
Subject: Sky is falling, maybe?

Posted by [Lasse Clausen](#) on Thu, 08 Oct 2009 18:40:11 GMT

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I find the following odd but maybe the sky is just falling and one of you guys can explain why this happens. Try running

```
power = randomu(1001, 150)
power[77+lindgen(10)*3] = 1e+7
help, where(~finite(power))
plot, power, yrange=[.1, 10]
loadct, 12
oplot, smooth(power, 12, /nan), thick=3, color=20
oplot, smooth(power, 12), thick=3, color=120
end
```

On my machine

```
IDL> print, !version
{ x86_64 linux unix linux 7.0 Oct 25 2007    64    64}
```

I see a distinct difference in the SMOOTH output after the very uppy-downy bit of the data. It seems the documentation should be changed from

SMOOTH should never be called without the NAN keyword if the input array may possibly contain NaN values.

to

SMOOTH should never be called without the NAN. Period.

Again, maybe I'm missing something but the SMOOTH function seems like a pretty straight forward piece of code - without ever having seen it, of course - that leaves very little room for error. But by the same token we all know that "Every program has at least one bug and can be shortened by at least one instruction - from which, by induction - it can be shown that every program can be reduced to one instruction that doesn't work".

So long
Lasse
