

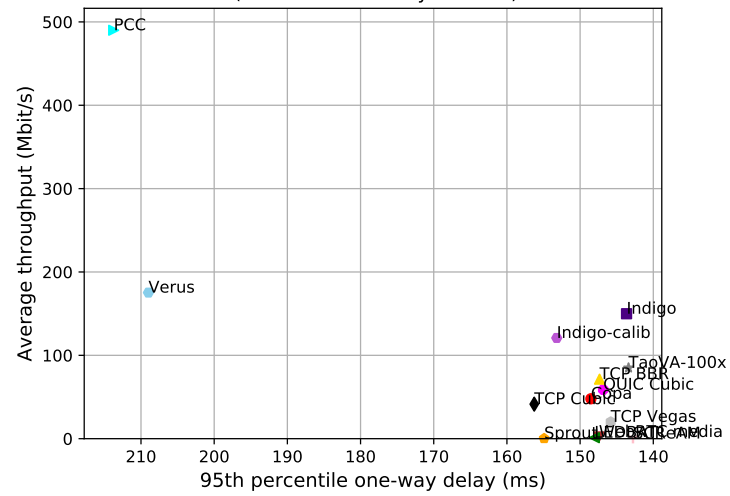
Pantheon Report

Generated at 2017-11-16 10:31:57 (UTC).
Data path: GCE London Ethernet (*remote*) → GCE Sydney Ethernet (*local*).
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**).

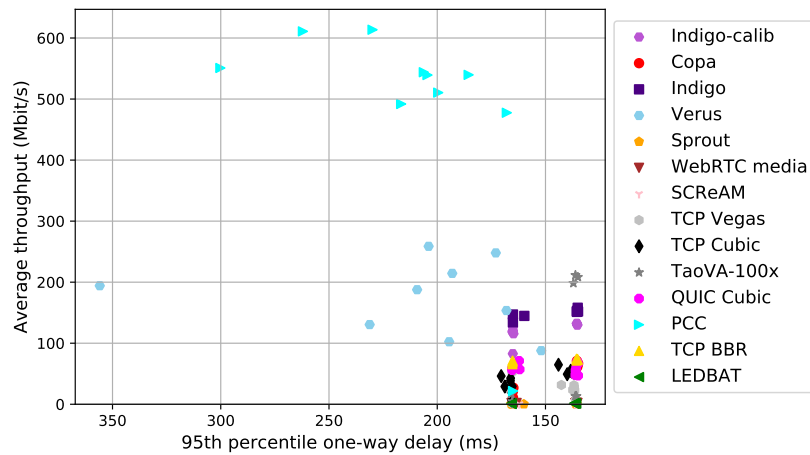
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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 @ f1a14bffe749737437f61b1eaaeb30b267cde681
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 London Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



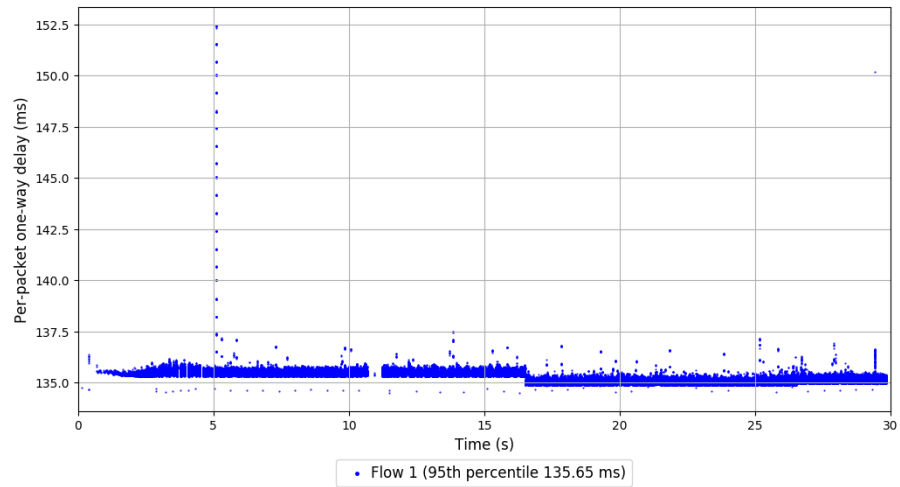
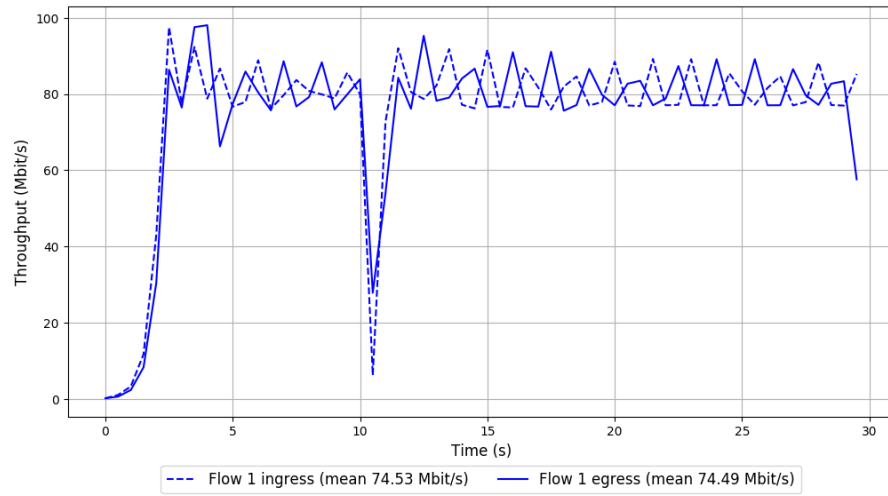
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	71.45	147.35	1.08
TCP Cubic	10	41.43	156.27	1.43
LEDBAT	10	1.17	148.06	1.16
PCC	10	490.00	213.73	2.84
QUIC Cubic	10	58.81	146.85	1.07
SCReAM	8	0.21	142.78	0.87
WebRTC media	10	2.10	147.44	1.05
Sprout	9	0.33	154.92	0.66
TaoVA-100x	8	84.97	143.39	0.65
TCP Vegas	10	20.16	145.82	1.18
Verus	9	175.26	208.98	2.26
Copa	9	47.88	148.53	0.86
Indigo	10	149.90	143.65	0.93
Indigo-calib	10	120.86	153.19	1.09

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-16 06:13:21
End at: 2017-11-16 06:13:51

# Below is generated by plot.py at 2017-11-16 10:03:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.49 Mbit/s
95th percentile per-packet one-way delay: 135.648 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 74.49 Mbit/s
95th percentile per-packet one-way delay: 135.648 ms
Loss rate: 0.96%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-16 06:24:48

End at: 2017-11-16 06:25:18

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 135.506 ms

Loss rate: 0.99%

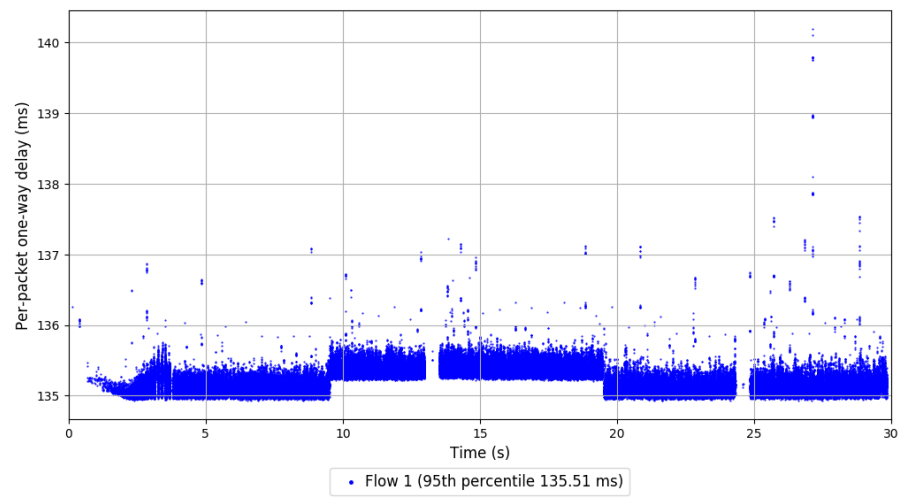
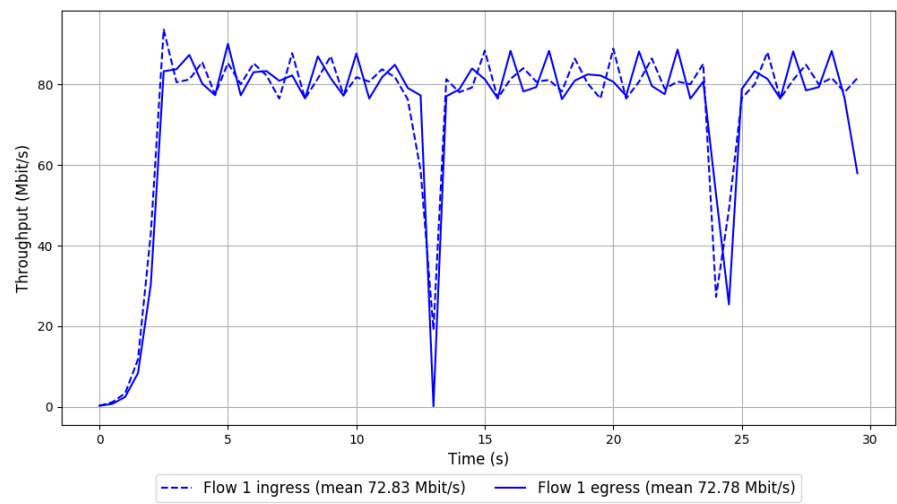
-- Flow 1:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 135.506 ms

Loss rate: 0.99%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-16 06:36:12

End at: 2017-11-16 06:36:42

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.52 Mbit/s

95th percentile per-packet one-way delay: 165.258 ms

Loss rate: 1.17%

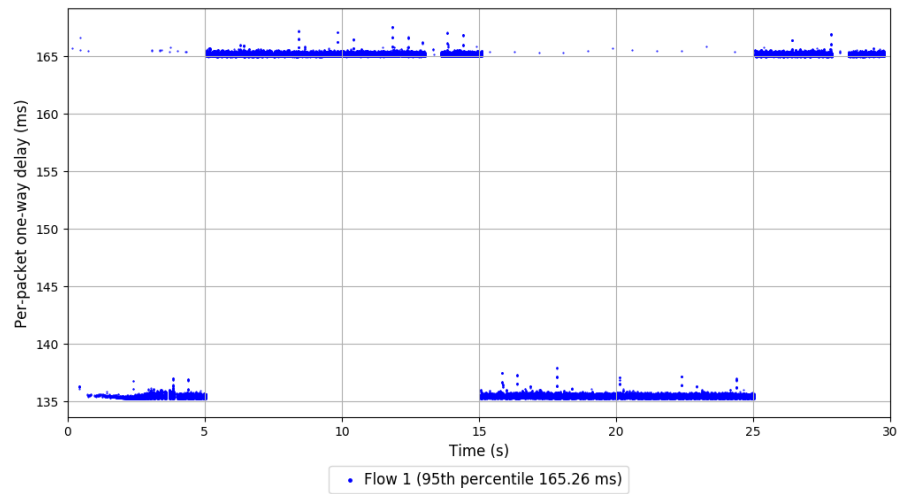
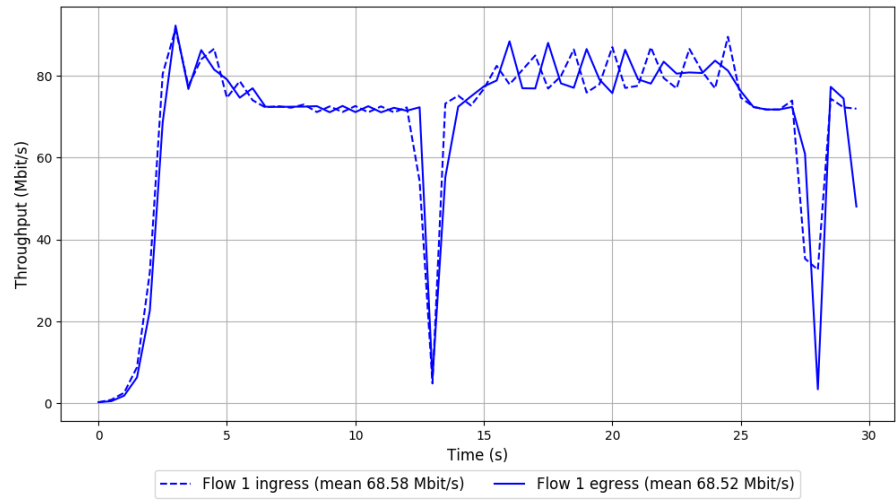
-- Flow 1:

Average throughput: 68.52 Mbit/s

95th percentile per-packet one-way delay: 165.258 ms

Loss rate: 1.17%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-16 06:47:30

End at: 2017-11-16 06:48:00

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.11 Mbit/s

95th percentile per-packet one-way delay: 165.182 ms

Loss rate: 1.11%

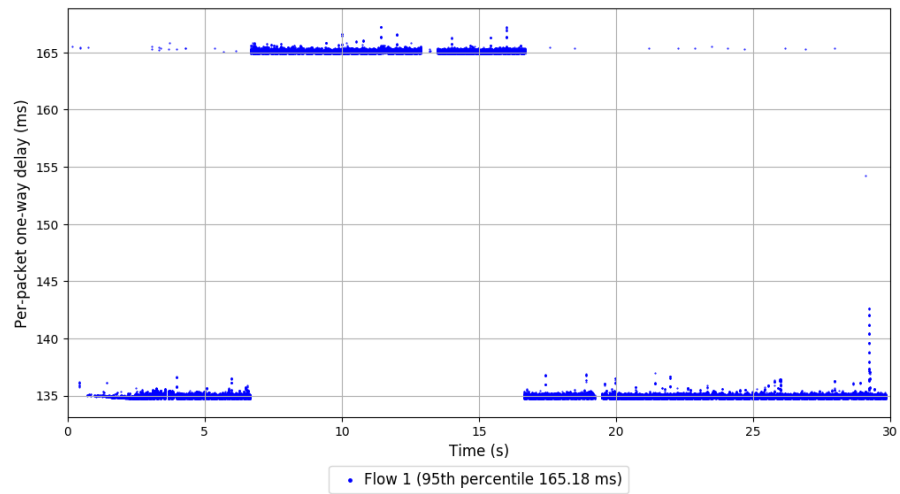
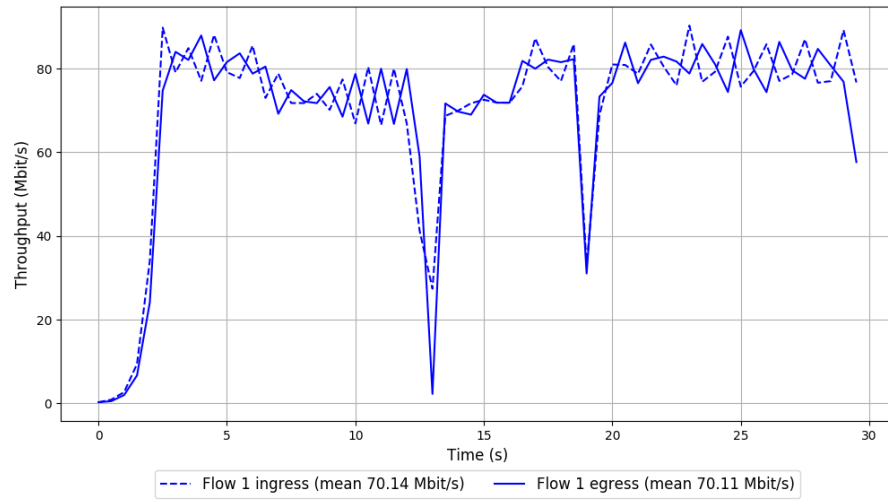
-- Flow 1:

Average throughput: 70.11 Mbit/s

95th percentile per-packet one-way delay: 165.182 ms

Loss rate: 1.11%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-16 06:59:08

End at: 2017-11-16 06:59:38

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.84 Mbit/s

95th percentile per-packet one-way delay: 135.122 ms

Loss rate: 1.10%

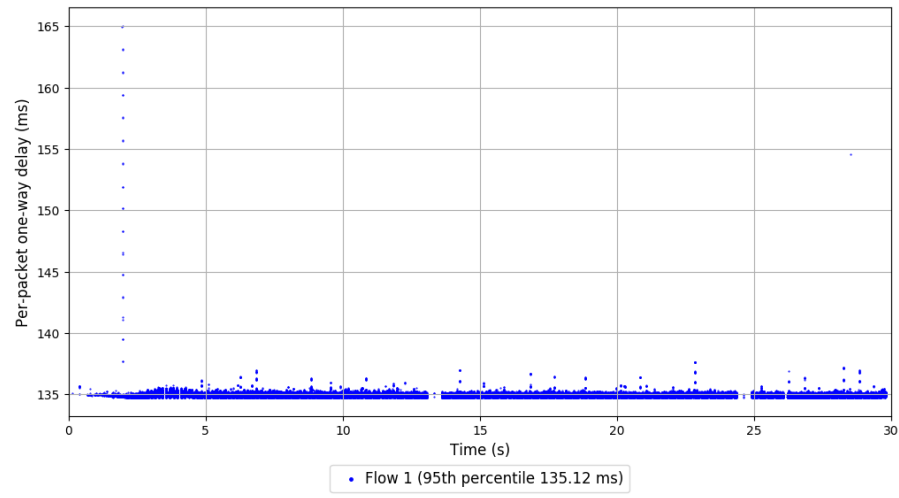
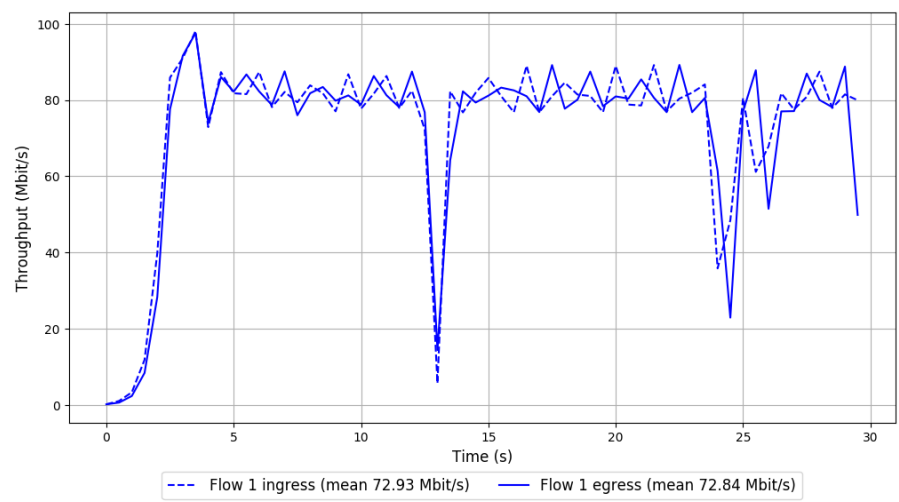
-- Flow 1:

Average throughput: 72.84 Mbit/s

95th percentile per-packet one-way delay: 135.122 ms

Loss rate: 1.10%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-16 07:11:00

End at: 2017-11-16 07:11:30

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.55 Mbit/s

95th percentile per-packet one-way delay: 165.204 ms

Loss rate: 0.96%

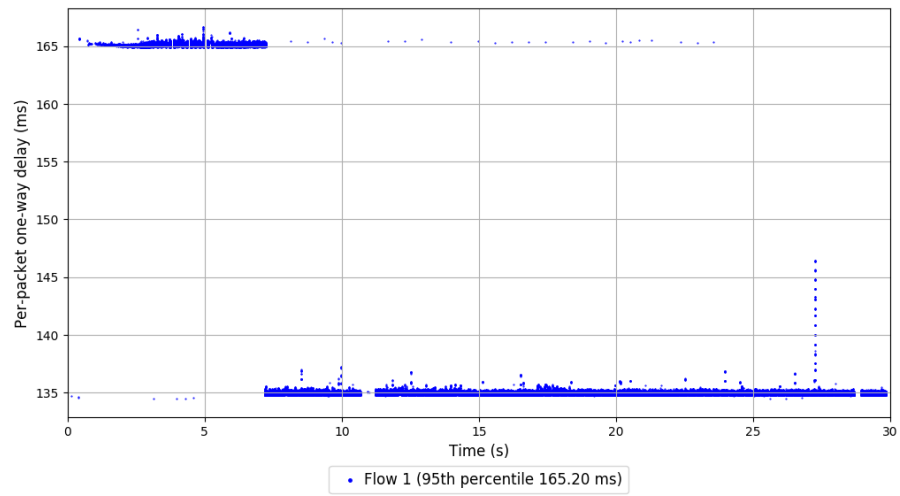
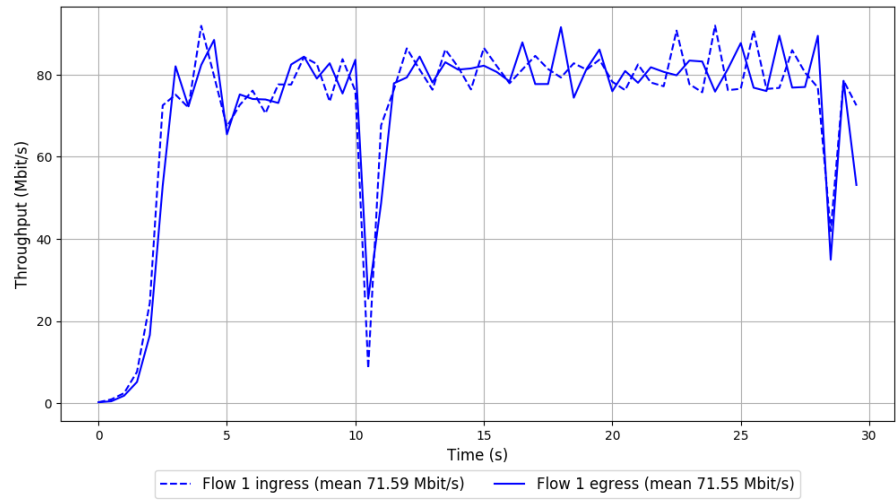
-- Flow 1:

Average throughput: 71.55 Mbit/s

95th percentile per-packet one-way delay: 165.204 ms

Loss rate: 0.96%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-16 07:22:19

End at: 2017-11-16 07:22:49

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.70 Mbit/s

95th percentile per-packet one-way delay: 165.279 ms

Loss rate: 1.38%

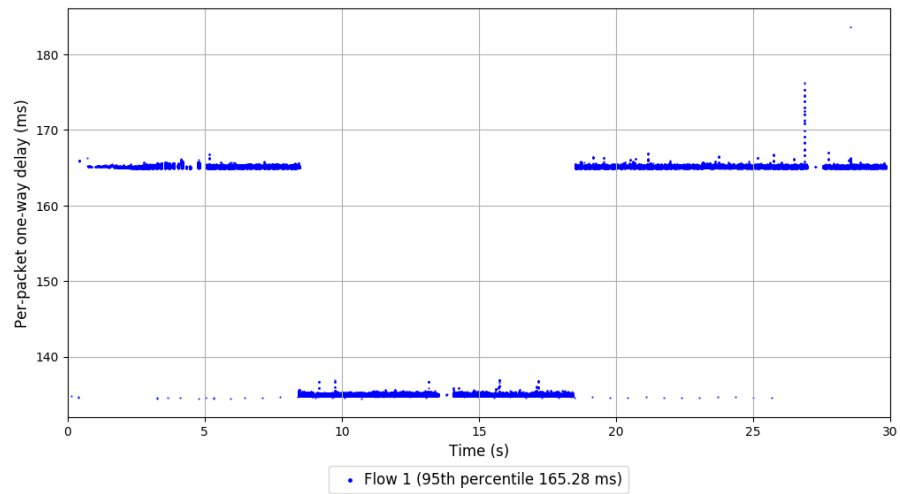
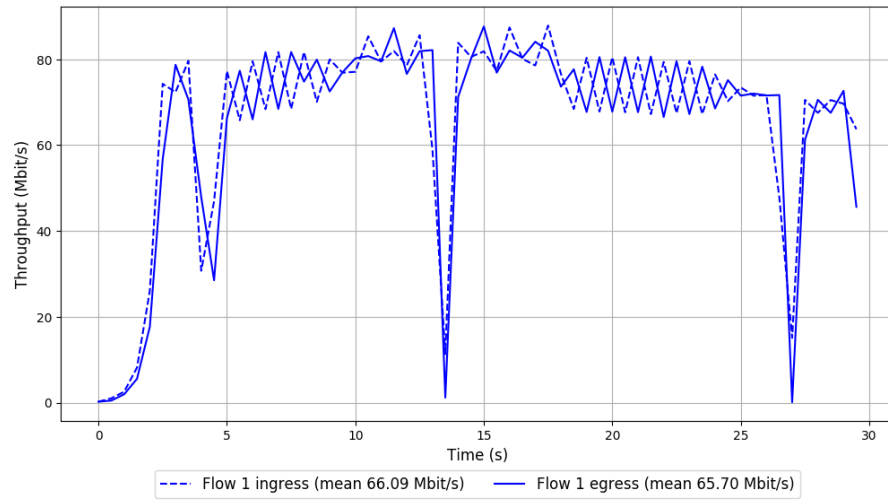
-- Flow 1:

Average throughput: 65.70 Mbit/s

95th percentile per-packet one-way delay: 165.279 ms

Loss rate: 1.38%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-16 07:33:55

End at: 2017-11-16 07:34:25

Below is generated by plot.py at 2017-11-16 10:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.68 Mbit/s

95th percentile per-packet one-way delay: 135.335 ms

Loss rate: 0.95%

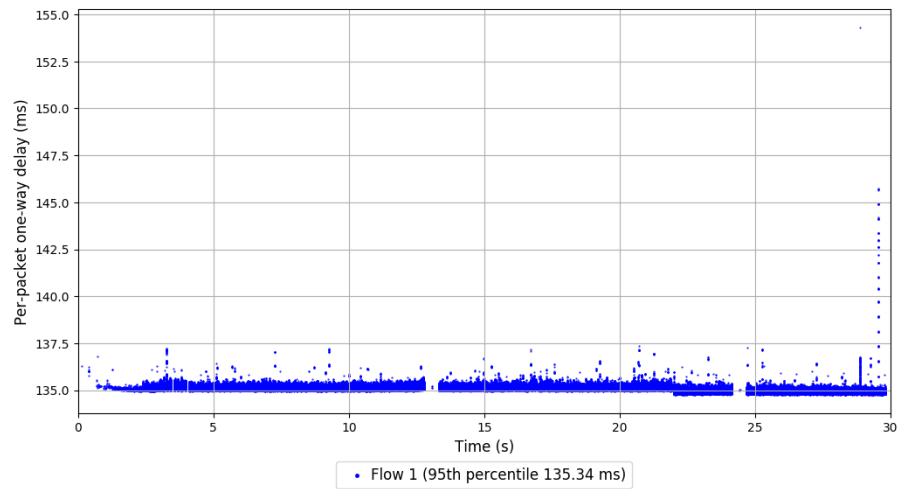
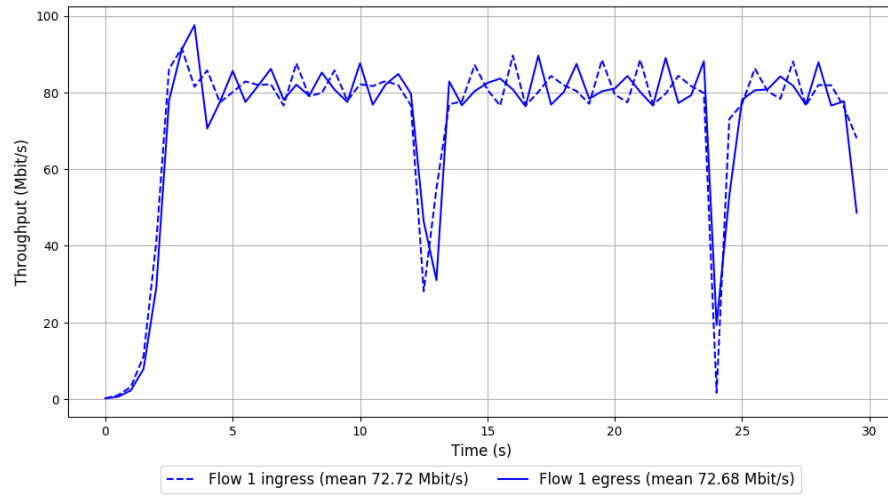
-- Flow 1:

Average throughput: 72.68 Mbit/s

95th percentile per-packet one-way delay: 135.335 ms

Loss rate: 0.95%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-16 07:45:25

End at: 2017-11-16 07:45:55

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.14 Mbit/s

95th percentile per-packet one-way delay: 135.238 ms

Loss rate: 1.13%

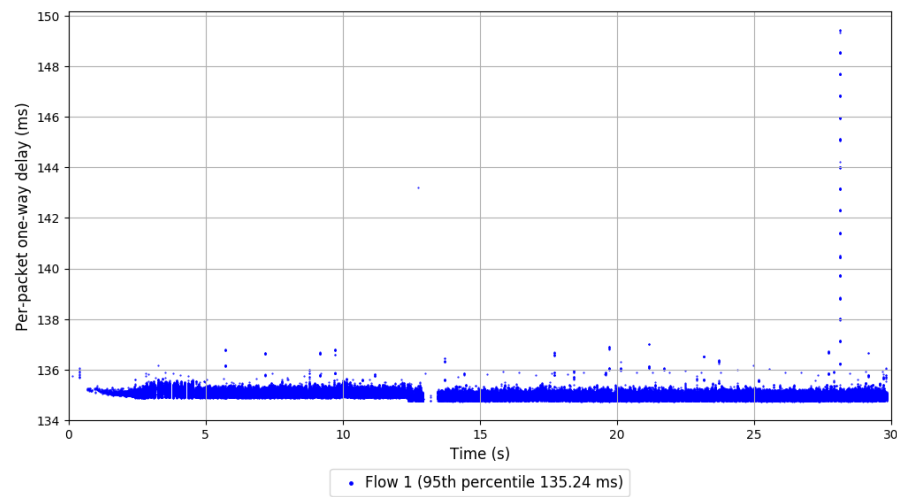
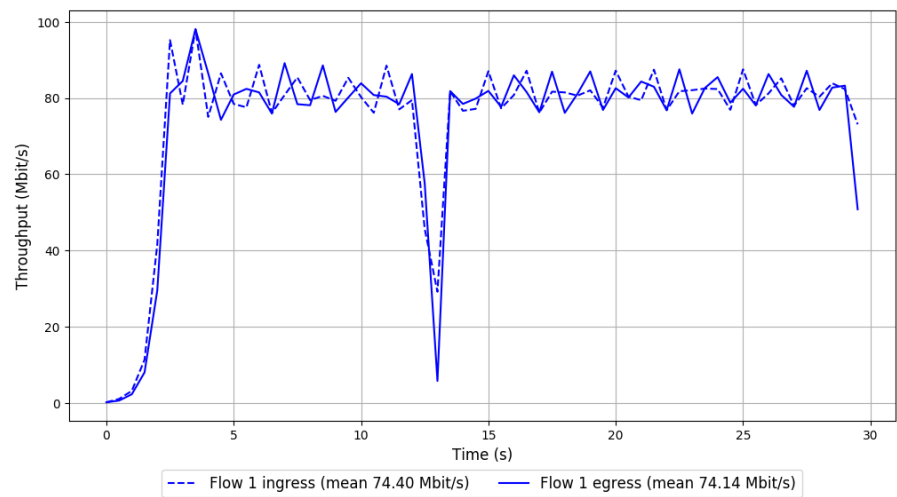
-- Flow 1:

Average throughput: 74.14 Mbit/s

95th percentile per-packet one-way delay: 135.238 ms

Loss rate: 1.13%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-16 07:57:06

End at: 2017-11-16 07:57:36

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.66 Mbit/s

95th percentile per-packet one-way delay: 135.679 ms

Loss rate: 1.08%

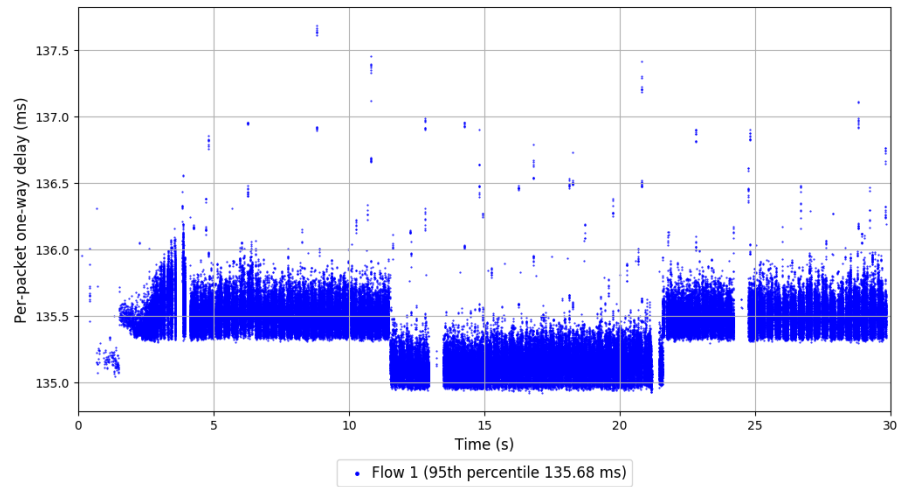
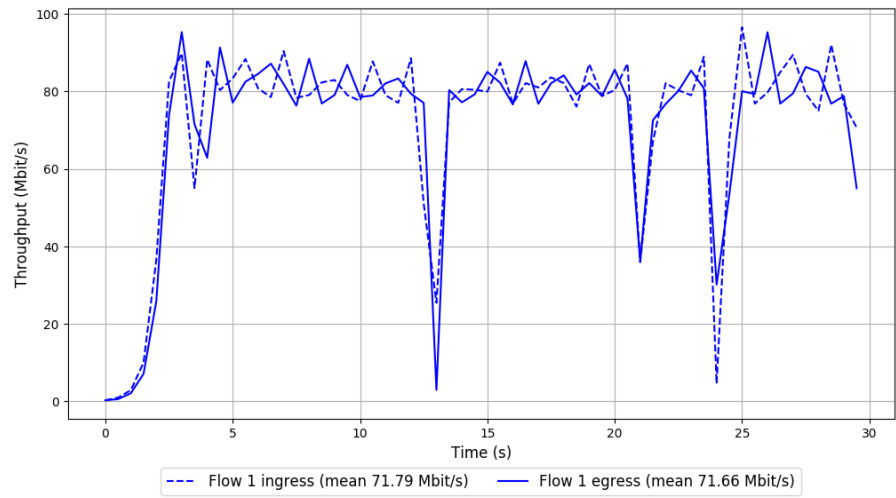
-- Flow 1:

Average throughput: 71.66 Mbit/s

95th percentile per-packet one-way delay: 135.679 ms

Loss rate: 1.08%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 06:20:29

End at: 2017-11-16 06:20:59

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.70 Mbit/s

95th percentile per-packet one-way delay: 143.995 ms

Loss rate: 1.59%

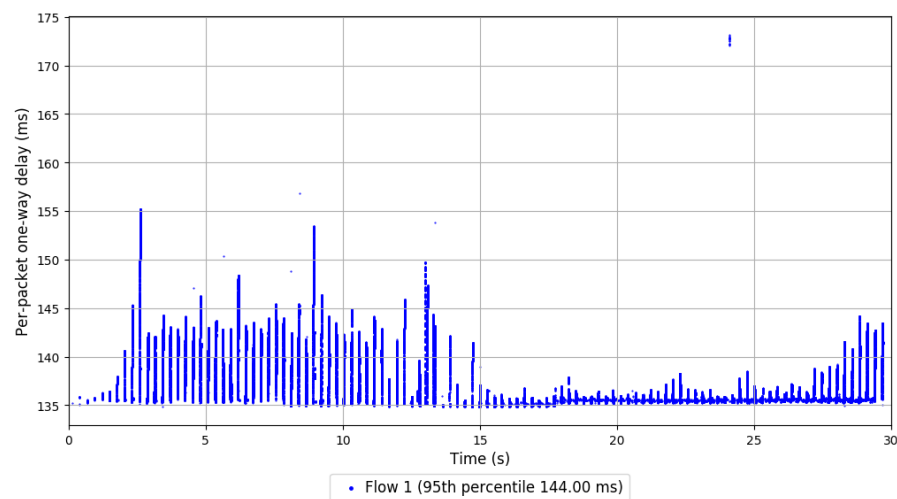
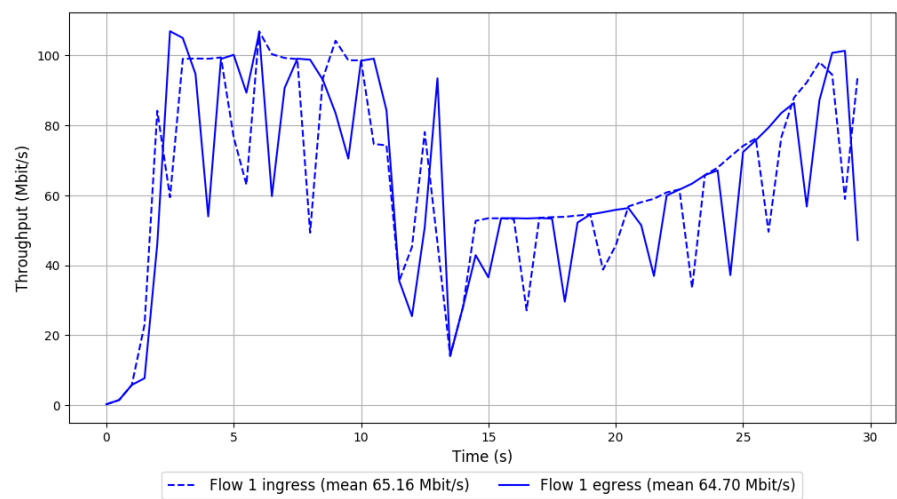
-- Flow 1:

Average throughput: 64.70 Mbit/s

95th percentile per-packet one-way delay: 143.995 ms

Loss rate: 1.59%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 06:31:56

End at: 2017-11-16 06:32:26

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 166.100 ms

Loss rate: 0.67%

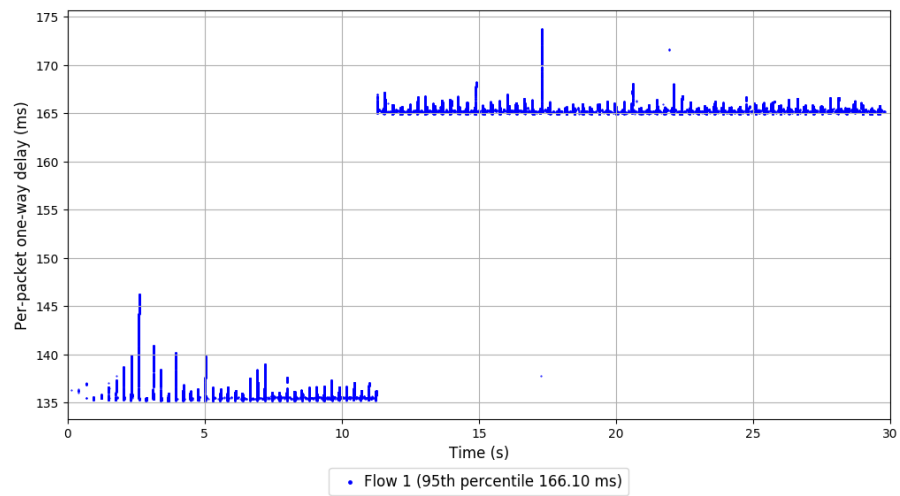
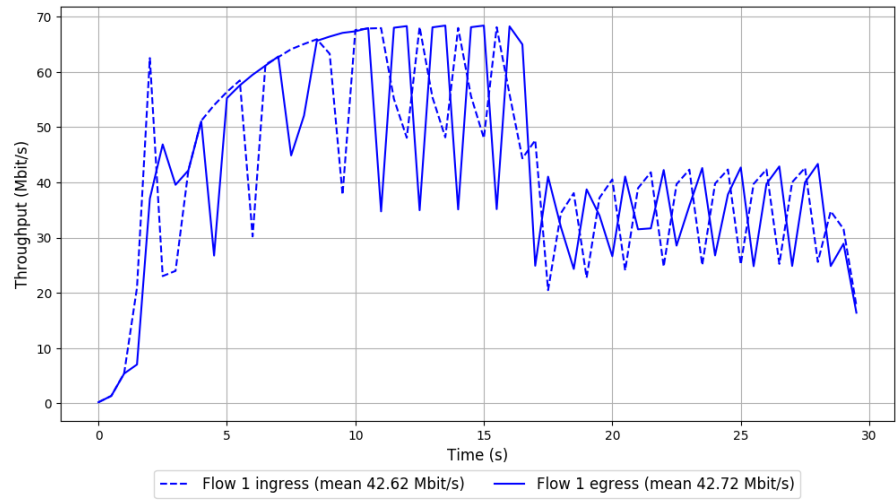
-- Flow 1:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 166.100 ms

Loss rate: 0.67%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 06:43:40

End at: 2017-11-16 06:44:10

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.55 Mbit/s

95th percentile per-packet one-way delay: 166.178 ms

Loss rate: 1.22%

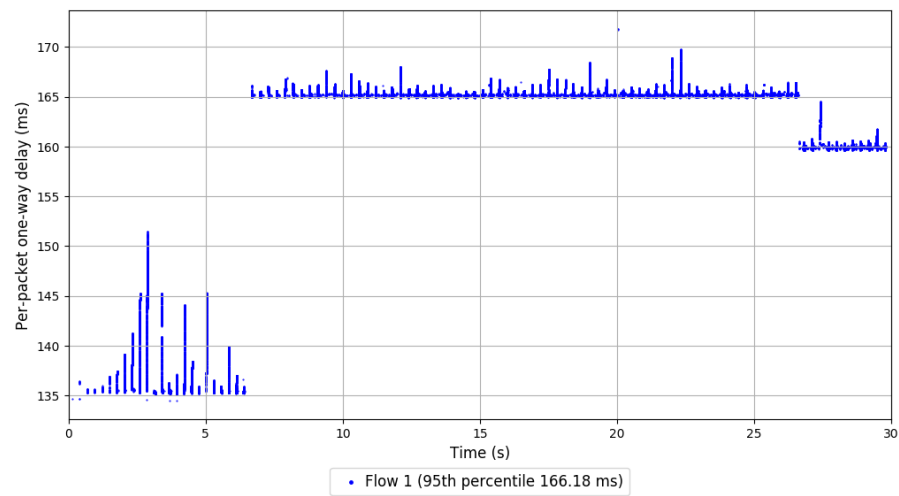
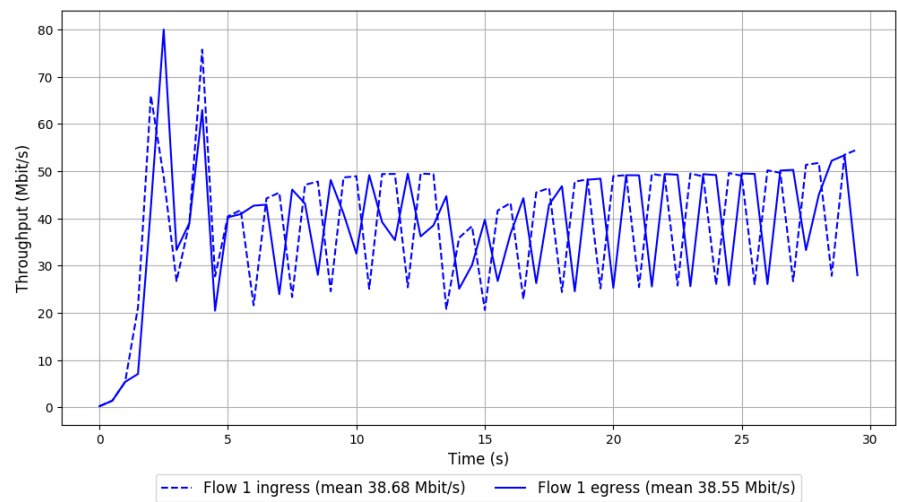
-- Flow 1:

Average throughput: 38.55 Mbit/s

95th percentile per-packet one-way delay: 166.178 ms

Loss rate: 1.22%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 06:54:42

End at: 2017-11-16 06:55:12

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.07 Mbit/s

95th percentile per-packet one-way delay: 168.771 ms

Loss rate: 1.34%

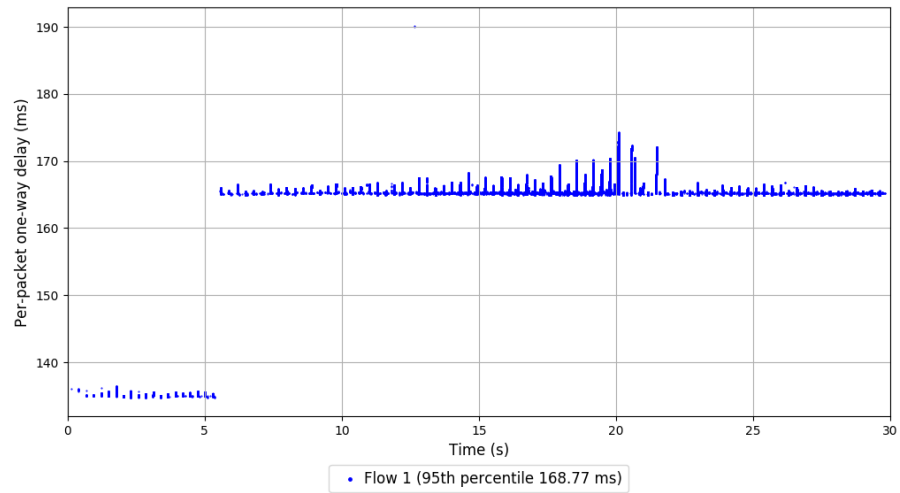
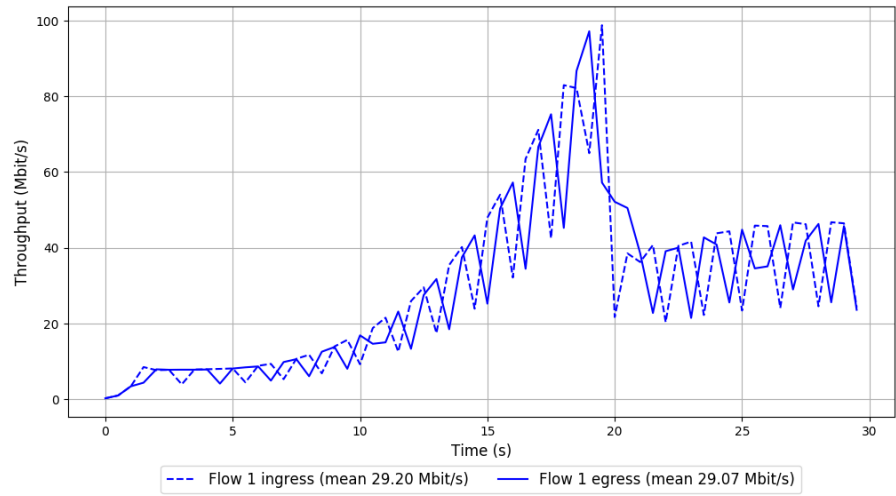
-- Flow 1:

Average throughput: 29.07 Mbit/s

95th percentile per-packet one-way delay: 168.771 ms

Loss rate: 1.34%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 07:06:43

End at: 2017-11-16 07:07:13

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.13 Mbit/s

95th percentile per-packet one-way delay: 170.458 ms

Loss rate: 0.58%

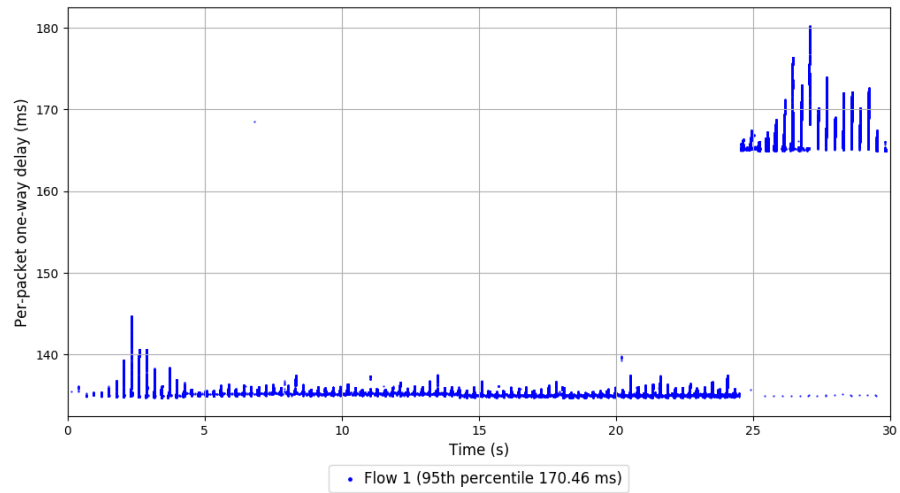
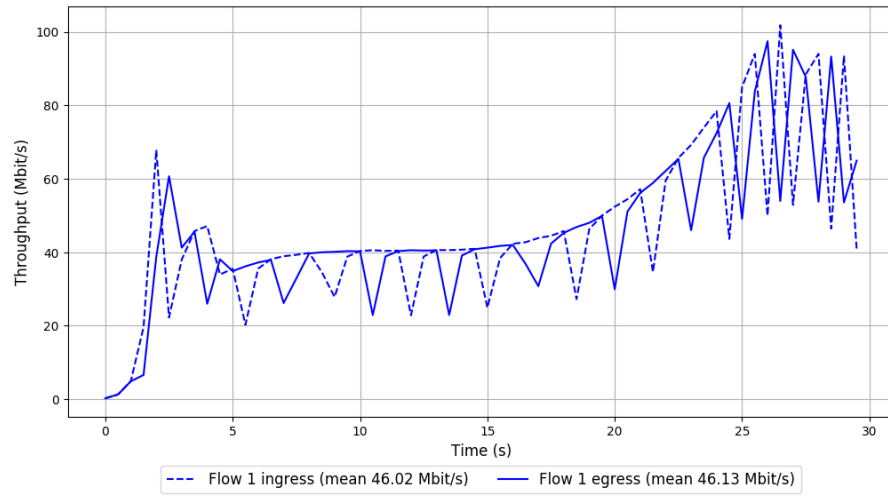
-- Flow 1:

Average throughput: 46.13 Mbit/s

95th percentile per-packet one-way delay: 170.458 ms

Loss rate: 0.58%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 07:18:12

End at: 2017-11-16 07:18:42

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 165.636 ms

Loss rate: 2.75%

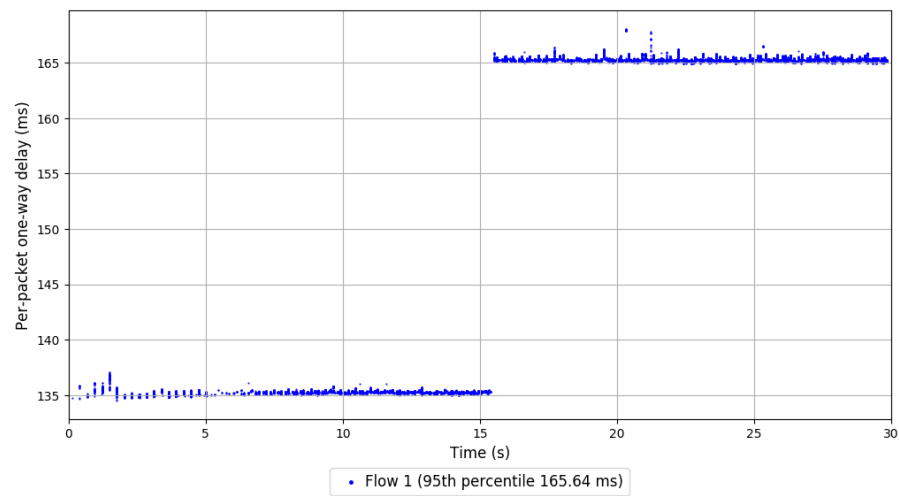
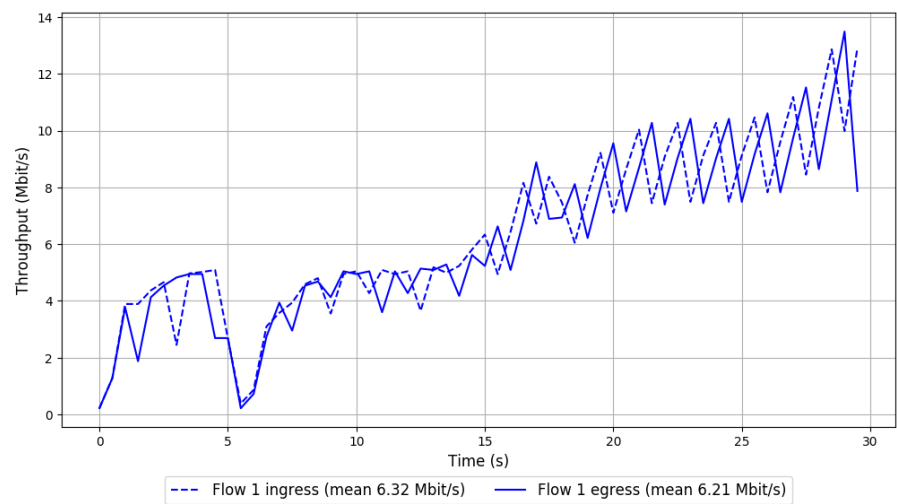
-- Flow 1:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 165.636 ms

Loss rate: 2.75%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 07:29:41

End at: 2017-11-16 07:30:11

Below is generated by plot.py at 2017-11-16 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.25 Mbit/s

