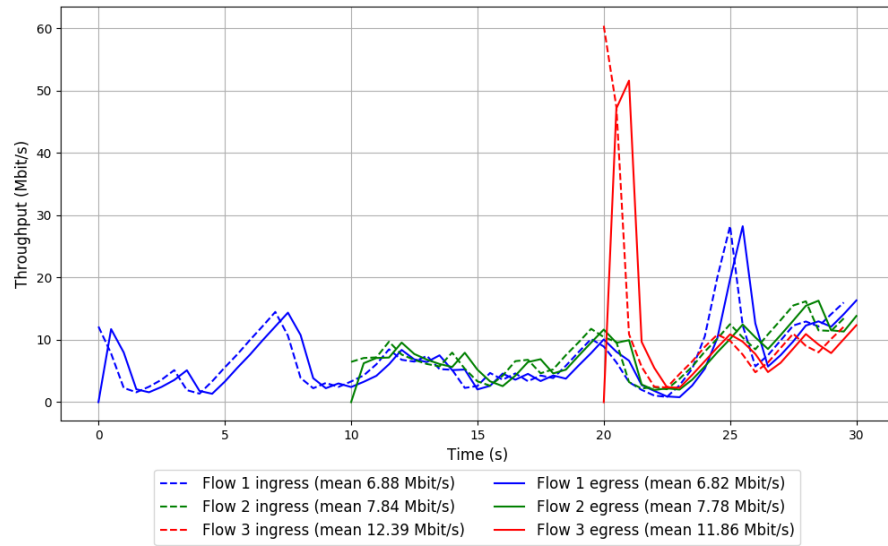
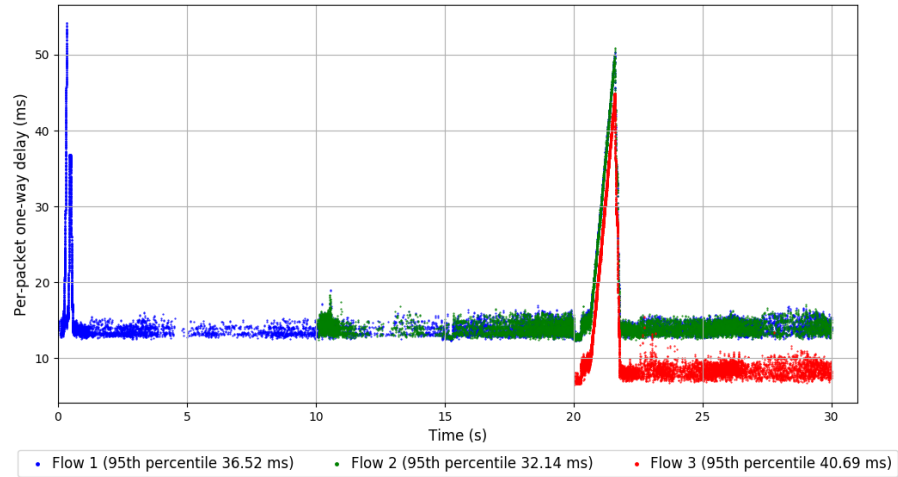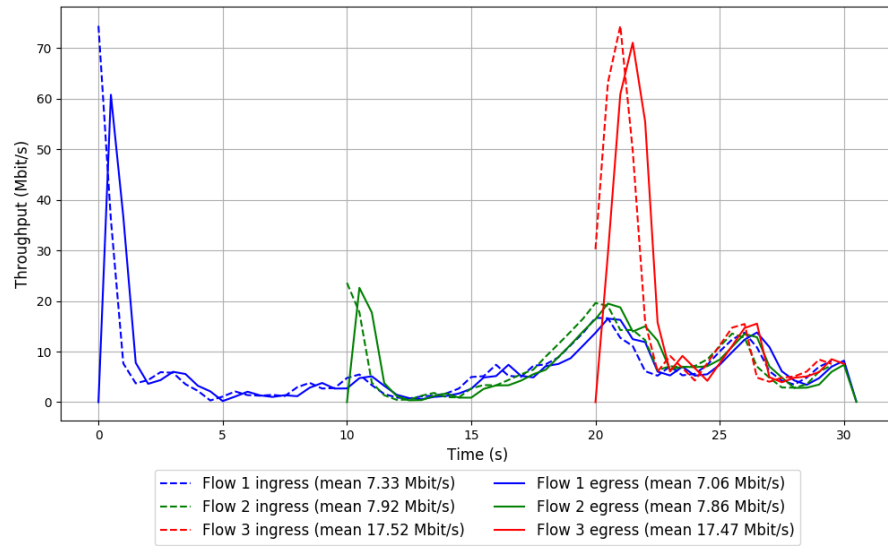Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-09-06 10:47:30
End at: 2018-09-06 10:48:00
Local clock offset: 1.036 ms
Remote clock offset: -1.017 ms


# Below is generated by plot.py at 2018-09-06 11:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.10 Mbit/s
95th percentile per-packet one-way delay: 37.576 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 36.516 ms
Loss rate: 3.67%
-- Flow 2:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 32.139 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 40.687 ms
Loss rate: 0.28%
```

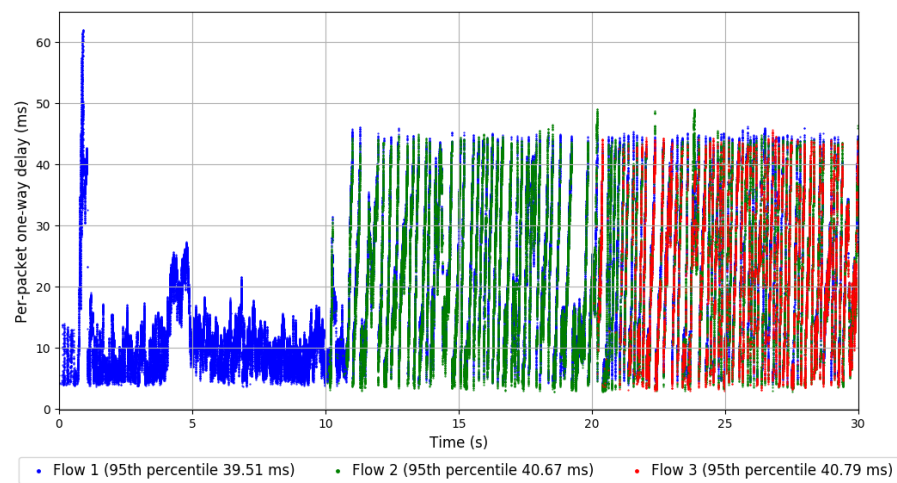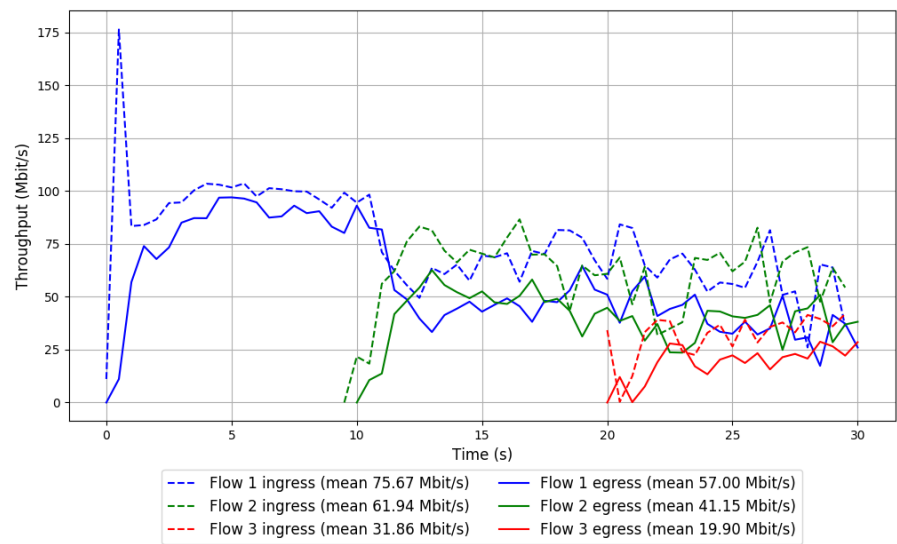Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-09-06 09:09:52
End at: 2018-09-06 09:10:22
Local clock offset: 0.879 ms
Remote clock offset: -3.472 ms


# Below is generated by plot.py at 2018-09-06 11:04:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 39.998 ms
Loss rate: 28.57%
-- Flow 1:
Average throughput: 57.00 Mbit/s
95th percentile per-packet one-way delay: 39.512 ms
Loss rate: 24.62%
-- Flow 2:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 40.675 ms
Loss rate: 33.50%
-- Flow 3:
Average throughput: 19.90 Mbit/s
95th percentile per-packet one-way delay: 40.790 ms
Loss rate: 37.53%
```

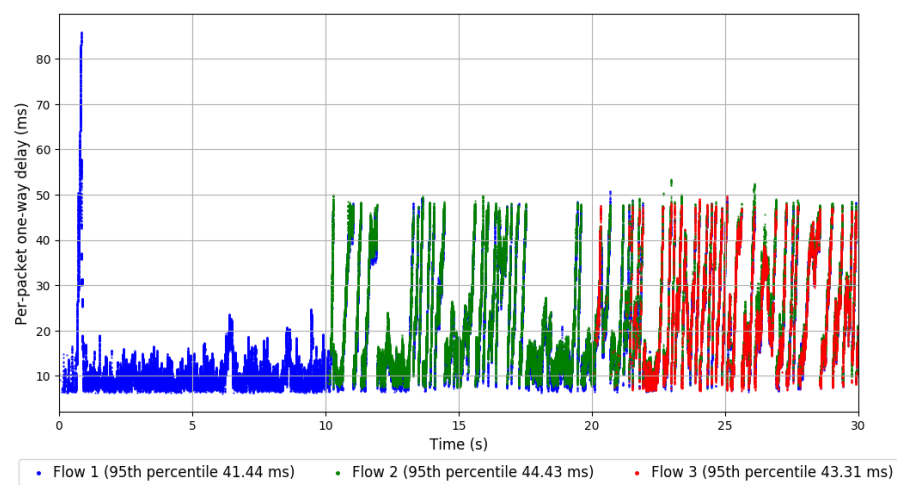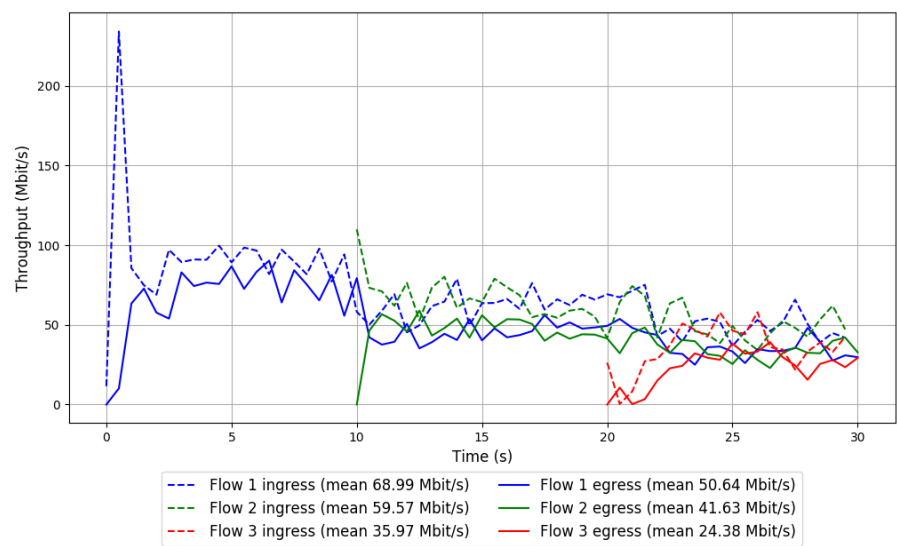Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-09-06 09:30:47
End at: 2018-09-06 09:31:17
Local clock offset: 1.449 ms
Remote clock offset: -1.533 ms


# Below is generated by plot.py at 2018-09-06 11:04:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 43.033 ms
Loss rate: 28.28%
-- Flow 1:
Average throughput: 50.64 Mbit/s
95th percentile per-packet one-way delay: 41.443 ms
Loss rate: 26.58%
-- Flow 2:
Average throughput: 41.63 Mbit/s
95th percentile per-packet one-way delay: 44.432 ms
Loss rate: 30.07%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 43.311 ms
Loss rate: 32.19%
```

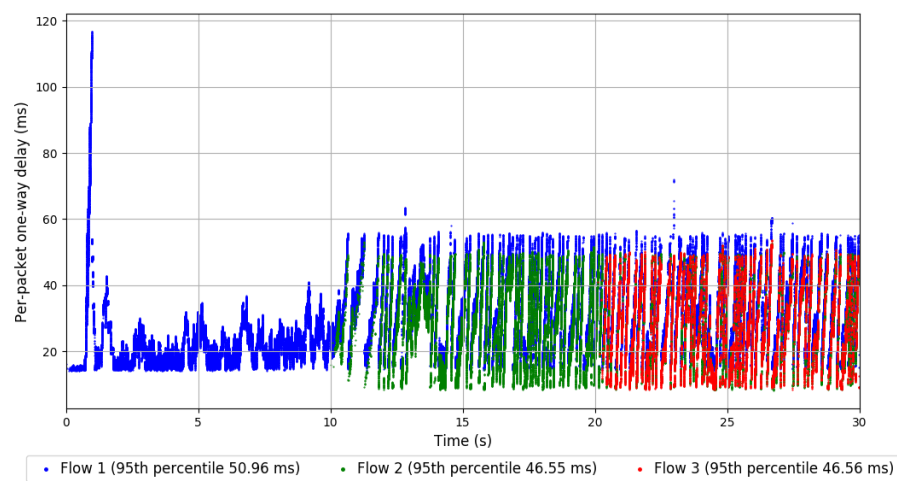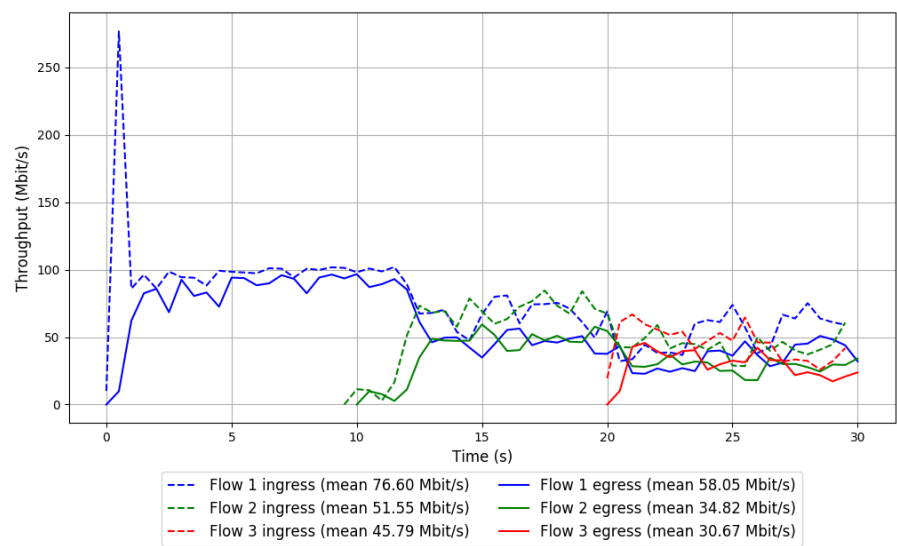Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-09-06 09:57:46
End at: 2018-09-06 09:58:16
Local clock offset: -0.095 ms
Remote clock offset: -2.224 ms

# Below is generated by plot.py at 2018-09-06 11:04:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.40 Mbit/s
95th percentile per-packet one-way delay: 48.914 ms
Loss rate: 27.54%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 50.957 ms
Loss rate: 24.22%
-- Flow 2:
Average throughput: 34.82 Mbit/s
95th percentile per-packet one-way delay: 46.546 ms
Loss rate: 32.48%
-- Flow 3:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 46.559 ms
Loss rate: 33.11%
```

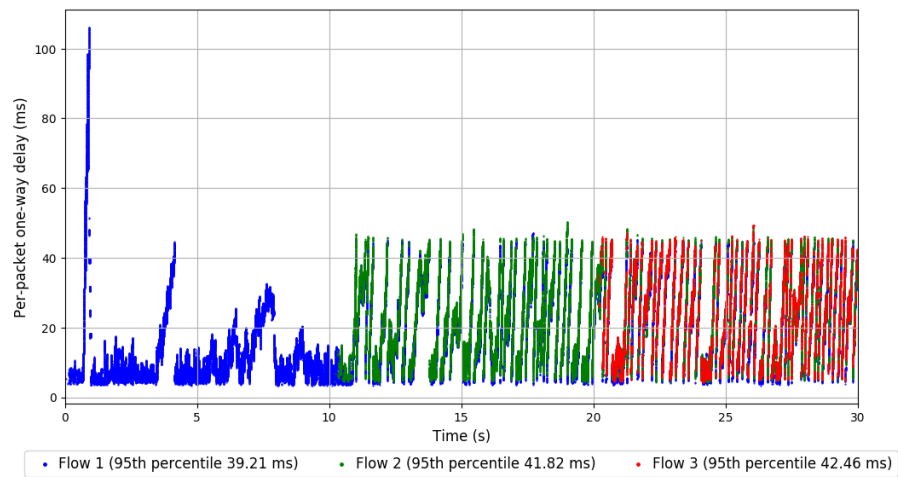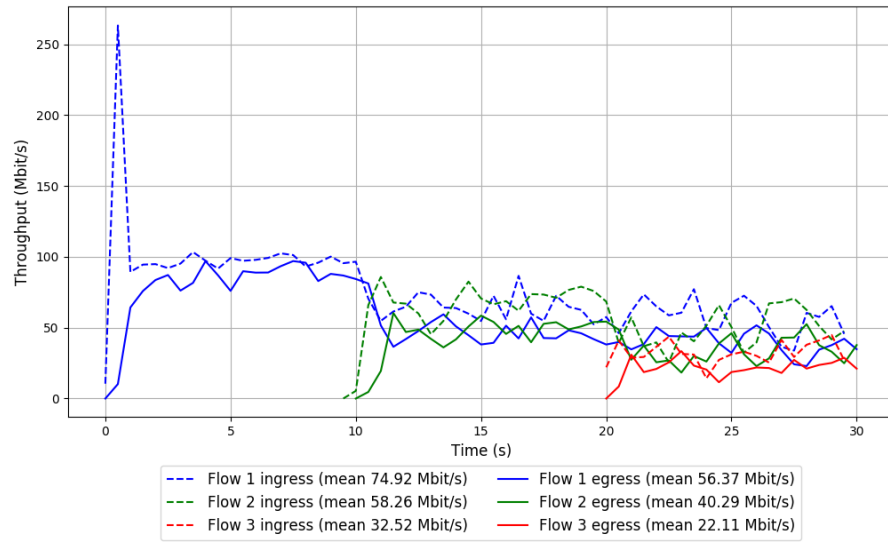Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-09-06 10:21:31
End at: 2018-09-06 10:22:01
Local clock offset: 3.309 ms
Remote clock offset: -2.119 ms


# Below is generated by plot.py at 2018-09-06 11:04:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.29 Mbit/s
95th percentile per-packet one-way delay: 40.690 ms
Loss rate: 27.41%
-- Flow 1:
Average throughput: 56.37 Mbit/s
95th percentile per-packet one-way delay: 39.211 ms
Loss rate: 24.68%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 41.820 ms
Loss rate: 31.42%
-- Flow 3:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 42.458 ms
Loss rate: 31.90%
```
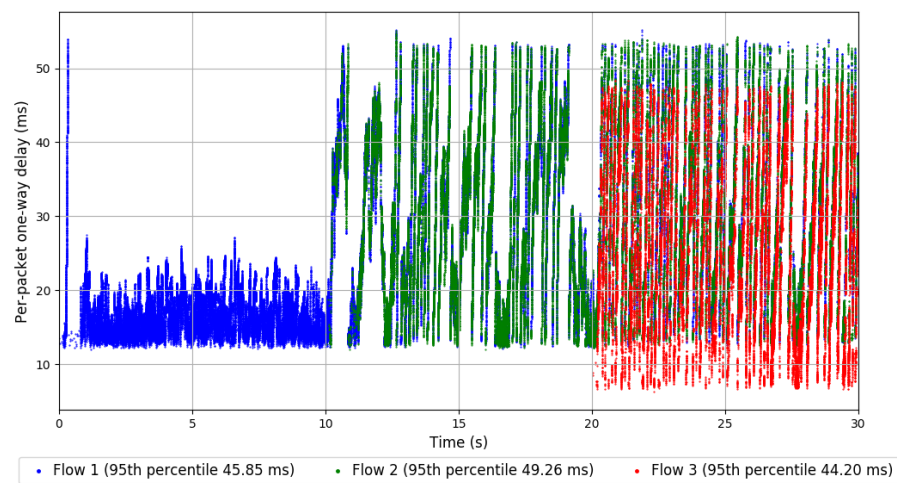
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 74.92 Mbit/s) — Flow 1 egress (mean 56.37 Mbit/s)
Flow 2 ingress (mean 58.26 Mbit/s) — Flow 2 egress (mean 40.29 Mbit/s)
Flow 3 ingress (mean 32.52 Mbit/s) — Flow 3 egress (mean 22.11 Mbit/s)

Flow 1 (95th percentile 39.21 ms) • Flow 2 (95th percentile 41.82 ms) • Flow 3 (95th percentile 42.46 ms)
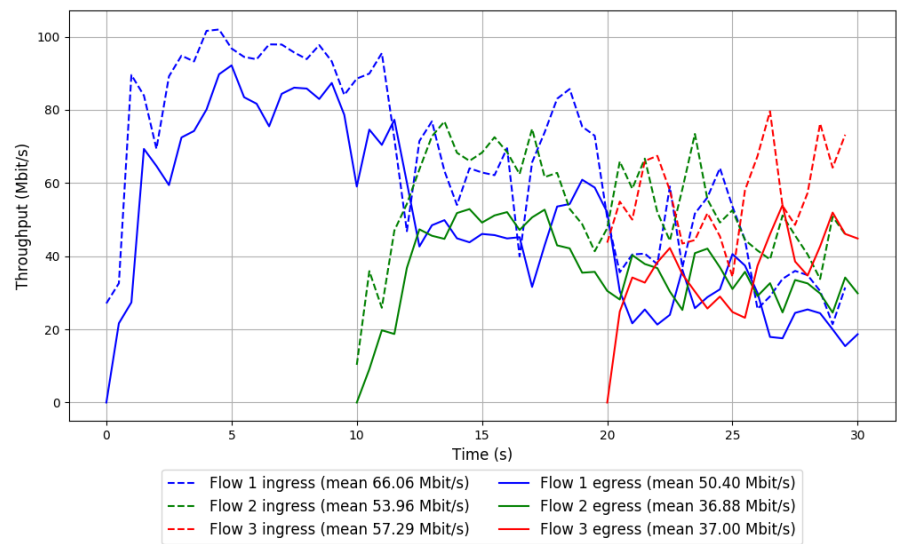
```
Run 5: Statistics of FillP

Start at: 2018-09-06 10:42:41
End at: 2018-09-06 10:43:11
Local clock offset: 1.385 ms
Remote clock offset: -0.538 ms


# Below is generated by plot.py at 2018-09-06 11:04:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.26 Mbit/s
95th percentile per-packet one-way delay: 46.958 ms
Loss rate: 27.82%
-- Flow 1:
Average throughput: 50.40 Mbit/s
95th percentile per-packet one-way delay: 45.851 ms
Loss rate: 23.64%
-- Flow 2:
Average throughput: 36.88 Mbit/s
95th percentile per-packet one-way delay: 49.262 ms
Loss rate: 31.58%
-- Flow 3:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 44.195 ms
Loss rate: 35.26%
```

Run 5: Report of FillP — Data Link

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```
Run 1: Statistics of FillP-Sheep

Start at: 2018-09-06 09:20:18
End at: 2018-09-06 09:20:48
Local clock offset: -1.226 ms
Remote clock offset: -0.92 ms


# Below is generated by plot.py at 2018-09-06 11:04:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 44.986 ms
Loss rate: 23.38%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 42.989 ms
Loss rate: 20.18%
-- Flow 2:
Average throughput: 42.24 Mbit/s
95th percentile per-packet one-way delay: 45.270 ms
Loss rate: 25.56%
-- Flow 3:
Average throughput: 31.88 Mbit/s
95th percentile per-packet one-way delay: 47.374 ms
Loss rate: 31.82%
```
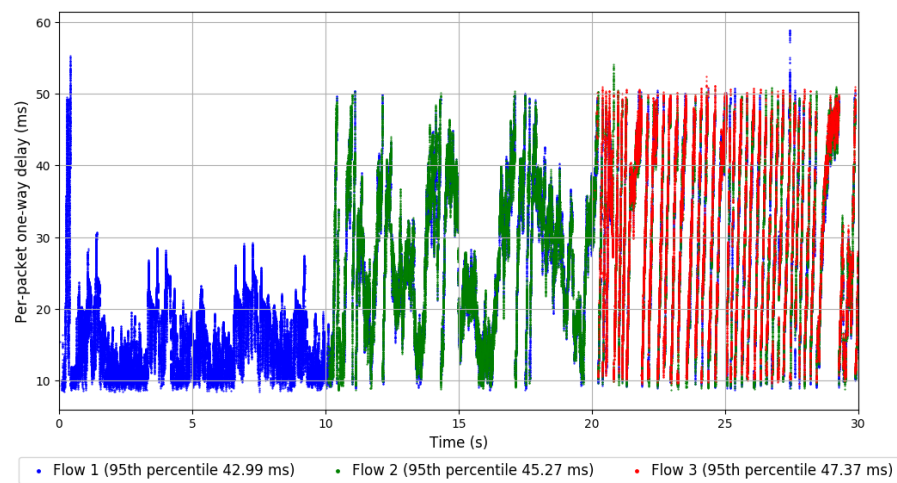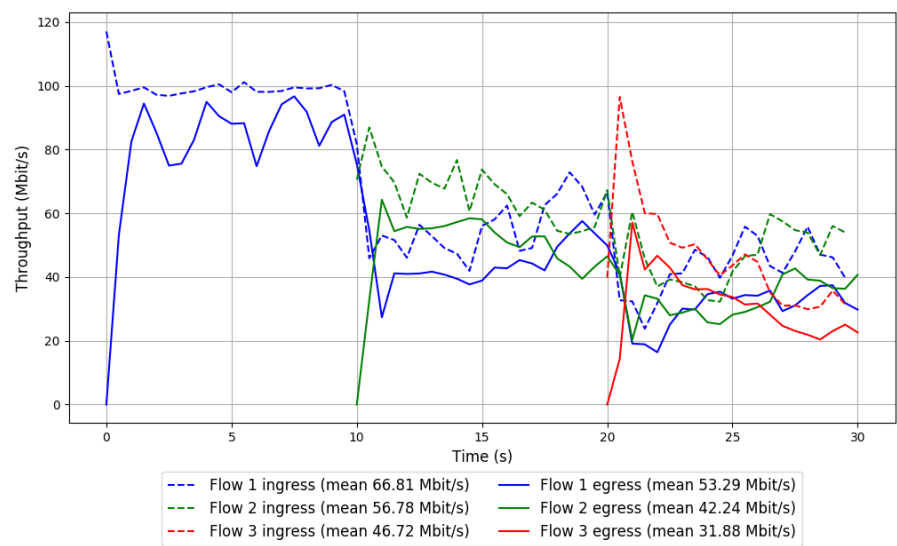
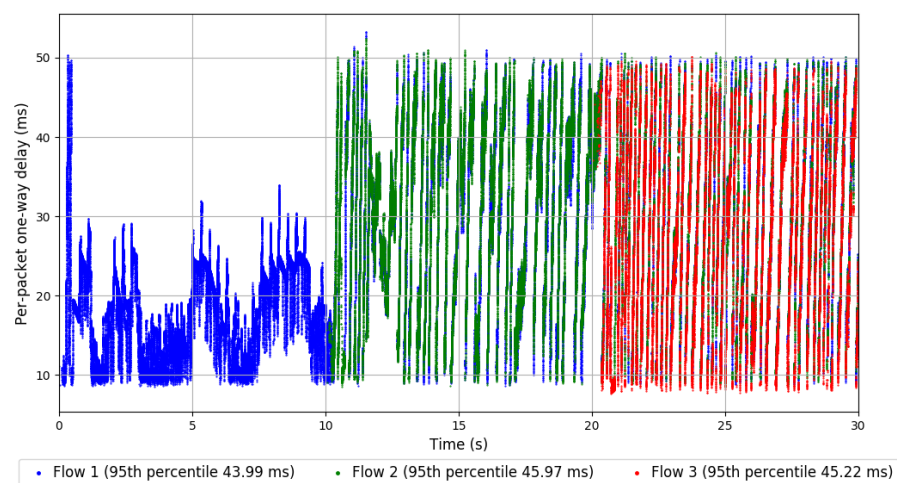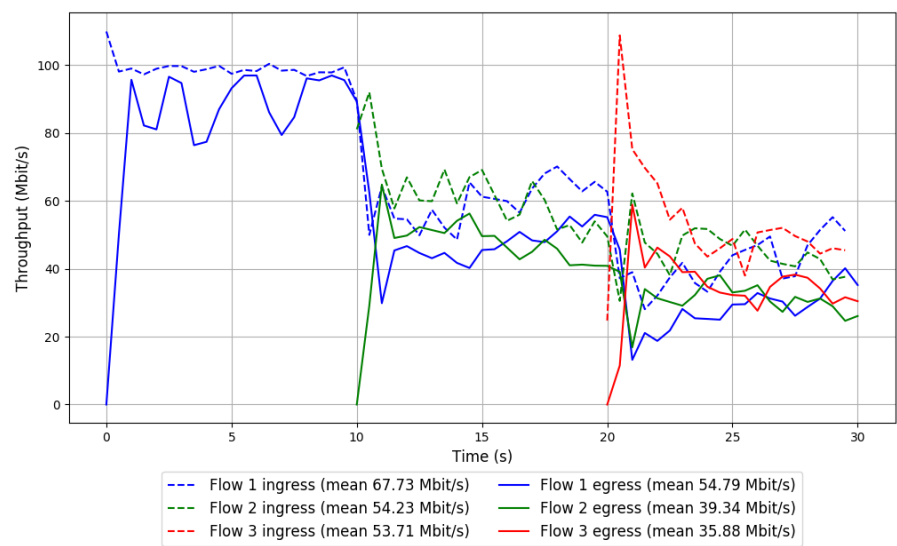Run 1: Report of FillP-Sheep — Data Link

- - - Flow 1 ingress (mean 66.81 Mbit/s) —— Flow 1 egress (mean 53.29 Mbit/s)
- - - Flow 2 ingress (mean 56.78 Mbit/s) —— Flow 2 egress (mean 42.24 Mbit/s)
- - - Flow 3 ingress (mean 46.72 Mbit/s) —— Flow 3 egress (mean 31.88 Mbit/s)

• Flow 1 (95th percentile 42.99 ms)   • Flow 2 (95th percentile 45.27 ms)   • Flow 3 (95th percentile 47.37 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2018-09-06 09:47:00
End at: 2018-09-06 09:47:30
Local clock offset: 1.004 ms
Remote clock offset: -0.869 ms


# Below is generated by plot.py at 2018-09-06 11:04:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 44.954 ms
Loss rate: 23.64%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 43.993 ms
Loss rate: 19.08%
-- Flow 2:
Average throughput: 39.34 Mbit/s
95th percentile per-packet one-way delay: 45.972 ms
Loss rate: 27.43%
-- Flow 3:
Average throughput: 35.88 Mbit/s
95th percentile per-packet one-way delay: 45.221 ms
Loss rate: 33.29%
```

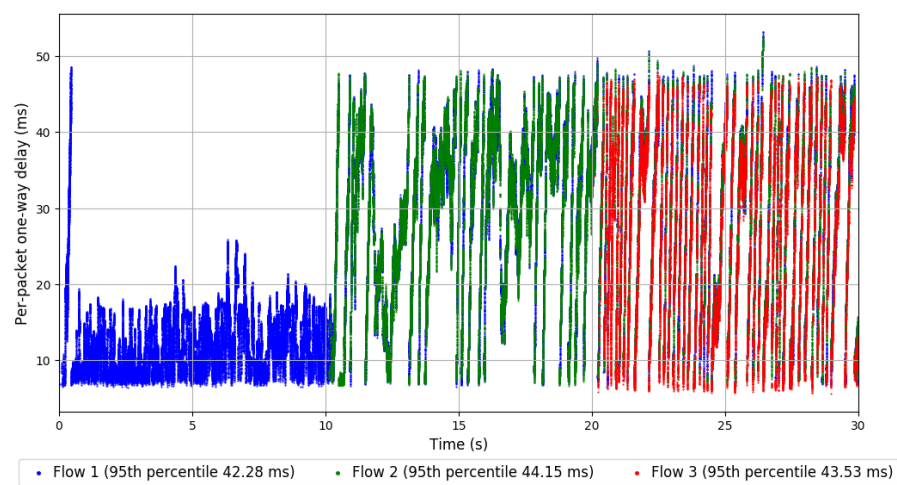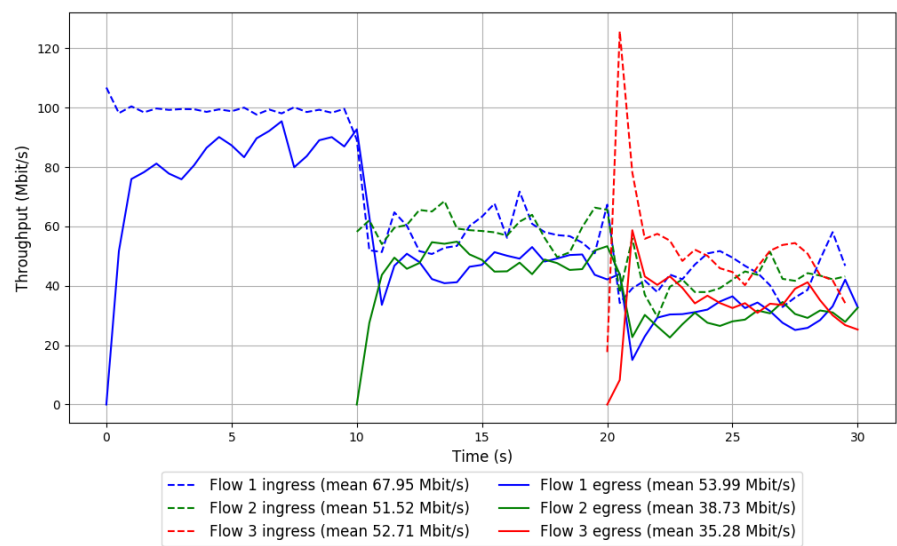Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2018-09-06 10:08:24
End at: 2018-09-06 10:08:54
Local clock offset: 1.871 ms
Remote clock offset: -1.804 ms


# Below is generated by plot.py at 2018-09-06 11:04:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 43.189 ms
Loss rate: 23.60%
-- Flow 1:
Average throughput: 53.99 Mbit/s
95th percentile per-packet one-way delay: 42.278 ms
Loss rate: 20.52%
-- Flow 2:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 44.153 ms
Loss rate: 24.82%
-- Flow 3:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 43.532 ms
Loss rate: 33.19%
```

