Subject: Re: Polynomial warping of satellite images
Posted by Andy Loughe on Tue, 30 Jun 1998 07:00:00 GMT
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Liam,

Hi!
What are the advantages of using POLYWARP or POLY_2D?
I thought MAP_IMAGE or MAP_PATCH were supposed to accomplish this task.

--Andy

Liam Gumley wrote:
>
> Has anyone tried warping large (say 2048x2048) satellite images to map
> projections using POLYWARP and POLY_2D in IDL? I've looked at the
> documentation, but I'm not quite sure where to begin. If someone has
> tried this before, I'd like to learn more.
>
> Cheers,
> Liam.

--
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"I do not feel obliged to believe that the same God who has endowed us
with
sense, reason, and intellect has intended us to forego their use."
-Galileo

Subject: Re: Polynomial warping of satellite images
Posted by wmc on Wed, 01 Jul 1998 07:00:00 GMT
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In article 5658@cdc.noaa.gov, Andy Loughe <afl@cdc.noaa.gov> writes:
> What are the advantages of using POLYWARP or POLY_2D?
> I thought MAP_IMAGE or MAP_PATCH were supposed to accomplish this task.

> Liam Gumley wrote:
>> Has anyone tried warping large (say 2048x2048) satellite images to map

>> projections using POLYWARP and POLY_2D in IDL?

I thought that map_image and map_patch assume that the image is pasted into
a rectangle in lat-lon space, which has its sides EW and NS. Which is a major
failing, since most satellite passes aren't arranged so conveniently. This was
true last time I looked, and 5.1 doesn't seem to have improved it. Is use
of polywarp supposed to get round that problem? I'd be interested if so.

- William

William M Connolley | wmc@bas.ac.uk | http://www.nbs.ac.uk/public/icd/wmc/
Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself

---

Subject: Re: Polynomial warping of satellite images
Posted by Liam Gumley on Thu, 02 Jul 1998 07:00:00 GMT
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William Connolley wrote:
> In article 5658@cdc.noaa.gov, Andy Loughe <afl@cdc.noaa.gov> writes:
>> What are the advantages of using POLYWARP or POLY_2D?
>> I thought MAP_IMAGE or MAP_PATCH were supposed to accomplish this task.
>
> I thought that map_image and map_patch assume that the image is pasted into
> a rectangle in lat-lon space, which has its sides EW and NS. Which is a major
> failing, since most satellite passes aren't arranged so conveniently. This was
> true last time I looked, and 5.1 doesn't seem to have improved it. Is use
> of polywarp supposed to get round that problem? I'd be interested if so.

You are correct. MAP_IMAGE and MAP_PATCH require data on a regular
lat/lon grid. Transforming irregularly gridded data to a regular grid is
pretty straightforward for small datasets, but it just isn't possible
(using TRIANGULATE and TRIGRID) to rectify large satellite images. I'm
sure it can be done with POLYWARP - I just need to find out exactly how
(the documentation is a bit obscure).

Cheers,
Liam.