95th percentile per-packet one-way delay: 165.338 ms

Loss rate: 2.27%

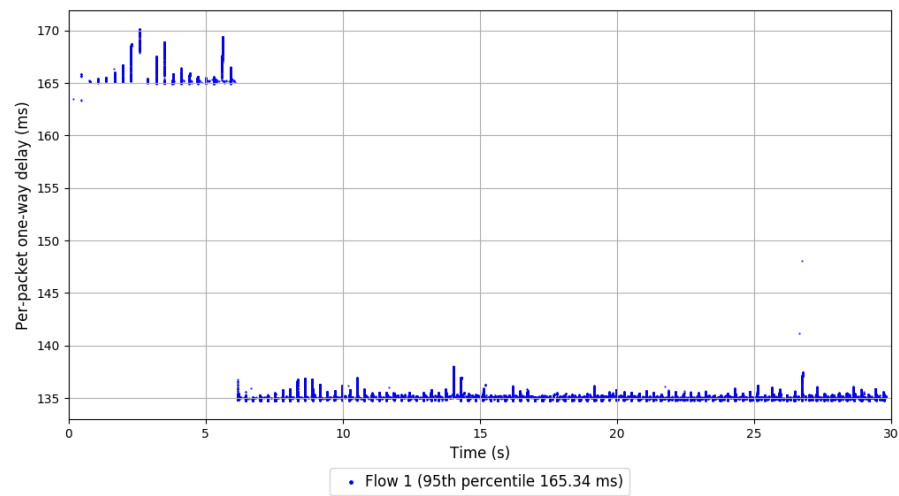
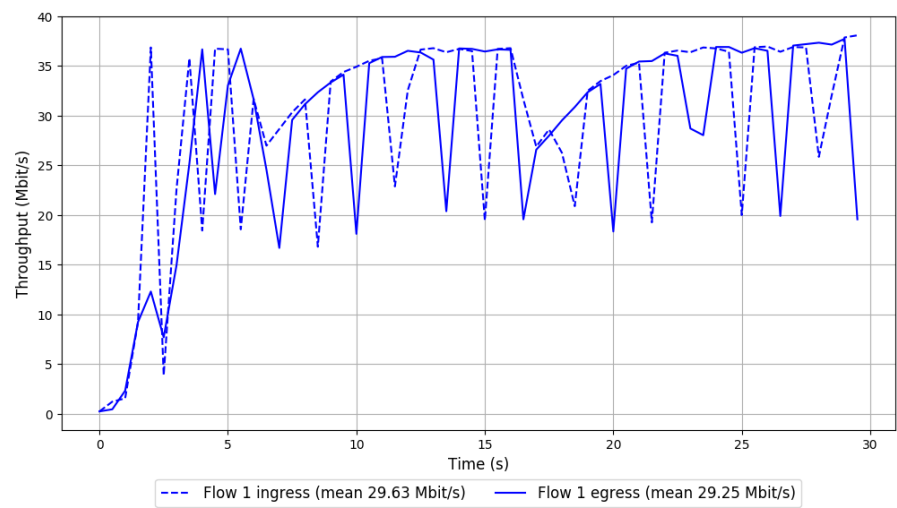
-- Flow 1:

Average throughput: 29.25 Mbit/s

95th percentile per-packet one-way delay: 165.338 ms

Loss rate: 2.27%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 07:41:10

End at: 2017-11-16 07:41:40

Below is generated by plot.py at 2017-11-16 10:05:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.27 Mbit/s

95th percentile per-packet one-way delay: 139.953 ms

Loss rate: 1.51%

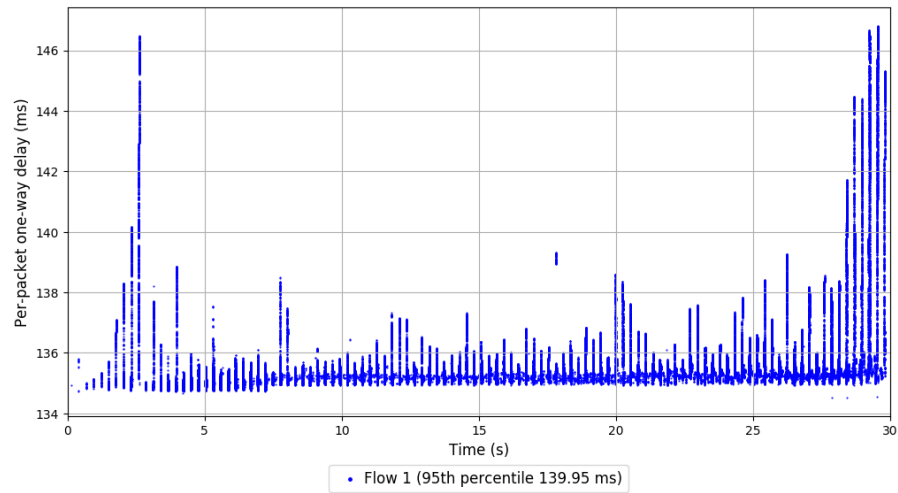
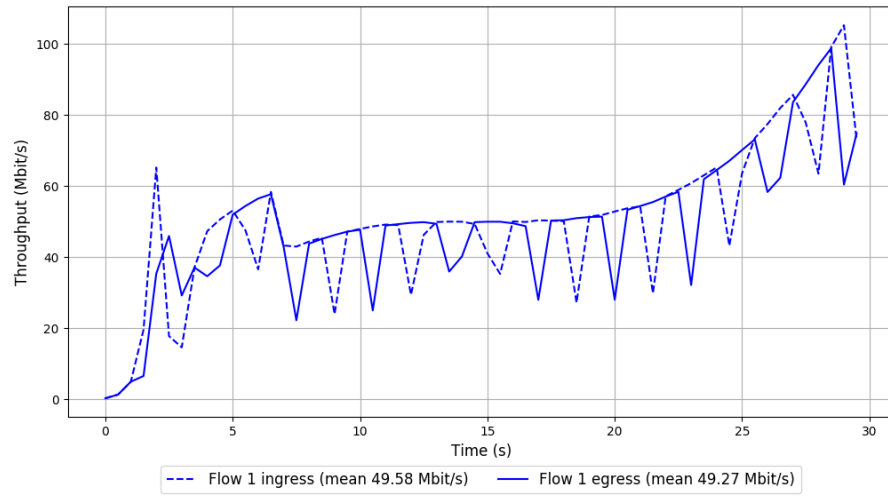
-- Flow 1:

Average throughput: 49.27 Mbit/s

95th percentile per-packet one-way delay: 139.953 ms

Loss rate: 1.51%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 07:52:50

End at: 2017-11-16 07:53:20

Below is generated by plot.py at 2017-11-16 10:05:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 137.920 ms

Loss rate: 0.95%

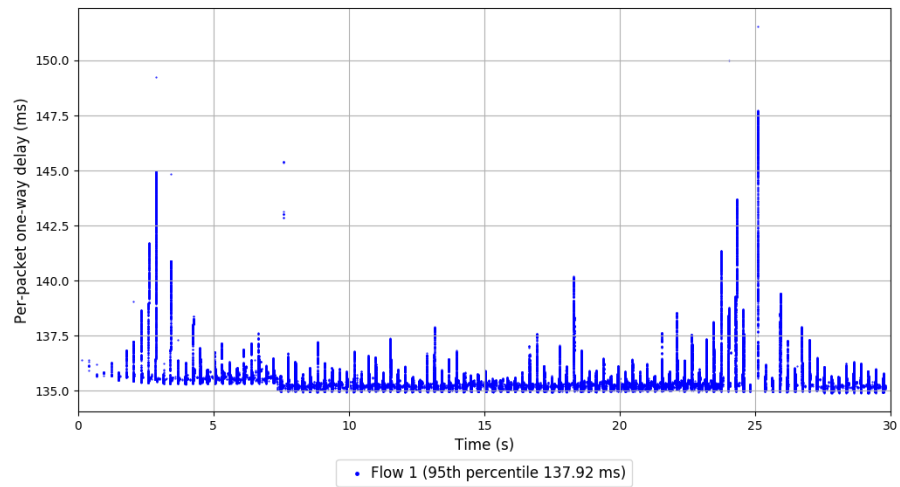
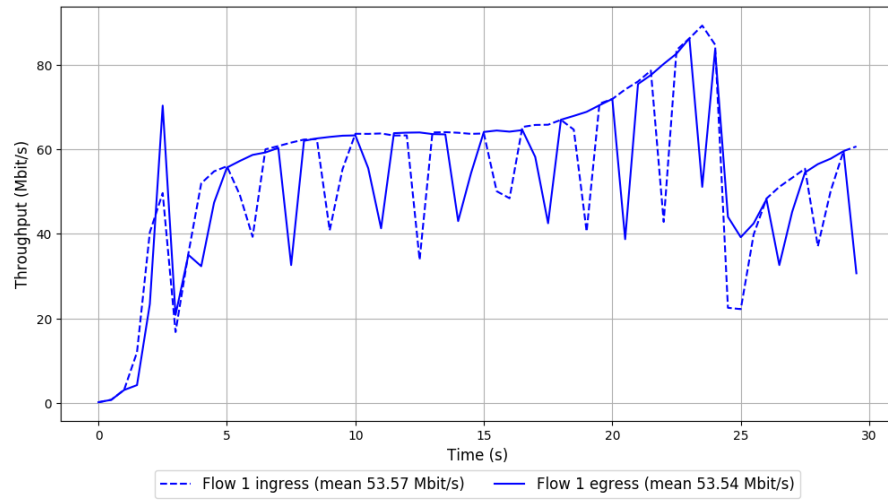
-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 137.920 ms

Loss rate: 0.95%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 08:04:17

End at: 2017-11-16 08:04:47

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 138.323 ms

Loss rate: 1.41%

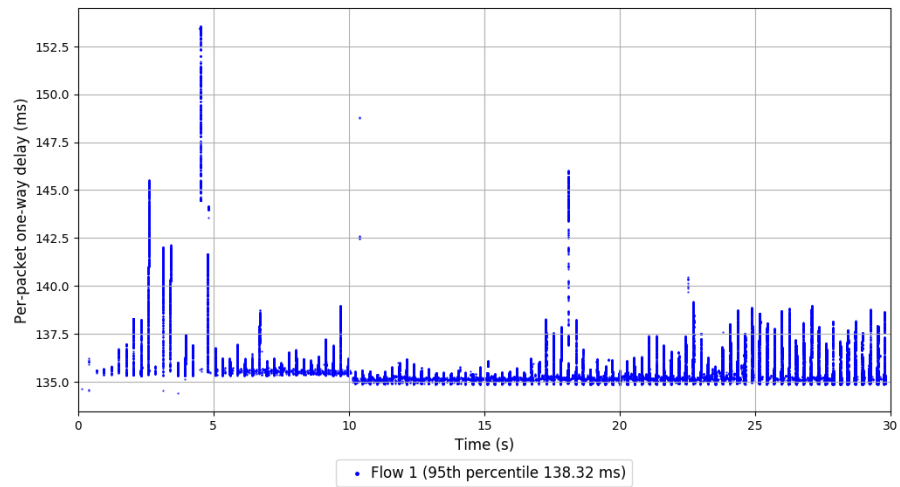
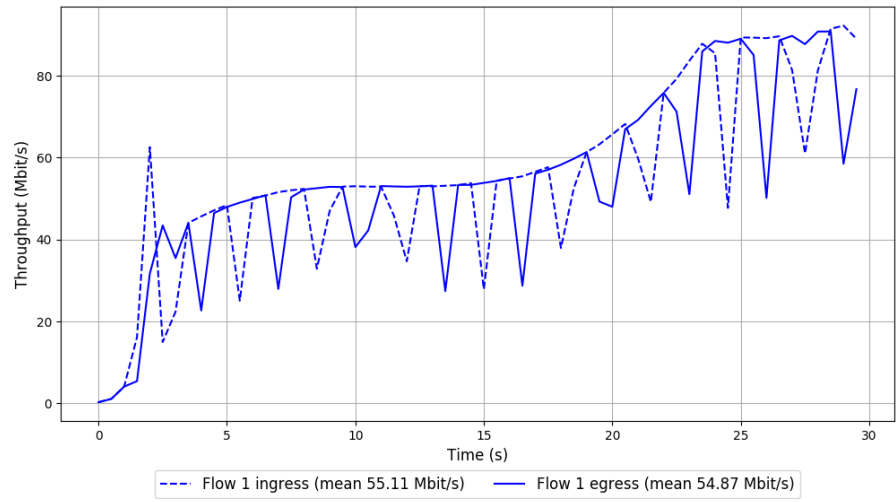
-- Flow 1:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 138.323 ms

Loss rate: 1.41%

Run 10: Report of TCP Cubic — Data Link

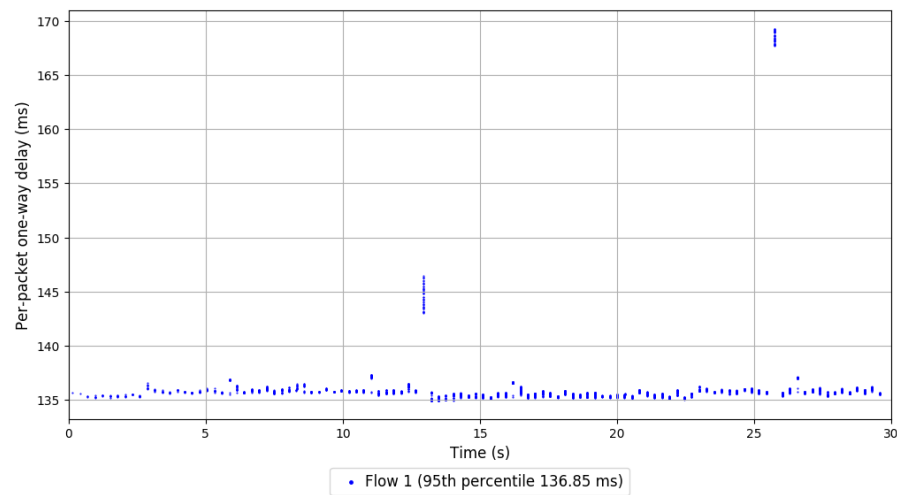
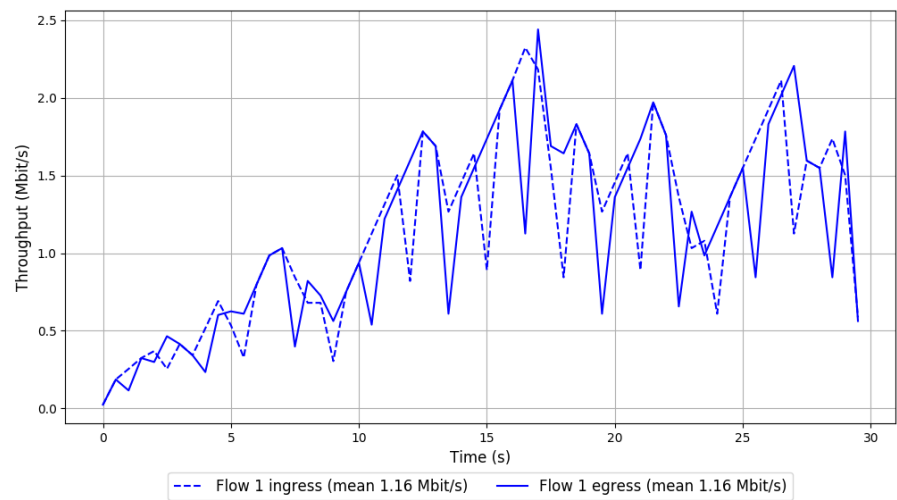


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 06:15:04
End at: 2017-11-16 06:15:34

# Below is generated by plot.py at 2017-11-16 10:05:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 136.848 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 136.848 ms
Loss rate: 0.92%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-11-16 06:26:31

End at: 2017-11-16 06:27:01

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 136.483 ms

Loss rate: 0.65%

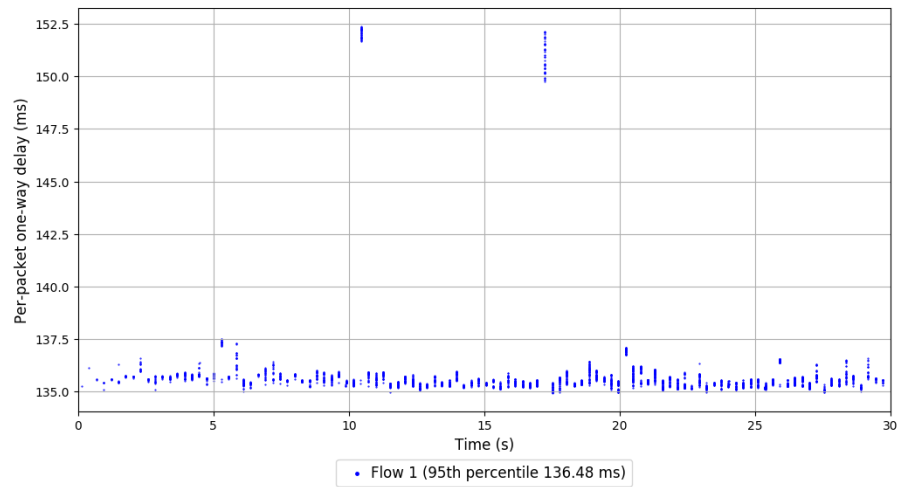
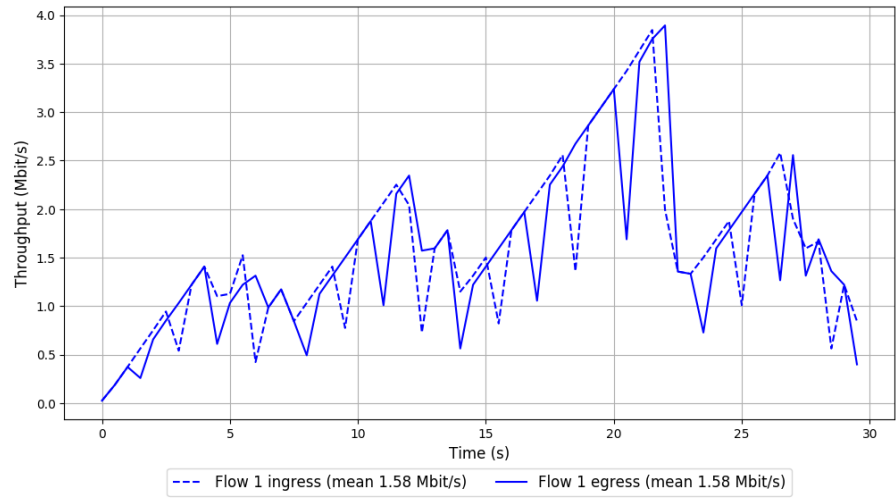
-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 136.483 ms

Loss rate: 0.65%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-16 06:37:56

End at: 2017-11-16 06:38:26

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 165.788 ms

Loss rate: 1.20%

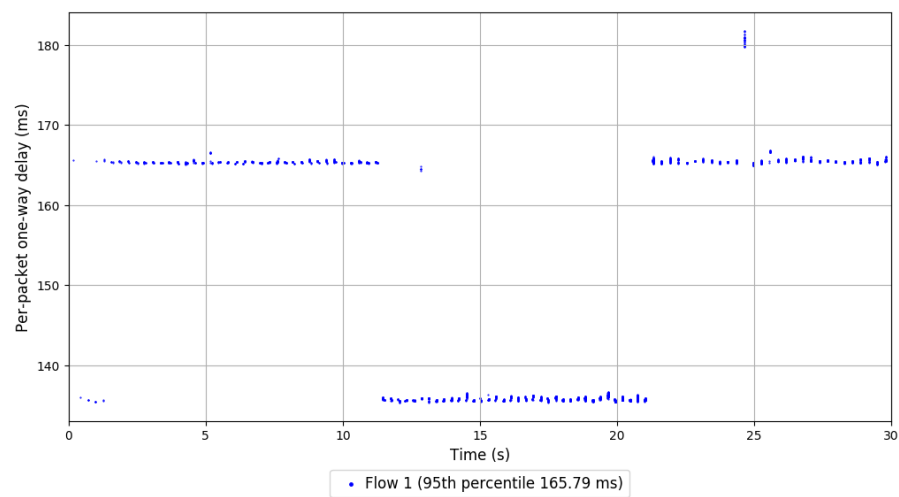
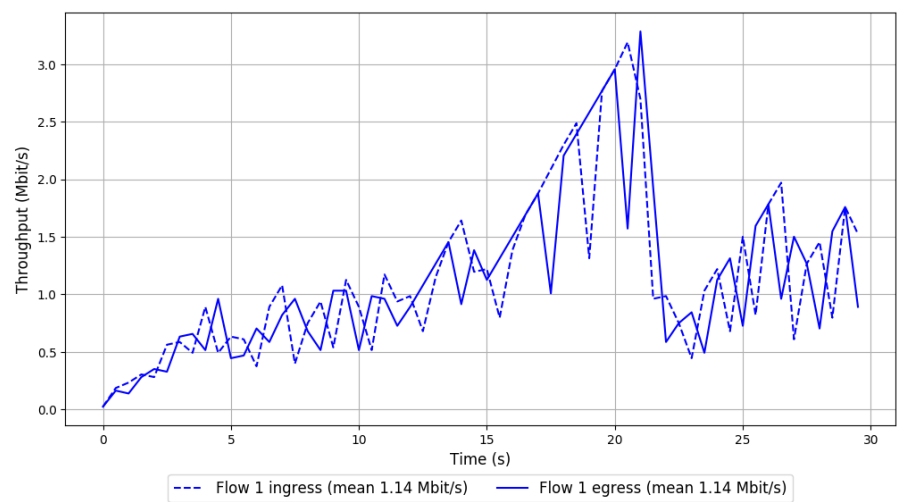
-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 165.788 ms

Loss rate: 1.20%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-16 06:49:14

End at: 2017-11-16 06:49:44

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 165.582 ms

Loss rate: 1.11%

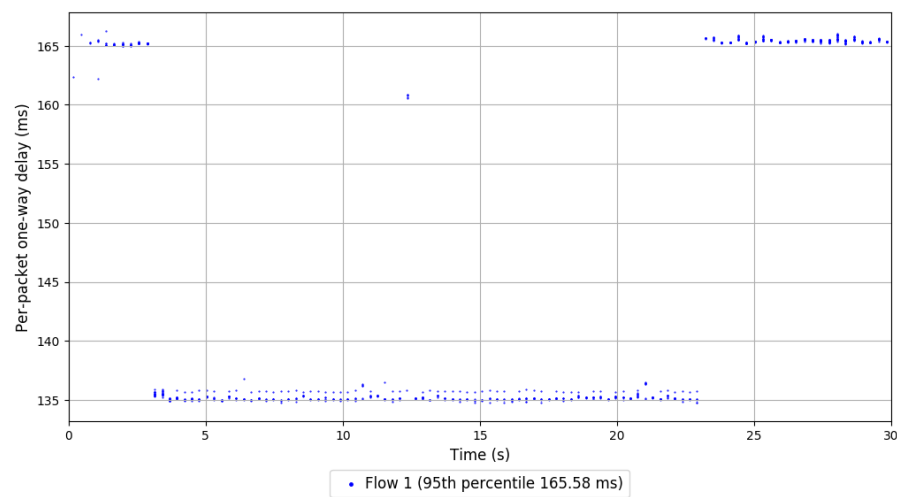
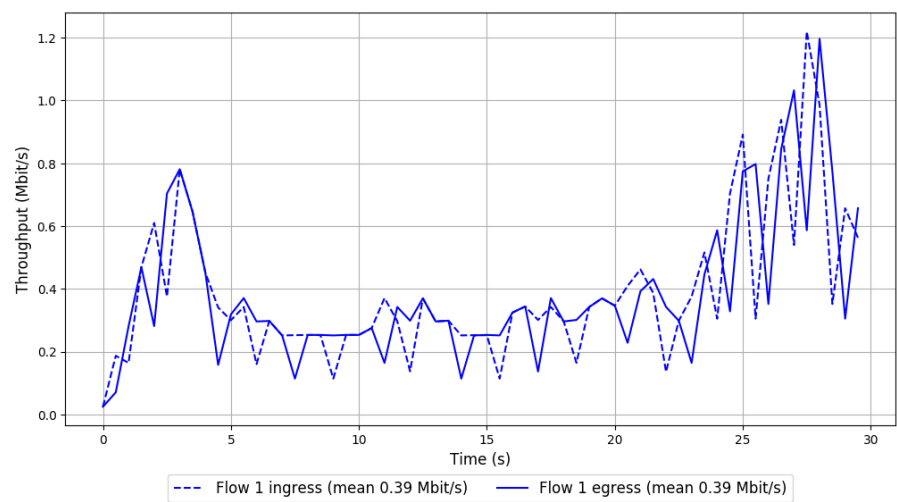
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 165.582 ms

Loss rate: 1.11%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-16 07:00:51

End at: 2017-11-16 07:01:21

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 165.591 ms

Loss rate: 1.49%

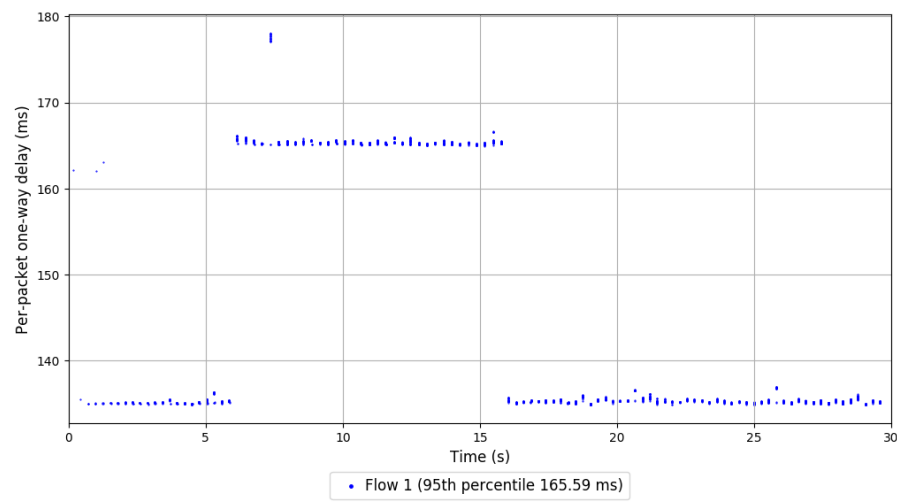
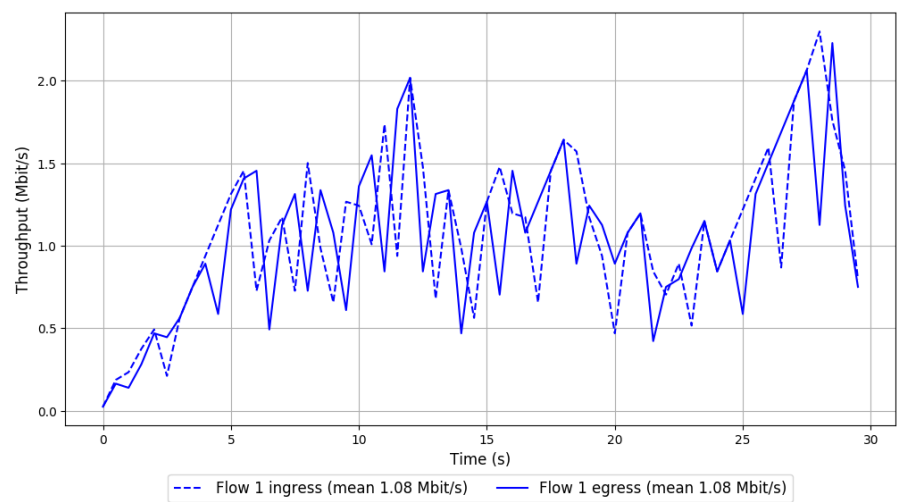
-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 165.591 ms

Loss rate: 1.49%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-16 07:12:42

End at: 2017-11-16 07:13:12

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 165.566 ms

Loss rate: 1.30%

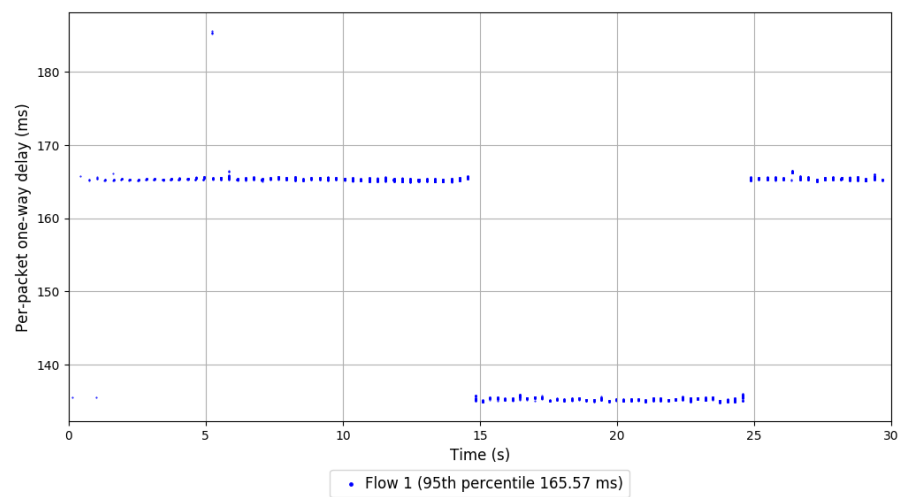
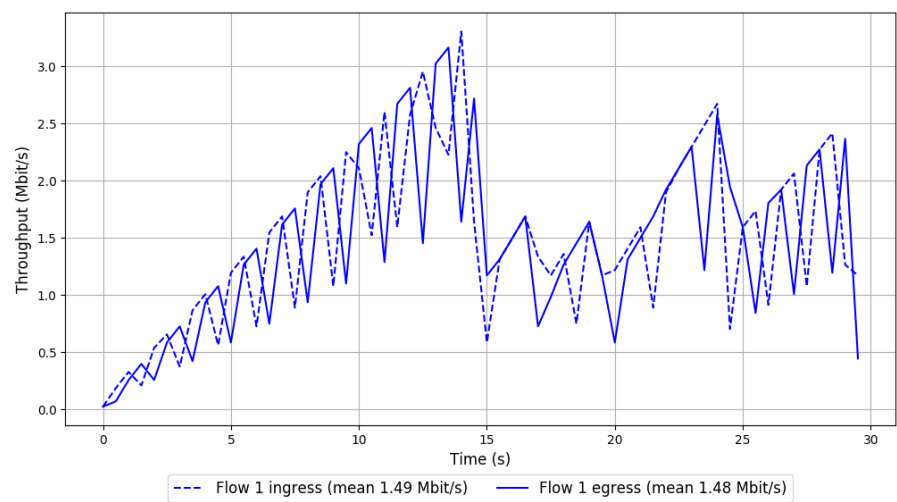
-- Flow 1:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 165.566 ms

Loss rate: 1.30%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-16 07:24:01

End at: 2017-11-16 07:24:31

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 135.985 ms

Loss rate: 1.05%

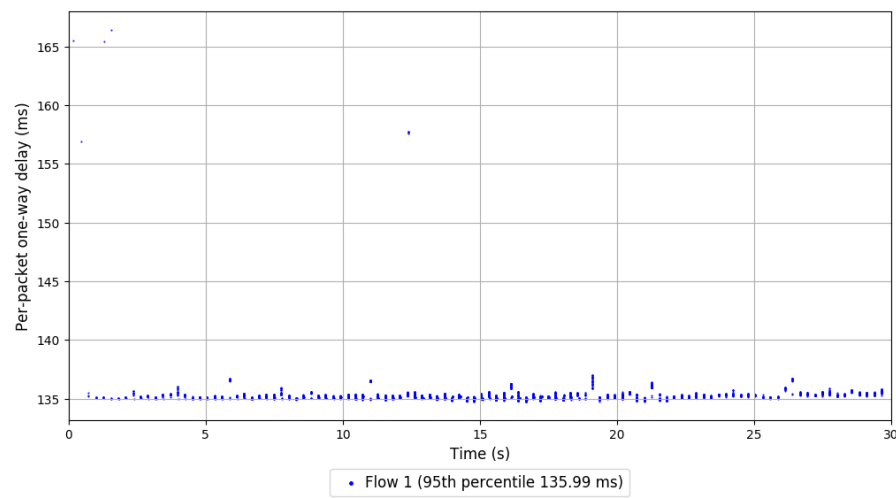
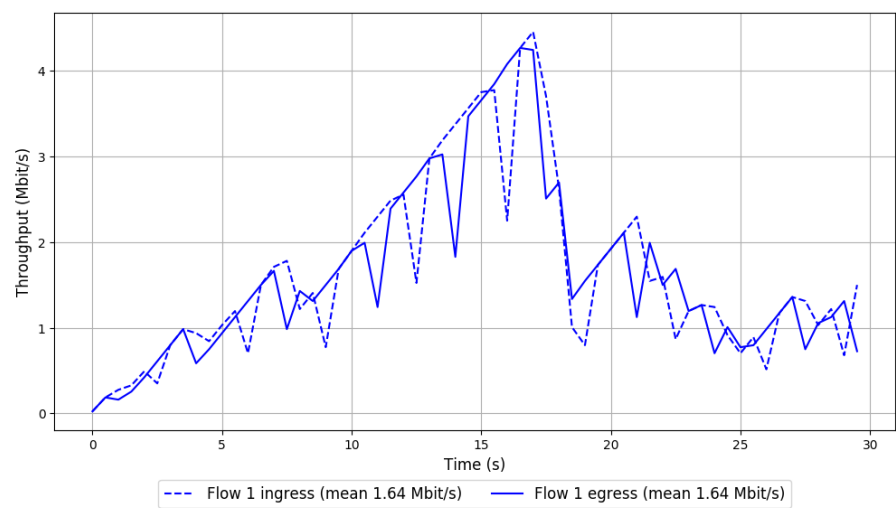
-- Flow 1:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 135.985 ms

Loss rate: 1.05%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-16 07:35:39

End at: 2017-11-16 07:36:09

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 135.785 ms

Loss rate: 0.72%

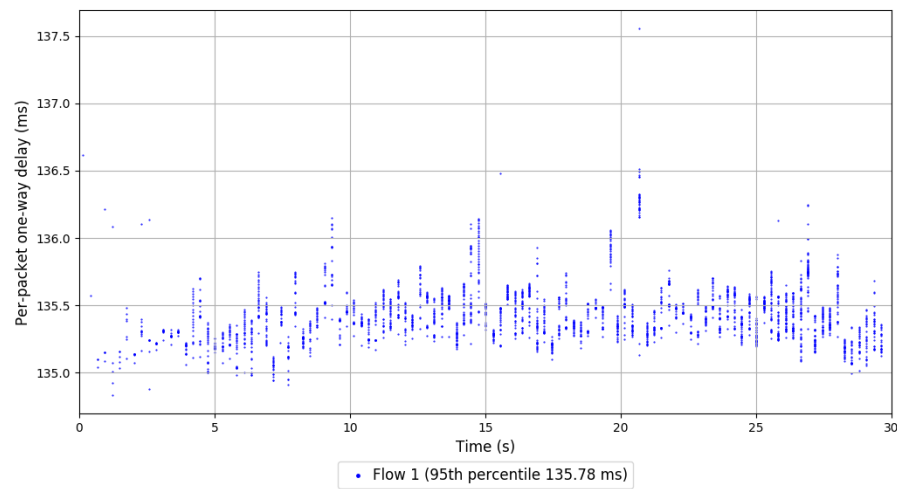
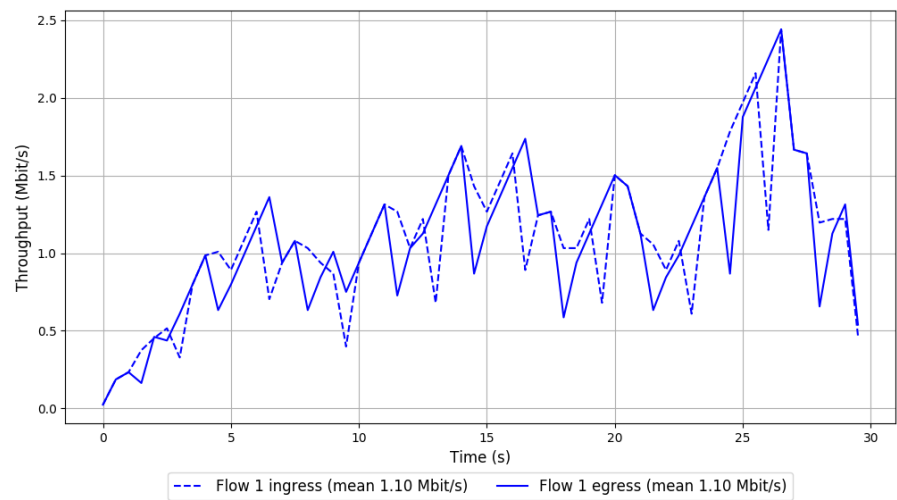
-- Flow 1:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 135.785 ms

Loss rate: 0.72%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-16 07:47:08

End at: 2017-11-16 07:47:38

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 136.233 ms

Loss rate: 1.86%

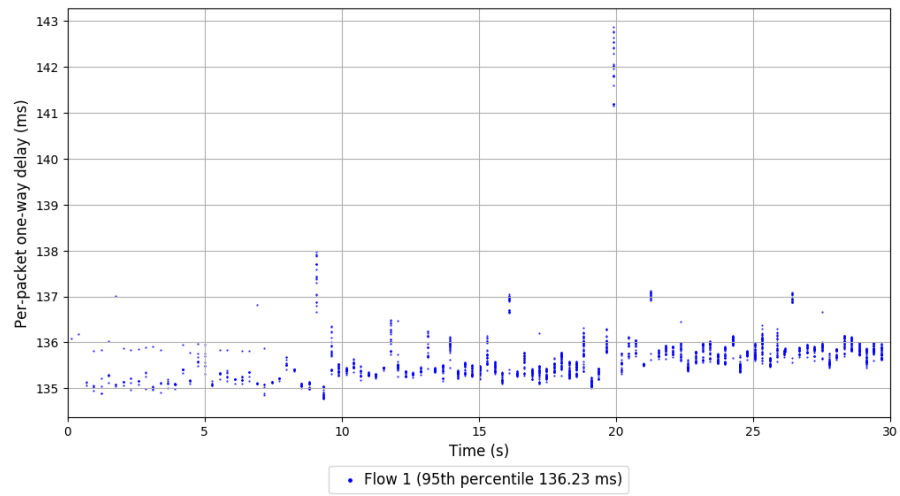
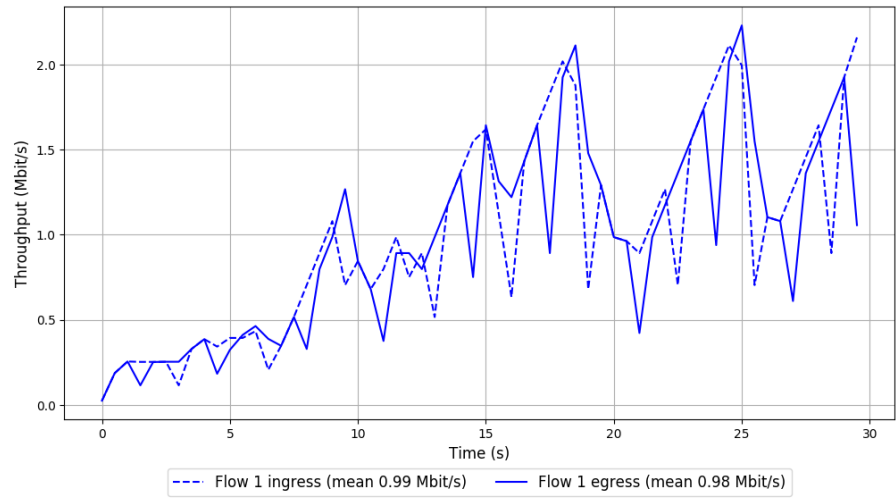
-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 136.233 ms

Loss rate: 1.86%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-16 07:58:50

End at: 2017-11-16 07:59:20

Below is generated by plot.py at 2017-11-16 10:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 136.698 ms

Loss rate: 1.30%

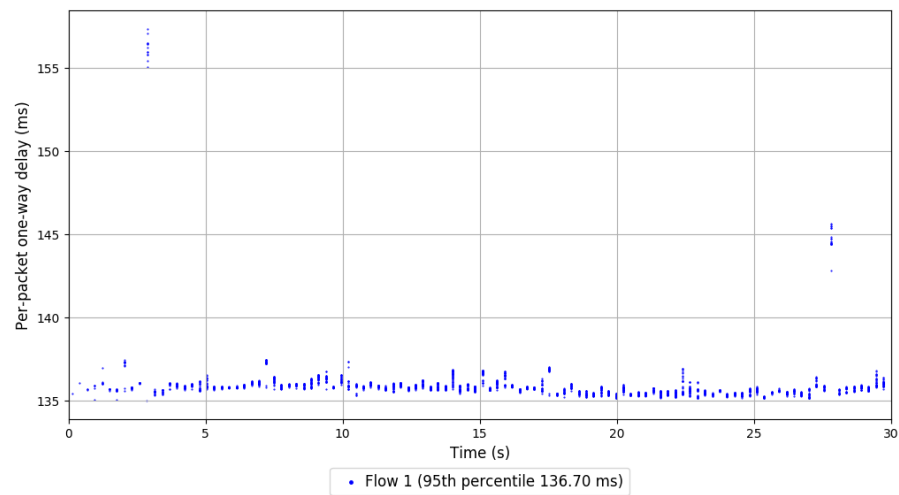
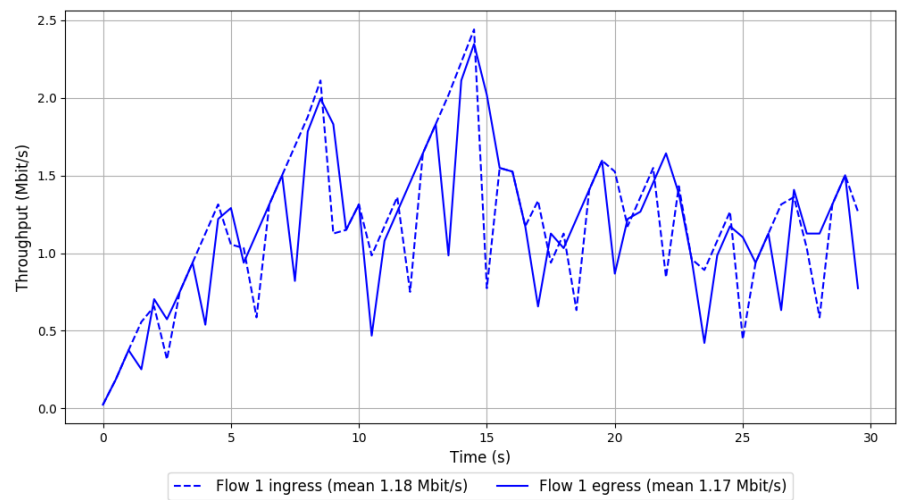
-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 136.698 ms

