Pantheon Report

Generated at 2017-08-11 16:30:51 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

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

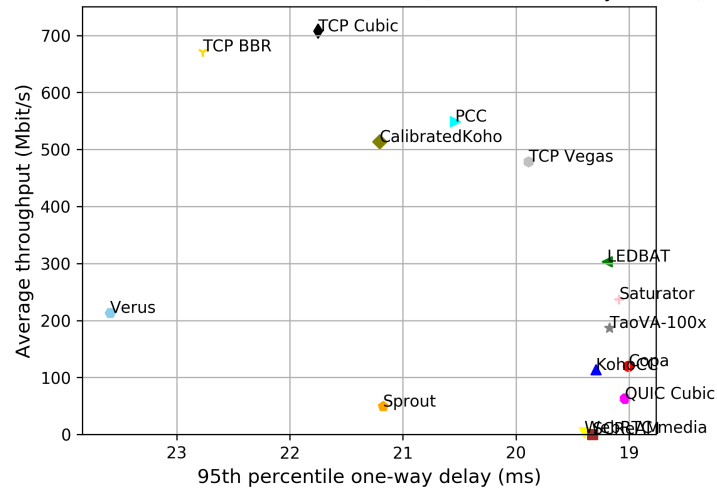Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

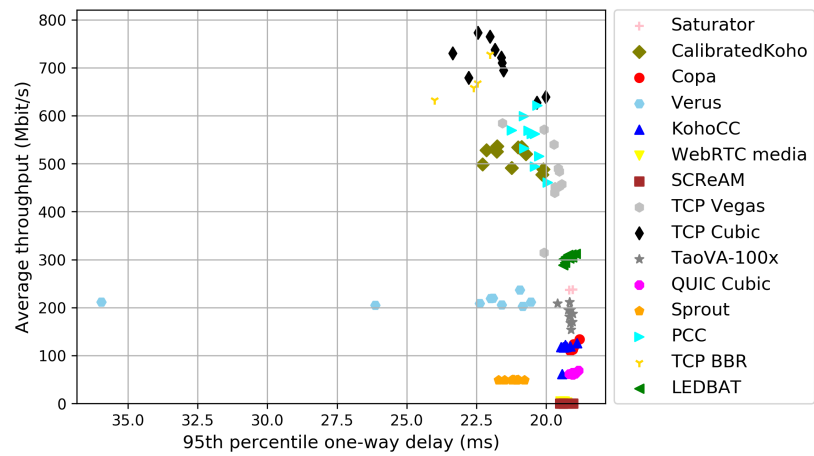NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
 M scripts/merge-tunnel-logs
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	4	345.55	327.05	283.53	22.70	22.39	23.20	0.06	0.11	0.10
CalibratedKoho	10	307.49	220.00	182.09	20.83	21.33	21.50	0.02	0.00	0.00
Copa	6	64.60	59.30	48.04	18.71	19.03	18.95	0.00	0.00	0.01
TCP Cubic	10	376.88	335.27	325.39	21.46	21.68	22.06	0.01	0.01	0.02
KohoCC	10	119.05	59.36	58.86	129.35	19.23	19.27	0.00	0.00	0.00
LEDBAT	10	179.77	132.80	103.41	19.11	19.11	19.14	0.00	0.00	0.00
PCC	10	386.99	182.61	124.70	20.59	19.92	19.55	0.07	0.02	0.00
QUIC Cubic	9	0.30	67.14	51.93	18.97	18.82	19.03	0.00	0.00	0.00
Saturator	3	118.84	118.78	118.14	19.06	18.98	19.06	0.02	0.00	0.00
SCReAM	10	0.22	0.22	0.22	19.19	19.11	19.11	0.01	0.00	0.00
Sprout	10	24.74	24.70	24.25	21.26	20.88	20.70	0.00	0.00	0.00
TaoVA-100x	10	118.58	74.74	56.46	19.12	19.28	19.00	0.08	0.00	0.00
TCP Vegas	10	241.14	256.09	201.54	19.75	19.84	19.57	0.00	0.00	0.00
Verus	9	130.06	92.91	66.58	24.47	22.17	21.66	0.00	0.00	0.00
WebRTC media	10	1.65	1.46	0.55	19.53	19.18	19.66	0.01	0.00	0.00

3

```
Run 1: Statistics of TCP BBR

Start at: 2017-08-11 09:30:48
End at: 2017-08-11 09:31:18
Local clock offset: 0.29 ms
Remote clock offset: -0.606 ms
```
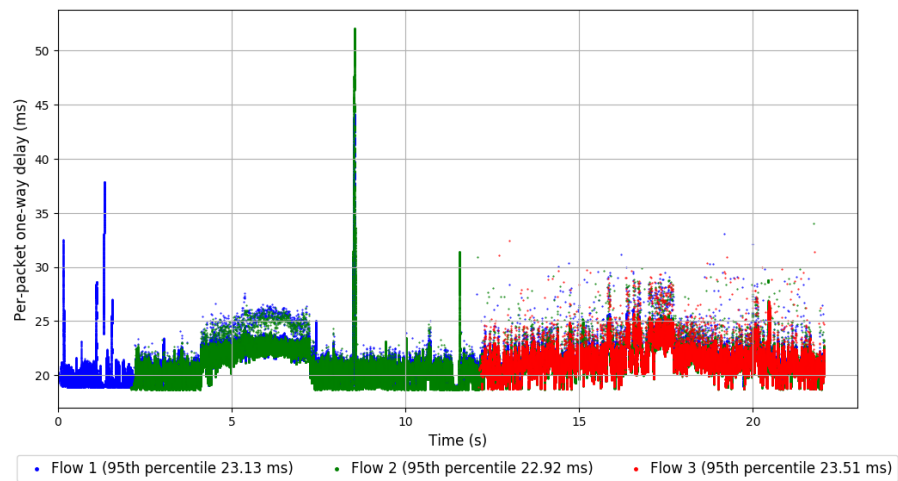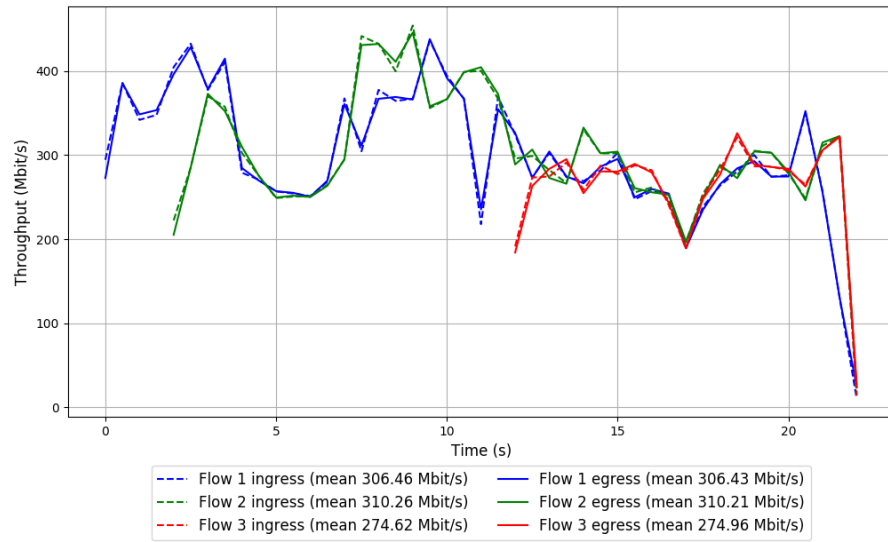
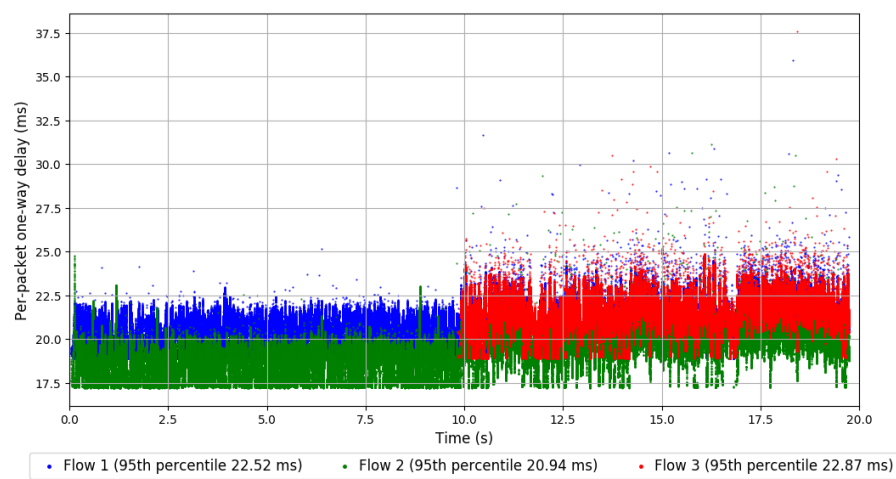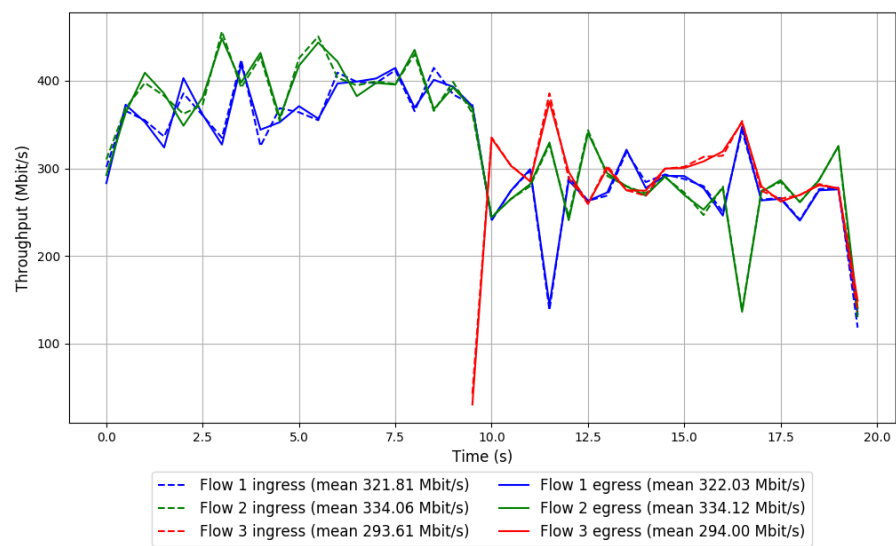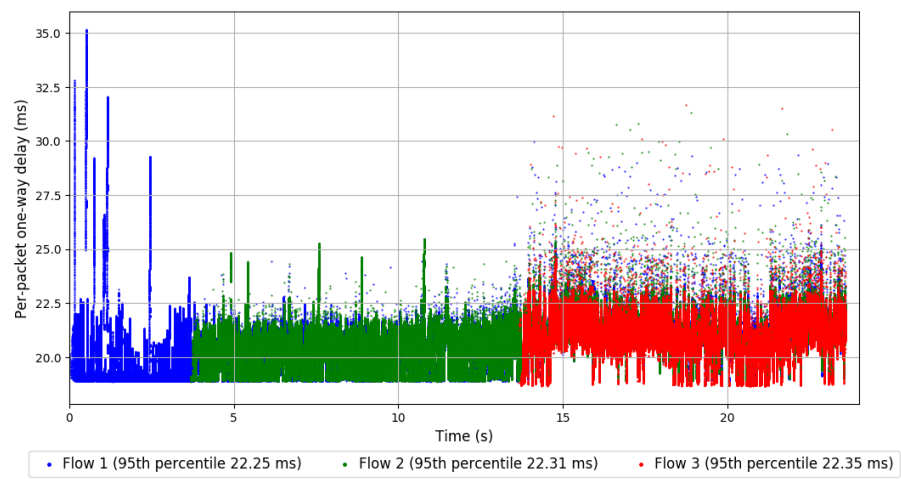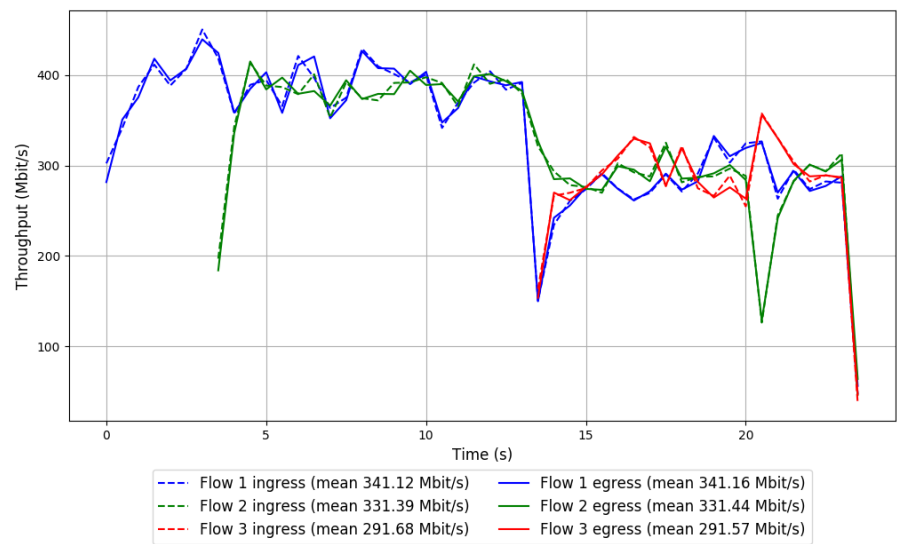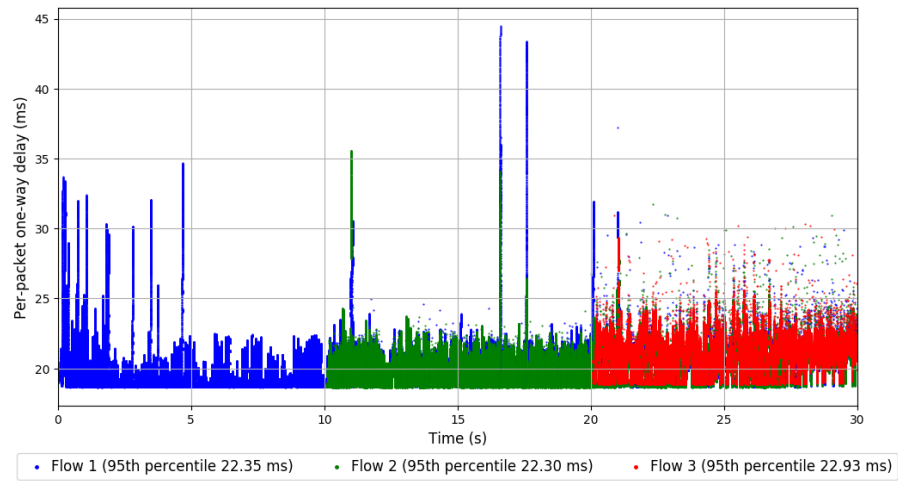Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-08-11 09:52:18
End at: 2017-08-11 09:52:48
Local clock offset: 0.434 ms
Remote clock offset: -0.836 ms
```

Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 321.81 Mbit/s) --- Flow 1 egress (mean 322.03 Mbit/s)
Flow 2 ingress (mean 334.06 Mbit/s) --- Flow 2 egress (mean 334.12 Mbit/s)
Flow 3 ingress (mean 293.61 Mbit/s) --- Flow 3 egress (mean 294.00 Mbit/s)

Flow 1 (95th percentile 22.52 ms)   Flow 2 (95th percentile 20.94 ms)   Flow 3 (95th percentile 22.87 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-08-11 10:13:42
End at: 2017-08-11 10:14:12
Local clock offset: 0.369 ms
Remote clock offset: -1.155 ms
```
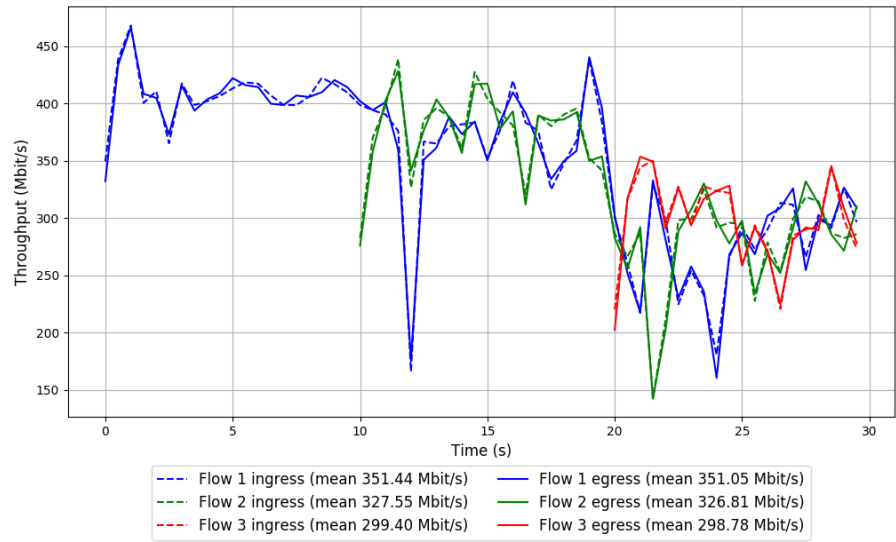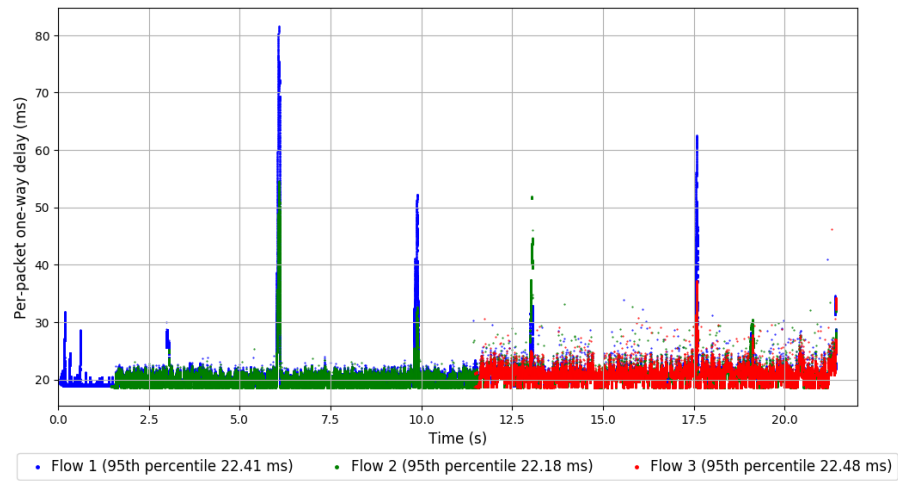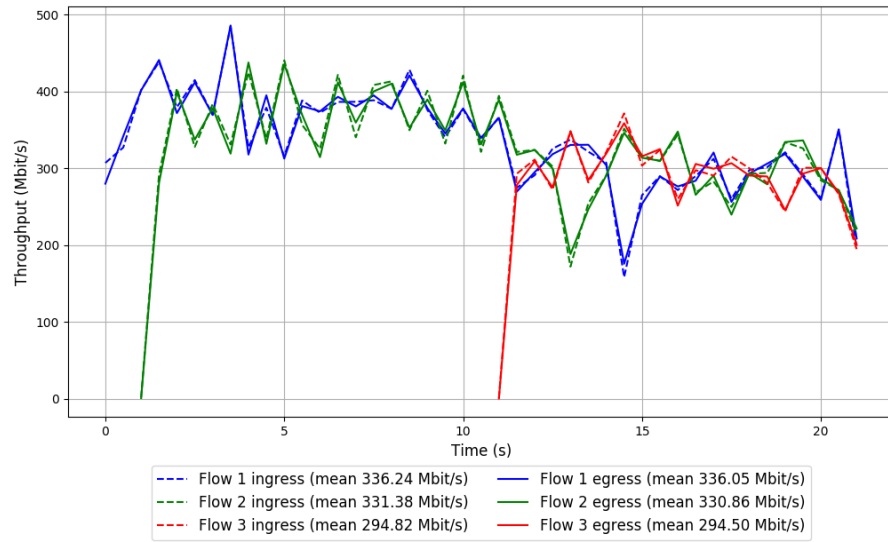
Run 3: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 341.12 Mbit/s) —— Flow 1 egress (mean 341.16 Mbit/s)
- - - Flow 2 ingress (mean 331.39 Mbit/s) —— Flow 2 egress (mean 331.44 Mbit/s)
- - - Flow 3 ingress (mean 291.68 Mbit/s) —— Flow 3 egress (mean 291.57 Mbit/s)

- Flow 1 (95th percentile 22.25 ms)   • Flow 2 (95th percentile 22.31 ms)   • Flow 3 (95th percentile 22.35 ms)
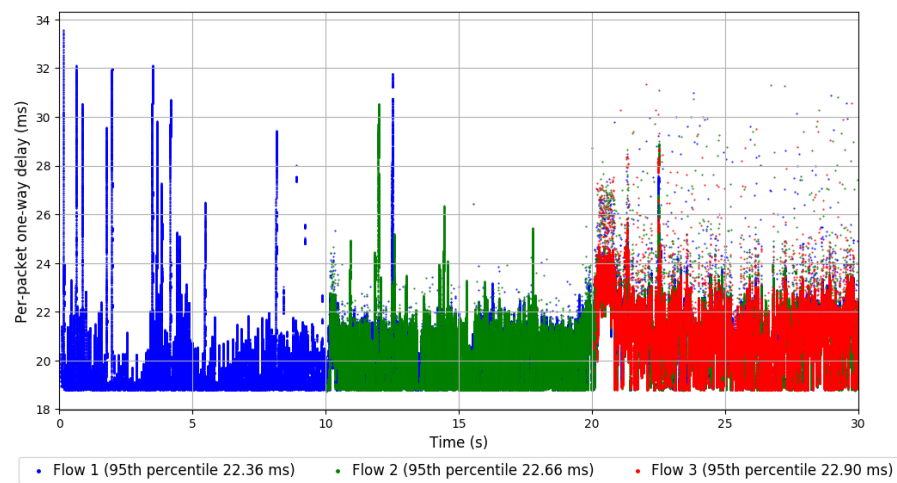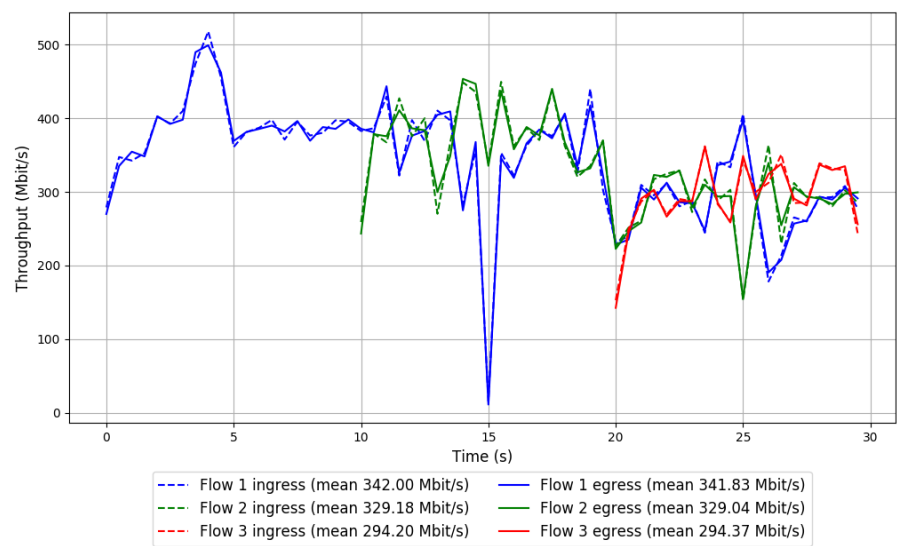
```
Run 4: Statistics of TCP BBR

Start at: 2017-08-11 10:35:26
End at: 2017-08-11 10:35:56
Local clock offset: 0.532 ms
Remote clock offset: -1.195 ms


# Below is generated by plot.py at 2017-08-11 15:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.84 Mbit/s
95th percentile per-packet one-way delay: 22.457 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 351.05 Mbit/s
95th percentile per-packet one-way delay: 22.353 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 326.81 Mbit/s
95th percentile per-packet one-way delay: 22.299 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 298.78 Mbit/s
95th percentile per-packet one-way delay: 22.933 ms
Loss rate: 0.20%
```

Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 351.44 Mbit/s) --- Flow 1 egress (mean 351.05 Mbit/s)
Flow 2 ingress (mean 327.55 Mbit/s) --- Flow 2 egress (mean 326.81 Mbit/s)
Flow 3 ingress (mean 299.40 Mbit/s) --- Flow 3 egress (mean 298.78 Mbit/s)

Flow 1 (95th percentile 22.35 ms)   Flow 2 (95th percentile 22.30 ms)   Flow 3 (95th percentile 22.93 ms)

11

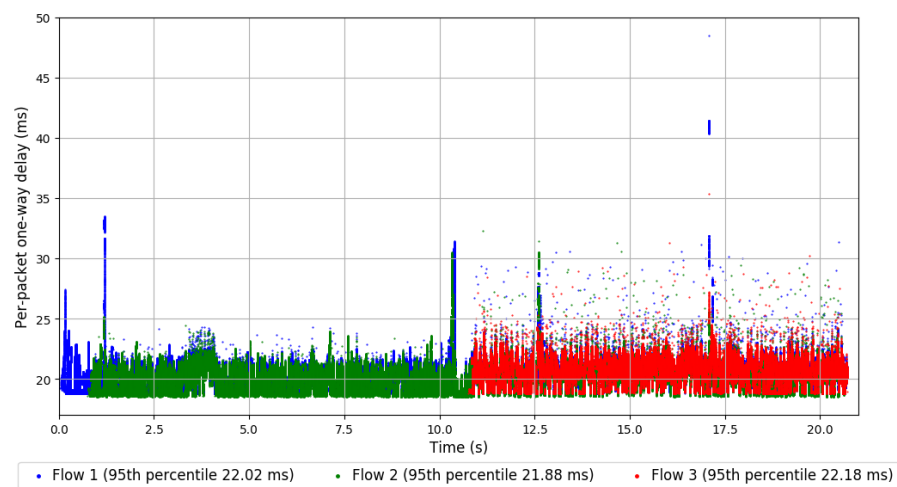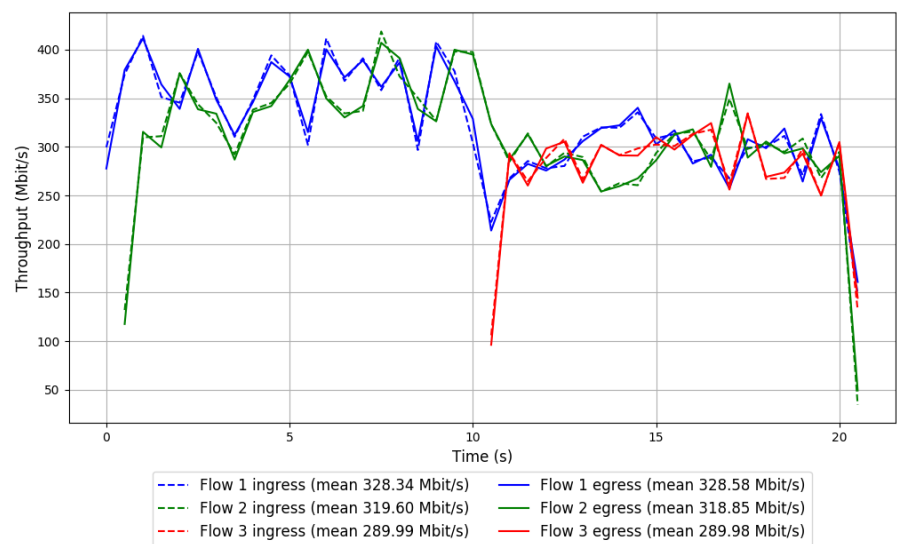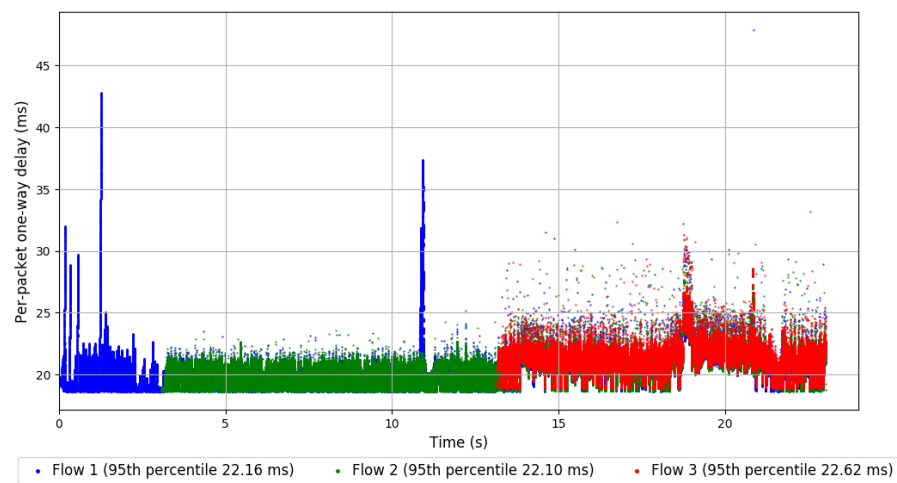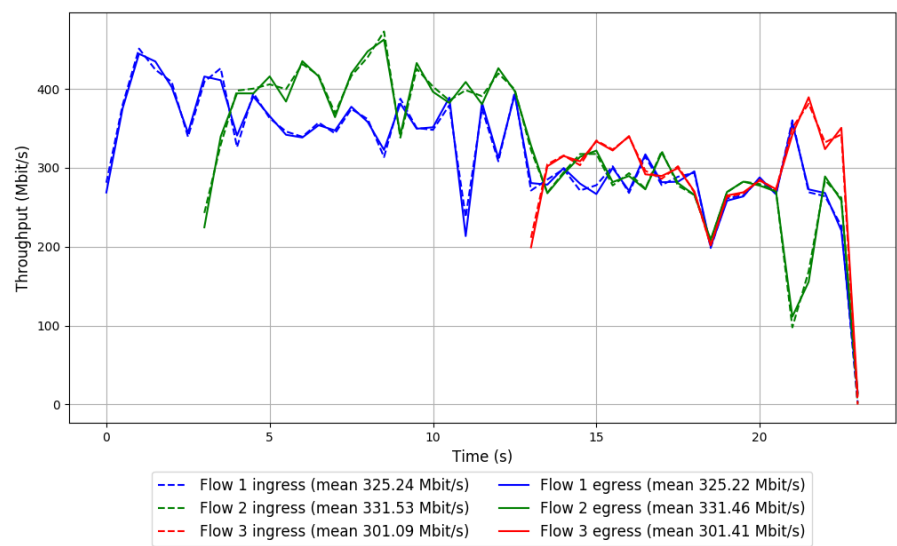```
Run 5: Statistics of TCP BBR

Start at: 2017-08-11 10:56:58
End at: 2017-08-11 10:57:28
Local clock offset: 0.593 ms
Remote clock offset: -1.254 ms
```

Run 5: Report of TCP BBR — Data Link



Flow 1 ingress (mean 336.24 Mbit/s) --- Flow 1 egress (mean 336.05 Mbit/s)
Flow 2 ingress (mean 331.38 Mbit/s) --- Flow 2 egress (mean 330.86 Mbit/s)
Flow 3 ingress (mean 294.82 Mbit/s) --- Flow 3 egress (mean 294.50 Mbit/s)



Flow 1 (95th percentile 22.41 ms)    Flow 2 (95th percentile 22.18 ms)    Flow 3 (95th percentile 22.48 ms)
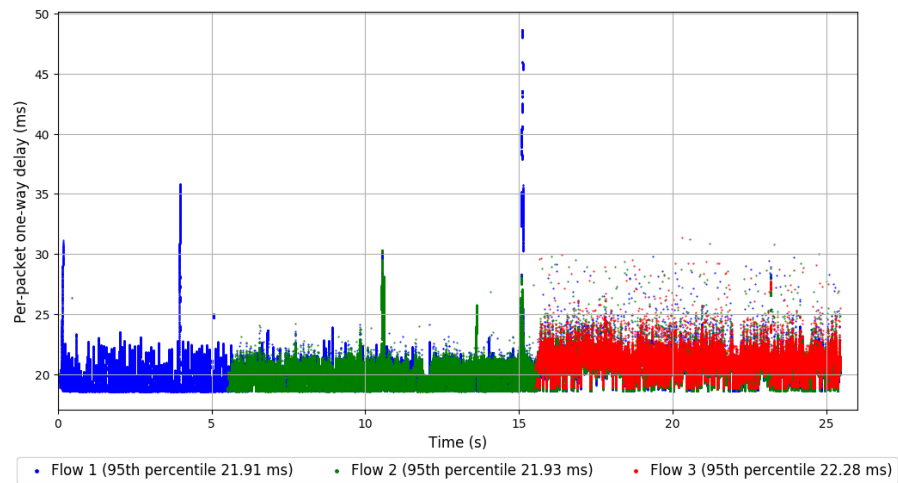
13

```
Run 6: Statistics of TCP BBR

Start at: 2017-08-11 11:18:27
End at: 2017-08-11 11:18:57
Local clock offset: 0.646 ms
Remote clock offset: -1.195 ms

Below is generated by plot.py at 2017-08-11 15:49:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 658.74 Mbit/s
95th percentile per-packet one-way delay: 22.600 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 341.83 Mbit/s
95th percentile per-packet one-way delay: 22.360 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 329.04 Mbit/s
95th percentile per-packet one-way delay: 22.658 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 294.37 Mbit/s
95th percentile per-packet one-way delay: 22.899 ms
Loss rate: 0.10%
```
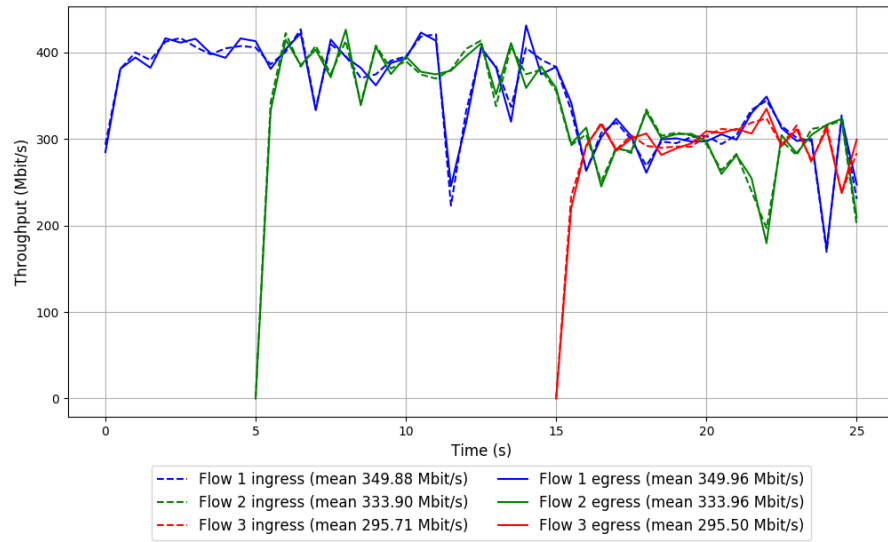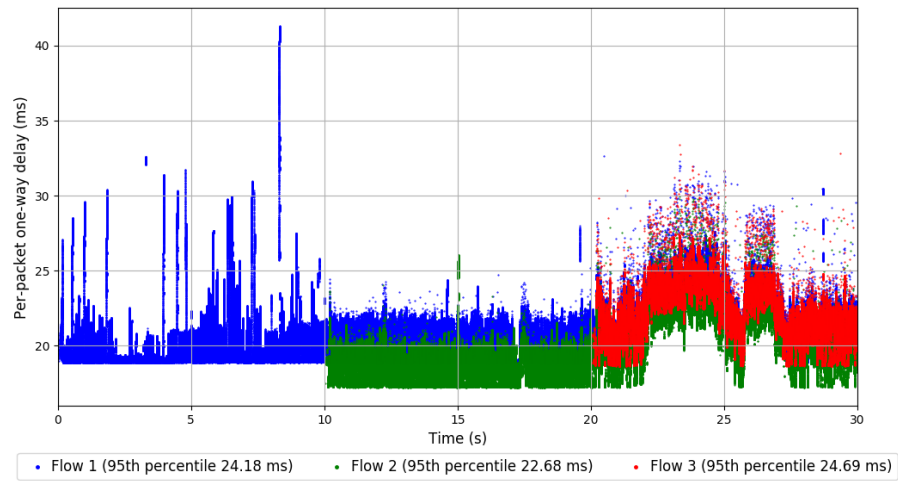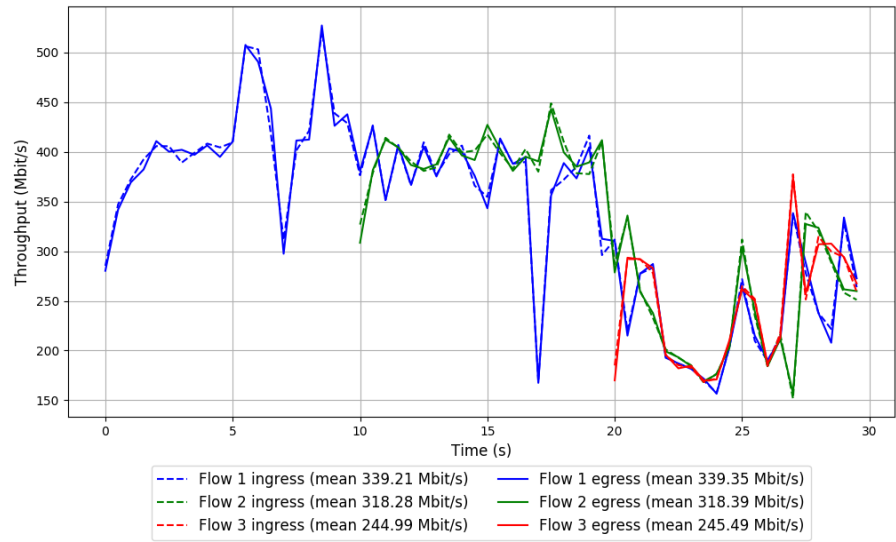
Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2017-08-11 11:40:12
End at: 2017-08-11 11:40:42
Local clock offset: 0.792 ms
Remote clock offset: -1.143 ms
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 328.34 Mbit/s) —— Flow 1 egress (mean 328.58 Mbit/s)
Flow 2 ingress (mean 319.60 Mbit/s) —— Flow 2 egress (mean 318.85 Mbit/s)
Flow 3 ingress (mean 289.99 Mbit/s) —— Flow 3 egress (mean 289.98 Mbit/s)

Flow 1 (95th percentile 22.02 ms)   Flow 2 (95th percentile 21.88 ms)   Flow 3 (95th percentile 22.18 ms)

17

```
Run 8: Statistics of TCP BBR

Start at: 2017-08-11 12:01:35
End at: 2017-08-11 12:02:05
Local clock offset: 0.819 ms
Remote clock offset: -1.174 ms
```

Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2017-08-11 12:23:18
End at: 2017-08-11 12:23:48
Local clock offset: 0.783 ms
Remote clock offset: -1.465 ms


# Below is generated by plot.py at 2017-08-11 15:51:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 727.68 Mbit/s
95th percentile per-packet one-way delay: 22.019 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 349.96 Mbit/s
95th percentile per-packet one-way delay: 21.908 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 333.96 Mbit/s
95th percentile per-packet one-way delay: 21.926 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 295.50 Mbit/s
95th percentile per-packet one-way delay: 22.281 ms
Loss rate: 0.06%
```
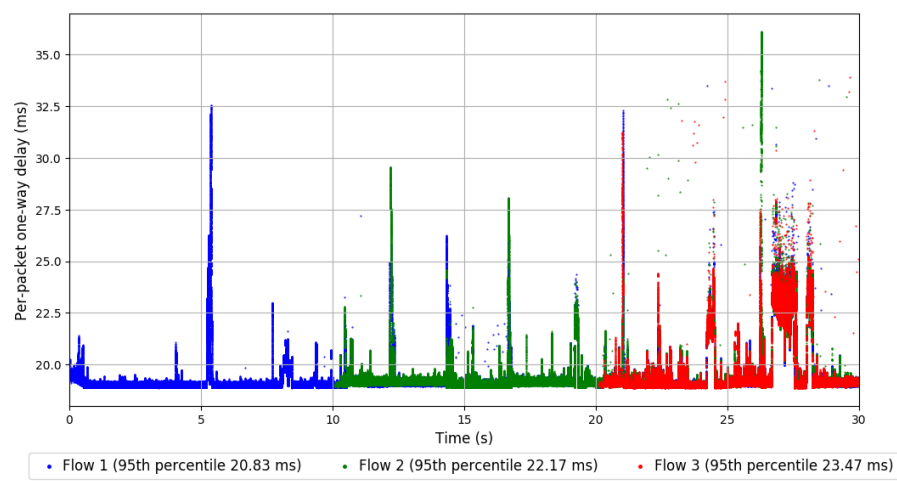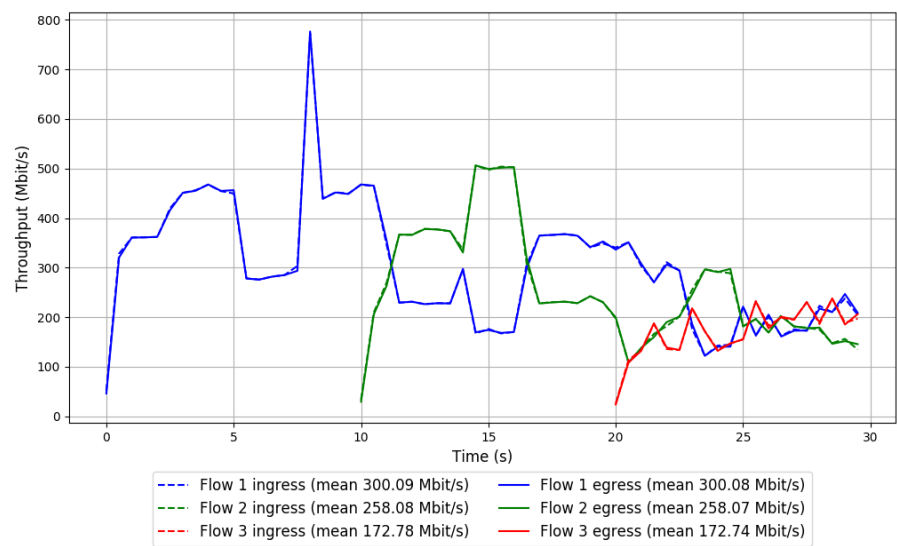
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 349.88 Mbit/s) ---- Flow 1 egress (mean 349.96 Mbit/s) ——
Flow 2 ingress (mean 333.90 Mbit/s) ---- Flow 2 egress (mean 333.96 Mbit/s) ——
Flow 3 ingress (mean 295.71 Mbit/s) ---- Flow 3 egress (mean 295.50 Mbit/s) ——

Flow 1 (95th percentile 21.91 ms) • Flow 2 (95th percentile 21.93 ms) • Flow 3 (95th percentile 22.28 ms) •

```
Run 10: Statistics of TCP BBR

Start at: 2017-08-11 12:44:52
End at: 2017-08-11 12:45:22
Local clock offset: 0.731 ms
Remote clock offset: -1.633 ms


# Below is generated by plot.py at 2017-08-11 15:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 632.51 Mbit/s
95th percentile per-packet one-way delay: 24.001 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 339.35 Mbit/s
95th percentile per-packet one-way delay: 24.175 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 318.39 Mbit/s
95th percentile per-packet one-way delay: 22.676 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 245.49 Mbit/s
95th percentile per-packet one-way delay: 24.688 ms
Loss rate: 0.05%
```
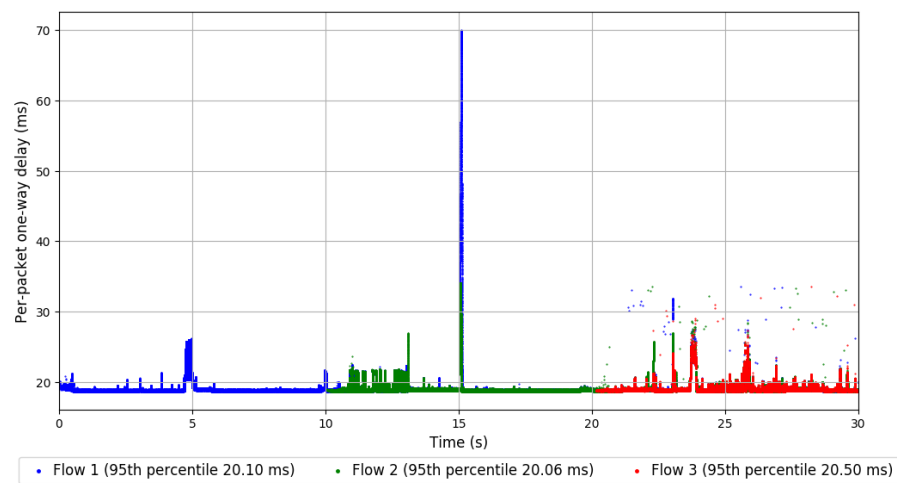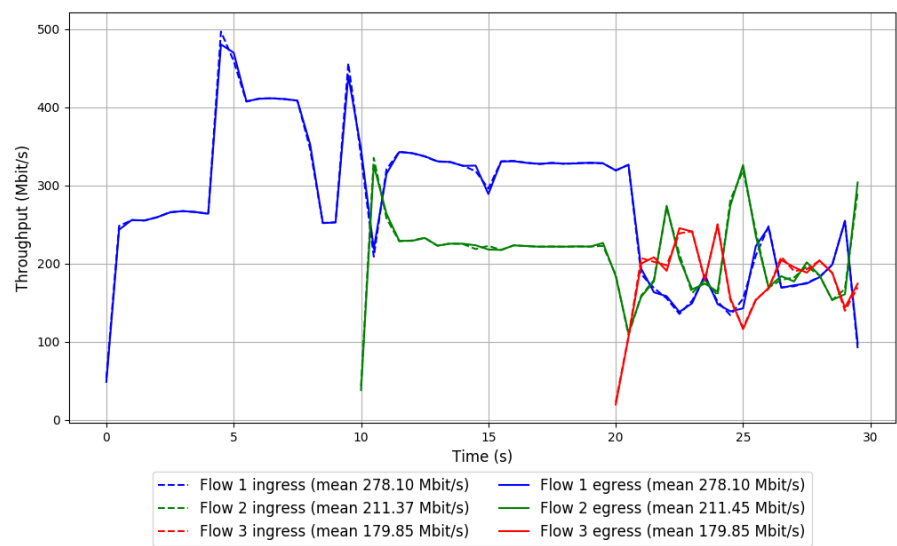
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 09:29:03
End at: 2017-08-11 09:29:33
Local clock offset: 0.369 ms
Remote clock offset: -0.526 ms


# Below is generated by plot.py at 2017-08-11 15:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.14 Mbit/s
95th percentile per-packet one-way delay: 22.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 300.08 Mbit/s
95th percentile per-packet one-way delay: 20.833 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.07 Mbit/s
95th percentile per-packet one-way delay: 22.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.74 Mbit/s
95th percentile per-packet one-way delay: 23.466 ms
Loss rate: 0.00%
```

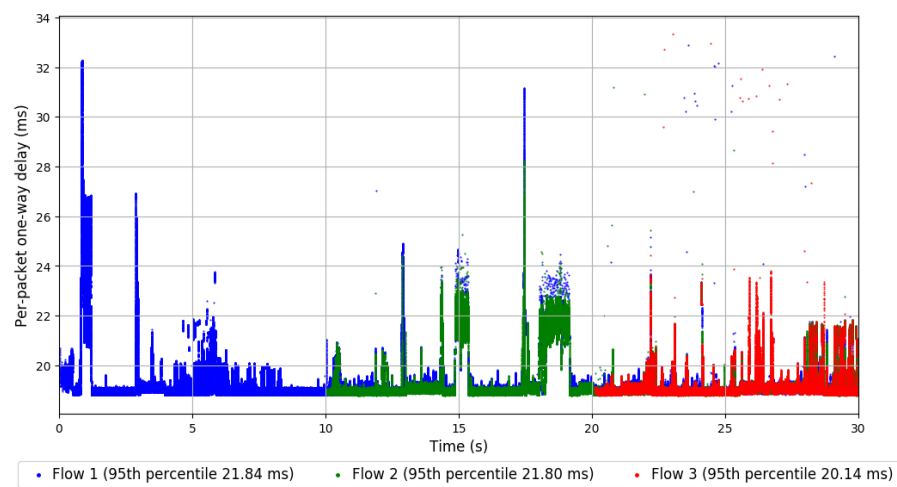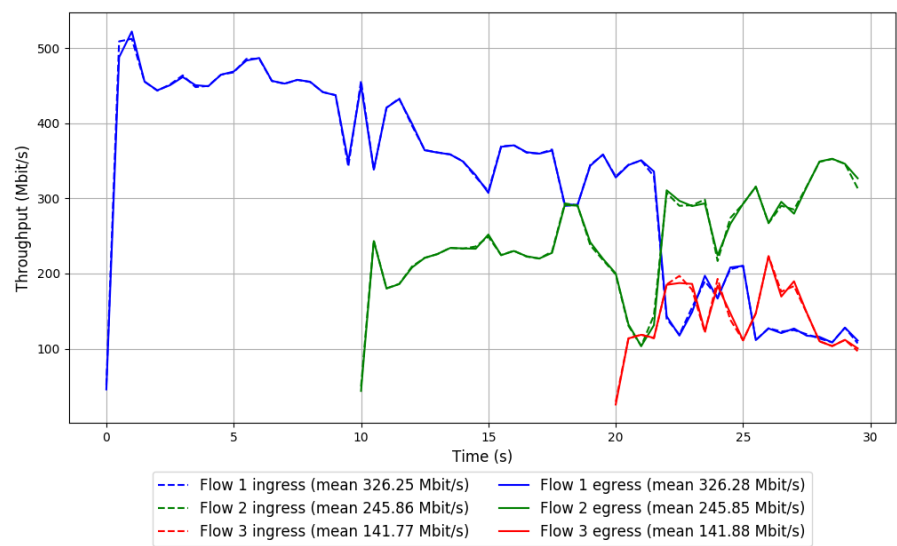Run 1: Report of CalibratedKoho — Data Link

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 09:50:36
End at: 2017-08-11 09:51:06
Local clock offset: 0.342 ms
Remote clock offset: -0.885 ms

# Below is generated by plot.py at 2017-08-11 15:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.51 Mbit/s
95th percentile per-packet one-way delay: 20.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 278.10 Mbit/s
95th percentile per-packet one-way delay: 20.101 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 211.45 Mbit/s
95th percentile per-packet one-way delay: 20.062 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.85 Mbit/s
95th percentile per-packet one-way delay: 20.495 ms
Loss rate: 0.00%
```

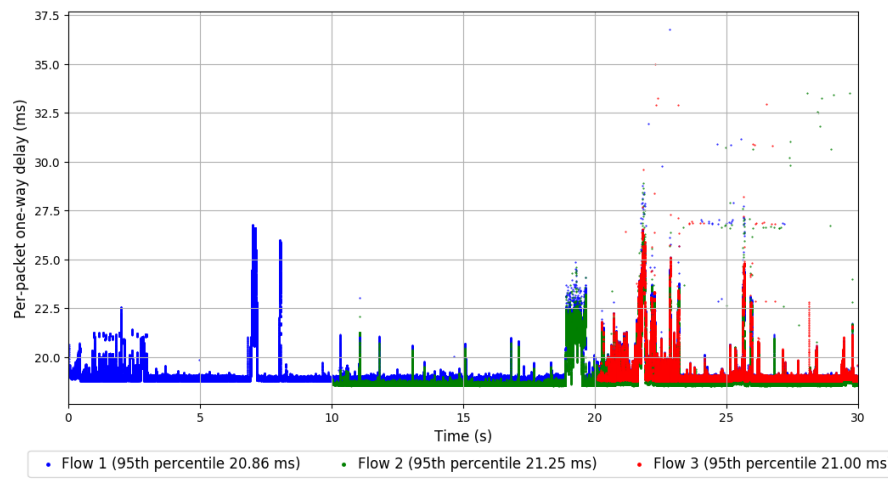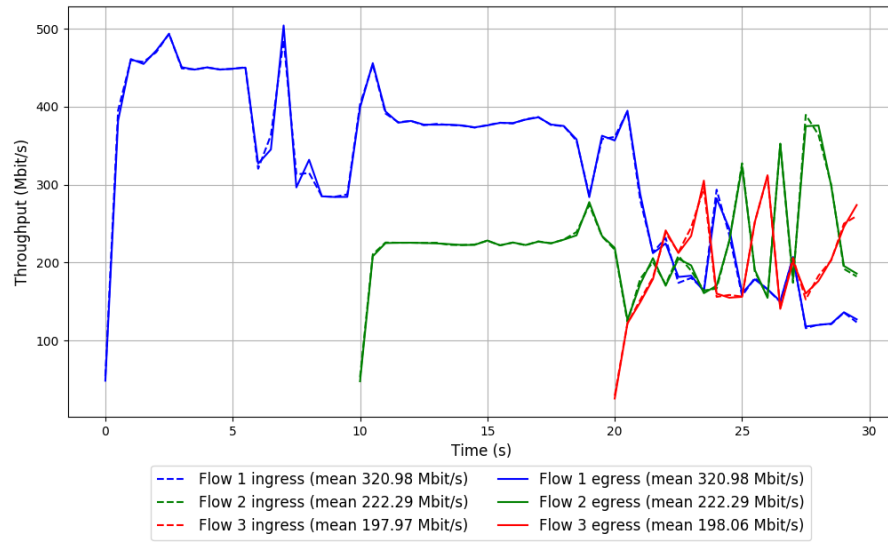Run 2: Report of CalibratedKoho — Data Link

```
Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 10:11:56
End at: 2017-08-11 10:12:26
Local clock offset: 0.47 ms
Remote clock offset: -1.131 ms


# Below is generated by plot.py at 2017-08-11 15:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.67 Mbit/s
95th percentile per-packet one-way delay: 21.758 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 326.28 Mbit/s
95th percentile per-packet one-way delay: 21.842 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 245.85 Mbit/s
95th percentile per-packet one-way delay: 21.800 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 141.88 Mbit/s
95th percentile per-packet one-way delay: 20.138 ms
Loss rate: 0.00%
```

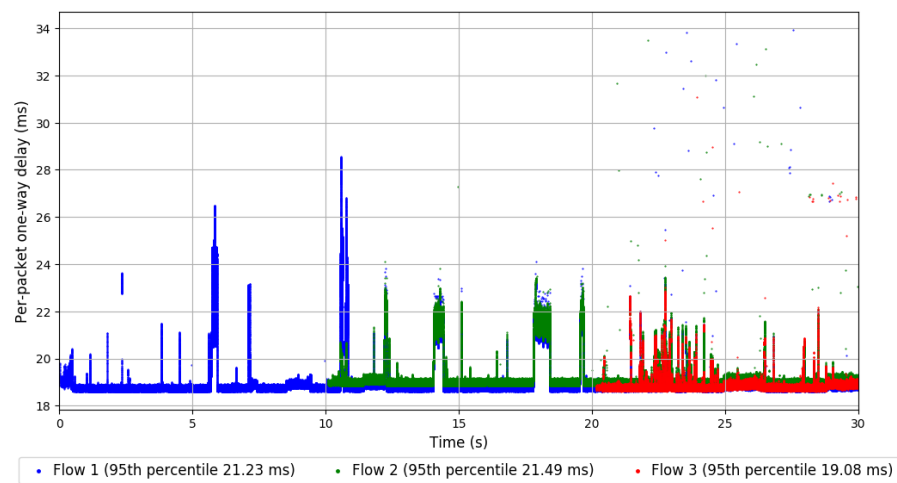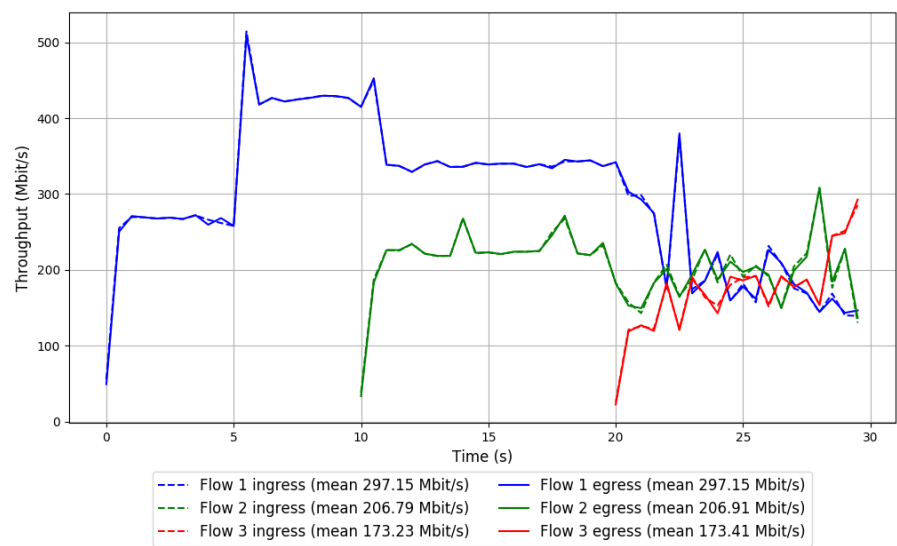Run 3: Report of CalibratedKoho — Data Link

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 10:33:40
End at: 2017-08-11 10:34:10
Local clock offset: 0.559 ms
Remote clock offset: -1.246 ms

# Below is generated by plot.py at 2017-08-11 15:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.15 Mbit/s
95th percentile per-packet one-way delay: 21.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 320.98 Mbit/s
95th percentile per-packet one-way delay: 20.857 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.29 Mbit/s
95th percentile per-packet one-way delay: 21.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.06 Mbit/s
95th percentile per-packet one-way delay: 21.002 ms
Loss rate: 0.01%
```

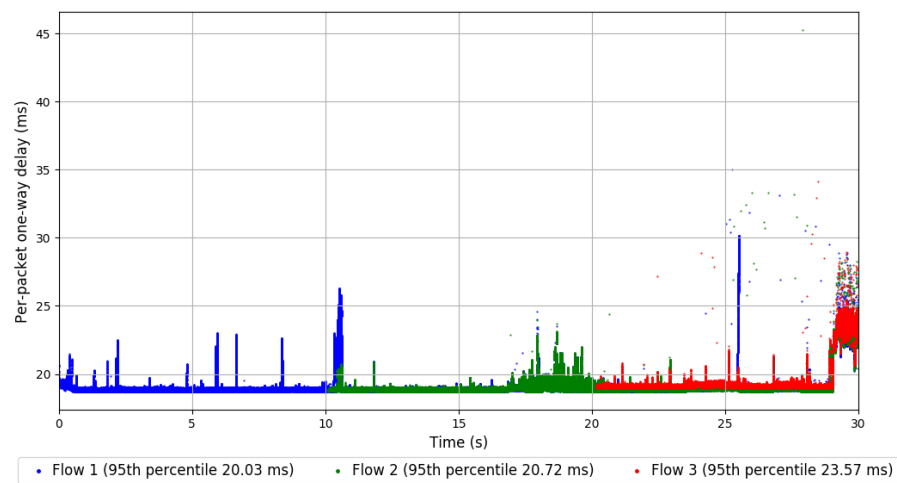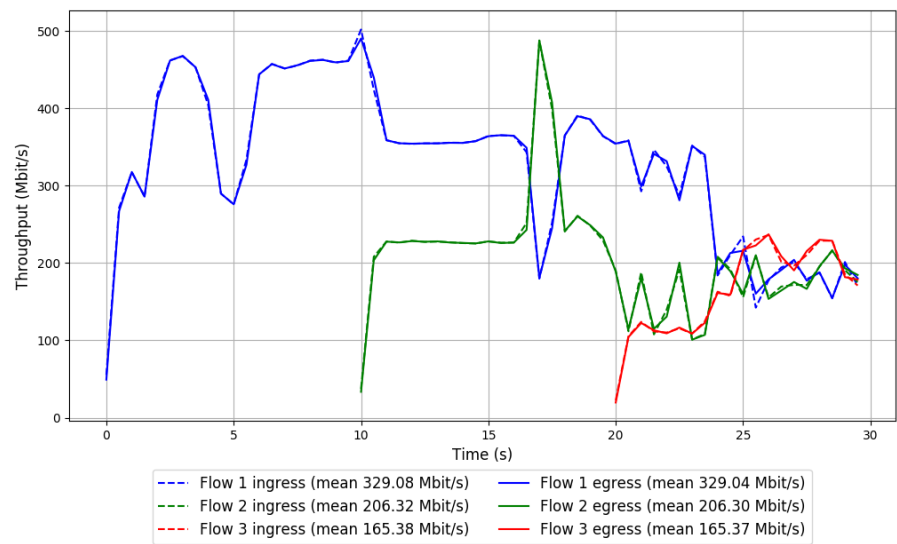Run 4: Report of CalibratedKoho — Data Link

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 10:55:15
End at: 2017-08-11 10:55:45
Local clock offset: 0.566 ms
Remote clock offset: -1.286 ms

# Below is generated by plot.py at 2017-08-11 15:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 491.38 Mbit/s
95th percentile per-packet one-way delay: 21.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 297.15 Mbit/s
95th percentile per-packet one-way delay: 21.235 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 206.91 Mbit/s
95th percentile per-packet one-way delay: 21.486 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 173.41 Mbit/s
95th percentile per-packet one-way delay: 19.078 ms
Loss rate: 0.00%
```
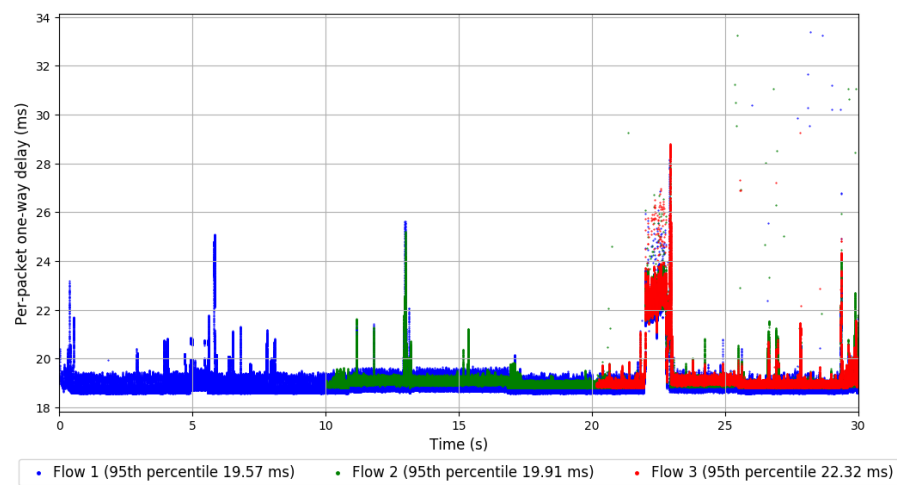
Run 5: Report of CalibratedKoho — Data Link

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 11:16:43
End at: 2017-08-11 11:17:13
Local clock offset: 0.553 ms
Remote clock offset: -1.146 ms


