

Pantheon Report

Generated at 2018-11-29 23:45:58 (UTC).

Data path: AWS India 2 on **ens5** (*local*) → Saudi Arabia on **enp2s0** (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

System info:

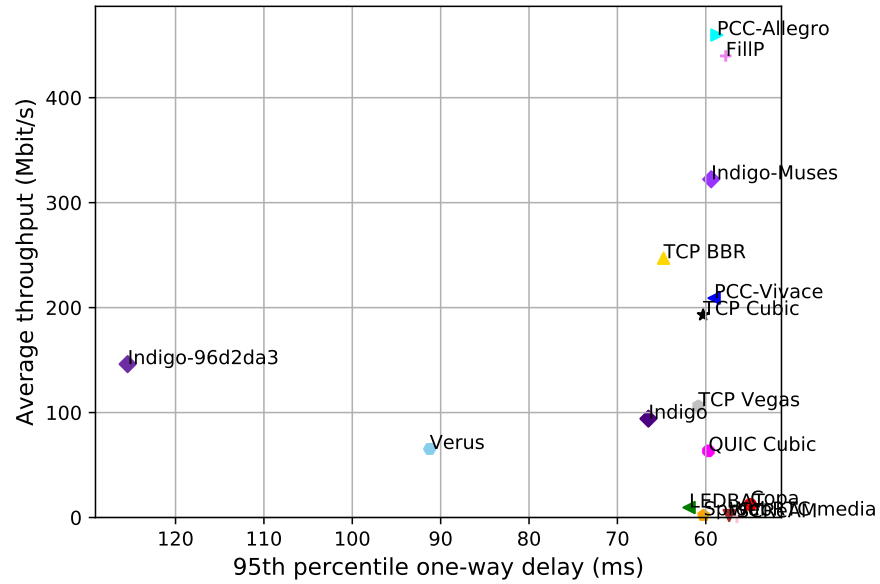
```
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

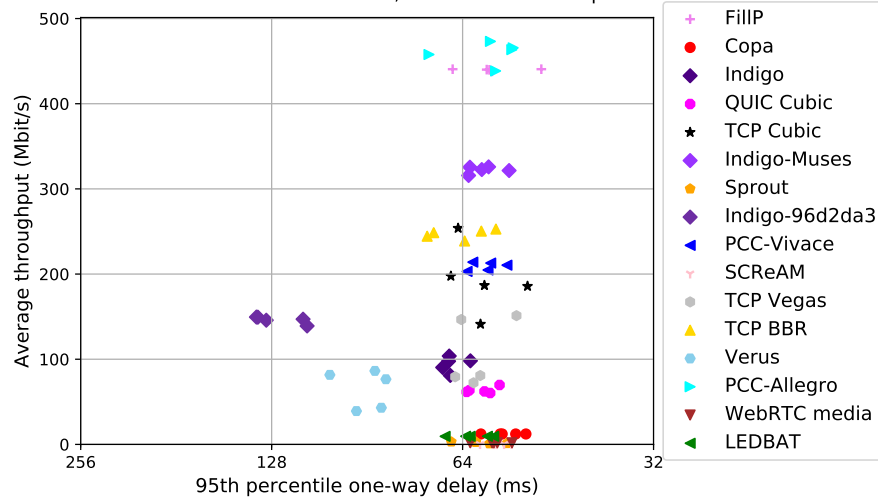
```
branch: muses @ 794ca3866981572cb73700a276691acf79c60f2b
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS India 2 to Saudi Arabia, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS India 2 to Saudi Arabia, 5 runs of 30s each per scheme



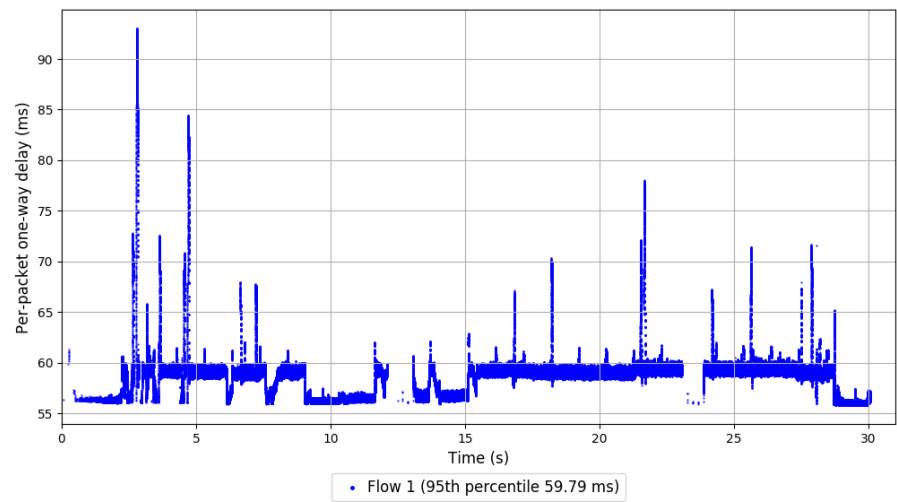
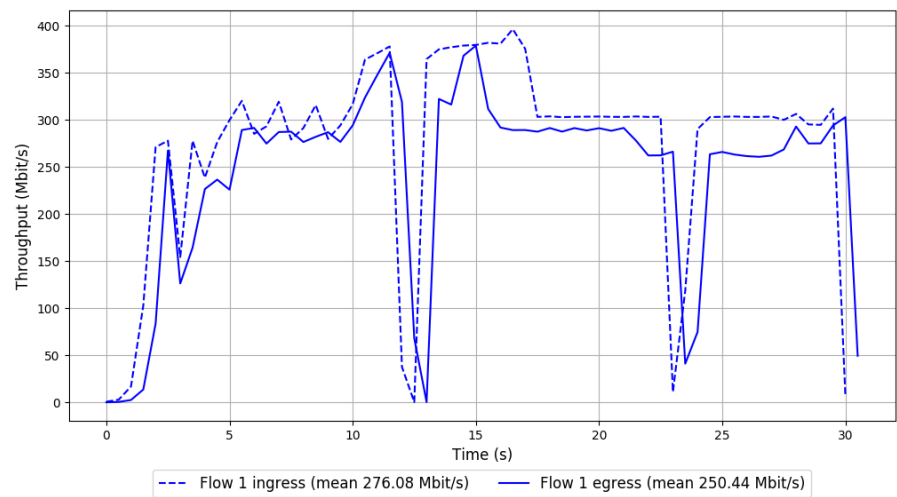
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	247.04	64.78	8.22
Copa	5	12.24	54.96	62.63
TCP Cubic	5	193.02	60.30	0.65
FillP	5	439.78	57.74	5.10
Indigo	5	94.19	66.49	0.10
Indigo-96d2da3	5	146.16	125.42	36.19
LEDBAT	5	9.52	61.89	0.00
Indigo-Muses	5	322.26	59.39	31.23
PCC-Allegro	5	459.70	58.74	3.88
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	5	63.51	59.70	0.00
SCReAM	5	0.22	56.47	0.00
Sprout	5	2.13	60.25	0.00
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	106.07	60.85	0.63
Verus	5	65.33	91.24	46.99
PCC-Vivace	5	209.03	59.06	0.89
WebRTC media	5	1.88	57.36	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-11-29 20:32:17
End at: 2018-11-29 20:32:47
Local clock offset: -3.996 ms
Remote clock offset: -40.786 ms

Below is generated by plot.py at 2018-11-29 23:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 250.44 Mbit/s
95th percentile per-packet one-way delay: 59.794 ms
Loss rate: 9.29%
-- Flow 1:
Average throughput: 250.44 Mbit/s
95th percentile per-packet one-way delay: 59.794 ms
Loss rate: 9.29%

Run 1: Report of TCP BBR — Data Link

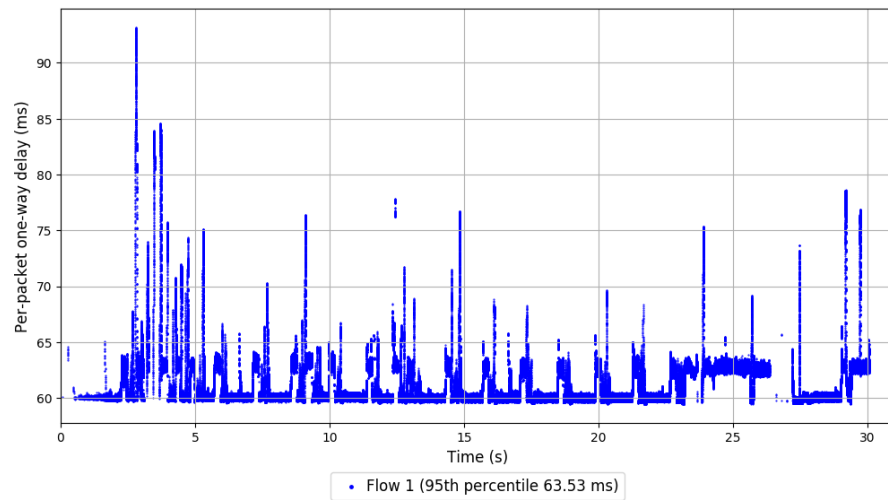
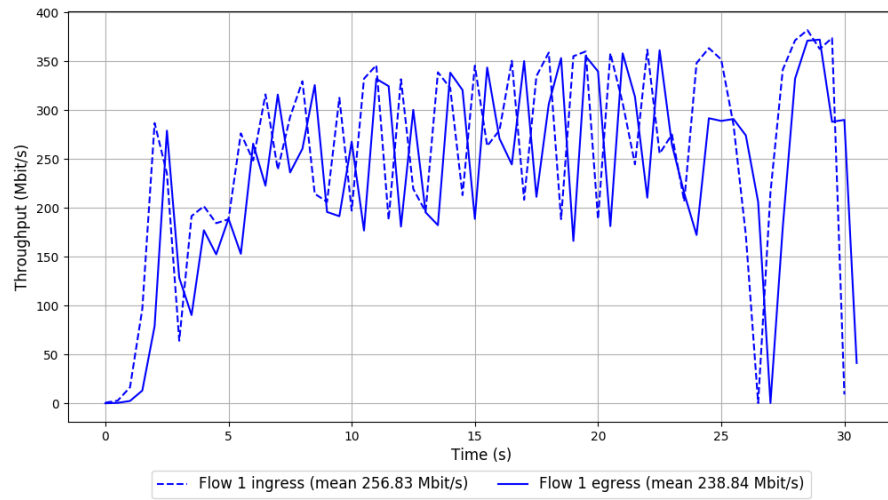


Run 2: Statistics of TCP BBR

Start at: 2018-11-29 21:07:22
End at: 2018-11-29 21:07:52
Local clock offset: -22.84 ms
Remote clock offset: -38.496 ms

Below is generated by plot.py at 2018-11-29 23:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 238.84 Mbit/s
95th percentile per-packet one-way delay: 63.534 ms
Loss rate: 7.00%
-- Flow 1:
Average throughput: 238.84 Mbit/s
95th percentile per-packet one-way delay: 63.534 ms
Loss rate: 7.00%

Run 2: Report of TCP BBR — Data Link

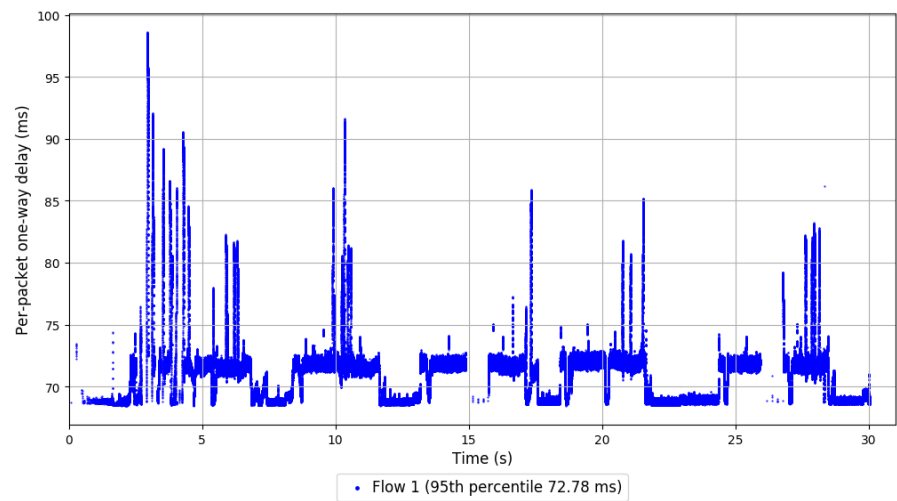
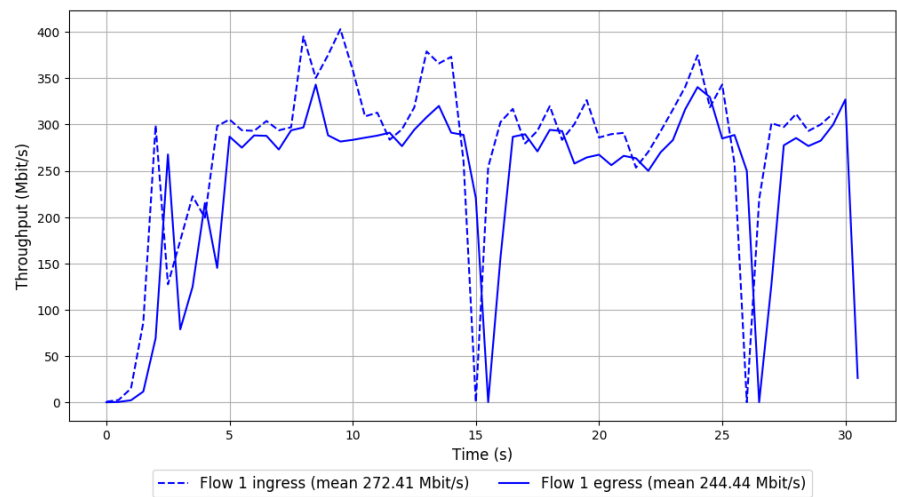


Run 3: Statistics of TCP BBR

Start at: 2018-11-29 21:42:04
End at: 2018-11-29 21:42:34
Local clock offset: -0.261 ms
Remote clock offset: -32.64 ms

Below is generated by plot.py at 2018-11-29 23:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 244.44 Mbit/s
95th percentile per-packet one-way delay: 72.781 ms
Loss rate: 10.27%
-- Flow 1:
Average throughput: 244.44 Mbit/s
95th percentile per-packet one-way delay: 72.781 ms
Loss rate: 10.27%

Run 3: Report of TCP BBR — Data Link

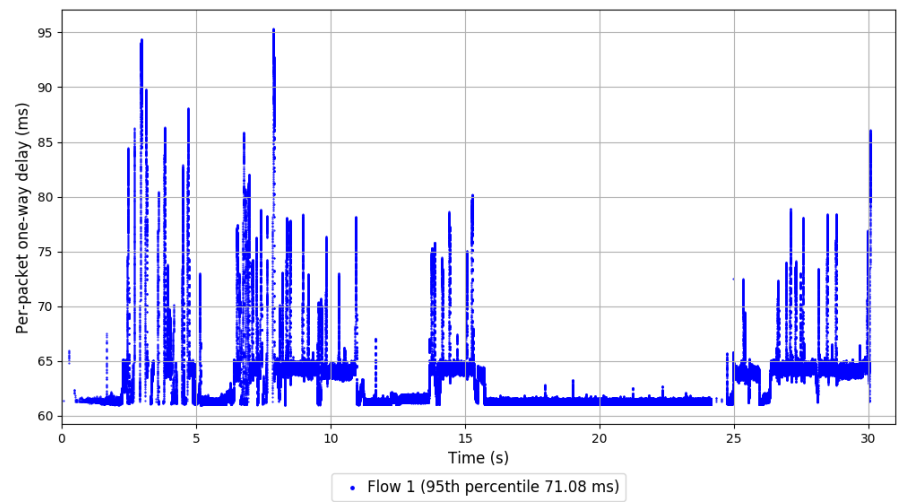
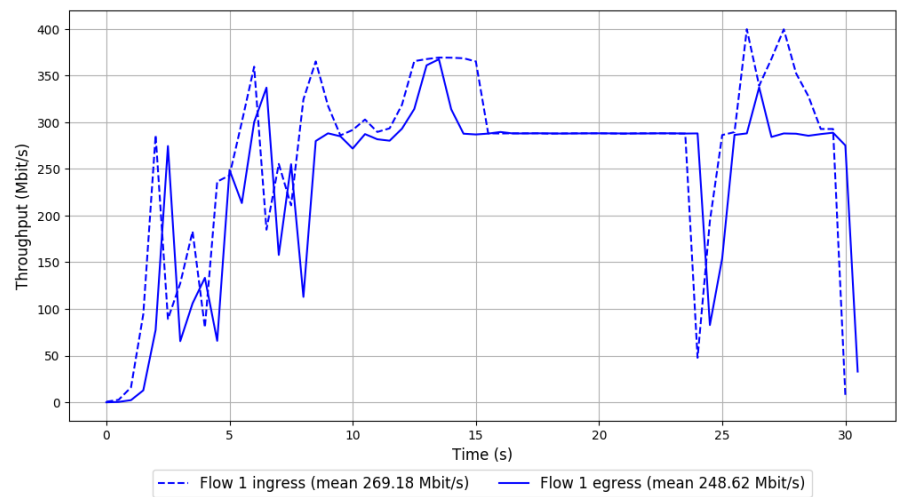


Run 4: Statistics of TCP BBR

Start at: 2018-11-29 22:22:06
End at: 2018-11-29 22:22:36
Local clock offset: 1.184 ms
Remote clock offset: -36.132 ms

Below is generated by plot.py at 2018-11-29 23:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 248.62 Mbit/s
95th percentile per-packet one-way delay: 71.079 ms
Loss rate: 7.62%
-- Flow 1:
Average throughput: 248.62 Mbit/s
95th percentile per-packet one-way delay: 71.079 ms
Loss rate: 7.62%

Run 4: Report of TCP BBR — Data Link

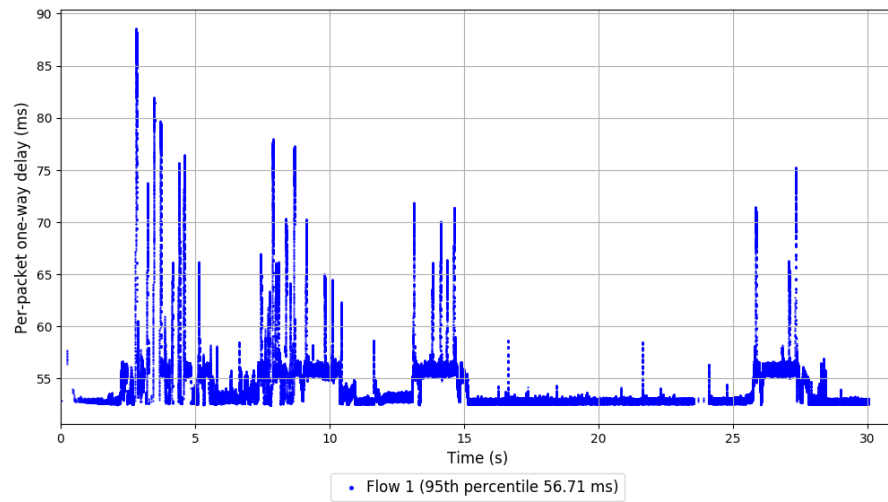
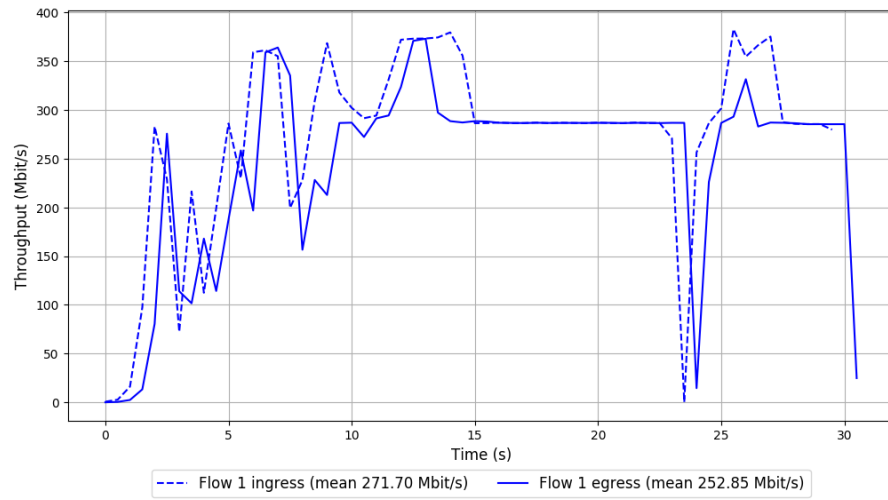


Run 5: Statistics of TCP BBR

Start at: 2018-11-29 23:02:14
End at: 2018-11-29 23:02:44
Local clock offset: 0.229 ms
Remote clock offset: -46.746 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 252.85 Mbit/s
95th percentile per-packet one-way delay: 56.713 ms
Loss rate: 6.94%
-- Flow 1:
Average throughput: 252.85 Mbit/s
95th percentile per-packet one-way delay: 56.713 ms
Loss rate: 6.94%

Run 5: Report of TCP BBR — Data Link

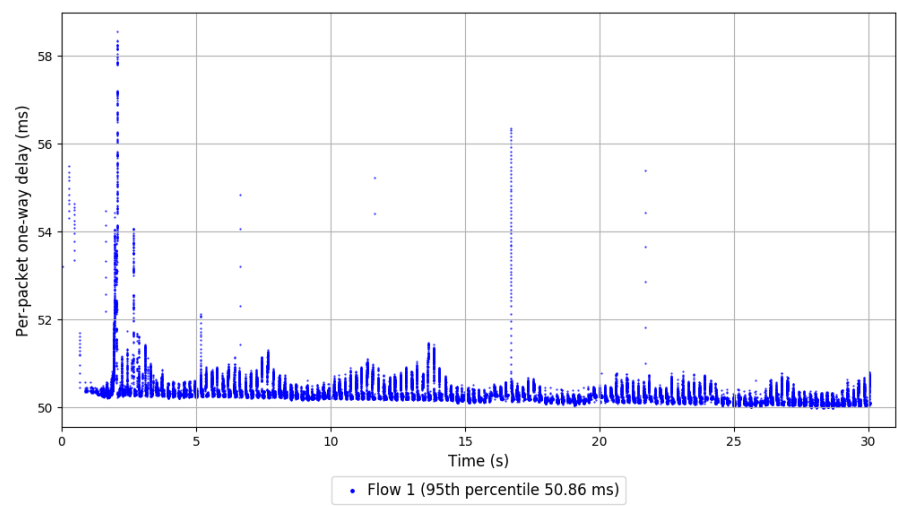
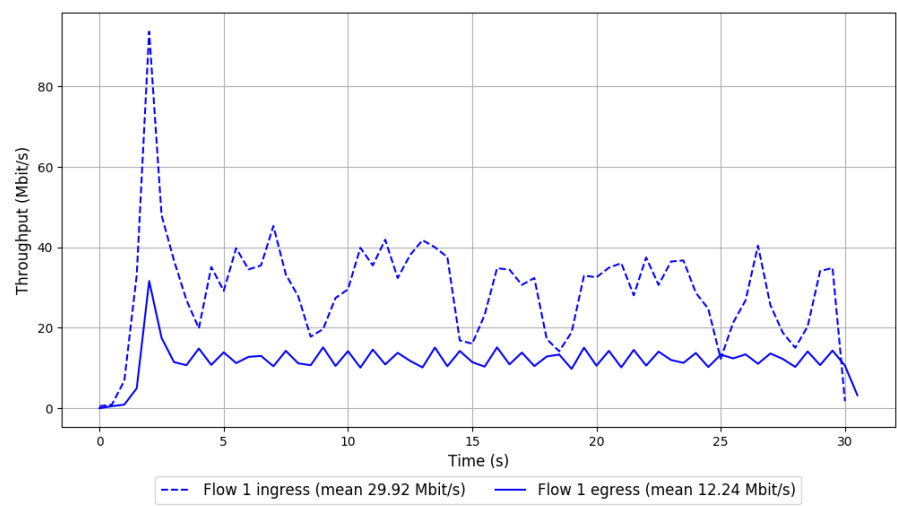


Run 1: Statistics of Copa

Start at: 2018-11-29 20:46:19
End at: 2018-11-29 20:46:49
Local clock offset: -9.733 ms
Remote clock offset: -45.13 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 50.861 ms
Loss rate: 59.09%
-- Flow 1:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 50.861 ms
Loss rate: 59.09%

Run 1: Report of Copa — Data Link

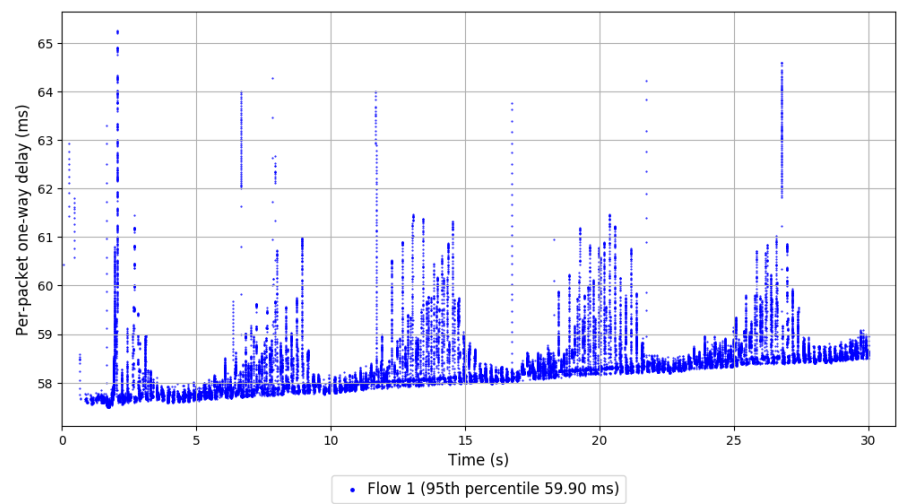
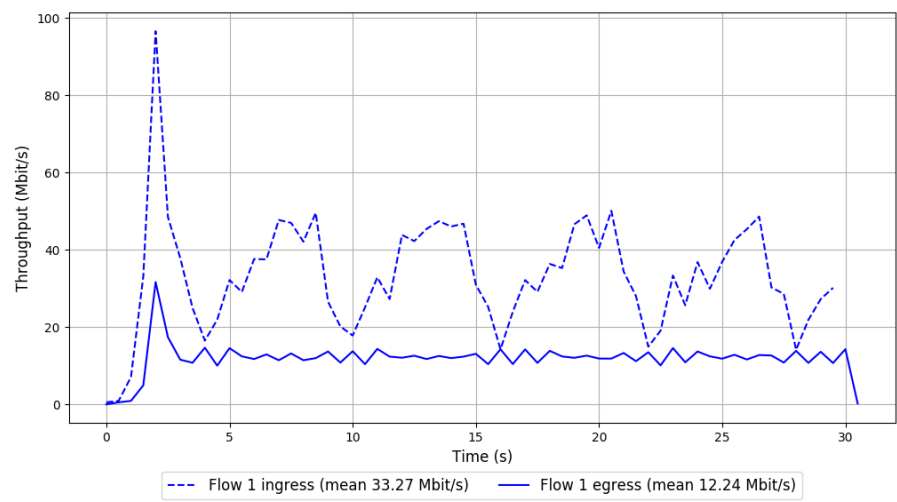


Run 2: Statistics of Copa

Start at: 2018-11-29 21:21:26
End at: 2018-11-29 21:21:56
Local clock offset: -16.722 ms
Remote clock offset: -40.922 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 59.895 ms
Loss rate: 63.21%
-- Flow 1:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 59.895 ms
Loss rate: 63.21%

Run 2: Report of Copa — Data Link

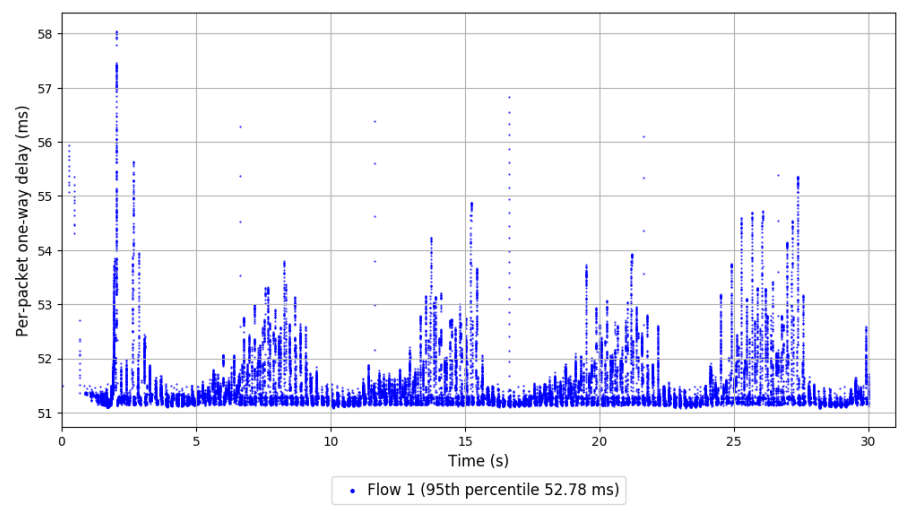
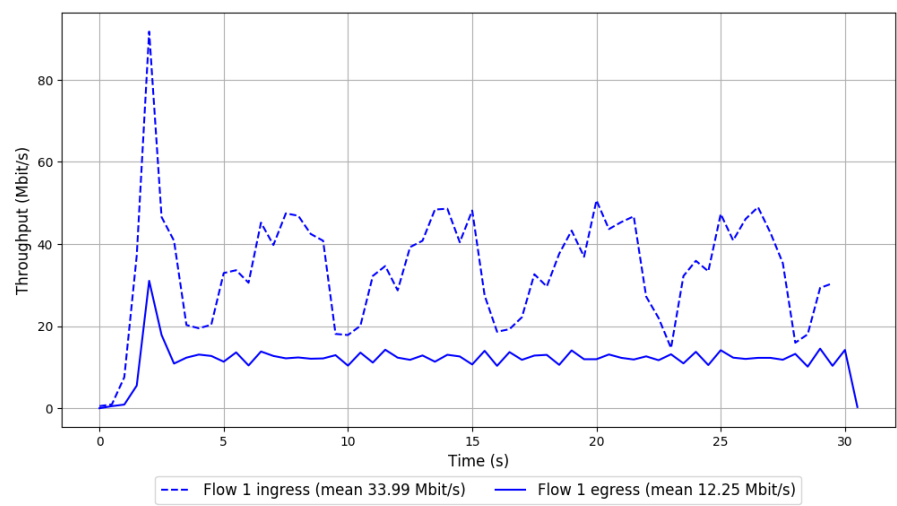


Run 3: Statistics of Copa

Start at: 2018-11-29 21:56:05
End at: 2018-11-29 21:56:35
Local clock offset: 1.231 ms
Remote clock offset: -46.441 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 52.781 ms
Loss rate: 63.97%
-- Flow 1:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 52.781 ms
Loss rate: 63.97%

Run 3: Report of Copa — Data Link

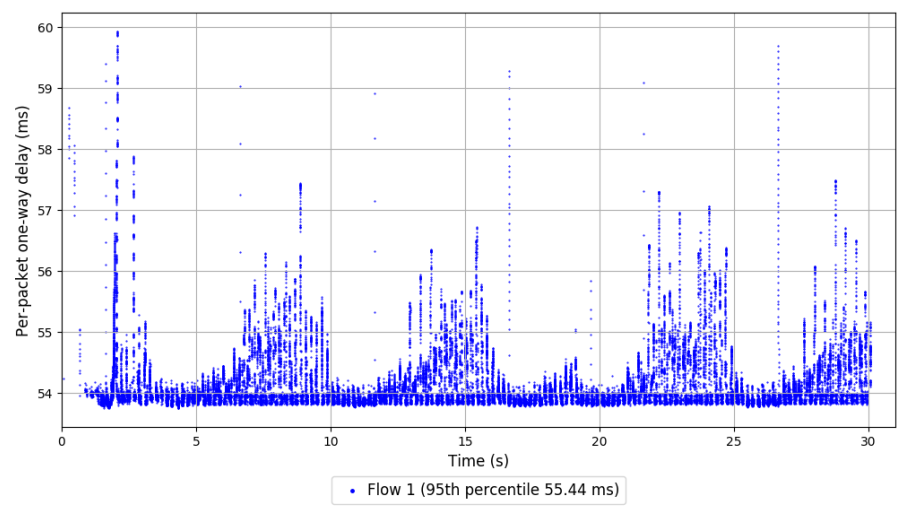
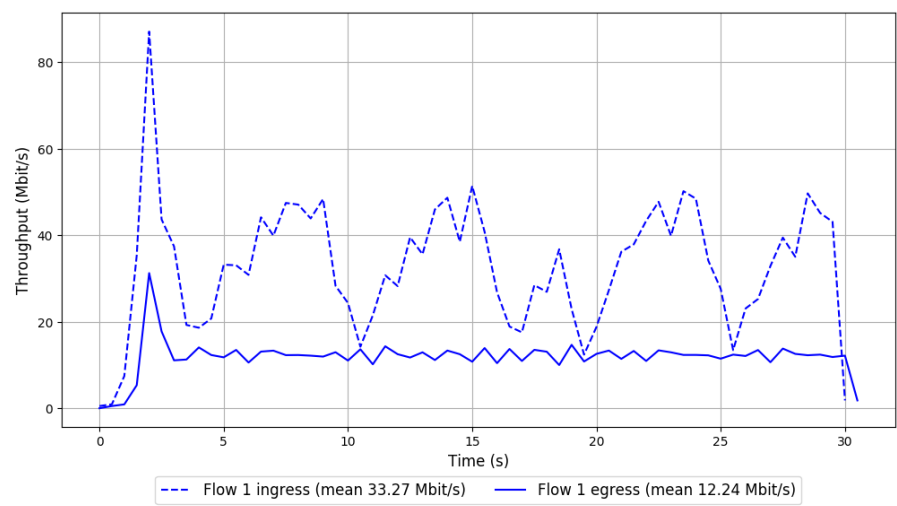


Run 4: Statistics of Copa

Start at: 2018-11-29 22:30:41
End at: 2018-11-29 22:31:11
Local clock offset: 3.409 ms
Remote clock offset: -41.349 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 55.436 ms
Loss rate: 63.22%
-- Flow 1:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 55.436 ms
Loss rate: 63.22%

Run 4: Report of Copa — Data Link

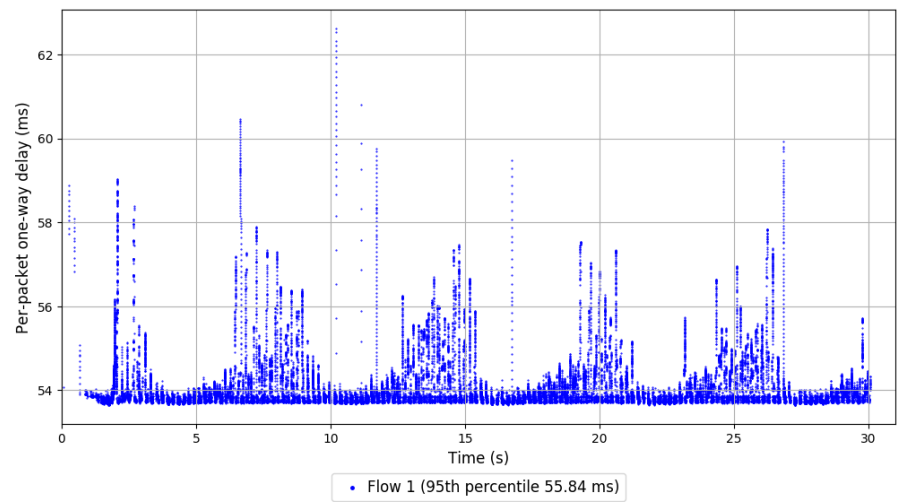
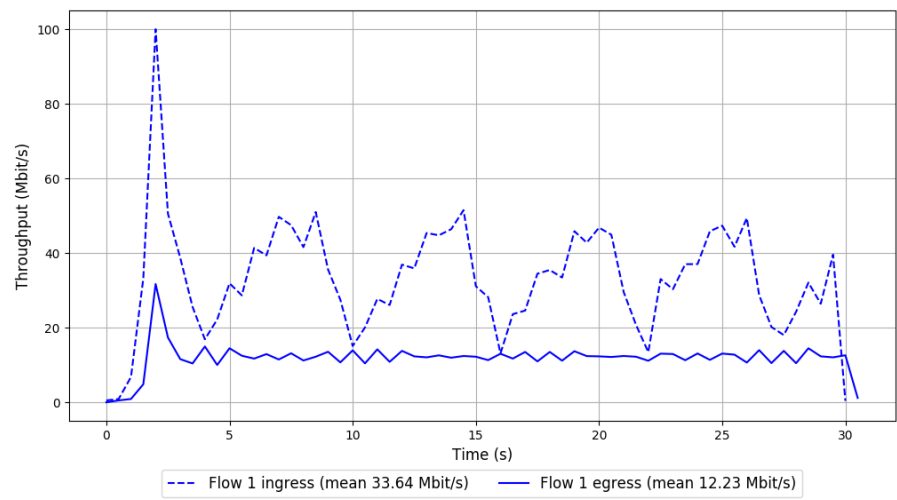


