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=' '. MISS
- > 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...

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

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

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: MISSING\_VALUE

Posted by David Fanning on Tue, 29 Mar 2005 15:34:06 GMT

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#### Matthias Demuzere writes:

- > 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??

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

--

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 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...

> Matthias Demuzere writes:

```
>
>> 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
>> 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
> David Fanning, Ph.D.
```

Subject: Re: MISSING\_VALUE
Posted by Benjamin Luethi on Wed, 30 Mar 2005 07:26:46 GMT
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> Coyote's Guide to IDL Programming: http://www.dfanning.com/

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

> Fanning Software Consulting, Inc.

Ben

On Wed, 30 Mar 2005 09:10:12 +0200, Matthias Demuzere <a href="Matthias.demuzere@geo.kuleuven.ac.be">Matthias.demuzere@geo.kuleuven.ac.be</a> 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....

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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!
> Greetz.
> Matthias
 "David Fanning" <davidf@dfanning.com> wrote in message
> news:MPG.1cb3231e1d37767198999f@news.frii.com...
>> Matthias Demuzere writes:
>>
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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 pilot error?
>>
>> Cheers,
>>
>> David
>> --
>> David Fanning, Ph.D.
>> Fanning Software Consulting, Inc.
>> Coyote's Guide to IDL Programming: http://www.dfanning.com/
>
```

Using Opera's revolutionary e-mail client: http://www.opera.com/m2/

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....
- >
- > 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!

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 View Forum Message <> Reply to Message

Create the "empty" array and fill it with NaN's.

Ed

P.S. David forgot his P.S.

;-)

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