
Subject: Opening and read .dat file double format
Posted by [alghafisuct](#) on Fri, 18 Dec 2015 12:26:03 GMT
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Hi everyone

I have a .dat file double and is 5000 by 8039. I'm using the file in Matlab and I want to try to open it in IDL. So I know it is very basic question but I'm new in IDL and I want to start using it. After I open the file, I want to read like the value of (1,1)

Thanks in advance

Subject: Re: Opening and read .dat file double format
Posted by [Craig Markwardt](#) on Fri, 18 Dec 2015 15:22:06 GMT
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On Friday, December 18, 2015 at 7:26:07 AM UTC-5, algha...@gmail.com wrote:

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What format is the data in? ASCII? Binary? Matlab format? It makes a difference.

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Sun, 20 Dec 2015 16:42:11 GMT
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On Friday, December 18, 2015 at 7:22:10 AM UTC-8, Craig Markwardt wrote:

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im = IMAGE(Result)
end
```

But I got an image meaning nothing to me only white and black image

Am I doing the right way or there are other ways to see the image

Thanks

Subject: Re: Opening and read .dat file double format
Posted by [Helder Marchetto](#) on Sun, 20 Dec 2015 17:52:19 GMT
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On Sunday, December 20, 2015 at 4:42:19 PM UTC, algha...@gmail.com wrote:
> On Friday, December 18, 2015 at 7:22:10 AM UTC-8, Craig Markwardt wrote:
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Cheers,
Helder

(*) - or the min/max values are not evenly distributed. Meaning that if one pixel is 0, one is 1000 and the rest of your data is distributed between 500 and 501... then you won't see much unless you set min_value and max_value at 500 and 501. You could also try to have a look at the histogram distribution.

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Mon, 21 Dec 2015 08:14:17 GMT
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On Sunday, December 20, 2015 at 9:52:23 AM UTC-8, Helder wrote:

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any suggestions ?

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 Posted by [Helder Marchetto](#) on Mon, 21 Dec 2015 09:42:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

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and see what happens.

If that doesn't work out. Do you know how the data is stored? If it's a simple array of doubles, you could use something like:

```
array = make_array(4999, 8038, /double, /nozero)
filename = 'C:\...' ;your file name
OPENR, importUnit, filename, /GET_LUN
READU, importUnit, array
CLOSE, importUnit
FREE_LUN, importUnit
im = IMAGE(array)
```

cheers,
Helder

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Mon, 21 Dec 2015 11:04:08 GMT
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On Monday, December 21, 2015 at 1:42:19 AM UTC-8, Helder wrote:

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> `im = IMAGE(array)`

>

> cheers,

> Helder

Thank you very much it's good know. I tried the `OPENR` way it's double.

On my MATLAB code I seprated real and imaginary such as the following

```
array = array (1:2:end, :) + j * array (2:2:end, :);
```

how can that be done in IDL so I can have imagenary and real values

Thanks

Subject: Re: Opening and read .dat file double format

Posted by [Helder Marchetto](#) on Mon, 21 Dec 2015 11:17:30 GMT

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I don't know Matlab. But I guess (yes, it's a guess...) that those Matlab commands put every odd position value in the real part and even position values in the imaginary part. If so, then I would try with:

```
array = make_array(4999, 8038, /dcomplex, /nozero)
```

This is also a guess... but I suppose that imaginary data is written this way.

Try this and then display the image as:

```
im_r = IMAGE(real_part(array))
im_i = IMAGE(imaginary(array))
```

and you should see real and imaginary part displayed. Then you can play around and use other useful commands for imaginary data: `abs()` and `atan()`. See the help for details:

<http://www.exelisvis.com/docs/ABS.html>

<http://www.exelisvis.com/docs/ATAN.html> with the phase keyword.

Cheers,

Helder

Subject: Re: Opening and read .dat file double format

Posted by [alghafisuct](#) on Wed, 23 Dec 2015 08:49:24 GMT

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

On Monday, December 21, 2015 at 3:17:33 AM UTC-8, Helder wrote:

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>>> If that doesn't work out. Do you know how the data is stored? If it's a simple array of doubles,

```

you could use something like:

```
>>>
>>> array = make_array(4999, 8038, /double, /nozero)
>>> filename = 'C:\...' ;your file name
>>> OPENR, importUnit, filename, /GET_LUN
>>> READU, importUnit, array
>>> CLOSE, importUnit
>>> FREE_LUN, importUnit
>>> im = IMAGE(array)
>>>
>>> cheers,
>>> Helder
>>
>> Thank you very much it's good know. I tried the OPENR way it's double.
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>> array = array (1:2:end, :) + j * array (2:2:end, :);
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> im_r = IMAGE(real_part(array))
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```

Thanks Helder for the help

I tried print,ABS(image(array)) and im_r = IMAGE(real_part(array)) and im_i = IMAGE(imaginary(array)) to see images but I'm getting the following :

% IMAGE: Unable to allocate memory: to make array.

if the problem is the memory is not enough, how can I get a small subset of the image and save it as a new file then I can see if it is working

Thanks

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Fri, 25 Dec 2015 13:05:16 GMT
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On Wednesday, December 23, 2015 at 3:33:21 AM UTC-8, Helder wrote:
> On Wednesday, December 23, 2015 at 8:49:31 AM UTC, algha...@gmail.com wrote:
>> On Monday, December 21, 2015 at 3:17:33 AM UTC-8, Helder wrote:
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>>>> > > > > On Friday, December 18, 2015 at 7:22:10 AM UTC-8, Craig Markwardt wrote:
>>>> > > > > > On Friday, December 18, 2015 at 7:26:07 AM UTC-5, algha...@gmail.com wrote:
>>>> > > > > > > Hi everyone
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>>>> > > > > > I have a .dat file double and is 5000 by 8039. I'm using the file in Matlab and I want to try to open it in IDL. So I know it is very basic question but I'm new in IDL and I want to start using it. After I open the file, I want to read like the value of (1,1)
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>>>> > > > mn = min(Result, max=mx)
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>>>> > > >
>>>> > > > array = make_array(4999, 8038, /double, /nozero)
>>>> > > > filename = 'C:\...' ;your file name
>>>> > > > OPENR, importUnit, filename, /GET_LUN
>>>> > > > READU, importUnit, array