Run 5: Statistics of Copa

Start at: 2018-11-29 23:16:16
End at: 2018-11-29 23:16:47
Local clock offset: 2.802 ms
Remote clock offset: -42.828 ms

Below is generated by plot.py at 2018-11-29 23:30:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 55.840 ms
Loss rate: 63.64%
-- Flow 1:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 55.840 ms
Loss rate: 63.64%

Run 5: Report of Copa — Data Link

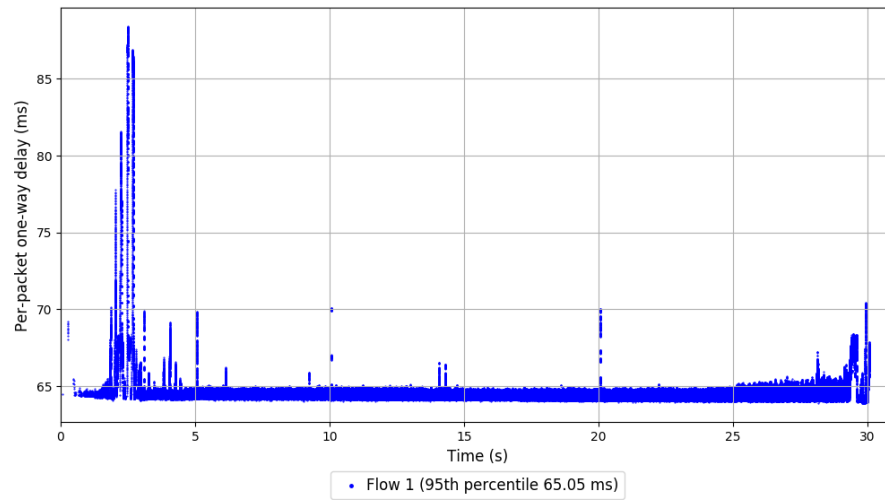
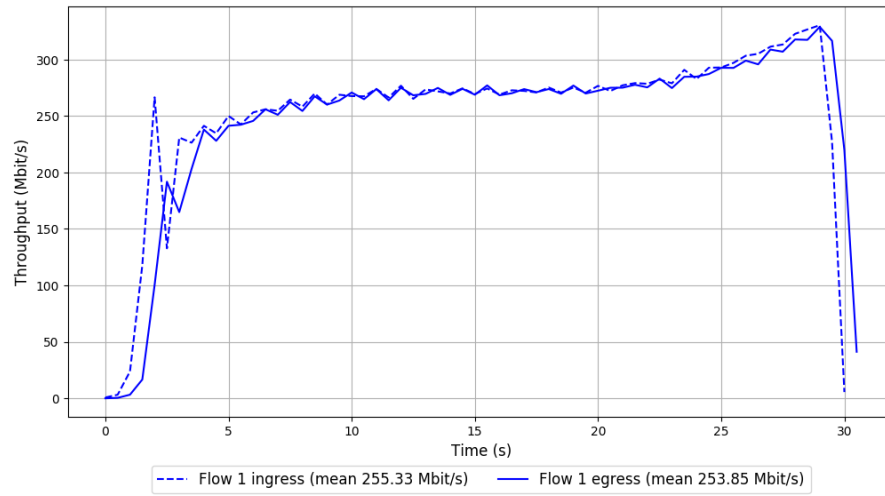


Run 1: Statistics of TCP Cubic

Start at: 2018-11-29 20:50:31
End at: 2018-11-29 20:51:01
Local clock offset: -12.922 ms
Remote clock offset: -32.452 ms

Below is generated by plot.py at 2018-11-29 23:30:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 253.85 Mbit/s
95th percentile per-packet one-way delay: 65.046 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 253.85 Mbit/s
95th percentile per-packet one-way delay: 65.046 ms
Loss rate: 0.58%

Run 1: Report of TCP Cubic — Data Link

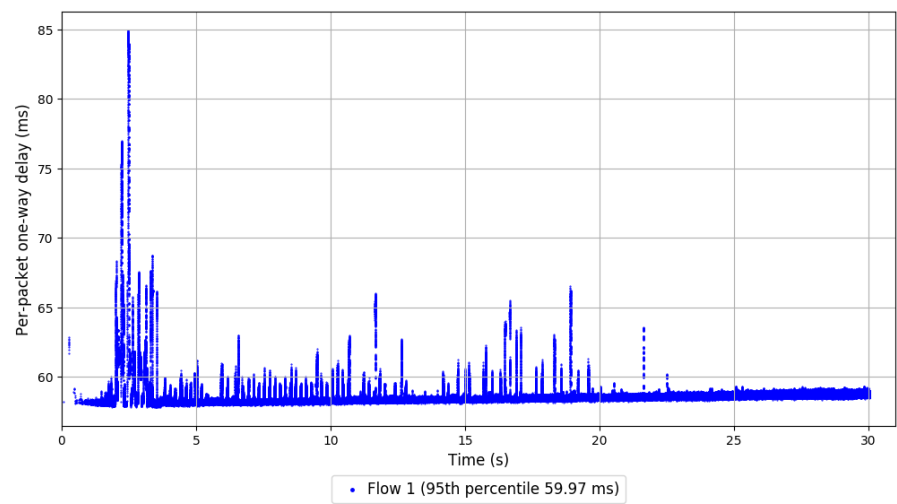
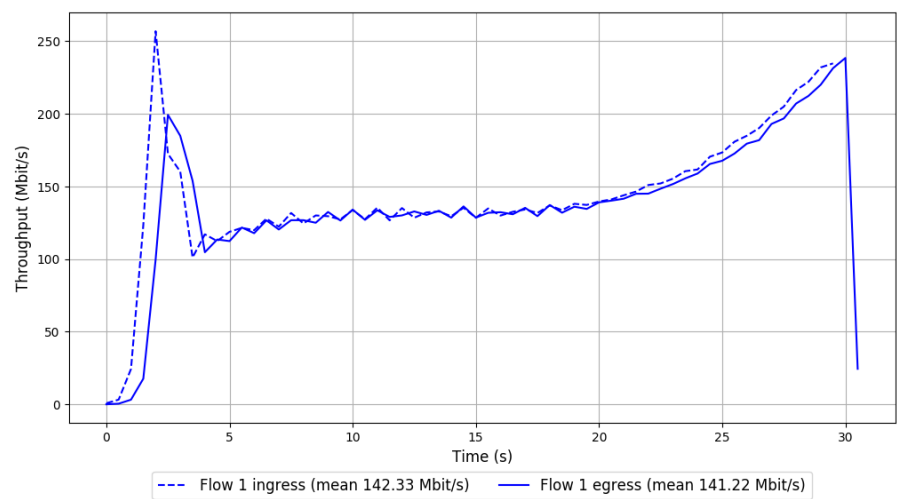


Run 2: Statistics of TCP Cubic

Start at: 2018-11-29 21:25:31
End at: 2018-11-29 21:26:01
Local clock offset: -10.522 ms
Remote clock offset: -40.797 ms

Below is generated by plot.py at 2018-11-29 23:30:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 141.22 Mbit/s
95th percentile per-packet one-way delay: 59.974 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 141.22 Mbit/s
95th percentile per-packet one-way delay: 59.974 ms
Loss rate: 0.78%

Run 2: Report of TCP Cubic — Data Link

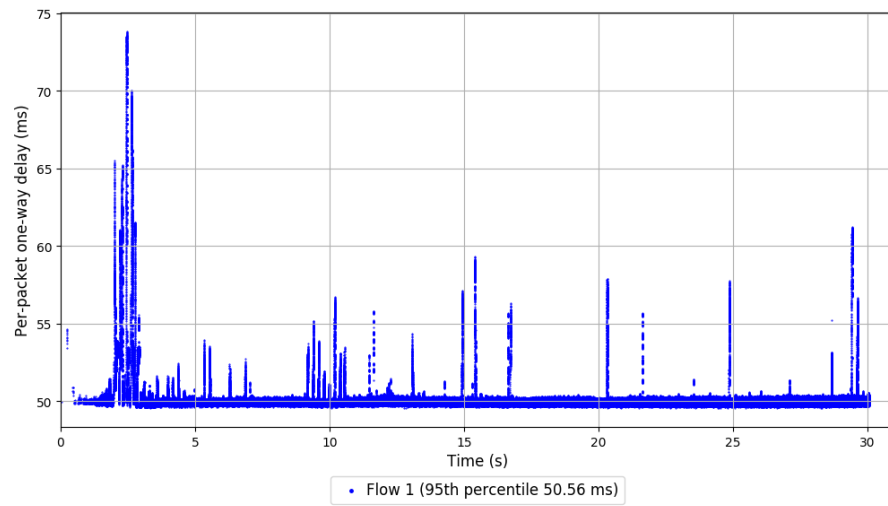
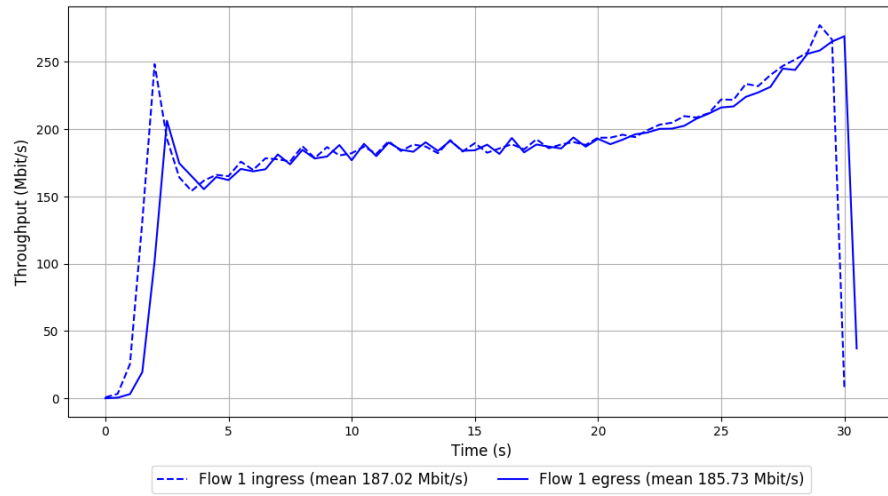


Run 3: Statistics of TCP Cubic

Start at: 2018-11-29 21:59:55
End at: 2018-11-29 22:00:25
Local clock offset: 0.98 ms
Remote clock offset: -47.972 ms

Below is generated by plot.py at 2018-11-29 23:30:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 185.73 Mbit/s
95th percentile per-packet one-way delay: 50.564 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 185.73 Mbit/s
95th percentile per-packet one-way delay: 50.564 ms
Loss rate: 0.69%

Run 3: Report of TCP Cubic — Data Link

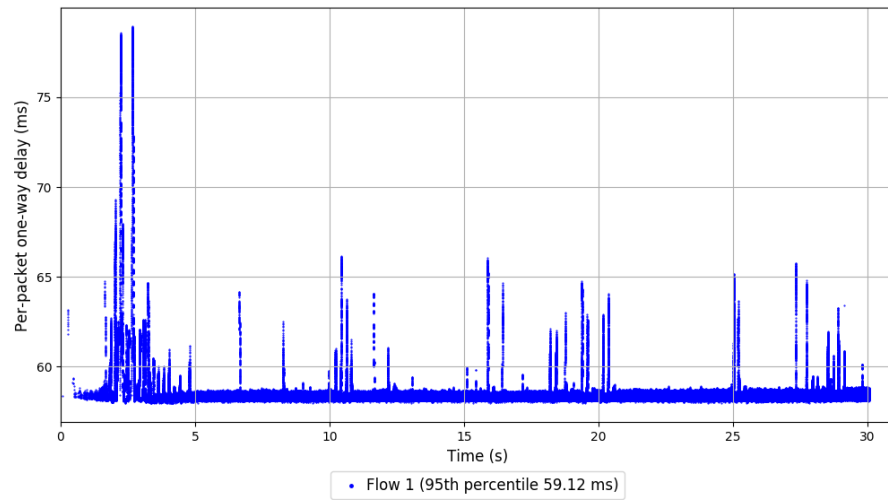
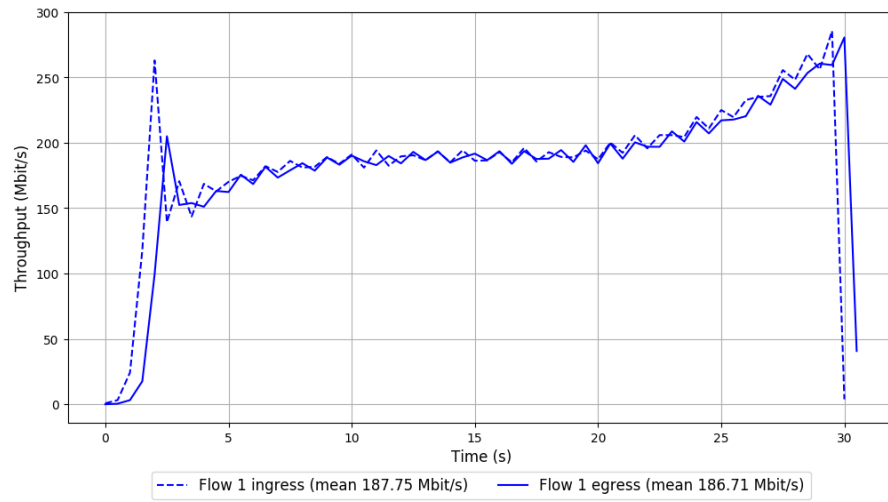


Run 4: Statistics of TCP Cubic

Start at: 2018-11-29 22:34:30
End at: 2018-11-29 22:35:00
Local clock offset: 0.311 ms
Remote clock offset: -40.503 ms

Below is generated by plot.py at 2018-11-29 23:31:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 186.71 Mbit/s
95th percentile per-packet one-way delay: 59.122 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 186.71 Mbit/s
95th percentile per-packet one-way delay: 59.122 ms
Loss rate: 0.56%

Run 4: Report of TCP Cubic — Data Link

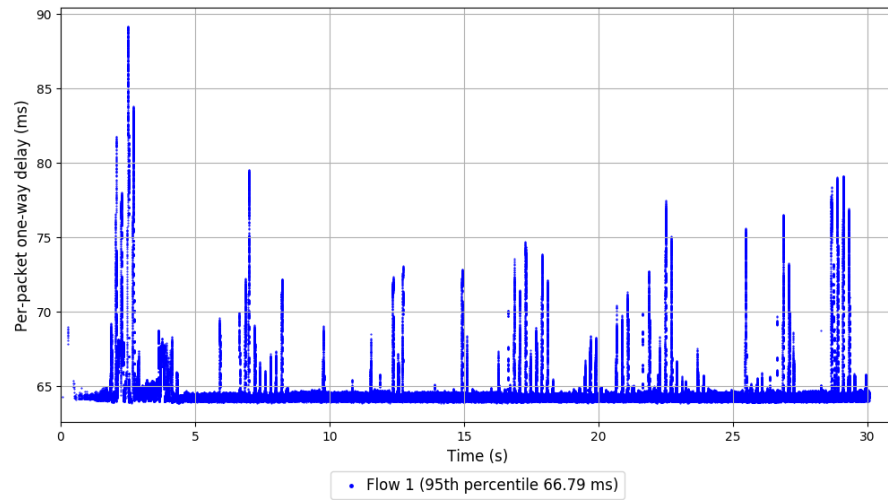
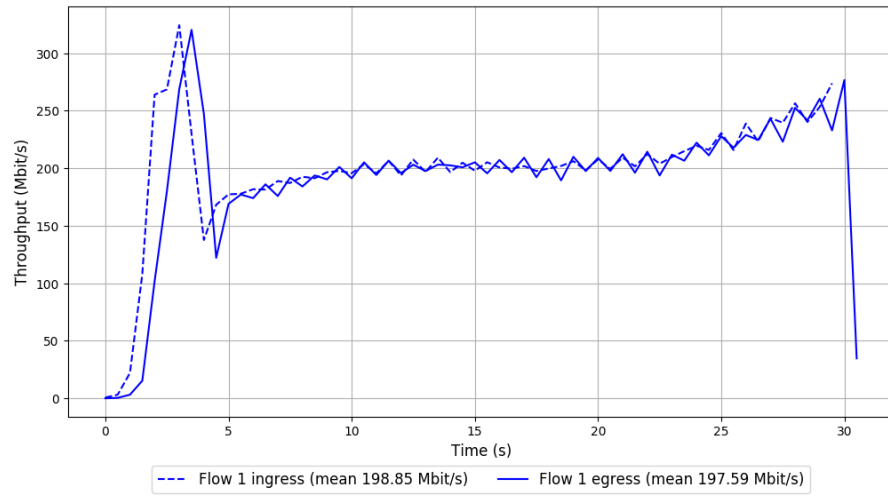


Run 5: Statistics of TCP Cubic

Start at: 2018-11-29 23:20:07
End at: 2018-11-29 23:20:37
Local clock offset: -1.477 ms
Remote clock offset: -39.26 ms

Below is generated by plot.py at 2018-11-29 23:31:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 197.59 Mbit/s
95th percentile per-packet one-way delay: 66.789 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 197.59 Mbit/s
95th percentile per-packet one-way delay: 66.789 ms
Loss rate: 0.63%

Run 5: Report of TCP Cubic — Data Link

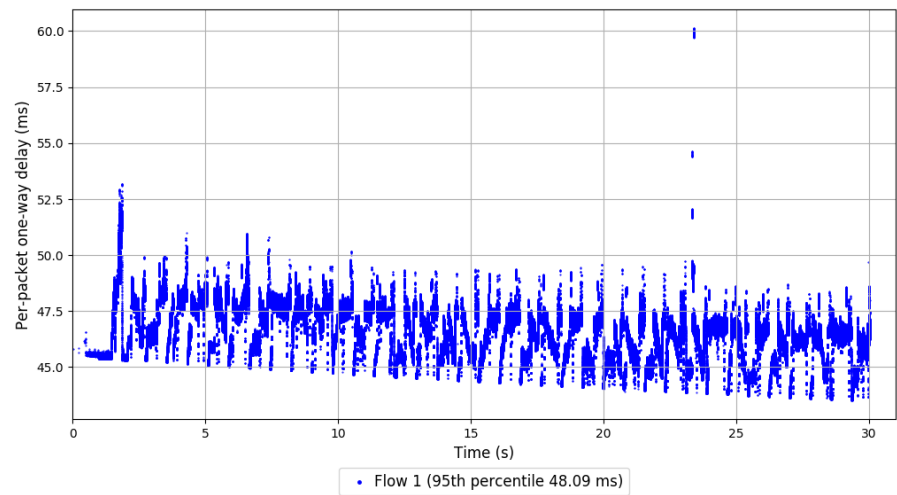
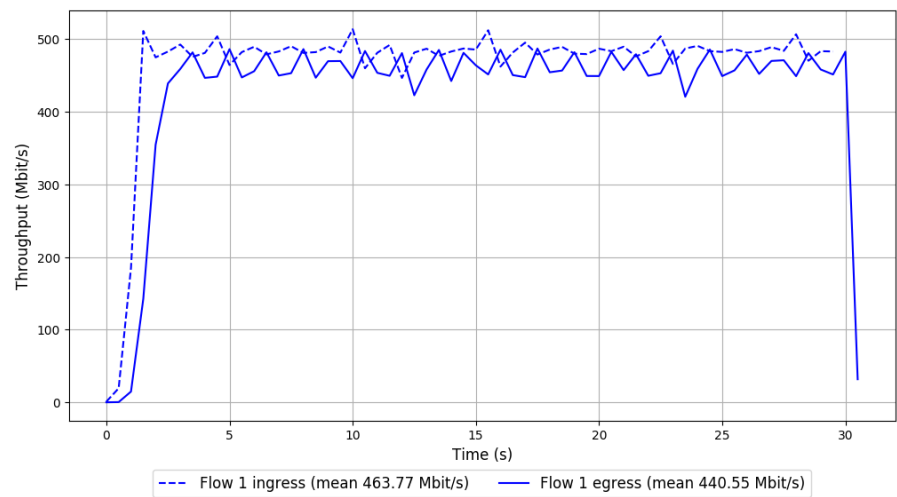


Run 1: Statistics of FillP

Start at: 2018-11-29 20:15:14
End at: 2018-11-29 20:15:44
Local clock offset: 17.555 ms
Remote clock offset: -31.068 ms

Below is generated by plot.py at 2018-11-29 23:36:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 440.55 Mbit/s
95th percentile per-packet one-way delay: 48.093 ms
Loss rate: 5.00%
-- Flow 1:
Average throughput: 440.55 Mbit/s
95th percentile per-packet one-way delay: 48.093 ms
Loss rate: 5.00%

Run 1: Report of FillP — Data Link

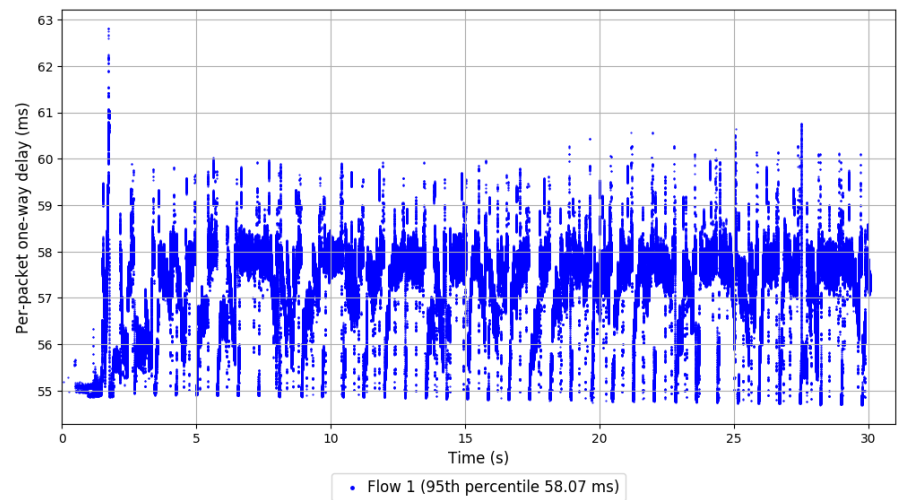
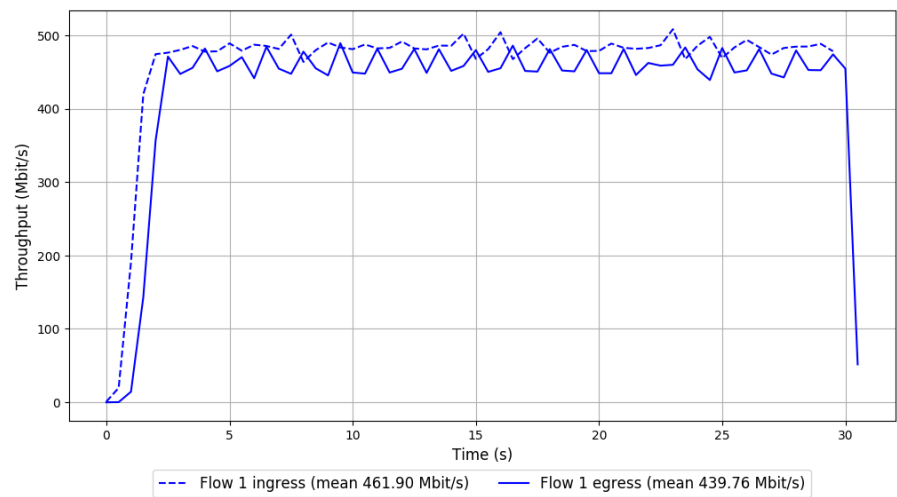


Run 2: Statistics of FillP

Start at: 2018-11-29 20:55:50
End at: 2018-11-29 20:56:20
Local clock offset: -14.411 ms
Remote clock offset: -40.16 ms

Below is generated by plot.py at 2018-11-29 23:36:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 439.76 Mbit/s
95th percentile per-packet one-way delay: 58.067 ms
Loss rate: 4.79%
-- Flow 1:
Average throughput: 439.76 Mbit/s
95th percentile per-packet one-way delay: 58.067 ms
Loss rate: 4.79%

Run 2: Report of FillP — Data Link

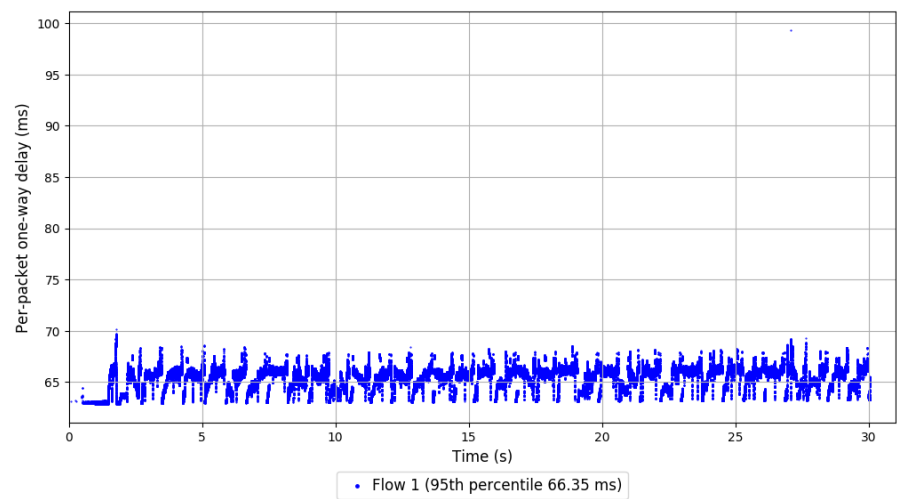
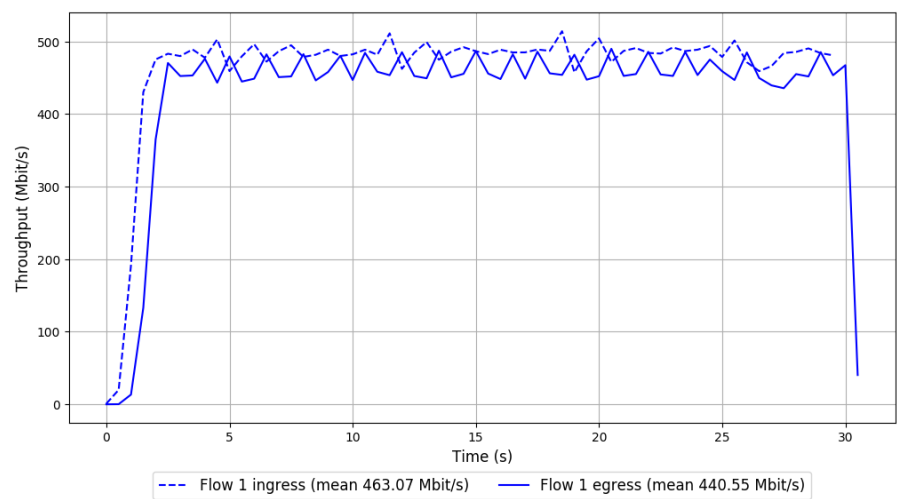


Run 3: Statistics of FillP

Start at: 2018-11-29 21:30:27
End at: 2018-11-29 21:30:57
Local clock offset: -1.954 ms
Remote clock offset: -32.323 ms

Below is generated by plot.py at 2018-11-29 23:36:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 440.55 Mbit/s
95th percentile per-packet one-way delay: 66.353 ms
Loss rate: 4.86%
-- Flow 1:
Average throughput: 440.55 Mbit/s
95th percentile per-packet one-way delay: 66.353 ms
Loss rate: 4.86%

Run 3: Report of FillP — Data Link

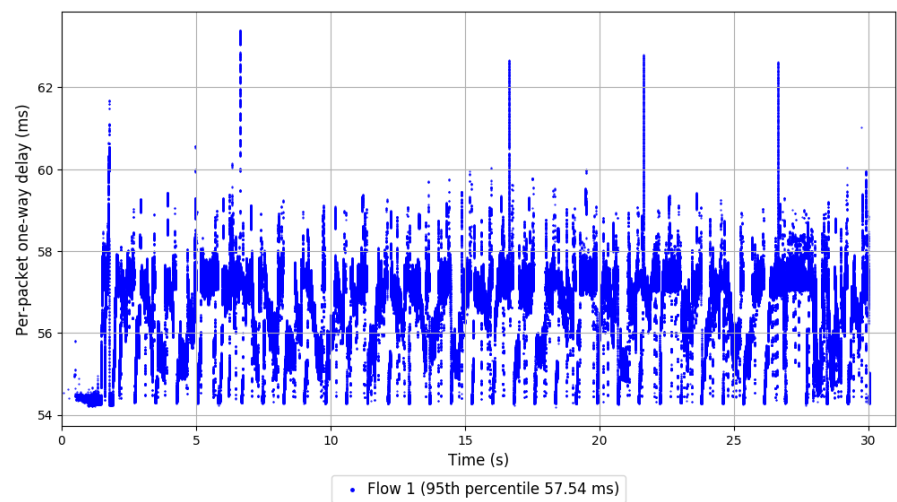
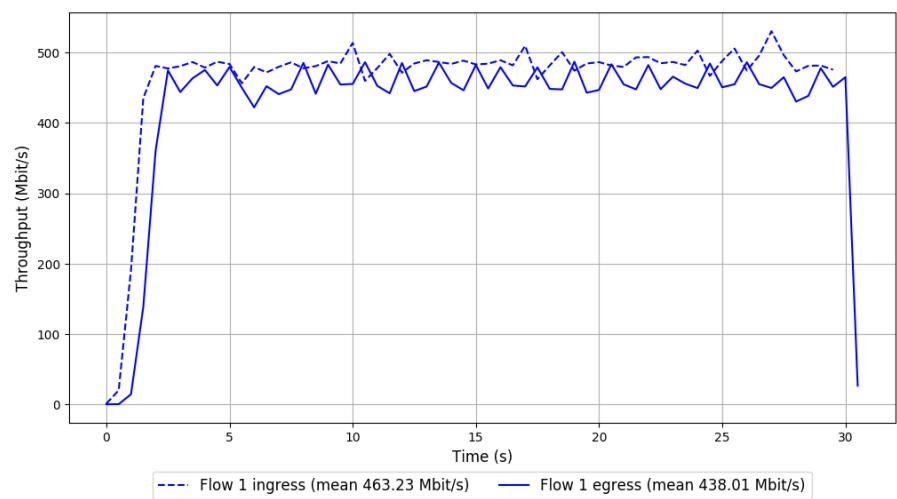


Run 4: Statistics of FillP

Start at: 2018-11-29 22:05:02
End at: 2018-11-29 22:05:32
Local clock offset: 2.789 ms
Remote clock offset: -41.182 ms

Below is generated by plot.py at 2018-11-29 23:36:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 438.01 Mbit/s
95th percentile per-packet one-way delay: 57.542 ms
Loss rate: 5.44%
-- Flow 1:
Average throughput: 438.01 Mbit/s
95th percentile per-packet one-way delay: 57.542 ms
Loss rate: 5.44%

Run 4: Report of FillP — Data Link

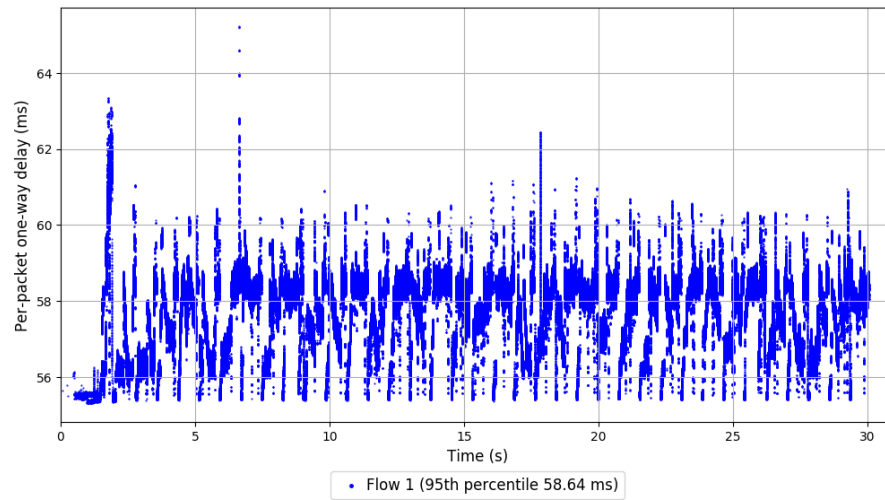
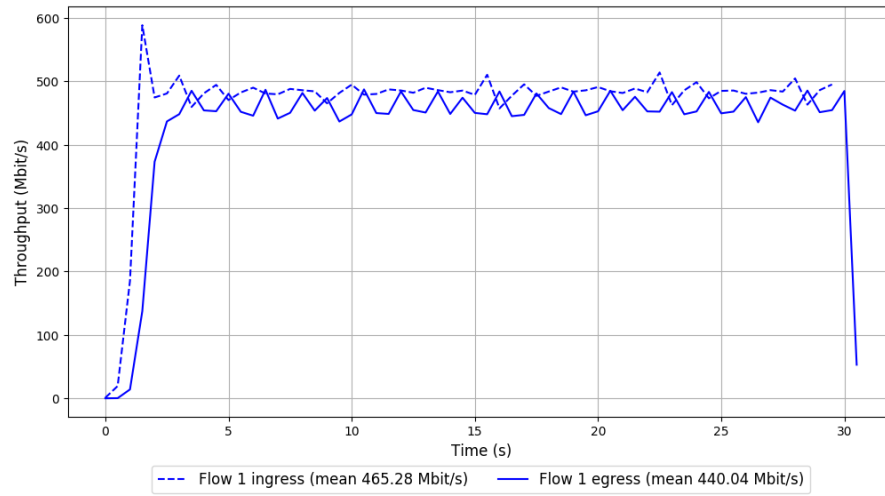


Run 5: Statistics of FillP

Start at: 2018-11-29 22:39:38
End at: 2018-11-29 22:40:08
Local clock offset: 1.536 ms
Remote clock offset: -42.248 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 440.04 Mbit/s
95th percentile per-packet one-way delay: 58.637 ms
Loss rate: 5.42%
-- Flow 1:
Average throughput: 440.04 Mbit/s
95th percentile per-packet one-way delay: 58.637 ms
Loss rate: 5.42%

Run 5: Report of FillP — Data Link

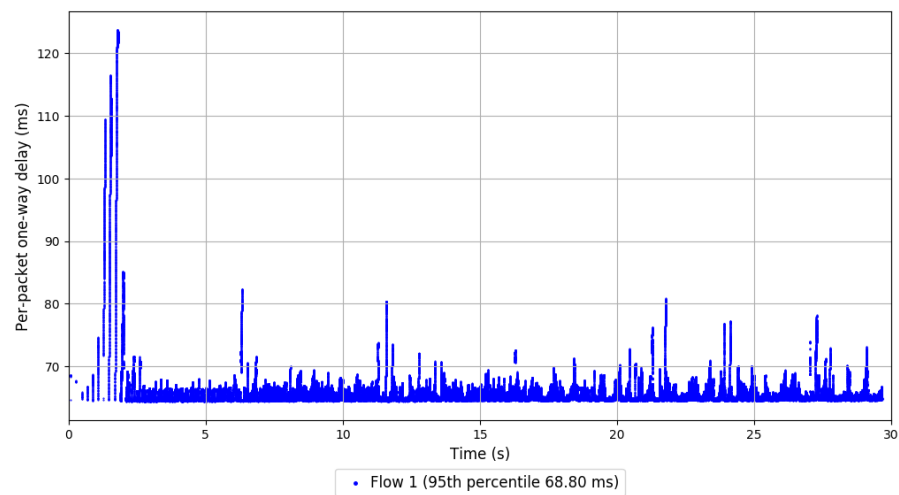
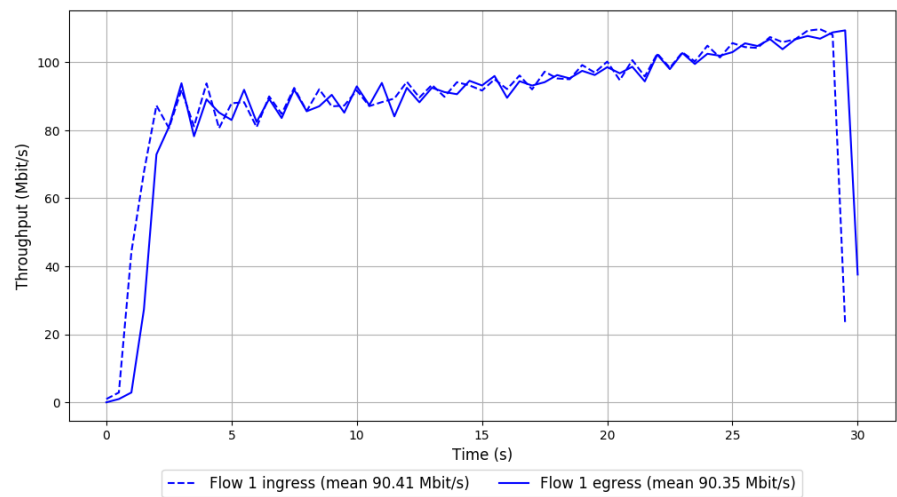


```
Run 1: Statistics of Indigo

Start at: 2018-11-29 20:20:35
End at: 2018-11-29 20:21:05
Local clock offset: -0.103 ms
Remote clock offset: -32.382 ms

# Below is generated by plot.py at 2018-11-29 23:36:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 68.799 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 68.799 ms
Loss rate: 0.06%
```

