
Subject: equal lat long grid

Posted by [Pawan](#) on Fri, 07 Apr 2006 15:43:44 GMT

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Hi all,

I was trying to convert my unequal size lat long data into equal size lat long (grid) data.

Here is code that I am using. I was wondering if someone could give me some idea on improving this. I have almost 2 M data points and this code is taking more than 12 hour to do the job.

thanks,
pawan

```
:: Gridding data
;output arrays to store the data

mean_aot = fltarr(241,721) ; to store mean
std_aot = fltarr(241,721) ; to store stdev
  min_aot = fltarr(241,721) ; to store min
max_aot = fltarr(241,721) ; to store max
cnt = fltarr(241,721)

starttime=systemtime(0)
for i = 0,240 do begin
lat = i * 0.5 - 60
for j = 0,720 do begin
lon = j * 0.5 - 180

res = where((param(6,*) gt (lat-0.25) and $
  param(6,*) le (lat+0.25)) and $
  (param(5,*) gt (lon-0.25) and $
    param(5,*) le (lon+0.25)) and $
  (param(25,*) ge 0. and param(25,*) le 5.) and $
  param(10,*) gt 0. and $
  param(17,*) gt 0., count)

if(count gt 0) then begin
mean_aot(i,j) = mean(param(17,res))
  cnt(i,j) = count
std_aot(i,j) = 0.
  if (count gt 1) then begin
std_aot(i,j) = stddev(param(17,res))
  endif

;
```

```
printf,2,format='(7f10.3)',lat,lon,mswf(i,j),maot(i,j),cnt(i ,j),std_swf,std_aot

    endif

endfor
print,lat
endfor
endtime=systime(0)
close,2
print,'Start Time :',starttime
print,'End Time :',endtime
end
```

Subject: Re: equal lat long grid
Posted by [David Fanning](#) on Fri, 28 Apr 2006 18:52:12 GMT
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Pawan writes:

```
> I am running this program on IDL_6.0 on Linux machine and it gives me
> error on the following location. IDL does not recognize indgen_array.
>
> glon = indgen_array(nlon, nlat, /lon) * dlon + lon0[0] + dlon / 2.
> glat = indgen_array(nlon, nlat, /lat) * dlat + lat0[0] + dlat / 2.
>
> I was wondering is this just indgen or some other thing you want to do
> here ?
>
> glon = indgen(nlon, nlat) * dlon + lon0[0] + dlon / 2.
> glat = indgen(nlon, nlat) * dlat + lat0[0] + dlat / 2.
```

You will have to download this from his web page. See his previous post for a link to this file.

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