```



```

>>>> > CLOSE, importUnit
>>>> > FREE_LUN, importUnit
>>>> > im = IMAGE(array)
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> Everything ok? (it should not give an error unless you run out of memory)
> If that is ok, then you can try to reduce the size of the images. Given that you have an odd
number of rows (8039), you're going to have to use congrid to reduce the size of the image:
> smaller_im_r = congrid(im_r,5000/10.0,8039/10.0)
> smaller_im_i = congrid(im_i,5000/10.0,8039/10.0)
> then
> olm_r = image(smaller_im_r)
> olm_i = image(smaller_im_i)
>
> If you do get an error, you have to tell me *which* line generated the error.
>
> Cheers,
> Helder

```

Thanks Helder for the help I finally got the image as follows

```

array_VV = make_array(5000, 5359, /dcomplex, /nozero)
filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
OPENR, importUnit, filename_VV, /GET_LUN
READU, importUnit, array_VV
A_VV = ABS(array_VV)
B_VV = A_VV^(0.7/2)
images_VV = image(B_VV, TITLE='Intensity VV')
CLOSE, importUnit
FREE_LUN, importUnit
end

```

Know I have two things to solve. The first one is the gray image is a little bit dark so how can I increase the intensity of it and make it more brighter

The second is I want to open other .dat file dcomplex in the same page with the same number of array so I can compare them. Can I just copy the previous thing and paste it and change the file path? Is that right as follows

```

array_HH = make_array(5000, 5359, /dcomplex, /nozero)
filename_HH = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
OPENR, importUnit, filename_HH, /GET_LUN
READU, importUnit, array_HH

```

```

A = ABS(array_HH)
B = A^(0.7/2)
image_HH = image(B, TITLE='Intensity HH')
CLOSE, importUnit
FREE_LUN, importUnit
array_VV = make_array(5000, 5359, /dcomplex, /nozero)
filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
OPENR, importUnit, filename_VV, /GET_LUN
READU, importUnit, array_VV
A_VV = ABS(array_VV)
B_VV = A_VV^(0.7/2)
images_VV = image(B_VV, TITLE='Intensity VV')
CLOSE, importUnit
FREE_LUN, importUnit
end

```

Thanks you

Subject: Re: Opening and read .dat file double format
 Posted by [Helder Marchetto](#) on Fri, 25 Dec 2015 22:10:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Friday, December 25, 2015 at 1:05:20 PM UTC, algha...@gmail.com wrote:

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>>>> >>>> mn = min(Result, max=mx)
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```
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```

```
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```

```
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```
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>>>> > > array = make_array(4999, 8038, /double, /nozero)
```

```
>>>> > > filename = 'C:\...' ;your file name
```

```
>>>> > > OPENR, importUnit, filename, /GET_LUN
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```
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```

```
>>>> >
```

```
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```

```
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```

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>>>> This is also a guess... but I suppose that imaginary data is written this way.
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```

```
>>>>
```

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>>>> im_r = IMAGE(real_part(array))
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```
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```

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```

```
>>>> http://www.exelisvis.com/docs/ABS.html
```

```

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> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
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> OPENR, importUnit, filename_VV, /GET_LUN
> READU, importUnit, array_VV
> A_VV = ABS(array_VV)

```

```

> B_VV = A_VV^(0.7/2)
> images_VV = image(B_VV, TITLE='Intensity VV')
> CLOSE, importUnit
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> end
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> Know I have two things to solve. The first one is the gray image is a little bit dark so how can I
increase the intensity of it and make it more brighter
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> OPENR, importUnit, filename_HH, /GET_LUN
> READU, importUnit, array_HH
> A = ABS(array_HH)
> B = A^(0.7/2)
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> images_VV = image(B_VV, TITLE='Intensity VV')
> CLOSE, importUnit
> FREE_LUN, importUnit
> end
>
>
> Thanks you

```

A couple of comments:

1) after opening and reading the file, you can close it right away:

```

> OPENR, importUnit, filename_VV, /GET_LUN
> READU, importUnit, array_VV
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> A_VV = ABS(array_VV)
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```


2) regarding your question:

> Know I have two things to solve. The first one is the gray image is a little bit dark so how can I increase the intensity of it and make it more brighter

remember my answer:

```
im.min_value = mn
```

```
im.max_value = mx
```

check what `im.max_value` is and try to make it lower. This defines the white level.

3) same page? Try to adapt this code:

```
ww = window(dimensions=[1200,600])
```

```
im1 = image(/test, margin=0, layout=[2,1,1], current=ww)
```

```
im2 = image(/test, margin=0, layout=[2,1,2], current=ww)
```

Check <http://www.exelisvis.com/docs/IMAGE.html> for details.

Keep in mind that every image is about 400 Mb. Are you using 64-bit version of IDL (type `print, !version` to find out)

Cheers,
Helder

Subject: Re: Opening and read .dat file double format

Posted by [alghafisuct](#) on Sat, 26 Dec 2015 09:12:18 GMT

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

On Friday, December 25, 2015 at 2:11:02 PM UTC-8, Helder wrote:

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>>>> >>>>>> Am I doing the right way or there are other ways to see the image
>>>> >>>>>>
>>>> >>>>>> Thanks
>>>> >>>>>>
>>>> >>>>>> Difficult to tell.
>>>> >>>>>> My suggestion would be to try:
>>>> >>>>>> template =
>>>> >>>>>> BINARY_TEMPLATE('C:\Users\asus\Desktop\Metasensing\IDL_PROJE
>>>> >>>>>> CTS\20151021115853_11_SAR_CPLX_0_pres_8.dat')
>>>> >>>>>> Result = READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
>>>> >>>>>> 20151021115853_11_SAR_CPLX_0_pres_8.dat', DATA_DIMS = [4999, 8038])
>>>> >>>>>> mn = min(Result, max=mx)
>>>> >>>>>> print, mn, mx
>>>> >>>>>> im = IMAGE(Result)
>>>> >>>>>> im.min_value = mn
>>>> >>>>>> im.max_value = mx
>>>> >>>>>>
>>>> >>>>>> Any better? If not, what does "print, mn, mx" show? If you're getting the same
>>>> >>>>>> value, then there must a problem with the import (read_binary()). (*)
>>>> >>>>>>
>>>> >>>>>> Cheers,
>>>> >>>>>> Helder
>>>> >>>>>>
>>>> >>>>>> (*) - or the min/max values are not evenly distributed. Meaning that if one pixel is
>>>> >>>>>> 0, one is 1000 and the rest of your data is distributed between 500 and 501... then you won't see
>>>> >>>>>> much unless you set min_value and max_value at 500 and 501. You could also try to have a look
>>>> >>>>>> at the histogram distribution.
>>>> >>>>>>

