Subject: Resampling large satellite (AVHRR) images to a grid
Posted by Liam Gumley on Tue, 09 Jul 1996 07:00:00 GMT
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Hi folks,

I have the following data in 1-D arrays for an AVHRR scene:

latitude
longitude
brightness temperature

I can display the data as an image in satellite coordinates with
no problems (just REFORM the brightness temperature array).

However, I don't know of an efficient way to resample the image to
a lat/lon grid (say equidistant cylindrical). TRIANGULATE and REGRID
are far too slow (and are probably overkill) when used on every lat/lon
point. I have tried a few things with POLYWARP and POLY_2D but have
not come up with a satisfactory method yet.

Has anyone done something like this? I am looking for a *fast* algorithm
that will handle large AVHRR scenes (say 2048x208 pixels).

Cheers.
Liam.

Subject: Re: Resampling large satellite (AVHRR) images to a grid
Posted by Hermann Mannstein on Thu, 11 Jul 1996 07:00:00 GMT
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Liam Gumley wrote:
>
> Hi folks,
>
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> latitude
> longitude
> brightness temperature
>
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> a lat/lon grid (say equidistant cylindrical). TRIANGULATE and REGRID
> are far too slow (and are probably overkill) when used on every lat/lon

> point. I have tried a few things with POLYWARP and POLY_2D but have
> not come up with a satisfactory method yet.
>
> Has anyone done something like this? I am looking for a *fast* algorithm
> that will handle large AVHRR scenes (say 2048x208 pixels).

Hallo Liam,
try to use the 'convert_coord' routine. Set your map and then
p = convert_coord(lon, lat, /data, /to_device)
image=fltarr(!d.x_size, !d.ysize)
and then
image(ps(0,*),ps(1,*)) = brightness_temperature

to fill holes use the dilate operator.

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Regards,


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