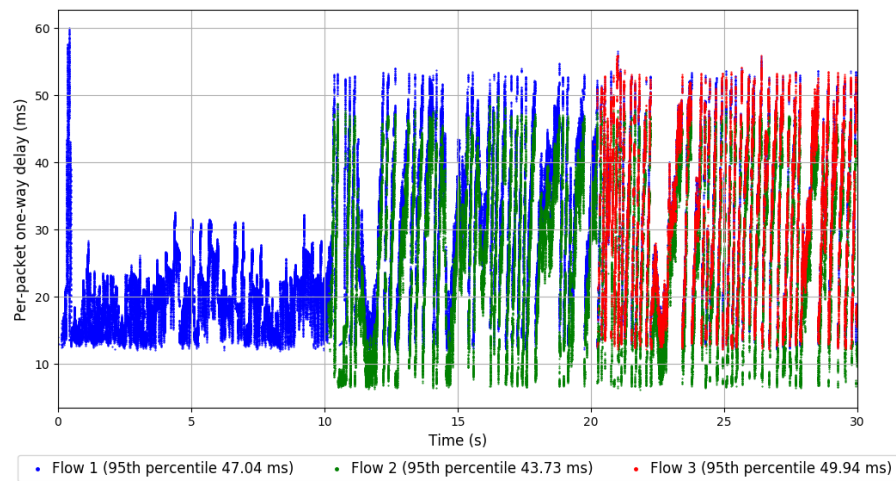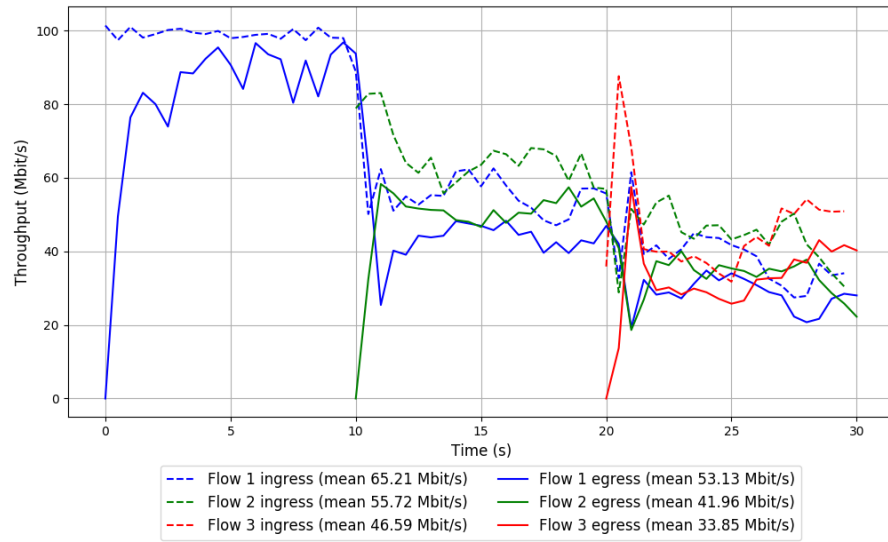Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 67.95 Mbit/s)   Flow 1 egress (mean 53.99 Mbit/s)
Flow 2 ingress (mean 51.52 Mbit/s)   Flow 2 egress (mean 38.73 Mbit/s)
Flow 3 ingress (mean 52.71 Mbit/s)   Flow 3 egress (mean 35.28 Mbit/s)

Flow 1 (95th percentile 42.28 ms)   Flow 2 (95th percentile 44.15 ms)   Flow 3 (95th percentile 43.53 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2018-09-06 10:31:55
End at: 2018-09-06 10:32:25
Local clock offset: 1.266 ms
Remote clock offset: -1.063 ms


# Below is generated by plot.py at 2018-09-06 11:05:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 46.620 ms
Loss rate: 21.64%
-- Flow 1:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 47.042 ms
Loss rate: 18.50%
-- Flow 2:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 43.728 ms
Loss rate: 24.71%
-- Flow 3:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 49.942 ms
Loss rate: 27.52%
```

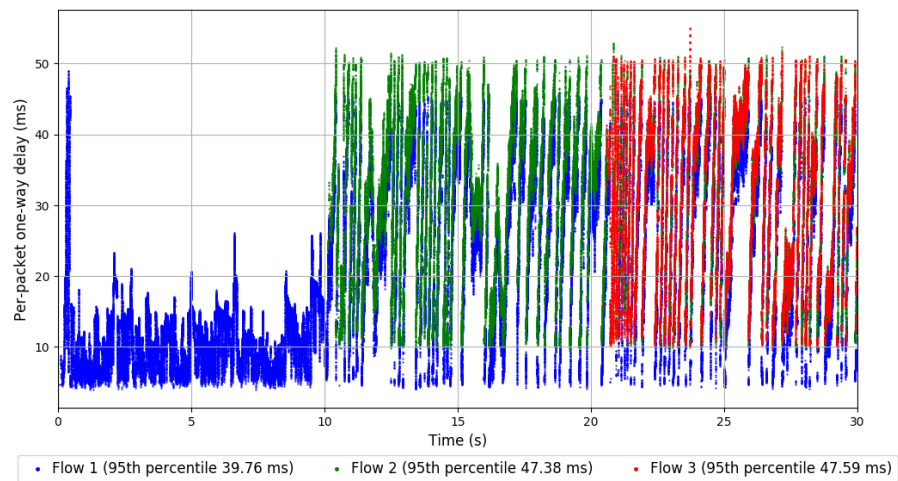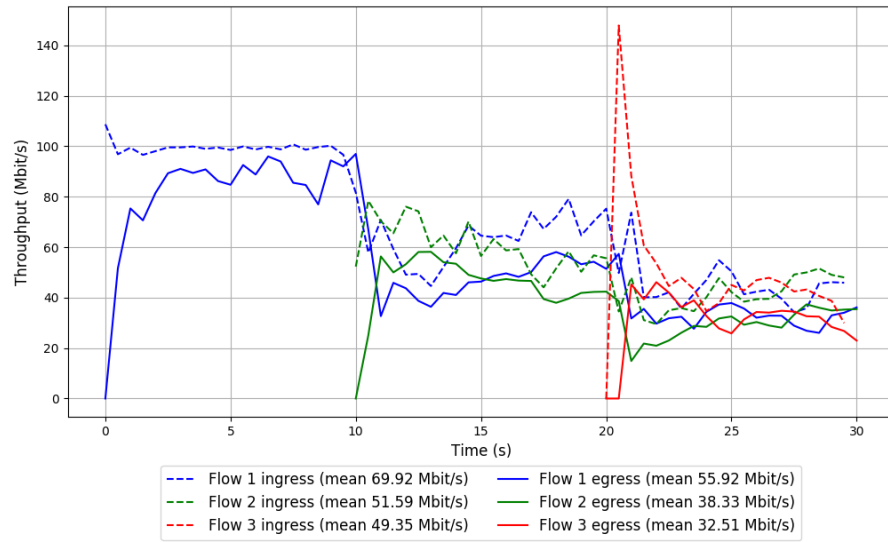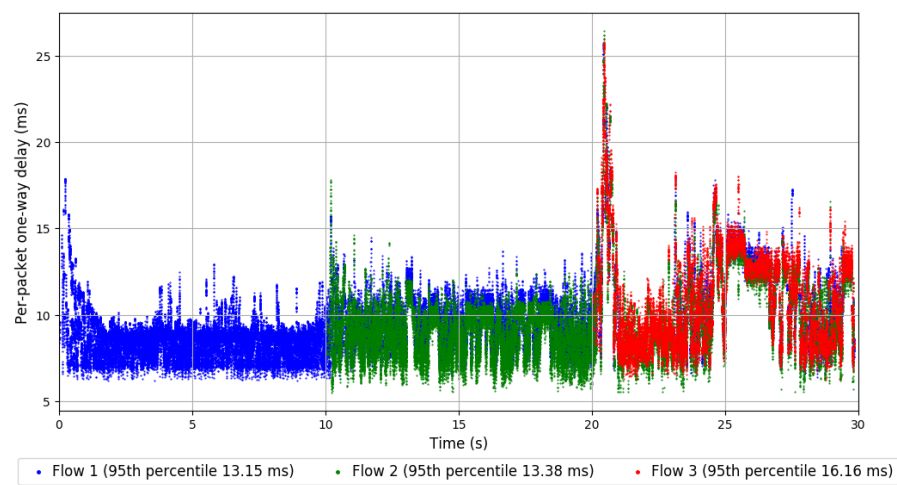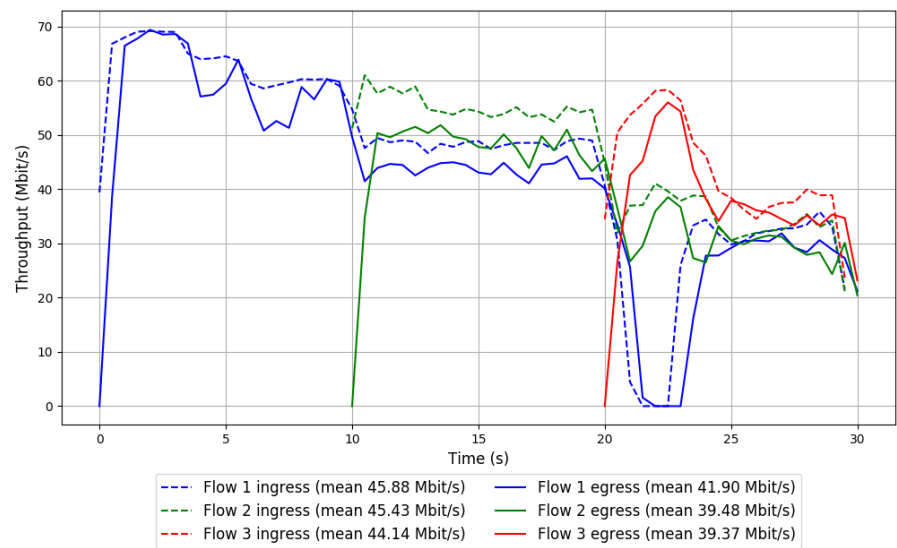Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 65.21 Mbit/s) --- Flow 1 egress (mean 53.13 Mbit/s)
Flow 2 ingress (mean 55.72 Mbit/s) --- Flow 2 egress (mean 41.96 Mbit/s)
Flow 3 ingress (mean 46.59 Mbit/s) --- Flow 3 egress (mean 33.85 Mbit/s)

Flow 1 (95th percentile 47.04 ms)   Flow 2 (95th percentile 43.73 ms)   Flow 3 (95th percentile 49.94 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2018-09-06 10:53:25
End at: 2018-09-06 10:53:55
Local clock offset: 3.41 ms
Remote clock offset: -1.644 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.19 Mbit/s
95th percentile per-packet one-way delay: 44.564 ms
Loss rate: 23.52%
-- Flow 1:
Average throughput: 55.92 Mbit/s
95th percentile per-packet one-way delay: 39.763 ms
Loss rate: 19.98%
-- Flow 2:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 47.381 ms
Loss rate: 25.62%
-- Flow 3:
Average throughput: 32.51 Mbit/s
95th percentile per-packet one-way delay: 47.592 ms
Loss rate: 34.21%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 69.92 Mbit/s) ---- Flow 1 egress (mean 55.92 Mbit/s)
Flow 2 ingress (mean 51.59 Mbit/s) ---- Flow 2 egress (mean 38.33 Mbit/s)
Flow 3 ingress (mean 49.35 Mbit/s) ---- Flow 3 egress (mean 32.51 Mbit/s)

Flow 1 (95th percentile 39.76 ms)   Flow 2 (95th percentile 47.38 ms)   Flow 3 (95th percentile 47.59 ms)
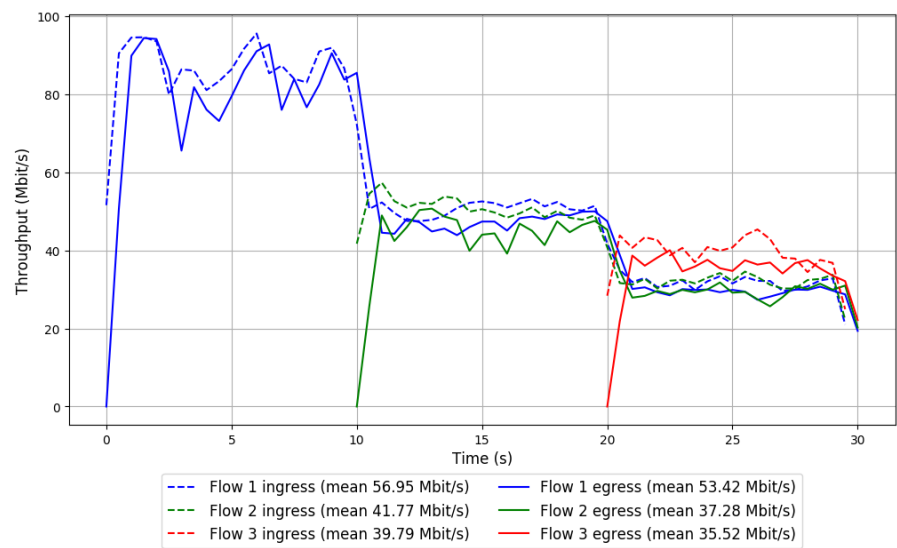
53

```
Run 1: Statistics of Indigo

Start at: 2018-09-06 09:27:15
End at: 2018-09-06 09:27:45
Local clock offset: 2.626 ms
Remote clock offset: -1.168 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.01 Mbit/s
95th percentile per-packet one-way delay: 13.898 ms
Loss rate: 10.49%
-- Flow 1:
Average throughput: 41.90 Mbit/s
95th percentile per-packet one-way delay: 13.147 ms
Loss rate: 8.68%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 13.380 ms
Loss rate: 13.11%
-- Flow 3:
Average throughput: 39.37 Mbit/s
95th percentile per-packet one-way delay: 16.160 ms
Loss rate: 10.82%
```
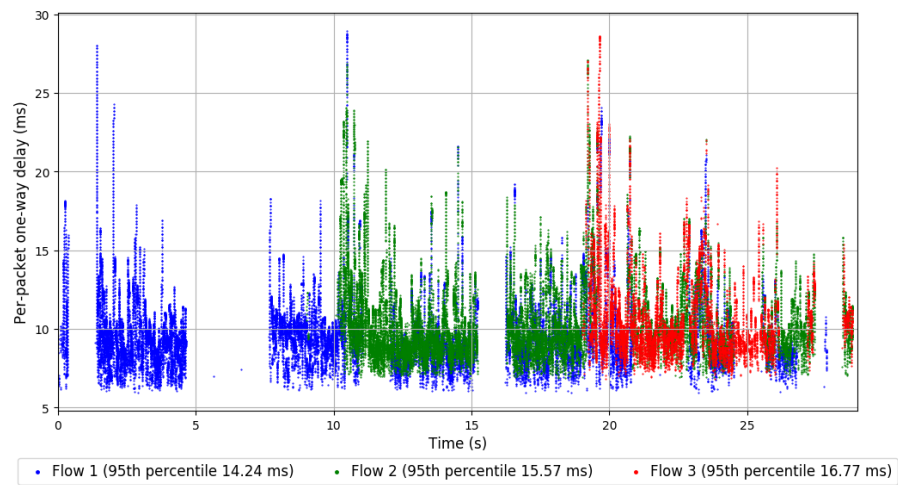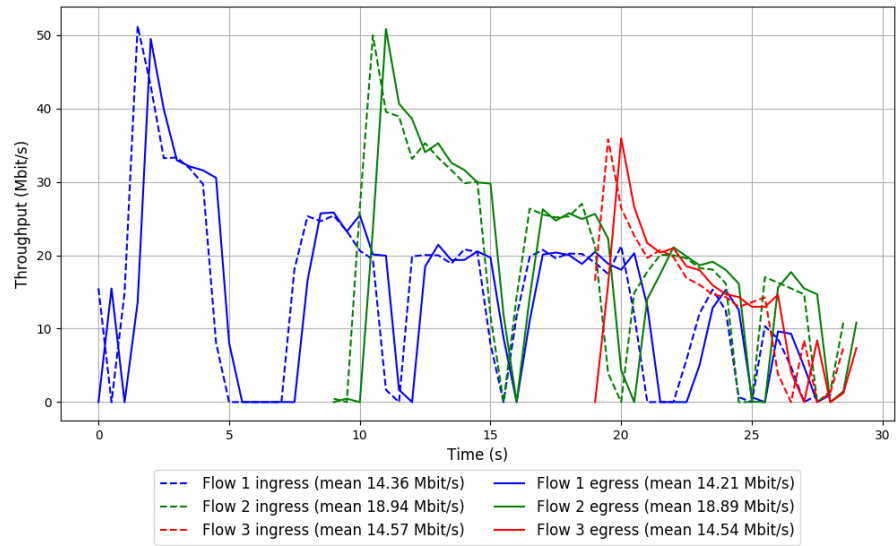
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-09-06 09:54:10
End at: 2018-09-06 09:54:40
Local clock offset: 2.929 ms
Remote clock offset: -2.035 ms

# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 12.041 ms
Loss rate: 8.09%
-- Flow 1:
Average throughput: 53.42 Mbit/s
95th percentile per-packet one-way delay: 11.966 ms
Loss rate: 6.19%
-- Flow 2:
Average throughput: 37.28 Mbit/s
95th percentile per-packet one-way delay: 12.036 ms
Loss rate: 10.75%
-- Flow 3:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 12.488 ms
Loss rate: 10.71%
```
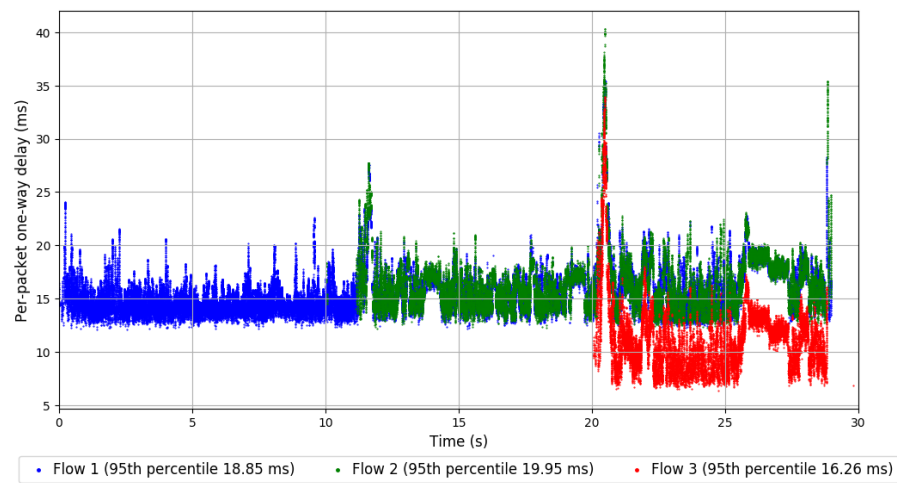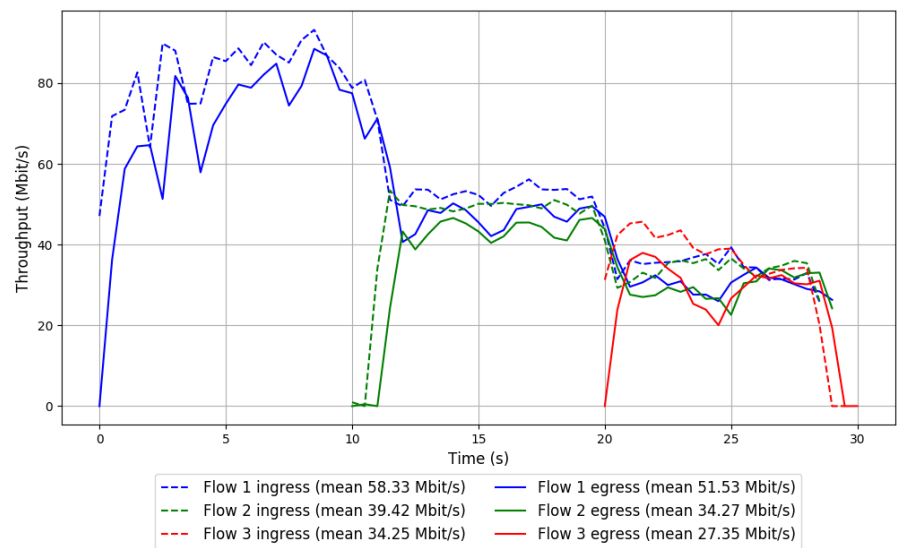
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 56.95 Mbit/s)   Flow 1 egress (mean 53.42 Mbit/s)
Flow 2 ingress (mean 41.77 Mbit/s)   Flow 2 egress (mean 37.28 Mbit/s)
Flow 3 ingress (mean 39.79 Mbit/s)   Flow 3 egress (mean 35.52 Mbit/s)

Flow 1 (95th percentile 11.97 ms)   Flow 2 (95th percentile 12.04 ms)   Flow 3 (95th percentile 12.49 ms)

```
Run 3: Statistics of Indigo

Start at: 2018-09-06 10:16:22
End at: 2018-09-06 10:16:52
Local clock offset: 1.409 ms
Remote clock offset: -1.893 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 15.309 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 14.241 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 18.89 Mbit/s
95th percentile per-packet one-way delay: 15.575 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 14.54 Mbit/s
95th percentile per-packet one-way delay: 16.771 ms
Loss rate: 0.19%
```
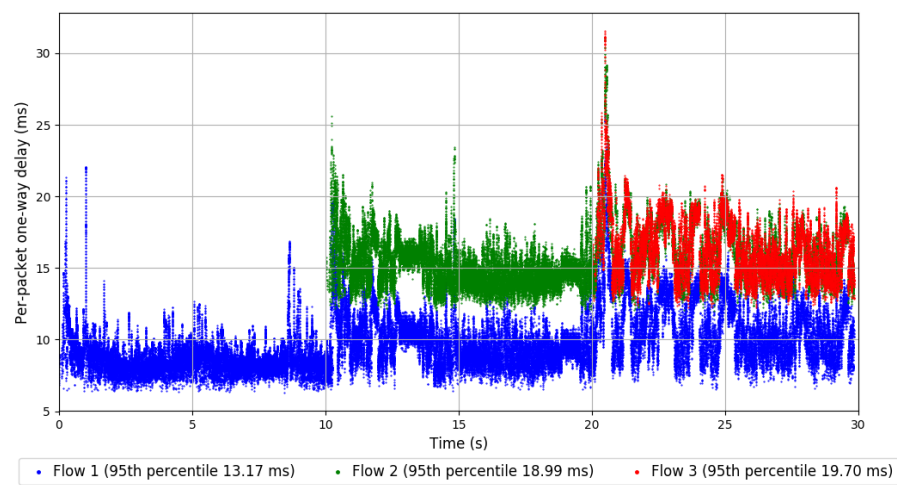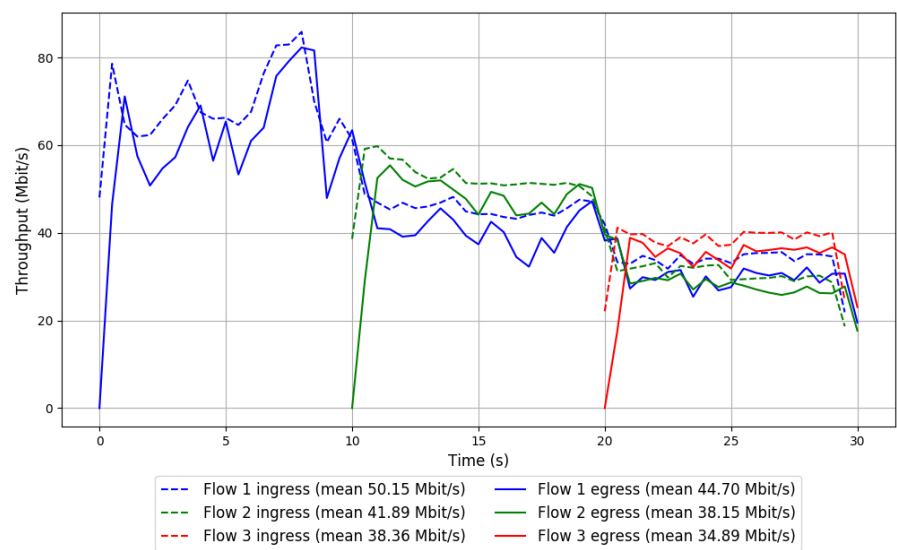
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-09-06 10:38:54
End at: 2018-09-06 10:39:24
Local clock offset: 0.03 ms
Remote clock offset: -1.956 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.81 Mbit/s
95th percentile per-packet one-way delay: 19.208 ms
Loss rate: 13.05%
-- Flow 1:
Average throughput: 51.53 Mbit/s
95th percentile per-packet one-way delay: 18.850 ms
Loss rate: 11.65%
-- Flow 2:
Average throughput: 34.27 Mbit/s
95th percentile per-packet one-way delay: 19.953 ms
Loss rate: 13.02%
-- Flow 3:
Average throughput: 27.35 Mbit/s
95th percentile per-packet one-way delay: 16.258 ms
Loss rate: 20.16%
```
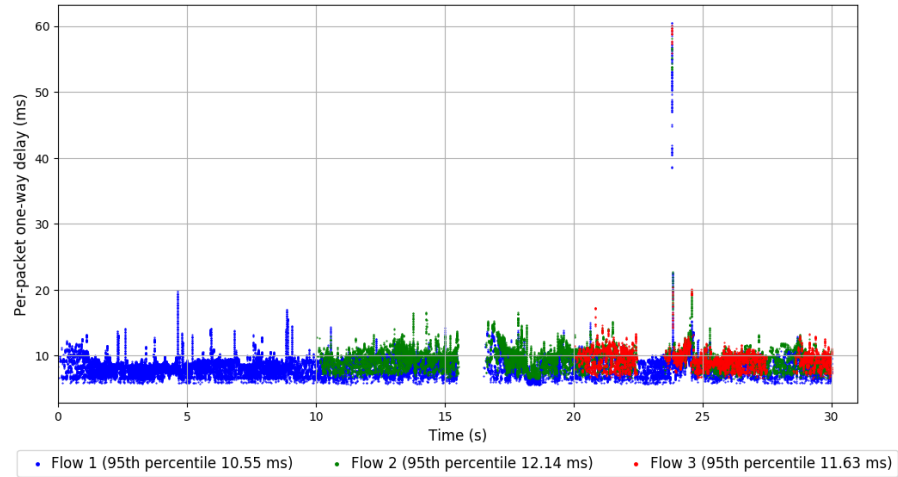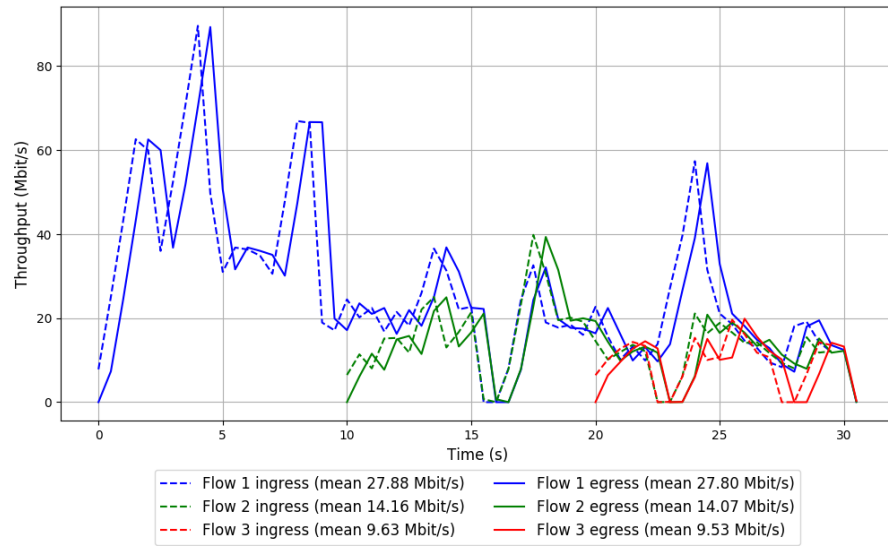
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-09-06 11:00:38
End at: 2018-09-06 11:01:08
Local clock offset: 1.239 ms
Remote clock offset: -1.905 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.45 Mbit/s
95th percentile per-packet one-way delay: 18.518 ms
Loss rate: 10.01%
-- Flow 1:
Average throughput: 44.70 Mbit/s
95th percentile per-packet one-way delay: 13.174 ms
Loss rate: 10.85%
-- Flow 2:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 18.986 ms
Loss rate: 8.93%
-- Flow 3:
Average throughput: 34.89 Mbit/s
95th percentile per-packet one-way delay: 19.704 ms
Loss rate: 9.06%
```

Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-09-06 09:07:36
End at: 2018-09-06 09:08:06
Local clock offset: -0.713 ms
Remote clock offset: -2.335 ms

# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.34 Mbit/s
95th percentile per-packet one-way delay: 11.226 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 27.80 Mbit/s
95th percentile per-packet one-way delay: 10.548 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 12.140 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 11.630 ms
Loss rate: 1.09%
```
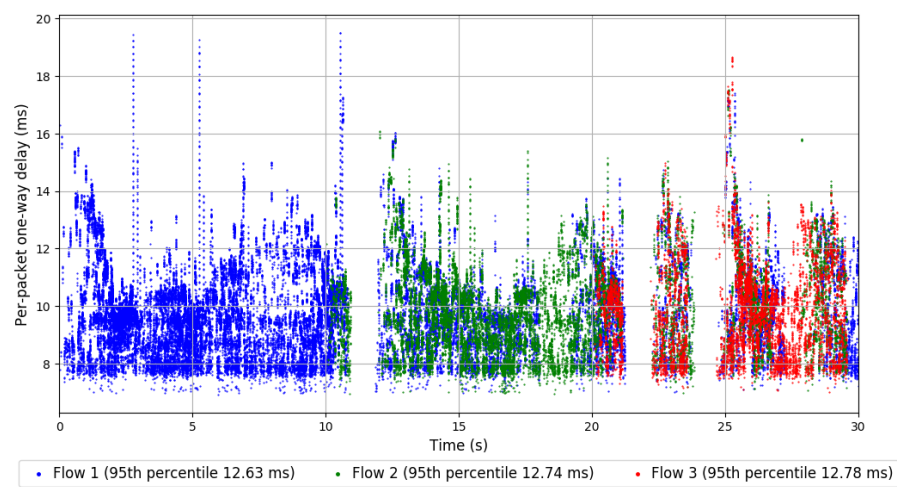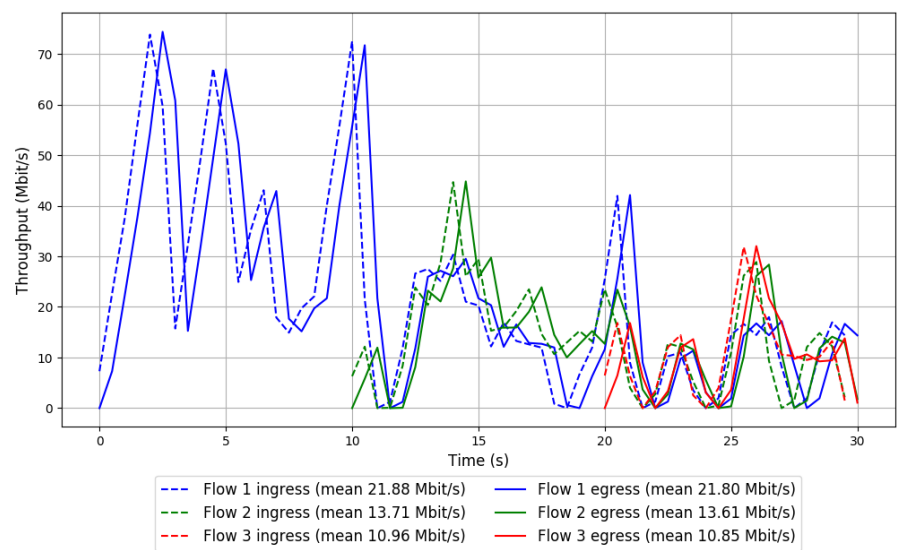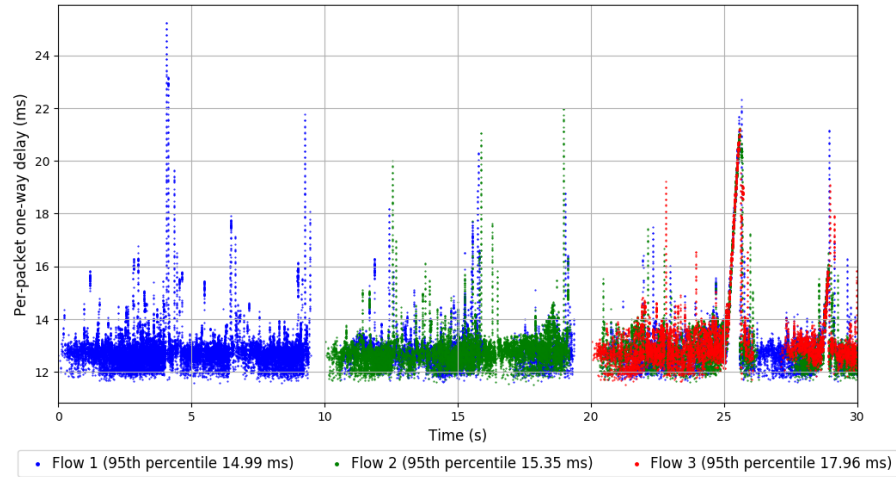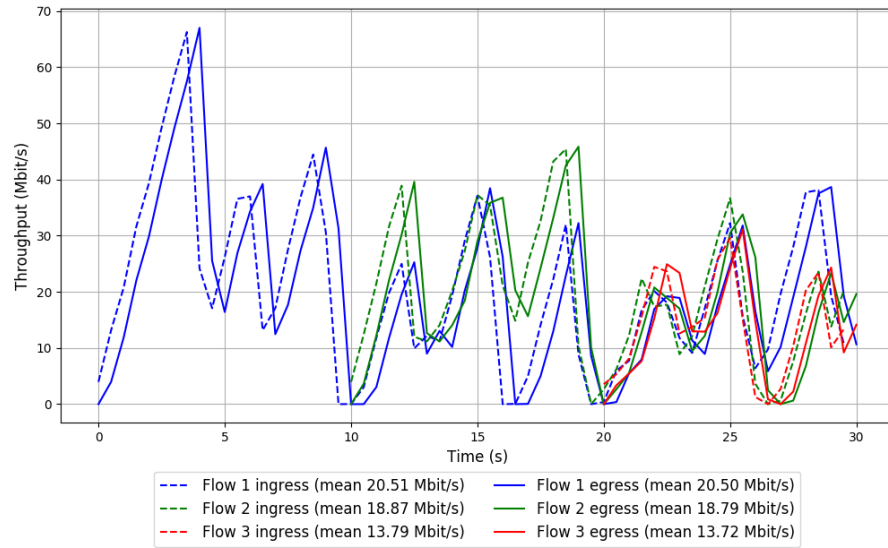
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-09-06 09:28:30
End at: 2018-09-06 09:29:00
Local clock offset: 2.194 ms
Remote clock offset: -0.947 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 12.674 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 12.626 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 12.737 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 12.775 ms
Loss rate: 1.01%
```
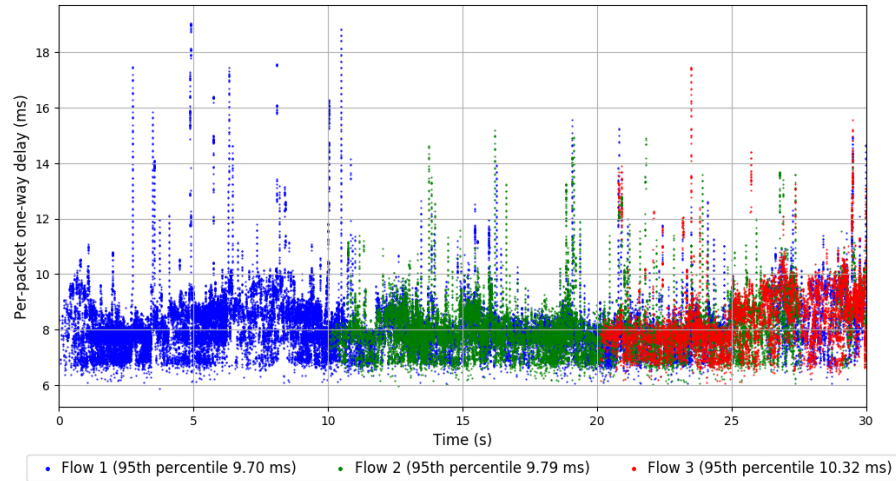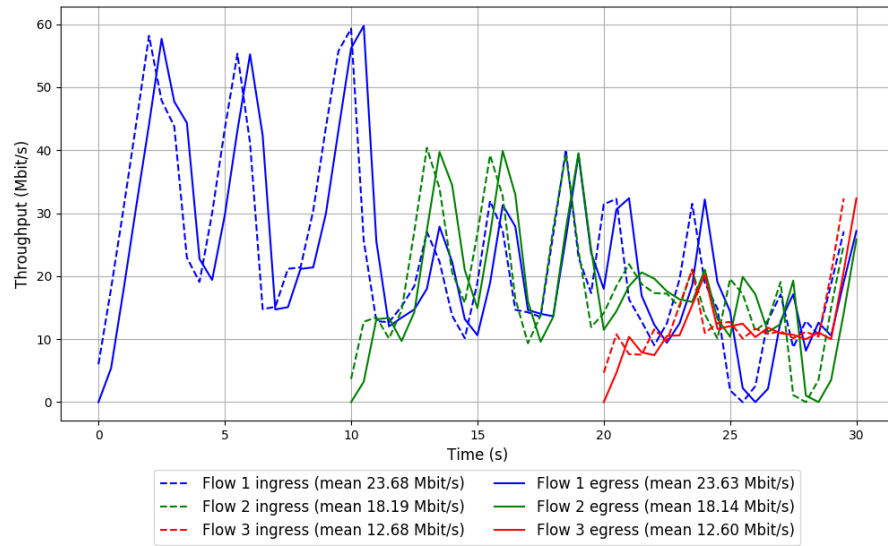
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 21.88 Mbit/s)   Flow 1 egress (mean 21.80 Mbit/s)
Flow 2 ingress (mean 13.71 Mbit/s)   Flow 2 egress (mean 13.61 Mbit/s)
Flow 3 ingress (mean 10.96 Mbit/s)   Flow 3 egress (mean 10.85 Mbit/s)

Flow 1 (95th percentile 12.63 ms)   Flow 2 (95th percentile 12.74 ms)   Flow 3 (95th percentile 12.78 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-09-06 09:55:25
End at: 2018-09-06 09:55:55
Local clock offset: 2.867 ms
Remote clock offset: -1.802 ms


# Below is generated by plot.py at 2018-09-06 11:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.55 Mbit/s
95th percentile per-packet one-way delay: 15.492 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 20.50 Mbit/s
95th percentile per-packet one-way delay: 14.995 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 18.79 Mbit/s
95th percentile per-packet one-way delay: 15.354 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 13.72 Mbit/s
95th percentile per-packet one-way delay: 17.963 ms
Loss rate: 0.46%
```
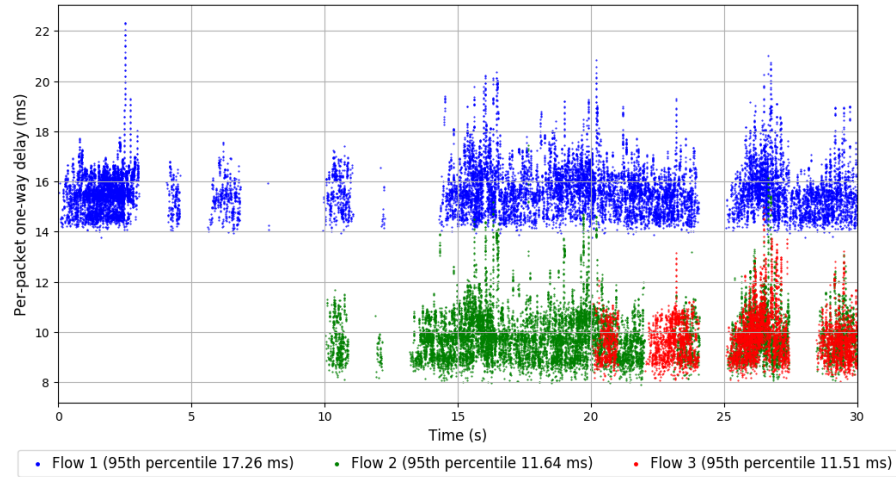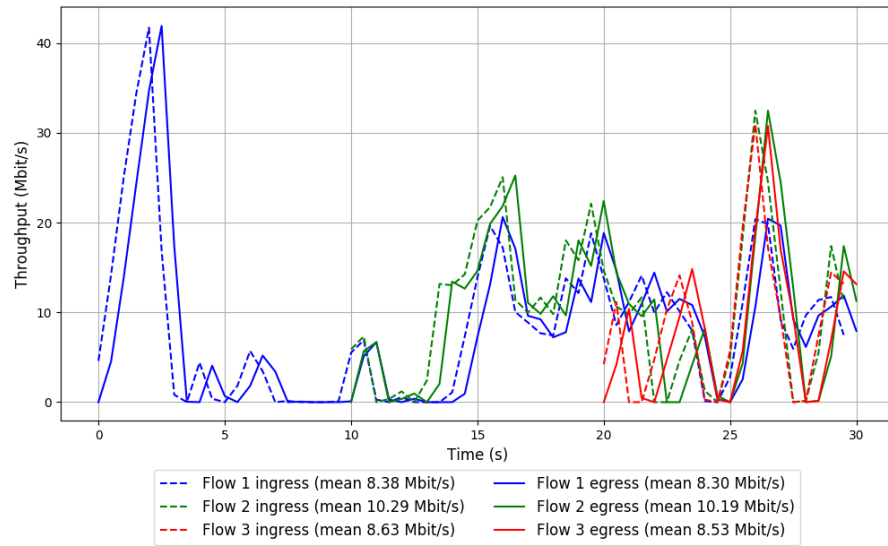
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-09-06 10:19:11
End at: 2018-09-06 10:19:41
Local clock offset: 1.876 ms
Remote clock offset: -1.067 ms


# Below is generated by plot.py at 2018-09-06 11:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 9.808 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 9.695 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 18.14 Mbit/s
95th percentile per-packet one-way delay: 9.791 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 12.60 Mbit/s
95th percentile per-packet one-way delay: 10.317 ms
Loss rate: 0.65%
```
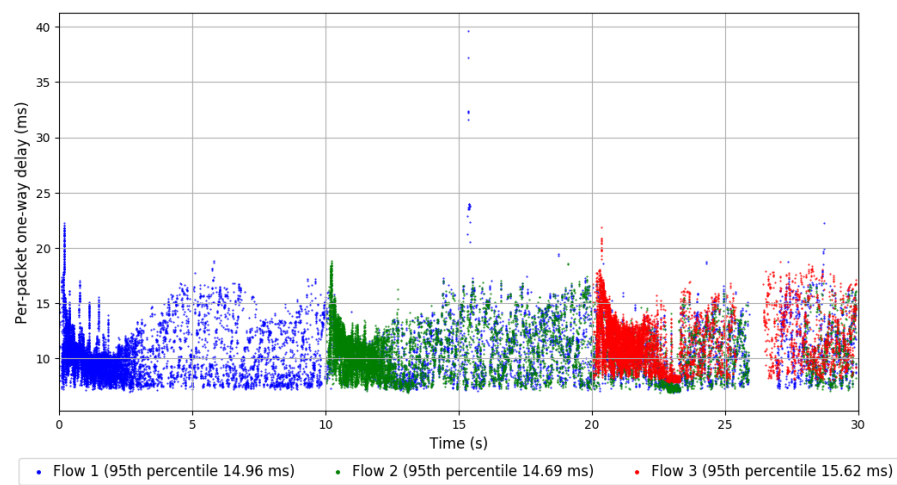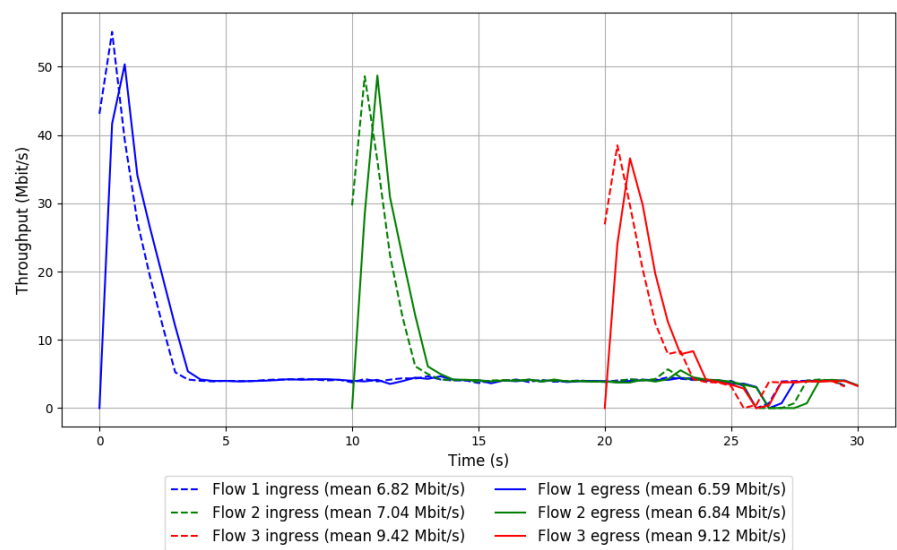
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-09-06 10:40:19
End at: 2018-09-06 10:40:49
Local clock offset: -0.031 ms
Remote clock offset: -0.403 ms


# Below is generated by plot.py at 2018-09-06 11:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.92 Mbit/s
95th percentile per-packet one-way delay: 16.694 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 17.264 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 11.645 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 11.511 ms
Loss rate: 1.22%
```
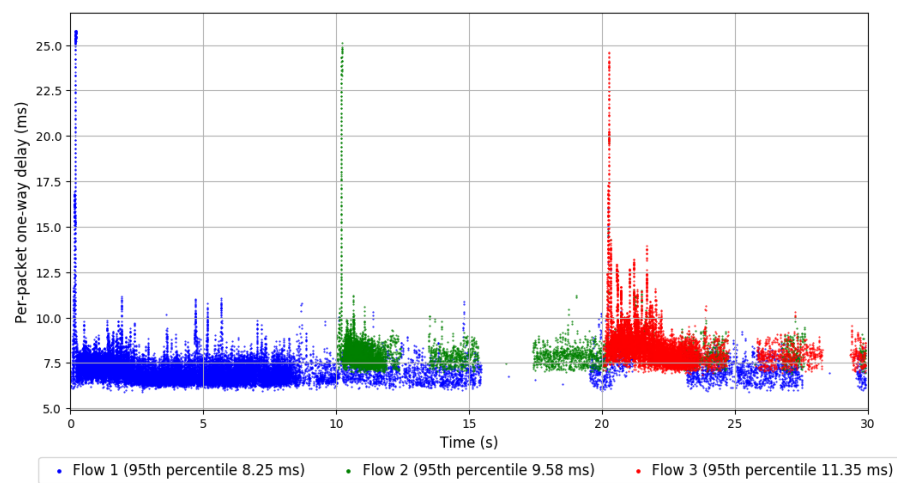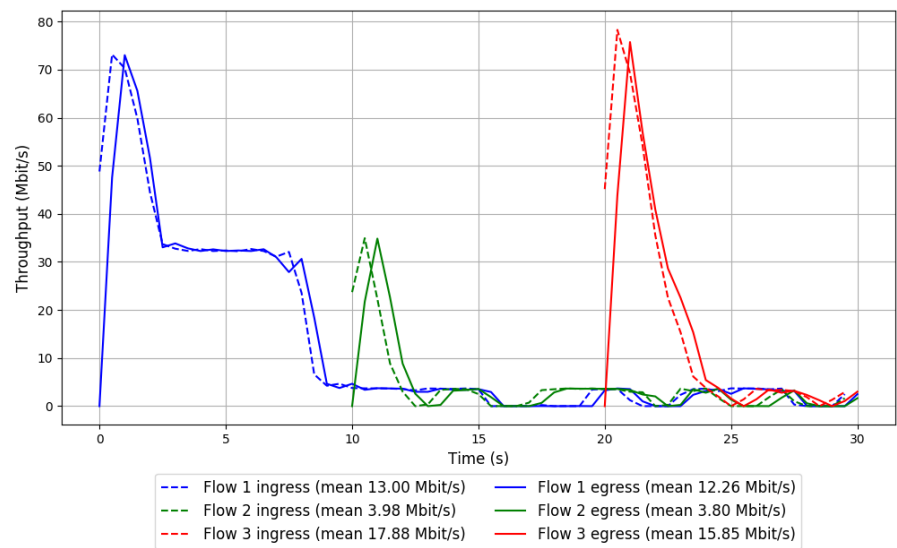
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Indigo-Muses

Start at: 2018-09-06 09:23:52
End at: 2018-09-06 09:24:22
Local clock offset: -0.049 ms
Remote clock offset: -1.814 ms


# Below is generated by plot.py at 2018-09-06 11:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.15 Mbit/s
95th percentile per-packet one-way delay: 15.044 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 14.965 ms
Loss rate: 3.44%
-- Flow 2:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 14.690 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 15.623 ms
Loss rate: 3.15%
```

Run 1: Report of Indigo-Muses — Data Link

```
Run 2: Statistics of Indigo-Muses

Start at: 2018-09-06 09:50:36
End at: 2018-09-06 09:51:06
Local clock offset: 1.669 ms
Remote clock offset: -1.912 ms


# Below is generated by plot.py at 2018-09-06 11:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.02 Mbit/s
95th percentile per-packet one-way delay: 9.558 ms
Loss rate: 7.09%
-- Flow 1:
Average throughput: 12.26 Mbit/s
95th percentile per-packet one-way delay: 8.246 ms
Loss rate: 5.72%
-- Flow 2:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 9.576 ms
Loss rate: 4.37%
-- Flow 3:
Average throughput: 15.85 Mbit/s
95th percentile per-packet one-way delay: 11.349 ms
Loss rate: 11.33%
```
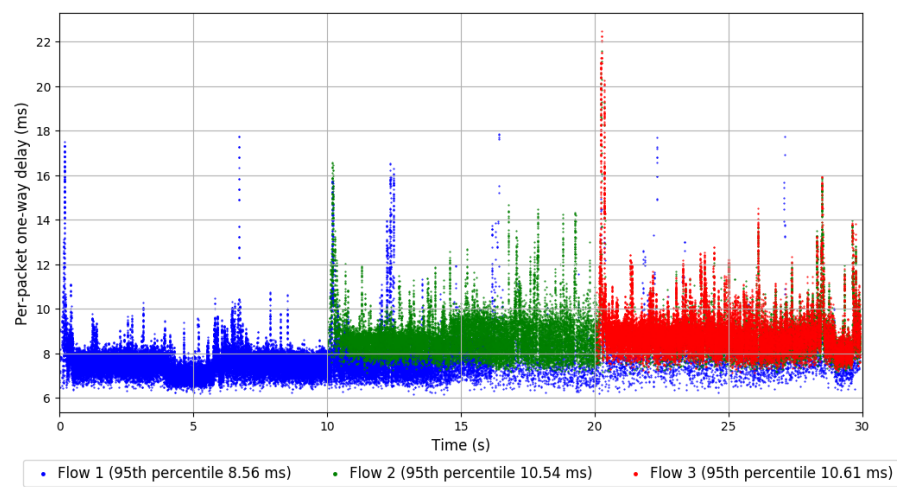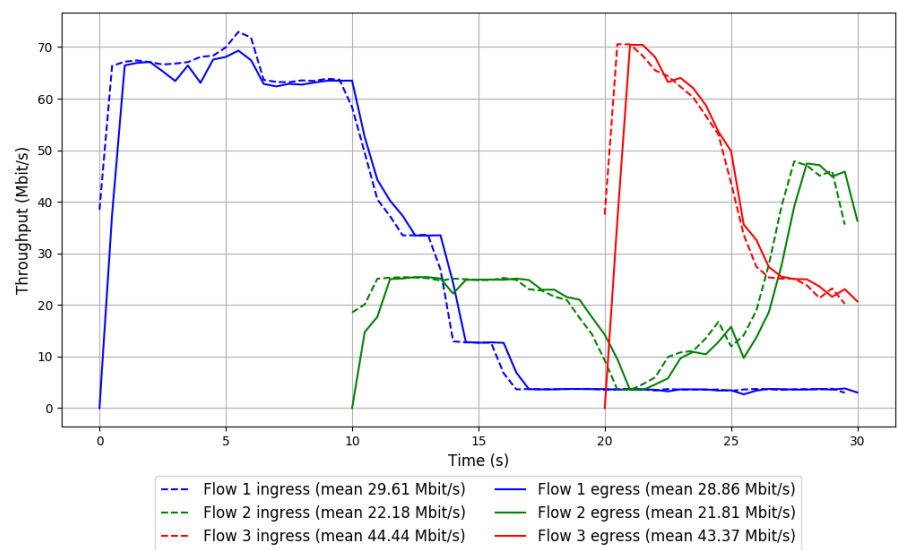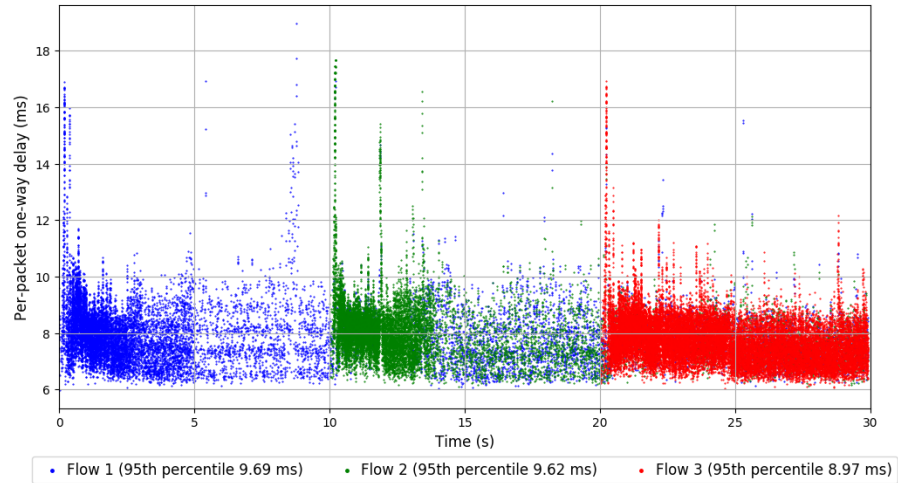
Run 2: Report of Indigo-Muses — Data Link

```
Run 3: Statistics of Indigo-Muses

Start at: 2018-09-06 10:11:57
End at: 2018-09-06 10:12:27
Local clock offset: 1.572 ms
Remote clock offset: -1.61 ms


# Below is generated by plot.py at 2018-09-06 11:06:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: 9.980 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 8.560 ms
Loss rate: 2.54%
-- Flow 2:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 10.541 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 43.37 Mbit/s
95th percentile per-packet one-way delay: 10.614 ms
Loss rate: 2.41%
```

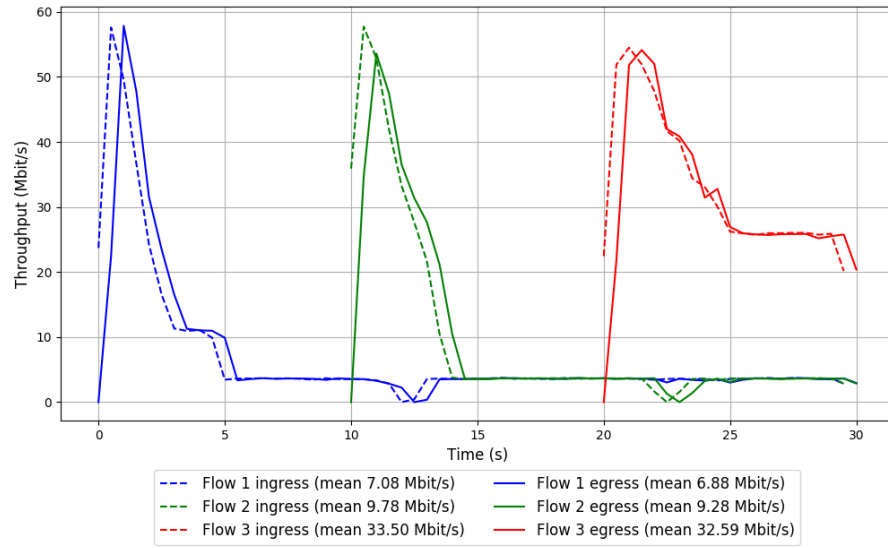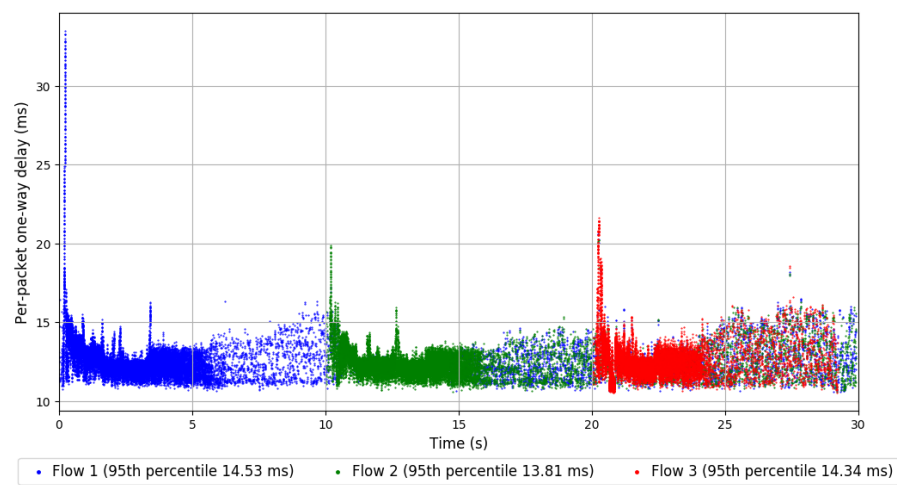Run 3: Report of Indigo-Muses — Data Link

```
Run 4: Statistics of Indigo-Muses

Start at: 2018-09-06 10:35:27
End at: 2018-09-06 10:35:57
Local clock offset: 1.702 ms
Remote clock offset: -0.728 ms


# Below is generated by plot.py at 2018-09-06 11:06:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.82 Mbit/s
95th percentile per-packet one-way delay: 9.403 ms
Loss rate: 3.39%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 9.694 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 9.28 Mbit/s
95th percentile per-packet one-way delay: 9.615 ms
Loss rate: 5.14%
-- Flow 3:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 8.968 ms
Loss rate: 2.73%
```

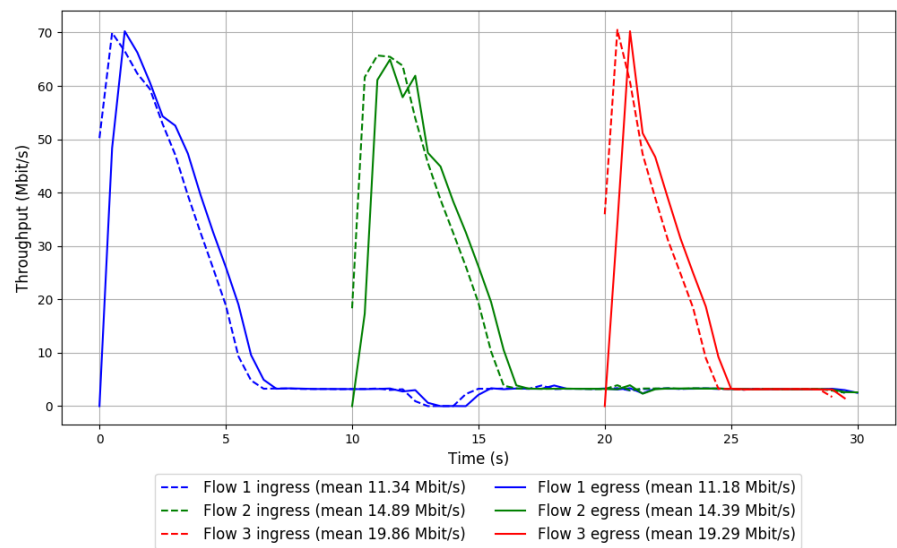Run 4: Report of Indigo-Muses — Data Link

```
Run 5: Statistics of Indigo-Muses

Start at: 2018-09-06 10:57:06
End at: 2018-09-06 10:57:36
Local clock offset: 3.169 ms
Remote clock offset: -1.121 ms


# Below is generated by plot.py at 2018-09-06 11:06:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.69 Mbit/s
95th percentile per-packet one-way delay: 14.273 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 11.18 Mbit/s
95th percentile per-packet one-way delay: 14.533 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 14.39 Mbit/s
95th percentile per-packet one-way delay: 13.808 ms
Loss rate: 3.35%
-- Flow 3:
Average throughput: 19.29 Mbit/s
95th percentile per-packet one-way delay: 14.344 ms
Loss rate: 3.21%
```

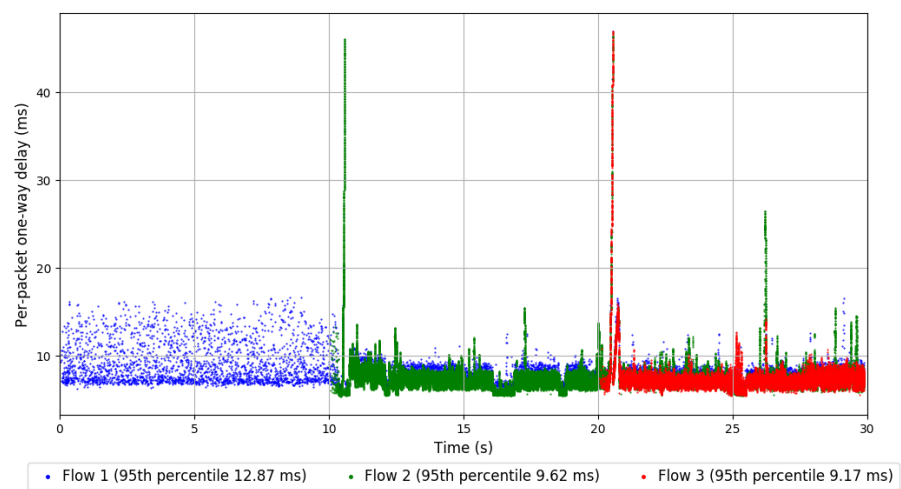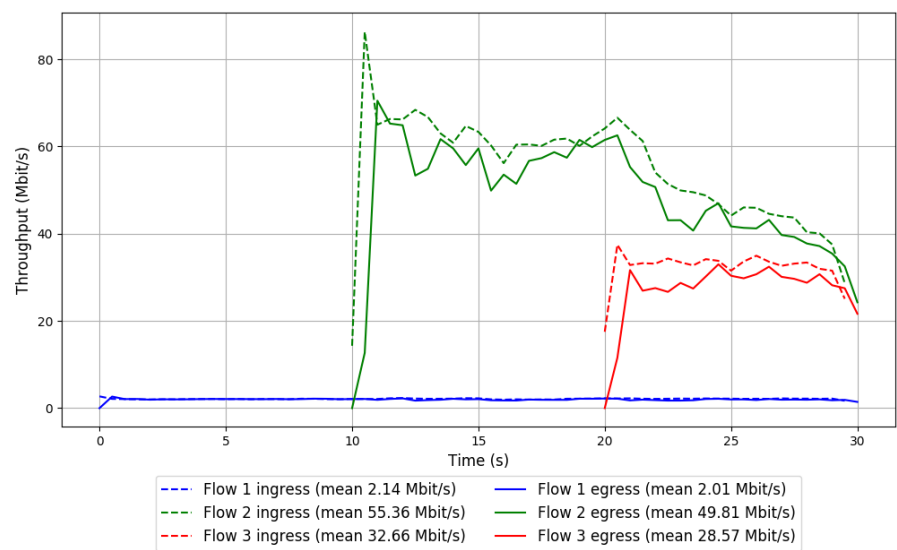Run 5: Report of Indigo-Muses — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-09-06 09:12:13
End at: 2018-09-06 09:12:43
Local clock offset: -1.037 ms
Remote clock offset: -2.503 ms


