Subject: Re: Comparison operators and floating-point errors
Posted by Craig Markwardt on Mon, 19 Apr 2010 20:36:40 GMT
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On Apr 19, 3:18 pm, pp <pp.pente...@gmail.com> wrote:
> On Apr 19, 3:31 pm, Ed Hyer <ejh...@gmail.com> wrote:
>
>
>
>> IDL> nan=1/0.0
>> % Program caused arithmetic error: Floating divide by 0
>> IDL> print, -0.1 > nan
>> Inf
>> IDL> print, -0.1 < nan
>> -0.100000
>> IDL> print, 1 gt nan
>> 0
>> IDL> print, 1 lt nan
>> 1
>
>> I thought the rule was "Any calculation involving a NaN will produce
>> NaN."
>> Has it been this way since the dawn of time? I'm sure it has.
>
>> I have found a few uses for NaN in IDL over the years, and now I have
>> to come up with new ones.
>
>> For instance (the one that led me to track this down), I use NaN to
>> exclude areas from contour plots. There are other ways, but none quite
>> as simple and flexible.
>
> This all looks right to me, for one thing because there are no NaNs
> around. The variable you called nan is infinity, no NaN.

Right. Try setting NAN=0.0/0.0 or NAN=!values.f_nan.

Craig