Pantheon Report

Generated at 2018-04-25 06:02:39 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

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

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

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).
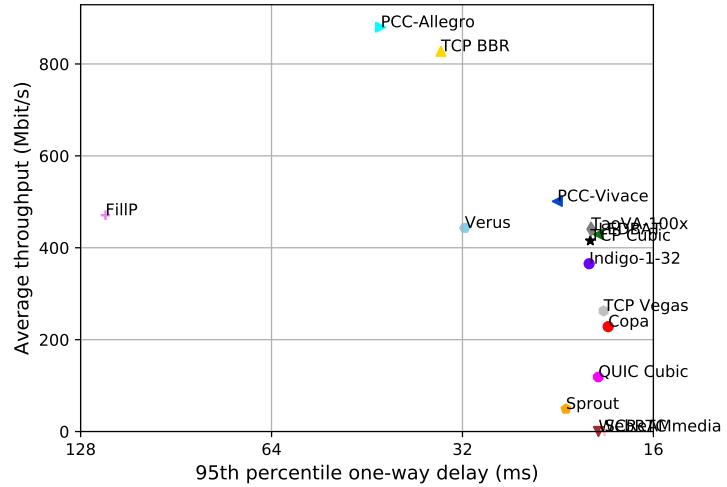
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
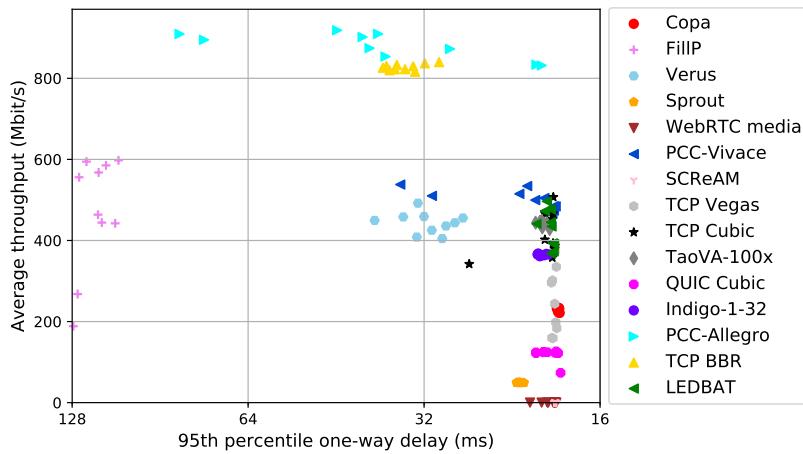
```
Git summary:
branch: master @ 114e807ac1bad7b85168ceb1f8a969063ee6c12c
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
```

third_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581

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
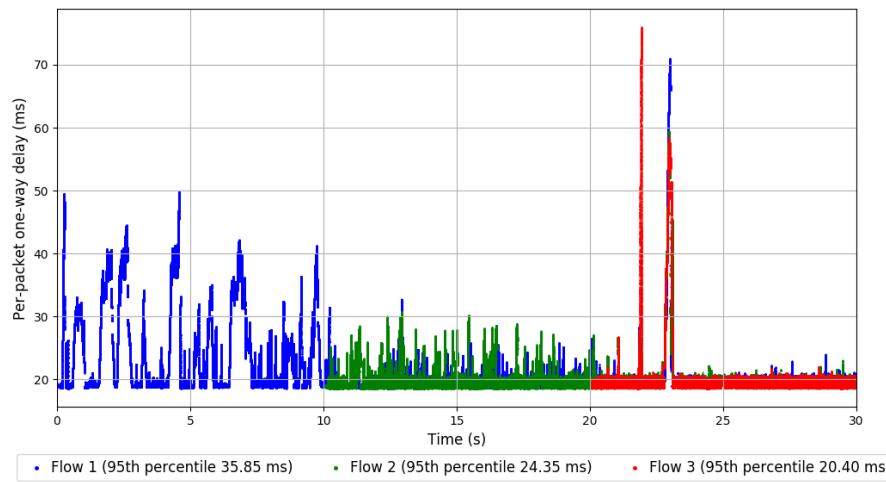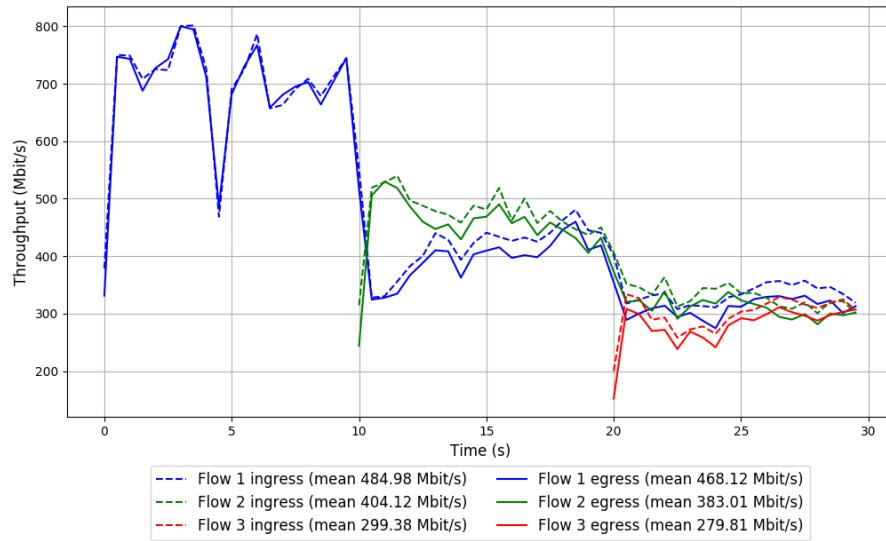3 flows with 10s interval between flows

3

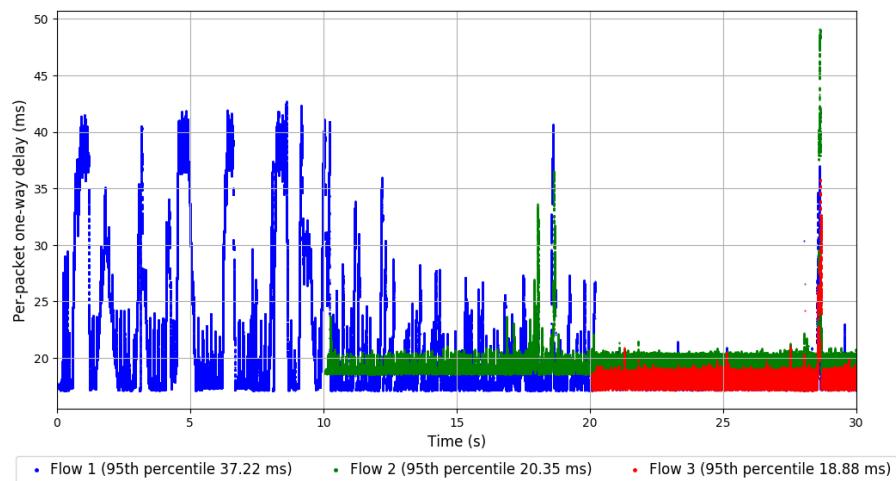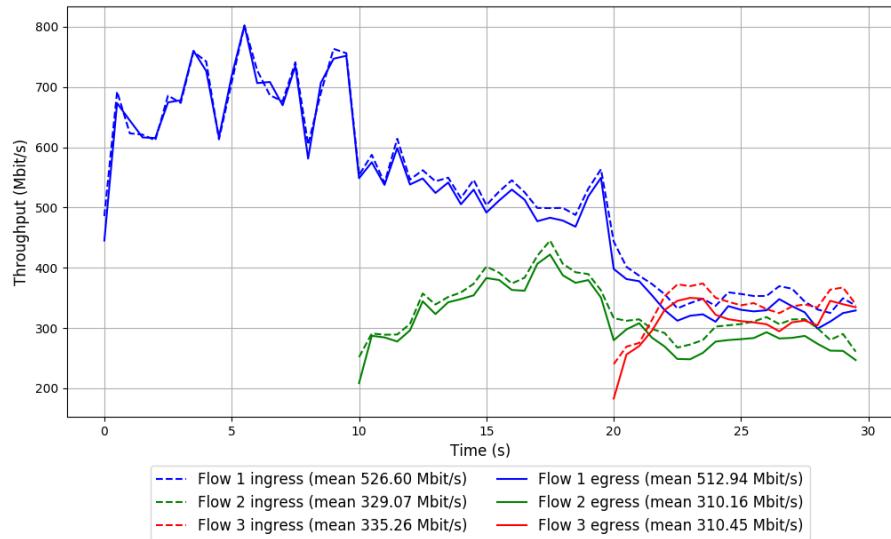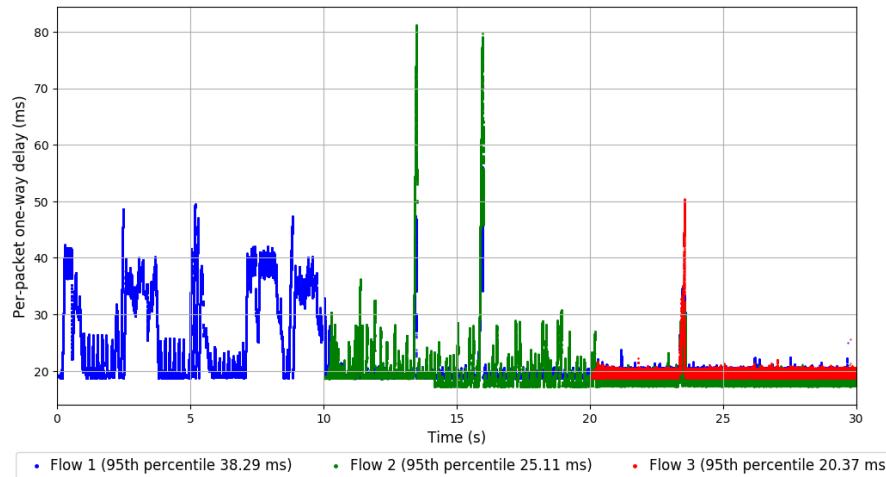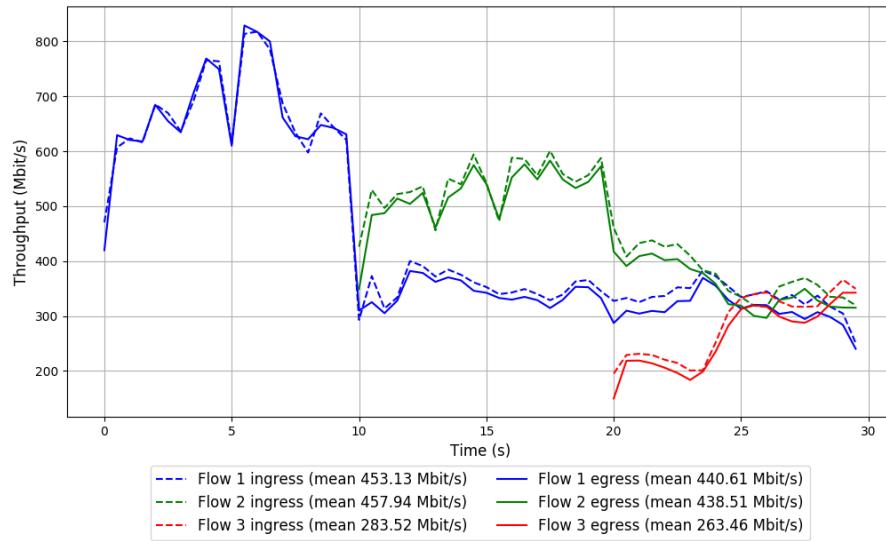| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	480.56	376.83	289.66	36.79	22.63	20.08	2.66	4.99	6.74
TCP Cubic	10	242.59	161.17	196.75	21.96	19.14	19.06	0.07	0.11	0.12
LEDBAT	10	242.26	204.86	151.96	19.74	19.17	19.21	0.02	0.04	0.05
PCC-Allegro	10	736.28	176.05	80.95	46.56	20.13	19.39	0.68	0.54	0.58
QUIC Cubic	10	59.83	63.16	52.17	19.41	19.06	20.75	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	18.83	18.54	18.86	0.00	0.00	0.00
WebRTC media	10	0.06	0.06	0.05	19.54	19.08	19.80	0.00	0.00	0.00
Sprout	10	24.67	24.67	24.45	22.18	21.34	21.49	0.01	0.03	0.02
TaoVA-100x	10	228.82	220.04	196.85	19.46	19.90	21.34	0.01	0.01	0.01
TCP Vegas	10	141.92	102.41	157.85	18.82	18.92	19.18	0.02	0.12	0.10
Verus	10	233.02	217.30	198.68	33.18	29.37	31.91	11.89	13.96	15.22
Copa	10	113.42	110.44	124.68	18.85	18.28	18.68	0.00	0.01	0.01
FillP	10	223.30	137.31	471.22	114.19	103.58	107.58	12.16	18.46	16.92
Indigo-1-32	10	191.27	181.42	168.78	19.40	20.41	21.13	0.02	0.02	0.04
PCC-Vivace	10	284.42	269.20	114.21	25.32	22.54	19.22	0.05	0.08	0.03
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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```
Run 1: Statistics of TCP BBR

Start at: 2018-04-24 21:39:56
End at: 2018-04-24 21:40:26
Local clock offset: 0.284 ms
Remote clock offset: -5.37 ms


# Below is generated by plot.py at 2018-04-25 04:20:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 816.17 Mbit/s
95th percentile per-packet one-way delay: 33.157 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 468.12 Mbit/s
95th percentile per-packet one-way delay: 35.846 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 383.01 Mbit/s
95th percentile per-packet one-way delay: 24.346 ms
Loss rate: 5.22%
-- Flow 3:
Average throughput: 279.81 Mbit/s
95th percentile per-packet one-way delay: 20.399 ms
Loss rate: 6.53%
```
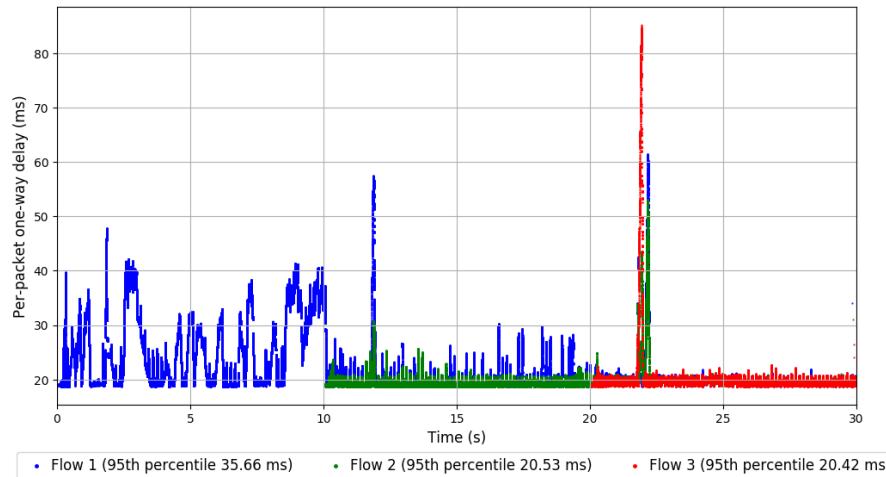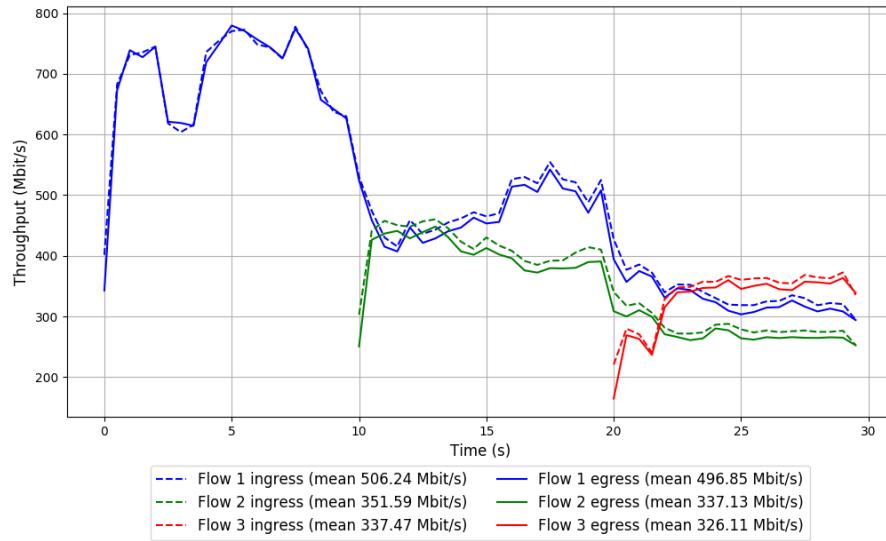
Run 1: Report of TCP BBR — Data Link

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Run 2: Statistics of TCP BBR

Start at: 2018-04-24 22:06:29
End at: 2018-04-24 22:06:59
Local clock offset: 0.211 ms
Remote clock offset: -5.707 ms


# Below is generated by plot.py at 2018-04-25 04:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 822.60 Mbit/s
95th percentile per-packet one-way delay: 34.497 ms
Loss rate: 4.02%
-- Flow 1:
Average throughput: 512.94 Mbit/s
95th percentile per-packet one-way delay: 37.216 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 310.16 Mbit/s
95th percentile per-packet one-way delay: 20.348 ms
Loss rate: 5.74%
-- Flow 3:
Average throughput: 310.45 Mbit/s
95th percentile per-packet one-way delay: 18.875 ms
Loss rate: 7.39%
```
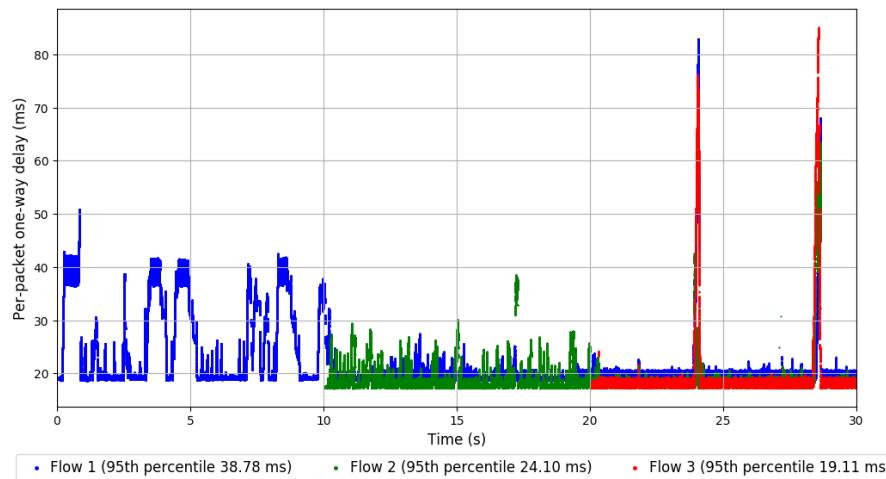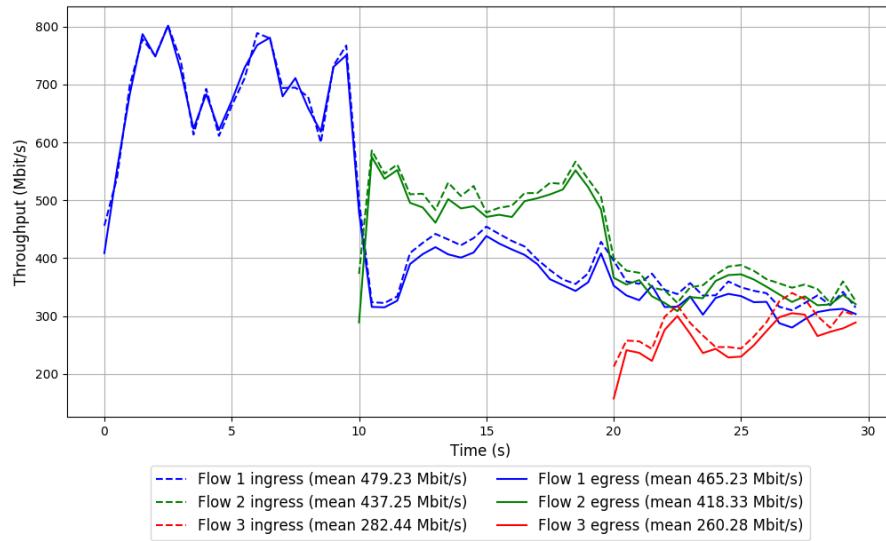
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 526.60 Mbit/s)   Flow 1 egress (mean 512.94 Mbit/s)
Flow 2 ingress (mean 329.07 Mbit/s)   Flow 2 egress (mean 310.16 Mbit/s)
Flow 3 ingress (mean 335.26 Mbit/s)   Flow 3 egress (mean 310.45 Mbit/s)

Flow 1 (95th percentile 37.22 ms)   Flow 2 (95th percentile 20.35 ms)   Flow 3 (95th percentile 18.88 ms)

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Run 3: Statistics of TCP BBR

Start at: 2018-04-24 22:33:14
End at: 2018-04-24 22:33:44
Local clock offset: -0.08 ms
Remote clock offset: -5.741 ms


# Below is generated by plot.py at 2018-04-25 04:20:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 820.01 Mbit/s
95th percentile per-packet one-way delay: 36.665 ms
Loss rate: 3.77%
-- Flow 1:
Average throughput: 440.61 Mbit/s
95th percentile per-packet one-way delay: 38.291 ms
Loss rate: 2.76%
-- Flow 2:
Average throughput: 438.51 Mbit/s
95th percentile per-packet one-way delay: 25.109 ms
Loss rate: 4.24%
-- Flow 3:
Average throughput: 263.46 Mbit/s
95th percentile per-packet one-way delay: 20.366 ms
Loss rate: 7.08%
```
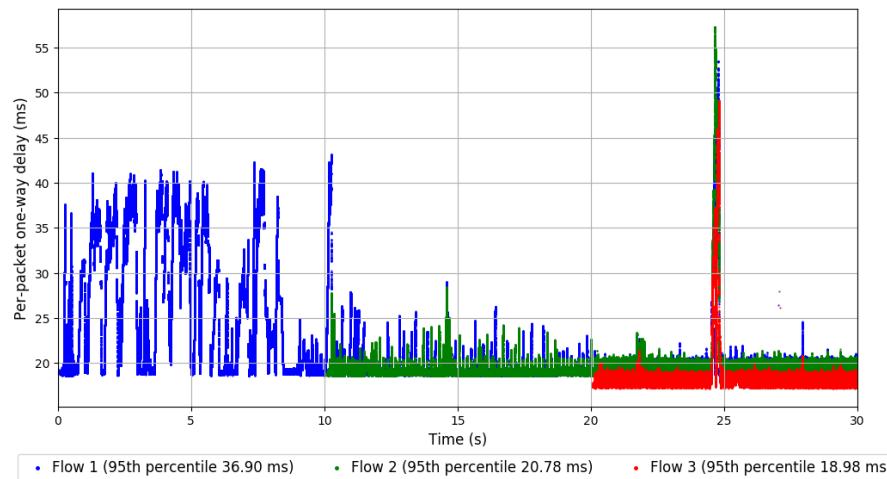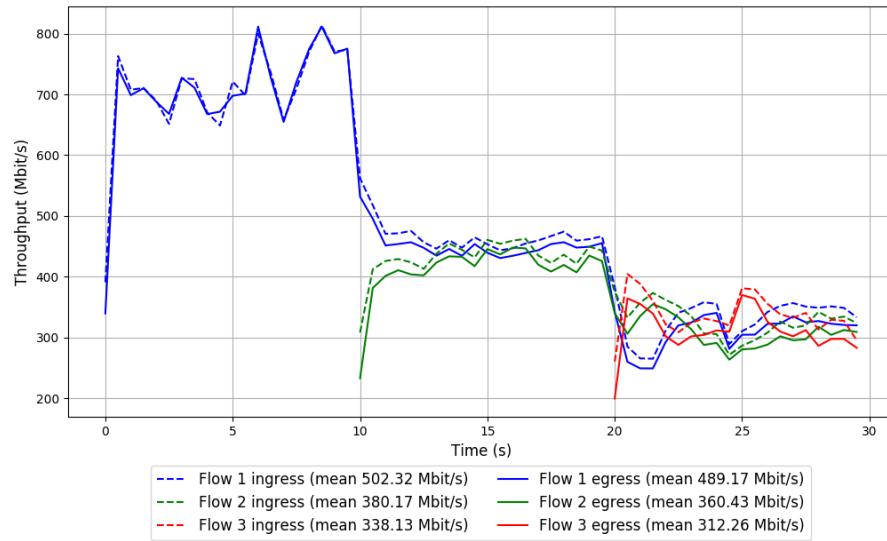
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 453.13 Mbit/s) Flow 1 egress (mean 440.61 Mbit/s)
Flow 2 ingress (mean 457.94 Mbit/s) Flow 2 egress (mean 438.51 Mbit/s)
Flow 3 ingress (mean 283.52 Mbit/s) Flow 3 egress (mean 263.46 Mbit/s)

Flow 1 (95th percentile 38.29 ms)   Flow 2 (95th percentile 25.11 ms)   Flow 3 (95th percentile 20.37 ms)

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Run 4: Statistics of TCP BBR

Start at: 2018-04-24 22:59:55
End at: 2018-04-24 23:00:25
Local clock offset: -0.065 ms
Remote clock offset: -5.552 ms


# Below is generated by plot.py at 2018-04-25 04:20:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 829.61 Mbit/s
95th percentile per-packet one-way delay: 33.408 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 496.85 Mbit/s
95th percentile per-packet one-way delay: 35.662 ms
Loss rate: 1.85%
-- Flow 2:
Average throughput: 337.13 Mbit/s
95th percentile per-packet one-way delay: 20.534 ms
Loss rate: 4.11%
-- Flow 3:
Average throughput: 326.11 Mbit/s
95th percentile per-packet one-way delay: 20.421 ms
Loss rate: 3.36%
```
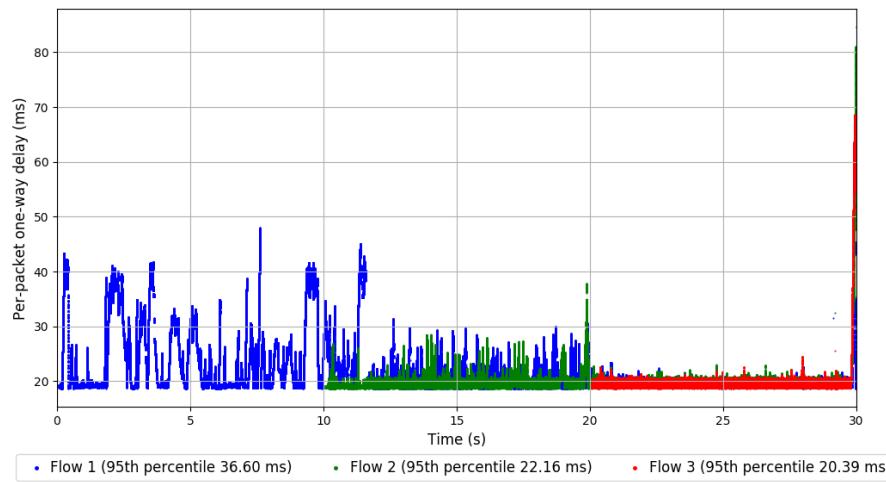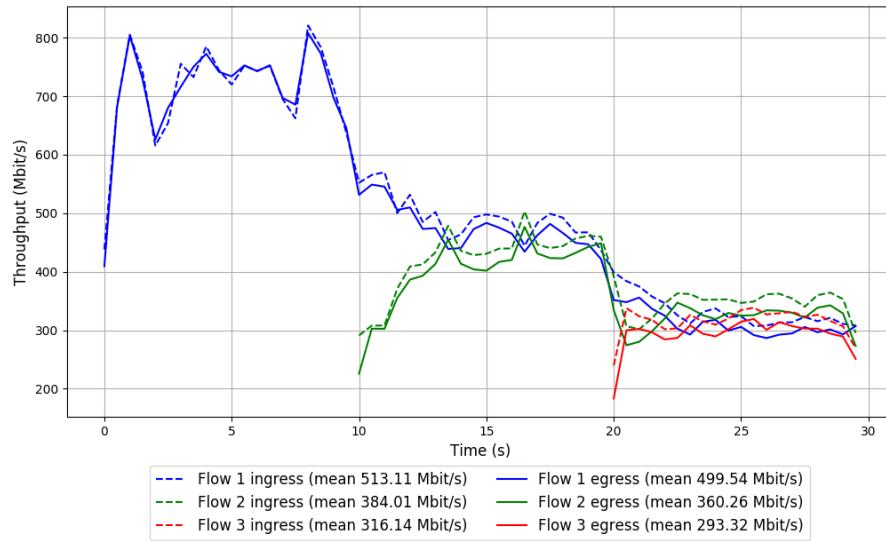
Run 4: Report of TCP BBR — Data Link

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Run 5: Statistics of TCP BBR

Start at: 2018-04-24 23:26:39
End at: 2018-04-24 23:27:09
Local clock offset: 0.207 ms
Remote clock offset: -6.612 ms


# Below is generated by plot.py at 2018-04-25 04:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 830.18 Mbit/s
95th percentile per-packet one-way delay: 37.124 ms
Loss rate: 3.93%
-- Flow 1:
Average throughput: 465.23 Mbit/s
95th percentile per-packet one-way delay: 38.778 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 418.33 Mbit/s
95th percentile per-packet one-way delay: 24.098 ms
Loss rate: 4.33%
-- Flow 3:
Average throughput: 260.28 Mbit/s
95th percentile per-packet one-way delay: 19.109 ms
Loss rate: 7.84%
```
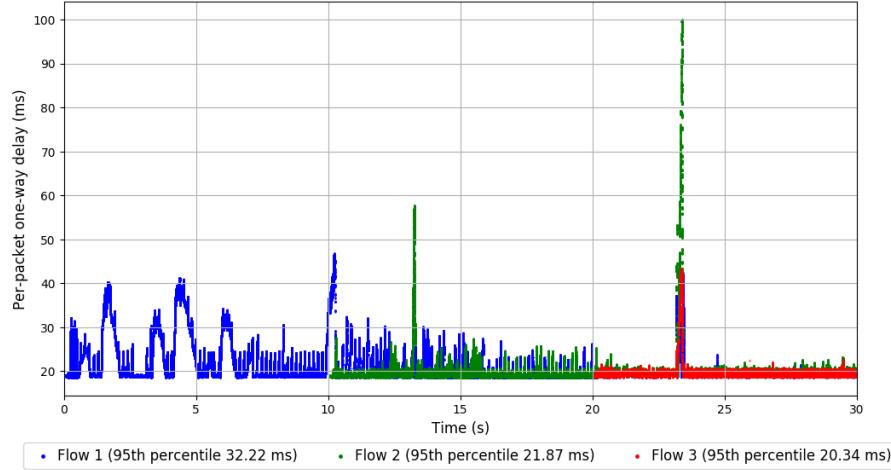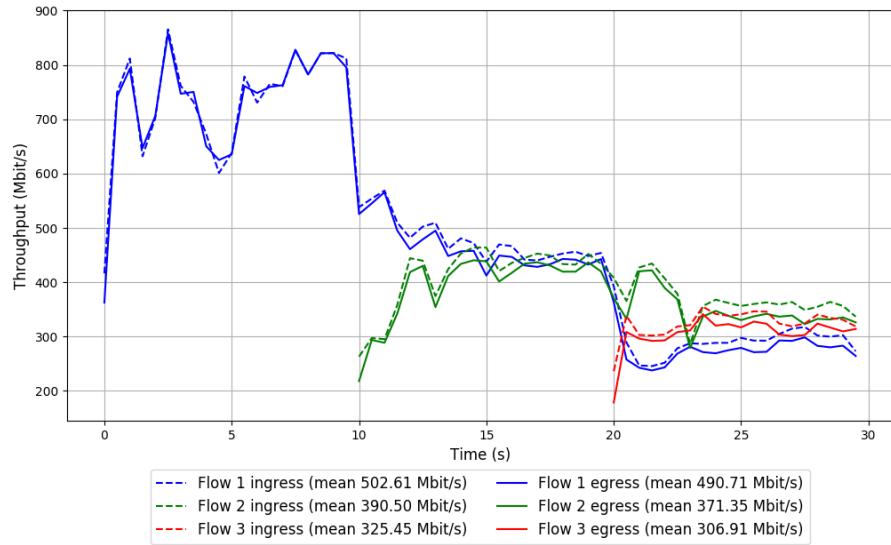
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 479.23 Mbit/s)   Flow 1 egress (mean 465.23 Mbit/s)
Flow 2 ingress (mean 437.25 Mbit/s)   Flow 2 egress (mean 418.33 Mbit/s)
Flow 3 ingress (mean 282.44 Mbit/s)   Flow 3 egress (mean 260.28 Mbit/s)

Flow 1 (95th percentile 38.78 ms)   Flow 2 (95th percentile 24.10 ms)   Flow 3 (95th percentile 19.11 ms)

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Run 6: Statistics of TCP BBR

Start at: 2018-04-24 23:53:12
End at: 2018-04-24 23:53:42
Local clock offset: 0.444 ms
Remote clock offset: -5.66 ms


# Below is generated by plot.py at 2018-04-25 04:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.01 Mbit/s
95th percentile per-packet one-way delay: 35.624 ms
Loss rate: 4.02%
-- Flow 1:
Average throughput: 489.17 Mbit/s
95th percentile per-packet one-way delay: 36.903 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 360.43 Mbit/s
95th percentile per-packet one-way delay: 20.781 ms
Loss rate: 5.20%
-- Flow 3:
Average throughput: 312.26 Mbit/s
95th percentile per-packet one-way delay: 18.976 ms
Loss rate: 7.64%
```
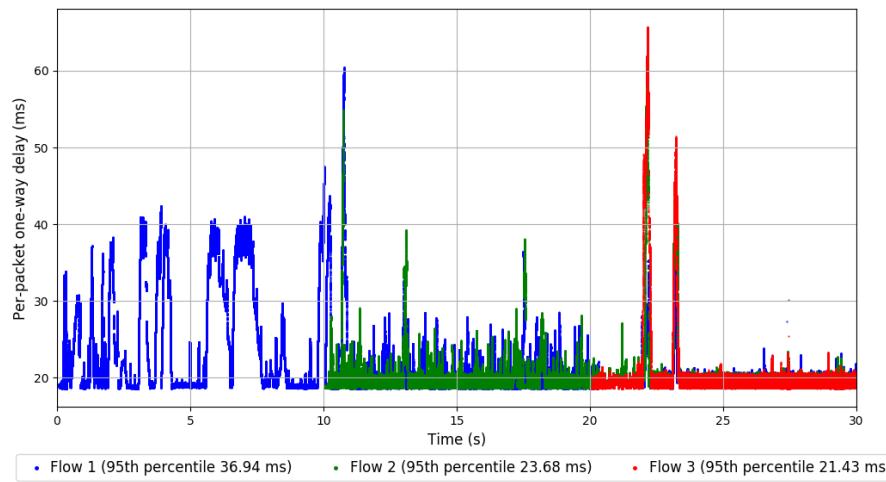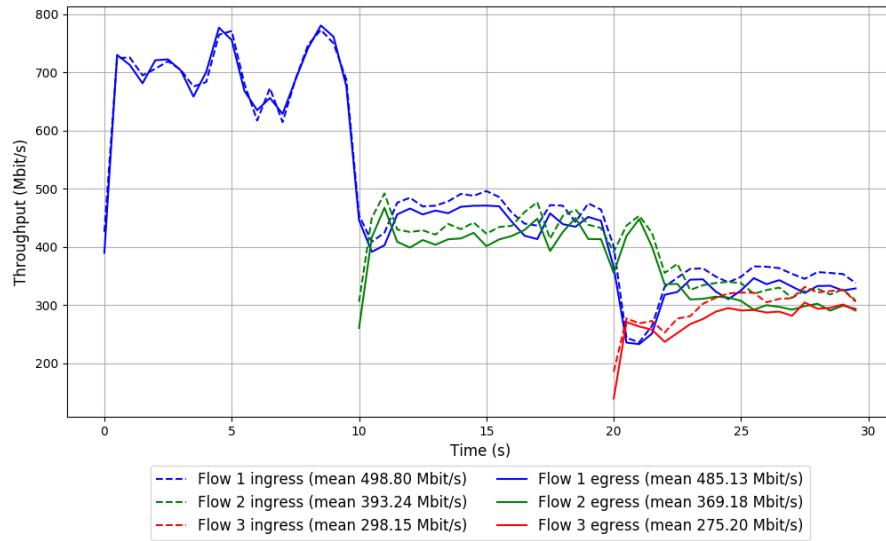
Run 6: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 502.32 Mbit/s)   —— Flow 1 egress (mean 489.17 Mbit/s)
- - - Flow 2 ingress (mean 380.17 Mbit/s)   —— Flow 2 egress (mean 360.43 Mbit/s)
- - - Flow 3 ingress (mean 338.13 Mbit/s)   —— Flow 3 egress (mean 312.26 Mbit/s)

• Flow 1 (95th percentile 36.90 ms)   • Flow 2 (95th percentile 20.78 ms)   • Flow 3 (95th percentile 18.98 ms)

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Run 7: Statistics of TCP BBR

Start at: 2018-04-25 00:19:36
End at: 2018-04-25 00:20:06
Local clock offset: -0.178 ms
Remote clock offset: -5.596 ms


# Below is generated by plot.py at 2018-04-25 04:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.84 Mbit/s
95th percentile per-packet one-way delay: 31.904 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 499.54 Mbit/s
95th percentile per-packet one-way delay: 36.603 ms
Loss rate: 2.64%
-- Flow 2:
Average throughput: 360.26 Mbit/s
95th percentile per-packet one-way delay: 22.155 ms
Loss rate: 6.17%
-- Flow 3:
Average throughput: 293.32 Mbit/s
95th percentile per-packet one-way delay: 20.393 ms
Loss rate: 7.23%
```
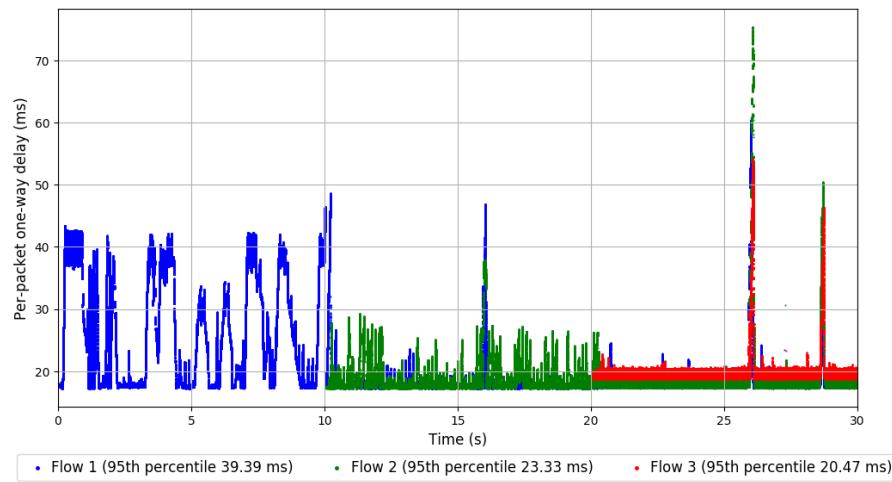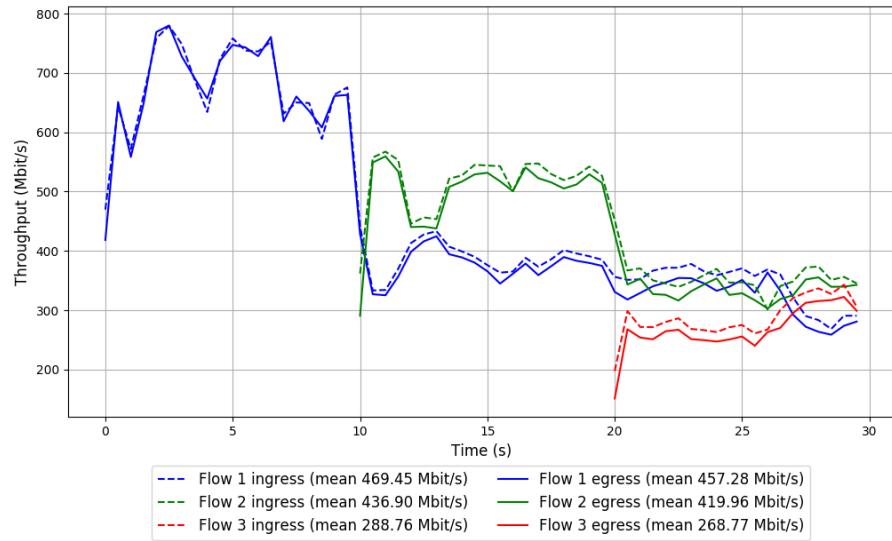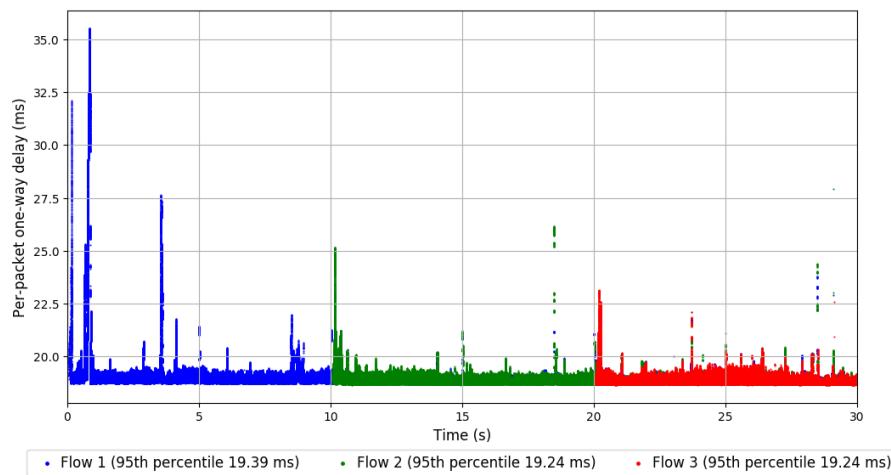
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 513.11 Mbit/s) --- Flow 1 egress (mean 499.54 Mbit/s)
Flow 2 ingress (mean 384.01 Mbit/s) --- Flow 2 egress (mean 360.26 Mbit/s)
Flow 3 ingress (mean 316.14 Mbit/s) --- Flow 3 egress (mean 293.32 Mbit/s)

Flow 1 (95th percentile 36.60 ms)　Flow 2 (95th percentile 22.16 ms)　Flow 3 (95th percentile 20.39 ms)

18

```
Run 8: Statistics of TCP BBR

Start at: 2018-04-25 00:46:12
End at: 2018-04-25 00:46:42
Local clock offset: 0.021 ms
Remote clock offset: -5.548 ms

# Below is generated by plot.py at 2018-04-25 04:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 839.97 Mbit/s
95th percentile per-packet one-way delay: 30.161 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 490.71 Mbit/s
95th percentile per-packet one-way delay: 32.221 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 371.35 Mbit/s
95th percentile per-packet one-way delay: 21.873 ms
Loss rate: 4.91%
-- Flow 3:
Average throughput: 306.91 Mbit/s
95th percentile per-packet one-way delay: 20.343 ms
Loss rate: 5.70%
```
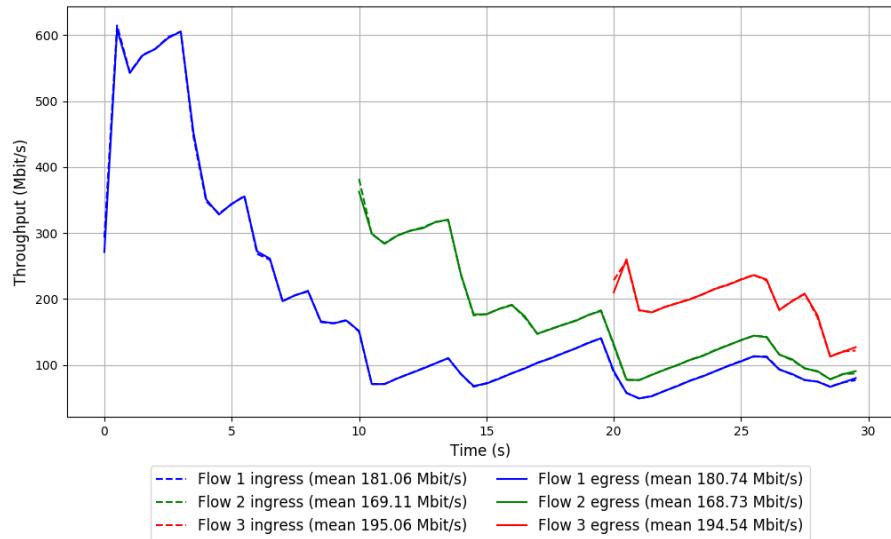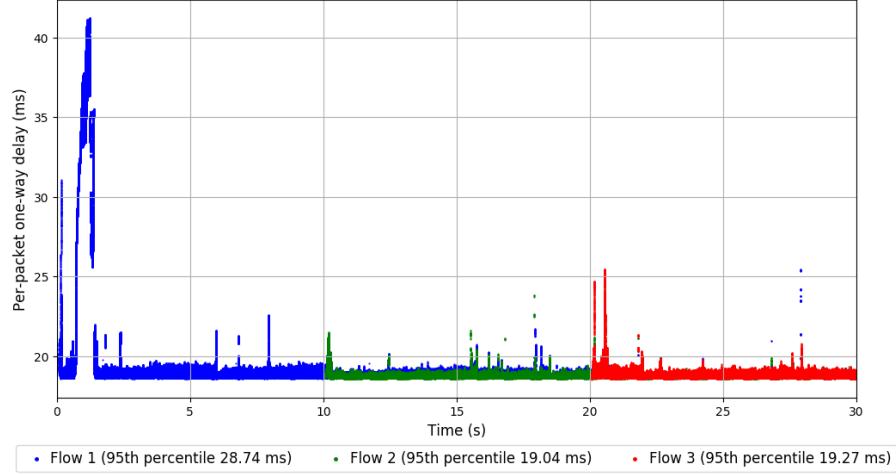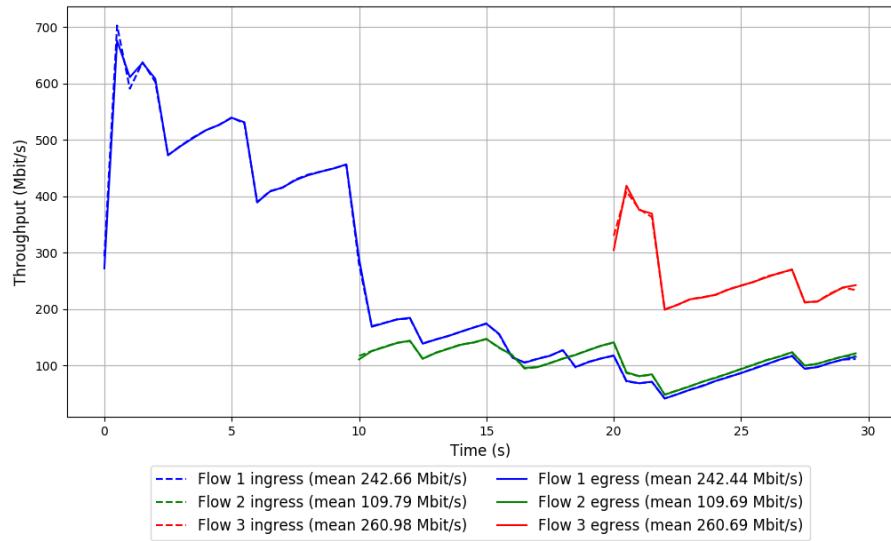
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 502.61 Mbit/s) --- Flow 1 egress (mean 490.71 Mbit/s)
Flow 2 ingress (mean 390.50 Mbit/s) --- Flow 2 egress (mean 371.35 Mbit/s)
Flow 3 ingress (mean 325.45 Mbit/s) --- Flow 3 egress (mean 306.91 Mbit/s)

Flow 1 (95th percentile 32.22 ms)   Flow 2 (95th percentile 21.87 ms)   Flow 3 (95th percentile 20.34 ms)

20

```
Run 9: Statistics of TCP BBR

Start at: 2018-04-25 01:12:54
End at: 2018-04-25 01:13:24
Local clock offset: 0.353 ms
Remote clock offset: -5.314 ms


# Below is generated by plot.py at 2018-04-25 04:32:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 822.26 Mbit/s
95th percentile per-packet one-way delay: 35.891 ms
Loss rate: 4.34%
-- Flow 1:
Average throughput: 485.13 Mbit/s
95th percentile per-packet one-way delay: 36.941 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 369.18 Mbit/s
95th percentile per-packet one-way delay: 23.676 ms
Loss rate: 6.12%
-- Flow 3:
Average throughput: 275.20 Mbit/s
95th percentile per-packet one-way delay: 21.432 ms
Loss rate: 7.71%
```
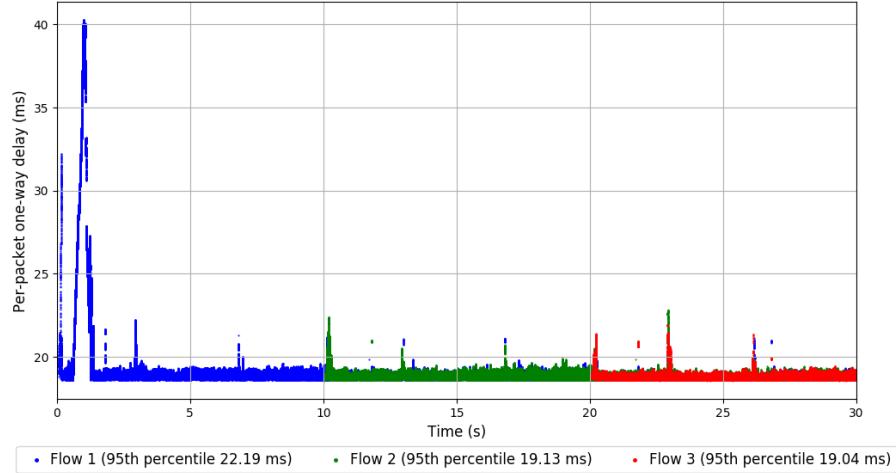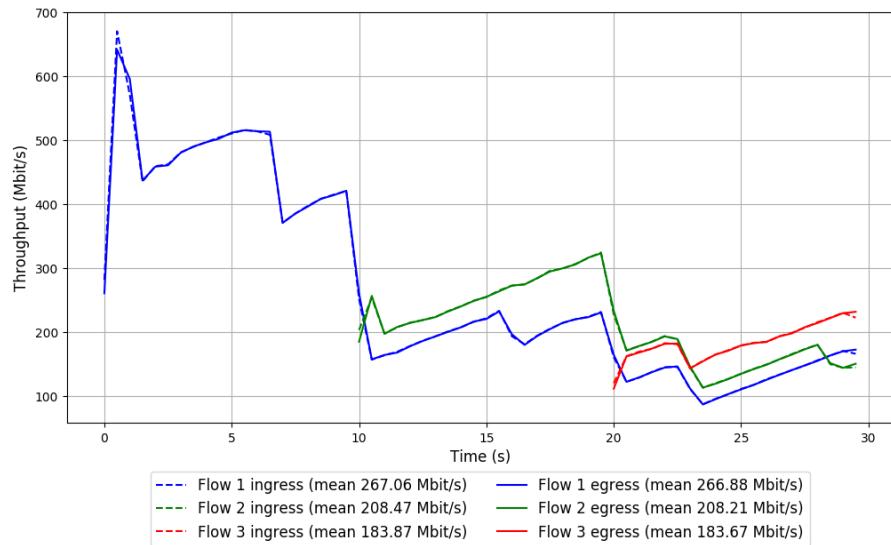
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 498.80 Mbit/s) --- Flow 1 egress (mean 485.13 Mbit/s)
Flow 2 ingress (mean 393.24 Mbit/s) --- Flow 2 egress (mean 369.18 Mbit/s)
Flow 3 ingress (mean 298.15 Mbit/s) --- Flow 3 egress (mean 275.20 Mbit/s)

Flow 1 (95th percentile 36.94 ms)   Flow 2 (95th percentile 23.68 ms)   Flow 3 (95th percentile 21.43 ms)

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```
Run 10: Statistics of TCP BBR

Start at: 2018-04-25 01:39:49
End at: 2018-04-25 01:40:19
Local clock offset: 0.395 ms
Remote clock offset: -6.556 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 826.13 Mbit/s
95th percentile per-packet one-way delay: 37.633 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 457.28 Mbit/s
95th percentile per-packet one-way delay: 39.390 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 419.96 Mbit/s
95th percentile per-packet one-way delay: 23.334 ms
Loss rate: 3.87%
-- Flow 3:
Average throughput: 268.77 Mbit/s
95th percentile per-packet one-way delay: 20.472 ms
Loss rate: 6.93%
```
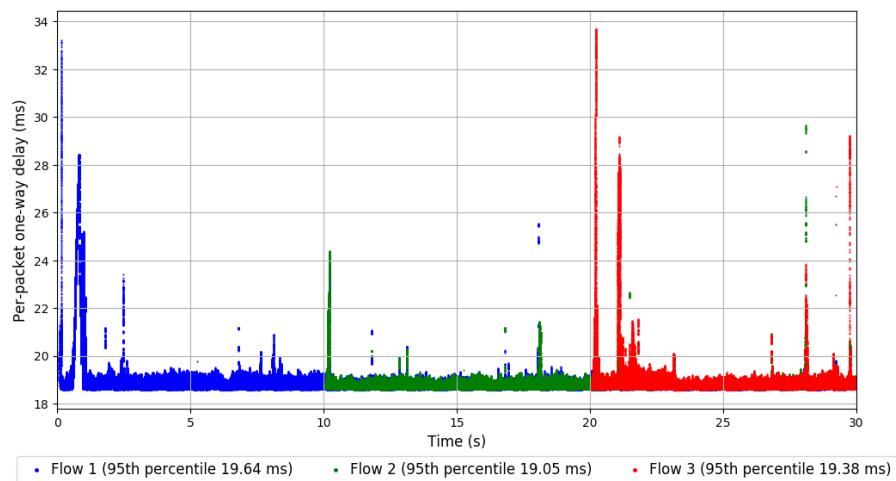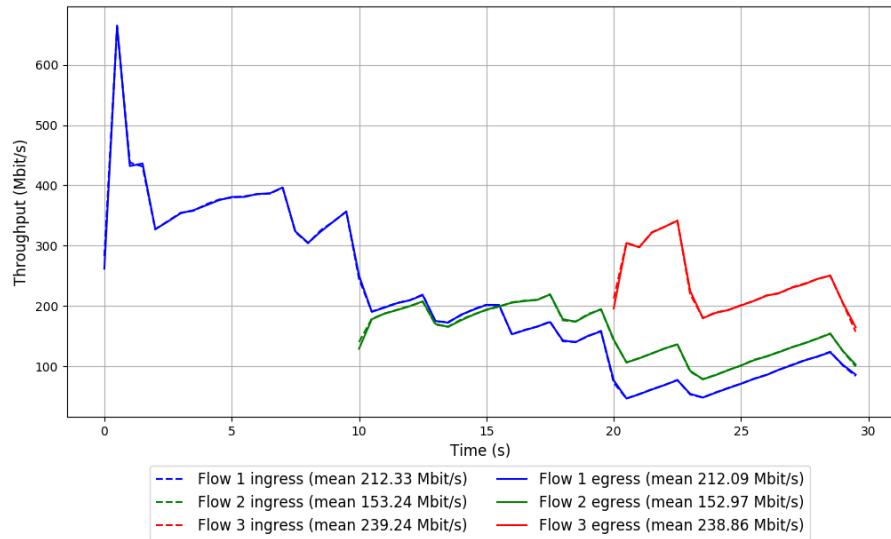
Run 10: Report of TCP BBR — Data Link

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```
Run 1: Statistics of TCP Cubic

Start at: 2018-04-24 21:26:20
End at: 2018-04-24 21:26:50
Local clock offset: 0.313 ms
Remote clock offset: -5.256 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.75 Mbit/s
95th percentile per-packet one-way delay: 19.311 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 180.74 Mbit/s
95th percentile per-packet one-way delay: 19.392 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 168.73 Mbit/s
95th percentile per-packet one-way delay: 19.243 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 194.54 Mbit/s
95th percentile per-packet one-way delay: 19.244 ms
Loss rate: 0.27%
```

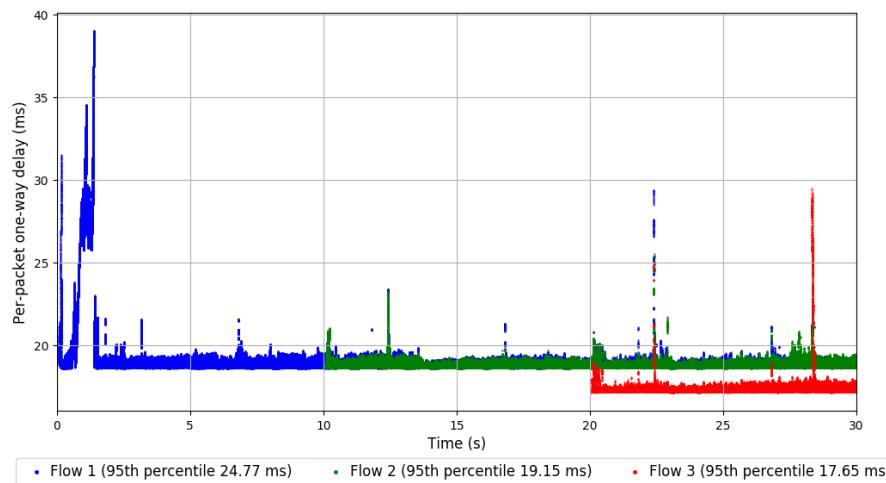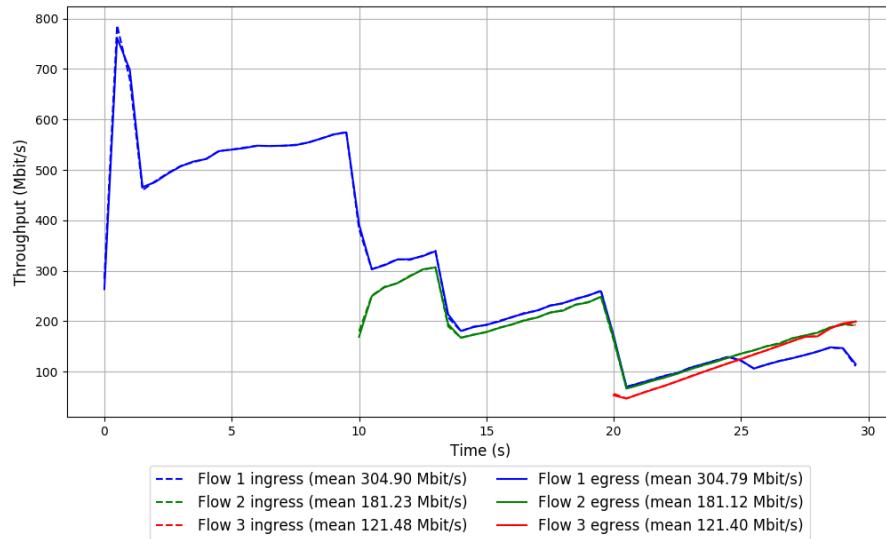Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-04-24 21:52:50
End at: 2018-04-24 21:53:20
Local clock offset: 0.235 ms
Remote clock offset: -5.407 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 402.04 Mbit/s
95th percentile per-packet one-way delay: 19.885 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 242.44 Mbit/s
95th percentile per-packet one-way delay: 28.741 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 109.69 Mbit/s
95th percentile per-packet one-way delay: 19.040 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 260.69 Mbit/s
95th percentile per-packet one-way delay: 19.269 ms
Loss rate: 0.11%
```

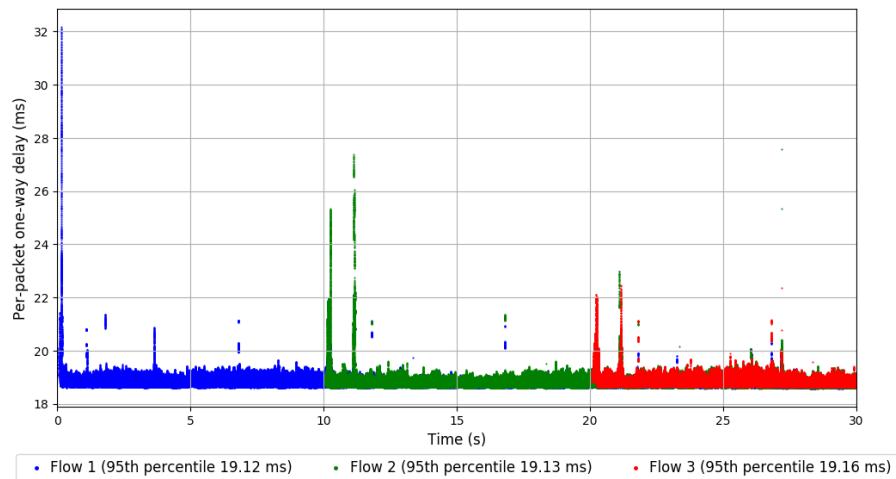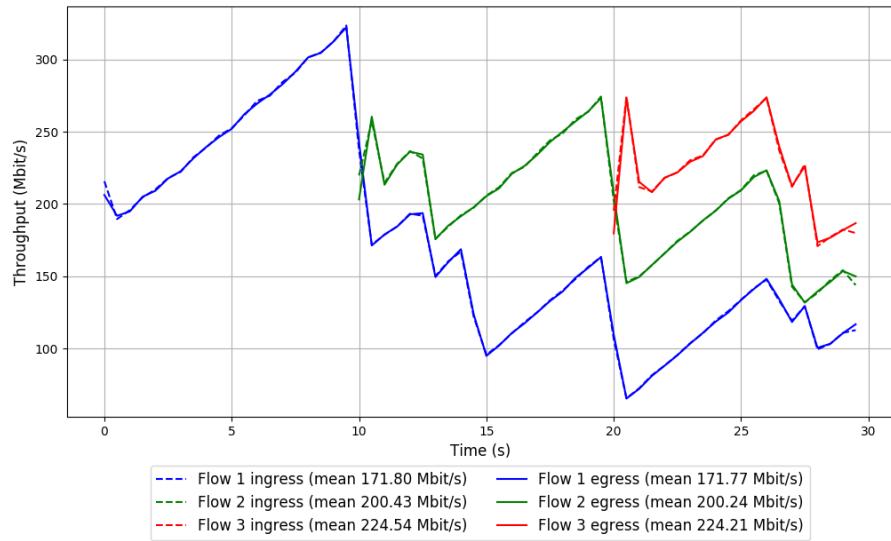Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-04-24 22:19:25
End at: 2018-04-24 22:19:55
Local clock offset: 0.054 ms
Remote clock offset: -5.844 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.57 Mbit/s
95th percentile per-packet one-way delay: 19.261 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 266.88 Mbit/s
95th percentile per-packet one-way delay: 22.190 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 208.21 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 183.67 Mbit/s
95th percentile per-packet one-way delay: 19.040 ms
Loss rate: 0.11%
```

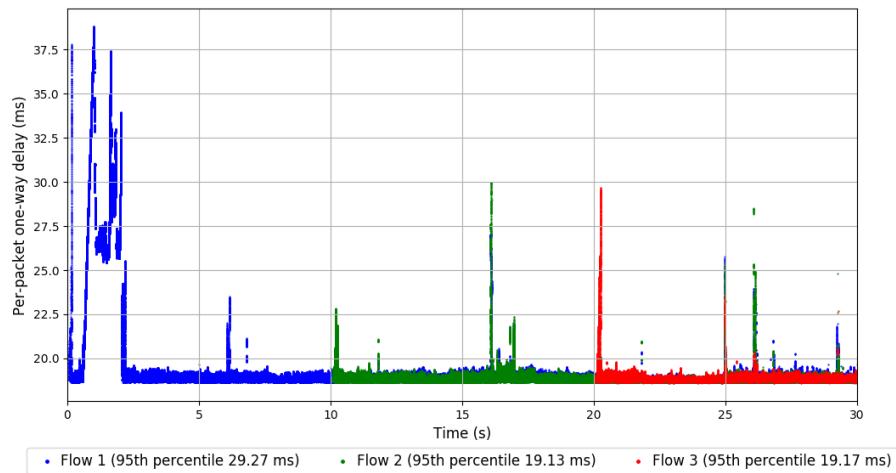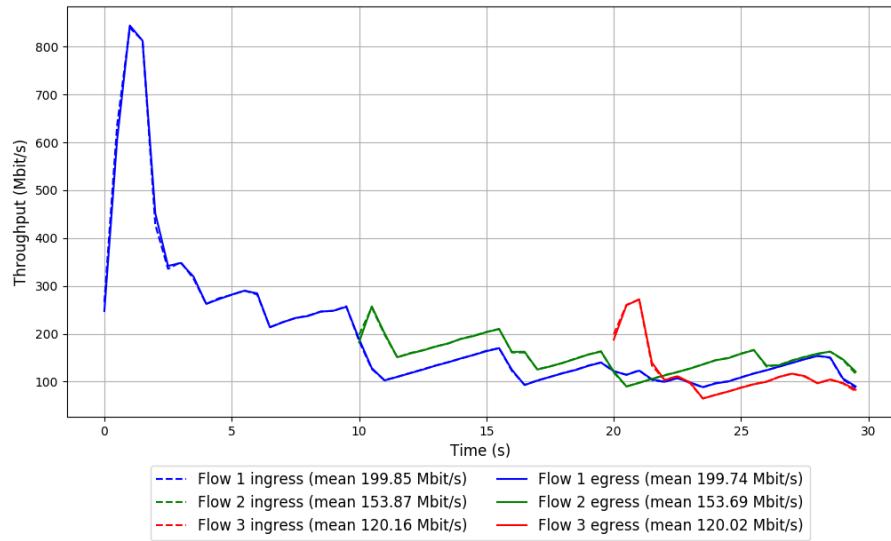Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-04-24 22:46:09
End at: 2018-04-24 22:46:39
Local clock offset: 0.014 ms
Remote clock offset: -5.58 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.29 Mbit/s
95th percentile per-packet one-way delay: 19.259 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 212.09 Mbit/s
95th percentile per-packet one-way delay: 19.641 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 152.97 Mbit/s
95th percentile per-packet one-way delay: 19.054 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 238.86 Mbit/s
95th percentile per-packet one-way delay: 19.381 ms
Loss rate: 0.16%
```