```

```

>>>> > > > Hi
>>>> > > >
>>>> > > > I got the same thing and the min vale is 0 and the max value is 255
>>>> > > >
>>>> > > > any suggestions ?
>>>> > > >
>>>> > > > I just noticed that you import using BINARY_TEMPLATE() and READ_BINARY(). I
>>>> never used these functions because I normally know how my template looks like and use readu
>>>> directly. I'll try to do some guess work: it seems to me as if you're missing something. With
>>>> binary_template you generate a structure for importing data that you call "template". This template
>>>> should be used in READ_BINARY() to import the data, but you don't use it.
>>>> > > > Why don't you try:
>>>> > > > Result = READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
>>>> 20151021115853_11_SAR_CPLX_0_pres_8.dat', template=template, DATA_DIMS = [4999,
>>>> 8038])
>>>> > > >
>>>> > > > and see what happens.
>>>> > > >
>>>> > > > If that doesn't work out. Do you know how the data is stored? If it's a simple array of
>>>> doubles, you could use something like:
>>>> > > >
>>>> > > > array = make_array(4999, 8038, /double, /nozero)
>>>> > > > filename = 'C:\...' ;your file name
>>>> > > > OPENR, importUnit, filename, /GET_LUN
>>>> > > > READU, importUnit, array
>>>> > > > CLOSE, importUnit
>>>> > > > FREE_LUN, importUnit
>>>> > > > im = IMAGE(array)
>>>> > > >
>>>> > > > cheers,
>>>> > > > Helder
>>>> > >
>>>> > > Thank you very much it's good know. I tried the OPENR way it's double.
>>>> > >
>>>> > > On my MATLAB code I seprated real and imaginary such as the following
>>>> > >
>>>> > > array = array (1:2:end, :) + j * array (2:2:end, :);
>>>> > >
>>>> > > how can that be done in IDL so I can have imagenary and real values
>>>> > >
>>>> > > Thanks
>>>> >
>>>> > I don't know Matlab. But I guess (yes, it's a guess...) that those Matlab commands put
>>>> every odd position value in the real part and even position values in the imaginary part. If so, then
>>>> I would try with:
>>>> > array = make_array(4999, 8038, /dcomplex, /nozero)
>>>> > This is also a guess... but I suppose that imaginary data is written this way.
>>>> > Try this and then display the image as:

```

```

>>>> >
>>>> > im_r = IMAGE(real_part(array))
>>>> > im_i = IMAGE(imaginary(array))
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>>>> > and you should see real and imaginary part displayed. Then you can play around and use
other useful commands for imaginary data: abs() and atan(). See the help for details:
>>>> > http://www.exelisvis.com/docs/ABS.html
>>>> > http://www.exelisvis.com/docs/ATAN.html with the phase keyword.
>>>> >
>>>> > Cheers,
>>>> > Helder
>>>>
>>>> Thanks Helder for the help
>>>>
>>>> I tried print,ABS(image(array)) and im_r = IMAGE(real_part(array)) and im_i =
IMAGE(imaginary(array)) to see images but I'm getting the following :
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>>>> % IMAGE: Unable to allocate memory: to make array.
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>>>> if the problem is the memory is not enough, how can I get a small subset of the image and
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>>> I think that the command:
>>> print,ABS(image(array))
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>>> What happens if you try this:
>>> im_r = real_part(array)
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>>> Everything ok? (it should not give an error unless you run out of memory)
>>> If that is ok, then you can try to reduce the size of the images. Given that you have an odd
number of rows (8039), you're going to have to use congrid to reduce the size of the image:
>>> smaller_im_r = congrid(im_r,5000/10.0,8039/10.0)
>>> smaller_im_i = congrid(im_i,5000/10.0,8039/10.0)
>>> then
>>> olm_r = image(smaller_im_r)
>>> olm_i = image(smaller_im_i)
>>>
>>> If you do get an error, you have to tell me *which* line generated the error.
>>>
>>> Cheers,
>>> Helder
>>
>> Thanks Helder for the help I finally got the image as follows

```

```

>>
>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename_VV, /GET_LUN
>> READU, importUnit, array_VV
>> A_VV = ABS(array_VV)
>> B_VV = A_VV^(0.7/2)
>> images_VV = image(B_VV, TITLE='Intensity VV')
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> end
>>
>> Know I have two things to solve. The first one is the gray image is a little bit dark so how can I
increase the intensity of it and make it more brighter
>>
>> The second is I want to open other .dat file dcomplex in the same page with the same
number of array so I can compare them. Can I just copy the previous thing and paste it and
change the file path ? is that right as follow
>>
>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)
>> filename_HH = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename_HH, /GET_LUN
>> READU, importUnit, array_HH
>> A = ABS(array_HH)
>> B = A^(0.7/2)
>> image_HH = image(B, TITLE='Intensity HH')
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename_VV, /GET_LUN
>> READU, importUnit, array_VV
>> A_VV = ABS(array_VV)
>> B_VV = A_VV^(0.7/2)
>> images_VV = image(B_VV, TITLE='Intensity VV')
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> end
>>
>>
>> Thanks you
>
> A couple of comments:
> 1) after opening and reading the file, you can close it right away:
>

```

```

>> OPENR, importUnit, filename_VV, /GET_LUN
>> READU, importUnit, array_VV
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> A_VV = ABS(array_VV)
>> B_VV = A_VV^(0.7/2)
>> images_VV = image(B_VV, TITLE='Intensity VV')
>
> 2) regarding your question:
>> Know I have two things to solve. The first one is the gray image is a little bit dark so how can I
increase the intensity of it and make it more brighter
>
> remember my answer:
> im.min_value = mn
> im.max_value = mx
>
> check what im.max_value is and try to make it lower. This defines the white level.
>
> 3) same page? Try to adapt this code:
>
> ww = window(dimensions=[1200,600])
> im1 = image(/test, margin=0, layout=[2,1,1], current=ww)
> im2 = image(/test, margin=0, layout=[2,1,2], current=ww)
>
> Check http://www.exelisvis.com/docs/IMAGE.html for details.
>
> Keep in mind that every image is about 400 Mb. Are you using 64-bit version of IDL (type print,
!version to find out)
>
> Cheers,
> Helder

```

Thanks Helder

What I mean in 3 is to open and read more than one file (complex- double) and all the files have the same number of colomus and raws (5000,5359). So do I tried to do the previous step of opening a file twice but did not work

The first file is:

```

array_HH = make_array(5000, 5359, /dcomplex, /nozero)
filename = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
OPENR, importUnit, filename, /GET_LUN
READU, importUnit, array_HH
CLOSE, importUnit
FREE_LUN, importUnit

```

```

array_VV = make_array(5000, 5359, /dcomplex, /nozero)
filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\2015102111