Run 1: Report of Indigo — Data Link

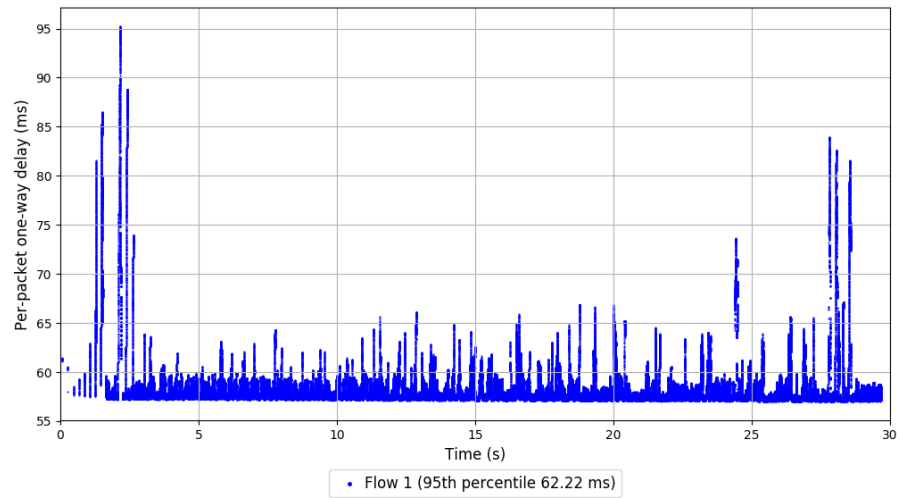
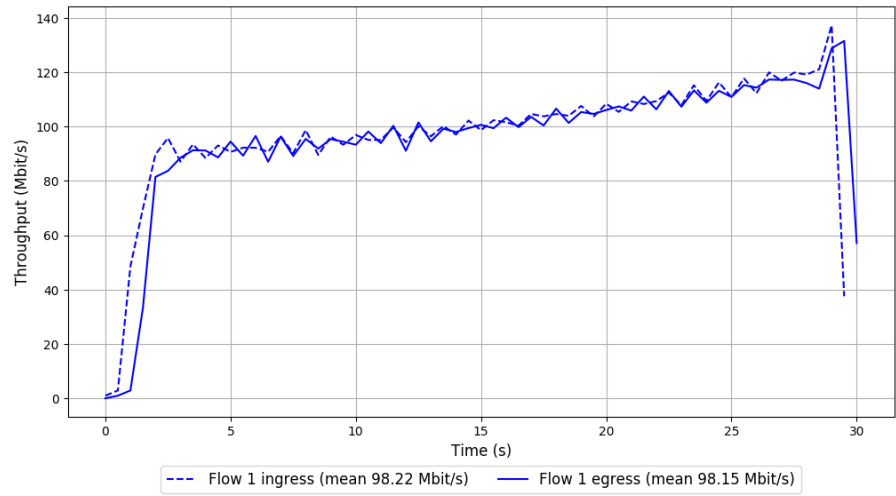


Run 2: Statistics of Indigo

Start at: 2018-11-29 21:01:10
End at: 2018-11-29 21:01:40
Local clock offset: -17.606 ms
Remote clock offset: -41.196 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 98.15 Mbit/s
95th percentile per-packet one-way delay: 62.215 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 98.15 Mbit/s
95th percentile per-packet one-way delay: 62.215 ms
Loss rate: 0.07%

Run 2: Report of Indigo — Data Link

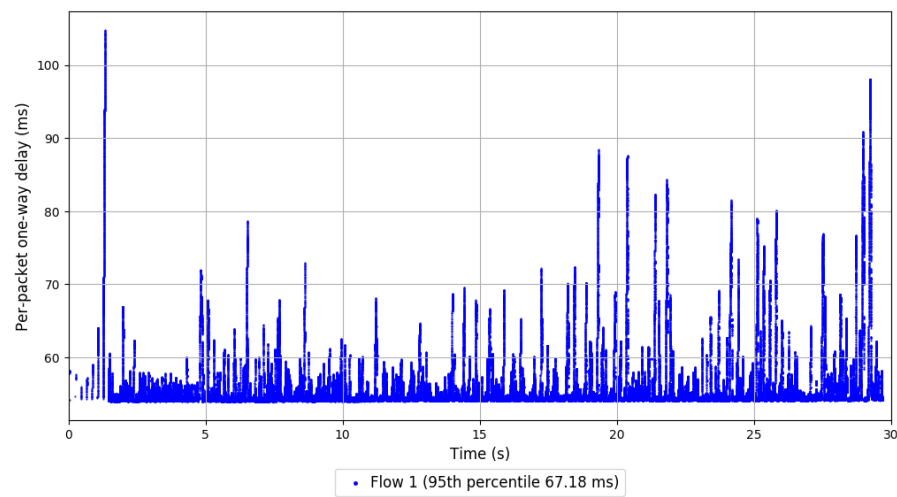
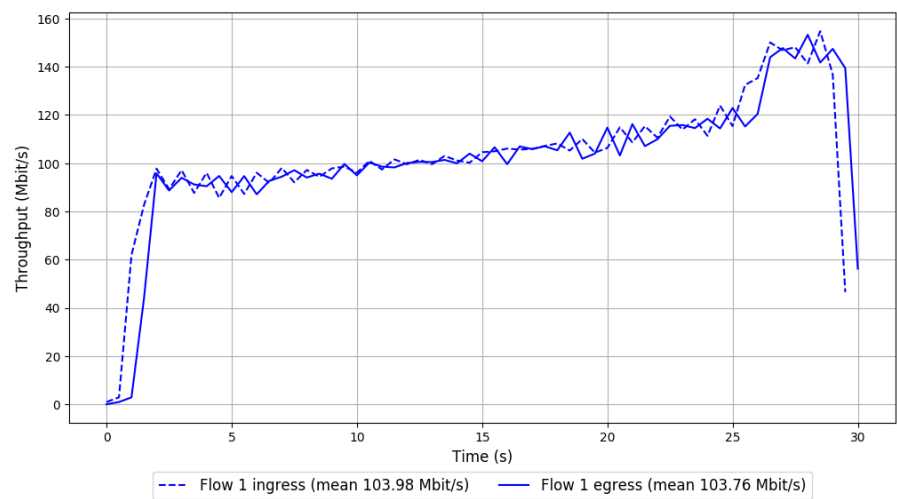


Run 3: Statistics of Indigo

Start at: 2018-11-29 21:35:48
End at: 2018-11-29 21:36:18
Local clock offset: 1.158 ms
Remote clock offset: -41.265 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 103.76 Mbit/s
95th percentile per-packet one-way delay: 67.182 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 103.76 Mbit/s
95th percentile per-packet one-way delay: 67.182 ms
Loss rate: 0.20%

Run 3: Report of Indigo — Data Link

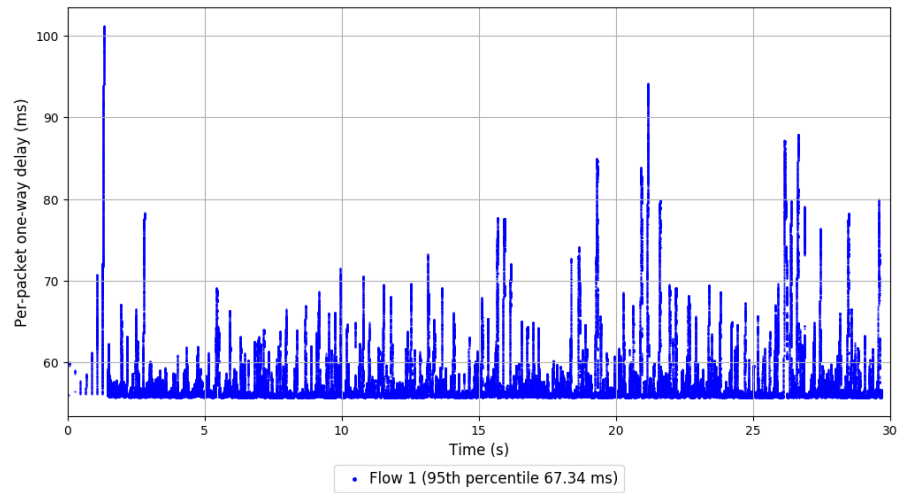
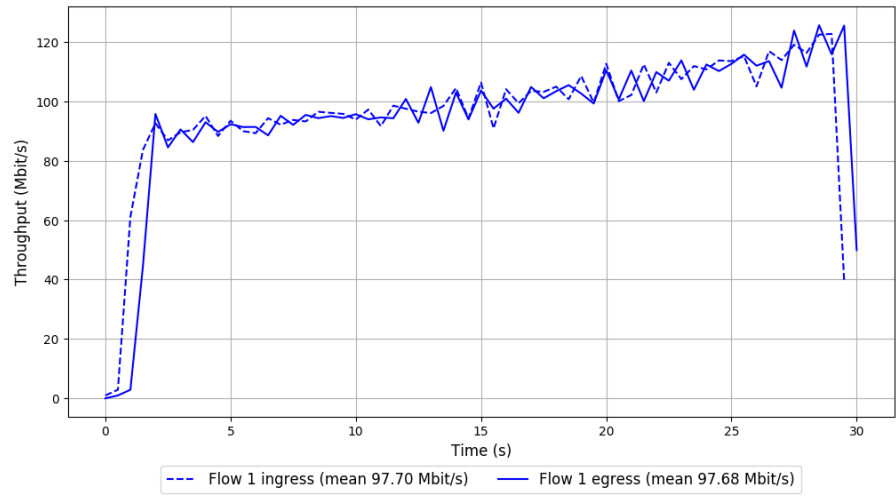


Run 4: Statistics of Indigo

Start at: 2018-11-29 22:10:20
End at: 2018-11-29 22:10:50
Local clock offset: 2.199 ms
Remote clock offset: -39.876 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 97.68 Mbit/s
95th percentile per-packet one-way delay: 67.342 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 97.68 Mbit/s
95th percentile per-packet one-way delay: 67.342 ms
Loss rate: 0.02%

Run 4: Report of Indigo — Data Link

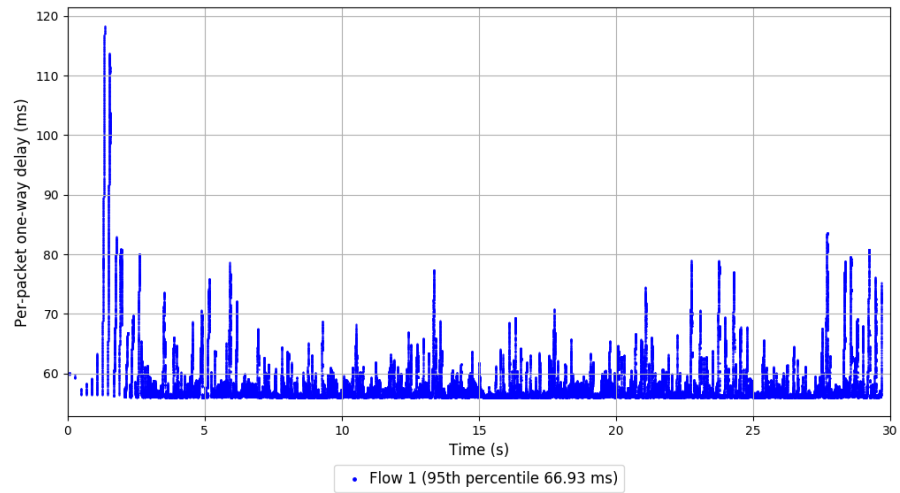
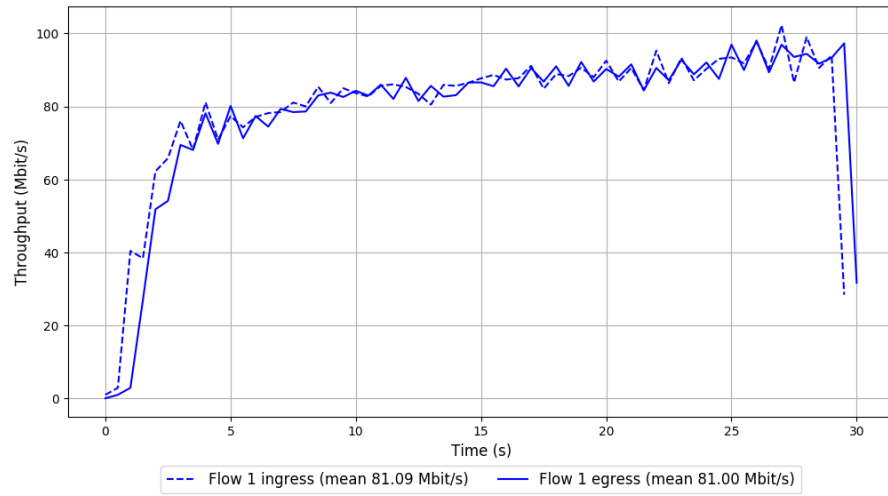


Run 5: Statistics of Indigo

Start at: 2018-11-29 22:50:32
End at: 2018-11-29 22:51:02
Local clock offset: 1.07 ms
Remote clock offset: -44.759 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.00 Mbit/s
95th percentile per-packet one-way delay: 66.930 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 81.00 Mbit/s
95th percentile per-packet one-way delay: 66.930 ms
Loss rate: 0.13%

Run 5: Report of Indigo — Data Link

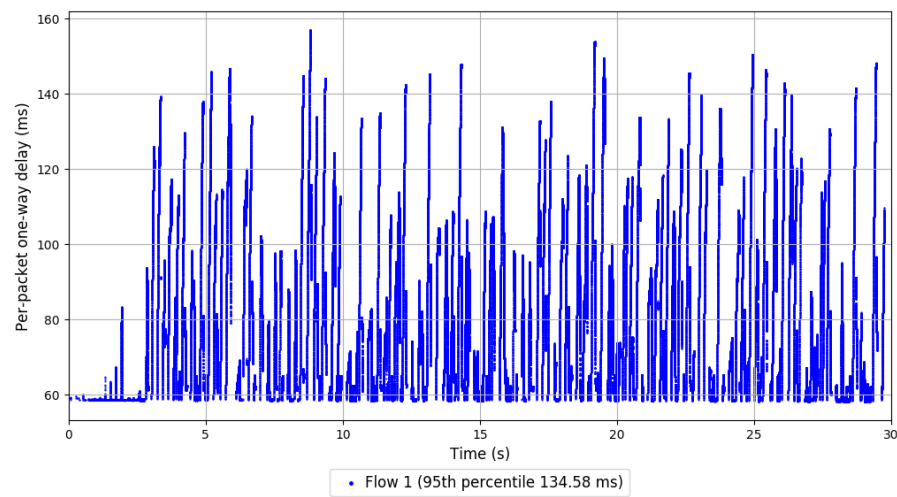
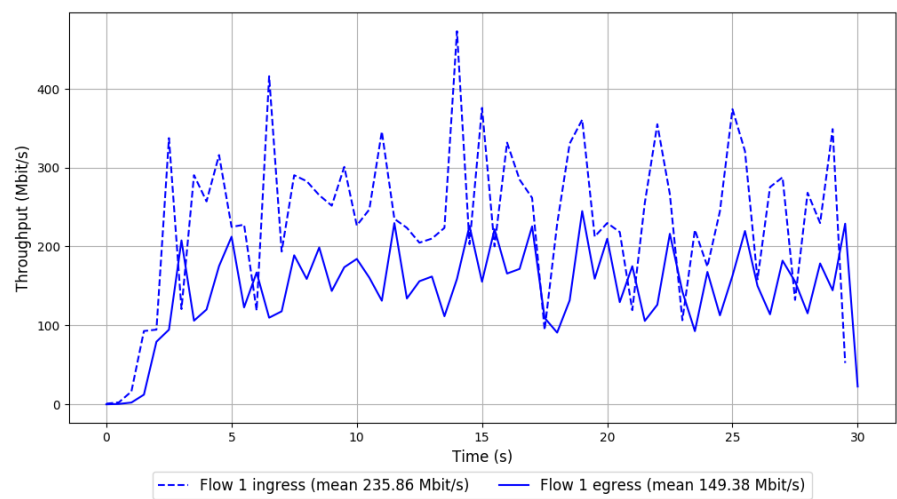


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-29 20:17:41
End at: 2018-11-29 20:18:11
Local clock offset: -6.534 ms
Remote clock offset: -46.276 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 149.38 Mbit/s
95th percentile per-packet one-way delay: 134.577 ms
Loss rate: 36.66%
-- Flow 1:
Average throughput: 149.38 Mbit/s
95th percentile per-packet one-way delay: 134.577 ms
Loss rate: 36.66%

Run 1: Report of Indigo-96d2da3 — Data Link

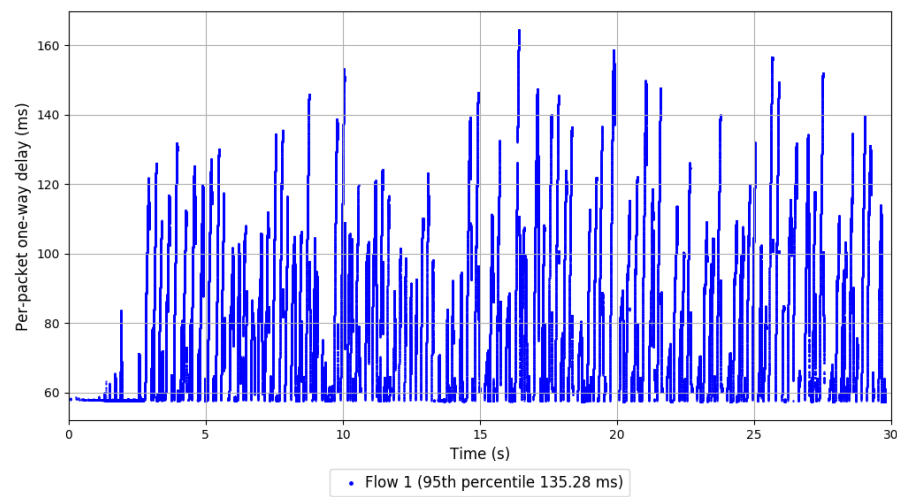
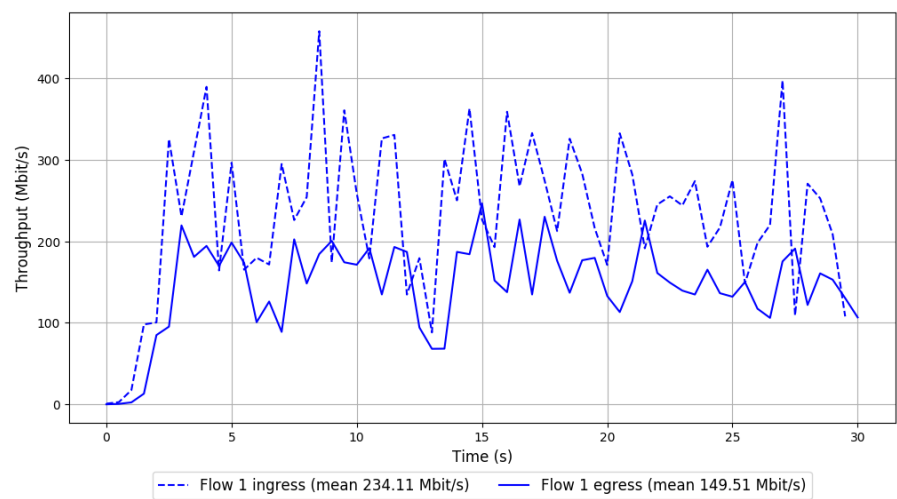


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-29 20:58:16
End at: 2018-11-29 20:58:46
Local clock offset: -17.281 ms
Remote clock offset: -39.623 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 149.51 Mbit/s
95th percentile per-packet one-way delay: 135.279 ms
Loss rate: 36.13%
-- Flow 1:
Average throughput: 149.51 Mbit/s
95th percentile per-packet one-way delay: 135.279 ms
Loss rate: 36.13%

Run 2: Report of Indigo-96d2da3 — Data Link

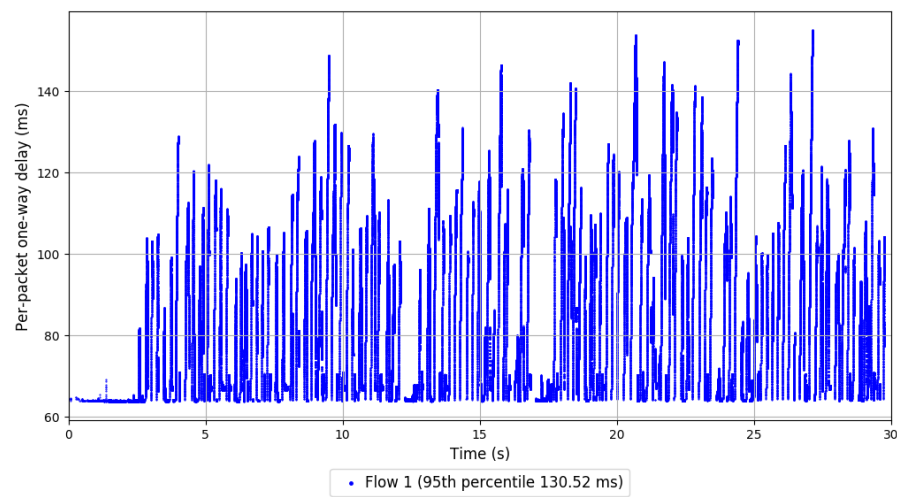
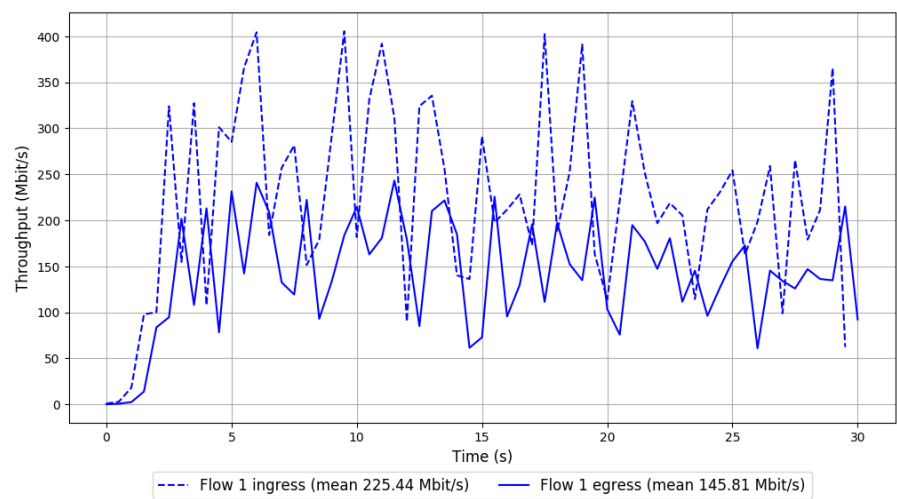


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-29 21:32:54
End at: 2018-11-29 21:33:24
Local clock offset: -3.685 ms
Remote clock offset: -35.262 ms

Below is generated by plot.py at 2018-11-29 23:36:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 145.81 Mbit/s
95th percentile per-packet one-way delay: 130.518 ms
Loss rate: 35.29%
-- Flow 1:
Average throughput: 145.81 Mbit/s
95th percentile per-packet one-way delay: 130.518 ms
Loss rate: 35.29%

Run 3: Report of Indigo-96d2da3 — Data Link

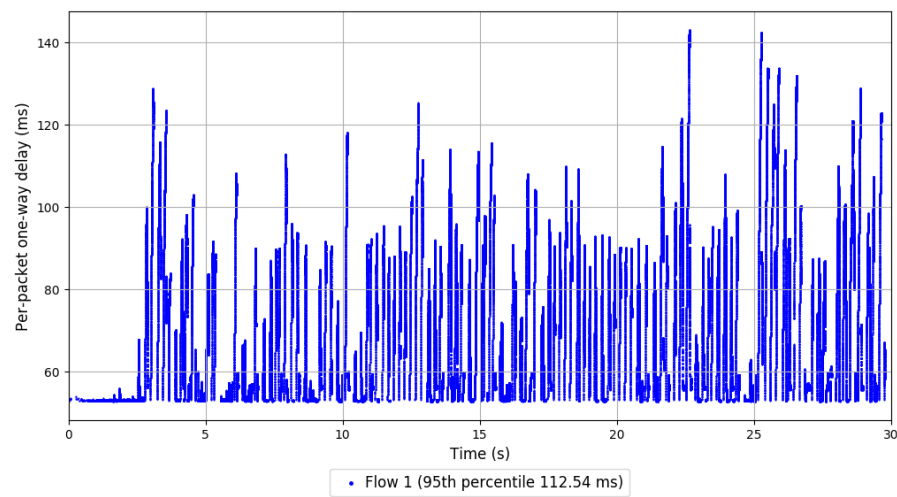
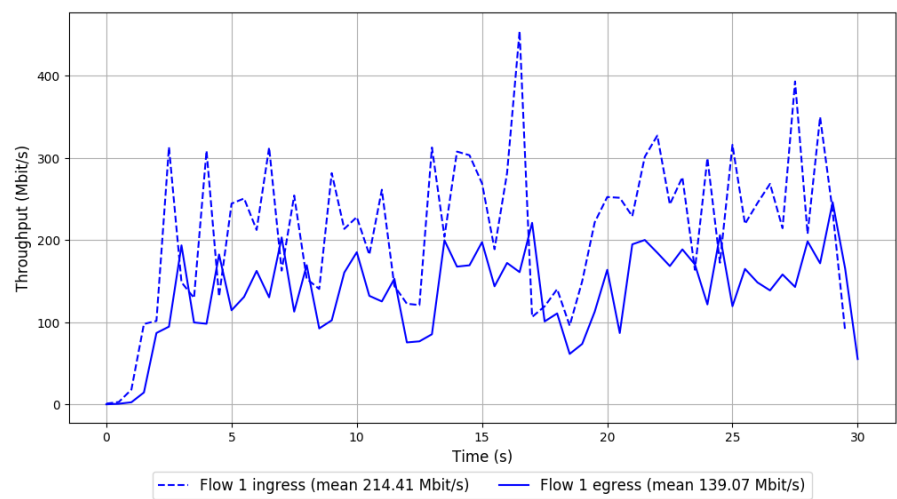


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-29 22:07:28
End at: 2018-11-29 22:07:58
Local clock offset: 0.14 ms
Remote clock offset: -45.421 ms

Below is generated by plot.py at 2018-11-29 23:36:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 139.07 Mbit/s
95th percentile per-packet one-way delay: 112.542 ms
Loss rate: 35.13%
-- Flow 1:
Average throughput: 139.07 Mbit/s
95th percentile per-packet one-way delay: 112.542 ms
Loss rate: 35.13%

Run 4: Report of Indigo-96d2da3 — Data Link

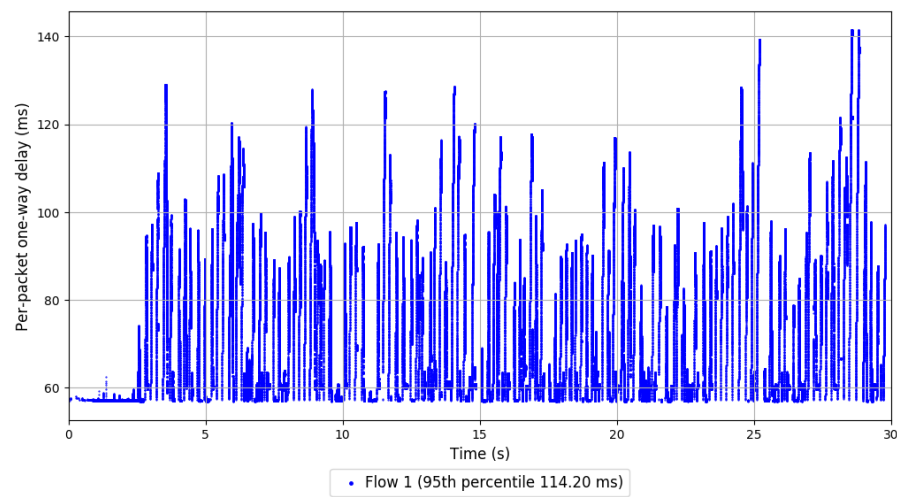
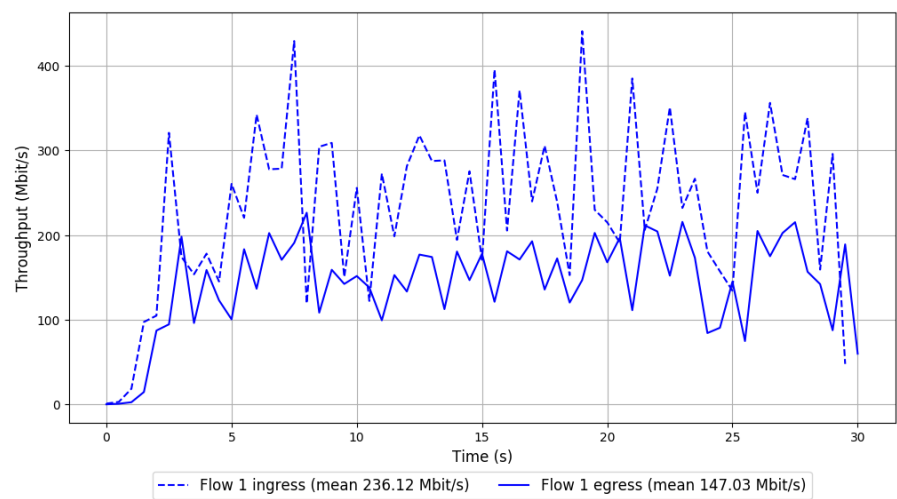


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-11-29 22:47:38
End at: 2018-11-29 22:48:08
Local clock offset: 0.278 ms
Remote clock offset: -42.321 ms

Below is generated by plot.py at 2018-11-29 23:36:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 147.03 Mbit/s
95th percentile per-packet one-way delay: 114.198 ms
Loss rate: 37.72%
-- Flow 1:
Average throughput: 147.03 Mbit/s
95th percentile per-packet one-way delay: 114.198 ms
Loss rate: 37.72%

