Pantheon Report

Generated at 2017-12-20 16:00:39 (UTC).

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

Repeated the test of 14 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 @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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)
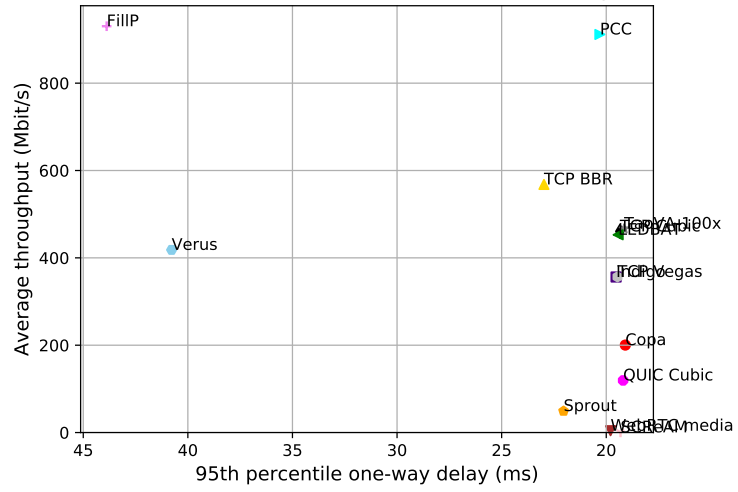
test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

2
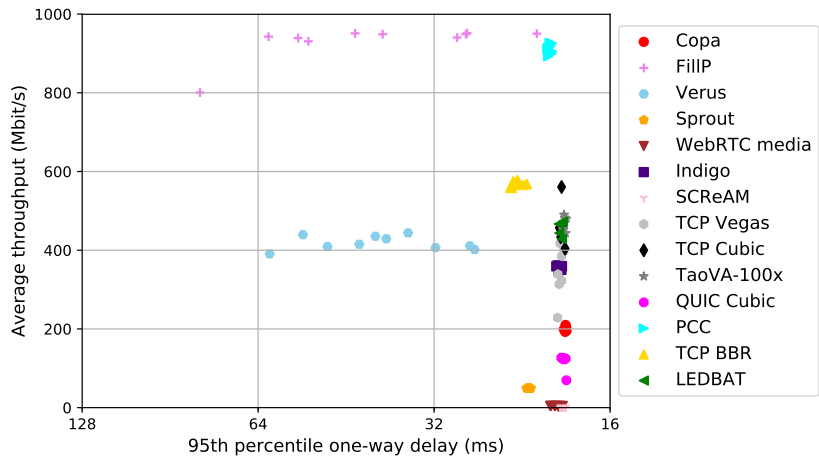
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	311.20	264.51	243.51	23.73	21.79	20.90	16.56	20.49	22.60
TCP Cubic	6	267.22	178.86	189.09	19.15	19.33	19.39	0.07	0.10	0.12
LEDBAT	4	262.27	209.11	154.93	19.38	19.48	19.14	0.02	0.03	0.05
PCC	10	781.74	151.15	89.26	20.30	20.18	20.28	0.51	0.37	0.45
QUIC Cubic	10	60.52	61.68	54.48	19.28	19.17	20.09	0.00	0.01	0.01
SCReAM	9	0.22	0.22	0.22	19.26	19.09	19.27	0.00	0.00	0.00
WebRTC media	10	2.11	1.46	0.57	19.74	19.88	20.11	0.00	0.00	0.02
Sprout	10	24.73	24.68	24.44	22.13	21.81	21.65	0.02	0.02	0.05
TaoVA-100x	10	242.81	241.30	243.57	18.71	18.85	19.20	0.00	0.01	0.01
TCP Vegas	8	148.26	193.81	187.41	601.29	19.29	19.36	0.05	0.11	0.14
Verus	10	215.50	218.63	179.22	47.06	30.39	27.22	20.42	20.99	20.25
Copa	7	100.88	101.47	114.56	19.04	18.83	19.05	0.00	0.01	0.01
FillP	10	577.79	403.73	254.07	52.88	27.92	26.14	9.42	14.20	16.18
Indigo	10	187.51	175.10	163.52	19.45	19.52	19.60	0.01	0.01	0.03

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-20 08:40:31
End at: 2017-12-20 08:41:01
Local clock offset: 0.945 ms
Remote clock offset: -0.79 ms

# Below is generated by plot.py at 2017-12-20 14:29:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.02 Mbit/s
95th percentile per-packet one-way delay: 23.557 ms
Loss rate: 19.72%
-- Flow 1:
Average throughput: 307.70 Mbit/s
95th percentile per-packet one-way delay: 24.222 ms
Loss rate: 18.84%
-- Flow 2:
Average throughput: 252.52 Mbit/s
95th percentile per-packet one-way delay: 22.081 ms
Loss rate: 21.46%
-- Flow 3:
Average throughput: 247.52 Mbit/s
95th percentile per-packet one-way delay: 21.167 ms
Loss rate: 19.37%
```
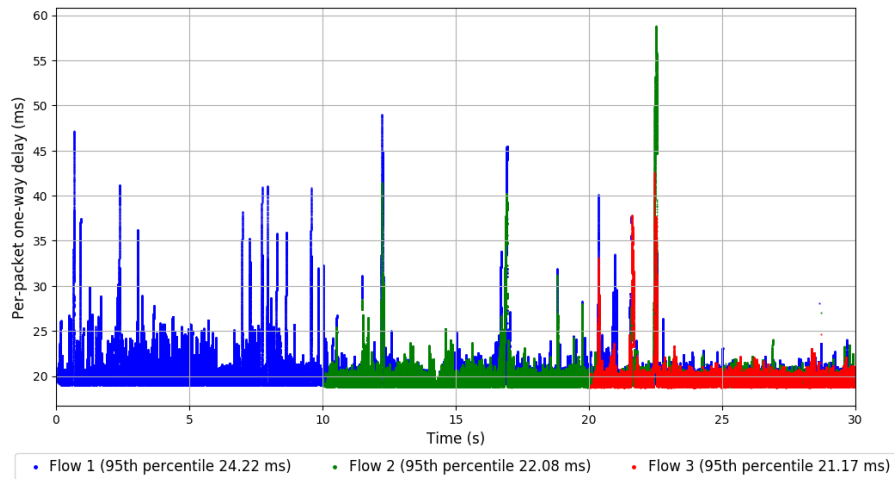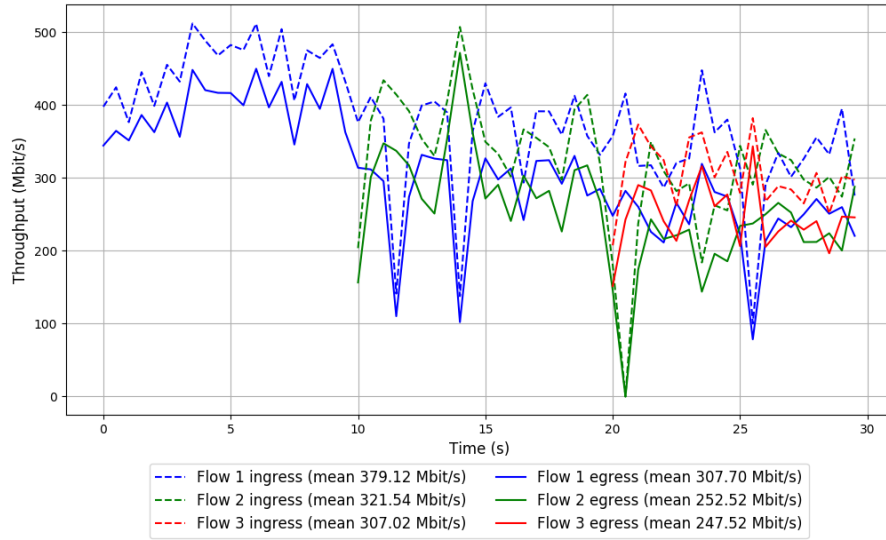
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 379.12 Mbit/s)   Flow 1 egress (mean 307.70 Mbit/s)
Flow 2 ingress (mean 321.54 Mbit/s)   Flow 2 egress (mean 252.52 Mbit/s)
Flow 3 ingress (mean 307.02 Mbit/s)   Flow 3 egress (mean 247.52 Mbit/s)

Flow 1 (95th percentile 24.22 ms)   Flow 2 (95th percentile 22.08 ms)   Flow 3 (95th percentile 21.17 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2017-12-20 09:02:10
End at: 2017-12-20 09:02:40
Local clock offset: 0.93 ms
Remote clock offset: -0.749 ms


# Below is generated by plot.py at 2017-12-20 14:30:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.70 Mbit/s
95th percentile per-packet one-way delay: 22.589 ms
Loss rate: 17.69%
-- Flow 1:
Average throughput: 303.86 Mbit/s
95th percentile per-packet one-way delay: 23.504 ms
Loss rate: 14.41%
-- Flow 2:
Average throughput: 262.20 Mbit/s
95th percentile per-packet one-way delay: 21.375 ms
Loss rate: 20.86%
-- Flow 3:
Average throughput: 263.06 Mbit/s
95th percentile per-packet one-way delay: 20.919 ms
Loss rate: 21.88%
```

Run 2: Report of TCP BBR — Data Link
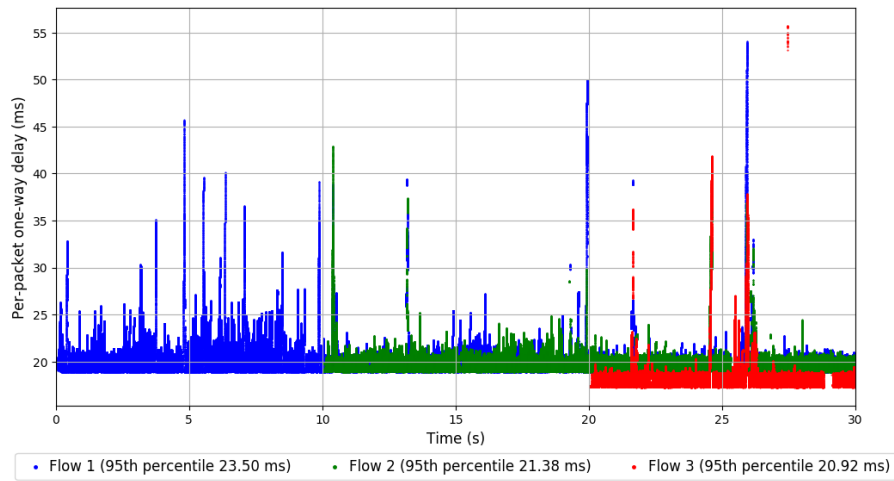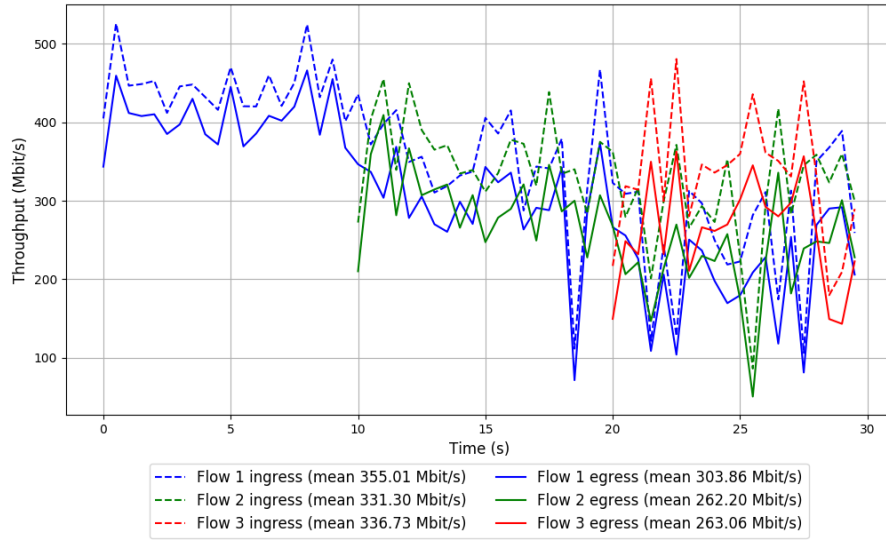
```
Run 3: Statistics of TCP BBR

Start at: 2017-12-20 09:24:00
End at: 2017-12-20 09:24:30
Local clock offset: 0.911 ms
Remote clock offset: -0.97 ms


# Below is generated by plot.py at 2017-12-20 14:30:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.28 Mbit/s
95th percentile per-packet one-way delay: 23.724 ms
Loss rate: 17.50%
-- Flow 1:
Average throughput: 327.73 Mbit/s
95th percentile per-packet one-way delay: 24.252 ms
Loss rate: 14.95%
-- Flow 2:
Average throughput: 235.32 Mbit/s
95th percentile per-packet one-way delay: 22.159 ms
Loss rate: 19.39%
-- Flow 3:
Average throughput: 222.46 Mbit/s
95th percentile per-packet one-way delay: 21.470 ms
Loss rate: 23.88%
```

Run 3: Report of TCP BBR — Data Link
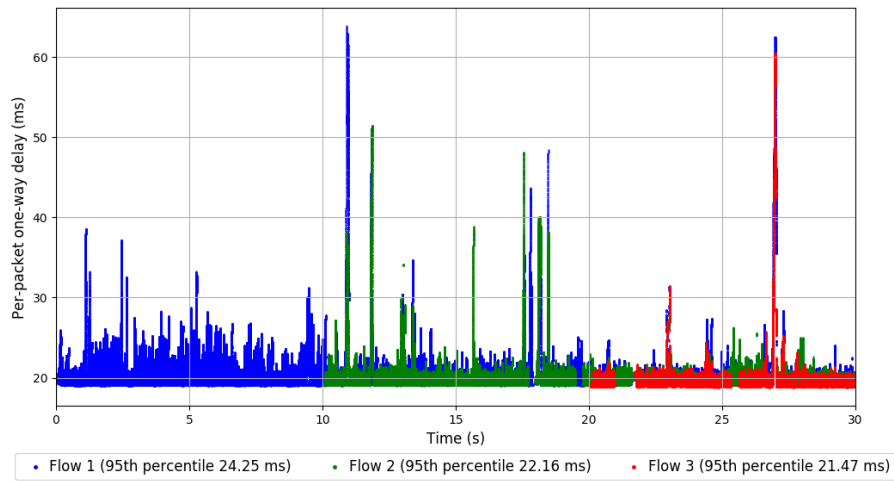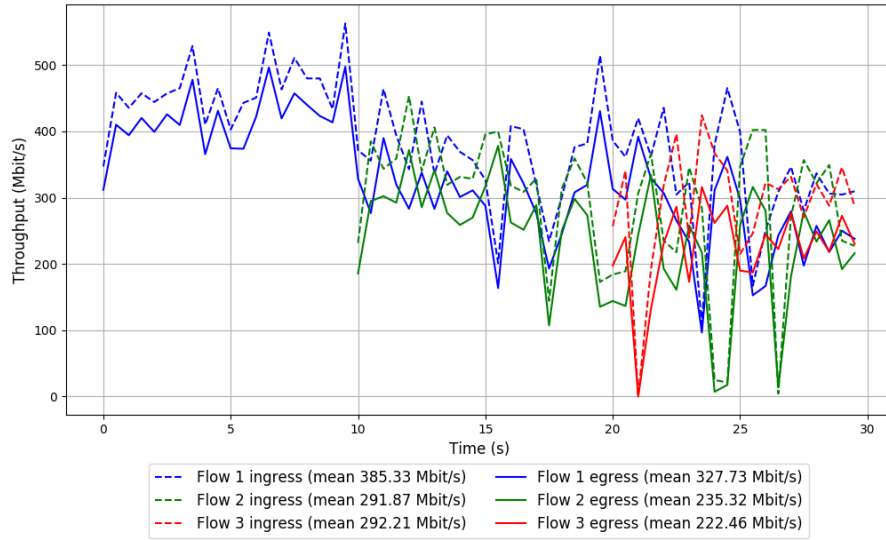
```
Run 4: Statistics of TCP BBR

Start at: 2017-12-20 09:45:47
End at: 2017-12-20 09:46:17
Local clock offset: 0.866 ms
Remote clock offset: -0.959 ms


# Below is generated by plot.py at 2017-12-20 14:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.42 Mbit/s
95th percentile per-packet one-way delay: 23.434 ms
Loss rate: 19.93%
-- Flow 1:
Average throughput: 314.94 Mbit/s
95th percentile per-packet one-way delay: 24.419 ms
Loss rate: 16.81%
-- Flow 2:
Average throughput: 268.48 Mbit/s
95th percentile per-packet one-way delay: 21.679 ms
Loss rate: 21.54%
-- Flow 3:
Average throughput: 245.89 Mbit/s
95th percentile per-packet one-way delay: 21.090 ms
Loss rate: 27.22%
```
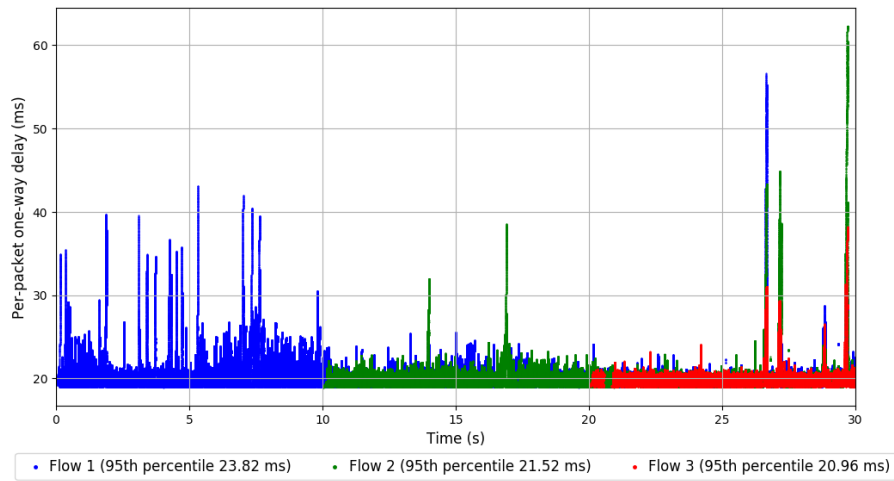
Run 4: Report of TCP BBR — Data Link
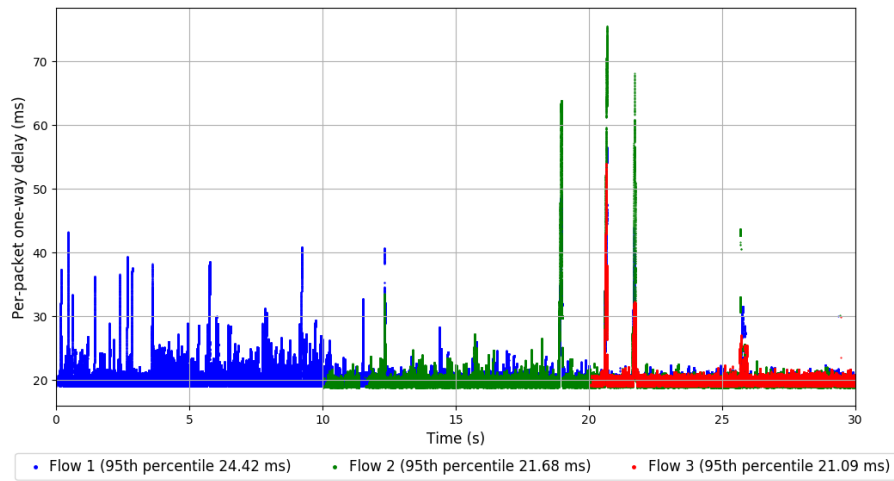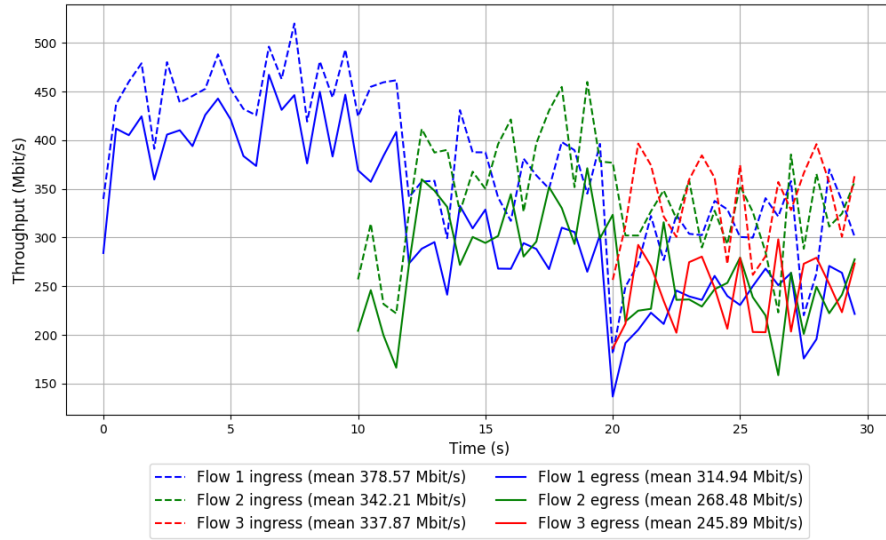
```
Run 5: Statistics of TCP BBR

Start at: 2017-12-20 10:07:31
End at: 2017-12-20 10:08:01
Local clock offset: 0.567 ms
Remote clock offset: -1.094 ms


# Below is generated by plot.py at 2017-12-20 14:30:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 577.94 Mbit/s
95th percentile per-packet one-way delay: 23.026 ms
Loss rate: 19.70%
-- Flow 1:
Average throughput: 313.47 Mbit/s
95th percentile per-packet one-way delay: 23.821 ms
Loss rate: 18.36%
-- Flow 2:
Average throughput: 282.84 Mbit/s
95th percentile per-packet one-way delay: 21.523 ms
Loss rate: 19.34%
-- Flow 3:
Average throughput: 229.66 Mbit/s
95th percentile per-packet one-way delay: 20.958 ms
Loss rate: 25.52%
```
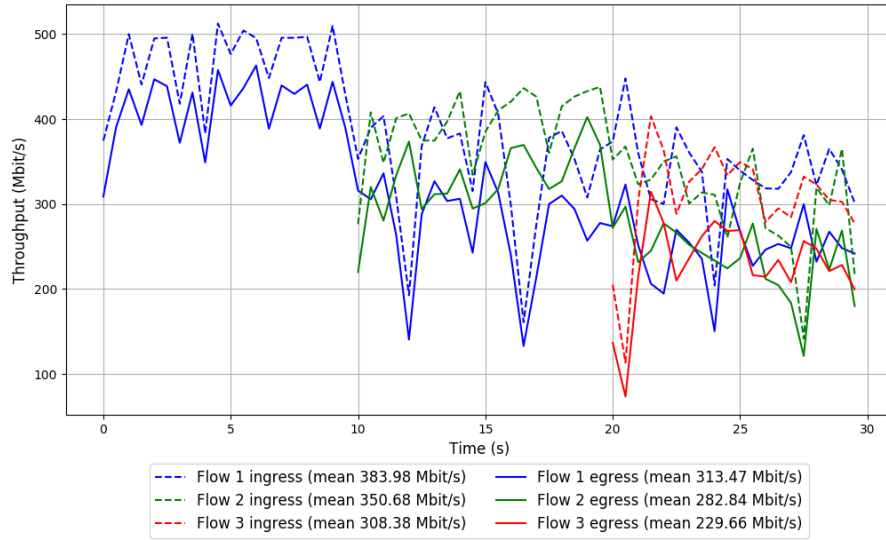
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 383.98 Mbit/s) --- Flow 1 egress (mean 313.47 Mbit/s)
Flow 2 ingress (mean 350.68 Mbit/s) --- Flow 2 egress (mean 282.84 Mbit/s)
Flow 3 ingress (mean 308.38 Mbit/s) --- Flow 3 egress (mean 229.66 Mbit/s)

Flow 1 (95th percentile 23.82 ms)　　Flow 2 (95th percentile 21.52 ms)　　Flow 3 (95th percentile 20.96 ms)

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```
Run 6: Statistics of TCP BBR

Start at: 2017-12-20 10:29:24
End at: 2017-12-20 10:29:54
Local clock offset: 0.253 ms
Remote clock offset: -1.324 ms

# Below is generated by plot.py at 2017-12-20 14:30:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.92 Mbit/s
95th percentile per-packet one-way delay: 22.979 ms
Loss rate: 19.06%
-- Flow 1:
Average throughput: 308.87 Mbit/s
95th percentile per-packet one-way delay: 23.523 ms
Loss rate: 17.12%
-- Flow 2:
Average throughput: 266.24 Mbit/s
95th percentile per-packet one-way delay: 22.103 ms
Loss rate: 18.80%
-- Flow 3:
Average throughput: 240.21 Mbit/s
95th percentile per-packet one-way delay: 21.244 ms
Loss rate: 26.29%
```
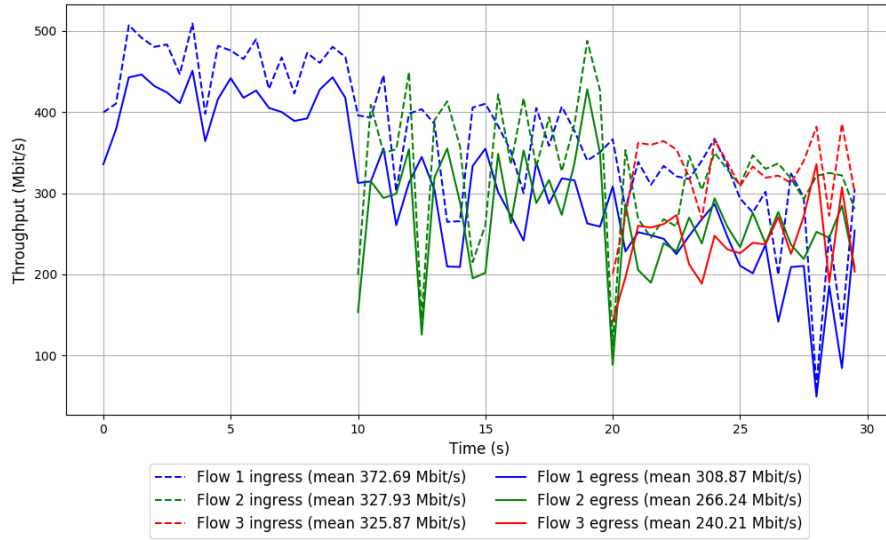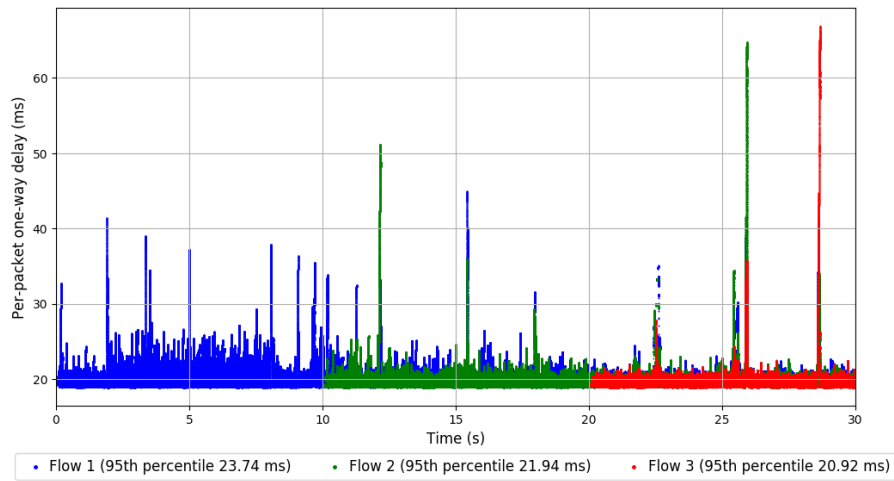
Run 6: Report of TCP BBR — Data Link
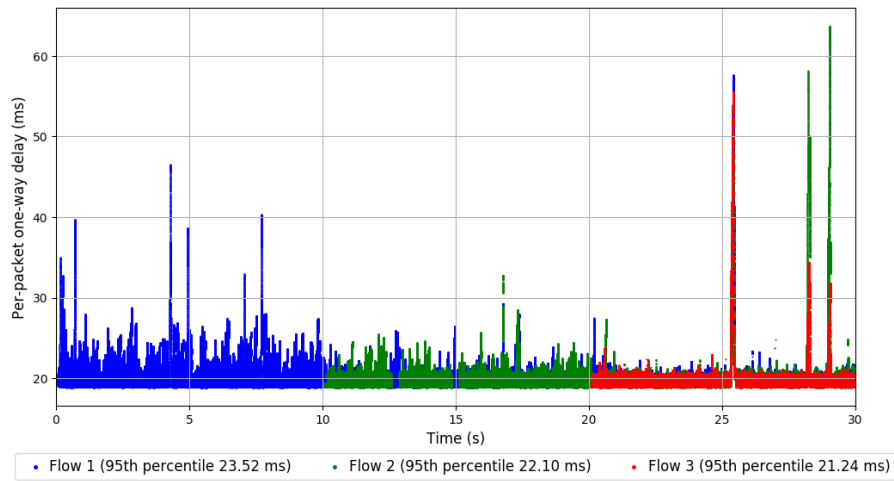
```
Run 7: Statistics of TCP BBR

Start at: 2017-12-20 10:51:25
End at: 2017-12-20 10:51:55
Local clock offset: 0.074 ms
Remote clock offset: -1.043 ms


# Below is generated by plot.py at 2017-12-20 14:30:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 578.64 Mbit/s
95th percentile per-packet one-way delay: 23.047 ms
Loss rate: 17.85%
-- Flow 1:
Average throughput: 317.98 Mbit/s
95th percentile per-packet one-way delay: 23.740 ms
Loss rate: 15.56%
-- Flow 2:
Average throughput: 266.72 Mbit/s
95th percentile per-packet one-way delay: 21.940 ms
Loss rate: 20.04%
-- Flow 3:
Average throughput: 250.23 Mbit/s
95th percentile per-packet one-way delay: 20.917 ms
Loss rate: 21.40%
```
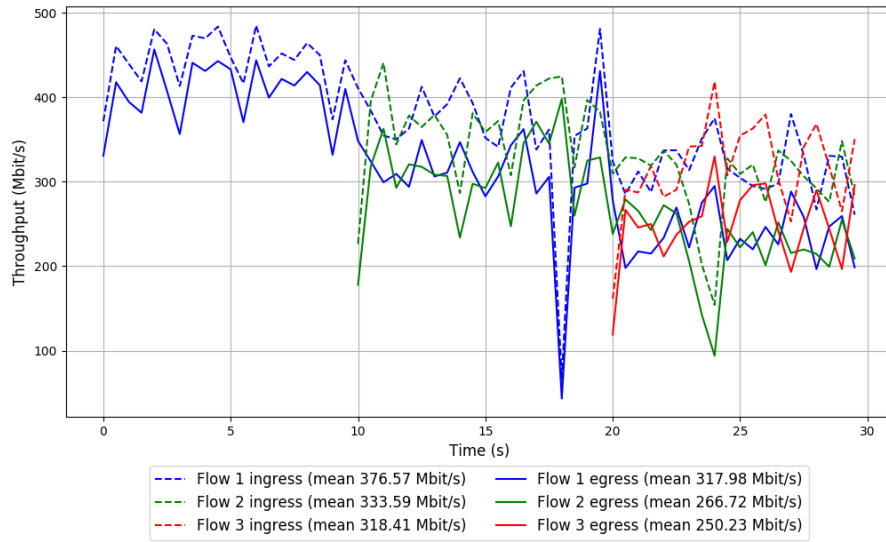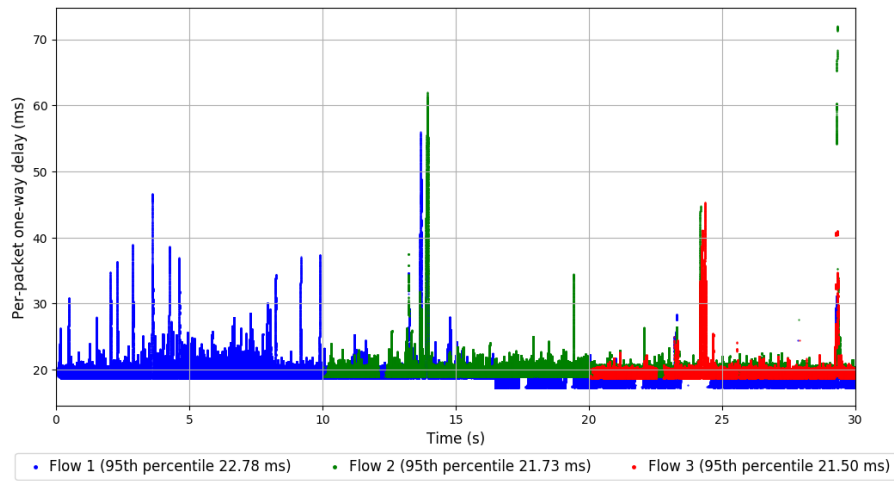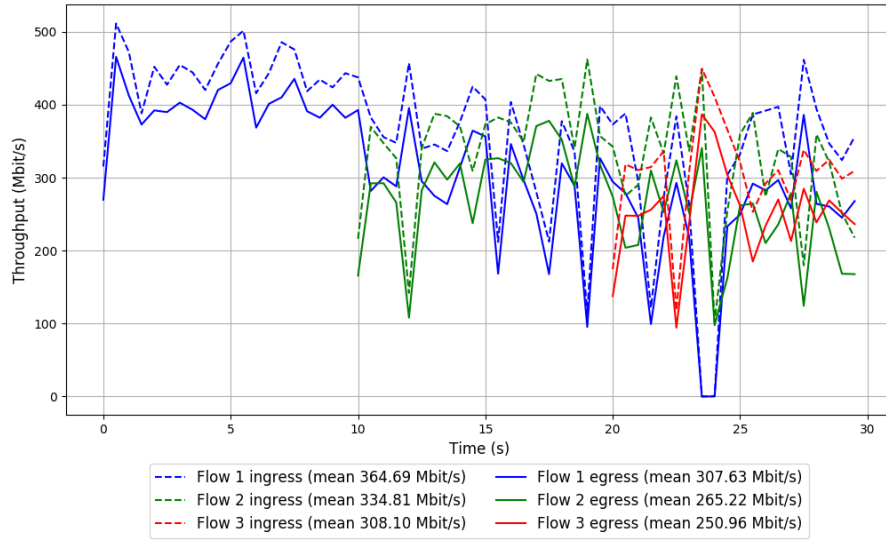
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 376.57 Mbit/s) --- Flow 1 egress (mean 317.98 Mbit/s)
Flow 2 ingress (mean 333.59 Mbit/s) --- Flow 2 egress (mean 266.72 Mbit/s)
Flow 3 ingress (mean 318.41 Mbit/s) --- Flow 3 egress (mean 250.23 Mbit/s)

Flow 1 (95th percentile 23.74 ms)   Flow 2 (95th percentile 21.94 ms)   Flow 3 (95th percentile 20.92 ms)

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```
Run 8: Statistics of TCP BBR

Start at: 2017-12-20 11:13:15
End at: 2017-12-20 11:13:45
Local clock offset: -0.083 ms
Remote clock offset: -1.194 ms

# Below is generated by plot.py at 2017-12-20 14:30:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.51 Mbit/s
95th percentile per-packet one-way delay: 22.289 ms
Loss rate: 17.74%
-- Flow 1:
Average throughput: 307.63 Mbit/s
95th percentile per-packet one-way delay: 22.782 ms
Loss rate: 15.65%
-- Flow 2:
Average throughput: 265.22 Mbit/s
95th percentile per-packet one-way delay: 21.729 ms
Loss rate: 20.78%
-- Flow 3:
Average throughput: 250.96 Mbit/s
95th percentile per-packet one-way delay: 21.501 ms
Loss rate: 18.56%
```
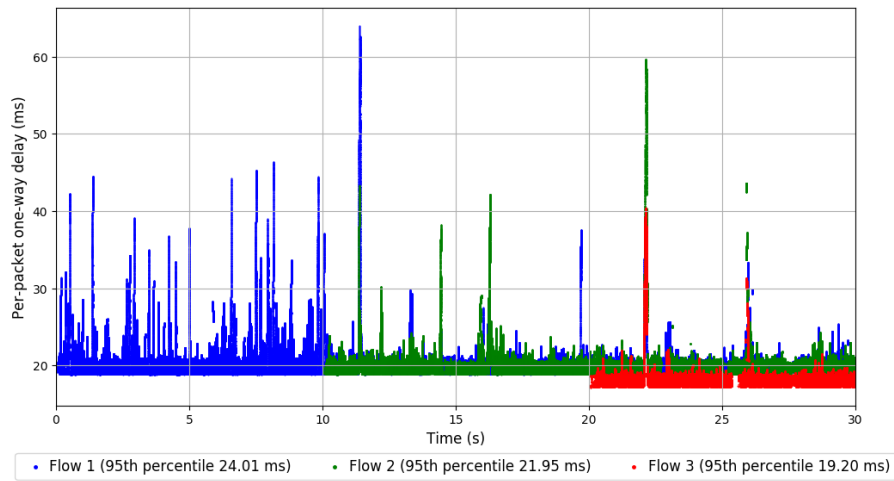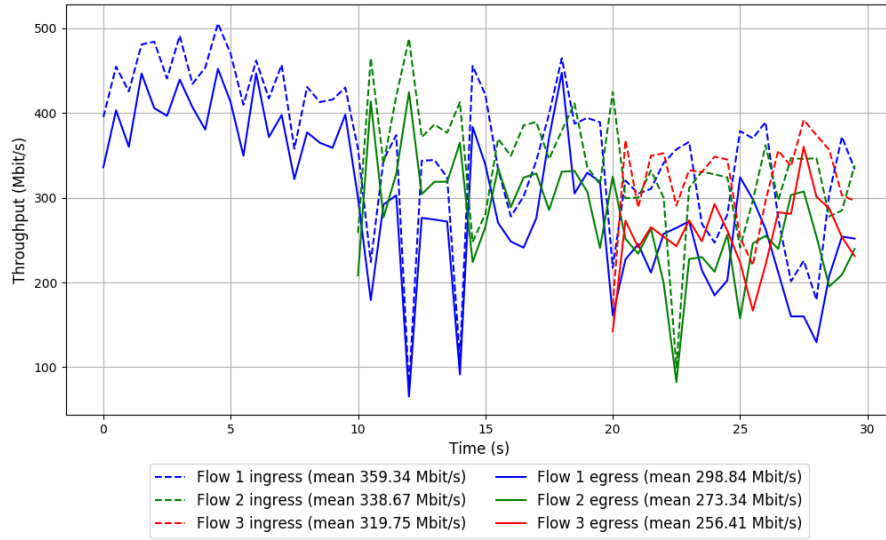
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 364.69 Mbit/s)   Flow 1 egress (mean 307.63 Mbit/s)
Flow 2 ingress (mean 334.81 Mbit/s)   Flow 2 egress (mean 265.22 Mbit/s)
Flow 3 ingress (mean 308.10 Mbit/s)   Flow 3 egress (mean 250.96 Mbit/s)

Flow 1 (95th percentile 22.78 ms)   Flow 2 (95th percentile 21.73 ms)   Flow 3 (95th percentile 21.50 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2017-12-20 11:35:02
End at: 2017-12-20 11:35:32
Local clock offset: -0.15 ms
Remote clock offset: -1.61 ms

# Below is generated by plot.py at 2017-12-20 14:37:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 566.02 Mbit/s
95th percentile per-packet one-way delay: 22.931 ms
Loss rate: 18.09%
-- Flow 1:
Average throughput: 298.84 Mbit/s
95th percentile per-packet one-way delay: 24.012 ms
Loss rate: 16.83%
-- Flow 2:
Average throughput: 273.34 Mbit/s
95th percentile per-packet one-way delay: 21.949 ms
Loss rate: 19.29%
-- Flow 3:
Average throughput: 256.41 Mbit/s
95th percentile per-packet one-way delay: 19.199 ms
Loss rate: 19.80%
```
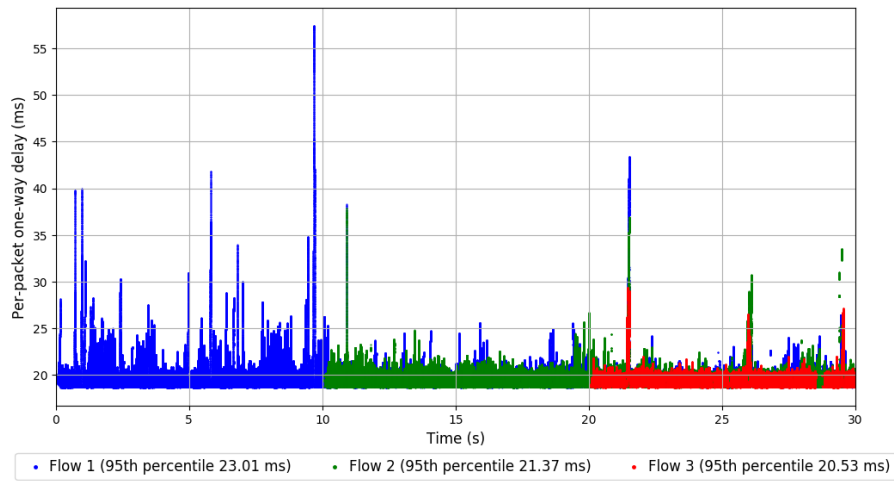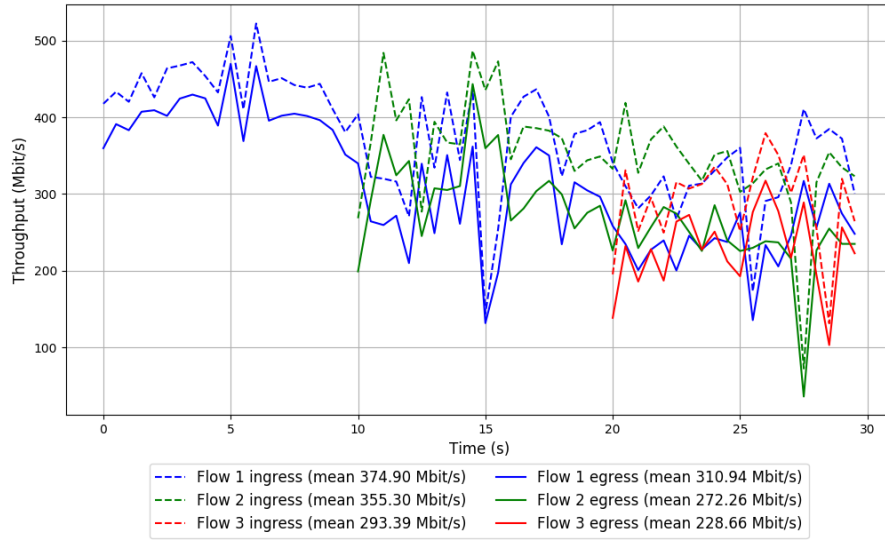
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 359.34 Mbit/s)   Flow 1 egress (mean 298.84 Mbit/s)
Flow 2 ingress (mean 338.67 Mbit/s)   Flow 2 egress (mean 273.34 Mbit/s)
Flow 3 ingress (mean 319.75 Mbit/s)   Flow 3 egress (mean 256.41 Mbit/s)

Flow 1 (95th percentile 24.01 ms)   Flow 2 (95th percentile 21.95 ms)   Flow 3 (95th percentile 19.20 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2017-12-20 11:57:08
End at: 2017-12-20 11:57:38
Local clock offset: -0.185 ms
Remote clock offset: -2.066 ms


# Below is generated by plot.py at 2017-12-20 14:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.10 Mbit/s
95th percentile per-packet one-way delay: 22.201 ms
Loss rate: 19.85%
-- Flow 1:
Average throughput: 310.94 Mbit/s
95th percentile per-packet one-way delay: 23.012 ms
Loss rate: 17.06%
-- Flow 2:
Average throughput: 272.26 Mbit/s
95th percentile per-packet one-way delay: 21.369 ms
Loss rate: 23.37%
-- Flow 3:
Average throughput: 228.66 Mbit/s
95th percentile per-packet one-way delay: 20.534 ms
Loss rate: 22.06%
```

Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 374.90 Mbit/s) --- Flow 1 egress (mean 310.94 Mbit/s)
Flow 2 ingress (mean 355.30 Mbit/s) --- Flow 2 egress (mean 272.26 Mbit/s)
Flow 3 ingress (mean 293.39 Mbit/s) --- Flow 3 egress (mean 228.66 Mbit/s)

Flow 1 (95th percentile 23.01 ms)   Flow 2 (95th percentile 21.37 ms)   Flow 3 (95th percentile 20.53 ms)

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```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 08:43:26
End at: 2017-12-20 08:43:56
Local clock offset: 0.93 ms
Remote clock offset: -0.726 ms
```

Run 1: Report of TCP Cubic — Data Link
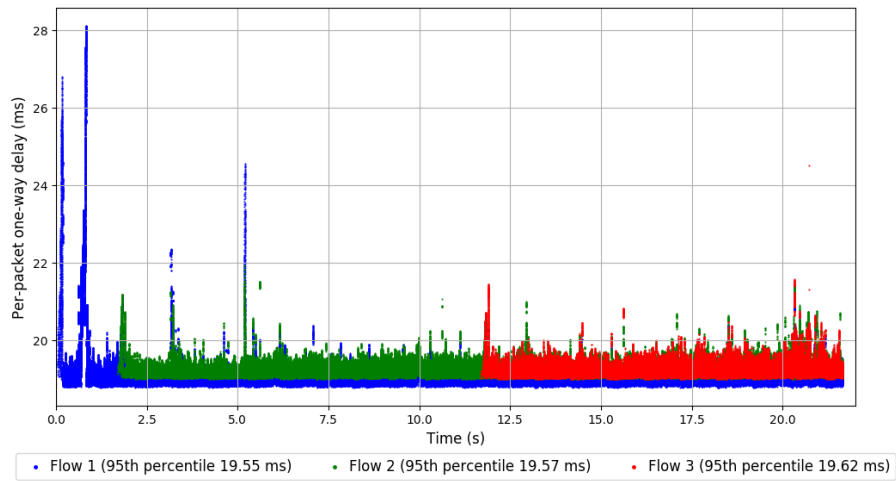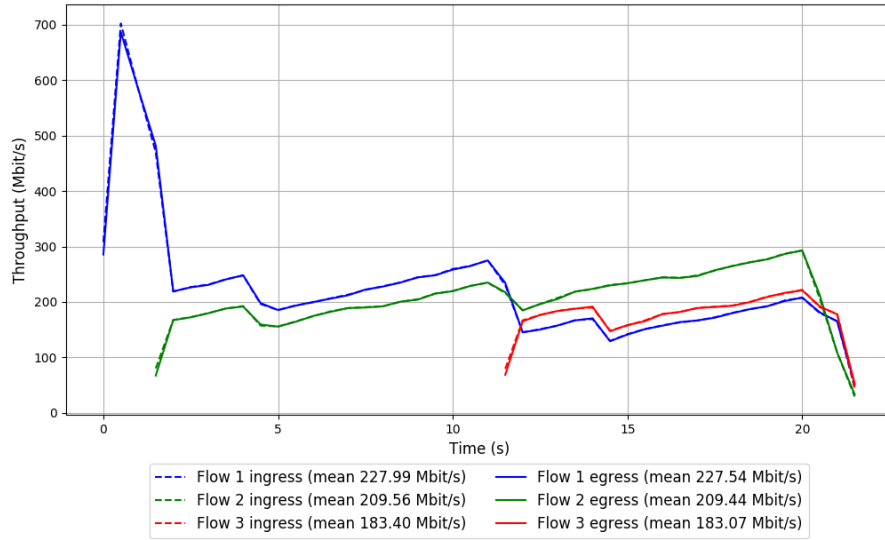
```
Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 09:05:04
End at: 2017-12-20 09:05:34
Local clock offset: 0.938 ms
Remote clock offset: -0.757 ms


# Below is generated by plot.py at 2017-12-20 14:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.65 Mbit/s
95th percentile per-packet one-way delay: 19.367 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 354.00 Mbit/s
95th percentile per-packet one-way delay: 19.378 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 199.36 Mbit/s
95th percentile per-packet one-way delay: 19.342 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 222.49 Mbit/s
95th percentile per-packet one-way delay: 19.379 ms
Loss rate: 0.13%
```
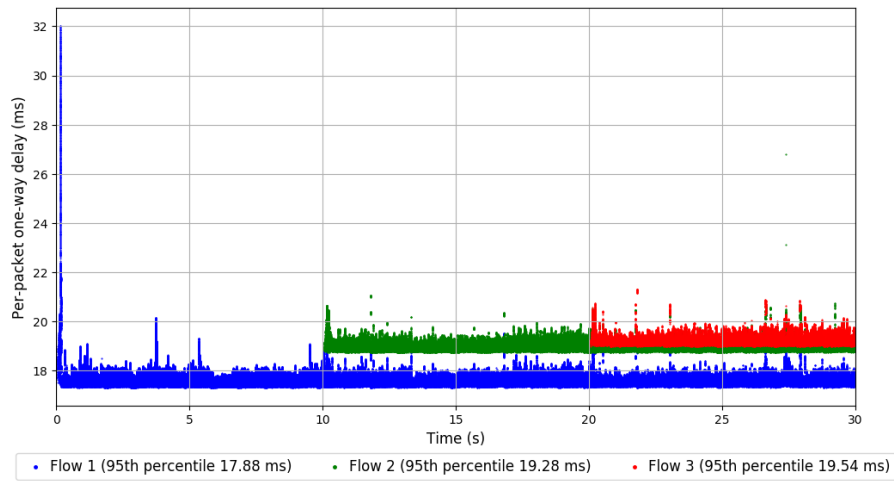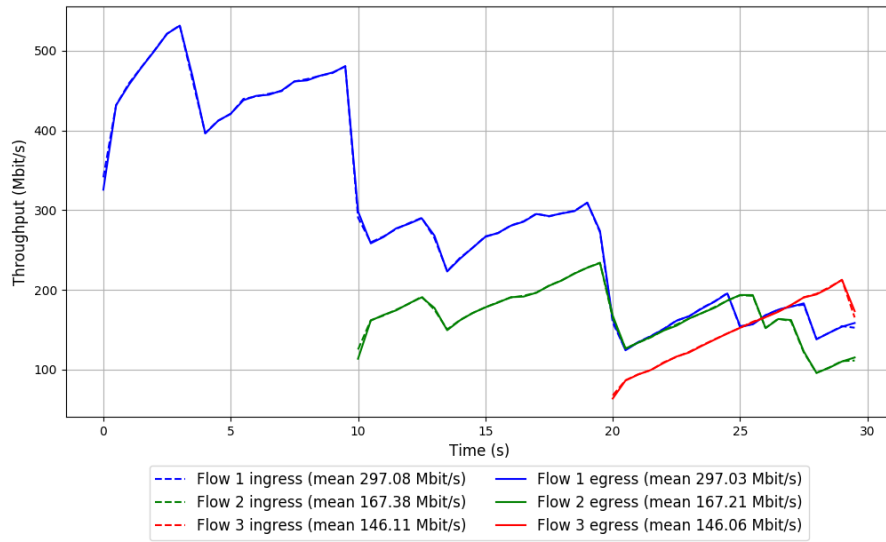
Run 2: Report of TCP Cubic — Data Link
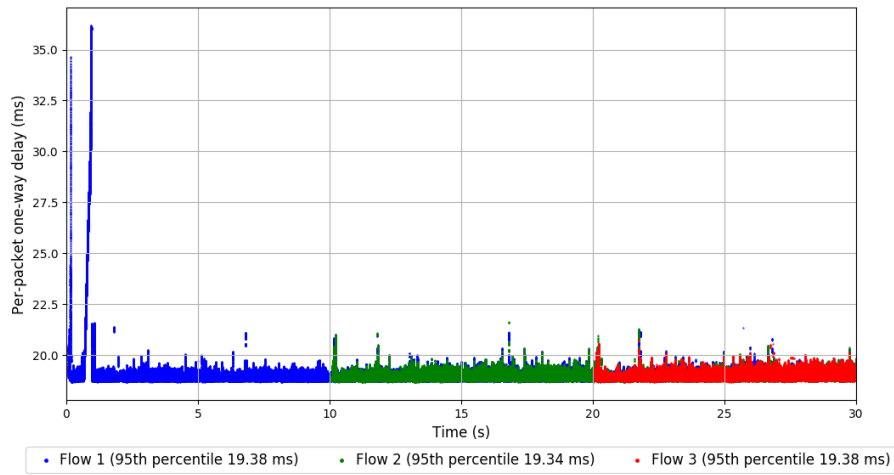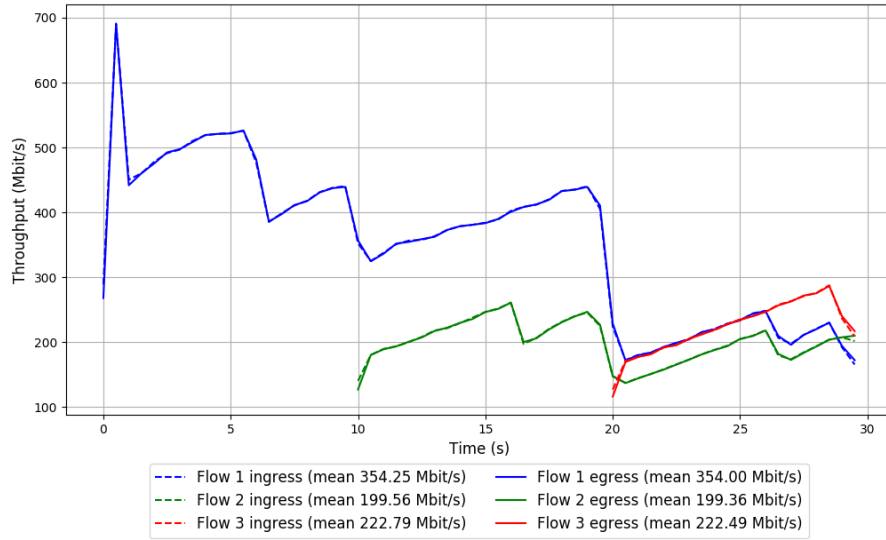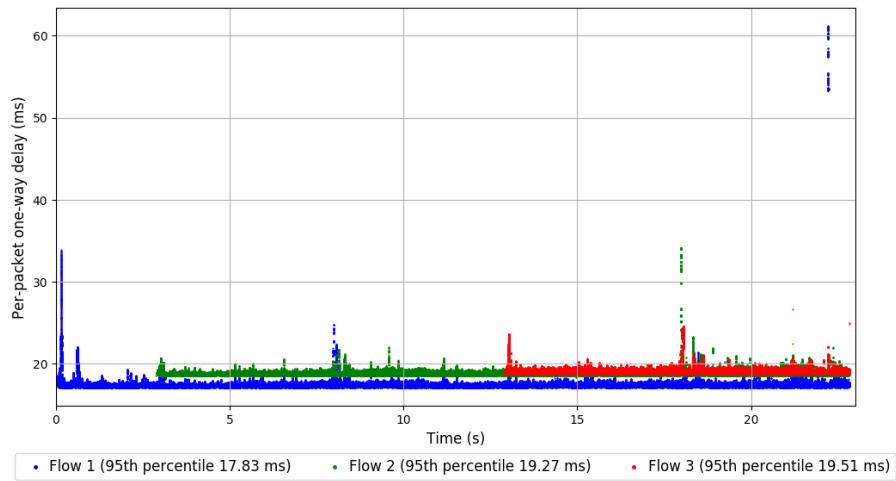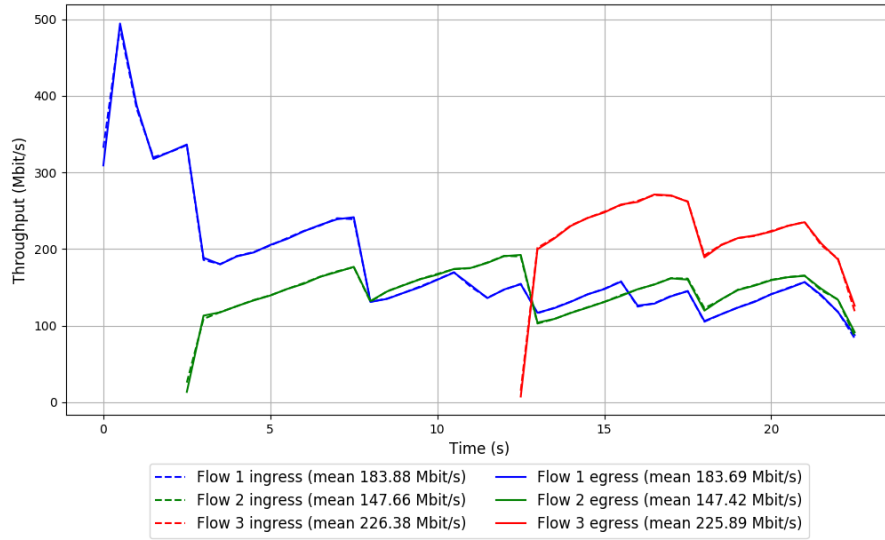
```
Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 09:26:54
End at: 2017-12-20 09:27:24
Local clock offset: 1.019 ms
Remote clock offset: -0.951 ms


# Below is generated by plot.py at 2017-12-20 14:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.87 Mbit/s
95th percentile per-packet one-way delay: 19.260 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 297.03 Mbit/s
95th percentile per-packet one-way delay: 17.877 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 167.21 Mbit/s
95th percentile per-packet one-way delay: 19.284 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 146.06 Mbit/s
95th percentile per-packet one-way delay: 19.536 ms
Loss rate: 0.03%
```
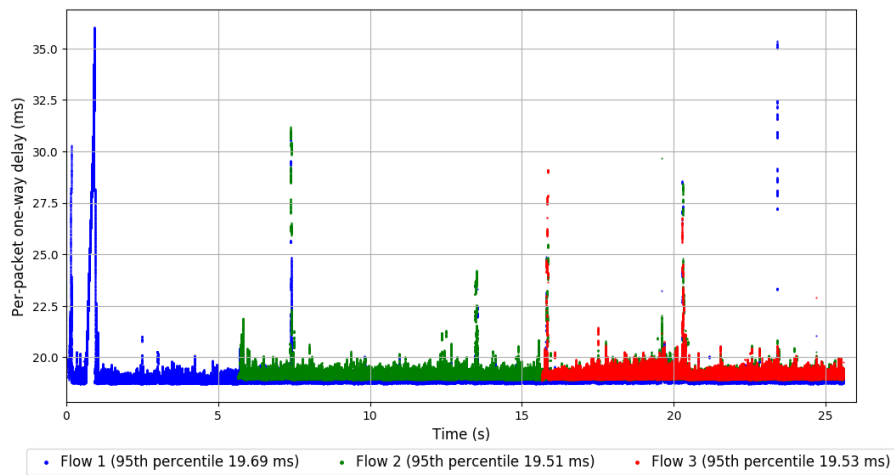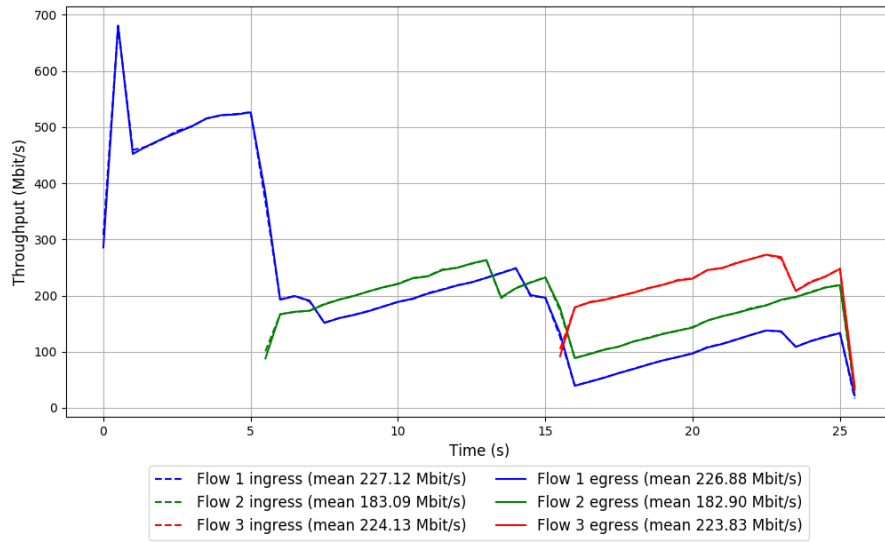
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 297.08 Mbit/s) --- Flow 1 egress (mean 297.03 Mbit/s)
Flow 2 ingress (mean 167.38 Mbit/s) --- Flow 2 egress (mean 167.21 Mbit/s)
Flow 3 ingress (mean 146.11 Mbit/s) --- Flow 3 egress (mean 146.06 Mbit/s)

Flow 1 (95th percentile 17.88 ms)   Flow 2 (95th percentile 19.28 ms)   Flow 3 (95th percentile 19.54 ms)

29

```
Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 09:48:43
End at: 2017-12-20 09:49:13
Local clock offset: 0.954 ms
Remote clock offset: -1.05 ms
```

Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 10:10:26
End at: 2017-12-20 10:10:56
Local clock offset: 0.534 ms
Remote clock offset: -1.188 ms


# Below is generated by plot.py at 2017-12-20 14:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.82 Mbit/s
95th percentile per-packet one-way delay: 19.541 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 226.88 Mbit/s
95th percentile per-packet one-way delay: 19.693 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 182.90 Mbit/s
95th percentile per-packet one-way delay: 19.513 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 223.83 Mbit/s
95th percentile per-packet one-way delay: 19.528 ms
Loss rate: 0.13%
```
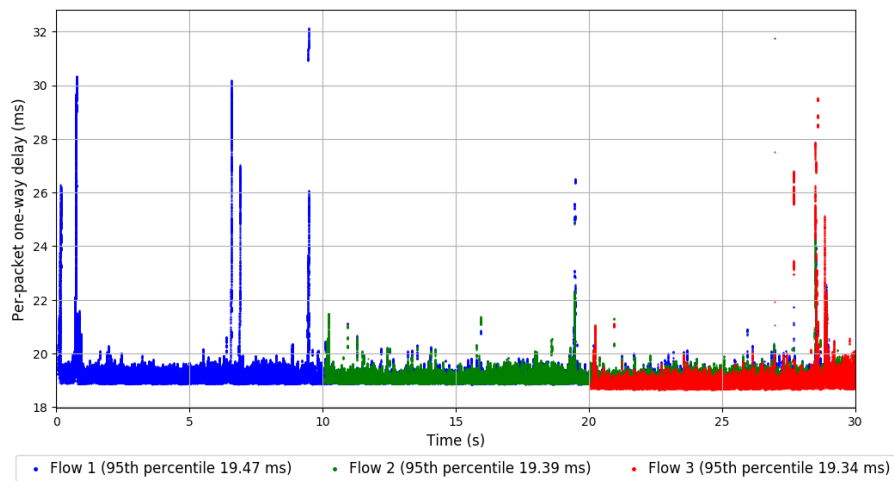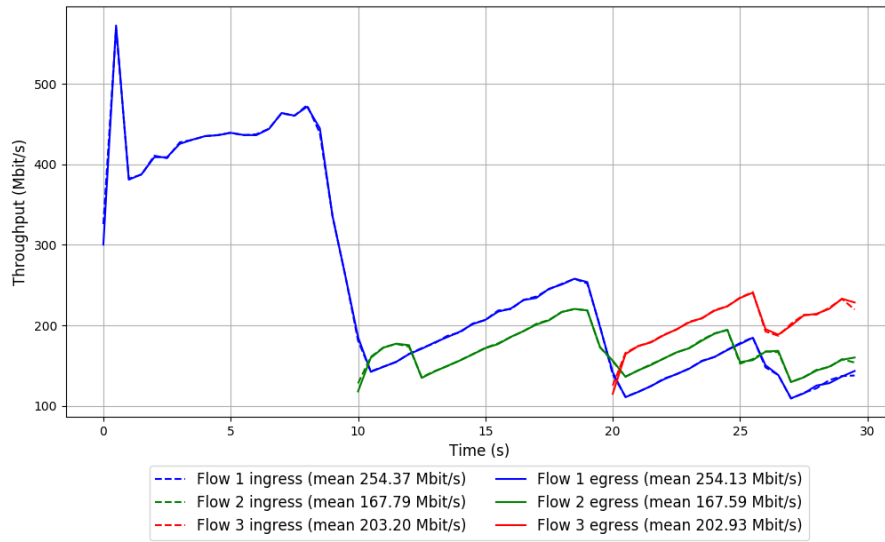
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 227.12 Mbit/s) --- Flow 1 egress (mean 226.88 Mbit/s)
Flow 2 ingress (mean 183.09 Mbit/s) --- Flow 2 egress (mean 182.90 Mbit/s)
Flow 3 ingress (mean 224.13 Mbit/s) --- Flow 3 egress (mean 223.83 Mbit/s)

