
Subject: Re: Gridding-Interpolation of satellite data

Posted by [btt](#) on Mon, 23 Feb 2004 14:05:01 GMT

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Matt McCabe wrote:

> I always get nervous posting to this site for fear of asking a
> particularly stupid question....well, here goes.
>
> I'm using some satellite data and need to regrid the standard EASE
> projection (around 25km resolution) onto a regular grid of my own
> design - a 1/8th degree grid over the US. Previous postings have been
> very helpful in assisting me in this.
>
> I realise GRIDDATA and TRIANGULATE would do this no
> problems...however, I have gaps in the global/continental data from
> the overpasses which are causing me issues. The satellite scans leave
> no-data values (assigned 8888) in between overpasses. However, I don't
> see that GRIDDATA allows me to ignore these areas without affecting
> the interpolated values around the 'edges' (areas between data and
> no-data) i.e. values near the boundary of these, depending on the
> interpolation routine employed, will be affected by the no-data
> values. A post-interpolation mask, while getting rid of most of the
> affected data - will still leave numerous edge effects significantly
> different to the 'true' value.
>
> I thought I might be able to set no-data values to !VALUES.F_NAN - but
> GRIDDATA and TRIANGULATE don't handle this....basically I just want to
> interpolate within those areas that have data and exclude from the
> interpolation values I don't want so I don't significantly influence
> the 'real' data. My aim is not so much to smooth or massage the raw
> data - just regularly grid it.
>
> Have I missed something completely fundamental or is it actually a bit
> tricky.
>
> Thanks in advance,
> Matt
Hi,

I think you want to look into the FAULT_POLYGONS and FAULT_XY keywords.

You should be getting rid of the missing data, before using
GRIDDATA, by using the GRID_INPUT routine with the EXCLUDE keyword set
to the indices of you NODATA values.

Ben
