

---

Subject: Re: help with cgDrawVectors in write\_gif procedure  
Posted by [David Fanning](#) on Wed, 03 Jun 2015 16:33:16 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Helder writes:

```
>
> On Wednesday, June 3, 2015 at 5:39:15 PM UTC+2, g.na...@gmail.com wrote:
>>> "OPENW: Filename argument must be a scalar string: FILE."
>>> you should check if your variable file is a string or a scalar.
>>
>> I used
>> help, file
>> to check whether is a string or a scalar and I got the following
>>
>> FILE      UNDEFINED = <Undefined>
>> OPENW: Filename argument must be a scalar string: FILE.
>>
>> I will share my code because maybe I did a mistake somewhere else and I am not able to find
it. I have the following procedure. (Image,VX,VY are 3D arrays.)
>>
>>
>> PRO vectors_overlaid, Image, VX, VY, name
>>
>> dims_i_need = Size(Dindgen(20,20), /Dimensions)
>>
>> pos_x = Rebin(Findgen(dims_i_need[0]), dims_i_need[0], dims_i_need[1])
>> pos_y = Rebin(Reform(Findgen(dims_i_need[1]), 1, dims_i_need[1]), dims_i_need[0],
dims_i_need[1])
>>
>> for i=0L, n-1 do begin
>>   cgDisplay, 500, 550
>>   Image = BYTSCL(Image, min=0.,max=160.)
>>   cgimage,Reform(Image[i,*,*])
>>   cgDrawVectors, REFORM(VX[i,*,*]), REFORM(VY[i,*,*]), pos_x,
pos_y,VECCOLORS='yellow', /ORDERED, overplot = 1
>>   write_gif,file, Reform(Image[i,*,*]), /multiple
>> endfor
>>
>> write_gif, file, /close
>> END
>>
>> Then I called the vectors_overlaid in my main program like this
>>
>> vectors_overlaid, Image, VX,VY, 'C:\Users\Desktop\Vectors('+string(i,format='(i3.3)')+','+st
ring(level)+'','+strtrim(iter)+'').gif'
>>
>> Why the file is undefined?
```

>  
 > Ok, this is something you should be able to solve by looking at what the error messages tell you and what the help, file told you (file is undefined!).  
 >  
 > In your procedure declaration you use:  
 > PRO vectors\_overlaid, Image, VX, VY, name  
 >  
 > These variable names have to be used in the procedure. This means that when you call:  
 > vectors\_overlaid, Image, VX, VY, 'C:\Users\Desktop\Vectors('+string(i,format='(i3.3)')+','+string(level)+','+strtrim(iter)+')'.gif'  
 >  
 > the variable "name" assumes the value  
 'C:\Users\Desktop\Vectors('+string(i,format='(i3.3)')+','+string(level)+','+strtrim(iter)+')'.gif'  
 >  
 > so in \*all\* your write\_gif commands you should substitute "file" with "name".  
 >  
 > That should bring you a step further.

It should, but it still feels like an unfathomable long way to the finish line.

Since the images you want to animate already exist in individual files, if you insist on doing this completely in IDL (not my recommendation), you should think about opening each file in succession, reading the image data, and storing that in a new, multiple frame GIF file.

That should be a simple, concise loop to write. The algorithm looks like this:

1. Open a GIF file, set up for multiple images.
2. Start a loop.
  - a. Read the image from one of the image files.
  - b. Store the image in the open GIF file as a "frame"
3. End the loop.
4. Close the open GIF 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.")