Subject: EPS output from functional graphic 'LARGE' size Posted by Haojie Xu on Tue, 03 Mar 2015 04:00:01 GMT

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Hi there.

I use IDL functional graphic to create eps file inserted to latex but however, I found the size of eps file is way too large. say,

IDL> x = [0:100:0.1]IDL> pl = plot(x,sin(x),'-b')IDL> $pl.Save,'test_sin.eps'$

it ends up with a file like 46Megabytes file.

For pdf output file, it seems okay, reasonable size but I found preview has some issue to opensome pdf output file from IDL.

Is there any suggestion that I can use functional graphics to produce elegant eps file?

Thanks

Η

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by chris_torrence@NOSPAM on Tue, 03 Mar 2015 17:12:47 GMT View Forum Message <> Reply to Message

```
On Monday, March 2, 2015 at 9:00:05 PM UTC-7, Haojie Xu wrote:
> Hi there.
> I use IDL functional graphic to create eps file inserted to latex
> but however, I found the size of eps file is way too large.
> say,
> IDL > x = [0:100:0.1]
> IDL> pl = plot(x,sin(x),'-b')
> IDL> pl.Save, 'test_sin.eps'
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> it ends up with a file like 46Megabytes file.
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opensome pdf output file from IDL.
>
  Is there any suggestion that I can use functional graphics to produce elegant eps file?
>
>
> Thanks
```

> H

Hi H,

It looks like it is defaulting to "bitmap" format instead of "vector". I don't know why. When I run your commands I get a tiny EPS file (only about 24 KB). Try forcing it to use vector:

```
pl.Save, 'test_sin.eps', bitmap=0
```

Cheers, Chris ExelisVIS

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by Haojie Xu on Tue, 03 Mar 2015 17:35:59 GMT

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```
On Tuesday, March 3, 2015 at 10:12:48 AM UTC-7, Chris Torrence wrote:
> On Monday, March 2, 2015 at 9:00:05 PM UTC-7, Haoiie Xu wrote:
>> Hi there.
>>
>> I use IDL functional graphic to create eps file inserted to latex
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>> Thanks
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> Hi H,
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your commands I get a tiny EPS file (only about 24 KB). Try forcing it to use vector:
>
  pl.Save, 'test_sin.eps', bitmap=0
> Cheers,
> Chris
> ExelisVIS
```

Hi Chris,

Yes, you are right. I use bitmap = 1 for default because I use some symbols in labels or titles,i.e., \$M_{\odot}\$, which is required to add this flag to show correctly on vector eps and pdf.

To avoid this, maybe I can use some function like 'TEXTOIDL' to produce the string I need and then put it on whatever I want.

Sounds ok?(I have not text this idea yet) or maybe other elegant way?

Best, H

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by chris_torrence@NOSPAM on Tue, 03 Mar 2015 18:38:30 GMT View Forum Message <> Reply to Message

```
On Tuesday, March 3, 2015 at 10:36:01 AM UTC-7, Haojie Xu wrote:
> On Tuesday, March 3, 2015 at 10:12:48 AM UTC-7, Chris Torrence wrote:
>> On Monday, March 2, 2015 at 9:00:05 PM UTC-7, Haojie Xu wrote:
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>>
>> Cheers,
```

```
>> Chris
>> ExelisVIS
>
> Hi Chris,
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> Yes, you are right. I use bitmap = 1 for default because I use some symbols in labels or titles,i.e., $M_{\odot}$, which is required to add this flag to show correctly on vector eps and pdf.
>
> To avoid this, maybe I can use some function like 'TEXTOIDL' to produce the string I need and then put it on whatever I want.
>
> Sounds ok?(I have not text this idea yet) or maybe other elegant way?
>
> Best,
> H
```

If you are using symbols like that, then you will have to use bitmap. But, EPS is very inefficient with bitmap. Perhaps you should switch to PNG, and then import your image into LaTeX.

-Chris

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by Haojie Xu on Tue, 03 Mar 2015 18:54:22 GMT View Forum Message <> Reply to Message

