Pantheon Report

Generated at 2017-11-21 12:35:28 (UTC).

Data path: GCE Sydney Ethernet (*local*) →GCE London Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.
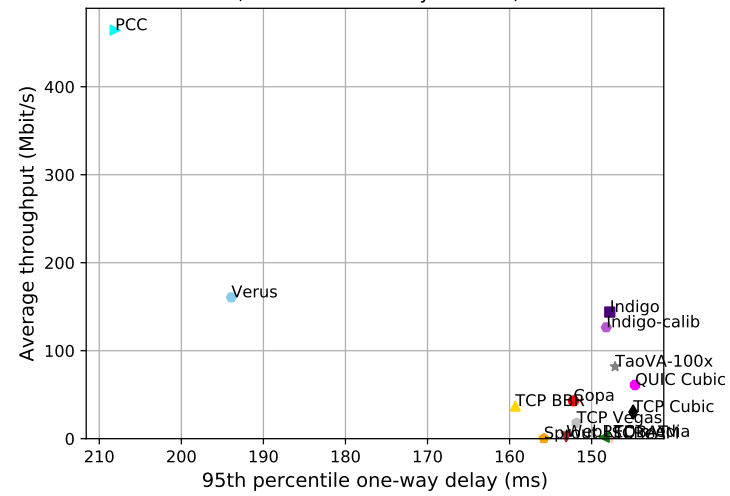
Each test lasted for 30 seconds running 1 flow.

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

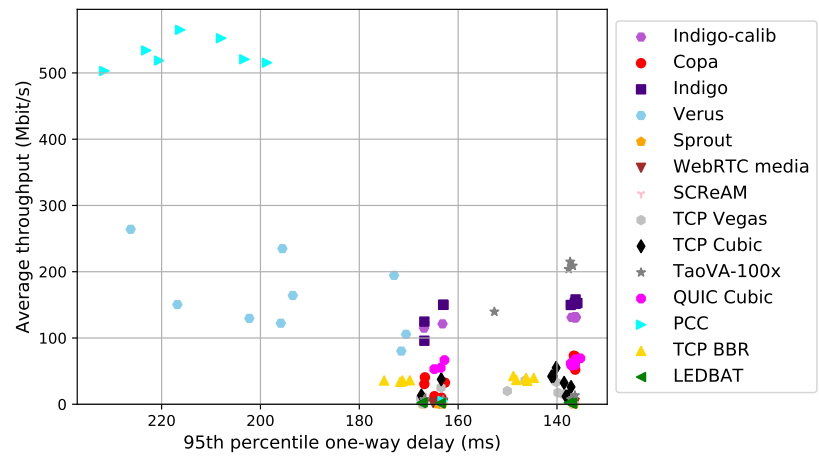Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

```
Git summary:
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Sydney Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)

test from GCE Sydney Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	37.08	159.30	0.19
TCP Cubic	9	30.31	144.95	0.05
LEDBAT	10	1.64	148.47	0.19
PCC	8	464.28	208.06	2.38
QUIC Cubic	10	61.09	144.71	0.00
SCReAM	10	0.21	147.55	0.02
WebRTC media	10	2.08	153.10	0.00
Sprout	10	0.34	155.82	0.01
TaoVA-100x	10	81.88	147.14	0.00
TCP Vegas	10	17.77	151.84	0.02
Verus	9	160.65	193.91	0.43
Copa	9	43.01	152.22	0.00
Indigo	10	143.90	147.79	0.03
Indigo-calib	10	126.61	148.22	0.02

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-21 09:50:20
End at: 2017-11-21 09:50:50

# Below is generated by plot.py at 2017-11-21 12:10:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 144.700 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 144.700 ms
Loss rate: 0.04%
```
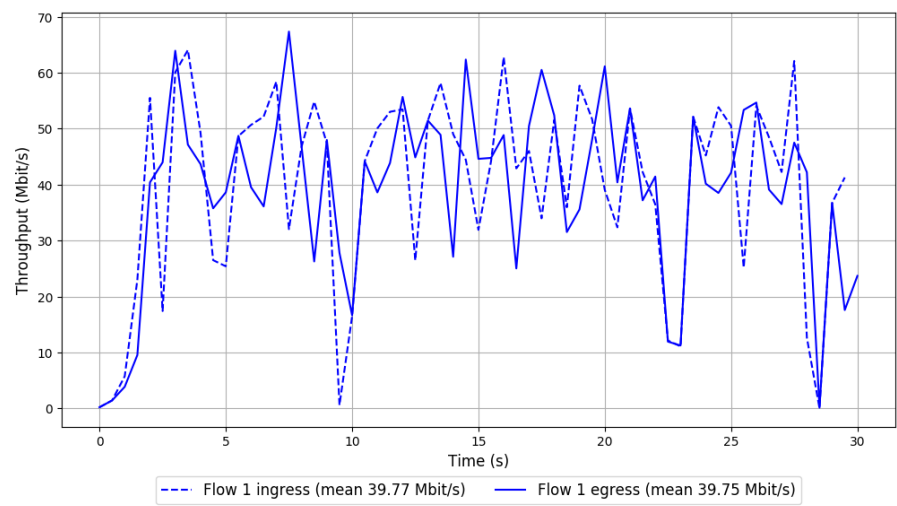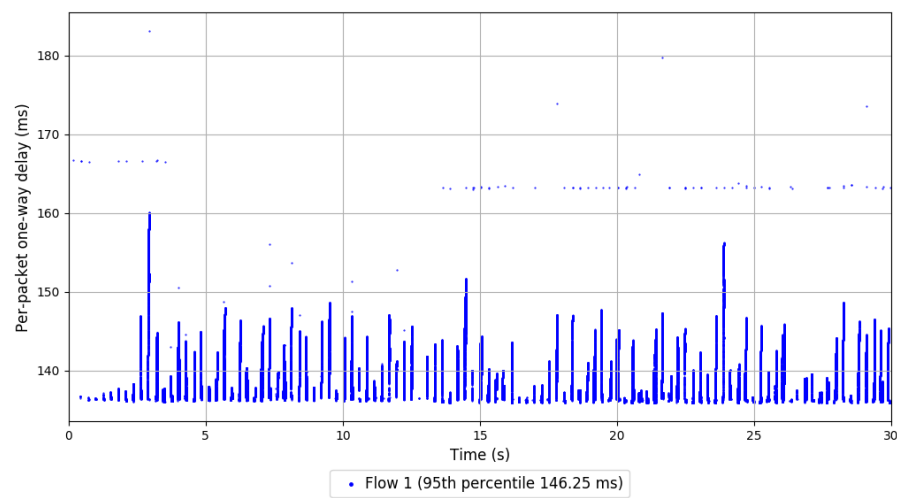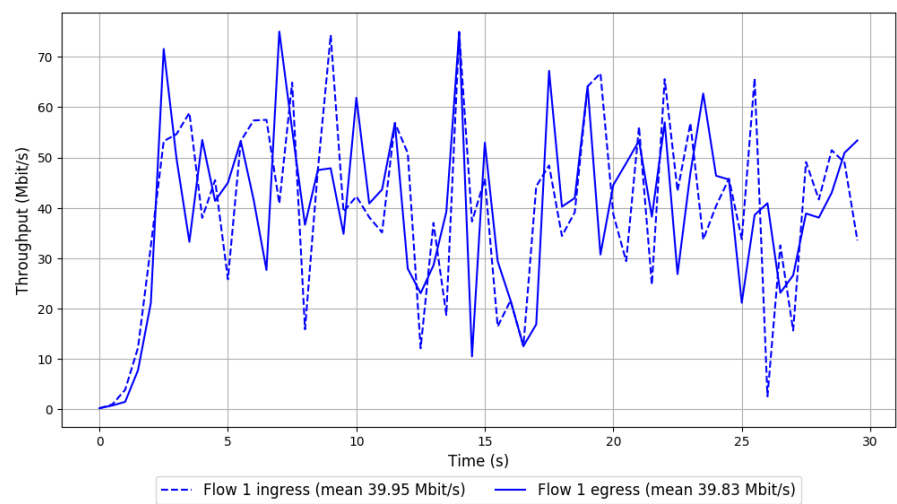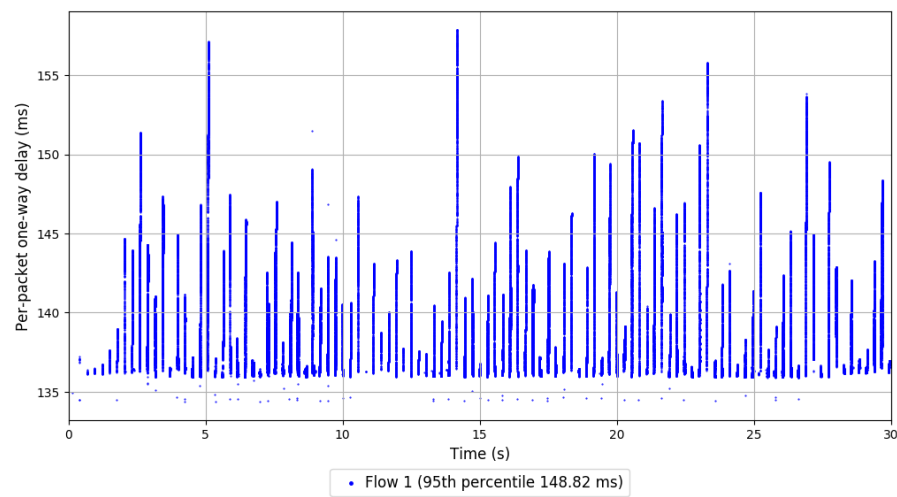
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-11-21 10:01:35
End at: 2017-11-21 10:02:05

# Below is generated by plot.py at 2017-11-21 12:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.83 Mbit/s
95th percentile per-packet one-way delay: 146.250 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 39.83 Mbit/s
95th percentile per-packet one-way delay: 146.250 ms
Loss rate: 0.30%
```
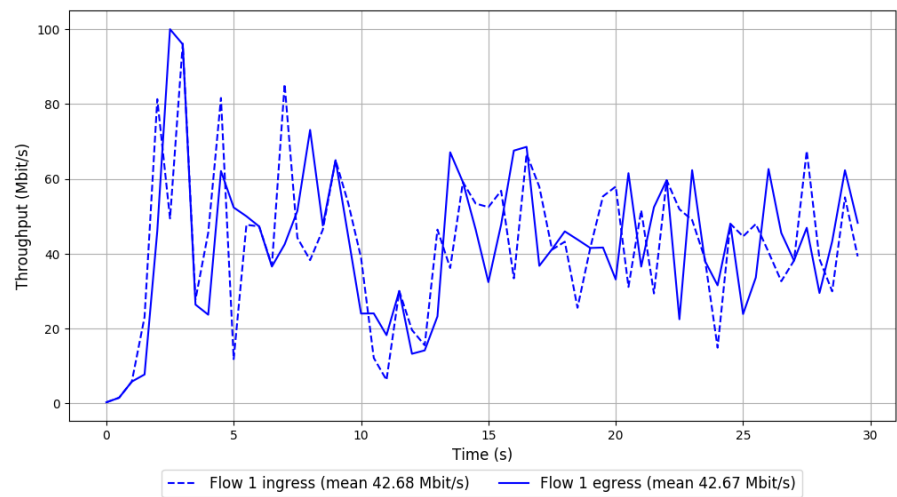
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-11-21 10:12:50
End at: 2017-11-21 10:13:20

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 148.824 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 148.824 ms
Loss rate: 0.01%
```
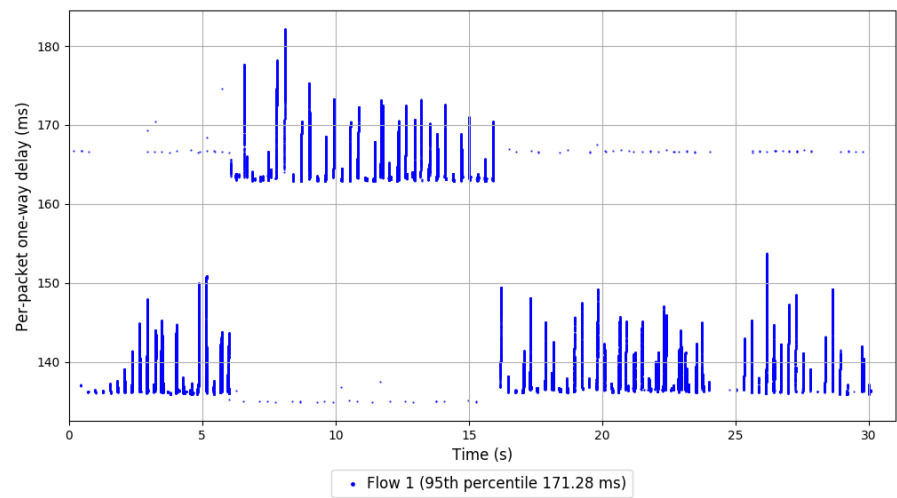
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2017-11-21 10:24:22
End at: 2017-11-21 10:24:52

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 171.280 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 171.280 ms
Loss rate: 0.15%
```
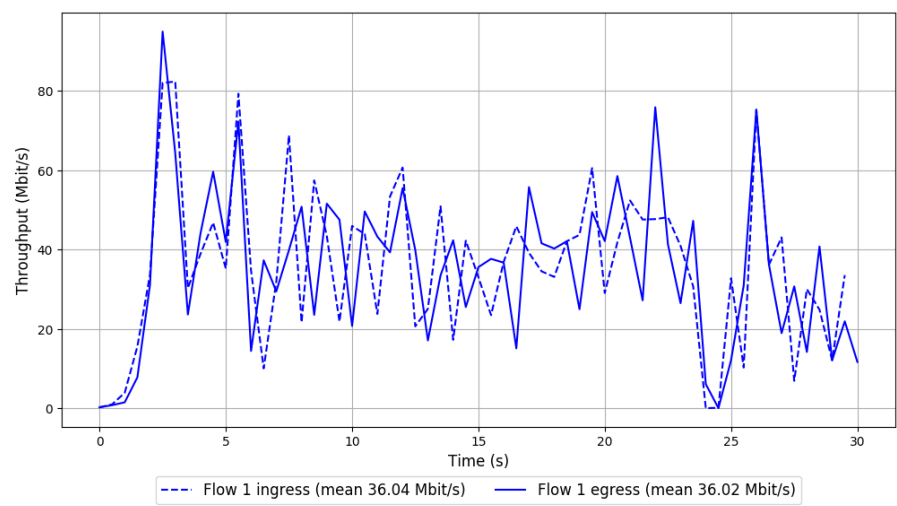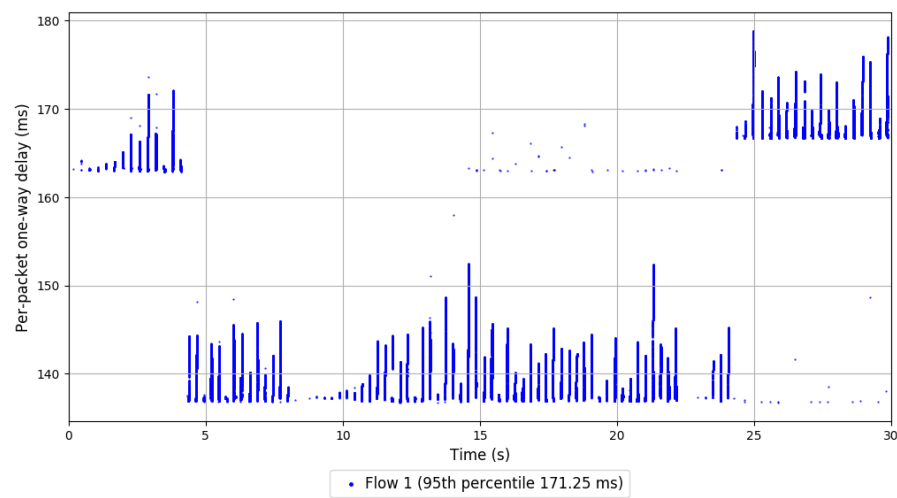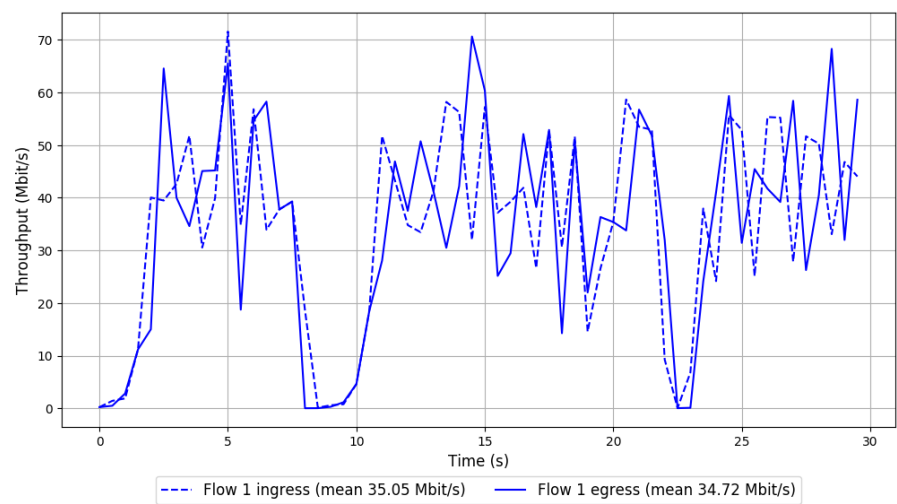
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 36.04 Mbit/s) — — —   Flow 1 egress (mean 36.02 Mbit/s) ———

• Flow 1 (95th percentile 171.28 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-11-21 10:35:54
End at: 2017-11-21 10:36:24

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.72 Mbit/s
95th percentile per-packet one-way delay: 171.247 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 34.72 Mbit/s
95th percentile per-packet one-way delay: 171.247 ms
Loss rate: 0.92%
```
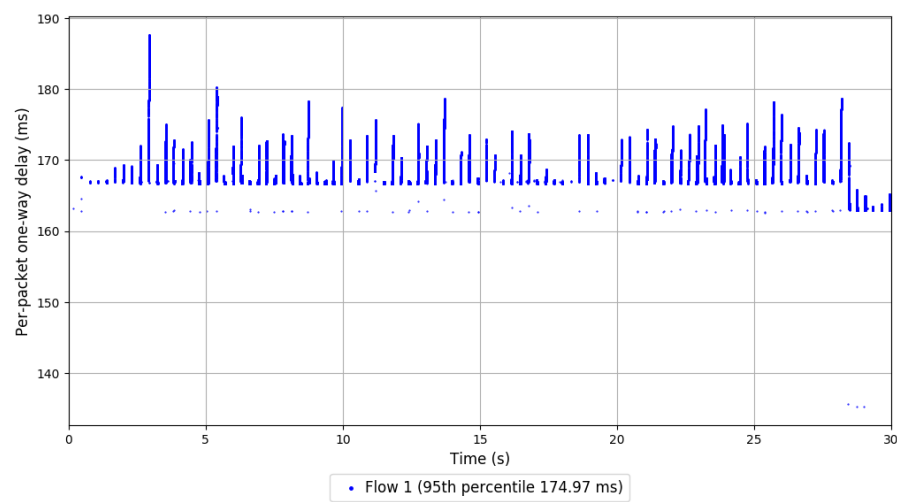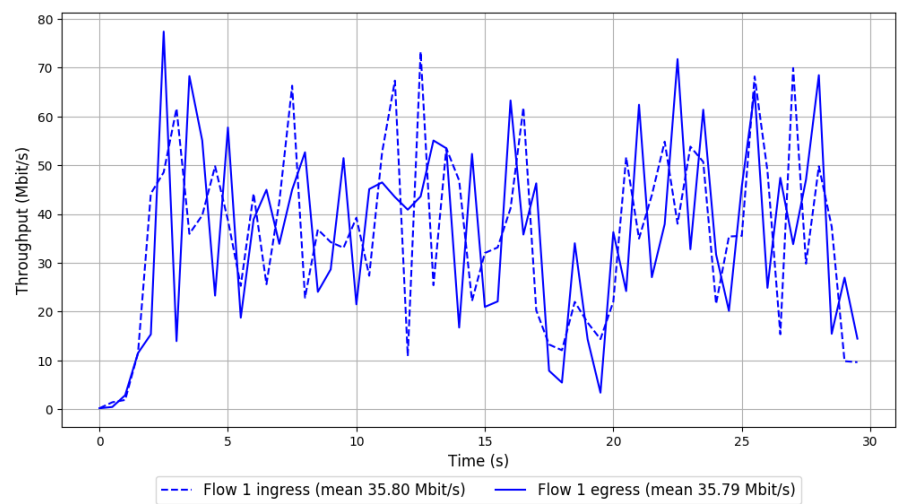
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2017-11-21 10:47:10
End at: 2017-11-21 10:47:40

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 174.973 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 174.973 ms
Loss rate: 0.03%
```
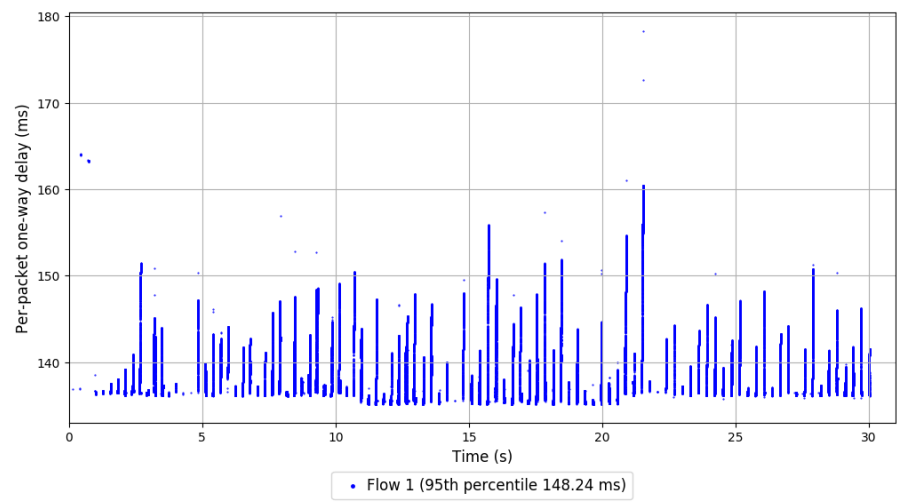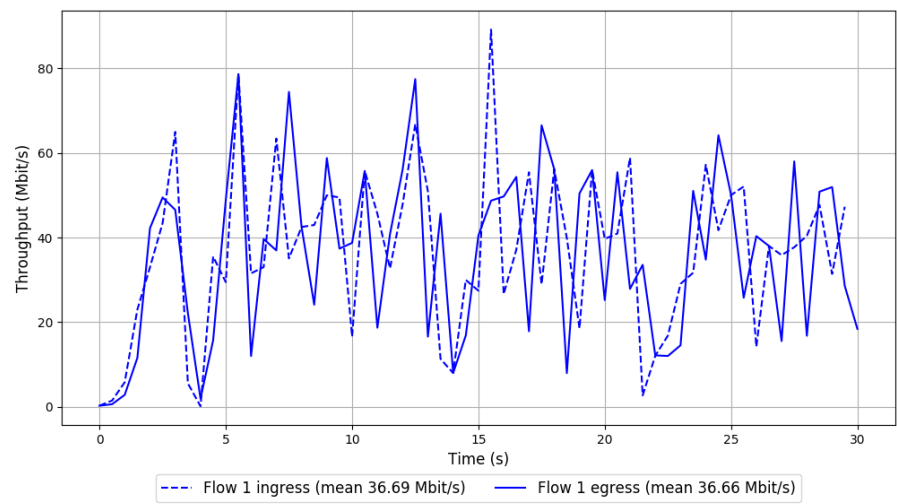
Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2017-11-21 10:58:17
End at: 2017-11-21 10:58:48

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 148.235 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 148.235 ms
Loss rate: 0.06%
```
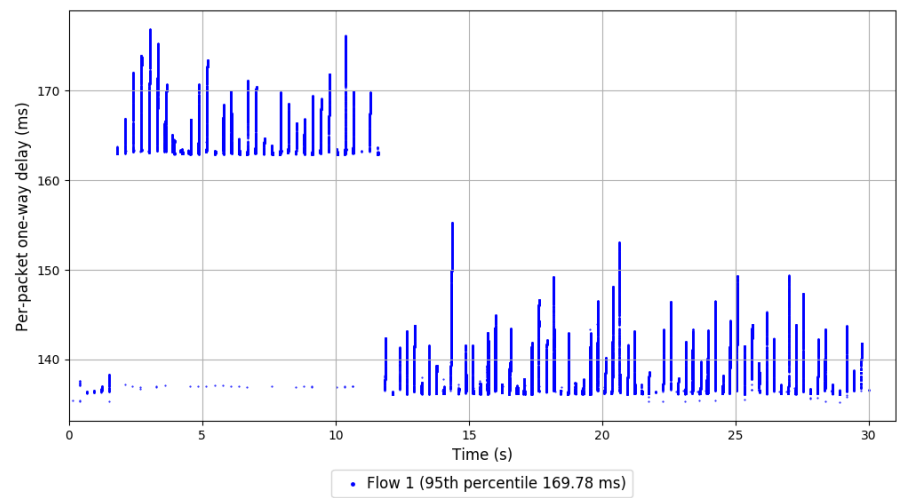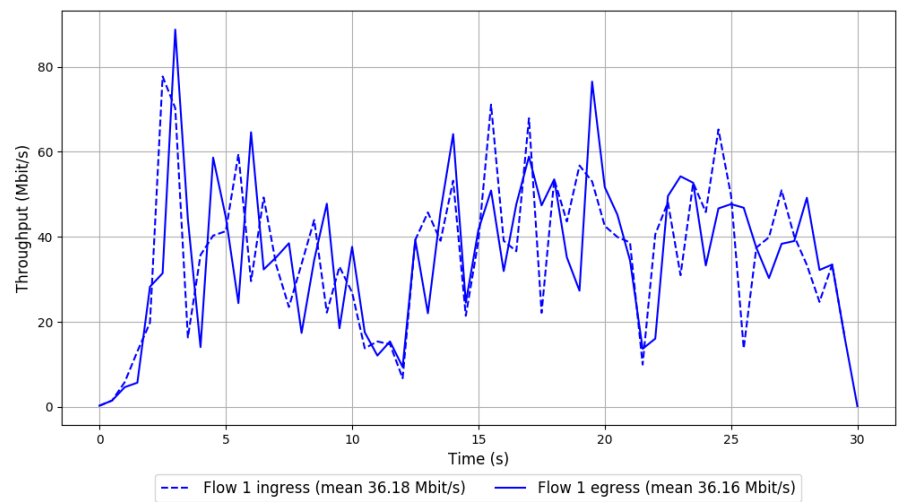
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 36.69 Mbit/s) ---- Flow 1 egress (mean 36.66 Mbit/s)

Flow 1 (95th percentile 148.24 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2017-11-21 11:09:07
End at: 2017-11-21 11:09:37

# Below is generated by plot.py at 2017-11-21 12:11:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 169.783 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 169.783 ms
Loss rate: 0.03%
```

Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 36.18 Mbit/s)   Flow 1 egress (mean 36.16 Mbit/s)

Flow 1 (95th percentile 169.78 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2017-11-21 11:20:21
End at: 2017-11-21 11:20:51

# Below is generated by plot.py at 2017-11-21 12:11:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 171.707 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 171.707 ms
Loss rate: 0.06%
```
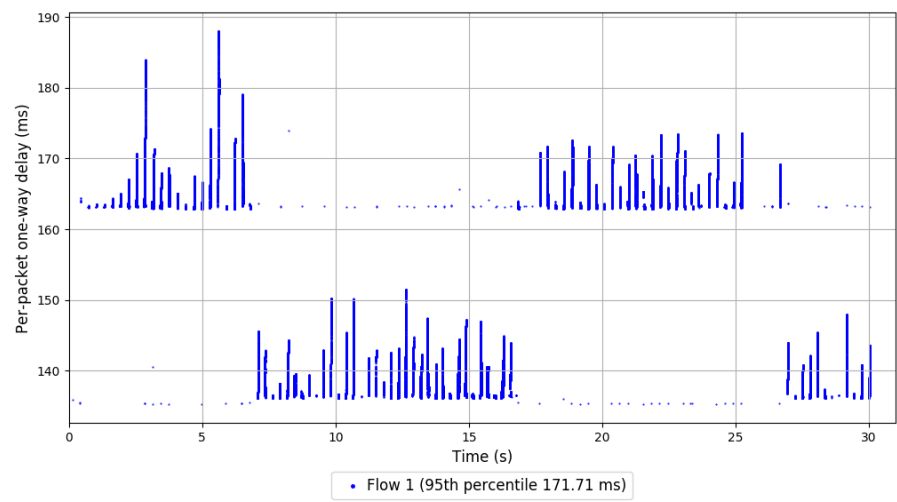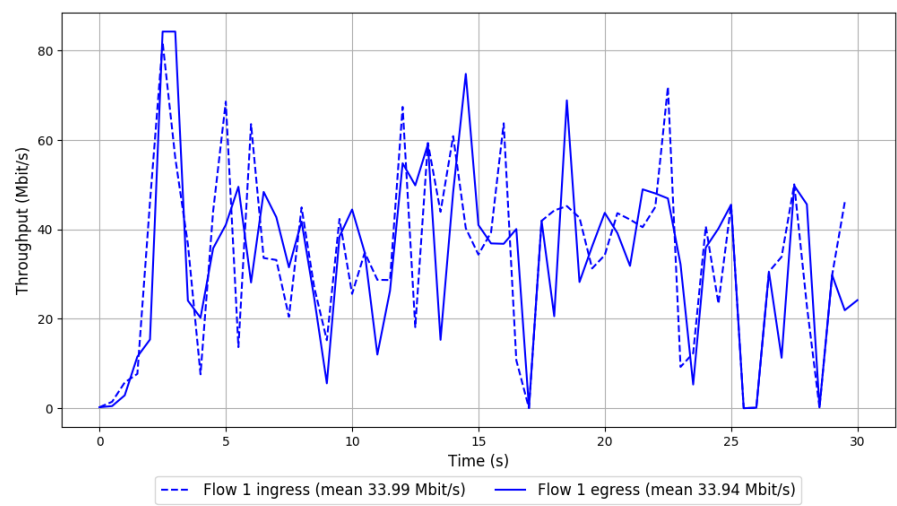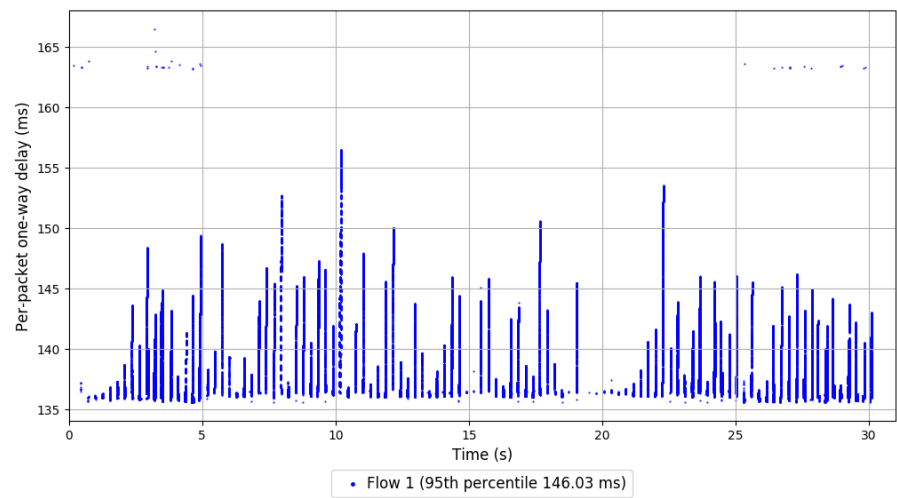
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2017-11-21 11:31:43
End at: 2017-11-21 11:32:13

# Below is generated by plot.py at 2017-11-21 12:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 146.025 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 146.025 ms
Loss rate: 0.28%
```
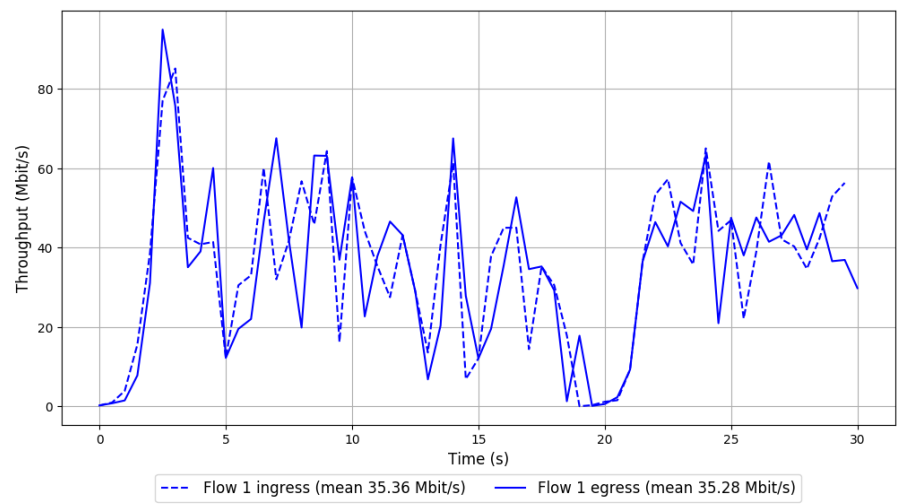
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 35.36 Mbit/s)   Flow 1 egress (mean 35.28 Mbit/s)

• Flow 1 (95th percentile 146.03 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2017-11-21 09:53:48
End at: 2017-11-21 09:54:18

# Below is generated by plot.py at 2017-11-21 12:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 138.172 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 138.172 ms
Loss rate: 0.16%
```
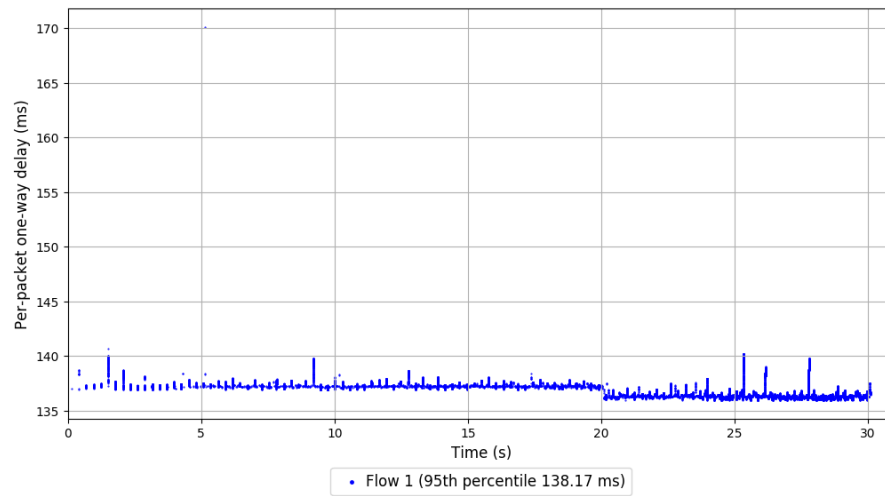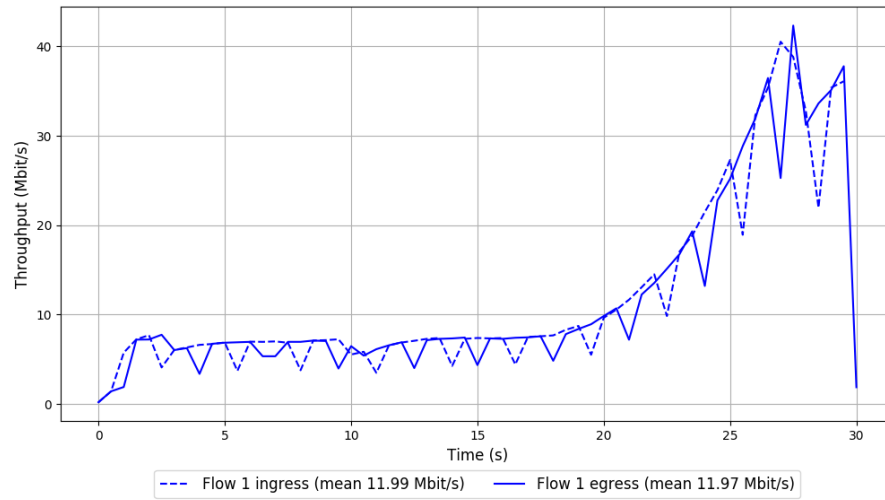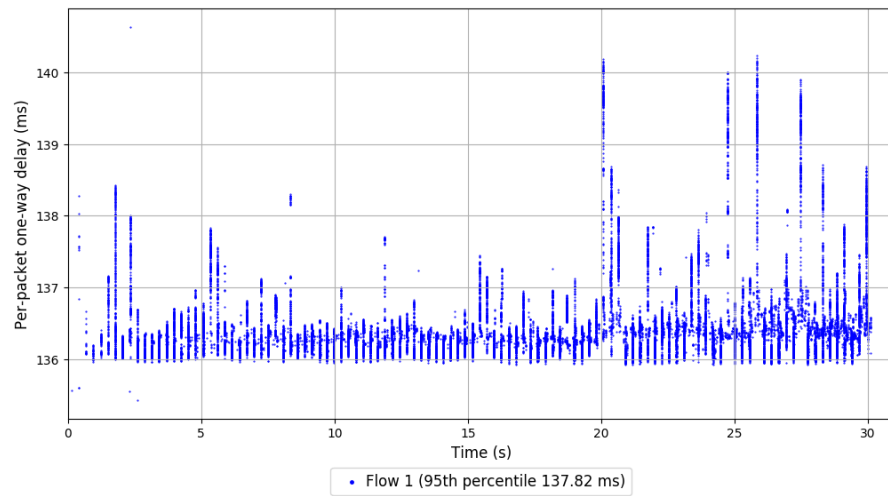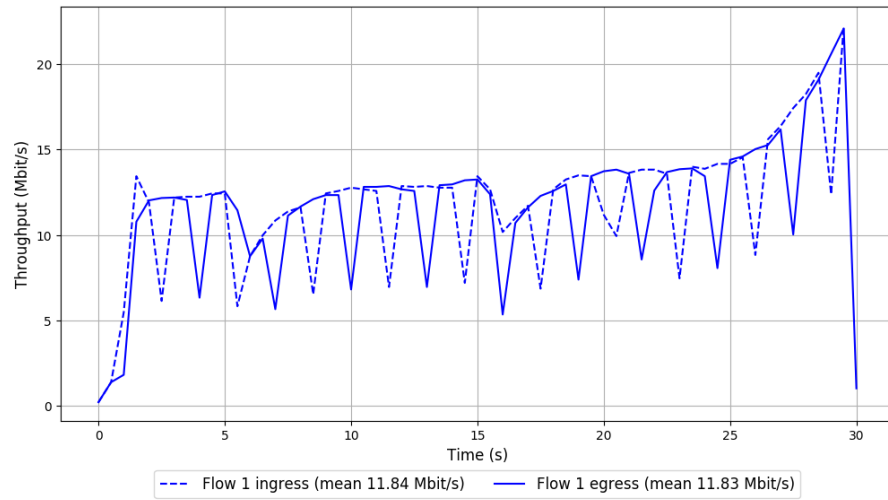
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-11-21 10:04:52
End at: 2017-11-21 10:05:22

# Below is generated by plot.py at 2017-11-21 12:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 137.821 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 137.821 ms
Loss rate: 0.10%
```
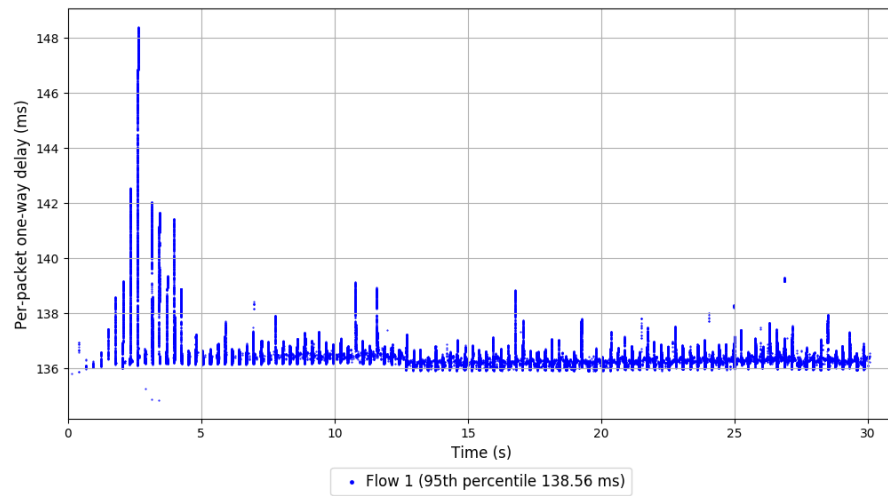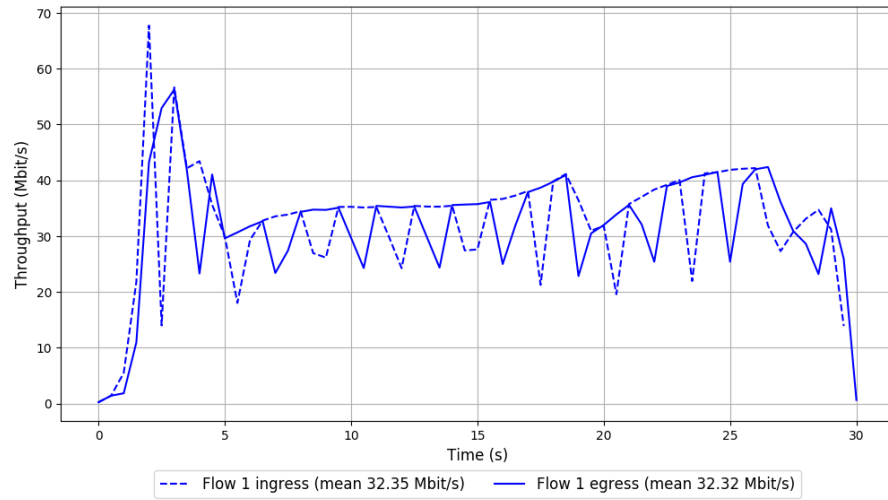
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 11.84 Mbit/s) — — — Flow 1 egress (mean 11.83 Mbit/s)

· Flow 1 (95th percentile 137.82 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 10:16:26
End at: 2017-11-21 10:16:56

# Below is generated by plot.py at 2017-11-21 12:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 138.559 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 138.559 ms
Loss rate: 0.07%
```
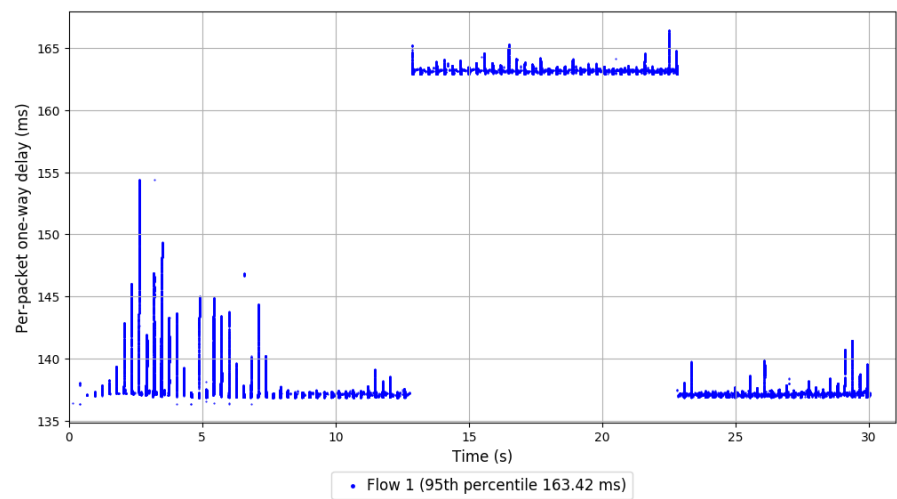
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 32.35 Mbit/s) --- Flow 1 egress (mean 32.32 Mbit/s)

• Flow 1 (95th percentile 138.56 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 10:28:05
End at: 2017-11-21 10:28:35

# Below is generated by plot.py at 2017-11-21 12:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 163.418 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 163.418 ms
Loss rate: 0.01%
```
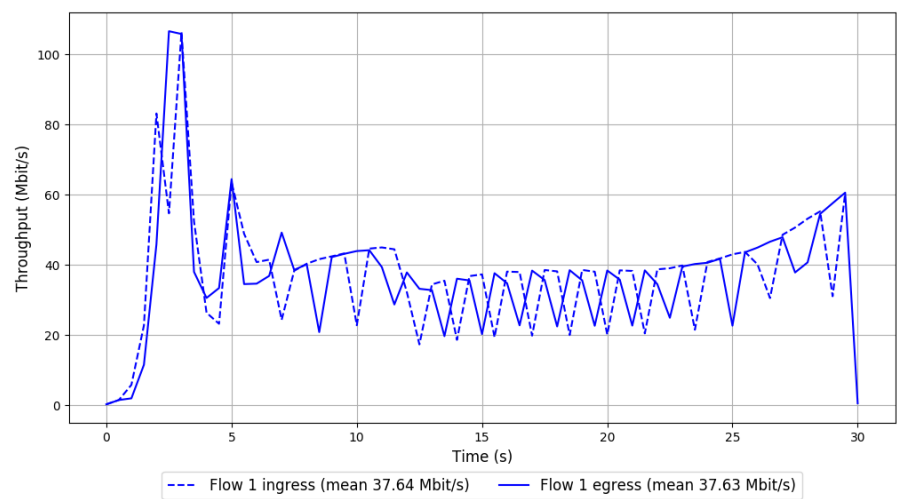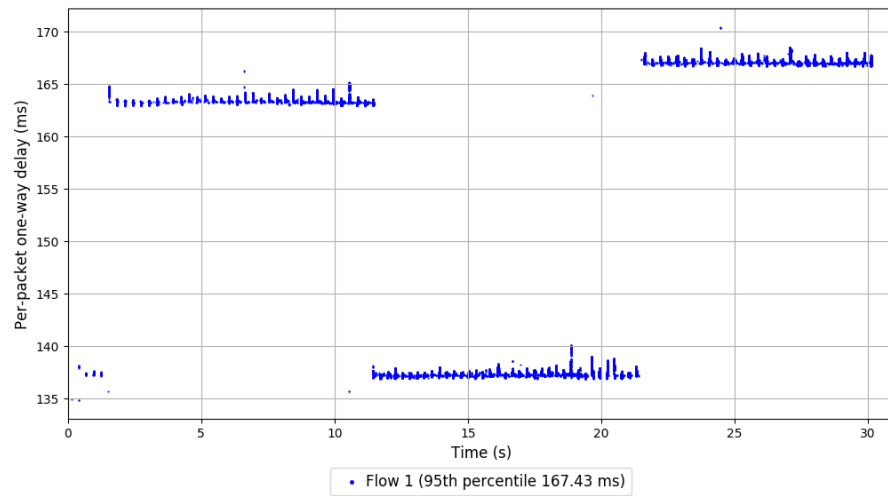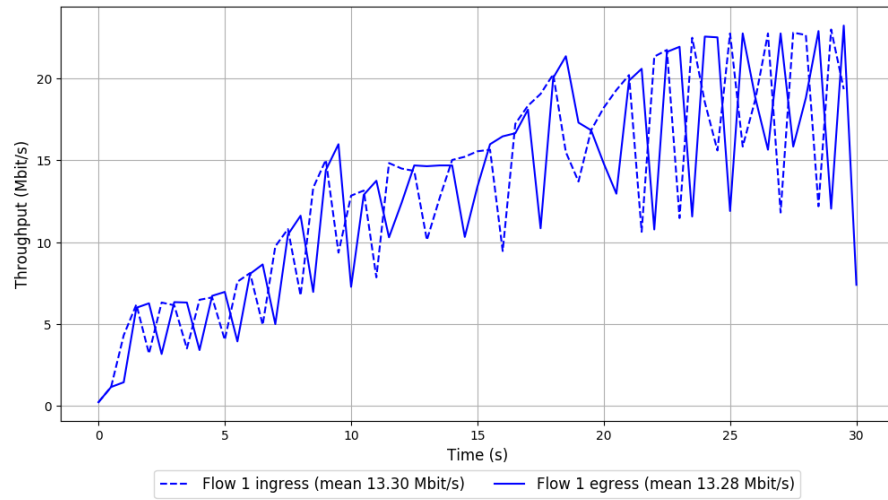
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 10:39:17
End at: 2017-11-21 10:39:47


# Below is generated by plot.py at 2017-11-21 12:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 167.434 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 167.434 ms
Loss rate: 0.05%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 13.30 Mbit/s) --- Flow 1 egress (mean 13.28 Mbit/s)

Flow 1 (95th percentile 167.43 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 10:50:35
End at: 2017-11-21 10:51:05

# Below is generated by plot.py at 2017-11-21 12:11:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.04 Mbit/s
95th percentile per-packet one-way delay: 141.087 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 42.04 Mbit/s
95th percentile per-packet one-way delay: 141.087 ms
Loss rate: 0.03%
```
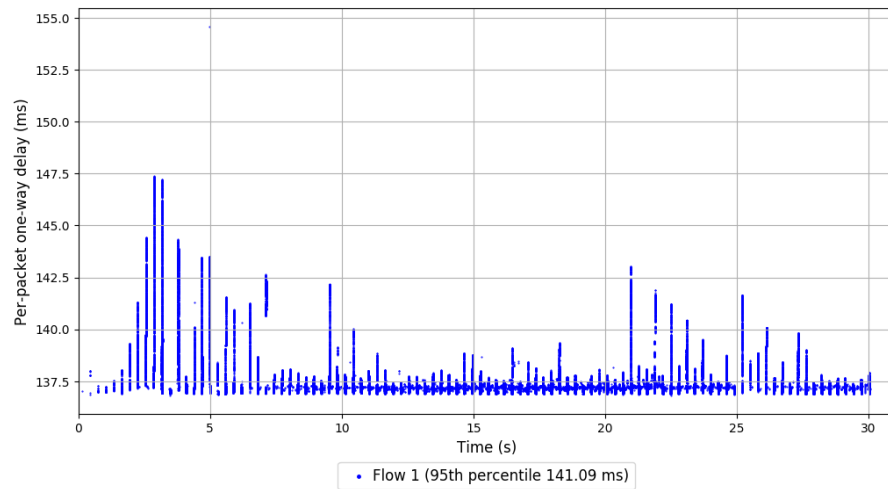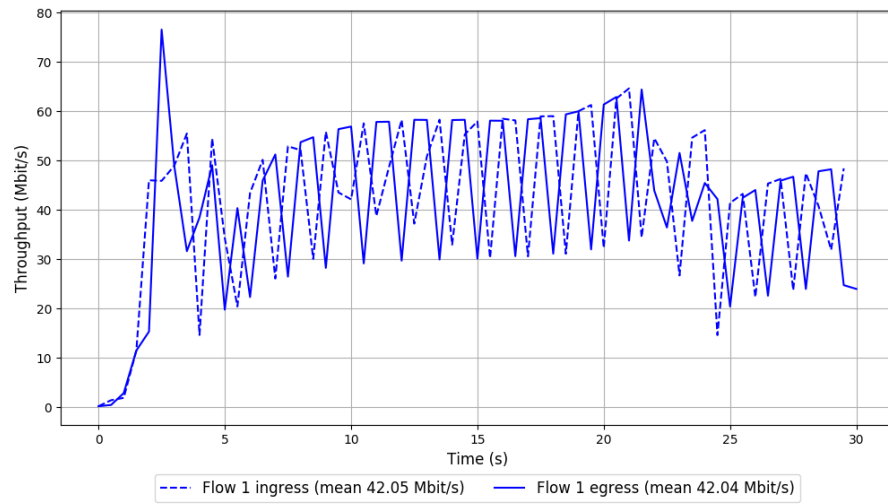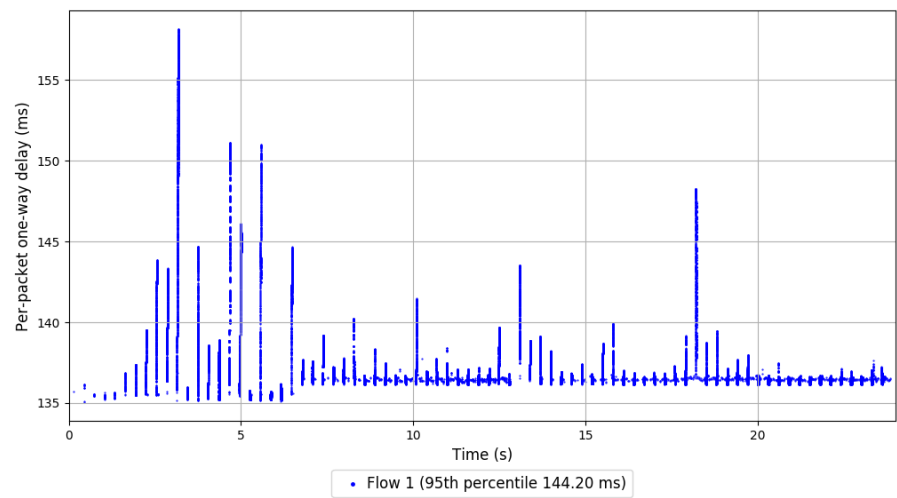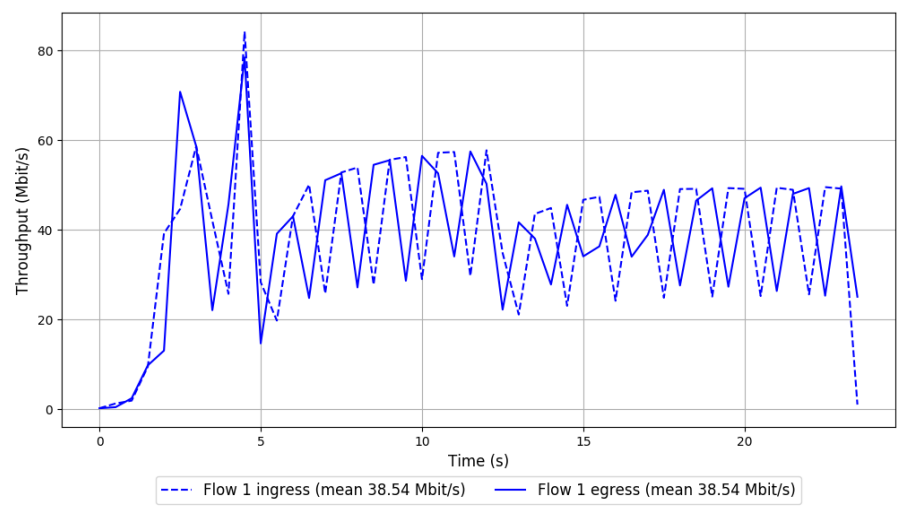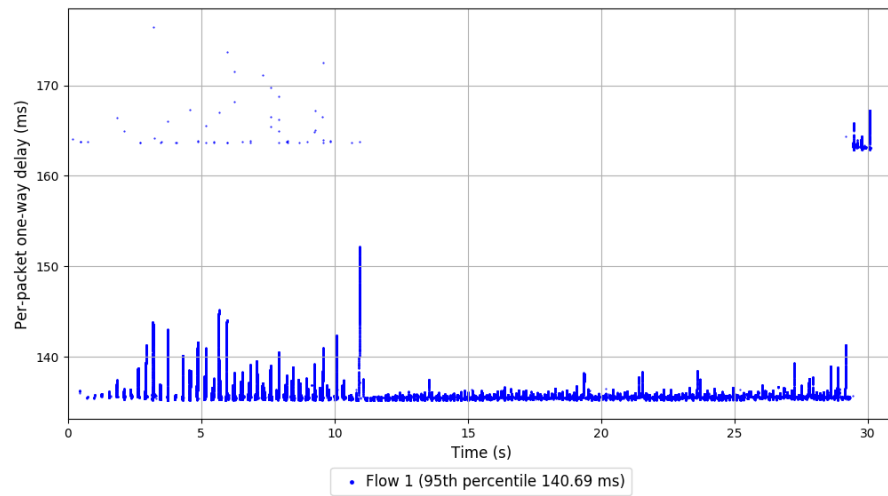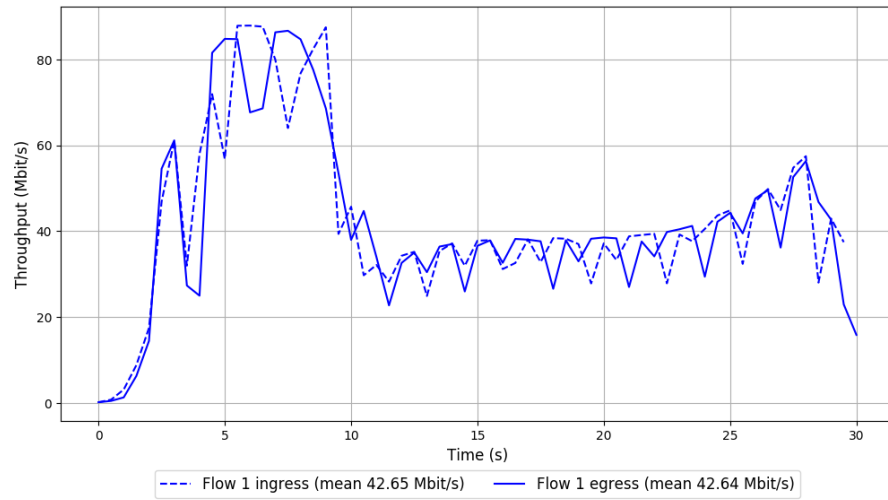
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 42.05 Mbit/s)   Flow 1 egress (mean 42.04 Mbit/s)