```

```
5853_22_SAR_CPLX_0_pres_8.dat')
OPENR, importUnit, filename_VV, /GET_LUN
READU, importUnit, array_VV
CLOSE, importUnit
FREE_LUN, importUnit
end
```

This is what I need so I can compare things from file array_HH to array_VV

Thanks

Subject: Re: Opening and read .dat file double format
Posted by [Helder Marchetto](#) on Sat, 26 Dec 2015 11:14:08 GMT
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On Saturday, December 26, 2015 at 9:12:21 AM UTC, algha...@gmail.com wrote:
> On Friday, December 25, 2015 at 2:11:02 PM UTC-8, Helder wrote:
>> On Friday, December 25, 2015 at 1:05:20 PM UTC, algha...@gmail.com wrote:
>>> On Wednesday, December 23, 2015 at 3:33:21 AM UTC-8, Helder wrote:
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>>>> > > > > > > > On Friday, December 18, 2015 at 7:22:10 AM UTC-8, Craig Markwardt wrote:
>>>> > > > > > > > On Friday, December 18, 2015 at 7:26:07 AM UTC-5, algha...@gmail.com wrote:
>>>> > > > > > > > > Hi everyone
>>>> > > > > > > > >
>>>> > > > > > > > > I have a .dat file double and is 5000 by 8039. I'm using the file in Matlab and I want to try to open it in IDL. So I know it is very basic question but I'm new in IDL and I want to start using it. After I open the file, I want to read like the value of (1,1)
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>>>> > > > > > > > > What format is the data in? ASCII? Binary? Matlab format? It makes a difference.
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>>>> > > > > > > > > Thanks Craig
>>>> > > > > > > >
>>>> > > > > > > > > My data is Binary double format and I used the following because I want to extract the image to see as I'm doing in Matlab
>>>> > > > > > > >
>>>> > > > > > > > > template =
BINARY_TEMPLATE('C:\Users\asus\Desktop\Metasensing\IDL_PROJE
CTS\20151021115853_11_SAR_CPLX_0_pres_8.dat')


```

>>>> >>>>>>> Result =
READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', DATA_DIMS = [4999, 8038])
>>>> >>>>>>> im = IMAGE(Result)
>>>> >>>>>>> end
>>>> >>>>>>>
>>>> >>>>>>> But I got an image meaning nothing to me only white and black image
>>>> >>>>>>>
>>>> >>>>>>> Am I doing the right way or there are other ways to see the image
>>>> >>>>>>>
>>>> >>>>>>> Thanks
>>>> >>>>>>>
>>>> >>>>>>> Difficult to tell.
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>>>> >>>>>>> mn = min(Result, max=mx)
>>>> >>>>>>> print, mn, mx
>>>> >>>>>>> im = IMAGE(Result)
>>>> >>>>>>> im.min_value = mn
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>>>> >>>>>>> Any better? If not, what does "print, mn, mx" show? If you're getting the same
value, then there must a problem with the import (read_binary()). (*)
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>>>> >>>>>>> Cheers,
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>>>> >>>>>>> (*) - or the min/max values are not evenly distributed. Meaning that if one pixel
is 0, one is 1000 and the rest of your data is distributed between 500 and 501... then you won't
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binary_template you generate a structure for importing data that you call "template". This template
should be used in READ_BINARY() to import the data, but you don't use it.

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```

>>>> >>>> Why don't you try:
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>>>> >>>> If that doesn't work out. Do you know how the data is stored? If it's a simple array of
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>>>> >>>> array = make_array(4999, 8038, /double, /nozero)
>>>> >>>> filename = 'C:\...' ;your file name
>>>> >>>> OPENR, importUnit, filename, /GET_LUN
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>>>> >>>> FREE_LUN, importUnit
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>>>> >>>> I don't know Matlab. But I guess (yes, it's a guess...) that those Matlab commands put
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I would try with:
>>>> >>>> array = make_array(4999, 8038, /dcomplex, /nozero)
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>>>> >>>> and you should see real and imaginary part displayed. Then you can play around and
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>>>> >>>> http://www.exelisvis.com/docs/ABS.html
>>>> >>>> http://www.exelisvis.com/docs/ATAN.html with the phase keyword.
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```

```

>>>> >
>>>> > Thanks Helder for the help
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>>>> > I tried print,ABS(image(array)) and im_r = IMAGE(real_part(array)) and im_i =
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>>>> > % IMAGE: Unable to allocate memory: to make array.
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>>>> If that is ok, then you can try to reduce the size of the images. Given that you have an odd
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>>>> smaller_im_r = congrid(im_r,5000/10.0,8039/10.0)
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>>>> If you do get an error, you have to tell me *which* line generated the error.
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>>>> Cheers,
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>>> Thanks Helder for the help I finally got the image as follows
>>>
>>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>>> OPENR, importUnit, filename_VV, /GET_LUN
>>> READU, importUnit, array_VV
>>> A_VV = ABS(array_VV)
>>> B_VV = A_VV^(0.7/2)
>>> images_VV = image(B_VV, TITLE='Intensity VV')
>>> CLOSE, importUnit
>>> FREE_LUN, importUnit

```

```

>>> end
>>>
>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how can
I increase the intensity of it and make it more brighter
>>>
>>> The second is I want to open other .dat file dcomplex in the same page with the same
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>>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)
>>> filename_HH = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
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>>> OPENR, importUnit, filename_HH, /GET_LUN
>>> READU, importUnit, array_HH
>>> A = ABS(array_HH)
>>> B = A^(0.7/2)
>>> image_HH = image(B, TITLE='Intensity HH')
>>> CLOSE, importUnit
>>> FREE_LUN, importUnit
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>>> CLOSE, importUnit
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>>> end
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>> A couple of comments:
>> 1) after opening and reading the file, you can close it right away:
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>>> OPENR, importUnit, filename_VV, /GET_LUN
>>> READU, importUnit, array_VV
>>> CLOSE, importUnit
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>>> A_VV = ABS(array_VV)
>>> B_VV = A_VV^(0.7/2)
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>> 2) regarding your question:
>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how can
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>> remember my answer:
>> im.min_value = mn
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>> check what im.max_value is and try to make it lower. This defines the white level.
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>> Cheers,
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> Thanks Helder
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> filename = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
> OPENR, importUnit, filename, /GET_LUN
> READU, importUnit, array_HH
> CLOSE, importUnit
> FREE_LUN, importUnit
>
> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
> filename_VV =('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\2015102111
5853_22_SAR_CPLX_0_pres_8.dat')
> OPENR, importUnit, filename_VV, /GET_LUN
> READU, importUnit, array_VV
> CLOSE, importUnit
> FREE_LUN, importUnit
> end
>
> This is what I need so I can compare things from file array_HH to array_VV
>
> Thanks

```

why wouldn't that work? what is the error message? Which line throws the error?
You've gotta tell a bit more if you want some response...

h

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Sat, 26 Dec 2015 12:00:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Saturday, December 26, 2015 at 3:14:12 AM UTC-8, Helder wrote:
> On Saturday, December 26, 2015 at 9:12:21 AM UTC, algha...@gmail.com wrote:
>> On Friday, December 25, 2015 at 2:11:02 PM UTC-8, Helder wrote:
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>>>> > > > > > > > > Result =
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>>>> > > > > > > > > im = IMAGE(Result)

