How to set number of ticks in plt.colorbar?
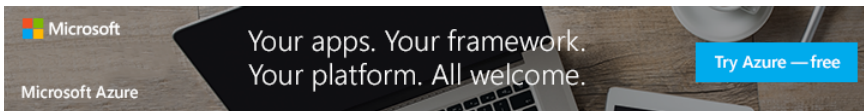
When I plot a matrix with a colorbar, then the colorbar has 10 ticks. Since the colorbar has to be pretty small, the ticklabels overlap. Therefore I want to reduce the number of ticks from 10 to 5. I do not want to reduce the font size!

Is there an easy way to do this? I do not want to set the ticks manually...

python   matplotlib   colorbar

	edited Jun 18 '14 at 15:26	asked Feb 25 '14 at 10:58
	Sam	FrankTheTank
	4,922 7 27 58	**149** 1 3 12

1 Answer

The MaxNLocator ticker might suit your purposes?

> class **matplotlib.ticker.MaxNLocator**
>
> Select no more than N intervals at nice locations

For example:

```
from matplotlib import ticker

# (generate plot here)
cb = plt.colorbar()
tick_locator = ticker.MaxNLocator(nbins=5)
cb.locator = tick_locator
cb.update_ticks()
plt.show()
```

	answered Feb 25 '14 at 11:34
	Bonlenfum
	6,580 1 21 31

Thank you very much! This was the correct (and very easy) solution! – FrankTheTank Feb 25 '14 at 12:27

2   At the moment there is no tick at the upper end of the colorbar. but at the lower end. This looks very asymmetric and ugly to me. Is there a solution for that? – FrankTheTank Feb 28 '14 at 9:27

1   Ok.... just put cb.ax.yaxis.set_major_locator(matplotlib.ticker.AutoLocator()) before c.b.update_icks() – FrankTheTank Feb 28 '14 at 9:41

Thanks @FrankTheTank for the addition. For other people copy and pasting that addition, there's a hidden character which causes a `SyntaxError: invalid syntax` on the brackets. Just delete and retype the brackets (and thus deleting also the hidden character) and it'll work fine. – mjp Jan 17 at 15:25