Subject: Re: where and NAN numbers
Posted by Mark Hadfield on Wed, 12 Jan 2005 23:16:46 GMT
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maarten wrote:
> What version are you using, because in 6.1.1. the results are:
> IDL> u = [!values.f_nan, 1, 2, 3]
> IDL> print, where(u eq 3)
> 3
> IDL> print, where(u ge 3)
> 3

The result of a comparison operation between a NaN and an "ordinary" number will depend on the platform. (At least I vaguely recall some dicussion of this somewhere, perhaps this group or perhaps another one.) It is not wise to rely on getting logically consistent results. For example on IDL 6.1.1 (win32), NaN is not equal to 0 (according to the EQ and NE operators) but it is neither larger or smaller than 0 (according to the LT and GT operators). So, as another poster has suggested, it is good practice to use the FINITE function to establish whether a floating point number is finite; if it's not the results from comparison operations will likely be misleading.

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