Loss rate: 1.30%

Run 10: Report of LEDBAT — Data Link

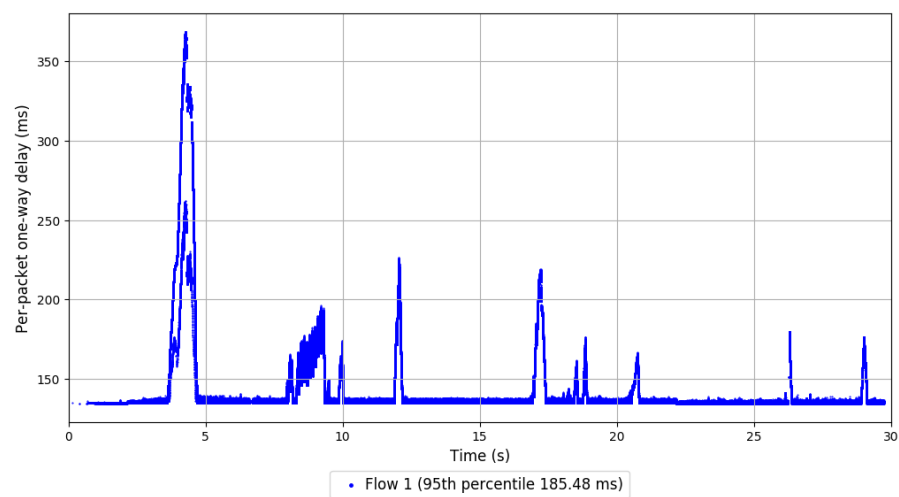
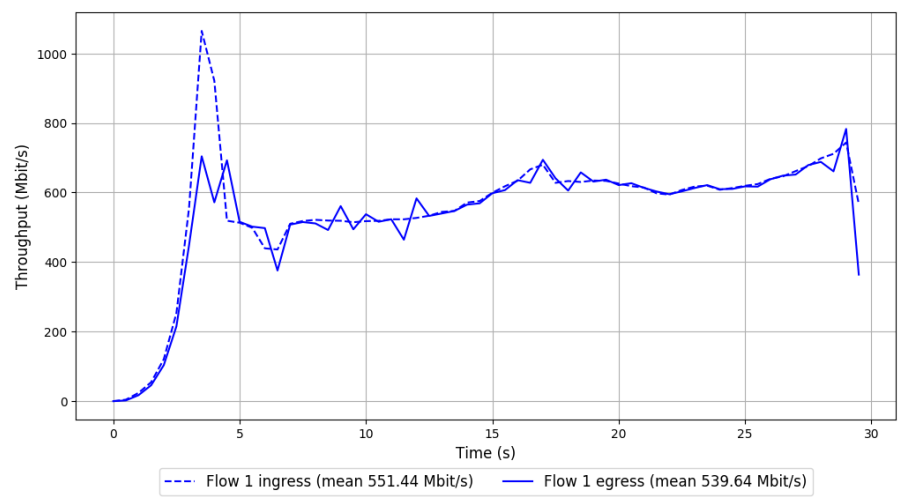


```
Run 1: Statistics of PCC

Start at: 2017-11-16 06:12:12
End at: 2017-11-16 06:12:42

# Below is generated by plot.py at 2017-11-16 10:14:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.64 Mbit/s
95th percentile per-packet one-way delay: 185.483 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 539.64 Mbit/s
95th percentile per-packet one-way delay: 185.483 ms
Loss rate: 3.03%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-16 06:23:37

End at: 2017-11-16 06:24:07

Below is generated by plot.py at 2017-11-16 10:15:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 613.57 Mbit/s

95th percentile per-packet one-way delay: 229.875 ms

Loss rate: 2.36%

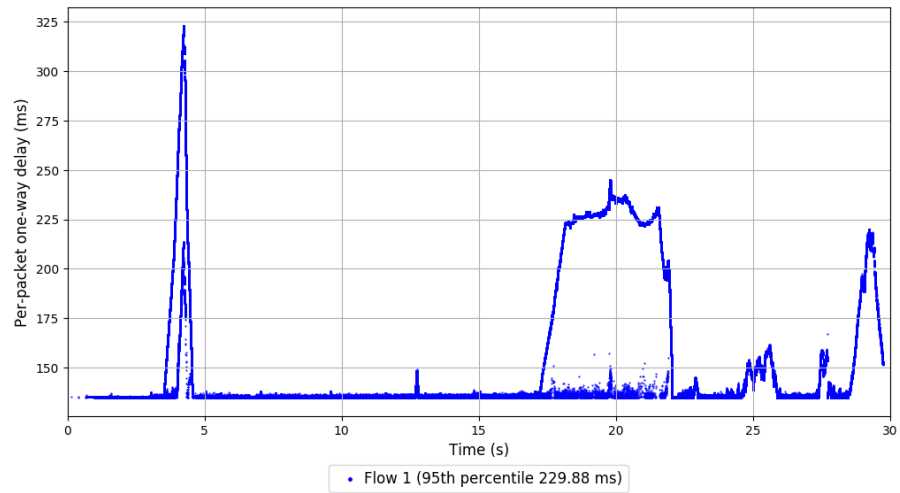
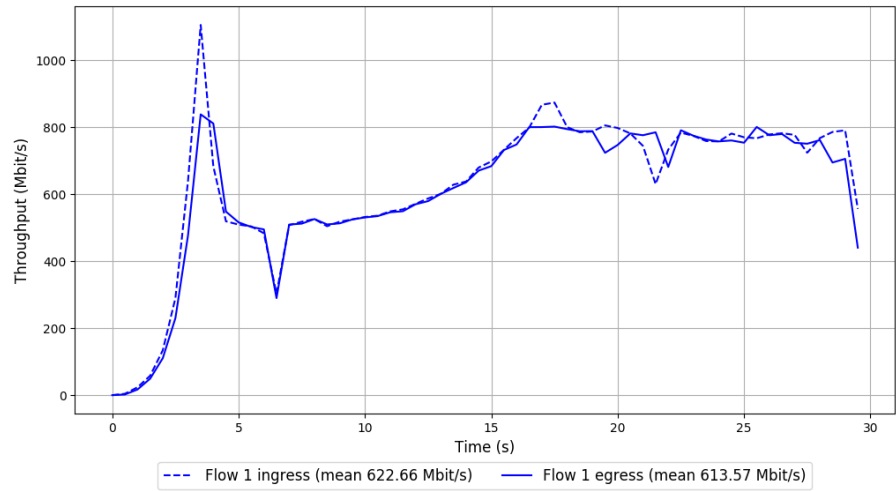
-- Flow 1:

Average throughput: 613.57 Mbit/s

95th percentile per-packet one-way delay: 229.875 ms

Loss rate: 2.36%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 06:35:03

End at: 2017-11-16 06:35:33

Below is generated by plot.py at 2017-11-16 10:15:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 550.92 Mbit/s

95th percentile per-packet one-way delay: 300.164 ms

Loss rate: 4.45%

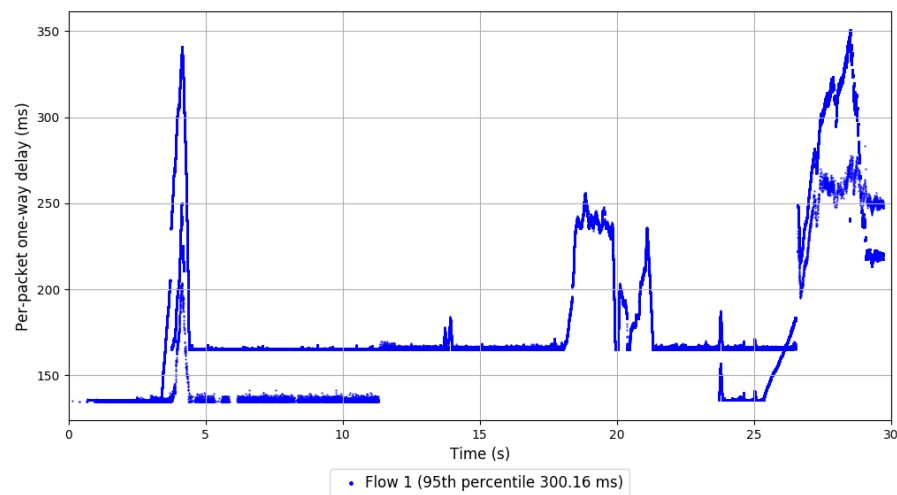
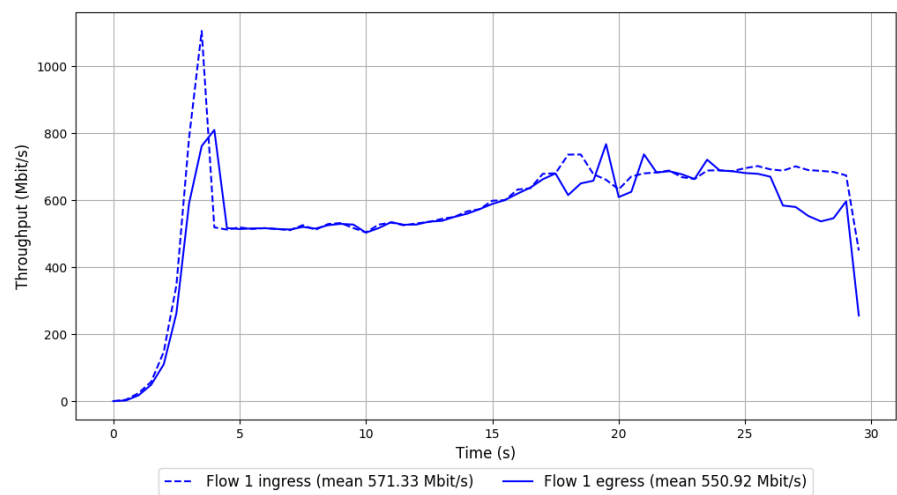
-- Flow 1:

Average throughput: 550.92 Mbit/s

95th percentile per-packet one-way delay: 300.164 ms

Loss rate: 4.45%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-16 06:46:45

End at: 2017-11-16 06:47:15

Below is generated by plot.py at 2017-11-16 10:15:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 164.987 ms

Loss rate: 1.81%

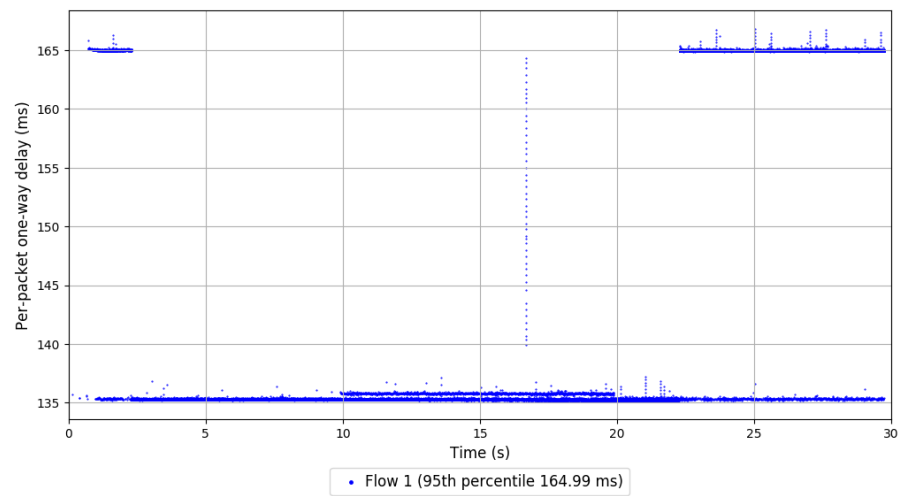
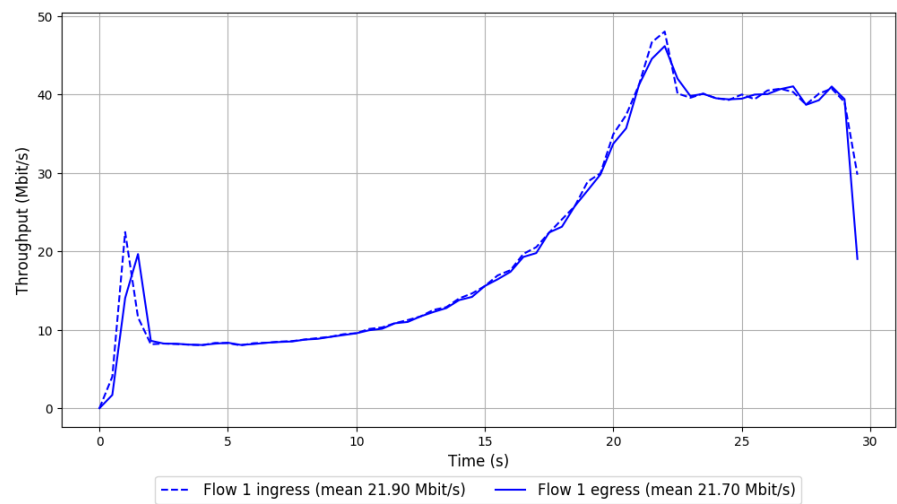
-- Flow 1:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 164.987 ms

Loss rate: 1.81%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-16 06:57:59

End at: 2017-11-16 06:58:29

Below is generated by plot.py at 2017-11-16 10:15:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 539.31 Mbit/s

95th percentile per-packet one-way delay: 204.493 ms

Loss rate: 3.19%

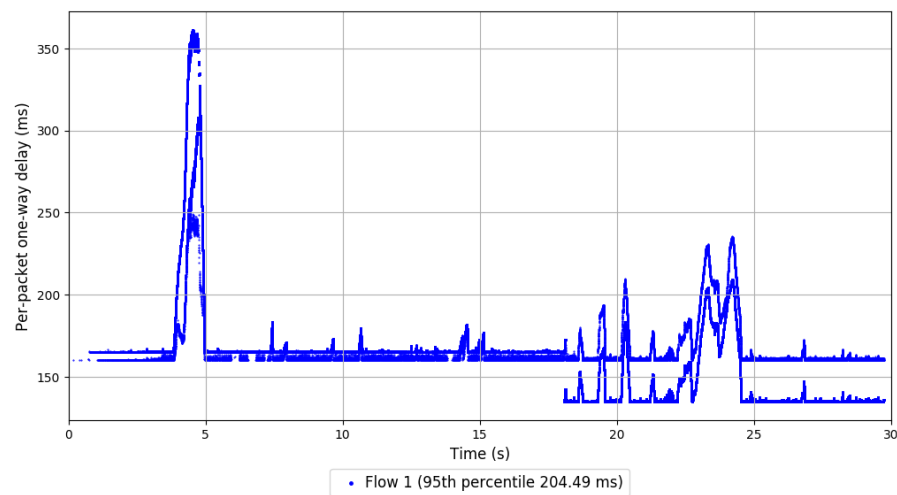
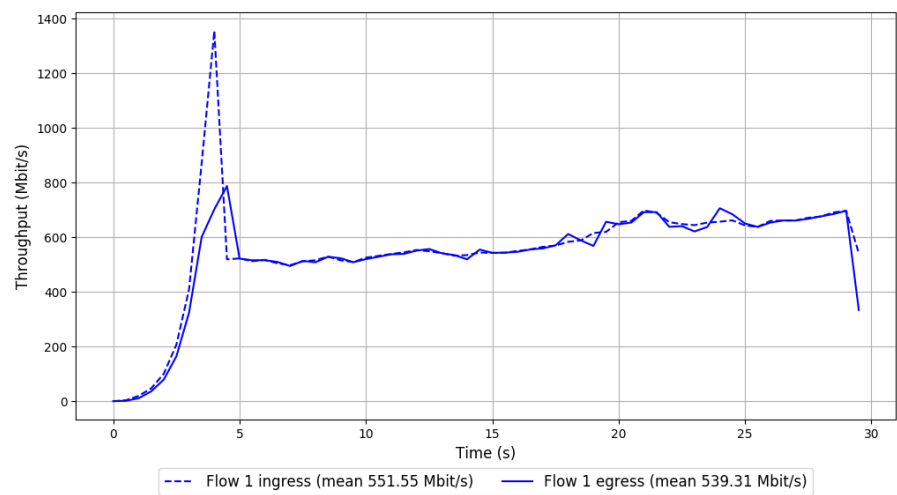
-- Flow 1:

Average throughput: 539.31 Mbit/s

95th percentile per-packet one-way delay: 204.493 ms

Loss rate: 3.19%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-16 07:09:48

End at: 2017-11-16 07:10:18

Below is generated by plot.py at 2017-11-16 10:16:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 610.88 Mbit/s

95th percentile per-packet one-way delay: 262.045 ms

Loss rate: 3.27%

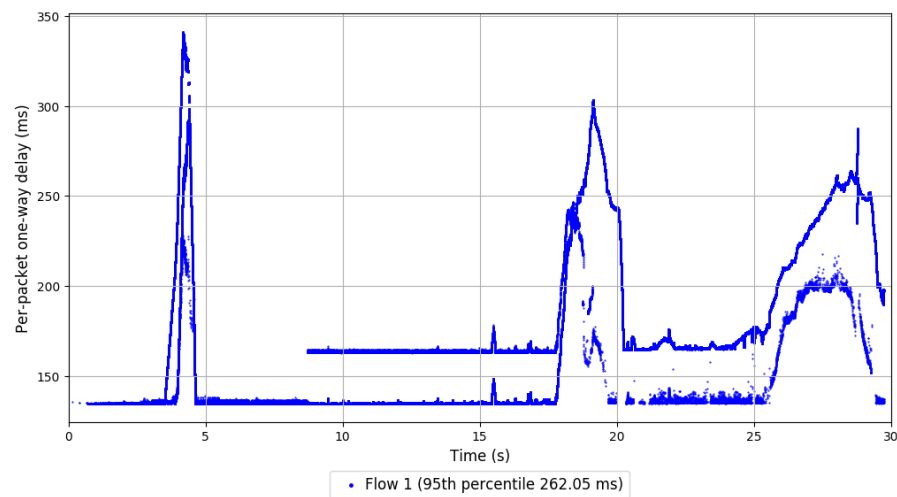
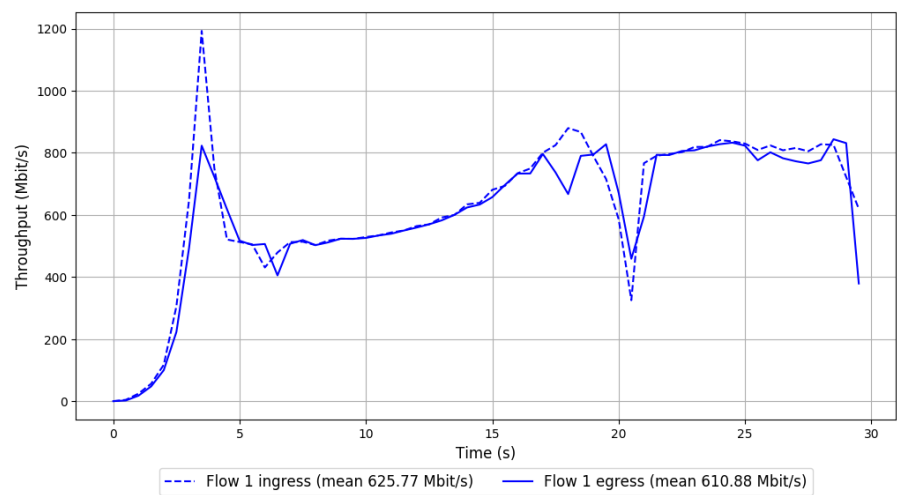
-- Flow 1:

Average throughput: 610.88 Mbit/s

95th percentile per-packet one-way delay: 262.045 ms

Loss rate: 3.27%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-16 07:21:12

End at: 2017-11-16 07:21:42

Below is generated by plot.py at 2017-11-16 10:16:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 477.56 Mbit/s

95th percentile per-packet one-way delay: 167.845 ms

Loss rate: 2.36%

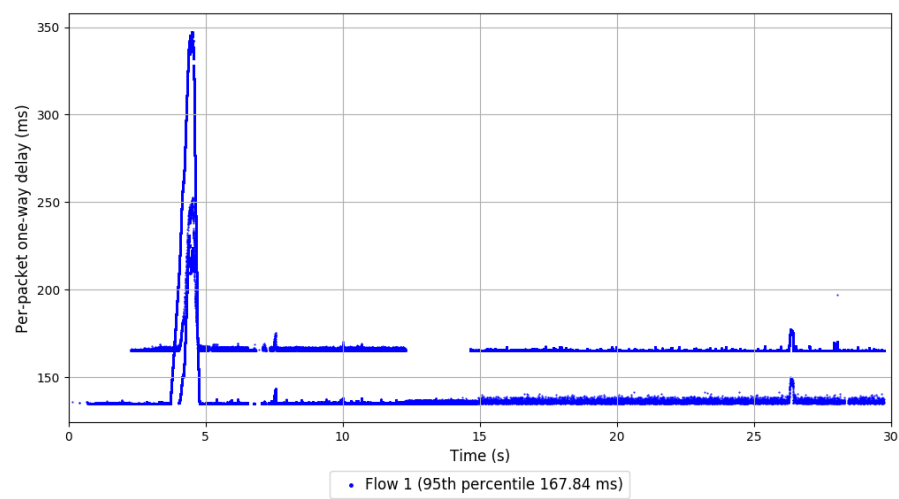
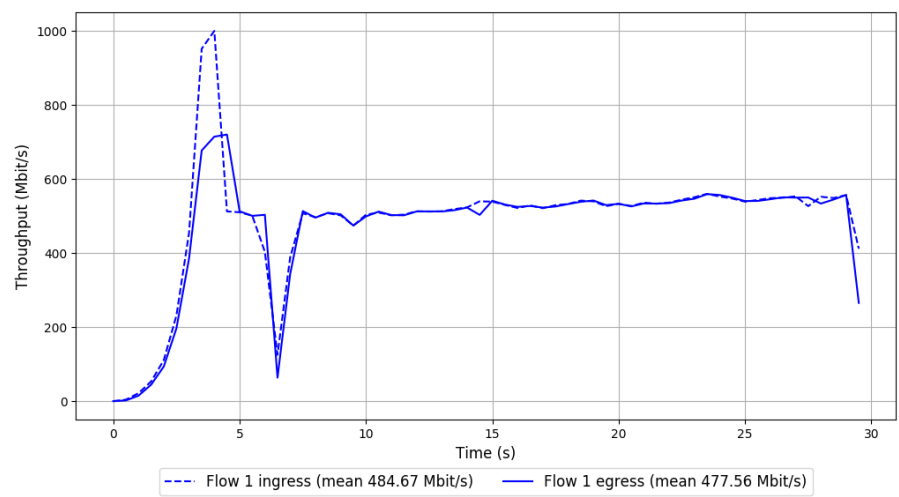
-- Flow 1:

Average throughput: 477.56 Mbit/s

95th percentile per-packet one-way delay: 167.845 ms

Loss rate: 2.36%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-16 07:32:48

End at: 2017-11-16 07:33:18

Below is generated by plot.py at 2017-11-16 10:16:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 510.53 Mbit/s

95th percentile per-packet one-way delay: 199.541 ms

Loss rate: 2.66%

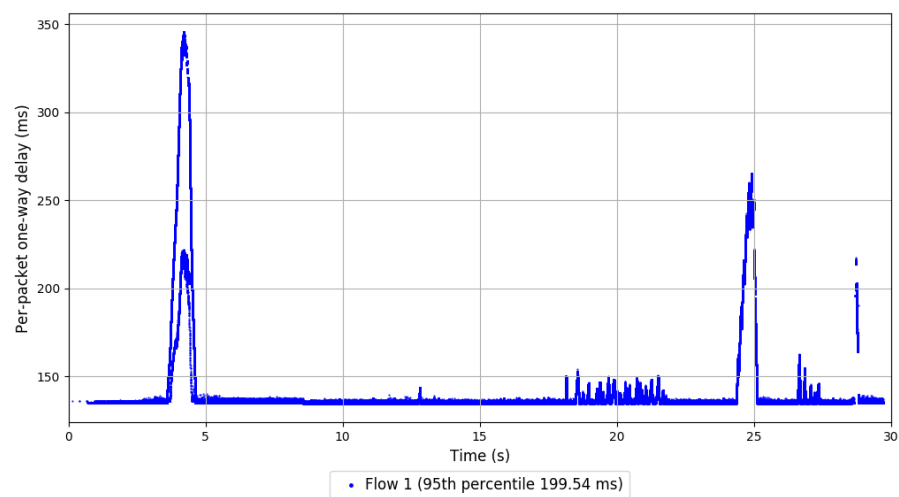
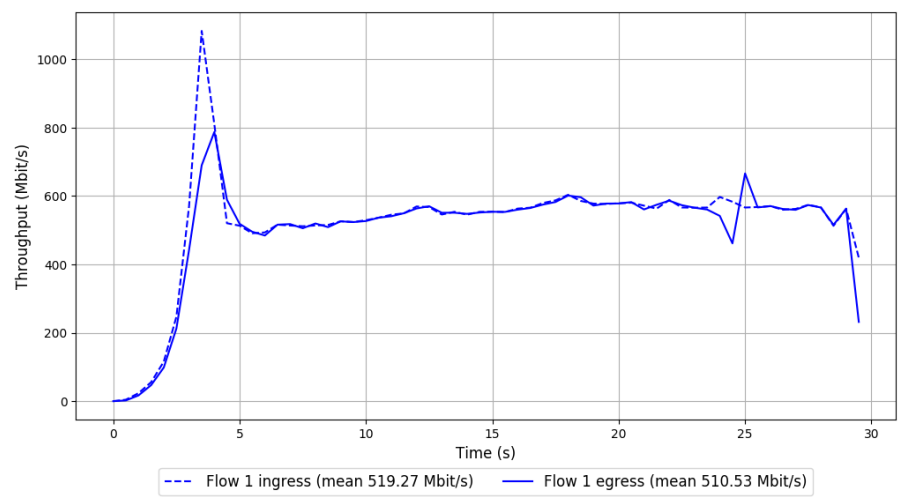
-- Flow 1:

Average throughput: 510.53 Mbit/s

95th percentile per-packet one-way delay: 199.541 ms

Loss rate: 2.66%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-16 07:44:17

End at: 2017-11-16 07:44:47

Below is generated by plot.py at 2017-11-16 10:16:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 543.93 Mbit/s

95th percentile per-packet one-way delay: 206.194 ms

Loss rate: 2.48%

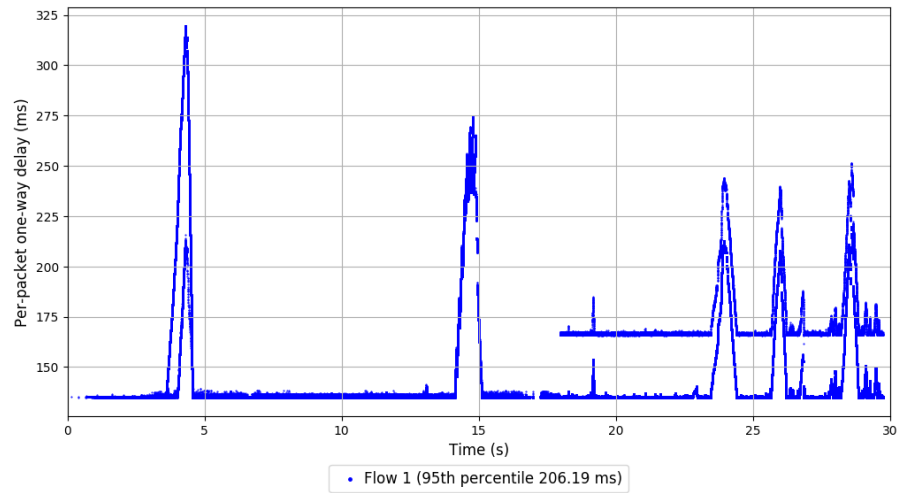
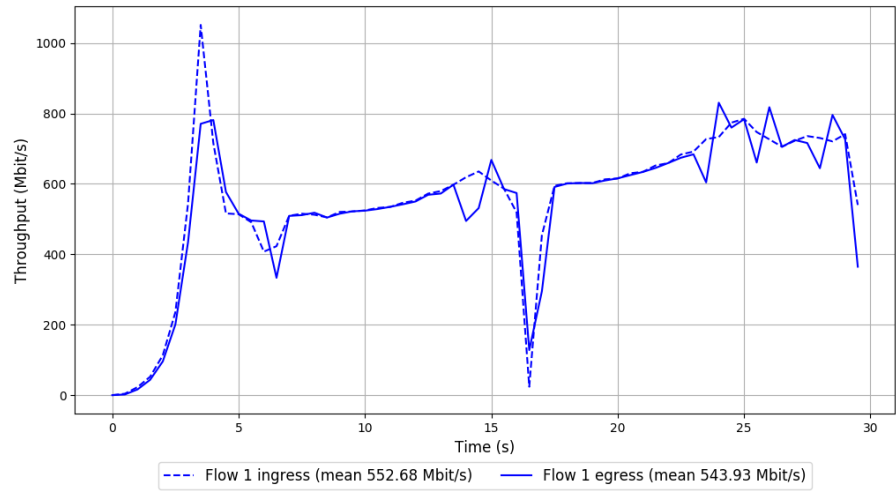
-- Flow 1:

Average throughput: 543.93 Mbit/s

95th percentile per-packet one-way delay: 206.194 ms

Loss rate: 2.48%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-16 07:55:59

End at: 2017-11-16 07:56:29

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 491.94 Mbit/s

95th percentile per-packet one-way delay: 216.661 ms

Loss rate: 2.80%

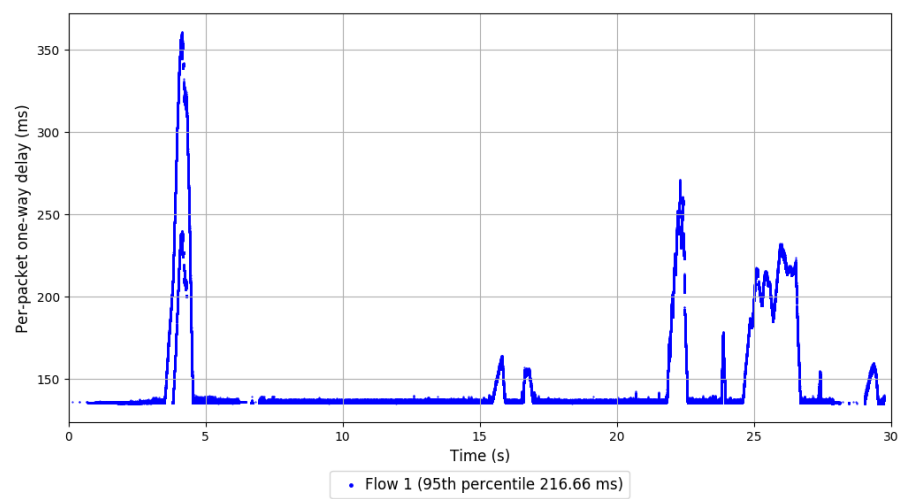
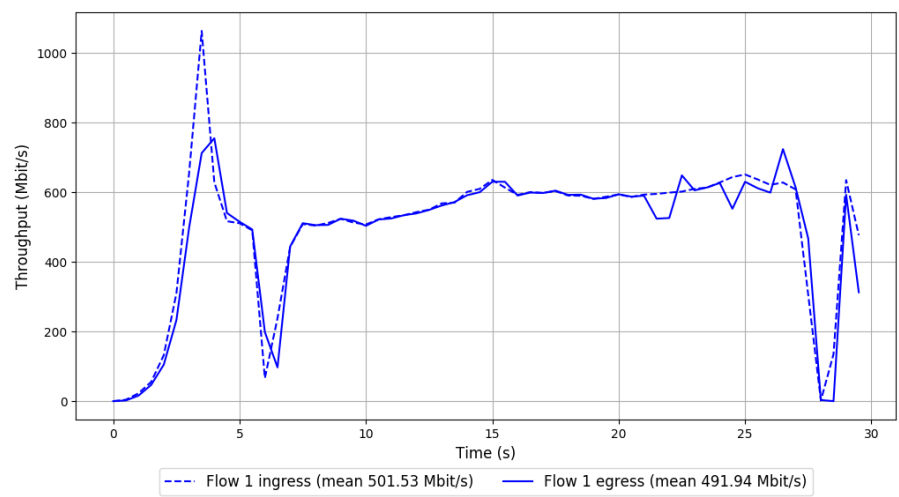
-- Flow 1:

Average throughput: 491.94 Mbit/s

95th percentile per-packet one-way delay: 216.661 ms

Loss rate: 2.80%

Run 10: Report of PCC — Data Link

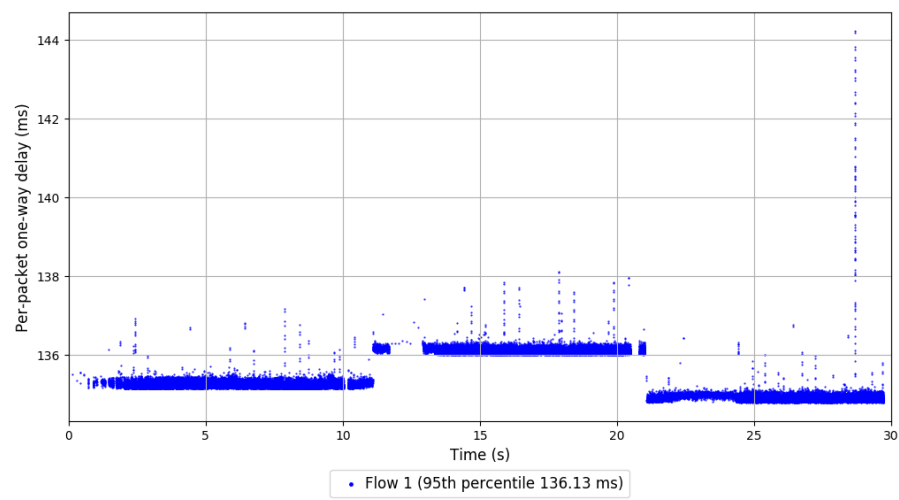
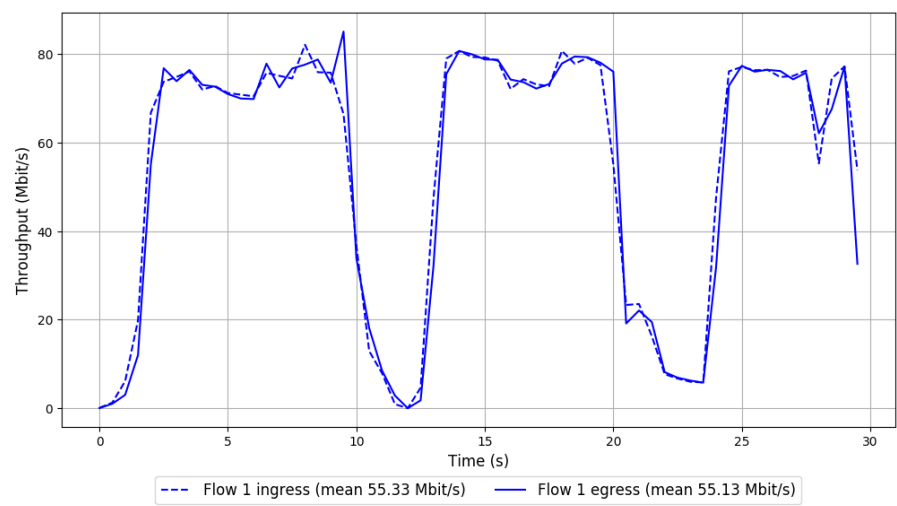


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 06:22:06
End at: 2017-11-16 06:22:36

# Below is generated by plot.py at 2017-11-16 10:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.13 Mbit/s
95th percentile per-packet one-way delay: 136.127 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 55.13 Mbit/s
95th percentile per-packet one-way delay: 136.127 ms
Loss rate: 1.27%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 06:33:31

End at: 2017-11-16 06:34:01

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.42 Mbit/s

95th percentile per-packet one-way delay: 165.436 ms

Loss rate: 1.32%

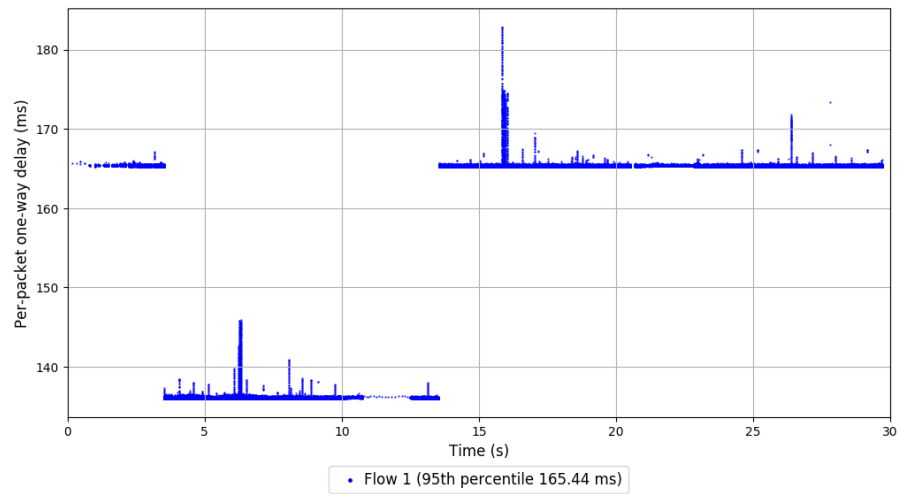
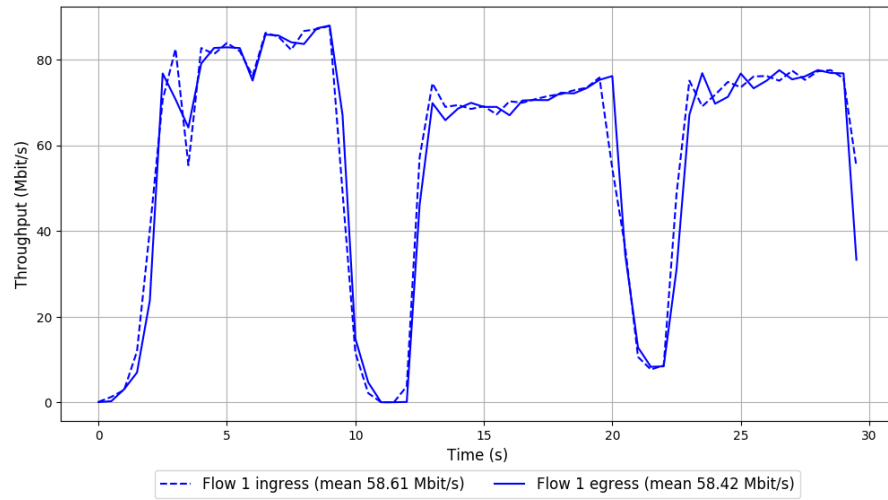
-- Flow 1:

Average throughput: 58.42 Mbit/s

95th percentile per-packet one-way delay: 165.436 ms

Loss rate: 1.32%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 06:45:12

End at: 2017-11-16 06:45:42

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.08 Mbit/s

95th percentile per-packet one-way delay: 162.188 ms

Loss rate: 1.07%

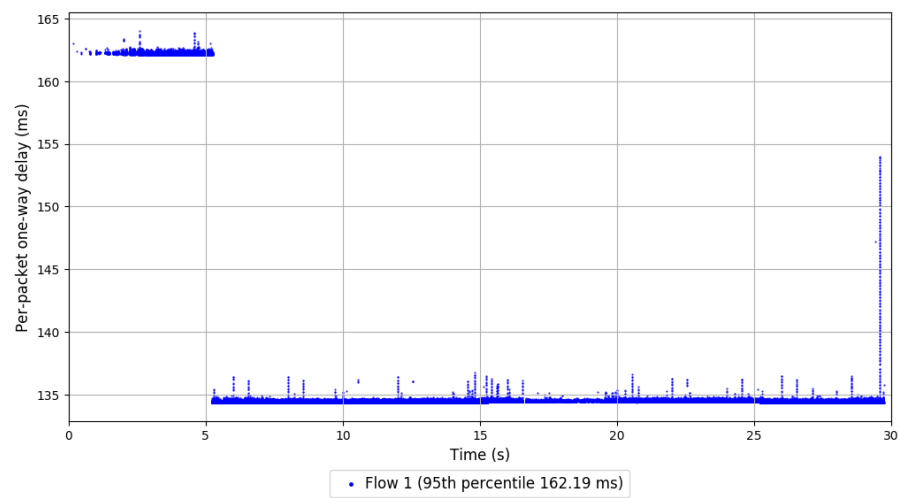
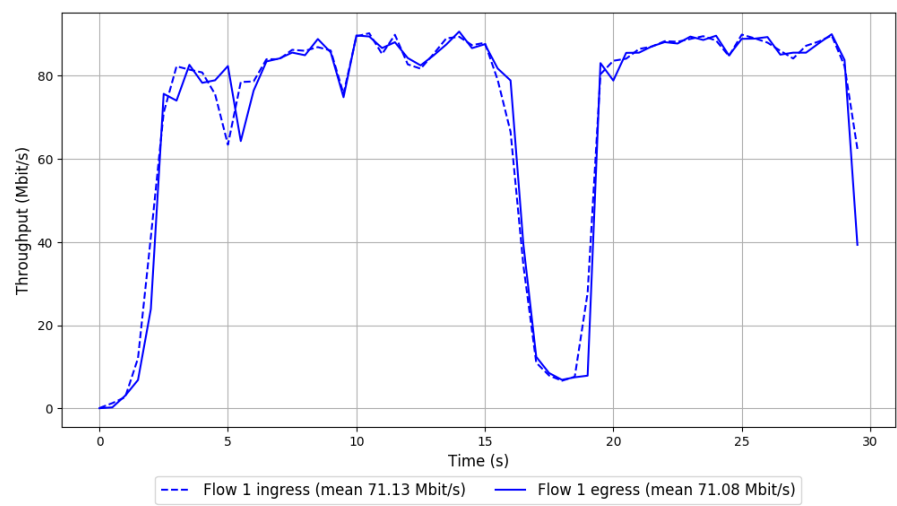
-- Flow 1:

Average throughput: 71.08 Mbit/s

95th percentile per-packet one-way delay: 162.188 ms

Loss rate: 1.07%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-16 06:56:15

End at: 2017-11-16 06:56:45

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.11 Mbit/s

95th percentile per-packet one-way delay: 161.932 ms

Loss rate: 1.31%

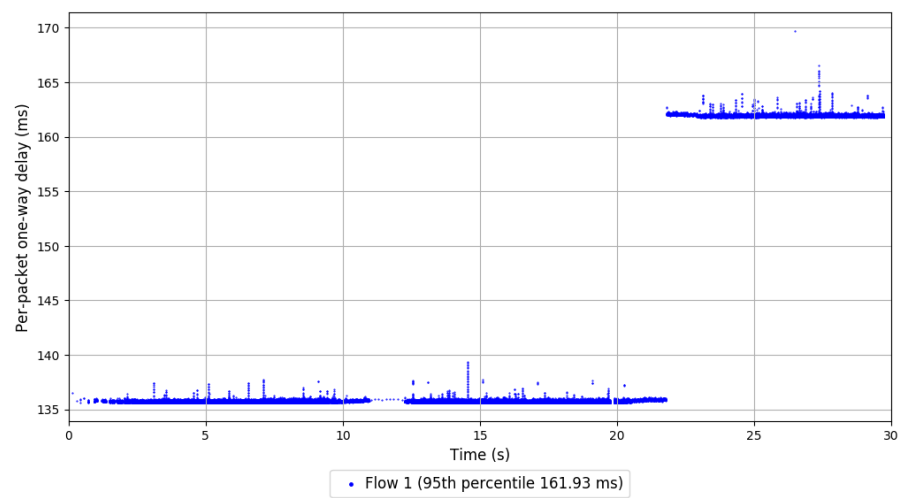
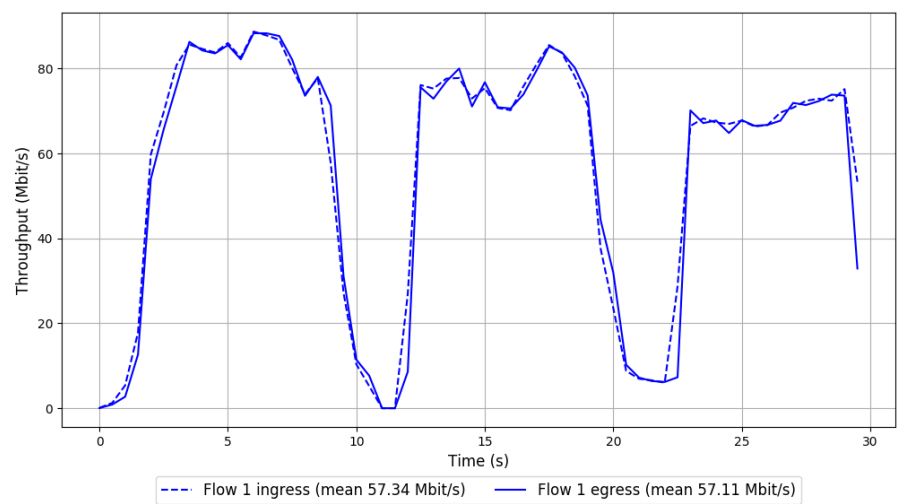
-- Flow 1:

Average throughput: 57.11 Mbit/s

95th percentile per-packet one-way delay: 161.932 ms

Loss rate: 1.31%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 07:08:18

End at: 2017-11-16 07:08:48

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.94 Mbit/s

95th percentile per-packet one-way delay: 134.909 ms

Loss rate: 0.00%

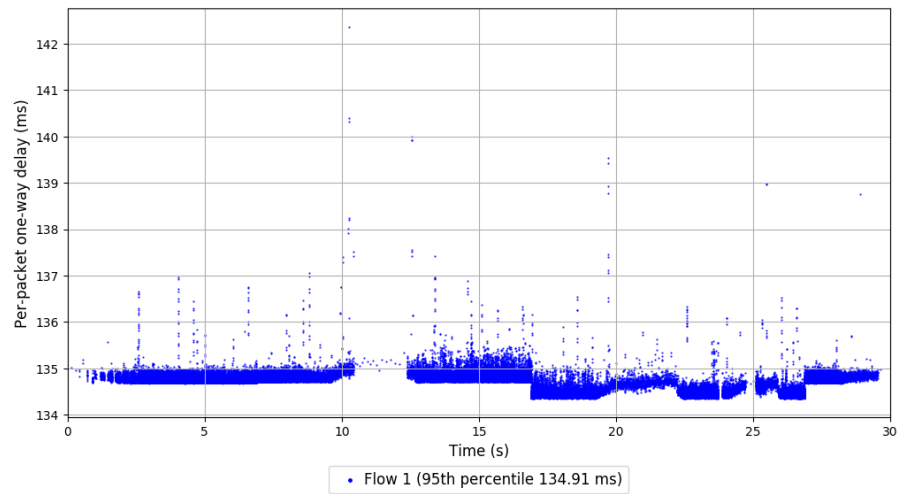
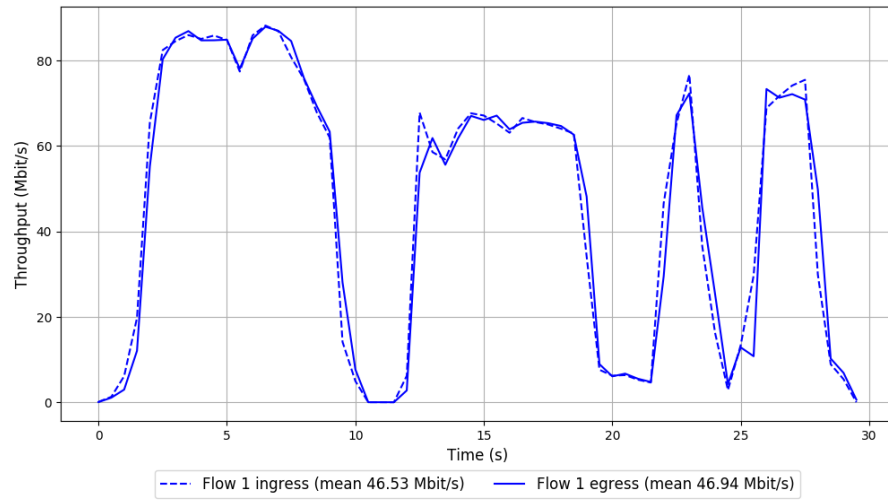
-- Flow 1:

Average throughput: 46.94 Mbit/s

95th percentile per-packet one-way delay: 134.909 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-16 07:19:41

End at: 2017-11-16 07:20:11

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 165.377 ms

Loss rate: 1.30%

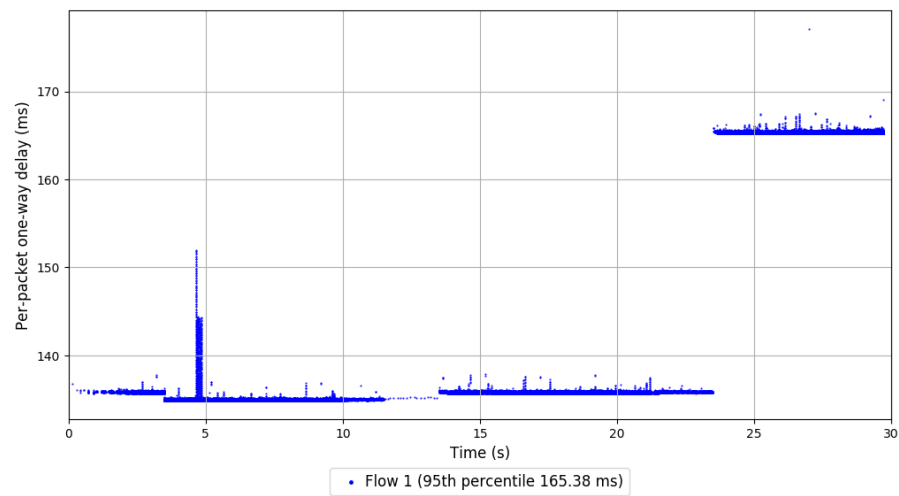
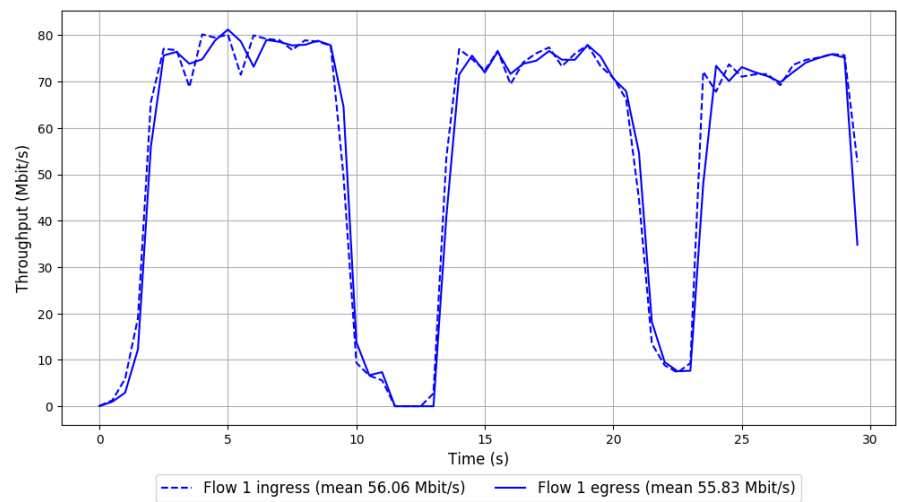
-- Flow 1:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 165.377 ms

Loss rate: 1.30%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 07:31:17

End at: 2017-11-16 07:31:47

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 135.030 ms

Loss rate: 0.98%

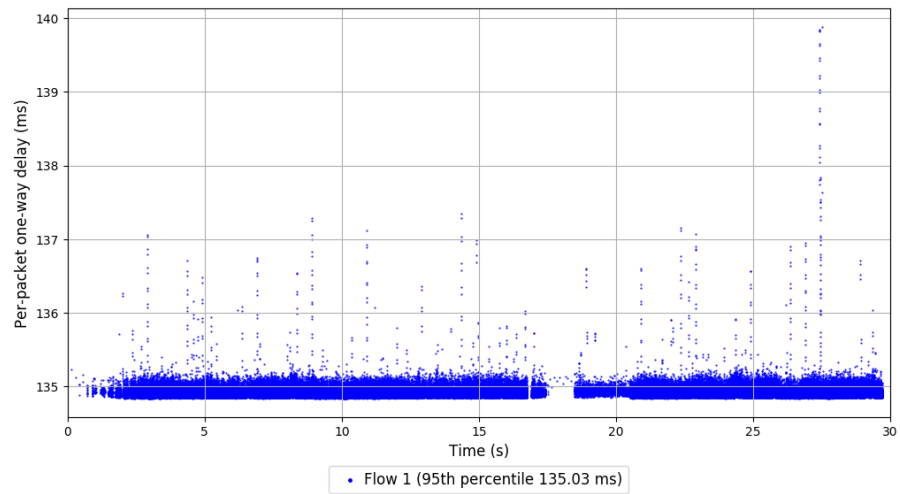
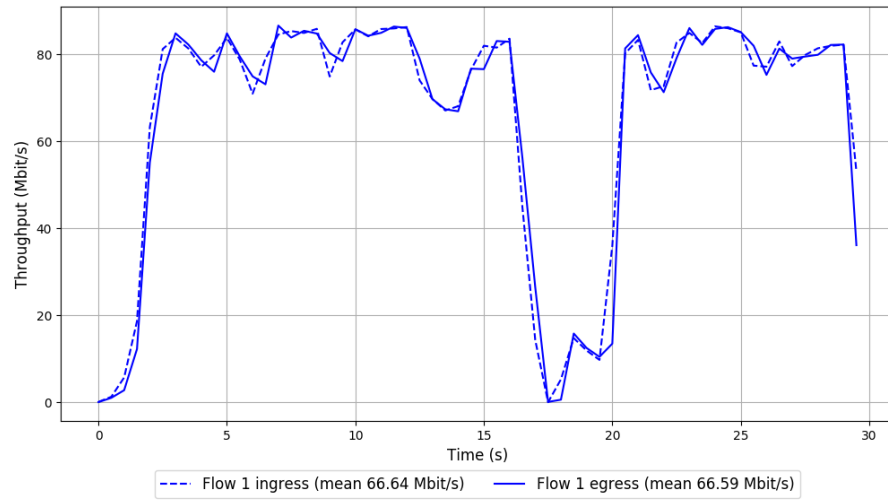
-- Flow 1:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 135.030 ms

Loss rate: 0.98%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 07:42:46

End at: 2017-11-16 07:43:16

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.66 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 1.38%

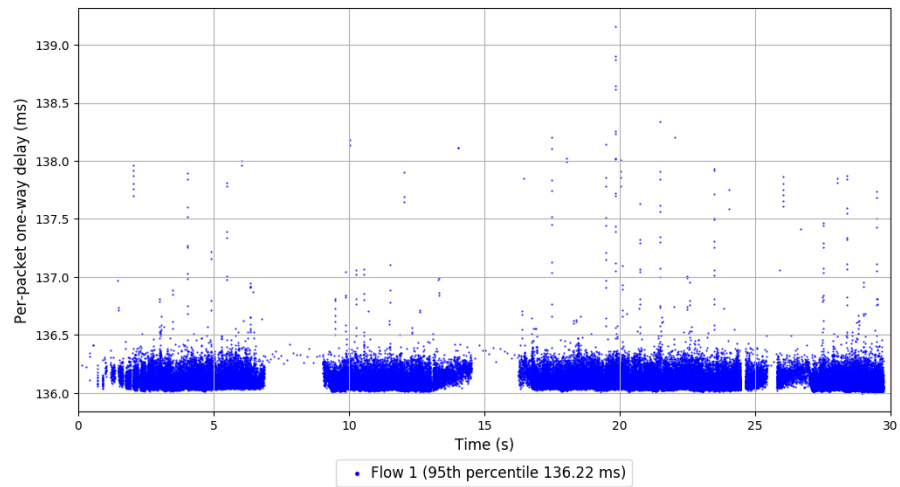
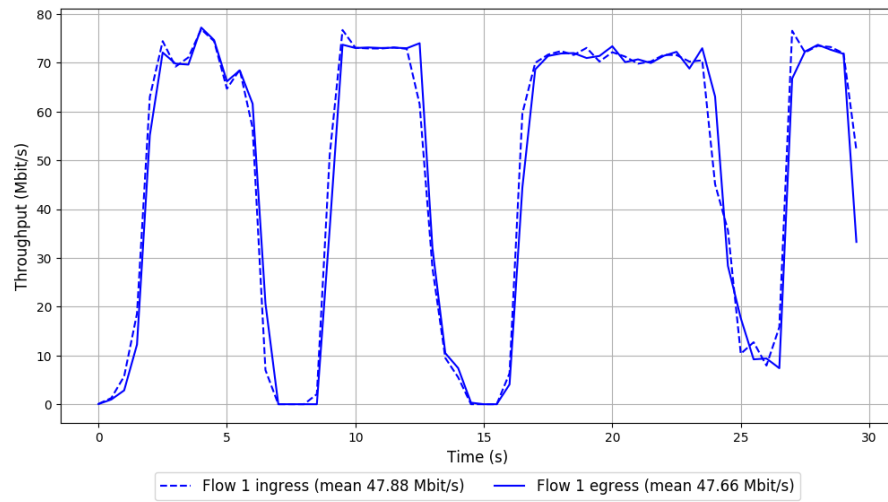
-- Flow 1:

Average throughput: 47.66 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 1.38%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 07:54:28

End at: 2017-11-16 07:54:58

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.29 Mbit/s

95th percentile per-packet one-way delay: 135.862 ms

Loss rate: 1.01%

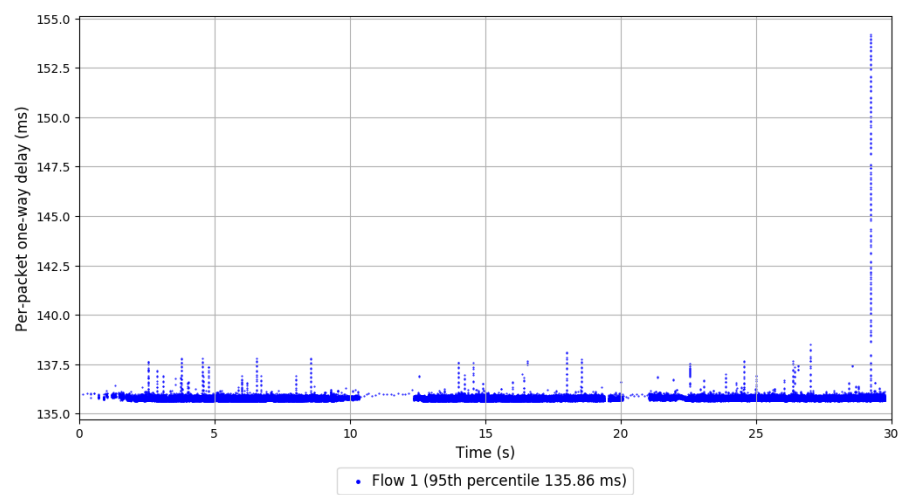
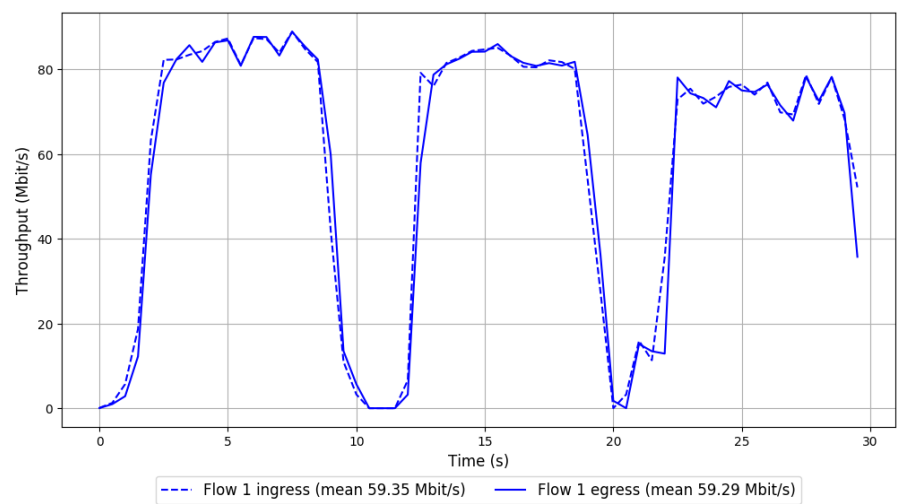
-- Flow 1:

Average throughput: 59.29 Mbit/s

95th percentile per-packet one-way delay: 135.862 ms

Loss rate: 1.01%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 08:05:49

End at: 2017-11-16 08:06:19

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.06 Mbit/s

95th percentile per-packet one-way delay: 135.370 ms

Loss rate: 1.11%

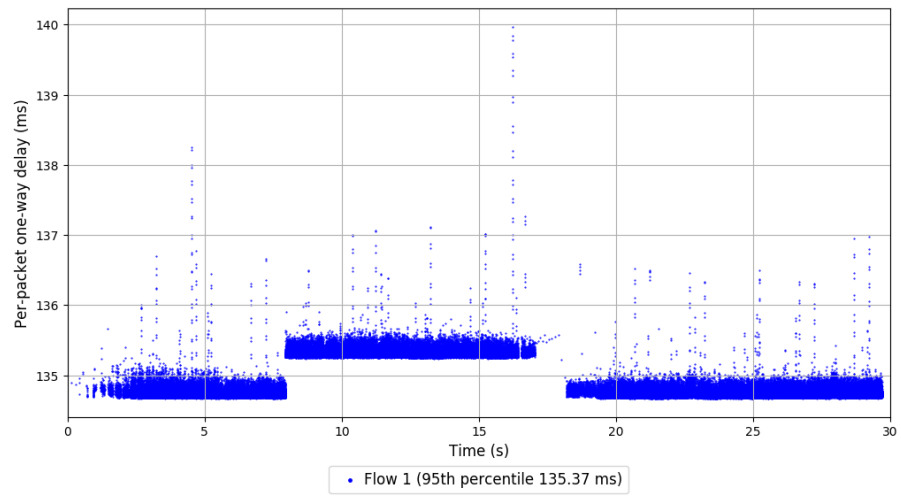
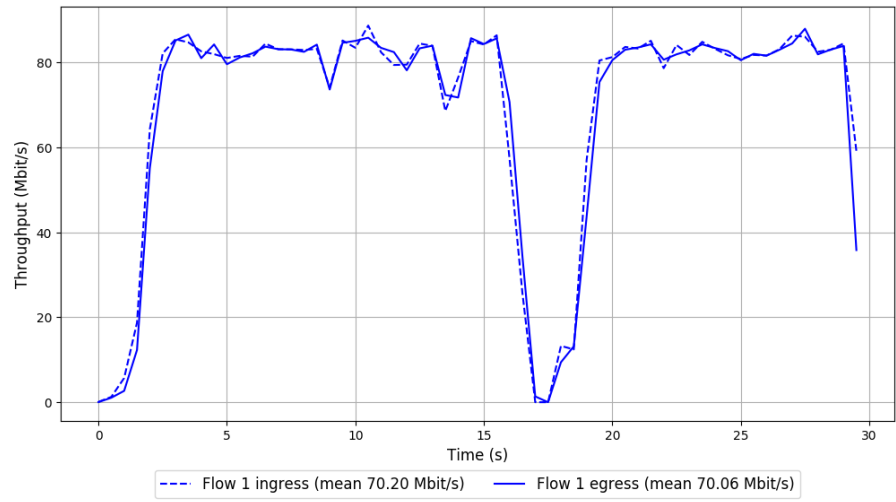
-- Flow 1:

Average throughput: 70.06 Mbit/s

95th percentile per-packet one-way delay: 135.370 ms

Loss rate: 1.11%

Run 10: Report of QUIC Cubic — Data Link

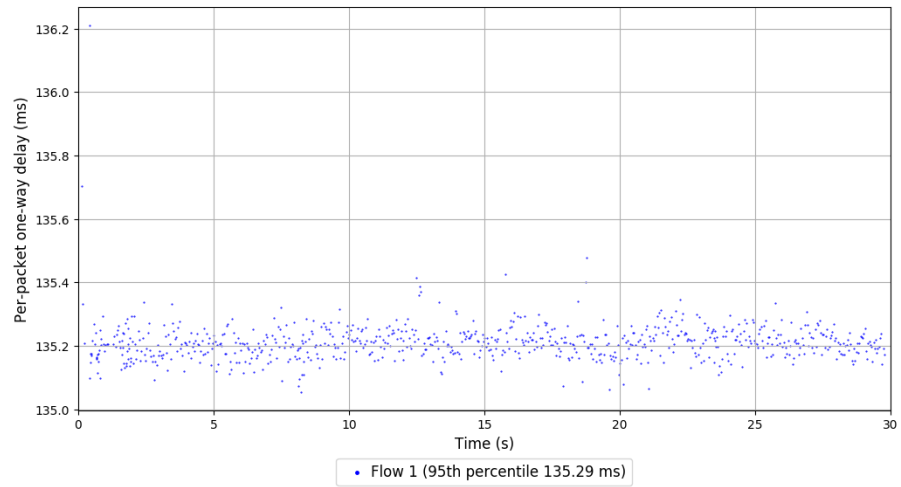
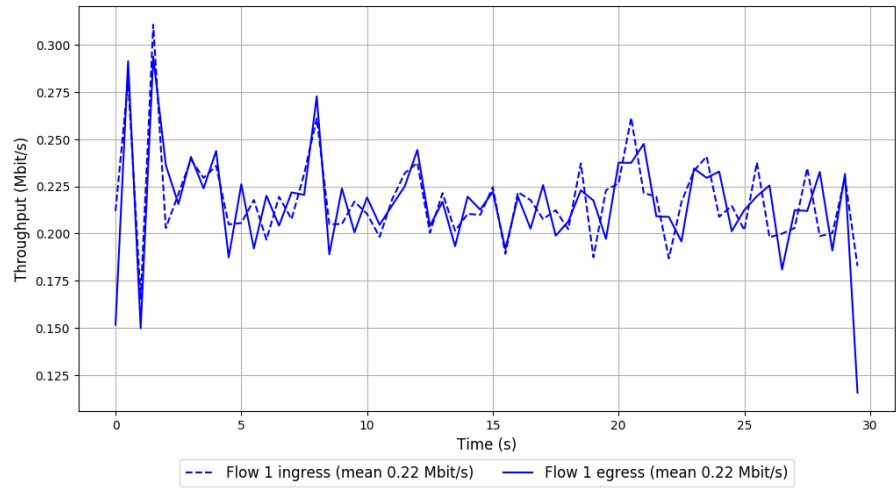


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 06:15:47
End at: 2017-11-16 06:16:17

# Below is generated by plot.py at 2017-11-16 10:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.289 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.289 ms
Loss rate: 0.89%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-11-16 06:27:14

End at: 2017-11-16 06:27:44

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.313 ms

Loss rate: 0.89%

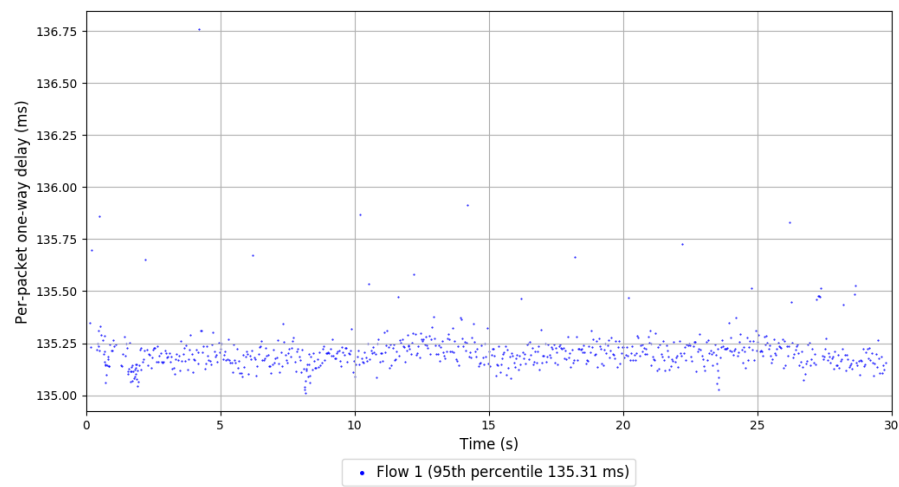
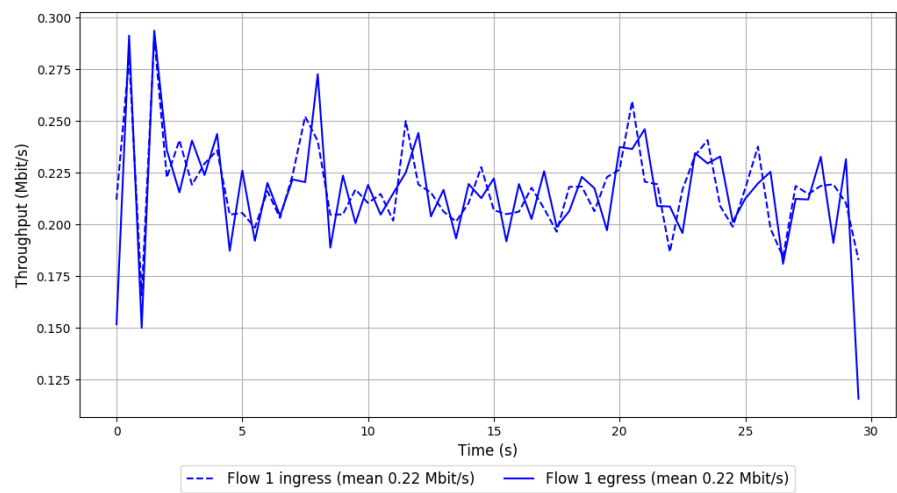
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.313 ms

Loss rate: 0.89%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-16 06:38:39