Run 5: Report of Indigo-96d2da3 — Data Link

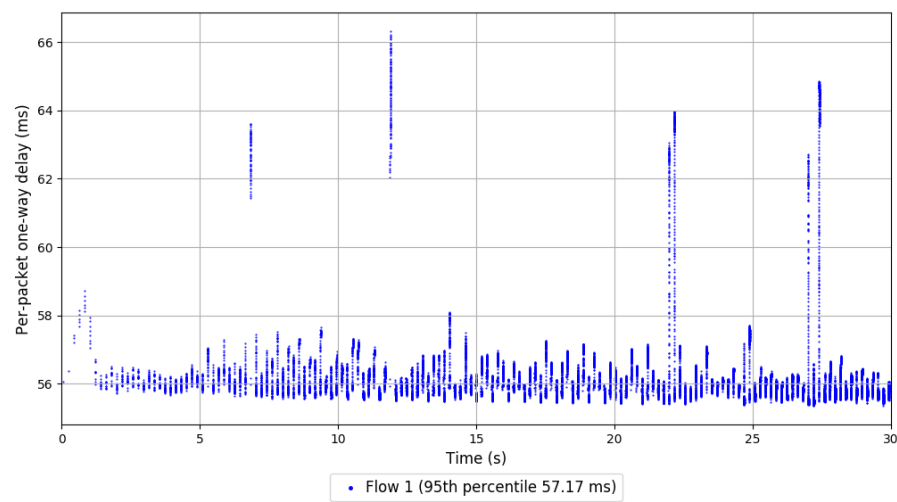
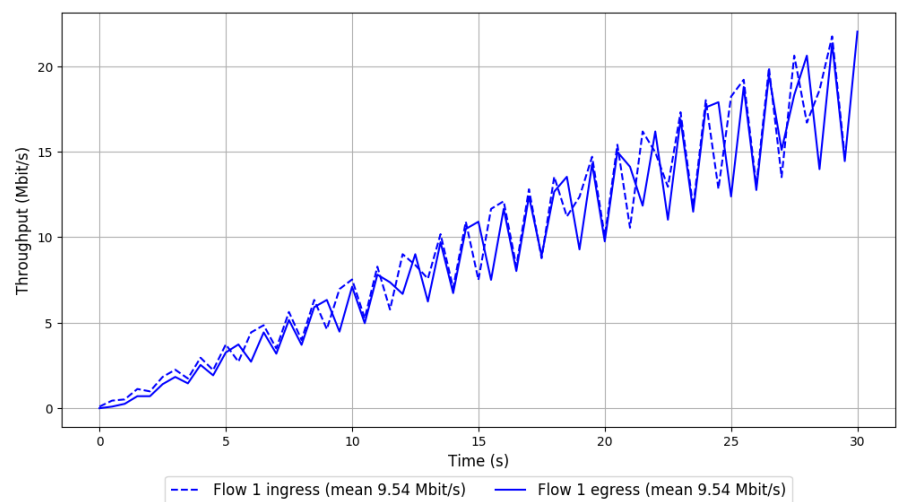


```
Run 1: Statistics of LEDBAT

Start at: 2018-11-29 20:19:23
End at: 2018-11-29 20:19:53
Local clock offset: 1.858 ms
Remote clock offset: -39.646 ms

# Below is generated by plot.py at 2018-11-29 23:36:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 57.175 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 57.175 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

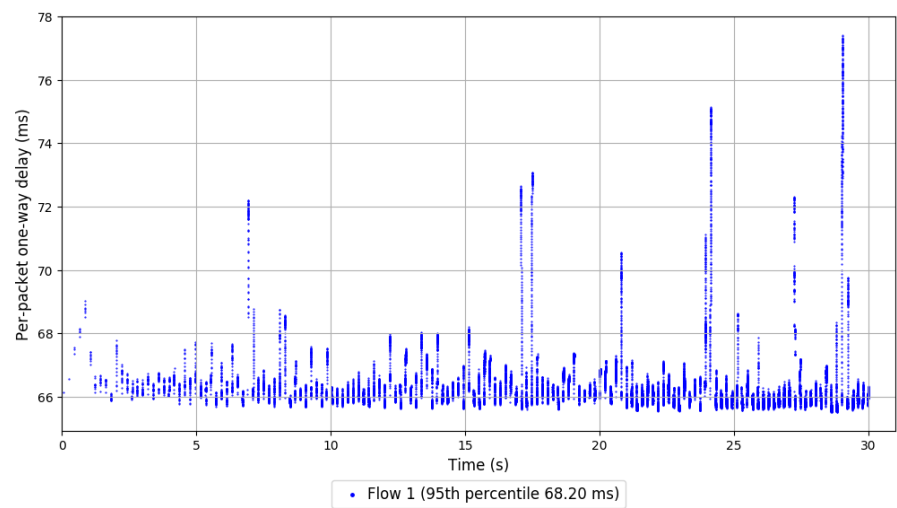
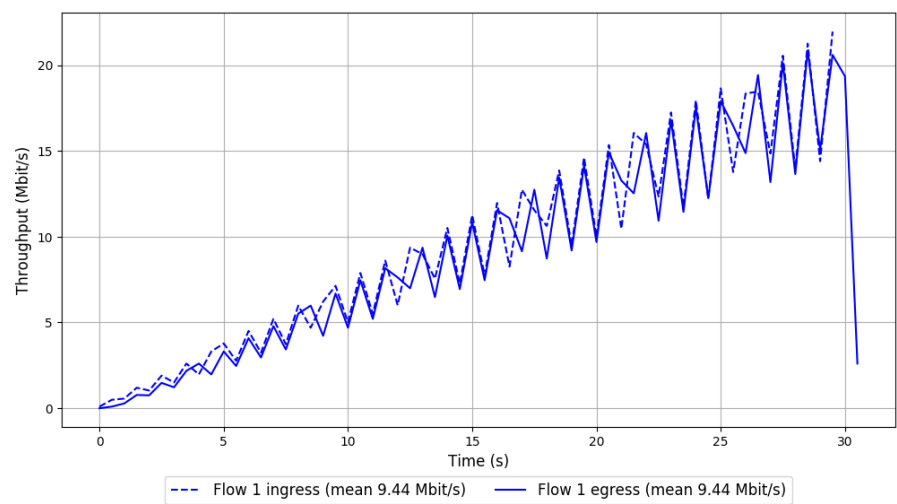


Run 2: Statistics of LEDBAT

Start at: 2018-11-29 20:59:58
End at: 2018-11-29 21:00:28
Local clock offset: -19.858 ms
Remote clock offset: -35.592 ms

Below is generated by plot.py at 2018-11-29 23:36:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 68.203 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 68.203 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

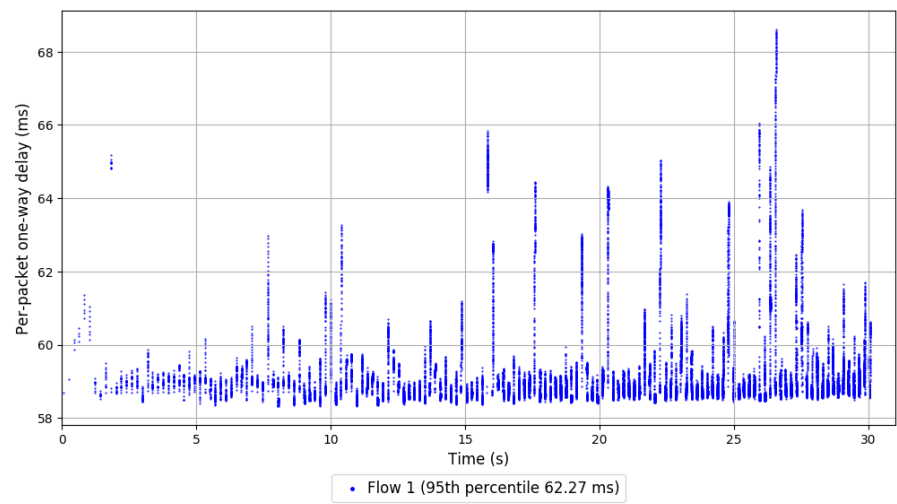
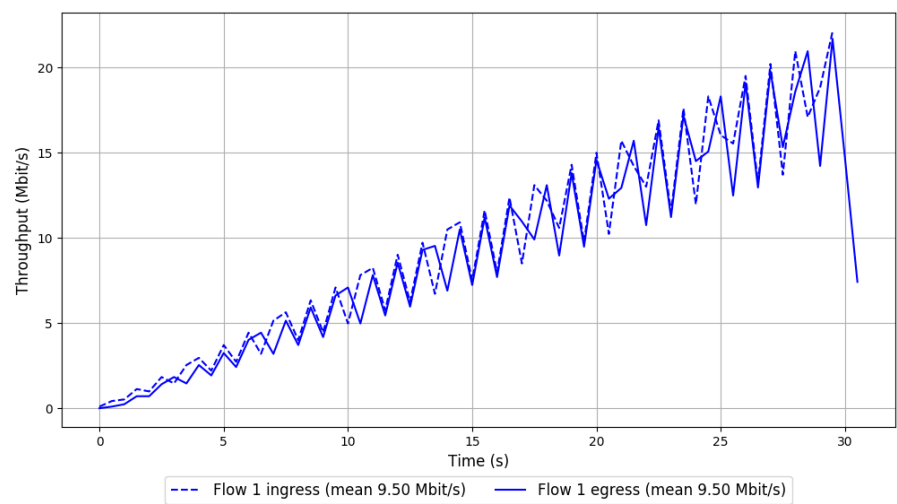


Run 3: Statistics of LEDBAT

Start at: 2018-11-29 21:34:35
End at: 2018-11-29 21:35:05
Local clock offset: -2.588 ms
Remote clock offset: -40.227 ms

Below is generated by plot.py at 2018-11-29 23:36:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 62.273 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 62.273 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

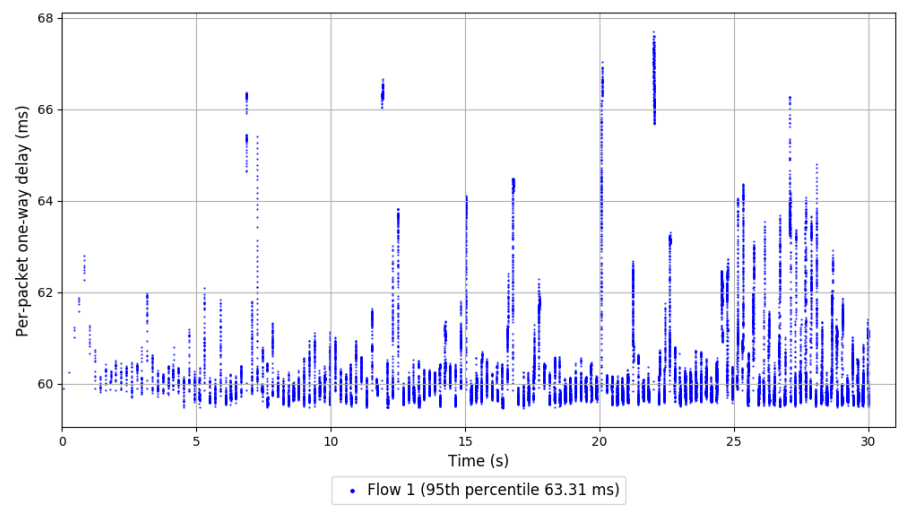
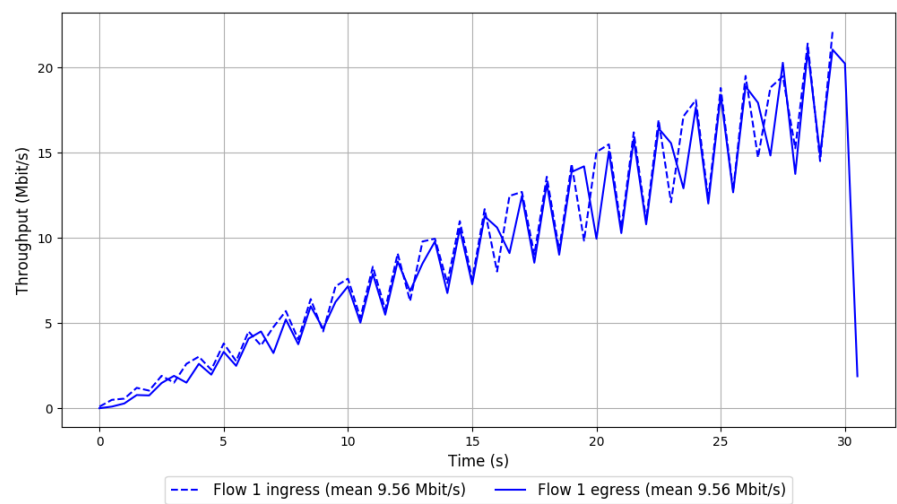


Run 4: Statistics of LEDBAT

Start at: 2018-11-29 22:09:08
End at: 2018-11-29 22:09:38
Local clock offset: 0.172 ms
Remote clock offset: -38.685 ms

Below is generated by plot.py at 2018-11-29 23:36:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 63.310 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 63.310 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

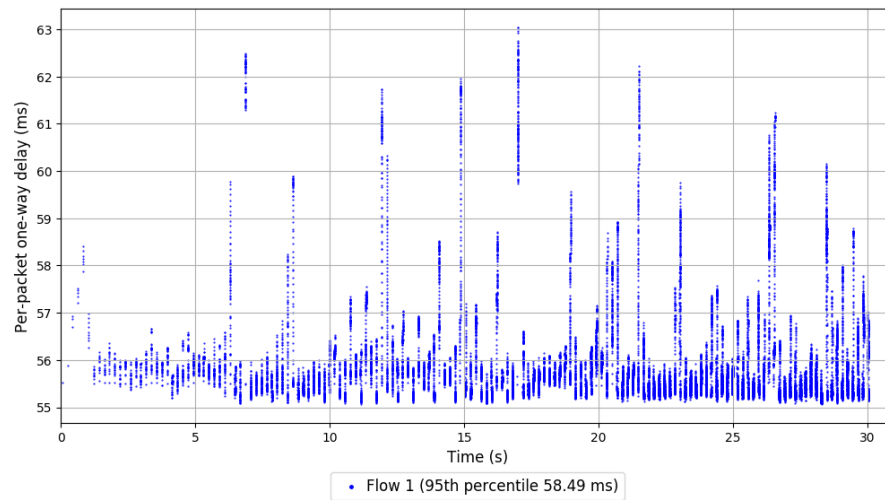
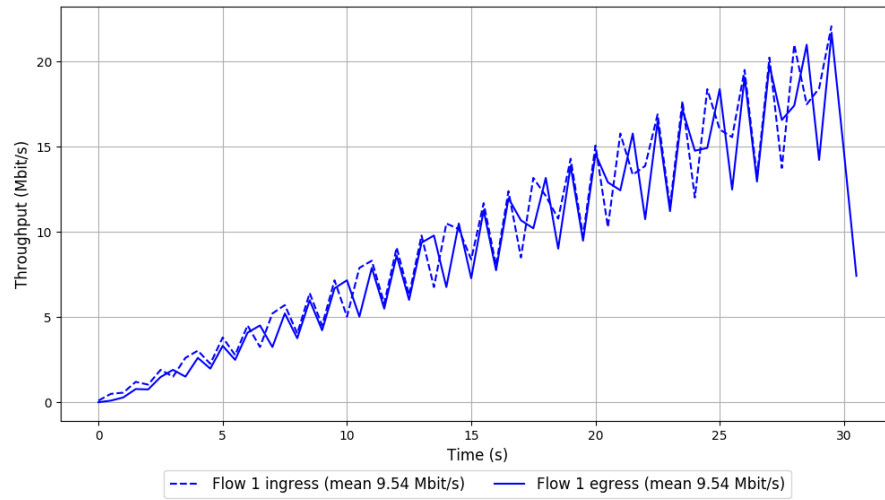


Run 5: Statistics of LEDBAT

Start at: 2018-11-29 22:49:19
End at: 2018-11-29 22:49:50
Local clock offset: 2.973 ms
Remote clock offset: -41.206 ms

Below is generated by plot.py at 2018-11-29 23:36:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 58.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 58.490 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

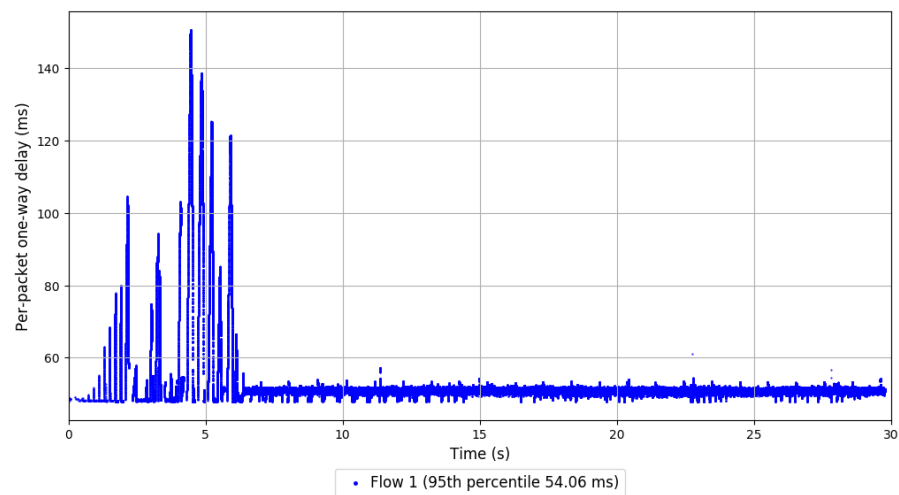
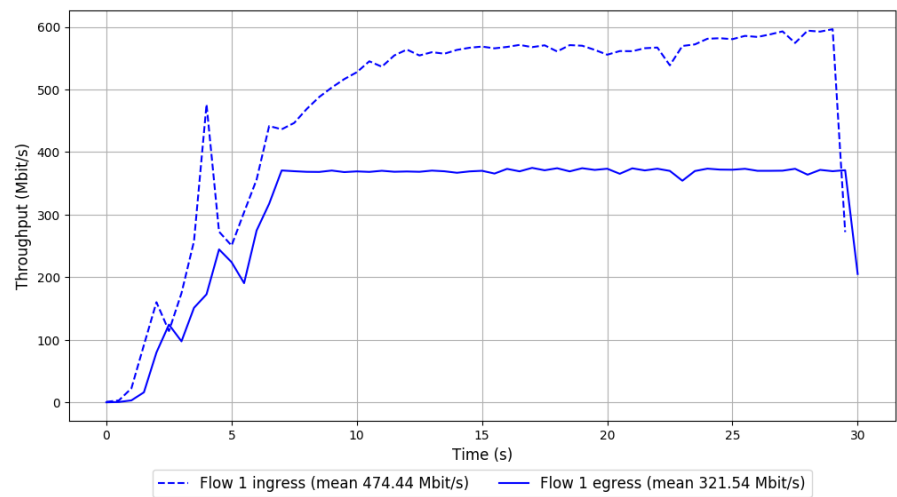


```
Run 1: Statistics of Indigo-Muses

Start at: 2018-11-29 20:34:36
End at: 2018-11-29 20:35:06
Local clock offset: -3.196 ms
Remote clock offset: -46.946 ms

# Below is generated by plot.py at 2018-11-29 23:39:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 321.54 Mbit/s
95th percentile per-packet one-way delay: 54.060 ms
Loss rate: 32.22%
-- Flow 1:
Average throughput: 321.54 Mbit/s
95th percentile per-packet one-way delay: 54.060 ms
Loss rate: 32.22%
```

Run 1: Report of Indigo-Muses — Data Link

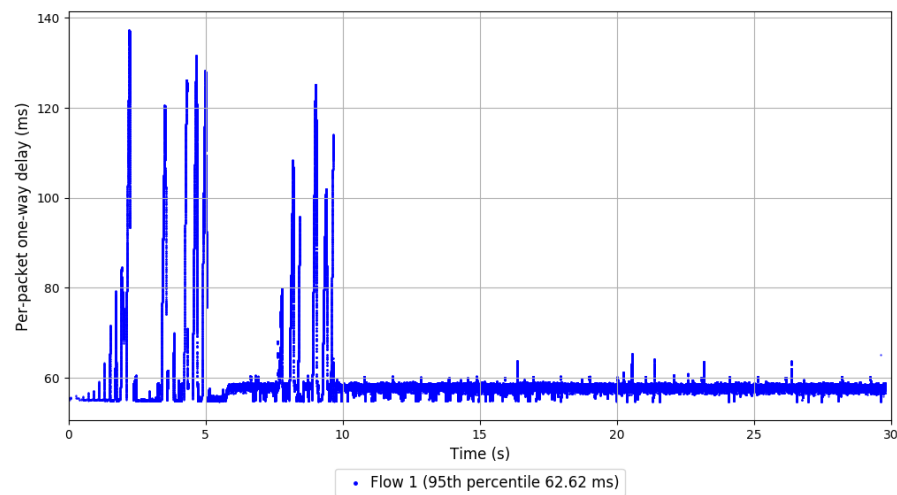
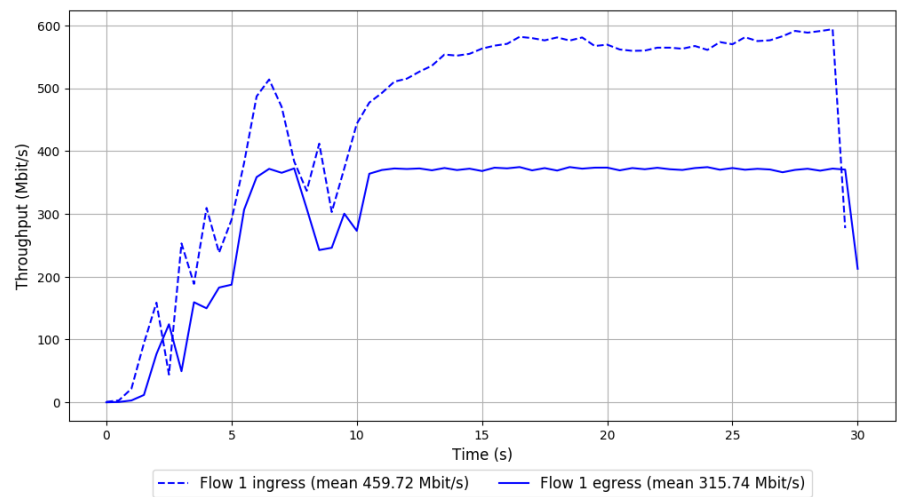


Run 2: Statistics of Indigo-Muses

Start at: 2018-11-29 21:09:27
End at: 2018-11-29 21:09:57
Local clock offset: -24.255 ms
Remote clock offset: -43.753 ms

Below is generated by plot.py at 2018-11-29 23:40:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 315.74 Mbit/s
95th percentile per-packet one-way delay: 62.624 ms
Loss rate: 31.31%
-- Flow 1:
Average throughput: 315.74 Mbit/s
95th percentile per-packet one-way delay: 62.624 ms
Loss rate: 31.31%

Run 2: Report of Indigo-Muses — Data Link

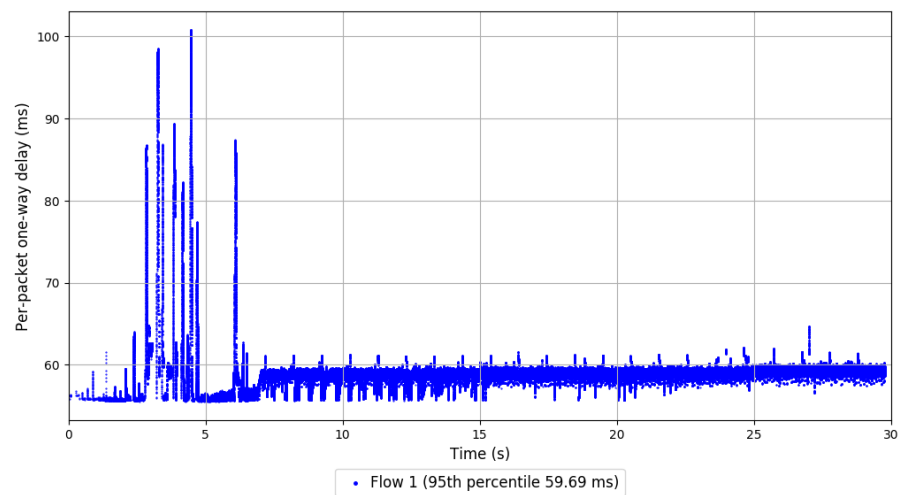
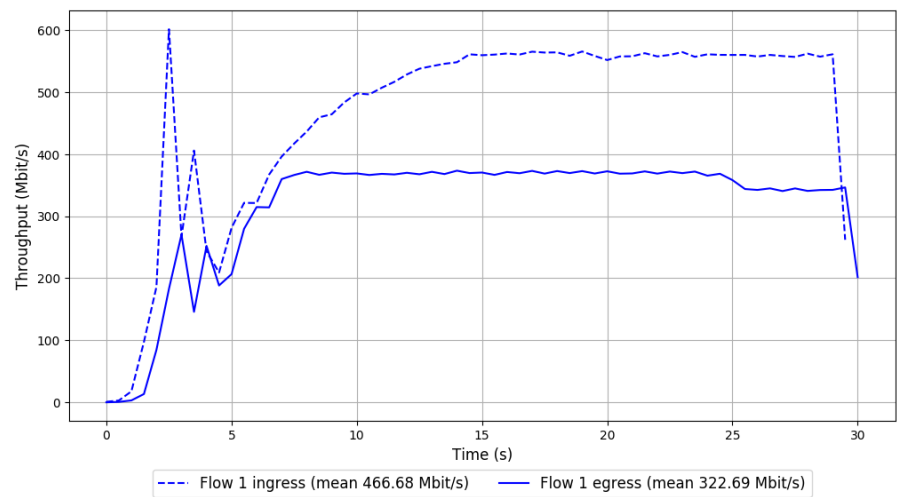


Run 3: Statistics of Indigo-Muses

Start at: 2018-11-29 21:44:15
End at: 2018-11-29 21:44:45
Local clock offset: 3.791 ms
Remote clock offset: -41.949 ms

Below is generated by plot.py at 2018-11-29 23:40:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 322.69 Mbit/s
95th percentile per-packet one-way delay: 59.691 ms
Loss rate: 30.85%
-- Flow 1:
Average throughput: 322.69 Mbit/s
95th percentile per-packet one-way delay: 59.691 ms
Loss rate: 30.85%

Run 3: Report of Indigo-Muses — Data Link

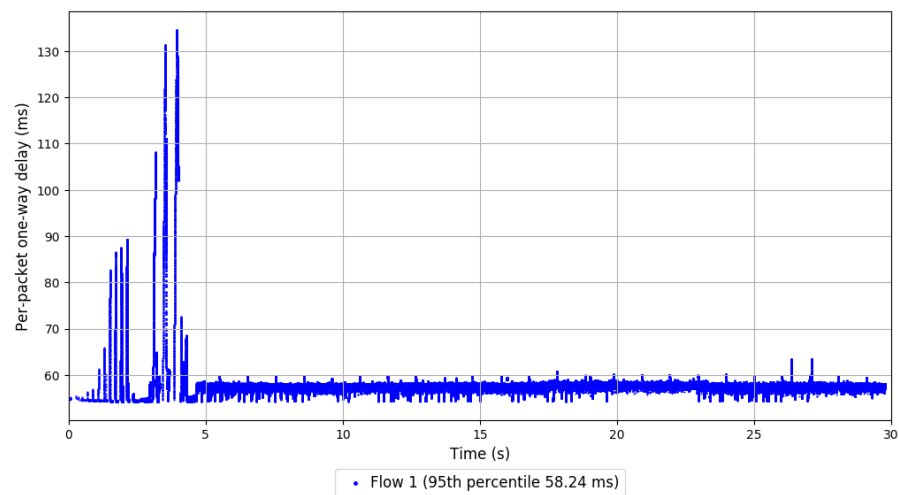
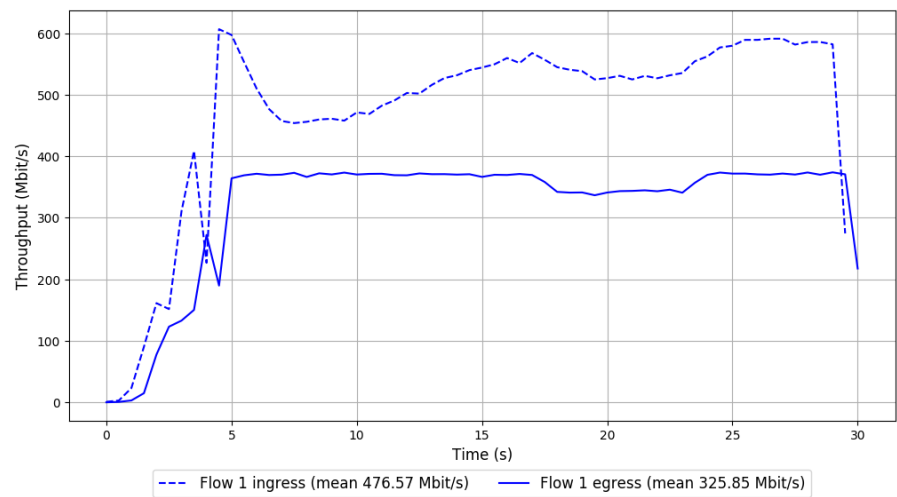


Run 4: Statistics of Indigo-Muses

Start at: 2018-11-29 22:24:14
End at: 2018-11-29 22:24:44
Local clock offset: 2.534 ms
Remote clock offset: -44.14 ms

Below is generated by plot.py at 2018-11-29 23:40:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 325.85 Mbit/s
95th percentile per-packet one-way delay: 58.237 ms
Loss rate: 31.62%
-- Flow 1:
Average throughput: 325.85 Mbit/s
95th percentile per-packet one-way delay: 58.237 ms
Loss rate: 31.62%

Run 4: Report of Indigo-Muses — Data Link

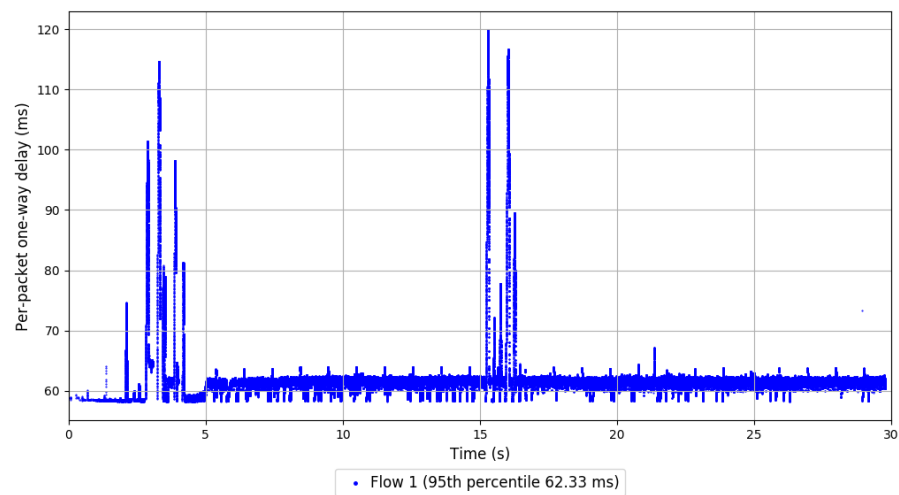
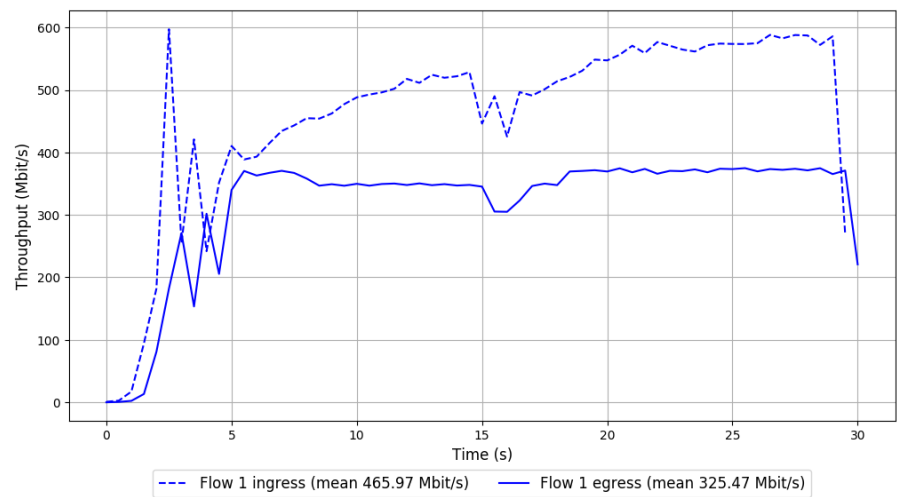


Run 5: Statistics of Indigo-Muses

Start at: 2018-11-29 23:04:21
End at: 2018-11-29 23:04:51
Local clock offset: 1.246 ms
Remote clock offset: -42.369 ms

Below is generated by plot.py at 2018-11-29 23:40:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 325.47 Mbit/s
95th percentile per-packet one-way delay: 62.334 ms
Loss rate: 30.14%
-- Flow 1:
Average throughput: 325.47 Mbit/s
95th percentile per-packet one-way delay: 62.334 ms
Loss rate: 30.14%

Run 5: Report of Indigo-Muses — Data Link

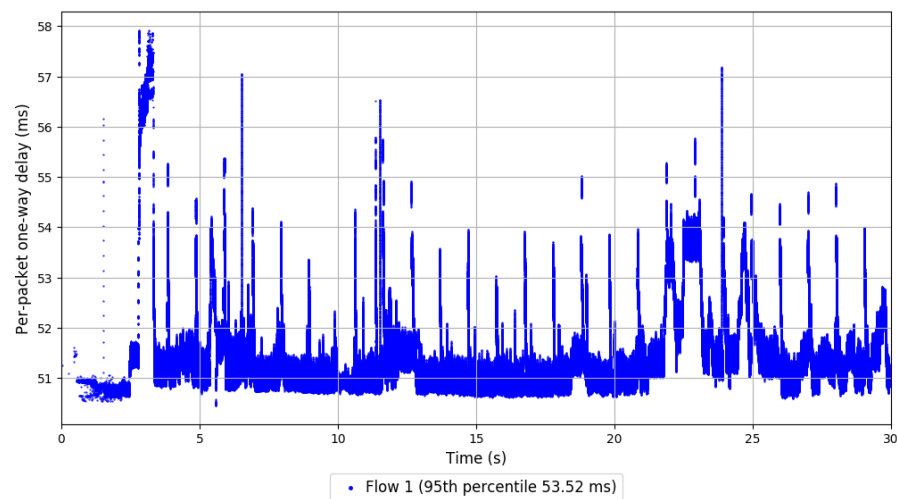
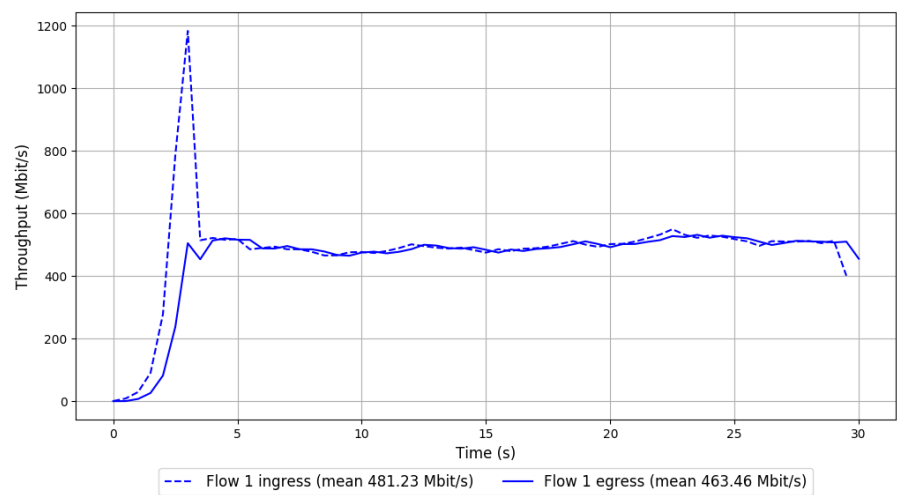


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-11-29 20:24:29
End at: 2018-11-29 20:24:59
Local clock offset: -1.042 ms
Remote clock offset: -46.123 ms

# Below is generated by plot.py at 2018-11-29 23:41:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 463.46 Mbit/s
95th percentile per-packet one-way delay: 53.524 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 463.46 Mbit/s
95th percentile per-packet one-way delay: 53.524 ms
Loss rate: 3.69%
```

Run 1: Report of PCC-Allegro — Data Link

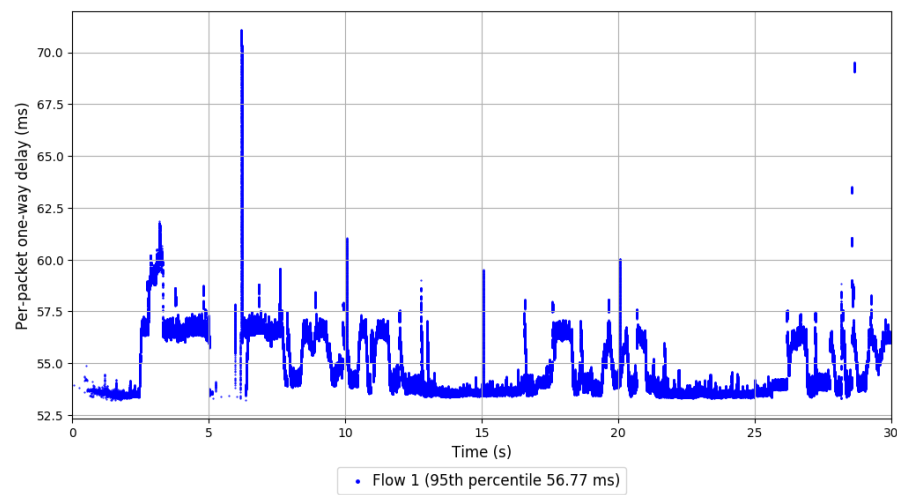
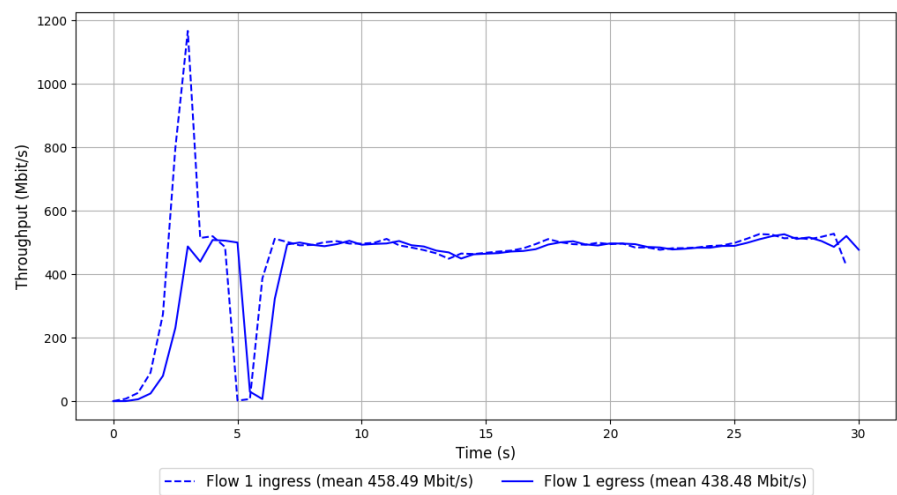


Run 2: Statistics of PCC-Allegro

Start at: 2018-11-29 21:05:06
End at: 2018-11-29 21:05:36
Local clock offset: -20.545 ms
Remote clock offset: -45.836 ms

Below is generated by plot.py at 2018-11-29 23:41:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 438.48 Mbit/s
95th percentile per-packet one-way delay: 56.774 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 438.48 Mbit/s
95th percentile per-packet one-way delay: 56.774 ms
Loss rate: 4.36%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-11-29 21:39:45

End at: 2018-11-29 21:40:15

Local clock offset: -0.636 ms

Remote clock offset: -31.782 ms

Below is generated by plot.py at 2018-11-29 23:42:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 457.77 Mbit/s

95th percentile per-packet one-way delay: 72.300 ms

Loss rate: 3.95%

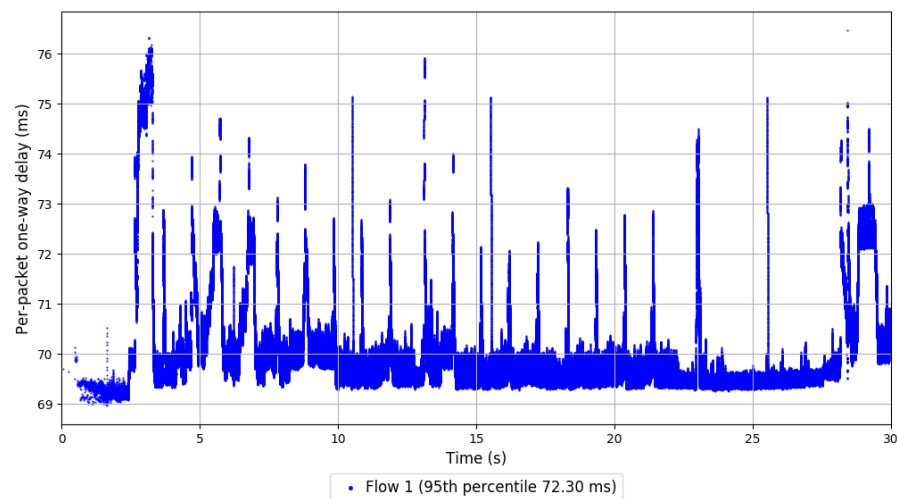
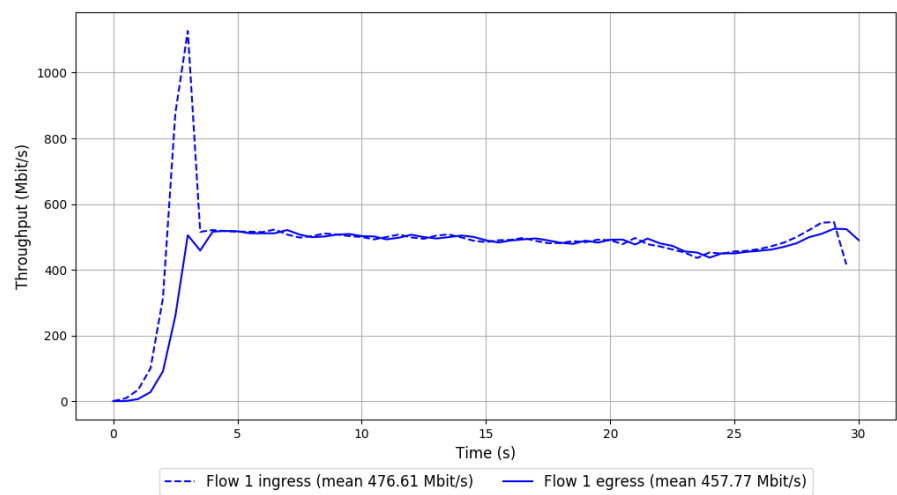
-- Flow 1:

