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,
>
> 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).

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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Hermann Mannstein   Tel.: +49 8153 28-2503
Institut fuer Physik der Atmosphaere   or -2558
DLR - Oberpfaffenhofen   Fax.: +49 8153 28-1841
Postfach 1116   \   mailto:H.Mannstein@dlr.de
D-82230 Wessling   \ 0   http://www.op.dlr.de/~pa64
Germany   ________\/|________
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