End at: 2017-11-16 06:39:09

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 165.249 ms

Loss rate: 0.72%

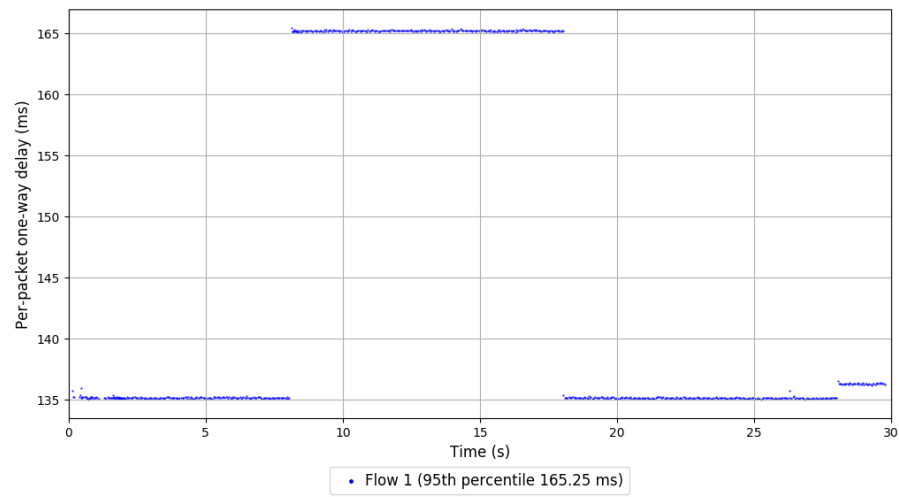
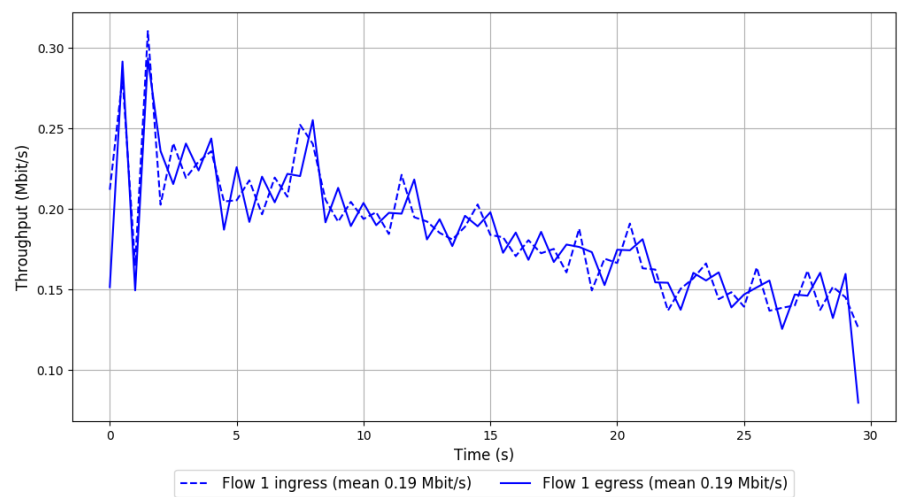
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 165.249 ms

Loss rate: 0.72%

Run 3: Report of SReAM — Data Link

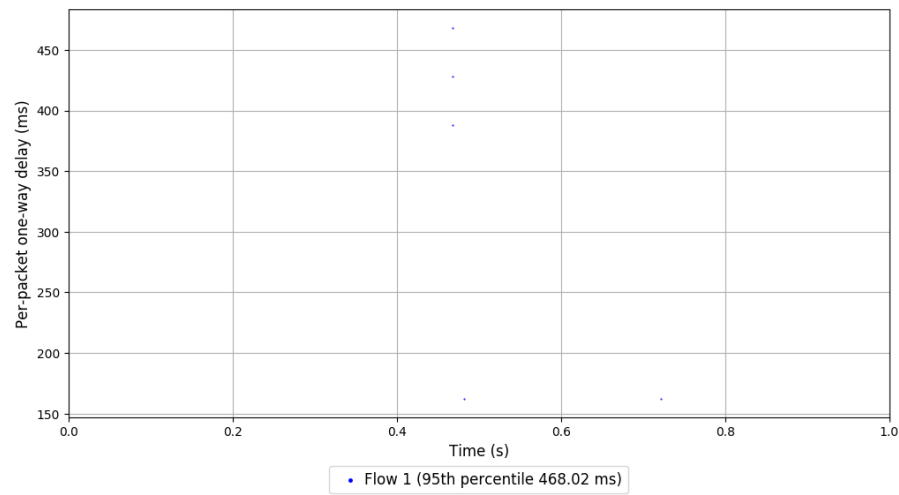
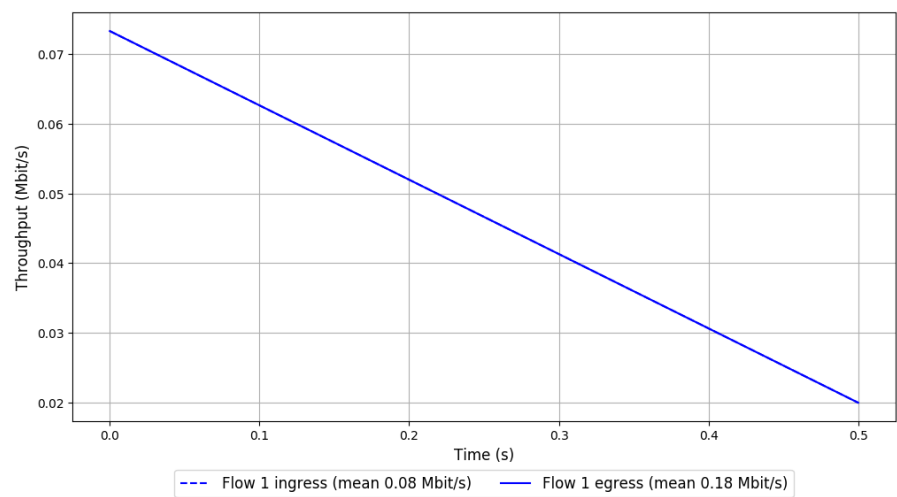


Run 4: Statistics of SReAM

Start at: 2017-11-16 06:49:57

End at: 2017-11-16 06:50:27

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-16 07:01:34

End at: 2017-11-16 07:02:04

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 162.079 ms

Loss rate: 0.88%

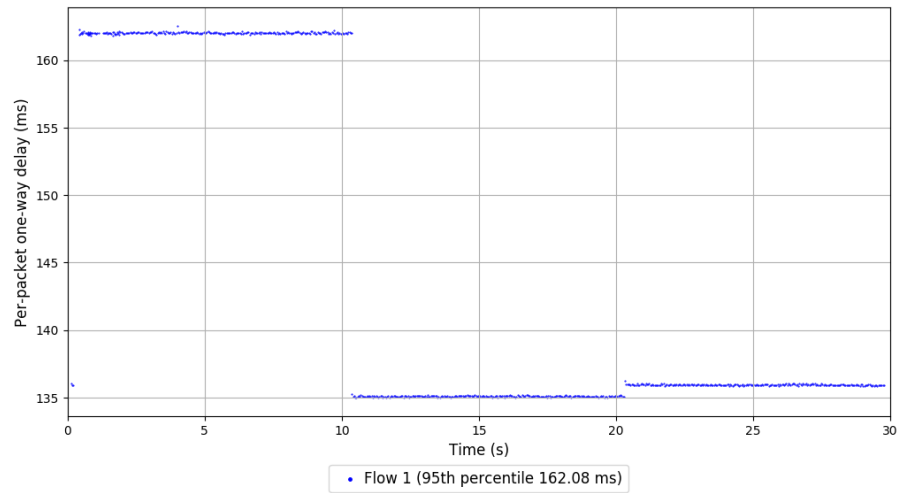
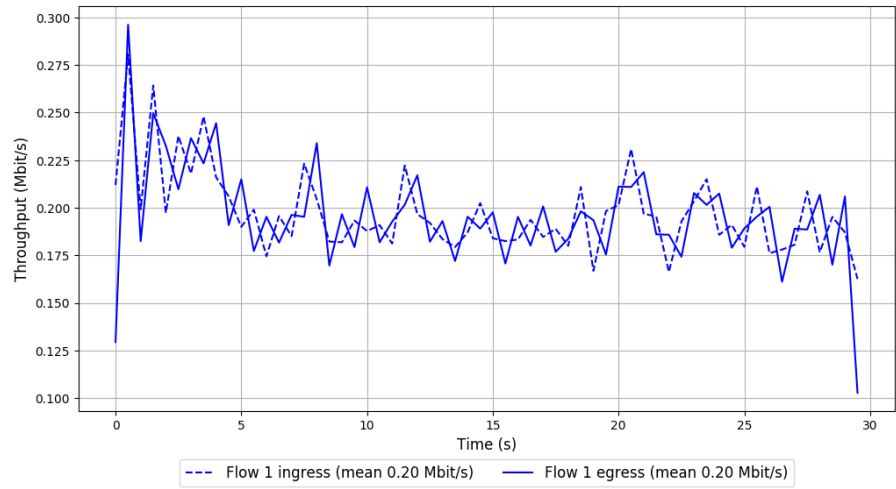
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 162.079 ms

Loss rate: 0.88%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-16 07:13:26

End at: 2017-11-16 07:13:56

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.955 ms

Loss rate: 0.89%

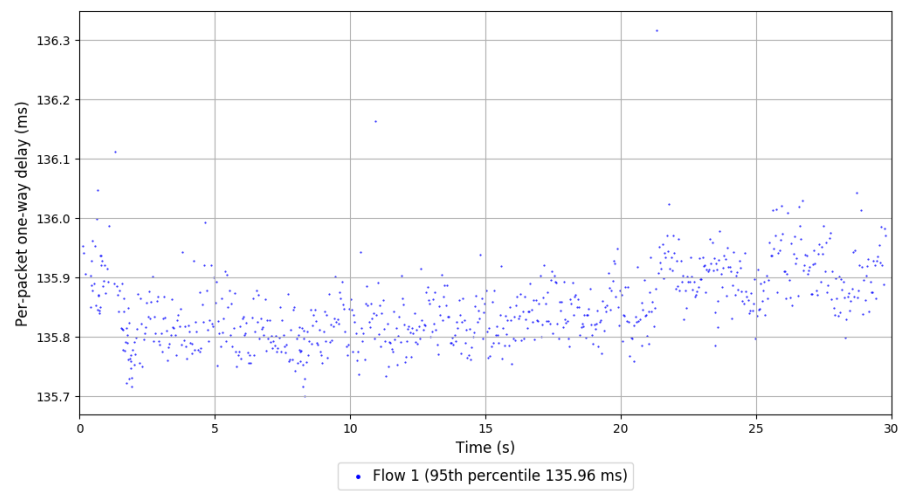
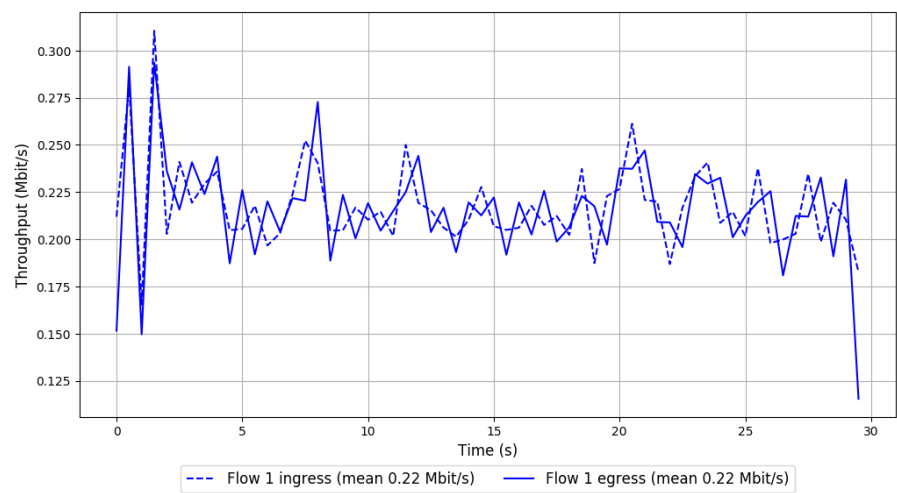
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.955 ms

Loss rate: 0.89%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-16 07:24:44

End at: 2017-11-16 07:25:14

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.971 ms

Loss rate: 0.89%

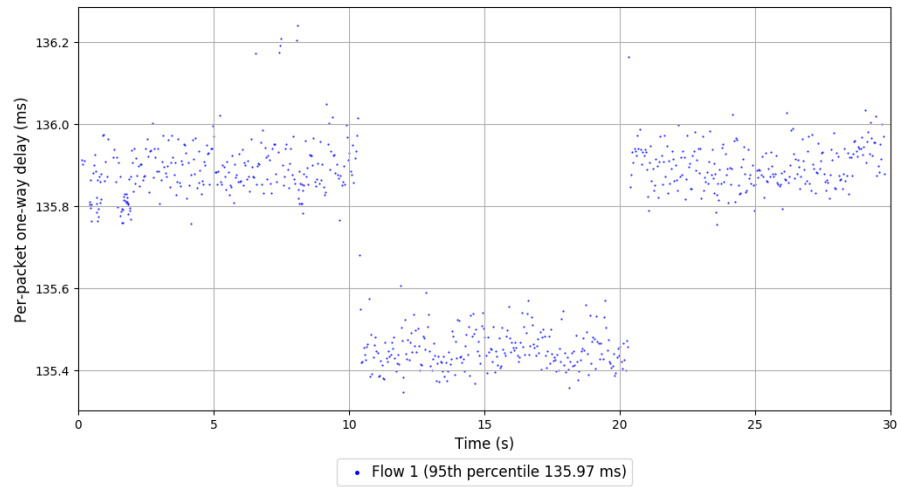
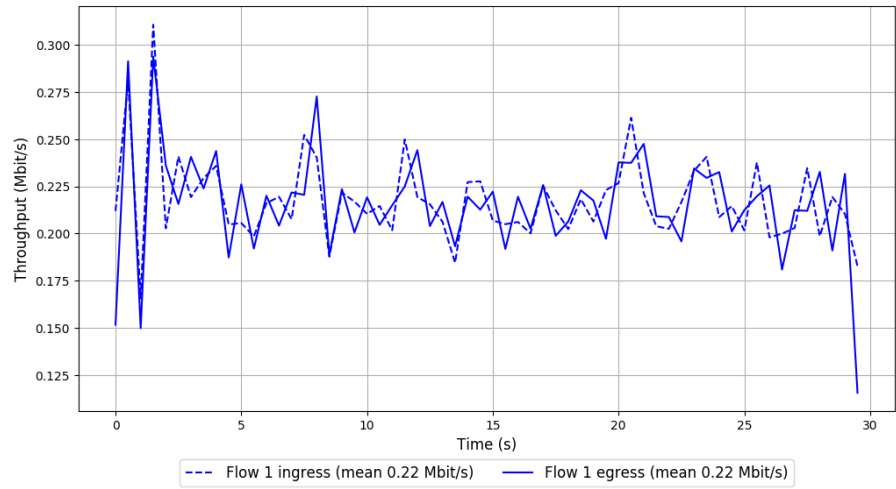
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.971 ms

Loss rate: 0.89%

Run 7: Report of SReAM — Data Link

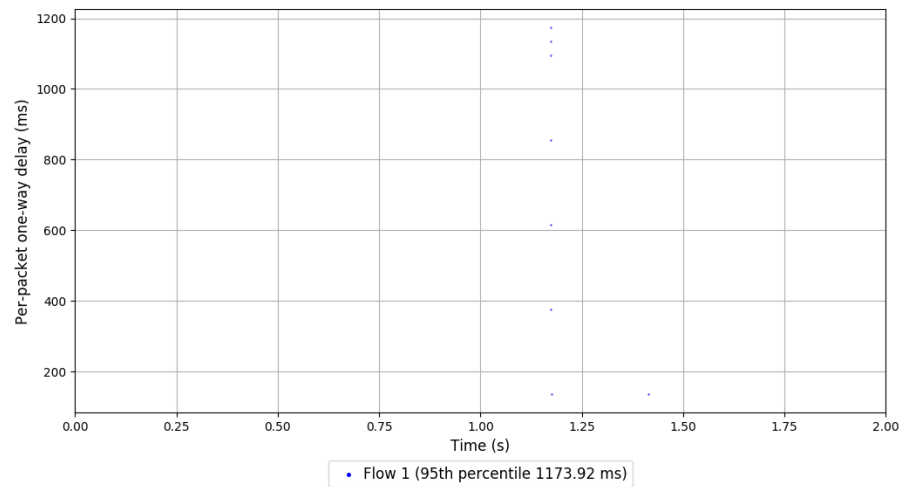
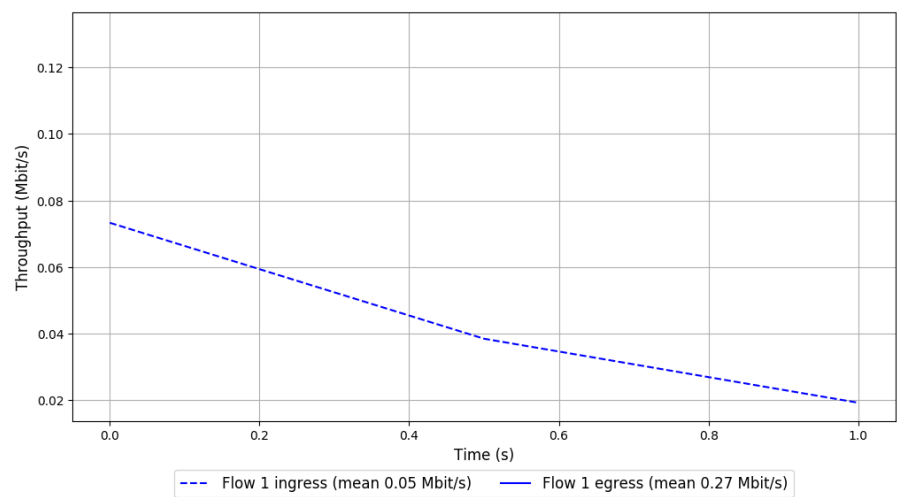


Run 8: Statistics of SReAM

Start at: 2017-11-16 07:36:22

End at: 2017-11-16 07:36:52

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-16 07:47:50

End at: 2017-11-16 07:48:20

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.005 ms

Loss rate: 0.89%

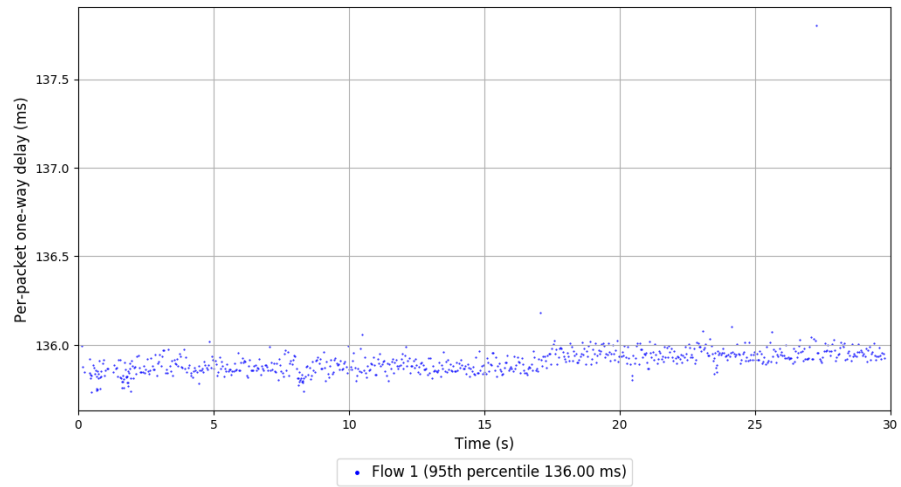
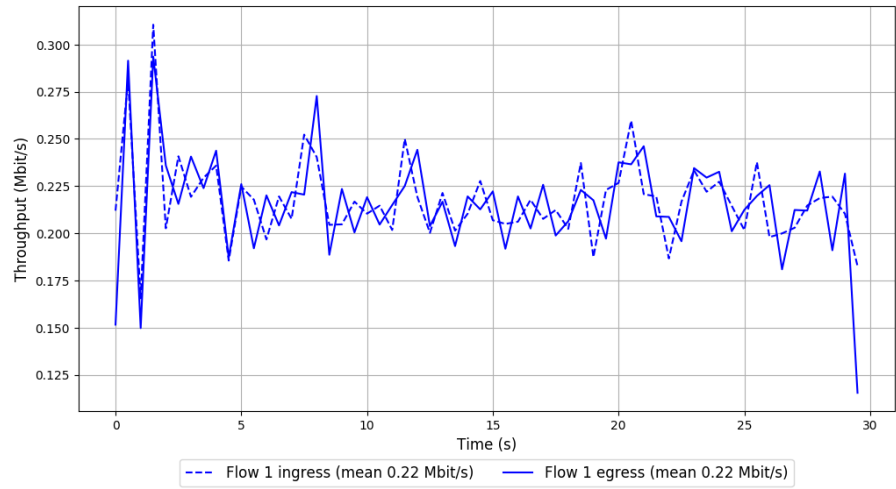
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.005 ms

Loss rate: 0.89%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-16 07:59:33

End at: 2017-11-16 08:00:03

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.346 ms

Loss rate: 0.89%

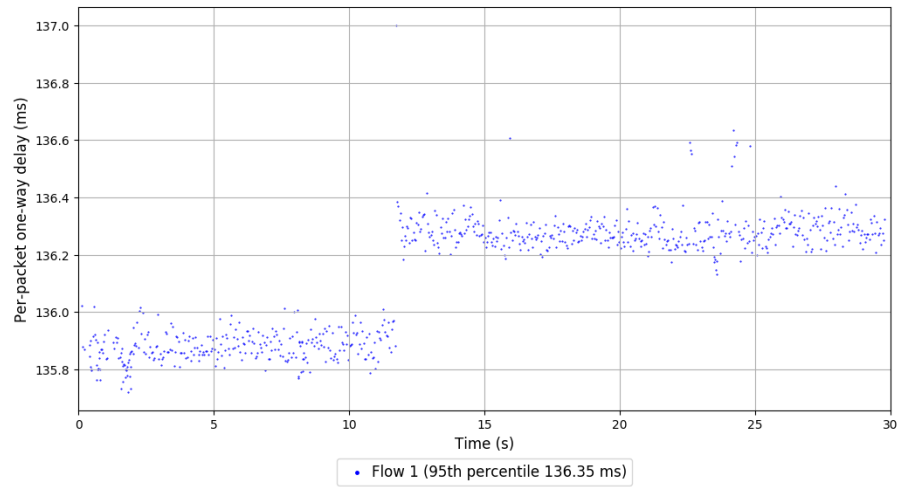
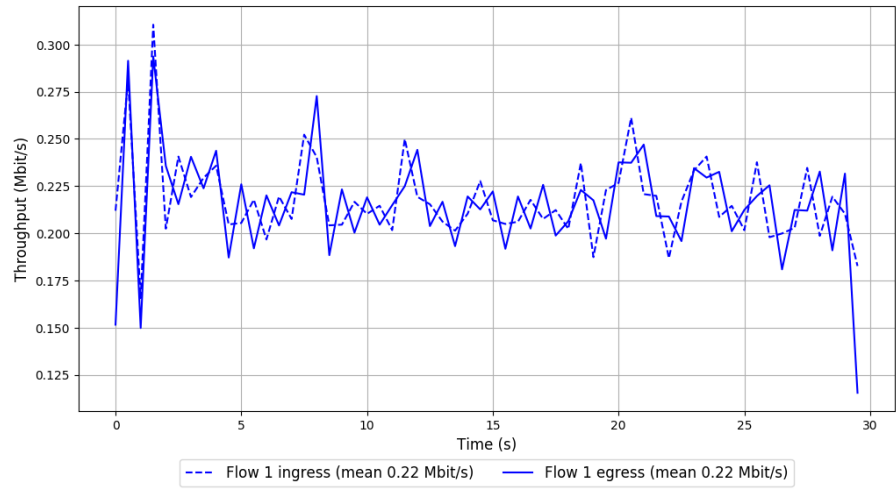
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.346 ms

Loss rate: 0.89%

Run 10: Report of SReAM — Data Link

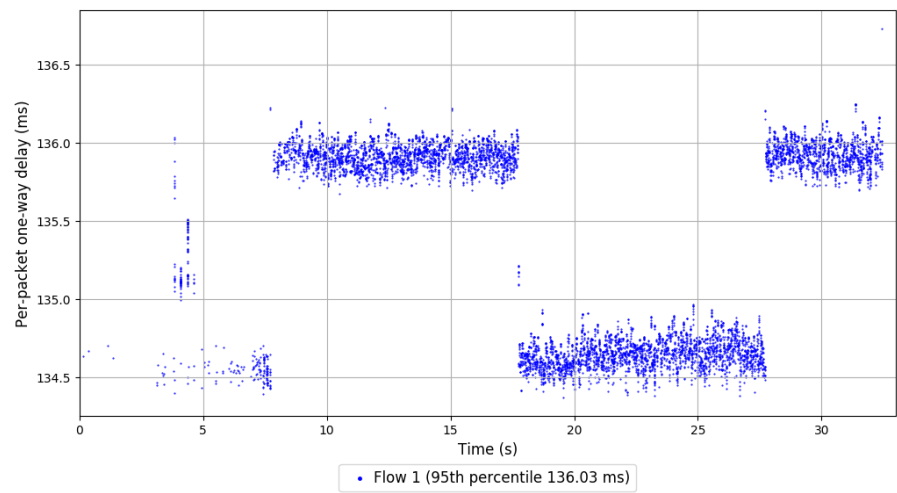
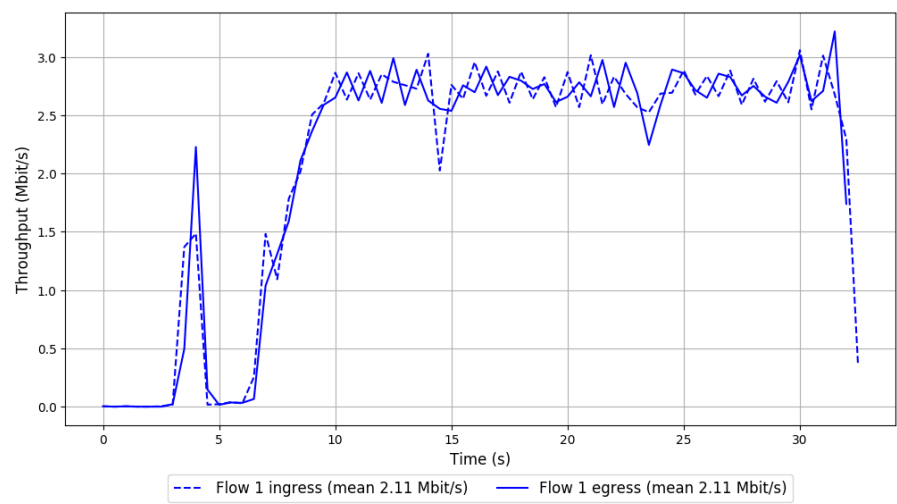


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 06:11:30
End at: 2017-11-16 06:12:00

# Below is generated by plot.py at 2017-11-16 10:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 136.029 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 136.029 ms
Loss rate: 0.96%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-16 06:22:53

End at: 2017-11-16 06:23:23

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 135.305 ms

Loss rate: 1.24%

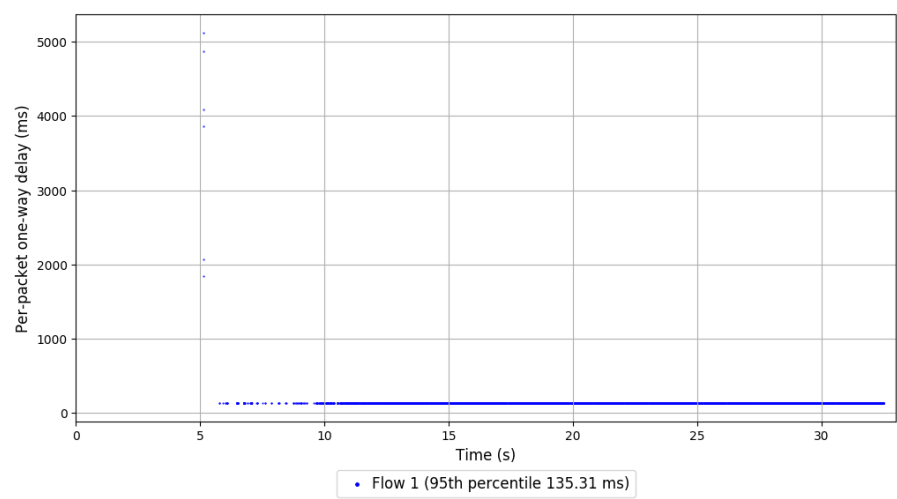
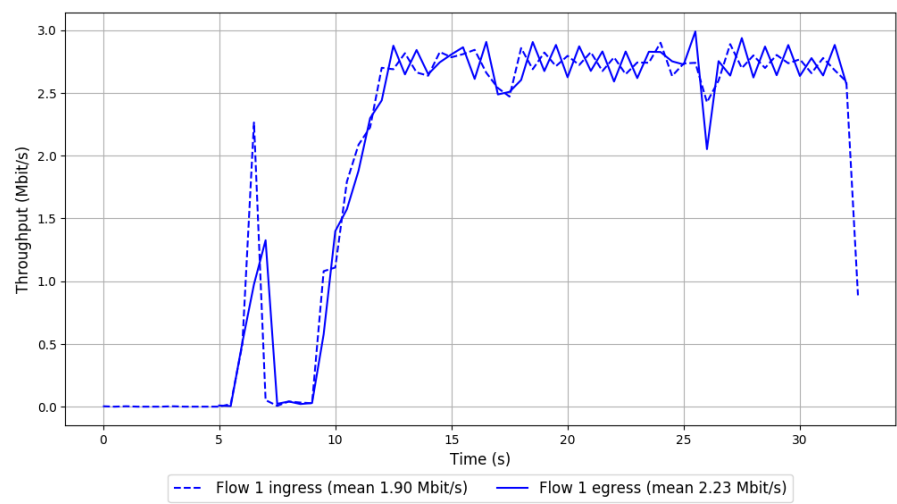
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 135.305 ms

Loss rate: 1.24%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-16 06:34:20

End at: 2017-11-16 06:34:50

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 165.633 ms

Loss rate: 1.34%

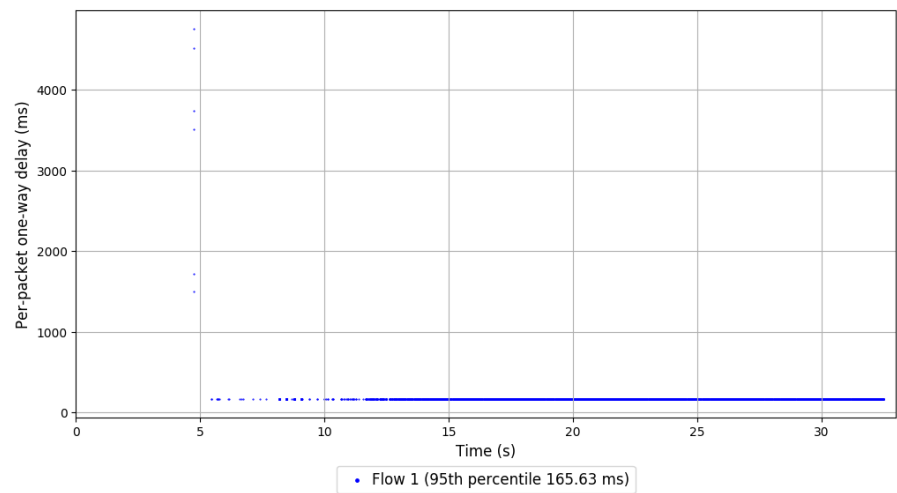
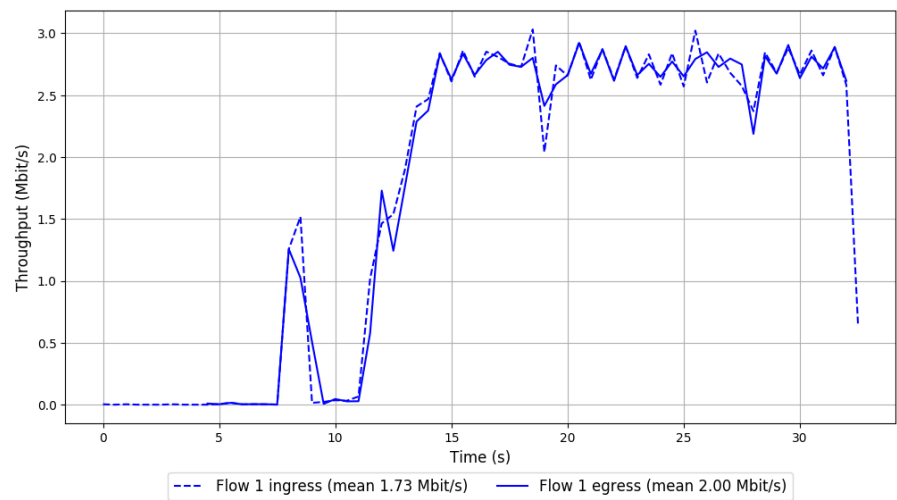
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 165.633 ms

Loss rate: 1.34%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-16 06:46:01

End at: 2017-11-16 06:46:31

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.006 ms

Loss rate: 0.98%

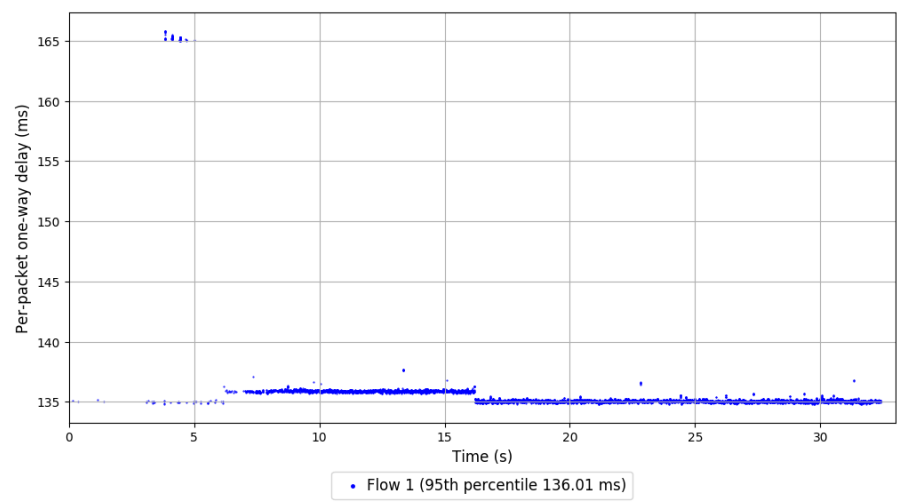
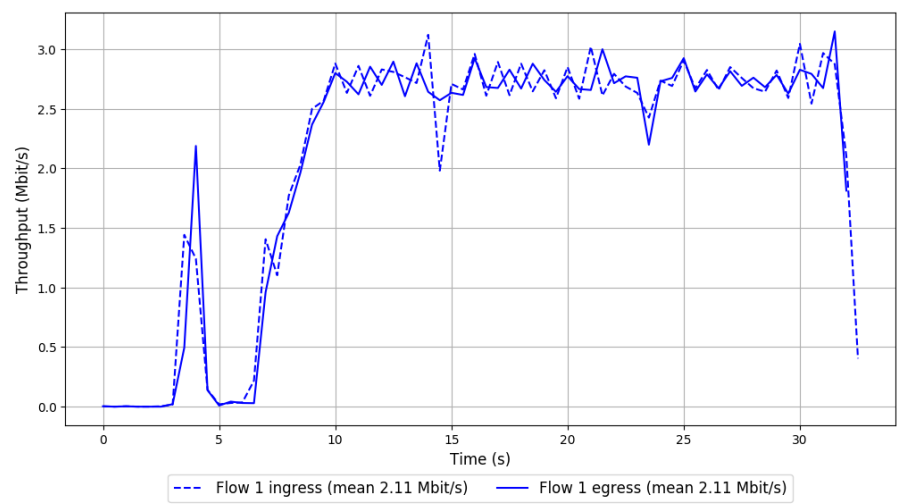
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.006 ms

Loss rate: 0.98%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-16 06:57:15

End at: 2017-11-16 06:57:45

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 165.556 ms

Loss rate: 0.93%

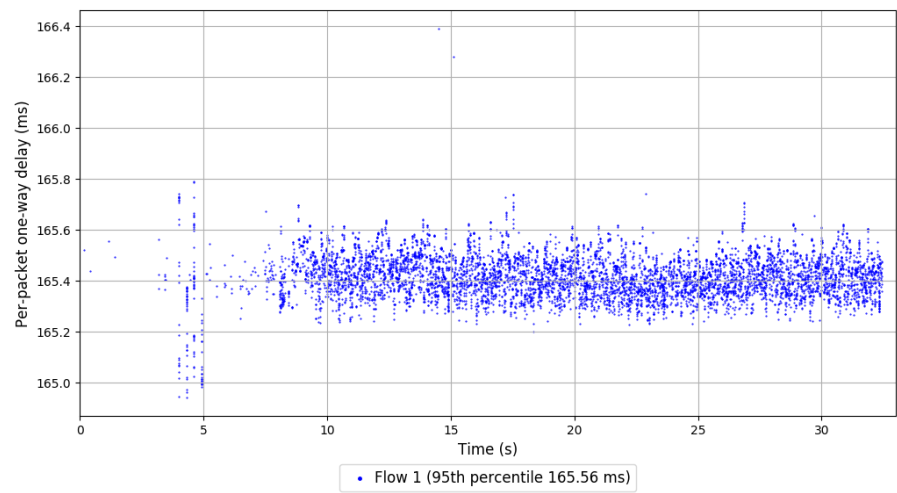
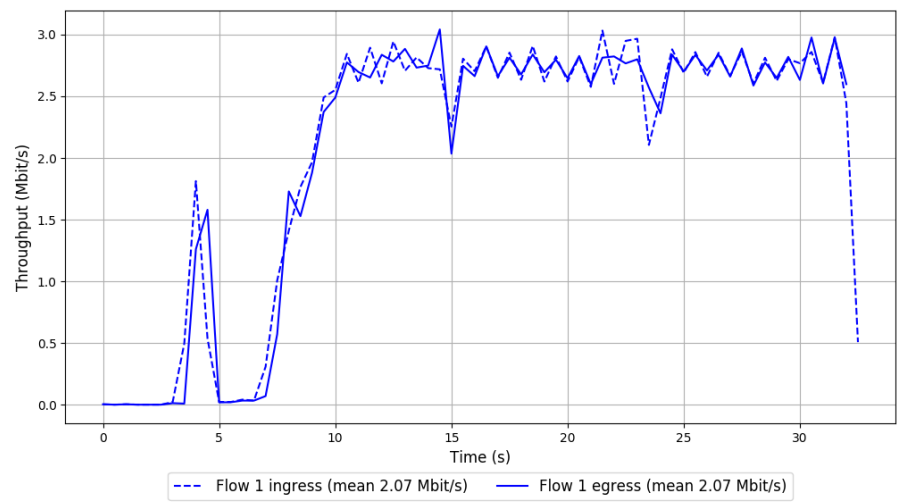
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 165.556 ms

Loss rate: 0.93%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-16 07:09:05

End at: 2017-11-16 07:09:35

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 165.208 ms

Loss rate: 1.14%

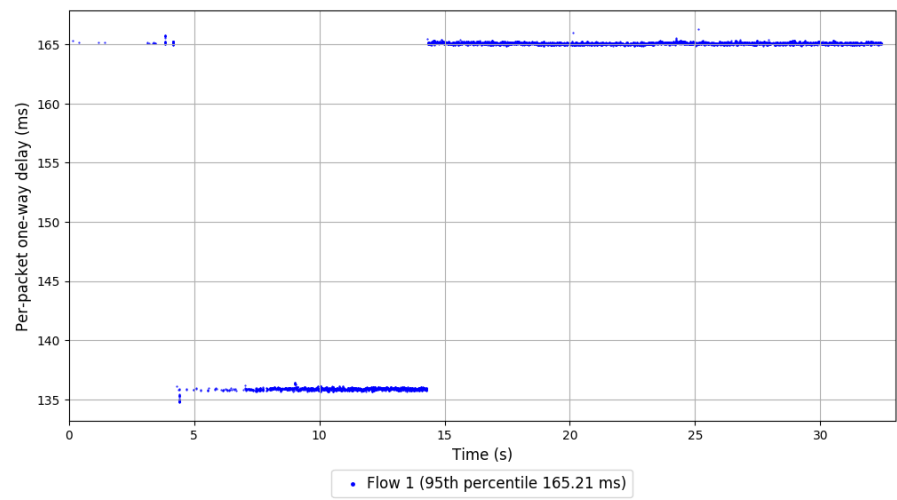
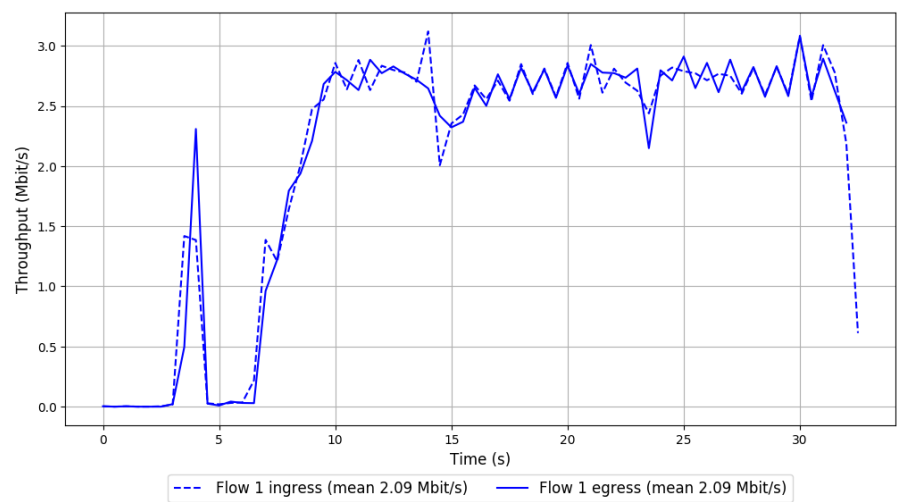
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 165.208 ms

Loss rate: 1.14%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-16 07:20:29

End at: 2017-11-16 07:20:59

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 163.329 ms

Loss rate: 0.94%

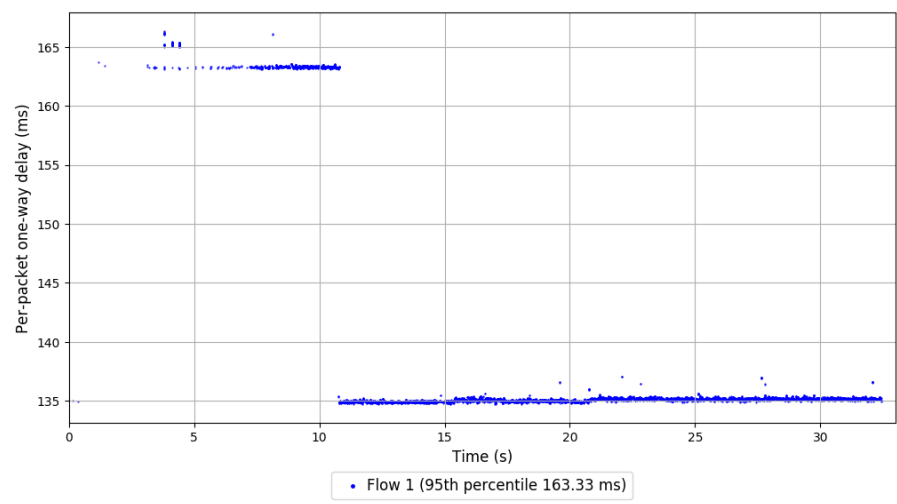
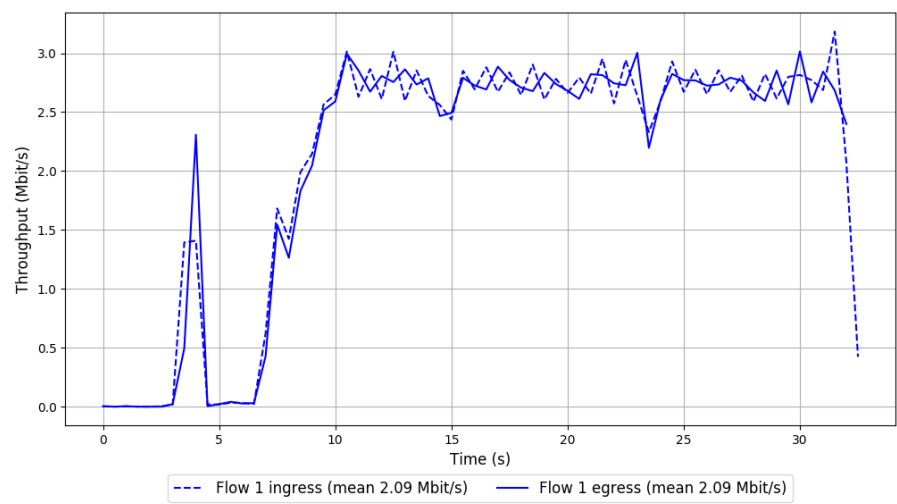
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 163.329 ms

Loss rate: 0.94%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-16 07:32:06

End at: 2017-11-16 07:32:36

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 135.930 ms

Loss rate: 1.03%

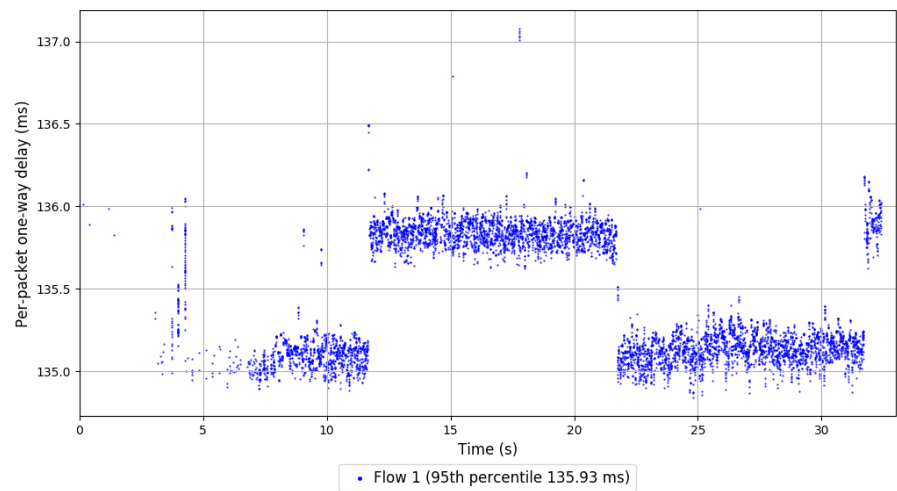
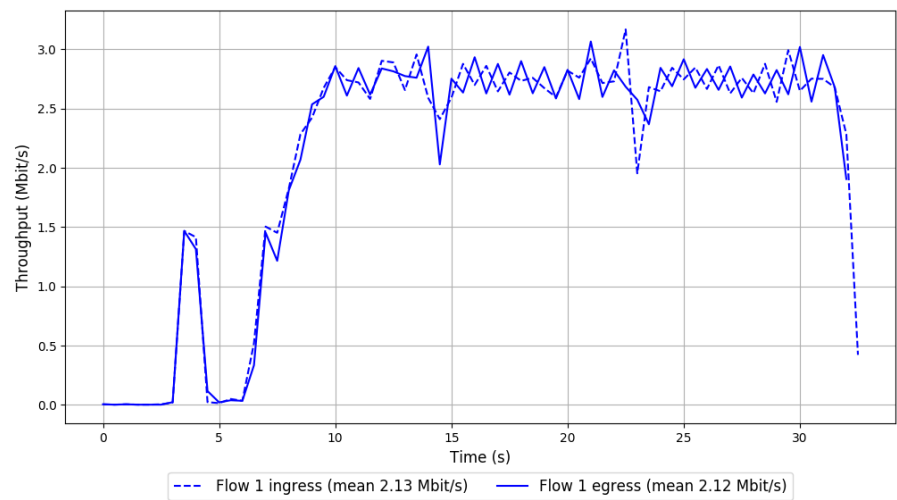
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 135.930 ms

Loss rate: 1.03%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-16 07:43:33

End at: 2017-11-16 07:44:03

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 135.325 ms

Loss rate: 0.98%

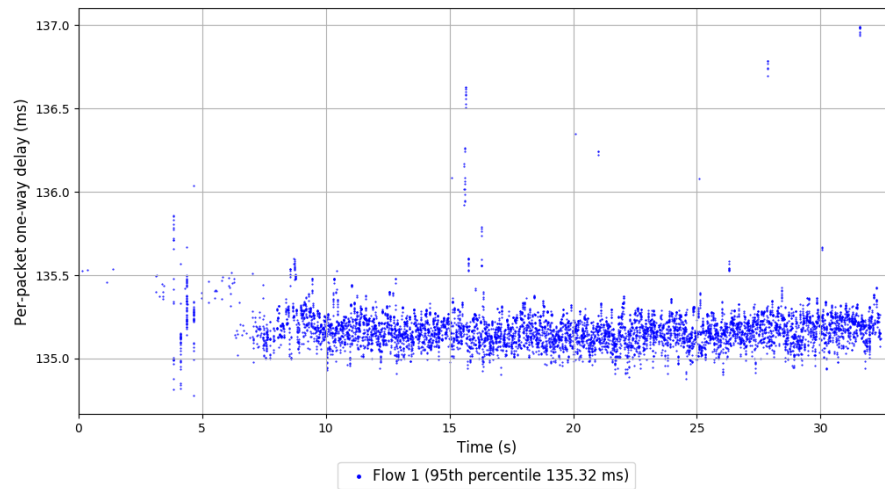
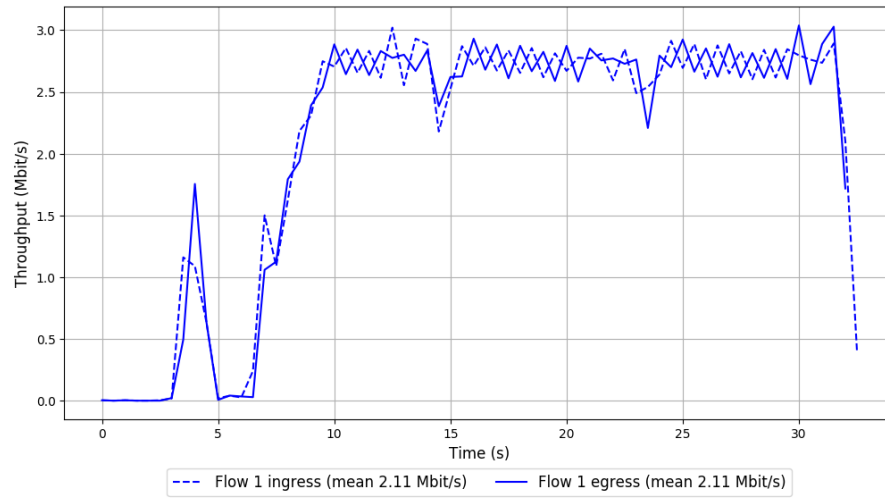
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 135.325 ms

Loss rate: 0.98%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-16 07:55:16

End at: 2017-11-16 07:55:46

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.058 ms

Loss rate: 0.95%

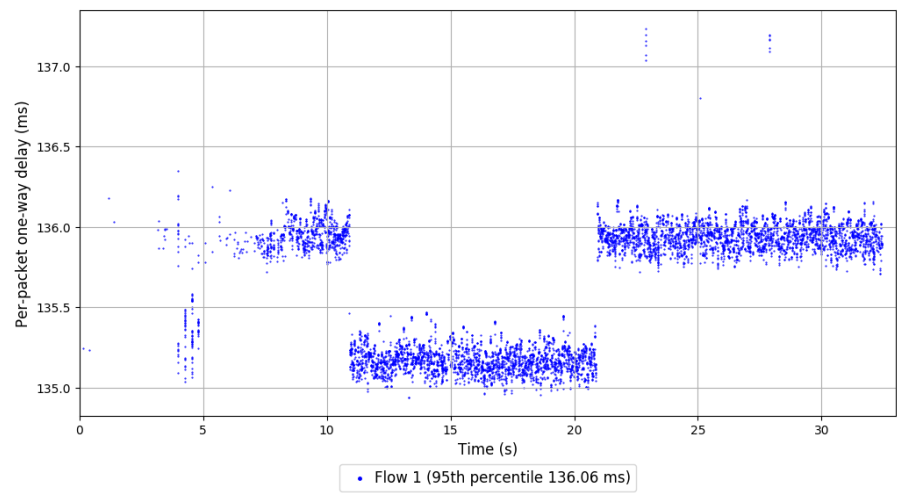
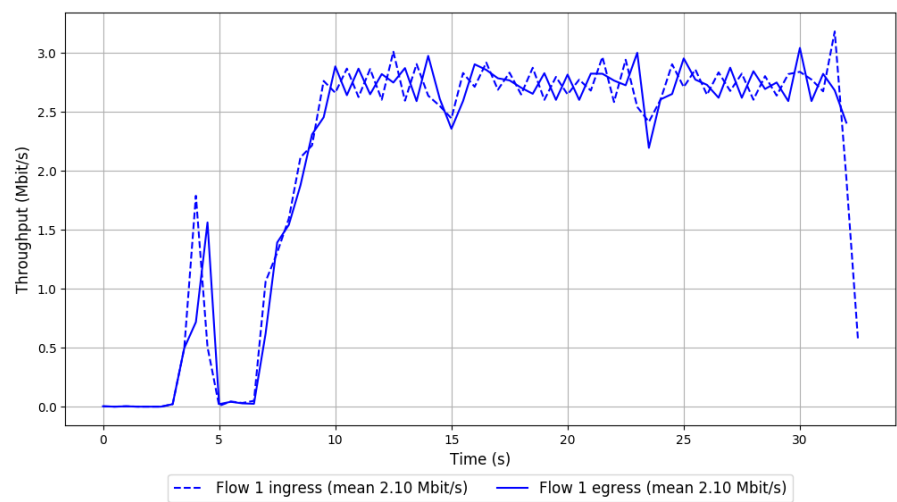
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.058 ms

Loss rate: 0.95%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-16 06:18:08

End at: 2017-11-16 06:18:38

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 165.881 ms

Loss rate: 0.23%

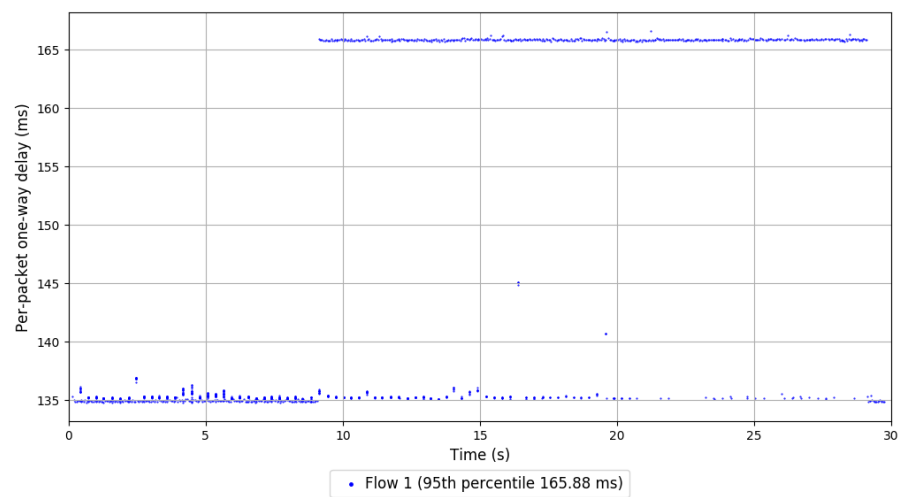
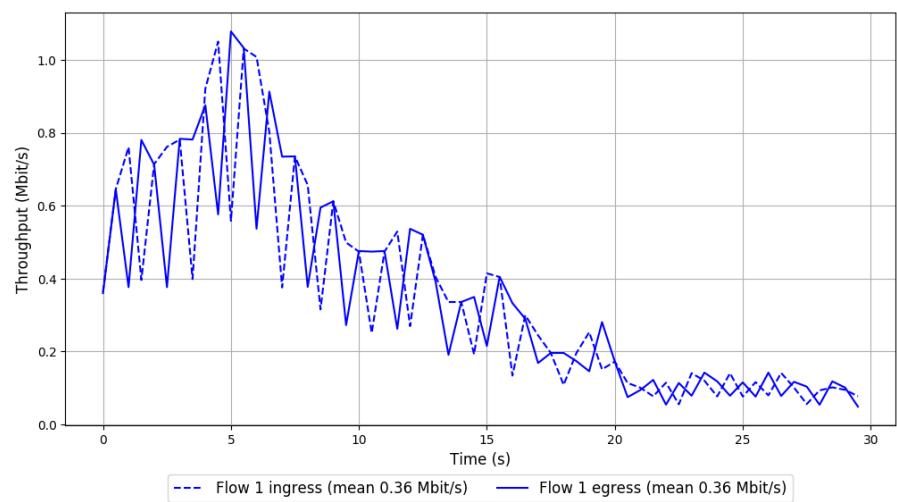
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 165.881 ms

Loss rate: 0.23%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-16 06:29:36

End at: 2017-11-16 06:30:06

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 135.982 ms

Loss rate: 1.12%

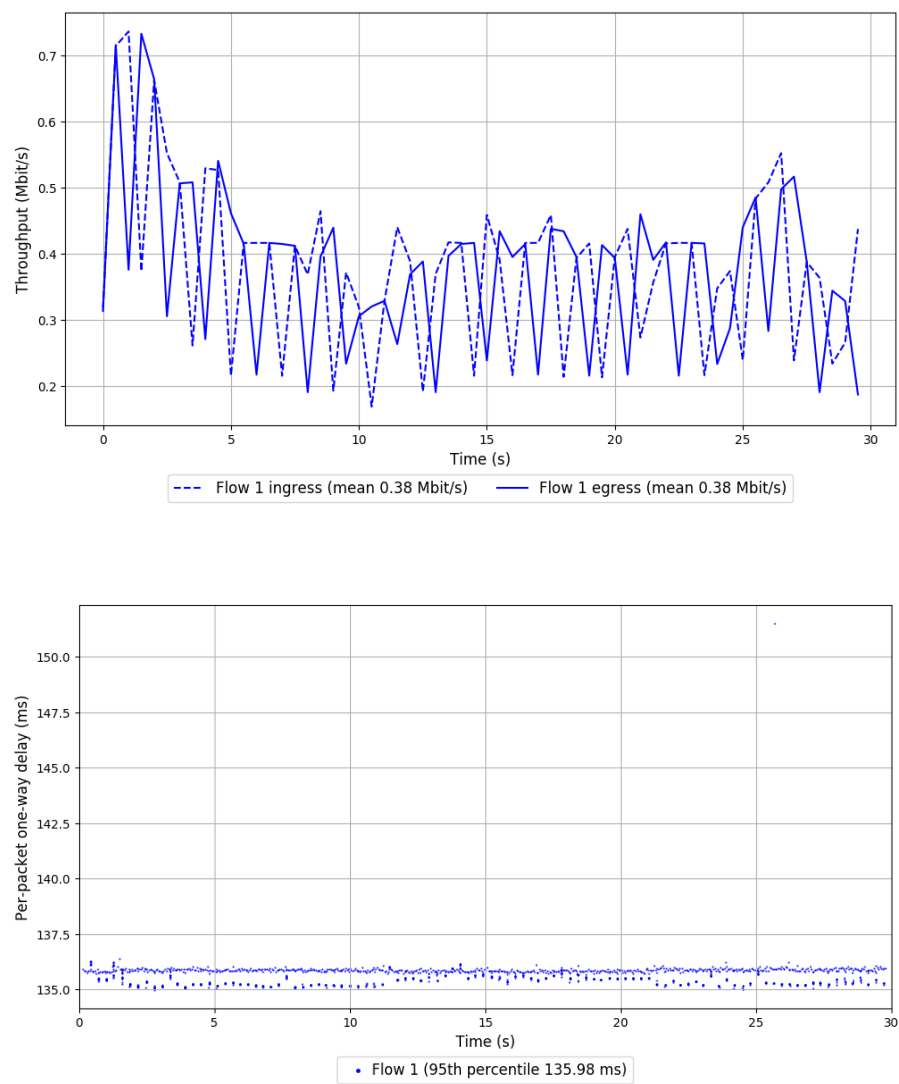
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 135.982 ms

Loss rate: 1.12%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-16 06:41:02

End at: 2017-11-16 06:41:32

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 165.290 ms

Loss rate: 0.41%

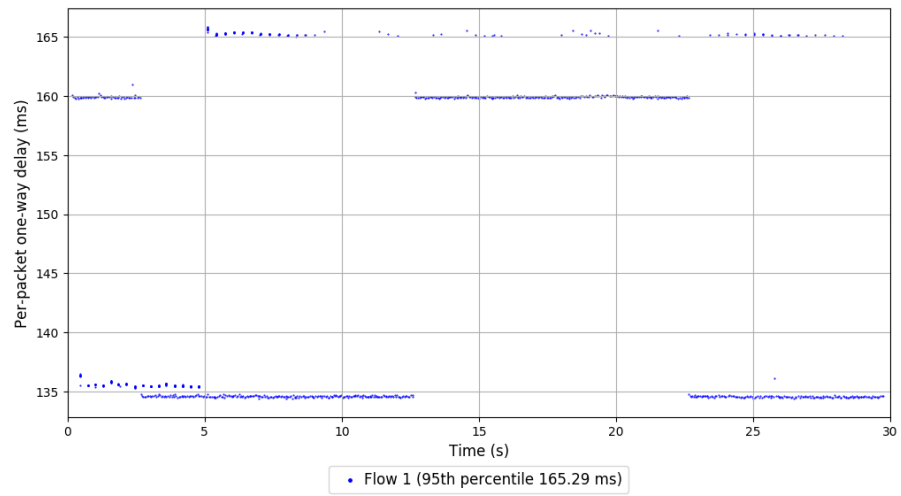
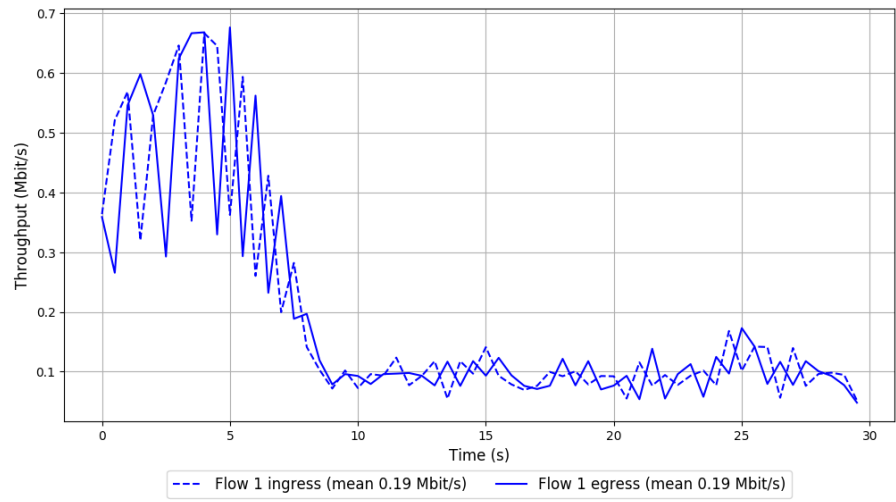
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 165.290 ms

Loss rate: 0.41%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-16 06:52:19

End at: 2017-11-16 06:52:49

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 160.008 ms

Loss rate: 1.78%

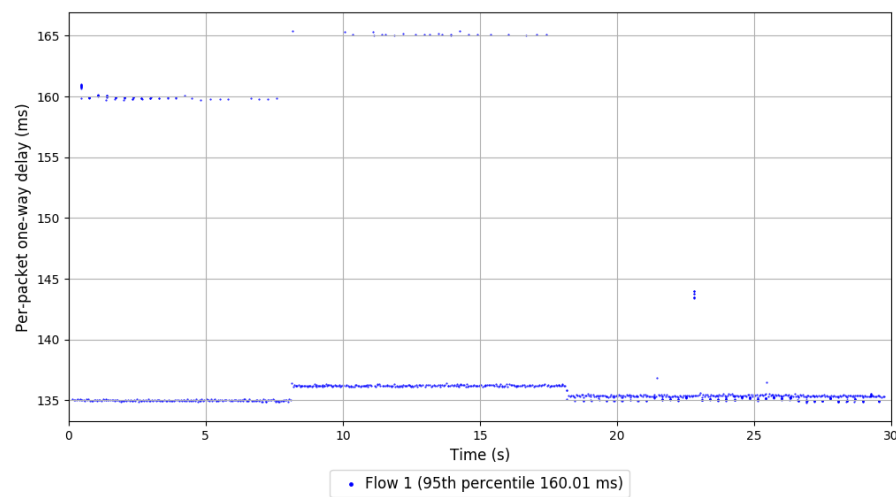
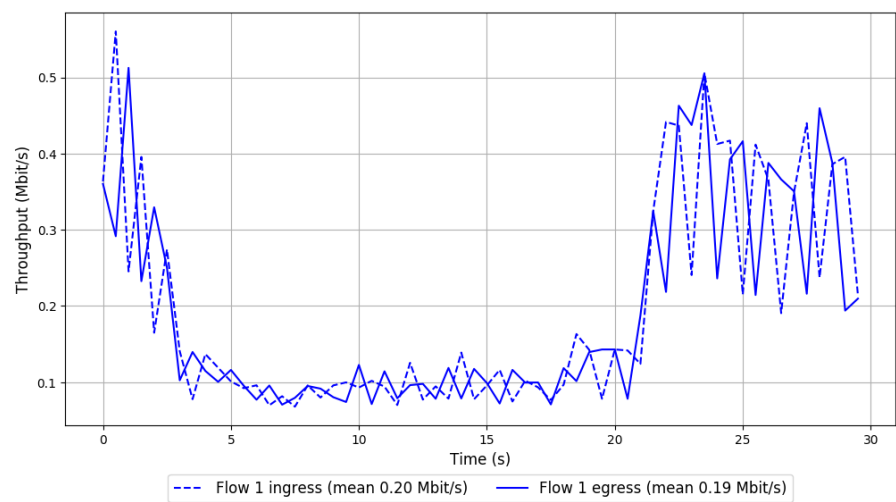
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 160.008 ms

Loss rate: 1.78%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-16 07:03:57

End at: 2017-11-16 07:04:27

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 165.394 ms

Loss rate: 1.12%

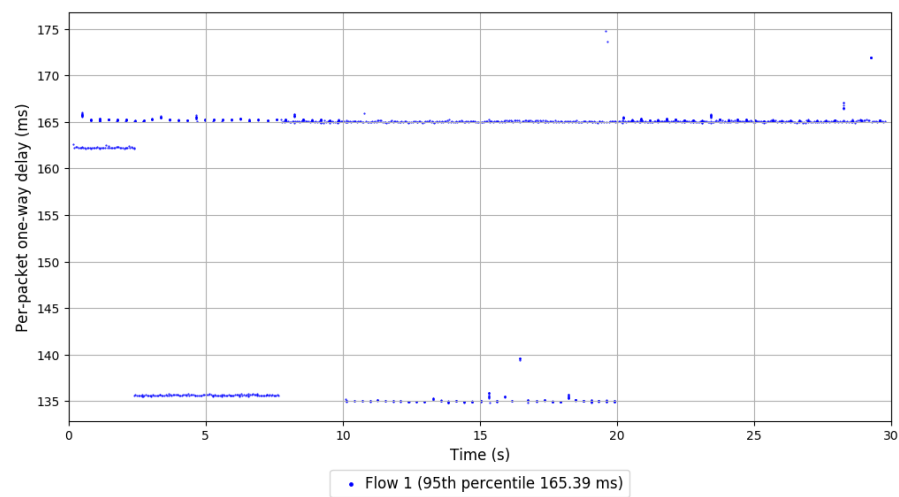
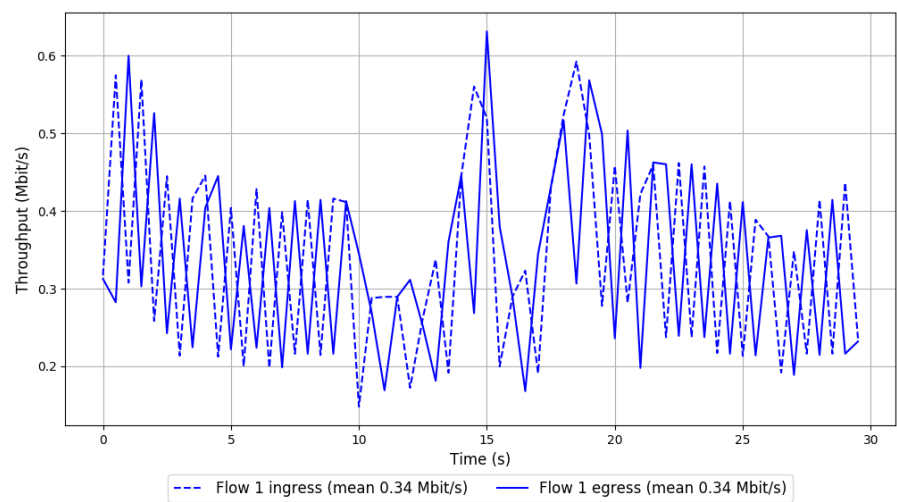
-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 165.394 ms

Loss rate: 1.12%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-16 07:15:45

End at: 2017-11-16 07:16:15

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 165.515 ms

Loss rate: 0.31%

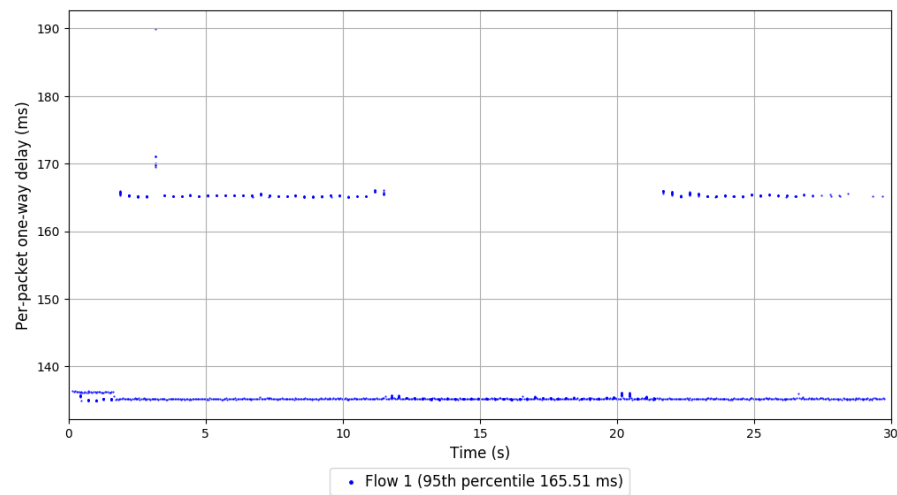
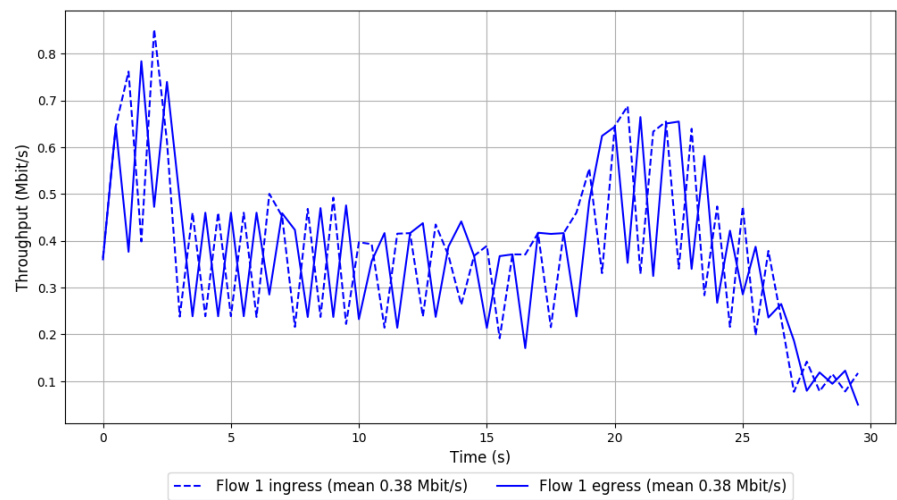
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 165.515 ms

Loss rate: 0.31%

Run 6: Report of Sprout — Data Link

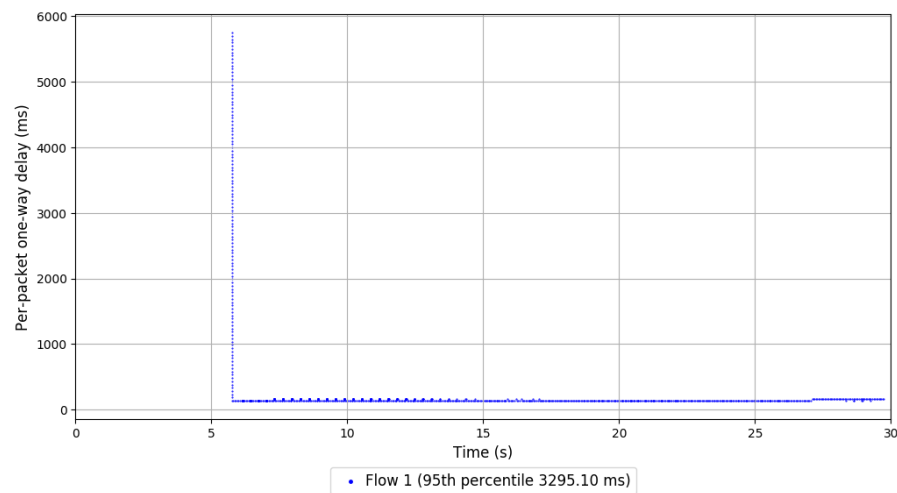
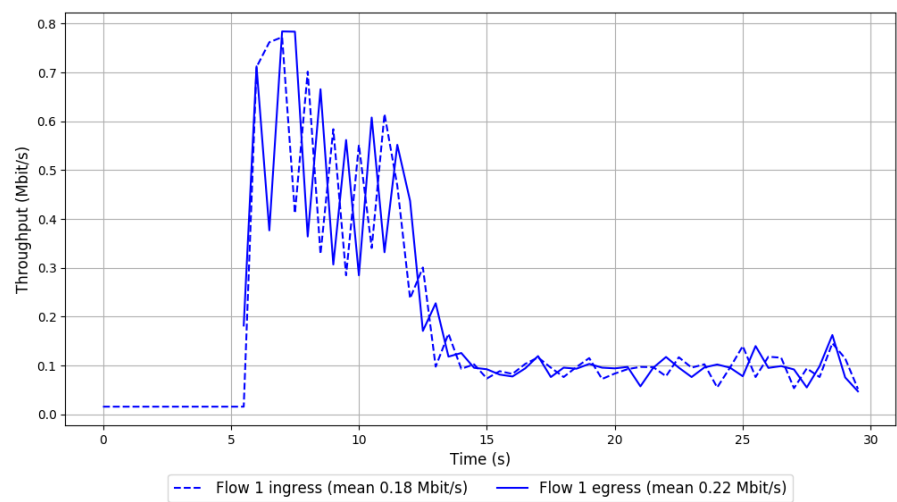


Run 7: Statistics of Sprout

Start at: 2017-11-16 07:27:00

End at: 2017-11-16 07:27:30

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-16 07:38:43

End at: 2017-11-16 07:39:13

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 135.478 ms

Loss rate: 0.90%

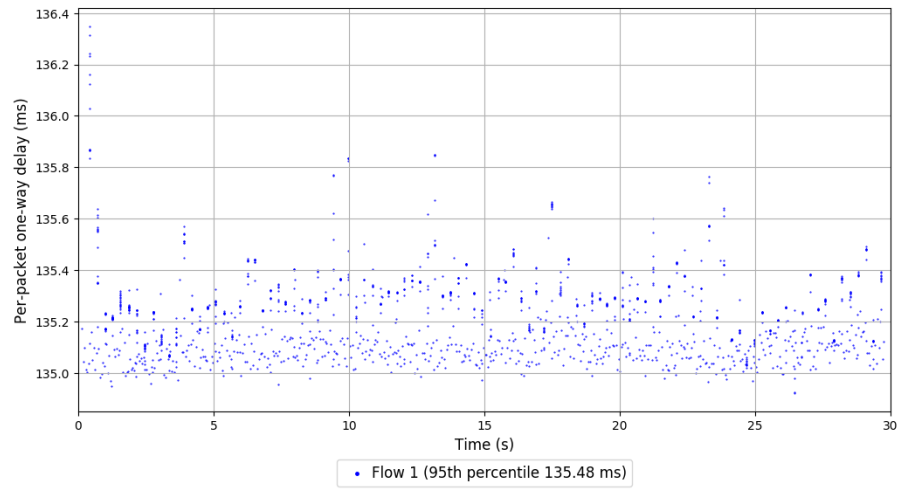
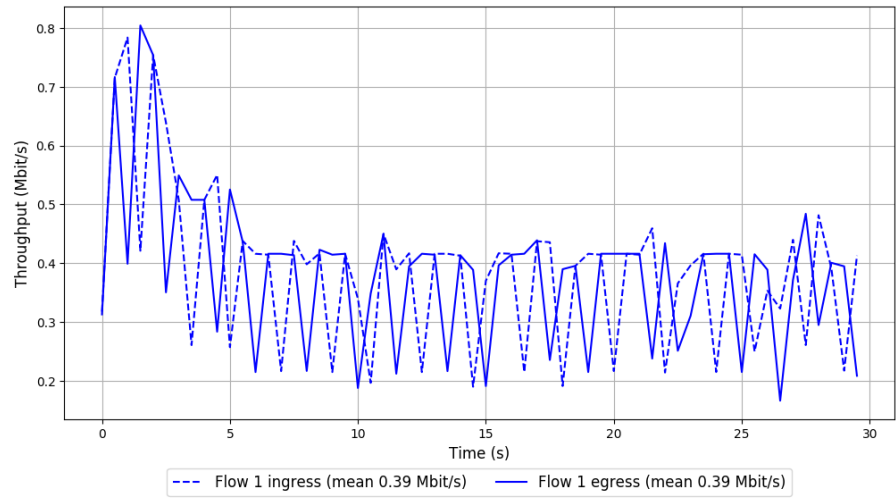
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 135.478 ms

Loss rate: 0.90%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-16 07:50:12

End at: 2017-11-16 07:50:42

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 135.701 ms

Loss rate: 0.03%

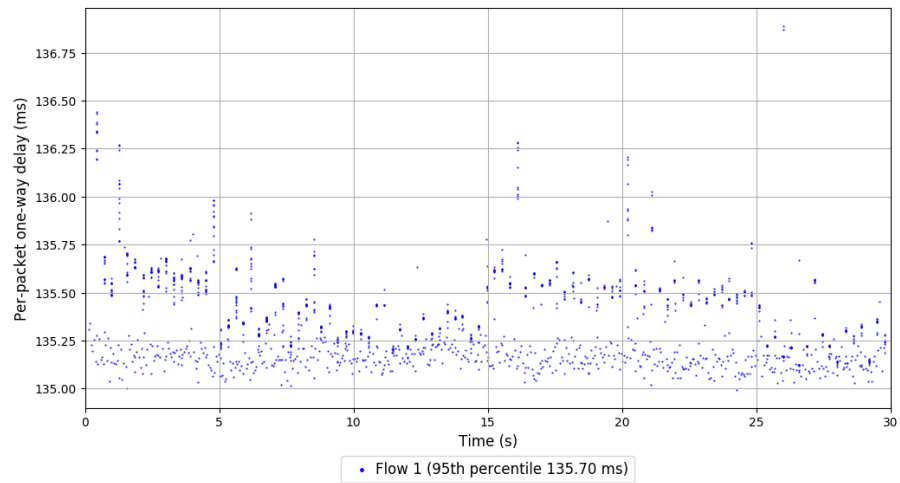
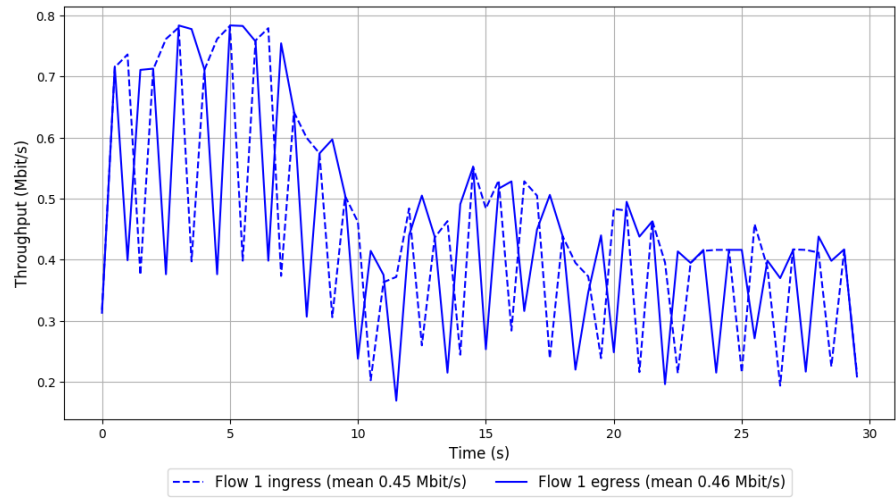
-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 135.701 ms

Loss rate: 0.03%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-16 08:01:52

End at: 2017-11-16 08:02:22

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 165.002 ms

Loss rate: 0.05%

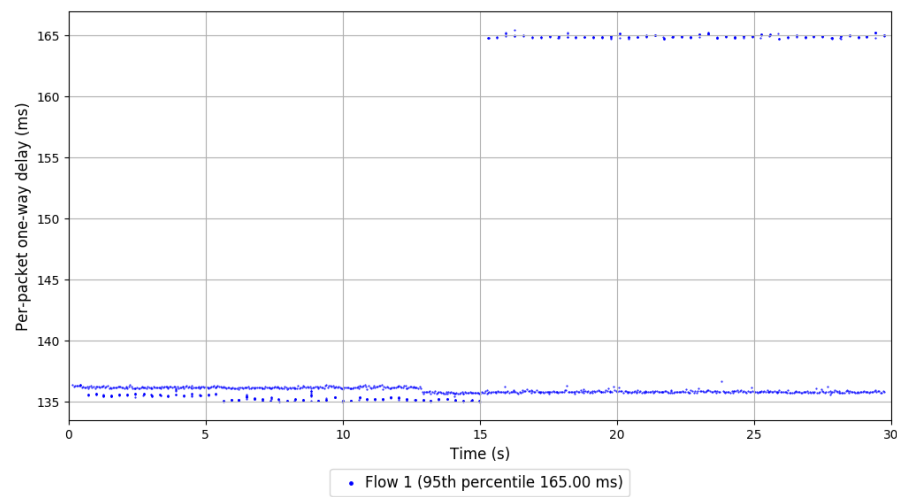
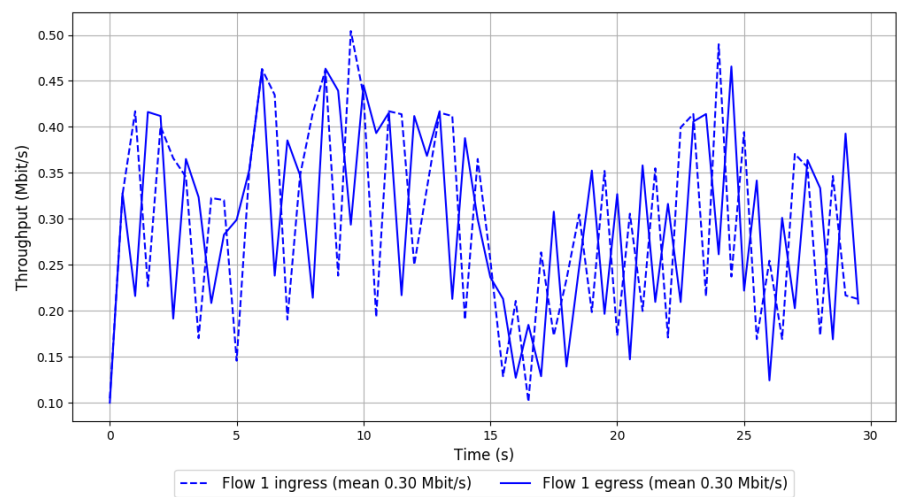
-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 165.002 ms

Loss rate: 0.05%

Run 10: Report of Sprout — Data Link

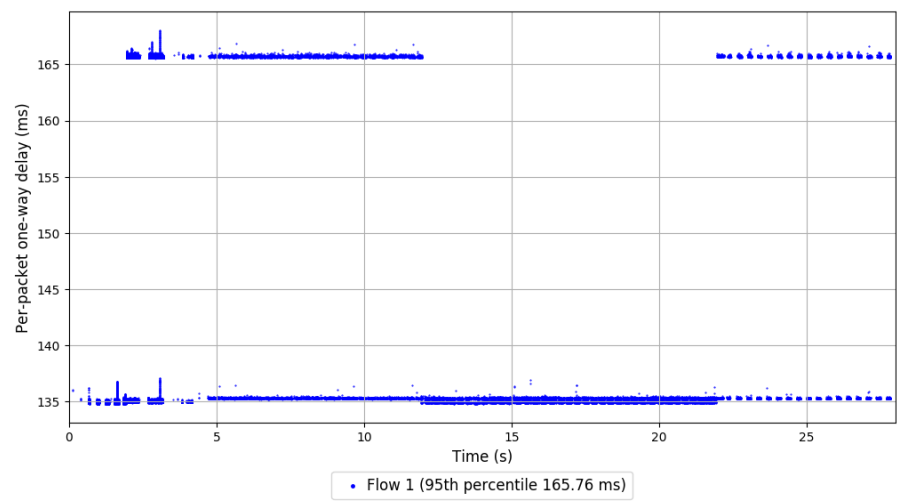
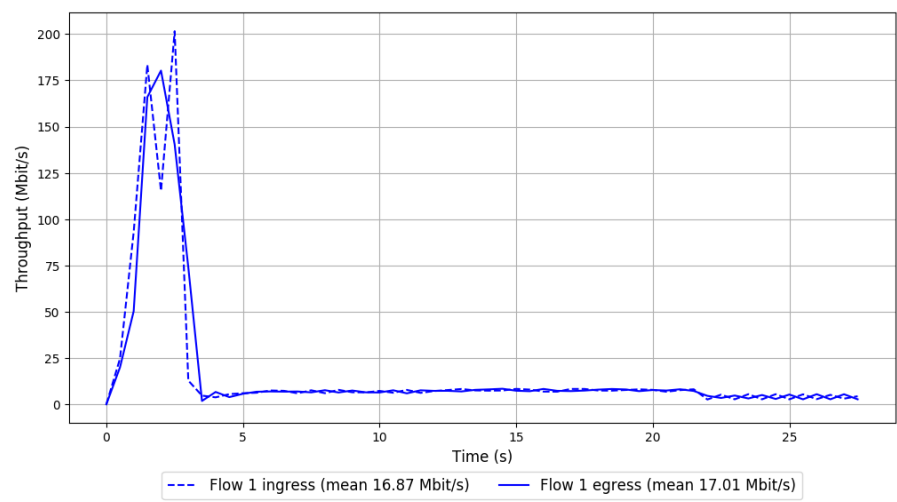


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 06:18:51
End at: 2017-11-16 06:19:21

# Below is generated by plot.py at 2017-11-16 10:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.01 Mbit/s
95th percentile per-packet one-way delay: 165.765 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 17.01 Mbit/s
95th percentile per-packet one-way delay: 165.765 ms
Loss rate: 0.18%
```