# Below is generated by plot.py at 2017-08-11 15:55:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 520.17 Mbit/s
95th percentile per-packet one-way delay: 20.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 329.04 Mbit/s
95th percentile per-packet one-way delay: 20.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 206.30 Mbit/s
95th percentile per-packet one-way delay: 20.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.37 Mbit/s
95th percentile per-packet one-way delay: 23.571 ms
Loss rate: 0.00%
```

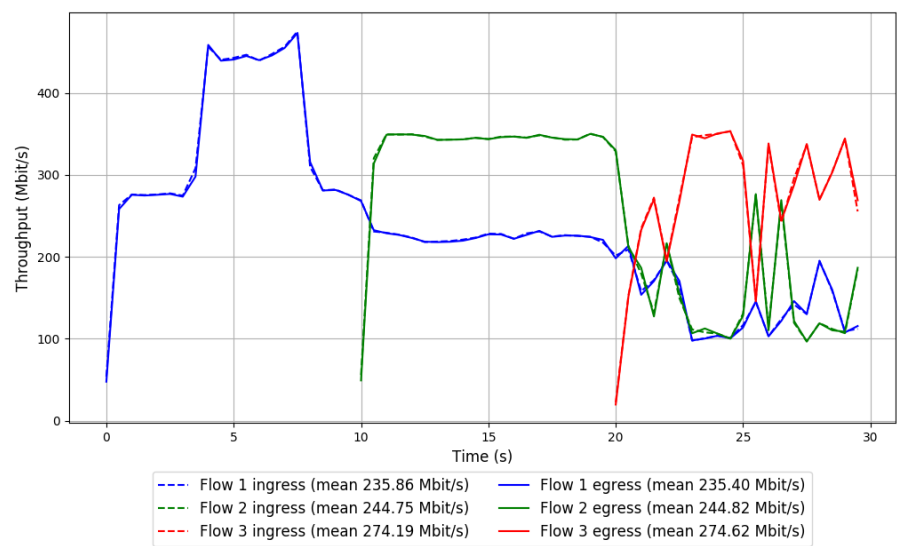Run 6: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 329.08 Mbit/s) --- Flow 1 egress (mean 329.04 Mbit/s)
Flow 2 ingress (mean 206.32 Mbit/s) --- Flow 2 egress (mean 206.30 Mbit/s)
Flow 3 ingress (mean 165.38 Mbit/s) --- Flow 3 egress (mean 165.37 Mbit/s)

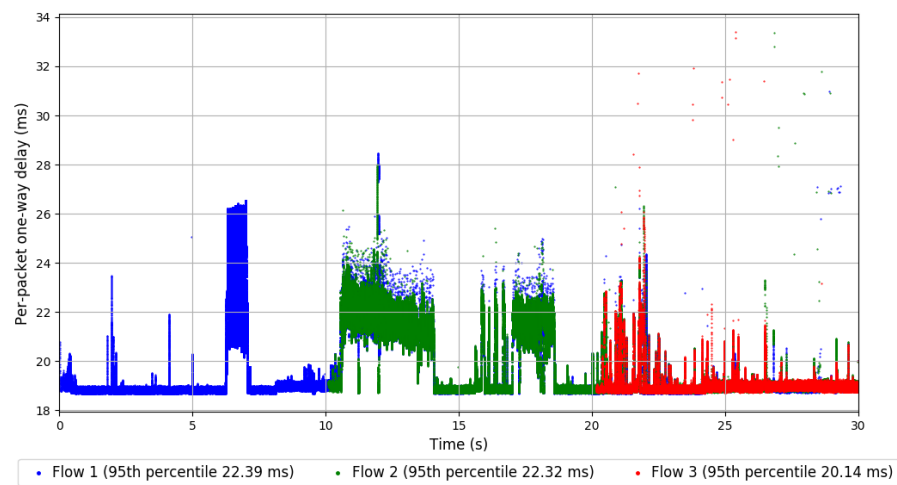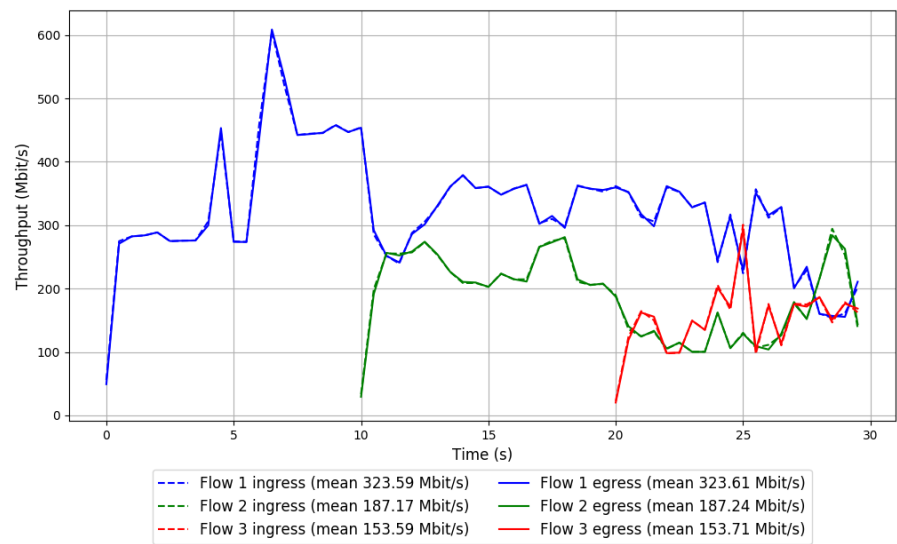Flow 1 (95th percentile 20.03 ms)   Flow 2 (95th percentile 20.72 ms)   Flow 3 (95th percentile 23.57 ms)

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 11:38:30
End at: 2017-08-11 11:39:00
Local clock offset: 0.746 ms
Remote clock offset: -1.141 ms


# Below is generated by plot.py at 2017-08-11 15:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.40 Mbit/s
95th percentile per-packet one-way delay: 20.101 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 235.40 Mbit/s
95th percentile per-packet one-way delay: 19.569 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 244.82 Mbit/s
95th percentile per-packet one-way delay: 19.915 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 274.62 Mbit/s
95th percentile per-packet one-way delay: 22.323 ms
Loss rate: 0.00%
```

Run 7: Report of CalibratedKoho — Data Link

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 11:59:51
End at: 2017-08-11 12:00:21
Local clock offset: 0.84 ms
Remote clock offset: -1.139 ms

# Below is generated by plot.py at 2017-08-11 15:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.28 Mbit/s
95th percentile per-packet one-way delay: 22.289 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 323.61 Mbit/s
95th percentile per-packet one-way delay: 22.386 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.24 Mbit/s
95th percentile per-packet one-way delay: 22.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.71 Mbit/s
95th percentile per-packet one-way delay: 20.140 ms
Loss rate: 0.00%
```
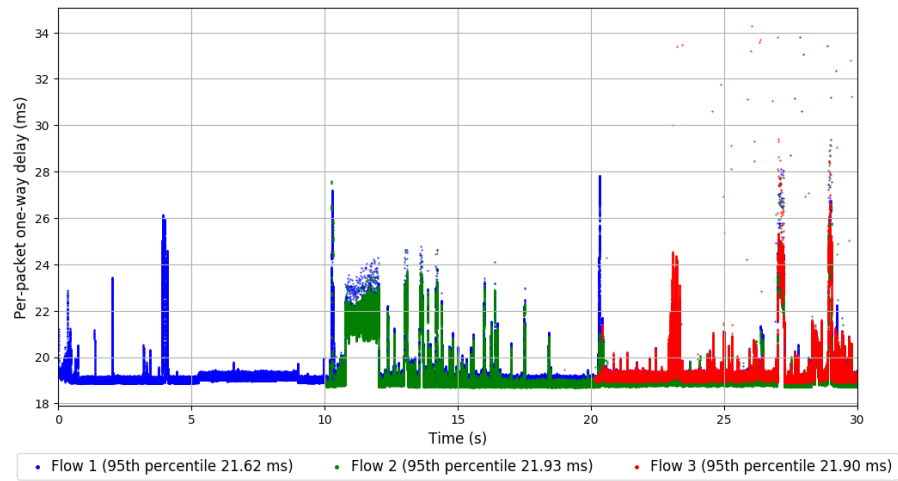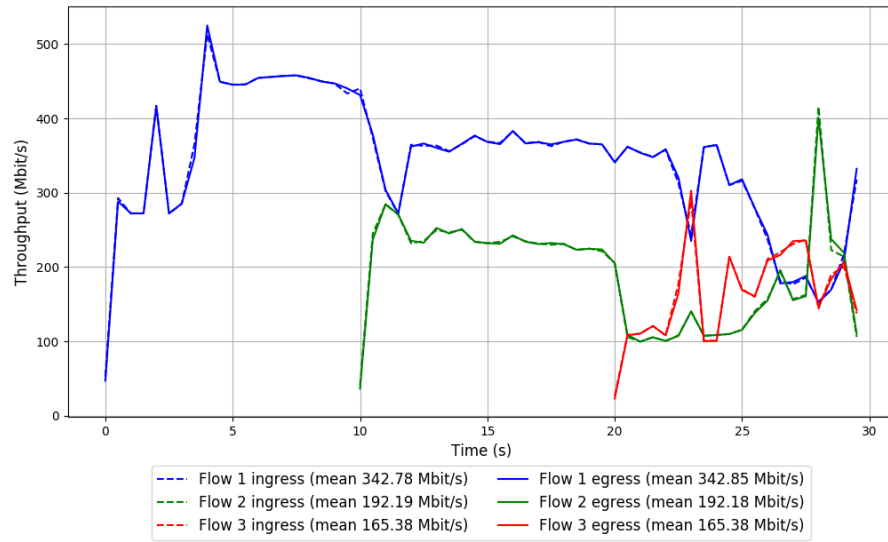
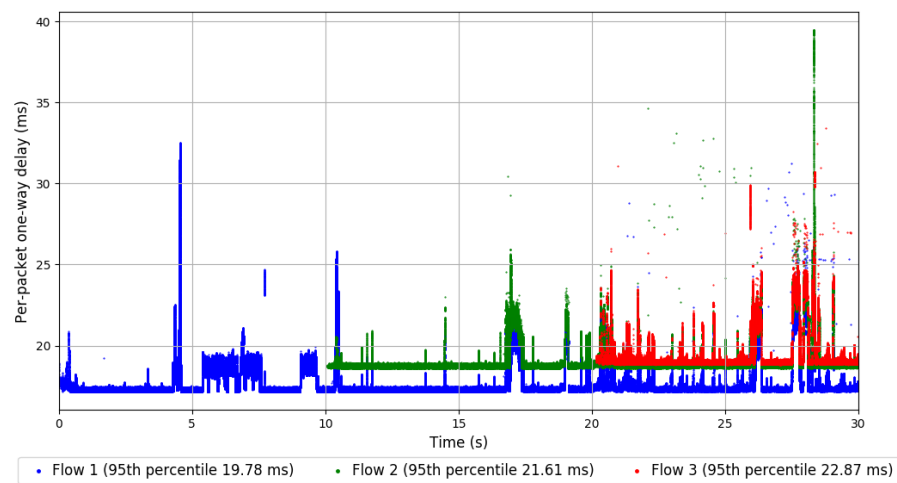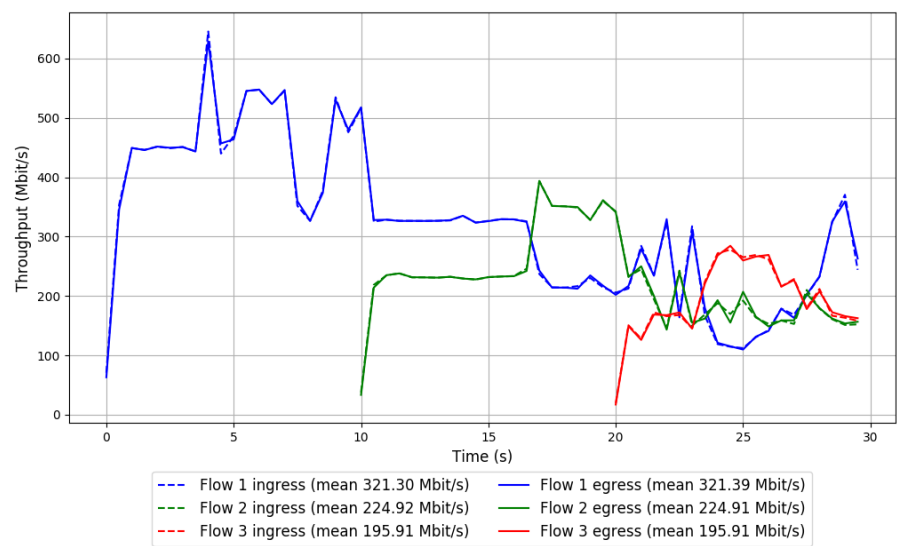Run 8: Report of CalibratedKoho — Data Link

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 12:21:33
End at: 2017-08-11 12:22:03
Local clock offset: 0.75 ms
Remote clock offset: -1.37 ms

# Below is generated by plot.py at 2017-08-11 15:56:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.21 Mbit/s
95th percentile per-packet one-way delay: 21.768 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 342.85 Mbit/s
95th percentile per-packet one-way delay: 21.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.18 Mbit/s
95th percentile per-packet one-way delay: 21.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.38 Mbit/s
95th percentile per-packet one-way delay: 21.900 ms
Loss rate: 0.00%
```

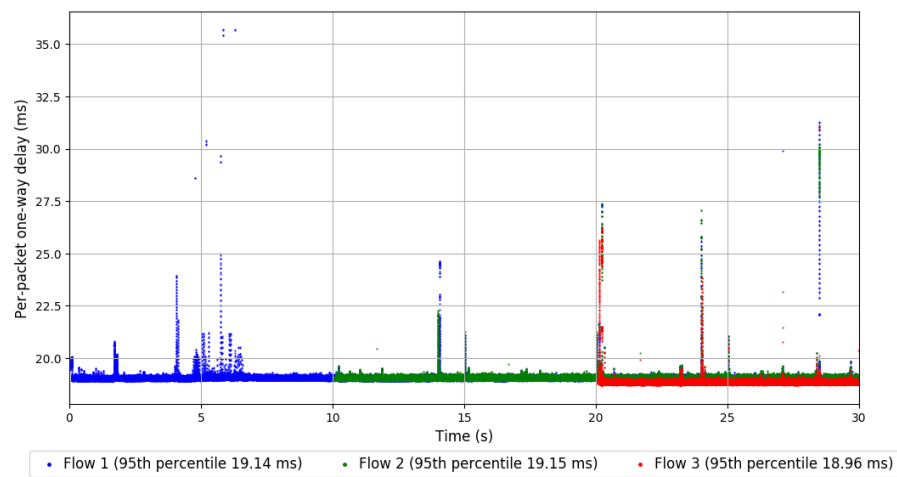Run 9: Report of CalibratedKoho — Data Link

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 12:43:06
End at: 2017-08-11 12:43:36
Local clock offset: 0.726 ms
Remote clock offset: -1.695 ms

# Below is generated by plot.py at 2017-08-11 15:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.85 Mbit/s
95th percentile per-packet one-way delay: 20.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 321.39 Mbit/s
95th percentile per-packet one-way delay: 19.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.91 Mbit/s
95th percentile per-packet one-way delay: 21.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 195.91 Mbit/s
95th percentile per-packet one-way delay: 22.871 ms
Loss rate: 0.00%
```

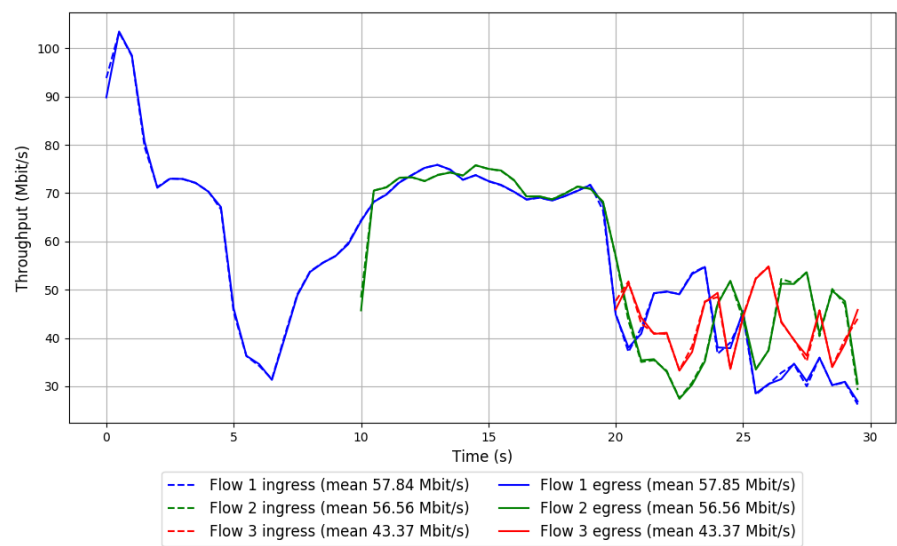Run 10: Report of CalibratedKoho — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-08-11 09:32:30
End at: 2017-08-11 09:33:00
Local clock offset: 0.362 ms
Remote clock offset: -0.566 ms

# Below is generated by plot.py at 2017-08-11 15:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.80 Mbit/s
95th percentile per-packet one-way delay: 19.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.85 Mbit/s
95th percentile per-packet one-way delay: 19.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.56 Mbit/s
95th percentile per-packet one-way delay: 19.150 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.37 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.01%
```

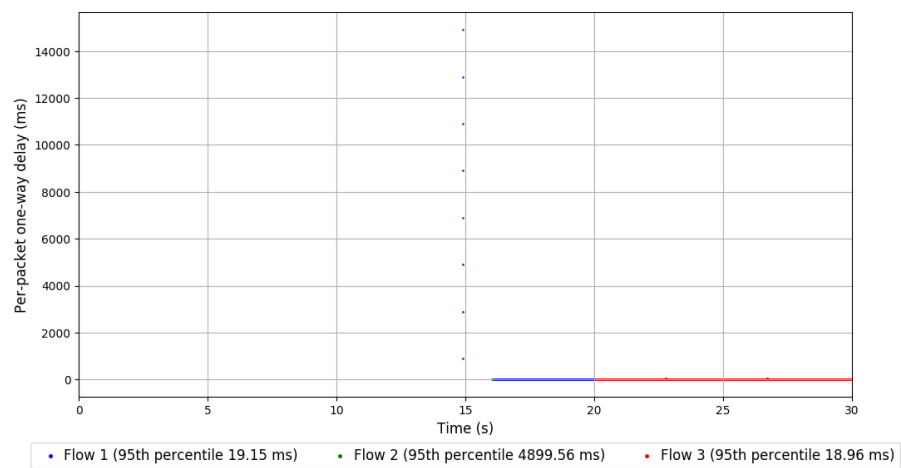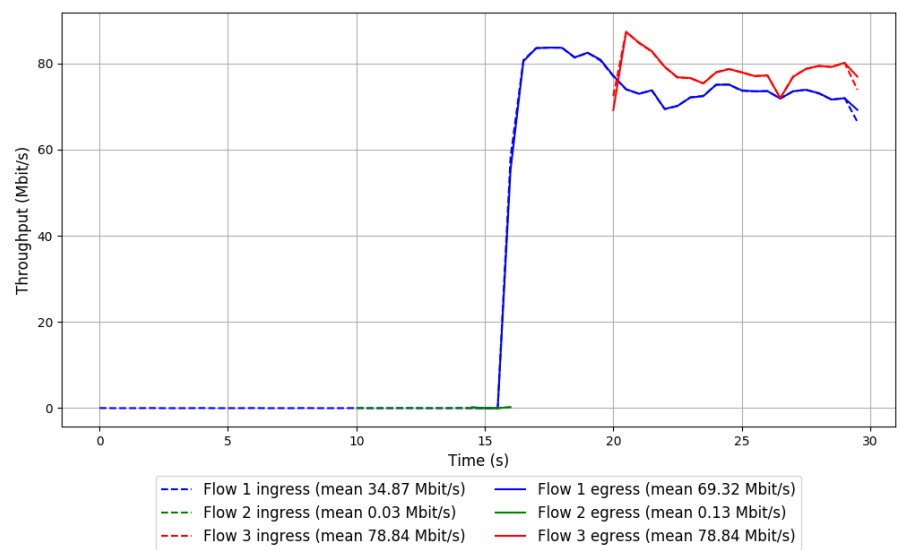Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2017-08-11 09:54:00
End at: 2017-08-11 09:54:30
Local clock offset: 0.37 ms
Remote clock offset: -0.825 ms
```
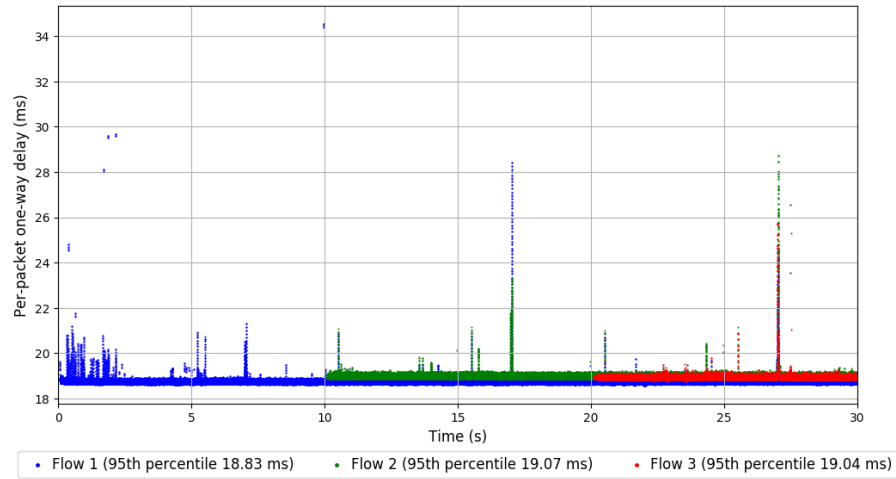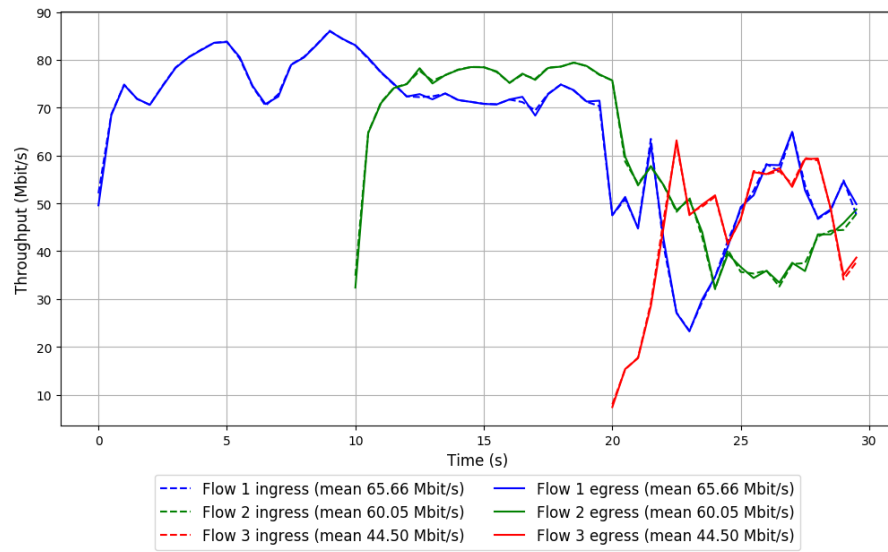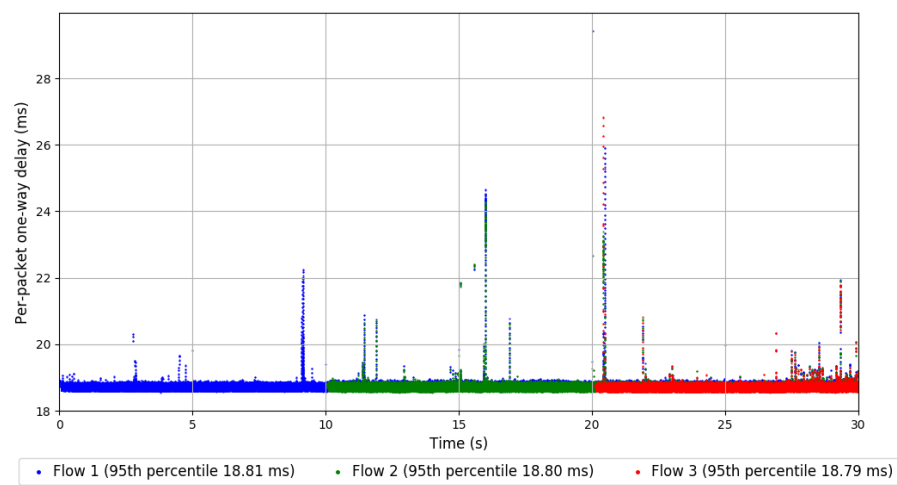
Run 2: Report of Copa — Data Link

Legend:
- Flow 1 ingress (mean 34.87 Mbit/s)
- Flow 1 egress (mean 69.32 Mbit/s)
- Flow 2 ingress (mean 0.03 Mbit/s)
- Flow 2 egress (mean 0.13 Mbit/s)
- Flow 3 ingress (mean 78.84 Mbit/s)
- Flow 3 egress (mean 78.84 Mbit/s)

Legend:
- Flow 1 (95th percentile 19.15 ms)
- Flow 2 (95th percentile 4899.56 ms)
- Flow 3 (95th percentile 18.96 ms)

47

```
Run 3: Statistics of Copa

Start at: 2017-08-11 10:15:27
End at: 2017-08-11 10:15:57
Local clock offset: 0.443 ms
Remote clock offset: -1.144 ms


# Below is generated by plot.py at 2017-08-11 15:57:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.24 Mbit/s
95th percentile per-packet one-way delay: 19.024 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.66 Mbit/s
95th percentile per-packet one-way delay: 18.827 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.05 Mbit/s
95th percentile per-packet one-way delay: 19.074 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 44.50 Mbit/s
95th percentile per-packet one-way delay: 19.036 ms
Loss rate: 0.01%
```
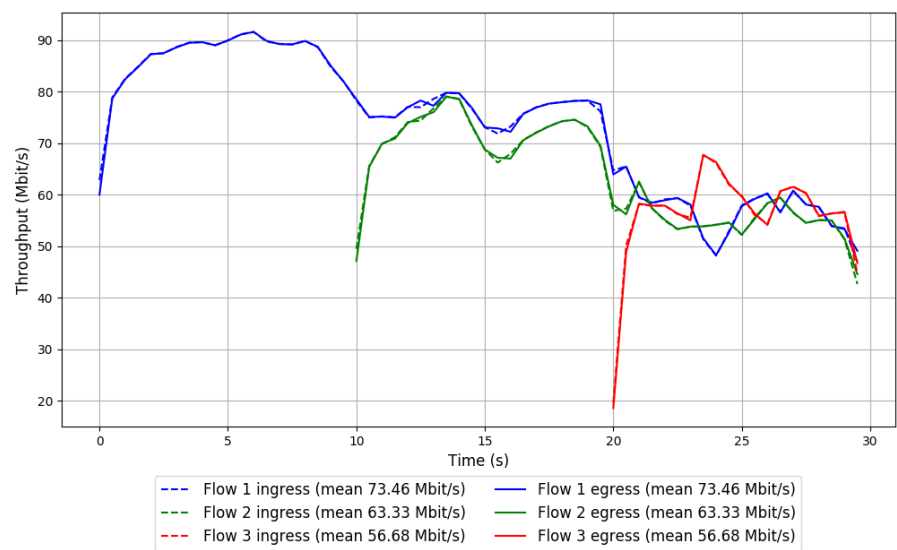
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 65.66 Mbit/s)   Flow 1 egress (mean 65.66 Mbit/s)
Flow 2 ingress (mean 60.05 Mbit/s)   Flow 2 egress (mean 60.05 Mbit/s)
Flow 3 ingress (mean 44.50 Mbit/s)   Flow 3 egress (mean 44.50 Mbit/s)

Flow 1 (95th percentile 18.83 ms)   Flow 2 (95th percentile 19.07 ms)   Flow 3 (95th percentile 19.04 ms)

49

```
Run 4: Statistics of Copa

Start at: 2017-08-11 10:37:17
End at: 2017-08-11 10:37:47
Local clock offset: 0.542 ms
Remote clock offset: -1.263 ms

# Below is generated by plot.py at 2017-08-11 15:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.23 Mbit/s
95th percentile per-packet one-way delay: 18.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 18.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.33 Mbit/s
95th percentile per-packet one-way delay: 18.797 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.68 Mbit/s
95th percentile per-packet one-way delay: 18.785 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

Run 5: Statistics of Copa

Start at: 2017-08-11 10:58:42
End at: 2017-08-11 10:59:12
Local clock offset: 0.479 ms
Remote clock offset: -1.286 ms
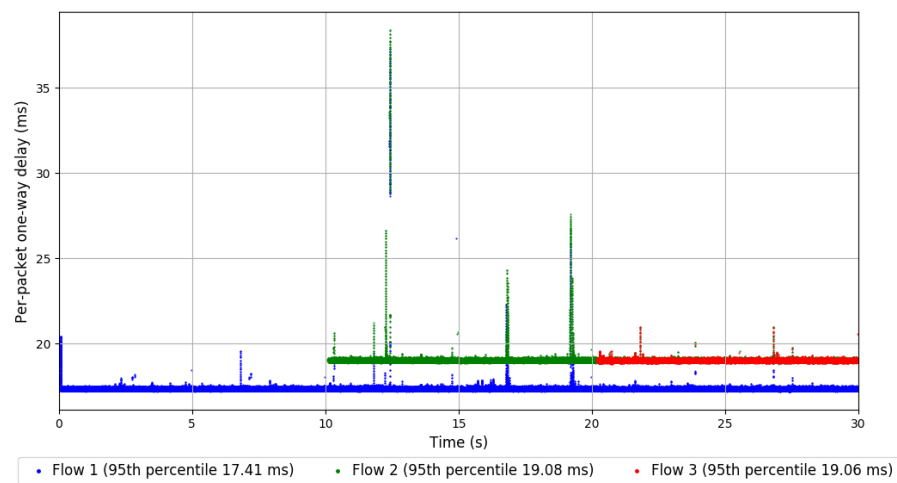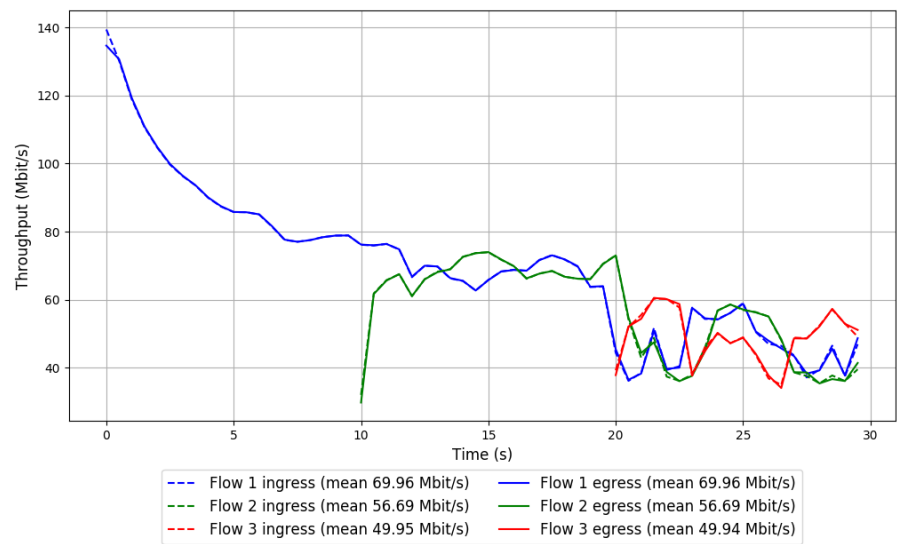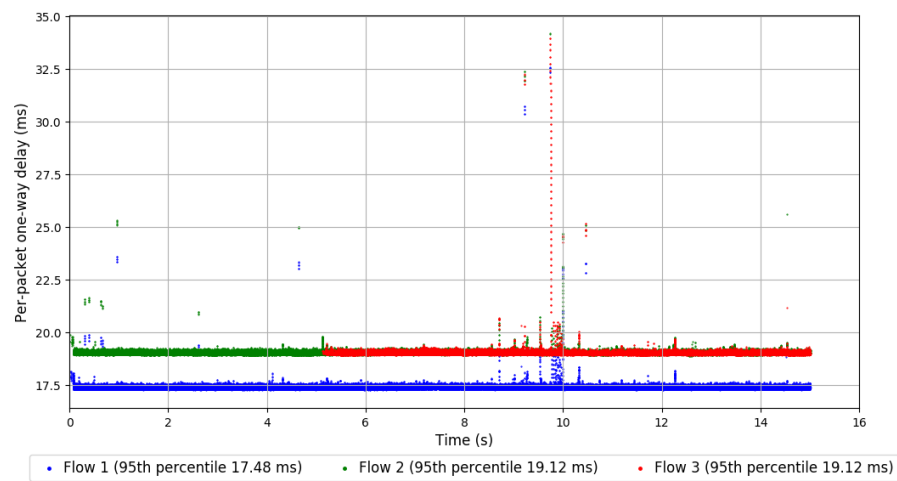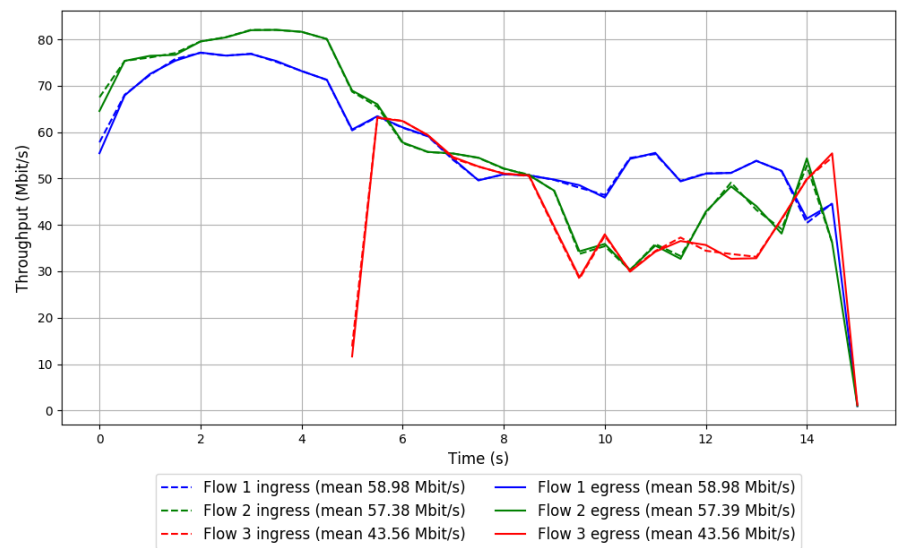
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 51.20 Mbit/s) --- Flow 1 egress (mean 51.20 Mbit/s)
Flow 2 ingress (mean 52.31 Mbit/s) --- Flow 2 egress (mean 52.31 Mbit/s)
Flow 3 ingress (mean 47.27 Mbit/s) --- Flow 3 egress (mean 47.26 Mbit/s)

Flow 1 (95th percentile 19.15 ms) • Flow 2 (95th percentile 19.16 ms) • Flow 3 (95th percentile 19.14 ms)
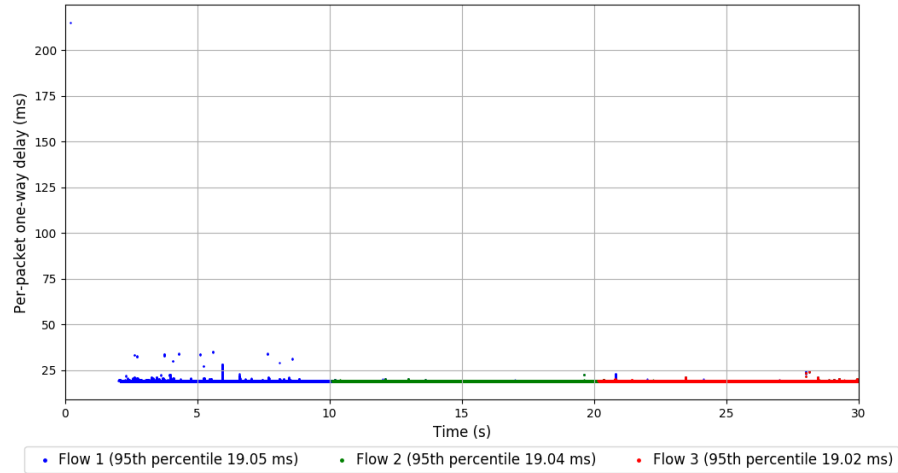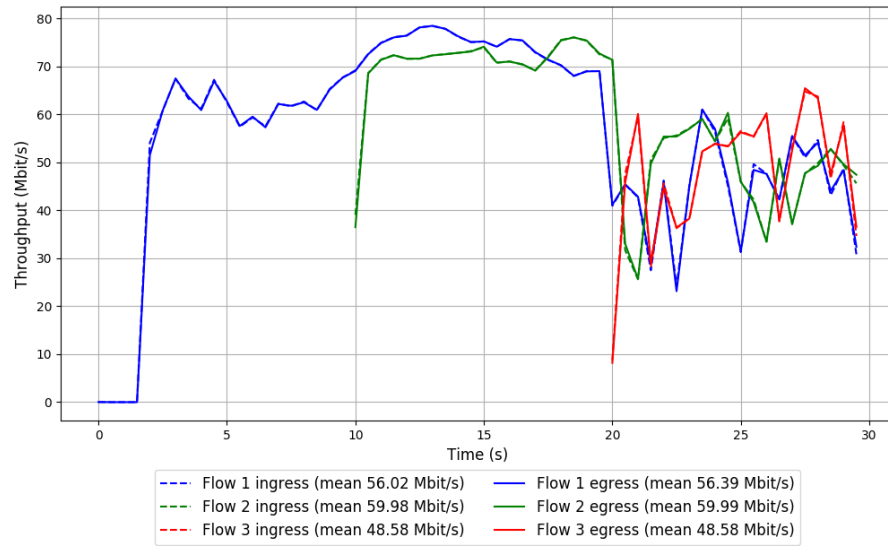
53

```
Run 6: Statistics of Copa

Start at: 2017-08-11 11:20:17
End at: 2017-08-11 11:20:47
Local clock offset: 0.637 ms
Remote clock offset: -1.116 ms


# Below is generated by plot.py at 2017-08-11 15:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.95 Mbit/s
95th percentile per-packet one-way delay: 19.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.96 Mbit/s
95th percentile per-packet one-way delay: 17.406 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.69 Mbit/s
95th percentile per-packet one-way delay: 19.082 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 19.062 ms
Loss rate: 0.01%
```

Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 69.96 Mbit/s)   Flow 1 egress (mean 69.96 Mbit/s)
Flow 2 ingress (mean 56.69 Mbit/s)   Flow 2 egress (mean 56.69 Mbit/s)
Flow 3 ingress (mean 49.95 Mbit/s)   Flow 3 egress (mean 49.94 Mbit/s)

• Flow 1 (95th percentile 17.41 ms)   • Flow 2 (95th percentile 19.08 ms)   • Flow 3 (95th percentile 19.06 ms)

```
Run 7: Statistics of Copa

Start at: 2017-08-11 11:41:55
End at: 2017-08-11 11:42:25
Local clock offset: 0.696 ms
Remote clock offset: -1.126 ms
```
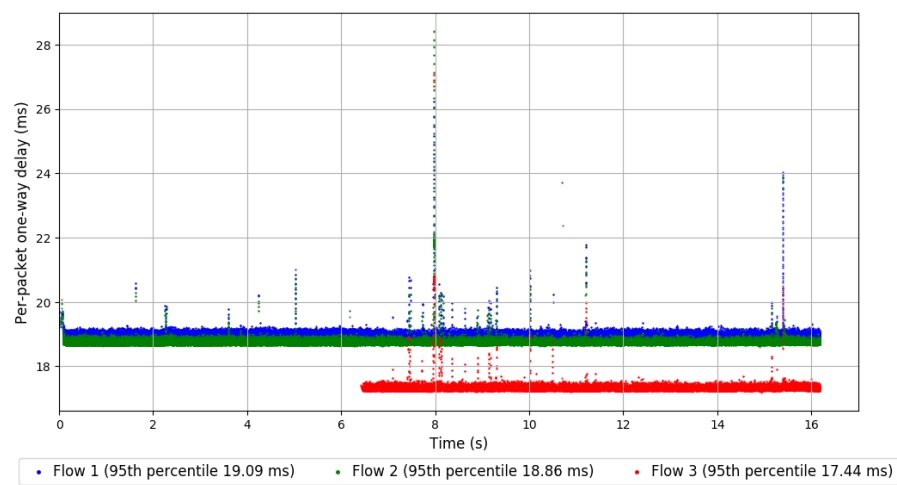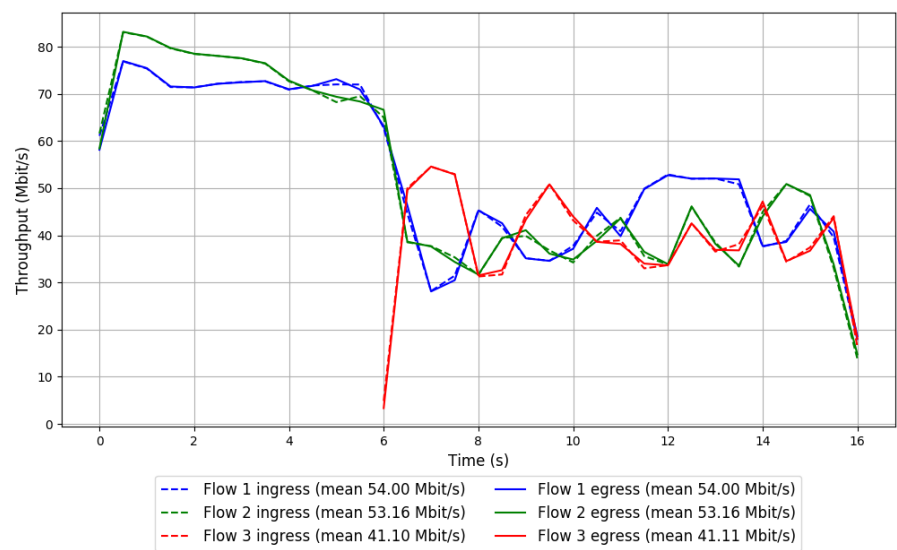
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2017-08-11 12:03:20
End at: 2017-08-11 12:03:50
Local clock offset: 0.802 ms
Remote clock offset: -1.174 ms


# Below is generated by plot.py at 2017-08-11 15:58:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.54 Mbit/s
95th percentile per-packet one-way delay: 19.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 19.050 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.99 Mbit/s
95th percentile per-packet one-way delay: 19.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.58 Mbit/s
95th percentile per-packet one-way delay: 19.025 ms
Loss rate: 0.00%
```
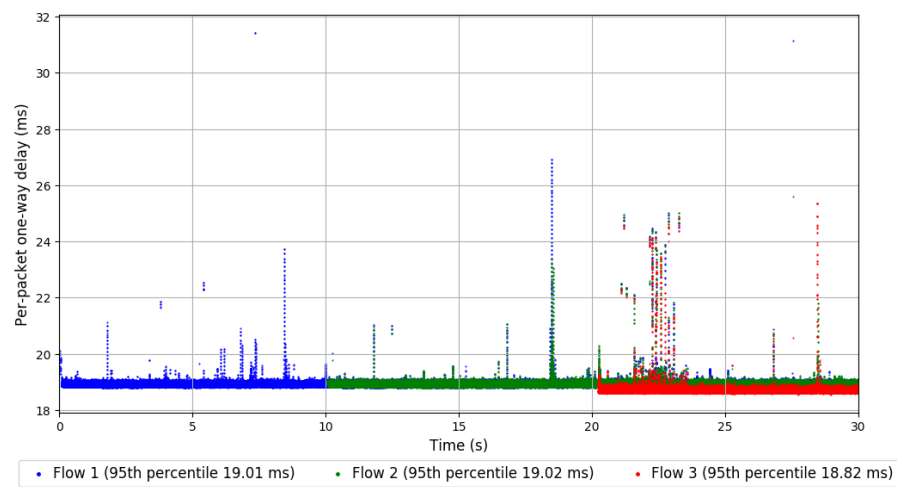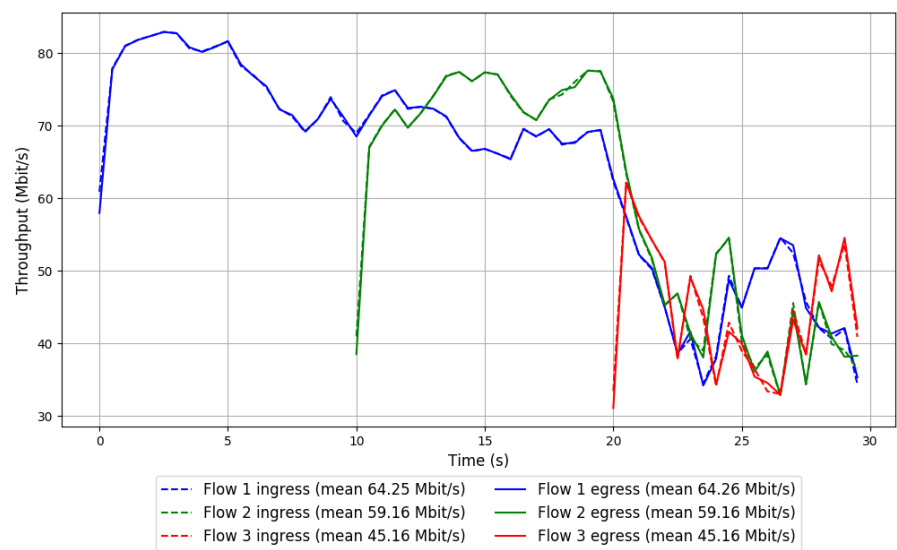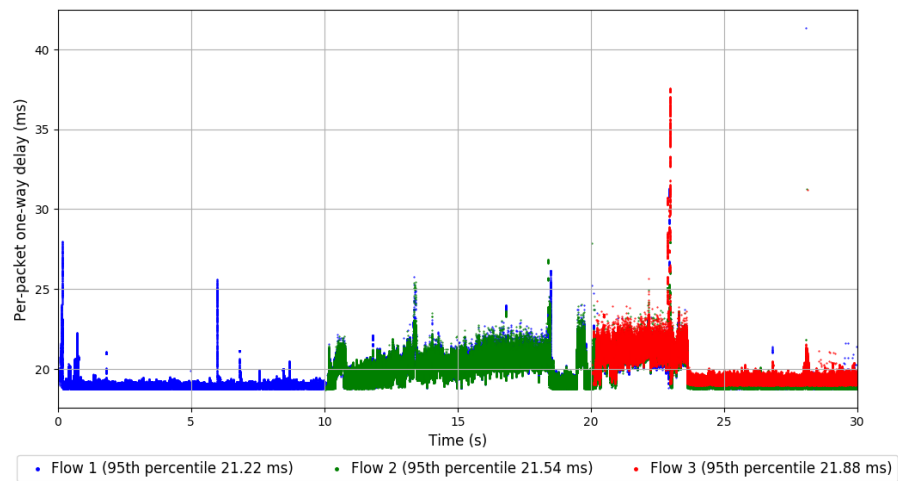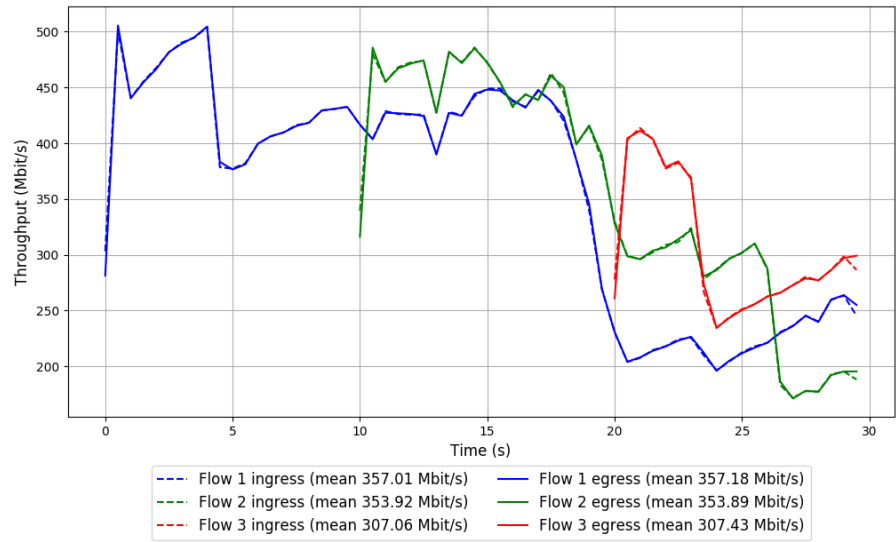
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 56.02 Mbit/s) --- Flow 1 egress (mean 56.39 Mbit/s)
Flow 2 ingress (mean 59.98 Mbit/s) --- Flow 2 egress (mean 59.99 Mbit/s)
Flow 3 ingress (mean 48.58 Mbit/s) --- Flow 3 egress (mean 48.58 Mbit/s)

Flow 1 (95th percentile 19.05 ms)   Flow 2 (95th percentile 19.04 ms)   Flow 3 (95th percentile 19.02 ms)

```
Run 9: Statistics of Copa

Start at: 2017-08-11 12:25:05
End at: 2017-08-11 12:25:35
Local clock offset: 0.779 ms
Remote clock offset: -1.454 ms
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 54.00 Mbit/s) --- Flow 1 egress (mean 54.00 Mbit/s)
Flow 2 ingress (mean 53.16 Mbit/s) --- Flow 2 egress (mean 53.16 Mbit/s)
Flow 3 ingress (mean 41.10 Mbit/s) --- Flow 3 egress (mean 41.11 Mbit/s)

Flow 1 (95th percentile 19.09 ms)   Flow 2 (95th percentile 18.86 ms)   Flow 3 (95th percentile 17.44 ms)

61

```
Run 10: Statistics of Copa

Start at: 2017-08-11 12:46:39
End at: 2017-08-11 12:47:09
Local clock offset: 0.735 ms
Remote clock offset: -1.68 ms


# Below is generated by plot.py at 2017-08-11 15:59:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.38 Mbit/s
95th percentile per-packet one-way delay: 19.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 19.007 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 19.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.16 Mbit/s
95th percentile per-packet one-way delay: 18.817 ms
Loss rate: 0.01%
```
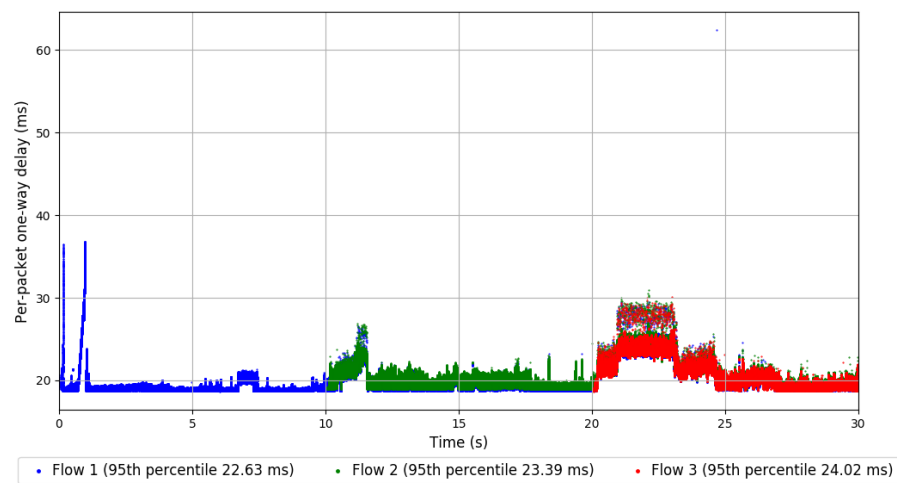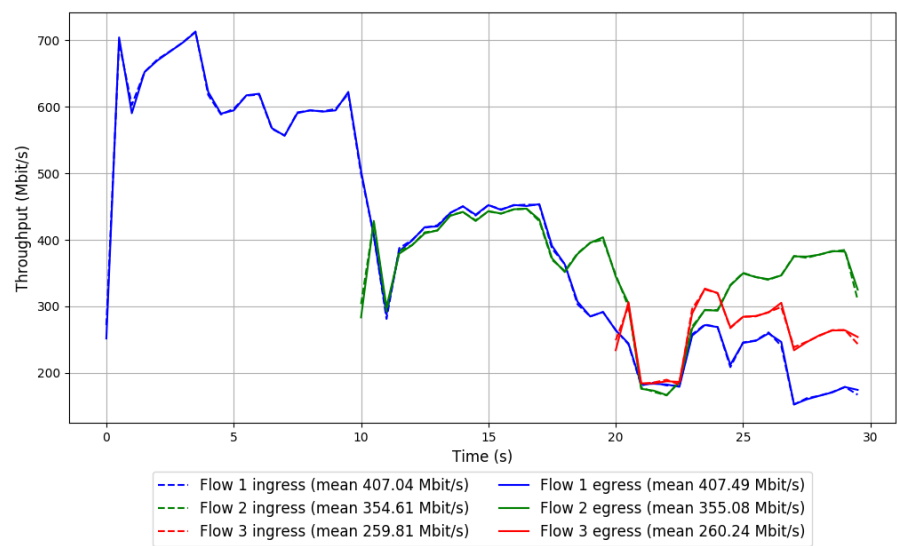
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 09:19:20
End at: 2017-08-11 09:19:50
Local clock offset: 0.255 ms
Remote clock offset: -0.496 ms


# Below is generated by plot.py at 2017-08-11 16:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.75 Mbit/s
95th percentile per-packet one-way delay: 21.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 357.18 Mbit/s
95th percentile per-packet one-way delay: 21.224 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 353.89 Mbit/s
95th percentile per-packet one-way delay: 21.535 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 307.43 Mbit/s
95th percentile per-packet one-way delay: 21.884 ms
Loss rate: 0.00%
```
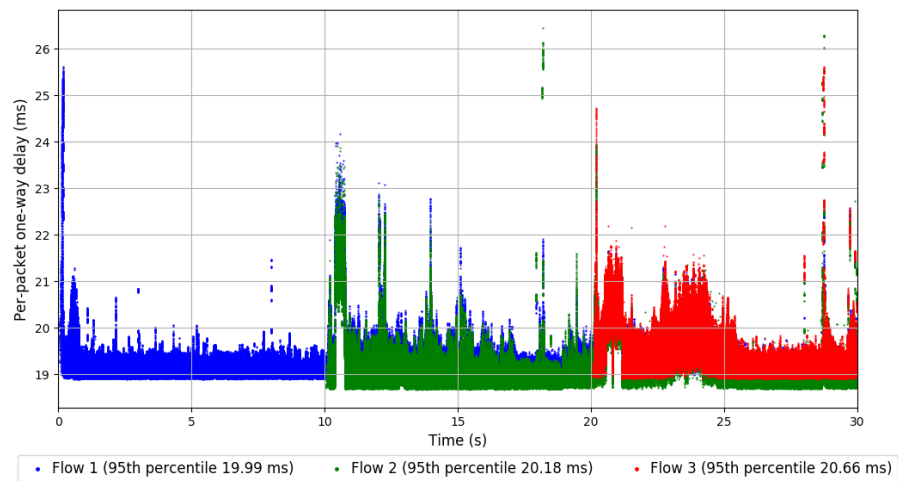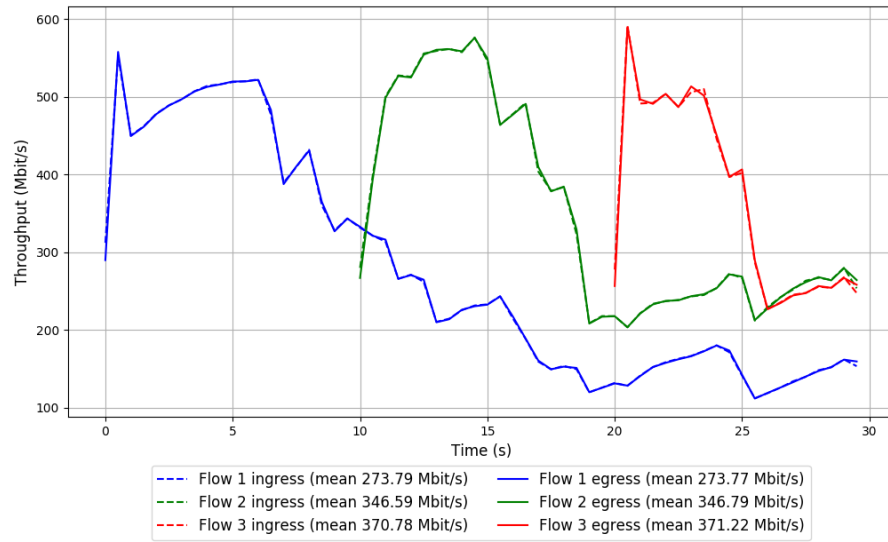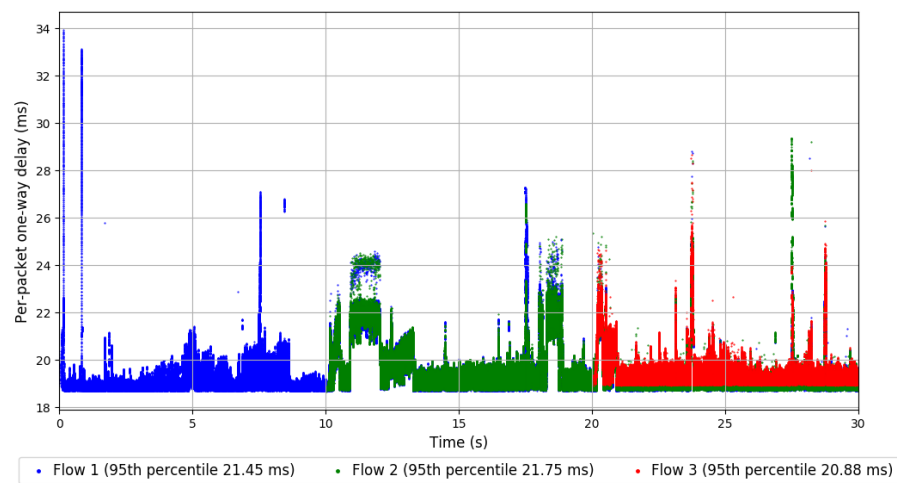
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 357.01 Mbit/s) --- Flow 1 egress (mean 357.18 Mbit/s)
Flow 2 ingress (mean 353.92 Mbit/s) --- Flow 2 egress (mean 353.89 Mbit/s)
Flow 3 ingress (mean 307.06 Mbit/s) --- Flow 3 egress (mean 307.43 Mbit/s)

Flow 1 (95th percentile 21.22 ms)   Flow 2 (95th percentile 21.54 ms)   Flow 3 (95th percentile 21.88 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 09:40:50
End at: 2017-08-11 09:41:20
Local clock offset: 0.387 ms
Remote clock offset: -0.742 ms


# Below is generated by plot.py at 2017-08-11 16:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 730.14 Mbit/s
95th percentile per-packet one-way delay: 23.357 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 407.49 Mbit/s
95th percentile per-packet one-way delay: 22.631 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 355.08 Mbit/s
95th percentile per-packet one-way delay: 23.387 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 260.24 Mbit/s
95th percentile per-packet one-way delay: 24.021 ms
Loss rate: 0.01%
```

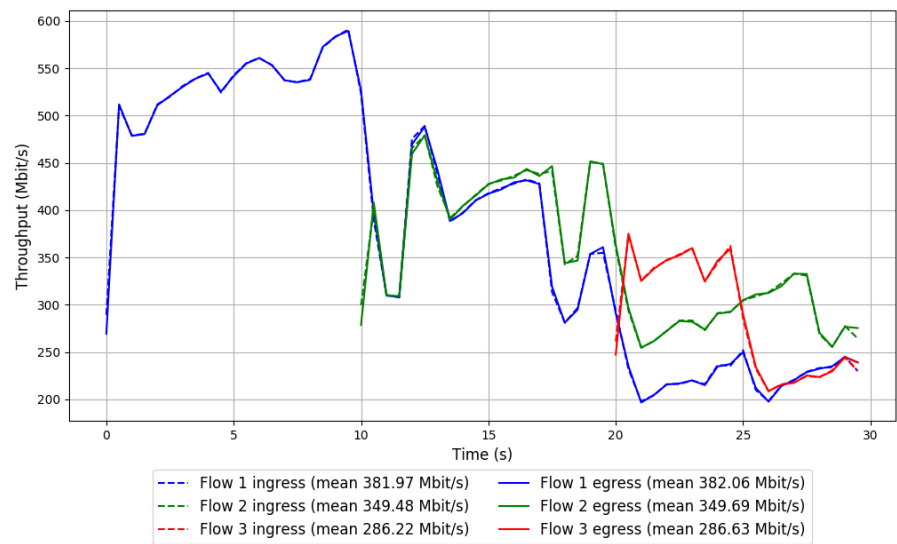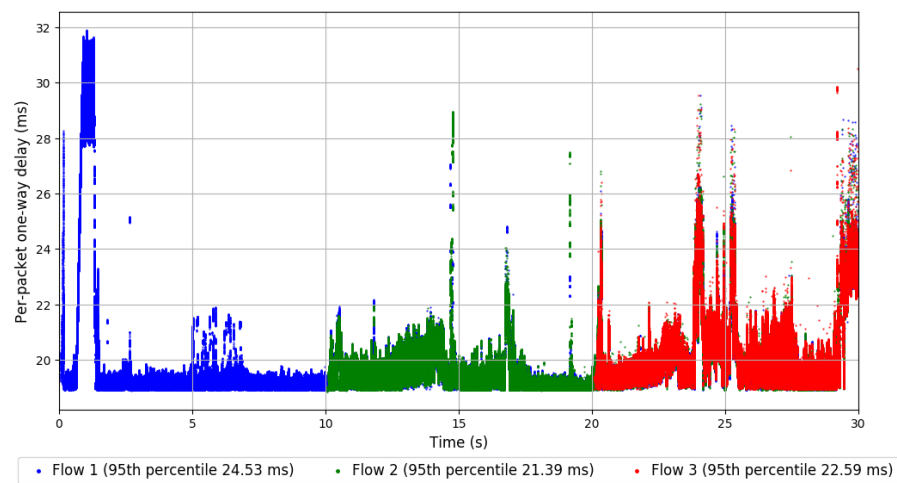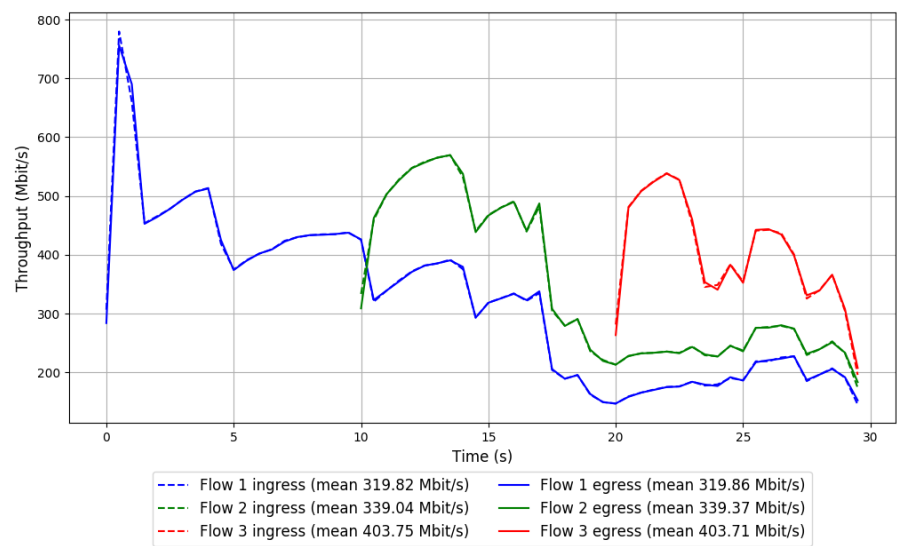Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 10:02:18
End at: 2017-08-11 10:02:48
Local clock offset: 0.367 ms
Remote clock offset: -1.069 ms


# Below is generated by plot.py at 2017-08-11 16:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.54 Mbit/s
95th percentile per-packet one-way delay: 20.339 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 273.77 Mbit/s
95th percentile per-packet one-way delay: 19.994 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 346.79 Mbit/s
95th percentile per-packet one-way delay: 20.176 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 371.22 Mbit/s
95th percentile per-packet one-way delay: 20.660 ms
Loss rate: 0.00%
```

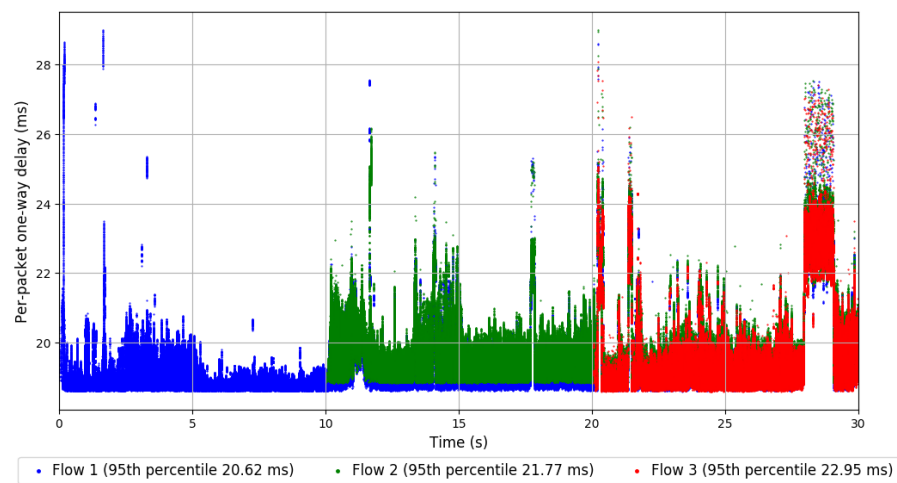Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-08-11 10:23:56
End at: 2017-08-11 10:24:26
Local clock offset: 0.405 ms
Remote clock offset: -1.174 ms


# Below is generated by plot.py at 2017-08-11 16:01:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.11 Mbit/s
95th percentile per-packet one-way delay: 21.577 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 382.06 Mbit/s
95th percentile per-packet one-way delay: 21.447 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 349.69 Mbit/s
95th percentile per-packet one-way delay: 21.748 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 286.63 Mbit/s
95th percentile per-packet one-way delay: 20.880 ms
Loss rate: 0.01%
```
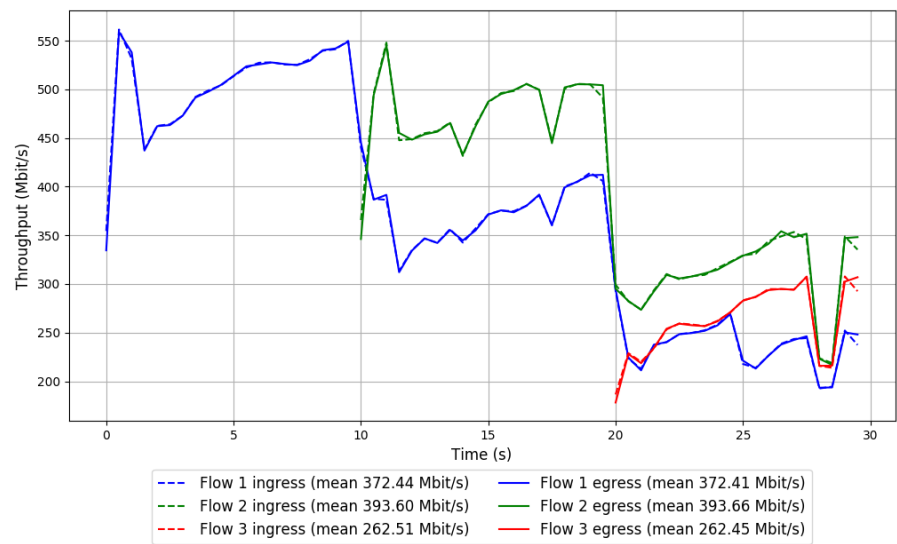
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 10:45:38
End at: 2017-08-11 10:46:08
Local clock offset: 0.474 ms
Remote clock offset: -1.268 ms