# Below is generated by plot.py at 2018-09-06 11:06:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 9.935 ms
Loss rate: 10.41%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 12.868 ms
Loss rate: 6.28%
-- Flow 2:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 9.623 ms
Loss rate: 10.03%
-- Flow 3:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 9.168 ms
Loss rate: 12.51%
```
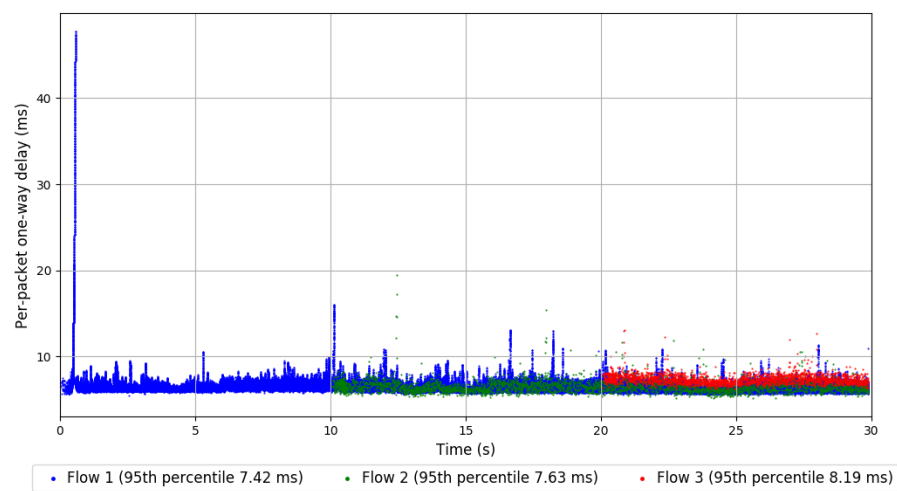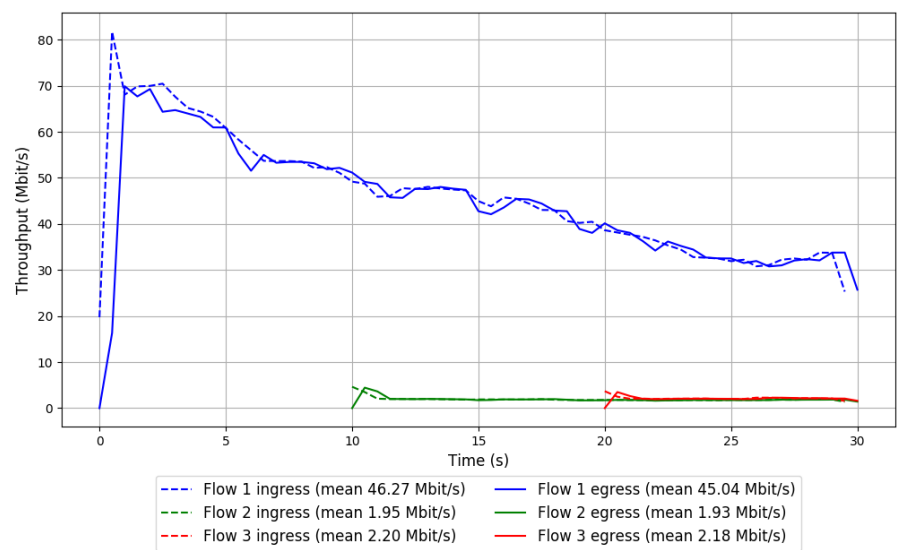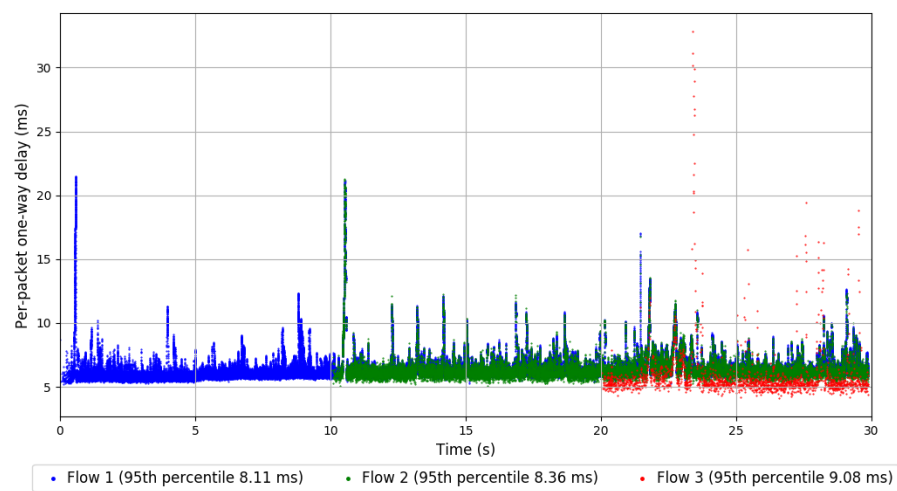
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 2.14 Mbit/s) --- Flow 1 egress (mean 2.01 Mbit/s)
Flow 2 ingress (mean 55.36 Mbit/s) --- Flow 2 egress (mean 49.81 Mbit/s)
Flow 3 ingress (mean 32.66 Mbit/s) --- Flow 3 egress (mean 28.57 Mbit/s)

Flow 1 (95th percentile 12.87 ms) • Flow 2 (95th percentile 9.62 ms) • Flow 3 (95th percentile 9.17 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-09-06 09:33:08
End at: 2018-09-06 09:33:38
Local clock offset: 1.112 ms
Remote clock offset: -2.93 ms


# Below is generated by plot.py at 2018-09-06 11:06:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 7.511 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 7.418 ms
Loss rate: 2.65%
-- Flow 2:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 7.629 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 8.189 ms
Loss rate: 0.78%
```

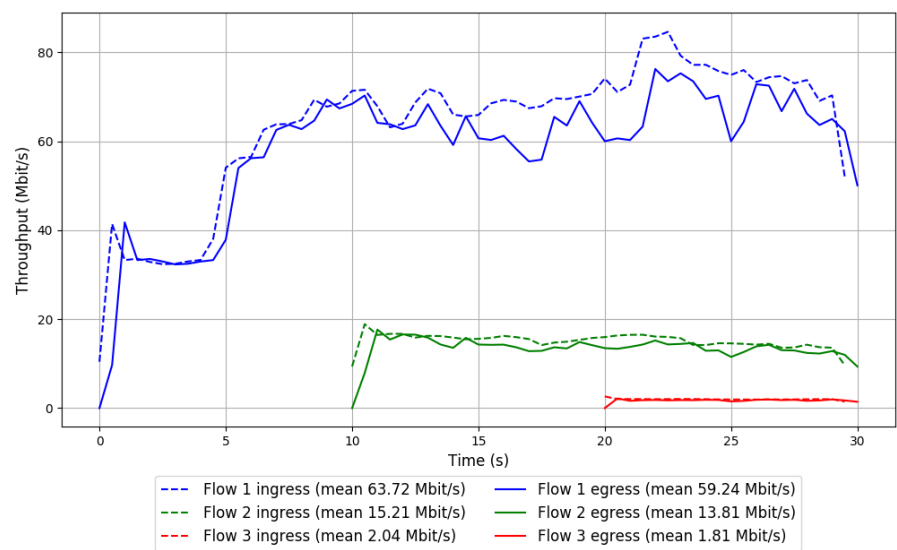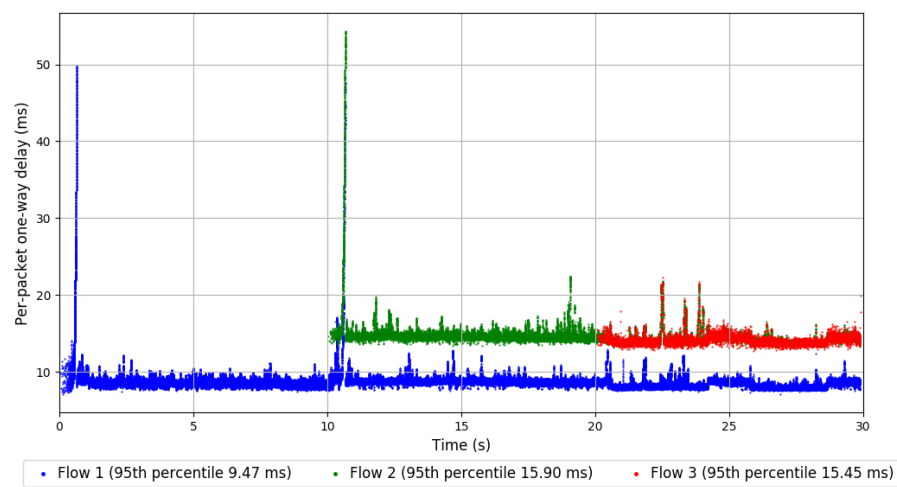Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-09-06 10:00:07
End at: 2018-09-06 10:00:37
Local clock offset: 3.708 ms
Remote clock offset: -1.532 ms


# Below is generated by plot.py at 2018-09-06 11:07:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 8.142 ms
Loss rate: 7.37%
-- Flow 1:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 8.106 ms
Loss rate: 7.04%
-- Flow 2:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 8.361 ms
Loss rate: 9.23%
-- Flow 3:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 9.079 ms
Loss rate: 10.99%
```

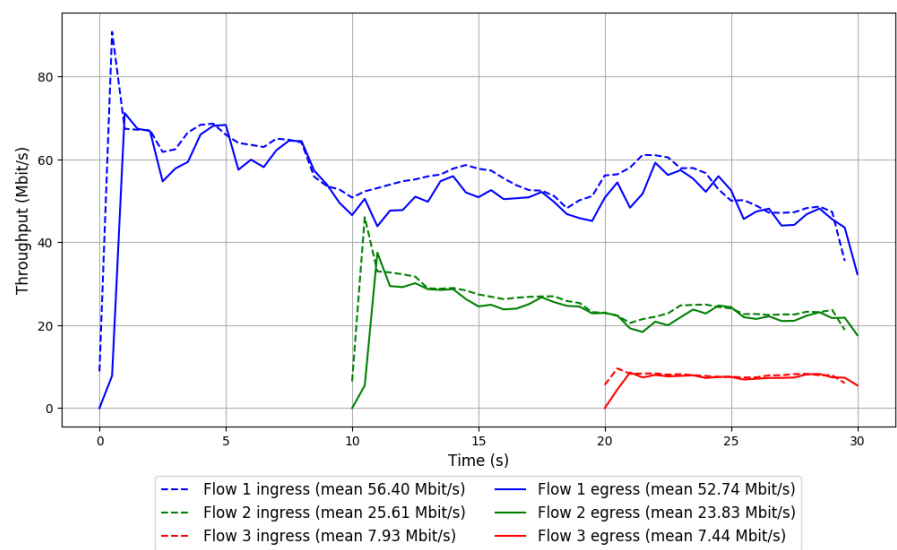Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-09-06 10:23:53
End at: 2018-09-06 10:24:23
Local clock offset: 1.026 ms
Remote clock offset: -0.743 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.02 Mbit/s
95th percentile per-packet one-way delay: 14.787 ms
Loss rate: 6.58%
-- Flow 1:
Average throughput: 52.74 Mbit/s
95th percentile per-packet one-way delay: 9.472 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 23.83 Mbit/s
95th percentile per-packet one-way delay: 15.900 ms
Loss rate: 6.95%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 15.454 ms
Loss rate: 6.13%
```

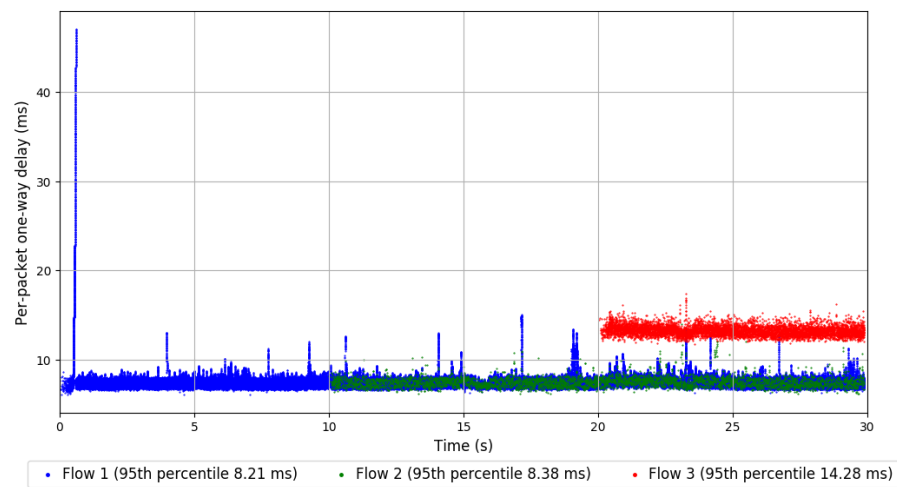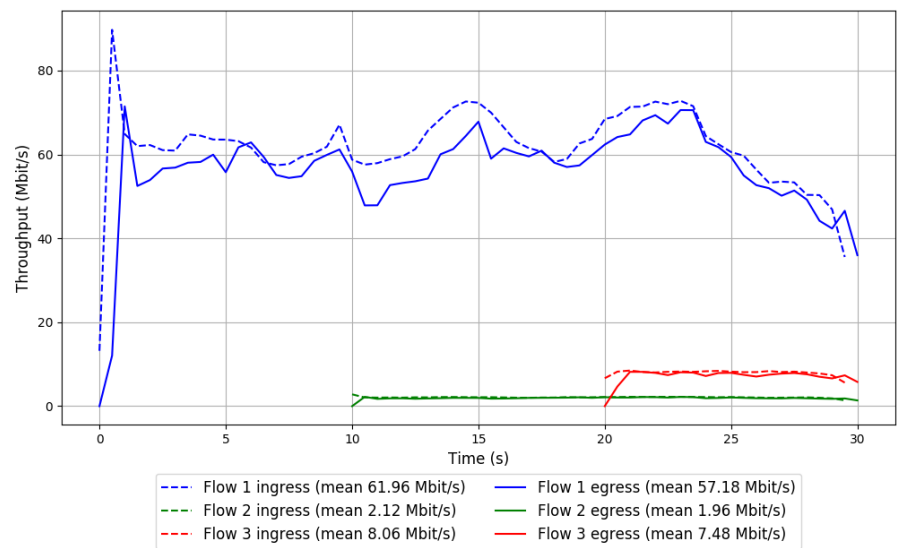Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-09-06 10:45:03
End at: 2018-09-06 10:45:33
Local clock offset: 0.625 ms
Remote clock offset: -1.675 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.94 Mbit/s
95th percentile per-packet one-way delay: 11.412 ms
Loss rate: 7.70%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 8.210 ms
Loss rate: 7.72%
-- Flow 2:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 8.378 ms
Loss rate: 7.81%
-- Flow 3:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 14.278 ms
Loss rate: 7.16%
```

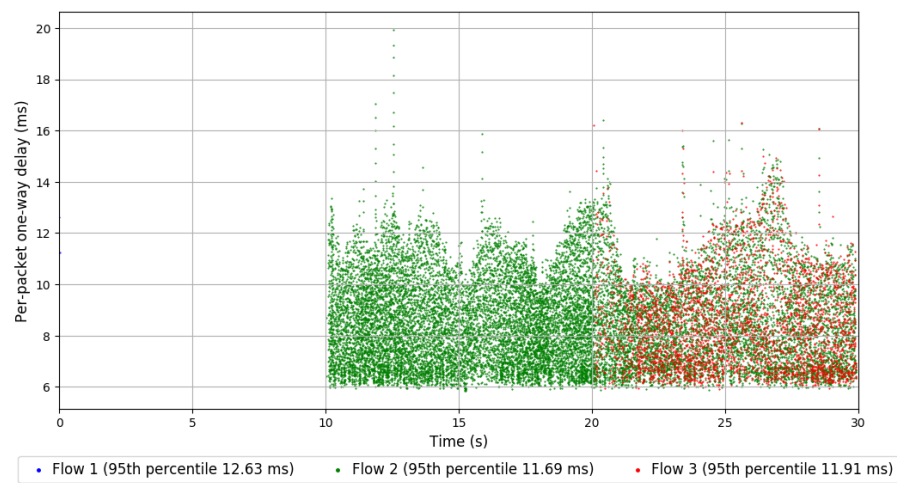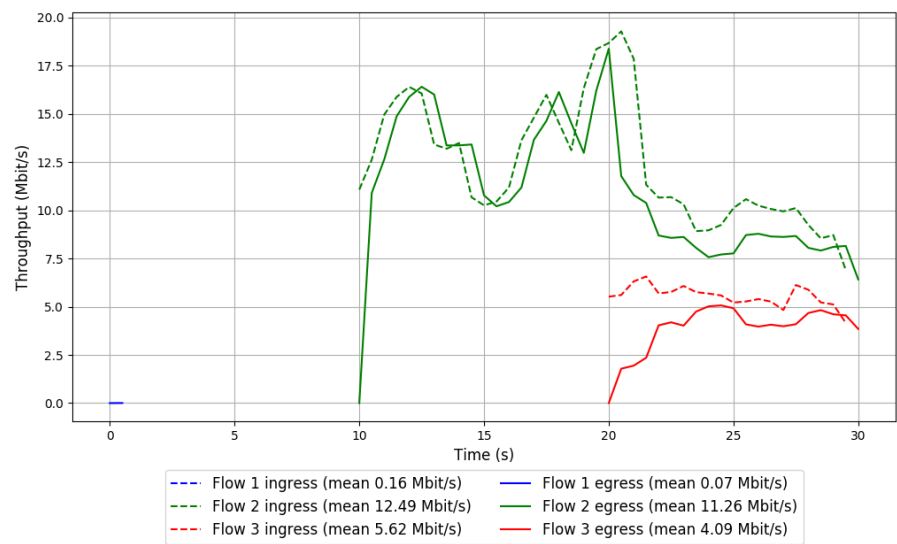Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-09-06 09:08:45
End at: 2018-09-06 09:09:15
Local clock offset: 0.039 ms
Remote clock offset: -1.317 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 11.725 ms
Loss rate: 13.03%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 12.630 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 11.687 ms
Loss rate: 9.84%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 11.910 ms
Loss rate: 27.26%
```
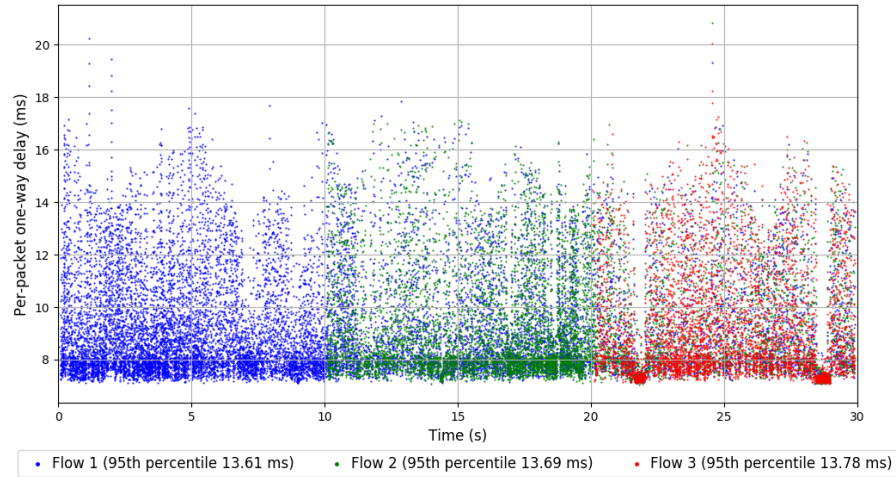
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-09-06 09:29:39
End at: 2018-09-06 09:30:09
Local clock offset: -0.6 ms
Remote clock offset: -2.74 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 13.666 ms
Loss rate: 36.87%
-- Flow 1:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 13.614 ms
Loss rate: 23.61%
-- Flow 2:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 13.685 ms
Loss rate: 38.15%
-- Flow 3:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 13.775 ms
Loss rate: 59.58%
```
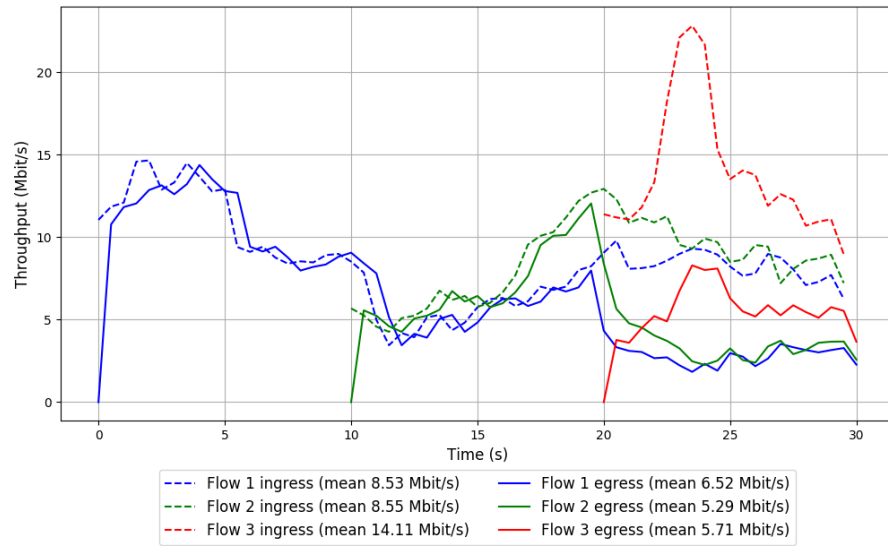
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-09-06 09:56:38
End at: 2018-09-06 09:57:08
Local clock offset: 2.28 ms
Remote clock offset: -1.692 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 13.807 ms
Loss rate: 30.38%
-- Flow 1:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 13.805 ms
Loss rate: 24.06%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 13.798 ms
Loss rate: 37.80%
-- Flow 3:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 13.847 ms
Loss rate: 45.21%
```
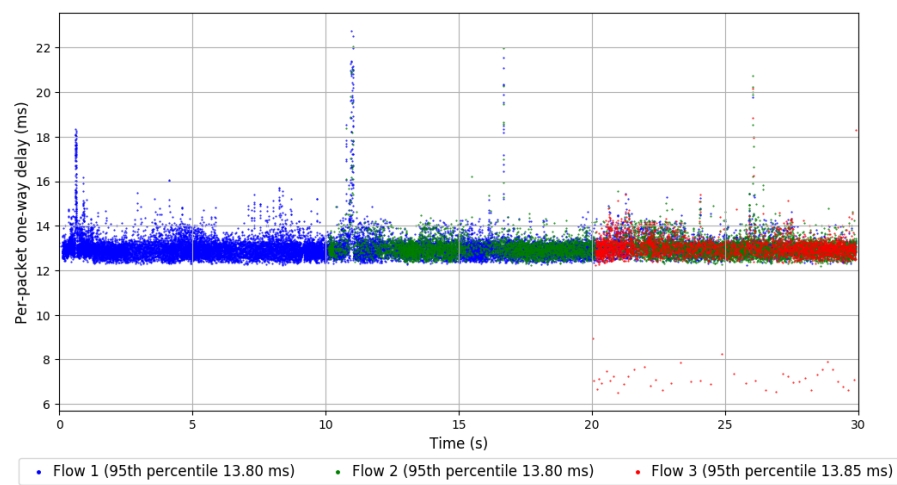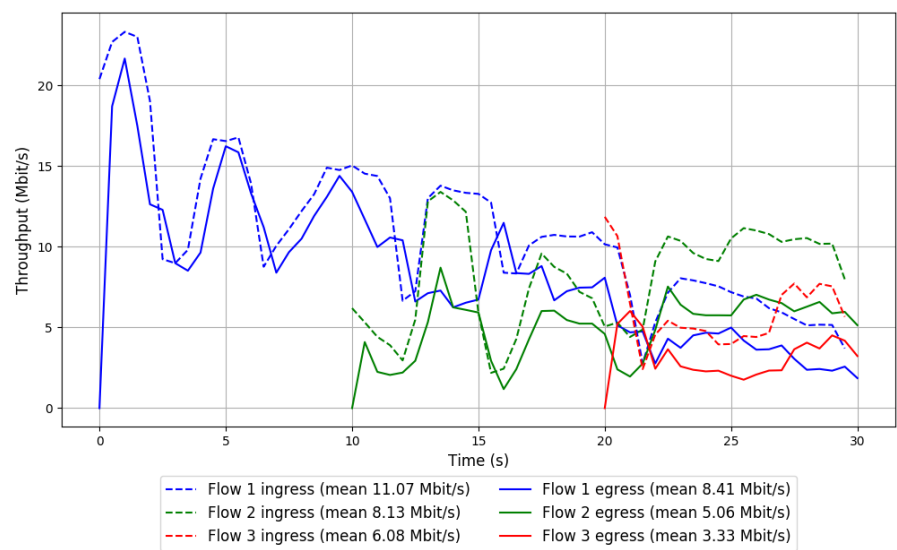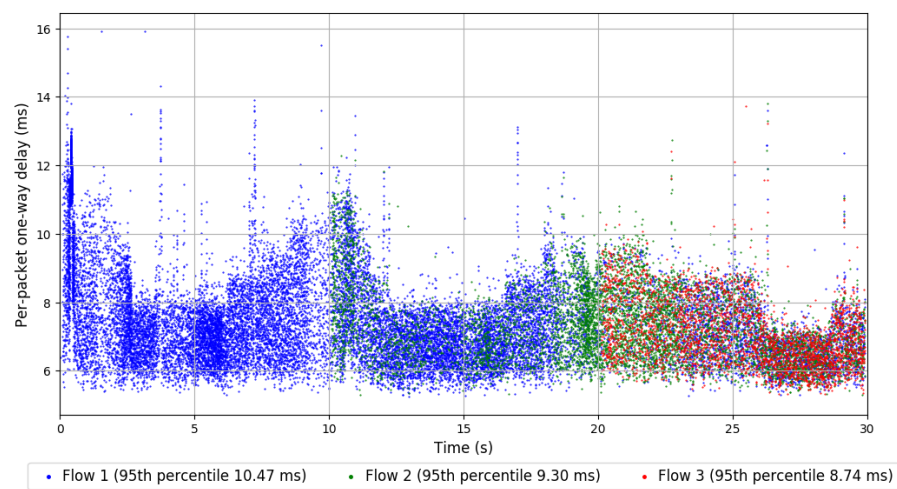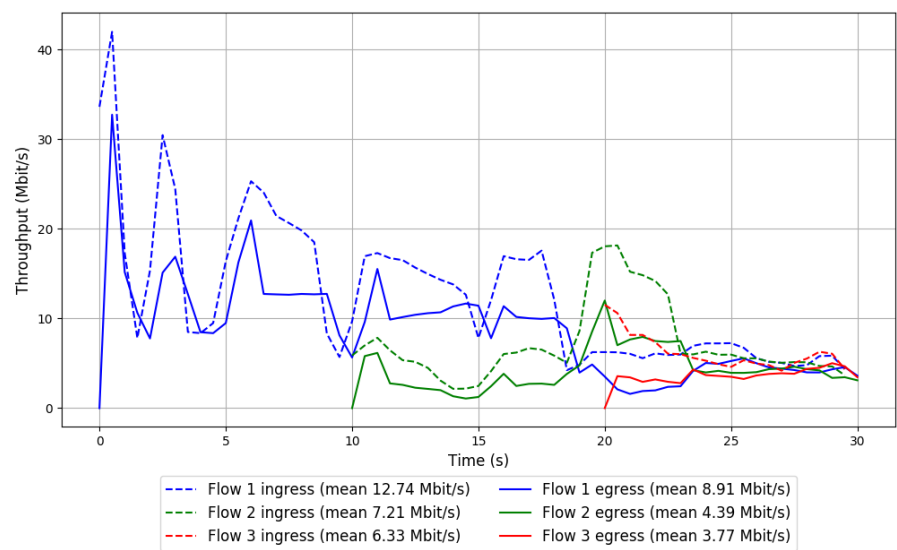
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-09-06 10:20:23
End at: 2018-09-06 10:20:53
Local clock offset: 2.538 ms
Remote clock offset: -1.151 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 9.982 ms
Loss rate: 33.36%
-- Flow 1:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 10.466 ms
Loss rate: 30.02%
-- Flow 2:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 9.301 ms
Loss rate: 39.13%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 8.739 ms
Loss rate: 40.43%
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-09-06 10:41:29
End at: 2018-09-06 10:41:59
Local clock offset: 3.347 ms
Remote clock offset: -1.034 ms


# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 6.412 ms
Loss rate: 46.62%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 10.765 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 6.389 ms
Loss rate: 48.98%
-- Flow 3:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 6.482 ms
Loss rate: 39.24%
```
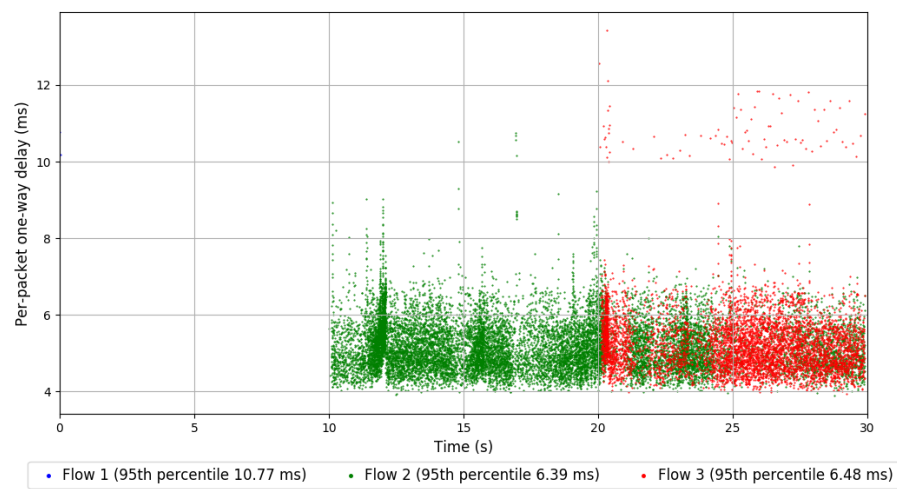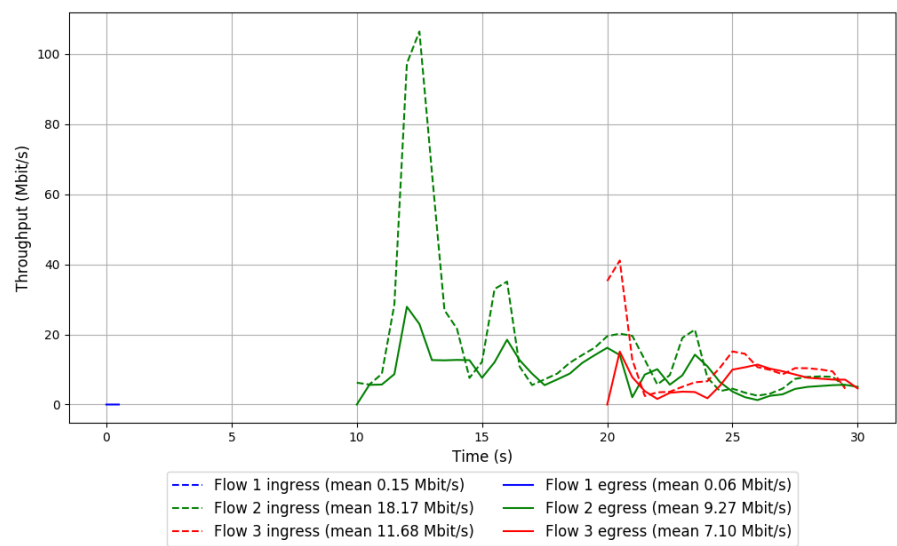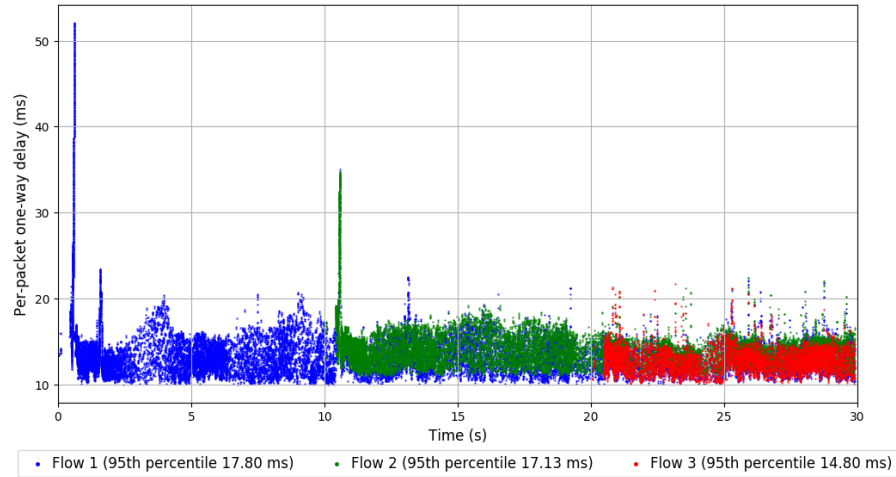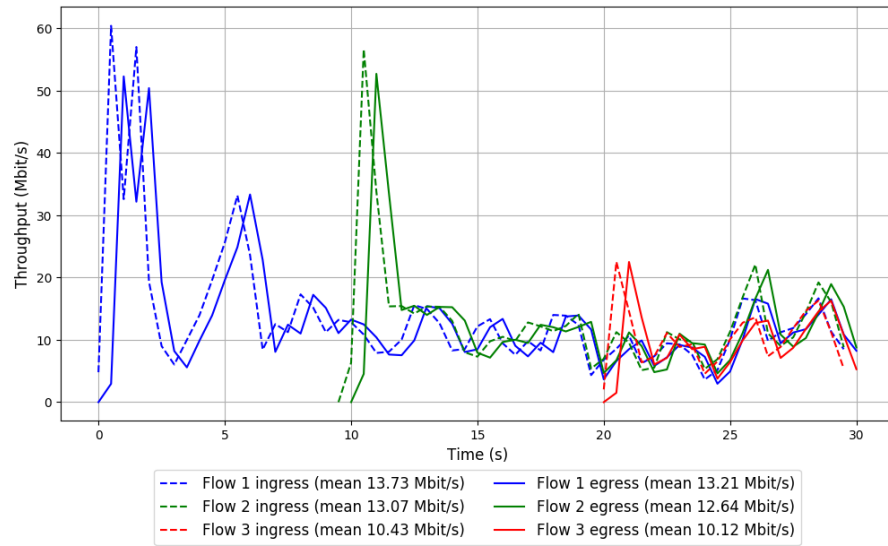
Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-09-06 09:22:44
End at: 2018-09-06 09:23:14
Local clock offset: -6.687 ms
Remote clock offset: -5.262 ms

# Below is generated by plot.py at 2018-09-06 11:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 17.123 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 17.804 ms
Loss rate: 3.86%
-- Flow 2:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 17.131 ms
Loss rate: 3.32%
-- Flow 3:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 14.805 ms
Loss rate: 2.91%
```