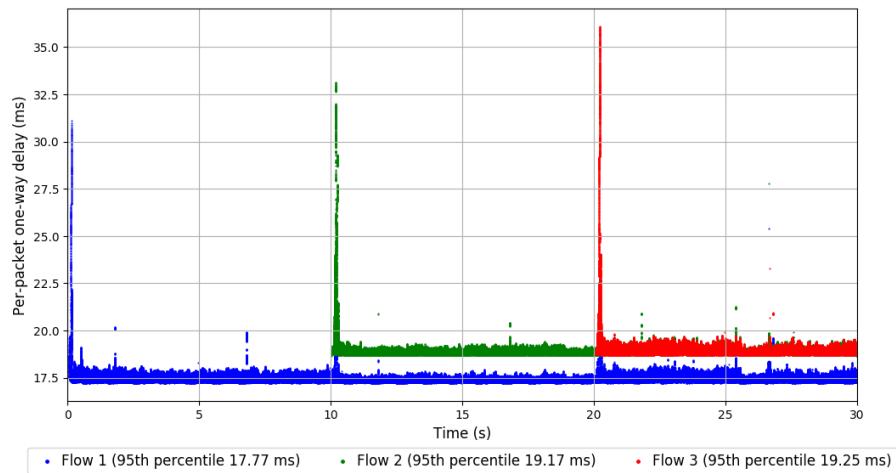Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-04-24 23:12:54
End at: 2018-04-24 23:13:24
Local clock offset: 0.115 ms
Remote clock offset: -6.272 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.72 Mbit/s
95th percentile per-packet one-way delay: 19.853 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 304.79 Mbit/s
95th percentile per-packet one-way delay: 24.772 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 181.12 Mbit/s
95th percentile per-packet one-way delay: 19.150 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 121.40 Mbit/s
95th percentile per-packet one-way delay: 17.652 ms
Loss rate: 0.06%
```

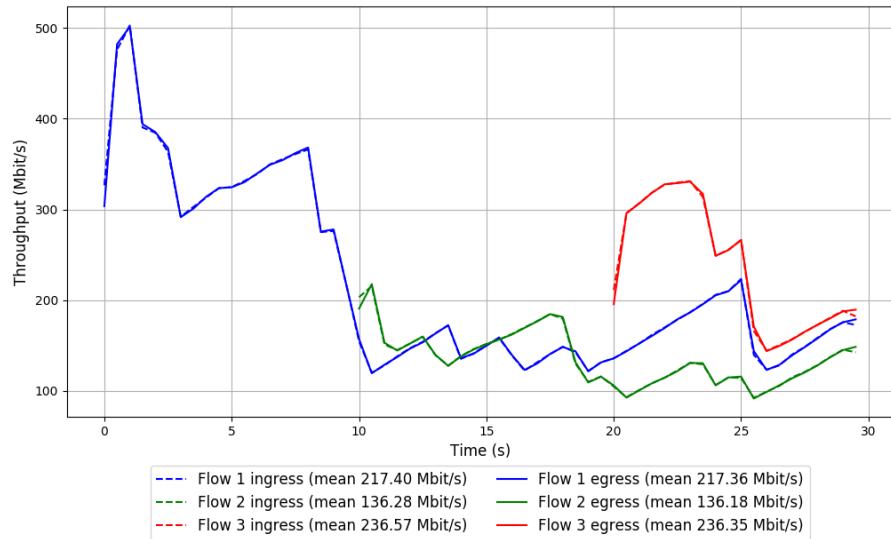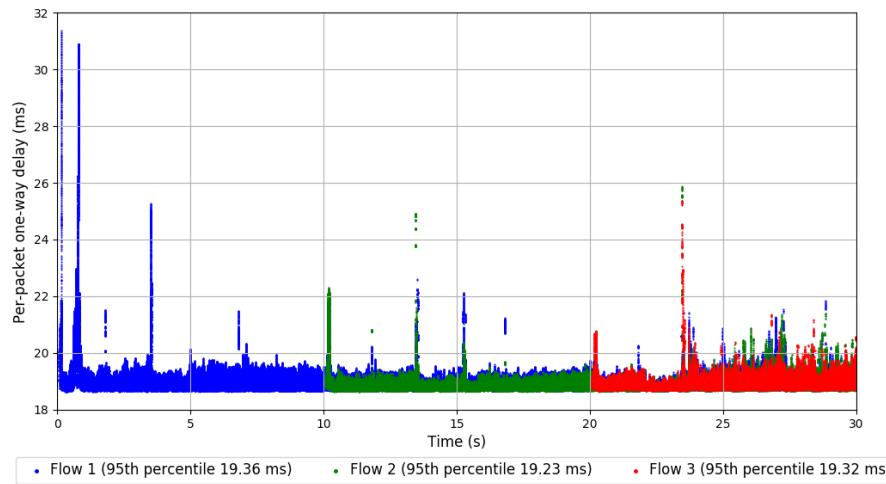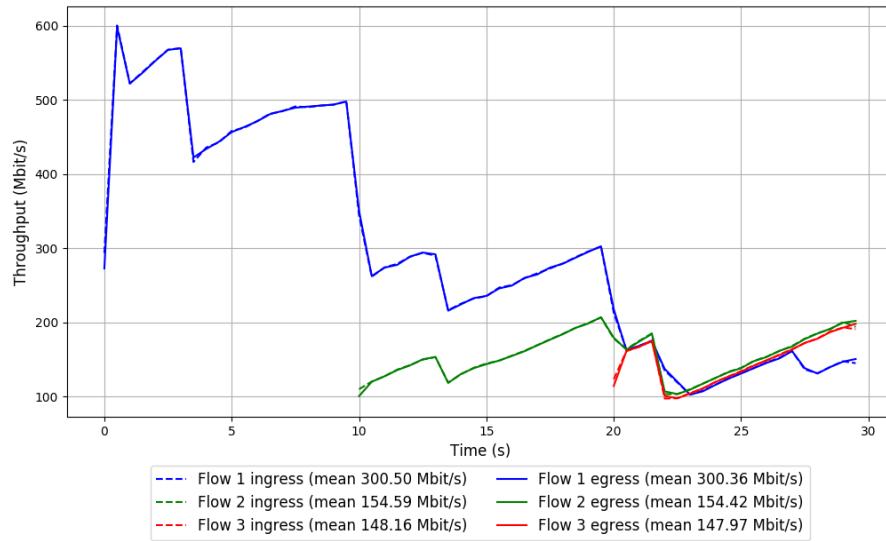## Run 5: Report of TCP Cubic — Data Link

Legend (top figure):
- Flow 1 ingress (mean 304.90 Mbit/s) — Flow 1 egress (mean 304.79 Mbit/s)
- Flow 2 ingress (mean 181.23 Mbit/s) — Flow 2 egress (mean 181.12 Mbit/s)
- Flow 3 ingress (mean 121.48 Mbit/s) — Flow 3 egress (mean 121.40 Mbit/s)

Legend (bottom figure):
- Flow 1 (95th percentile 24.77 ms)
- Flow 2 (95th percentile 19.15 ms)
- Flow 3 (95th percentile 17.65 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-04-24 23:39:35
End at: 2018-04-24 23:40:05
Local clock offset: 0.497 ms
Remote clock offset: -6.267 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.56 Mbit/s
95th percentile per-packet one-way delay: 19.134 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 171.77 Mbit/s
95th percentile per-packet one-way delay: 19.124 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 200.24 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 224.21 Mbit/s
95th percentile per-packet one-way delay: 19.165 ms
Loss rate: 0.14%
```

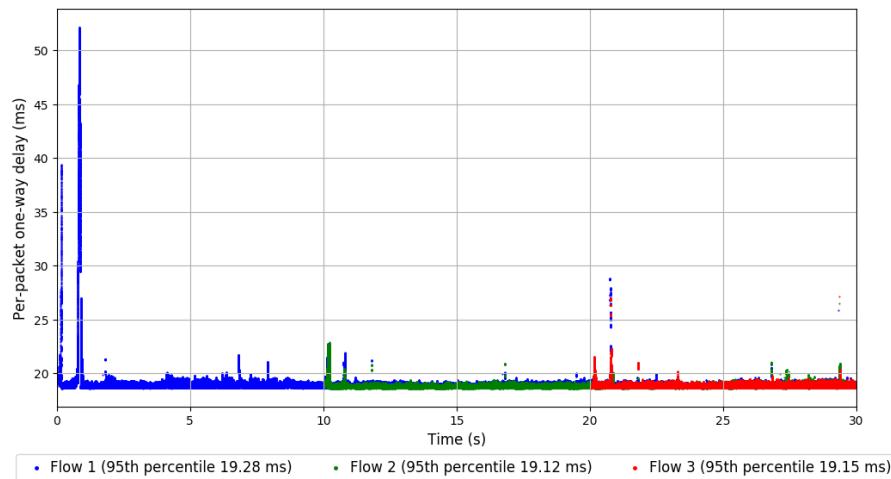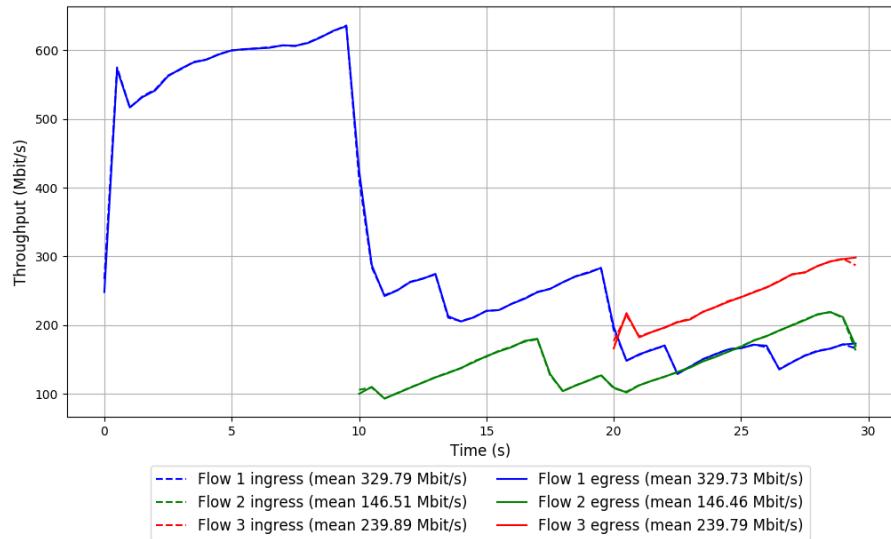Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-04-25 00:06:10
End at: 2018-04-25 00:06:40
Local clock offset: 0.11 ms
Remote clock offset: -5.5 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.93 Mbit/s
95th percentile per-packet one-way delay: 26.789 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 199.74 Mbit/s
95th percentile per-packet one-way delay: 29.269 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 153.69 Mbit/s
95th percentile per-packet one-way delay: 19.129 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 120.02 Mbit/s
95th percentile per-packet one-way delay: 19.167 ms
Loss rate: 0.10%
```
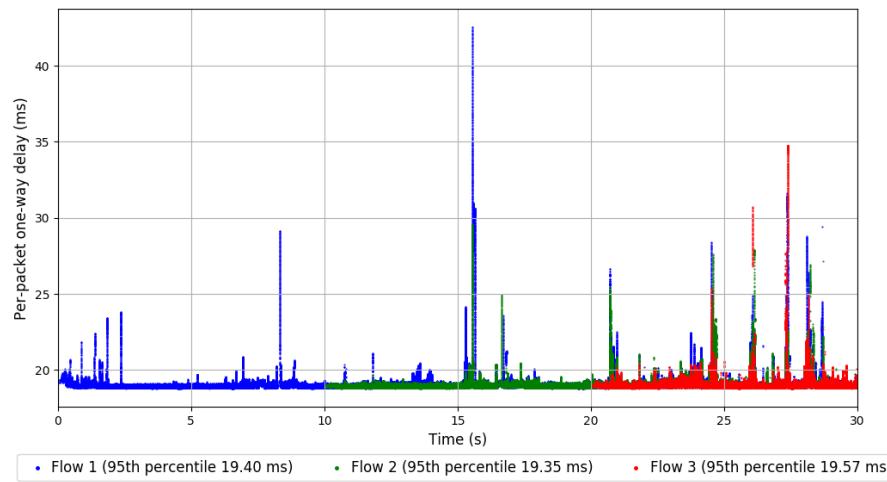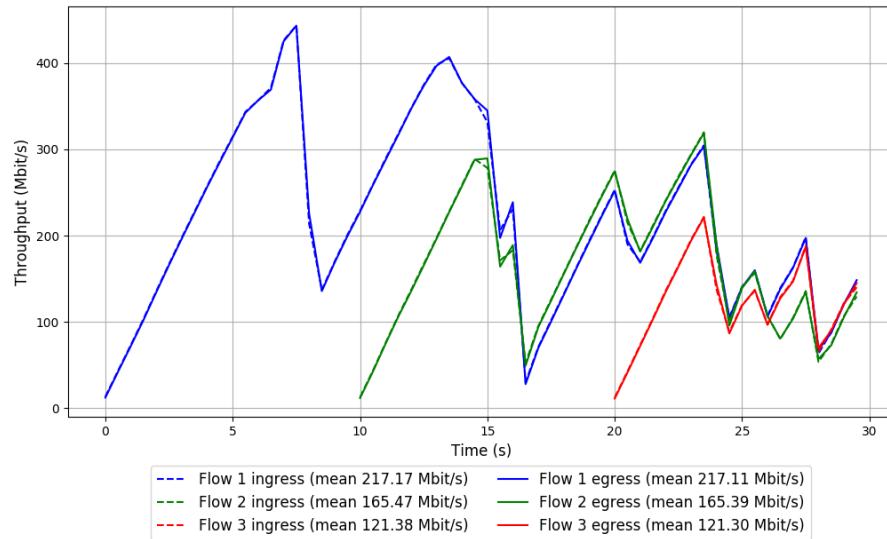
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 199.85 Mbit/s)   Flow 1 egress (mean 199.74 Mbit/s)
Flow 2 ingress (mean 153.87 Mbit/s)   Flow 2 egress (mean 153.69 Mbit/s)
Flow 3 ingress (mean 120.16 Mbit/s)   Flow 3 egress (mean 120.02 Mbit/s)

Flow 1 (95th percentile 29.27 ms)   Flow 2 (95th percentile 19.13 ms)   Flow 3 (95th percentile 19.17 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-04-25 00:32:35
End at: 2018-04-25 00:33:05
Local clock offset: -0.013 ms
Remote clock offset: -5.523 ms


# Below is generated by plot.py at 2018-04-25 04:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.60 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 217.36 Mbit/s
95th percentile per-packet one-way delay: 17.774 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 136.18 Mbit/s
95th percentile per-packet one-way delay: 19.170 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 236.35 Mbit/s
95th percentile per-packet one-way delay: 19.255 ms
Loss rate: 0.09%
```
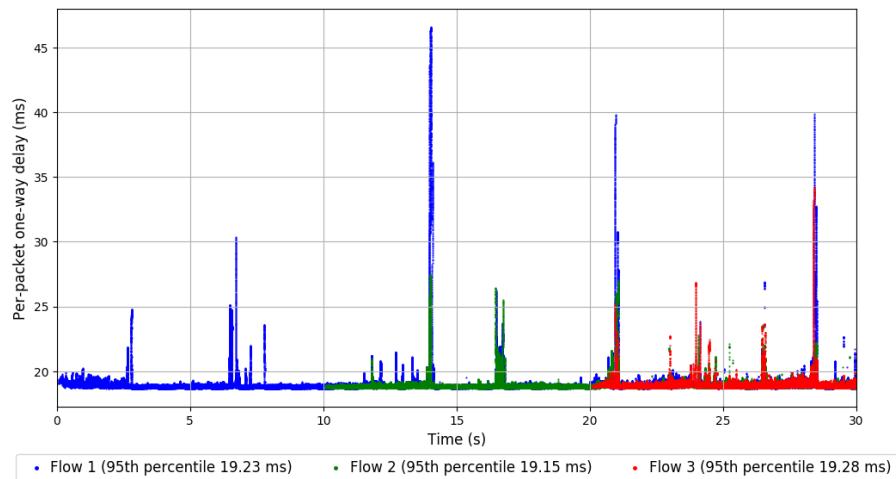
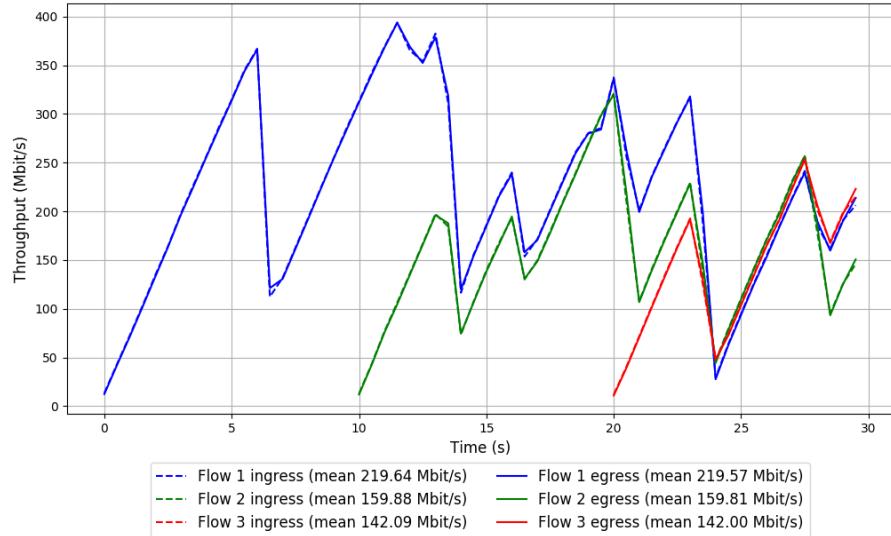Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-04-25 00:59:12
End at: 2018-04-25 00:59:42
Local clock offset: 0.021 ms
Remote clock offset: -5.371 ms


# Below is generated by plot.py at 2018-04-25 04:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.33 Mbit/s
95th percentile per-packet one-way delay: 19.335 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 300.36 Mbit/s
95th percentile per-packet one-way delay: 19.365 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 154.42 Mbit/s
95th percentile per-packet one-way delay: 19.235 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 147.97 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.12%
```
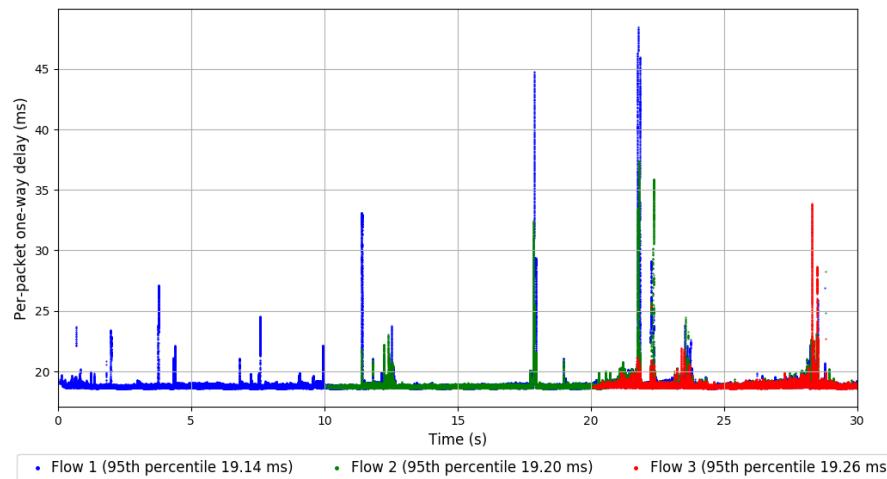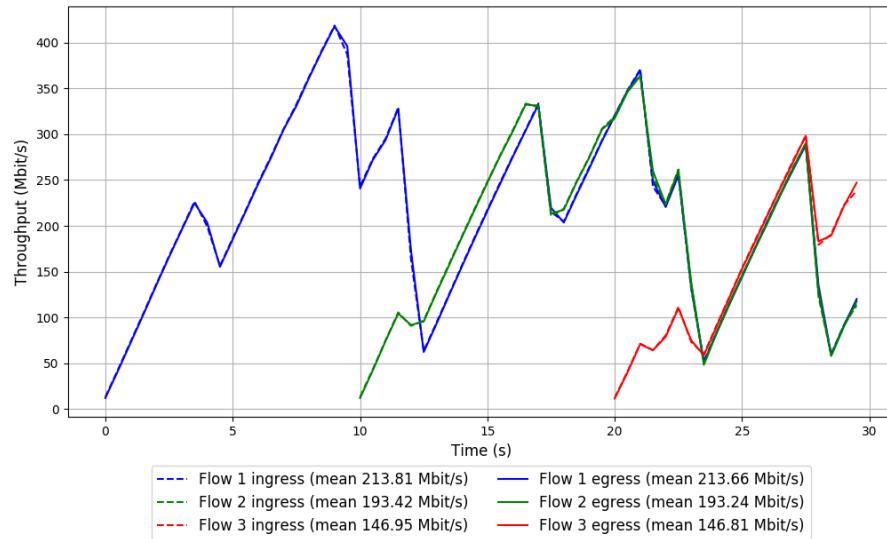
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 300.50 Mbit/s) --- Flow 1 egress (mean 300.36 Mbit/s)
Flow 2 ingress (mean 154.59 Mbit/s) --- Flow 2 egress (mean 154.42 Mbit/s)
Flow 3 ingress (mean 148.16 Mbit/s) --- Flow 3 egress (mean 147.97 Mbit/s)

Flow 1 (95th percentile 19.36 ms)   Flow 2 (95th percentile 19.23 ms)   Flow 3 (95th percentile 19.32 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-04-25 01:25:54
End at: 2018-04-25 01:26:24
Local clock offset: 0.425 ms
Remote clock offset: -6.032 ms


# Below is generated by plot.py at 2018-04-25 04:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 506.98 Mbit/s
95th percentile per-packet one-way delay: 19.236 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 329.73 Mbit/s
95th percentile per-packet one-way delay: 19.282 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 146.46 Mbit/s
95th percentile per-packet one-way delay: 19.121 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 239.79 Mbit/s
95th percentile per-packet one-way delay: 19.149 ms
Loss rate: 0.04%
```

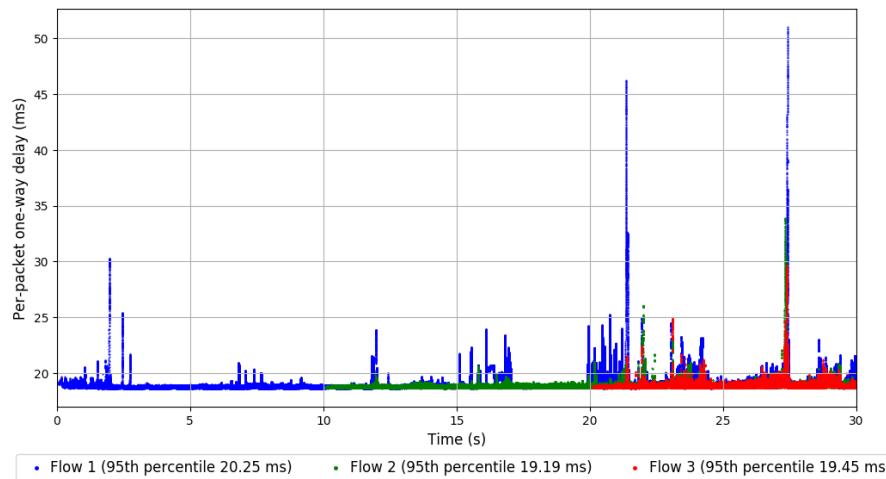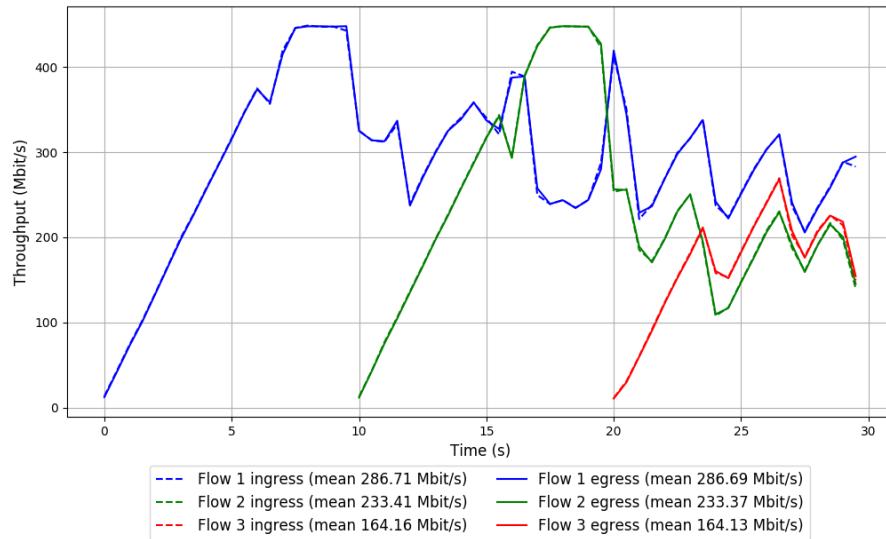Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 329.79 Mbit/s)   Flow 1 egress (mean 329.73 Mbit/s)
Flow 2 ingress (mean 146.51 Mbit/s)   Flow 2 egress (mean 146.46 Mbit/s)
Flow 3 ingress (mean 239.89 Mbit/s)   Flow 3 egress (mean 239.79 Mbit/s)

Flow 1 (95th percentile 19.28 ms)   Flow 2 (95th percentile 19.12 ms)   Flow 3 (95th percentile 19.15 ms)

44

```
Run 1: Statistics of LEDBAT

Start at: 2018-04-24 21:49:37
End at: 2018-04-24 21:50:07
Local clock offset: 0.154 ms
Remote clock offset: -5.284 ms


# Below is generated by plot.py at 2018-04-25 04:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.50 Mbit/s
95th percentile per-packet one-way delay: 19.406 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 217.11 Mbit/s
95th percentile per-packet one-way delay: 19.399 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 165.39 Mbit/s
95th percentile per-packet one-way delay: 19.352 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 121.30 Mbit/s
95th percentile per-packet one-way delay: 19.565 ms
Loss rate: 0.06%
```
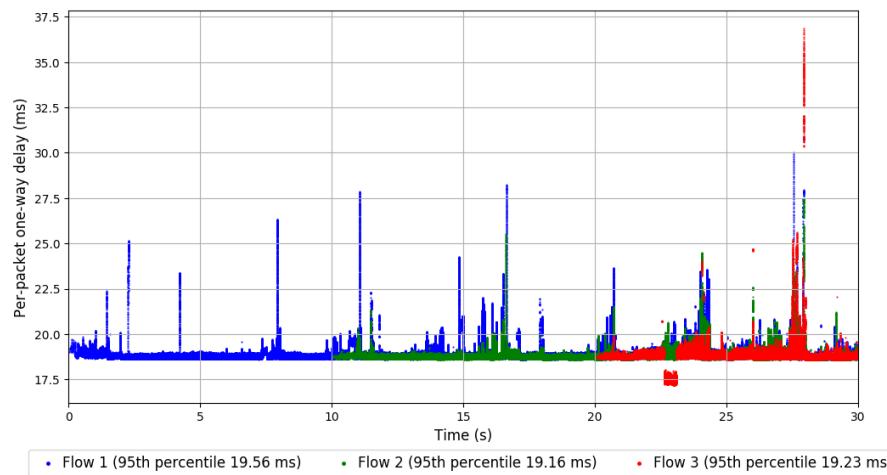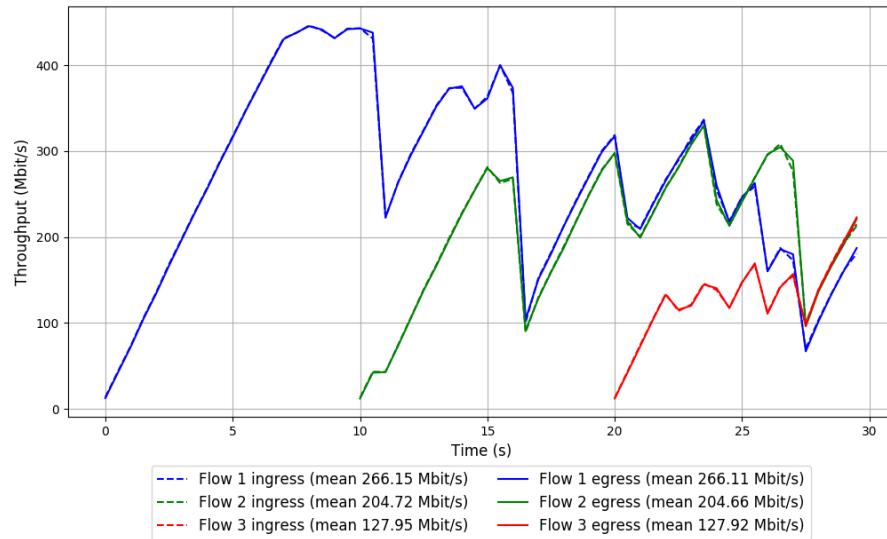
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 217.17 Mbit/s) Flow 1 egress (mean 217.11 Mbit/s)
Flow 2 ingress (mean 165.47 Mbit/s) Flow 2 egress (mean 165.39 Mbit/s)
Flow 3 ingress (mean 121.38 Mbit/s) Flow 3 egress (mean 121.30 Mbit/s)

Flow 1 (95th percentile 19.40 ms)   Flow 2 (95th percentile 19.35 ms)   Flow 3 (95th percentile 19.57 ms)

46

```
Run 2: Statistics of LEDBAT

Start at: 2018-04-24 22:16:11
End at: 2018-04-24 22:16:41
Local clock offset: 0.063 ms
Remote clock offset: -5.719 ms


# Below is generated by plot.py at 2018-04-25 04:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 373.09 Mbit/s
95th percentile per-packet one-way delay: 19.215 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 219.57 Mbit/s
95th percentile per-packet one-way delay: 19.228 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 159.81 Mbit/s
95th percentile per-packet one-way delay: 19.146 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 142.00 Mbit/s
95th percentile per-packet one-way delay: 19.284 ms
Loss rate: 0.06%
```
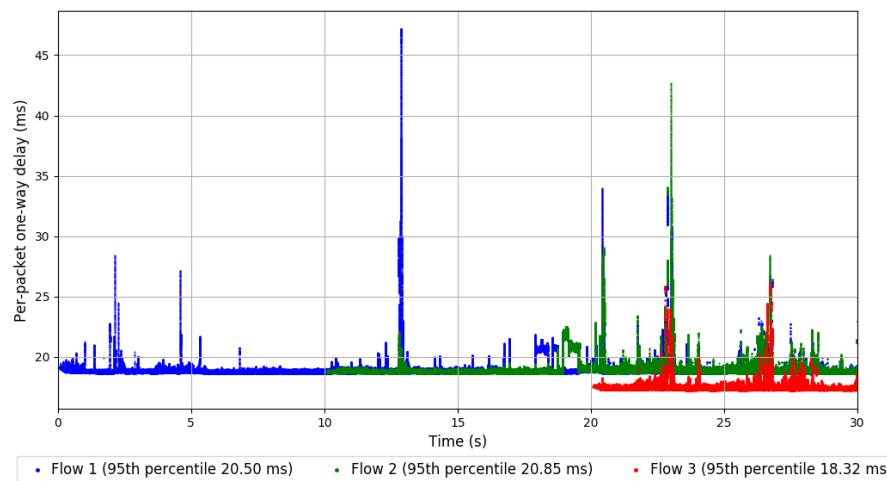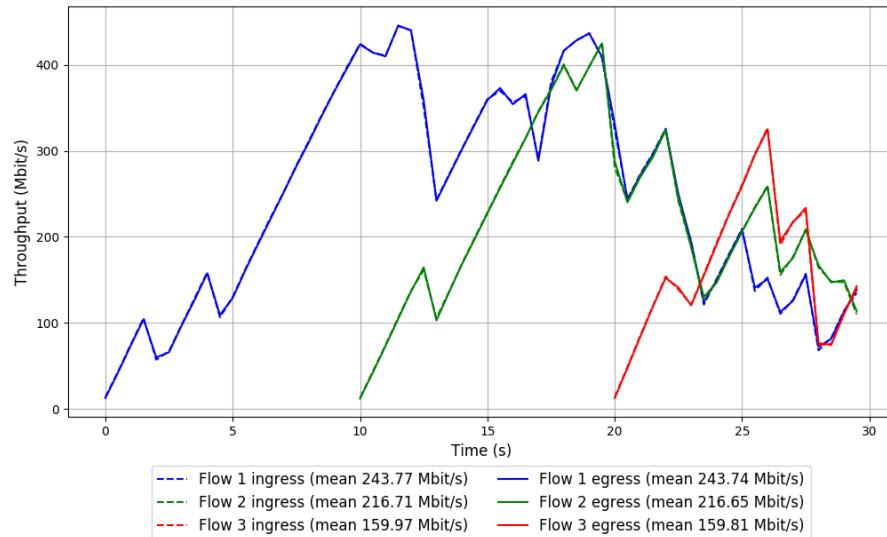
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-04-24 22:42:55
End at: 2018-04-24 22:43:25
Local clock offset: -0.003 ms
Remote clock offset: -5.606 ms

# Below is generated by plot.py at 2018-04-25 04:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.98 Mbit/s
95th percentile per-packet one-way delay: 19.175 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 213.66 Mbit/s
95th percentile per-packet one-way delay: 19.138 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 193.24 Mbit/s
95th percentile per-packet one-way delay: 19.200 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 146.81 Mbit/s
95th percentile per-packet one-way delay: 19.257 ms
Loss rate: 0.10%
```
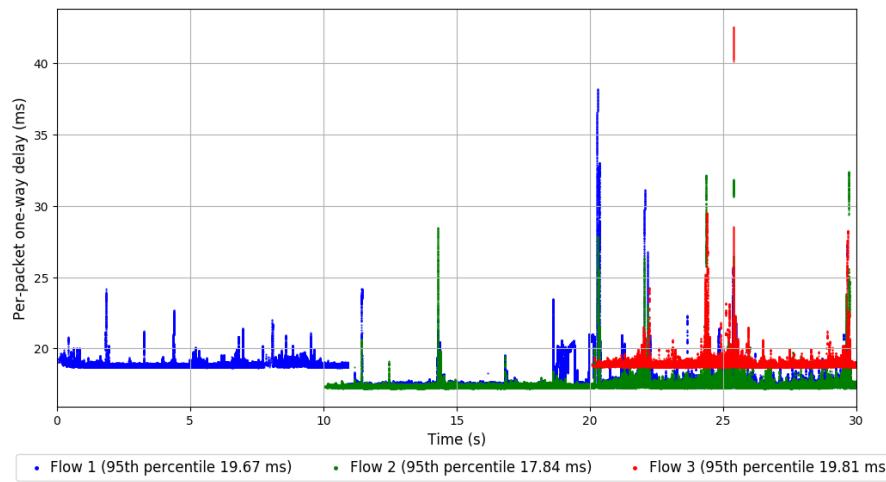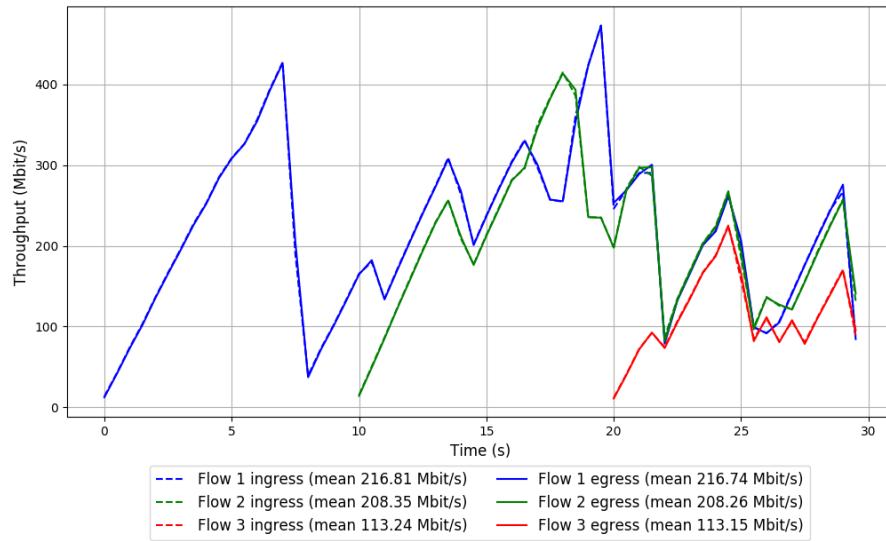
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 213.81 Mbit/s) --- Flow 1 egress (mean 213.66 Mbit/s)
Flow 2 ingress (mean 193.42 Mbit/s) --- Flow 2 egress (mean 193.24 Mbit/s)
Flow 3 ingress (mean 146.95 Mbit/s) --- Flow 3 egress (mean 146.81 Mbit/s)

Flow 1 (95th percentile 19.14 ms)   Flow 2 (95th percentile 19.20 ms)   Flow 3 (95th percentile 19.26 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-04-24 23:09:35
End at: 2018-04-24 23:10:05
Local clock offset: 0.054 ms
Remote clock offset: -6.142 ms


# Below is generated by plot.py at 2018-04-25 04:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.49 Mbit/s
95th percentile per-packet one-way delay: 19.732 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 286.69 Mbit/s
95th percentile per-packet one-way delay: 20.245 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 233.37 Mbit/s
95th percentile per-packet one-way delay: 19.189 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 164.13 Mbit/s
95th percentile per-packet one-way delay: 19.455 ms
Loss rate: 0.02%
```
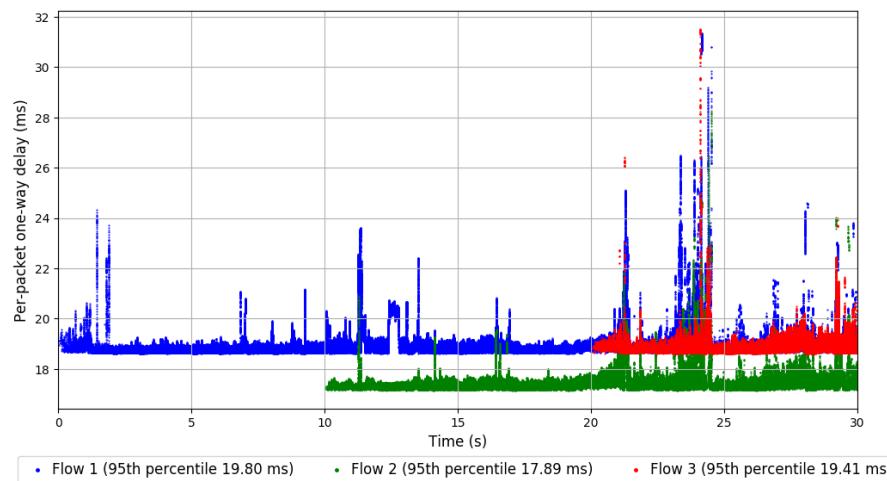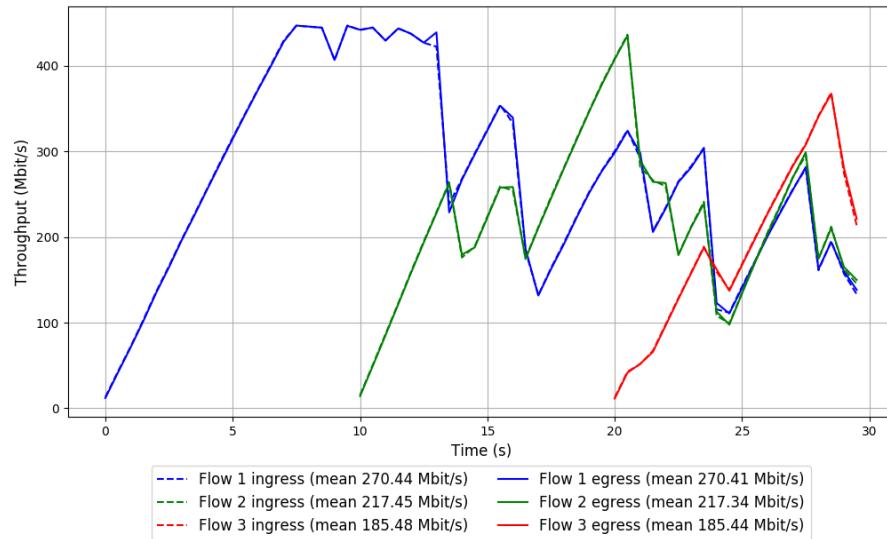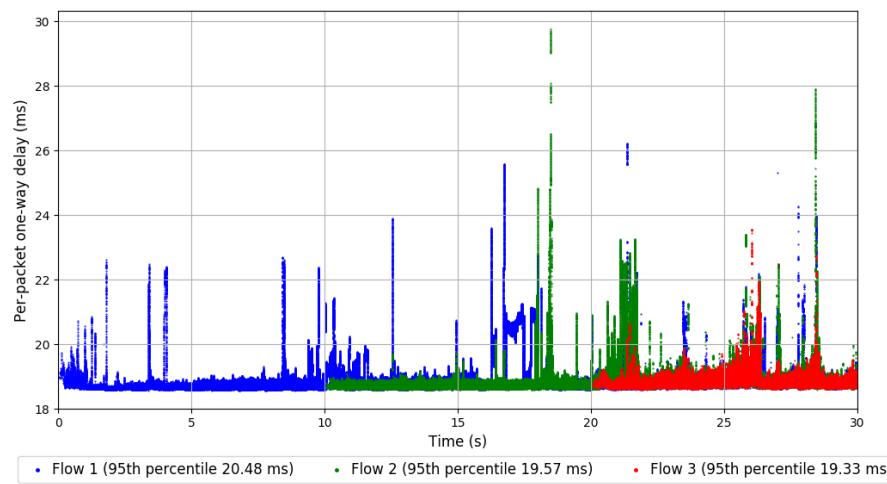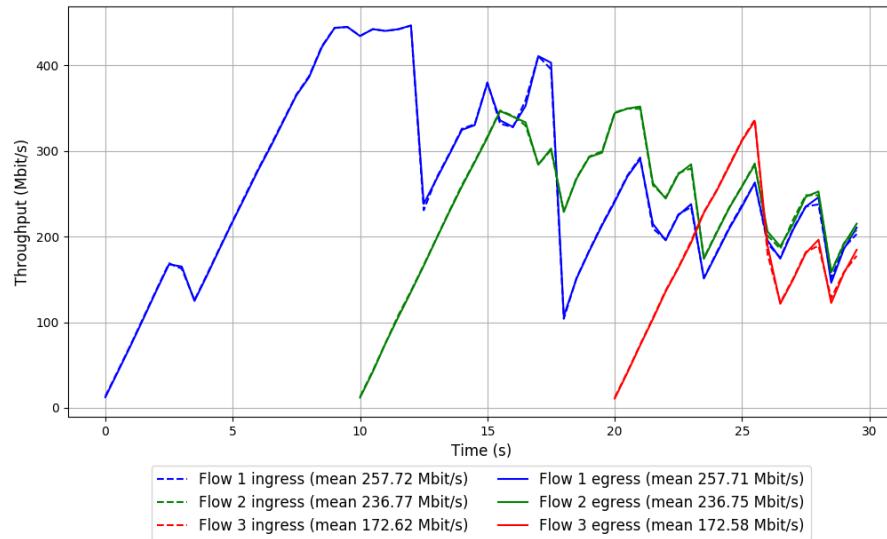
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 286.71 Mbit/s) Flow 1 egress (mean 286.69 Mbit/s)
Flow 2 ingress (mean 233.41 Mbit/s) Flow 2 egress (mean 233.37 Mbit/s)
Flow 3 ingress (mean 164.16 Mbit/s) Flow 3 egress (mean 164.13 Mbit/s)

Flow 1 (95th percentile 20.25 ms)   Flow 2 (95th percentile 19.19 ms)   Flow 3 (95th percentile 19.45 ms)

52

```
Run 5: Statistics of LEDBAT

Start at: 2018-04-24 23:36:19
End at: 2018-04-24 23:36:49
Local clock offset: 0.356 ms
Remote clock offset: -6.698 ms


# Below is generated by plot.py at 2018-04-25 04:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.85 Mbit/s
95th percentile per-packet one-way delay: 19.412 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 266.11 Mbit/s
95th percentile per-packet one-way delay: 19.564 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 204.66 Mbit/s
95th percentile per-packet one-way delay: 19.158 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 127.92 Mbit/s
95th percentile per-packet one-way delay: 19.225 ms
Loss rate: 0.02%
```
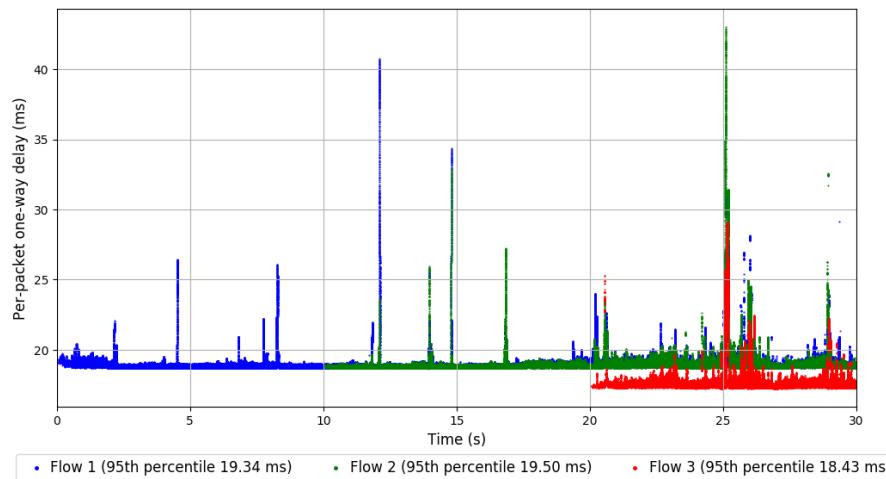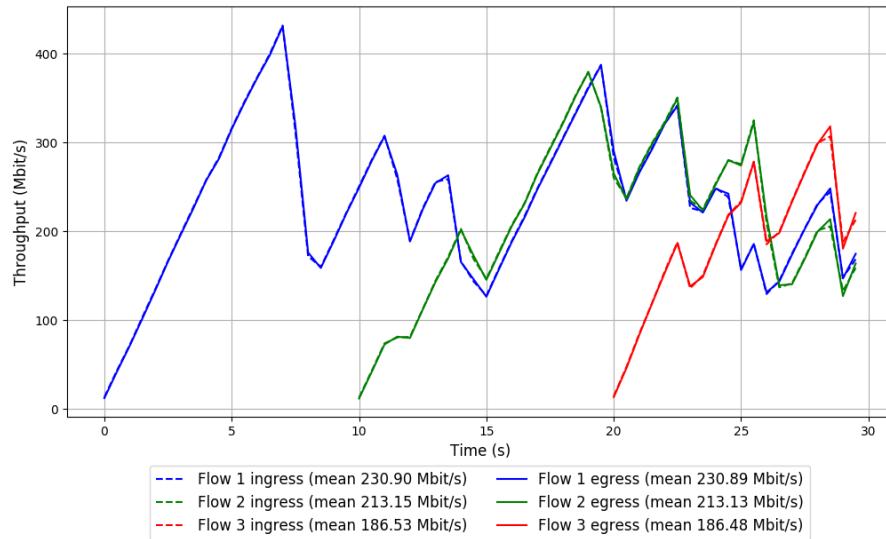
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-04-25 00:02:53
End at: 2018-04-25 00:03:23
Local clock offset: 0.091 ms
Remote clock offset: -5.596 ms

# Below is generated by plot.py at 2018-04-25 04:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.94 Mbit/s
95th percentile per-packet one-way delay: 20.554 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 243.74 Mbit/s
95th percentile per-packet one-way delay: 20.496 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 216.65 Mbit/s
95th percentile per-packet one-way delay: 20.848 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 159.81 Mbit/s
95th percentile per-packet one-way delay: 18.317 ms
Loss rate: 0.05%
```
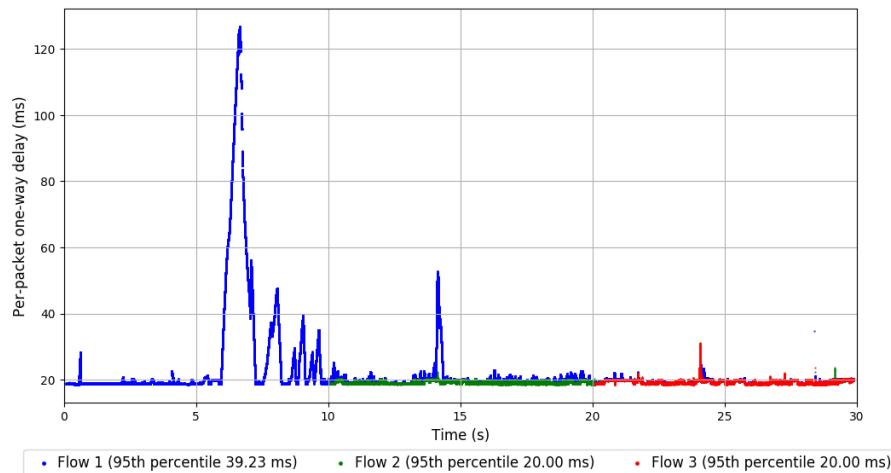
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-04-25 00:29:21
End at: 2018-04-25 00:29:51
Local clock offset: -0.04 ms
Remote clock offset: -5.535 ms

# Below is generated by plot.py at 2018-04-25 04:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.90 Mbit/s
95th percentile per-packet one-way delay: 19.277 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 216.74 Mbit/s
95th percentile per-packet one-way delay: 19.671 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 208.26 Mbit/s
95th percentile per-packet one-way delay: 17.841 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 113.15 Mbit/s
95th percentile per-packet one-way delay: 19.811 ms
Loss rate: 0.08%
```
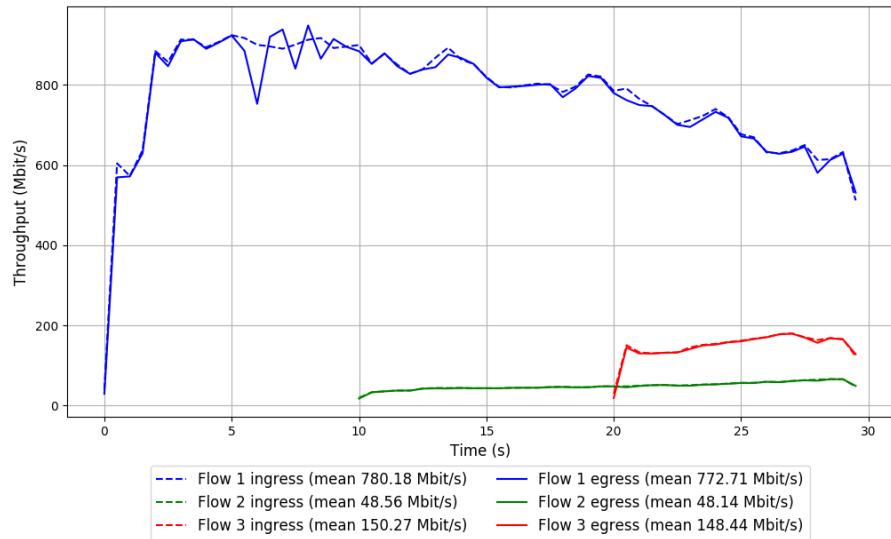
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-04-25 00:55:54
End at: 2018-04-25 00:56:24
Local clock offset: 0.002 ms
Remote clock offset: -5.405 ms


# Below is generated by plot.py at 2018-04-25 04:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 476.69 Mbit/s
95th percentile per-packet one-way delay: 19.419 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 270.41 Mbit/s
95th percentile per-packet one-way delay: 19.795 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 217.34 Mbit/s
95th percentile per-packet one-way delay: 17.892 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 185.44 Mbit/s
95th percentile per-packet one-way delay: 19.405 ms
Loss rate: 0.03%
```
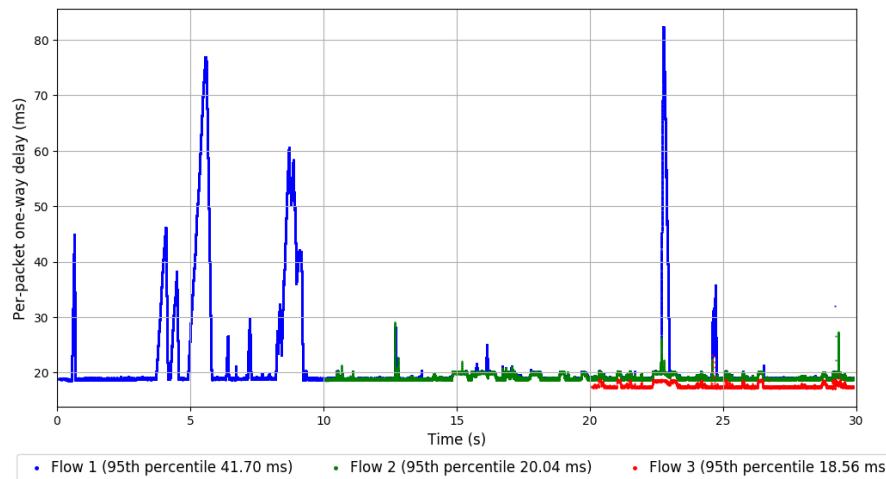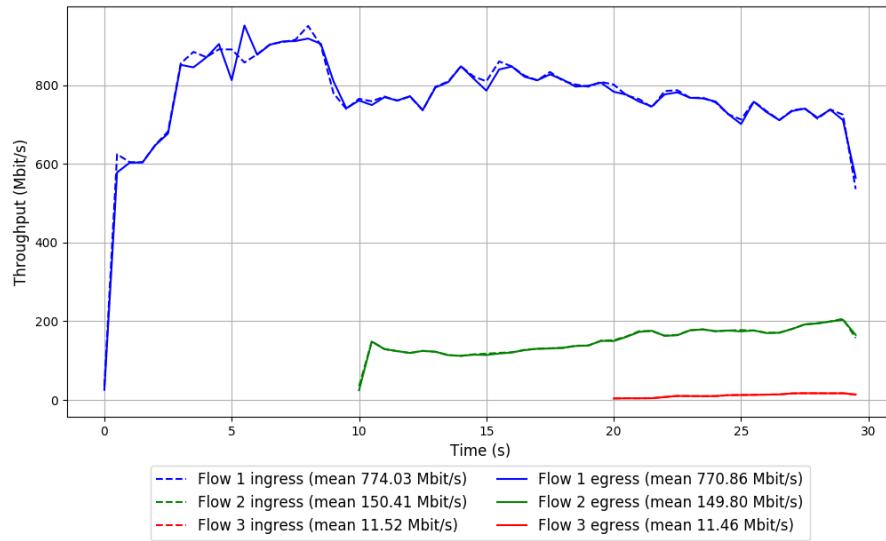
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-04-25 01:22:36
End at: 2018-04-25 01:23:06
Local clock offset: 0.414 ms
Remote clock offset: -5.823 ms


# Below is generated by plot.py at 2018-04-25 04:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 472.66 Mbit/s
95th percentile per-packet one-way delay: 19.886 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 257.71 Mbit/s
95th percentile per-packet one-way delay: 20.482 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 236.75 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 172.58 Mbit/s
95th percentile per-packet one-way delay: 19.334 ms
Loss rate: 0.02%
```

Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-04-25 01:49:30
End at: 2018-04-25 01:50:00
Local clock offset: 0.364 ms
Remote clock offset: -6.694 ms


# Below is generated by plot.py at 2018-04-25 04:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.61 Mbit/s
95th percentile per-packet one-way delay: 19.371 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 230.89 Mbit/s
95th percentile per-packet one-way delay: 19.339 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 213.13 Mbit/s
95th percentile per-packet one-way delay: 19.502 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 186.48 Mbit/s
95th percentile per-packet one-way delay: 18.433 ms
Loss rate: 0.02%
```
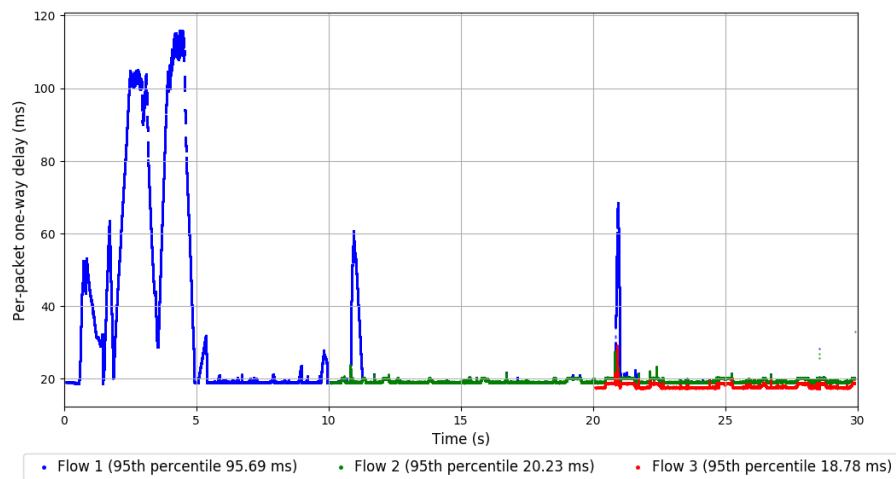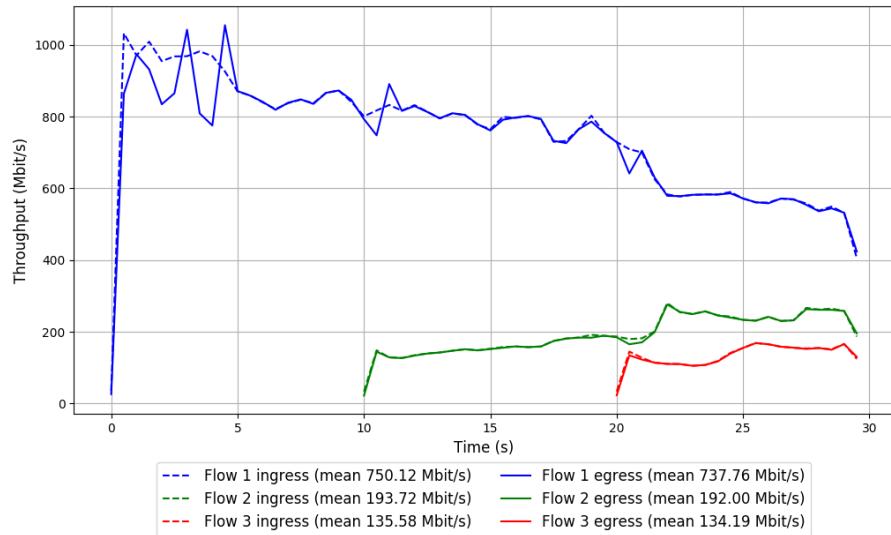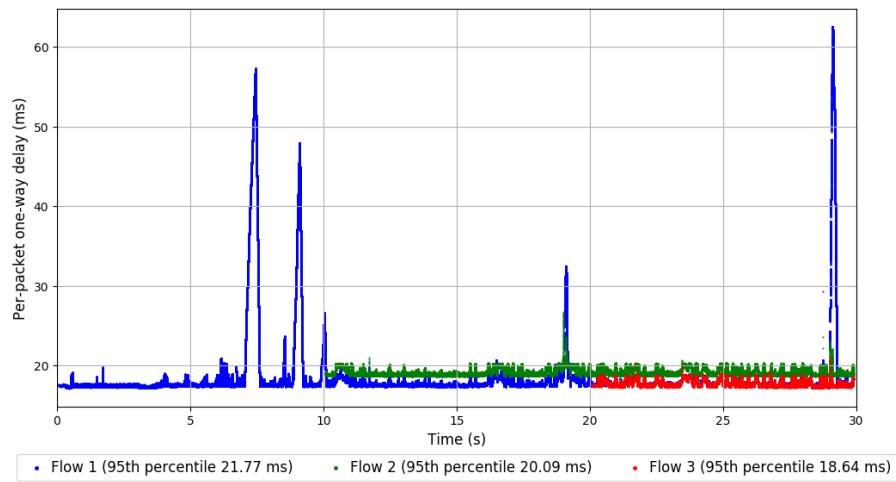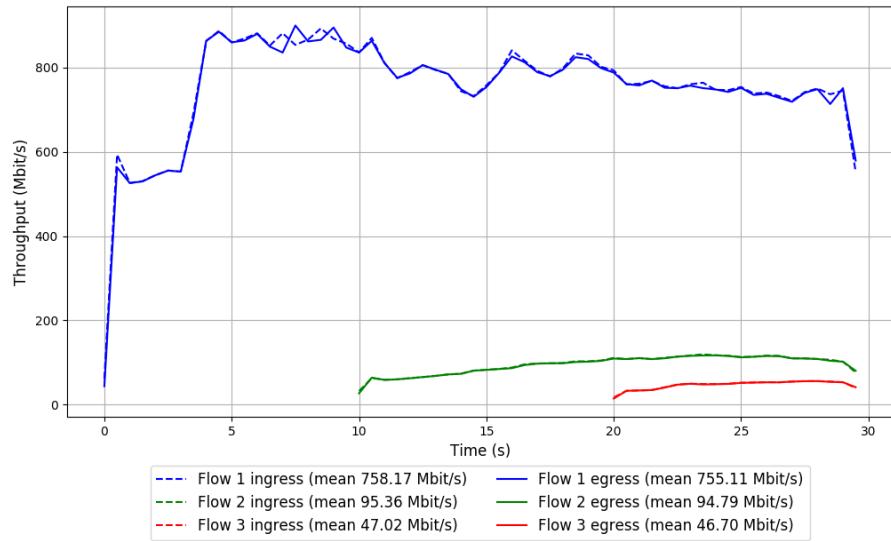
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-04-24 21:35:04
End at: 2018-04-24 21:35:34
Local clock offset: 0.295 ms
Remote clock offset: -5.357 ms


# Below is generated by plot.py at 2018-04-25 04:49:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 853.67 Mbit/s
95th percentile per-packet one-way delay: 37.246 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 772.71 Mbit/s
95th percentile per-packet one-way delay: 39.234 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 20.005 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 148.44 Mbit/s
95th percentile per-packet one-way delay: 20.002 ms
Loss rate: 1.21%
```

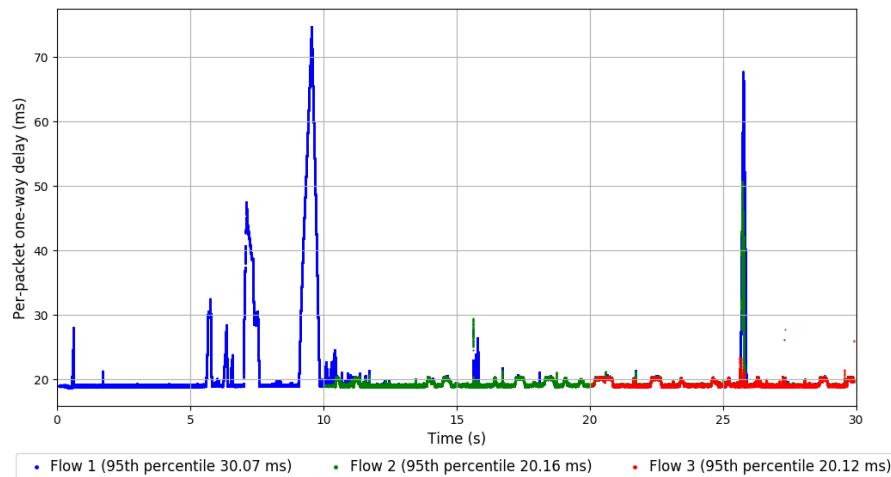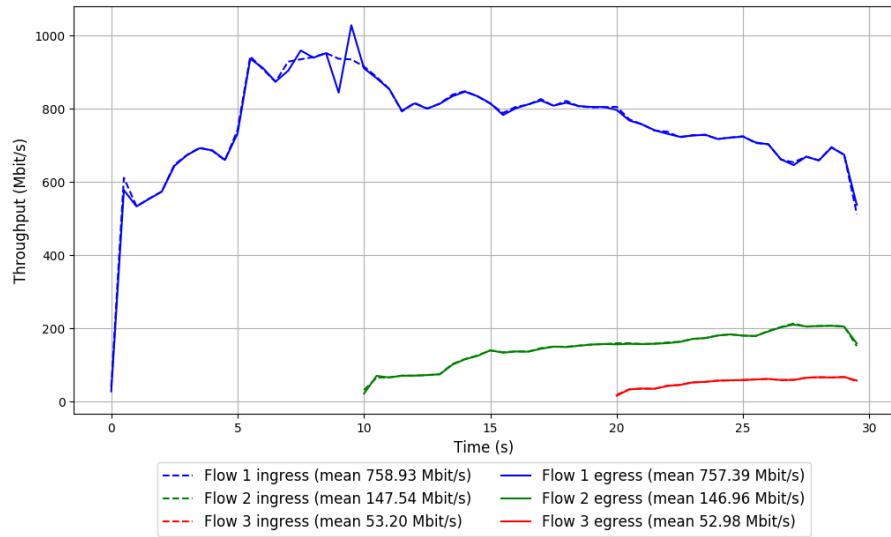Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-04-24 22:01:35
End at: 2018-04-24 22:02:05
Local clock offset: 0.233 ms
Remote clock offset: -5.632 ms


# Below is generated by plot.py at 2018-04-25 04:51:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 874.23 Mbit/s
95th percentile per-packet one-way delay: 39.661 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 770.86 Mbit/s
95th percentile per-packet one-way delay: 41.698 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 149.80 Mbit/s
95th percentile per-packet one-way delay: 20.044 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 18.557 ms
Loss rate: 0.46%
```

Run 2: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 774.03 Mbit/s) —— Flow 1 egress (mean 770.86 Mbit/s)
- - - Flow 2 ingress (mean 150.41 Mbit/s) —— Flow 2 egress (mean 149.80 Mbit/s)
- - - Flow 3 ingress (mean 11.52 Mbit/s) —— Flow 3 egress (mean 11.46 Mbit/s)

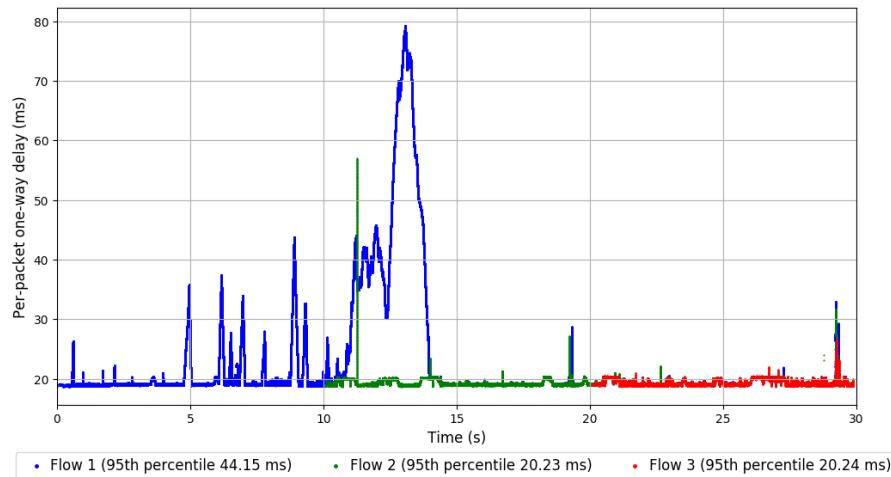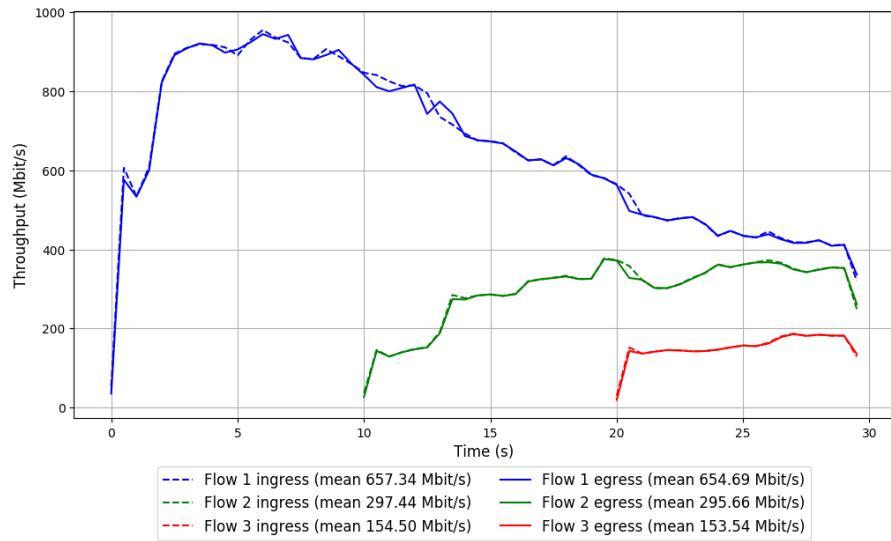• Flow 1 (95th percentile 41.70 ms)   • Flow 2 (95th percentile 20.04 ms)   • Flow 3 (95th percentile 18.56 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-04-24 22:28:17
End at: 2018-04-24 22:28:47
Local clock offset: 0.015 ms
Remote clock offset: -5.795 ms


# Below is generated by plot.py at 2018-04-25 04:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 909.30 Mbit/s
95th percentile per-packet one-way delay: 83.829 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 737.76 Mbit/s
95th percentile per-packet one-way delay: 95.687 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 192.00 Mbit/s
95th percentile per-packet one-way delay: 20.232 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 134.19 Mbit/s
95th percentile per-packet one-way delay: 18.780 ms
Loss rate: 1.01%
```

