
Subject: Re: faster minimization needed - maybe mpfit?

Posted by [rogass](#) on Tue, 27 Mar 2012 12:28:02 GMT

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Hi Craig,

sorry I made several typos. I would also be satisfied with a least squares solution as you can see if you compare function test2 with the previous posts. The function I want to minimize is test2. It doesn't matter for me at this stage whether `total(abs(resid))` or `total(resid^2)` is minimized.

```
function test2,p,xval=x,errval=err
resid=convol(x-rebin(p[*],size(x,/dim)),[-1.,0.,1.])
return,total(resid^2)
end
```

```
ENVI> help,im
IM      INT      = Array[512, 7237]
ENVI> sz=size(im,/dim)
ENVI> im2=im+fix(1000.*rebin((((add=randomn(seed,sz[0]))-mean(add ))/
stddev(add),sz))
ENVI> help,im2
IM2     INT      = Array[512, 7237]
ENVI> p0=((p0=total(im2,2)/float(sz[1])))>smooth(p0,3,/edge_trunc)
ENVI> help,p0
P0      FLOAT    = Array[512]
ENVI> st={x:im2,errval:sqrt(p0)}
&res=mpfit('test2',p0,functargs=st,maxiter=100,status=st atus,errmsg=errmsg)
&print,status,string(10b),errmsg
0
ERROR: number of parameters must not exceed data
```

THANKS in advance

CR