Flow 1 (95th percentile 19.69 ms)   Flow 2 (95th percentile 19.51 ms)   Flow 3 (95th percentile 19.53 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 10:32:18
End at: 2017-12-20 10:32:48
Local clock offset: 0.307 ms
Remote clock offset: -1.237 ms


# Below is generated by plot.py at 2017-12-20 14:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.12 Mbit/s
95th percentile per-packet one-way delay: 19.436 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 254.13 Mbit/s
95th percentile per-packet one-way delay: 19.467 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 167.59 Mbit/s
95th percentile per-packet one-way delay: 19.385 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 202.93 Mbit/s
95th percentile per-packet one-way delay: 19.339 ms
Loss rate: 0.13%
```

Run 6: Report of TCP Cubic — Data Link

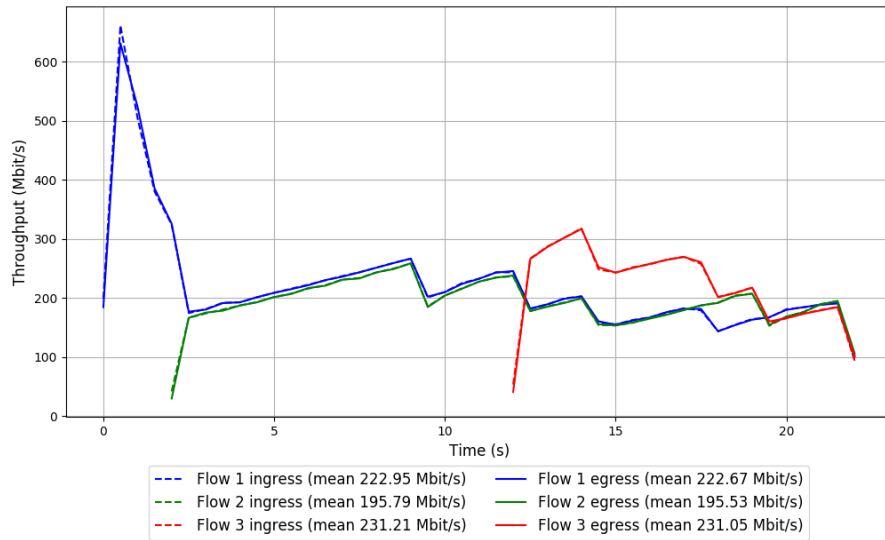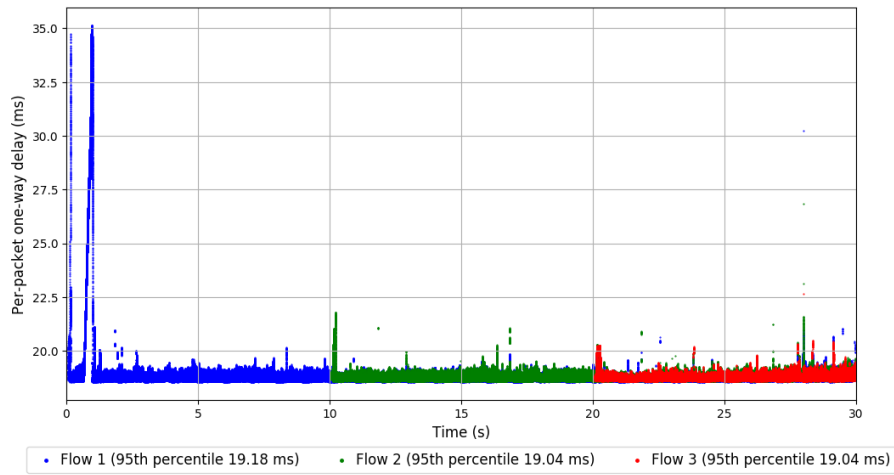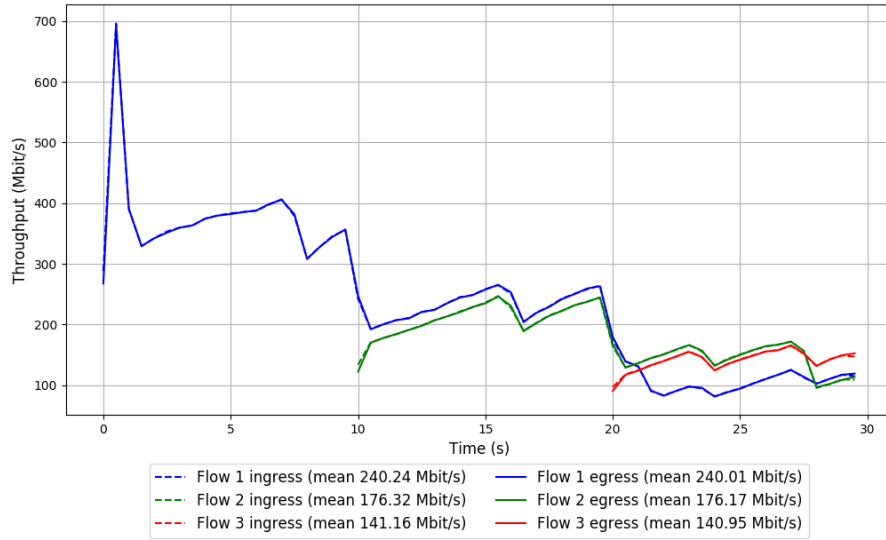Flow 1 ingress (mean 254.37 Mbit/s) --- Flow 1 egress (mean 254.13 Mbit/s)
Flow 2 ingress (mean 167.79 Mbit/s) --- Flow 2 egress (mean 167.59 Mbit/s)
Flow 3 ingress (mean 203.20 Mbit/s) --- Flow 3 egress (mean 202.93 Mbit/s)

Flow 1 (95th percentile 19.47 ms)   Flow 2 (95th percentile 19.39 ms)   Flow 3 (95th percentile 19.34 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 10:54:21
End at: 2017-12-20 10:54:51
Local clock offset: 0.059 ms
Remote clock offset: -1.045 ms
```

Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 222.95 Mbit/s) --- Flow 1 egress (mean 222.67 Mbit/s)
Flow 2 ingress (mean 195.79 Mbit/s) --- Flow 2 egress (mean 195.53 Mbit/s)
Flow 3 ingress (mean 231.21 Mbit/s) --- Flow 3 egress (mean 231.05 Mbit/s)

Flow 1 (95th percentile 20.60 ms) Flow 2 (95th percentile 19.82 ms) Flow 3 (95th percentile 19.77 ms)

37
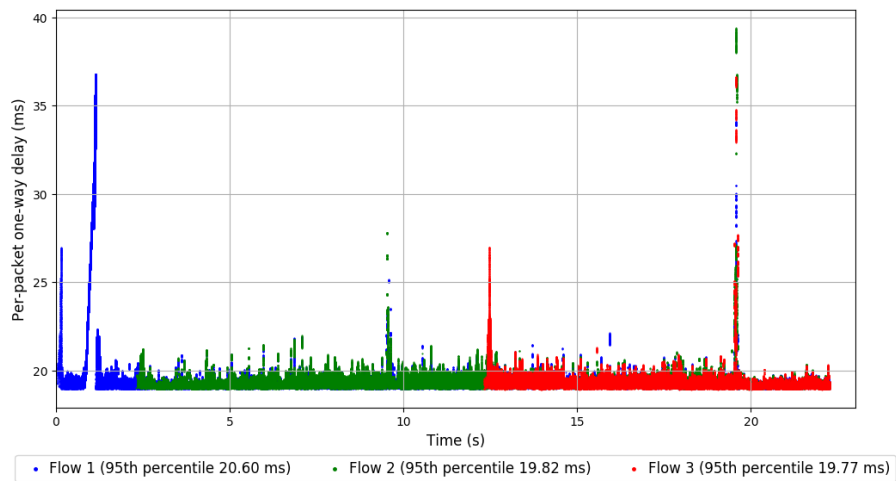
```
Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 11:16:09
End at: 2017-12-20 11:16:39
Local clock offset: 0.019 ms
Remote clock offset: -1.2 ms


# Below is generated by plot.py at 2017-12-20 14:40:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.17 Mbit/s
95th percentile per-packet one-way delay: 19.099 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 240.01 Mbit/s
95th percentile per-packet one-way delay: 19.176 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 19.041 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 140.95 Mbit/s
95th percentile per-packet one-way delay: 19.039 ms
Loss rate: 0.14%
```
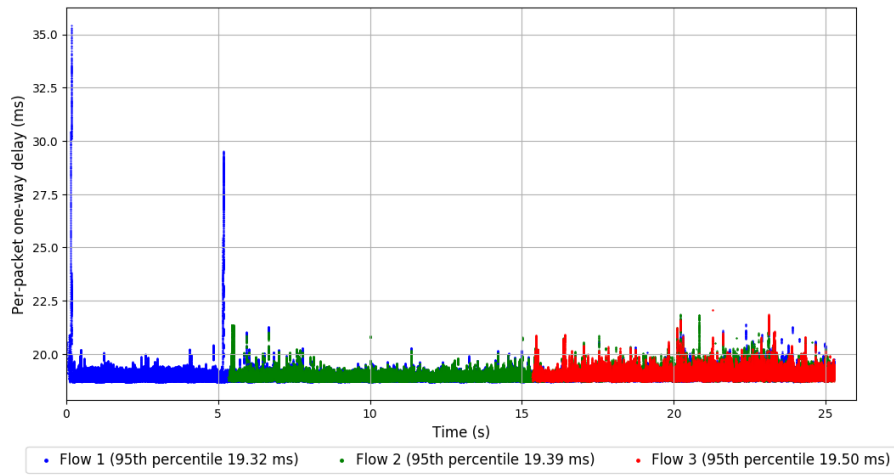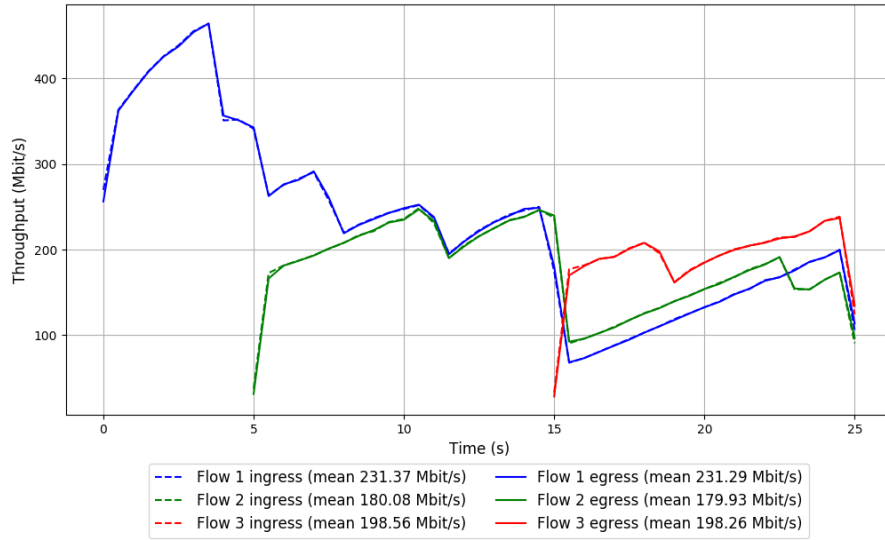
Run 8: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 240.24 Mbit/s) —— Flow 1 egress (mean 240.01 Mbit/s)
- - - - Flow 2 ingress (mean 176.32 Mbit/s) —— Flow 2 egress (mean 176.17 Mbit/s)
- - - - Flow 3 ingress (mean 141.16 Mbit/s) —— Flow 3 egress (mean 140.95 Mbit/s)

- Flow 1 (95th percentile 19.18 ms)   • Flow 2 (95th percentile 19.04 ms)   • Flow 3 (95th percentile 19.04 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 11:37:57
End at: 2017-12-20 11:38:27
Local clock offset: -0.225 ms
Remote clock offset: -1.686 ms


# Below is generated by plot.py at 2017-12-20 14:40:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.60 Mbit/s
95th percentile per-packet one-way delay: 19.384 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 231.29 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 179.93 Mbit/s
95th percentile per-packet one-way delay: 19.393 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 198.26 Mbit/s
95th percentile per-packet one-way delay: 19.502 ms
Loss rate: 0.15%
```
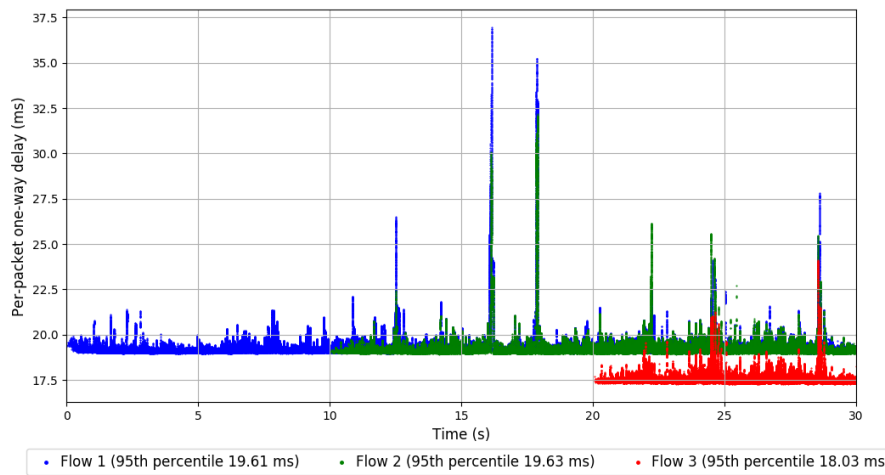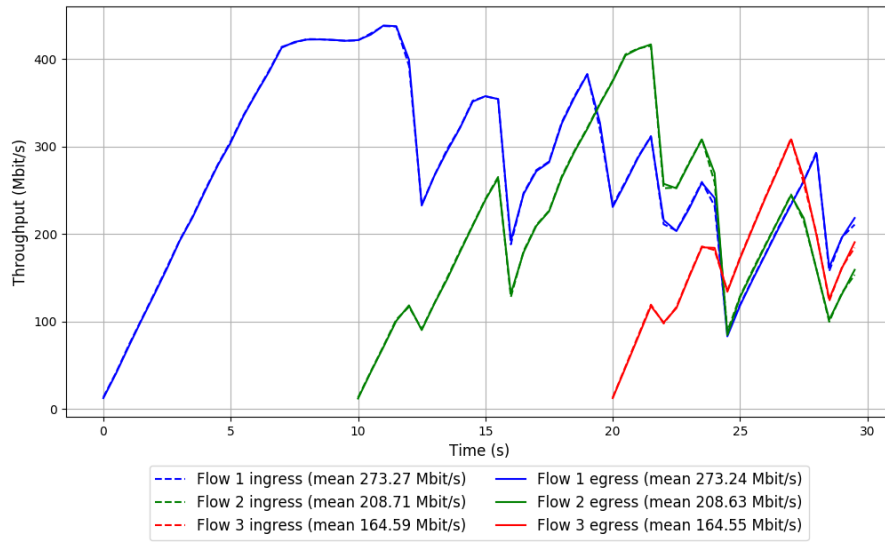
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 231.37 Mbit/s) --- Flow 1 egress (mean 231.29 Mbit/s)
Flow 2 ingress (mean 180.08 Mbit/s) --- Flow 2 egress (mean 179.93 Mbit/s)
Flow 3 ingress (mean 198.56 Mbit/s) --- Flow 3 egress (mean 198.26 Mbit/s)

Flow 1 (95th percentile 19.32 ms)   Flow 2 (95th percentile 19.39 ms)   Flow 3 (95th percentile 19.50 ms)

41

```
Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 12:00:03
End at: 2017-12-20 12:00:33
Local clock offset: -0.196 ms
Remote clock offset: -2.089 ms
```

Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 241.54 Mbit/s) ---- Flow 1 egress (mean 241.23 Mbit/s)
Flow 2 ingress (mean 192.21 Mbit/s) ---- Flow 2 egress (mean 191.97 Mbit/s)
Flow 3 ingress (mean 221.27 Mbit/s) ---- Flow 3 egress (mean 221.15 Mbit/s)

Flow 1 (95th percentile 19.66 ms)   Flow 2 (95th percentile 17.91 ms)   Flow 3 (95th percentile 19.43 ms)

43
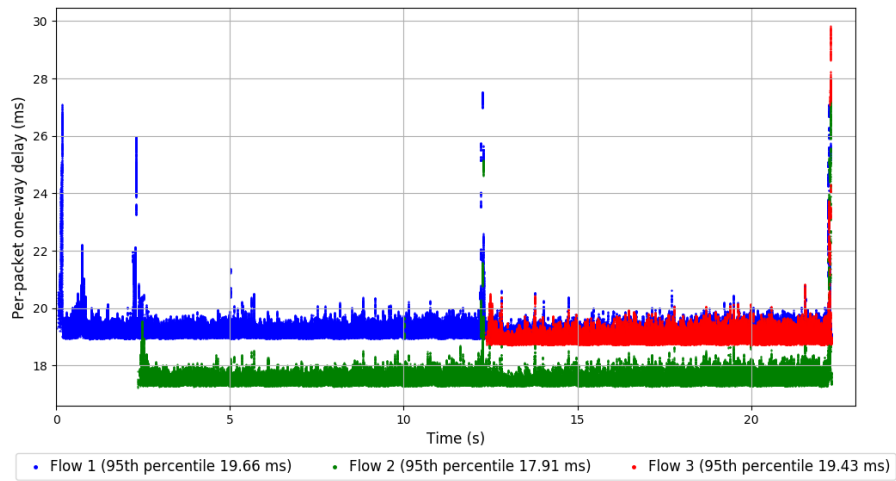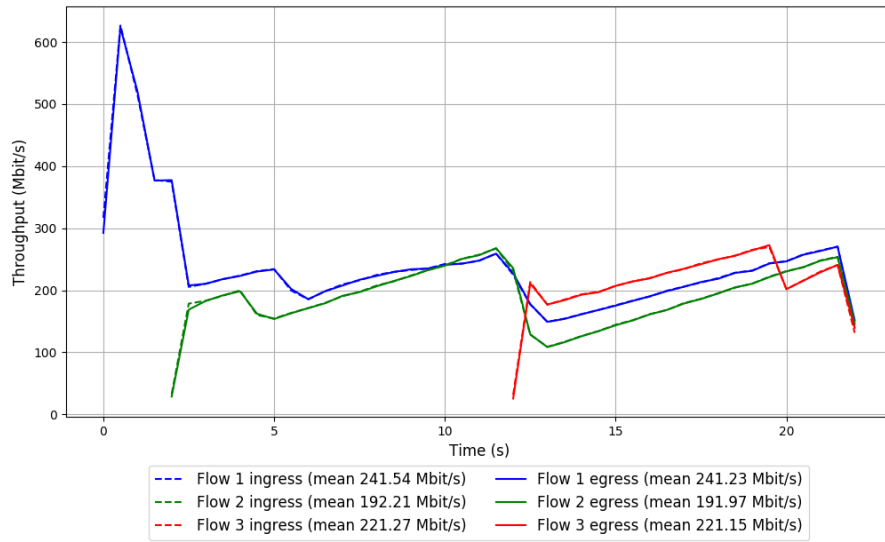
```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 08:38:55
End at: 2017-12-20 08:39:25
Local clock offset: 1.013 ms
Remote clock offset: -0.78 ms

# Below is generated by plot.py at 2017-12-20 14:42:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.73 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 273.24 Mbit/s
95th percentile per-packet one-way delay: 19.608 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 208.63 Mbit/s
95th percentile per-packet one-way delay: 19.629 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 164.55 Mbit/s
95th percentile per-packet one-way delay: 18.031 ms
Loss rate: 0.01%
```

Run 1: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 273.27 Mbit/s) — Flow 1 egress (mean 273.24 Mbit/s)
- - - Flow 2 ingress (mean 208.71 Mbit/s) — Flow 2 egress (mean 208.63 Mbit/s)
- - - Flow 3 ingress (mean 164.59 Mbit/s) — Flow 3 egress (mean 164.55 Mbit/s)

- Flow 1 (95th percentile 19.61 ms)   • Flow 2 (95th percentile 19.63 ms)   • Flow 3 (95th percentile 18.03 ms)
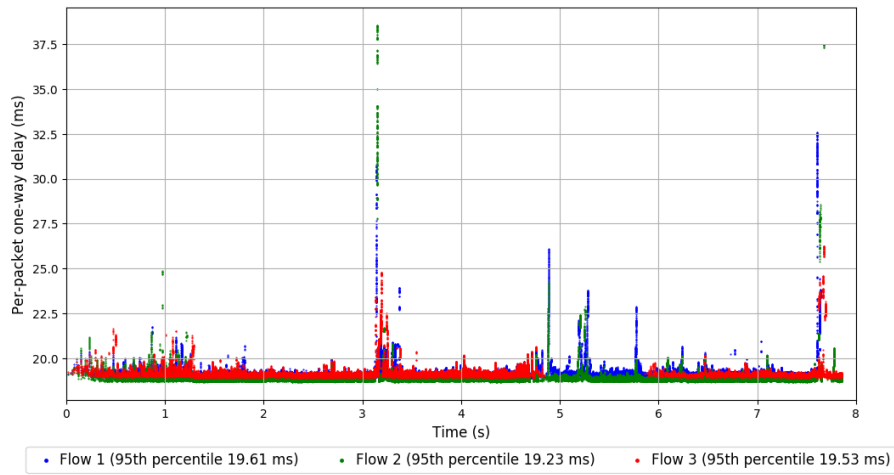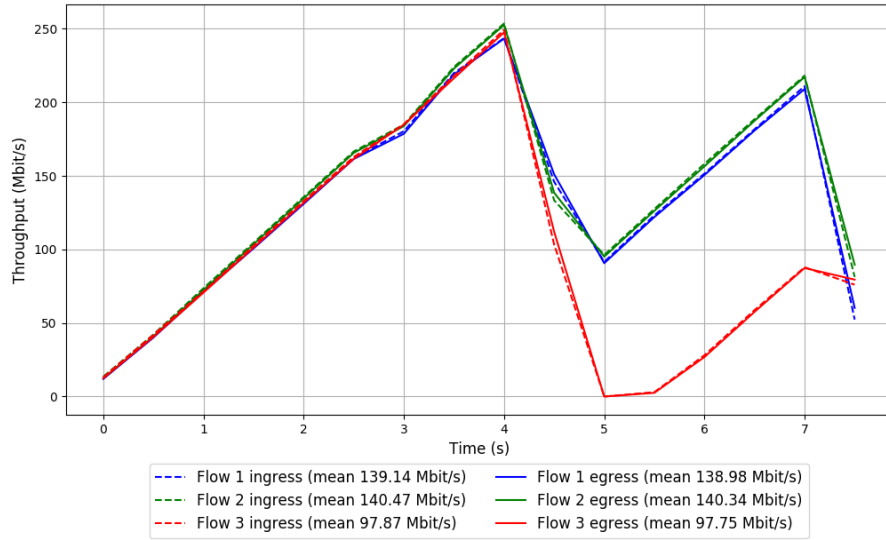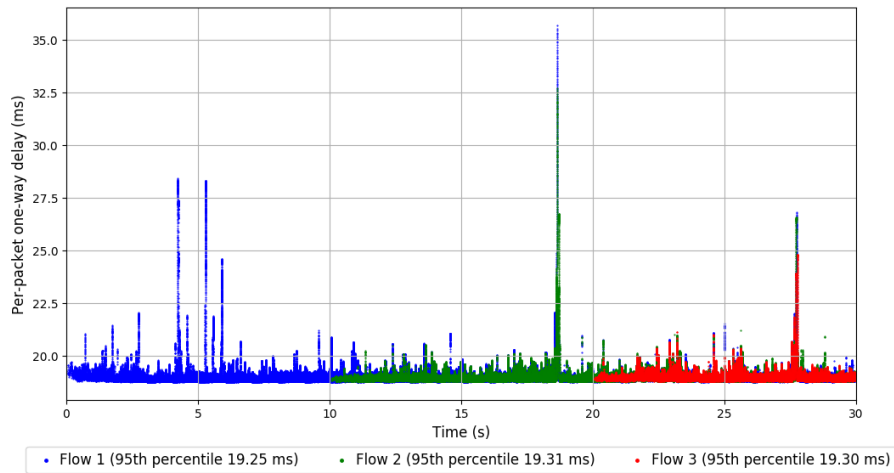
```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 09:00:51
End at: 2017-12-20 09:01:21
Local clock offset: 0.921 ms
Remote clock offset: -0.705 ms
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 163.17 Mbit/s)   Flow 1 egress (mean 163.16 Mbit/s)
Flow 2 ingress (mean 158.53 Mbit/s)   Flow 2 egress (mean 158.48 Mbit/s)
Flow 3 ingress (mean 165.70 Mbit/s)   Flow 3 egress (mean 165.63 Mbit/s)

Flow 1 (95th percentile 19.46 ms)   Flow 2 (95th percentile 18.04 ms)   Flow 3 (95th percentile 19.36 ms)
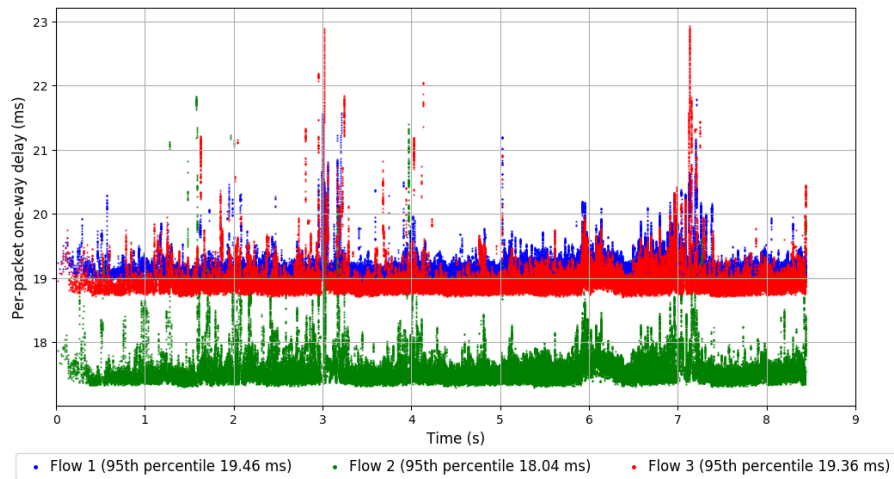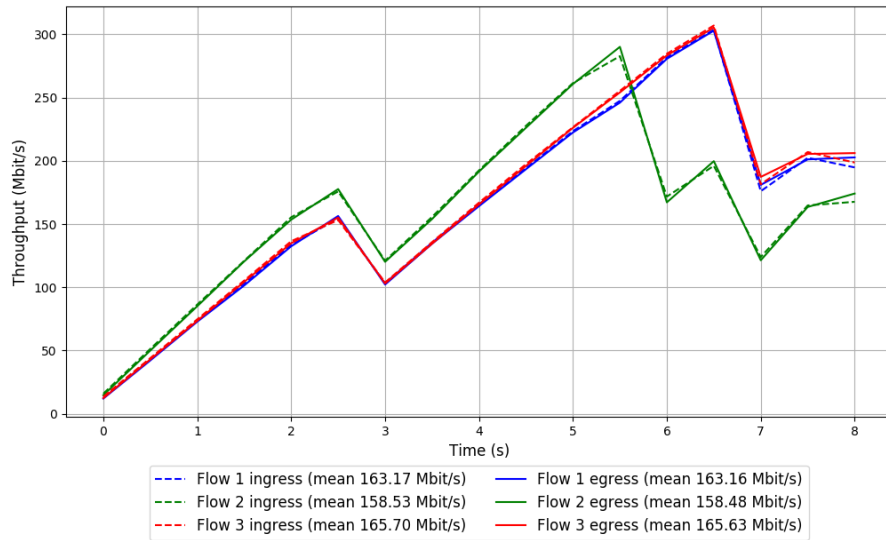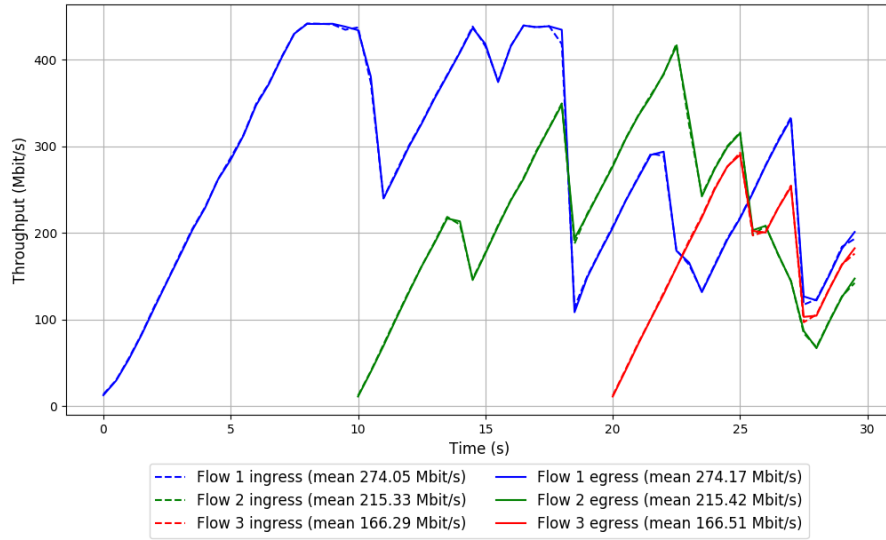
```
Run 3: Statistics of LEDBAT

Start at: 2017-12-20 09:22:42
End at: 2017-12-20 09:23:12
Local clock offset: 1.029 ms
Remote clock offset: -0.976 ms
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 185.30 Mbit/s) ---- Flow 1 egress (mean 185.29 Mbit/s) ——
Flow 2 ingress (mean 168.28 Mbit/s) ---- Flow 2 egress (mean 168.25 Mbit/s) ——
Flow 3 ingress (mean 144.01 Mbit/s) ---- Flow 3 egress (mean 143.95 Mbit/s) ——

Flow 1 (95th percentile 19.49 ms)   • Flow 2 (95th percentile 17.89 ms)   • Flow 3 (95th percentile 19.33 ms)
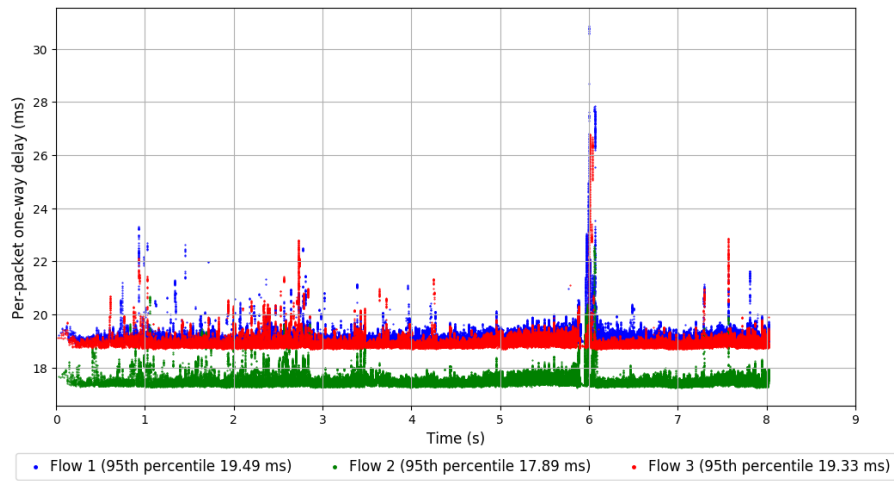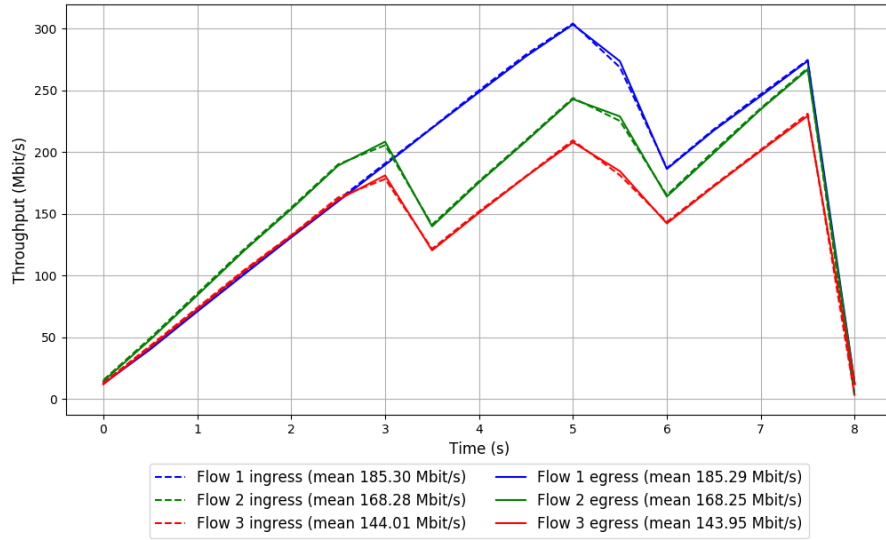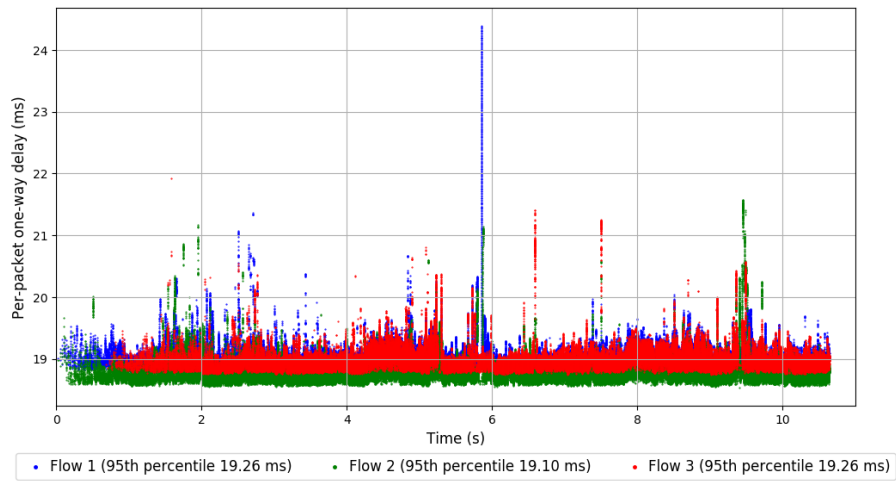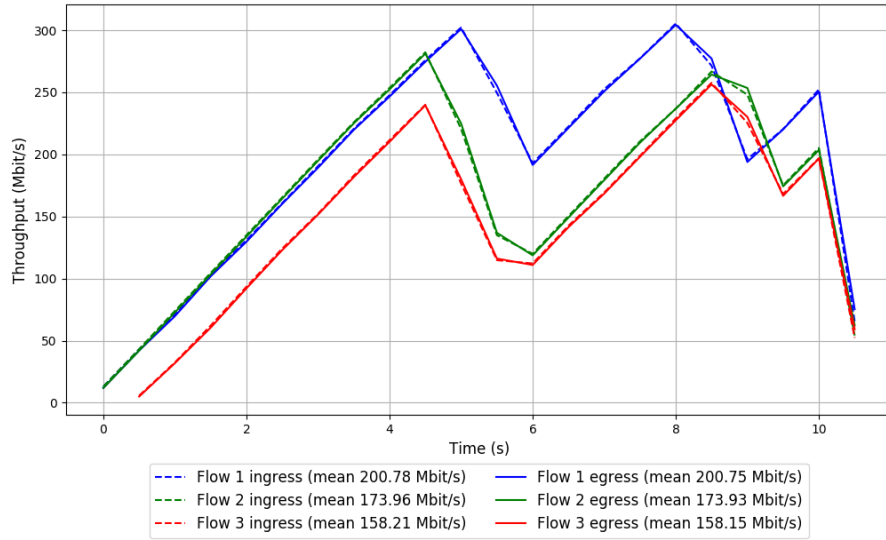
```
Run 4: Statistics of LEDBAT

Start at: 2017-12-20 09:44:29
End at: 2017-12-20 09:44:59
Local clock offset: 0.85 ms
Remote clock offset: -1.086 ms
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 152.55 Mbit/s) --- Flow 1 egress (mean 152.51 Mbit/s)
Flow 2 ingress (mean 146.14 Mbit/s) --- Flow 2 egress (mean 146.07 Mbit/s)
Flow 3 ingress (mean 145.64 Mbit/s) --- Flow 3 egress (mean 145.51 Mbit/s)

Flow 1 (95th percentile 19.45 ms)   Flow 2 (95th percentile 19.62 ms)   Flow 3 (95th percentile 19.65 ms)

51
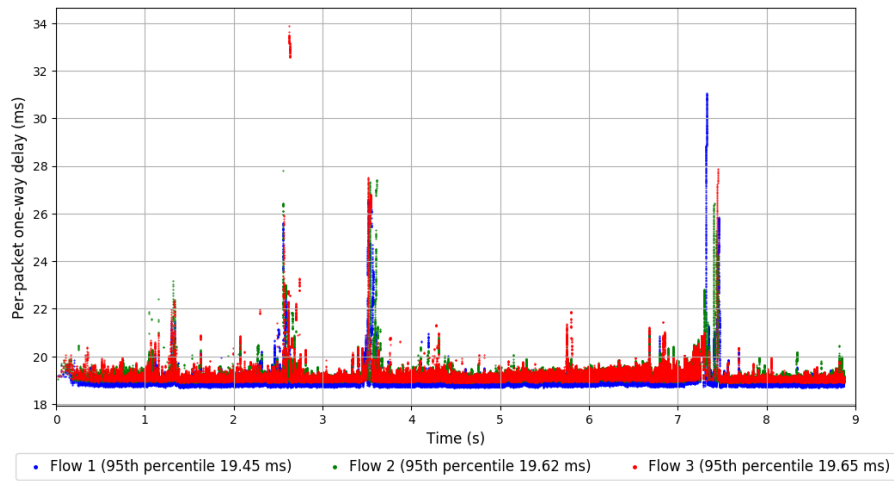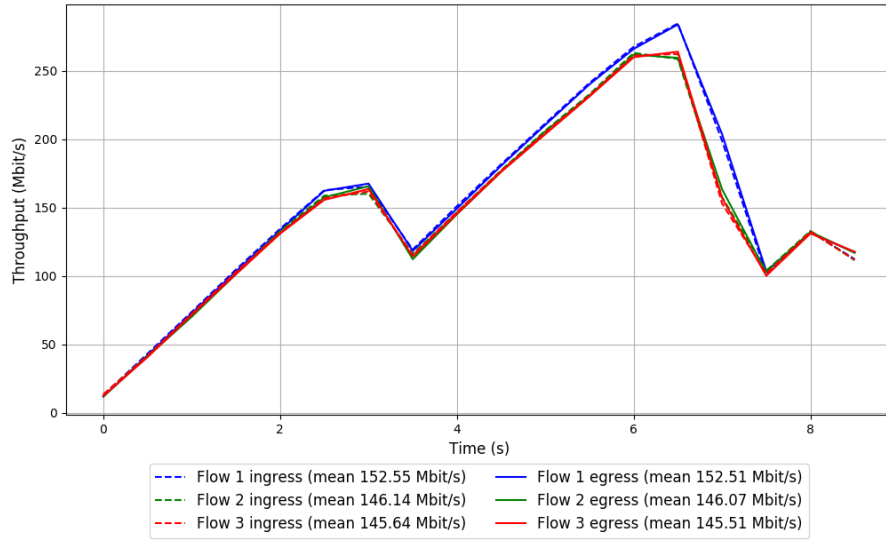
Run 5: Statistics of LEDBAT

Start at: 2017-12-20 10:06:15
End at: 2017-12-20 10:06:45
Local clock offset: 0.711 ms
Remote clock offset: -1.07 ms

Run 5: Report of LEDBAT — Data Link
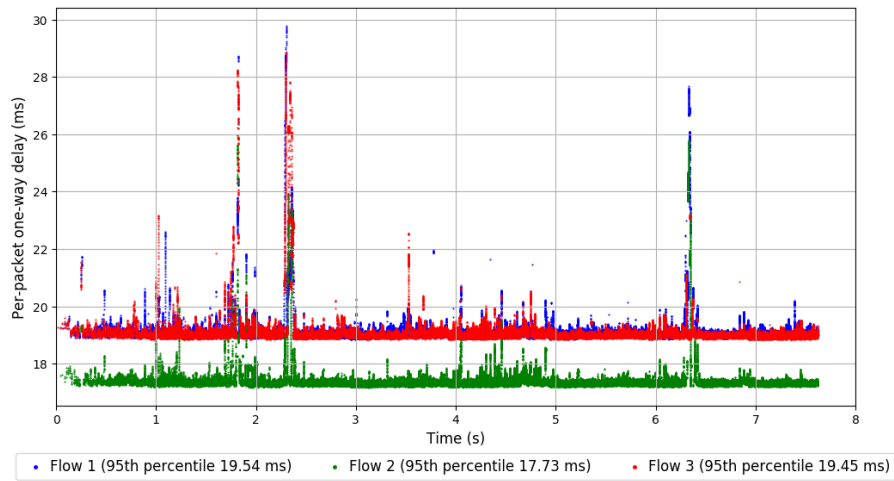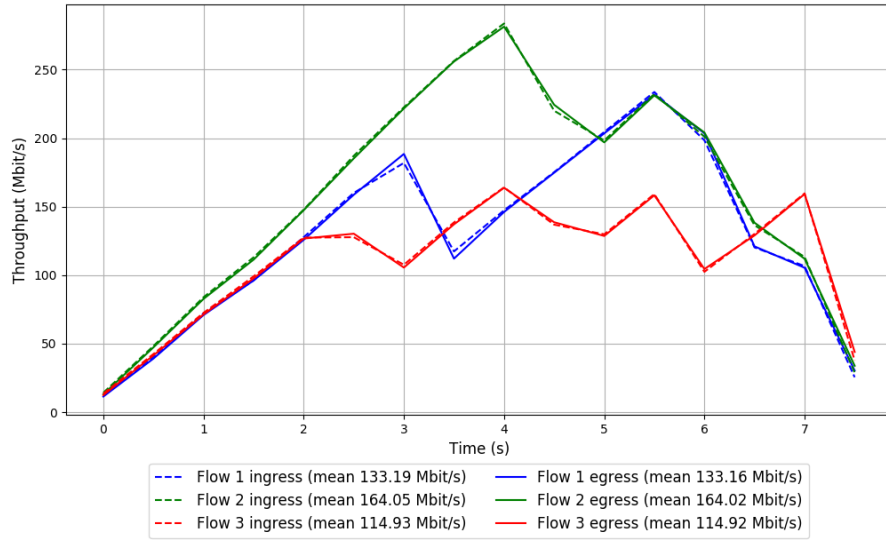
```
Run 6: Statistics of LEDBAT

Start at: 2017-12-20 10:28:08
End at: 2017-12-20 10:28:38
Local clock offset: 0.365 ms
Remote clock offset: -1.239 ms
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 139.14 Mbit/s) ---- Flow 1 egress (mean 138.98 Mbit/s) ——
Flow 2 ingress (mean 140.47 Mbit/s) ---- Flow 2 egress (mean 140.34 Mbit/s) ——
Flow 3 ingress (mean 97.87 Mbit/s) ---- Flow 3 egress (mean 97.75 Mbit/s) ——

Flow 1 (95th percentile 19.61 ms) • Flow 2 (95th percentile 19.23 ms) • Flow 3 (95th percentile 19.53 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2017-12-20 10:49:49
End at: 2017-12-20 10:50:19
Local clock offset: 0.2 ms
Remote clock offset: -1.022 ms

# Below is generated by plot.py at 2017-12-20 14:46:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 472.67 Mbit/s
95th percentile per-packet one-way delay: 19.280 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 274.17 Mbit/s
95th percentile per-packet one-way delay: 19.255 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 215.42 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 166.51 Mbit/s
95th percentile per-packet one-way delay: 19.302 ms
Loss rate: 0.02%
```
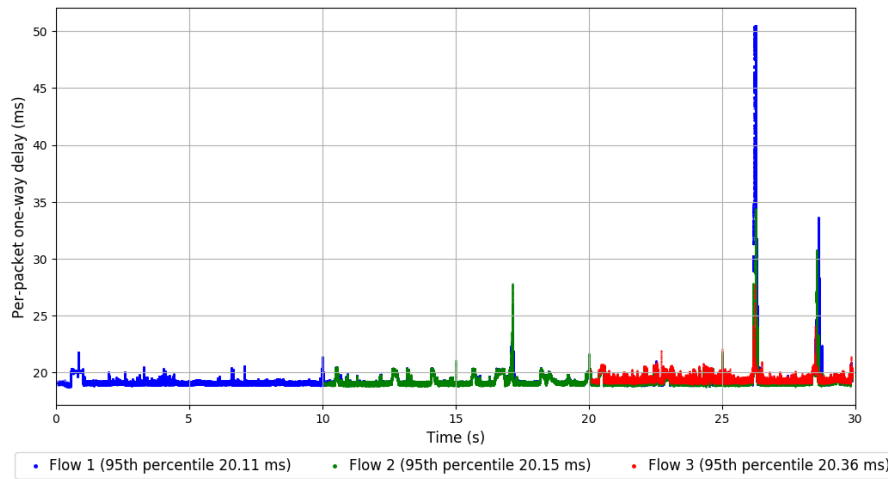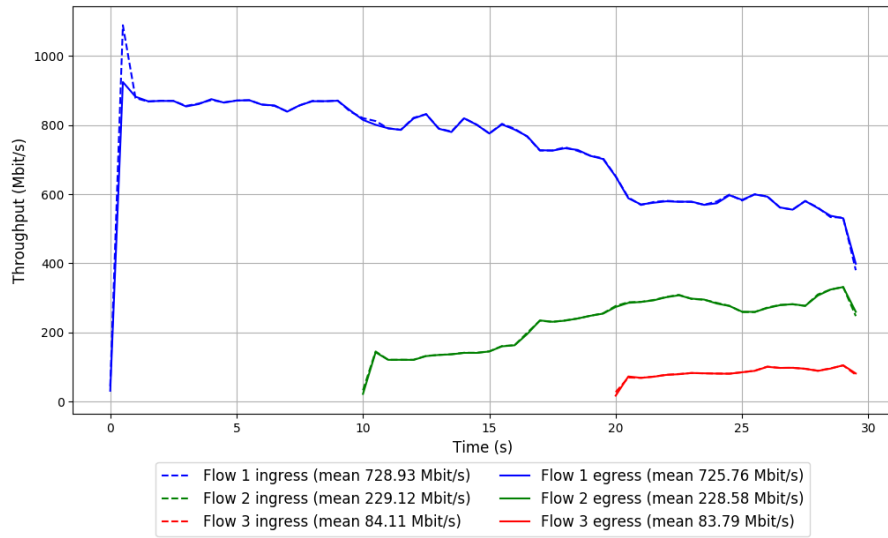
Run 7: Report of LEDBAT — Data Link

Run 8: Statistics of LEDBAT

Start at: 2017-12-20 11:11:54
End at: 2017-12-20 11:12:24
Local clock offset: 0.045 ms
Remote clock offset: -1.228 ms

Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 200.78 Mbit/s) --- Flow 1 egress (mean 200.75 Mbit/s)
Flow 2 ingress (mean 173.96 Mbit/s) --- Flow 2 egress (mean 173.93 Mbit/s)
Flow 3 ingress (mean 158.21 Mbit/s) --- Flow 3 egress (mean 158.15 Mbit/s)

Flow 1 (95th percentile 19.26 ms)   Flow 2 (95th percentile 19.10 ms)   Flow 3 (95th percentile 19.26 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2017-12-20 11:33:27
End at: 2017-12-20 11:33:57
Local clock offset: -0.133 ms
Remote clock offset: -1.499 ms


# Below is generated by plot.py at 2017-12-20 14:46:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.56 Mbit/s
95th percentile per-packet one-way delay: 19.541 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 255.69 Mbit/s
95th percentile per-packet one-way delay: 19.416 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 211.88 Mbit/s
95th percentile per-packet one-way delay: 19.662 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 141.28 Mbit/s
95th percentile per-packet one-way delay: 19.626 ms
Loss rate: 0.11%
```

Run 9: Report of LEDBAT — Data Link
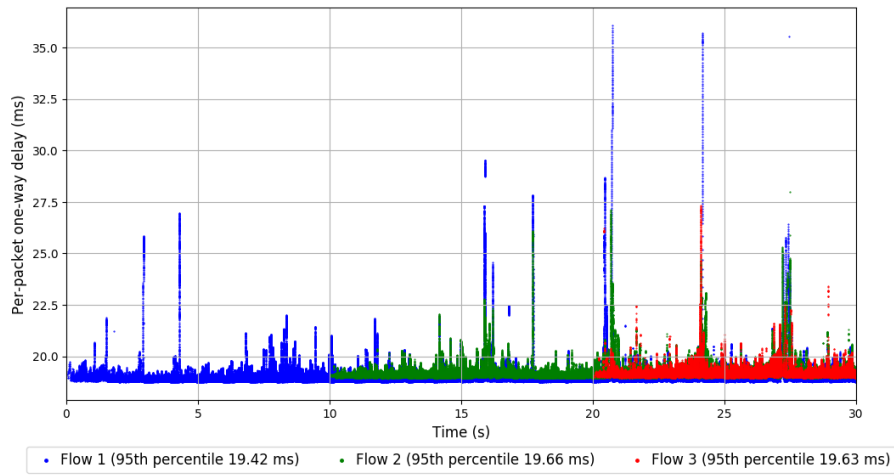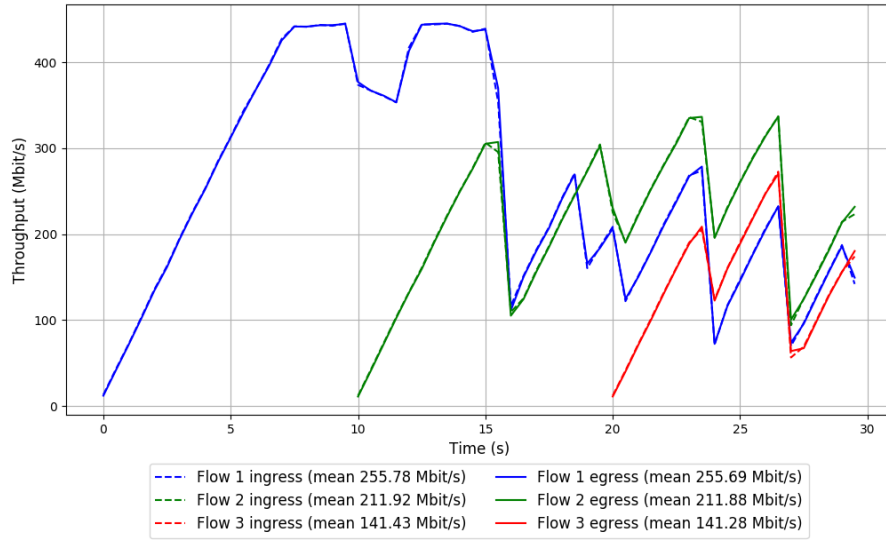
```
Run 10: Statistics of LEDBAT

Start at: 2017-12-20 11:55:35
End at: 2017-12-20 11:56:05
Local clock offset: -0.186 ms
Remote clock offset: -2.04 ms


# Below is generated by plot.py at 2017-12-20 14:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.28 Mbit/s
95th percentile per-packet one-way delay: 19.339 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 245.99 Mbit/s
95th percentile per-packet one-way delay: 19.246 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 200.50 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 147.37 Mbit/s
95th percentile per-packet one-way delay: 19.588 ms
Loss rate: 0.05%
```

Run 10: Report of LEDBAT — Data Link
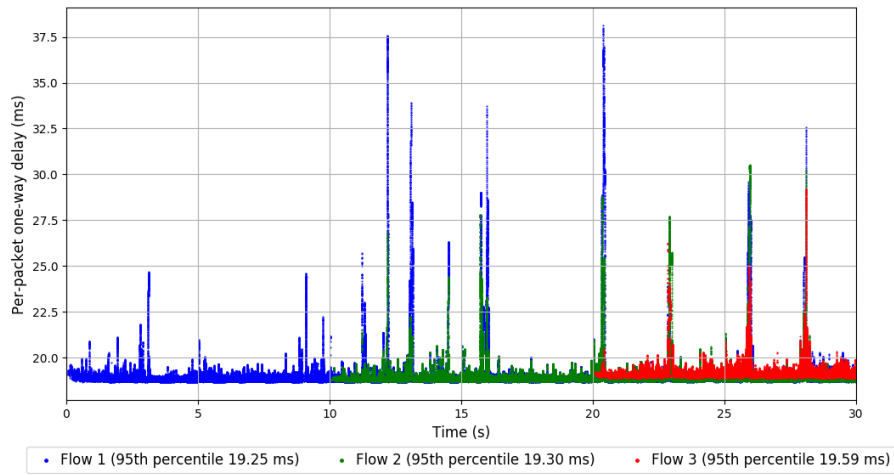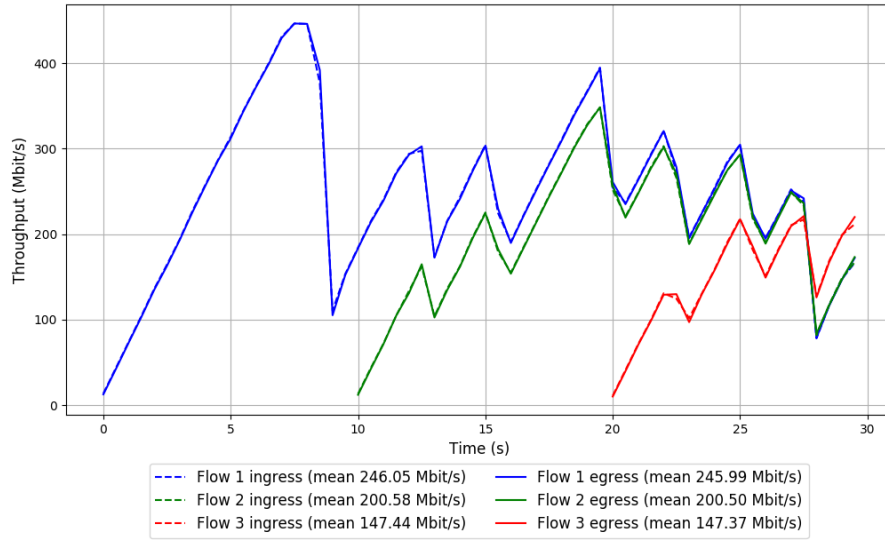
```
Run 1: Statistics of PCC

Start at: 2017-12-20 08:47:21
End at: 2017-12-20 08:47:51
Local clock offset: 0.96 ms
Remote clock offset: -0.732 ms


# Below is generated by plot.py at 2017-12-20 14:53:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.25 Mbit/s
95th percentile per-packet one-way delay: 20.116 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 725.76 Mbit/s
95th percentile per-packet one-way delay: 20.106 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 228.58 Mbit/s
95th percentile per-packet one-way delay: 20.153 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 83.79 Mbit/s
95th percentile per-packet one-way delay: 20.356 ms
Loss rate: 0.39%
```

Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 728.93 Mbit/s)   Flow 1 egress (mean 725.76 Mbit/s)
Flow 2 ingress (mean 229.12 Mbit/s)   Flow 2 egress (mean 228.58 Mbit/s)
Flow 3 ingress (mean 84.11 Mbit/s)   Flow 3 egress (mean 83.79 Mbit/s)

Flow 1 (95th percentile 20.11 ms)   Flow 2 (95th percentile 20.15 ms)   Flow 3 (95th percentile 20.36 ms)

```
Run 2: Statistics of PCC

Start at: 2017-12-20 09:09:06
End at: 2017-12-20 09:09:36
Local clock offset: 0.932 ms
Remote clock offset: -0.84 ms


# Below is generated by plot.py at 2017-12-20 14:53:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 926.55 Mbit/s
95th percentile per-packet one-way delay: 20.302 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 815.95 Mbit/s
95th percentile per-packet one-way delay: 20.304 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 133.13 Mbit/s
95th percentile per-packet one-way delay: 18.861 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 20.521 ms
Loss rate: 0.72%
```

Run 2: Report of PCC — Data Link

67
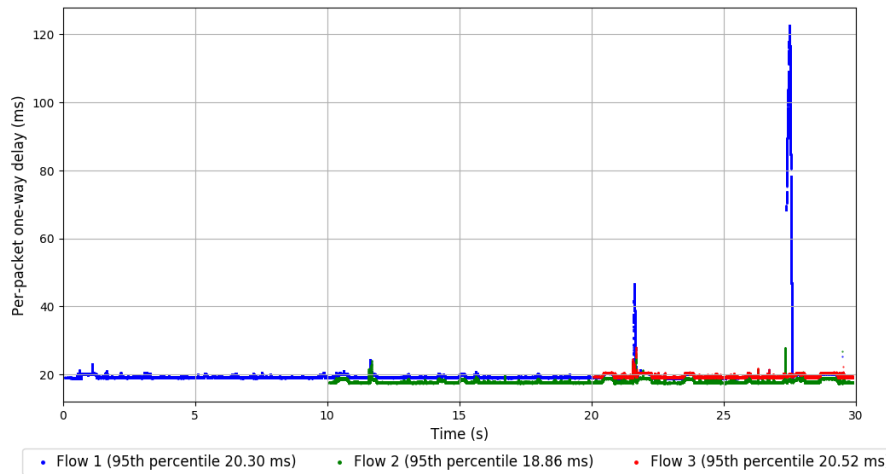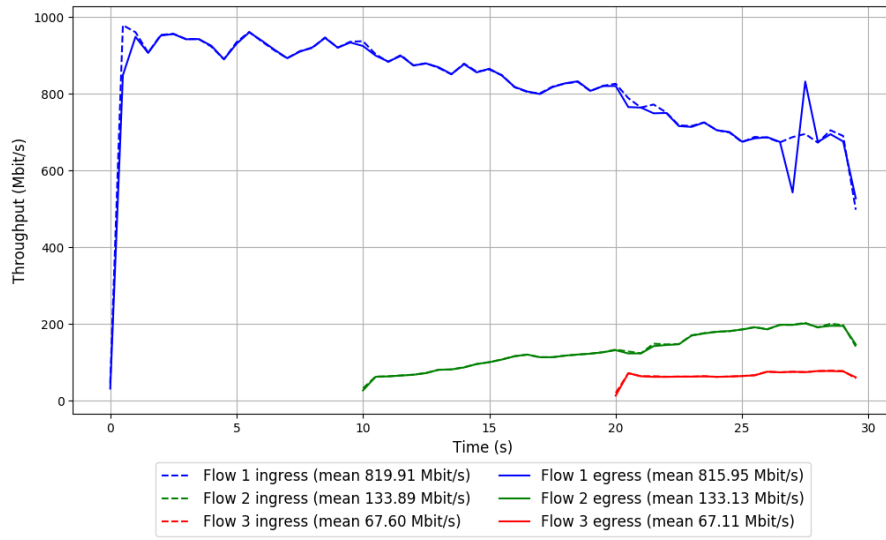
```
Run 3: Statistics of PCC

Start at: 2017-12-20 09:30:57
End at: 2017-12-20 09:31:27
Local clock offset: 1.045 ms
Remote clock offset: -1.107 ms


# Below is generated by plot.py at 2017-12-20 14:54:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 925.96 Mbit/s
95th percentile per-packet one-way delay: 20.127 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 834.45 Mbit/s
95th percentile per-packet one-way delay: 20.119 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 20.280 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 83.35 Mbit/s
95th percentile per-packet one-way delay: 20.065 ms
Loss rate: 0.21%
```
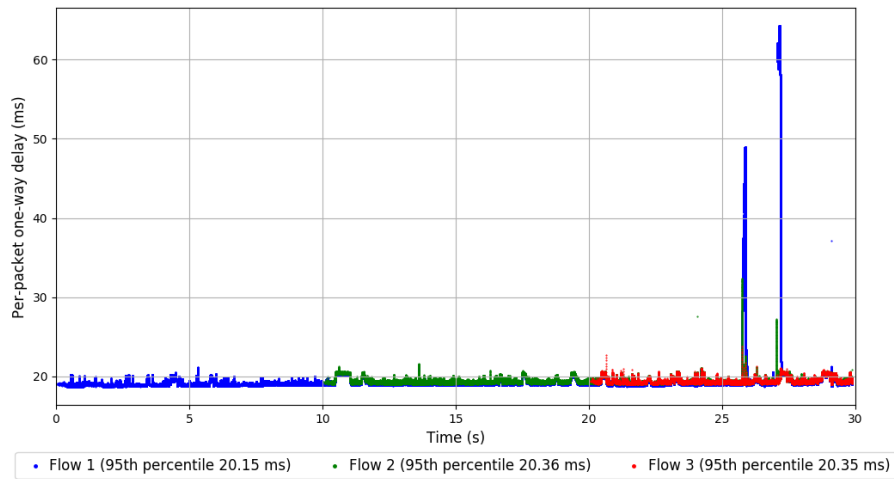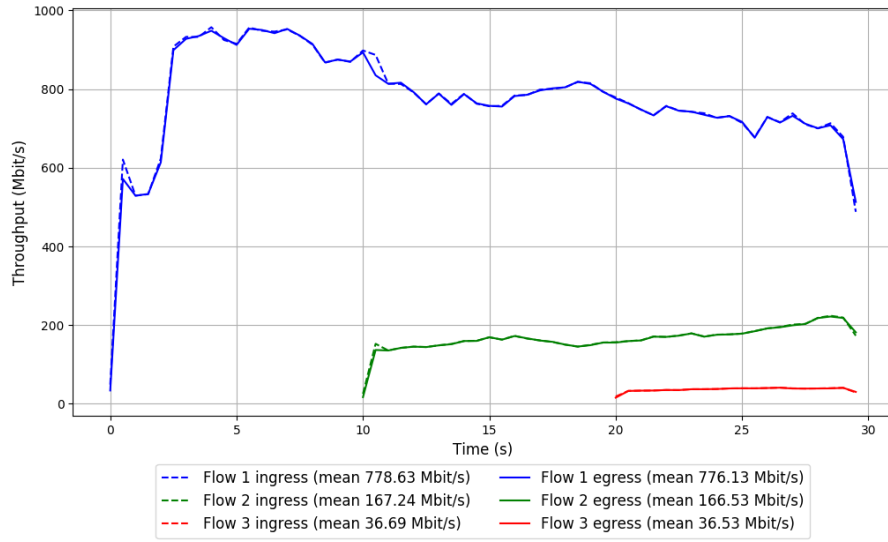
Run 3: Report of PCC — Data Link
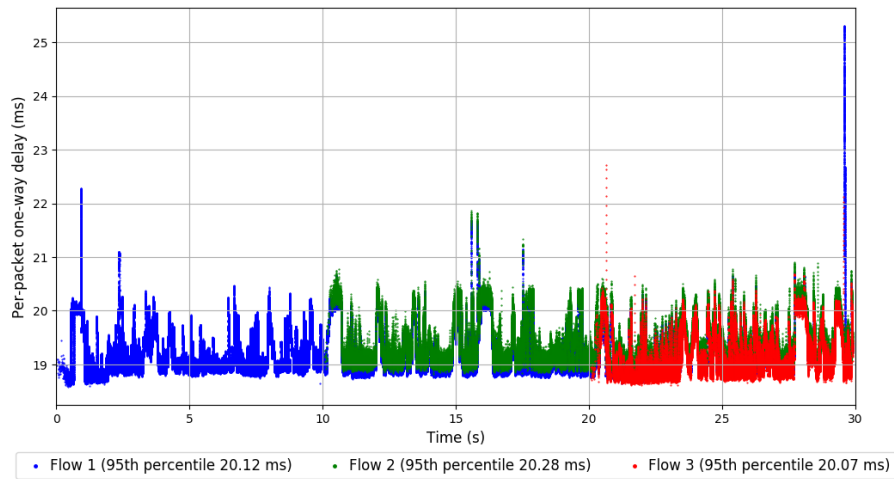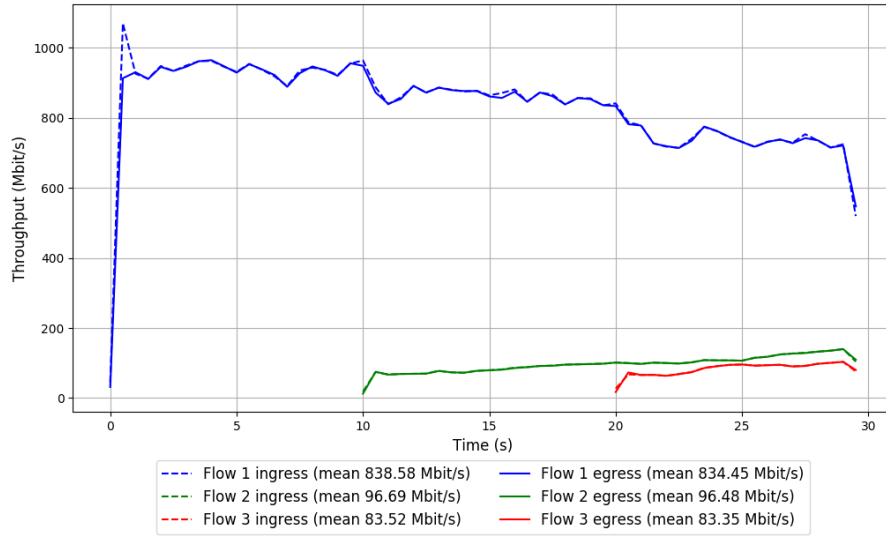
```
Run 4: Statistics of PCC

