
Subject: Re: sigma_filter calling sequence
Posted by [David Fanning](#) on Sat, 04 Dec 2010 22:47:46 GMT
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burton449 writes:

```
> I would like to use the sigma_filter.pro on an image in IDL 7.1.  
>  
> Im a new user and I dont understand how the calling sequence works.  
> The documentation of the filter says that the calling sequence is:  
>  
> Result = sigma_filter( image, box_width, N_sigma=(#), /ALL,/MON )  
>  
> Can someone help me? I try it in IDL command Line without any success.
```

Please send us the syntax of the command you used,
and the error message. Otherwise we have to guess
among about 100 things you could have done wrong.

Good questions get good answers. :-)

Cheers,

David

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

Subject: Re: sigma_filter calling sequence
Posted by [burton449](#) on Sat, 04 Dec 2010 23:55:23 GMT
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On Dec 4, 5:47 pm, David Fanning <n...@dfanning.com> wrote:

```
> burton449 writes:  
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Ok!

the script and the image are in the directory d:\
the image is a .tif

In IDL command line I typed the calling sequence with those
parameters:

```
Result = sigma_filter( image.tif, 5, 2 )
```

I want the box_widht to be of 5 and the N_sigma to be 2.

The error i got is:

```
% Syntax error.  
IDL> Result = sigma_filter( image.tif, 5, 2 )  
% Expression must be a structure in this context: IMAGE.  
% Execution halted at: $MAIN$
```

If try to show the path of the image like d:\\image.tif the error
message is:
% Illegal character in program text.

Thank you for your help,
Max

Subject: Re: sigma_filter calling sequence
Posted by [David Fanning](#) on Sun, 05 Dec 2010 01:04:40 GMT
[View Forum Message](#) <> [Reply to Message](#)

burton449 writes:

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> the script and the image are in the directory d:\
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> In IDL command line I typed the calling sequence with those
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> Result = sigma_filter(image.tif, 5, 2)
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>
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>
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> % Expression must be a structure in this context: IMAGE.
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The "image" in the command has to be the image itself,
not the name of the file containing an image. So, you have
to read the image data out of the image file.

```
IDL> image = Read_Tiff('myimagefile.tif')  
IDL> Help, image
```

Try that and see what happens. :-)

Cheers,

David

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Subject: Re: sigma_filter calling sequence
Posted by [burton449](#) on Sun, 05 Dec 2010 15:41:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Dec 4, 8:04 pm, David Fanning <n...@dfanning.com> wrote:

```
> burton449 writes:
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Thank you David for your help, because I am used with Python, I have the bad habit to try the same calling sequences in IDL. I did what you told me, and script start running but there is a syntax error now. This is what I did in IDL (I put the image and the .pro in the

IDL71\bin\bin.x86\ folder):

```
image = Read_Tiff('myimage.tif')
sigma_filter(image, 5, 2, /ALL, /MON )
```

This is the error message in brief:

%syntax error. ... at line 56

%Attempt to call undefined procedure/function: 'SIGMA_FILTER'

```
mean=( filter_image( image,SMO=box_width,ALL=all )*bw2 - image )/
(bw2-1)
```

%syntax error. ... at line 63

```
imvar = fact*( filter_image( imdev,SMO=box_width,ALL=all )*bw2 -
imdev )
```

Do you think the error is in the script itself or in my calling sequence?

Thanks again!

Max

Subject: Re: sigma_filter calling sequence

Posted by [burton449](#) on Sun, 05 Dec 2010 15:44:44 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Dec 4, 8:04 pm, David Fanning <n...@dfanning.com> wrote:

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This is the error message in brief:

```

%syntax error. ... at line 56
%Attempt to call undefined procedure/function: 'SIGMA_FILTER'

```

```

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image )/
(bw2-1)

```

```

%syntax error. ... at line 63

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```

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Do you think the error is in the script itself or in my calling sequence?

Thanks again!

Max

Subject: Re: sigma_filter calling sequence
Posted by [burton449](#) on Sun, 05 Dec 2010 16:36:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

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Thank you David,
It works fine now.

I have to mention that other scripts are necessary to run the NASA's
sigma_filter.pro
You will need: filter_image.pro convolve.pro and pfs_gaussian.pro

all the scripts are available in NASA's website at this adress:
<http://idlastro.gsfc.nasa.gov/contents.html>

Greetings,
Max

Subject: Re: sigma_filter calling sequence
Posted by [burton449](#) on Sun, 05 Dec 2010 16:47:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Dec 4, 8:04 pm, David Fanning <n...@dfanning.com> wrote:

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It doesnt work because of lack of memory in arrays. Im not sure if
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Greetings,
Max

Subject: Re: sigma_filter calling sequence
Posted by [David Fanning](#) on Sun, 05 Dec 2010 17:16:12 GMT
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burton449 writes:

> The only problem is with the Iterate (/ITERATE) option of this script.
> It doesnt work because of lack of memory in arrays. Im not sure if
> there is a way to fix that? What do you think David?

I think memory is cheap and that everyone who wants to work with
large data sets should be using 64-bit operating systems by now. :-)

> By the way, I have to mention that other scripts are necessary to run
> the NASA's sigma_filter.pro

Yes, in general if you get a program from a library, you are going to need other programs from that same library. Better to just get the whole darn thing and install it somewhere on your IDL path. Although NOT where you seem to be putting these programs, in the IDL bin directory structure! That's a really bad place. I'd choose somewhere else. :-)

http://www.dfanning.com/code_tips/installcoyote.html

Cheers,

David

--

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