Average throughput: 457.77 Mbit/s

95th percentile per-packet one-way delay: 72.300 ms

Loss rate: 3.95%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-11-29 22:14:17

End at: 2018-11-29 22:14:47

Local clock offset: 0.143 ms

Remote clock offset: -43.637 ms

Below is generated by plot.py at 2018-11-29 23:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 473.17 Mbit/s

95th percentile per-packet one-way delay: 57.848 ms

Loss rate: 3.64%

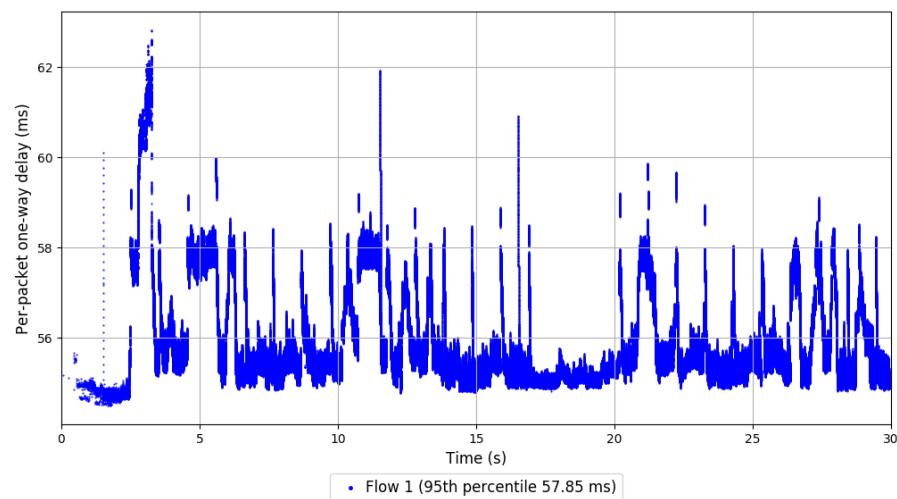
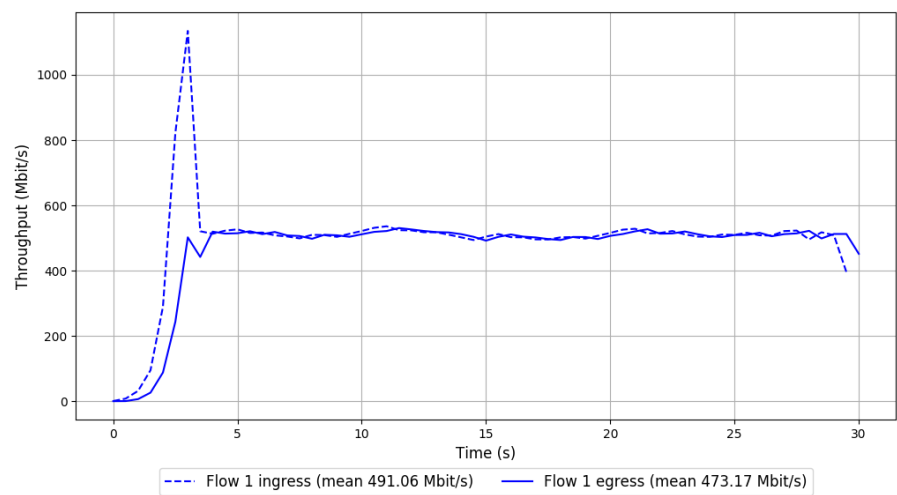
-- Flow 1:

Average throughput: 473.17 Mbit/s

95th percentile per-packet one-way delay: 57.848 ms

Loss rate: 3.64%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-11-29 22:54:24

End at: 2018-11-29 22:54:54

Local clock offset: 2.118 ms

Remote clock offset: -47.159 ms

Below is generated by plot.py at 2018-11-29 23:45:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 465.61 Mbit/s

95th percentile per-packet one-way delay: 53.262 ms

Loss rate: 3.76%

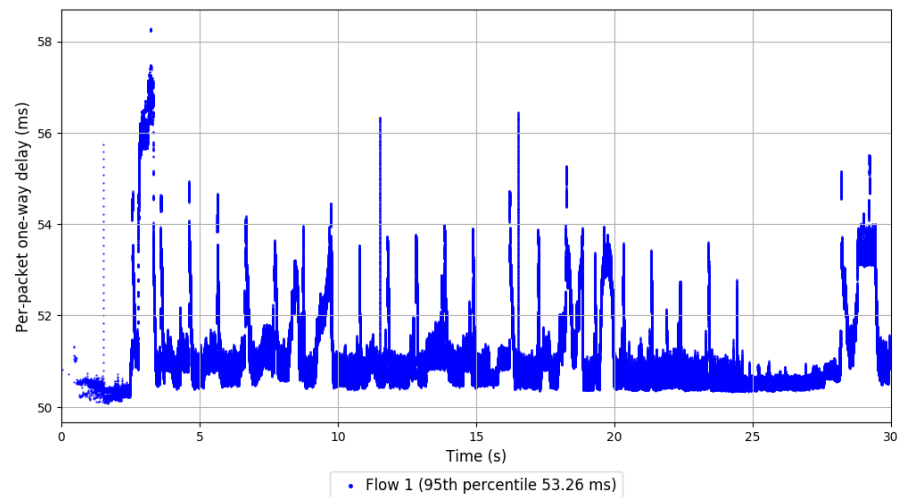
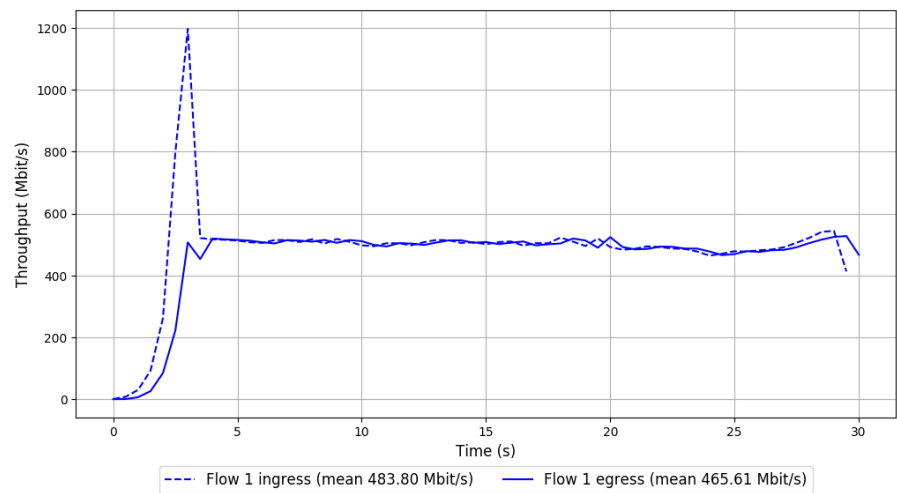
-- Flow 1:

Average throughput: 465.61 Mbit/s

95th percentile per-packet one-way delay: 53.262 ms

Loss rate: 3.76%

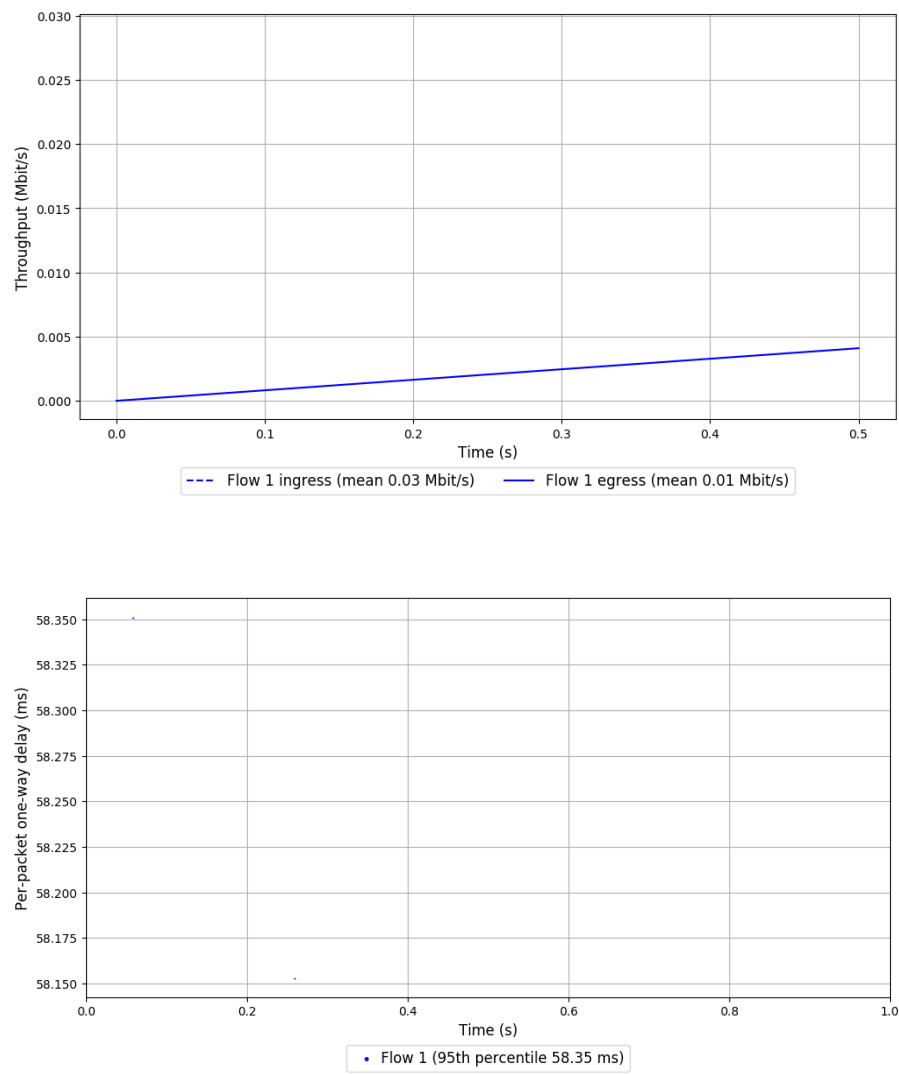
Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-11-29 20:54:40
End at: 2018-11-29 20:55:10
Local clock offset: -15.681 ms
Remote clock offset: -39.545 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

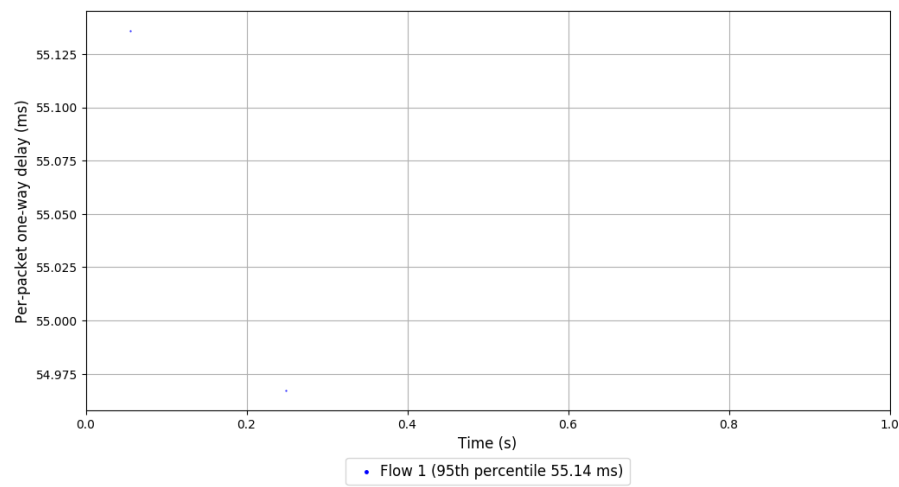
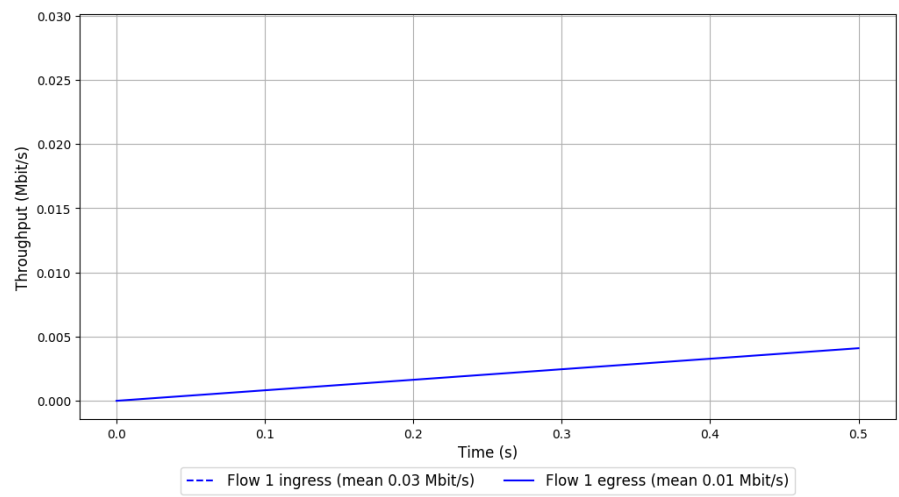
Start at: 2018-11-29 21:29:17

End at: 2018-11-29 21:29:47

Local clock offset: -3.573 ms

Remote clock offset: -41.59 ms

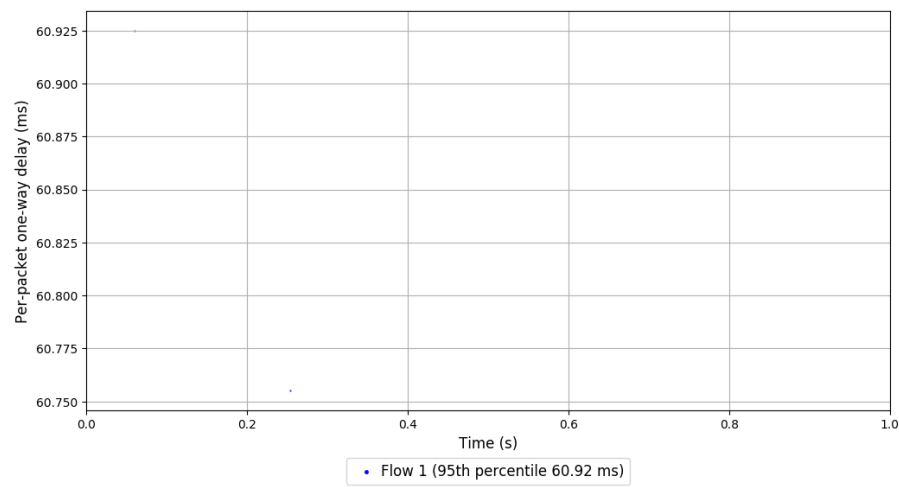
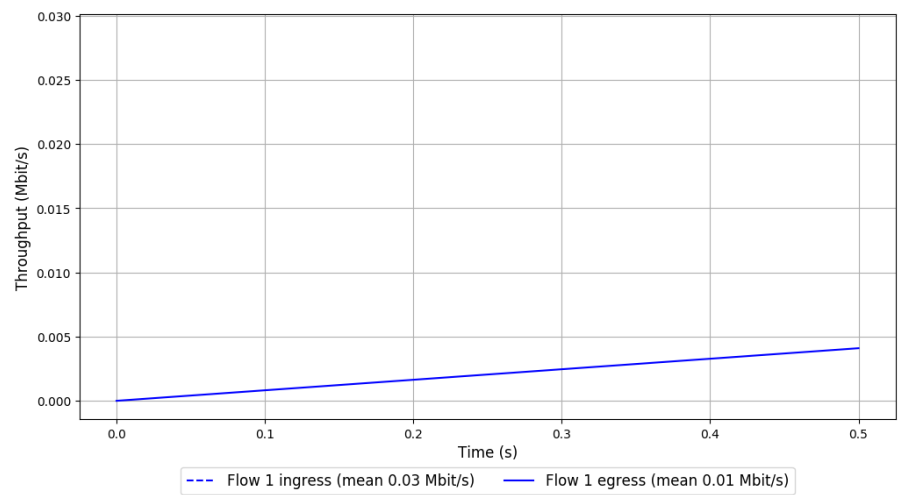
Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-11-29 22:03:53
End at: 2018-11-29 22:04:23
Local clock offset: 3.848 ms
Remote clock offset: -33.738 ms

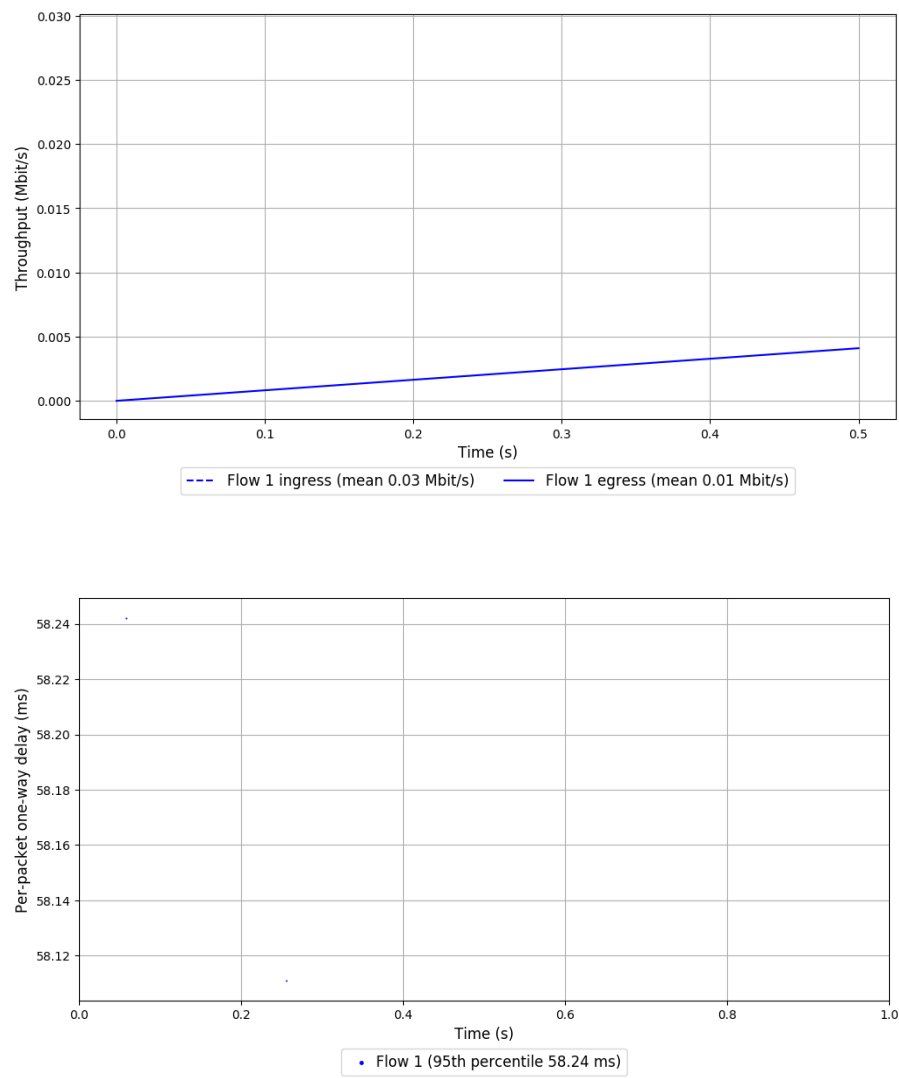
Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-11-29 22:38:28
End at: 2018-11-29 22:38:58
Local clock offset: 1.965 ms
Remote clock offset: -41.855 ms

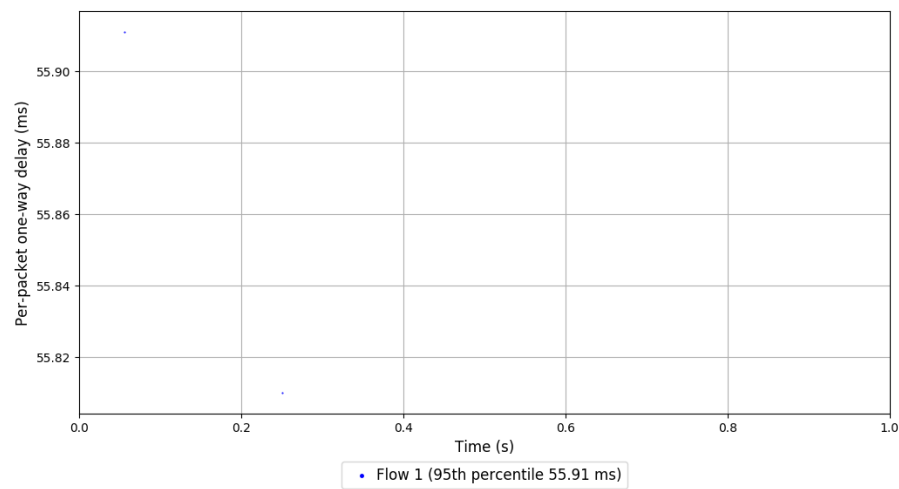
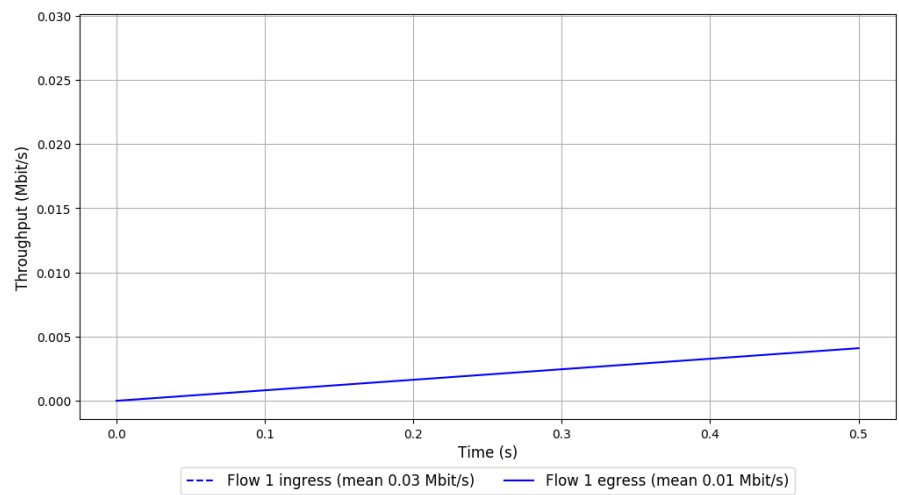
Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-11-29 23:24:08
End at: 2018-11-29 23:24:38
Local clock offset: 2.949 ms
Remote clock offset: -40.981 ms

Run 5: Report of PCC-Expr — Data Link

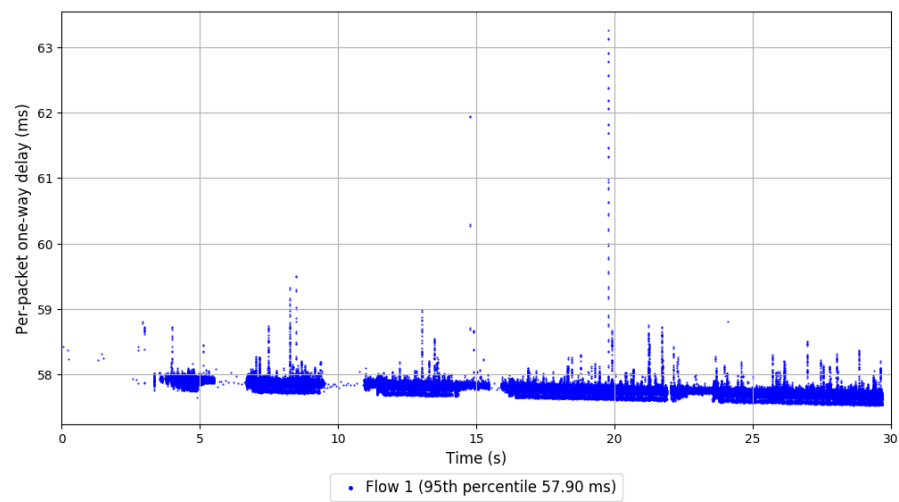
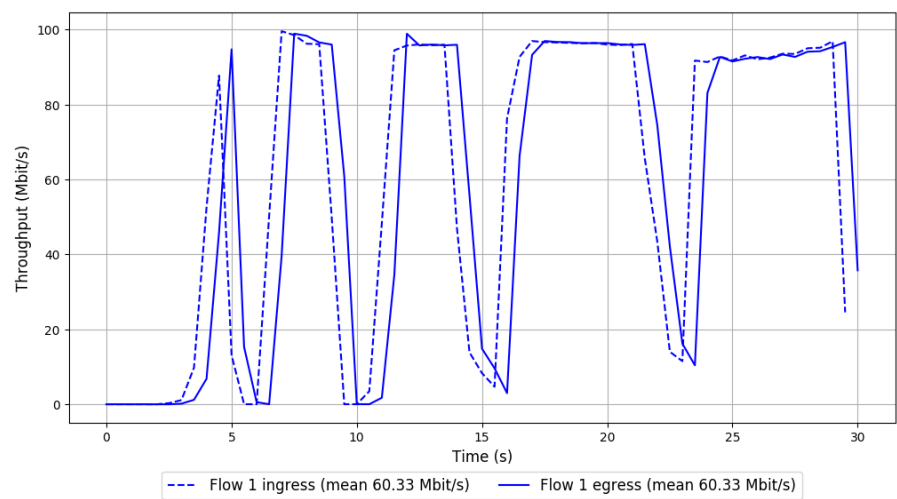


Run 1: Statistics of QUIC Cubic

Start at: 2018-11-29 20:38:04
End at: 2018-11-29 20:38:34
Local clock offset: -6.266 ms
Remote clock offset: -38.239 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 57.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 57.904 ms
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

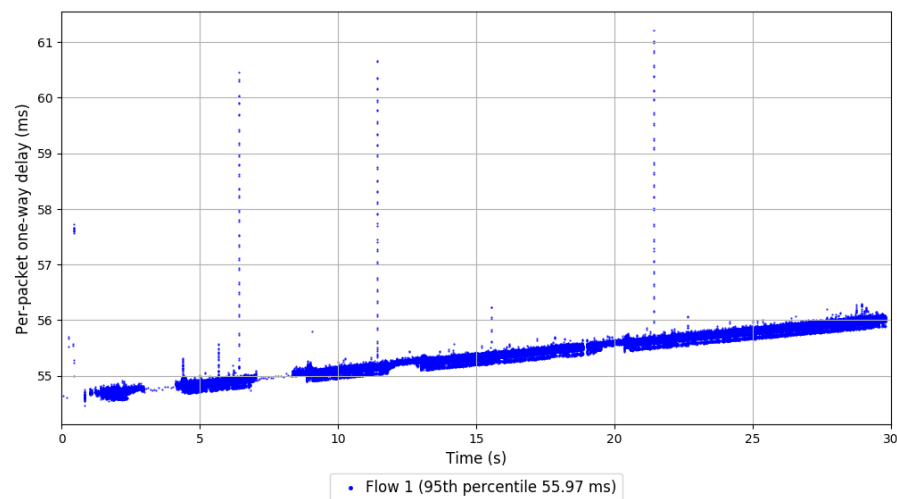
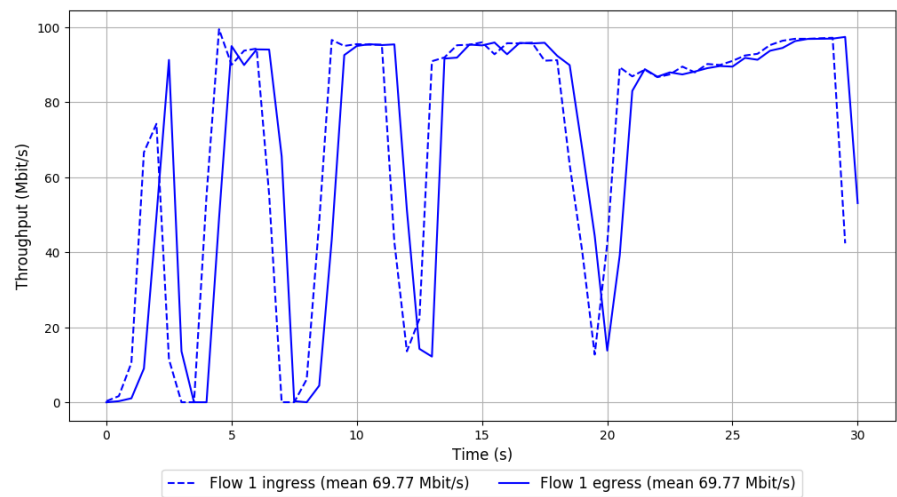


Run 2: Statistics of QUIC Cubic

Start at: 2018-11-29 21:18:29
End at: 2018-11-29 21:18:59
Local clock offset: -24.623 ms
Remote clock offset: -44.057 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 69.77 Mbit/s
95th percentile per-packet one-way delay: 55.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.77 Mbit/s
95th percentile per-packet one-way delay: 55.968 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

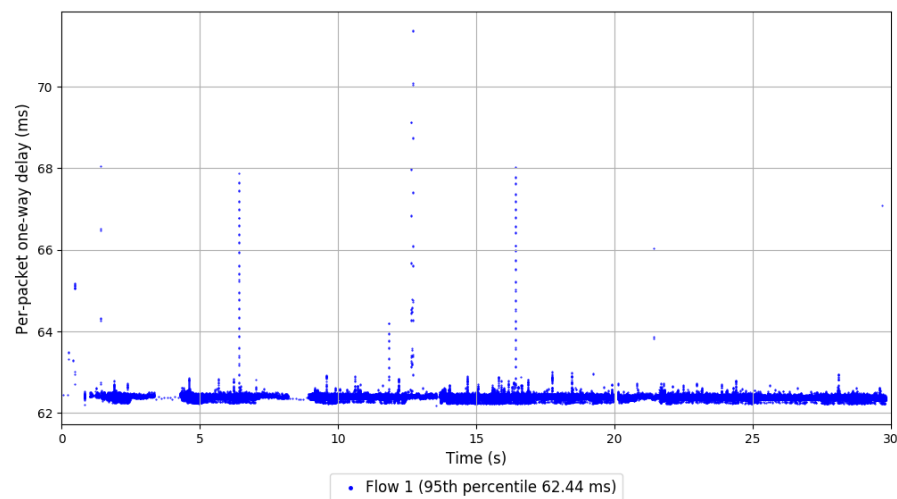
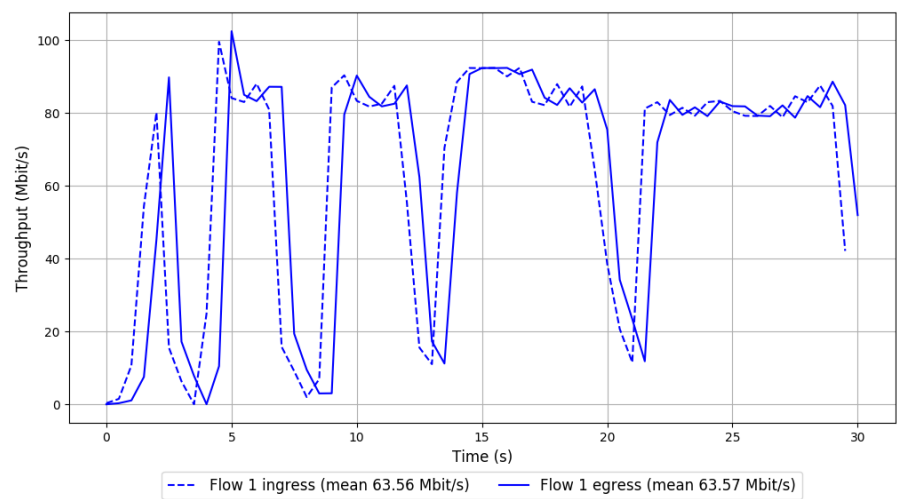


Run 3: Statistics of QUIC Cubic

Start at: 2018-11-29 21:53:20
End at: 2018-11-29 21:53:50
Local clock offset: 1.15 ms
Remote clock offset: -37.854 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 62.444 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 62.444 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

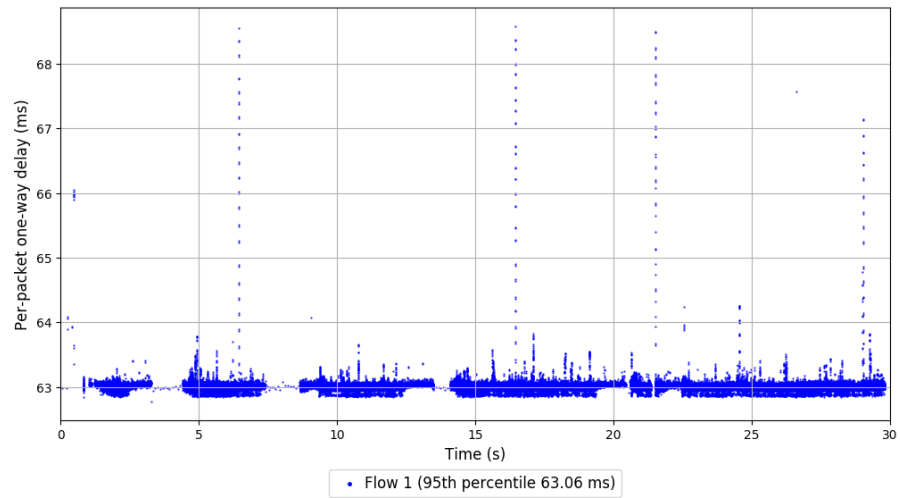
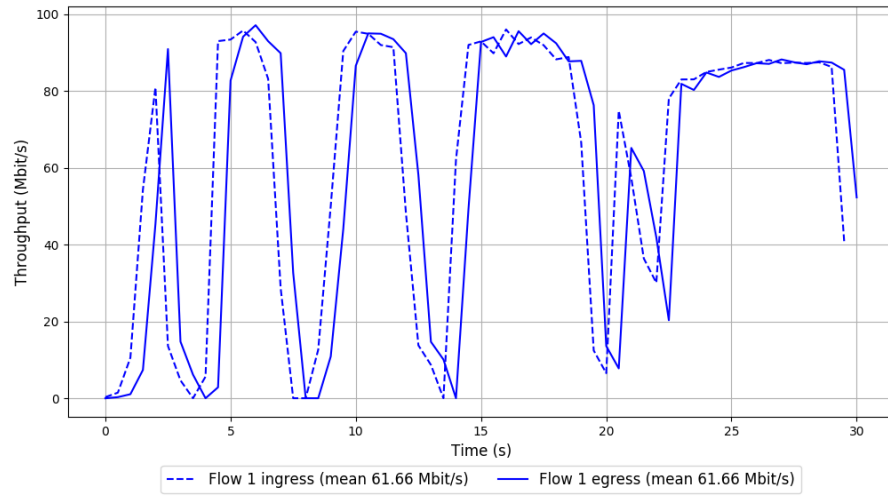


Run 4: Statistics of QUIC Cubic

Start at: 2018-11-29 22:27:43
End at: 2018-11-29 22:28:13
Local clock offset: 0.078 ms
Remote clock offset: -38.016 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 63.063 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 63.063 ms
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

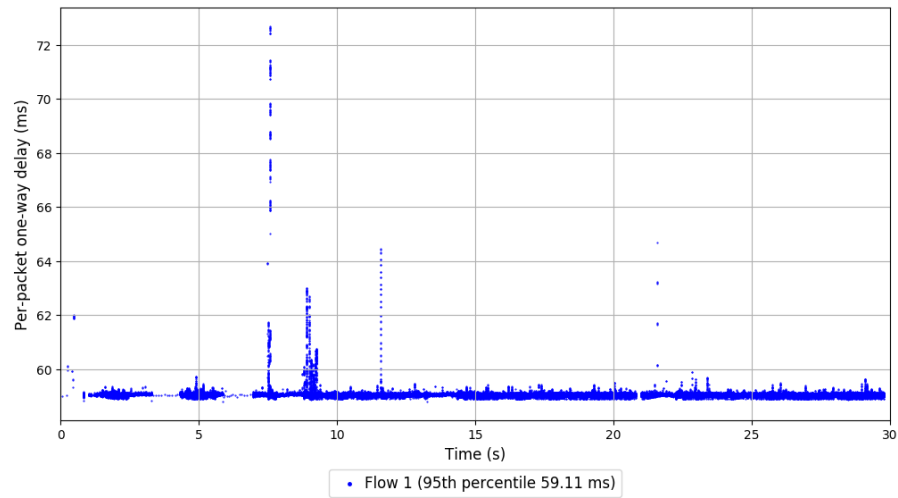
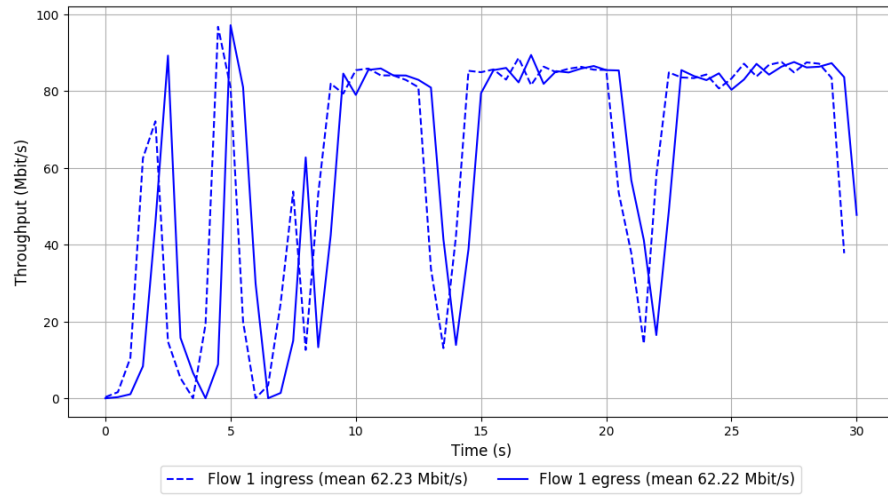


