Subject: Change the default dpi Posted by envi35@yahoo.ca on Fri, 20 May 2005 21:55:49 GMT View Forum Message <> Reply to Message

Does any one how to change the default dpi setting in ENVI? I want to export some JPEG images with 300 dpi, instead of the the default 72 dpi. Is this possible in ENVI?

I'm sorry to post this ENVI-related question here, but I can't find any ENVI user group. And I suppose most of you are ENVI experts as well:)

Thank you in advance, Jenny

Subject: Re: Change the default dpi Posted by Rick Towler on Mon, 23 May 2005 17:37:15 GMT View Forum Message <> Reply to Message

envi35@yahoo.ca wrote:

- > Does any one how to change the default dpi setting in ENVI? I want to
- > export some JPEG images with 300 dpi, instead of the the default 72
- > dpi. Is this possible in ENVI?

I don't know anything about ENVI, and I don't know a lot about the JPEG spec, but in my experience JPEG images don't store dpi info in their header (or at least I haven't used a program that reads it).

So if you want a final image with a greater dpi just export a larger image. For a 2" x 2" 300dpi print image, export a 600 pixel x 600 pixel image from ENVI.

-Rick

Subject: Re: Change the default dpi Posted by envi35@yahoo.ca on Mon, 23 May 2005 21:06:29 GMT View Forum Message <> Reply to Message

Thanks, Rick. Paint Shop could be used to check the dpi of any image. The problem is the images I'm preparing will be published in a journal, and it has strick length limit, so your suggestion to export a larger image won't work in my case.

Thank you all the same.

-Jenny

Subject: Re: Change the default dpi Posted by Rick Towler on Mon, 23 May 2005 22:27:04 GMT View Forum Message <> Reply to Message

- > Thanks, Rick. Paint Shop could be used to check the dpi of any image.
- > The problem is the images I'm preparing will be published in a journal,
- > and it has strick length limit, so your suggestion to export a larger
- > image won't work in my case.

Sure it will.

O.K. I was wrong about the JPEG header business (I just played around with photoshop and JPEGs can store dpi info), but you still can export to a larger size then load it into Paint Shop and "fix" it.

Say you want a 2" x 2" image @ 300dpi. Export a 600 x 600 image from ENVI. Load it into your paint program and change the DPI to 300 while at the same time changing the print size to 2" x 2" (this preserves the pixel dimensions so no resampling occurs). Save it.

Now you have a 2" x 2" JPEG image at 300dpi.

-Rick

Subject: Re: Change the default dpi Posted by envi35@yahoo.ca on Tue, 24 May 2005 04:17:22 GMT View Forum Message <> Reply to Message

But it seems that I can't do this in ENVI. Say my image is 512\*512, I can only export it as a 512\*512 image, I can't change the dimentions. I know a little bit IDL (direct graphics), so I'm thinking maybe I could try to do a program. Is it possible to use different colors or color tables to display different parts of an image? My image includes 3 parts: ocean (=999), land(=900), ROIs on land (=0~100). I'd like my ocean to be white, land to be yellow, and ROIs to be displayed using the Blue-red color table. I've been trying for 3 hours with no luck. Could you give me some hints or at least tell me is it possible with IDL direct graphics?

Thanks again, Jenny

Subject: Re: Change the default dpi

Posted by James Kuyper on Tue, 24 May 2005 15:34:54 GMT

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envi35@yahoo.ca wrote:

- > But it seems that I can't do this in ENVI. Say my image is 512\*512, I
- > can only export it as a 512\*512 image, I can't change the dimentions.

We have ENVI 4.1 installed; what I'm about to say may be different in different versions of ENVI.

Select "Basic Tools" from the top menu. On the drop-down menu, select "Resize Data (Spatial/Spectral)". Select your input file, and then hit the "OK" button. Set the Samples/Lines numbers to match your desired output size. Save the result in memory - if you tell it to save to a file it will save it in an ENVI-specific format. Choose your desired sampling method, and whether or not you want the file compressed. Hit the "OK" button and it rebins the data in memory.

Select "File" from the top menu. On the drop-down menu, select "Save File As". Choose JPEG2000 (old-style jpeg doesn't seem to be an available option), and a dialog window pops up. Select the "Input File" that corresponds to your resized image in memory. Hit the "OK" button, and a new dialog window replaces the old one. Choose your desired output file name and compression level. Hit the "OK" button, and you're done.

If JPEG2000 isn't acceptable, then you have to use IDL directly, rather than ENVI:

READ\_JPEG,infilename,image output = REBIN(image,3,newcols,newrows) WRITE\_JPEG,outfilename,output,/true

REBIN requires that each new dimension be a multiple or factor of the corresponding dimension of the original image. If that's an unacceptable limitation, then you can use CONGRID instead, though it's somewhat slower.