Subject: Need to use GRIDDATA instead of CONGRID?
Posted by Tim B on Thu, 17 Dec 2009 06:22:50 GMT
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I've been happily using CONGRID for upscaling an array of sea temperatures at 1/2 degree latitude and longitude intervals to 1/8 degree (to match some data from elsewhere which is at 1/8 degree intervals). To provide a code example, say:

```
dims = size(sst, /dimensions)
sst_regrid = congrid(sst, 4*dims[0], 4*dims[1], /center)
```

This gives me essentially a 4x version of the original array with no interpolation. However, the end algorithm I'm working on now requires that I interpolate the temperature values. With the land values set to NaN, the following
produces a 4x interpolation:

```
...
sst_regrid = congrid(sst, 4*dims[0], 4*dims[1], /center, /interp)
```

BUT the array values that neighbour the NaN values are also being set to NaN, and thus my landmask is effectively growing - quite visible in some images. I would much rather that any value that neighbours a NaN simply retain the value it had in the first way I used congrid().

Conceivably I could do a tweak to congrid.pro, or replace any values from the second call that are NaN with their non-NaN equivalents from the first call, or is there a simpler way - maybe using GRIDDATA? Curiously, doing a search on 'griddata' produces *no* results with the google group search for idl-pvwave but I'm sure there must be threads that reference it. The IDL reference page for GRIDDATA requires extremely strong coffee...

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