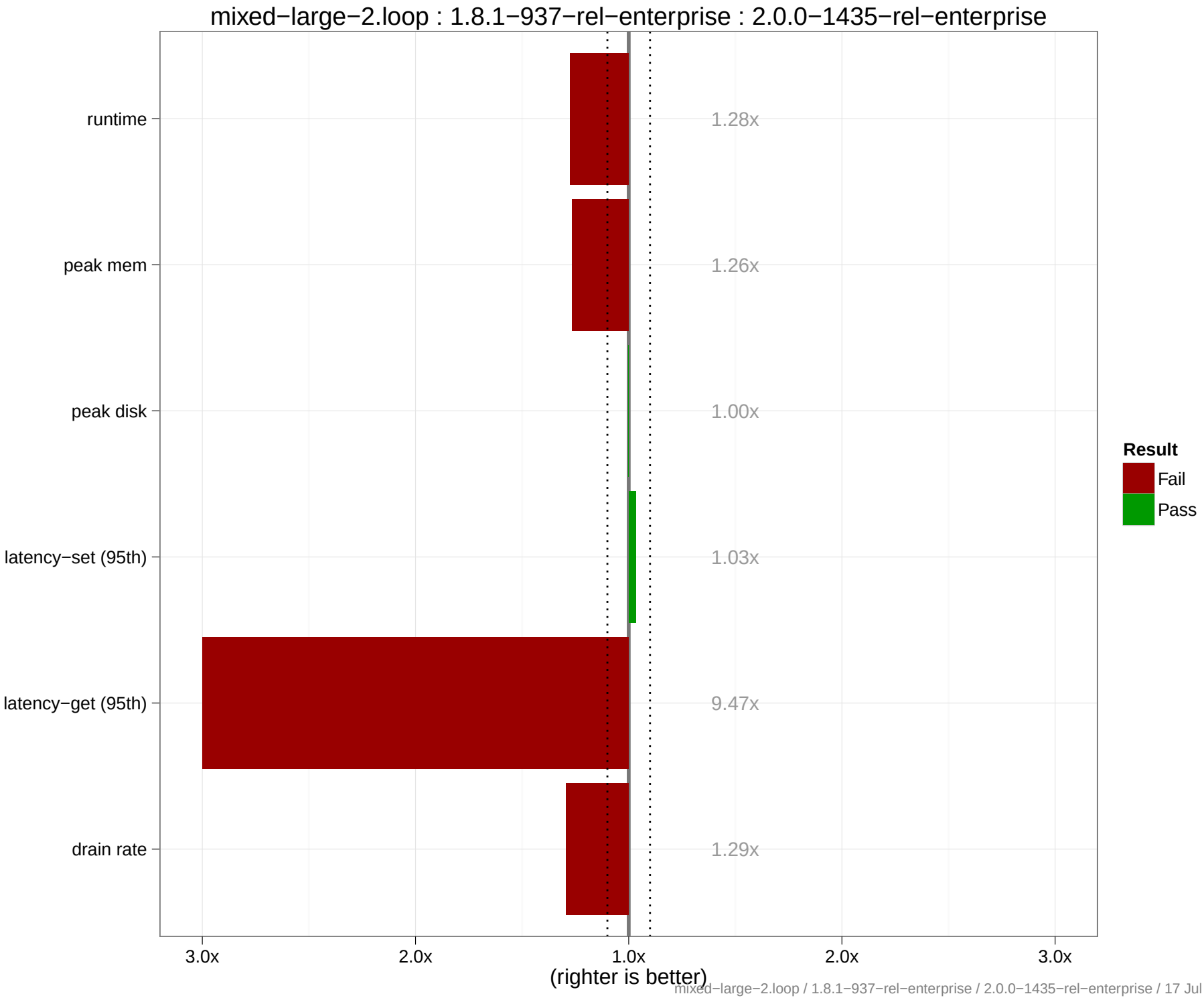
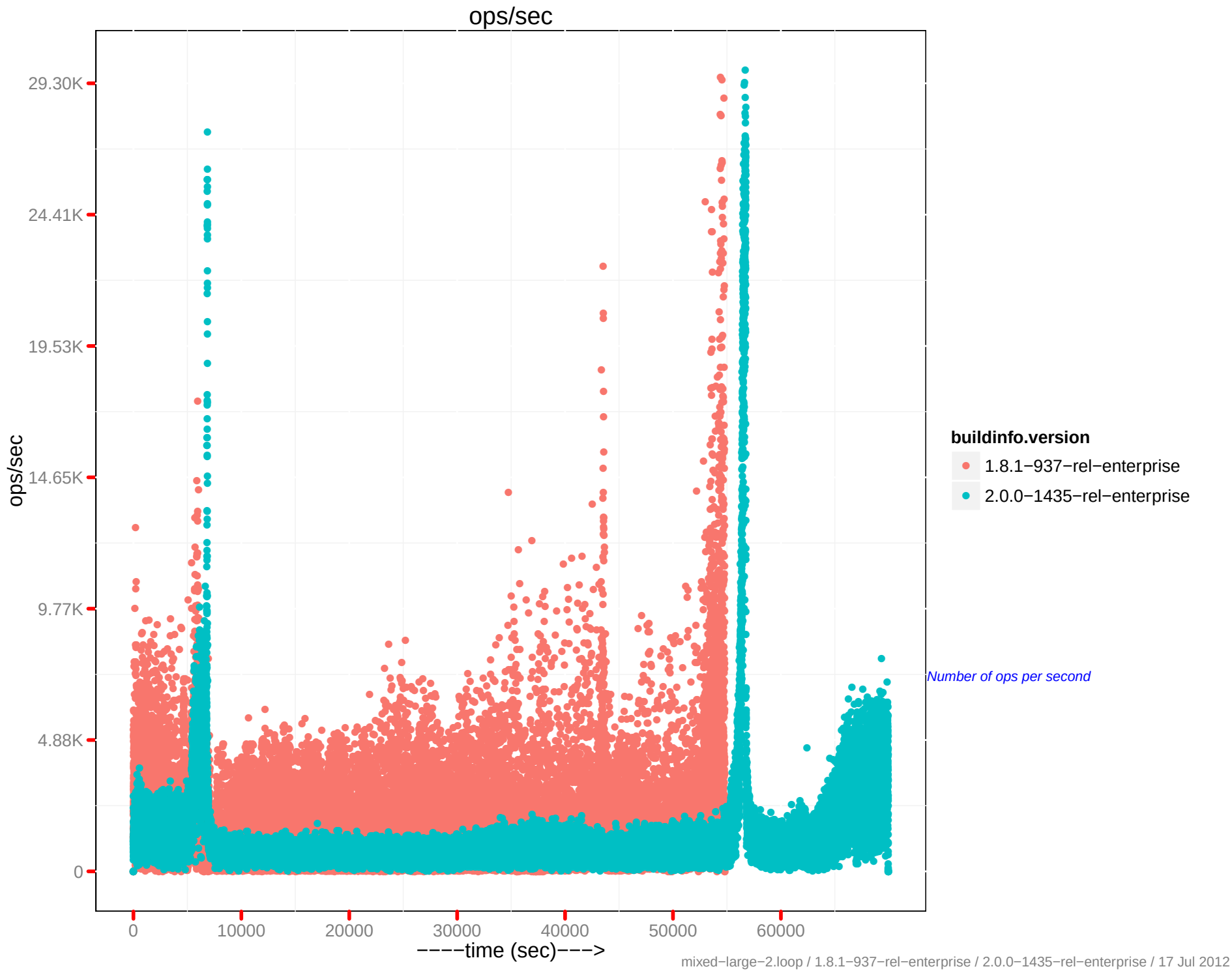
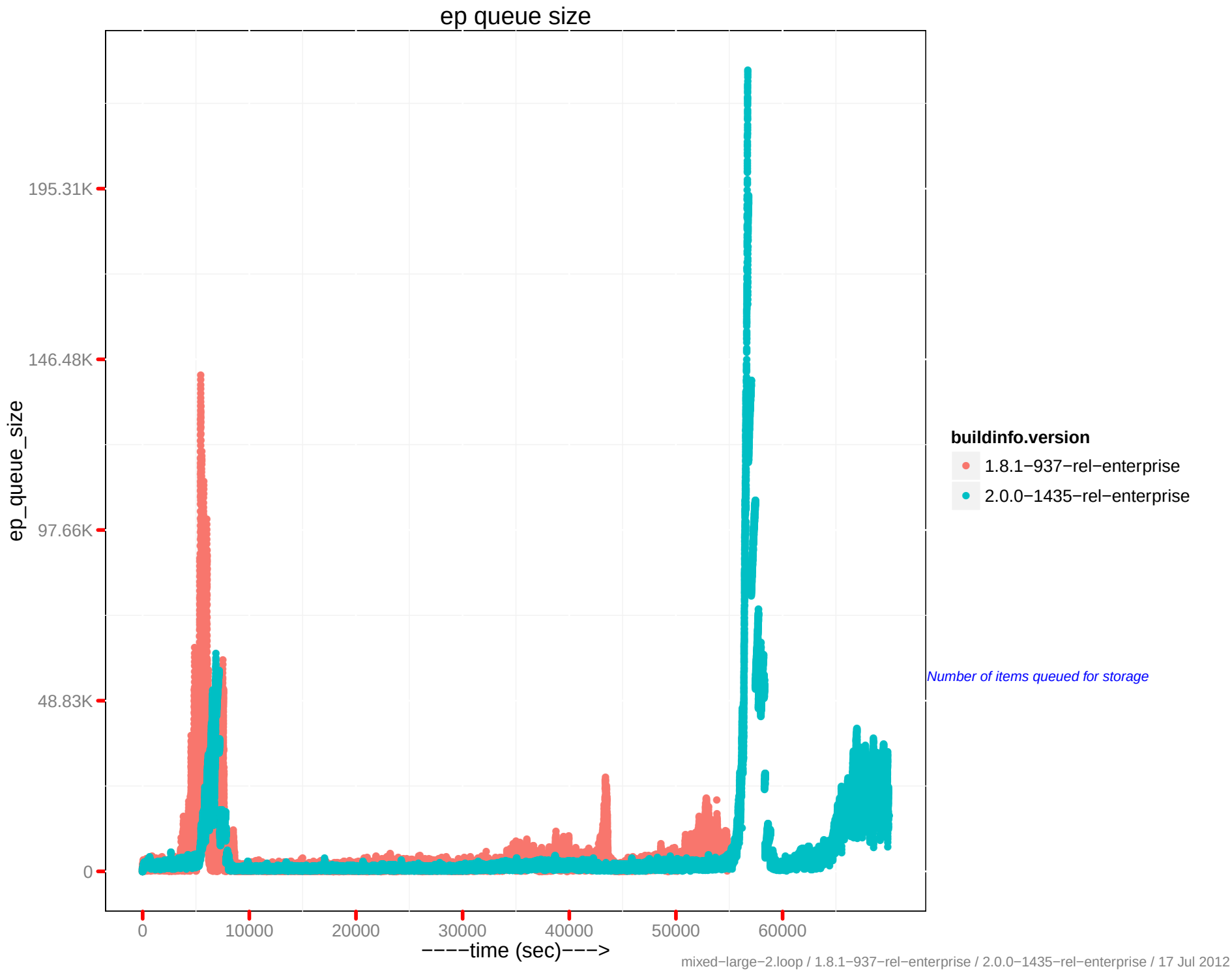
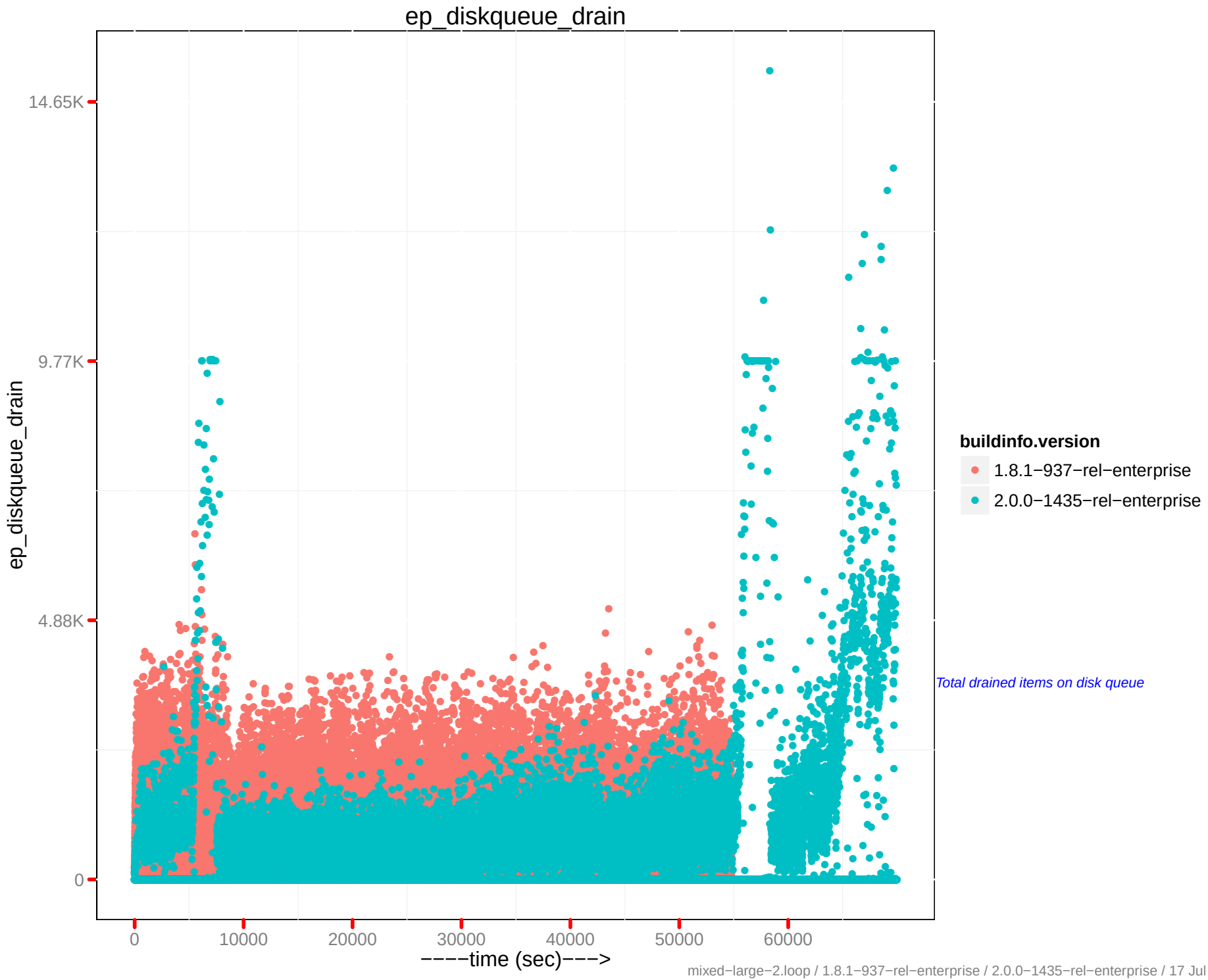
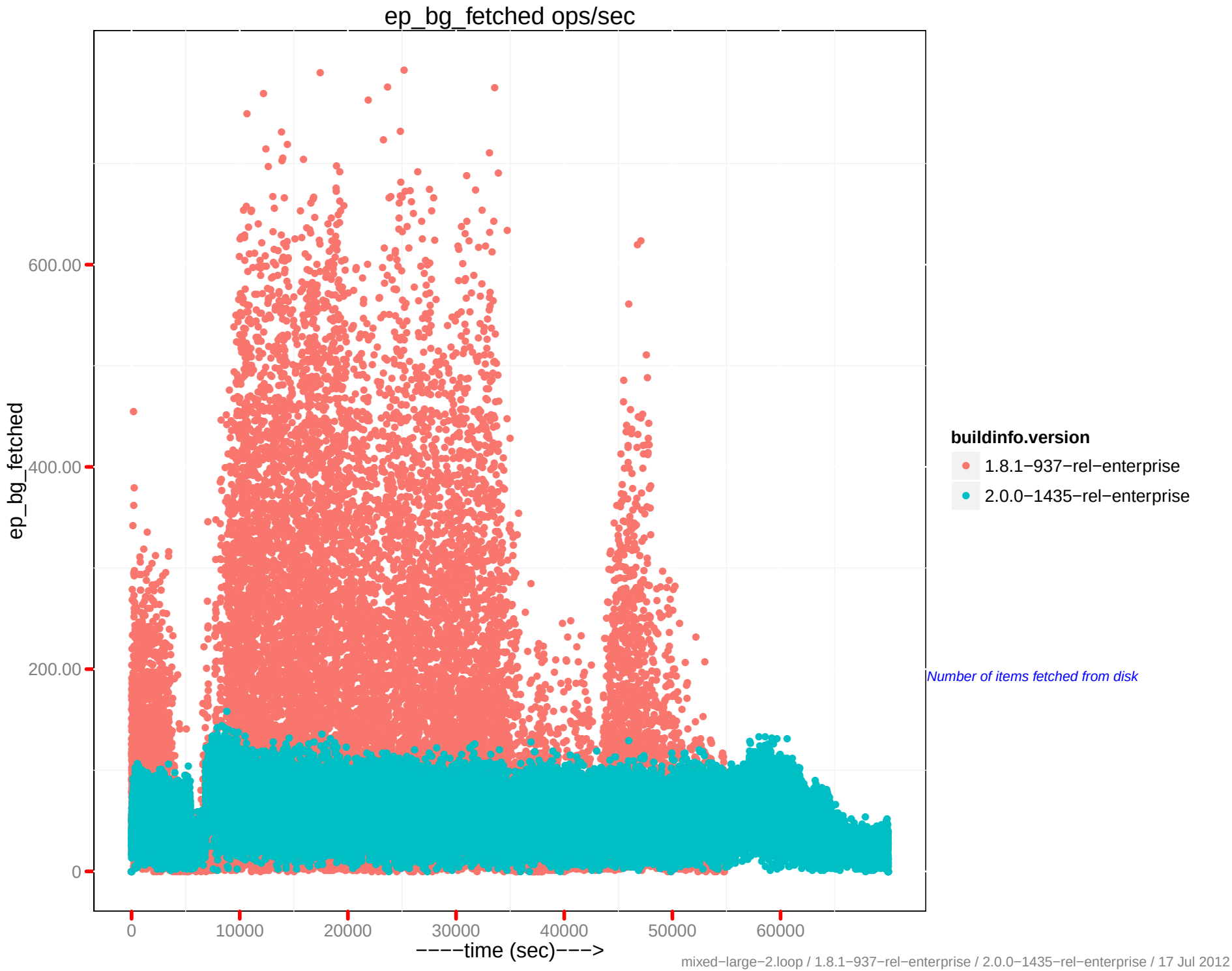

mixed−large−2.loop : 1.8.1−937−rel−enterprise : 2.0.0−1435−rel−enterprise
runtime
peak mem
peak disk
latency−set (95th)
latency−get (95th)
drain rate
1.28x
1.26x
1.00x
1.03x
9.47x
1.29x
Result
Fail
Pass
3.0x
2.0x
1.0x
2.0x
3.0x
(righter is better)
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

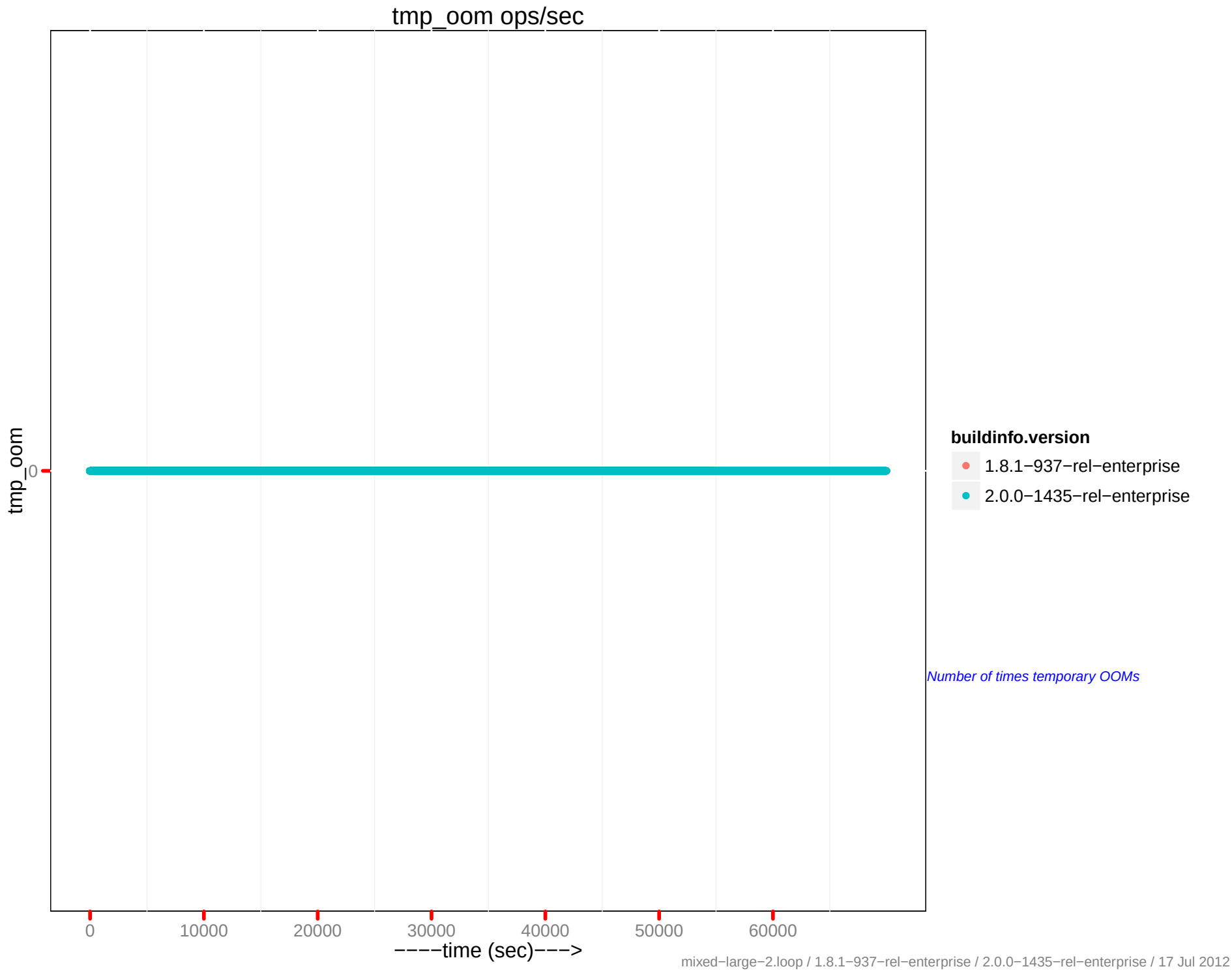
	1.8.1 − 937	2.0.0 − 1435
Runtime (in hr)	15.23	19.44
Avg. Drain Rate	998.41	771.13
Peak Disk (GB)	461.04	461.36
Peak Memory (GB)	16.34	20.66
Avg. OPS	1.34K	1.31K
Avg. mem memcached (GB)	16.25	20.19
Avg. mem beam.smp (MB)	76.93	251.12
Latency−get (90th) (ms)	5.08	64.44
Latency−get (95th) (ms)	41.44	392.27
Latency−get (99th) (ms)	911.2	1793.17
Latency−set (90th) (ms)	0.63	0.54
Latency−set (95th) (ms)	1.09	1.06
Latency−set (99th) (ms)	4.81	6.29
Latency−query (80th) (ms)	NA	NA
Latency−query (90th) (ms)	NA	NA
Latency−query (95th) (ms)	NA	NA
Latency−query (99th) (ms)	NA	NA
Latency−query (99.9th) (ms)	NA	NA
Avg. QPS	0	0
Rebalance Time (sec)	0	0
Testrunner Version	2ee3d34	49feda7

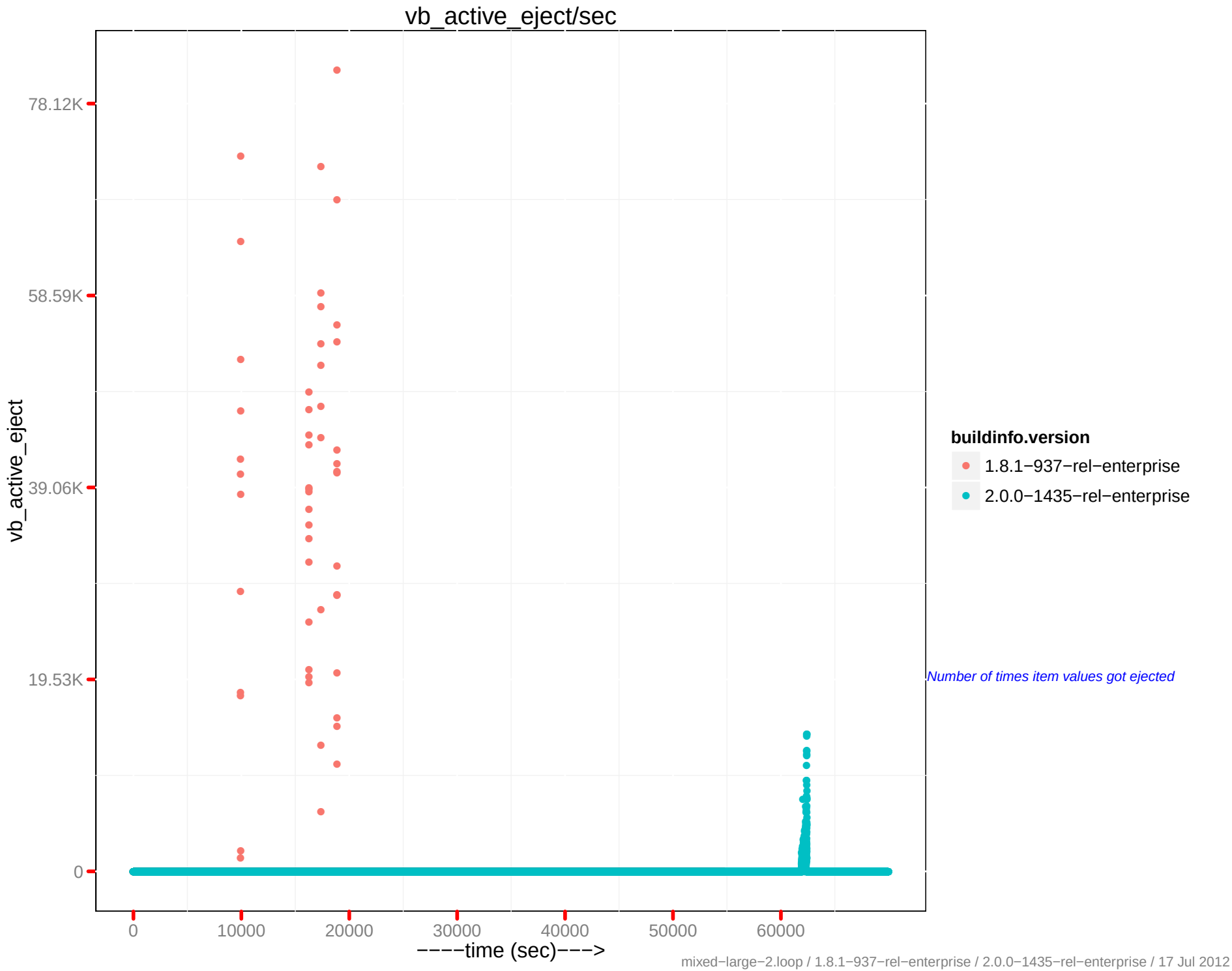

ops/sec
29.30K
24.41K
19.53K
14.65K
9.77K
4.88K
0
ops/sec
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of ops per second
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