# Below is generated by plot.py at 2017-08-11 16:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 679.07 Mbit/s
95th percentile per-packet one-way delay: 22.776 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 319.86 Mbit/s
95th percentile per-packet one-way delay: 24.529 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 339.37 Mbit/s
95th percentile per-packet one-way delay: 21.391 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 403.71 Mbit/s
95th percentile per-packet one-way delay: 22.588 ms
Loss rate: 0.00%
```
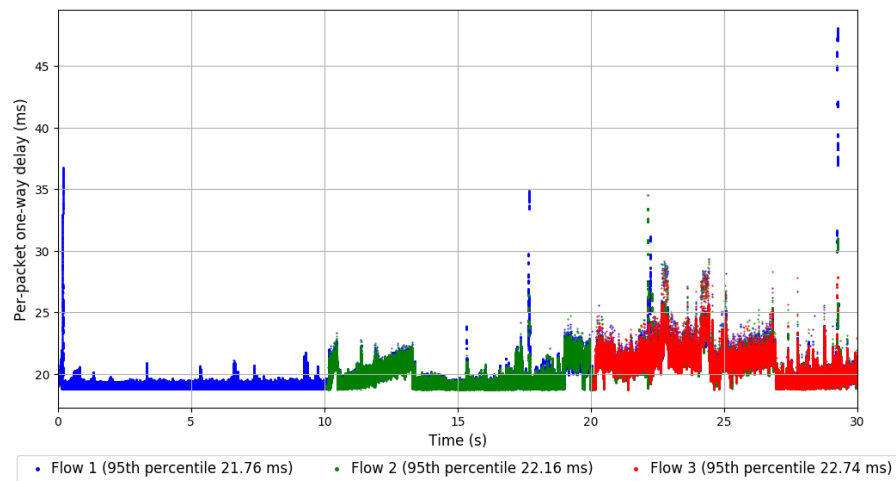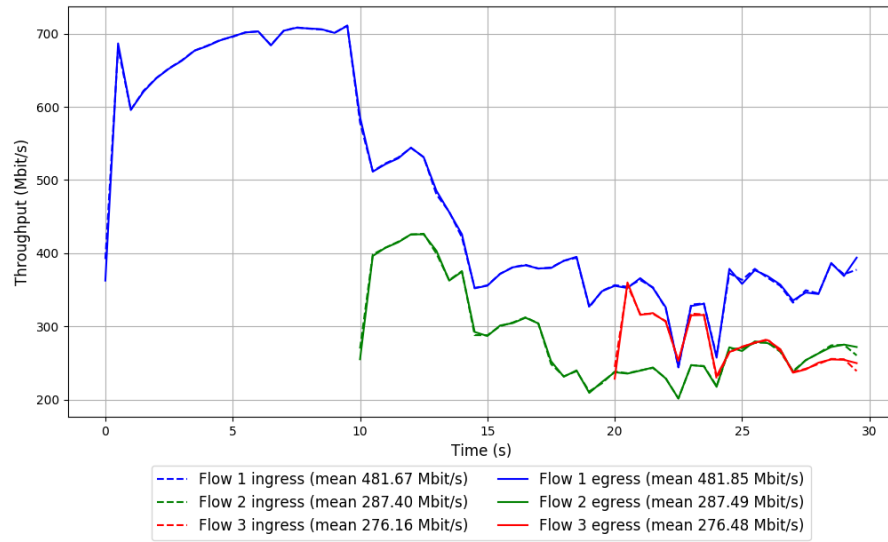
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 11:06:58
End at: 2017-08-11 11:07:28
Local clock offset: 0.613 ms
Remote clock offset: -1.229 ms


# Below is generated by plot.py at 2017-08-11 16:03:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 721.62 Mbit/s
95th percentile per-packet one-way delay: 21.612 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 372.41 Mbit/s
95th percentile per-packet one-way delay: 20.620 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 393.66 Mbit/s
95th percentile per-packet one-way delay: 21.769 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 262.45 Mbit/s
95th percentile per-packet one-way delay: 22.954 ms
Loss rate: 0.02%
```

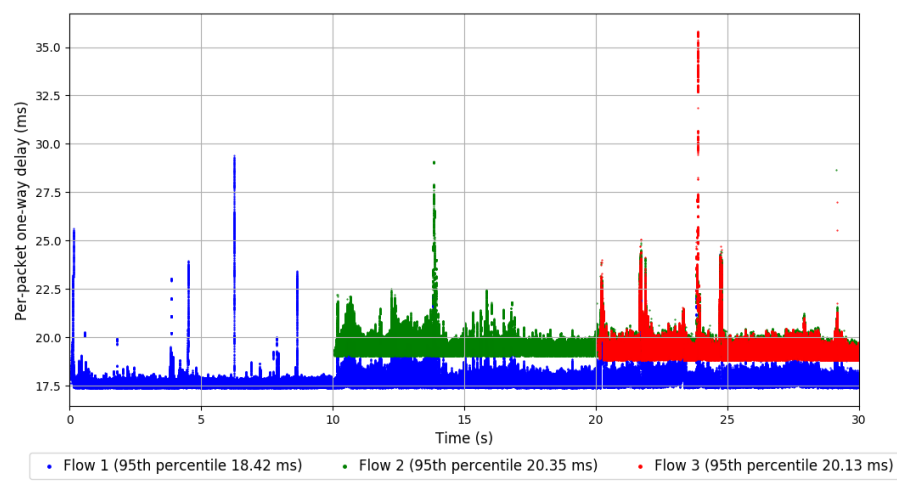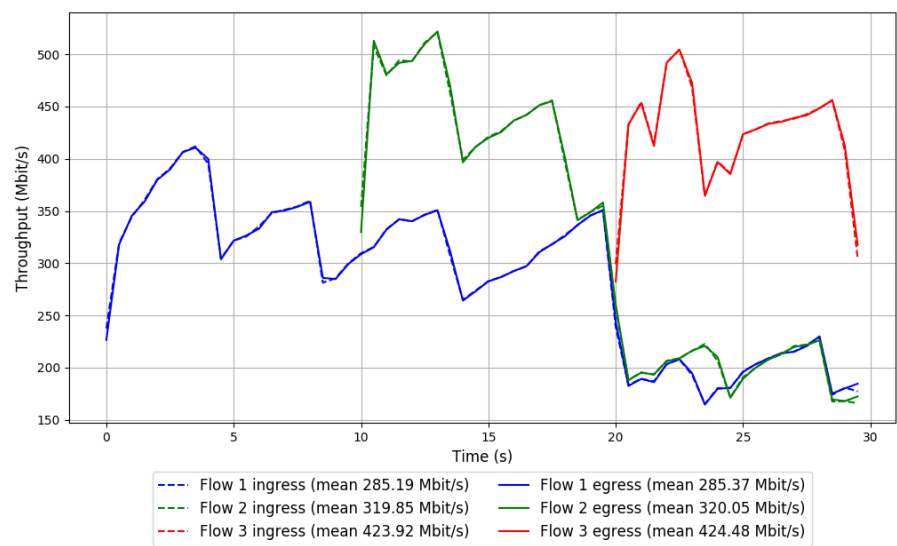Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 11:28:44
End at: 2017-08-11 11:29:14
Local clock offset: 0.58 ms
Remote clock offset: -1.136 ms


# Below is generated by plot.py at 2017-08-11 16:04:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.94 Mbit/s
95th percentile per-packet one-way delay: 22.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 481.85 Mbit/s
95th percentile per-packet one-way delay: 21.759 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 287.49 Mbit/s
95th percentile per-packet one-way delay: 22.158 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 276.48 Mbit/s
95th percentile per-packet one-way delay: 22.741 ms
Loss rate: 0.01%
```
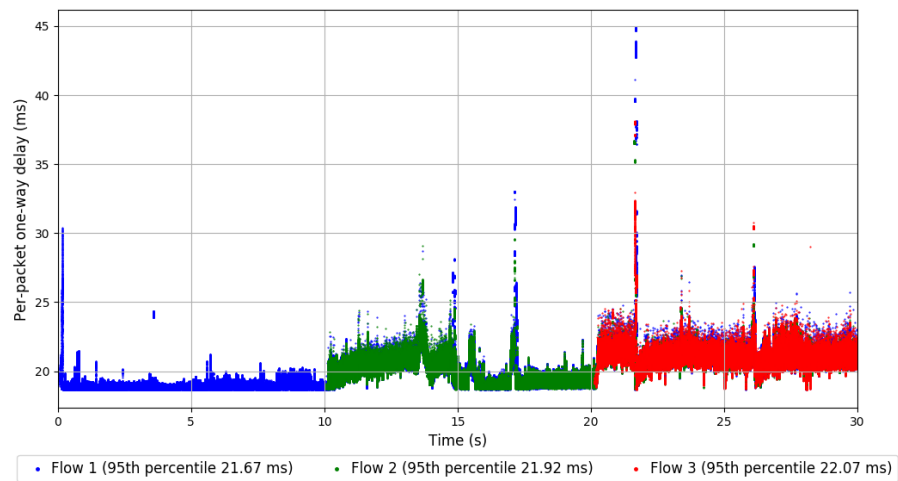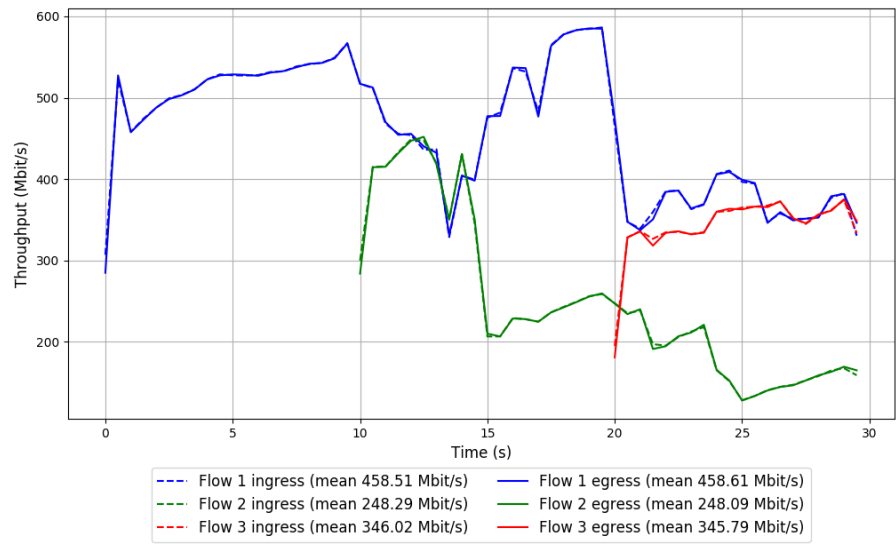
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 11:50:09
End at: 2017-08-11 11:50:39
Local clock offset: 0.756 ms
Remote clock offset: -1.091 ms


# Below is generated by plot.py at 2017-08-11 16:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 639.07 Mbit/s
95th percentile per-packet one-way delay: 20.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 285.37 Mbit/s
95th percentile per-packet one-way delay: 18.422 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 320.05 Mbit/s
95th percentile per-packet one-way delay: 20.348 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 424.48 Mbit/s
95th percentile per-packet one-way delay: 20.131 ms
Loss rate: 0.00%
```
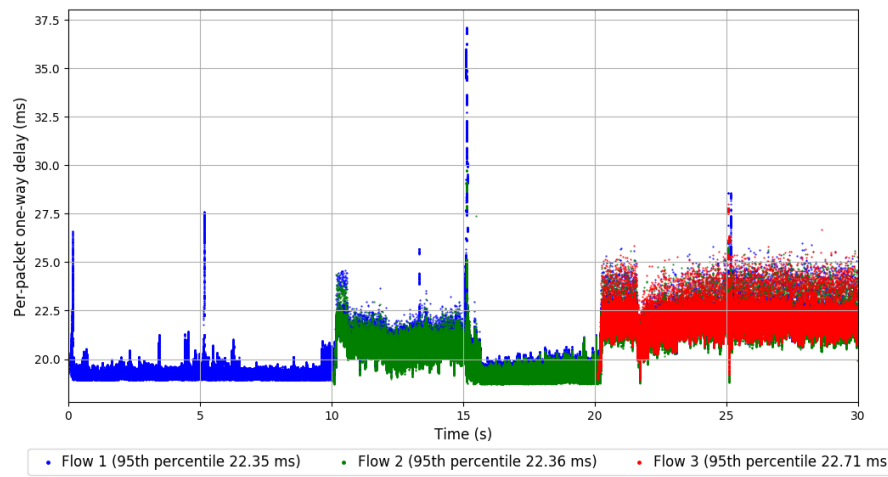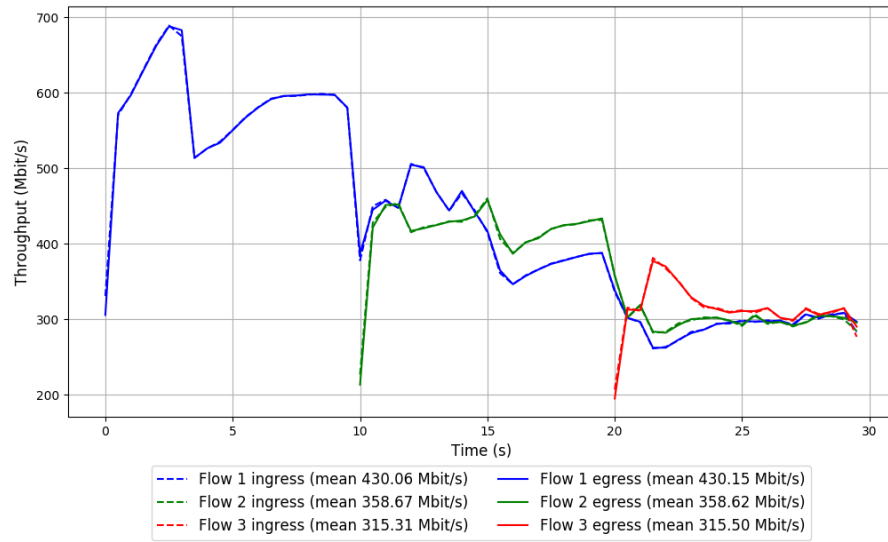
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 12:11:47
End at: 2017-08-11 12:12:17
Local clock offset: 0.792 ms
Remote clock offset: -1.181 ms


# Below is generated by plot.py at 2017-08-11 16:06:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 737.81 Mbit/s
95th percentile per-packet one-way delay: 21.835 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 458.61 Mbit/s
95th percentile per-packet one-way delay: 21.673 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 248.09 Mbit/s
95th percentile per-packet one-way delay: 21.919 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 345.79 Mbit/s
95th percentile per-packet one-way delay: 22.075 ms
Loss rate: 0.13%
```

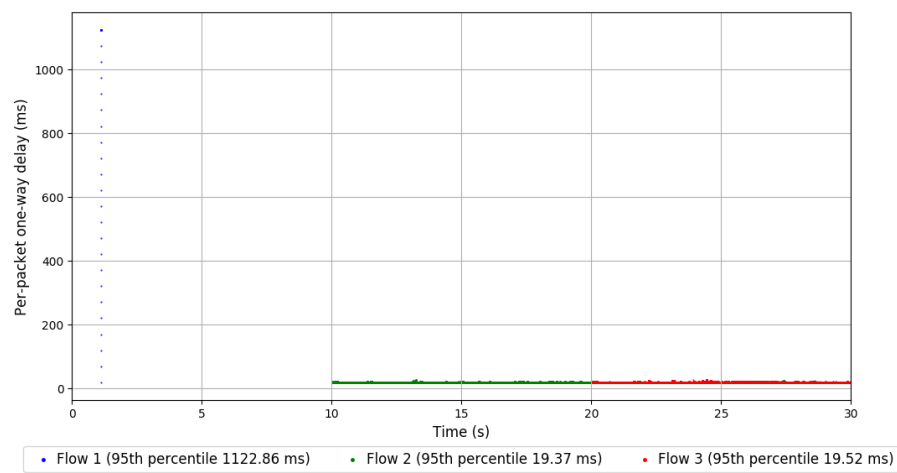Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 12:33:28
End at: 2017-08-11 12:33:58
Local clock offset: 0.665 ms
Remote clock offset: -1.555 ms


# Below is generated by plot.py at 2017-08-11 16:06:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.34 Mbit/s
95th percentile per-packet one-way delay: 22.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 430.15 Mbit/s
95th percentile per-packet one-way delay: 22.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 358.62 Mbit/s
95th percentile per-packet one-way delay: 22.365 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 315.50 Mbit/s
95th percentile per-packet one-way delay: 22.709 ms
Loss rate: 0.00%
```

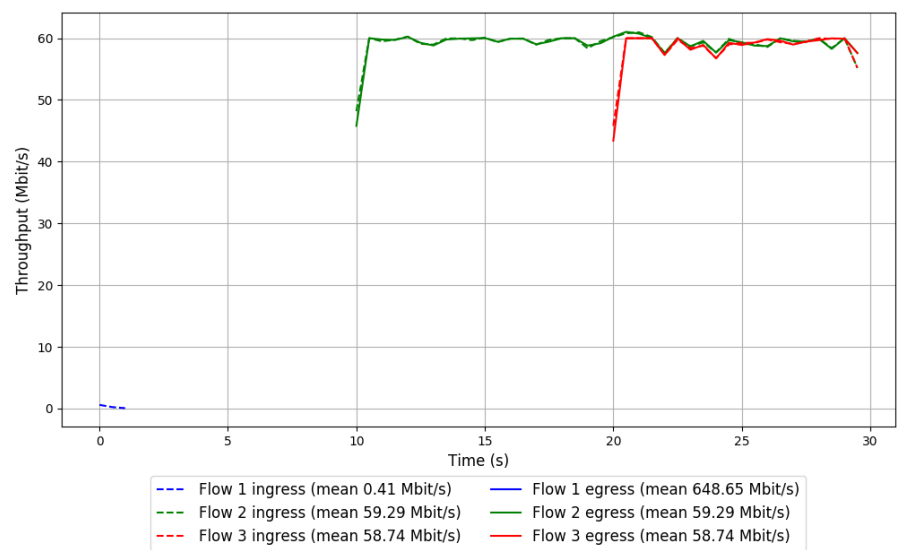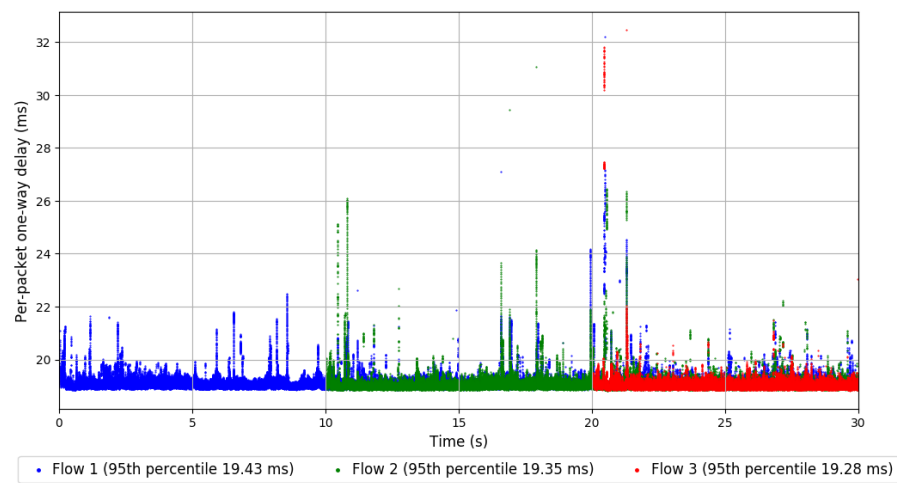## Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 09:16:36
End at: 2017-08-11 09:17:06
Local clock offset: 0.244 ms
Remote clock offset: -0.515 ms


# Below is generated by plot.py at 2017-08-11 16:06:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 19.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 648.65 Mbit/s
95th percentile per-packet one-way delay: 1122.857 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 19.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 19.523 ms
Loss rate: 0.00%
```
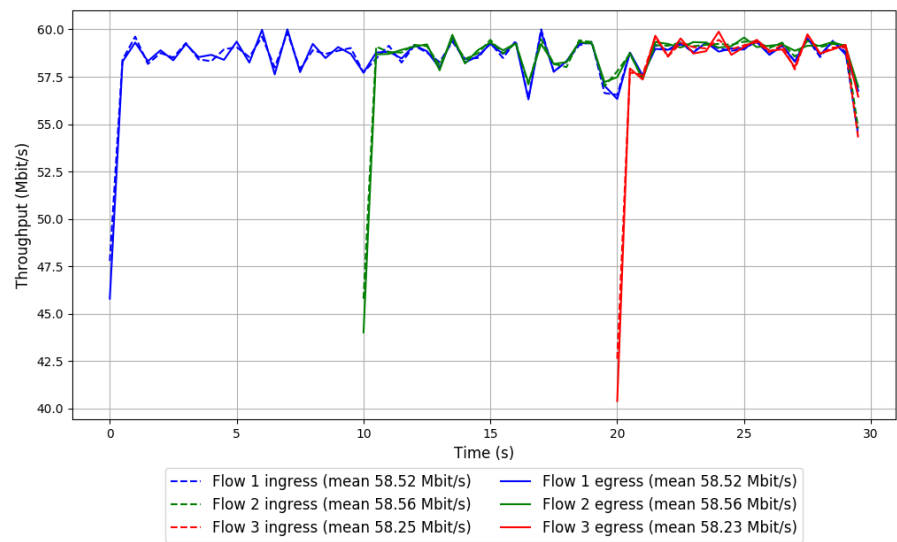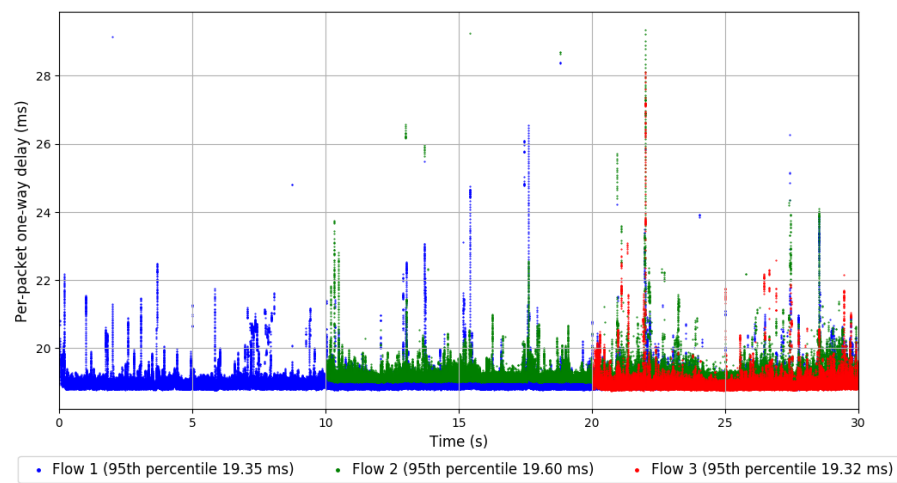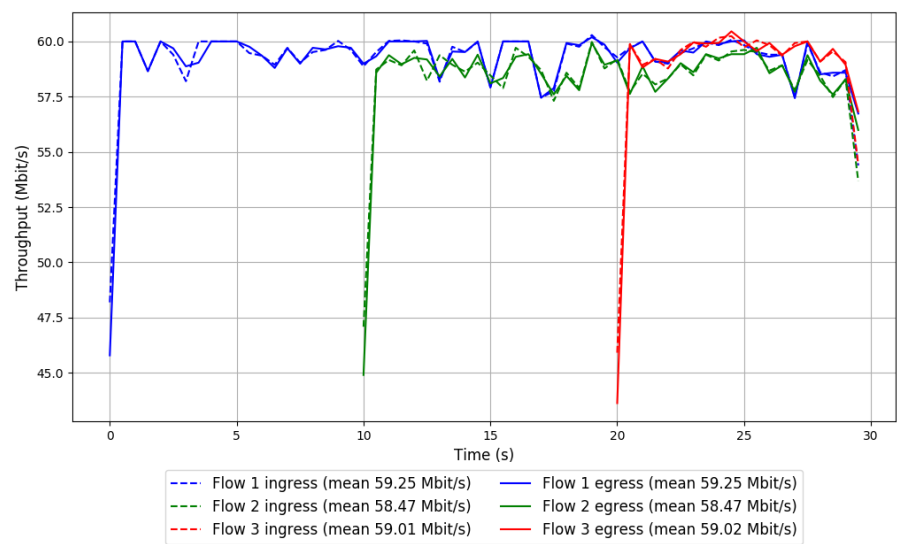
Run 1: Report of KohoCC — Data Link

- Flow 1 ingress (mean 0.41 Mbit/s) --- Flow 1 egress (mean 648.65 Mbit/s)
- Flow 2 ingress (mean 59.29 Mbit/s) --- Flow 2 egress (mean 59.29 Mbit/s)
- Flow 3 ingress (mean 58.74 Mbit/s) --- Flow 3 egress (mean 58.74 Mbit/s)

- Flow 1 (95th percentile 1122.86 ms) • Flow 2 (95th percentile 19.37 ms) • Flow 3 (95th percentile 19.52 ms)

85

```
Run 2: Statistics of KohoCC

Start at: 2017-08-11 09:37:58
End at: 2017-08-11 09:38:28
Local clock offset: 0.351 ms
Remote clock offset: -0.796 ms


# Below is generated by plot.py at 2017-08-11 16:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.81 Mbit/s
95th percentile per-packet one-way delay: 19.382 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 19.434 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 19.351 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 19.281 ms
Loss rate: 0.00%
```
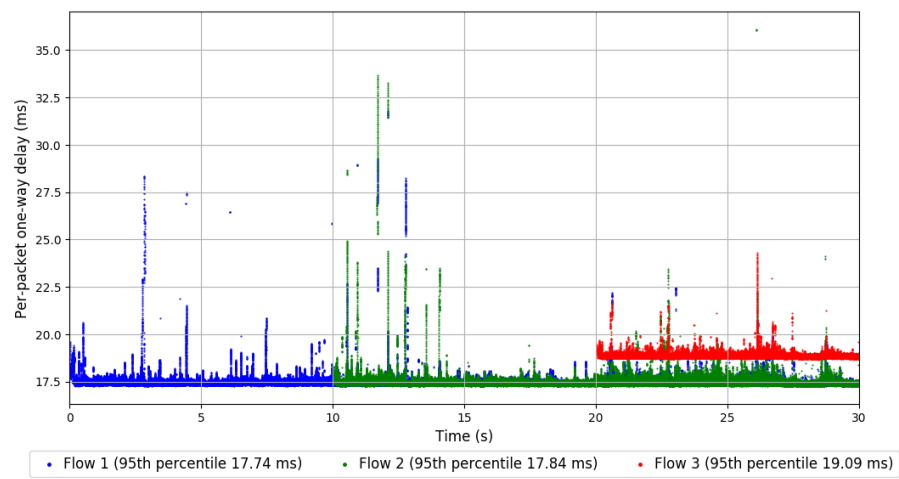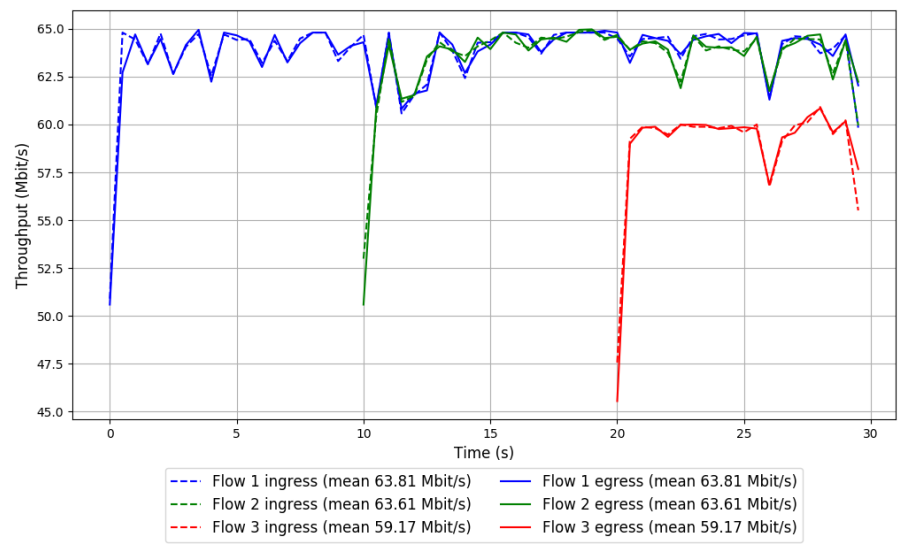
Run 2: Report of KohoCC — Data Link

```
Run 3: Statistics of KohoCC

Start at: 2017-08-11 09:59:31
End at: 2017-08-11 10:00:01
Local clock offset: 0.37 ms
Remote clock offset: -0.916 ms


# Below is generated by plot.py at 2017-08-11 16:06:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.77 Mbit/s
95th percentile per-packet one-way delay: 19.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 19.349 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.47 Mbit/s
95th percentile per-packet one-way delay: 19.601 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.02 Mbit/s
95th percentile per-packet one-way delay: 19.318 ms
Loss rate: 0.00%
```

Run 3: Report of KohoCC — Data Link

Flow 1 ingress (mean 59.25 Mbit/s)   Flow 1 egress (mean 59.25 Mbit/s)
Flow 2 ingress (mean 58.47 Mbit/s)   Flow 2 egress (mean 58.47 Mbit/s)
Flow 3 ingress (mean 59.01 Mbit/s)   Flow 3 egress (mean 59.02 Mbit/s)

Flow 1 (95th percentile 19.35 ms)   Flow 2 (95th percentile 19.60 ms)   Flow 3 (95th percentile 19.32 ms)

```
Run 4: Statistics of KohoCC

Start at: 2017-08-11 10:21:06
End at: 2017-08-11 10:21:36
Local clock offset: 0.398 ms
Remote clock offset: -1.163 ms


# Below is generated by plot.py at 2017-08-11 16:06:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.83 Mbit/s
95th percentile per-packet one-way delay: 18.896 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 17.744 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.61 Mbit/s
95th percentile per-packet one-way delay: 17.837 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 19.089 ms
Loss rate: 0.00%
```
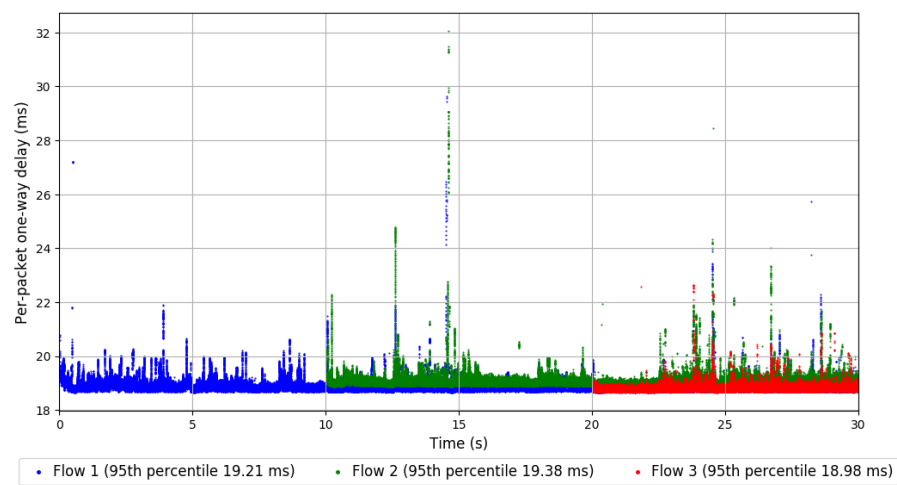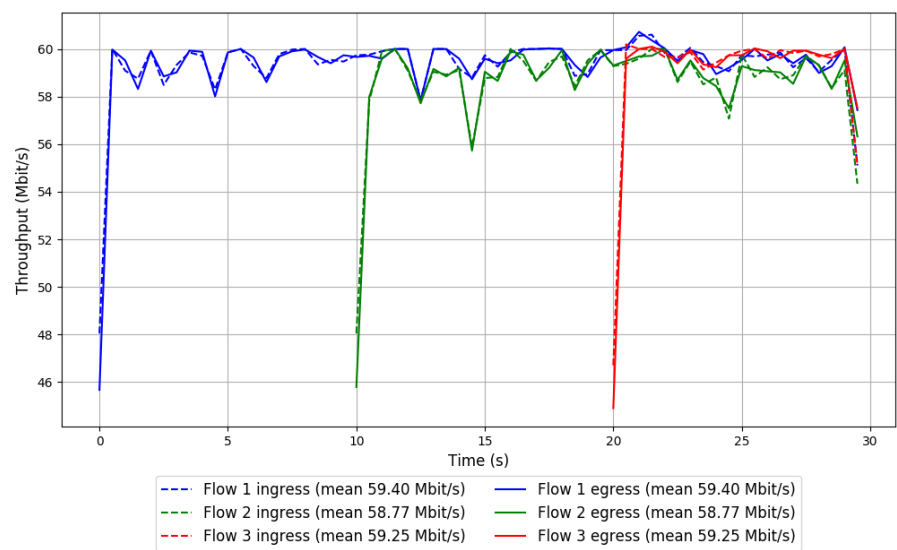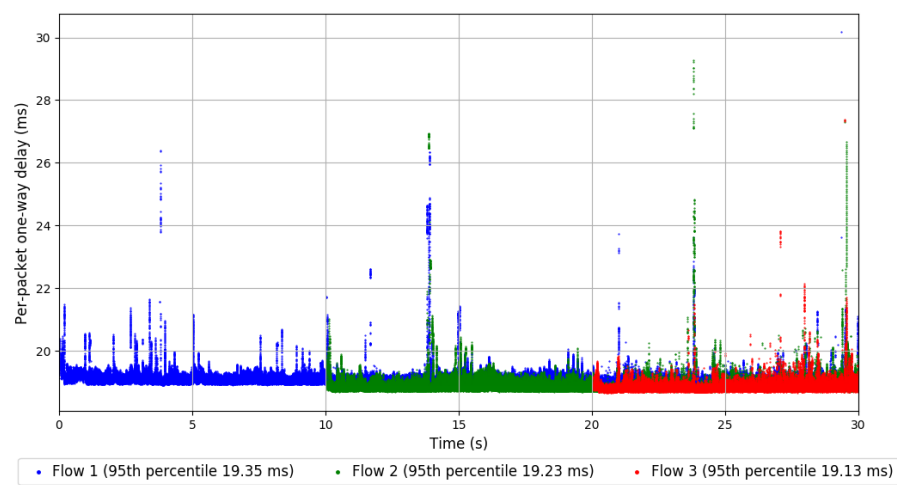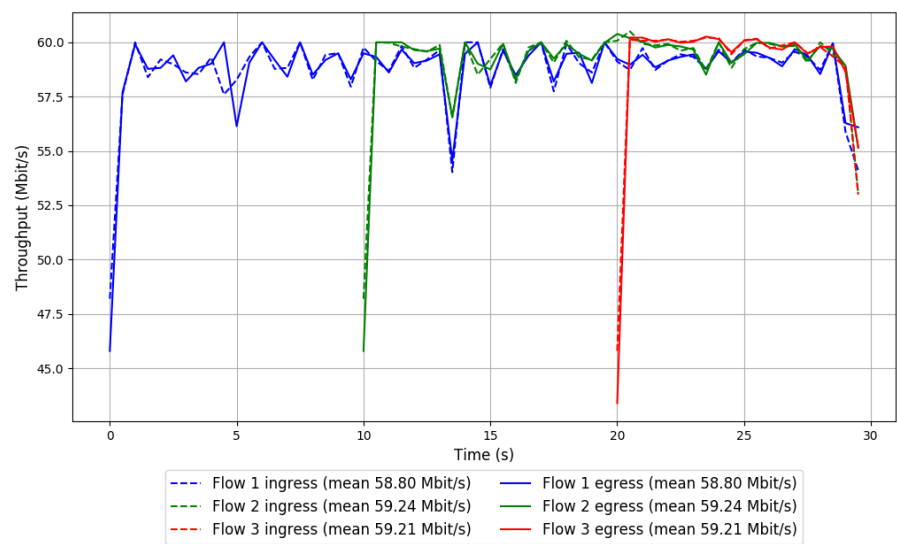
Run 4: Report of KohoCC — Data Link

```
Run 5: Statistics of KohoCC

Start at: 2017-08-11 10:42:47
End at: 2017-08-11 10:43:17
Local clock offset: 0.555 ms
Remote clock offset: -1.21 ms

# Below is generated by plot.py at 2017-08-11 16:06:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.20 Mbit/s
95th percentile per-packet one-way delay: 19.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.40 Mbit/s
95th percentile per-packet one-way delay: 19.211 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.77 Mbit/s
95th percentile per-packet one-way delay: 19.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 18.981 ms
Loss rate: 0.00%
```
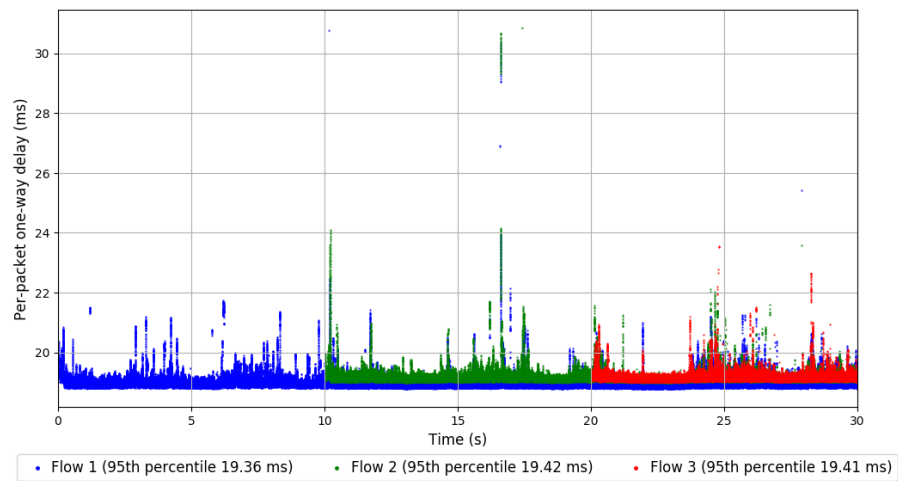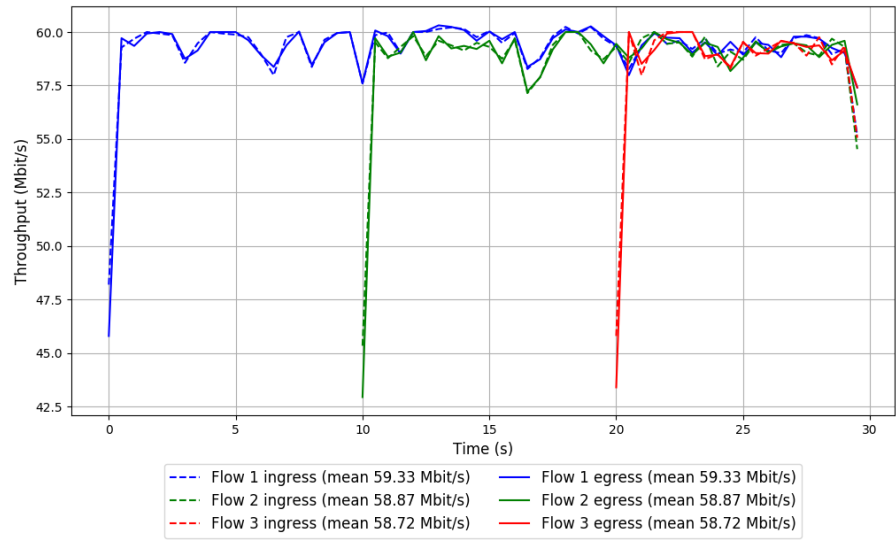
Run 5: Report of KohoCC — Data Link

```
Run 6: Statistics of KohoCC

Start at: 2017-08-11 11:04:11
End at: 2017-08-11 11:04:41
Local clock offset: 0.535 ms
Remote clock offset: -1.263 ms


# Below is generated by plot.py at 2017-08-11 16:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.88 Mbit/s
95th percentile per-packet one-way delay: 19.306 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 19.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 19.229 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 19.132 ms
Loss rate: 0.00%
```
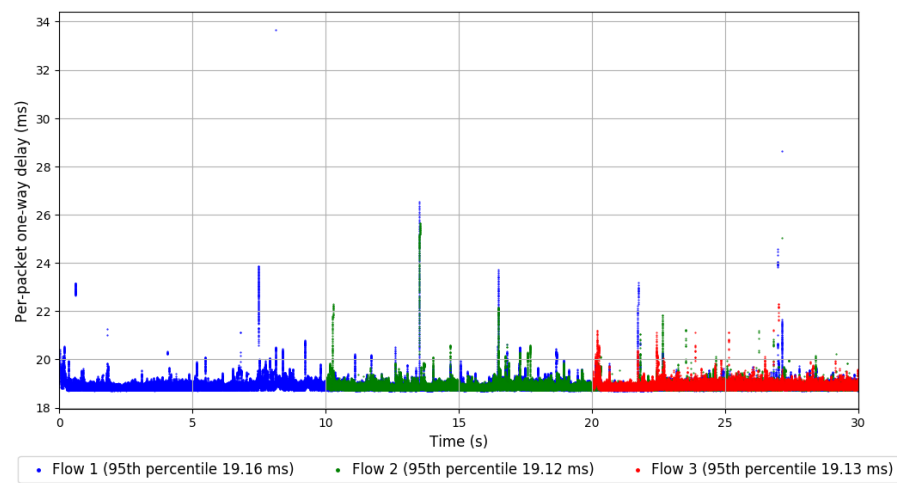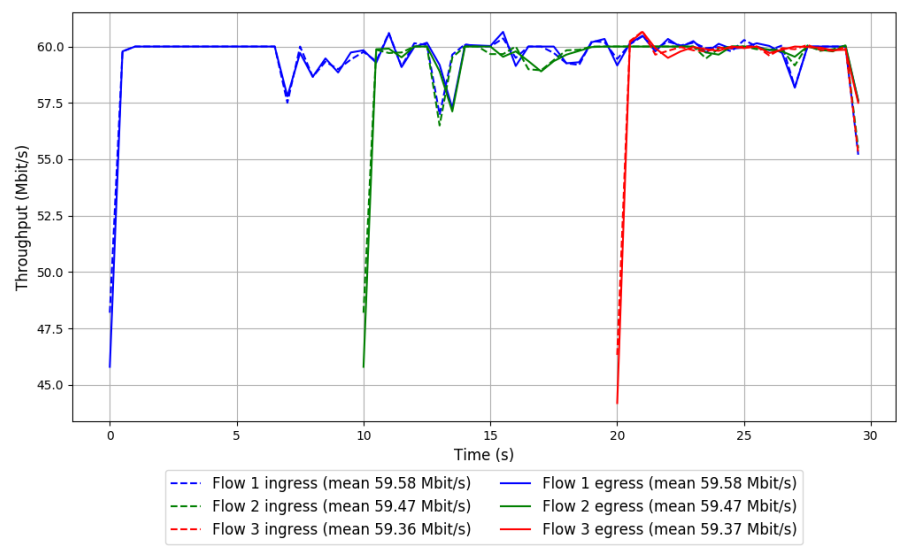
Run 6: Report of KohoCC — Data Link

Flow 1 ingress (mean 58.80 Mbit/s) --- Flow 1 egress (mean 58.80 Mbit/s)
Flow 2 ingress (mean 59.24 Mbit/s) --- Flow 2 egress (mean 59.24 Mbit/s)
Flow 3 ingress (mean 59.21 Mbit/s) --- Flow 3 egress (mean 59.21 Mbit/s)

Flow 1 (95th percentile 19.35 ms)   Flow 2 (95th percentile 19.23 ms)   Flow 3 (95th percentile 19.13 ms)

```
Run 7: Statistics of KohoCC

Start at: 2017-08-11 11:25:54
End at: 2017-08-11 11:26:24
Local clock offset: 0.564 ms
Remote clock offset: -1.111 ms

# Below is generated by plot.py at 2017-08-11 16:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.02 Mbit/s
95th percentile per-packet one-way delay: 19.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.33 Mbit/s
95th percentile per-packet one-way delay: 19.365 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 19.420 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 19.410 ms
Loss rate: 0.00%
```
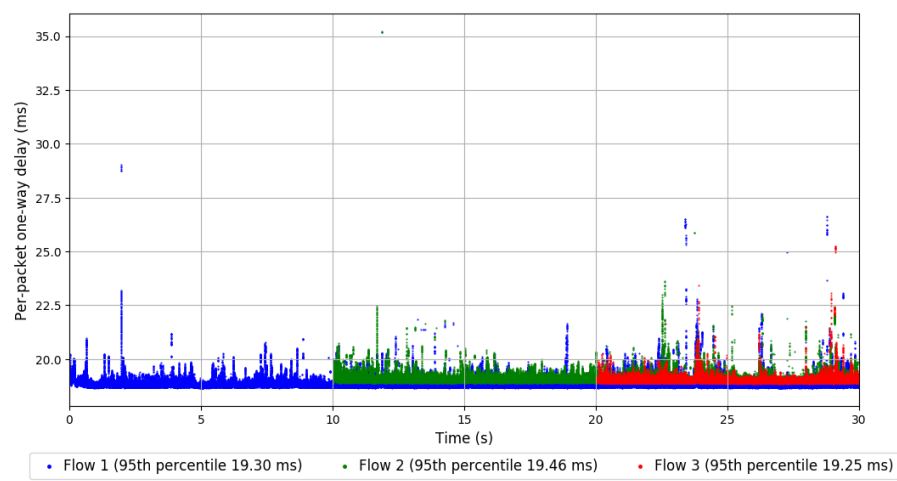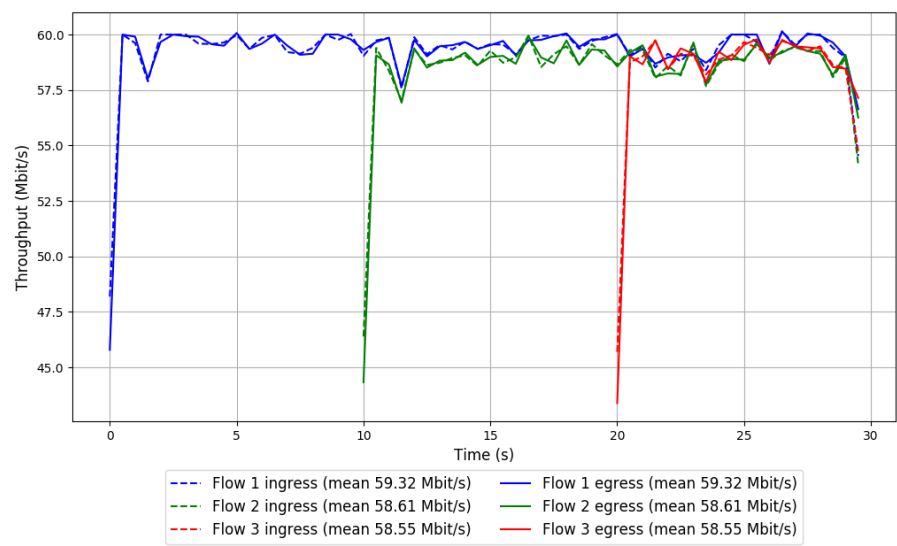
Run 7: Report of KohoCC — Data Link

- - - - Flow 1 ingress (mean 59.33 Mbit/s) ——— Flow 1 egress (mean 59.33 Mbit/s)
- - - - Flow 2 ingress (mean 58.87 Mbit/s) ——— Flow 2 egress (mean 58.87 Mbit/s)
- - - - Flow 3 ingress (mean 58.72 Mbit/s) ——— Flow 3 egress (mean 58.72 Mbit/s)

• Flow 1 (95th percentile 19.36 ms)　　• Flow 2 (95th percentile 19.42 ms)　　• Flow 3 (95th percentile 19.41 ms)

97

```
Run 8: Statistics of KohoCC

Start at: 2017-08-11 11:47:21
End at: 2017-08-11 11:47:51
Local clock offset: 0.705 ms
Remote clock offset: -1.178 ms


# Below is generated by plot.py at 2017-08-11 16:07:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.88 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.58 Mbit/s
95th percentile per-packet one-way delay: 19.162 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.47 Mbit/s
95th percentile per-packet one-way delay: 19.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 19.129 ms
Loss rate: 0.00%
```
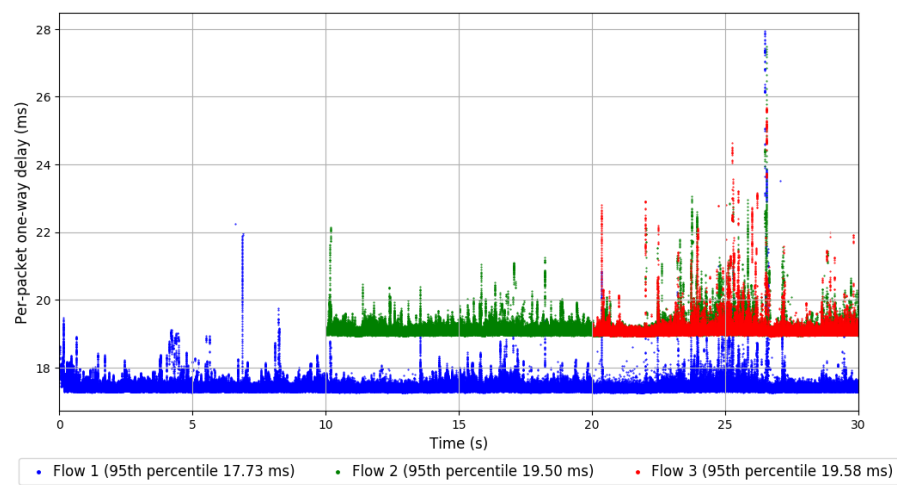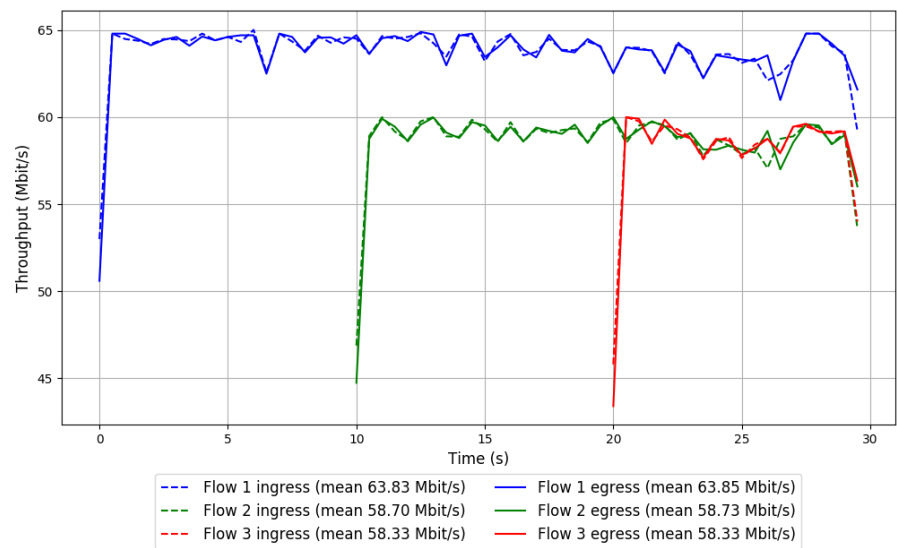
Run 8: Report of KohoCC — Data Link

```
Run 9: Statistics of KohoCC

Start at: 2017-08-11 12:08:58
End at: 2017-08-11 12:09:28
Local clock offset: 0.8 ms
Remote clock offset: -1.197 ms


# Below is generated by plot.py at 2017-08-11 16:07:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.77 Mbit/s
95th percentile per-packet one-way delay: 19.356 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 19.300 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 19.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.55 Mbit/s
95th percentile per-packet one-way delay: 19.247 ms
Loss rate: 0.00%
```
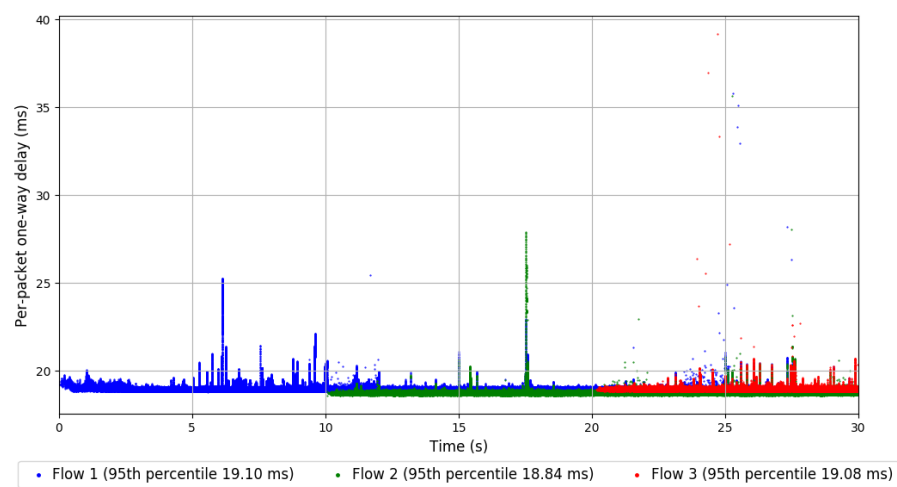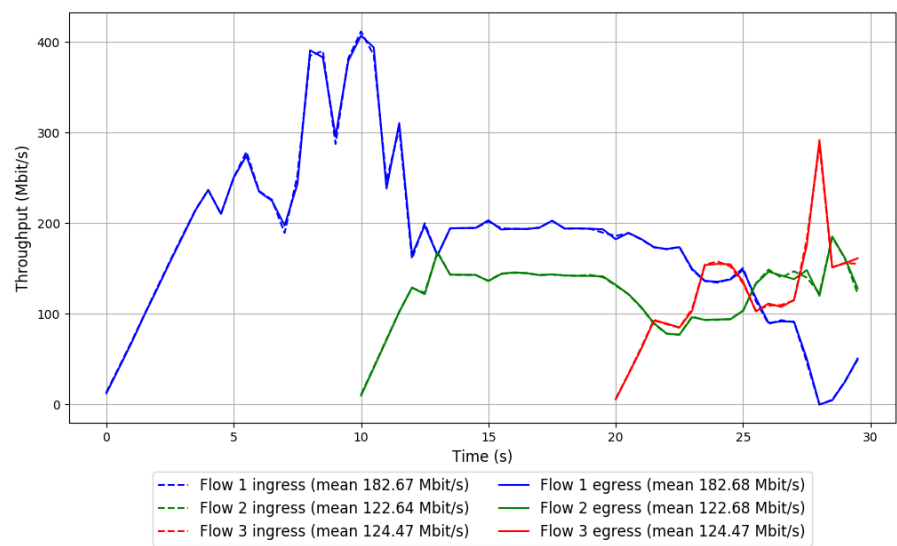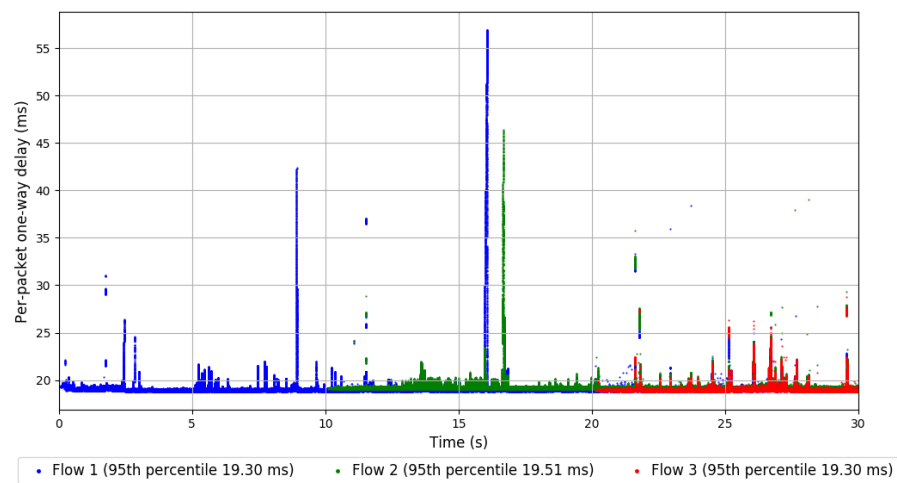
Run 9: Report of KohoCC — Data Link

- - - Flow 1 ingress (mean 59.32 Mbit/s) — Flow 1 egress (mean 59.32 Mbit/s)
- - - Flow 2 ingress (mean 58.61 Mbit/s) — Flow 2 egress (mean 58.61 Mbit/s)
- - - Flow 3 ingress (mean 58.55 Mbit/s) — Flow 3 egress (mean 58.55 Mbit/s)

- Flow 1 (95th percentile 19.30 ms) • Flow 2 (95th percentile 19.46 ms) • Flow 3 (95th percentile 19.25 ms)

```
Run 10: Statistics of KohoCC

Start at: 2017-08-11 12:30:36
End at: 2017-08-11 12:31:06
Local clock offset: 0.773 ms
Remote clock offset: -1.436 ms


# Below is generated by plot.py at 2017-08-11 16:07:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.31 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.85 Mbit/s
95th percentile per-packet one-way delay: 17.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.73 Mbit/s
95th percentile per-packet one-way delay: 19.500 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.33 Mbit/s
95th percentile per-packet one-way delay: 19.584 ms
Loss rate: 0.00%
```
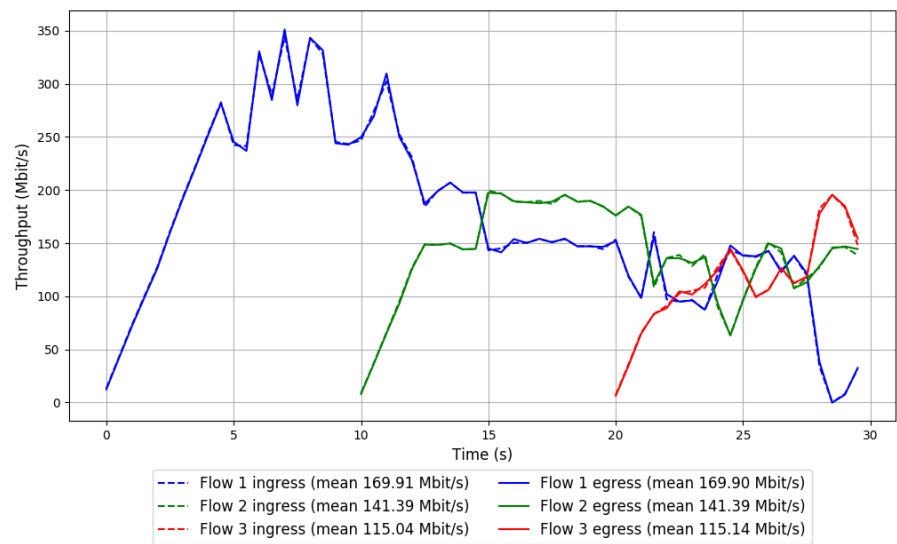
Run 10: Report of KohoCC — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 09:22:16
End at: 2017-08-11 09:22:46
Local clock offset: 0.369 ms
Remote clock offset: -0.557 ms

# Below is generated by plot.py at 2017-08-11 16:08:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.97 Mbit/s
95th percentile per-packet one-way delay: 19.071 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.68 Mbit/s
95th percentile per-packet one-way delay: 19.103 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.68 Mbit/s
95th percentile per-packet one-way delay: 18.836 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 124.47 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.00%
```
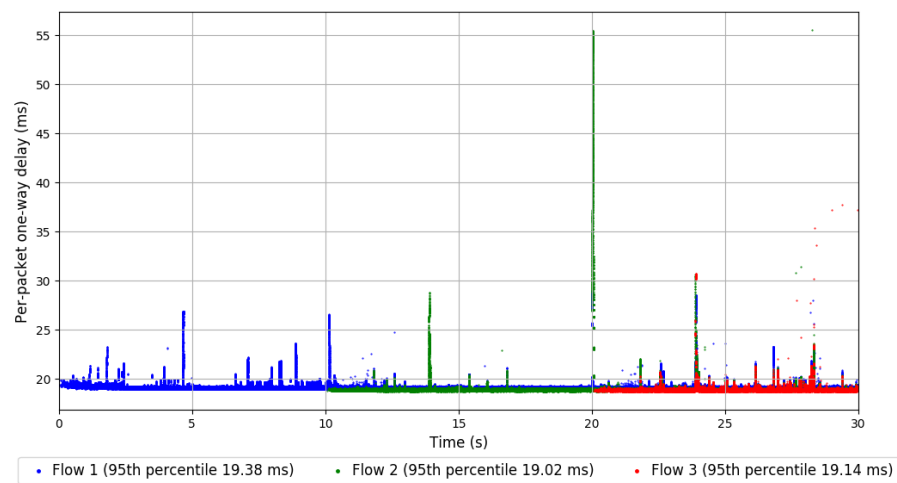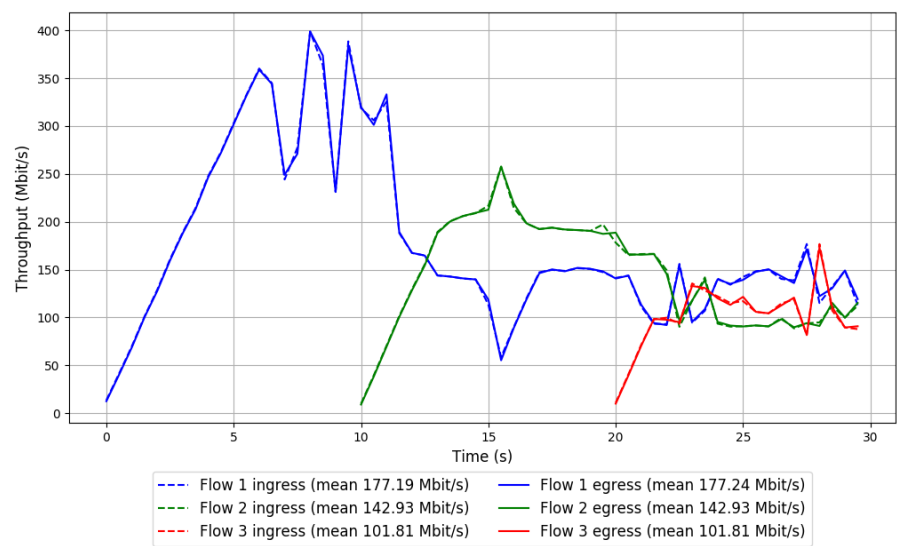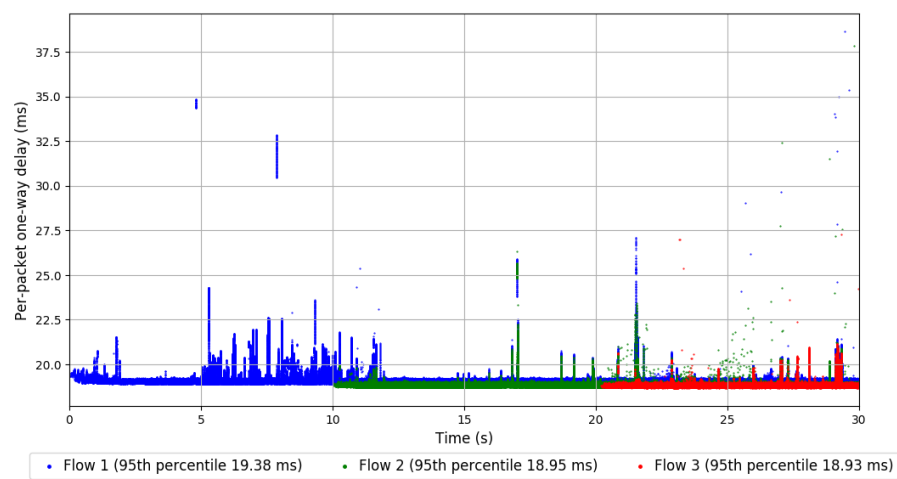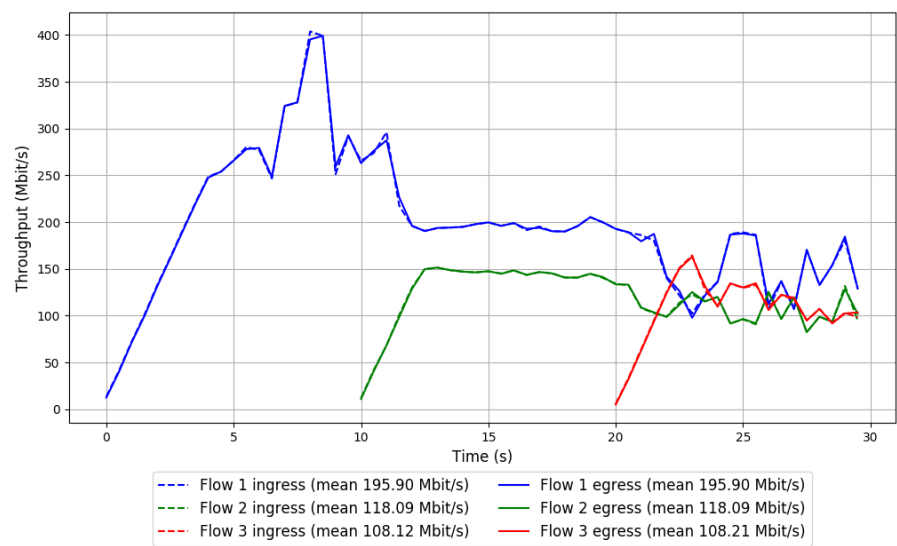
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 182.67 Mbit/s) —— Flow 1 egress (mean 182.68 Mbit/s)
Flow 2 ingress (mean 122.64 Mbit/s) —— Flow 2 egress (mean 122.68 Mbit/s)
Flow 3 ingress (mean 124.47 Mbit/s) —— Flow 3 egress (mean 124.47 Mbit/s)