Start at: 2017-12-20 09:52:42
End at: 2017-12-20 09:53:12
Local clock offset: 0.819 ms
Remote clock offset: -0.997 ms


# Below is generated by plot.py at 2017-12-20 14:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.53 Mbit/s
95th percentile per-packet one-way delay: 20.235 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 735.33 Mbit/s
95th percentile per-packet one-way delay: 20.210 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 206.23 Mbit/s
95th percentile per-packet one-way delay: 20.365 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 140.11 Mbit/s
95th percentile per-packet one-way delay: 20.086 ms
Loss rate: 0.66%
```

Run 4: Report of PCC — Data Link
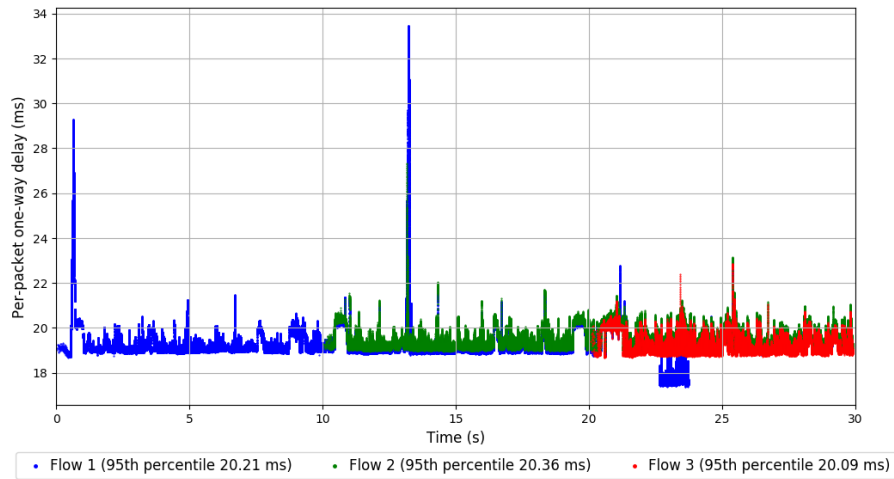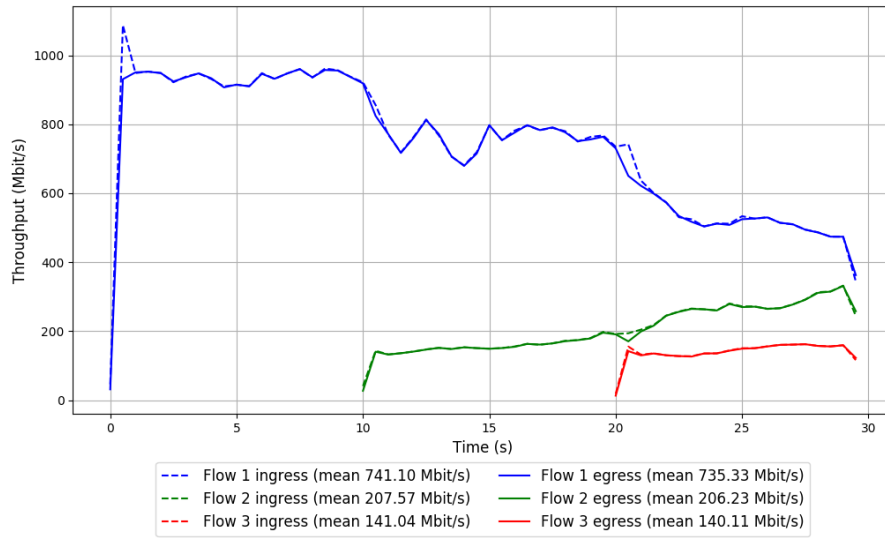
```
Run 5: Statistics of PCC

Start at: 2017-12-20 10:14:32
End at: 2017-12-20 10:15:02
Local clock offset: 0.507 ms
Remote clock offset: -1.219 ms


# Below is generated by plot.py at 2017-12-20 14:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 898.73 Mbit/s
95th percentile per-packet one-way delay: 20.175 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 776.13 Mbit/s
95th percentile per-packet one-way delay: 20.152 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 166.53 Mbit/s
95th percentile per-packet one-way delay: 20.356 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 36.53 Mbit/s
95th percentile per-packet one-way delay: 20.351 ms
Loss rate: 0.45%
```
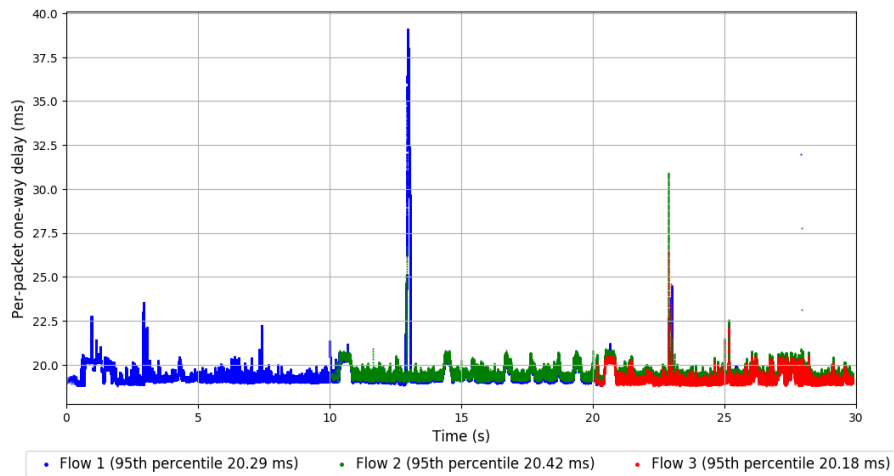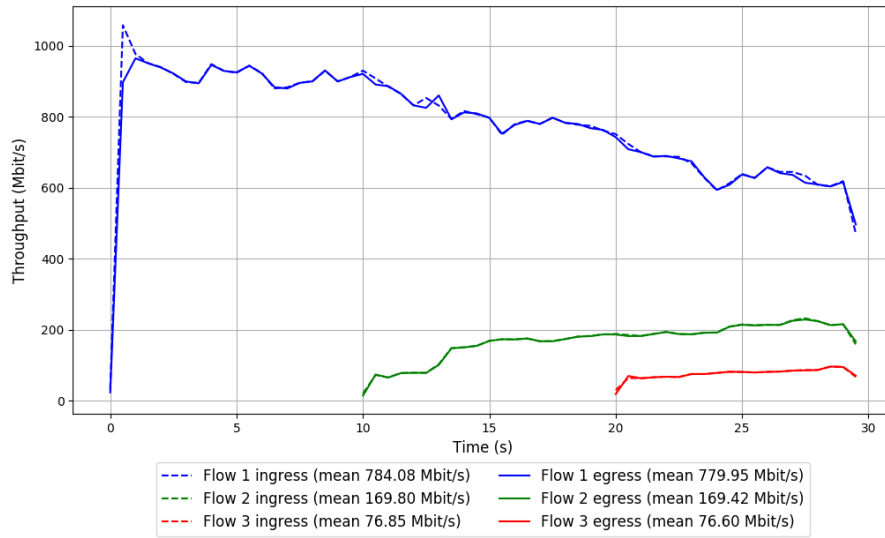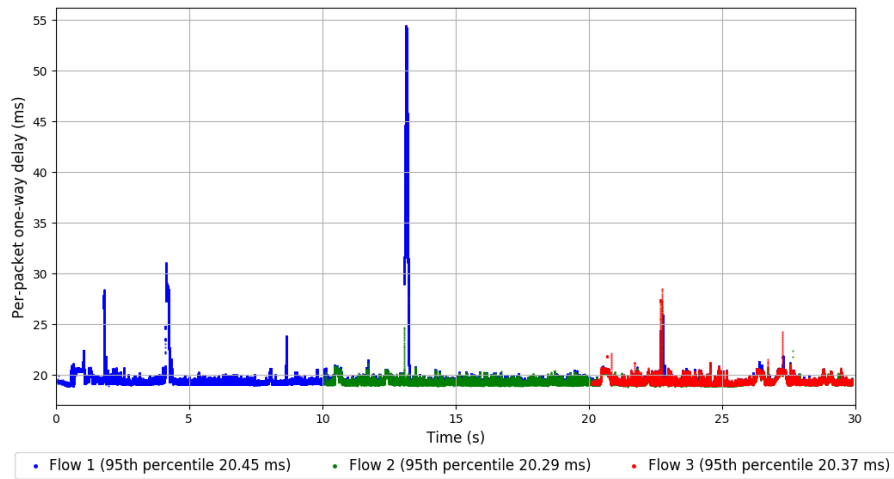
Run 5: Report of PCC — Data Link

- - - Flow 1 ingress (mean 778.63 Mbit/s)   —— Flow 1 egress (mean 776.13 Mbit/s)
- - - Flow 2 ingress (mean 167.24 Mbit/s)   —— Flow 2 egress (mean 166.53 Mbit/s)
- - - Flow 3 ingress (mean 36.69 Mbit/s)   —— Flow 3 egress (mean 36.53 Mbit/s)

- Flow 1 (95th percentile 20.15 ms)   • Flow 2 (95th percentile 20.36 ms)   • Flow 3 (95th percentile 20.35 ms)

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```
Run 6: Statistics of PCC

Start at: 2017-12-20 10:36:24
End at: 2017-12-20 10:36:54
Local clock offset: 0.315 ms
Remote clock offset: -1.161 ms


# Below is generated by plot.py at 2017-12-20 14:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 892.21 Mbit/s
95th percentile per-packet one-way delay: 20.420 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 721.56 Mbit/s
95th percentile per-packet one-way delay: 20.422 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 168.75 Mbit/s
95th percentile per-packet one-way delay: 20.413 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 177.31 Mbit/s
95th percentile per-packet one-way delay: 20.415 ms
Loss rate: 0.67%
```
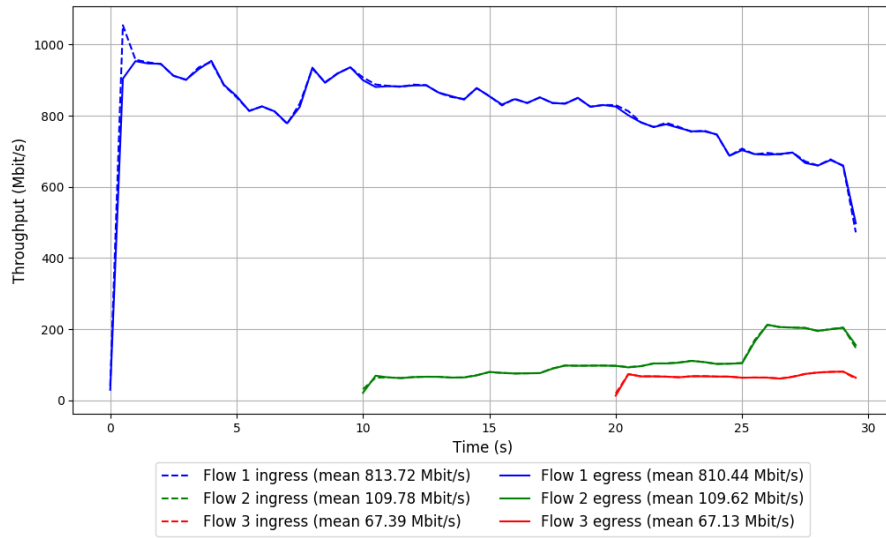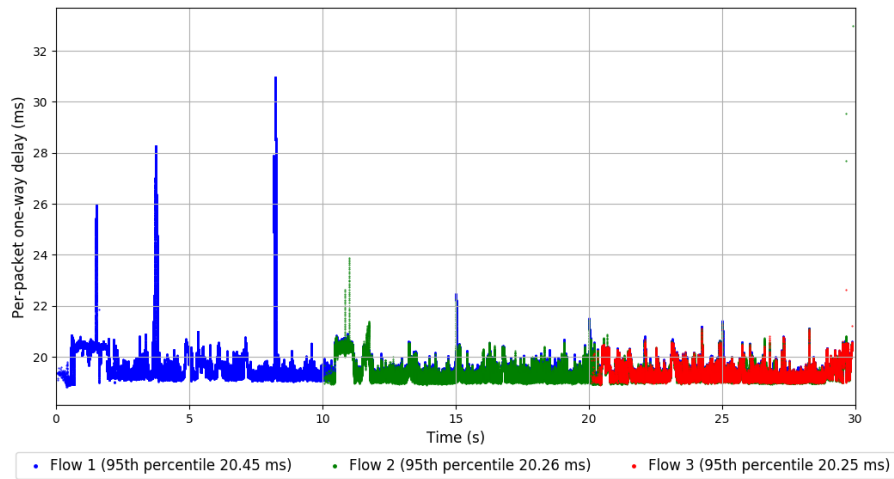
Run 6: Report of PCC — Data Link
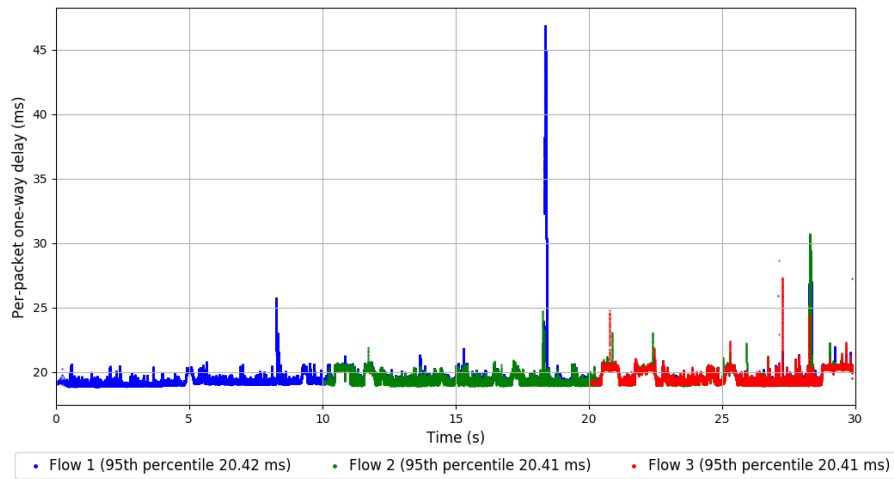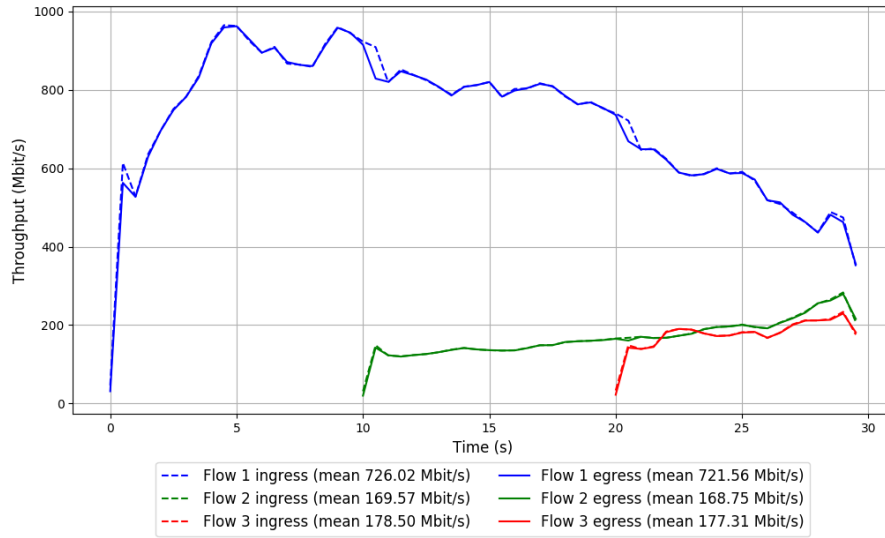
```
Run 7: Statistics of PCC

Start at: 2017-12-20 10:58:20
End at: 2017-12-20 10:58:50
Local clock offset: 0.032 ms
Remote clock offset: -1.099 ms


# Below is generated by plot.py at 2017-12-20 15:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 917.67 Mbit/s
95th percentile per-packet one-way delay: 20.305 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 779.95 Mbit/s
95th percentile per-packet one-way delay: 20.293 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 169.42 Mbit/s
95th percentile per-packet one-way delay: 20.417 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 20.176 ms
Loss rate: 0.32%
```
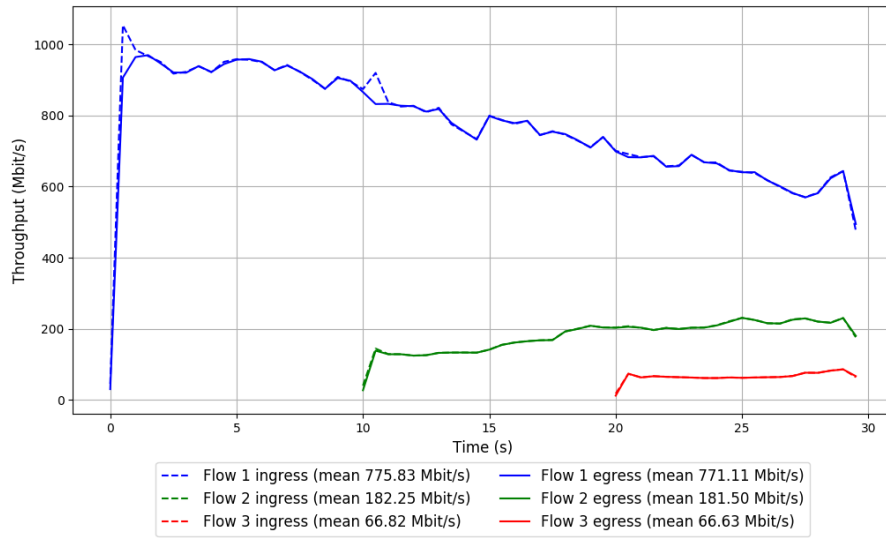
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 784.08 Mbit/s)   Flow 1 egress (mean 779.95 Mbit/s)
Flow 2 ingress (mean 169.80 Mbit/s)   Flow 2 egress (mean 169.42 Mbit/s)
Flow 3 ingress (mean 76.85 Mbit/s)   Flow 3 egress (mean 76.60 Mbit/s)

Flow 1 (95th percentile 20.29 ms)   Flow 2 (95th percentile 20.42 ms)   Flow 3 (95th percentile 20.18 ms)

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```
Run 8: Statistics of PCC

Start at: 2017-12-20 11:20:00
End at: 2017-12-20 11:20:30
Local clock offset: 0.003 ms
Remote clock offset: -1.191 ms

# Below is generated by plot.py at 2017-12-20 15:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.38 Mbit/s
95th percentile per-packet one-way delay: 20.436 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 810.44 Mbit/s
95th percentile per-packet one-way delay: 20.447 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 109.62 Mbit/s
95th percentile per-packet one-way delay: 20.294 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 67.13 Mbit/s
95th percentile per-packet one-way delay: 20.369 ms
Loss rate: 0.40%
```
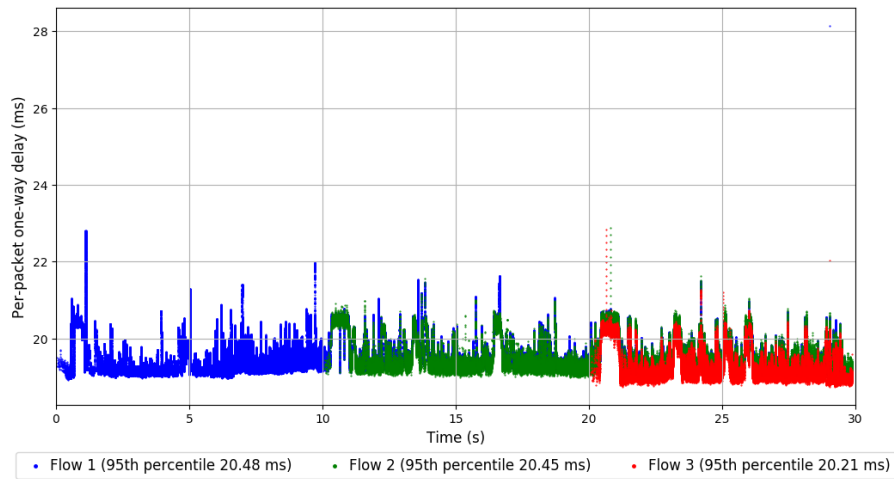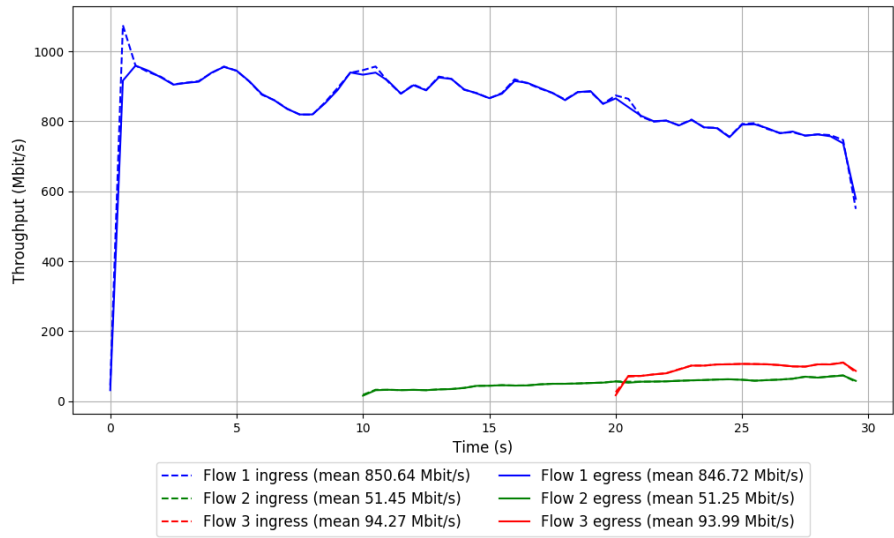
Run 8: Report of PCC — Data Link

- - - - Flow 1 ingress (mean 813.72 Mbit/s)   —— Flow 1 egress (mean 810.44 Mbit/s)
- - - - Flow 2 ingress (mean 109.78 Mbit/s)   —— Flow 2 egress (mean 109.62 Mbit/s)
- - - - Flow 3 ingress (mean 67.39 Mbit/s)   —— Flow 3 egress (mean 67.13 Mbit/s)

• Flow 1 (95th percentile 20.45 ms)   • Flow 2 (95th percentile 20.29 ms)   • Flow 3 (95th percentile 20.37 ms)

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```
Run 9: Statistics of PCC

Start at: 2017-12-20 11:41:59
End at: 2017-12-20 11:42:29
Local clock offset: -0.12 ms
Remote clock offset: -1.721 ms


# Below is generated by plot.py at 2017-12-20 15:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 913.37 Mbit/s
95th percentile per-packet one-way delay: 20.431 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 771.11 Mbit/s
95th percentile per-packet one-way delay: 20.446 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 181.50 Mbit/s
95th percentile per-packet one-way delay: 20.256 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 66.63 Mbit/s
95th percentile per-packet one-way delay: 20.246 ms
Loss rate: 0.32%
```

Run 9: Report of PCC — Data Link

- - - Flow 1 ingress (mean 775.83 Mbit/s)   —— Flow 1 egress (mean 771.11 Mbit/s)
- - - Flow 2 ingress (mean 182.25 Mbit/s)   —— Flow 2 egress (mean 181.50 Mbit/s)
- - - Flow 3 ingress (mean 66.82 Mbit/s)   —— Flow 3 egress (mean 66.63 Mbit/s)

- Flow 1 (95th percentile 20.45 ms)   • Flow 2 (95th percentile 20.26 ms)   • Flow 3 (95th percentile 20.25 ms)

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```
Run 10: Statistics of PCC

Start at: 2017-12-20 12:04:01
End at: 2017-12-20 12:04:31
Local clock offset: -0.173 ms
Remote clock offset: -2.096 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 911.70 Mbit/s
95th percentile per-packet one-way delay: 20.472 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 846.72 Mbit/s
95th percentile per-packet one-way delay: 20.477 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 51.25 Mbit/s
95th percentile per-packet one-way delay: 20.448 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 93.99 Mbit/s
95th percentile per-packet one-way delay: 20.211 ms
Loss rate: 0.32%
```
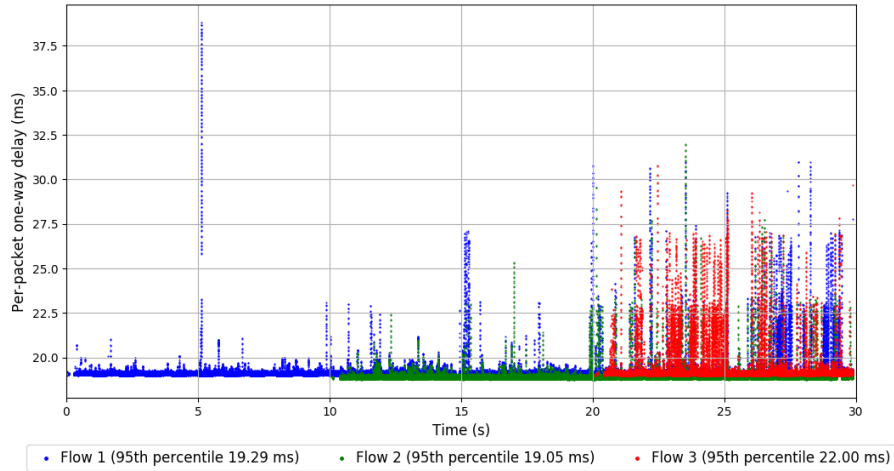
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 850.64 Mbit/s) --- Flow 1 egress (mean 846.72 Mbit/s)
Flow 2 ingress (mean 51.45 Mbit/s) --- Flow 2 egress (mean 51.25 Mbit/s)
Flow 3 ingress (mean 94.27 Mbit/s) --- Flow 3 egress (mean 93.99 Mbit/s)

Flow 1 (95th percentile 20.48 ms) • Flow 2 (95th percentile 20.45 ms) • Flow 3 (95th percentile 20.21 ms)

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```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 08:56:56
End at: 2017-12-20 08:57:26
Local clock offset: 0.916 ms
Remote clock offset: -0.656 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 19.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 20.330 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 19.000 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.49 Mbit/s
95th percentile per-packet one-way delay: 19.027 ms
Loss rate: 0.00%
```
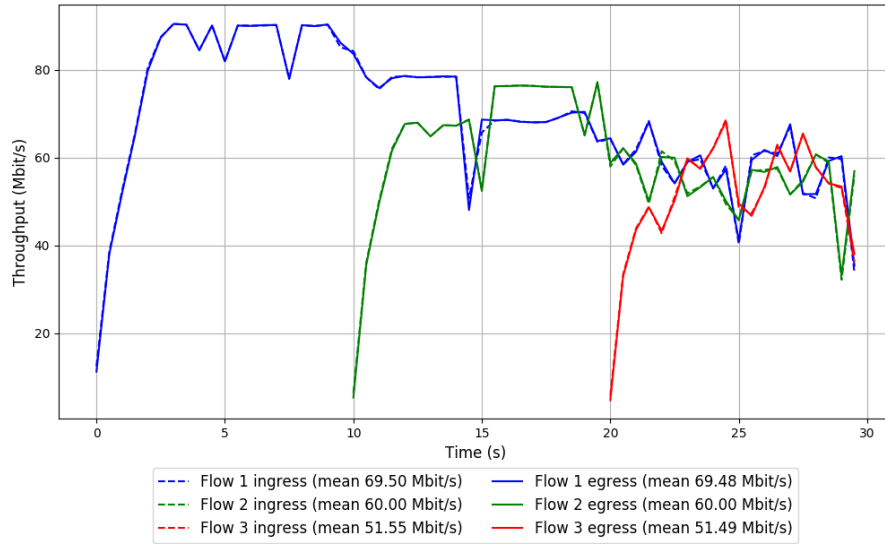
Run 1: Report of QUIC Cubic — Data Link
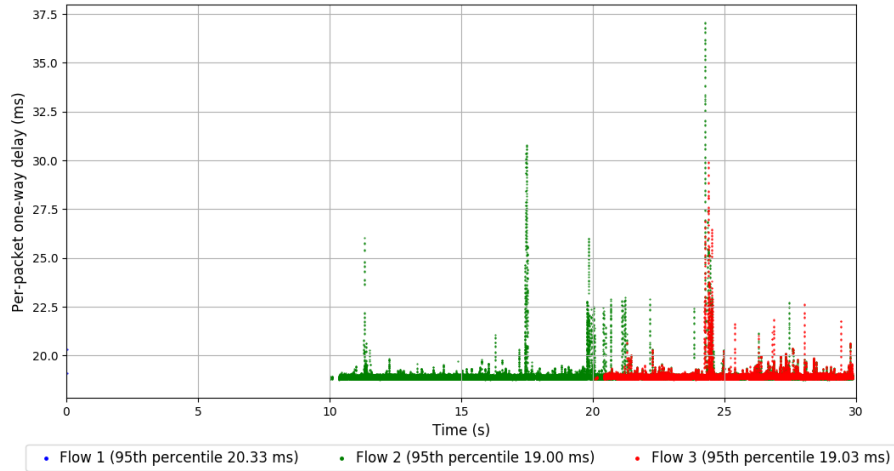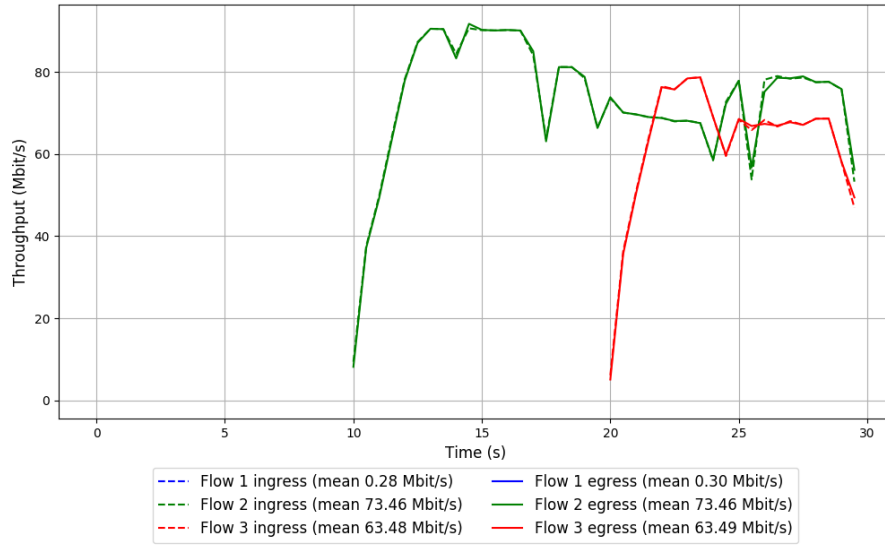
```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 09:18:44
End at: 2017-12-20 09:19:14
Local clock offset: 1.025 ms
Remote clock offset: -0.985 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.36 Mbit/s
95th percentile per-packet one-way delay: 19.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.57 Mbit/s
95th percentile per-packet one-way delay: 19.213 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.80 Mbit/s
95th percentile per-packet one-way delay: 19.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.77 Mbit/s
95th percentile per-packet one-way delay: 20.216 ms
Loss rate: 0.00%
```
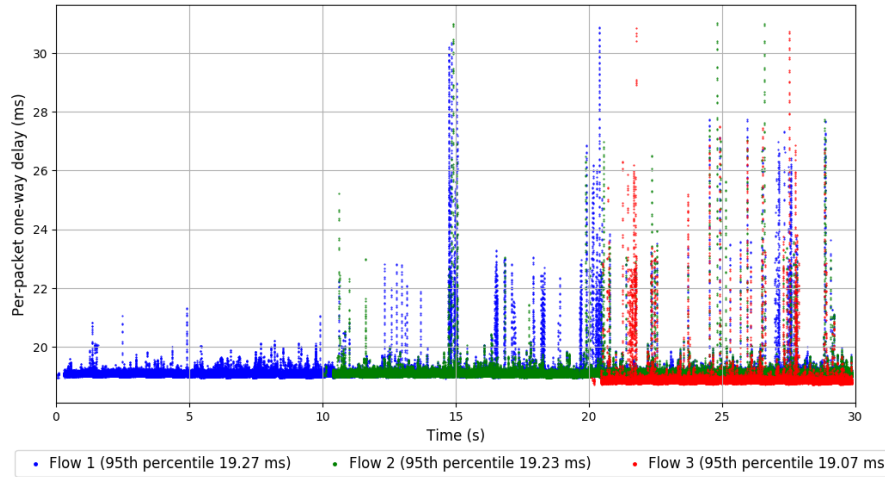
Run 2: Report of QUIC Cubic — Data Link
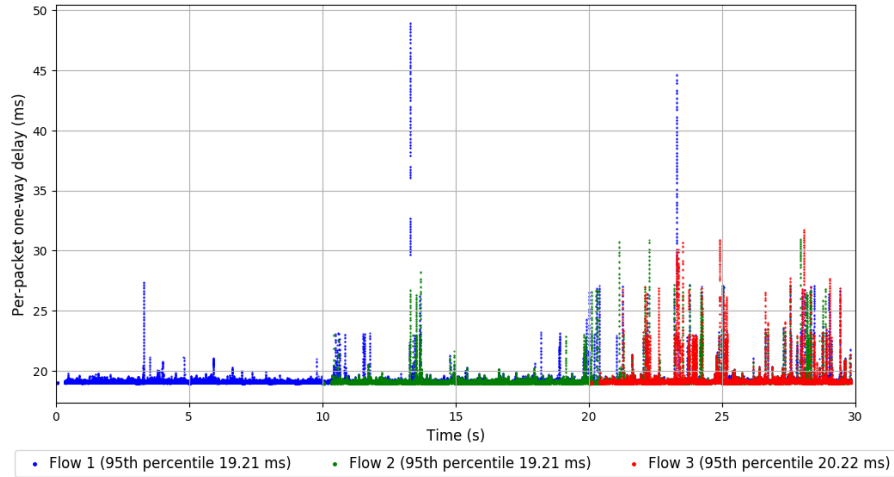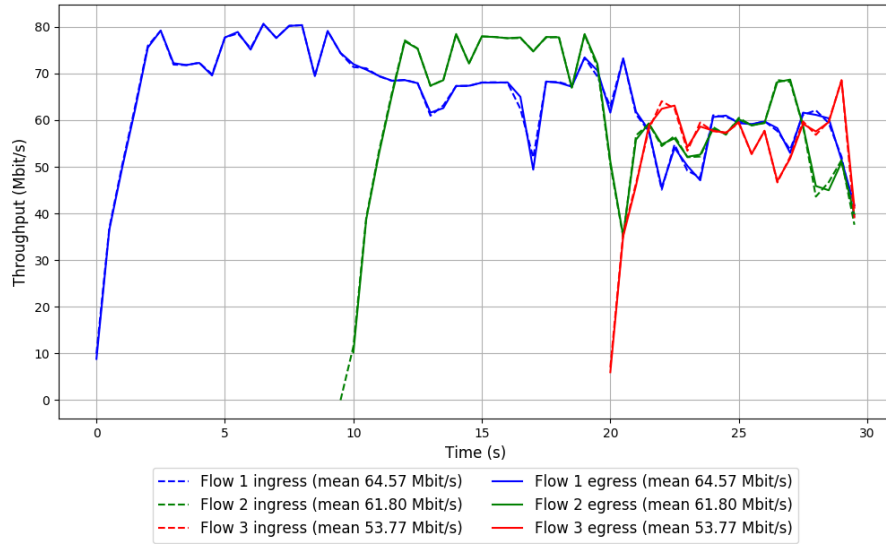
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 09:40:33
End at: 2017-12-20 09:41:03
Local clock offset: 0.927 ms
Remote clock offset: -1.0 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.18 Mbit/s
95th percentile per-packet one-way delay: 19.378 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.48 Mbit/s
95th percentile per-packet one-way delay: 19.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.00 Mbit/s
95th percentile per-packet one-way delay: 19.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.49 Mbit/s
95th percentile per-packet one-way delay: 21.999 ms
Loss rate: 0.00%
```
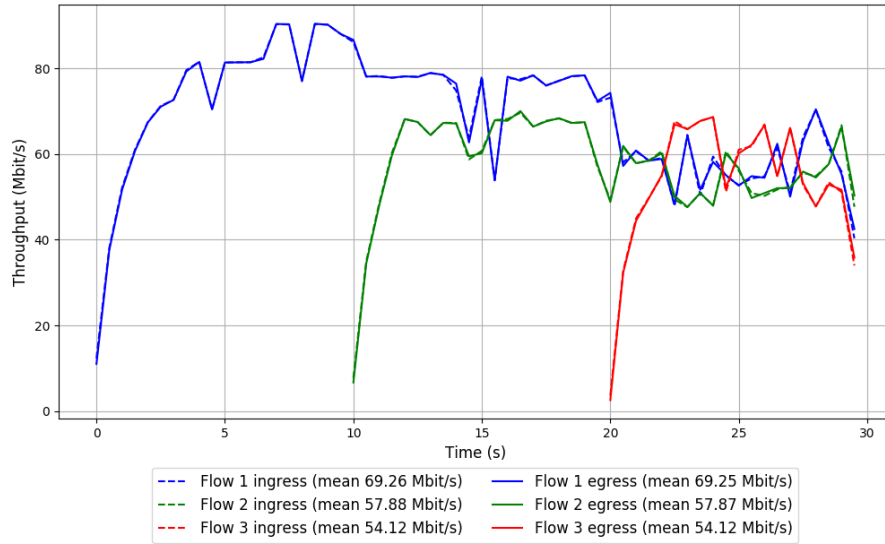
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.50 Mbit/s)   Flow 1 egress (mean 69.48 Mbit/s)
Flow 2 ingress (mean 60.00 Mbit/s)   Flow 2 egress (mean 60.00 Mbit/s)
Flow 3 ingress (mean 51.55 Mbit/s)   Flow 3 egress (mean 51.49 Mbit/s)

Flow 1 (95th percentile 19.29 ms)   Flow 2 (95th percentile 19.05 ms)   Flow 3 (95th percentile 22.00 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 10:02:17
End at: 2017-12-20 10:02:47
Local clock offset: 0.773 ms
Remote clock offset: -0.964 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.42 Mbit/s
95th percentile per-packet one-way delay: 19.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 19.248 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 18.971 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 54.21 Mbit/s
95th percentile per-packet one-way delay: 20.456 ms
Loss rate: 0.00%
```
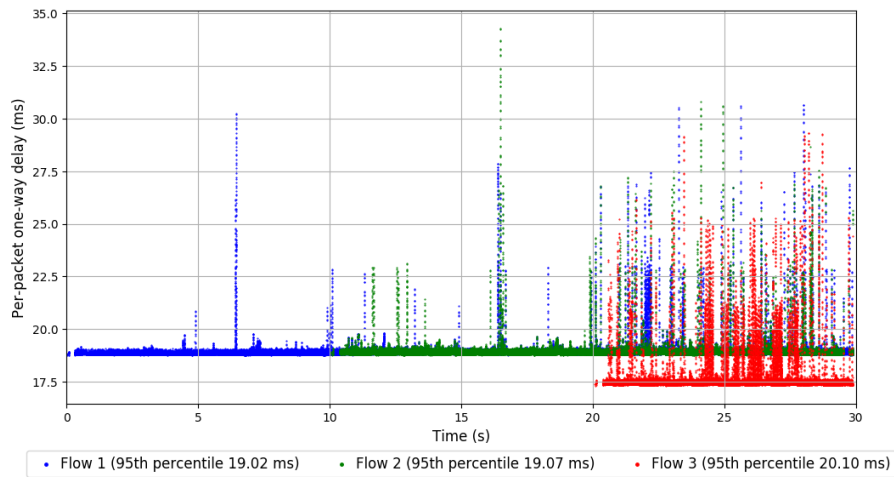
Run 4: Report of QUIC Cubic — Data Link
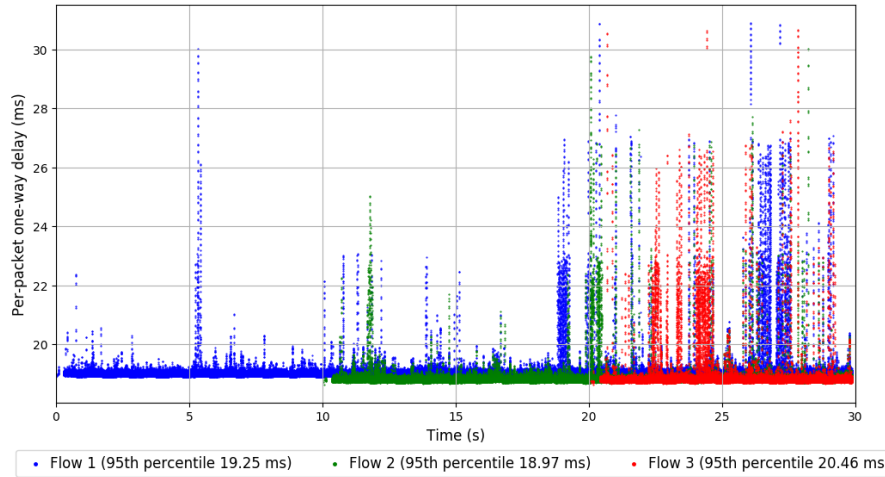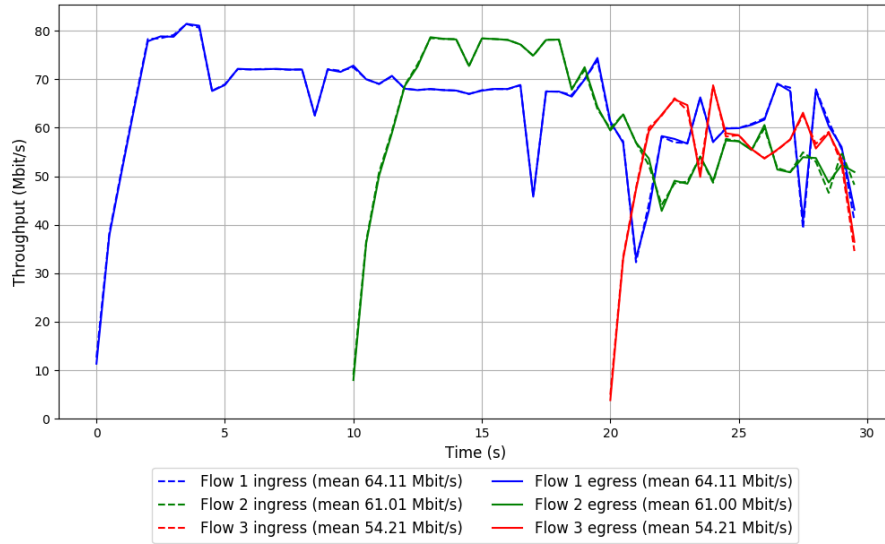
```
Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 10:24:10
End at: 2017-12-20 10:24:40
Local clock offset: 0.301 ms
Remote clock offset: -1.367 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.39 Mbit/s
95th percentile per-packet one-way delay: 19.244 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 69.25 Mbit/s
95th percentile per-packet one-way delay: 19.265 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 57.87 Mbit/s
95th percentile per-packet one-way delay: 19.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 19.068 ms
Loss rate: 0.00%
```
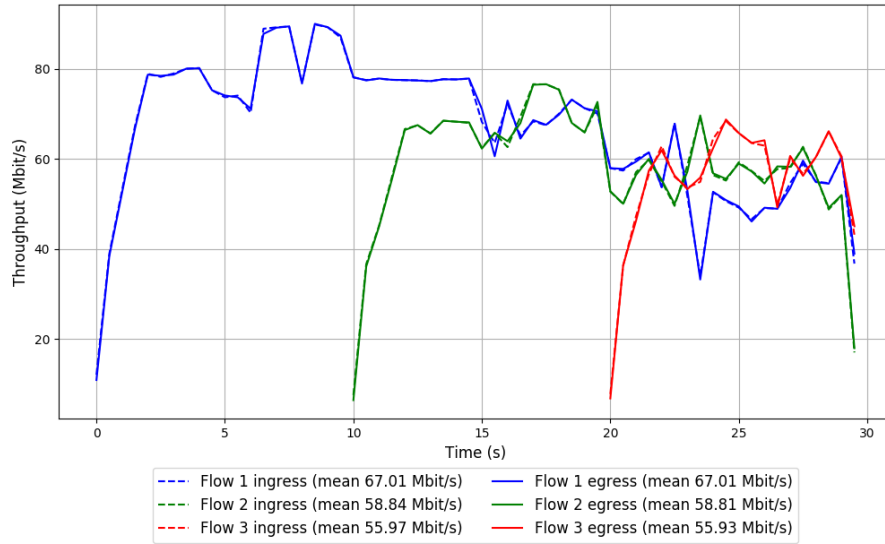
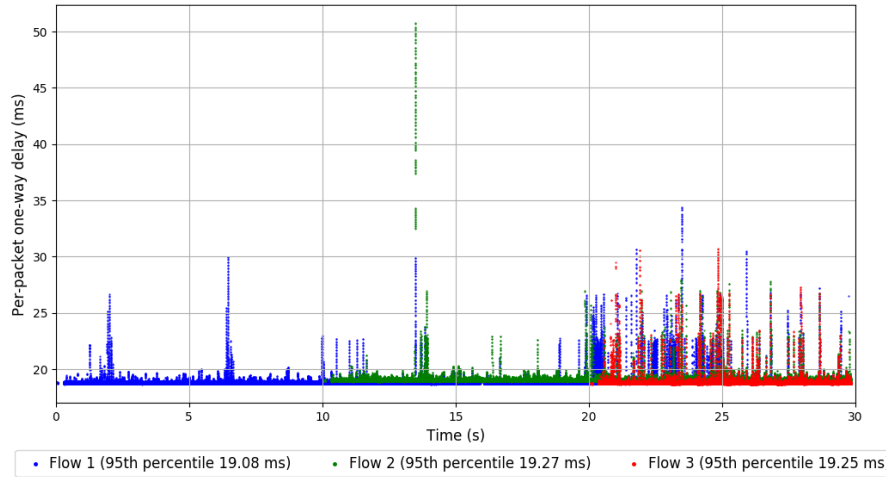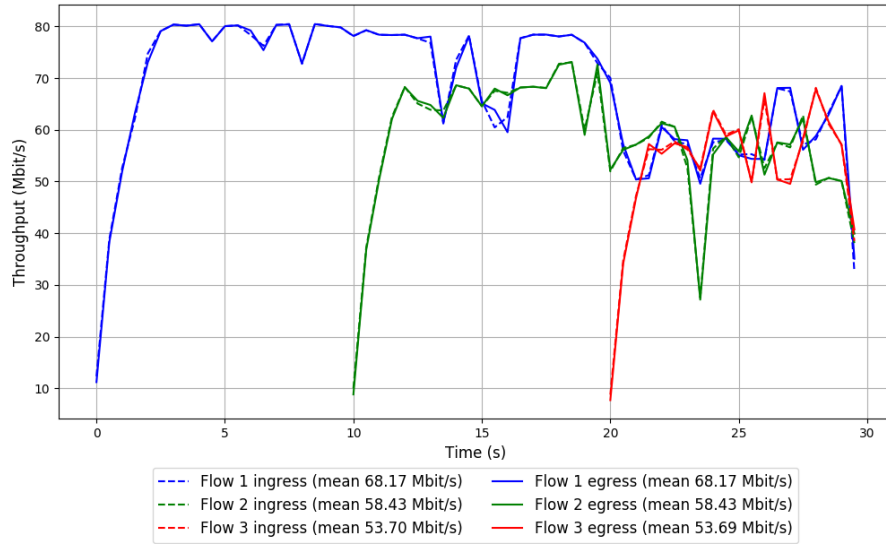Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.26 Mbit/s)   Flow 1 egress (mean 69.25 Mbit/s)
Flow 2 ingress (mean 57.88 Mbit/s)   Flow 2 egress (mean 57.87 Mbit/s)
Flow 3 ingress (mean 54.12 Mbit/s)   Flow 3 egress (mean 54.12 Mbit/s)

Flow 1 (95th percentile 19.27 ms)   Flow 2 (95th percentile 19.23 ms)   Flow 3 (95th percentile 19.07 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 10:45:52
End at: 2017-12-20 10:46:22
Local clock offset: 0.129 ms
Remote clock offset: -1.06 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.80 Mbit/s
95th percentile per-packet one-way delay: 19.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.07 Mbit/s
95th percentile per-packet one-way delay: 18.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 19.136 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.95 Mbit/s
95th percentile per-packet one-way delay: 21.863 ms
Loss rate: 0.00%
```
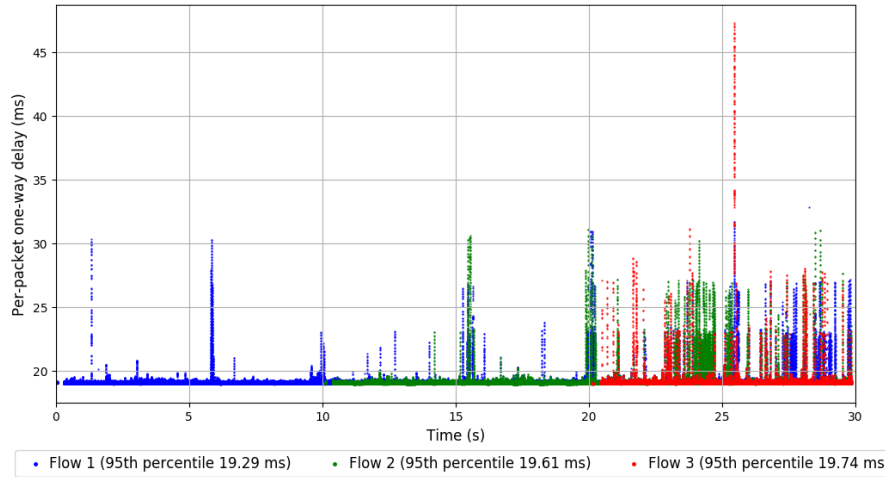
Run 6: Report of QUIC Cubic — Data Link
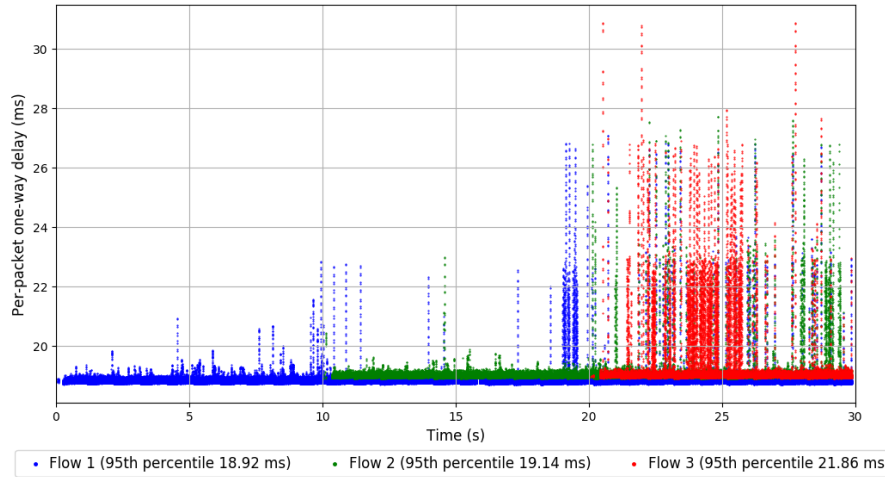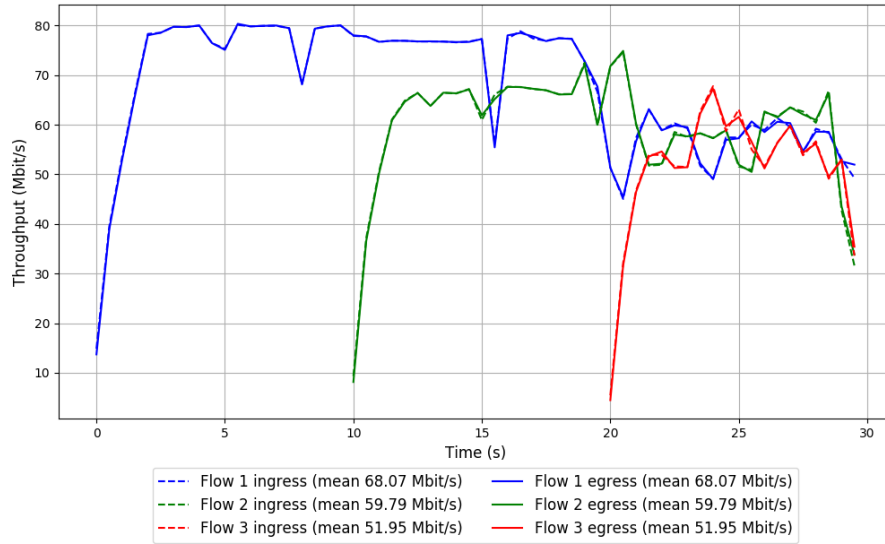
```
Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 11:07:56
End at: 2017-12-20 11:08:26
Local clock offset: -0.013 ms
Remote clock offset: -1.134 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.45 Mbit/s
95th percentile per-packet one-way delay: 19.050 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 67.01 Mbit/s
95th percentile per-packet one-way delay: 19.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.81 Mbit/s
95th percentile per-packet one-way delay: 19.066 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 55.93 Mbit/s
95th percentile per-packet one-way delay: 20.096 ms
Loss rate: 0.05%
```
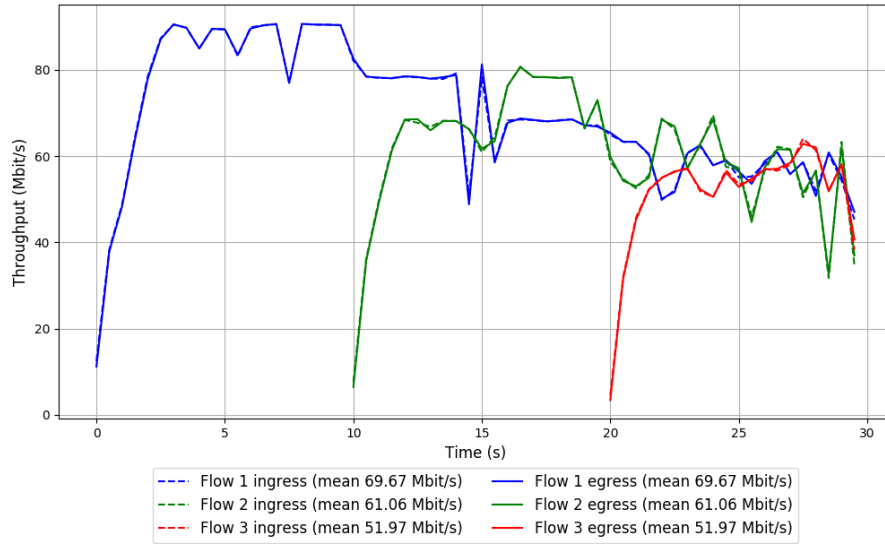
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 67.01 Mbit/s) — — — Flow 1 egress (mean 67.01 Mbit/s)
Flow 2 ingress (mean 58.84 Mbit/s) — — — Flow 2 egress (mean 58.81 Mbit/s)
Flow 3 ingress (mean 55.97 Mbit/s) — — — Flow 3 egress (mean 55.93 Mbit/s)

Flow 1 (95th percentile 19.02 ms) • Flow 2 (95th percentile 19.07 ms) • Flow 3 (95th percentile 20.10 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 11:29:29
End at: 2017-12-20 11:29:59
Local clock offset: -0.02 ms
Remote clock offset: -1.444 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.63 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.17 Mbit/s
95th percentile per-packet one-way delay: 19.083 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 58.43 Mbit/s
95th percentile per-packet one-way delay: 19.266 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 19.254 ms
Loss rate: 0.01%
```
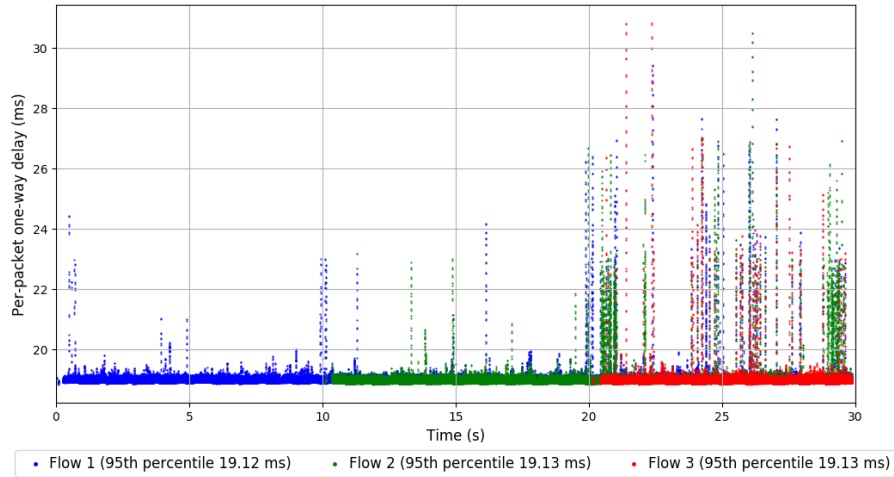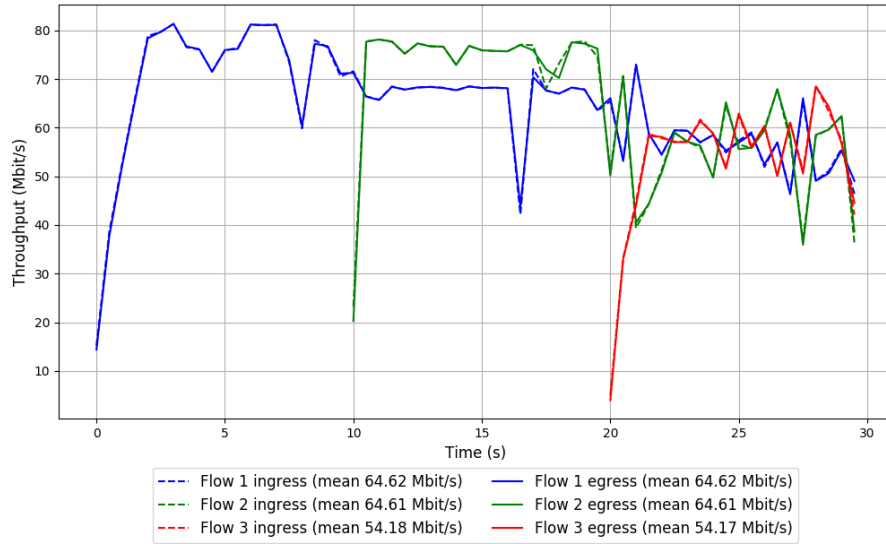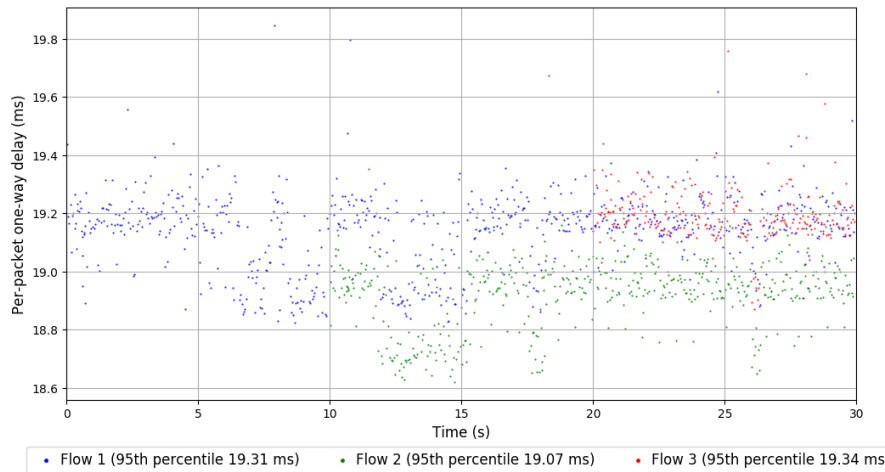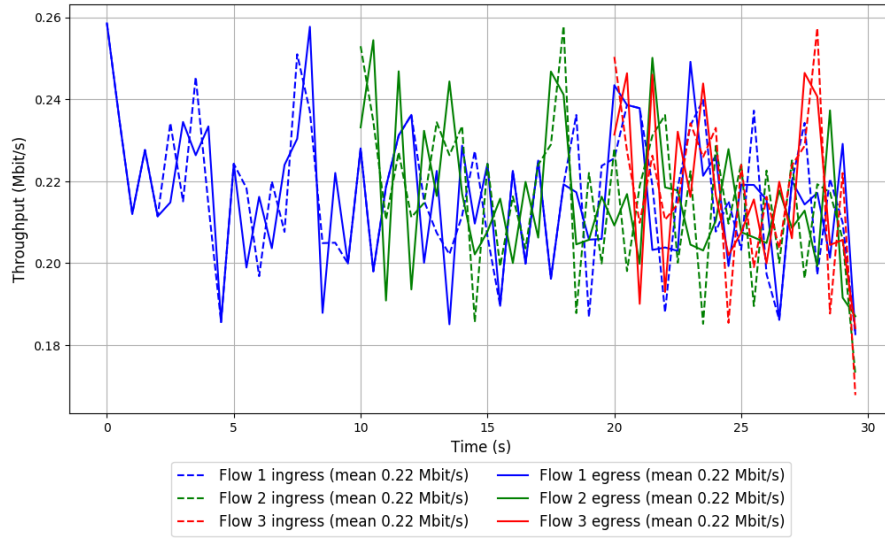
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.17 Mbit/s)   Flow 1 egress (mean 68.17 Mbit/s)
Flow 2 ingress (mean 58.43 Mbit/s)   Flow 2 egress (mean 58.43 Mbit/s)
Flow 3 ingress (mean 53.70 Mbit/s)   Flow 3 egress (mean 53.69 Mbit/s)