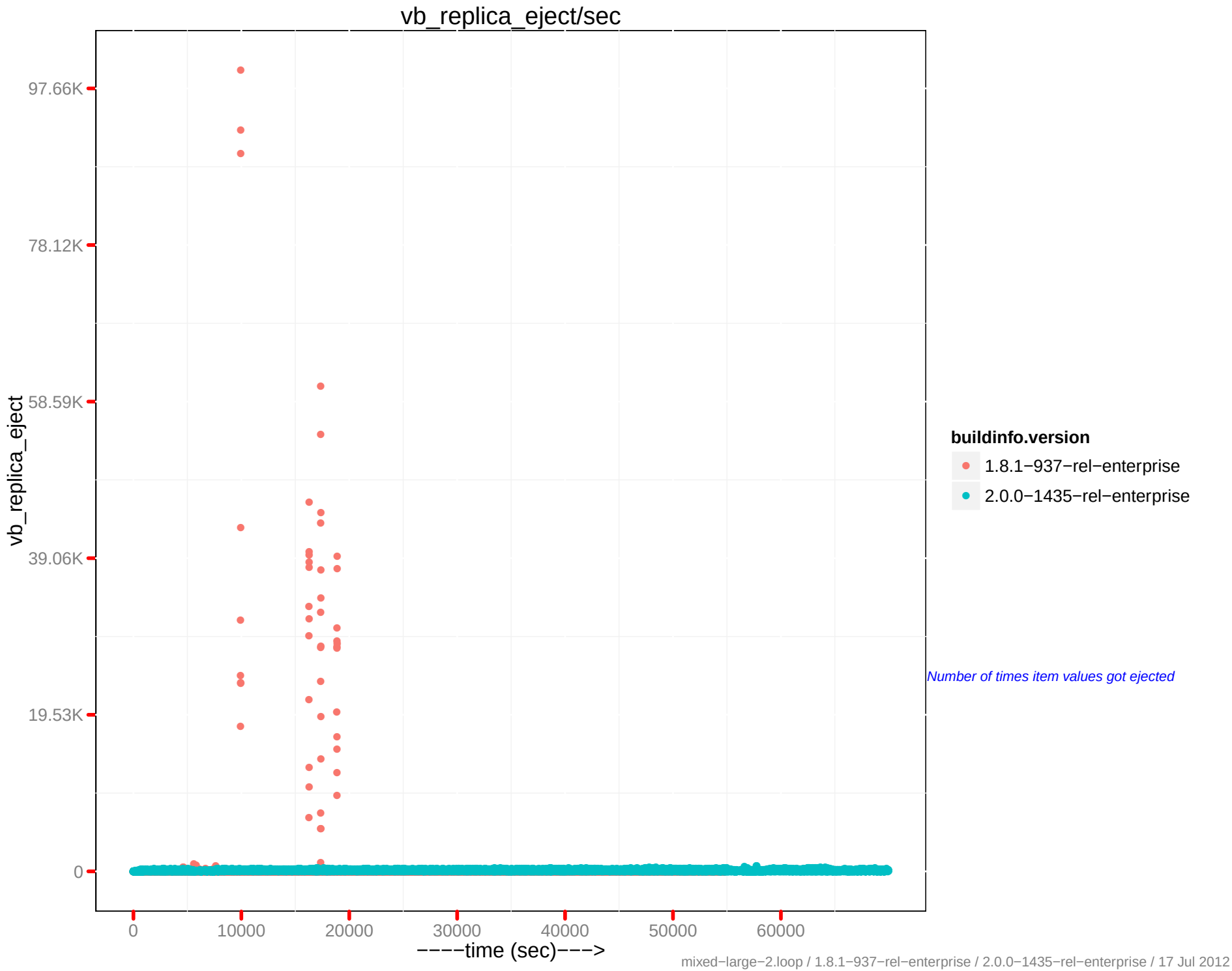

ep queue size
195.31K
146.48K
97.66K
48.83K
0
ep_queue_size
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of items queued for storage
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

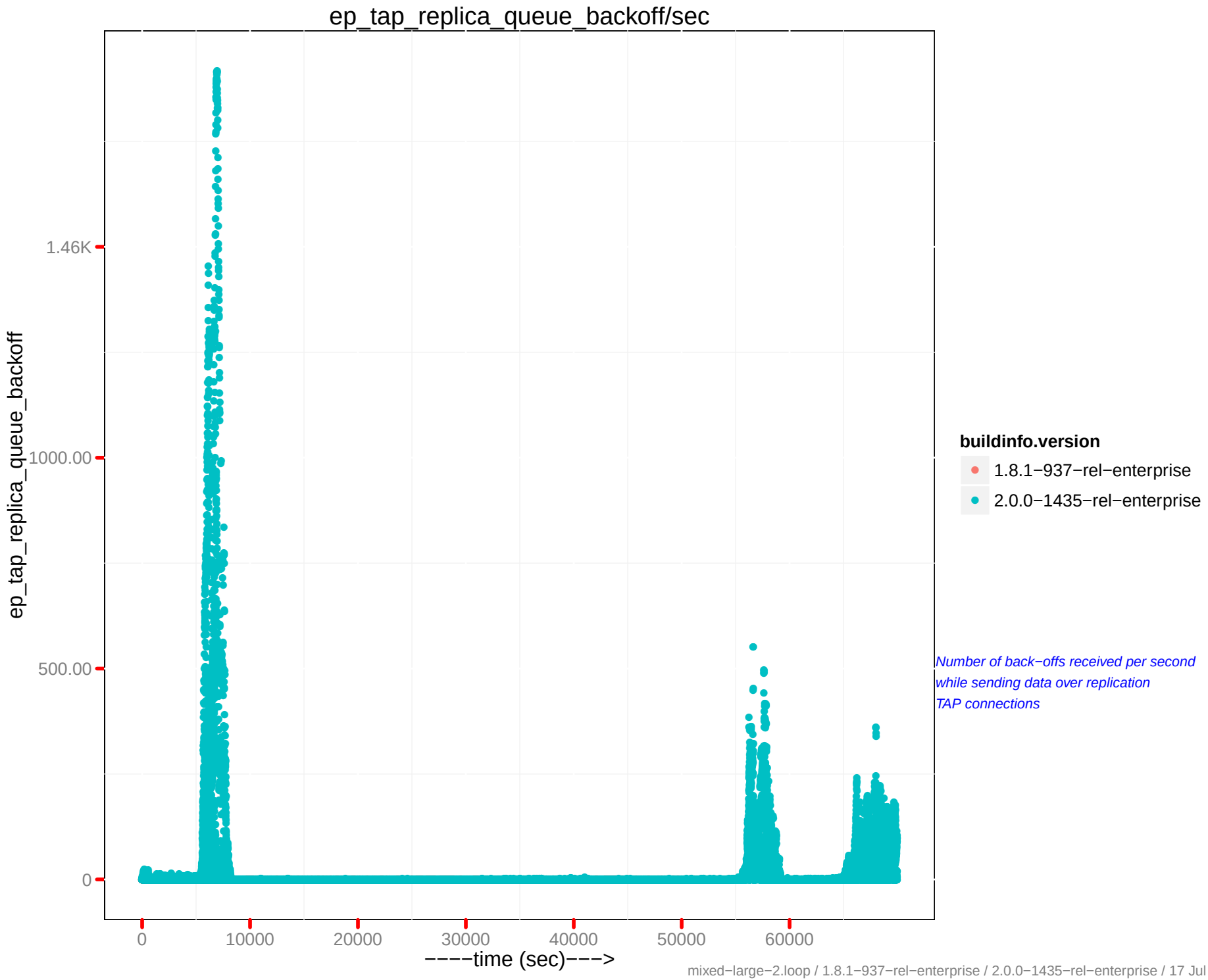

ep_diskqueue_drain
14.65K
9.77K
4.88K
0
ep_diskqueue_drain
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Total drained items on disk queue
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


ep_bg_fetched ops/sec
ep_bg_fetched
600.00
400.00
200.00
0
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of items fetched from disk
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

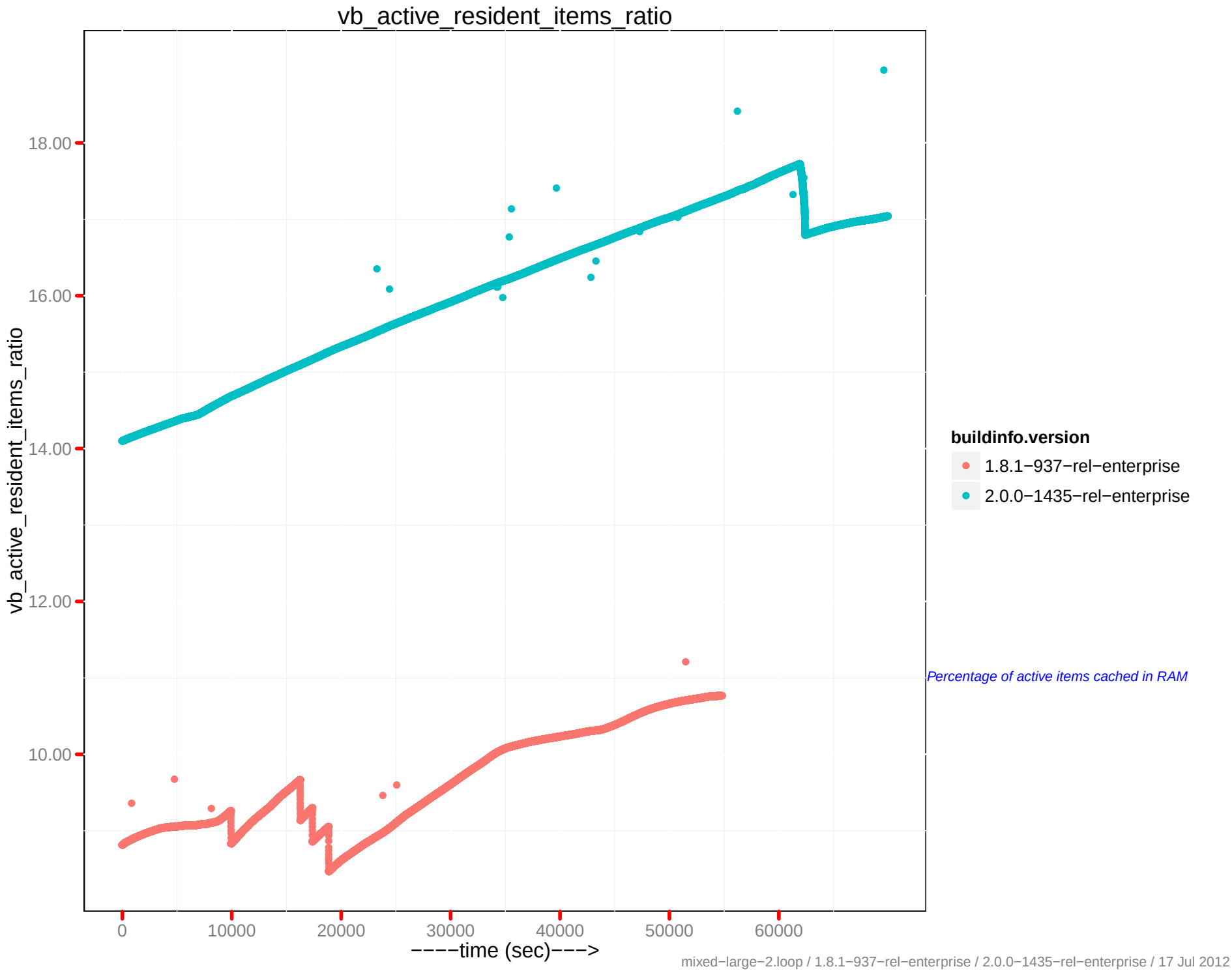

tmp_oom ops/sec
tmp_oom
0
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of times temporary OOMs
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

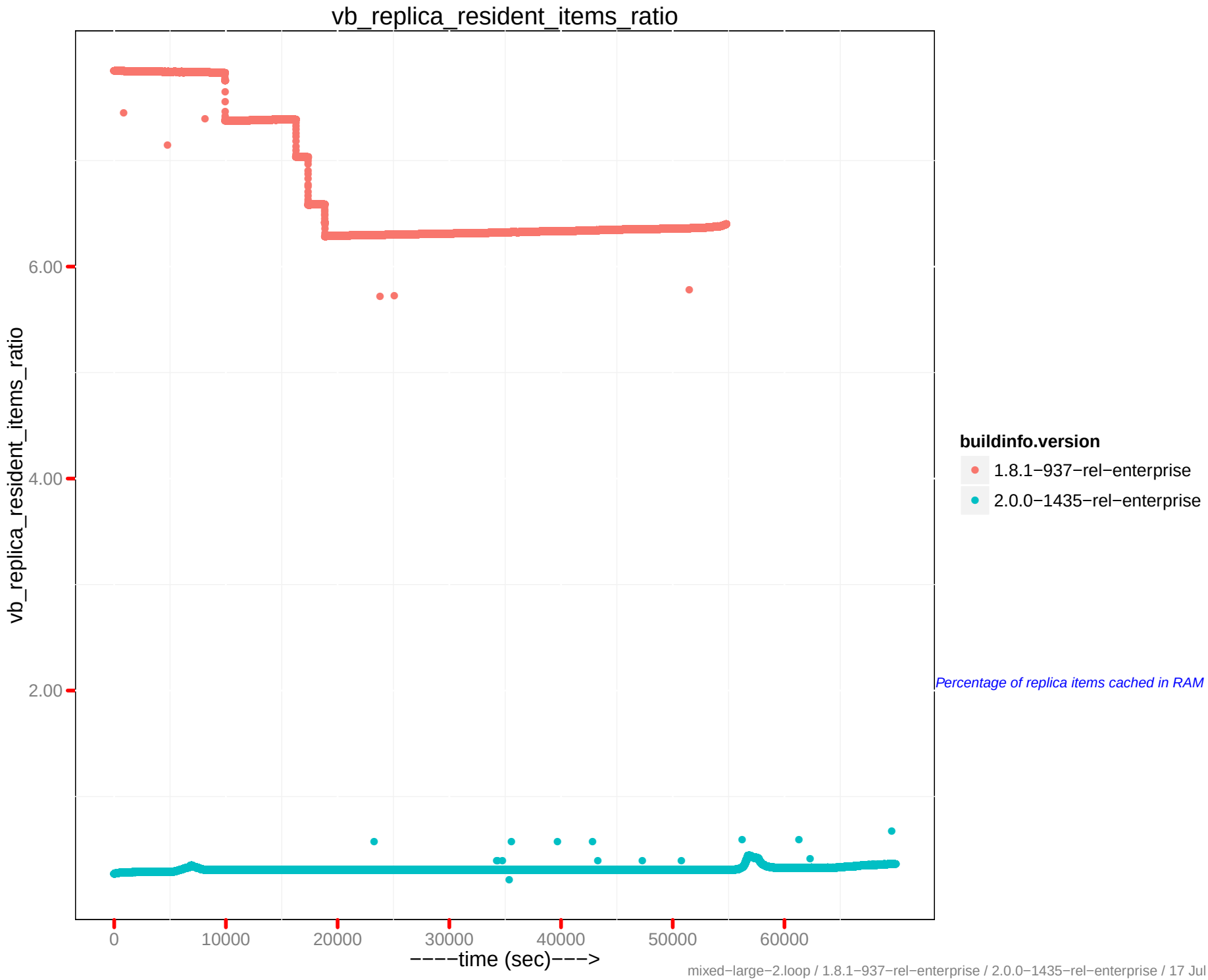

vb_active_eject/sec
78.12K
58.59K
39.06K
19.53K
0
vb_active_eject
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of times item values got ejected
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


vb_replica_eject/sec
97.66K
78.12K
58.59K
39.06K
19.53K
0
vb_replica_eject
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of times item values got ejected
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

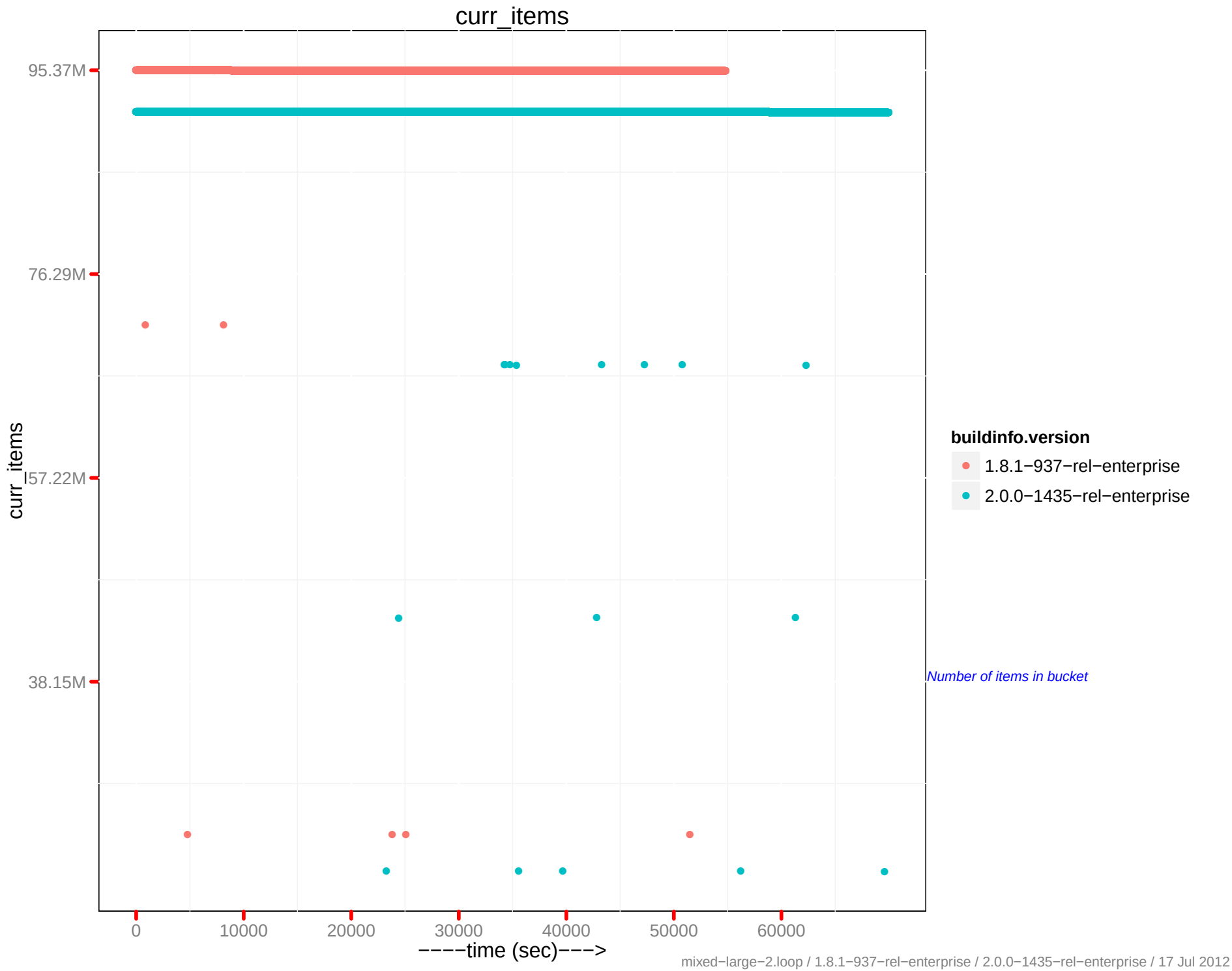


mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

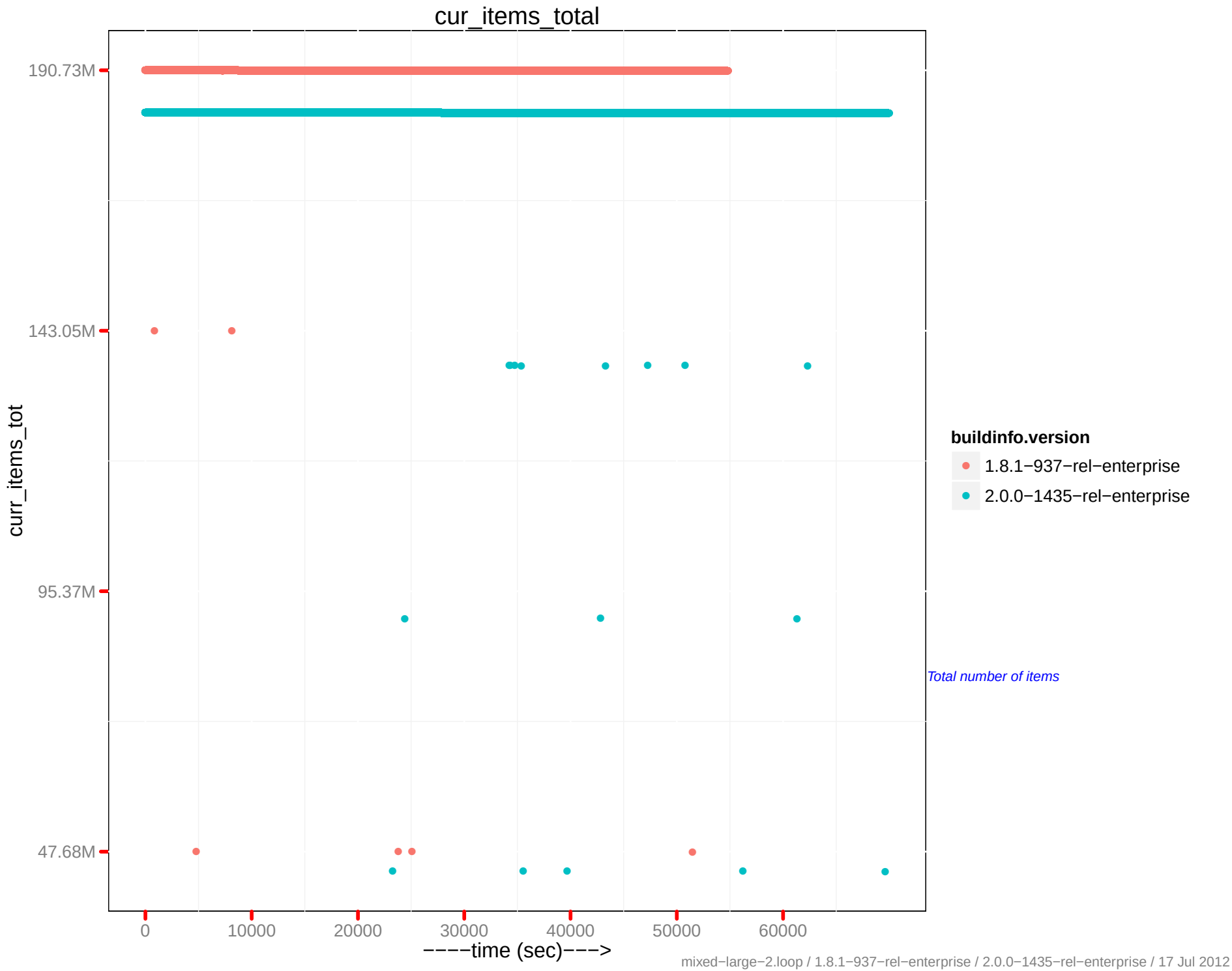

vb_active_resident_items_ratio
vb_active_resident_items_ratio
18.00
16.00
14.00
12.00
10.00
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Percentage of active items cached in RAM
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012



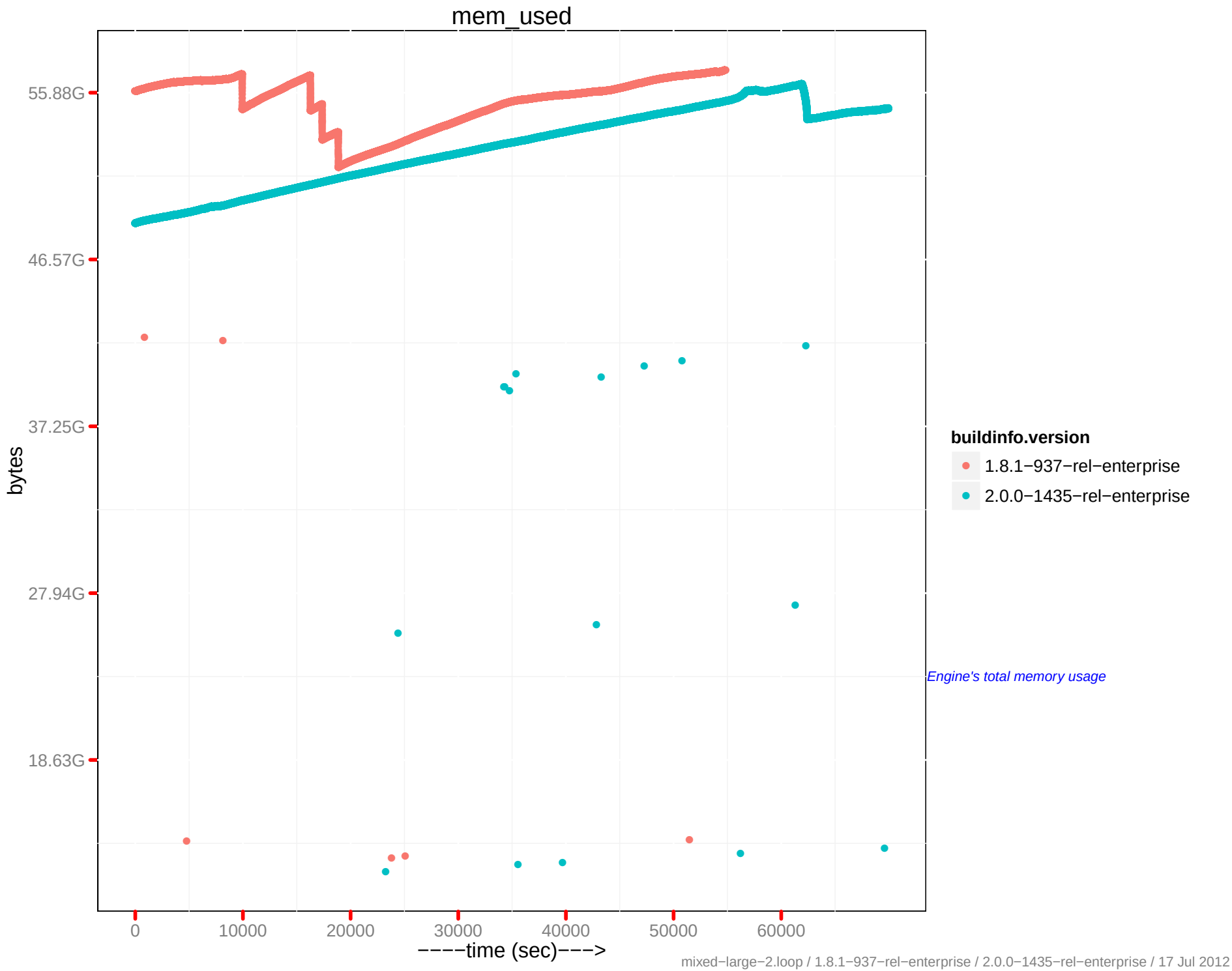
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

