## Subject: Re: IDL - fundamental question about image display Posted by David Fanning on Thu, 13 May 2004 15:17:08 GMT

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## François writes:

- > Why does IDL invert (upside-down) an image when using the command tv or
- > tvscl?

>

- > I have a TIFF file that is correct in all other software. But when I read it
- > with IDL 6.0 using read\_tiff,
- > it is reverse when using tv or tvscl.

Oh, surely not \*all\* other software! :-)

This is just a convention. IDL chooses (by default) to set the (0,0) point in the lower-left corner. Other software (perhaps the majority, I don't know) puts the (0,0) point in the upper-left corner. I'm sure there were good reasons for the choice 20 years ago. Perhaps a different choice would be made today.

In any case, you can choose the other convention by setting the ORDER keyword on TV or TVSCL, or for all images by setting the !ORDER system variable. Doing so is OK for displaying images, but plays absolute havoc when you are trying to interact with them, \*especially\* if they have a coordinate system associated with them, as I have painfully learned the past couple of weeks.

In that case, I think you are better off just flipping the image when you read it and let IDL do its thing:

```
image = Read_Tiff(filename)
image = Reverse(image, 2)
```

And when you write TIFF files from within IDL:

```
Write_Tiff, filename, Reverse(image,2)
```

You sorta get used to doing it, if you know what I mean. :-)

Cheers.

David

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