Run 5: Statistics of QUIC Cubic

Start at: 2018-11-29 23:13:22
End at: 2018-11-29 23:13:52
Local clock offset: -0.196 ms
Remote clock offset: -40.255 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 62.22 Mbit/s
95th percentile per-packet one-way delay: 59.111 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 62.22 Mbit/s
95th percentile per-packet one-way delay: 59.111 ms
Loss rate: 0.02%

Run 5: Report of QUIC Cubic — Data Link

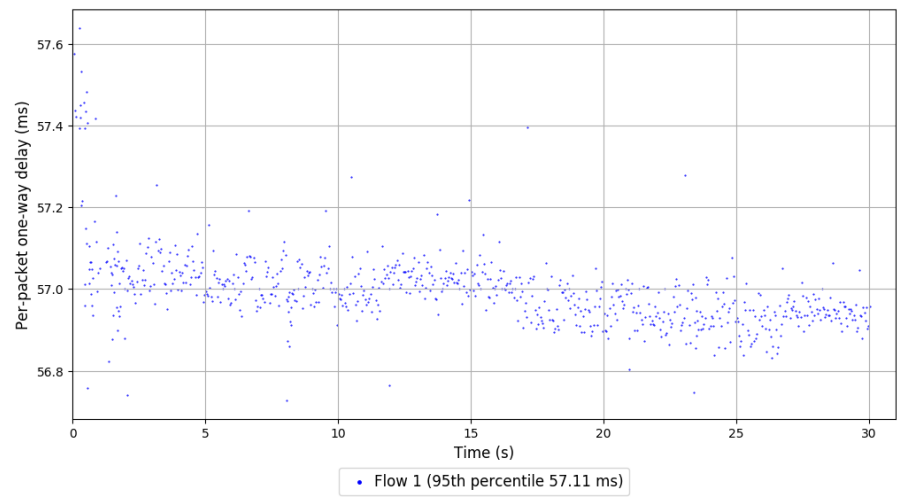
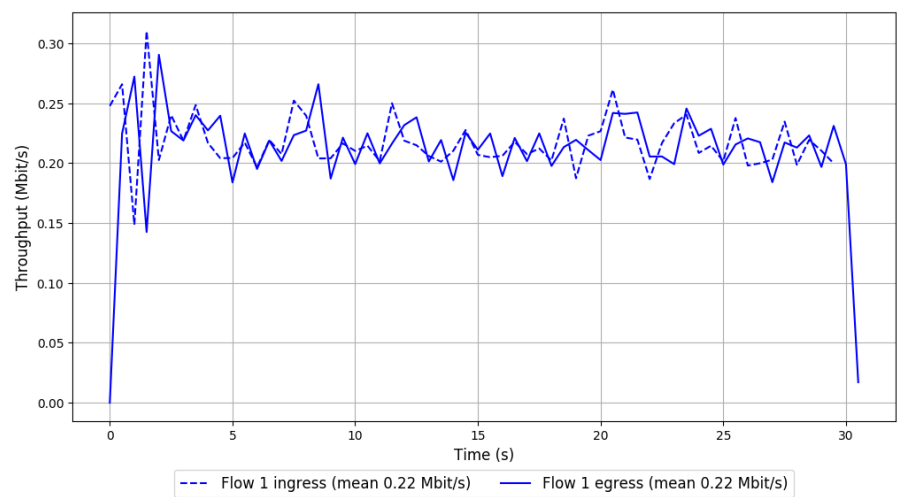


```
Run 1: Statistics of SCReAM

Start at: 2018-11-29 20:22:09
End at: 2018-11-29 20:22:39
Local clock offset: 0.628 ms
Remote clock offset: -39.239 ms

# Below is generated by plot.py at 2018-11-29 23:45:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.110 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

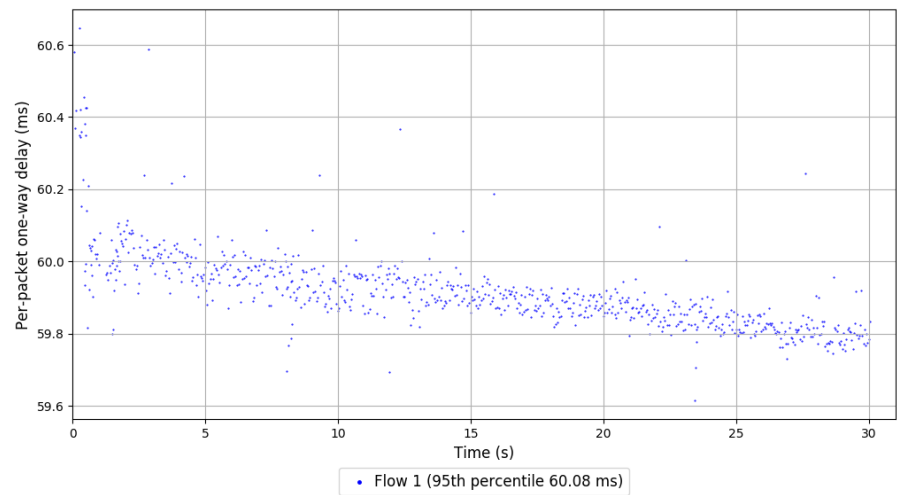
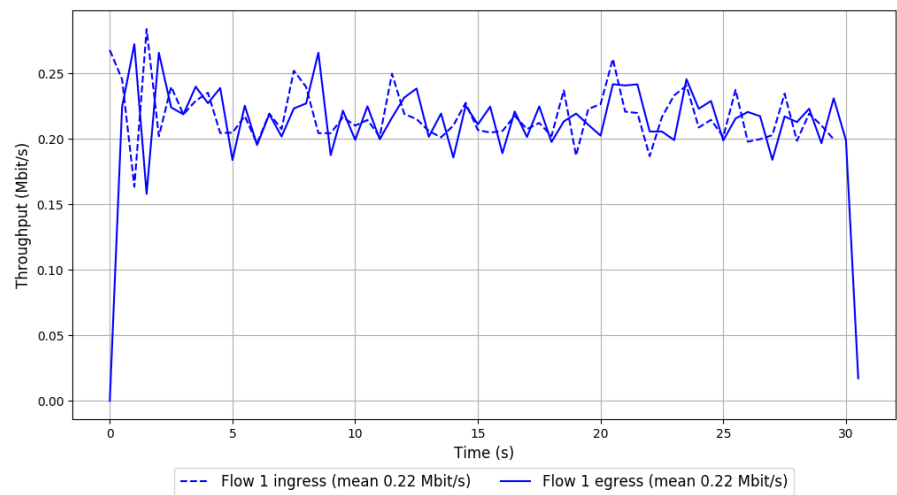


Run 2: Statistics of SCReAM

Start at: 2018-11-29 21:02:46
End at: 2018-11-29 21:03:16
Local clock offset: -19.689 ms
Remote clock offset: -37.225 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.076 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

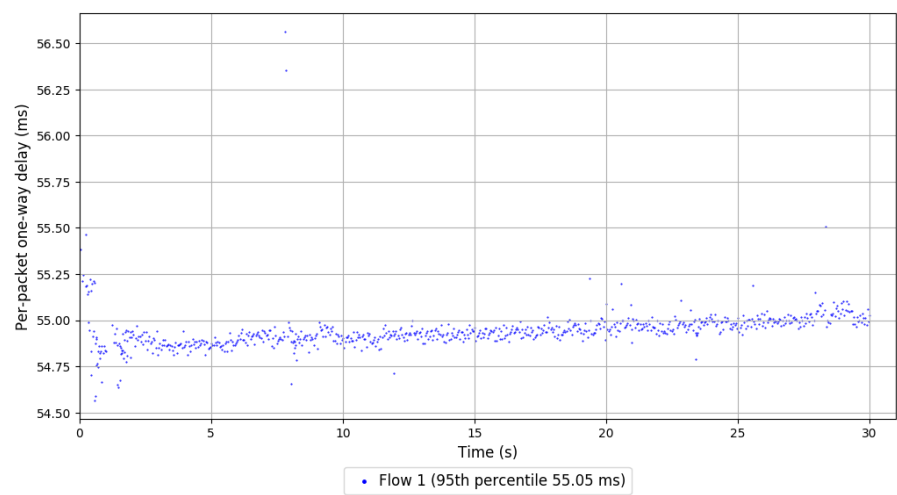
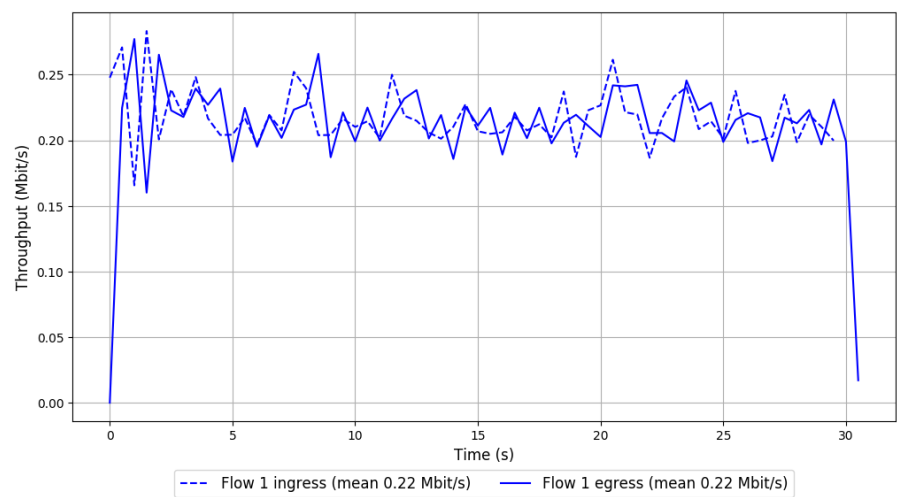


Run 3: Statistics of SReAM

Start at: 2018-11-29 21:37:26
End at: 2018-11-29 21:37:56
Local clock offset: 0.132 ms
Remote clock offset: -42.486 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.052 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.052 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

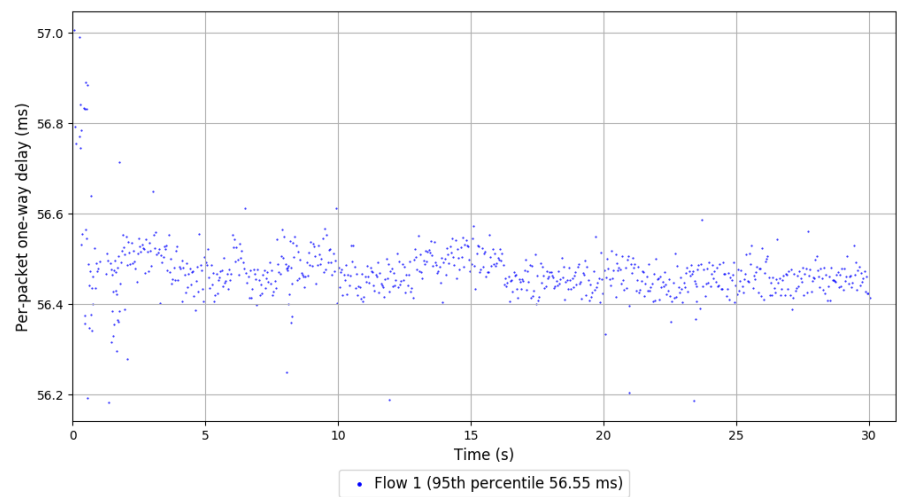
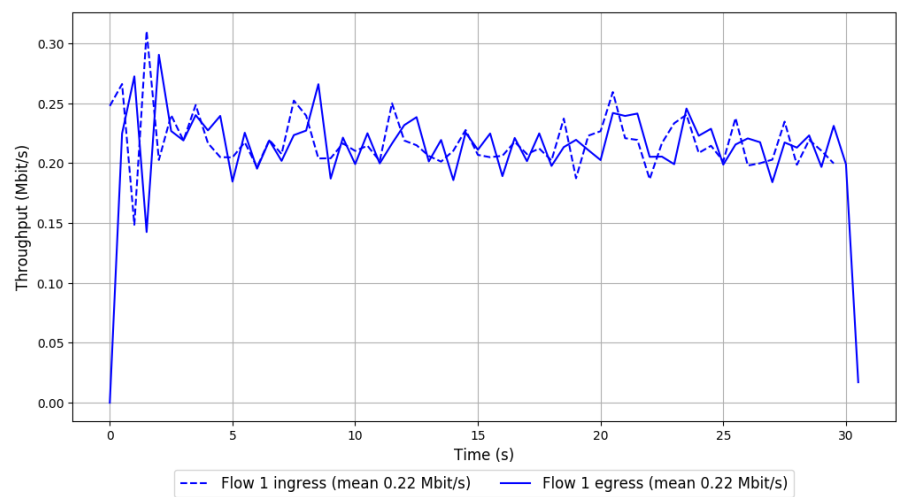


Run 4: Statistics of SCReAM

Start at: 2018-11-29 22:11:56
End at: 2018-11-29 22:12:26
Local clock offset: 2.149 ms
Remote clock offset: -39.836 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.546 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

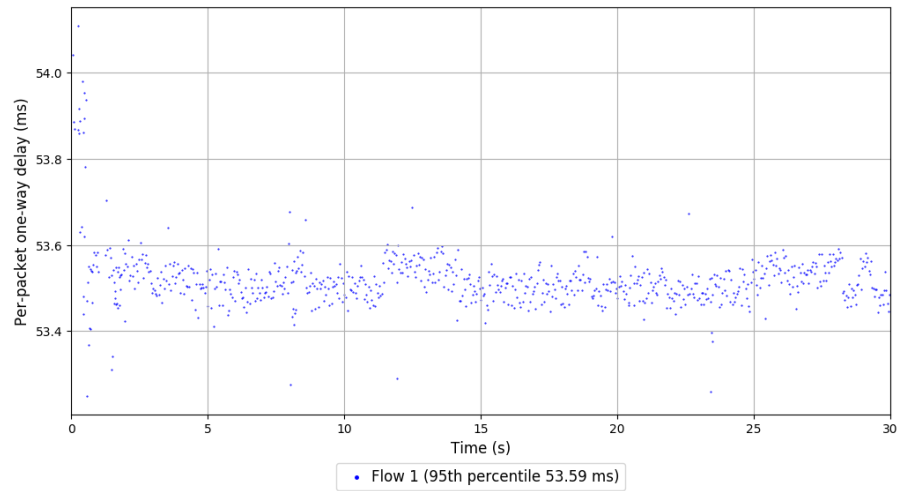
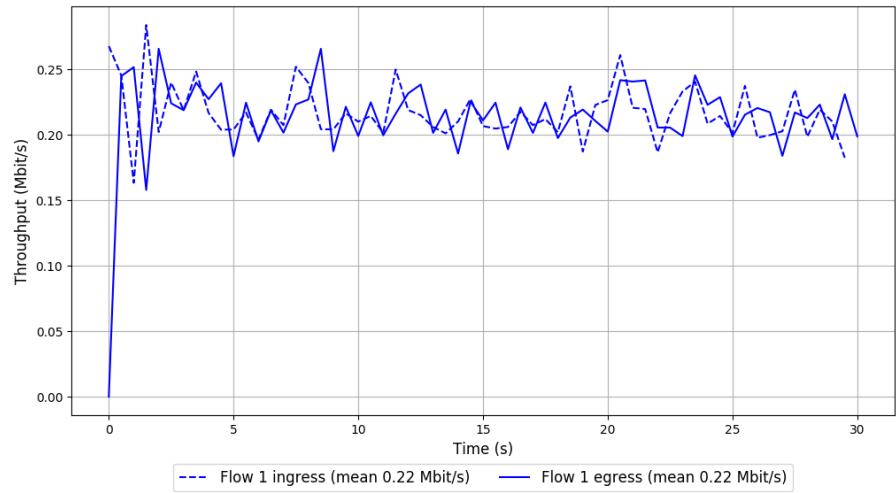


Run 5: Statistics of SCReAM

Start at: 2018-11-29 22:52:04
End at: 2018-11-29 22:52:34
Local clock offset: 1.683 ms
Remote clock offset: -44.389 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

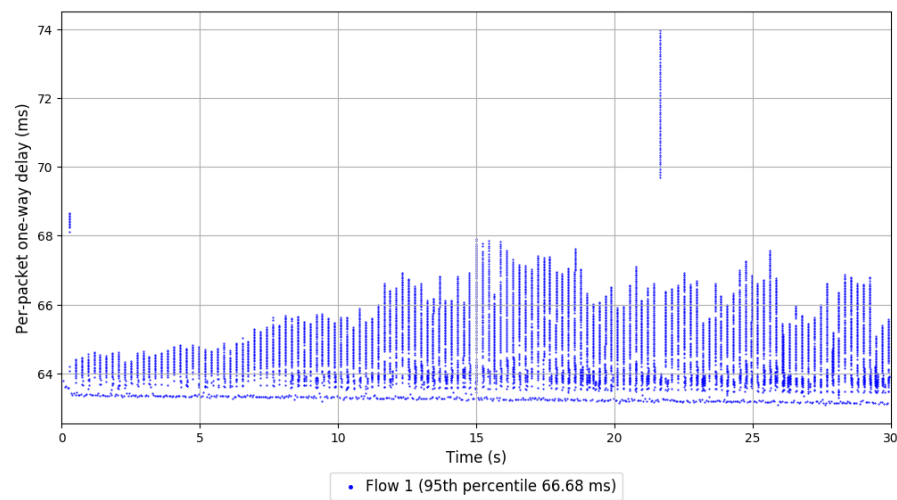
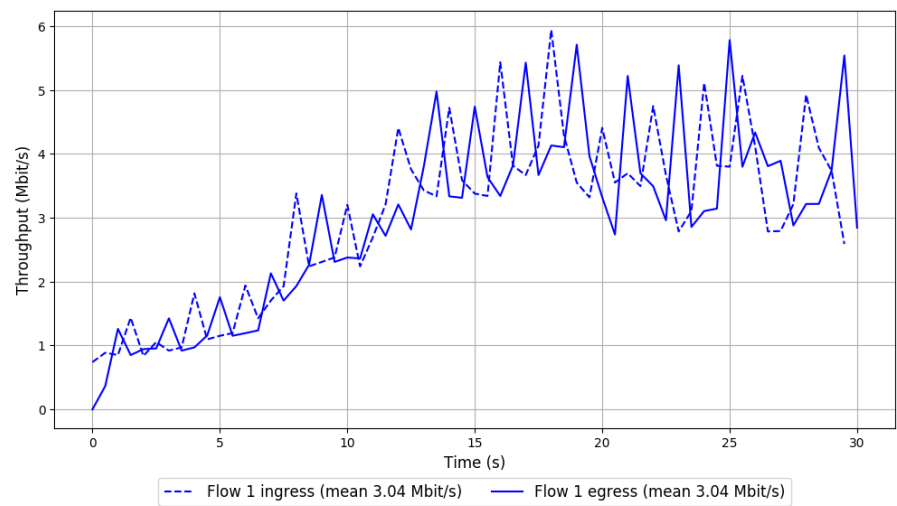


Run 1: Statistics of Sprout

Start at: 2018-11-29 20:23:19
End at: 2018-11-29 20:23:49
Local clock offset: -2.233 ms
Remote clock offset: -37.756 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 66.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 66.683 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

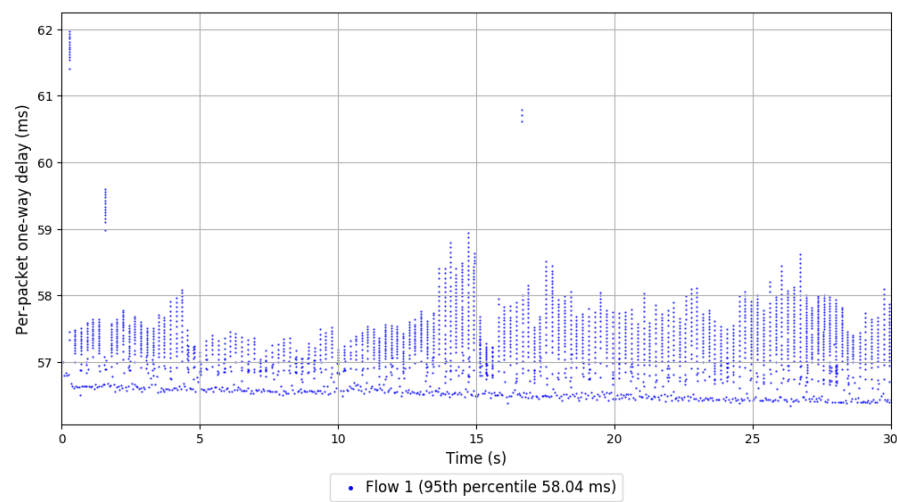
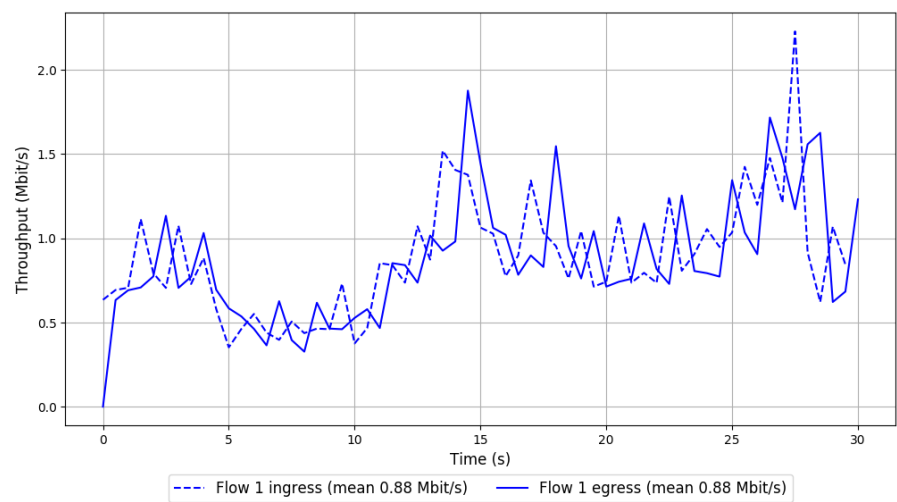


Run 2: Statistics of Sprout

Start at: 2018-11-29 21:03:56
End at: 2018-11-29 21:04:26
Local clock offset: -22.122 ms
Remote clock offset: -42.502 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 58.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 58.044 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

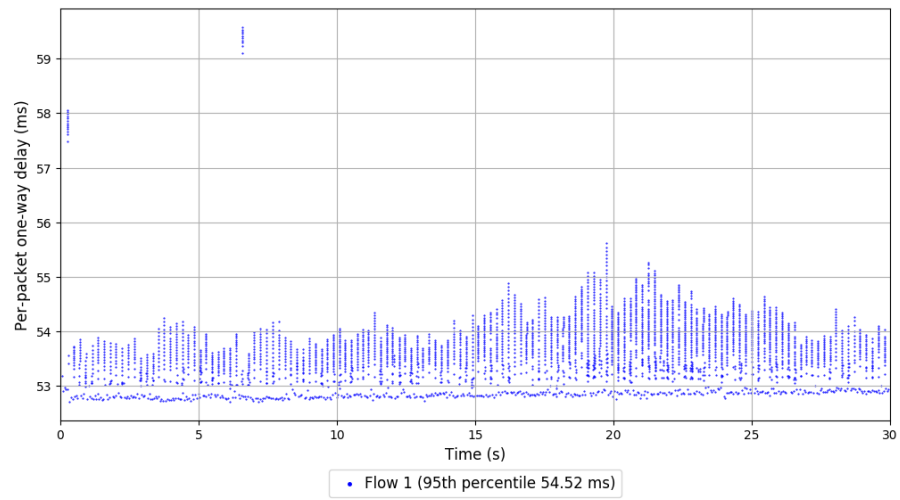
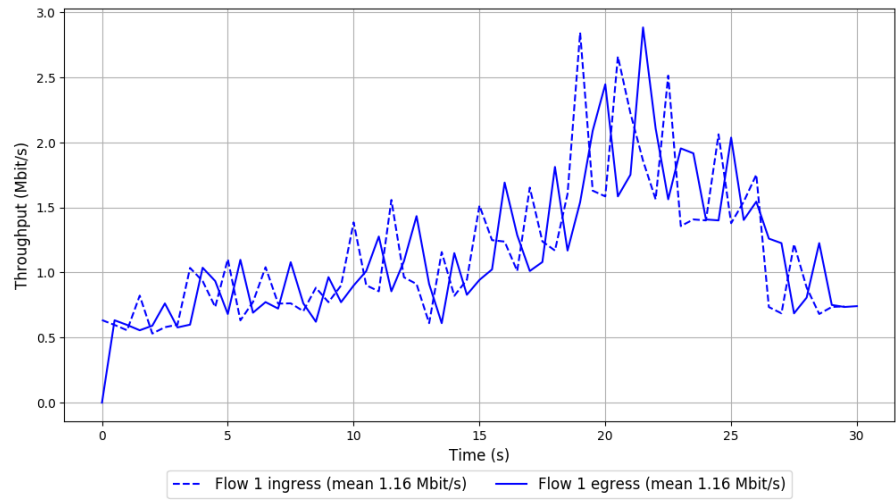


Run 3: Statistics of Sprout

Start at: 2018-11-29 21:38:35
End at: 2018-11-29 21:39:05
Local clock offset: -2.05 ms
Remote clock offset: -46.625 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 54.524 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 54.524 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

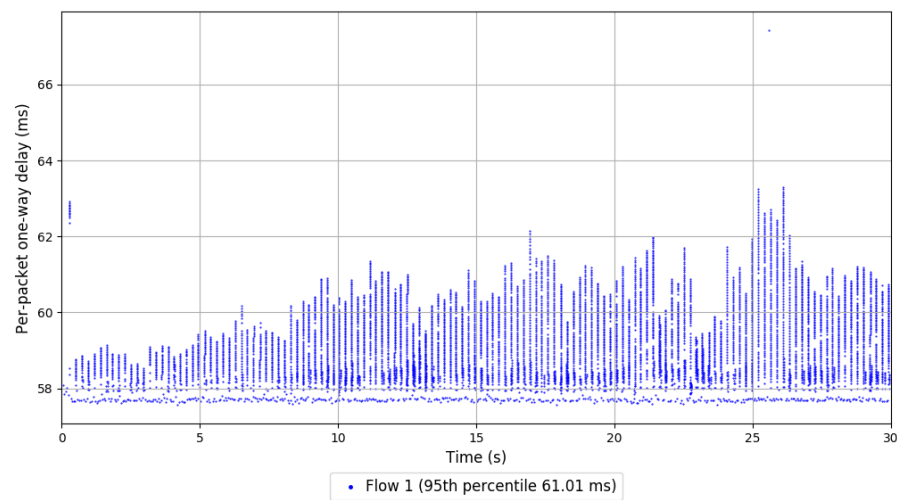
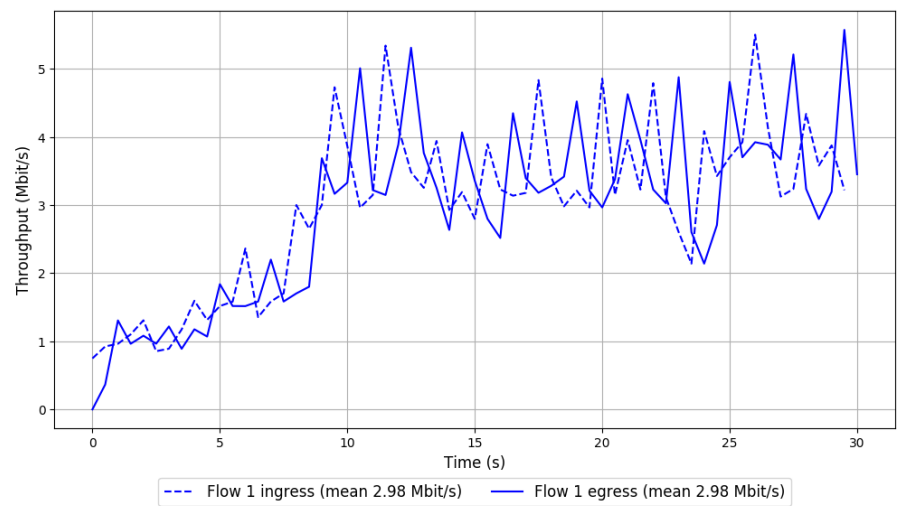


Run 4: Statistics of Sprout

Start at: 2018-11-29 22:13:06
End at: 2018-11-29 22:13:36
Local clock offset: 0.791 ms
Remote clock offset: -42.262 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 61.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 61.009 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

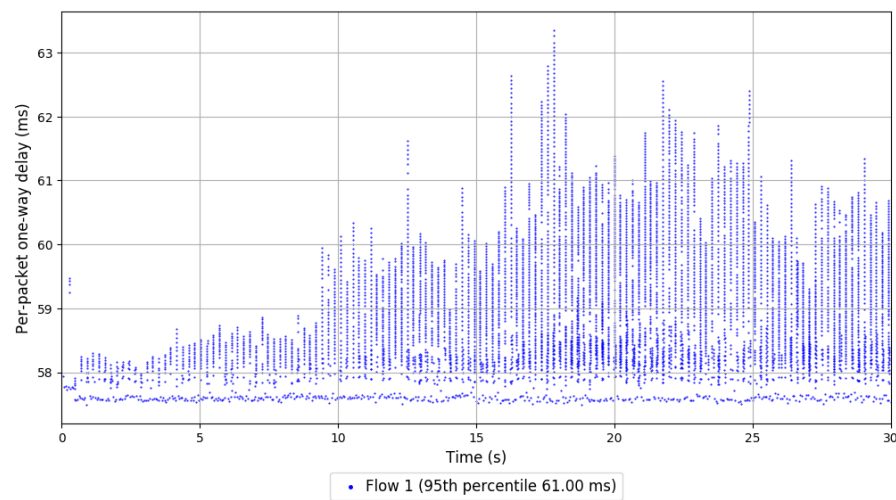
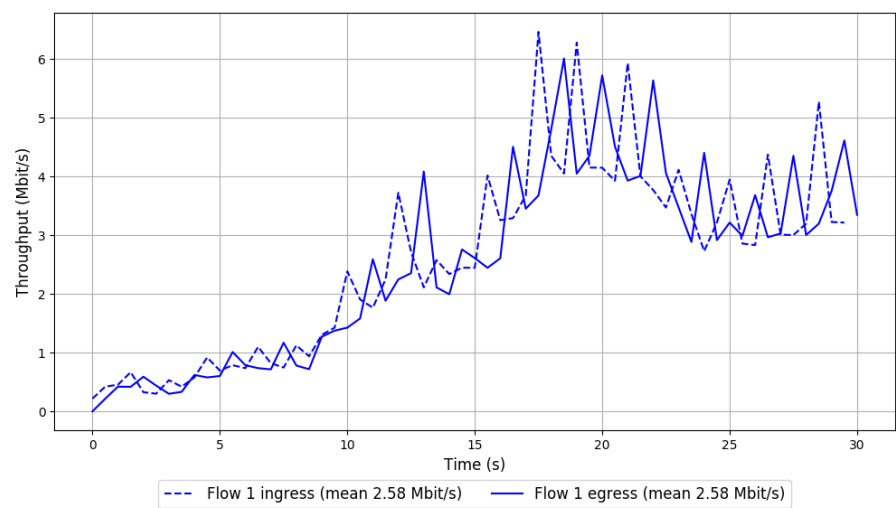


Run 5: Statistics of Sprout

Start at: 2018-11-29 22:53:13
End at: 2018-11-29 22:53:43
Local clock offset: 0.015 ms
Remote clock offset: -41.903 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 61.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 61.004 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

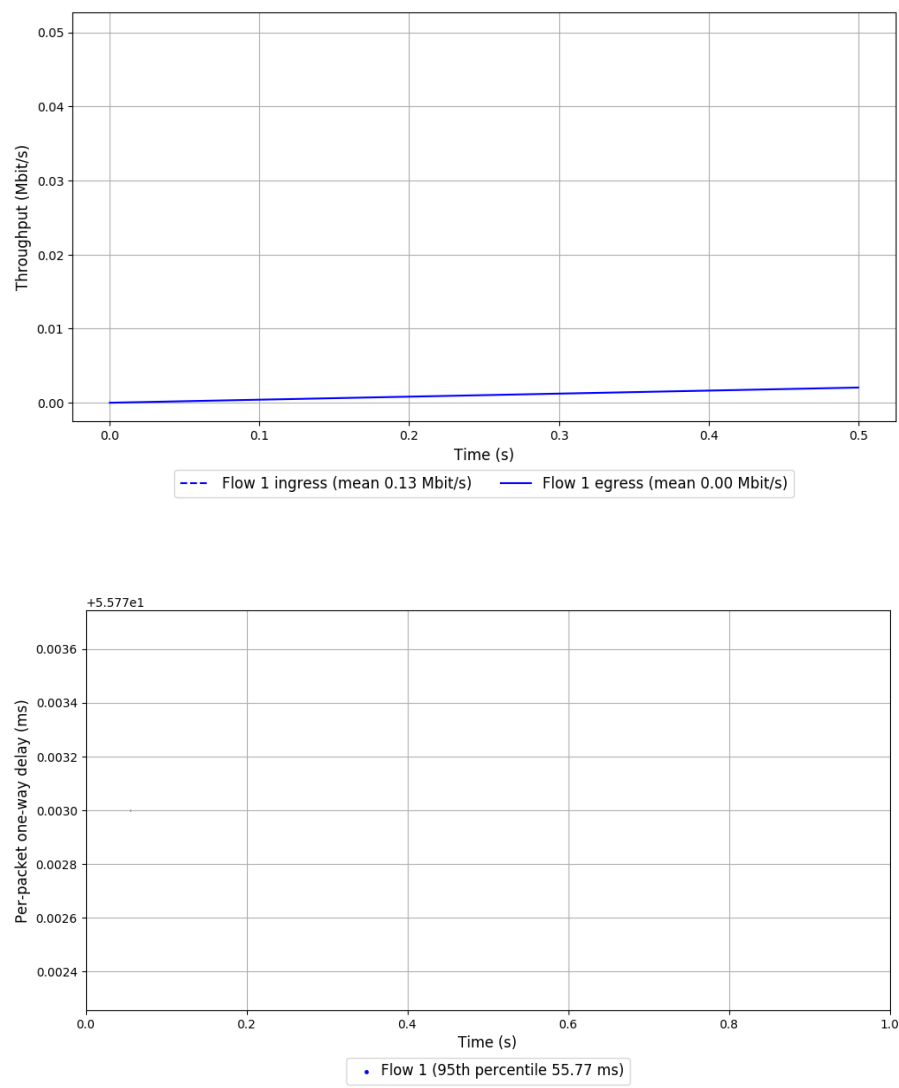
Start at: 2018-11-29 20:36:54

End at: 2018-11-29 20:37:24

Local clock offset: -4.623 ms

Remote clock offset: -39.883 ms

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



Run 2: Statistics of TaoVA-100x

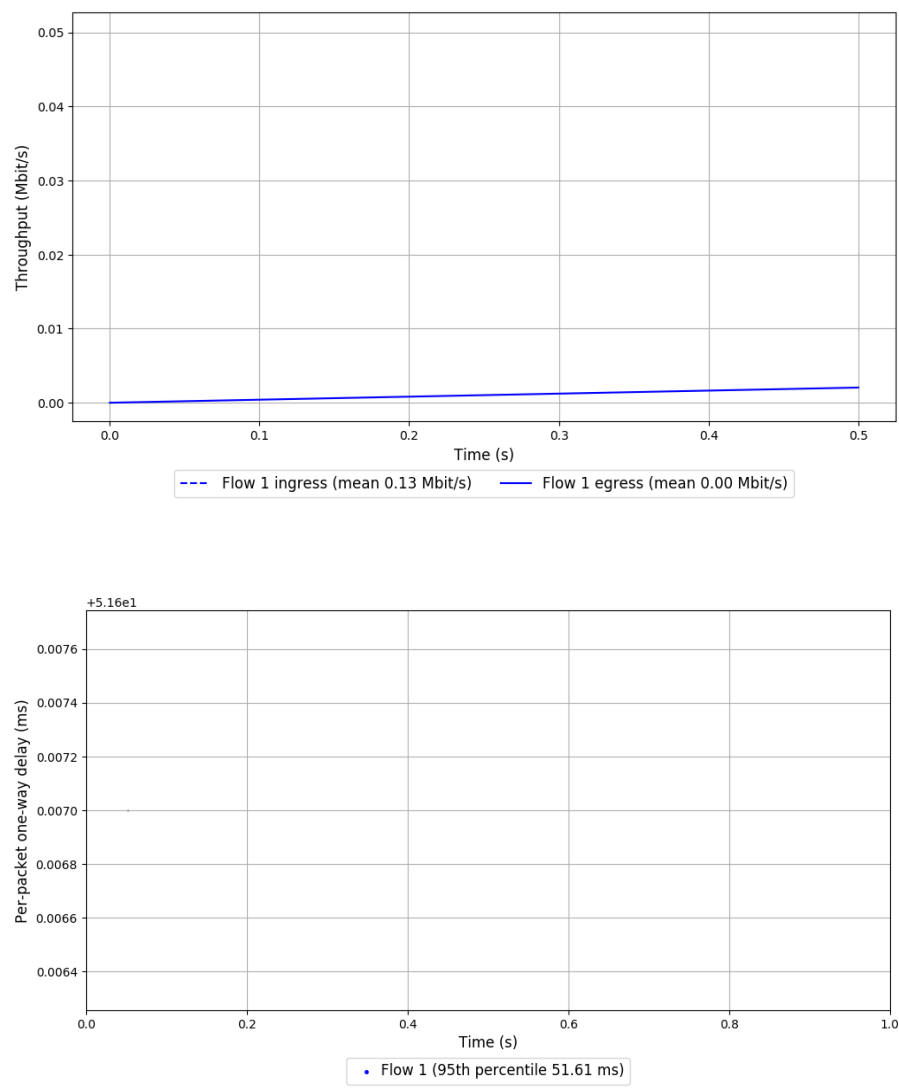
Start at: 2018-11-29 21:17:19

End at: 2018-11-29 21:17:49

Local clock offset: -25.1 ms

Remote clock offset: -47.043 ms

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



Run 3: Statistics of TaoVA-100x

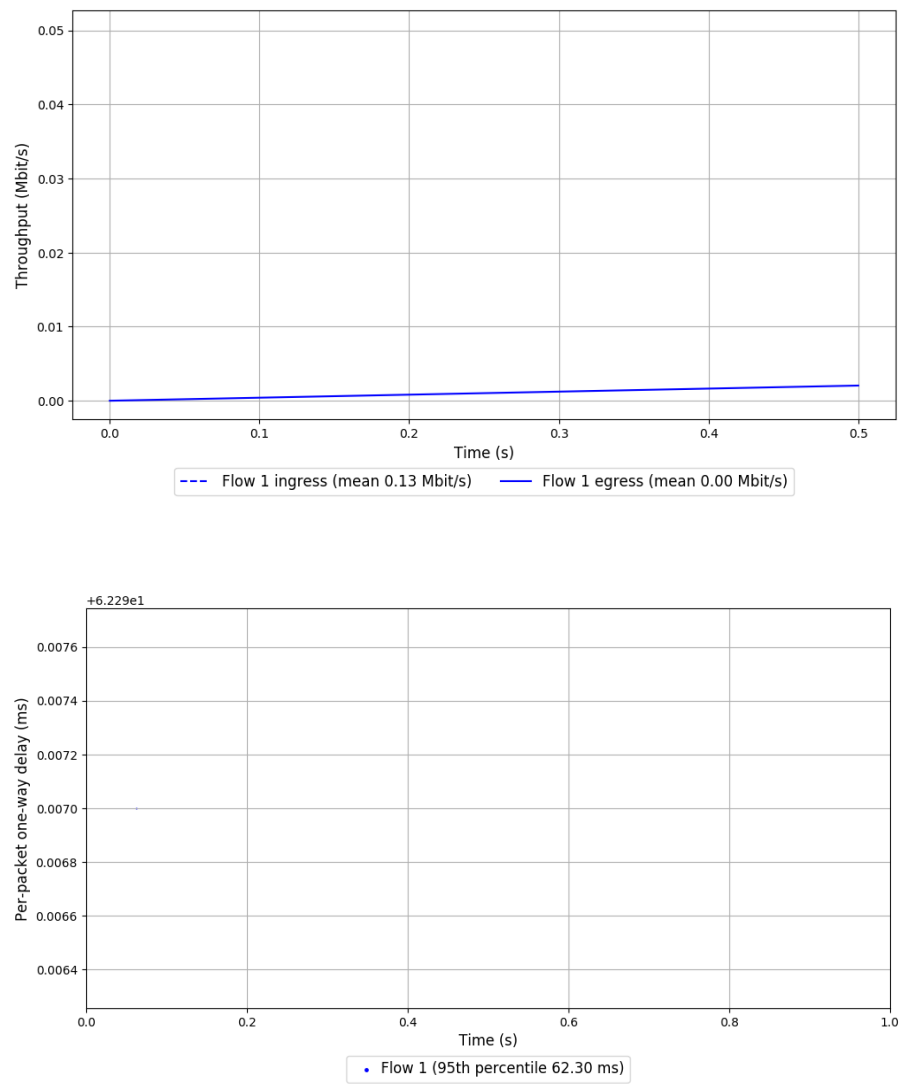
Start at: 2018-11-29 21:52:10

End at: 2018-11-29 21:52:40

Local clock offset: 1.85 ms

Remote clock offset: -35.457 ms

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



Run 4: Statistics of TaoVA-100x

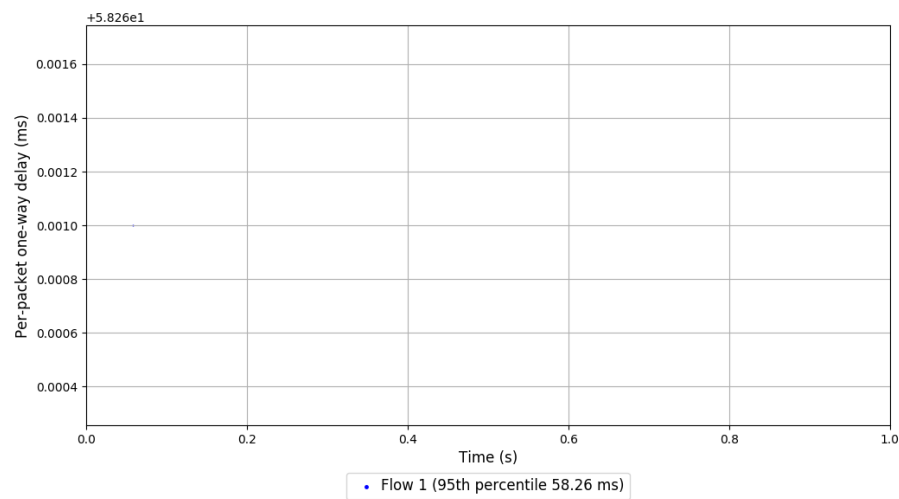
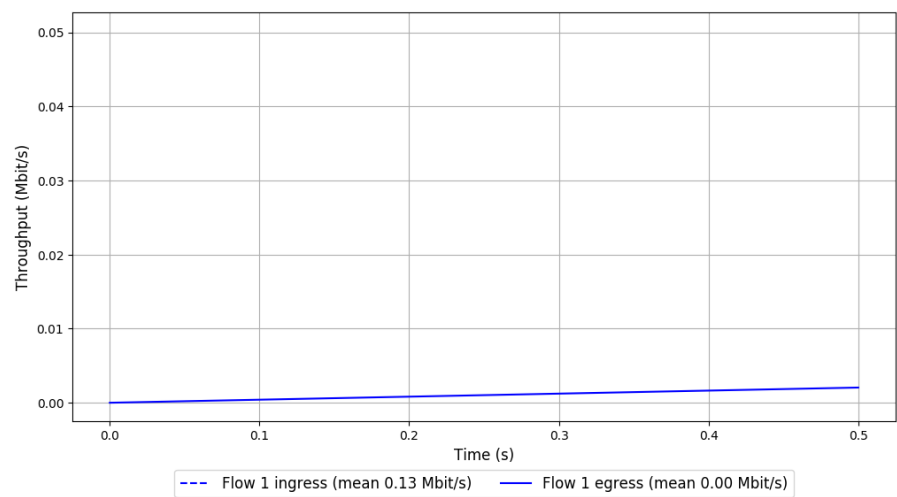