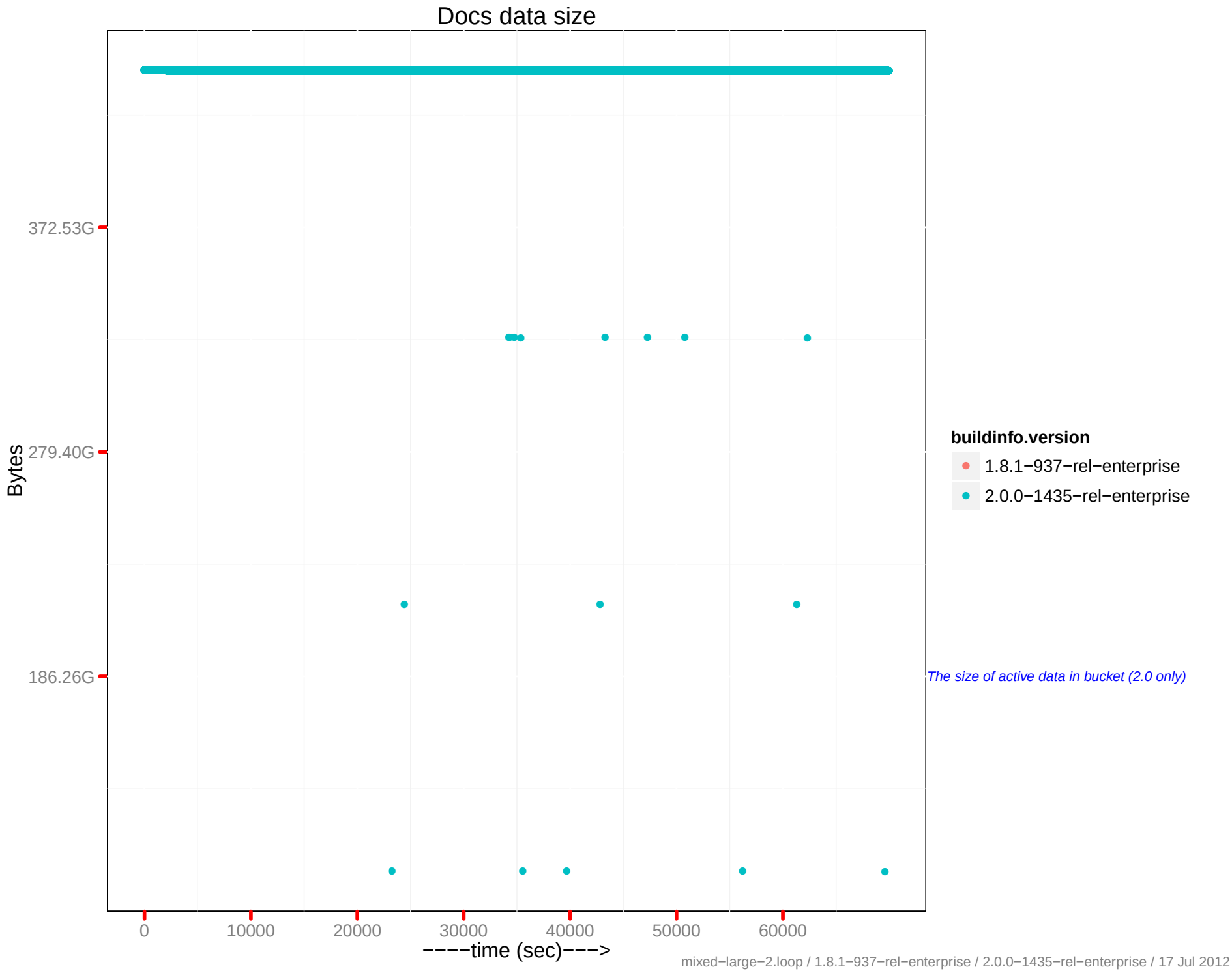


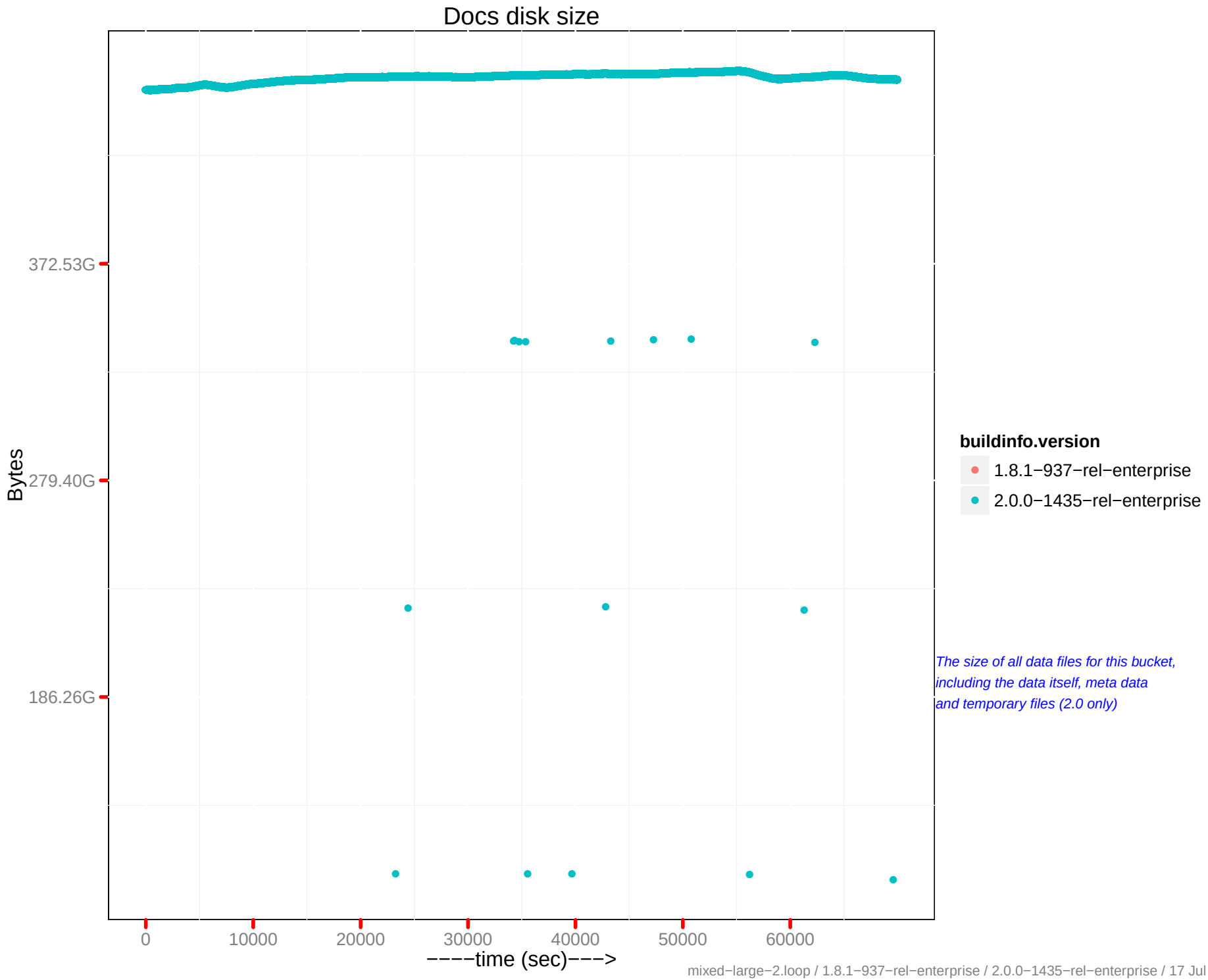
mixed-large-2.loop / 1.8.1-937-rel-enterprise / 2.0.0-1435-rel-enterprise / 17 Jul 2012



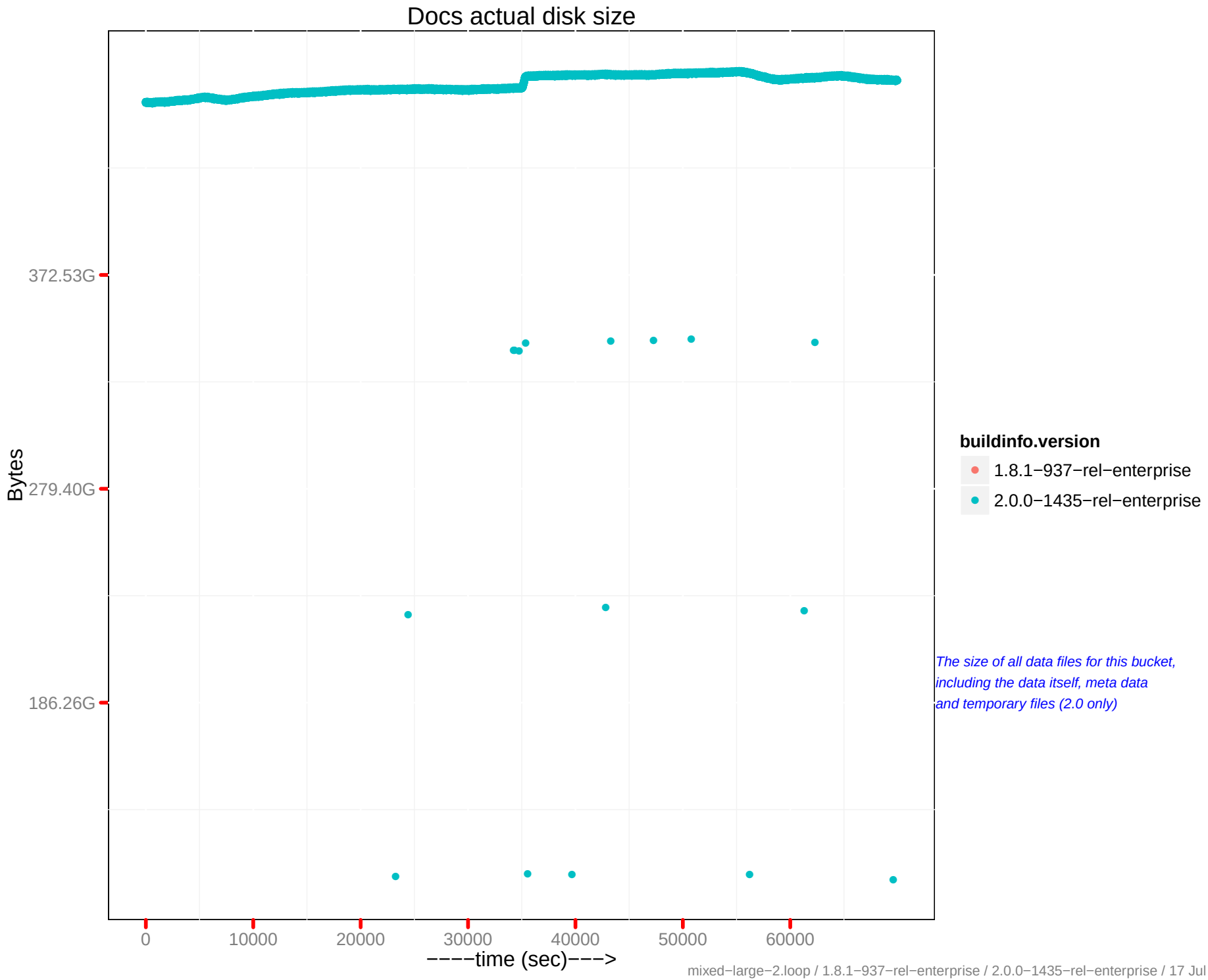
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


mem_used
55.88G
46.57G
37.25G
27.94G
18.63G
bytes
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Engine's total memory usage
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

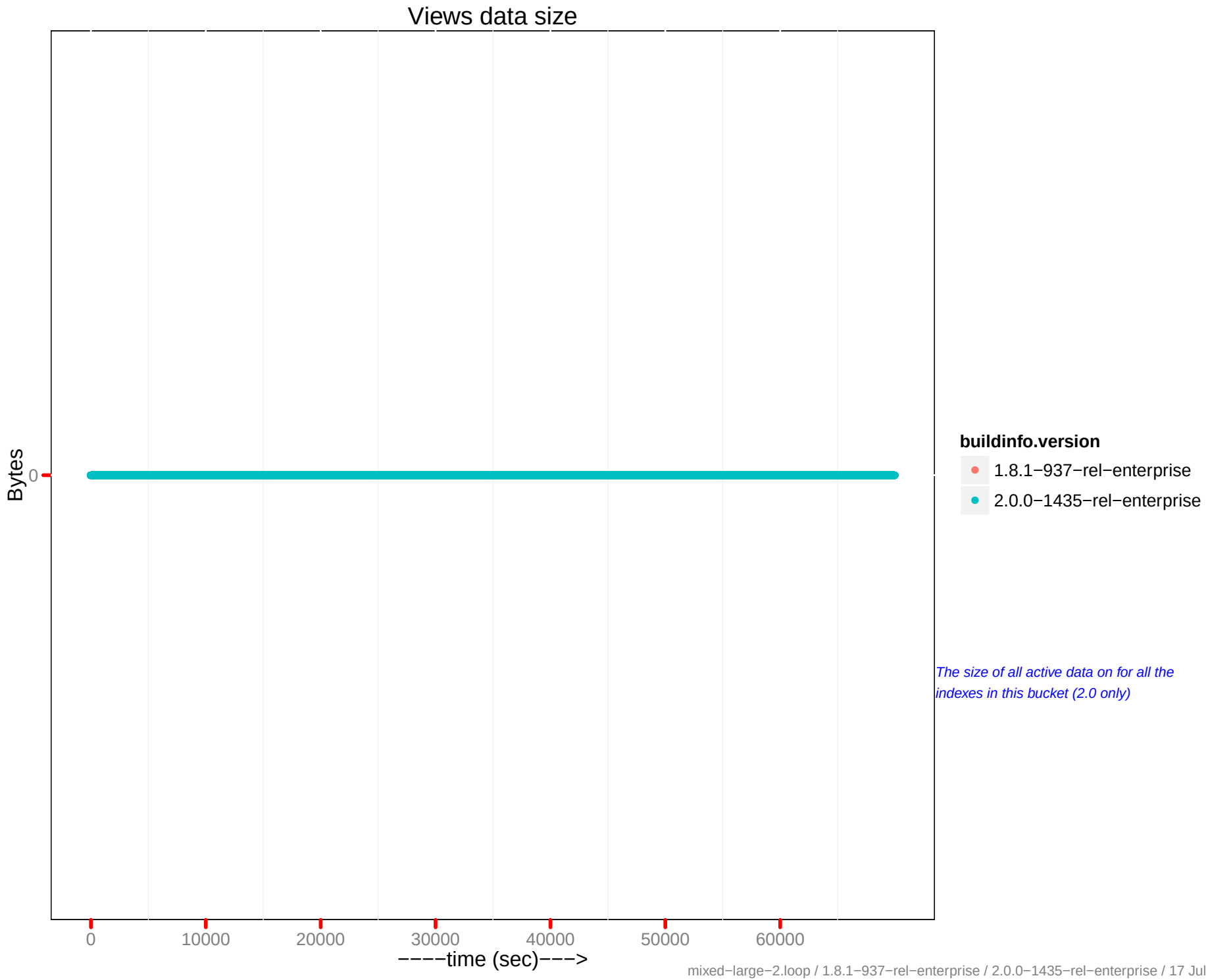

Docs data size
372.53G
279.40G
186.26G
Bytes
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1-937-rel-enterprise
2.0.0-1435-rel-enterprise
The size of active data in bucket (2.0 only)
mixed-large-2.loop / 1.8.1-937-rel-enterprise / 2.0.0-1435-rel-enterprise / 17 Jul 2012



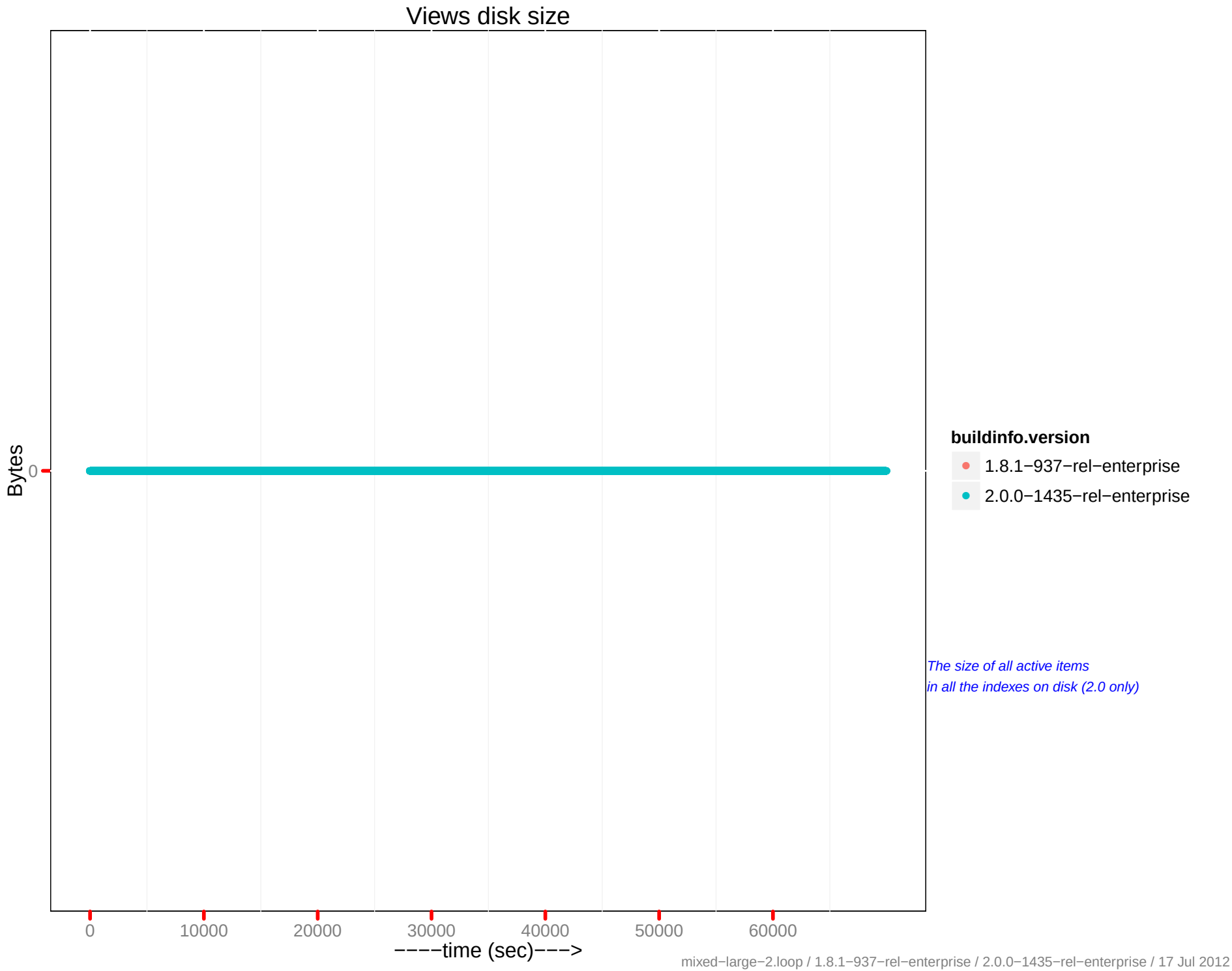
mixed-large-2.loop / 1.8.1-937-rel-enterprise / 2.0.0-1435-rel-enterprise / 17 Jul 2012

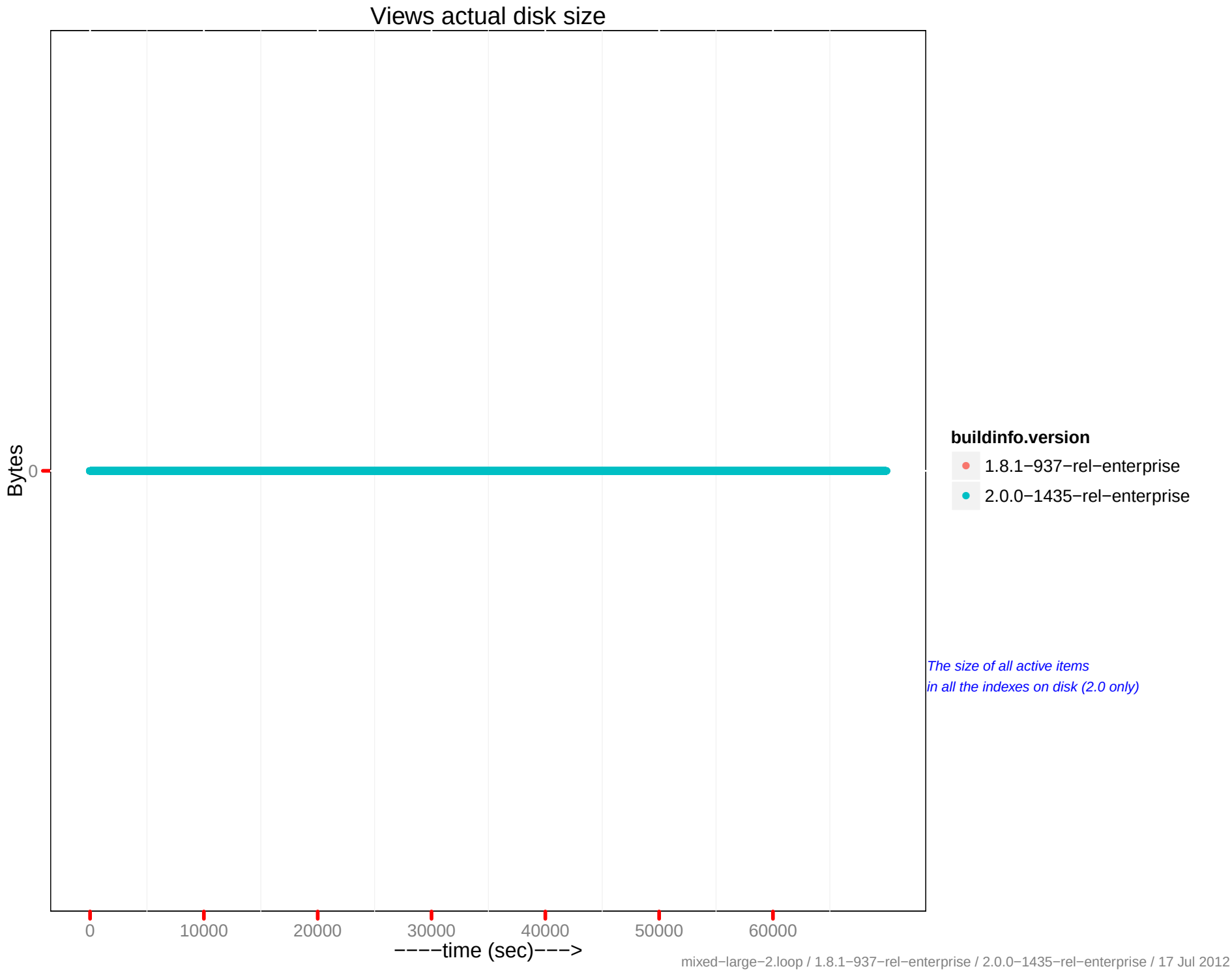


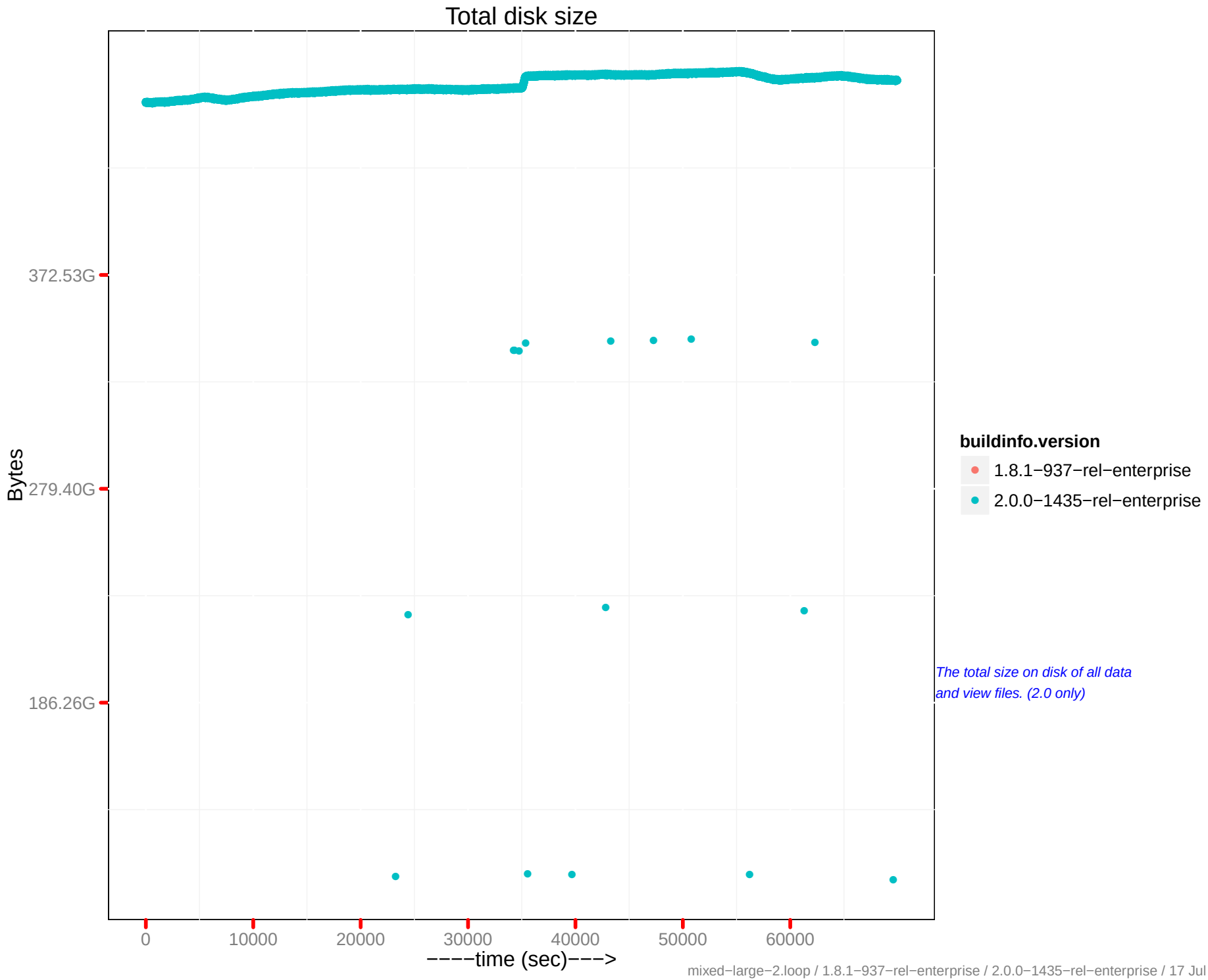
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012



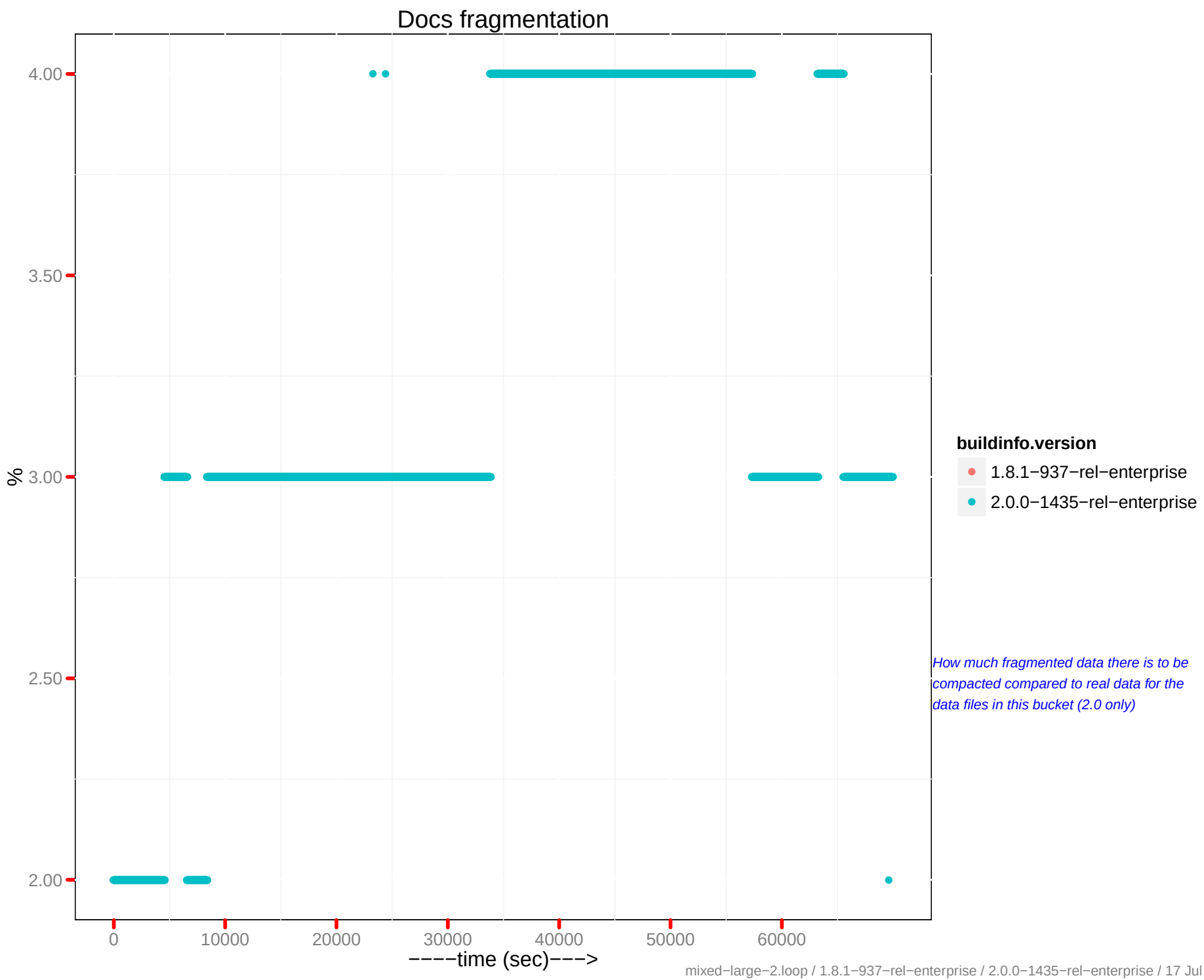
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Views disk size
Bytes
0
0
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
The size of all active items
in all the indexes on disk (2.0 only)
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