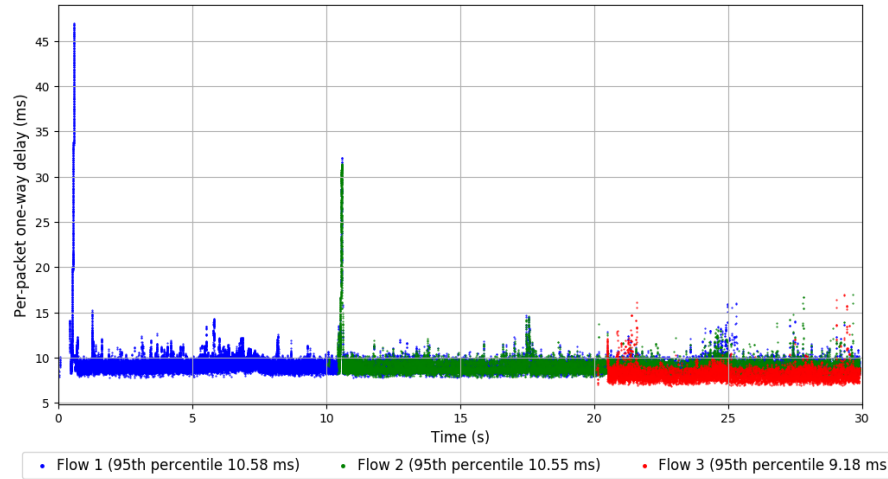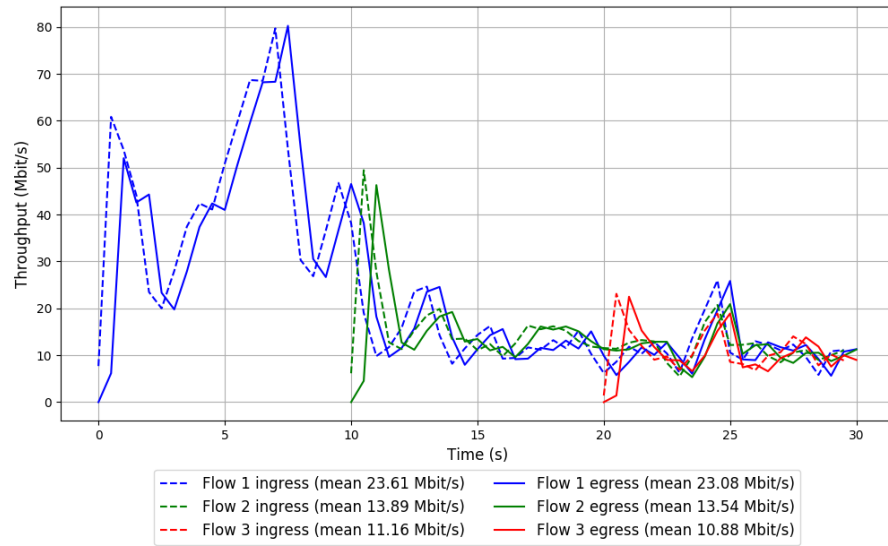Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-09-06 09:49:28
End at: 2018-09-06 09:49:58
Local clock offset: 0.172 ms
Remote clock offset: -2.406 ms


# Below is generated by plot.py at 2018-09-06 11:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.66 Mbit/s
95th percentile per-packet one-way delay: 10.493 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 10.582 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 13.54 Mbit/s
95th percentile per-packet one-way delay: 10.553 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 9.177 ms
Loss rate: 2.50%
```

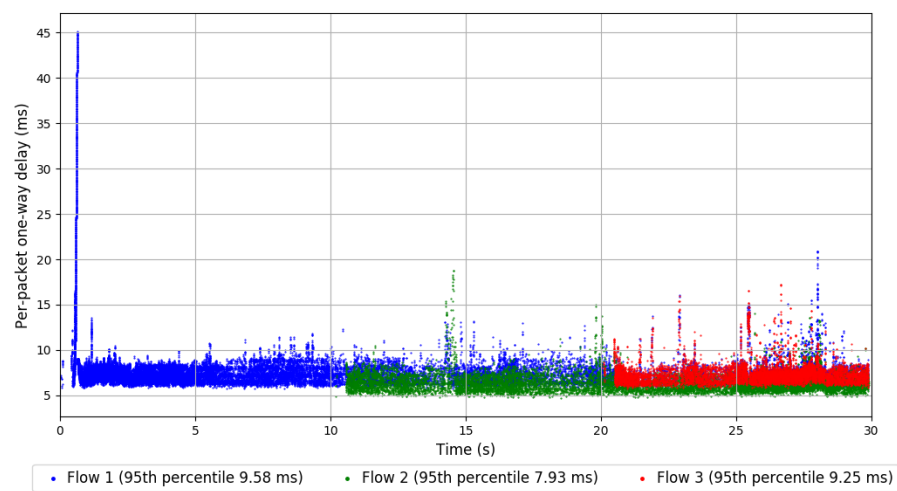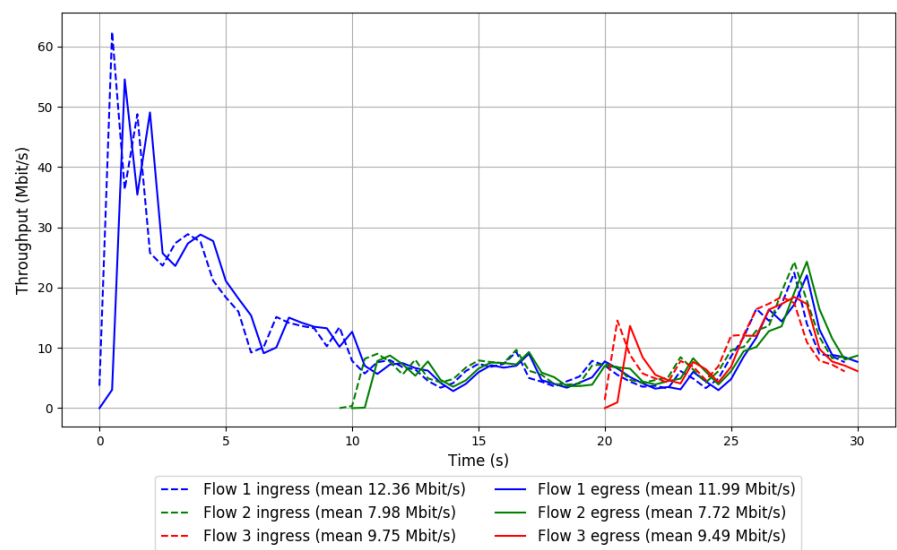Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-09-06 10:10:49
End at: 2018-09-06 10:11:19
Local clock offset: 2.696 ms
Remote clock offset: -1.796 ms


# Below is generated by plot.py at 2018-09-06 11:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 9.118 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 9.577 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 7.928 ms
Loss rate: 3.32%
-- Flow 3:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 9.252 ms
Loss rate: 2.71%
```

Run 3: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 12.36 Mbit/s)
- Flow 1 egress (mean 11.99 Mbit/s)
- Flow 2 ingress (mean 7.98 Mbit/s)
- Flow 2 egress (mean 7.72 Mbit/s)
- Flow 3 ingress (mean 9.75 Mbit/s)
- Flow 3 egress (mean 9.49 Mbit/s)

- Flow 1 (95th percentile 9.58 ms)
- Flow 2 (95th percentile 7.93 ms)
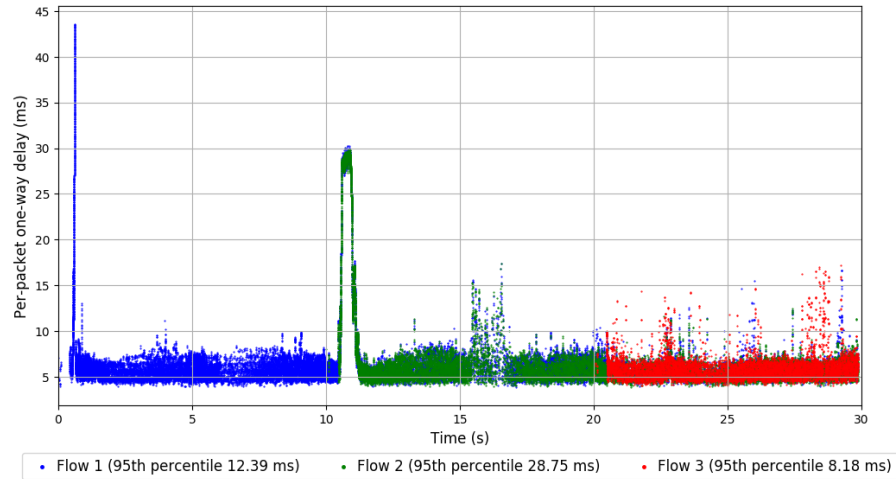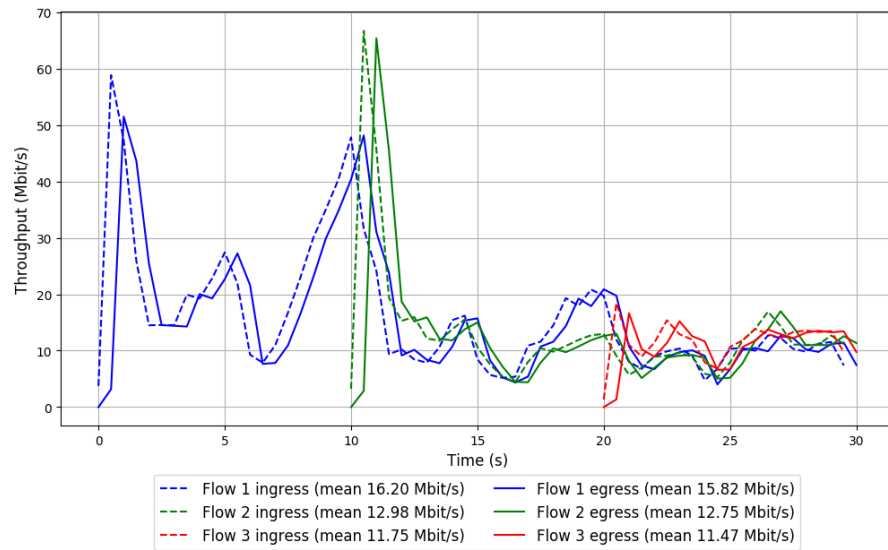- Flow 3 (95th percentile 9.25 ms)

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```
Run 4: Statistics of QUIC Cubic

Start at: 2018-09-06 10:34:19
End at: 2018-09-06 10:34:49
Local clock offset: 3.485 ms
Remote clock offset: -0.992 ms


# Below is generated by plot.py at 2018-09-06 11:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.08 Mbit/s
95th percentile per-packet one-way delay: 22.575 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 12.389 ms
Loss rate: 2.33%
-- Flow 2:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 28.749 ms
Loss rate: 1.77%
-- Flow 3:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 8.182 ms
Loss rate: 2.35%
```
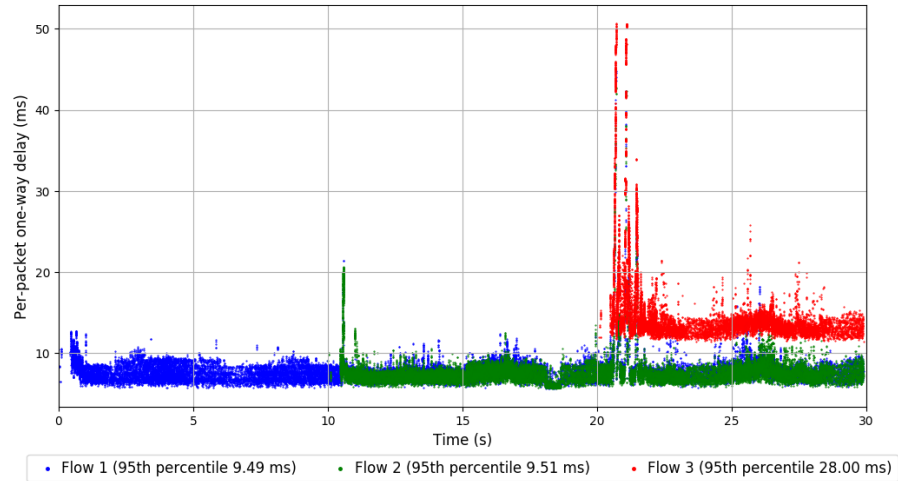
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 16.20 Mbit/s) --- Flow 1 egress (mean 15.82 Mbit/s)
Flow 2 ingress (mean 12.98 Mbit/s) --- Flow 2 egress (mean 12.75 Mbit/s)
Flow 3 ingress (mean 11.75 Mbit/s) --- Flow 3 egress (mean 11.47 Mbit/s)

Flow 1 (95th percentile 12.39 ms)   Flow 2 (95th percentile 28.75 ms)   Flow 3 (95th percentile 8.18 ms)
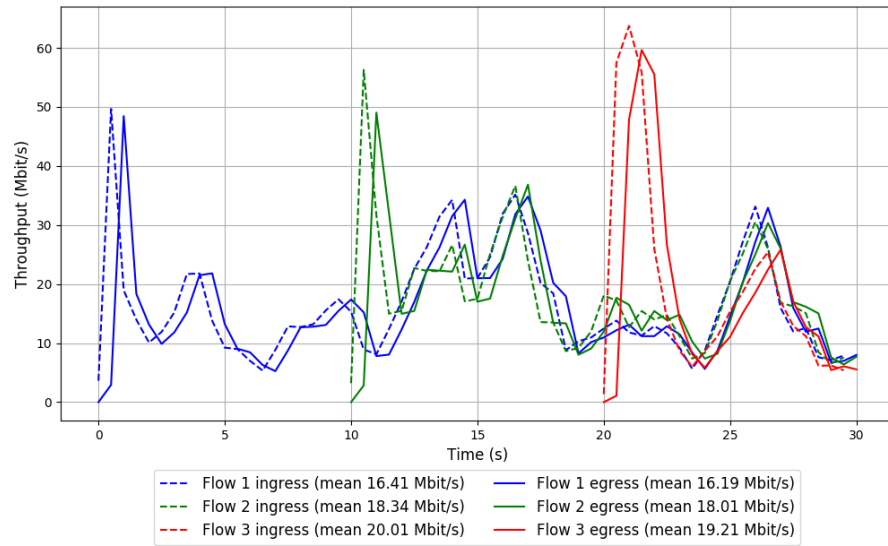
```
Run 5: Statistics of QUIC Cubic

Start at: 2018-09-06 10:55:57
End at: 2018-09-06 10:56:27
Local clock offset: 0.913 ms
Remote clock offset: -2.554 ms


# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.50 Mbit/s
95th percentile per-packet one-way delay: 15.199 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 9.495 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 18.01 Mbit/s
95th percentile per-packet one-way delay: 9.511 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 19.21 Mbit/s
95th percentile per-packet one-way delay: 27.995 ms
Loss rate: 3.99%
```

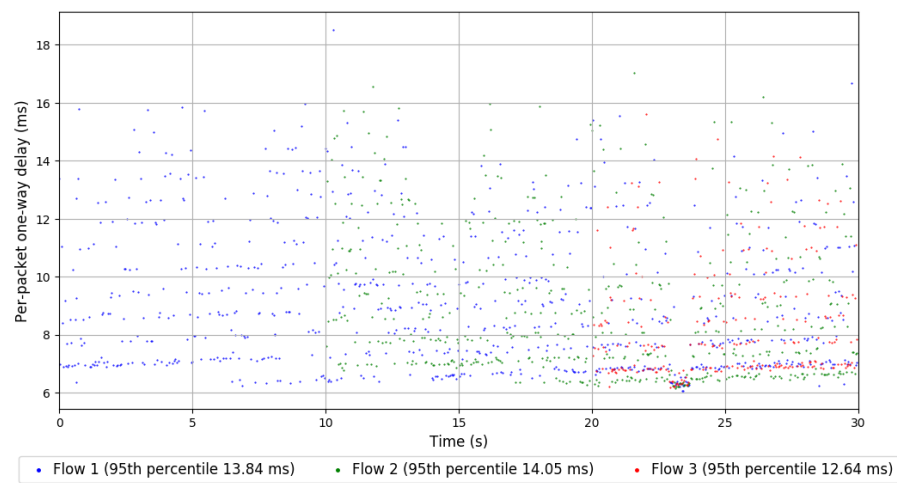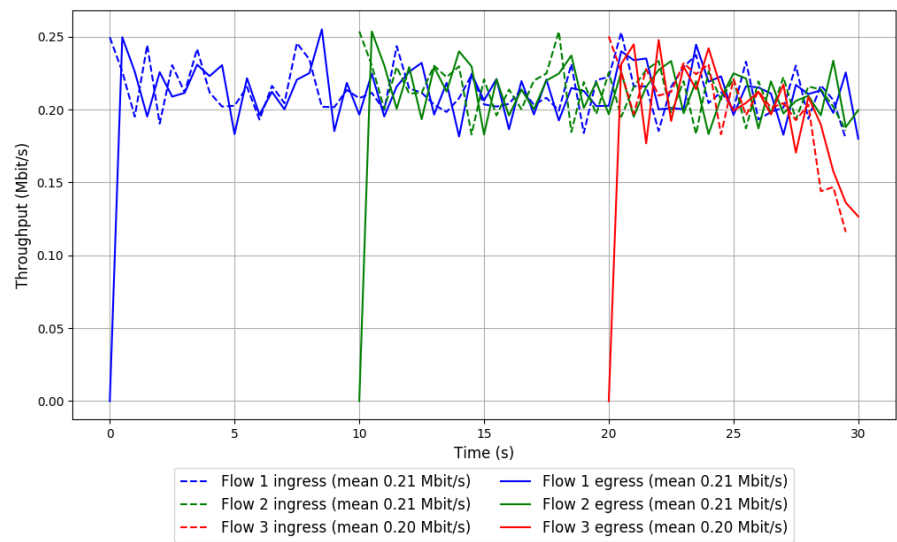Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-09-06 09:13:21
End at: 2018-09-06 09:13:51
Local clock offset: -1.343 ms
Remote clock offset: -2.07 ms

# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 13.670 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 12.644 ms
Loss rate: 0.45%
```
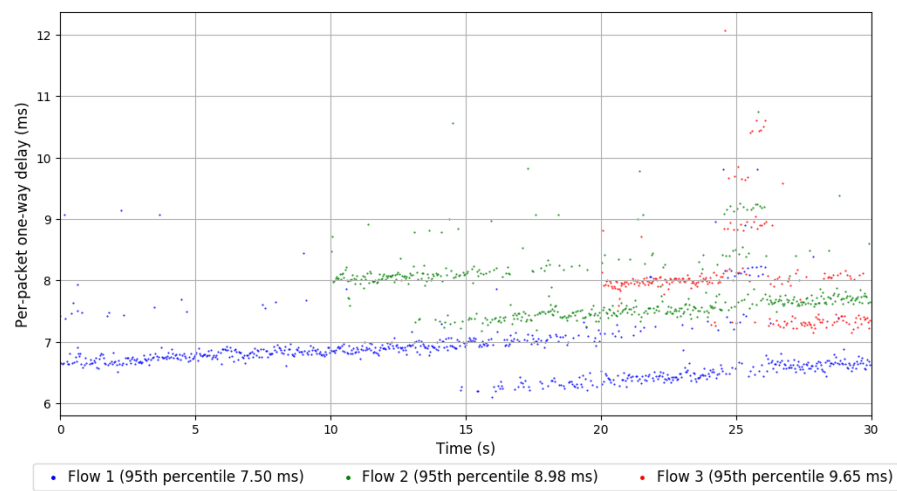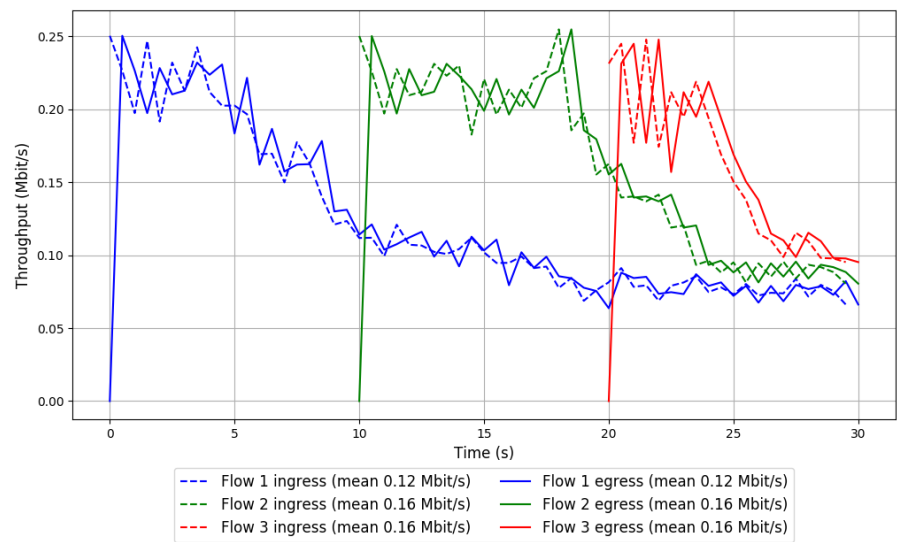
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-09-06 09:39:52
End at: 2018-09-06 09:40:22
Local clock offset: 1.086 ms
Remote clock offset: -2.272 ms


# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 8.524 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 7.499 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 8.978 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 9.648 ms
Loss rate: 0.54%
```
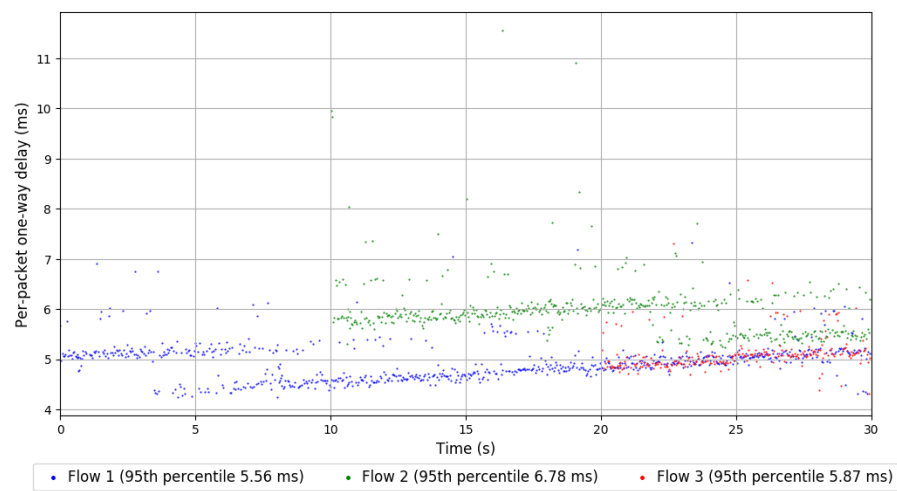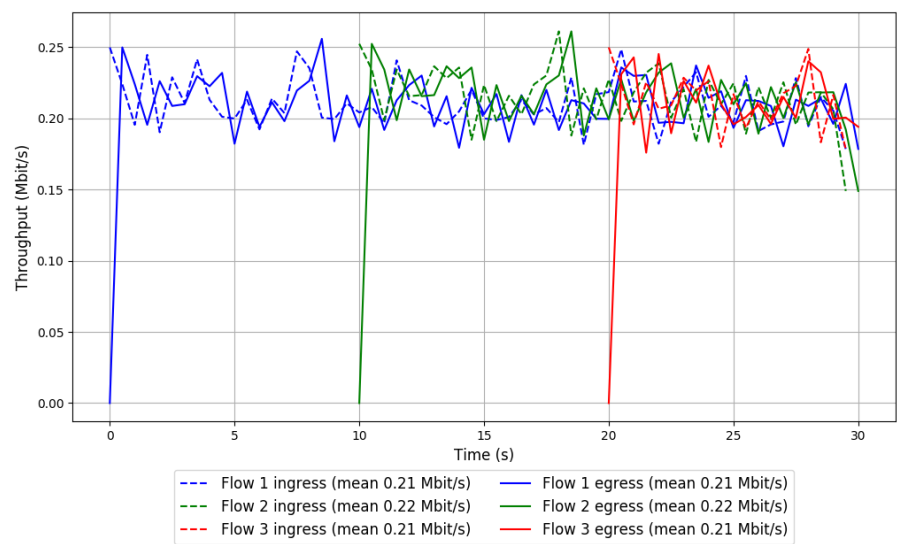
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-09-06 10:01:16
End at: 2018-09-06 10:01:46
Local clock offset: 3.193 ms
Remote clock offset: -1.966 ms


# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 6.252 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.778 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.869 ms
Loss rate: 0.00%
```
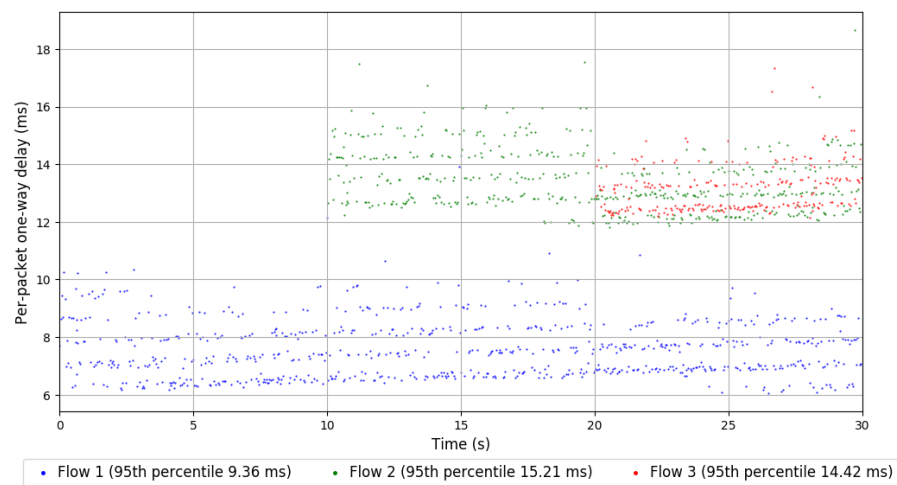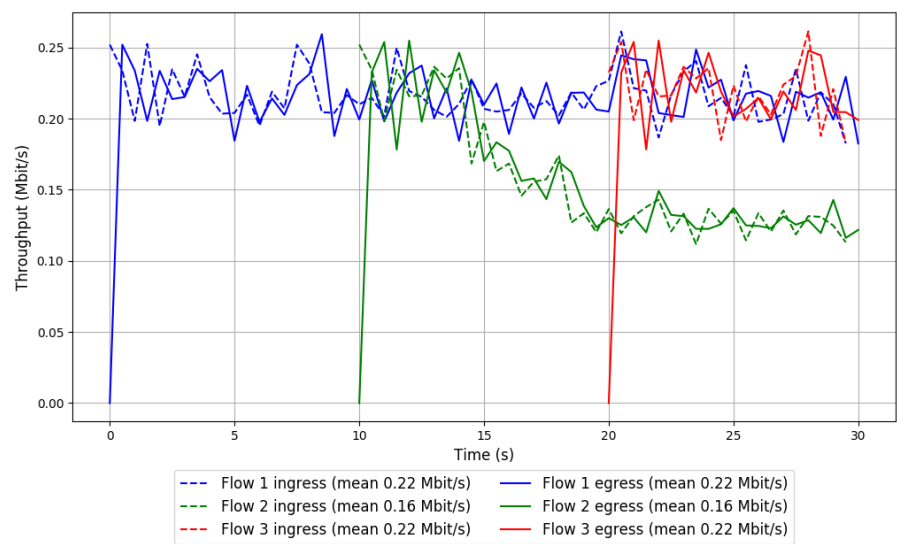
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-09-06 10:25:03
End at: 2018-09-06 10:25:33
Local clock offset: 1.49 ms
Remote clock offset: -1.191 ms


# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 14.700 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 9.359 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 15.207 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 14.416 ms
Loss rate: 0.00%
```
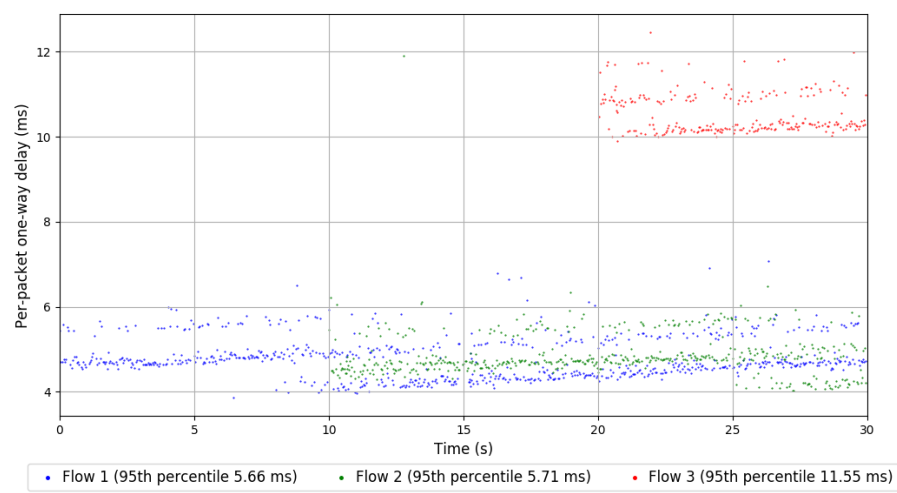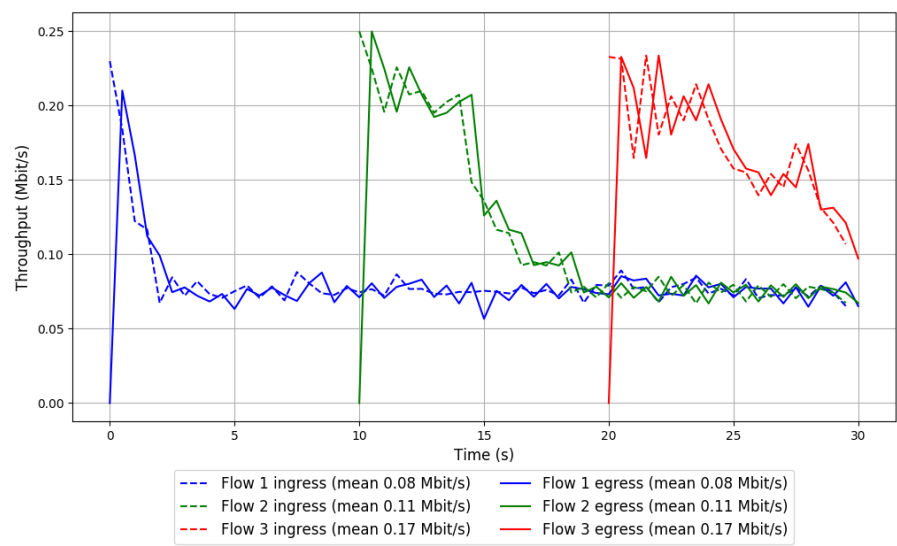
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-09-06 10:46:23
End at: 2018-09-06 10:46:53
Local clock offset: 2.287 ms
Remote clock offset: -2.202 ms


# Below is generated by plot.py at 2018-09-06 11:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.850 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 5.659 ms
Loss rate: 2.33%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 5.714 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 11.550 ms
Loss rate: 1.61%
```
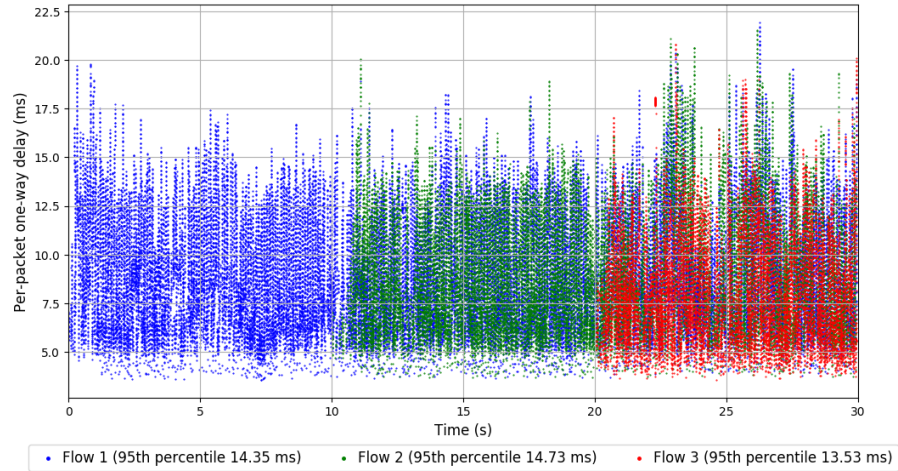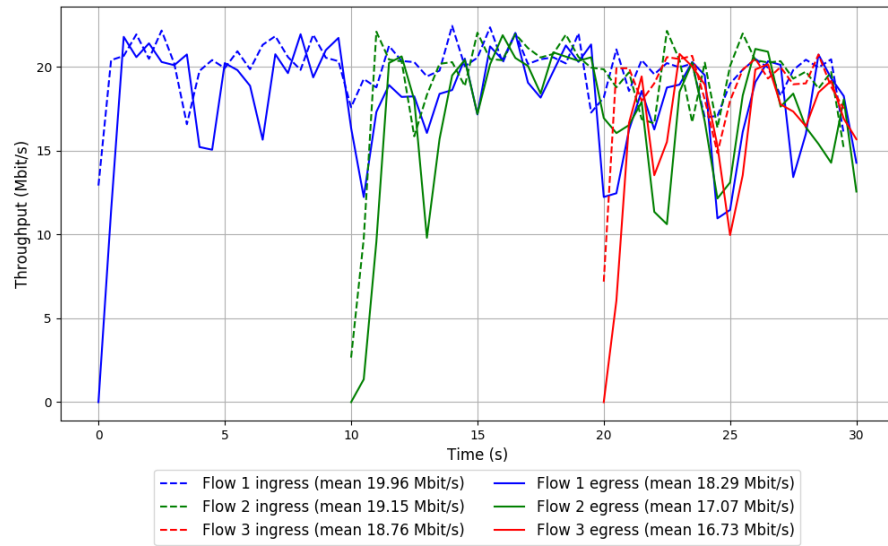
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-09-06 09:16:42
End at: 2018-09-06 09:17:12
Local clock offset: 0.107 ms
Remote clock offset: -3.716 ms