• Flow 1 (95th percentile 19.10 ms)   • Flow 2 (95th percentile 18.84 ms)   • Flow 3 (95th percentile 19.08 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2017-08-11 09:43:47
End at: 2017-08-11 09:44:17
Local clock offset: 0.302 ms
Remote clock offset: -0.727 ms


# Below is generated by plot.py at 2017-08-11 16:08:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.43 Mbit/s
95th percentile per-packet one-way delay: 19.382 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 169.90 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.39 Mbit/s
95th percentile per-packet one-way delay: 19.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.14 Mbit/s
95th percentile per-packet one-way delay: 19.299 ms
Loss rate: 0.00%
```
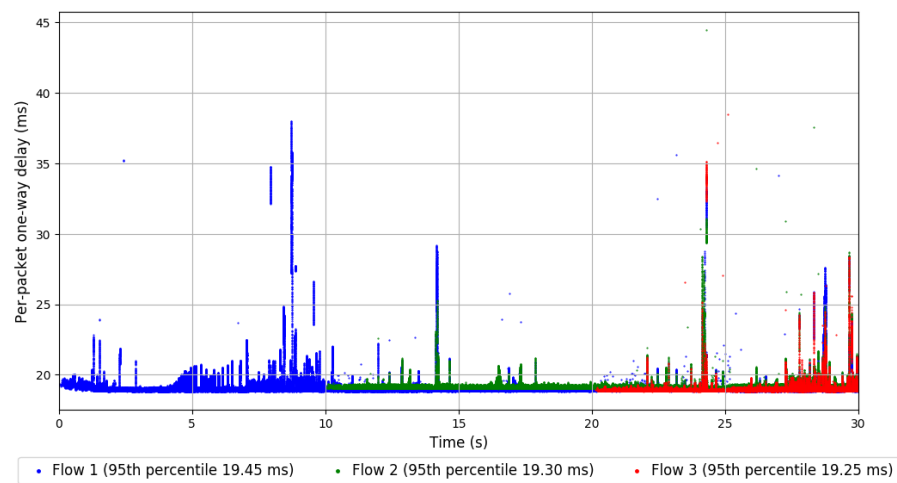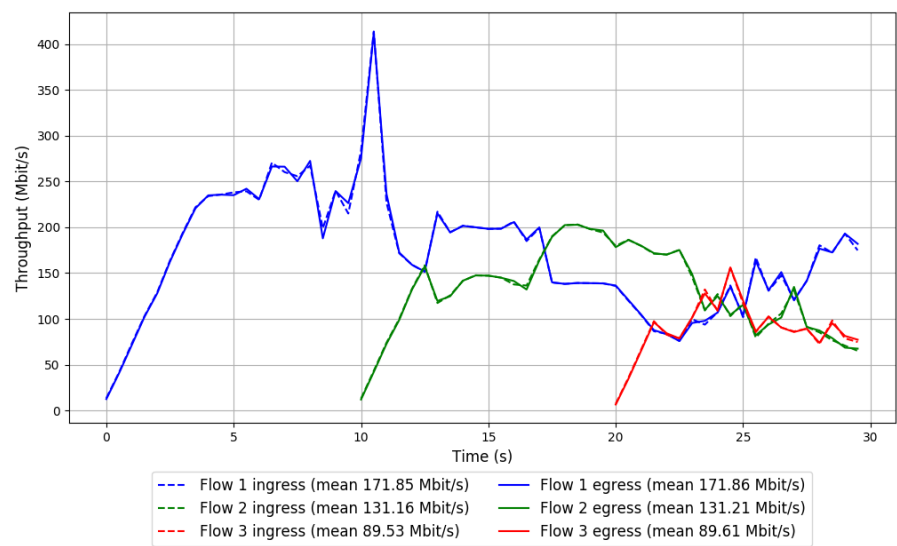
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-08-11 10:05:10
End at: 2017-08-11 10:05:40
Local clock offset: 0.368 ms
Remote clock offset: -1.076 ms


# Below is generated by plot.py at 2017-08-11 16:08:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.81 Mbit/s
95th percentile per-packet one-way delay: 19.297 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.24 Mbit/s
95th percentile per-packet one-way delay: 19.382 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.93 Mbit/s
95th percentile per-packet one-way delay: 19.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.81 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.00%
```
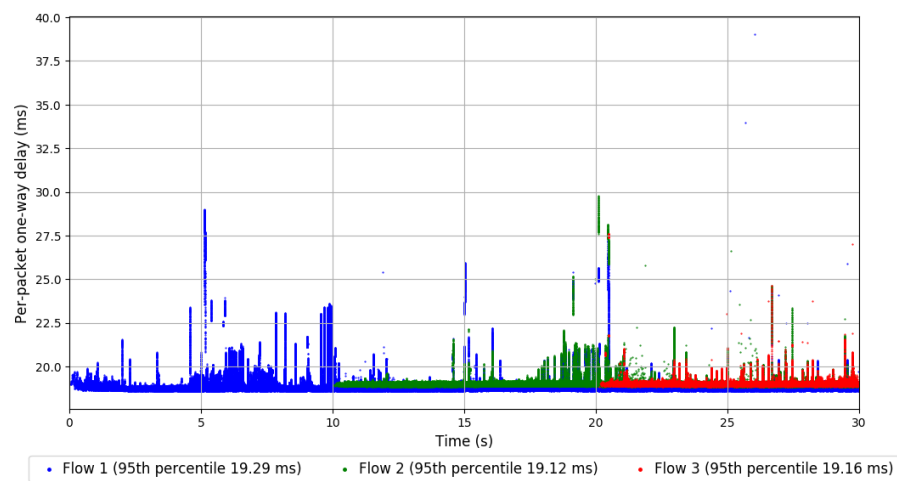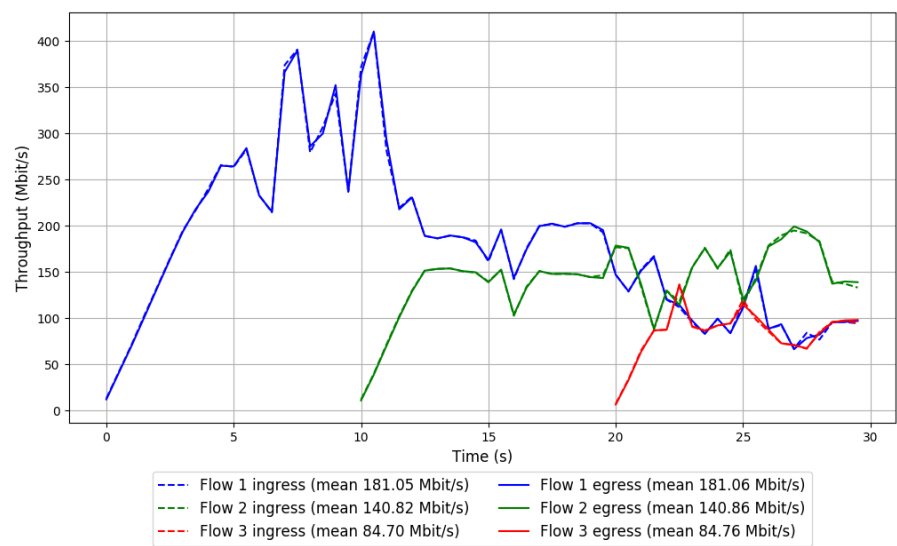
Run 3: Report of LEDBAT — Data Link

109

```
Run 4: Statistics of LEDBAT

Start at: 2017-08-11 10:26:52
End at: 2017-08-11 10:27:22
Local clock offset: 0.428 ms
Remote clock offset: -1.182 ms


# Below is generated by plot.py at 2017-08-11 16:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.84 Mbit/s
95th percentile per-packet one-way delay: 19.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.90 Mbit/s
95th percentile per-packet one-way delay: 19.376 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 118.09 Mbit/s
95th percentile per-packet one-way delay: 18.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 108.21 Mbit/s
95th percentile per-packet one-way delay: 18.926 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 195.90 Mbit/s) Flow 1 egress (mean 195.90 Mbit/s)
Flow 2 ingress (mean 118.09 Mbit/s) Flow 2 egress (mean 118.09 Mbit/s)
Flow 3 ingress (mean 108.12 Mbit/s) Flow 3 egress (mean 108.21 Mbit/s)

Flow 1 (95th percentile 19.38 ms) Flow 2 (95th percentile 18.95 ms) Flow 3 (95th percentile 18.93 ms)
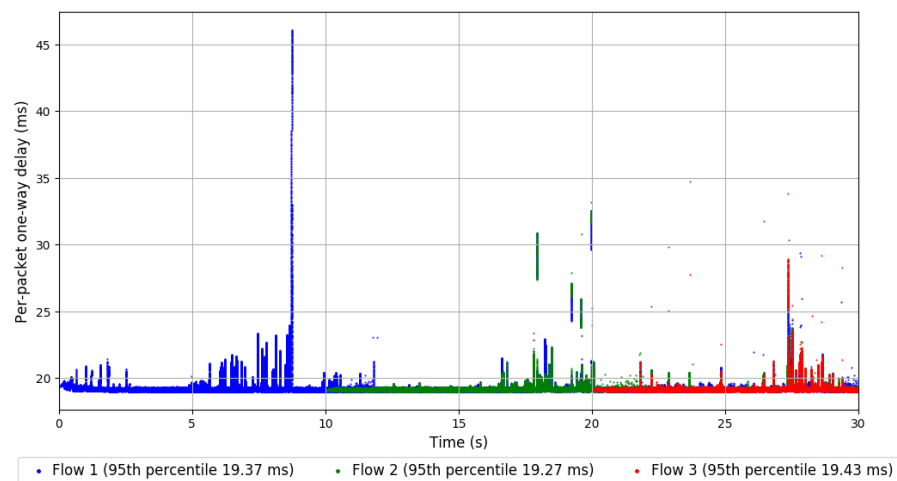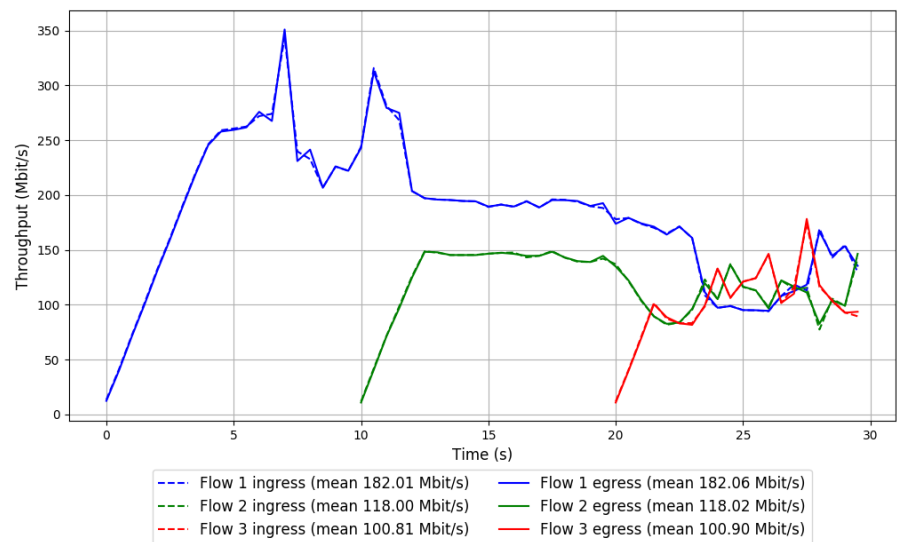
111

```
Run 5: Statistics of LEDBAT

Start at: 2017-08-11 10:48:33
End at: 2017-08-11 10:49:03
Local clock offset: 0.472 ms
Remote clock offset: -1.171 ms


# Below is generated by plot.py at 2017-08-11 16:09:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.64 Mbit/s
95th percentile per-packet one-way delay: 19.391 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.86 Mbit/s
95th percentile per-packet one-way delay: 19.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 131.21 Mbit/s
95th percentile per-packet one-way delay: 19.302 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 19.252 ms
Loss rate: 0.00%
```
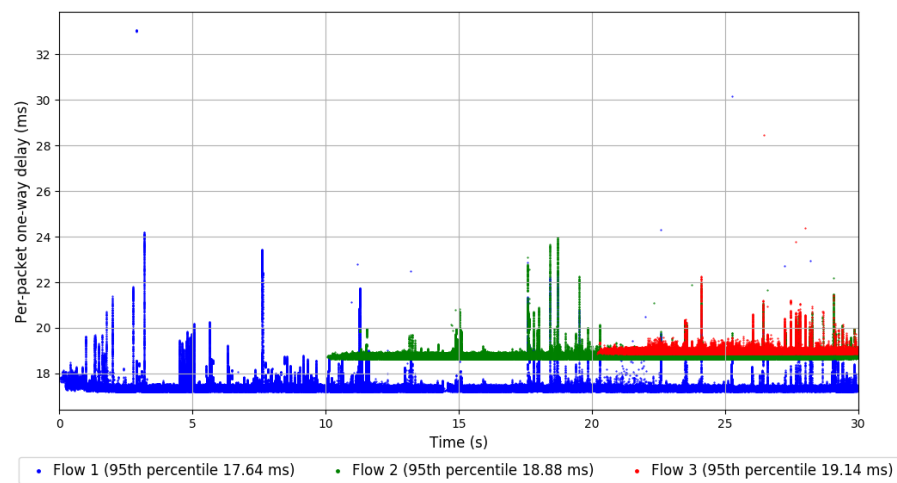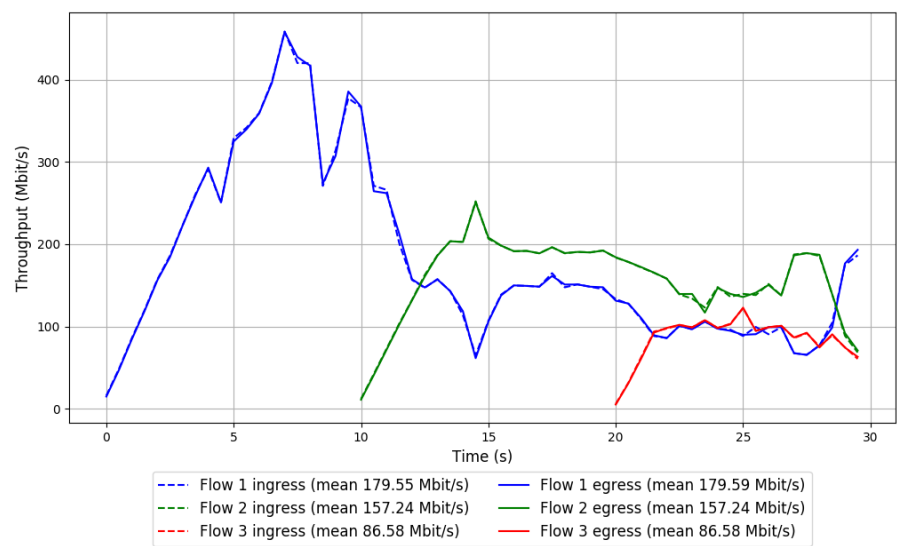
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2017-08-11 11:09:55
End at: 2017-08-11 11:10:25
Local clock offset: 0.605 ms
Remote clock offset: -1.224 ms


# Below is generated by plot.py at 2017-08-11 16:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.59 Mbit/s
95th percentile per-packet one-way delay: 19.169 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.06 Mbit/s
95th percentile per-packet one-way delay: 19.287 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.86 Mbit/s
95th percentile per-packet one-way delay: 19.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.76 Mbit/s
95th percentile per-packet one-way delay: 19.159 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2017-08-11 11:31:43
End at: 2017-08-11 11:32:13
Local clock offset: 0.601 ms
Remote clock offset: -1.107 ms


# Below is generated by plot.py at 2017-08-11 16:09:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.99 Mbit/s
95th percentile per-packet one-way delay: 19.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.06 Mbit/s
95th percentile per-packet one-way delay: 19.372 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 118.02 Mbit/s
95th percentile per-packet one-way delay: 19.273 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.90 Mbit/s
95th percentile per-packet one-way delay: 19.426 ms
Loss rate: 0.00%
```
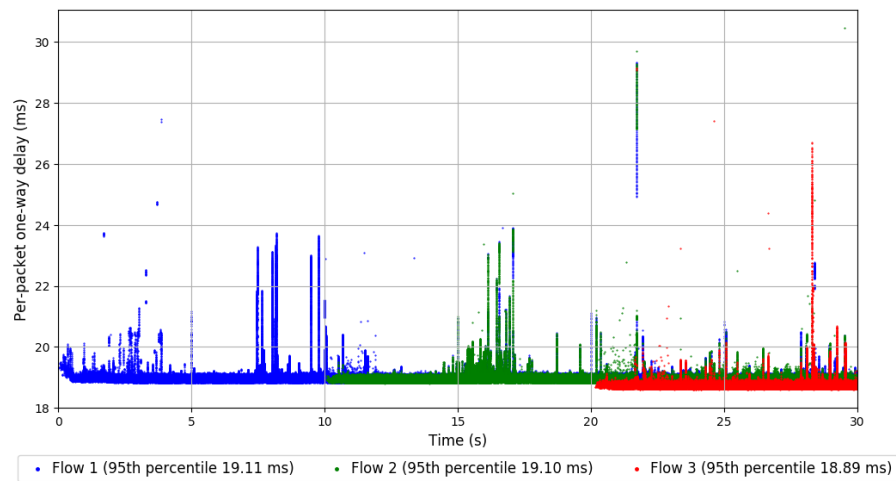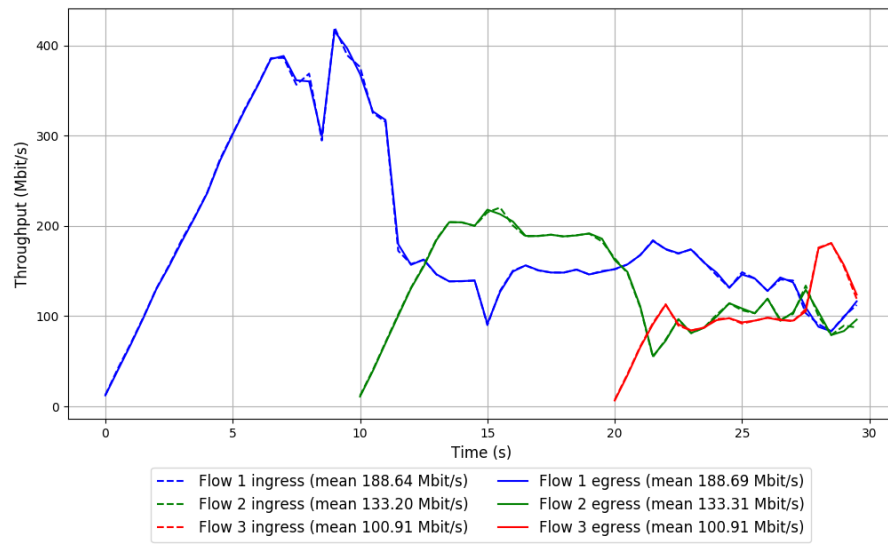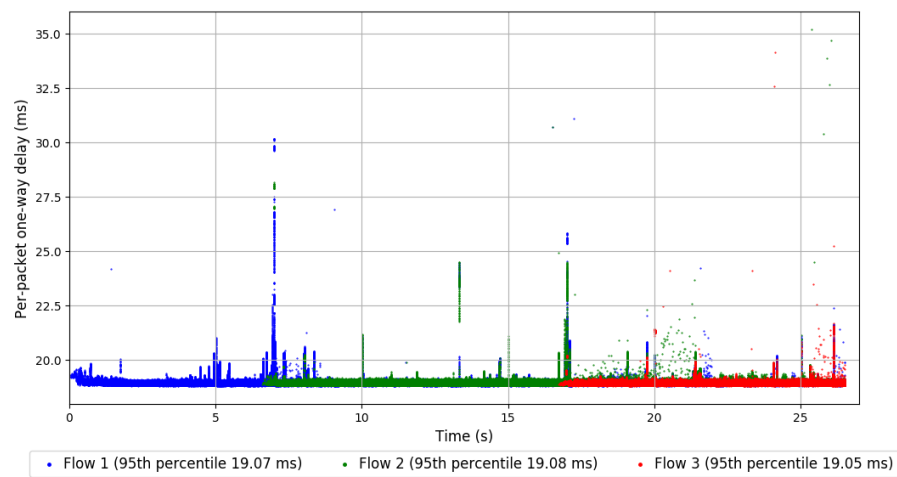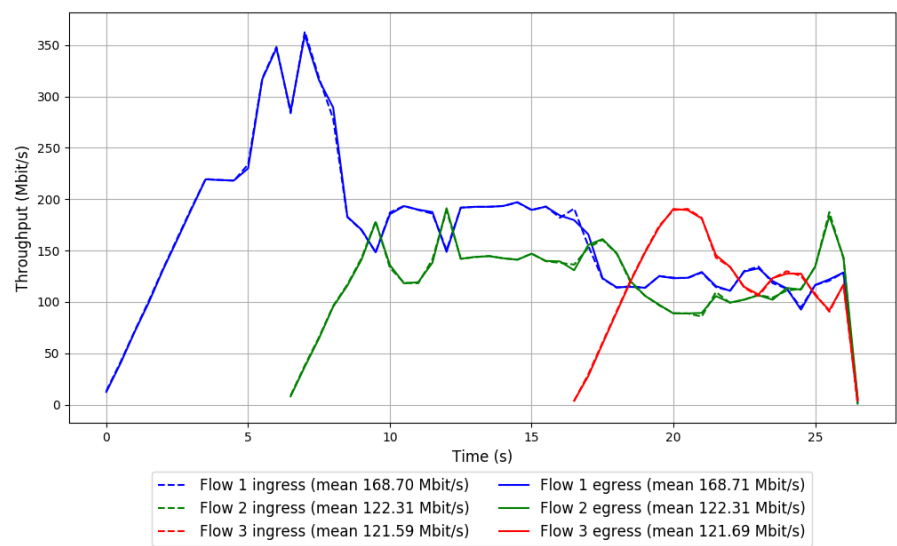
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 182.01 Mbit/s) — Flow 1 egress (mean 182.06 Mbit/s)
Flow 2 ingress (mean 118.00 Mbit/s) — Flow 2 egress (mean 118.02 Mbit/s)
Flow 3 ingress (mean 100.81 Mbit/s) — Flow 3 egress (mean 100.90 Mbit/s)

Flow 1 (95th percentile 19.37 ms)   Flow 2 (95th percentile 19.27 ms)   Flow 3 (95th percentile 19.43 ms)

117

```
Run 8: Statistics of LEDBAT

Start at: 2017-08-11 11:53:02
End at: 2017-08-11 11:53:32
Local clock offset: 0.84 ms
Remote clock offset: -1.195 ms


# Below is generated by plot.py at 2017-08-11 16:10:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.44 Mbit/s
95th percentile per-packet one-way delay: 18.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 17.638 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 157.24 Mbit/s
95th percentile per-packet one-way delay: 18.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 86.58 Mbit/s
95th percentile per-packet one-way delay: 19.137 ms
Loss rate: 0.00%
```
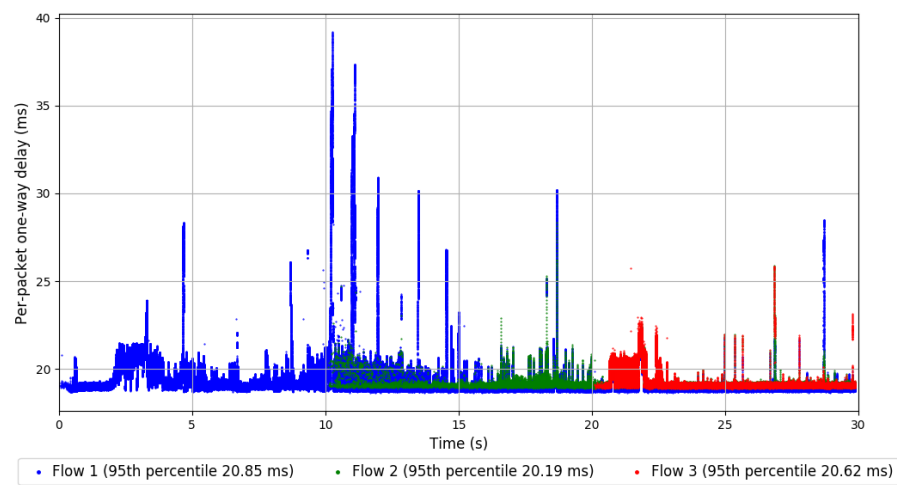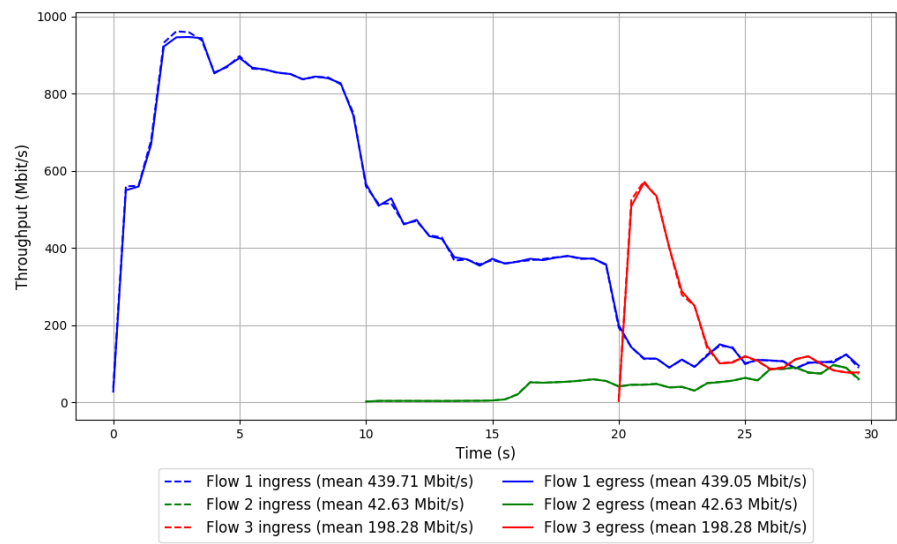
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-08-11 12:14:45
End at: 2017-08-11 12:15:15
Local clock offset: 0.78 ms
Remote clock offset: -1.26 ms

# Below is generated by plot.py at 2017-08-11 16:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.43 Mbit/s
95th percentile per-packet one-way delay: 19.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.69 Mbit/s
95th percentile per-packet one-way delay: 19.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 133.31 Mbit/s
95th percentile per-packet one-way delay: 19.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.91 Mbit/s
95th percentile per-packet one-way delay: 18.892 ms
Loss rate: 0.00%
```
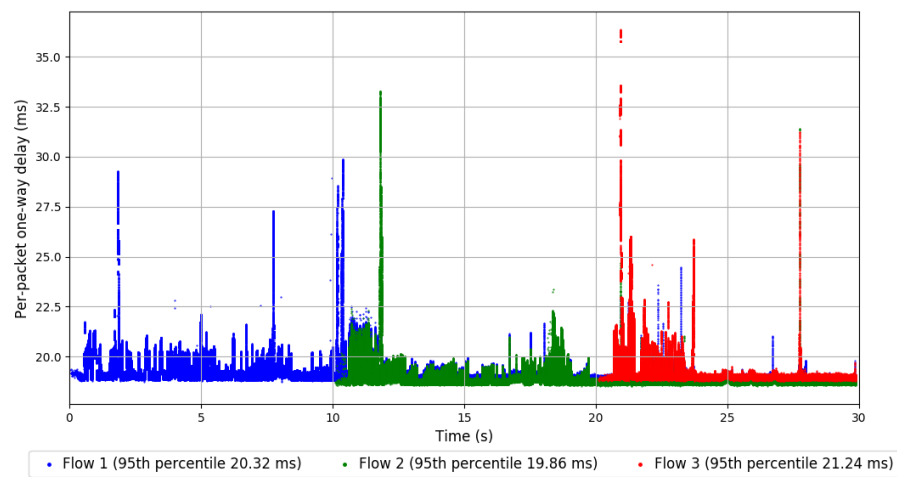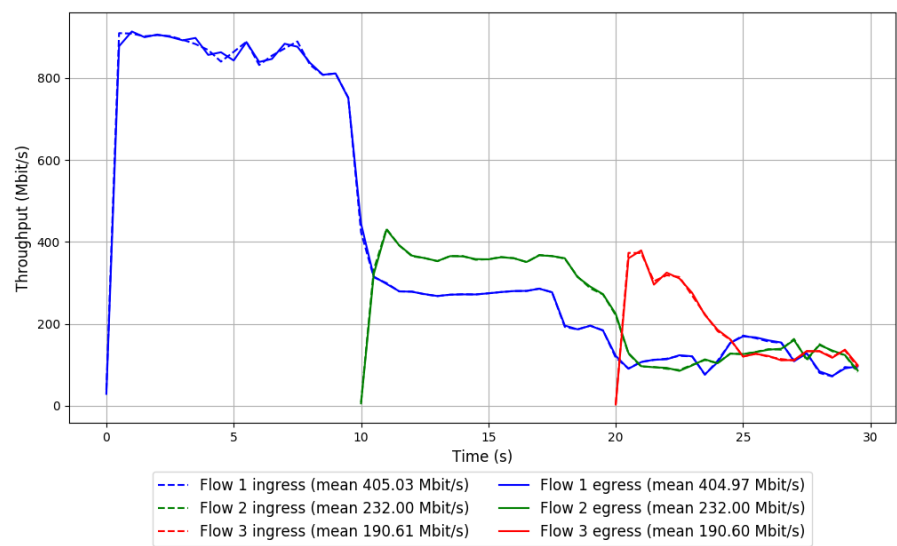
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2017-08-11 12:36:27
End at: 2017-08-11 12:36:57
Local clock offset: 0.755 ms
Remote clock offset: -1.588 ms


# Below is generated by plot.py at 2017-08-11 16:10:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.61 Mbit/s
95th percentile per-packet one-way delay: 19.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.71 Mbit/s
95th percentile per-packet one-way delay: 19.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.31 Mbit/s
95th percentile per-packet one-way delay: 19.079 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.69 Mbit/s
95th percentile per-packet one-way delay: 19.052 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-08-11 09:17:50
End at: 2017-08-11 09:18:20
Local clock offset: 0.358 ms
Remote clock offset: -0.435 ms


# Below is generated by plot.py at 2017-08-11 16:11:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.26 Mbit/s
95th percentile per-packet one-way delay: 20.794 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 439.05 Mbit/s
95th percentile per-packet one-way delay: 20.847 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 20.186 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.28 Mbit/s
95th percentile per-packet one-way delay: 20.622 ms
Loss rate: 0.00%
```
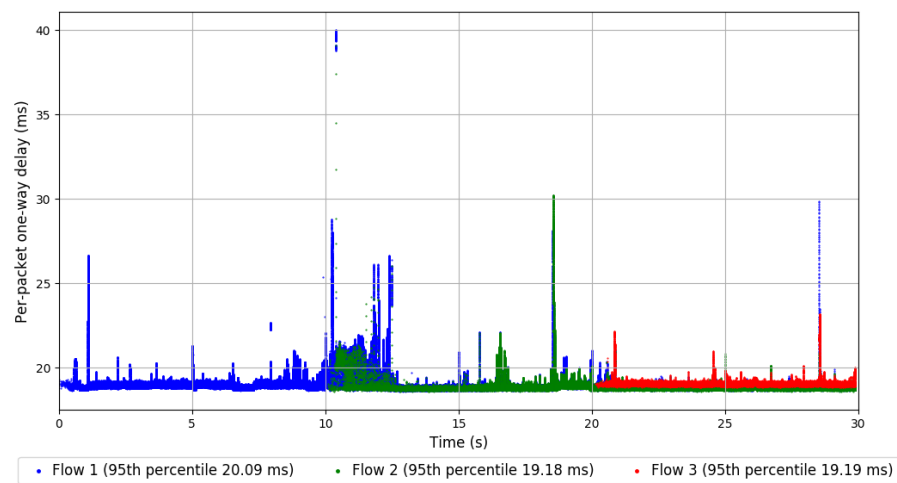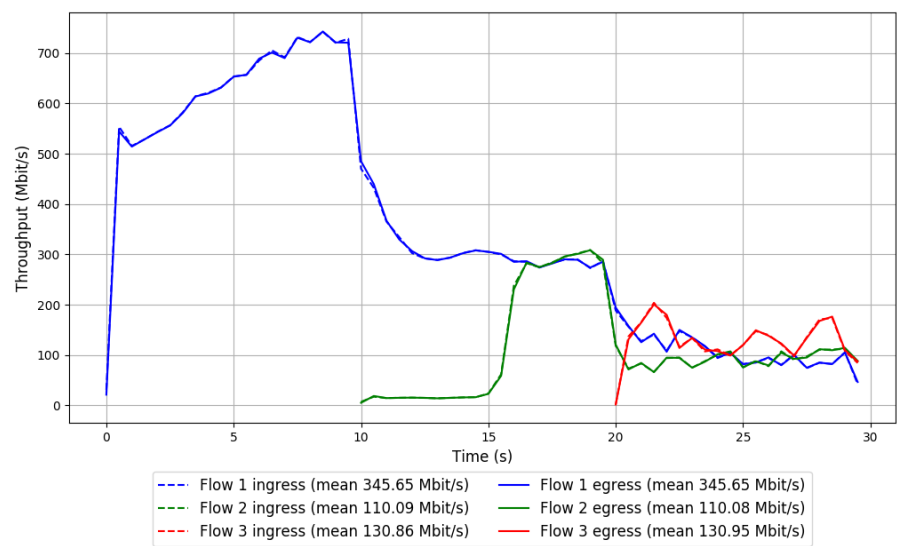
Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 439.71 Mbit/s)   Flow 1 egress (mean 439.05 Mbit/s)
Flow 2 ingress (mean 42.63 Mbit/s)   Flow 2 egress (mean 42.63 Mbit/s)
Flow 3 ingress (mean 198.28 Mbit/s)   Flow 3 egress (mean 198.28 Mbit/s)

Flow 1 (95th percentile 20.85 ms)   Flow 2 (95th percentile 20.19 ms)   Flow 3 (95th percentile 20.62 ms)
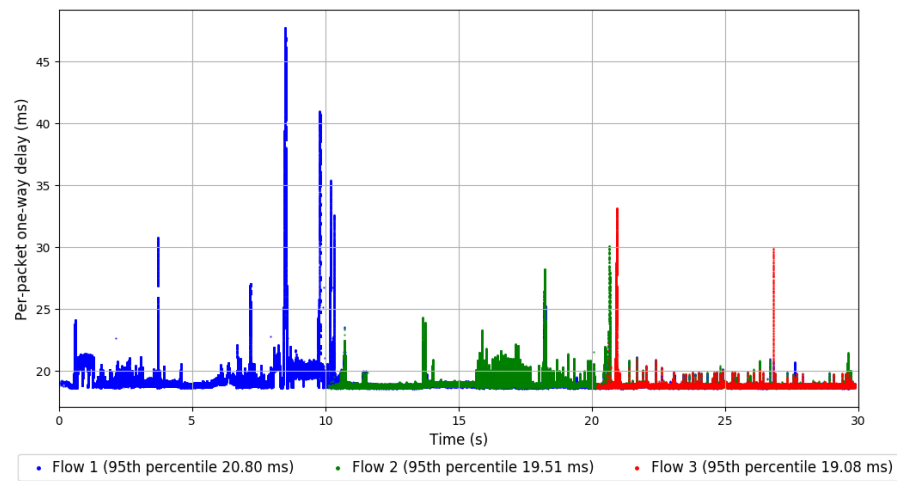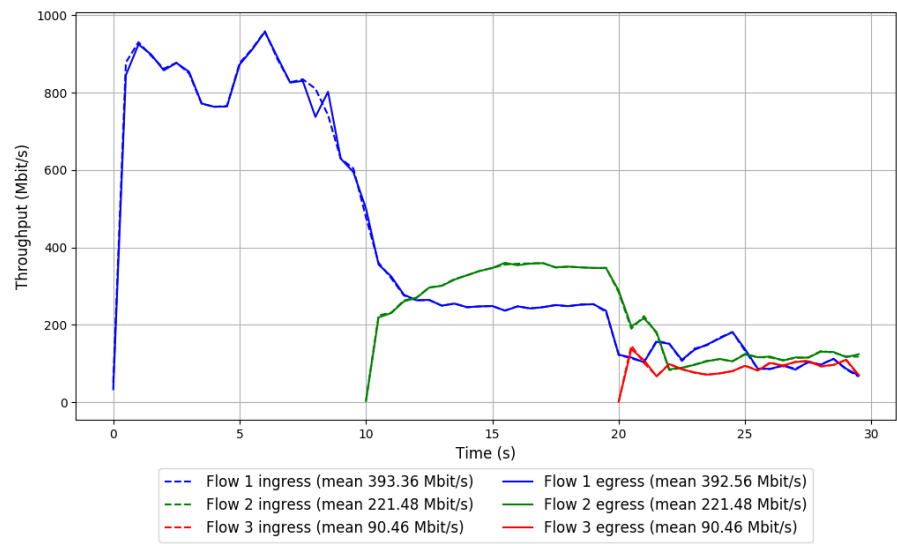
```
Run 2: Statistics of PCC

Start at: 2017-08-11 09:39:17
End at: 2017-08-11 09:39:47
Local clock offset: 0.372 ms
Remote clock offset: -0.807 ms


# Below is generated by plot.py at 2017-08-11 16:12:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 621.18 Mbit/s
95th percentile per-packet one-way delay: 20.320 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 404.97 Mbit/s
95th percentile per-packet one-way delay: 20.319 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 232.00 Mbit/s
95th percentile per-packet one-way delay: 19.857 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.60 Mbit/s
95th percentile per-packet one-way delay: 21.237 ms
Loss rate: 0.00%
```
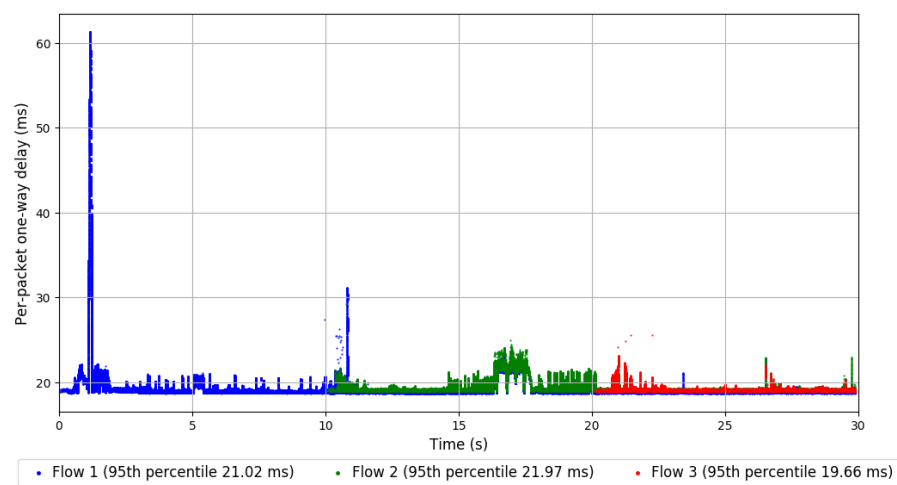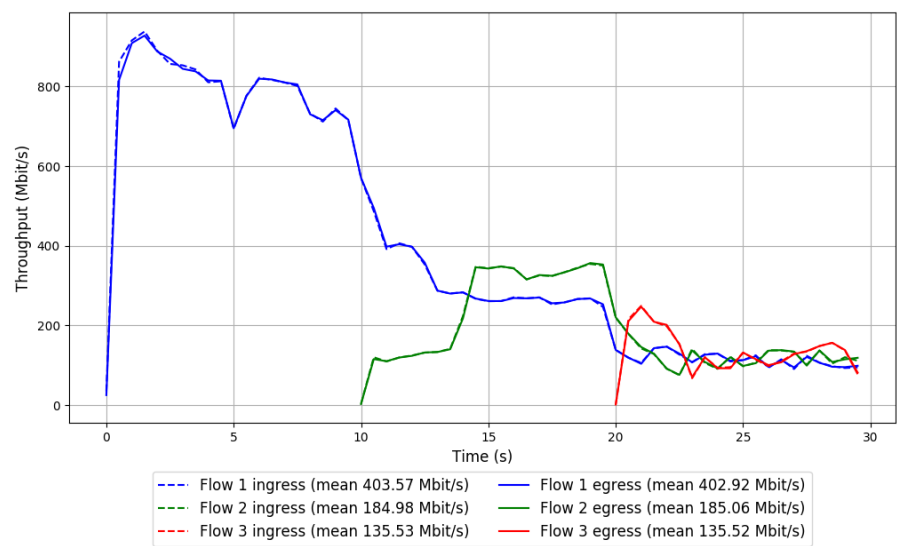
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-08-11 10:00:50
End at: 2017-08-11 10:01:20
Local clock offset: 0.46 ms
Remote clock offset: -0.95 ms


# Below is generated by plot.py at 2017-08-11 16:12:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.16 Mbit/s
95th percentile per-packet one-way delay: 19.954 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 345.65 Mbit/s
95th percentile per-packet one-way delay: 20.092 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.08 Mbit/s
95th percentile per-packet one-way delay: 19.181 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 130.95 Mbit/s
95th percentile per-packet one-way delay: 19.187 ms
Loss rate: 0.00%
```
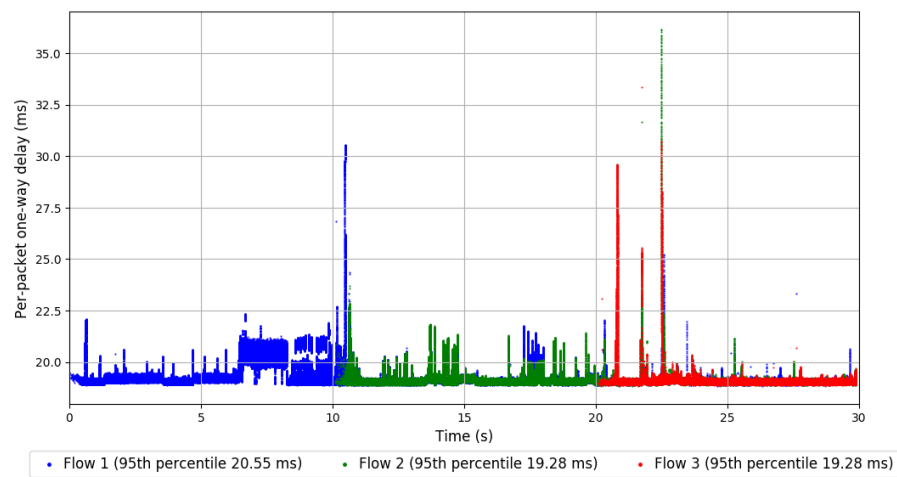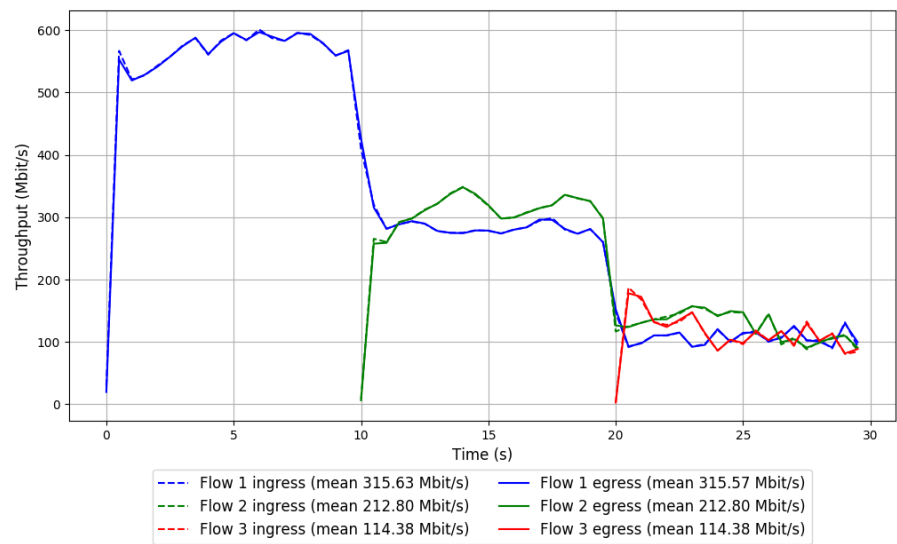
Run 3: Report of PCC — Data Link

```
Run 4: Statistics of PCC

Start at: 2017-08-11 10:22:25
End at: 2017-08-11 10:22:55
Local clock offset: 0.479 ms
Remote clock offset: -1.173 ms


# Below is generated by plot.py at 2017-08-11 16:13:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.66 Mbit/s
95th percentile per-packet one-way delay: 20.643 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 392.56 Mbit/s
95th percentile per-packet one-way delay: 20.799 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 221.48 Mbit/s
95th percentile per-packet one-way delay: 19.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.46 Mbit/s
95th percentile per-packet one-way delay: 19.080 ms
Loss rate: 0.00%
```
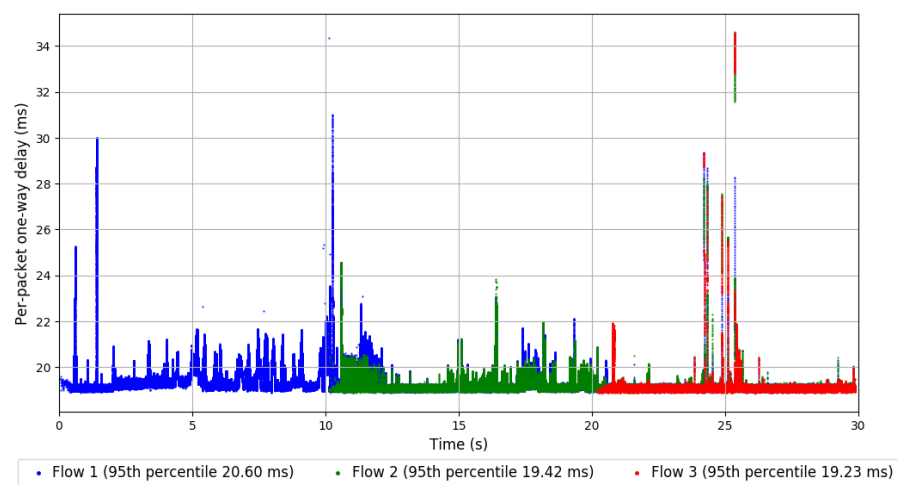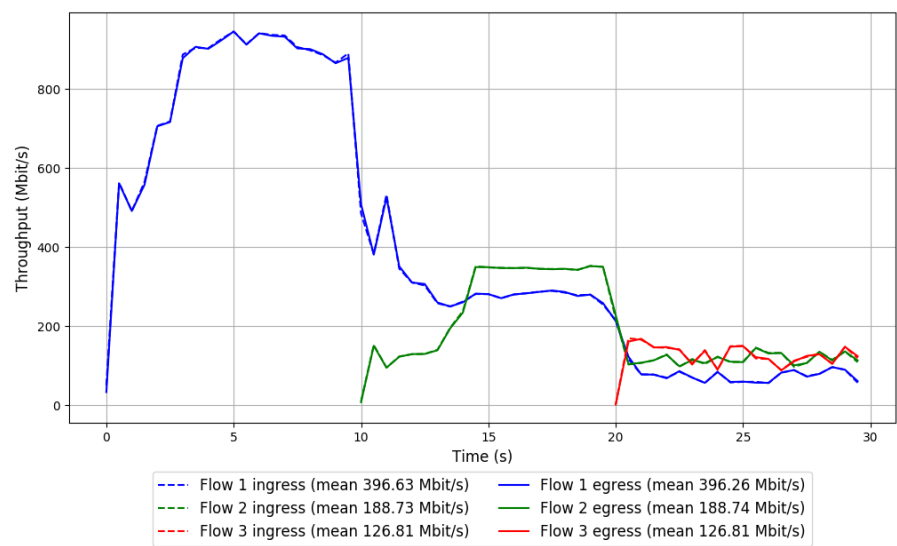
Run 4: Report of PCC — Data Link

```
Run 5: Statistics of PCC

Start at: 2017-08-11 10:44:06
End at: 2017-08-11 10:44:36
Local clock offset: 0.45 ms
Remote clock offset: -1.258 ms


# Below is generated by plot.py at 2017-08-11 16:13:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 569.90 Mbit/s
95th percentile per-packet one-way delay: 21.239 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 402.92 Mbit/s
95th percentile per-packet one-way delay: 21.023 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 185.06 Mbit/s
95th percentile per-packet one-way delay: 21.971 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.52 Mbit/s
95th percentile per-packet one-way delay: 19.658 ms
Loss rate: 0.00%
```

Run 5: Report of PCC — Data Link

```
Run 6: Statistics of PCC

Start at: 2017-08-11 11:05:30
End at: 2017-08-11 11:06:00
Local clock offset: 0.612 ms
Remote clock offset: -1.167 ms


# Below is generated by plot.py at 2017-08-11 16:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.13 Mbit/s
95th percentile per-packet one-way delay: 20.413 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 315.57 Mbit/s
95th percentile per-packet one-way delay: 20.548 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 212.80 Mbit/s
95th percentile per-packet one-way delay: 19.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 114.38 Mbit/s
95th percentile per-packet one-way delay: 19.277 ms
Loss rate: 0.00%
```
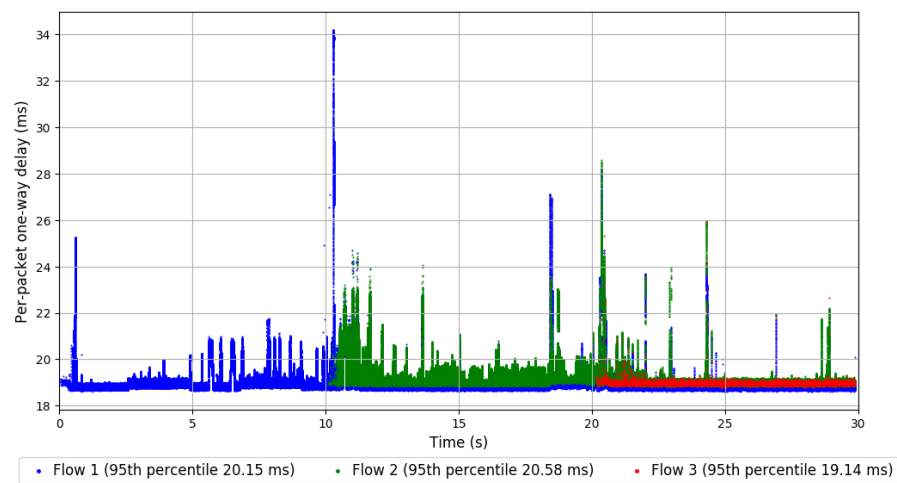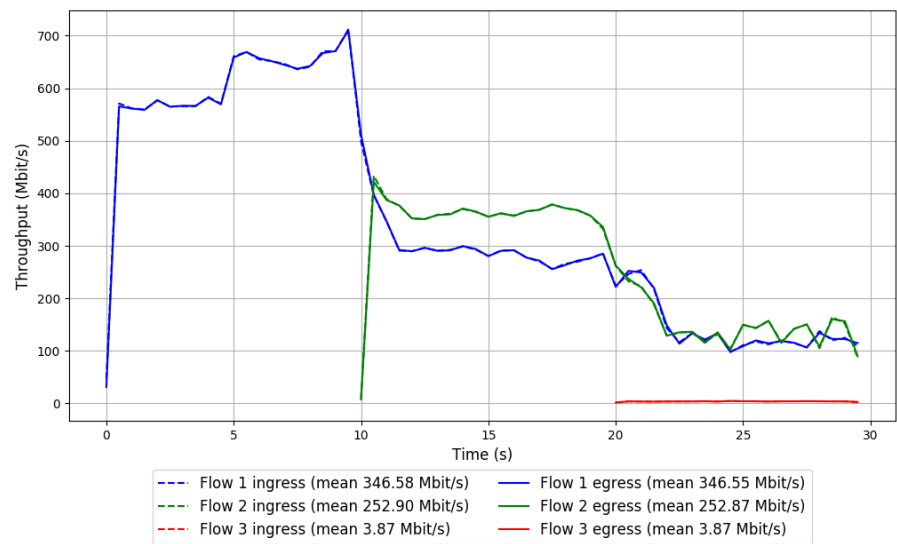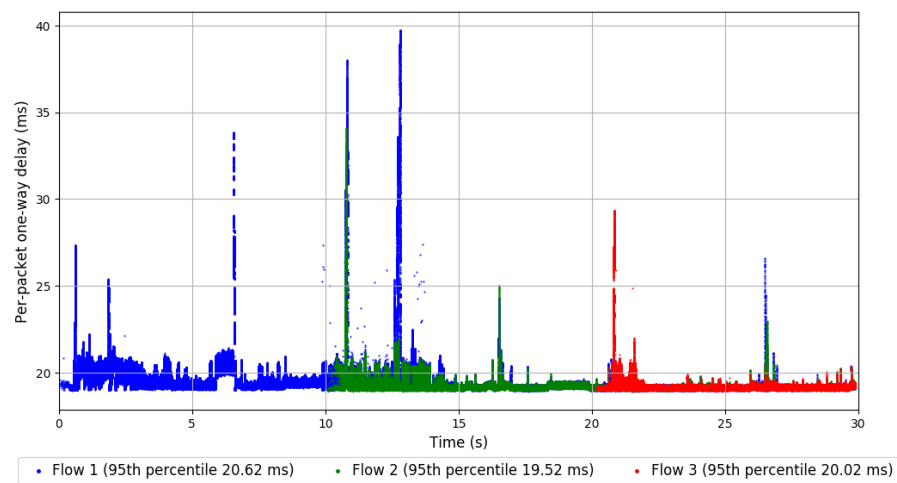
Run 6: Report of PCC — Data Link

```
Run 7: Statistics of PCC

Start at: 2017-08-11 11:27:12
End at: 2017-08-11 11:27:42
Local clock offset: 0.567 ms
Remote clock offset: -1.184 ms


# Below is generated by plot.py at 2017-08-11 16:14:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.49 Mbit/s
95th percentile per-packet one-way delay: 20.417 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 396.26 Mbit/s
95th percentile per-packet one-way delay: 20.602 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 188.74 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.81 Mbit/s
95th percentile per-packet one-way delay: 19.235 ms
Loss rate: 0.00%
```
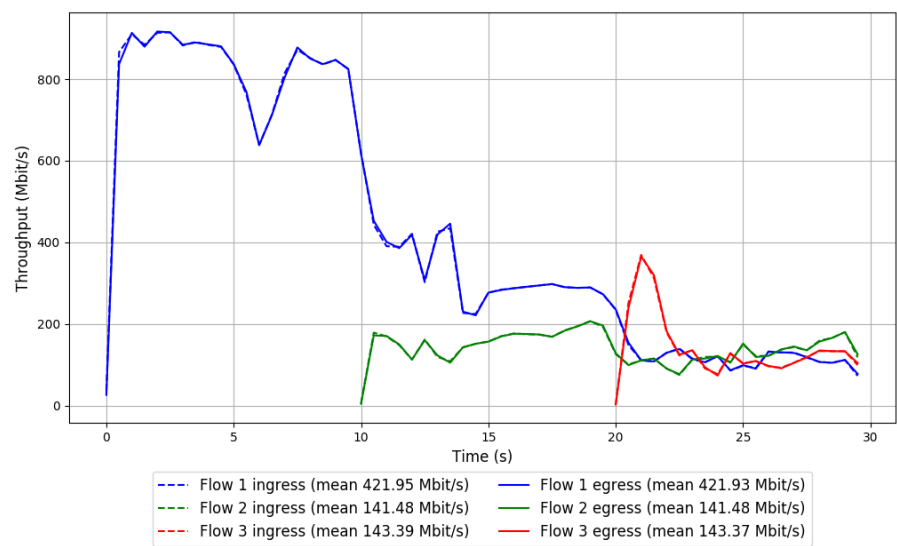
Run 7: Report of PCC — Data Link

```
Run 8: Statistics of PCC

Start at: 2017-08-11 11:48:40
End at: 2017-08-11 11:49:10
Local clock offset: 0.805 ms
Remote clock offset: -1.14 ms


# Below is generated by plot.py at 2017-08-11 16:15:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.42 Mbit/s
95th percentile per-packet one-way delay: 20.262 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 346.55 Mbit/s
95th percentile per-packet one-way delay: 20.152 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 252.87 Mbit/s
95th percentile per-packet one-way delay: 20.576 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 19.143 ms
Loss rate: 0.00%
```
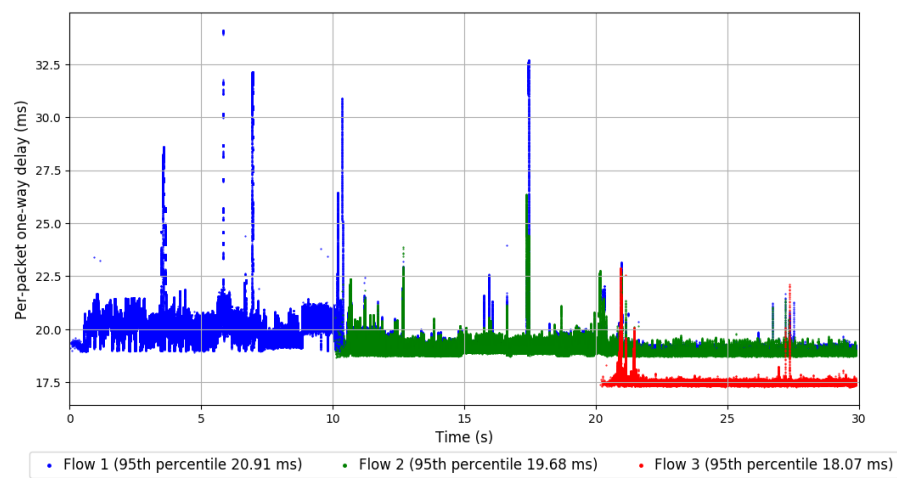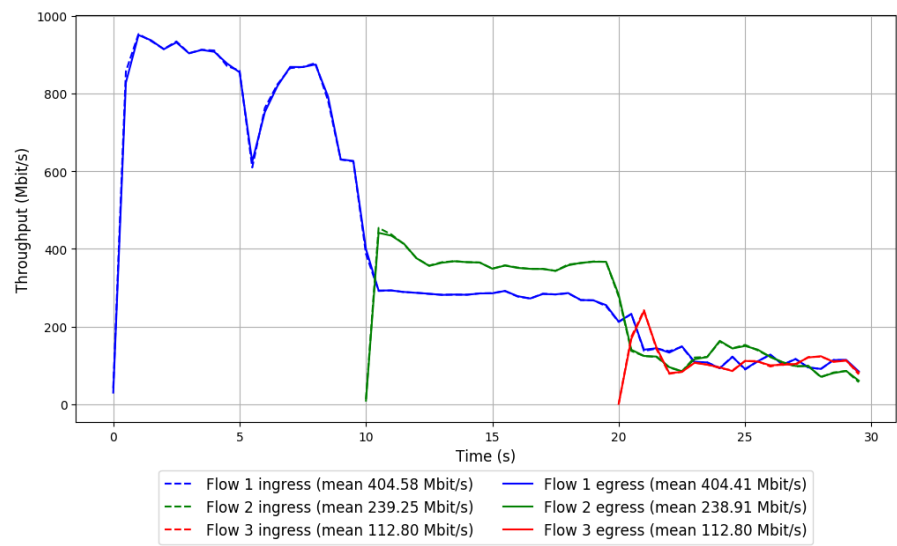
Run 8: Report of PCC — Data Link

Flow 1 ingress (mean 346.58 Mbit/s)   Flow 1 egress (mean 346.55 Mbit/s)
Flow 2 ingress (mean 252.90 Mbit/s)   Flow 2 egress (mean 252.87 Mbit/s)
Flow 3 ingress (mean 3.87 Mbit/s)   Flow 3 egress (mean 3.87 Mbit/s)

Flow 1 (95th percentile 20.15 ms)   Flow 2 (95th percentile 20.58 ms)   Flow 3 (95th percentile 19.14 ms)

```
Run 9: Statistics of PCC

Start at: 2017-08-11 12:10:16
End at: 2017-08-11 12:10:46
Local clock offset: 0.714 ms
Remote clock offset: -1.132 ms


# Below is generated by plot.py at 2017-08-11 16:15:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.60 Mbit/s
95th percentile per-packet one-way delay: 20.523 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 421.93 Mbit/s
95th percentile per-packet one-way delay: 20.616 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.48 Mbit/s
95th percentile per-packet one-way delay: 19.520 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.37 Mbit/s
95th percentile per-packet one-way delay: 20.021 ms
Loss rate: 0.01%
```

Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 421.95 Mbit/s) --- Flow 1 egress (mean 421.93 Mbit/s)
Flow 2 ingress (mean 141.48 Mbit/s) --- Flow 2 egress (mean 141.48 Mbit/s)
Flow 3 ingress (mean 143.39 Mbit/s) --- Flow 3 egress (mean 143.37 Mbit/s)

Flow 1 (95th percentile 20.62 ms)   Flow 2 (95th percentile 19.52 ms)   Flow 3 (95th percentile 20.02 ms)

```
Run 10: Statistics of PCC

Start at: 2017-08-11 12:31:55
End at: 2017-08-11 12:32:25
Local clock offset: 0.669 ms
Remote clock offset: -1.49 ms