Flow 1 (95th percentile 141.09 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 11:01:15
End at: 2017-11-21 11:01:45
```

Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 11:12:29
End at: 2017-11-21 11:12:59

# Below is generated by plot.py at 2017-11-21 12:12:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.64 Mbit/s
95th percentile per-packet one-way delay: 140.690 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 42.64 Mbit/s
95th percentile per-packet one-way delay: 140.690 ms
Loss rate: 0.05%
```
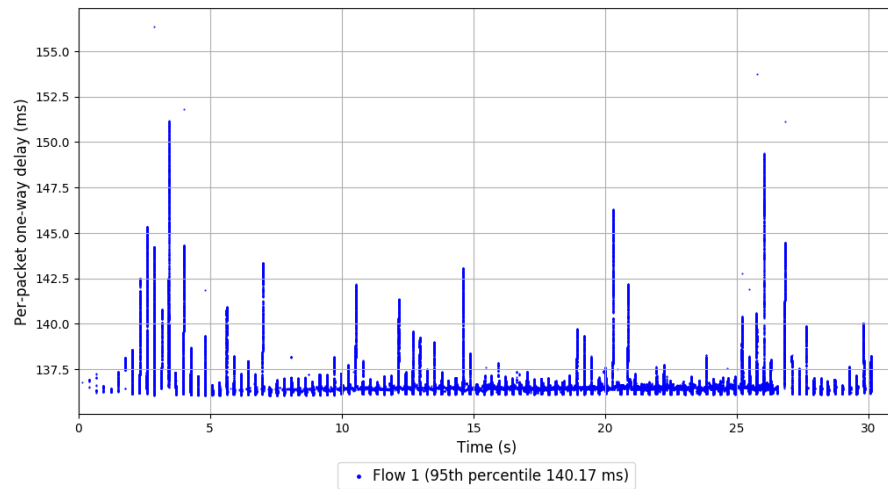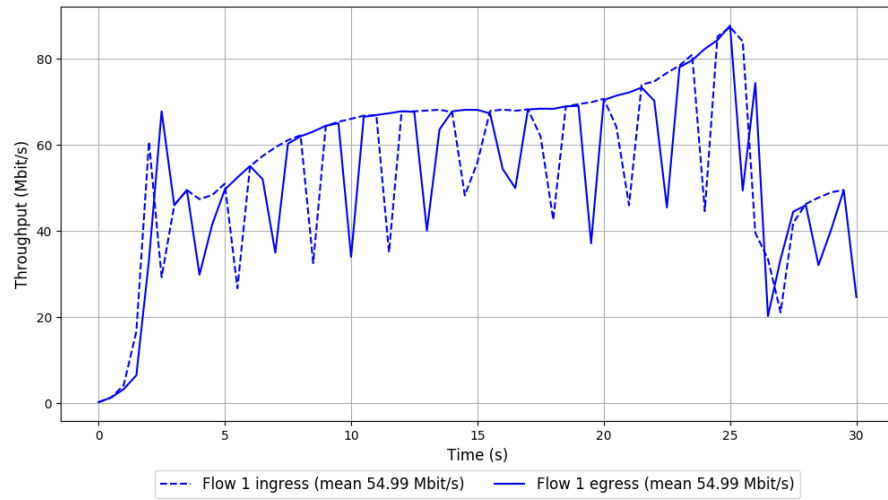
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 42.65 Mbit/s) ----- Flow 1 egress (mean 42.64 Mbit/s) ——

• Flow 1 (95th percentile 140.69 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 11:23:48
End at: 2017-11-21 11:24:18


# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 140.174 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 140.174 ms
Loss rate: 0.00%
```

Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 54.99 Mbit/s)　　Flow 1 egress (mean 54.99 Mbit/s)

Flow 1 (95th percentile 140.17 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 11:35:04
End at: 2017-11-21 11:35:34

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.07 Mbit/s
95th percentile per-packet one-way delay: 137.156 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 26.07 Mbit/s
95th percentile per-packet one-way delay: 137.156 ms
Loss rate: 0.01%
```
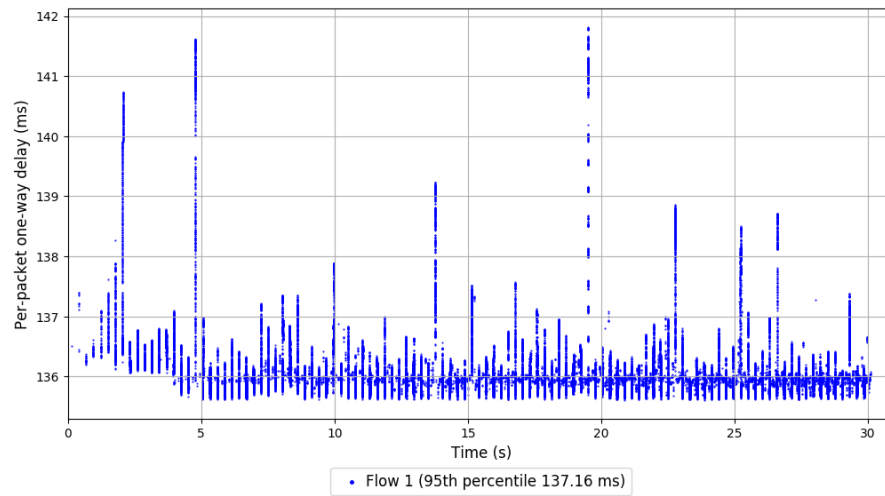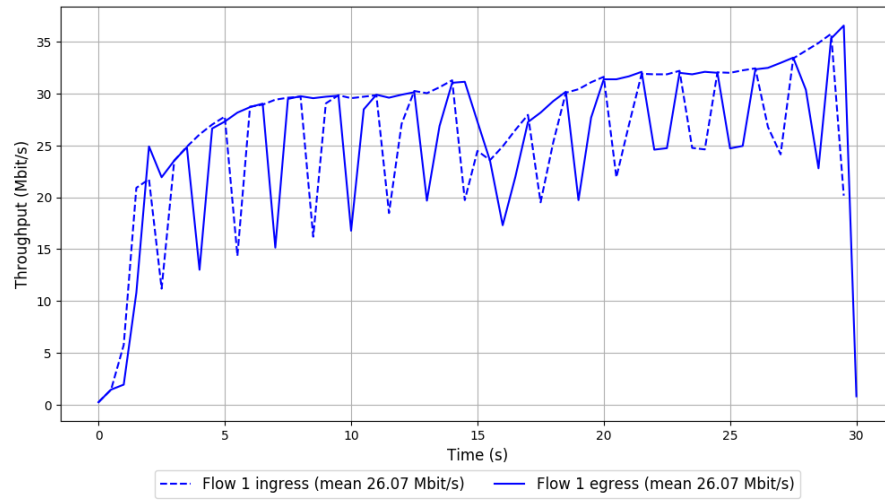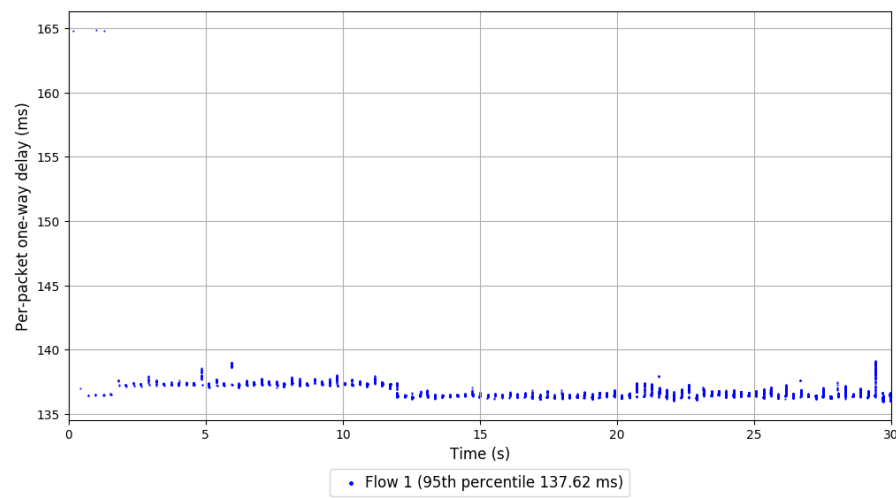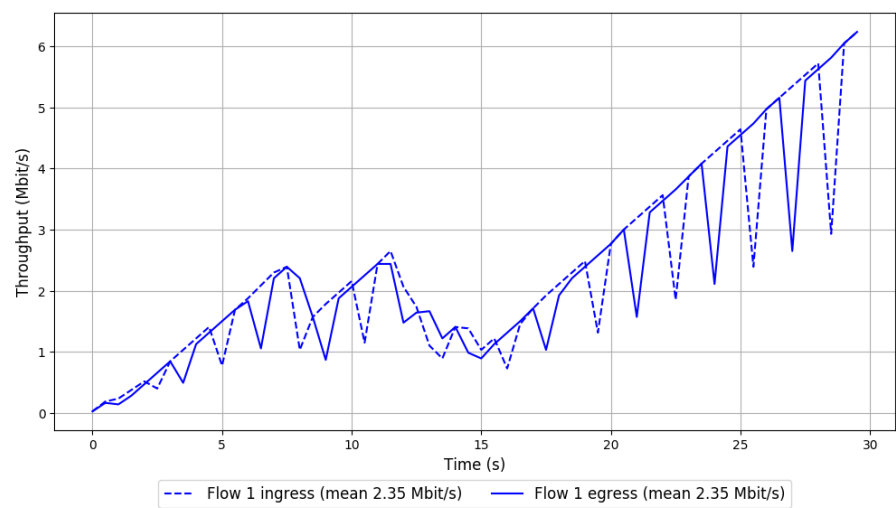
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 26.07 Mbit/s)   Flow 1 egress (mean 26.07 Mbit/s)

Flow 1 (95th percentile 137.16 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2017-11-21 09:46:16
End at: 2017-11-21 09:46:46

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 137.625 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 137.625 ms
Loss rate: 0.00%
```
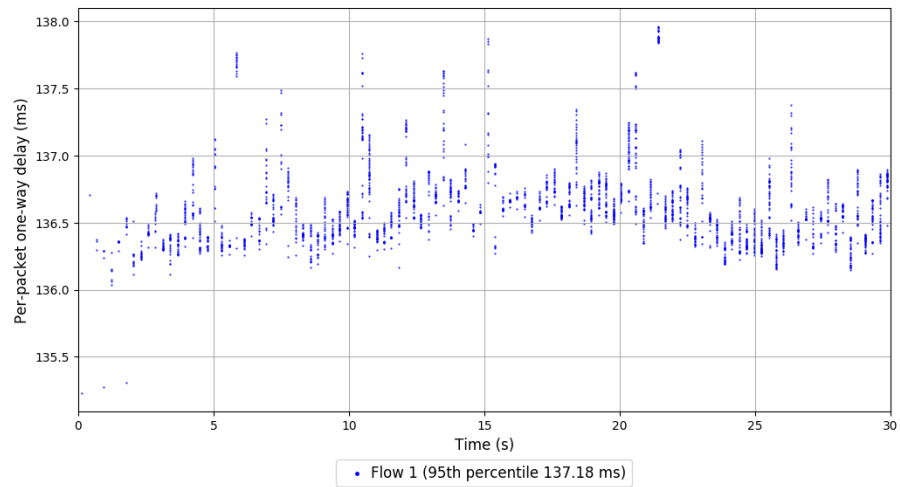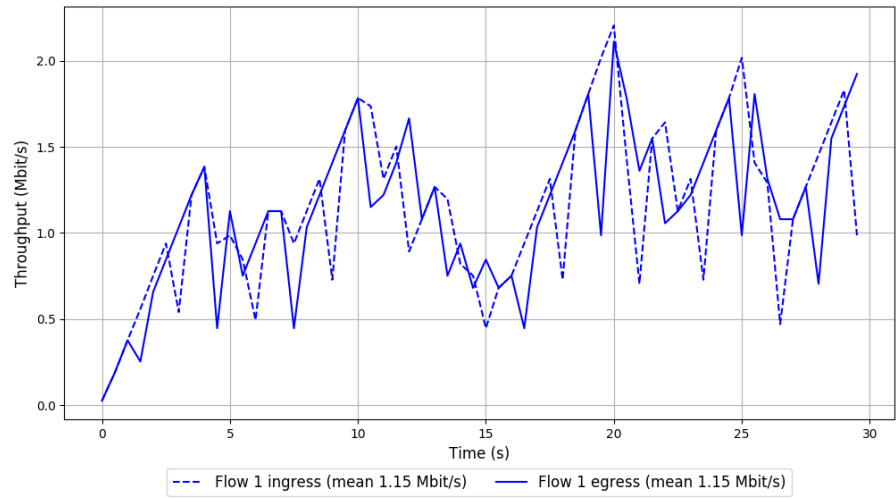
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-11-21 09:57:26
End at: 2017-11-21 09:57:56

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 137.180 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 137.180 ms
Loss rate: 0.17%
```
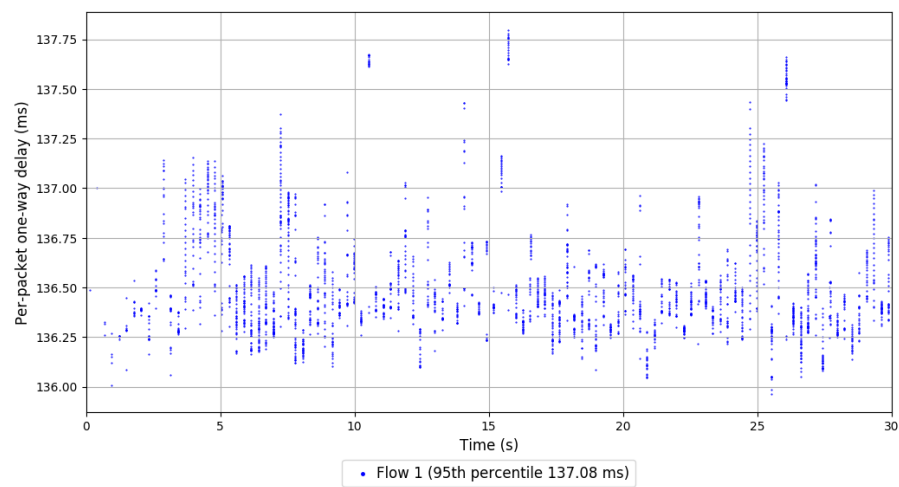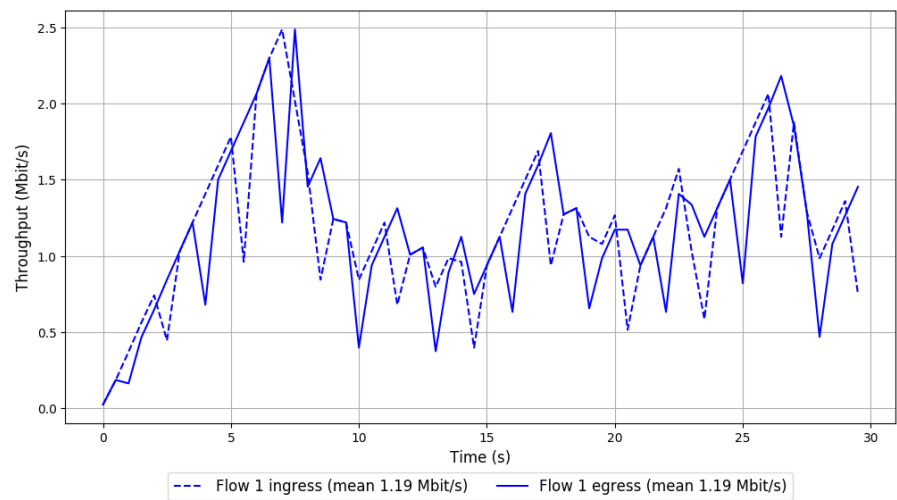
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.15 Mbit/s) --- Flow 1 egress (mean 1.15 Mbit/s)

• Flow 1 (95th percentile 137.18 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2017-11-21 10:08:31
End at: 2017-11-21 10:09:01

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 137.079 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 137.079 ms
Loss rate: 0.17%
```
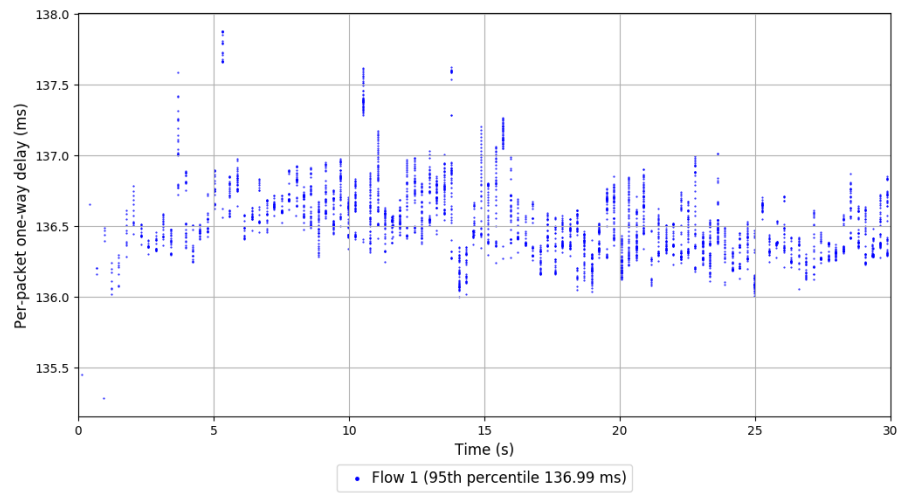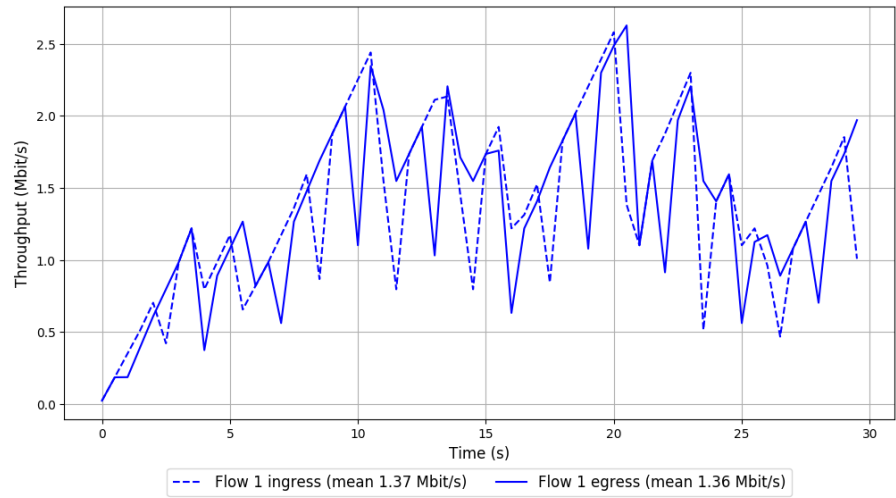
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-11-21 10:20:05
End at: 2017-11-21 10:20:35

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 136.989 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 136.989 ms
Loss rate: 0.46%
```
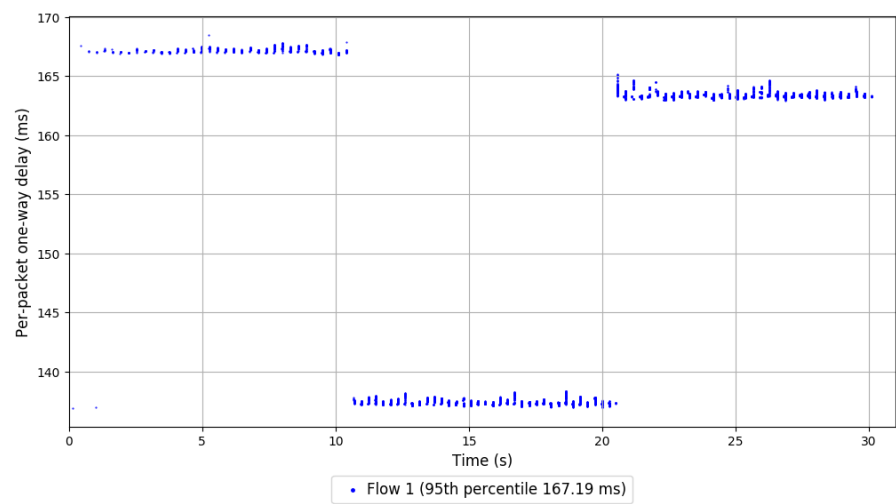
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2017-11-21 10:31:48
End at: 2017-11-21 10:32:18

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 167.193 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 167.193 ms
Loss rate: 0.00%
```
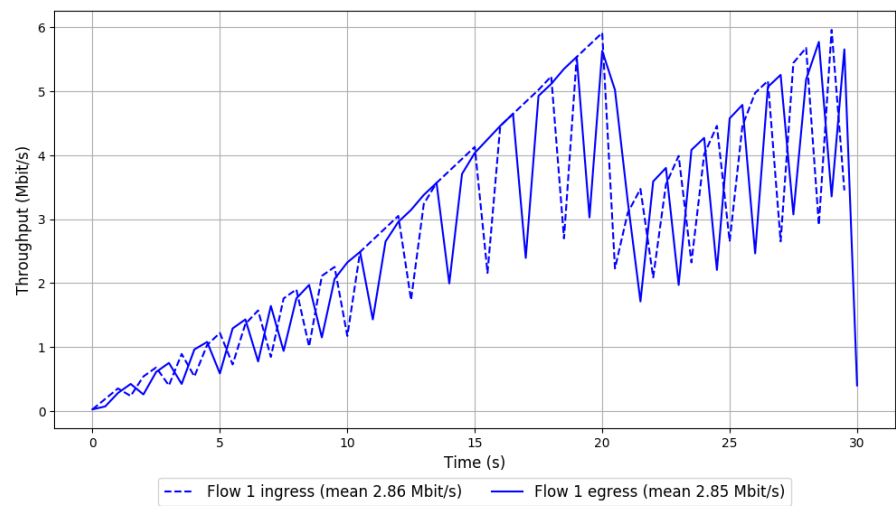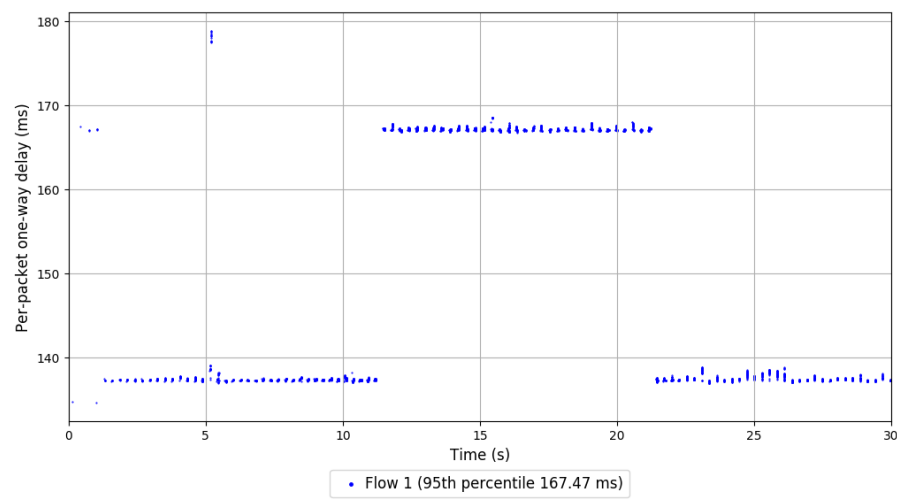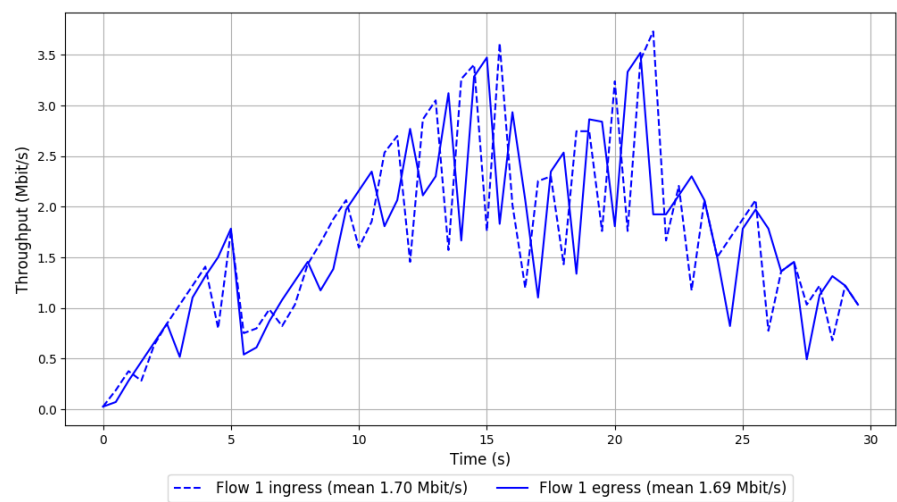
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 2.86 Mbit/s)   Flow 1 egress (mean 2.85 Mbit/s)

Flow 1 (95th percentile 167.19 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2017-11-21 10:42:57
End at: 2017-11-21 10:43:27

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 167.473 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 167.473 ms
Loss rate: 0.56%
```
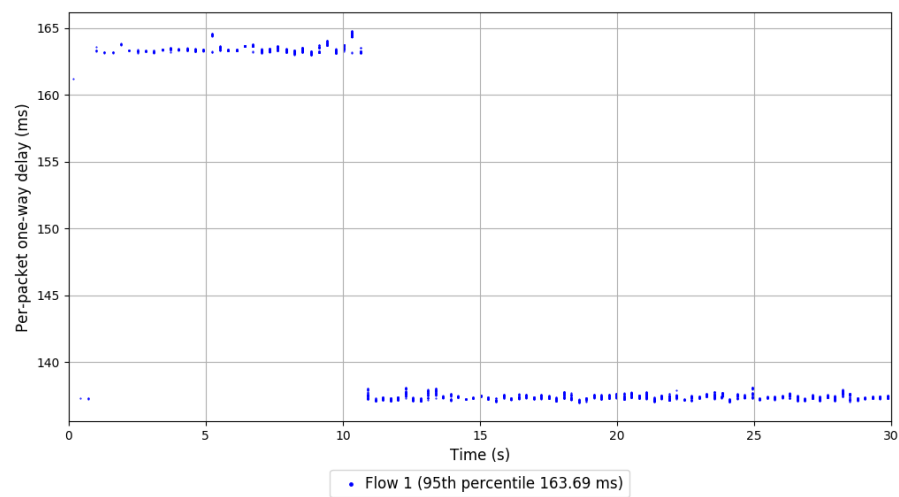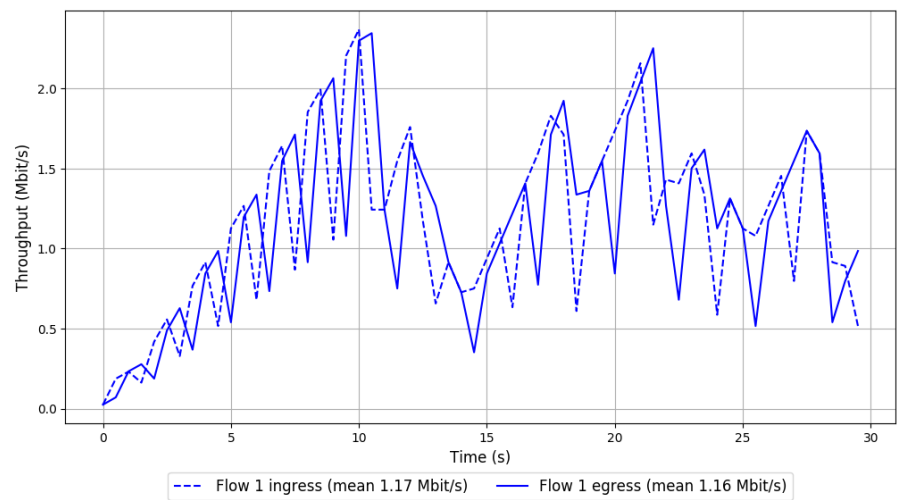
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.70 Mbit/s) — — — Flow 1 egress (mean 1.69 Mbit/s)

• Flow 1 (95th percentile 167.47 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2017-11-21 10:54:17
End at: 2017-11-21 10:54:47

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 163.686 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 163.686 ms
Loss rate: 0.37%
```
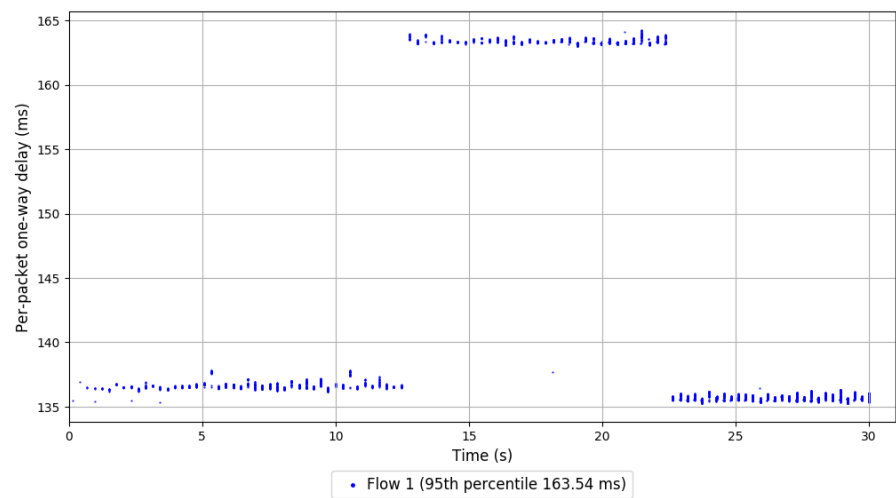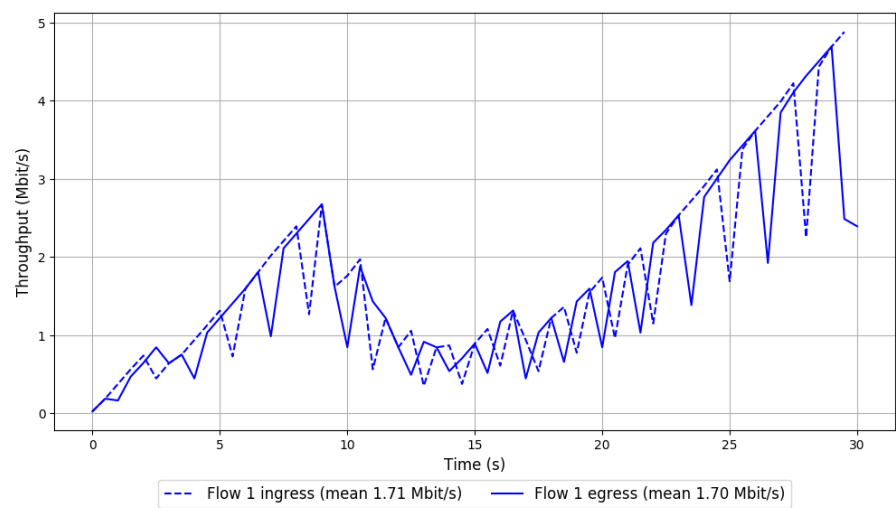
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2017-11-21 11:04:56
End at: 2017-11-21 11:05:26

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 163.540 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 163.540 ms
Loss rate: 0.14%
```
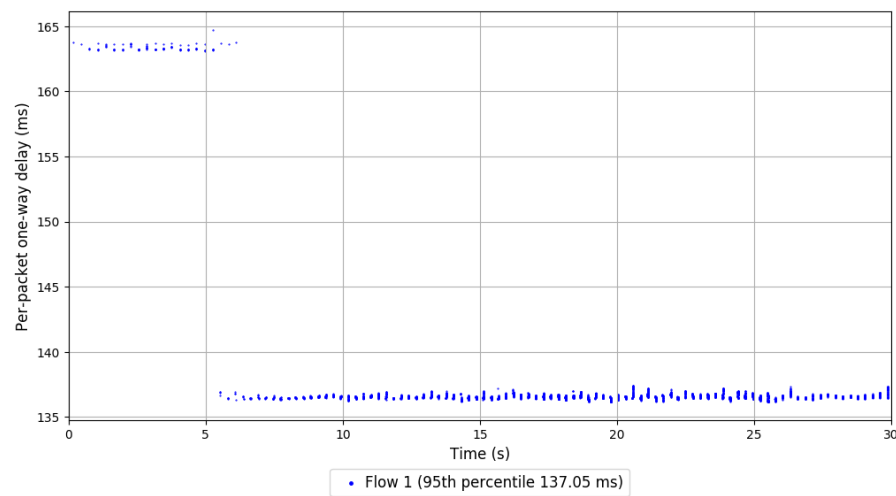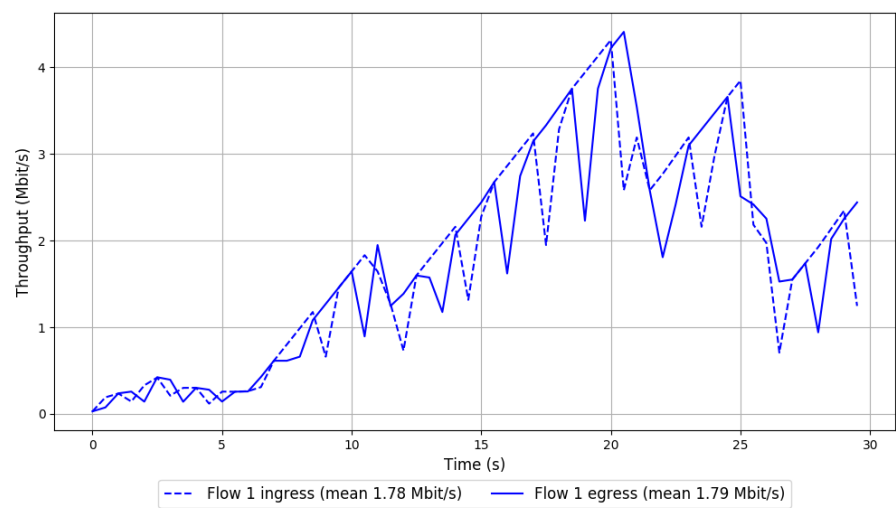
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-11-21 11:16:13
End at: 2017-11-21 11:16:43

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 137.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 137.046 ms
Loss rate: 0.00%
```
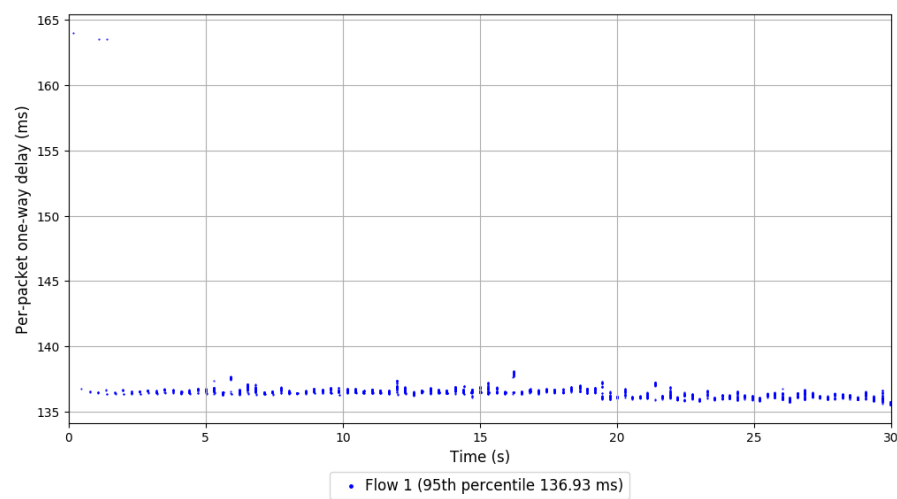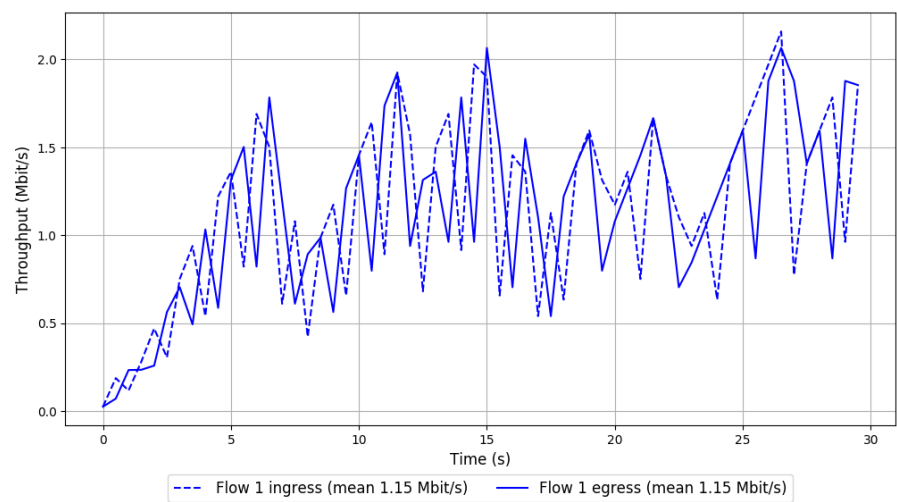
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.78 Mbit/s) ——— Flow 1 egress (mean 1.79 Mbit/s)

• Flow 1 (95th percentile 137.05 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-11-21 11:27:29
End at: 2017-11-21 11:27:59

# Below is generated by plot.py at 2017-11-21 12:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 136.934 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 136.934 ms
Loss rate: 0.03%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-11-21 09:52:39
End at: 2017-11-21 09:53:10

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 564.99 Mbit/s
95th percentile per-packet one-way delay: 216.257 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 564.99 Mbit/s
95th percentile per-packet one-way delay: 216.257 ms
Loss rate: 3.61%
```
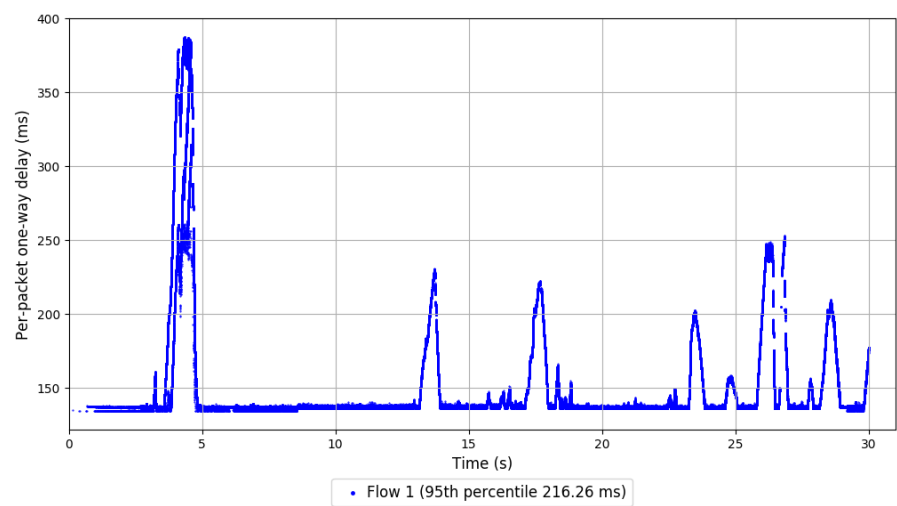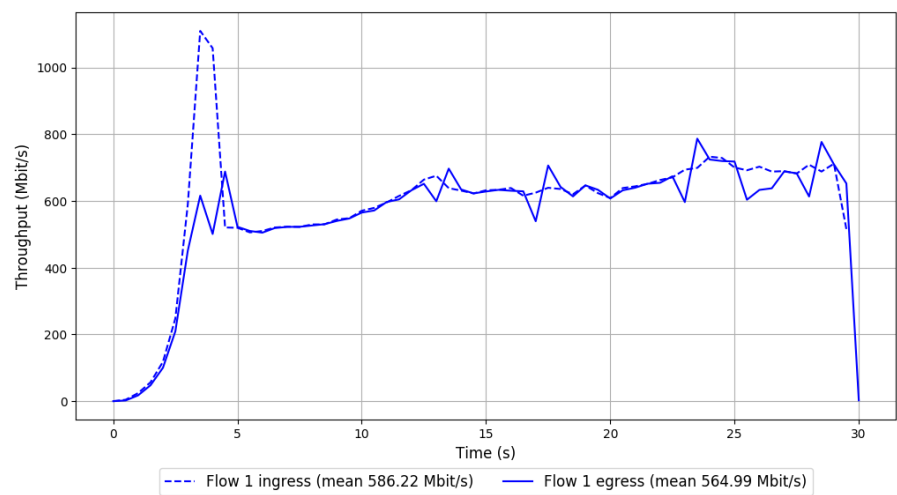
Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2017-11-21 10:03:47
End at: 2017-11-21 10:04:17

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 502.97 Mbit/s
95th percentile per-packet one-way delay: 231.585 ms
Loss rate: 4.08%
-- Flow 1:
Average throughput: 502.97 Mbit/s
95th percentile per-packet one-way delay: 231.585 ms
Loss rate: 4.08%
```
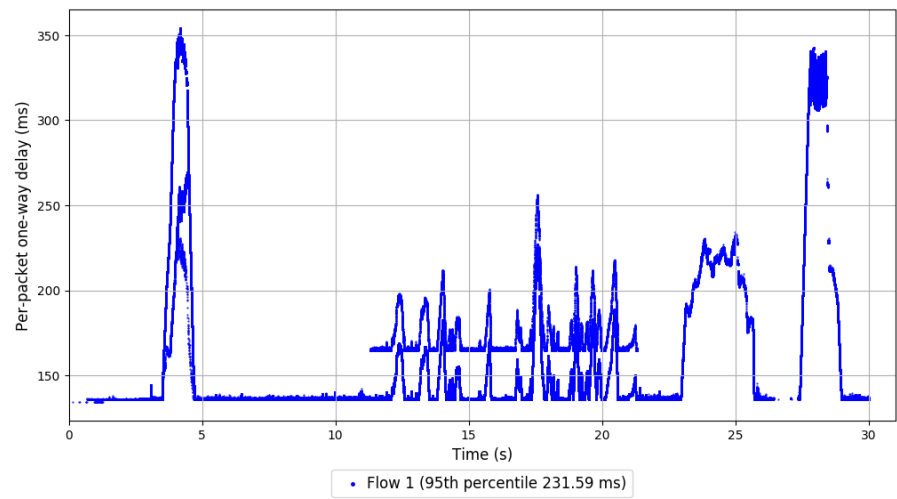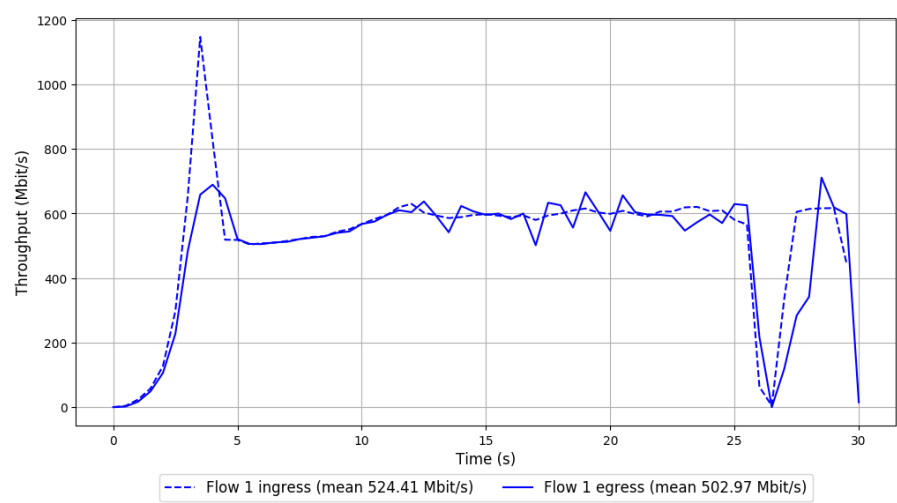
Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 524.41 Mbit/s)   Flow 1 egress (mean 502.97 Mbit/s)

Flow 1 (95th percentile 231.59 ms)

```
Run 3: Statistics of PCC

Start at: 2017-11-21 10:15:20
End at: 2017-11-21 10:15:50

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 515.41 Mbit/s
95th percentile per-packet one-way delay: 198.694 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 515.41 Mbit/s
95th percentile per-packet one-way delay: 198.694 ms
Loss rate: 1.97%
```
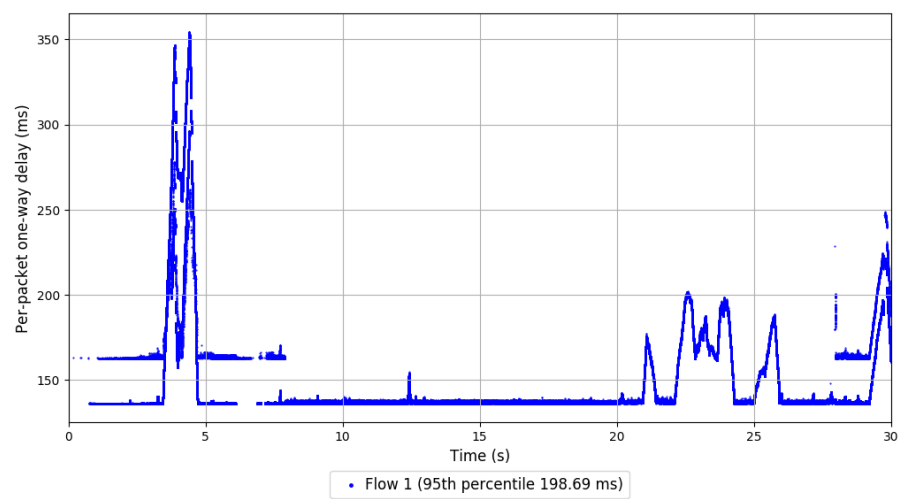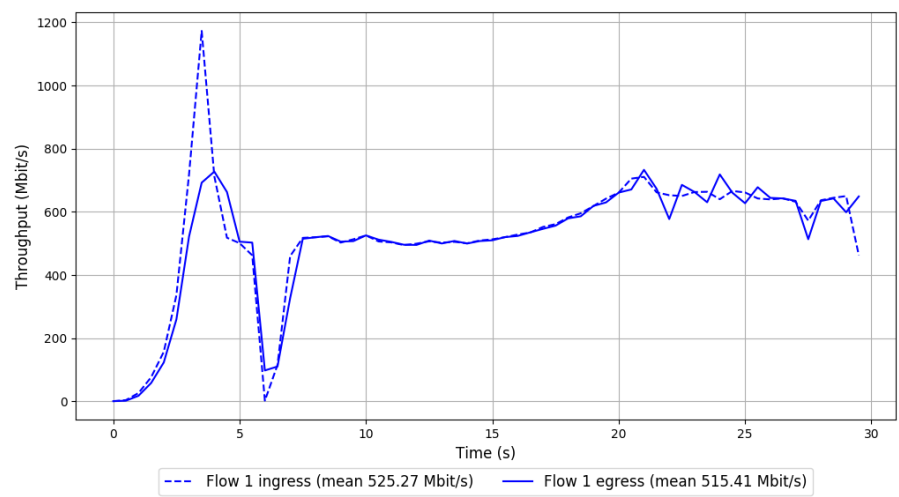
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 525.27 Mbit/s) Flow 1 egress (mean 515.41 Mbit/s)

• Flow 1 (95th percentile 198.69 ms)

69

```
Run 4: Statistics of PCC

Start at: 2017-11-21 10:26:59
End at: 2017-11-21 10:27:29

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 533.97 Mbit/s
95th percentile per-packet one-way delay: 223.120 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 533.97 Mbit/s
95th percentile per-packet one-way delay: 223.120 ms
Loss rate: 2.74%
```
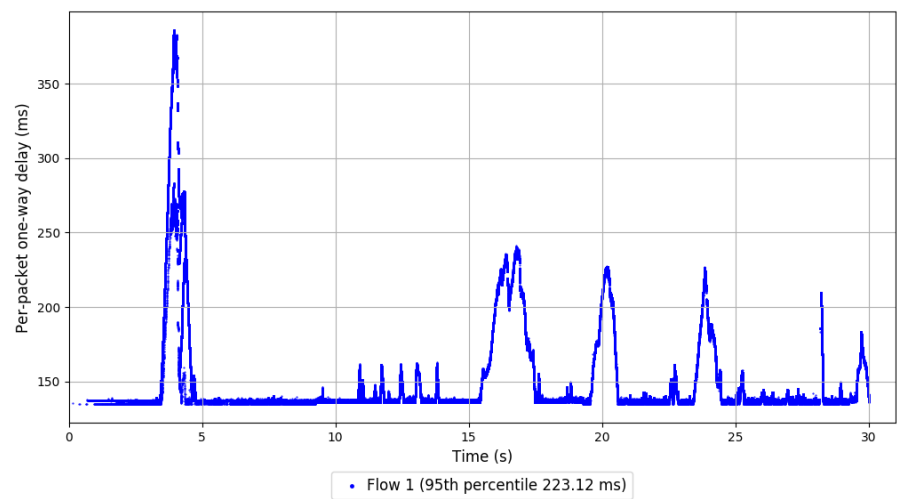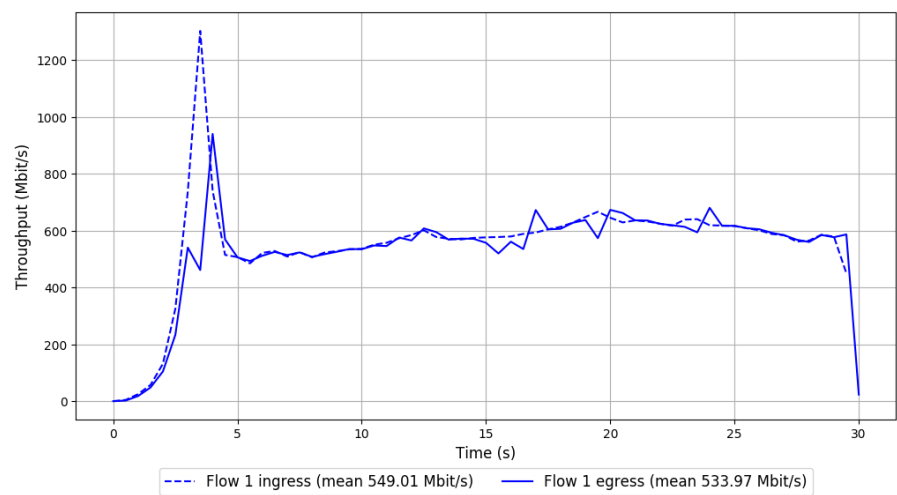
Run 4: Report of PCC — Data Link

Flow 1 ingress (mean 549.01 Mbit/s)   Flow 1 egress (mean 533.97 Mbit/s)

• Flow 1 (95th percentile 223.12 ms)