Flow 1 (95th percentile 19.08 ms)   Flow 2 (95th percentile 19.27 ms)   Flow 3 (95th percentile 19.25 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 11:51:37
End at: 2017-12-20 11:52:07
Local clock offset: -0.181 ms
Remote clock offset: -1.897 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.23 Mbit/s
95th percentile per-packet one-way delay: 19.374 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.67 Mbit/s
95th percentile per-packet one-way delay: 19.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.06 Mbit/s
95th percentile per-packet one-way delay: 19.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 19.743 ms
Loss rate: 0.00%
```

Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.67 Mbit/s) --- Flow 1 egress (mean 69.67 Mbit/s)
Flow 2 ingress (mean 61.06 Mbit/s) --- Flow 2 egress (mean 61.06 Mbit/s)
Flow 3 ingress (mean 51.97 Mbit/s) --- Flow 3 egress (mean 51.97 Mbit/s)

Flow 1 (95th percentile 19.29 ms)   Flow 2 (95th percentile 19.61 ms)   Flow 3 (95th percentile 19.74 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 12:13:37
End at: 2017-12-20 12:14:07
Local clock offset: -0.125 ms
Remote clock offset: -2.021 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.21 Mbit/s
95th percentile per-packet one-way delay: 19.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.62 Mbit/s
95th percentile per-packet one-way delay: 19.120 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.61 Mbit/s
95th percentile per-packet one-way delay: 19.127 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.17 Mbit/s
95th percentile per-packet one-way delay: 19.129 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.62 Mbit/s) Flow 1 egress (mean 64.62 Mbit/s)
Flow 2 ingress (mean 64.61 Mbit/s) Flow 2 egress (mean 64.61 Mbit/s)
Flow 3 ingress (mean 54.18 Mbit/s) Flow 3 egress (mean 54.17 Mbit/s)

Flow 1 (95th percentile 19.12 ms)   Flow 2 (95th percentile 19.13 ms)   Flow 3 (95th percentile 19.13 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 08:44:52
End at: 2017-12-20 08:45:22
Local clock offset: 1.024 ms
Remote clock offset: -0.813 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.295 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.313 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.336 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 19.31 ms)   Flow 2 (95th percentile 19.07 ms)   Flow 3 (95th percentile 19.34 ms)

```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 09:06:38
End at: 2017-12-20 09:07:08
Local clock offset: 1.046 ms
Remote clock offset: -0.817 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.052 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.062 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.034 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.061 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link
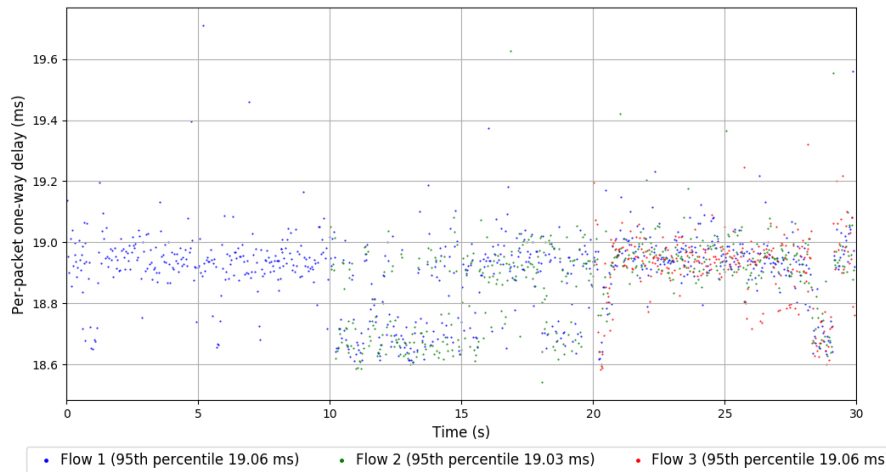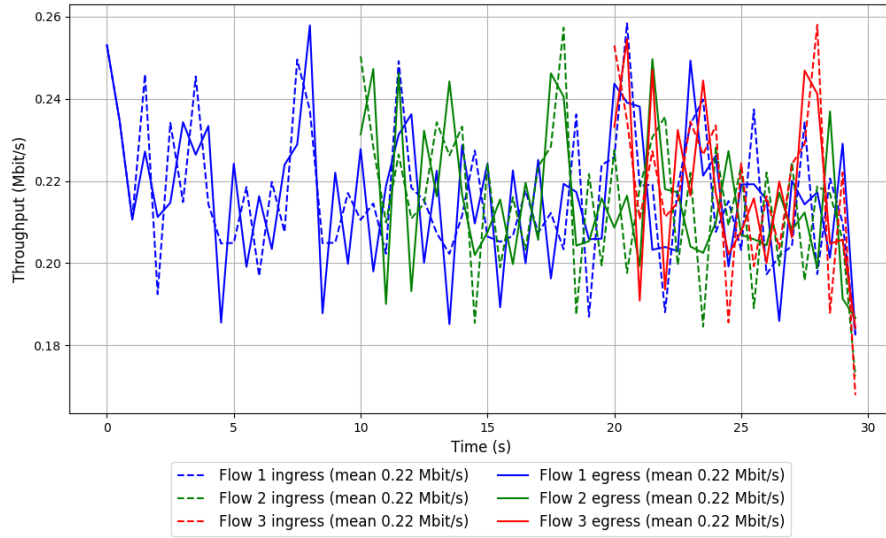
```
Run 3: Statistics of SCReAM

Start at: 2017-12-20 09:28:23
End at: 2017-12-20 09:28:53
Local clock offset: 1.047 ms
Remote clock offset: -1.062 ms
```

Run 3: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.02 Mbit/s) --- Flow 1 egress (mean 206.10 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s) --- Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s) --- Flow 3 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 6200.62 ms)   Flow 2 (95th percentile 19.31 ms)   Flow 3 (95th percentile 19.34 ms)
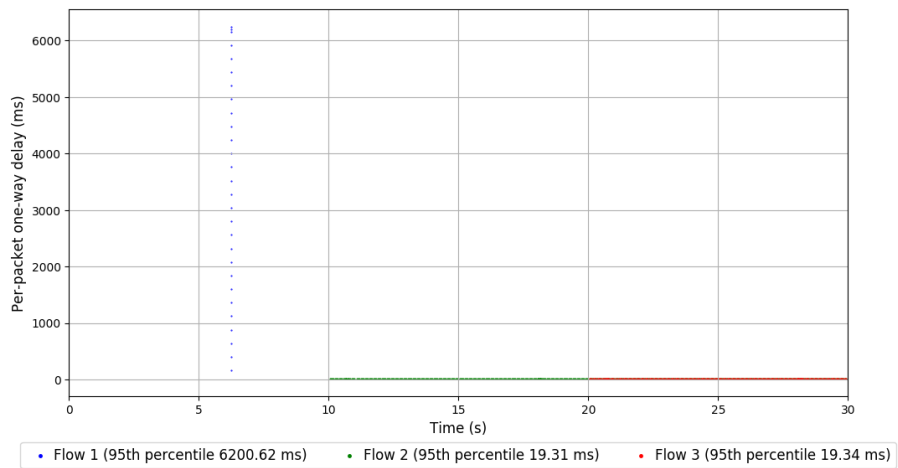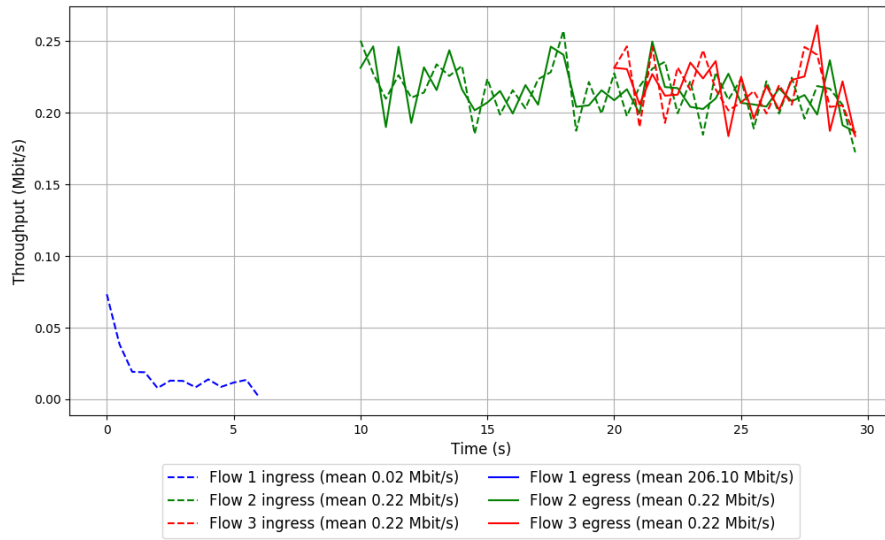
```
Run 4: Statistics of SCReAM

Start at: 2017-12-20 09:50:07
End at: 2017-12-20 09:50:37
Local clock offset: 0.855 ms
Remote clock offset: -0.924 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.429 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.241 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.489 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.236 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link
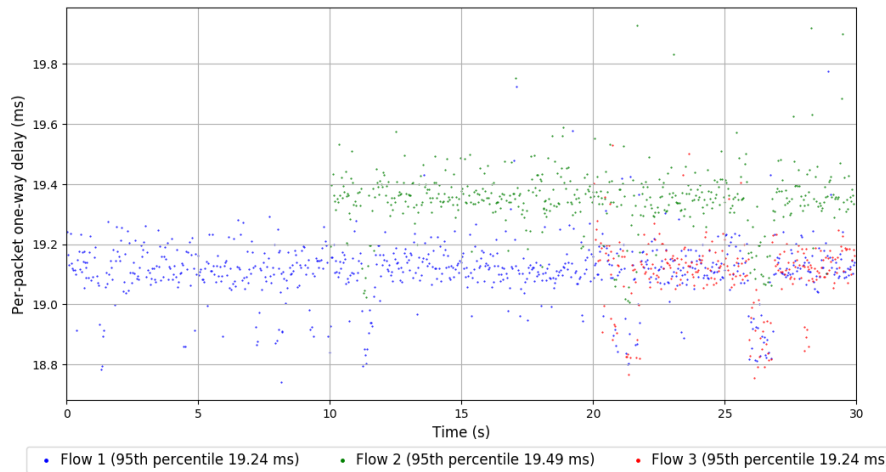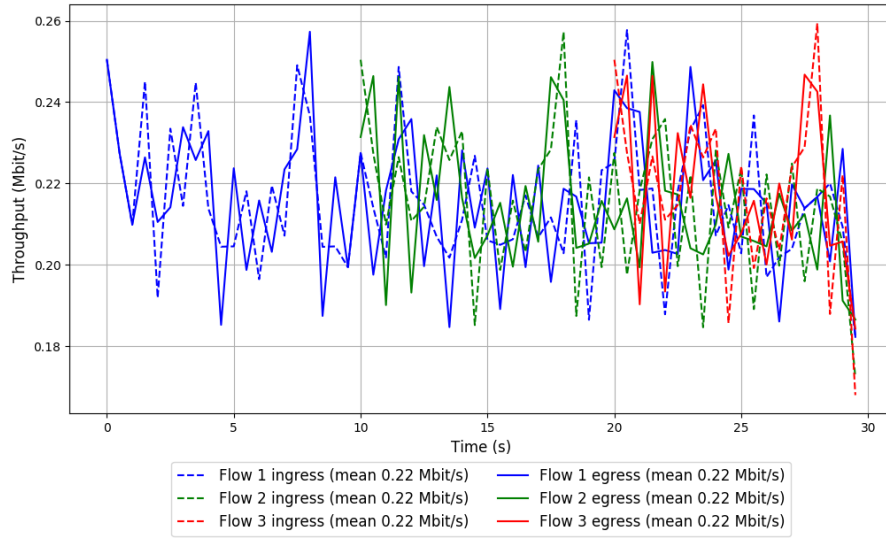
```
Run 5: Statistics of SCReAM

Start at: 2017-12-20 10:11:53
End at: 2017-12-20 10:12:23
Local clock offset: 0.566 ms
Remote clock offset: -1.116 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.483 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.438 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.215 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link
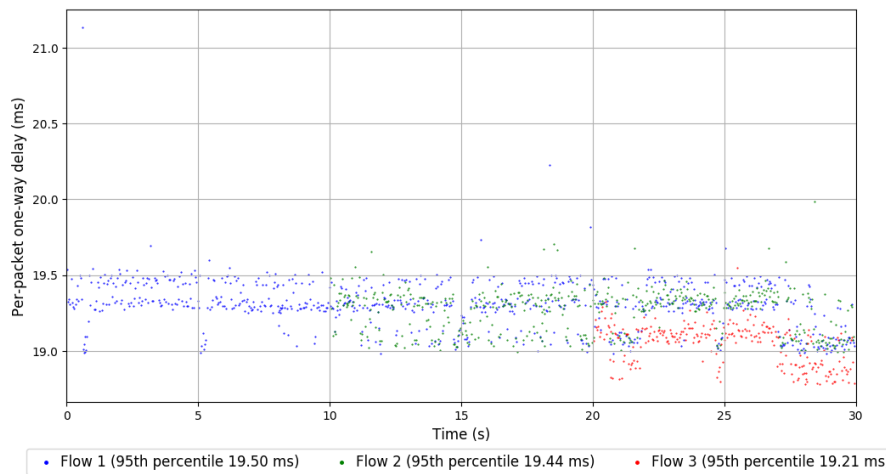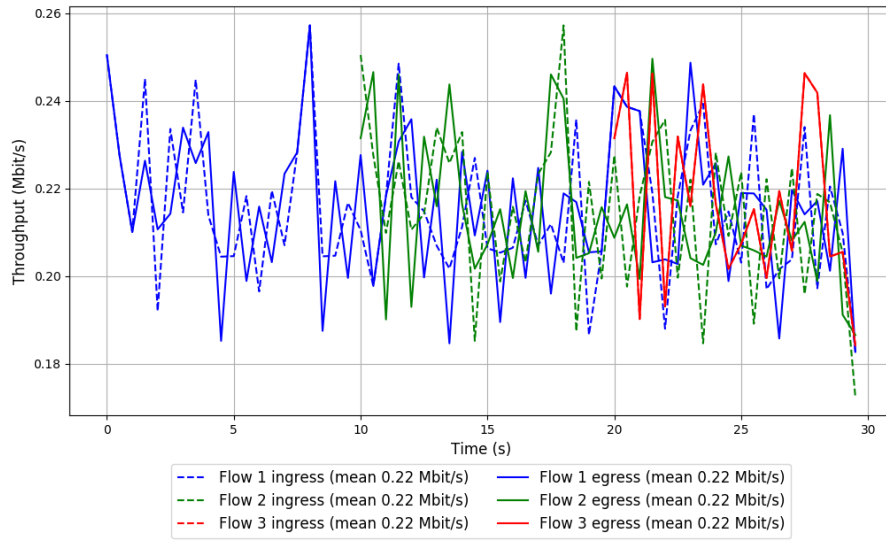
```
Run 6: Statistics of SCReAM

Start at: 2017-12-20 10:33:47
End at: 2017-12-20 10:34:17
Local clock offset: 0.35 ms
Remote clock offset: -1.235 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.305 ms
Loss rate: 0.00%
```

Run 6: Report of SCReAM — Data Link
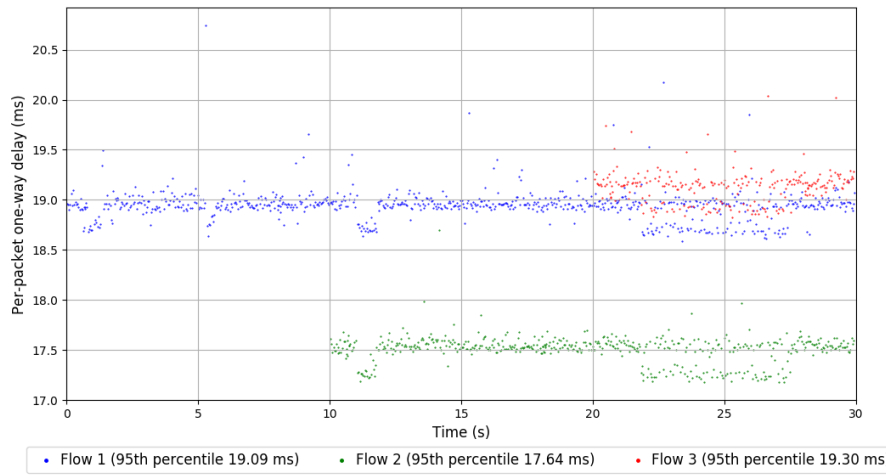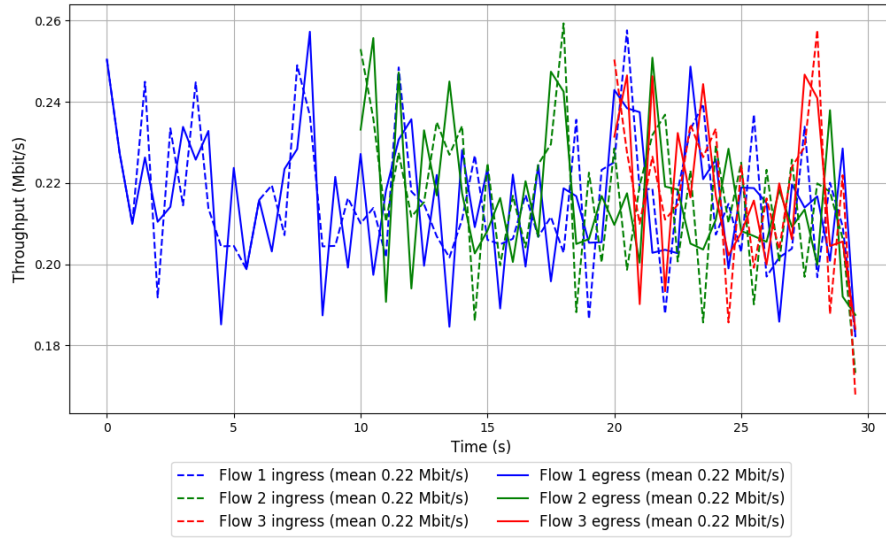
```
Run 7: Statistics of SCReAM

Start at: 2017-12-20 10:55:46
End at: 2017-12-20 10:56:16
Local clock offset: 0.041 ms
Remote clock offset: -1.079 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.461 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.491 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.269 ms
Loss rate: 0.00%
```

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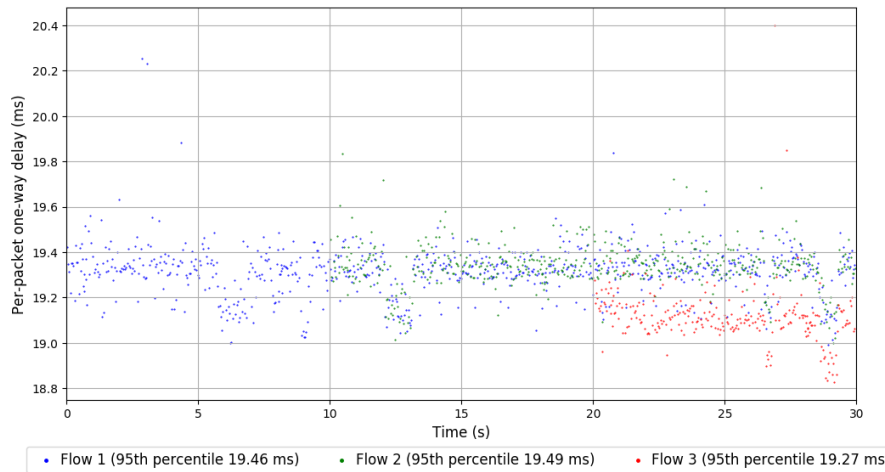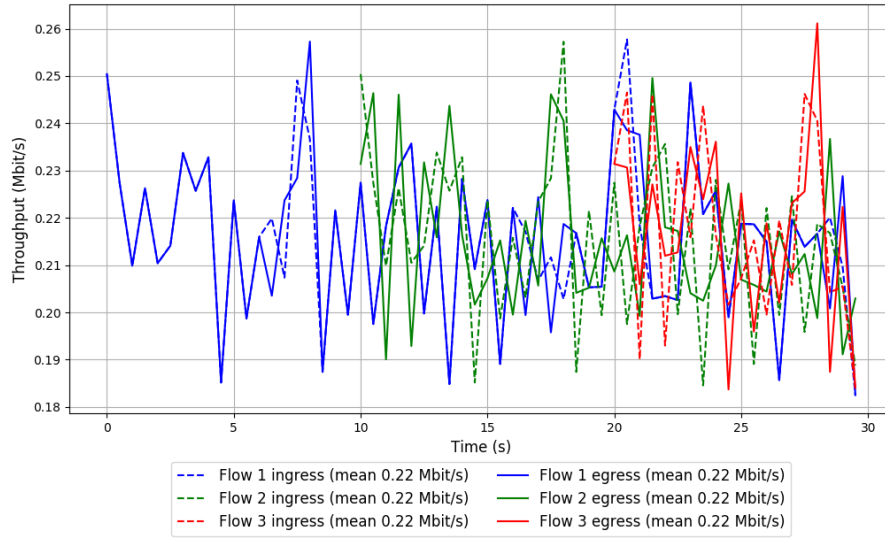
```
Run 8: Statistics of SCReAM

Start at: 2017-12-20 11:17:36
End at: 2017-12-20 11:18:06
Local clock offset: -0.106 ms
Remote clock offset: -1.206 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.415 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.210 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link
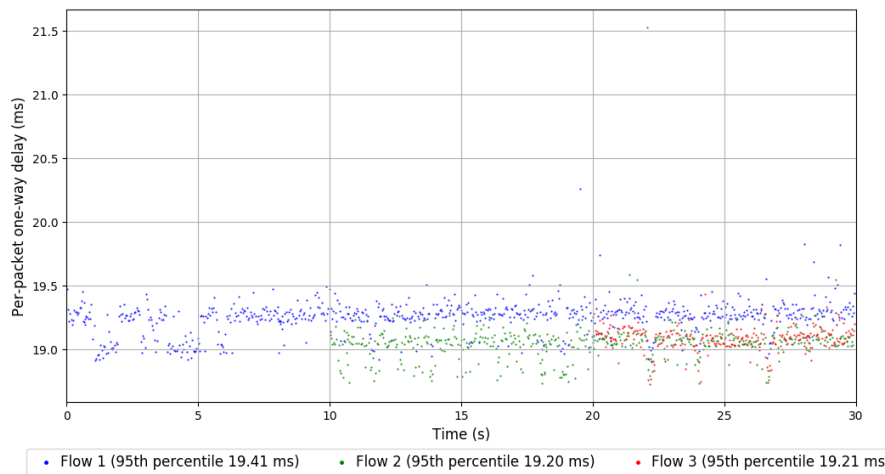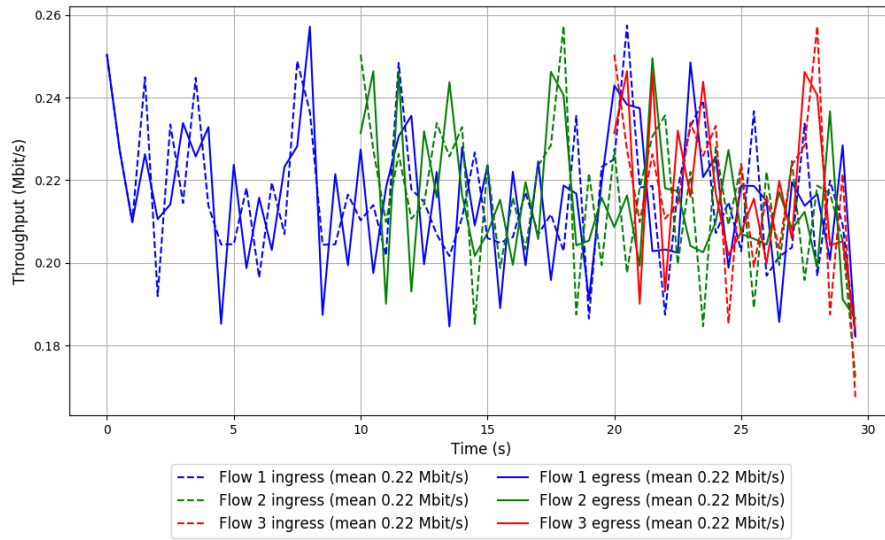
```
Run 9: Statistics of SCReAM

Start at: 2017-12-20 11:39:23
End at: 2017-12-20 11:39:53
Local clock offset: -0.102 ms
Remote clock offset: -1.708 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.253 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.112 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.409 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link

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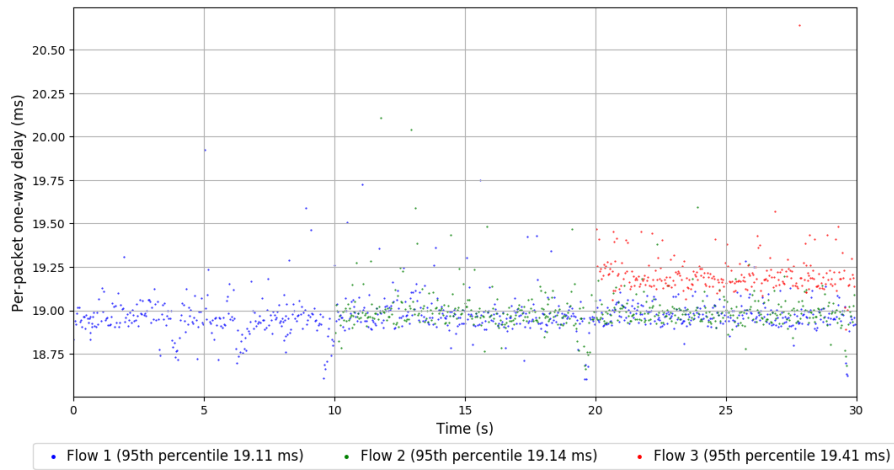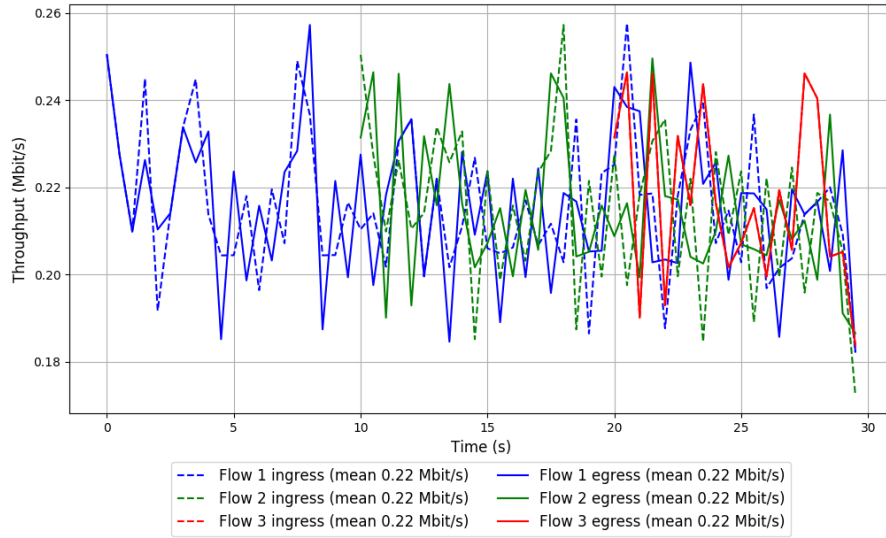
```
Run 10: Statistics of SCReAM

Start at: 2017-12-20 12:01:29
End at: 2017-12-20 12:01:59
Local clock offset: -0.12 ms
Remote clock offset: -2.132 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.348 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.358 ms
Loss rate: 0.00%
```
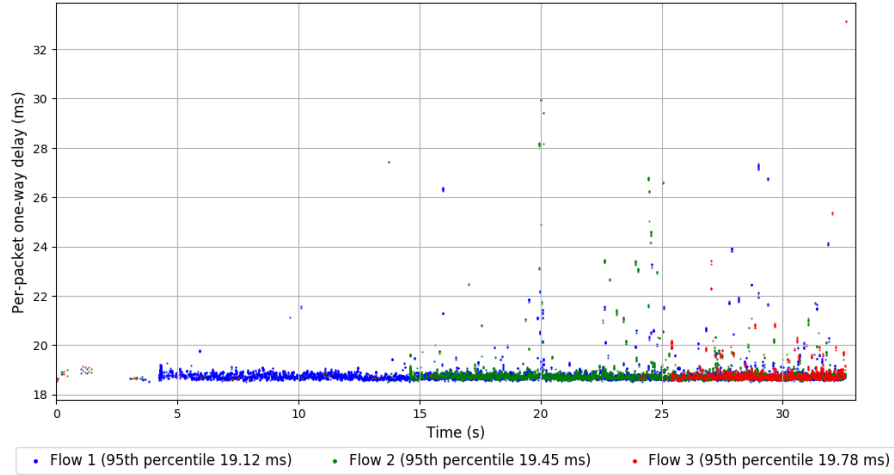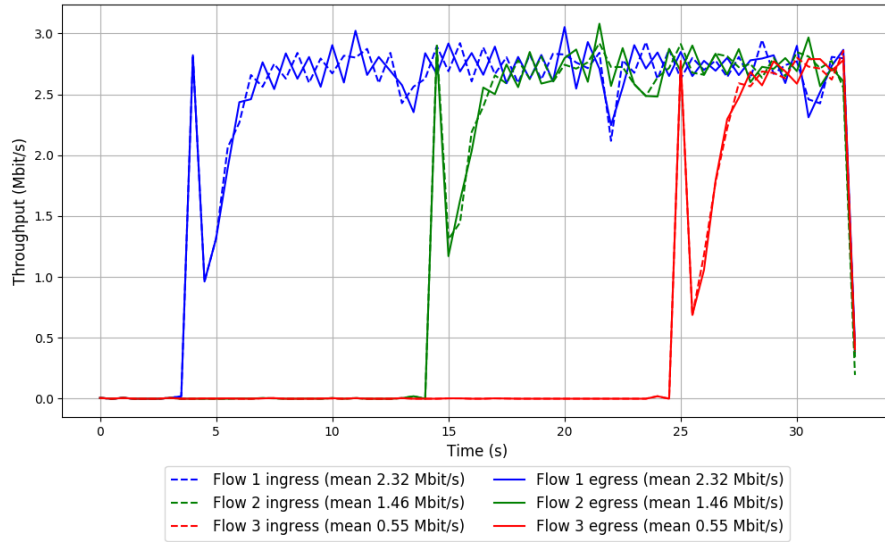
Run 10: Report of SCReAM — Data Link

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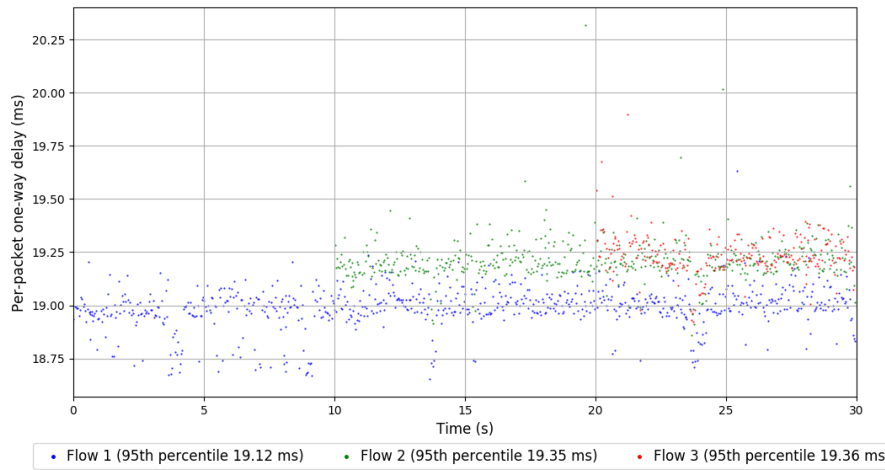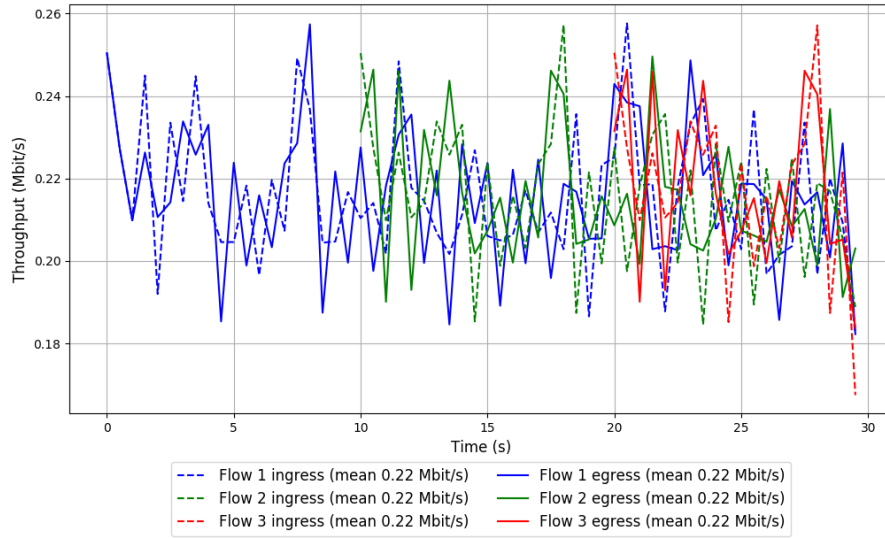
```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 08:58:10
End at: 2017-12-20 08:58:40
Local clock offset: 1.022 ms
Remote clock offset: -0.743 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 19.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 19.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 20.089 ms
Loss rate: 0.00%
```
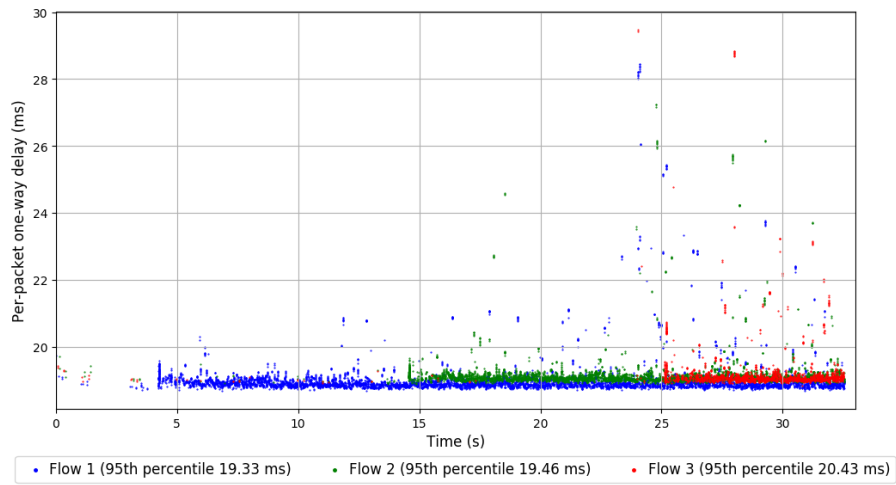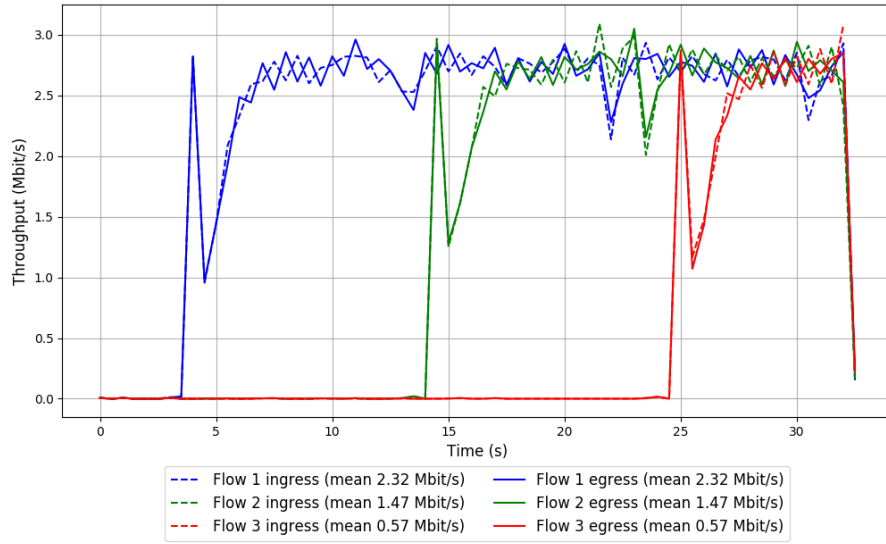
Run 1: Report of WebRTC media — Data Link
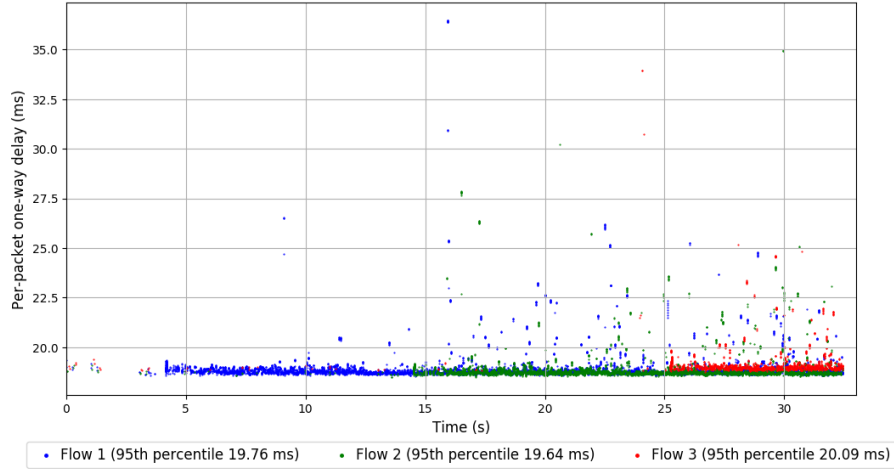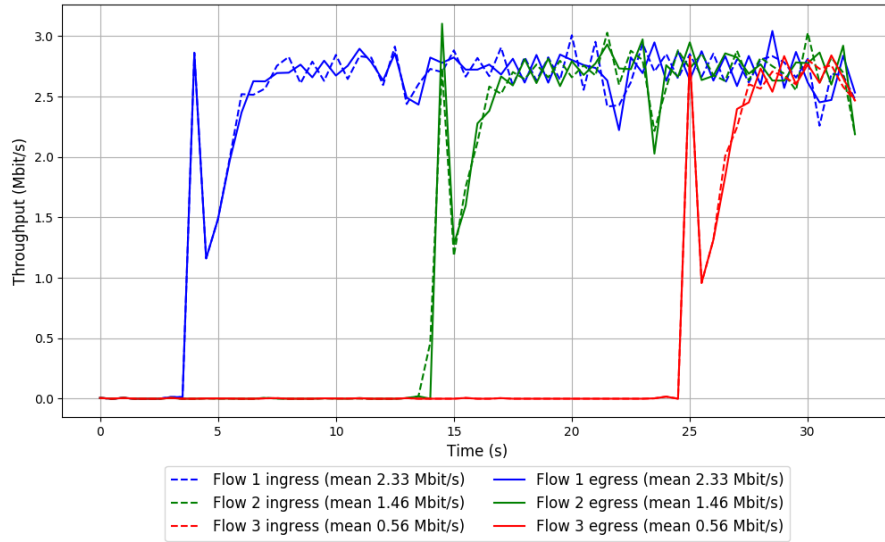
```
Run 2: Statistics of WebRTC media

Start at: 2017-12-20 09:20:00
End at: 2017-12-20 09:20:30
Local clock offset: 1.064 ms
Remote clock offset: -1.086 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 19.275 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 19.777 ms
Loss rate: 0.16%
```
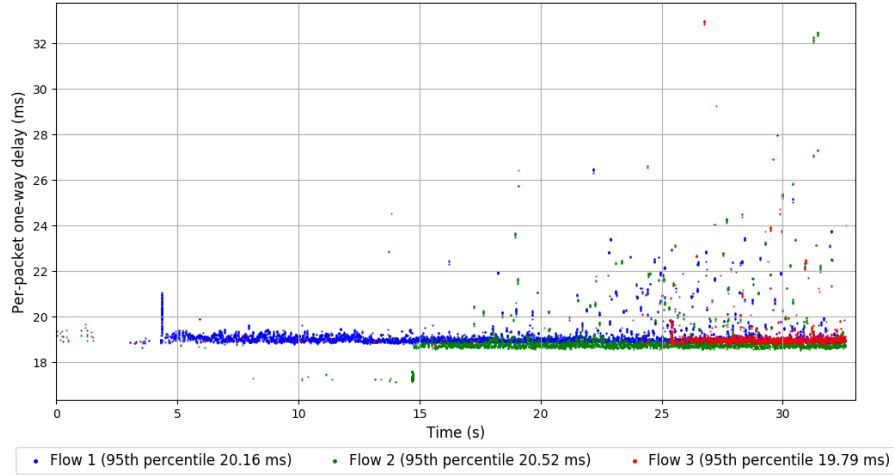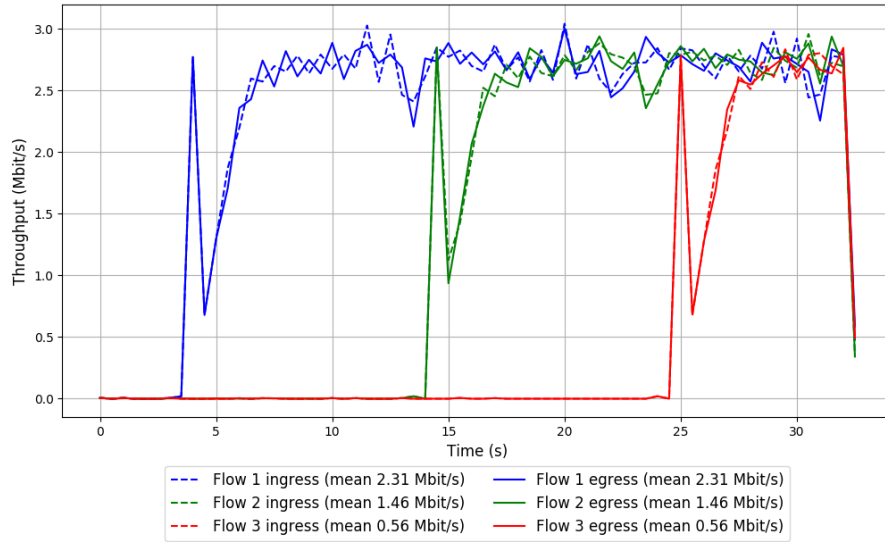
Run 2: Report of WebRTC media — Data Link

- - - - Flow 1 ingress (mean 2.32 Mbit/s) ——— Flow 1 egress (mean 2.32 Mbit/s)
- - - - Flow 2 ingress (mean 1.46 Mbit/s) ——— Flow 2 egress (mean 1.46 Mbit/s)
- - - - Flow 3 ingress (mean 0.55 Mbit/s) ——— Flow 3 egress (mean 0.55 Mbit/s)

• Flow 1 (95th percentile 19.12 ms)   • Flow 2 (95th percentile 19.45 ms)   • Flow 3 (95th percentile 19.78 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2017-12-20 09:41:49
End at: 2017-12-20 09:42:19
Local clock offset: 0.975 ms
Remote clock offset: -0.987 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 19.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 19.456 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20.425 ms
Loss rate: 0.00%
```
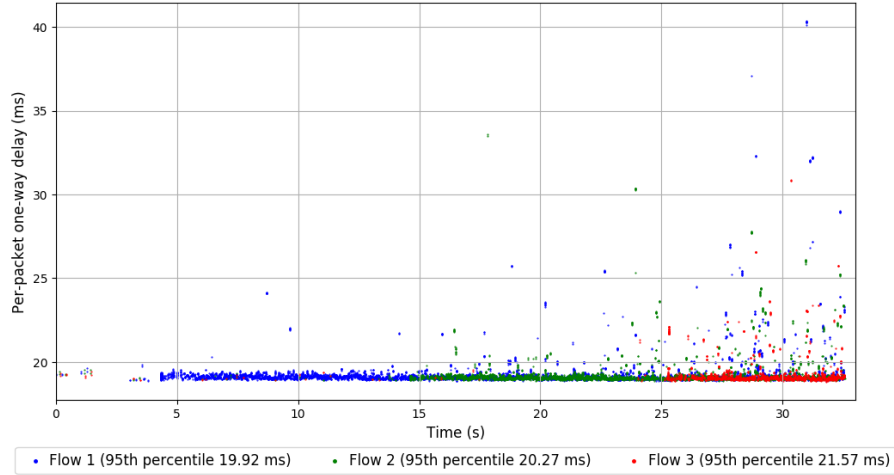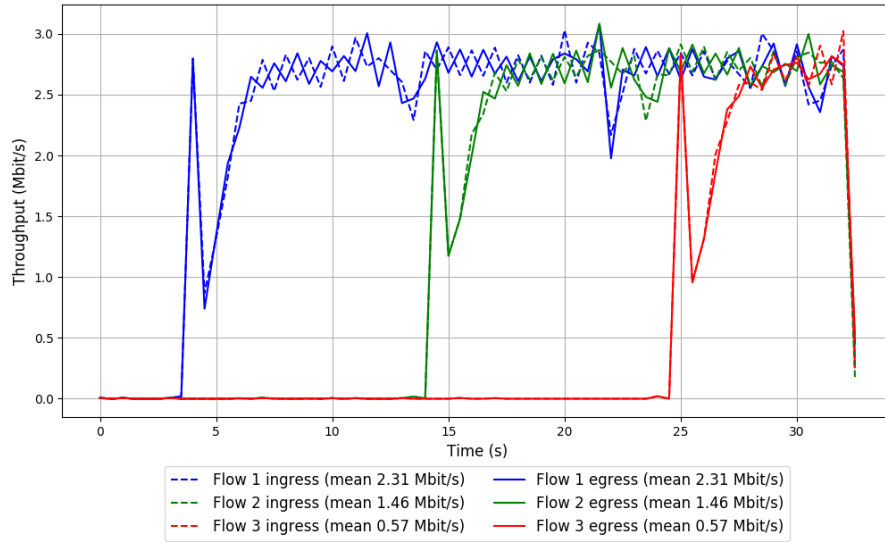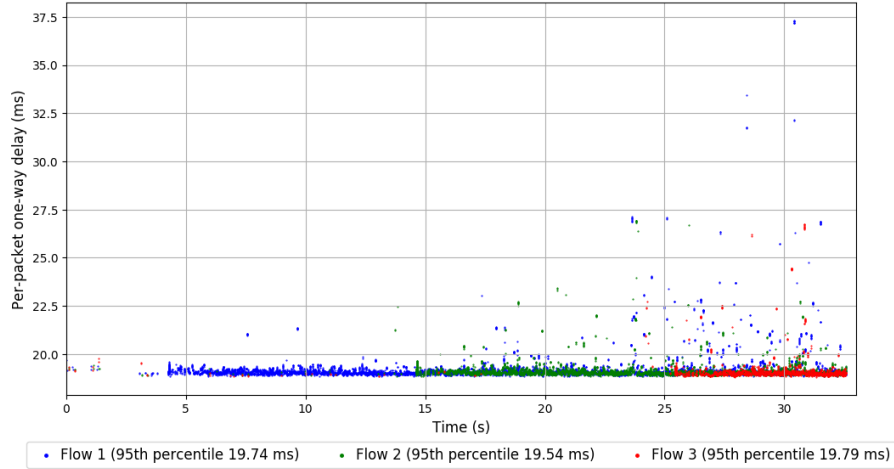
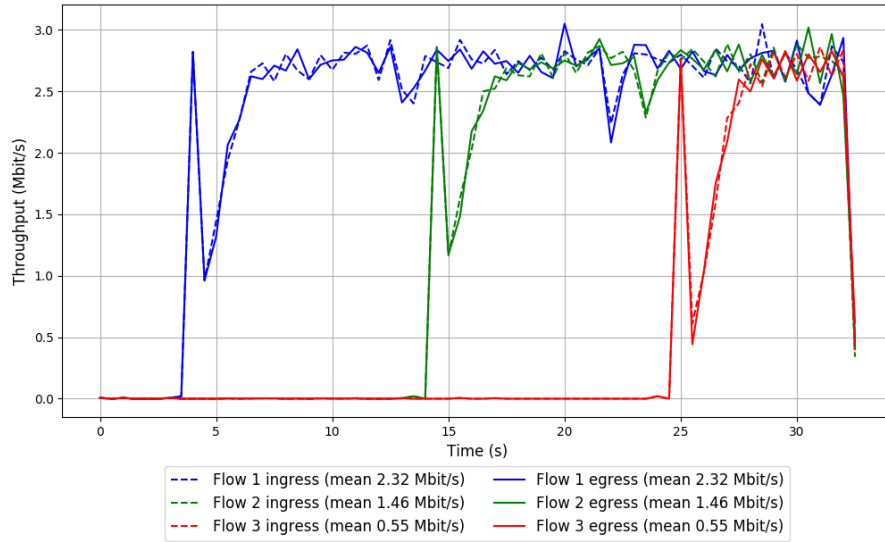Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-12-20 10:03:33
End at: 2017-12-20 10:04:03
Local clock offset: 0.768 ms
Remote clock offset: -1.075 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 20.194 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 20.161 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 20.519 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 19.789 ms
Loss rate: 0.00%
```
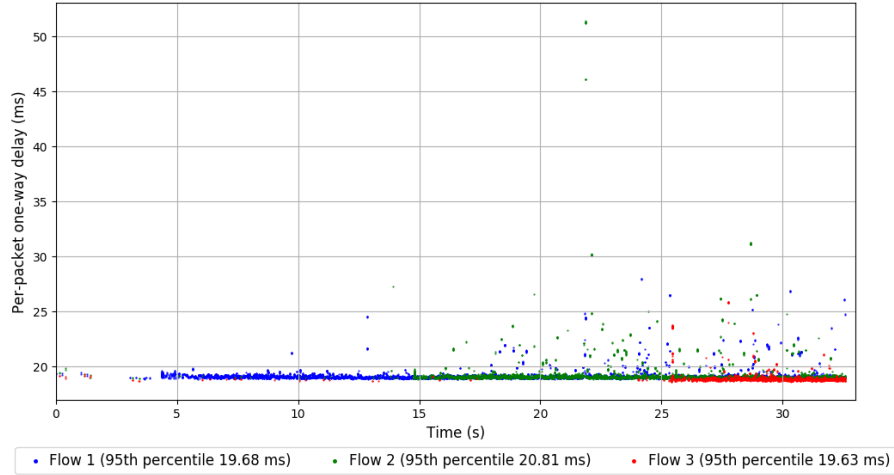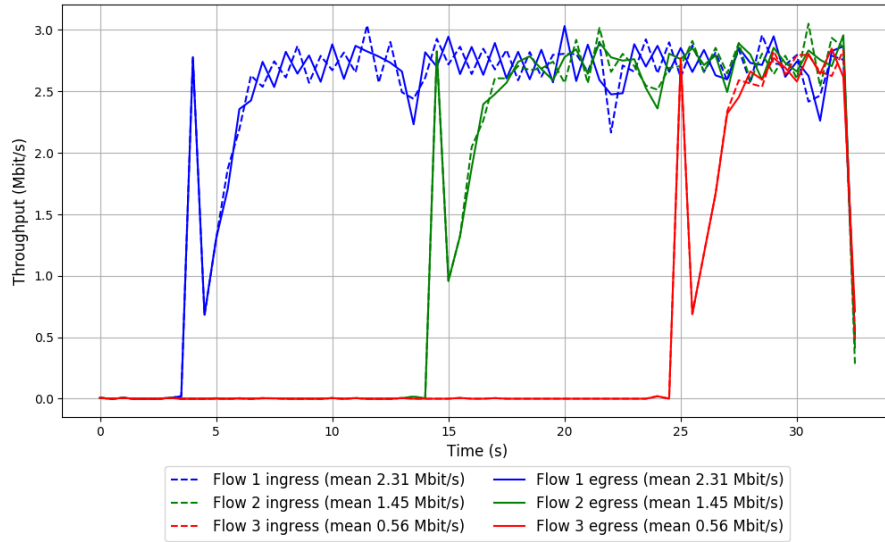
Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.31 Mbit/s) — — — — Flow 1 egress (mean 2.31 Mbit/s)
Flow 2 ingress (mean 1.46 Mbit/s) — — — — Flow 2 egress (mean 1.46 Mbit/s)
Flow 3 ingress (mean 0.56 Mbit/s) — — — — Flow 3 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 20.16 ms)   Flow 2 (95th percentile 20.52 ms)   Flow 3 (95th percentile 19.79 ms)

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```
Run 5: Statistics of WebRTC media

Start at: 2017-12-20 10:25:27
End at: 2017-12-20 10:25:57
Local clock offset: 0.302 ms
Remote clock offset: -1.415 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 20.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 20.270 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21.570 ms
Loss rate: 0.00%
```
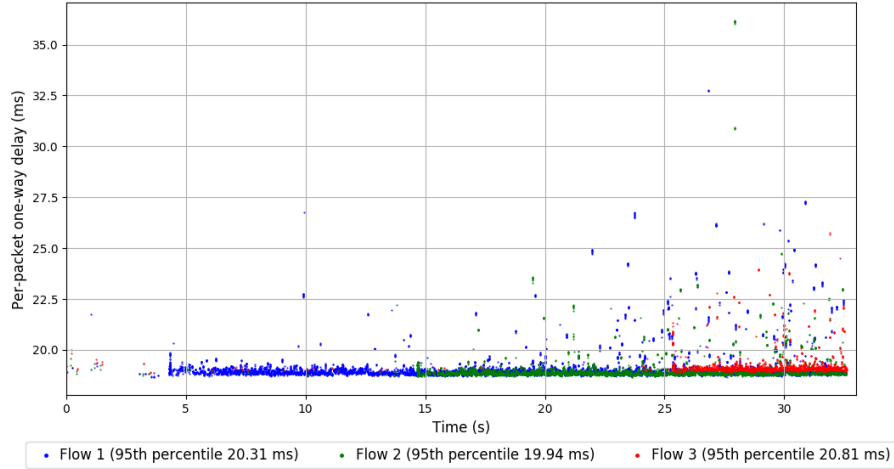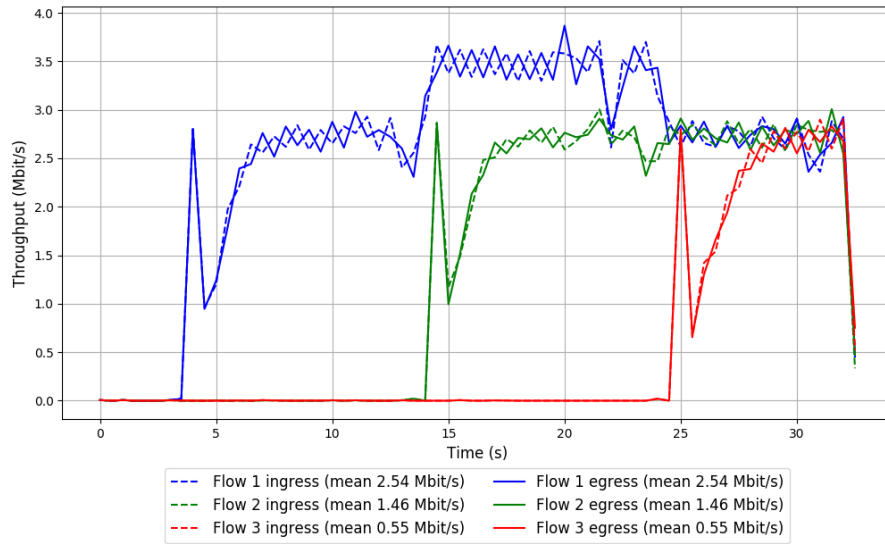
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-12-20 10:47:08
End at: 2017-12-20 10:47:38
Local clock offset: 0.131 ms
Remote clock offset: -1.072 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 19.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.742 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.539 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 19.791 ms
Loss rate: 0.00%
```
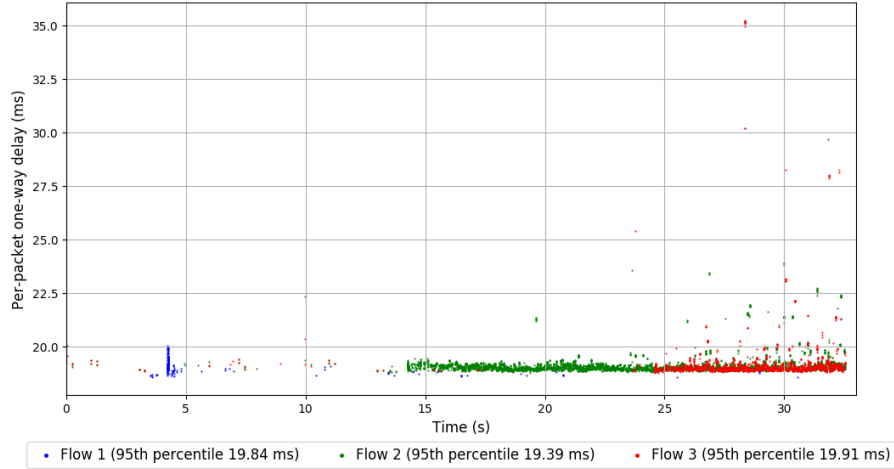
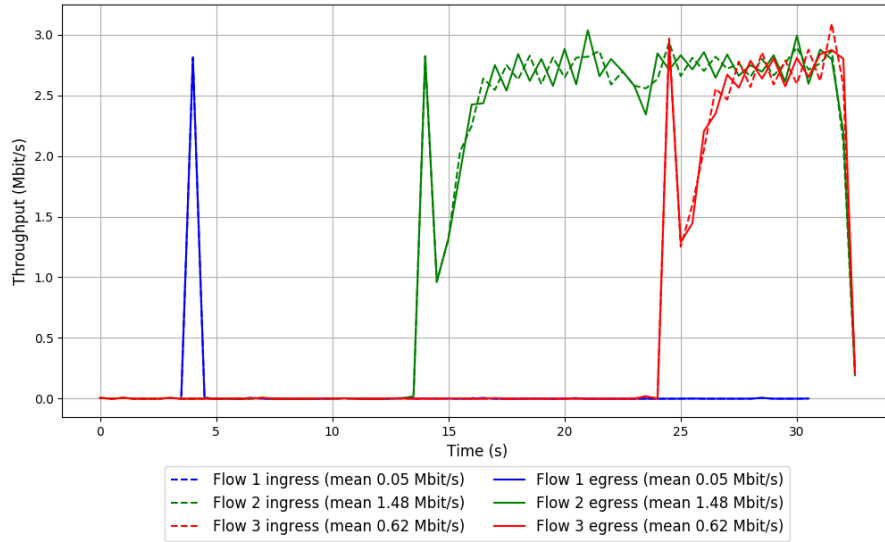Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-12-20 11:09:13
End at: 2017-12-20 11:09:43
Local clock offset: 0.063 ms
Remote clock offset: -1.152 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 19.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.683 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 20.807 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 19.632 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.31 Mbit/s) --- Flow 1 egress (mean 2.31 Mbit/s)
Flow 2 ingress (mean 1.45 Mbit/s) --- Flow 2 egress (mean 1.45 Mbit/s)
Flow 3 ingress (mean 0.56 Mbit/s) --- Flow 3 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 19.68 ms)   Flow 2 (95th percentile 20.81 ms)   Flow 3 (95th percentile 19.63 ms)

```
Run 8: Statistics of WebRTC media

Start at: 2017-12-20 11:30:46
End at: 2017-12-20 11:31:16
Local clock offset: -0.056 ms
Remote clock offset: -1.451 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 20.251 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 20.310 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.937 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 20.810 ms
Loss rate: 0.00%
```

Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-12-20 11:52:54
End at: 2017-12-20 11:53:24
Local clock offset: -0.108 ms
Remote clock offset: -1.998 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 19.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 19.391 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 19.913 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-12-20 12:14:53
End at: 2017-12-20 12:15:23
Local clock offset: -0.225 ms
Remote clock offset: -2.046 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 19.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link

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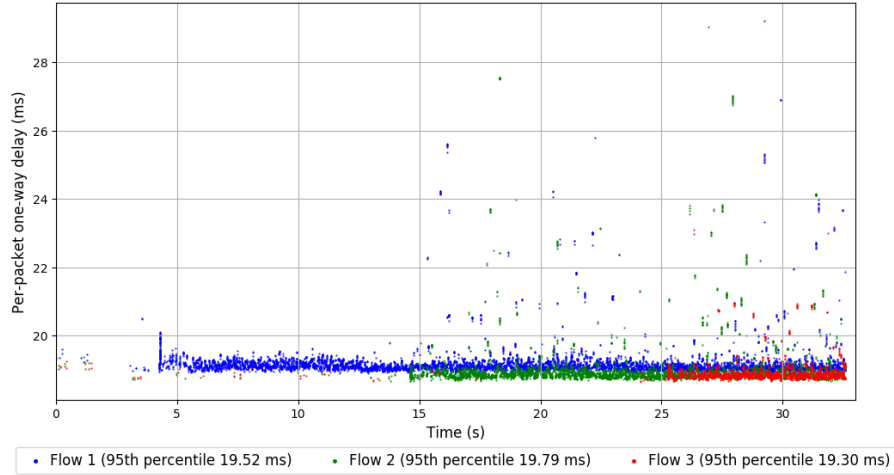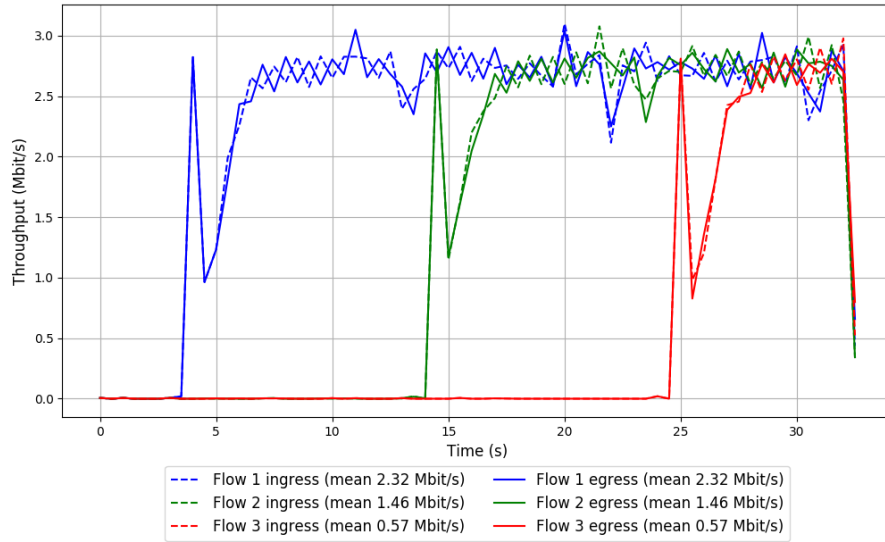
```
Run 1: Statistics of Sprout

Start at: 2017-12-20 08:42:14
End at: 2017-12-20 08:42:44
Local clock offset: 0.953 ms
Remote clock offset: -0.808 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 22.047 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 21.942 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 22.359 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 24.51 Mbit/s
95th percentile per-packet one-way delay: 21.151 ms
Loss rate: 0.00%
```