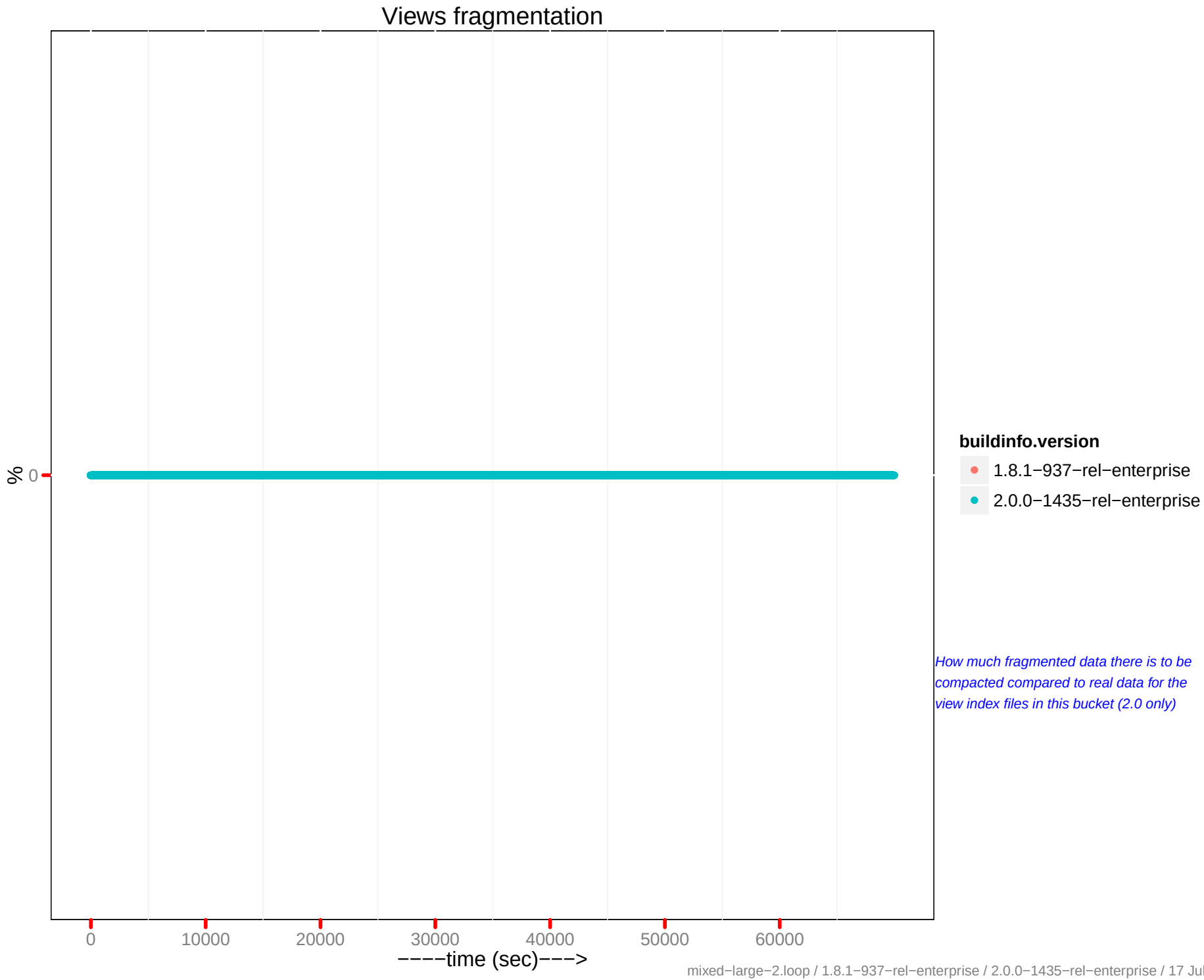

Views actual disk size
Bytes
0
0
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
The size of all active items
in all the indexes on disk (2.0 only)
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012



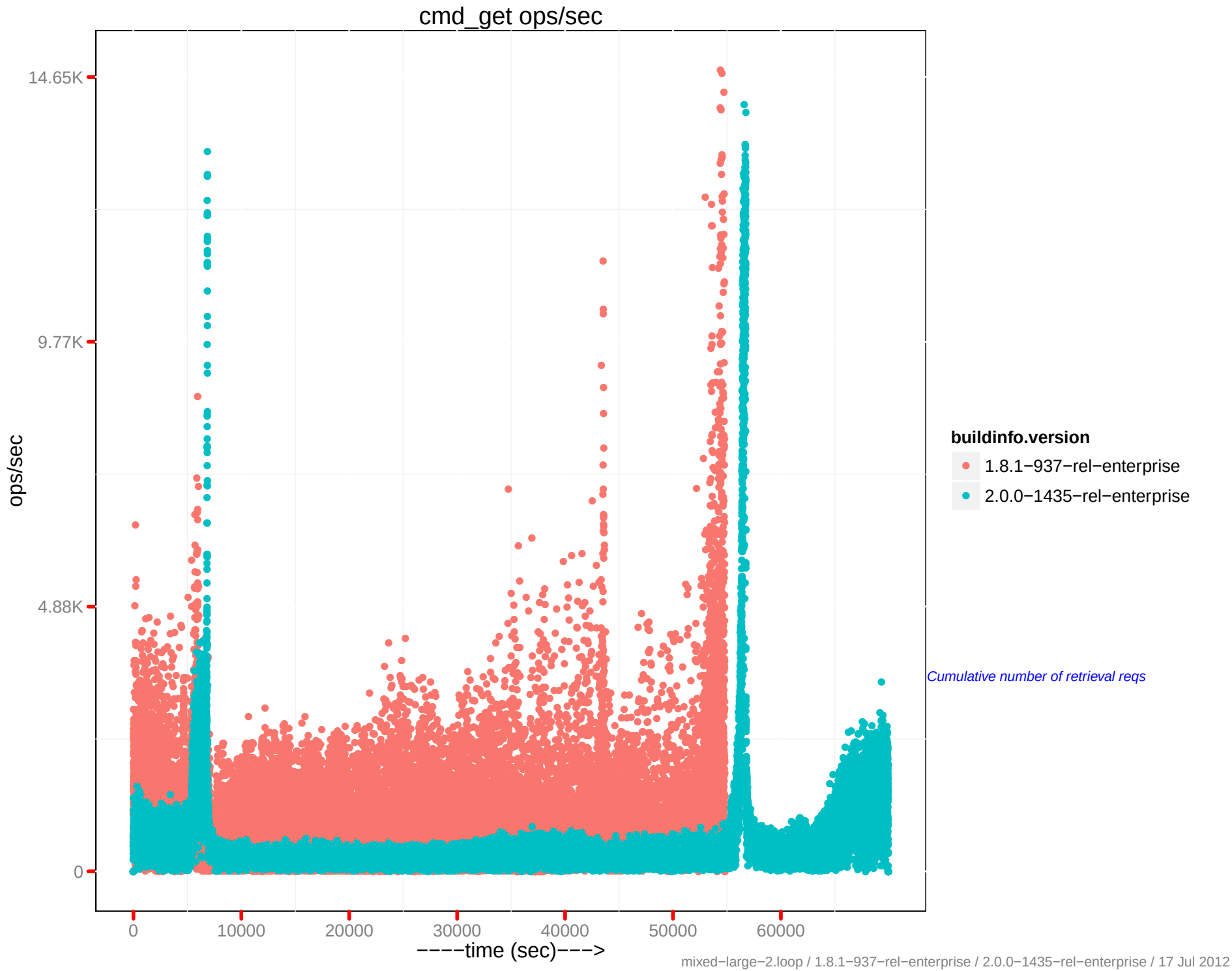
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

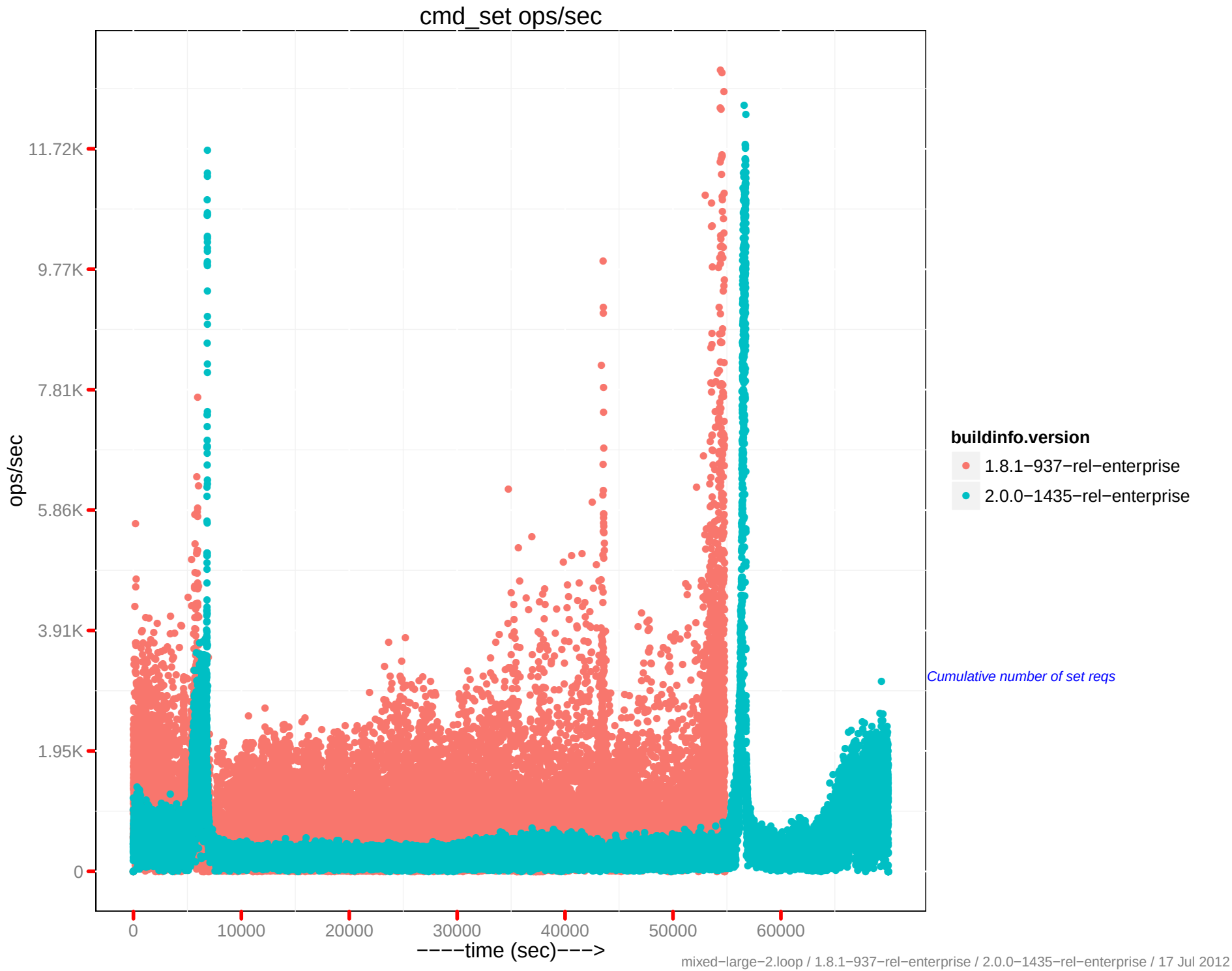


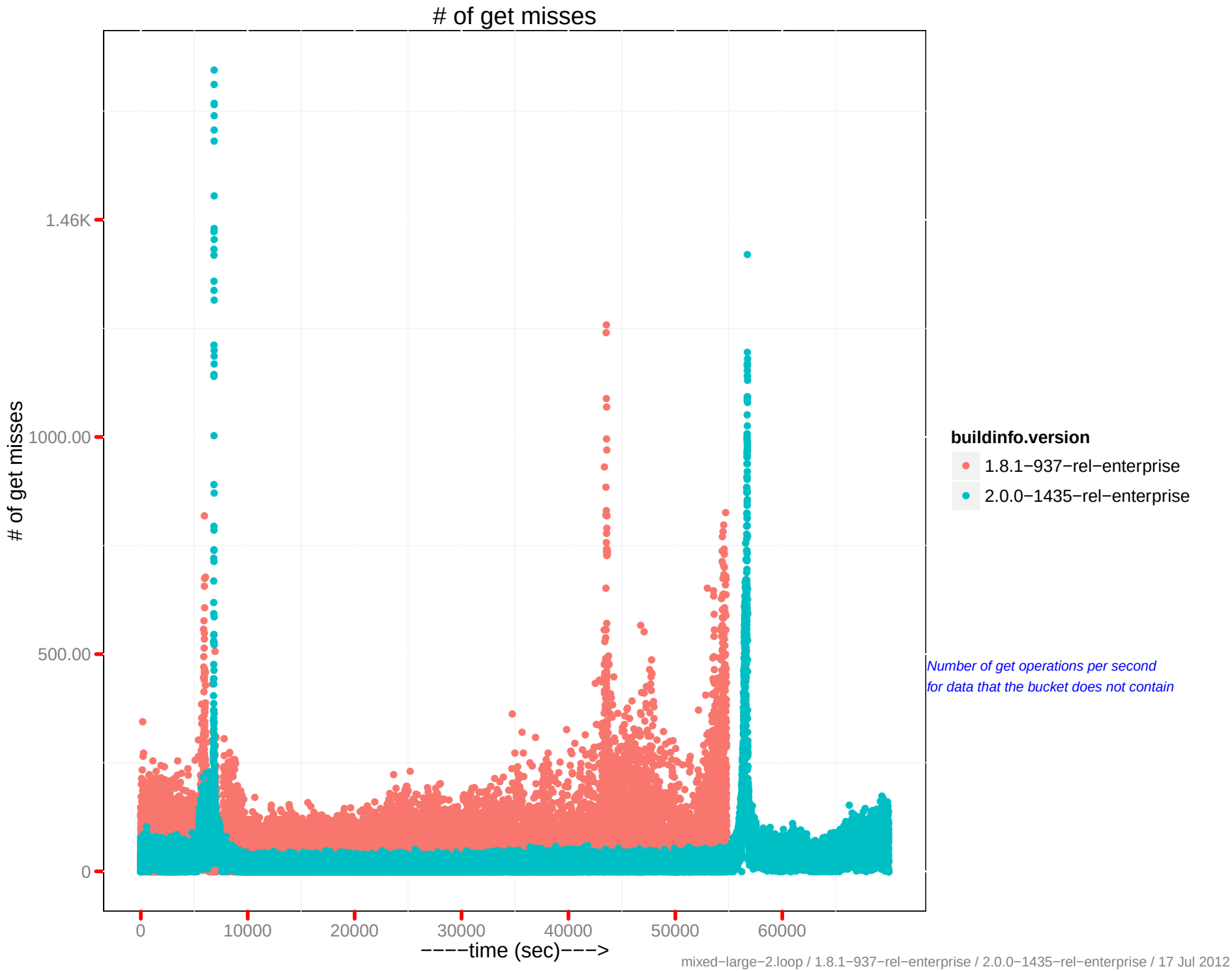
mixed-large-2.loop / 1.8.1-937-rel-enterprise / 2.0.0-1435-rel-enterprise / 17 Jul 2012

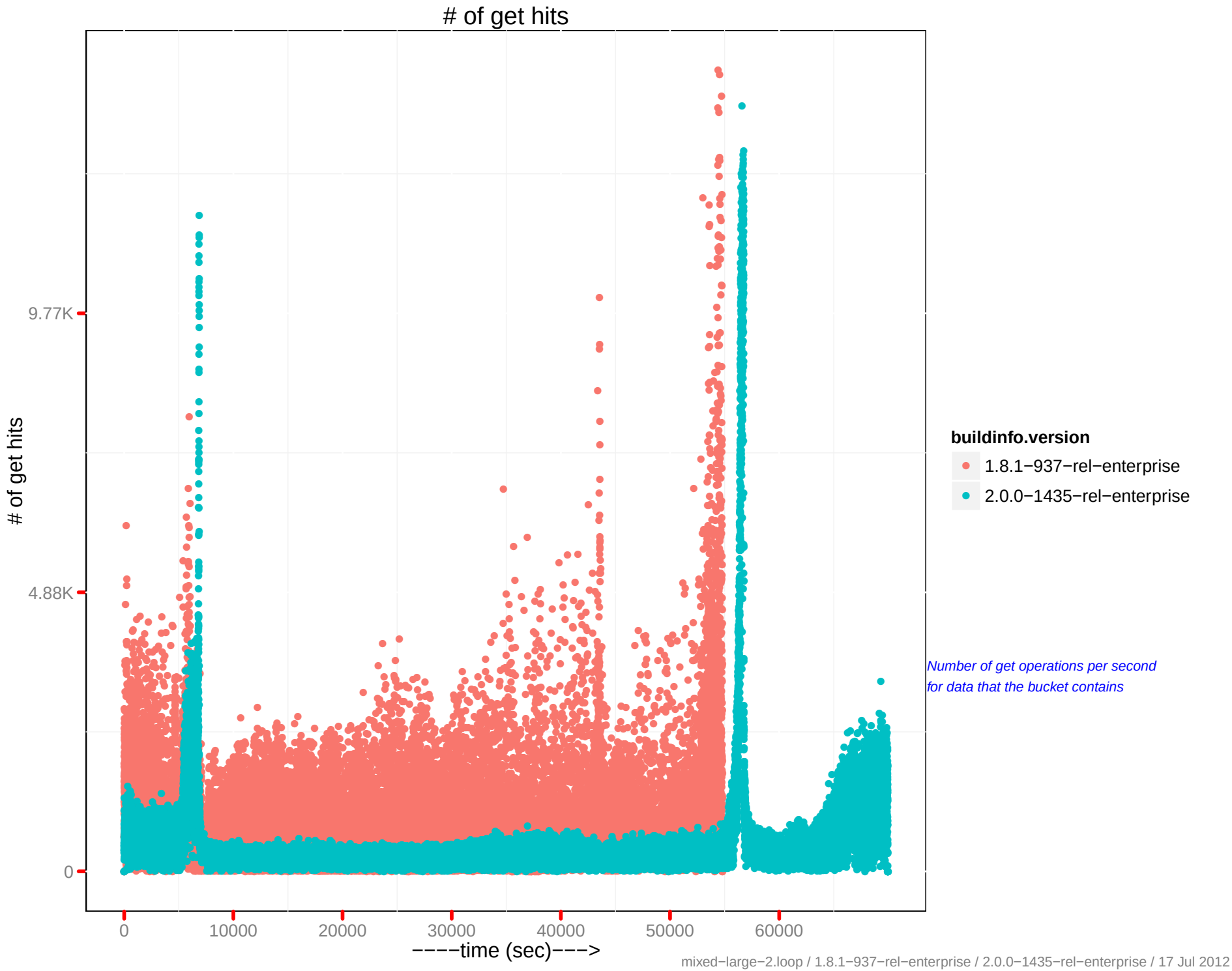


mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

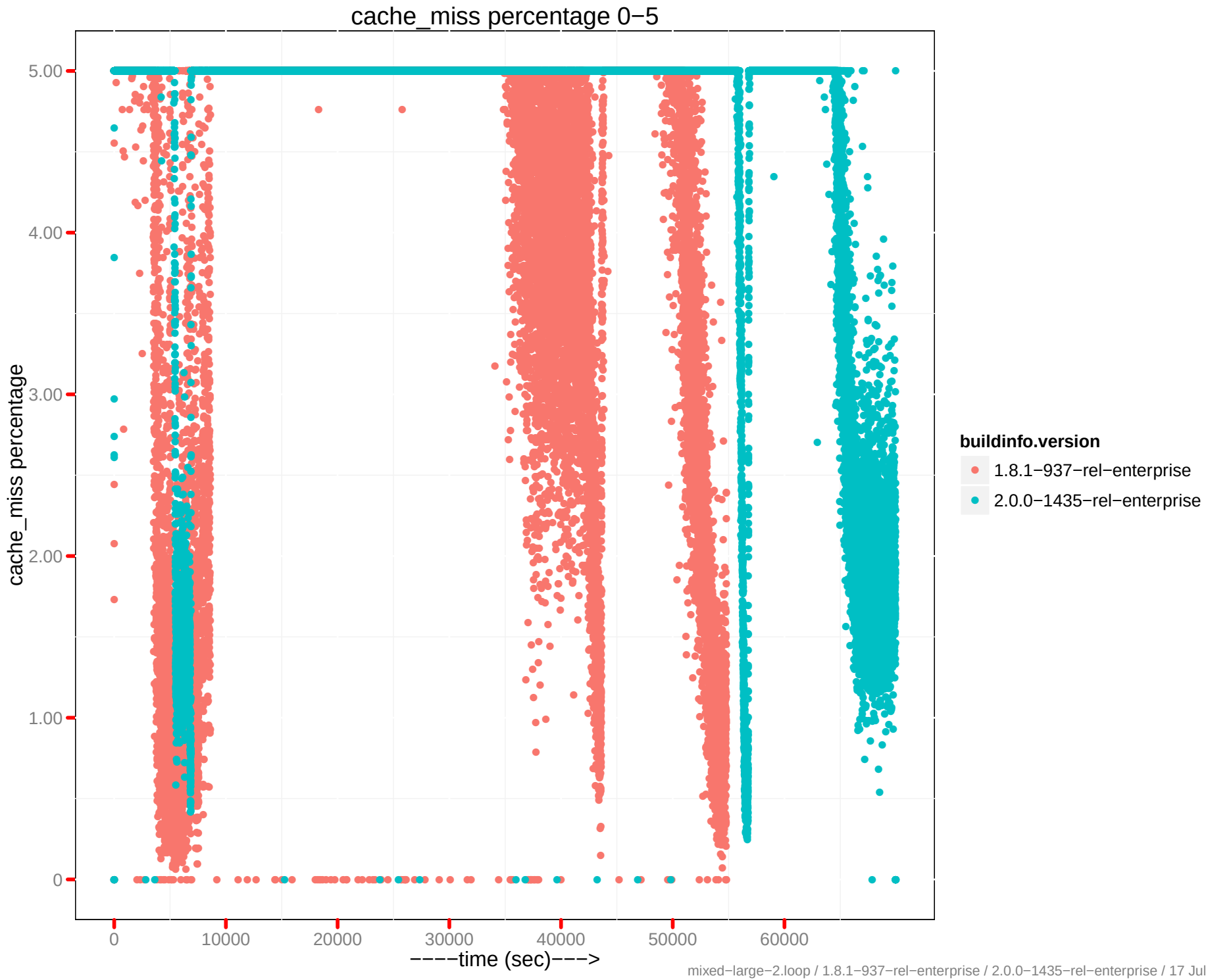

cmd_get ops/sec
14.65K
9.77K
4.88K
0
ops/sec
0
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Cumulative number of retrieval reqs
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

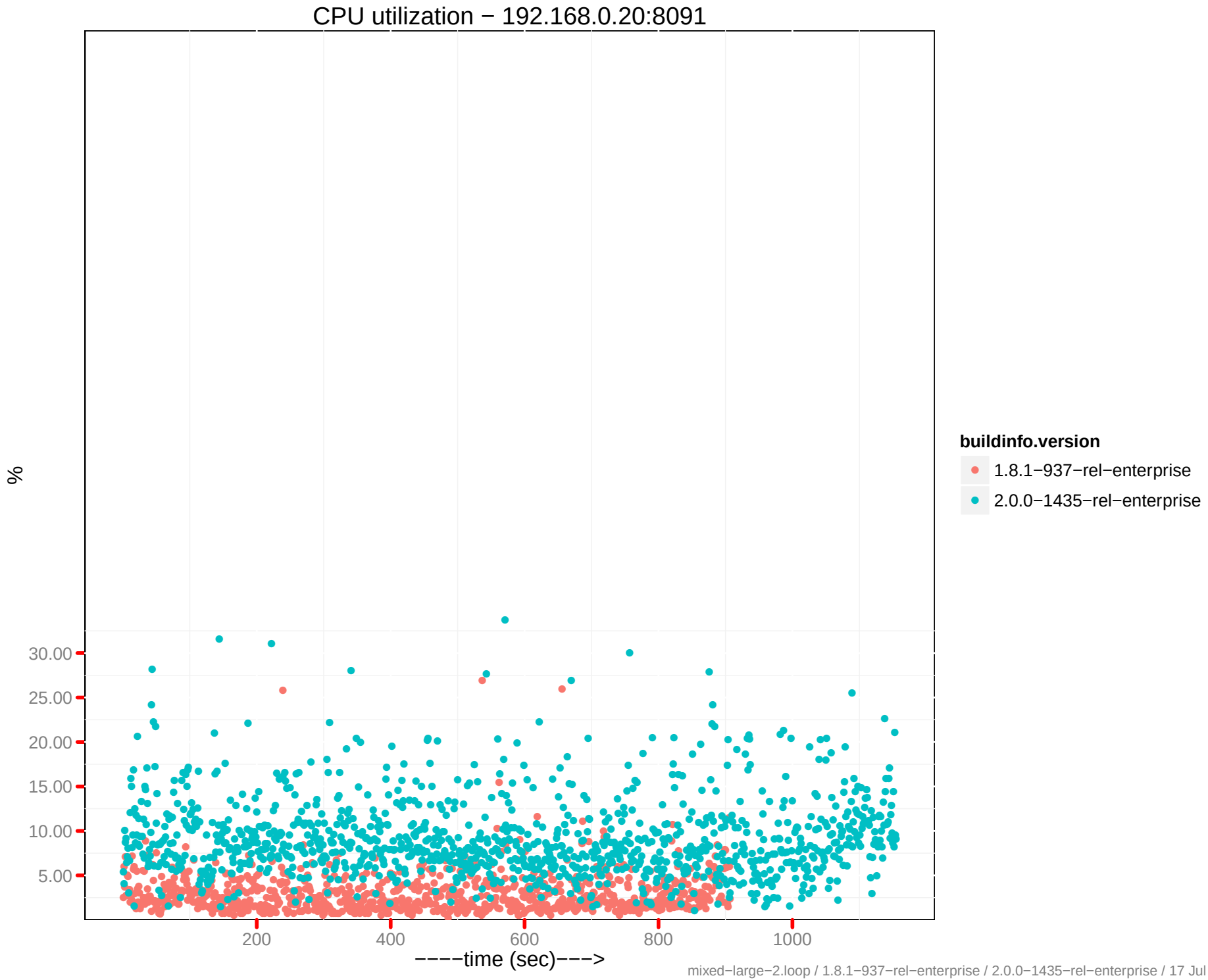

cmd_set ops/sec
ops/sec
11.72K
9.77K
7.81K
5.86K
3.91K
1.95K
0
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Cumulative number of set reqs
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

