Subject: Re: How to locate a "NaN"?
Posted by lasse on Tue, 09 Oct 2007 08:26:46 GMT
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On 9 Oct, 07:12, mystea <idllear...@gmail.com> wrote:
> Hello All,
>
> I have a array of length 100. A significant portion of them is
> recorded as NaN. Now I want to figure out what is the largest index of
> the element that contains a valid number, then assign its value to
> these NaN entries.
>
> I thought it would be easy and tried:
>
> IDL> k=max(where(myarray[*] ne !VALUES.D_NAN))
>
> but it does not work! k equals to 99 in this case. what's really
> strange is the following:
>
> IDL> help, myarray[50]
> <Expression> DOUBLE = NaN
>
> IDL>print, (myarray[50] eq !VALUES.D_NAN)
> 0
> (so I think this means myarray[50] is double, is NAN, yet is not !
> VALUES.D_NAN)
>
> In short, the problem is, how to locate array elements whose values
> are NaN?

It might be worth noting here that *nothing* is equal to NaNs. Even

!values.f_nan eq !values.f_nan and
!values.d_nan eq !values.d_nan

returns false (at least on my machine, there might be differences between different platforms, although there shouldn't). This result is obvious, really, because if it is a NaN (=Not A Number), how can it be equal to anything?

And fanxing is right, only the finite() function will tell you where NaNs are.

Cheers
Lasse