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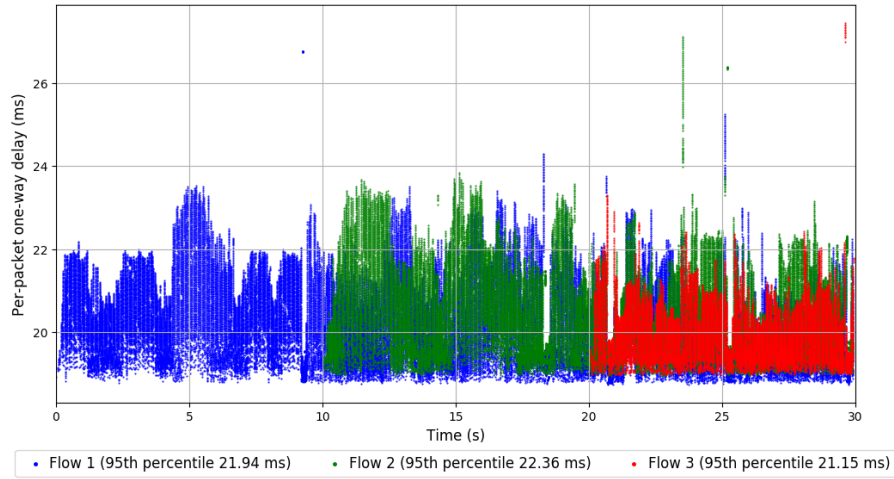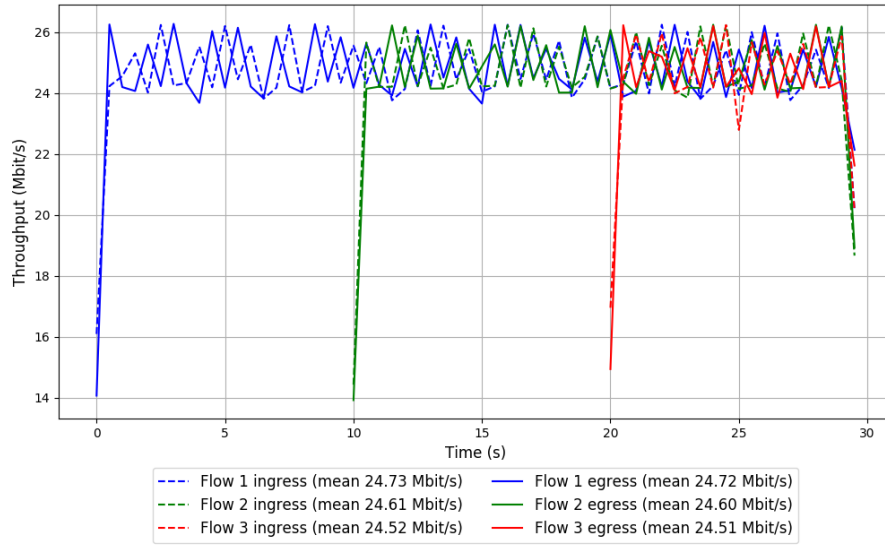
```
Run 2: Statistics of Sprout

Start at: 2017-12-20 09:03:52
End at: 2017-12-20 09:04:22
Local clock offset: 1.041 ms
Remote clock offset: -0.699 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 22.203 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.116 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 22.348 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 22.043 ms
Loss rate: 0.01%
```

Run 2: Report of Sprout — Data Link
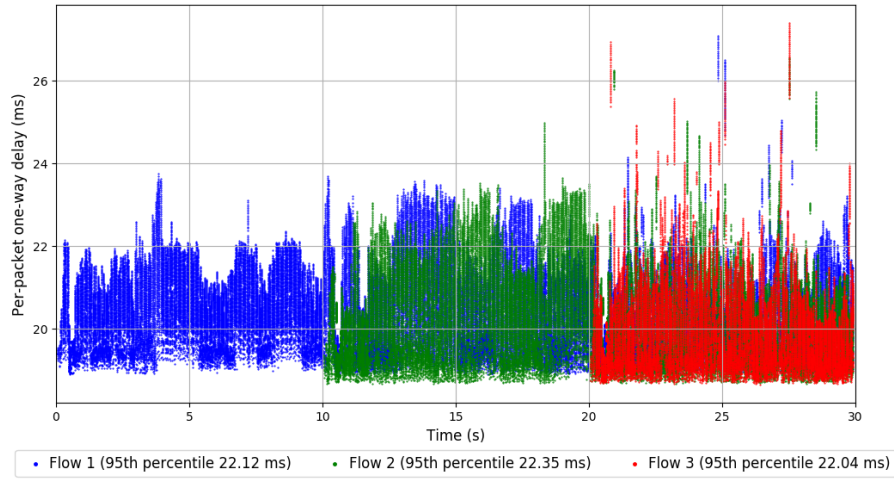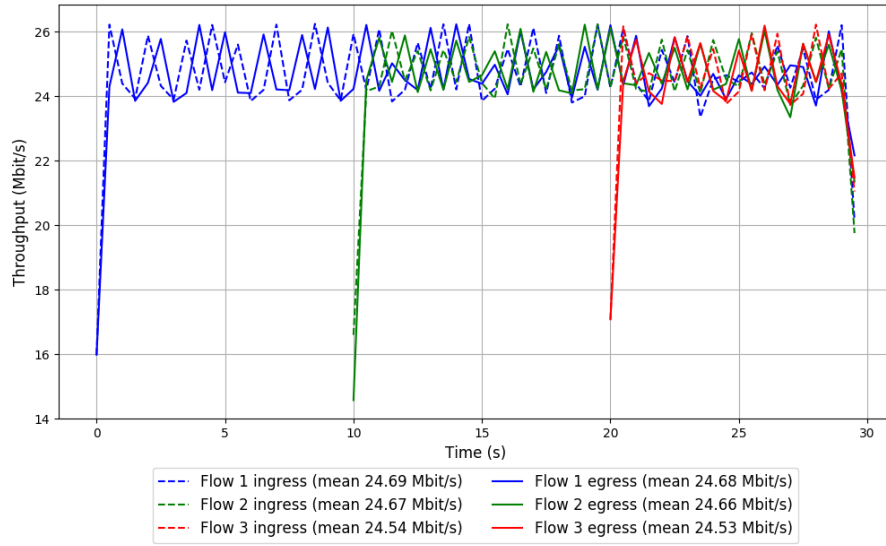
```
Run 3: Statistics of Sprout

Start at: 2017-12-20 09:25:42
End at: 2017-12-20 09:26:12
Local clock offset: 1.068 ms
Remote clock offset: -0.961 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 22.079 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 22.017 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 22.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 21.805 ms
Loss rate: 0.03%
```

Run 3: Report of Sprout — Data Link
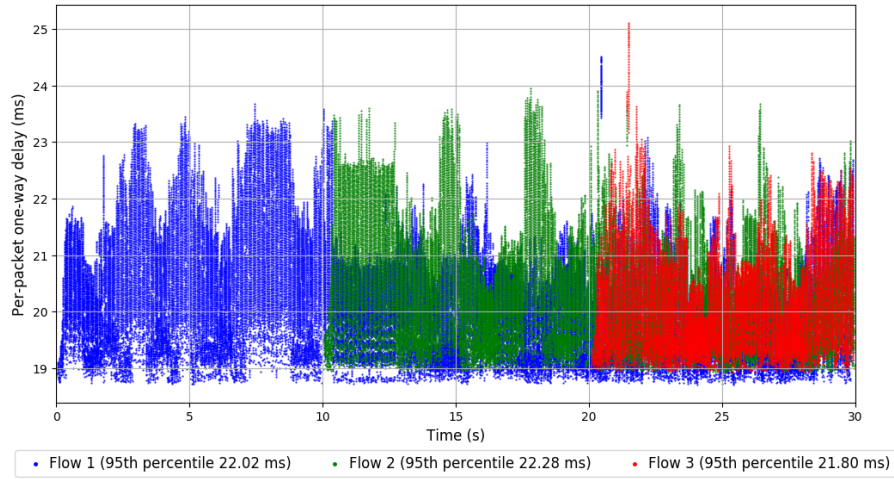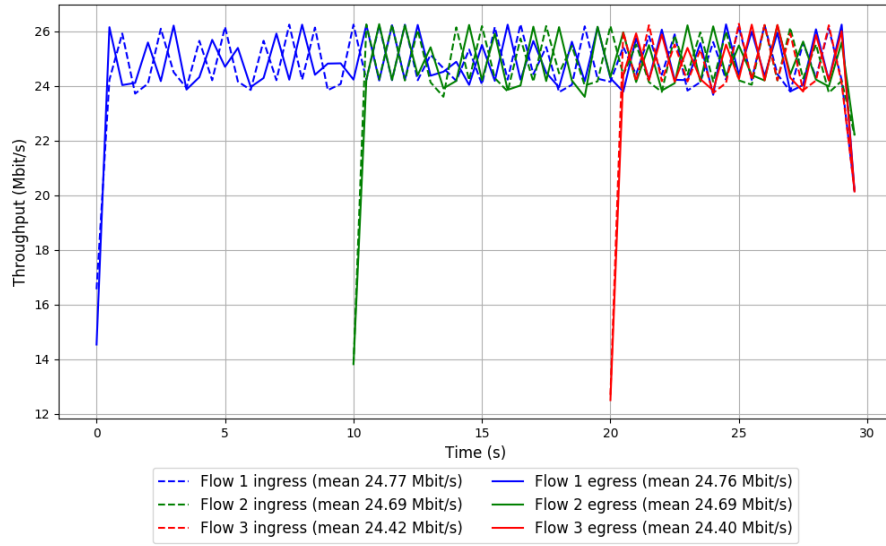
```
Run 4: Statistics of Sprout

Start at: 2017-12-20 09:47:30
End at: 2017-12-20 09:48:00
Local clock offset: 0.943 ms
Remote clock offset: -0.95 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 21.878 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 22.197 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 20.299 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 21.685 ms
Loss rate: 0.00%
```
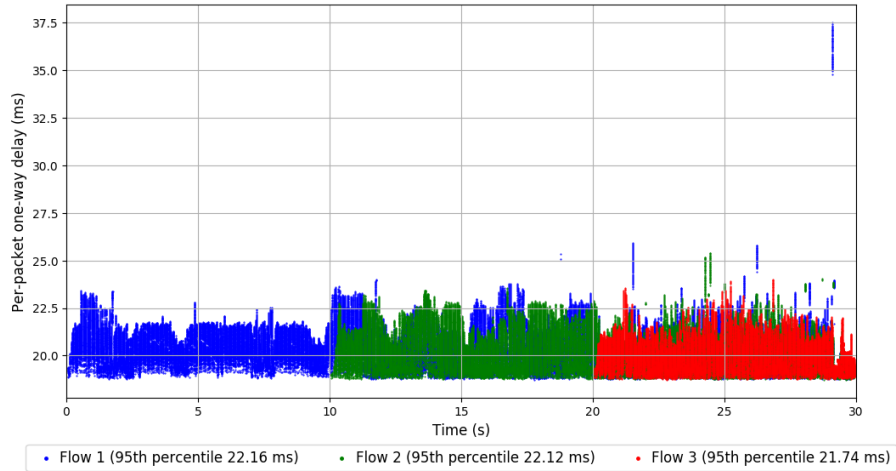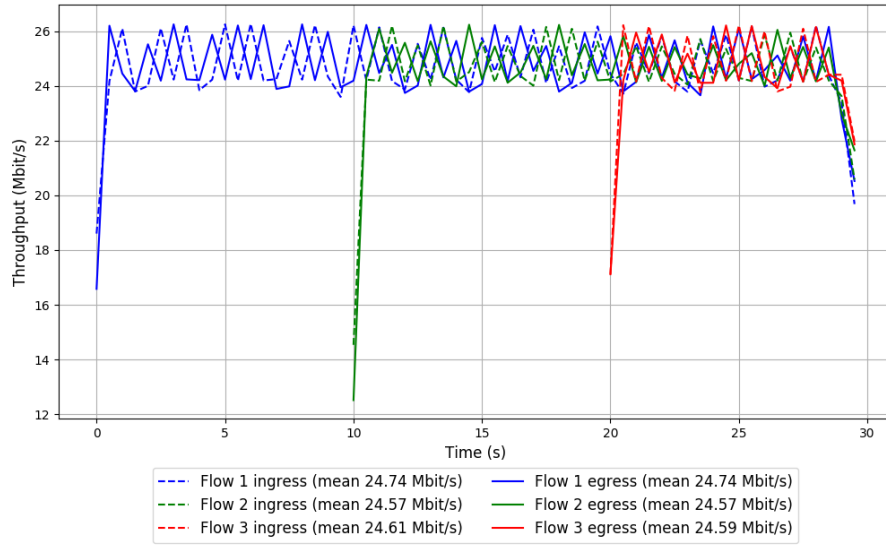
Run 4: Report of Sprout — Data Link
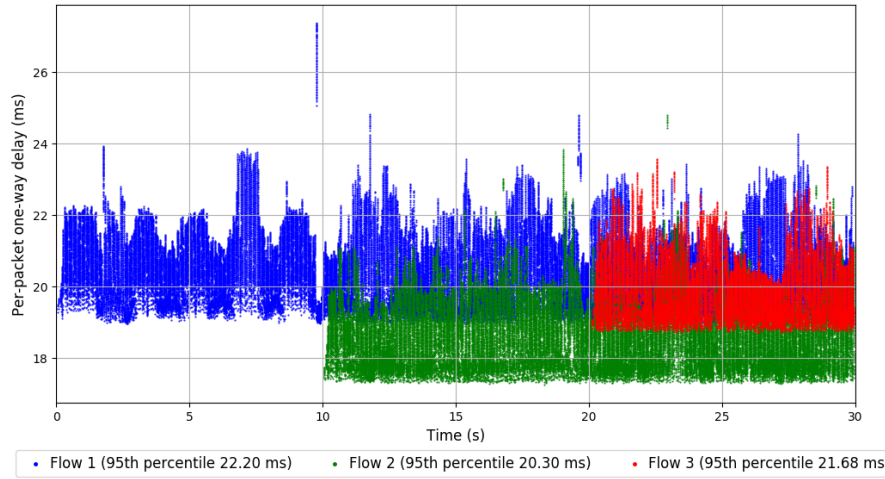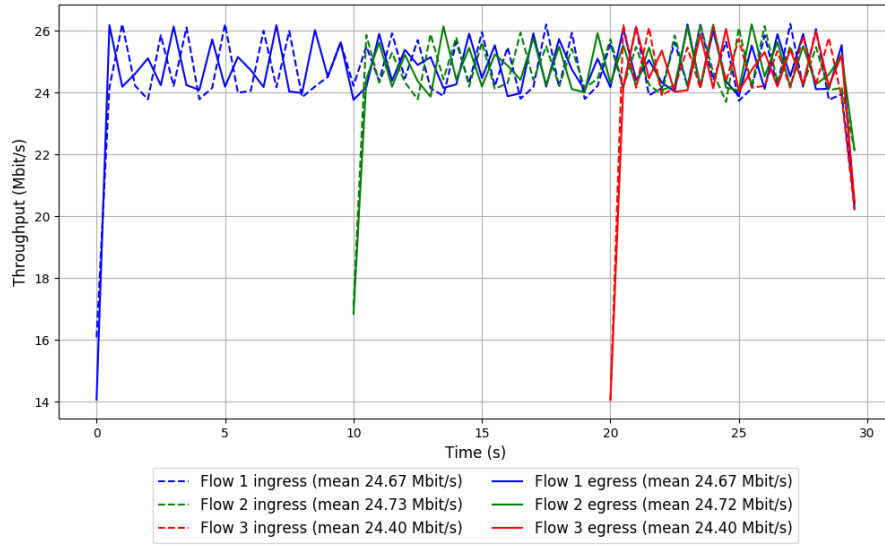
```
Run 5: Statistics of Sprout

Start at: 2017-12-20 10:09:14
End at: 2017-12-20 10:09:44
Local clock offset: 0.551 ms
Remote clock offset: -1.131 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.20 Mbit/s
95th percentile per-packet one-way delay: 22.093 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 22.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 22.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 21.737 ms
Loss rate: 0.07%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 24.74 Mbit/s) Flow 1 egress (mean 24.74 Mbit/s)
Flow 2 ingress (mean 24.57 Mbit/s) Flow 2 egress (mean 24.57 Mbit/s)
Flow 3 ingress (mean 24.61 Mbit/s) Flow 3 egress (mean 24.59 Mbit/s)

Flow 1 (95th percentile 22.16 ms)   Flow 2 (95th percentile 22.12 ms)   Flow 3 (95th percentile 21.74 ms)

```
Run 6: Statistics of Sprout

Start at: 2017-12-20 10:31:06
End at: 2017-12-20 10:31:36
Local clock offset: 0.326 ms
Remote clock offset: -1.178 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 22.084 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.291 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.27 Mbit/s
95th percentile per-packet one-way delay: 21.494 ms
Loss rate: 0.33%
```

Run 6: Report of Sprout — Data Link

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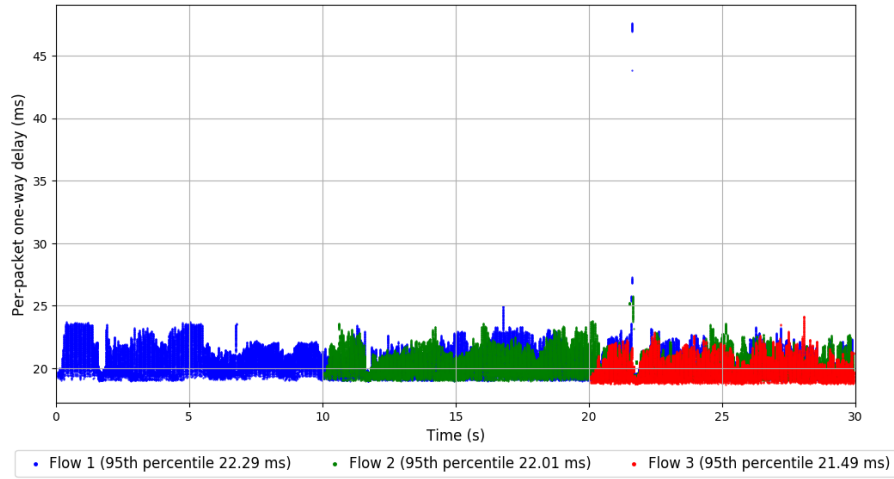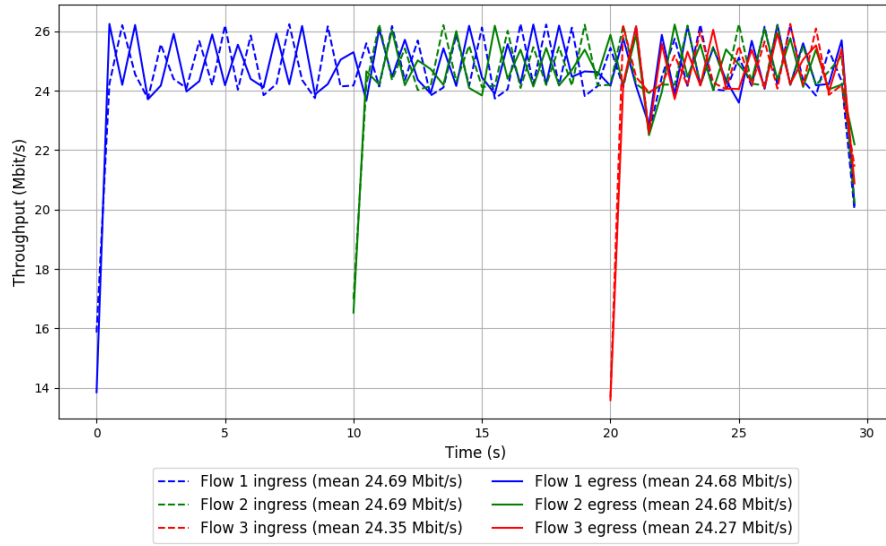
```
Run 7: Statistics of Sprout

Start at: 2017-12-20 10:53:08
End at: 2017-12-20 10:53:39
Local clock offset: 0.09 ms
Remote clock offset: -1.076 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 21.932 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 21.963 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 22.084 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 21.311 ms
Loss rate: 0.00%
```

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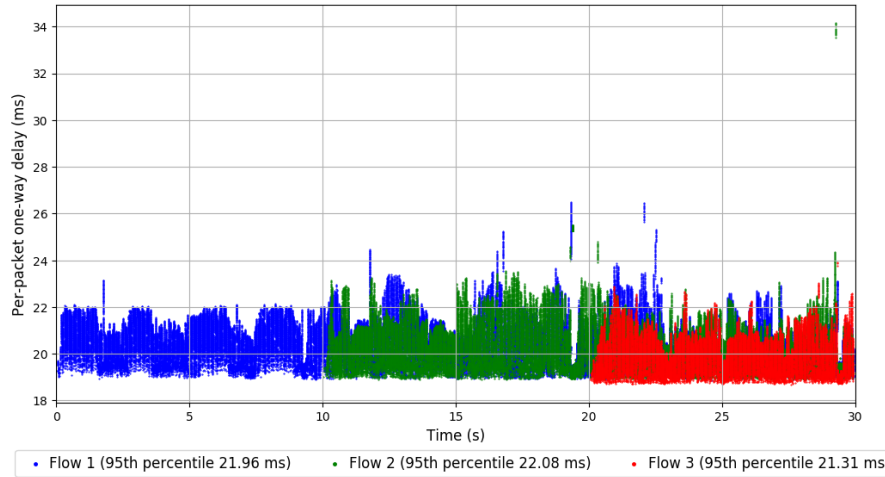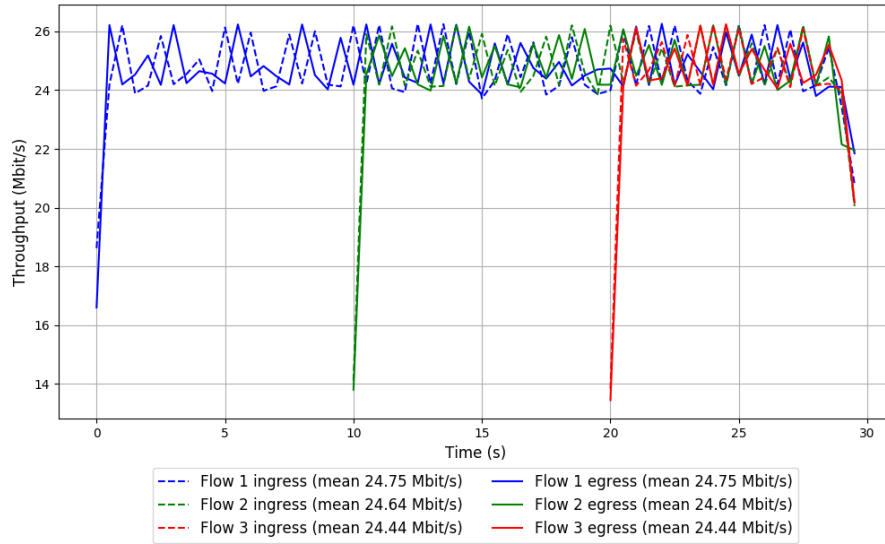
```
Run 8: Statistics of Sprout

Start at: 2017-12-20 11:14:57
End at: 2017-12-20 11:15:27
Local clock offset: 0.037 ms
Remote clock offset: -1.144 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.28 Mbit/s
95th percentile per-packet one-way delay: 21.863 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 22.017 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.688 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 21.783 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link
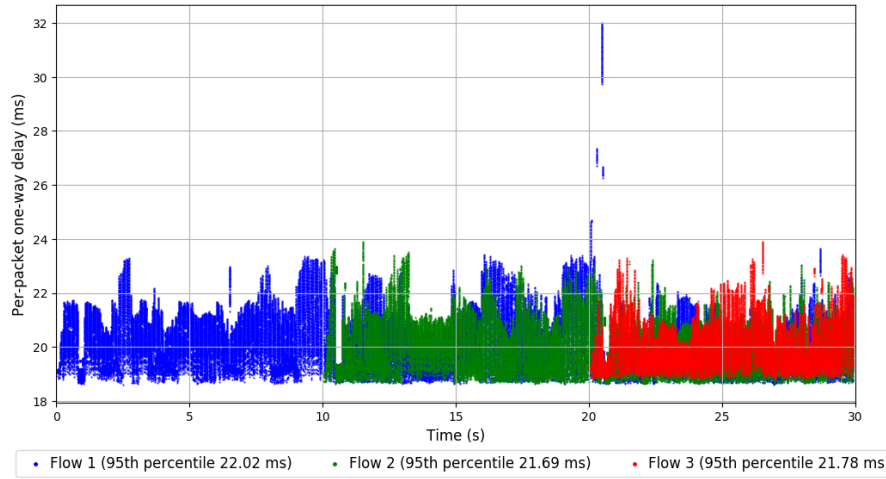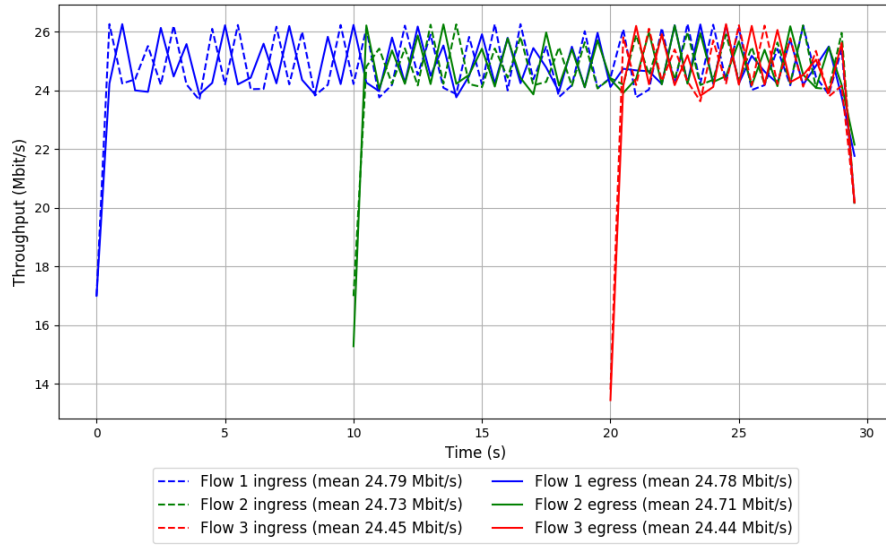
```
Run 9: Statistics of Sprout

Start at: 2017-12-20 11:36:45
End at: 2017-12-20 11:37:15
Local clock offset: -0.101 ms
Remote clock offset: -1.553 ms

# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.31 Mbit/s
95th percentile per-packet one-way delay: 22.243 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 22.244 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 22.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.43 Mbit/s
95th percentile per-packet one-way delay: 21.495 ms
Loss rate: 0.03%
```

Run 9: Report of Sprout — Data Link
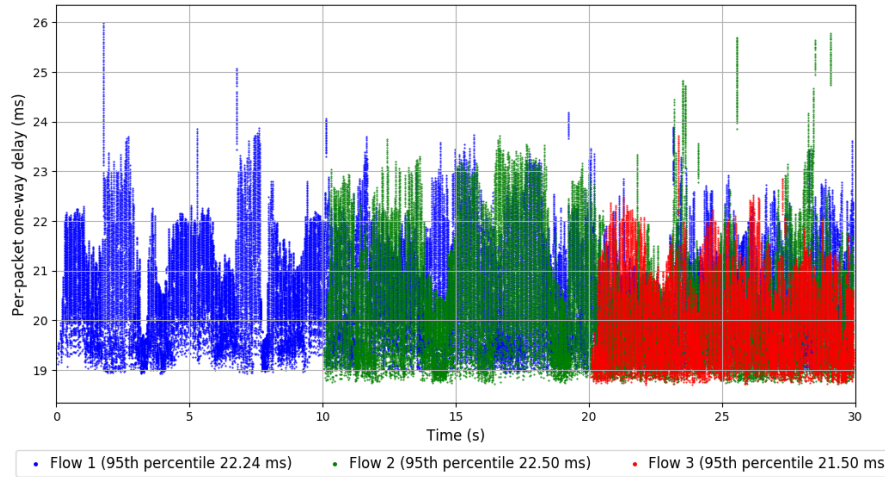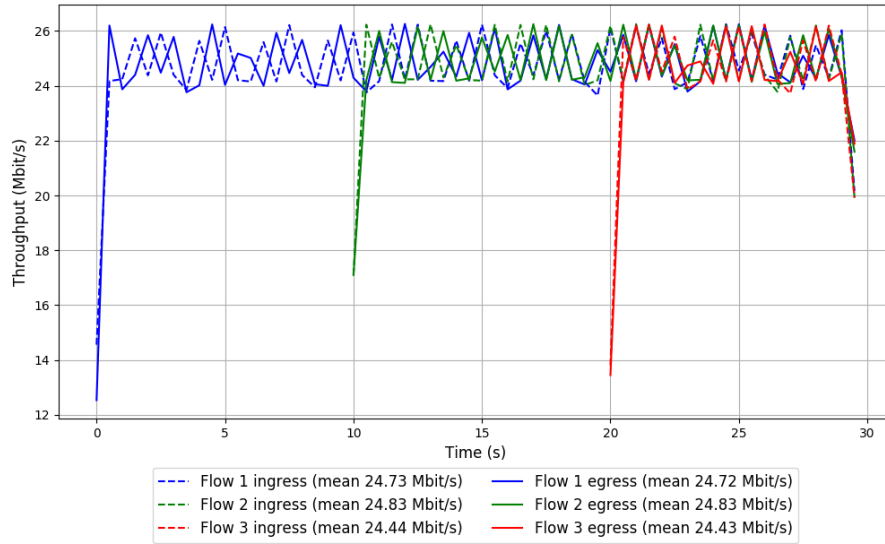
```
Run 10: Statistics of Sprout

Start at: 2017-12-20 11:58:51
End at: 2017-12-20 11:59:21
Local clock offset: -0.176 ms
Remote clock offset: -2.002 ms


# Below is generated by plot.py at 2017-12-20 15:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.29 Mbit/s
95th percentile per-packet one-way delay: 21.975 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 22.362 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 20.441 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 22.004 ms
Loss rate: 0.08%
```
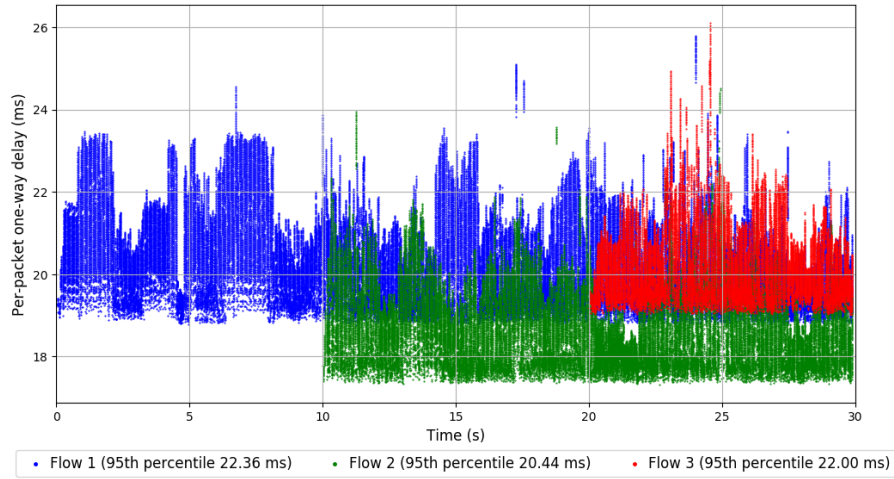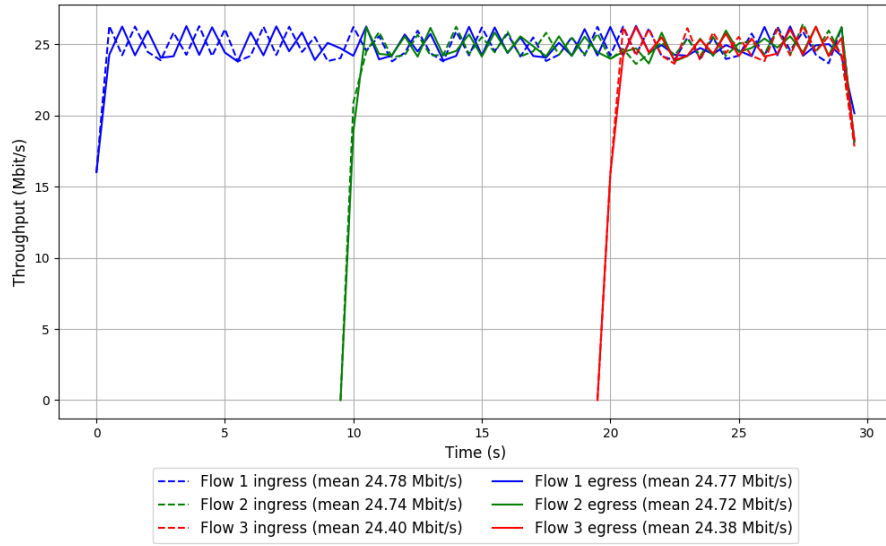
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 24.78 Mbit/s) — Flow 1 egress (mean 24.77 Mbit/s)
Flow 2 ingress (mean 24.74 Mbit/s) — Flow 2 egress (mean 24.72 Mbit/s)
Flow 3 ingress (mean 24.40 Mbit/s) — Flow 3 egress (mean 24.38 Mbit/s)

Flow 1 (95th percentile 22.36 ms)   Flow 2 (95th percentile 20.44 ms)   Flow 3 (95th percentile 22.00 ms)

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

Start at: 2017-12-20 08:53:36
End at: 2017-12-20 08:54:06
Local clock offset: 0.926 ms
Remote clock offset: -0.644 ms

# Below is generated by plot.py at 2017-12-20 15:12:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.18 Mbit/s
95th percentile per-packet one-way delay: 19.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.23 Mbit/s
95th percentile per-packet one-way delay: 19.262 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 209.32 Mbit/s
95th percentile per-packet one-way delay: 19.027 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.67 Mbit/s
95th percentile per-packet one-way delay: 19.055 ms
Loss rate: 0.00%
```
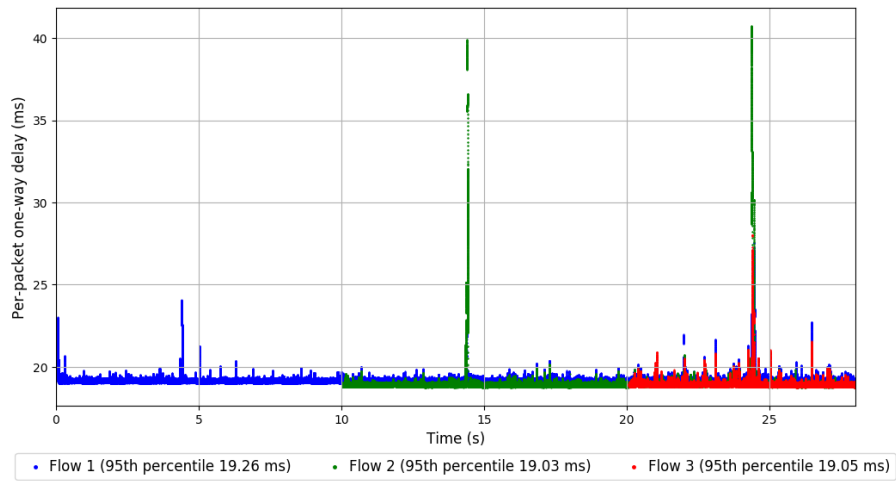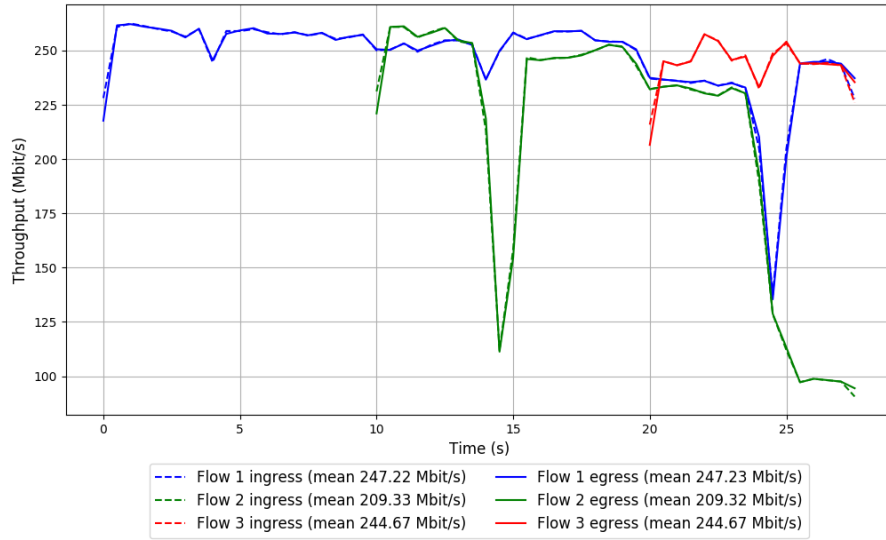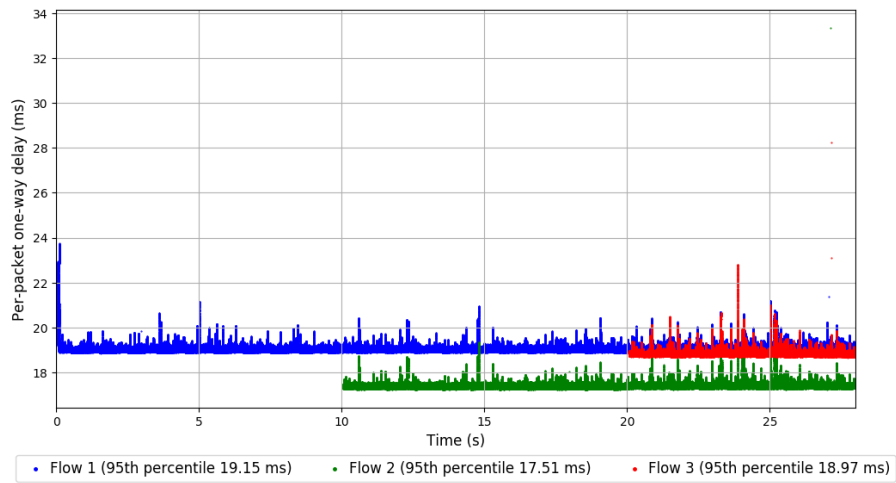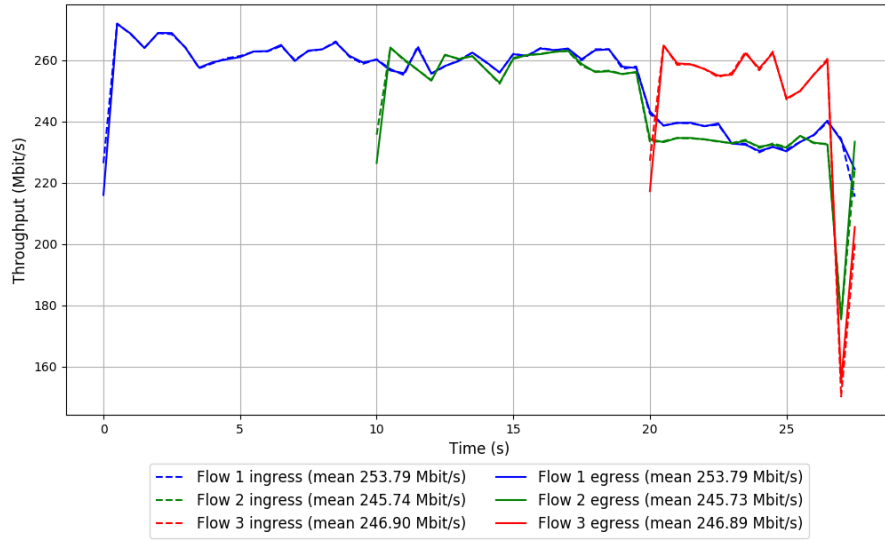
Run 1: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 247.22 Mbit/s)   —— Flow 1 egress (mean 247.23 Mbit/s)
- - - Flow 2 ingress (mean 209.33 Mbit/s)   —— Flow 2 egress (mean 209.32 Mbit/s)
- - - Flow 3 ingress (mean 244.67 Mbit/s)   —— Flow 3 egress (mean 244.67 Mbit/s)

• Flow 1 (95th percentile 19.26 ms)   • Flow 2 (95th percentile 19.03 ms)   • Flow 3 (95th percentile 19.05 ms)
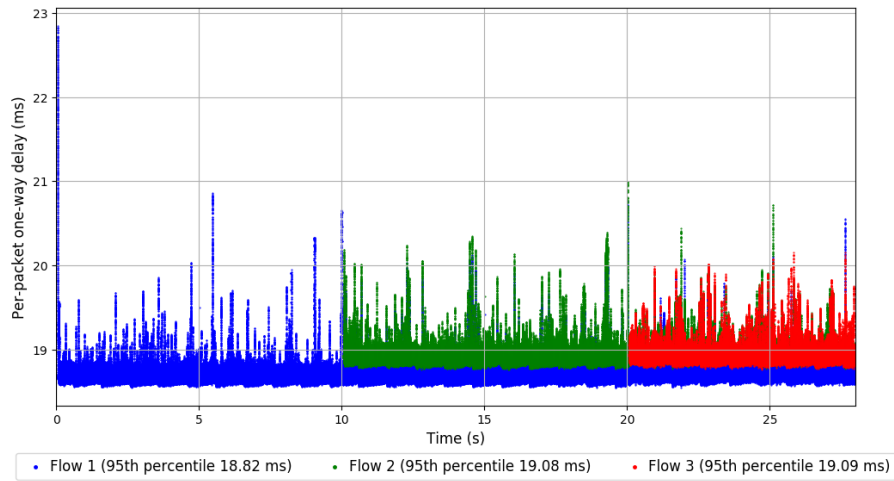
```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 09:15:23
End at: 2017-12-20 09:15:53
Local clock offset: 1.04 ms
Remote clock offset: -0.998 ms


# Below is generated by plot.py at 2017-12-20 15:13:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.69 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 253.79 Mbit/s
95th percentile per-packet one-way delay: 19.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 245.73 Mbit/s
95th percentile per-packet one-way delay: 17.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 246.89 Mbit/s
95th percentile per-packet one-way delay: 18.972 ms
Loss rate: 0.01%
```

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

Flow 1 ingress (mean 253.79 Mbit/s) Flow 1 egress (mean 253.79 Mbit/s)
Flow 2 ingress (mean 245.74 Mbit/s) Flow 2 egress (mean 245.73 Mbit/s)
Flow 3 ingress (mean 246.90 Mbit/s) Flow 3 egress (mean 246.89 Mbit/s)

Flow 1 (95th percentile 19.15 ms)   Flow 2 (95th percentile 17.51 ms)   Flow 3 (95th percentile 18.97 ms)

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

Start at: 2017-12-20 09:37:13
End at: 2017-12-20 09:37:43
Local clock offset: 1.023 ms
Remote clock offset: -1.108 ms


# Below is generated by plot.py at 2017-12-20 15:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.25 Mbit/s
95th percentile per-packet one-way delay: 19.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 252.64 Mbit/s
95th percentile per-packet one-way delay: 18.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 246.60 Mbit/s
95th percentile per-packet one-way delay: 19.076 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 240.35 Mbit/s
95th percentile per-packet one-way delay: 19.091 ms
Loss rate: 0.01%
```
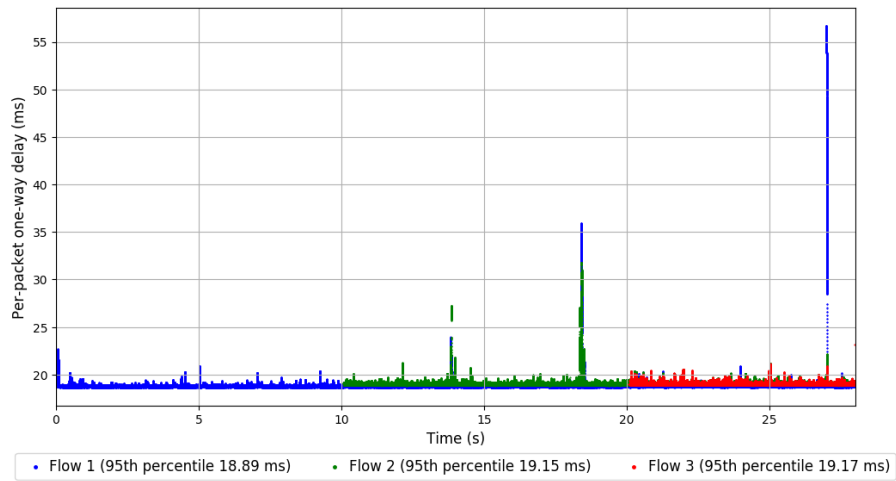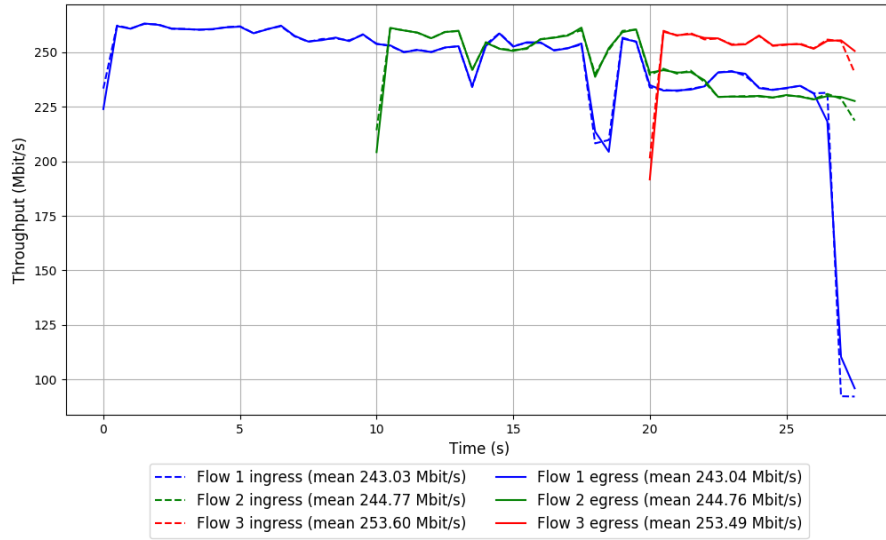
Run 3: Report of TaoVA-100x — Data Link
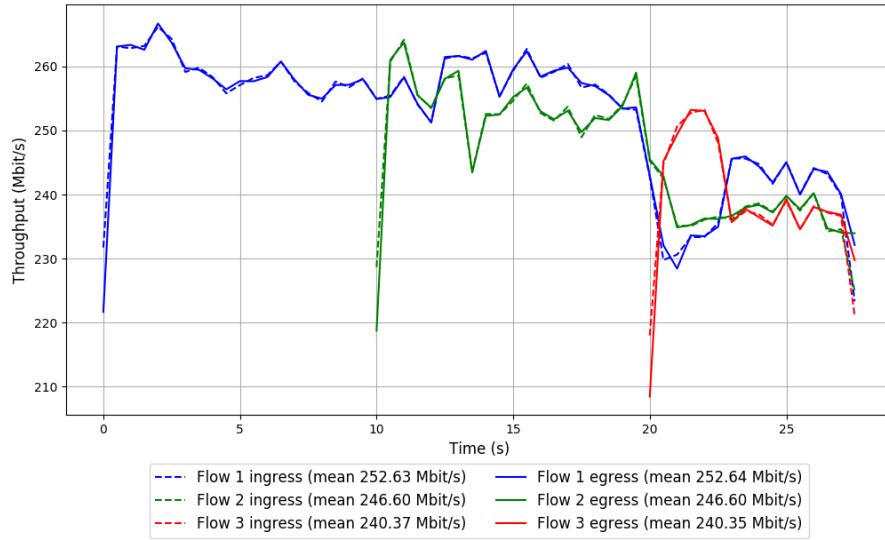
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 09:58:57
End at: 2017-12-20 09:59:28
Local clock offset: 0.801 ms
Remote clock offset: -0.97 ms

# Below is generated by plot.py at 2017-12-20 15:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.71 Mbit/s
95th percentile per-packet one-way delay: 19.106 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 243.04 Mbit/s
95th percentile per-packet one-way delay: 18.894 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 244.76 Mbit/s
95th percentile per-packet one-way delay: 19.150 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 253.49 Mbit/s
95th percentile per-packet one-way delay: 19.168 ms
Loss rate: 0.00%
```

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

Flow 1 ingress (mean 243.03 Mbit/s) --- Flow 1 egress (mean 243.04 Mbit/s)
Flow 2 ingress (mean 244.77 Mbit/s) --- Flow 2 egress (mean 244.76 Mbit/s)
Flow 3 ingress (mean 253.60 Mbit/s) --- Flow 3 egress (mean 253.49 Mbit/s)

Flow 1 (95th percentile 18.89 ms)   Flow 2 (95th percentile 19.15 ms)   Flow 3 (95th percentile 19.17 ms)

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

Start at: 2017-12-20 10:20:53
End at: 2017-12-20 10:21:23
Local clock offset: 0.328 ms
Remote clock offset: -1.359 ms


# Below is generated by plot.py at 2017-12-20 15:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.96 Mbit/s
95th percentile per-packet one-way delay: 19.250 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 243.27 Mbit/s
95th percentile per-packet one-way delay: 19.037 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.77 Mbit/s
95th percentile per-packet one-way delay: 19.294 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 216.46 Mbit/s
95th percentile per-packet one-way delay: 19.329 ms
Loss rate: 0.01%
```
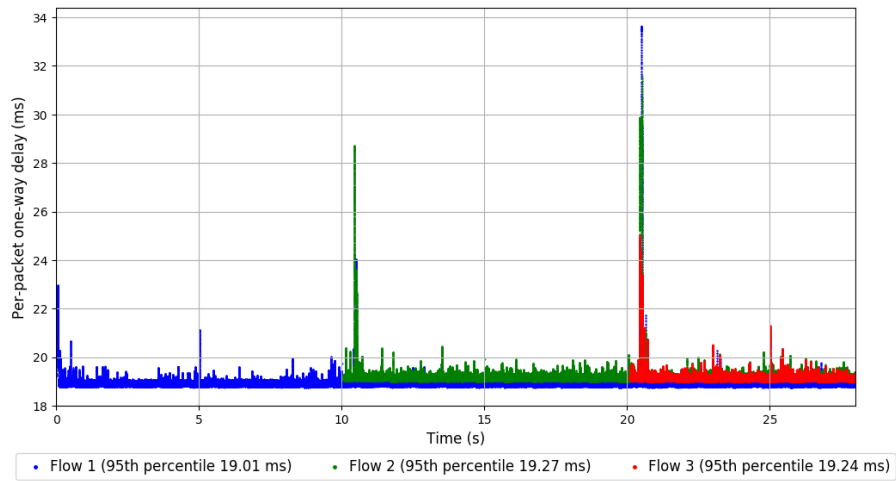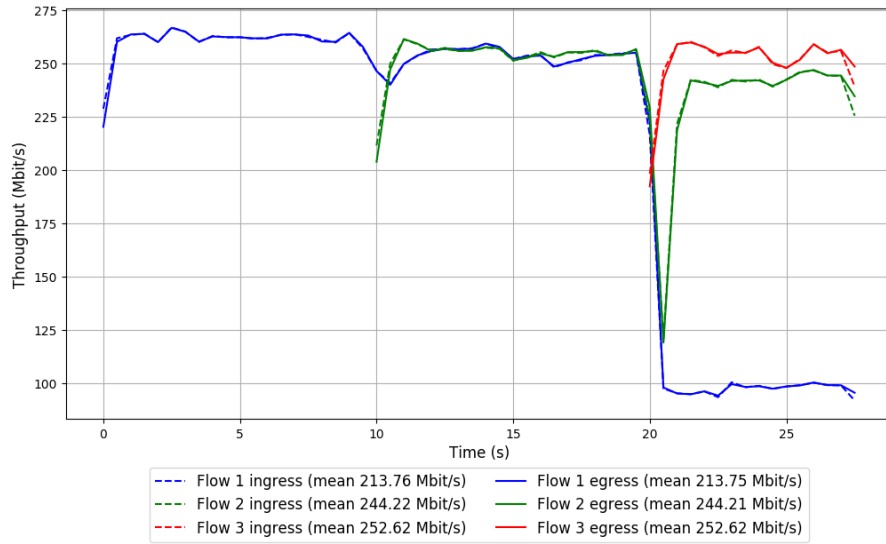
Run 5: Report of TaoVA-100x — Data Link
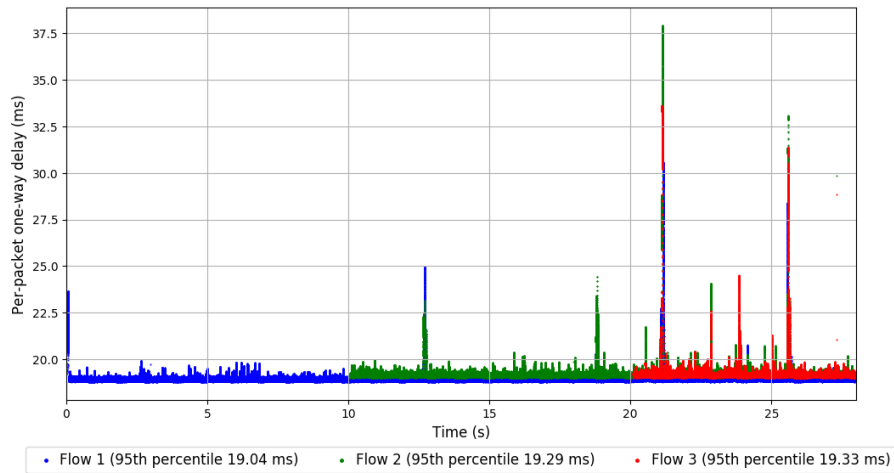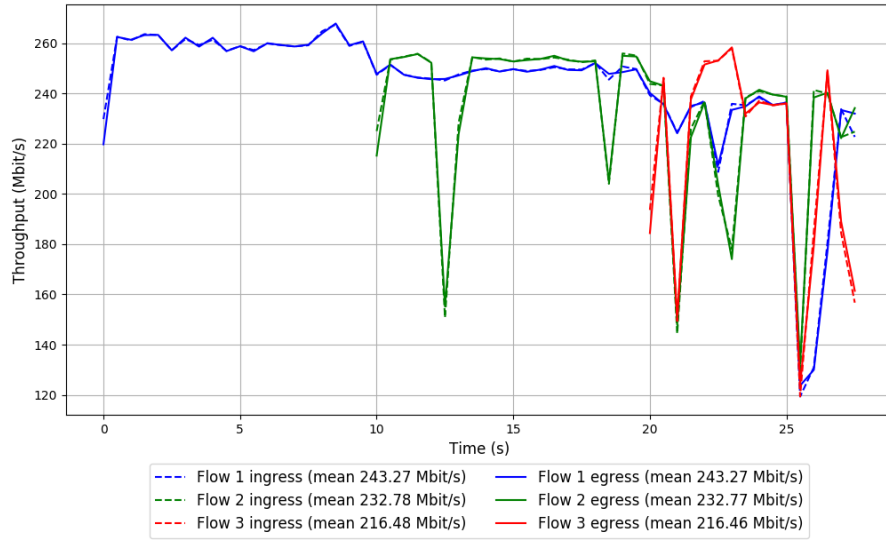
```
Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 10:42:35
End at: 2017-12-20 10:43:05
Local clock offset: 0.135 ms
Remote clock offset: -1.051 ms

# Below is generated by plot.py at 2017-12-20 15:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.12 Mbit/s
95th percentile per-packet one-way delay: 19.231 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.75 Mbit/s
95th percentile per-packet one-way delay: 19.013 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 244.21 Mbit/s
95th percentile per-packet one-way delay: 19.270 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 252.62 Mbit/s
95th percentile per-packet one-way delay: 19.243 ms
Loss rate: 0.00%
```
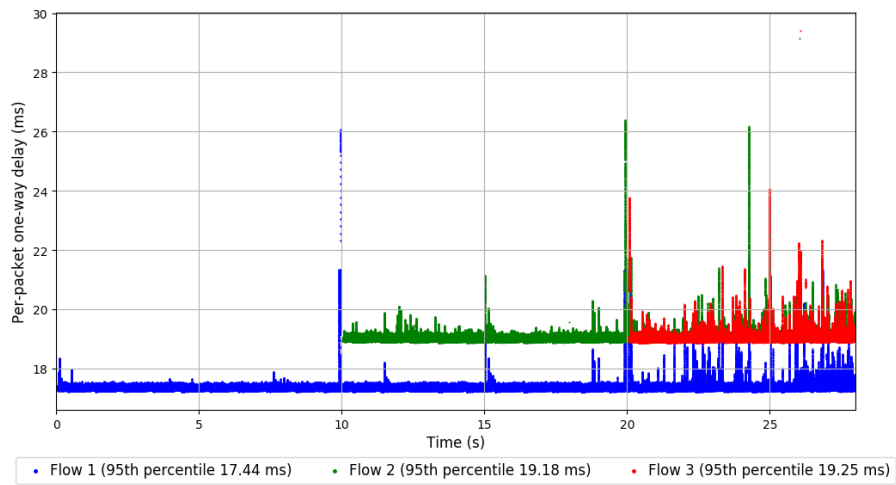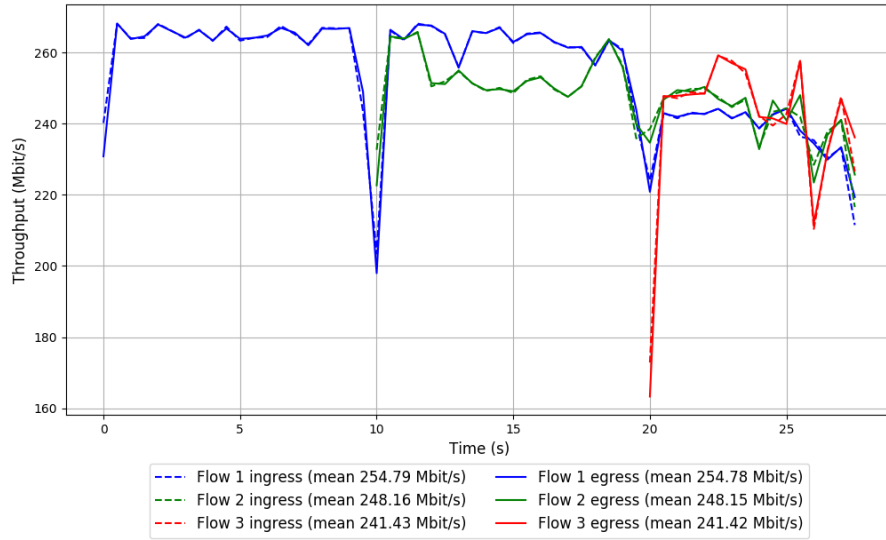
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 213.76 Mbit/s) --- Flow 1 egress (mean 213.75 Mbit/s) ---
Flow 2 ingress (mean 244.22 Mbit/s) --- Flow 2 egress (mean 244.21 Mbit/s) ---
Flow 3 ingress (mean 252.62 Mbit/s) --- Flow 3 egress (mean 252.62 Mbit/s) ---

Flow 1 (95th percentile 19.01 ms)   Flow 2 (95th percentile 19.27 ms)   Flow 3 (95th percentile 19.24 ms)

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

Start at: 2017-12-20 11:04:36
End at: 2017-12-20 11:05:06
Local clock offset: 0.071 ms
Remote clock offset: -1.179 ms

# Below is generated by plot.py at 2017-12-20 15:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 482.68 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 254.78 Mbit/s
95th percentile per-packet one-way delay: 17.441 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 248.15 Mbit/s
95th percentile per-packet one-way delay: 19.179 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 241.42 Mbit/s
95th percentile per-packet one-way delay: 19.253 ms
Loss rate: 0.00%
```
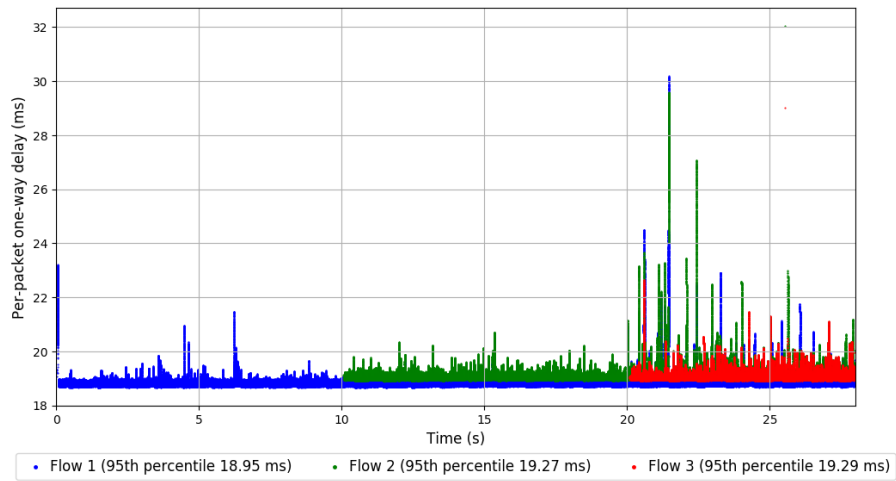
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 254.79 Mbit/s) Flow 1 egress (mean 254.78 Mbit/s)
Flow 2 ingress (mean 248.16 Mbit/s) Flow 2 egress (mean 248.15 Mbit/s)
Flow 3 ingress (mean 241.43 Mbit/s) Flow 3 egress (mean 241.42 Mbit/s)

Flow 1 (95th percentile 17.44 ms)   Flow 2 (95th percentile 19.18 ms)   Flow 3 (95th percentile 19.25 ms)

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

Start at: 2017-12-20 11:26:11
End at: 2017-12-20 11:26:41
Local clock offset: 0.002 ms
Remote clock offset: -1.341 ms


# Below is generated by plot.py at 2017-12-20 15:18:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.01 Mbit/s
95th percentile per-packet one-way delay: 19.156 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.66 Mbit/s
95th percentile per-packet one-way delay: 17.542 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 247.54 Mbit/s
95th percentile per-packet one-way delay: 19.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.13 Mbit/s
95th percentile per-packet one-way delay: 19.329 ms
Loss rate: 0.01%
```
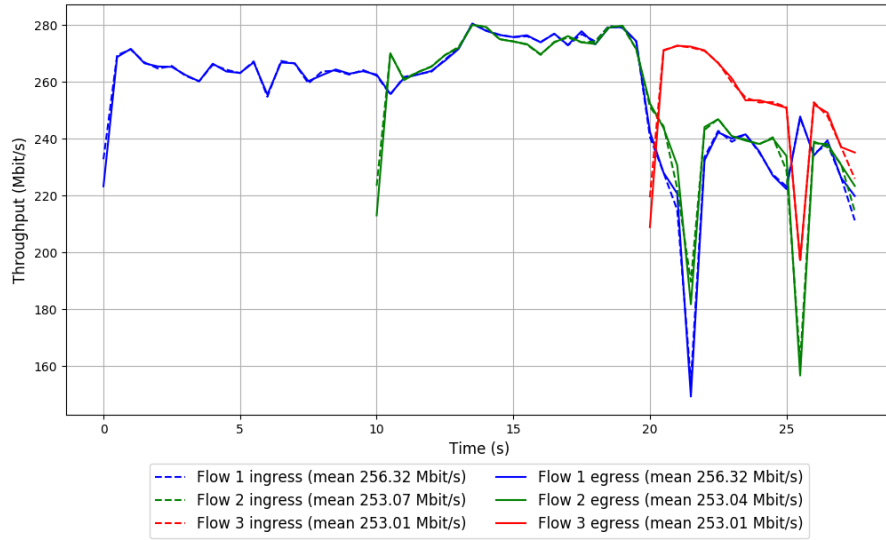
Run 8: Report of TaoVA-100x — Data Link