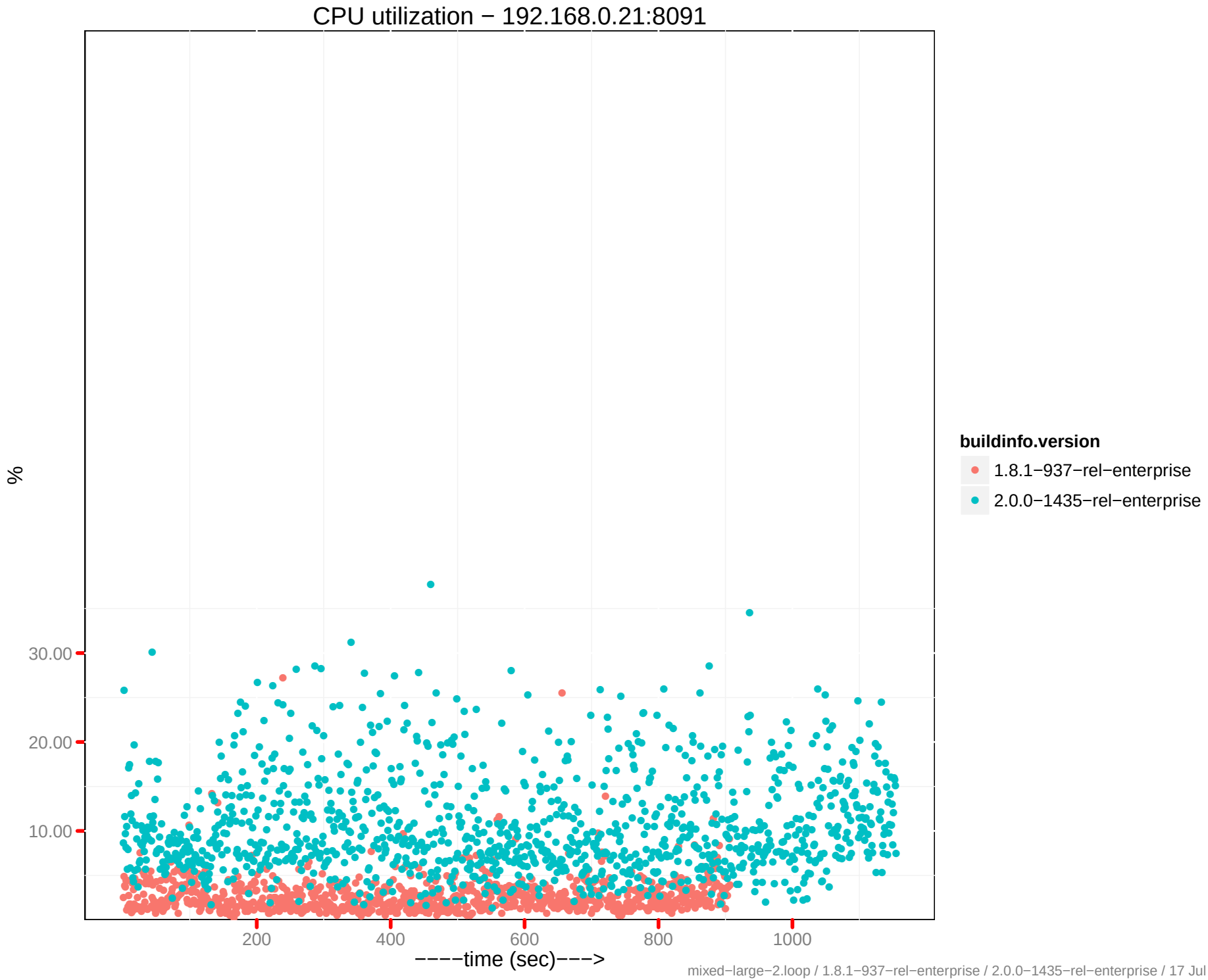

# of get misses
1.46K
1000.00
500.00
0
# of get misses
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of get operations per second
for data that the bucket does not contain
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


# of get hits
# of get hits
9.77K
4.88K
0
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Number of get operations per second
for data that the bucket contains
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

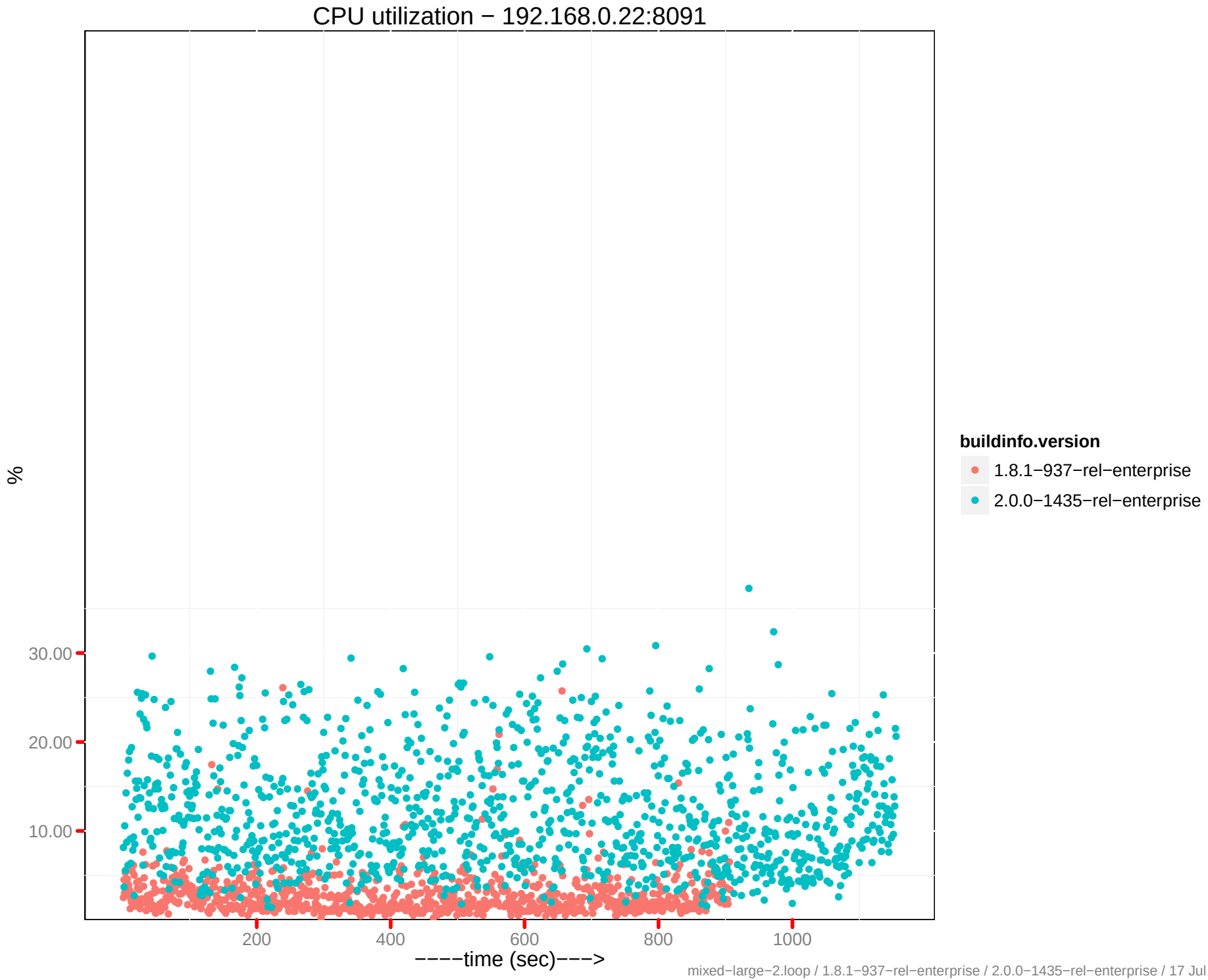

cache_miss percentage
cache_miss percentage
80.00
60.00
40.00
20.00
0
0
10000
20000
30000
40000
50000
60000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Percentage of reads per second
from disk as opposed to RAM
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

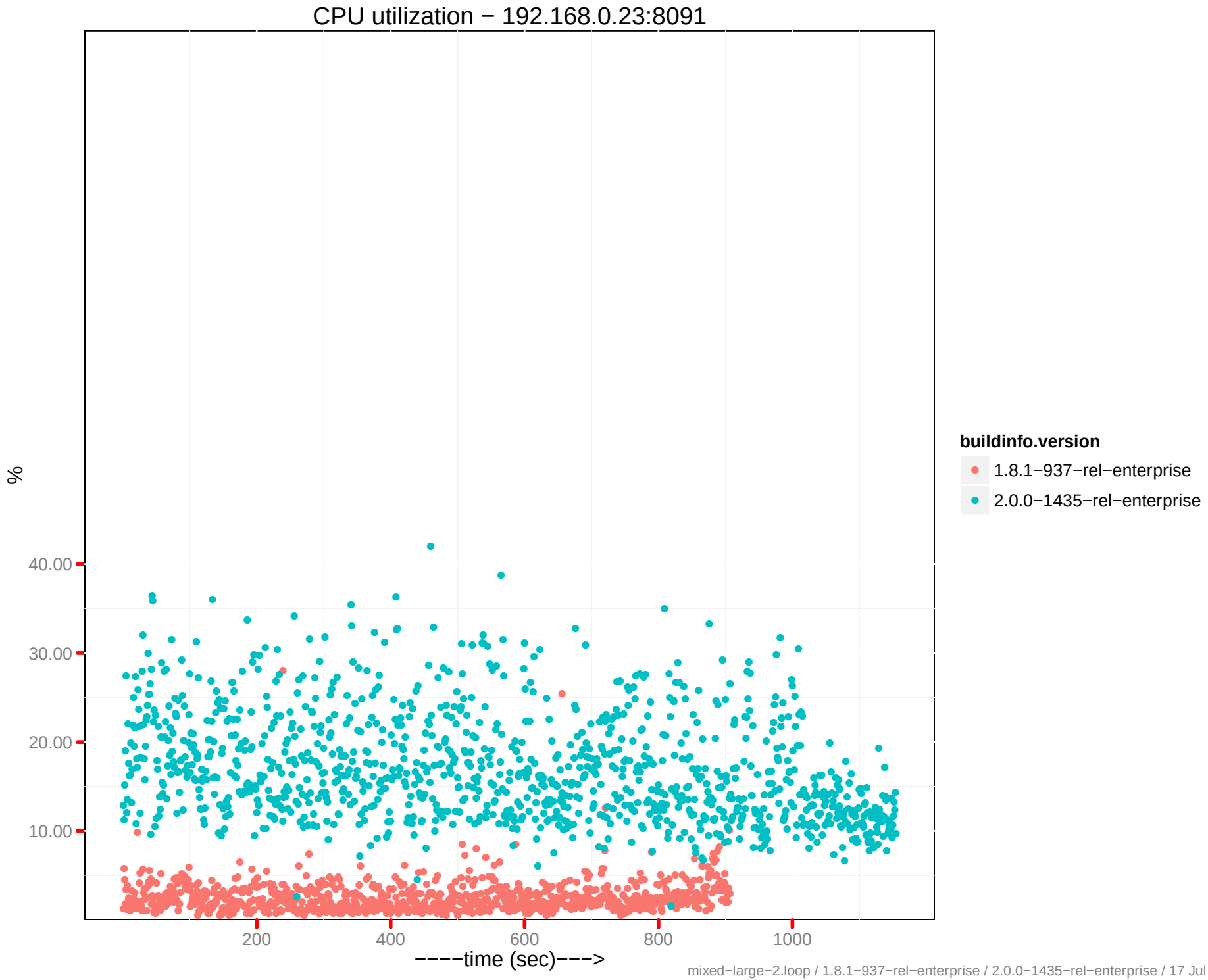

cache_miss percentage 0−5
cache_miss percentage
5.00
4.00
3.00
2.00
1.00
0
0
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

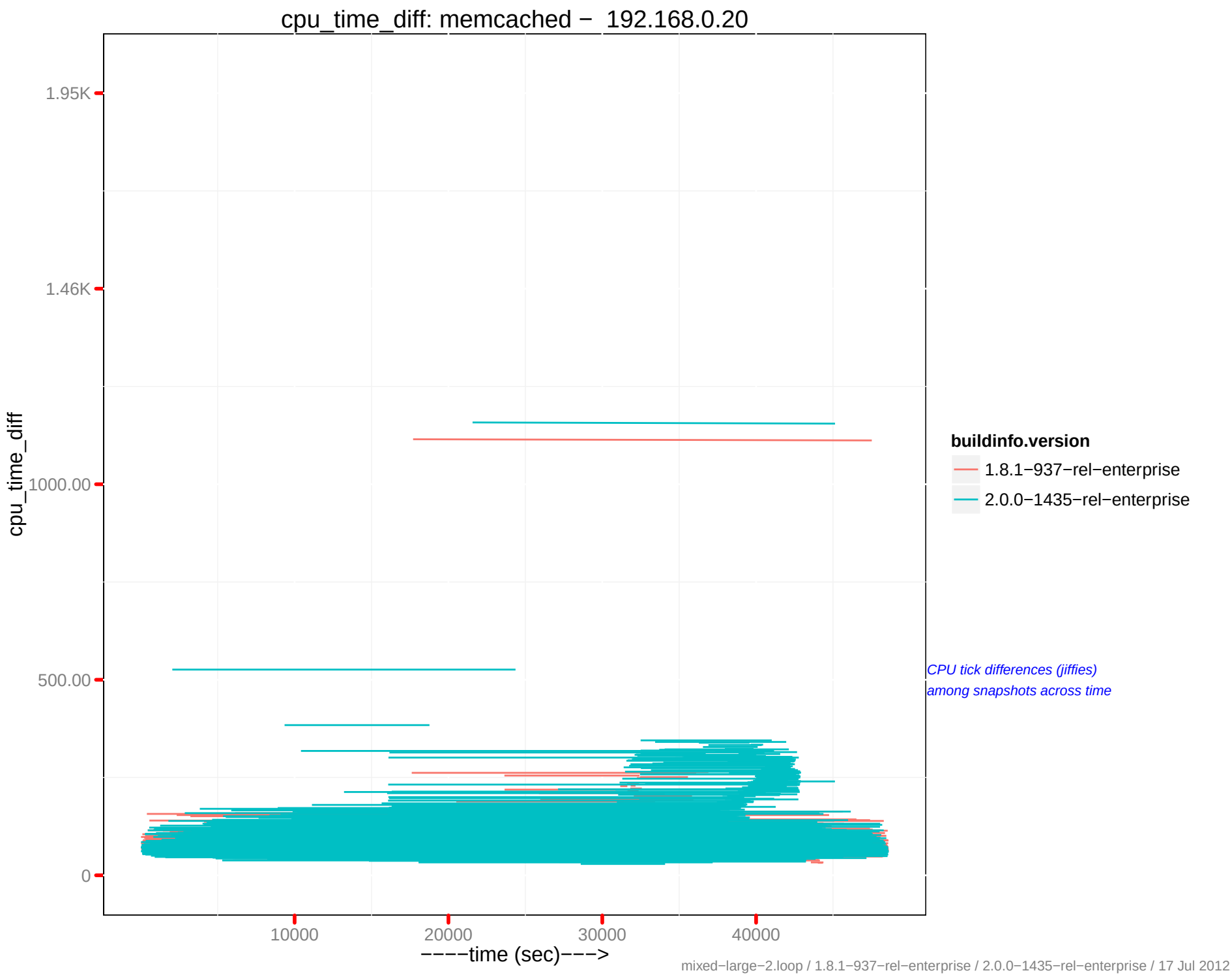

CPU utilization − 192.168.0.20:8091
%
30.00
25.00
20.00
15.00
10.00
5.00
200
400
600
800
1000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

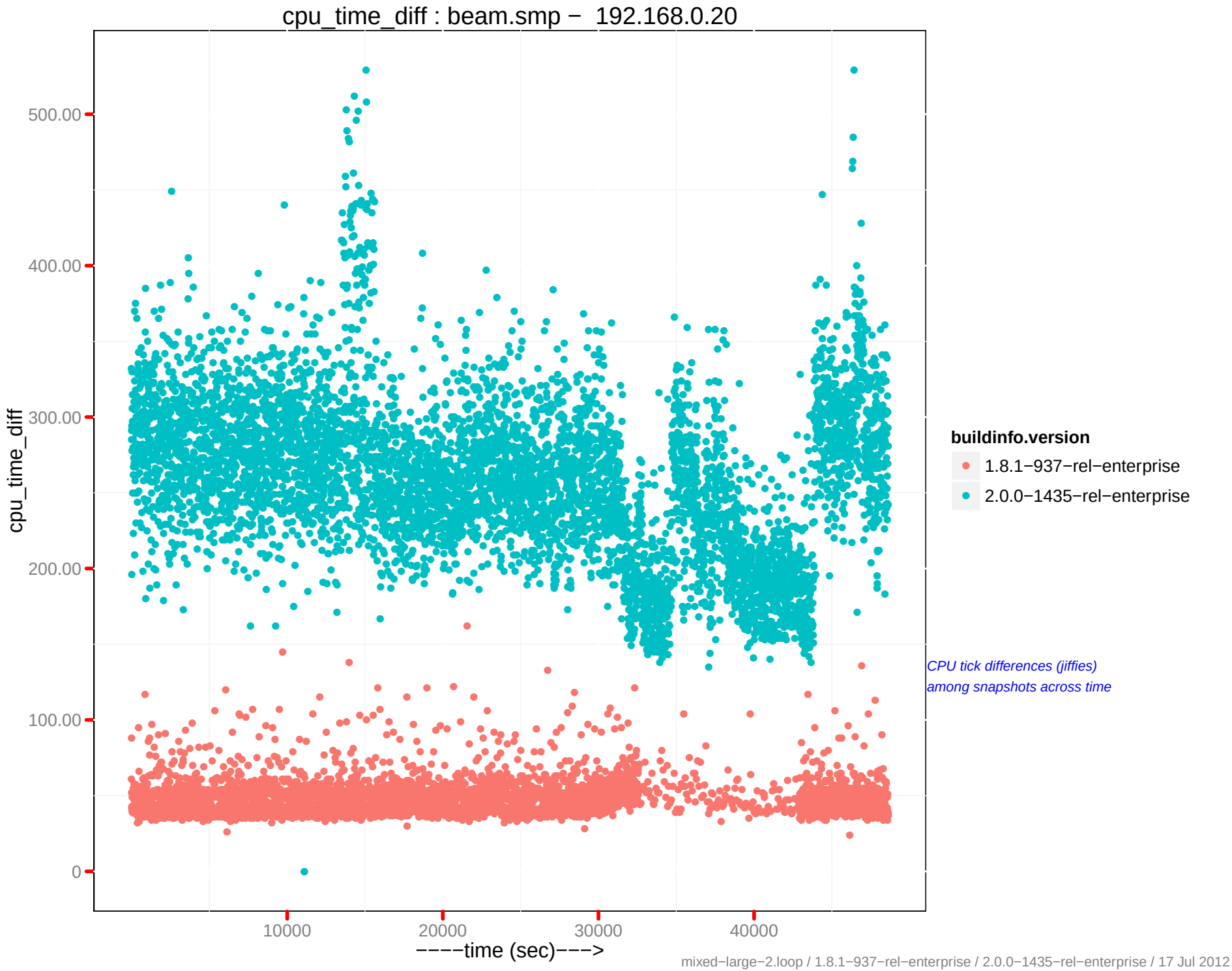


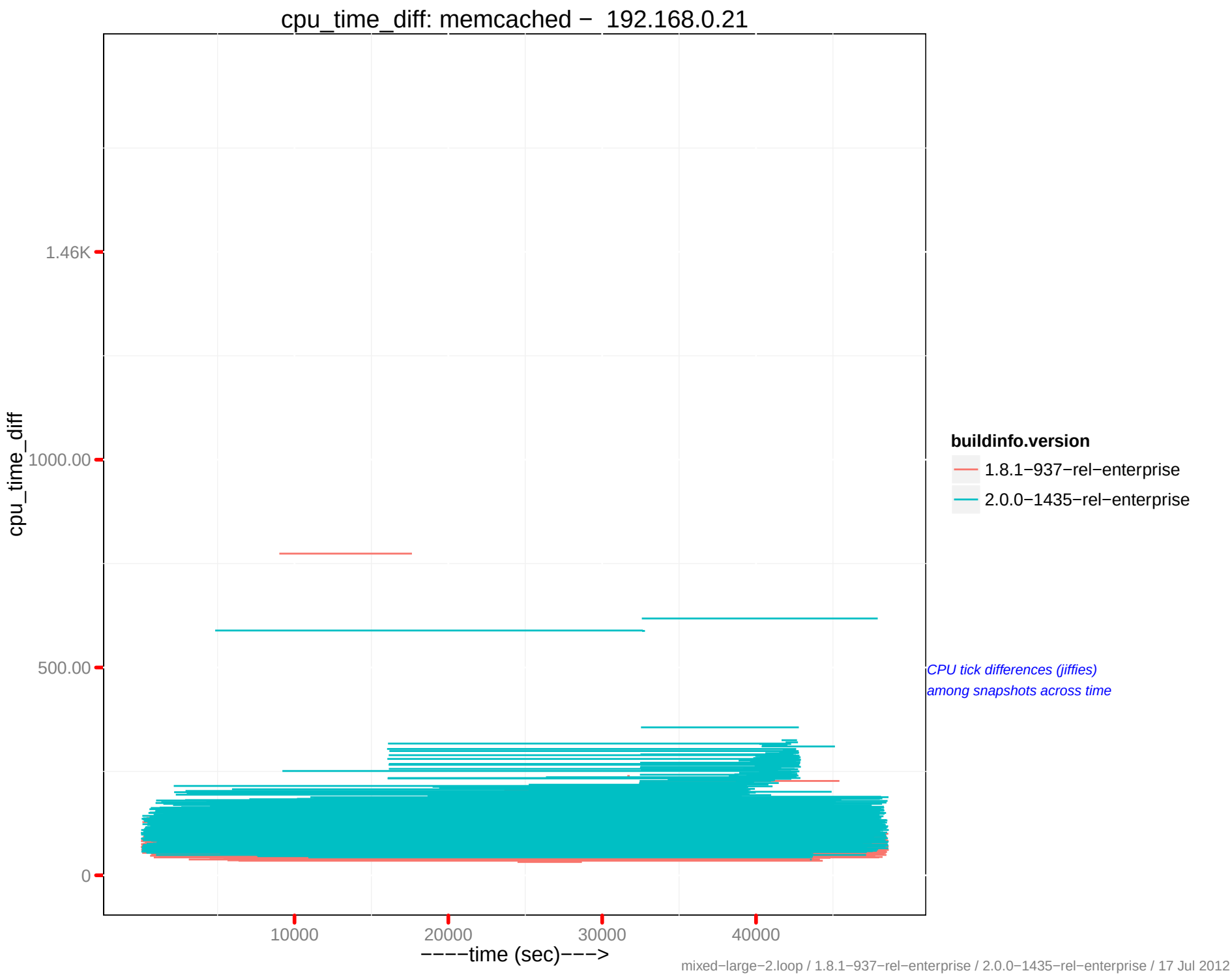
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

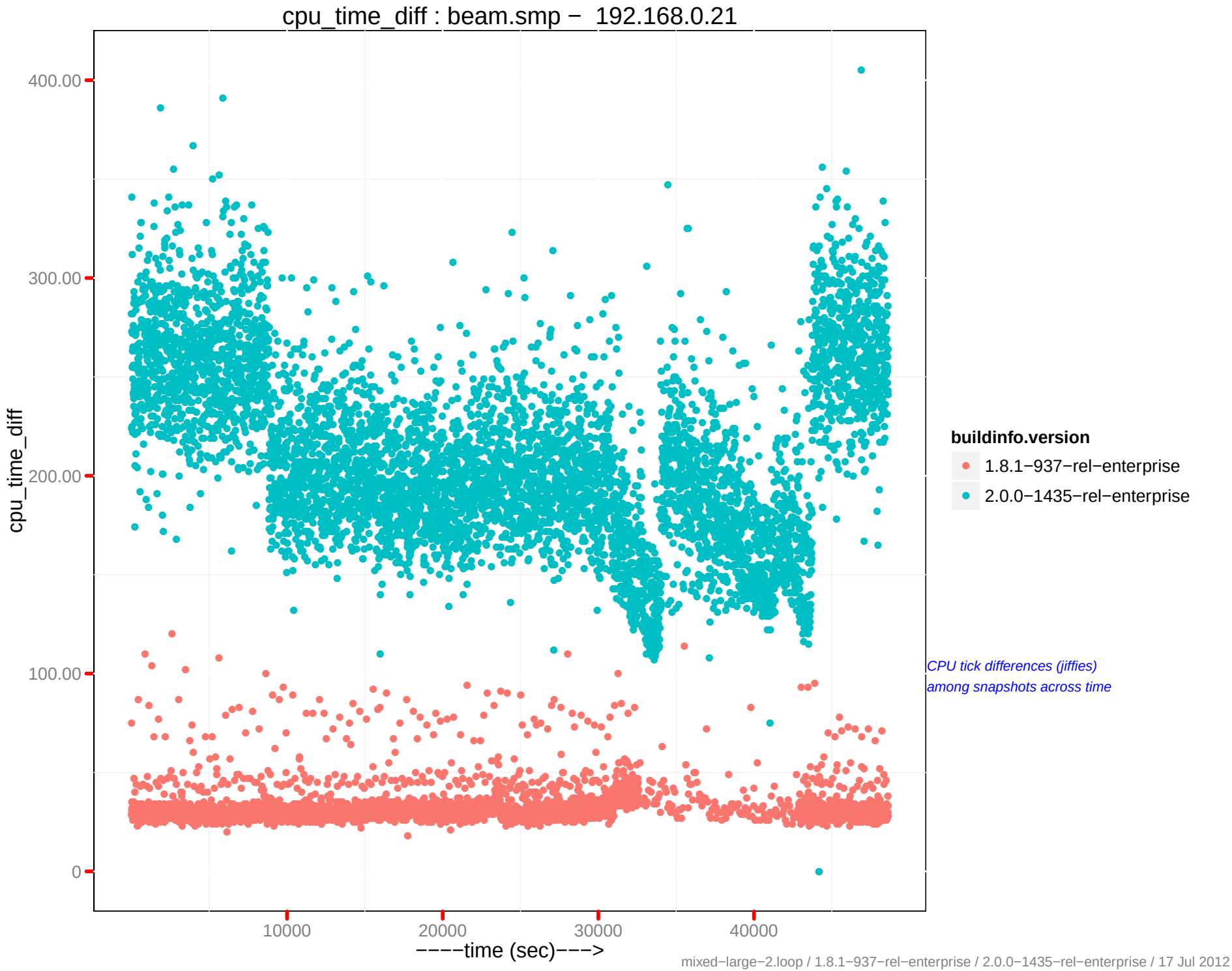

CPU utilization − 192.168.0.22:8091
%
30.00
20.00
10.00
200
400
600
800
1000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

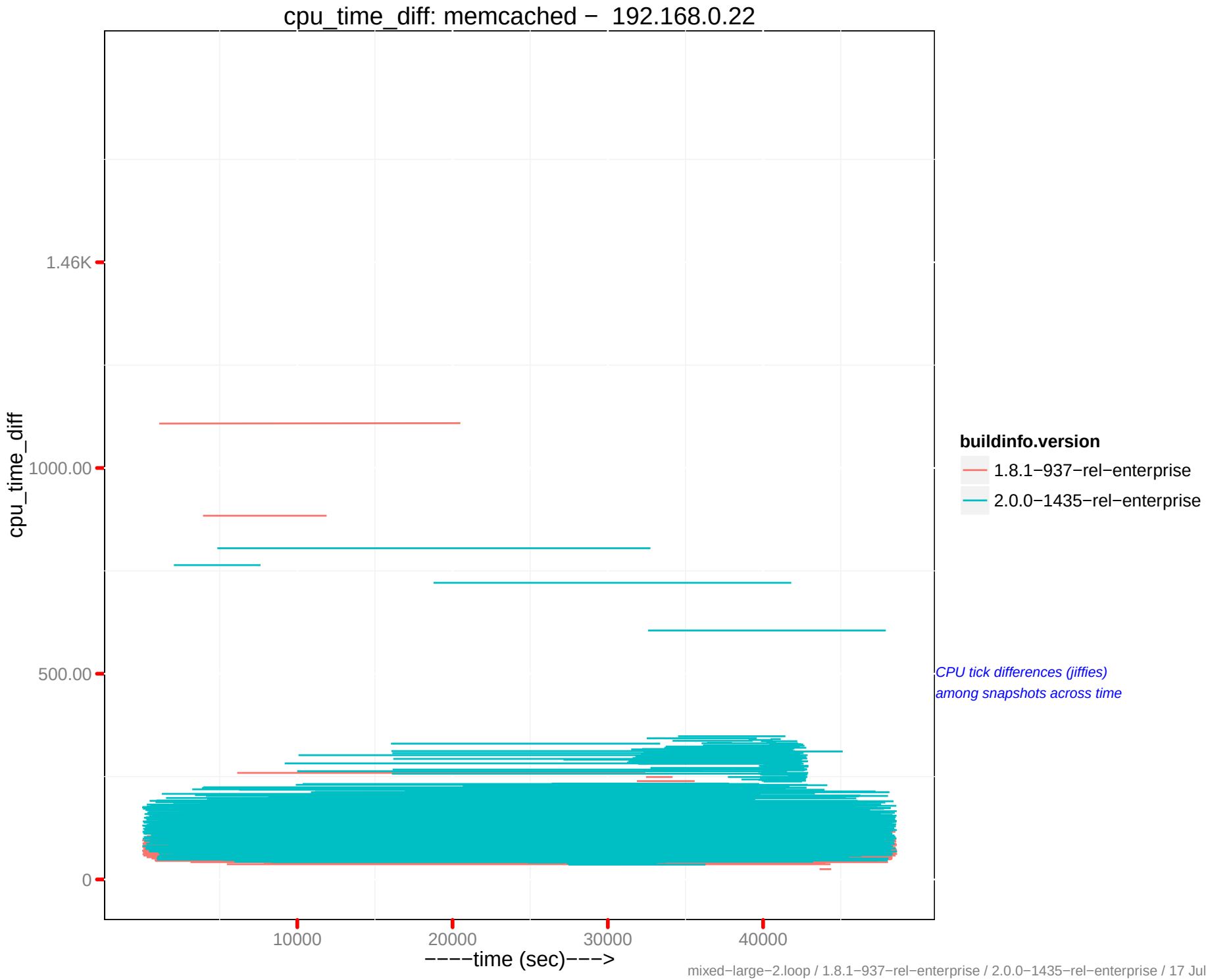

CPU utilization − 192.168.0.23:8091
%
40.00
30.00
20.00
10.00
200
400
600
800
1000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