Start at: 2018-11-29 22:26:34

End at: 2018-11-29 22:27:04

Local clock offset: 0.28 ms

Remote clock offset: -40.508 ms

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



Run 5: Statistics of TaoVA-100x

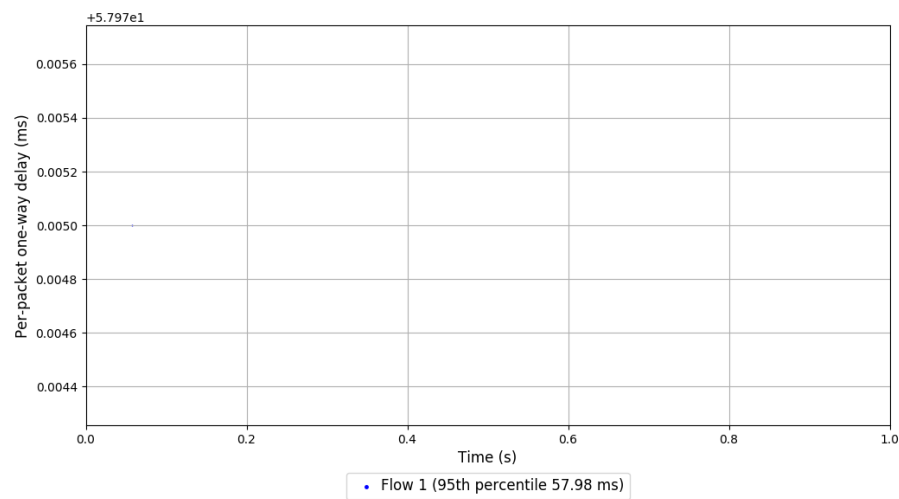
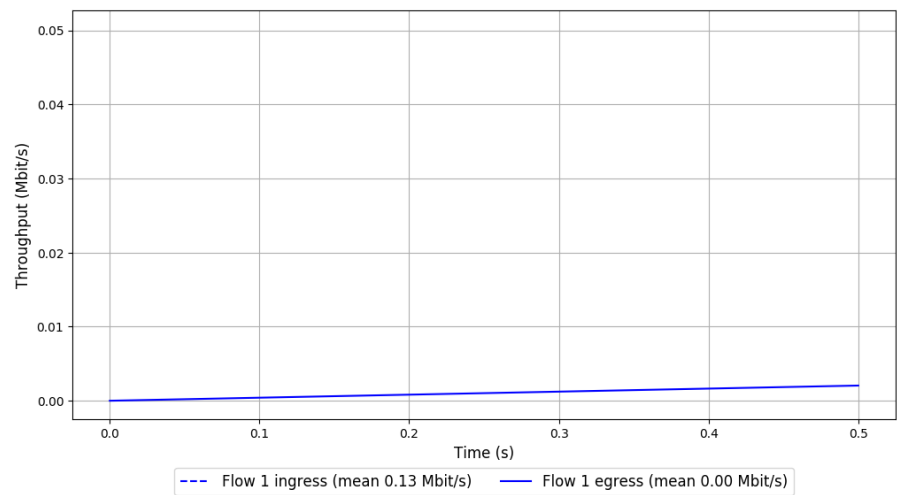
Start at: 2018-11-29 23:12:12

End at: 2018-11-29 23:12:42

Local clock offset: 2.375 ms

Remote clock offset: -39.683 ms

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

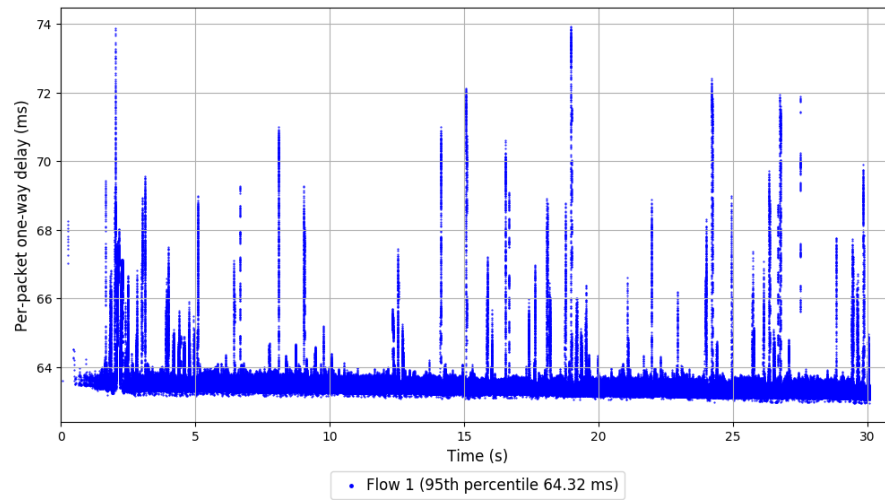
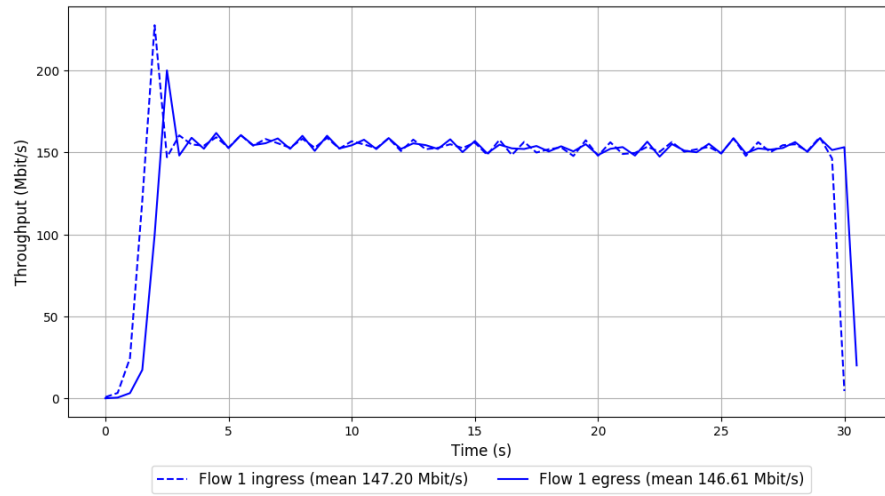


Run 1: Statistics of TCP Vegas

Start at: 2018-11-29 20:47:41
End at: 2018-11-29 20:48:11
Local clock offset: -10.658 ms
Remote clock offset: -32.075 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 146.61 Mbit/s
95th percentile per-packet one-way delay: 64.322 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 146.61 Mbit/s
95th percentile per-packet one-way delay: 64.322 ms
Loss rate: 0.40%

Run 1: Report of TCP Vegas — Data Link

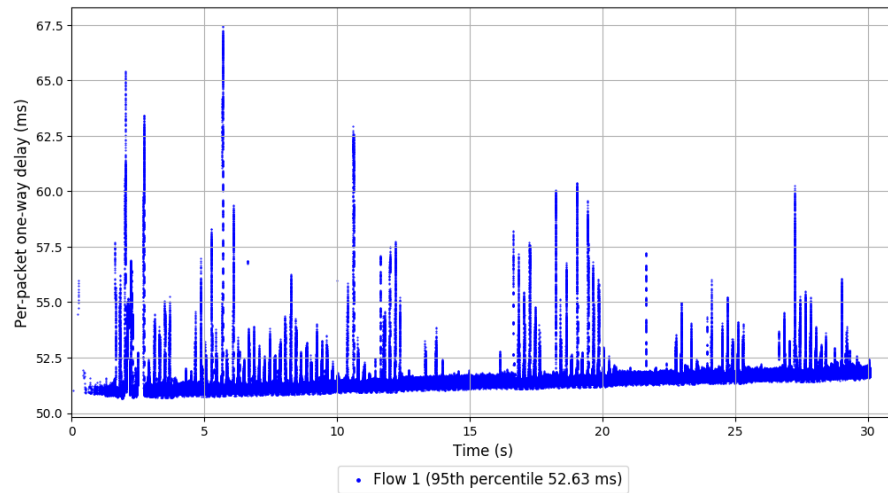
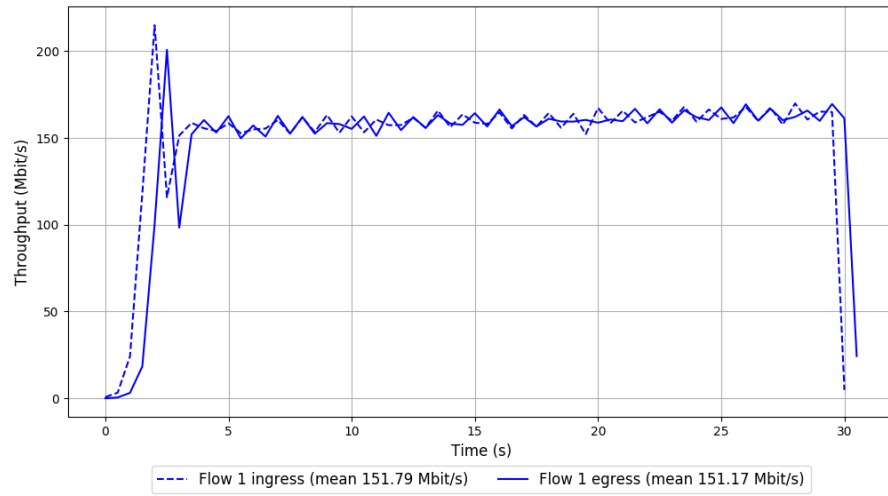


Run 2: Statistics of TCP Vegas

Start at: 2018-11-29 21:22:40
End at: 2018-11-29 21:23:10
Local clock offset: -12.796 ms
Remote clock offset: -46.299 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 151.17 Mbit/s
95th percentile per-packet one-way delay: 52.631 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 151.17 Mbit/s
95th percentile per-packet one-way delay: 52.631 ms
Loss rate: 0.41%

Run 2: Report of TCP Vegas — Data Link

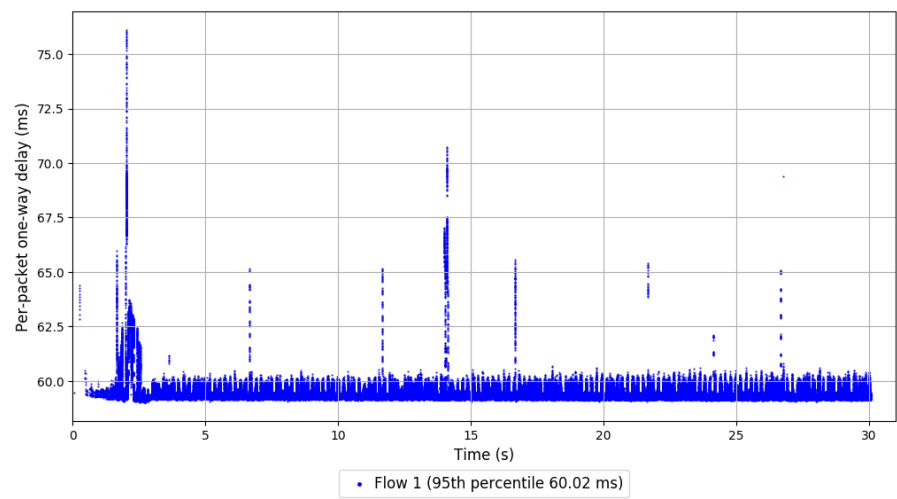
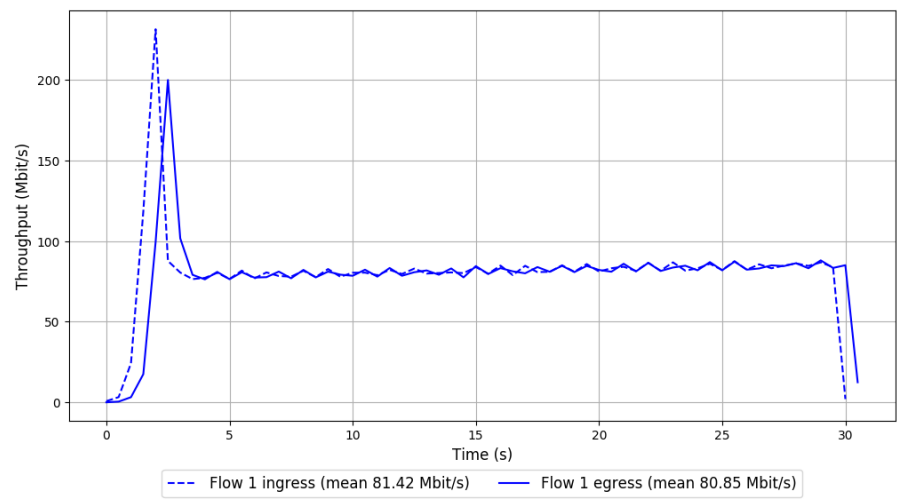


Run 3: Statistics of TCP Vegas

Start at: 2018-11-29 21:57:19
End at: 2018-11-29 21:57:49
Local clock offset: 3.628 ms
Remote clock offset: -36.041 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 80.85 Mbit/s
95th percentile per-packet one-way delay: 60.022 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 80.85 Mbit/s
95th percentile per-packet one-way delay: 60.022 ms
Loss rate: 0.70%

Run 3: Report of TCP Vegas — Data Link

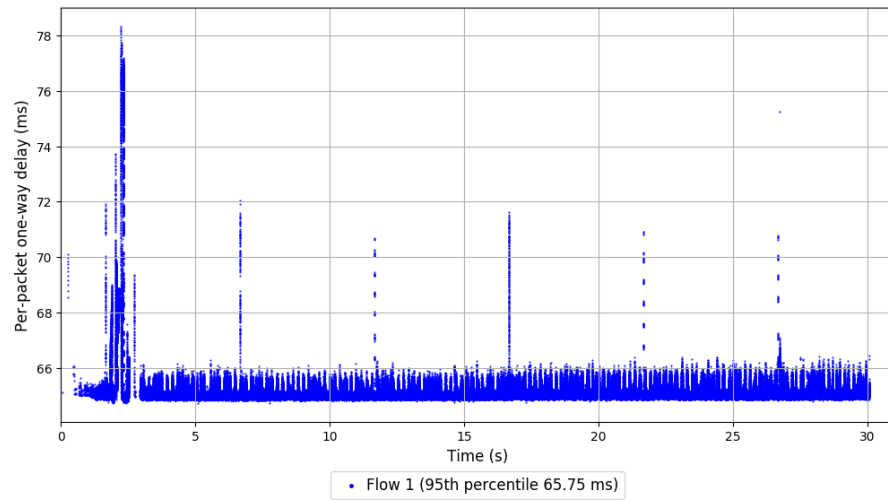
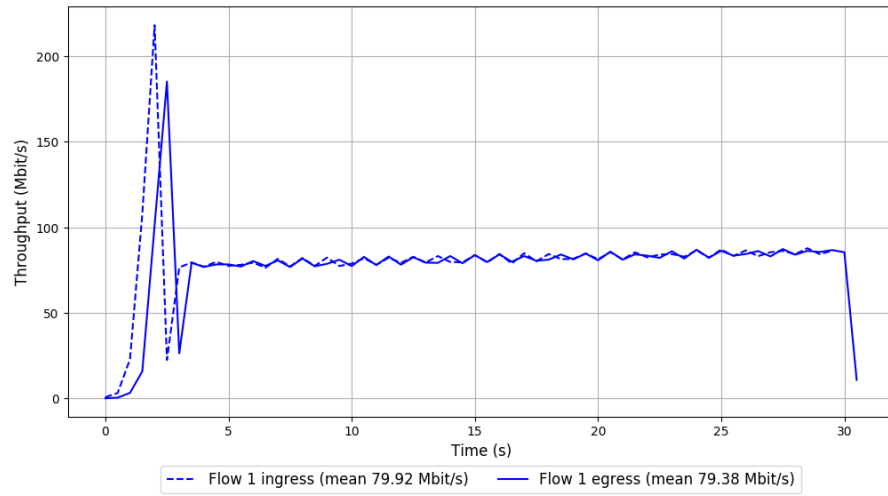


Run 4: Statistics of TCP Vegas

Start at: 2018-11-29 22:31:54
End at: 2018-11-29 22:32:24
Local clock offset: -0.661 ms
Remote clock offset: -37.196 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.38 Mbit/s
95th percentile per-packet one-way delay: 65.748 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 79.38 Mbit/s
95th percentile per-packet one-way delay: 65.748 ms
Loss rate: 0.66%

Run 4: Report of TCP Vegas — Data Link

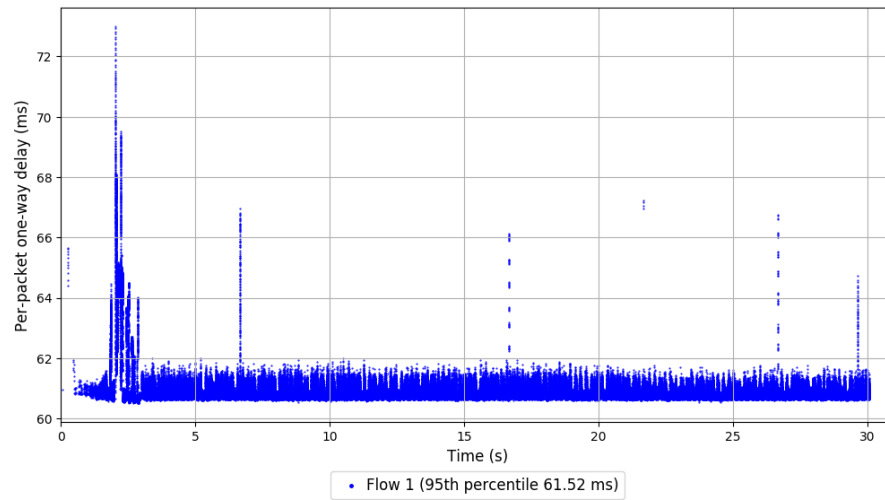
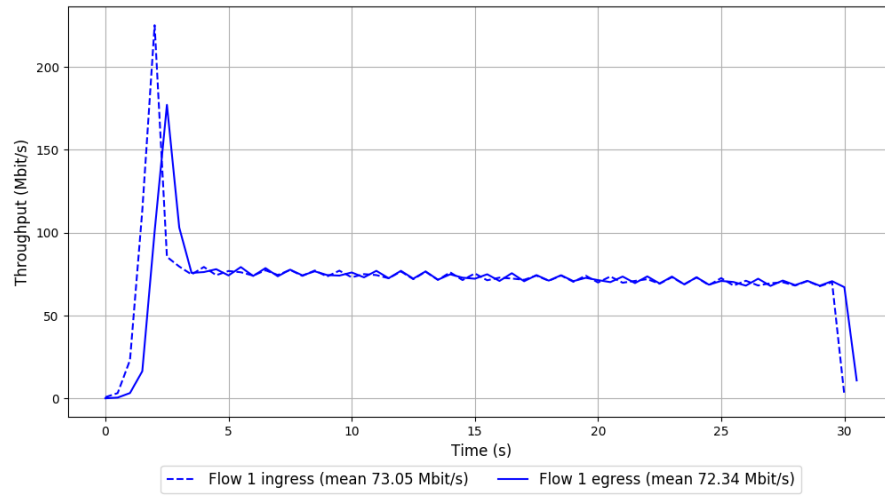


Run 5: Statistics of TCP Vegas

Start at: 2018-11-29 23:17:31
End at: 2018-11-29 23:18:01
Local clock offset: -1.096 ms
Remote clock offset: -42.264 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.34 Mbit/s
95th percentile per-packet one-way delay: 61.515 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 72.34 Mbit/s
95th percentile per-packet one-way delay: 61.515 ms
Loss rate: 0.98%

Run 5: Report of TCP Vegas — Data Link

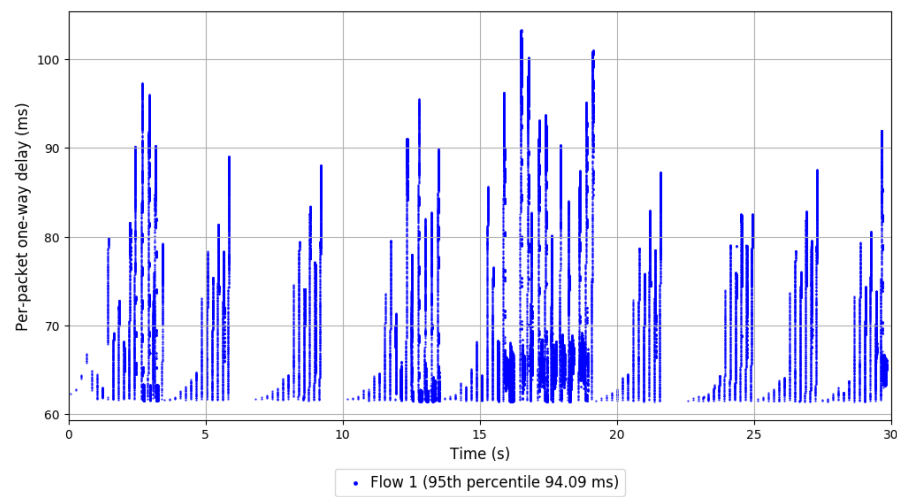
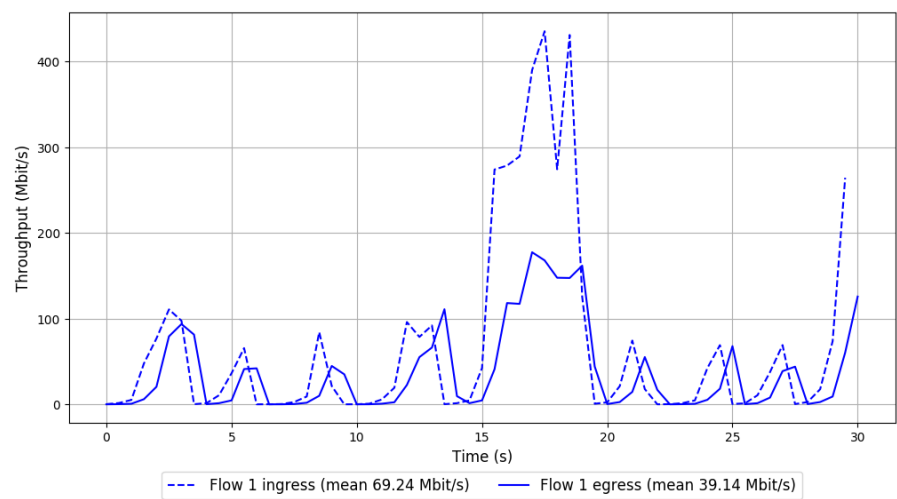


Run 1: Statistics of Verus

Start at: 2018-11-29 20:39:26
End at: 2018-11-29 20:39:56
Local clock offset: -9.403 ms
Remote clock offset: -37.121 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 94.090 ms
Loss rate: 43.46%
-- Flow 1:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 94.090 ms
Loss rate: 43.46%

Run 1: Report of Verus — Data Link

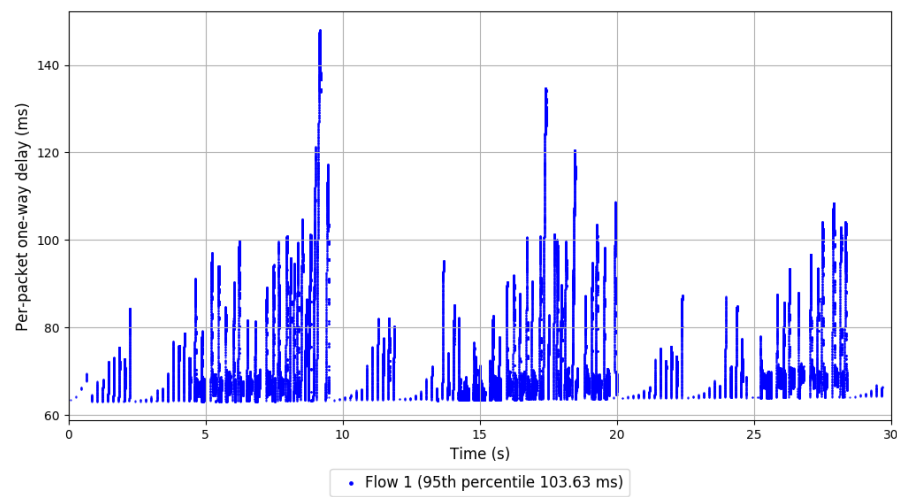
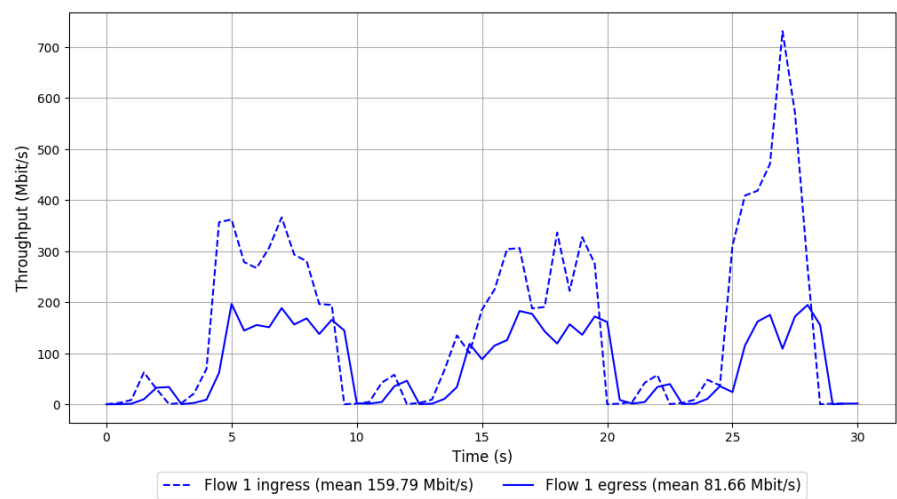


Run 2: Statistics of Verus

Start at: 2018-11-29 21:19:54
End at: 2018-11-29 21:20:24
Local clock offset: -21.154 ms
Remote clock offset: -39.024 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 103.626 ms
Loss rate: 48.89%
-- Flow 1:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 103.626 ms
Loss rate: 48.89%

Run 2: Report of Verus — Data Link

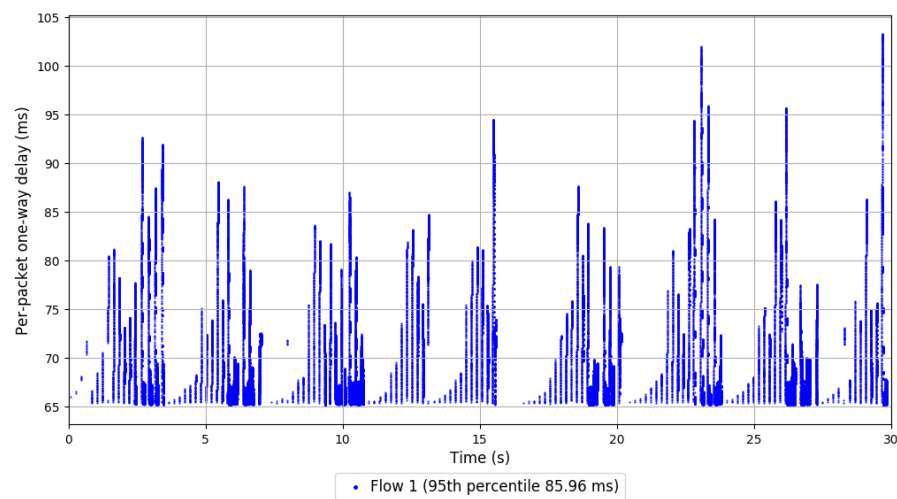
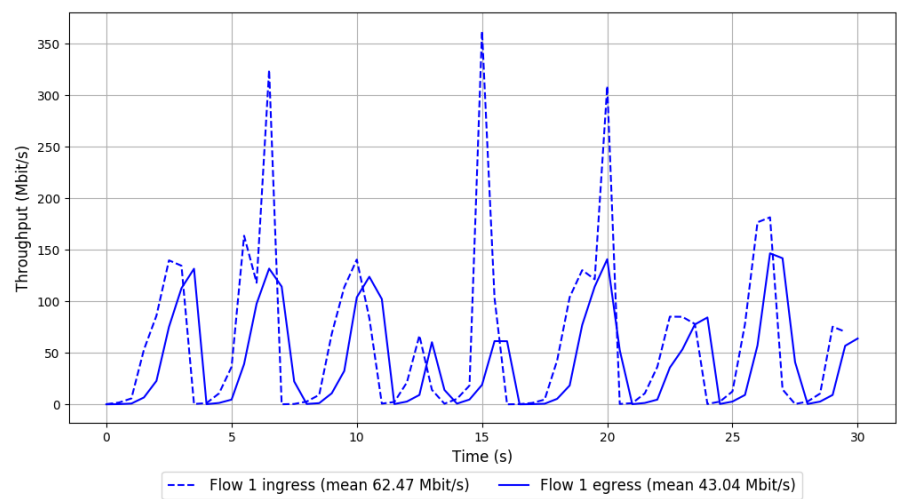


Run 3: Statistics of Verus

Start at: 2018-11-29 21:54:43
End at: 2018-11-29 21:55:13
Local clock offset: 1.178 ms
Remote clock offset: -32.511 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 43.04 Mbit/s
95th percentile per-packet one-way delay: 85.957 ms
Loss rate: 31.10%
-- Flow 1:
Average throughput: 43.04 Mbit/s
95th percentile per-packet one-way delay: 85.957 ms
Loss rate: 31.10%

Run 3: Report of Verus — Data Link

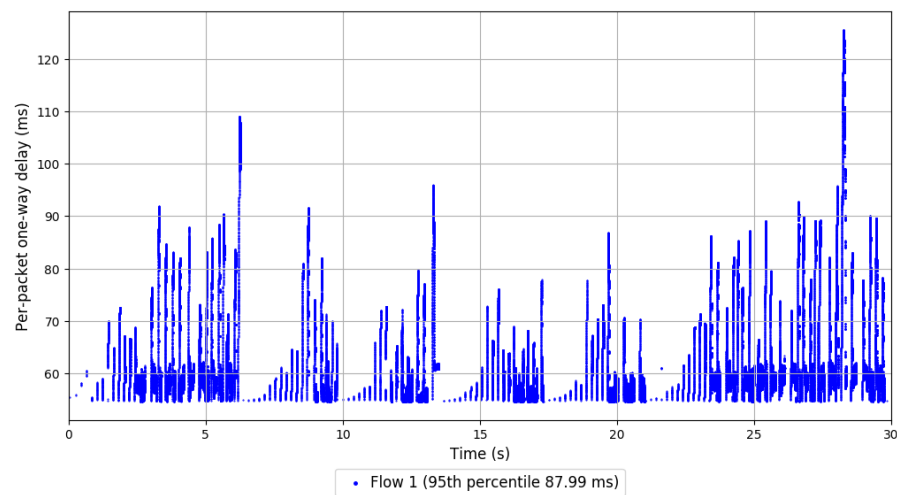
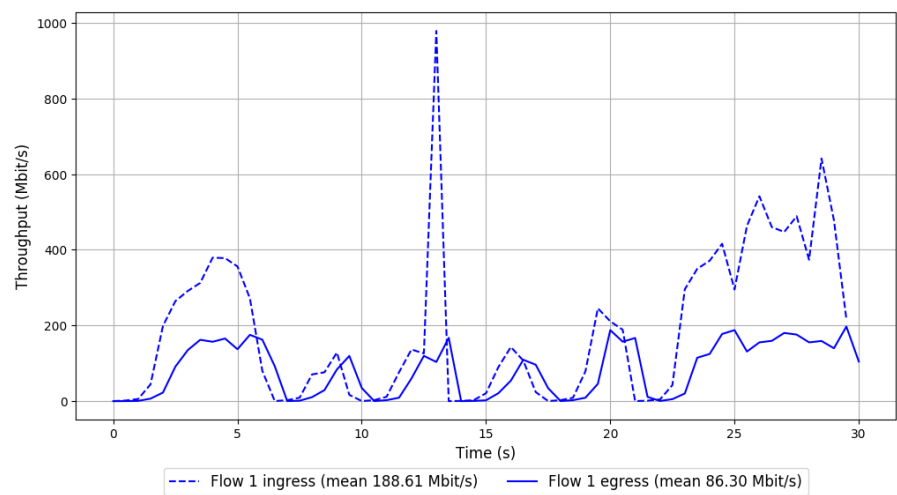


Run 4: Statistics of Verus

Start at: 2018-11-29 22:29:06
End at: 2018-11-29 22:29:36
Local clock offset: 2.06 ms
Remote clock offset: -41.93 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.30 Mbit/s
95th percentile per-packet one-way delay: 87.993 ms
Loss rate: 54.24%
-- Flow 1:
Average throughput: 86.30 Mbit/s
95th percentile per-packet one-way delay: 87.993 ms
Loss rate: 54.24%

Run 4: Report of Verus — Data Link

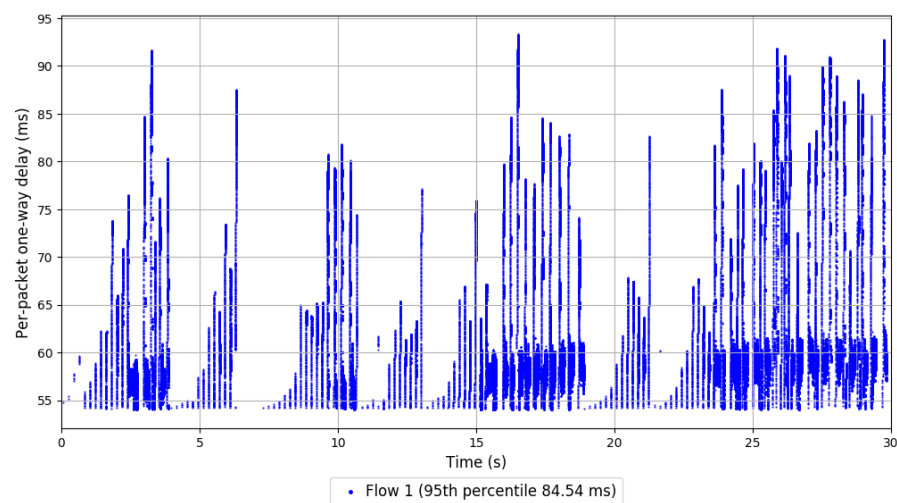
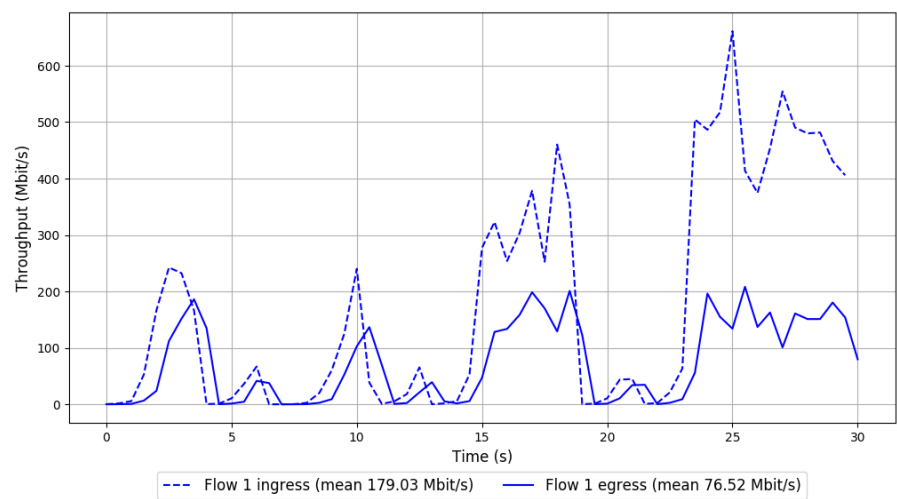