# Below is generated by plot.py at 2018-09-06 11:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.16 Mbit/s
95th percentile per-packet one-way delay: 14.363 ms
Loss rate: 9.55%
-- Flow 1:
Average throughput: 18.29 Mbit/s
95th percentile per-packet one-way delay: 14.345 ms
Loss rate: 8.34%
-- Flow 2:
Average throughput: 17.07 Mbit/s
95th percentile per-packet one-way delay: 14.726 ms
Loss rate: 10.87%
-- Flow 3:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 13.526 ms
Loss rate: 10.71%
```
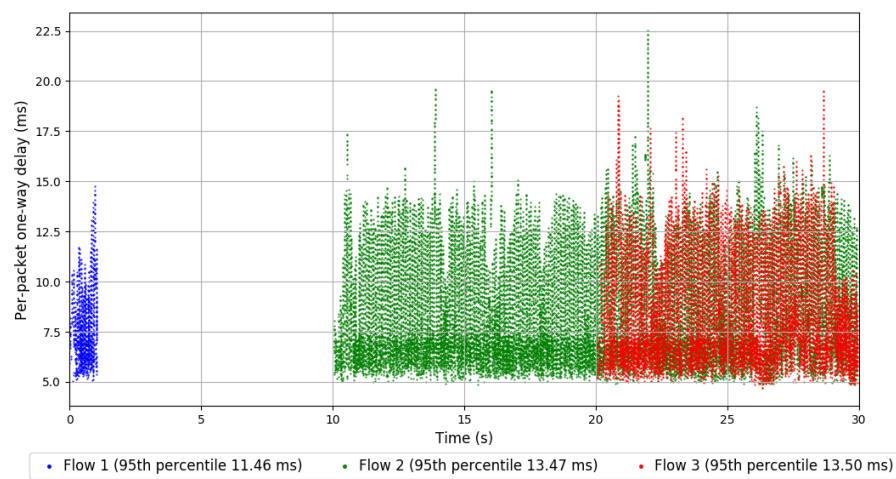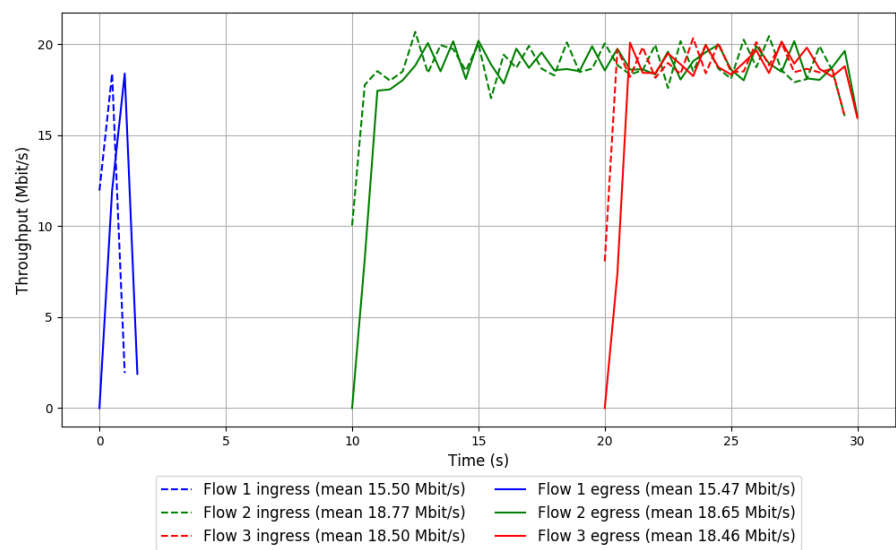
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-09-06 09:43:18
End at: 2018-09-06 09:43:48
Local clock offset: 2.728 ms
Remote clock offset: -1.982 ms


# Below is generated by plot.py at 2018-09-06 11:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.04 Mbit/s
95th percentile per-packet one-way delay: 13.460 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 11.459 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 18.65 Mbit/s
95th percentile per-packet one-way delay: 13.467 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 18.46 Mbit/s
95th percentile per-packet one-way delay: 13.499 ms
Loss rate: 0.23%
```
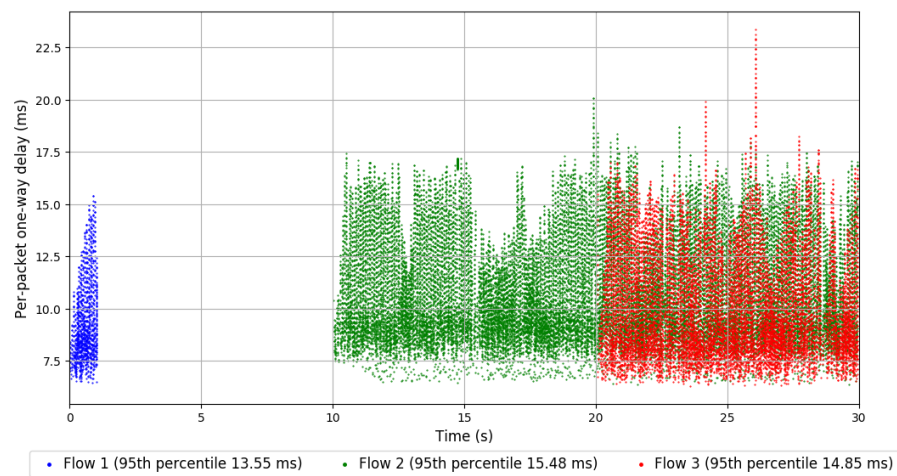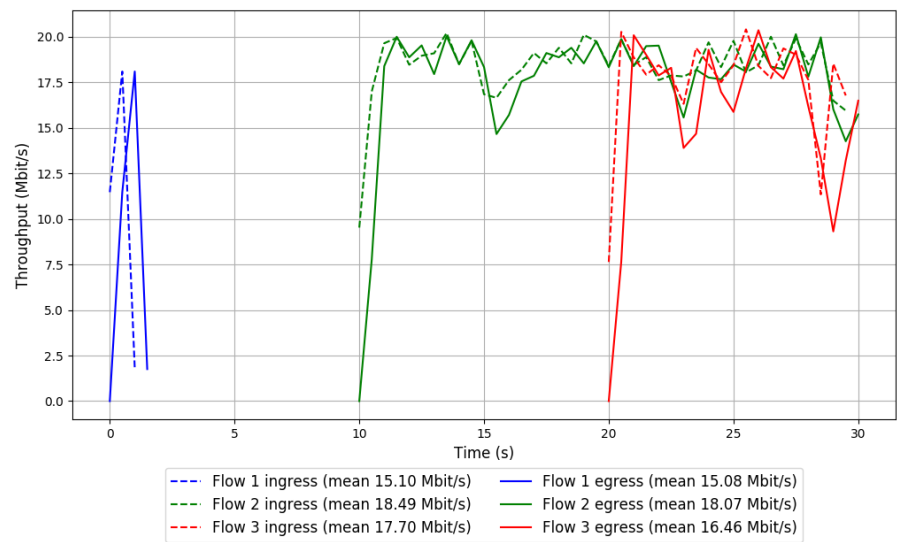
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-09-06 10:04:45
End at: 2018-09-06 10:05:15
Local clock offset: 1.258 ms
Remote clock offset: -1.794 ms


# Below is generated by plot.py at 2018-09-06 11:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.99 Mbit/s
95th percentile per-packet one-way delay: 15.301 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 13.546 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 18.07 Mbit/s
95th percentile per-packet one-way delay: 15.478 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 14.849 ms
Loss rate: 6.94%
```
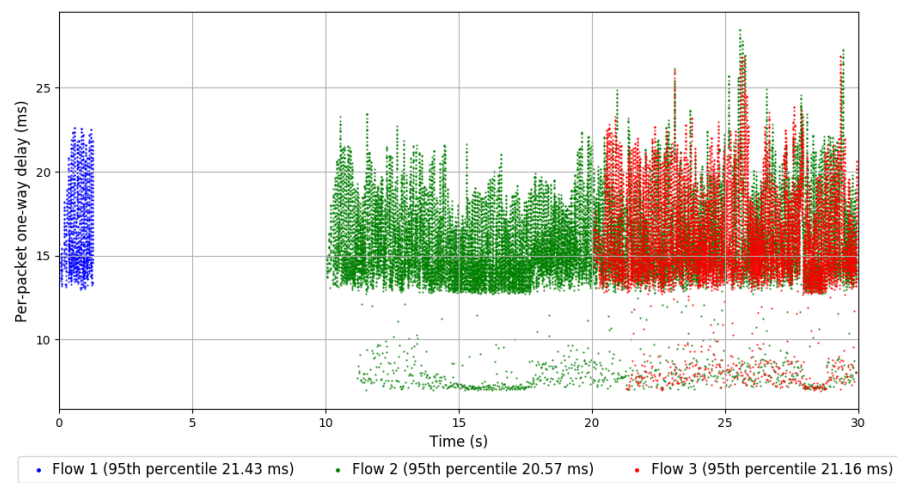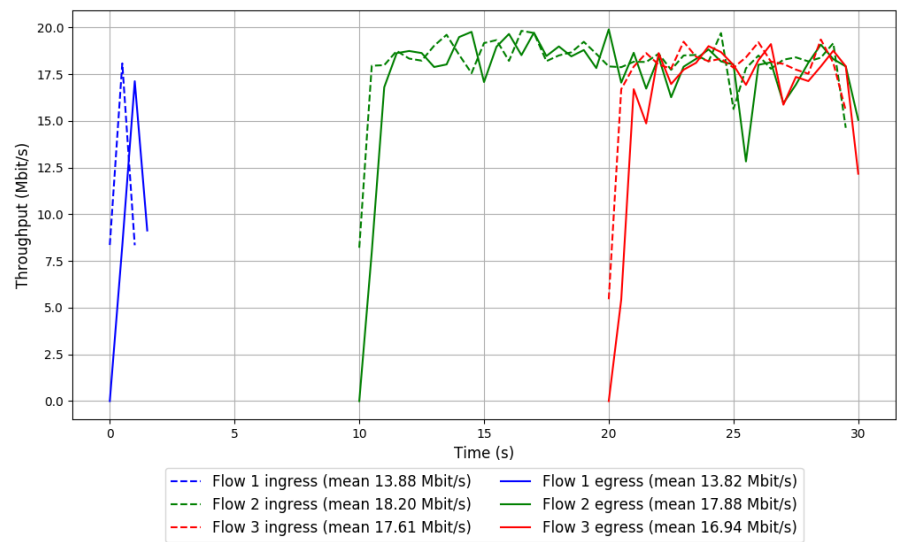
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-09-06 10:28:26
End at: 2018-09-06 10:28:56
Local clock offset: -0.433 ms
Remote clock offset: -2.036 ms


# Below is generated by plot.py at 2018-09-06 11:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.07 Mbit/s
95th percentile per-packet one-way delay: 20.865 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 13.82 Mbit/s
95th percentile per-packet one-way delay: 21.435 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 20.569 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 16.94 Mbit/s
95th percentile per-packet one-way delay: 21.156 ms
Loss rate: 3.76%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 13.88 Mbit/s) ---- Flow 1 egress (mean 13.82 Mbit/s) ——
Flow 2 ingress (mean 18.20 Mbit/s) ---- Flow 2 egress (mean 17.88 Mbit/s) ——
Flow 3 ingress (mean 17.61 Mbit/s) ---- Flow 3 egress (mean 16.94 Mbit/s) ——

· Flow 1 (95th percentile 21.43 ms)   · Flow 2 (95th percentile 20.57 ms)   · Flow 3 (95th percentile 21.16 ms)
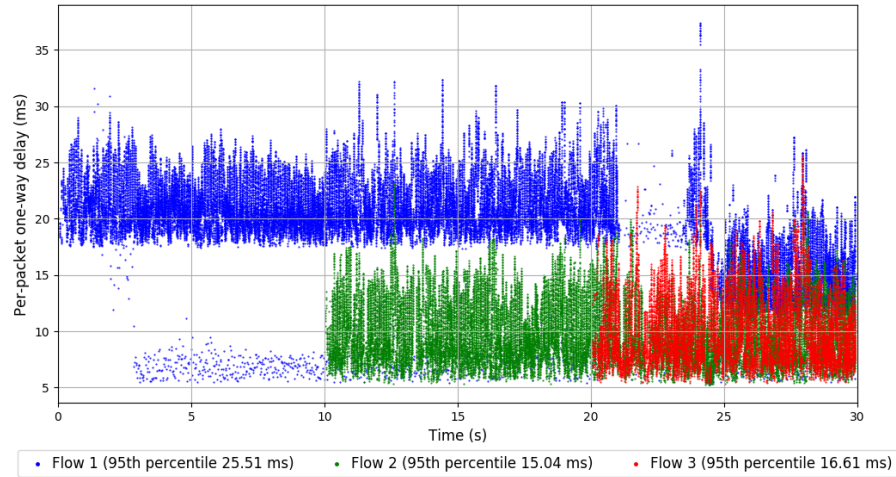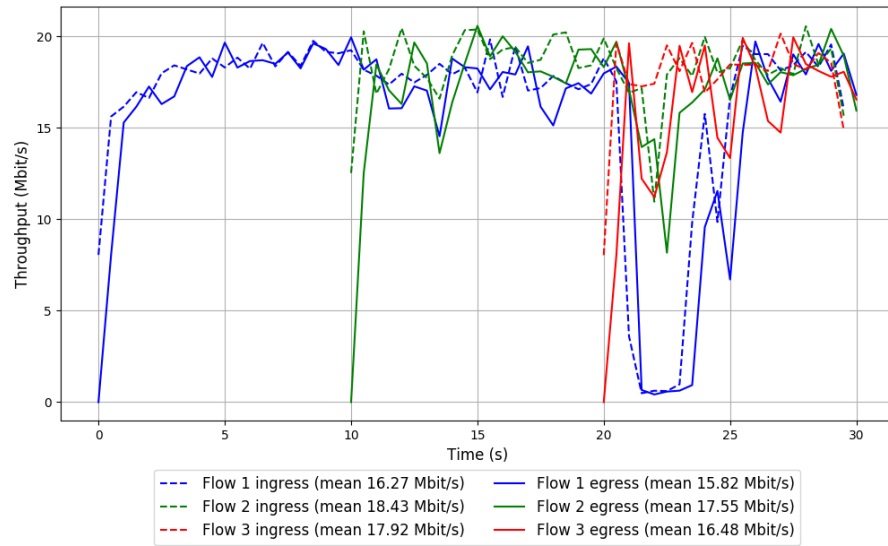
```
Run 5: Statistics of Sprout

Start at: 2018-09-06 10:49:52
End at: 2018-09-06 10:50:22
Local clock offset: 1.737 ms
Remote clock offset: -1.846 ms


# Below is generated by plot.py at 2018-09-06 11:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.94 Mbit/s
95th percentile per-packet one-way delay: 24.298 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 25.507 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 15.044 ms
Loss rate: 4.75%
-- Flow 3:
Average throughput: 16.48 Mbit/s
95th percentile per-packet one-way delay: 16.608 ms
Loss rate: 8.06%
```
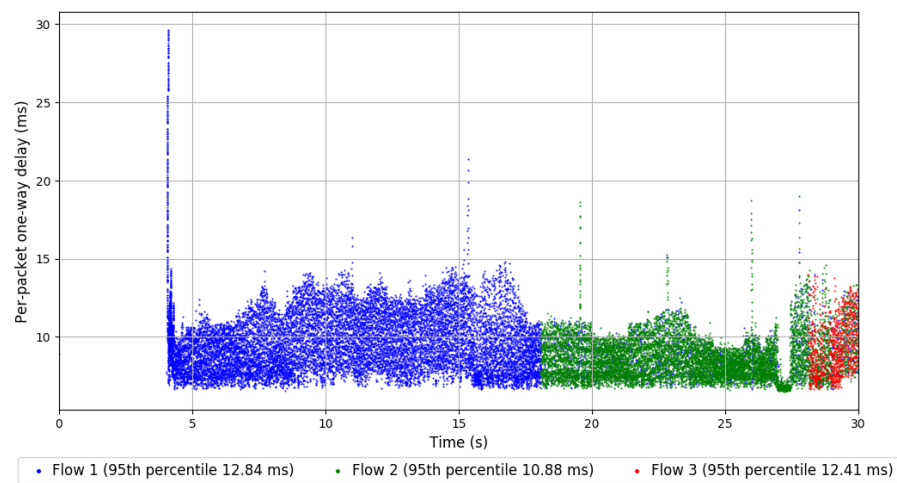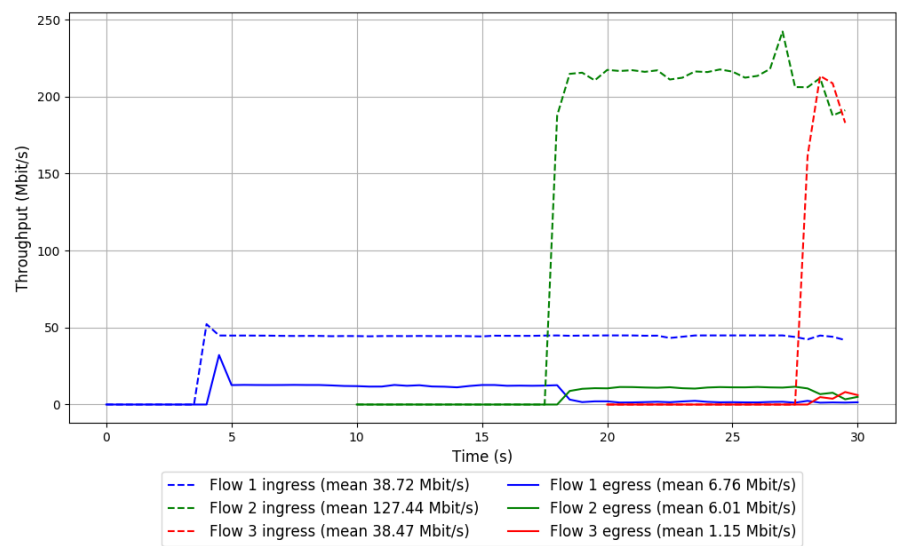
Run 5: Report of Sprout — Data Link

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

Start at: 2018-09-06 09:11:04
End at: 2018-09-06 09:11:34
Local clock offset: -0.924 ms
Remote clock offset: -1.372 ms


# Below is generated by plot.py at 2018-09-06 11:07:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 12.470 ms
Loss rate: 91.83%
-- Flow 1:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 12.842 ms
Loss rate: 82.55%
-- Flow 2:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 10.876 ms
Loss rate: 95.28%
-- Flow 3:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 12.412 ms
Loss rate: 97.02%
```

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

Flow 1 ingress (mean 38.72 Mbit/s) — Flow 1 egress (mean 6.76 Mbit/s)
Flow 2 ingress (mean 127.44 Mbit/s) — Flow 2 egress (mean 6.01 Mbit/s)
Flow 3 ingress (mean 38.47 Mbit/s) — Flow 3 egress (mean 1.15 Mbit/s)

Flow 1 (95th percentile 12.84 ms)   Flow 2 (95th percentile 10.88 ms)   Flow 3 (95th percentile 12.41 ms)
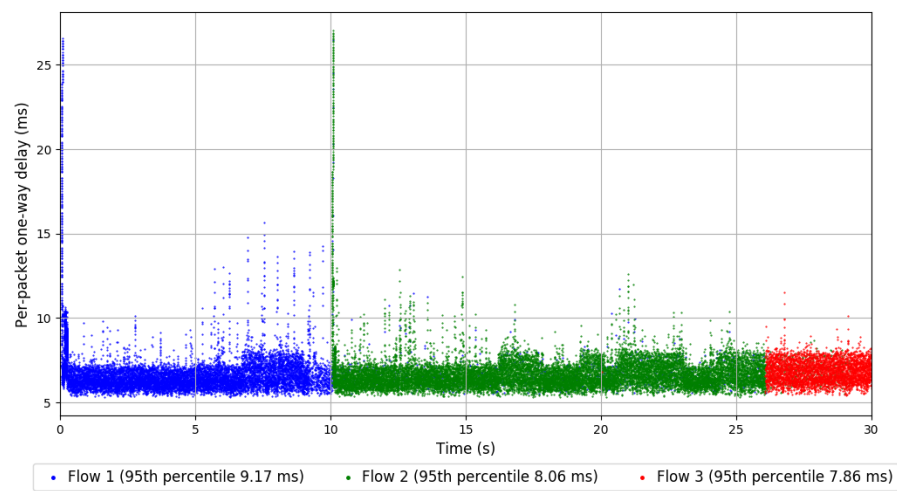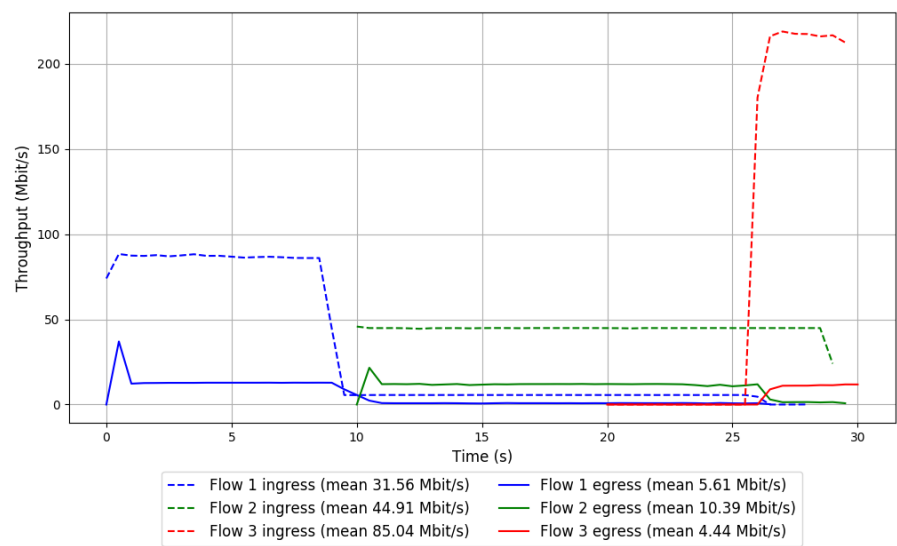
```
Run 2: Statistics of TaoVA-100x

Start at: 2018-09-06 09:31:59
End at: 2018-09-06 09:32:29
Local clock offset: 1.409 ms
Remote clock offset: -2.693 ms


# Below is generated by plot.py at 2018-09-06 11:07:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.03 Mbit/s
95th percentile per-packet one-way delay: 8.330 ms
Loss rate: 85.00%
-- Flow 1:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 9.174 ms
Loss rate: 83.49%
-- Flow 2:
Average throughput: 10.39 Mbit/s
95th percentile per-packet one-way delay: 8.059 ms
Loss rate: 76.97%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 7.859 ms
Loss rate: 94.78%
```

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

- - - Flow 1 ingress (mean 31.56 Mbit/s) —— Flow 1 egress (mean 5.61 Mbit/s)
- - - Flow 2 ingress (mean 44.91 Mbit/s) —— Flow 2 egress (mean 10.39 Mbit/s)
- - - Flow 3 ingress (mean 85.04 Mbit/s) —— Flow 3 egress (mean 4.44 Mbit/s)

• Flow 1 (95th percentile 9.17 ms)   • Flow 2 (95th percentile 8.06 ms)   • Flow 3 (95th percentile 7.86 ms)
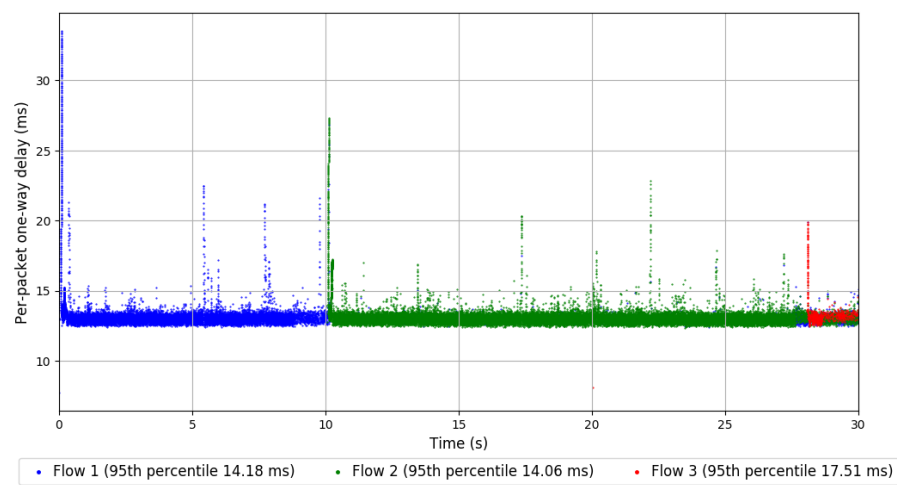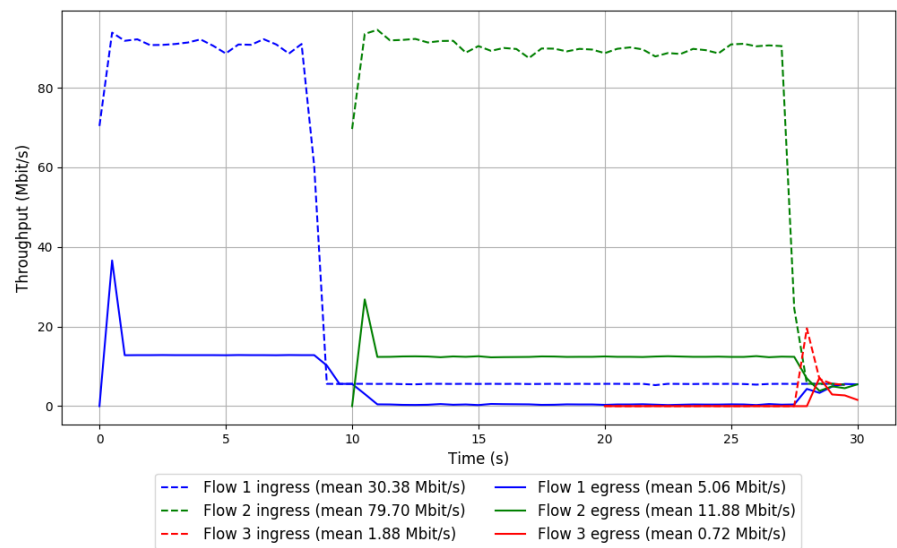
```
Run 3: Statistics of TaoVA-100x

Start at: 2018-09-06 09:58:59
End at: 2018-09-06 09:59:29
Local clock offset: 1.942 ms
Remote clock offset: -1.887 ms


# Below is generated by plot.py at 2018-09-06 11:07:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 14.163 ms
Loss rate: 84.29%
-- Flow 1:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 14.177 ms
Loss rate: 83.34%
-- Flow 2:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 14.064 ms
Loss rate: 85.09%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 17.509 ms
Loss rate: 61.73%
```
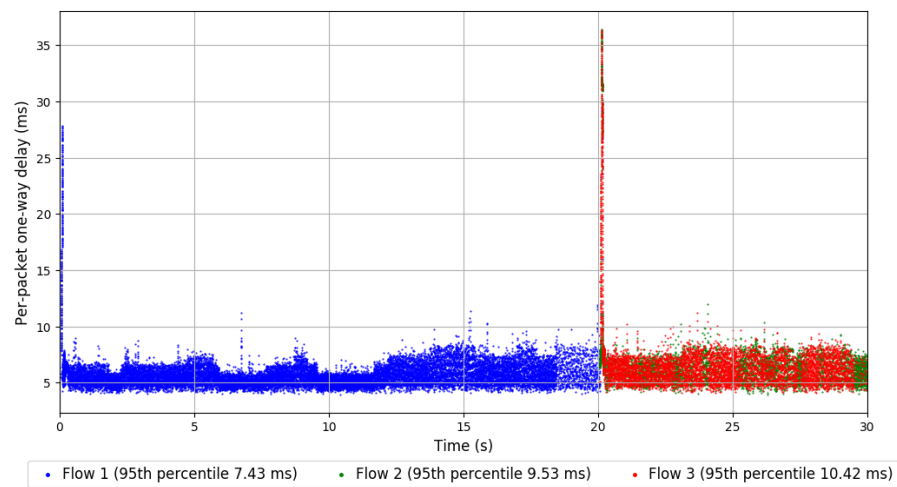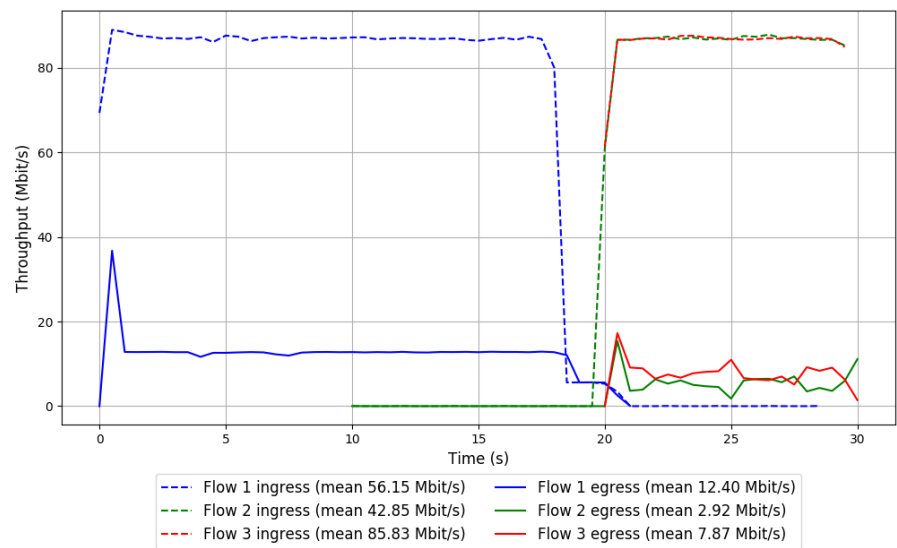
Run 3: Report of TaoVA-100x — Data Link

- - - - Flow 1 ingress (mean 30.38 Mbit/s)   —— Flow 1 egress (mean 5.06 Mbit/s)
- - - - Flow 2 ingress (mean 79.70 Mbit/s)   —— Flow 2 egress (mean 11.88 Mbit/s)
- - - - Flow 3 ingress (mean 1.88 Mbit/s)   —— Flow 3 egress (mean 0.72 Mbit/s)

- Flow 1 (95th percentile 14.18 ms)   • Flow 2 (95th percentile 14.06 ms)   • Flow 3 (95th percentile 17.51 ms)

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

Start at: 2018-09-06 10:22:44
End at: 2018-09-06 10:23:14
Local clock offset: 3.08 ms
Remote clock offset: -1.788 ms


# Below is generated by plot.py at 2018-09-06 11:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.11 Mbit/s
95th percentile per-packet one-way delay: 7.972 ms
Loss rate: 88.17%
-- Flow 1:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 7.435 ms
Loss rate: 84.09%
-- Flow 2:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 9.529 ms
Loss rate: 93.17%
-- Flow 3:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 10.424 ms
Loss rate: 90.84%
```

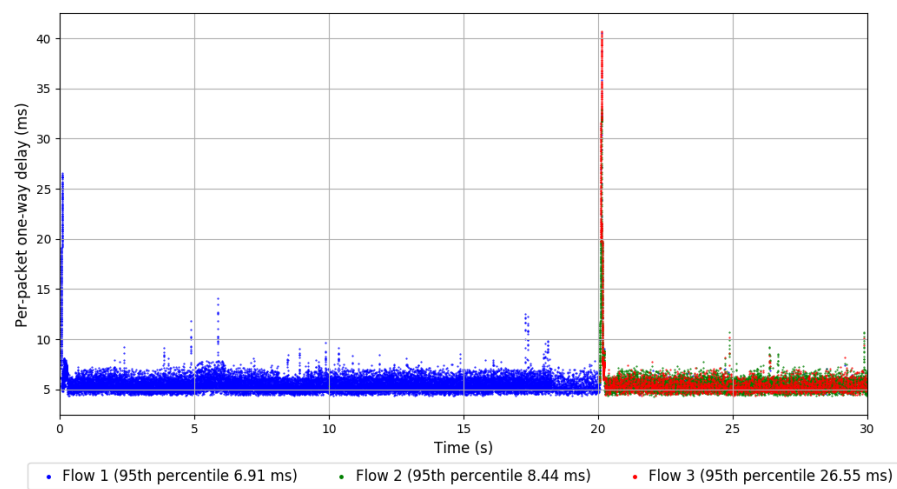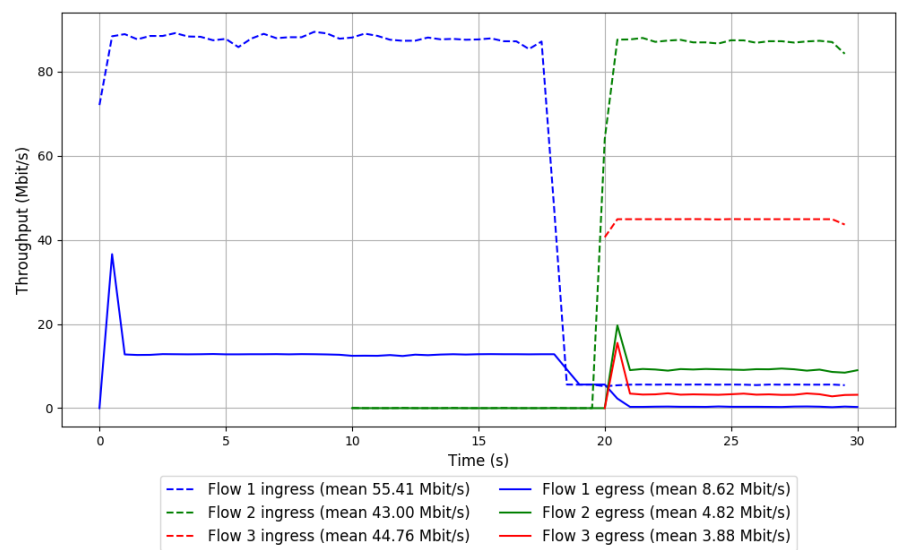Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-09-06 10:43:54
End at: 2018-09-06 10:44:24
Local clock offset: 2.836 ms
Remote clock offset: -1.194 ms


# Below is generated by plot.py at 2018-09-06 11:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 7.317 ms
Loss rate: 86.74%
-- Flow 1:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 6.906 ms
Loss rate: 84.45%
-- Flow 2:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 8.442 ms
Loss rate: 88.79%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 26.547 ms
Loss rate: 91.33%
```
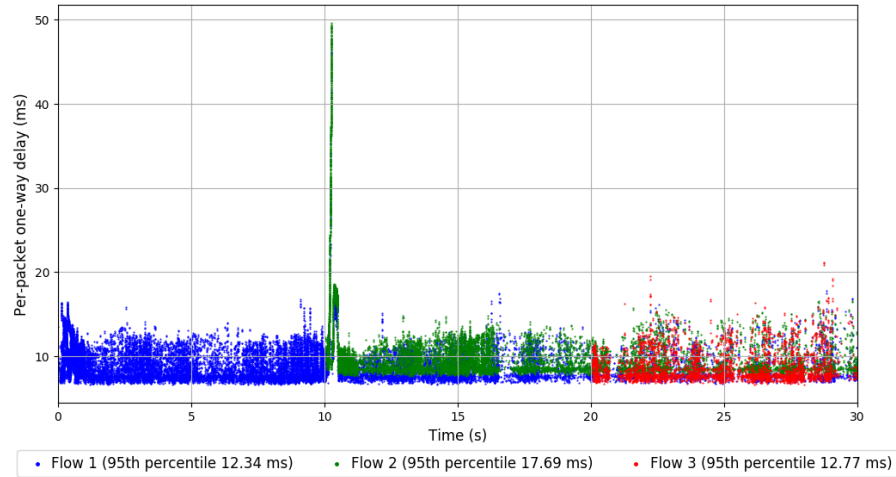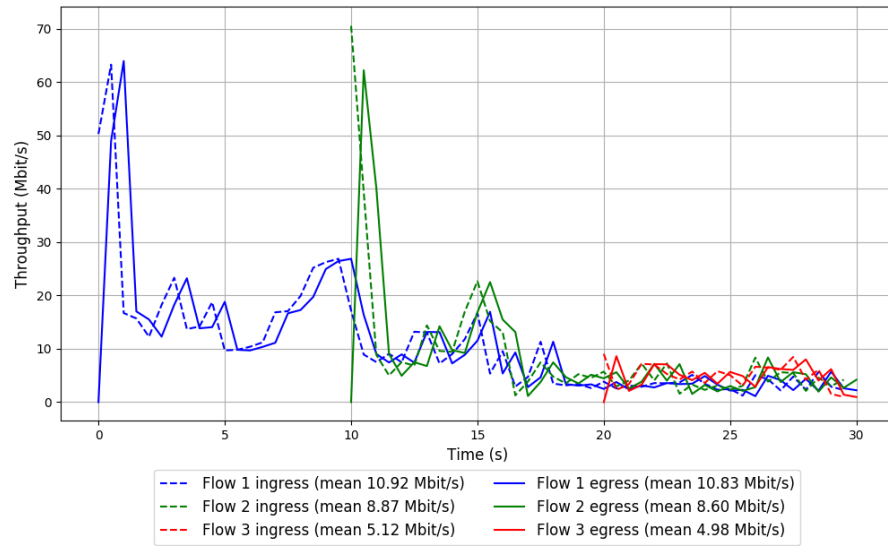
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 55.41 Mbit/s) --- Flow 1 egress (mean 8.62 Mbit/s)
Flow 2 ingress (mean 43.00 Mbit/s) --- Flow 2 egress (mean 4.82 Mbit/s)
Flow 3 ingress (mean 44.76 Mbit/s) --- Flow 3 egress (mean 3.88 Mbit/s)