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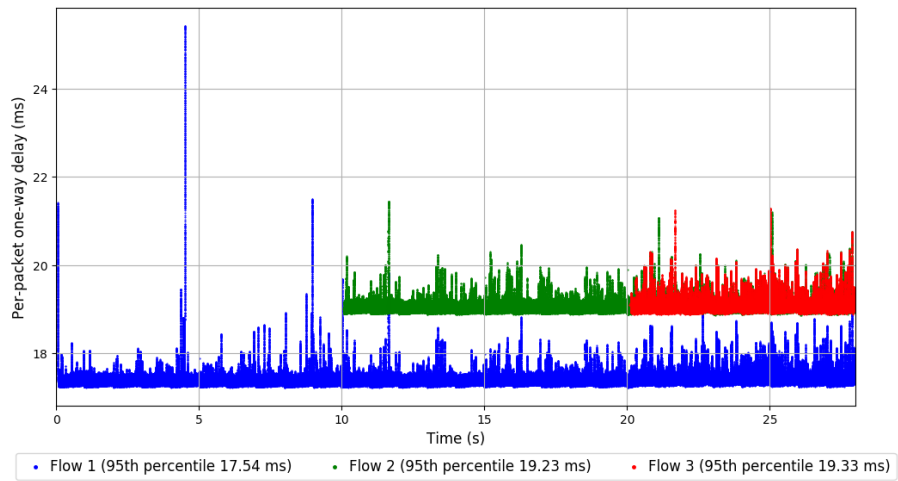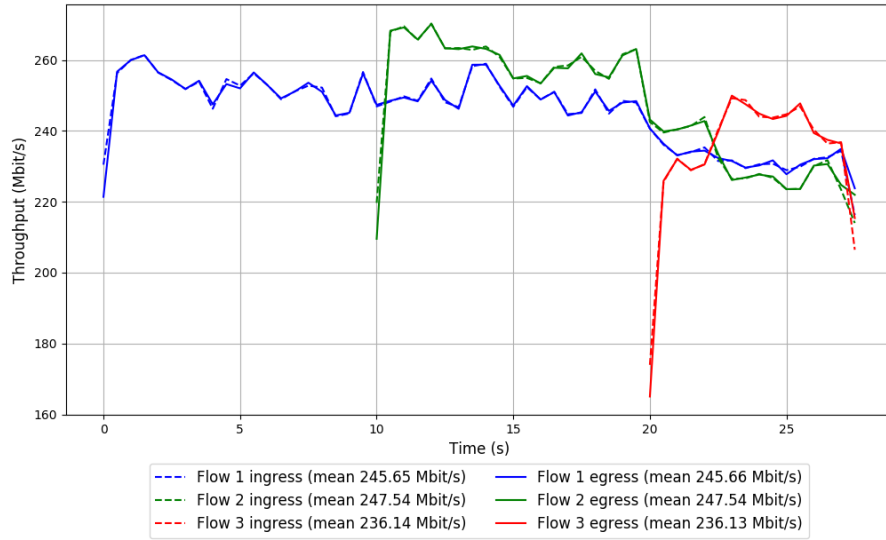
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 11:48:17
End at: 2017-12-20 11:48:47
Local clock offset: -0.097 ms
Remote clock offset: -1.828 ms

# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.14 Mbit/s
95th percentile per-packet one-way delay: 19.182 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 256.32 Mbit/s
95th percentile per-packet one-way delay: 18.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 253.04 Mbit/s
95th percentile per-packet one-way delay: 19.271 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 253.01 Mbit/s
95th percentile per-packet one-way delay: 19.292 ms
Loss rate: 0.00%
```

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

Flow 1 ingress (mean 256.32 Mbit/s) — — — Flow 1 egress (mean 256.32 Mbit/s)
Flow 2 ingress (mean 253.07 Mbit/s) — — — Flow 2 egress (mean 253.04 Mbit/s)
Flow 3 ingress (mean 253.01 Mbit/s) — — — Flow 3 egress (mean 253.01 Mbit/s)

Flow 1 (95th percentile 18.95 ms)   Flow 2 (95th percentile 19.27 ms)   Flow 3 (95th percentile 19.29 ms)

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

Start at: 2017-12-20 12:10:19
End at: 2017-12-20 12:10:49
Local clock offset: -0.208 ms
Remote clock offset: -2.182 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.39 Mbit/s
95th percentile per-packet one-way delay: 19.059 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 217.64 Mbit/s
95th percentile per-packet one-way delay: 18.950 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 240.93 Mbit/s
95th percentile per-packet one-way delay: 17.505 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 250.67 Mbit/s
95th percentile per-packet one-way delay: 19.229 ms
Loss rate: 0.01%
```
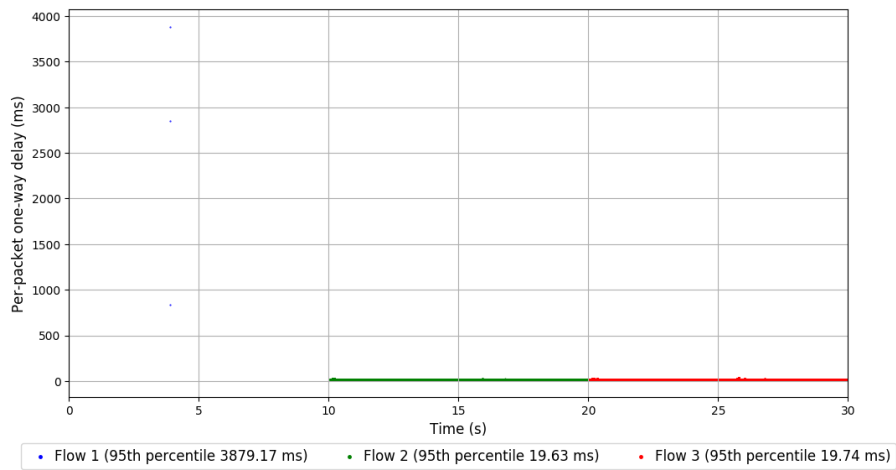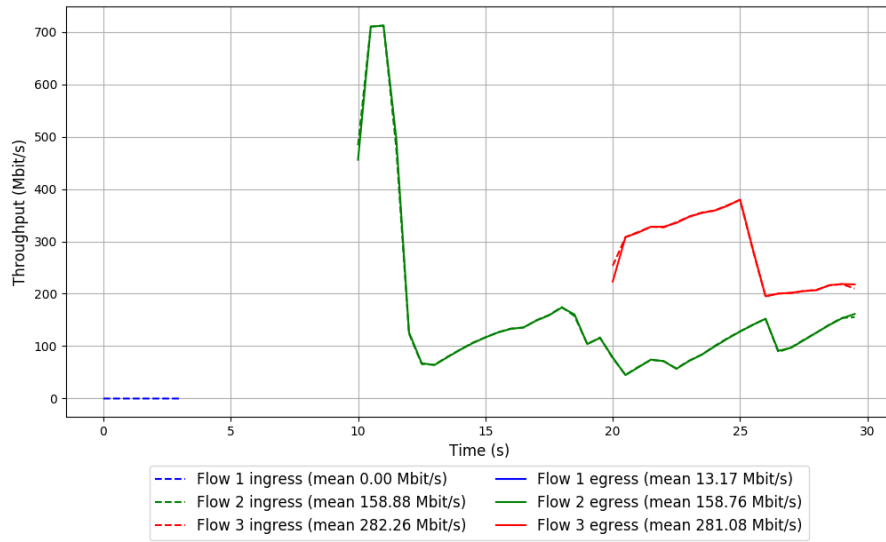
Run 10: Report of TaoVA-100x — Data Link
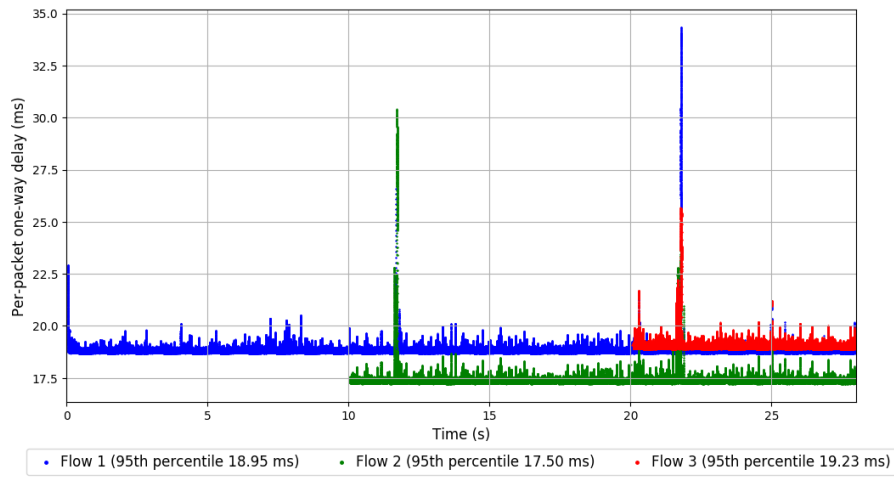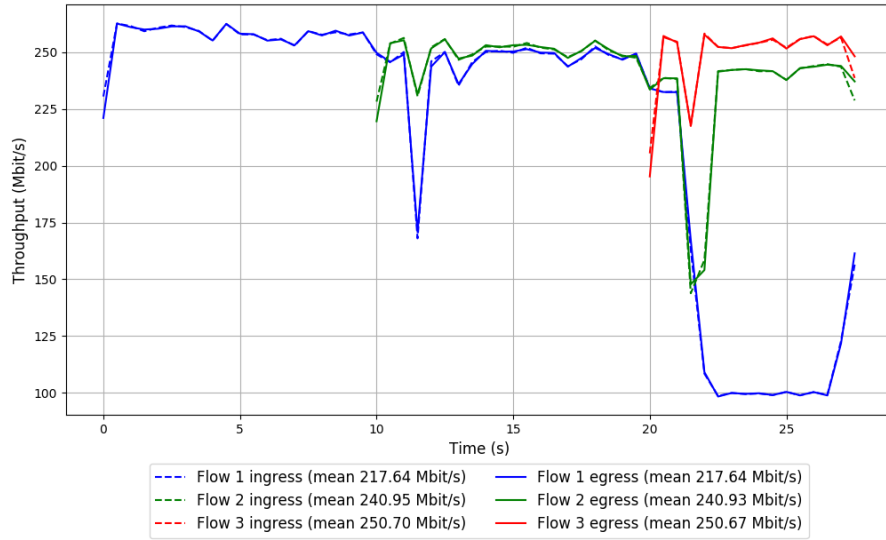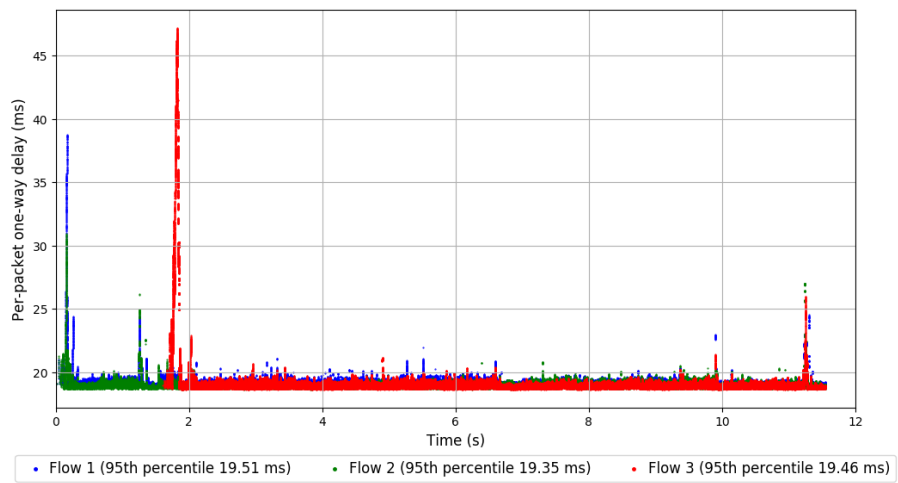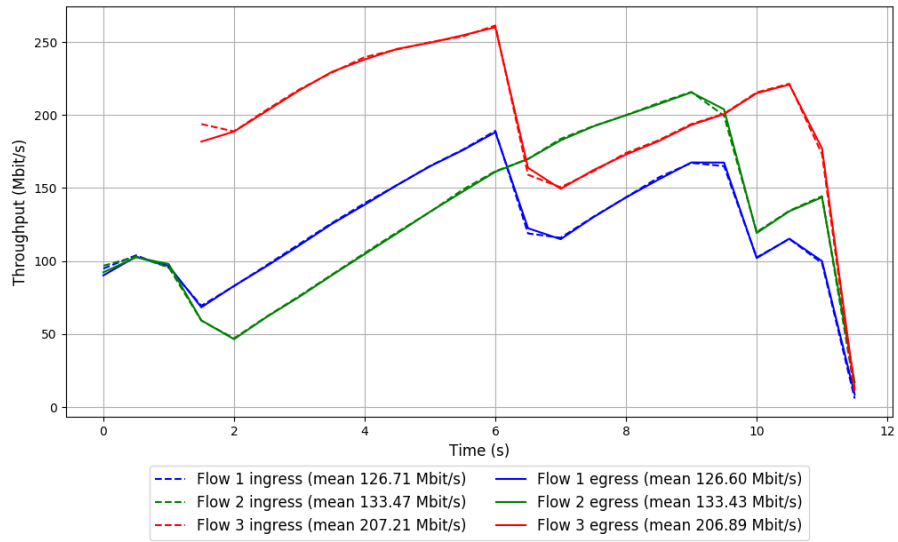
```
Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 08:46:02
End at: 2017-12-20 08:46:32
Local clock offset: 0.942 ms
Remote clock offset: -0.717 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.48 Mbit/s
95th percentile per-packet one-way delay: 19.675 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 3879.174 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.76 Mbit/s
95th percentile per-packet one-way delay: 19.633 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 281.08 Mbit/s
95th percentile per-packet one-way delay: 19.740 ms
Loss rate: 0.42%
```
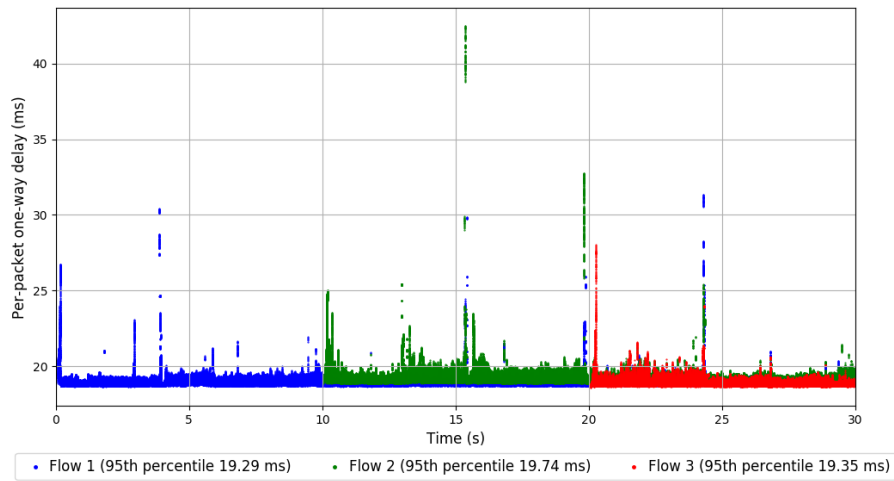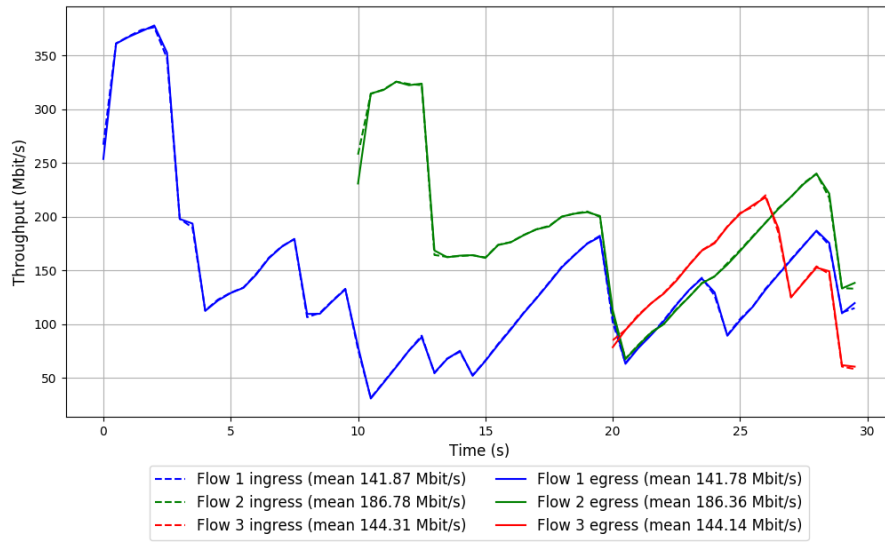
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.00 Mbit/s)   Flow 1 egress (mean 13.17 Mbit/s)
Flow 2 ingress (mean 158.88 Mbit/s)   Flow 2 egress (mean 158.76 Mbit/s)
Flow 3 ingress (mean 282.26 Mbit/s)   Flow 3 egress (mean 281.08 Mbit/s)

Flow 1 (95th percentile 3879.17 ms)   Flow 2 (95th percentile 19.63 ms)   Flow 3 (95th percentile 19.74 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 09:07:48
End at: 2017-12-20 09:08:18
Local clock offset: 1.03 ms
Remote clock offset: -0.797 ms
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 126.71 Mbit/s) — Flow 1 egress (mean 126.60 Mbit/s)
Flow 2 ingress (mean 133.47 Mbit/s) — Flow 2 egress (mean 133.43 Mbit/s)
Flow 3 ingress (mean 207.21 Mbit/s) — Flow 3 egress (mean 206.89 Mbit/s)

Flow 1 (95th percentile 19.51 ms)   Flow 2 (95th percentile 19.35 ms)   Flow 3 (95th percentile 19.46 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 09:29:34
End at: 2017-12-20 09:30:04
Local clock offset: 1.023 ms
Remote clock offset: -1.035 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.72 Mbit/s
95th percentile per-packet one-way delay: 19.552 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 141.78 Mbit/s
95th percentile per-packet one-way delay: 19.294 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 186.36 Mbit/s
95th percentile per-packet one-way delay: 19.738 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 144.14 Mbit/s
95th percentile per-packet one-way delay: 19.348 ms
Loss rate: 0.11%
```
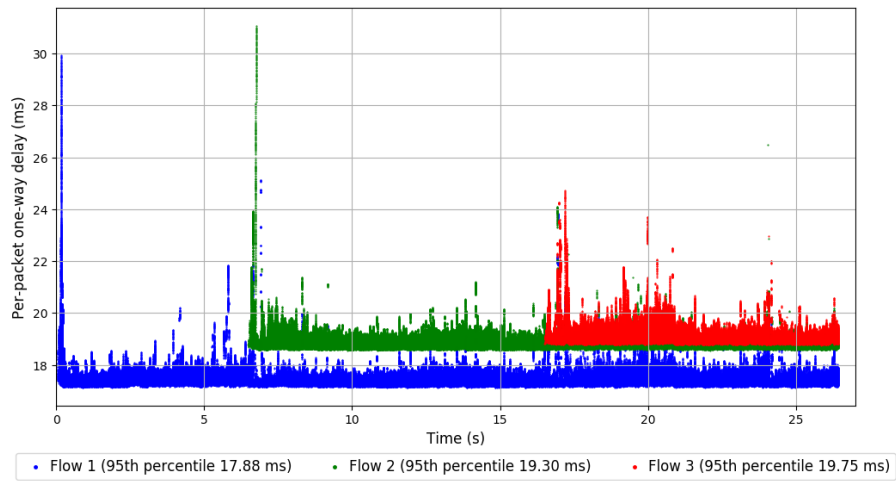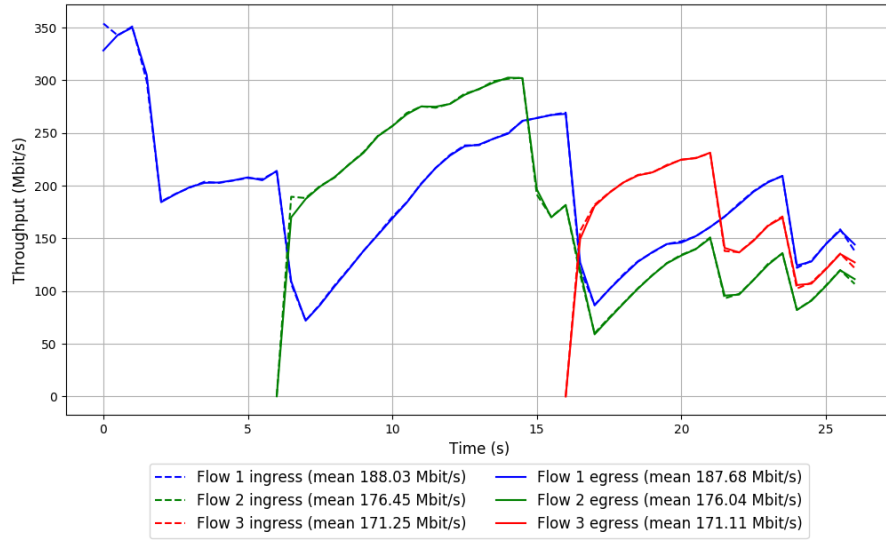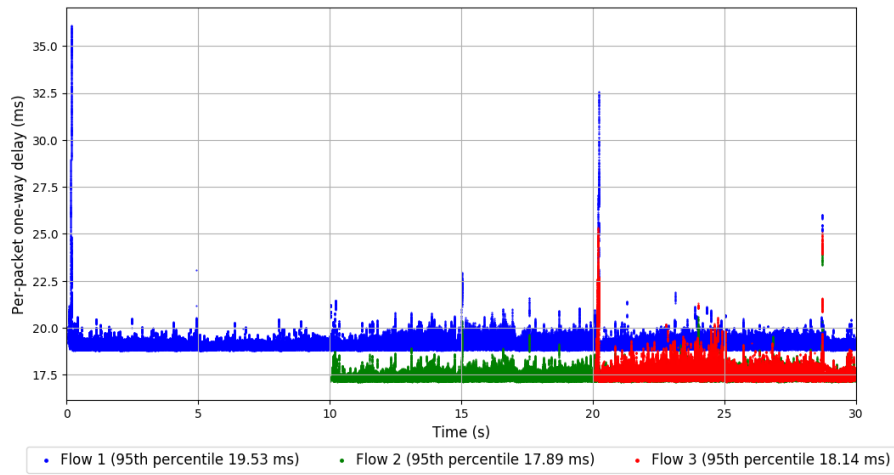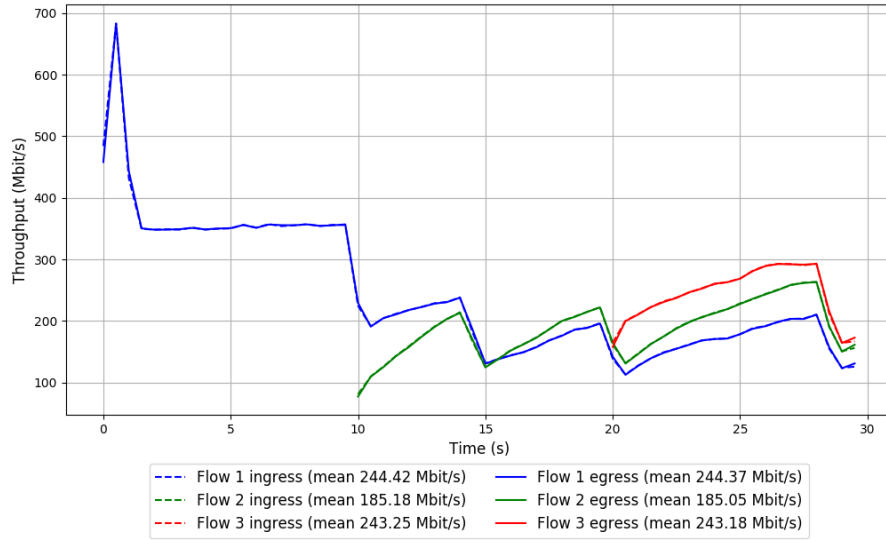
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 141.87 Mbit/s) --- Flow 1 egress (mean 141.78 Mbit/s)
Flow 2 ingress (mean 186.78 Mbit/s) --- Flow 2 egress (mean 186.36 Mbit/s)
Flow 3 ingress (mean 144.31 Mbit/s) --- Flow 3 egress (mean 144.14 Mbit/s)

Flow 1 (95th percentile 19.29 ms)   Flow 2 (95th percentile 19.74 ms)   Flow 3 (95th percentile 19.35 ms)

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```
Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 09:51:17
End at: 2017-12-20 09:51:47
Local clock offset: 0.927 ms
Remote clock offset: -1.02 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.08 Mbit/s
95th percentile per-packet one-way delay: 19.357 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 187.68 Mbit/s
95th percentile per-packet one-way delay: 17.882 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 176.04 Mbit/s
95th percentile per-packet one-way delay: 19.295 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 171.11 Mbit/s
95th percentile per-packet one-way delay: 19.750 ms
Loss rate: 0.07%
```

## Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 188.03 Mbit/s)   Flow 1 egress (mean 187.68 Mbit/s)
Flow 2 ingress (mean 176.45 Mbit/s)   Flow 2 egress (mean 176.04 Mbit/s)
Flow 3 ingress (mean 171.25 Mbit/s)   Flow 3 egress (mean 171.11 Mbit/s)

Flow 1 (95th percentile 17.88 ms)   Flow 2 (95th percentile 19.30 ms)   Flow 3 (95th percentile 19.75 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 10:13:04
End at: 2017-12-20 10:13:34
Local clock offset: 0.586 ms
Remote clock offset: -1.257 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.35 Mbit/s
95th percentile per-packet one-way delay: 19.420 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 244.37 Mbit/s
95th percentile per-packet one-way delay: 19.534 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 185.05 Mbit/s
95th percentile per-packet one-way delay: 17.894 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 243.18 Mbit/s
95th percentile per-packet one-way delay: 18.141 ms
Loss rate: 0.03%
```
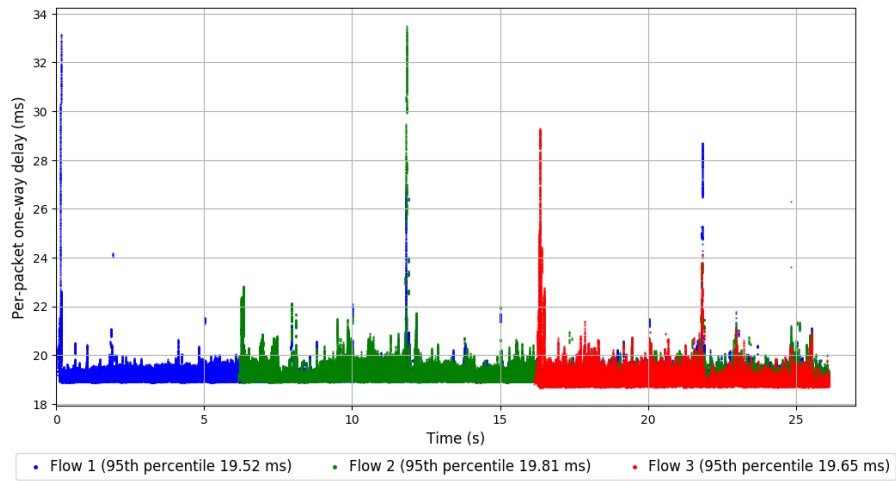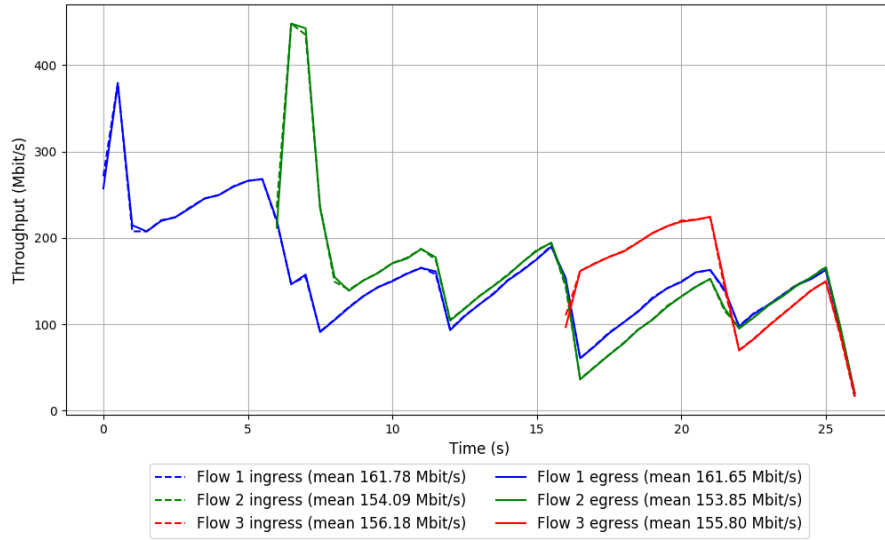
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 244.42 Mbit/s) Flow 1 egress (mean 244.37 Mbit/s)
Flow 2 ingress (mean 185.18 Mbit/s) Flow 2 egress (mean 185.05 Mbit/s)
Flow 3 ingress (mean 243.25 Mbit/s) Flow 3 egress (mean 243.18 Mbit/s)

Flow 1 (95th percentile 19.53 ms) Flow 2 (95th percentile 17.89 ms) Flow 3 (95th percentile 18.14 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 10:34:58
End at: 2017-12-20 10:35:28
Local clock offset: 0.313 ms
Remote clock offset: -1.242 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.66 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 206.57 Mbit/s
95th percentile per-packet one-way delay: 17.774 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 205.57 Mbit/s
95th percentile per-packet one-way delay: 19.222 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 163.30 Mbit/s
95th percentile per-packet one-way delay: 19.421 ms
Loss rate: 0.05%
```

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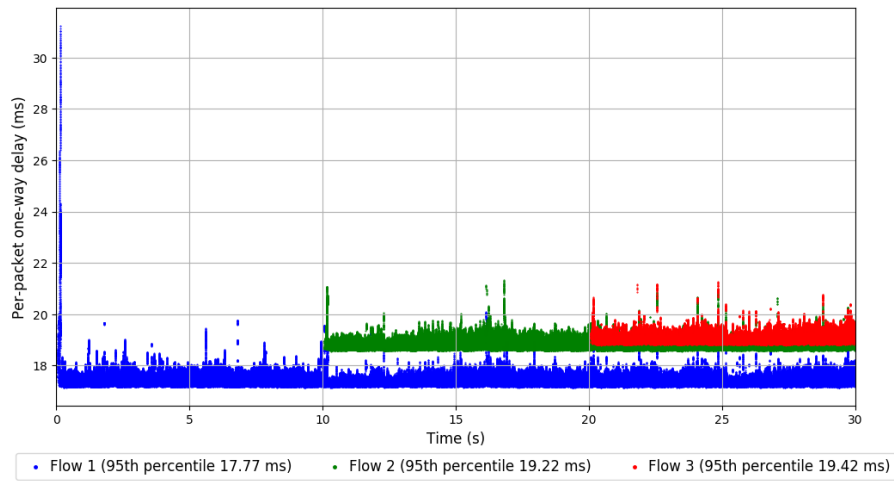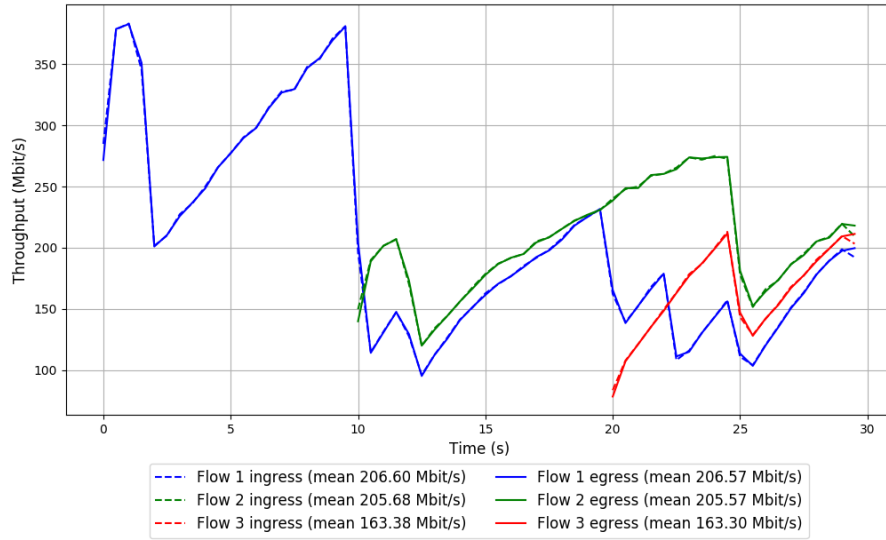
```
Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 10:56:57
End at: 2017-12-20 10:57:27
Local clock offset: 0.068 ms
Remote clock offset: -1.163 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.81 Mbit/s
95th percentile per-packet one-way delay: 19.650 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 161.65 Mbit/s
95th percentile per-packet one-way delay: 19.524 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 153.85 Mbit/s
95th percentile per-packet one-way delay: 19.806 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 155.80 Mbit/s
95th percentile per-packet one-way delay: 19.651 ms
Loss rate: 0.24%
```
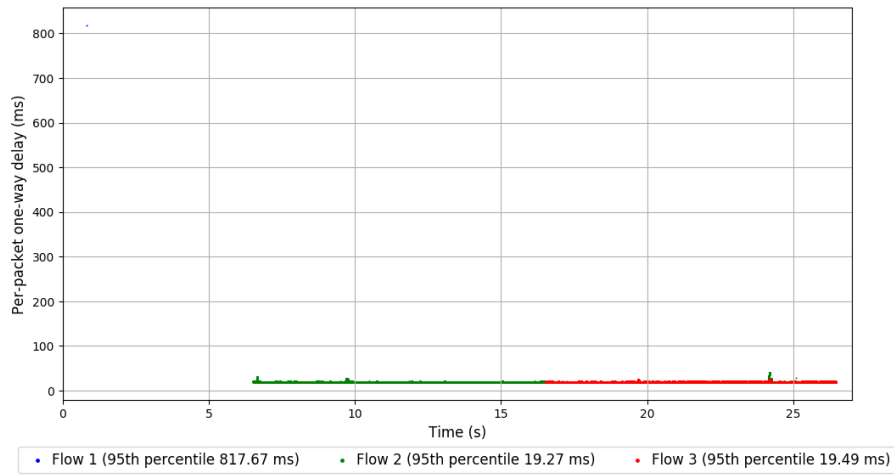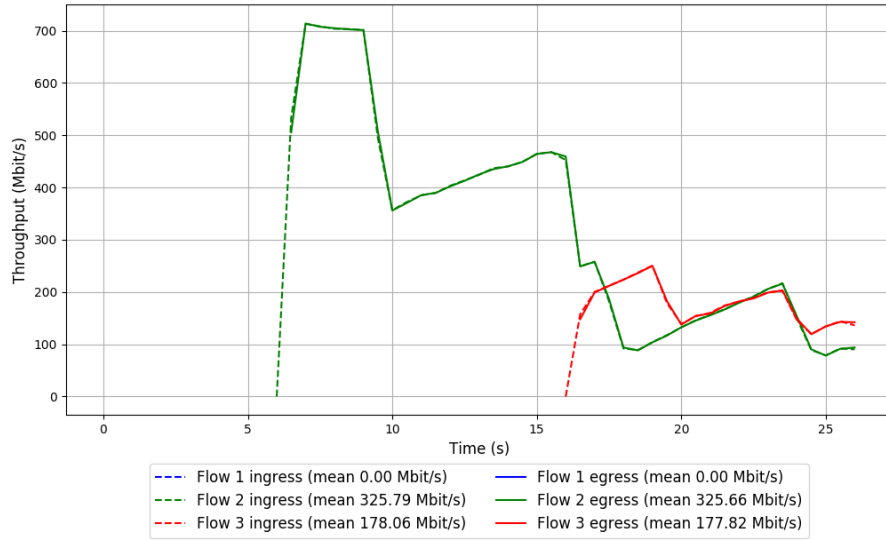
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 11:18:47
End at: 2017-12-20 11:19:17
Local clock offset: -0.009 ms
Remote clock offset: -1.137 ms
```

Run 8: Report of TCP Vegas — Data Link

- - - - Flow 1 ingress (mean 136.36 Mbit/s) —— Flow 1 egress (mean 136.27 Mbit/s)
- - - - Flow 2 ingress (mean 90.58 Mbit/s) —— Flow 2 egress (mean 90.52 Mbit/s)
- - - - Flow 3 ingress (mean 94.53 Mbit/s) —— Flow 3 egress (mean 94.48 Mbit/s)

- Flow 1 (95th percentile 19.64 ms) · Flow 2 (95th percentile 19.68 ms) · Flow 3 (95th percentile 19.62 ms)
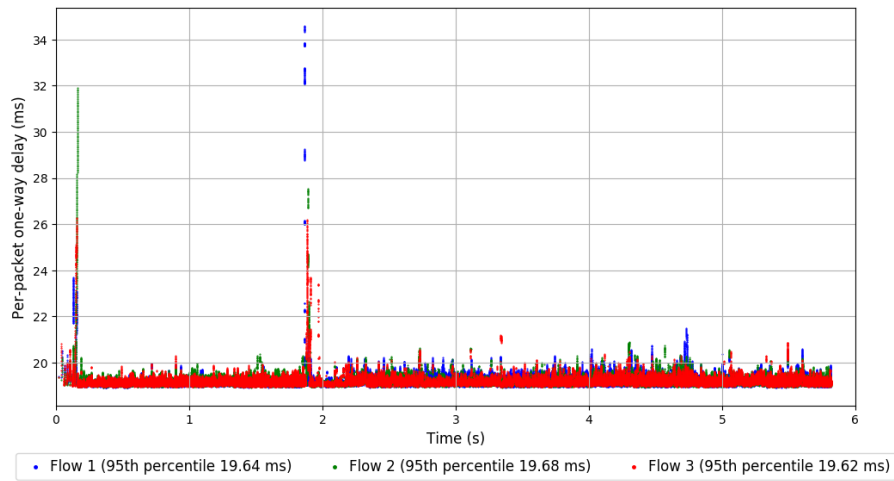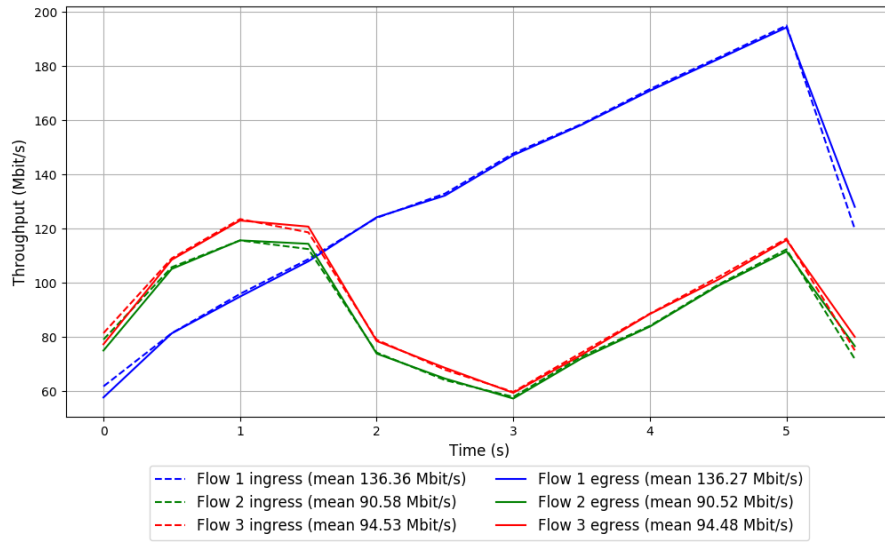
```
Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 11:40:34
End at: 2017-12-20 11:41:04
Local clock offset: -0.133 ms
Remote clock offset: -1.747 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.24 Mbit/s
95th percentile per-packet one-way delay: 19.483 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 230.83 Mbit/s
95th percentile per-packet one-way delay: 19.502 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 159.21 Mbit/s
95th percentile per-packet one-way delay: 19.492 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 162.88 Mbit/s
95th percentile per-packet one-way delay: 19.304 ms
Loss rate: 0.05%
```

Run 9: Report of TCP Vegas — Data Link
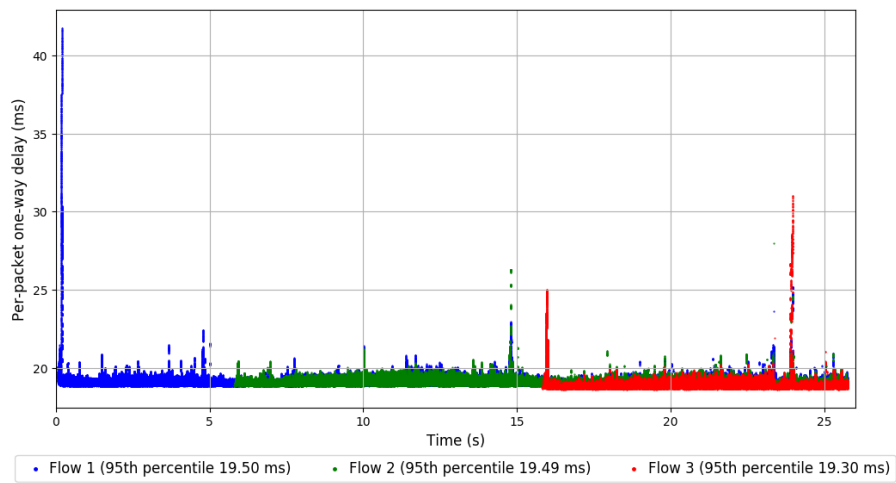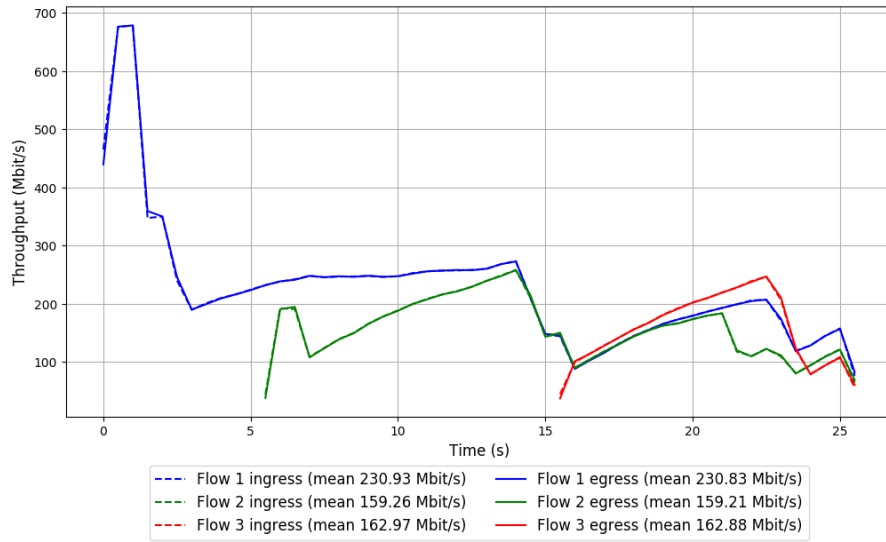
```
Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 12:02:40
End at: 2017-12-20 12:03:10
Local clock offset: -0.186 ms
Remote clock offset: -2.149 ms


# Below is generated by plot.py at 2017-12-20 15:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.40 Mbit/s
95th percentile per-packet one-way delay: 19.364 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 817.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 325.66 Mbit/s
95th percentile per-packet one-way delay: 19.273 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 177.82 Mbit/s
95th percentile per-packet one-way delay: 19.492 ms
Loss rate: 0.13%
```

Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.00 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 325.79 Mbit/s) --- Flow 2 egress (mean 325.66 Mbit/s)
Flow 3 ingress (mean 178.06 Mbit/s) --- Flow 3 egress (mean 177.82 Mbit/s)

Flow 1 (95th percentile 817.67 ms) • Flow 2 (95th percentile 19.27 ms) • Flow 3 (95th percentile 19.49 ms)

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```
Run 1: Statistics of Verus

Start at: 2017-12-20 08:55:19
End at: 2017-12-20 08:55:49
Local clock offset: 1.034 ms
Remote clock offset: -0.68 ms


# Below is generated by plot.py at 2017-12-20 15:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.93 Mbit/s
95th percentile per-packet one-way delay: 35.450 ms
Loss rate: 20.96%
-- Flow 1:
Average throughput: 210.76 Mbit/s
95th percentile per-packet one-way delay: 38.730 ms
Loss rate: 17.78%
-- Flow 2:
Average throughput: 237.20 Mbit/s
95th percentile per-packet one-way delay: 29.635 ms
Loss rate: 24.82%
-- Flow 3:
Average throughput: 228.04 Mbit/s
95th percentile per-packet one-way delay: 37.495 ms
Loss rate: 21.01%
```
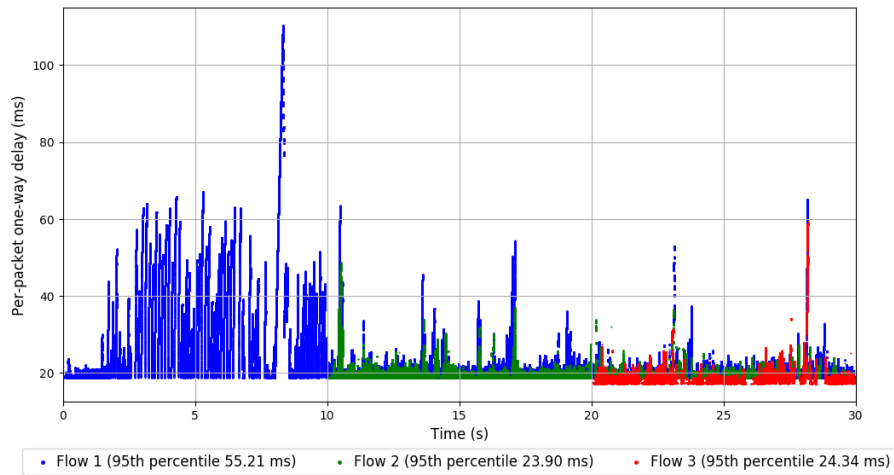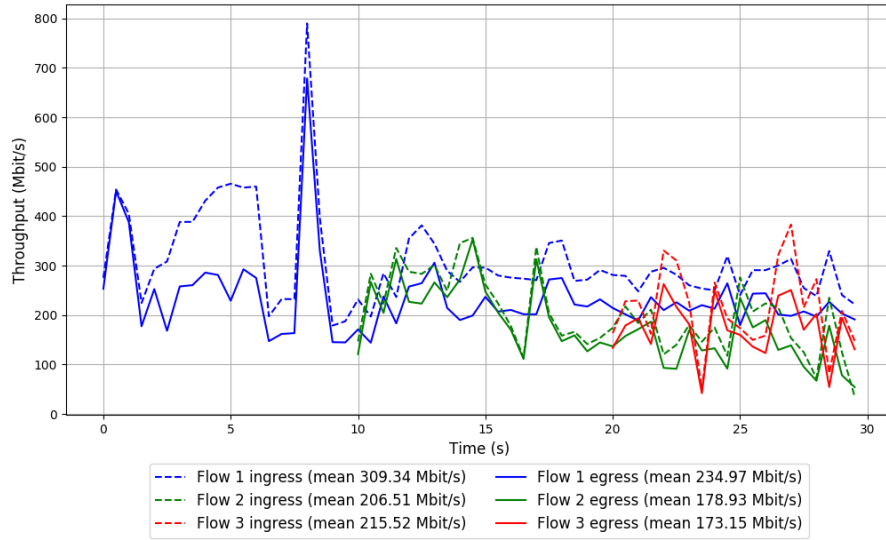
Run 1: Report of Verus — Data Link
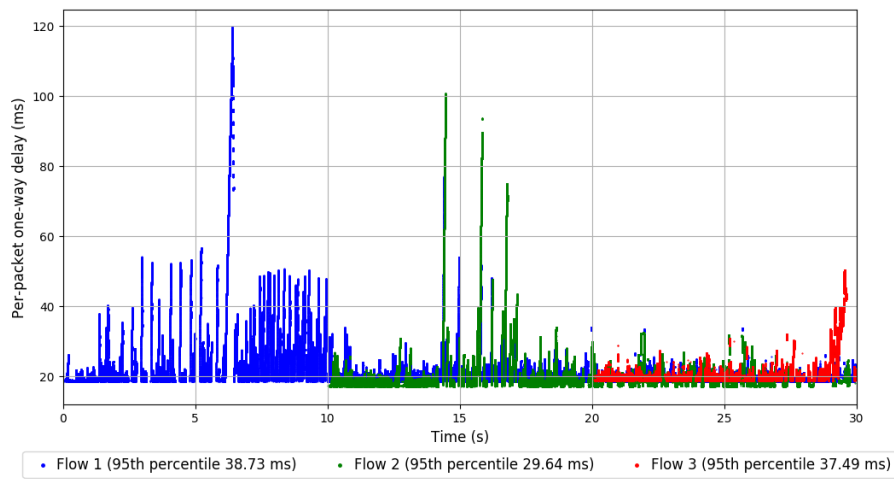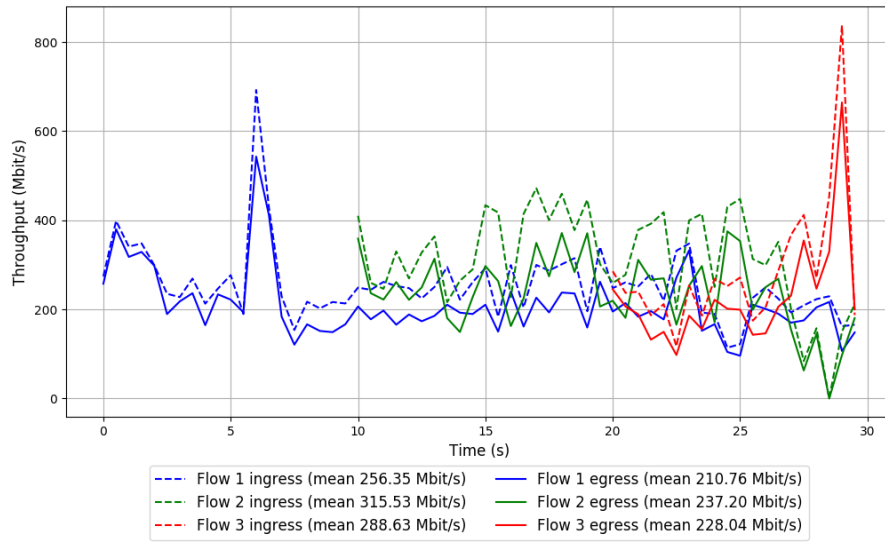
```
Run 2: Statistics of Verus

Start at: 2017-12-20 09:17:08
End at: 2017-12-20 09:17:38
Local clock offset: 0.94 ms
Remote clock offset: -1.079 ms


# Below is generated by plot.py at 2017-12-20 15:28:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 439.44 Mbit/s
95th percentile per-packet one-way delay: 53.637 ms
Loss rate: 22.94%
-- Flow 1:
Average throughput: 229.62 Mbit/s
95th percentile per-packet one-way delay: 59.781 ms
Loss rate: 24.09%
-- Flow 2:
Average throughput: 239.97 Mbit/s
95th percentile per-packet one-way delay: 27.666 ms
Loss rate: 20.97%
-- Flow 3:
Average throughput: 172.31 Mbit/s
95th percentile per-packet one-way delay: 24.586 ms
Loss rate: 23.69%
```

Run 2: Report of Verus — Data Link
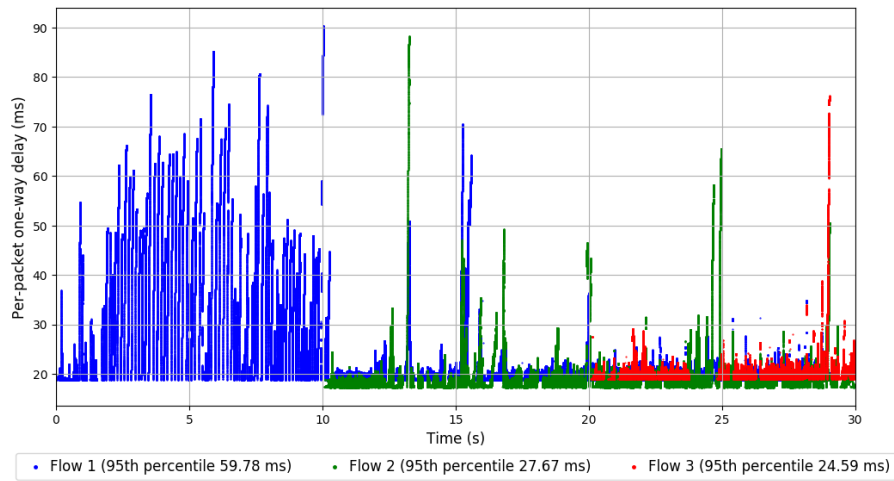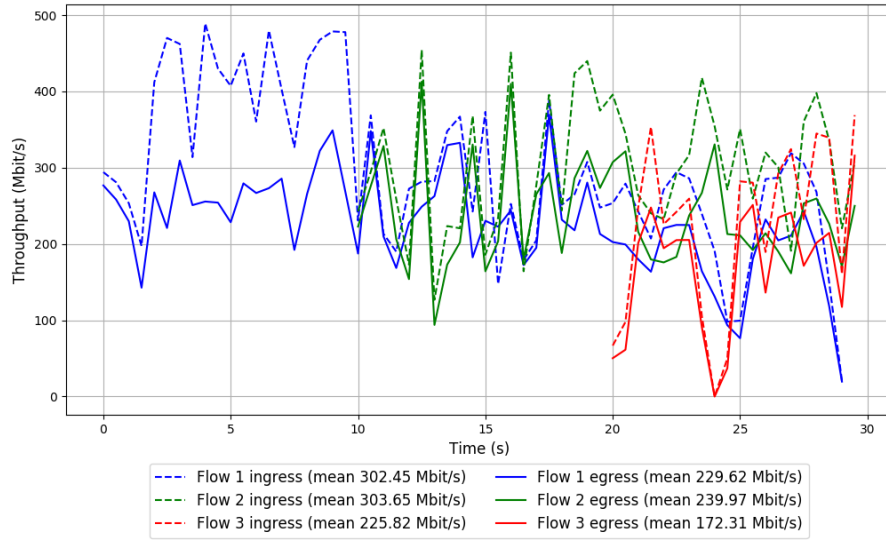
```
Run 3: Statistics of Verus

Start at: 2017-12-20 09:38:58
End at: 2017-12-20 09:39:28
Local clock offset: 0.922 ms
Remote clock offset: -1.085 ms


# Below is generated by plot.py at 2017-12-20 15:28:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.25 Mbit/s
95th percentile per-packet one-way delay: 48.703 ms
Loss rate: 20.64%
-- Flow 1:
Average throughput: 234.97 Mbit/s
95th percentile per-packet one-way delay: 55.213 ms
Loss rate: 24.04%
-- Flow 2:
Average throughput: 178.93 Mbit/s
95th percentile per-packet one-way delay: 23.901 ms
Loss rate: 13.36%
-- Flow 3:
Average throughput: 173.15 Mbit/s
95th percentile per-packet one-way delay: 24.335 ms
Loss rate: 19.66%
```
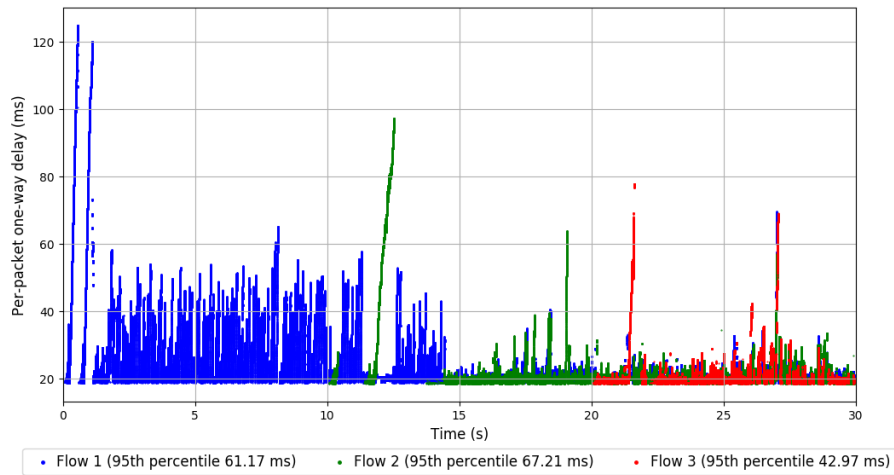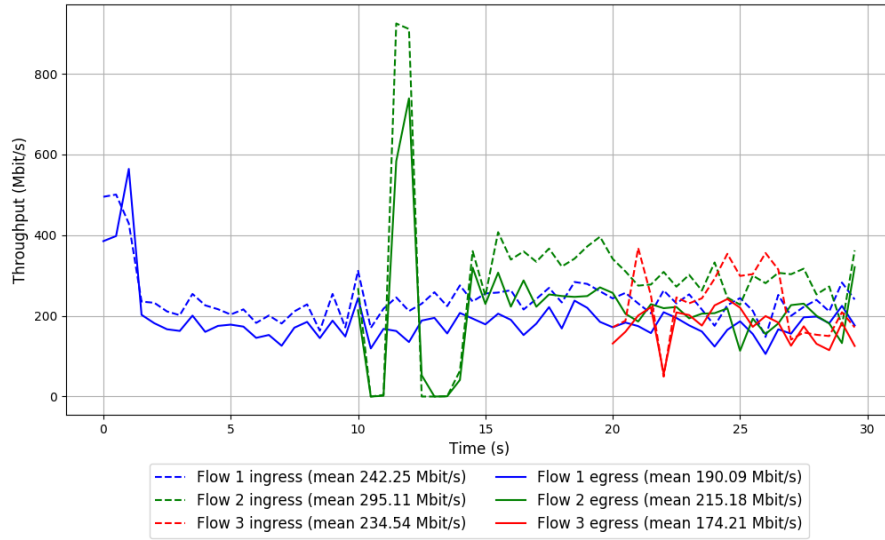
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 309.34 Mbit/s) --- Flow 1 egress (mean 234.97 Mbit/s)
Flow 2 ingress (mean 206.51 Mbit/s) --- Flow 2 egress (mean 178.93 Mbit/s)
Flow 3 ingress (mean 215.52 Mbit/s) --- Flow 3 egress (mean 173.15 Mbit/s)

Flow 1 (95th percentile 55.21 ms)   Flow 2 (95th percentile 23.90 ms)   Flow 3 (95th percentile 24.34 ms)

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```
Run 4: Statistics of Verus

Start at: 2017-12-20 10:00:41
End at: 2017-12-20 10:01:11
Local clock offset: 0.828 ms
Remote clock offset: -0.952 ms


# Below is generated by plot.py at 2017-12-20 15:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.11 Mbit/s
95th percentile per-packet one-way delay: 42.970 ms
Loss rate: 19.94%
-- Flow 1:
Average throughput: 202.15 Mbit/s
95th percentile per-packet one-way delay: 48.676 ms
Loss rate: 21.54%
-- Flow 2:
Average throughput: 230.76 Mbit/s
95th percentile per-packet one-way delay: 26.714 ms
Loss rate: 18.31%
-- Flow 3:
Average throughput: 180.34 Mbit/s
95th percentile per-packet one-way delay: 22.940 ms
Loss rate: 18.47%
```

Run 4: Report of Verus — Data Link

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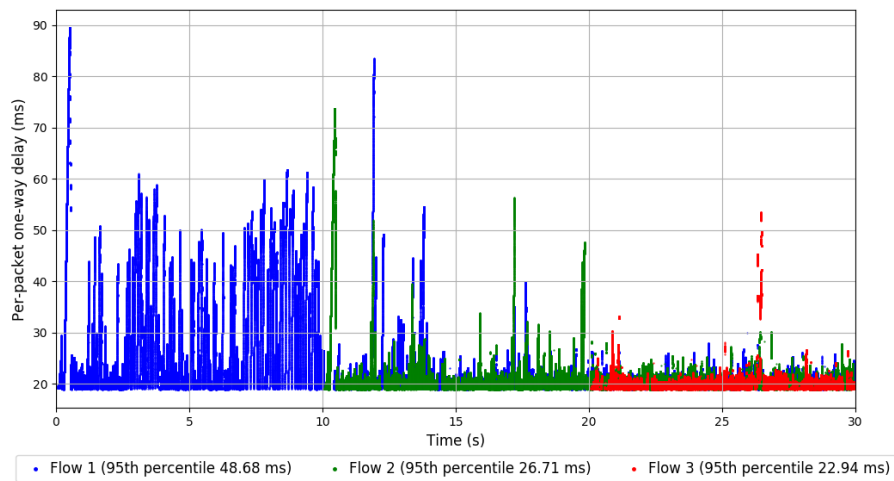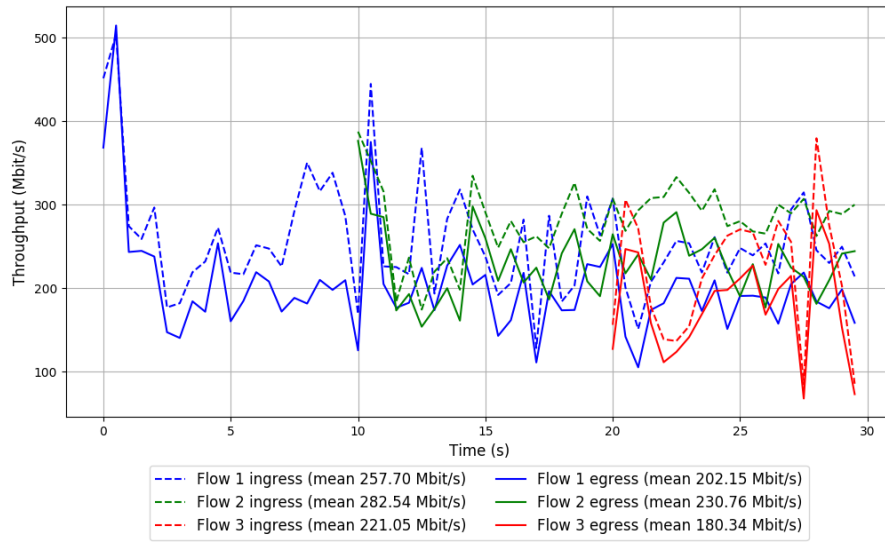
```
Run 5: Statistics of Verus

Start at: 2017-12-20 10:22:36
End at: 2017-12-20 10:23:06
Local clock offset: 0.414 ms
Remote clock offset: -1.377 ms


# Below is generated by plot.py at 2017-12-20 15:28:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.82 Mbit/s
95th percentile per-packet one-way delay: 61.152 ms
Loss rate: 24.28%
-- Flow 1:
Average throughput: 190.09 Mbit/s
95th percentile per-packet one-way delay: 61.174 ms
Loss rate: 21.54%
-- Flow 2:
Average throughput: 215.18 Mbit/s
95th percentile per-packet one-way delay: 67.213 ms
Loss rate: 27.08%
-- Flow 3:
Average throughput: 174.21 Mbit/s
95th percentile per-packet one-way delay: 42.965 ms
Loss rate: 25.72%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 242.25 Mbit/s)   Flow 1 egress (mean 190.09 Mbit/s)
Flow 2 ingress (mean 295.11 Mbit/s)   Flow 2 egress (mean 215.18 Mbit/s)
Flow 3 ingress (mean 234.54 Mbit/s)   Flow 3 egress (mean 174.21 Mbit/s)