Run 5: Statistics of Verus

Start at: 2018-11-29 23:14:44
End at: 2018-11-29 23:15:14
Local clock offset: 0.292 ms
Remote clock offset: -44.934 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 84.542 ms
Loss rate: 57.25%
-- Flow 1:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 84.542 ms
Loss rate: 57.25%

Run 5: Report of Verus — Data Link

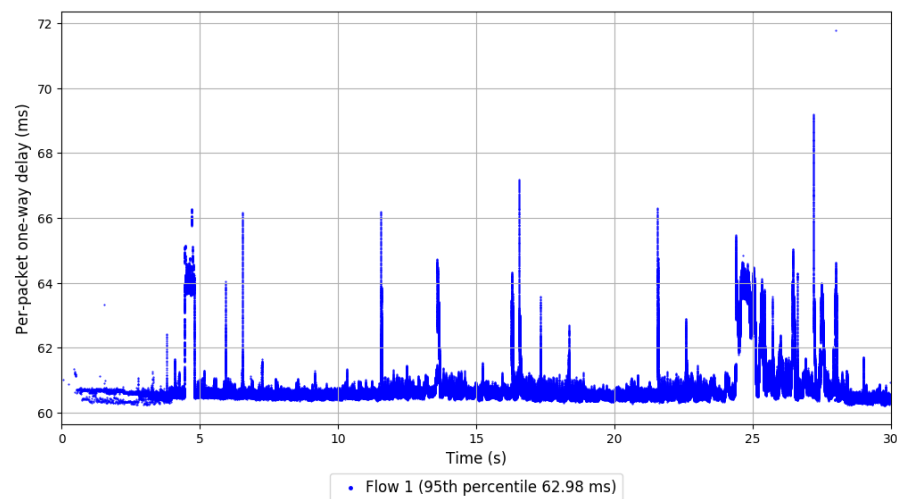
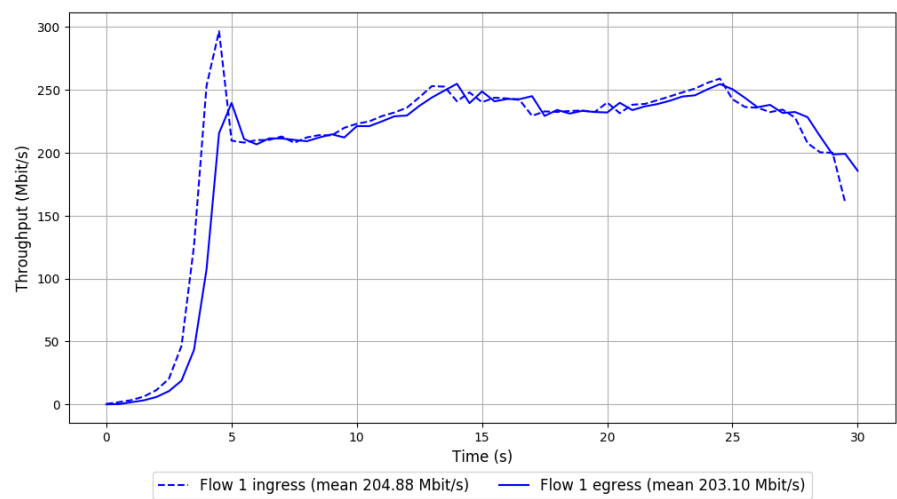


Run 1: Statistics of PCC-Vivace

Start at: 2018-11-29 20:52:33
End at: 2018-11-29 20:53:03
Local clock offset: -15.117 ms
Remote clock offset: -39.717 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 203.10 Mbit/s
95th percentile per-packet one-way delay: 62.976 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 203.10 Mbit/s
95th percentile per-packet one-way delay: 62.976 ms
Loss rate: 0.87%

Run 1: Report of PCC-Vivace — Data Link

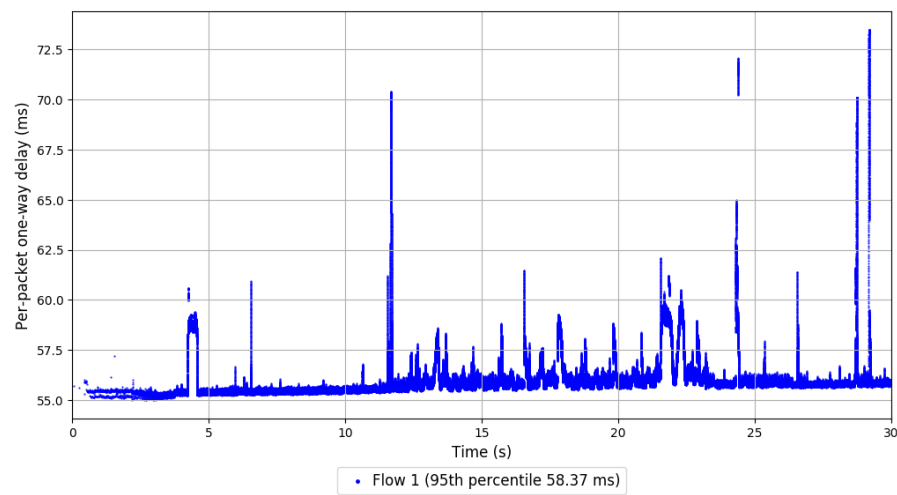
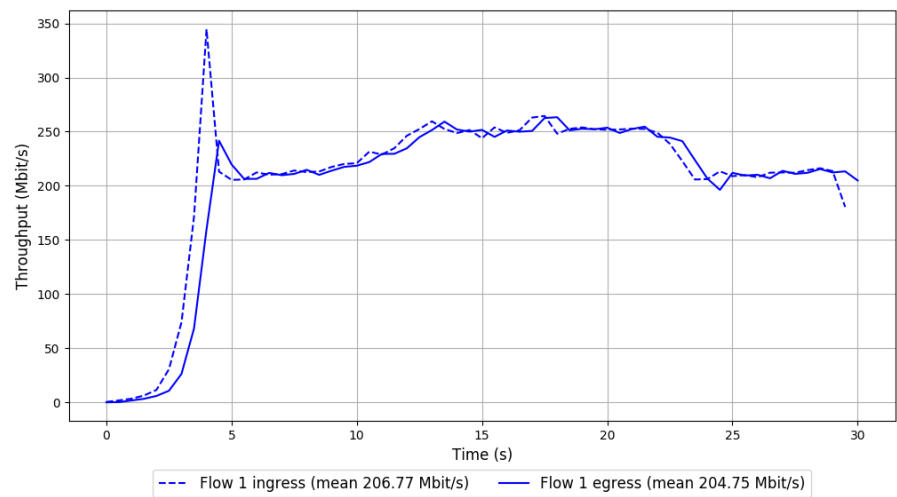


Run 2: Statistics of PCC-Vivace

Start at: 2018-11-29 21:27:10
End at: 2018-11-29 21:27:40
Local clock offset: -5.984 ms
Remote clock offset: -41.23 ms

Below is generated by plot.py at 2018-11-29 23:45:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 204.75 Mbit/s
95th percentile per-packet one-way delay: 58.372 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 204.75 Mbit/s
95th percentile per-packet one-way delay: 58.372 ms
Loss rate: 0.98%

Run 2: Report of PCC-Vivace — Data Link

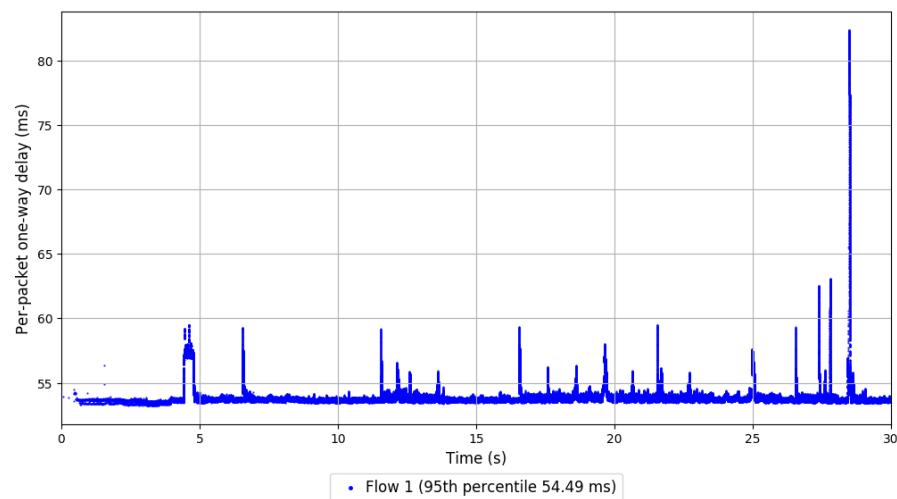
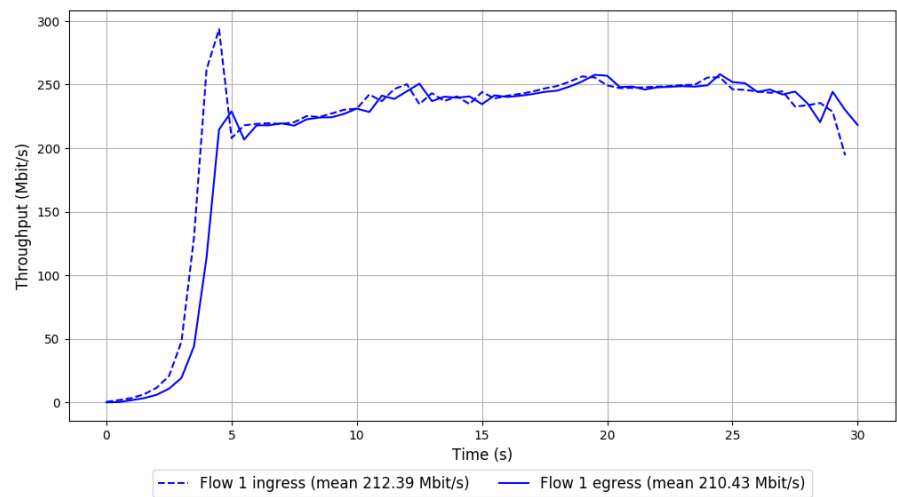


Run 3: Statistics of PCC-Vivace

Start at: 2018-11-29 22:01:43
End at: 2018-11-29 22:02:13
Local clock offset: 3.872 ms
Remote clock offset: -41.167 ms

Below is generated by plot.py at 2018-11-29 23:45:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 210.43 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 210.43 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.92%

Run 3: Report of PCC-Vivace — Data Link

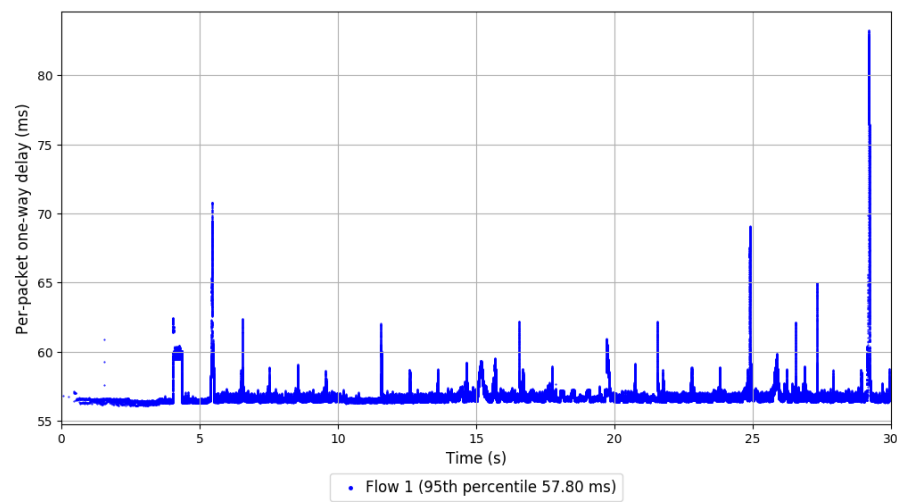
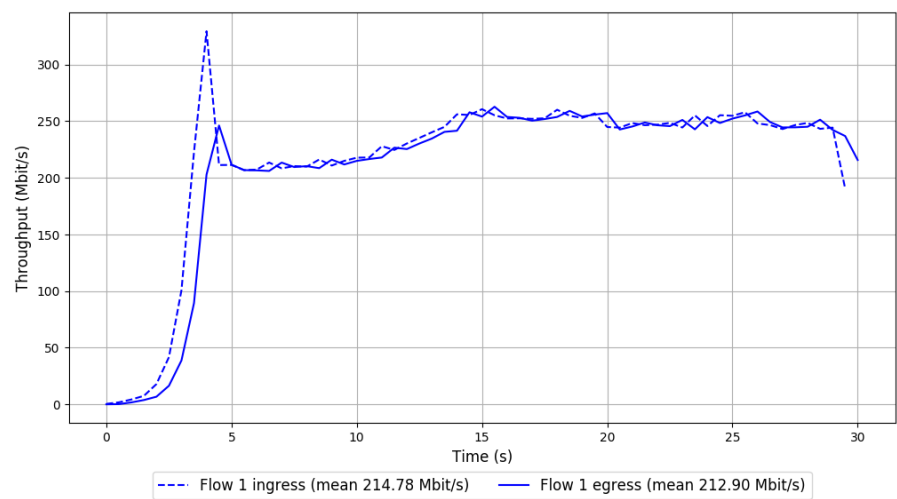


Run 4: Statistics of PCC-Vivace

Start at: 2018-11-29 22:36:18
End at: 2018-11-29 22:36:48
Local clock offset: 0.664 ms
Remote clock offset: -41.846 ms

Below is generated by plot.py at 2018-11-29 23:45:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 212.90 Mbit/s
95th percentile per-packet one-way delay: 57.798 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 212.90 Mbit/s
95th percentile per-packet one-way delay: 57.798 ms
Loss rate: 0.87%

Run 4: Report of PCC-Vivace — Data Link

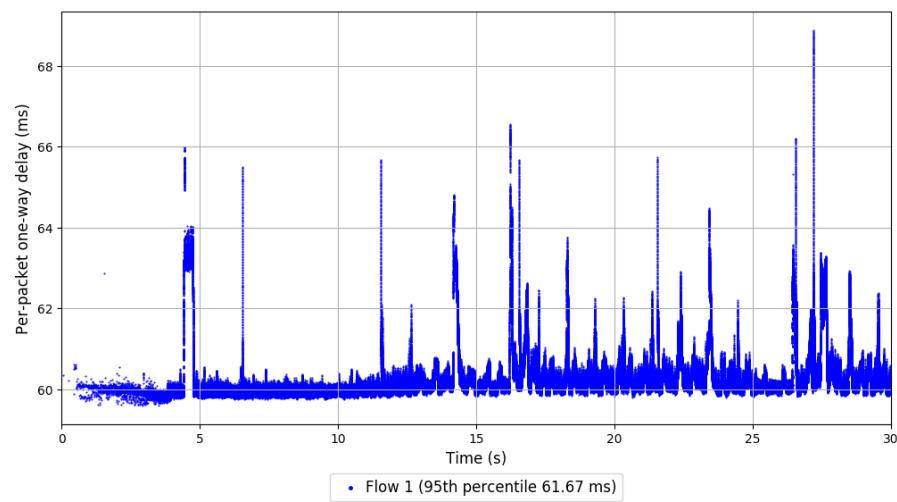
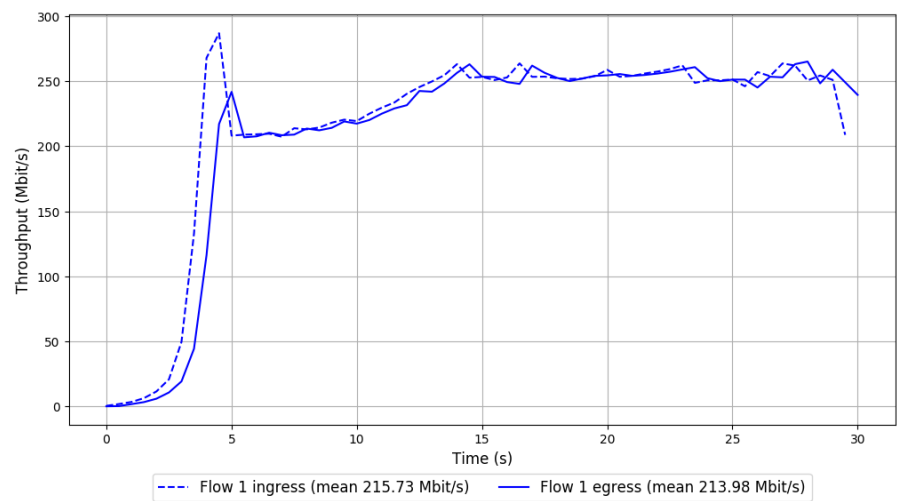


Run 5: Statistics of PCC-Vivace

Start at: 2018-11-29 23:21:57
End at: 2018-11-29 23:22:27
Local clock offset: 0.475 ms
Remote clock offset: -39.144 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 213.98 Mbit/s
95th percentile per-packet one-way delay: 61.674 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 213.98 Mbit/s
95th percentile per-packet one-way delay: 61.674 ms
Loss rate: 0.81%

Run 5: Report of PCC-Vivace — Data Link

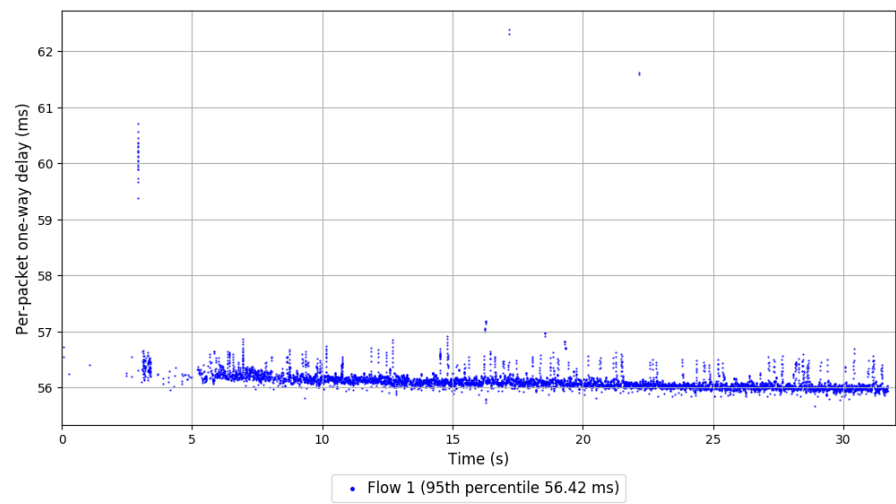
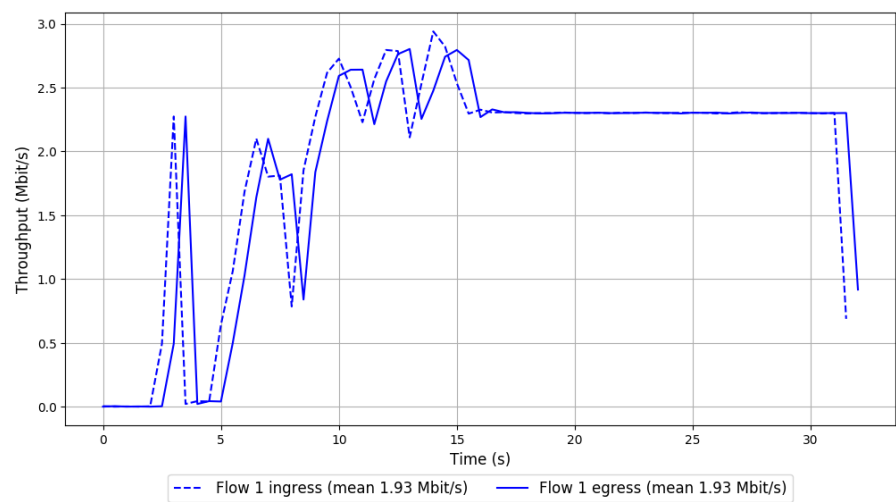


Run 1: Statistics of WebRTC media

Start at: 2018-11-29 20:49:21
End at: 2018-11-29 20:49:51
Local clock offset: -14.642 ms
Remote clock offset: -45.005 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 56.416 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 56.416 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

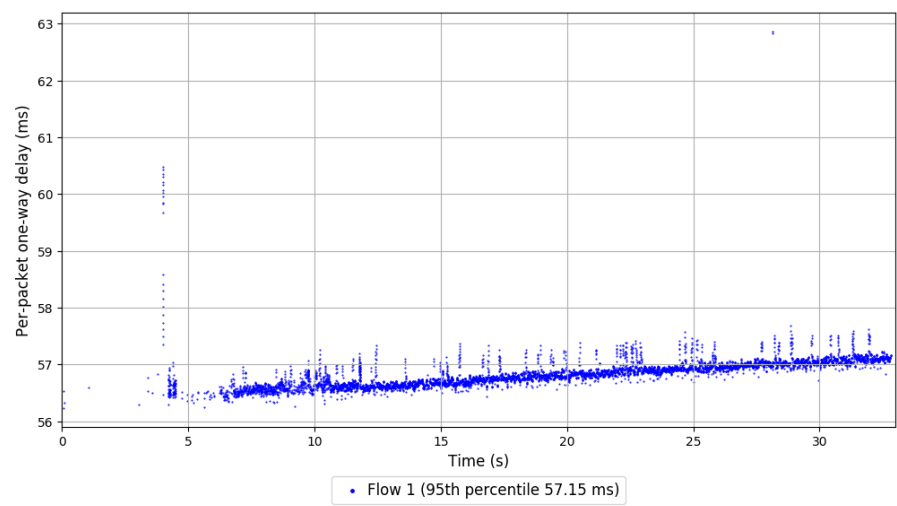
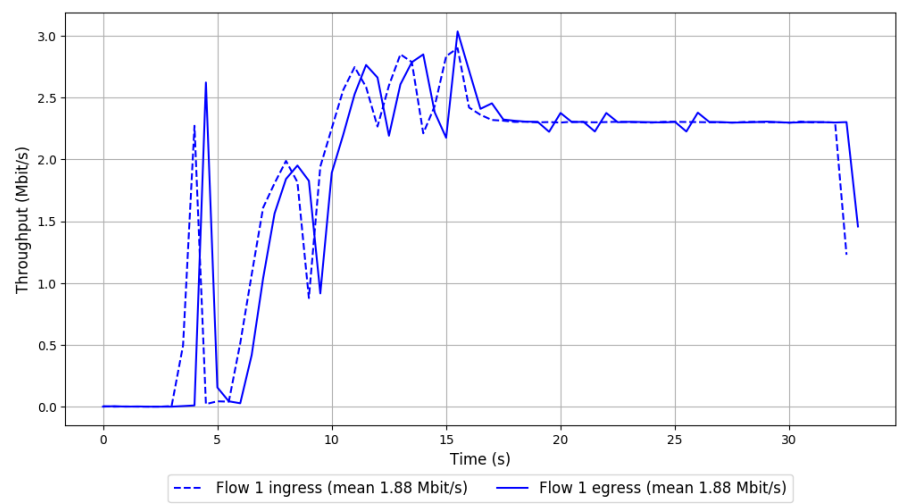


Run 2: Statistics of WebRTC media

Start at: 2018-11-29 21:24:20
End at: 2018-11-29 21:24:50
Local clock offset: -11.643 ms
Remote clock offset: -42.248 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 57.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 57.150 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

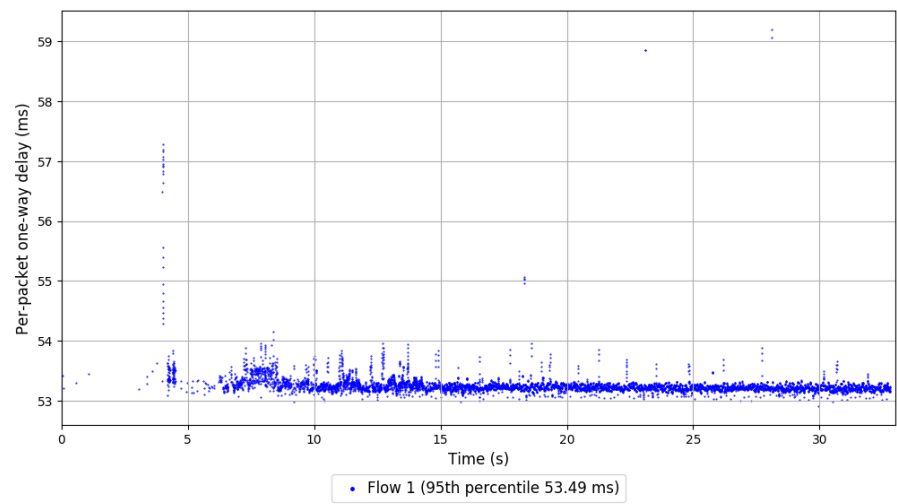
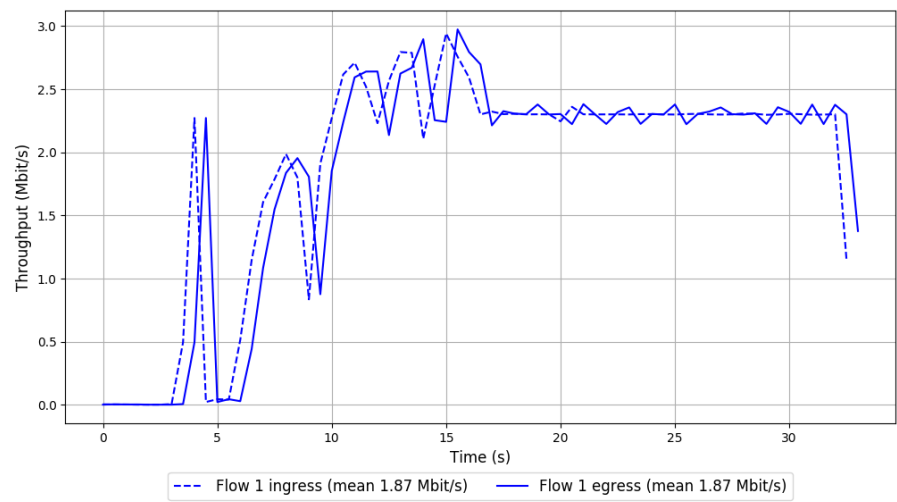


Run 3: Statistics of WebRTC media

Start at: 2018-11-29 21:58:45
End at: 2018-11-29 21:59:15
Local clock offset: -0.354 ms
Remote clock offset: -48.297 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 53.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 53.495 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

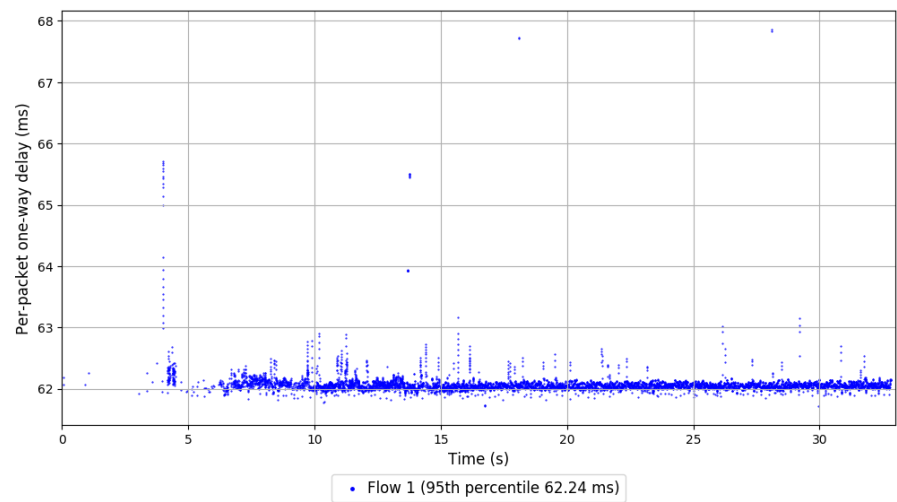
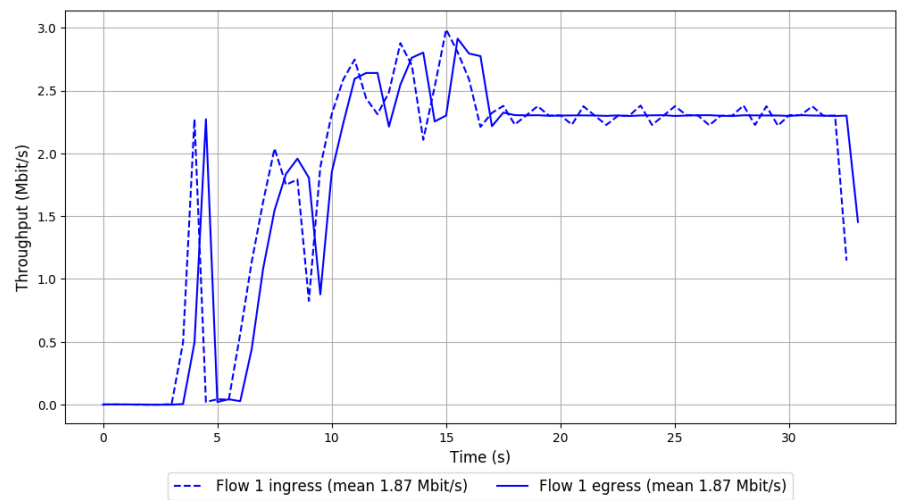


Run 4: Statistics of WebRTC media

Start at: 2018-11-29 22:33:20
End at: 2018-11-29 22:33:50
Local clock offset: 1.372 ms
Remote clock offset: -35.437 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 62.241 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 62.241 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-11-29 23:18:57
End at: 2018-11-29 23:19:27
Local clock offset: 1.058 ms
Remote clock offset: -41.179 ms

Below is generated by plot.py at 2018-11-29 23:45:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 57.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 57.479 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