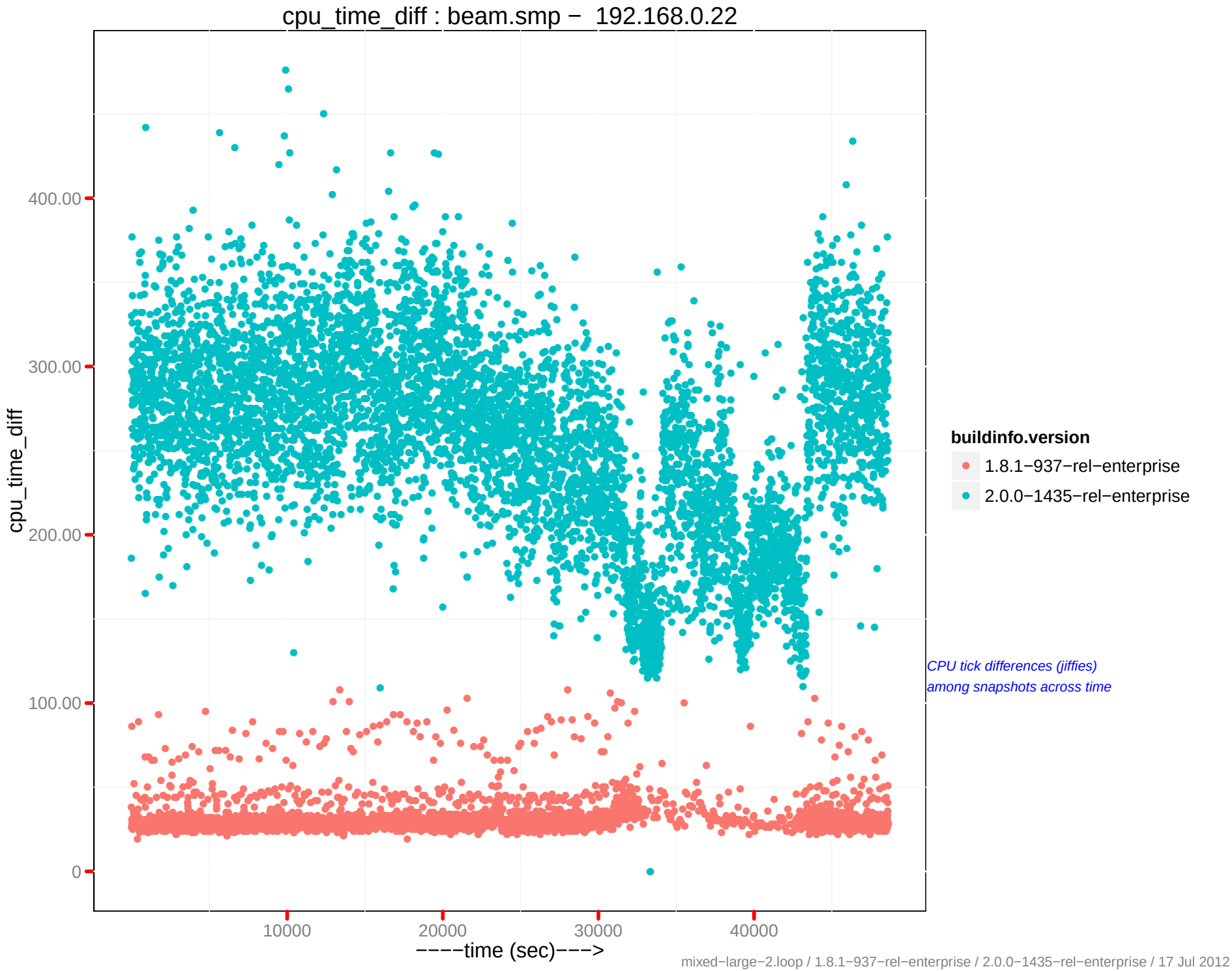

cpu_time_diff: memcached − 192.168.0.20
1.95K
1.46K
1000.00
500.00
0
cpu_time_diff
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

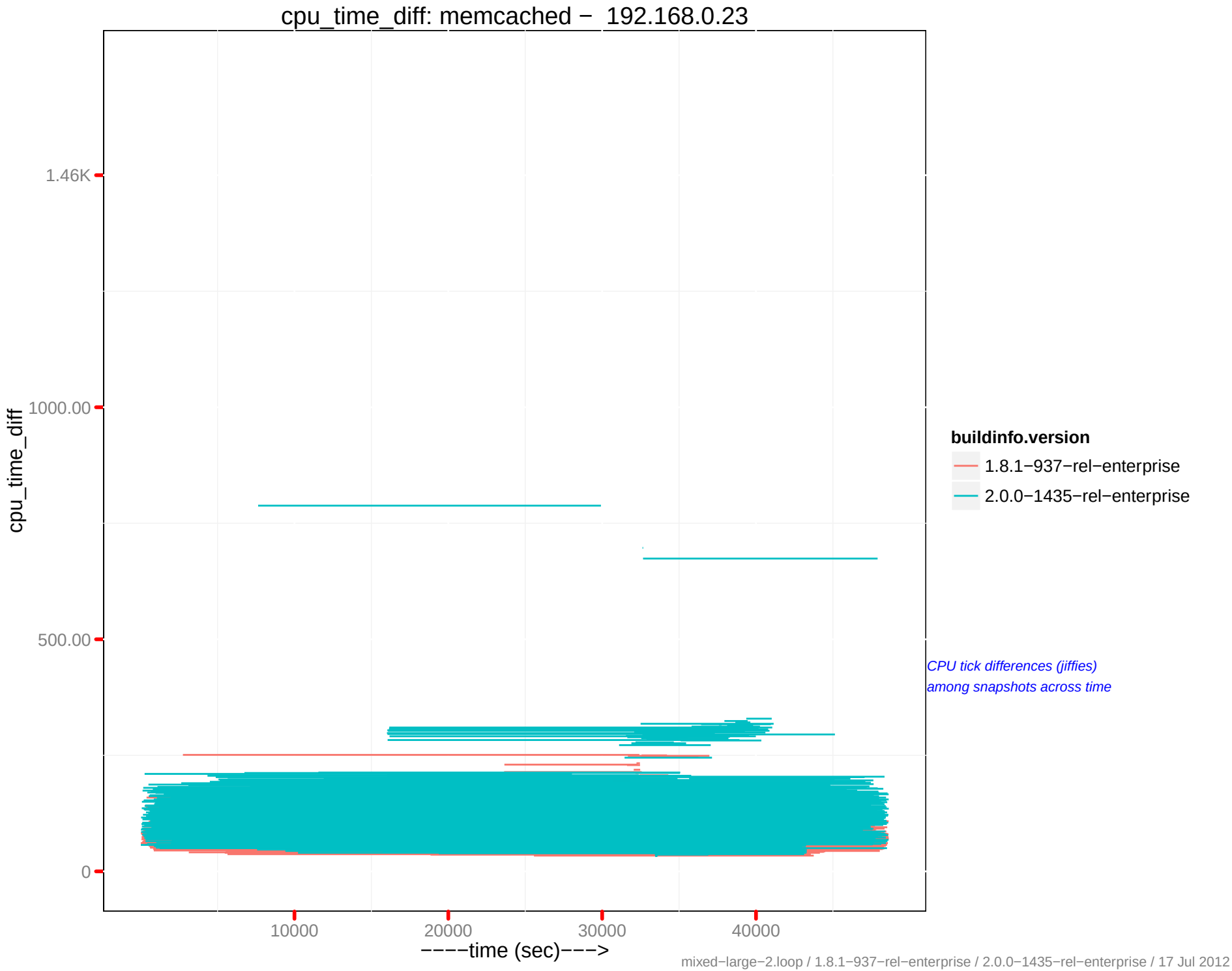

cpu_time_diff : beam.smp − 192.168.0.20
cpu_time_diff
500.00
400.00
300.00
200.00
100.00
0
10000
20000
30000
40000
----time (sec)--->
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

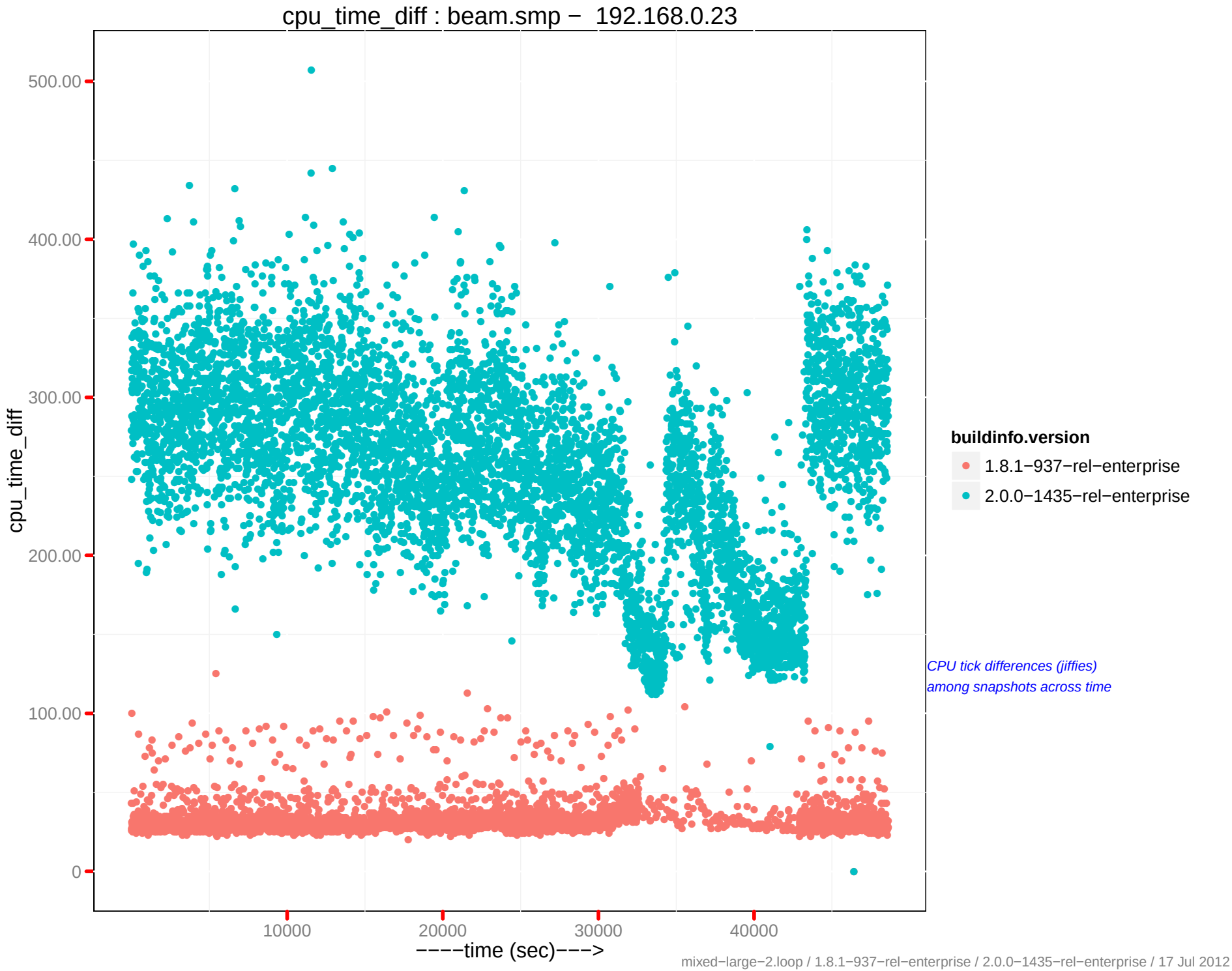

cpu_time_diff: memcached − 192.168.0.21
cpu_time_diff
1.46K
1000.00
500.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

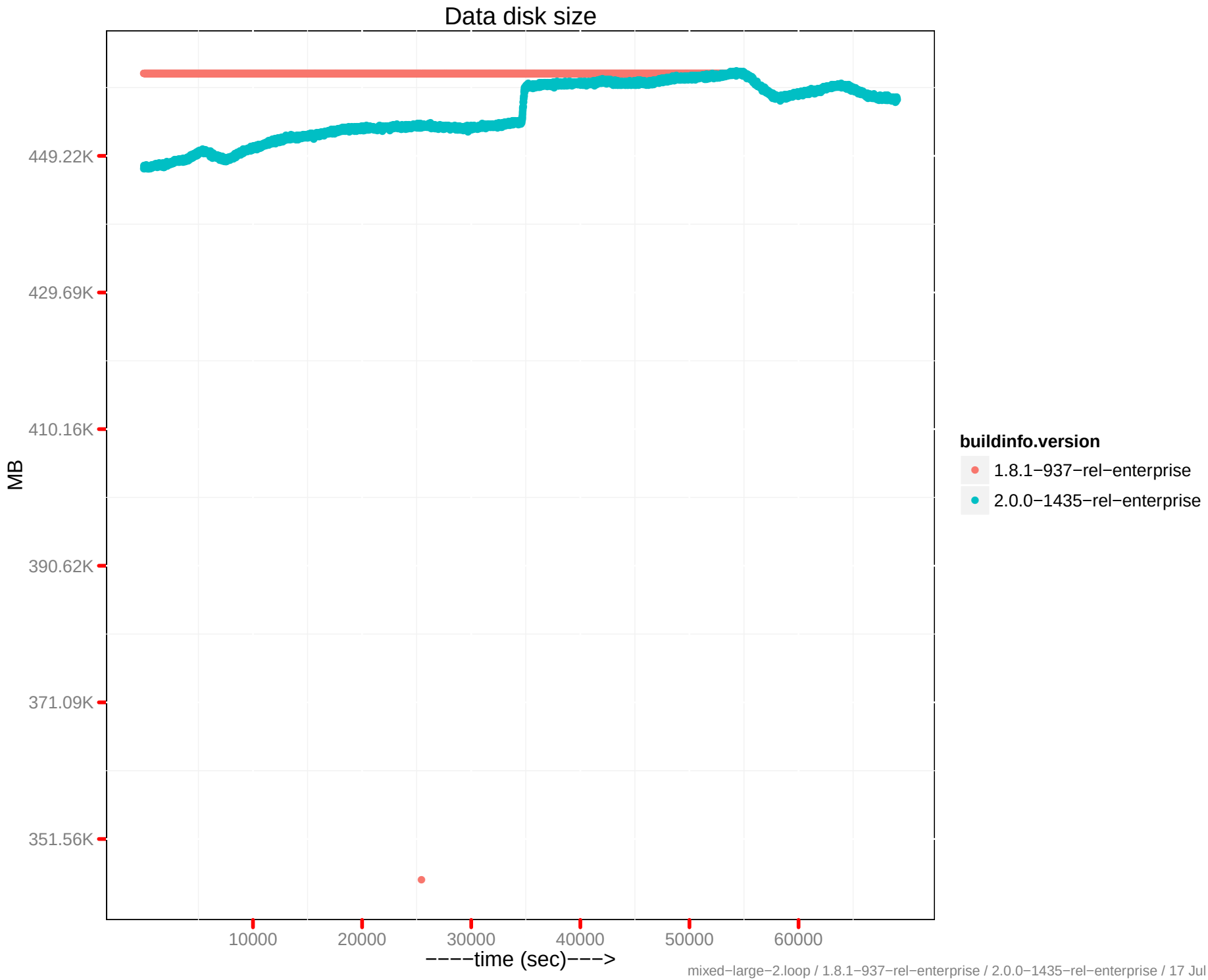

cpu_time_diff : beam.smp − 192.168.0.21
cpu_time_diff
400.00
300.00
200.00
100.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


cpu_time_diff: memcached − 192.168.0.22
cpu_time_diff
1.46K
1000.00
500.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

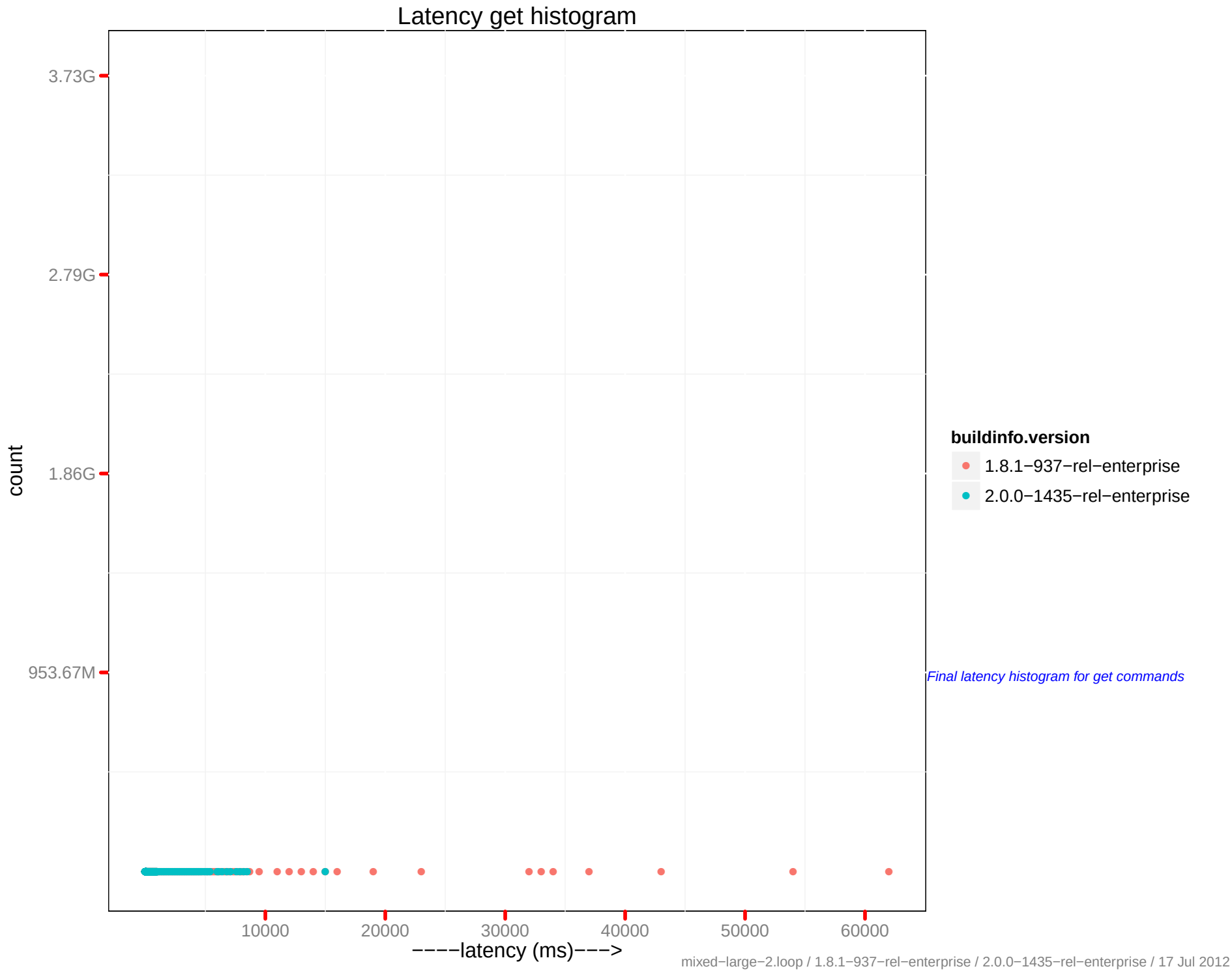

cpu_time_diff : beam.smp − 192.168.0.22
cpu_time_diff
400.00
300.00
200.00
100.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

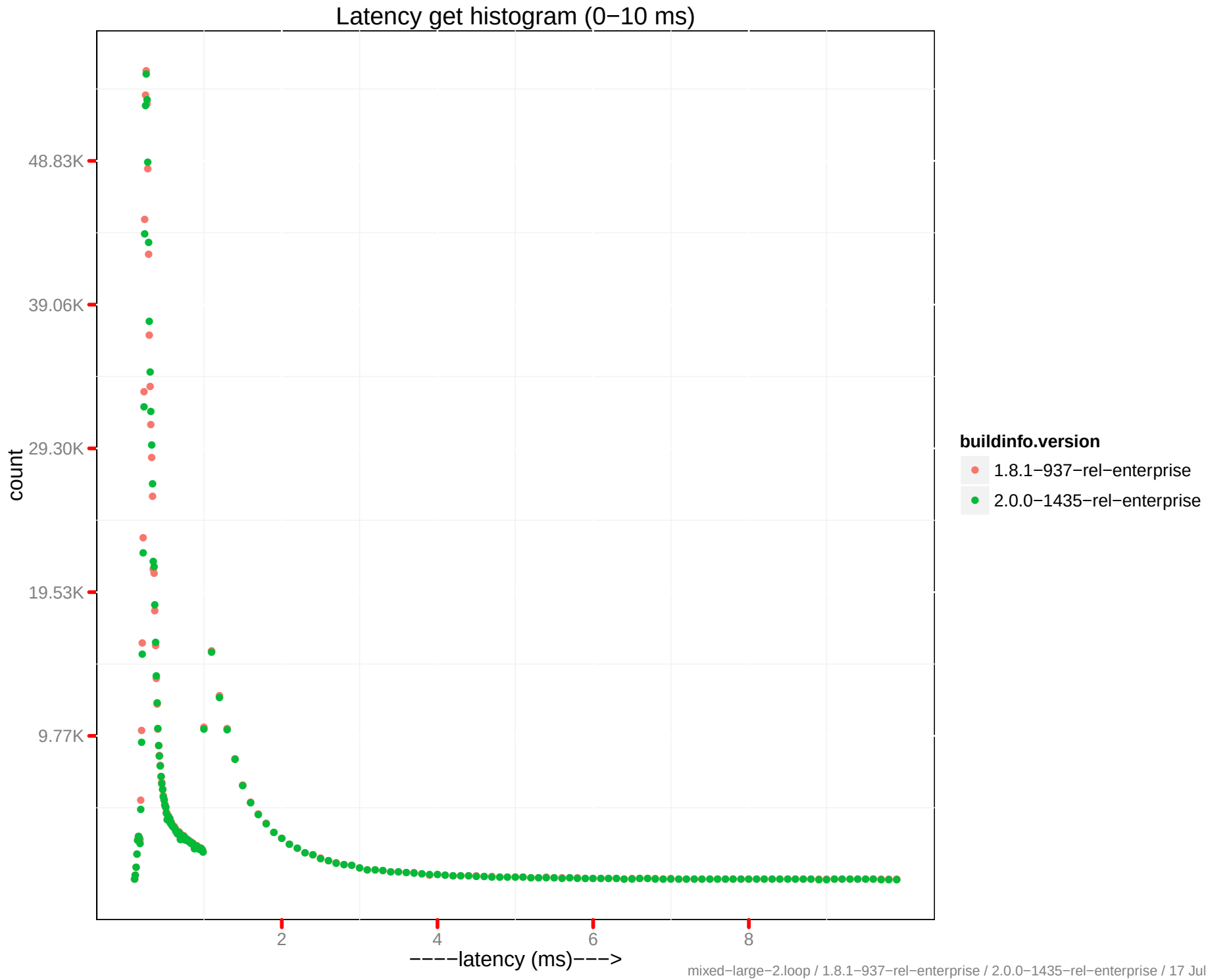

cpu_time_diff: memcached − 192.168.0.23
cpu_time_diff
1.46K
1000.00
500.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


cpu_time_diff : beam.smp − 192.168.0.23
cpu_time_diff
500.00
400.00
300.00
200.00
100.00
0
10000
20000
30000
40000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