```
On Tuesday, March 3, 2015 at 11:38:34 AM UTC-7, Chris Torrence wrote:
> On Tuesday, March 3, 2015 at 10:36:01 AM UTC-7, Haojie Xu wrote:
>> On Tuesday, March 3, 2015 at 10:12:48 AM UTC-7, Chris Torrence wrote:
>>> On Monday, March 2, 2015 at 9:00:05 PM UTC-7, Haojie Xu wrote:
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```
>>>
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>>>
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>>> Chris
>>> ExelisVIS
>> Hi Chris,
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>> Yes, you are right. I use bitmap = 1 for default because I use some symbols in labels or
titles,i.e., $M_{\odot}$, which is required to add this flag to show correctly on vector eps and pdf.
>>
>> To avoid this, maybe I can use some function like 'TEXTOIDL' to produce the string I need
and then put it on whatever I want.
>> Sounds ok?(I have not text this idea yet ) or maybe other elegant way?
>> Best.
>> H
> If you are using symbols like that, then you will have to use bitmap. But, EPS is very inefficient
with bitmap. Perhaps you should switch to PNG, and then import your image into LaTeX.
> -Chris
```

Thanks, Chris. Well, It seems some astronomical journal only accept post script file. Sigh~

Also, I tried to save to pdf, with bitmap flag on. When I open it via preview, it totally go blur and sometime make my computer crash. Is here any one to find this weird thing?

-H

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by David Fanning on Tue, 03 Mar 2015 19:08:43 GMT View Forum Message <> Reply to Message

Haojie Xu writes:

- > Thanks, Chris. Well, It seems some astronomical journal only accept post script file. Sigh~
- > Also, I tried to save to pdf, with bitmap flag on. When I open it via preview, it totally go blur and sometime make my computer crash. Is here any one to find this weird thing?

Another alternative would be to use Coyote Graphics to create your PostScript file. You can use TexToIDL directly:

https://www.idlcoyote.com/cg_tips/textoidl.php

The PostScript output will be a "normal" size. :-)

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: EPS output from functional graphic 'LARGE' size Posted by chris_torrence@NOSPAM on Tue, 03 Mar 2015 20:11:49 GMT View Forum Message <> Reply to Message

On Tuesday, March 3, 2015 at 11:54:25 AM UTC-7, Haojie Xu wrote:

> Thanks, Chris. Well, It seems some astronomical journal only accept post script file. Sigh~

> Also, I tried to save to pdf, with bitmap flag on. When I open it via preview, it totally go blur and sometime make my computer crash. Is here any one to find this weird thing?

> -H

Hi H.

I think you could easily embed the PNG file into the Postscript. There are even a bunch of online converters.

-Chris

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by Haojie Xu on Tue, 03 Mar 2015 20:51:39 GMT

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On Tuesday, March 3, 2015 at 1:11:51 PM UTC-7, Chris Torrence wrote:

> On Tuesday, March 3, 2015 at 11:54:25 AM UTC-7, Haojie Xu wrote:

- >> Thanks, Chris. Well, It seems some astronomical journal only accept post script file. Sigh~
- >> Also, I tried to save to pdf, with bitmap flag on. When I open it via preview, it totally go blur

and sometime make my computer crash. Is here any one to find this weird thing?

>> >> -H

> > Hi H.

- > I think you could easily embed the PNG file into the Postscript. There are even a bunch of online converters.
- > -Chris

Hi Chris,

Well, I think I did that. convert PNG file to eps file on linux shell command line but the eps is huge as I said. All of plots are with /bitmap on, though one can twinkle eps2pdf, or eps2eps thing to make this file smaller. Just like the simple example in the beginning, when I save it with PNG format, it is only 93K, and then do convert test, png to test, eps. It is 74M. Probably I'm not doing the right way to convert.

-H

Subject: Re: EPS output from functional graphic 'LARGE' size Posted by Haojie Xu on Tue, 03 Mar 2015 20:54:00 GMT

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On Tuesday, March 3, 2015 at 12:08:47 PM UTC-7, David Fanning wrote:

> Haojie Xu writes:

>

>

>

>

>> Thanks, Chris. Well, It seems some astronomical journal only accept post script file. Sigh~

- >> Also, I tried to save to pdf, with bitmap flag on. When I open it via preview, it totally go blur and sometime make my computer crash. Is here any one to find this weird thing?
- > Another alternative would be to use Coyote Graphics to create your
- > PostScript file. You can use TexToIDL directly:

https://www.idlcoyote.com/cg_tips/textoidl.php >

- The PostScript output will be a "normal" size. :-) >
- > Cheers.

> David

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

Thanks David. Before I use new graphic to produce nice plot, I use coyote library a lot. Probably I

need to go back to rewrite part of the scripts to produce such eps file.

-Haojie