Issue #14743:

logit scale ignores limits when no data is plotted(original) logitlocator misses tick at edge of axis(follow-up)

Description:

Original issue:

The original issue is that logit scale ignores limits when no data is plotted, however we found that this is issue can be generalized for other situations where data is plotted, and limit of y is defined. According to the issue post, the issue has already been fixed by Pull Request #14928; however, our testing shows that the issue is still present.

Follow-up issue:

Based on the issue post, there is a follow-up issue where no tick exists at the upper bound of the limit of y.

Related issue:

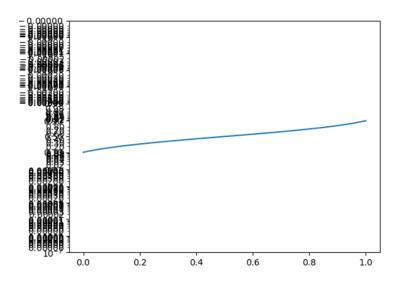
Another related issue is that there are too many ticks on the y axis causing the graph to be cluttered and unreadable. This issue was supposed to be fixed by Pull Request #14512, but our testing shows otherwise.

Reproduction Steps:

- 1. If you haven't already, follow the instructions in the Deliverable 2 README
- 2. cd to directory dir
- 3. Checkout and build branch master by running
 - a. cd matplotlib
 - b. git checkout master
 - c. python setup.py build
 - d. cd..
- 4. Download file 'Issue_14743.py' to 'dir'
- 5. Run file 'Issue_14743.py'
 - a. python Issue_14743.py

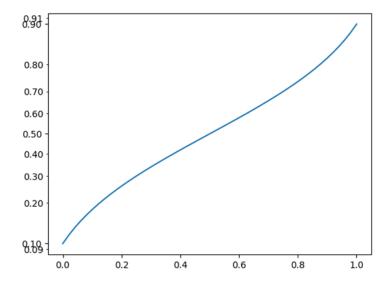
Results:

Buggy:



As shown above, there are too many ticks, and the specified limit for y is ignored.

Expected:



There is reduced number of ticks and the set limit of y is respected.