
Subject: outputting 2D arrays into a txt file

Posted by [Kemal Ramic](#) on Mon, 13 Feb 2012 00:00:31 GMT

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Hello guys,

I am completely new to IDL. I have problems with outputting 2D arrays into a txt file. What i have to do is run the procedure a 1000 times, and the procedure is looking for a number of clumps hit in X-ray and optical area, and it goes through different inclination and azimuthal angle, and stores all the values into a 2D arrays, one for X-ray and one for Optical region. Here is my code:

```
function satellite,clumps,nasteps,nisteps,fnameex,fnameo

azi=0.0
observer_azi=0.0
ii=0.0
observer_i=0.0

lines_x=fltarr(nisteps+1,nasteps+1)
lines_o=fltarr(nisteps+1,nasteps+1)

; each row has same azi
for i=0L,nasteps-1 do lines_x[0,i+1]=(360.0/(nasteps-1))*i
for i=0L,nasteps-1 do lines_o[0,i+1]=(360.0/(nasteps-1))*i

; each column has same inclination from -90 to 90
for i=0L,nisteps-1 do lines_x[i+1,0]=(180.0/(nisteps-1))*i-90.0
for i=0L,nisteps-1 do lines_o[i+1,0]=(180.0/(nisteps-1))*i-90.0

for j=1L,nisteps do begin

for i=1L,nasteps do begin

intersect_x=fltarr(2,50)
intersect_o=fltarr(2,600)

print, 'Azimuth=', lines_x[0,i]
print, 'Inclination=', lines_x[j,0]

line_sphere_test,clumps,lines_x[0,i],lines_x[j,
0],intersect_x,intersect_o
print, moment(intersect_x[0,*])
print, moment(intersect_o[0,*])
```

```

lines_x[j,i]=(moment(intersect_x[0,*]))[0]
lines_o[j,i]=(moment(intersect_o[0,*]))[0]
print,'end of a step'

endfor
endfor

openw,1,fnamex
openw,2,fnameo
for j=0L,nasteps do begin

    printf,1,lines_x[* ,j]
    printf,2,lines_o[* ,j]

endfor
close,1
close,2

return, lines_o

end
and this is how i run the code 1000 times:pro run_satellite

N = 1000
root='datarun5_kemal'
nasteps=3
nisteps=3

for i=0,N-1 do begin

    fxray=root+strtrim(i,2)+'_xray.txt'
    fopt=root+strtrim(i,2)+'_opt.txt'

    clumps=clumps_generator(1000,0.5,2,30,0.02,1.5)

    test=satellite(clumps,nasteps,nisteps,fxray,fopt)

endfor

return
end

```

The problem that occurs is the way tables(arrays) are formatted. First it doesnt output 1000 txt files for each, but it crams them up in a few, and then I cant figure out formatting at all. What i want is having them, in tables where i can later go through each column, and

analyze data. Can somebody please help me?