Flow 1 (95th percentile 61.17 ms)   Flow 2 (95th percentile 67.21 ms)   Flow 3 (95th percentile 42.97 ms)

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```
Run 6: Statistics of Verus

Start at: 2017-12-20 10:44:17
End at: 2017-12-20 10:44:47
Local clock offset: 0.157 ms
Remote clock offset: -1.123 ms


# Below is generated by plot.py at 2017-12-20 15:30:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.62 Mbit/s
95th percentile per-packet one-way delay: 31.819 ms
Loss rate: 22.78%
-- Flow 1:
Average throughput: 205.97 Mbit/s
95th percentile per-packet one-way delay: 38.055 ms
Loss rate: 24.44%
-- Flow 2:
Average throughput: 239.72 Mbit/s
95th percentile per-packet one-way delay: 26.376 ms
Loss rate: 21.80%
-- Flow 3:
Average throughput: 142.23 Mbit/s
95th percentile per-packet one-way delay: 25.584 ms
Loss rate: 17.76%
```

Run 6: Report of Verus — Data Link
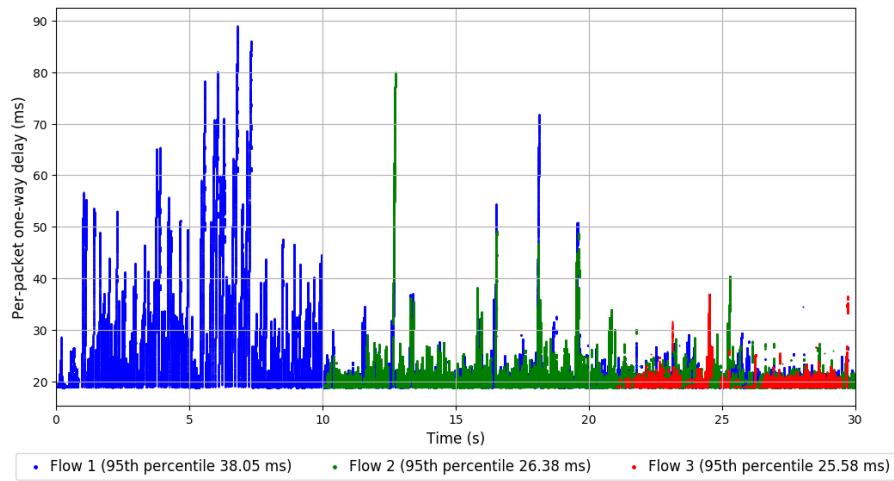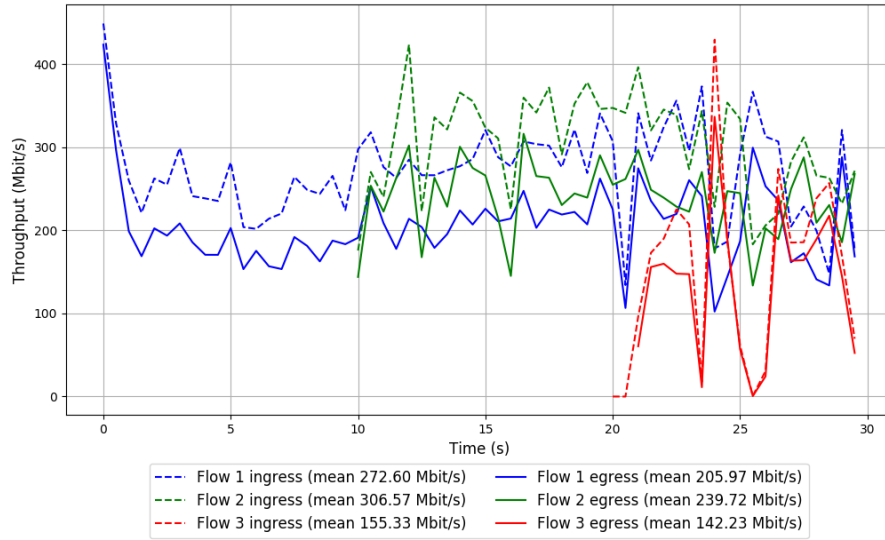
```
Run 7: Statistics of Verus

Start at: 2017-12-20 11:06:20
End at: 2017-12-20 11:06:50
Local clock offset: -0.037 ms
Remote clock offset: -1.146 ms


# Below is generated by plot.py at 2017-12-20 15:30:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.49 Mbit/s
95th percentile per-packet one-way delay: 40.329 ms
Loss rate: 20.28%
-- Flow 1:
Average throughput: 229.02 Mbit/s
95th percentile per-packet one-way delay: 62.464 ms
Loss rate: 21.93%
-- Flow 2:
Average throughput: 219.98 Mbit/s
95th percentile per-packet one-way delay: 24.583 ms
Loss rate: 18.01%
-- Flow 3:
Average throughput: 182.13 Mbit/s
95th percentile per-packet one-way delay: 24.165 ms
Loss rate: 19.21%
```
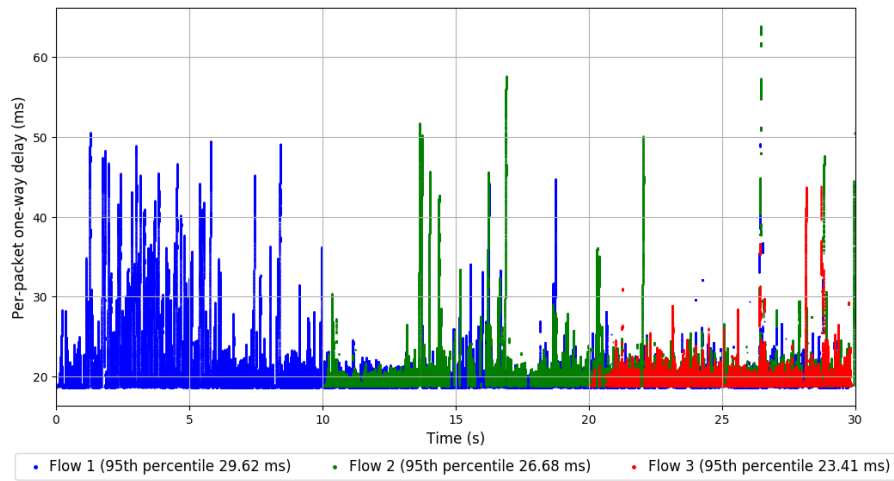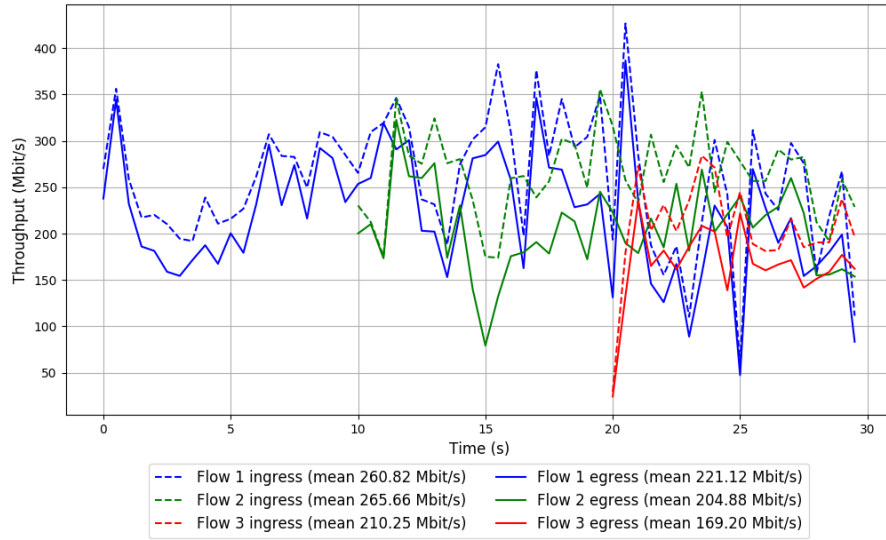
Run 7: Report of Verus — Data Link
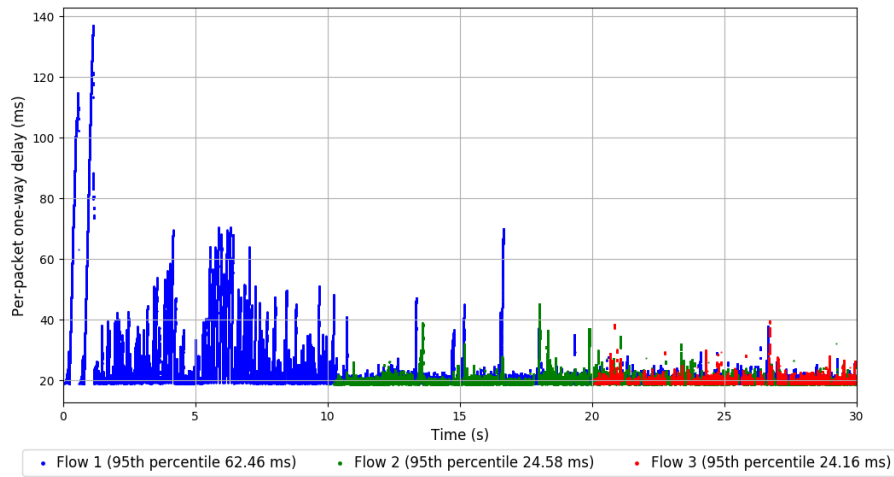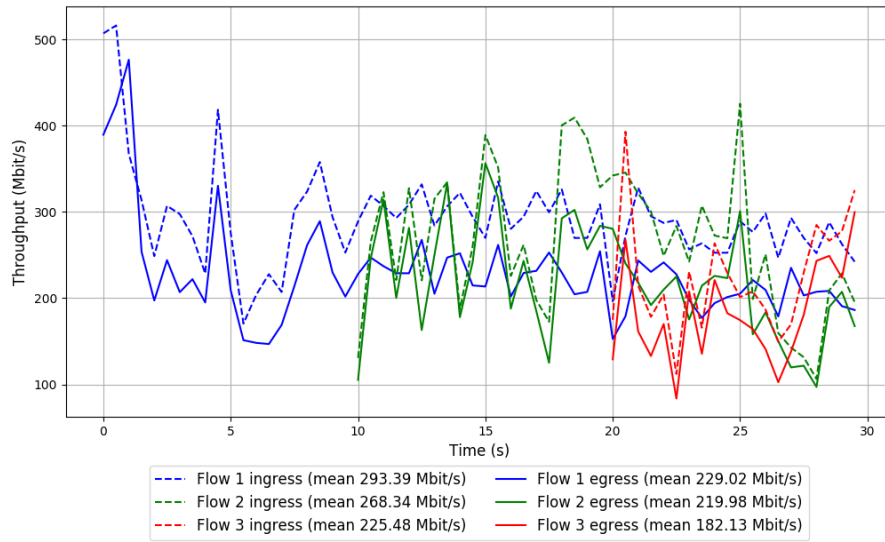
```
Run 8: Statistics of Verus

Start at: 2017-12-20 11:27:55
End at: 2017-12-20 11:28:25
Local clock offset: -0.008 ms
Remote clock offset: -1.487 ms


# Below is generated by plot.py at 2017-12-20 15:30:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.85 Mbit/s
95th percentile per-packet one-way delay: 27.286 ms
Loss rate: 18.01%
-- Flow 1:
Average throughput: 203.32 Mbit/s
95th percentile per-packet one-way delay: 31.278 ms
Loss rate: 15.20%
-- Flow 2:
Average throughput: 207.23 Mbit/s
95th percentile per-packet one-way delay: 25.048 ms
Loss rate: 22.61%
-- Flow 3:
Average throughput: 184.25 Mbit/s
95th percentile per-packet one-way delay: 21.745 ms
Loss rate: 15.96%
```

Run 8: Report of Verus — Data Link
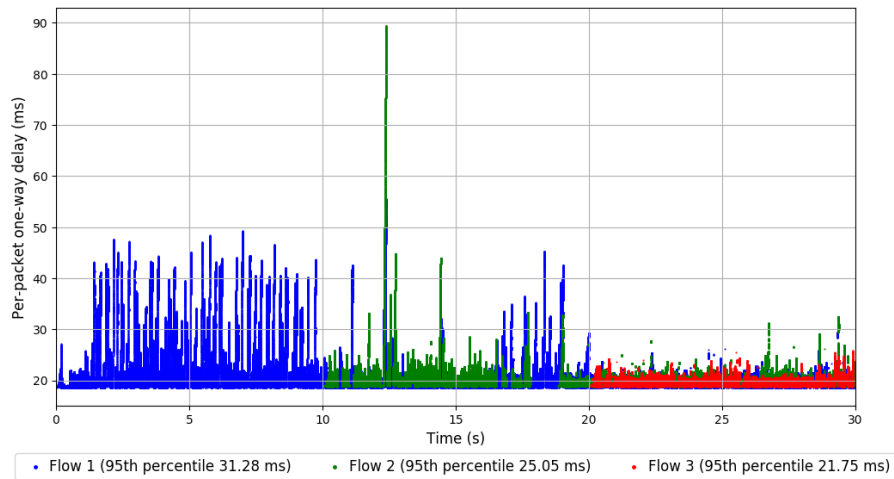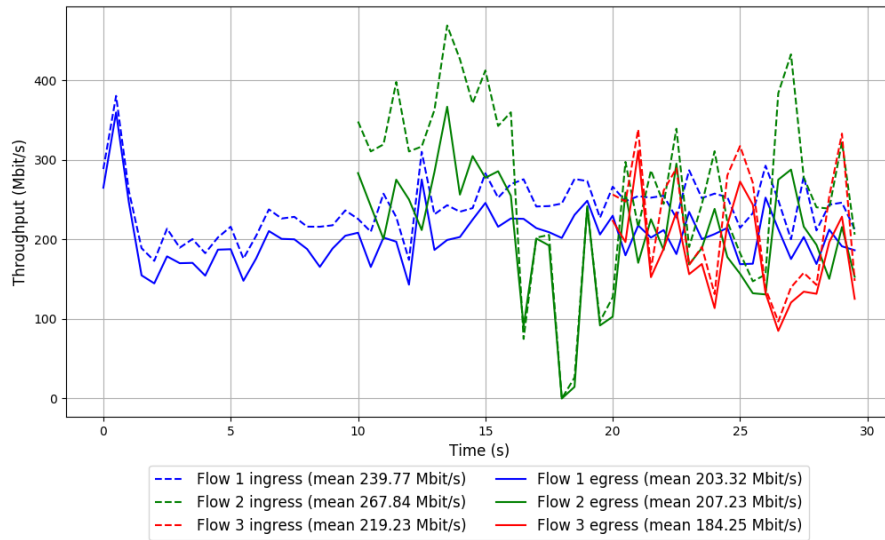
```
Run 9: Statistics of Verus

Start at: 2017-12-20 11:50:02
End at: 2017-12-20 11:50:32
Local clock offset: -0.085 ms
Remote clock offset: -1.942 ms


# Below is generated by plot.py at 2017-12-20 15:32:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.12 Mbit/s
95th percentile per-packet one-way delay: 27.791 ms
Loss rate: 18.47%
-- Flow 1:
Average throughput: 221.12 Mbit/s
95th percentile per-packet one-way delay: 29.617 ms
Loss rate: 15.21%
-- Flow 2:
Average throughput: 204.88 Mbit/s
95th percentile per-packet one-way delay: 26.675 ms
Loss rate: 22.84%
-- Flow 3:
Average throughput: 169.20 Mbit/s
95th percentile per-packet one-way delay: 23.410 ms
Loss rate: 19.53%
```

Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 260.82 Mbit/s) — Flow 1 egress (mean 221.12 Mbit/s)
Flow 2 ingress (mean 265.66 Mbit/s) — Flow 2 egress (mean 204.88 Mbit/s)
Flow 3 ingress (mean 210.25 Mbit/s) — Flow 3 egress (mean 169.20 Mbit/s)

Flow 1 (95th percentile 29.62 ms) — Flow 2 (95th percentile 26.68 ms) — Flow 3 (95th percentile 23.41 ms)

```
Run 10: Statistics of Verus

Start at: 2017-12-20 12:12:01
End at: 2017-12-20 12:12:31
Local clock offset: -0.124 ms
Remote clock offset: -2.073 ms


# Below is generated by plot.py at 2017-12-20 15:35:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.02 Mbit/s
95th percentile per-packet one-way delay: 38.630 ms
Loss rate: 19.43%
-- Flow 1:
Average throughput: 228.02 Mbit/s
95th percentile per-packet one-way delay: 45.614 ms
Loss rate: 18.45%
-- Flow 2:
Average throughput: 212.50 Mbit/s
95th percentile per-packet one-way delay: 26.073 ms
Loss rate: 20.06%
-- Flow 3:
Average throughput: 186.39 Mbit/s
95th percentile per-packet one-way delay: 24.927 ms
Loss rate: 21.53%
```

Run 10: Report of Verus — Data Link

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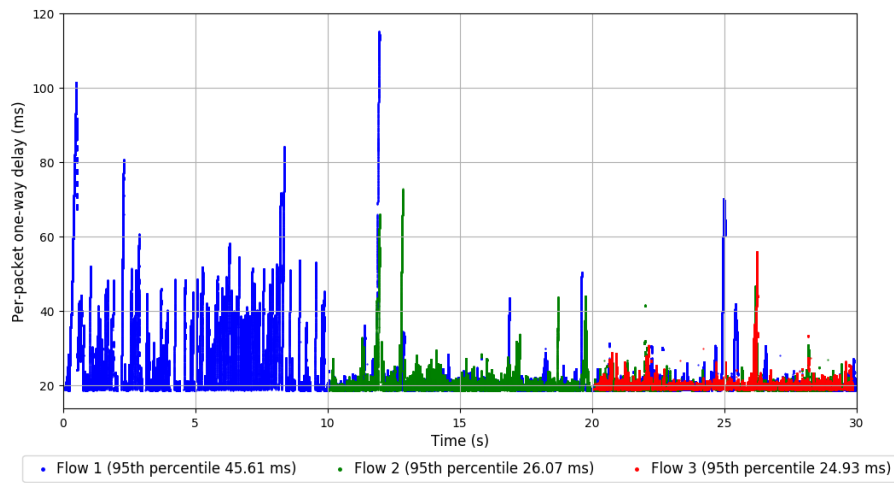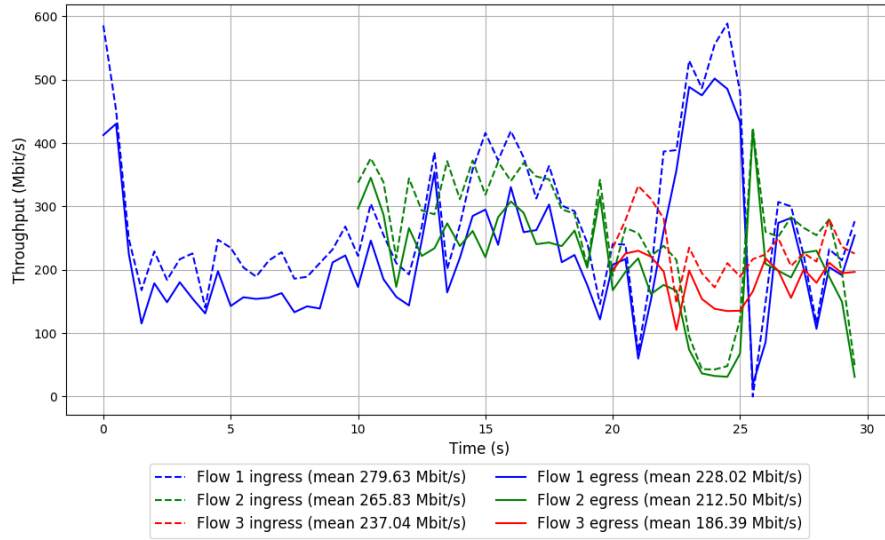
```
Run 1: Statistics of Copa

Start at: 2017-12-20 08:48:59
End at: 2017-12-20 08:49:29
Local clock offset: 0.939 ms
Remote clock offset: -0.781 ms
```

Run 1: Report of Copa — Data Link
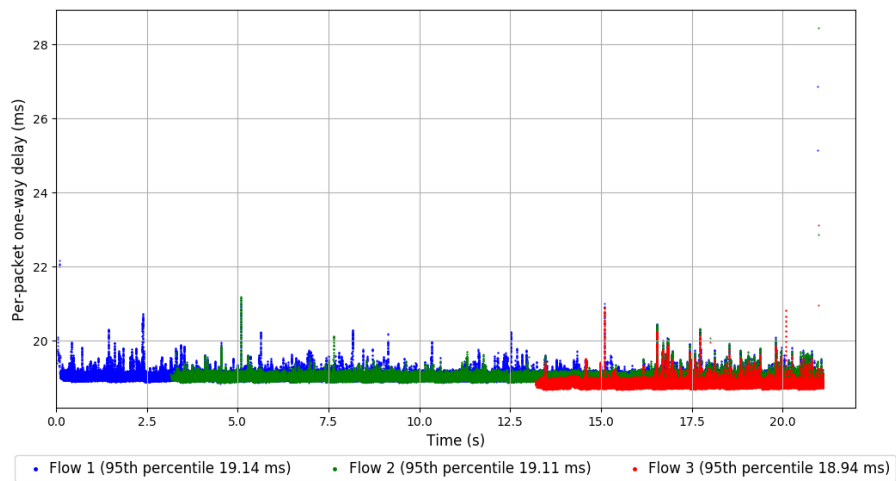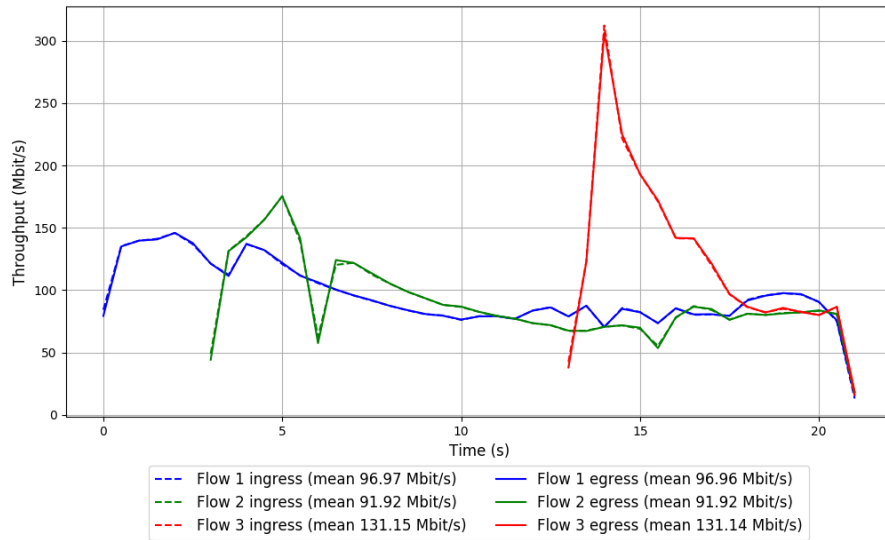
Run 2: Statistics of Copa

Start at: 2017-12-20 09:10:44
End at: 2017-12-20 09:11:14
Local clock offset: 1.038 ms
Remote clock offset: -0.953 ms

Run 2: Report of Copa — Data Link
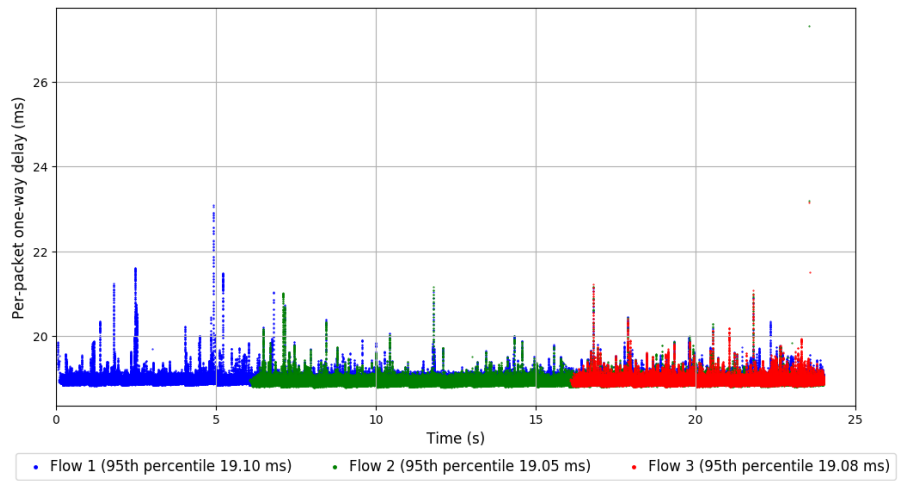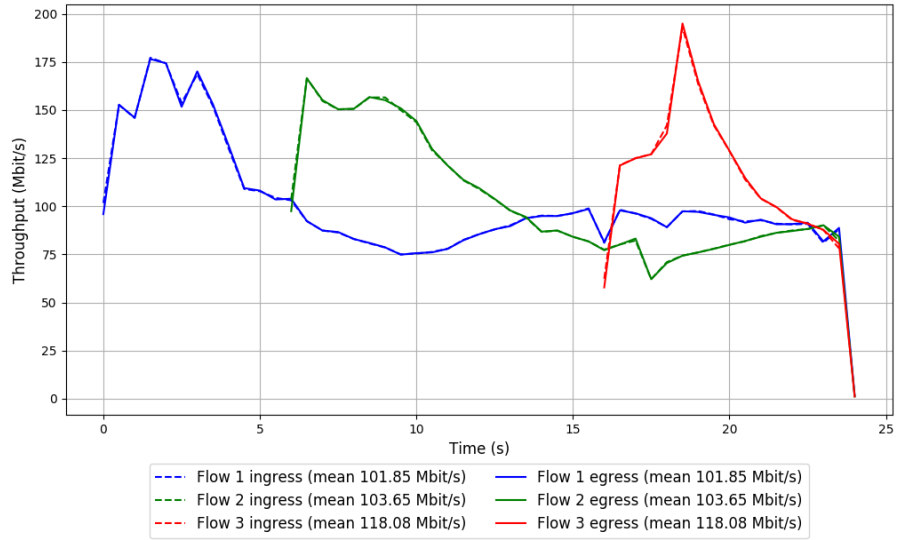
```
Run 3: Statistics of Copa

Start at: 2017-12-20 09:32:36
End at: 2017-12-20 09:33:06
Local clock offset: 0.961 ms
Remote clock offset: -1.108 ms

# Below is generated by plot.py at 2017-12-20 15:35:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.85 Mbit/s
95th percentile per-packet one-way delay: 19.128 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.00 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 106.74 Mbit/s
95th percentile per-packet one-way delay: 19.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 113.94 Mbit/s
95th percentile per-packet one-way delay: 18.903 ms
Loss rate: 0.02%
```

Run 3: Report of Copa — Data Link
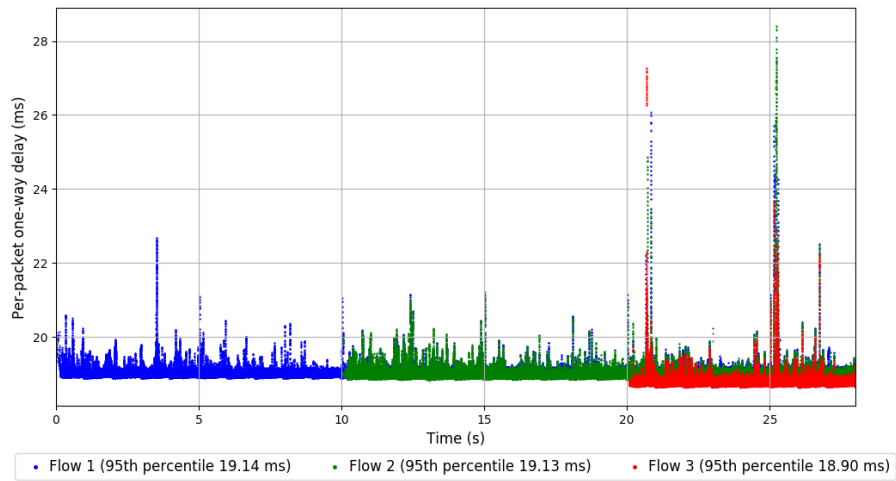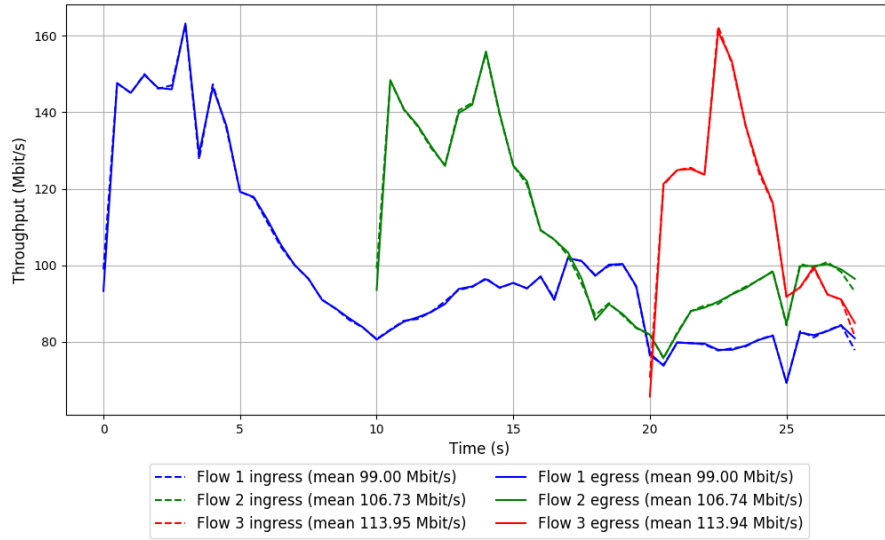
```
Run 4: Statistics of Copa

Start at: 2017-12-20 09:54:21
End at: 2017-12-20 09:54:51
Local clock offset: 0.921 ms
Remote clock offset: -0.995 ms


# Below is generated by plot.py at 2017-12-20 15:35:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 195.61 Mbit/s
95th percentile per-packet one-way delay: 18.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.42 Mbit/s
95th percentile per-packet one-way delay: 18.811 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.81 Mbit/s
95th percentile per-packet one-way delay: 19.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.56 Mbit/s
95th percentile per-packet one-way delay: 19.019 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link
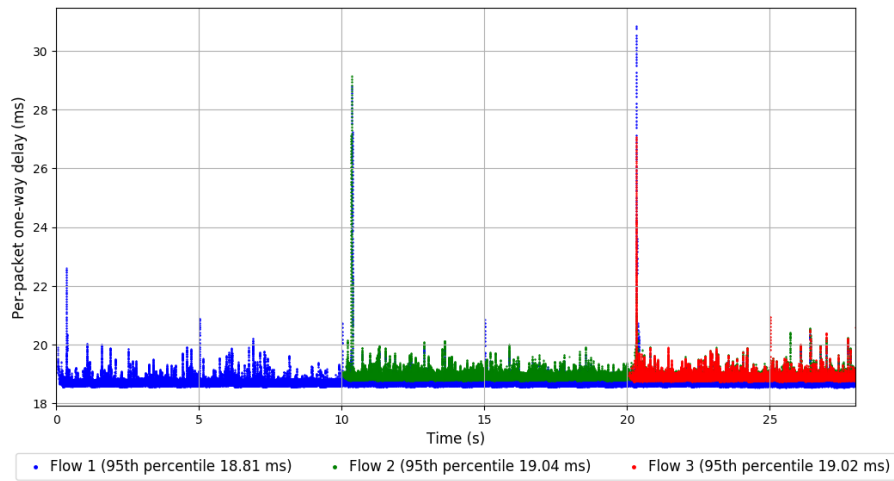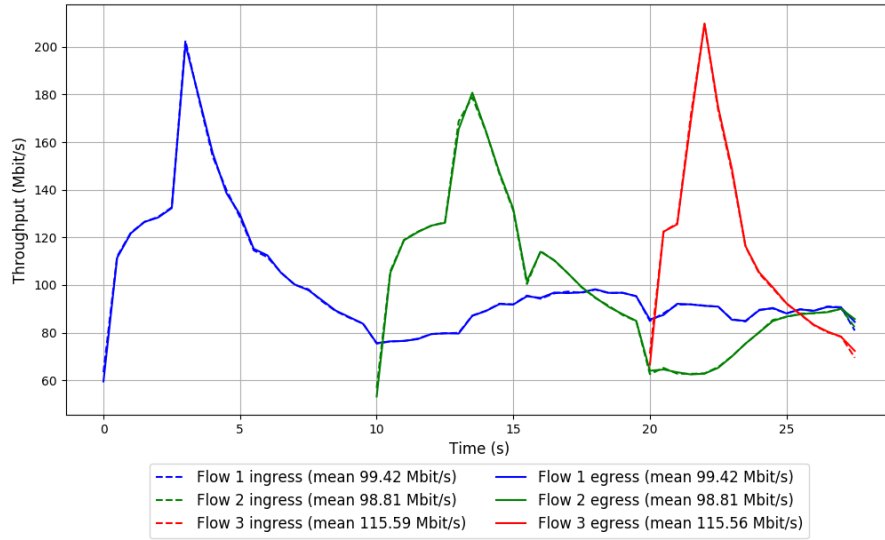
```
Run 5: Statistics of Copa

Start at: 2017-12-20 10:16:10
End at: 2017-12-20 10:16:40
Local clock offset: 0.527 ms
Remote clock offset: -1.245 ms


# Below is generated by plot.py at 2017-12-20 15:35:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.53 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 103.09 Mbit/s
95th percentile per-packet one-way delay: 19.109 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 101.79 Mbit/s
95th percentile per-packet one-way delay: 19.116 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 109.66 Mbit/s
95th percentile per-packet one-way delay: 19.123 ms
Loss rate: 0.04%
```

Run 5: Report of Copa — Data Link
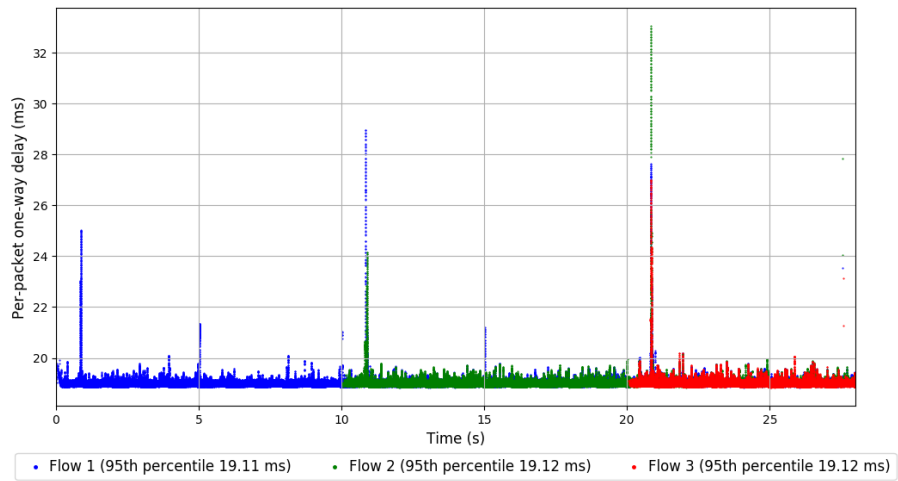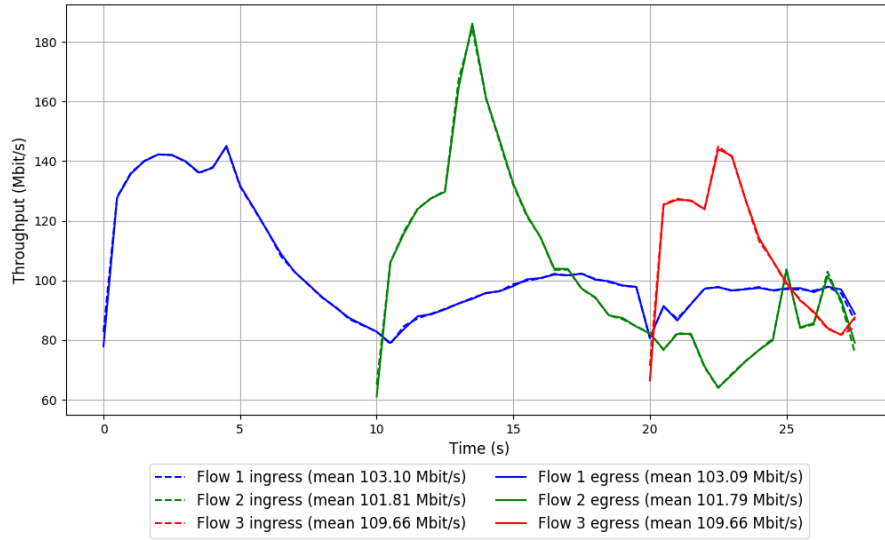
```
Run 6: Statistics of Copa

Start at: 2017-12-20 10:38:03
End at: 2017-12-20 10:38:33
Local clock offset: 0.203 ms
Remote clock offset: -1.217 ms


# Below is generated by plot.py at 2017-12-20 15:35:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 192.60 Mbit/s
95th percentile per-packet one-way delay: 19.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 19.095 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 100.49 Mbit/s
95th percentile per-packet one-way delay: 19.102 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 114.64 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.00%
```
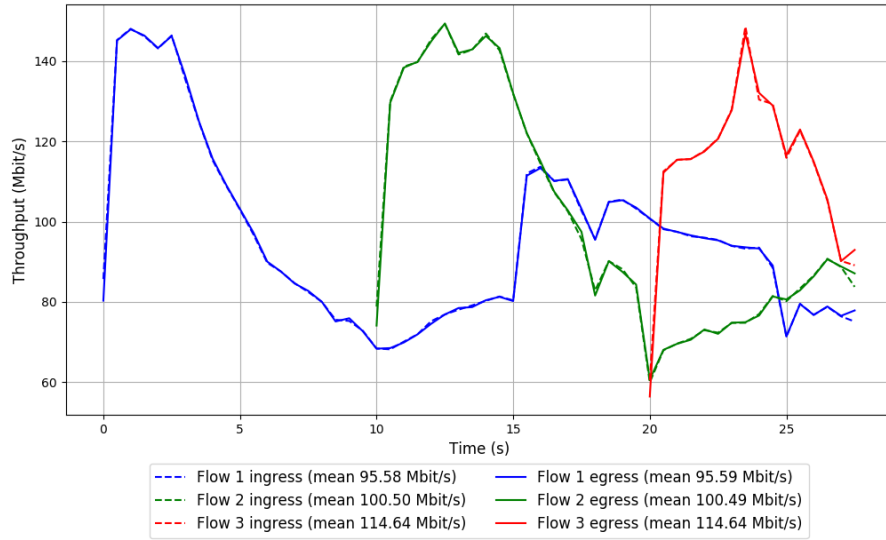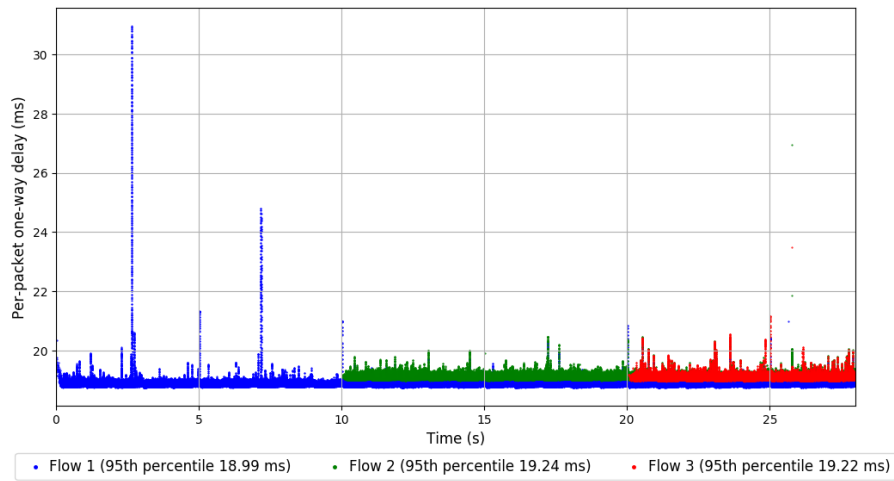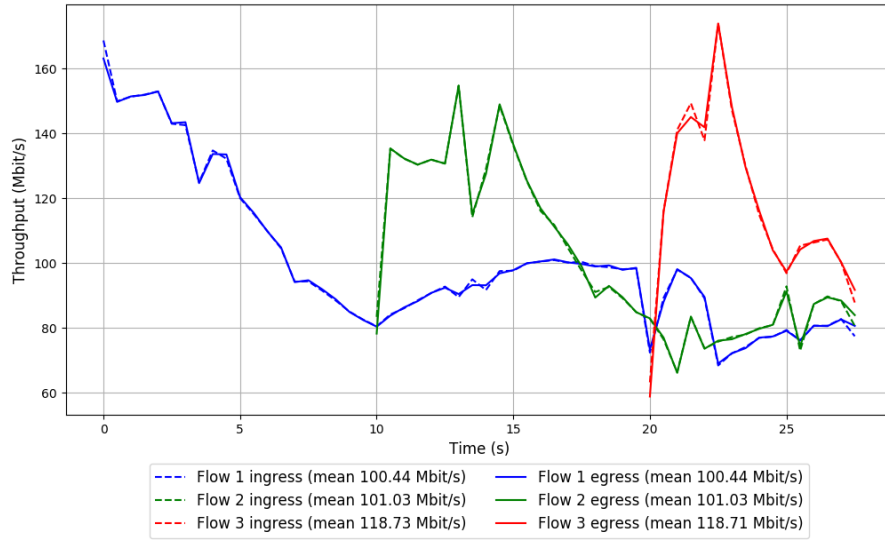
Run 6: Report of Copa — Data Link
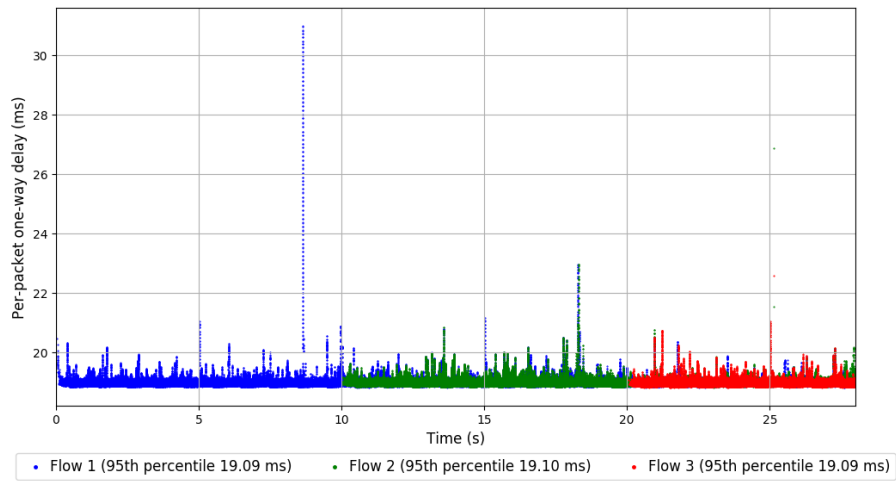
```
Run 7: Statistics of Copa

Start at: 2017-12-20 10:59:58
End at: 2017-12-20 11:00:28
Local clock offset: 0.041 ms
Remote clock offset: -1.132 ms

# Below is generated by plot.py at 2017-12-20 15:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.89 Mbit/s
95th percentile per-packet one-way delay: 19.195 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 100.44 Mbit/s
95th percentile per-packet one-way delay: 18.989 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 101.03 Mbit/s
95th percentile per-packet one-way delay: 19.237 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 118.71 Mbit/s
95th percentile per-packet one-way delay: 19.222 ms
Loss rate: 0.01%
```
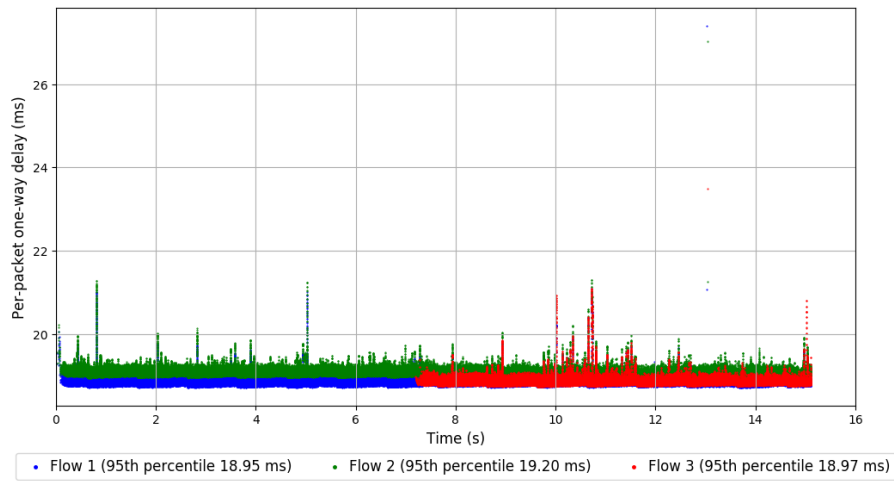
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 100.44 Mbit/s) --- Flow 1 egress (mean 100.44 Mbit/s)
Flow 2 ingress (mean 101.03 Mbit/s) --- Flow 2 egress (mean 101.03 Mbit/s)
Flow 3 ingress (mean 118.73 Mbit/s) --- Flow 3 egress (mean 118.71 Mbit/s)

Flow 1 (95th percentile 18.99 ms) · Flow 2 (95th percentile 19.24 ms) · Flow 3 (95th percentile 19.22 ms)
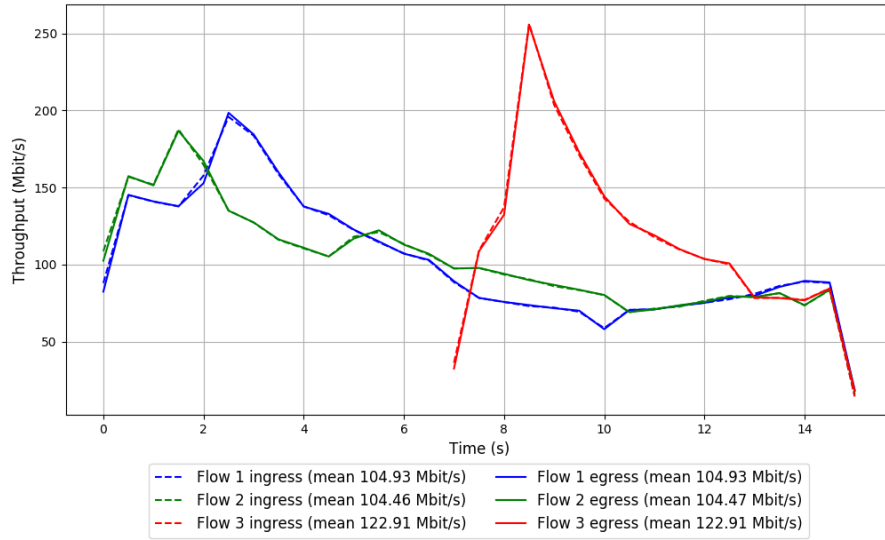
```
Run 8: Statistics of Copa

Start at: 2017-12-20 11:21:38
End at: 2017-12-20 11:22:08
Local clock offset: -0.093 ms
Remote clock offset: -1.277 ms
```

Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 104.93 Mbit/s) Flow 1 egress (mean 104.93 Mbit/s)
Flow 2 ingress (mean 104.46 Mbit/s) Flow 2 egress (mean 104.47 Mbit/s)
Flow 3 ingress (mean 122.91 Mbit/s) Flow 3 egress (mean 122.91 Mbit/s)

Flow 1 (95th percentile 18.95 ms)   Flow 2 (95th percentile 19.20 ms)   Flow 3 (95th percentile 18.97 ms)

```
Run 9: Statistics of Copa

Start at: 2017-12-20 11:43:37
End at: 2017-12-20 11:44:07
Local clock offset: -0.104 ms
Remote clock offset: -1.826 ms


# Below is generated by plot.py at 2017-12-20 15:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.52 Mbit/s
95th percentile per-packet one-way delay: 19.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.58 Mbit/s
95th percentile per-packet one-way delay: 19.058 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 100.23 Mbit/s
95th percentile per-packet one-way delay: 18.820 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 121.97 Mbit/s
95th percentile per-packet one-way delay: 18.856 ms
Loss rate: 0.00%
```
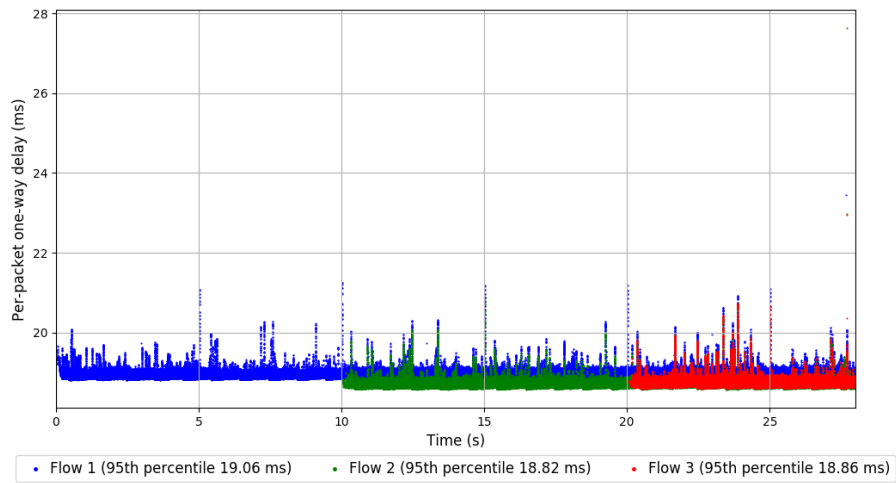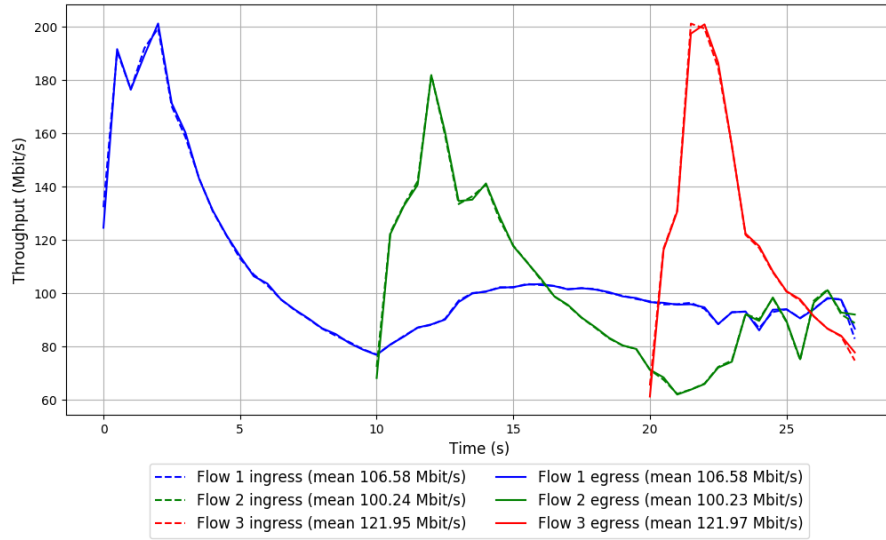
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2017-12-20 12:05:39
End at: 2017-12-20 12:06:09
Local clock offset: -0.1 ms
Remote clock offset: -2.195 ms


# Below is generated by plot.py at 2017-12-20 15:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.95 Mbit/s
95th percentile per-packet one-way delay: 19.067 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.07 Mbit/s
95th percentile per-packet one-way delay: 19.107 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 101.23 Mbit/s
95th percentile per-packet one-way delay: 17.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.46 Mbit/s
95th percentile per-packet one-way delay: 19.109 ms
Loss rate: 0.00%
```
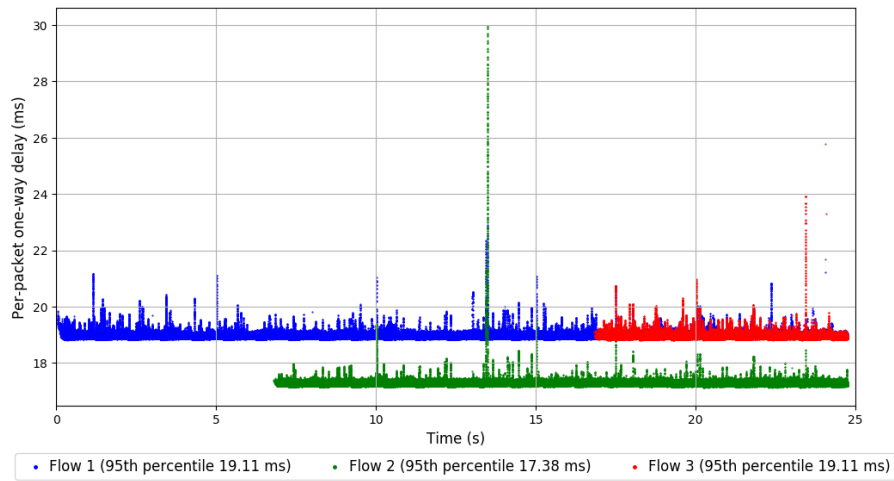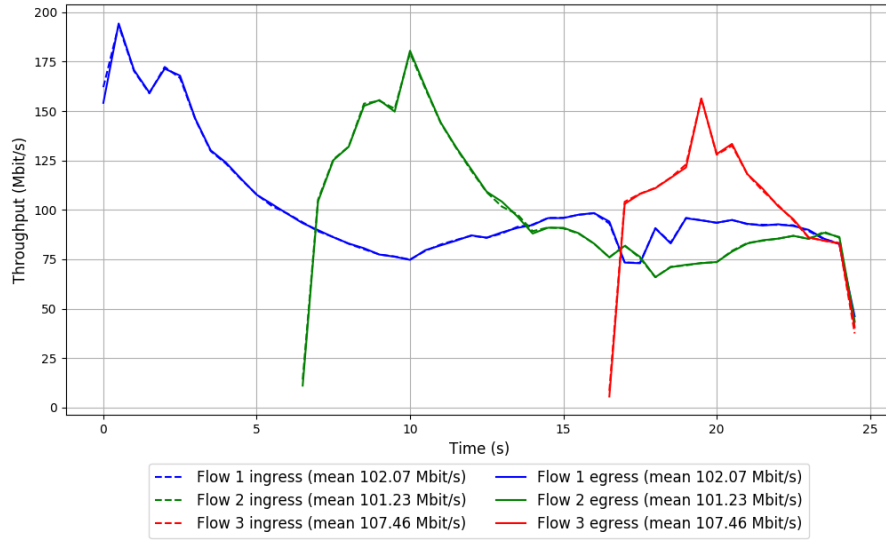
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2017-12-20 08:51:48
End at: 2017-12-20 08:52:18
Local clock offset: 0.904 ms
Remote clock offset: -0.773 ms

# Below is generated by plot.py at 2017-12-20 15:50:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 951.35 Mbit/s
95th percentile per-packet one-way delay: 28.097 ms
Loss rate: 11.41%
-- Flow 1:
Average throughput: 578.51 Mbit/s
95th percentile per-packet one-way delay: 31.205 ms
Loss rate: 9.09%
-- Flow 2:
Average throughput: 397.39 Mbit/s
95th percentile per-packet one-way delay: 20.942 ms
Loss rate: 14.41%
-- Flow 3:
Average throughput: 327.07 Mbit/s
95th percentile per-packet one-way delay: 20.304 ms
Loss rate: 15.65%
```
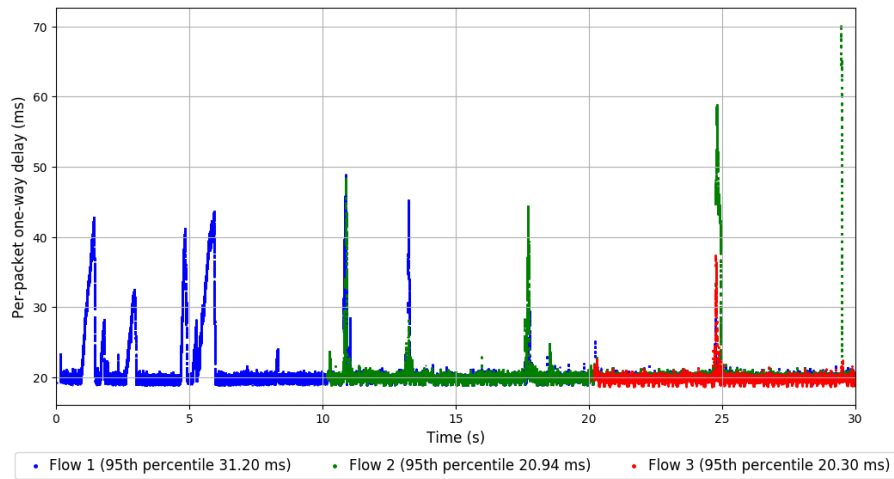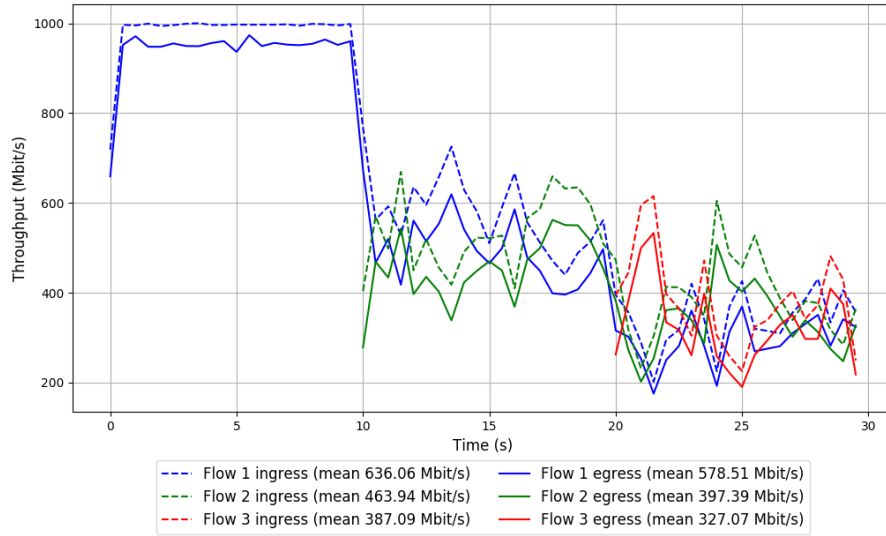
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 636.06 Mbit/s) — — — Flow 1 egress (mean 578.51 Mbit/s)
Flow 2 ingress (mean 463.94 Mbit/s) — — — Flow 2 egress (mean 397.39 Mbit/s)
Flow 3 ingress (mean 387.09 Mbit/s) — — — Flow 3 egress (mean 327.07 Mbit/s)

• Flow 1 (95th percentile 31.20 ms)   • Flow 2 (95th percentile 20.94 ms)   • Flow 3 (95th percentile 20.30 ms)

```
Run 2: Statistics of FillP

Start at: 2017-12-20 09:13:35
End at: 2017-12-20 09:14:05
Local clock offset: 0.934 ms
Remote clock offset: -1.033 ms


# Below is generated by plot.py at 2017-12-20 15:50:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 948.74 Mbit/s
95th percentile per-packet one-way delay: 39.183 ms
Loss rate: 10.98%
-- Flow 1:
Average throughput: 551.69 Mbit/s
95th percentile per-packet one-way delay: 44.824 ms
Loss rate: 8.72%
-- Flow 2:
Average throughput: 436.87 Mbit/s
95th percentile per-packet one-way delay: 35.007 ms
Loss rate: 13.25%
-- Flow 3:
Average throughput: 320.80 Mbit/s
95th percentile per-packet one-way delay: 20.378 ms
Loss rate: 15.76%
```
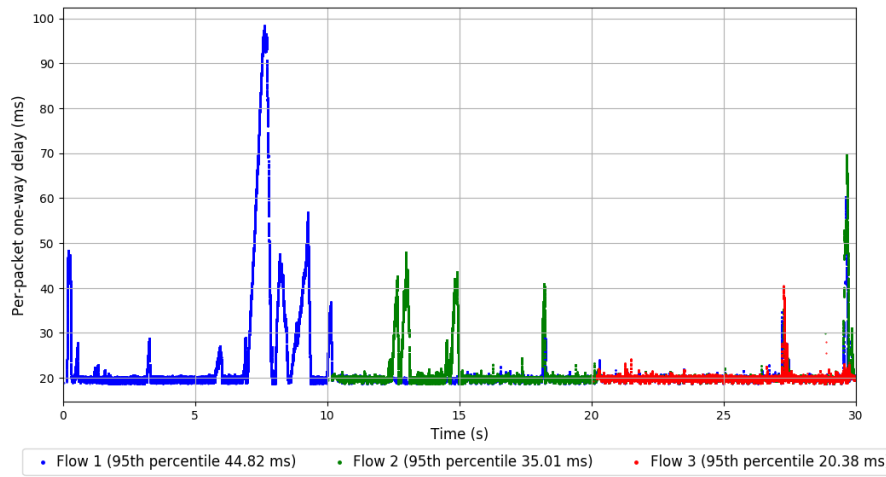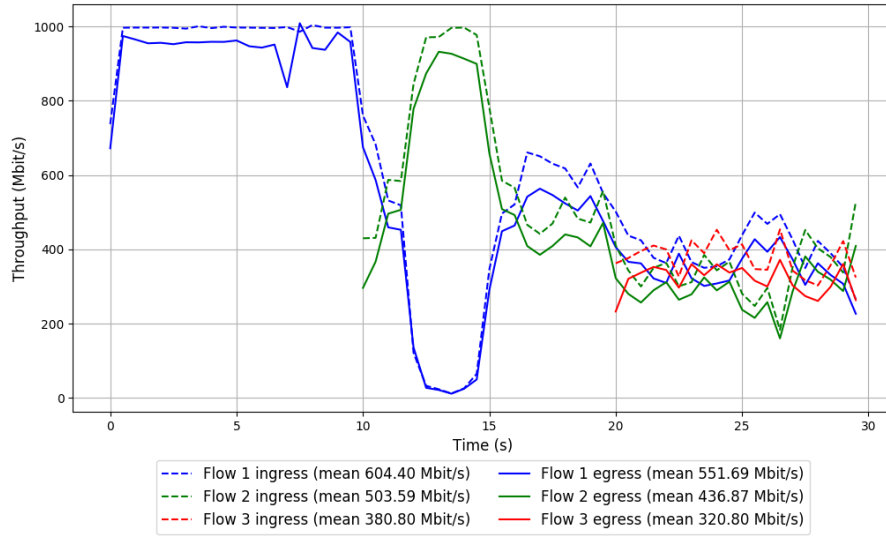
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2017-12-20 09:35:24
End at: 2017-12-20 09:35:54
Local clock offset: 0.948 ms
Remote clock offset: -1.104 ms


