Subject: Re: NULL value in IDL ?
Posted by David Fanning on Tue, 01 Feb 2005 19:30:34 GMT

Jerome Colin writes:

> Is there in IDL a way to give a variable the value NULL, meaning 'no data' ?
> My problem is that I use REBIN() to reduce an image, but some parts of
> this image do not contain information, even is the value is zero. These
>   zero-value pixels are hence taken into account in the REBIN()
> calculation, and that's what I would like to avoid.

REBIN seems to work OK with NANs:

```
a = findgen(5, 5)
a[1,1] = !Values.F_NAN
b = Rebin(a, 10, 10)
print, b
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: NULL value in IDL ?
Posted by Jerome Colin on Wed, 02 Feb 2005 08:28:01 GMT

David Fanning wrote:
> Jerome Colin writes:
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>   b = Rebin(a, 10, 10)
>   print, b
>

> Cheers,
>
> David
>
Ok, now I replace values of the array with !values.f_NaN, it work properly.
But at the end, I use a WRITE_BMP() to have a look at the result. NaN
values cause a failure, so I tried to replace NaN values with 0. Has the
array dimensions have changed, I cannot use the index array I previoulsy
used :

search=WHERE(data le 0.) & data(search)=!values.f_NaN

And if I use :

search=WHERE(newdata eq !values.f_nan)

it returns -1.

What kind of operator can be used to identify NaN cells in my array ?

Many thanks, David !

Jerome

Subject: Re: NULL value in IDL ?
Posted by Jerome Colin on Wed, 02 Feb 2005 08:58:05 GMT
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Jerome Colin wrote:
> David Fanning wrote:
>
>> Jerome Colin writes:
>>
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>>> data' ?
>>> My problem is that I use REBIN() to reduce an image, but some parts
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>>> These zero-value pixels are hence taken into account in the REBIN()
>>> calculation, and that's what I would like to avoid.
>>
>>
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>>   a[1,1] = !Values.F_NAN
>>   b = Rebin(a, 10, 10)
>>   print, b

>>
>> Cheers,
>>
>> David
>>
> Ok, now I replace values of the array with !values.f_NaN, it work properly.
> But at the end, I use a WRITE_BMP() to have a look at the result. NaN
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>
> And if I use :
>
> search=WHERE(newdata eq !values.f_nan)
>
> it returns -1.
>
> What kind of operator can be used to identify NaN cells in my array ?
>
> Many thanks, David !
>
> Jerome
Oups... Forget my question, I've found your answer on your web site, in
math tips 'finding NaN in arrays'.
Thank you for your help.
Jerome

Subject: Re: NULL value in IDL ?
Posted by K. Bowman on Wed, 02 Feb 2005 15:03:43 GMT
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In article <ctq3og$76u$2@news.u-strasbg.fr>,
 Jerome Colin <jcolin@ulp.u-strasbg.fr> wrote:

> search=WHERE(data le 0.) & data(search)=!values.f_NaN
>
> And if I use :
>
> search=WHERE(newdata eq !values.f_nan)
>
> it returns -1.
>
> What kind of operator can be used to identify NaN cells in my array ?

You need to use

```
i = WHERE(~FINITE(newdata), count)
IF (count GT 0) THEN newdata[i] = 0
```

Cheers, Ken Bowman