Subject: Re: NaN problems
Posted by David Fanning on Thu, 21 Apr 2005 13:42:40 GMT
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David Lopez Pons writes:

> I have a problem detecting NaN values. When I write:
>
> err=findgen(10)-5
> res=err^2.5
> print,res
>
>   NaN   NaN   NaN   NaN   NaN
> 0.00000   1.00000   5.65685   15.5885   32.0000
>
> Until here everything is OK, but now i want to look for Nan values in my
> result so I write:
>
> print,where(res EQ !values.f_nan)
>   -1
>
> I can see the NaN values in res. Why they are not equal to !values.f_nan?

Because, uh, NANs are *not* numbers:

  http://www.dfanning.com/math_tips/nans.html

Cheers,

David
--
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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: NaN problems
Posted by Vince Hradil on Thu, 21 Apr 2005 13:43:57 GMT
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use the finite() function

Subject: Re: NaN problems
Posted by Y.T. on Sat, 23 Apr 2005 02:43:44 GMT
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> http://www.dfanning.com/math_tips/nans.html

Pretty cool page.

;)

I don't have access to IDL on a win-box, but I have a (potentially stupid) question: On that page of yours where you write

```
IDL> print, array ne array
     0   0   0   0   0
```

have you tried the converse, i.e.

```
IDL> print, array eq array
```

?

I am asking since, while it is true that a NaN is not equal to a NaN it does not seem to follow (to my wrinkled brain) that a NaN is necessarily UNequal to a NaN.

In your version you test for the latter, and I'm kinda curious what would happen if you tried the former...

cordially

Y.T.

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Remove YourClothes before you email me.