• Flow 1 (95th percentile 6.91 ms)   • Flow 2 (95th percentile 8.44 ms)   • Flow 3 (95th percentile 26.55 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-09-06 09:15:34
End at: 2018-09-06 09:16:04
Local clock offset: -1.967 ms
Remote clock offset: -2.311 ms

# Below is generated by plot.py at 2018-09-06 11:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.22 Mbit/s
95th percentile per-packet one-way delay: 14.561 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 12.337 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 17.692 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 12.773 ms
Loss rate: 2.82%
```

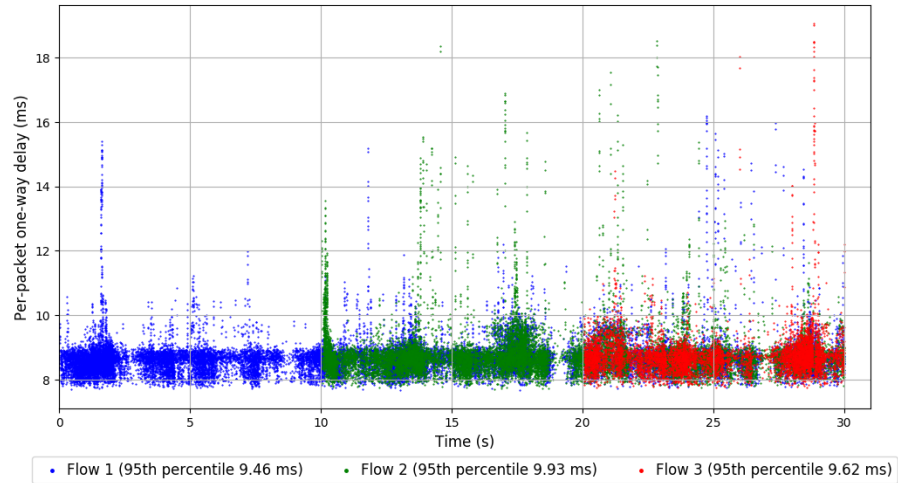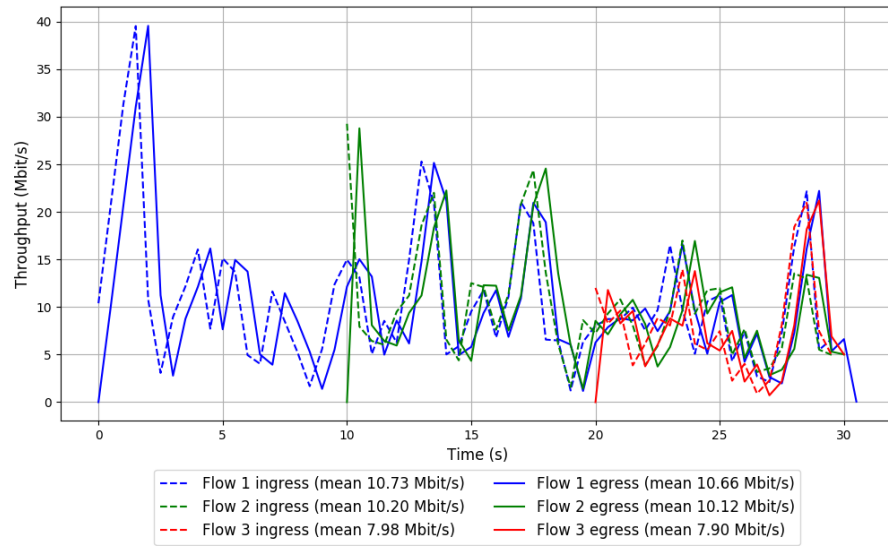Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-09-06 09:42:06
End at: 2018-09-06 09:42:36
Local clock offset: -0.299 ms
Remote clock offset: -2.153 ms


# Below is generated by plot.py at 2018-09-06 11:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 9.619 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 10.66 Mbit/s
95th percentile per-packet one-way delay: 9.464 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 9.932 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 9.617 ms
Loss rate: 1.04%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-09-06 10:03:34
End at: 2018-09-06 10:04:04
Local clock offset: 2.686 ms
Remote clock offset: -2.167 ms


# Below is generated by plot.py at 2018-09-06 11:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 9.476 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 12.62 Mbit/s
95th percentile per-packet one-way delay: 6.691 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 17.15 Mbit/s
95th percentile per-packet one-way delay: 20.366 ms
Loss rate: 3.44%
-- Flow 3:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 16.871 ms
Loss rate: 2.44%
```
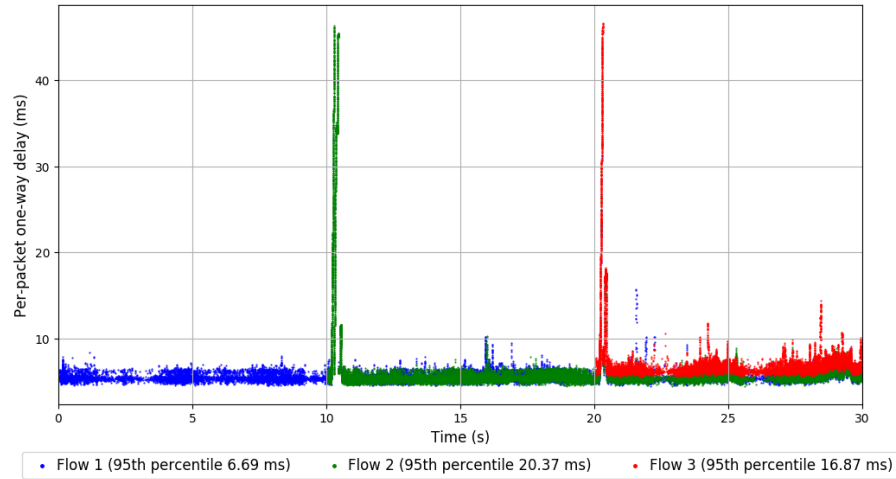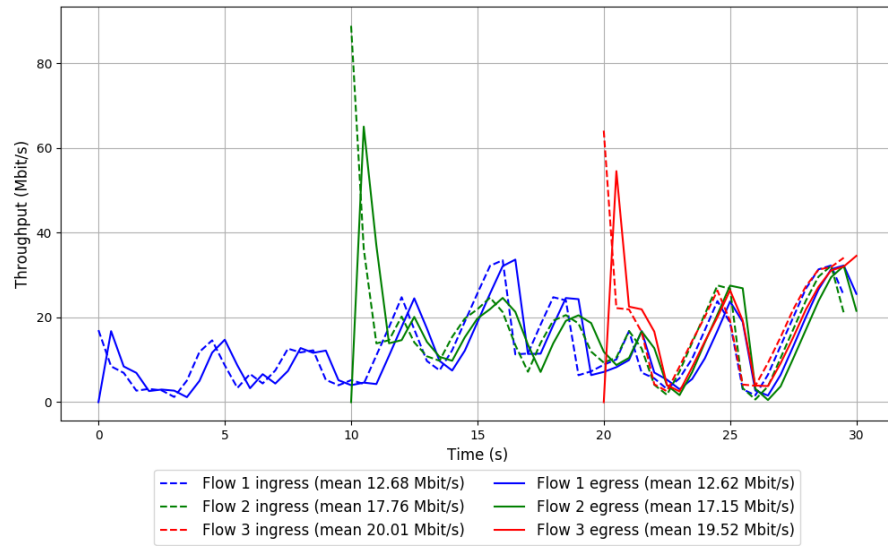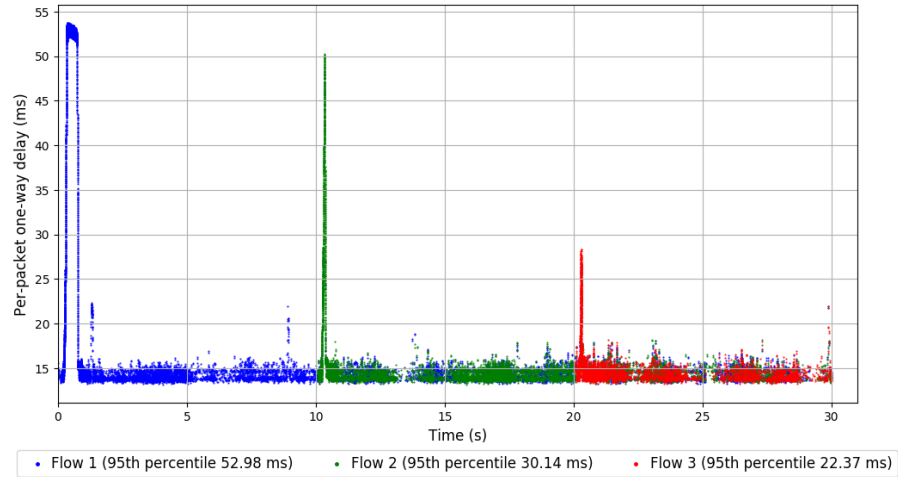
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-09-06 10:27:18
End at: 2018-09-06 10:27:48
Local clock offset: 1.33 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2018-09-06 11:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.84 Mbit/s
95th percentile per-packet one-way delay: 52.729 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 52.975 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 30.142 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 22.372 ms
Loss rate: 1.52%
```
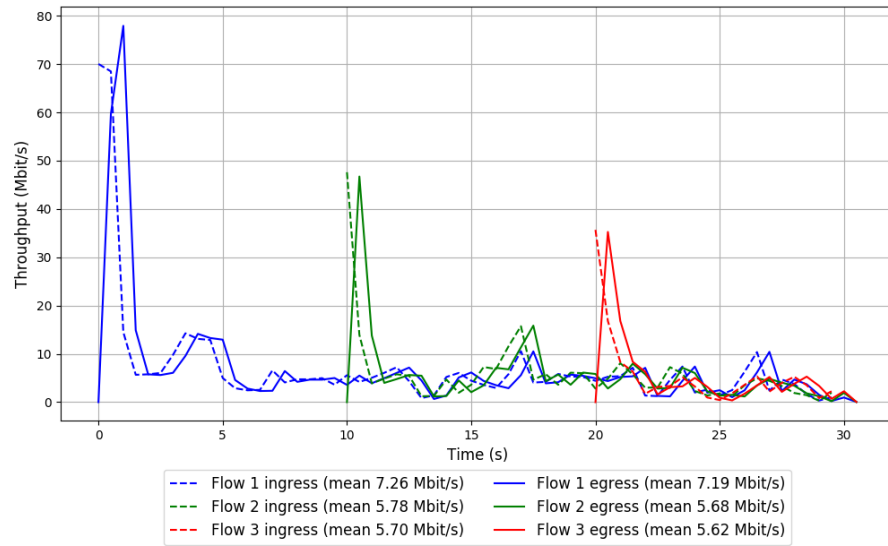
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-09-06 10:48:42
End at: 2018-09-06 10:49:12
Local clock offset: 2.782 ms
Remote clock offset: -1.407 ms


# Below is generated by plot.py at 2018-09-06 11:07:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.07 Mbit/s
95th percentile per-packet one-way delay: 12.807 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 8.471 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 15.67 Mbit/s
95th percentile per-packet one-way delay: 8.247 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 13.47 Mbit/s
95th percentile per-packet one-way delay: 26.747 ms
Loss rate: 0.18%
```
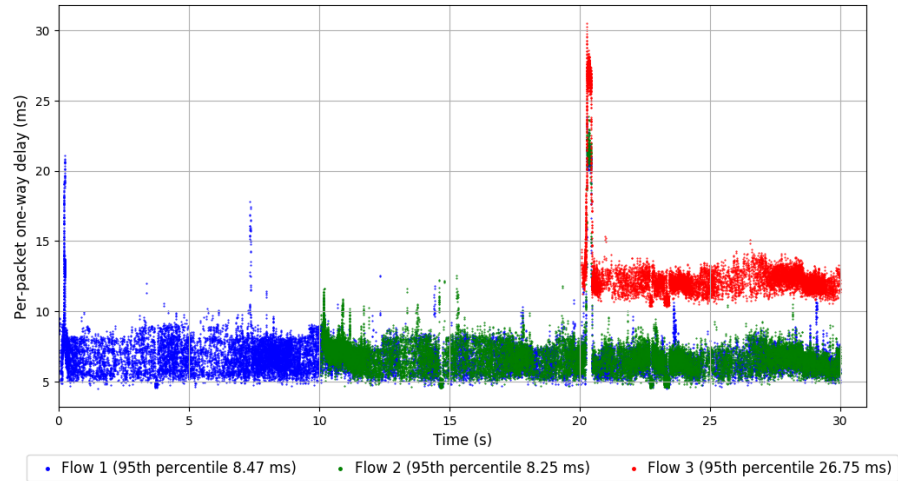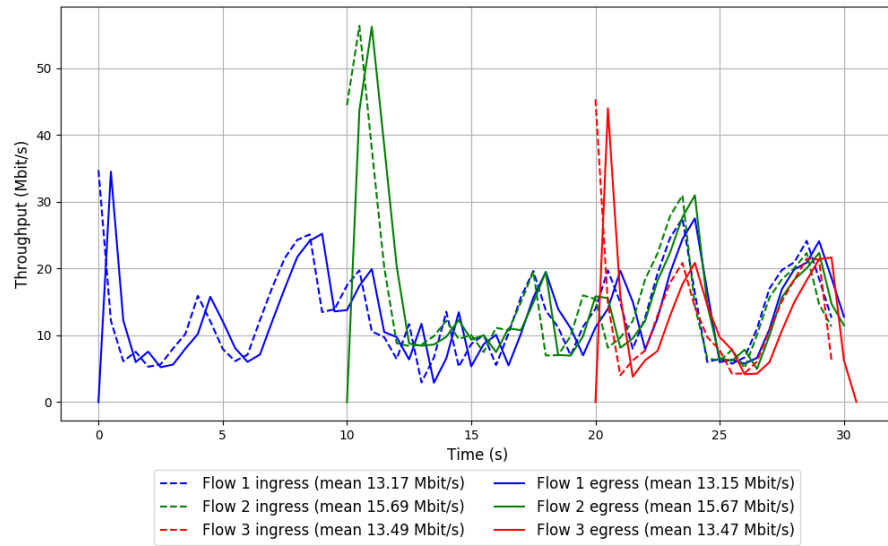
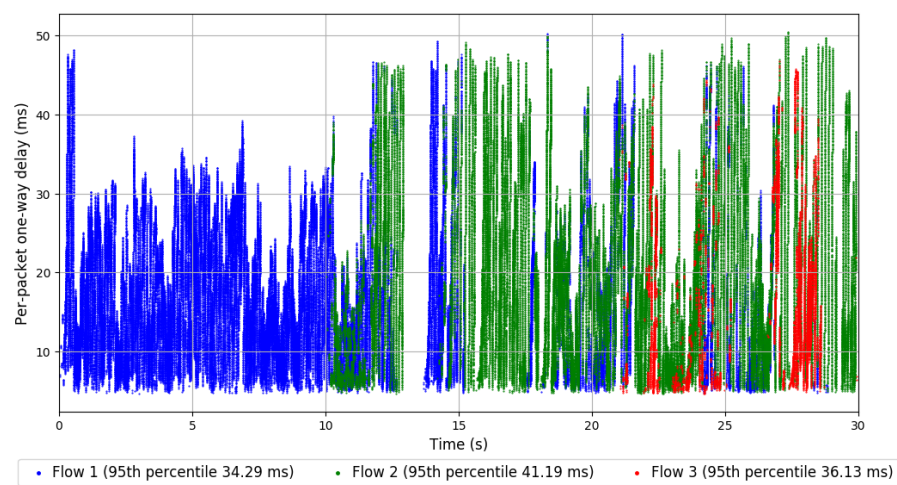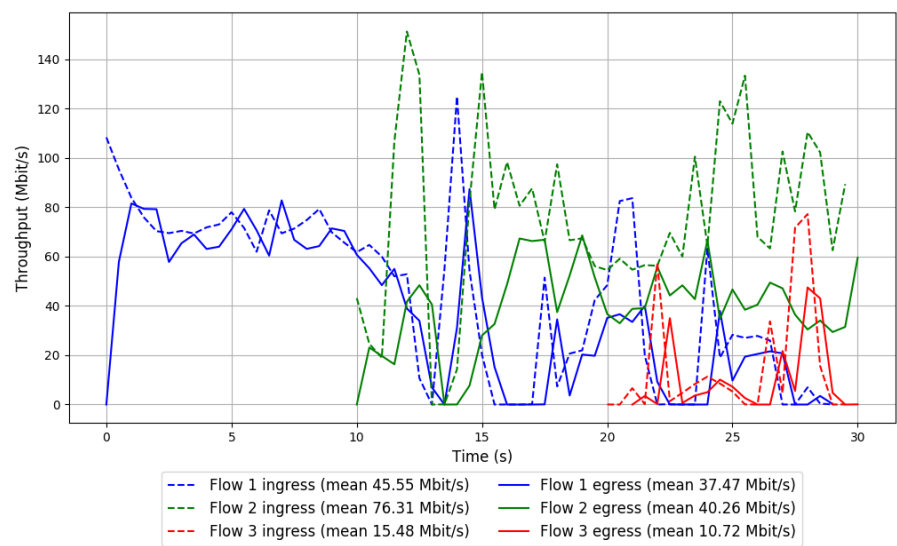Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-09-06 09:21:31
End at: 2018-09-06 09:22:01
Local clock offset: 2.231 ms
Remote clock offset: -2.364 ms


# Below is generated by plot.py at 2018-09-06 11:08:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.04 Mbit/s
95th percentile per-packet one-way delay: 38.657 ms
Loss rate: 33.93%
-- Flow 1:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 34.286 ms
Loss rate: 18.24%
-- Flow 2:
Average throughput: 40.26 Mbit/s
95th percentile per-packet one-way delay: 41.191 ms
Loss rate: 47.20%
-- Flow 3:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 36.135 ms
Loss rate: 37.95%
```

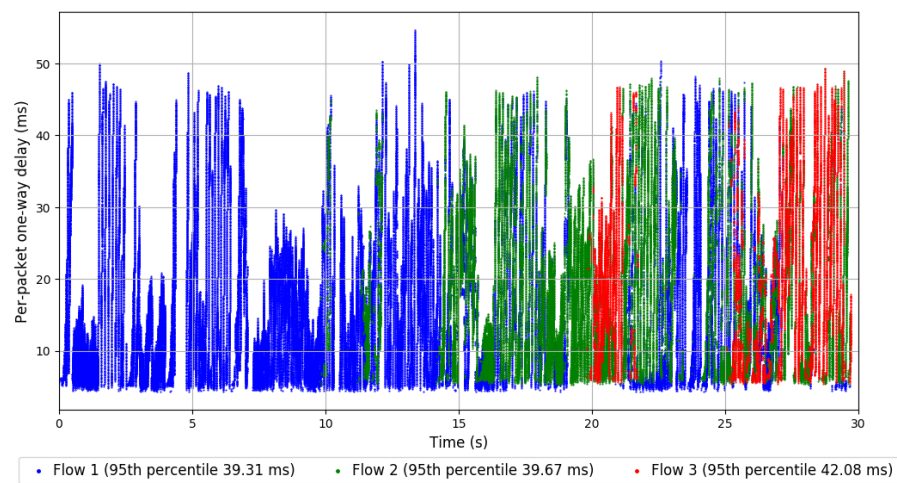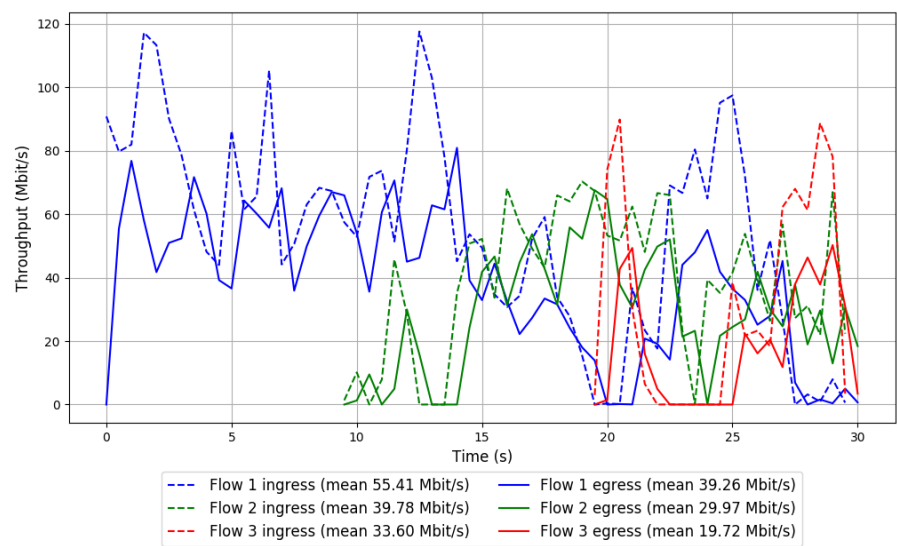Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-09-06 09:48:13
End at: 2018-09-06 09:48:44
Local clock offset: 4.109 ms
Remote clock offset: -1.066 ms


# Below is generated by plot.py at 2018-09-06 11:08:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.95 Mbit/s
95th percentile per-packet one-way delay: 39.840 ms
Loss rate: 29.30%
-- Flow 1:
Average throughput: 39.26 Mbit/s
95th percentile per-packet one-way delay: 39.306 ms
Loss rate: 29.14%
-- Flow 2:
Average throughput: 29.97 Mbit/s
95th percentile per-packet one-way delay: 39.671 ms
Loss rate: 24.61%
-- Flow 3:
Average throughput: 19.72 Mbit/s
95th percentile per-packet one-way delay: 42.075 ms
Loss rate: 41.27%
```

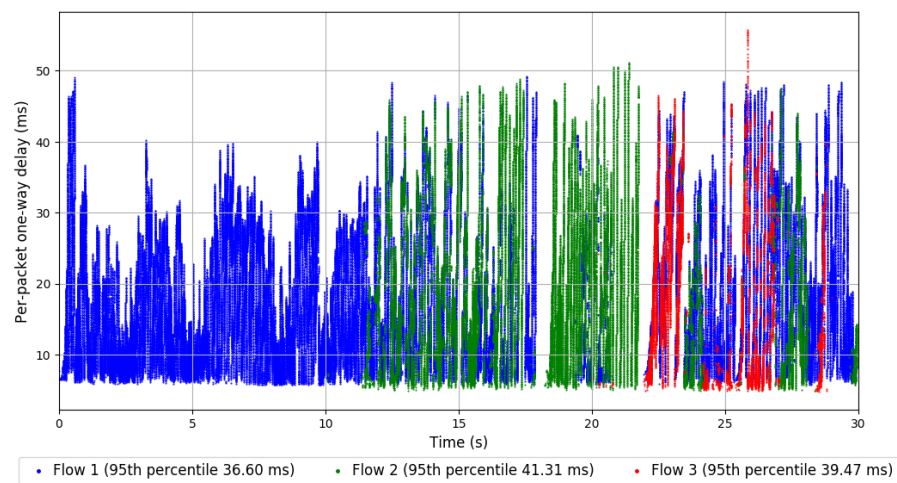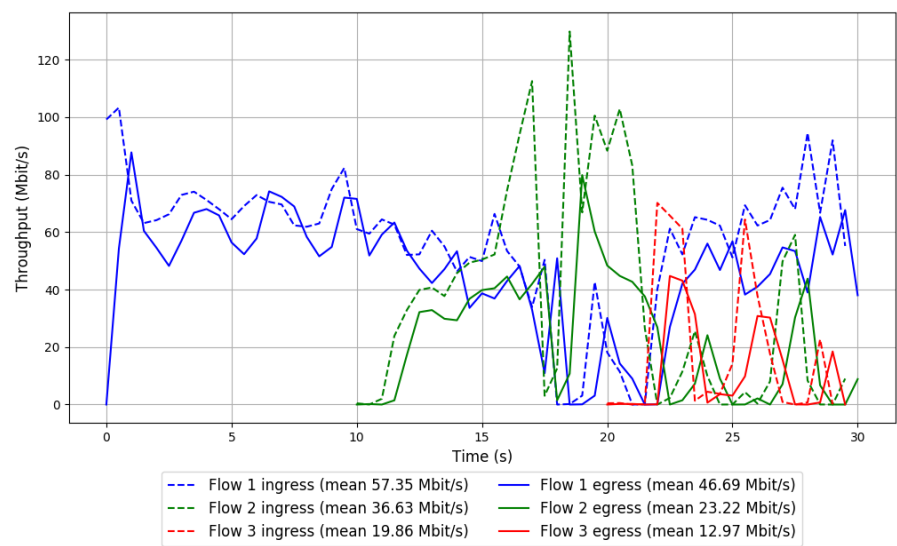Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-09-06 10:09:37
End at: 2018-09-06 10:10:07
Local clock offset: 3.087 ms
Remote clock offset: -1.313 ms


# Below is generated by plot.py at 2018-09-06 11:08:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.01 Mbit/s
95th percentile per-packet one-way delay: 38.360 ms
Loss rate: 24.82%
-- Flow 1:
Average throughput: 46.69 Mbit/s
95th percentile per-packet one-way delay: 36.602 ms
Loss rate: 18.59%
-- Flow 2:
Average throughput: 23.22 Mbit/s
95th percentile per-packet one-way delay: 41.313 ms
Loss rate: 36.59%
-- Flow 3:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 39.465 ms
Loss rate: 36.38%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 57.35 Mbit/s)   Flow 1 egress (mean 46.69 Mbit/s)
Flow 2 ingress (mean 36.63 Mbit/s)   Flow 2 egress (mean 23.22 Mbit/s)
Flow 3 ingress (mean 19.86 Mbit/s)   Flow 3 egress (mean 12.97 Mbit/s)

Flow 1 (95th percentile 36.60 ms)   Flow 2 (95th percentile 41.31 ms)   Flow 3 (95th percentile 39.47 ms)

```
Run 4: Statistics of Verus

Start at: 2018-09-06 10:33:07
End at: 2018-09-06 10:33:37
Local clock offset: 2.943 ms
Remote clock offset: -1.2 ms


# Below is generated by plot.py at 2018-09-06 11:08:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 45.940 ms
Loss rate: 47.42%
-- Flow 1:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 43.364 ms
Loss rate: 28.12%
-- Flow 2:
Average throughput: 25.17 Mbit/s
95th percentile per-packet one-way delay: 49.627 ms
Loss rate: 68.82%
-- Flow 3:
Average throughput: 16.52 Mbit/s
95th percentile per-packet one-way delay: 37.050 ms
Loss rate: 32.98%
```
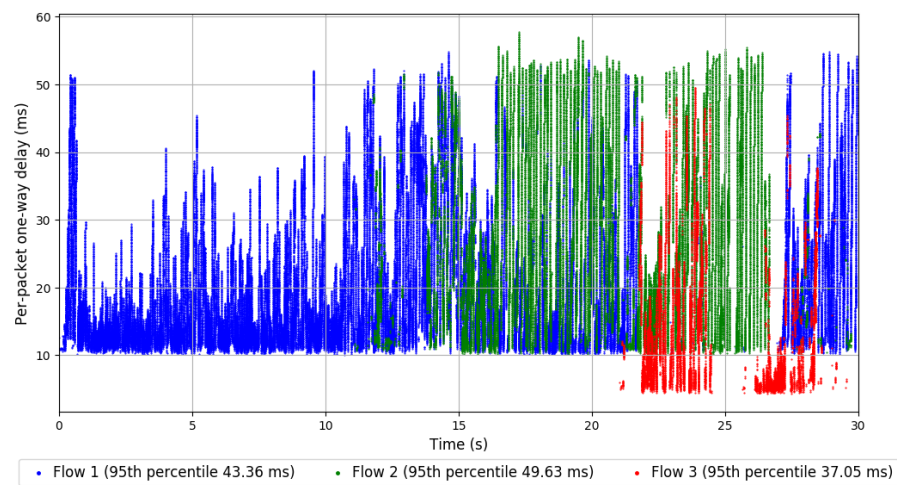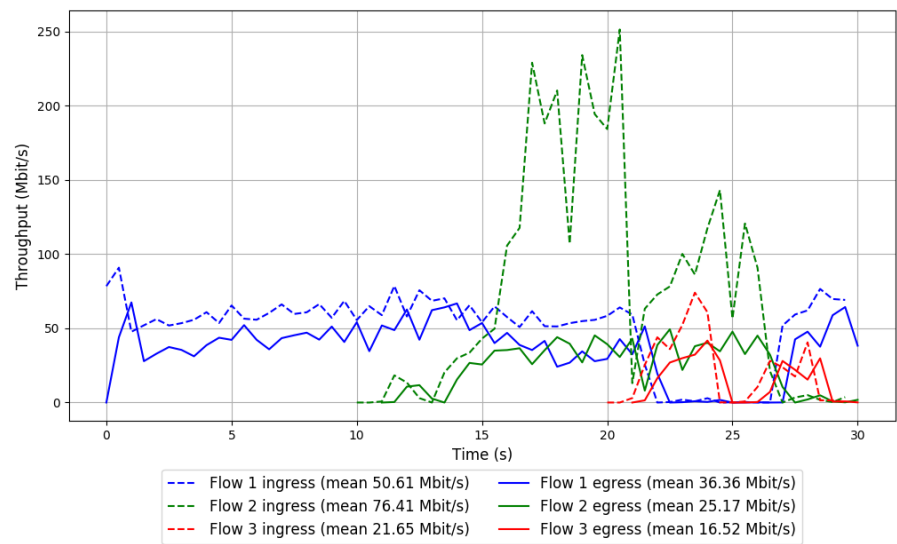
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-09-06 10:54:42
End at: 2018-09-06 10:55:12
Local clock offset: 3.771 ms
Remote clock offset: -1.43 ms