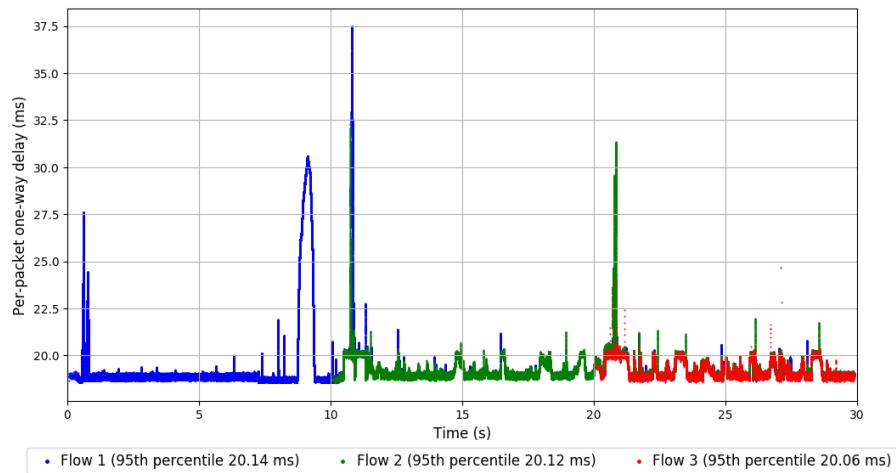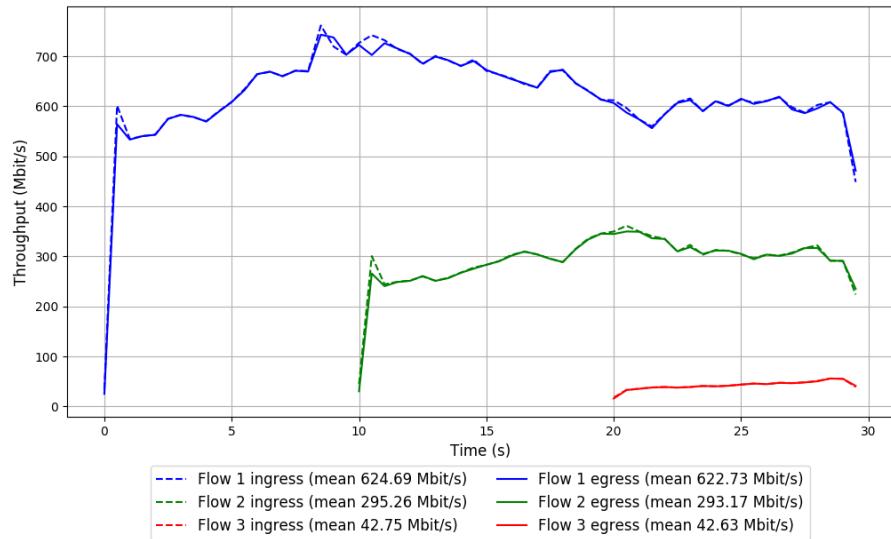Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-04-24 22:54:58
End at: 2018-04-24 22:55:28
Local clock offset: 0.006 ms
Remote clock offset: -5.596 ms


# Below is generated by plot.py at 2018-04-25 04:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.49 Mbit/s
95th percentile per-packet one-way delay: 20.553 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 755.11 Mbit/s
95th percentile per-packet one-way delay: 21.775 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 20.095 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 18.639 ms
Loss rate: 0.68%
```

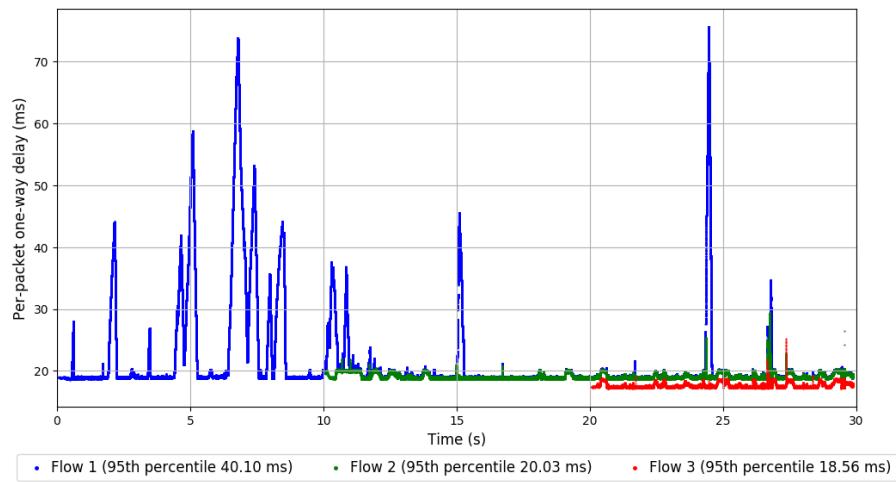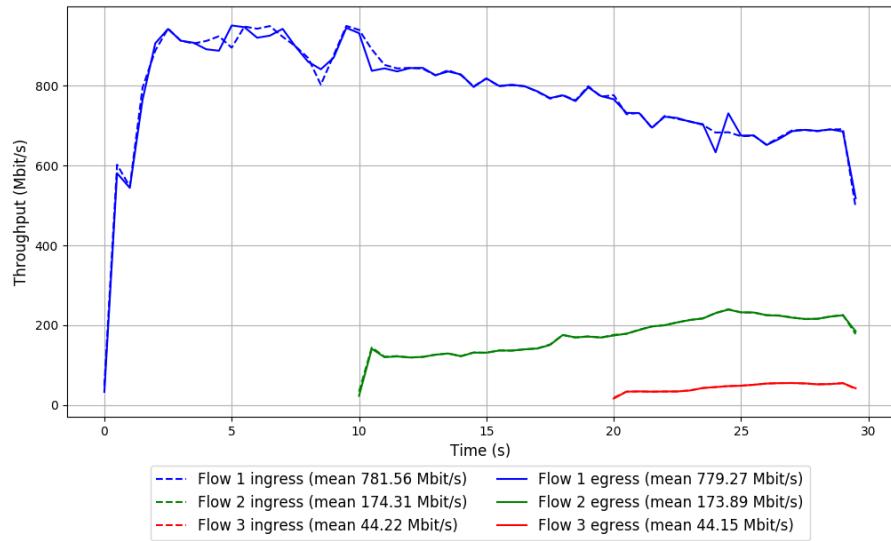Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 758.17 Mbit/s) ---- Flow 1 egress (mean 755.11 Mbit/s) ——
Flow 2 ingress (mean 95.36 Mbit/s) ---- Flow 2 egress (mean 94.79 Mbit/s) ——
Flow 3 ingress (mean 47.02 Mbit/s) ---- Flow 3 egress (mean 46.70 Mbit/s) ——

Flow 1 (95th percentile 21.77 ms) • Flow 2 (95th percentile 20.09 ms) • Flow 3 (95th percentile 18.64 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-04-24 23:21:41
End at: 2018-04-24 23:22:11
Local clock offset: 0.223 ms
Remote clock offset: -6.471 ms


# Below is generated by plot.py at 2018-04-25 04:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 872.43 Mbit/s
95th percentile per-packet one-way delay: 28.891 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 757.39 Mbit/s
95th percentile per-packet one-way delay: 30.070 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 146.96 Mbit/s
95th percentile per-packet one-way delay: 20.155 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 20.123 ms
Loss rate: 0.35%
```

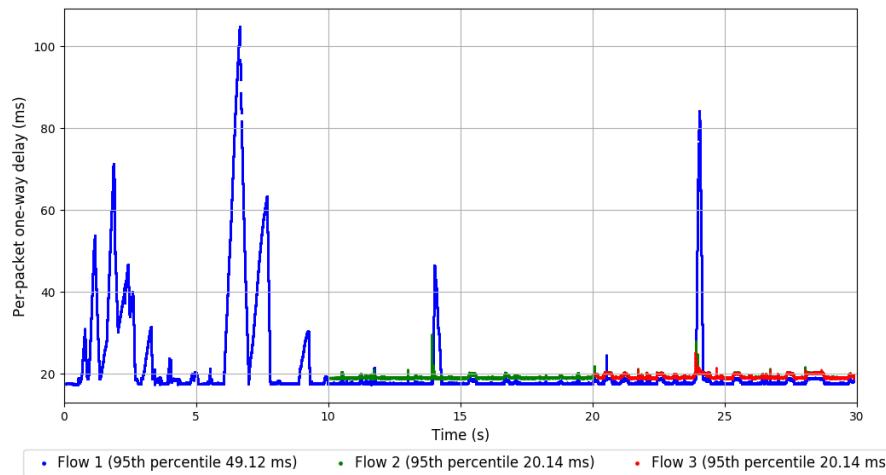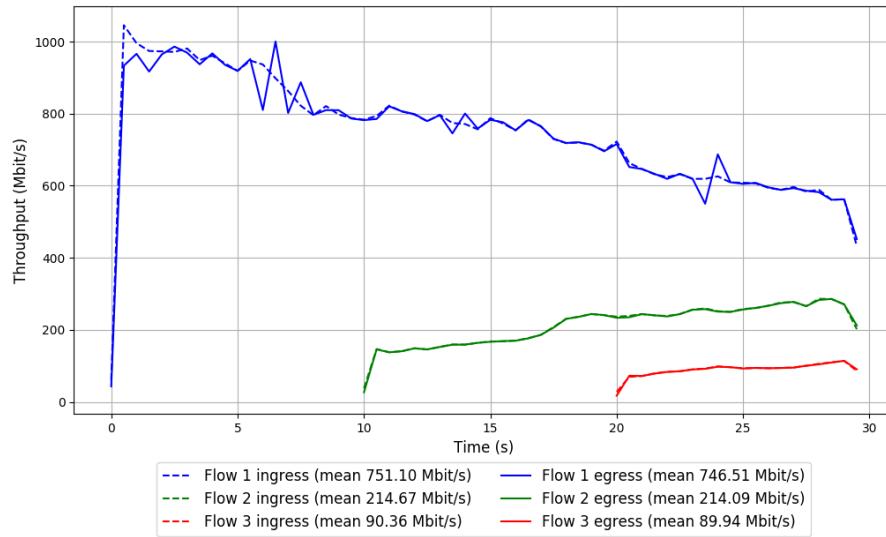Run 5: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 758.93 Mbit/s)   ——— Flow 1 egress (mean 757.39 Mbit/s)
- - - Flow 2 ingress (mean 147.54 Mbit/s)   ——— Flow 2 egress (mean 146.96 Mbit/s)
- - - Flow 3 ingress (mean 53.20 Mbit/s)   ——— Flow 3 egress (mean 52.98 Mbit/s)

- Flow 1 (95th percentile 30.07 ms)   • Flow 2 (95th percentile 20.16 ms)   • Flow 3 (95th percentile 20.12 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-04-24 23:48:17
End at: 2018-04-24 23:48:47
Local clock offset: 0.512 ms
Remote clock offset: -5.795 ms


# Below is generated by plot.py at 2018-04-25 04:53:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 901.84 Mbit/s
95th percentile per-packet one-way delay: 40.770 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 654.69 Mbit/s
95th percentile per-packet one-way delay: 44.148 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 295.66 Mbit/s
95th percentile per-packet one-way delay: 20.231 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 153.54 Mbit/s
95th percentile per-packet one-way delay: 20.241 ms
Loss rate: 0.62%
```

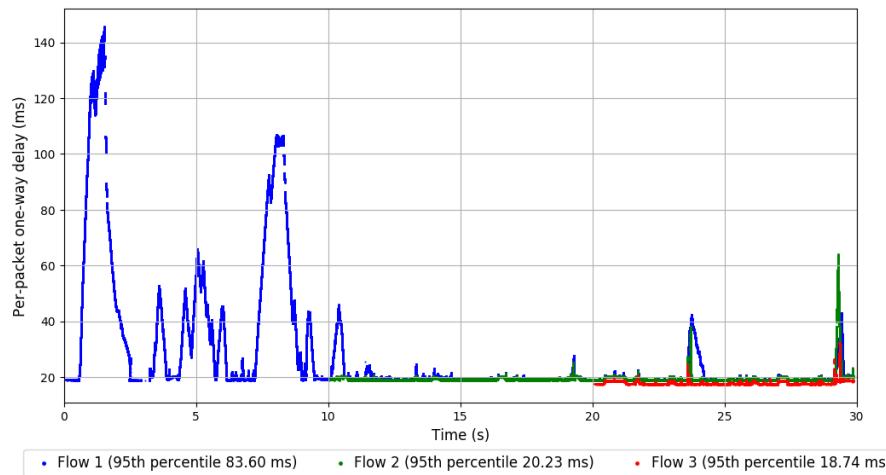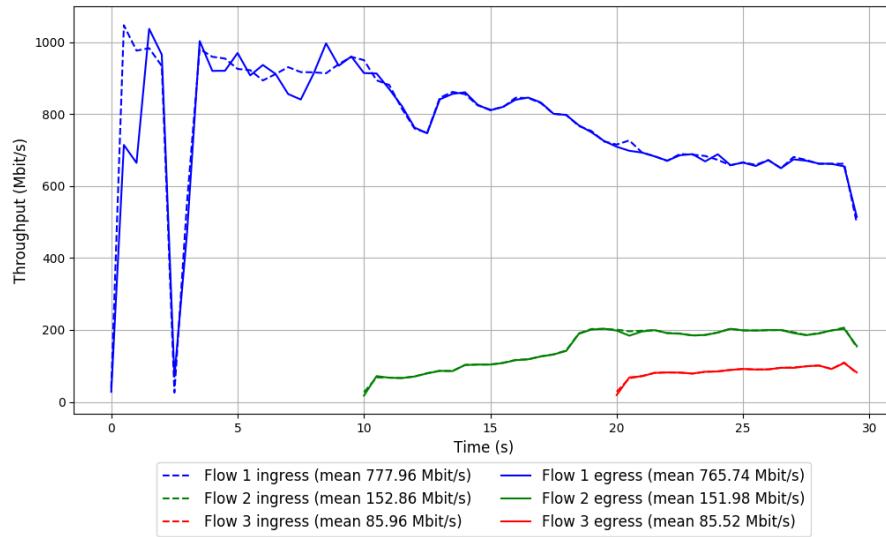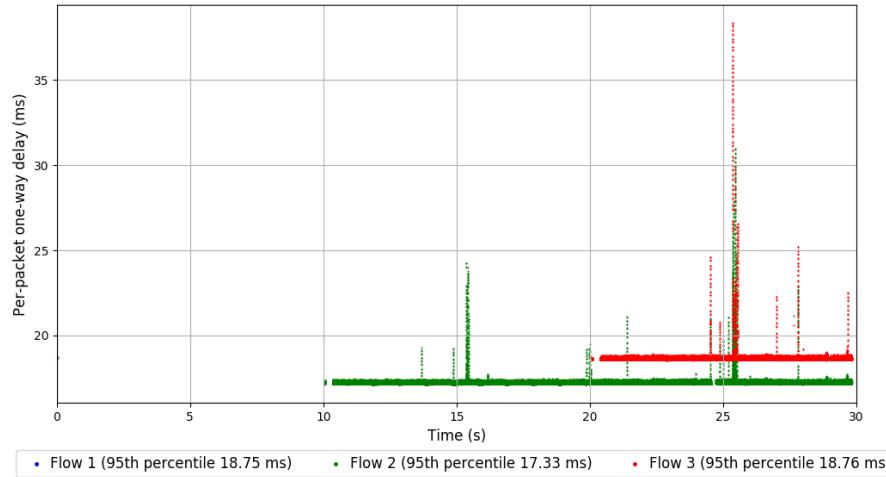Run 6: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 657.34 Mbit/s)   —— Flow 1 egress (mean 654.69 Mbit/s)
- - - Flow 2 ingress (mean 297.44 Mbit/s)   —— Flow 2 egress (mean 295.66 Mbit/s)
- - - Flow 3 ingress (mean 154.50 Mbit/s)   —— Flow 3 egress (mean 153.54 Mbit/s)

- Flow 1 (95th percentile 44.15 ms)   • Flow 2 (95th percentile 20.23 ms)   • Flow 3 (95th percentile 20.24 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-04-25 00:14:45
End at: 2018-04-25 00:15:15
Local clock offset: -0.026 ms
Remote clock offset: -5.591 ms

# Below is generated by plot.py at 2018-04-25 04:53:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 831.71 Mbit/s
95th percentile per-packet one-way delay: 20.133 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 622.73 Mbit/s
95th percentile per-packet one-way delay: 20.141 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 293.17 Mbit/s
95th percentile per-packet one-way delay: 20.120 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 20.064 ms
Loss rate: 0.30%
```

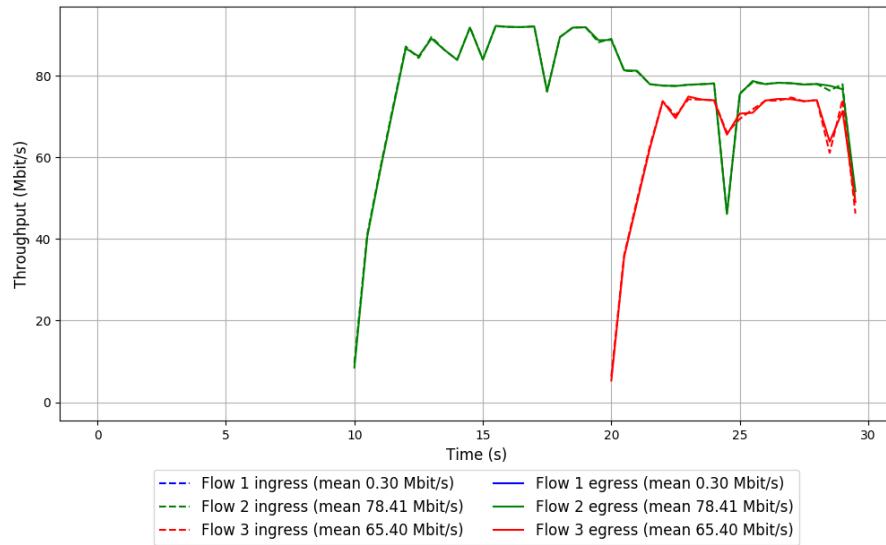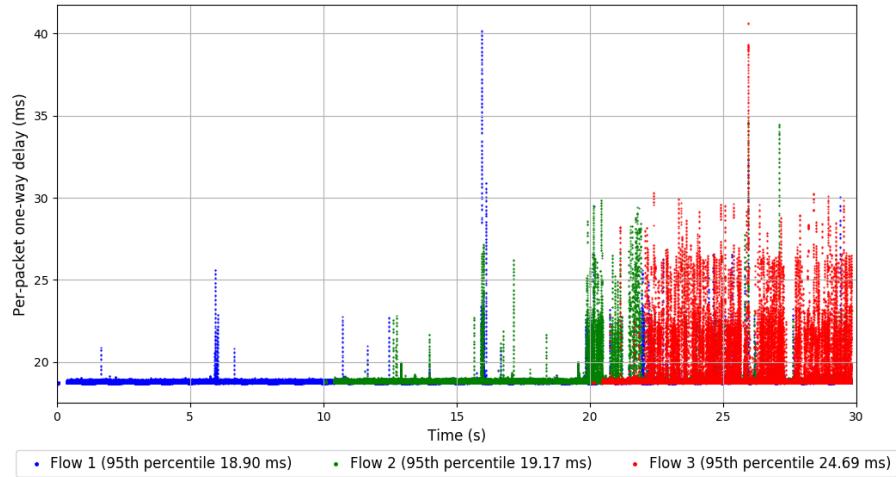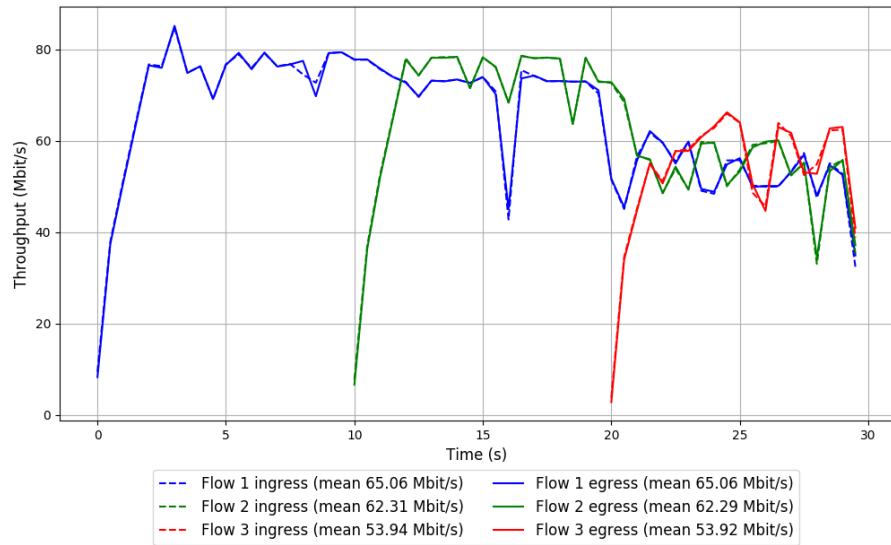# Run 7: Report of PCC-Allegro — Data Link

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-04-25 00:41:10
End at: 2018-04-25 00:41:40
Local clock offset: 0.04 ms
Remote clock offset: -5.59 ms


# Below is generated by plot.py at 2018-04-25 04:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 909.42 Mbit/s
95th percentile per-packet one-way delay: 38.345 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 779.27 Mbit/s
95th percentile per-packet one-way delay: 40.105 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 173.89 Mbit/s
95th percentile per-packet one-way delay: 20.029 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 18.564 ms
Loss rate: 0.15%
```
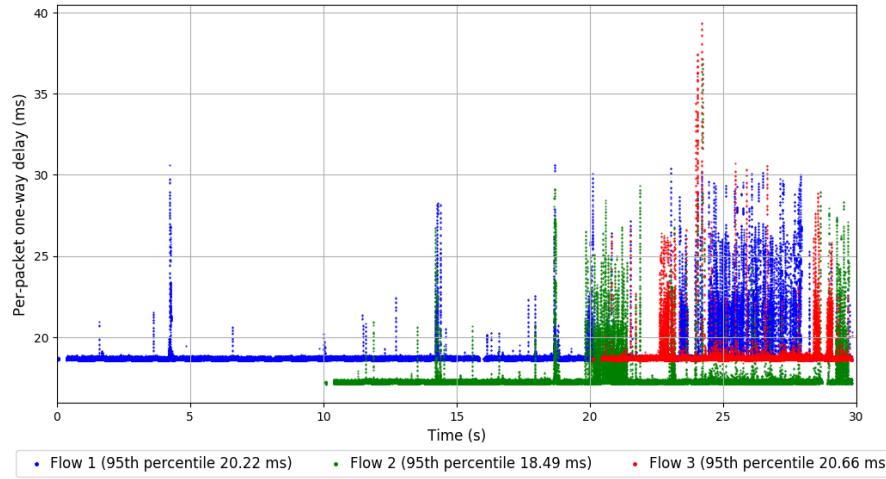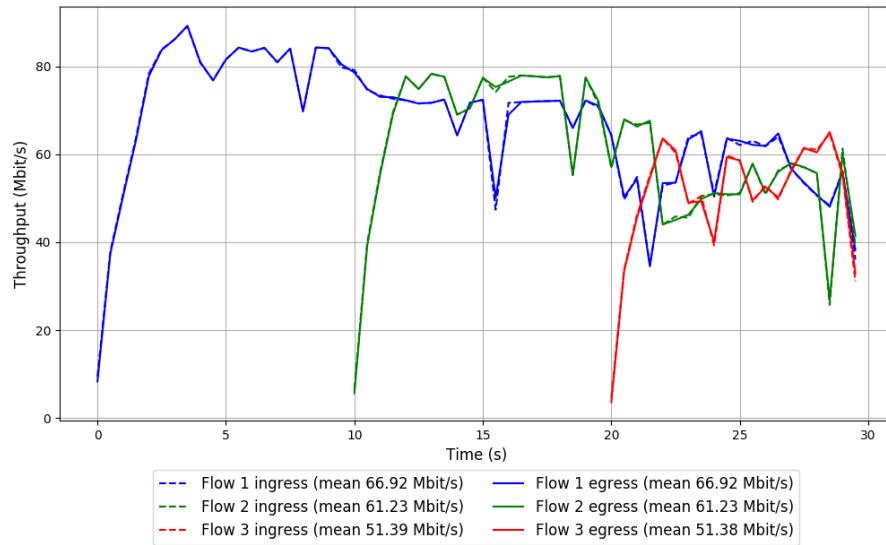
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 781.56 Mbit/s) ---- Flow 1 egress (mean 779.27 Mbit/s)
Flow 2 ingress (mean 174.31 Mbit/s) ---- Flow 2 egress (mean 173.89 Mbit/s)
Flow 3 ingress (mean 44.22 Mbit/s) ---- Flow 3 egress (mean 44.15 Mbit/s)

Flow 1 (95th percentile 40.10 ms)   Flow 2 (95th percentile 20.03 ms)   Flow 3 (95th percentile 18.56 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-04-25 01:08:01
End at: 2018-04-25 01:08:31
Local clock offset: 0.286 ms
Remote clock offset: -5.327 ms


# Below is generated by plot.py at 2018-04-25 05:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.47 Mbit/s
95th percentile per-packet one-way delay: 45.076 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 746.51 Mbit/s
95th percentile per-packet one-way delay: 49.117 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 214.09 Mbit/s
95th percentile per-packet one-way delay: 20.139 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 20.145 ms
Loss rate: 0.47%
```

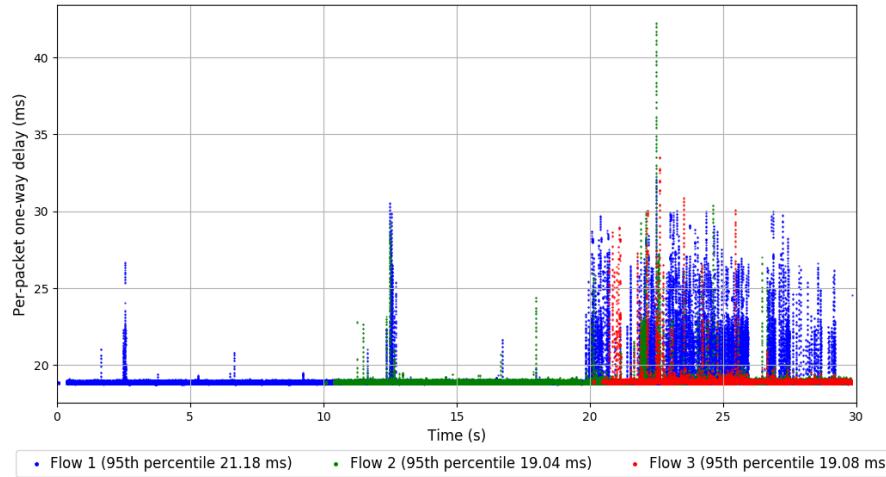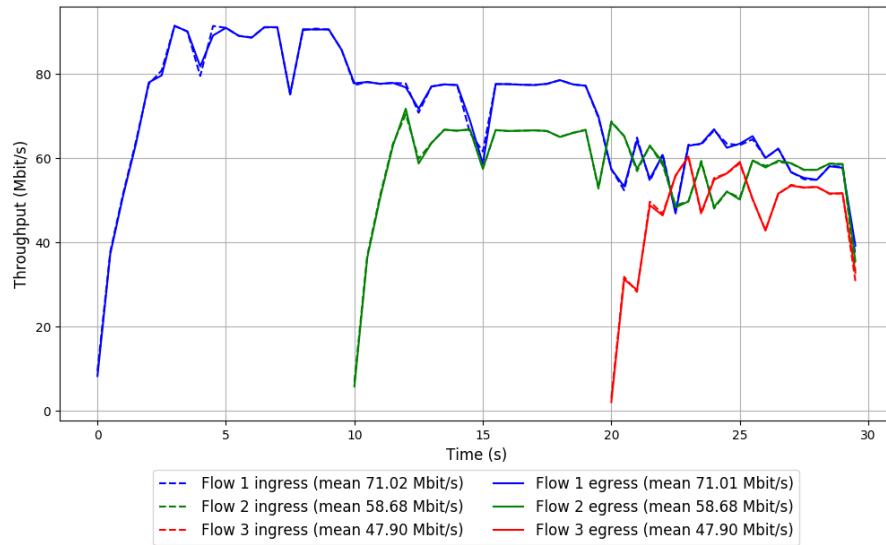Run 9: Report of PCC-Allegro — Data Link

---- Flow 1 ingress (mean 751.10 Mbit/s) ——— Flow 1 egress (mean 746.51 Mbit/s)
---- Flow 2 ingress (mean 214.67 Mbit/s) ——— Flow 2 egress (mean 214.09 Mbit/s)
---- Flow 3 ingress (mean 90.36 Mbit/s) ——— Flow 3 egress (mean 89.94 Mbit/s)

• Flow 1 (95th percentile 49.12 ms)   • Flow 2 (95th percentile 20.14 ms)   • Flow 3 (95th percentile 20.14 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-04-25 01:34:45
End at: 2018-04-25 01:35:15
Local clock offset: 0.351 ms
Remote clock offset: -6.421 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 894.91 Mbit/s
95th percentile per-packet one-way delay: 76.132 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 765.74 Mbit/s
95th percentile per-packet one-way delay: 83.597 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 151.98 Mbit/s
95th percentile per-packet one-way delay: 20.232 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 18.737 ms
Loss rate: 0.51%
```

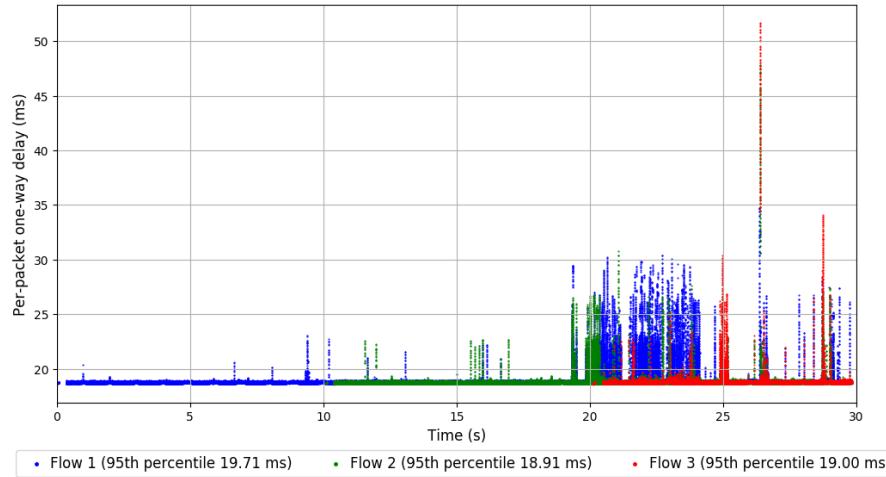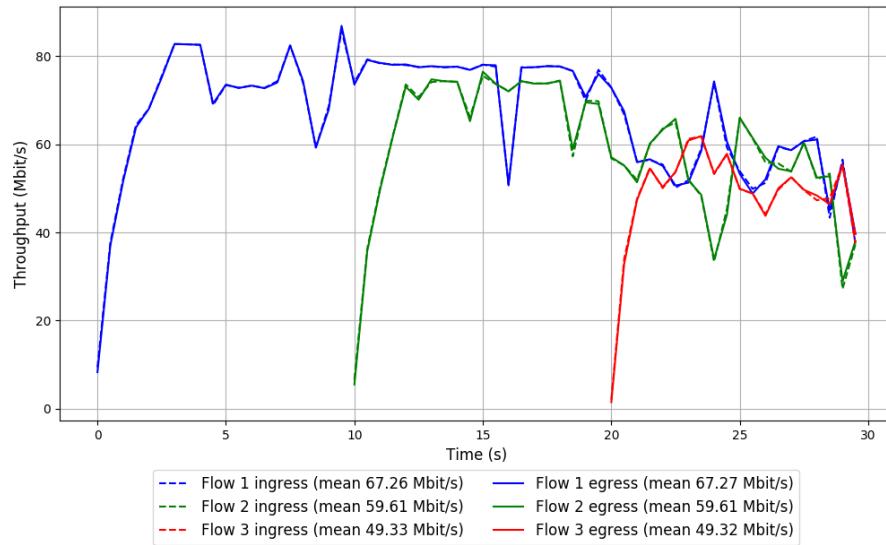Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 777.96 Mbit/s) ---- Flow 1 egress (mean 765.74 Mbit/s)
Flow 2 ingress (mean 152.86 Mbit/s) ---- Flow 2 egress (mean 151.98 Mbit/s)
Flow 3 ingress (mean 85.96 Mbit/s) ---- Flow 3 egress (mean 85.52 Mbit/s)

Flow 1 (95th percentile 83.60 ms) Flow 2 (95th percentile 20.23 ms) Flow 3 (95th percentile 18.74 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-24 21:33:43
End at: 2018-04-24 21:34:13
Local clock offset: 0.307 ms
Remote clock offset: -5.354 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.57 Mbit/s
95th percentile per-packet one-way delay: 18.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 18.754 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.41 Mbit/s
95th percentile per-packet one-way delay: 17.326 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 18.756 ms
Loss rate: 0.00%
```
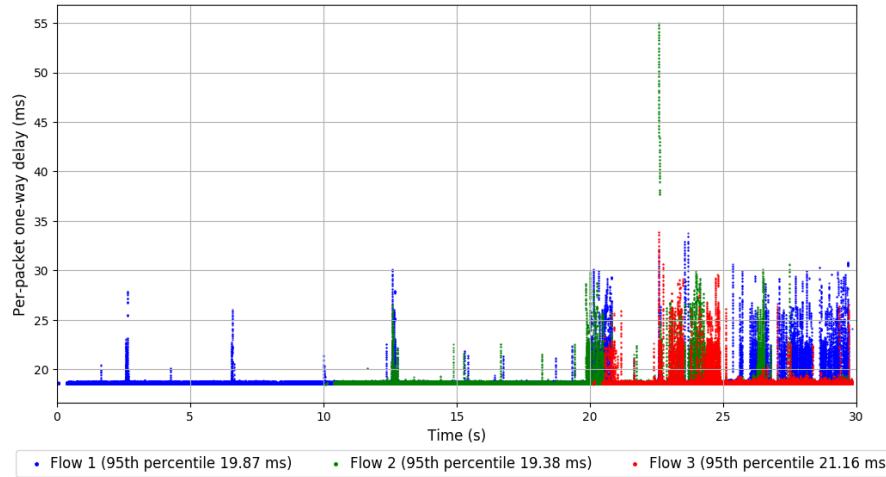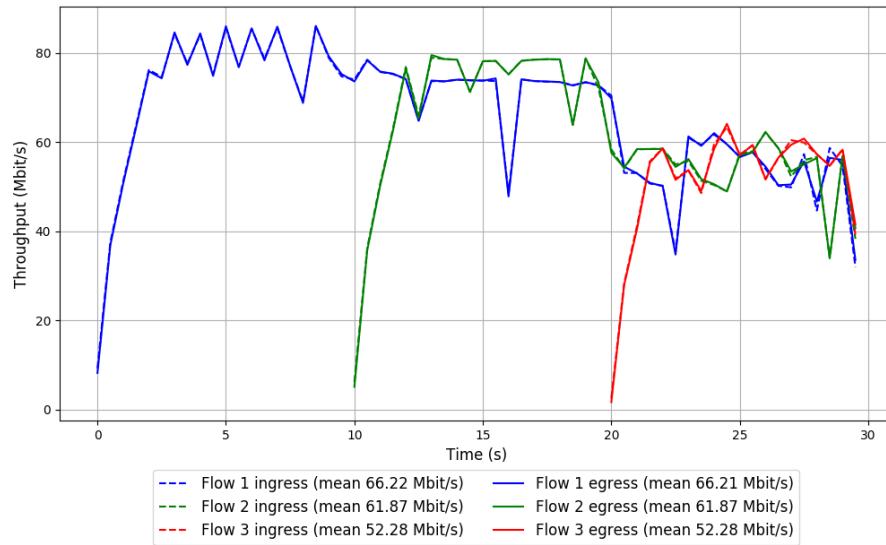
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-24 22:00:12
End at: 2018-04-24 22:00:42
Local clock offset: 0.222 ms
Remote clock offset: -5.497 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.01 Mbit/s
95th percentile per-packet one-way delay: 20.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.06 Mbit/s
95th percentile per-packet one-way delay: 18.896 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.29 Mbit/s
95th percentile per-packet one-way delay: 19.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.92 Mbit/s
95th percentile per-packet one-way delay: 24.694 ms
Loss rate: 0.01%
```

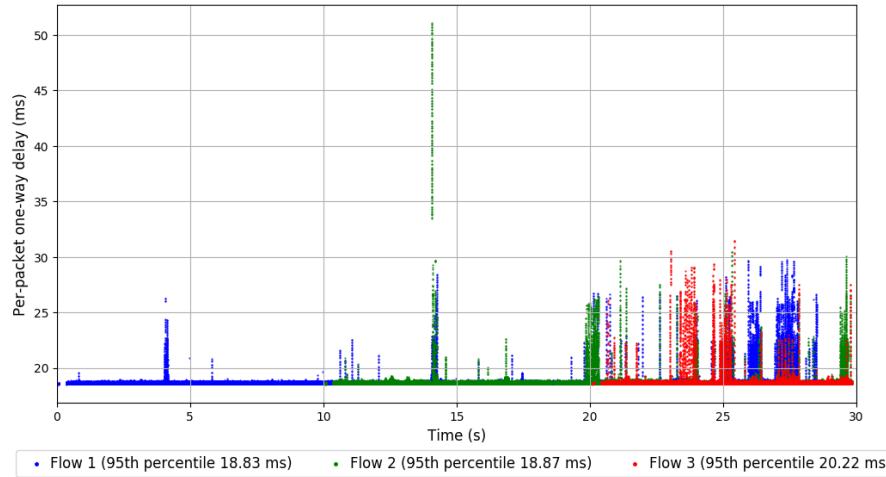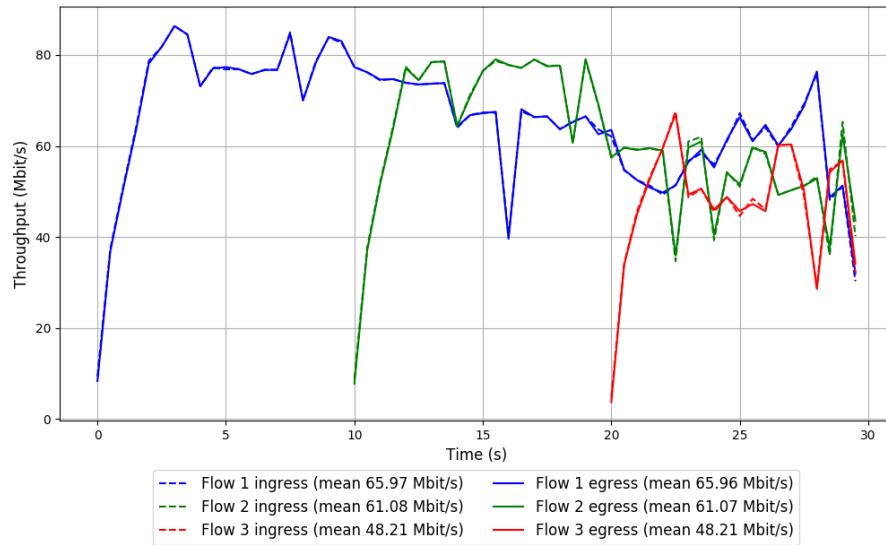Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-24 22:26:53
End at: 2018-04-24 22:27:23
Local clock offset: 0.044 ms
Remote clock offset: -5.947 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.35 Mbit/s
95th percentile per-packet one-way delay: 19.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.92 Mbit/s
95th percentile per-packet one-way delay: 20.217 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 18.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.38 Mbit/s
95th percentile per-packet one-way delay: 20.656 ms
Loss rate: 0.00%
```

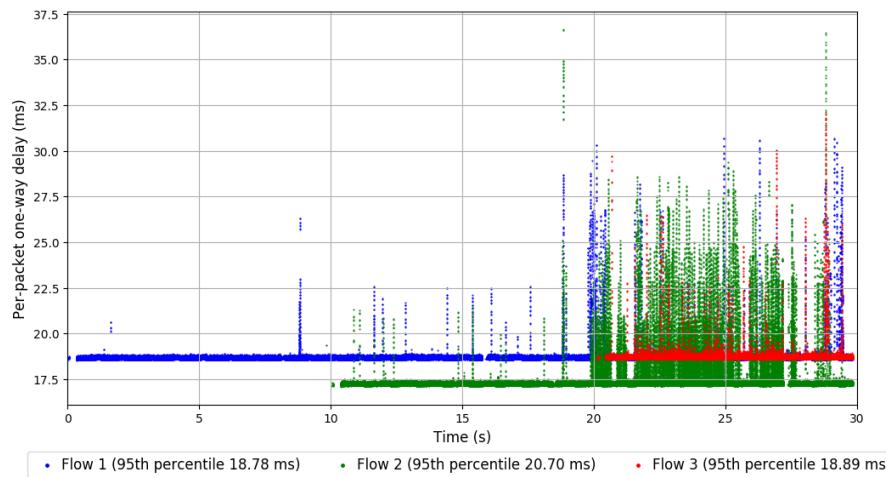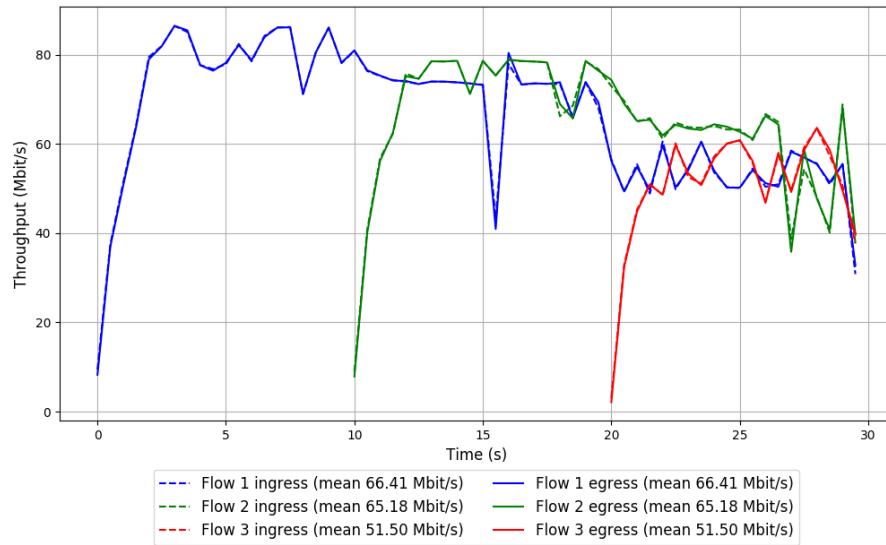Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.92 Mbit/s)   Flow 1 egress (mean 66.92 Mbit/s)
Flow 2 ingress (mean 61.23 Mbit/s)   Flow 2 egress (mean 61.23 Mbit/s)
Flow 3 ingress (mean 51.39 Mbit/s)   Flow 3 egress (mean 51.38 Mbit/s)

Flow 1 (95th percentile 20.22 ms)   Flow 2 (95th percentile 18.49 ms)   Flow 3 (95th percentile 20.66 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-24 22:53:34
End at: 2018-04-24 22:54:04
Local clock offset: -0.076 ms
Remote clock offset: -5.503 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.50 Mbit/s
95th percentile per-packet one-way delay: 19.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.01 Mbit/s
95th percentile per-packet one-way delay: 21.176 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.68 Mbit/s
95th percentile per-packet one-way delay: 19.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.90 Mbit/s
95th percentile per-packet one-way delay: 19.080 ms
Loss rate: 0.00%
```

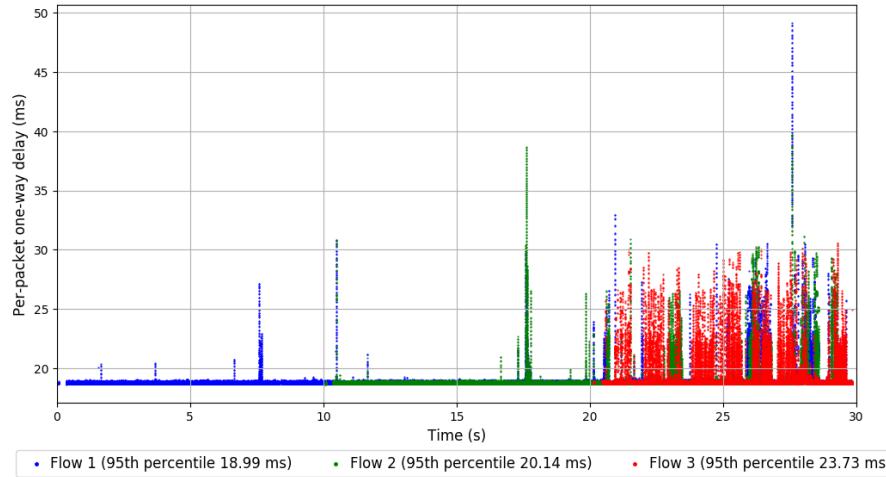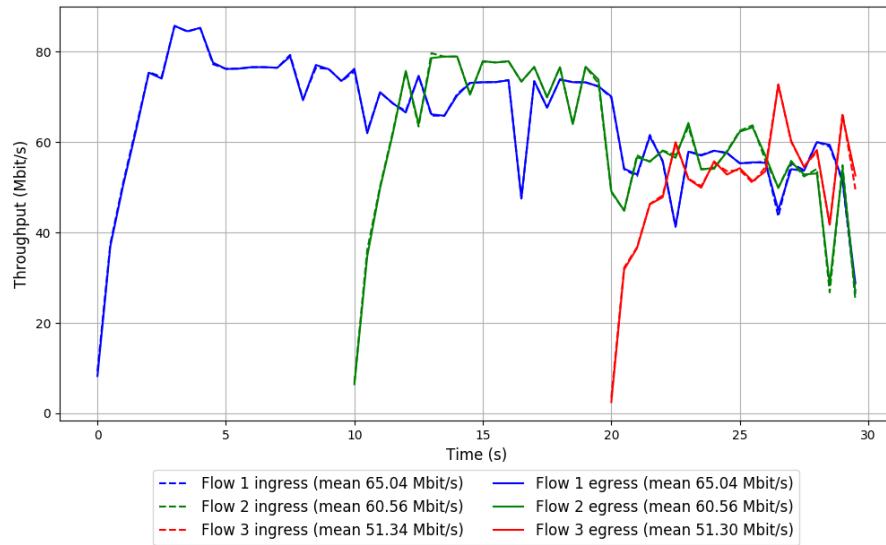Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-24 23:20:17
End at: 2018-04-24 23:20:47
Local clock offset: 0.214 ms
Remote clock offset: -6.449 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.87 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.27 Mbit/s
95th percentile per-packet one-way delay: 19.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 18.914 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 19.001 ms
Loss rate: 0.00%
```

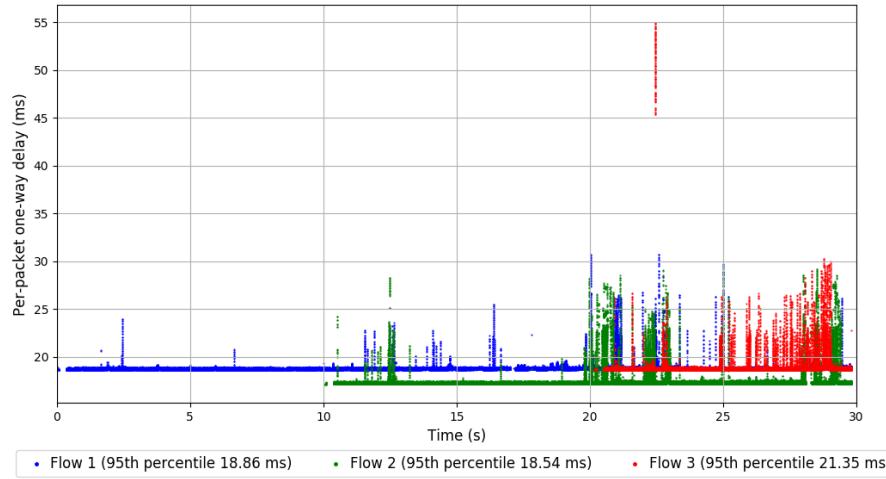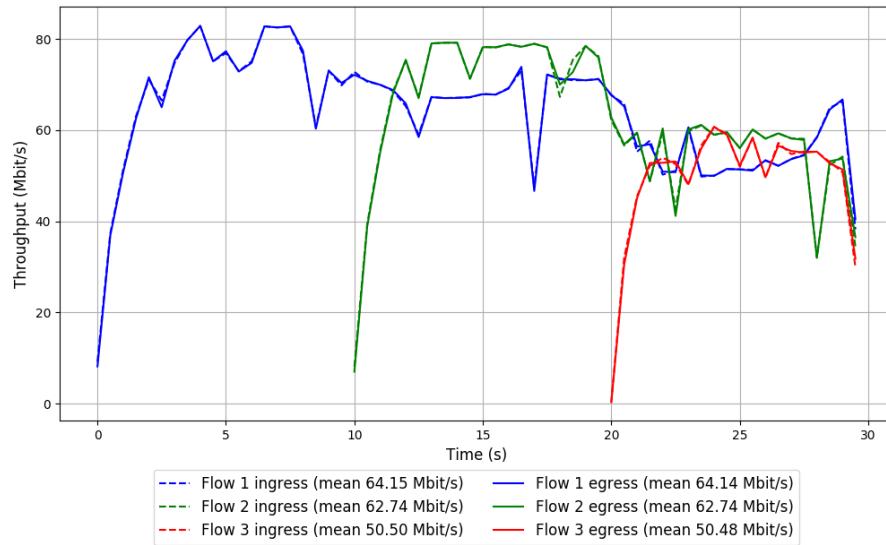Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-24 23:46:54
End at: 2018-04-24 23:47:24
Local clock offset: 0.597 ms
Remote clock offset: -5.909 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.28 Mbit/s
95th percentile per-packet one-way delay: 20.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.21 Mbit/s
95th percentile per-packet one-way delay: 19.867 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 19.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 21.158 ms
Loss rate: 0.00%
```
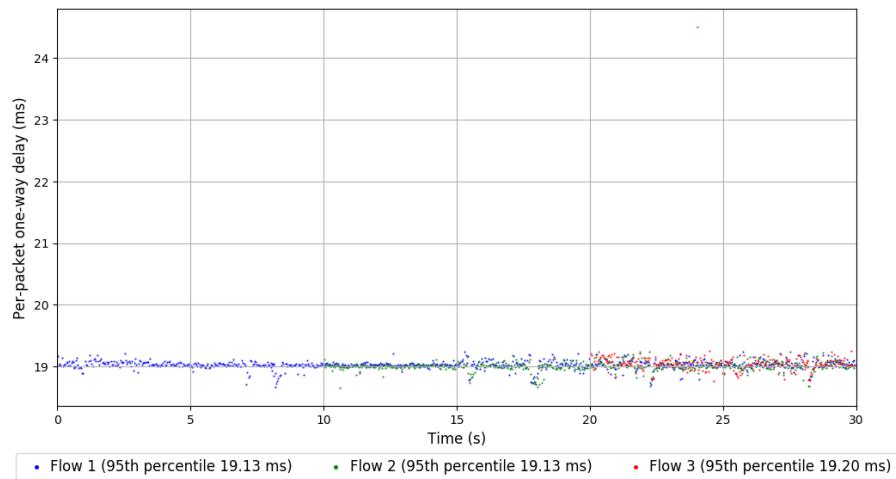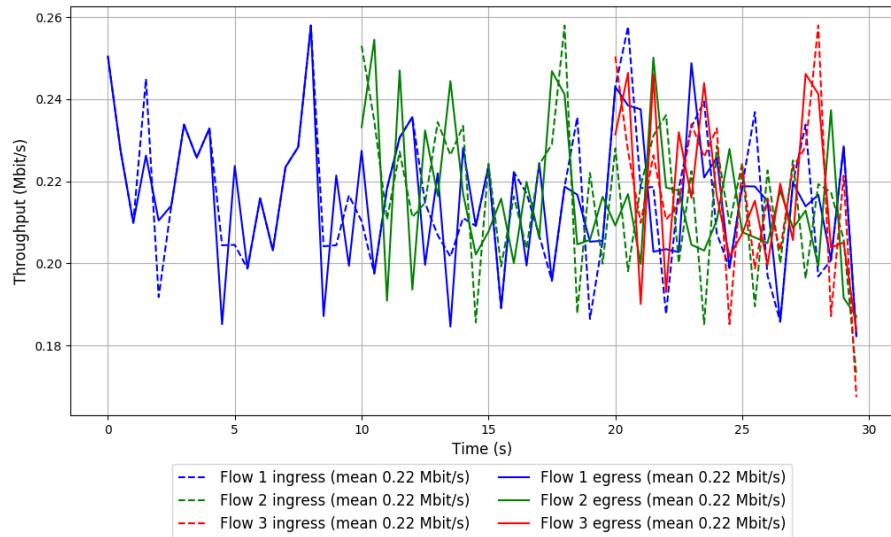
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-25 00:13:22
End at: 2018-04-25 00:13:52
Local clock offset: 0.021 ms
Remote clock offset: -5.565 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.30 Mbit/s
95th percentile per-packet one-way delay: 18.872 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 65.96 Mbit/s
95th percentile per-packet one-way delay: 18.832 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 18.870 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 20.224 ms
Loss rate: 0.01%
```
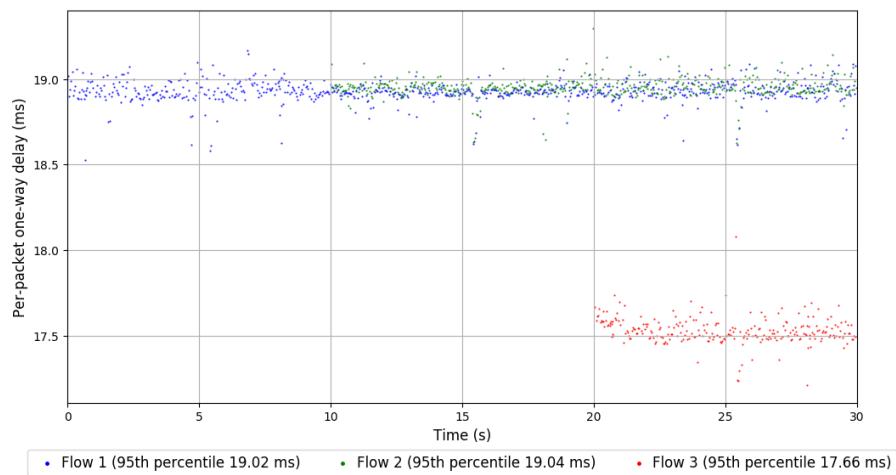
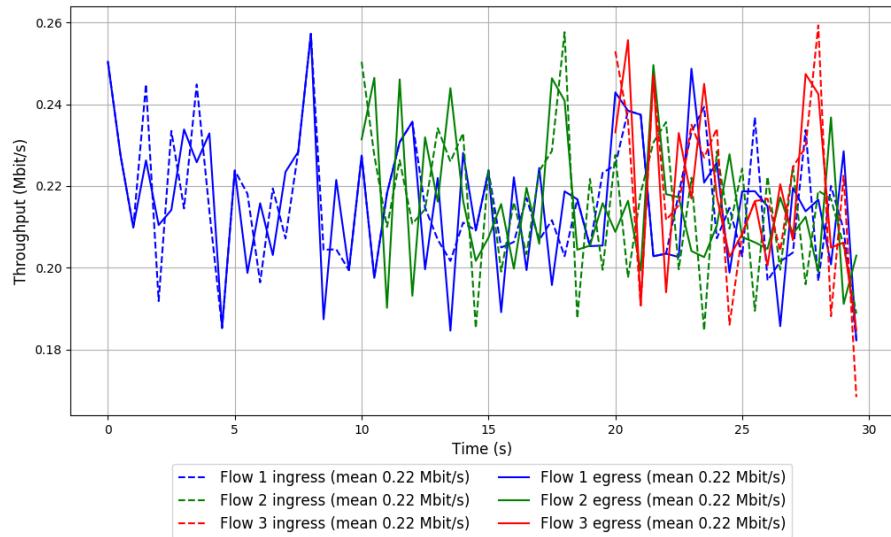Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-25 00:39:46
End at: 2018-04-25 00:40:16
Local clock offset: 0.039 ms
Remote clock offset: -5.609 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.48 Mbit/s
95th percentile per-packet one-way delay: 19.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.41 Mbit/s
95th percentile per-packet one-way delay: 18.782 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 20.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.50 Mbit/s
95th percentile per-packet one-way delay: 18.885 ms
Loss rate: 0.00%
```

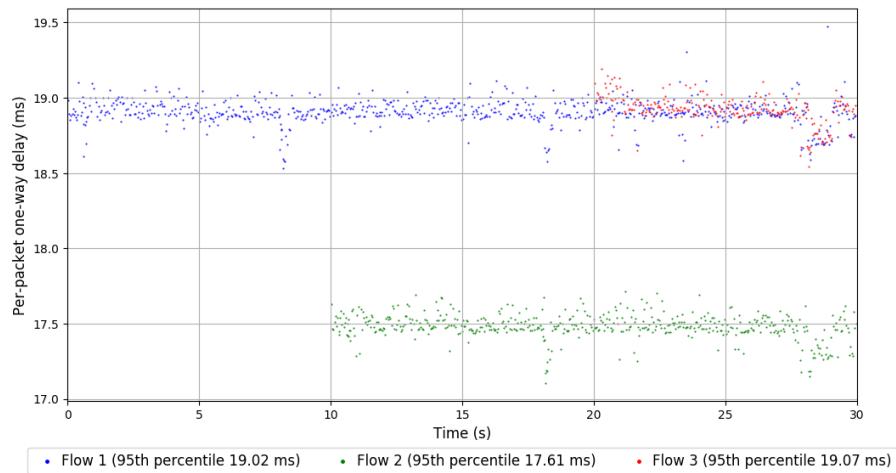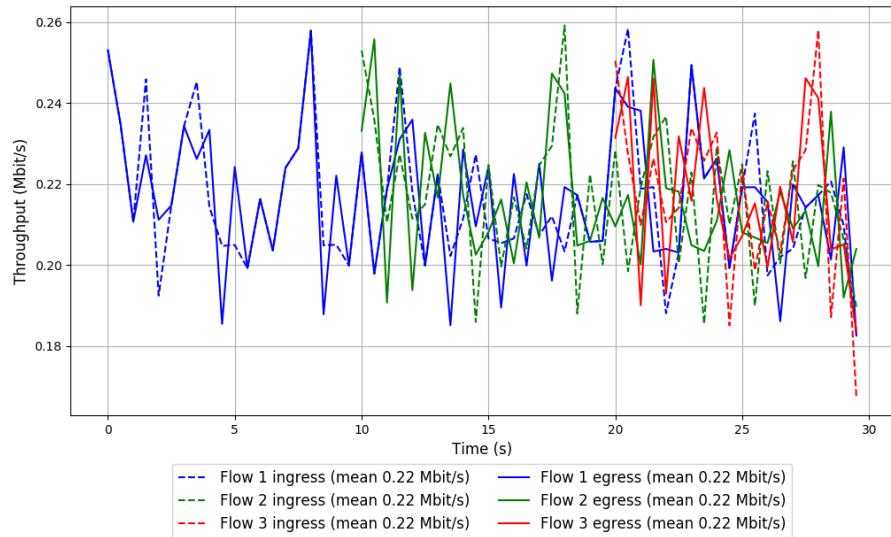Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-25 01:06:37
End at: 2018-04-25 01:07:07
Local clock offset: 0.146 ms
Remote clock offset: -5.409 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.01 Mbit/s
95th percentile per-packet one-way delay: 20.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.04 Mbit/s
95th percentile per-packet one-way delay: 18.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 20.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.30 Mbit/s
95th percentile per-packet one-way delay: 23.728 ms
Loss rate: 0.00%
```

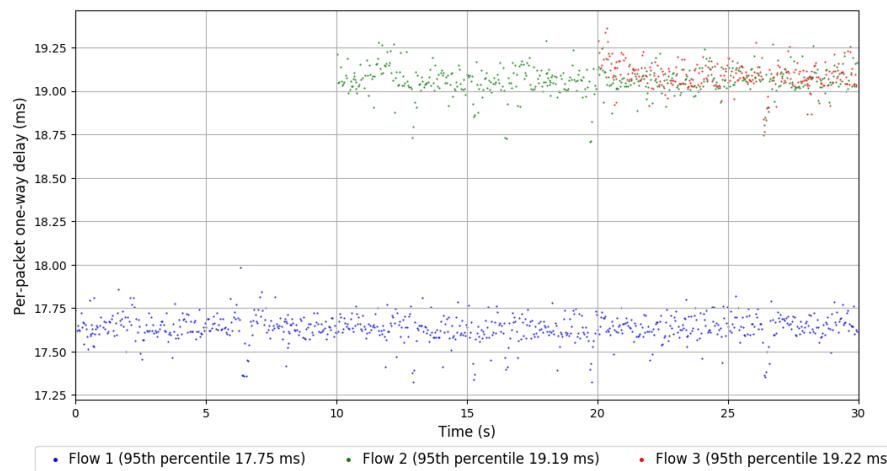Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-25 01:33:22
End at: 2018-04-25 01:33:52
Local clock offset: 0.433 ms
Remote clock offset: -6.415 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 18.889 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 18.864 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.74 Mbit/s
95th percentile per-packet one-way delay: 18.538 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.48 Mbit/s
95th percentile per-packet one-way delay: 21.346 ms
Loss rate: 0.01%
```
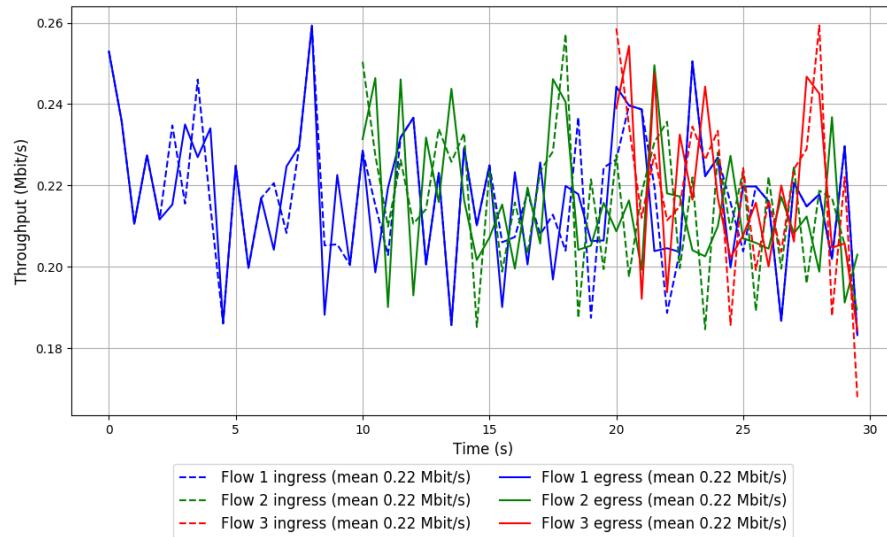
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.15 Mbit/s) --- Flow 1 egress (mean 64.14 Mbit/s)
Flow 2 ingress (mean 62.74 Mbit/s) --- Flow 2 egress (mean 62.74 Mbit/s)
Flow 3 ingress (mean 50.50 Mbit/s) --- Flow 3 egress (mean 50.48 Mbit/s)

Flow 1 (95th percentile 18.86 ms)   Flow 2 (95th percentile 18.54 ms)   Flow 3 (95th percentile 21.35 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-04-24 21:29:10
End at: 2018-04-24 21:29:40
Local clock offset: 0.239 ms
Remote clock offset: -5.326 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.153 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.129 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.195 ms
Loss rate: 0.00%
```
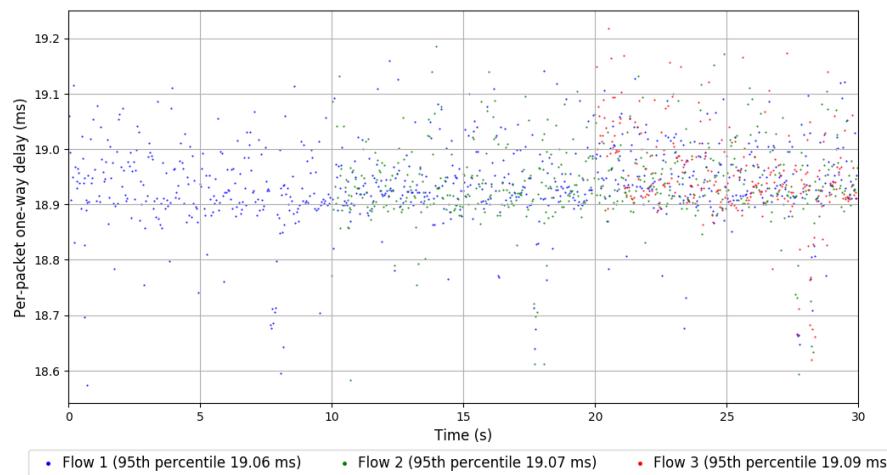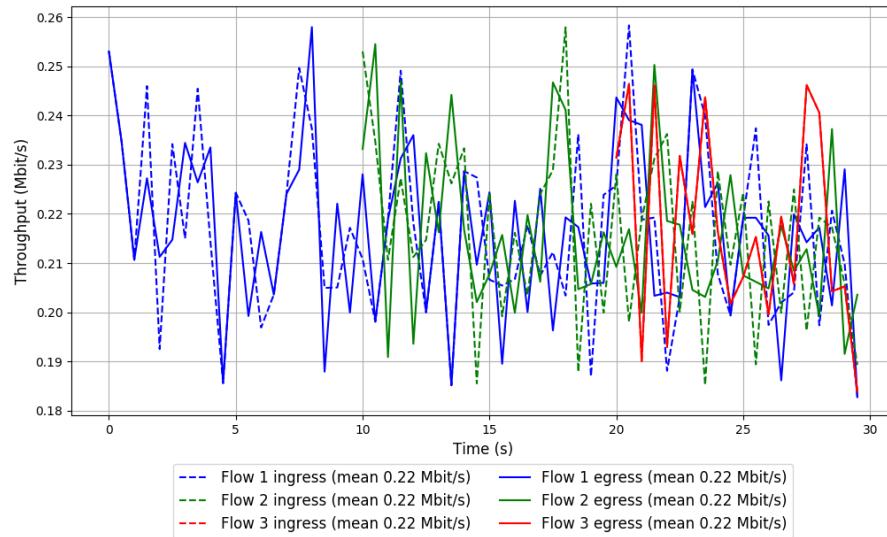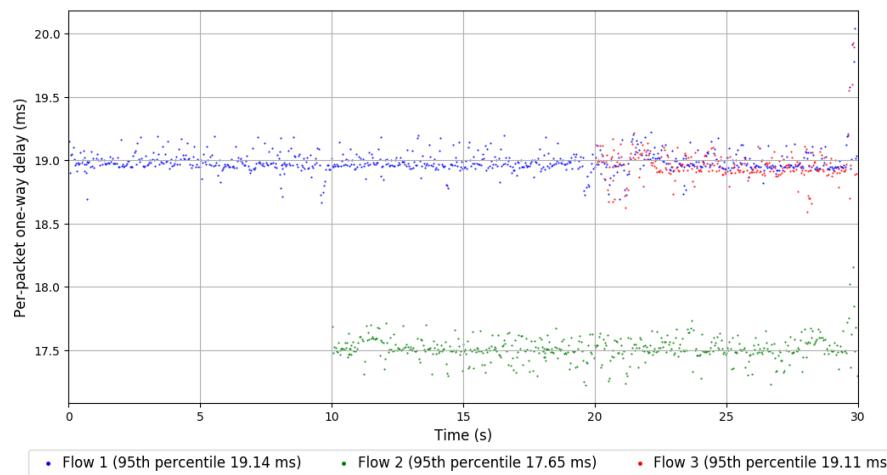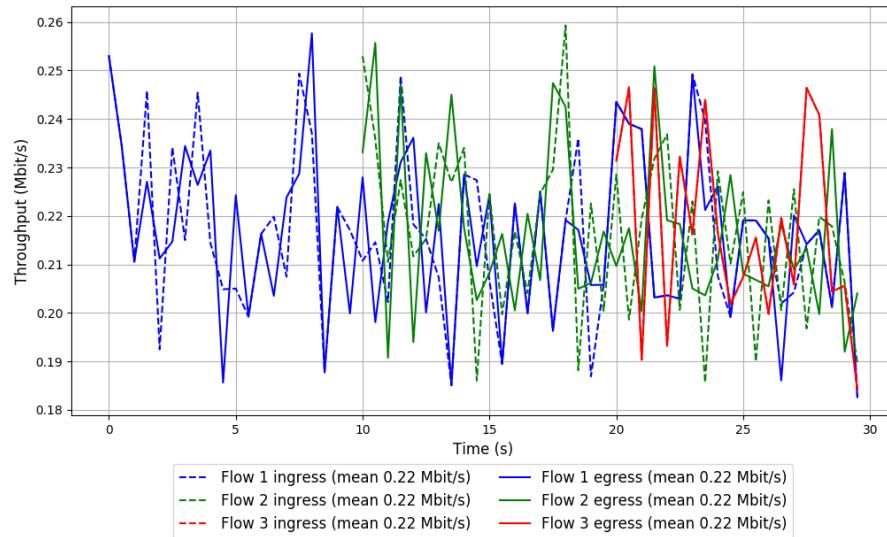
Run 1: Report of SCReAM — Data Link