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

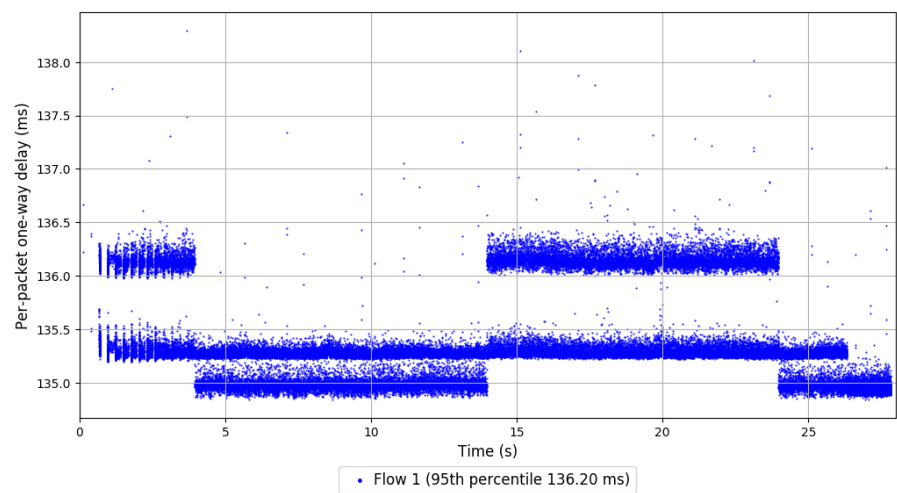
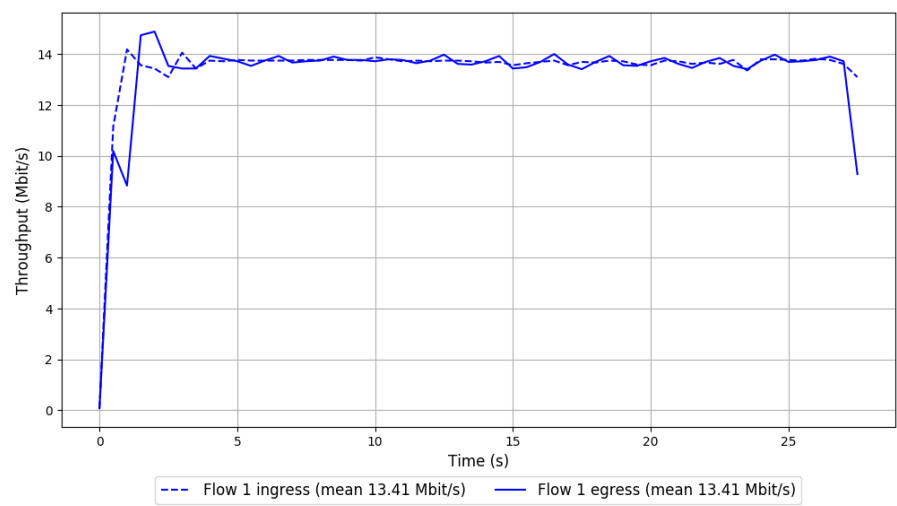


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 06:30:19
End at: 2017-11-16 06:30:49