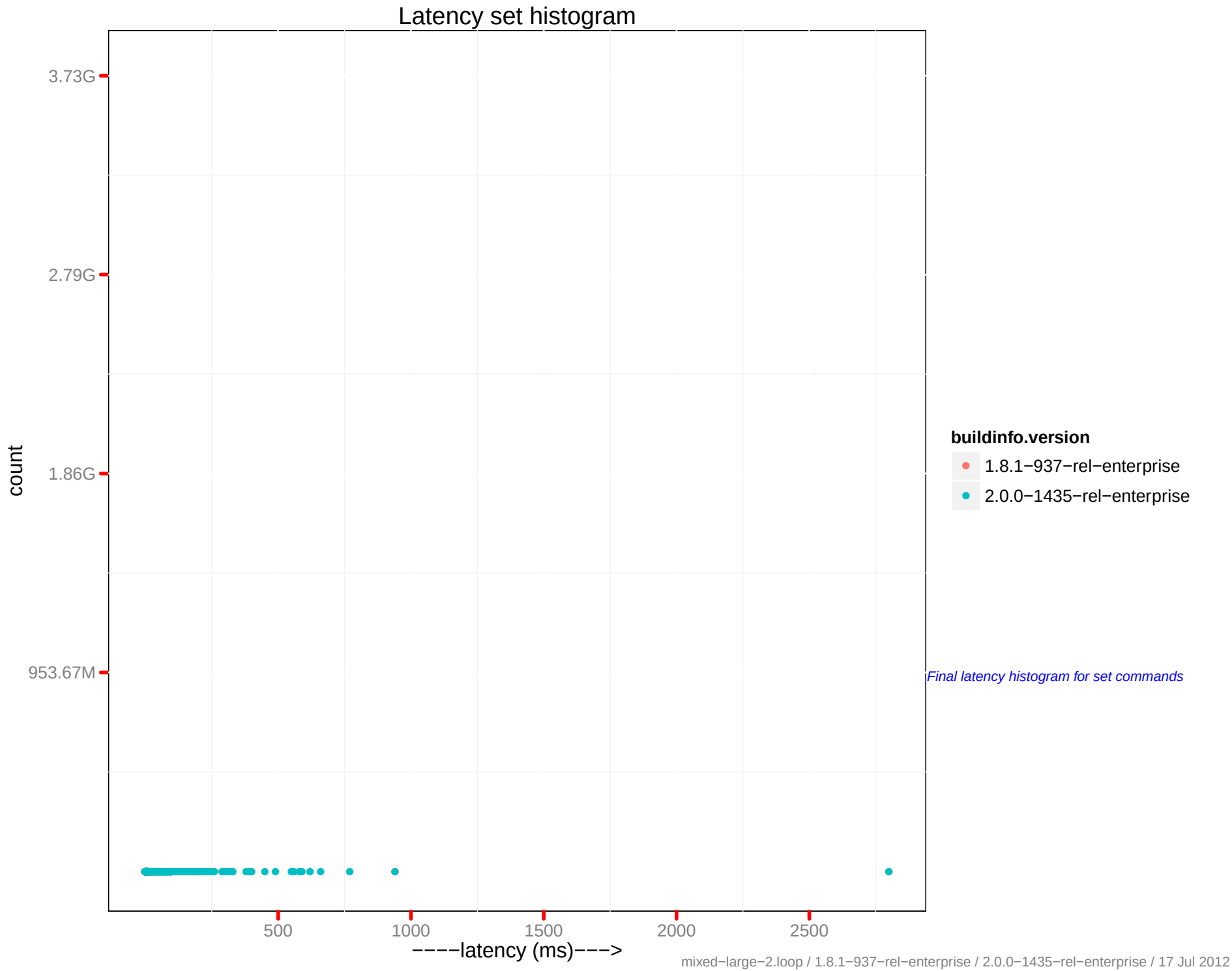


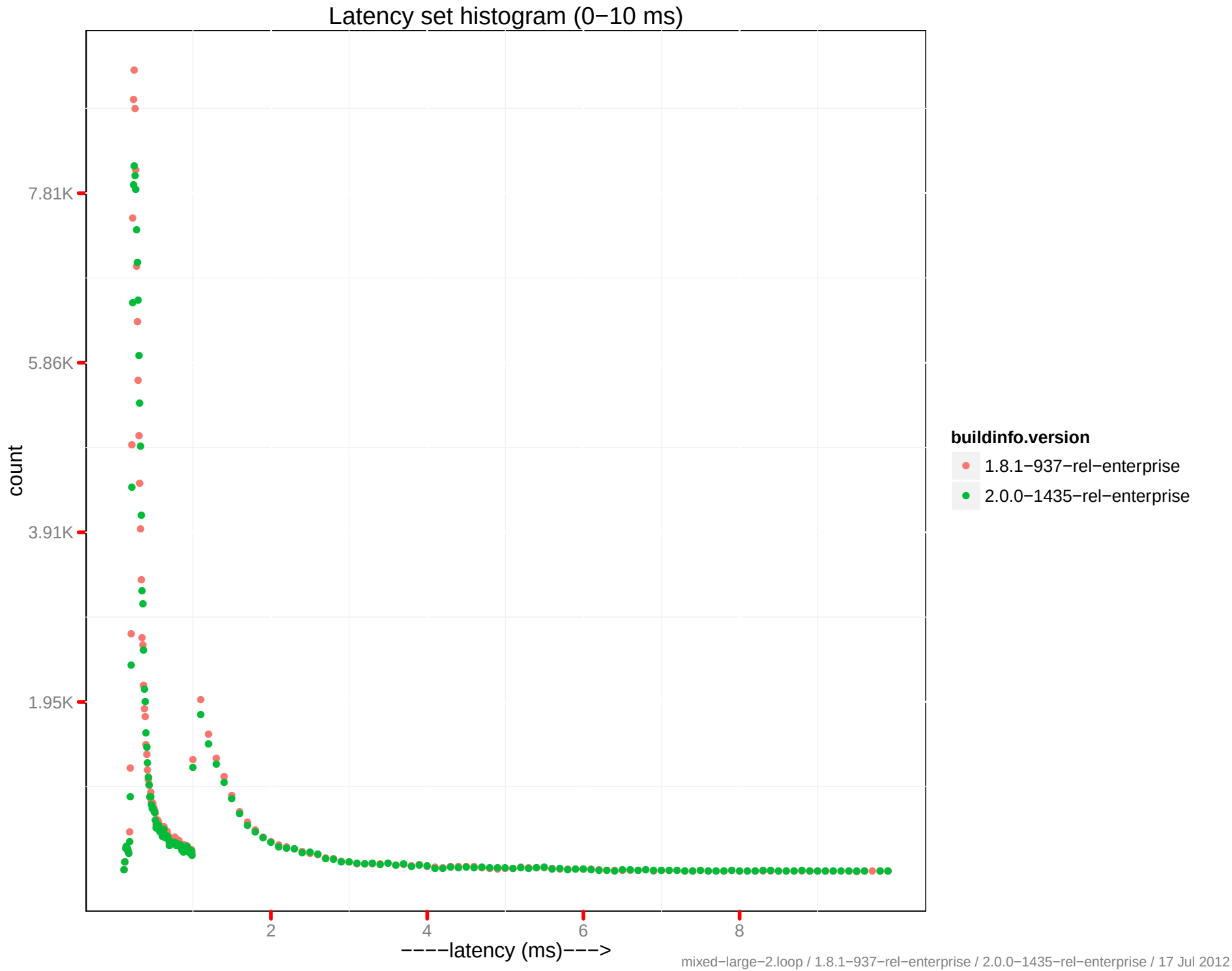
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

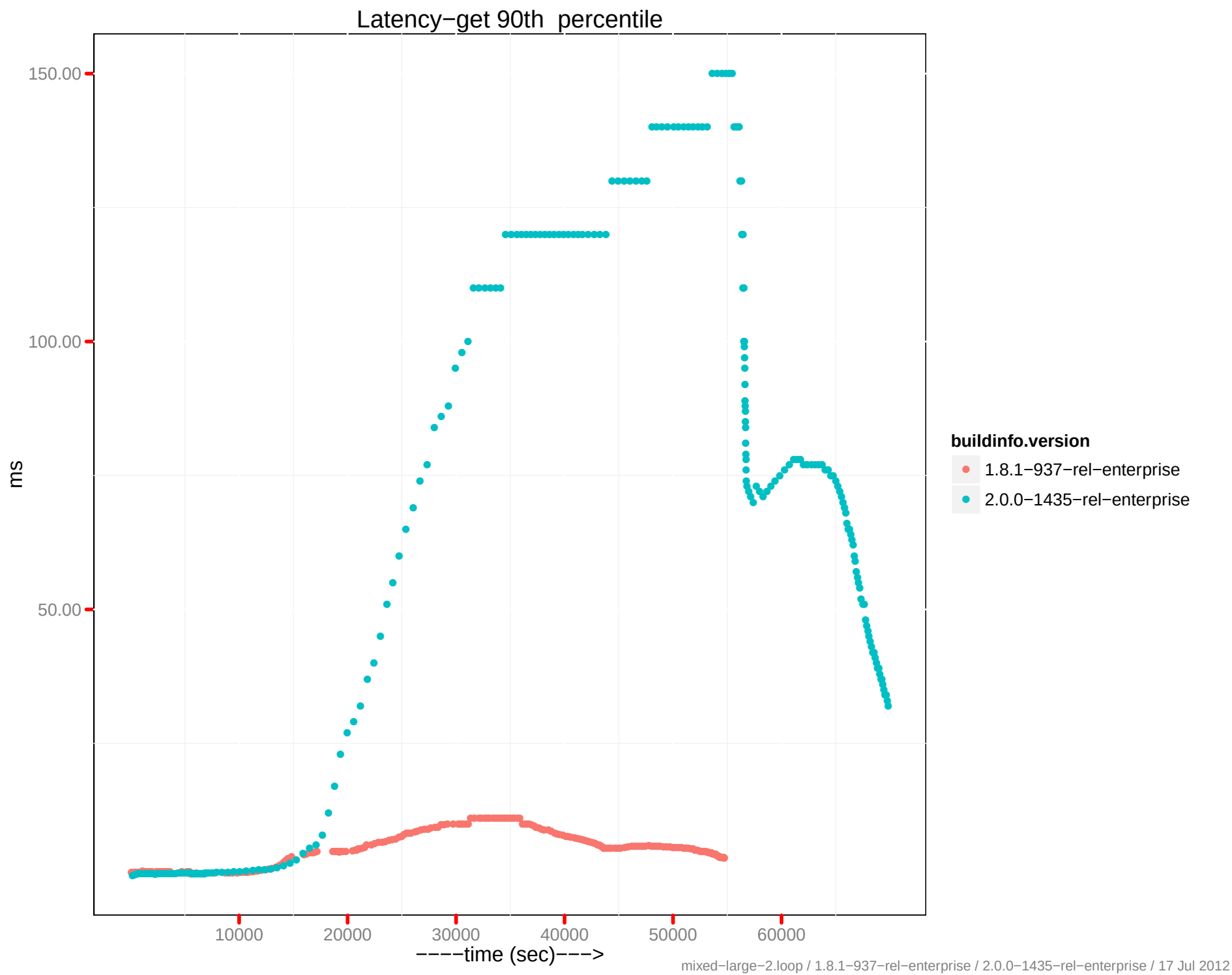

Latency get histogram
3.73G
2.79G
1.86G
953.67M
count
10000
20000
30000
40000
50000
60000
−−−−latency (ms)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Final latency histogram for get commands
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

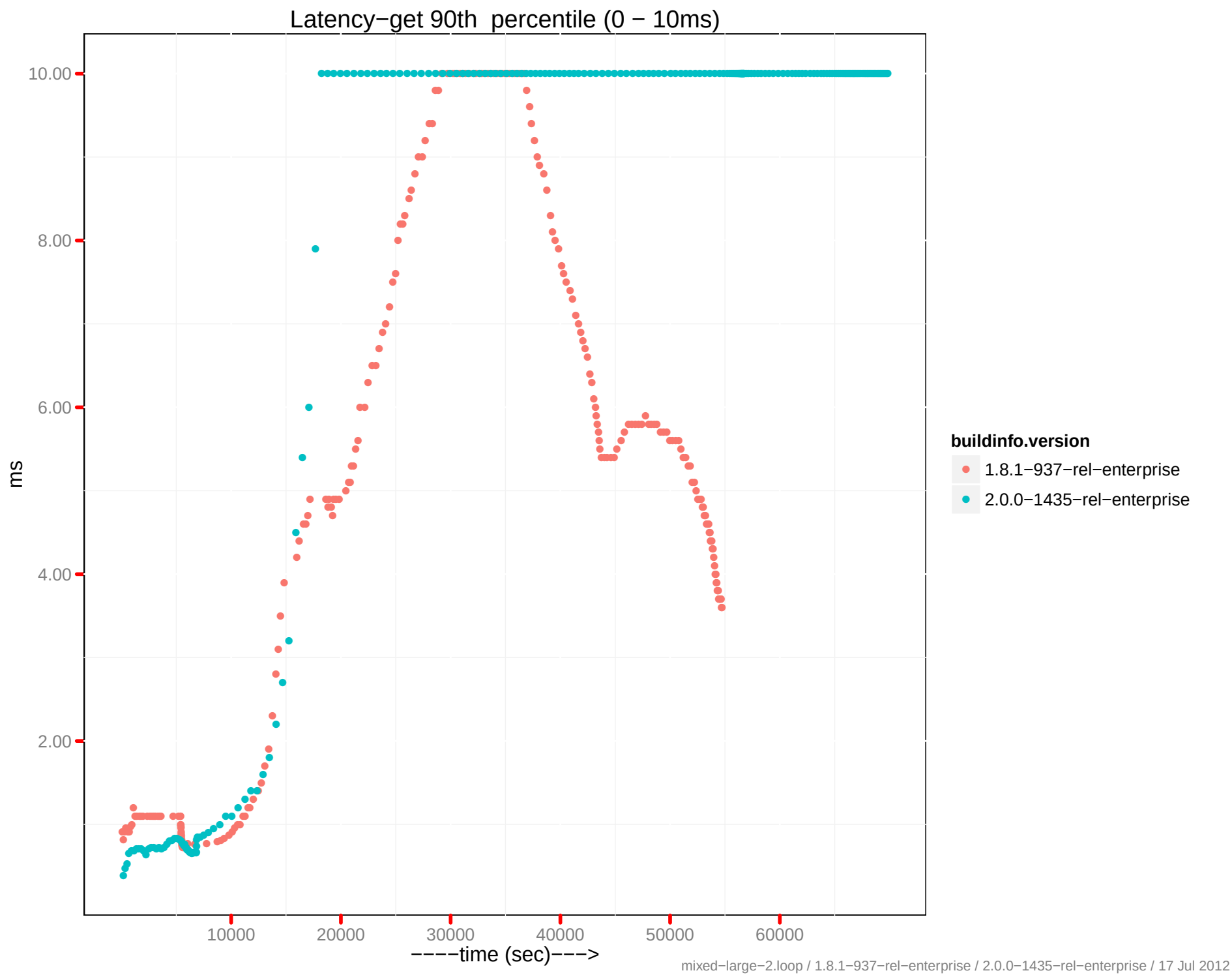


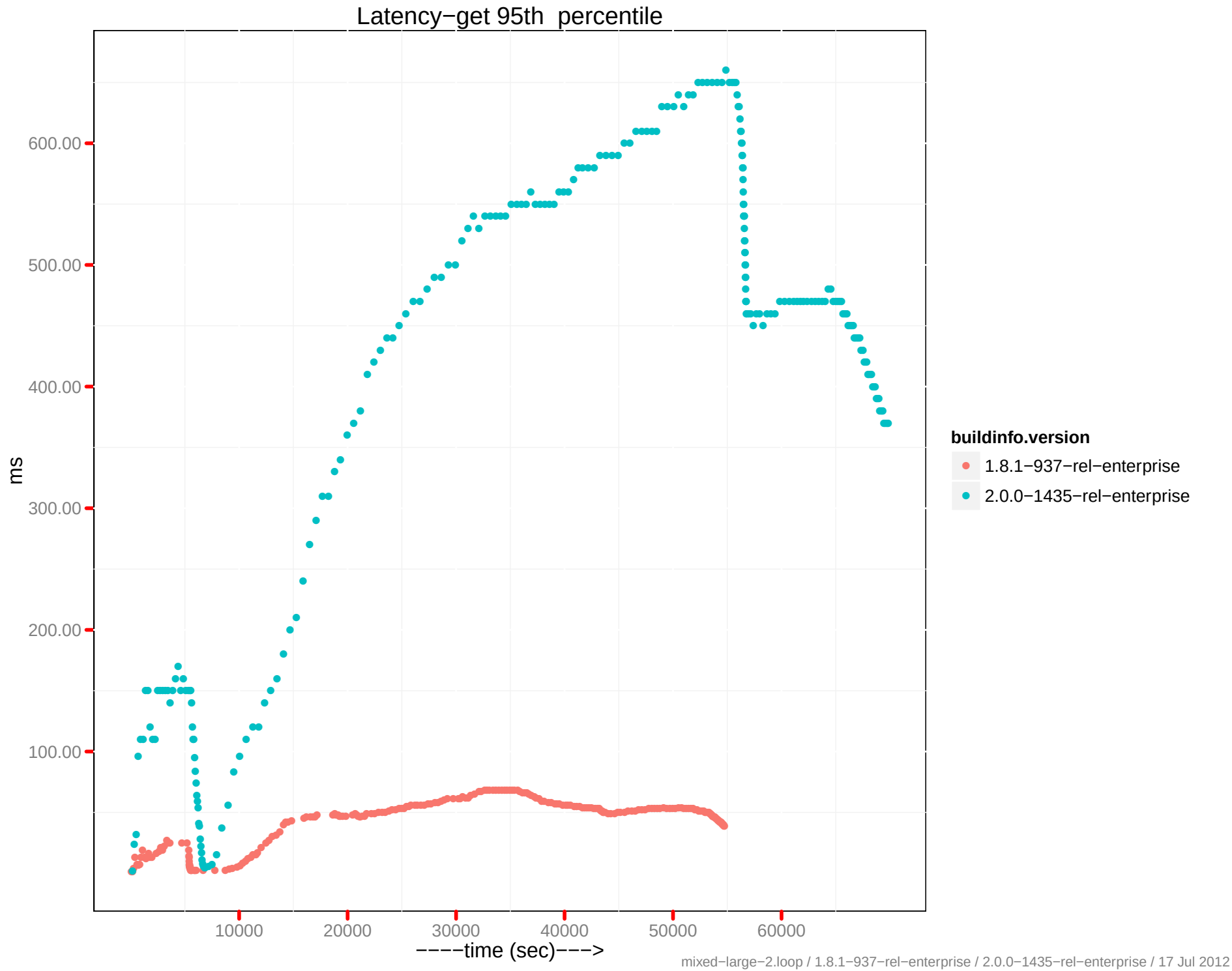
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Latency set histogram
3.73G
2.79G
1.86G
953.67M
count
500
1000
1500
2000
2500
−−−−latency (ms)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
Final latency histogram for set commands
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

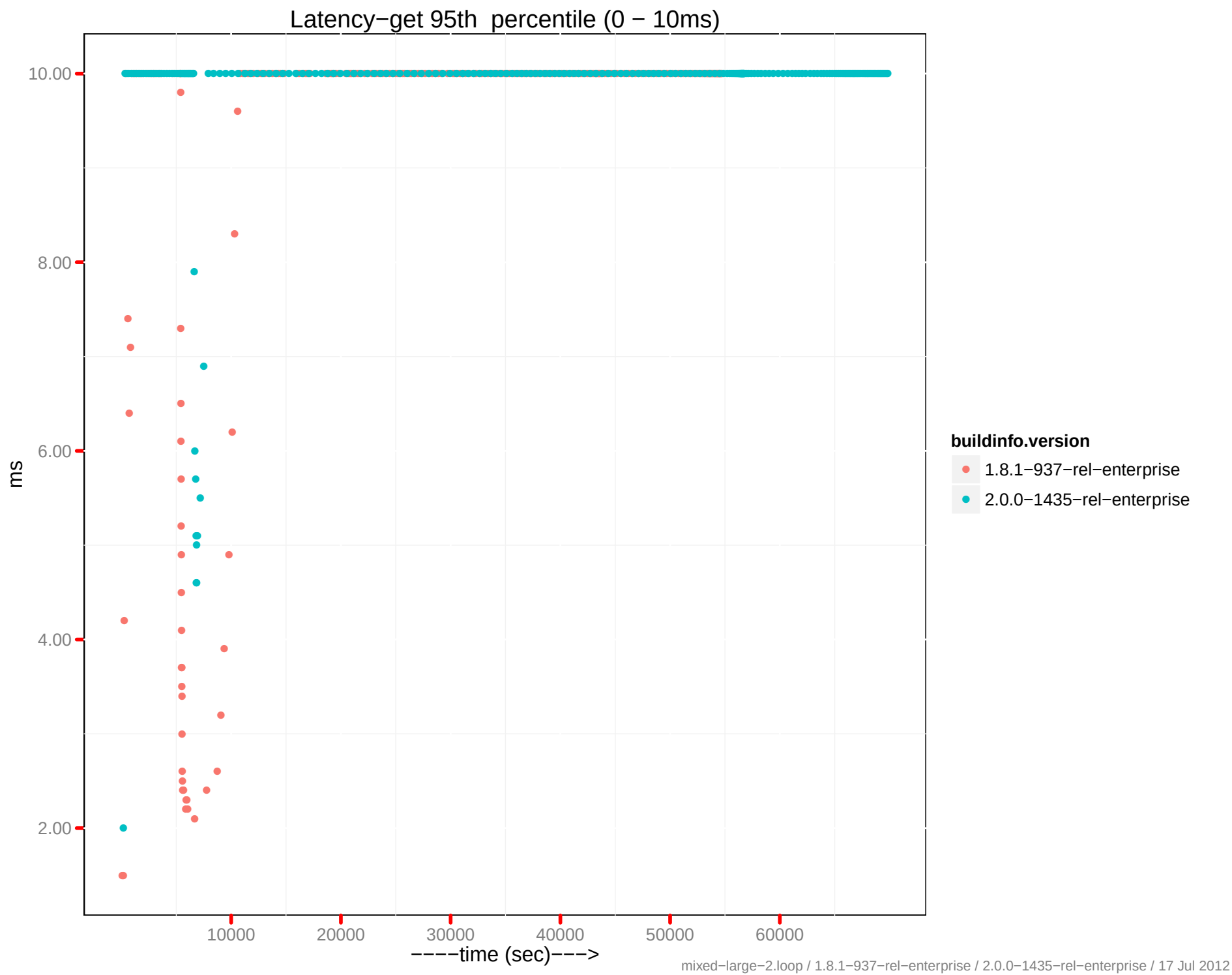

Latency set histogram (0−10 ms)
count
7.81K
5.86K
3.91K
1.95K
2
4
6
8
−−−−latency (ms)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

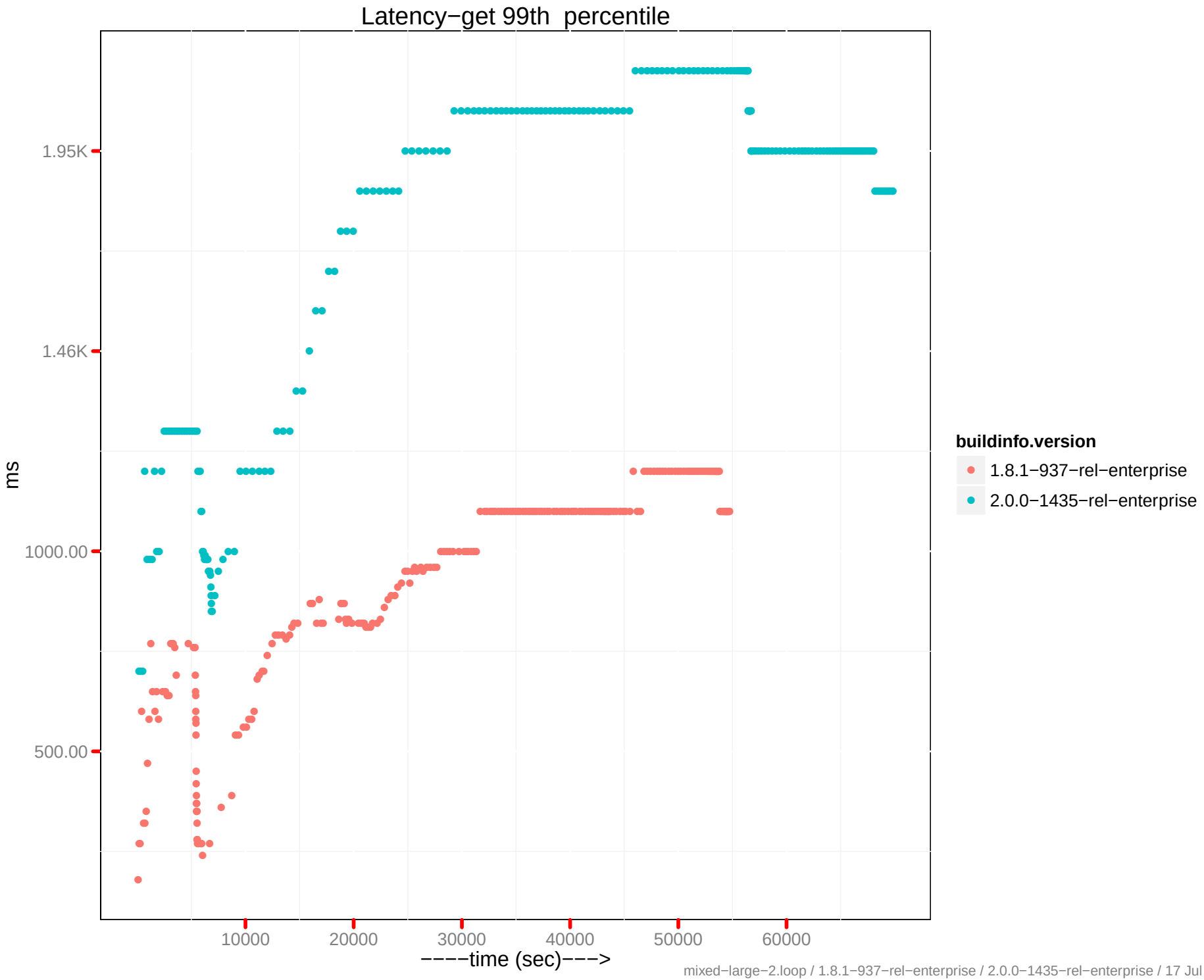

Latency−get 90th percentile
150.00
100.00
50.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

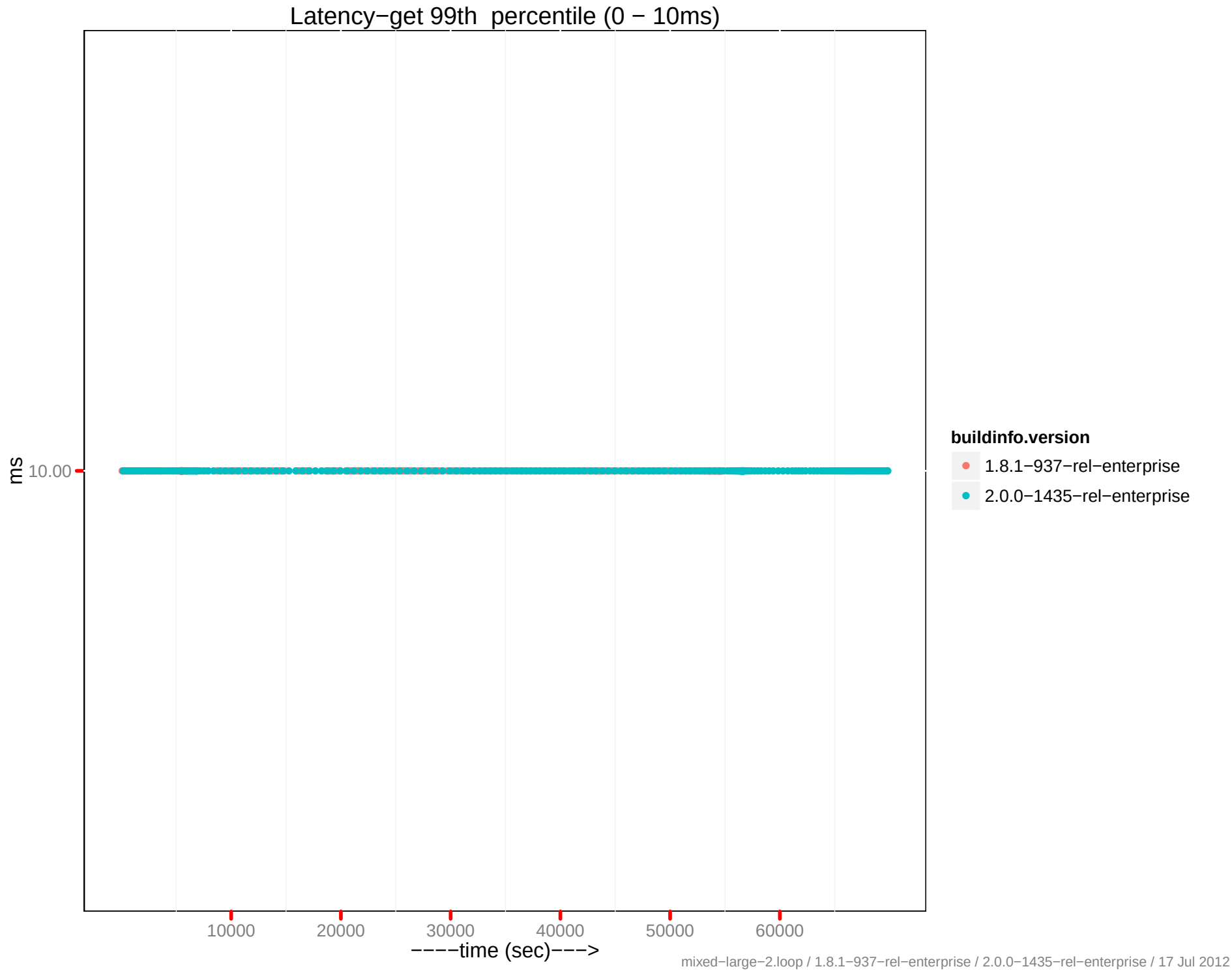

Latency−get 90th percentile (0 − 10ms)
10.00
8.00
6.00
4.00
2.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