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 19.13 ms)   Flow 2 (95th percentile 19.13 ms)   Flow 3 (95th percentile 19.20 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-04-24 21:55:43
End at: 2018-04-24 21:56:13
Local clock offset: 0.235 ms
Remote clock offset: -5.477 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.025 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.656 ms
Loss rate: 0.00%
```
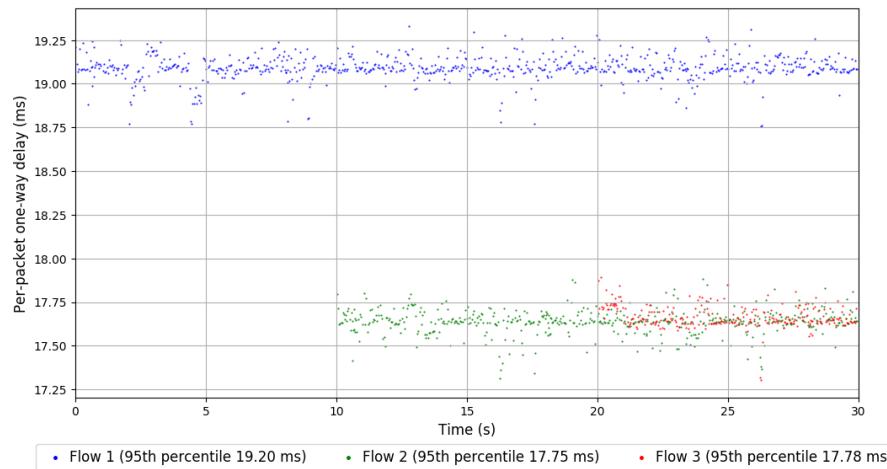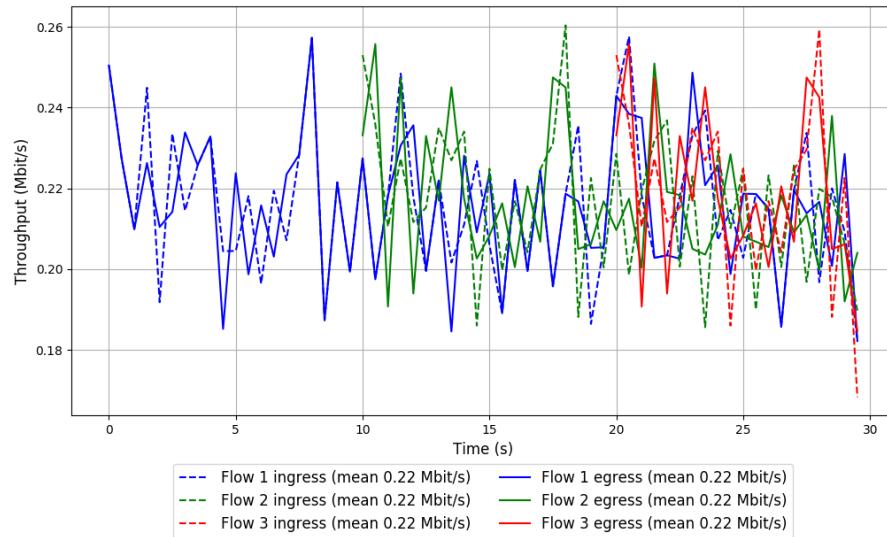
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-04-24 22:22:19
End at: 2018-04-24 22:22:49
Local clock offset: 0.041 ms
Remote clock offset: -5.879 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.073 ms
Loss rate: 0.00%
```
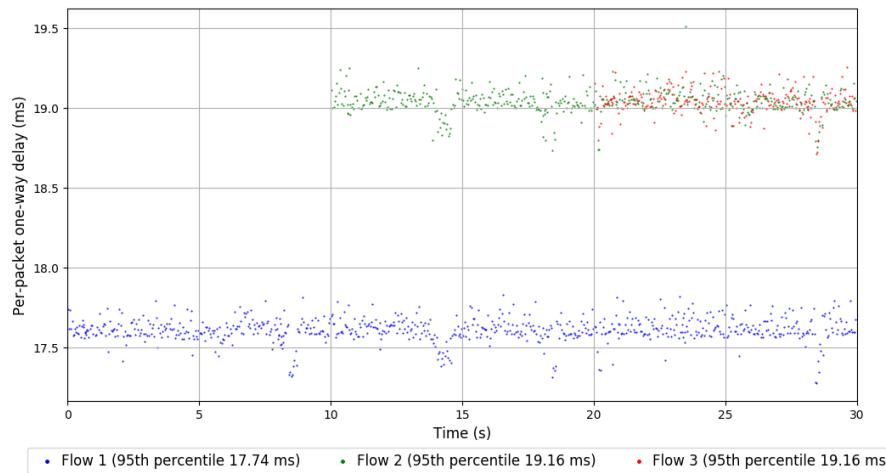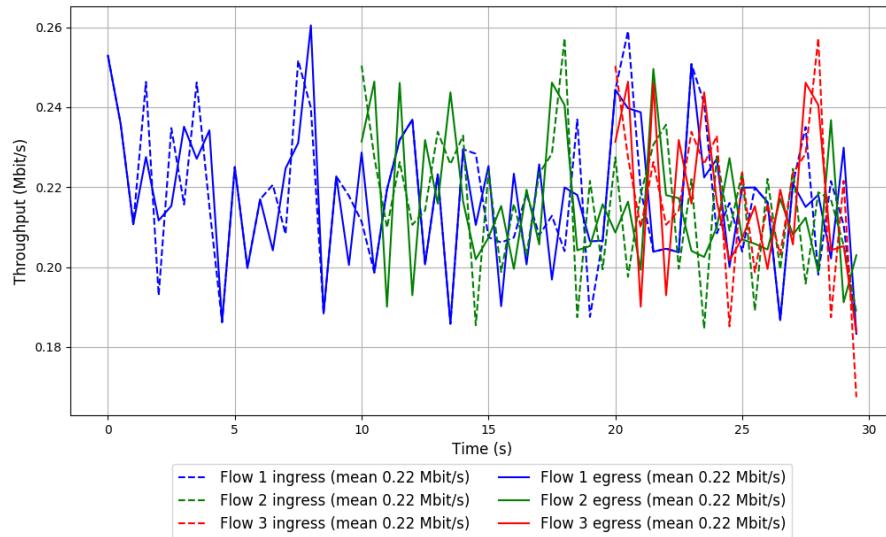
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-04-24 22:49:01
End at: 2018-04-24 22:49:31
Local clock offset: -0.067 ms
Remote clock offset: -5.57 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.164 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.749 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.00%
```

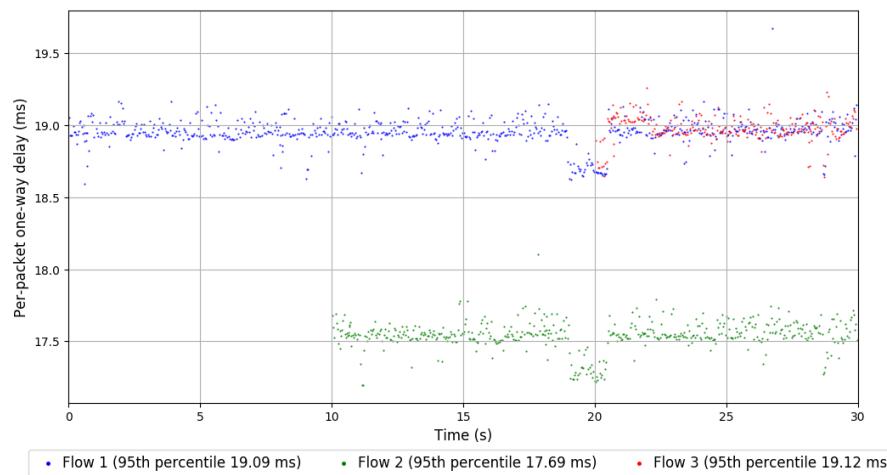# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-04-24 23:15:49
End at: 2018-04-24 23:16:19
Local clock offset: 0.158 ms
Remote clock offset: -6.368 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.056 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.070 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.094 ms
Loss rate: 0.00%
```
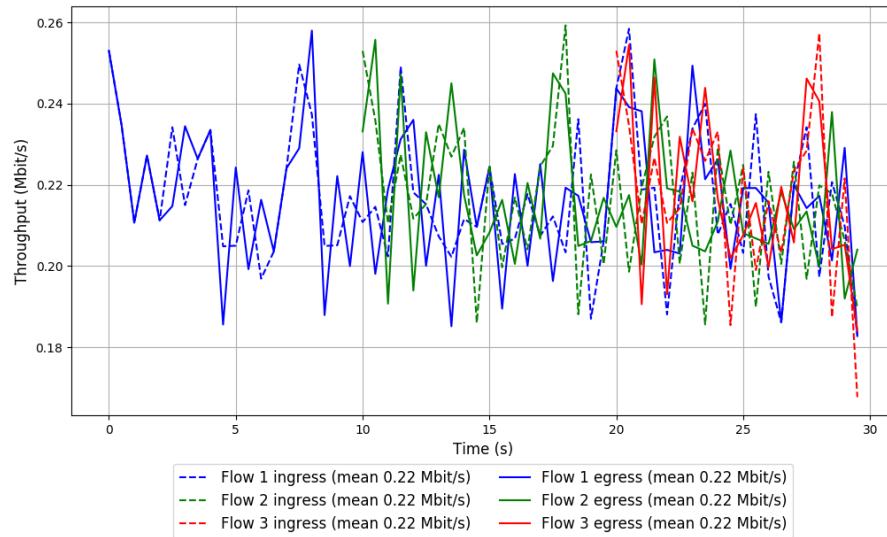
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-04-24 23:42:27
End at: 2018-04-24 23:42:57
Local clock offset: 0.507 ms
Remote clock offset: -6.086 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.135 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.651 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 0.00%
```
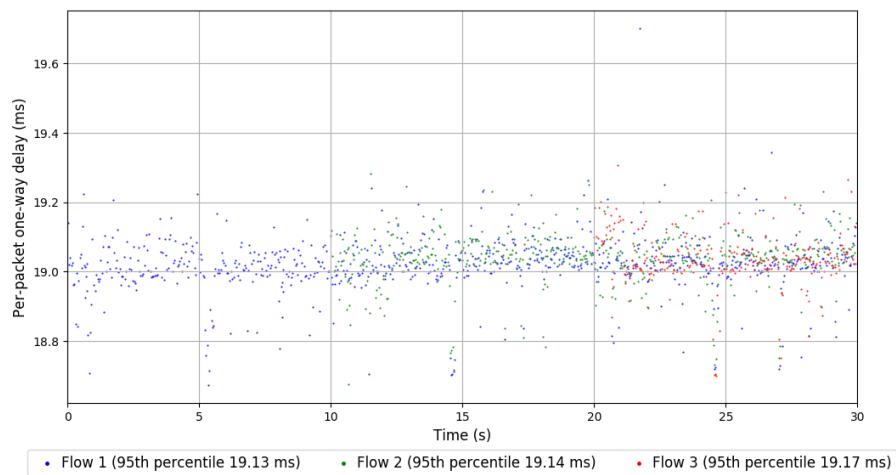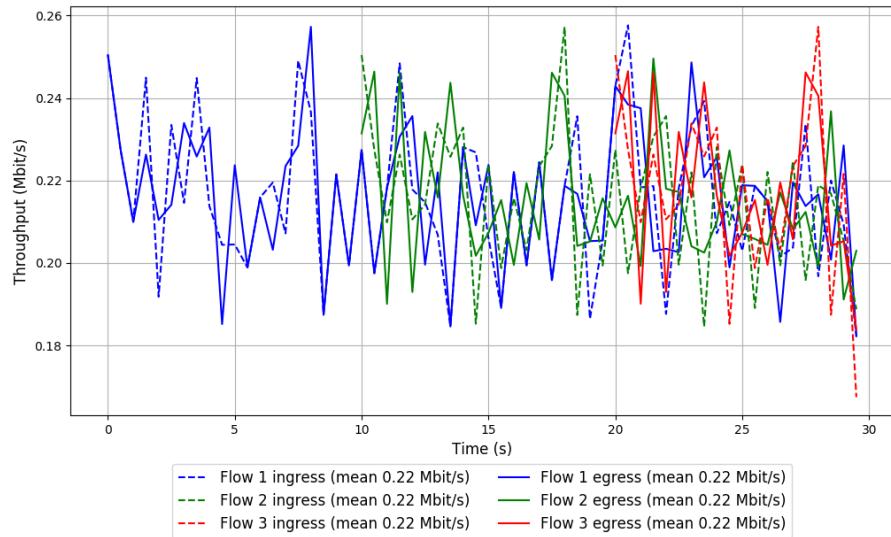
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-04-25 00:09:00
End at: 2018-04-25 00:09:30
Local clock offset: -0.01 ms
Remote clock offset: -5.442 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.201 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.779 ms
Loss rate: 0.00%
```
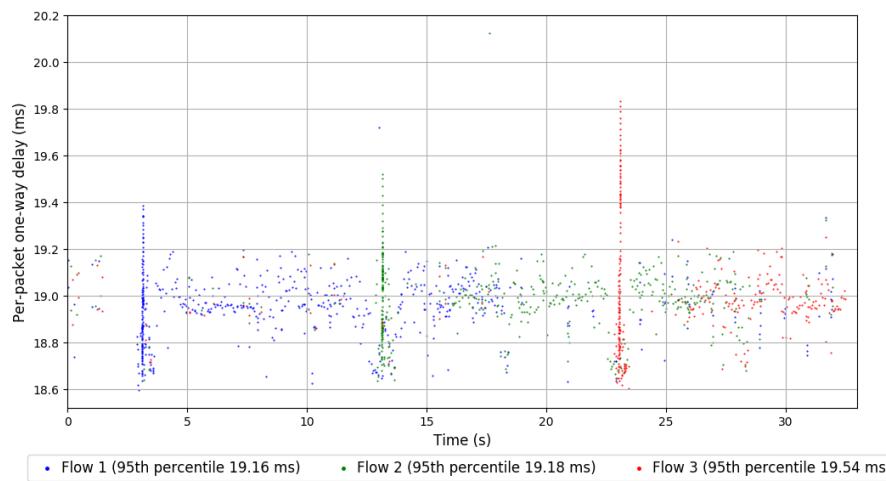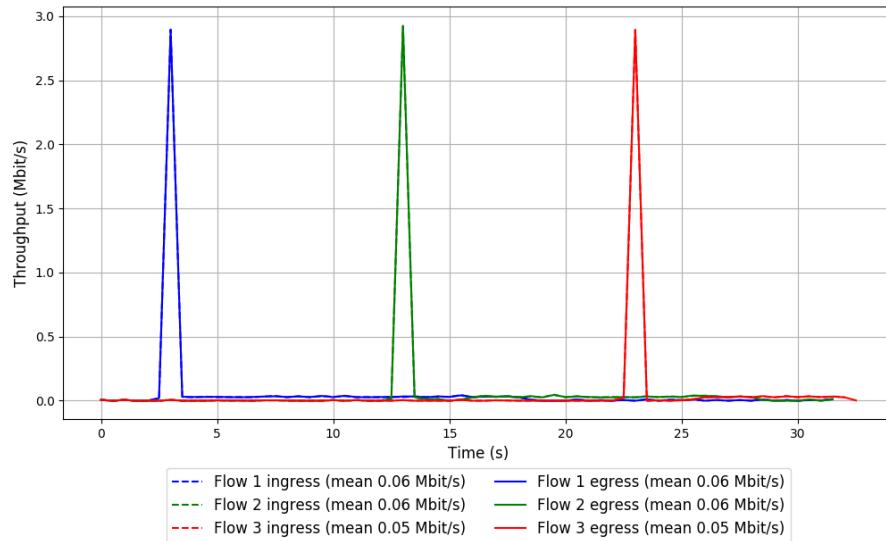
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-04-25 00:35:27
End at: 2018-04-25 00:35:57
Local clock offset: -0.057 ms
Remote clock offset: -5.58 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.736 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.163 ms
Loss rate: 0.00%
```
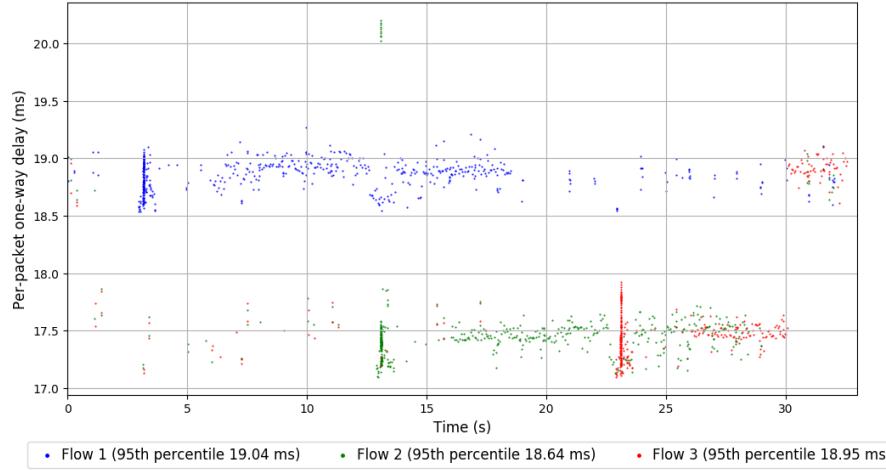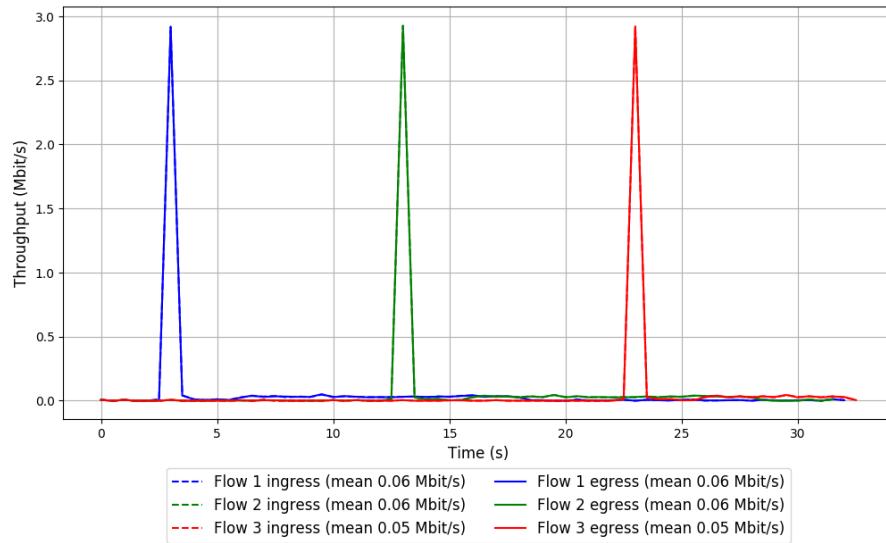
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-04-25 01:02:06
End at: 2018-04-25 01:02:36
Local clock offset: 0.117 ms
Remote clock offset: -5.405 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.085 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.688 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.124 ms
Loss rate: 0.00%
```
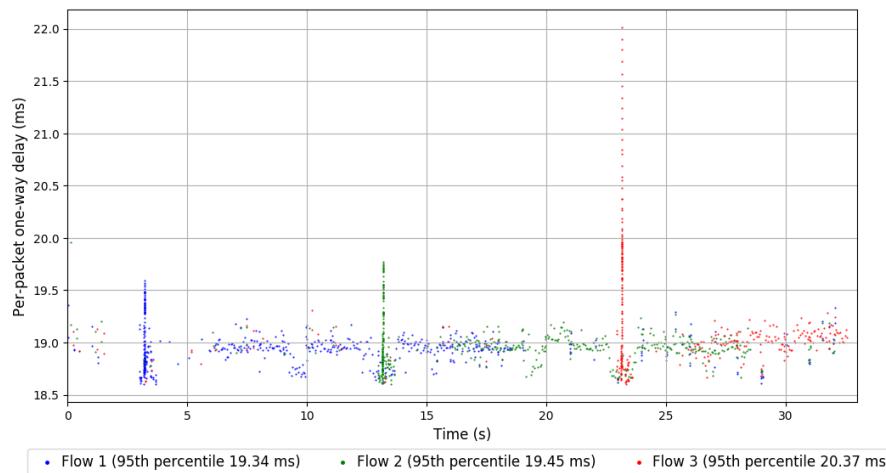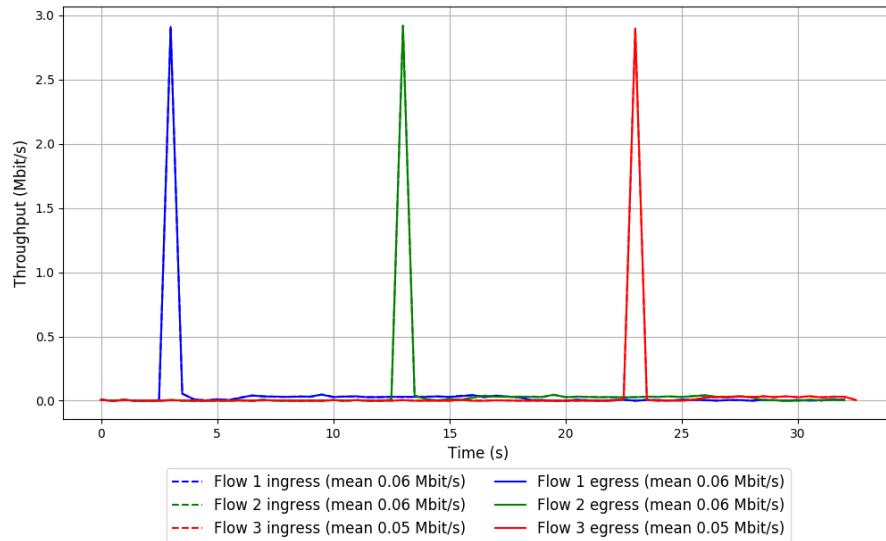
Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 19.09 ms)   Flow 2 (95th percentile 17.69 ms)   Flow 3 (95th percentile 19.12 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-04-25 01:28:50
End at: 2018-04-25 01:29:20
Local clock offset: 0.423 ms
Remote clock offset: -6.155 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.130 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: 19.174 ms
Loss rate: 0.00%
```
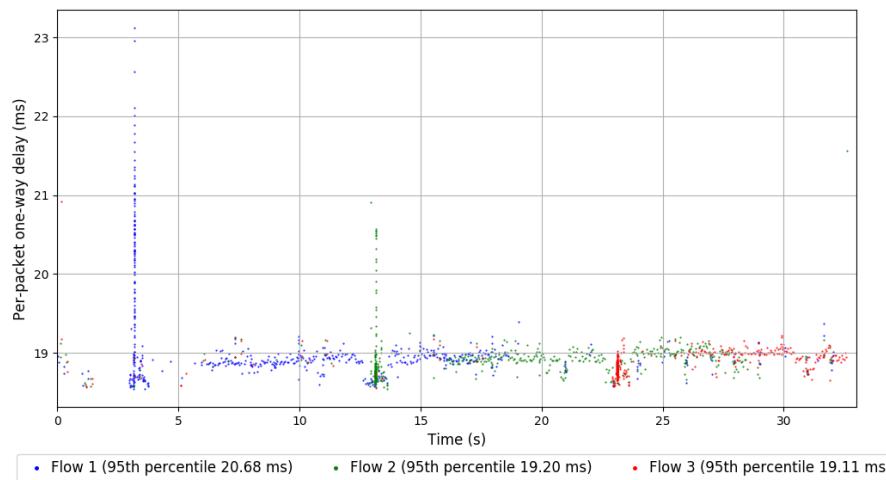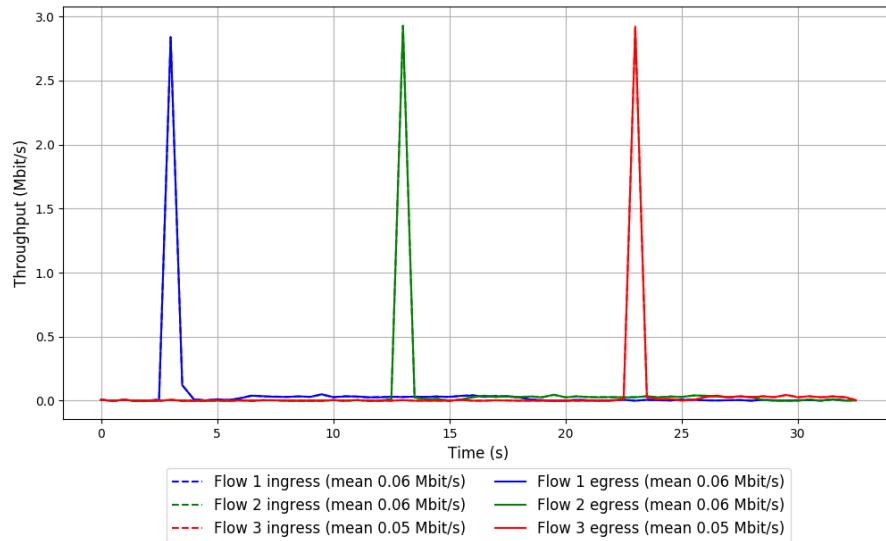
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-04-24 21:41:53
End at: 2018-04-24 21:42:23
Local clock offset: 0.215 ms
Remote clock offset: -5.357 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.234 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.538 ms
Loss rate: 0.00%
```
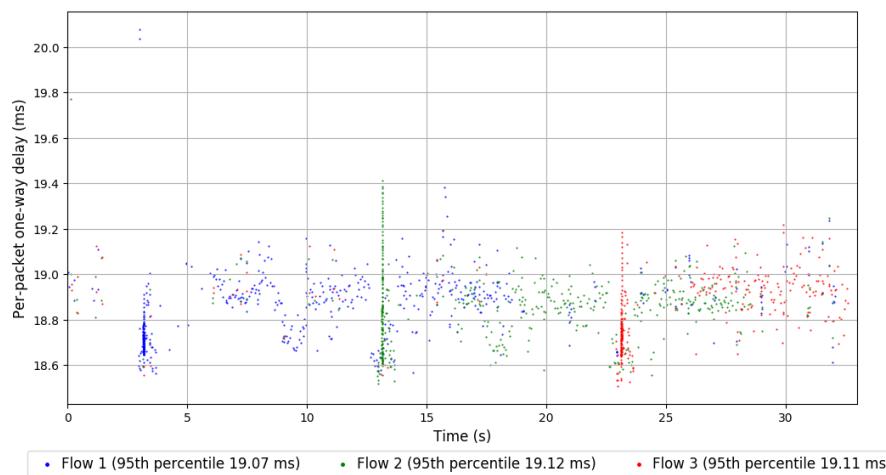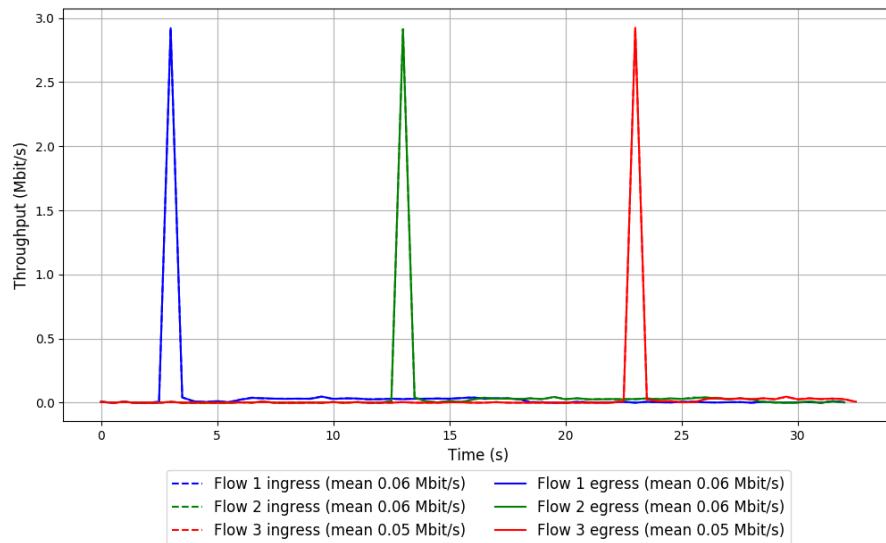
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-04-24 22:08:26
End at: 2018-04-24 22:08:56
Local clock offset: 0.186 ms
Remote clock offset: -5.708 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.007 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 18.642 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 18.954 ms
Loss rate: 0.00%
```
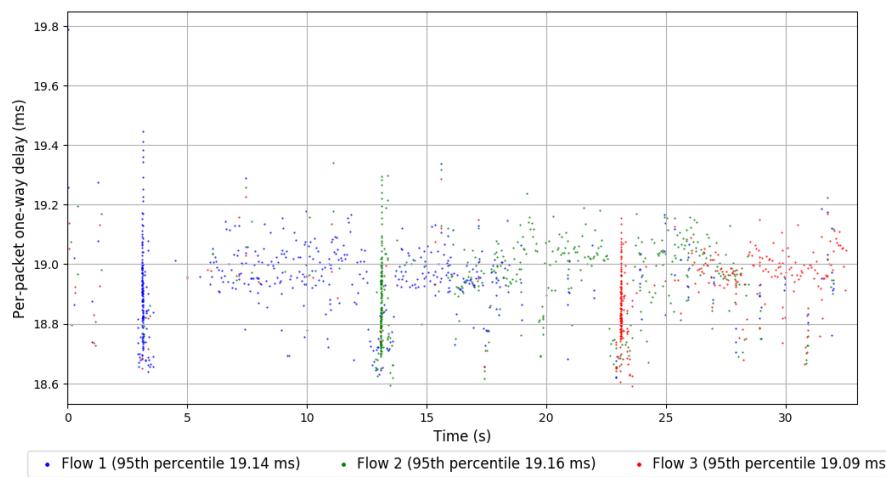
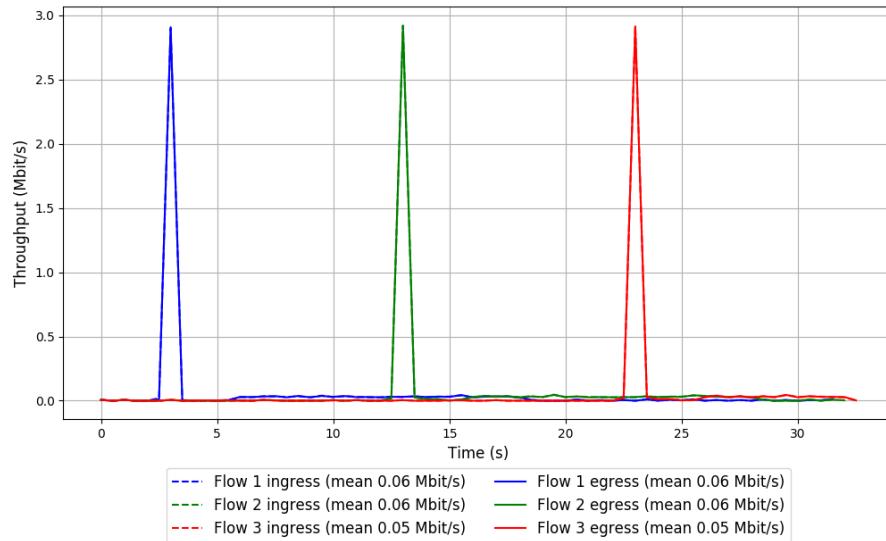Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-04-24 22:35:11
End at: 2018-04-24 22:35:41
Local clock offset: -0.082 ms
Remote clock offset: -5.696 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.690 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.343 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.447 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 20.370 ms
Loss rate: 0.00%
```

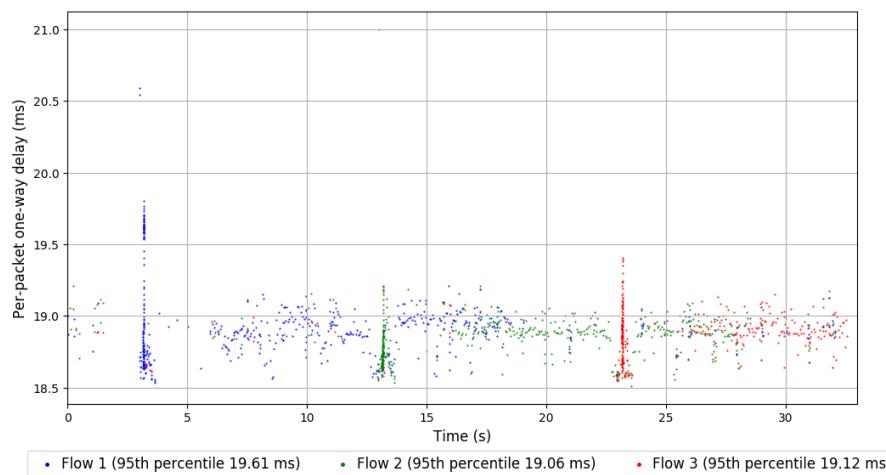Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-04-24 23:01:49
End at: 2018-04-24 23:02:19
Local clock offset: 0.03 ms
Remote clock offset: -5.633 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 20.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 20.680 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 0.00%
```
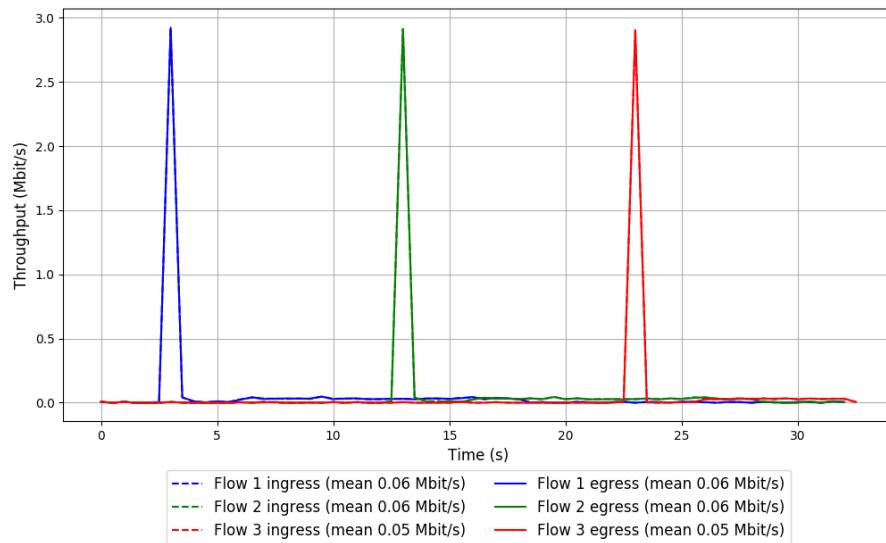
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-04-24 23:28:35
End at: 2018-04-24 23:29:05
Local clock offset: 0.333 ms
Remote clock offset: -6.65 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.120 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.108 ms
Loss rate: 0.00%
```
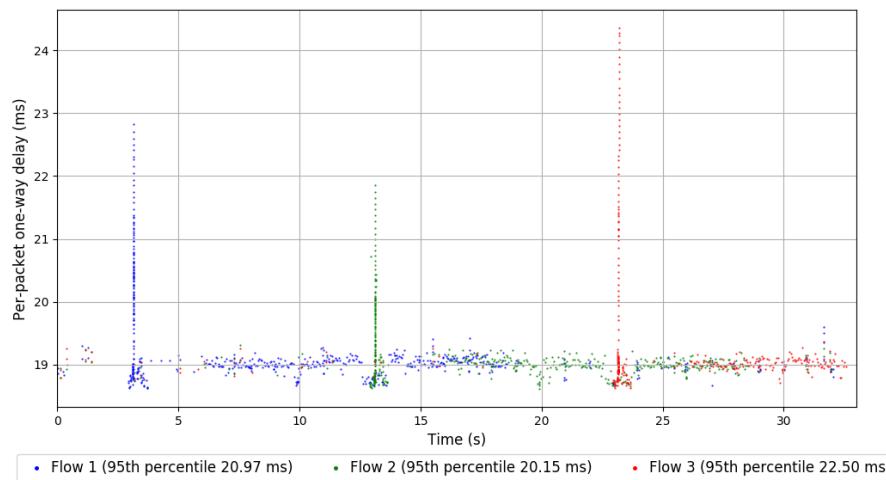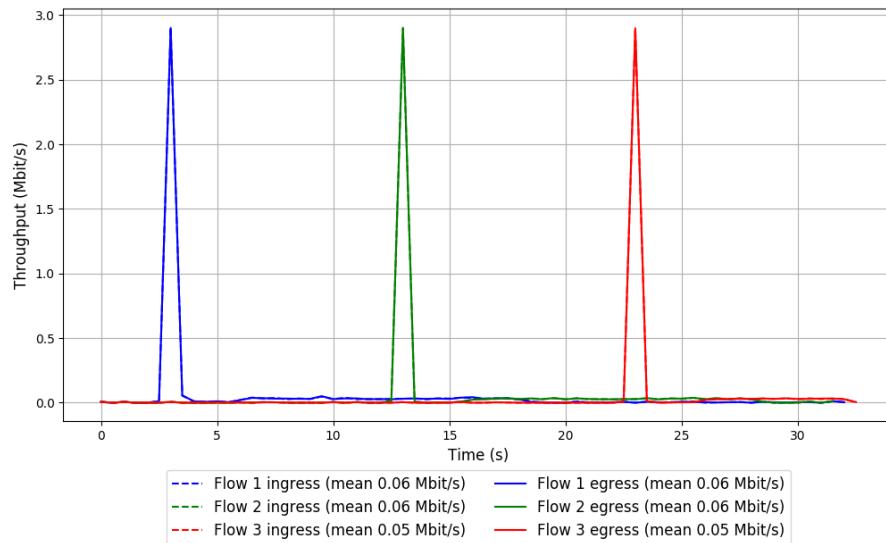
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-04-24 23:55:08
End at: 2018-04-24 23:55:38
Local clock offset: 0.291 ms
Remote clock offset: -5.649 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.156 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.091 ms
Loss rate: 0.00%
```
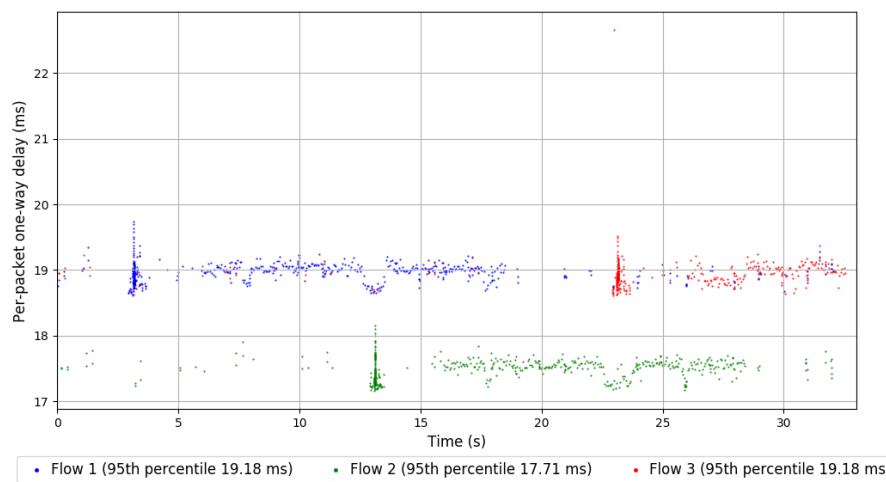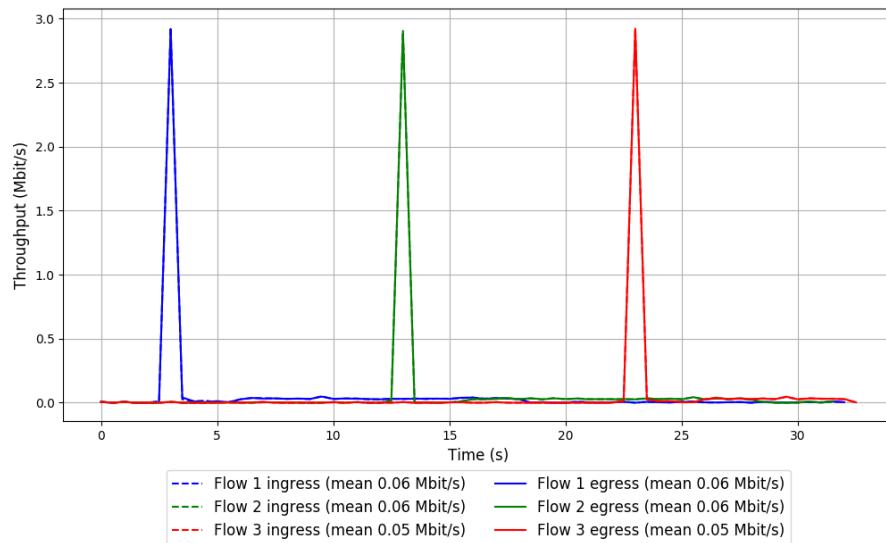
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-04-25 00:21:33
End at: 2018-04-25 00:22:03
Local clock offset: -0.122 ms
Remote clock offset: -5.58 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.605 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.125 ms
Loss rate: 0.00%
```
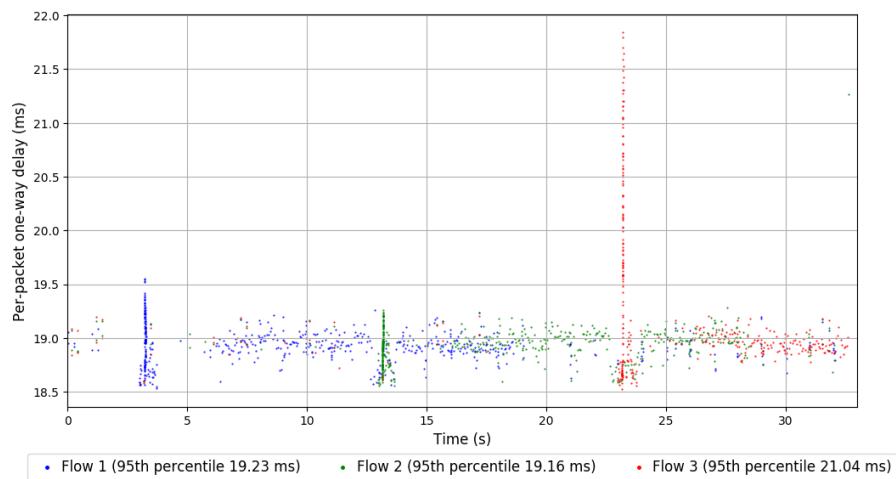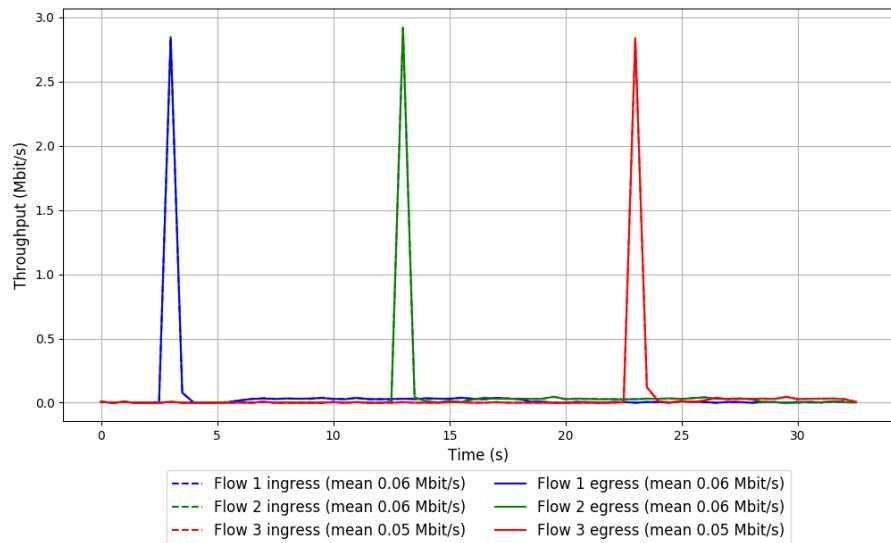
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-04-25 00:48:08
End at: 2018-04-25 00:48:38
Local clock offset: 0.019 ms
Remote clock offset: -5.402 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 21.081 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 20.966 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 20.152 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 22.499 ms
Loss rate: 0.00%
```
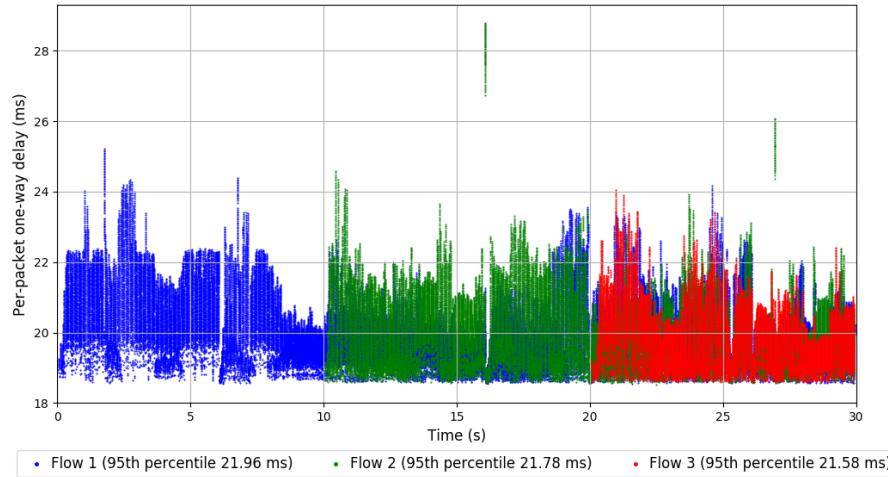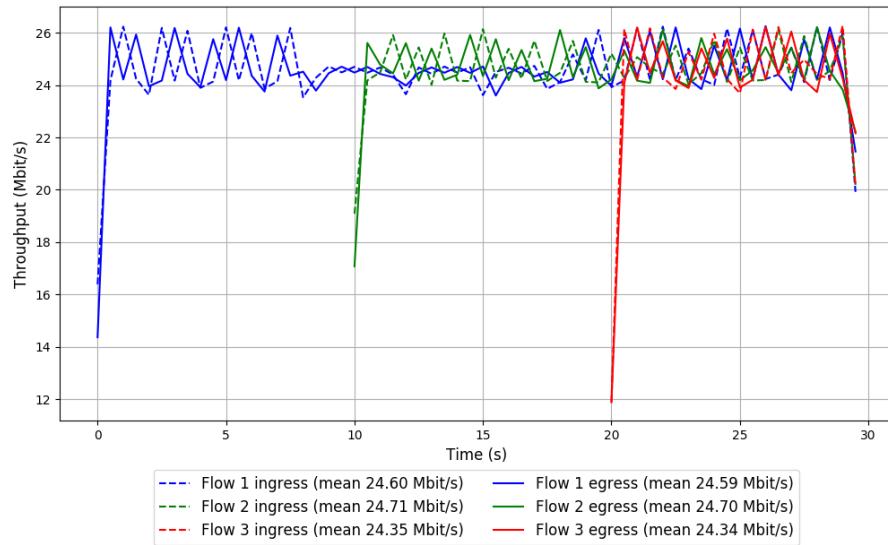
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-04-25 01:14:50
End at: 2018-04-25 01:15:20
Local clock offset: 0.343 ms
Remote clock offset: -5.28 ms

# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 17.707 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.178 ms
Loss rate: 0.00%
```
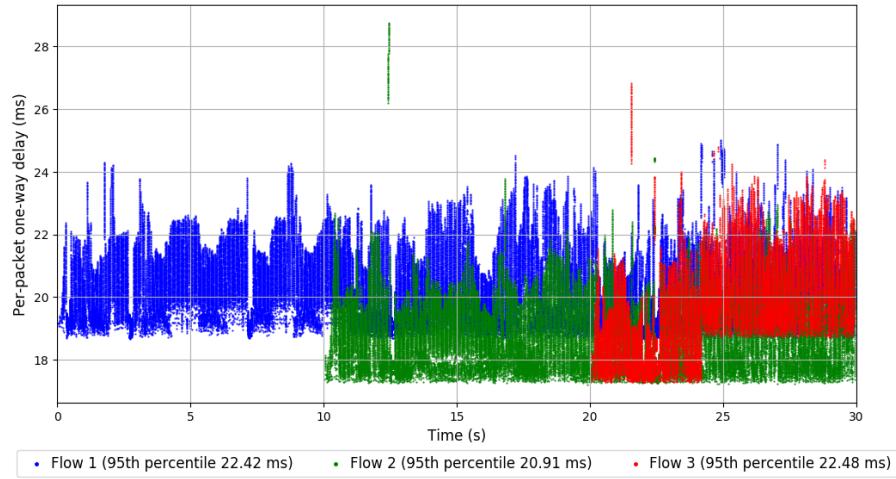
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-04-25 01:41:44
End at: 2018-04-25 01:42:14
Local clock offset: 0.387 ms
Remote clock offset: -6.639 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 19.625 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.231 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 19.160 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 21.044 ms
Loss rate: 0.00%
```
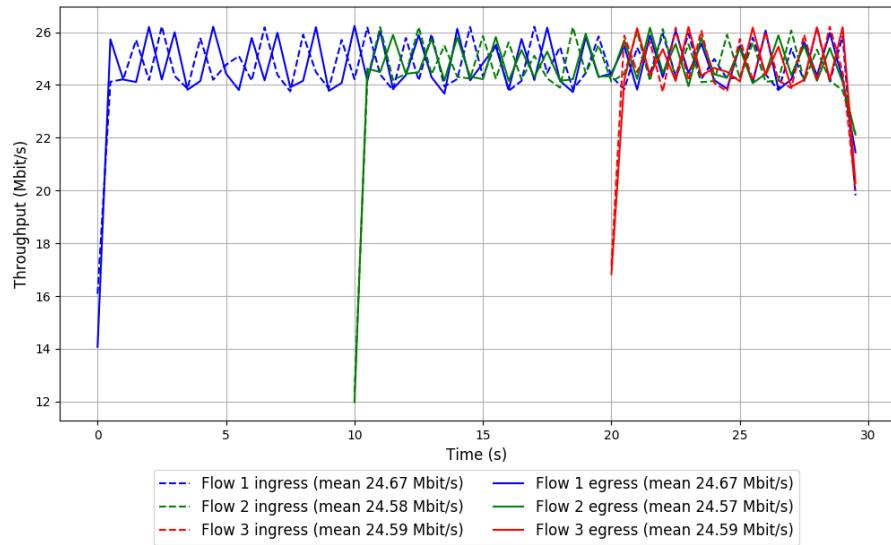
Run 10: Report of WebRTC media — Data Link

144

```
Run 1: Statistics of Sprout

Start at: 2018-04-24 21:44:52
End at: 2018-04-24 21:45:22
Local clock offset: 0.301 ms
Remote clock offset: -5.388 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 21.860 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 21.961 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 21.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.34 Mbit/s
95th percentile per-packet one-way delay: 21.576 ms
Loss rate: 0.01%
```
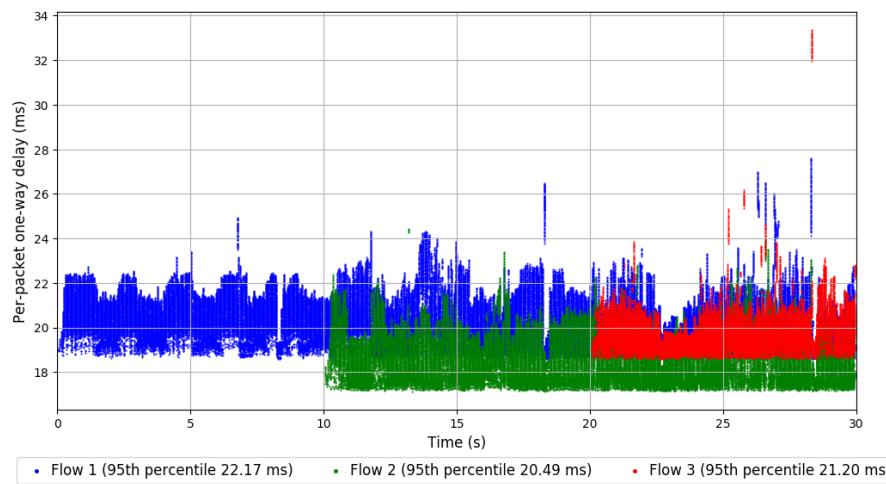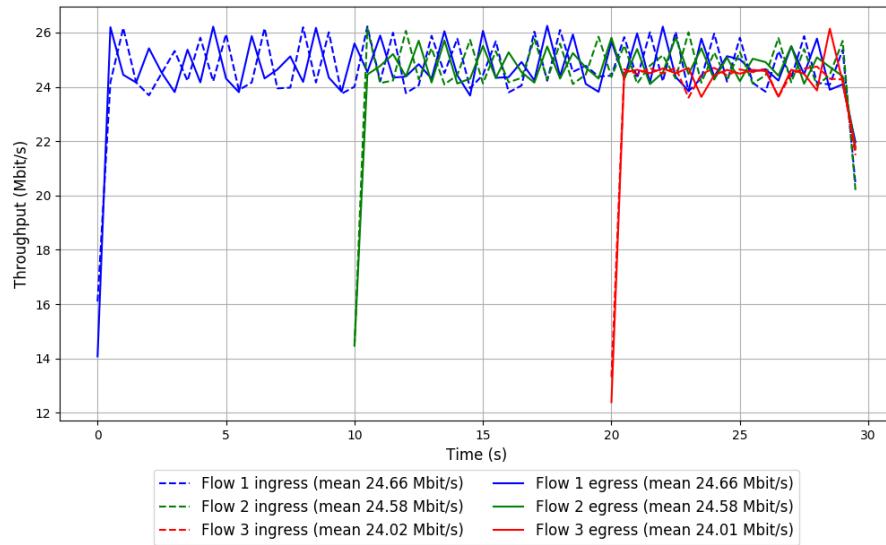
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-04-24 22:11:25
End at: 2018-04-24 22:11:55
Local clock offset: 0.044 ms
Remote clock offset: -5.756 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 22.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 22.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 20.911 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 22.478 ms
Loss rate: 0.00%
```
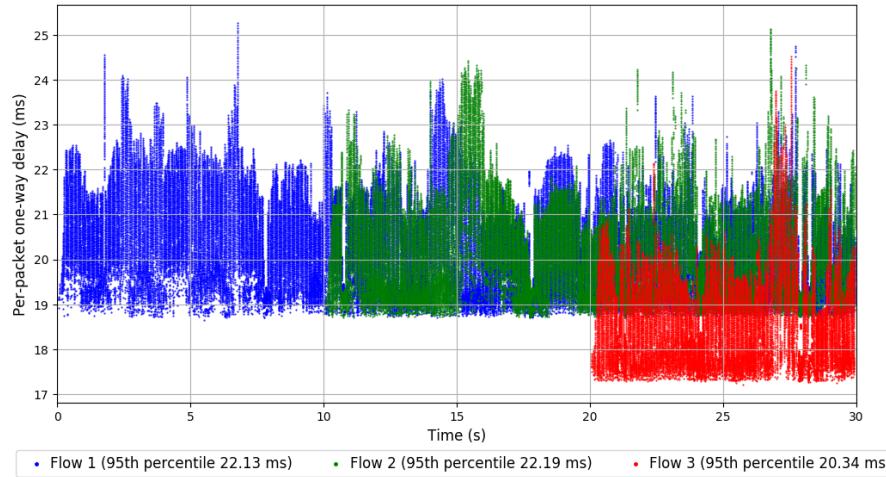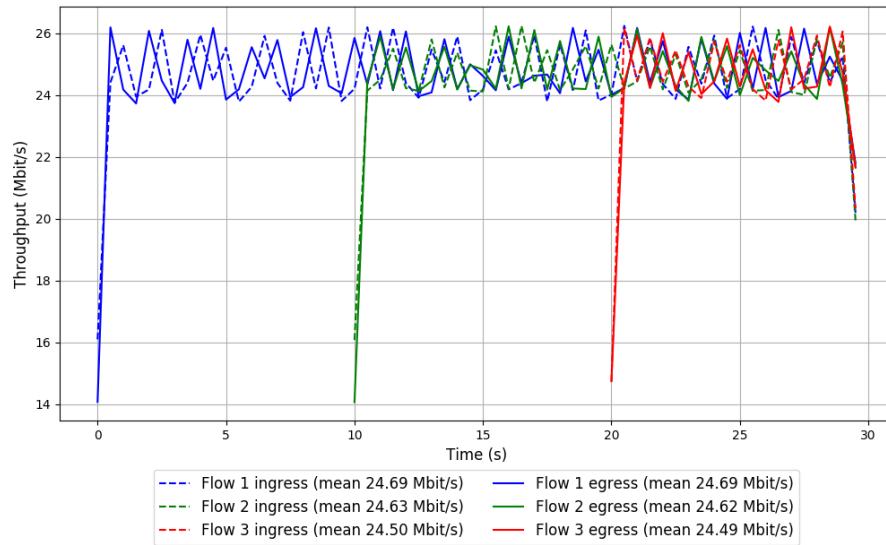
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-04-24 22:38:09
End at: 2018-04-24 22:38:39
Local clock offset: 0.037 ms
Remote clock offset: -5.639 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 21.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 22.170 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.58 Mbit/s
95th percentile per-packet one-way delay: 20.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.01 Mbit/s
95th percentile per-packet one-way delay: 21.202 ms
Loss rate: 0.00%
```
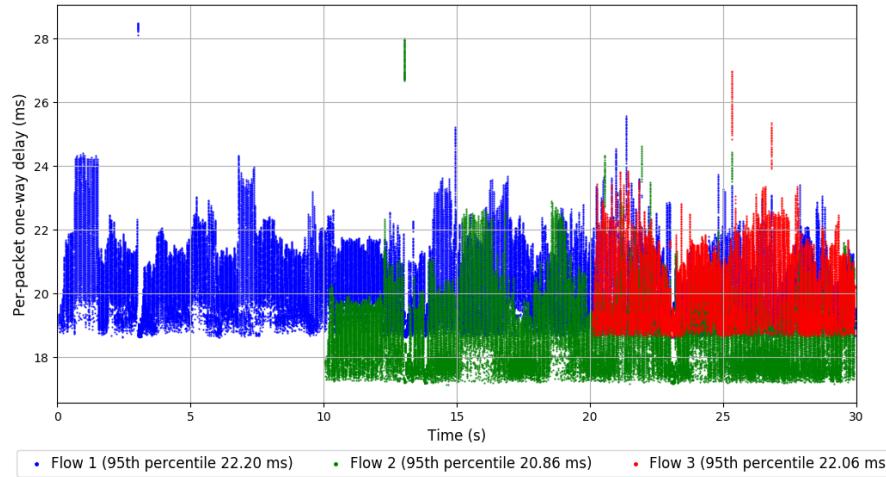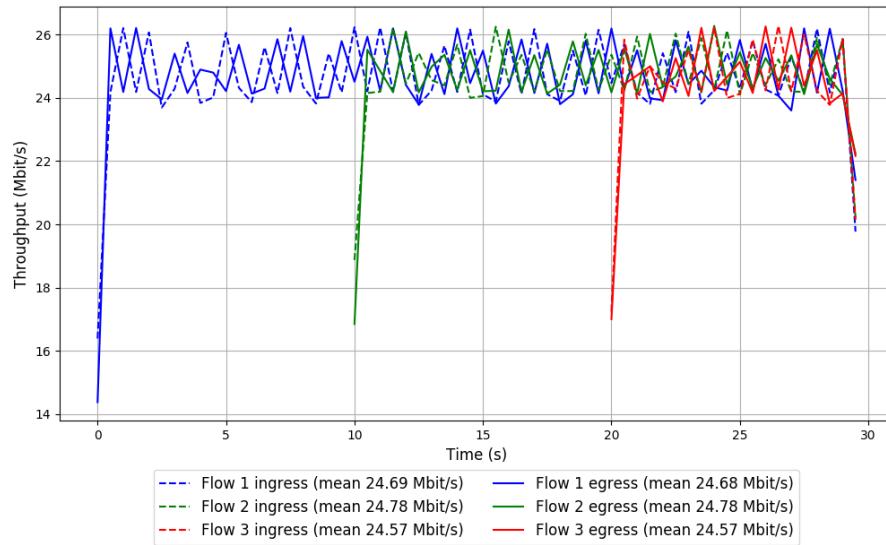
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-04-24 23:04:49
End at: 2018-04-24 23:05:19
Local clock offset: 0.047 ms
Remote clock offset: -5.804 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 22.053 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 22.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 22.186 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 20.344 ms
Loss rate: 0.00%
```
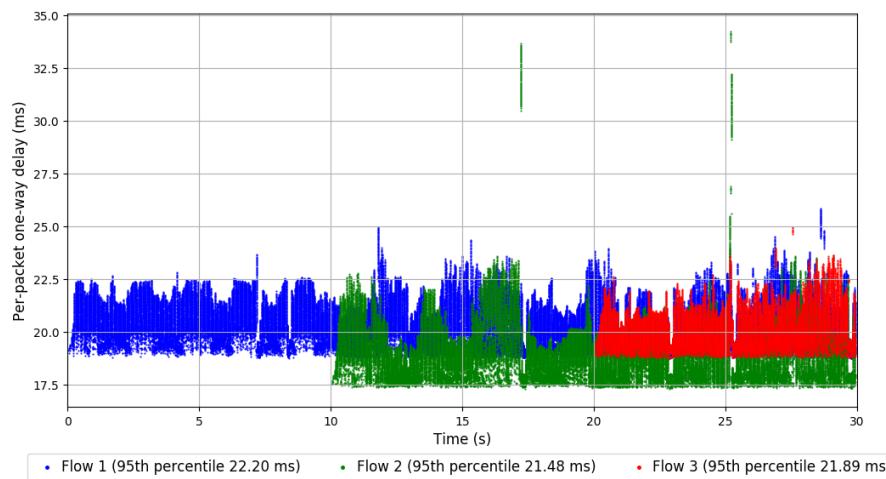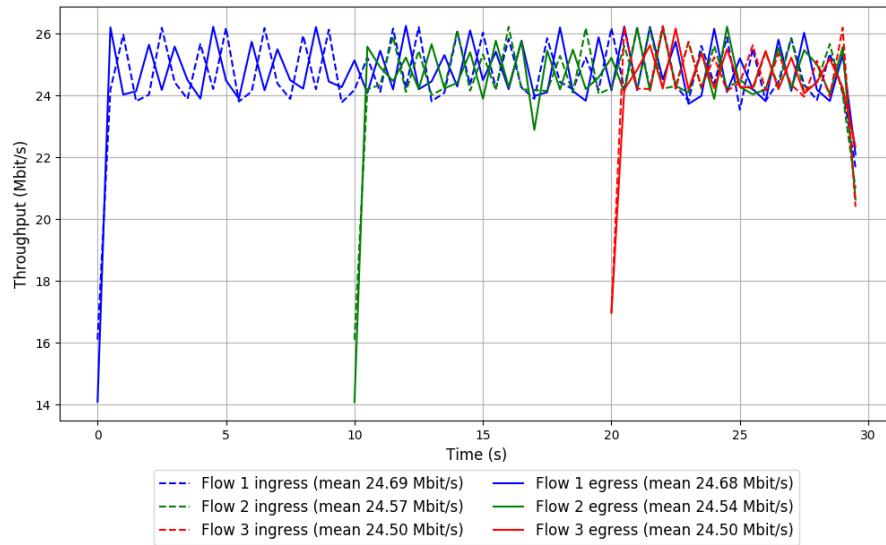
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 24.69 Mbit/s)   Flow 1 egress (mean 24.69 Mbit/s)
Flow 2 ingress (mean 24.63 Mbit/s)   Flow 2 egress (mean 24.62 Mbit/s)
Flow 3 ingress (mean 24.50 Mbit/s)   Flow 3 egress (mean 24.49 Mbit/s)