```

>>>> >>>>>>>> end
>>>> >>>>>>>>
>>>> >>>>>>>> But I got an image meaning nothing to me only white and black image
>>>> >>>>>>>>
>>>> >>>>>>>> Am I doing the right way or there are other ways to see the image
>>>> >>>>>>>>
>>>> >>>>>>>> Thanks
>>>> >>>>>>>>
>>>> >>>>>>>> Difficult to tell.
>>>> >>>>>>>> My suggestion would be to try:
>>>> >>>>>>>> template =
BINARY_TEMPLATE('C:\Users\asus\Desktop\Metasensing\IDL_PROJE
CTS\20151021115853_11_SAR_CPLX_0_pres_8.dat')
>>>> >>>>>>>> Result =
READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', DATA_DIMS = [4999, 8038])
>>>> >>>>>>>> mn = min(Result, max=mx)
>>>> >>>>>>>> print, mn, mx
>>>> >>>>>>>> im = IMAGE(Result)
>>>> >>>>>>>> im.min_value = mn
>>>> >>>>>>>> im.max_value = mx
>>>> >>>>>>>>
>>>> >>>>>>>> Any better? If not, what does "print, mn, mx" show? If you're getting the same
value, then there must a problem with the import (read_binary()). (*)
>>>> >>>>>>>>
>>>> >>>>>>>> Cheers,
>>>> >>>>>>>> Helder
>>>> >>>>>>>>
>>>> >>>>>>>> (*) - or the min/max values are not evenly distributed. Meaning that if one
pixel is 0, one is 1000 and the rest of your data is distributed between 500 and 501... then you
won't see much unless you set min_value and max_value at 500 and 501. You could also try to
have a look at the histogram distribution.
>>>> >>>>>>>>
>>>> >>>>>>>> Hi
>>>> >>>>>>>>
>>>> >>>>>>>> I got the same thing and the min vale is 0 and the max value is 255
>>>> >>>>>>>>
>>>> >>>>>>>> any suggestions ?
>>>> >>>>>>>>
>>>> >>>>>>>> I just noticed that you import using BINARY_TEMPLATE() and READ_BINARY().
I never used these functions because I normally know how my template looks like and use readu
directely. I'll try to do some guess work: it seems to me as if you're missing something. With
binary_template you generate a structure for importing data that you call "template". This template
should be used in READ_BINARY() to import the data, but you don't use it.
>>>> >>>>>>>> Why don't you try:
>>>> >>>>>>>> Result = READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', template=template, DATA_DIMS = [4999,
8038])

```



```

>>>> >>>>
>>>> >>>> and see what happens.
>>>> >>>>
>>>> >>>> If that doesn't work out. Do you know how the data is stored? If it's a simple array
of doubles, you could use something like:
>>>> >>>>
>>>> >>>> array = make_array(4999, 8038, /double, /nozero)
>>>> >>>> filename = 'C:\...' ;your file name
>>>> >>>> OPENR, importUnit, filename, /GET_LUN
>>>> >>>> READU, importUnit, array
>>>> >>>> CLOSE, importUnit
>>>> >>>> FREE_LUN, importUnit
>>>> >>>> im = IMAGE(array)
>>>> >>>>
>>>> >>>> cheers,
>>>> >>>> Helder
>>>> >>>>
>>>> >>>> Thank you very much it's good know. I tried the OPENR way it's double.
>>>> >>>>
>>>> >>>> On my MATLAB code I seprated real and imaginary such as the following
>>>> >>>>
>>>> >>>> array = array (1:2:end, :) + j * array (2:2:end, :);
>>>> >>>>
>>>> >>>> how can that be done in IDL so I can have imagenary and real values
>>>> >>>>
>>>> >>>> Thanks
>>>> >>>>
>>>> >>>> I don't know Matlab. But I guess (yes, it's a guess...) that those Matlab commands put
every odd position value in the real part and even position values in the imaginary part. If so, then
I would try with:
>>>> >>>> array = make_array(4999, 8038, /dcomplex, /nozero)
>>>> >>>> This is also a guess... but I suppose that imaginary data is written this way.
>>>> >>>> Try this and then display the image as:
>>>> >>>>
>>>> >>>> im_r = IMAGE(real_part(array))
>>>> >>>> im_i = IMAGE(imaginary(array))
>>>> >>>>
>>>> >>>> and you should see real and imaginary part displayed. Then you can play around and
use other useful commands for imaginary data: abs() and atan(). See the help for details:
>>>> >>>> http://www.exelisvis.com/docs/ABS.html
>>>> >>>> http://www.exelisvis.com/docs/ATAN.html with the phase keyword.
>>>> >>>>
>>>> >>>> Cheers,
>>>> >>>> Helder
>>>> >>>>
>>>> >>>> Thanks Helder for the help
>>>> >>>>
>>>> >>>> I tried print,ABS(image(array)) and im_r = IMAGE(real_part(array)) and im_i =

```

IMAGE(imaginary(array)) to see images but I'm getting the following :