# Below is generated by plot.py at 2017-12-20 15:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 939.23 Mbit/s
95th percentile per-packet one-way delay: 54.669 ms
Loss rate: 11.77%
-- Flow 1:
Average throughput: 646.52 Mbit/s
95th percentile per-packet one-way delay: 67.044 ms
Loss rate: 9.86%
-- Flow 2:
Average throughput: 280.95 Mbit/s
95th percentile per-packet one-way delay: 20.259 ms
Loss rate: 15.83%
-- Flow 3:
Average throughput: 318.83 Mbit/s
95th percentile per-packet one-way delay: 20.307 ms
Loss rate: 15.54%
```
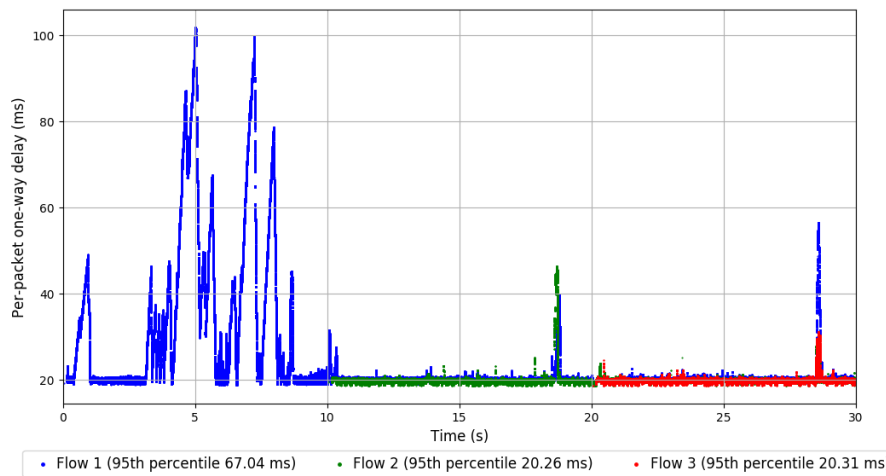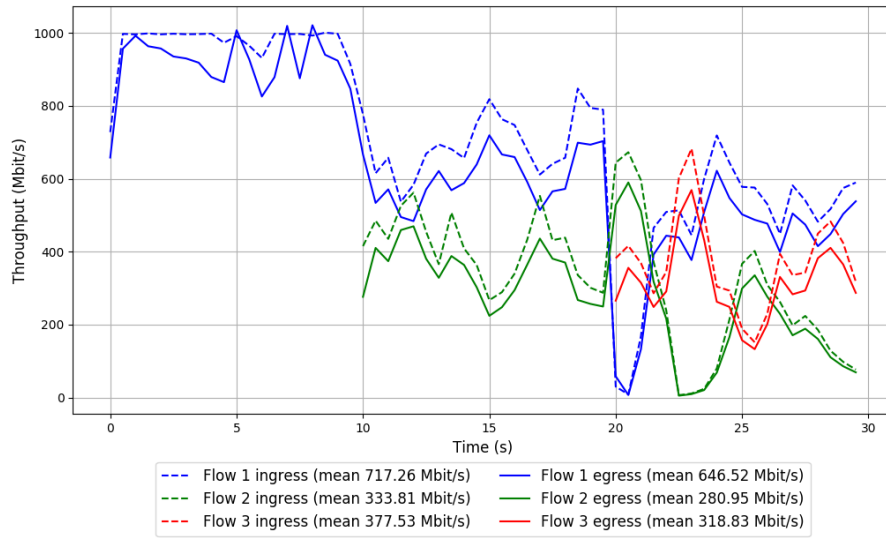
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2017-12-20 09:57:08
End at: 2017-12-20 09:57:38
Local clock offset: 0.902 ms
Remote clock offset: -0.889 ms

# Below is generated by plot.py at 2017-12-20 15:50:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 942.59 Mbit/s
95th percentile per-packet one-way delay: 61.424 ms
Loss rate: 11.70%
-- Flow 1:
Average throughput: 565.77 Mbit/s
95th percentile per-packet one-way delay: 76.501 ms
Loss rate: 9.45%
-- Flow 2:
Average throughput: 392.56 Mbit/s
95th percentile per-packet one-way delay: 20.329 ms
Loss rate: 14.49%
-- Flow 3:
Average throughput: 348.43 Mbit/s
95th percentile per-packet one-way delay: 20.211 ms
Loss rate: 15.70%
```
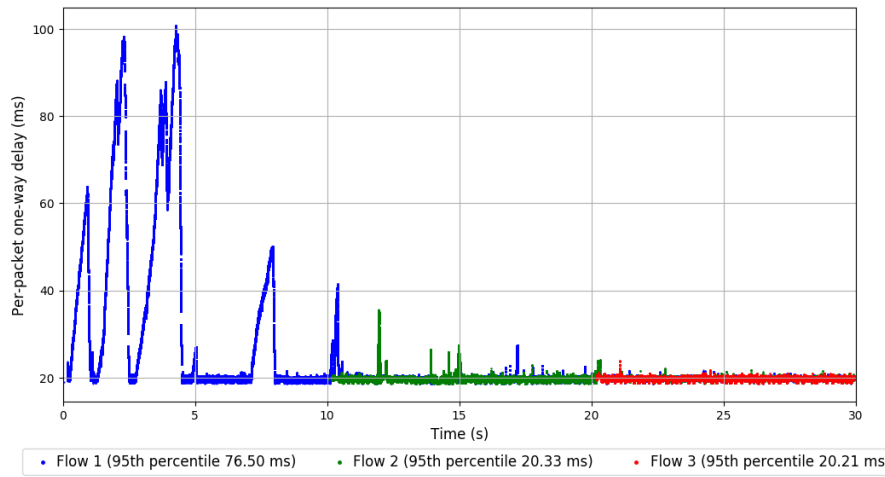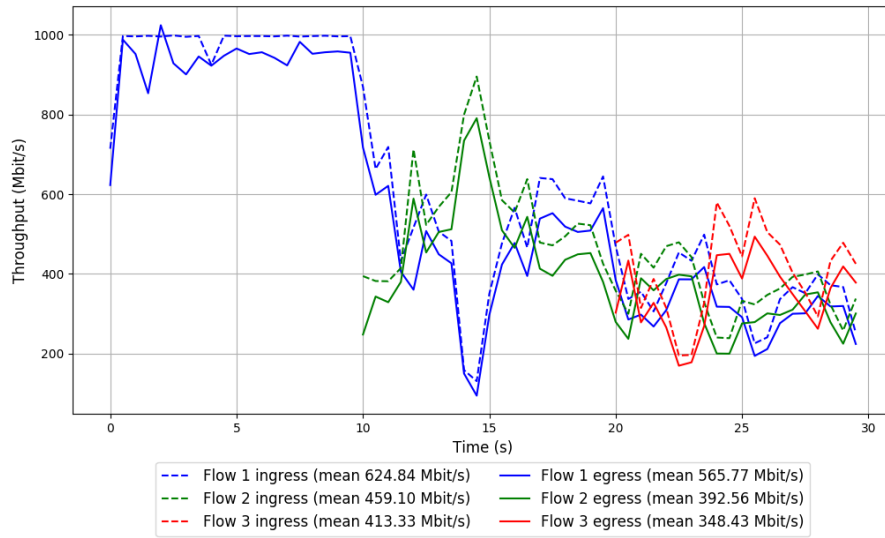
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 624.84 Mbit/s)   Flow 1 egress (mean 565.77 Mbit/s)
Flow 2 ingress (mean 459.10 Mbit/s)   Flow 2 egress (mean 392.56 Mbit/s)
Flow 3 ingress (mean 413.33 Mbit/s)   Flow 3 egress (mean 348.43 Mbit/s)

Flow 1 (95th percentile 76.50 ms)   Flow 2 (95th percentile 20.33 ms)   Flow 3 (95th percentile 20.21 ms)

251

```
Run 5: Statistics of FillP

Start at: 2017-12-20 10:19:04
End at: 2017-12-20 10:19:34
Local clock offset: 0.464 ms
Remote clock offset: -1.41 ms

# Below is generated by plot.py at 2017-12-20 15:50:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 930.74 Mbit/s
95th percentile per-packet one-way delay: 52.496 ms
Loss rate: 12.30%
-- Flow 1:
Average throughput: 573.64 Mbit/s
95th percentile per-packet one-way delay: 72.344 ms
Loss rate: 10.09%
-- Flow 2:
Average throughput: 356.34 Mbit/s
95th percentile per-packet one-way delay: 20.180 ms
Loss rate: 15.88%
-- Flow 3:
Average throughput: 361.34 Mbit/s
95th percentile per-packet one-way delay: 20.180 ms
Loss rate: 15.14%
```
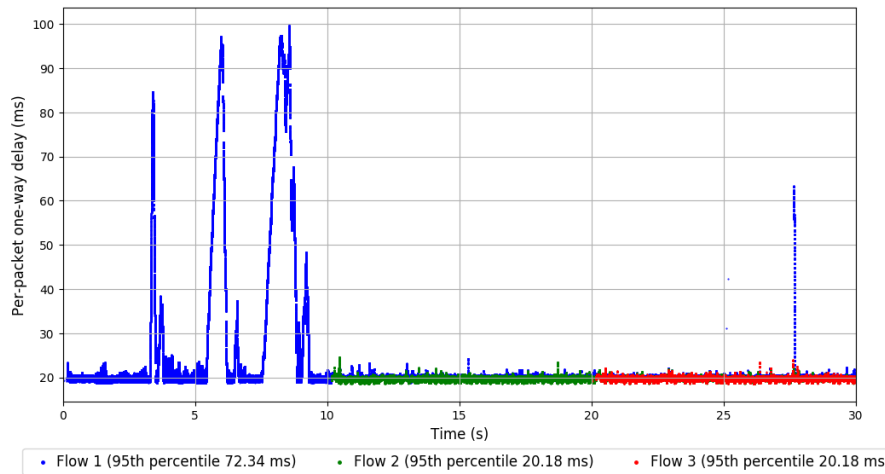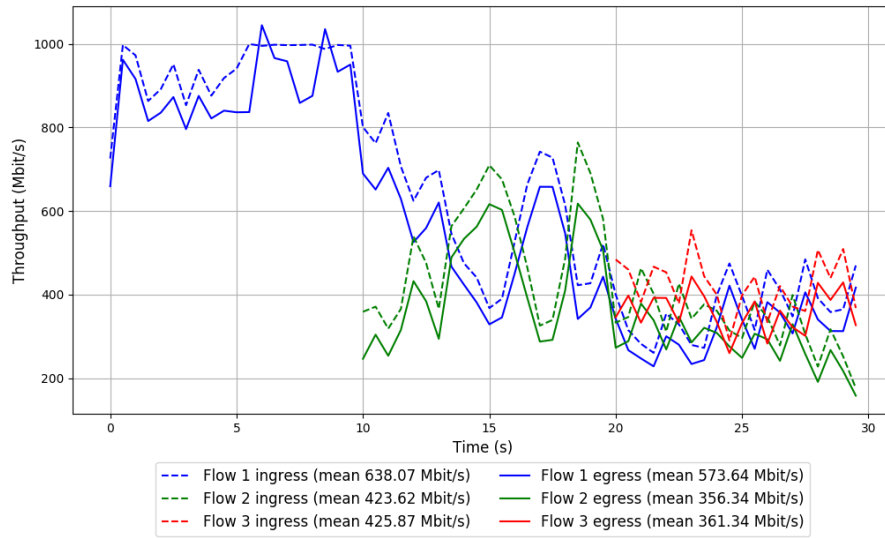
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 638.07 Mbit/s)   Flow 1 egress (mean 573.64 Mbit/s)
Flow 2 ingress (mean 423.62 Mbit/s)   Flow 2 egress (mean 356.34 Mbit/s)
Flow 3 ingress (mean 425.87 Mbit/s)   Flow 3 egress (mean 361.34 Mbit/s)

Flow 1 (95th percentile 72.34 ms)   Flow 2 (95th percentile 20.18 ms)   Flow 3 (95th percentile 20.18 ms)

253

```
Run 6: Statistics of FillP

Start at: 2017-12-20 10:40:53
End at: 2017-12-20 10:41:23
Local clock offset: 0.265 ms
Remote clock offset: -1.166 ms


# Below is generated by plot.py at 2017-12-20 15:50:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 800.74 Mbit/s
95th percentile per-packet one-way delay: 80.468 ms
Loss rate: 10.63%
-- Flow 1:
Average throughput: 462.49 Mbit/s
95th percentile per-packet one-way delay: 81.877 ms
Loss rate: 9.84%
-- Flow 2:
Average throughput: 465.64 Mbit/s
95th percentile per-packet one-way delay: 80.372 ms
Loss rate: 10.81%
-- Flow 3:
Average throughput: 92.35 Mbit/s
95th percentile per-packet one-way delay: 43.598 ms
Loss rate: 19.71%
```
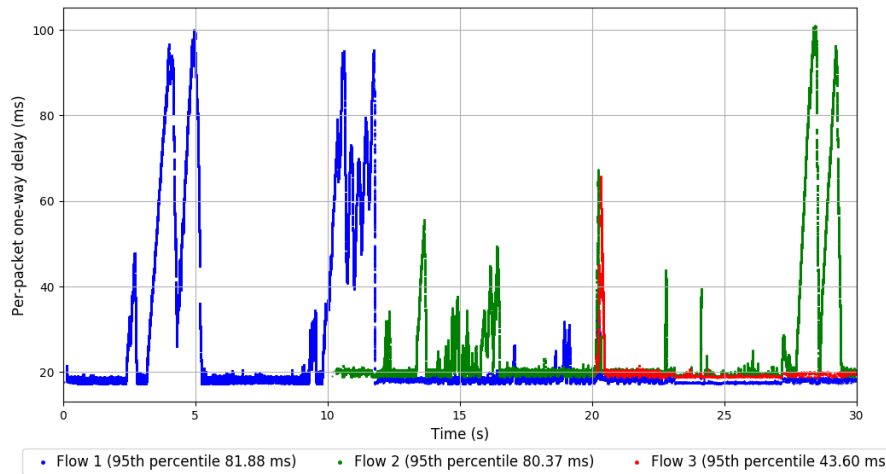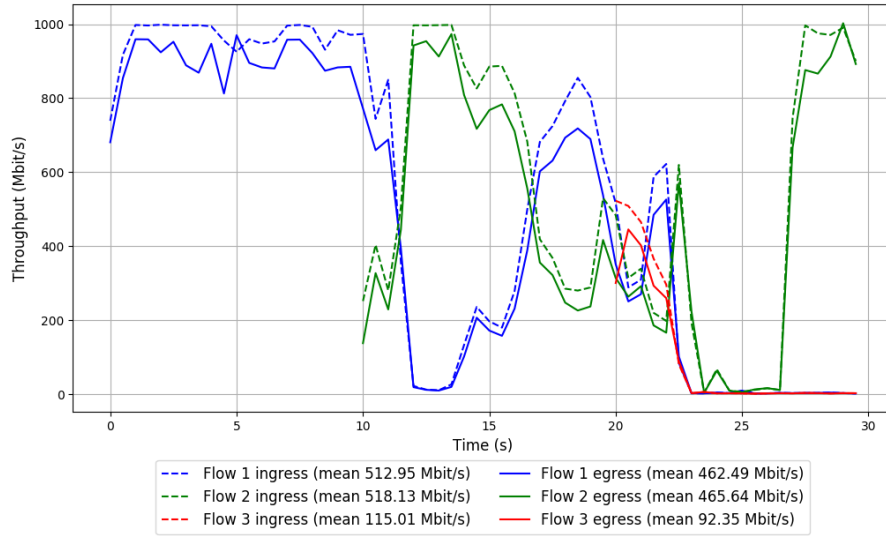
Run 6: Report of FillP — Data Link

Legend:
- Flow 1 ingress (mean 512.95 Mbit/s)
- Flow 1 egress (mean 462.49 Mbit/s)
- Flow 2 ingress (mean 518.13 Mbit/s)
- Flow 2 egress (mean 465.64 Mbit/s)
- Flow 3 ingress (mean 115.01 Mbit/s)
- Flow 3 egress (mean 92.35 Mbit/s)

Legend:
- Flow 1 (95th percentile 81.88 ms)
- Flow 2 (95th percentile 80.37 ms)
- Flow 3 (95th percentile 43.60 ms)

255

```
Run 7: Statistics of FillP

Start at: 2017-12-20 11:02:47
End at: 2017-12-20 11:03:17
Local clock offset: 0.091 ms
Remote clock offset: -1.267 ms


# Below is generated by plot.py at 2017-12-20 15:52:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 940.53 Mbit/s
95th percentile per-packet one-way delay: 29.221 ms
Loss rate: 11.63%
-- Flow 1:
Average throughput: 577.42 Mbit/s
95th percentile per-packet one-way delay: 33.720 ms
Loss rate: 9.80%
-- Flow 2:
Average throughput: 496.69 Mbit/s
95th percentile per-packet one-way delay: 20.753 ms
Loss rate: 13.99%
-- Flow 3:
Average throughput: 98.03 Mbit/s
95th percentile per-packet one-way delay: 54.742 ms
Loss rate: 18.32%
```
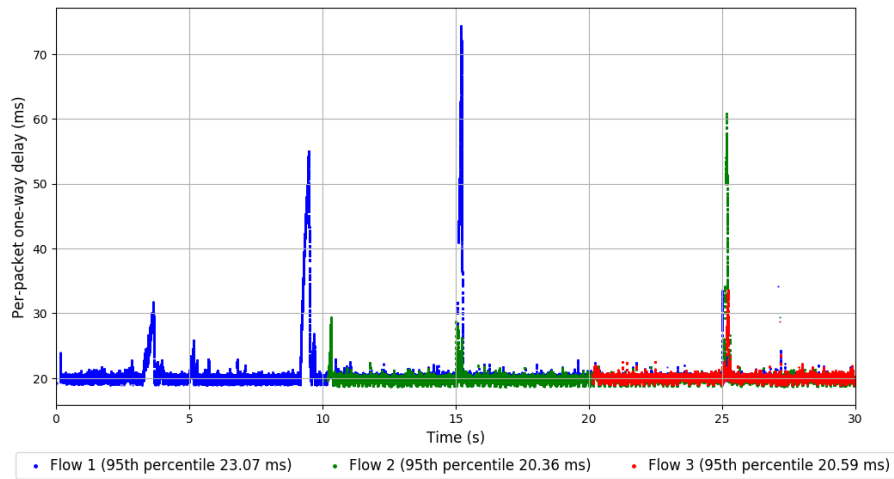
Run 7: Report of FillP — Data Link

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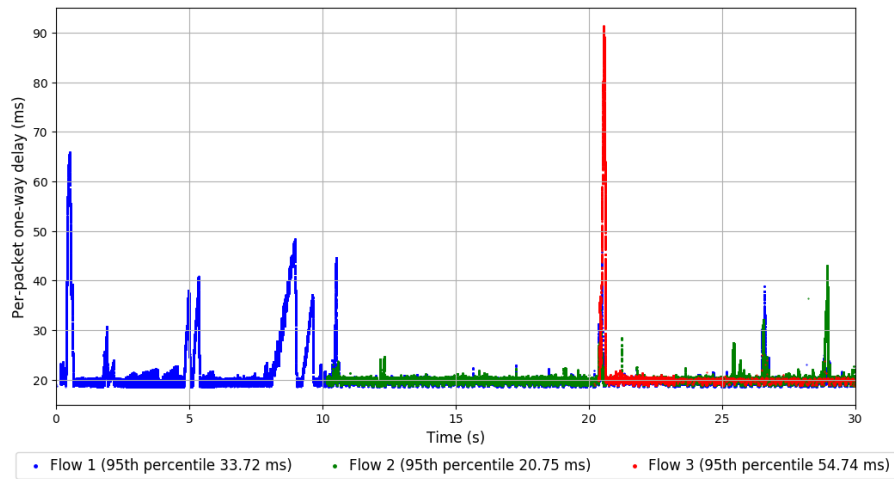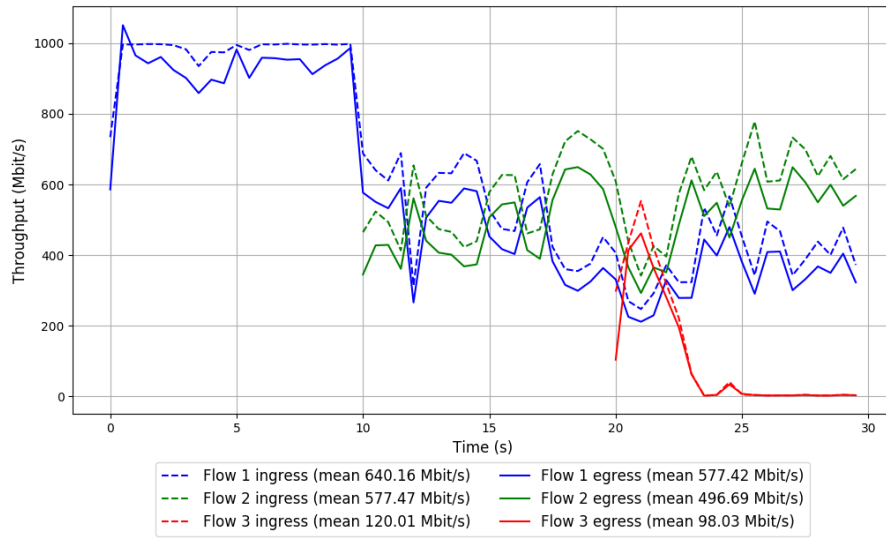
```
Run 8: Statistics of FillP

Start at: 2017-12-20 11:24:23
End at: 2017-12-20 11:24:53
Local clock offset: -0.008 ms
Remote clock offset: -1.344 ms

# Below is generated by plot.py at 2017-12-20 15:52:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 950.21 Mbit/s
95th percentile per-packet one-way delay: 21.350 ms
Loss rate: 11.38%
-- Flow 1:
Average throughput: 553.36 Mbit/s
95th percentile per-packet one-way delay: 23.068 ms
Loss rate: 8.93%
-- Flow 2:
Average throughput: 448.88 Mbit/s
95th percentile per-packet one-way delay: 20.356 ms
Loss rate: 14.34%
-- Flow 3:
Average throughput: 295.59 Mbit/s
95th percentile per-packet one-way delay: 20.594 ms
Loss rate: 15.35%
```
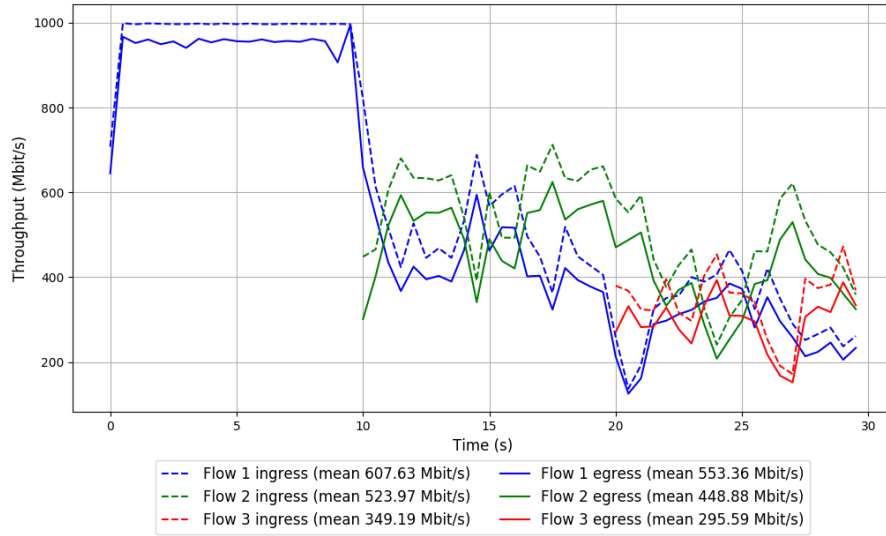
Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 607.63 Mbit/s) --- Flow 1 egress (mean 553.36 Mbit/s)
Flow 2 ingress (mean 523.97 Mbit/s) --- Flow 2 egress (mean 448.88 Mbit/s)
Flow 3 ingress (mean 349.19 Mbit/s) --- Flow 3 egress (mean 295.59 Mbit/s)

Flow 1 (95th percentile 23.07 ms) Flow 2 (95th percentile 20.36 ms) Flow 3 (95th percentile 20.59 ms)

259

```
Run 9: Statistics of FillP

Start at: 2017-12-20 11:46:29
End at: 2017-12-20 11:46:59
Local clock offset: -0.112 ms
Remote clock offset: -1.897 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 948.64 Mbit/s
95th percentile per-packet one-way delay: 28.233 ms
Loss rate: 10.82%
-- Flow 1:
Average throughput: 645.79 Mbit/s
95th percentile per-packet one-way delay: 31.259 ms
Loss rate: 9.05%
-- Flow 2:
Average throughput: 405.57 Mbit/s
95th percentile per-packet one-way delay: 20.483 ms
Loss rate: 14.25%
-- Flow 3:
Average throughput: 99.45 Mbit/s
95th percentile per-packet one-way delay: 20.434 ms
Loss rate: 15.29%
```
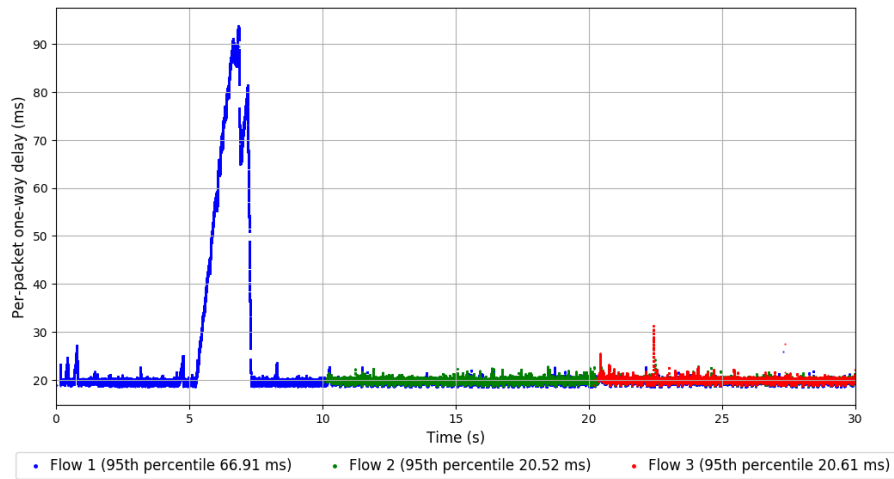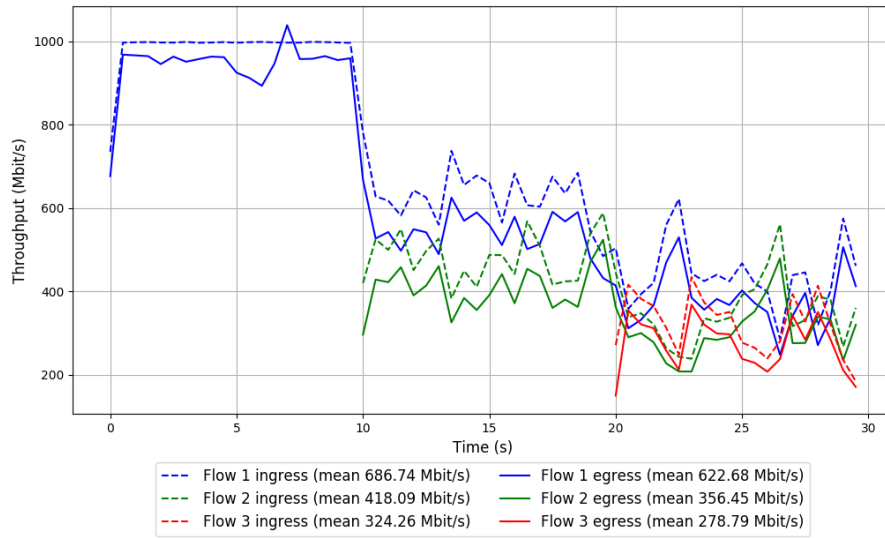
Run 9: Report of FillP — Data Link

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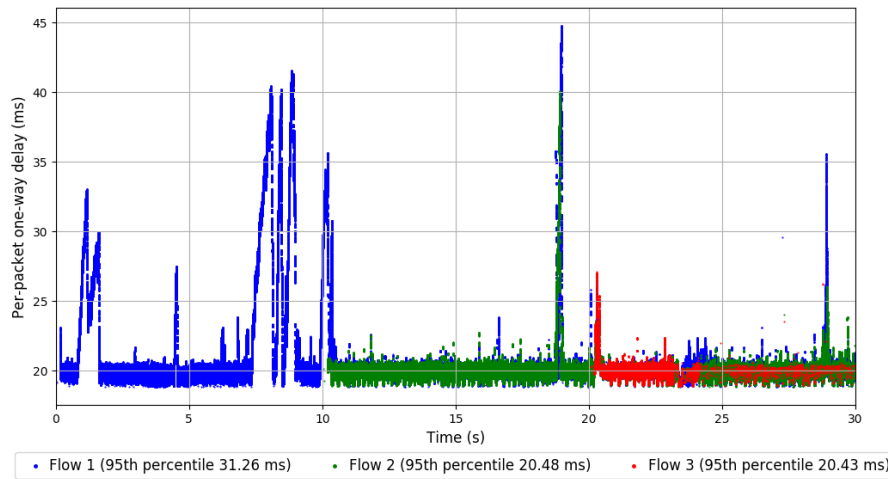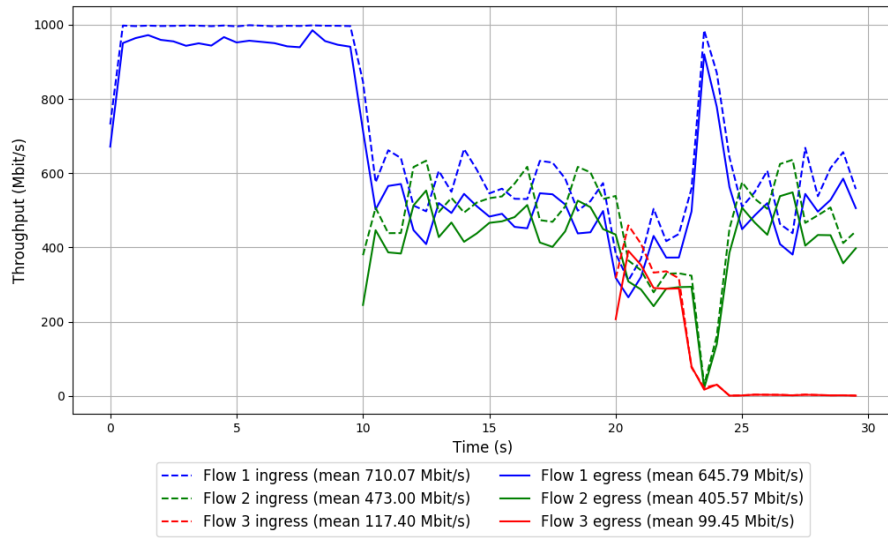
```
Run 10: Statistics of FillP

Start at: 2017-12-20 12:08:30
End at: 2017-12-20 12:09:00
Local clock offset: -0.121 ms
Remote clock offset: -2.201 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 950.94 Mbit/s
95th percentile per-packet one-way delay: 43.677 ms
Loss rate: 11.33%
-- Flow 1:
Average throughput: 622.68 Mbit/s
95th percentile per-packet one-way delay: 66.912 ms
Loss rate: 9.32%
-- Flow 2:
Average throughput: 356.45 Mbit/s
95th percentile per-packet one-way delay: 20.519 ms
Loss rate: 14.73%
-- Flow 3:
Average throughput: 278.79 Mbit/s
95th percentile per-packet one-way delay: 20.606 ms
Loss rate: 15.32%
```

Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 686.74 Mbit/s)   Flow 1 egress (mean 622.68 Mbit/s)
Flow 2 ingress (mean 418.09 Mbit/s)   Flow 2 egress (mean 356.45 Mbit/s)
Flow 3 ingress (mean 324.26 Mbit/s)   Flow 3 egress (mean 278.79 Mbit/s)

Flow 1 (95th percentile 66.91 ms)   Flow 2 (95th percentile 20.52 ms)   Flow 3 (95th percentile 20.61 ms)

263

```
Run 1: Statistics of Indigo

Start at: 2017-12-20 08:37:25
End at: 2017-12-20 08:37:55
Local clock offset: 1.012 ms
Remote clock offset: -0.818 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.17 Mbit/s
95th percentile per-packet one-way delay: 19.619 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 183.48 Mbit/s
95th percentile per-packet one-way delay: 19.589 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.46 Mbit/s
95th percentile per-packet one-way delay: 19.300 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.53 Mbit/s
95th percentile per-packet one-way delay: 20.103 ms
Loss rate: 0.07%
```
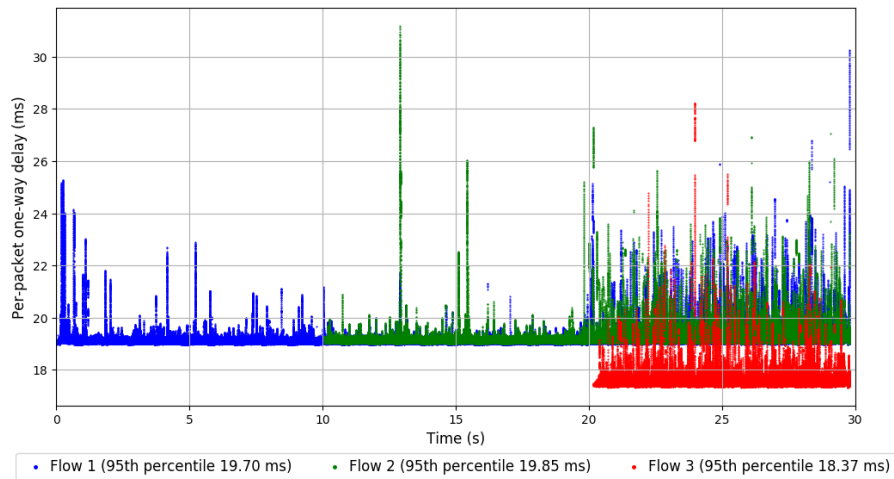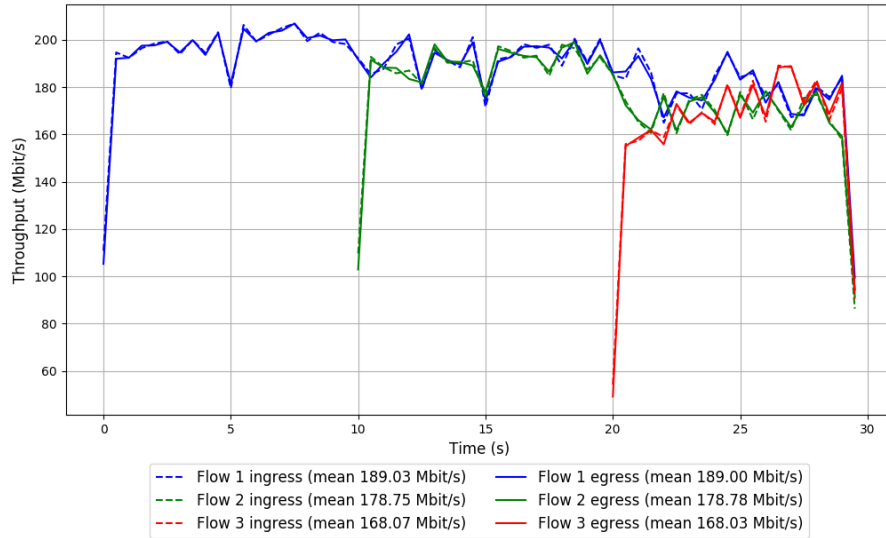
Run 1: Report of Indigo — Data Link

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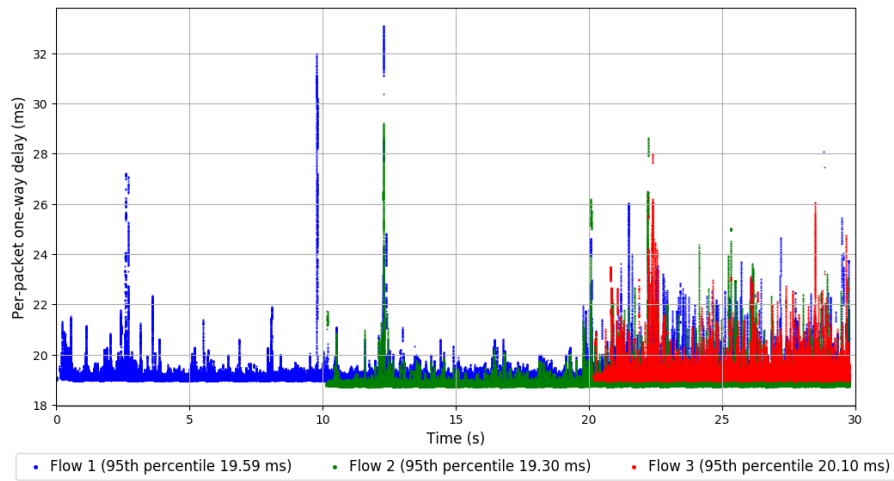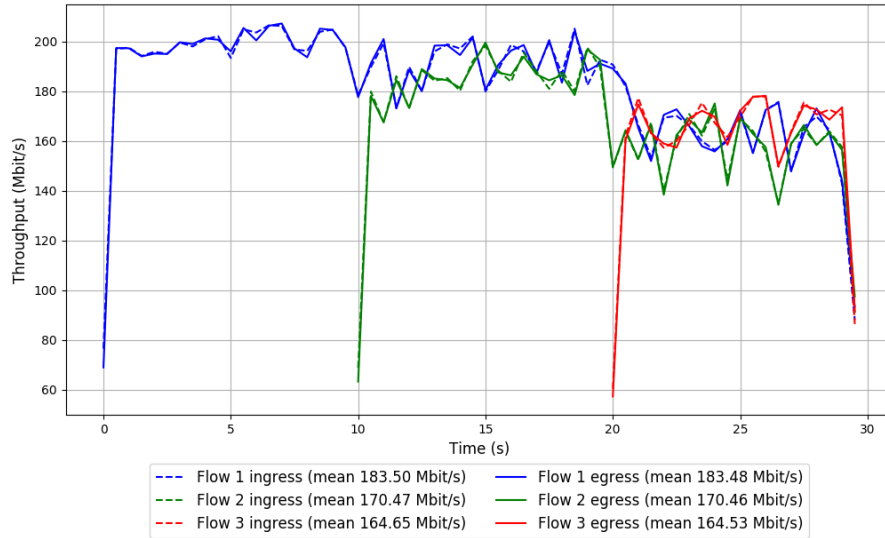
```
Run 2: Statistics of Indigo

Start at: 2017-12-20 08:59:21
End at: 2017-12-20 08:59:51
Local clock offset: 0.912 ms
Remote clock offset: -0.67 ms

# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.62 Mbit/s
95th percentile per-packet one-way delay: 19.675 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 189.00 Mbit/s
95th percentile per-packet one-way delay: 19.701 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 178.78 Mbit/s
95th percentile per-packet one-way delay: 19.848 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 168.03 Mbit/s
95th percentile per-packet one-way delay: 18.368 ms
Loss rate: 0.03%
```

Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 189.03 Mbit/s) --- Flow 1 egress (mean 189.00 Mbit/s)
Flow 2 ingress (mean 178.75 Mbit/s) --- Flow 2 egress (mean 178.78 Mbit/s)
Flow 3 ingress (mean 168.07 Mbit/s) --- Flow 3 egress (mean 168.03 Mbit/s)

Flow 1 (95th percentile 19.70 ms) • Flow 2 (95th percentile 19.85 ms) • Flow 3 (95th percentile 18.37 ms)

267

```
Run 3: Statistics of Indigo

Start at: 2017-12-20 09:21:12
End at: 2017-12-20 09:21:42
Local clock offset: 1.003 ms
Remote clock offset: -1.002 ms

# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.82 Mbit/s
95th percentile per-packet one-way delay: 19.570 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 187.93 Mbit/s
95th percentile per-packet one-way delay: 19.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.34 Mbit/s
95th percentile per-packet one-way delay: 19.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.36 Mbit/s
95th percentile per-packet one-way delay: 19.779 ms
Loss rate: 0.03%
```

Run 3: Report of Indigo — Data Link
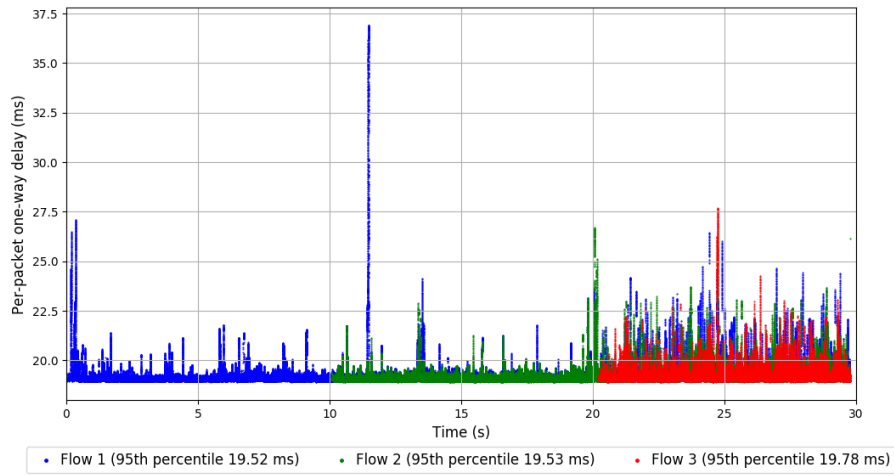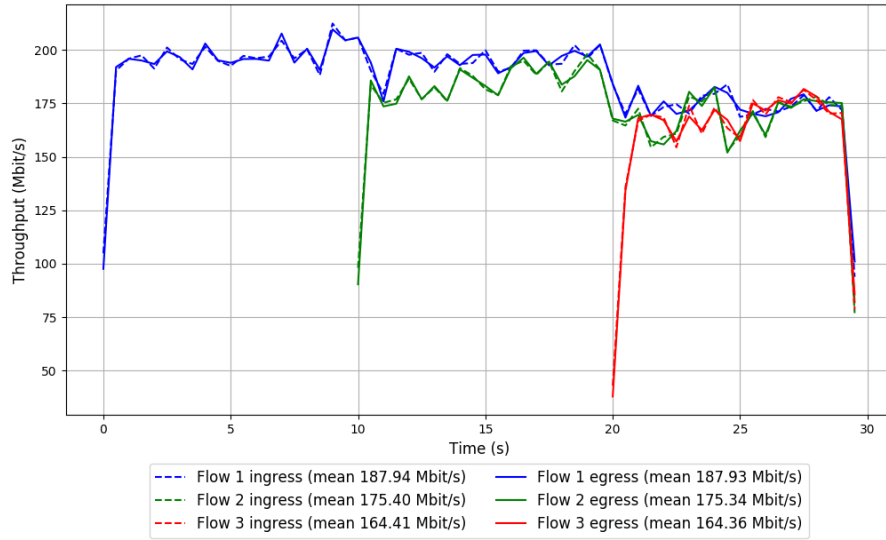
```
Run 4: Statistics of Indigo

Start at: 2017-12-20 09:43:00
End at: 2017-12-20 09:43:30
Local clock offset: 0.991 ms
Remote clock offset: -0.997 ms

# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.21 Mbit/s
95th percentile per-packet one-way delay: 19.381 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 186.76 Mbit/s
95th percentile per-packet one-way delay: 19.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.04 Mbit/s
95th percentile per-packet one-way delay: 19.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.04 Mbit/s
95th percentile per-packet one-way delay: 19.591 ms
Loss rate: 0.03%
```
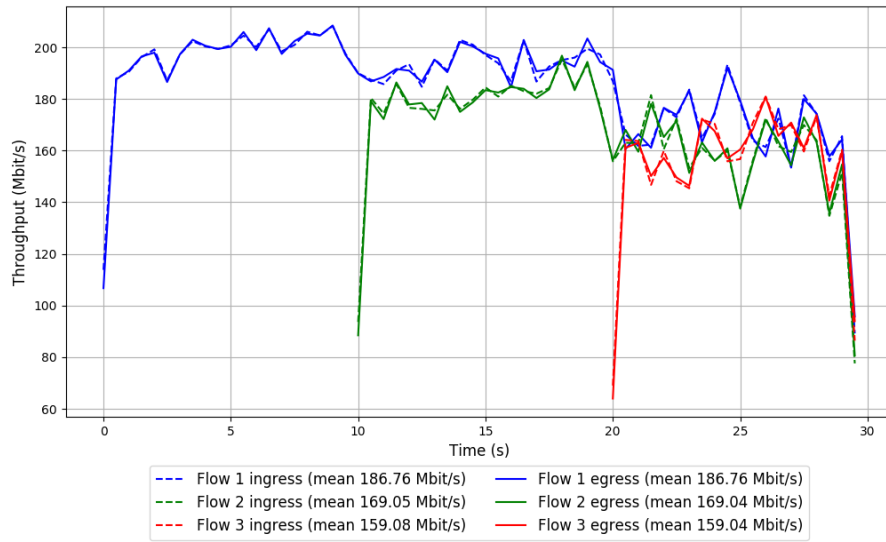
Run 4: Report of Indigo — Data Link
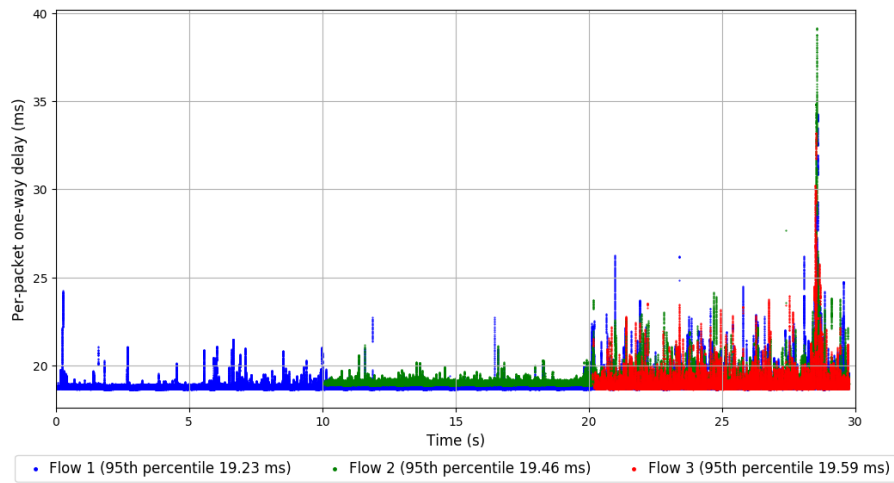
```
Run 5: Statistics of Indigo

Start at: 2017-12-20 10:04:44
End at: 2017-12-20 10:05:14
Local clock offset: 0.721 ms
Remote clock offset: -1.094 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.96 Mbit/s
95th percentile per-packet one-way delay: 19.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.60 Mbit/s
95th percentile per-packet one-way delay: 19.375 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 175.01 Mbit/s
95th percentile per-packet one-way delay: 19.218 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.34 Mbit/s
95th percentile per-packet one-way delay: 19.588 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo — Data Link
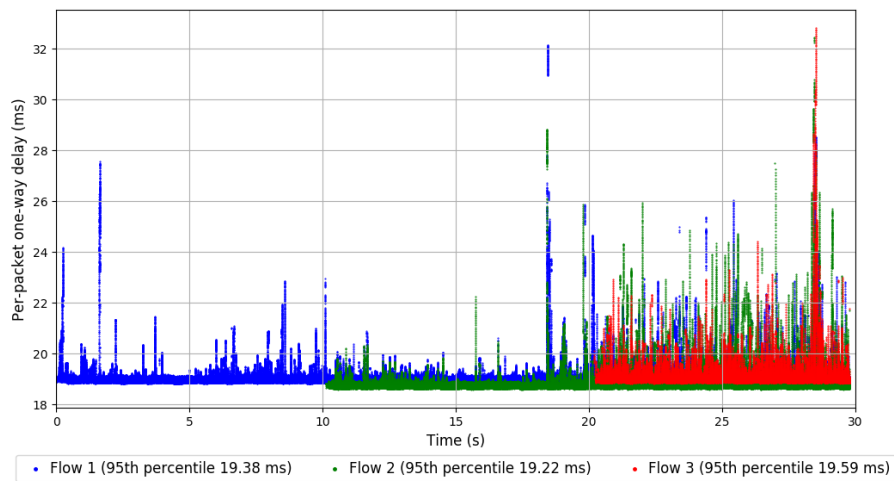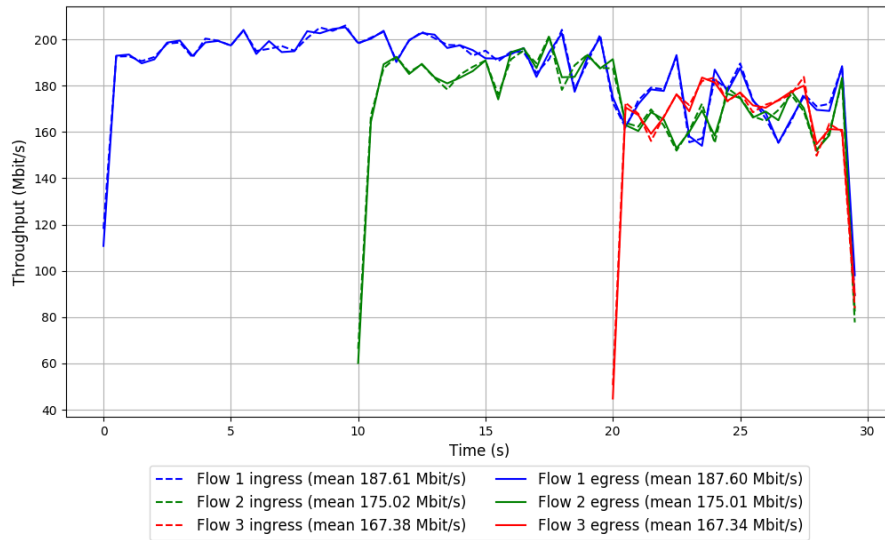
```
Run 6: Statistics of Indigo

Start at: 2017-12-20 10:26:38
End at: 2017-12-20 10:27:08
Local clock offset: 0.306 ms
Remote clock offset: -1.345 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.72 Mbit/s
95th percentile per-packet one-way delay: 19.481 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.66 Mbit/s
95th percentile per-packet one-way delay: 19.393 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.33 Mbit/s
95th percentile per-packet one-way delay: 19.521 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 152.45 Mbit/s
95th percentile per-packet one-way delay: 19.725 ms
Loss rate: 0.00%
```

Run 6: Report of Indigo — Data Link
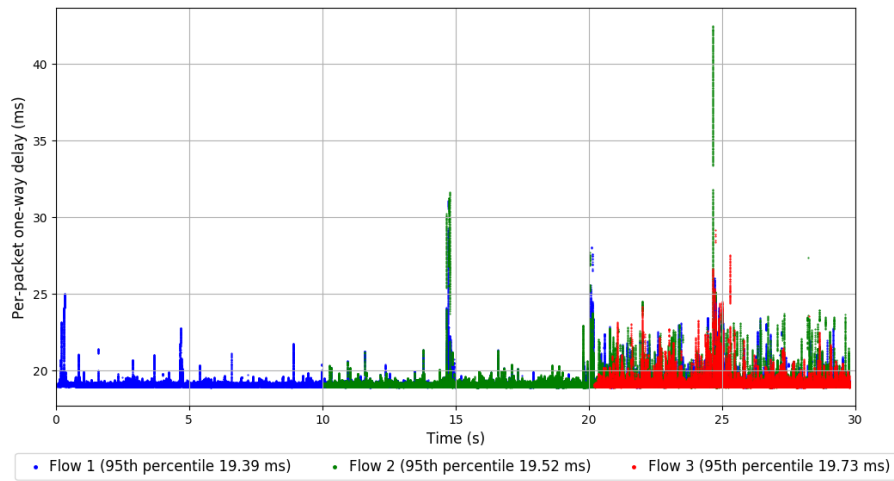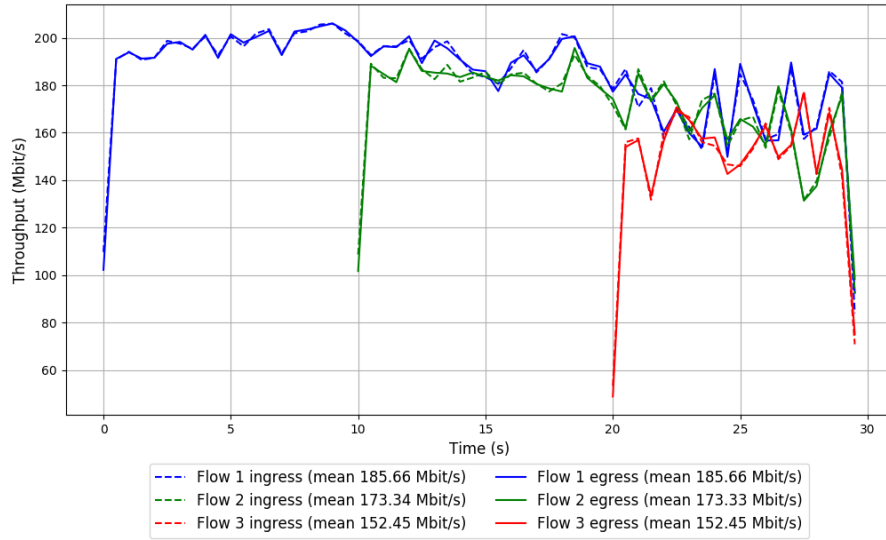
```
Run 7: Statistics of Indigo

Start at: 2017-12-20 10:48:19
End at: 2017-12-20 10:48:49
Local clock offset: 0.112 ms
Remote clock offset: -1.041 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.74 Mbit/s
95th percentile per-packet one-way delay: 19.632 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 188.21 Mbit/s
95th percentile per-packet one-way delay: 19.519 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 178.93 Mbit/s
95th percentile per-packet one-way delay: 19.767 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 160.33 Mbit/s
95th percentile per-packet one-way delay: 19.760 ms
Loss rate: 0.08%
```
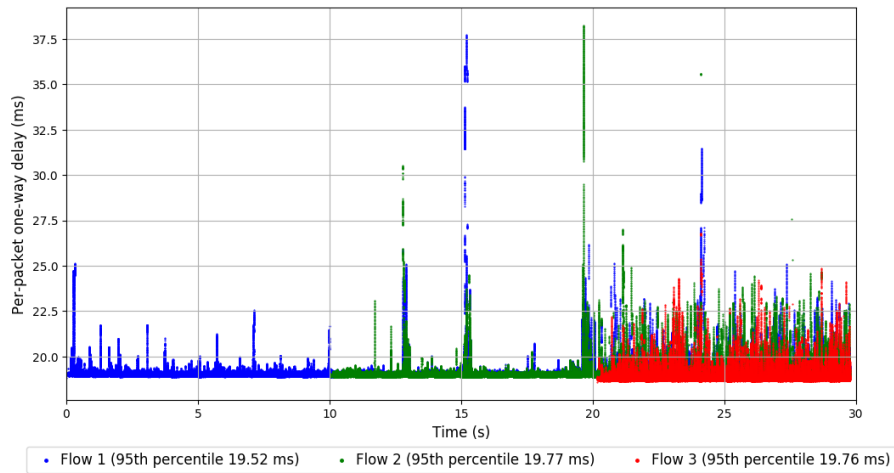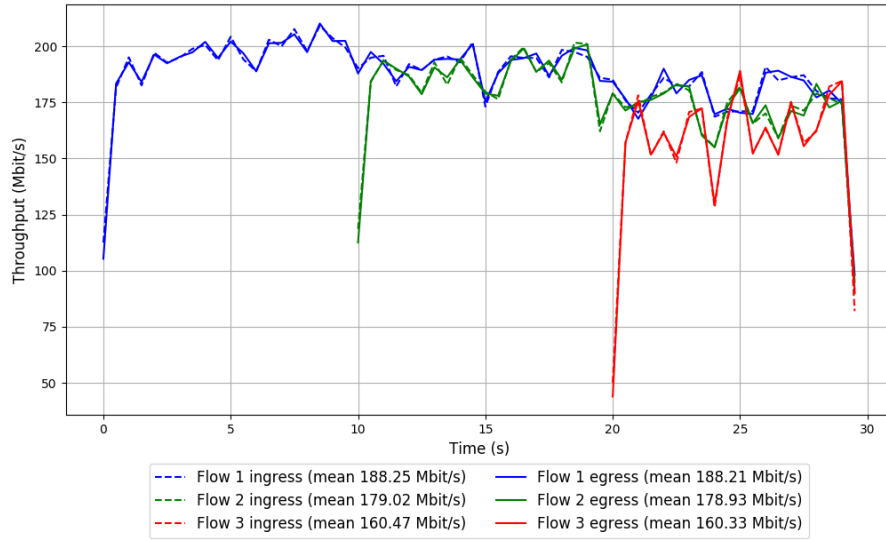
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2017-12-20 11:10:24
End at: 2017-12-20 11:10:54
Local clock offset: 0.034 ms
Remote clock offset: -1.224 ms

# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.58 Mbit/s
95th percentile per-packet one-way delay: 19.338 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 190.22 Mbit/s
95th percentile per-packet one-way delay: 19.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.91 Mbit/s
95th percentile per-packet one-way delay: 19.412 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 168.00 Mbit/s
95th percentile per-packet one-way delay: 19.672 ms
Loss rate: 0.01%
```

Run 8: Report of Indigo — Data Link
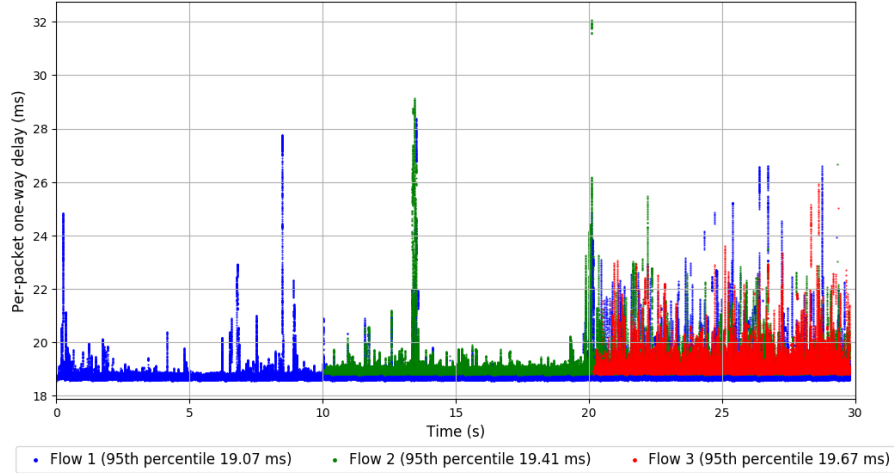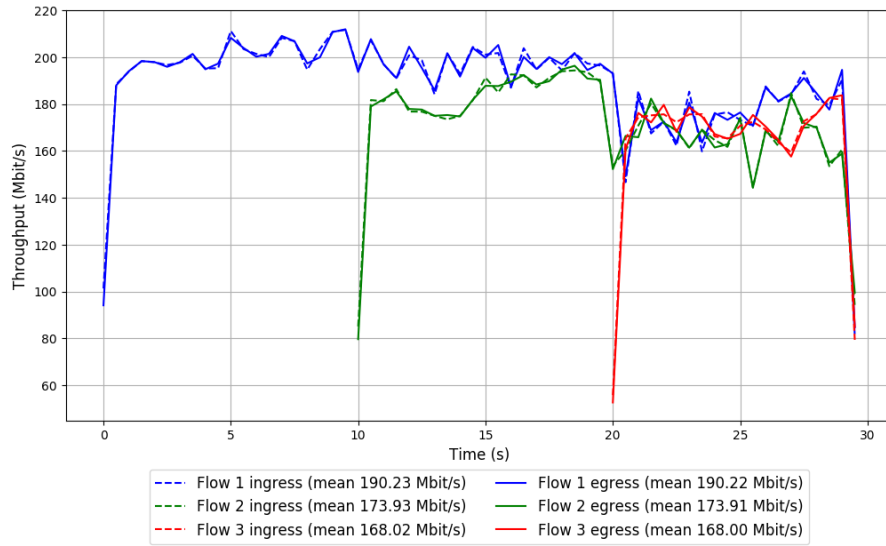
```
Run 9: Statistics of Indigo

Start at: 2017-12-20 11:31:57
End at: 2017-12-20 11:32:27
Local clock offset: -0.155 ms
Remote clock offset: -1.51 ms

# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.04 Mbit/s
95th percentile per-packet one-way delay: 19.775 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 187.90 Mbit/s
95th percentile per-packet one-way delay: 19.740 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 177.76 Mbit/s
95th percentile per-packet one-way delay: 19.870 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 165.63 Mbit/s
95th percentile per-packet one-way delay: 19.671 ms
Loss rate: 0.02%
```
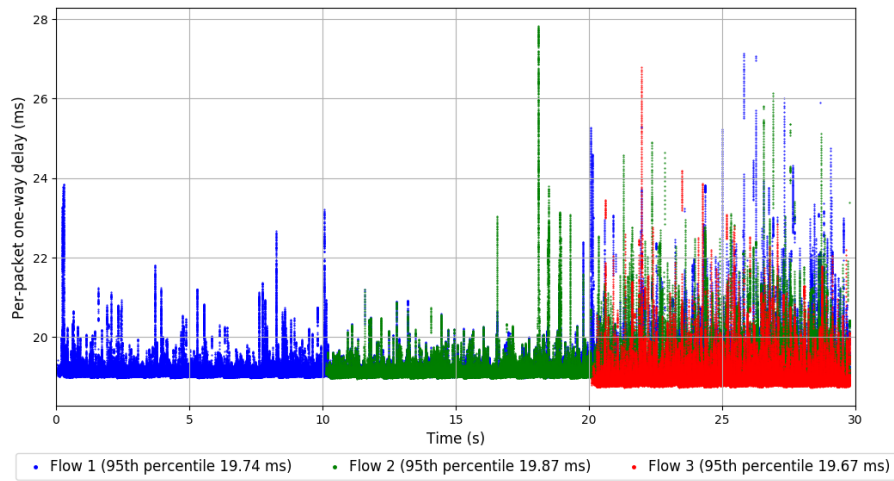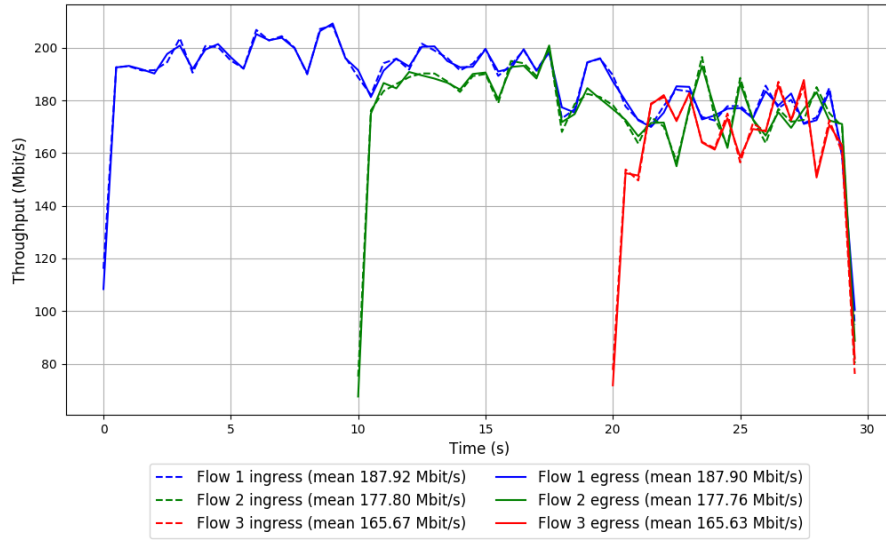
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-12-20 11:54:05
End at: 2017-12-20 11:54:35
Local clock offset: -0.185 ms
Remote clock offset: -2.014 ms


# Below is generated by plot.py at 2017-12-20 16:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.92 Mbit/s
95th percentile per-packet one-way delay: 19.439 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 188.36 Mbit/s
95th percentile per-packet one-way delay: 19.380 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 178.44 Mbit/s
95th percentile per-packet one-way delay: 19.286 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 165.44 Mbit/s
95th percentile per-packet one-way delay: 19.749 ms
Loss rate: 0.02%
```

Run 10: Report of Indigo — Data Link