Flow 1 (95th percentile 22.13 ms)   Flow 2 (95th percentile 22.19 ms)   Flow 3 (95th percentile 20.34 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-04-24 23:31:33
End at: 2018-04-24 23:32:03
Local clock offset: 0.368 ms
Remote clock offset: -6.709 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.28 Mbit/s
95th percentile per-packet one-way delay: 21.950 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.199 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 20.861 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 22.059 ms
Loss rate: 0.00%
```
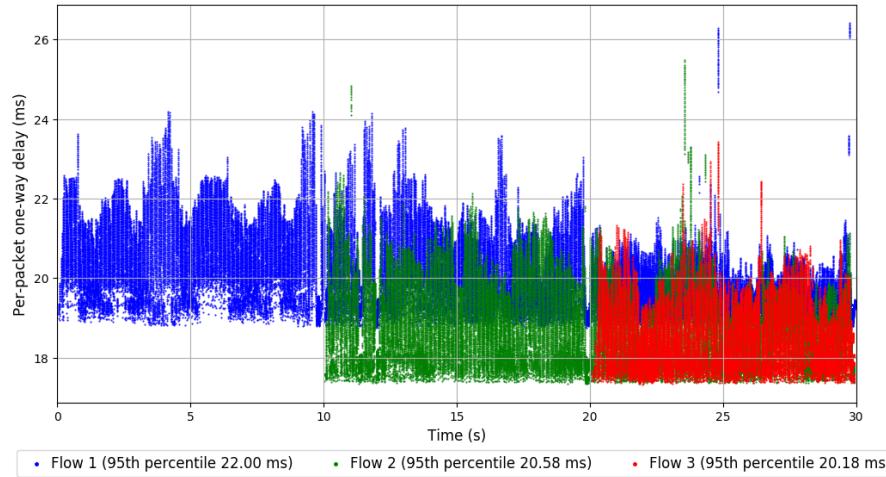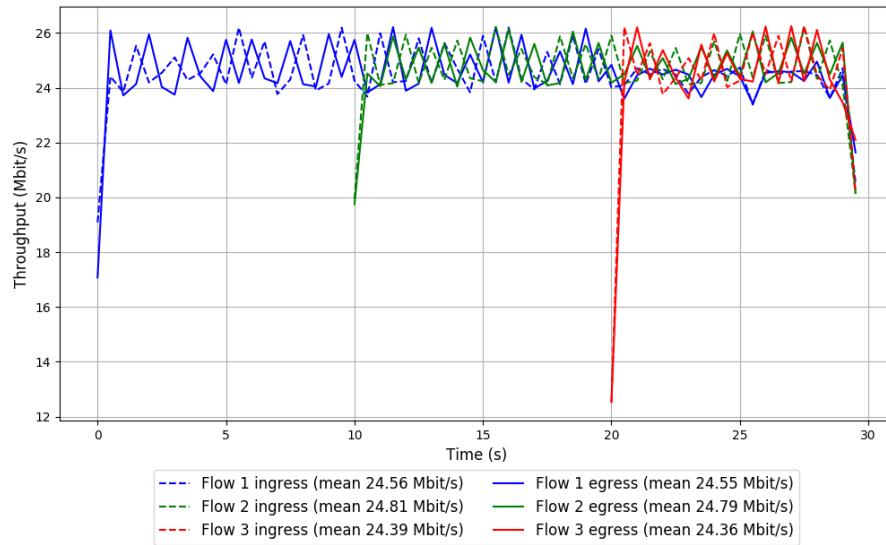
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-04-24 23:58:09
End at: 2018-04-24 23:58:39
Local clock offset: 0.183 ms
Remote clock offset: -5.55 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.12 Mbit/s
95th percentile per-packet one-way delay: 22.039 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.199 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.54 Mbit/s
95th percentile per-packet one-way delay: 21.475 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 24.50 Mbit/s
95th percentile per-packet one-way delay: 21.888 ms
Loss rate: 0.00%
```
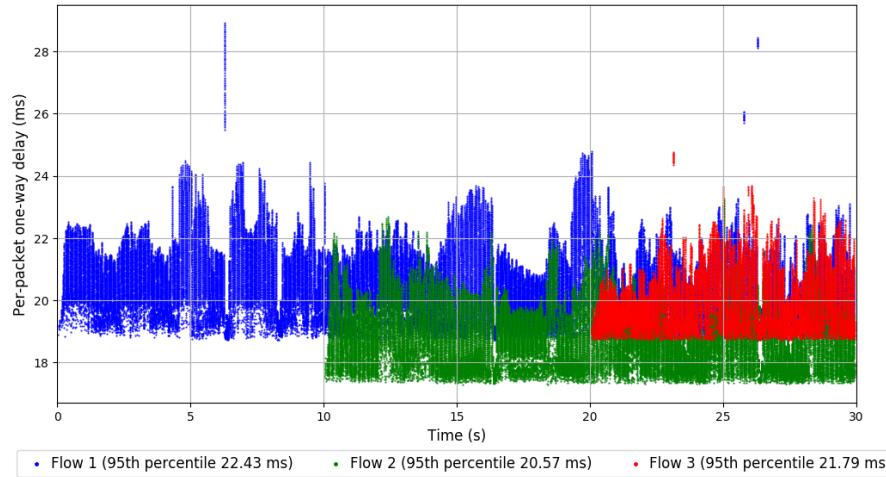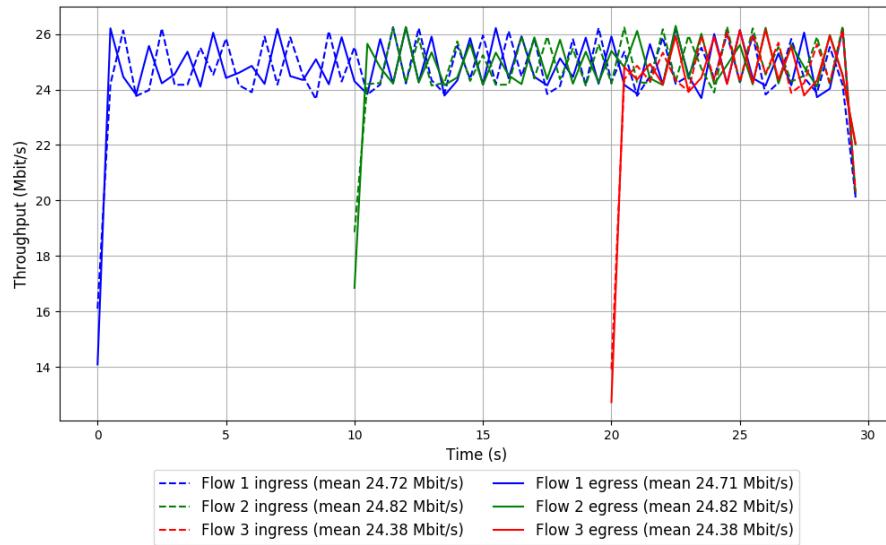
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-04-25 00:24:36
End at: 2018-04-25 00:25:06
Local clock offset: -0.243 ms
Remote clock offset: -5.569 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 21.583 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 22.000 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 20.583 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 20.180 ms
Loss rate: 0.10%
```
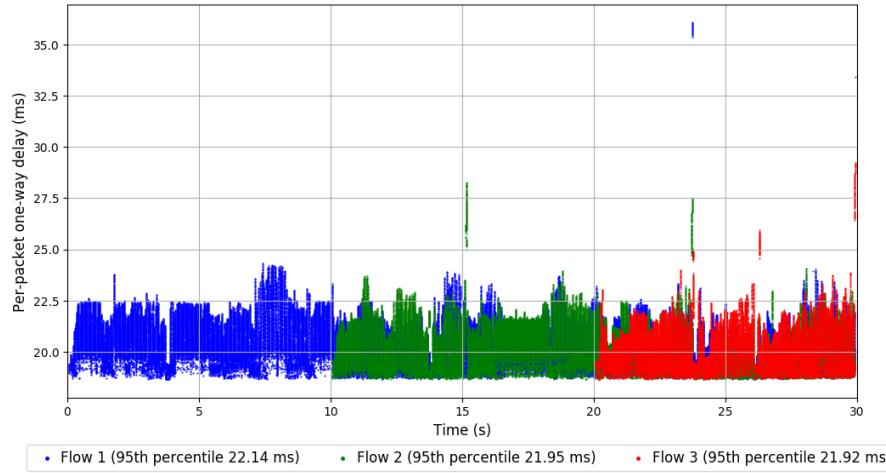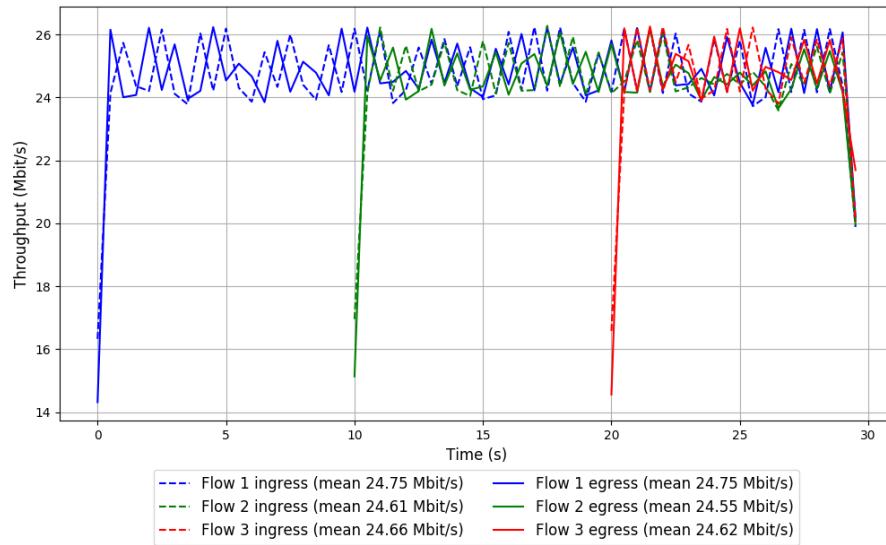
Run 7: Report of Sprout — Data Link

Flow 1 ingress (mean 24.56 Mbit/s) --- Flow 1 egress (mean 24.55 Mbit/s)
Flow 2 ingress (mean 24.81 Mbit/s) --- Flow 2 egress (mean 24.79 Mbit/s)
Flow 3 ingress (mean 24.39 Mbit/s) --- Flow 3 egress (mean 24.36 Mbit/s)

• Flow 1 (95th percentile 22.00 ms)   • Flow 2 (95th percentile 20.58 ms)   • Flow 3 (95th percentile 20.18 ms)

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```
Run 8: Statistics of Sprout

Start at: 2018-04-25 00:51:09
End at: 2018-04-25 00:51:39
Local clock offset: -0.065 ms
Remote clock offset: -5.461 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 22.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 22.430 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.82 Mbit/s
95th percentile per-packet one-way delay: 20.566 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 21.790 ms
Loss rate: 0.00%
```
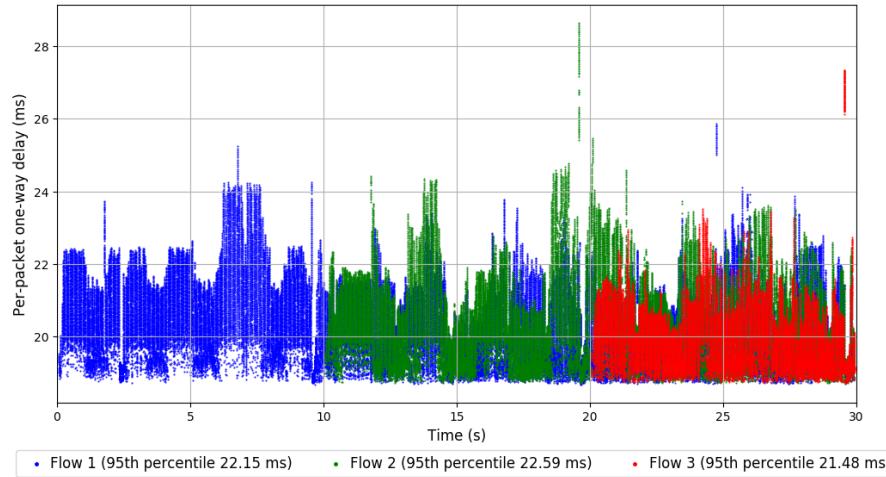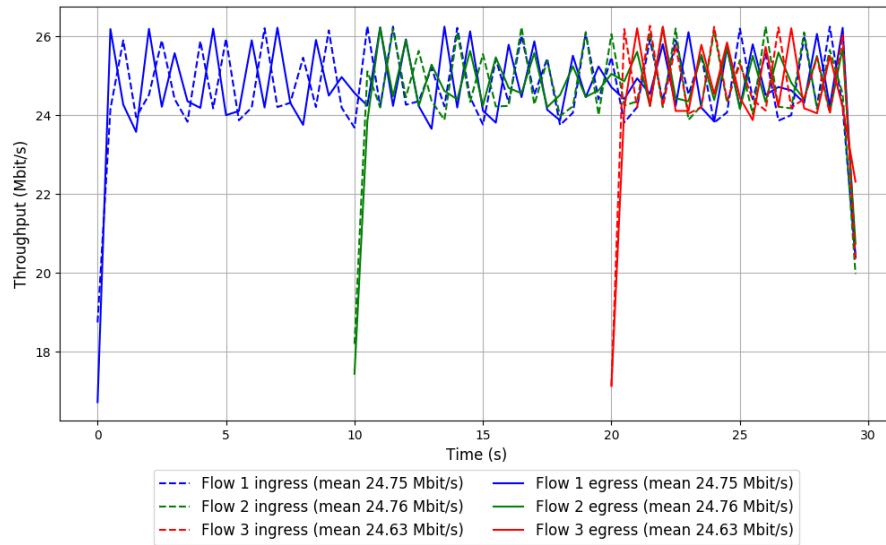
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-04-25 01:17:51
End at: 2018-04-25 01:18:21
Local clock offset: 0.386 ms
Remote clock offset: -5.3 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 22.049 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 22.135 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 21.946 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 21.918 ms
Loss rate: 0.06%
```
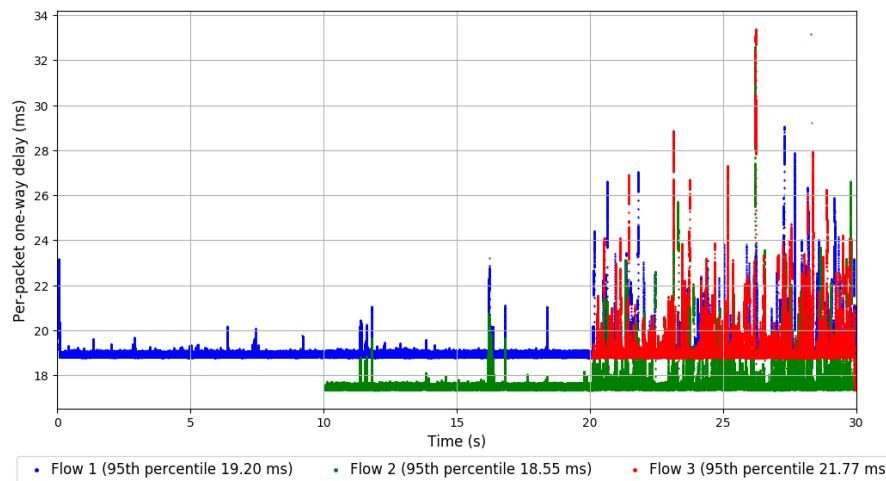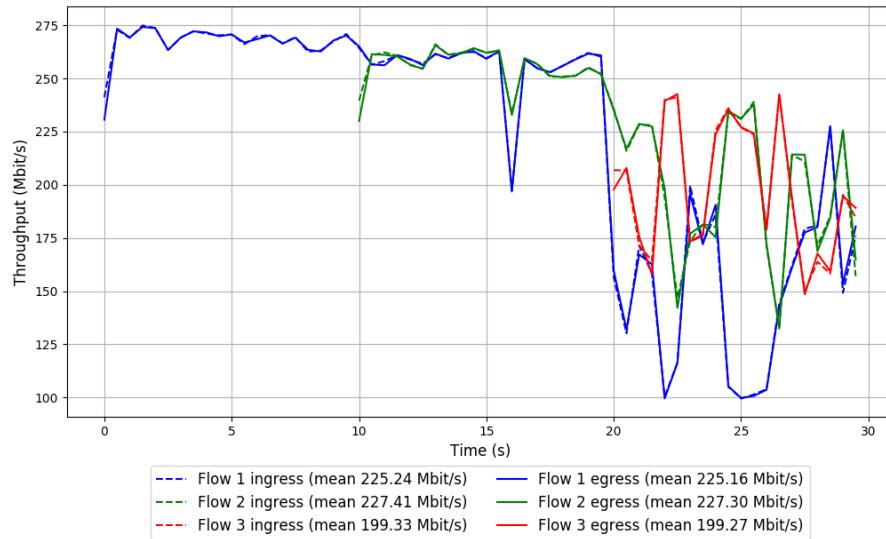
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-04-25 01:44:45
End at: 2018-04-25 01:45:15
Local clock offset: 0.375 ms
Remote clock offset: -6.631 ms


# Below is generated by plot.py at 2018-04-25 05:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 22.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 22.151 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 22.586 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 21.476 ms
Loss rate: 0.00%
```
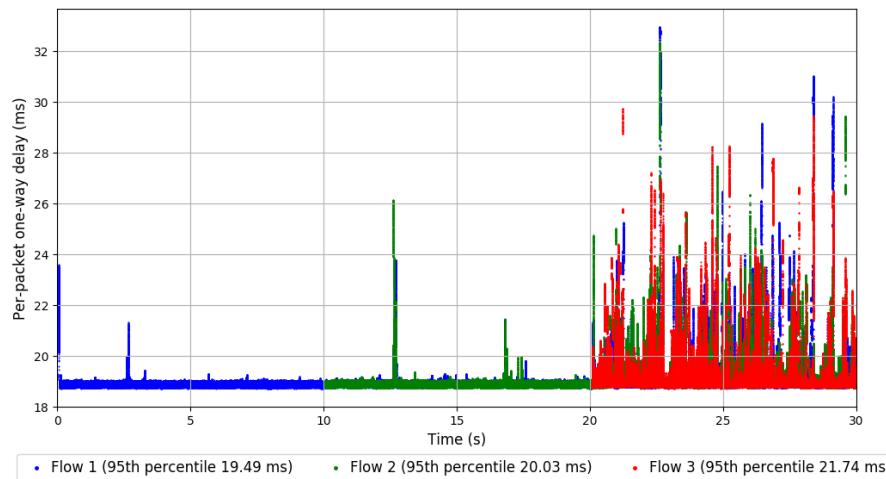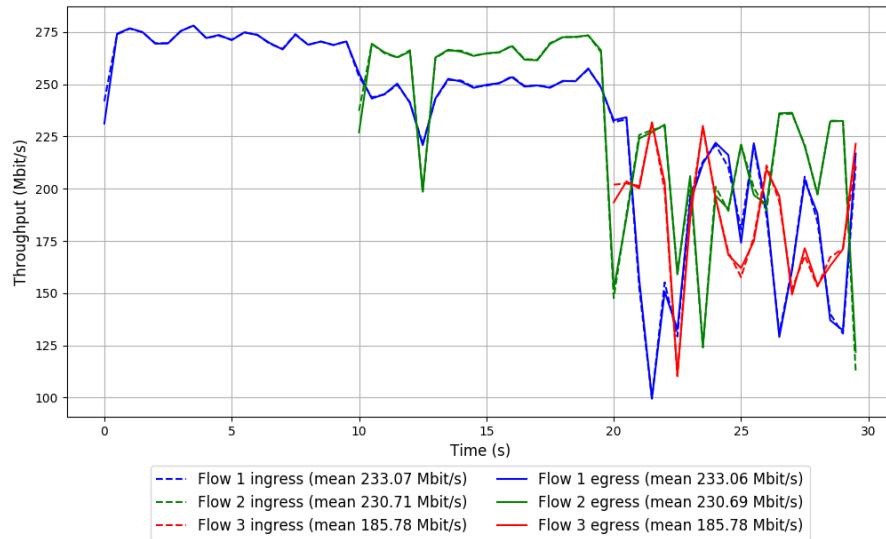
Run 10: Report of Sprout — Data Link

- - - Flow 1 ingress (mean 24.75 Mbit/s) —— Flow 1 egress (mean 24.75 Mbit/s)
- - - Flow 2 ingress (mean 24.76 Mbit/s) —— Flow 2 egress (mean 24.76 Mbit/s)
- - - Flow 3 ingress (mean 24.63 Mbit/s) —— Flow 3 egress (mean 24.63 Mbit/s)

• Flow 1 (95th percentile 22.15 ms)   • Flow 2 (95th percentile 22.59 ms)   • Flow 3 (95th percentile 21.48 ms)

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

Start at: 2018-04-24 21:46:12
End at: 2018-04-24 21:46:42
Local clock offset: 0.161 ms
Remote clock offset: -5.292 ms

# Below is generated by plot.py at 2018-04-25 05:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.56 Mbit/s
95th percentile per-packet one-way delay: 19.733 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 225.16 Mbit/s
95th percentile per-packet one-way delay: 19.201 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 227.30 Mbit/s
95th percentile per-packet one-way delay: 18.545 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 199.27 Mbit/s
95th percentile per-packet one-way delay: 21.769 ms
Loss rate: 0.04%
```

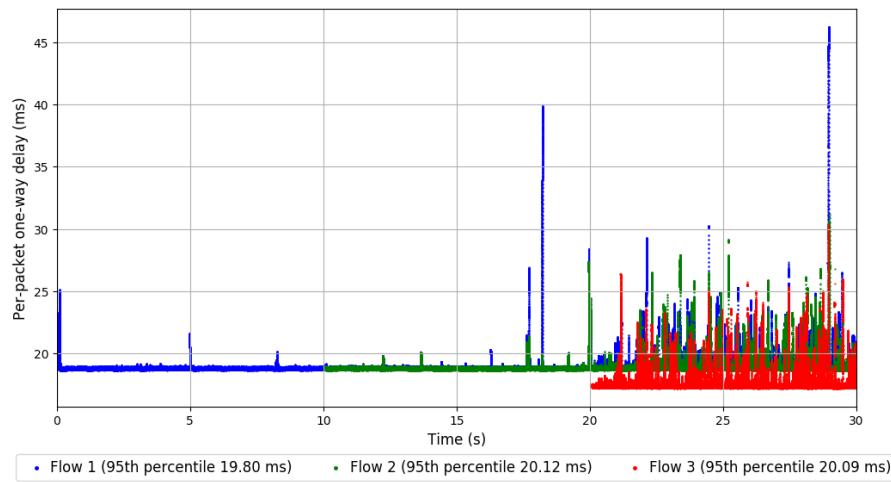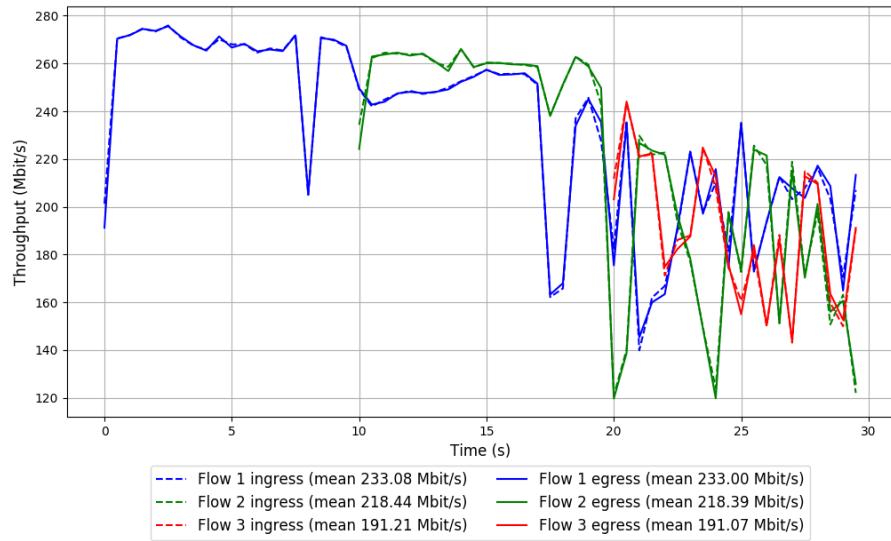Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 22:12:45
End at: 2018-04-24 22:13:15
Local clock offset: -0.008 ms
Remote clock offset: -5.723 ms

# Below is generated by plot.py at 2018-04-25 05:09:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.30 Mbit/s
95th percentile per-packet one-way delay: 20.133 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 233.06 Mbit/s
95th percentile per-packet one-way delay: 19.490 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 230.69 Mbit/s
95th percentile per-packet one-way delay: 20.031 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 185.78 Mbit/s
95th percentile per-packet one-way delay: 21.742 ms
Loss rate: 0.00%
```

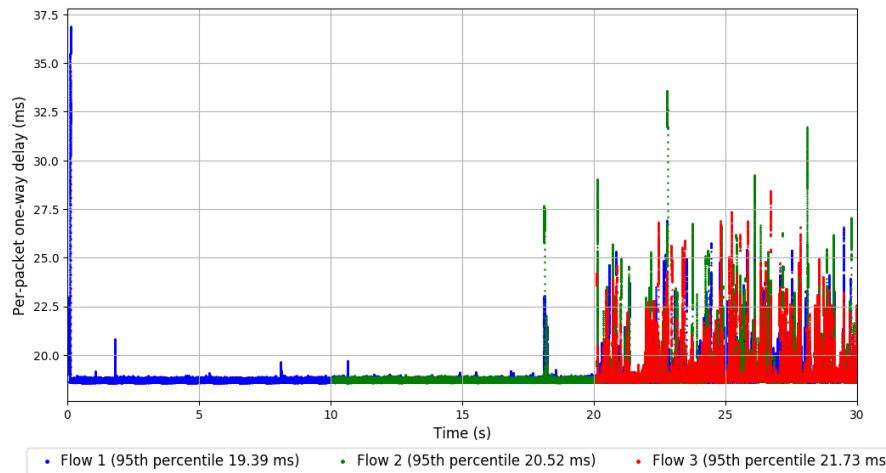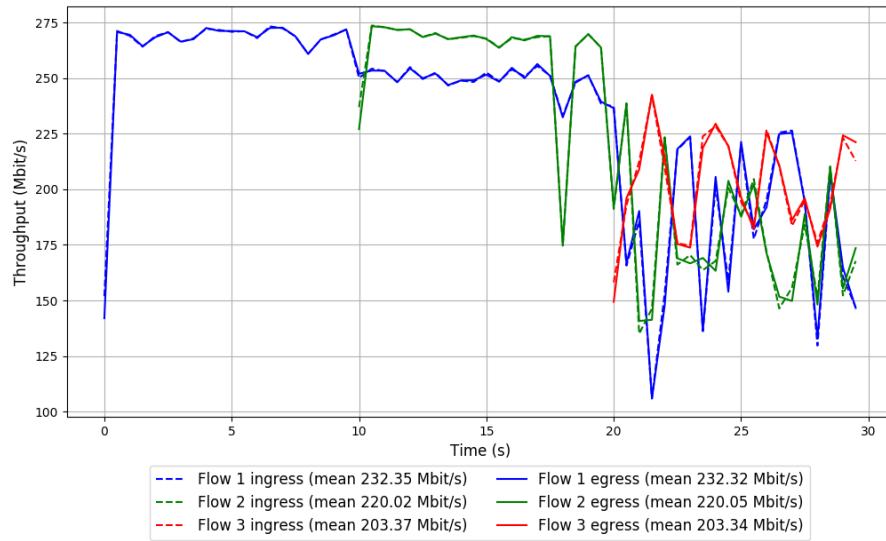Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 233.07 Mbit/s) --- Flow 1 egress (mean 233.06 Mbit/s)
Flow 2 ingress (mean 230.71 Mbit/s) --- Flow 2 egress (mean 230.69 Mbit/s)
Flow 3 ingress (mean 185.78 Mbit/s) --- Flow 3 egress (mean 185.78 Mbit/s)

Flow 1 (95th percentile 19.49 ms)   Flow 2 (95th percentile 20.03 ms)   Flow 3 (95th percentile 21.74 ms)

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

Start at: 2018-04-24 22:39:29
End at: 2018-04-24 22:39:59
Local clock offset: -0.084 ms
Remote clock offset: -5.631 ms


# Below is generated by plot.py at 2018-04-25 05:09:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 441.77 Mbit/s
95th percentile per-packet one-way delay: 19.939 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 233.00 Mbit/s
95th percentile per-packet one-way delay: 19.802 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 218.39 Mbit/s
95th percentile per-packet one-way delay: 20.124 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 191.07 Mbit/s
95th percentile per-packet one-way delay: 20.089 ms
Loss rate: 0.06%
```

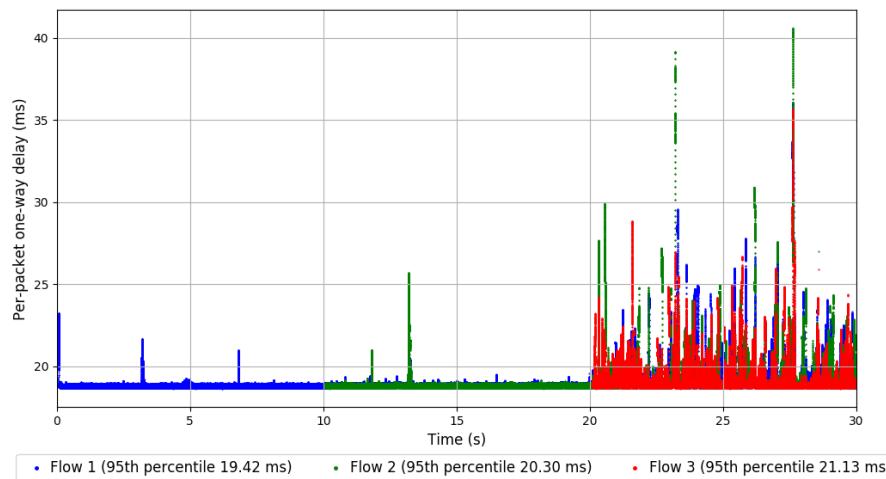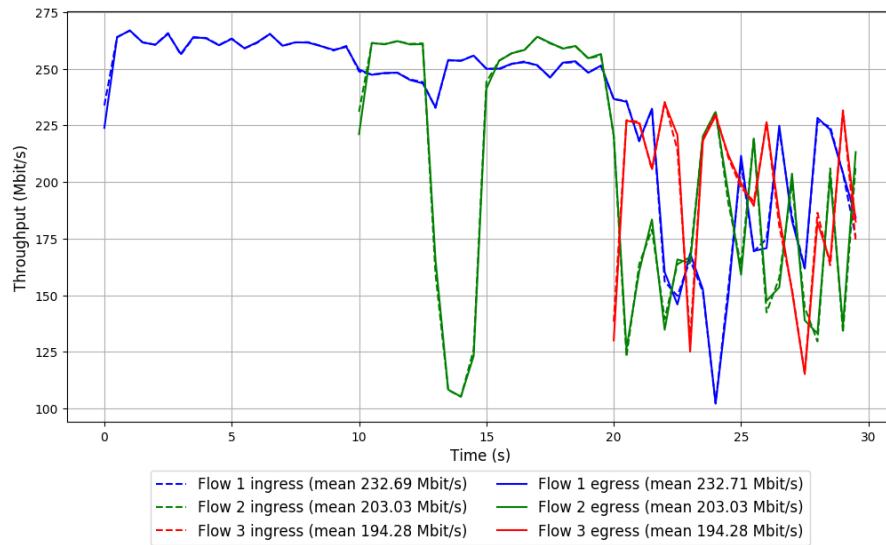Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 233.08 Mbit/s) ---- Flow 1 egress (mean 233.00 Mbit/s)
Flow 2 ingress (mean 218.44 Mbit/s) ---- Flow 2 egress (mean 218.39 Mbit/s)
Flow 3 ingress (mean 191.21 Mbit/s) ---- Flow 3 egress (mean 191.07 Mbit/s)

Flow 1 (95th percentile 19.80 ms)   Flow 2 (95th percentile 20.12 ms)   Flow 3 (95th percentile 20.09 ms)

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

Start at: 2018-04-24 23:06:09
End at: 2018-04-24 23:06:39
Local clock offset: 0.056 ms
Remote clock offset: -5.979 ms

# Below is generated by plot.py at 2018-04-25 05:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 446.21 Mbit/s
95th percentile per-packet one-way delay: 20.281 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 232.32 Mbit/s
95th percentile per-packet one-way delay: 19.394 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 220.05 Mbit/s
95th percentile per-packet one-way delay: 20.520 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.34 Mbit/s
95th percentile per-packet one-way delay: 21.726 ms
Loss rate: 0.01%
```

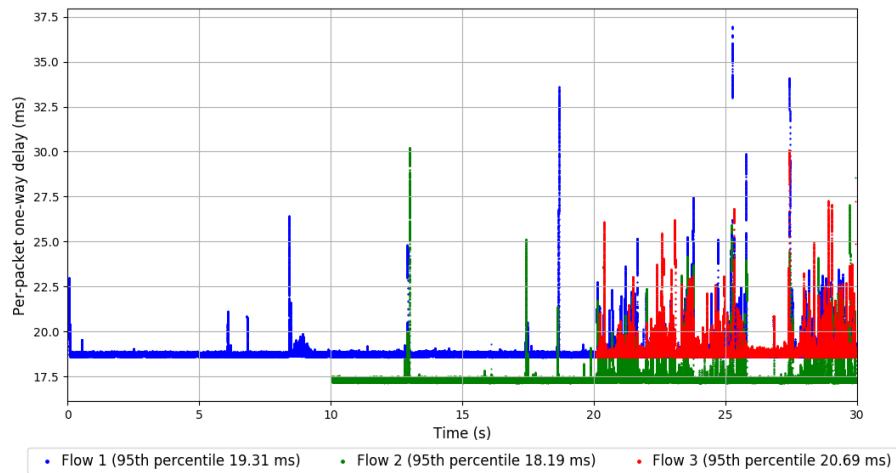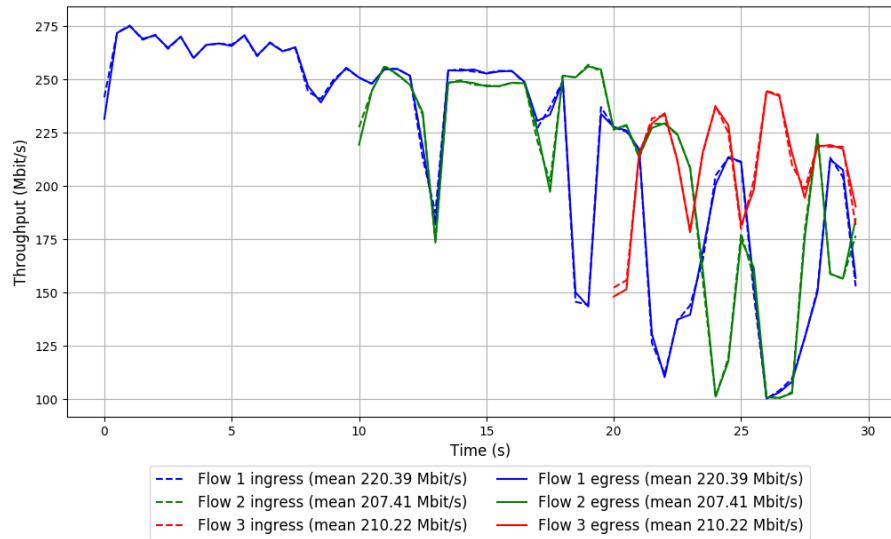## Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 23:32:53
End at: 2018-04-24 23:33:23
Local clock offset: 0.311 ms
Remote clock offset: -6.733 ms


# Below is generated by plot.py at 2018-04-25 05:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.27 Mbit/s
95th percentile per-packet one-way delay: 20.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.71 Mbit/s
95th percentile per-packet one-way delay: 19.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 203.03 Mbit/s
95th percentile per-packet one-way delay: 20.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 194.28 Mbit/s
95th percentile per-packet one-way delay: 21.130 ms
Loss rate: 0.00%
```

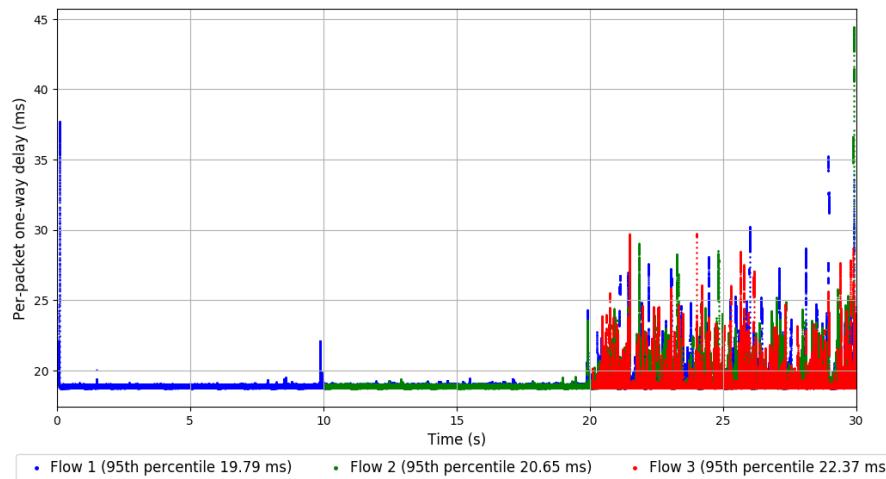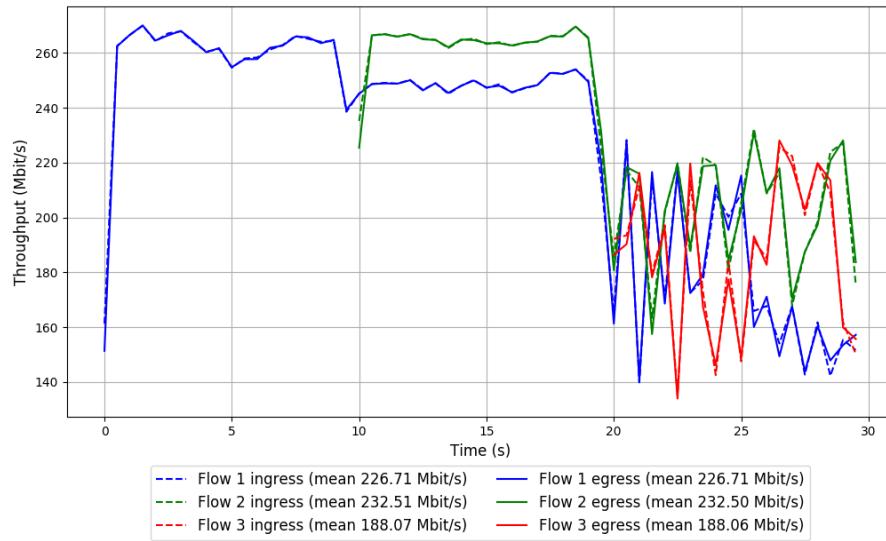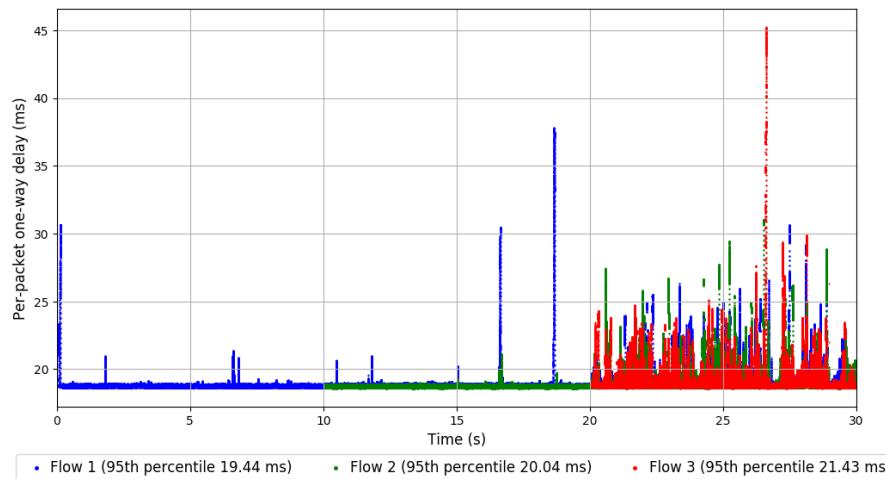Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 232.69 Mbit/s) --- Flow 1 egress (mean 232.71 Mbit/s)
Flow 2 ingress (mean 203.03 Mbit/s) --- Flow 2 egress (mean 203.03 Mbit/s)
Flow 3 ingress (mean 194.28 Mbit/s) --- Flow 3 egress (mean 194.28 Mbit/s)

Flow 1 (95th percentile 19.42 ms)   Flow 2 (95th percentile 20.30 ms)   Flow 3 (95th percentile 21.13 ms)

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

Start at: 2018-04-24 23:59:29
End at: 2018-04-24 23:59:59
Local clock offset: 0.274 ms
Remote clock offset: -5.549 ms


# Below is generated by plot.py at 2018-04-25 05:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.15 Mbit/s
95th percentile per-packet one-way delay: 19.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.39 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 207.41 Mbit/s
95th percentile per-packet one-way delay: 18.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 210.22 Mbit/s
95th percentile per-packet one-way delay: 20.690 ms
Loss rate: 0.00%
```

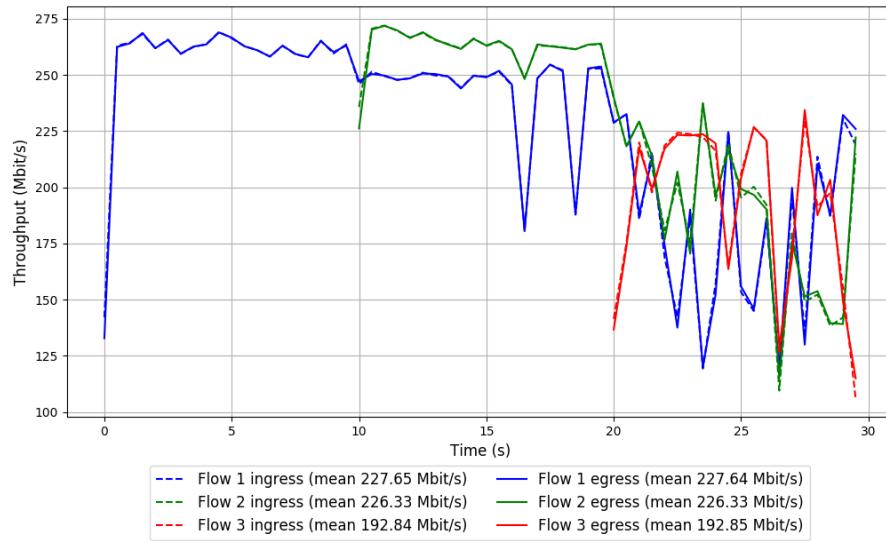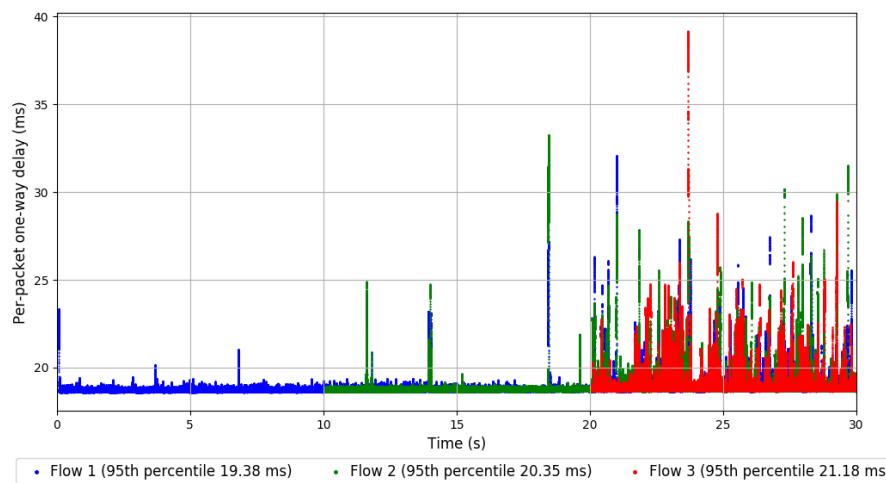## Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-25 00:25:56
End at: 2018-04-25 00:26:26
Local clock offset: -0.16 ms
Remote clock offset: -5.506 ms

# Below is generated by plot.py at 2018-04-25 05:15:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.86 Mbit/s
95th percentile per-packet one-way delay: 20.627 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.71 Mbit/s
95th percentile per-packet one-way delay: 19.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.50 Mbit/s
95th percentile per-packet one-way delay: 20.650 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.06 Mbit/s
95th percentile per-packet one-way delay: 22.370 ms
Loss rate: 0.01%
```

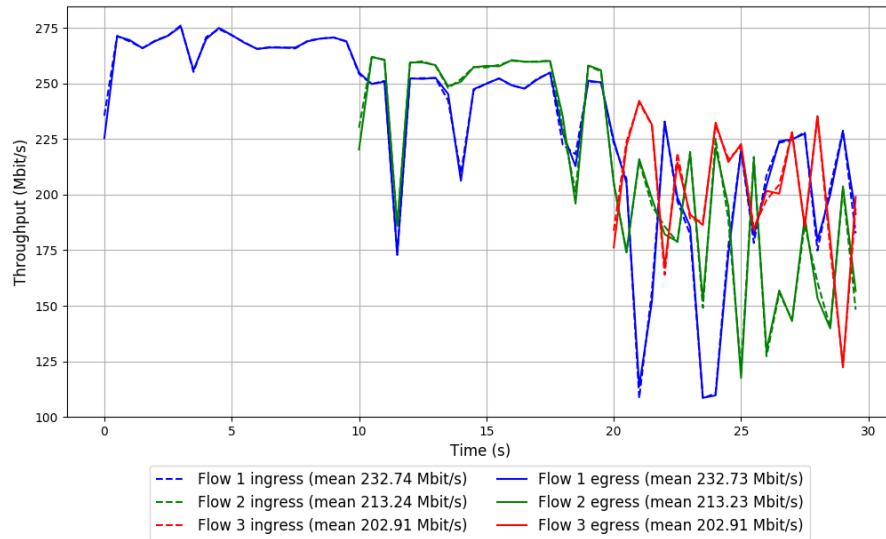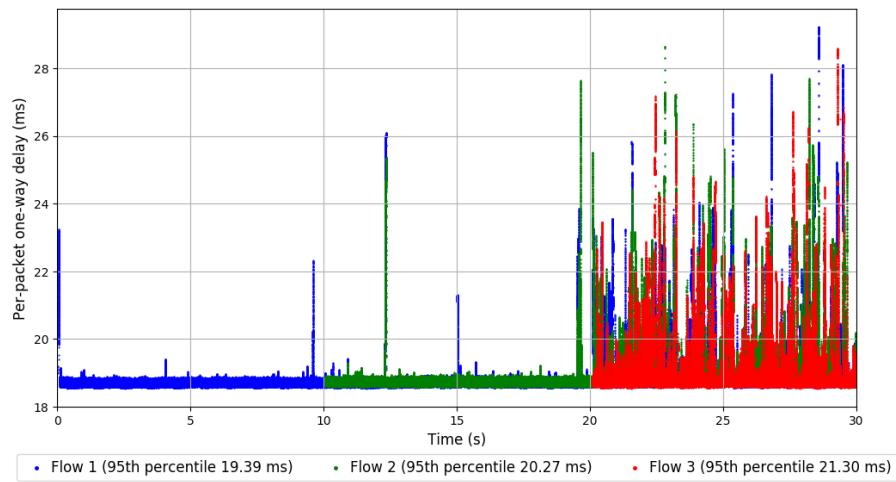Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 226.71 Mbit/s)   Flow 1 egress (mean 226.71 Mbit/s)
Flow 2 ingress (mean 232.51 Mbit/s)   Flow 2 egress (mean 232.50 Mbit/s)
Flow 3 ingress (mean 188.07 Mbit/s)   Flow 3 egress (mean 188.06 Mbit/s)

Flow 1 (95th percentile 19.79 ms)   Flow 2 (95th percentile 20.65 ms)   Flow 3 (95th percentile 22.37 ms)

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

Start at: 2018-04-25 00:52:29
End at: 2018-04-25 00:52:59
Local clock offset: 0.006 ms
Remote clock offset: -5.44 ms

# Below is generated by plot.py at 2018-04-25 05:17:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.38 Mbit/s
95th percentile per-packet one-way delay: 20.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.64 Mbit/s
95th percentile per-packet one-way delay: 19.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 226.33 Mbit/s
95th percentile per-packet one-way delay: 20.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.85 Mbit/s
95th percentile per-packet one-way delay: 21.429 ms
Loss rate: 0.00%
```

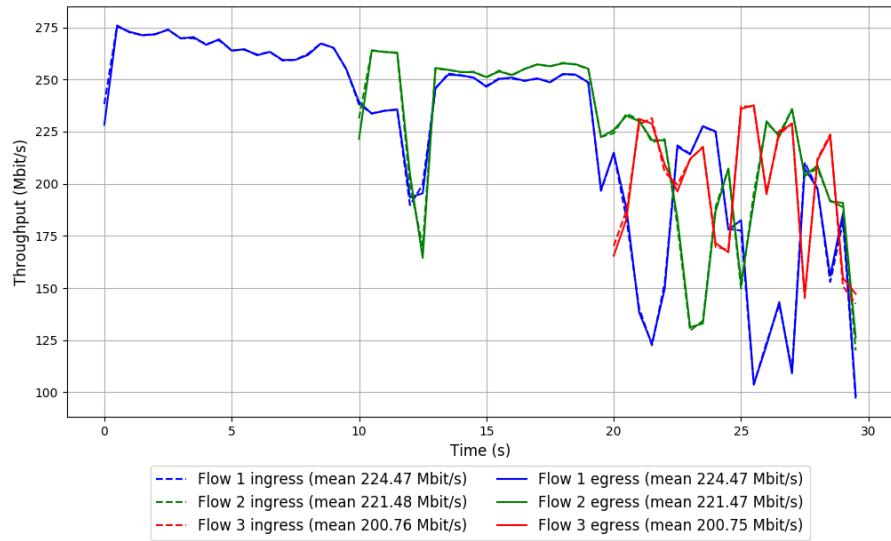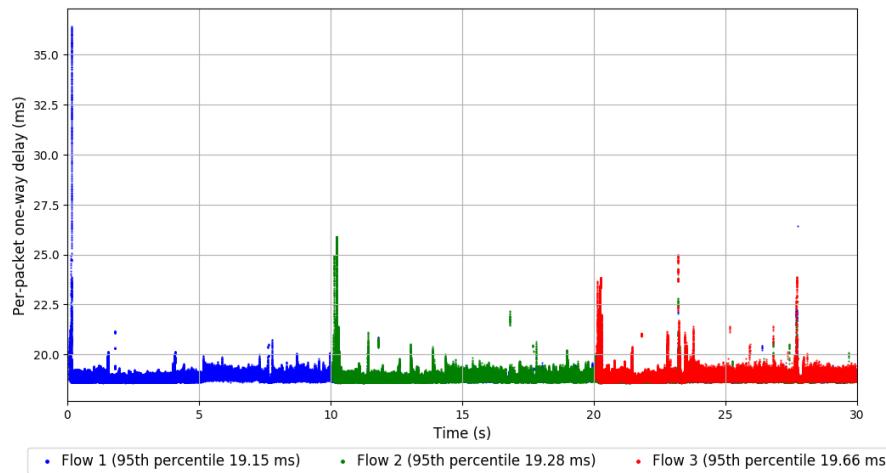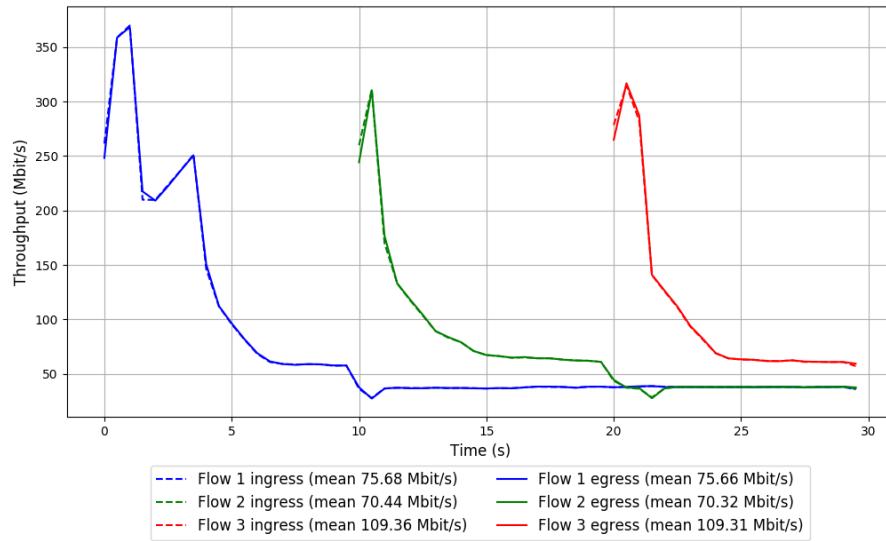Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-25 01:19:11
End at: 2018-04-25 01:19:41
Local clock offset: 0.417 ms
Remote clock offset: -5.457 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.09 Mbit/s
95th percentile per-packet one-way delay: 20.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.73 Mbit/s
95th percentile per-packet one-way delay: 19.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 213.23 Mbit/s
95th percentile per-packet one-way delay: 20.351 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 202.91 Mbit/s
95th percentile per-packet one-way delay: 21.177 ms
Loss rate: 0.00%
```

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

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

Start at: 2018-04-25 01:46:05
End at: 2018-04-25 01:46:35
Local clock offset: 0.403 ms
Remote clock offset: -6.735 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 438.50 Mbit/s
95th percentile per-packet one-way delay: 20.160 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.47 Mbit/s
95th percentile per-packet one-way delay: 19.391 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 221.47 Mbit/s
95th percentile per-packet one-way delay: 20.275 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.75 Mbit/s
95th percentile per-packet one-way delay: 21.305 ms
Loss rate: 0.00%
```
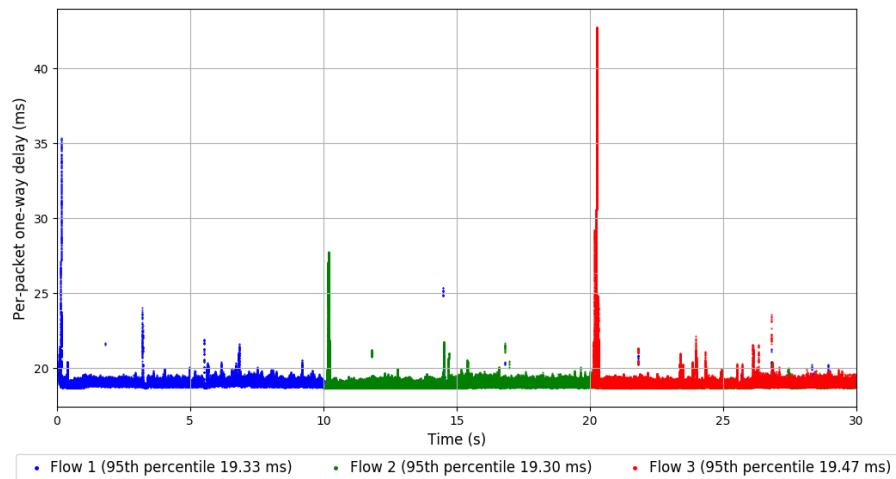
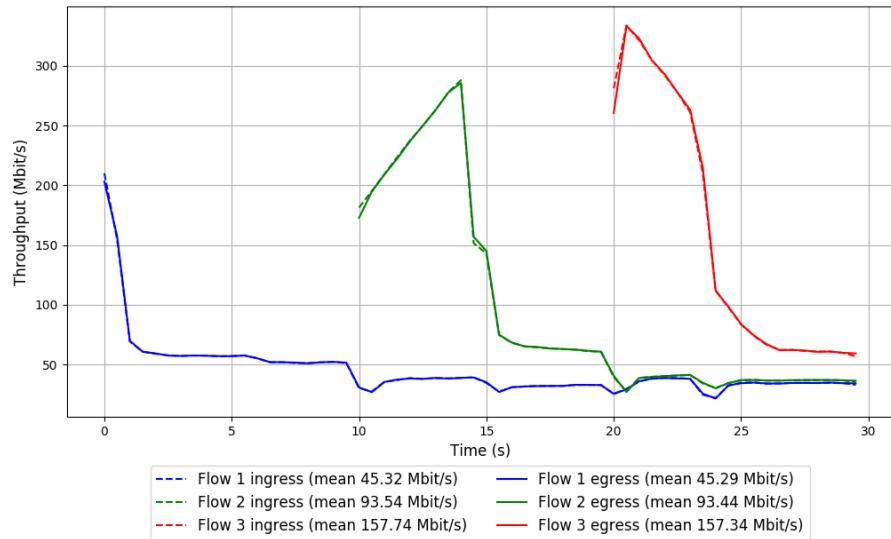Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2018-04-24 21:38:31
End at: 2018-04-24 21:39:01
Local clock offset: 0.287 ms
Remote clock offset: -5.351 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 158.77 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 19.152 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 70.32 Mbit/s
95th percentile per-packet one-way delay: 19.277 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 109.31 Mbit/s
95th percentile per-packet one-way delay: 19.661 ms
Loss rate: 0.05%
```
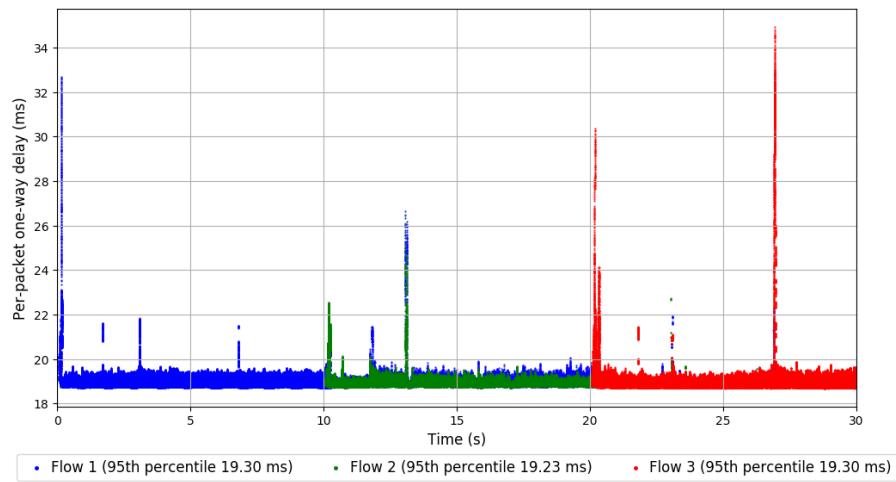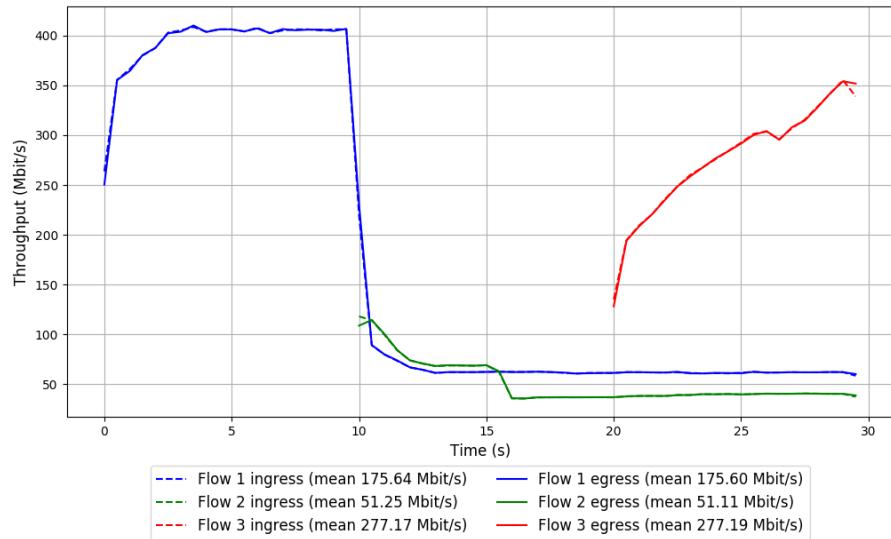
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-04-24 22:05:05
End at: 2018-04-24 22:05:35
Local clock offset: 0.097 ms
Remote clock offset: -5.688 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.75 Mbit/s
95th percentile per-packet one-way delay: 19.348 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 19.333 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 157.34 Mbit/s
95th percentile per-packet one-way delay: 19.474 ms
Loss rate: 0.25%
```
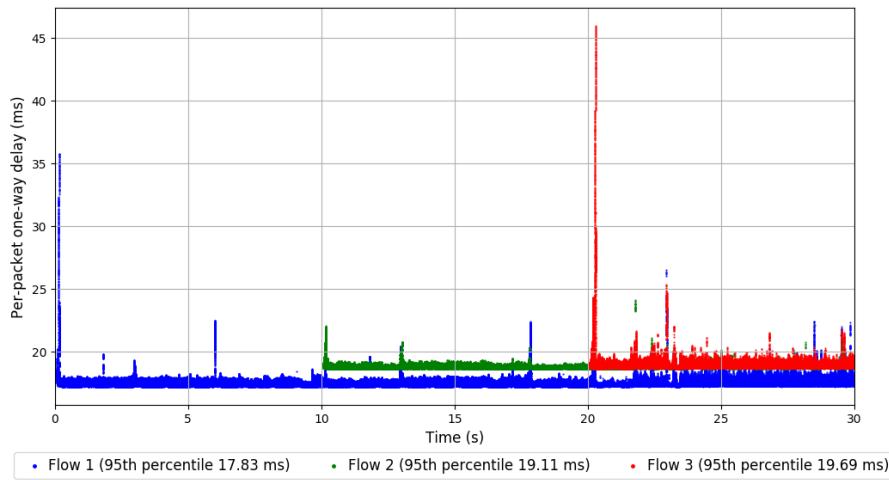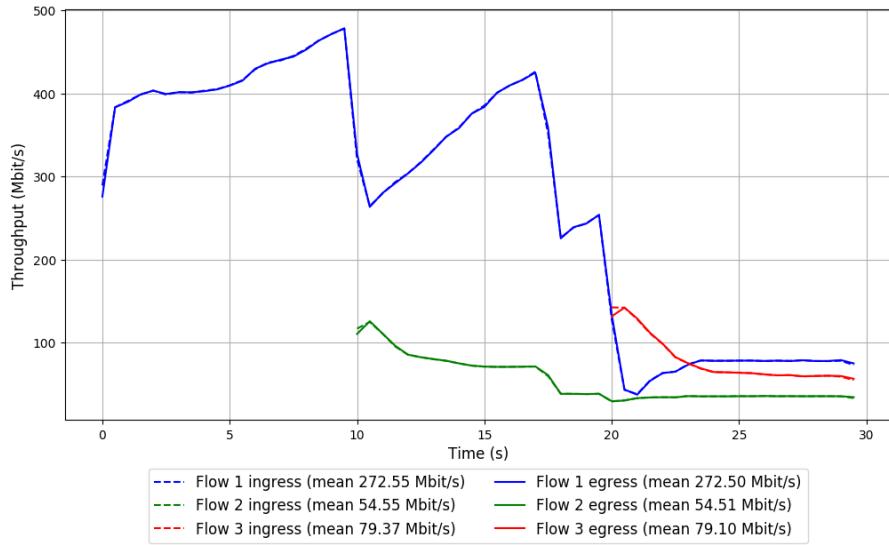
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-04-24 22:31:44
End at: 2018-04-24 22:32:14
Local clock offset: -0.066 ms
Remote clock offset: -5.711 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.61 Mbit/s
95th percentile per-packet one-way delay: 19.300 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 175.60 Mbit/s
95th percentile per-packet one-way delay: 19.305 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 19.231 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 277.19 Mbit/s
95th percentile per-packet one-way delay: 19.298 ms
Loss rate: 0.01%
```

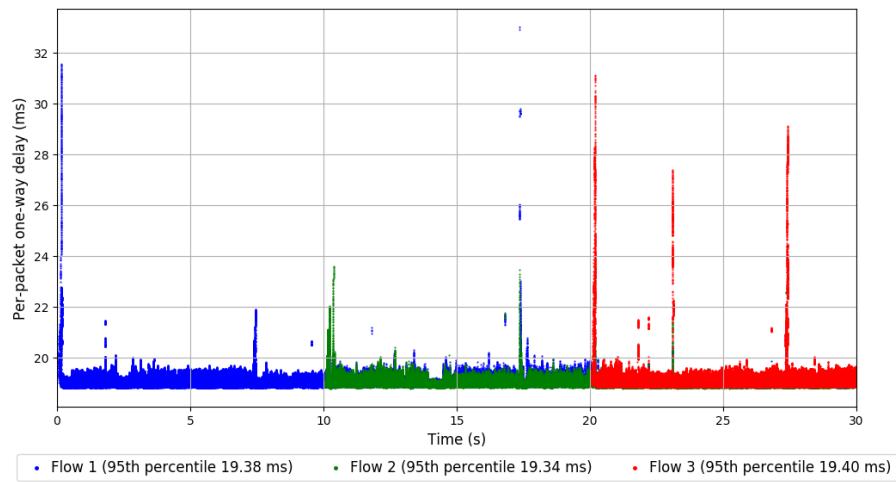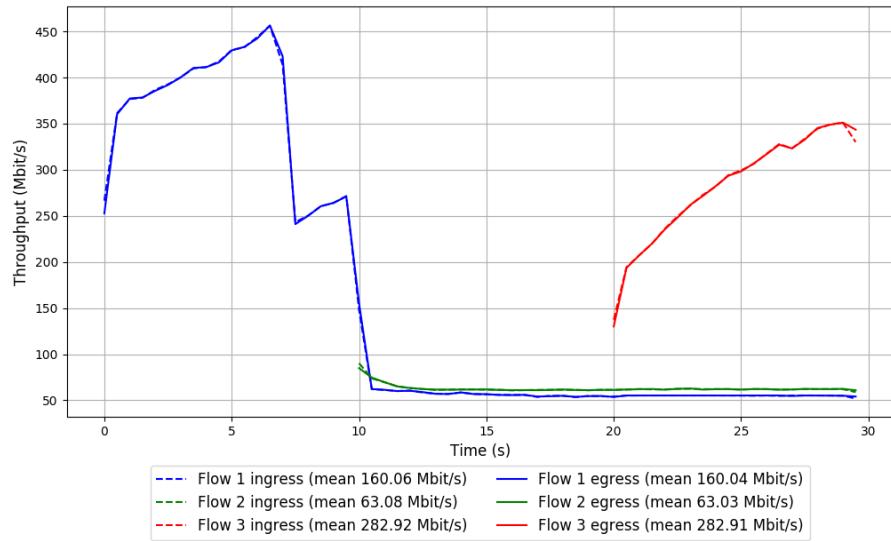Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-04-24 22:58:24
End at: 2018-04-24 22:58:54
Local clock offset: -0.06 ms
Remote clock offset: -5.61 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.06 Mbit/s
95th percentile per-packet one-way delay: 19.009 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 272.50 Mbit/s
95th percentile per-packet one-way delay: 17.827 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 54.51 Mbit/s
95th percentile per-packet one-way delay: 19.112 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 79.10 Mbit/s
95th percentile per-packet one-way delay: 19.686 ms
Loss rate: 0.33%
```
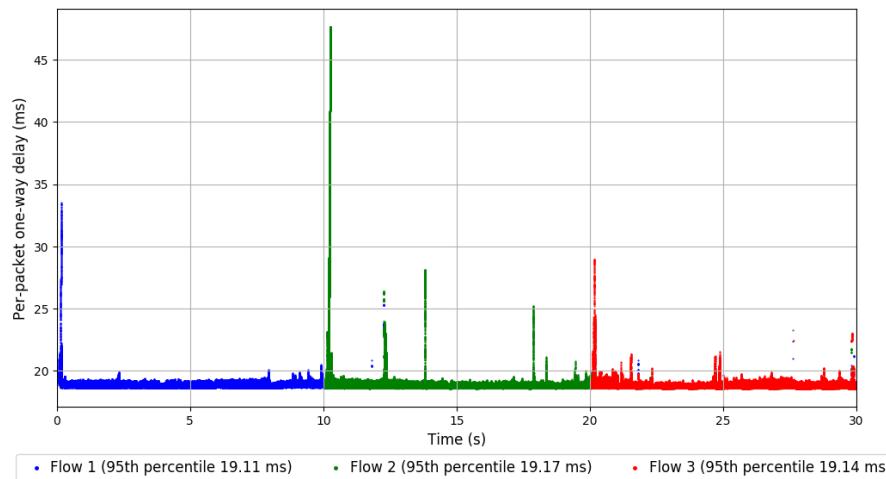
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-04-24 23:25:09
End at: 2018-04-24 23:25:39
Local clock offset: 0.189 ms
Remote clock offset: -6.475 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.04 Mbit/s
95th percentile per-packet one-way delay: 19.382 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 160.04 Mbit/s
95th percentile per-packet one-way delay: 19.381 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 63.03 Mbit/s
95th percentile per-packet one-way delay: 19.336 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 282.91 Mbit/s
95th percentile per-packet one-way delay: 19.396 ms
Loss rate: 0.00%
```

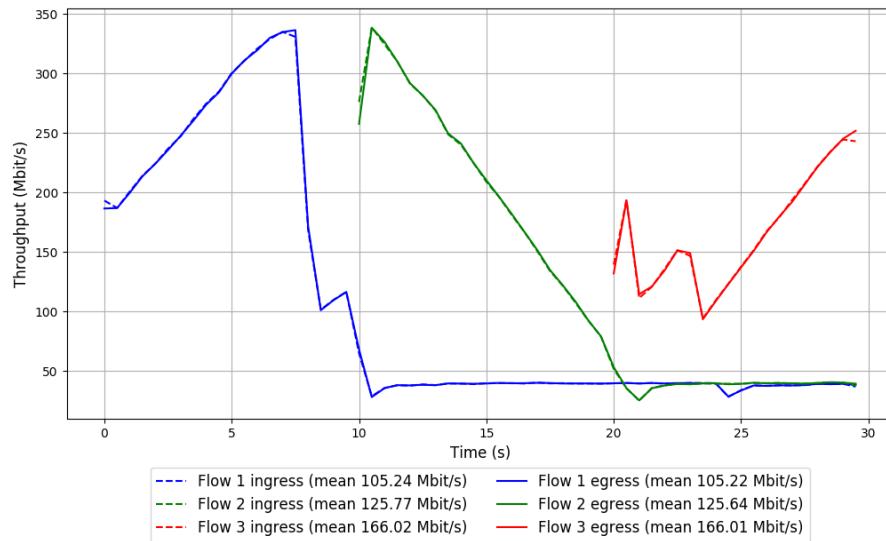Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-04-24 23:51:44
End at: 2018-04-24 23:52:14
Local clock offset: 0.531 ms
Remote clock offset: -5.688 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.06 Mbit/s
95th percentile per-packet one-way delay: 19.127 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 105.22 Mbit/s
95th percentile per-packet one-way delay: 19.105 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 125.64 Mbit/s
95th percentile per-packet one-way delay: 19.169 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 166.01 Mbit/s
95th percentile per-packet one-way delay: 19.145 ms
Loss rate: 0.00%
```