```
>>>> > >
>>>> > > % IMAGE: Unable to allocate memory: to make array.
>>>> > >
>>>> > > if the problem is the memory is not enough, how can I get a small subset of the image
and save it as a new file then I can see if it is working
>>>> > >
>>>> > > Thanks
>>>> >
>>>> > Hi,
>>>> > I think that the command:
>>>> > print,ABS(image(array))
>>>> > makes no sense.
>>>> >
>>>> > What happens if you try this:
>>>> > im_r = real_part(array)
>>>> > im_i = imaginary(array)
>>>> >
>>>> > Everything ok? (it should not give an error unless you run out of memory)
>>>> > If that is ok, then you can try to reduce the size of the images. Given that you have an
odd number of rows (8039), you're going to have to use congrid to reduce the size of the image:
>>>> > smaller_im_r = congrid(im_r,5000/10.0,8039/10.0)
>>>> > smaller_im_i = congrid(im_i,5000/10.0,8039/10.0)
>>>> > then
>>>> > olm_r = image(smaller_im_r)
>>>> > olm_i = image(smaller_im_i)
>>>> >
>>>> > If you do get an error, you have to tell me *which* line generated the error.
>>>> >
>>>> > Cheers,
>>>> > Helder
>>>>
>>>> Thanks Helder for the help I finally got the image as follows
>>>>
>>>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>>>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>>>> OPENR, importUnit, filename_VV, /GET_LUN
>>>> READU, importUnit, array_VV
>>>> A_VV = ABS(array_VV)
>>>> B_VV = A_VV^(0.7/2)
>>>> images_VV = image(B_VV, TITLE='Intensity VV')
>>>> CLOSE, importUnit
>>>> FREE_LUN, importUnit
>>>> end
>>>>
>>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how
can I increase the intensity of it and make it more brighter
```

```

>>>>
>>>> The second is I want to open other .dat file dcomplex in the same page with the same
number of array so I can compare them. Can I just copy the previous thing and paste it and
change the file path ? is that right as follow
>>>>
>>>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)
>>>> filename_HH = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
>>>> OPENR, importUnit, filename_HH, /GET_LUN
>>>> READU, importUnit, array_HH
>>>> A = ABS(array_HH)
>>>> B = A^(0.7/2)
>>>> image_HH = image(B, TITLE='Intensity HH')
>>>> CLOSE, importUnit
>>>> FREE_LUN, importUnit
>>>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>>>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>>>> OPENR, importUnit, filename_VV, /GET_LUN
>>>> READU, importUnit, array_VV
>>>> A_VV = ABS(array_VV)
>>>> B_VV = A_VV^(0.7/2)
>>>> images_VV = image(B_VV, TITLE='Intensity VV')
>>>> CLOSE, importUnit
>>>> FREE_LUN, importUnit
>>>> end
>>>>
>>>>
>>>> Thanks you
>>>
>>> A couple of comments:
>>> 1) after opening and reading the file, you can close it right away:
>>>
>>>> OPENR, importUnit, filename_VV, /GET_LUN
>>>> READU, importUnit, array_VV
>>>> CLOSE, importUnit
>>>> FREE_LUN, importUnit
>>>> A_VV = ABS(array_VV)
>>>> B_VV = A_VV^(0.7/2)
>>>> images_VV = image(B_VV, TITLE='Intensity VV')
>>>
>>> 2) regarding your question:
>>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how
can I increase the intensity of it and make it more brighter
>>>
>>> remember my answer:
>>> im.min_value = mn
>>> im.max_value = mx

```

```

>>>
>>> check what im.max_value is and try to make it lower. This defines the white level.
>>>
>>> 3) same page? Try to adapt this code:
>>>
>>> ww = window(dimensions=[1200,600])
>>> im1 = image(/test, margin=0, layout=[2,1,1], current=ww)
>>> im2 = image(/test, margin=0, layout=[2,1,2], current=ww)
>>>
>>> Check http://www.exelisvis.com/docs/IMAGE.html for details.
>>>
>>> Keep in mind that every image is about 400 Mb. Are you using 64-bit version of IDL (type
print, !version to find out)
>>>
>>> Cheers,
>>> Helder
>>
>> Thanks Helder
>>
>> What I mean in 3 is to open and read more than one file (complex- double ) and all the files
have the same number of colomus and raws (5000,5359). So do I tried to do the previous step of
opening a file twice but did not work
>> The first file is:
>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)
>> filename = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename, /GET_LUN
>> READU, importUnit, array_HH
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>>
>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>> filename_VV =('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\2015102111
5853_22_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename_VV, /GET_LUN
>> READU, importUnit, array_VV
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> end
>>
>> This is what I need so I can compare things from file array_HH to array_VV
>>
>> Thanks
>
> why wouldn't that work? what is the error message? Which line throws the error?
> You've gotta tell a bit more if you want some response...
>
> h

```

Sorry Helder When I run it in my desktop it works now but not in the laptop and I think memory issues

Thanks

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Sat, 26 Dec 2015 14:46:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Saturday, December 26, 2015 at 1:14:12 PM UTC+2, Helder wrote:
> On Saturday, December 26, 2015 at 9:12:21 AM UTC, algha...@gmail.com wrote:
>> On Friday, December 25, 2015 at 2:11:02 PM UTC-8, Helder wrote:
>>> On Friday, December 25, 2015 at 1:05:20 PM UTC, algha...@gmail.com wrote:
>>>> On Wednesday, December 23, 2015 at 3:33:21 AM UTC-8, Helder wrote:
>>>> > On Wednesday, December 23, 2015 at 8:49:31 AM UTC, algha...@gmail.com wrote:
>>>> > > On Monday, December 21, 2015 at 3:17:33 AM UTC-8, Helder wrote:
>>>> > > > On Monday, December 21, 2015 at 11:04:11 AM UTC, algha...@gmail.com wrote:
>>>> > > > > On Monday, December 21, 2015 at 1:42:19 AM UTC-8, Helder wrote:
>>>> > > > > > On Monday, December 21, 2015 at 8:14:22 AM UTC, algha...@gmail.com wrote:
>>>> > > > > > > On Sunday, December 20, 2015 at 9:52:23 AM UTC-8, Helder wrote:
>>>> > > > > > > > On Sunday, December 20, 2015 at 4:42:19 PM UTC, algha...@gmail.com wrote:
>>>> > > > > > > > > On Friday, December 18, 2015 at 7:22:10 AM UTC-8, Craig Markwardt wrote:
>>>> > > > > > > > > On Friday, December 18, 2015 at 7:26:07 AM UTC-5, algha...@gmail.com wrote:
>>>> > > > > > > > > > Hi everyone
>>>> > > > > > > > > >
>>>> > > > > > > > > > I have a .dat file double and is 5000 by 8039. I'm using the file in Matlab and I want to try to open it in IDL. So I know it is very basic question but I'm new in IDL and I want to start using it. After I open the file, I want to read like the value of (1,1)
>>>> > > > > > > > > >
>>>> > > > > > > > > > What format is the data in? ASCII? Binary? Matlab format? It makes a difference.
>>>> > > > > > > > > >
>>>> > > > > > > > > > Thanks Craig
>>>> > > > > > > > > >
>>>> > > > > > > > > > My data is Binary double format and I used the following because I want to extract the image to see as I'm doing in Matlab
>>>> > > > > > > > > >
>>>> > > > > > > > > > template =
BINARY_TEMPLATE('C:\Users\asus\Desktop\Metasensing\IDL_PROJE
CTS\20151021115853_11_SAR_CPLX_0_pres_8.dat')
>>>> > > > > > > > > > Result =
READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', DATA_DIMS = [4999, 8038])

