
Subject: Re: rotate a large data volume
Posted by [Jeff N.](#) on Thu, 08 Sep 2005 05:03:48 GMT
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A little more info....the volume is stored in a stack of tiff files
right now. The output needs to be another tiff stack.

Jeff

Subject: Re: rotate a large data volume
Posted by peter.albert@gmx.de on Thu, 08 Sep 2005 06:01:40 GMT
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Hi Jeff,

I am most probably getting something wrong here, but if I assume that
each tiff file represents one x/y layer, then rotating about the z axis
would just mean that you have to rotate each individual file, which you
could (on a Unix machine) easily do with e.g. convert without bothering
IDL.

However, I guess there is more to it, so I'd appreciate if you could
clarify the problem with e.g. a 2x2x3 example.

Regards,

Peter

Subject: Re: rotate a large data volume
Posted by [Jeff N.](#) on Thu, 08 Sep 2005 07:05:46 GMT
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Sure Peter,

Here's an example with a 3x3x3 cube that I'd already made up so that I
could get a handle on problem myself (I'm helping out a friend here,
its not really my problem....though I guess it has become that way I
suppose :))

These three input bands (BSQ interleave):

```
in0
9 4 5
2 8 6
2 6 4
```

in1
2 8 1
3 5 2
1 1 6

in2
1 7 4
7 6 2
3 8 5

should give a 1st output band of

5 1 4
6 2 2
4 6 5

Hope this helps!
Jeff

Subject: Re: rotate a large data volume
Posted by [Jeff N.](#) on Thu, 08 Sep 2005 07:11:41 GMT
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I suppose I should also point out that I can already make this work....in fact the person that asked me for help already had it working....I just need to make it work in a way that doesn't take 4 days now :)

I can post you two versions of code if it'll help: one is the original code by the person that asked me for help, and the second is what I came up with using ENVI tiling routines.

I think that the problem is that i'm trying to move around columns of data, which aren't in contiguous locations on disk, and its the read times that are killing me.

Subject: Re: rotate a large data volume
Posted by [Jeff N.](#) on Thu, 08 Sep 2005 07:35:33 GMT
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Ooops!! I guess that's rotating about the x-axis isn't it?
Whew....sorry, you can tell from all my posting that its late and I've been working WAY to long today....

Subject: Re: rotate a large data volume

Posted by peter.albert@gmx.de on Thu, 08 Sep 2005 12:53:17 GMT

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> Ooops!! I guess that's rotating about the x-axis isn't it?

Fine, so that's settled :-)

Well, in this case I am a bit stuck, as you can't read in all the data at once in order to do some fancy things with histogram. So I guess you are right, clever reading from disk is necessary, and I doubt it's something you can easily solve with IDL. Well, I'll think over it over the week-end (starting today :-)) and will hope that someone else comes with a good solution ...

Best regards,

Peter

Subject: Re: rotate a large data volume

Posted by [Jeff N.](#) on Thu, 08 Sep 2005 13:35:48 GMT

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Thanks anyway Peter!
