
Subject: North America landmass extractiong using Land_mask function in idl
Posted by [siumtesfai](#) on Sat, 18 Jul 2015 00:27:37 GMT
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Hello All,

I have Climate model data with the following dimension

data = [144,73] ; longitude X latitude

I am interested in analyzing the landmass only. I would exclude ocean data.

I learned that there is idl function that does what I am interest to do.

That is land_mask.pro

However, here is my problem

land = land_mask (resolution=[2.5,2.5], lat=lat,lon=lon)

This would provide a dimension of

land = [144,72] :

0 represent ocean

1 represent land

I would do the following to get the landmass data which I know it has a dimension of 144 longitude by 73 latitude with 2.5 by 2.5 resolution

```
landmass= fltarr(144,73)
```

```
FOR i=0,143 do begin
```

```
FOR j=0,72 do begin
```

```
  x=reform(land(i,j))
```

```
  y=where(x GT 0 )
```

```
  if y(0) GE 0 then begin
```

```
    landmass(i,j)=data(i,j)
```

```
  endif else begin
```

```
    landmass(i,j)= !F.values_NAN
```

```
  endelse
```

```
ENDFOR  
ENDFOR
```

Problem is out of range latitude range that is the j loop

Additional example is below

```
land = LAND_MASK( lat=lat,lon=lon,Limit=[-170,30,-50,75],resolution=[2.5,2.5])
```

Land_mask function provide the following dimension for north america domain

```
land = [48,18]
```

It should have given the following dimension

```
land =[49,17]
```

What am i missing ?

Thank you very much for you help

Best regards