# Below is generated by plot.py at 2017-11-16 10:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 136.196 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 136.196 ms
Loss rate: 0.98%
```

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

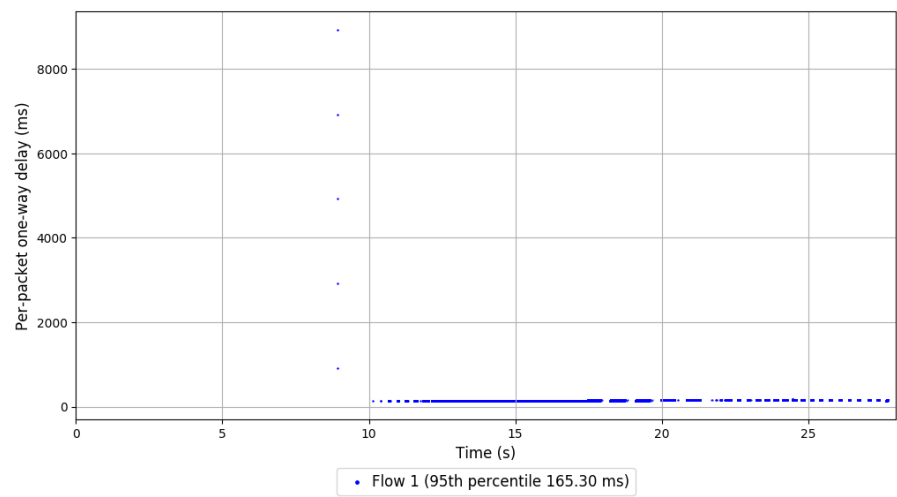
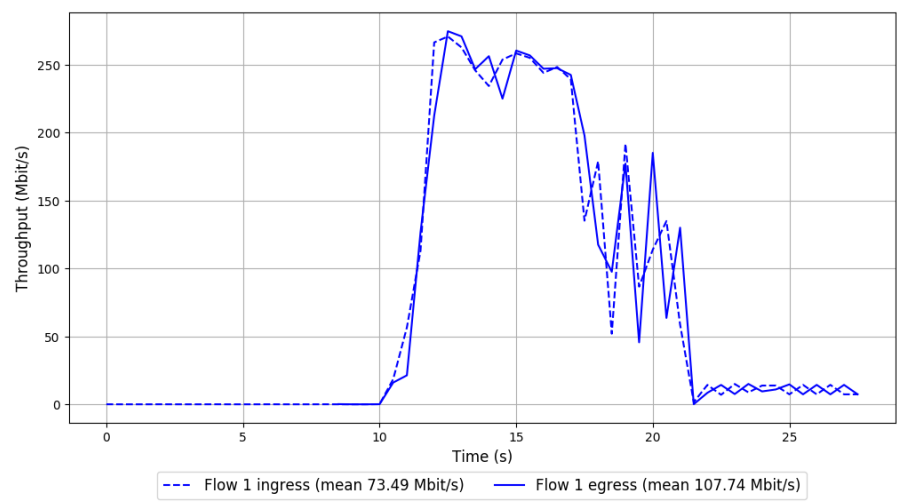


Run 3: Statistics of TaoVA-100x

Start at: 2017-11-16 06:41:45

End at: 2017-11-16 06:42:15

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

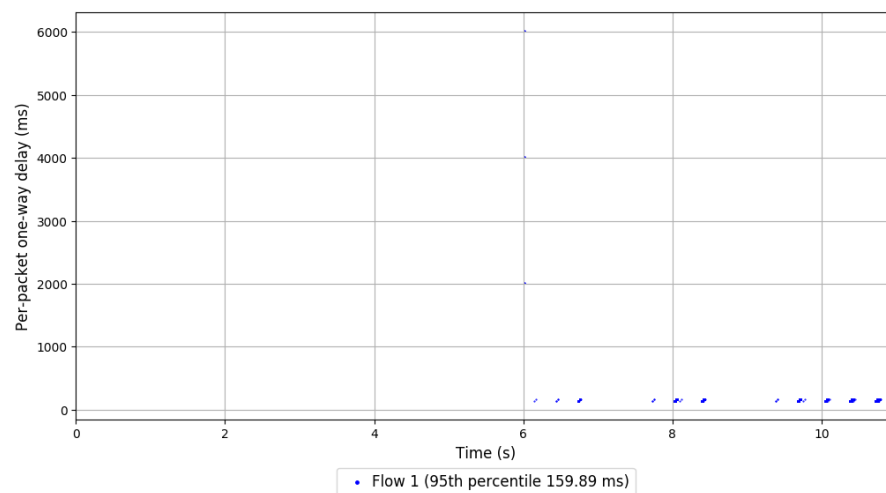
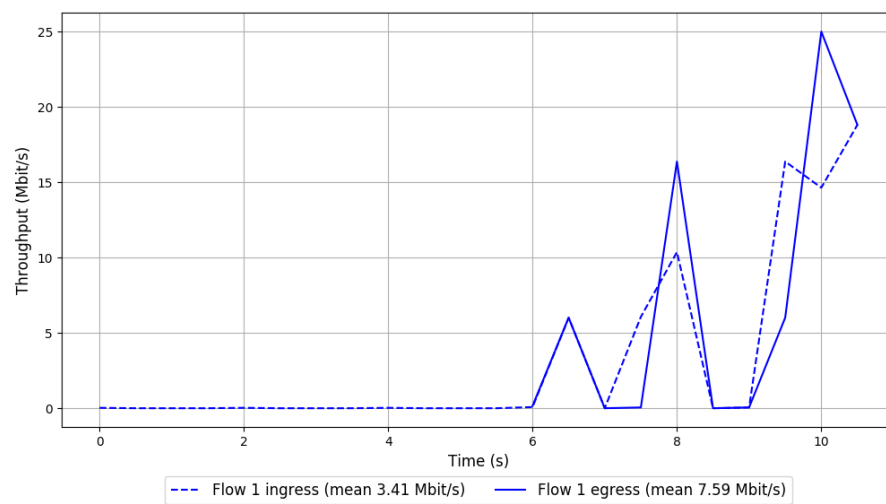


Run 4: Statistics of TaoVA-100x

Start at: 2017-11-16 06:53:02

End at: 2017-11-16 06:53:32

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-16 07:04:40

End at: 2017-11-16 07:05:10

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.38 Mbit/s

95th percentile per-packet one-way delay: 137.108 ms

Loss rate: 1.04%

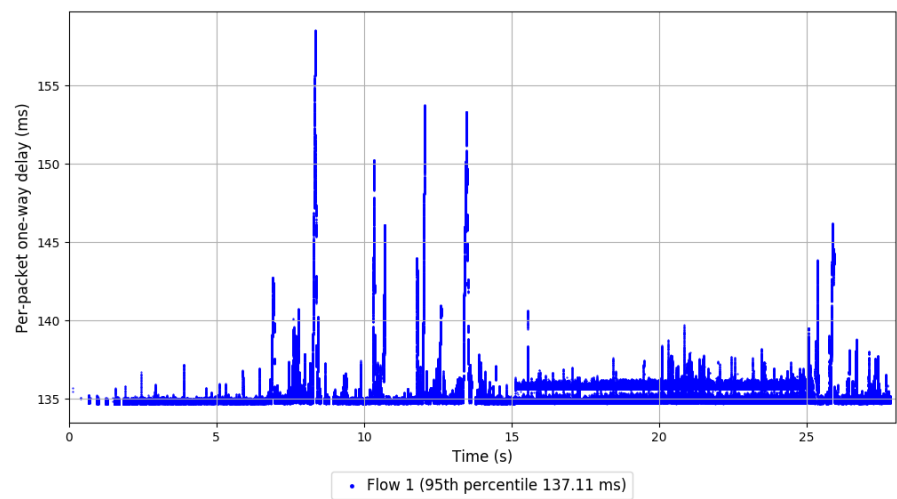
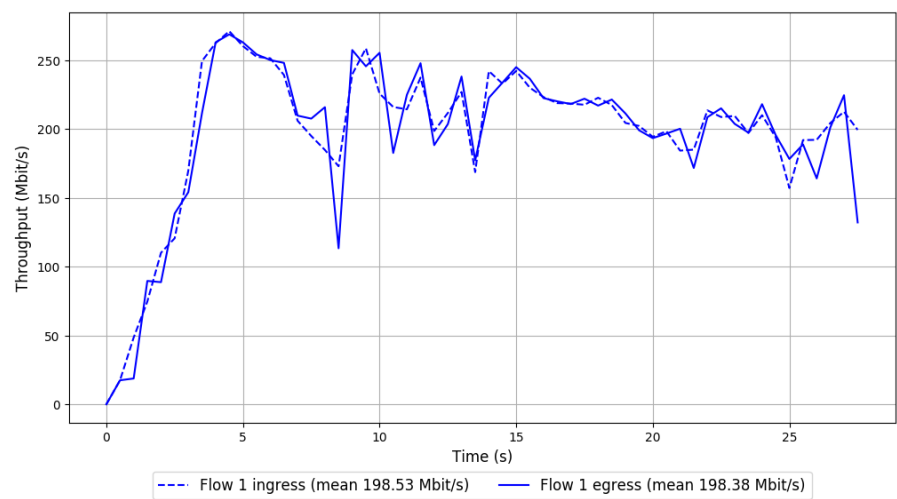
-- Flow 1:

Average throughput: 198.38 Mbit/s

95th percentile per-packet one-way delay: 137.108 ms

Loss rate: 1.04%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 07:16:28

End at: 2017-11-16 07:16:58

Below is generated by plot.py at 2017-11-16 10:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 165.331 ms

Loss rate: 0.00%

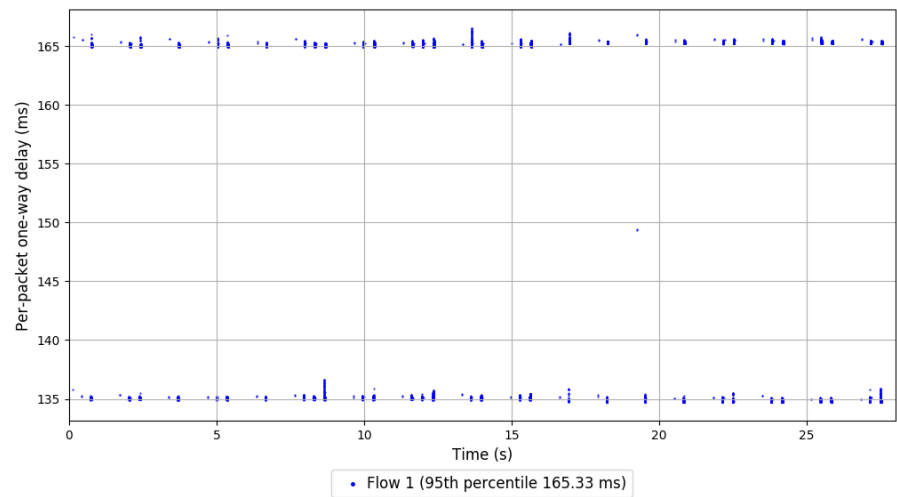
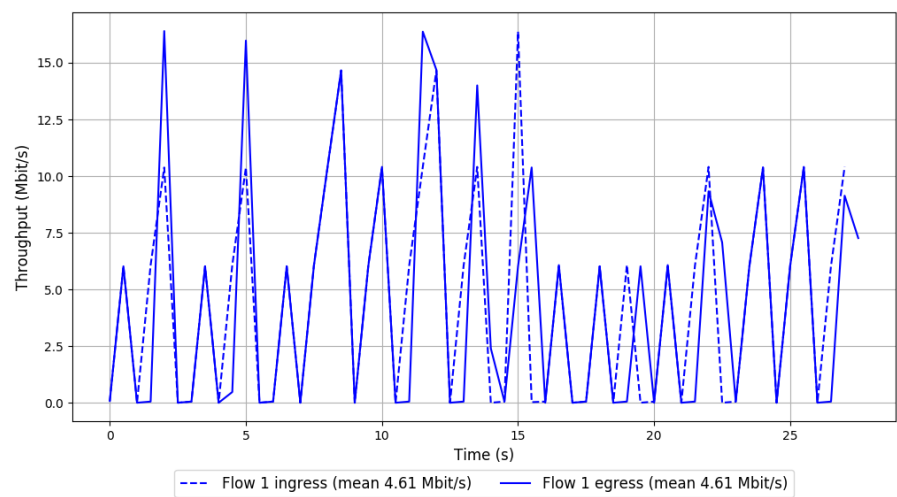
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 165.331 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 07:27:43

End at: 2017-11-16 07:28:13

Below is generated by plot.py at 2017-11-16 10:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.37 Mbit/s

95th percentile per-packet one-way delay: 135.011 ms

Loss rate: 1.03%

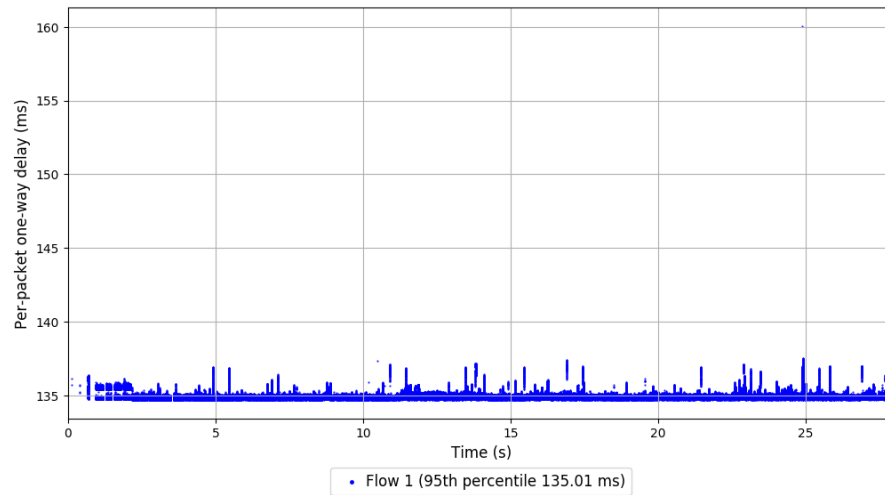
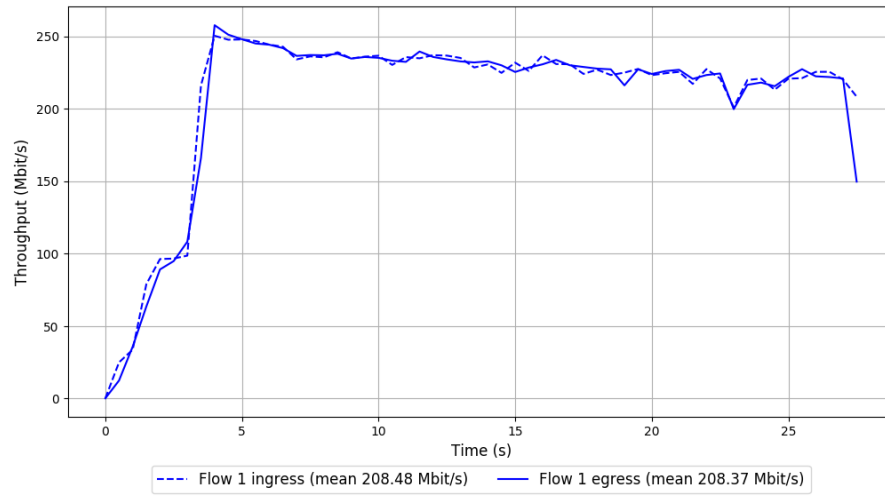
-- Flow 1:

Average throughput: 208.37 Mbit/s

95th percentile per-packet one-way delay: 135.011 ms

Loss rate: 1.03%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 07:39:25

End at: 2017-11-16 07:39:55

Below is generated by plot.py at 2017-11-16 10:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 135.801 ms

Loss rate: 0.37%

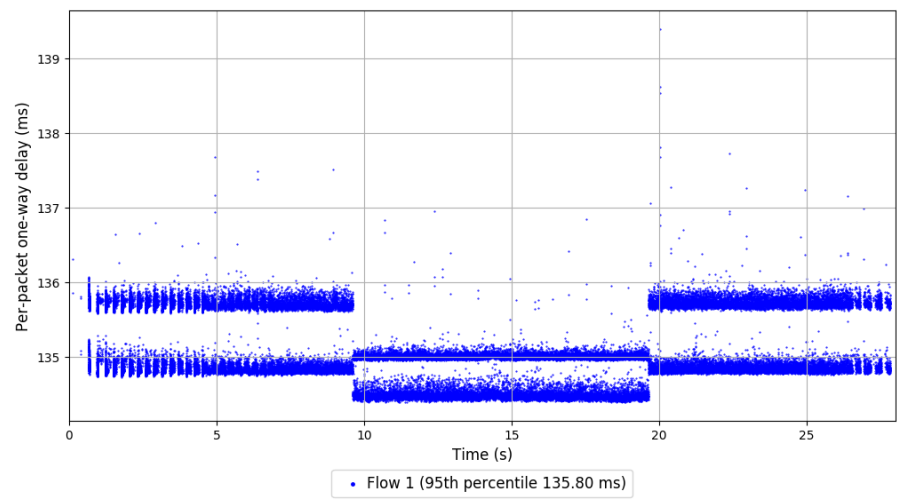
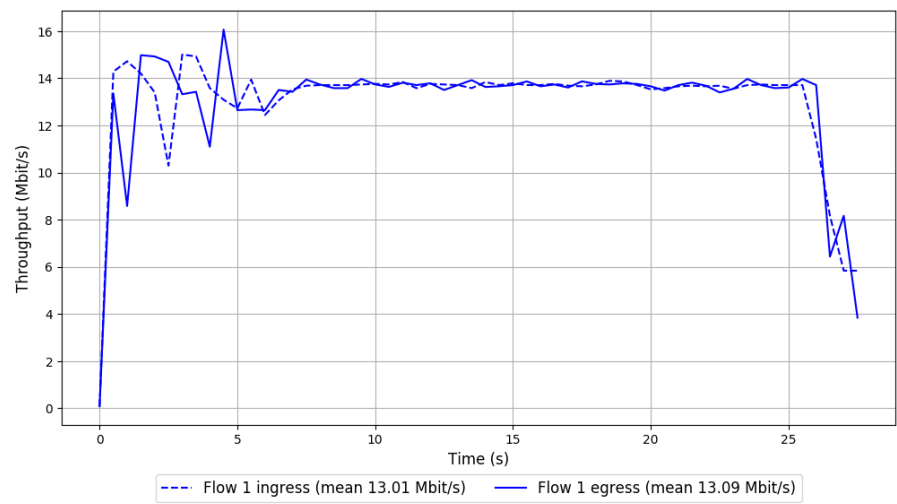
-- Flow 1:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 135.801 ms

Loss rate: 0.37%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 07:50:55

End at: 2017-11-16 07:51:25

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.58 Mbit/s

95th percentile per-packet one-way delay: 136.162 ms

Loss rate: 1.09%

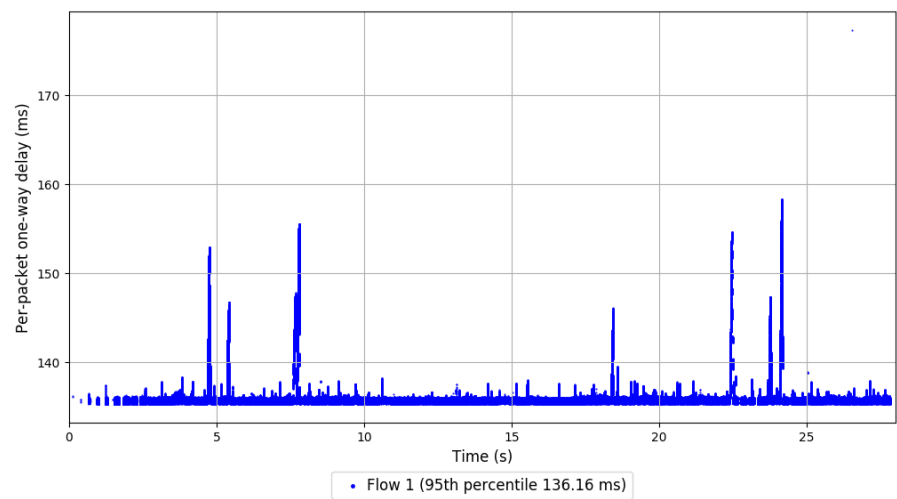
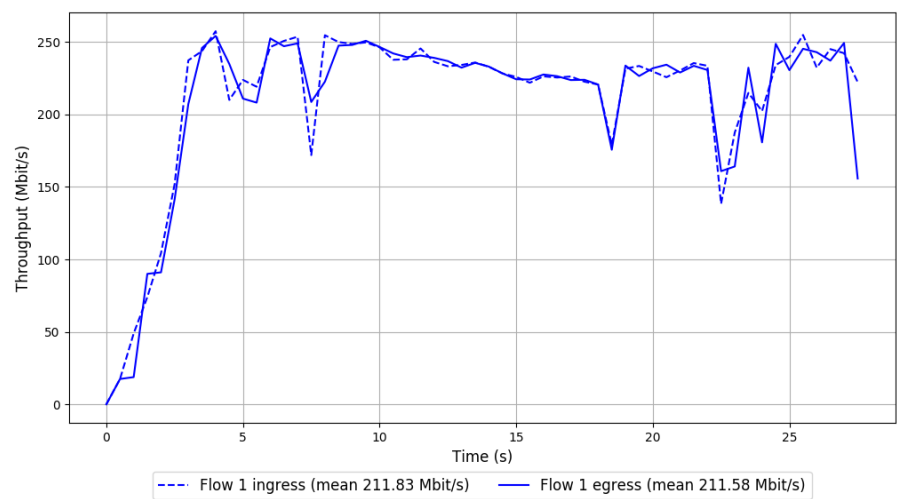
-- Flow 1:

Average throughput: 211.58 Mbit/s

95th percentile per-packet one-way delay: 136.162 ms

Loss rate: 1.09%

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

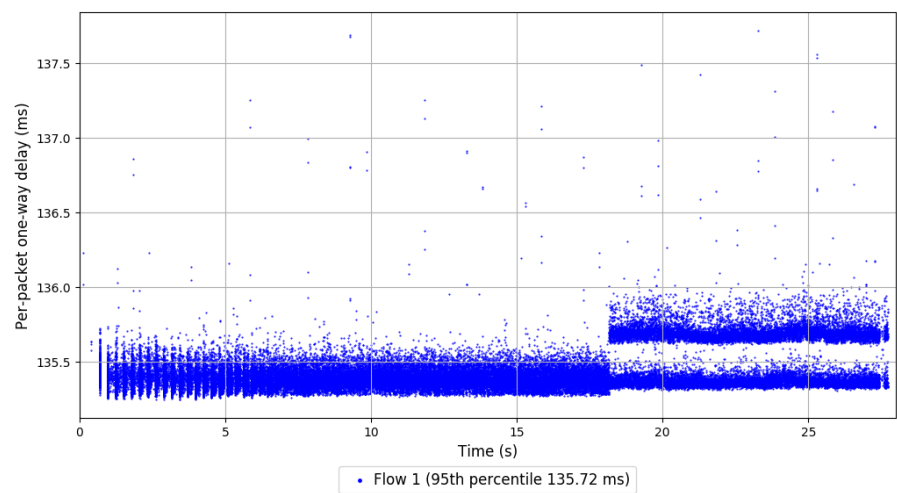
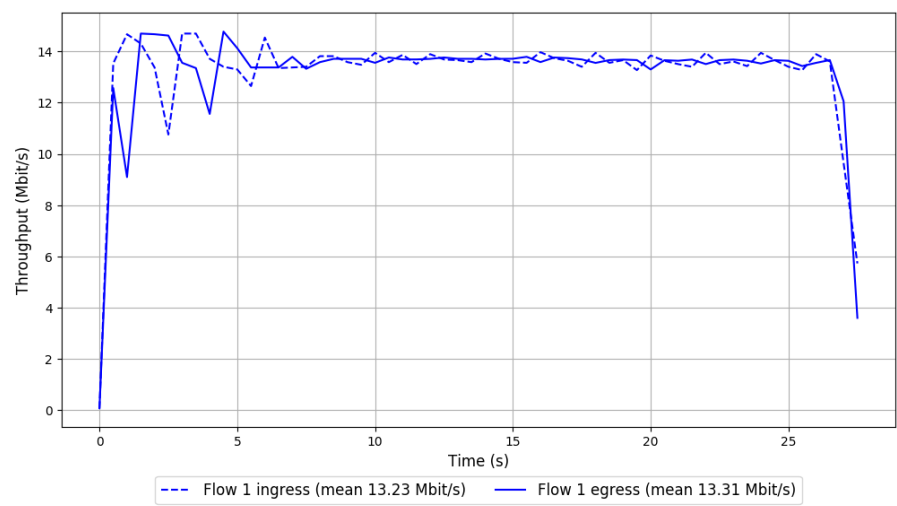


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 08:02:35
End at: 2017-11-16 08:03:05

# Below is generated by plot.py at 2017-11-16 10:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 135.718 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 135.718 ms
Loss rate: 0.47%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 06:16:30

End at: 2017-11-16 06:17:00

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 136.085 ms

Loss rate: 1.32%

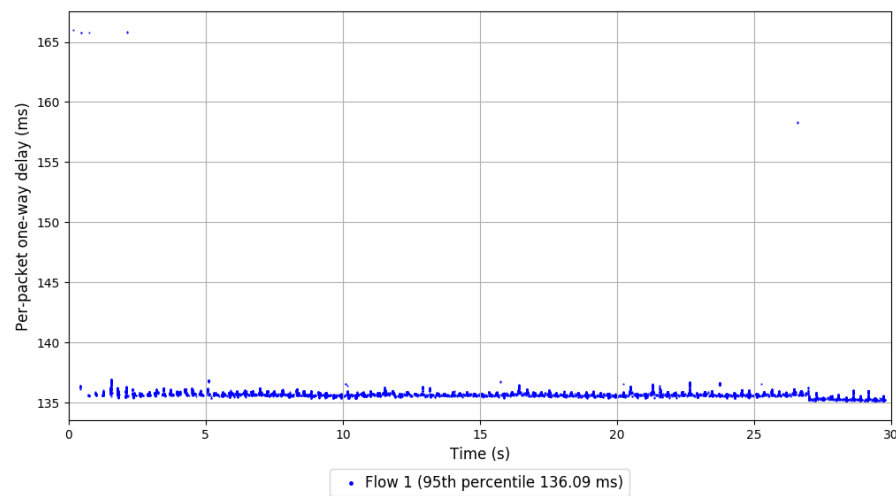
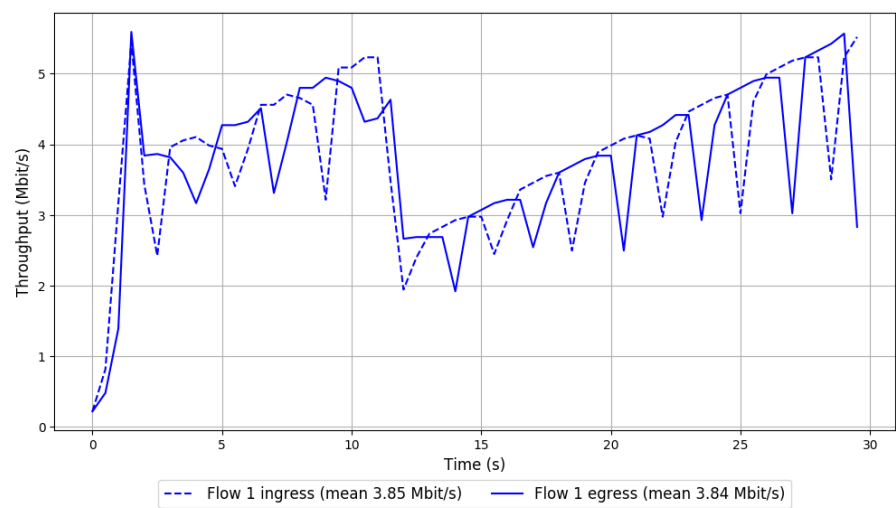
-- Flow 1:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 136.085 ms

Loss rate: 1.32%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 06:27:57

End at: 2017-11-16 06:28:27

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 136.836 ms

Loss rate: 1.10%

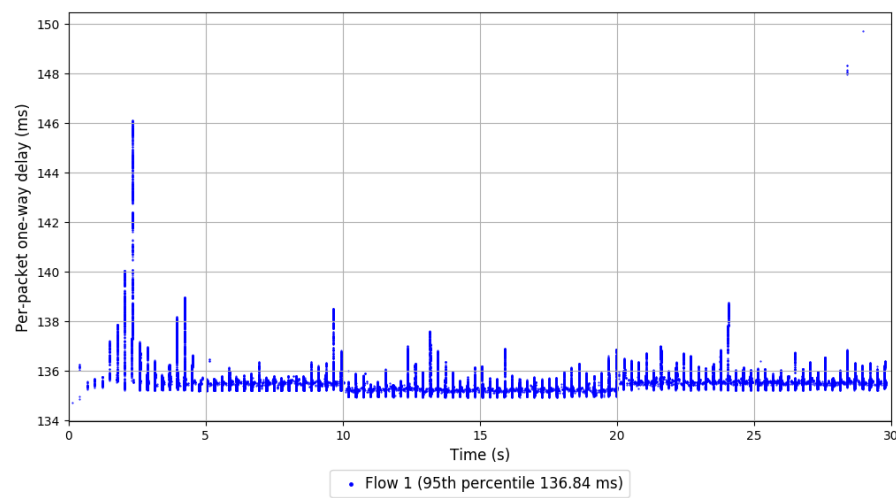
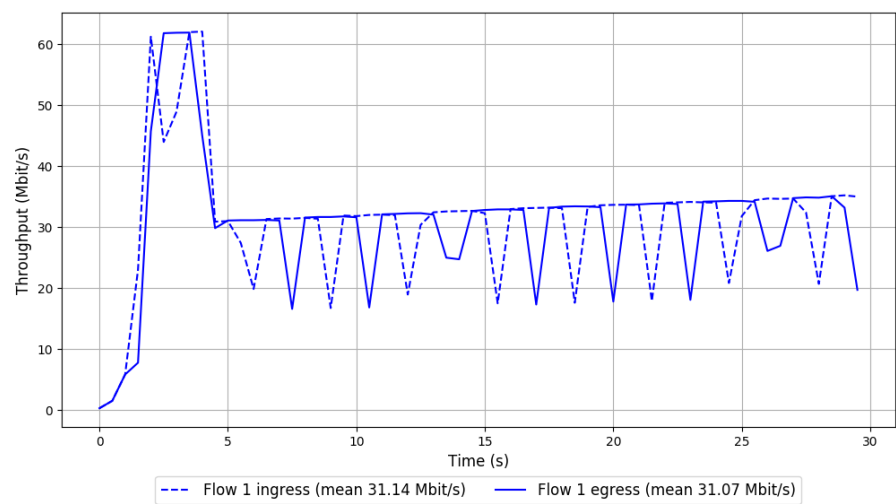
-- Flow 1:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 136.836 ms

Loss rate: 1.10%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 06:39:22

End at: 2017-11-16 06:39:52

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 165.417 ms

Loss rate: 1.02%

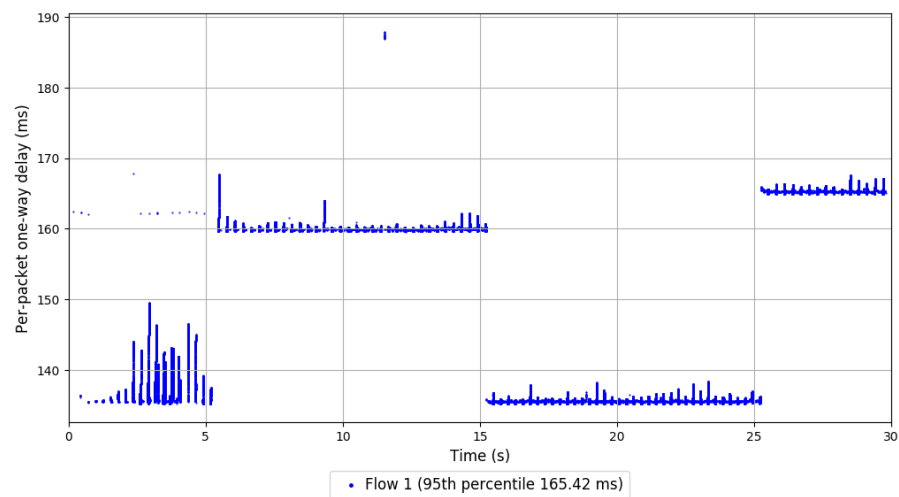
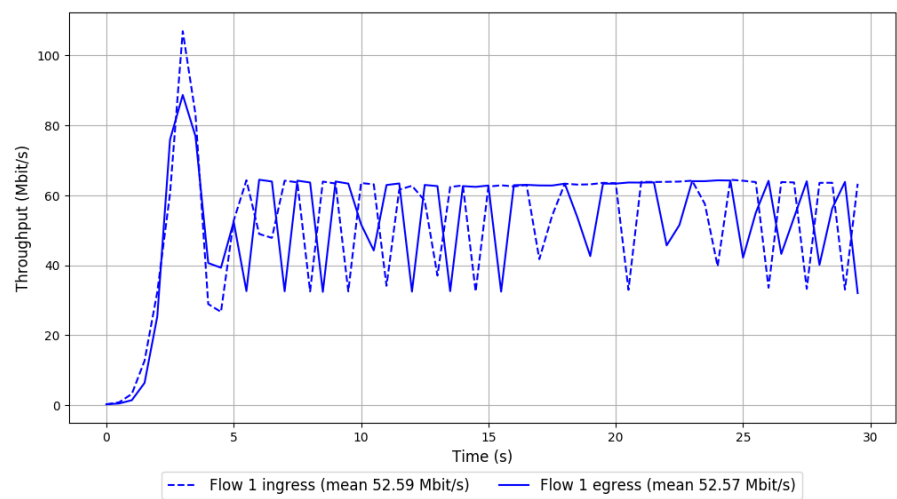
-- Flow 1:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 165.417 ms

Loss rate: 1.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 06:50:39

End at: 2017-11-16 06:51:10

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 142.646 ms

Loss rate: 0.26%

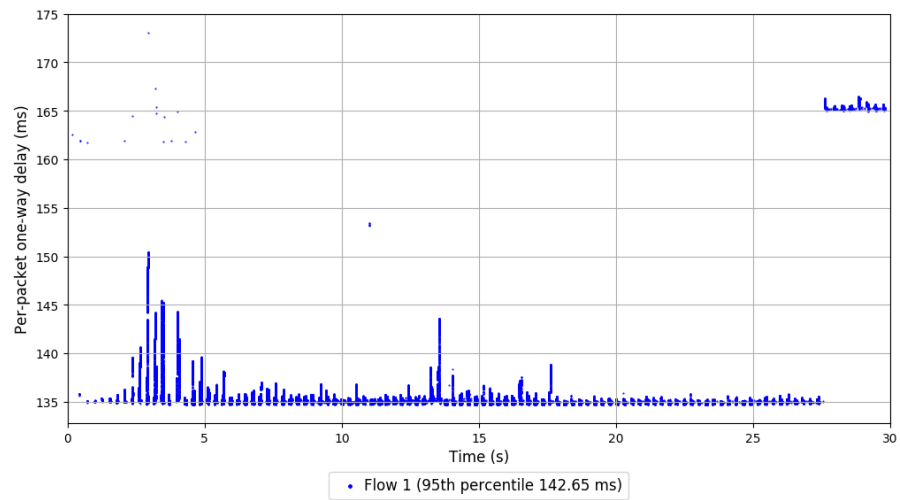
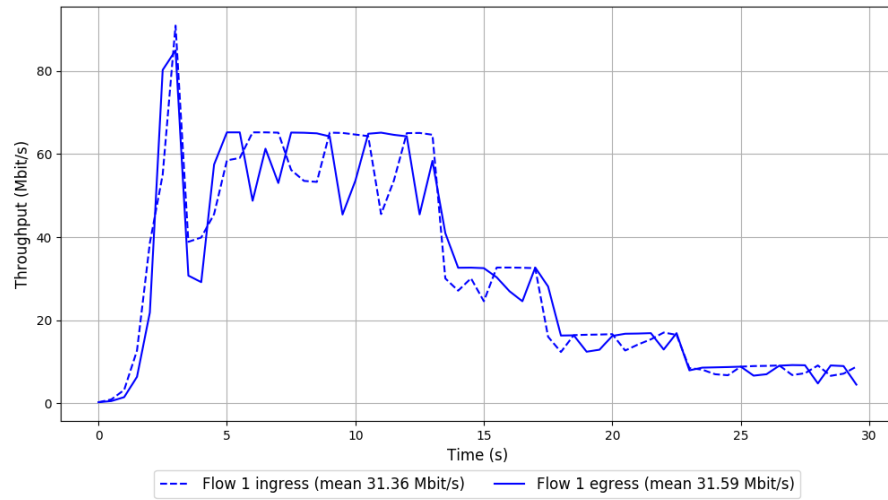
-- Flow 1:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 142.646 ms

Loss rate: 0.26%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 07:02:17

End at: 2017-11-16 07:02:47

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.45 Mbit/s

95th percentile per-packet one-way delay: 136.502 ms

Loss rate: 0.41%

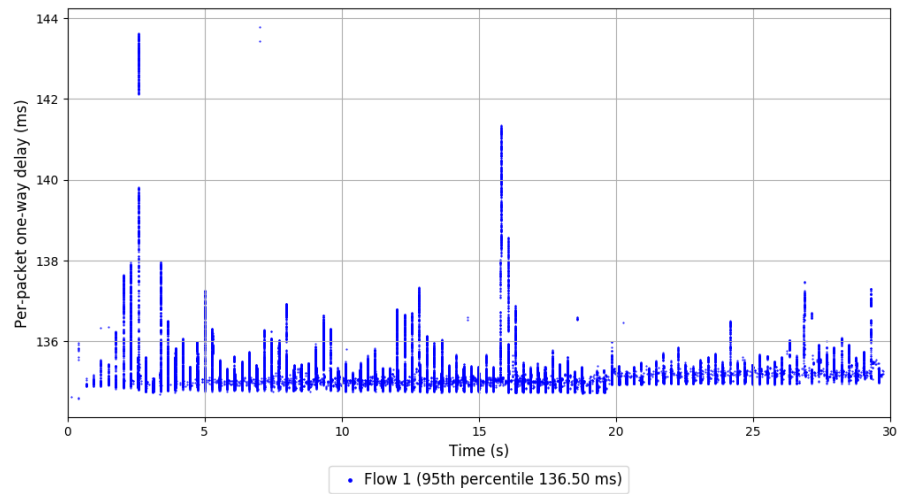
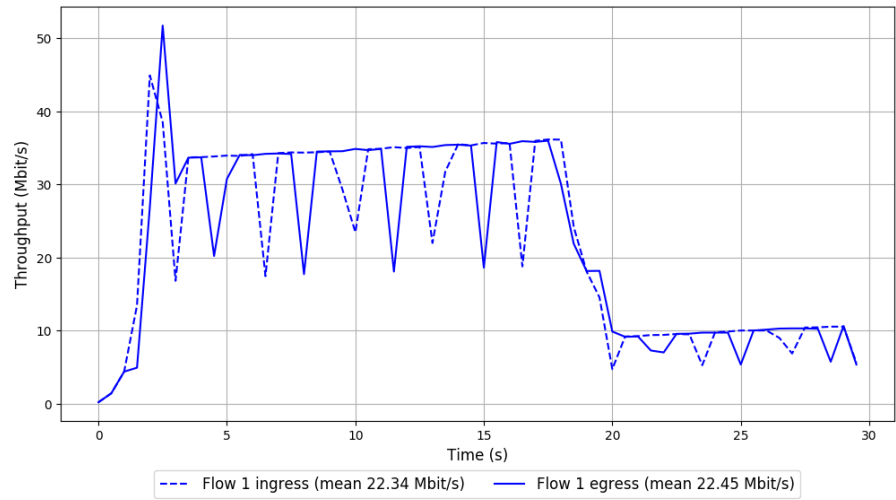
-- Flow 1:

Average throughput: 22.45 Mbit/s

95th percentile per-packet one-way delay: 136.502 ms

Loss rate: 0.41%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 07:14:09

End at: 2017-11-16 07:14:39

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 165.240 ms

Loss rate: 1.77%

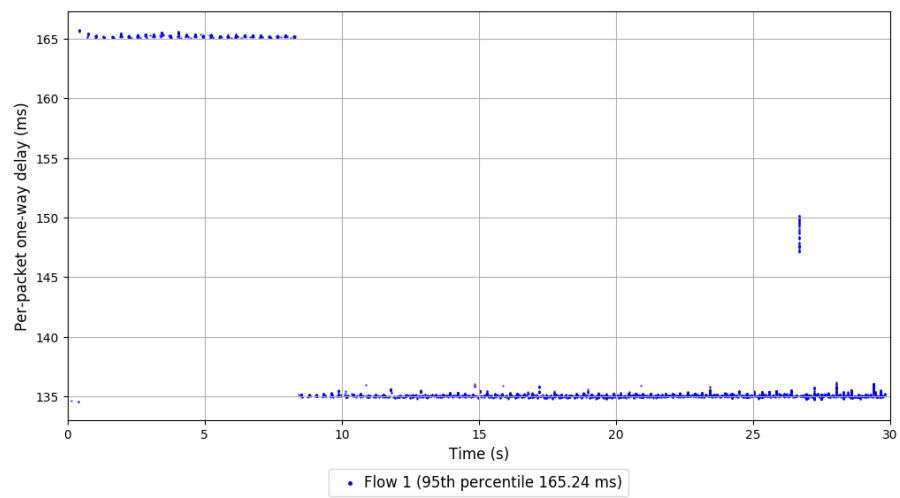
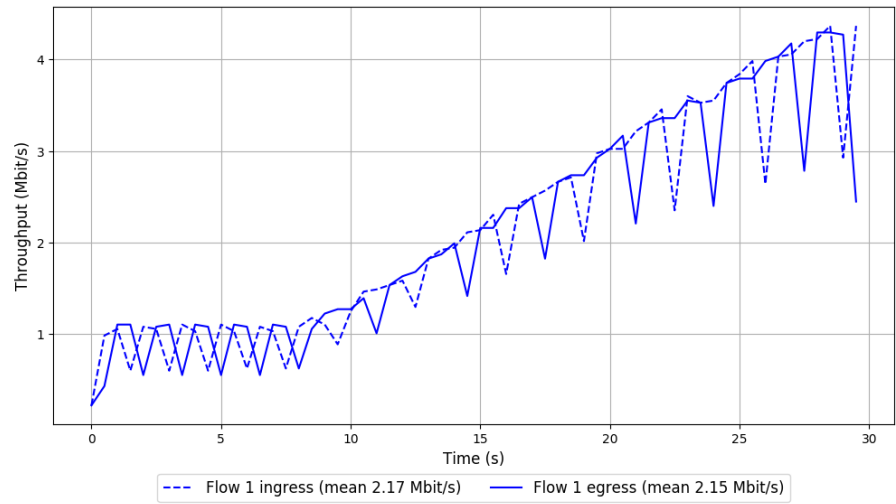
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 165.240 ms

Loss rate: 1.77%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 07:25:27

End at: 2017-11-16 07:25:57

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 165.297 ms

Loss rate: 1.97%

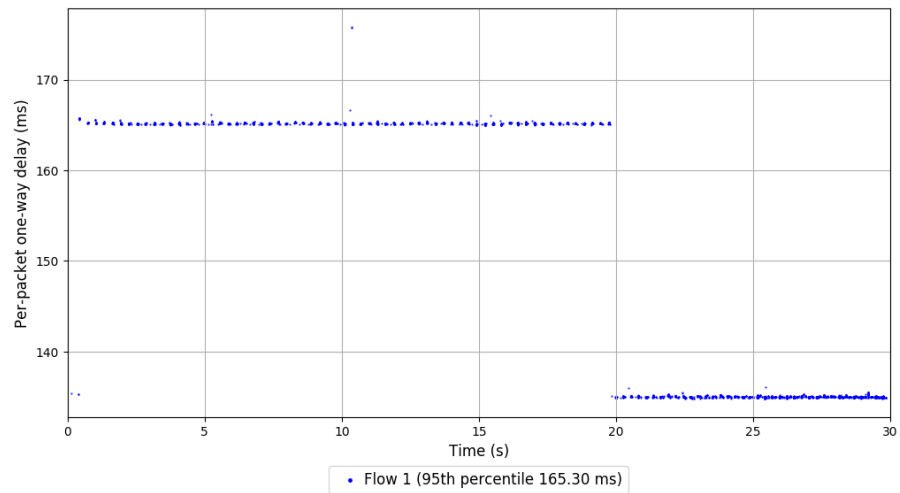
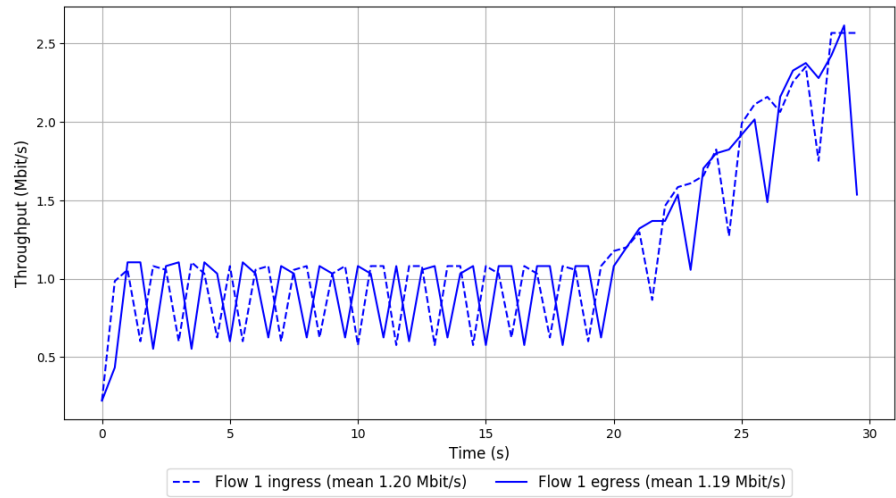
-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 165.297 ms

Loss rate: 1.97%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 07:37:04

End at: 2017-11-16 07:37:34

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.45 Mbit/s

95th percentile per-packet one-way delay: 137.390 ms

Loss rate: 1.63%

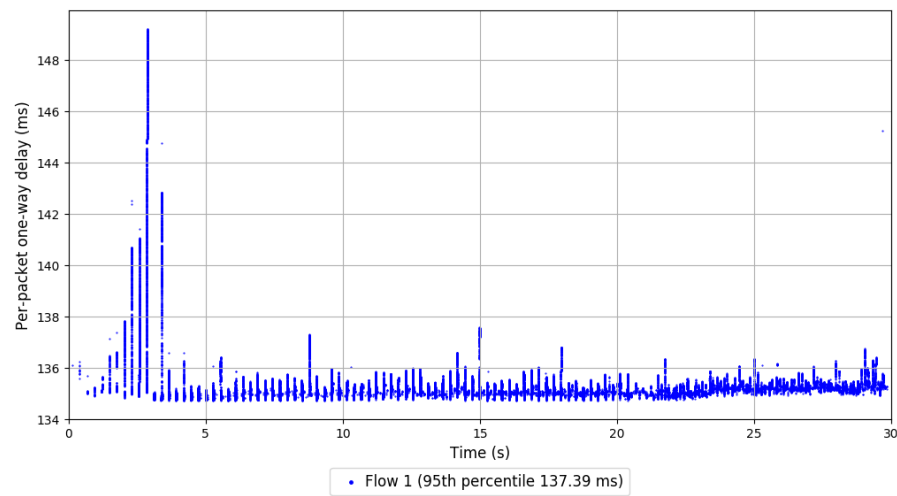
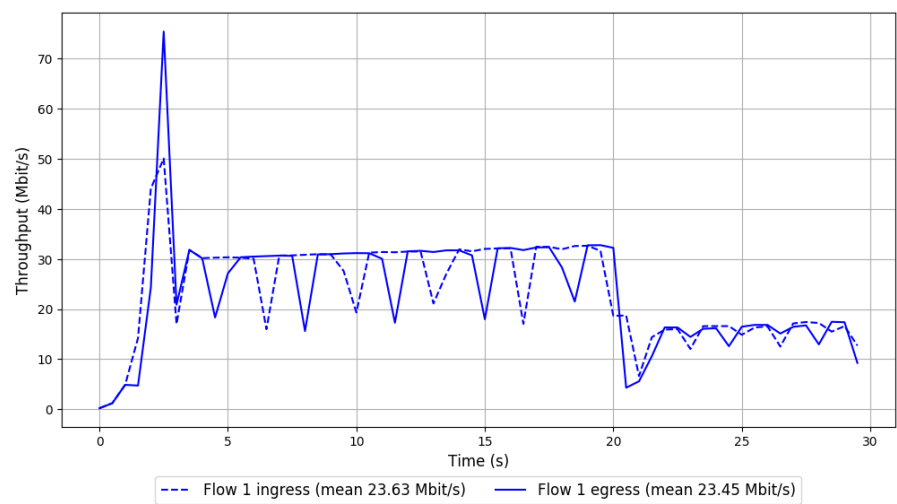
-- Flow 1:

Average throughput: 23.45 Mbit/s

95th percentile per-packet one-way delay: 137.390 ms

Loss rate: 1.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 07:48:33

End at: 2017-11-16 07:49:03

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.43 Mbit/s

95th percentile per-packet one-way delay: 136.678 ms

Loss rate: 1.01%

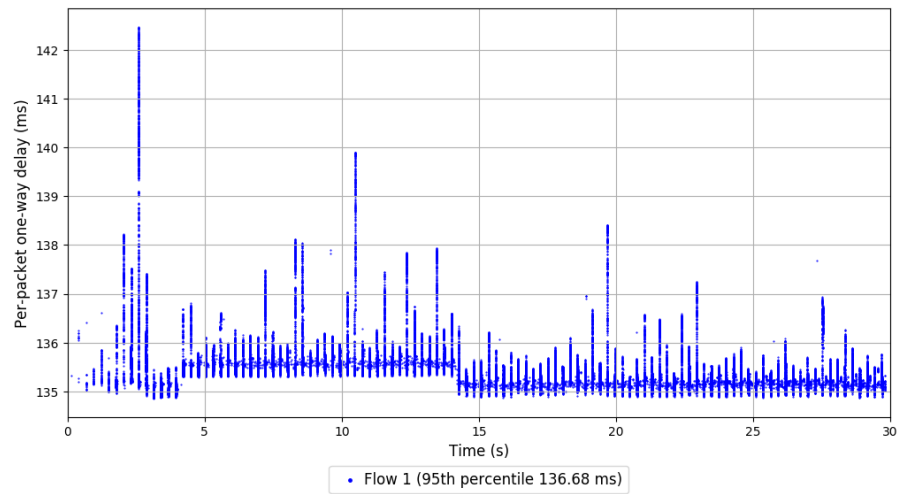
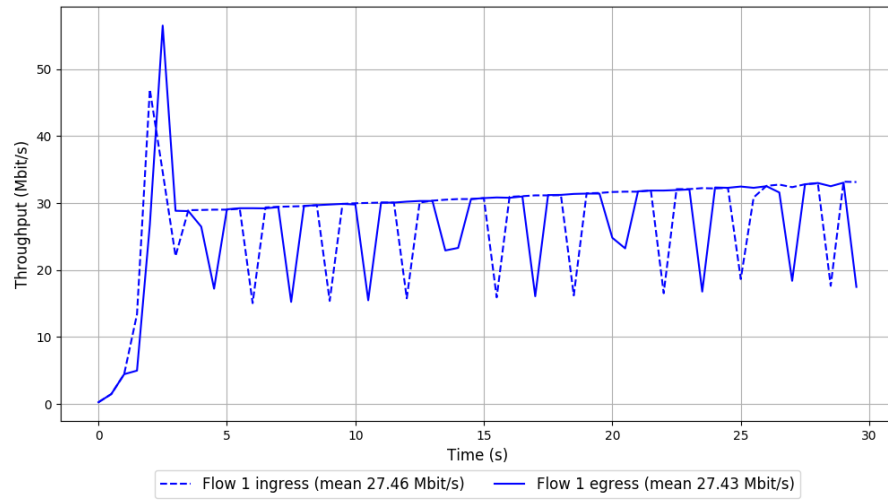
-- Flow 1:

Average throughput: 27.43 Mbit/s

95th percentile per-packet one-way delay: 136.678 ms

Loss rate: 1.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 08:00:15

End at: 2017-11-16 08:00:45

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.88 Mbit/s

95th percentile per-packet one-way delay: 136.113 ms

Loss rate: 1.30%

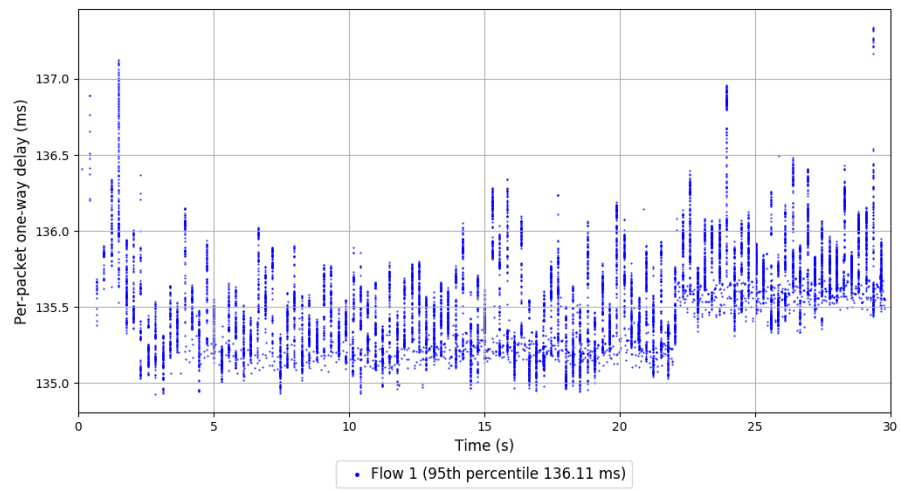
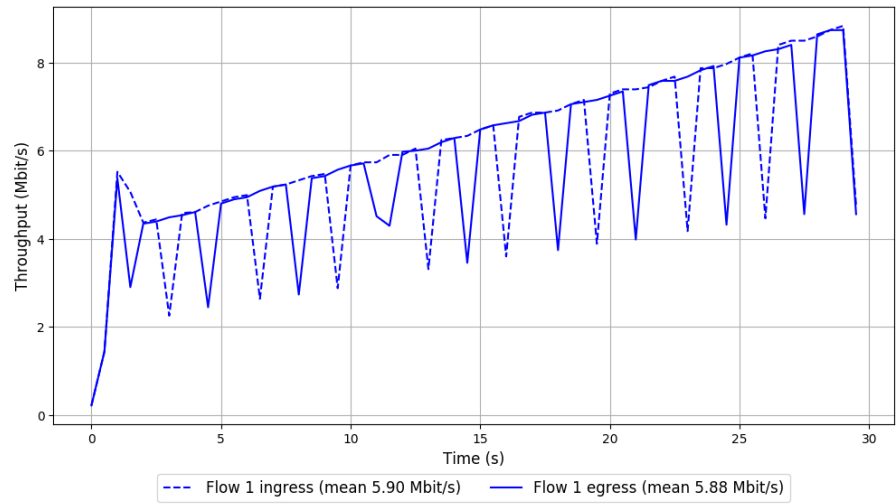
-- Flow 1:

Average throughput: 5.88 Mbit/s

95th percentile per-packet one-way delay: 136.113 ms

Loss rate: 1.30%

Run 10: Report of TCP Vegas — Data Link

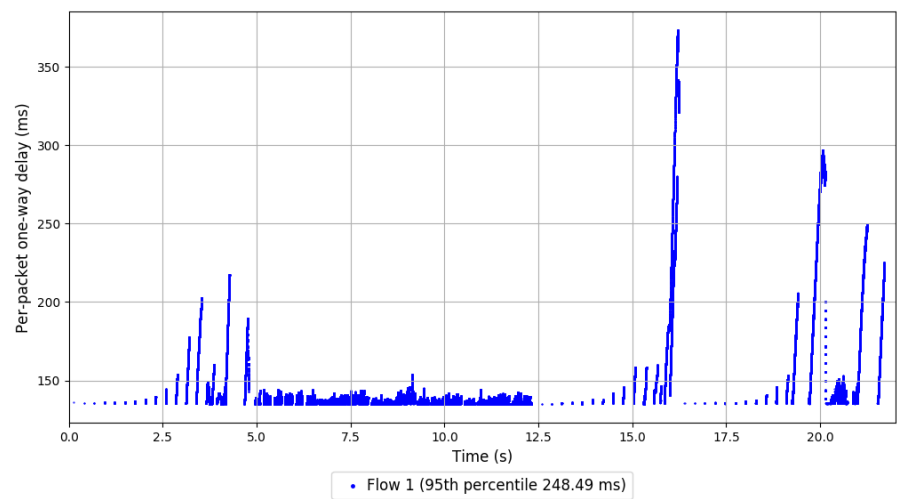
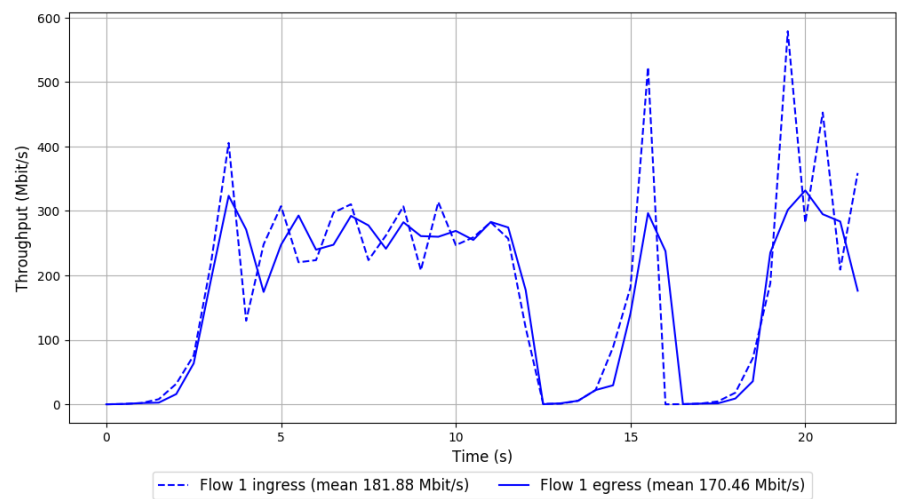


Run 1: Statistics of Verus

Start at: 2017-11-16 06:19:35

End at: 2017-11-16 06:20:05

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-16 06:31:04

End at: 2017-11-16 06:31:34

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.40 Mbit/s

95th percentile per-packet one-way delay: 194.485 ms

Loss rate: 0.03%

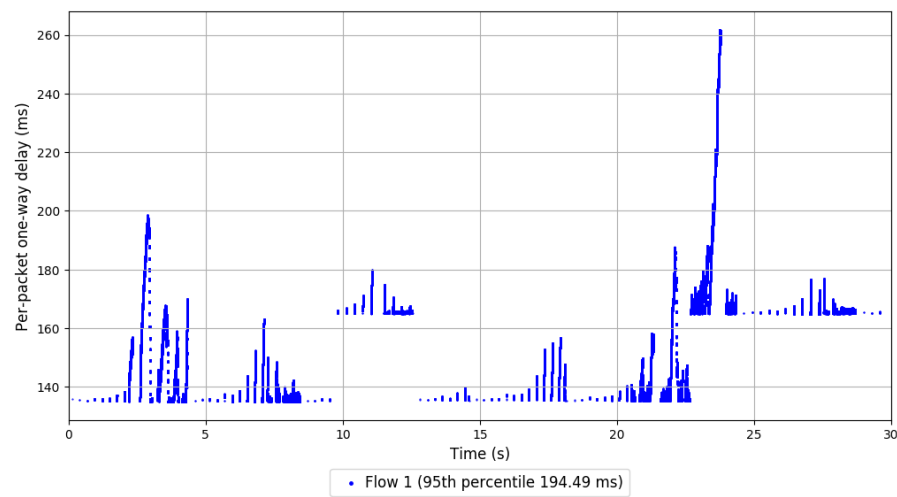
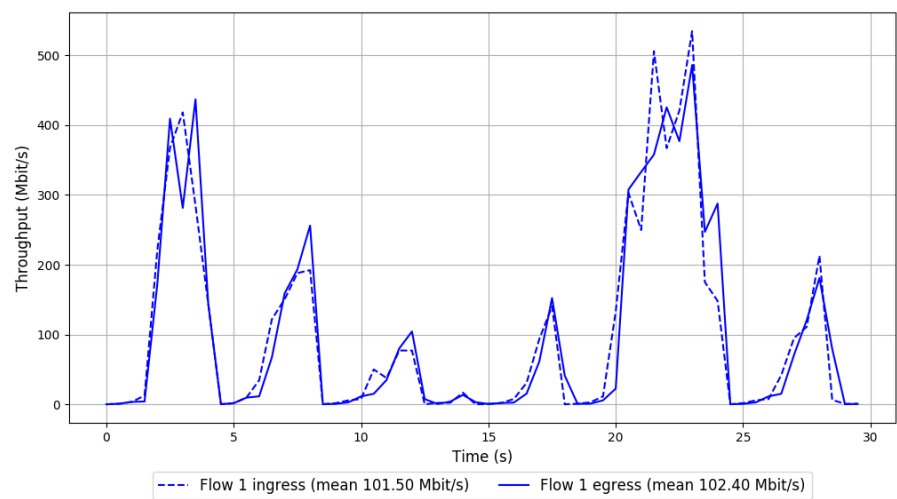
-- Flow 1:

Average throughput: 102.40 Mbit/s

95th percentile per-packet one-way delay: 194.485 ms

Loss rate: 0.03%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-16 06:42:36

End at: 2017-11-16 06:43:06

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.75 Mbit/s

95th percentile per-packet one-way delay: 203.976 ms

Loss rate: 1.01%

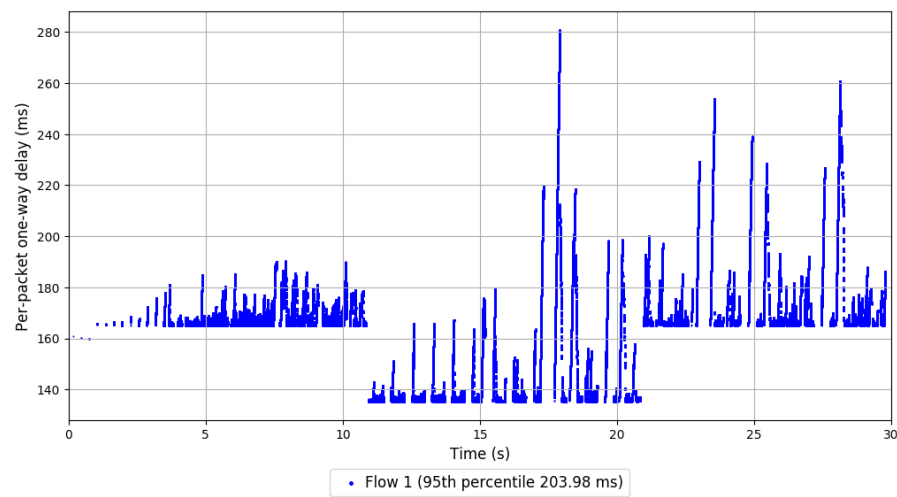
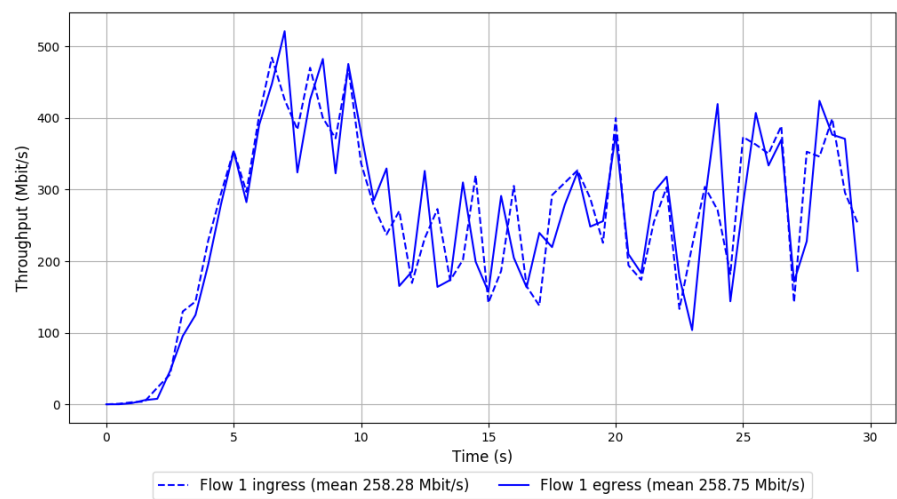
-- Flow 1:

Average throughput: 258.75 Mbit/s

95th percentile per-packet one-way delay: 203.976 ms

Loss rate: 1.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-16 06:53:46

End at: 2017-11-16 06:54:16

Below is generated by plot.py at 2017-11-16 10:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.55 Mbit/s

95th percentile per-packet one-way delay: 168.033 ms

Loss rate: 0.85%

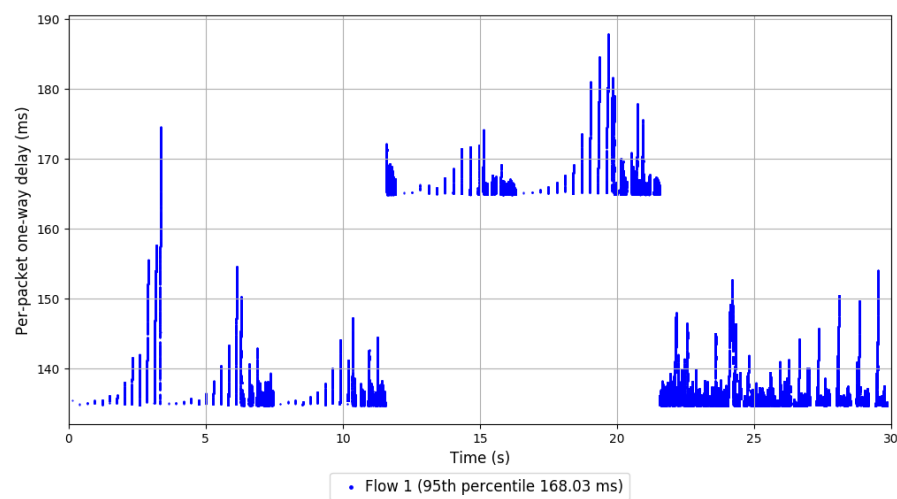
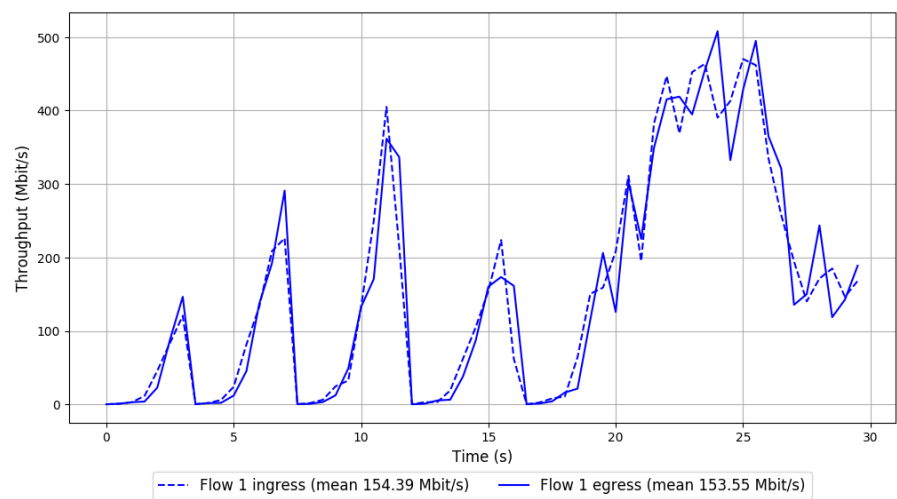
-- Flow 1:

Average throughput: 153.55 Mbit/s

95th percentile per-packet one-way delay: 168.033 ms

Loss rate: 0.85%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-16 07:05:43

End at: 2017-11-16 07:06:13

Below is generated by plot.py at 2017-11-16 10:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.42 Mbit/s

95th percentile per-packet one-way delay: 193.062 ms

Loss rate: 1.17%

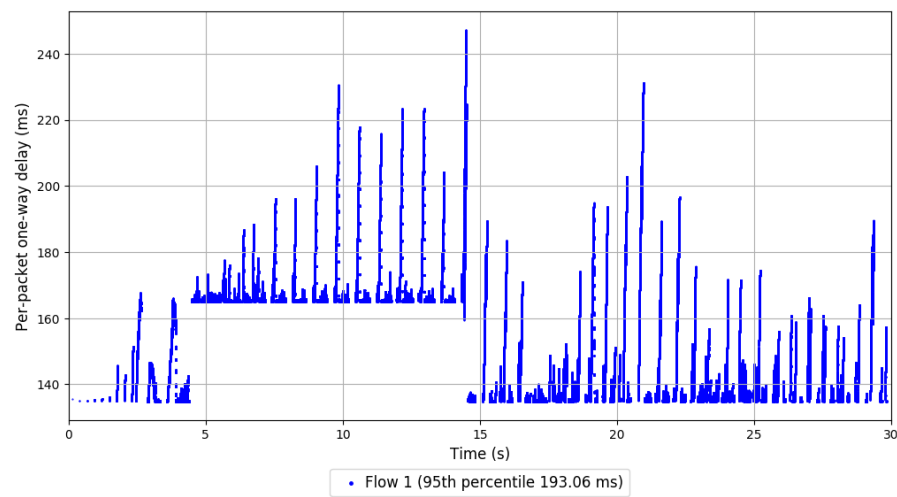
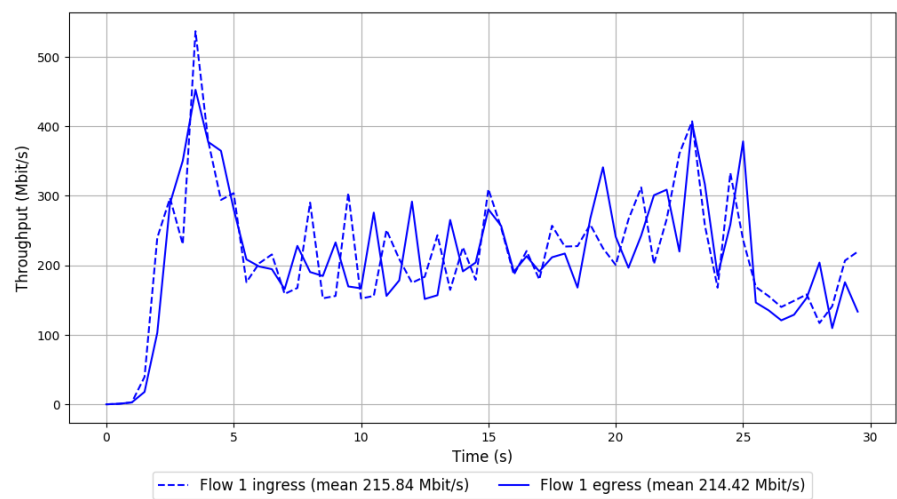
-- Flow 1:

Average throughput: 214.42 Mbit/s

95th percentile per-packet one-way delay: 193.062 ms

Loss rate: 1.17%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-16 07:17:12

End at: 2017-11-16 07:17:42

Below is generated by plot.py at 2017-11-16 10:24:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.19 Mbit/s

95th percentile per-packet one-way delay: 355.887 ms

Loss rate: 6.77%

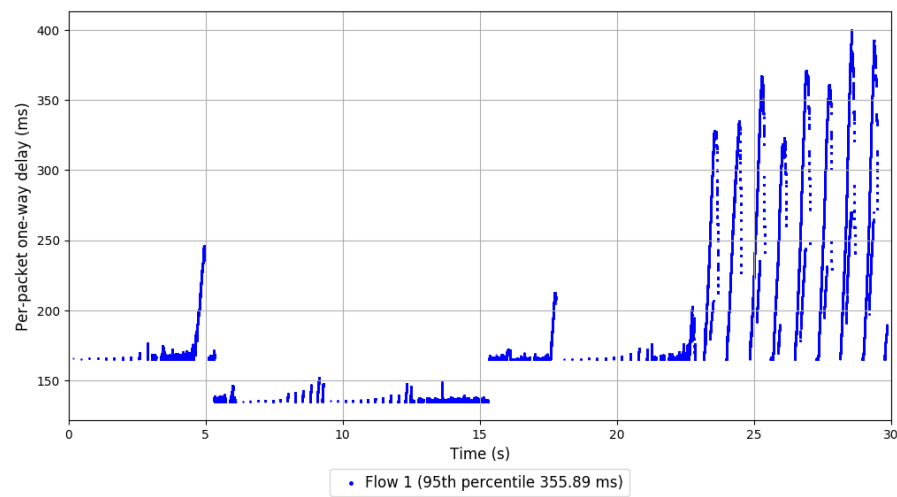
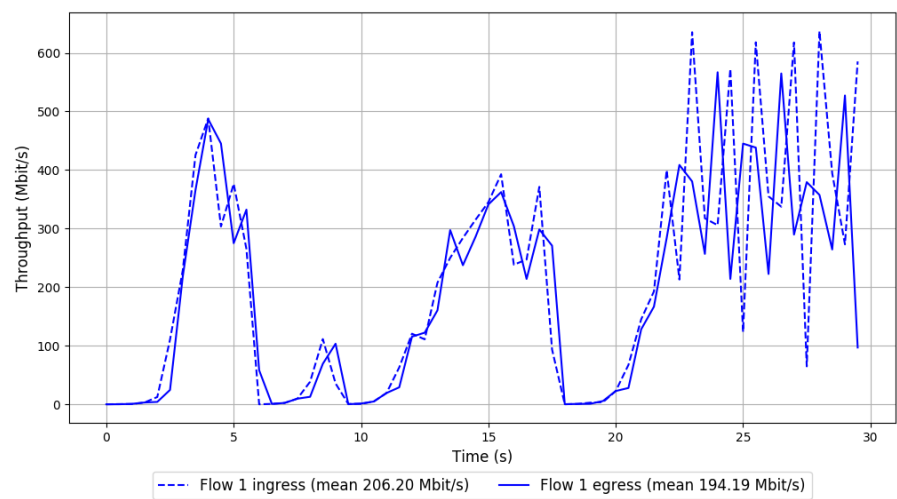
-- Flow 1:

Average throughput: 194.19 Mbit/s

95th percentile per-packet one-way delay: 355.887 ms

Loss rate: 6.77%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-16 07:28:47

End at: 2017-11-16 07:29:17

Below is generated by plot.py at 2017-11-16 10:24:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.53 Mbit/s

95th percentile per-packet one-way delay: 231.205 ms

Loss rate: 2.68%

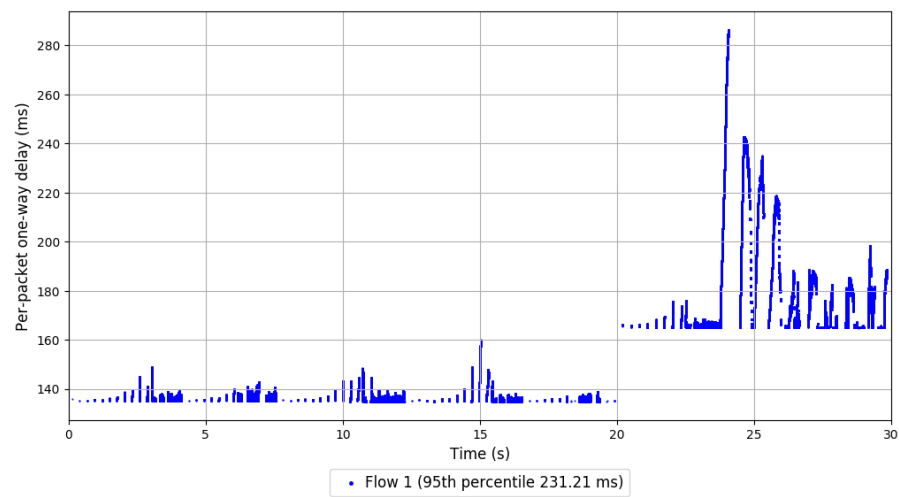
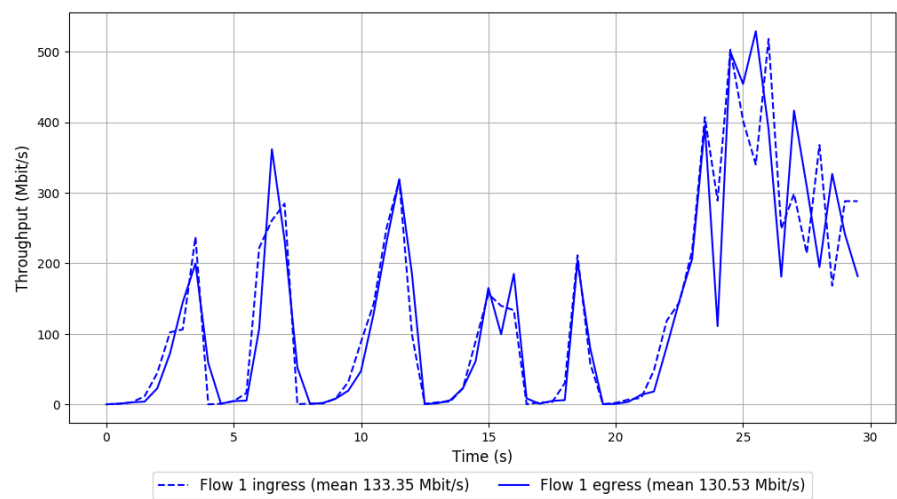
-- Flow 1:

Average throughput: 130.53 Mbit/s

95th percentile per-packet one-way delay: 231.205 ms

Loss rate: 2.68%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-16 07:40:10

End at: 2017-11-16 07:40:40

Below is generated by plot.py at 2017-11-16 10:26:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.97 Mbit/s