```

>>>> >>>>>>>> im = IMAGE(Result)
>>>> >>>>>>>> end
>>>> >>>>>>>>
>>>> >>>>>>>> But I got an image meaning nothing to me only white and black image
>>>> >>>>>>>>
>>>> >>>>>>>> Am I doing the right way or there are other ways to see the image
>>>> >>>>>>>>
>>>> >>>>>>>> Thanks
>>>> >>>>>>>>
>>>> >>>>>>>> Difficult to tell.
>>>> >>>>>>>> My suggestion would be to try:
>>>> >>>>>>>> template =
BINARY_TEMPLATE('C:\Users\asus\Desktop\Metasensing\IDL_PROJE
CTS\20151021115853_11_SAR_CPLX_0_pres_8.dat')
>>>> >>>>>>>> Result =
READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', DATA_DIMS = [4999, 8038])
>>>> >>>>>>>> mn = min(Result, max=mx)
>>>> >>>>>>>> print, mn, mx
>>>> >>>>>>>> im = IMAGE(Result)
>>>> >>>>>>>> im.min_value = mn
>>>> >>>>>>>> im.max_value = mx
>>>> >>>>>>>>
>>>> >>>>>>>> Any better? If not, what does "print, mn, mx" show? If you're getting the same
value, then there must a problem with the import (read_binary()). (*)
>>>> >>>>>>>>
>>>> >>>>>>>> Cheers,
>>>> >>>>>>>> Helder
>>>> >>>>>>>>
>>>> >>>>>>>> (*) - or the min/max values are not evenly distributed. Meaning that if one
pixel is 0, one is 1000 and the rest of your data is distributed between 500 and 501... then you
won't see much unless you set min_value and max_value at 500 and 501. You could also try to
have a look at the histogram distribution.
>>>> >>>>>>>>
>>>> >>>>>>>> Hi
>>>> >>>>>>>>
>>>> >>>>>>>> I got the same thing and the min vale is 0 and the max value is 255
>>>> >>>>>>>>
>>>> >>>>>>>> any suggestions ?
>>>> >>>>>>>>
>>>> >>>>>>>> I just noticed that you import using BINARY_TEMPLATE() and READ_BINARY().
I never used these functions because I normally know how my template looks like and use readu
directely. I'll try to do some guess work: it seems to me as if you're missing something. With
binary_template you generate a structure for importing data that you call "template". This template
should be used in READ_BINARY() to import the data, but you don't use it.
>>>> >>>>>>>> Why don't you try:
>>>> >>>>>>>> Result = READ_BINARY('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\
20151021115853_11_SAR_CPLX_0_pres_8.dat', template=template, DATA_DIMS = [4999,

```

8038])

>>>> > > > >

>>>> > > > > and see what happens.

>>>> > > > >

>>>> > > > > If that doesn't work out. Do you know how the data is stored? If it's a simple array of doubles, you could use something like:

>>>> > > > >

>>>> > > > > array = make_array(4999, 8038, /double, /nozero)

>>>> > > > > filename = 'C:\....' ;your file name

>>>> > > > > OPENR, importUnit, filename, /GET_LUN

>>>> > > > > READU, importUnit, array

>>>> > > > > CLOSE, importUnit

>>>> > > > > FREE_LUN, importUnit

>>>> > > > > im = IMAGE(array)

>>>> > > > >

>>>> > > > > cheers,

>>>> > > > > Helder

>>>> > > > >

>>>> > > > > Thank you very much it's good know. I tried the OPENR way it's double.

>>>> > > > >

>>>> > > > > On my MATLAB code I seprated real and imaginary such as the following

>>>> > > > >

>>>> > > > > array = array (1:2:end, :) + j * array (2:2:end, :);

>>>> > > > >

>>>> > > > > how can that be done in IDL so I can have imagenary and real values

>>>> > > > >

>>>> > > > > Thanks

>>>> > > > >

>>>> > > > I don't know Matlab. But I guess (yes, it's a guess...) that those Matlab commands put every odd position value in the real part and even position values in the imaginary part. If so, then I would try with:

>>>> > > > array = make_array(4999, 8038, /dcomplex, /nozero)

>>>> > > > This is also a guess... but I suppose that imaginary data is written this way.

>>>> > > > Try this and then display the image as:

>>>> > > >

>>>> > > > im_r = IMAGE(real_part(array))

>>>> > > > im_i = IMAGE(imaginary(array))

>>>> > > >

>>>> > > > and you should see real and imaginary part displayed. Then you can play around and use other useful commands for imaginary data: abs() and atan(). See the help for details:

>>>> > > > <http://www.exelisvis.com/docs/ABS.html>

>>>> > > > <http://www.exelisvis.com/docs/ATAN.html> with the phase keyword.

>>>> > > >

>>>> > > > Cheers,

>>>> > > > Helder

>>>> > > >

>>>> > > Thanks Helder for the help

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```

>>>> > > I tried print,ABS(image(array)) and im_r = IMAGE(real_part(array)) and im_i =
IMAGE(imaginary(array)) to see images but I'm getting the following :
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>>>> > > % IMAGE: Unable to allocate memory: to make array.
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and save it as a new file then I can see if it is working
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>>>> > Everything ok? (it should not give an error unless you run out of memory)
>>>> > If that is ok, then you can try to reduce the size of the images. Given that you have an
odd number of rows (8039), you're going to have to use congrid to reduce the size of the image:
>>>> > smaller_im_r = congrid(im_r,5000/10.0,8039/10.0)
>>>> > smaller_im_i = congrid(im_i,5000/10.0,8039/10.0)
>>>> > then
>>>> > olm_r = image(smaller_im_r)
>>>> > olm_i = image(smaller_im_i)
>>>> >
>>>> > If you do get an error, you have to tell me *which* line generated the error.
>>>> >
>>>> > Cheers,
>>>> > Helder
>>>>
>>>> Thanks Helder for the help I finally got the image as follows
>>>>
>>>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>>>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')
>>>> OPENR, importUnit, filename_VV, /GET_LUN
>>>> READU, importUnit, array_VV
>>>> A_VV = ABS(array_VV)
>>>> B_VV = A_VV^(0.7/2)
>>>> images_VV = image(B_VV, TITLE='Intensity VV')
>>>> CLOSE, importUnit
>>>> FREE_LUN, importUnit
>>>> end
>>>>
>>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how

