
Subject: Re: MISSING_VALUE

Posted by [David Fanning](#) on Tue, 29 Mar 2005 15:05:39 GMT

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Matthias Demuzere writes:

```
> I'm reading an ascii file with the following command:
> res = read_ascii(input+fnam+'.txt', delimiter=' ', MISSING_VALUE=99999)
>
> When I print "res", he's also printing 99999, but I want that value to be
> reproduced as NaN.
> Can anyone help me with this little problem?
```

How about:

```
res = read_ascii(input+fnam+'.txt', delimiter=' ', $
MISSING_VALUE=!VALUES.F_NAN)
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: MISSING_VALUE

Posted by [Matthias Demuzere](#) on Tue, 29 Mar 2005 15:24:10 GMT

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Thanks, but I still have a problem now...

"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.1cb31cad9915836098999e@news.frii.com...

```
> Matthias Demuzere writes:
>
>> I'm reading an ascii file with the following command:
>> res = read_ascii(input+fnam+'.txt', delimiter=' ', MISSING_VALUE=99999)
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>> reproduced as NaN.
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>
> How about:
>
> res = read_ascii(input+fnam+'.txt', delimiter=' ', $
```

> MISSING_VALUE=!VALUES.F_NAN)

At a certain point i the proces, he's giving me the values 'NaN' where there are no values, so this is OK. But when i'm trying to plot the data, no he's giving a '0' value in my graph, so that isn't correct, there shouldn't be any value at all...
Any helps??

Greetz,
Matthias

> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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Subject: Re: MISSING_VALUE
Posted by [David Fanning](#) on Tue, 29 Mar 2005 15:33:06 GMT
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Matthias Demuzere writes:

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> are no values, so this is OK. But when i'm trying to plot the data, no he's
> giving a '0' value in my graph, so that isn't correct, there shouldn't be
> any value at all...
> Any helps??

Well, that's not what happens *here*. :-)

What kind of machine? What version of IDL? Are you
certain this isn't pilot error?

Cheers,

David

--

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Fanning Software Consulting, Inc.
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Subject: Re: MISSING_VALUE

Posted by [David Fanning](#) on Tue, 29 Mar 2005 15:34:06 GMT

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Matthias Demuzere writes:

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> are no values, so this is OK. But when I'm trying to plot the data, he's
> giving a '0' value in my graph, so that isn't correct, there shouldn't be
> any value at all...
> Any help??

Does this code give you a 0 or a gap?

```
IDL> a=findgen(11)
IDL> a[5] = !values.f_nan
IDL> plot,a
```

Cheers,

David

--

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Subject: Re: MISSING_VALUE

Posted by [Matthias Demuzere](#) on Wed, 30 Mar 2005 07:10:12 GMT

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Hi,

Now the problem has moved. When the dataset is initially read in with
read_ascii, I get the value NaN where it should....

BUT....I declare empty arrays (with zero's) in which I put a part of the
original array. So where there is the value NaN, my new array now shows
0....Any solutions?

Hope I made myself clear!

Greetz,

Matthias

"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.1cb3231e1d37767198999f@news.frii.com...

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>
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>> any value at all...
>> Any helps??
>
> Well, that's not what happens *here*. :-)
>
> What kind of machine? What version of IDL? Are you
> *certain* this isn't a plot error?
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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Subject: Re: MISSING_VALUE
Posted by [Benjamin Luethi](#) on Wed, 30 Mar 2005 07:26:46 GMT
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Hi,

Maybe you're copying floats into an integer array? (there is no NaN for integers) But then you would see a warning like:

% Program caused arithmetic error: Floating illegal operand

Ben

On Wed, 30 Mar 2005 09:10:12 +0200, Matthias Demuzere
<Matthias.demuzere@geo.kuleuven.ac.be> wrote:

> Hi,
>
> Now the problem has moved. When the dataset is initially read in with
> read_ascii, I get the value NaN where it should....
>
> BUT....I declare empty arrays (with zero's) in which I put a part of the
> original array. So where there is the value NaN, my new array now shows

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>
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>
>

--

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Subject: Re: MISSING_VALUE
Posted by [David Fanning](#) on Wed, 30 Mar 2005 13:52:58 GMT
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Matthias Demuzere writes:

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> read_ascii, I get the value NaN where it should....
>
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> original array. So where there is the value NaN, my new array now shows
> 0....Any solutions?
> Hope I made myself clear!

In general, setting missing values to NaN should probably be done in the last stage of data preparation, if possible, since it is typically MUCH easier to work with numbers than with, well, not numbers. I would probably set the missing values from READ_ASCII to something easily recognizable as not a valid value (e.g. -99999.9) and do all your array manipulation with these numbers. Then, at the end, find all the -99999.9s and turn them into NaNs.

The only other solution you have is to find the NaNs in your original array and set the corresponding values in your new array to NaN. But that is harder to do:

http://www.dfanning.com/tips.check_nan.html

Cheers,

David

--

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

Subject: Re: MISSING_VALUE
Posted by edward.s.meinel@aero on Thu, 31 Mar 2005 14:27:56 GMT
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Create the "empty" array and fill it with NaN's.

Ed

P.S. David forgot his P.S.
;-)

Matthias Demuzere wrote:

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>
> Now the problem has moved. When the dataset is initially read in with

> read_ascii, I get the value NaN where it should....
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