
Subject: Output file with string blanks and float
Posted by [Miguel](#) on Sun, 03 May 2015 08:26:37 GMT
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Hi,

I'm trying to create an output file with these specific conditions :

- 1) If the result is negative, the corresponding output is a blank
- 2) If the result is ok, the output is a number with a specific number of decimal

For example, I have this initial output

```
-1      2.312  54.124
547.5460 -1.0  65.321
```

And I want

```
      2.31  54.12
547.55      65.32
```

For the blank, I convert each line into a string array and I put "String(Replicate(32B, 8))" to create a blank with specific width.

However, if I convert into a string array, I cannot use the format F[w].[d] to specify the number of decimal.

I thought I could use STRNSIGNIF but the number of decimal won't be the same for each numbers.

Do you have an idea to have the output file with these two conditions ?
Is this possible to create a blank in float and not in string format ?

Thanks

Miguel

Subject: Re: Output file with string blanks and float
Posted by [Miguel](#) on Sun, 03 May 2015 09:07:07 GMT
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Ok, I just found a way :

```
x=21.4567
print,strnsignif( x,strlen(strcompress(fix(x)))-1+2 )
```

gives : x=21.46

If you have a better way, please tell me.
Moreover, I still want to know if a blank array is possible in float format

Thanks
Miguel

Subject: Re: Output file with string blanks and float
Posted by [David Fanning](#) on Sun, 03 May 2015 12:35:44 GMT
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miguelfigueirasebastiao@gmail.com writes:

- > I'm trying to create an output file with these specific conditions :
- >
- > 1) If the result is negative, the corresponding output is a blank
- > 2) If the result is ok, the output is a number with a specific number of decimal

Humm. Good way to make yourself the most hated person on the planet when someone else has to read this data file. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Output file with string blanks and float
Posted by [Miguel](#) on Sun, 03 May 2015 15:14:11 GMT
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- > Humm. Good way to make yourself the most hated person on the planet when
- > someone else has to read this data file. :-)
- >

Well, if I put a blank, it is because the result just doesn't exist.

Finally, I'm still with my problem because "strnsignif(x,strlen(strcompress(fix(x)))-1+2)" does not work when the integer part of the number is 0

Miguel

Subject: Re: Output file with string blanks and float
Posted by [Matthew Argall](#) on Sun, 03 May 2015 20:44:09 GMT
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>> Humm. Good way to make yourself the most hated person on the planet when
>> someone else has to read this data file. :-)
>>
>
> Well, if I put a blank, it is because the result just doesn't exist.

It is much much better to define a fill value (e.g. -999.99) for your data, and specify what that value is in the header of the file.

Subject: Re: Output file with string blanks and float
Posted by [Miguel](#) on Mon, 04 May 2015 09:51:01 GMT
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> It is much much better to define a fill value (e.g. -999.99) for your data, and specify what that value is in the header of the file.

If I had to use my output file as a input file, I completely agree with you (and the output with fill value of -1 is already made).

Miguel

Subject: Re: Output file with string blanks and float
Posted by [Matthew Argall](#) on Mon, 04 May 2015 13:47:50 GMT
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Instead of writing a space, simply advance the file pointer to the right.

Take this example

```
;A line of data  
data = [1.0, -1.0, 6.0]
```

```
;Search for and remove negative numbers  
ipos = where(data ge 0, npos, COMPLEMENT=ineg, NCOMPLEMENT=nneg)  
data = data[ipos]
```

```
;Create a format code with floats for positive numbers and spaces for negative numbers  
fmt = strarr(npos + nneg)  
if npos gt 0 then fmt[ipos] = 'f8.2'  
if nneg gt 0 then fmt[ineg] = '8x'  
fmt = '(' + strjoin(fmt, ',') + ')'
```

;Results

help, string(data, FORMAT=fmt)

<Expression> STRING = ' 1.00 6.00'

Subject: Re: Output file with string blanks and float

Posted by [Miguel](#) on Mon, 04 May 2015 16:01:38 GMT

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> Instead of writing a space, simply advance the file pointer to the right.

Thanks, I will try that ;)

Miguel