95th percentile per-packet one-way delay: 172.943 ms

Loss rate: 1.61%

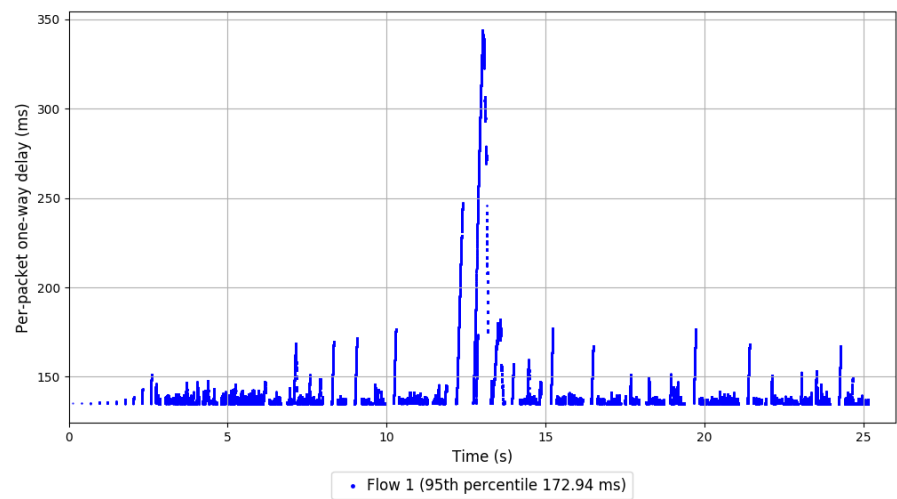
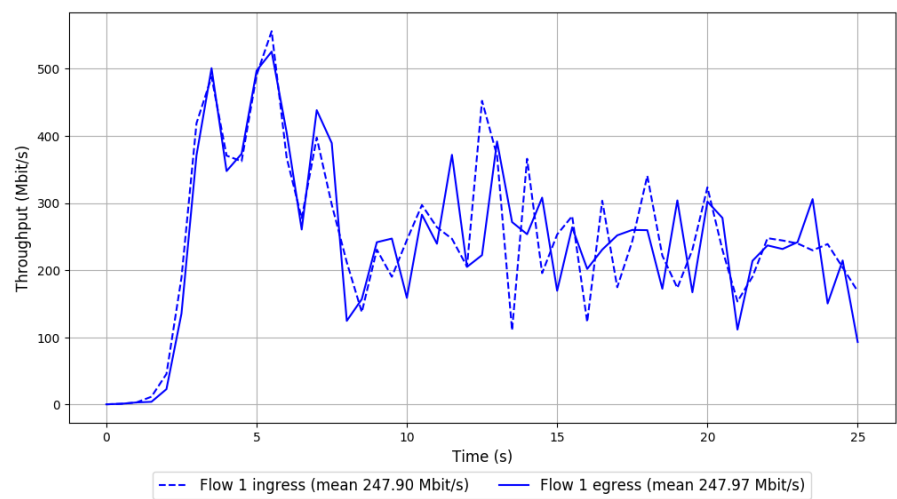
-- Flow 1:

Average throughput: 247.97 Mbit/s

95th percentile per-packet one-way delay: 172.943 ms

Loss rate: 1.61%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-16 07:52:00

End at: 2017-11-16 07:52:30

Below is generated by plot.py at 2017-11-16 10:26:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.83 Mbit/s

95th percentile per-packet one-way delay: 151.964 ms

Loss rate: 3.15%

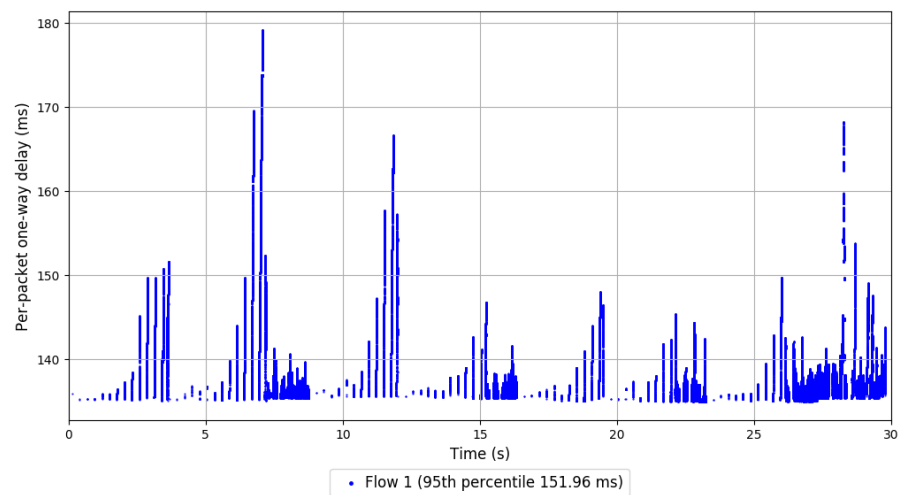
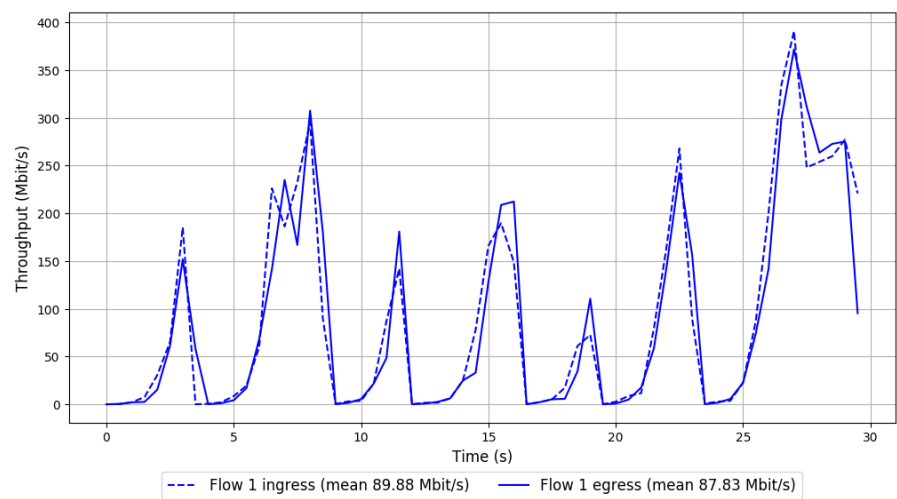
-- Flow 1:

Average throughput: 87.83 Mbit/s

95th percentile per-packet one-way delay: 151.964 ms

Loss rate: 3.15%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-16 08:03:19

End at: 2017-11-16 08:03:49

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.69 Mbit/s

95th percentile per-packet one-way delay: 209.293 ms

Loss rate: 3.08%

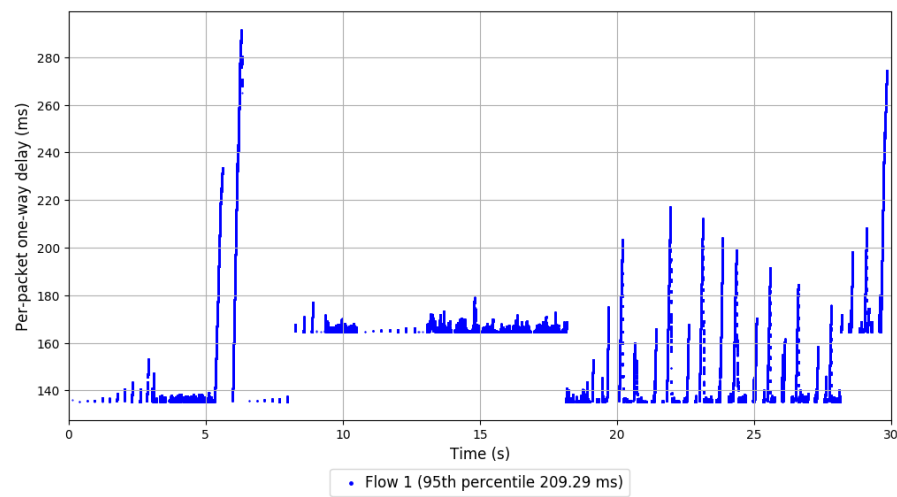
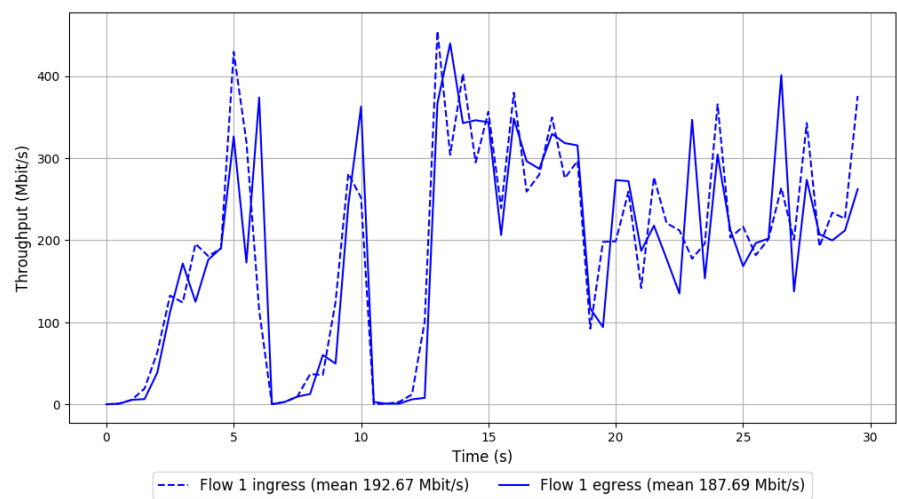
-- Flow 1:

Average throughput: 187.69 Mbit/s

95th percentile per-packet one-way delay: 209.293 ms

Loss rate: 3.08%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-16 06:21:16

End at: 2017-11-16 06:21:46

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 135.327 ms

Loss rate: 0.89%

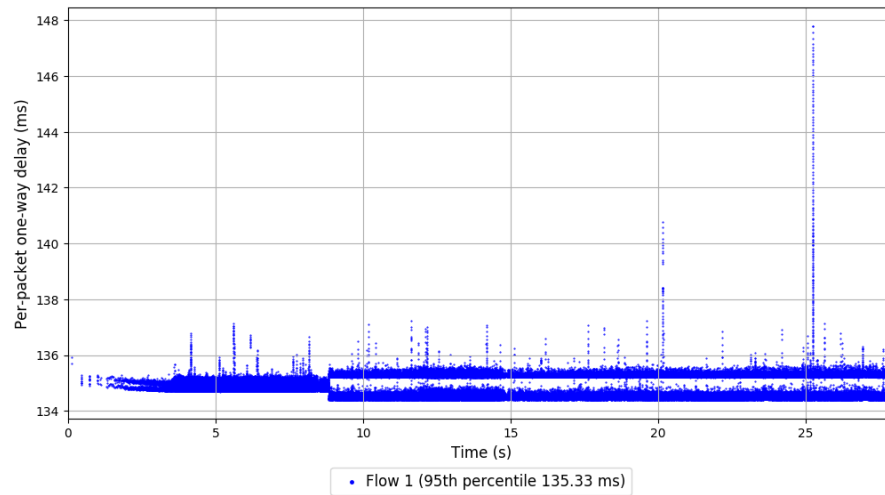
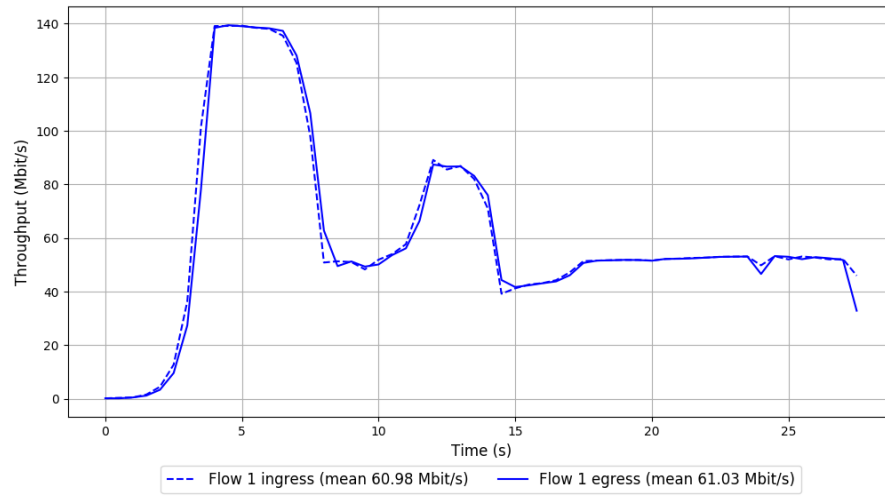
-- Flow 1:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 135.327 ms

Loss rate: 0.89%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 06:32:42

End at: 2017-11-16 06:33:12

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.64 Mbit/s

95th percentile per-packet one-way delay: 165.102 ms

Loss rate: 0.18%

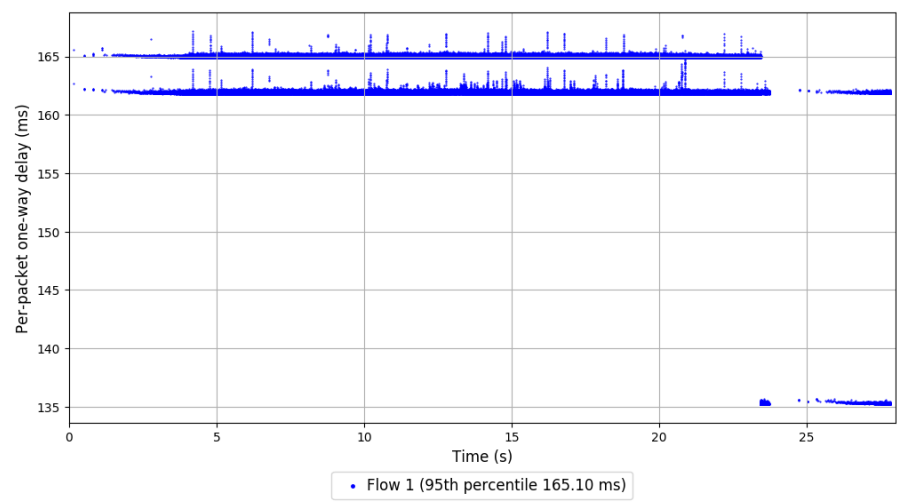
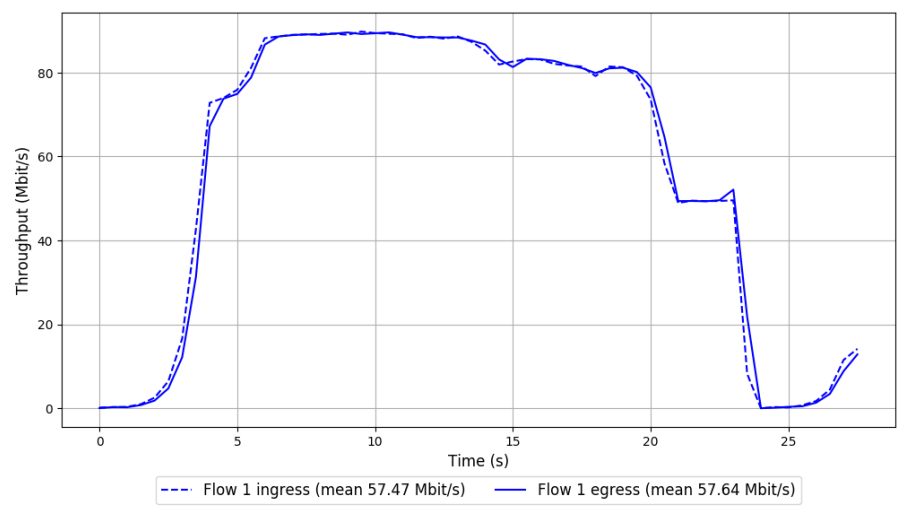
-- Flow 1:

Average throughput: 57.64 Mbit/s

95th percentile per-packet one-way delay: 165.102 ms

Loss rate: 0.18%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-16 06:44:27

End at: 2017-11-16 06:44:57

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 165.017 ms

Loss rate: 0.00%

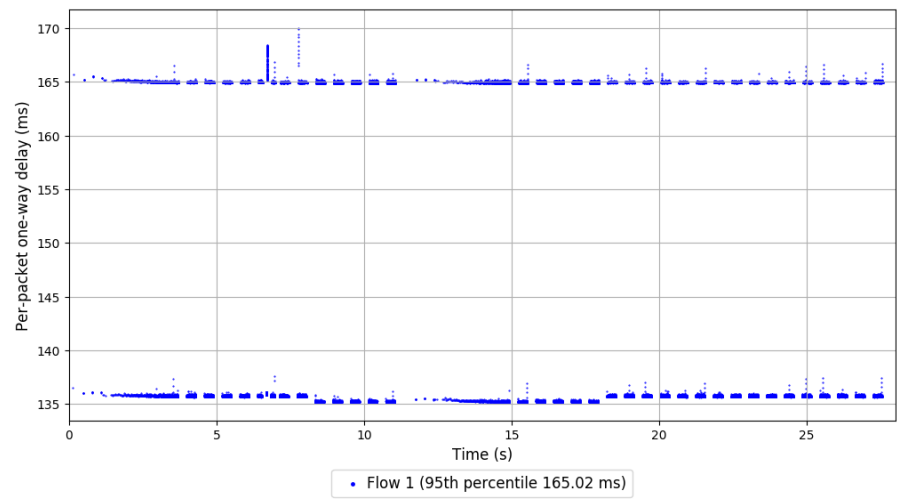
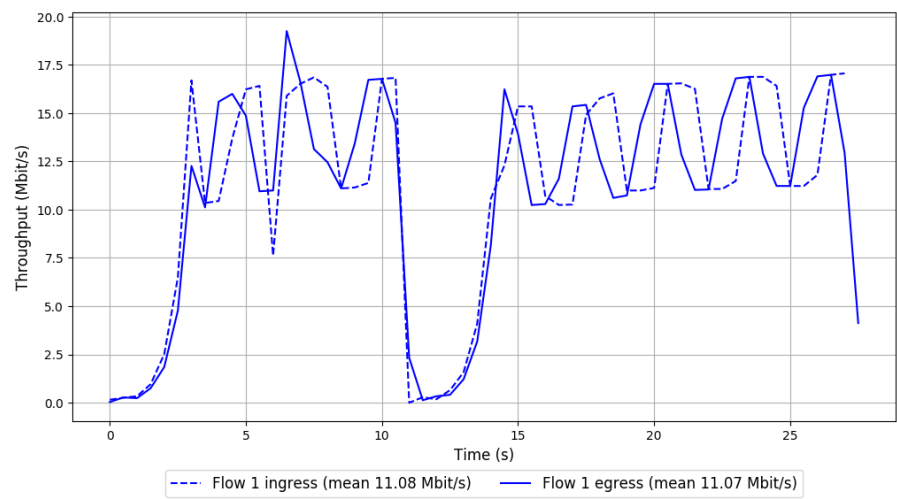
-- Flow 1:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 165.017 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link

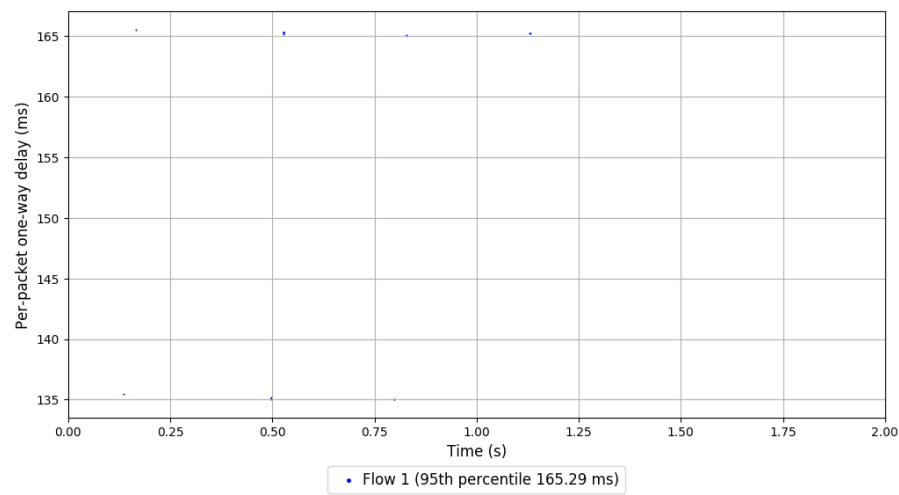
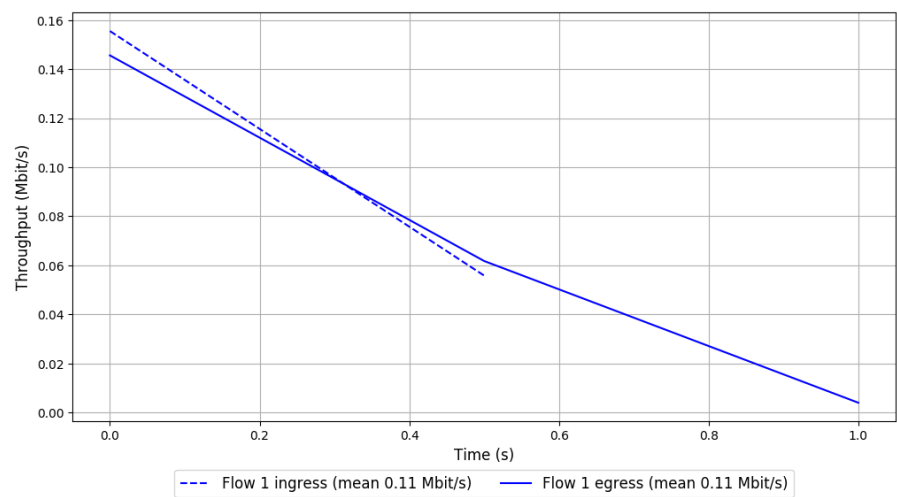


Run 4: Statistics of Copa

Start at: 2017-11-16 06:55:28

End at: 2017-11-16 06:55:58

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-16 07:07:30

End at: 2017-11-16 07:08:00

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 135.891 ms

Loss rate: 0.35%

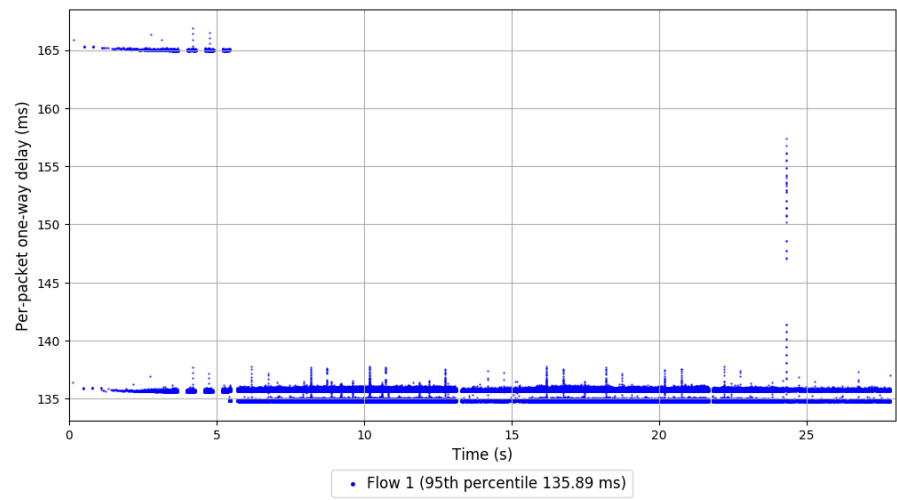
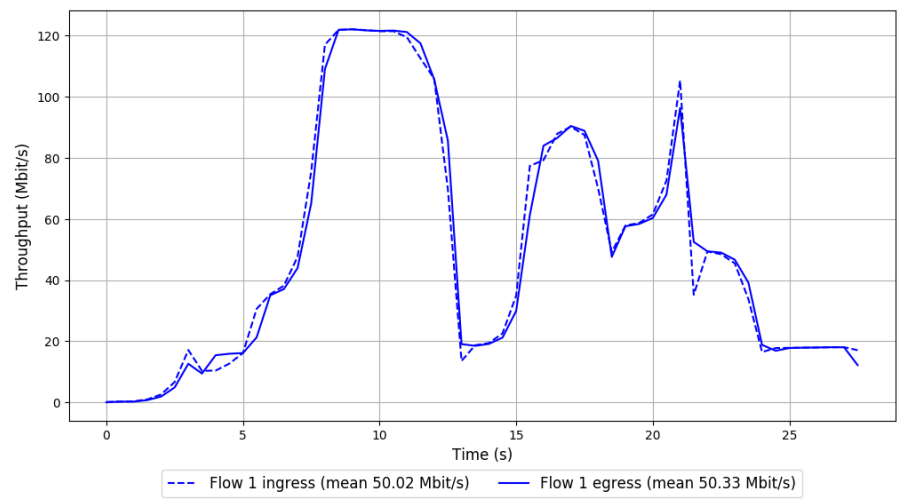
-- Flow 1:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 135.891 ms

Loss rate: 0.35%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-16 07:18:55

End at: 2017-11-16 07:19:25

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 165.058 ms

Loss rate: 0.01%

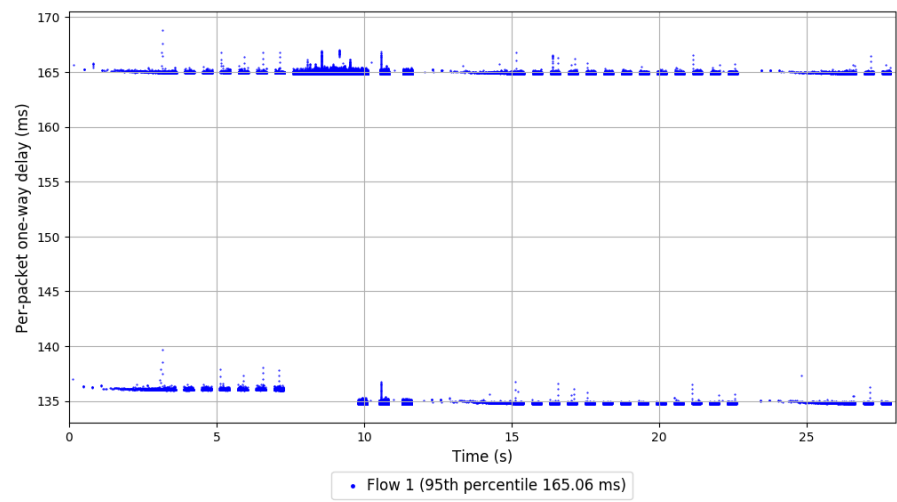
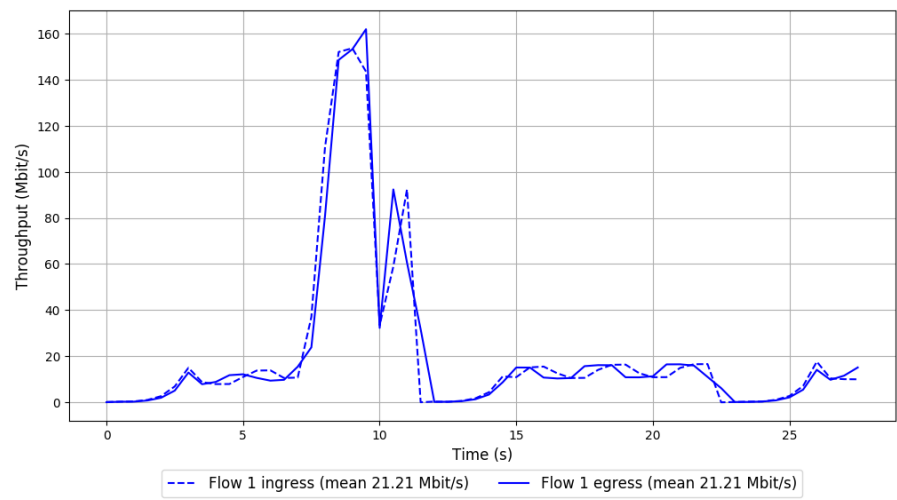
-- Flow 1:

Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 165.058 ms

Loss rate: 0.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-16 07:30:26

End at: 2017-11-16 07:30:57

Below is generated by plot.py at 2017-11-16 10:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 134.930 ms

Loss rate: 1.16%

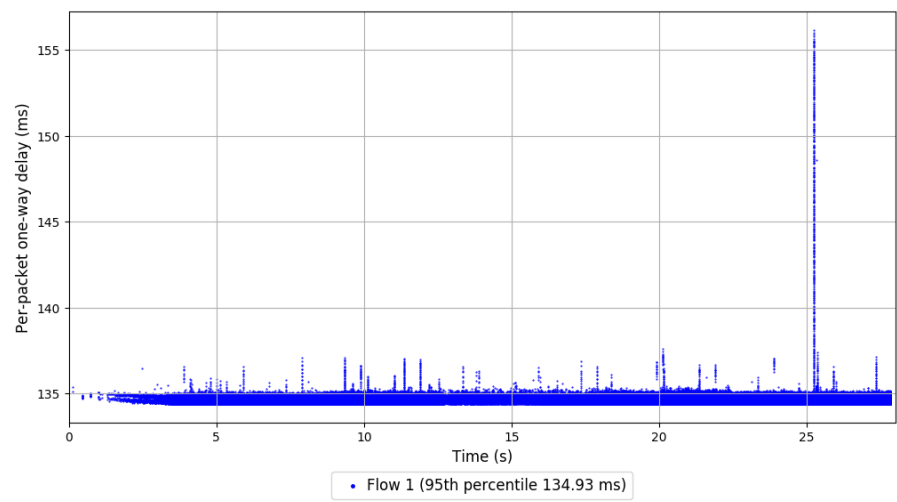
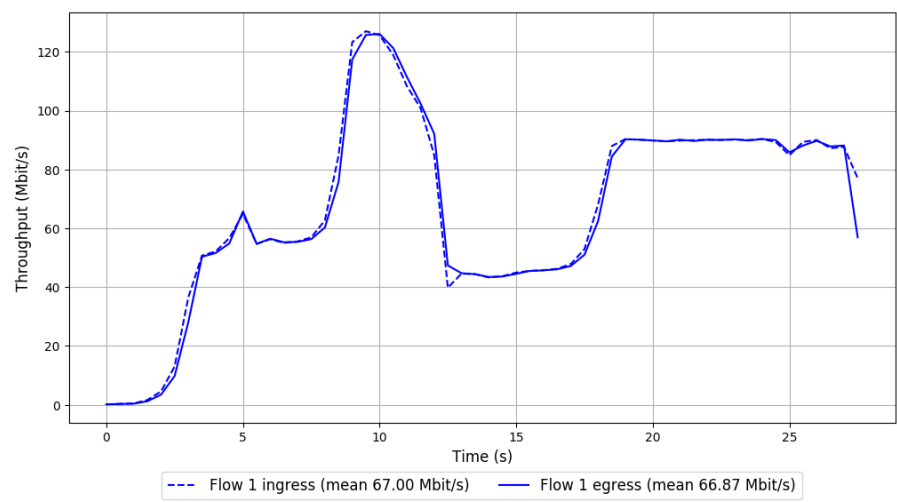
-- Flow 1:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 134.930 ms

Loss rate: 1.16%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-16 07:41:57

End at: 2017-11-16 07:42:27

Below is generated by plot.py at 2017-11-16 10:26:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 135.116 ms

Loss rate: 1.10%

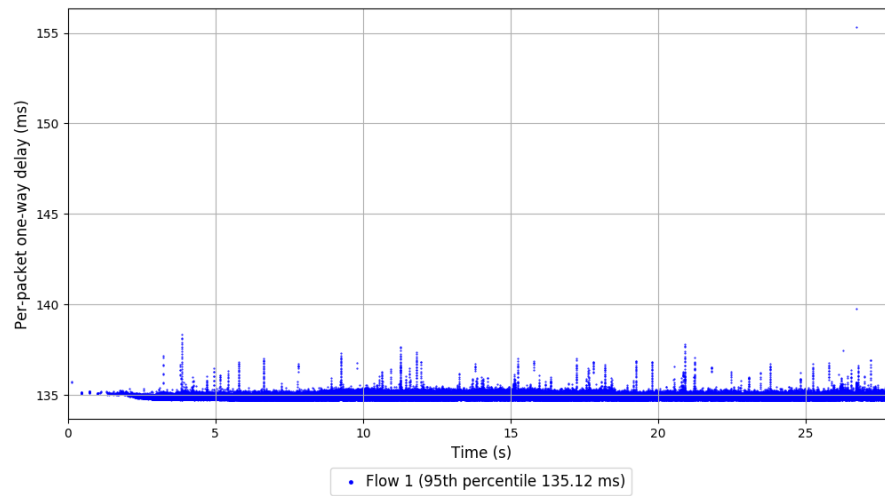
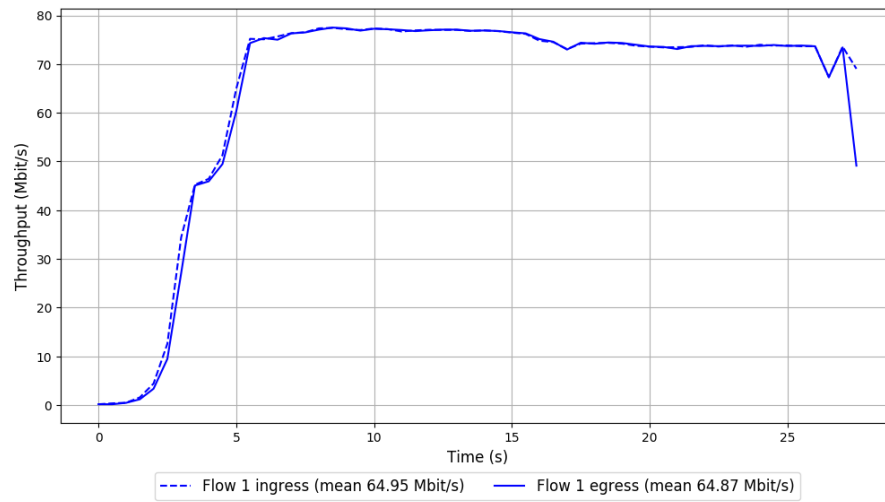
-- Flow 1:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 135.116 ms

Loss rate: 1.10%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-16 07:53:36

End at: 2017-11-16 07:54:06

Below is generated by plot.py at 2017-11-16 10:27:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 135.489 ms

Loss rate: 0.38%

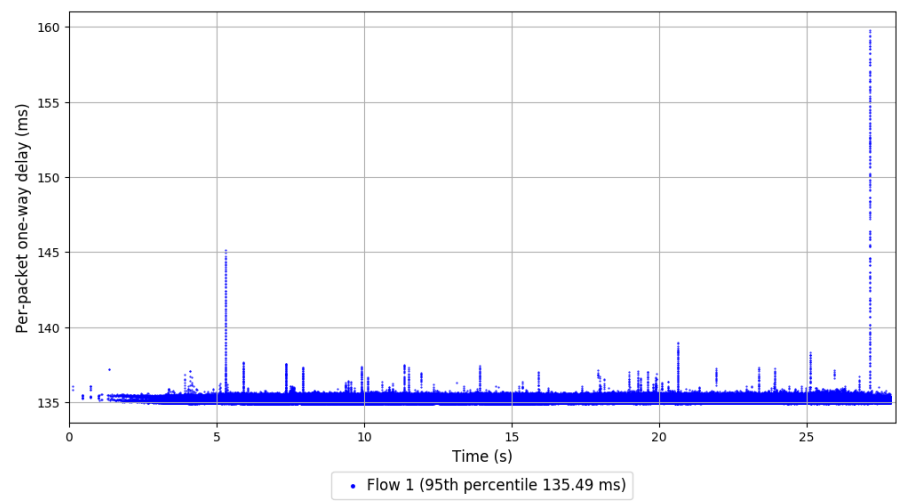
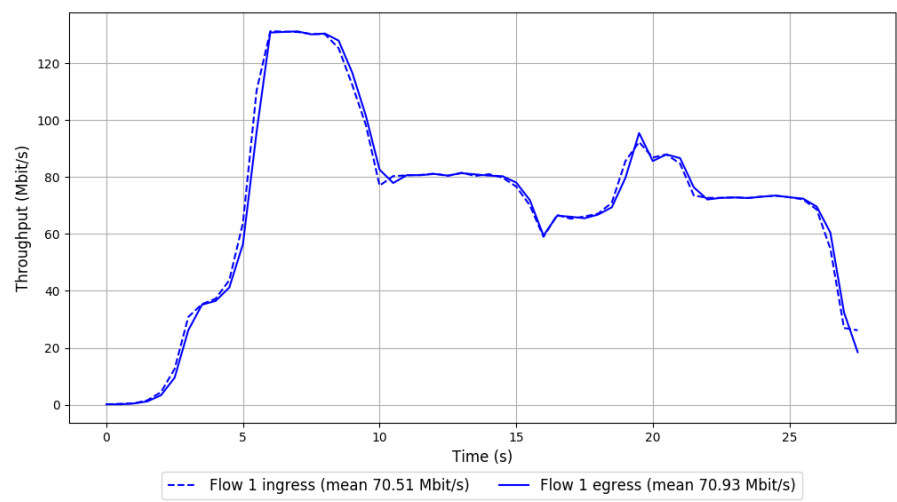
-- Flow 1:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 135.489 ms

Loss rate: 0.38%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-16 08:05:03

End at: 2017-11-16 08:05:33

Below is generated by plot.py at 2017-11-16 10:27:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.98 Mbit/s

95th percentile per-packet one-way delay: 164.812 ms

Loss rate: 3.64%

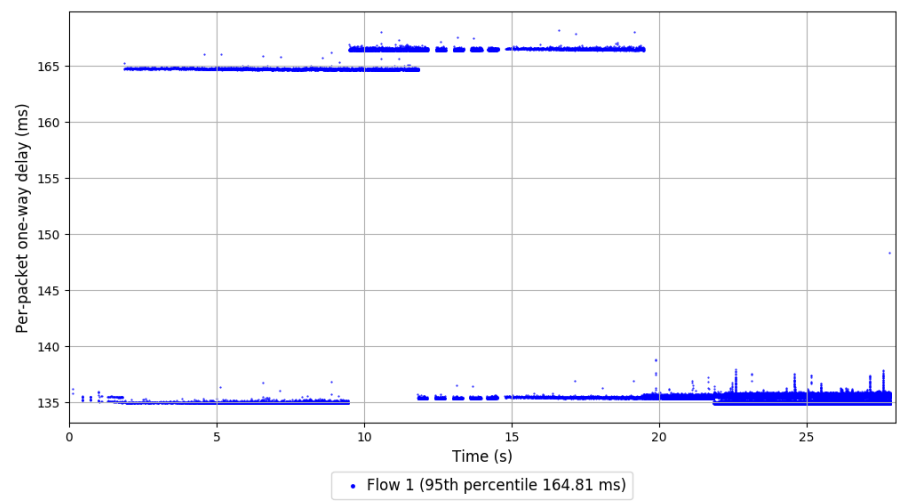
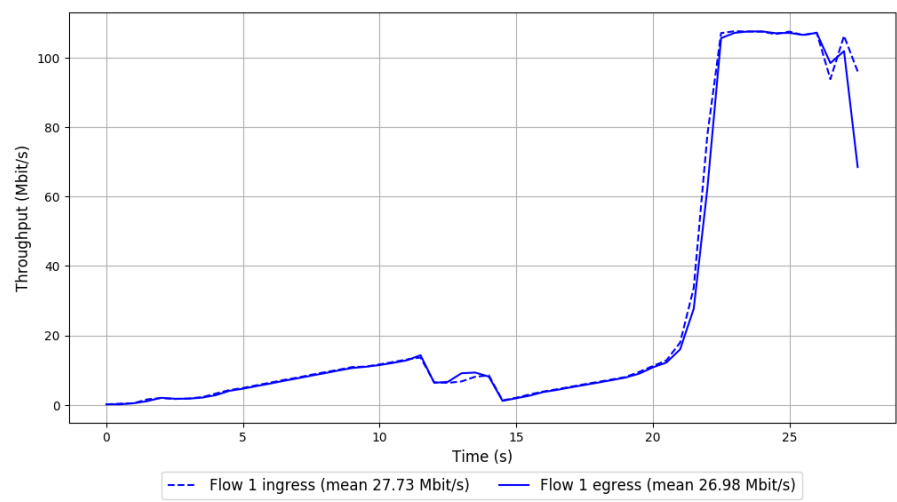
-- Flow 1:

Average throughput: 26.98 Mbit/s

95th percentile per-packet one-way delay: 164.812 ms

Loss rate: 3.64%

Run 10: Report of Copa — Data Link

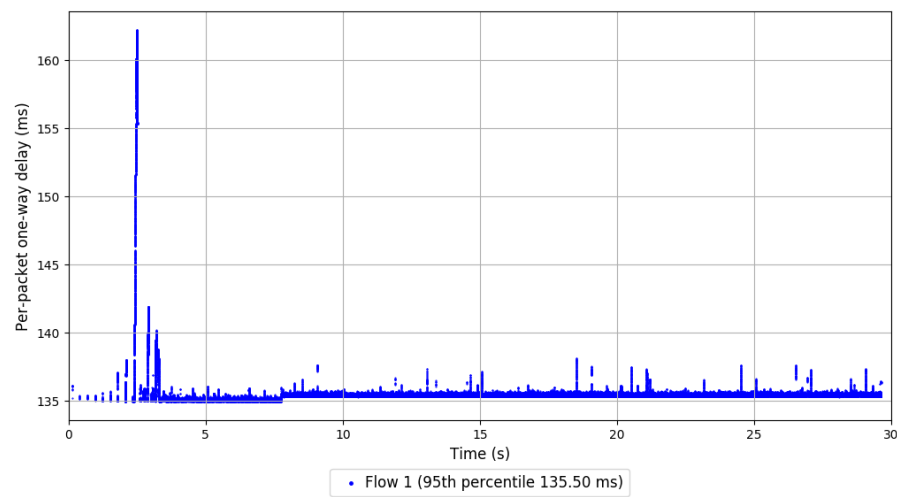
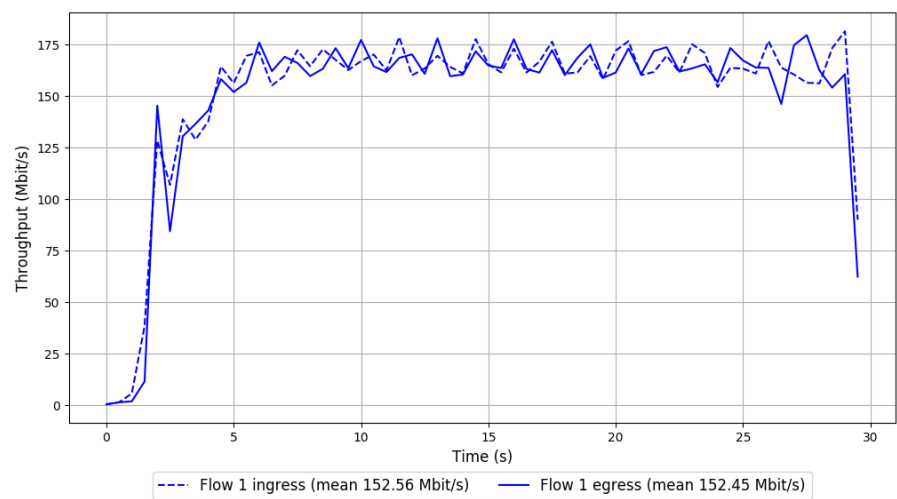


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 06:14:09
End at: 2017-11-16 06:14:39

# Below is generated by plot.py at 2017-11-16 10:28:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.45 Mbit/s
95th percentile per-packet one-way delay: 135.499 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 152.45 Mbit/s
95th percentile per-packet one-way delay: 135.499 ms
Loss rate: 0.99%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 06:25:36

End at: 2017-11-16 06:26:06

Below is generated by plot.py at 2017-11-16 10:28:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.96 Mbit/s

95th percentile per-packet one-way delay: 135.360 ms

Loss rate: 1.01%

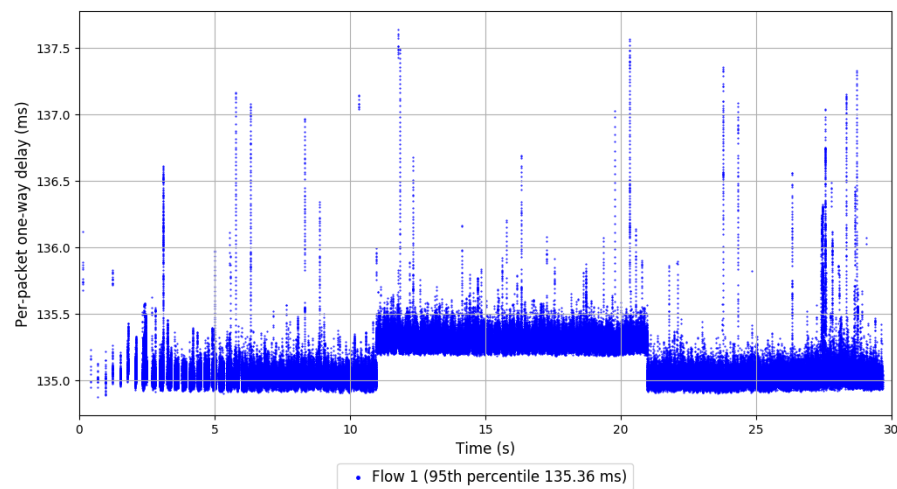
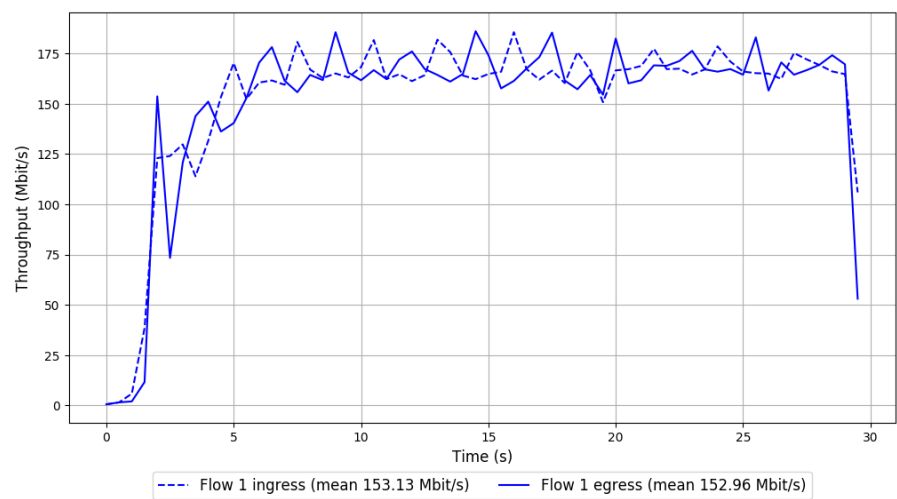
-- Flow 1:

Average throughput: 152.96 Mbit/s

95th percentile per-packet one-way delay: 135.360 ms

Loss rate: 1.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-16 06:37:00

End at: 2017-11-16 06:37:30

Below is generated by plot.py at 2017-11-16 10:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.75 Mbit/s

95th percentile per-packet one-way delay: 159.767 ms

Loss rate: 0.63%

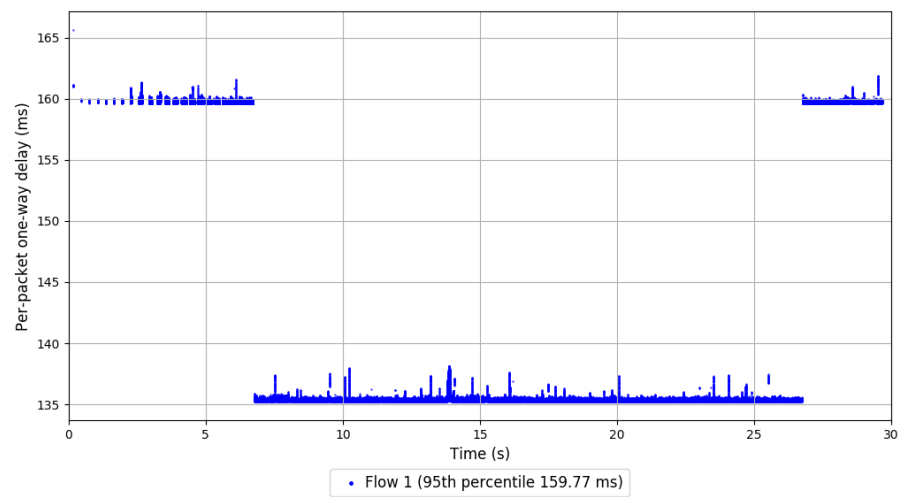
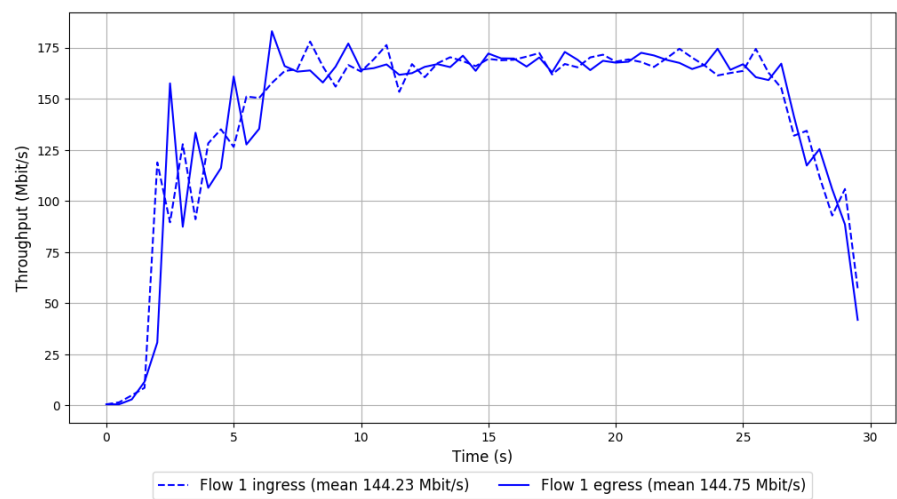
-- Flow 1:

Average throughput: 144.75 Mbit/s

95th percentile per-packet one-way delay: 159.767 ms

Loss rate: 0.63%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-16 06:48:18

End at: 2017-11-16 06:48:49

Below is generated by plot.py at 2017-11-16 10:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.03 Mbit/s

95th percentile per-packet one-way delay: 165.021 ms

Loss rate: 1.04%

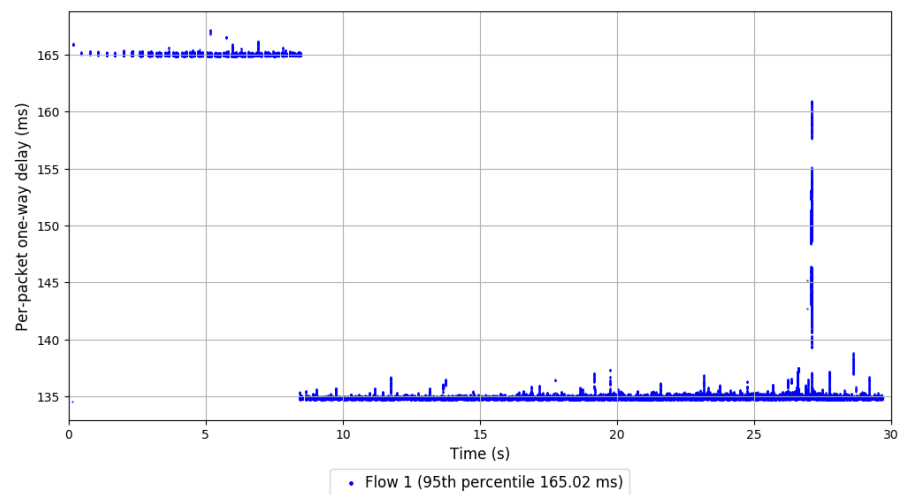
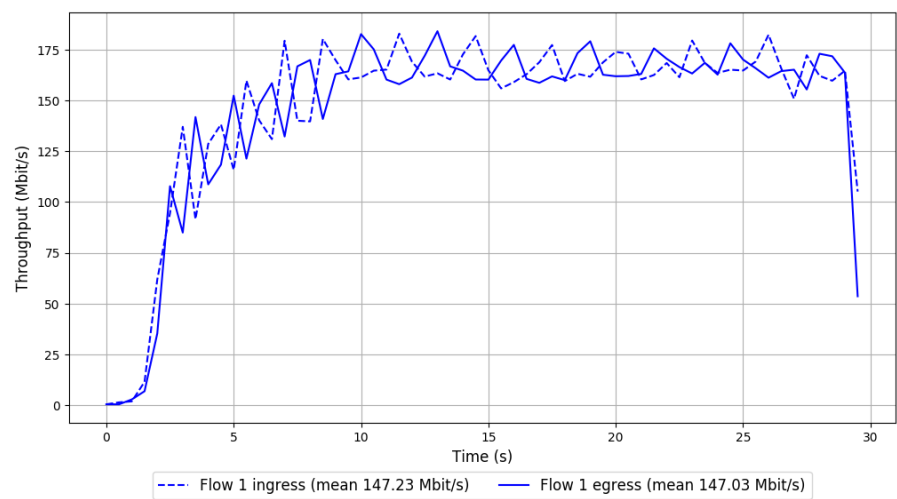
-- Flow 1:

Average throughput: 147.03 Mbit/s

95th percentile per-packet one-way delay: 165.021 ms

Loss rate: 1.04%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-16 06:59:56

End at: 2017-11-16 07:00:26

Below is generated by plot.py at 2017-11-16 10:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.31 Mbit/s

95th percentile per-packet one-way delay: 165.050 ms

Loss rate: 0.58%

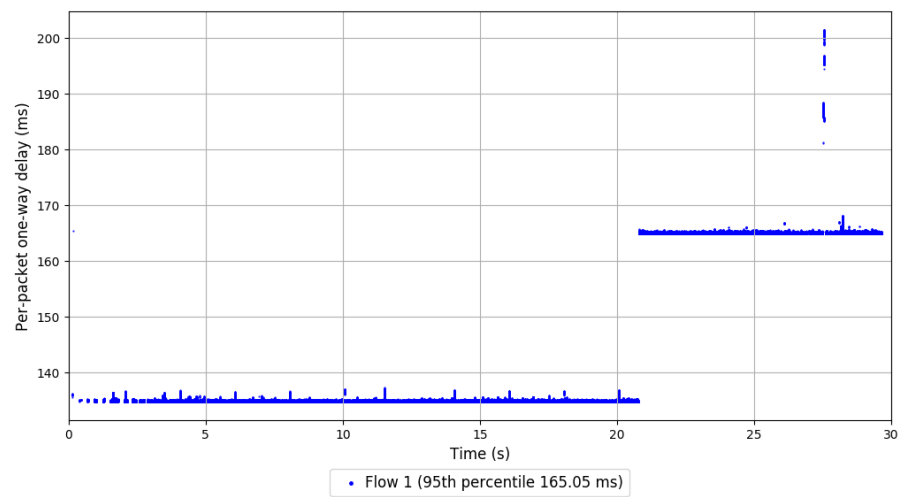
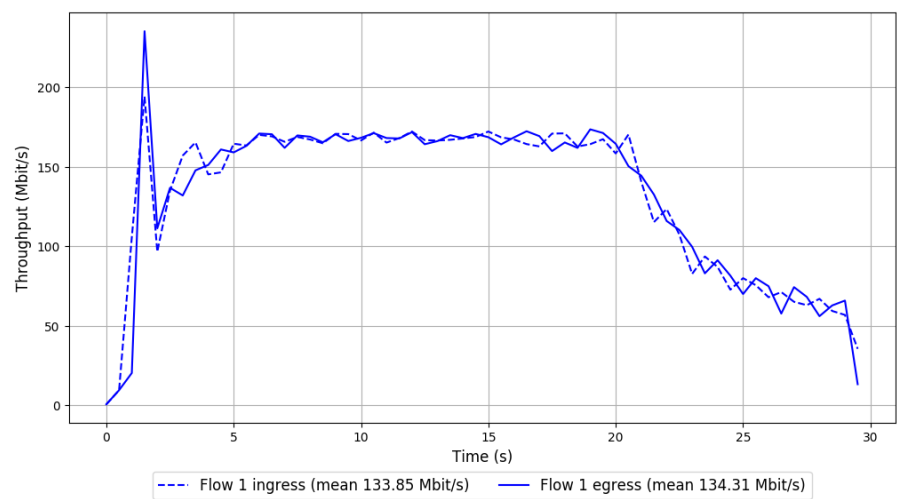
-- Flow 1:

Average throughput: 134.31 Mbit/s

95th percentile per-packet one-way delay: 165.050 ms

Loss rate: 0.58%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-16 07:11:47

End at: 2017-11-16 07:12:17

Below is generated by plot.py at 2017-11-16 10:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.97 Mbit/s

95th percentile per-packet one-way delay: 134.953 ms

Loss rate: 1.01%

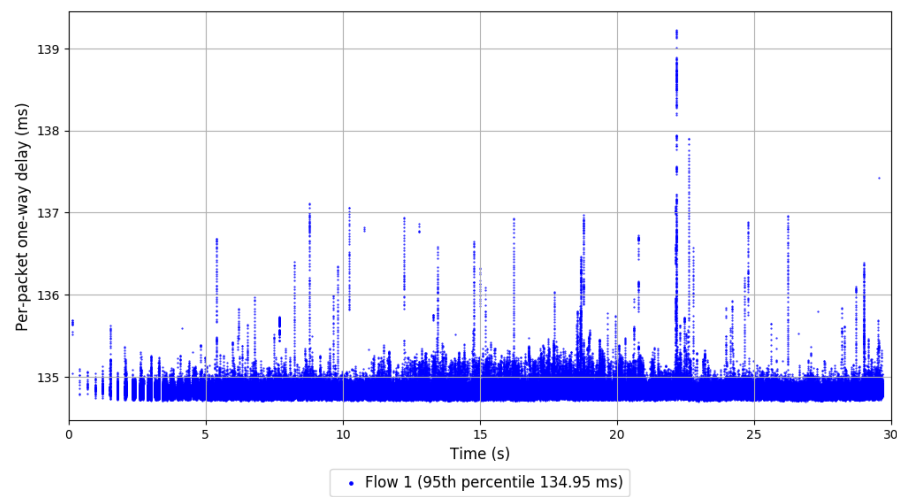
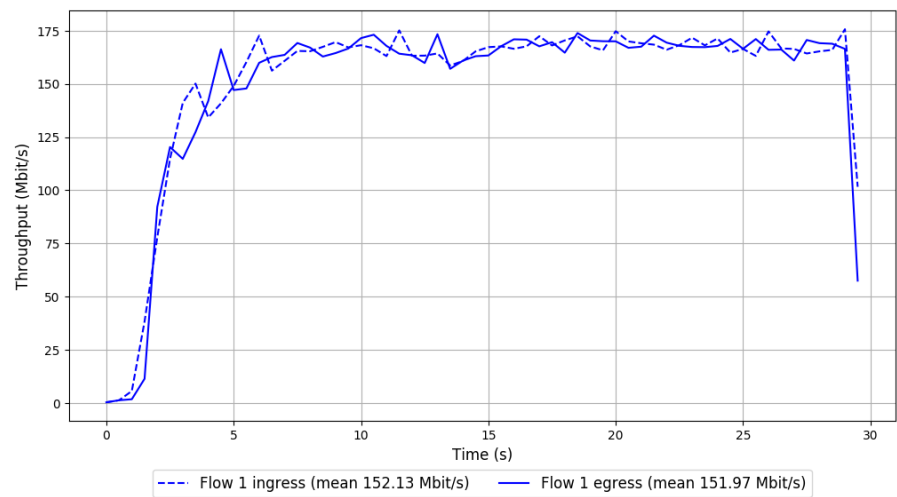
-- Flow 1:

Average throughput: 151.97 Mbit/s

95th percentile per-packet one-way delay: 134.953 ms

Loss rate: 1.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-16 07:23:06

End at: 2017-11-16 07:23:36

Below is generated by plot.py at 2017-11-16 10:29:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.22 Mbit/s

95th percentile per-packet one-way delay: 135.120 ms

Loss rate: 1.01%

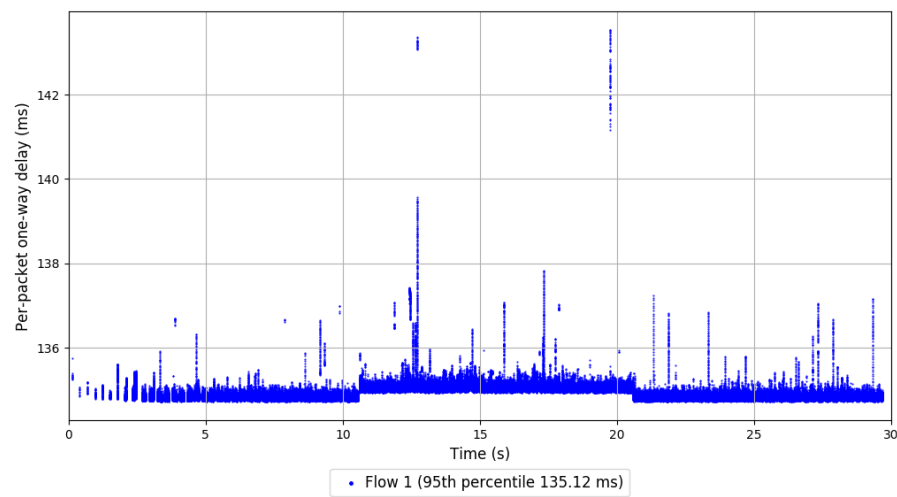
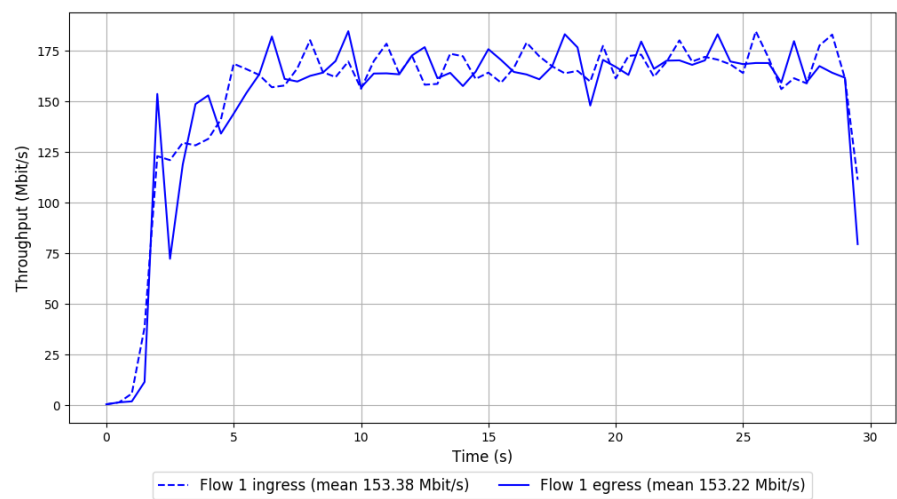
-- Flow 1:

Average throughput: 153.22 Mbit/s

95th percentile per-packet one-way delay: 135.120 ms

Loss rate: 1.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-16 07:34:43

End at: 2017-11-16 07:35:13

Below is generated by plot.py at 2017-11-16 10:29:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.33 Mbit/s

95th percentile per-packet one-way delay: 135.500 ms

Loss rate: 1.09%

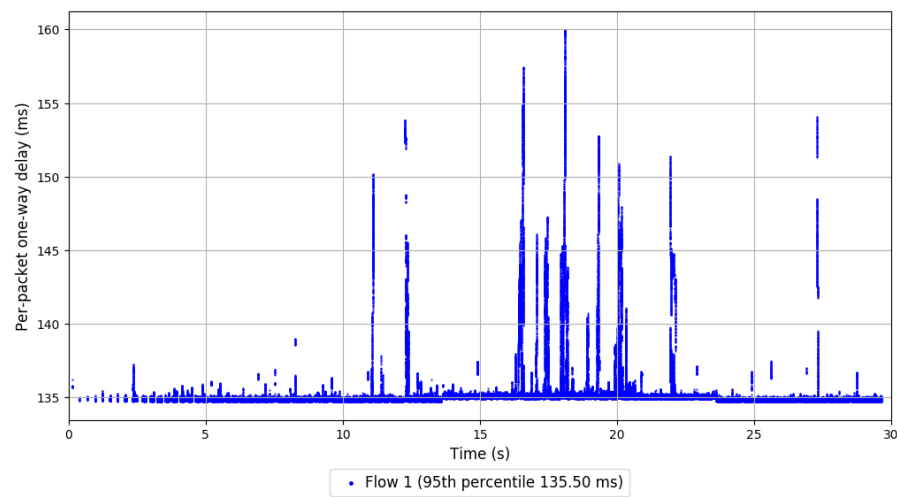
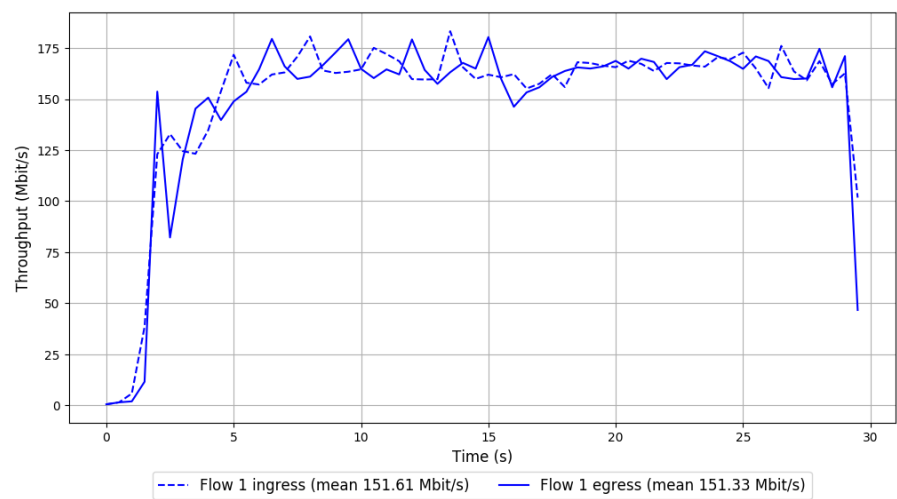
-- Flow 1:

Average throughput: 151.33 Mbit/s

95th percentile per-packet one-way delay: 135.500 ms

Loss rate: 1.09%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-16 07:46:12

End at: 2017-11-16 07:46:42

Below is generated by plot.py at 2017-11-16 10:30:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.92 Mbit/s

95th percentile per-packet one-way delay: 135.160 ms

Loss rate: 1.00%

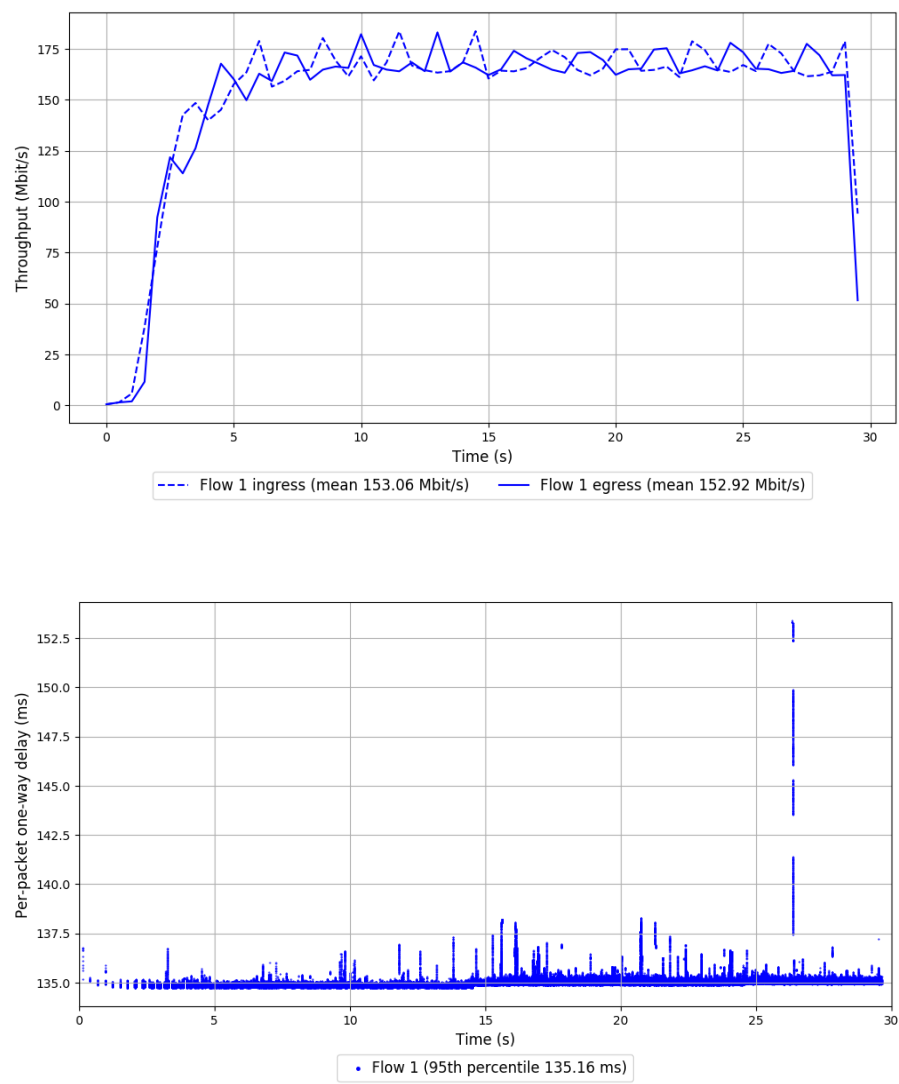
-- Flow 1:

Average throughput: 152.92 Mbit/s

95th percentile per-packet one-way delay: 135.160 ms

Loss rate: 1.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-16 07:57:54

End at: 2017-11-16 07:58:24

Below is generated by plot.py at 2017-11-16 10:31:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.09 Mbit/s

95th percentile per-packet one-way delay: 135.114 ms

Loss rate: 0.96%

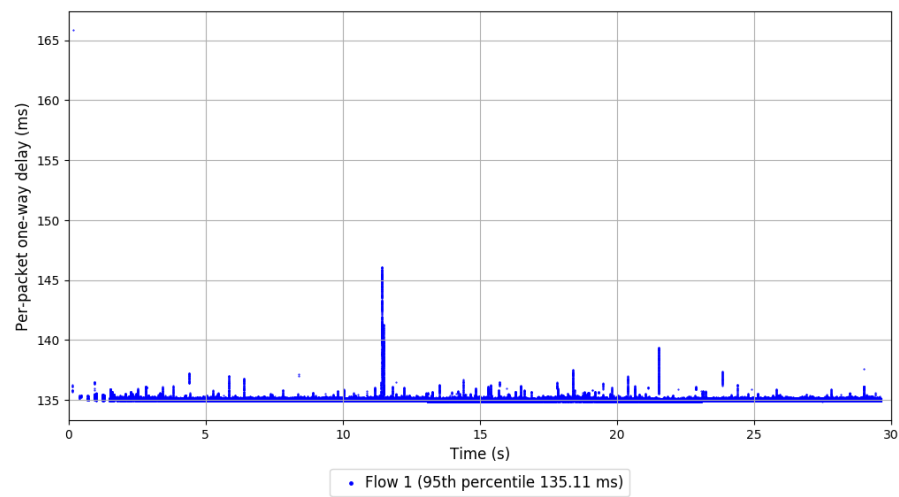
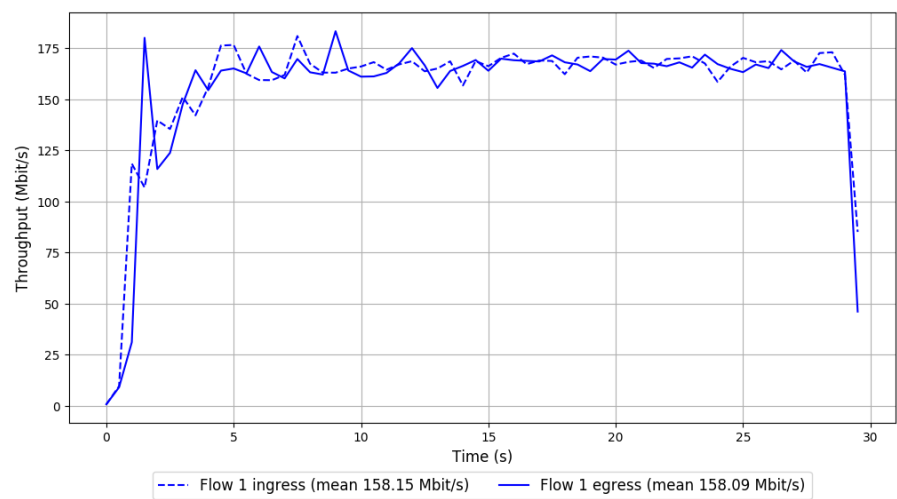
-- Flow 1:

Average throughput: 158.09 Mbit/s

95th percentile per-packet one-way delay: 135.114 ms

Loss rate: 0.96%

Run 10: Report of Indigo — Data Link

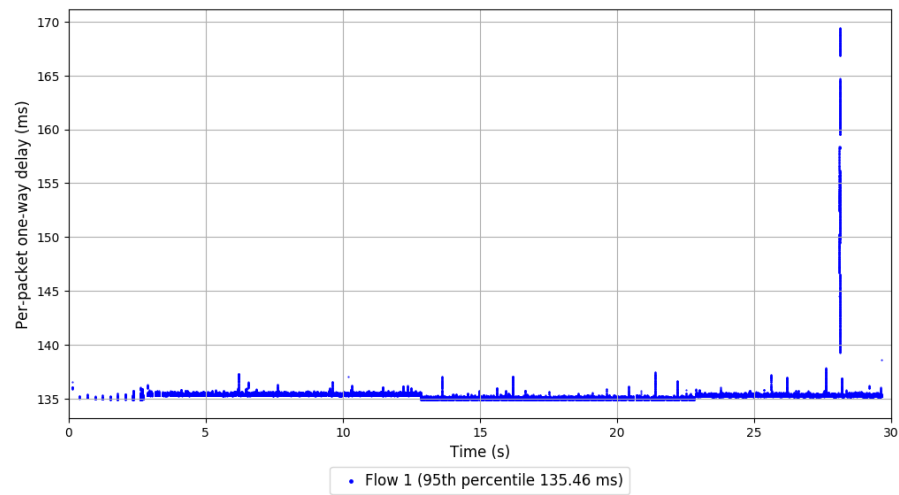
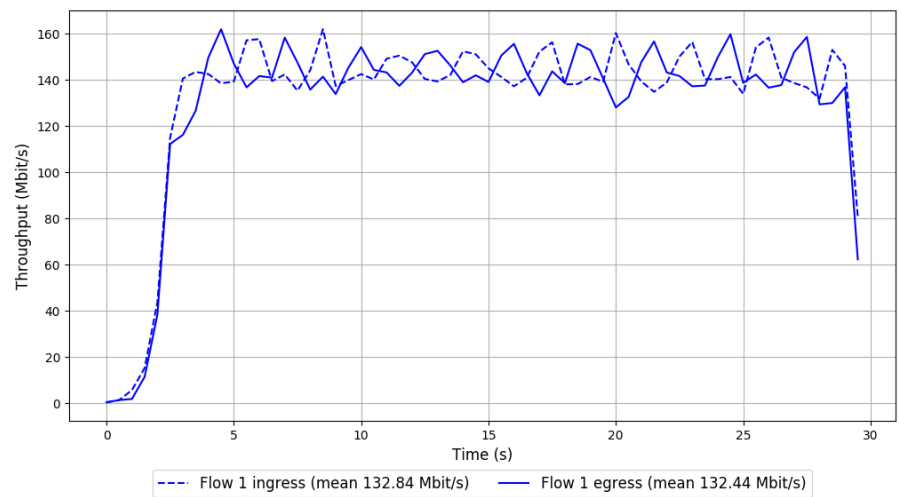


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 06:17:14
End at: 2017-11-16 06:17:44

# Below is generated by plot.py at 2017-11-16 10:31:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.44 Mbit/s
95th percentile per-packet one-way delay: 135.455 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 132.44 Mbit/s
95th percentile per-packet one-way delay: 135.455 ms
Loss rate: 1.20%
```