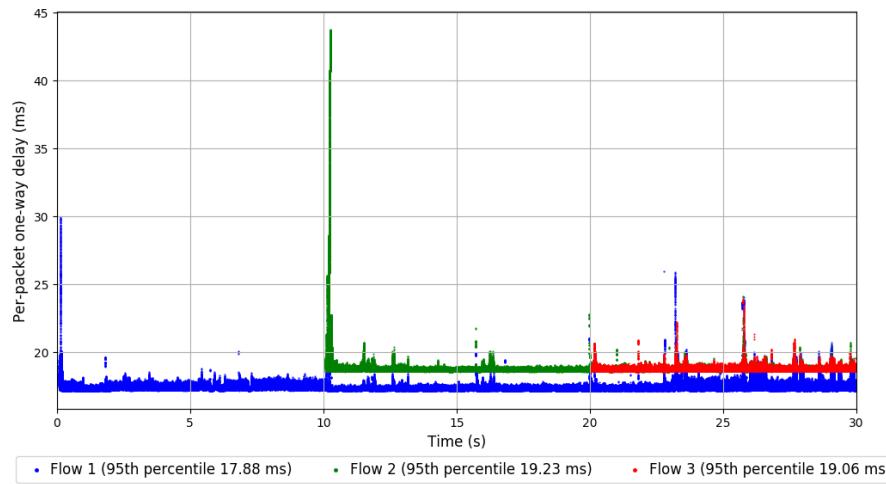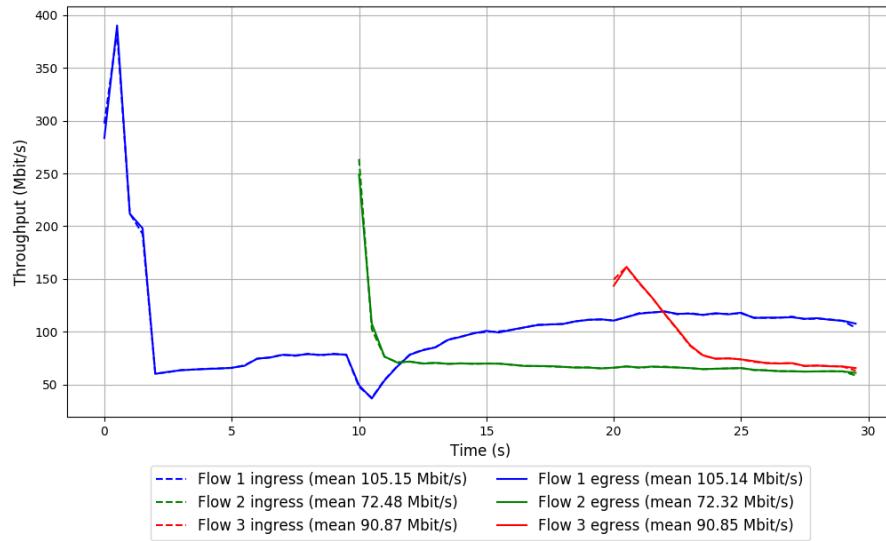Run 6: Report of TCP Vegas — Data Link

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```
Run 7: Statistics of TCP Vegas

Start at: 2018-04-25 00:18:10
End at: 2018-04-25 00:18:40
Local clock offset: -0.07 ms
Remote clock offset: -5.578 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 183.47 Mbit/s
95th percentile per-packet one-way delay: 18.973 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 105.14 Mbit/s
95th percentile per-packet one-way delay: 17.877 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.32 Mbit/s
95th percentile per-packet one-way delay: 19.232 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 90.85 Mbit/s
95th percentile per-packet one-way delay: 19.064 ms
Loss rate: 0.03%
```
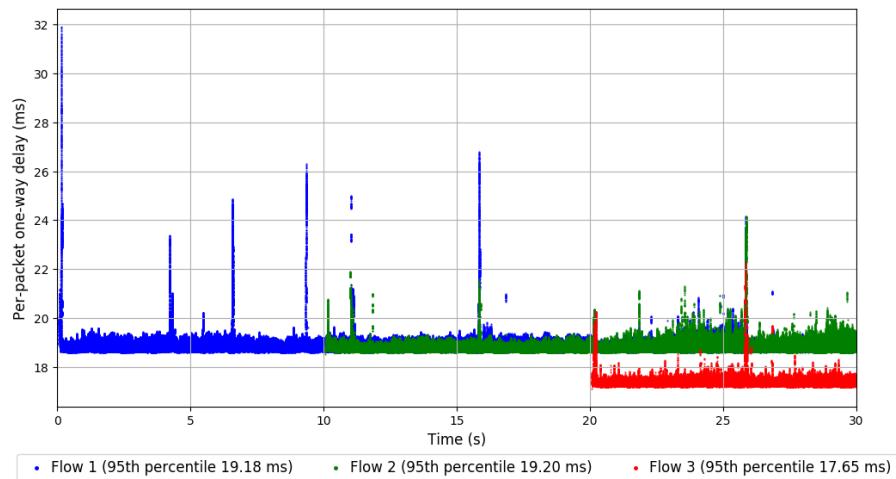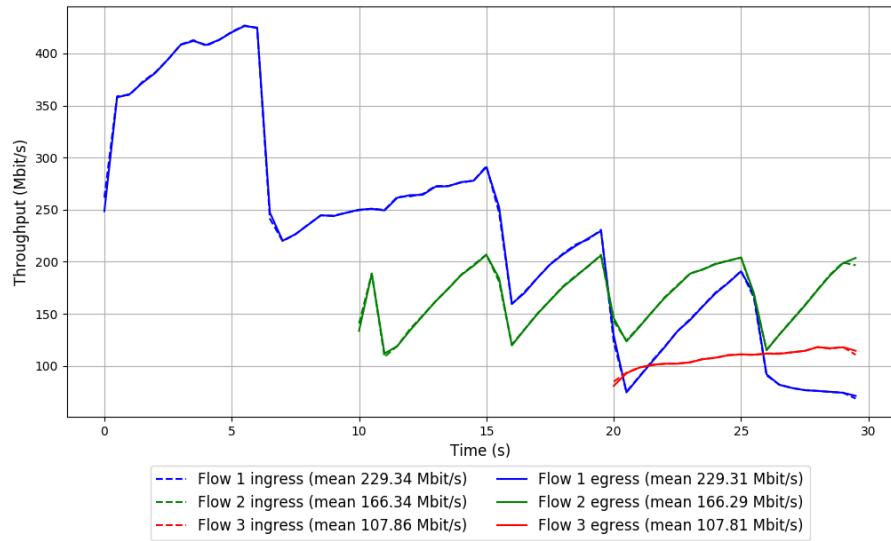
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-04-25 00:44:40
End at: 2018-04-25 00:45:10
Local clock offset: 0.038 ms
Remote clock offset: -5.521 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.83 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 229.31 Mbit/s
95th percentile per-packet one-way delay: 19.179 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 166.29 Mbit/s
95th percentile per-packet one-way delay: 19.196 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 107.81 Mbit/s
95th percentile per-packet one-way delay: 17.647 ms
Loss rate: 0.05%
```
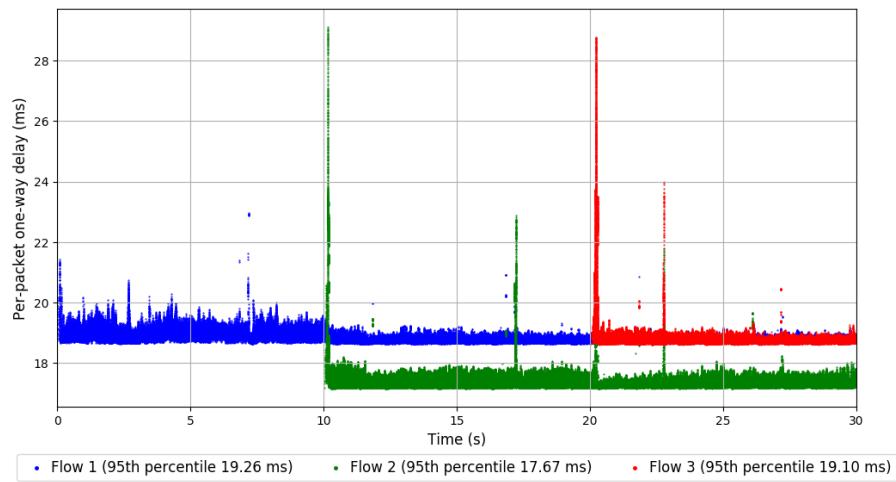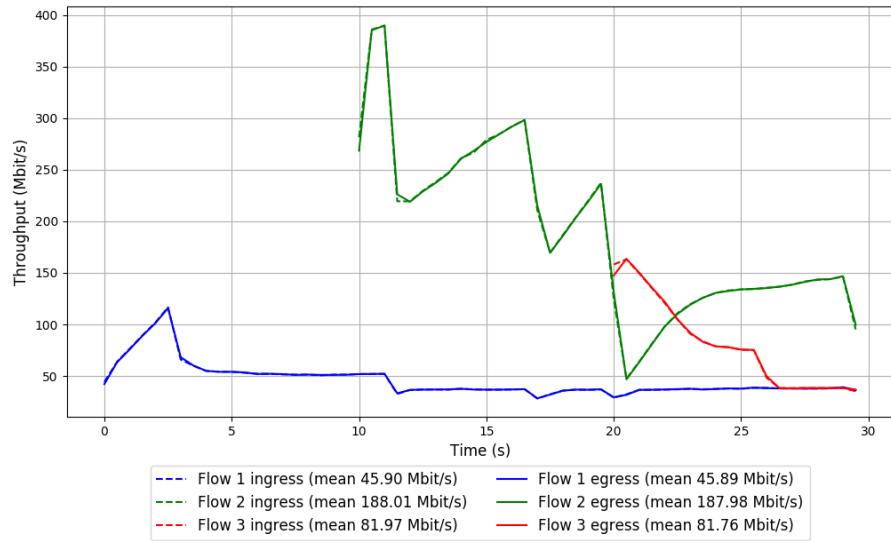
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-04-25 01:11:28
End at: 2018-04-25 01:11:58
Local clock offset: 0.311 ms
Remote clock offset: -5.354 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.16 Mbit/s
95th percentile per-packet one-way delay: 19.050 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 45.89 Mbit/s
95th percentile per-packet one-way delay: 19.263 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 187.98 Mbit/s
95th percentile per-packet one-way delay: 17.667 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 81.76 Mbit/s
95th percentile per-packet one-way delay: 19.096 ms
Loss rate: 0.26%
```
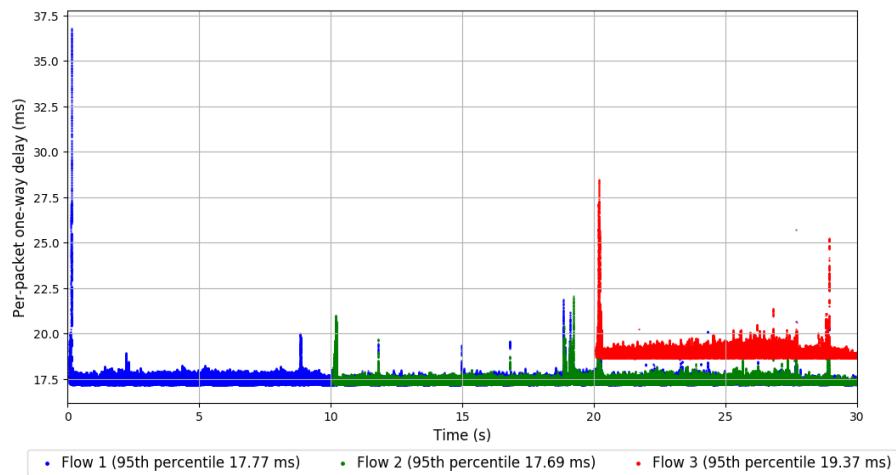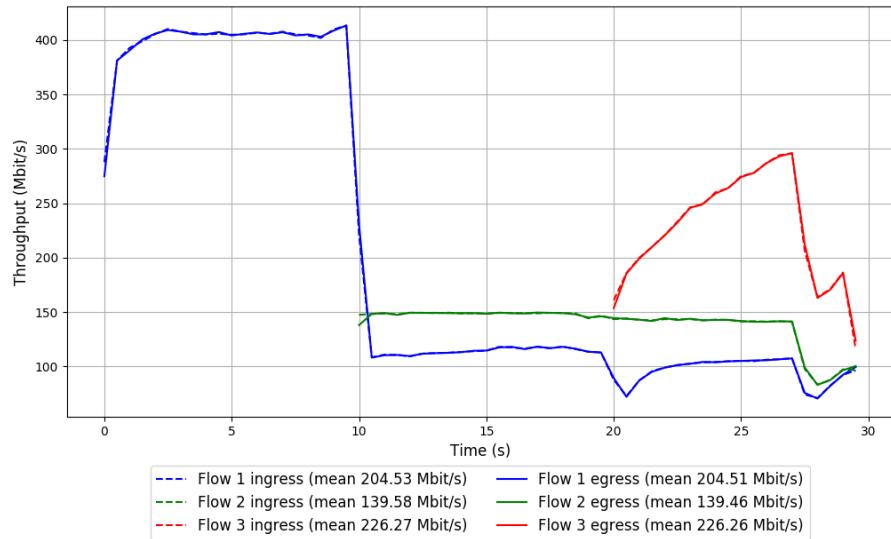
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 45.90 Mbit/s) --- Flow 1 egress (mean 45.89 Mbit/s)
Flow 2 ingress (mean 188.01 Mbit/s) --- Flow 2 egress (mean 187.98 Mbit/s)
Flow 3 ingress (mean 81.97 Mbit/s) --- Flow 3 egress (mean 81.76 Mbit/s)

Flow 1 (95th percentile 19.26 ms)   Flow 2 (95th percentile 17.67 ms)   Flow 3 (95th percentile 19.10 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2018-04-25 01:38:16
End at: 2018-04-25 01:38:46
Local clock offset: 0.421 ms
Remote clock offset: -6.546 ms


# Below is generated by plot.py at 2018-04-25 05:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.47 Mbit/s
95th percentile per-packet one-way delay: 19.097 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 204.51 Mbit/s
95th percentile per-packet one-way delay: 17.765 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 139.46 Mbit/s
95th percentile per-packet one-way delay: 17.689 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 226.26 Mbit/s
95th percentile per-packet one-way delay: 19.373 ms
Loss rate: 0.01%
```

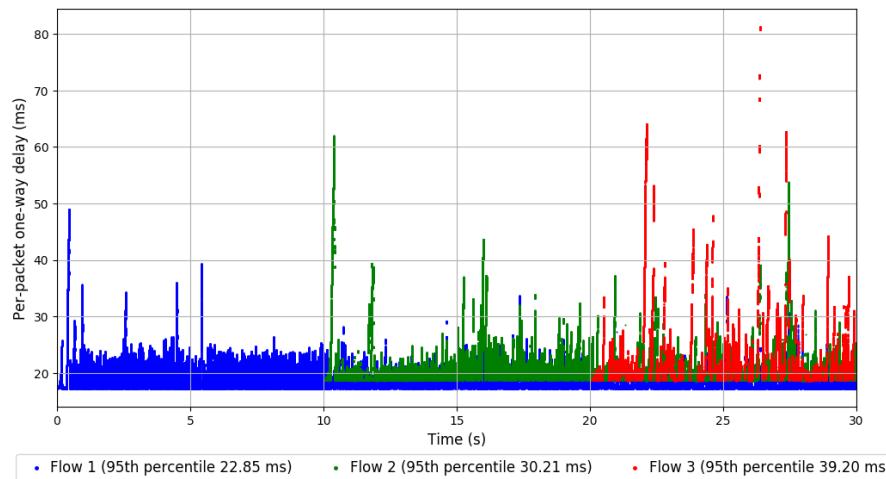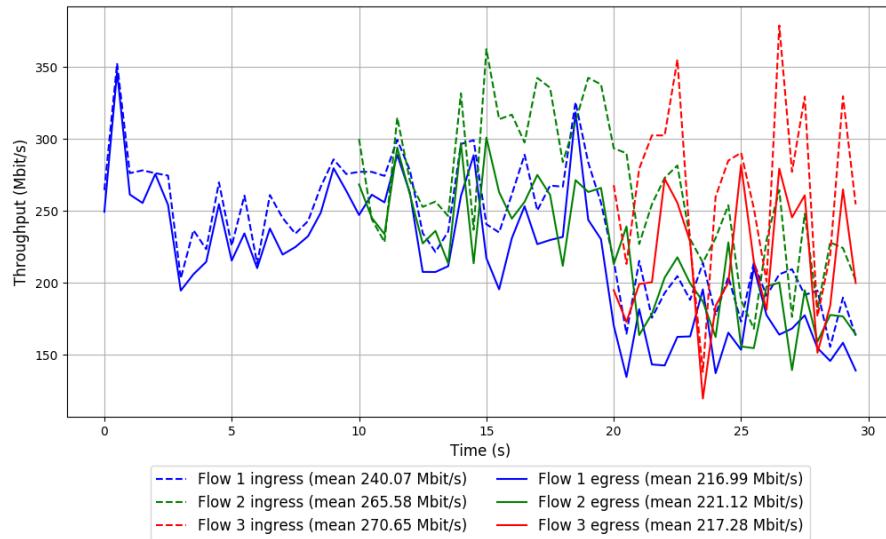# Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 204.53 Mbit/s)   Flow 1 egress (mean 204.51 Mbit/s)
Flow 2 ingress (mean 139.58 Mbit/s)   Flow 2 egress (mean 139.46 Mbit/s)
Flow 3 ingress (mean 226.27 Mbit/s)   Flow 3 egress (mean 226.26 Mbit/s)

Flow 1 (95th percentile 17.77 ms)   Flow 2 (95th percentile 17.69 ms)   Flow 3 (95th percentile 19.37 ms)
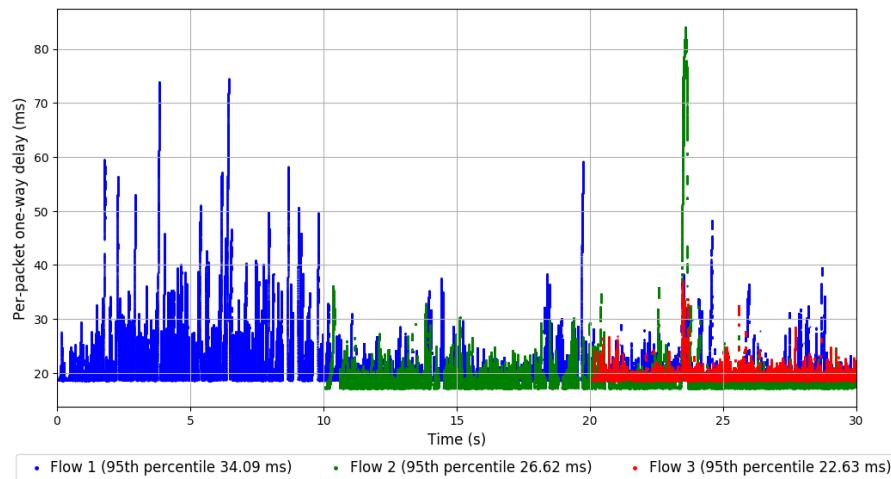
```
Run 1: Statistics of Verus

Start at: 2018-04-24 21:43:11
End at: 2018-04-24 21:43:41
Local clock offset: 0.197 ms
Remote clock offset: -5.377 ms


# Below is generated by plot.py at 2018-04-25 05:23:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.78 Mbit/s
95th percentile per-packet one-way delay: 29.361 ms
Loss rate: 13.86%
-- Flow 1:
Average throughput: 216.99 Mbit/s
95th percentile per-packet one-way delay: 22.847 ms
Loss rate: 9.61%
-- Flow 2:
Average throughput: 221.12 Mbit/s
95th percentile per-packet one-way delay: 30.210 ms
Loss rate: 16.73%
-- Flow 3:
Average throughput: 217.28 Mbit/s
95th percentile per-packet one-way delay: 39.202 ms
Loss rate: 19.64%
```
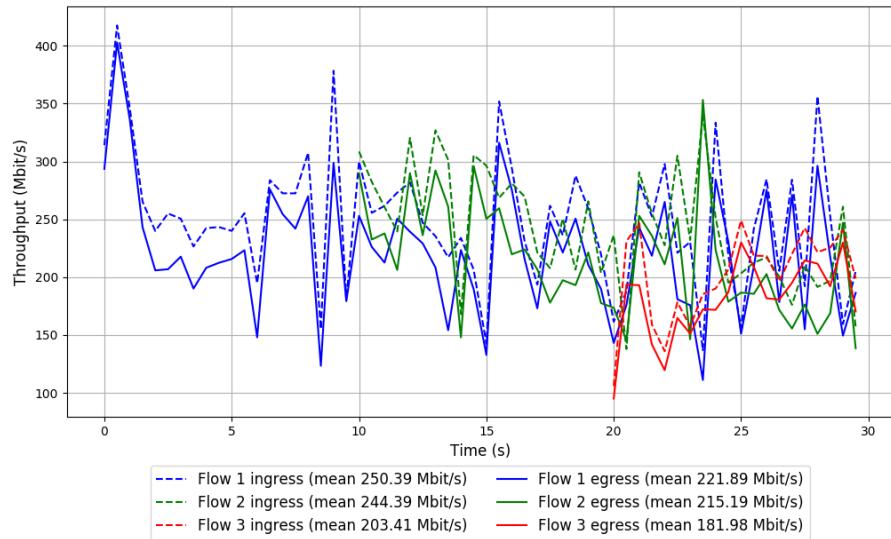
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-04-24 22:09:44
End at: 2018-04-24 22:10:14
Local clock offset: 0.143 ms
Remote clock offset: -5.733 ms


# Below is generated by plot.py at 2018-04-25 05:23:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.25 Mbit/s
95th percentile per-packet one-way delay: 31.041 ms
Loss rate: 11.45%
-- Flow 1:
Average throughput: 221.89 Mbit/s
95th percentile per-packet one-way delay: 34.089 ms
Loss rate: 11.38%
-- Flow 2:
Average throughput: 215.19 Mbit/s
95th percentile per-packet one-way delay: 26.624 ms
Loss rate: 11.94%
-- Flow 3:
Average throughput: 181.98 Mbit/s
95th percentile per-packet one-way delay: 22.629 ms
Loss rate: 10.50%
```
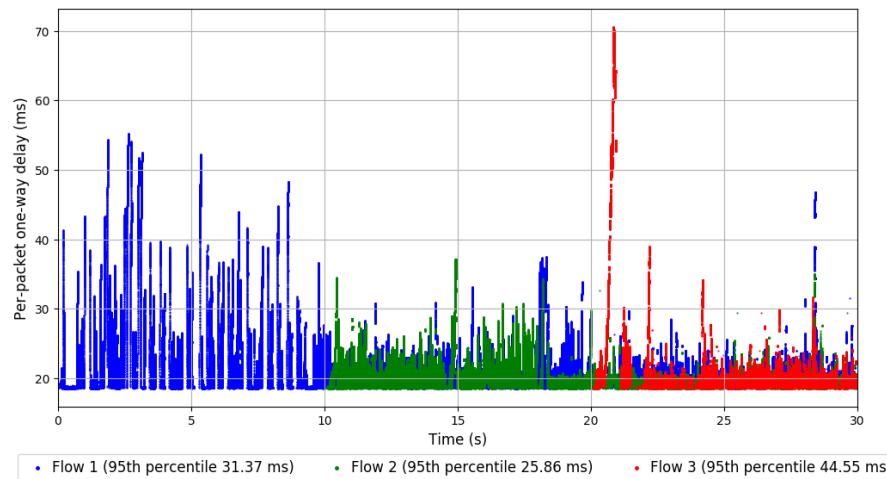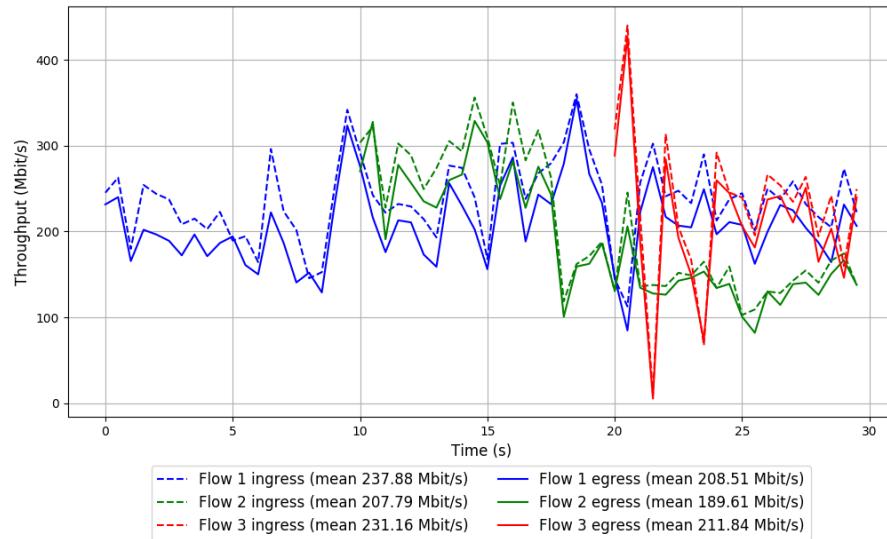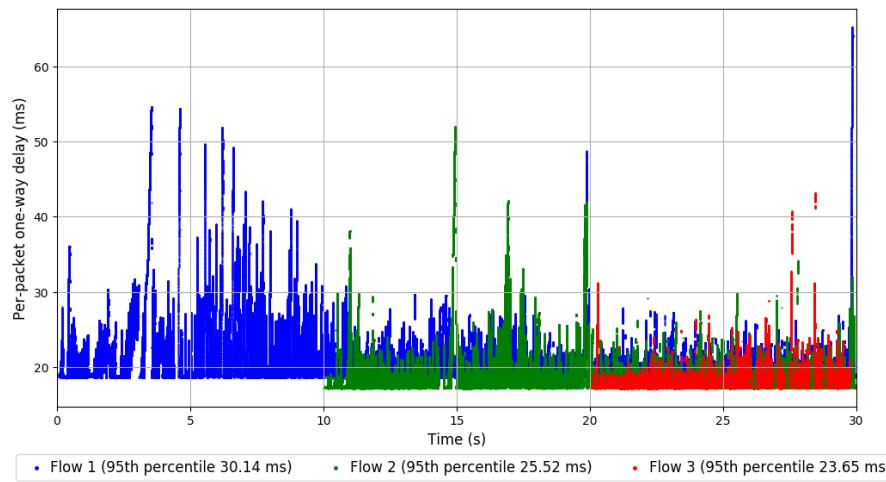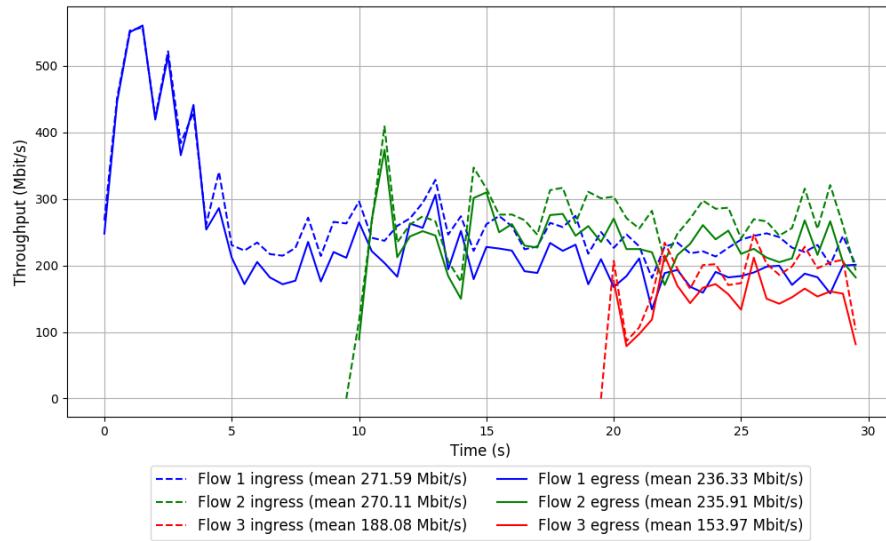
Run 2: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 250.39 Mbit/s) ——— Flow 1 egress (mean 221.89 Mbit/s)
- - - - Flow 2 ingress (mean 244.39 Mbit/s) ——— Flow 2 egress (mean 215.19 Mbit/s)
- - - - Flow 3 ingress (mean 203.41 Mbit/s) ——— Flow 3 egress (mean 181.98 Mbit/s)

- Flow 1 (95th percentile 34.09 ms) • Flow 2 (95th percentile 26.62 ms) • Flow 3 (95th percentile 22.63 ms)

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```
Run 3: Statistics of Verus

Start at: 2018-04-24 22:36:29
End at: 2018-04-24 22:36:59
Local clock offset: 0.008 ms
Remote clock offset: -5.675 ms


# Below is generated by plot.py at 2018-04-25 05:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.65 Mbit/s
95th percentile per-packet one-way delay: 29.794 ms
Loss rate: 10.57%
-- Flow 1:
Average throughput: 208.51 Mbit/s
95th percentile per-packet one-way delay: 31.370 ms
Loss rate: 12.34%
-- Flow 2:
Average throughput: 189.61 Mbit/s
95th percentile per-packet one-way delay: 25.862 ms
Loss rate: 8.74%
-- Flow 3:
Average throughput: 211.84 Mbit/s
95th percentile per-packet one-way delay: 44.555 ms
Loss rate: 8.35%
```
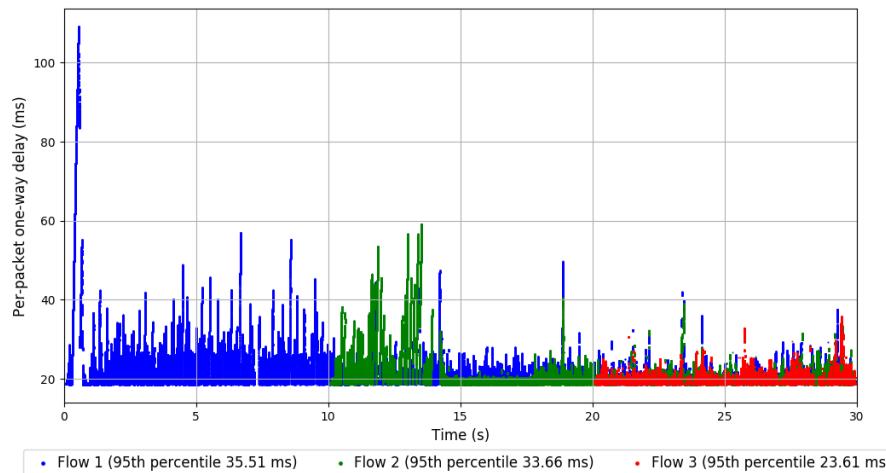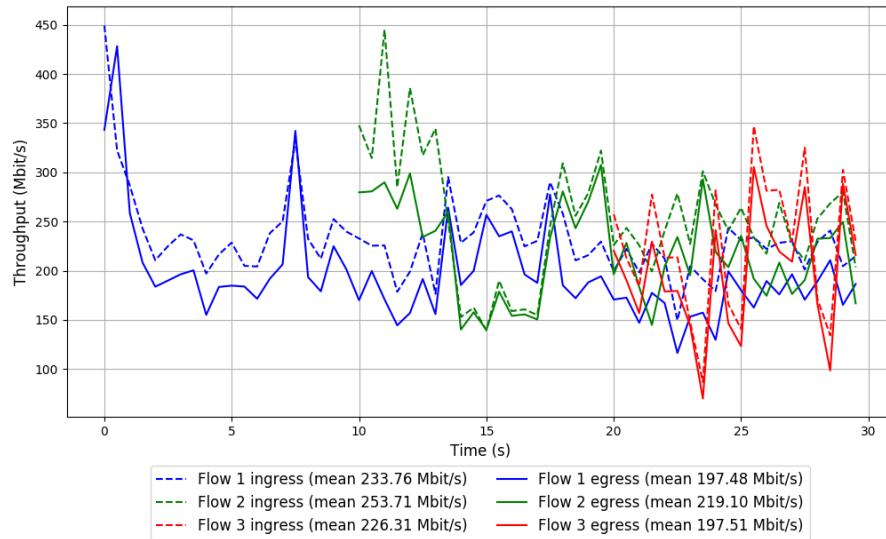
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 237.88 Mbit/s)   Flow 1 egress (mean 208.51 Mbit/s)
Flow 2 ingress (mean 207.79 Mbit/s)   Flow 2 egress (mean 189.61 Mbit/s)
Flow 3 ingress (mean 231.16 Mbit/s)   Flow 3 egress (mean 211.84 Mbit/s)

Flow 1 (95th percentile 31.37 ms)   Flow 2 (95th percentile 25.86 ms)   Flow 3 (95th percentile 44.55 ms)

```
Run 4: Statistics of Verus

Start at: 2018-04-24 23:03:07
End at: 2018-04-24 23:03:37
Local clock offset: 0.014 ms
Remote clock offset: -5.738 ms


# Below is generated by plot.py at 2018-04-25 05:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.68 Mbit/s
95th percentile per-packet one-way delay: 28.352 ms
Loss rate: 13.48%
-- Flow 1:
Average throughput: 236.33 Mbit/s
95th percentile per-packet one-way delay: 30.135 ms
Loss rate: 12.98%
-- Flow 2:
Average throughput: 235.91 Mbit/s
95th percentile per-packet one-way delay: 25.515 ms
Loss rate: 12.66%
-- Flow 3:
Average throughput: 153.97 Mbit/s
95th percentile per-packet one-way delay: 23.649 ms
Loss rate: 18.12%
```
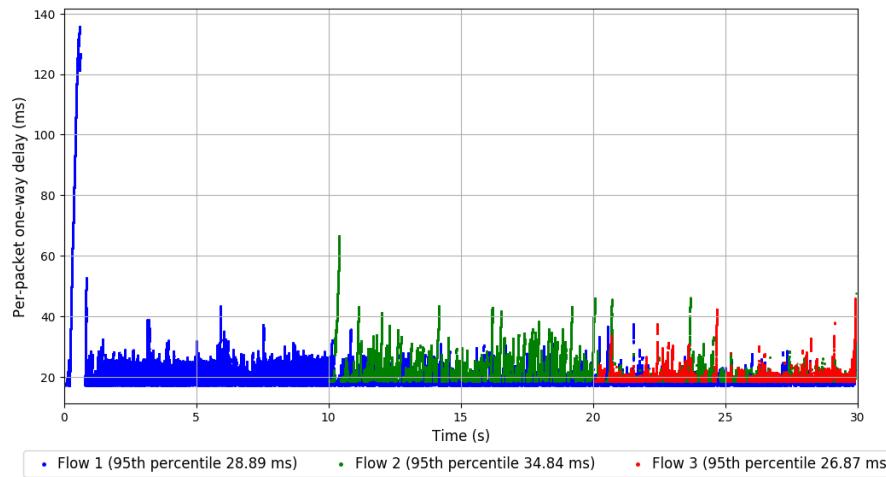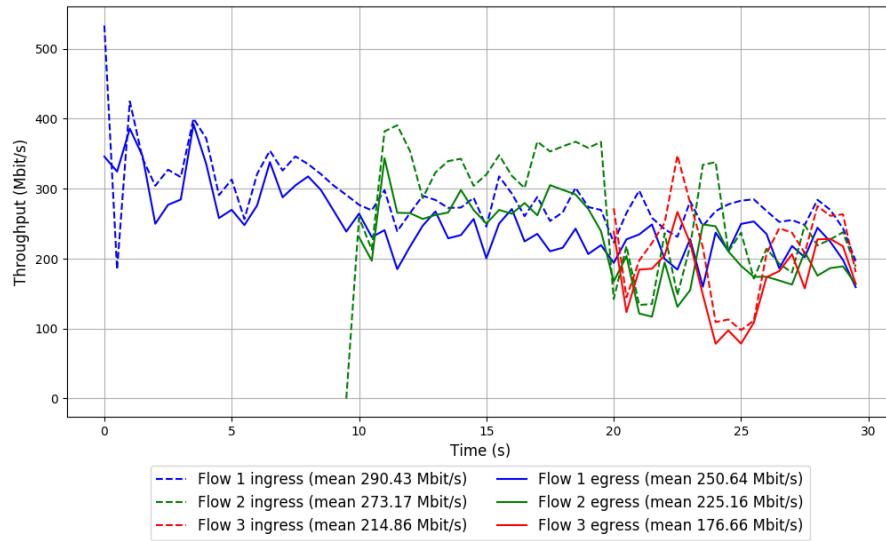
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-04-24 23:29:53
End at: 2018-04-24 23:30:23
Local clock offset: 0.312 ms
Remote clock offset: -6.679 ms

# Below is generated by plot.py at 2018-04-25 05:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.39 Mbit/s
95th percentile per-packet one-way delay: 32.935 ms
Loss rate: 14.42%
-- Flow 1:
Average throughput: 197.48 Mbit/s
95th percentile per-packet one-way delay: 35.509 ms
Loss rate: 15.52%
-- Flow 2:
Average throughput: 219.10 Mbit/s
95th percentile per-packet one-way delay: 33.660 ms
Loss rate: 13.64%
-- Flow 3:
Average throughput: 197.51 Mbit/s
95th percentile per-packet one-way delay: 23.614 ms
Loss rate: 12.74%
```
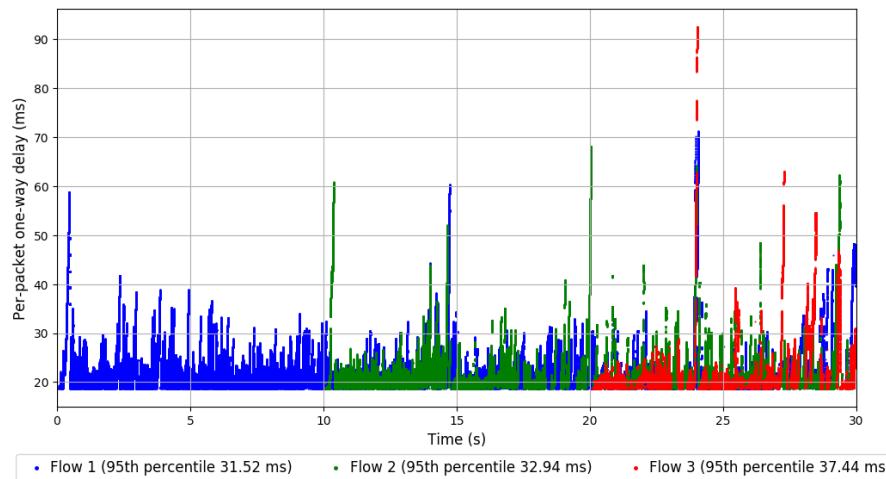
Run 5: Report of Verus — Data Link

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```
Run 6: Statistics of Verus

Start at: 2018-04-24 23:56:26
End at: 2018-04-24 23:56:56
Local clock offset: 0.361 ms
Remote clock offset: -5.654 ms


# Below is generated by plot.py at 2018-04-25 05:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 459.01 Mbit/s
95th percentile per-packet one-way delay: 32.009 ms
Loss rate: 15.48%
-- Flow 1:
Average throughput: 250.64 Mbit/s
95th percentile per-packet one-way delay: 28.892 ms
Loss rate: 13.68%
-- Flow 2:
Average throughput: 225.16 Mbit/s
95th percentile per-packet one-way delay: 34.841 ms
Loss rate: 17.55%
-- Flow 3:
Average throughput: 176.66 Mbit/s
95th percentile per-packet one-way delay: 26.868 ms
Loss rate: 17.56%
```
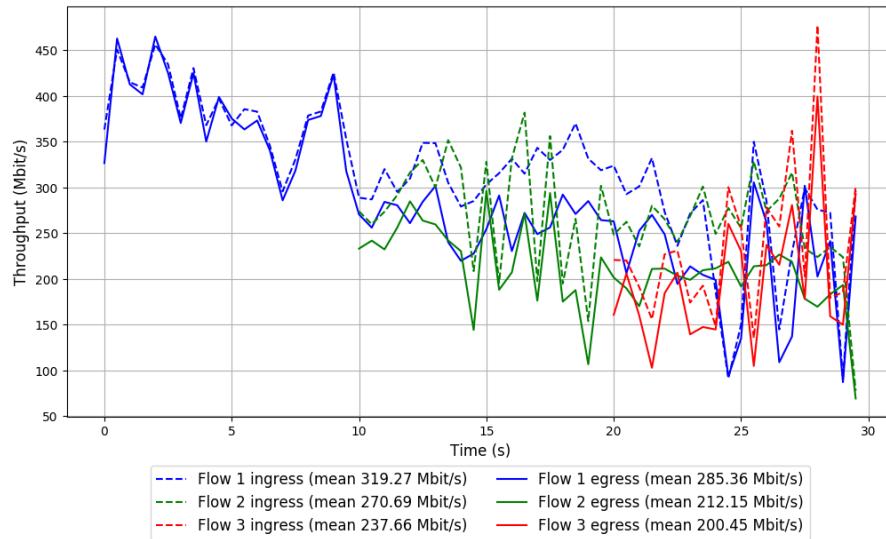
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-04-25 00:22:52
End at: 2018-04-25 00:23:22
Local clock offset: -0.222 ms
Remote clock offset: -5.598 ms


# Below is generated by plot.py at 2018-04-25 05:29:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.01 Mbit/s
95th percentile per-packet one-way delay: 32.786 ms
Loss rate: 14.72%
-- Flow 1:
Average throughput: 285.36 Mbit/s
95th percentile per-packet one-way delay: 31.520 ms
Loss rate: 10.62%
-- Flow 2:
Average throughput: 212.15 Mbit/s
95th percentile per-packet one-way delay: 32.938 ms
Loss rate: 21.62%
-- Flow 3:
Average throughput: 200.45 Mbit/s
95th percentile per-packet one-way delay: 37.439 ms
Loss rate: 15.64%
```
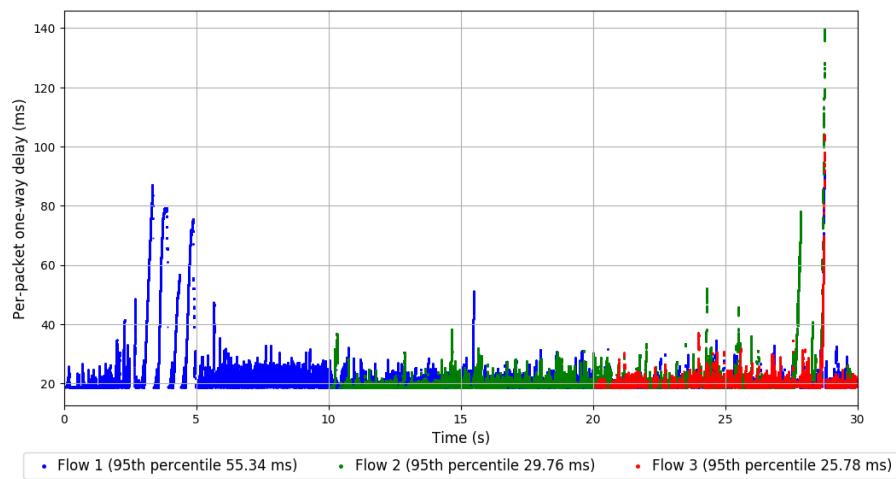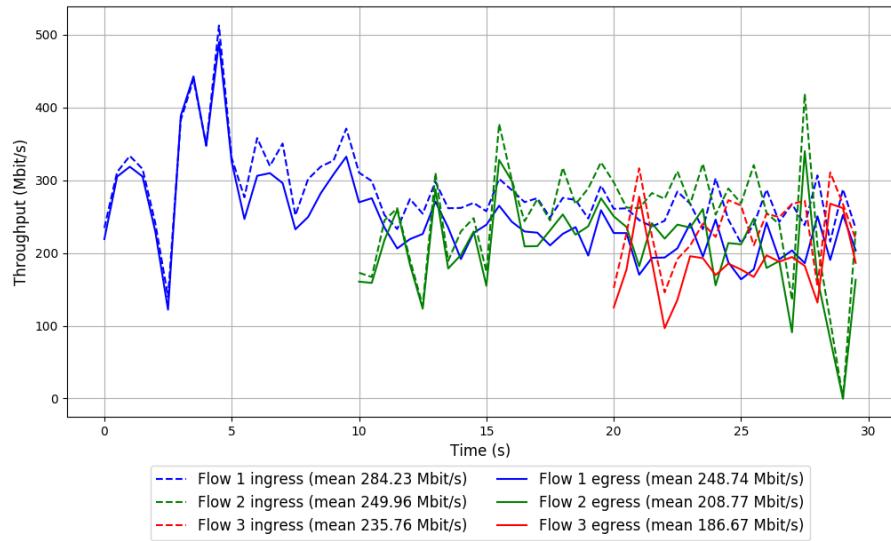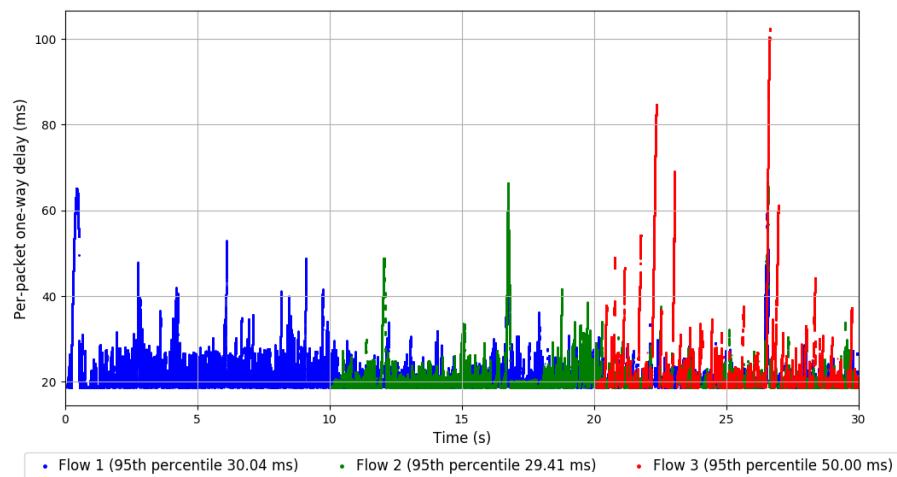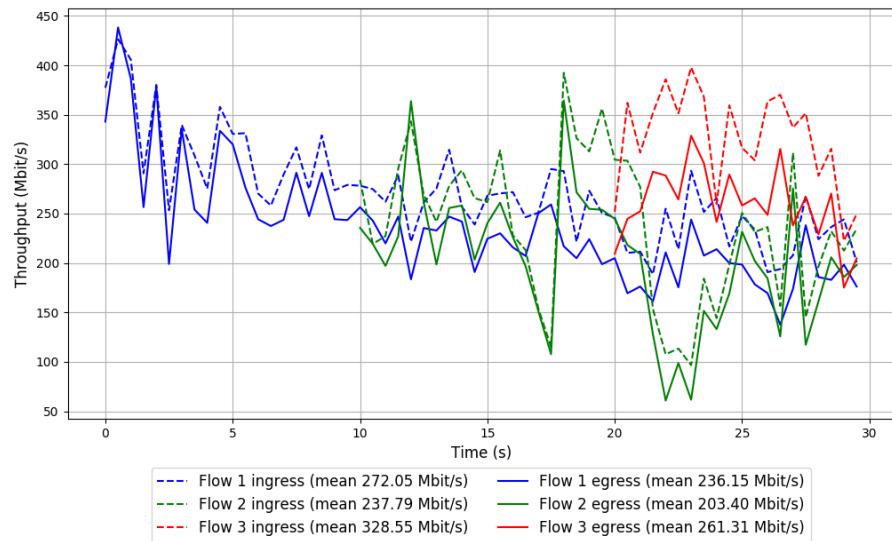
Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 319.27 Mbit/s) --- Flow 1 egress (mean 285.36 Mbit/s)
Flow 2 ingress (mean 270.69 Mbit/s) --- Flow 2 egress (mean 212.15 Mbit/s)
Flow 3 ingress (mean 237.66 Mbit/s) --- Flow 3 egress (mean 200.45 Mbit/s)

Flow 1 (95th percentile 31.52 ms)   Flow 2 (95th percentile 32.94 ms)   Flow 3 (95th percentile 37.44 ms)

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```
Run 8: Statistics of Verus

Start at: 2018-04-25 00:49:27
End at: 2018-04-25 00:49:57
Local clock offset: -0.054 ms
Remote clock offset: -5.513 ms


# Below is generated by plot.py at 2018-04-25 05:29:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.45 Mbit/s
95th percentile per-packet one-way delay: 38.882 ms
Loss rate: 14.97%
-- Flow 1:
Average throughput: 248.74 Mbit/s
95th percentile per-packet one-way delay: 55.345 ms
Loss rate: 12.49%
-- Flow 2:
Average throughput: 208.77 Mbit/s
95th percentile per-packet one-way delay: 29.762 ms
Loss rate: 16.47%
-- Flow 3:
Average throughput: 186.67 Mbit/s
95th percentile per-packet one-way delay: 25.778 ms
Loss rate: 20.83%
```
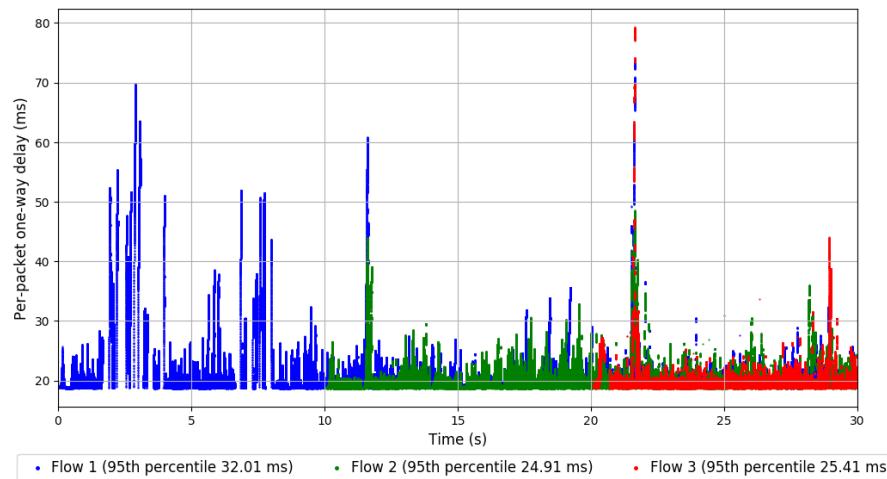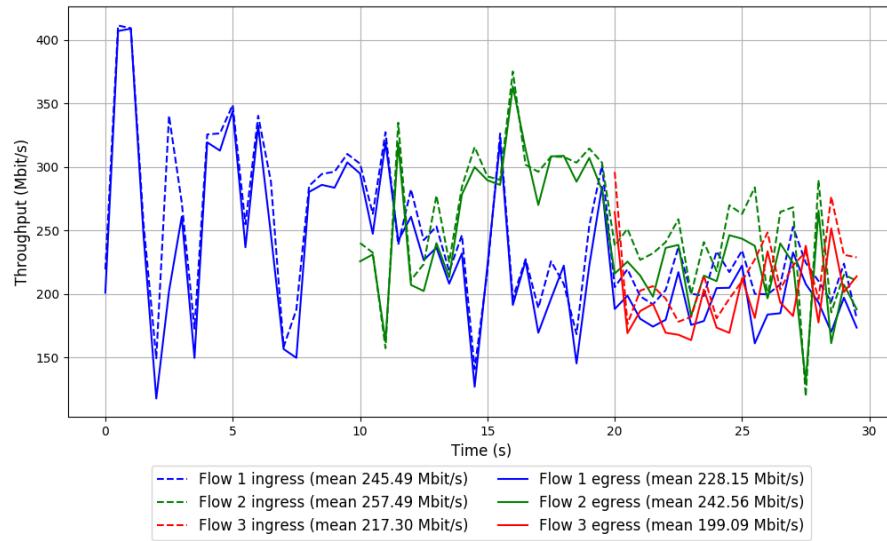
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 284.23 Mbit/s) — Flow 1 egress (mean 248.74 Mbit/s)
Flow 2 ingress (mean 249.96 Mbit/s) — Flow 2 egress (mean 208.77 Mbit/s)
Flow 3 ingress (mean 235.76 Mbit/s) — Flow 3 egress (mean 186.67 Mbit/s)

Flow 1 (95th percentile 55.34 ms) — Flow 2 (95th percentile 29.76 ms) — Flow 3 (95th percentile 25.78 ms)

```
Run 9: Statistics of Verus

Start at: 2018-04-25 01:16:08
End at: 2018-04-25 01:16:38
Local clock offset: 0.364 ms
Remote clock offset: -5.255 ms

# Below is generated by plot.py at 2018-04-25 05:30:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.08 Mbit/s
95th percentile per-packet one-way delay: 34.734 ms
Loss rate: 15.02%
-- Flow 1:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 30.042 ms
Loss rate: 13.17%
-- Flow 2:
Average throughput: 203.40 Mbit/s
95th percentile per-packet one-way delay: 29.408 ms
Loss rate: 14.46%
-- Flow 3:
Average throughput: 261.31 Mbit/s
95th percentile per-packet one-way delay: 49.998 ms
Loss rate: 20.47%
```
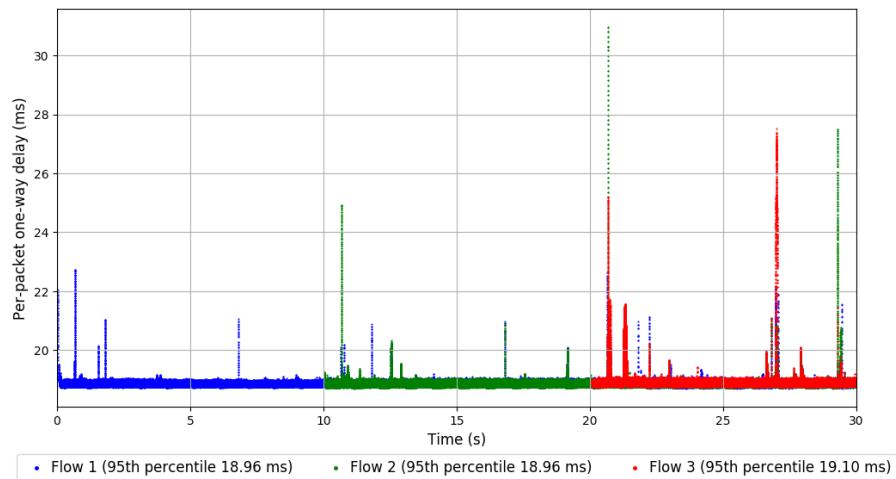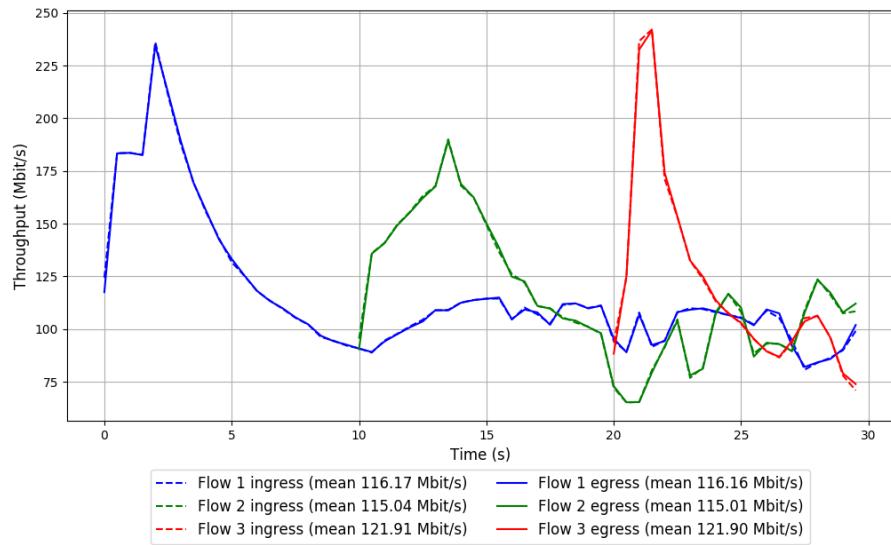
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 272.05 Mbit/s) --- Flow 1 egress (mean 236.15 Mbit/s)
Flow 2 ingress (mean 237.79 Mbit/s) --- Flow 2 egress (mean 203.40 Mbit/s)
Flow 3 ingress (mean 328.55 Mbit/s) --- Flow 3 egress (mean 261.31 Mbit/s)

Flow 1 (95th percentile 30.04 ms)   Flow 2 (95th percentile 29.41 ms)   Flow 3 (95th percentile 50.00 ms)

```
Run 10: Statistics of Verus

Start at: 2018-04-25 01:43:03
End at: 2018-04-25 01:43:33
Local clock offset: 0.383 ms
Remote clock offset: -6.59 ms


# Below is generated by plot.py at 2018-04-25 05:31:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.47 Mbit/s
95th percentile per-packet one-way delay: 27.452 ms
Loss rate: 6.81%
-- Flow 1:
Average throughput: 228.15 Mbit/s
95th percentile per-packet one-way delay: 32.009 ms
Loss rate: 7.06%
-- Flow 2:
Average throughput: 242.56 Mbit/s
95th percentile per-packet one-way delay: 24.907 ms
Loss rate: 5.79%
-- Flow 3:
Average throughput: 199.09 Mbit/s
95th percentile per-packet one-way delay: 25.406 ms
Loss rate: 8.40%
```
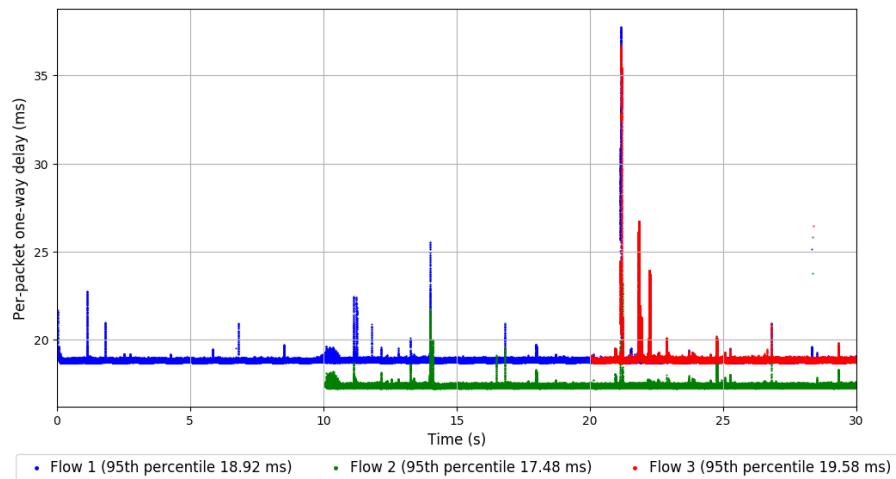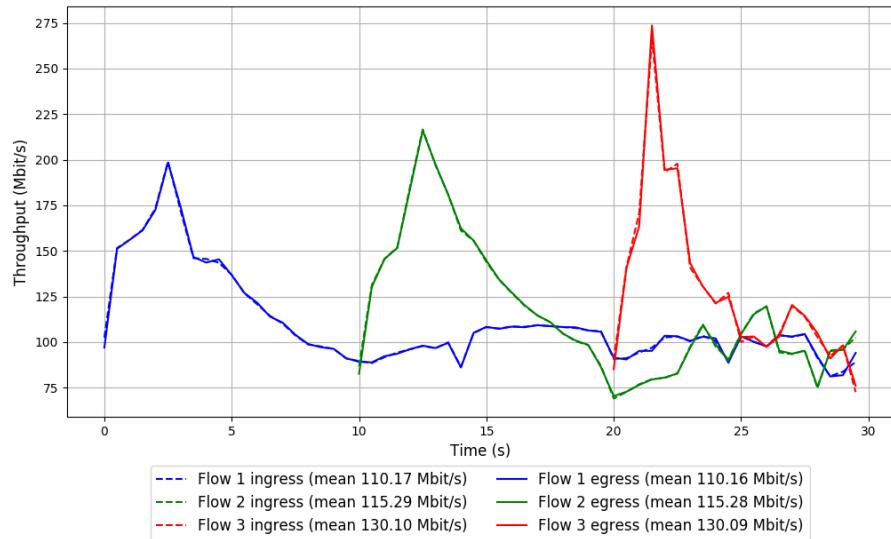
Run 10: Report of Verus — Data Link

224

```
Run 1: Statistics of Copa

Start at: 2018-04-24 21:32:08
End at: 2018-04-24 21:32:38
Local clock offset: 0.224 ms
Remote clock offset: -5.271 ms


# Below is generated by plot.py at 2018-04-25 05:31:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.18 Mbit/s
95th percentile per-packet one-way delay: 18.973 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 116.16 Mbit/s
95th percentile per-packet one-way delay: 18.957 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 115.01 Mbit/s
95th percentile per-packet one-way delay: 18.957 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 121.90 Mbit/s
95th percentile per-packet one-way delay: 19.101 ms
Loss rate: 0.00%
```
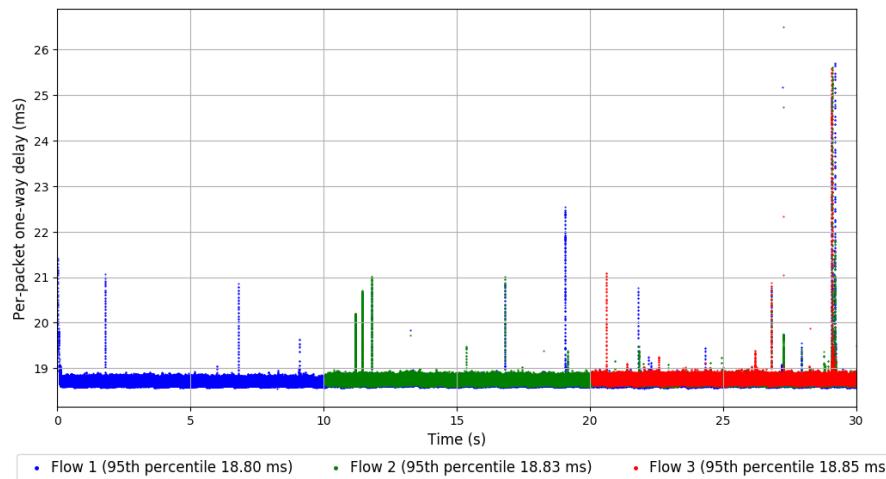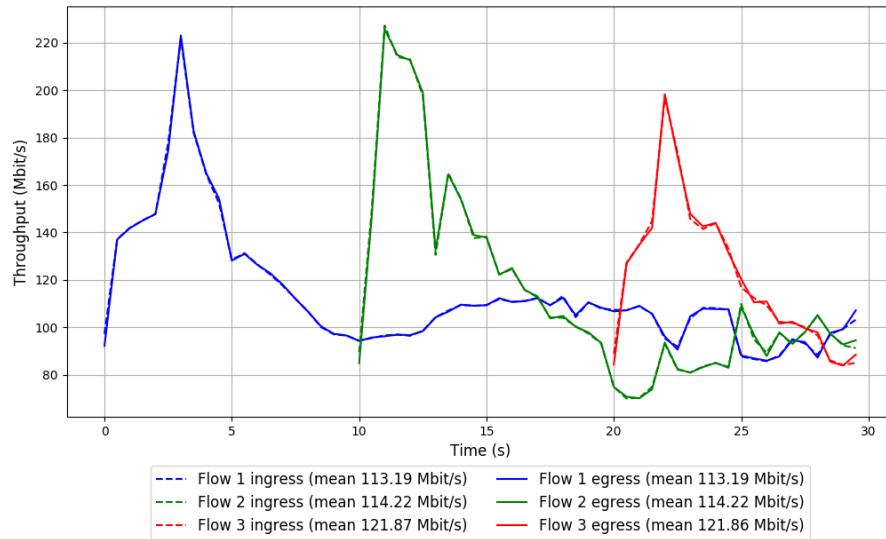
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-04-24 21:58:37
End at: 2018-04-24 21:59:07
Local clock offset: 0.149 ms
Remote clock offset: -5.518 ms