```


can I increase the intensity of it and make it more brighter

>>>>

>>>> The second is I want to open other .dat file dcomplex in the same page with the same number of array so I can compare them. Can I just copy the previous thing and paste it and change the file path ? is that right as follow

>>>>

>>>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)

>>>> filename_HH = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')

>>>> OPENR, importUnit, filename_HH, /GET_LUN

>>>> READU, importUnit, array_HH

>>>> A = ABS(array_HH)

>>>> B = A^(0.7/2)

>>>> image_HH = image(B, TITLE='Intensity HH')

>>>> CLOSE, importUnit

>>>> FREE_LUN, importUnit

>>>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)

>>>> filename_VV = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_22_SAR_CPLX_0_pres_8.dat')

>>>> OPENR, importUnit, filename_VV, /GET_LUN

>>>> READU, importUnit, array_VV

>>>> A_VV = ABS(array_VV)

>>>> B_VV = A_VV^(0.7/2)

>>>> images_VV = image(B_VV, TITLE='Intensity VV')

>>>> CLOSE, importUnit

>>>> FREE_LUN, importUnit

>>>> end

>>>>

>>>>

>>>> Thanks you

>>>

>>> A couple of comments:

>>> 1) after opening and reading the file, you can close it right away:

>>>

>>>> OPENR, importUnit, filename_VV, /GET_LUN

>>>> READU, importUnit, array_VV

>>>> CLOSE, importUnit

>>>> FREE_LUN, importUnit

>>>> A_VV = ABS(array_VV)

>>>> B_VV = A_VV^(0.7/2)

>>>> images_VV = image(B_VV, TITLE='Intensity VV')

>>>

>>> 2) regarding your question:

>>>> Know I have two things to solve. The first one is the gray image is a little bit dark so how can I increase the intensity of it and make it more brighter

>>>

>>> remember my answer:

>>> im.min_value = mn

```

>>> im.max_value = mx
>>>
>>> check what im.max_value is and try to make it lower. This defines the white level.
>>>
>>> 3) same page? Try to adapt this code:
>>>
>>> ww = window(dimensions=[1200,600])
>>> im1 = image(/test, margin=0, layout=[2,1,1], current=ww)
>>> im2 = image(/test, margin=0, layout=[2,1,2], current=ww)
>>>
>>> Check http://www.exelisvis.com/docs/IMAGE.html for details.
>>>
>>> Keep in mind that every image is about 400 Mb. Are you using 64-bit version of IDL (type
print, !version to find out)
>>>
>>> Cheers,
>>> Helder
>>
>> Thanks Helder
>>
>> What I mean in 3 is to open and read more than one file (complex- double ) and all the files
have the same number of colomus and raws (5000,5359). So do I tried to do the previous step of
opening a file twice but did not work
>> The first file is:
>> array_HH = make_array(5000, 5359, /dcomplex, /nozero)
>> filename = ('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\20151021115
853_11_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename, /GET_LUN
>> READU, importUnit, array_HH
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>>
>> array_VV = make_array(5000, 5359, /dcomplex, /nozero)
>> filename_VV =('C:\Users\asus\Desktop\Metasensing\IDL_PROJECTS\2015102111
5853_22_SAR_CPLX_0_pres_8.dat')
>> OPENR, importUnit, filename_VV, /GET_LUN
>> READU, importUnit, array_VV
>> CLOSE, importUnit
>> FREE_LUN, importUnit
>> end
>>
>> This is what I need so I can compare things from file array_HH to array_VV
>>
>> Thanks
>
> why wouldn't that work? what is the error message? Which line throws the error?
> You've gotta tell a bit more if you want some response...
>

```

> h

Hi

I have the image on the X-axis from 0 to 5000 and Y-axis from 0 to 5359 from the array[5000,5359]. I want to have the values in X-axis from 500 to 5500 and the Y-axis from -2697.5 to 2697.5 and finally I want to rotate the image 90 degree so everything to rotate even the axis

What I have is the following

```
; Display the image.  
im = IMAGE(array, DIMENSIONS=[5000, 5359], MARGIN=0.2)  
  
; Add the X and Y axes  
xax = AXIS('X',Title='Ground Range')  
yax = AXIS('Y',Title='Azimuth')
```

Subject: Re: Opening and read .dat file double format
Posted by [Helder Marchetto](#) on Sun, 27 Dec 2015 02:05:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

What have you tried? What didn't work? Did you look at the documentation? If so, what didn't you find that you expected to find?
Please give me a reason to answer this during the Christmas holidays...

Cheers, Helder

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Mon, 28 Dec 2015 10:34:14 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Saturday, December 26, 2015 at 6:05:24 PM UTC-8, Helder wrote:
> What have you tried? What didn't work? Did you look at the documentation? If so, what didn't you find that you expected to find?
> Please give me a reason to answer this during the Christmas holidays...
>
> Cheers, Helder

I have tried XRANGE = [500,500] and did not work as follows:
xax = AXIS('X',TITLE='Ground Range [m]',XRANGE = [500,5500])
Also, I tried xax = AXIS('X',TITLE='Ground Range [m]',AXIS_RANGE = [500,5500])
and it did not work.

my array is 5000,5359 and on the axis it goes from 0 to 5000 and the other axis it goes from 0 to

5359 and what I want is to have the x-axis change to [500,5500] and the Y-axis=[-2679,2679] without any change in the image only the axis. I want to make something like x-axis= 0=500 and 5000=5500

Thanks

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Mon, 28 Dec 2015 10:36:06 GMT
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On Saturday, December 26, 2015 at 6:05:24 PM UTC-8, Helder wrote:
> What have you tried? What didn't work? Did you look at the documentation? If so, what didn't you find that you expected to find?
> Please give me a reason to answer this during the Christmas holidays...
>
> Cheers, Helder

I have tried XRANGE = [500,5500] and did not work as follows:
xax = AXIS('X',TITLE='Ground Range [m]',XRANGE = [500,5500])
Also, I tried xax = AXIS('X',TITLE='Ground Range [m]',AXIS_RANGE = [500,5500])
and it did not work.

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Thanks

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Fri, 01 Jan 2016 12:00:12 GMT
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On Monday, December 28, 2015 at 2:36:08 AM UTC-8, algha...@gmail.com wrote:
> On Saturday, December 26, 2015 at 6:05:24 PM UTC-8, Helder wrote:
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>
> Thanks

Any Idea ??

Subject: Re: Opening and read .dat file double format
Posted by [alghafisuct](#) on Fri, 01 Jan 2016 12:01:02 GMT
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On Saturday, December 26, 2015 at 6:05:24 PM UTC-8, Helder wrote:
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