```
Run 5: Statistics of PCC

Start at: 2017-11-21 10:38:11
End at: 2017-11-21 10:38:41

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 518.68 Mbit/s
95th percentile per-packet one-way delay: 220.488 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 518.68 Mbit/s
95th percentile per-packet one-way delay: 220.488 ms
Loss rate: 2.04%
```
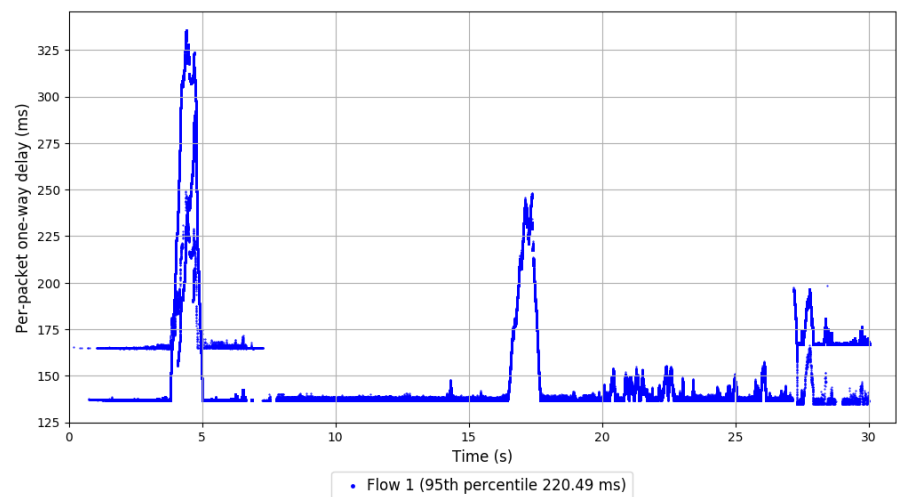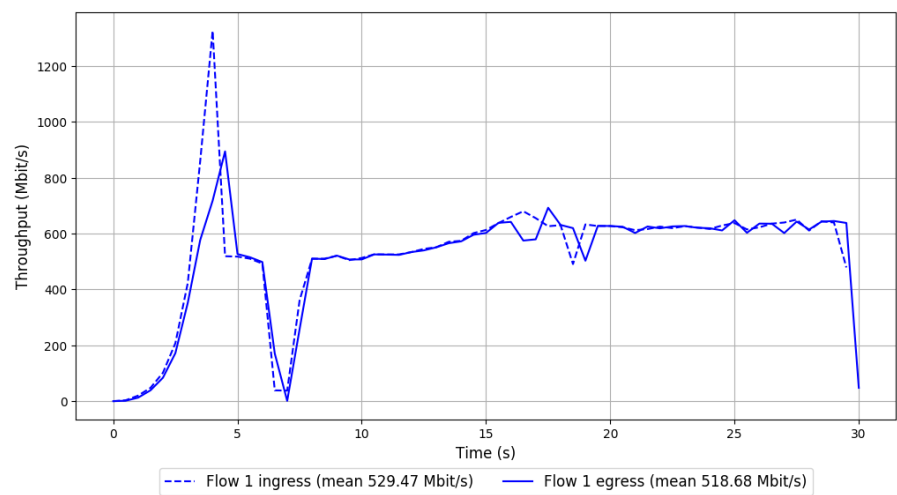
Run 5: Report of PCC — Data Link

73

```
Run 6: Statistics of PCC

Start at: 2017-11-21 10:49:28
End at: 2017-11-21 10:49:58

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.59 Mbit/s
95th percentile per-packet one-way delay: 203.262 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 520.59 Mbit/s
95th percentile per-packet one-way delay: 203.262 ms
Loss rate: 2.50%
```
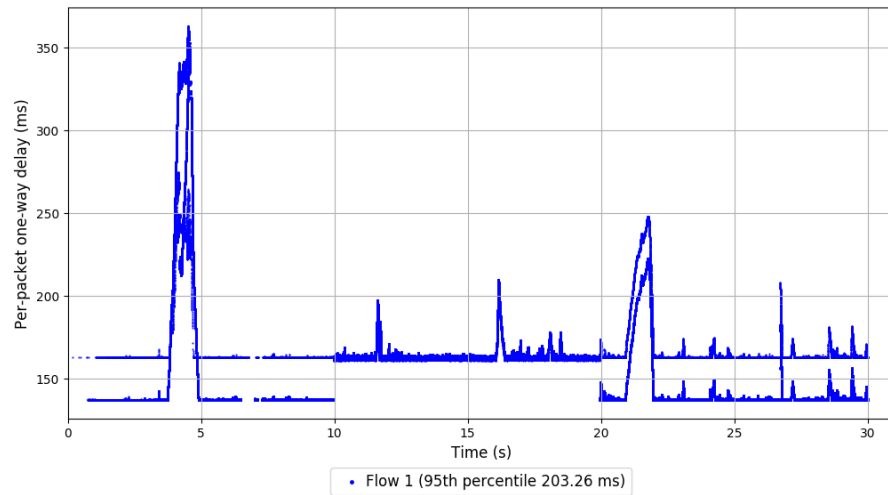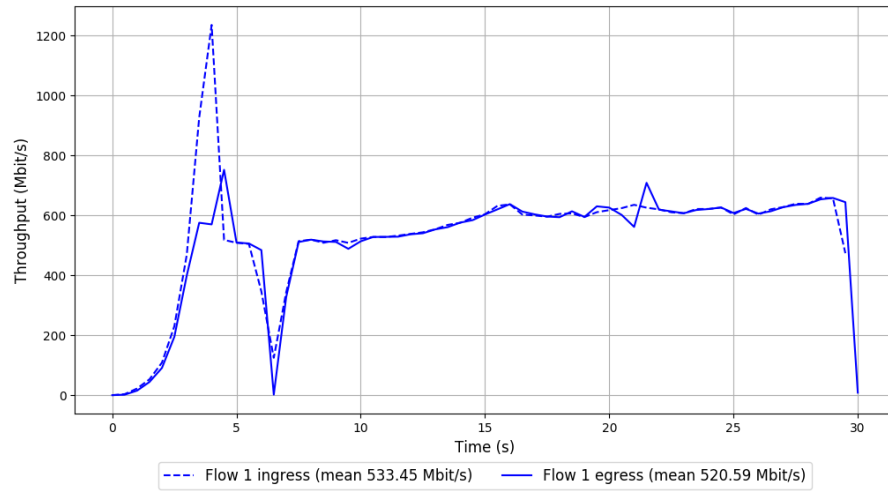
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 533.45 Mbit/s)   Flow 1 egress (mean 520.59 Mbit/s)

Flow 1 (95th percentile 203.26 ms)

```
Run 7: Statistics of PCC

Start at: 2017-11-21 11:00:32
End at: 2017-11-21 11:01:02

# Below is generated by plot.py at 2017-11-21 12:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 163.151 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 163.151 ms
Loss rate: 0.00%
```
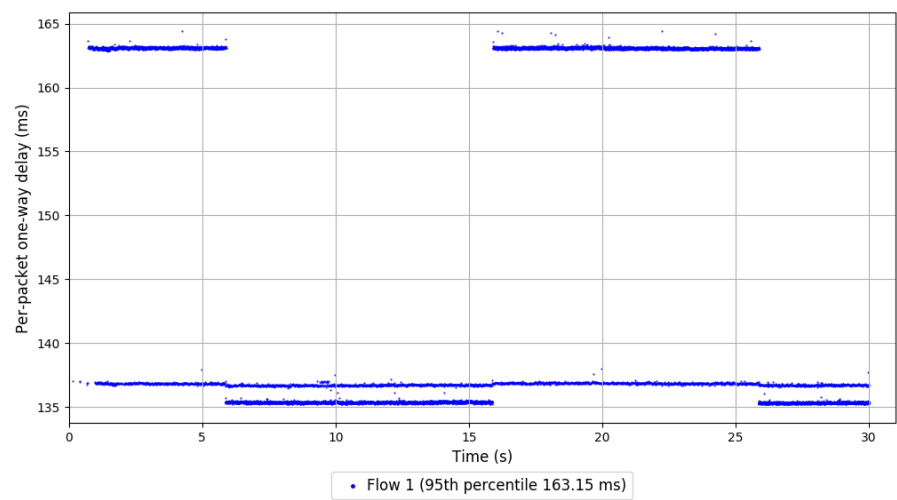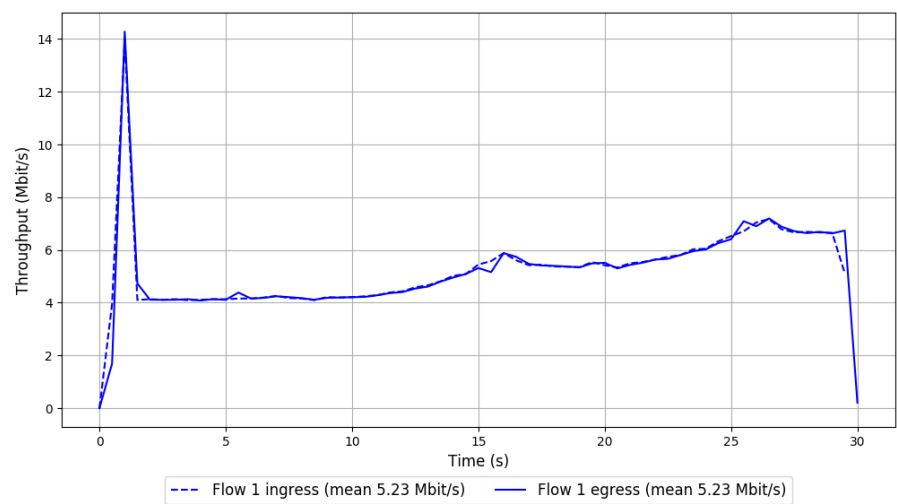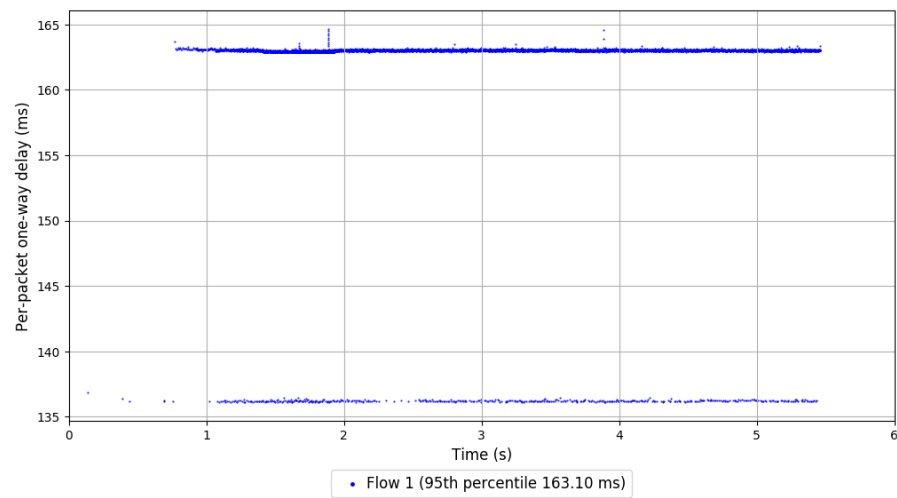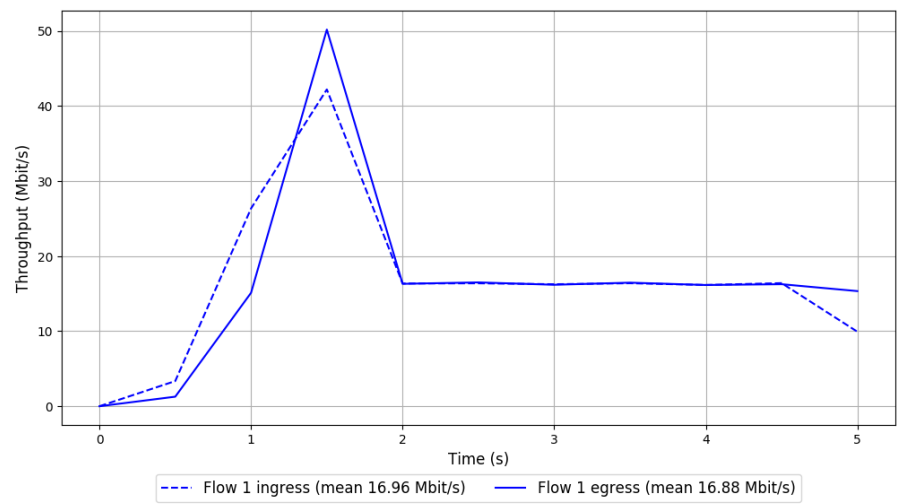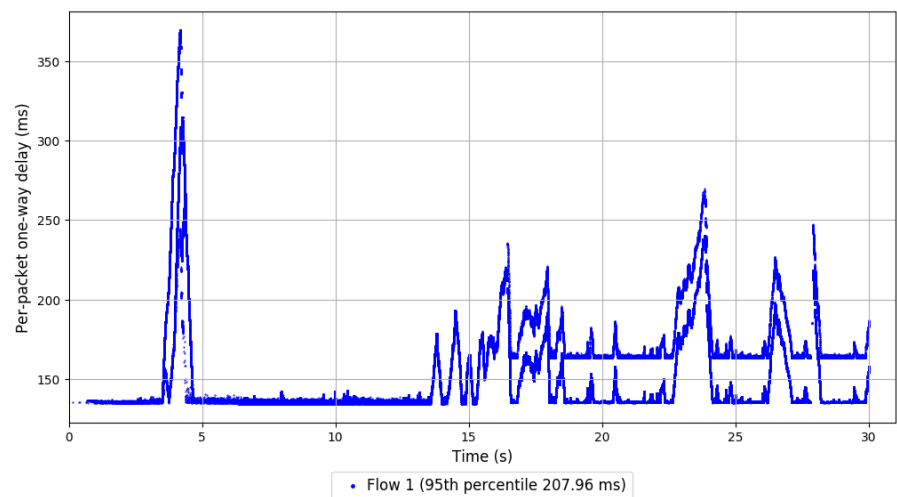
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 5.23 Mbit/s) --- Flow 1 egress (mean 5.23 Mbit/s)

Flow 1 (95th percentile 163.15 ms)

Run 8: Statistics of PCC

Start at: 2017-11-21 11:11:46
End at: 2017-11-21 11:12:16

Run 8: Report of PCC — Data Link

```
Run 9: Statistics of PCC

Start at: 2017-11-21 11:22:42
End at: 2017-11-21 11:23:12

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 552.38 Mbit/s
95th percentile per-packet one-way delay: 207.957 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 552.38 Mbit/s
95th percentile per-packet one-way delay: 207.957 ms
Loss rate: 2.14%
```
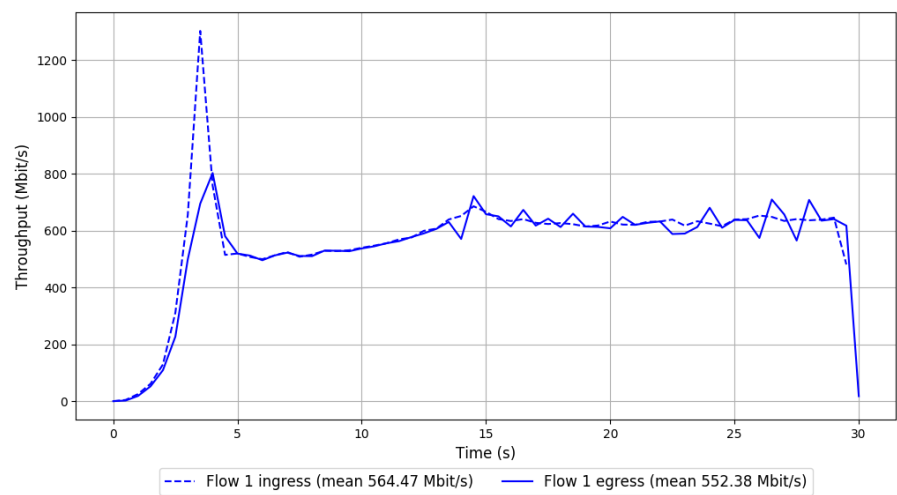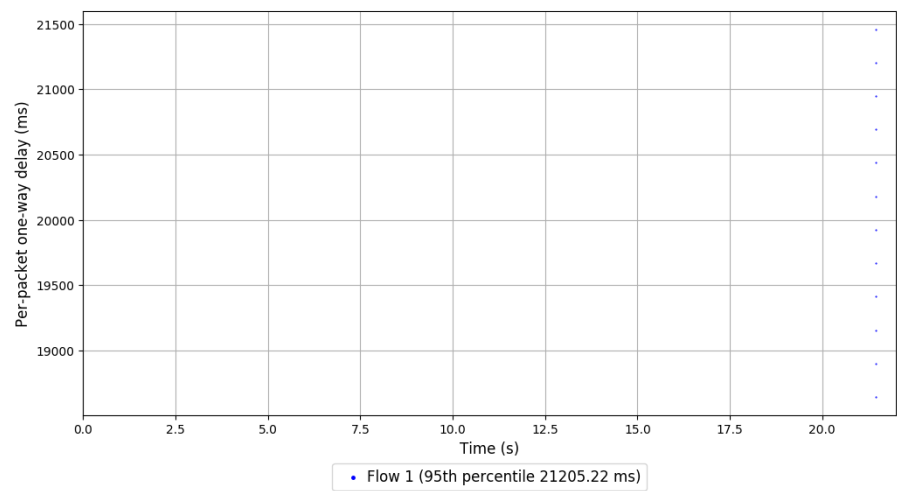
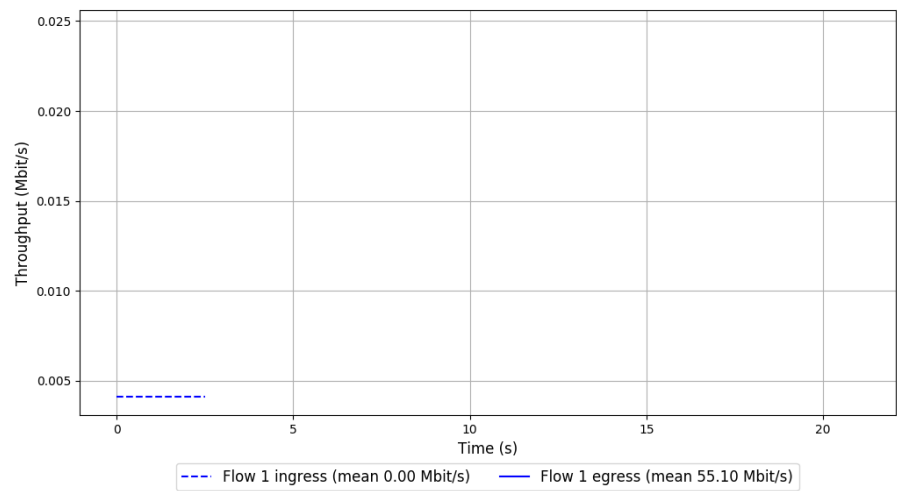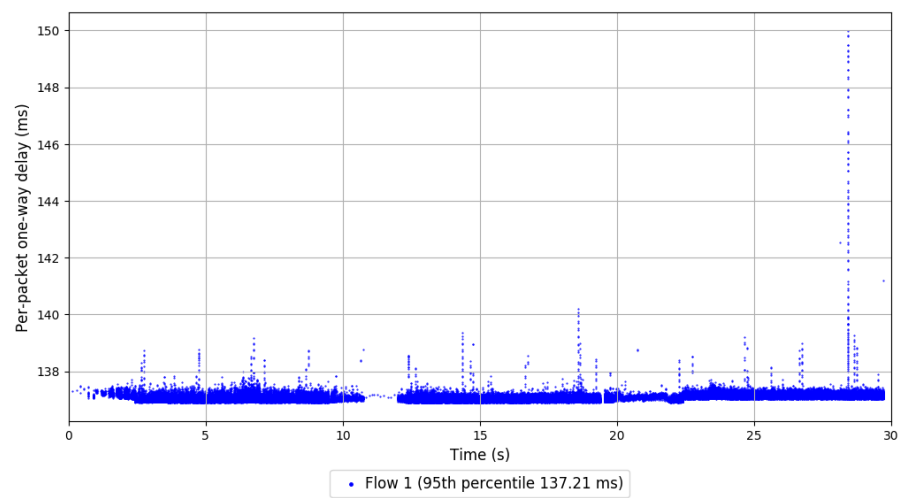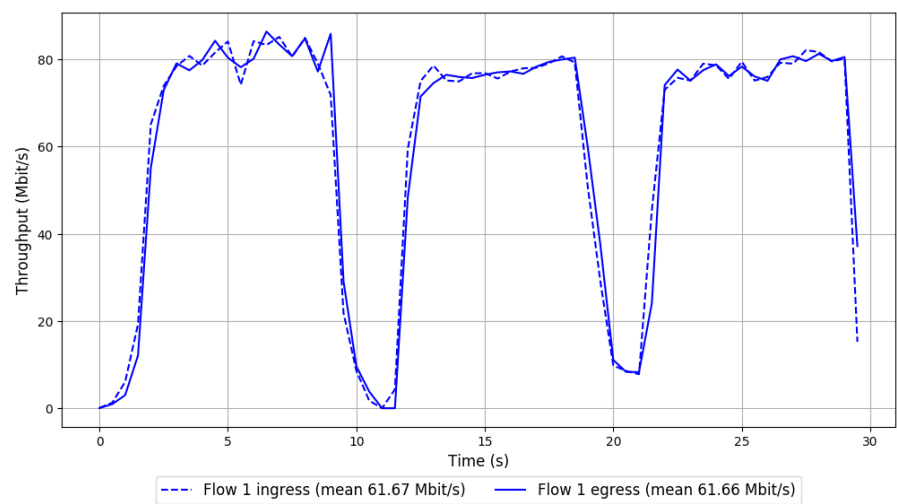# Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 564.47 Mbit/s)   Flow 1 egress (mean 552.38 Mbit/s)

Flow 1 (95th percentile 207.96 ms)

Run 10: Statistics of PCC

Start at: 2017-11-21 11:34:23
End at: 2017-11-21 11:34:53

Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 0.00 Mbit/s)   Flow 1 egress (mean 55.10 Mbit/s)

Flow 1 (95th percentile 21205.22 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-21 09:44:05
End at: 2017-11-21 09:44:35

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 137.211 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 137.211 ms
Loss rate: 0.01%
```
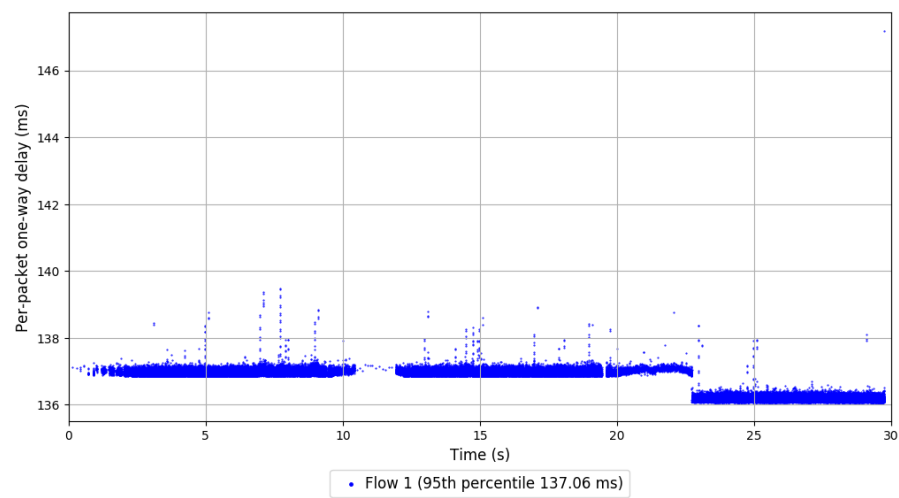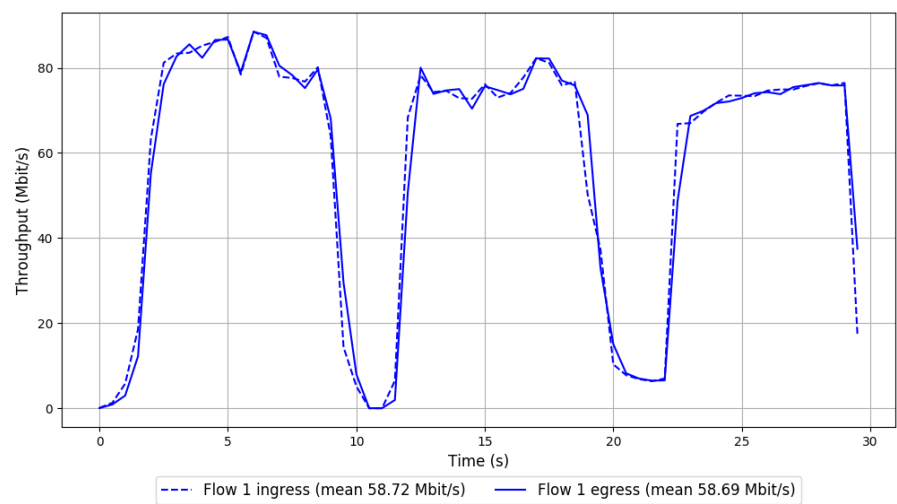
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-21 09:55:15
End at: 2017-11-21 09:55:45

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 137.063 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 137.063 ms
Loss rate: 0.02%
```

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 10:06:19
End at: 2017-11-21 10:06:49


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 136.288 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 136.288 ms
Loss rate: 0.00%
```
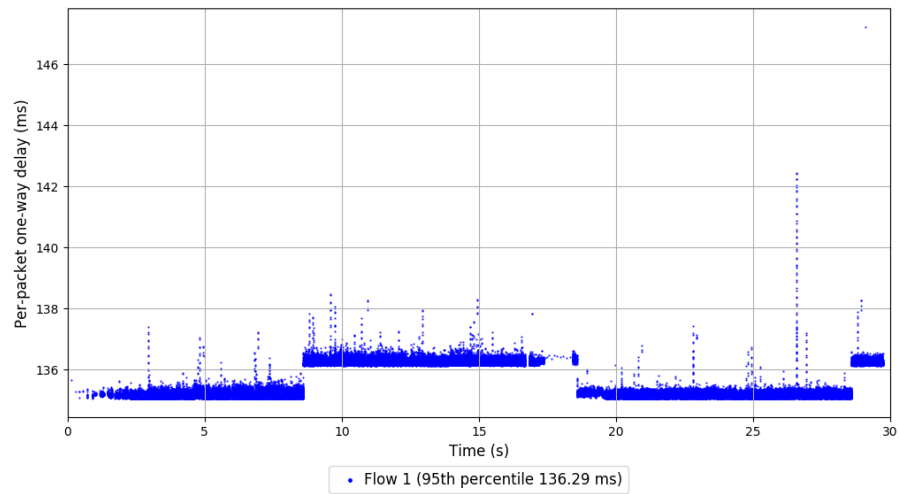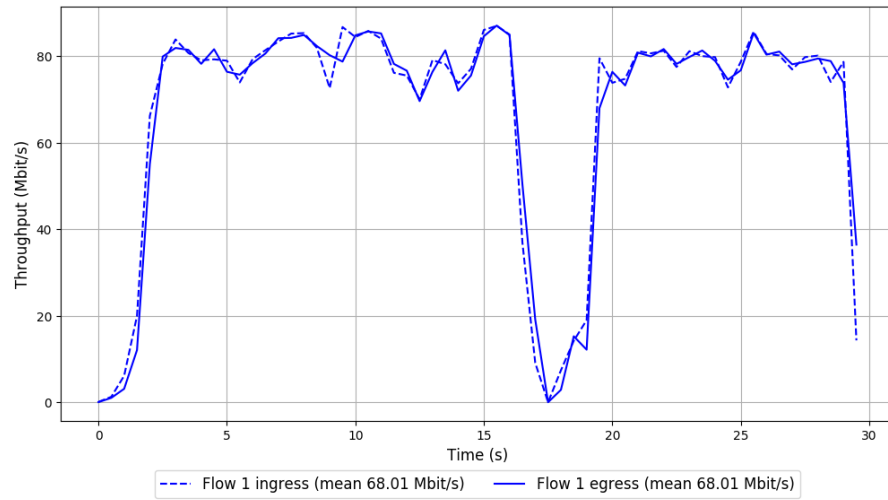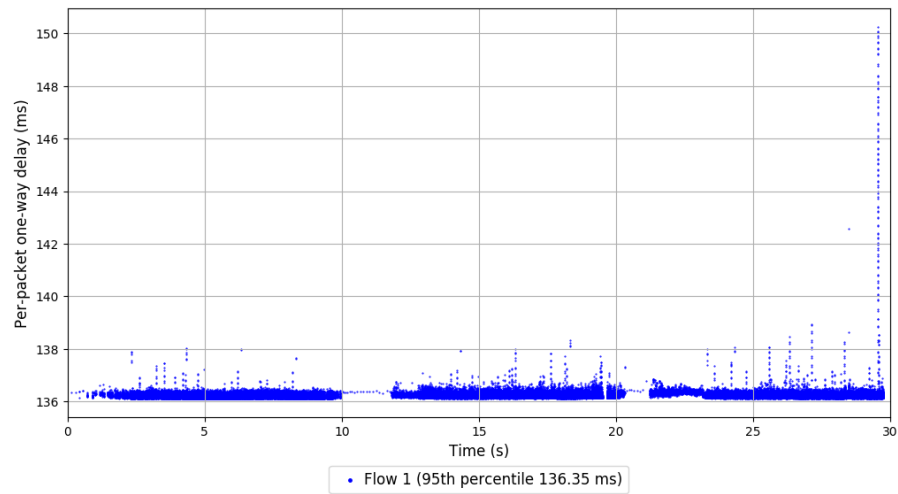
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.01 Mbit/s)   Flow 1 egress (mean 68.01 Mbit/s)

• Flow 1 (95th percentile 136.29 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 10:17:54
End at: 2017-11-21 10:18:24

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 136.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 136.354 ms
Loss rate: 0.00%
```
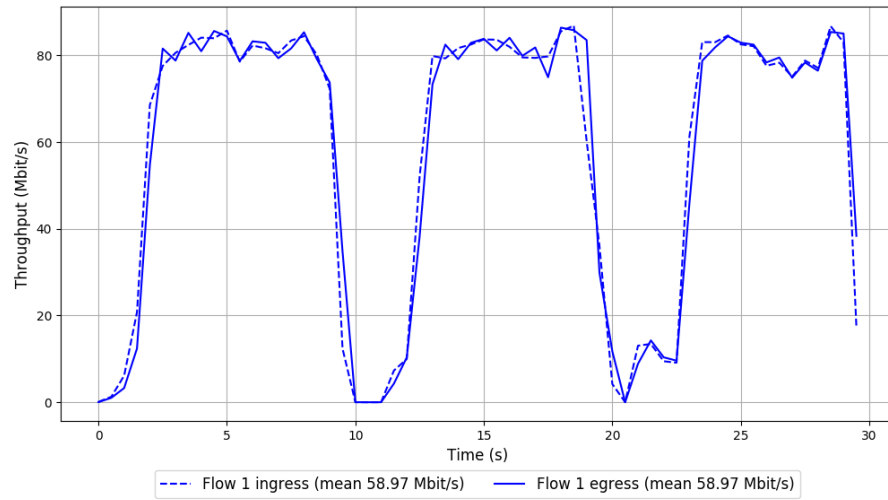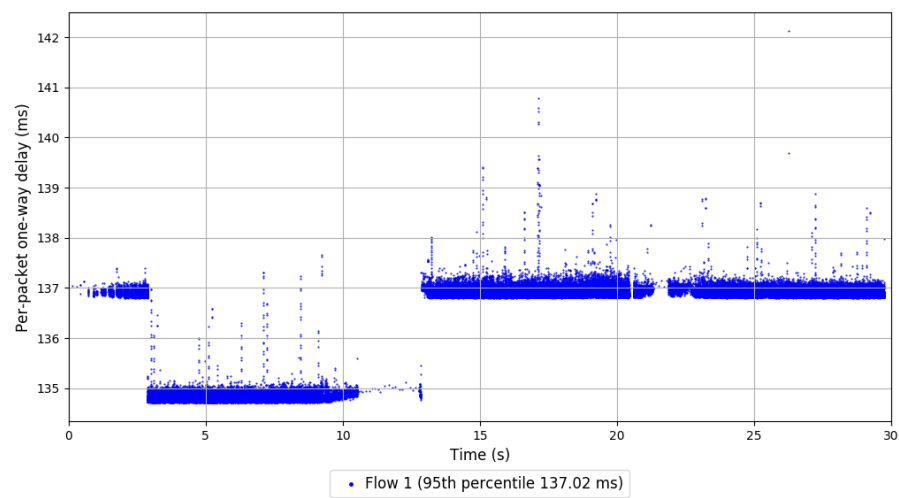
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 10:29:35
End at: 2017-11-21 10:30:05

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 137.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 137.021 ms
Loss rate: 0.00%
```
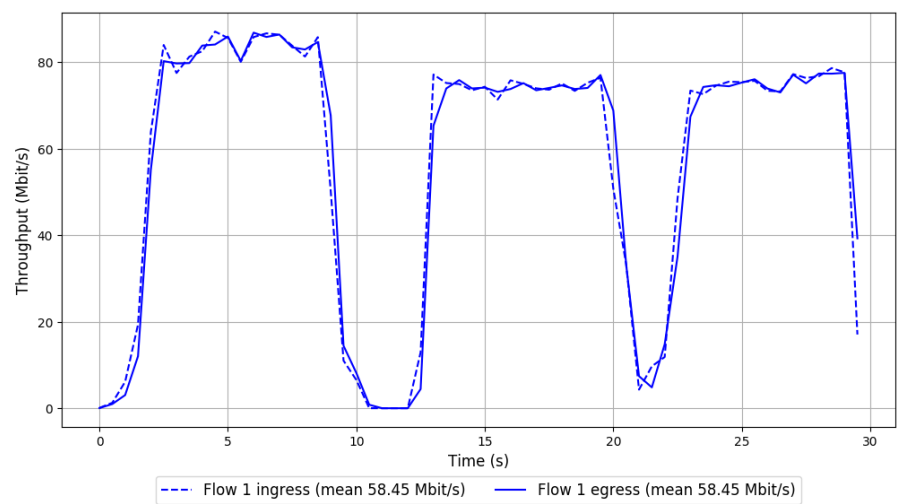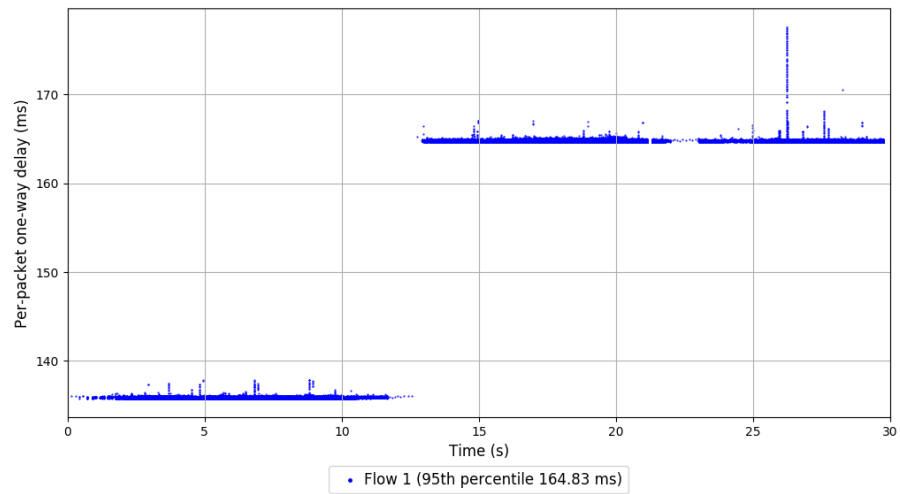
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 58.45 Mbit/s) --- Flow 1 egress (mean 58.45 Mbit/s)

Flow 1 (95th percentile 137.02 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 10:40:45
End at: 2017-11-21 10:41:15

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.02 Mbit/s
95th percentile per-packet one-way delay: 164.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.02 Mbit/s
95th percentile per-packet one-way delay: 164.831 ms
Loss rate: 0.00%
```
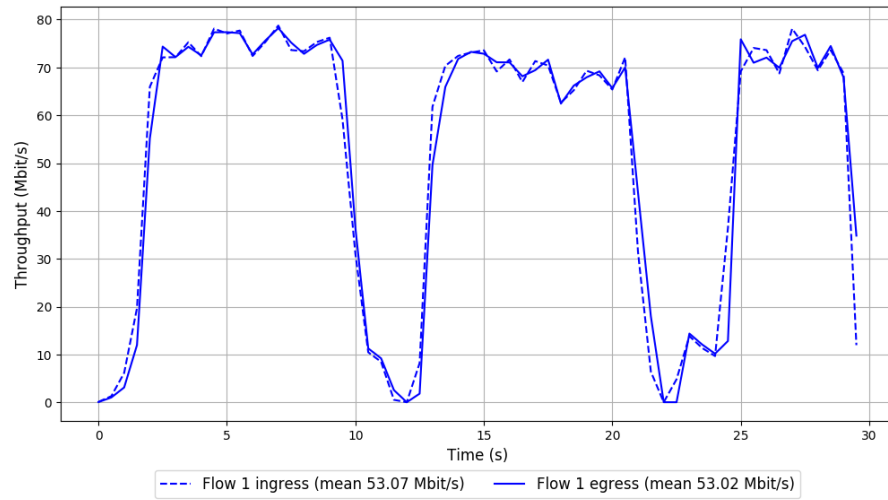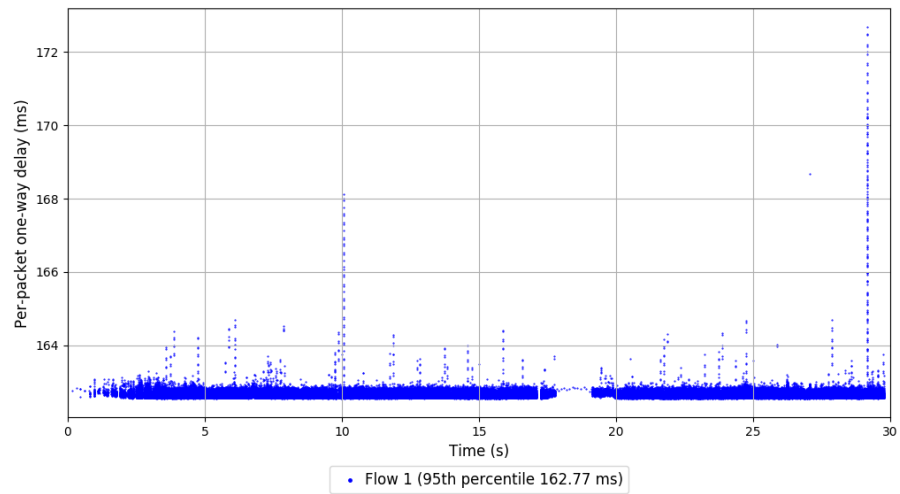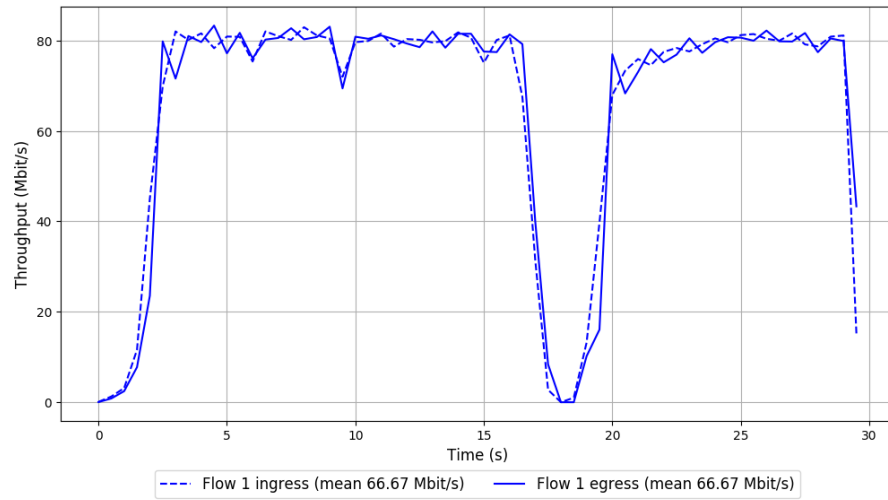
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 53.07 Mbit/s)   Flow 1 egress (mean 53.02 Mbit/s)

Flow 1 (95th percentile 164.83 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 10:52:04
End at: 2017-11-21 10:52:34

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.67 Mbit/s
95th percentile per-packet one-way delay: 162.769 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.67 Mbit/s
95th percentile per-packet one-way delay: 162.769 ms
Loss rate: 0.00%
```
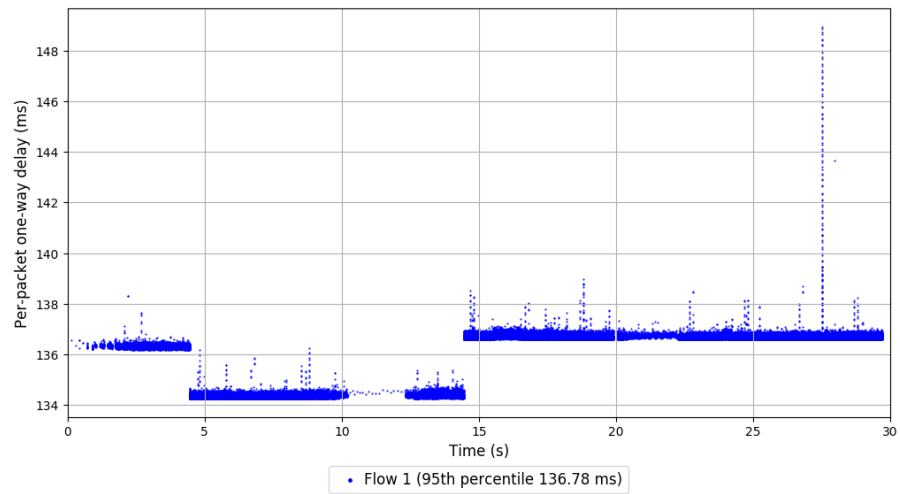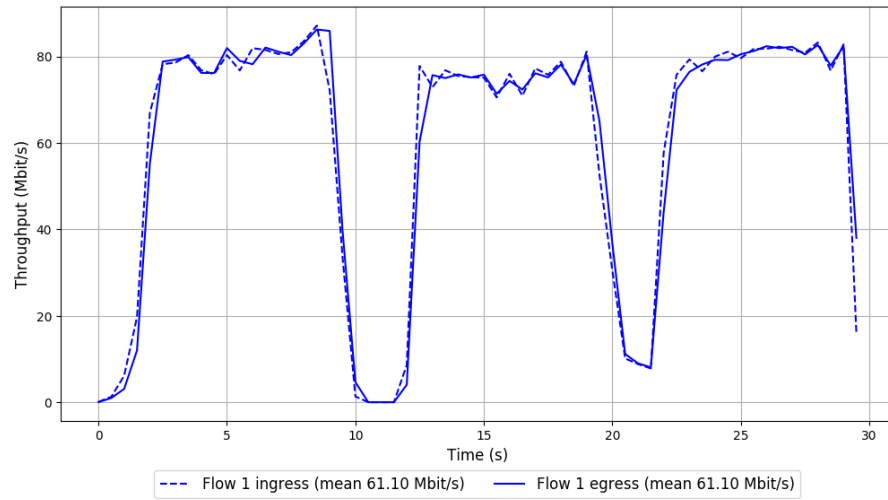
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.67 Mbit/s)   Flow 1 egress (mean 66.67 Mbit/s)

Flow 1 (95th percentile 162.77 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 11:02:43
End at: 2017-11-21 11:03:13

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 136.777 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 136.777 ms
Loss rate: 0.00%
```
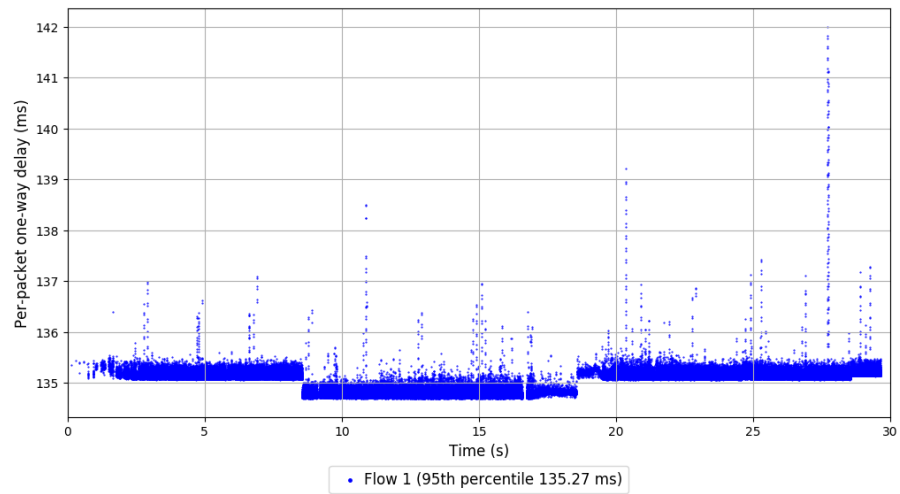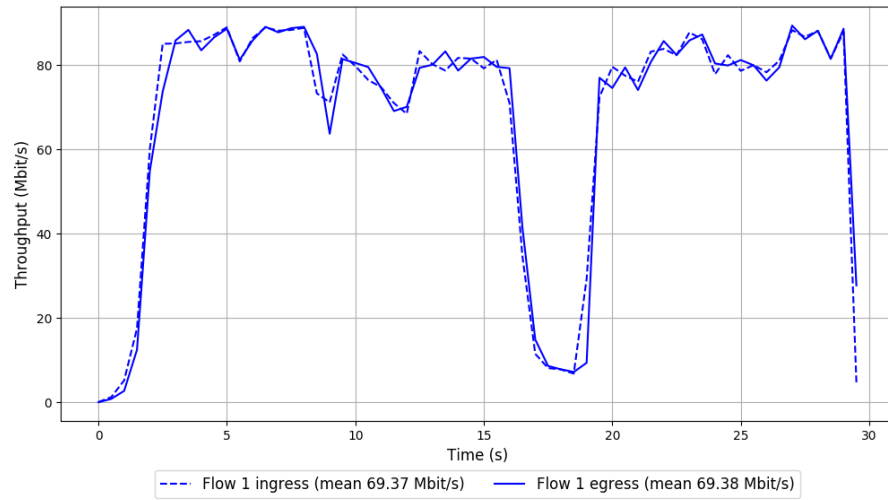
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 61.10 Mbit/s) --- Flow 1 egress (mean 61.10 Mbit/s) ——

Flow 1 (95th percentile 136.78 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 11:13:59
End at: 2017-11-21 11:14:29

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 135.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 135.272 ms
Loss rate: 0.00%
```
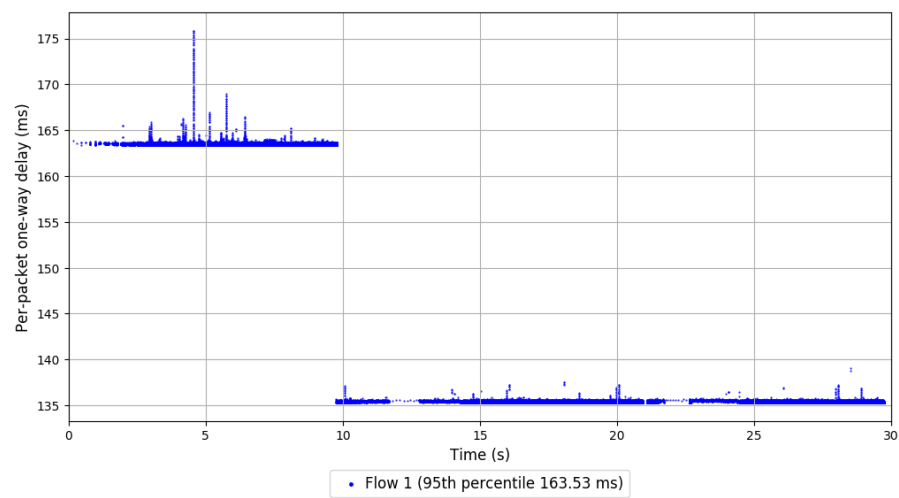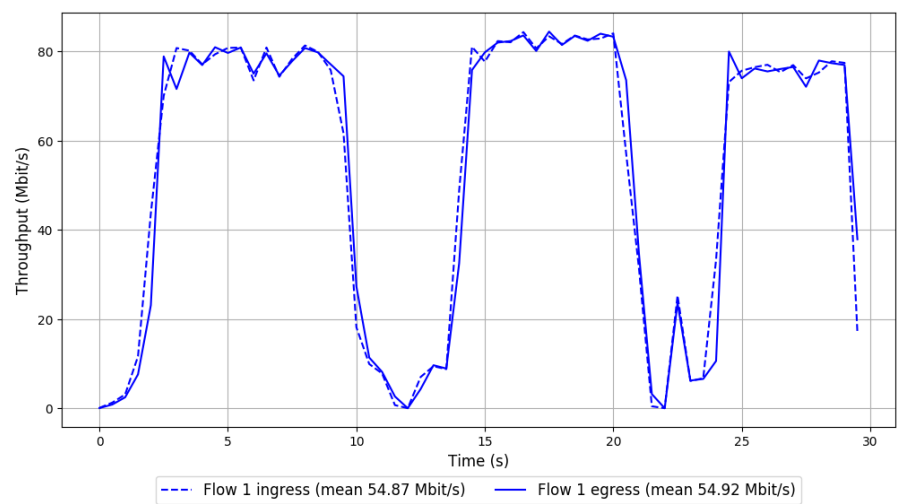
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.37 Mbit/s) ---- Flow 1 egress (mean 69.38 Mbit/s) ——

Flow 1 (95th percentile 135.27 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 11:25:18
End at: 2017-11-21 11:25:48

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.92 Mbit/s
95th percentile per-packet one-way delay: 163.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.92 Mbit/s
95th percentile per-packet one-way delay: 163.534 ms
Loss rate: 0.00%
```
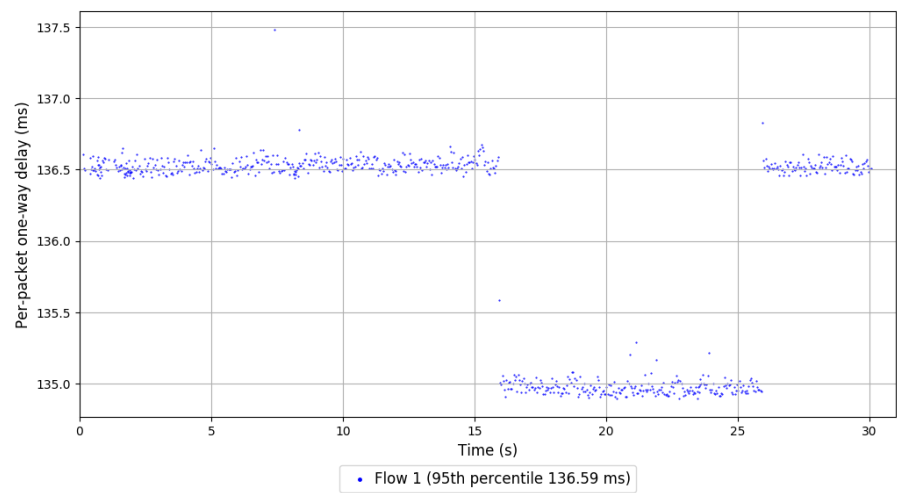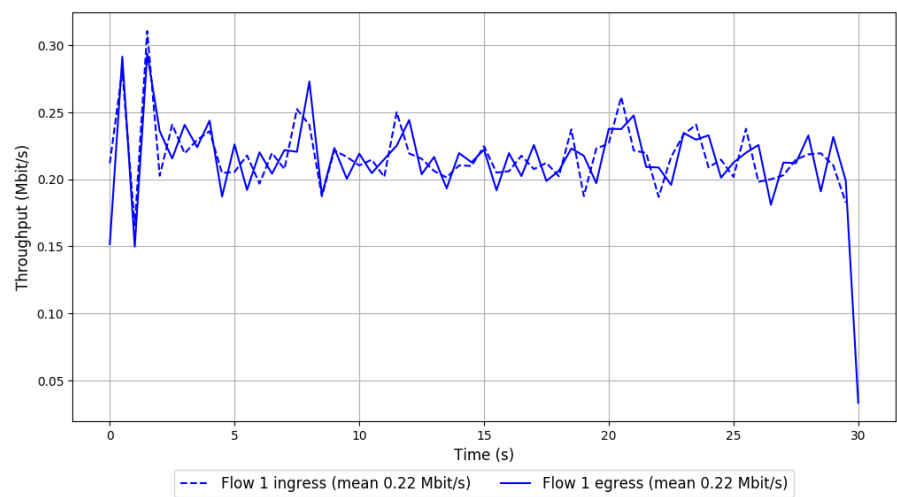
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.87 Mbit/s)   Flow 1 egress (mean 54.92 Mbit/s)
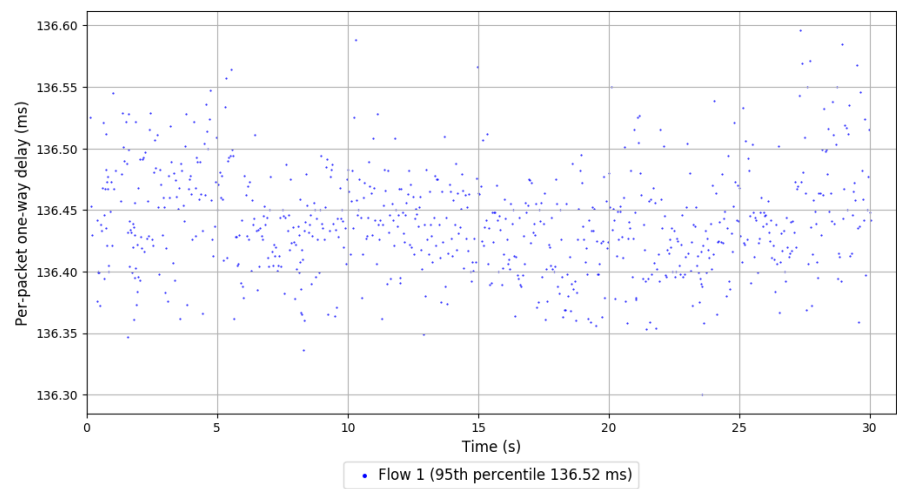

Flow 1 (95th percentile 163.53 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-11-21 09:44:52
End at: 2017-11-21 09:45:22

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.594 ms
Loss rate: 0.00%
```
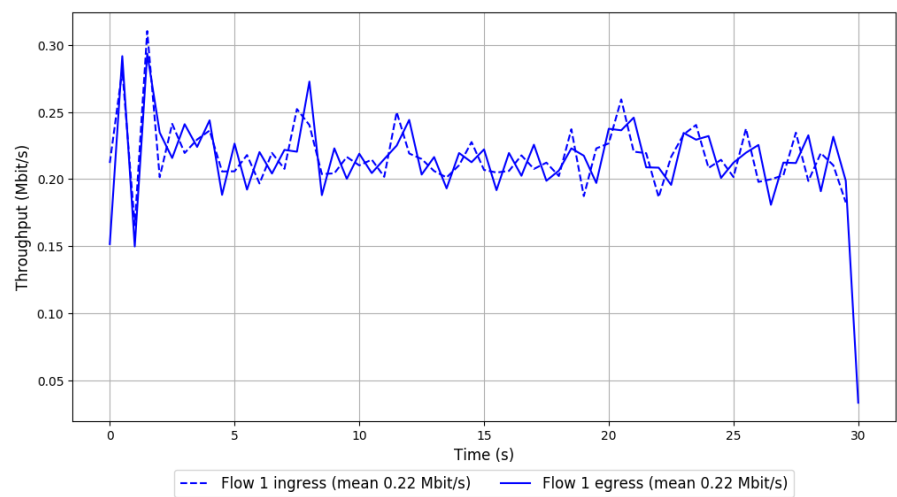
Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) ——— Flow 1 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 136.59 ms)

```
Run 2: Statistics of SCReAM

Start at: 2017-11-21 09:56:02
End at: 2017-11-21 09:56:32

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.519 ms
Loss rate: 0.00%
```
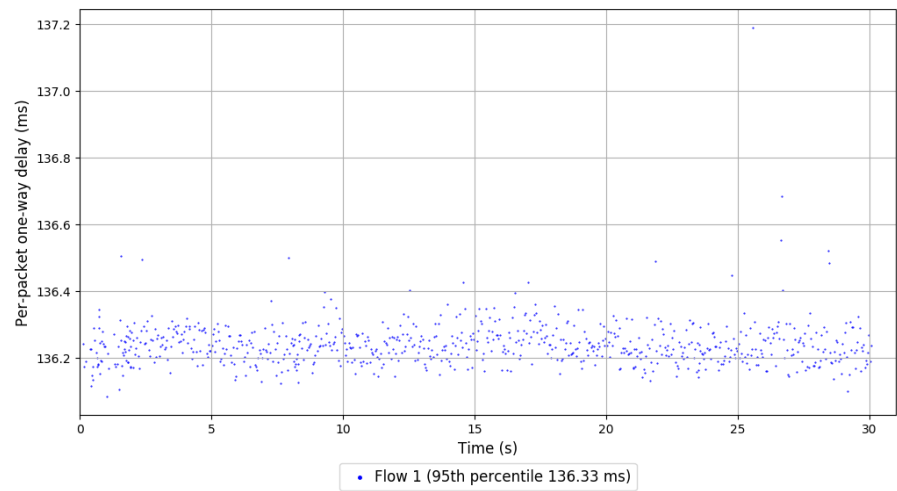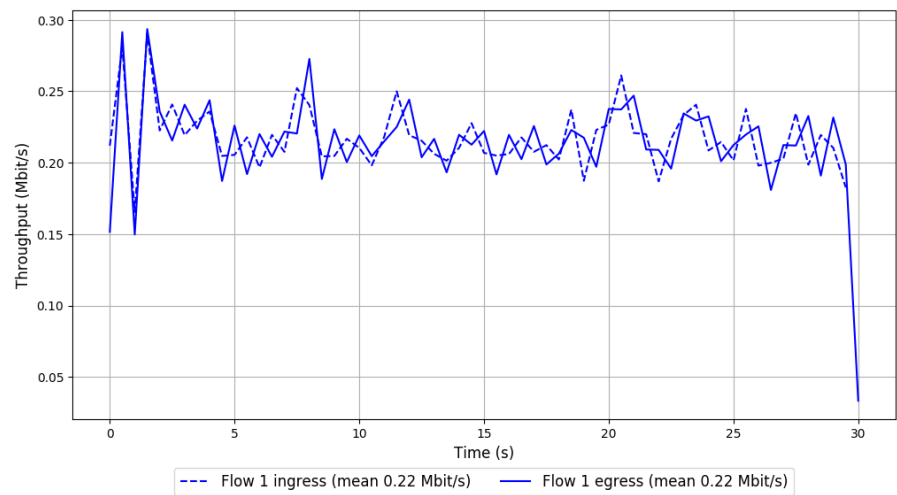
Run 2: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) ——— Flow 1 egress (mean 0.22 Mbit/s)

