
Subject: a newbie question on code efficiency
Posted by [gogosgogos](#) on Sat, 18 Aug 2001 02:54:19 GMT
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Dear group members,

i have a little challenge for you which i stumbled into..
i tried to write a program which takes a 3d array,
sets a cutoff at a certain level and then creates a mask
of all values above that level. the mask has to be 1 and 0.
i came up with this code, but could never get rid of the loop.

any suggestions on how to get rid of the loop?
i would prefer array operators for speed :)

;-----

PRO MAKE_MASK

a = dialog_pickfile()
b = READ_BINARY(a, DATA_TYPE=1, DATA_DIMS=[160,256,256])

b_dims = size(b)
x_dim = b_dims[1]
y_dim = b_dims[2]
z_dim = b_dims[3]

cutoff = 180

e = b

for i = 0, (x_dim-1) do begin
 for j = 0, (y_dim-1) do begin
 for k = 0, (z_dim-1) do begin

 if e[i,j,k] lt cutoff then e[i,j,k]=0
 if e[i,j,k] ge cutoff then e[i,j,k]=1

 endfor
 endfor
endfor

; and so on to use the mask further in the program

END
