
Subject: Re: faster minimization needed - maybe mpfit?

Posted by [rogass](#) on Thu, 29 Mar 2012 06:45:24 GMT

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On 27 Mrz., 15:38, Craig Markwardt <craig.markwa...@gmail.com> wrote:

> On Tuesday, March 27, 2012 8:28:02 AM UTC-4, chris wrote:

>> 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 doesnt

>> 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

>

> Check out the documentation for MPFIT. It expects your user function to return a 1D array of residuals, not the sum of squares.

>

> Craig

Dear Craig,

now it works perfect. Thank you!

CR
