Subject: black wrong multicolor map
Posted by Chrisss on Thu, 28 Nov 2013 22:45:32 GMT
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Hi guys!
the goal of my work should be to show, as a result, a multicolor map about 2D matrix within each pixel's value is the percentage fitting error obtained by:

100*(SQRT((TOTAL(yCurr-yfit))^2 /yCurr))

where yCurr and yfit are two curves within nested-for loops. Each pixel has a different error but my final map is monochrome….that meaning it's completely wrong! Where are the mistakes?
this is my code,
thanks in advance

```
FORWARD_FUNCTION muskfunct, X, A

t=TR/NSrr
t=t*frm
x=t
num_x=N_ELEMENTS(x)
ERR=FLTARR(num_x)
w=FLTARR(num_x)
w[*]=1.0
PARINFO=replicate({value:0.D, fixed:0, limited:[0,0], limits:[0.D,0]}, 3)
parinfo[0].limited(*) = [1,1]  ;S0 limits(S0>0)
parinfo[0].limits[0] = 0.0
parinfo[0].limits[1]  = 1000.0
parinfo[1].limited(*) = [1,1]  ;0<f<1
parinfo[1].limits[0] = 0.5
parinfo[1].limits[1]  = 1.0
parinfo[2].limited(*) = [1,1]  ;T1 limits(T1>100)
parinfo[2].limits[0] = 100
parinfo[2].limits[1]  = 4000.0
A0=[60.0, 1.0, 1000.0]
parinfo[*].value = A0

T1map=FLTARR(dx,dy)
FitErrMap=FLTARR(dx,dy)

fitErrors=FLTARR(num_x)
T1values=FLTARR(num_x)
S0values=FLTARR(num_x)
fValues=FLTARR(num_x)

for i=0,dx-220 do begin
  for j=0,dy-220 do begin
```

```
    y=REFORM(Im_final1[i,j,*],num_x)

    for t=0,num_x-1 do begin
      T0=t
      yCurr=y
      IF (t ne 0 ) THEN  yCurr[0:T0]=-y[0:T0]
      A0=[y(num_x-1), 1.0, 1000.0]
      A=mpfitfun('maskfunct',x, yCurr, ERR, A0, PARINFO=parinfo, WEIGHTS=w,YFIT=yfit,
BESTNORM=error,/QUIET)

      fitErrors[t]=error
      S0values[t]=A[0]
      fvalues[t]=A[1]
      T1values[t]=A[2]
      yCurrT=TOTAL(yCurr[0:num_x-1])
      yfitT=TOTAL(yfit[0:num_x-1])
    endfor
    min=MIN(fitErrors,idmin)
    T1 = T1values[idmin]
    f=fvalues[idmin]
    S0=S0values[idmin]
    yfit=maskfunct(x,[S0,f,T1])
    T1map[i,j]=T1
    RMSE=100.*sqrt(((yCurrT-yfitT)^2)/yCurrT)
    FitErrMap[i,j]=RMSE
  endfor
endfor

iimage, T1map, TITLE='T1map'
stop1=systime(1)
iimage, FitErrMap, RGB_TABLE=39, TITLE='FitError map'
```