• Flow 1 (95th percentile 136.52 ms)

```
Run 3: Statistics of SCReAM

Start at: 2017-11-21 10:07:07
End at: 2017-11-21 10:07:37


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.329 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.329 ms
Loss rate: 0.00%
```
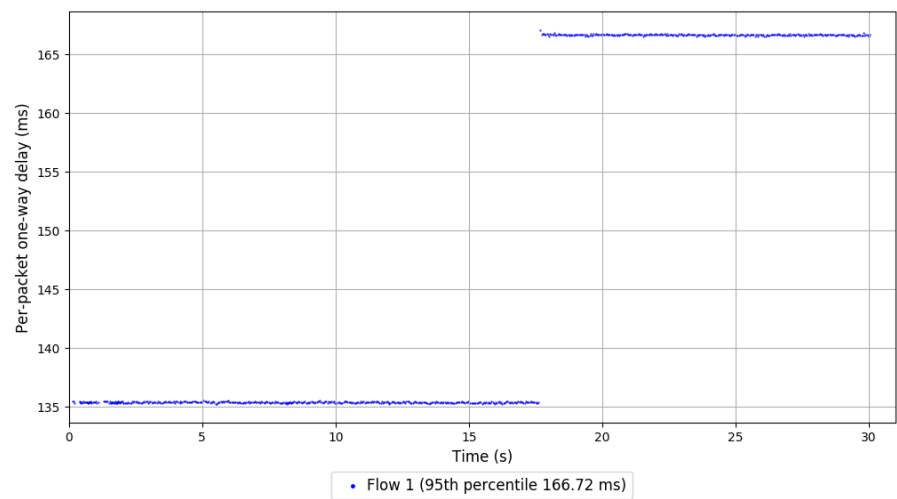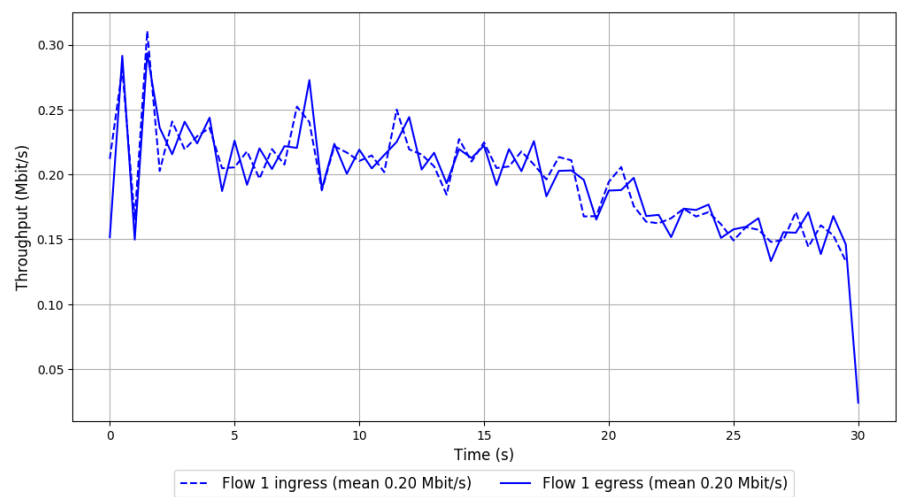
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 136.33 ms)

```
Run 4: Statistics of SCReAM

Start at: 2017-11-21 10:18:40
End at: 2017-11-21 10:19:11


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 166.715 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 166.715 ms
Loss rate: 0.10%
```
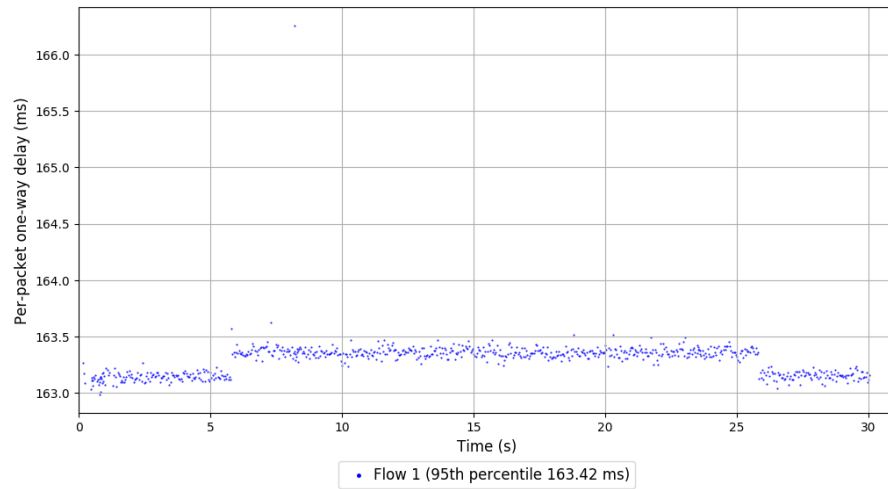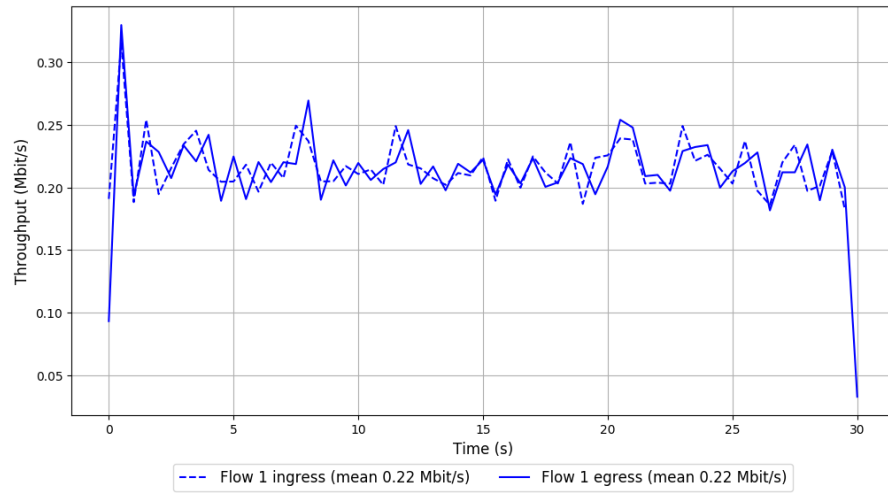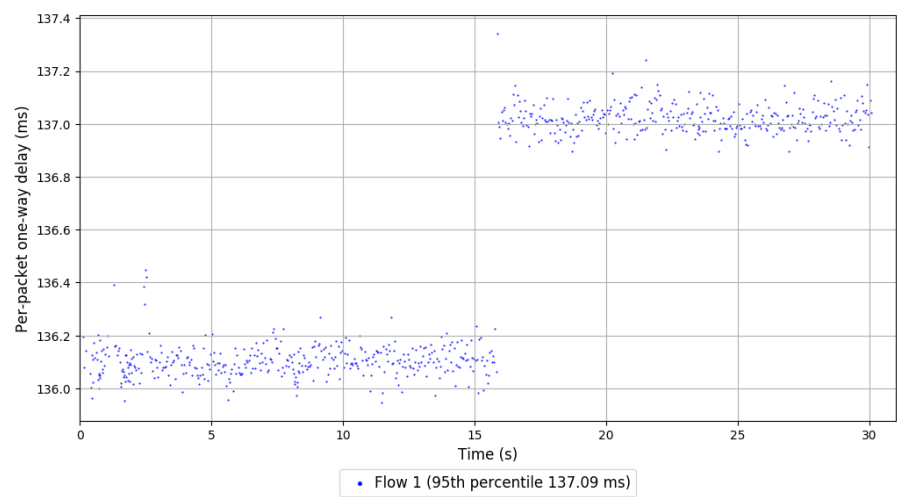
Run 4: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.20 Mbit/s) --- Flow 1 egress (mean 0.20 Mbit/s)

Flow 1 (95th percentile 166.72 ms)

```
Run 5: Statistics of SCReAM

Start at: 2017-11-21 10:30:22
End at: 2017-11-21 10:30:52

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 163.421 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 163.421 ms
Loss rate: 0.13%
```
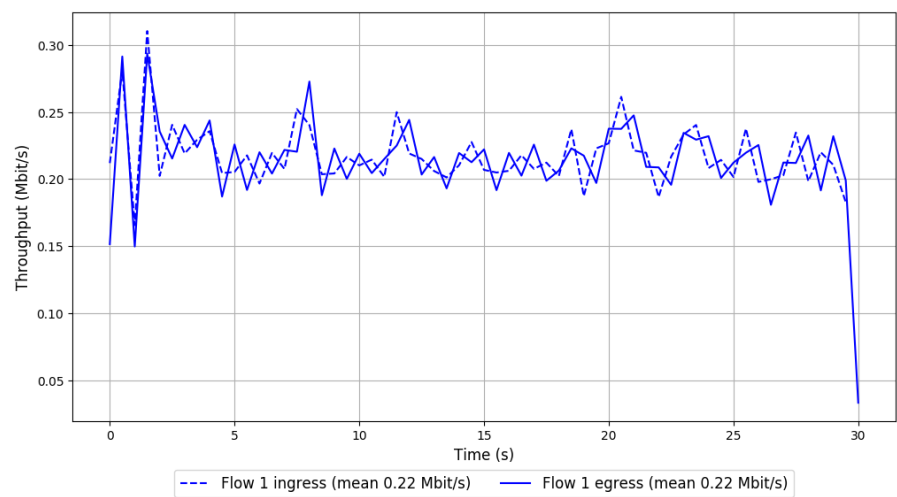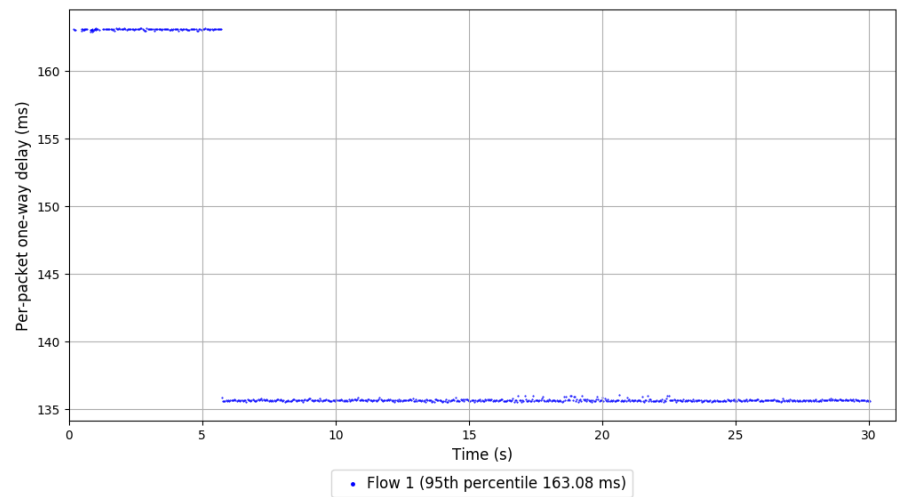
Run 5: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   —— Flow 1 egress (mean 0.22 Mbit/s)

• Flow 1 (95th percentile 163.42 ms)

```
Run 6: Statistics of SCReAM

Start at: 2017-11-21 10:41:32
End at: 2017-11-21 10:42:02

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.089 ms
Loss rate: 0.00%
```
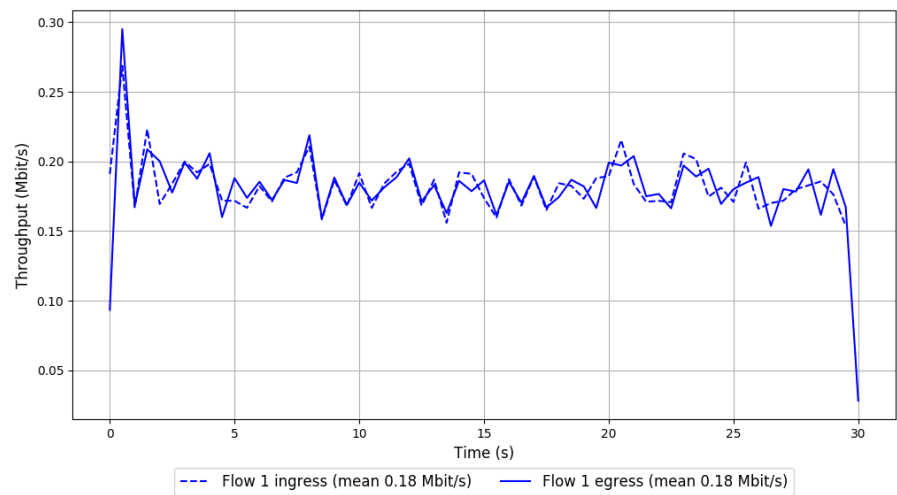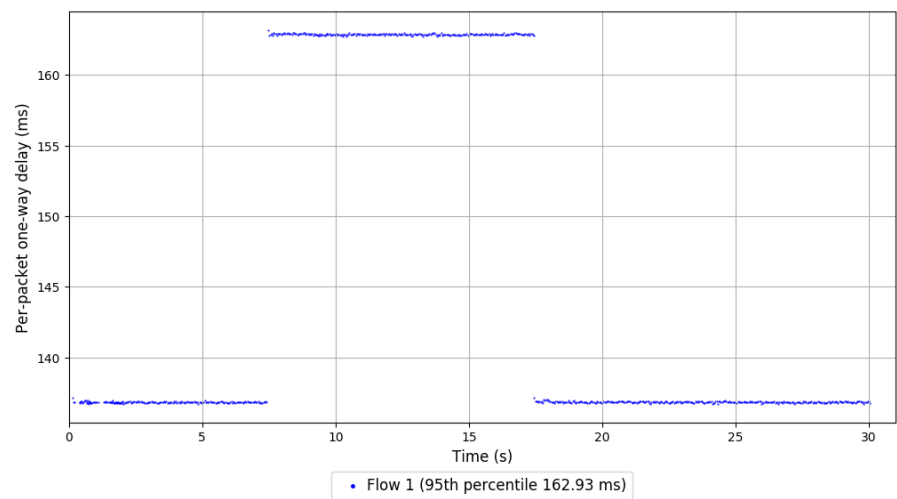
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-11-21 10:52:52
End at: 2017-11-21 10:53:22

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 163.081 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 163.081 ms
Loss rate: 0.00%
```
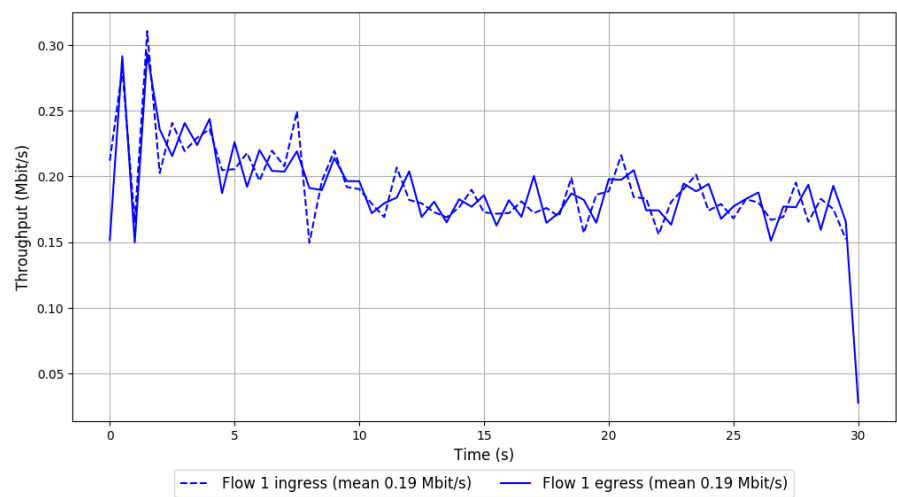
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-11-21 11:03:31
End at: 2017-11-21 11:04:01


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 162.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 162.928 ms
Loss rate: 0.00%
```
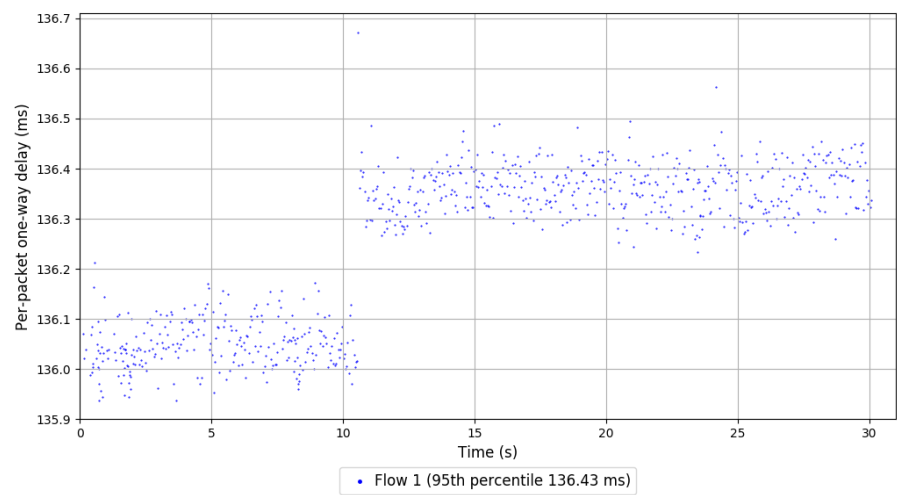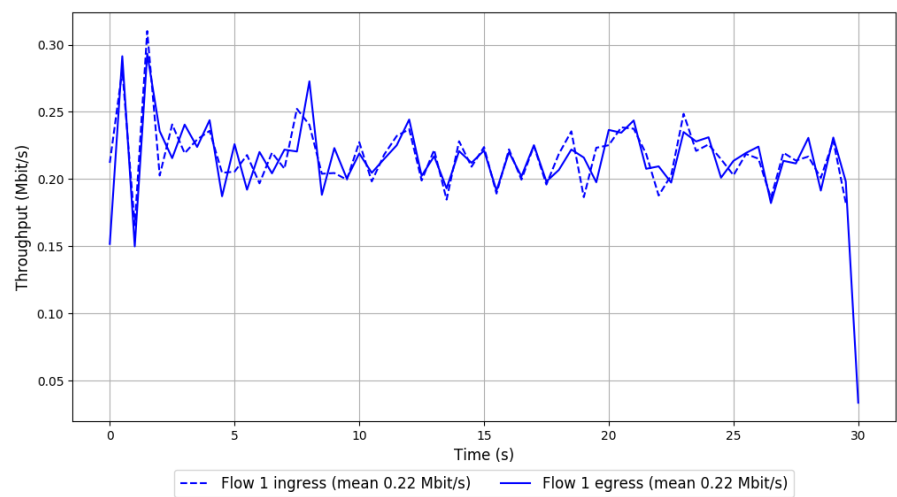
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2017-11-21 11:14:48
End at: 2017-11-21 11:15:18

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.428 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.428 ms
Loss rate: 0.00%
```
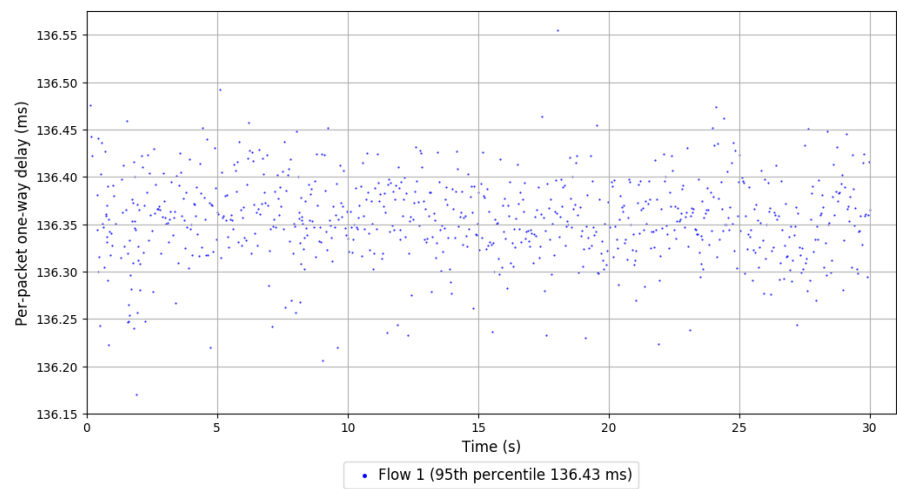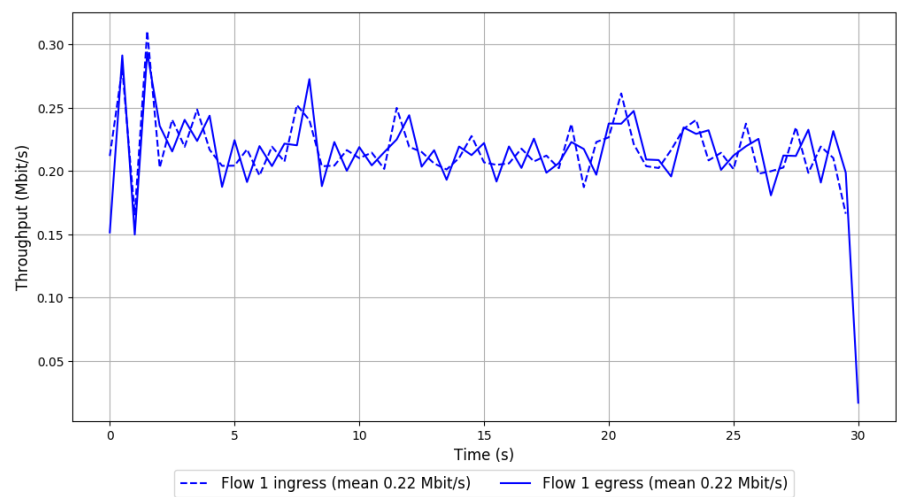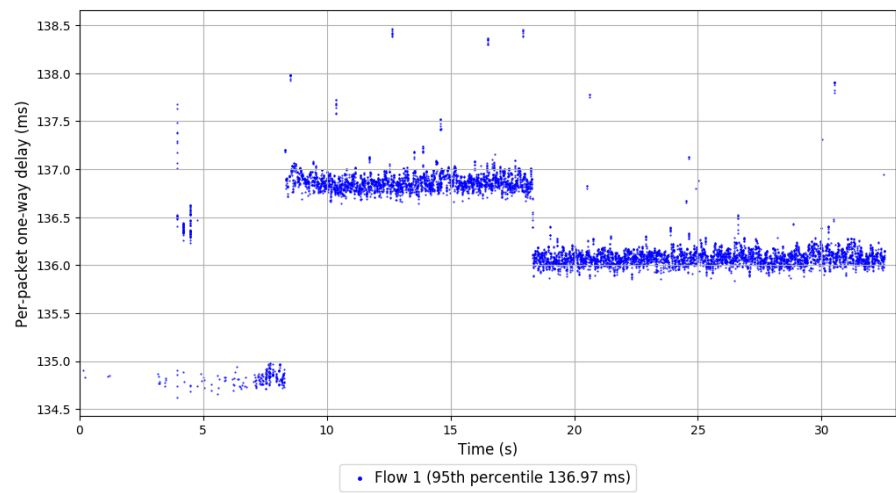
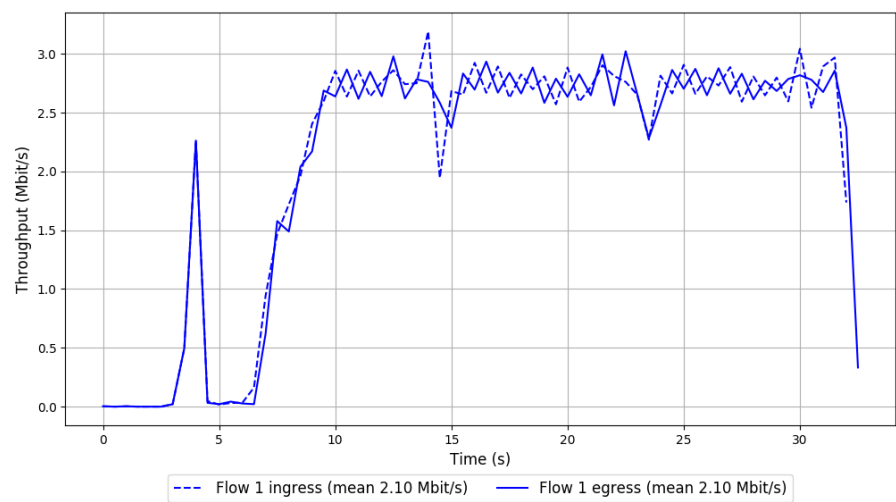# Run 9: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) ——— Flow 1 egress (mean 0.22 Mbit/s)

• Flow 1 (95th percentile 136.43 ms)

```
Run 10: Statistics of SCReAM

Start at: 2017-11-21 11:26:05
End at: 2017-11-21 11:26:35

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.426 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.426 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) --- Flow 1 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 136.43 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2017-11-21 09:43:22
End at: 2017-11-21 09:43:52

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.970 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.970 ms
Loss rate: 0.00%
```
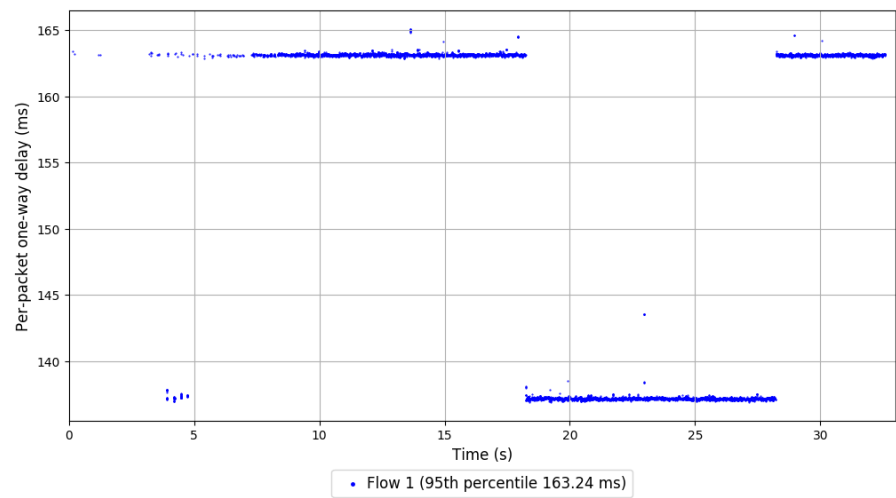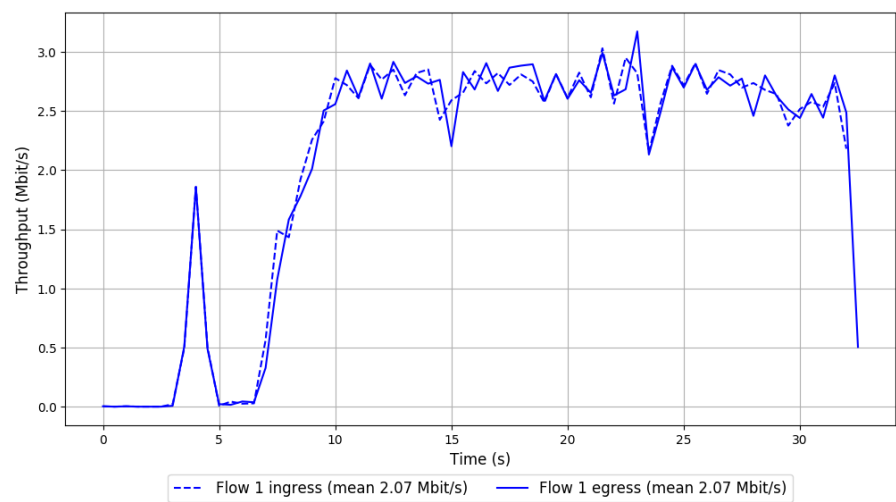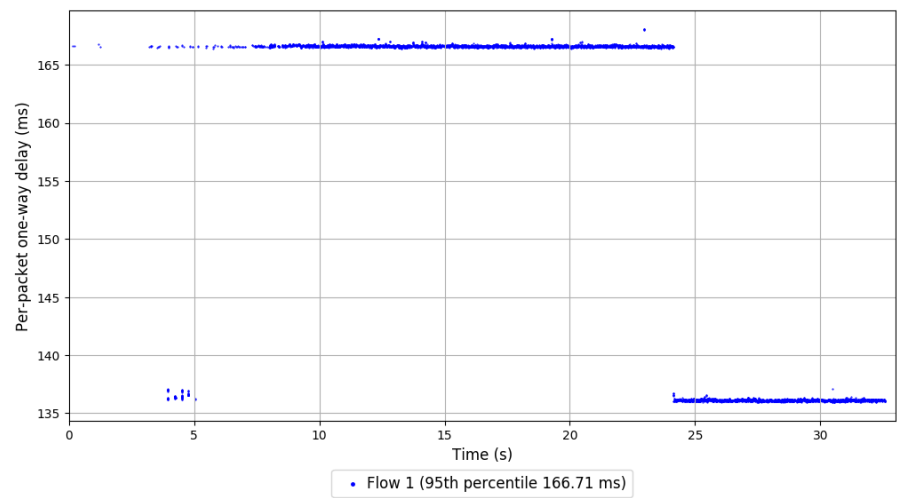
Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.10 Mbit/s) --- Flow 1 egress (mean 2.10 Mbit/s)

Flow 1 (95th percentile 136.97 ms)

```
Run 2: Statistics of WebRTC media

Start at: 2017-11-21 09:54:32
End at: 2017-11-21 09:55:02

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 163.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 163.237 ms
Loss rate: 0.00%
```
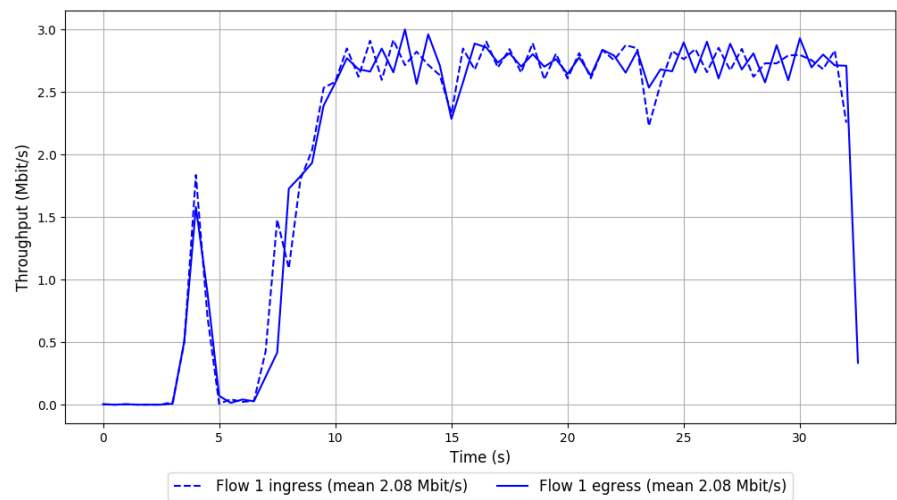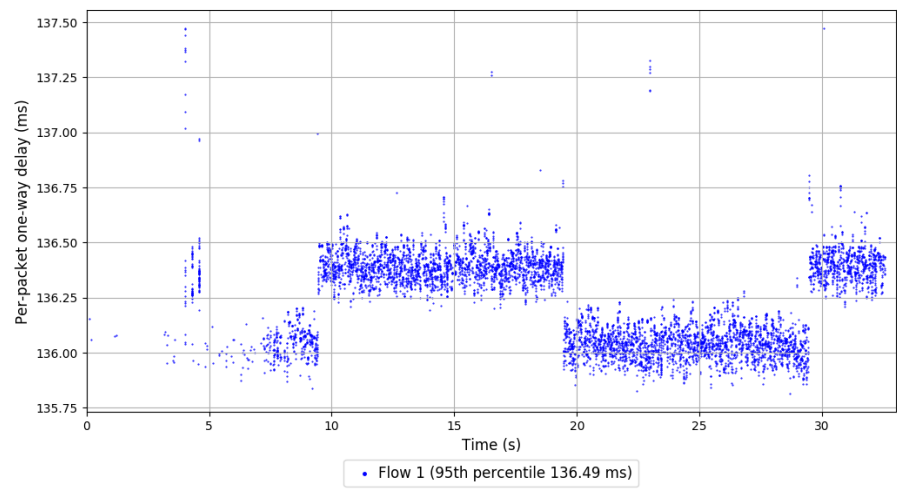
Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.07 Mbit/s) --- Flow 1 egress (mean 2.07 Mbit/s)

Flow 1 (95th percentile 163.24 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2017-11-21 10:05:37
End at: 2017-11-21 10:06:07


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 166.714 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 166.714 ms
Loss rate: 0.00%
```
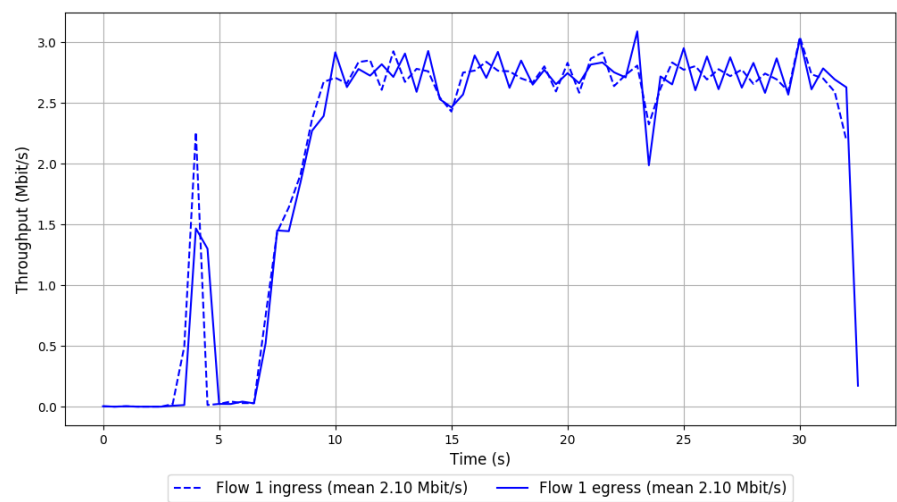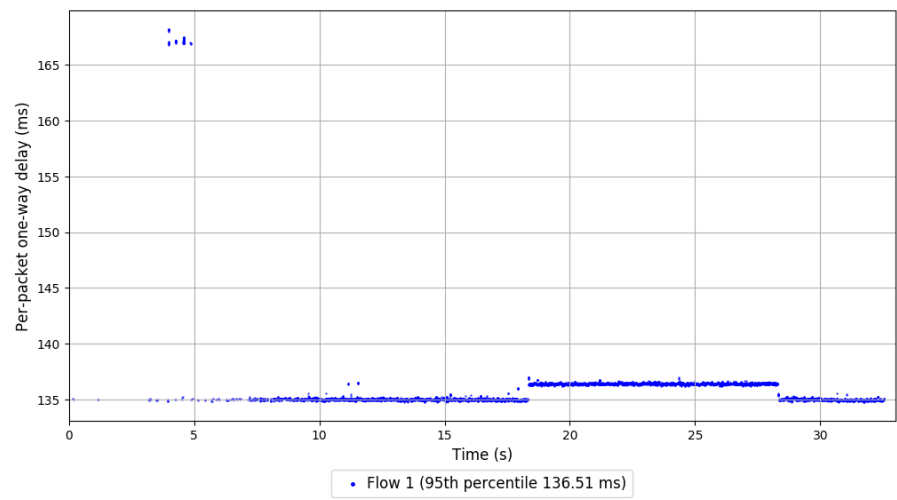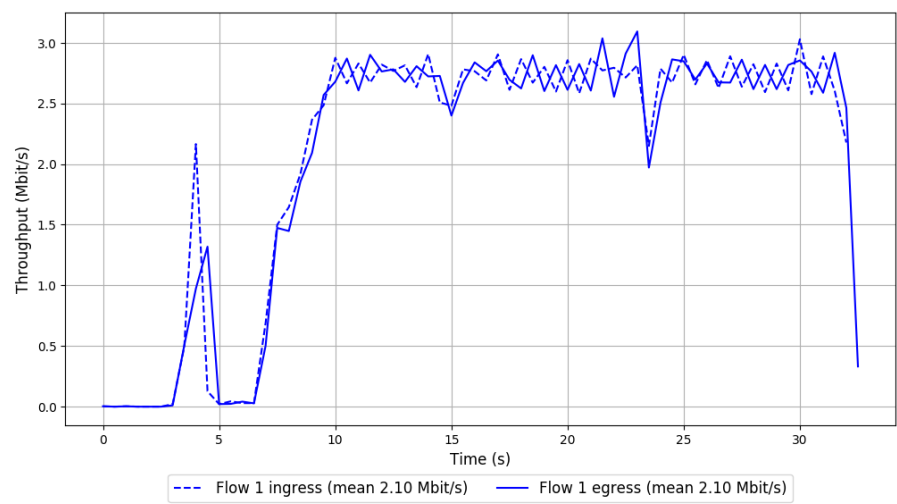
Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.08 Mbit/s)   Flow 1 egress (mean 2.08 Mbit/s)

Flow 1 (95th percentile 166.71 ms)

```
Run 4: Statistics of WebRTC media

Start at: 2017-11-21 10:17:11
End at: 2017-11-21 10:17:41

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.490 ms
Loss rate: 0.00%
```
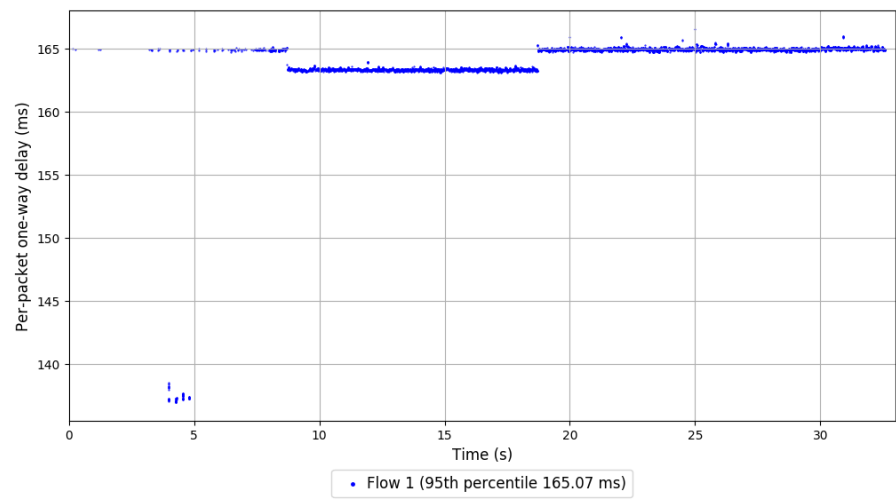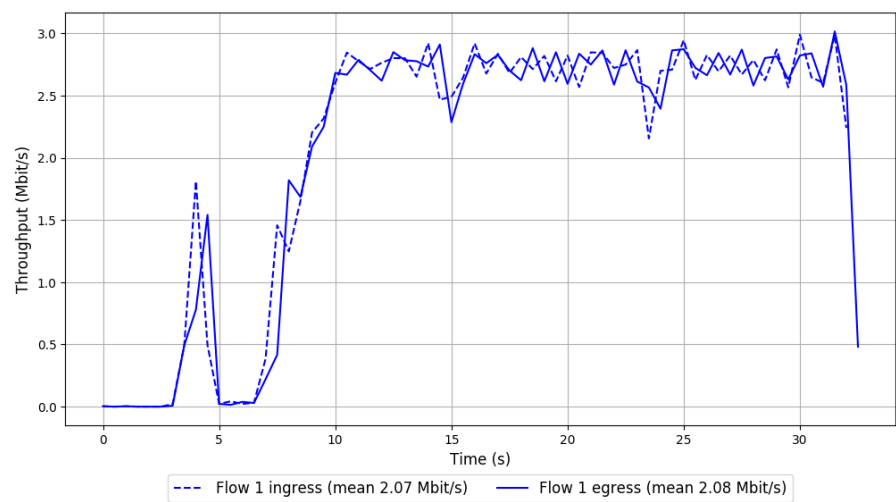
Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.10 Mbit/s)   Flow 1 egress (mean 2.10 Mbit/s)

Flow 1 (95th percentile 136.49 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2017-11-21 10:28:52
End at: 2017-11-21 10:29:22


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.511 ms
Loss rate: 0.00%
```
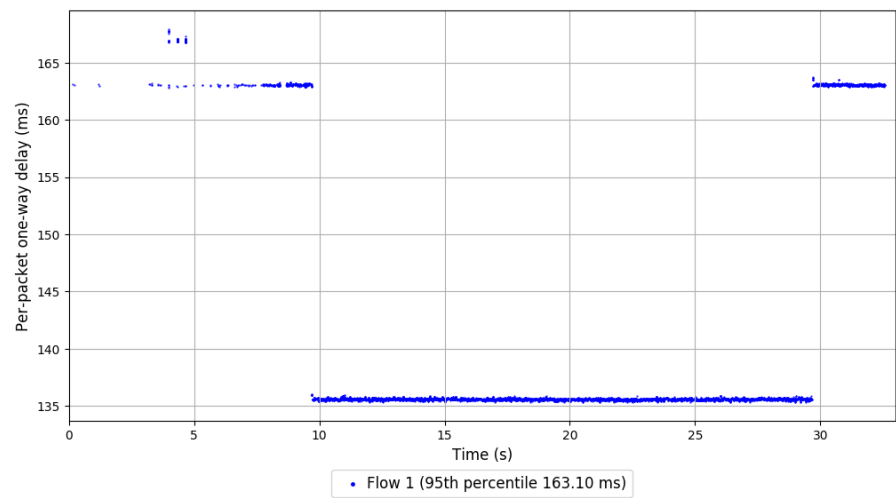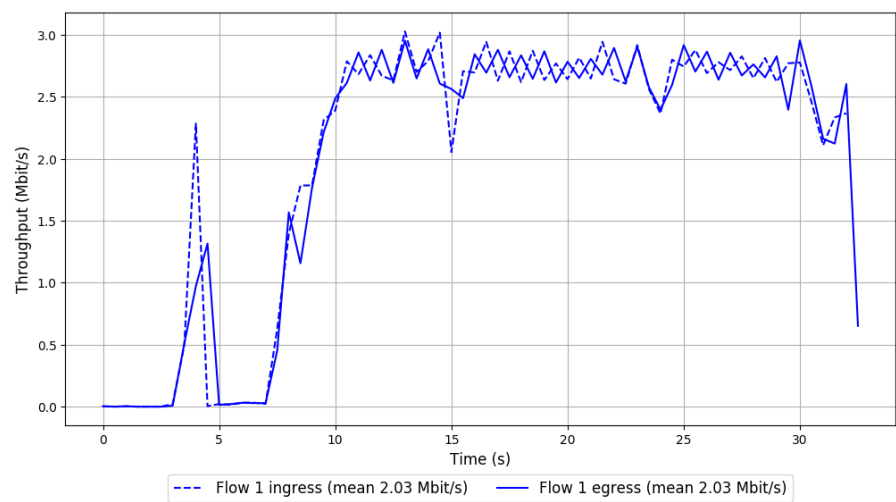
Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.10 Mbit/s) --- Flow 1 egress (mean 2.10 Mbit/s)

Flow 1 (95th percentile 136.51 ms)

```
Run 6: Statistics of WebRTC media

Start at: 2017-11-21 10:40:02
End at: 2017-11-21 10:40:32

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 165.068 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 165.068 ms
Loss rate: 0.01%
```
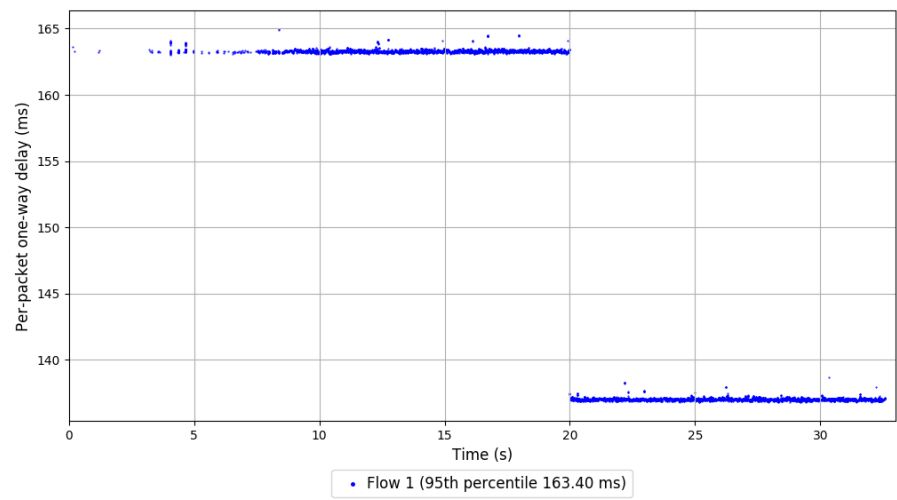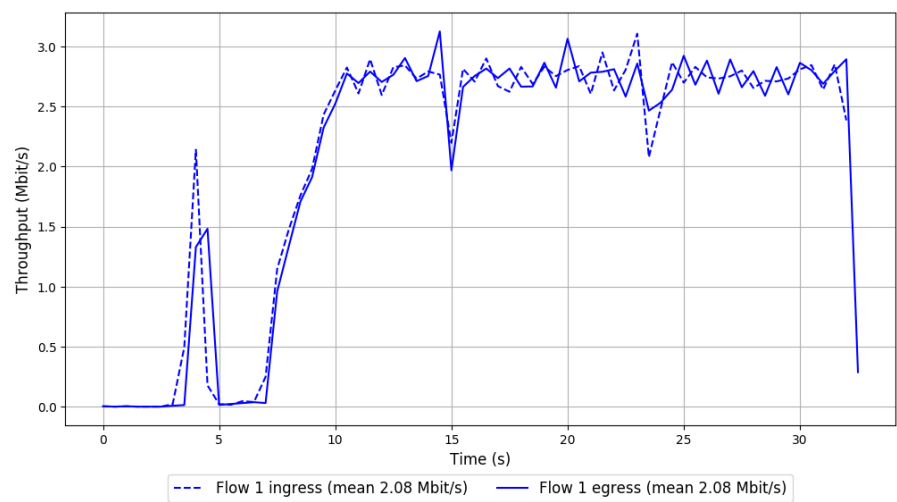
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-11-21 10:51:21
End at: 2017-11-21 10:51:51

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 163.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 163.105 ms
Loss rate: 0.00%
```
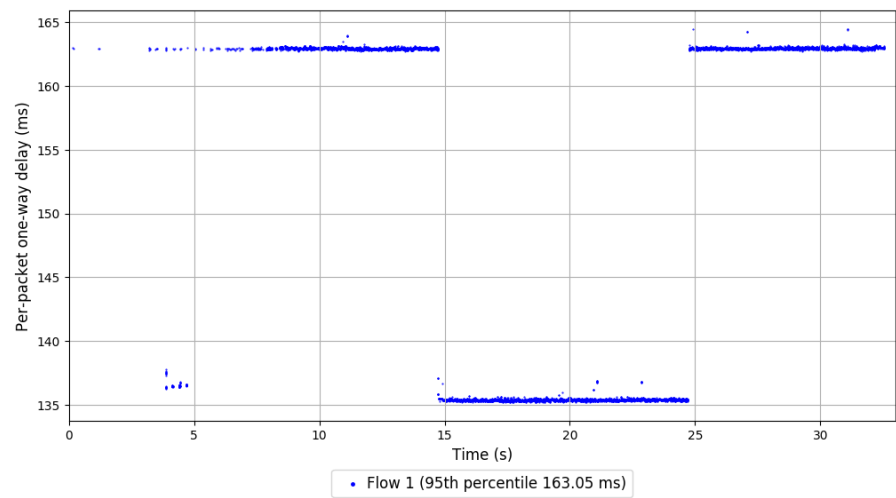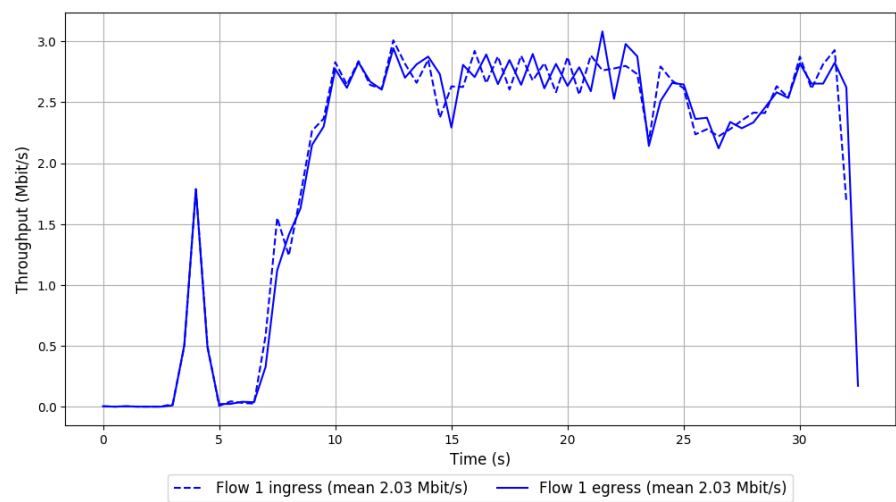
Run 7: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.03 Mbit/s)   Flow 1 egress (mean 2.03 Mbit/s)

Flow 1 (95th percentile 163.10 ms)

137

```
Run 8: Statistics of WebRTC media

Start at: 2017-11-21 11:02:01
End at: 2017-11-21 11:02:31


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 163.404 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 163.404 ms
Loss rate: 0.00%
```
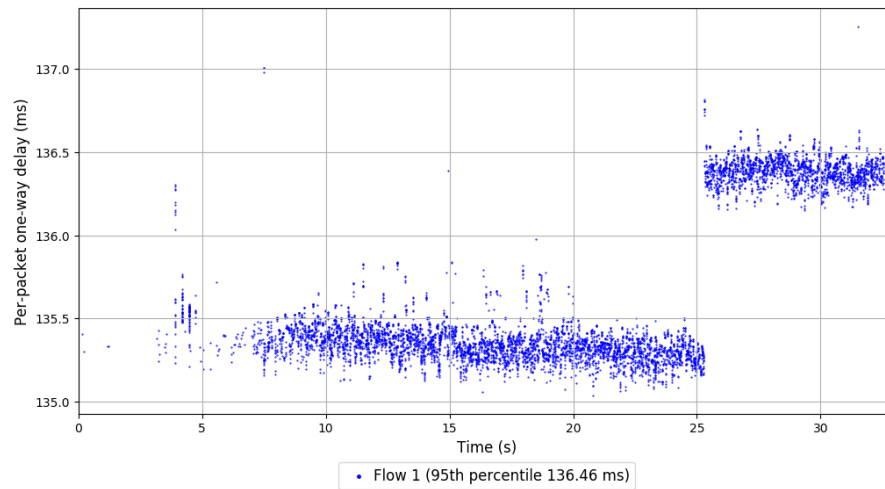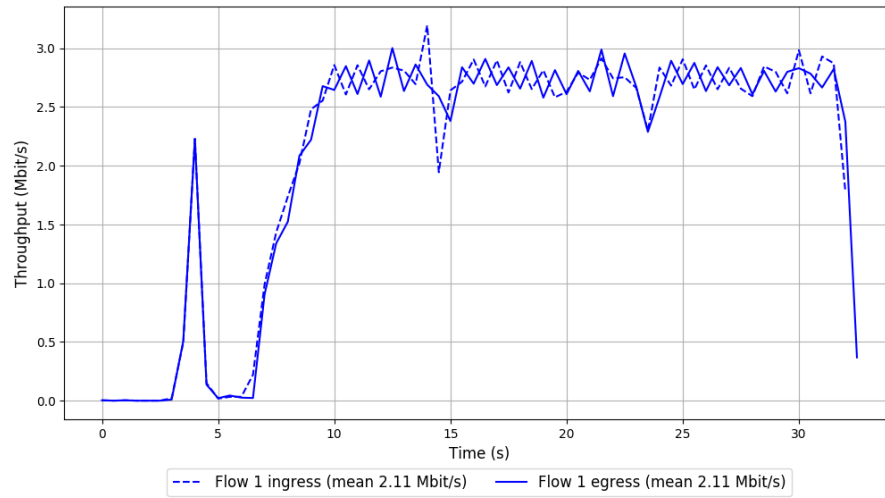
Run 8: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.08 Mbit/s) --- Flow 1 egress (mean 2.08 Mbit/s)

