## Subject: Gridding-Interpolation of satellite data Posted by mmccabe on Sun, 22 Feb 2004 00:37:24 GMT View Forum Message <> Reply to Message

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