Subject: help with IF statement
Posted by g.nacarts on Wed, 21 Jan 2015 17:26:56 GMT
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Hi

I need some help with an IF statement because I suspect that it's not doing what I really wish to do.

I have a 3D array [120,200,200] which contains my data. Then I am using this matrix to create another matrix. My code looks like this

DataArray ; contains the 3D data
Mean = total(DataArray[0:4,*,*],1)/5.

for i = 0, 199 do begin
   for j = 0, 199 do begin
      Barray = DataArray[*,i,j] - Array[i,j]
      IF (TOTAL(Barray LT 0)) GT 0 THEN NEW_DATA[*,j,k] = Mean[j,k] $
      ELSE NEW_DATA[*,j,k] = Mean[j,k] + OTHER
   endfor
endfor

What I wanted to achieve with the above is that if an entry in the Barray has a negative value then the New_Data it's equals the mean otherwise NEW_DATA= Mean+ OTHER.
My data are images and when I display the images after that I found out that in places that there are not negative numbers the new_data array equals the mean only not the whole expression (Mean[j,k] + OTHER). Why this happened? It supposed to use the mean only when there are negatives.

Subject: Re: help with IF statement
Posted by penteado on Thu, 22 Jan 2015 00:07:40 GMT
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If I am reading it right, your code seems to match your description. Someone here used to say that this usually means there is something wrong with your assumptions about your arrays.

I would suggest checking the types, dimensions and values of some of the relevant expressions in your code, such as barray, other, dataarray[*,i,j], array[i,j], new_data[*,j,k] and mean[j,k]

By the way, are the expressions with new_data and mean supposed to be indexed by j and k? Not j and i? There is nothing in this code fragment setting the value of k. If it is really k, check that j and k were not swapped.

Paulo

On Wednesday, January 21, 2015 at 3:26:59 PM UTC-2, g.na...@gmail.com wrote:

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Subject: Re: help with IF statement
Posted by g.nacarts on Thu, 22 Jan 2015 09:29:56 GMT

Thanks for your suggestions I will take a look. Just to double check my code

Instead of this IF statement:
 IF (TOTAL(Barray LT 0)) GT 0 THEN NEW_DATA[*,i,j] = Mean[i,j] $
     ELSE NEW_DATA[*,i,j] = Mean[i,j] + OTHER

Replace it by this:
  NEW_DATA[*,j,k] >= Mean[j,k] $

Still doing the same thing right?