Subject: Re: get image data of projected scenes
Posted by David Fanning on Wed, 01 Dec 2010 19:50:52 GMT
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chris writes:

> I have a very large image which is projected. The real data goes in a
> small stripe from southwest to northwest. How can I extract the real
> data into a completely filled matrix without reading zero data or
> rotating this image. I don't want to reproject the data.

I would suggest image subscripts. How can you tell
the real data from the imaginary?

Cheers,

David

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

Subject: Re: get image data of projected scenes
Posted by rogass on Wed, 01 Dec 2010 20:14:12 GMT
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On 1 Dez., 20:50, David Fanning <n...@dfanning.com> wrote:
> chris writes:
>> I have a very large image which is projected. The real data goes in a
>> small stripe from southwest to northwest. How can I extract the real
>> data into a completely filled matrix without reading zero data or
>> rotating this image. I don't want to reproject the data.
>
> I would suggest image subscripts. How can you tell
> the real data from the imaginary?
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Oh, no, it's not complex data. I meant missing data and measured data.
However, the measured data is only in a small stripe and I definitely
need it in a matrix without missing data. How can I achieve this
without reprojecting or rotating?

Thanks

CR

Subject: Re: get image data of projected scenes
Posted by David Fanning on Wed, 01 Dec 2010 20:29:20 GMT
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chris writes:

> Oh, no, it's not complex data. I meant missing data and measured data.
> However, the measured data is only in a small stripe and I definitely
> need it in a matrix without missing data. How can I achieve this
> without reprojecting or rotating?

Is the strip a rectangle? Do you know the corners of the rectangle?
Convert the corners from lat/lon coordinates to XY coordinates and
fit an XY grid over your image at whatever resolution you like.
Interpolate your image at the xy locations of your grid. Now you
have an XY projected image in a rectangular array. If you need
the pixel locations in lat/lon just convert them back to lat/lon
space with Map_Proj_Inverse.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: get image data of projected scenes
Posted by rogass on Wed, 01 Dec 2010 20:42:43 GMT
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On 1 Dez., 21:29, David Fanning <n...@dfanning.com> wrote:

> chris writes:
>> Oh, no, it's not complex data. I meant missing data and measured data.
>> However, the measured data is only in a small stripe and I definitely
>> need it in a matrix without missing data. How can I achieve this
>> without reprojecting or rotating?
>
> Is the strip a rectangle? Do you know the corners of the rectangle?
> Convert the corners from lat/lon coordinates to XY coordinates and
> fit an XY grid over your image at whatever resolution you like.
> Interpolate your image at the xy locations of your grid. Now you
> have an XY projected image in a rectangular array. If you need
> the pixel locations in lat/lon just convert them back to lat/lon
> space with Map_Proj_Inverse.
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Hm, let's make the assumption it is a rectangle. Maybe I can get the
image center and pivot it 'back' using the angle between y-axis and
along track. What I don't know is what would be better in terms of
'precision'. The grid interpolation or the pivot?

What do you mean?

Thanks for your rapid responses

CR

Subject: Re: get image data of projected scenes
Posted by David Fanning on Wed, 01 Dec 2010 21:06:36 GMT
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chris writes:

> Hm, let's make the assumption it is a rectangle. Maybe I can get the
> image center and pivot it 'back' using the angle between y-axis and
> along track. What I don't know is what would be better in terms of
> 'precision'. The grid interpolation or the pivot?
>
> What do you mean?

Mostly I mean I can't make heads or tails out of what
you are talking about from your questions. :-)

If this is a projected image, and the data you want is
a rectangle, then there is certainly a rotation of your
map projection that will put the rectangle in a proper
XY coordinate system, where all of this will be very
much easier to deal with.

But I don't have any idea what we are talking about,
so mostly I'm just waving my hands around. I've worked
about 40 days straight, I don't want to work on my book
today, I've answered all my mail, and I'm just fooling
around, drinking a beer. :-)

Cheers,

David

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

Subject: Re: get image data of projected scenes
Posted by rogass on Wed, 01 Dec 2010 21:19:42 GMT
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On 1 Dez., 22:06, David Fanning <n...@dfanning.com> wrote:
> chris writes:
>> Hm, let's make the assumption it is a rectangle. Maybe I can get the
>> image center and pivot it 'back' using the angle between y-axis and
>> along track. What I don't know is what would be better in terms of
>> 'precision'. The grid interpolation or the pivot?
>
>> What do you mean?
>
> Mostly I mean I can't make heads or tails out of what
> you are talking about from your questions. :-)
>
> If this is a projected image, and the data you want is
> a rectangle, then there is certainly a rotation of your
> map projection that will put the rectangle in a proper
> XY coordinate system, where all of this will be very

> much easier to deal with.
>
> But I don't have any idea what we are talking about,
> so mostly I'm just waving my hands around. I've worked
> about 40 days straight, I don't want to work on my book
> today, I've answered all my mail, and I'm just fooling
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> Cheers,
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> David
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> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Laughing out loud....

I was looking for an alternative way to perform this without having any map info. Meanwhile, I got something to work. Thank you for helping me.

Cheers or in German - Prost ;)

CR