Flow 1 (95th percentile 163.40 ms)

```
Run 9: Statistics of WebRTC media

Start at: 2017-11-21 11:13:16
End at: 2017-11-21 11:13:46

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 163.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 163.046 ms
Loss rate: 0.00%
```
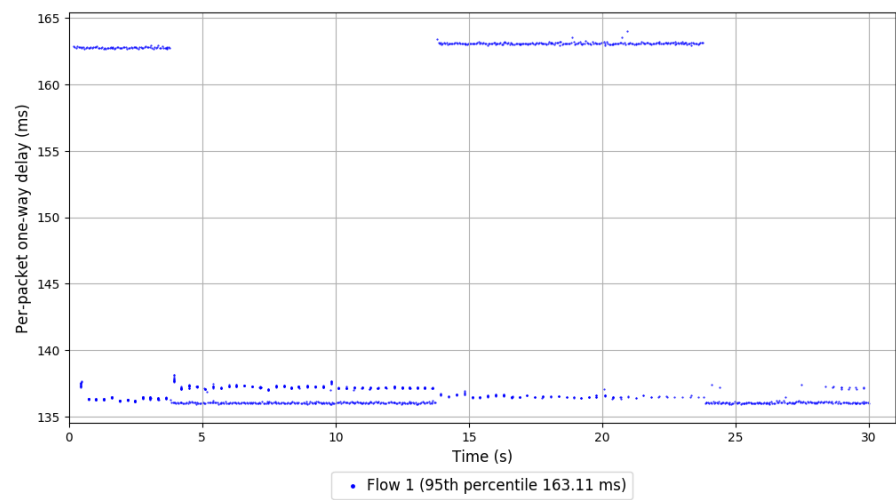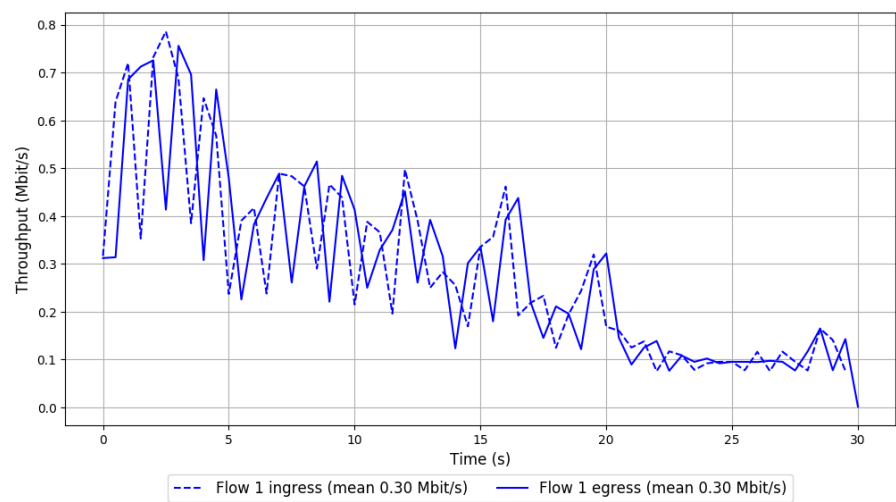
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-11-21 11:24:35
End at: 2017-11-21 11:25:05

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 136.455 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 136.455 ms
Loss rate: 0.00%
```
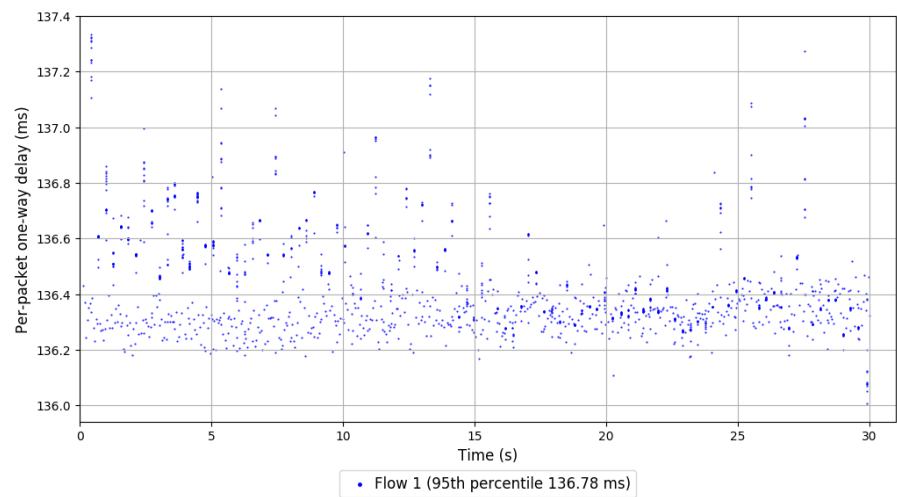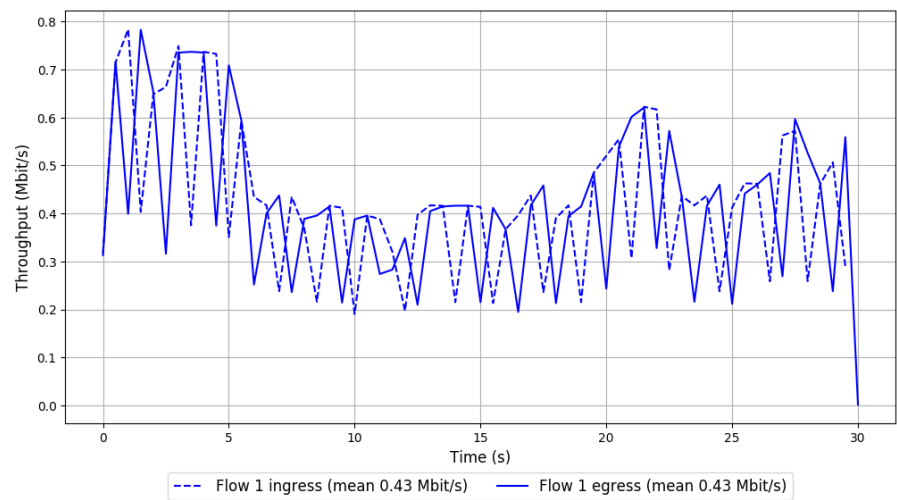
Run 10: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.11 Mbit/s) — — — Flow 1 egress (mean 2.11 Mbit/s)

• Flow 1 (95th percentile 136.46 ms)

```
Run 1: Statistics of Sprout

Start at: 2017-11-21 09:45:34
End at: 2017-11-21 09:46:04

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 163.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 163.110 ms
Loss rate: 0.00%
```
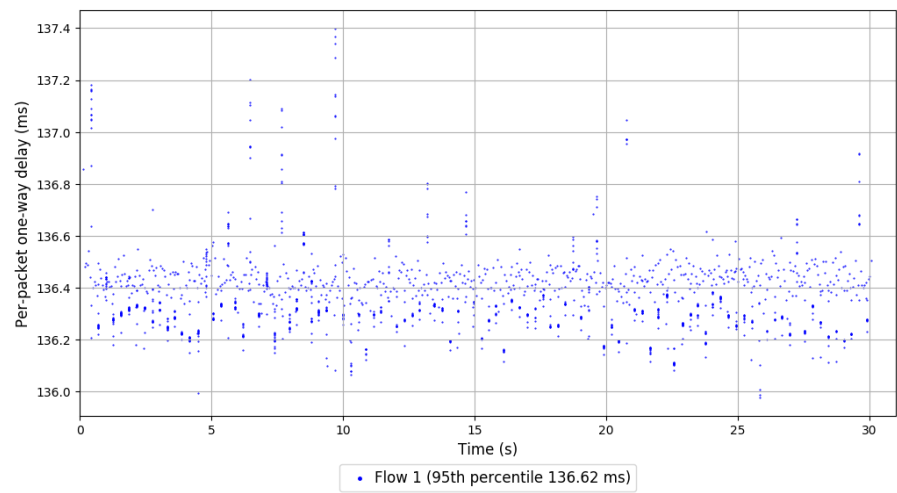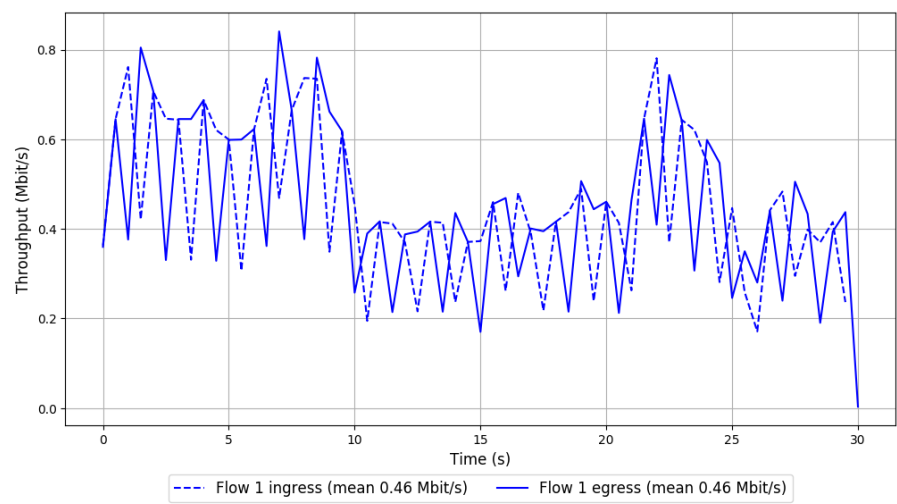
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-11-21 09:56:44
End at: 2017-11-21 09:57:14

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.784 ms
Loss rate: 0.00%
```
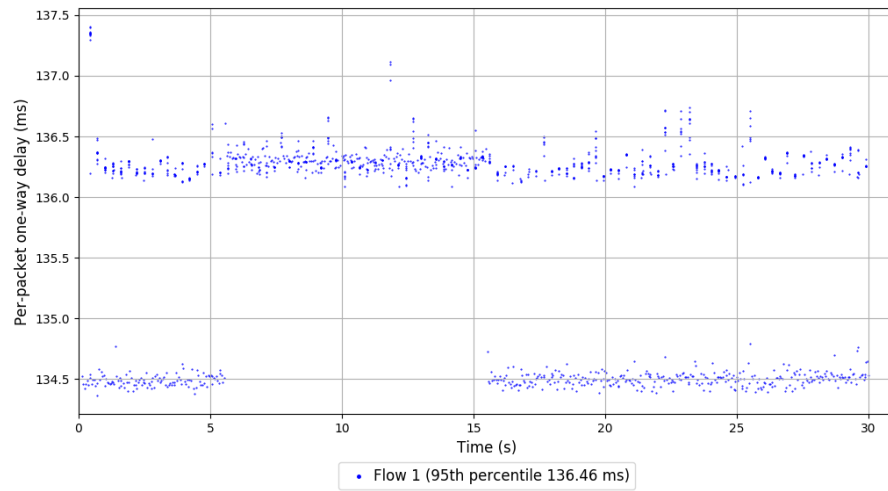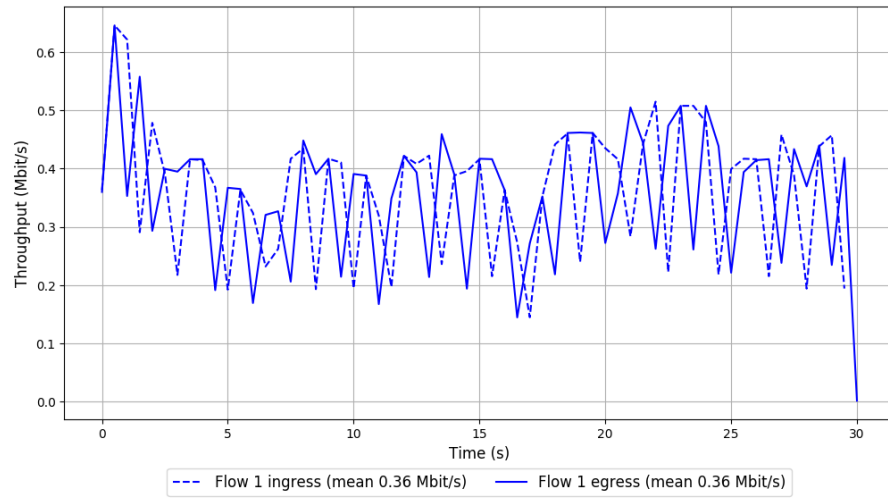
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-11-21 10:07:49
End at: 2017-11-21 10:08:19


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 136.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 136.617 ms
Loss rate: 0.00%
```
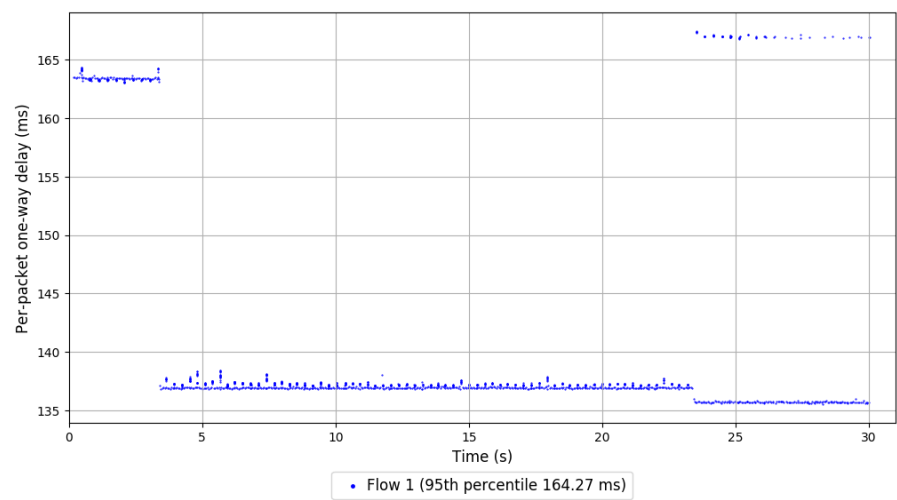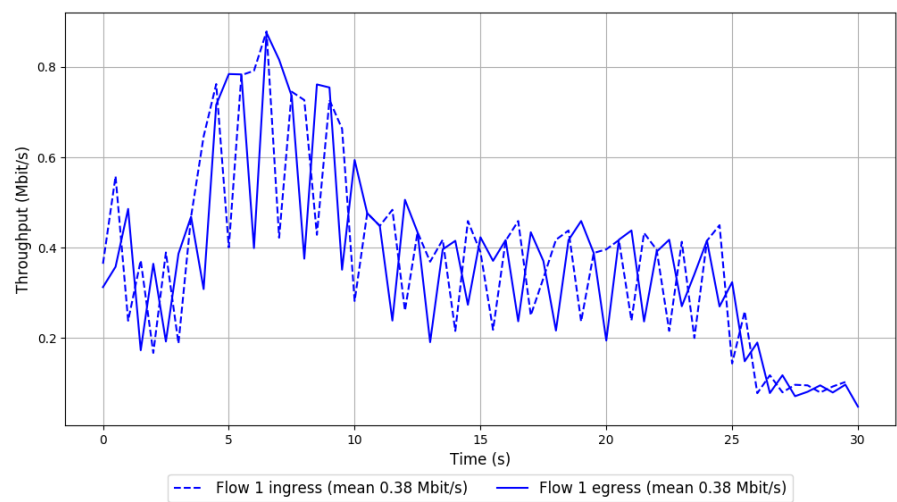
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 0.46 Mbit/s)   Flow 1 egress (mean 0.46 Mbit/s)

Flow 1 (95th percentile 136.62 ms)

```
Run 4: Statistics of Sprout

Start at: 2017-11-21 10:19:23
End at: 2017-11-21 10:19:53

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.463 ms
Loss rate: 0.00%
```
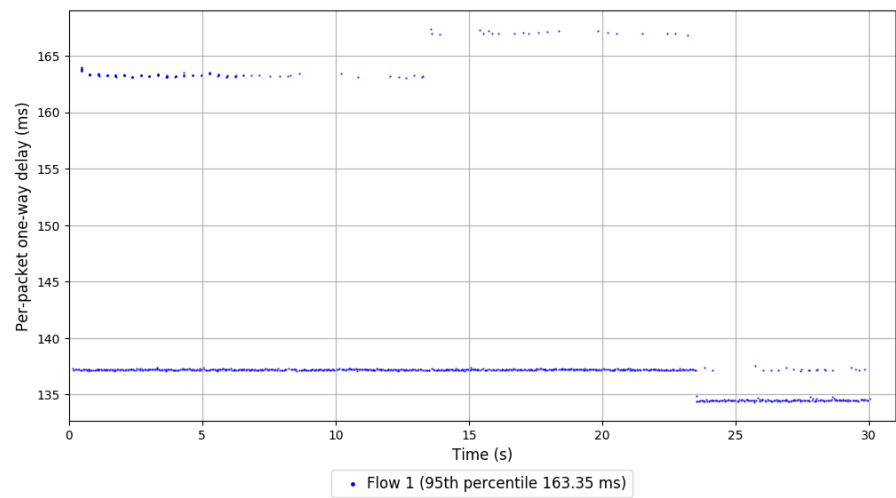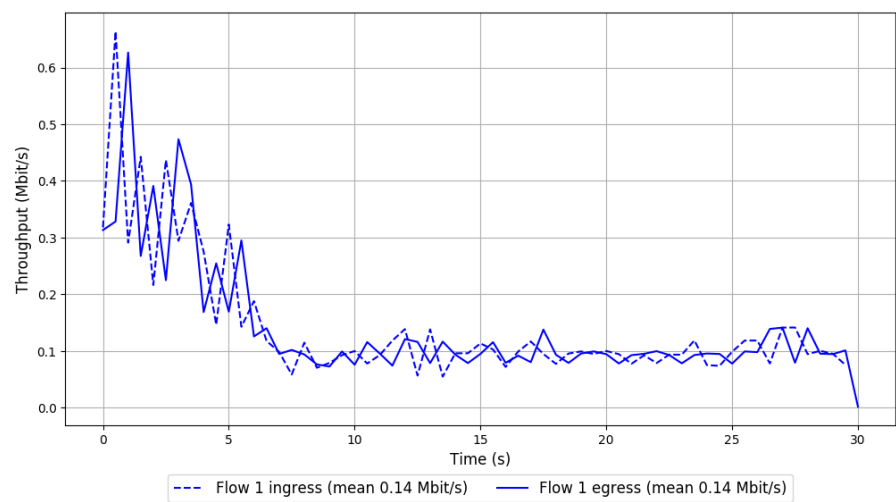
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 0.36 Mbit/s)   Flow 1 egress (mean 0.36 Mbit/s)

Flow 1 (95th percentile 136.46 ms)

```
Run 5: Statistics of Sprout

Start at: 2017-11-21 10:31:05
End at: 2017-11-21 10:31:35

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 164.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 164.272 ms
Loss rate: 0.00%
```
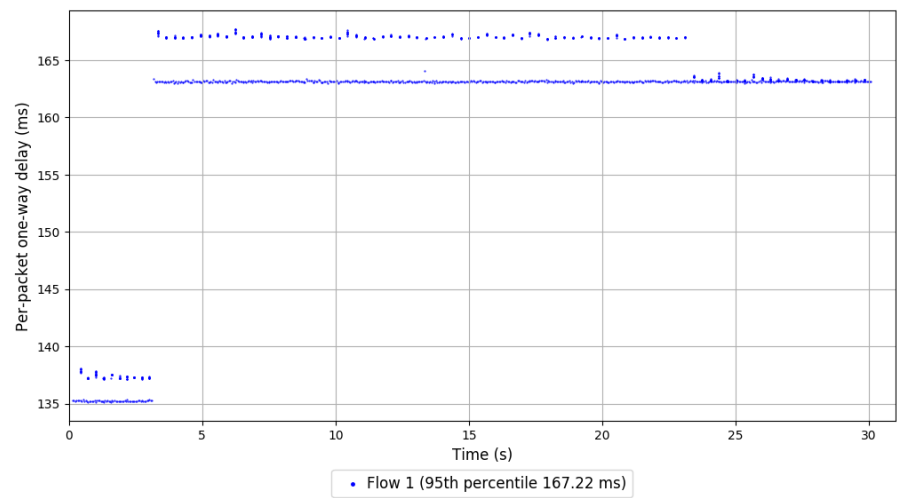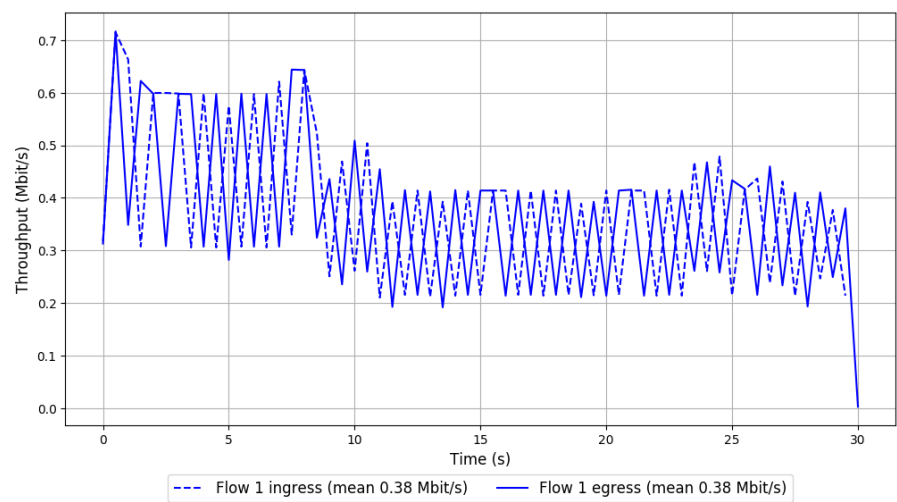
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-11-21 10:42:15
End at: 2017-11-21 10:42:45

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 163.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 163.354 ms
Loss rate: 0.00%
```
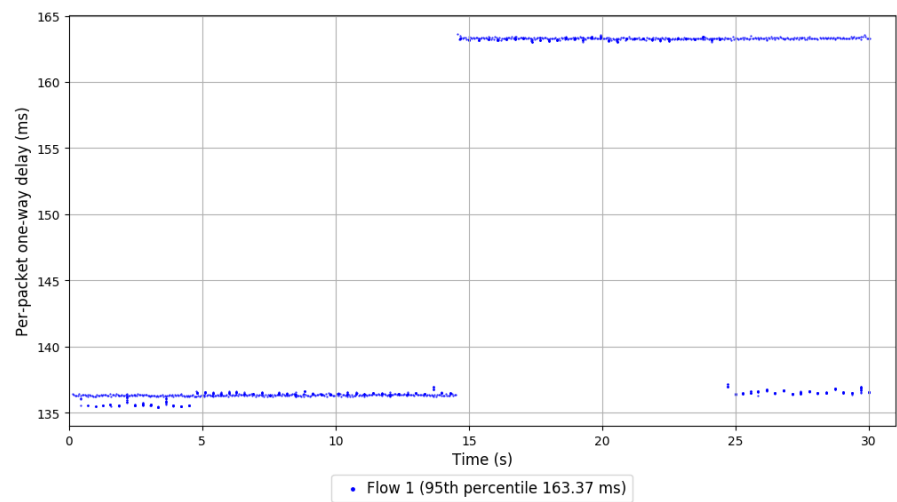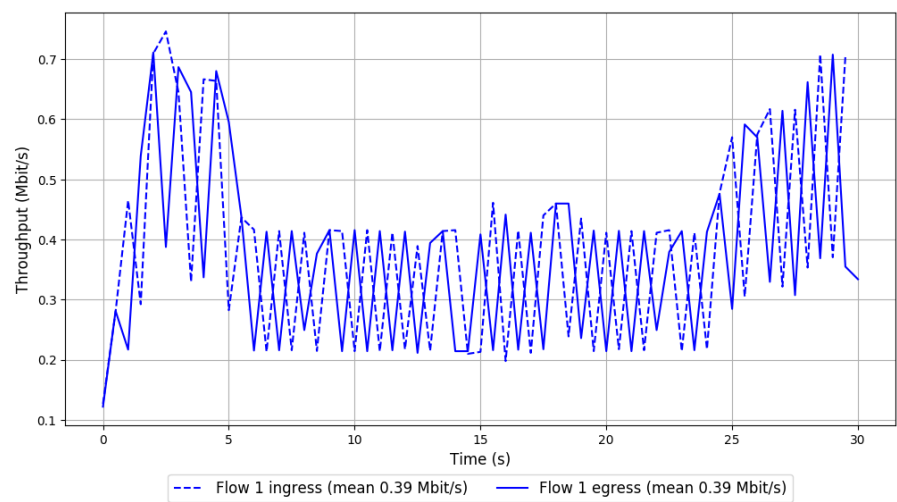
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-11-21 10:53:35
End at: 2017-11-21 10:54:05

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 167.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 167.221 ms
Loss rate: 0.00%
```
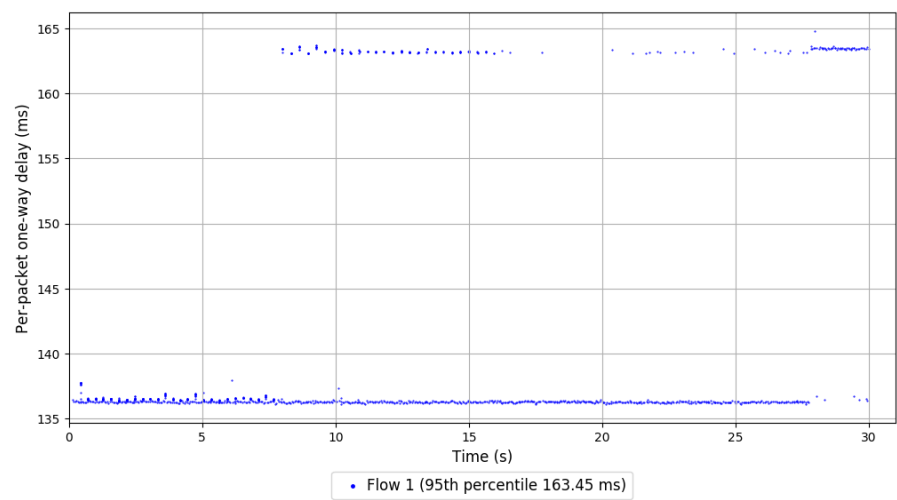
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-11-21 11:04:14
End at: 2017-11-21 11:04:44

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 163.368 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 163.368 ms
Loss rate: 0.09%
```
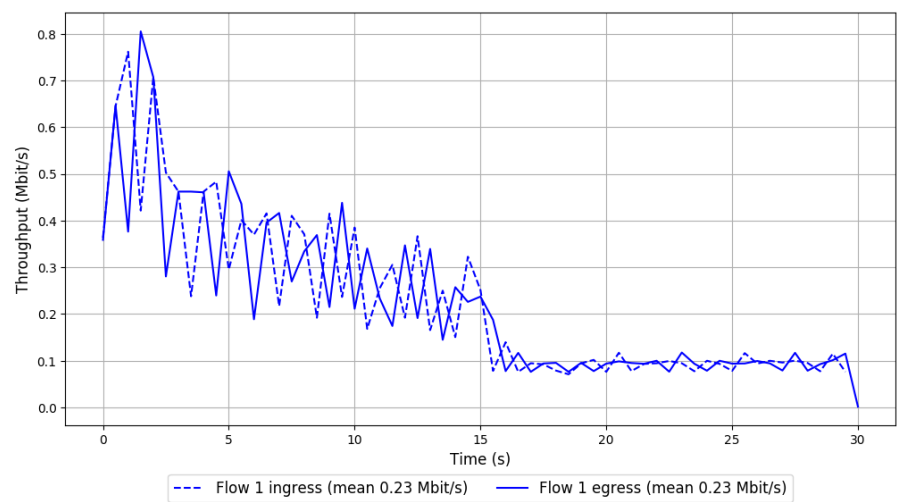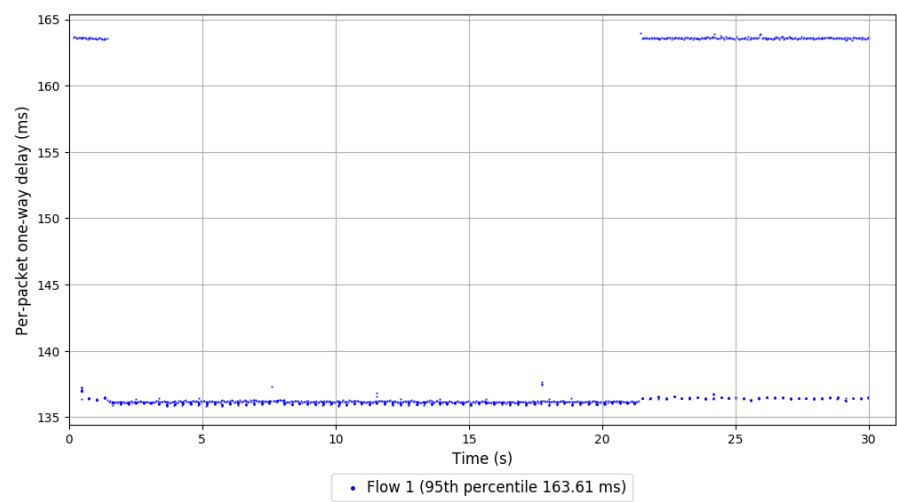
Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 0.39 Mbit/s)   —— Flow 1 egress (mean 0.39 Mbit/s)

• Flow 1 (95th percentile 163.37 ms)

```
Run 9: Statistics of Sprout

Start at: 2017-11-21 11:15:30
End at: 2017-11-21 11:16:00

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 163.447 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 163.447 ms
Loss rate: 0.01%
```
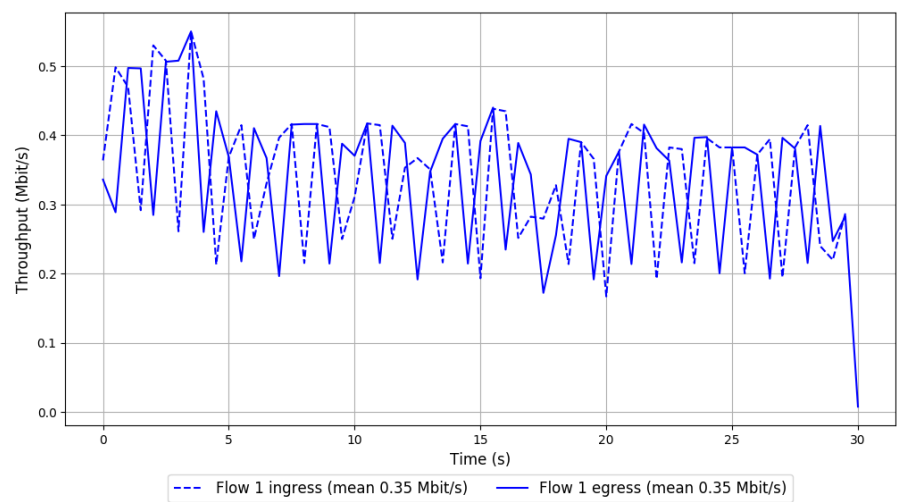
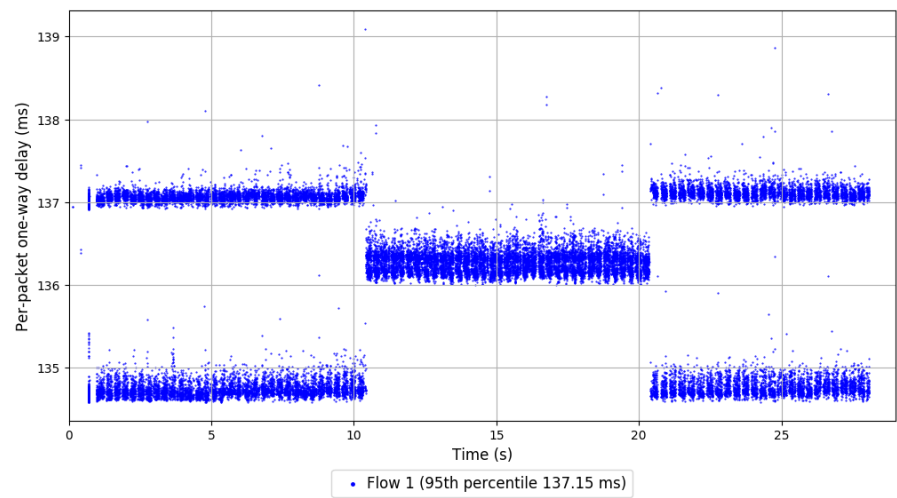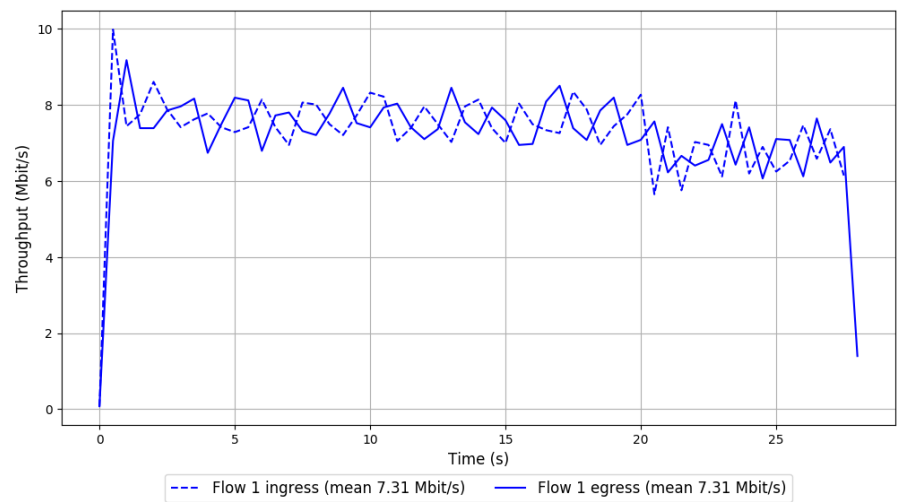## Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-11-21 11:26:47
End at: 2017-11-21 11:27:17


# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 163.607 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 163.607 ms
Loss rate: 0.01%
```

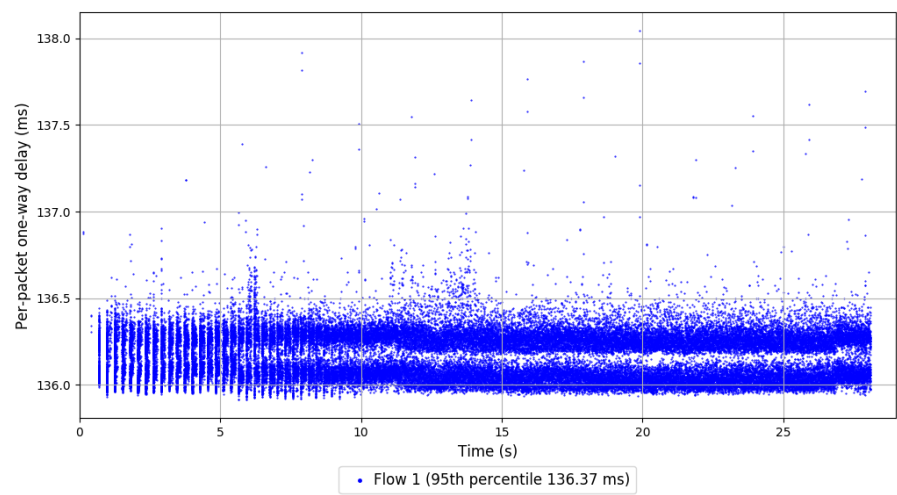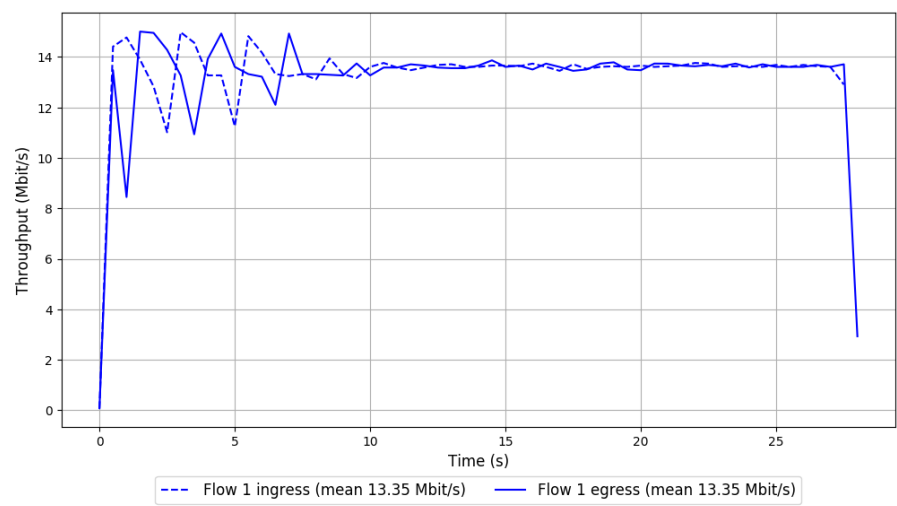Run 10: Report of Sprout — Data Link

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

Start at: 2017-11-21 09:51:06
End at: 2017-11-21 09:51:36

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 137.147 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 137.147 ms
Loss rate: 0.01%
```

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

Flow 1 ingress (mean 7.31 Mbit/s) — — — Flow 1 egress (mean 7.31 Mbit/s)

Flow 1 (95th percentile 137.15 ms)

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

Start at: 2017-11-21 10:02:21
End at: 2017-11-21 10:02:51

# Below is generated by plot.py at 2017-11-21 12:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 136.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 136.368 ms
Loss rate: 0.00%
```
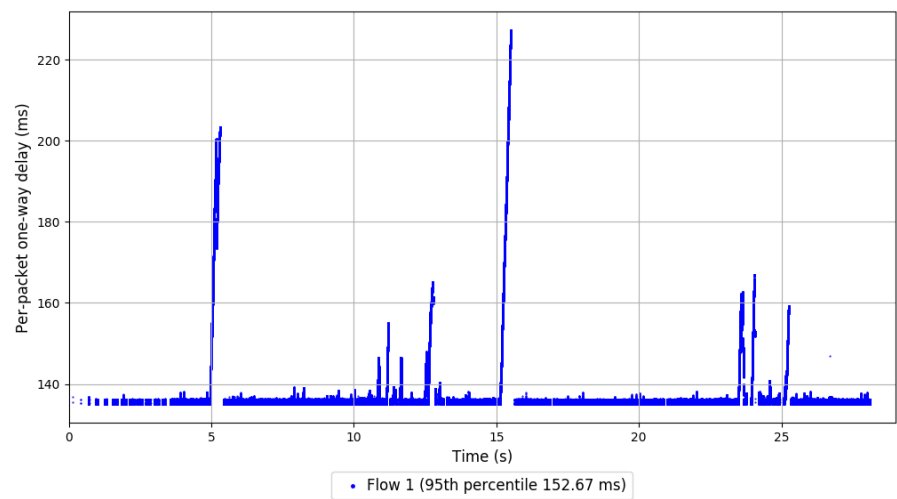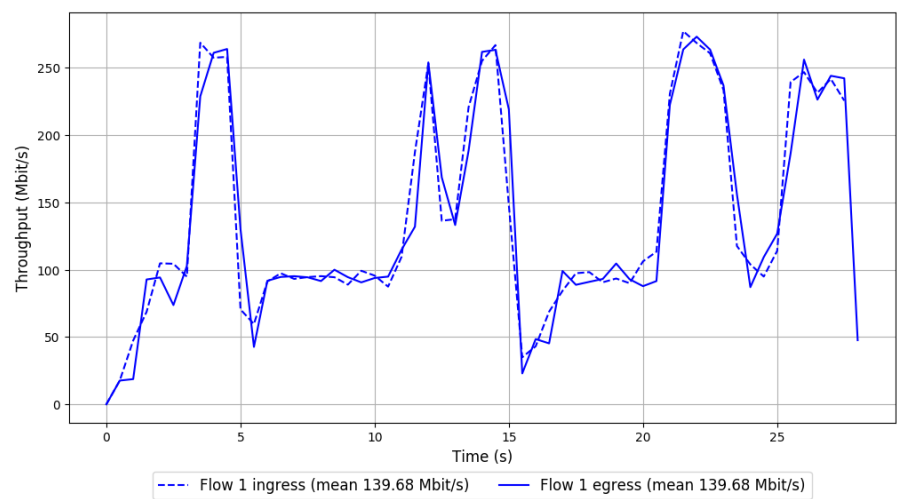
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-21 10:13:36
End at: 2017-11-21 10:14:07

# Below is generated by plot.py at 2017-11-21 12:25:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 139.68 Mbit/s
95th percentile per-packet one-way delay: 152.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 139.68 Mbit/s
95th percentile per-packet one-way delay: 152.669 ms
Loss rate: 0.00%
```
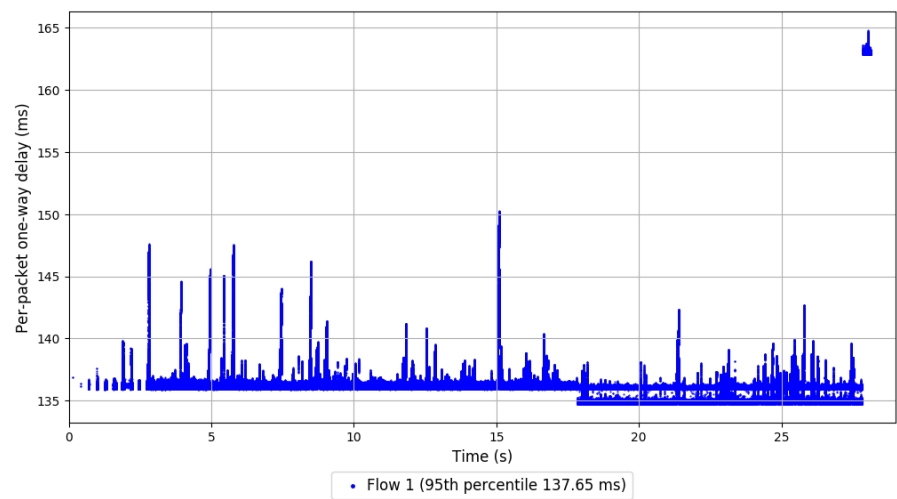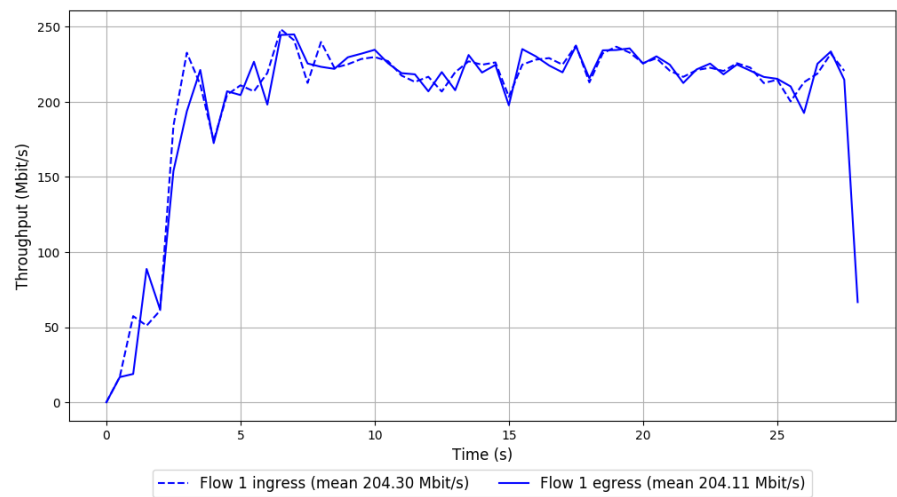
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-21 10:25:08
End at: 2017-11-21 10:25:38

# Below is generated by plot.py at 2017-11-21 12:27:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.11 Mbit/s
95th percentile per-packet one-way delay: 137.646 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.11 Mbit/s
95th percentile per-packet one-way delay: 137.646 ms
Loss rate: 0.00%
```
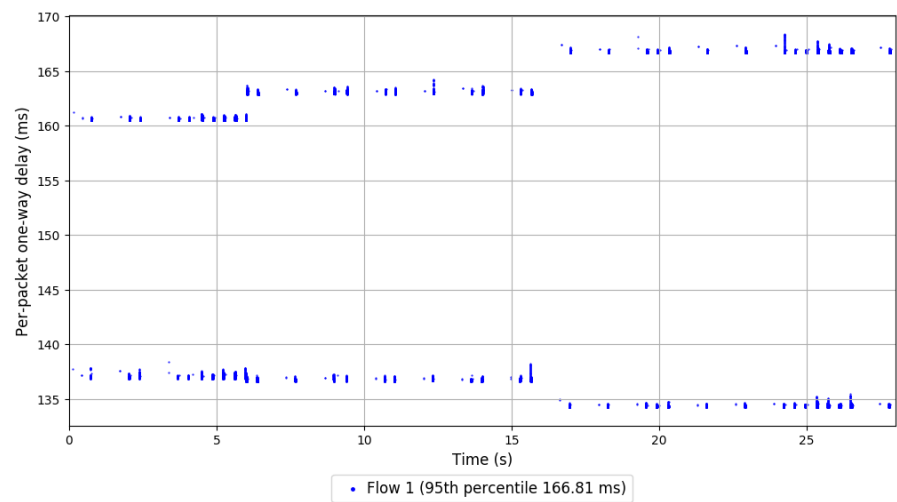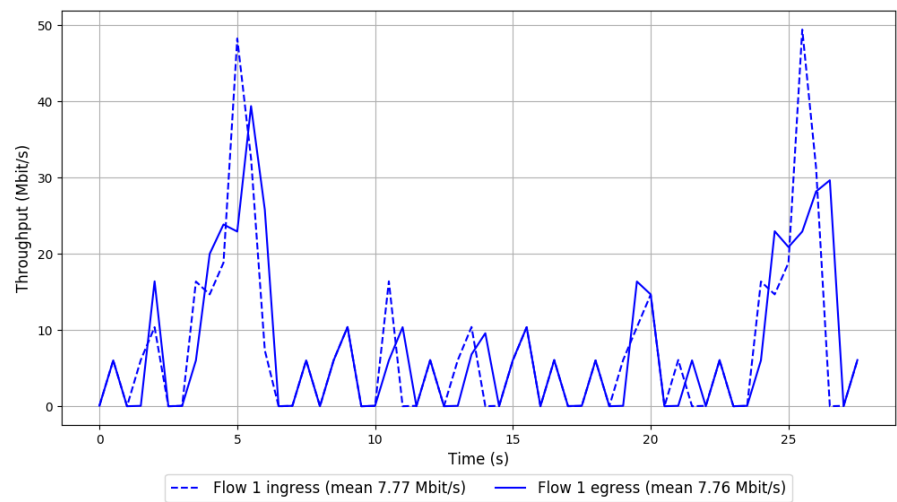
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 204.30 Mbit/s) — — — Flow 1 egress (mean 204.11 Mbit/s)

Flow 1 (95th percentile 137.65 ms)

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

Start at: 2017-11-21 10:36:40
End at: 2017-11-21 10:37:10

# Below is generated by plot.py at 2017-11-21 12:27:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 166.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 166.811 ms
Loss rate: 0.00%
```
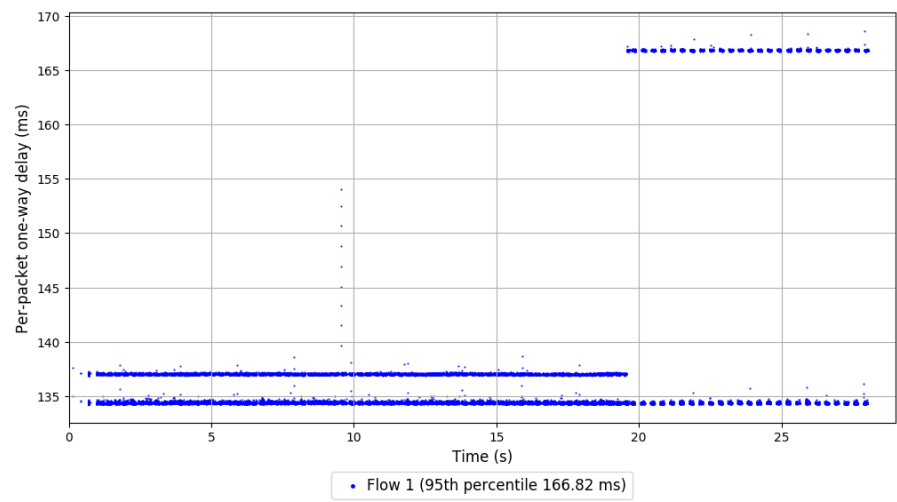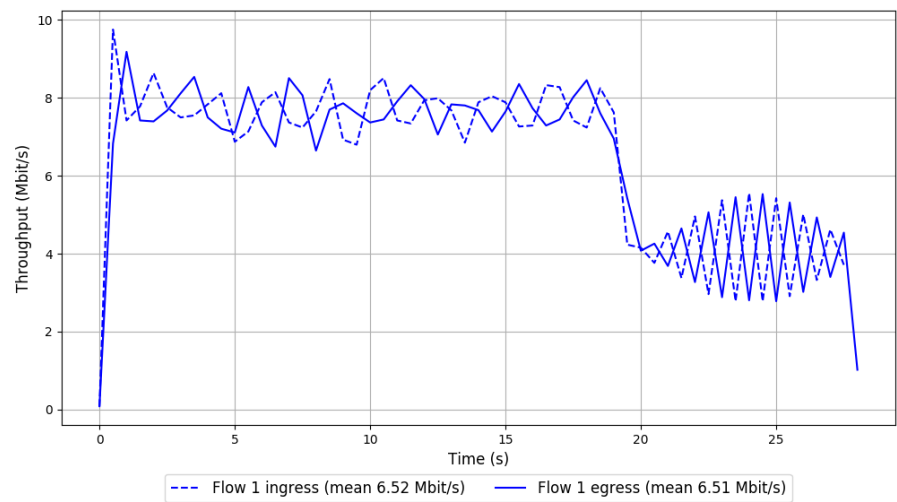
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 7.77 Mbit/s) --- Flow 1 egress (mean 7.76 Mbit/s)

Flow 1 (95th percentile 166.81 ms)

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

Start at: 2017-11-21 10:47:57
End at: 2017-11-21 10:48:27

# Below is generated by plot.py at 2017-11-21 12:27:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 166.822 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 166.822 ms
Loss rate: 0.00%
```
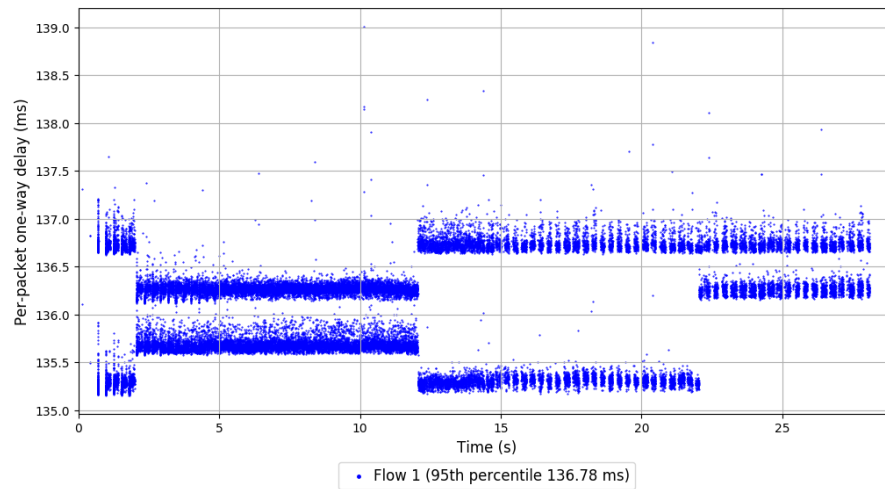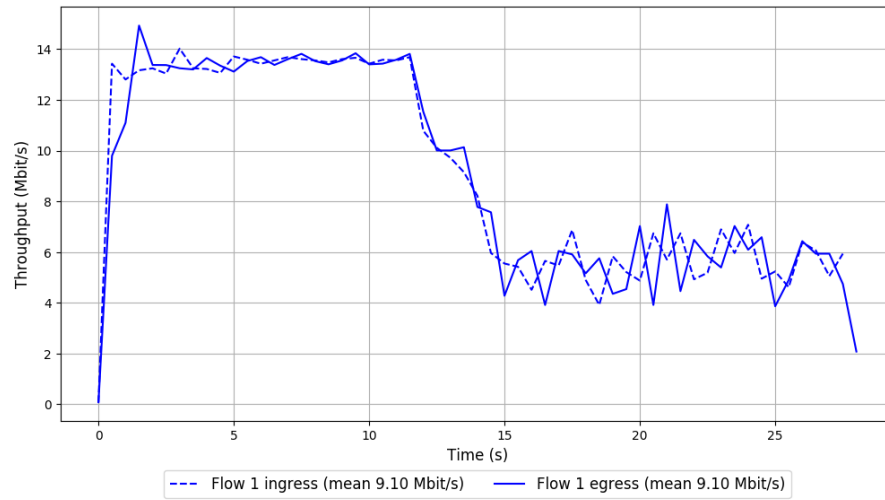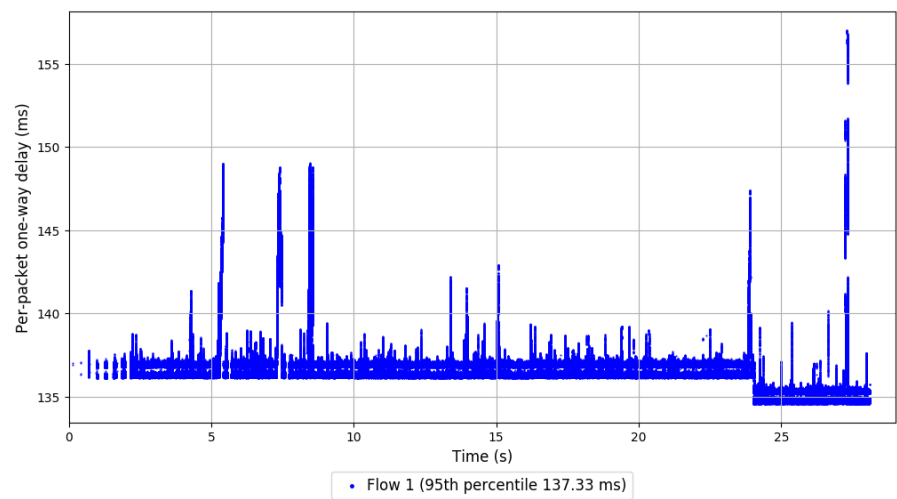
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 6.52 Mbit/s) —— Flow 1 egress (mean 6.51 Mbit/s)

• Flow 1 (95th percentile 166.82 ms)

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

Start at: 2017-11-21 10:59:04
End at: 2017-11-21 10:59:34

# Below is generated by plot.py at 2017-11-21 12:27:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.10 Mbit/s
95th percentile per-packet one-way delay: 136.780 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.10 Mbit/s
95th percentile per-packet one-way delay: 136.780 ms
Loss rate: 0.00%
```
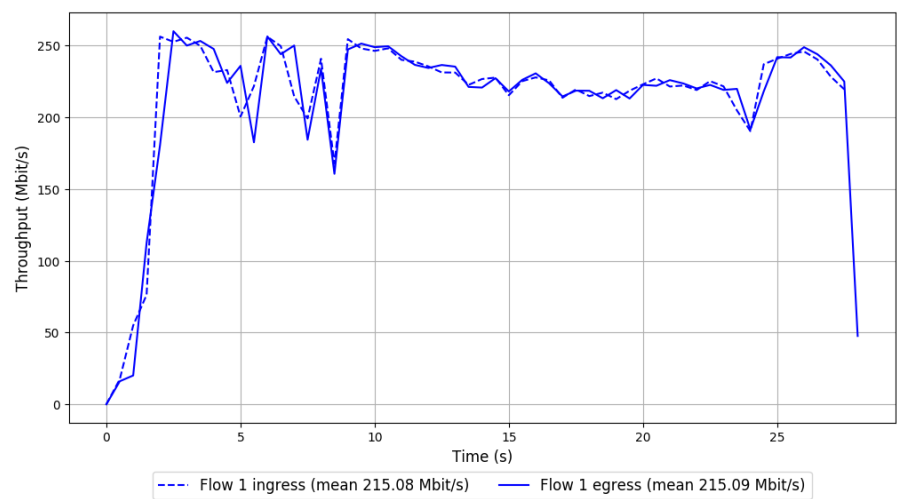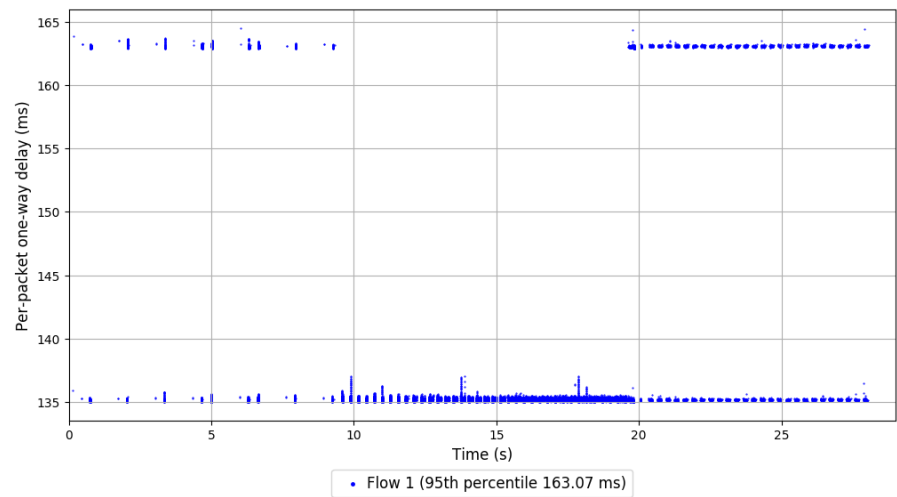
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-21 11:09:52
End at: 2017-11-21 11:10:22

