

## Issue #15225

Bug: Show offset text on subplots after sharing axis

<https://github.com/matplotlib/matplotlib/issues/15225>

**Description:** There is a bug in which the x-axis is not being labelled properly whenever you are sharing the x-axis. This bug happens when you try to have the x-axis labelled on a graph in which it doesn't have a graph directly under it on the last row. The graph will have the xticks shown but would not be labelled correctly. This only happens when the x-axis is big enough in which it shows the 1e#.

### Reproduction Steps:

1. Install matplotlib packages
  - a. `python -m pip install -U pip`
  - b. `python -m pip install -U matplotlib`
  - c. `pip install numpy`

2. Create a python file

3. Paste the following code into the file:

```
import numpy as np
import matplotlib.pyplot as plt

# Create 4 subplots
fig, axg = plt.subplots(2, 2, sharex=True, sharey=False,
                        figsize=(12, 8))

x = 100000 * np.arange(1000)
y = x/100000

num_plots = 3

# Show the xticks on the top right subplot
axg.flat[1].xaxis.set_tick_params(labelbottom=True)
for i in range(num_plots):
    axg.flat[i].plot(x, y, color=None)

plt.tight_layout()

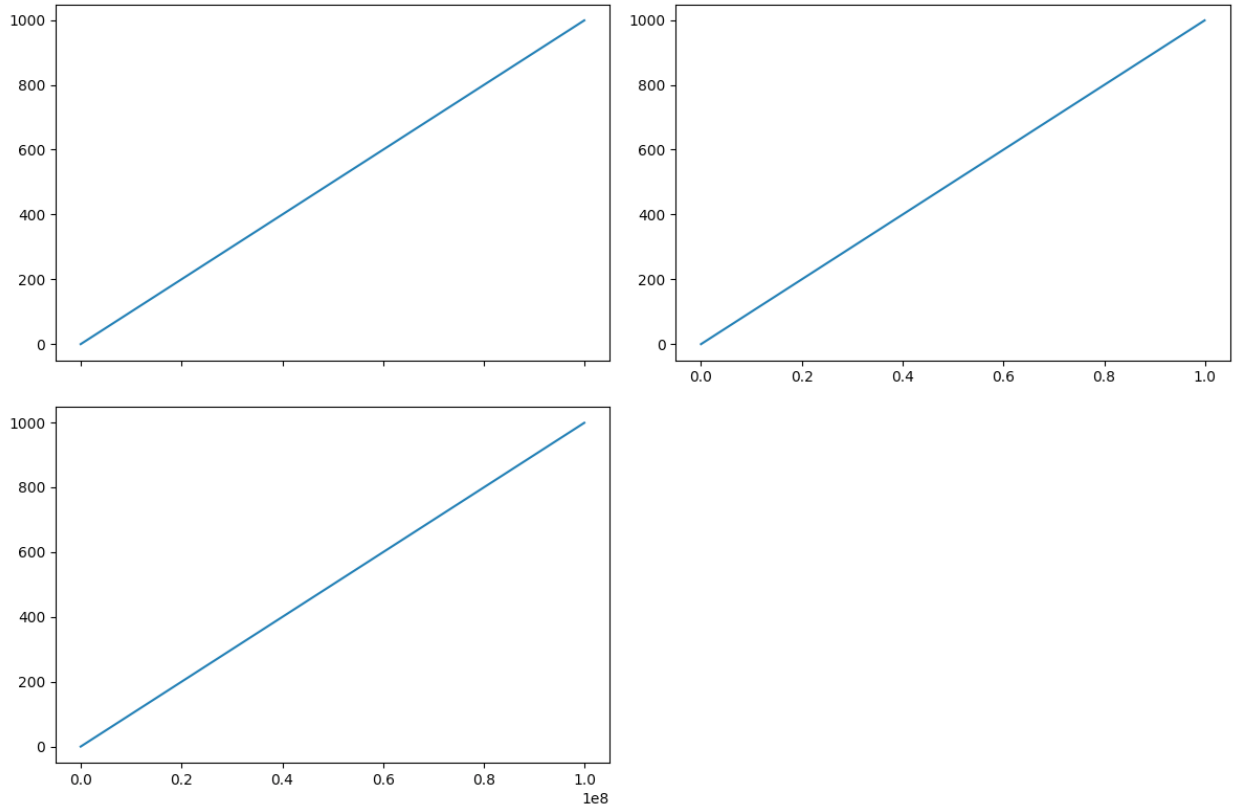
# Make the bottom right subplot not visible
for aa in axg.flat[3:]:
    aa.set_visible(False)

plt.show()
```

4. In terminal run the python file

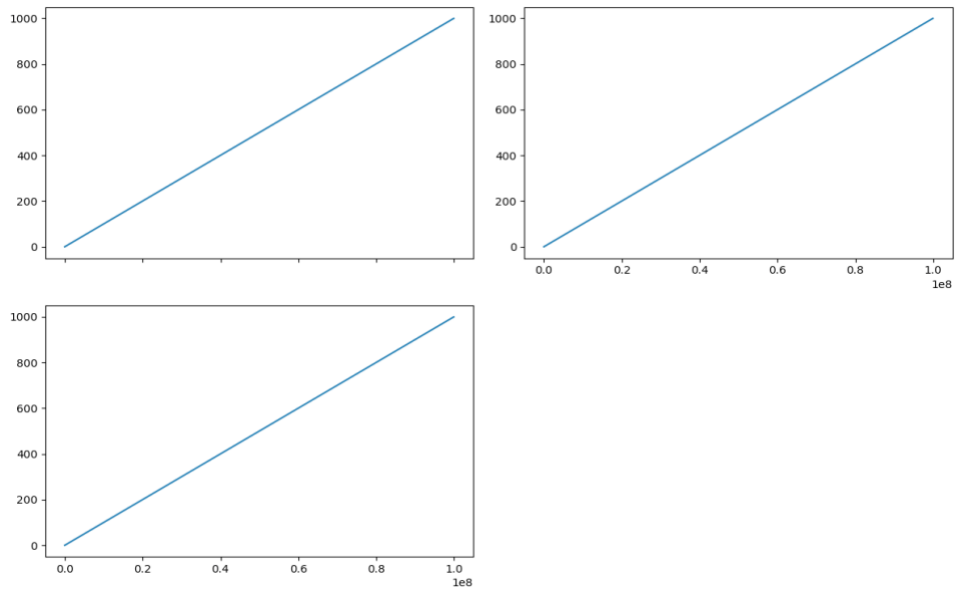
### Actual Result:

The x-axis for the top right graph is not labelled properly (missing 1e8)



### Expected Result:

The top right graph x-axis is labeled properly (showing the 1e8)



**If the x-axis is small the xticks are labelled properly because there is no need to put 1e# as shown below:**

