
Subject: Re: Need help with map projection conversion in ENVI

Posted by [Robin Wilson](#) on Mon, 24 Jan 2011 01:08:03 GMT

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> I've been going back and forth on this with no success. Any
> suggestions would be most welcome.

This could well be a bit of a long shot...but I noticed that the output filename was not defined properly in the code you gave. You had the code:

```
oname=/temp.img'
```

As far as I can see there may be two things wrong with that:

1) It needs a ' at the beginning to make it a valid string (although the compiler will probably catch that, so I guess that's a typo when copying to the newsgroup

2) A filename of "/temp.img" on a Linux/Unix/OS X machine may well not be able to be written to, as you are unlikely to have write access to the root of the root filesystem.

ENVI_FILE_OPEN will give an rfid of -1 if it couldn't open the file, so if the file hadn't been written properly in the first place then that might explain why.

It's just a crazy idea...but it can often be the simplest things that cause the major problems (I know I've done this before).

Cheers,

Robin

Subject: Re: Need help with map projection conversion in ENVI

Posted by [BLesht](#) on Mon, 24 Jan 2011 03:22:17 GMT

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On Jan 23, 7:08 pm, Robin Wilson <ro...@rtwilson.com> wrote:

>> I've been going back and forth on this with no success. Any
>> suggestions would be most welcome.

>

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> filename was not defined properly in the code you gave. You had the code:

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> ENVI_FILE_OPEN will give an rfid of -1 if it couldn't open the file, so
> if the file hadn't been written properly in the first place then that
> might explain why.
>
> It's just a crazy idea...but it can often be the simplest things that
> cause the major problems (I know I've done this before).
>
> Cheers,
>
> Robin

Thanks, Robin -- I wish it was that simple. The first ' got lost when
I did some editing. It is there in the code.

Subject: Re: Need help with map projection conversion in ENVI
Posted by [wita](#) on Tue, 25 Jan 2011 12:46:30 GMT
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Dear Barry,

The approach to be used is first to georeference the image in its original projection (the Mercator projection) which indeed needs the tie point (image row/column number with given lat/lon) and the pixel size which is in decimal degrees for the Mercator projection. The latter means that although coordinates between the pixels step with equal degrees, the real pixel size (in m2) changes with latitude. Also you need to associate the Mercator project with your image.

After having georeferenced the image you can check for correctness by overlaying the coastlines (see "create World boundaries"). Converting to a geographic project should then be easy.

I would have to look into it to see how this should

be done from the ENVI API, but in general your approach seems OK. Anyway, I would first test it from within the ENVI interface.

Allard

Subject: Re: Need help with map projection conversion in ENVI

Posted by [BLesht](#) on Tue, 25 Jan 2011 21:42:02 GMT

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On Jan 25, 6:46 am, Allard de Wit <allard.de...@wur.nl> wrote:

> Dear Barry,
>
> The approach to be used is first to georeference
> the image in its original projection (the Mercator
> projection) which indeed needs the tie point
> (image row/column number with given lat/lon) and
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> the Mercator projection. The latter means that
> although coordinates between the pixels step with
> equal degrees, the real pixel size (in m2)
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> associate the Mercator project with your image.
>
> After having georeferenced the image you can
> check for correctness by overlaying the
> coastlines (see "create World boundaries").
> Converting to a geographic project should then be
> easy.
>
> I would have to look into it to see how this should
> be done from the ENVI API, but in general your
> approach seems OK. Anyway, I would first test
> it from within the ENVI interface.
>
> Allard

Thanks, Allard. I will try that (again). I appreciate your suggestion. Barry