# Below is generated by plot.py at 2017-11-21 12:28:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.09 Mbit/s
95th percentile per-packet one-way delay: 137.330 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.09 Mbit/s
95th percentile per-packet one-way delay: 137.330 ms
Loss rate: 0.00%
```
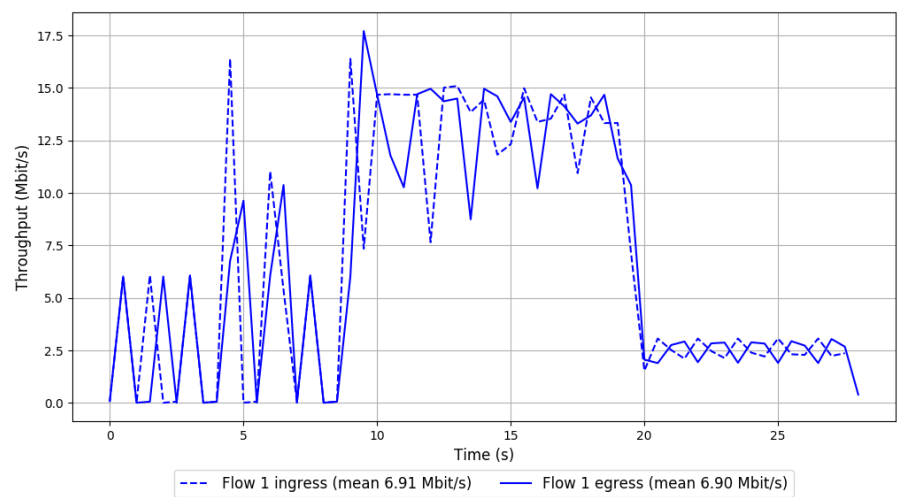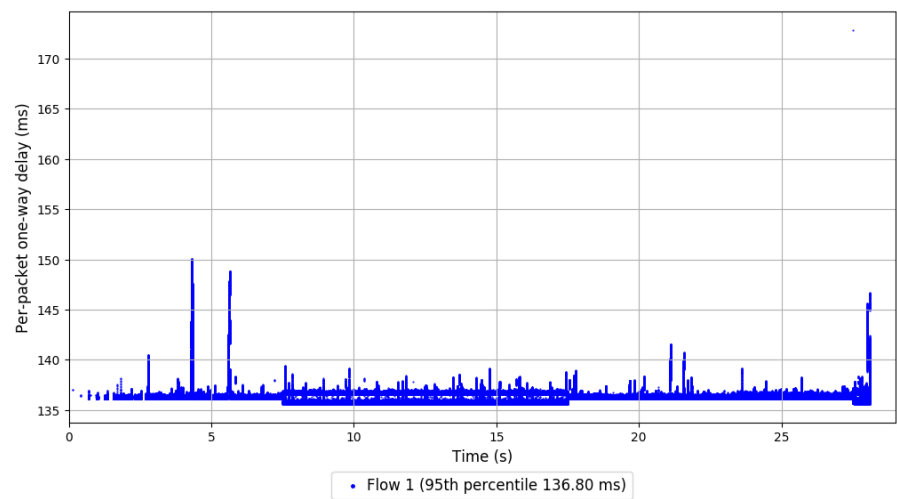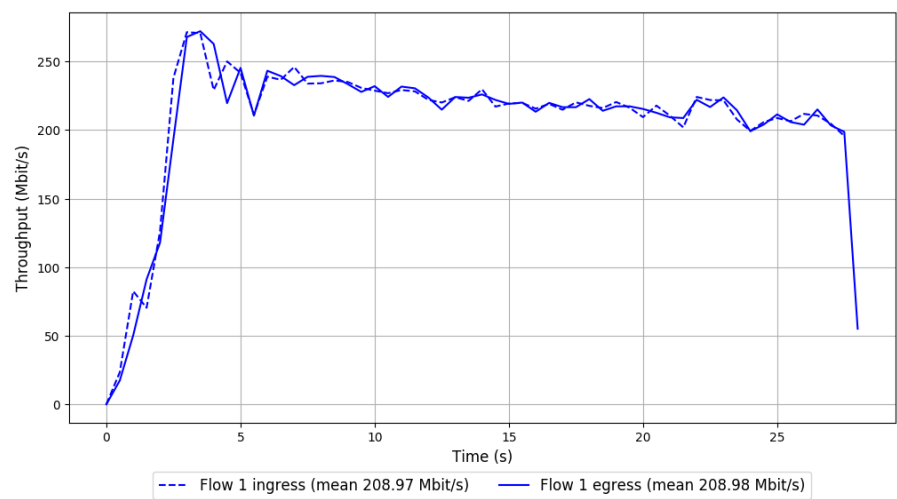
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2017-11-21 11:21:07
End at: 2017-11-21 11:21:37


# Below is generated by plot.py at 2017-11-21 12:28:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 163.067 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 163.067 ms
Loss rate: 0.00%
```

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

Flow 1 ingress (mean 6.91 Mbit/s) ——— Flow 1 egress (mean 6.90 Mbit/s)

• Flow 1 (95th percentile 163.07 ms)

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

Start at: 2017-11-21 11:32:29
End at: 2017-11-21 11:32:59

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.98 Mbit/s
95th percentile per-packet one-way delay: 136.801 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.98 Mbit/s
95th percentile per-packet one-way delay: 136.801 ms
Loss rate: 0.00%
```
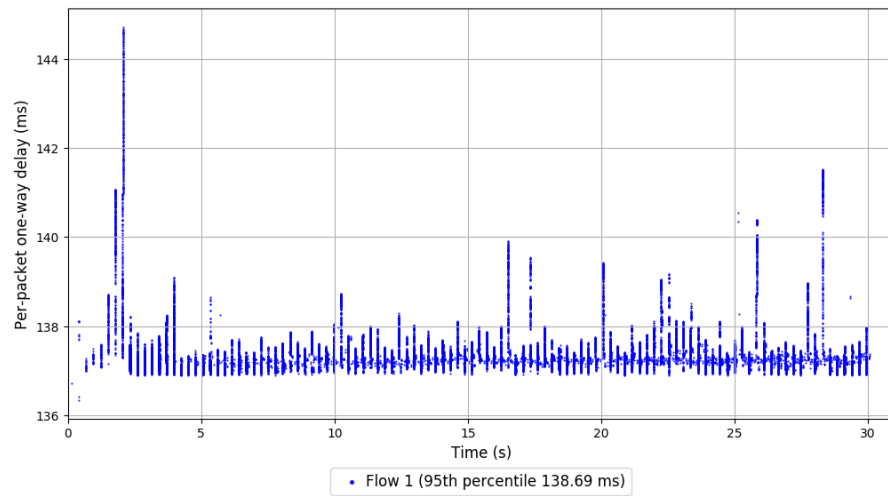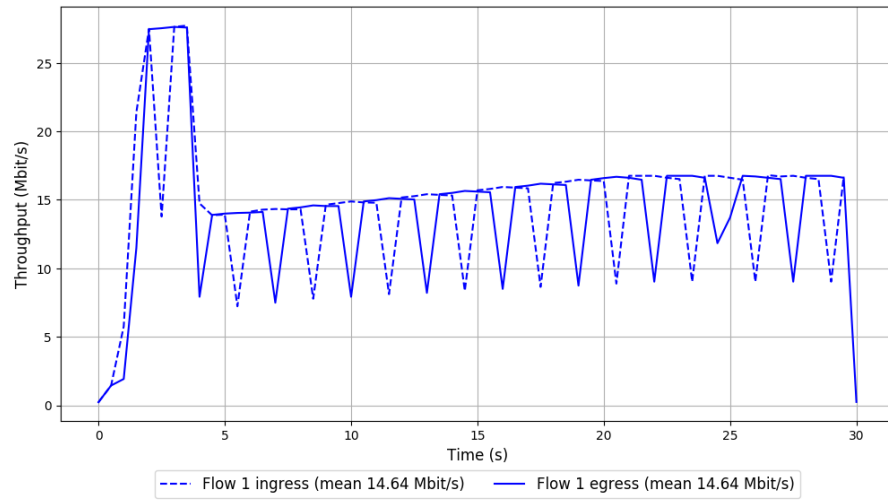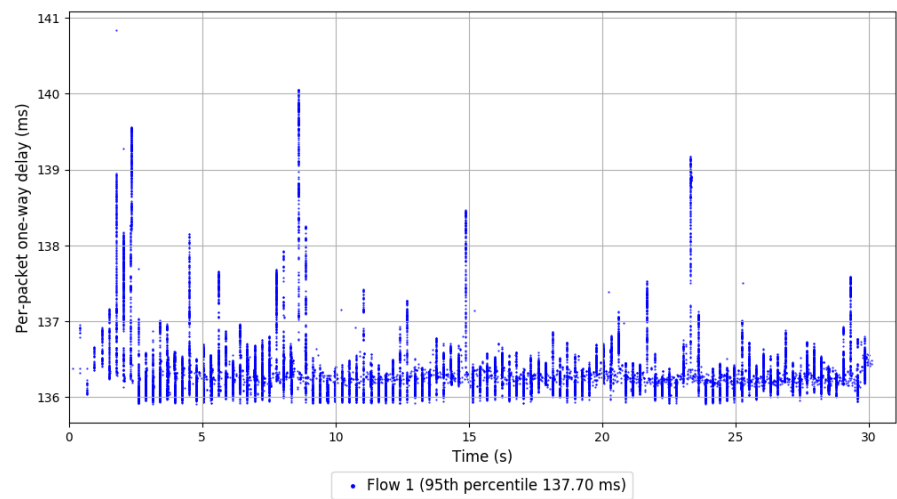
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 208.97 Mbit/s) Flow 1 egress (mean 208.98 Mbit/s)

Flow 1 (95th percentile 136.80 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2017-11-21 09:46:59
End at: 2017-11-21 09:47:29

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 138.690 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 138.690 ms
Loss rate: 0.00%
```
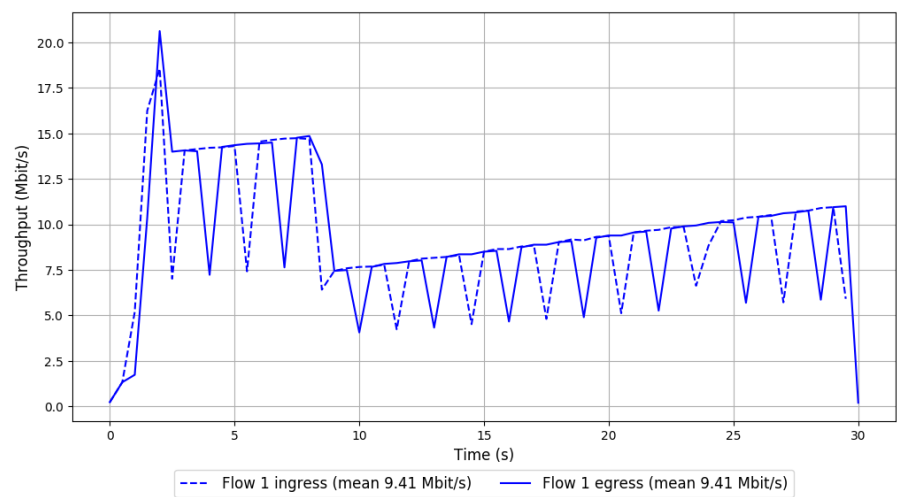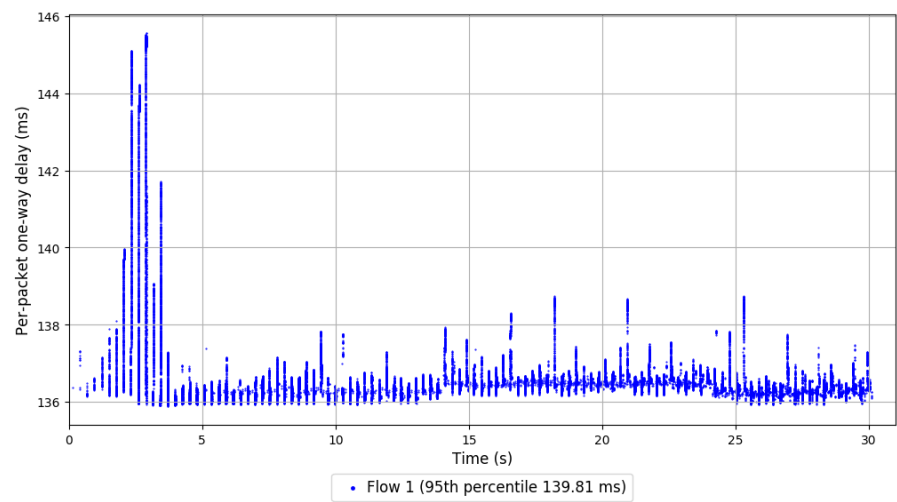
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 09:58:08
End at: 2017-11-21 09:58:38

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 137.701 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 137.701 ms
Loss rate: 0.09%
```
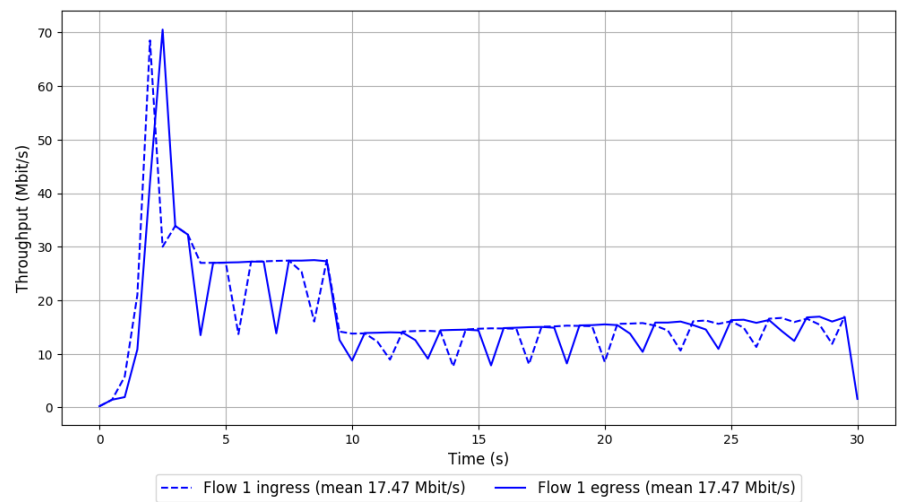
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 9.41 Mbit/s) ——— Flow 1 egress (mean 9.41 Mbit/s)

• Flow 1 (95th percentile 137.70 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 10:09:14
End at: 2017-11-21 10:09:44

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 139.805 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 139.805 ms
Loss rate: 0.01%
```
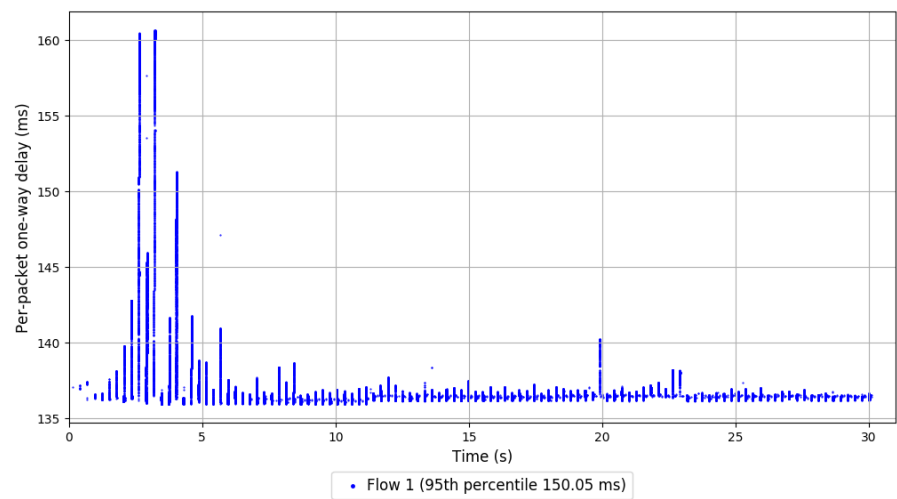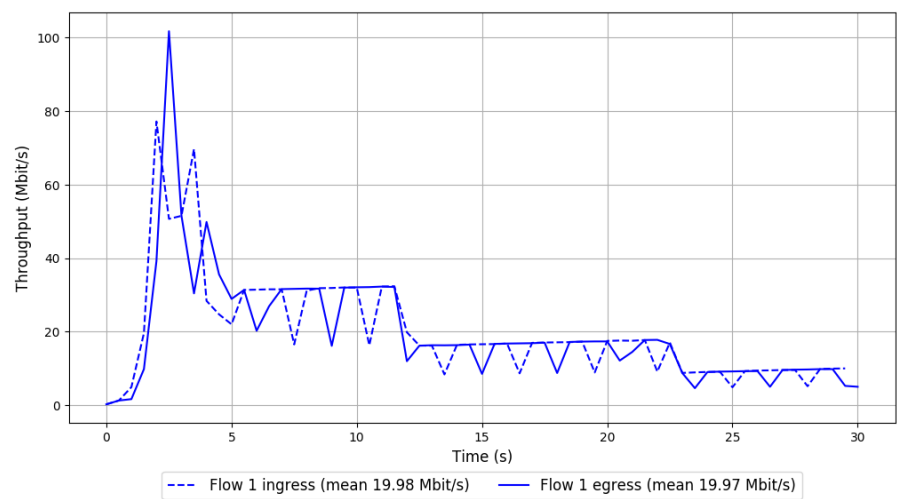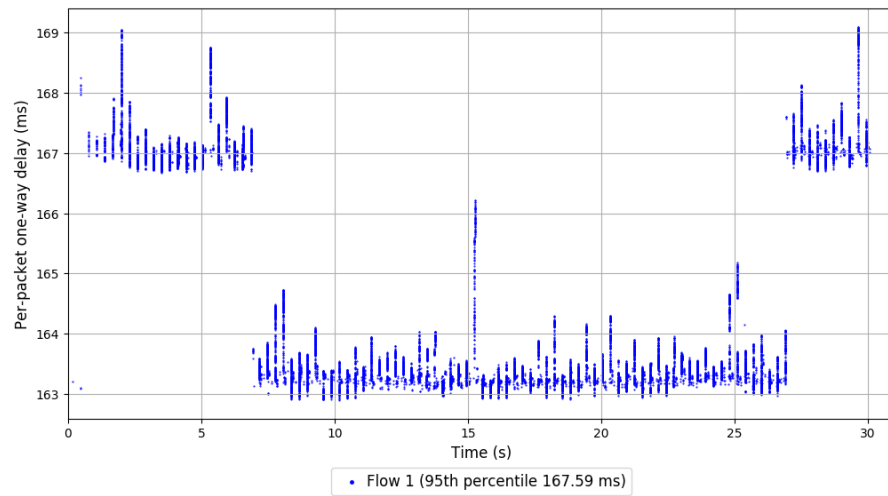
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 17.47 Mbit/s) -----   Flow 1 egress (mean 17.47 Mbit/s) ———

Flow 1 (95th percentile 139.81 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 10:20:47
End at: 2017-11-21 10:21:17

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.97 Mbit/s
95th percentile per-packet one-way delay: 150.047 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 19.97 Mbit/s
95th percentile per-packet one-way delay: 150.047 ms
Loss rate: 0.04%
```
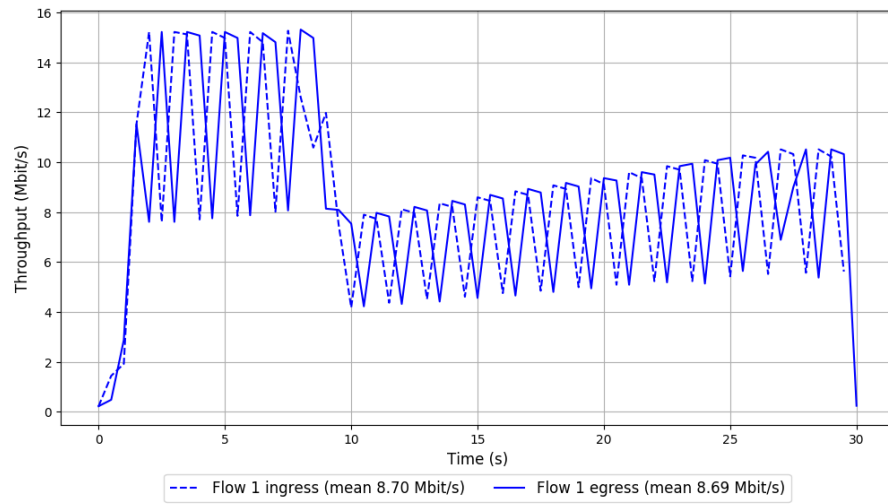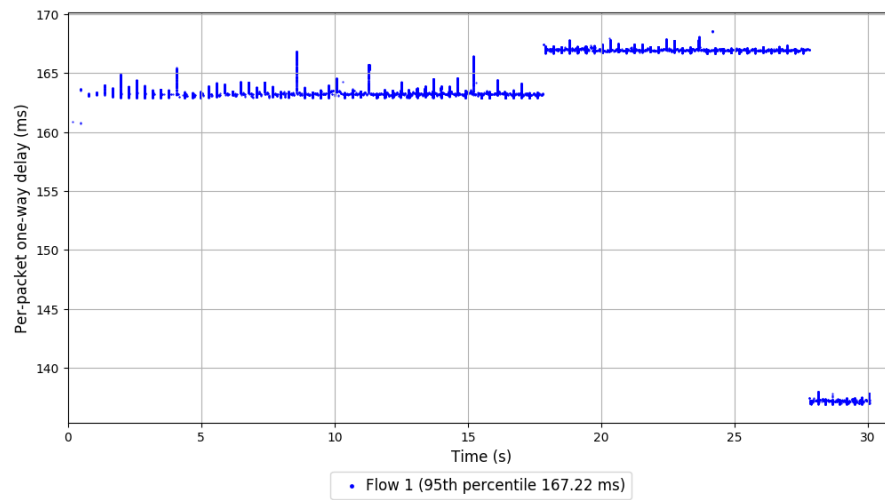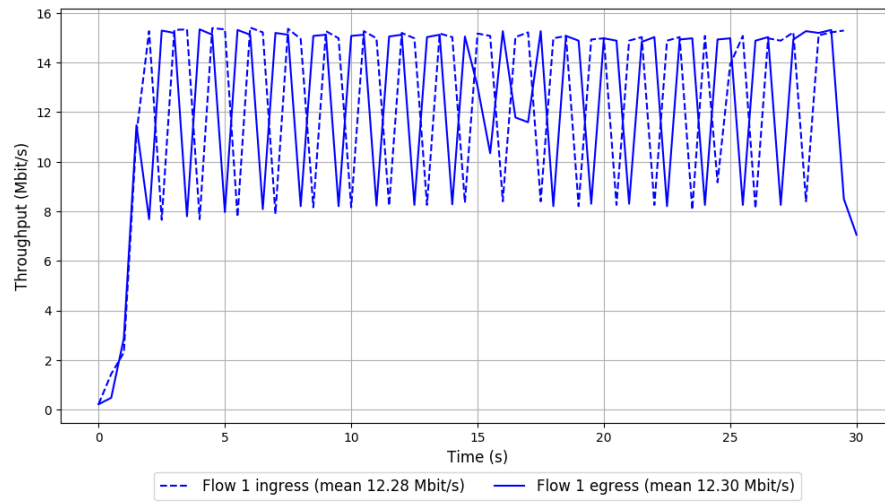
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 19.98 Mbit/s) --- Flow 1 egress (mean 19.97 Mbit/s)

Flow 1 (95th percentile 150.05 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 10:32:31
End at: 2017-11-21 10:33:01

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 167.595 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 167.595 ms
Loss rate: 0.03%
```
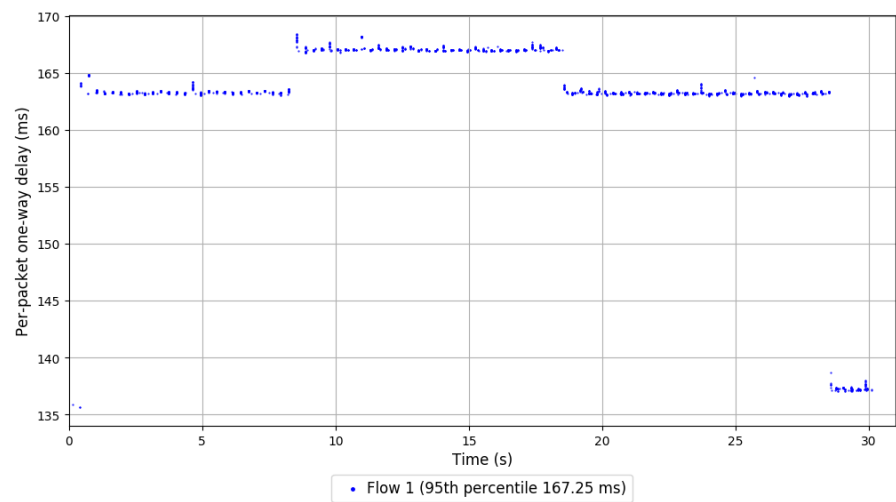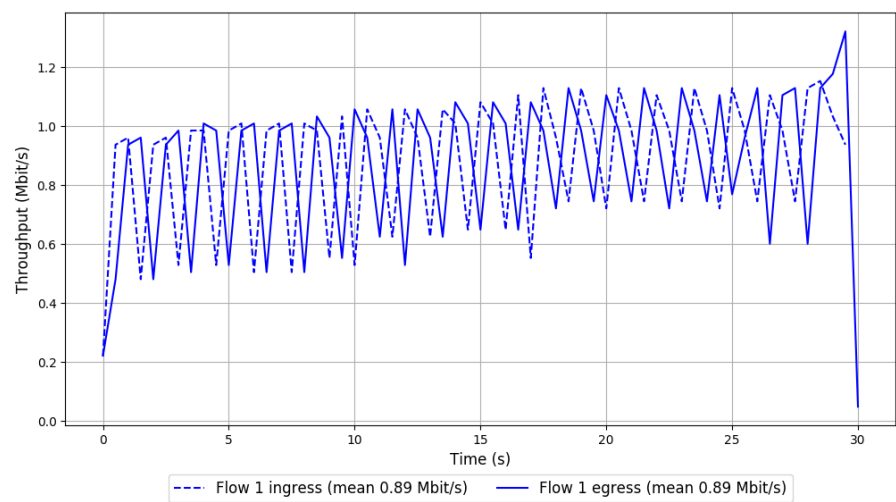
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 10:43:40
End at: 2017-11-21 10:44:10

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 167.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 167.221 ms
Loss rate: 0.00%
```
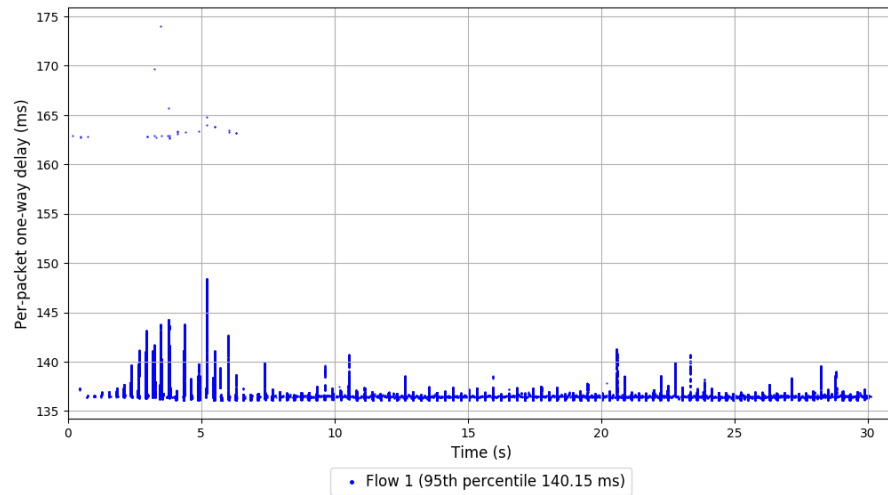
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 12.28 Mbit/s) --- Flow 1 egress (mean 12.30 Mbit/s)

Flow 1 (95th percentile 167.22 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 10:55:00
End at: 2017-11-21 10:55:30

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 167.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 167.255 ms
Loss rate: 0.00%
```
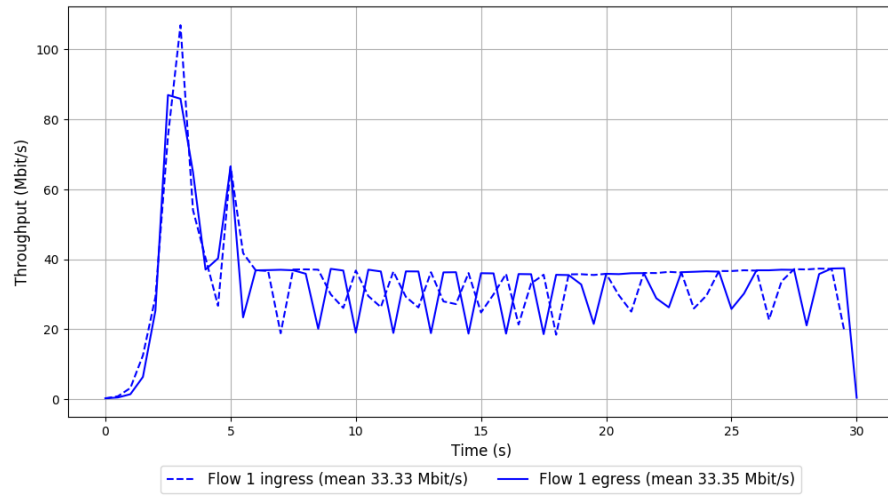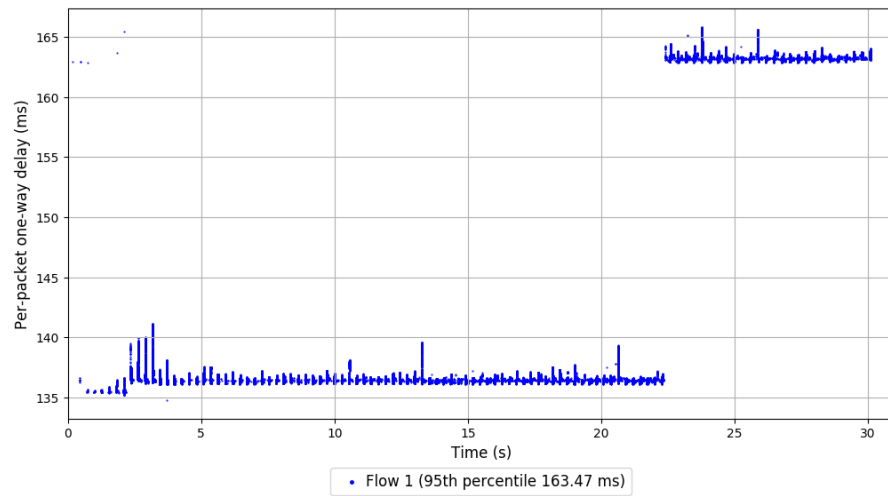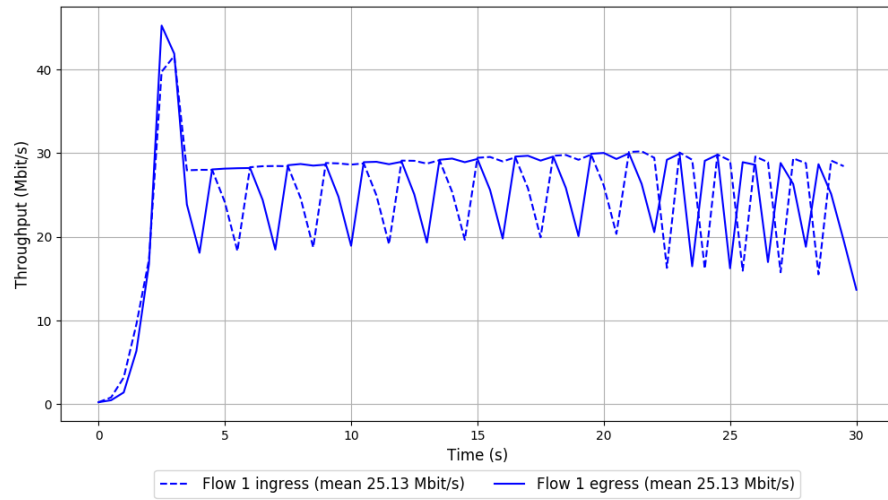
Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.89 Mbit/s)   Flow 1 egress (mean 0.89 Mbit/s)

Flow 1 (95th percentile 167.25 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 11:05:39
End at: 2017-11-21 11:06:09

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 140.145 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 140.145 ms
Loss rate: 0.01%
```
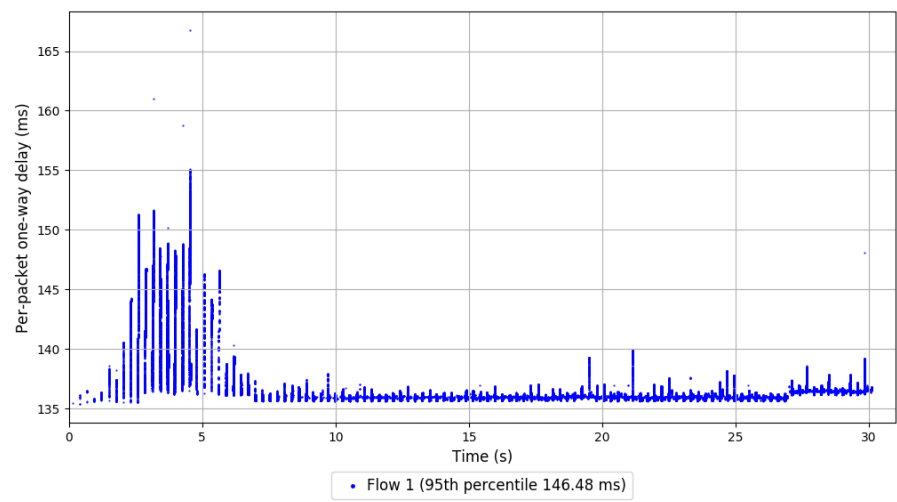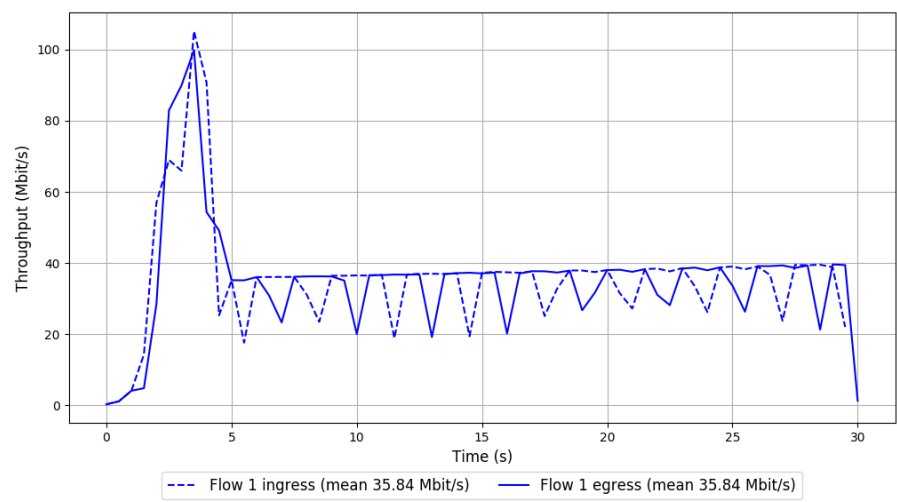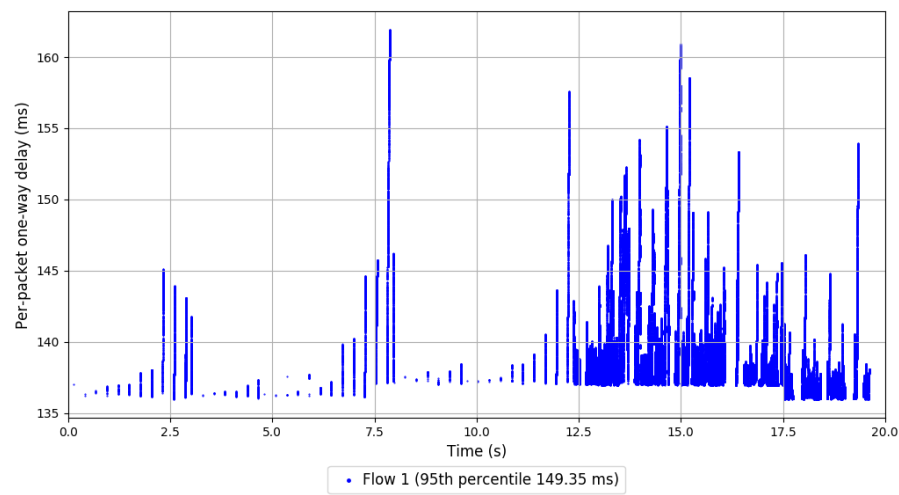
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 33.33 Mbit/s) --- Flow 1 egress (mean 33.35 Mbit/s)

Flow 1 (95th percentile 140.15 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 11:16:56
End at: 2017-11-21 11:17:26

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.13 Mbit/s
95th percentile per-packet one-way delay: 163.475 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.13 Mbit/s
95th percentile per-packet one-way delay: 163.475 ms
Loss rate: 0.00%
```
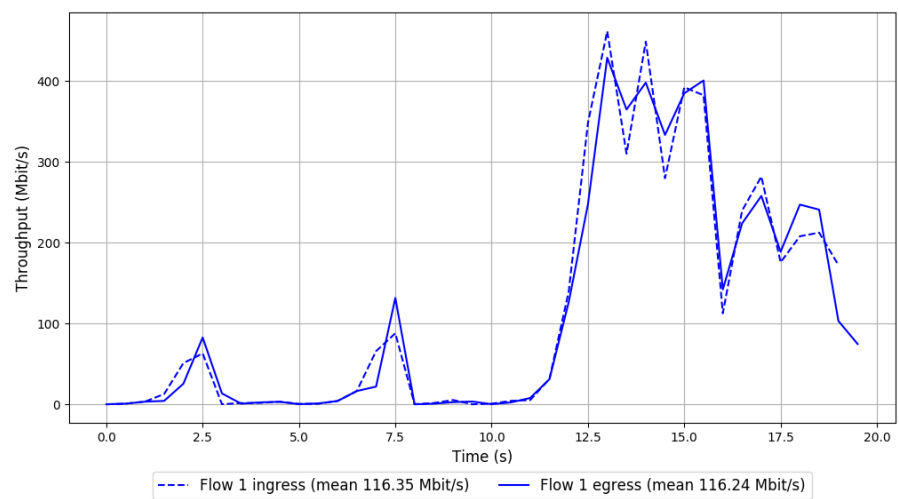
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 25.13 Mbit/s)   Flow 1 egress (mean 25.13 Mbit/s)

Flow 1 (95th percentile 163.47 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 11:28:11
End at: 2017-11-21 11:28:41

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 146.477 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 146.477 ms
Loss rate: 0.02%
```
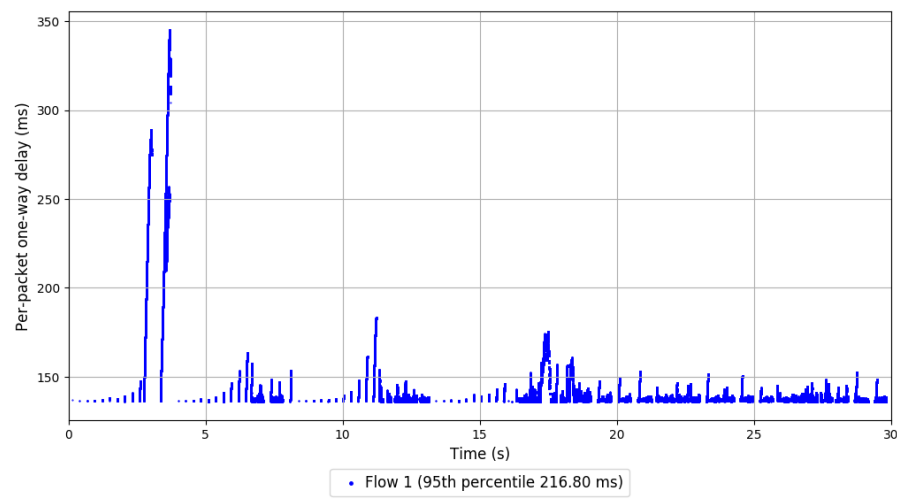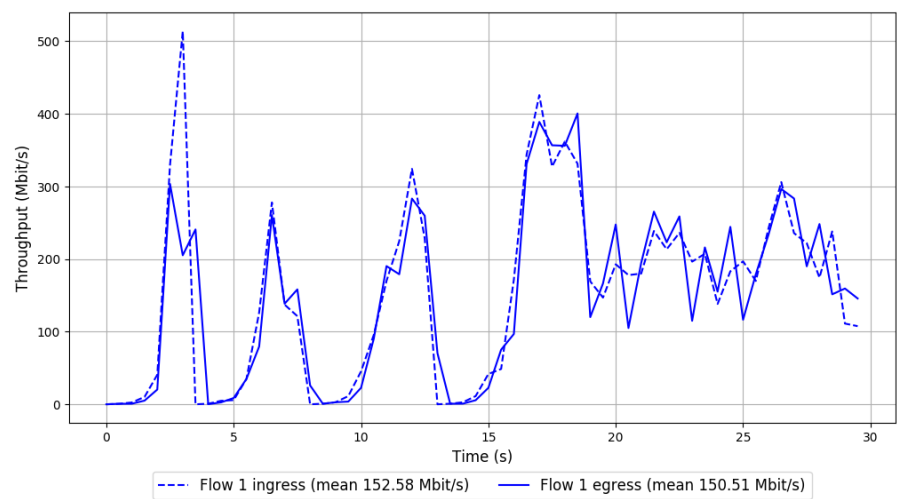
Run 10: Report of TCP Vegas — Data Link

Run 1: Statistics of Verus

Start at: 2017-11-21 09:49:30
End at: 2017-11-21 09:50:00

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-11-21 10:00:39
End at: 2017-11-21 10:01:09

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 150.51 Mbit/s
95th percentile per-packet one-way delay: 216.803 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 150.51 Mbit/s
95th percentile per-packet one-way delay: 216.803 ms
Loss rate: 1.35%
```
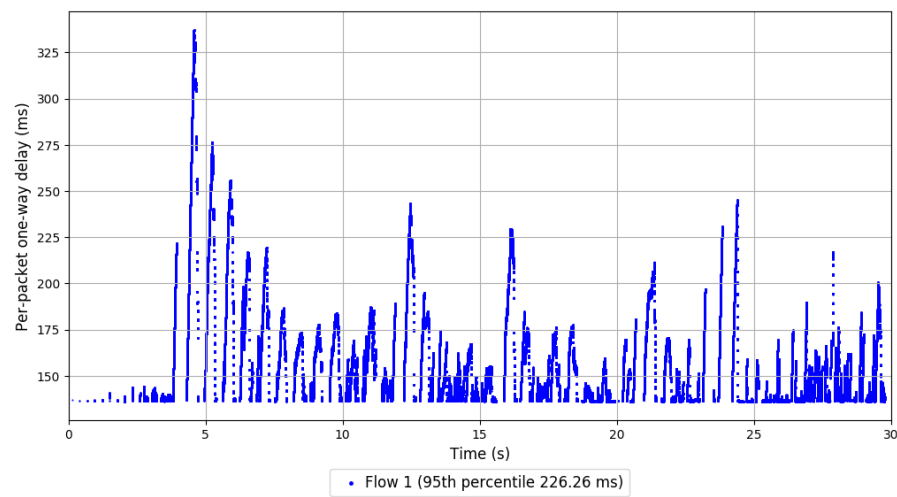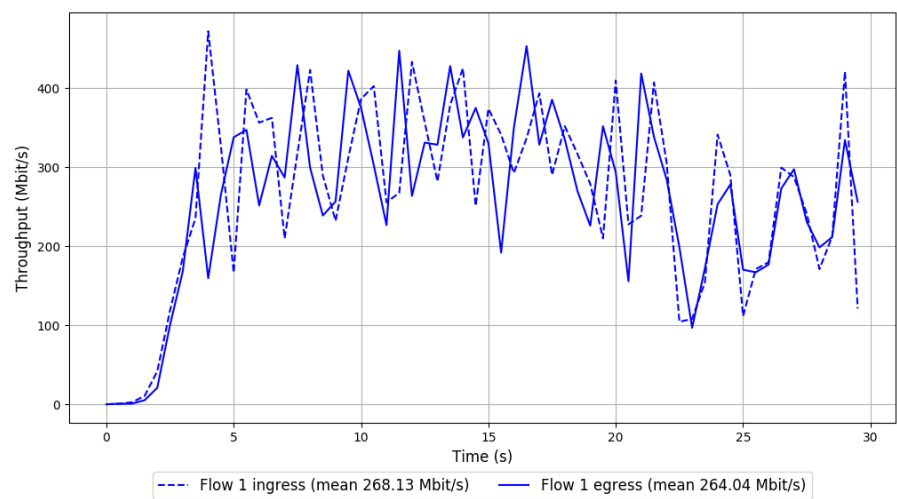
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-11-21 10:11:46
End at: 2017-11-21 10:12:16


# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.04 Mbit/s
95th percentile per-packet one-way delay: 226.257 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 264.04 Mbit/s
95th percentile per-packet one-way delay: 226.257 ms
Loss rate: 1.52%
```
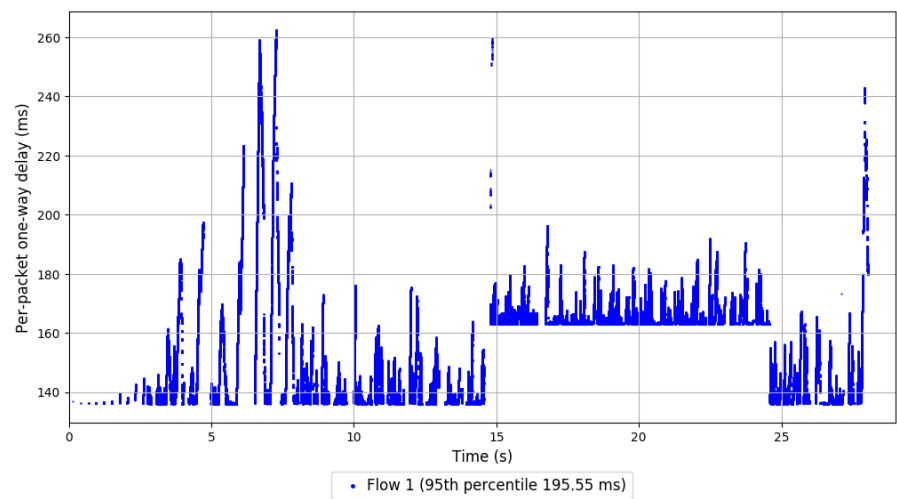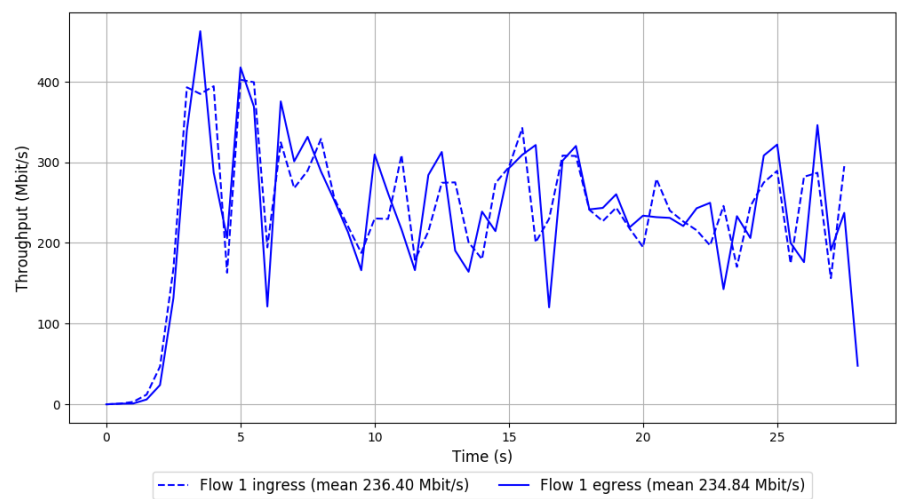
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-11-21 10:23:22
End at: 2017-11-21 10:23:52

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.84 Mbit/s
95th percentile per-packet one-way delay: 195.553 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 234.84 Mbit/s
95th percentile per-packet one-way delay: 195.553 ms
Loss rate: 0.64%
```
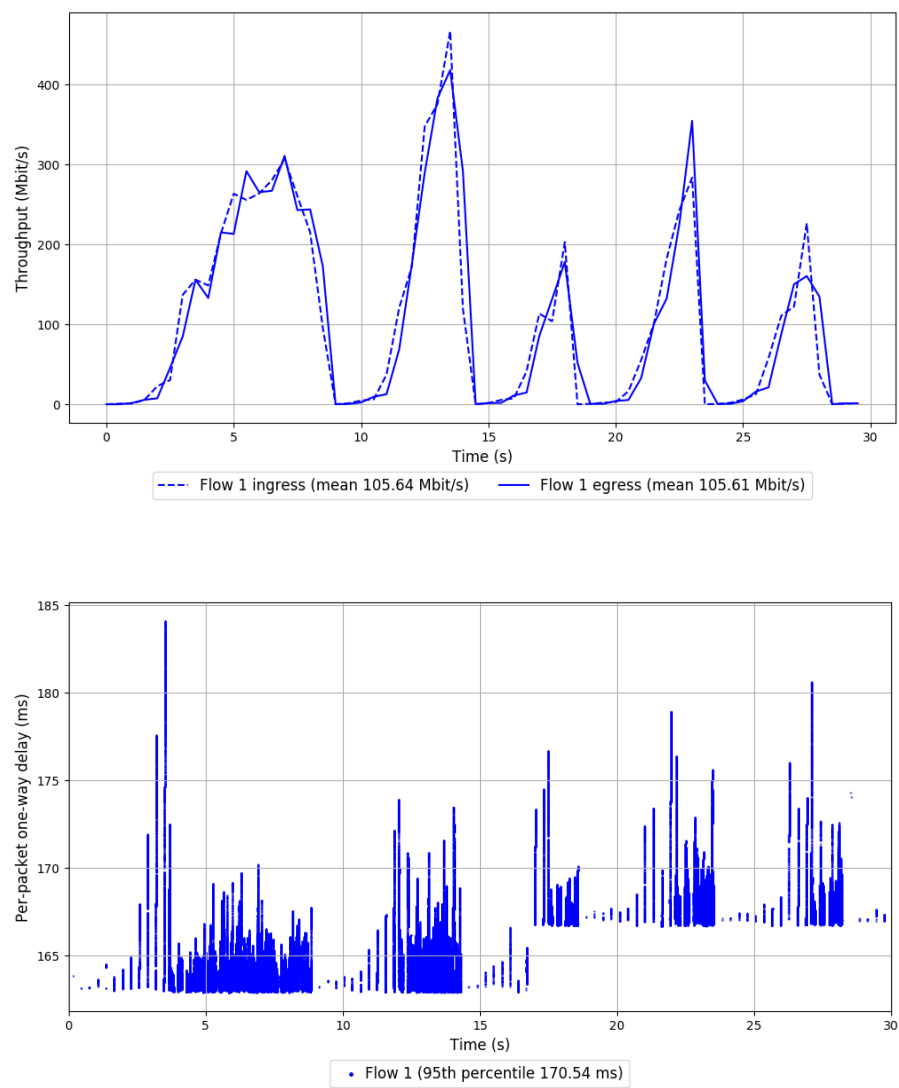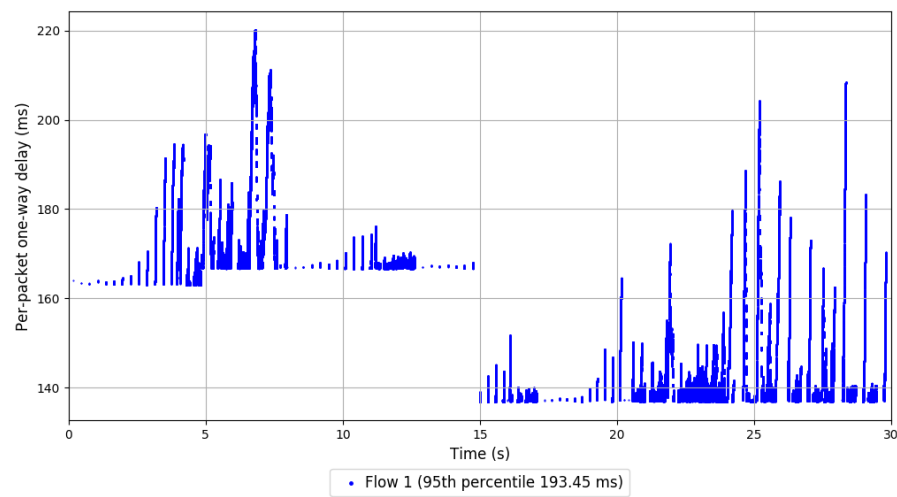
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 236.40 Mbit/s) — Flow 1 egress (mean 234.84 Mbit/s)