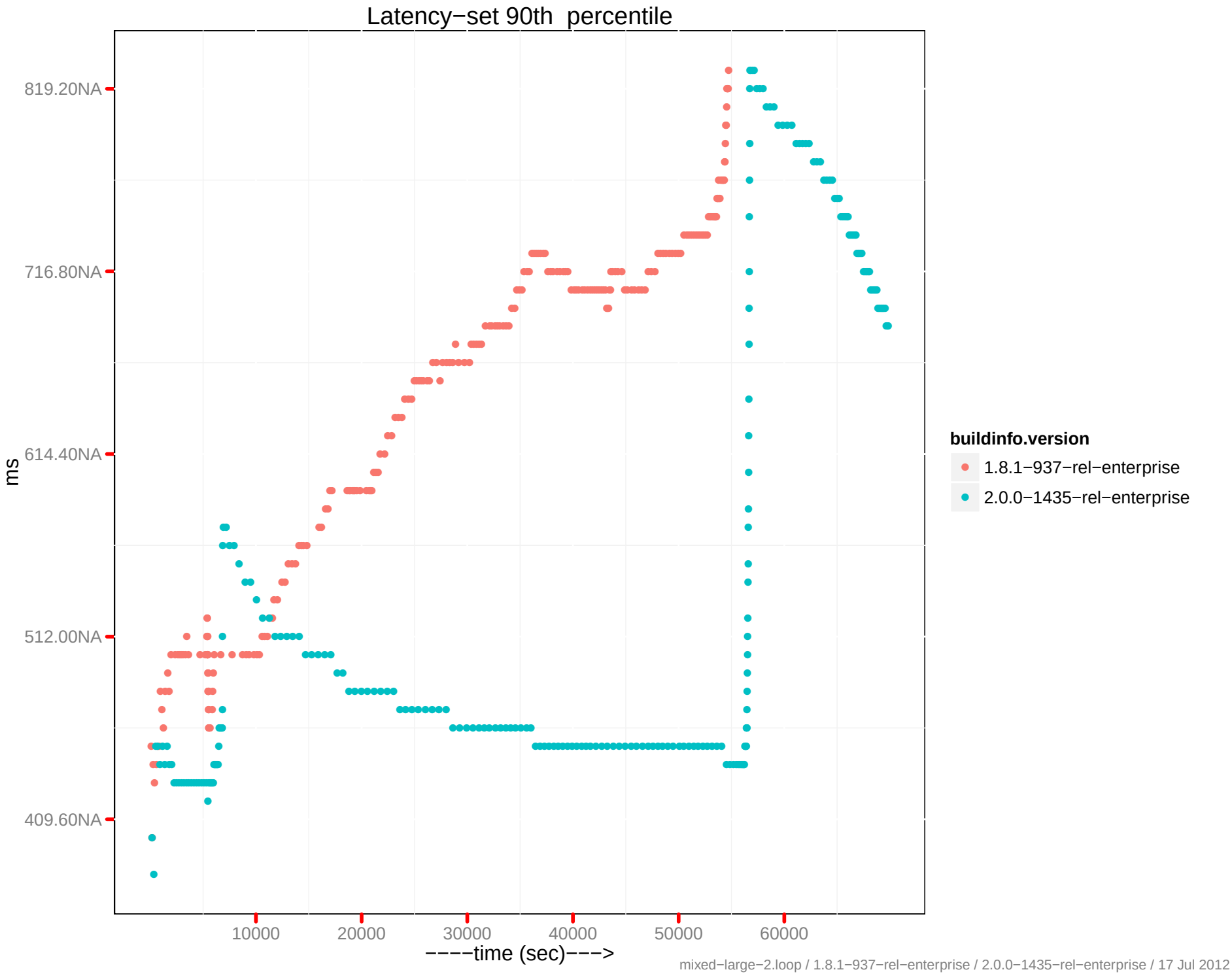


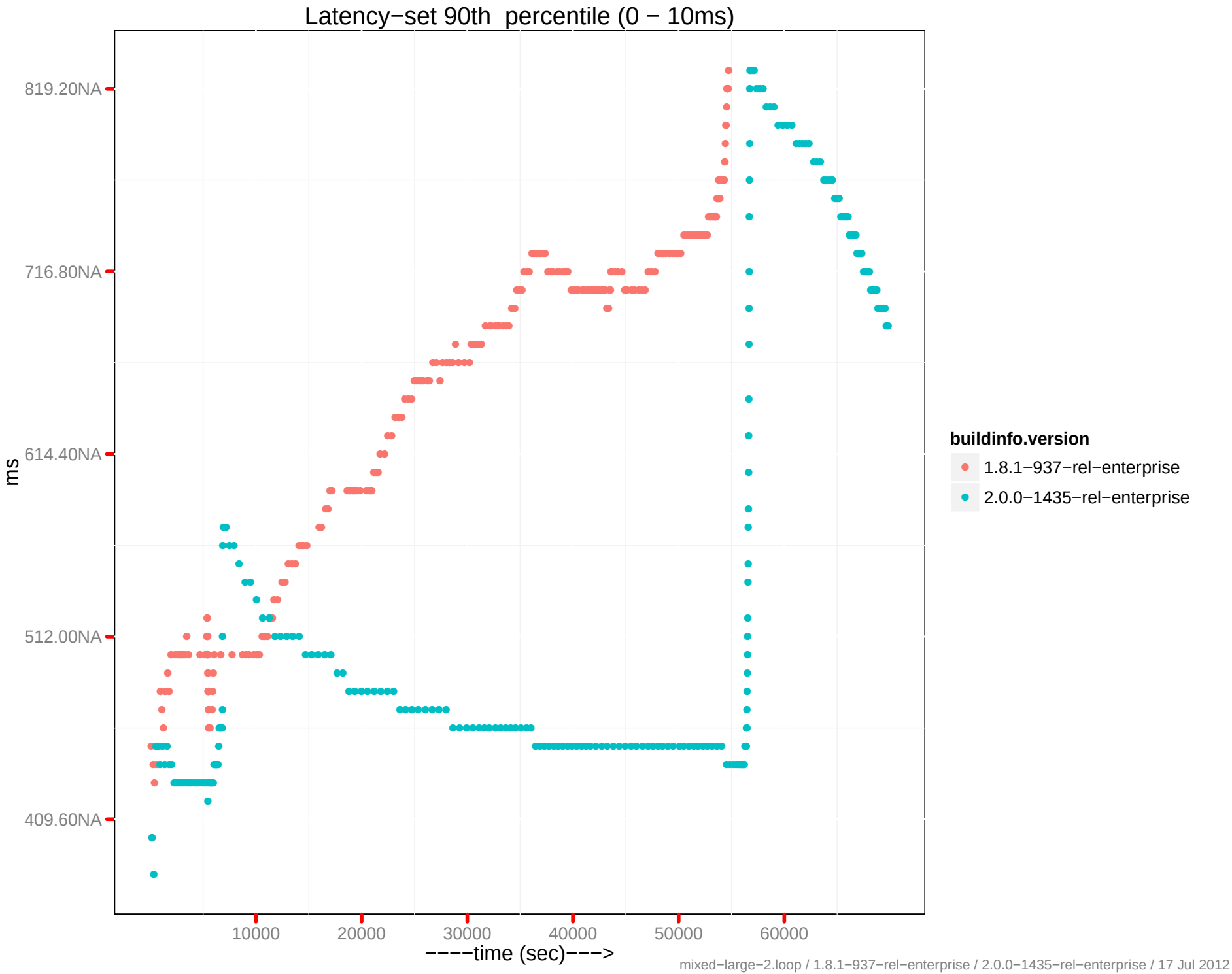
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

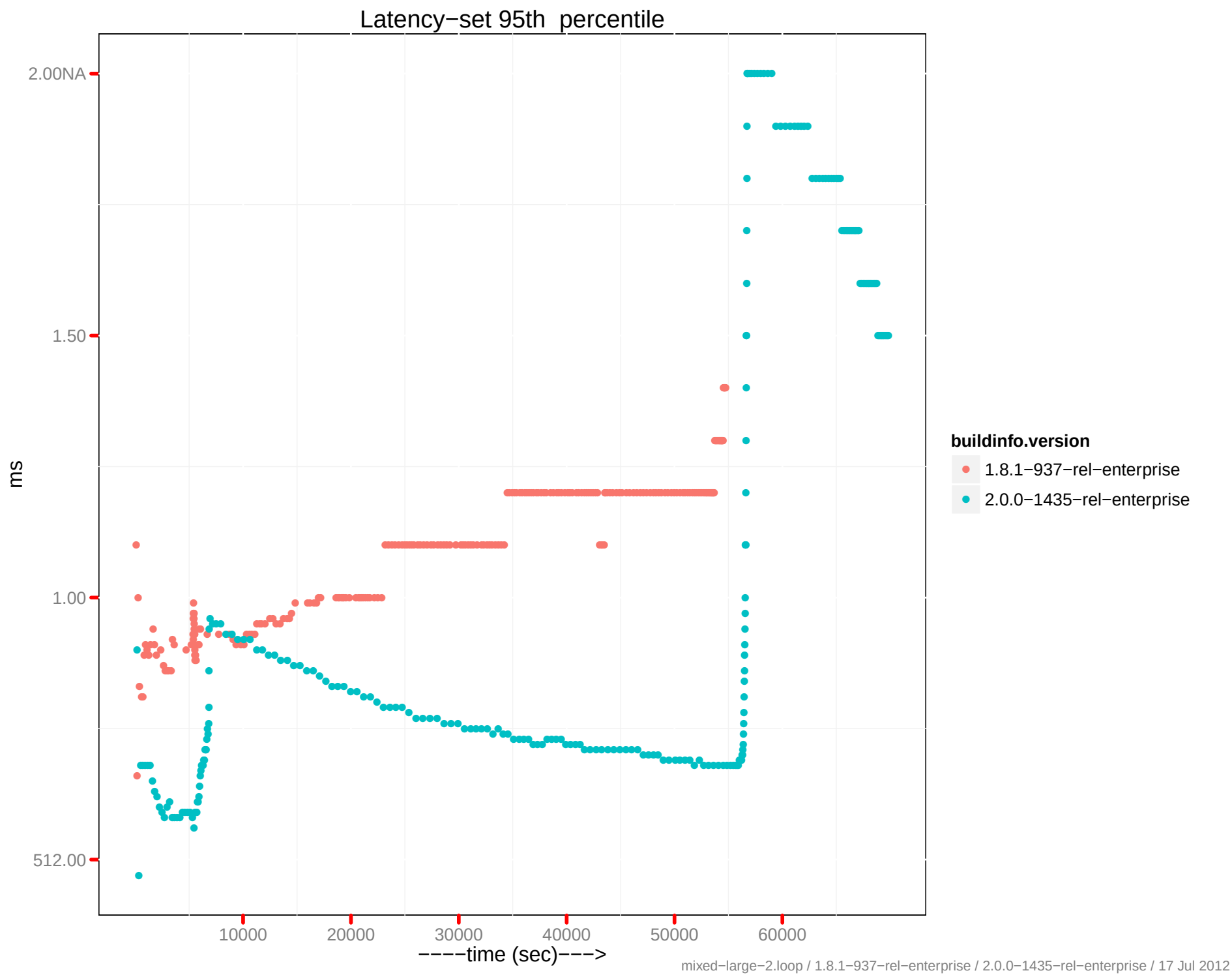

Latency−get 95th percentile (0 − 10ms)
10.00
8.00
6.00
4.00
2.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

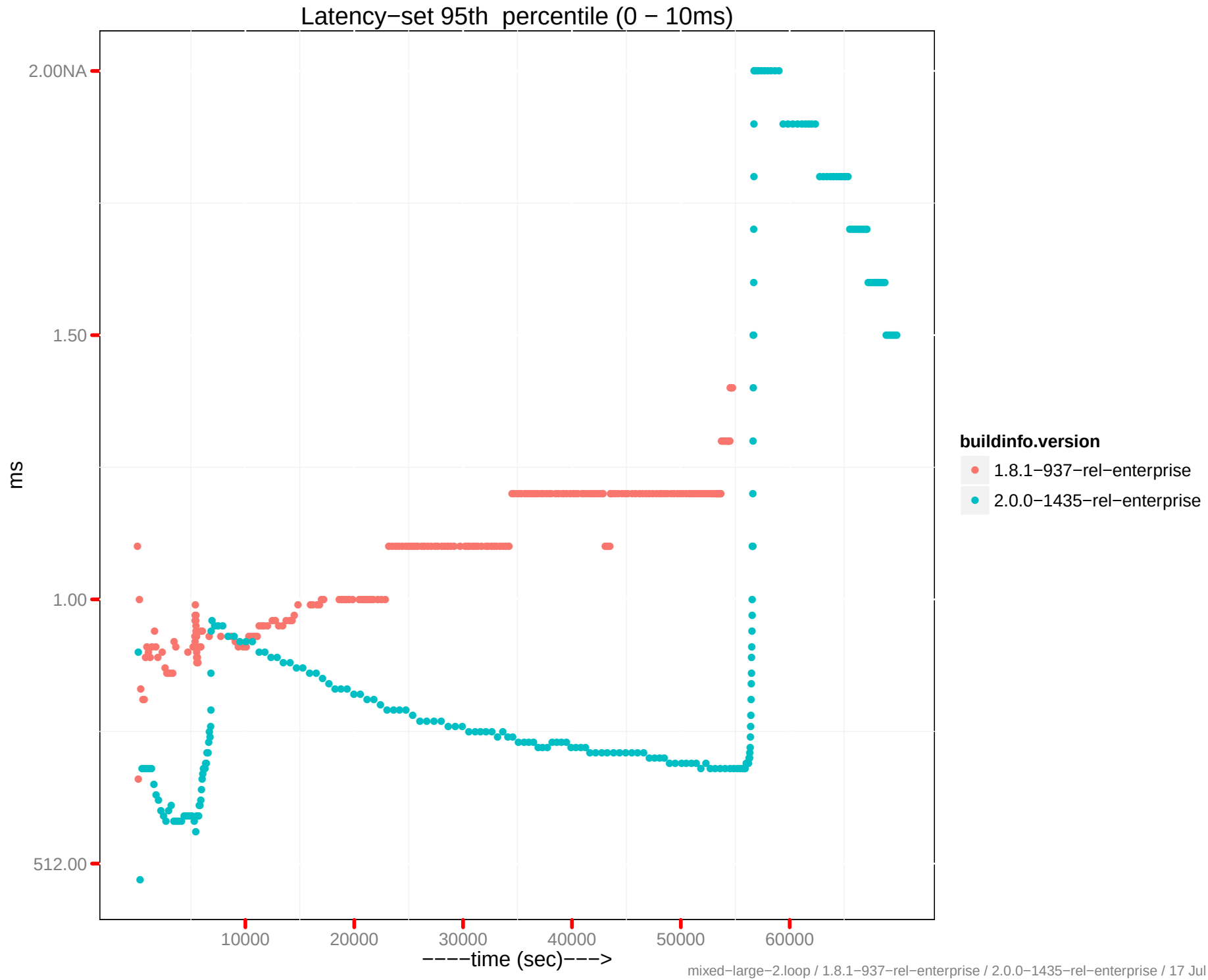

Latency−get 99th percentile
ms
1.95K
1.46K
1000.00
500.00
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

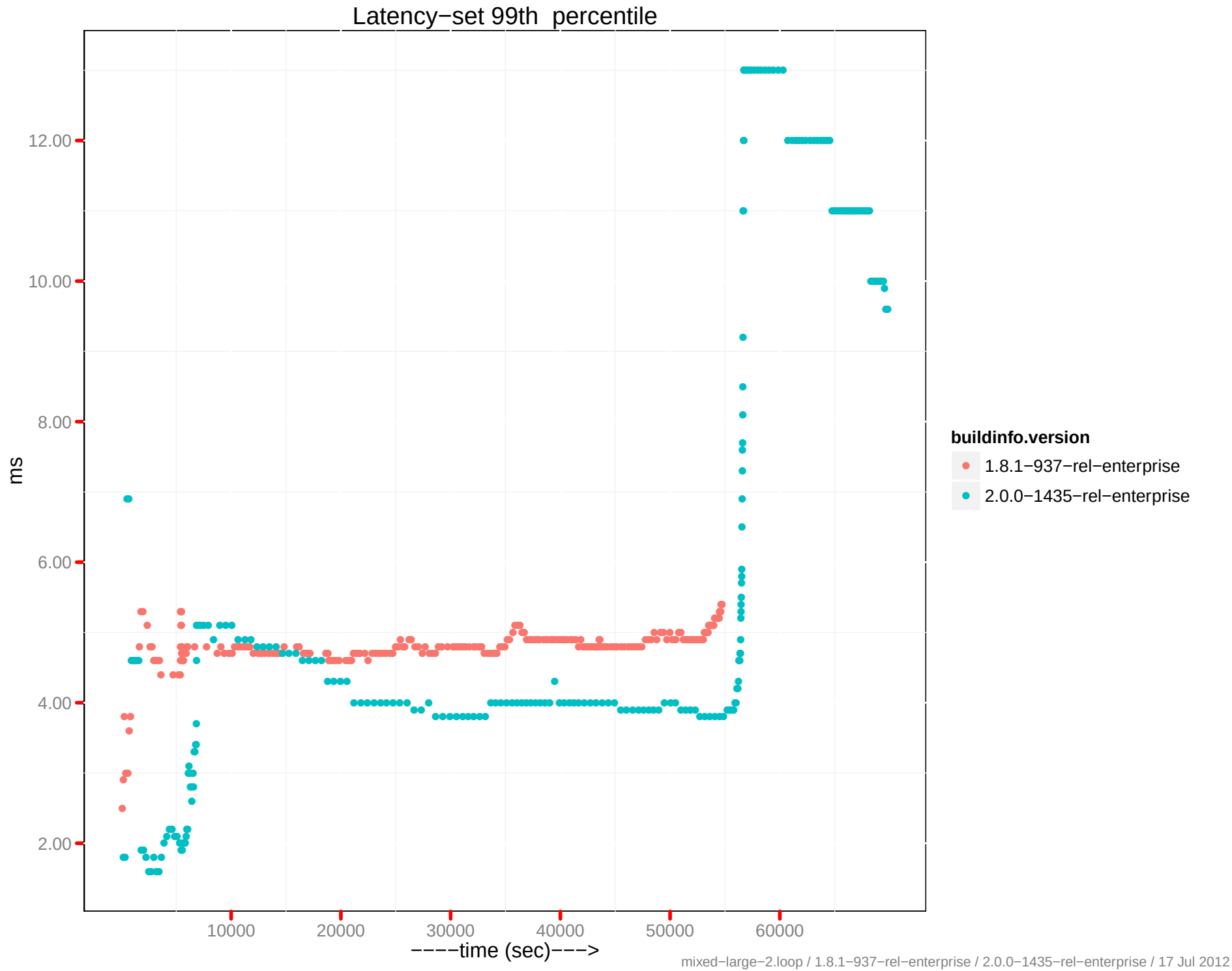

Latency−get 99th percentile (0 − 10ms)
ms
10.00
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

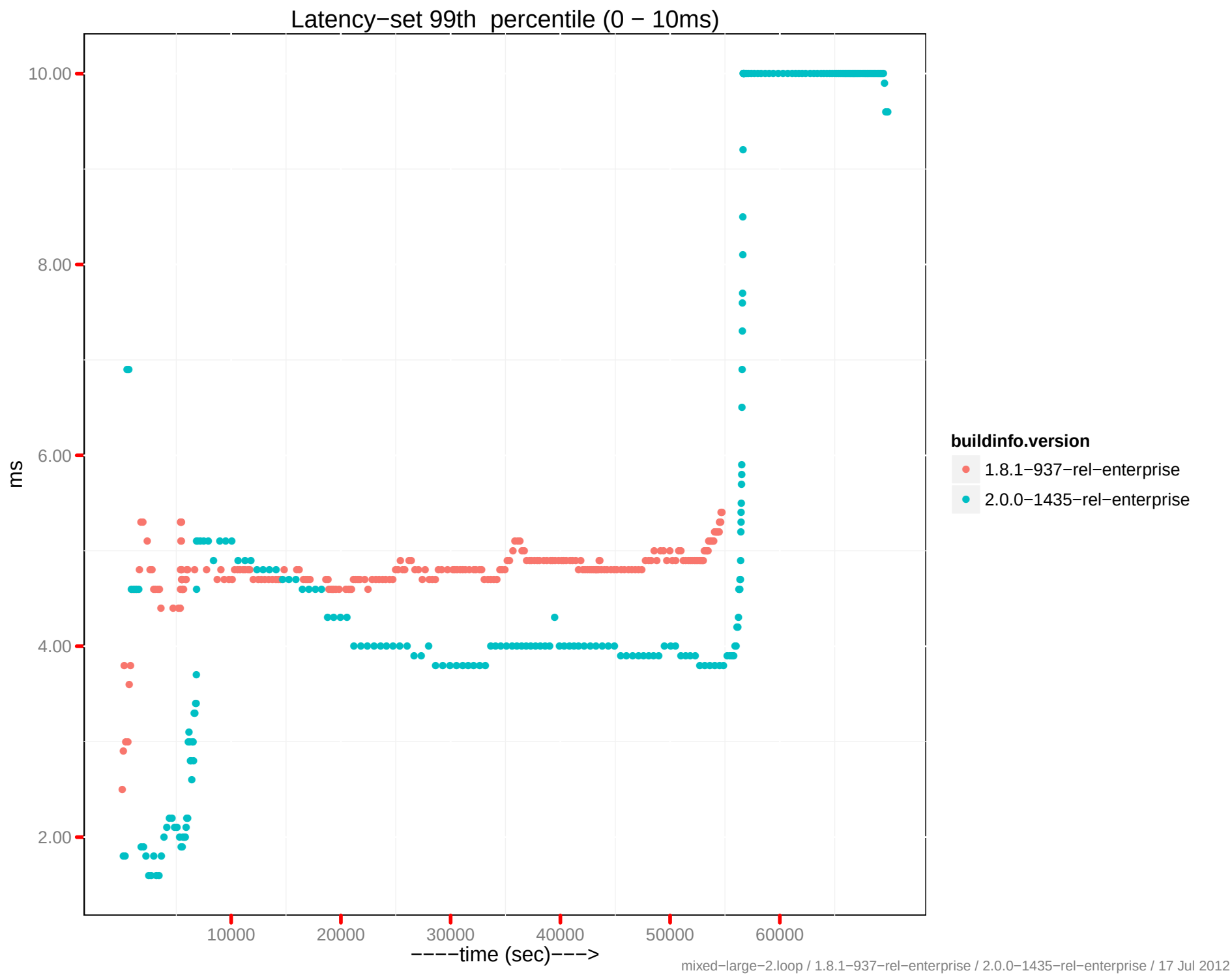

Latency−set 90th percentile
819.20NA
716.80NA
614.40NA
512.00NA
409.60NA
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

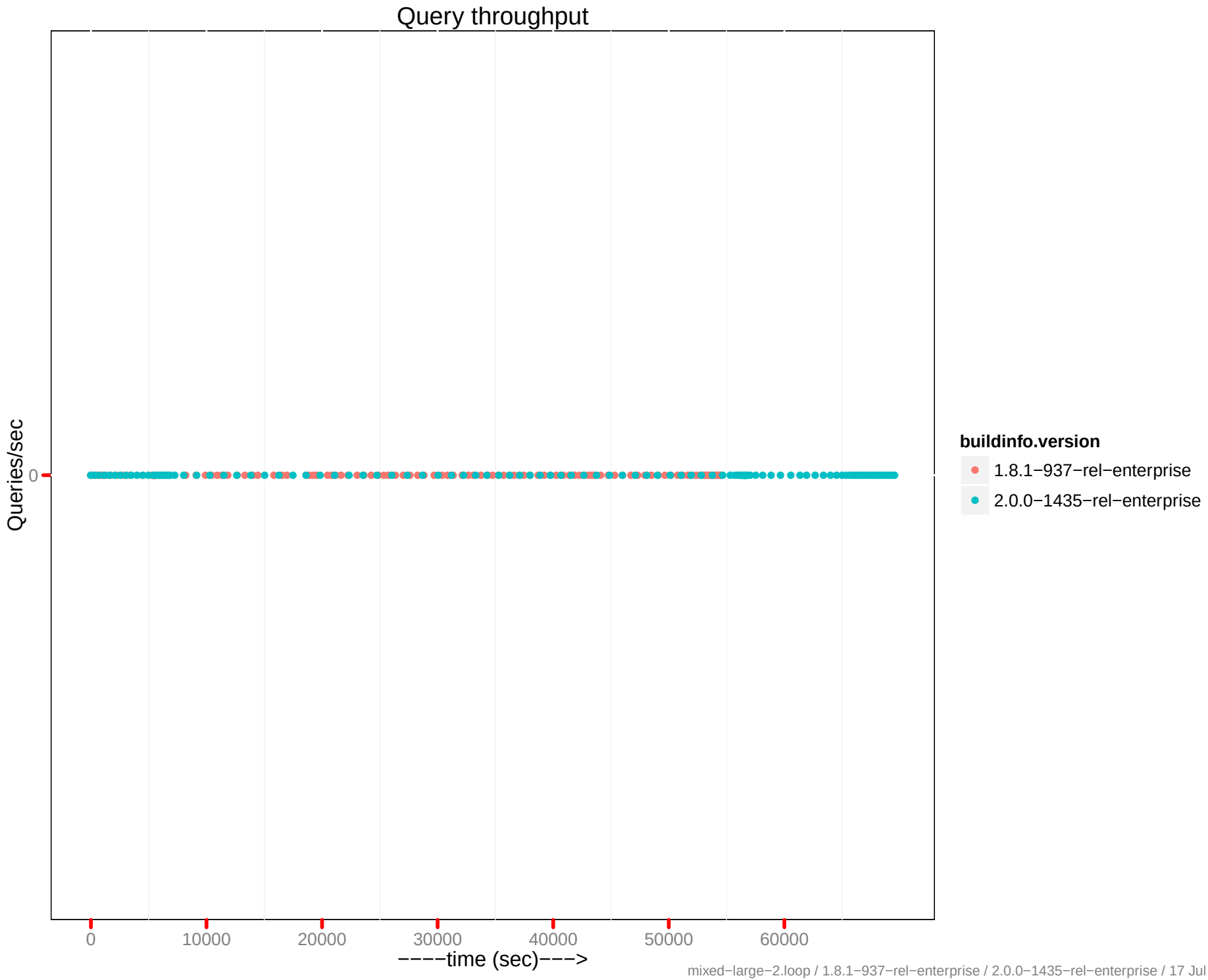

Latency−set 90th percentile (0 − 10ms)
819.20NA
716.80NA
614.40NA
512.00NA
409.60NA
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Latency−set 95th percentile
2.00NA
1.50
1.00
512.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Latency−set 95th percentile (0 − 10ms)
2.00NA
1.50
1.00
512.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Latency−set 99th percentile
ms
12.00
10.00
8.00
6.00
4.00
2.00
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Latency−set 99th percentile (0 − 10ms)
10.00
8.00
6.00
4.00
2.00
ms
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012


Query throughput
Queries/sec
0
0
10000
20000
30000
40000
50000
60000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−937−rel−enterprise
2.0.0−1435−rel−enterprise
mixed−large−2.loop / 1.8.1−937−rel−enterprise / 2.0.0−1435−rel−enterprise / 17 Jul 2012

```
mixed-large-2.conf
# mixed suv 100M load, 2M hot reload, 1M access creates
# speed limit = 1k per client
# num clients = 30
# DGM
#
performance.eperf.EPerfClient.test_eperf_mixed

params:

# general
batch=50
kind=nonjson
mem_quota=20000
spec=mixed-large-2

# load phase
hot_init_items=2000000
items=100000000

# access phase
# Read:Insert:Update:Delete Ratio = 50:4:40:6.
ratio_sets=0.5
ratio_misses=0.05
ratio_creates=0.08
ratio_deletes=0.13
ratio_hot=0.05
ratio_hot_gets=0.99
ratio_hot_sets=0.99
ratio_expirations=0.03
max_creates=3000000

# control (defaults: pytests/performance/perf_defaults.py)
load_wait_until_drained=1
loop_wait_until_drained=0
mcsoda_heartbeat=3
mcsoda_max_ops_sec=1000
tear_down=1
tear_down_proxy=1
tear_down_bucket=0
tear_down_cluster=1
tear_down_on_setup=0
```

```
tahoe-dedicated.ini
[global]
username:root
password:couchbase
port:8091
data_path:/data

[servers]
1:192.168.0.20
2:192.168.0.21
3:192.168.0.22
4:192.168.0.23

[clients]
1:192.168.0.24
2:192.168.0.25
3:192.168.0.26
4:192.168.0.27
5:192.168.0.28
6:192.168.0.29

[membase]
rest_username:Administrator
rest_password:password

[dashboard]
1:dashboard.hq.couchbase.com:80
```