# Below is generated by plot.py at 2018-09-06 11:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 38.824 ms
Loss rate: 28.10%
-- Flow 1:
Average throughput: 39.40 Mbit/s
95th percentile per-packet one-way delay: 35.906 ms
Loss rate: 19.93%
-- Flow 2:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 42.042 ms
Loss rate: 43.27%
-- Flow 3:
Average throughput: 33.31 Mbit/s
95th percentile per-packet one-way delay: 36.153 ms
Loss rate: 21.11%
```
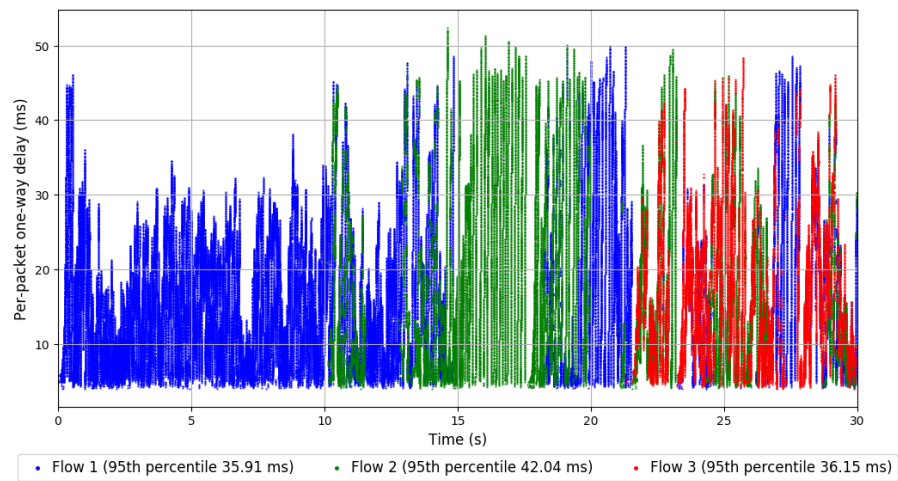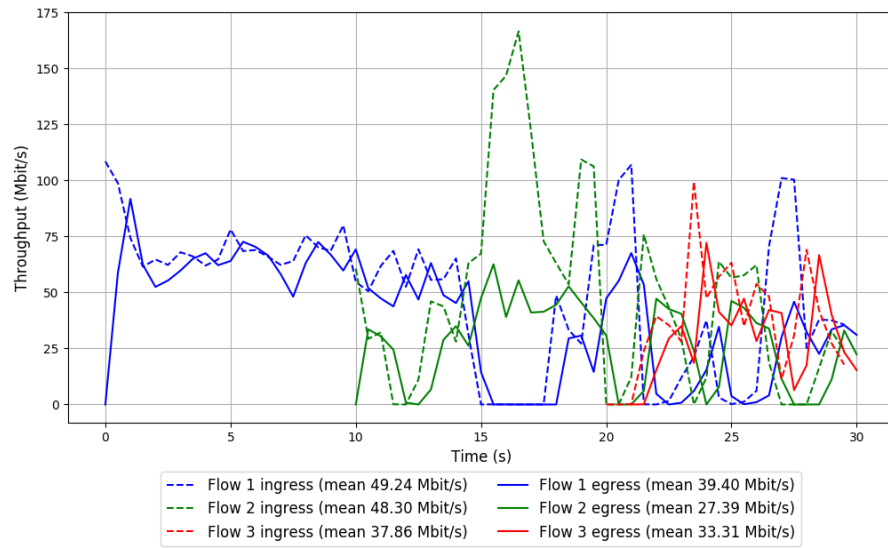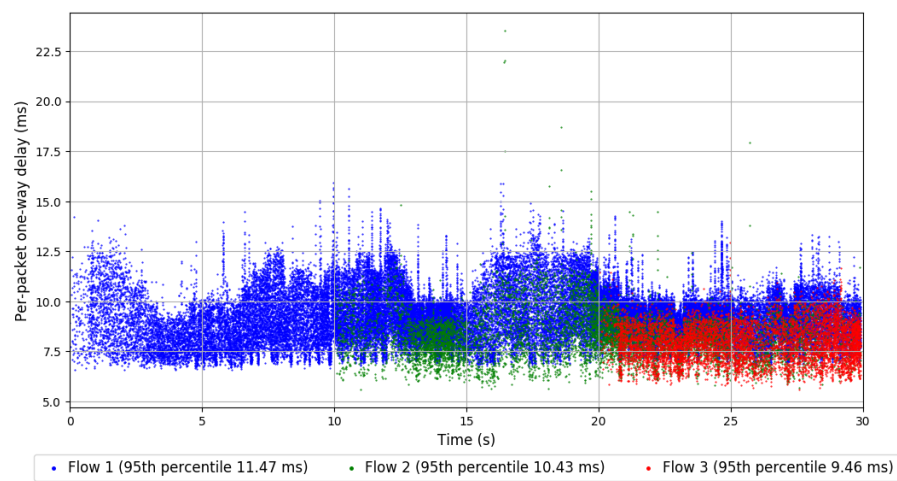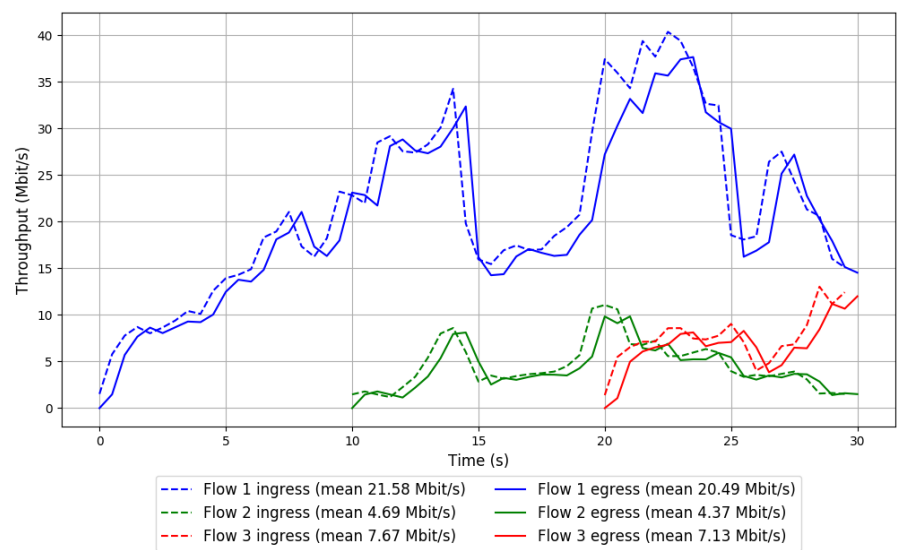
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-09-06 09:25:00
End at: 2018-09-06 09:25:30
Local clock offset: 2.002 ms
Remote clock offset: -1.202 ms


# Below is generated by plot.py at 2018-09-06 11:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.75 Mbit/s
95th percentile per-packet one-way delay: 11.301 ms
Loss rate: 5.44%
-- Flow 1:
Average throughput: 20.49 Mbit/s
95th percentile per-packet one-way delay: 11.474 ms
Loss rate: 5.06%
-- Flow 2:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 10.434 ms
Loss rate: 6.74%
-- Flow 3:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 9.459 ms
Loss rate: 7.07%
```

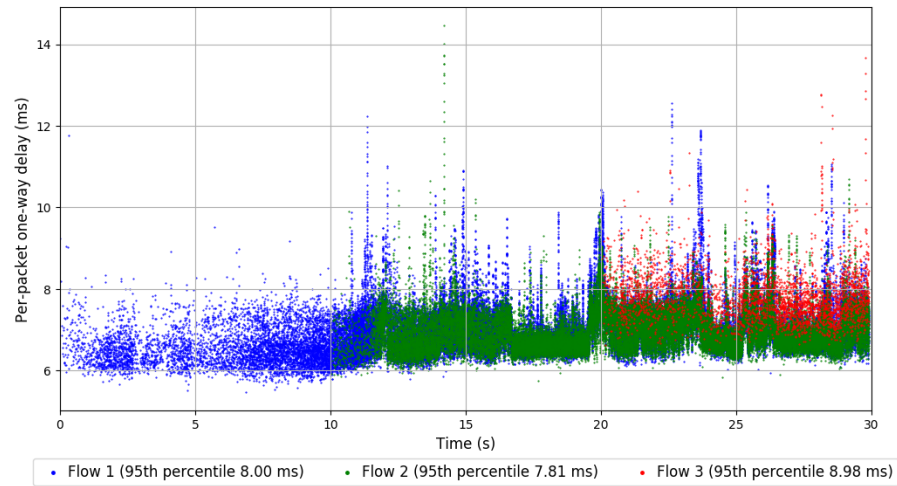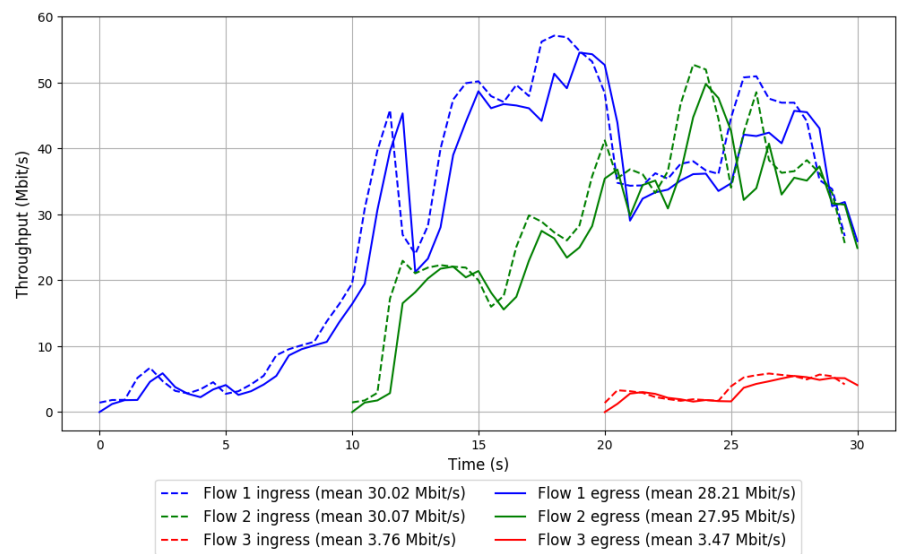# Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-09-06 09:51:50
End at: 2018-09-06 09:52:20
Local clock offset: 1.84 ms
Remote clock offset: -1.938 ms


# Below is generated by plot.py at 2018-09-06 11:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 8.004 ms
Loss rate: 6.47%
-- Flow 1:
Average throughput: 28.21 Mbit/s
95th percentile per-packet one-way delay: 7.996 ms
Loss rate: 6.02%
-- Flow 2:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 7.808 ms
Loss rate: 7.06%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 8.977 ms
Loss rate: 7.79%
```
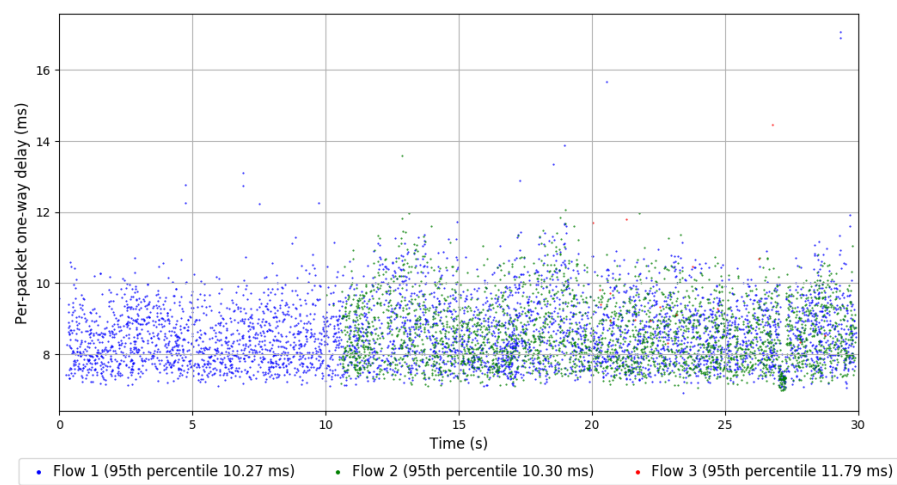
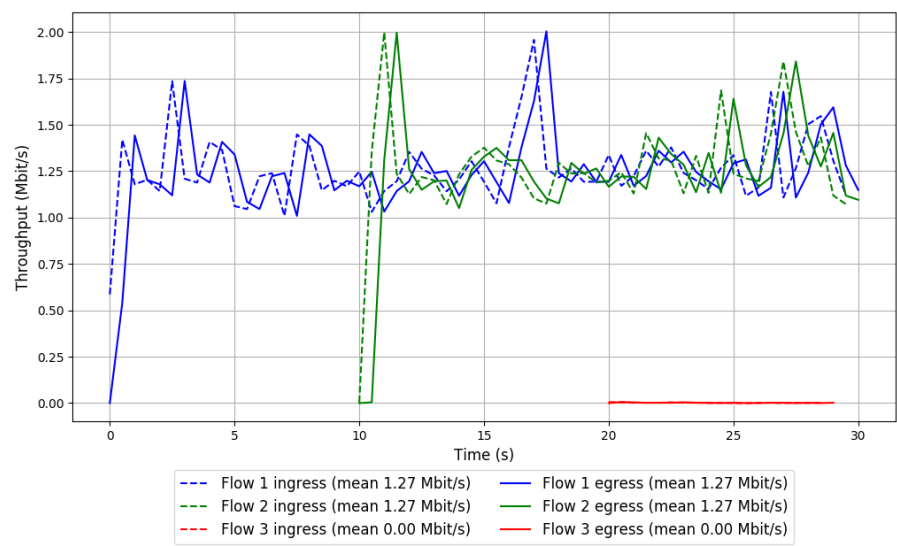Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-09-06 10:13:19
End at: 2018-09-06 10:13:49
Local clock offset: 0.345 ms
Remote clock offset: -1.776 ms


# Below is generated by plot.py at 2018-09-06 11:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 10.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 10.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 10.303 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 11.787 ms
Loss rate: 0.00%
```

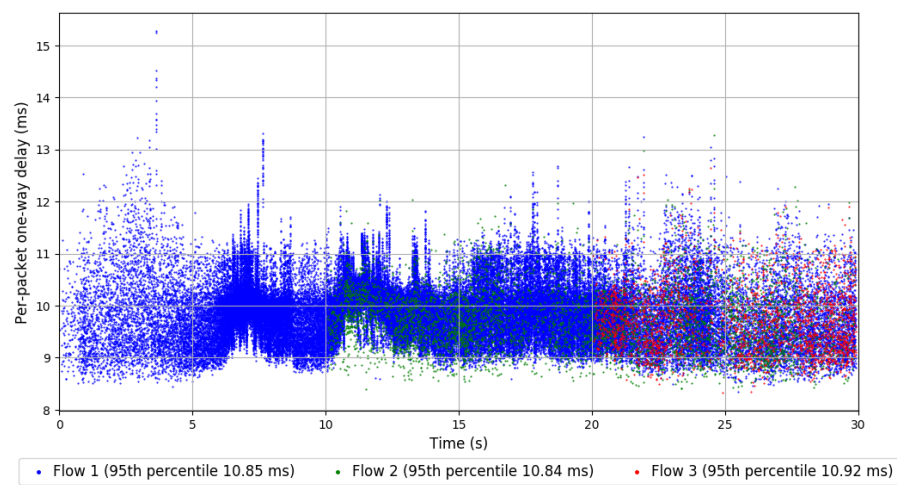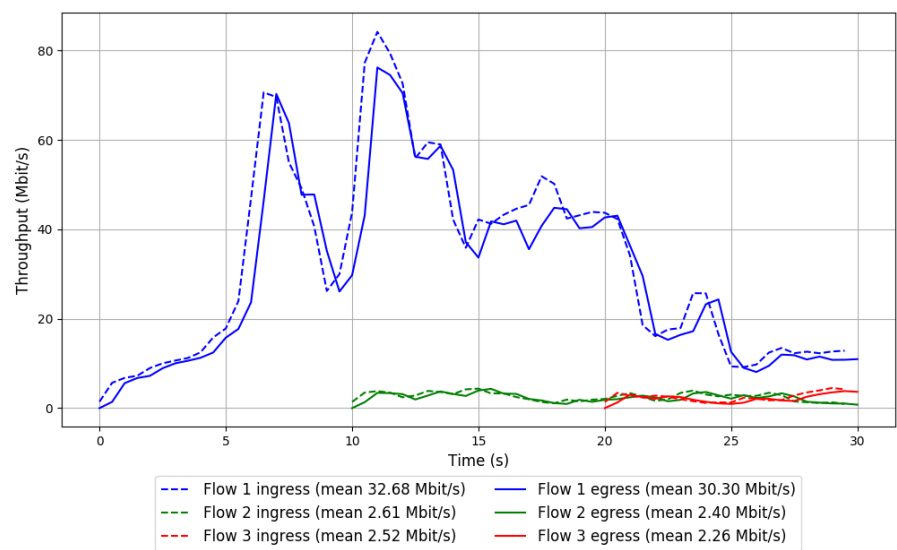Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-09-06 10:36:35
End at: 2018-09-06 10:37:05
Local clock offset: -1.96 ms
Remote clock offset: -7.688 ms


# Below is generated by plot.py at 2018-09-06 11:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 10.855 ms
Loss rate: 7.37%
-- Flow 1:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 10.854 ms
Loss rate: 7.27%
-- Flow 2:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 10.836 ms
Loss rate: 7.99%
-- Flow 3:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 10.922 ms
Loss rate: 10.12%
```

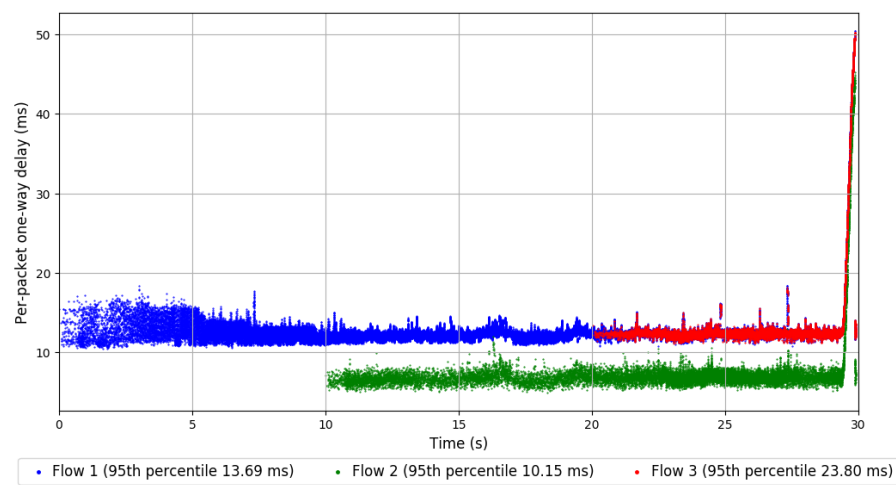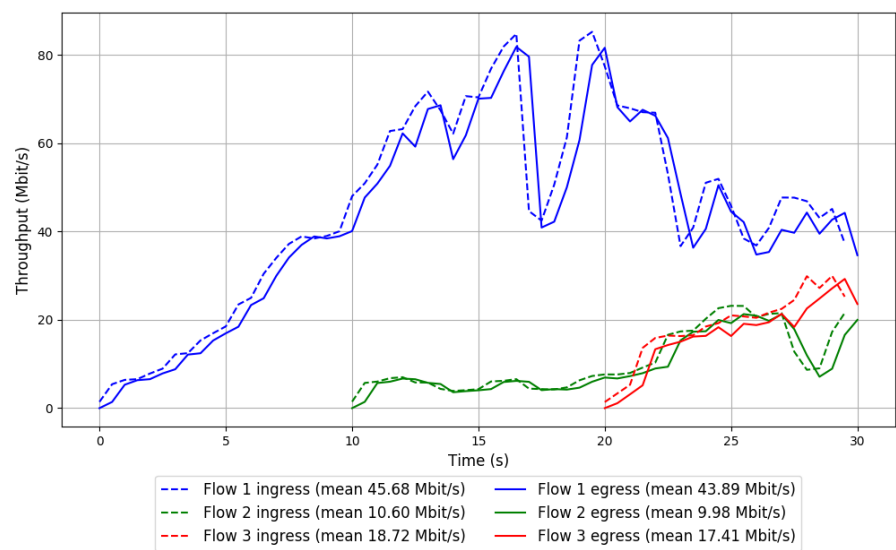Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-09-06 10:58:15
End at: 2018-09-06 10:58:45
Local clock offset: 1.316 ms
Remote clock offset: -3.023 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.28 Mbit/s
95th percentile per-packet one-way delay: 13.780 ms
Loss rate: 4.48%
-- Flow 1:
Average throughput: 43.89 Mbit/s
95th percentile per-packet one-way delay: 13.685 ms
Loss rate: 3.93%
-- Flow 2:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 10.153 ms
Loss rate: 5.86%
-- Flow 3:
Average throughput: 17.41 Mbit/s
95th percentile per-packet one-way delay: 23.798 ms
Loss rate: 7.00%
```

Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 45.68 Mbit/s) --- Flow 1 egress (mean 43.89 Mbit/s)
Flow 2 ingress (mean 10.60 Mbit/s) --- Flow 2 egress (mean 9.98 Mbit/s)
Flow 3 ingress (mean 18.72 Mbit/s) --- Flow 3 egress (mean 17.41 Mbit/s)

Flow 1 (95th percentile 13.69 ms)   Flow 2 (95th percentile 10.15 ms)   Flow 3 (95th percentile 23.80 ms)
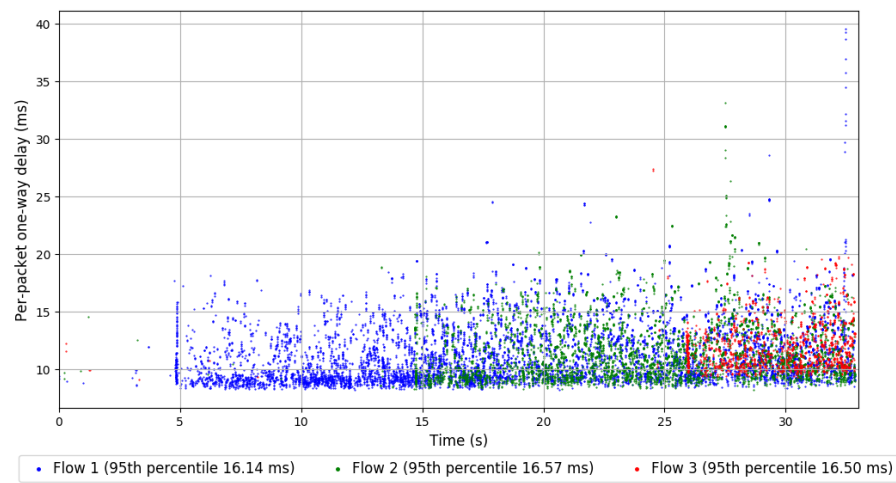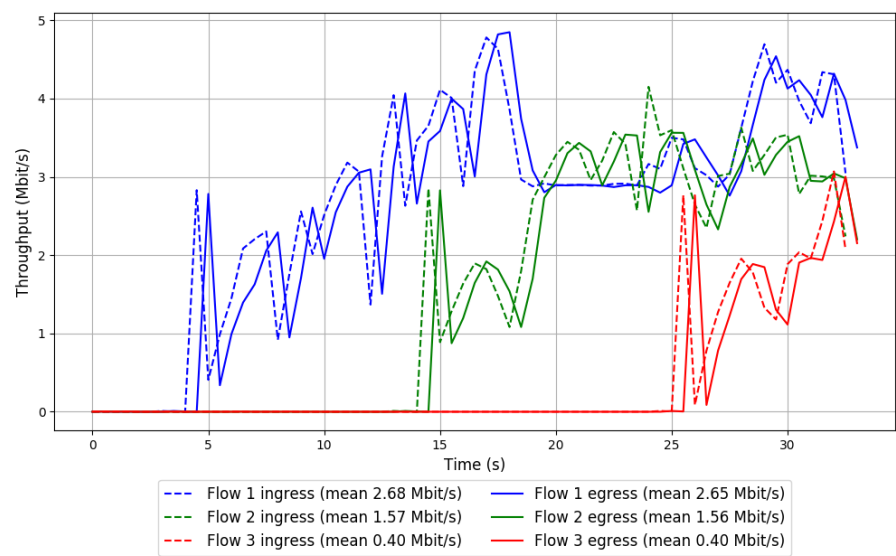
```
Run 1: Statistics of WebRTC media

Start at: 2018-09-06 09:19:11
End at: 2018-09-06 09:19:41
Local clock offset: -2.052 ms
Remote clock offset: -1.734 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 16.400 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 16.143 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 16.565 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 16.497 ms
Loss rate: 0.60%
```

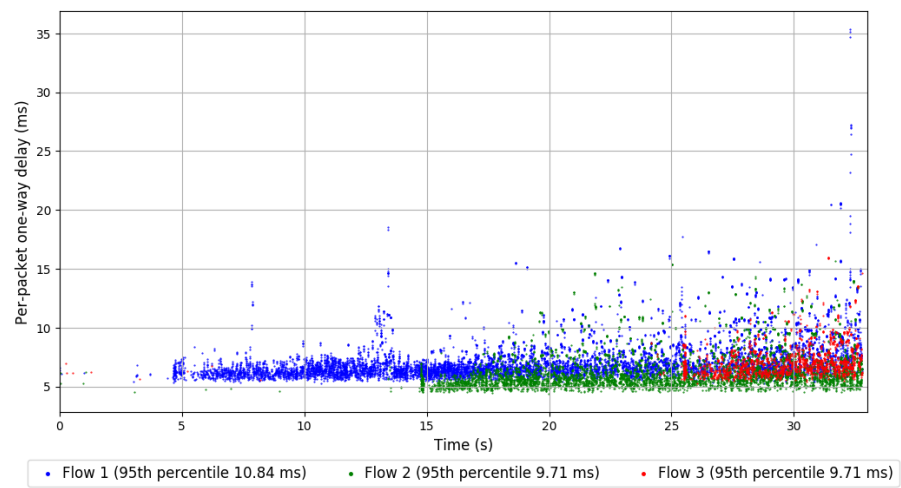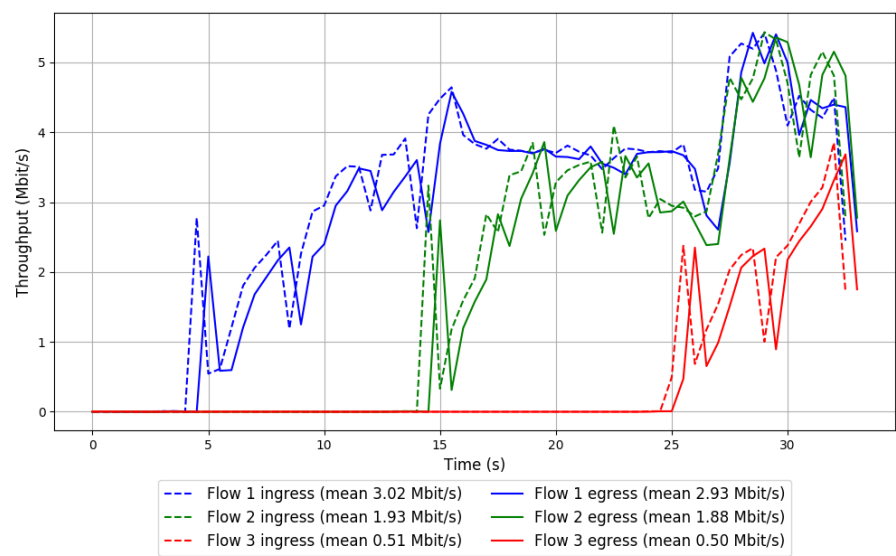Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-09-06 09:45:53
End at: 2018-09-06 09:46:23
Local clock offset: 3.553 ms
Remote clock offset: -1.551 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.30 Mbit/s
95th percentile per-packet one-way delay: 10.466 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 10.844 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 9.707 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 9.713 ms
Loss rate: 1.64%
```

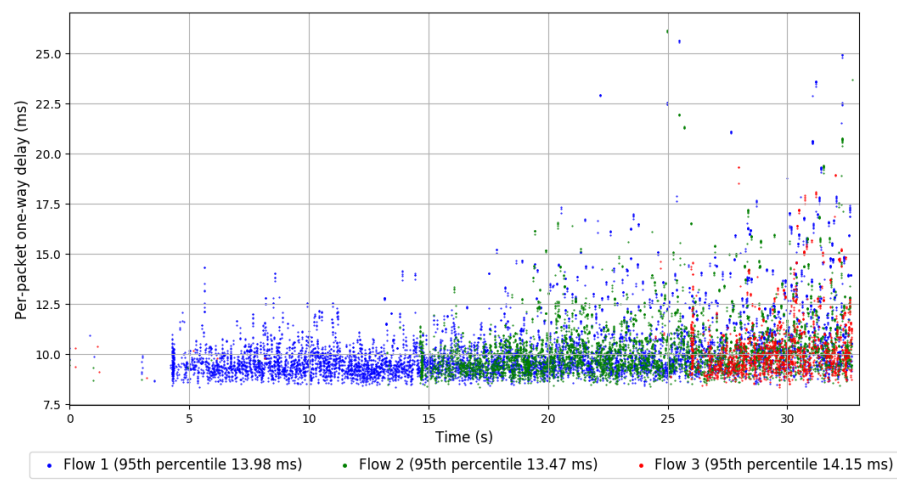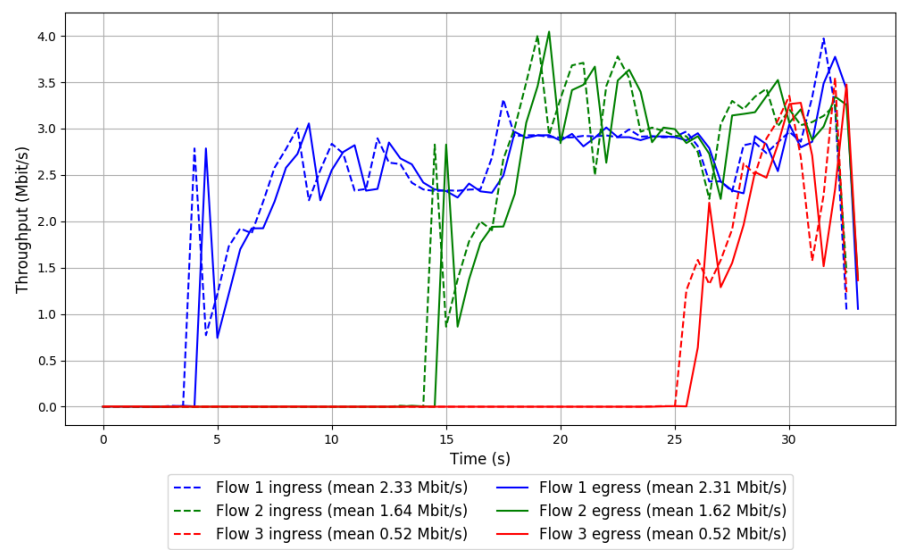Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-09-06 10:07:16
End at: 2018-09-06 10:07:46
Local clock offset: 0.273 ms
Remote clock offset: -1.535 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 13.837 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 13.977 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 13.472 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 14.150 ms
Loss rate: 0.09%
```

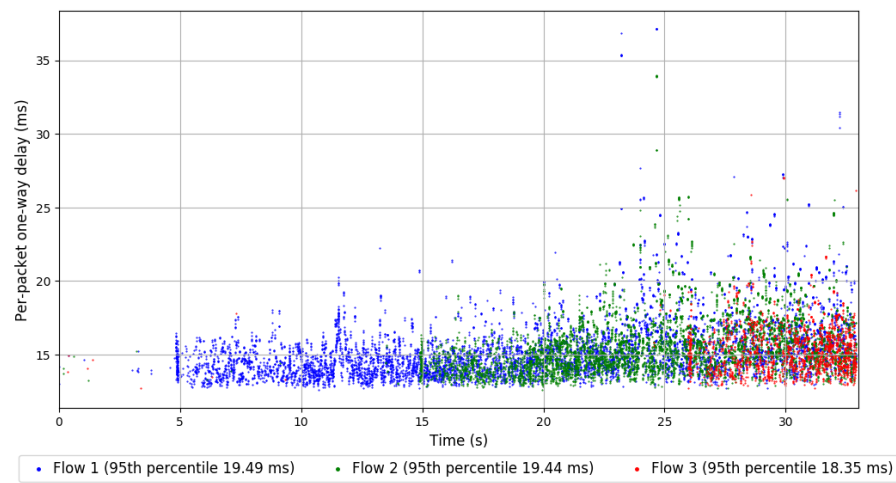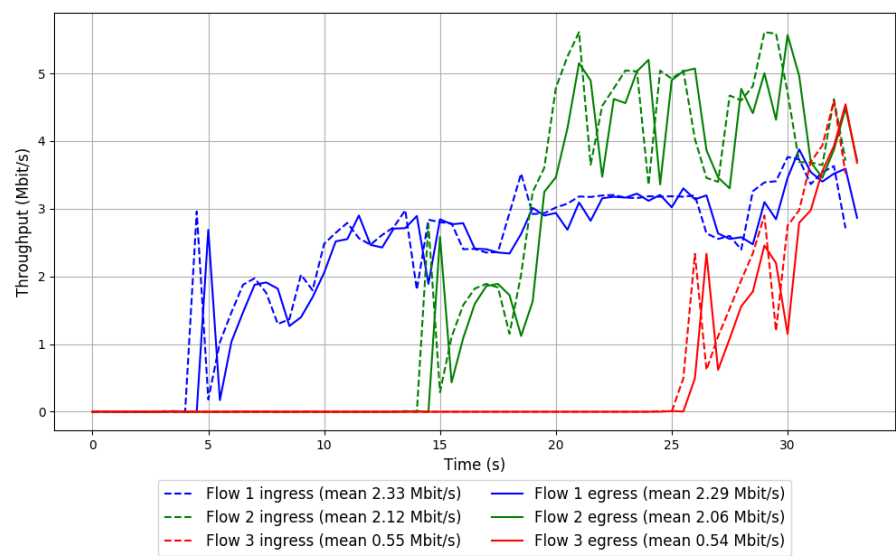## Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-09-06 10:30:48
End at: 2018-09-06 10:31:18
Local clock offset: 0.616 ms
Remote clock offset: -1.012 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.87 Mbit/s
95th percentile per-packet one-way delay: 19.346 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 19.494 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 19.442 ms
Loss rate: 2.58%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 18.350 ms
Loss rate: 2.21%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-09-06 10:52:18
End at: 2018-09-06 10:52:48
Local clock offset: 1.006 ms
Remote clock offset: -1.171 ms


# Below is generated by plot.py at 2018-09-06 11:08:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 17.058 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 17.604 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 12.798 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 17.880 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link