• Flow 1 (95th percentile 195.55 ms)

```
Run 5: Statistics of Verus

Start at: 2017-11-21 10:35:01
End at: 2017-11-21 10:35:31

# Below is generated by plot.py at 2017-11-21 12:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.61 Mbit/s
95th percentile per-packet one-way delay: 170.541 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 105.61 Mbit/s
95th percentile per-packet one-way delay: 170.541 ms
Loss rate: 0.01%
```
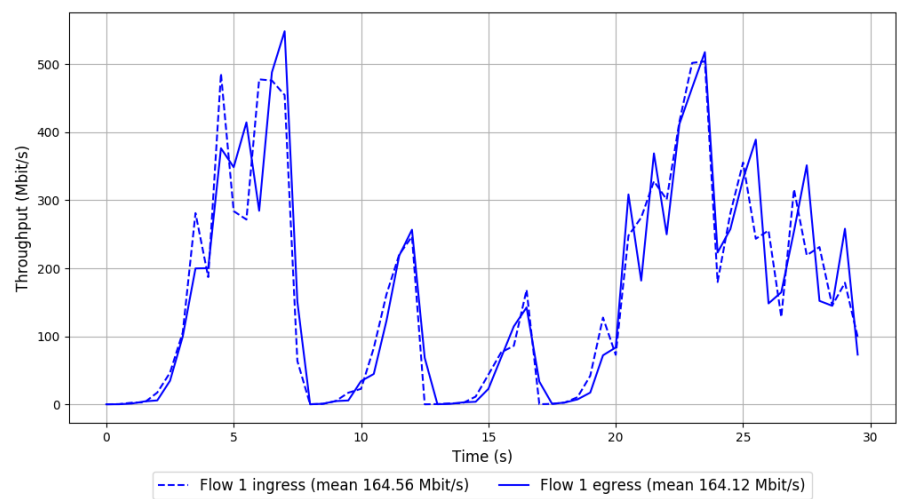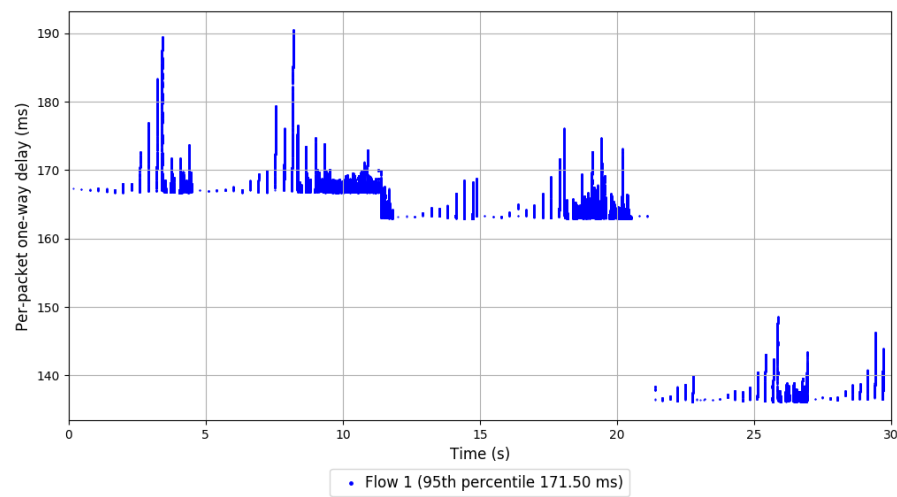
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-11-21 10:46:13
End at: 2017-11-21 10:46:43

# Below is generated by plot.py at 2017-11-21 12:28:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.12 Mbit/s
95th percentile per-packet one-way delay: 193.454 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 164.12 Mbit/s
95th percentile per-packet one-way delay: 193.454 ms
Loss rate: 0.27%
```
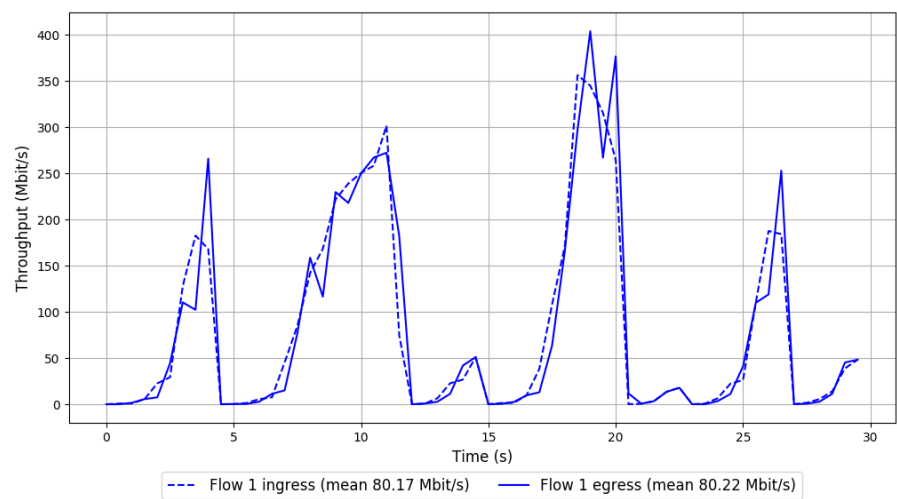
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-11-21 10:57:27
End at: 2017-11-21 10:57:57

# Below is generated by plot.py at 2017-11-21 12:28:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.22 Mbit/s
95th percentile per-packet one-way delay: 171.495 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 80.22 Mbit/s
95th percentile per-packet one-way delay: 171.495 ms
Loss rate: 0.01%
```
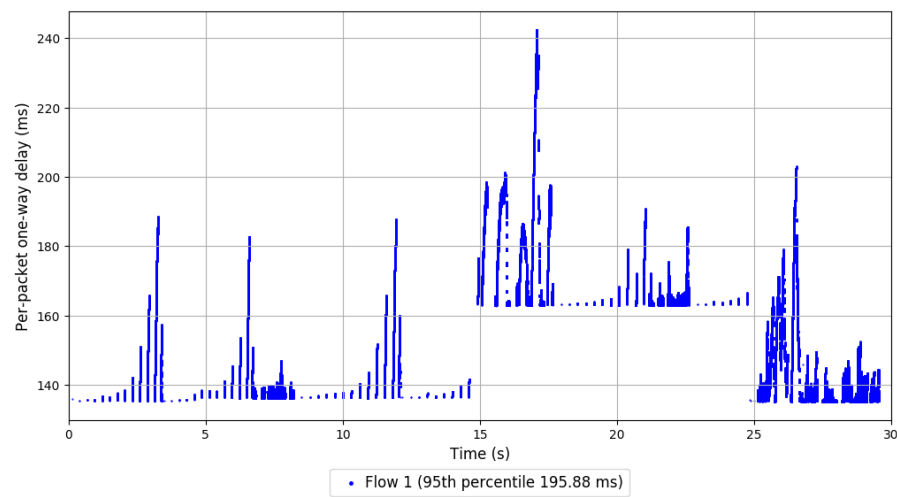
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-11-21 11:08:13
End at: 2017-11-21 11:08:43

# Below is generated by plot.py at 2017-11-21 12:28:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.29 Mbit/s
95th percentile per-packet one-way delay: 195.877 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 122.29 Mbit/s
95th percentile per-packet one-way delay: 195.877 ms
Loss rate: 0.01%
```
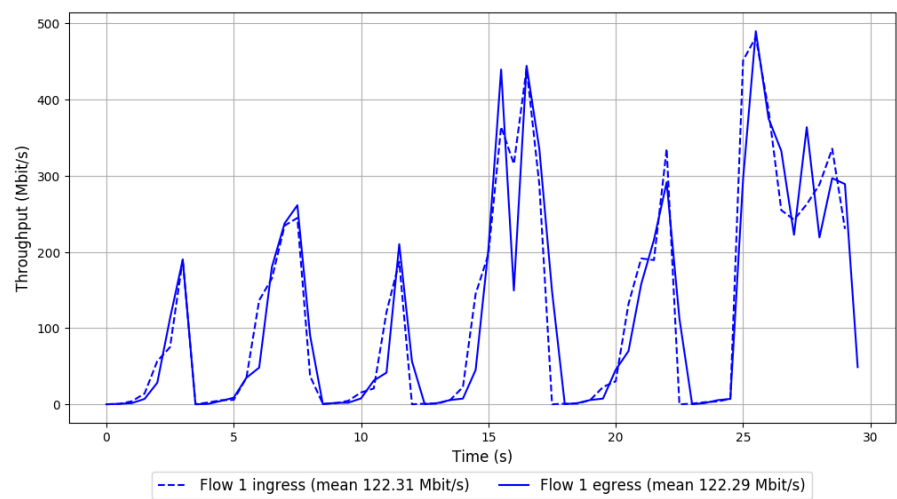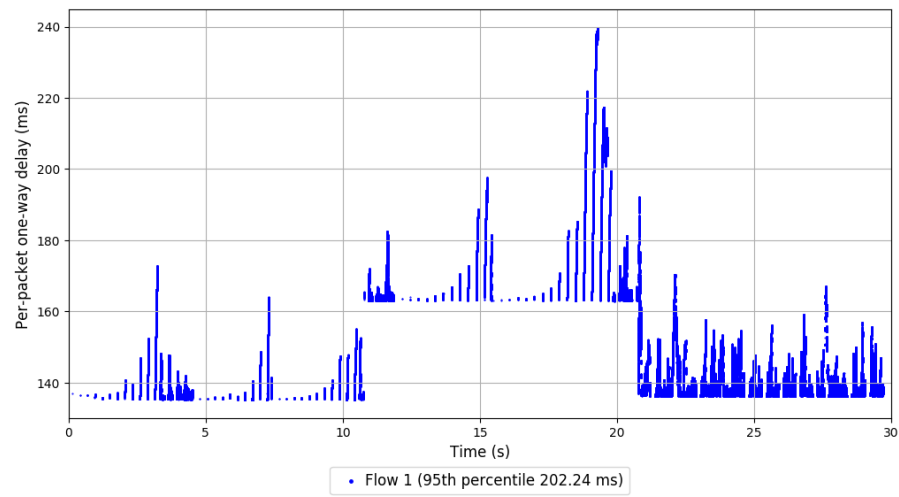
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-11-21 11:19:27
End at: 2017-11-21 11:19:57


# Below is generated by plot.py at 2017-11-21 12:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 129.67 Mbit/s
95th percentile per-packet one-way delay: 202.242 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 129.67 Mbit/s
95th percentile per-packet one-way delay: 202.242 ms
Loss rate: 0.01%
```
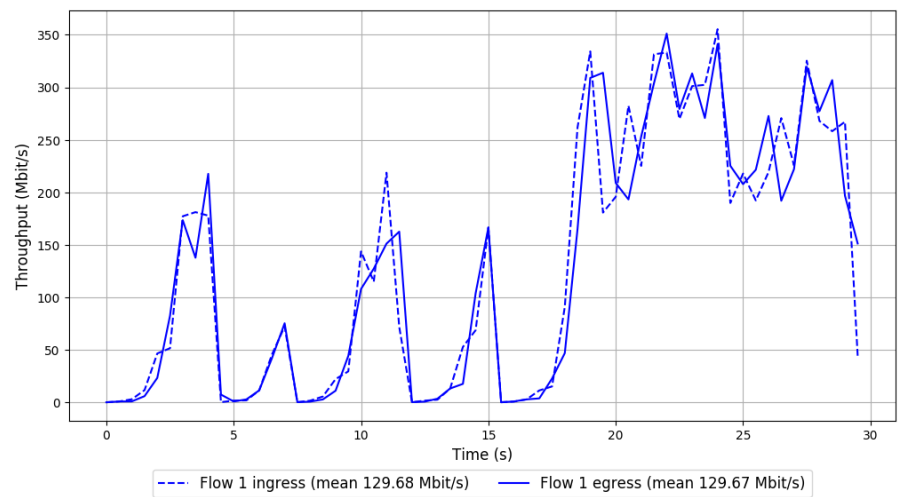
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-11-21 11:30:44
End at: 2017-11-21 11:31:14

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.53 Mbit/s
95th percentile per-packet one-way delay: 172.969 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 194.53 Mbit/s
95th percentile per-packet one-way delay: 172.969 ms
Loss rate: 0.01%
```
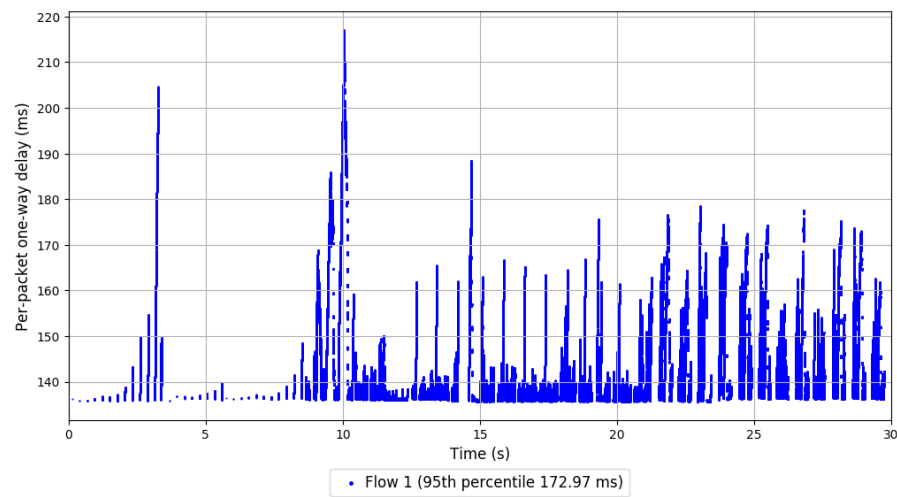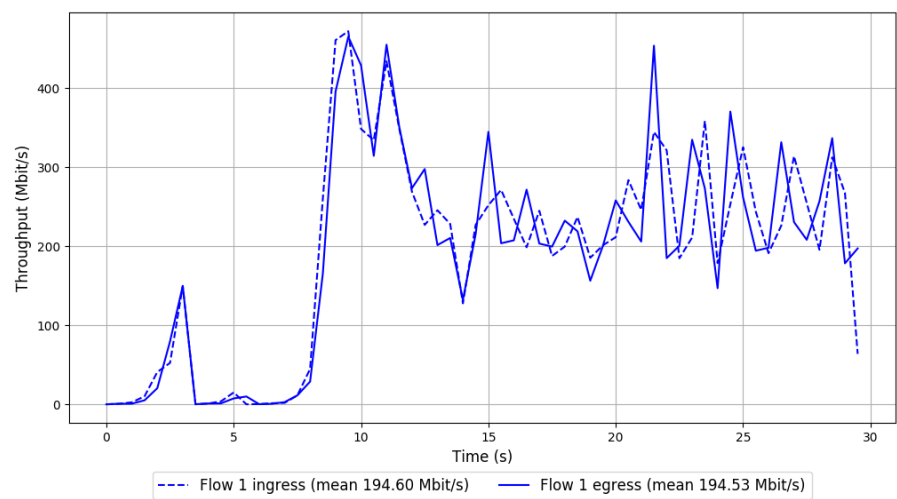
Run 10: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-11-21 09:51:49
End at: 2017-11-21 09:52:19

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: 136.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: 136.345 ms
Loss rate: 0.00%
```
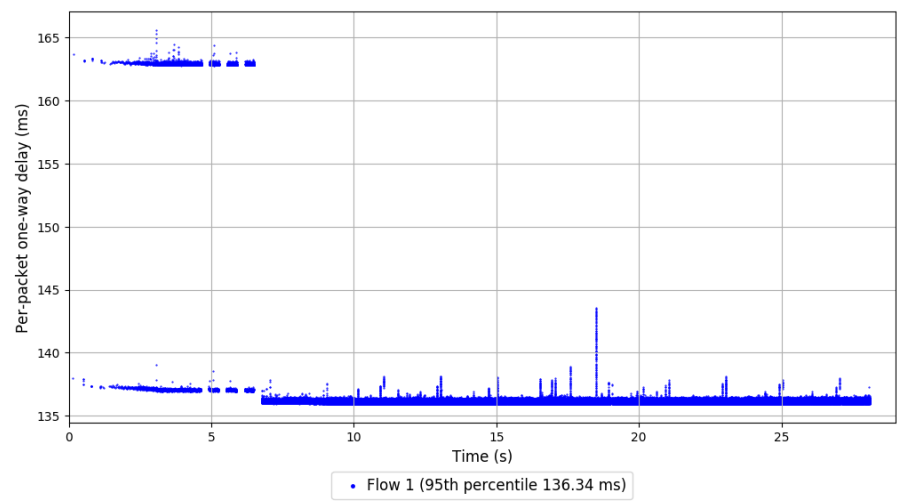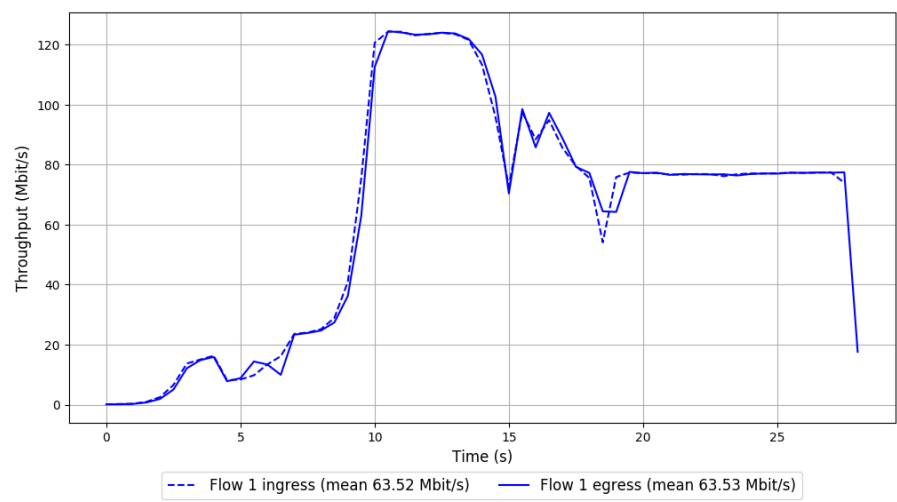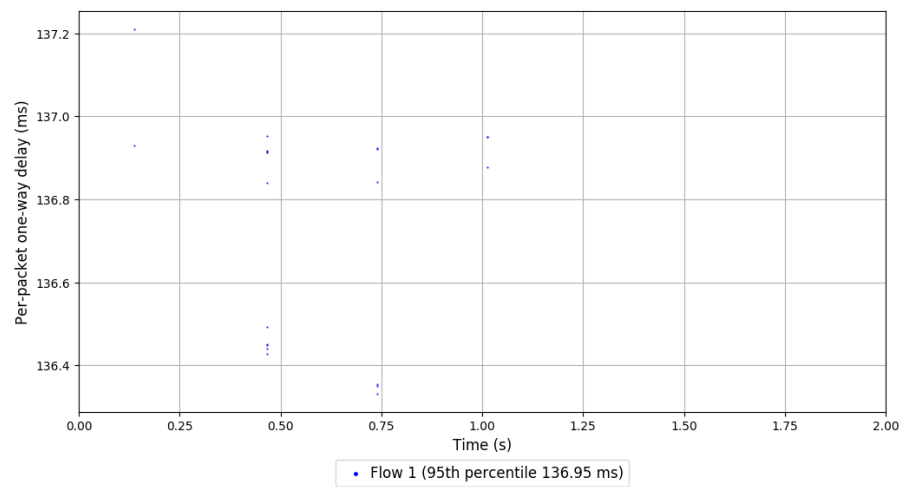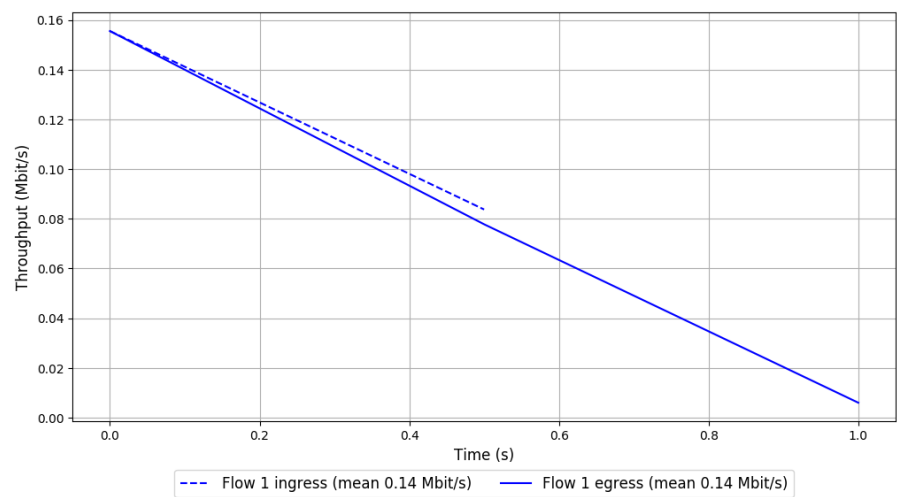
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 63.52 Mbit/s) --- Flow 1 egress (mean 63.53 Mbit/s)

• Flow 1 (95th percentile 136.34 ms)

```
Run 2: Statistics of Copa

Start at: 2017-11-21 10:03:05
End at: 2017-11-21 10:03:35
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-11-21 10:14:34
End at: 2017-11-21 10:15:04

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 162.671 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 162.671 ms
Loss rate: 0.00%
```
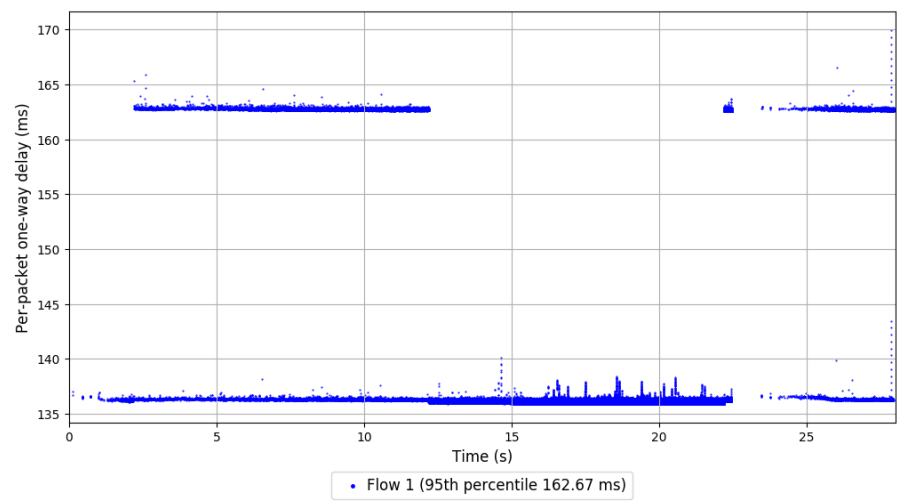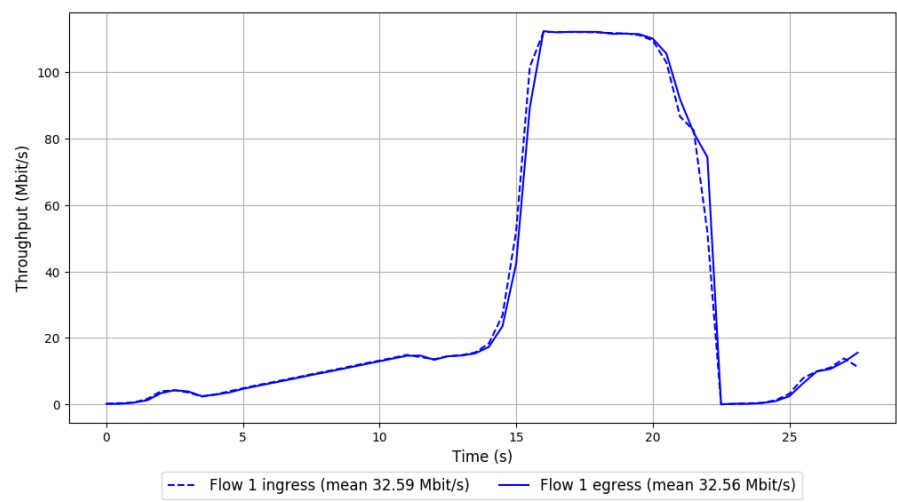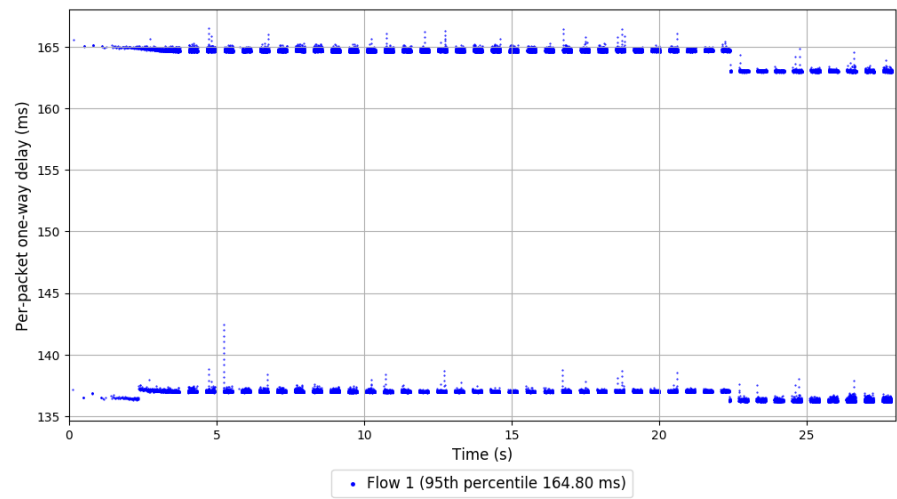
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 32.59 Mbit/s)   ——— Flow 1 egress (mean 32.56 Mbit/s)

• Flow 1 (95th percentile 162.67 ms)

```
Run 4: Statistics of Copa

Start at: 2017-11-21 10:26:14
End at: 2017-11-21 10:26:44

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 164.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 164.796 ms
Loss rate: 0.00%
```
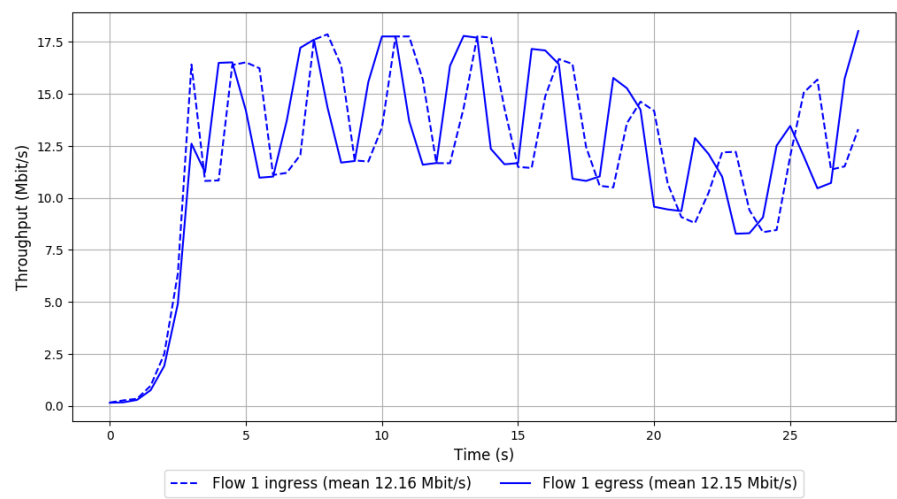
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-11-21 10:37:24
End at: 2017-11-21 10:37:54

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 166.831 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 166.831 ms
Loss rate: 0.02%
```
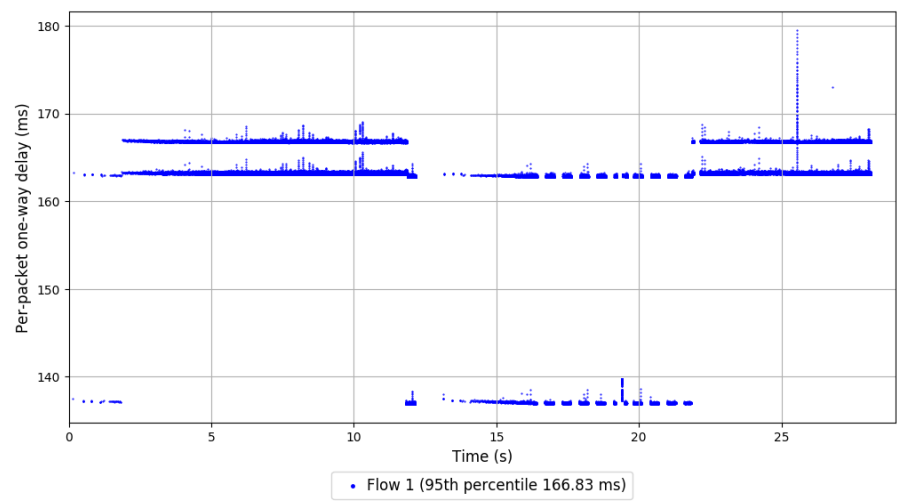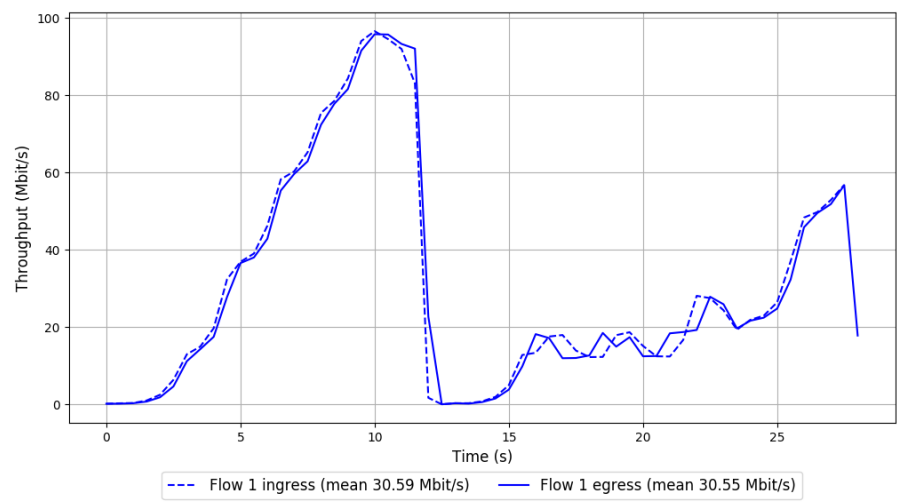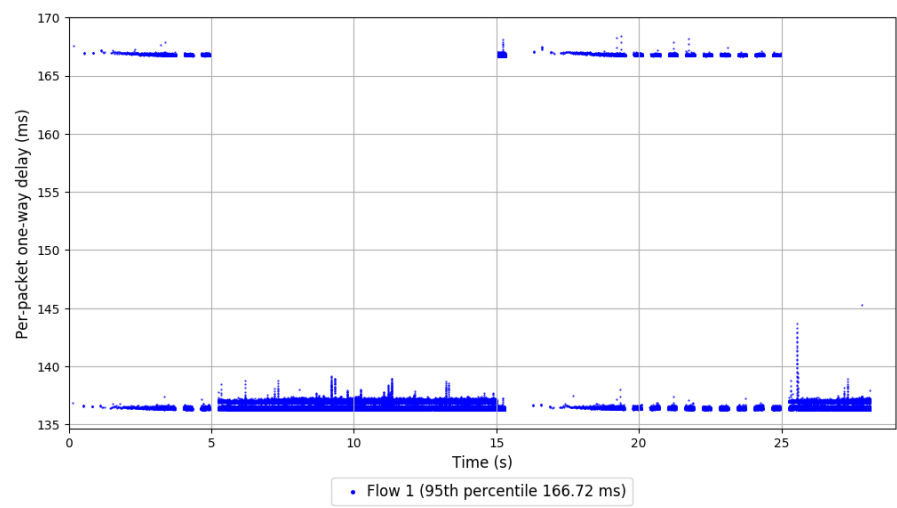
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2017-11-21 10:48:41
End at: 2017-11-21 10:49:11


# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 166.724 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 166.724 ms
Loss rate: 0.00%
```
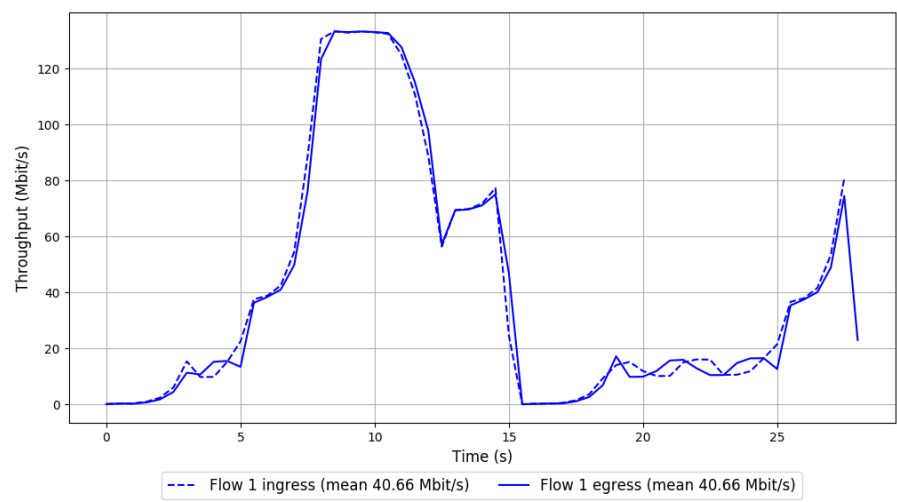
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2017-11-21 10:59:48
End at: 2017-11-21 11:00:18

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.97 Mbit/s
95th percentile per-packet one-way delay: 163.387 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 9.97 Mbit/s
95th percentile per-packet one-way delay: 163.387 ms
Loss rate: 0.02%
```
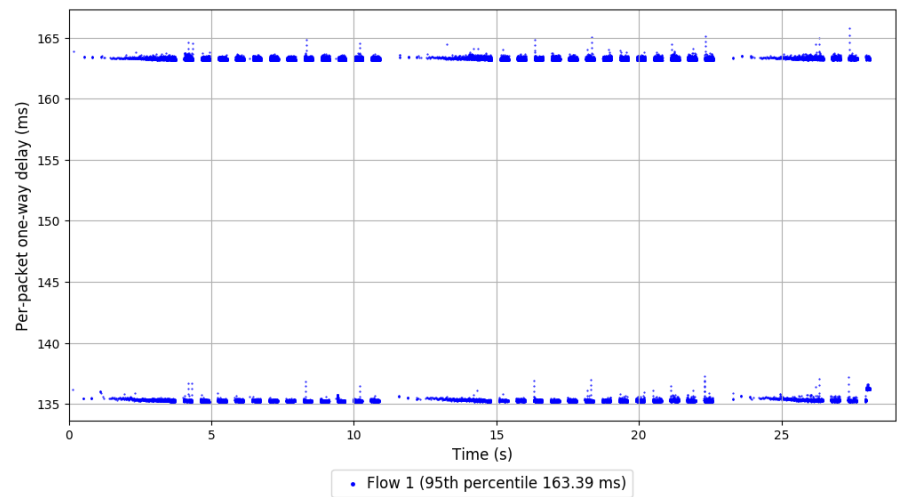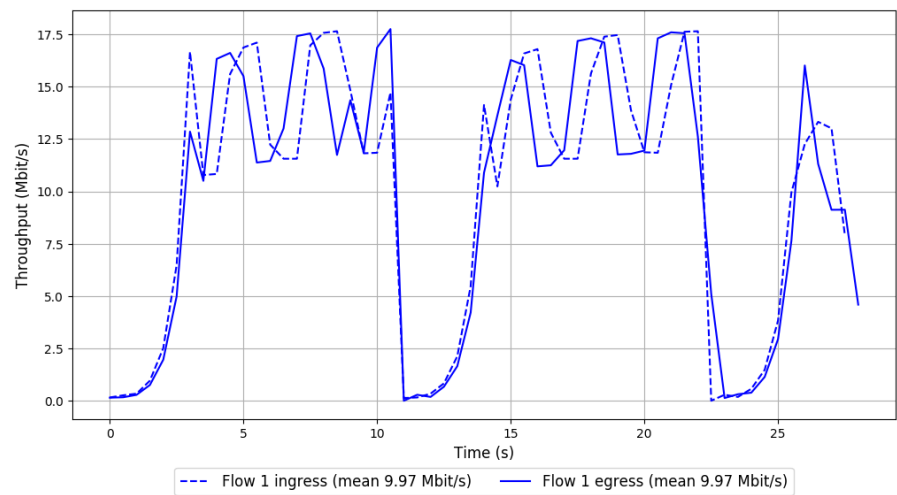
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 9.97 Mbit/s) ----- Flow 1 egress (mean 9.97 Mbit/s)

Flow 1 (95th percentile 163.39 ms)

```
Run 8: Statistics of Copa

Start at: 2017-11-21 11:10:58
End at: 2017-11-21 11:11:28

# Below is generated by plot.py at 2017-11-21 12:30:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.20 Mbit/s
95th percentile per-packet one-way delay: 136.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.20 Mbit/s
95th percentile per-packet one-way delay: 136.319 ms
Loss rate: 0.00%
```
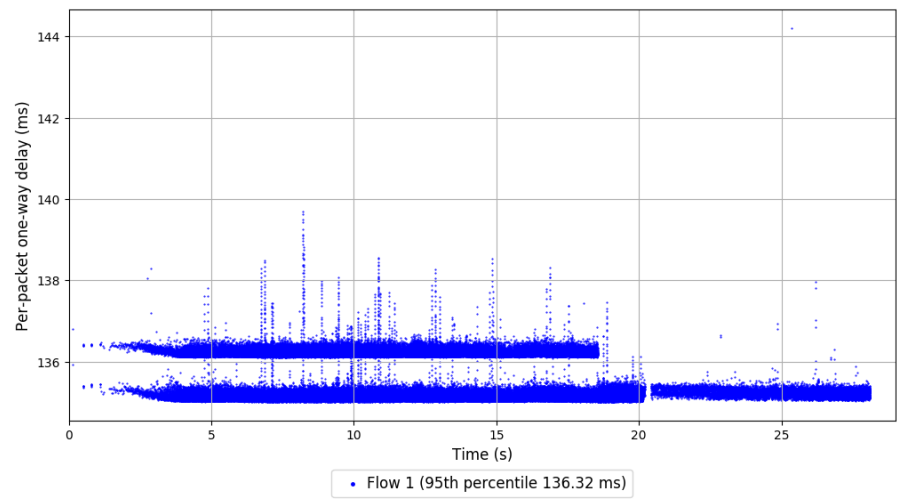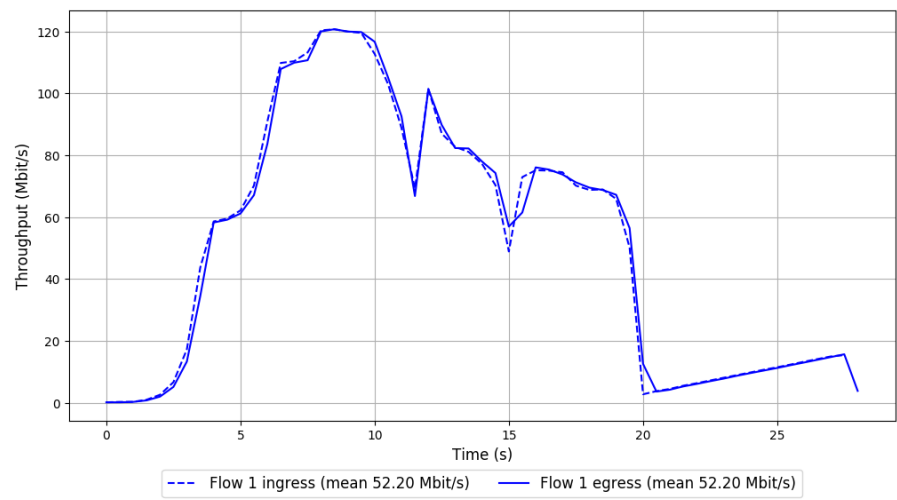
Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2017-11-21 11:21:51
End at: 2017-11-21 11:22:21

# Below is generated by plot.py at 2017-11-21 12:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.31 Mbit/s
95th percentile per-packet one-way delay: 136.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.31 Mbit/s
95th percentile per-packet one-way delay: 136.589 ms
Loss rate: 0.00%
```
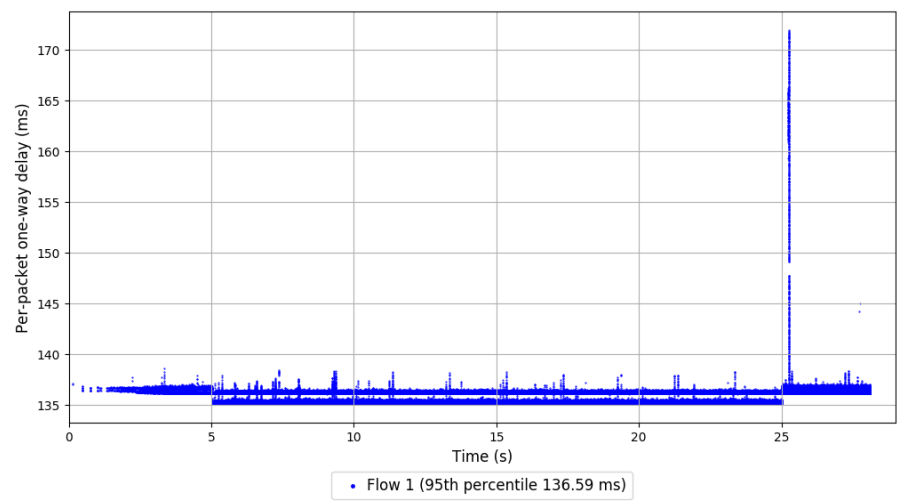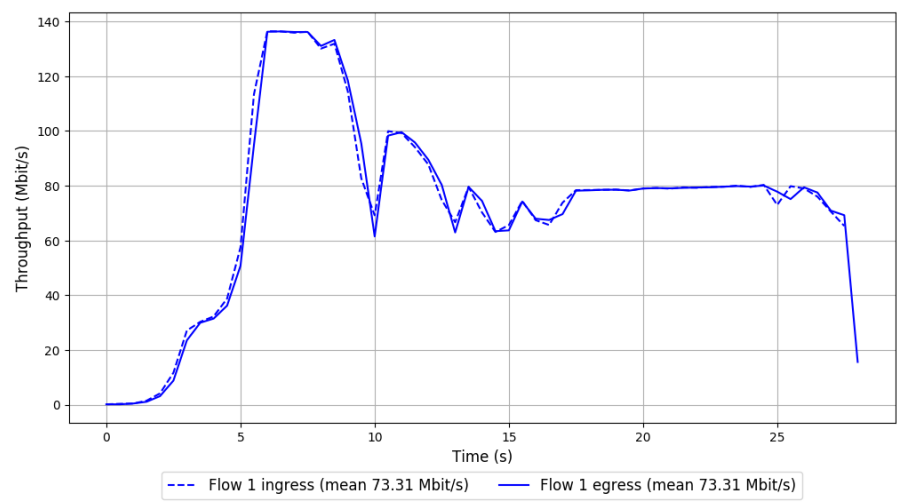
Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 73.31 Mbit/s)   Flow 1 egress (mean 73.31 Mbit/s)

Flow 1 (95th percentile 136.59 ms)

```
Run 10: Statistics of Copa

Start at: 2017-11-21 11:33:32
End at: 2017-11-21 11:34:02

# Below is generated by plot.py at 2017-11-21 12:30:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.20 Mbit/s
95th percentile per-packet one-way delay: 136.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.20 Mbit/s
95th percentile per-packet one-way delay: 136.286 ms
Loss rate: 0.00%
```
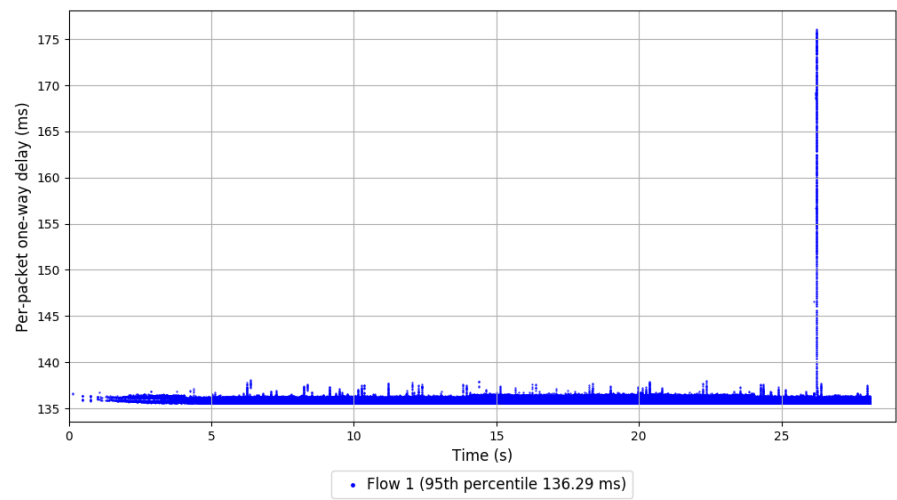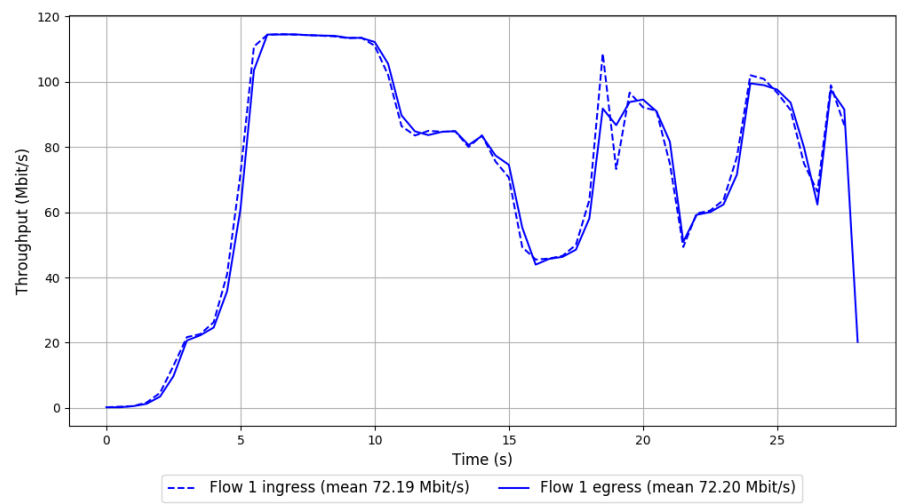
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of Indigo

Start at: 2017-11-21 09:48:36
End at: 2017-11-21 09:49:06

# Below is generated by plot.py at 2017-11-21 12:31:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.84 Mbit/s
95th percentile per-packet one-way delay: 137.213 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 149.84 Mbit/s
95th percentile per-packet one-way delay: 137.213 ms
Loss rate: 0.27%
```
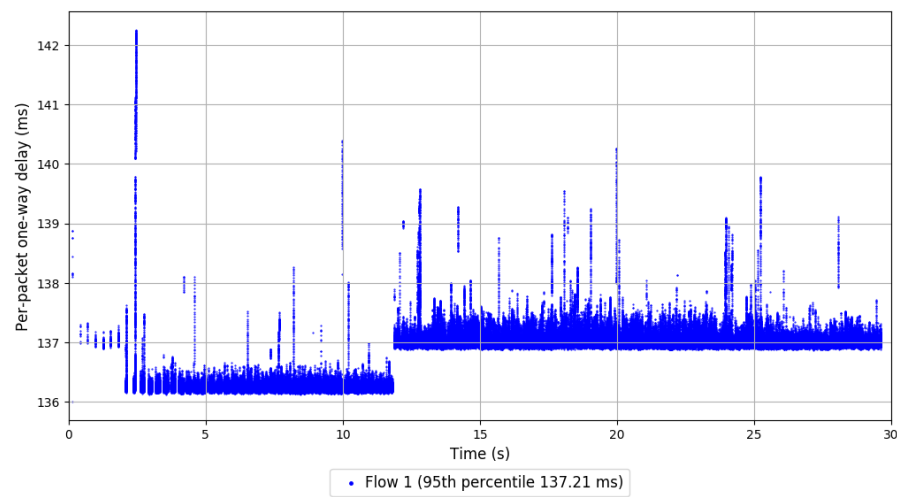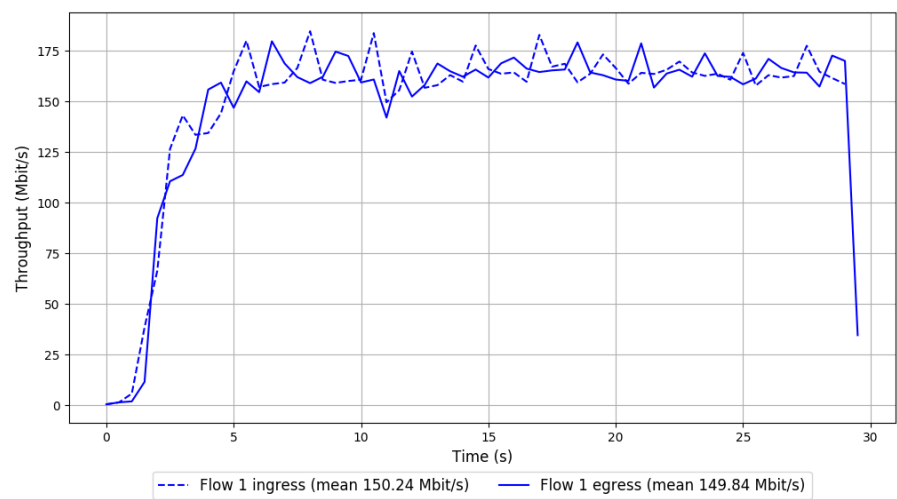
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2017-11-21 09:59:45
End at: 2017-11-21 10:00:15

# Below is generated by plot.py at 2017-11-21 12:31:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.51 Mbit/s
95th percentile per-packet one-way delay: 136.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.51 Mbit/s
95th percentile per-packet one-way delay: 136.220 ms
Loss rate: 0.00%
```
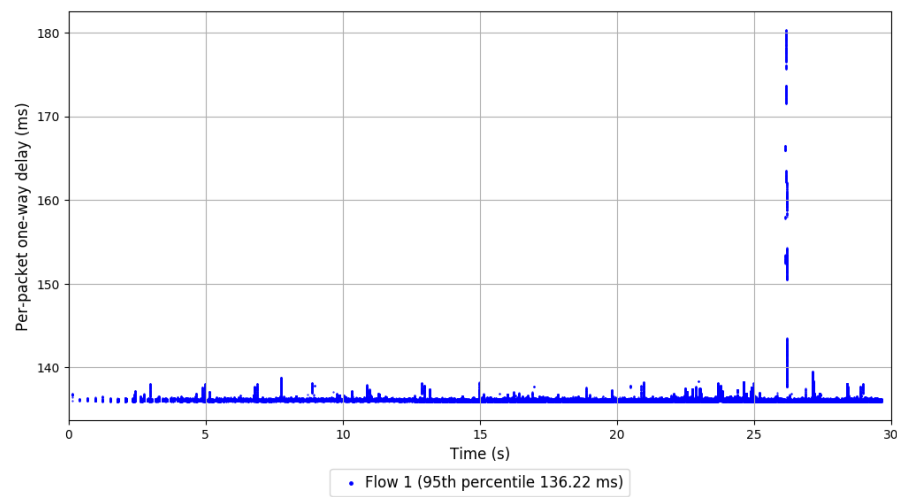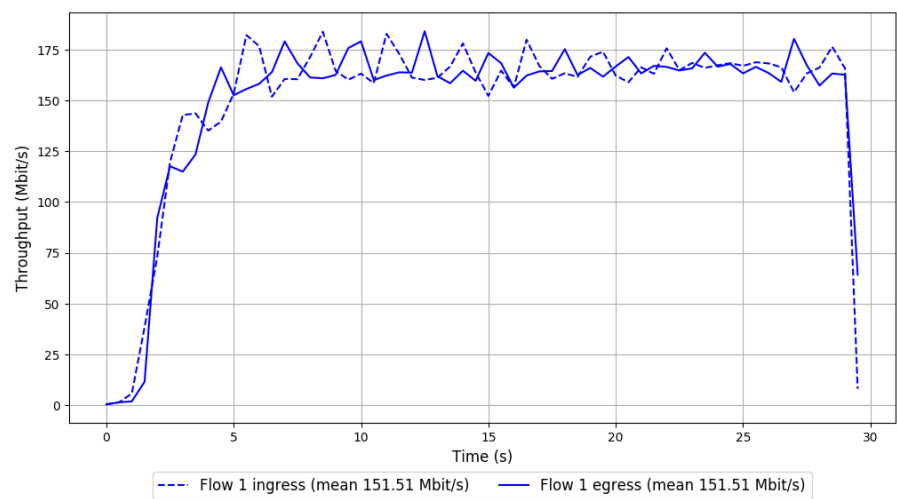
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2017-11-21 10:10:51
End at: 2017-11-21 10:11:21

