
Subject: MATLAB to IDL converter?

Posted by [htsang](#) on Mon, 24 Aug 1998 07:00:00 GMT

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Is there such thing as MATLAB to IDL converter? (wishful thinking maybe)

-- Herbert (htsang@mda.ca)

Subject: Re: Matlab to IDL

Posted by [David Fanning](#) on Sat, 11 Oct 2003 20:38:59 GMT

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dino nicola writes:

> Here is the IDL script:

>

> file='c:\pcon_1.sdt'

> rad=fltarr(1024,512)

> openr,lun,file,/get_lun

> point_lun,lun,0

> readu,lun,rad

> close,lun

> device,decomposed=0

> loadct,0

> tv,rad

> end

>

>

> Anybody can help me? thanks!

I'd try using TVSCL rather than the TV command. With floating point data, the chance of it already being scaled into the range of 0 to 255 is slim. :-)

Cheers,

David

--

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Matlab to IDL

Posted by [dino.nicola](#) on Sun, 12 Oct 2003 17:50:14 GMT

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> I'd try using TVSCL rather than the TV command. With
> floating point data, the chance of it already being
> scaled into the range of 0 to 255 is slim. :-)
>
> Cheers,
>
> David

I've tried the TVSCL command too, but the result is very bad anyway.
It appears like a 'starry night', with some white dots over a black
background while it should be an x-ray photograph of a condenser.
Thanks, Dino

Subject: Re: Matlab to IDL

Posted by [dino.nicola](#) on Sun, 12 Oct 2003 18:43:04 GMT

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I forgot to say that when I run the code I get this message if I use
the TVSCL command:

```
% Program caused arithmetic error: Floating underflow  
% Program caused arithmetic error: Floating overflow  
% Program caused arithmetic error: Floating illegal operand
```

while I get this one using TV:

```
% Program caused arithmetic error: Floating underflow  
% Program caused arithmetic error: Floating illegal operand
```

Don't know if this makes sense but I'm just a beginner in IDL. Thank
you.

Subject: Re: Matlab to IDL

Posted by [dino.nicola](#) on Sun, 12 Oct 2003 18:46:51 GMT

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I forgot to say that when I run the code I get this message if I use
the TVSCL command:

```
% Program caused arithmetic error: Floating underflow  
% Program caused arithmetic error: Floating overflow  
% Program caused arithmetic error: Floating illegal operand
```

while I get this one using TV:

```
% Program caused arithmetic error: Floating underflow
% Program caused arithmetic error: Floating illegal operand
```

Don't know if this makes sense but I'm just a beginner in IDL. Thank you.

Subject: Re: Matlab to IDL

Posted by [andrew.cool](#) on Sun, 12 Oct 2003 23:12:19 GMT

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dino.nicola@libero.it (dino nicola) wrote in message

news:<688447c0.0310121046.298717c5@posting.google.com>...

> I forgot to say that when I run the code I get this message if I use
> the TVSCL command:

>

> % Program caused arithmetic error: Floating underflow

> % Program caused arithmetic error: Floating overflow

> % Program caused arithmetic error: Floating illegal operand

>

> while I get this one using TV:

>

> % Program caused arithmetic error: Floating underflow

> % Program caused arithmetic error: Floating illegal operand

>

> Don't know if this makes sense but I'm just a beginner in IDL. Thank
> you.

Hi Dino,

How about trying this snippet of code that generates some dummy data.
On my Windows 2000 machine running IDL 6.0 it produces a window of
skewed rainbow coloured contours.

```
pro pcon
```

```
condensor = DIST(1025,512)
```

```
openw,lun,'c:\test.sdt',/get
```

```
writeu,lun,condensor
```

```
free_lun,lun
```

```
file='c:\test.sdt'
```

```
rad=fltarr(1024,512)
```

```
openr,lun,file,/get_lun
```

```
;point_lun,lun,0
```

```
readu,lun,rad
close,lun
window,xs=1024,ys=512
device,decomposed=0
loadct,38
tvscl,rad
end
```

Also, note that you need to either :-

- a. specifically size the window to your data,
e.g. window,xsize=1024,ysize=512 to see all your consensor image, or
- b. reduce the condensor array to the default window size using the
Congrid command.

If you don't get the same effect, there's something deeply wrong!
Perhaps your file doesn't contain what you think it contains!

Good Luck,

Andrew

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Subject: Re: Matlab to IDL
Posted by [Craig Markwardt](#) on Mon, 13 Oct 2003 00:47:16 GMT
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dino.nicola@libero.it (dino nicola) writes:

```
> I forgot to say that when I run the code I get this message if I use
> the TVSCL command:
>
> % Program caused arithmetic error: Floating underflow
```

> % Program caused arithmetic error: Floating overflow
> % Program caused arithmetic error: Floating illegal operand
>
> while I get this one using TV:
>
> % Program caused arithmetic error: Floating underflow
> % Program caused arithmetic error: Floating illegal operand
>
> Don't know if this makes sense but I'm just a beginner in IDL. Thank
> you.

Sounds like the format, or the endianness, of your data are not what you expected. Since you are reading unformatted floating point data, you need to take special care that the file is formatted in the same way, and written by a computer with the same endianness (byte-ordering).

Good luck,
Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
