

Hi everybody,

I feel really dumb asking this question, but I haven't been able to figure out a better way to write this code... and (it will become clear) programming obviously isn't my forte.

I have several arrays of data of the same length:

num=[data between 0 and 1 say]

temp=[data between 195 and 205 K]

and so on...

I would like to plot a histogram of % data for three different temperature ranges

So what this means is, I pick all the data

1) where the "num" array is between 0 and 1, and "temp" is between 195-200.

2) where "num" is between 0.1 and 1, and "temp" is between 195 and 200.

3) "num": 0.2 through 1 and "temp": 195 to 200

4) and so on...

repeat this for every 5 degree increment for temperature.

Basically, I THINK I would like to create an array made up of the output of a bunch of where statements.

This lame code is what I have written, could you please help me write this in a better/faster/not so emabarassing way?

plot, x_values, y_values, /nodata, etc, etc....

for k=0, 2 do begin

 a=where((num gt 0.0) and (temp GE (195+5*k)) AND (temp LT (200+5*k)))

 b=where((num gt 0.1) and (temp GE (195+5*k)) AND (temp LT (200+5*k)))

 c=where((num gt 0.2) and (temp GE (195+5*k)) AND (temp LT (200+5*k)))

 [.....]

 if (n_elements(a) GT 1) then a=n_elements(a) else a=0

 if (n_elements(b) GT 1) then b=n_elements(b) else b=0

 if (n_elements(c) GT 1) then c=n_elements(c) else c=0

[.....]

```
new_array=[a,b,c,d,e,f,g,h,i,j]  
max_value=float(a)  
oplot, x_values, (new_array/max_value)*100, PSYM=10
```

endfor

I know I should be using multidimensional arrays, but I always get stuck trying to define "new_array" without using all these repeated where statements.

Thanks for suffering through this! I would Dearly appreciate ANY suggestions (other than quit programming!) ;)

thanks again!
