Subject: interpolate 3D matrix
Posted by g.nacarts on Mon, 02 Mar 2015 14:04:36 GMT
View Forum Message <> Reply to Message

Hi

I have two 3D arrays Ax and Ay with the following dimensions[100,4,4]=[time,x,y].

I wanted to interpolate my matrices Ax and Ay and make them to have dimensions of [100,8,8]. A part of my code is shown below:

```
size = 8
Ax_2D_INT = fltarr(100,size,size)
Ay_2D_INT = fltarr(100,size,size)

for i=0, 99 do begin
    Ax_2D = REFORM(Ax[i,*,*])  ;change 3D to 2D
    Ay_2D = REFORM(Ay[i,*,*])

   dimensions_I_need = size(Dindgen(size,size),/Dimensions)
   dimensions_I_have = size(Ax_2D,/Dimensions)

  X = cgScaleVector(Dindgen(dimensions_I_need[0]), 0, dimensions_I_have[0]-1)

  Y = cgScaleVector(Dindgen(dimensions_I_need[1]), 0, dimensions_I_have[1]-1)

  Ax_2D_INT = INTERPOLATE(Ax_2D,X, Y, /GRID)
  Ay_2D_INT = INTERPOLATE(Ay_2D,X, Y, /GRID)
endfor
```

I got the following error but I couldn't figure out why.
Attempt to subscript DIMENSIONS_I_HAVE with <INT   (1)> is out of range.