# Below is generated by plot.py at 2018-04-25 05:32:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.05 Mbit/s
95th percentile per-packet one-way delay: 18.926 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 110.16 Mbit/s
95th percentile per-packet one-way delay: 18.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 115.28 Mbit/s
95th percentile per-packet one-way delay: 17.479 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 130.09 Mbit/s
95th percentile per-packet one-way delay: 19.581 ms
Loss rate: 0.01%
```
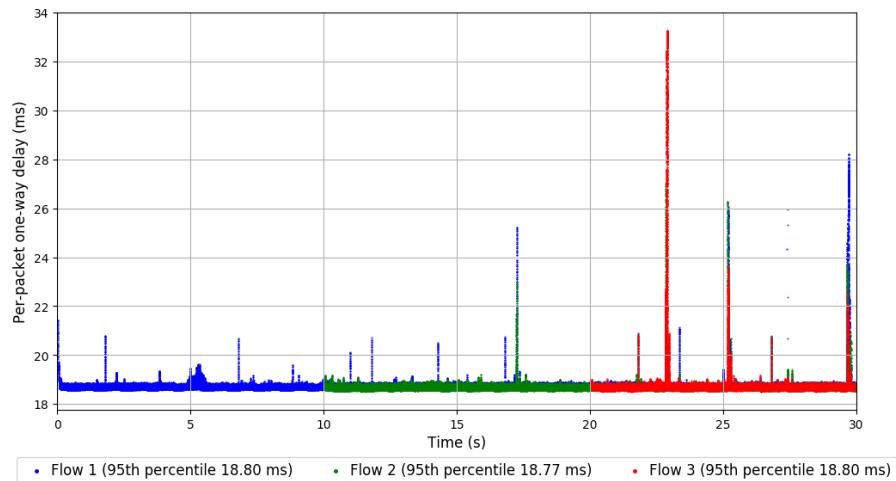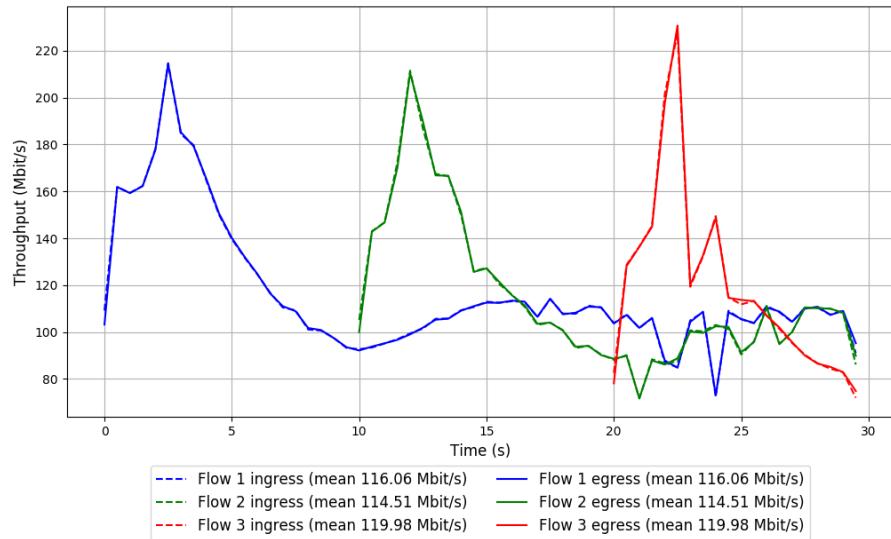
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-04-24 22:25:19
End at: 2018-04-24 22:25:49
Local clock offset: 0.0 ms
Remote clock offset: -5.933 ms


# Below is generated by plot.py at 2018-04-25 05:33:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.70 Mbit/s
95th percentile per-packet one-way delay: 18.821 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 113.19 Mbit/s
95th percentile per-packet one-way delay: 18.799 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 114.22 Mbit/s
95th percentile per-packet one-way delay: 18.830 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.86 Mbit/s
95th percentile per-packet one-way delay: 18.848 ms
Loss rate: 0.00%
```
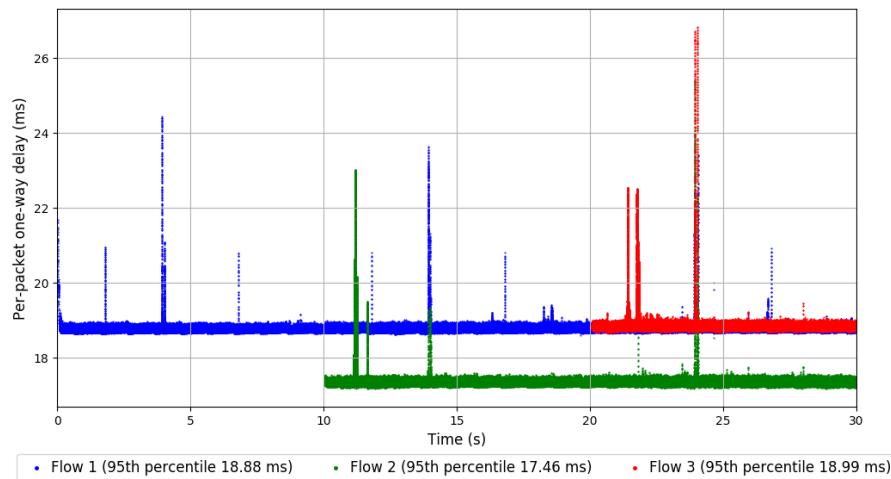
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-04-24 22:52:00
End at: 2018-04-24 22:52:30
Local clock offset: 0.031 ms
Remote clock offset: -5.606 ms


# Below is generated by plot.py at 2018-04-25 05:35:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.08 Mbit/s
95th percentile per-packet one-way delay: 18.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 116.06 Mbit/s
95th percentile per-packet one-way delay: 18.800 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 114.51 Mbit/s
95th percentile per-packet one-way delay: 18.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.98 Mbit/s
95th percentile per-packet one-way delay: 18.805 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-04-24 23:18:43
End at: 2018-04-24 23:19:13
Local clock offset: 0.091 ms
Remote clock offset: -6.466 ms


# Below is generated by plot.py at 2018-04-25 05:35:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.83 Mbit/s
95th percentile per-packet one-way delay: 18.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 114.70 Mbit/s
95th percentile per-packet one-way delay: 18.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.22 Mbit/s
95th percentile per-packet one-way delay: 17.456 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 116.92 Mbit/s
95th percentile per-packet one-way delay: 18.987 ms
Loss rate: 0.00%
```
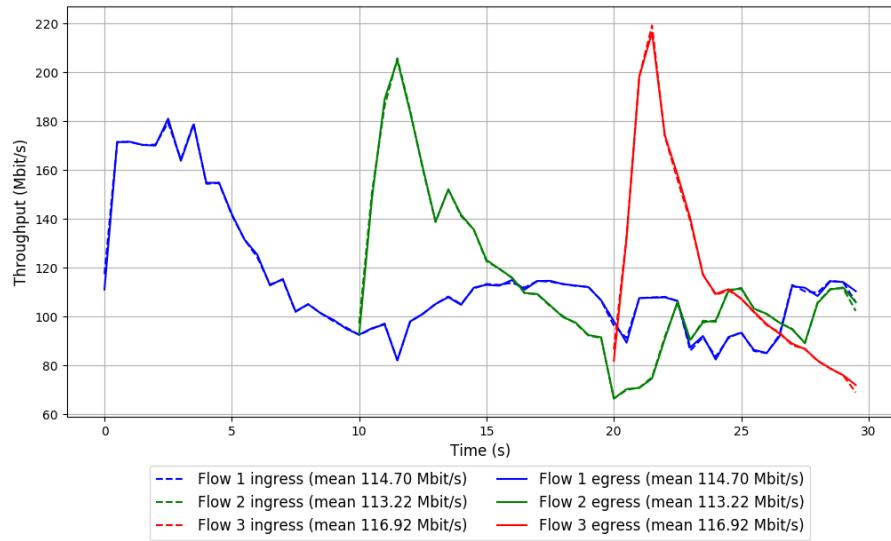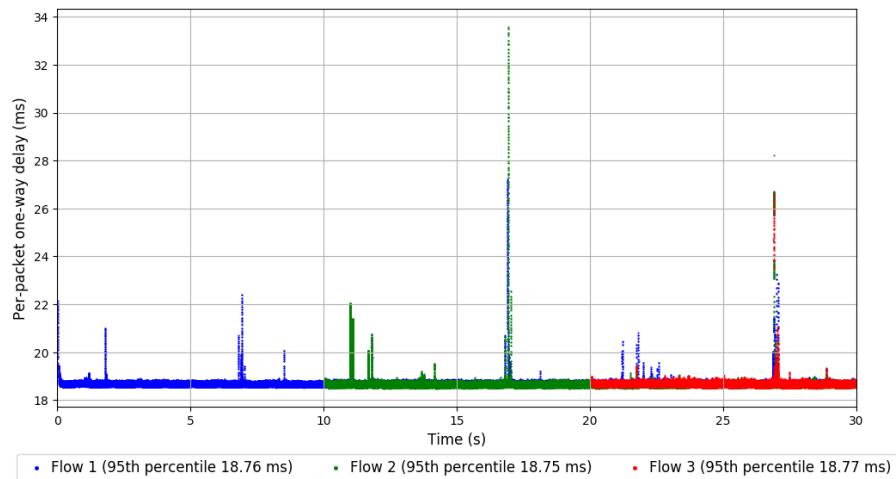
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-04-24 23:45:19
End at: 2018-04-24 23:45:49
Local clock offset: 0.577 ms
Remote clock offset: -5.977 ms


# Below is generated by plot.py at 2018-04-25 05:35:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.38 Mbit/s
95th percentile per-packet one-way delay: 18.760 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 110.47 Mbit/s
95th percentile per-packet one-way delay: 18.759 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 103.15 Mbit/s
95th percentile per-packet one-way delay: 18.750 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 127.20 Mbit/s
95th percentile per-packet one-way delay: 18.774 ms
Loss rate: 0.04%
```
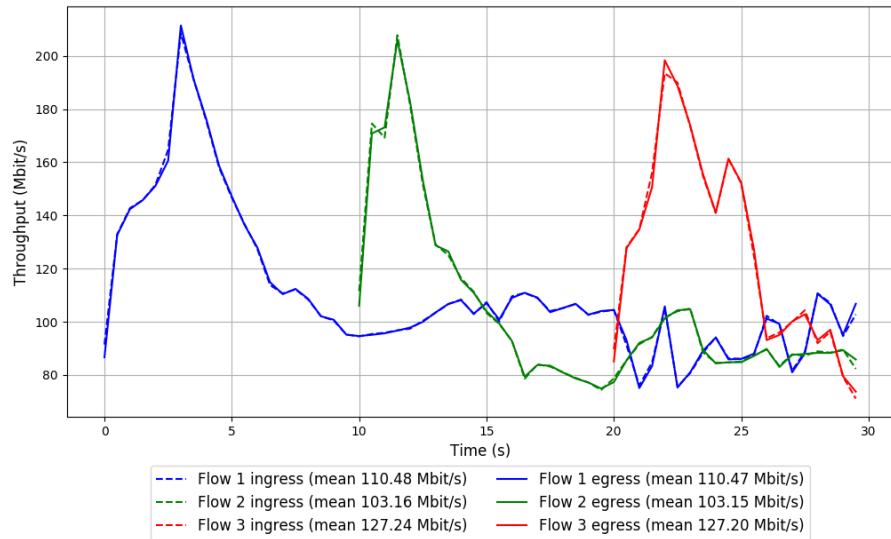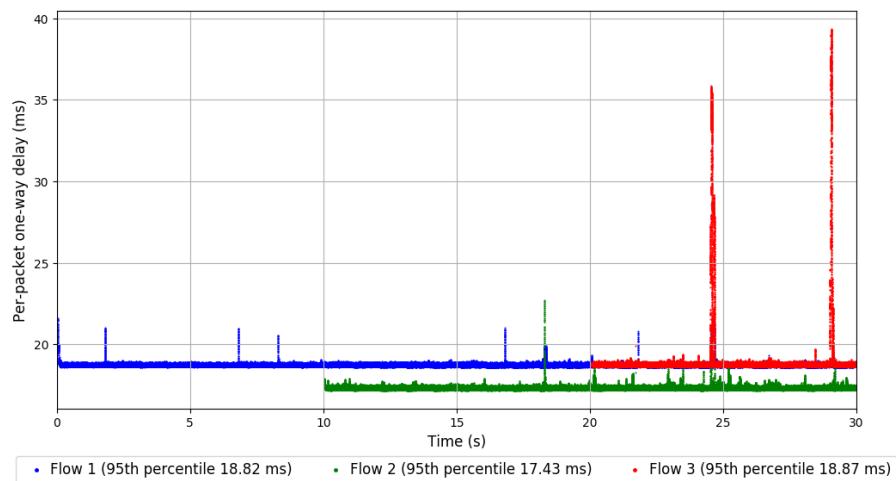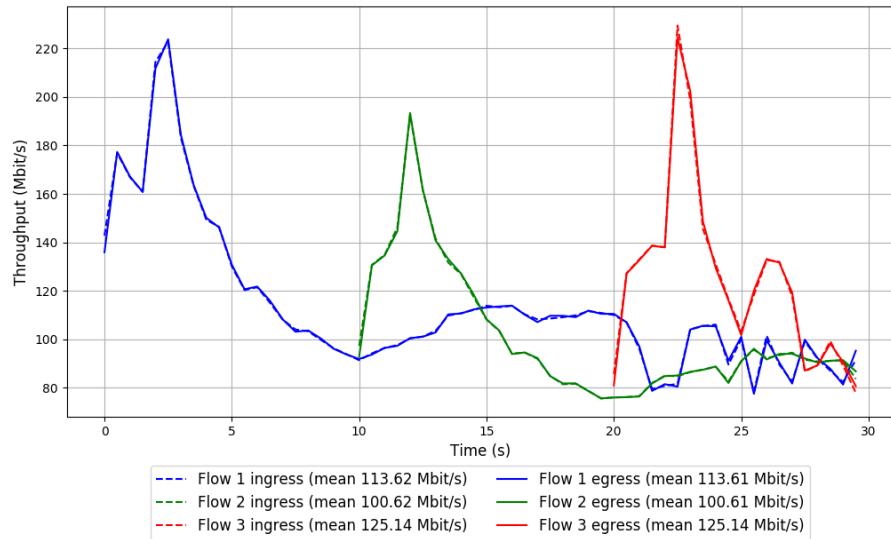
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-04-25 00:11:48
End at: 2018-04-25 00:12:18
Local clock offset: -0.049 ms
Remote clock offset: -5.579 ms


# Below is generated by plot.py at 2018-04-25 05:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.15 Mbit/s
95th percentile per-packet one-way delay: 18.818 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 113.61 Mbit/s
95th percentile per-packet one-way delay: 18.823 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 100.61 Mbit/s
95th percentile per-packet one-way delay: 17.427 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 125.14 Mbit/s
95th percentile per-packet one-way delay: 18.872 ms
Loss rate: 0.01%
```
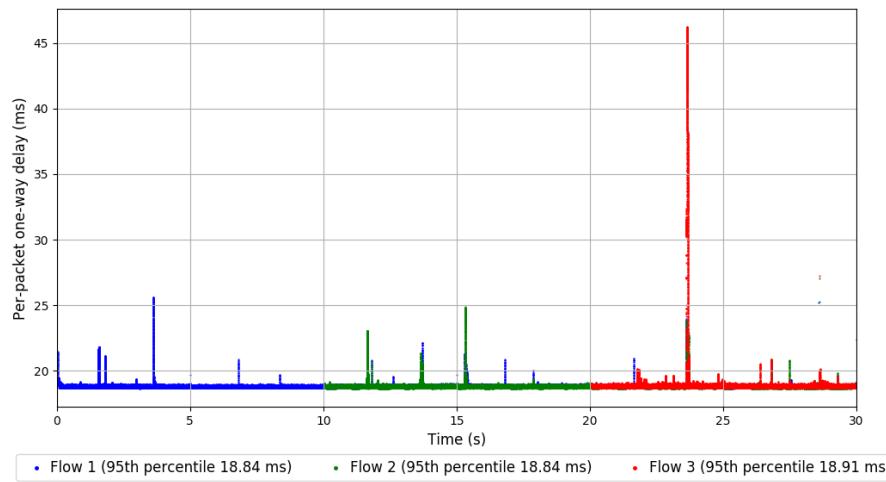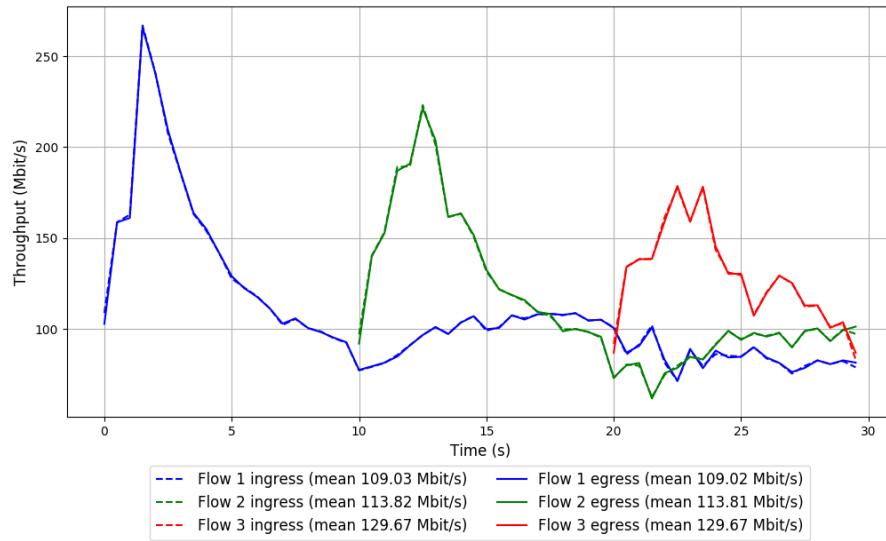
Run 7: Report of Copa — Data Link

238

```
Run 8: Statistics of Copa

Start at: 2018-04-25 00:38:12
End at: 2018-04-25 00:38:42
Local clock offset: -0.033 ms
Remote clock offset: -5.6 ms


# Below is generated by plot.py at 2018-04-25 05:37:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.83 Mbit/s
95th percentile per-packet one-way delay: 18.856 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.02 Mbit/s
95th percentile per-packet one-way delay: 18.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.81 Mbit/s
95th percentile per-packet one-way delay: 18.840 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 129.67 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.00%
```

Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-04-25 01:05:03
End at: 2018-04-25 01:05:33
Local clock offset: 0.139 ms
Remote clock offset: -5.402 ms


# Below is generated by plot.py at 2018-04-25 05:37:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.21 Mbit/s
95th percentile per-packet one-way delay: 18.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.78 Mbit/s
95th percentile per-packet one-way delay: 18.912 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 102.09 Mbit/s
95th percentile per-packet one-way delay: 17.434 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.84 Mbit/s
95th percentile per-packet one-way delay: 17.488 ms
Loss rate: 0.00%
```
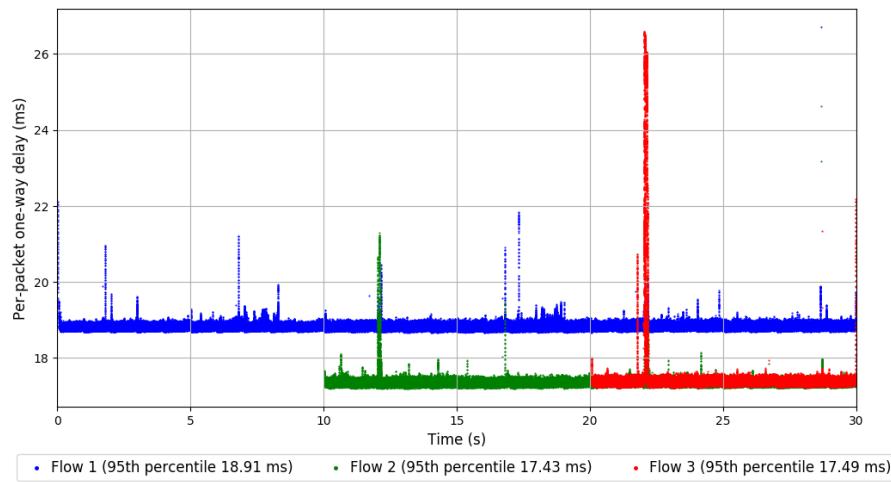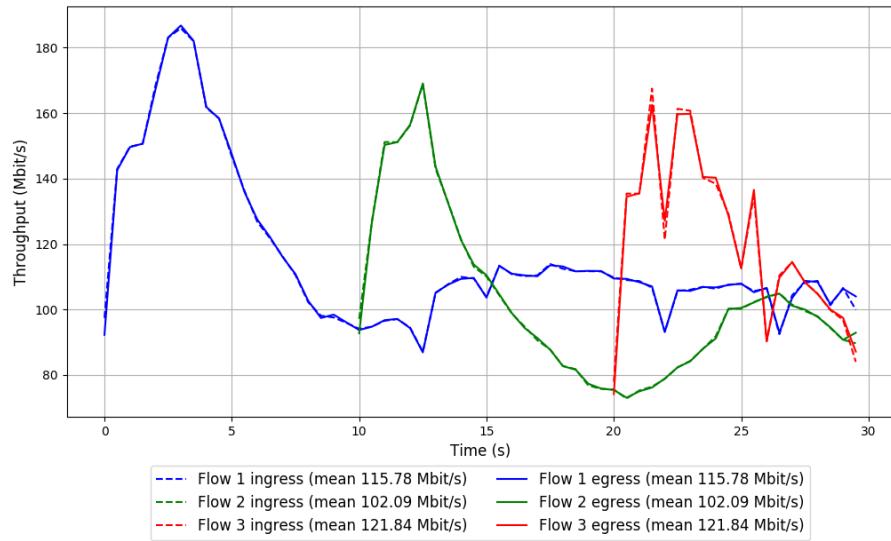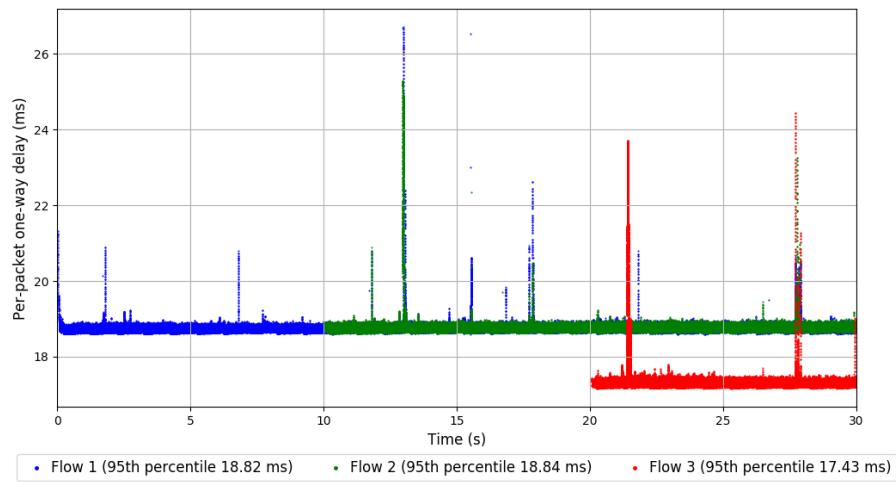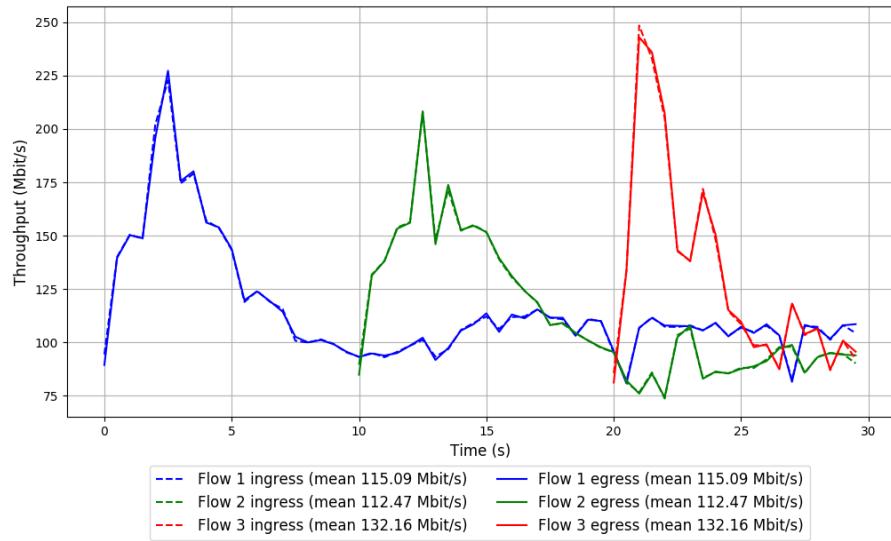
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-04-25 01:31:47
End at: 2018-04-25 01:32:17
Local clock offset: 0.415 ms
Remote clock offset: -6.369 ms


# Below is generated by plot.py at 2018-04-25 05:38:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.78 Mbit/s
95th percentile per-packet one-way delay: 18.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.09 Mbit/s
95th percentile per-packet one-way delay: 18.820 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.47 Mbit/s
95th percentile per-packet one-way delay: 18.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.16 Mbit/s
95th percentile per-packet one-way delay: 17.433 ms
Loss rate: 0.00%
```

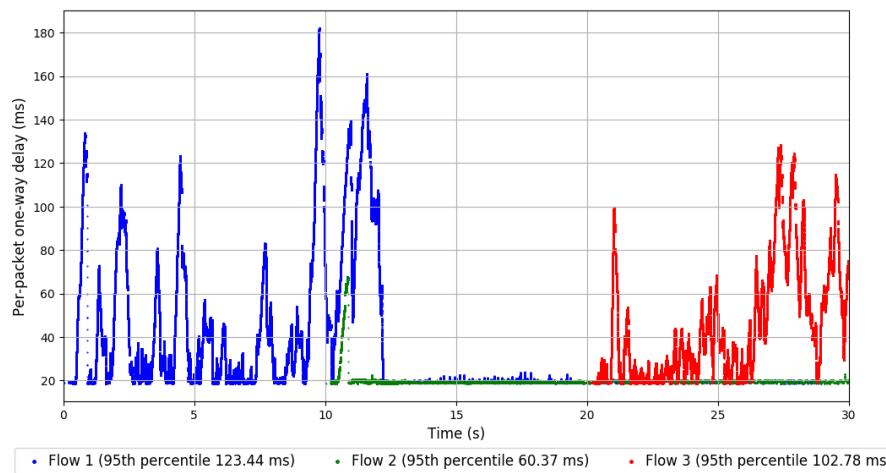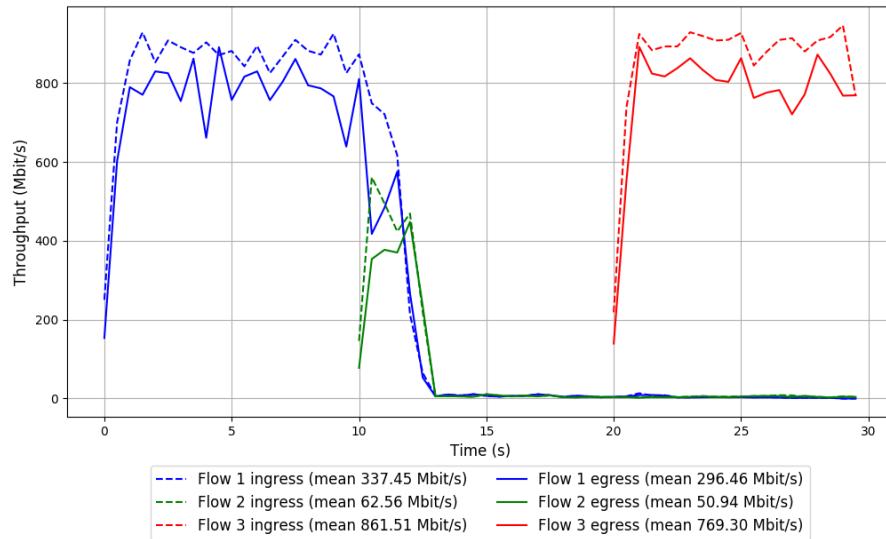## Run 10: Report of Copa — Data Link

244

```
Run 1: Statistics of FillP

Start at: 2018-04-24 21:30:29
End at: 2018-04-24 21:30:59
Local clock offset: 0.29 ms
Remote clock offset: -5.252 ms


# Below is generated by plot.py at 2018-04-25 05:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.29 Mbit/s
95th percentile per-packet one-way delay: 112.017 ms
Loss rate: 11.92%
-- Flow 1:
Average throughput: 296.46 Mbit/s
95th percentile per-packet one-way delay: 123.438 ms
Loss rate: 12.15%
-- Flow 2:
Average throughput: 50.94 Mbit/s
95th percentile per-packet one-way delay: 60.374 ms
Loss rate: 18.56%
-- Flow 3:
Average throughput: 769.30 Mbit/s
95th percentile per-packet one-way delay: 102.779 ms
Loss rate: 10.69%
```
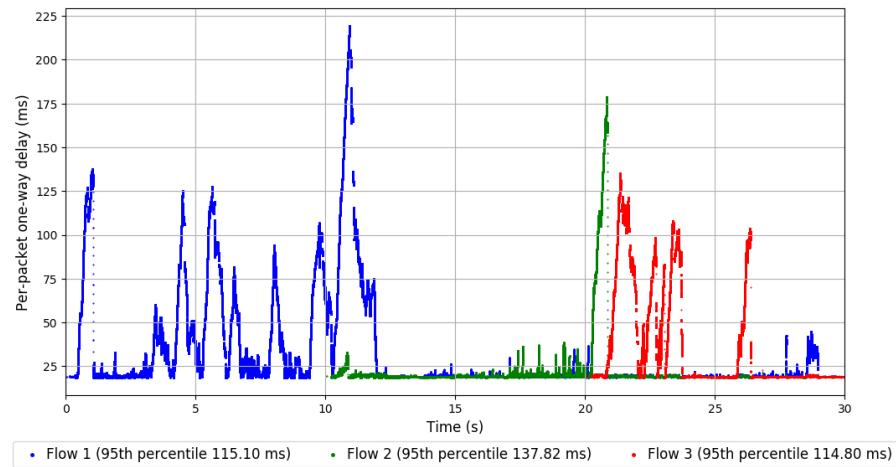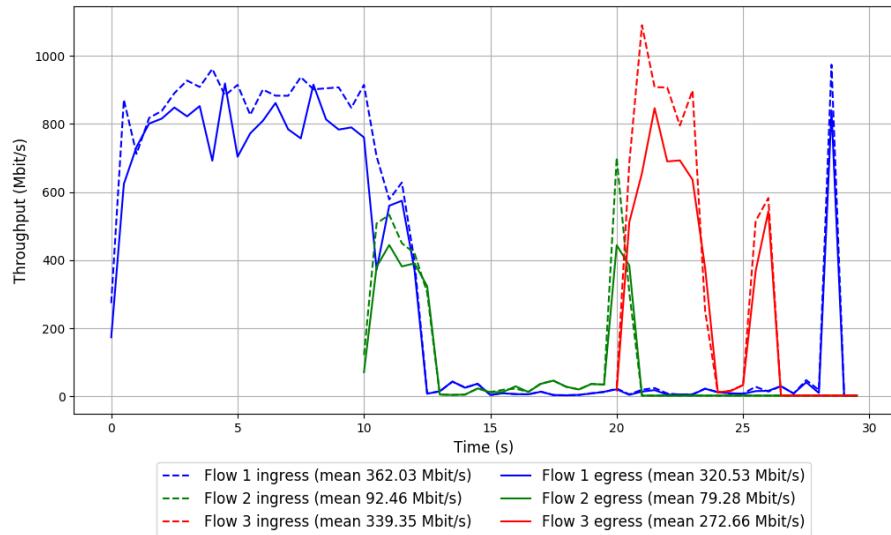
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-04-24 21:57:01
End at: 2018-04-24 21:57:31
Local clock offset: 0.235 ms
Remote clock offset: -5.483 ms

# Below is generated by plot.py at 2018-04-25 05:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.64 Mbit/s
95th percentile per-packet one-way delay: 115.599 ms
Loss rate: 13.50%
-- Flow 1:
Average throughput: 320.53 Mbit/s
95th percentile per-packet one-way delay: 115.102 ms
Loss rate: 11.46%
-- Flow 2:
Average throughput: 79.28 Mbit/s
95th percentile per-packet one-way delay: 137.819 ms
Loss rate: 14.25%
-- Flow 3:
Average throughput: 272.66 Mbit/s
95th percentile per-packet one-way delay: 114.800 ms
Loss rate: 19.65%
```
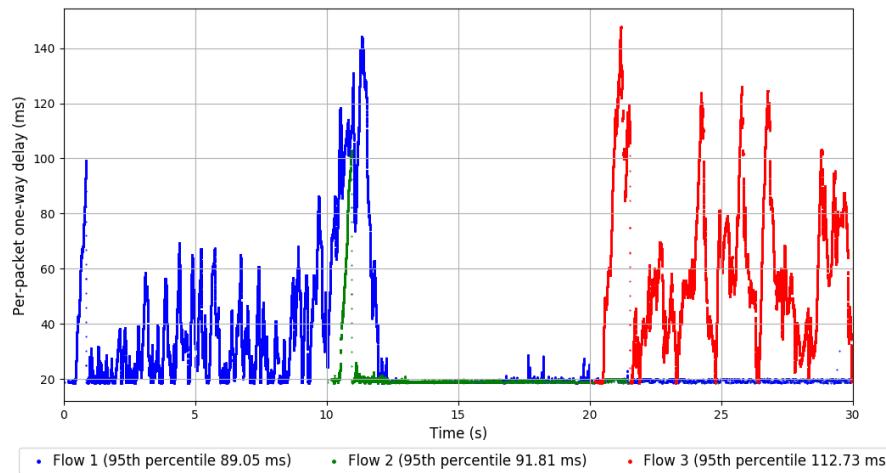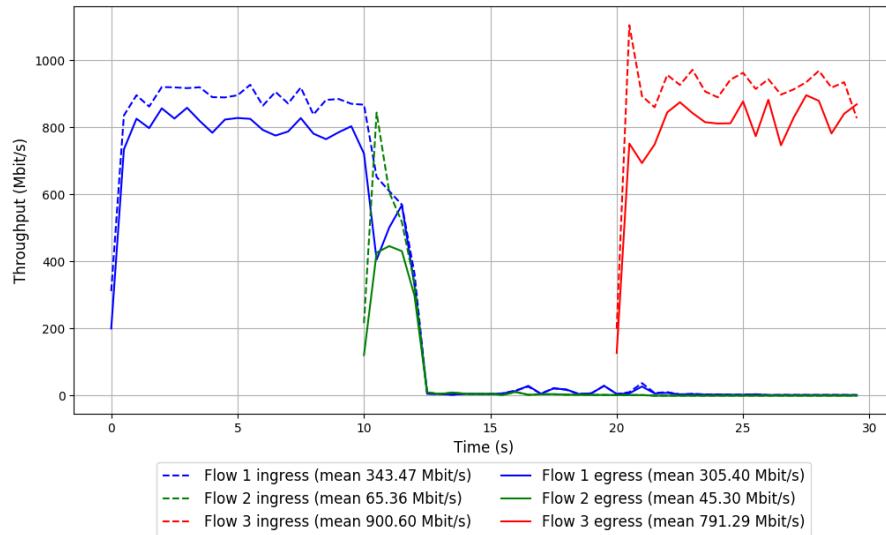
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 362.03 Mbit/s)   Flow 1 egress (mean 320.53 Mbit/s)
Flow 2 ingress (mean 92.46 Mbit/s)   Flow 2 egress (mean 79.28 Mbit/s)
Flow 3 ingress (mean 339.35 Mbit/s)   Flow 3 egress (mean 272.66 Mbit/s)

Flow 1 (95th percentile 115.10 ms)   Flow 2 (95th percentile 137.82 ms)   Flow 3 (95th percentile 114.80 ms)

```
Run 3: Statistics of FillP

Start at: 2018-04-24 22:23:38
End at: 2018-04-24 22:24:08
Local clock offset: 0.02 ms
Remote clock offset: -5.907 ms


# Below is generated by plot.py at 2018-04-25 05:45:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.73 Mbit/s
95th percentile per-packet one-way delay: 106.635 ms
Loss rate: 12.78%
-- Flow 1:
Average throughput: 305.40 Mbit/s
95th percentile per-packet one-way delay: 89.054 ms
Loss rate: 11.08%
-- Flow 2:
Average throughput: 45.30 Mbit/s
95th percentile per-packet one-way delay: 91.807 ms
Loss rate: 30.69%
-- Flow 3:
Average throughput: 791.29 Mbit/s
95th percentile per-packet one-way delay: 112.729 ms
Loss rate: 12.14%
```
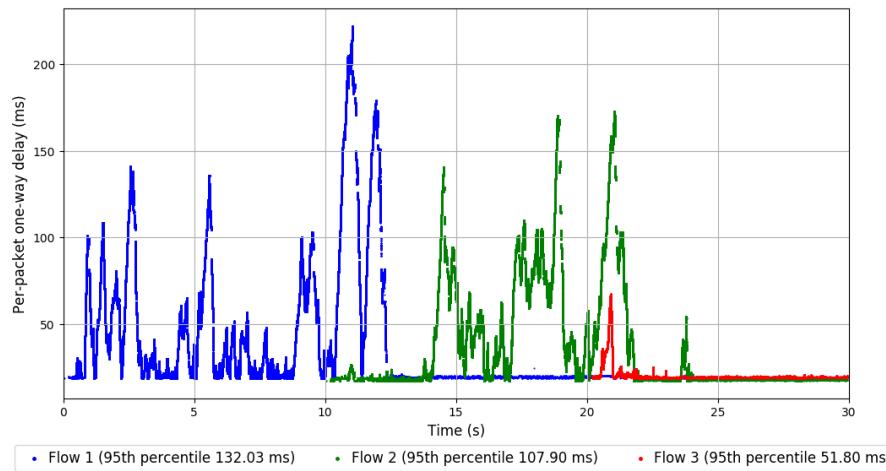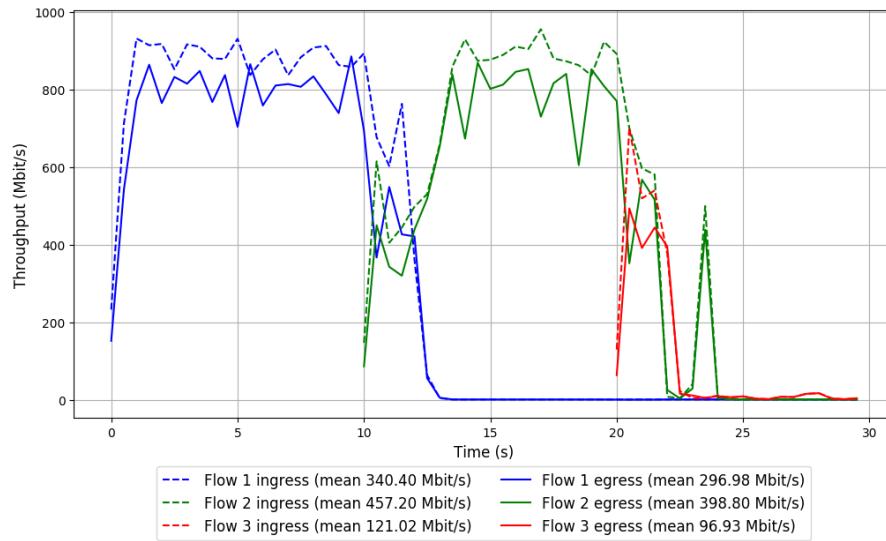
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 343.47 Mbit/s) — — — Flow 1 egress (mean 305.40 Mbit/s)
Flow 2 ingress (mean 65.36 Mbit/s) — — — Flow 2 egress (mean 45.30 Mbit/s)
Flow 3 ingress (mean 900.60 Mbit/s) — — — Flow 3 egress (mean 791.29 Mbit/s)

Flow 1 (95th percentile 89.05 ms) • Flow 2 (95th percentile 91.81 ms) • Flow 3 (95th percentile 112.73 ms)

250

```
Run 4: Statistics of FillP

Start at: 2018-04-24 22:50:19
End at: 2018-04-24 22:50:49
Local clock offset: -0.079 ms
Remote clock offset: -5.598 ms


# Below is generated by plot.py at 2018-04-25 05:45:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 594.55 Mbit/s
95th percentile per-packet one-way delay: 120.971 ms
Loss rate: 13.18%
-- Flow 1:
Average throughput: 296.98 Mbit/s
95th percentile per-packet one-way delay: 132.032 ms
Loss rate: 12.76%
-- Flow 2:
Average throughput: 398.80 Mbit/s
95th percentile per-packet one-way delay: 107.901 ms
Loss rate: 12.77%
-- Flow 3:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 51.805 ms
Loss rate: 19.90%
```

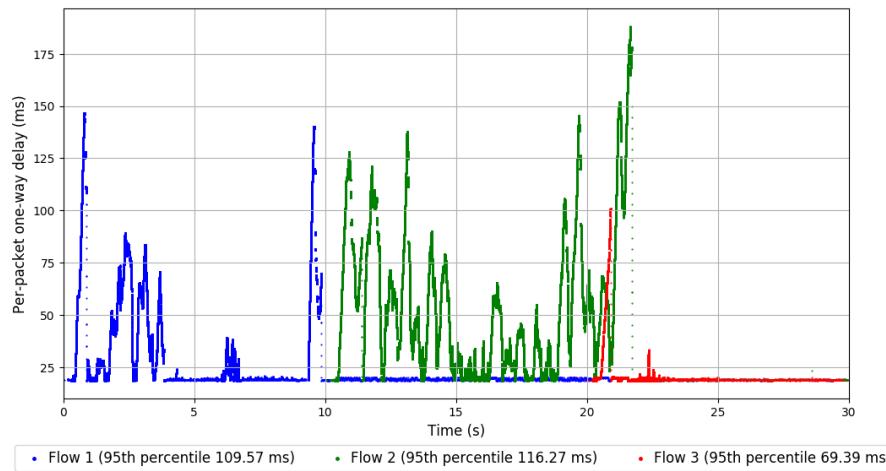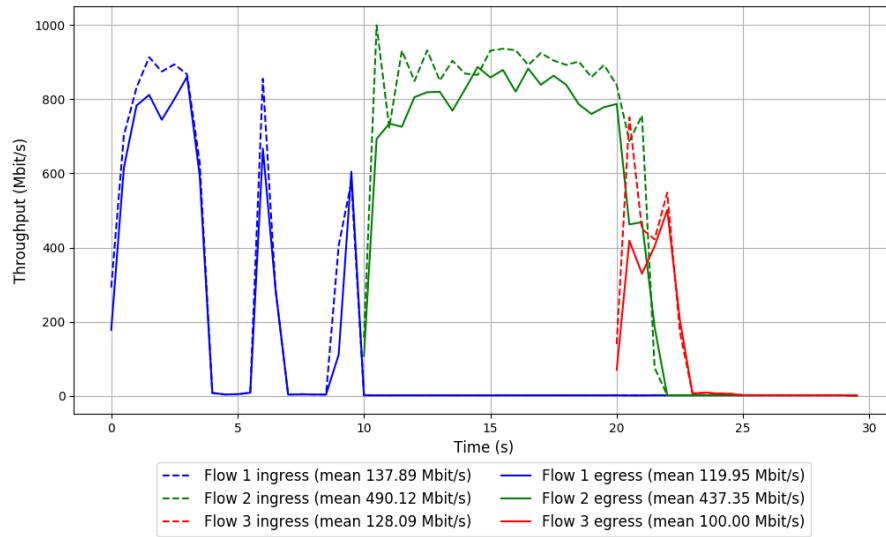Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-04-24 23:17:08
End at: 2018-04-24 23:17:38
Local clock offset: 0.138 ms
Remote clock offset: -6.405 ms


# Below is generated by plot.py at 2018-04-25 05:45:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.10 Mbit/s
95th percentile per-packet one-way delay: 113.879 ms
Loss rate: 12.31%
-- Flow 1:
Average throughput: 119.95 Mbit/s
95th percentile per-packet one-way delay: 109.572 ms
Loss rate: 13.01%
-- Flow 2:
Average throughput: 437.35 Mbit/s
95th percentile per-packet one-way delay: 116.273 ms
Loss rate: 10.77%
-- Flow 3:
Average throughput: 100.00 Mbit/s
95th percentile per-packet one-way delay: 69.394 ms
Loss rate: 21.93%
```

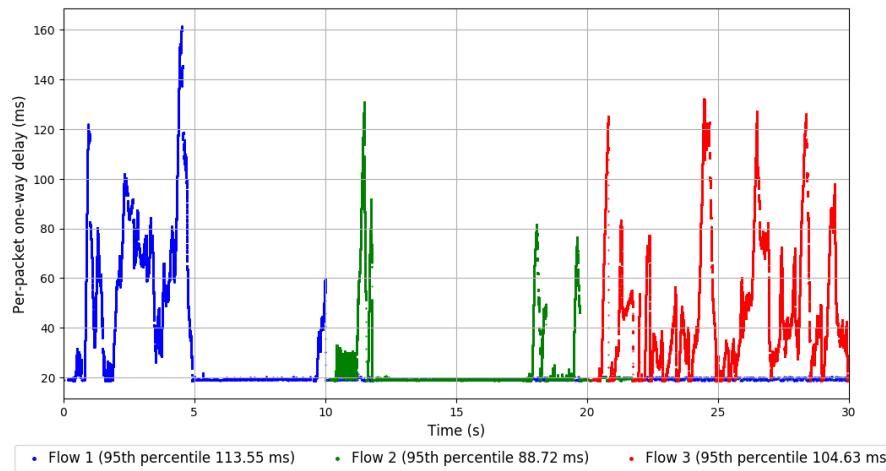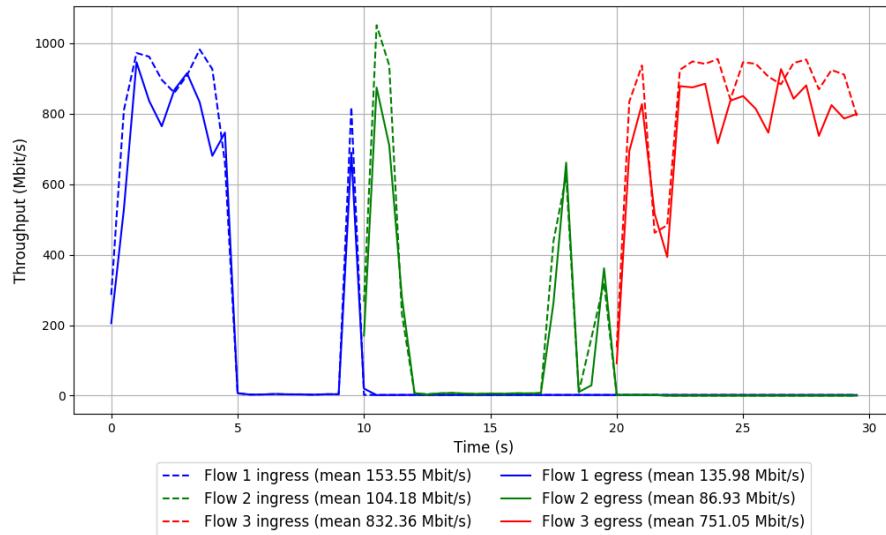Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 137.89 Mbit/s) --- Flow 1 egress (mean 119.95 Mbit/s)
Flow 2 ingress (mean 490.12 Mbit/s) --- Flow 2 egress (mean 437.35 Mbit/s)
Flow 3 ingress (mean 128.09 Mbit/s) --- Flow 3 egress (mean 100.00 Mbit/s)

Flow 1 (95th percentile 109.57 ms)   Flow 2 (95th percentile 116.27 ms)   Flow 3 (95th percentile 69.39 ms)

254

```
Run 6: Statistics of FillP

Start at: 2018-04-24 23:43:45
End at: 2018-04-24 23:44:15
Local clock offset: 0.45 ms
Remote clock offset: -5.949 ms


# Below is generated by plot.py at 2018-04-25 05:45:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.33 Mbit/s
95th percentile per-packet one-way delay: 108.039 ms
Loss rate: 11.22%
-- Flow 1:
Average throughput: 135.98 Mbit/s
95th percentile per-packet one-way delay: 113.549 ms
Loss rate: 11.45%
-- Flow 2:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 88.715 ms
Loss rate: 16.55%
-- Flow 3:
Average throughput: 751.05 Mbit/s
95th percentile per-packet one-way delay: 104.633 ms
Loss rate: 9.77%
```
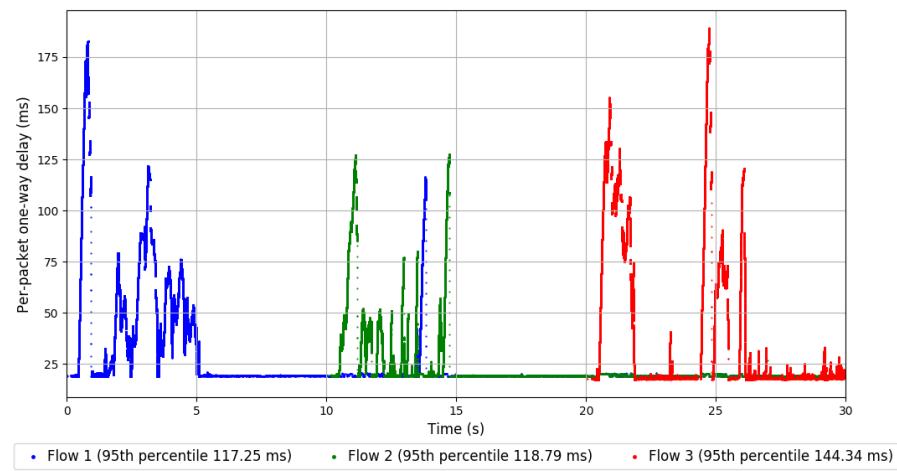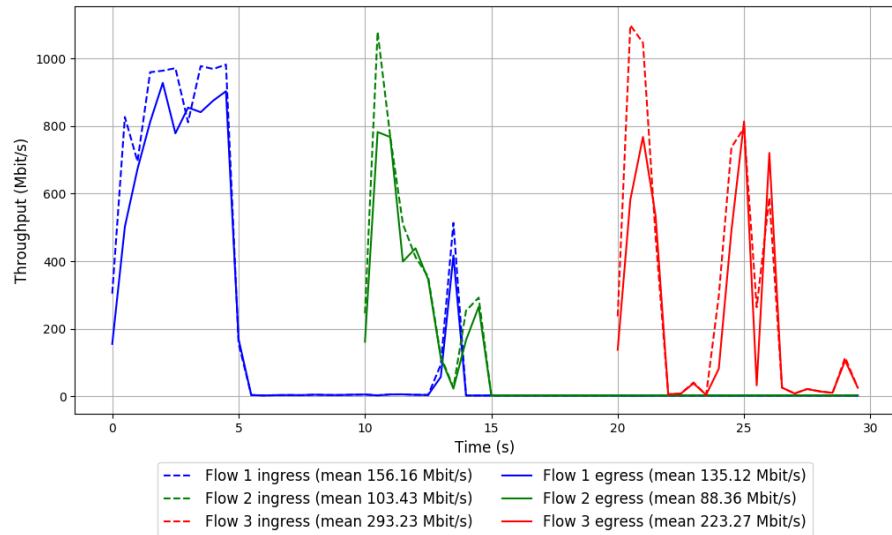
Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-04-25 00:10:18
End at: 2018-04-25 00:10:48
Local clock offset: -0.033 ms
Remote clock offset: -5.491 ms


# Below is generated by plot.py at 2018-04-25 05:45:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.86 Mbit/s
95th percentile per-packet one-way delay: 125.248 ms
Loss rate: 16.84%
-- Flow 1:
Average throughput: 135.12 Mbit/s
95th percentile per-packet one-way delay: 117.250 ms
Loss rate: 13.49%
-- Flow 2:
Average throughput: 88.36 Mbit/s
95th percentile per-packet one-way delay: 118.791 ms
Loss rate: 14.57%
-- Flow 3:
Average throughput: 223.27 Mbit/s
95th percentile per-packet one-way delay: 144.337 ms
Loss rate: 23.86%
```

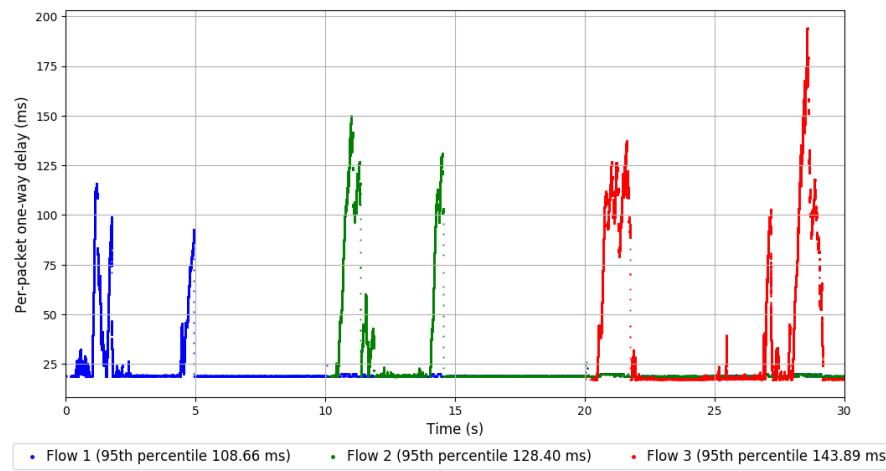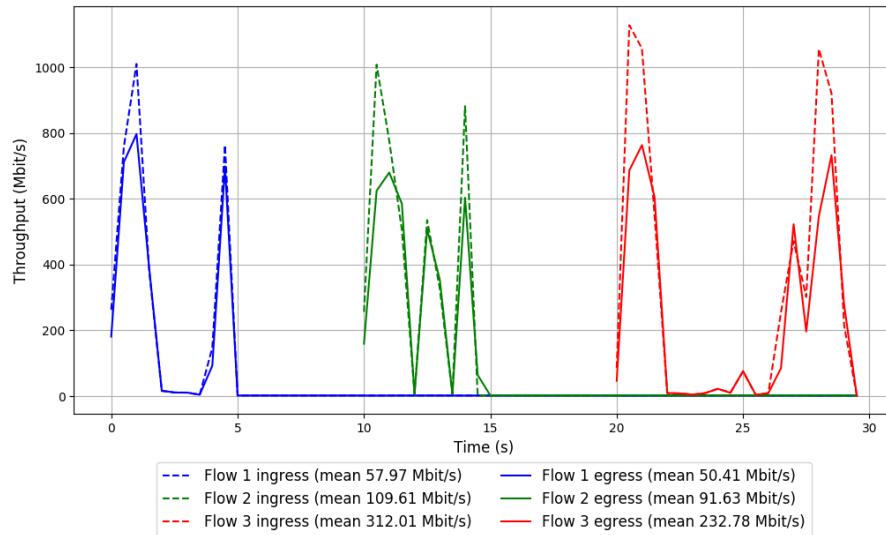# Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-04-25 00:36:45
End at: 2018-04-25 00:37:15
Local clock offset: 0.028 ms
Remote clock offset: -5.586 ms


# Below is generated by plot.py at 2018-04-25 05:45:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 188.54 Mbit/s
95th percentile per-packet one-way delay: 127.415 ms
Loss rate: 19.54%
-- Flow 1:
Average throughput: 50.41 Mbit/s
95th percentile per-packet one-way delay: 108.661 ms
Loss rate: 13.04%
-- Flow 2:
Average throughput: 91.63 Mbit/s
95th percentile per-packet one-way delay: 128.400 ms
Loss rate: 16.40%
-- Flow 3:
Average throughput: 232.78 Mbit/s
95th percentile per-packet one-way delay: 143.893 ms
Loss rate: 25.39%
```
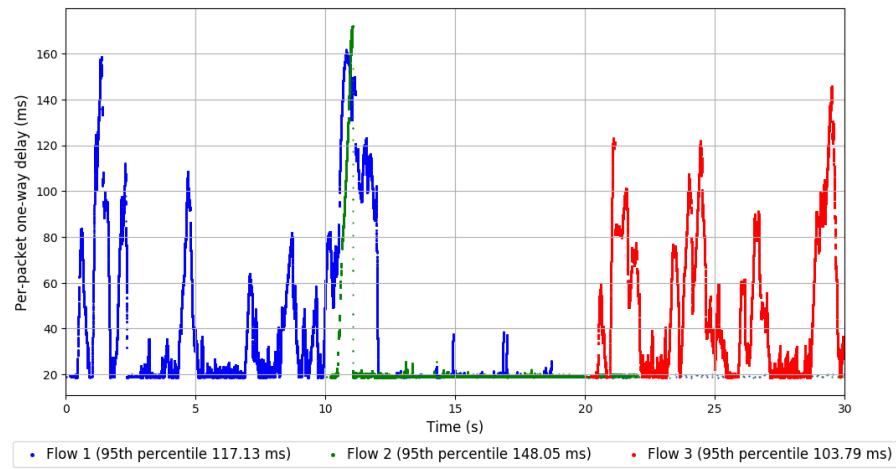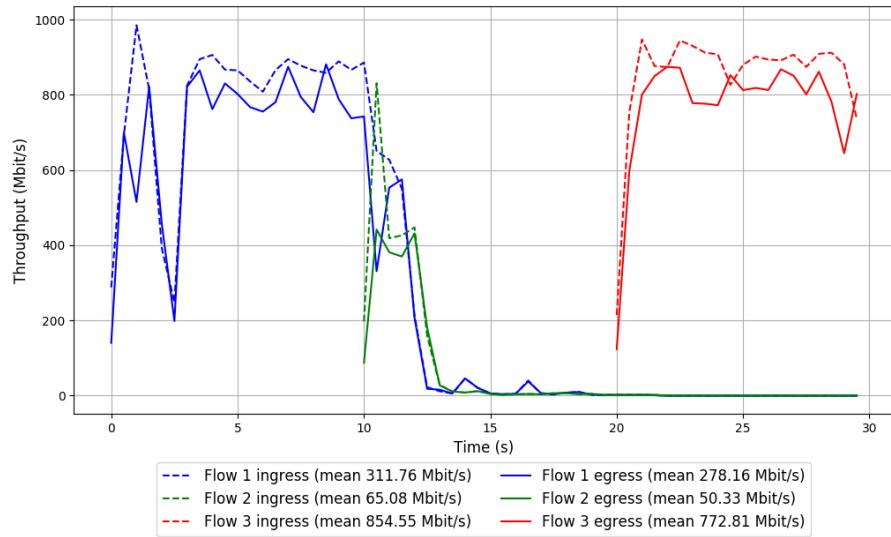
Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-04-25 01:03:25
End at: 2018-04-25 01:03:55
Local clock offset: 0.081 ms
Remote clock offset: -5.424 ms

# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.77 Mbit/s
95th percentile per-packet one-way delay: 115.321 ms
Loss rate: 11.04%
-- Flow 1:
Average throughput: 278.16 Mbit/s
95th percentile per-packet one-way delay: 117.126 ms
Loss rate: 10.77%
-- Flow 2:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 148.049 ms
Loss rate: 22.66%
-- Flow 3:
Average throughput: 772.81 Mbit/s
95th percentile per-packet one-way delay: 103.789 ms
Loss rate: 9.55%
```
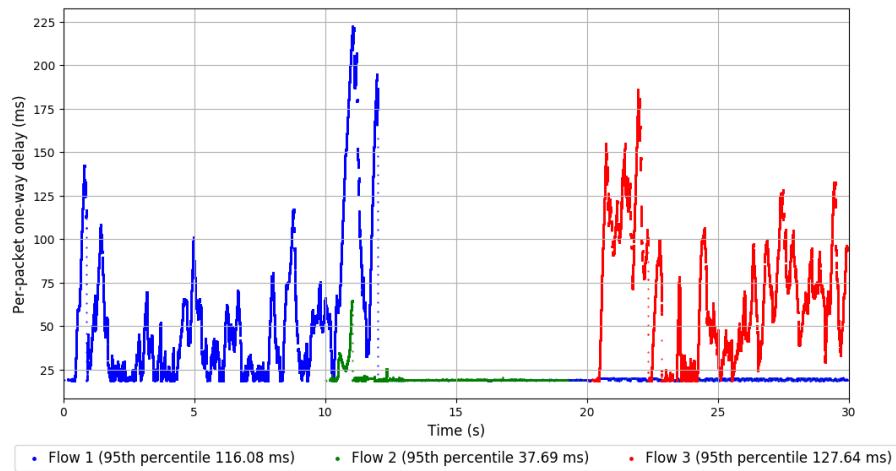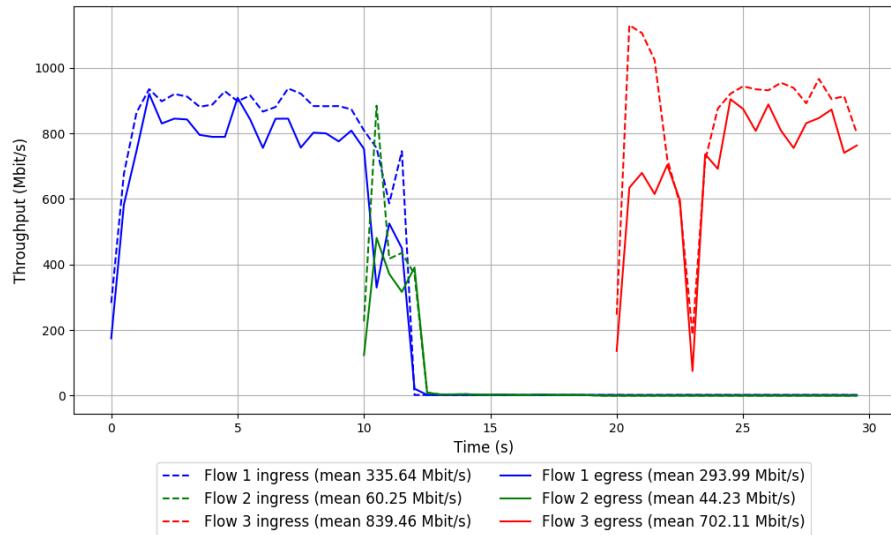
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 311.76 Mbit/s) --- Flow 1 egress (mean 278.16 Mbit/s)
Flow 2 ingress (mean 65.08 Mbit/s) --- Flow 2 egress (mean 50.33 Mbit/s)
Flow 3 ingress (mean 854.55 Mbit/s) --- Flow 3 egress (mean 772.81 Mbit/s)

Flow 1 (95th percentile 117.13 ms)   Flow 2 (95th percentile 148.05 ms)   Flow 3 (95th percentile 103.79 ms)

```
Run 10: Statistics of FillP

Start at: 2018-04-25 01:30:08
End at: 2018-04-25 01:30:38
Local clock offset: 0.458 ms
Remote clock offset: -6.188 ms


# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.92 Mbit/s
95th percentile per-packet one-way delay: 124.517 ms
Loss rate: 15.00%
-- Flow 1:
Average throughput: 293.99 Mbit/s
95th percentile per-packet one-way delay: 116.077 ms
Loss rate: 12.41%
-- Flow 2:
Average throughput: 44.23 Mbit/s
95th percentile per-packet one-way delay: 37.687 ms
Loss rate: 27.35%
-- Flow 3:
Average throughput: 702.11 Mbit/s
95th percentile per-packet one-way delay: 127.641 ms
Loss rate: 16.36%
```

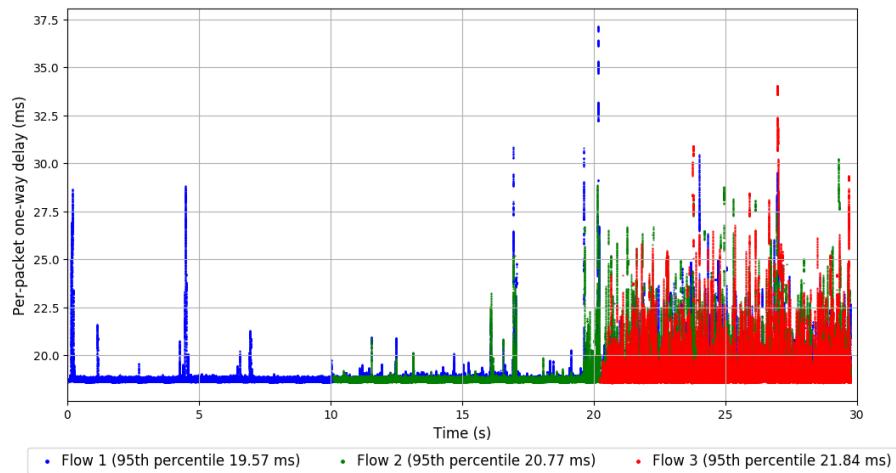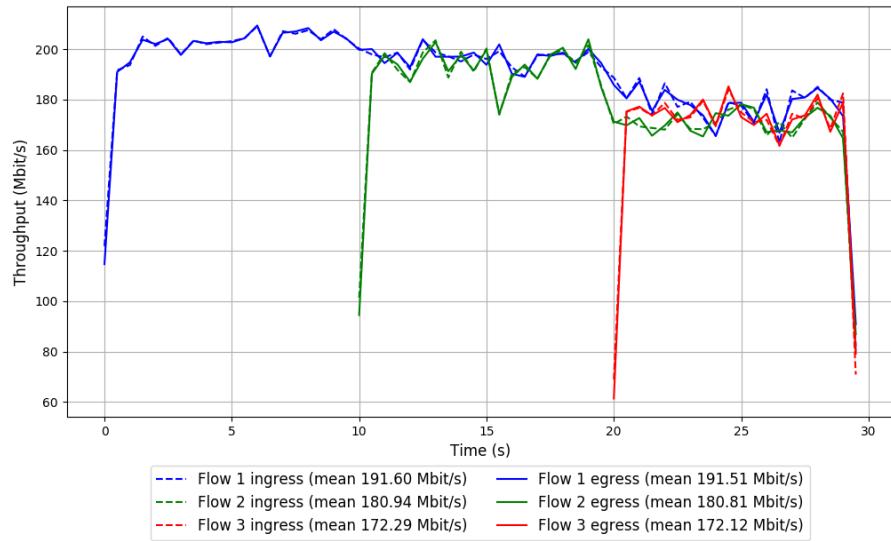## Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 335.64 Mbit/s) --- Flow 1 egress (mean 293.99 Mbit/s)
Flow 2 ingress (mean 60.25 Mbit/s) --- Flow 2 egress (mean 44.23 Mbit/s)
Flow 3 ingress (mean 839.46 Mbit/s) --- Flow 3 egress (mean 702.11 Mbit/s)

Flow 1 (95th percentile 116.08 ms)   Flow 2 (95th percentile 37.69 ms)   Flow 3 (95th percentile 127.64 ms)

```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-24 21:48:01
End at: 2018-04-24 21:48:31
Local clock offset: 0.249 ms
Remote clock offset: -5.386 ms


# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.16 Mbit/s
95th percentile per-packet one-way delay: 20.450 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 191.51 Mbit/s
95th percentile per-packet one-way delay: 19.569 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 180.81 Mbit/s
95th percentile per-packet one-way delay: 20.771 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 172.12 Mbit/s
95th percentile per-packet one-way delay: 21.838 ms
Loss rate: 0.10%
```

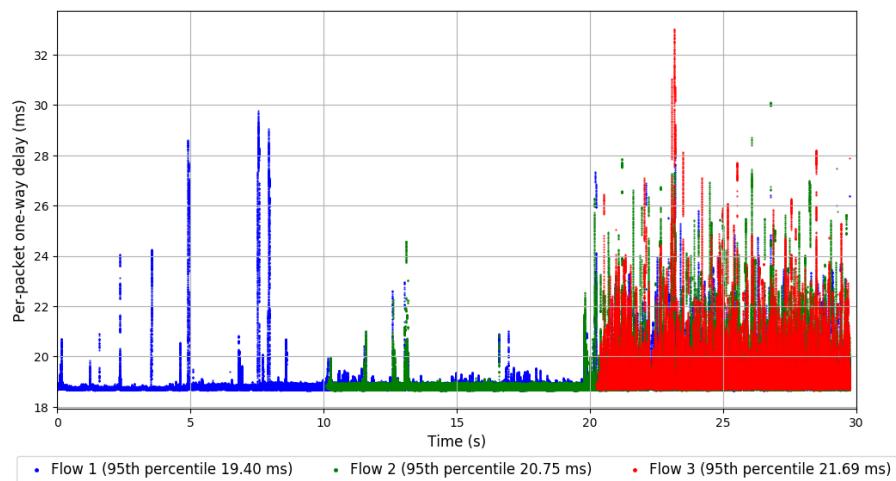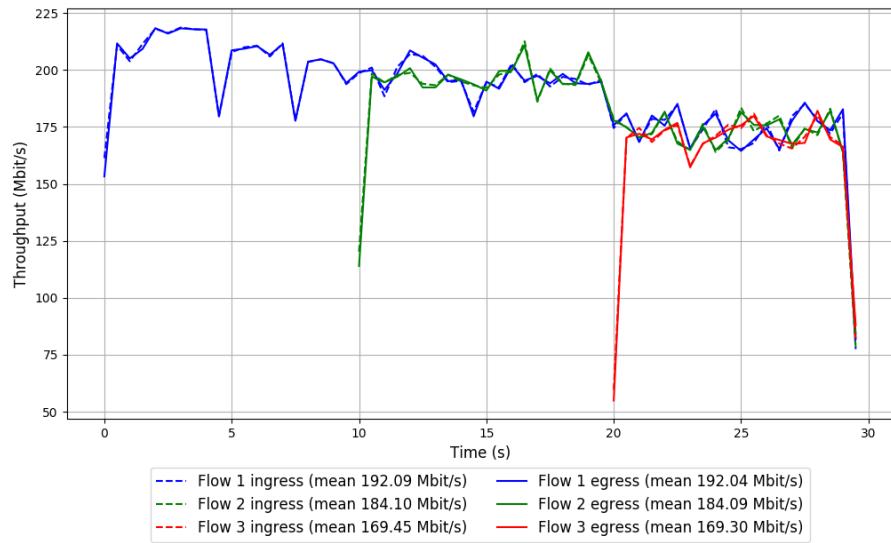Run 1: Report of Indigo-1-32 — Data Link

```
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-24 22:14:34
End at: 2018-04-24 22:15:05
Local clock offset: -0.014 ms
Remote clock offset: -5.81 ms


# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.83 Mbit/s
95th percentile per-packet one-way delay: 20.413 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.04 Mbit/s
95th percentile per-packet one-way delay: 19.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.09 Mbit/s
95th percentile per-packet one-way delay: 20.750 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.30 Mbit/s
95th percentile per-packet one-way delay: 21.693 ms
Loss rate: 0.01%
```