# Below is generated by plot.py at 2017-08-11 16:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 599.57 Mbit/s
95th percentile per-packet one-way delay: 20.804 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 404.41 Mbit/s
95th percentile per-packet one-way delay: 20.907 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 238.91 Mbit/s
95th percentile per-packet one-way delay: 19.677 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 112.80 Mbit/s
95th percentile per-packet one-way delay: 18.067 ms
Loss rate: 0.00%
```

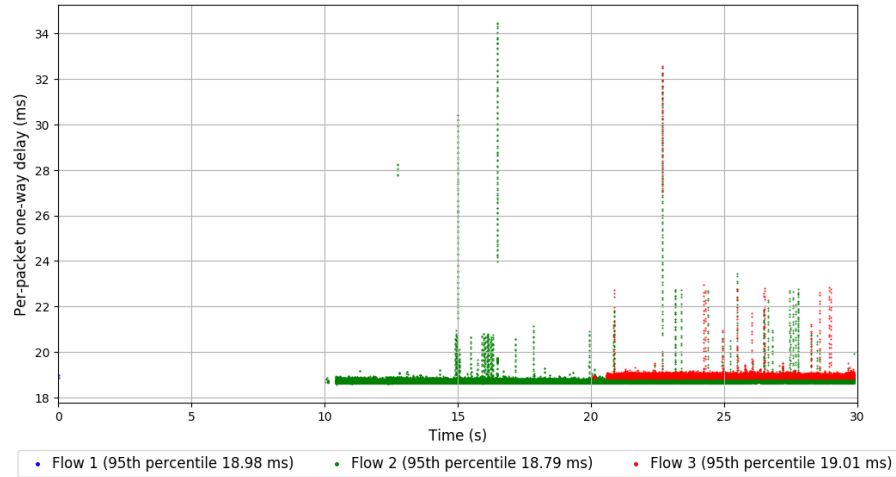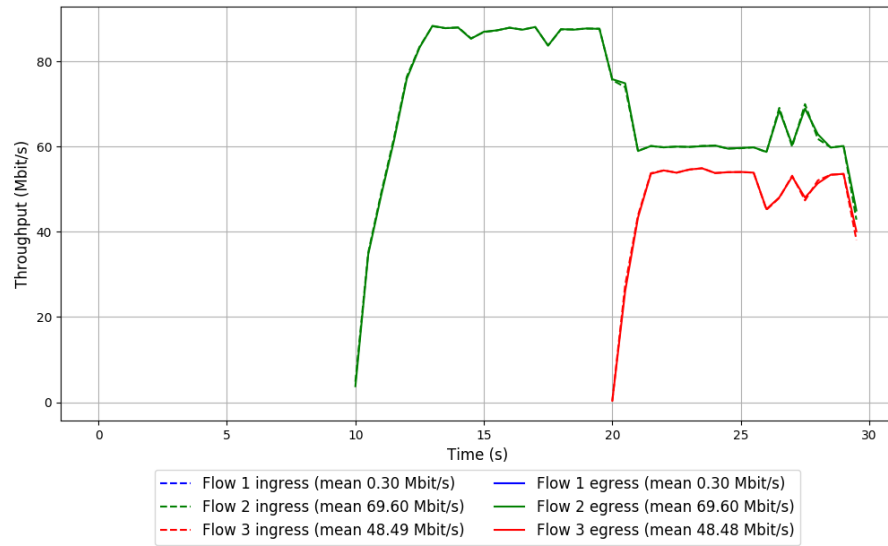## Run 10: Report of PCC — Data Link

143

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 09:35:17
End at: 2017-08-11 09:35:47
Local clock offset: 0.373 ms
Remote clock offset: -0.744 ms
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 09:56:51
End at: 2017-08-11 09:57:21
Local clock offset: 0.451 ms
Remote clock offset: -0.855 ms


# Below is generated by plot.py at 2017-08-11 16:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.60 Mbit/s
95th percentile per-packet one-way delay: 19.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 17.276 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 17.419 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.74 Mbit/s
95th percentile per-packet one-way delay: 19.116 ms
Loss rate: 0.00%
```
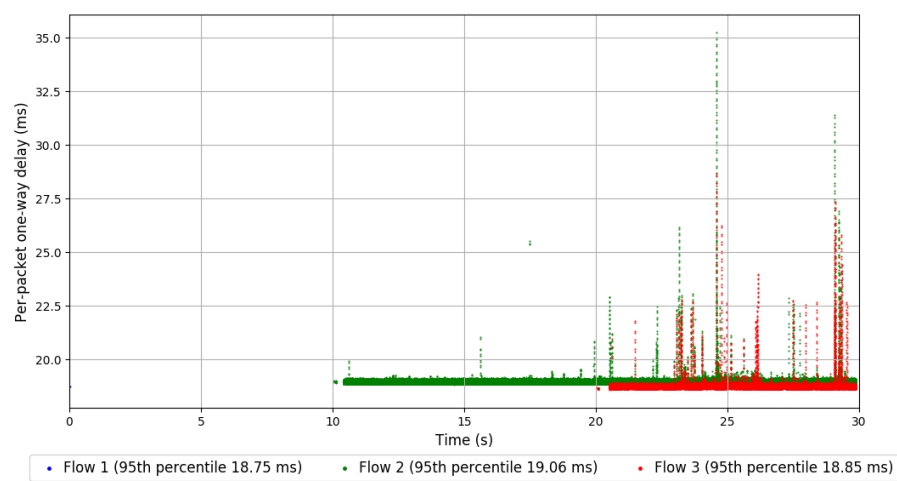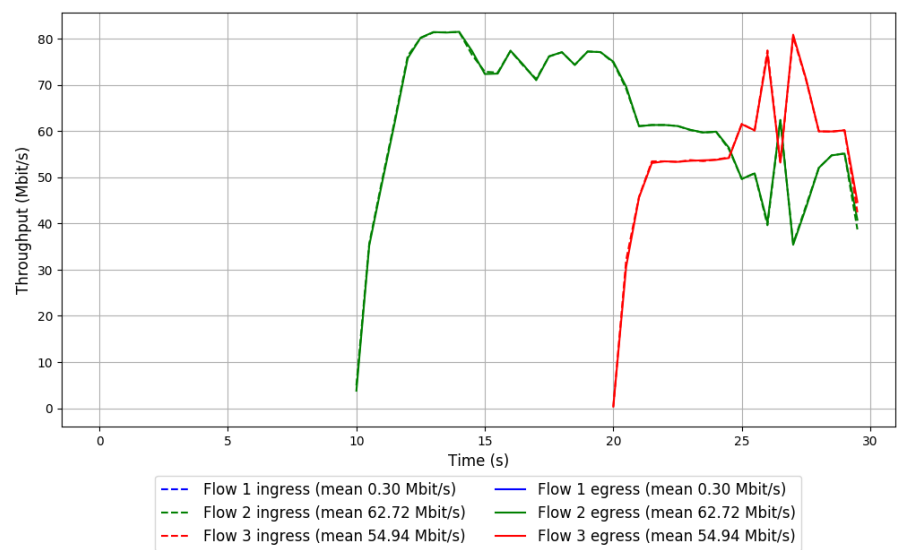
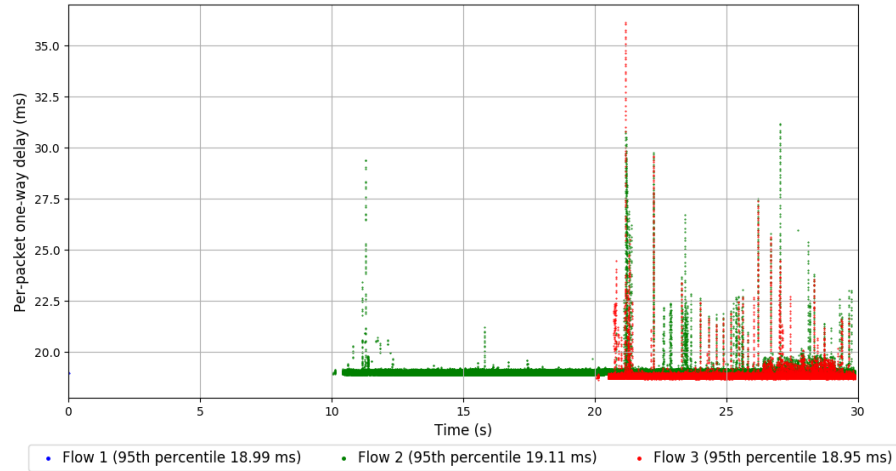Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 10:18:28
End at: 2017-08-11 10:18:58
Local clock offset: 0.482 ms
Remote clock offset: -1.144 ms


# Below is generated by plot.py at 2017-08-11 16:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.16 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.977 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 18.793 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.48 Mbit/s
95th percentile per-packet one-way delay: 19.012 ms
Loss rate: 0.00%
```
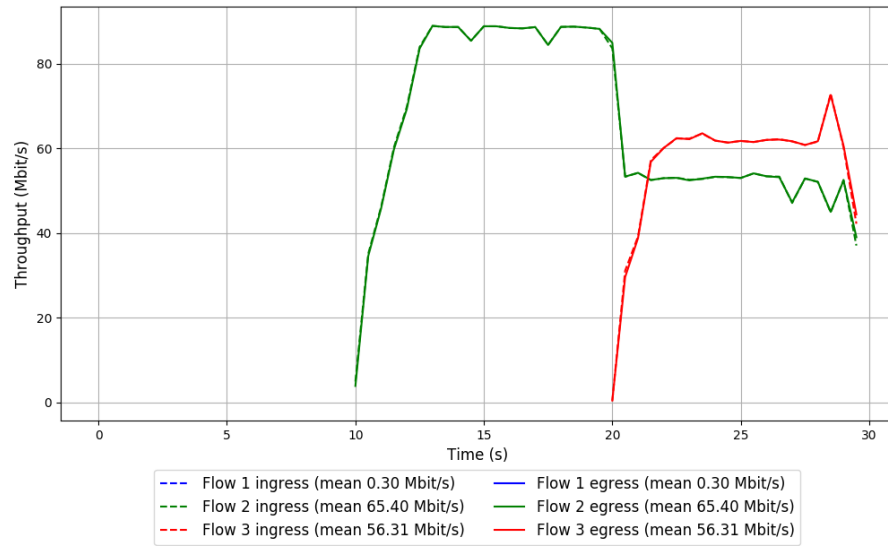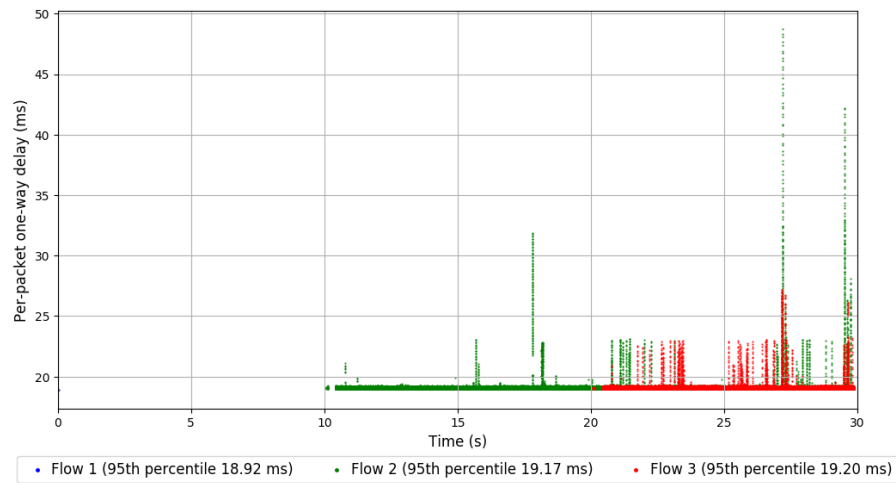
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.30 Mbit/s)   Flow 1 egress (mean 0.30 Mbit/s)
Flow 2 ingress (mean 69.60 Mbit/s)   Flow 2 egress (mean 69.60 Mbit/s)
Flow 3 ingress (mean 48.49 Mbit/s)   Flow 3 egress (mean 48.48 Mbit/s)

Flow 1 (95th percentile 18.98 ms)   Flow 2 (95th percentile 18.79 ms)   Flow 3 (95th percentile 19.01 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 10:40:13
End at: 2017-08-11 10:40:43
Local clock offset: 0.541 ms
Remote clock offset: -1.253 ms


# Below is generated by plot.py at 2017-08-11 16:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.78 Mbit/s
95th percentile per-packet one-way delay: 19.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.746 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.72 Mbit/s
95th percentile per-packet one-way delay: 19.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.94 Mbit/s
95th percentile per-packet one-way delay: 18.848 ms
Loss rate: 0.00%
```
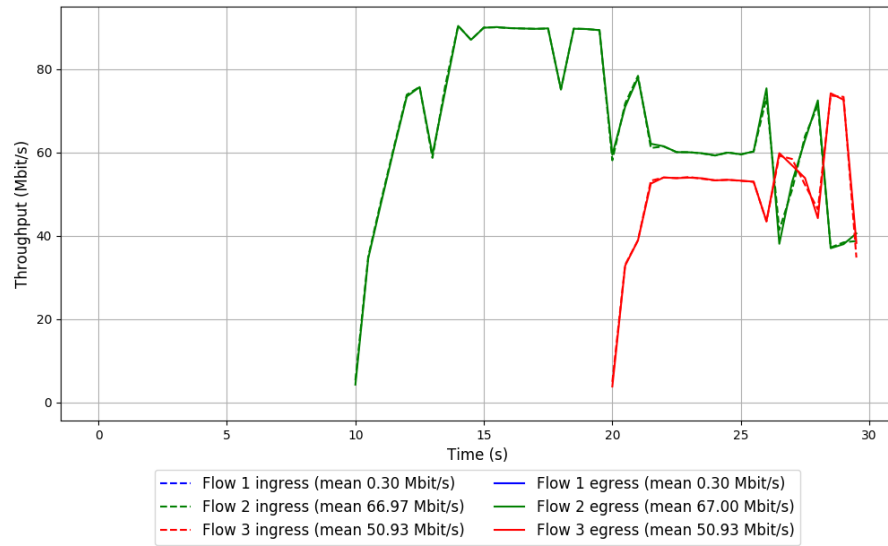
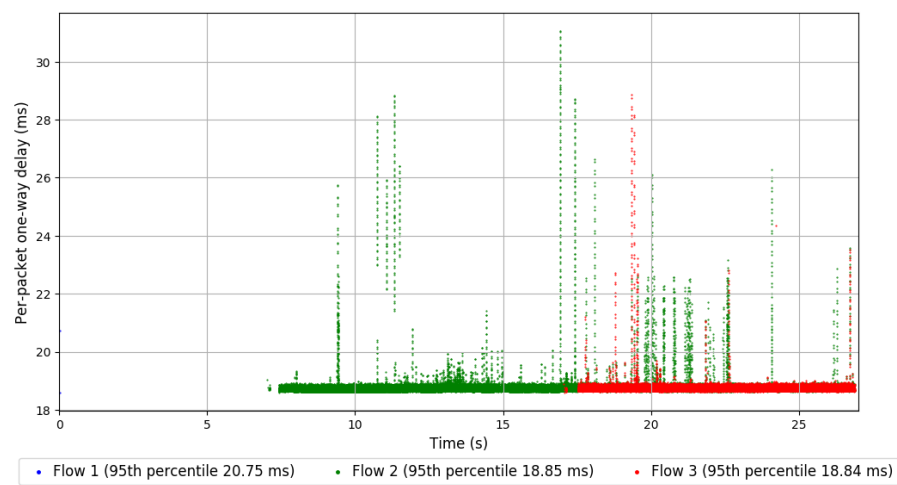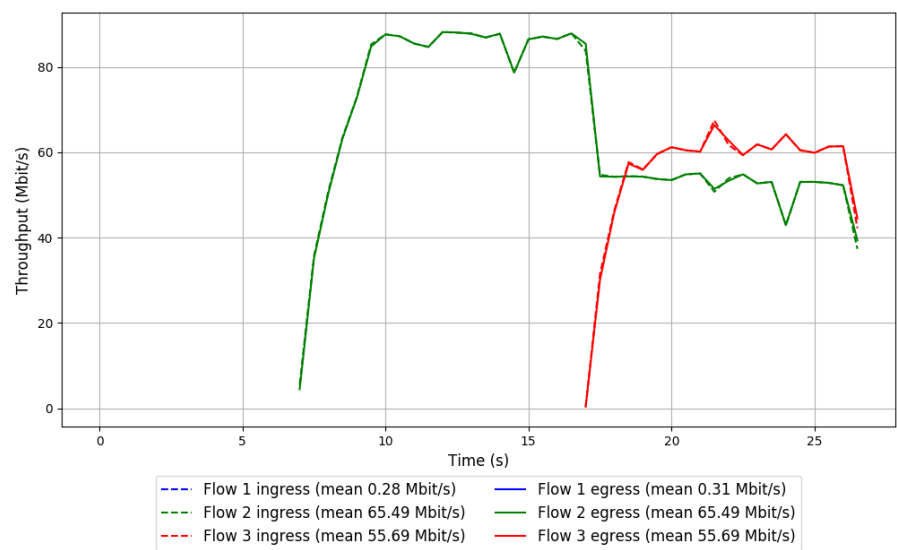Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 11:01:34
End at: 2017-08-11 11:02:04
Local clock offset: 0.508 ms
Remote clock offset: -1.278 ms


# Below is generated by plot.py at 2017-08-11 16:16:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 19.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.987 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.31 Mbit/s
95th percentile per-packet one-way delay: 18.953 ms
Loss rate: 0.00%
```
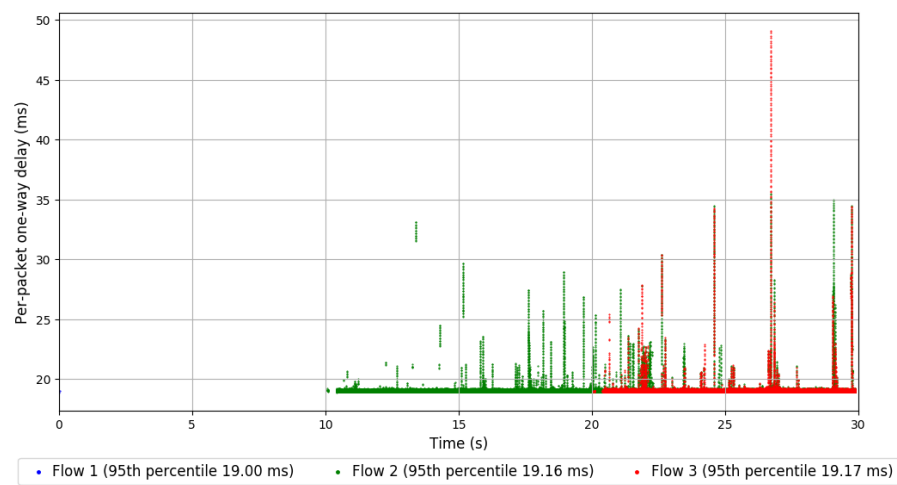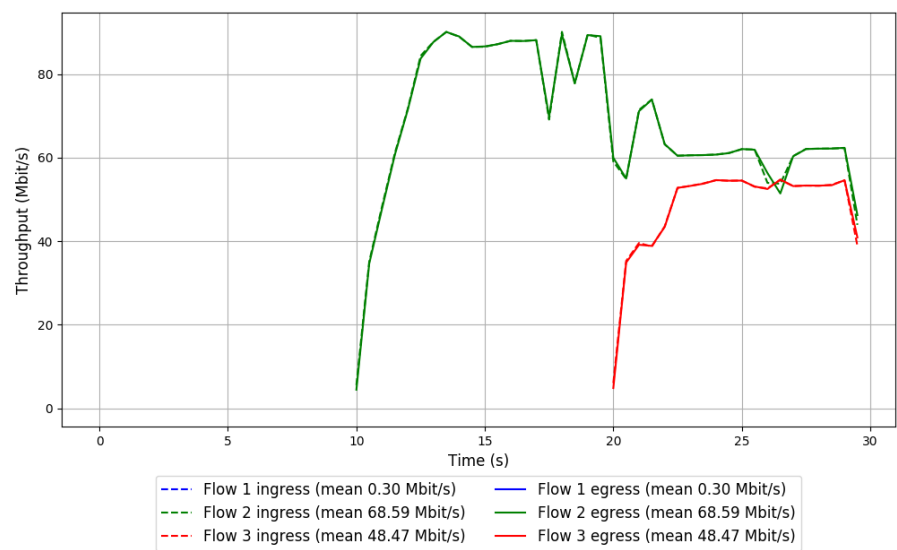
Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 0.30 Mbit/s) ——— Flow 1 egress (mean 0.30 Mbit/s)
- - - Flow 2 ingress (mean 65.40 Mbit/s) ——— Flow 2 egress (mean 65.40 Mbit/s)
- - - Flow 3 ingress (mean 56.31 Mbit/s) ——— Flow 3 egress (mean 56.31 Mbit/s)

- Flow 1 (95th percentile 18.99 ms)   • Flow 2 (95th percentile 19.11 ms)   • Flow 3 (95th percentile 18.95 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 11:23:17
End at: 2017-08-11 11:23:47
Local clock offset: 0.552 ms
Remote clock offset: -1.121 ms

# Below is generated by plot.py at 2017-08-11 16:16:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.26 Mbit/s
95th percentile per-packet one-way delay: 19.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.00 Mbit/s
95th percentile per-packet one-way delay: 19.168 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.93 Mbit/s
95th percentile per-packet one-way delay: 19.202 ms
Loss rate: 0.00%
```
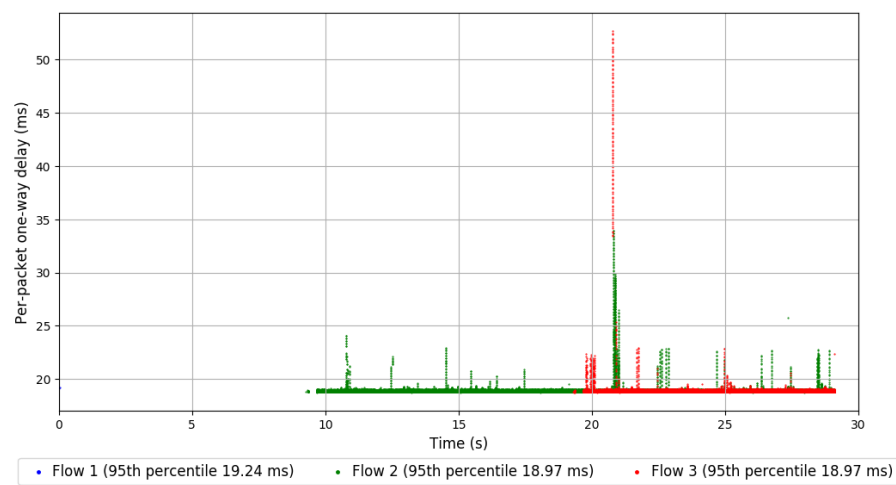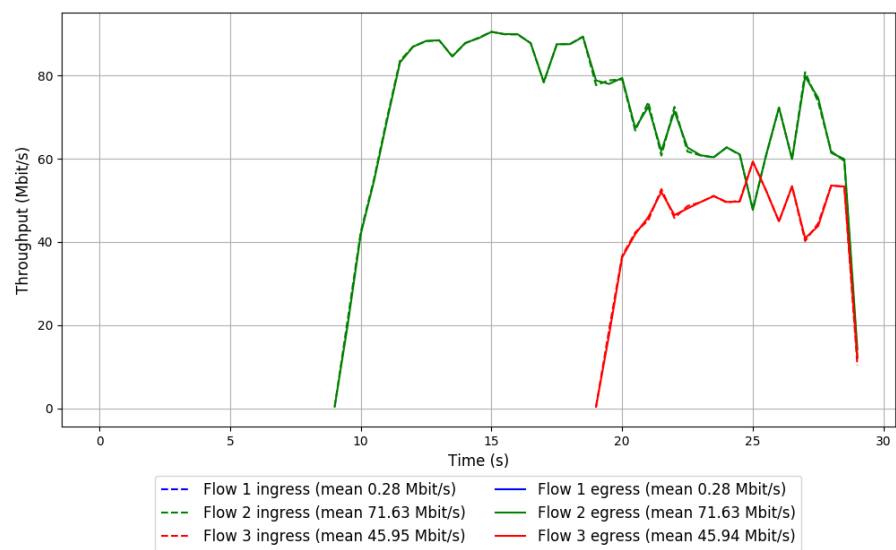
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.30 Mbit/s)   Flow 1 egress (mean 0.30 Mbit/s)
Flow 2 ingress (mean 66.97 Mbit/s)   Flow 2 egress (mean 67.00 Mbit/s)
Flow 3 ingress (mean 50.93 Mbit/s)   Flow 3 egress (mean 50.93 Mbit/s)

Flow 1 (95th percentile 18.92 ms)   Flow 2 (95th percentile 19.17 ms)   Flow 3 (95th percentile 19.20 ms)

155

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 11:44:45
End at: 2017-08-11 11:45:15
Local clock offset: 0.784 ms
Remote clock offset: -1.169 ms


# Below is generated by plot.py at 2017-08-11 16:17:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.76 Mbit/s
95th percentile per-packet one-way delay: 18.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 20.745 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.49 Mbit/s
95th percentile per-packet one-way delay: 18.847 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.69 Mbit/s
95th percentile per-packet one-way delay: 18.839 ms
Loss rate: 0.00%
```
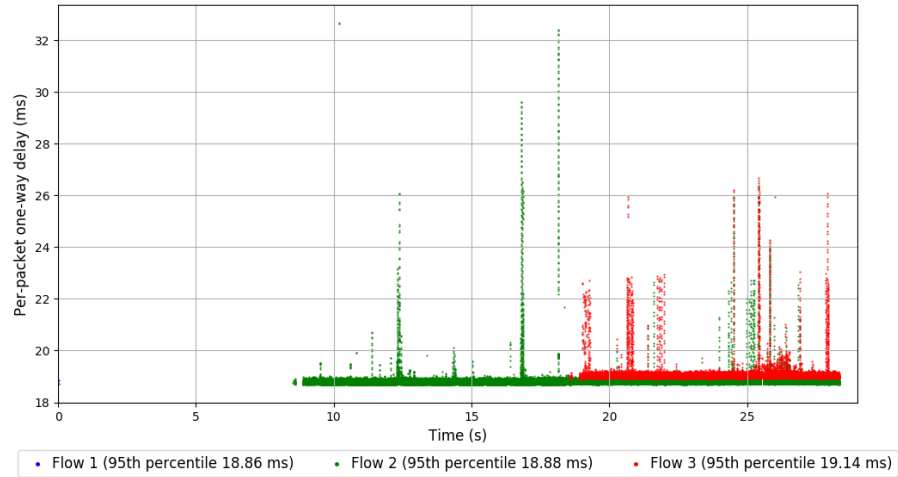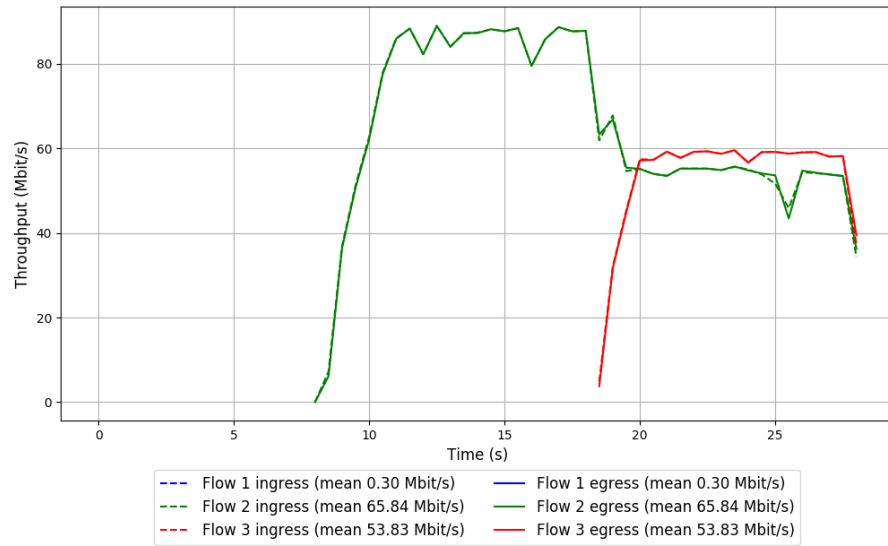
Run 7: Report of QUIC Cubic — Data Link

157

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 12:06:20
End at: 2017-08-11 12:06:50
Local clock offset: 0.793 ms
Remote clock offset: -1.126 ms


# Below is generated by plot.py at 2017-08-11 16:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.56 Mbit/s
95th percentile per-packet one-way delay: 19.163 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 19.002 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.59 Mbit/s
95th percentile per-packet one-way delay: 19.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.47 Mbit/s
95th percentile per-packet one-way delay: 19.168 ms
Loss rate: 0.01%
```
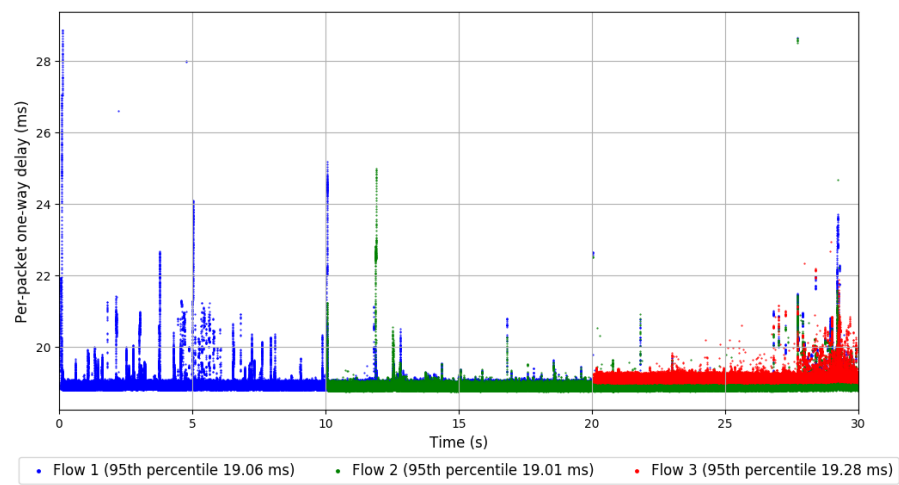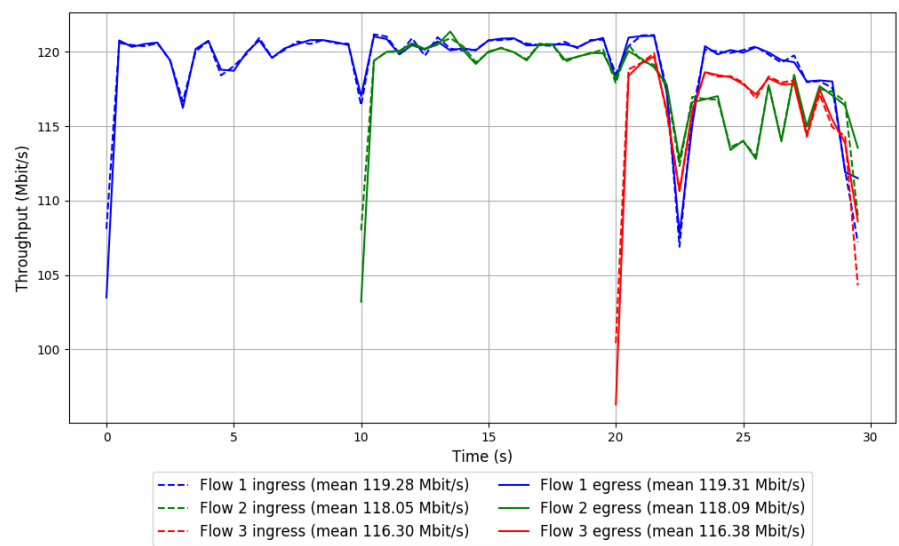
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 12:27:56
End at: 2017-08-11 12:28:26
Local clock offset: 0.685 ms
Remote clock offset: -1.457 ms


# Below is generated by plot.py at 2017-08-11 16:17:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.35 Mbit/s
95th percentile per-packet one-way delay: 18.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 19.243 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.63 Mbit/s
95th percentile per-packet one-way delay: 18.966 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.94 Mbit/s
95th percentile per-packet one-way delay: 18.971 ms
Loss rate: 0.01%
```
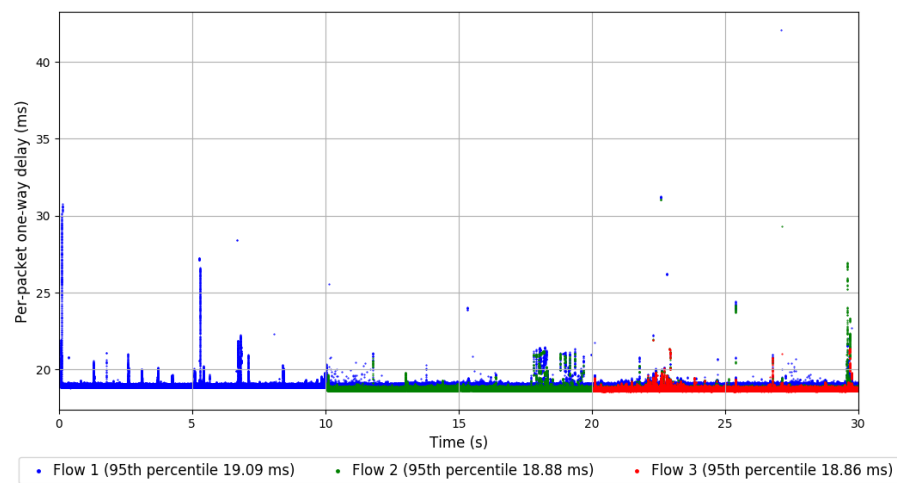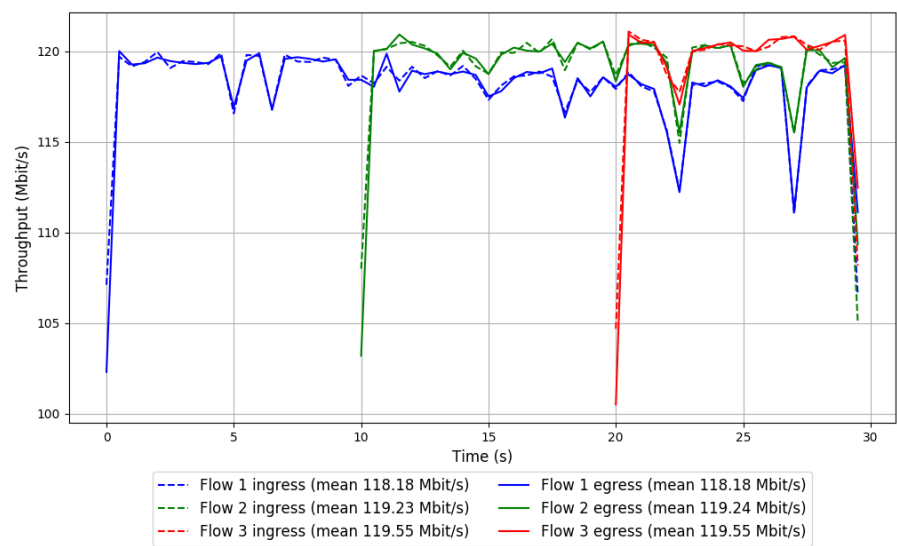
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 12:49:34
End at: 2017-08-11 12:50:04
Local clock offset: 0.655 ms
Remote clock offset: -1.682 ms


# Below is generated by plot.py at 2017-08-11 16:17:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.76 Mbit/s
95th percentile per-packet one-way delay: 19.053 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 18.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of Saturator

Start at: 2017-08-11 09:36:32
End at: 2017-08-11 09:37:02
Local clock offset: 0.284 ms
Remote clock offset: -0.696 ms


# Below is generated by plot.py at 2017-08-11 16:17:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.51 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 119.31 Mbit/s
95th percentile per-packet one-way delay: 19.056 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 118.09 Mbit/s
95th percentile per-packet one-way delay: 19.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 116.38 Mbit/s
95th percentile per-packet one-way delay: 19.277 ms
Loss rate: 0.00%
```

Run 1: Report of Saturator — Data Link
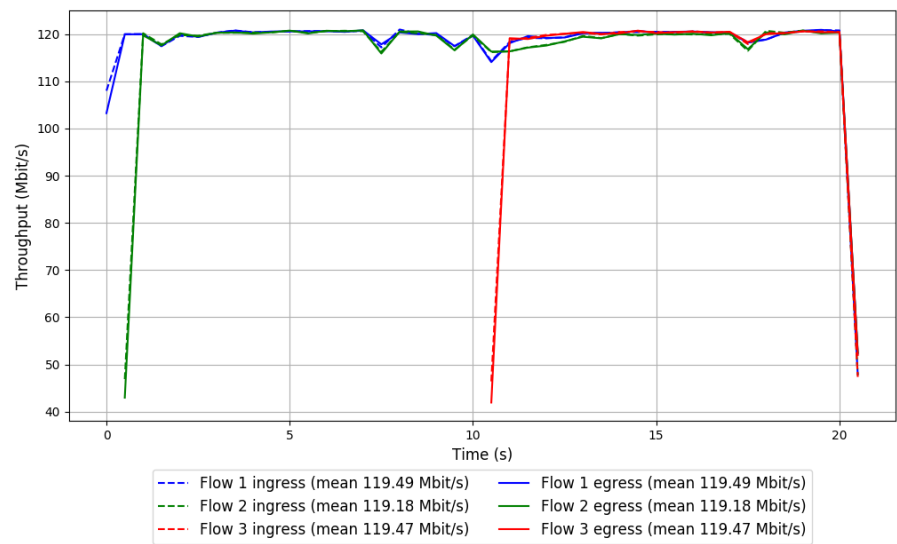
```
Run 2: Statistics of Saturator

Start at: 2017-08-11 09:58:05
End at: 2017-08-11 09:58:35
Local clock offset: 0.454 ms
Remote clock offset: -0.948 ms


# Below is generated by plot.py at 2017-08-11 16:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.25 Mbit/s
95th percentile per-packet one-way delay: 19.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.18 Mbit/s
95th percentile per-packet one-way delay: 19.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 119.24 Mbit/s
95th percentile per-packet one-way delay: 18.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.55 Mbit/s
95th percentile per-packet one-way delay: 18.857 ms
Loss rate: 0.00%
```

Run 2: Report of Saturator — Data Link

```
Run 3: Statistics of Saturator

Start at: 2017-08-11 10:19:42
End at: 2017-08-11 10:20:12
Local clock offset: 0.467 ms
Remote clock offset: -1.159 ms
```

Run 3: Report of Saturator — Data Link

```
Run 4: Statistics of Saturator

Start at: 2017-08-11 10:41:26
End at: 2017-08-11 10:41:56
Local clock offset: 0.476 ms
Remote clock offset: -1.218 ms
```
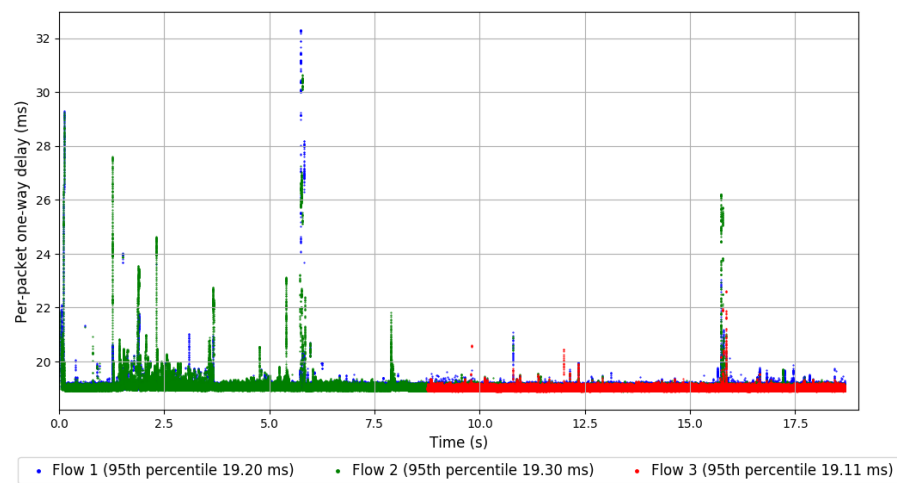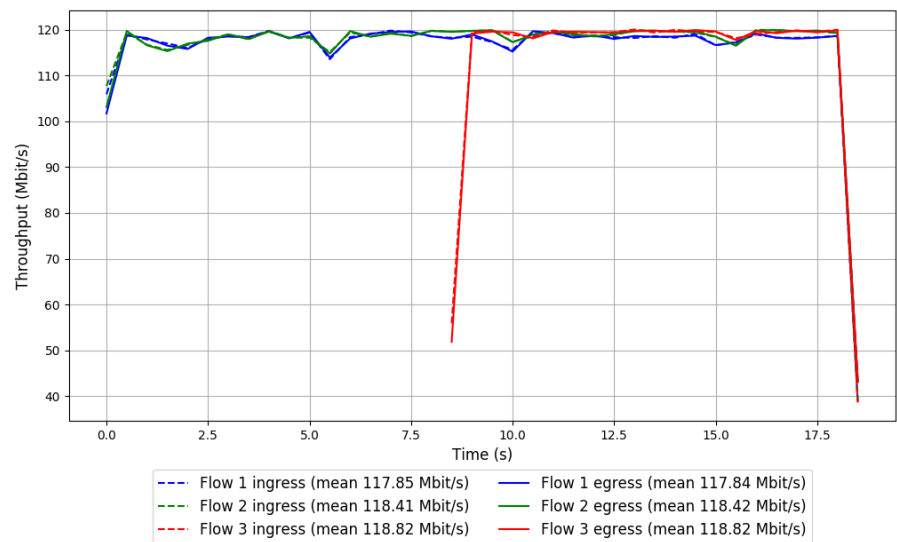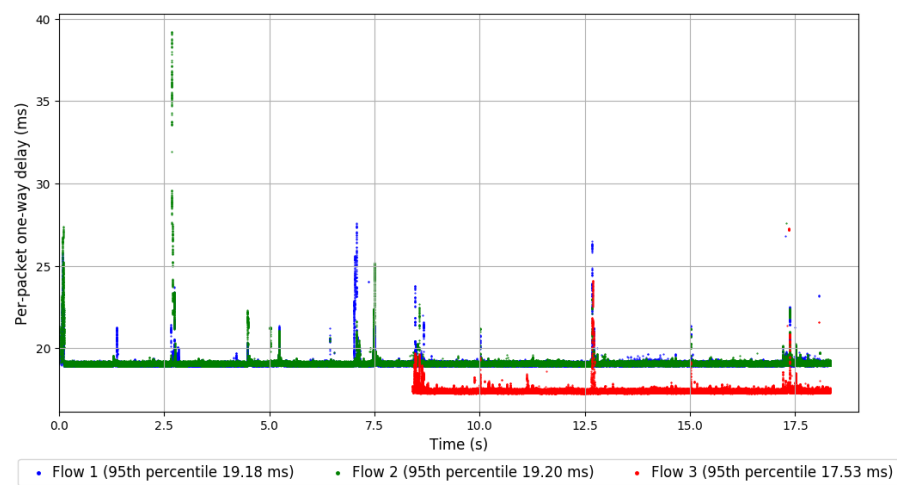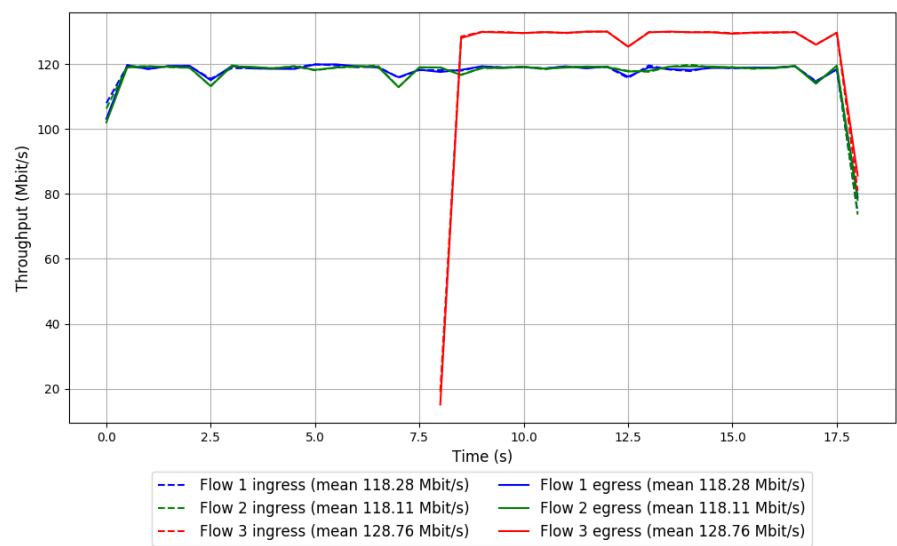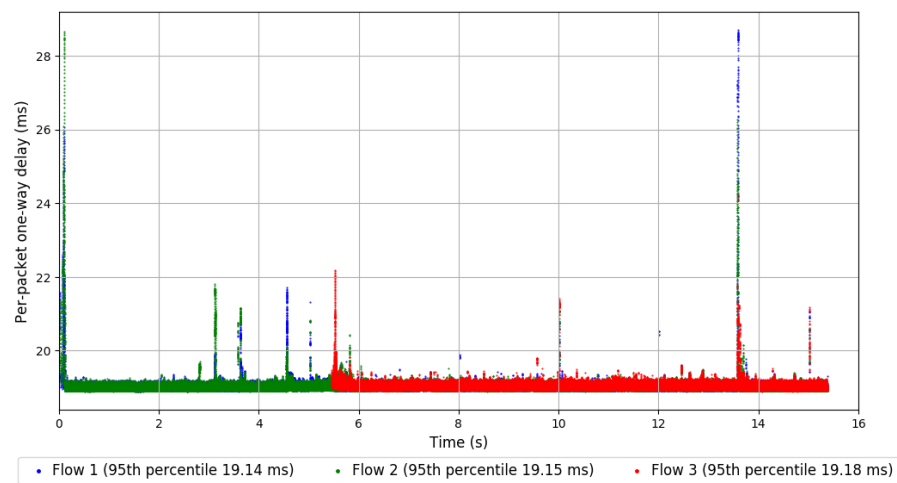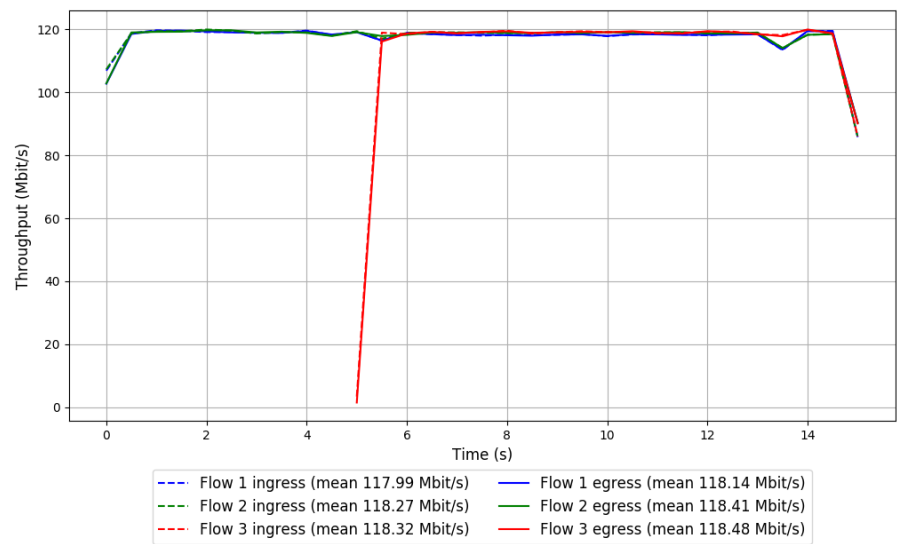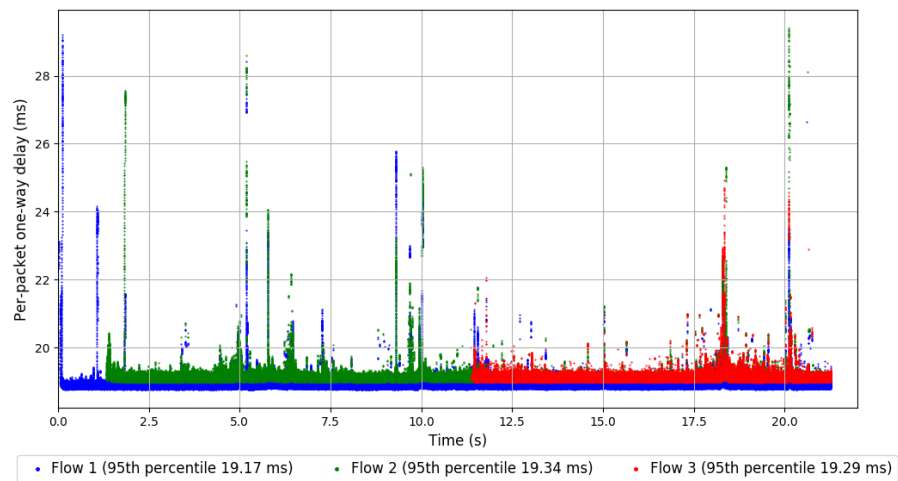
Run 4: Report of Saturator — Data Link

Flow 1 ingress (mean 117.53 Mbit/s) — Flow 1 egress (mean 117.53 Mbit/s)
Flow 2 ingress (mean 118.99 Mbit/s) — Flow 2 egress (mean 119.06 Mbit/s)
Flow 3 ingress (mean 118.47 Mbit/s) — Flow 3 egress (mean 118.46 Mbit/s)

Flow 1 (95th percentile 19.20 ms)   Flow 2 (95th percentile 19.03 ms)   Flow 3 (95th percentile 19.17 ms)

```
Run 5: Statistics of Saturator

Start at: 2017-08-11 11:02:48
End at: 2017-08-11 11:03:18
Local clock offset: 0.607 ms
Remote clock offset: -1.162 ms
```
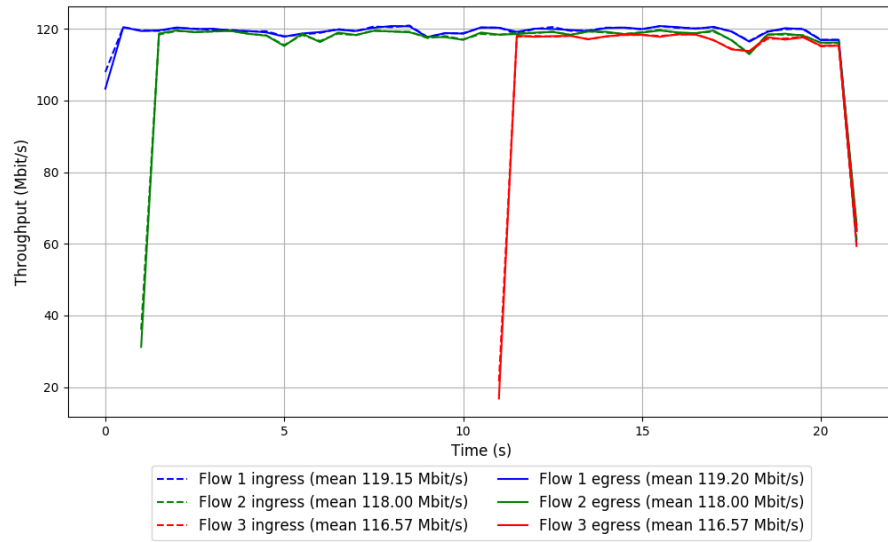
Run 5: Report of Saturator — Data Link

Flow 1 ingress (mean 117.85 Mbit/s) — Flow 1 egress (mean 117.84 Mbit/s)
Flow 2 ingress (mean 118.41 Mbit/s) — Flow 2 egress (mean 118.42 Mbit/s)
Flow 3 ingress (mean 118.82 Mbit/s) — Flow 3 egress (mean 118.82 Mbit/s)

Flow 1 (95th percentile 19.20 ms) • Flow 2 (95th percentile 19.30 ms) • Flow 3 (95th percentile 19.11 ms)

```
Run 6: Statistics of Saturator

Start at: 2017-08-11 11:24:30
End at: 2017-08-11 11:25:01
Local clock offset: 0.571 ms
Remote clock offset: -1.169 ms
```

Run 6: Report of Saturator — Data Link

Flow 1 ingress (mean 118.28 Mbit/s)   Flow 1 egress (mean 118.28 Mbit/s)
Flow 2 ingress (mean 118.11 Mbit/s)   Flow 2 egress (mean 118.11 Mbit/s)
Flow 3 ingress (mean 128.76 Mbit/s)   Flow 3 egress (mean 128.76 Mbit/s)

Flow 1 (95th percentile 19.18 ms)   Flow 2 (95th percentile 19.20 ms)   Flow 3 (95th percentile 17.53 ms)

175

```
Run 7: Statistics of Saturator

Start at: 2017-08-11 11:46:00
End at: 2017-08-11 11:46:30
Local clock offset: 0.799 ms
Remote clock offset: -1.105 ms
```

Run 7: Report of Saturator — Data Link
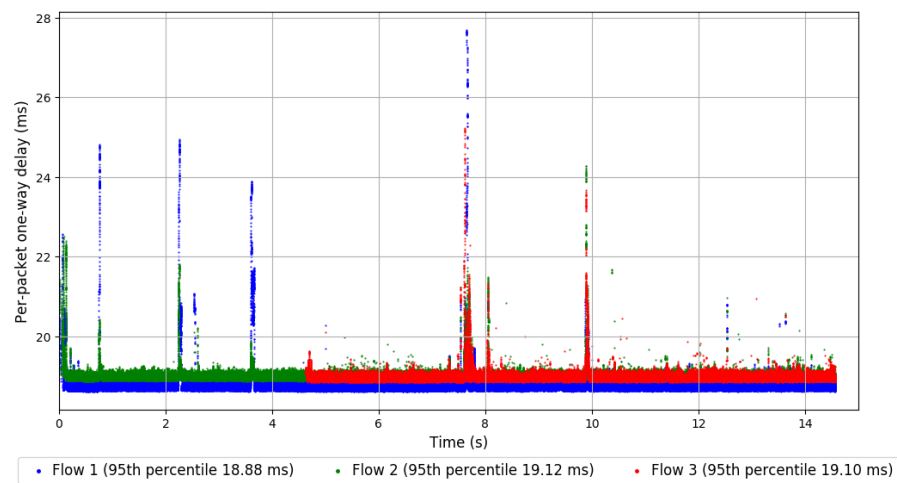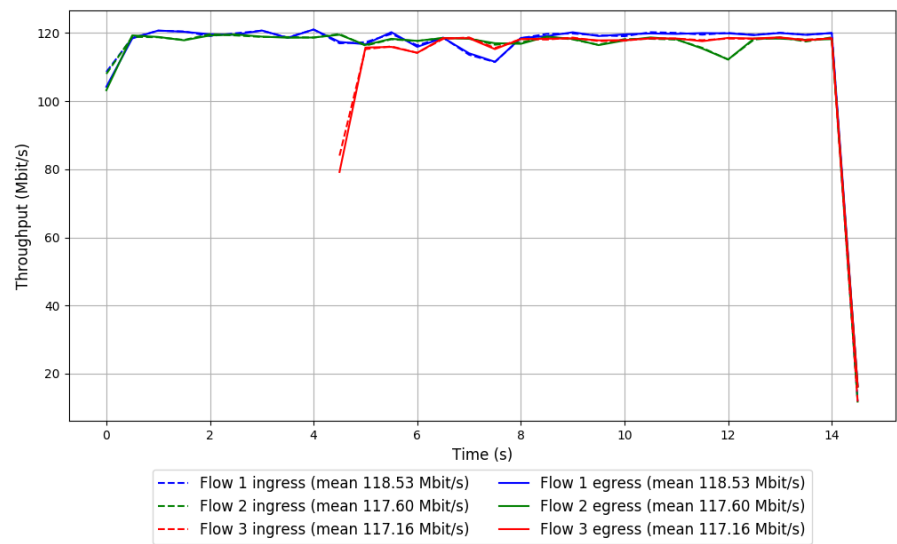
```
Run 8: Statistics of Saturator

Start at: 2017-08-11 12:07:34
End at: 2017-08-11 12:08:04
Local clock offset: 0.71 ms
Remote clock offset: -1.166 ms
```
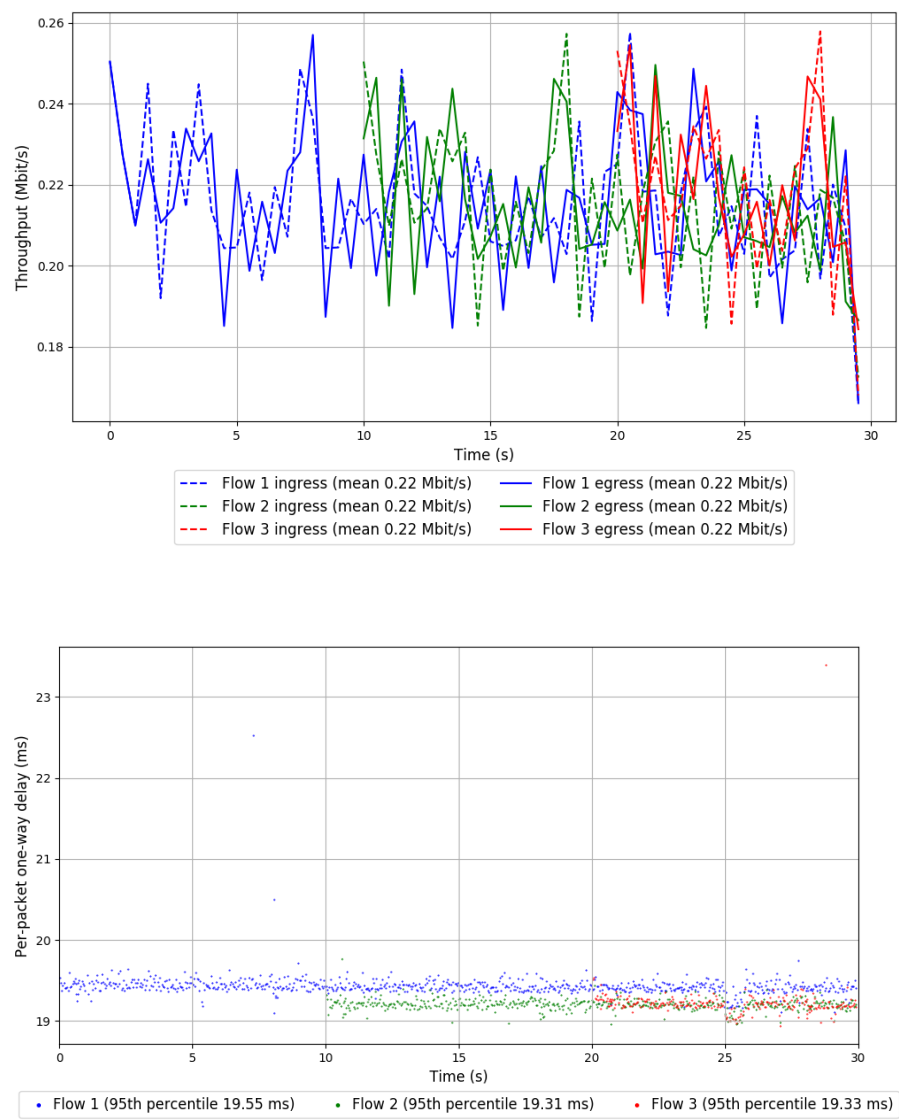
Run 8: Report of Saturator — Data Link

```
Run 9: Statistics of Saturator

Start at: 2017-08-11 12:29:10
End at: 2017-08-11 12:29:40
Local clock offset: 0.759 ms
Remote clock offset: -1.55 ms


# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.59 Mbit/s
95th percentile per-packet one-way delay: 19.046 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 119.02 Mbit/s
95th percentile per-packet one-way delay: 19.034 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 119.01 Mbit/s
95th percentile per-packet one-way delay: 19.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.49 Mbit/s
95th percentile per-packet one-way delay: 19.047 ms
Loss rate: 0.00%
```
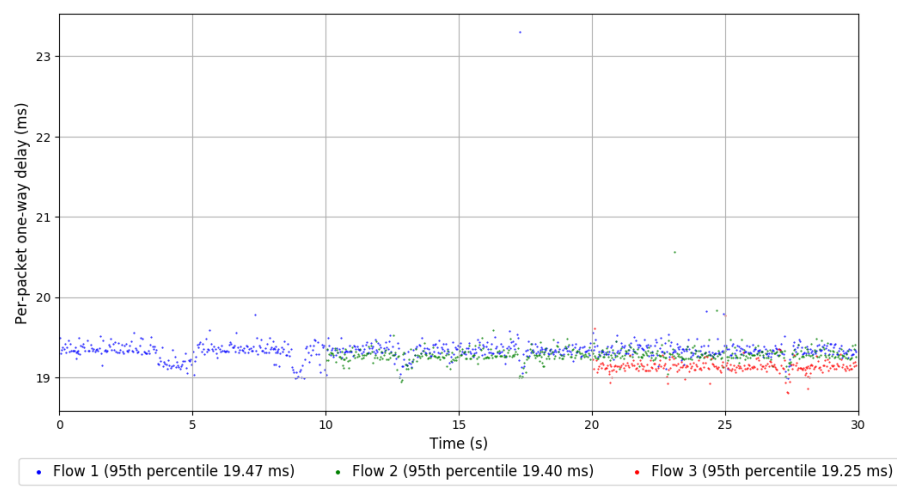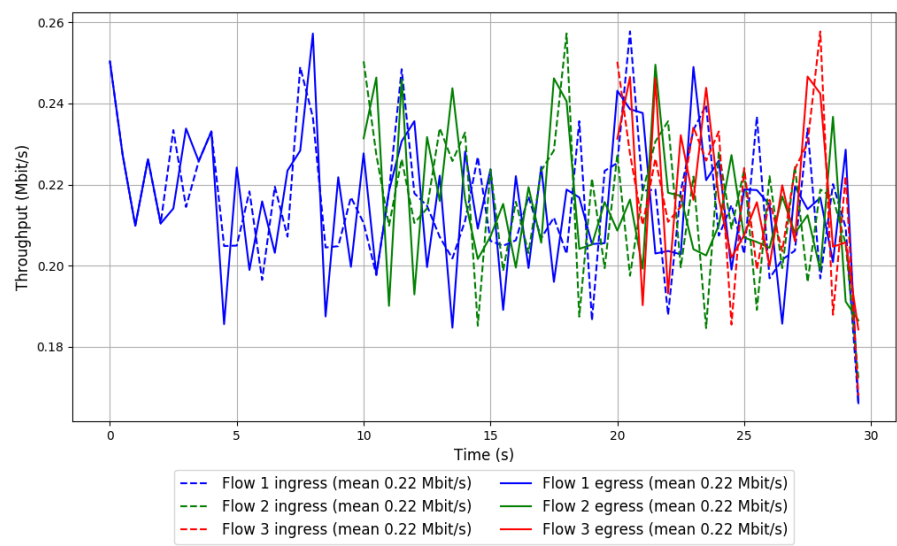
Run 9: Report of Saturator — Data Link

Flow 1 ingress (mean 119.10 Mbit/s) — Flow 1 egress (mean 119.02 Mbit/s)
Flow 2 ingress (mean 118.97 Mbit/s) — Flow 2 egress (mean 119.01 Mbit/s)
Flow 3 ingress (mean 118.49 Mbit/s) — Flow 3 egress (mean 118.49 Mbit/s)

Flow 1 (95th percentile 19.03 ms) • Flow 2 (95th percentile 19.05 ms) • Flow 3 (95th percentile 19.05 ms)

181

```
Run 10: Statistics of Saturator

Start at: 2017-08-11 12:50:48
End at: 2017-08-11 12:51:18
Local clock offset: 0.687 ms
Remote clock offset: -1.72 ms
```

Run 10: Report of Saturator — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 09:21:06
End at: 2017-08-11 09:21:36
Local clock offset: 0.24 ms
Remote clock offset: -0.48 ms

# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.334 ms
Loss rate: 0.00%
```
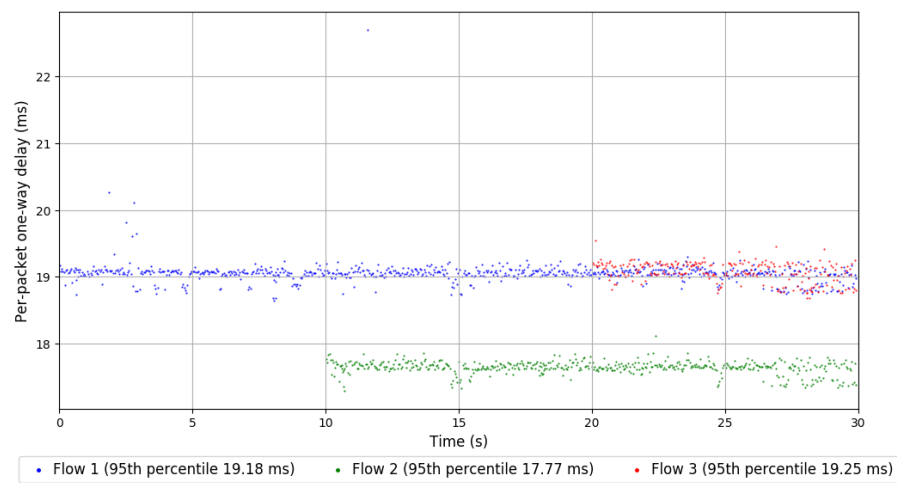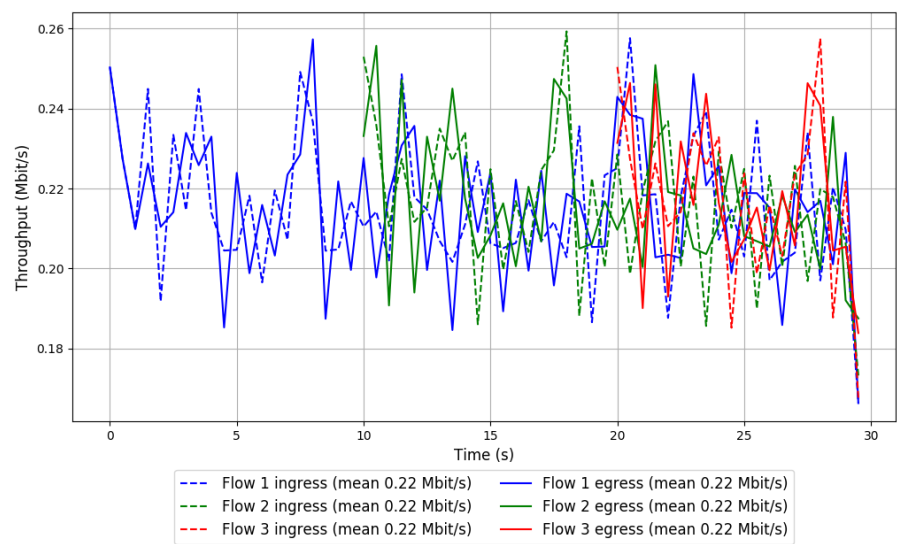
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 09:42:36
End at: 2017-08-11 09:43:06
Local clock offset: 0.295 ms
Remote clock offset: -0.847 ms


# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.470 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.249 ms
Loss rate: 0.00%
```
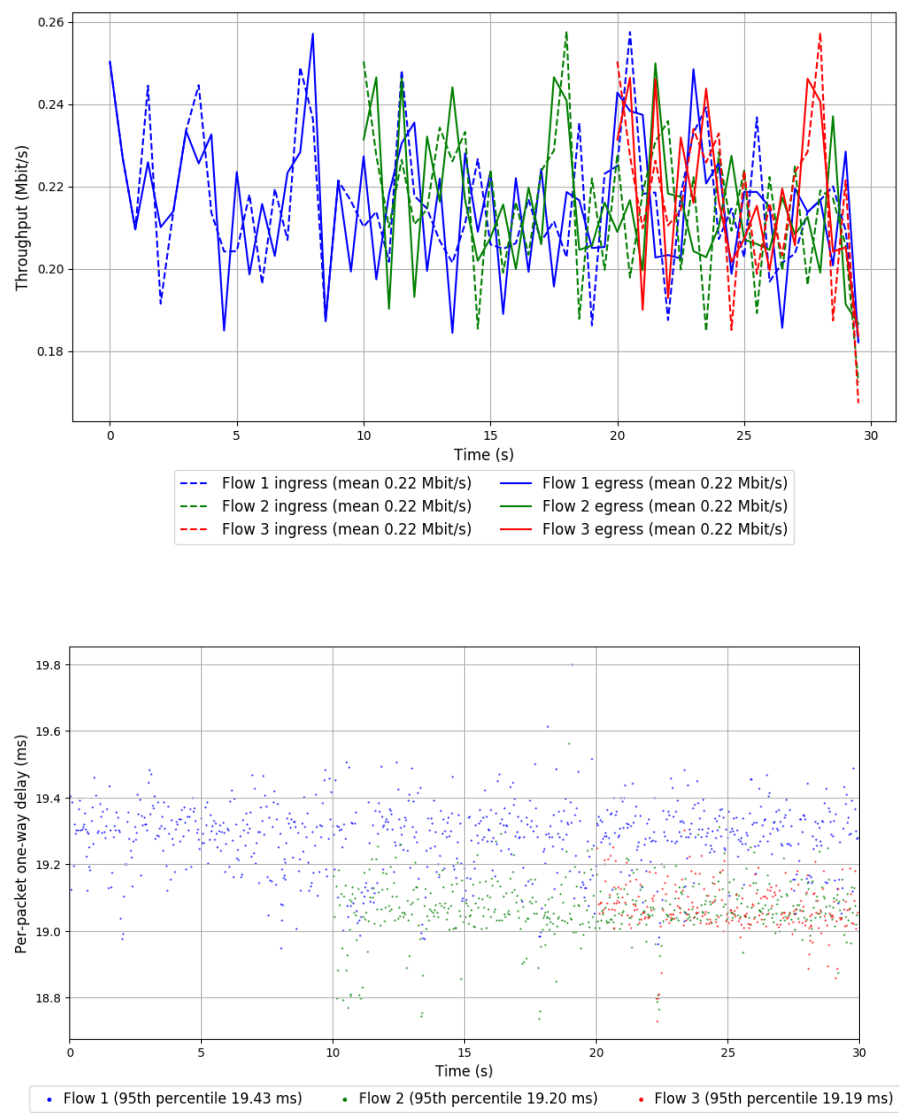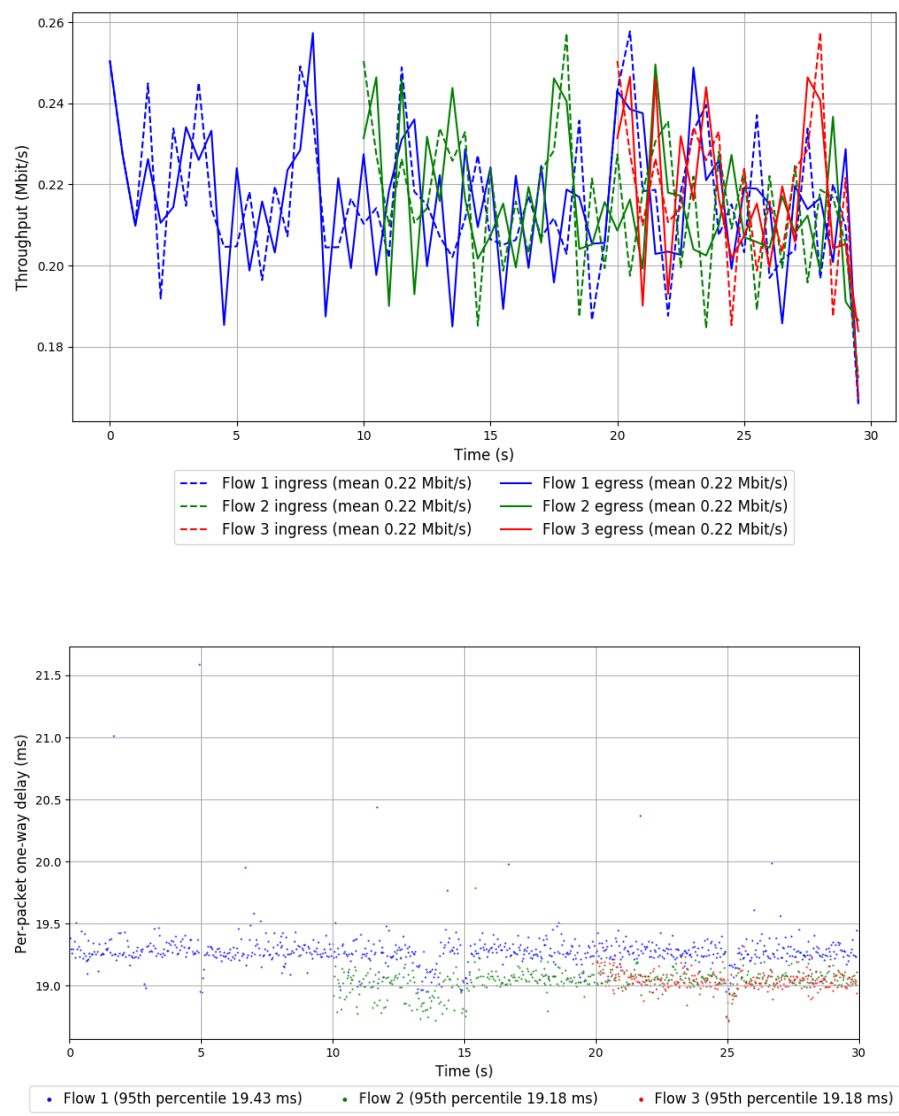
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-08-11 10:03:59
End at: 2017-08-11 10:04:29
Local clock offset: 0.46 ms
Remote clock offset: -1.034 ms


# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.182 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.245 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-08-11 10:25:42
End at: 2017-08-11 10:26:12
Local clock offset: 0.429 ms
Remote clock offset: -1.19 ms

# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.391 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.434 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.189 ms
Loss rate: 0.00%
```
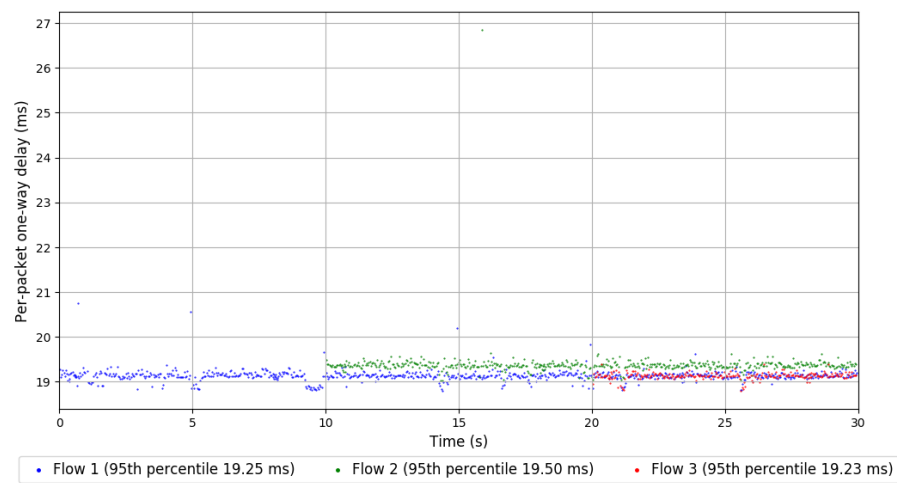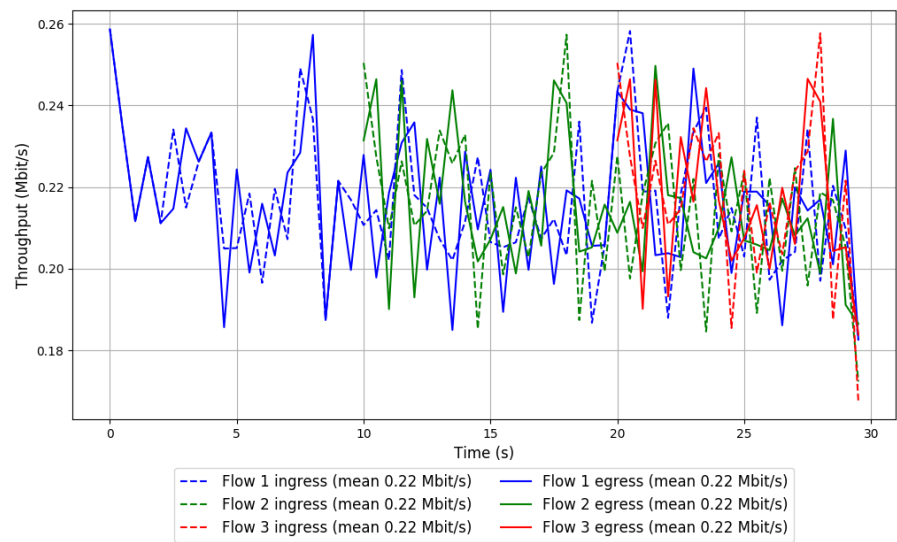
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-08-11 10:47:22
End at: 2017-08-11 10:47:52
Local clock offset: 0.57 ms
Remote clock offset: -1.218 ms


# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.375 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.183 ms
Loss rate: 0.00%
```
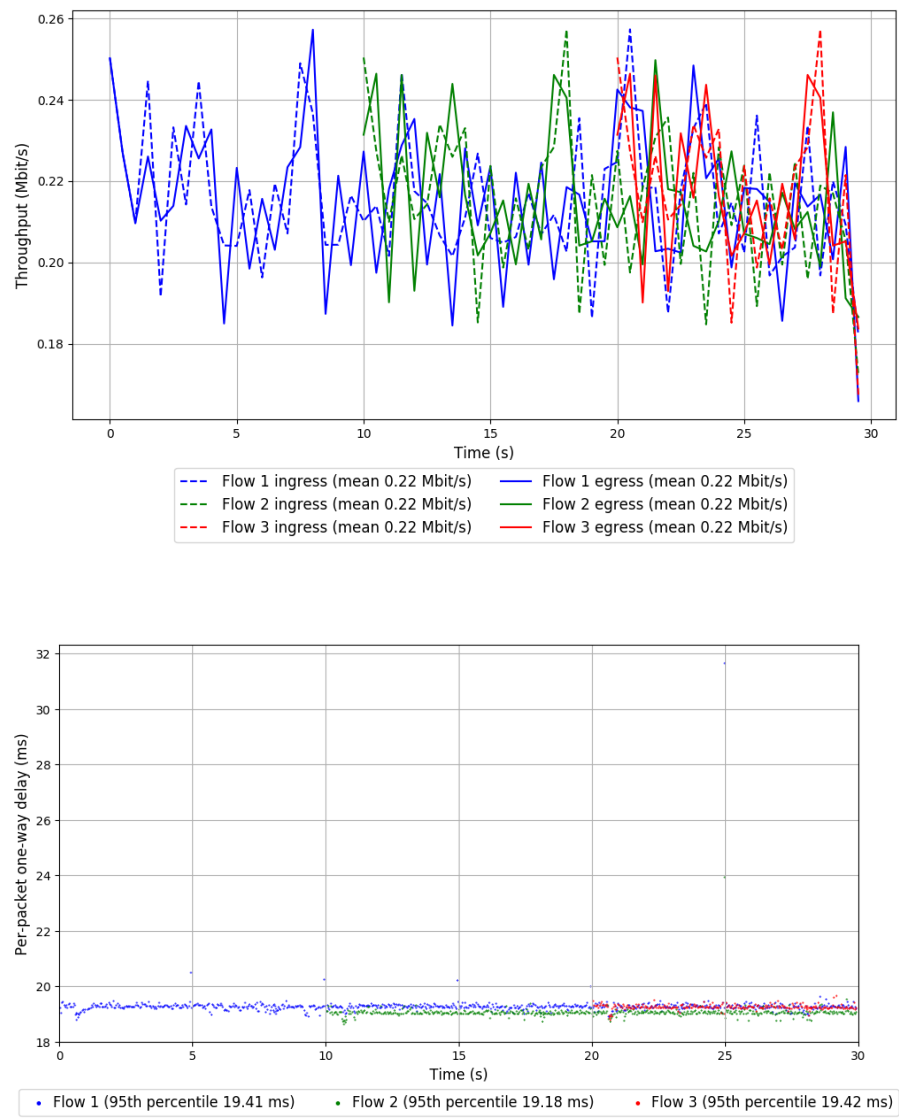
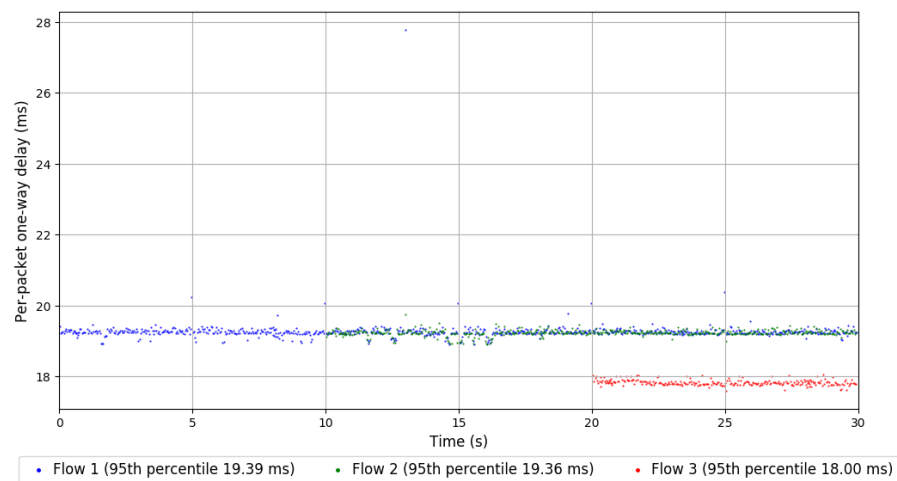# Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-08-11 11:08:45
End at: 2017-08-11 11:09:15
Local clock offset: 0.516 ms
Remote clock offset: -1.2 ms

# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.426 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.250 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.225 ms
Loss rate: 0.00%
```
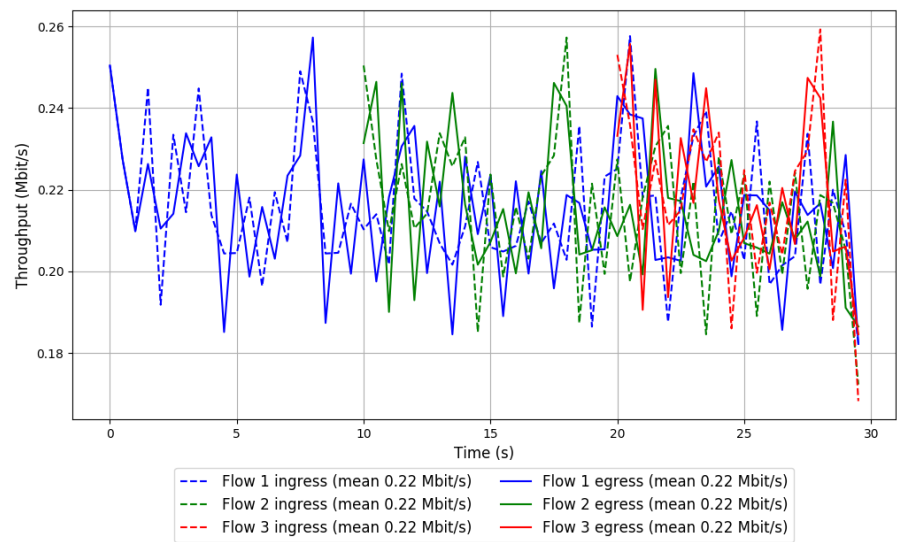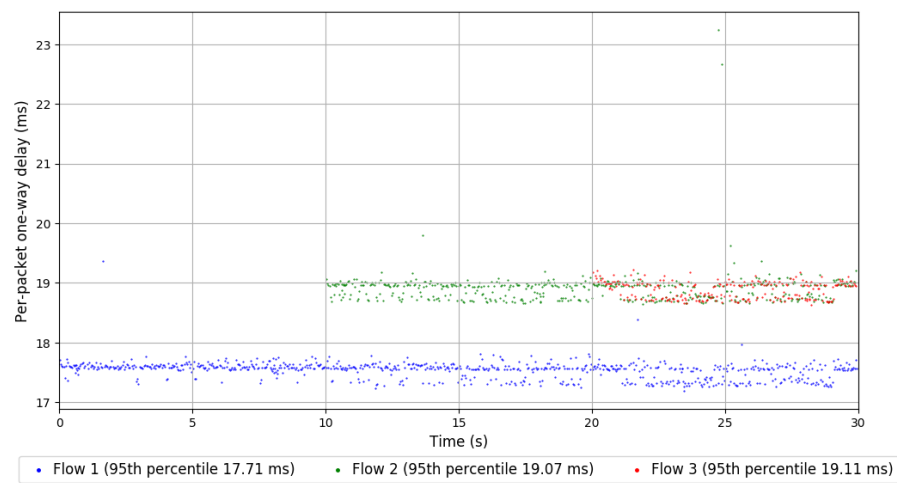
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-08-11 11:30:32
End at: 2017-08-11 11:31:02
Local clock offset: 0.709 ms
Remote clock offset: -1.13 ms


# Below is generated by plot.py at 2017-08-11 16:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.393 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.414 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.184 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.00%
```
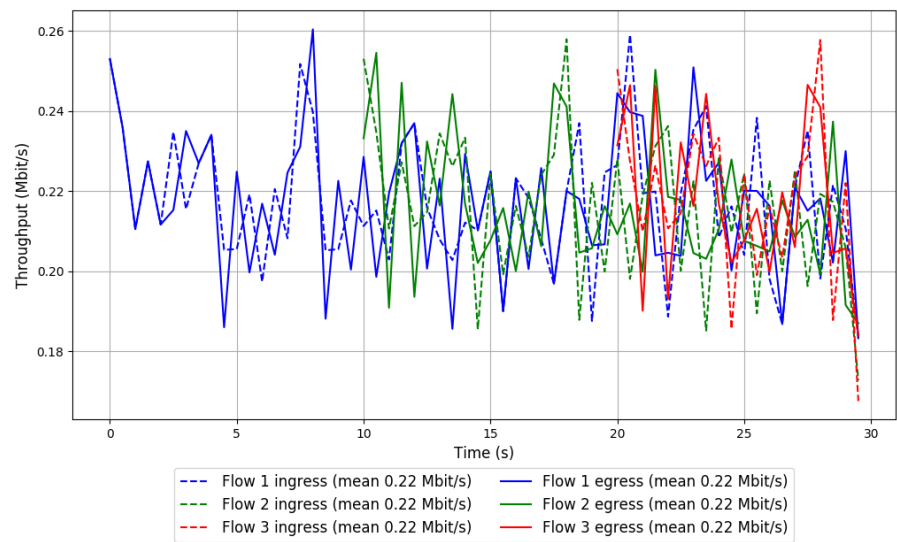
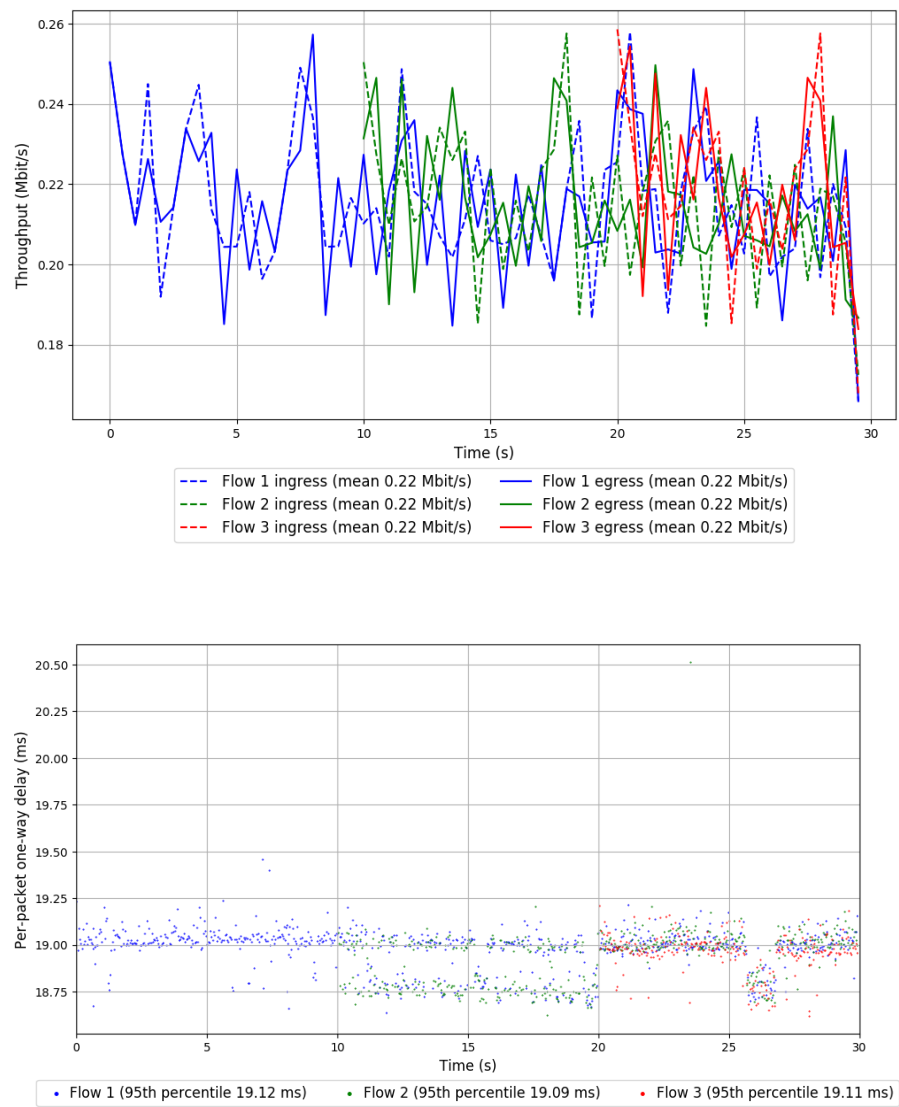## Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-08-11 11:51:51
End at: 2017-08-11 11:52:21
Local clock offset: 0.751 ms
Remote clock offset: -1.074 ms


# Below is generated by plot.py at 2017-08-11 16:19:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.385 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.363 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.999 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2017-08-11 12:13:34
End at: 2017-08-11 12:14:04
Local clock offset: 0.764 ms
Remote clock offset: -1.273 ms


# Below is generated by plot.py at 2017-08-11 16:19:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.710 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.072 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.108 ms
Loss rate: 0.00%
```
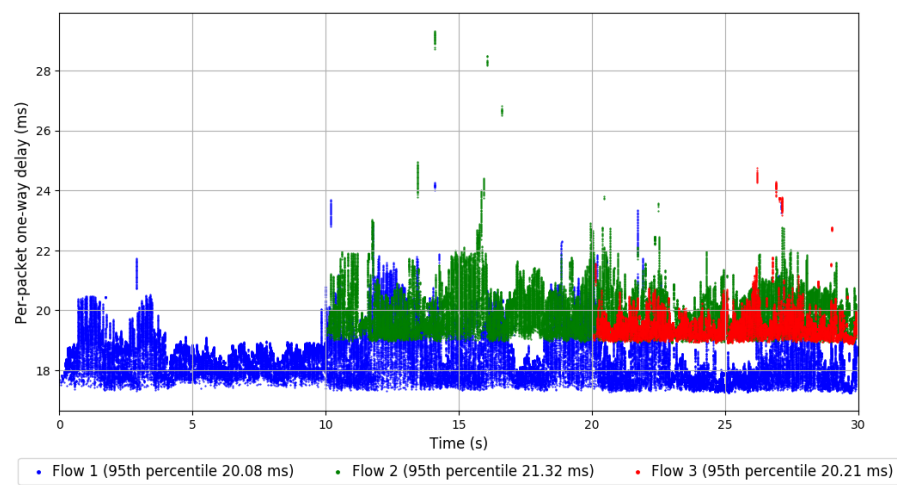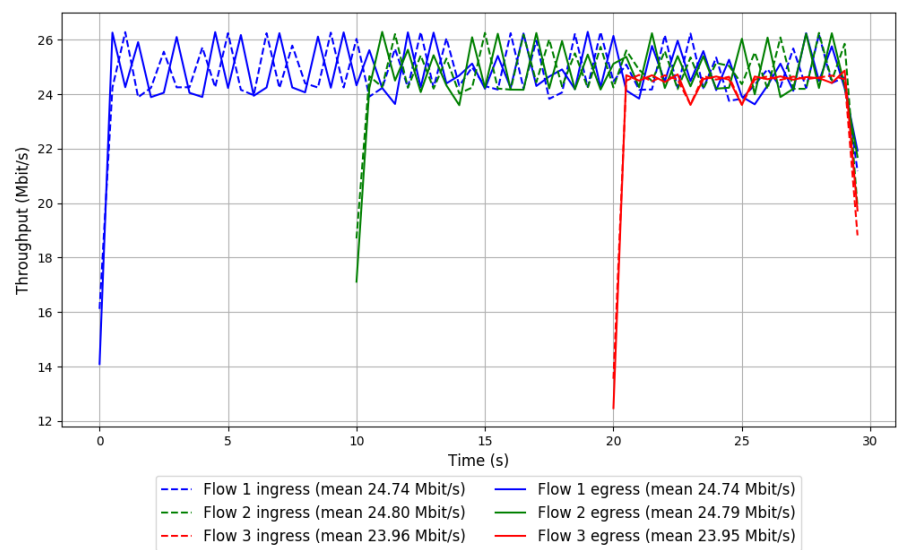
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2017-08-11 12:35:17
End at: 2017-08-11 12:35:47
Local clock offset: 0.75 ms
Remote clock offset: -1.584 ms


# Below is generated by plot.py at 2017-08-11 16:19:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.102 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.116 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.085 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.105 ms
Loss rate: 0.00%
```
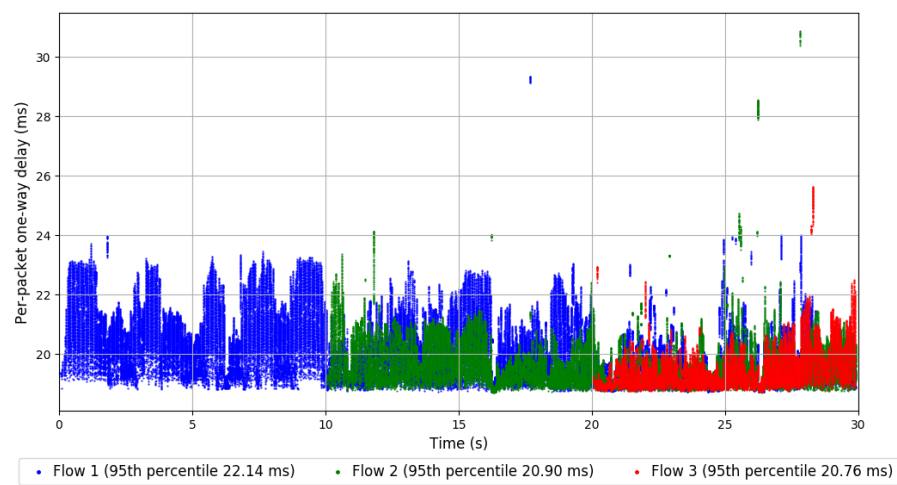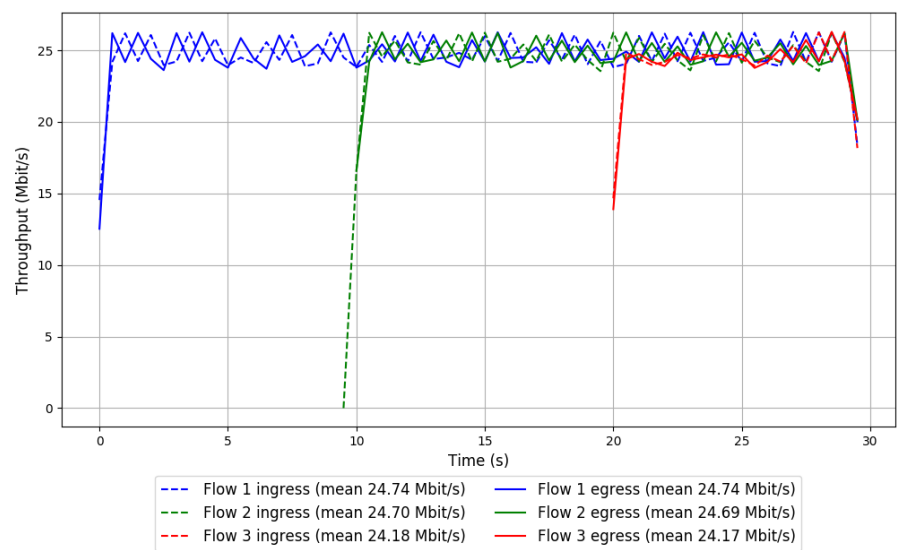
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-08-11 09:26:39
End at: 2017-08-11 09:27:09
Local clock offset: 0.358 ms
Remote clock offset: -0.538 ms


# Below is generated by plot.py at 2017-08-11 16:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.13 Mbit/s
95th percentile per-packet one-way delay: 20.777 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 20.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 21.318 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 20.206 ms
Loss rate: 0.00%
```
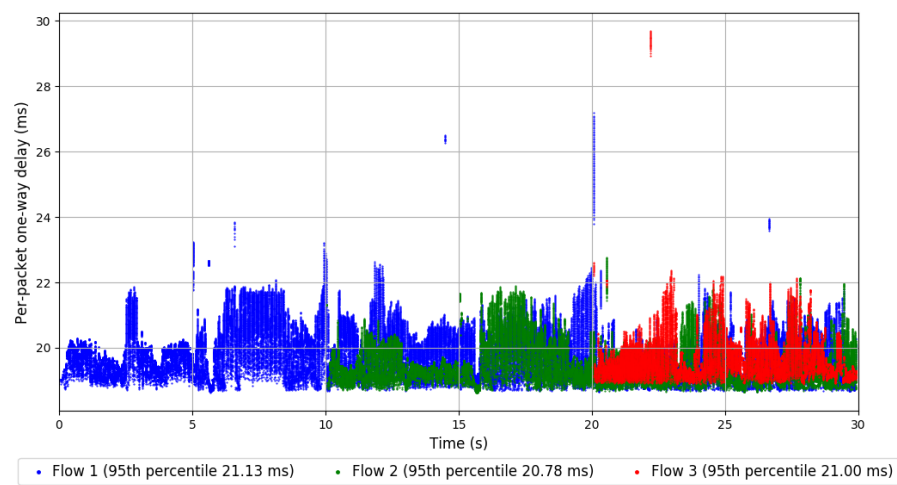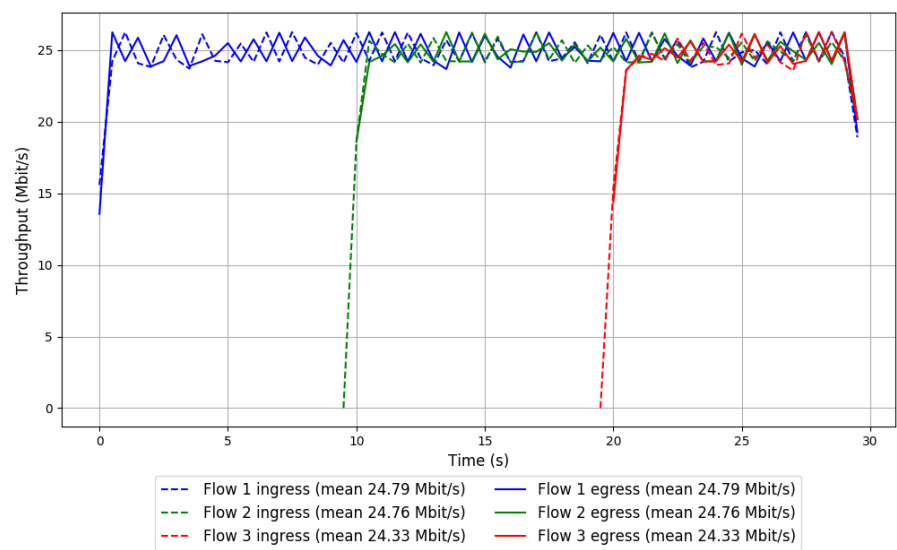
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-08-11 09:48:13
End at: 2017-08-11 09:48:43
Local clock offset: 0.367 ms
Remote clock offset: -0.832 ms


# Below is generated by plot.py at 2017-08-11 16:19:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 21.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 22.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 20.900 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 20.756 ms
Loss rate: 0.00%
```
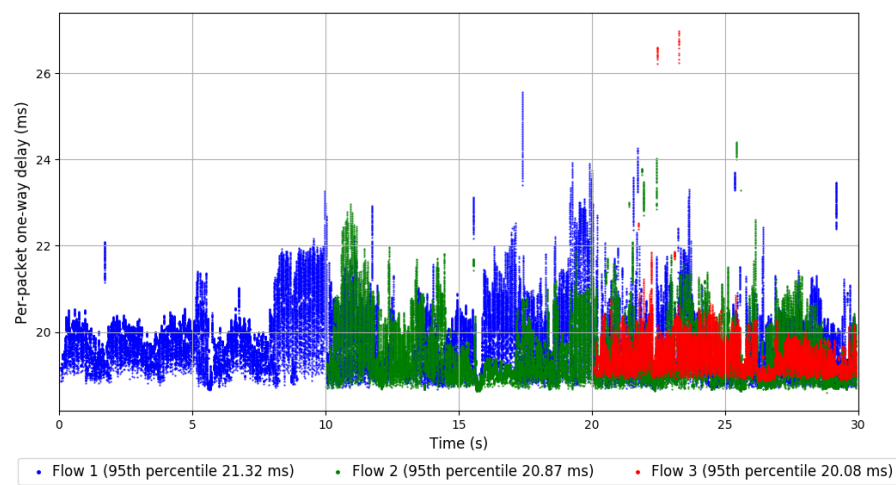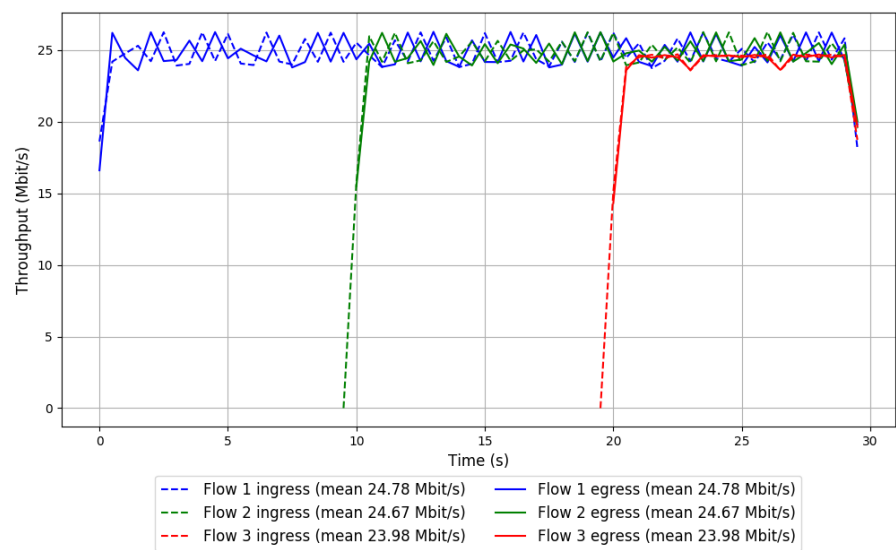
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-08-11 10:09:33
End at: 2017-08-11 10:10:03
Local clock offset: 0.439 ms
Remote clock offset: -1.124 ms


# Below is generated by plot.py at 2017-08-11 16:19:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 21.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 21.130 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 20.784 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 20.998 ms
Loss rate: 0.00%
```
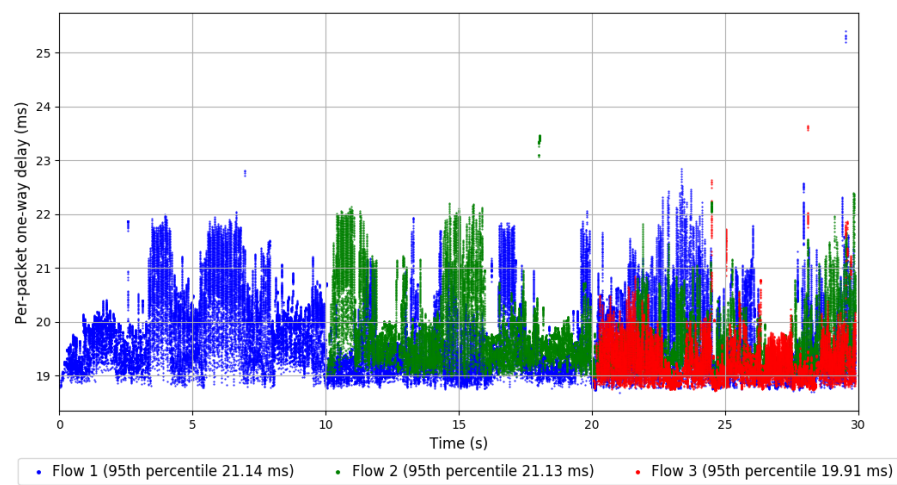
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-08-11 10:31:16
End at: 2017-08-11 10:31:46
Local clock offset: 0.511 ms
Remote clock offset: -1.2 ms


# Below is generated by plot.py at 2017-08-11 16:19:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 21.057 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 21.318 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 20.871 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 20.084 ms
Loss rate: 0.00%
```
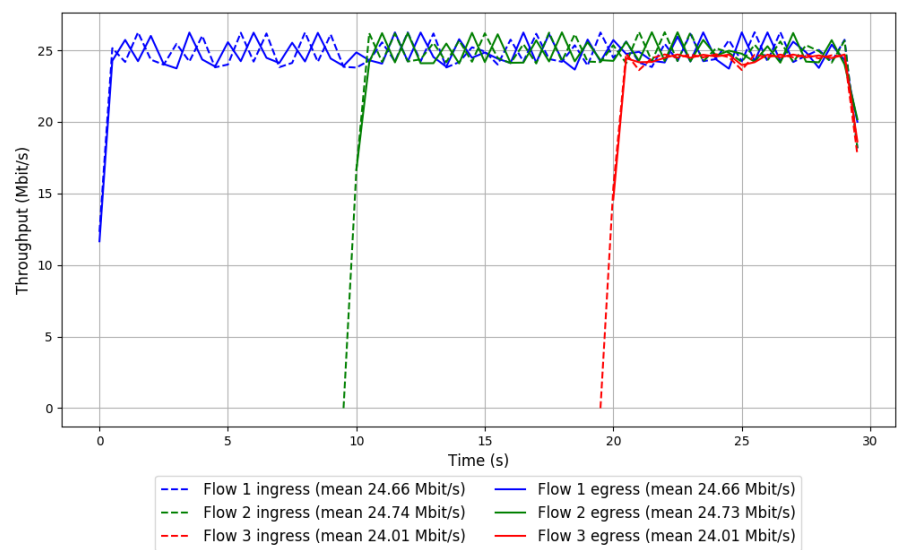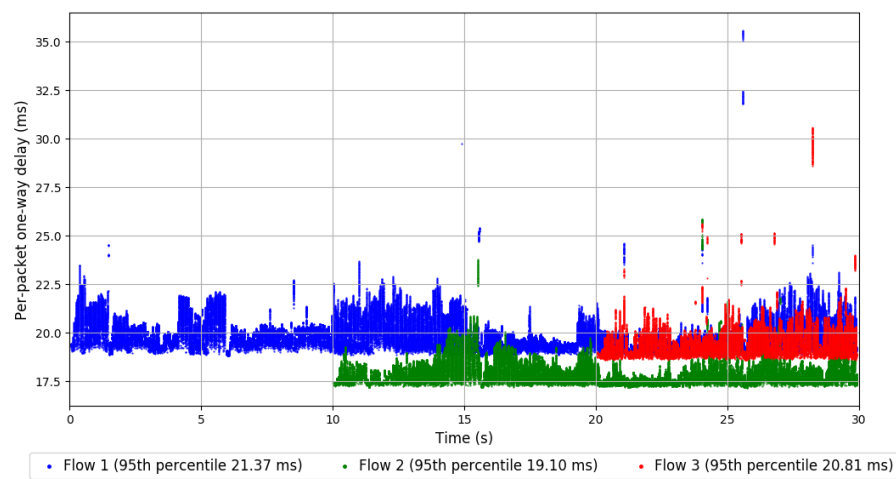
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-08-11 10:52:52
End at: 2017-08-11 10:53:22
Local clock offset: 0.481 ms
Remote clock offset: -1.283 ms


# Below is generated by plot.py at 2017-08-11 16:19:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.06 Mbit/s
95th percentile per-packet one-way delay: 21.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 21.143 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 21.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.01 Mbit/s
95th percentile per-packet one-way delay: 19.905 ms
Loss rate: 0.00%
```

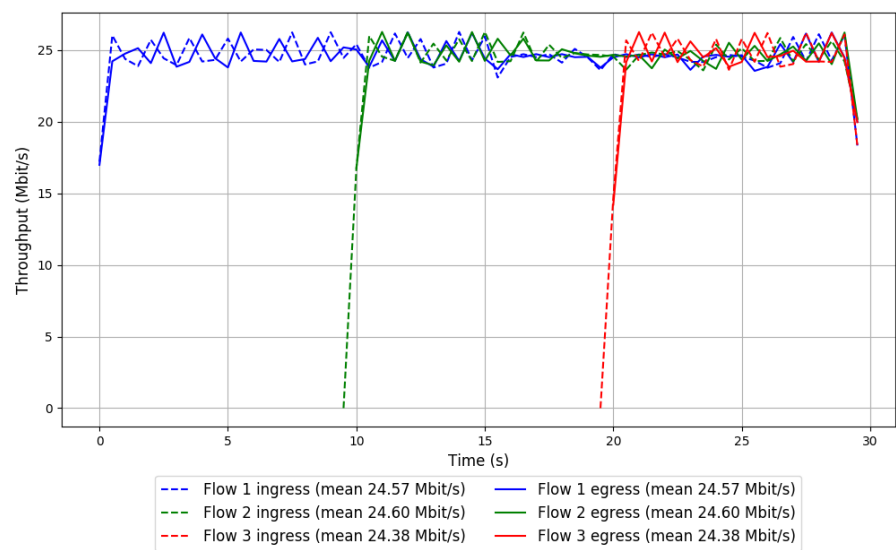Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-08-11 11:14:19
End at: 2017-08-11 11:14:49
Local clock offset: 0.654 ms
Remote clock offset: -1.209 ms


# Below is generated by plot.py at 2017-08-11 16:19:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.01 Mbit/s
95th percentile per-packet one-way delay: 21.066 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 21.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 19.097 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 20.813 ms
Loss rate: 0.00%
```

Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-08-11 11:36:06
End at: 2017-08-11 11:36:36
Local clock offset: 0.644 ms
Remote clock offset: -1.112 ms


# Below is generated by plot.py at 2017-08-11 16:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 21.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 21.398 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 21.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.97 Mbit/s
95th percentile per-packet one-way delay: 20.269 ms
Loss rate: 0.00%
```
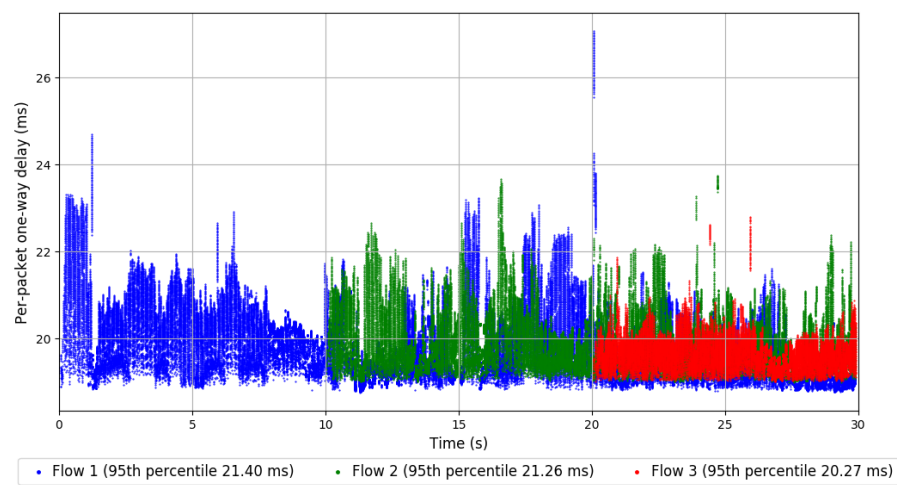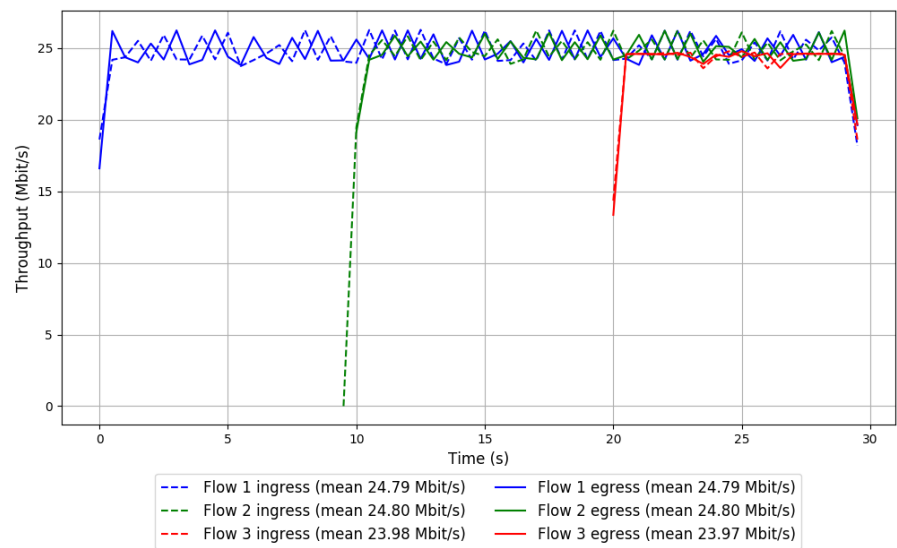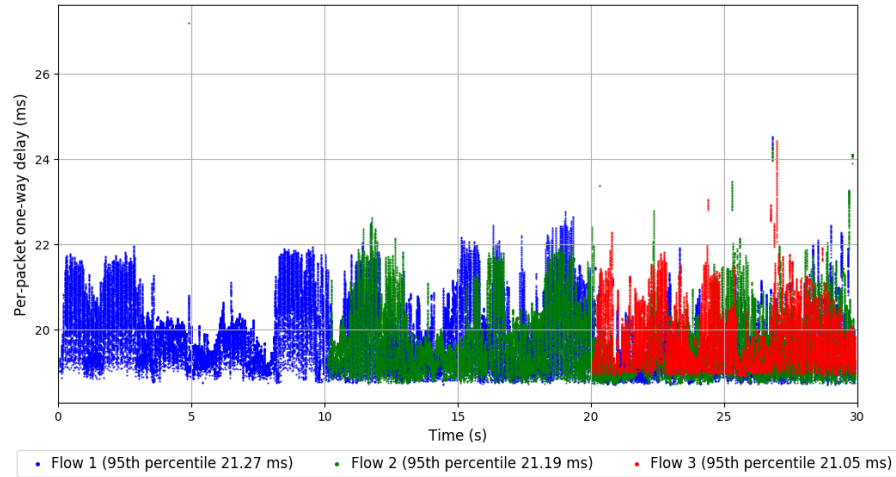
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-08-11 11:57:28
End at: 2017-08-11 11:57:58
Local clock offset: 0.791 ms
Remote clock offset: -1.22 ms


# Below is generated by plot.py at 2017-08-11 16:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.38 Mbit/s
95th percentile per-packet one-way delay: 21.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 21.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 21.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 21.055 ms
Loss rate: 0.00%
```
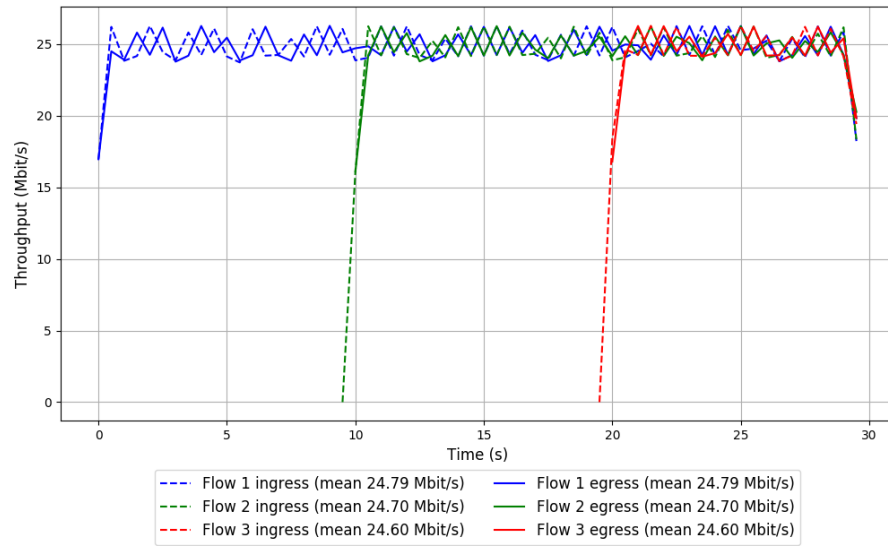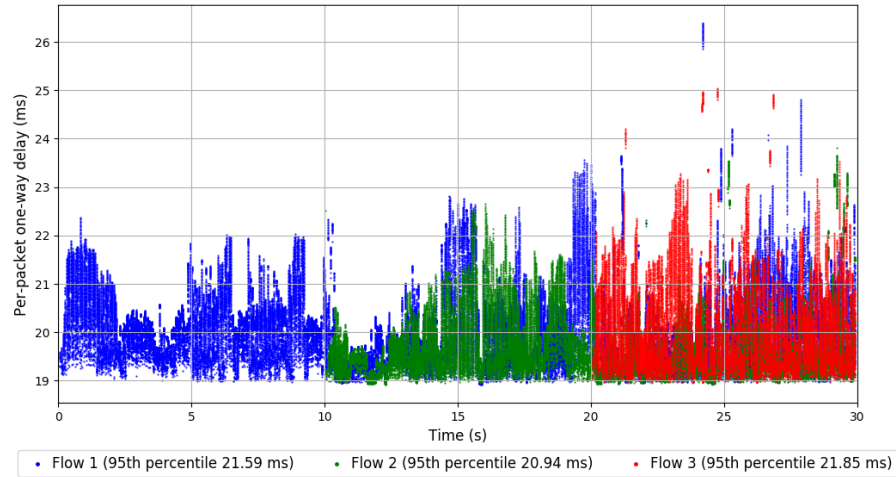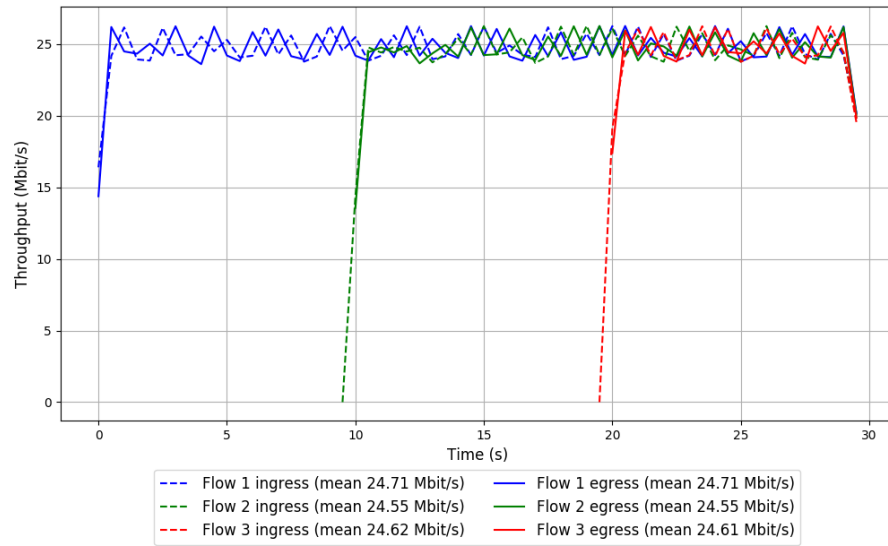
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2017-08-11 12:19:10
End at: 2017-08-11 12:19:40
Local clock offset: 0.783 ms
Remote clock offset: -1.267 ms


# Below is generated by plot.py at 2017-08-11 16:19:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 21.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 20.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 21.854 ms
Loss rate: 0.00%
```

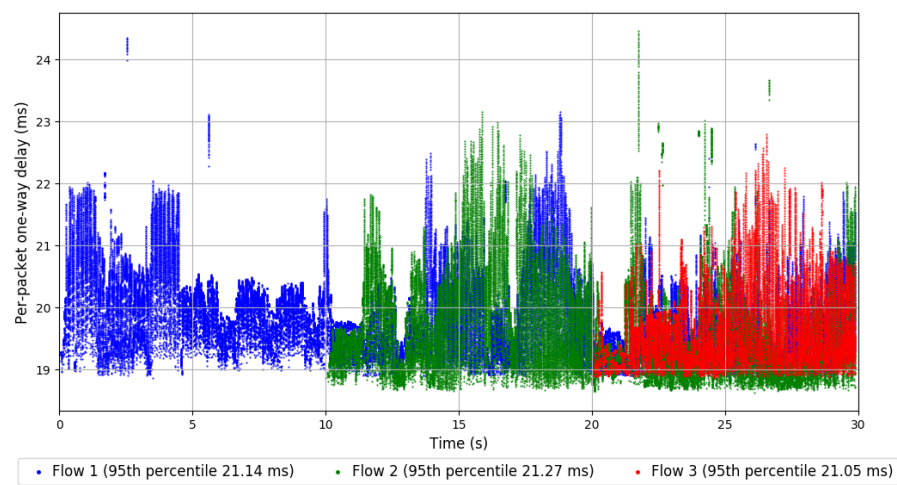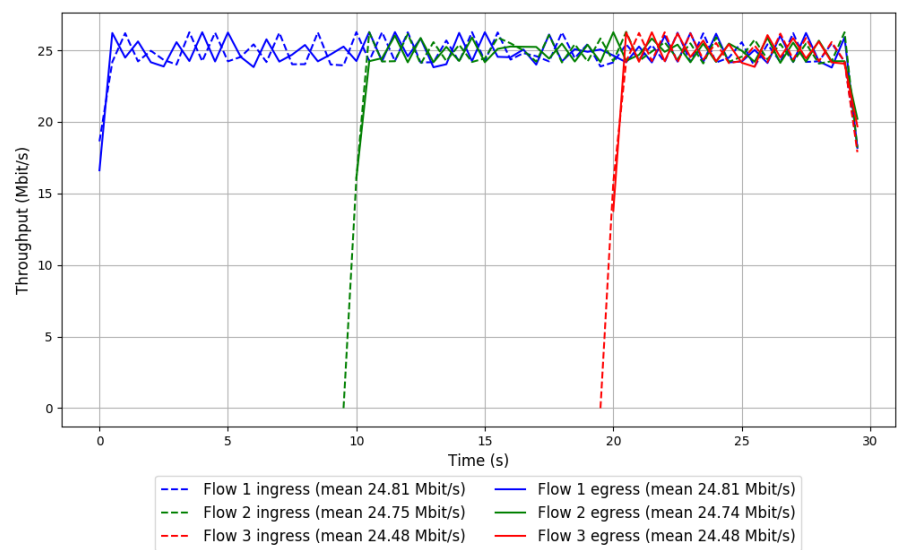## Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-08-11 12:40:42
End at: 2017-08-11 12:41:12
Local clock offset: 0.723 ms
Remote clock offset: -1.662 ms


# Below is generated by plot.py at 2017-08-11 16:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.33 Mbit/s
95th percentile per-packet one-way delay: 21.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 21.140 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 21.268 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 21.046 ms
Loss rate: 0.00%
```
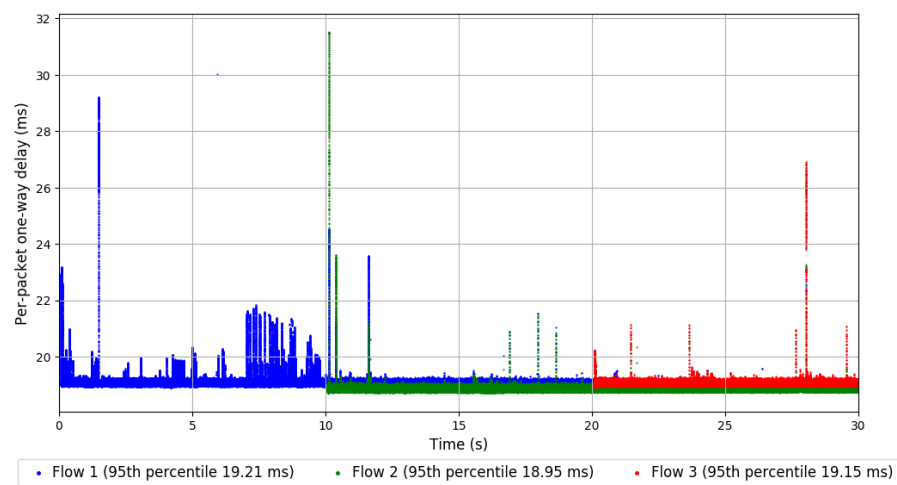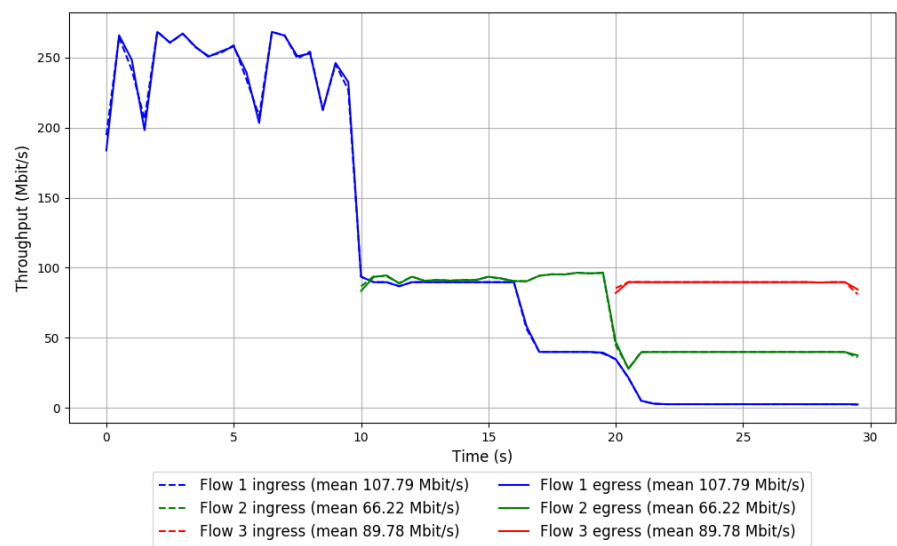
Run 10: Report of Sprout — Data Link

- - - Flow 1 ingress (mean 24.81 Mbit/s) —— Flow 1 egress (mean 24.81 Mbit/s)
- - - Flow 2 ingress (mean 24.75 Mbit/s) —— Flow 2 egress (mean 24.74 Mbit/s)
- - - Flow 3 ingress (mean 24.48 Mbit/s) —— Flow 3 egress (mean 24.48 Mbit/s)

- Flow 1 (95th percentile 21.14 ms) · Flow 2 (95th percentile 21.27 ms) · Flow 3 (95th percentile 21.05 ms)

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

Start at: 2017-08-11 09:25:12
End at: 2017-08-11 09:25:42
Local clock offset: 0.347 ms
Remote clock offset: -0.458 ms

# Below is generated by plot.py at 2017-08-11 16:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.64 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 107.79 Mbit/s
95th percentile per-packet one-way delay: 19.206 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.22 Mbit/s
95th percentile per-packet one-way delay: 18.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 19.148 ms
Loss rate: 0.00%
```

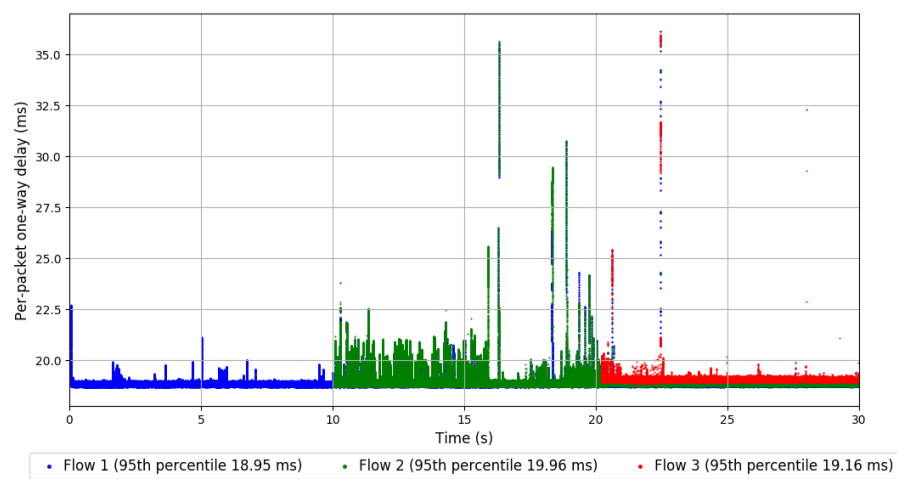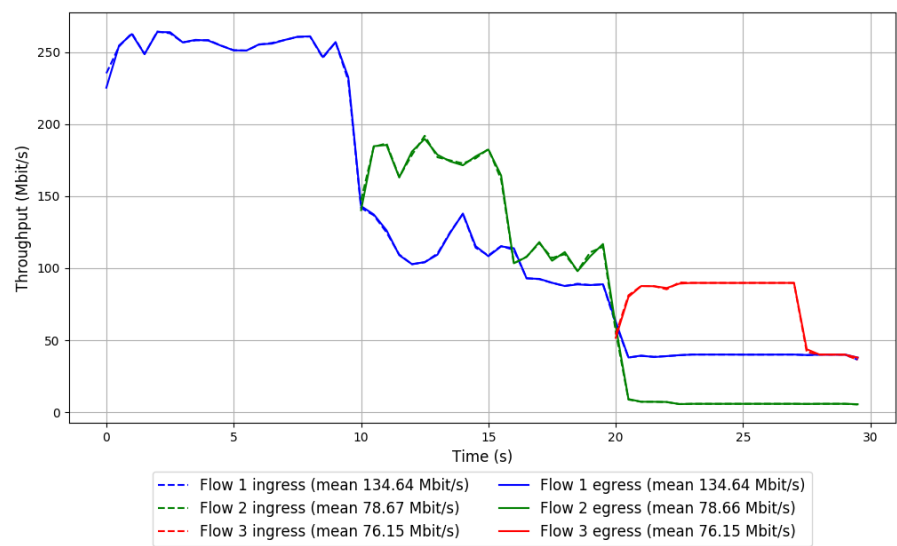# Run 1: Report of TaoVA-100x — Data Link

225

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

Start at: 2017-08-11 09:46:42
End at: 2017-08-11 09:47:12
Local clock offset: 0.305 ms
Remote clock offset: -0.868 ms


# Below is generated by plot.py at 2017-08-11 16:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.91 Mbit/s
95th percentile per-packet one-way delay: 19.161 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 134.64 Mbit/s
95th percentile per-packet one-way delay: 18.948 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 19.962 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 76.15 Mbit/s
95th percentile per-packet one-way delay: 19.157 ms
Loss rate: 0.00%
```

