Subject: Re: Double precision
Posted by plim.dreaming on Thu, 19 Mar 2009 19:02:30 GMT
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Thank you for all the useful comments.
My problem, you'll be excited to know, persists.

Allow me say more:

Firstly say what is not the problem:
the problem in not in comparing the numbers. I run one program which reads in the file and does some stuff to the numbers and then outputs to another file the selected array. Only after do I read in the selected array and perform separation comparisons. The problem already exists though in the output, since the numbers are truncated or rounded off there.

And I really look at how I input the numbers and it seems fine. I read them in as double and then I print the numbers with 2f12.7 for example and they are still fully there, not truncated.

I think the problem is in the printing to the output file.

I have x,y and they are numbers such as 100.912498
then I do a=strcompress(x)
openw,1,'fds'
printf,1,a

so, i am confused because:

print,x(83220),format='(2f12.7)'
100.9126890 which is the full value, the one i want to be printed to the output
but
a = string(x(83220))
print,a
100.91269 and here it is a string so it doesn't help to do format='....'

And finally, you guys may be seeing it clearly and trying to explain this to me so thanks for the patience.
P

On Mar 19, 5:55 am, "Jean H." <jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:
> plim.dream...@gmail.com wrote:
>> Later in the program I calculate the separation between points (x1,y1)
>> (x2,y2)

>> And for some of those points the program says that the pairs are the
>> same. But they are only the same if they are rounded off, the
>> difference often only shows up in the last 2 decimal places.
>> ya, i read that link, most of it at least.
>> One other thing is: lets say the print out is the issue; a case like
>> you pointed out above, then why is it that if I do:
>> b=string(num)
>> print,b will give me the rounded off number?
>
> as David pointed it out, be careful on how you compare your numbers...
> a = 0.12345678901234 56d
> b = 0.12345678901234 56d
> print, a eq b
> 1
>
> b = 0.12345678901234 56d + 0.1 - 0.1
> print, a eq b
> 0
>
> Also, I suggest you to print your number value a few times (after
> reading, after allocating to pixmag, before comparing it), with the
> proper format ...
> IDL> c = 100.489418d
> IDL> print, c
> 100.48942
> IDL> print, c, format = '(F15.10)'
> 100.4894180000
>
> Jean