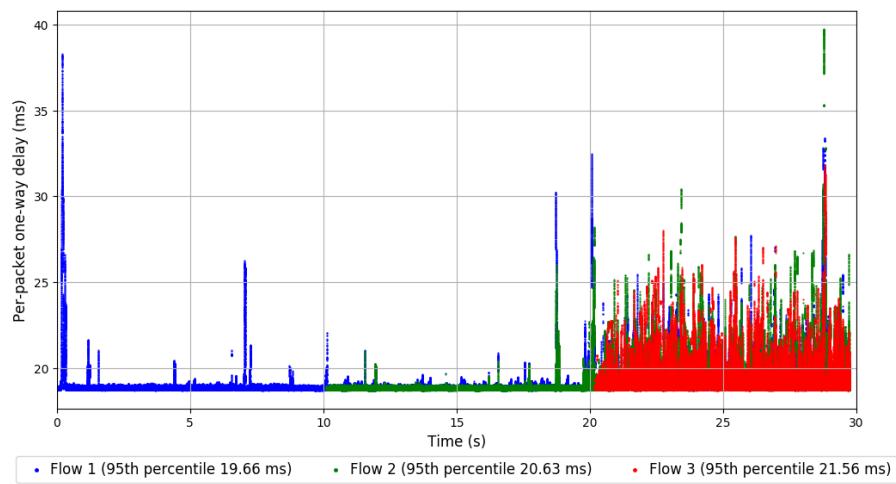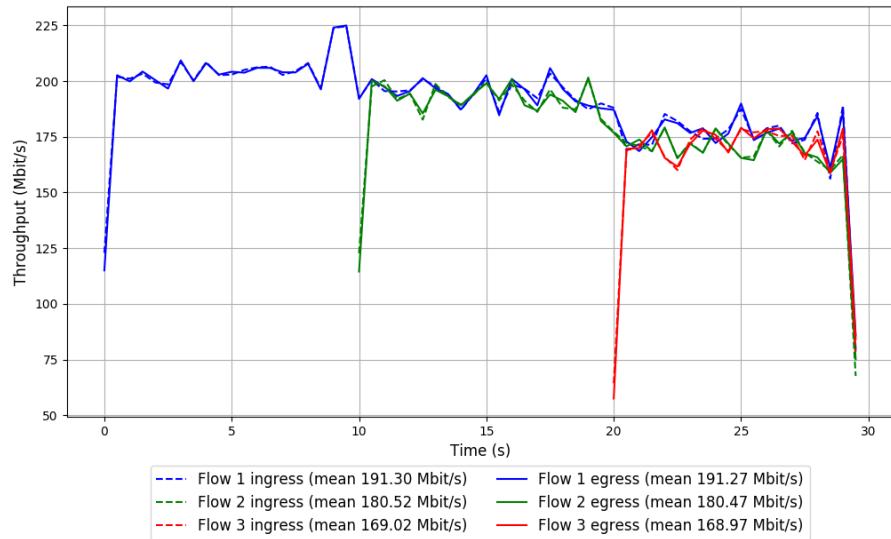Run 2: Report of Indigo-1-32 — Data Link

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```
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-24 22:41:18
End at: 2018-04-24 22:41:48
Local clock offset: -0.108 ms
Remote clock offset: -5.61 ms

# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.06 Mbit/s
95th percentile per-packet one-way delay: 20.413 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 191.27 Mbit/s
95th percentile per-packet one-way delay: 19.661 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 180.47 Mbit/s
95th percentile per-packet one-way delay: 20.630 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 168.97 Mbit/s
95th percentile per-packet one-way delay: 21.561 ms
Loss rate: 0.03%
```

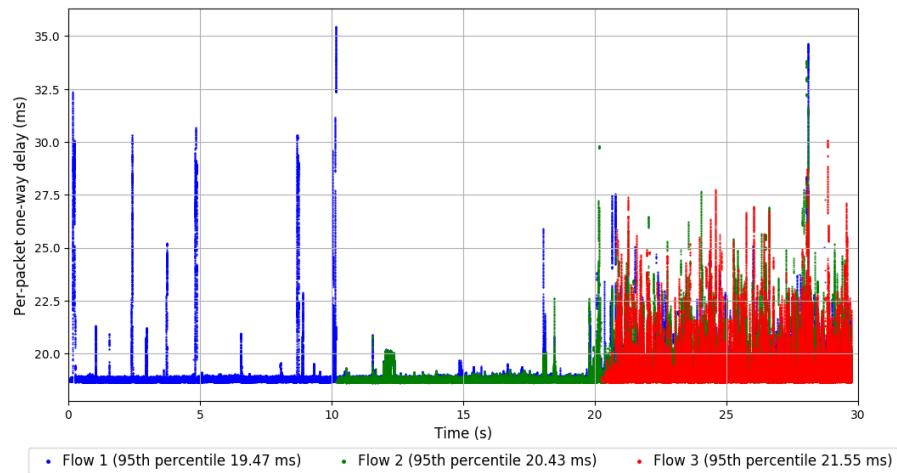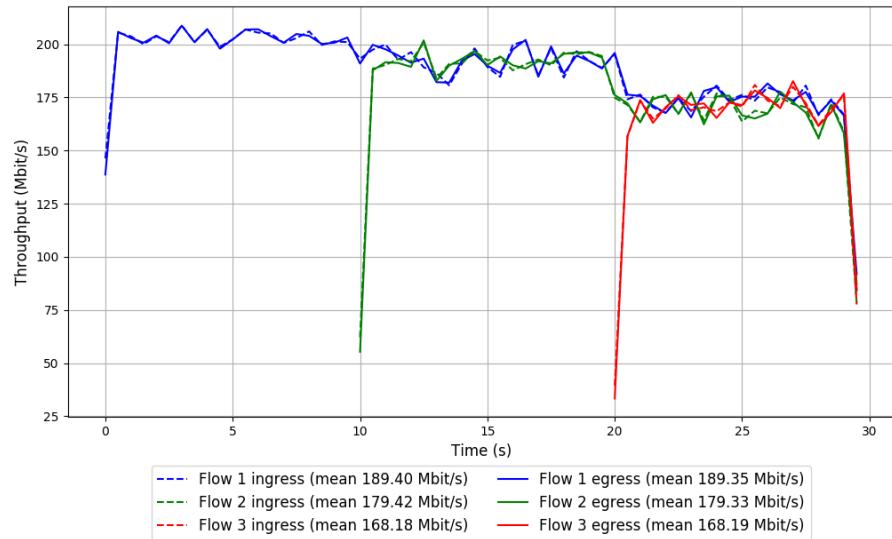Run 3: Report of Indigo-1-32 — Data Link

```
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-24 23:07:59
End at: 2018-04-24 23:08:29
Local clock offset: 0.043 ms
Remote clock offset: -6.065 ms

# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.09 Mbit/s
95th percentile per-packet one-way delay: 20.279 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 189.35 Mbit/s
95th percentile per-packet one-way delay: 19.466 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 179.33 Mbit/s
95th percentile per-packet one-way delay: 20.434 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 168.19 Mbit/s
95th percentile per-packet one-way delay: 21.549 ms
Loss rate: 0.00%
```

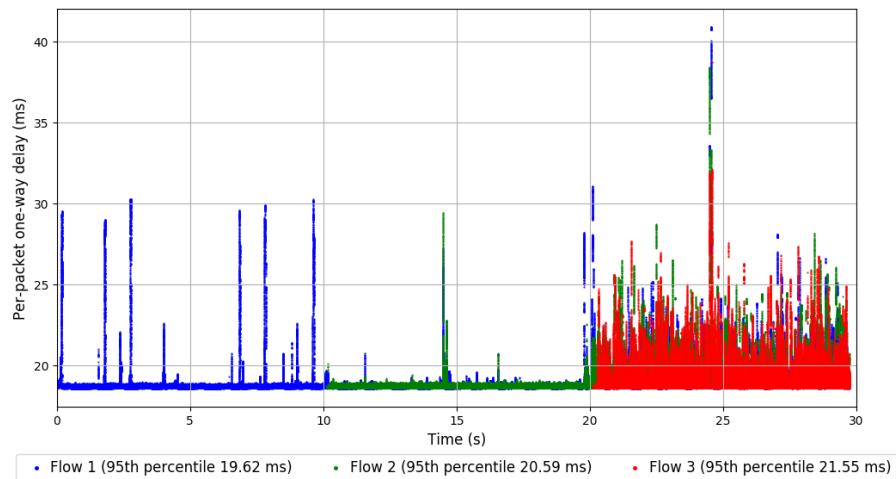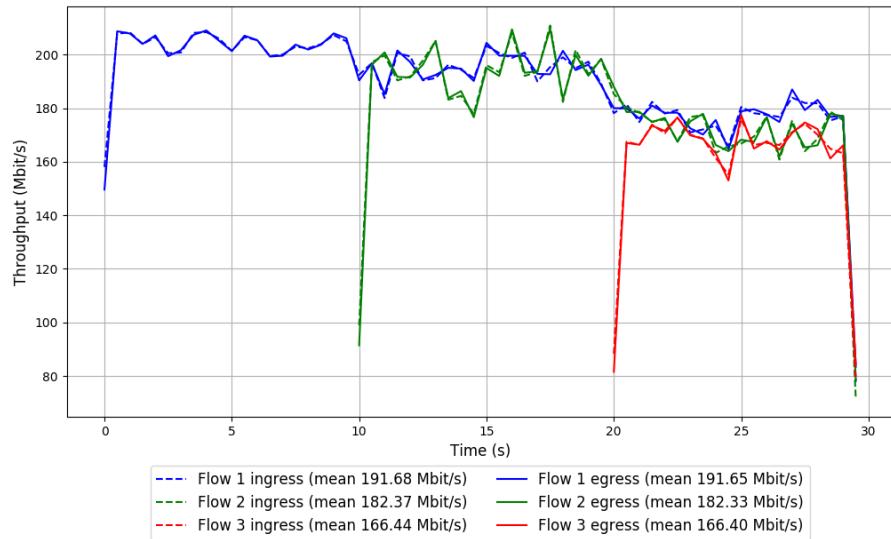Run 4: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 189.40 Mbit/s) --- Flow 1 egress (mean 189.35 Mbit/s) ---
Flow 2 ingress (mean 179.42 Mbit/s) --- Flow 2 egress (mean 179.33 Mbit/s) ---
Flow 3 ingress (mean 168.18 Mbit/s) --- Flow 3 egress (mean 168.19 Mbit/s) ---

Flow 1 (95th percentile 19.47 ms) • Flow 2 (95th percentile 20.43 ms) • Flow 3 (95th percentile 21.55 ms)

```
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-24 23:34:42
End at: 2018-04-24 23:35:12
Local clock offset: 0.399 ms
Remote clock offset: -6.768 ms


# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.61 Mbit/s
95th percentile per-packet one-way delay: 20.457 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 191.65 Mbit/s
95th percentile per-packet one-way delay: 19.618 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 182.33 Mbit/s
95th percentile per-packet one-way delay: 20.588 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 166.40 Mbit/s
95th percentile per-packet one-way delay: 21.549 ms
Loss rate: 0.02%
```

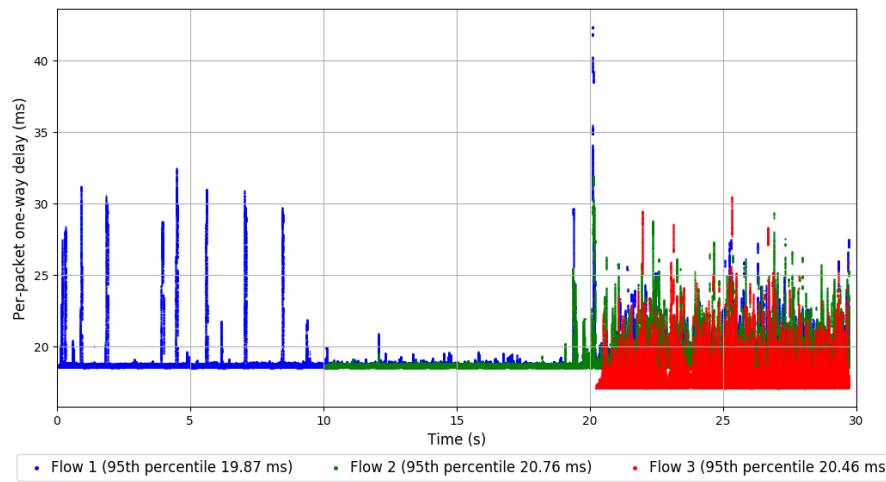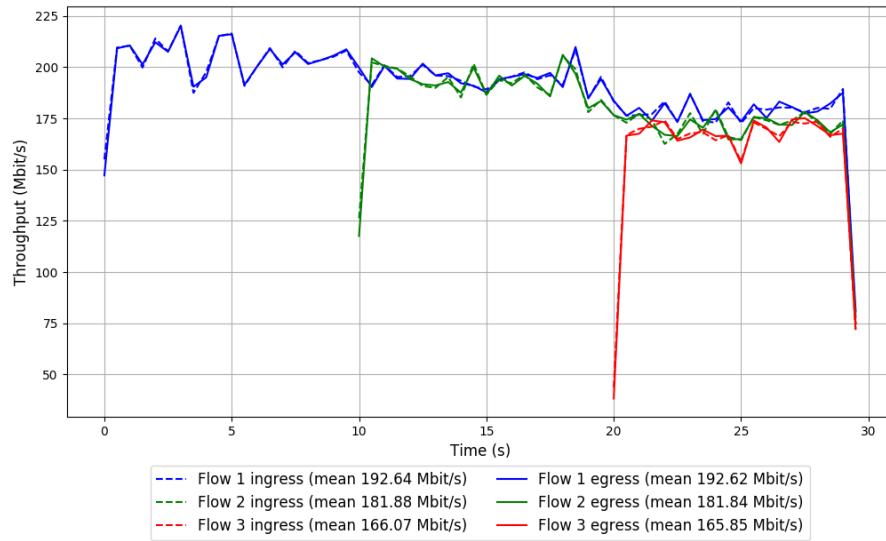Run 5: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 191.68 Mbit/s) —— Flow 1 egress (mean 191.65 Mbit/s)
- - - Flow 2 ingress (mean 182.37 Mbit/s) —— Flow 2 egress (mean 182.33 Mbit/s)
- - - Flow 3 ingress (mean 166.44 Mbit/s) —— Flow 3 egress (mean 166.40 Mbit/s)

• Flow 1 (95th percentile 19.62 ms) • Flow 2 (95th percentile 20.59 ms) • Flow 3 (95th percentile 21.55 ms)

```
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-25 00:01:16
End at: 2018-04-25 00:01:46
Local clock offset: 0.218 ms
Remote clock offset: -5.599 ms

# Below is generated by plot.py at 2018-04-25 05:51:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.77 Mbit/s
95th percentile per-packet one-way delay: 20.349 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 192.62 Mbit/s
95th percentile per-packet one-way delay: 19.866 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 181.84 Mbit/s
95th percentile per-packet one-way delay: 20.757 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 165.85 Mbit/s
95th percentile per-packet one-way delay: 20.459 ms
Loss rate: 0.13%
```

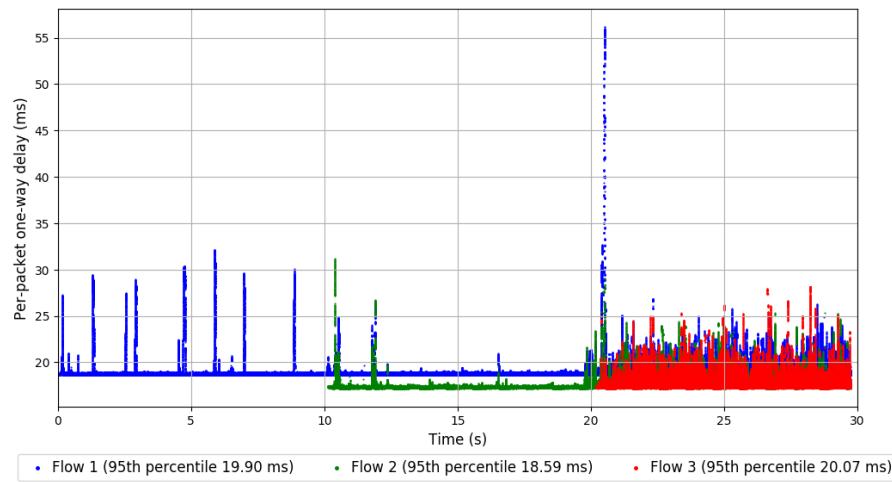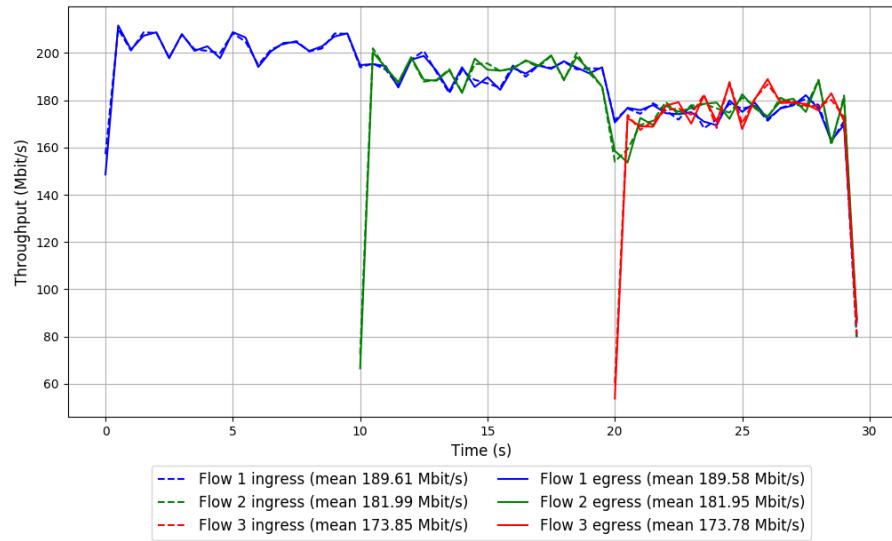# Run 6: Report of Indigo-1-32 — Data Link

```
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-25 00:27:45
End at: 2018-04-25 00:28:15
Local clock offset: -0.089 ms
Remote clock offset: -5.601 ms

# Below is generated by plot.py at 2018-04-25 05:54:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.41 Mbit/s
95th percentile per-packet one-way delay: 19.611 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 189.58 Mbit/s
95th percentile per-packet one-way delay: 19.904 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 181.95 Mbit/s
95th percentile per-packet one-way delay: 18.590 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 173.78 Mbit/s
95th percentile per-packet one-way delay: 20.066 ms
Loss rate: 0.04%
```

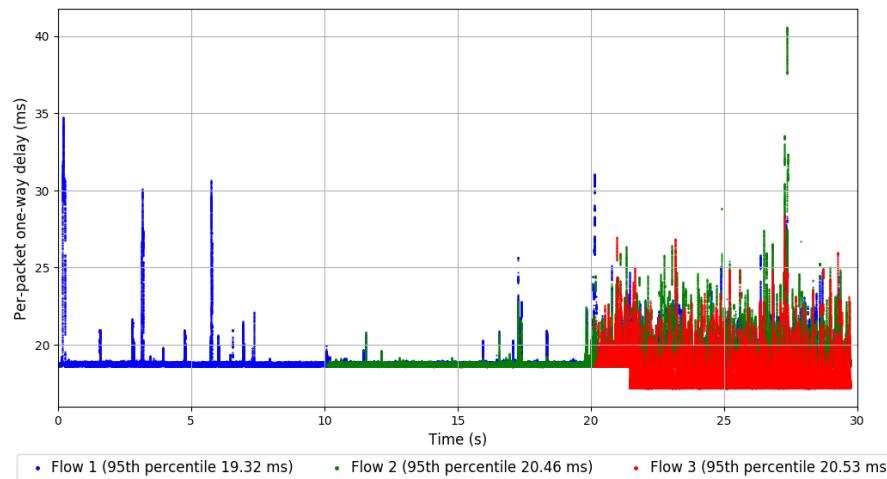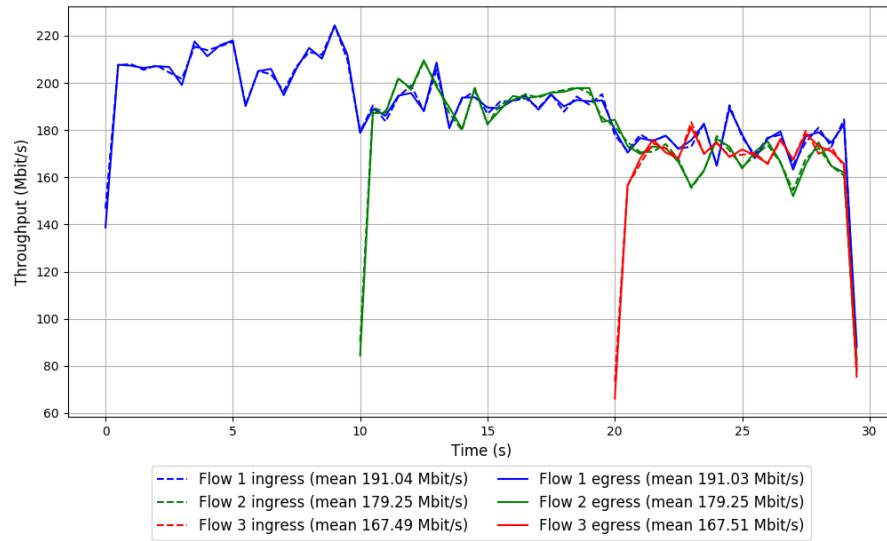Run 7: Report of Indigo-1-32 — Data Link

```
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-25 00:54:18
End at: 2018-04-25 00:54:48
Local clock offset: -0.003 ms
Remote clock offset: -5.468 ms

# Below is generated by plot.py at 2018-04-25 05:54:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.62 Mbit/s
95th percentile per-packet one-way delay: 19.948 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.03 Mbit/s
95th percentile per-packet one-way delay: 19.324 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 179.25 Mbit/s
95th percentile per-packet one-way delay: 20.456 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 167.51 Mbit/s
95th percentile per-packet one-way delay: 20.530 ms
Loss rate: 0.00%
```

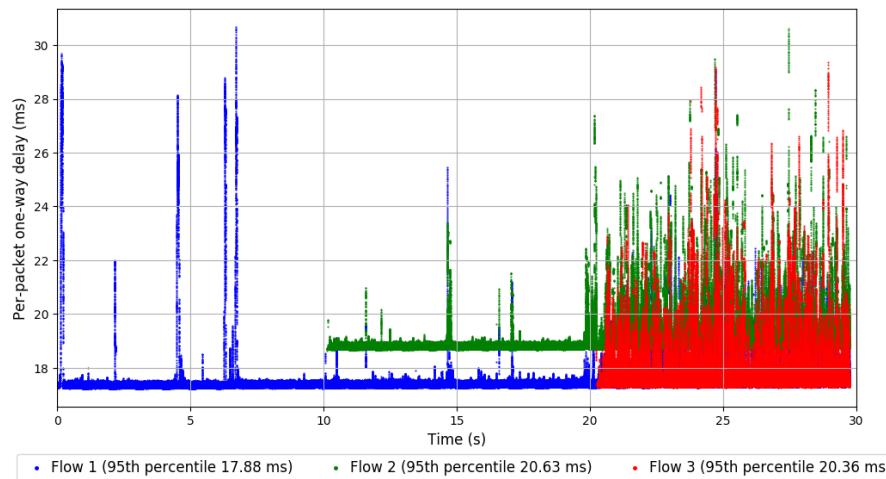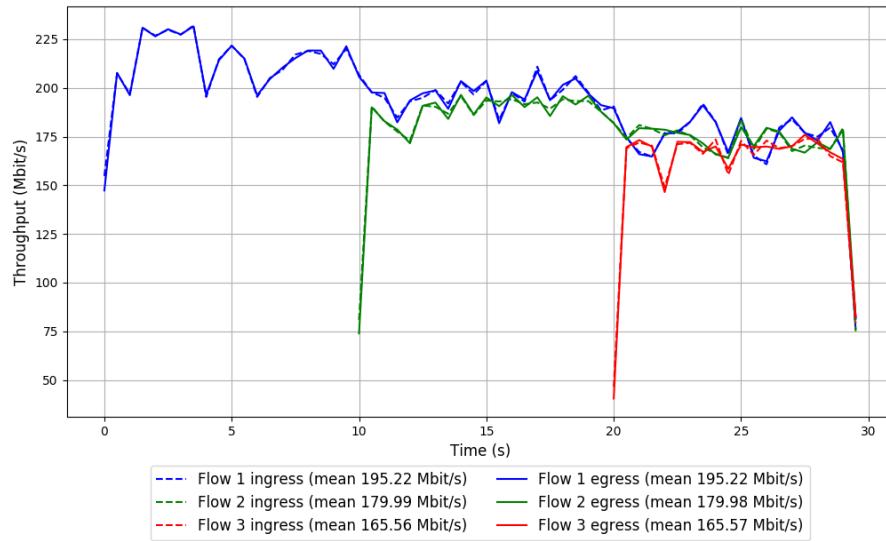Run 8: Report of Indigo-1-32 — Data Link

```
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-25 01:21:00
End at: 2018-04-25 01:21:30
Local clock offset: 0.423 ms
Remote clock offset: -5.599 ms


# Below is generated by plot.py at 2018-04-25 05:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.93 Mbit/s
95th percentile per-packet one-way delay: 19.768 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.22 Mbit/s
95th percentile per-packet one-way delay: 17.881 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.98 Mbit/s
95th percentile per-packet one-way delay: 20.626 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.57 Mbit/s
95th percentile per-packet one-way delay: 20.357 ms
Loss rate: 0.00%
```

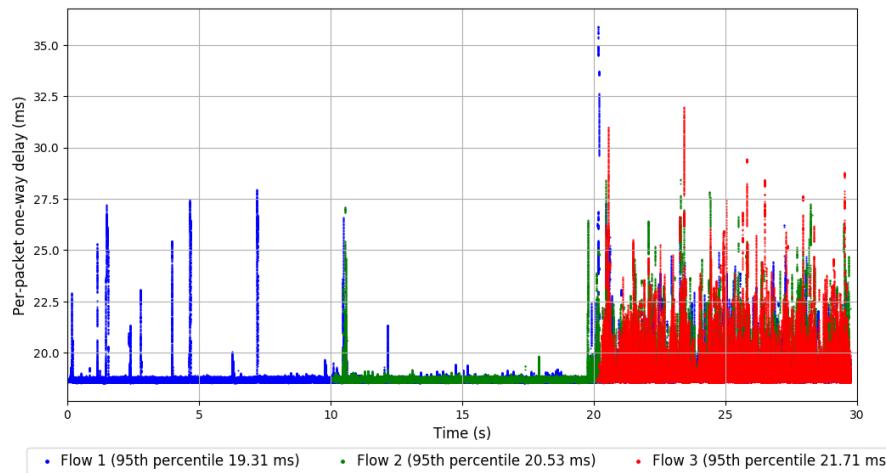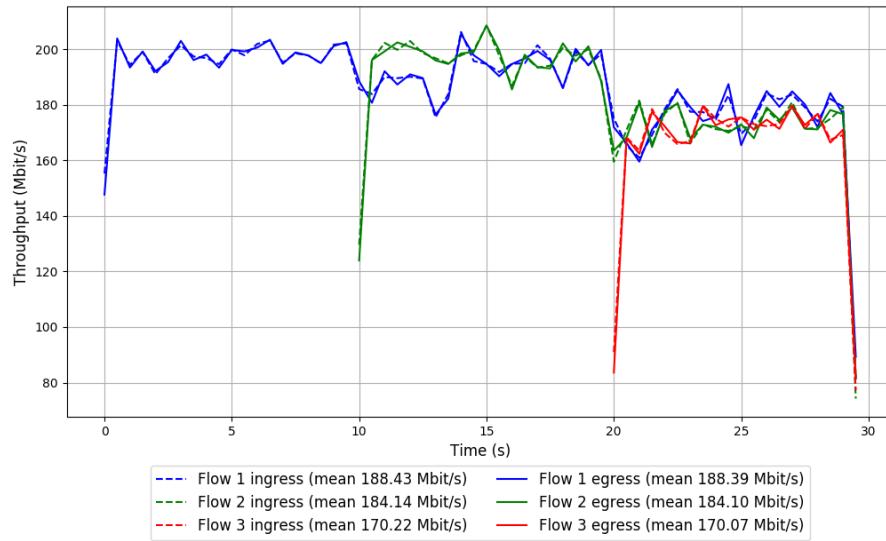Run 9: Report of Indigo-1-32 — Data Link

```
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-25 01:47:54
End at: 2018-04-25 01:48:24
Local clock offset: 0.397 ms
Remote clock offset: -6.764 ms


# Below is generated by plot.py at 2018-04-25 05:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.15 Mbit/s
95th percentile per-packet one-way delay: 20.352 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 188.39 Mbit/s
95th percentile per-packet one-way delay: 19.310 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 184.10 Mbit/s
95th percentile per-packet one-way delay: 20.529 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 170.07 Mbit/s
95th percentile per-packet one-way delay: 21.715 ms
Loss rate: 0.08%
```

Run 10: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 188.43 Mbit/s) --- Flow 1 egress (mean 188.39 Mbit/s)
Flow 2 ingress (mean 184.14 Mbit/s) --- Flow 2 egress (mean 184.10 Mbit/s)
Flow 3 ingress (mean 170.22 Mbit/s) --- Flow 3 egress (mean 170.07 Mbit/s)

Flow 1 (95th percentile 19.31 ms)   Flow 2 (95th percentile 20.53 ms)   Flow 3 (95th percentile 21.71 ms)
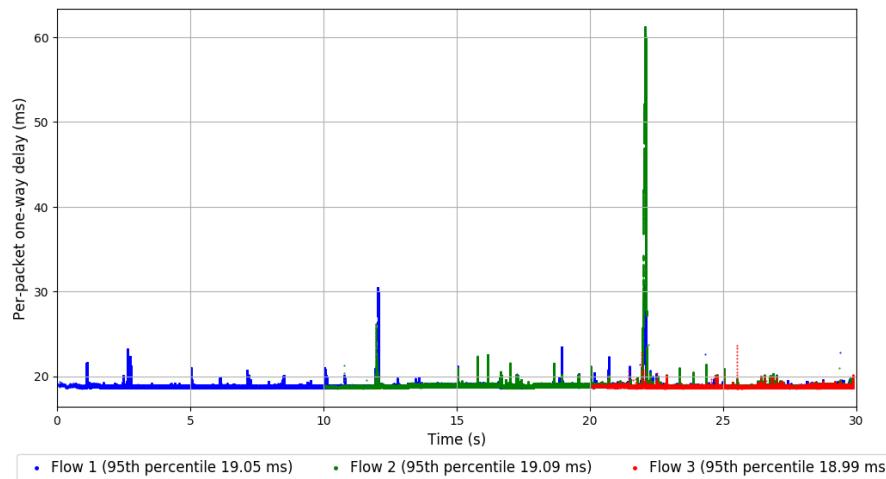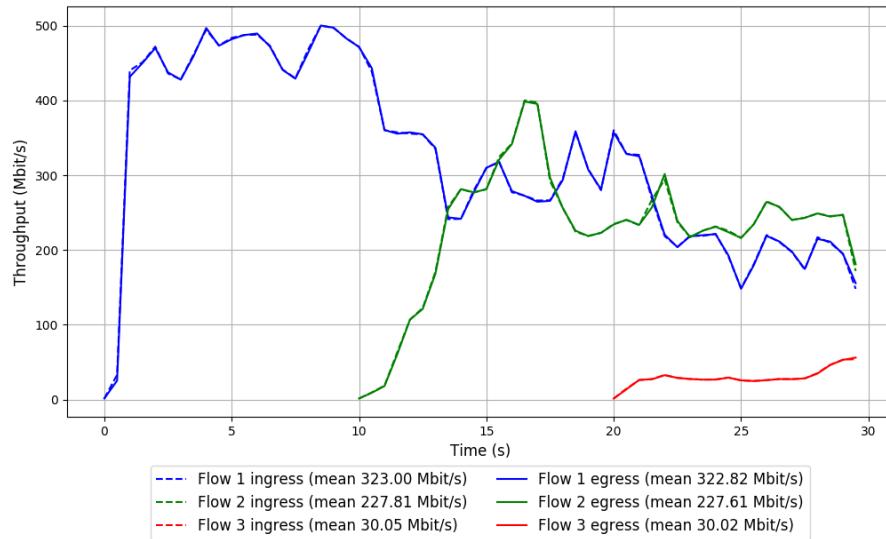
```
Run 1: Statistics of PCC-Vivace

Start at: 2018-04-24 21:36:46
End at: 2018-04-24 21:37:16
Local clock offset: 0.288 ms
Remote clock offset: -5.315 ms


# Below is generated by plot.py at 2018-04-25 05:58:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.06 Mbit/s
95th percentile per-packet one-way delay: 19.060 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 322.82 Mbit/s
95th percentile per-packet one-way delay: 19.051 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 227.61 Mbit/s
95th percentile per-packet one-way delay: 19.086 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 18.990 ms
Loss rate: 0.10%
```

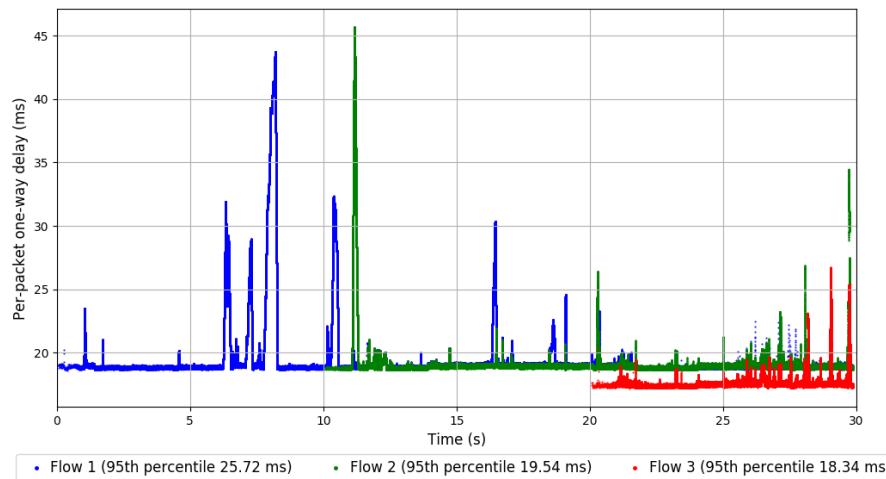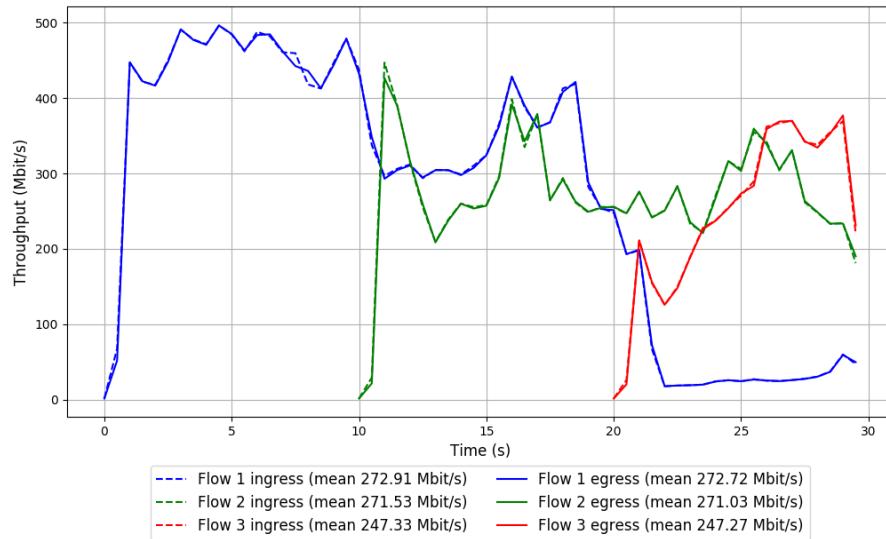Run 1: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 323.00 Mbit/s)   —— Flow 1 egress (mean 322.82 Mbit/s)
- - - Flow 2 ingress (mean 227.81 Mbit/s)   —— Flow 2 egress (mean 227.61 Mbit/s)
- - - Flow 3 ingress (mean 30.05 Mbit/s)   —— Flow 3 egress (mean 30.02 Mbit/s)

- Flow 1 (95th percentile 19.05 ms)   • Flow 2 (95th percentile 19.09 ms)   • Flow 3 (95th percentile 18.99 ms)

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```
Run 2: Statistics of PCC-Vivace

Start at: 2018-04-24 22:03:18
End at: 2018-04-24 22:03:48
Local clock offset: 0.184 ms
Remote clock offset: -5.594 ms


# Below is generated by plot.py at 2018-04-25 05:59:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.29 Mbit/s
95th percentile per-packet one-way delay: 21.322 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 272.72 Mbit/s
95th percentile per-packet one-way delay: 25.721 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 271.03 Mbit/s
95th percentile per-packet one-way delay: 19.536 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 247.27 Mbit/s
95th percentile per-packet one-way delay: 18.341 ms
Loss rate: 0.03%
```

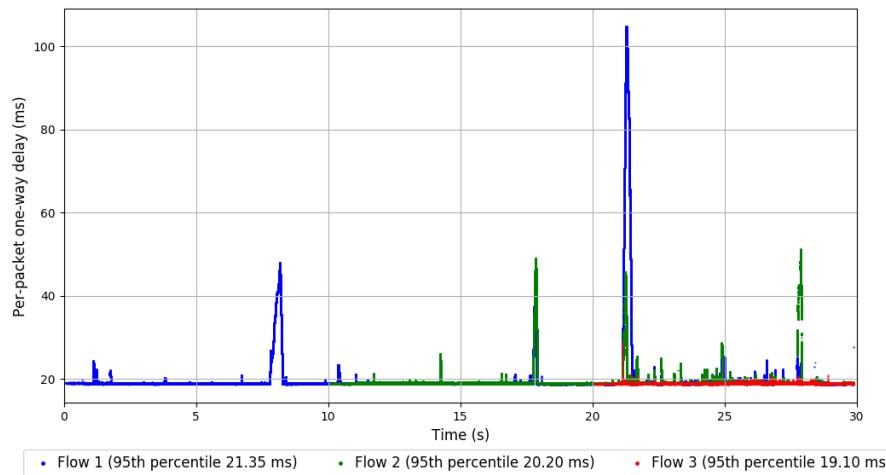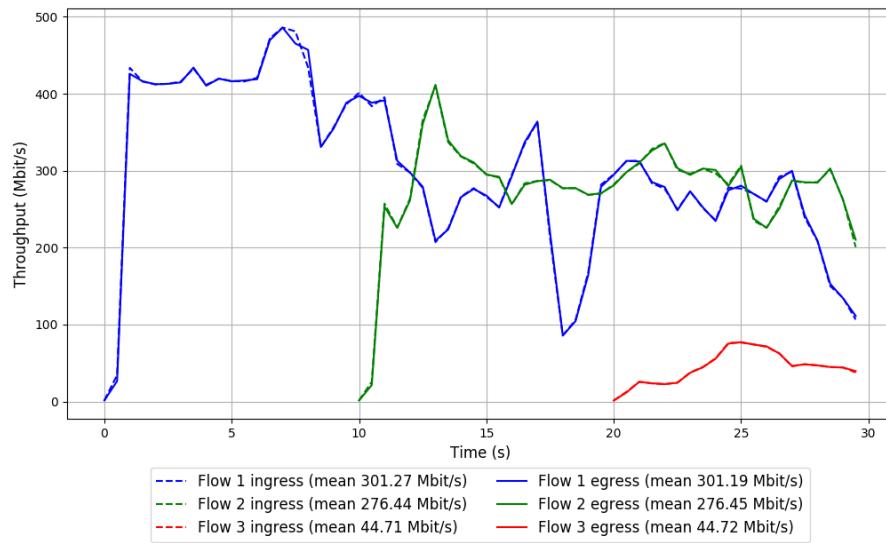Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-04-24 22:30:00
End at: 2018-04-24 22:30:30
Local clock offset: -0.072 ms
Remote clock offset: -5.812 ms


# Below is generated by plot.py at 2018-04-25 05:59:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.64 Mbit/s
95th percentile per-packet one-way delay: 20.655 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 301.19 Mbit/s
95th percentile per-packet one-way delay: 21.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 276.45 Mbit/s
95th percentile per-packet one-way delay: 20.198 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 44.72 Mbit/s
95th percentile per-packet one-way delay: 19.096 ms
Loss rate: 0.00%
```

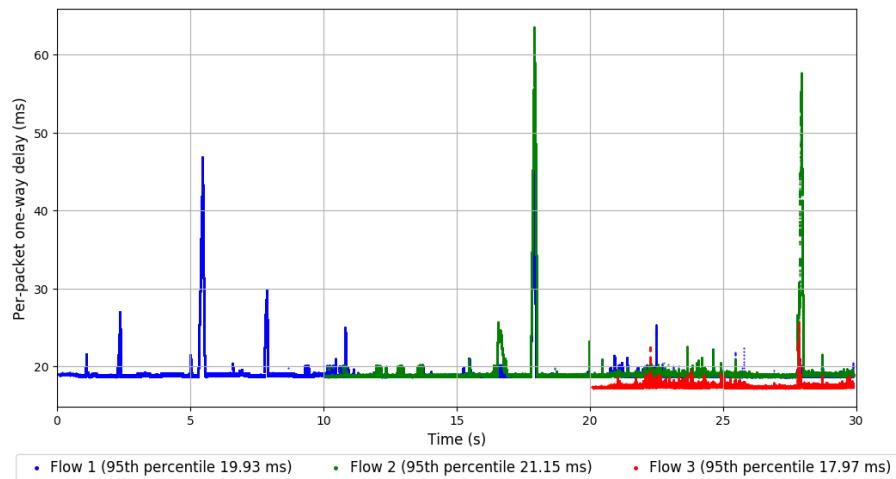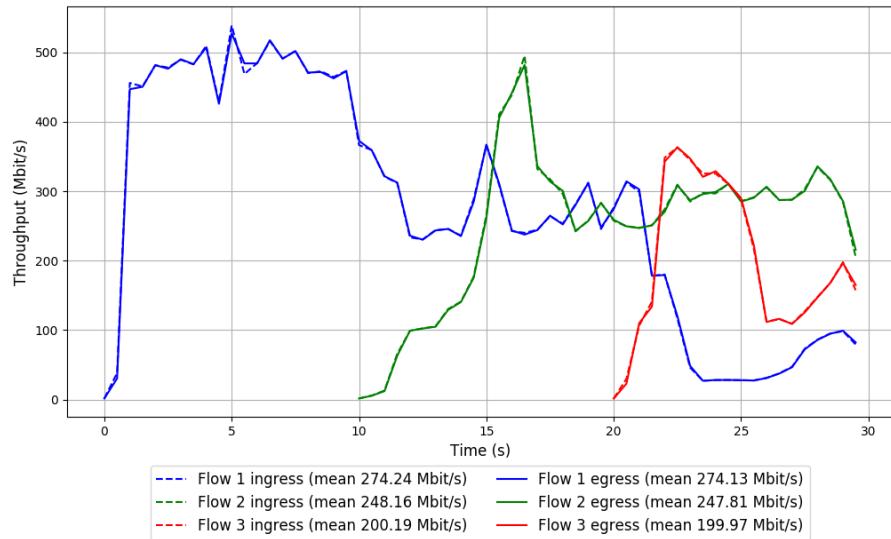Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-04-24 22:56:39
End at: 2018-04-24 22:57:09
Local clock offset: -0.076 ms
Remote clock offset: -5.603 ms


# Below is generated by plot.py at 2018-04-25 05:59:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.70 Mbit/s
95th percentile per-packet one-way delay: 19.925 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 274.13 Mbit/s
95th percentile per-packet one-way delay: 19.932 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 247.81 Mbit/s
95th percentile per-packet one-way delay: 21.149 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 199.97 Mbit/s
95th percentile per-packet one-way delay: 17.968 ms
Loss rate: 0.11%
```

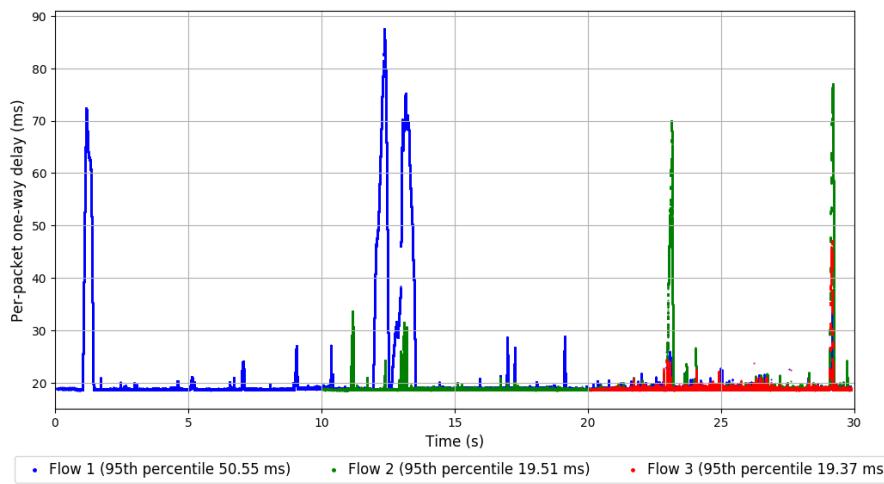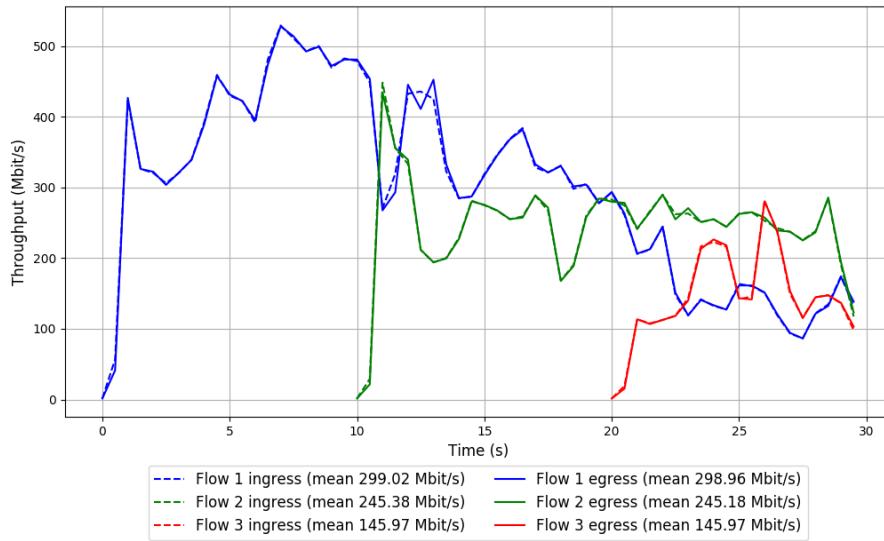Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-04-24 23:23:24
End at: 2018-04-24 23:23:54
Local clock offset: 0.214 ms
Remote clock offset: -6.563 ms


# Below is generated by plot.py at 2018-04-25 06:01:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.00 Mbit/s
95th percentile per-packet one-way delay: 31.030 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 298.96 Mbit/s
95th percentile per-packet one-way delay: 50.546 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 245.18 Mbit/s
95th percentile per-packet one-way delay: 19.513 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 145.97 Mbit/s
95th percentile per-packet one-way delay: 19.370 ms
Loss rate: 0.00%
```

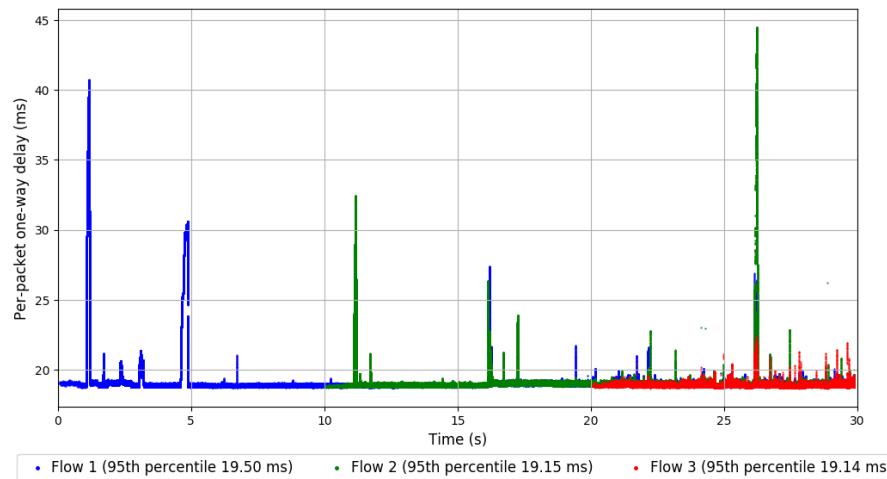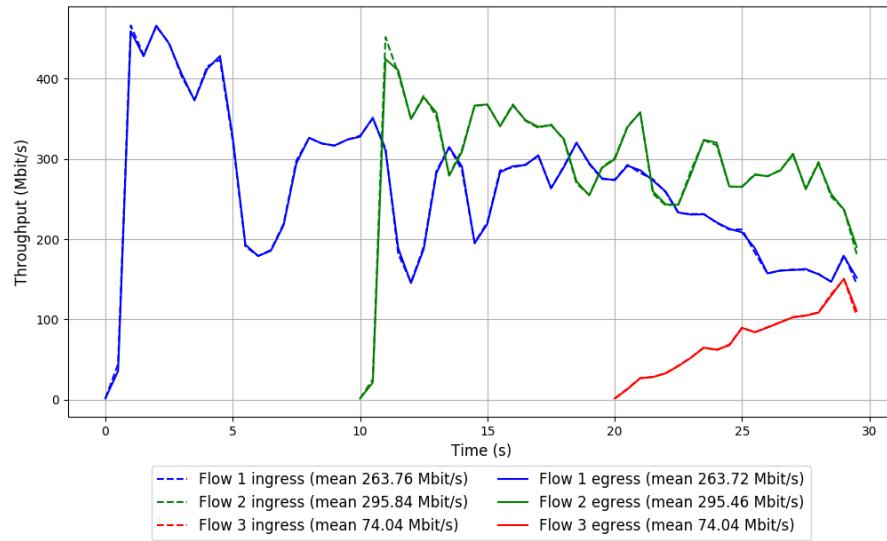Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-04-24 23:50:00
End at: 2018-04-24 23:50:30
Local clock offset: 0.514 ms
Remote clock offset: -5.678 ms


# Below is generated by plot.py at 2018-04-25 06:01:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.57 Mbit/s
95th percentile per-packet one-way delay: 19.201 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 263.72 Mbit/s
95th percentile per-packet one-way delay: 19.498 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 295.46 Mbit/s
95th percentile per-packet one-way delay: 19.151 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 74.04 Mbit/s
95th percentile per-packet one-way delay: 19.138 ms
Loss rate: 0.00%
```

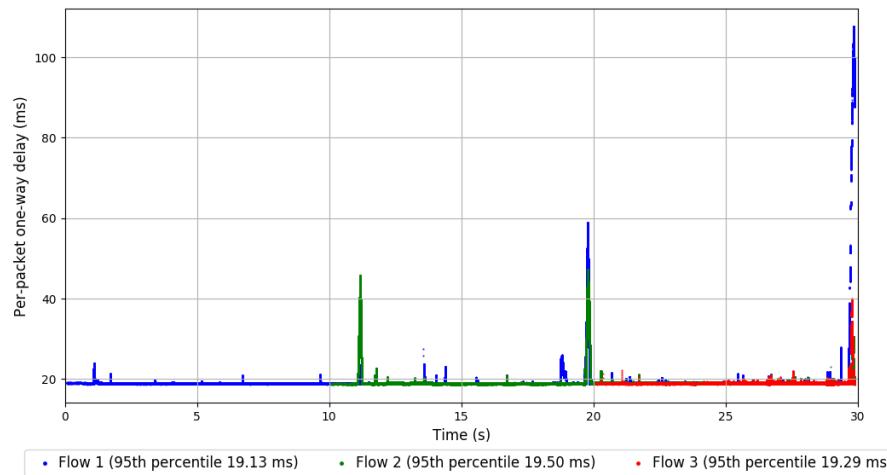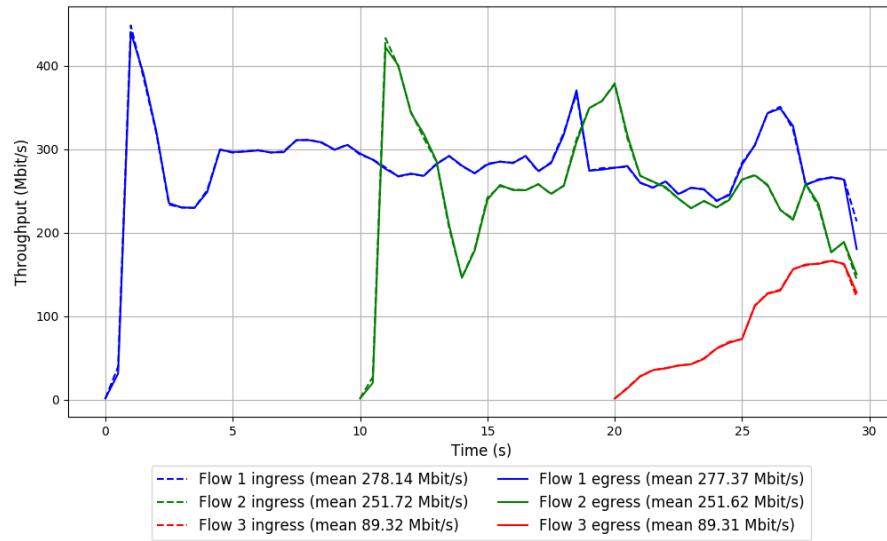Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-04-25 00:16:26
End at: 2018-04-25 00:16:56
Local clock offset: -0.01 ms
Remote clock offset: -5.475 ms


# Below is generated by plot.py at 2018-04-25 06:01:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.03 Mbit/s
95th percentile per-packet one-way delay: 19.192 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 277.37 Mbit/s
95th percentile per-packet one-way delay: 19.127 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 251.62 Mbit/s
95th percentile per-packet one-way delay: 19.496 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 89.31 Mbit/s
95th percentile per-packet one-way delay: 19.293 ms
Loss rate: 0.01%
```
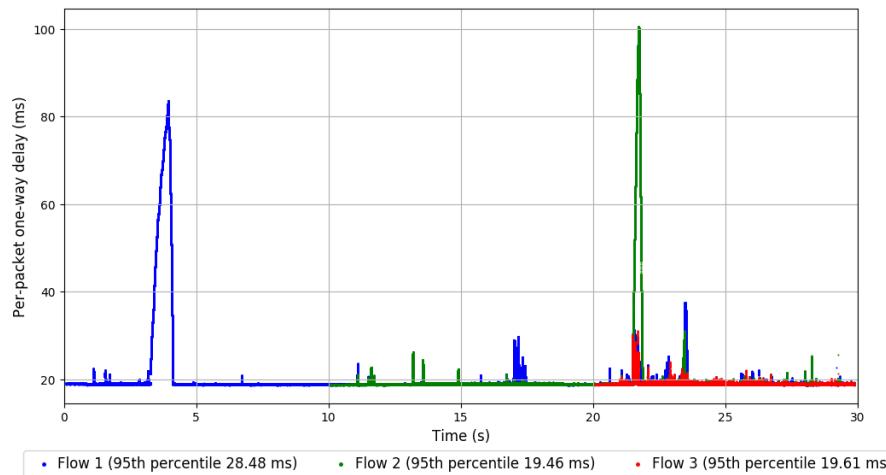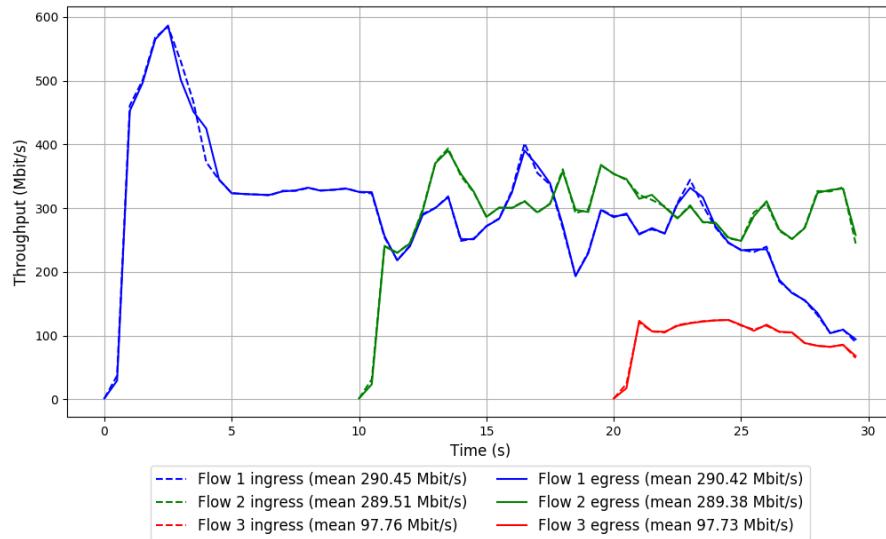
Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-04-25 00:42:54
End at: 2018-04-25 00:43:24
Local clock offset: 0.046 ms
Remote clock offset: -5.471 ms


# Below is generated by plot.py at 2018-04-25 06:01:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 514.99 Mbit/s
95th percentile per-packet one-way delay: 21.991 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 290.42 Mbit/s
95th percentile per-packet one-way delay: 28.480 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 289.38 Mbit/s
95th percentile per-packet one-way delay: 19.464 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 97.73 Mbit/s
95th percentile per-packet one-way delay: 19.611 ms
Loss rate: 0.04%
```

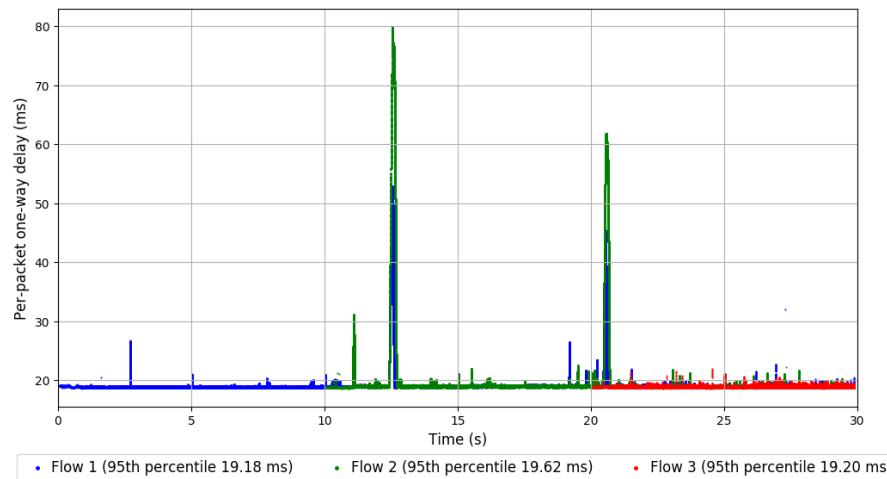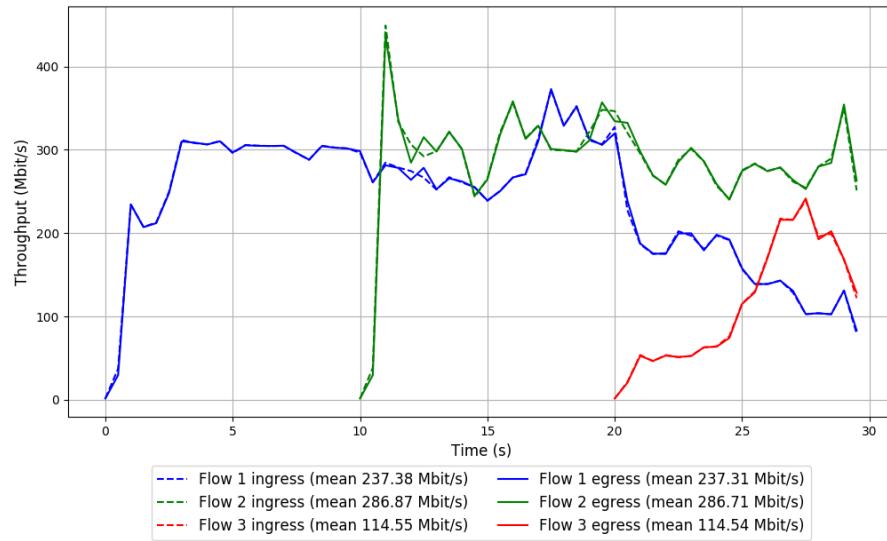# Run 8: Report of PCC-Vivace — Data Link

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-04-25 01:09:44
End at: 2018-04-25 01:10:14
Local clock offset: 0.21 ms
Remote clock offset: -5.371 ms


# Below is generated by plot.py at 2018-04-25 06:02:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.74 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 237.31 Mbit/s
95th percentile per-packet one-way delay: 19.178 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 286.71 Mbit/s
95th percentile per-packet one-way delay: 19.621 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 114.54 Mbit/s
95th percentile per-packet one-way delay: 19.196 ms
Loss rate: 0.01%
```

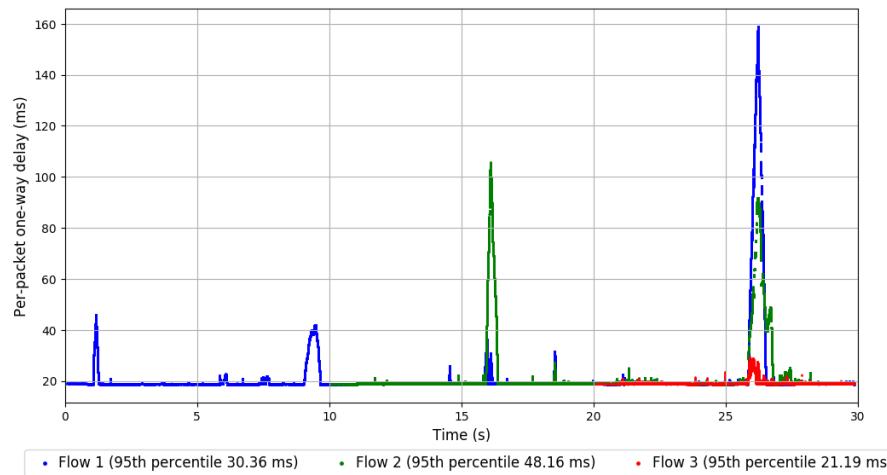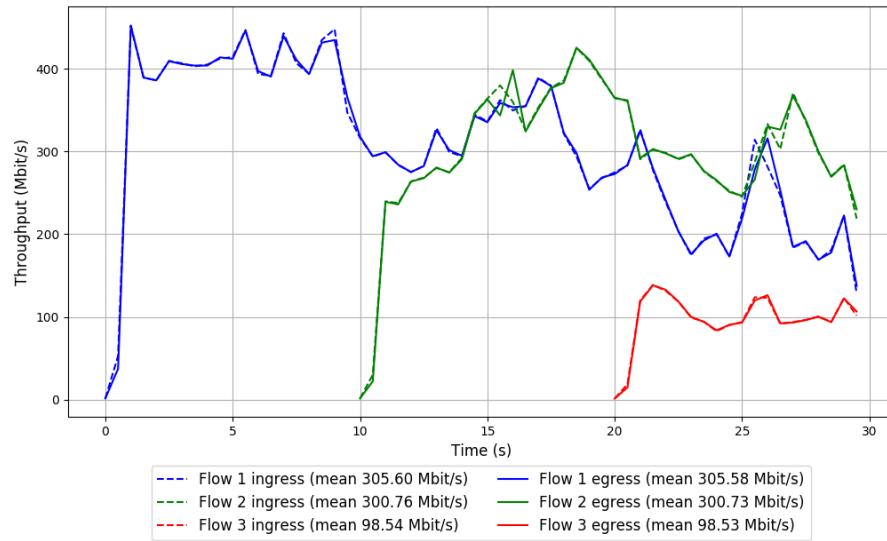Run 9: Report of PCC-Vivace — Data Link

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-04-25 01:36:29
End at: 2018-04-25 01:36:59
Local clock offset: 0.341 ms
Remote clock offset: -6.511 ms


# Below is generated by plot.py at 2018-04-25 06:02:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 537.97 Mbit/s
95th percentile per-packet one-way delay: 35.149 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 305.58 Mbit/s
95th percentile per-packet one-way delay: 30.361 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.73 Mbit/s
95th percentile per-packet one-way delay: 48.162 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 98.53 Mbit/s
95th percentile per-packet one-way delay: 21.188 ms
Loss rate: 0.00%
```

Run 10: Report of PCC-Vivace — Data Link

304

```
Run 1: Statistics of PCC-Expr

Start at: 2018-04-24 21:27:52
End at: 2018-04-24 21:28:22
Local clock offset: 0.326 ms
Remote clock offset: -5.273 ms
```

Run 1: Report of PCC-Expr — Data Link

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```
Run 2: Statistics of PCC-Expr

Start at: 2018-04-24 21:54:24
End at: 2018-04-24 21:54:54
Local clock offset: 0.166 ms
Remote clock offset: -5.373 ms
```

Run 2: Report of PCC-Expr — Data Link

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```
Run 3: Statistics of PCC-Expr

Start at: 2018-04-24 22:21:01
End at: 2018-04-24 22:21:31
Local clock offset: 0.04 ms
Remote clock offset: -5.831 ms
```

Run 3: Report of PCC-Expr — Data Link

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```
Run 4: Statistics of PCC-Expr

Start at: 2018-04-24 22:47:42
End at: 2018-04-24 22:48:12
Local clock offset: -0.078 ms
Remote clock offset: -5.575 ms
```

Run 4: Report of PCC-Expr — Data Link

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```
Run 5: Statistics of PCC-Expr

Start at: 2018-04-24 23:14:31
End at: 2018-04-24 23:15:01
Local clock offset: 0.014 ms
Remote clock offset: -6.207 ms
```

Run 5: Report of PCC-Expr — Data Link

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```
Run 6: Statistics of PCC-Expr

Start at: 2018-04-24 23:41:08
End at: 2018-04-24 23:41:38
Local clock offset: 0.513 ms
Remote clock offset: -6.214 ms
```

Run 6: Report of PCC-Expr — Data Link

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Run 7: Statistics of PCC-Expr

Start at: 2018-04-25 00:07:41
End at: 2018-04-25 00:08:11
Local clock offset: 0.074 ms
Remote clock offset: -5.54 ms

Run 7: Report of PCC-Expr — Data Link

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```
Run 8: Statistics of PCC-Expr

Start at: 2018-04-25 00:34:08
End at: 2018-04-25 00:34:38
Local clock offset: -0.007 ms
Remote clock offset: -5.56 ms
```

Run 8: Report of PCC-Expr — Data Link

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```
Run 9: Statistics of PCC-Expr

Start at: 2018-04-25 01:00:48
End at: 2018-04-25 01:01:18
Local clock offset: 0.068 ms
Remote clock offset: -5.407 ms
```

Run 9: Report of PCC-Expr — Data Link

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```
Run 10: Statistics of PCC-Expr

Start at: 2018-04-25 01:27:32
End at: 2018-04-25 01:28:02
Local clock offset: 0.4 ms
Remote clock offset: -6.168 ms
```

Run 10: Report of PCC-Expr — Data Link

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