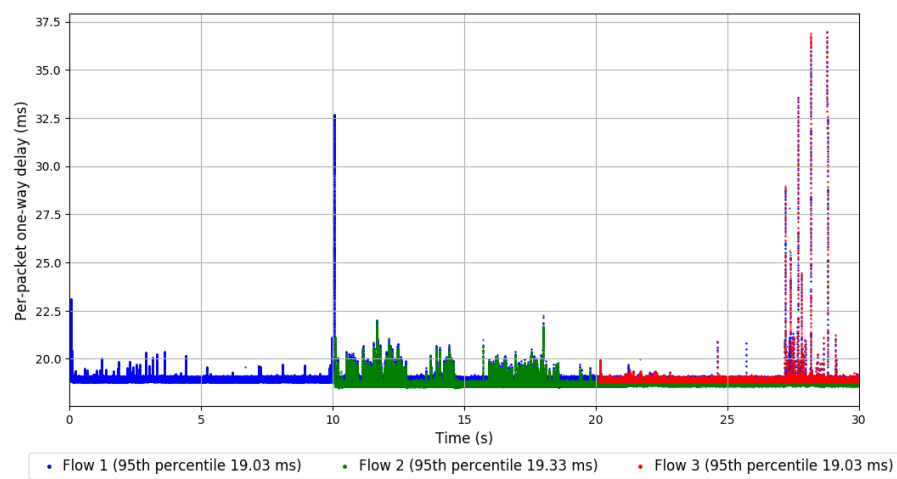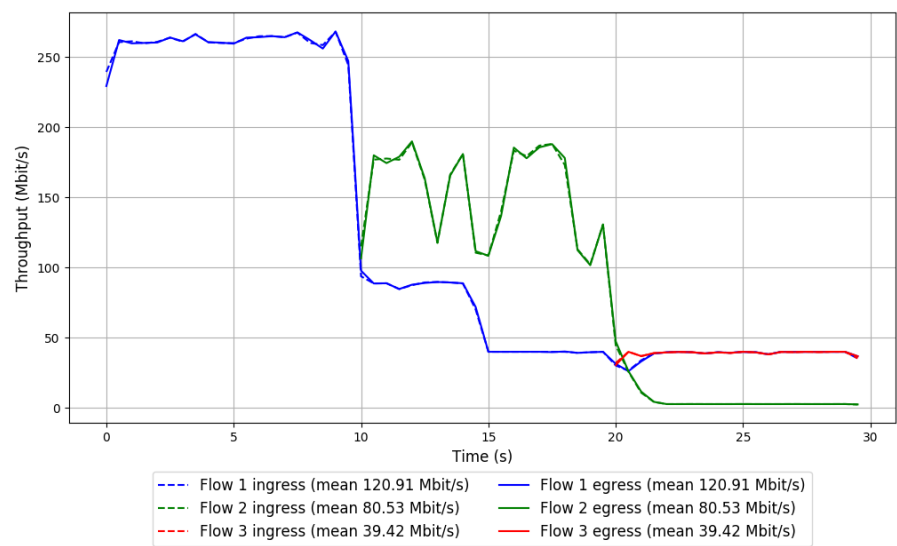Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-11 10:08:06
End at: 2017-08-11 10:08:36
Local clock offset: 0.462 ms
Remote clock offset: -1.141 ms

# Below is generated by plot.py at 2017-08-11 16:21:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.46 Mbit/s
95th percentile per-packet one-way delay: 19.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.91 Mbit/s
95th percentile per-packet one-way delay: 19.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 80.53 Mbit/s
95th percentile per-packet one-way delay: 19.330 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 19.026 ms
Loss rate: 0.00%
```

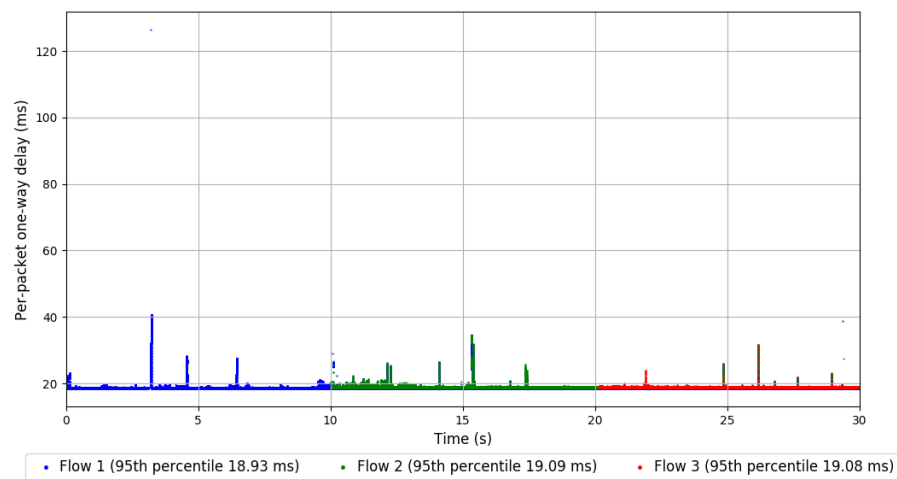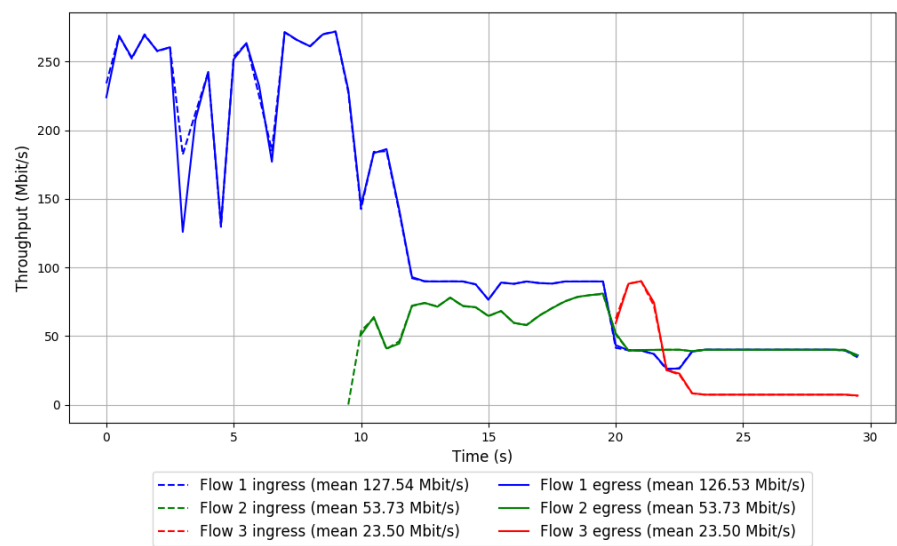# Run 3: Report of TaoVA-100x — Data Link

229

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

Start at: 2017-08-11 10:29:50
End at: 2017-08-11 10:30:20
Local clock offset: 0.524 ms
Remote clock offset: -1.196 ms


# Below is generated by plot.py at 2017-08-11 16:21:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 170.03 Mbit/s
95th percentile per-packet one-way delay: 19.056 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 126.53 Mbit/s
95th percentile per-packet one-way delay: 18.930 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 19.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.00%
```
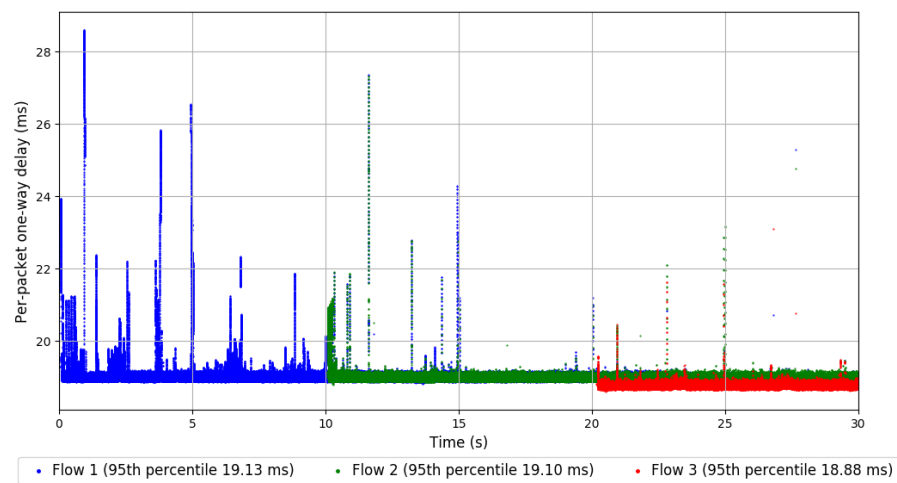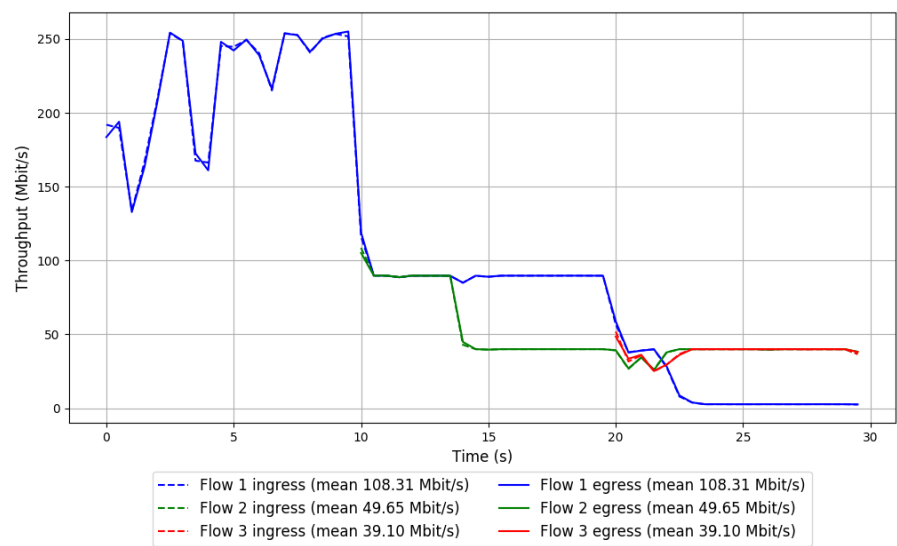
Run 4: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 127.54 Mbit/s)
- Flow 1 egress (mean 126.53 Mbit/s)
- Flow 2 ingress (mean 53.73 Mbit/s)
- Flow 2 egress (mean 53.73 Mbit/s)
- Flow 3 ingress (mean 23.50 Mbit/s)
- Flow 3 egress (mean 23.50 Mbit/s)

- Flow 1 (95th percentile 18.93 ms)
- Flow 2 (95th percentile 19.09 ms)
- Flow 3 (95th percentile 19.08 ms)

231

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

Start at: 2017-08-11 10:51:27
End at: 2017-08-11 10:51:57
Local clock offset: 0.499 ms
Remote clock offset: -1.295 ms


# Below is generated by plot.py at 2017-08-11 16:21:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.13 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 108.31 Mbit/s
95th percentile per-packet one-way delay: 19.130 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 19.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.10 Mbit/s
95th percentile per-packet one-way delay: 18.875 ms
Loss rate: 0.00%
```
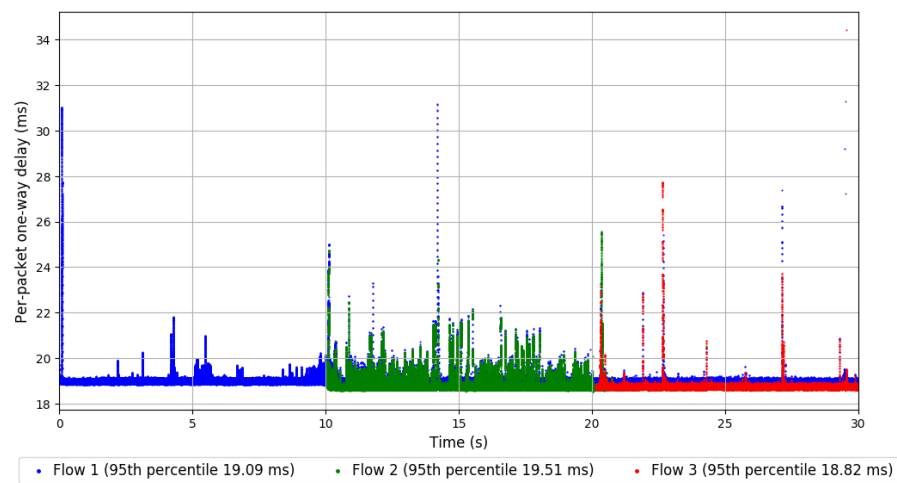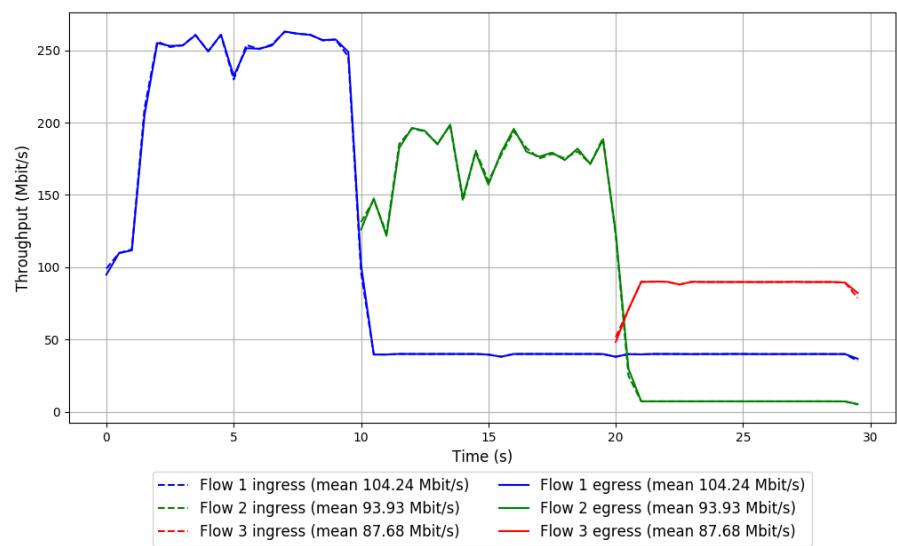
Run 5: Report of TaoVA-100x — Data Link

- --- Flow 1 ingress (mean 108.31 Mbit/s) — Flow 1 egress (mean 108.31 Mbit/s)
- --- Flow 2 ingress (mean 49.65 Mbit/s) — Flow 2 egress (mean 49.65 Mbit/s)
- --- Flow 3 ingress (mean 39.10 Mbit/s) — Flow 3 egress (mean 39.10 Mbit/s)

- Flow 1 (95th percentile 19.13 ms)   • Flow 2 (95th percentile 19.10 ms)   • Flow 3 (95th percentile 18.88 ms)
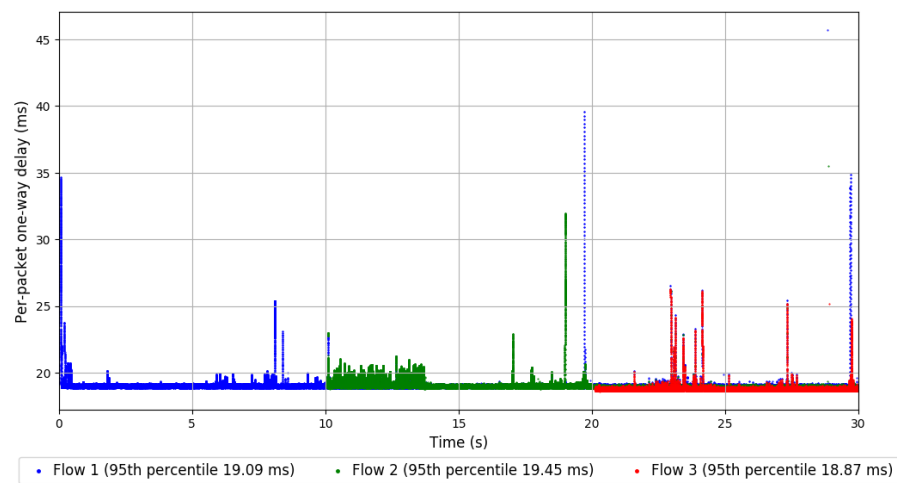
```
Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 11:12:51
End at: 2017-08-11 11:13:21
Local clock offset: 0.606 ms
Remote clock offset: -1.214 ms


# Below is generated by plot.py at 2017-08-11 16:22:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.59 Mbit/s
95th percentile per-packet one-way delay: 19.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 104.24 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 19.514 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 18.821 ms
Loss rate: 0.00%
```

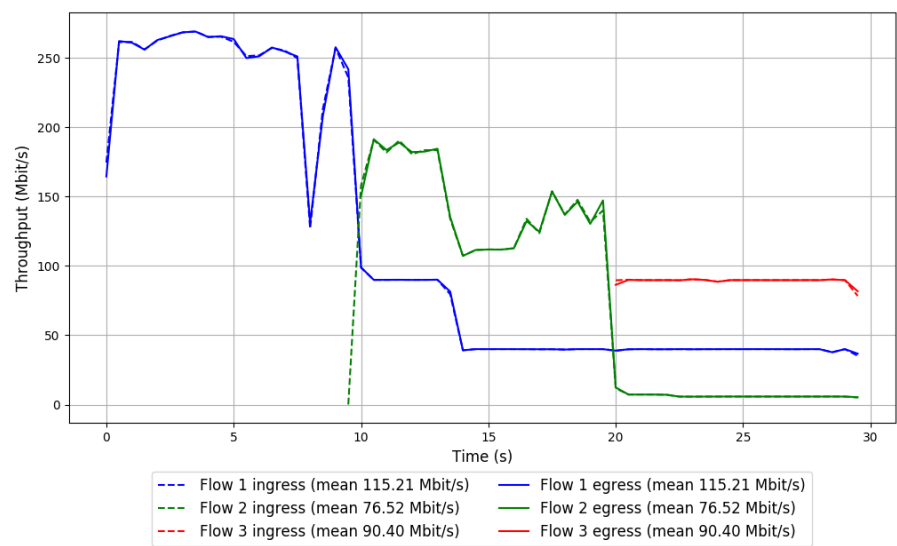Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-11 11:34:38
End at: 2017-08-11 11:35:08
Local clock offset: 0.684 ms
Remote clock offset: -1.195 ms


# Below is generated by plot.py at 2017-08-11 16:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.99 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.21 Mbit/s
95th percentile per-packet one-way delay: 19.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 19.454 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.40 Mbit/s
95th percentile per-packet one-way delay: 18.870 ms
Loss rate: 0.00%
```

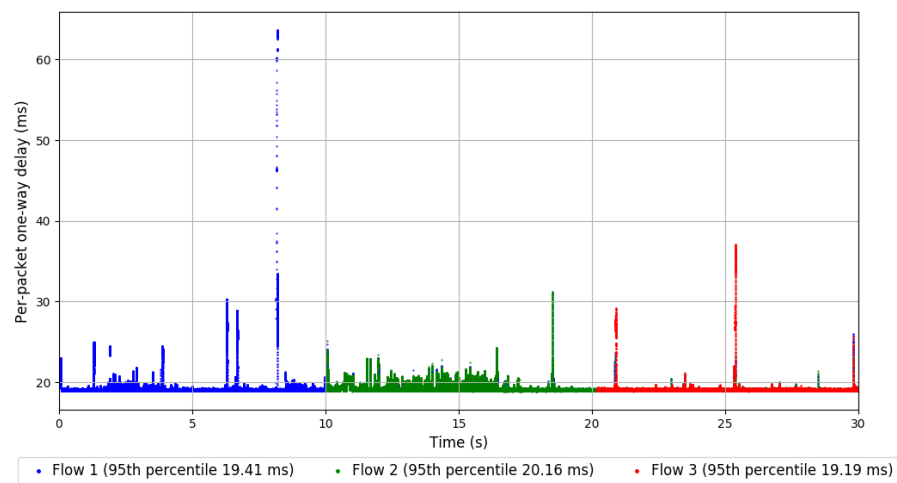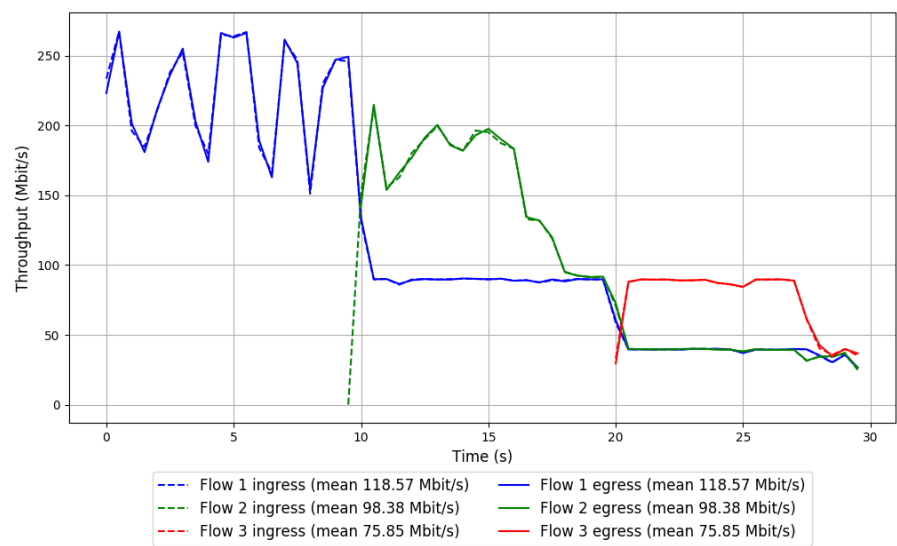Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-11 11:55:58
End at: 2017-08-11 11:56:28
Local clock offset: 0.785 ms
Remote clock offset: -1.164 ms


# Below is generated by plot.py at 2017-08-11 16:22:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.93 Mbit/s
95th percentile per-packet one-way delay: 19.596 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.57 Mbit/s
95th percentile per-packet one-way delay: 19.408 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.38 Mbit/s
95th percentile per-packet one-way delay: 20.157 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.85 Mbit/s
95th percentile per-packet one-way delay: 19.191 ms
Loss rate: 0.00%
```

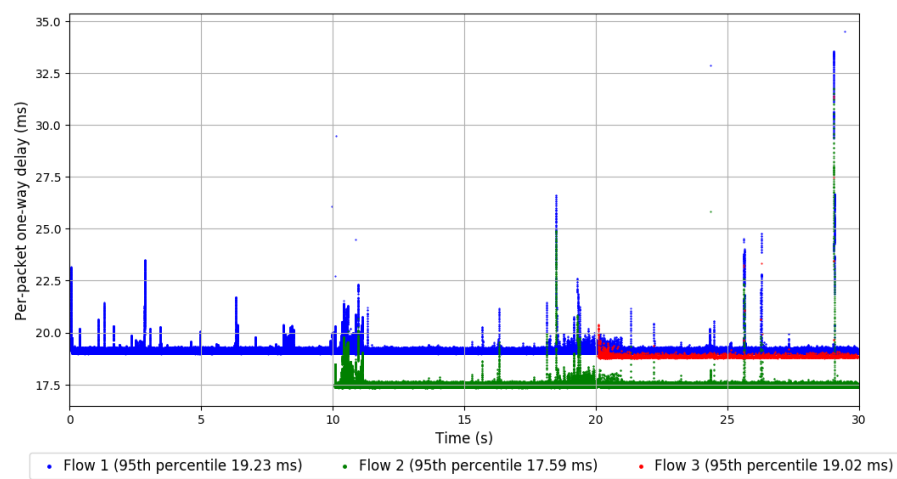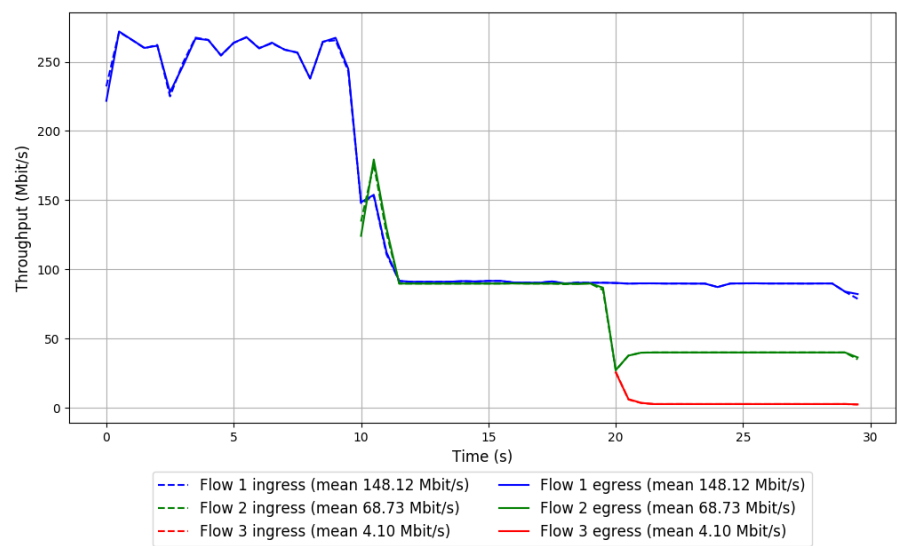Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-11 12:17:41
End at: 2017-08-11 12:18:12
Local clock offset: 0.675 ms
Remote clock offset: -1.236 ms


# Below is generated by plot.py at 2017-08-11 16:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.18 Mbit/s
95th percentile per-packet one-way delay: 19.211 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.12 Mbit/s
95th percentile per-packet one-way delay: 19.228 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.73 Mbit/s
95th percentile per-packet one-way delay: 17.595 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 19.020 ms
Loss rate: 0.00%
```

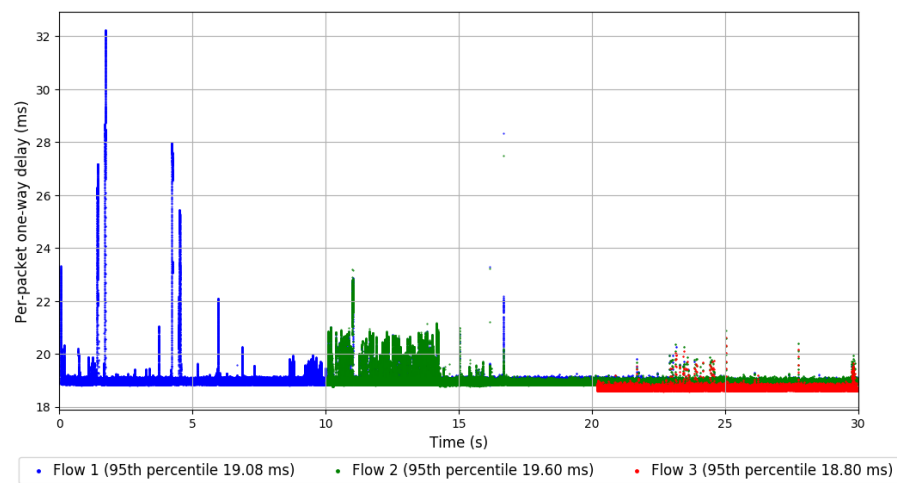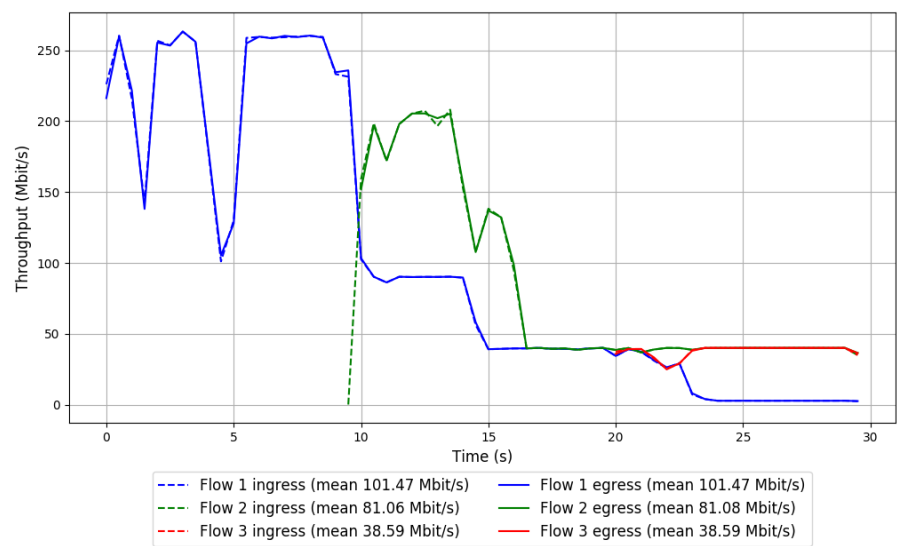# Run 9: Report of TaoVA-100x — Data Link

241

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

Start at: 2017-08-11 12:39:16
End at: 2017-08-11 12:39:46
Local clock offset: 0.738 ms
Remote clock offset: -1.629 ms


# Below is generated by plot.py at 2017-08-11 16:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 168.12 Mbit/s
95th percentile per-packet one-way delay: 19.134 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 101.47 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.08 Mbit/s
95th percentile per-packet one-way delay: 19.599 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.59 Mbit/s
95th percentile per-packet one-way delay: 18.798 ms
Loss rate: 0.00%
```

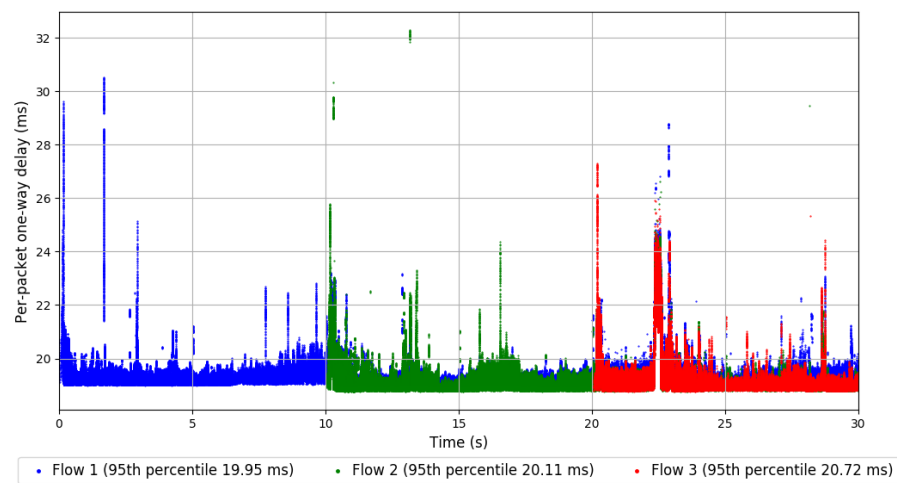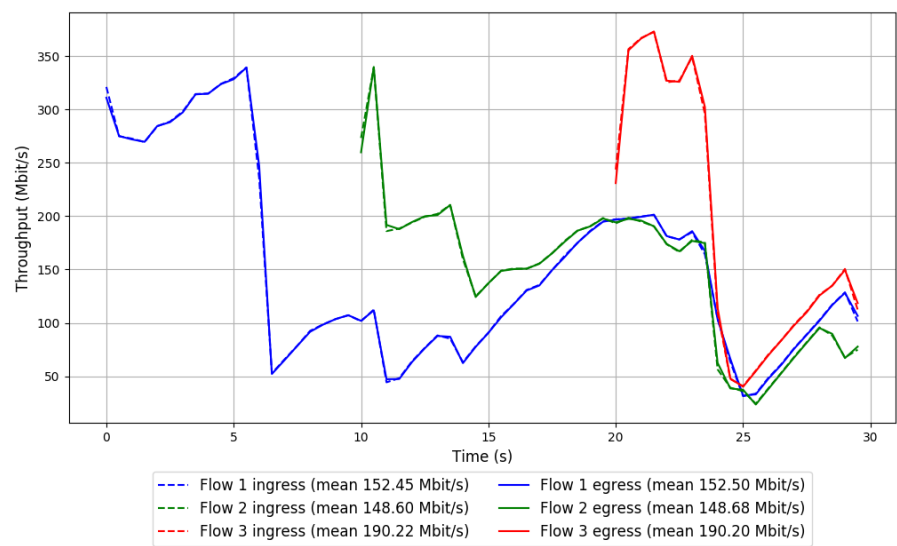Run 10: Report of TaoVA-100x — Data Link

243

```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 09:33:51
End at: 2017-08-11 09:34:21
Local clock offset: 0.272 ms
Remote clock offset: -0.644 ms


# Below is generated by plot.py at 2017-08-11 16:24:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.54 Mbit/s
95th percentile per-packet one-way delay: 20.079 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 152.50 Mbit/s
95th percentile per-packet one-way delay: 19.952 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.68 Mbit/s
95th percentile per-packet one-way delay: 20.111 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 190.20 Mbit/s
95th percentile per-packet one-way delay: 20.719 ms
Loss rate: 0.01%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 09:55:16
End at: 2017-08-11 09:55:46
Local clock offset: 0.354 ms
Remote clock offset: -0.84 ms


# Below is generated by plot.py at 2017-08-11 16:24:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.06 Mbit/s
95th percentile per-packet one-way delay: 19.575 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 291.21 Mbit/s
95th percentile per-packet one-way delay: 19.609 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.36 Mbit/s
95th percentile per-packet one-way delay: 19.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.23 Mbit/s
95th percentile per-packet one-way delay: 18.558 ms
Loss rate: 0.00%
```
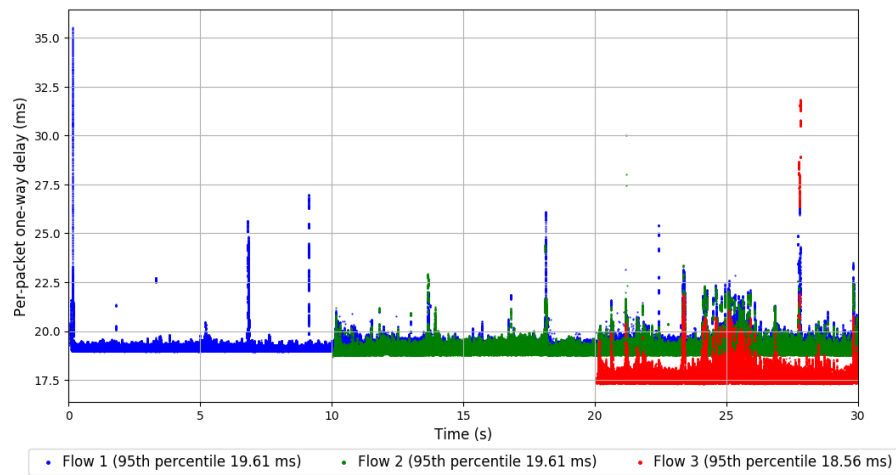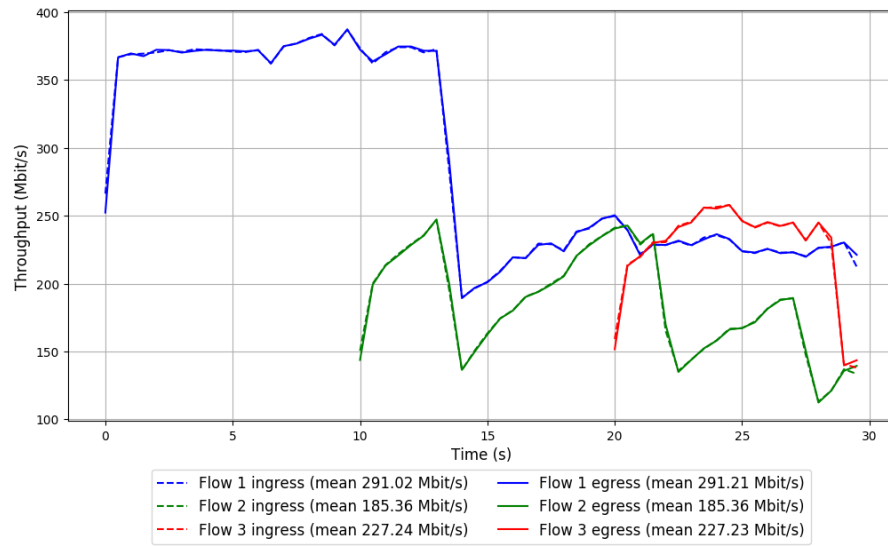
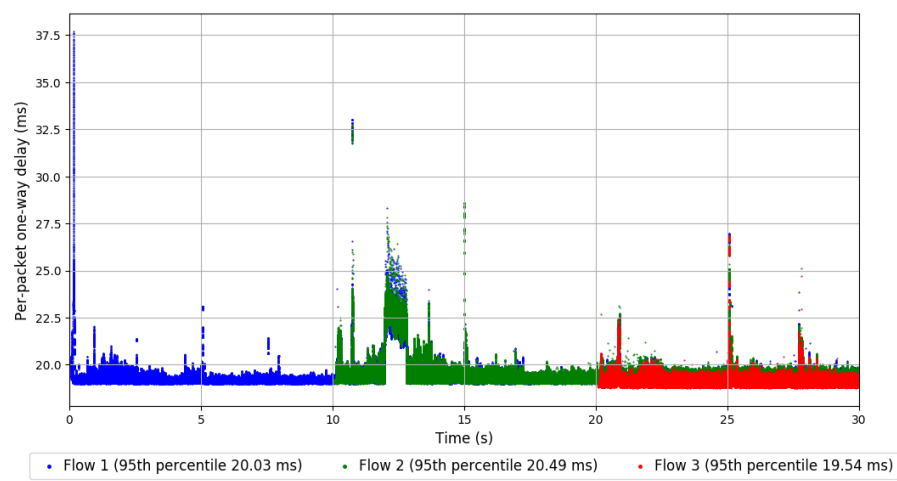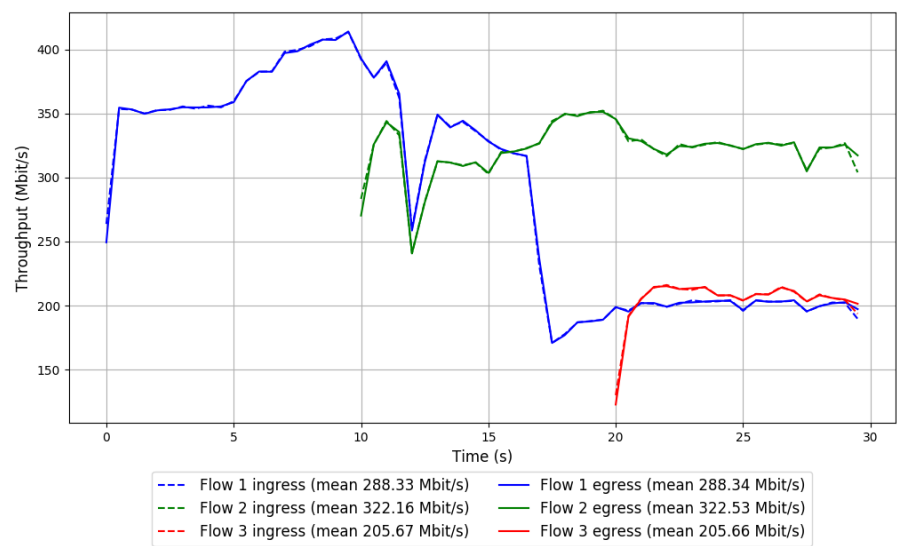Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 10:16:49
End at: 2017-08-11 10:17:19
Local clock offset: 0.369 ms
Remote clock offset: -1.095 ms


# Below is generated by plot.py at 2017-08-11 16:25:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 571.12 Mbit/s
95th percentile per-packet one-way delay: 20.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 288.34 Mbit/s
95th percentile per-packet one-way delay: 20.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 322.53 Mbit/s
95th percentile per-packet one-way delay: 20.489 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 205.66 Mbit/s
95th percentile per-packet one-way delay: 19.543 ms
Loss rate: 0.00%
```

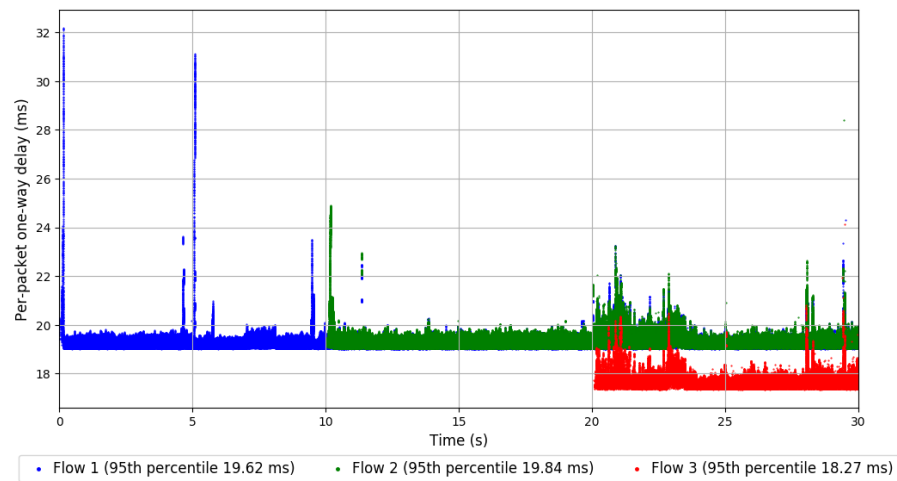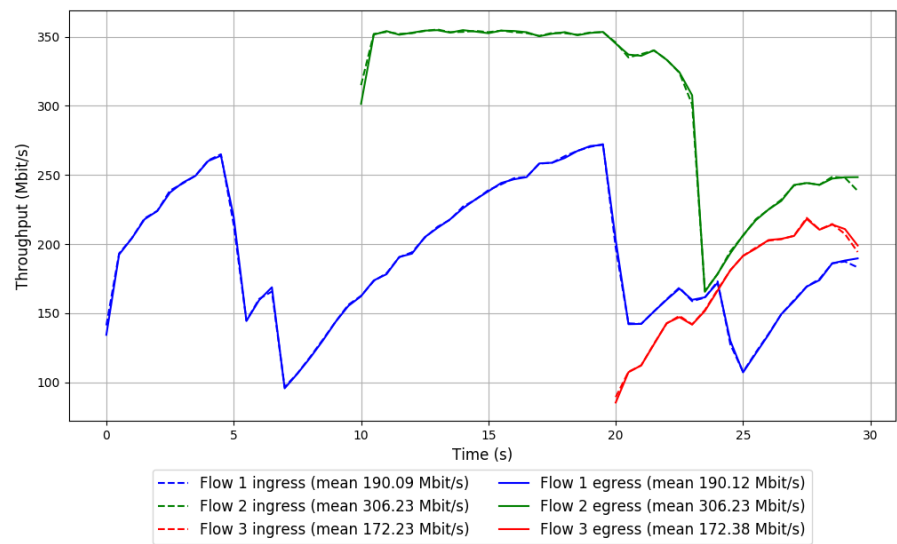Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 10:38:40
End at: 2017-08-11 10:39:10
Local clock offset: 0.458 ms
Remote clock offset: -1.151 ms


# Below is generated by plot.py at 2017-08-11 16:25:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.09 Mbit/s
95th percentile per-packet one-way delay: 19.686 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 190.12 Mbit/s
95th percentile per-packet one-way delay: 19.622 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 306.23 Mbit/s
95th percentile per-packet one-way delay: 19.838 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.38 Mbit/s
95th percentile per-packet one-way delay: 18.271 ms
Loss rate: 0.00%
```

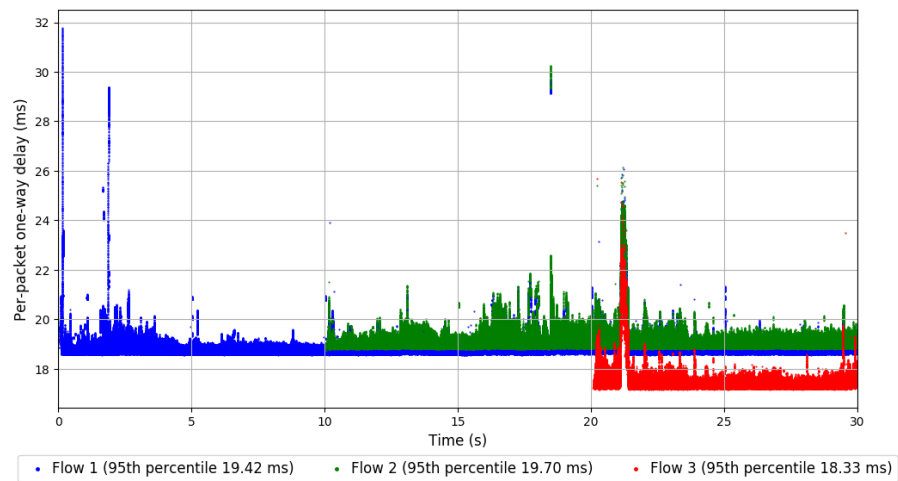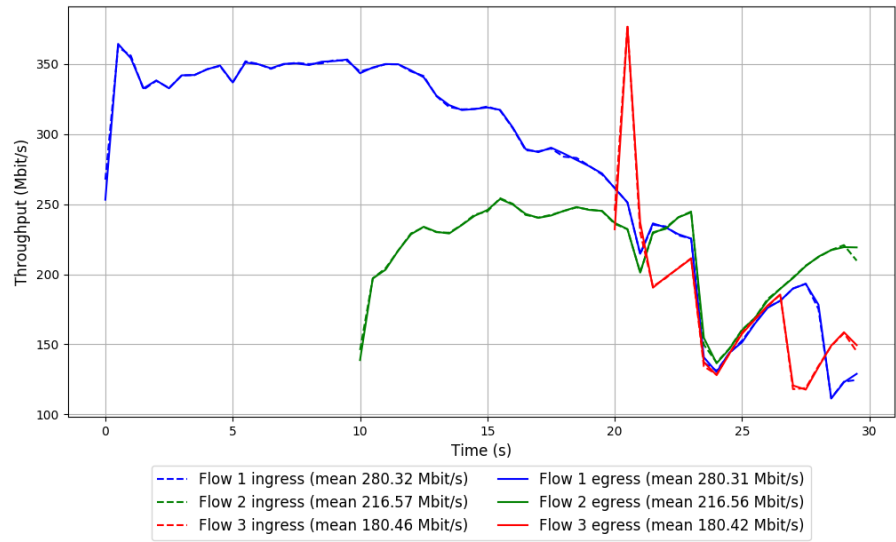# Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 10:59:59
End at: 2017-08-11 11:00:29
Local clock offset: 0.605 ms
Remote clock offset: -1.294 ms


# Below is generated by plot.py at 2017-08-11 16:26:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.16 Mbit/s
95th percentile per-packet one-way delay: 19.526 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 280.31 Mbit/s
95th percentile per-packet one-way delay: 19.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.56 Mbit/s
95th percentile per-packet one-way delay: 19.703 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.42 Mbit/s
95th percentile per-packet one-way delay: 18.328 ms
Loss rate: 0.02%
```

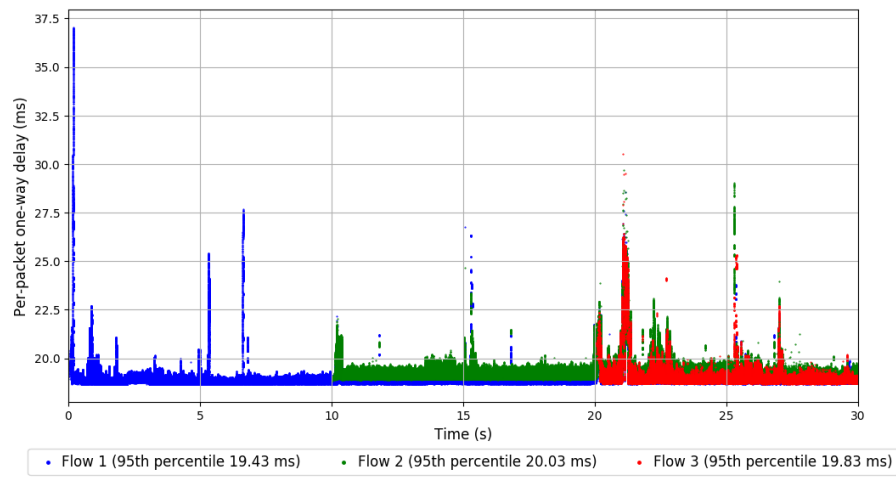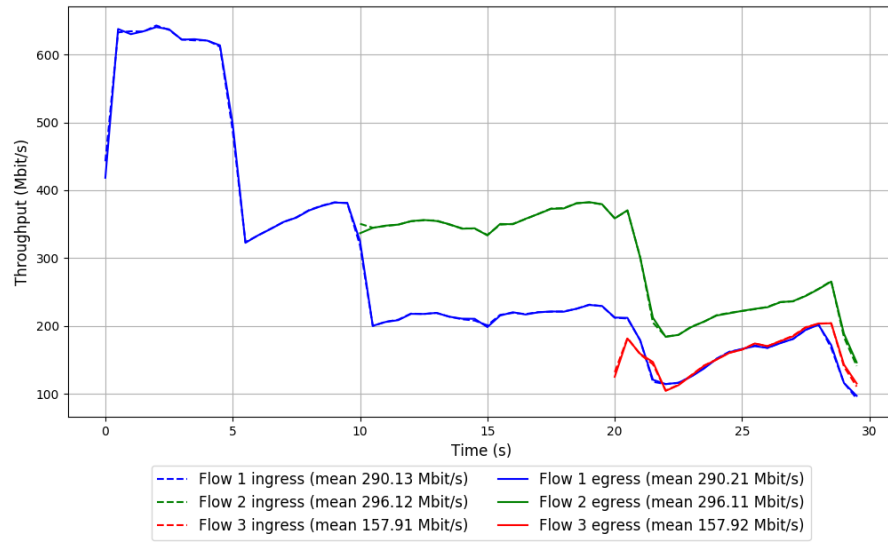Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 11:21:40
End at: 2017-08-11 11:22:10
Local clock offset: 0.554 ms
Remote clock offset: -1.164 ms


# Below is generated by plot.py at 2017-08-11 16:26:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 539.80 Mbit/s
95th percentile per-packet one-way delay: 19.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 290.21 Mbit/s
95th percentile per-packet one-way delay: 19.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 296.11 Mbit/s
95th percentile per-packet one-way delay: 20.029 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.92 Mbit/s
95th percentile per-packet one-way delay: 19.833 ms
Loss rate: 0.01%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 290.13 Mbit/s) --- Flow 1 egress (mean 290.21 Mbit/s)
Flow 2 ingress (mean 296.12 Mbit/s) --- Flow 2 egress (mean 296.11 Mbit/s)
Flow 3 ingress (mean 157.91 Mbit/s) --- Flow 3 egress (mean 157.92 Mbit/s)

Flow 1 (95th percentile 19.43 ms)   Flow 2 (95th percentile 20.03 ms)   Flow 3 (95th percentile 19.83 ms)
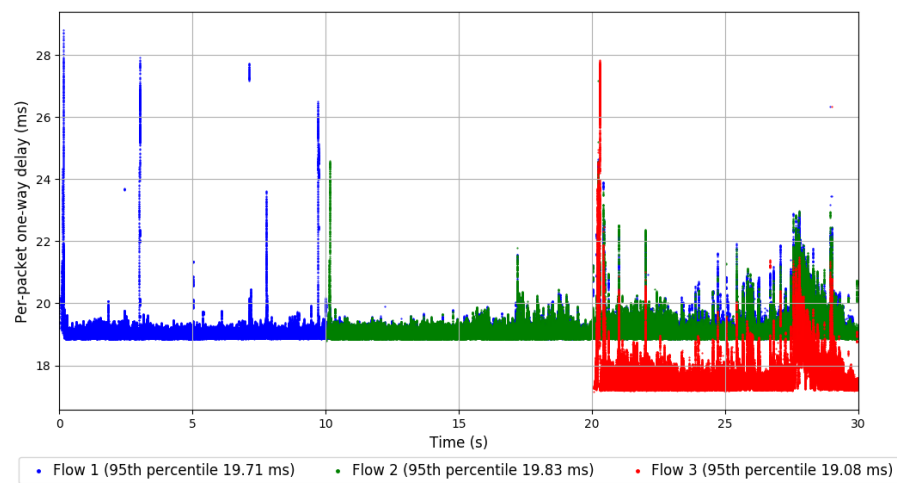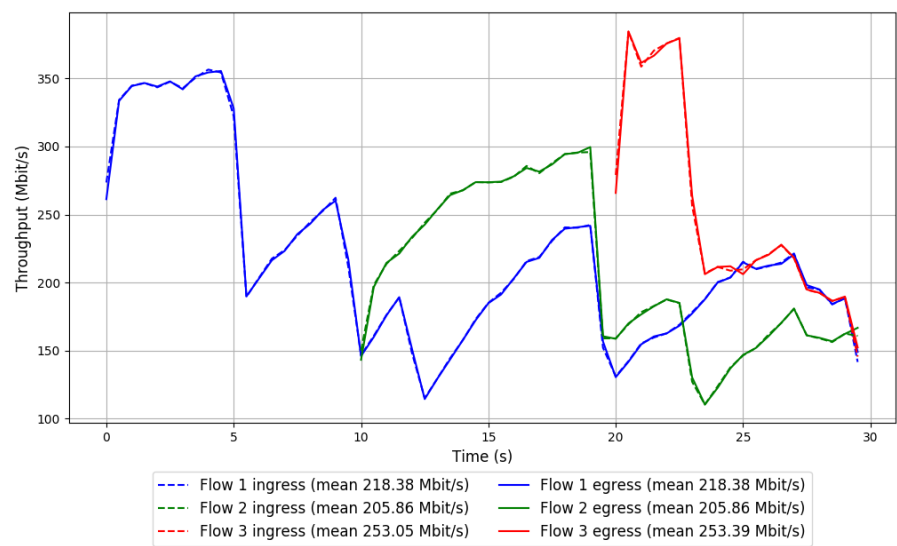
```
Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 11:43:13
End at: 2017-08-11 11:43:43
Local clock offset: 0.808 ms
Remote clock offset: -1.115 ms


# Below is generated by plot.py at 2017-08-11 16:27:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 439.48 Mbit/s
95th percentile per-packet one-way delay: 19.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.38 Mbit/s
95th percentile per-packet one-way delay: 19.713 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 205.86 Mbit/s
95th percentile per-packet one-way delay: 19.832 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 253.39 Mbit/s
95th percentile per-packet one-way delay: 19.081 ms
Loss rate: 0.00%
```

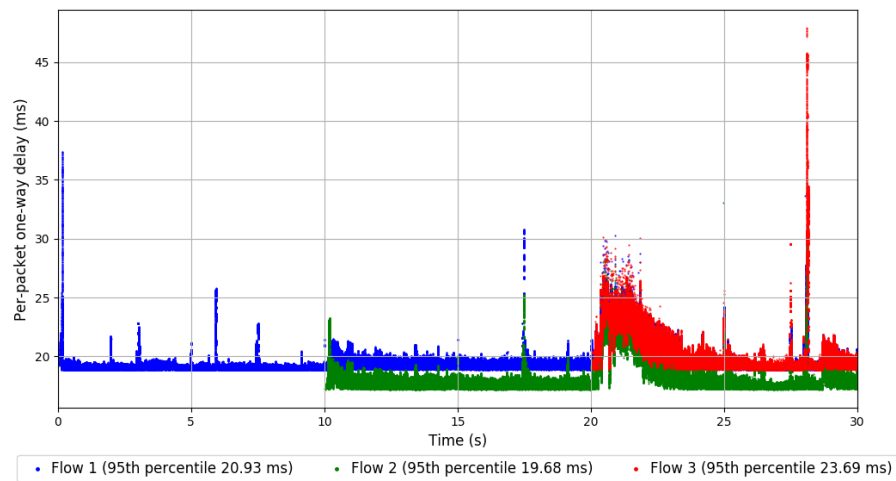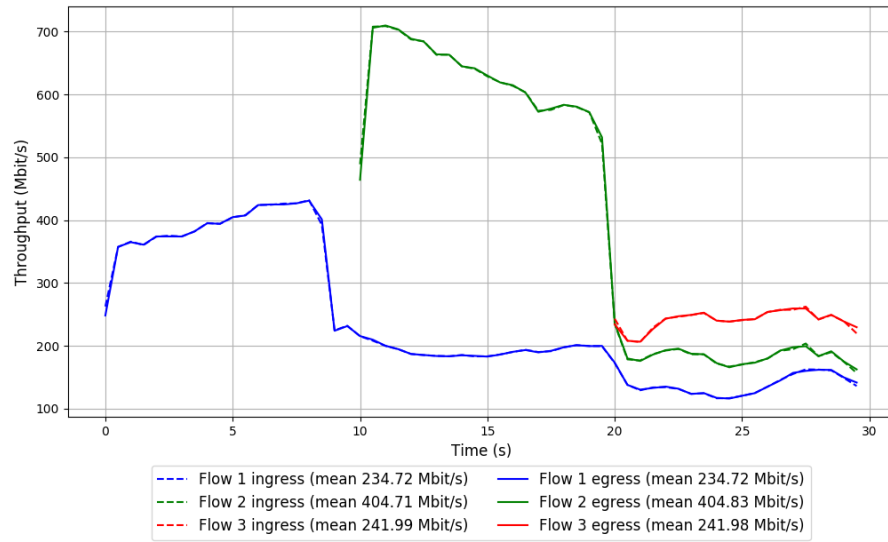Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 12:04:40
End at: 2017-08-11 12:05:10
Local clock offset: 0.788 ms
Remote clock offset: -1.205 ms

# Below is generated by plot.py at 2017-08-11 16:27:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.79 Mbit/s
95th percentile per-packet one-way delay: 21.576 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.72 Mbit/s
95th percentile per-packet one-way delay: 20.932 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 404.83 Mbit/s
95th percentile per-packet one-way delay: 19.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.98 Mbit/s
95th percentile per-packet one-way delay: 23.693 ms
Loss rate: 0.00%
```
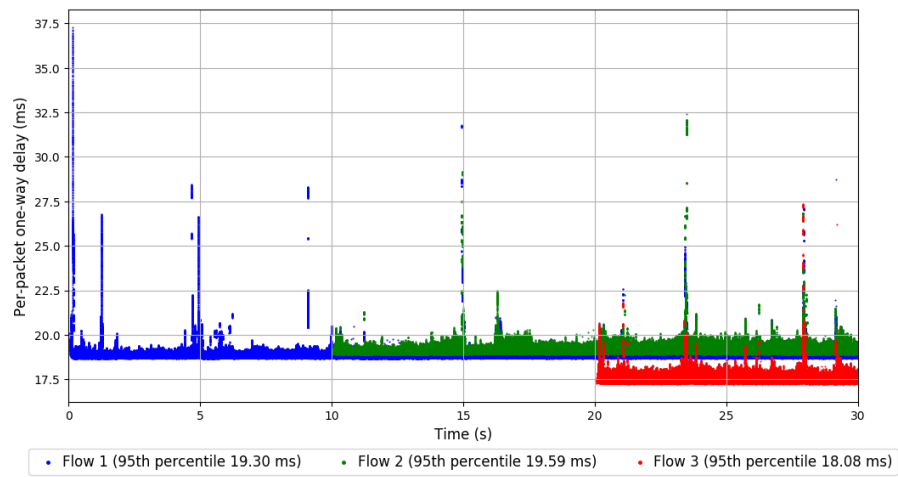
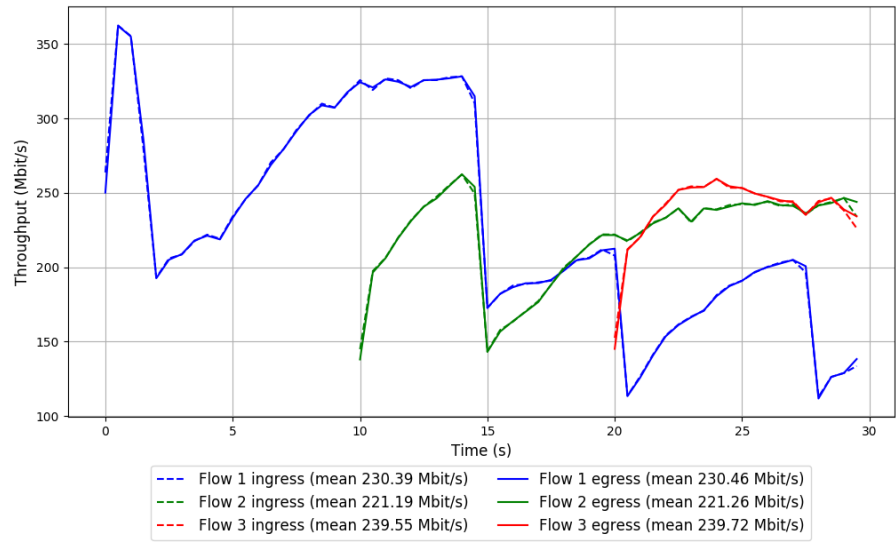Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 12:26:23
End at: 2017-08-11 12:26:53
Local clock offset: 0.672 ms
Remote clock offset: -1.558 ms


# Below is generated by plot.py at 2017-08-11 16:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 457.29 Mbit/s
95th percentile per-packet one-way delay: 19.447 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 230.46 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 221.26 Mbit/s
95th percentile per-packet one-way delay: 19.594 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 239.72 Mbit/s
95th percentile per-packet one-way delay: 18.078 ms
Loss rate: 0.00%
```

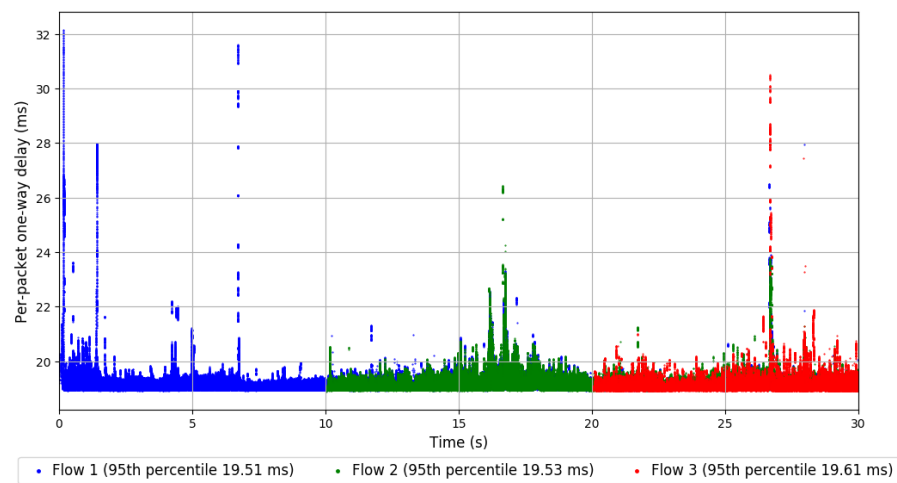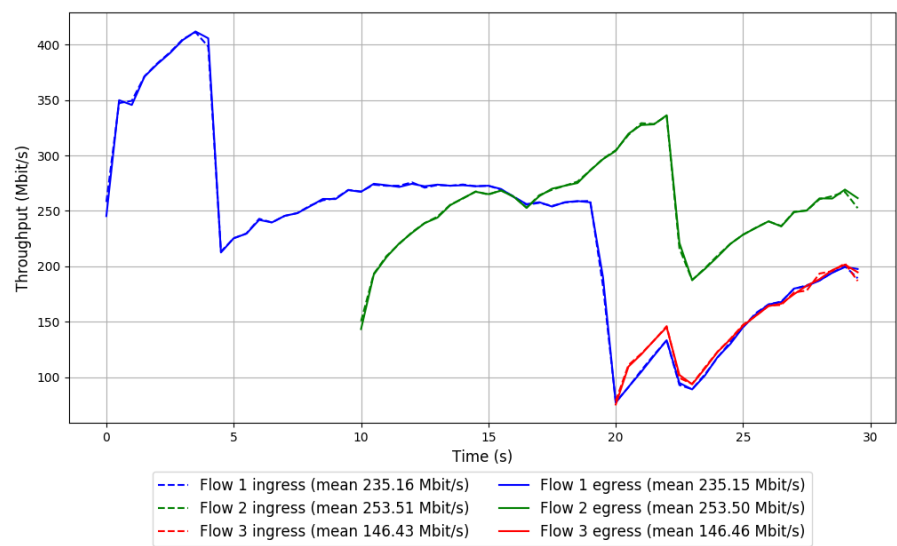# Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 12:48:01
End at: 2017-08-11 12:48:31
Local clock offset: 0.731 ms
Remote clock offset: -1.592 ms