# Below is generated by plot.py at 2017-11-21 12:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.73 Mbit/s
95th percentile per-packet one-way delay: 136.272 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 152.73 Mbit/s
95th percentile per-packet one-way delay: 136.272 ms
Loss rate: 0.01%
```
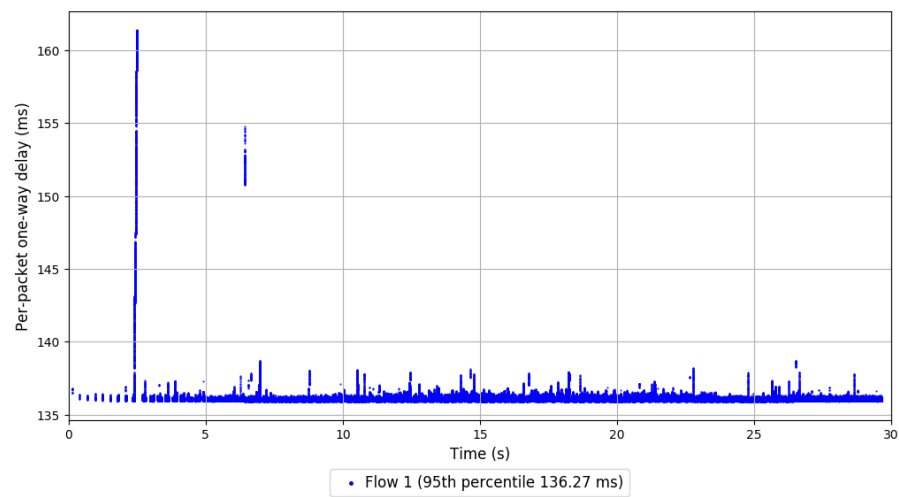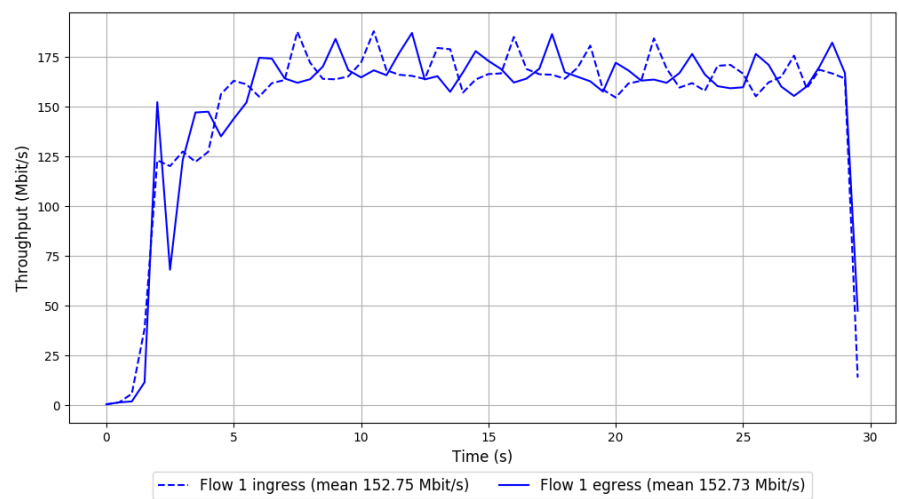
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2017-11-21 10:22:25
End at: 2017-11-21 10:22:55

# Below is generated by plot.py at 2017-11-21 12:32:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 158.22 Mbit/s
95th percentile per-packet one-way delay: 136.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.22 Mbit/s
95th percentile per-packet one-way delay: 136.240 ms
Loss rate: 0.00%
```
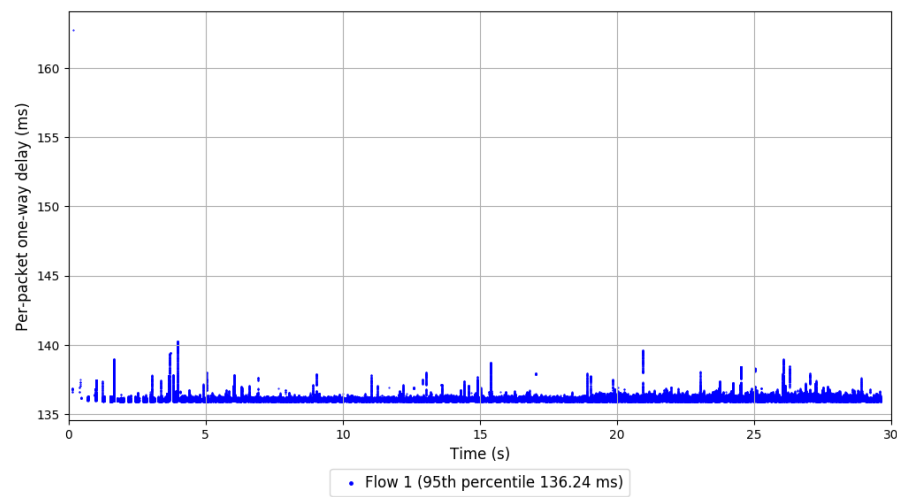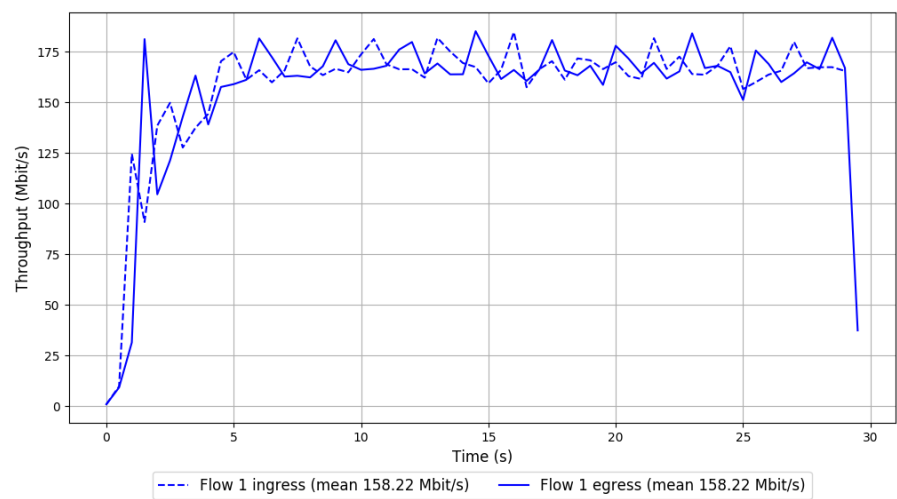
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-11-21 10:34:08
End at: 2017-11-21 10:34:38

# Below is generated by plot.py at 2017-11-21 12:32:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 166.837 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 166.837 ms
Loss rate: 0.05%
```
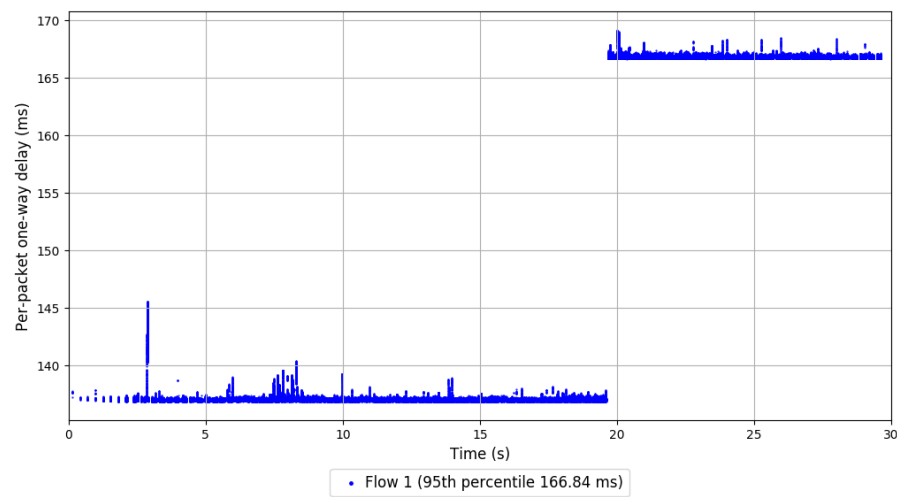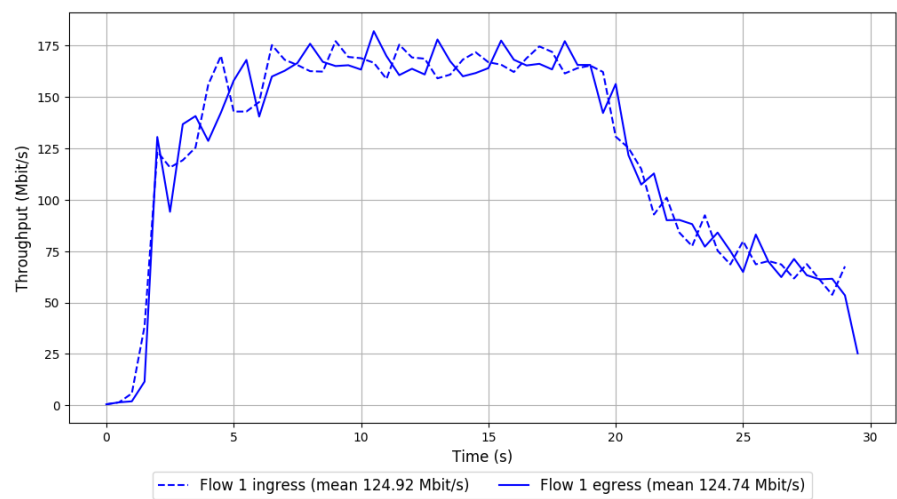
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2017-11-21 10:45:18
End at: 2017-11-21 10:45:48

# Below is generated by plot.py at 2017-11-21 12:32:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 150.09 Mbit/s
95th percentile per-packet one-way delay: 163.035 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 150.09 Mbit/s
95th percentile per-packet one-way delay: 163.035 ms
Loss rate: 0.00%
```
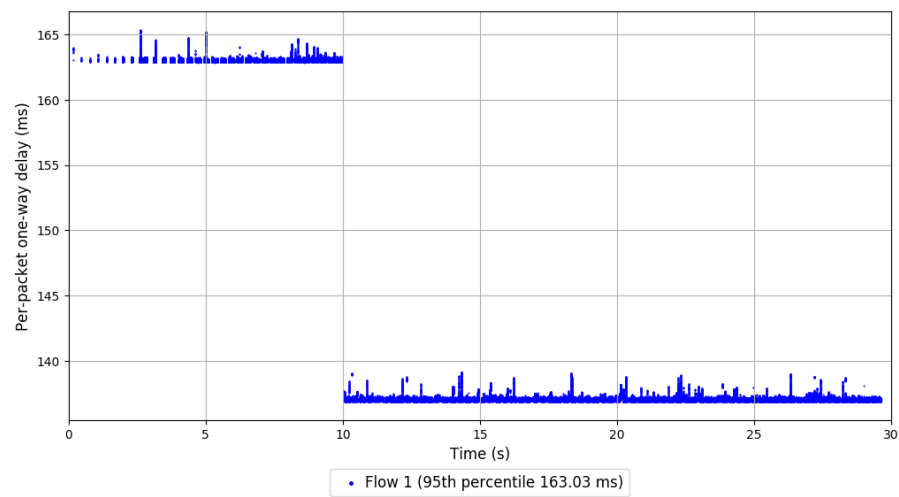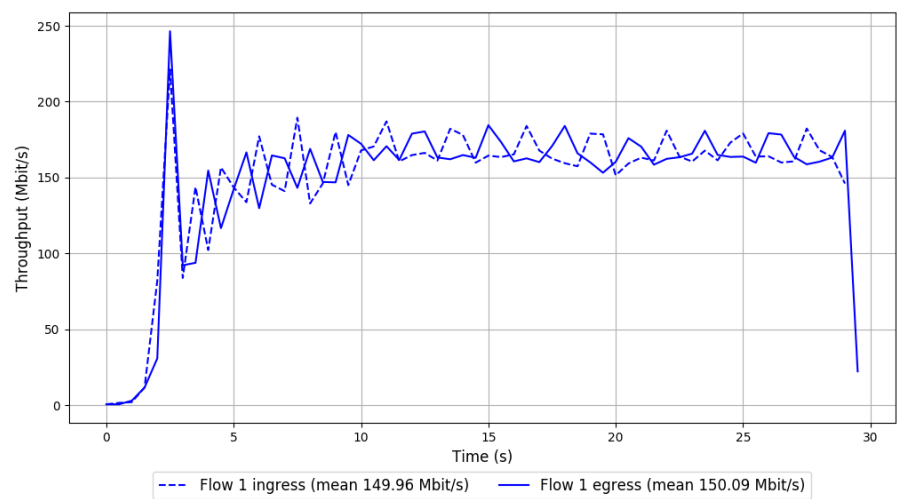
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 149.96 Mbit/s) — Flow 1 egress (mean 150.09 Mbit/s)

Flow 1 (95th percentile 163.03 ms)

```
Run 7: Statistics of Indigo

Start at: 2017-11-21 10:56:35
End at: 2017-11-21 10:57:05

# Below is generated by plot.py at 2017-11-21 12:32:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 166.836 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 166.836 ms
Loss rate: 0.00%
```
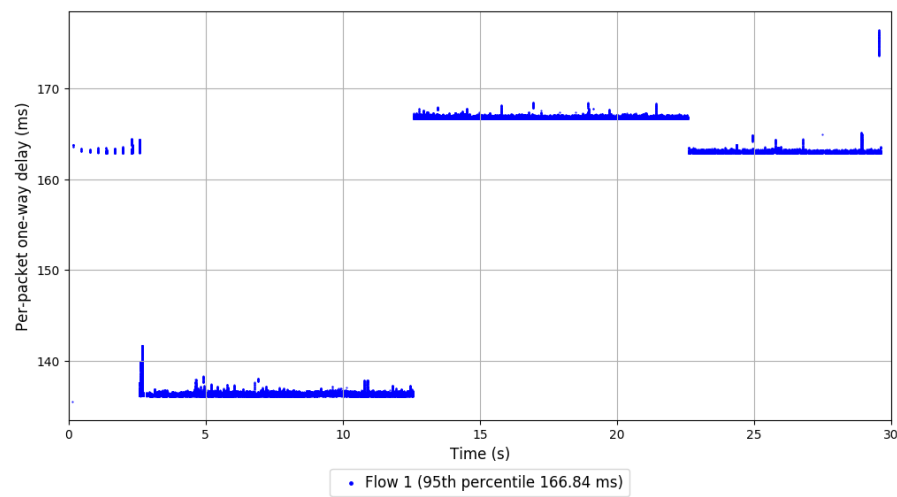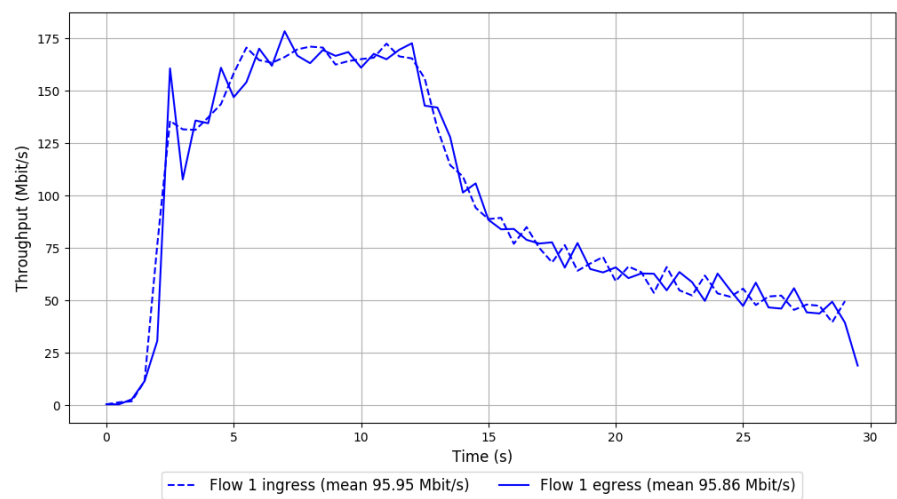
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2017-11-21 11:07:18
End at: 2017-11-21 11:07:48

# Below is generated by plot.py at 2017-11-21 12:33:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.16 Mbit/s
95th percentile per-packet one-way delay: 136.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.16 Mbit/s
95th percentile per-packet one-way delay: 136.397 ms
Loss rate: 0.00%
```
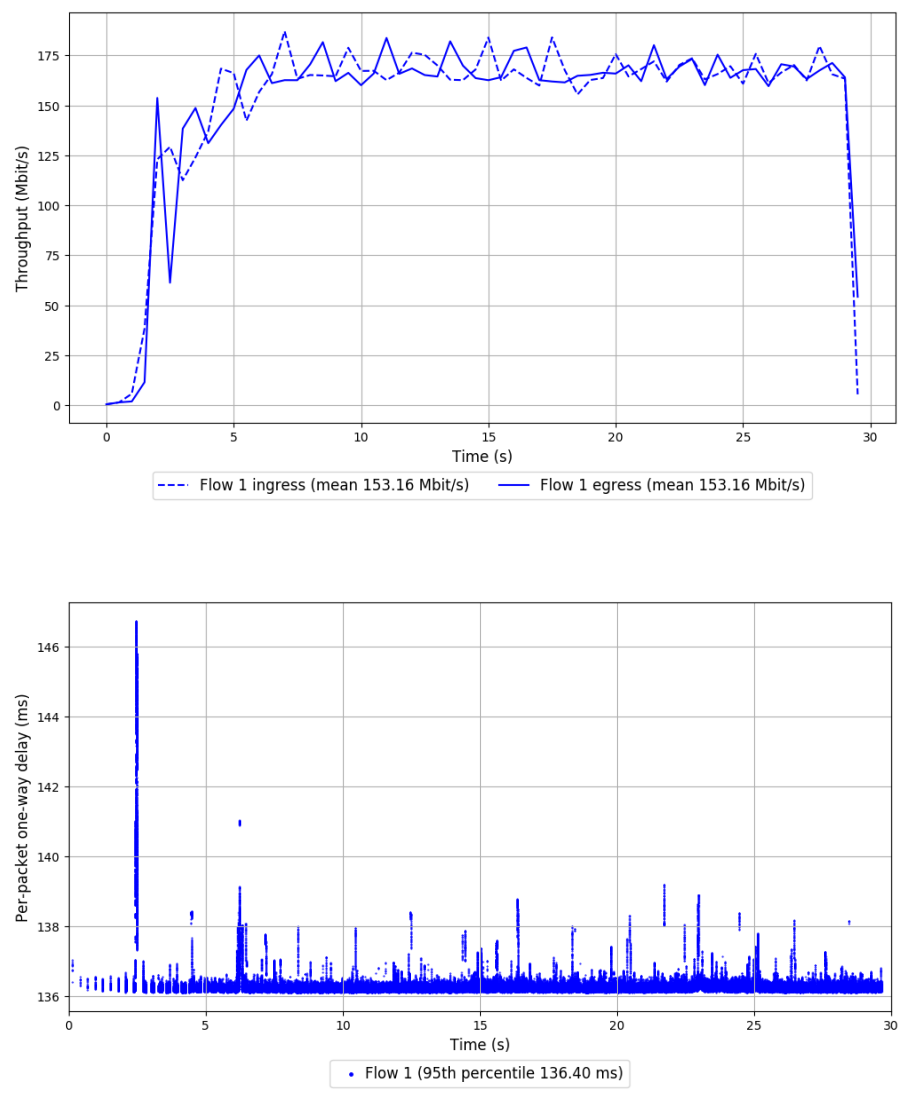
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2017-11-21 11:18:33
End at: 2017-11-21 11:19:03

# Below is generated by plot.py at 2017-11-21 12:34:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 150.05 Mbit/s
95th percentile per-packet one-way delay: 162.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 150.05 Mbit/s
95th percentile per-packet one-way delay: 162.975 ms
Loss rate: 0.00%
```
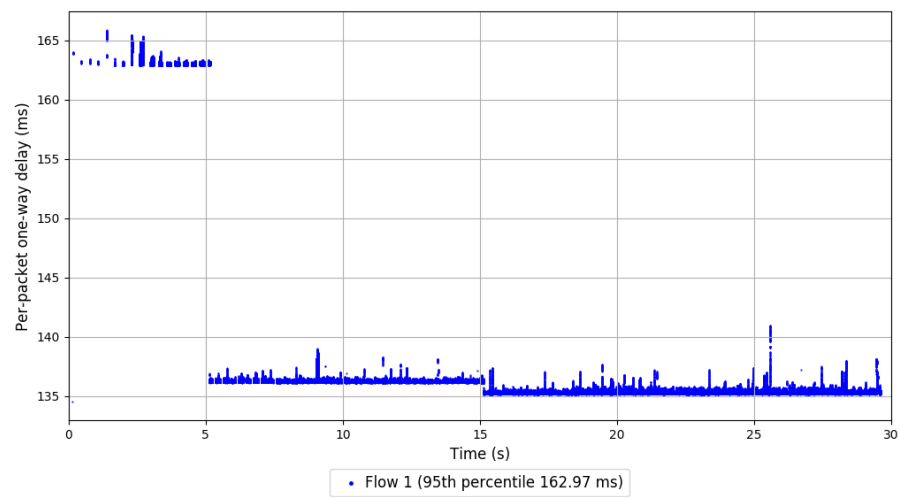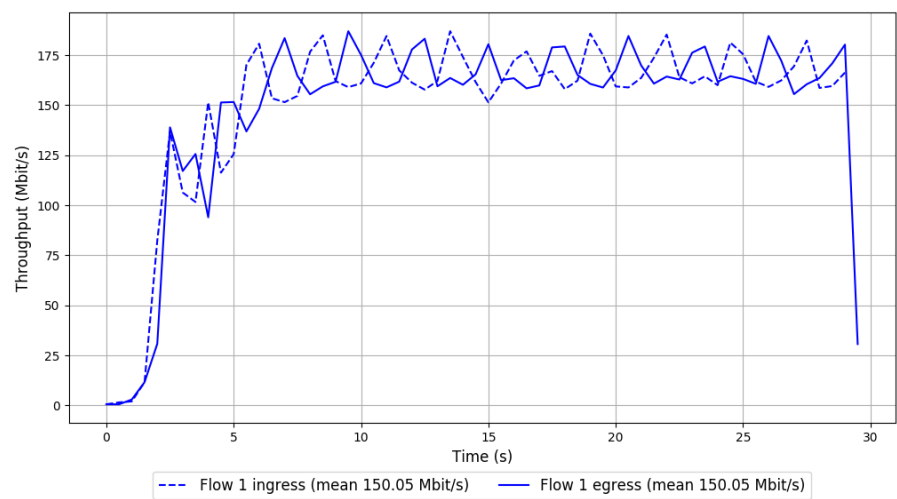
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-11-21 11:29:49
End at: 2017-11-21 11:30:19

# Below is generated by plot.py at 2017-11-21 12:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.81 Mbit/s
95th percentile per-packet one-way delay: 135.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.81 Mbit/s
95th percentile per-packet one-way delay: 135.881 ms
Loss rate: 0.00%
```
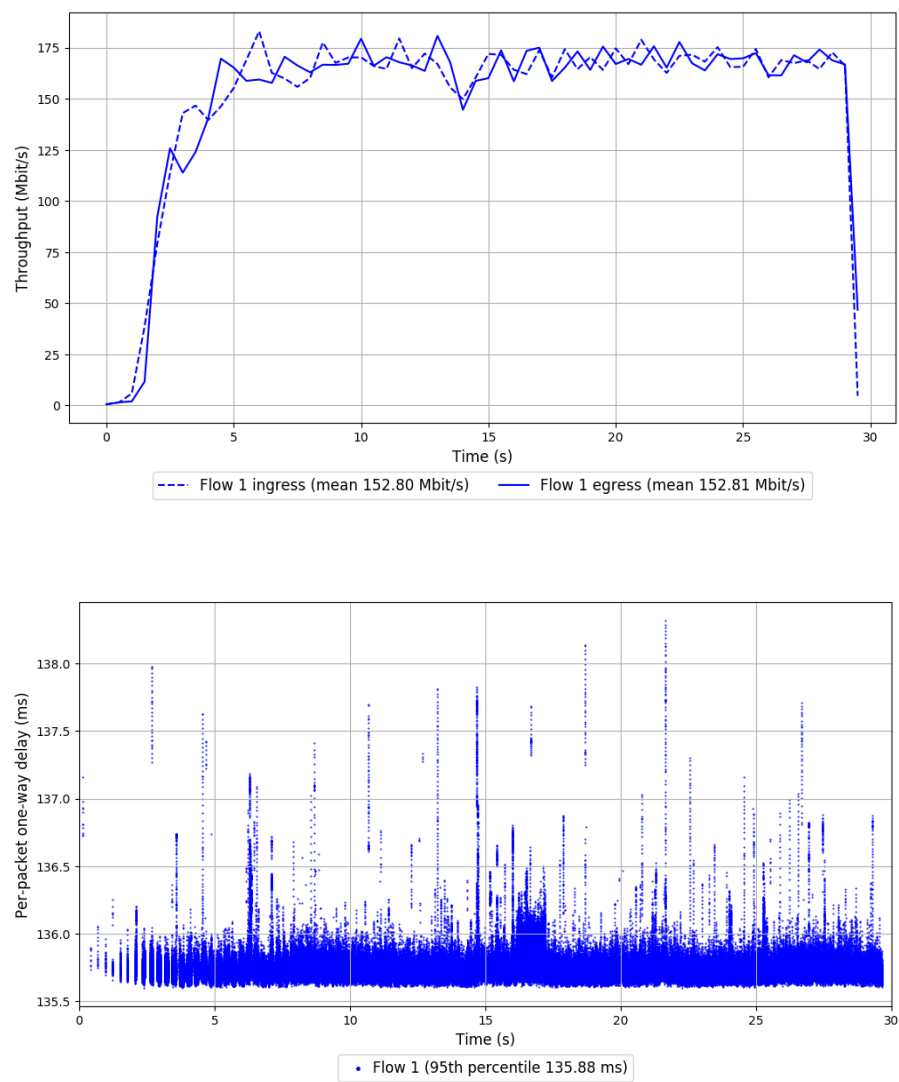
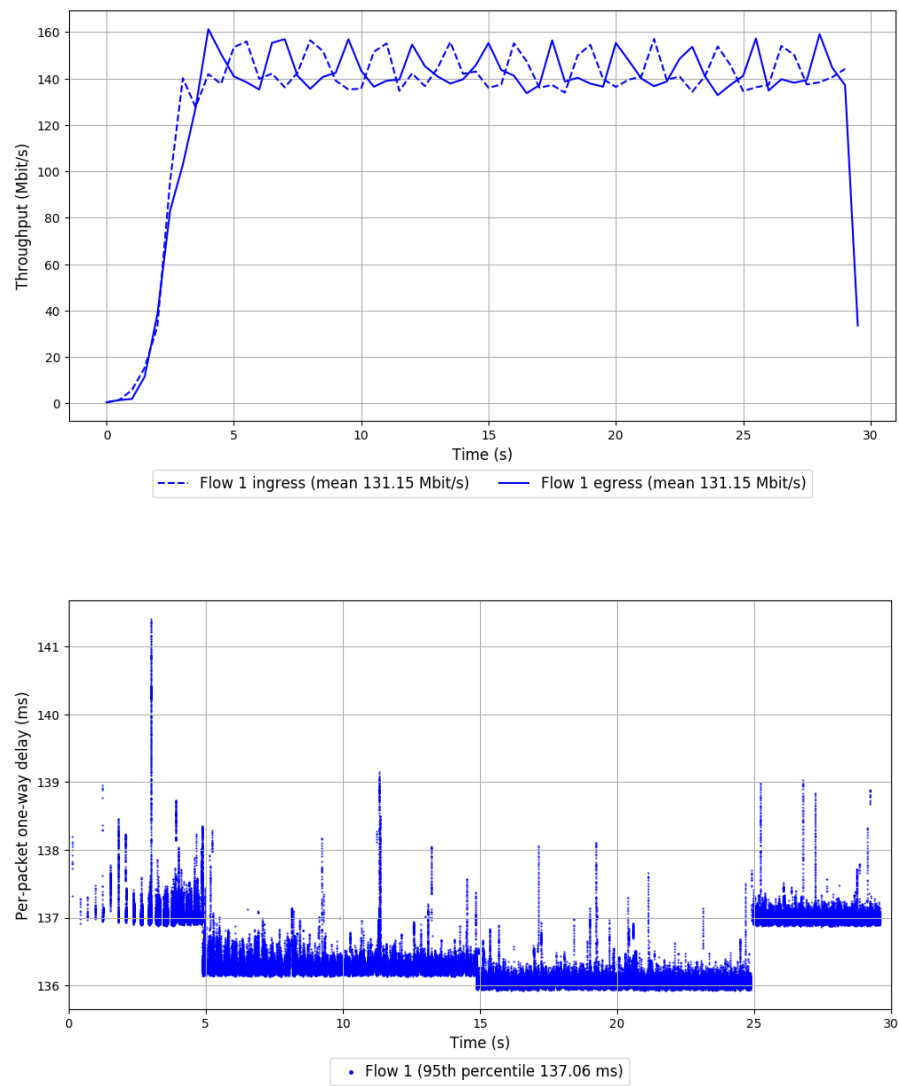# Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-21 09:47:43
End at: 2017-11-21 09:48:13

# Below is generated by plot.py at 2017-11-21 12:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.15 Mbit/s
95th percentile per-packet one-way delay: 137.059 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.15 Mbit/s
95th percentile per-packet one-way delay: 137.059 ms
Loss rate: 0.00%
```

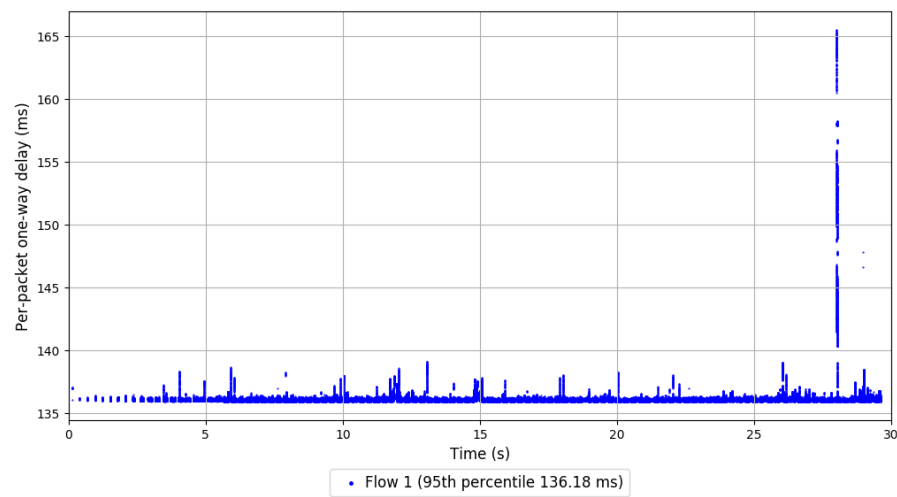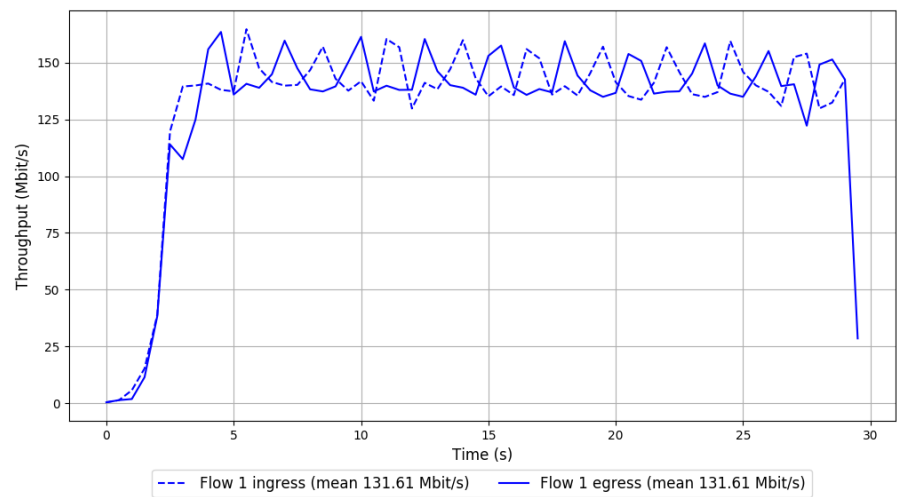# Run 1: Report of Indigo-calib — Data Link

```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-21 09:58:52
End at: 2017-11-21 09:59:22

# Below is generated by plot.py at 2017-11-21 12:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.61 Mbit/s
95th percentile per-packet one-way delay: 136.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.61 Mbit/s
95th percentile per-packet one-way delay: 136.181 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 10:09:58
End at: 2017-11-21 10:10:28

# Below is generated by plot.py at 2017-11-21 12:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.20 Mbit/s
95th percentile per-packet one-way delay: 136.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.20 Mbit/s
95th percentile per-packet one-way delay: 136.366 ms
Loss rate: 0.00%
```
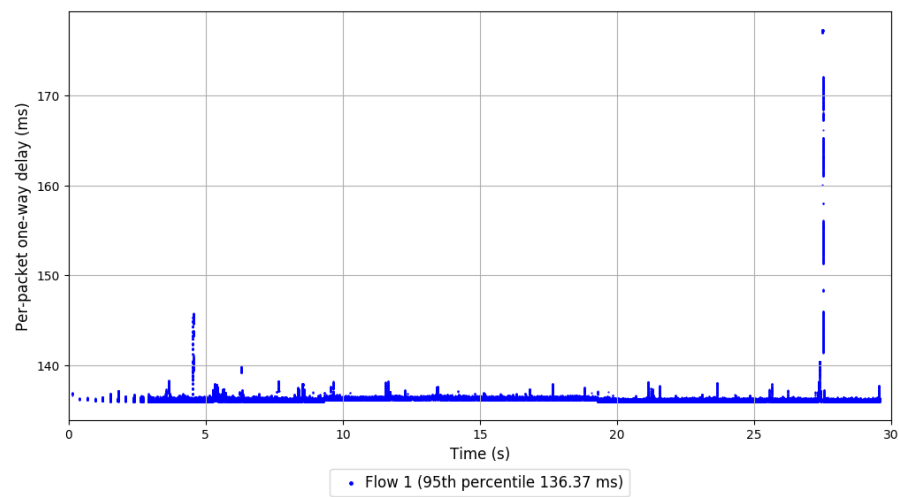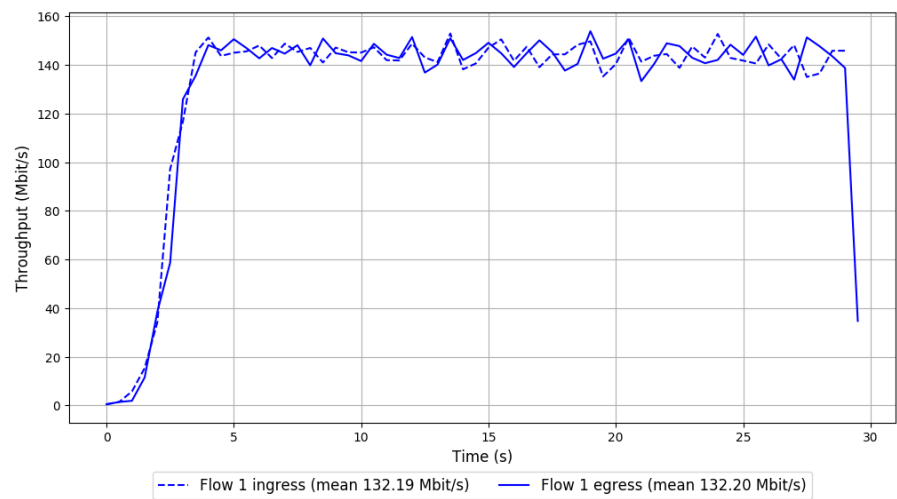
Run 3: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 132.19 Mbit/s)   Flow 1 egress (mean 132.20 Mbit/s)

Flow 1 (95th percentile 136.37 ms)

```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 10:21:31
End at: 2017-11-21 10:22:01

# Below is generated by plot.py at 2017-11-21 12:34:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.00 Mbit/s
95th percentile per-packet one-way delay: 136.182 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 131.00 Mbit/s
95th percentile per-packet one-way delay: 136.182 ms
Loss rate: 0.01%
```
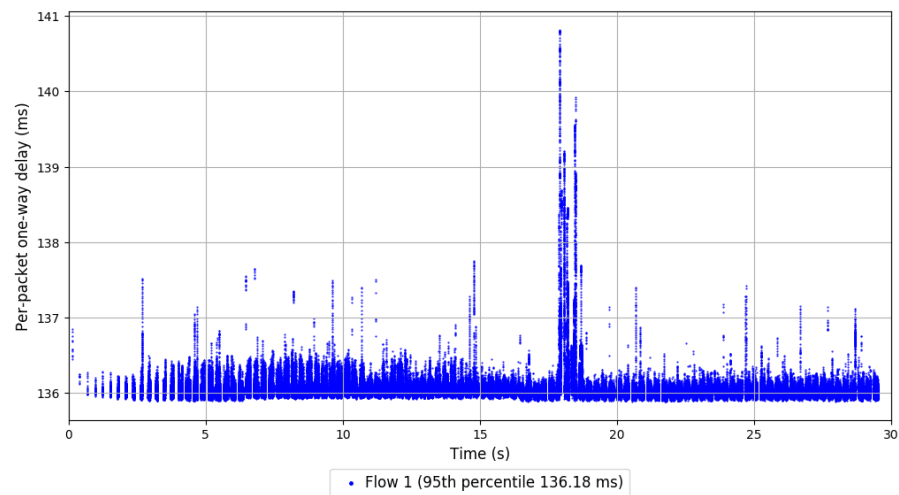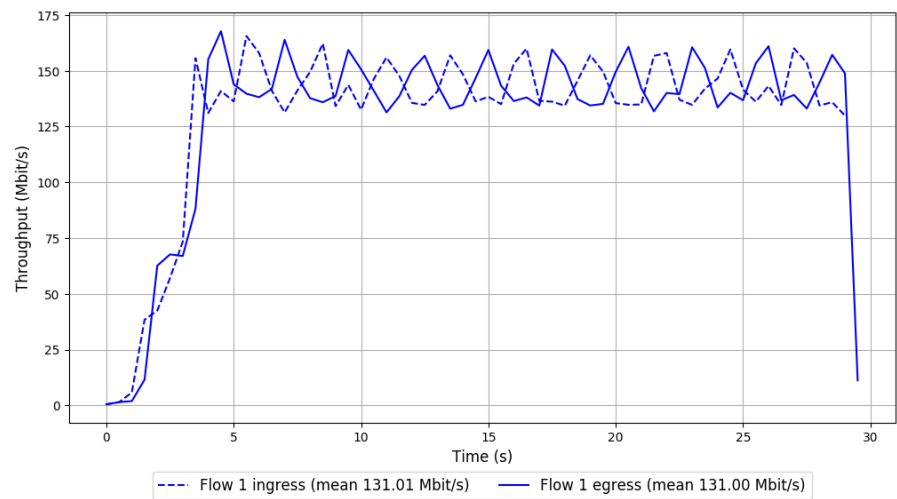
Run 4: Report of Indigo-calib — Data Link

- - - Flow 1 ingress (mean 131.01 Mbit/s) —— Flow 1 egress (mean 131.00 Mbit/s)

• Flow 1 (95th percentile 136.18 ms)

```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 10:33:15
End at: 2017-11-21 10:33:45

# Below is generated by plot.py at 2017-11-21 12:34:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 114.85 Mbit/s
95th percentile per-packet one-way delay: 166.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 114.85 Mbit/s
95th percentile per-packet one-way delay: 166.902 ms
Loss rate: 0.00%
```
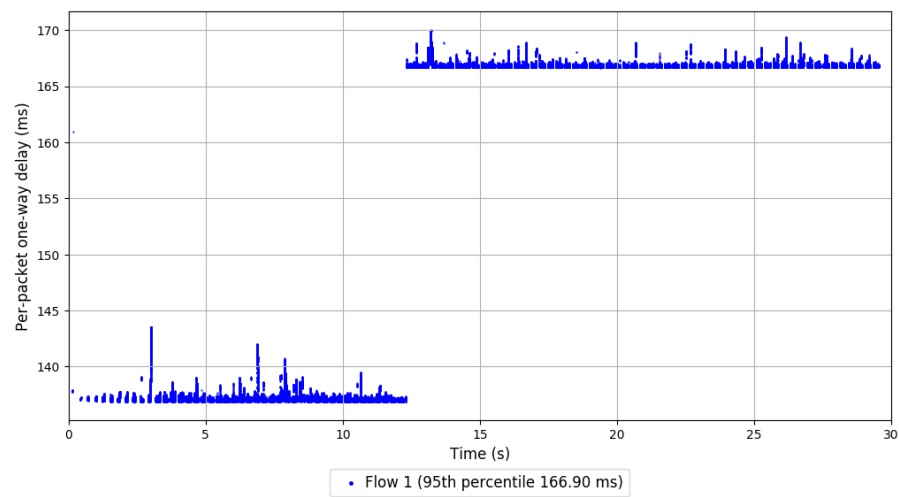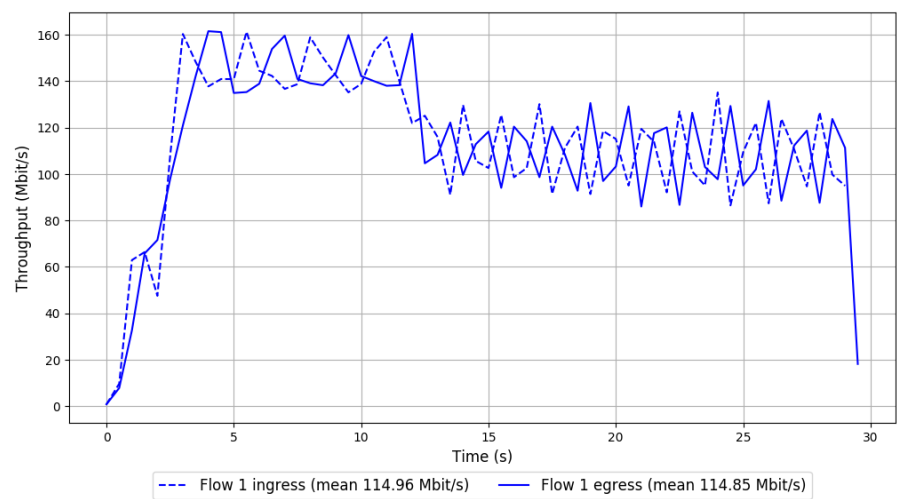
Run 5: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 114.96 Mbit/s)   Flow 1 egress (mean 114.85 Mbit/s)

• Flow 1 (95th percentile 166.90 ms)

```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 10:44:24
End at: 2017-11-21 10:44:54

# Below is generated by plot.py at 2017-11-21 12:35:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.50 Mbit/s
95th percentile per-packet one-way delay: 166.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.50 Mbit/s
95th percentile per-packet one-way delay: 166.793 ms
Loss rate: 0.00%
```
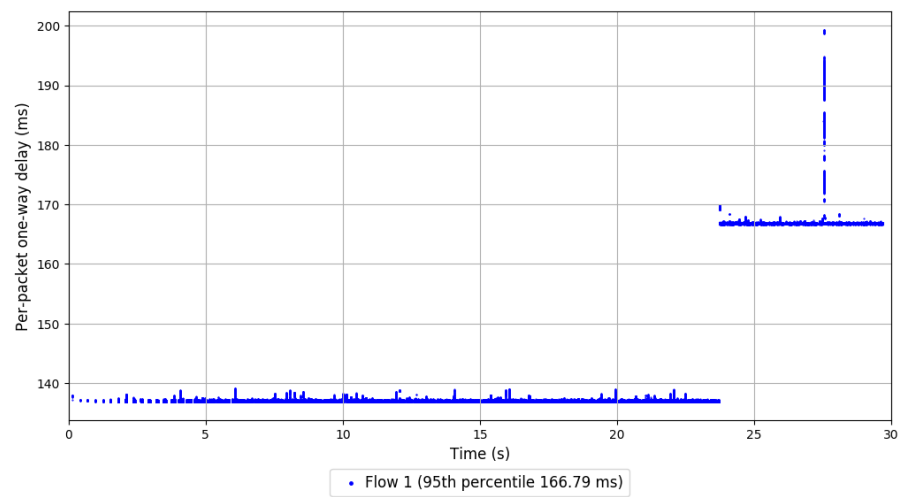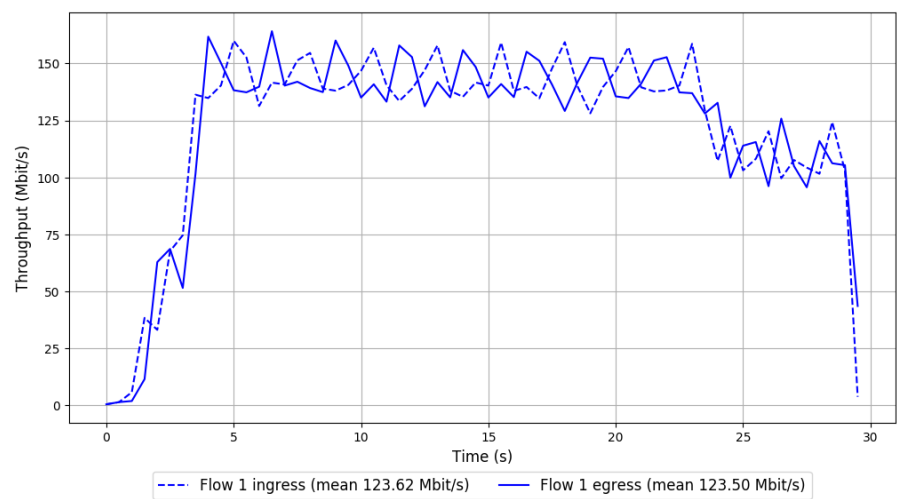
Run 6: Report of Indigo-calib — Data Link

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```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 10:55:42
End at: 2017-11-21 10:56:12

# Below is generated by plot.py at 2017-11-21 12:35:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.69 Mbit/s
95th percentile per-packet one-way delay: 166.859 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 119.69 Mbit/s
95th percentile per-packet one-way delay: 166.859 ms
Loss rate: 0.01%
```
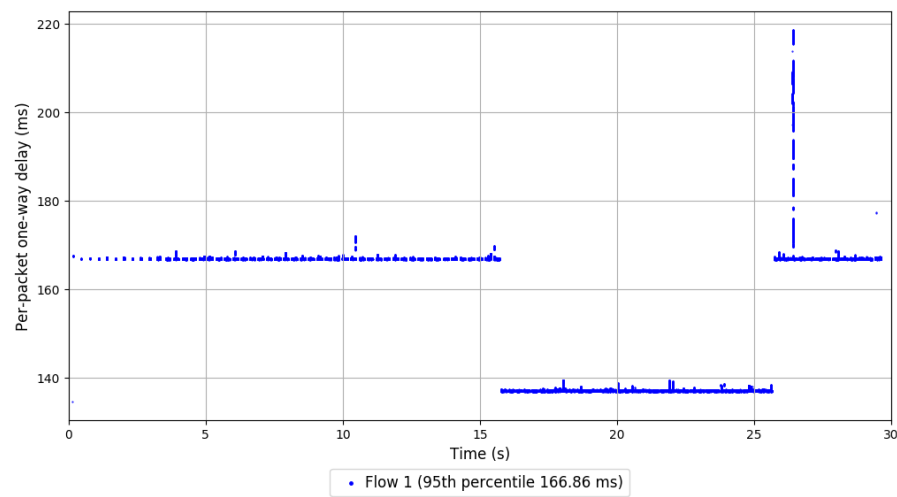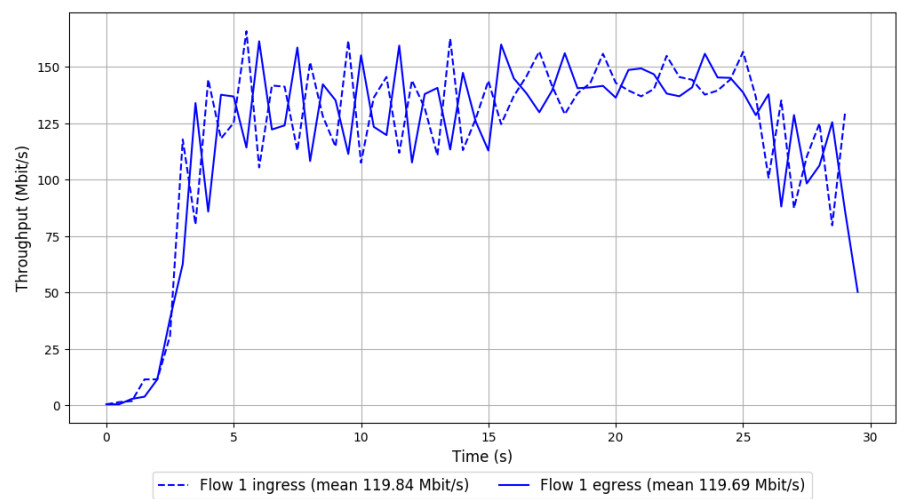
Run 7: Report of Indigo-calib — Data Link

```
Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 11:06:24
End at: 2017-11-21 11:06:54

# Below is generated by plot.py at 2017-11-21 12:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.47 Mbit/s
95th percentile per-packet one-way delay: 136.320 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 130.47 Mbit/s
95th percentile per-packet one-way delay: 136.320 ms
Loss rate: 0.22%
```
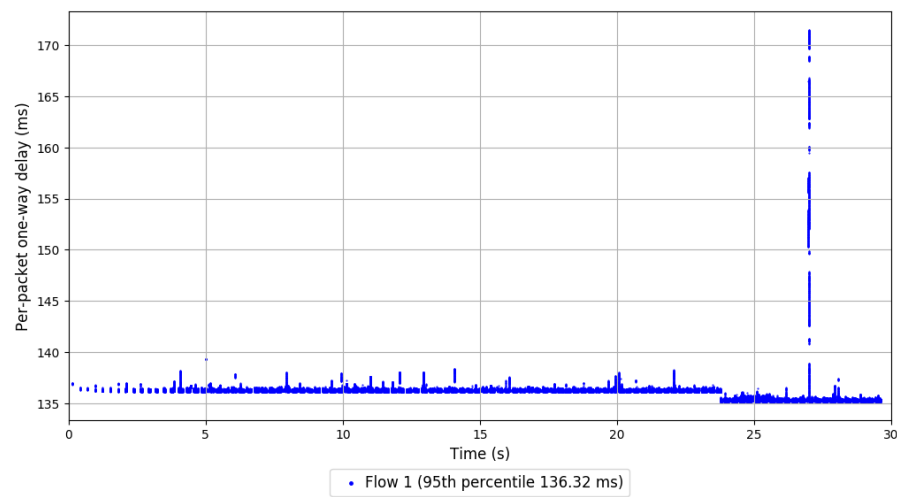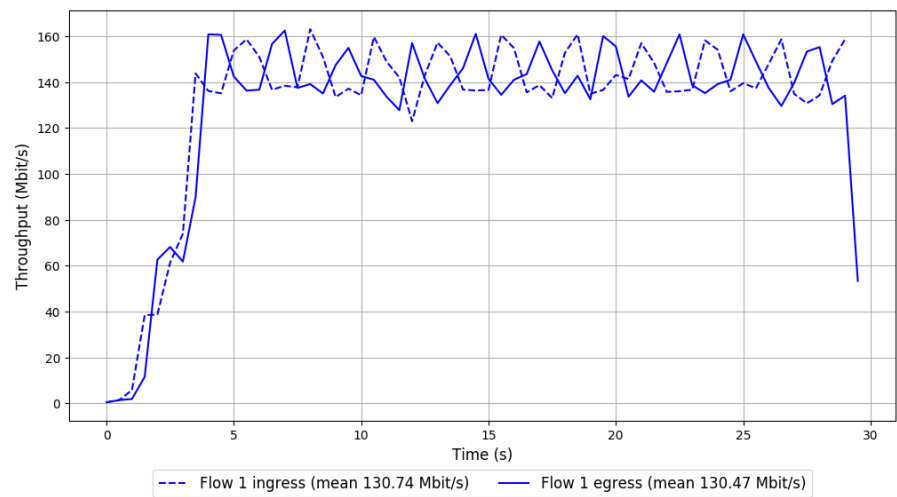
Run 8: Report of Indigo-calib — Data Link

```
Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 11:17:41
End at: 2017-11-21 11:18:11


# Below is generated by plot.py at 2017-11-21 12:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.33 Mbit/s
95th percentile per-packet one-way delay: 163.154 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 121.33 Mbit/s
95th percentile per-packet one-way delay: 163.154 ms
Loss rate: 0.00%
```
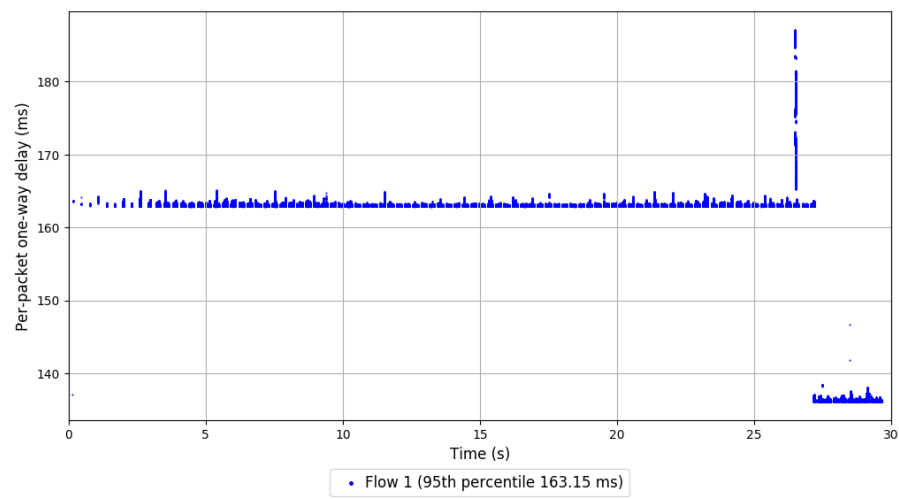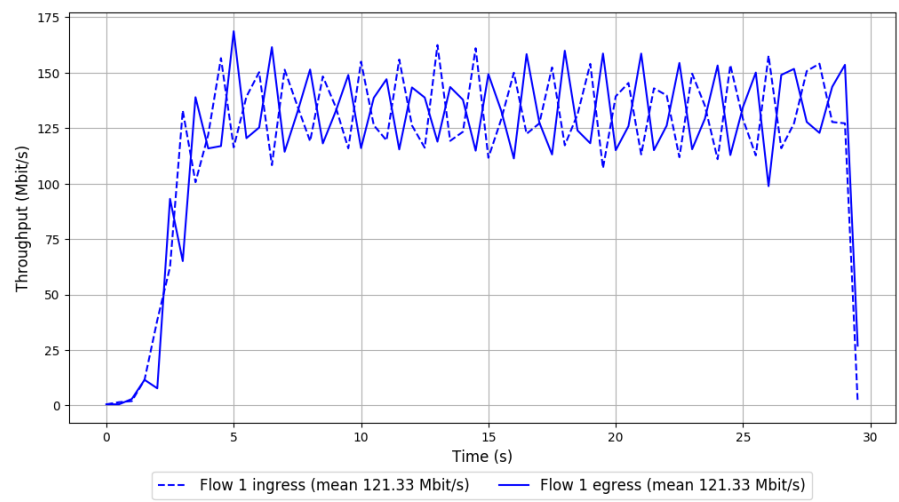
Run 9: Report of Indigo-calib — Data Link

```
Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 11:28:57
End at: 2017-11-21 11:29:27

# Below is generated by plot.py at 2017-11-21 12:35:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.29 Mbit/s
95th percentile per-packet one-way delay: 136.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.29 Mbit/s
95th percentile per-packet one-way delay: 136.349 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo-calib — Data Link