Run 1: Report of Indigo-calib — Data Link

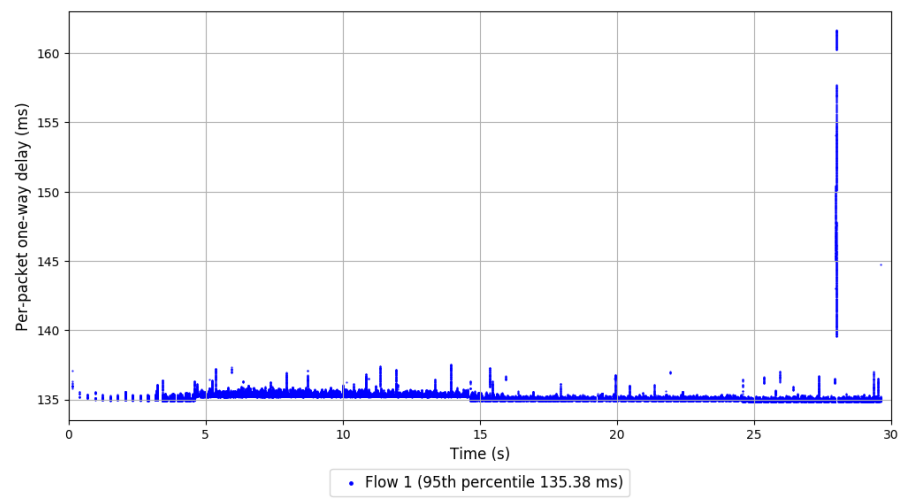
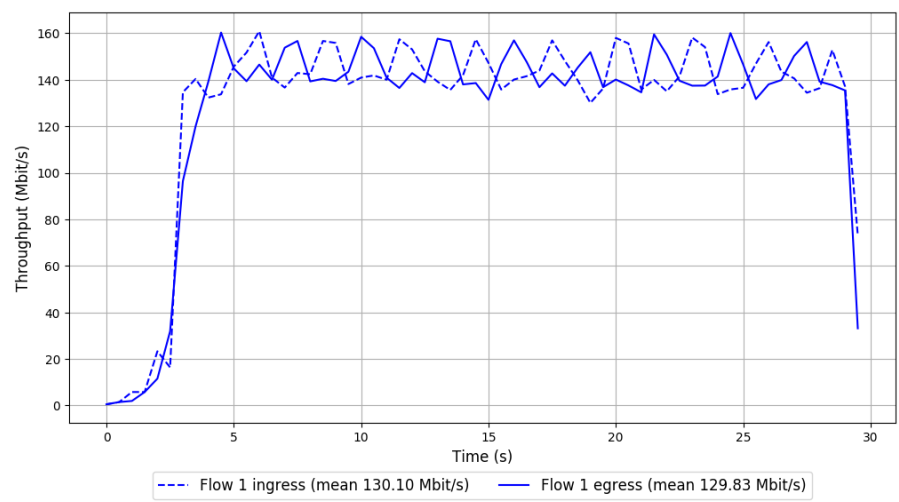


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 06:28:42
End at: 2017-11-16 06:29:12

# Below is generated by plot.py at 2017-11-16 10:31:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 129.83 Mbit/s
95th percentile per-packet one-way delay: 135.376 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 129.83 Mbit/s
95th percentile per-packet one-way delay: 135.376 ms
Loss rate: 1.12%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 06:40:09

End at: 2017-11-16 06:40:39

Below is generated by plot.py at 2017-11-16 10:31:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.48 Mbit/s

95th percentile per-packet one-way delay: 165.264 ms

Loss rate: 1.22%

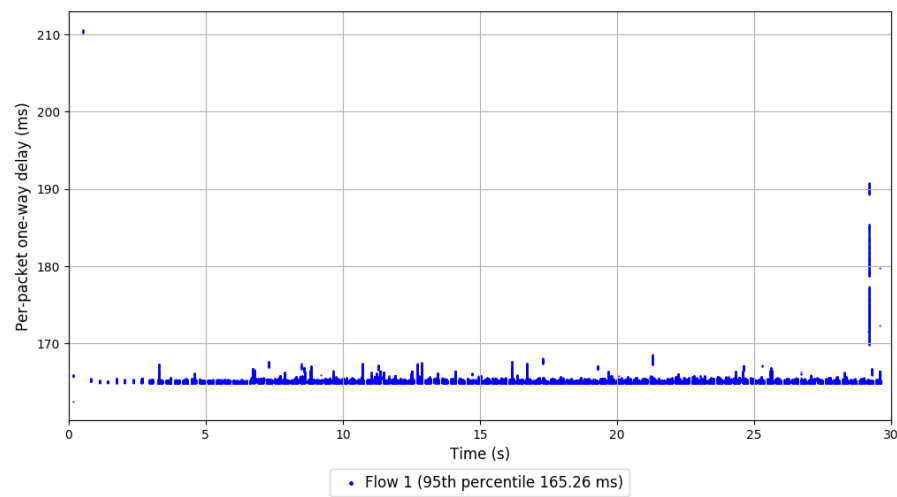
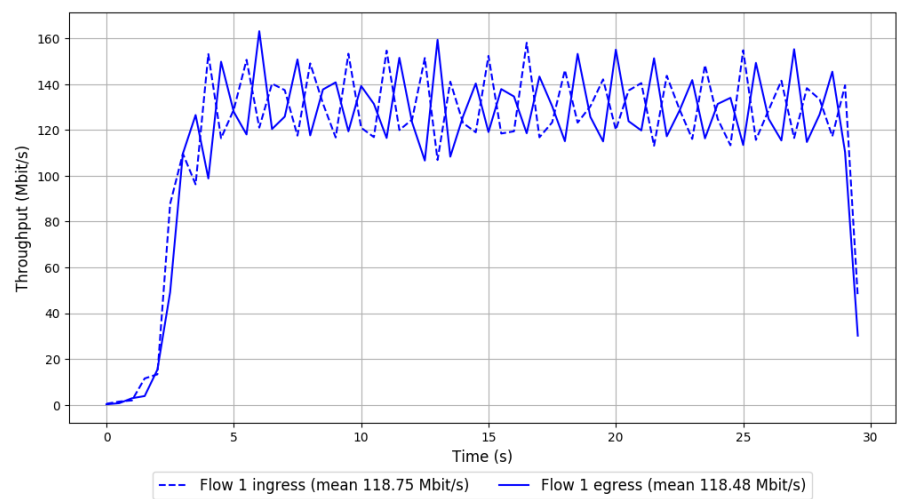
-- Flow 1:

Average throughput: 118.48 Mbit/s

95th percentile per-packet one-way delay: 165.264 ms

Loss rate: 1.22%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 06:51:26

End at: 2017-11-16 06:51:56

Below is generated by plot.py at 2017-11-16 10:31:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.05 Mbit/s

95th percentile per-packet one-way delay: 165.078 ms

Loss rate: 1.18%

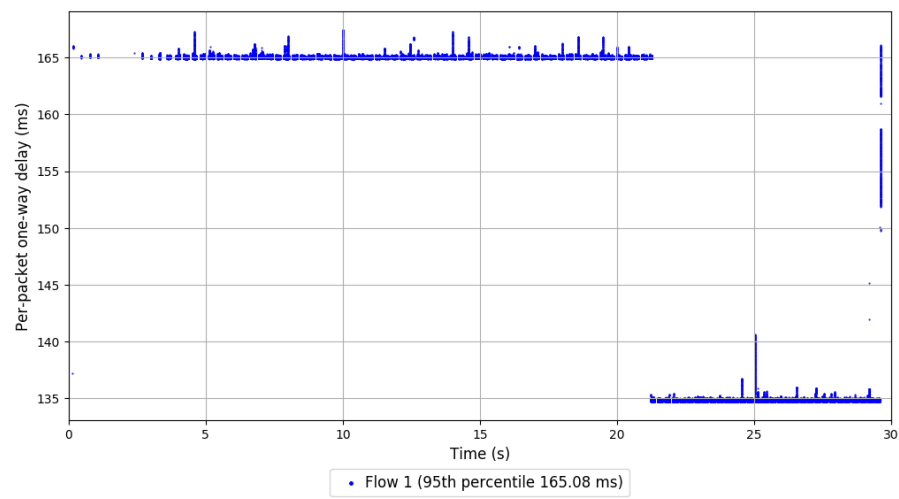
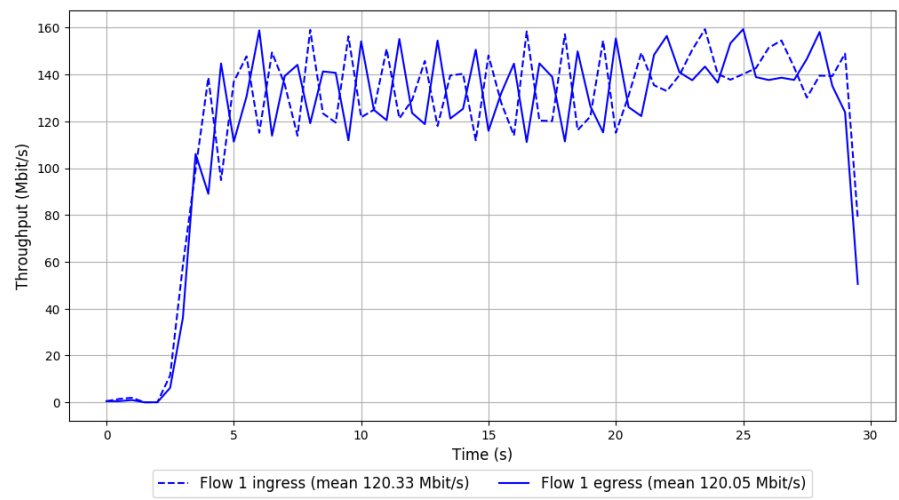
-- Flow 1:

Average throughput: 120.05 Mbit/s

95th percentile per-packet one-way delay: 165.078 ms

Loss rate: 1.18%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 07:03:03

End at: 2017-11-16 07:03:33

Below is generated by plot.py at 2017-11-16 10:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.25 Mbit/s

95th percentile per-packet one-way delay: 165.023 ms

Loss rate: 0.85%

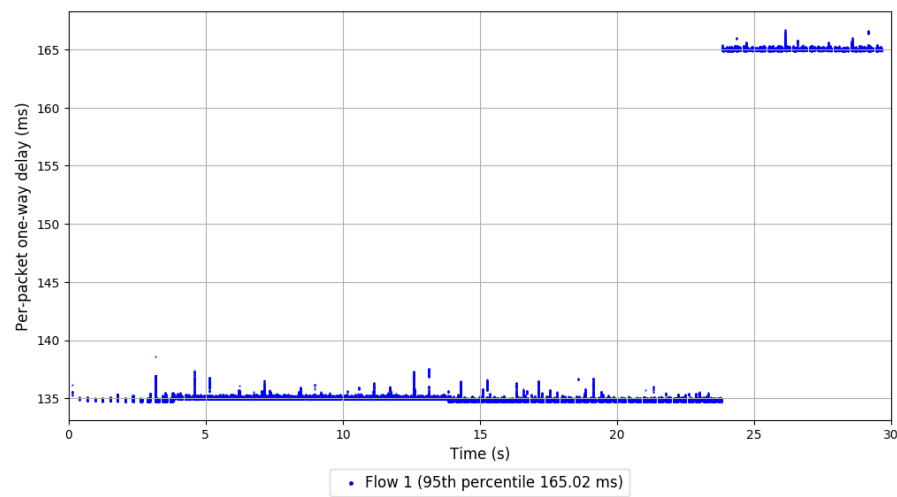
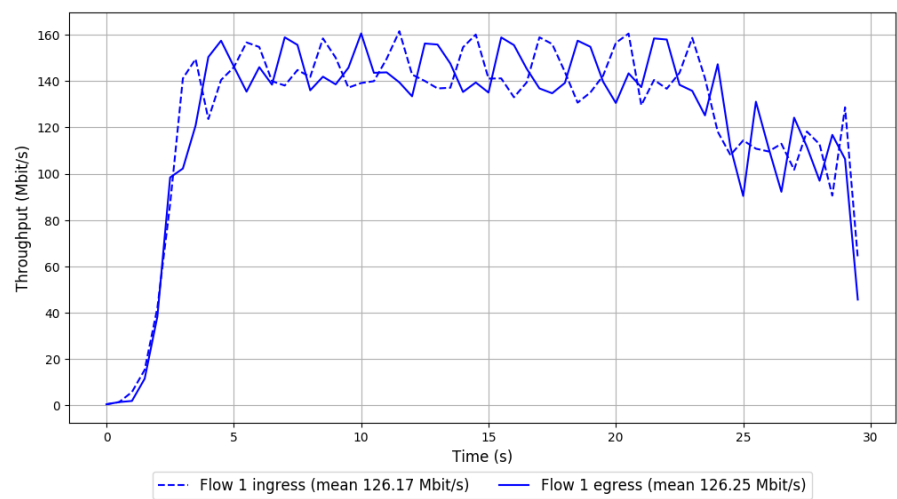
-- Flow 1:

Average throughput: 126.25 Mbit/s

95th percentile per-packet one-way delay: 165.023 ms

Loss rate: 0.85%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 07:14:52

End at: 2017-11-16 07:15:22

Below is generated by plot.py at 2017-11-16 10:31:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.82 Mbit/s

95th percentile per-packet one-way delay: 165.060 ms

Loss rate: 1.06%

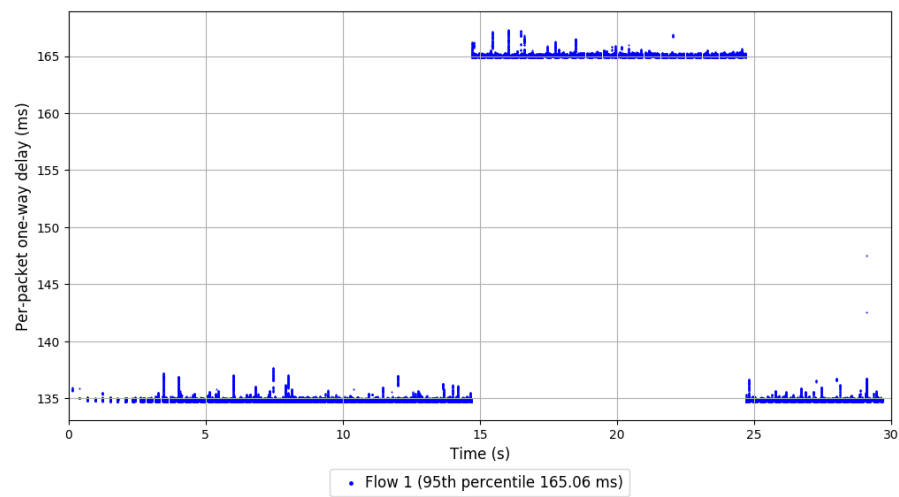
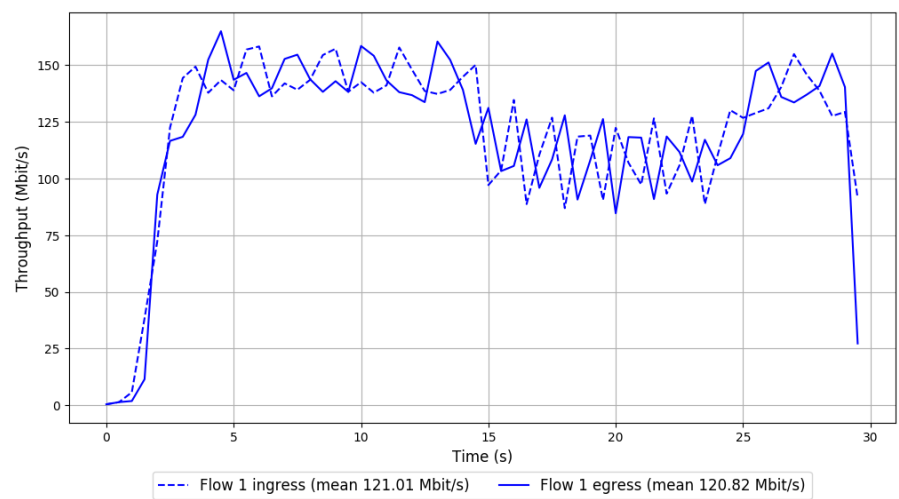
-- Flow 1:

Average throughput: 120.82 Mbit/s

95th percentile per-packet one-way delay: 165.060 ms

Loss rate: 1.06%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 07:26:11

End at: 2017-11-16 07:26:41

Below is generated by plot.py at 2017-11-16 10:31:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 165.092 ms

Loss rate: 1.23%

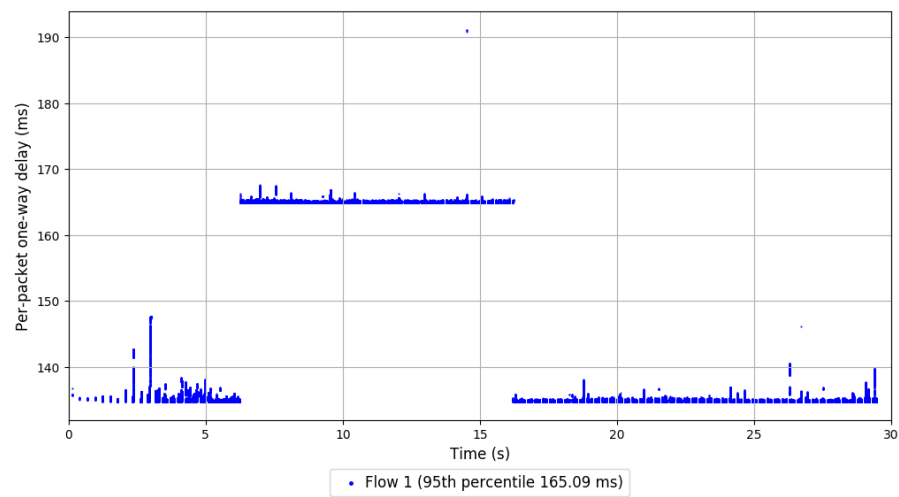
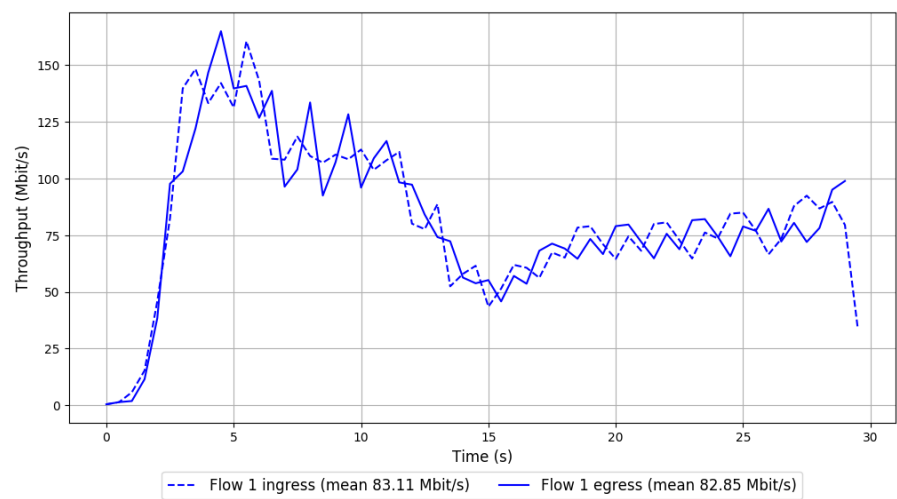
-- Flow 1:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 165.092 ms

Loss rate: 1.23%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 07:37:49

End at: 2017-11-16 07:38:19

Below is generated by plot.py at 2017-11-16 10:31:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.01 Mbit/s

95th percentile per-packet one-way delay: 135.240 ms

Loss rate: 1.02%

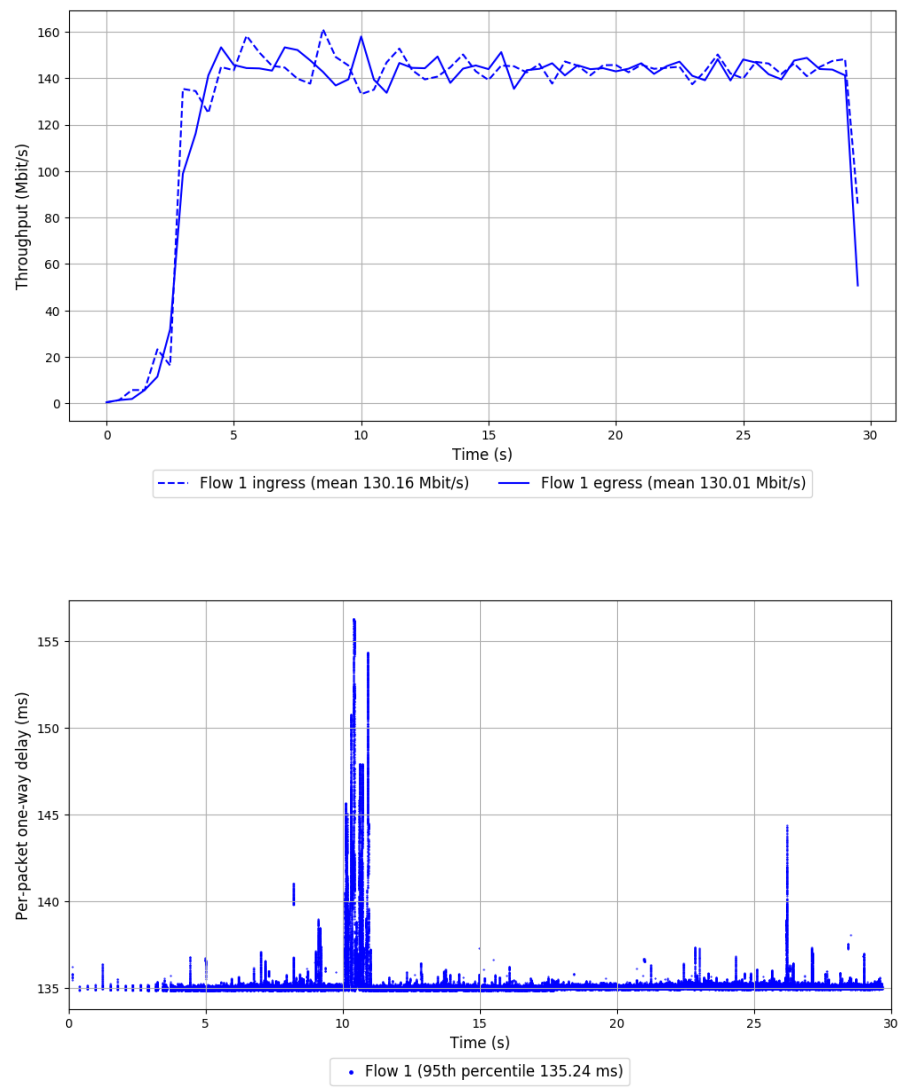
-- Flow 1:

Average throughput: 130.01 Mbit/s

95th percentile per-packet one-way delay: 135.240 ms

Loss rate: 1.02%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 07:49:18

End at: 2017-11-16 07:49:48

Below is generated by plot.py at 2017-11-16 10:31:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.42 Mbit/s

95th percentile per-packet one-way delay: 135.573 ms

Loss rate: 0.97%

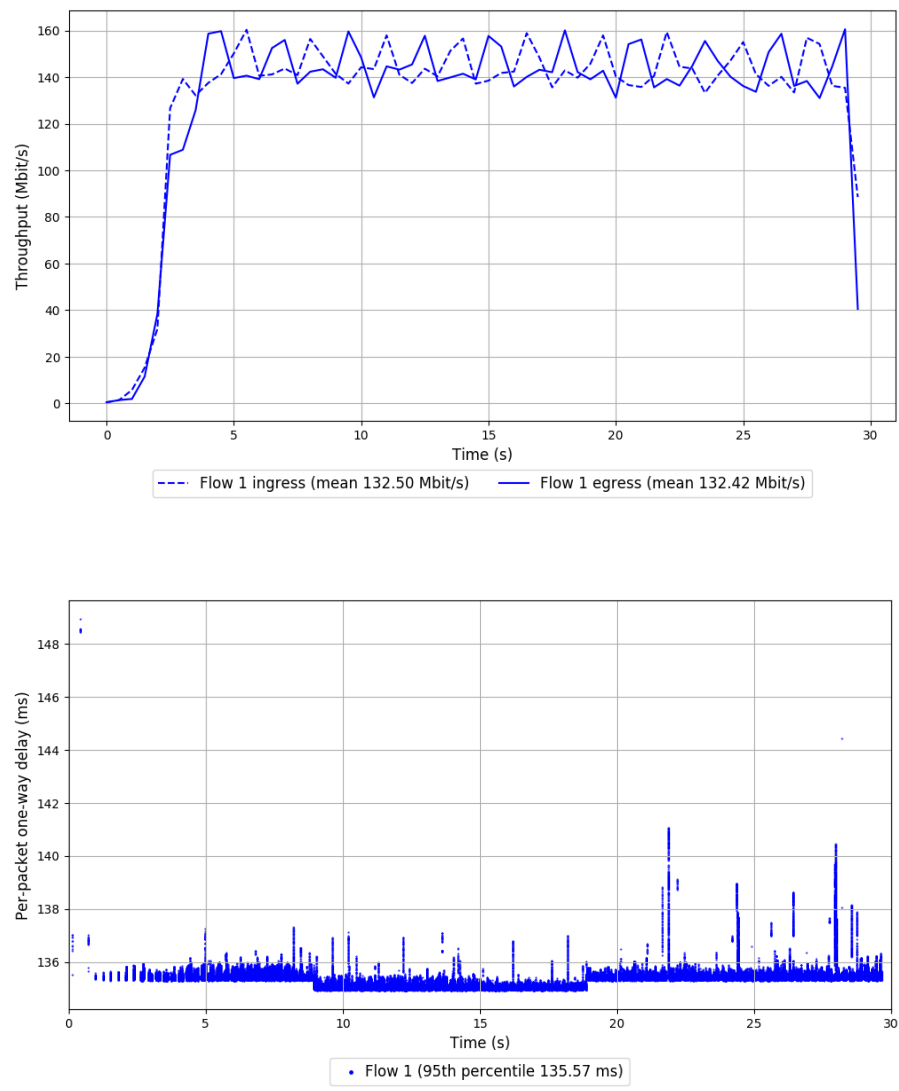
-- Flow 1:

Average throughput: 132.42 Mbit/s

95th percentile per-packet one-way delay: 135.573 ms

Loss rate: 0.97%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 08:00:59

End at: 2017-11-16 08:01:29

Below is generated by plot.py at 2017-11-16 10:31:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.49 Mbit/s

95th percentile per-packet one-way delay: 164.772 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 115.49 Mbit/s

95th percentile per-packet one-way delay: 164.772 ms

Loss rate: 1.05%

Run 10: Report of Indigo-calib — Data Link