# Below is generated by plot.py at 2017-08-11 16:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.63 Mbit/s
95th percentile per-packet one-way delay: 19.527 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 235.15 Mbit/s
95th percentile per-packet one-way delay: 19.506 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 253.50 Mbit/s
95th percentile per-packet one-way delay: 19.534 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.46 Mbit/s
95th percentile per-packet one-way delay: 19.611 ms
Loss rate: 0.00%
```

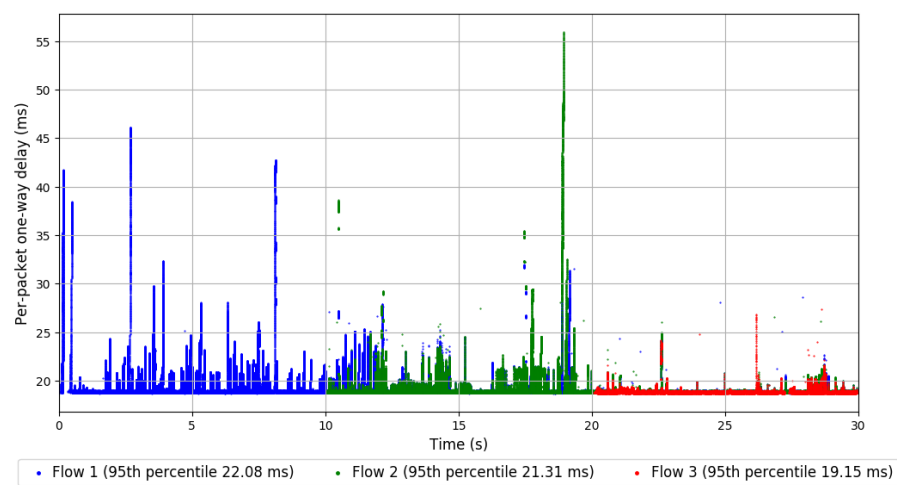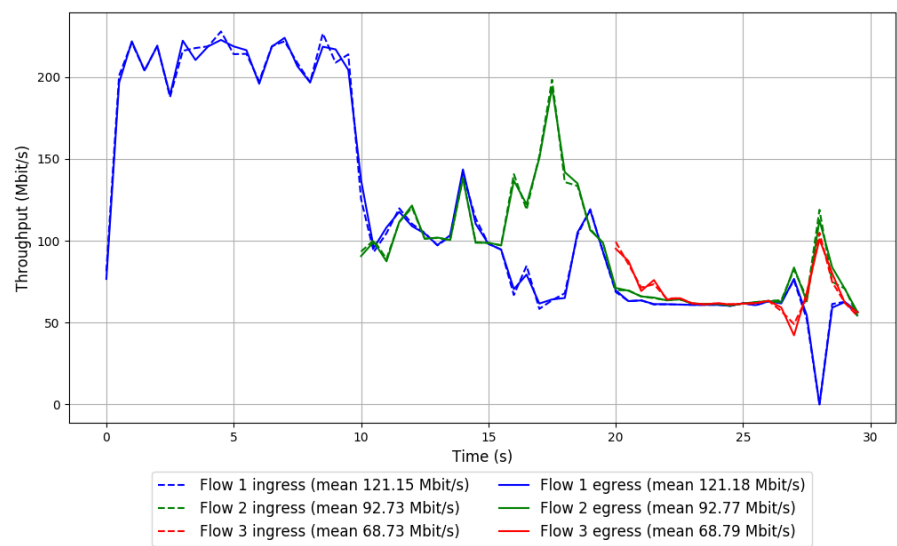## Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-08-11 09:23:48
End at: 2017-08-11 09:24:18
Local clock offset: 0.354 ms
Remote clock offset: -0.462 ms

# Below is generated by plot.py at 2017-08-11 16:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.65 Mbit/s
95th percentile per-packet one-way delay: 21.596 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 121.18 Mbit/s
95th percentile per-packet one-way delay: 22.084 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 21.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.79 Mbit/s
95th percentile per-packet one-way delay: 19.154 ms
Loss rate: 0.00%
```
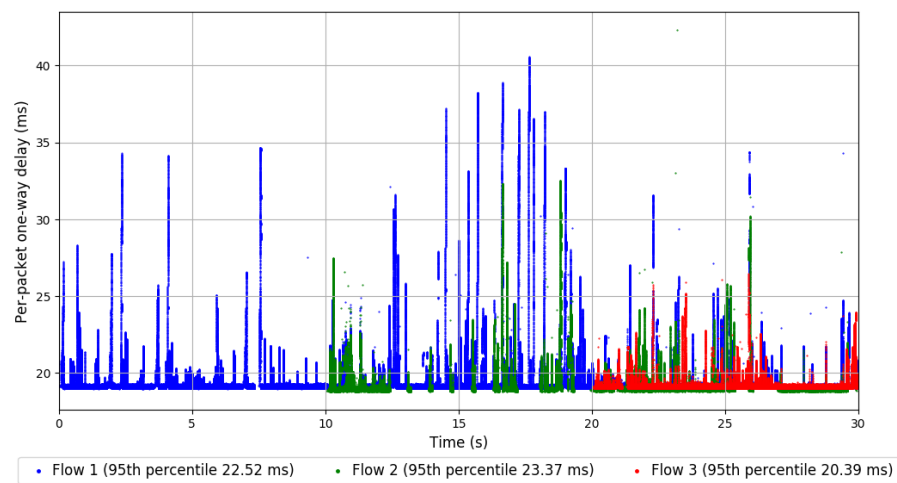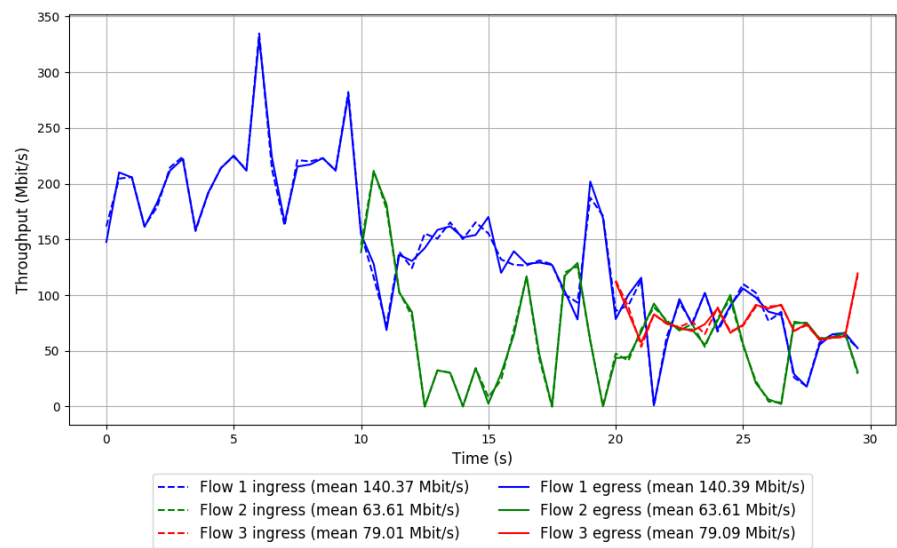
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-08-11 09:45:18
End at: 2017-08-11 09:45:48
Local clock offset: 0.314 ms
Remote clock offset: -0.786 ms


# Below is generated by plot.py at 2017-08-11 16:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.86 Mbit/s
95th percentile per-packet one-way delay: 22.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 140.39 Mbit/s
95th percentile per-packet one-way delay: 22.517 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.61 Mbit/s
95th percentile per-packet one-way delay: 23.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.09 Mbit/s
95th percentile per-packet one-way delay: 20.392 ms
Loss rate: 0.00%
```

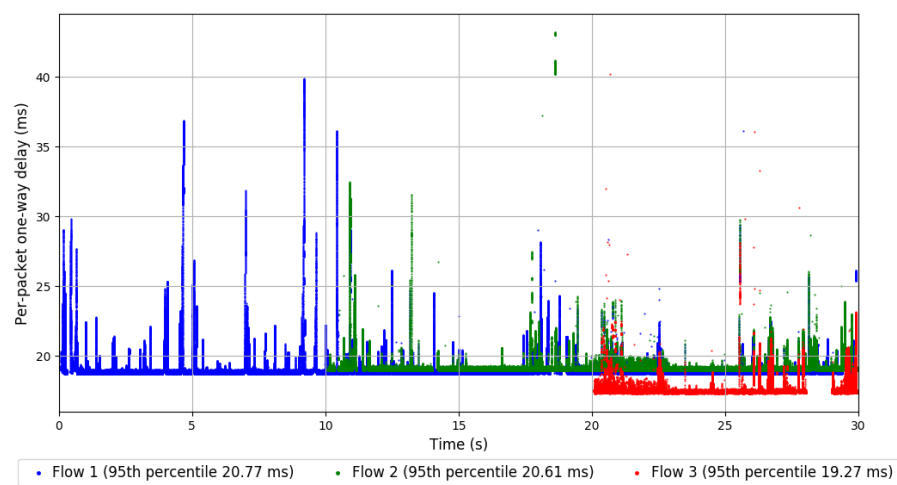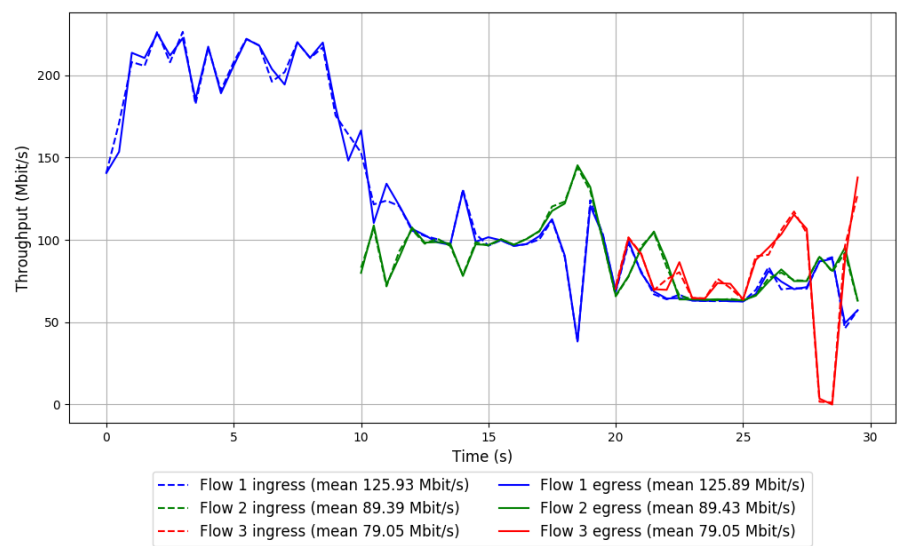Run 2: Report of Verus — Data Link

267

```
Run 3: Statistics of Verus

Start at: 2017-08-11 10:06:41
End at: 2017-08-11 10:07:11
Local clock offset: 0.372 ms
Remote clock offset: -1.082 ms


# Below is generated by plot.py at 2017-08-11 16:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.45 Mbit/s
95th percentile per-packet one-way delay: 20.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 125.89 Mbit/s
95th percentile per-packet one-way delay: 20.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 89.43 Mbit/s
95th percentile per-packet one-way delay: 20.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 19.273 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

- - - Flow 1 ingress (mean 125.93 Mbit/s)   —— Flow 1 egress (mean 125.89 Mbit/s)
- - - Flow 2 ingress (mean 89.39 Mbit/s)   —— Flow 2 egress (mean 89.43 Mbit/s)
- - - Flow 3 ingress (mean 79.05 Mbit/s)   —— Flow 3 egress (mean 79.05 Mbit/s)

• Flow 1 (95th percentile 20.77 ms)   • Flow 2 (95th percentile 20.61 ms)   • Flow 3 (95th percentile 19.27 ms)
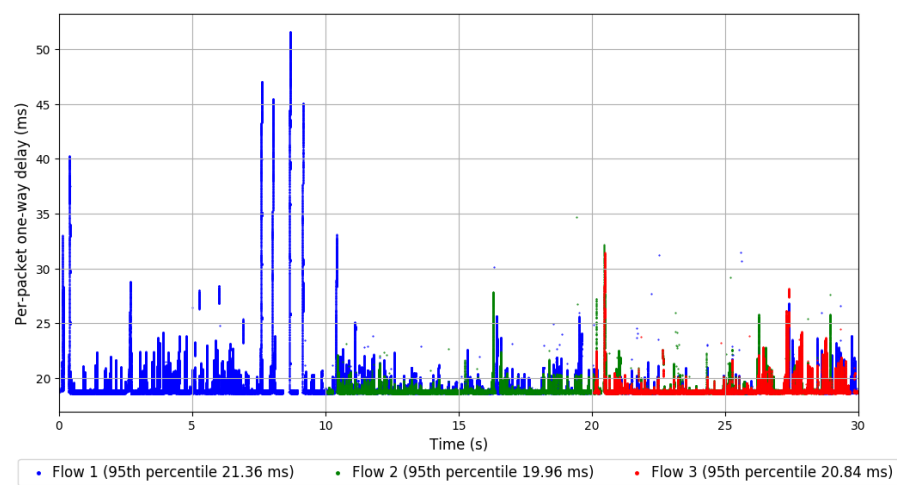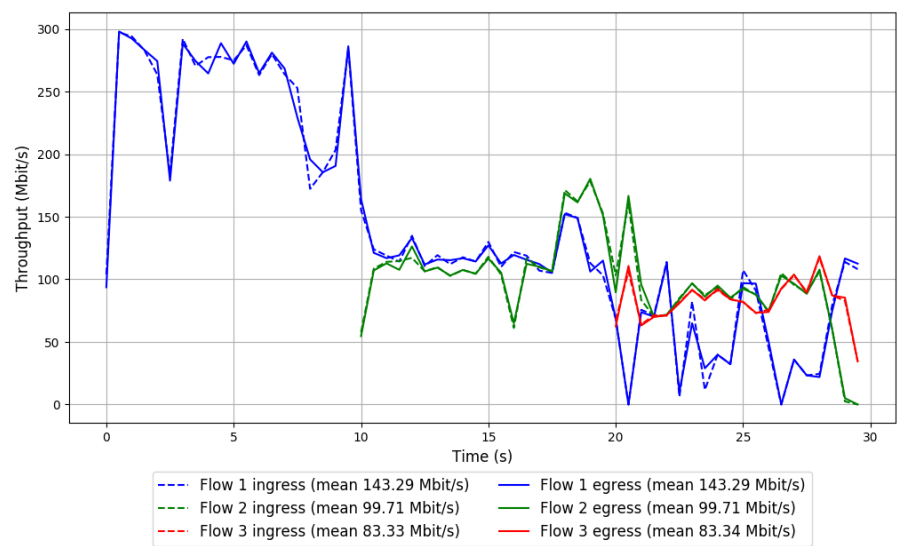
269

```
Run 4: Statistics of Verus

Start at: 2017-08-11 10:28:24
End at: 2017-08-11 10:28:54
Local clock offset: 0.507 ms
Remote clock offset: -1.193 ms


# Below is generated by plot.py at 2017-08-11 16:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.17 Mbit/s
95th percentile per-packet one-way delay: 20.950 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 143.29 Mbit/s
95th percentile per-packet one-way delay: 21.358 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.71 Mbit/s
95th percentile per-packet one-way delay: 19.962 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.34 Mbit/s
95th percentile per-packet one-way delay: 20.844 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-08-11 10:50:03
End at: 2017-08-11 10:50:33
Local clock offset: 0.486 ms
Remote clock offset: -1.25 ms


# Below is generated by plot.py at 2017-08-11 16:29:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.97 Mbit/s
95th percentile per-packet one-way delay: 20.842 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.93 Mbit/s
95th percentile per-packet one-way delay: 21.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 20.332 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.25 Mbit/s
95th percentile per-packet one-way delay: 20.792 ms
Loss rate: 0.00%
```
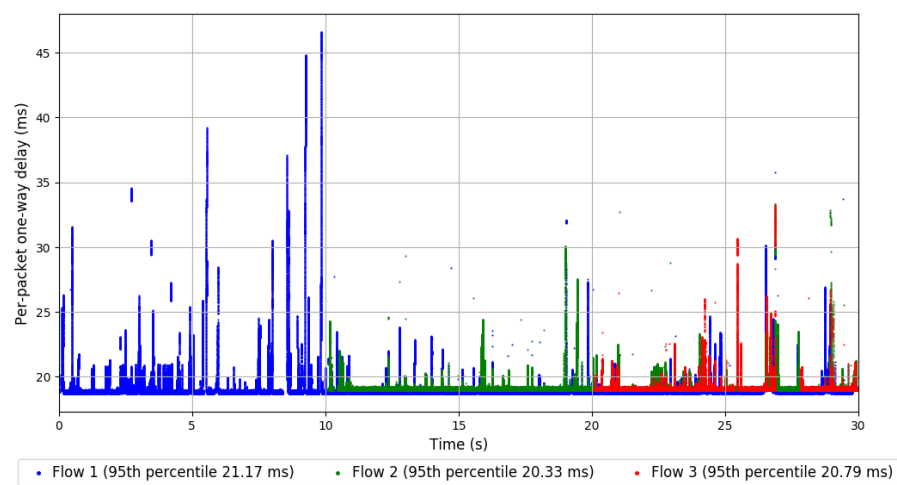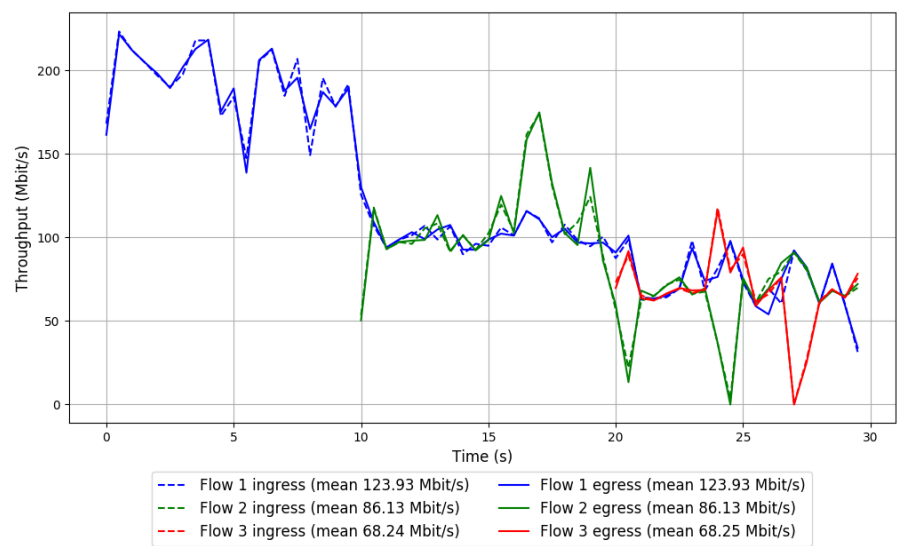
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 123.93 Mbit/s) --- Flow 1 egress (mean 123.93 Mbit/s)
Flow 2 ingress (mean 86.13 Mbit/s) --- Flow 2 egress (mean 86.13 Mbit/s)
Flow 3 ingress (mean 68.24 Mbit/s) --- Flow 3 egress (mean 68.25 Mbit/s)

Flow 1 (95th percentile 21.17 ms) • Flow 2 (95th percentile 20.33 ms) • Flow 3 (95th percentile 20.79 ms)
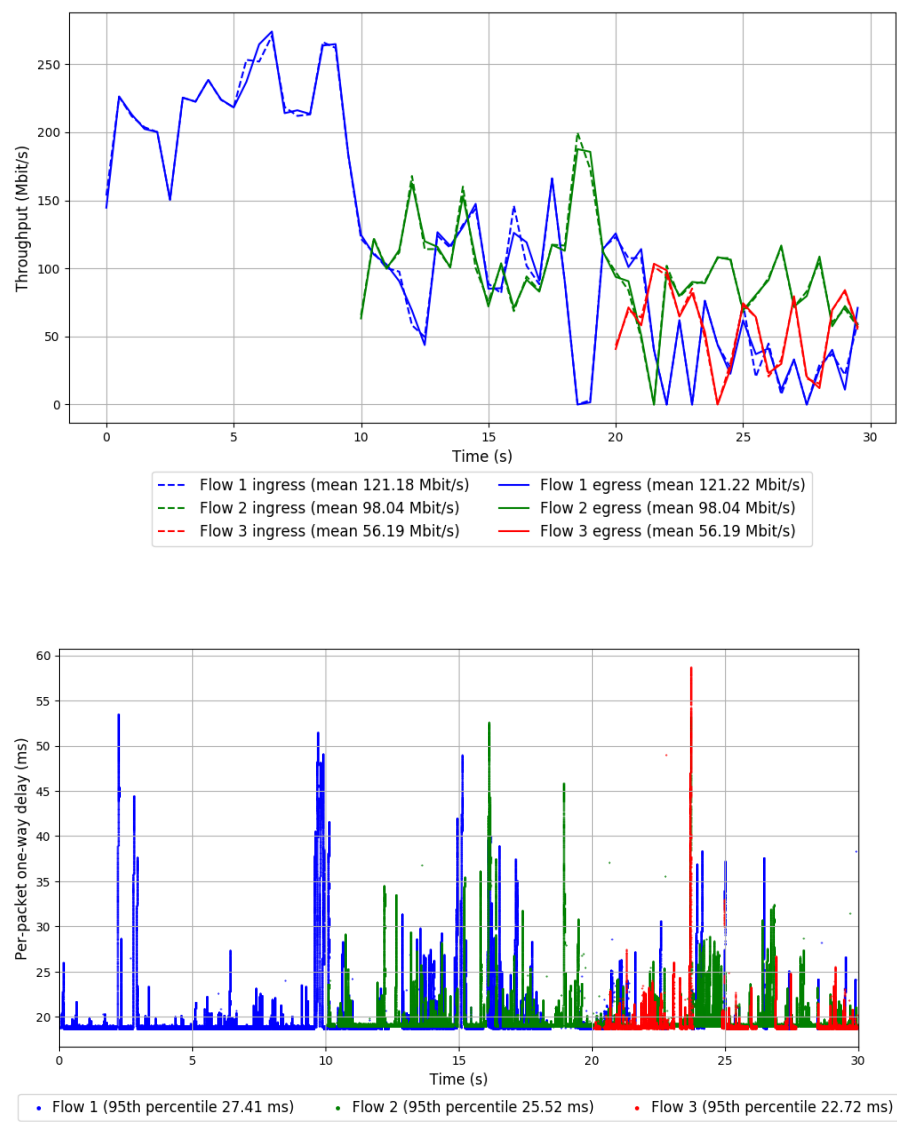
```
Run 6: Statistics of Verus

Start at: 2017-08-11 11:11:26
End at: 2017-08-11 11:11:56
Local clock offset: 0.603 ms
Remote clock offset: -1.121 ms


# Below is generated by plot.py at 2017-08-11 16:29:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.06 Mbit/s
95th percentile per-packet one-way delay: 26.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 121.22 Mbit/s
95th percentile per-packet one-way delay: 27.415 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.04 Mbit/s
95th percentile per-packet one-way delay: 25.519 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 56.19 Mbit/s
95th percentile per-packet one-way delay: 22.721 ms
Loss rate: 0.02%
```

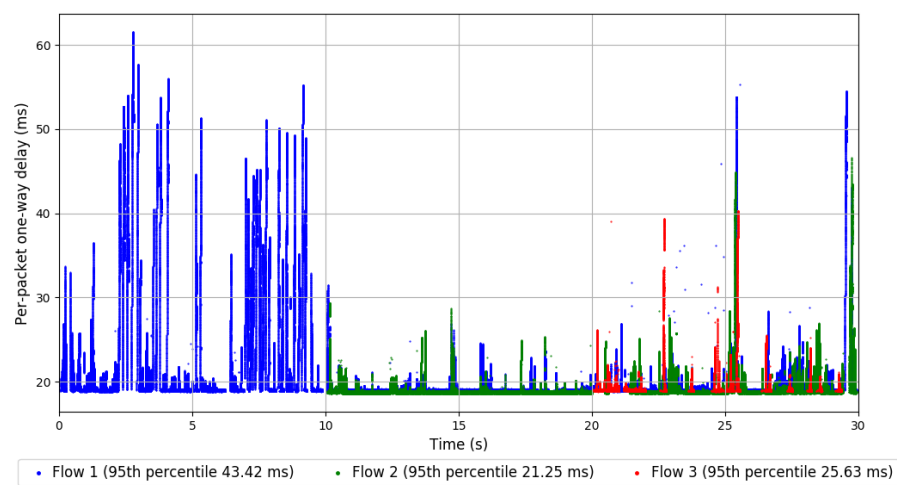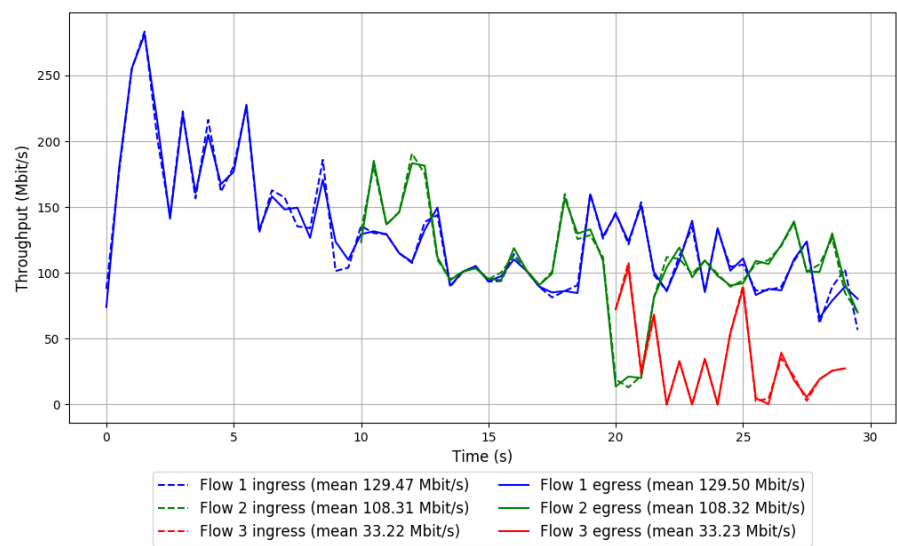Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-08-11 11:33:13
End at: 2017-08-11 11:33:43
Local clock offset: 0.725 ms
Remote clock offset: -1.148 ms


# Below is generated by plot.py at 2017-08-11 16:30:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.98 Mbit/s
95th percentile per-packet one-way delay: 35.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 129.50 Mbit/s
95th percentile per-packet one-way delay: 43.418 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.32 Mbit/s
95th percentile per-packet one-way delay: 21.255 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 25.629 ms
Loss rate: 0.00%
```

Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 129.47 Mbit/s) — — — Flow 1 egress (mean 129.50 Mbit/s)
Flow 2 ingress (mean 108.31 Mbit/s) — — — Flow 2 egress (mean 108.32 Mbit/s)
Flow 3 ingress (mean 33.22 Mbit/s) — — — Flow 3 egress (mean 33.23 Mbit/s)

Flow 1 (95th percentile 43.42 ms) • Flow 2 (95th percentile 21.25 ms) • Flow 3 (95th percentile 25.63 ms)
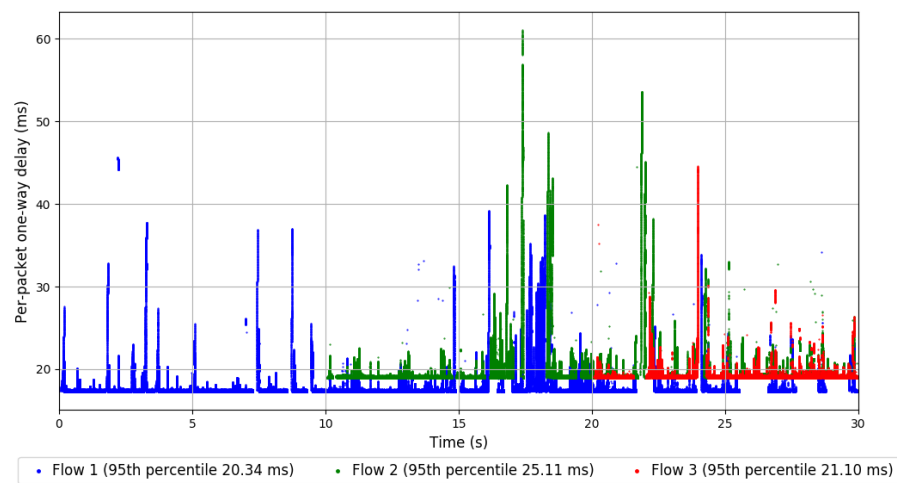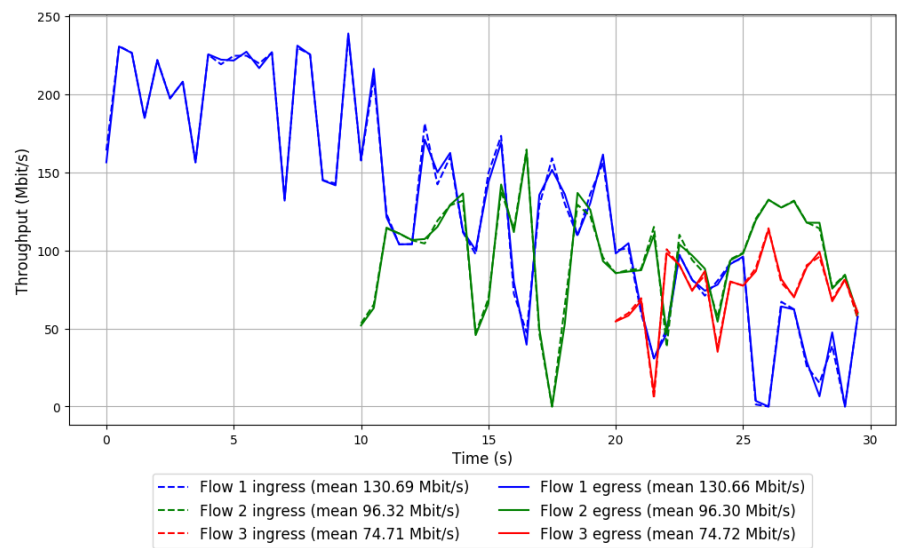
```
Run 8: Statistics of Verus

Start at: 2017-08-11 11:54:33
End at: 2017-08-11 11:55:03
Local clock offset: 0.852 ms
Remote clock offset: -1.145 ms


# Below is generated by plot.py at 2017-08-11 16:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.50 Mbit/s
95th percentile per-packet one-way delay: 21.914 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 130.66 Mbit/s
95th percentile per-packet one-way delay: 20.336 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 25.113 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 74.72 Mbit/s
95th percentile per-packet one-way delay: 21.103 ms
Loss rate: 0.00%
```
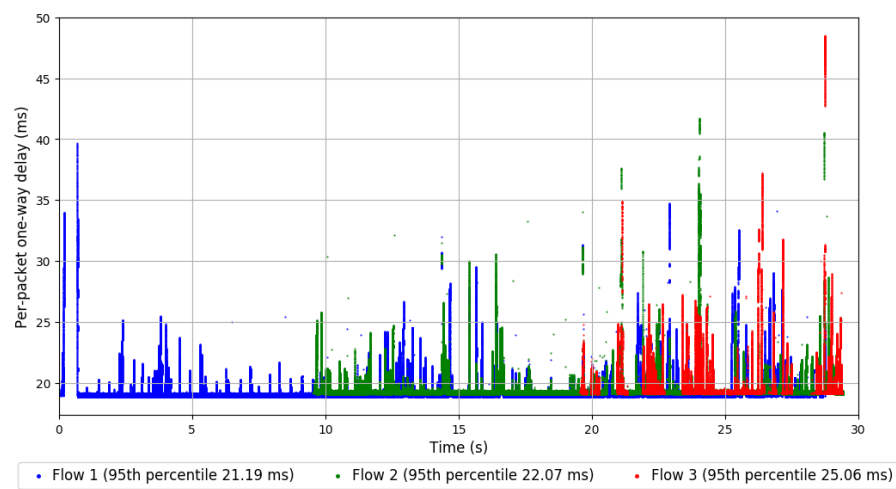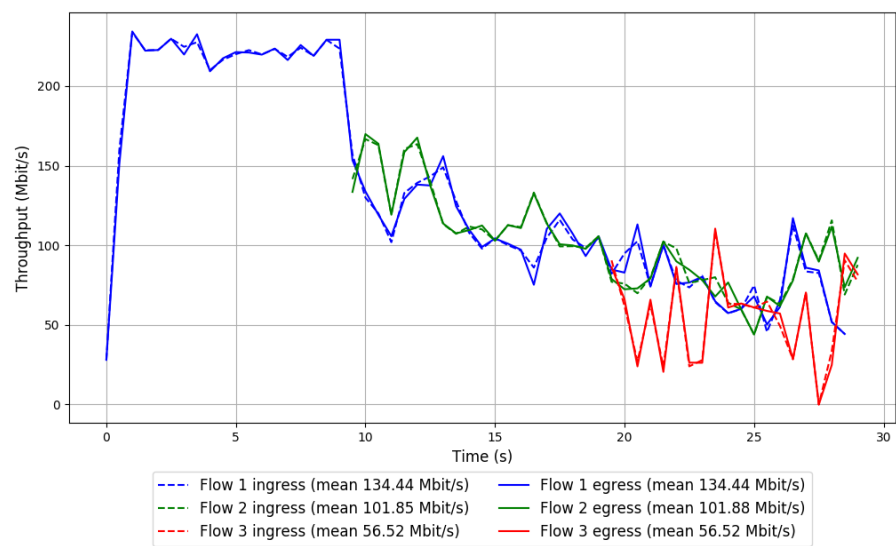
Run 8: Report of Verus — Data Link

- - - Flow 1 ingress (mean 130.69 Mbit/s) ——— Flow 1 egress (mean 130.66 Mbit/s)
- - - Flow 2 ingress (mean 96.32 Mbit/s) ——— Flow 2 egress (mean 96.30 Mbit/s)
- - - Flow 3 ingress (mean 74.71 Mbit/s) ——— Flow 3 egress (mean 74.72 Mbit/s)

• Flow 1 (95th percentile 20.34 ms)   • Flow 2 (95th percentile 25.11 ms)   • Flow 3 (95th percentile 21.10 ms)

279

```
Run 9: Statistics of Verus

Start at: 2017-08-11 12:16:16
End at: 2017-08-11 12:16:46
Local clock offset: 0.652 ms
Remote clock offset: -1.163 ms


# Below is generated by plot.py at 2017-08-11 16:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.18 Mbit/s
95th percentile per-packet one-way delay: 21.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.44 Mbit/s
95th percentile per-packet one-way delay: 21.191 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 22.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.52 Mbit/s
95th percentile per-packet one-way delay: 25.061 ms
Loss rate: 0.00%
```
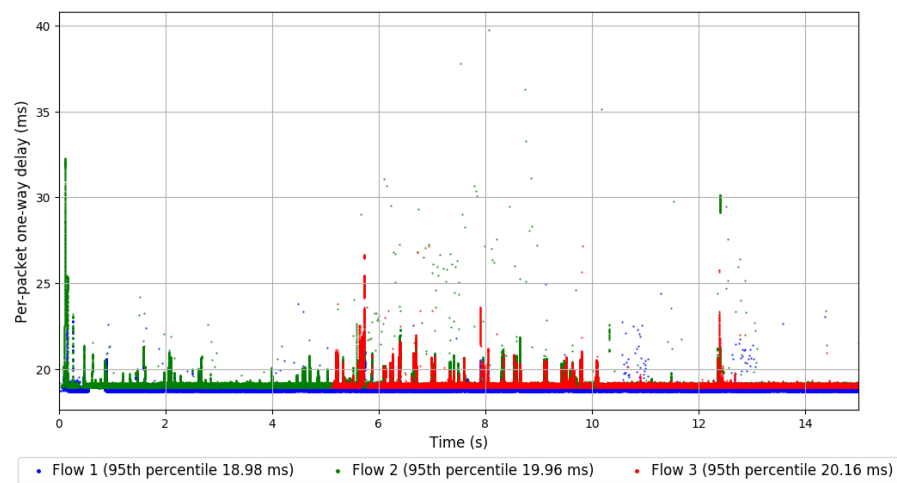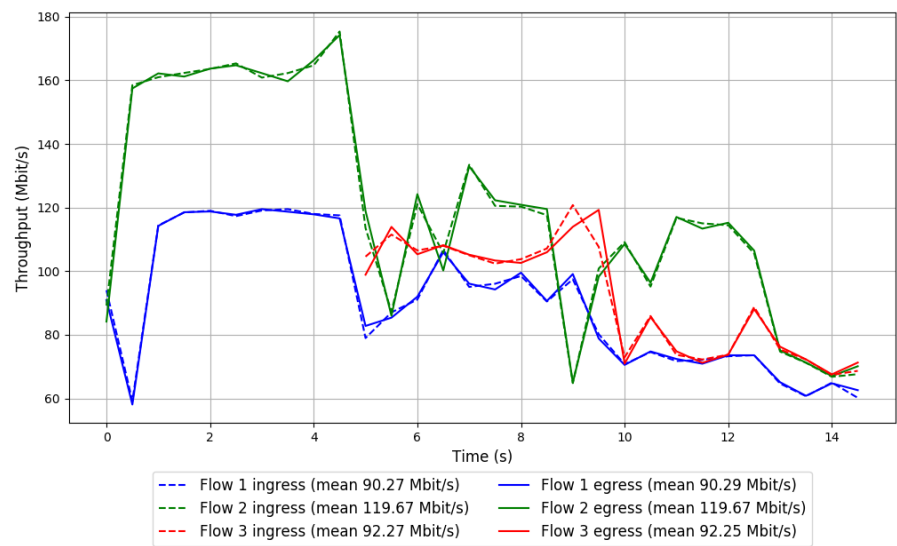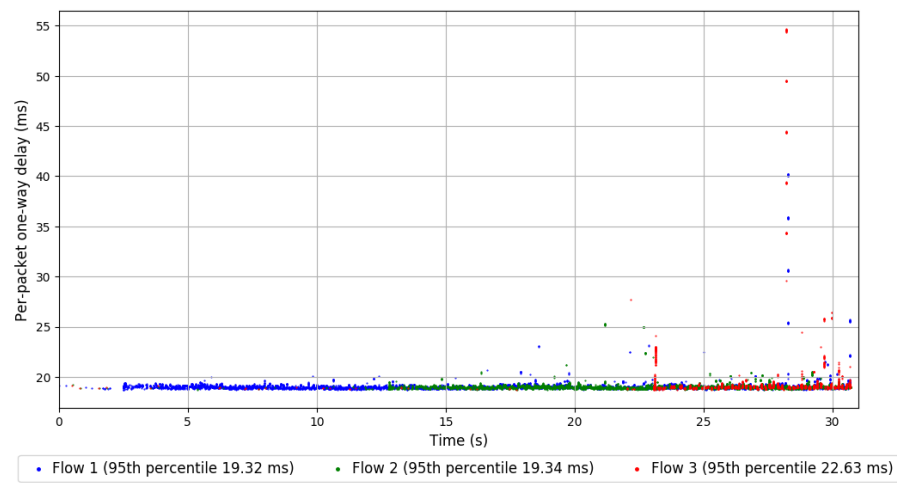
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 134.44 Mbit/s) --- Flow 1 egress (mean 134.44 Mbit/s)
Flow 2 ingress (mean 101.85 Mbit/s) --- Flow 2 egress (mean 101.88 Mbit/s)
Flow 3 ingress (mean 56.52 Mbit/s) --- Flow 3 egress (mean 56.52 Mbit/s)

Flow 1 (95th percentile 21.19 ms) Flow 2 (95th percentile 22.07 ms) Flow 3 (95th percentile 25.06 ms)

281

```
Run 10: Statistics of Verus

Start at: 2017-08-11 12:37:56
End at: 2017-08-11 12:38:26
Local clock offset: 0.746 ms
Remote clock offset: -1.539 ms
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 09:27:51
End at: 2017-08-11 09:28:21
Local clock offset: 0.237 ms
Remote clock offset: -0.57 ms


# Below is generated by plot.py at 2017-08-11 16:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 19.341 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 22.633 ms
Loss rate: 0.00%
```

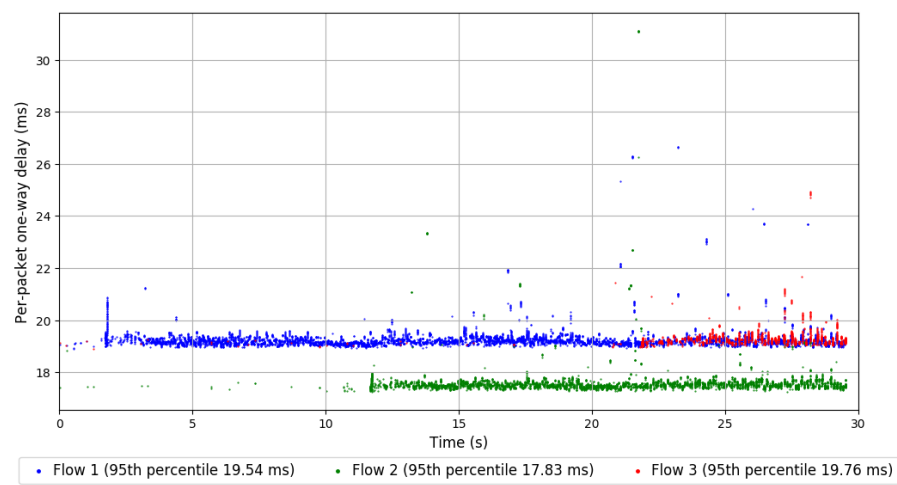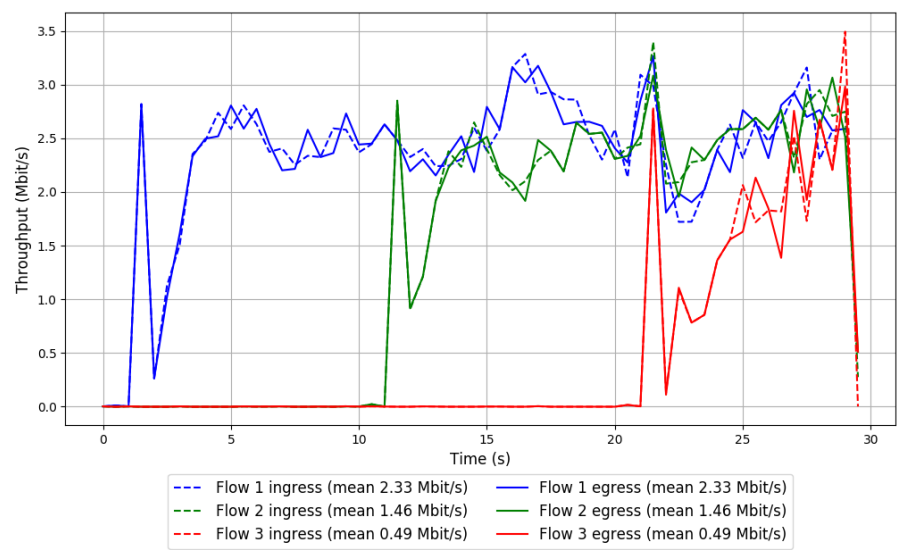Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-08-11 09:49:25
End at: 2017-08-11 09:49:55
Local clock offset: 0.391 ms
Remote clock offset: -0.794 ms


# Below is generated by plot.py at 2017-08-11 16:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 19.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 19.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 17.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 19.764 ms
Loss rate: 0.00%
```

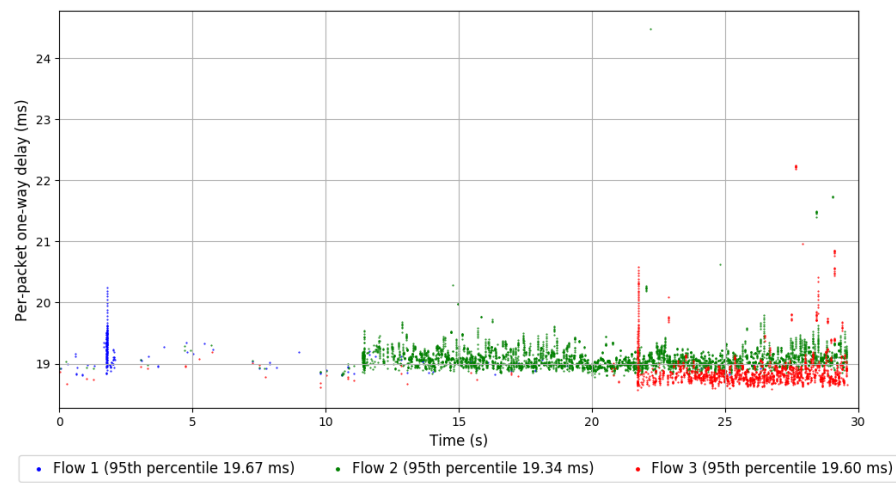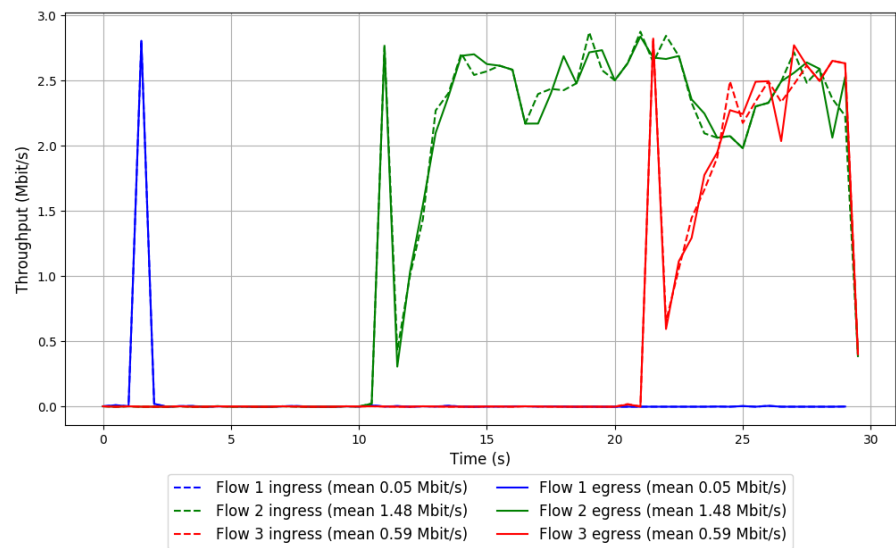Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-08-11 10:10:45
End at: 2017-08-11 10:11:15
Local clock offset: 0.45 ms
Remote clock offset: -1.141 ms


# Below is generated by plot.py at 2017-08-11 16:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 19.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.674 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 19.343 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 19.596 ms
Loss rate: 0.00%
```

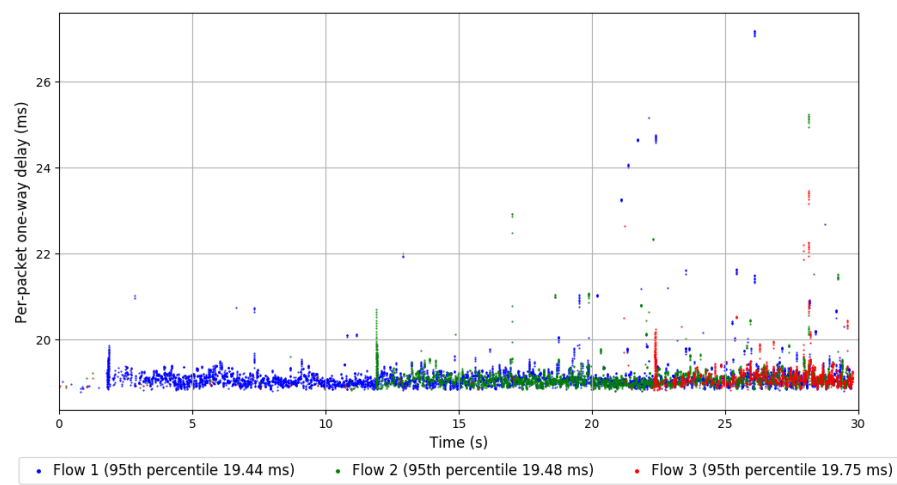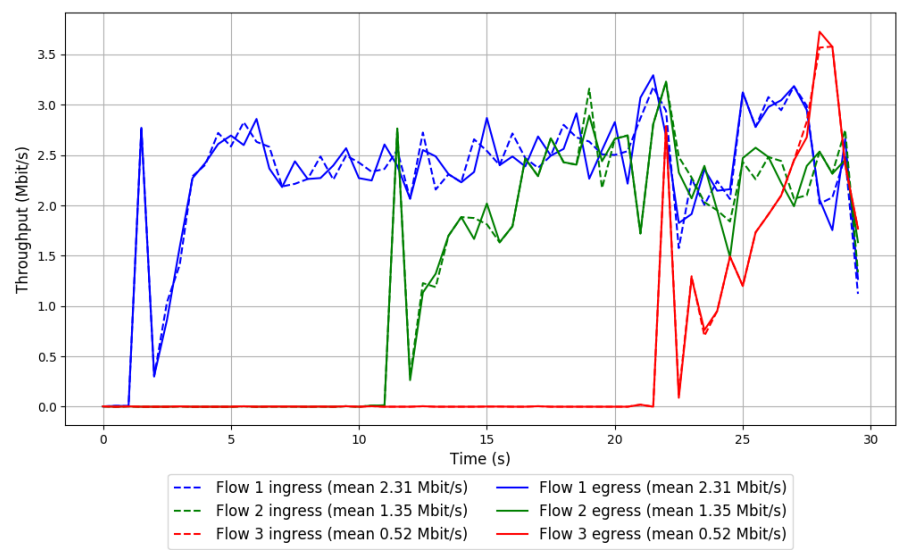Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-08-11 10:32:29
End at: 2017-08-11 10:32:59
Local clock offset: 0.526 ms
Remote clock offset: -1.221 ms


# Below is generated by plot.py at 2017-08-11 16:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 19.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 19.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 19.752 ms
Loss rate: 0.00%
```

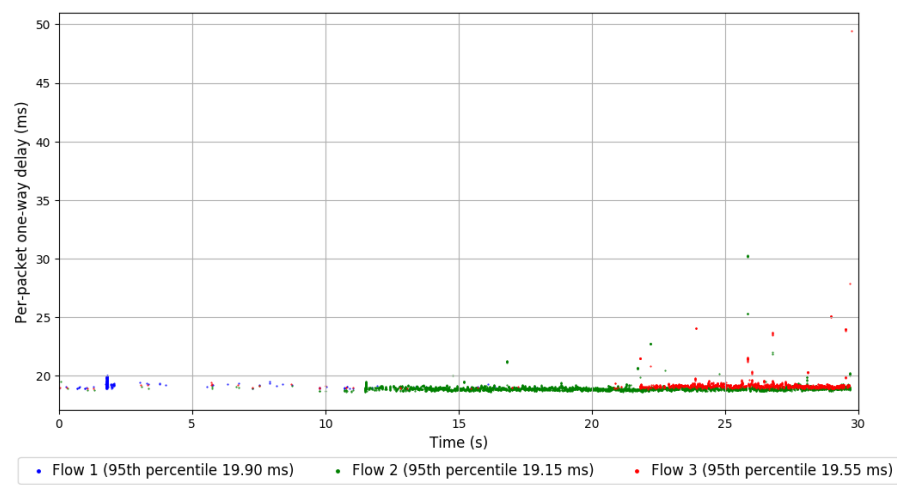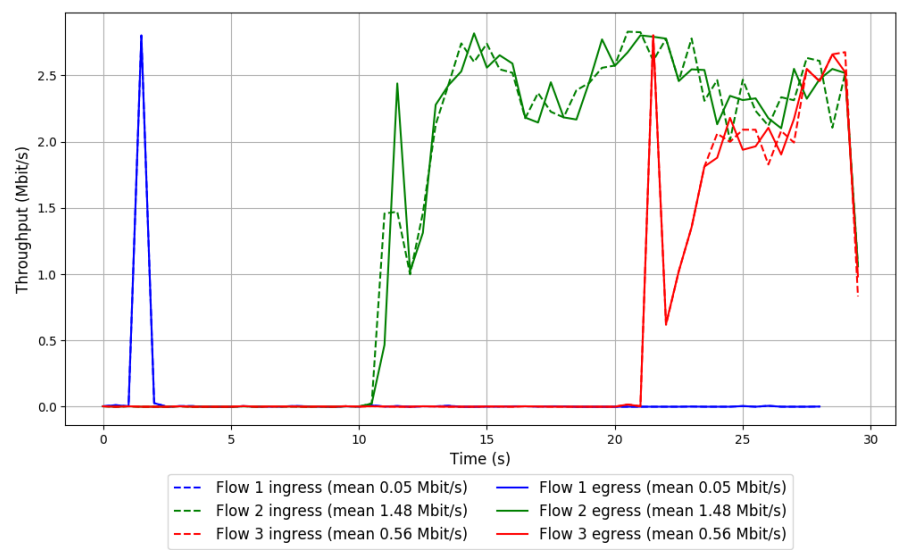Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2017-08-11 10:54:04
End at: 2017-08-11 10:54:34
Local clock offset: 0.5 ms
Remote clock offset: -1.302 ms


# Below is generated by plot.py at 2017-08-11 16:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 19.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.899 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 19.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 19.549 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-08-11 11:15:32
End at: 2017-08-11 11:16:02
Local clock offset: 0.535 ms
Remote clock offset: -1.13 ms


# Below is generated by plot.py at 2017-08-11 16:30:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 19.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 19.532 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 19.440 ms
Loss rate: 0.00%
```
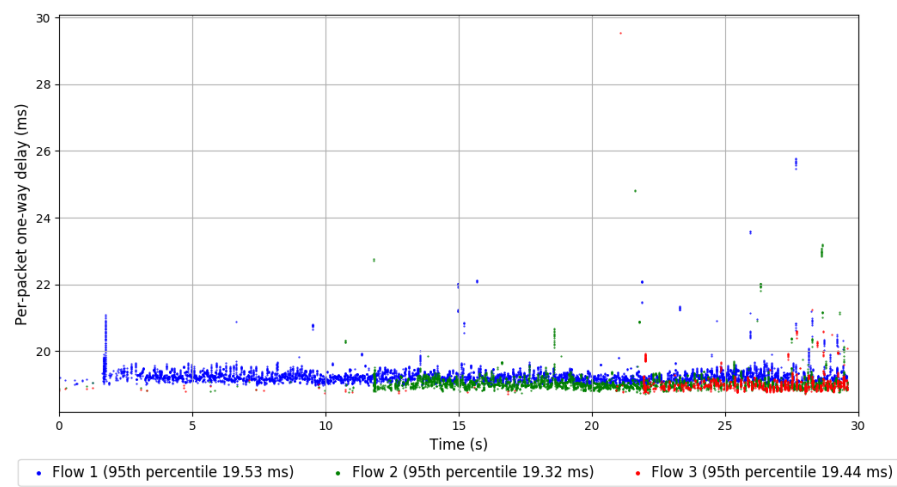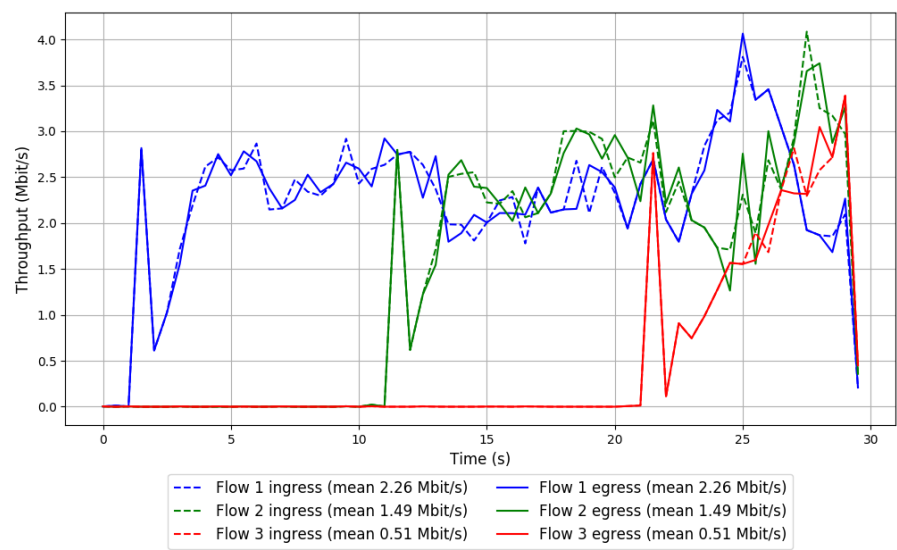
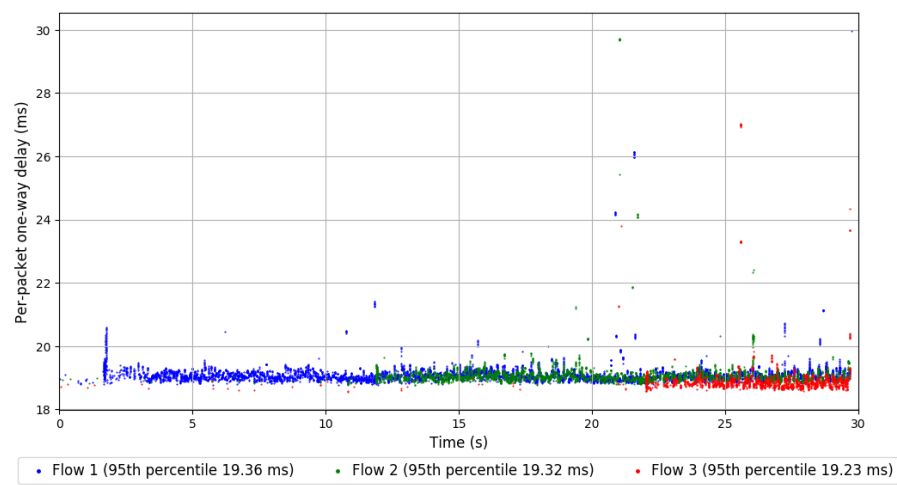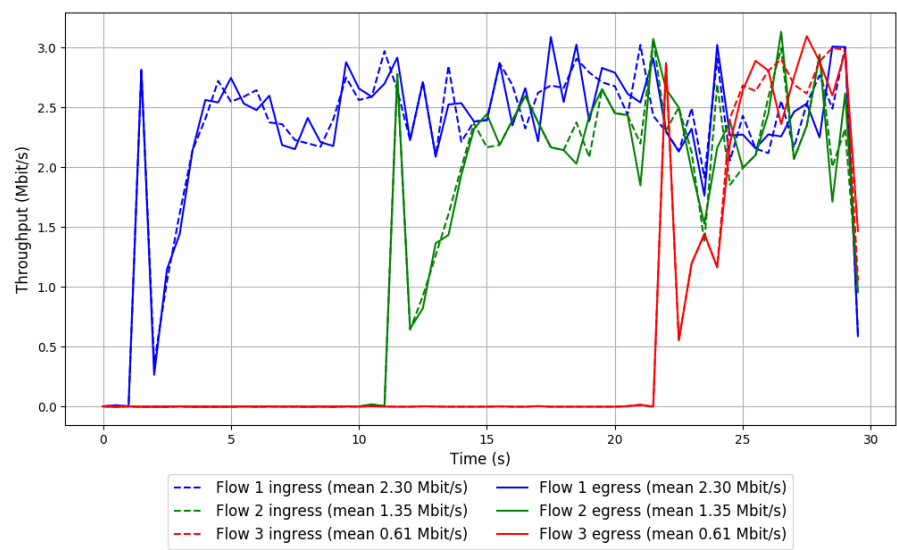Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-08-11 11:37:19
End at: 2017-08-11 11:37:49
Local clock offset: 0.738 ms
Remote clock offset: -1.154 ms


# Below is generated by plot.py at 2017-08-11 16:30:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 19.337 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 19.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 19.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 19.230 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-08-11 11:58:40
End at: 2017-08-11 11:59:10
Local clock offset: 0.823 ms
Remote clock offset: -1.23 ms


# Below is generated by plot.py at 2017-08-11 16:30:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 19.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 19.617 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 19.394 ms
Loss rate: 0.00%
```
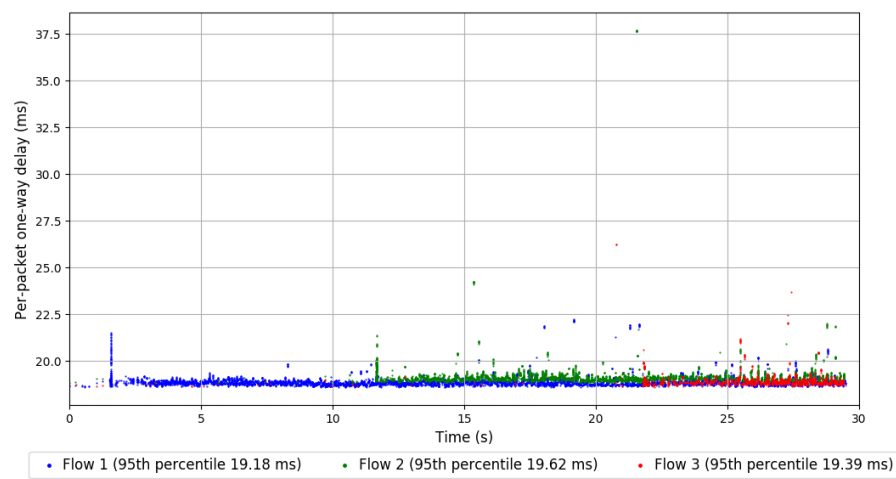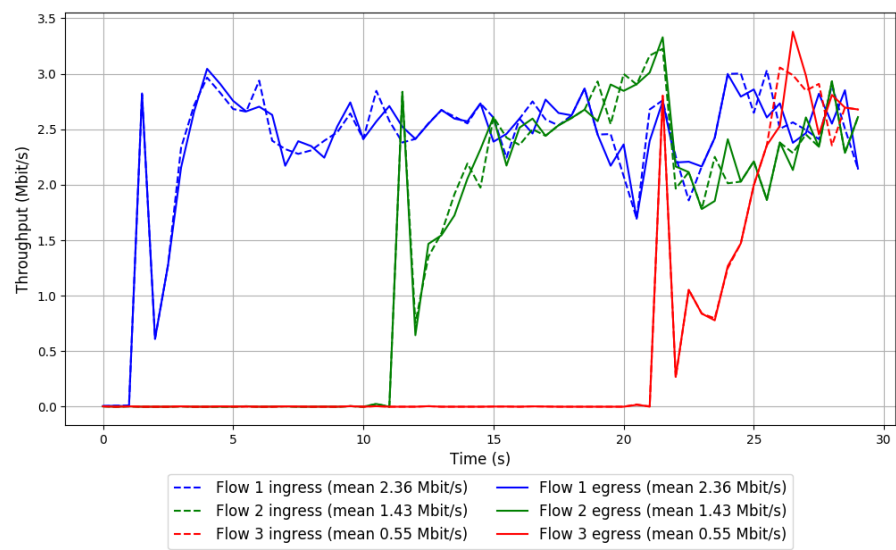
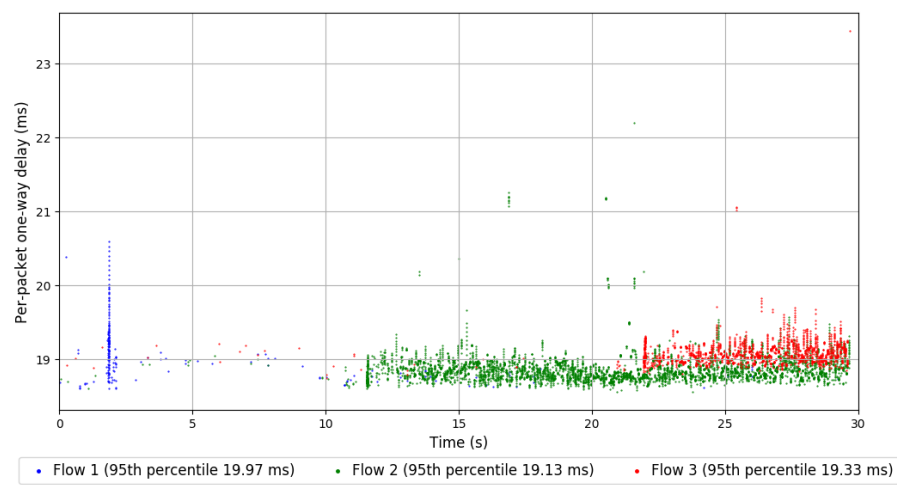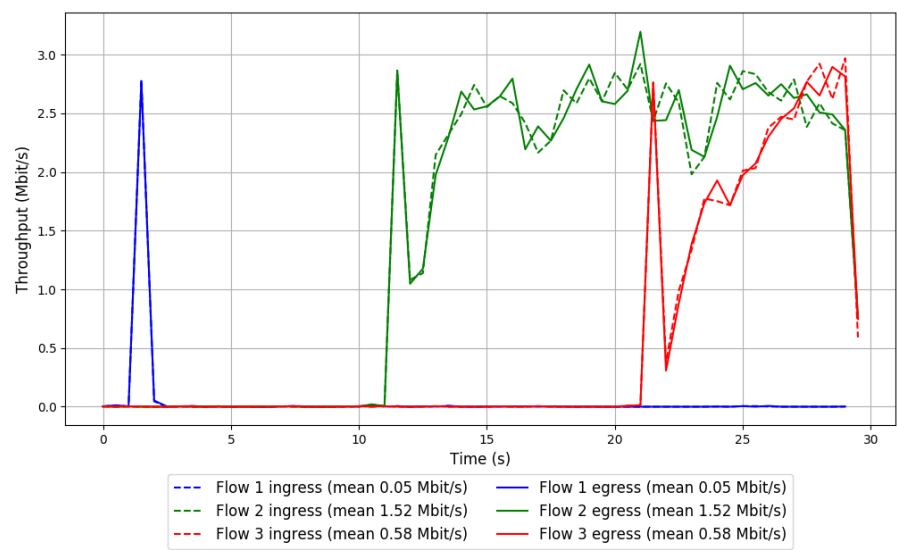Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-08-11 12:20:22
End at: 2017-08-11 12:20:52
Local clock offset: 0.769 ms
Remote clock offset: -1.379 ms


# Below is generated by plot.py at 2017-08-11 16:30:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 19.253 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 19.132 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 19.333 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-08-11 12:41:55
End at: 2017-08-11 12:42:25
Local clock offset: 0.745 ms
Remote clock offset: -1.554 ms


# Below is generated by plot.py at 2017-08-11 16:30:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 19.382 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.447 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 17.863 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link