Subject: Re: Satellite Swath Overlap Posted by Andy Sayer on Wed, 12 Feb 2014 19:26:38 GMT

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Well, you could try something like this (and assuming result1, result2 are supposed to be the same size and not different like in your code):

```
missingval=0; or whatever indicates no data

nx=n_elements(result1[*,0]); get size of x dimension
ny=n_elements(result1[0,*]); get size of y dimension

result_averaged=fltarr(36,400); array to contain average results

for i=0l,nx-1 do begin
   for j=0l,ny-1 do begin; Loop over cells
        if result1[i,j] eq missingval and result2[i,j] eq missingval then result_averaged[i,j] = missingval
        if result1[i,j] eq missingval and result2[i,j] ne missingval then result_averaged[i,j] = result2[i,j]
        if result1[i,j] ne missingval and result2[i,j] eq missingval then result_averaged[i,j] = result1[i,j]
        if result1[i,j] ne missingval and result2[i,j] ne missingval then result_averaged[i,j] =

mean([result1[i,j],result2[i,j]])
   endfor
endfor
```

Then do your plotting using result_averaged.

There are probably more efficient ways to code this but I think the above is an easy-to-understand method, if I have understood your problem correctly. Hope this helps!

Andy

>

```
On Wednesday, February 12, 2014 12:14:21 PM UTC-5, Chase Calkins wrote:

> Hello Everyone,

> 
> 
> 
I have a couple of files that I overlap on a mapset but when I plot it, the image is overwritten by the latter of each file. A simple set up is essentially like this.

> 
> 
Lat1 = fltarr[36,400]

> Lon1 = fltarr[36,400]
```

```
>
  Lat2 = fltarr[36,400]
  Lon2 = fltarr[36,400]
>
>
>
  result1 = fltarr[36,400]
>
  result2 = fltarr[46,400]
>
>
>
>
  cgcontour, result1, Lon1, Lat1, level = findgen(18)/10-.2, /overplot, /cell_fill
>
>
> MAP_SET, /Continents, limit = [10,70,45,135], /grid, label = 2, latlab = 110, color =1, charsize =
1.9, /noerase
>
>
  cgcontour, result2, Lon2, Lat2, level = findgen(18)/10-.2, /overplot, /cell_fill
>
>
> MAP_SET, /Continents, limit = [10,70,45,135], /grid, label = 2, latlab = 110, color =1, charsize =
1.9, /noerase
>
>
>
  A picture of what I am experiencing is here.
>
>
   http://www.vos.noaa.gov/MWL/apr_10/Images/pacific/Fig21P.jpg
>
>
>
>
>
> I was wanting to know if there is a way IDL can say where the overlap is and average the result
between the two files in the overlap section.
>
>
> Thanks,
>
```