
Subject: Re: FIT across images

Posted by [bas.basetta](#) on Wed, 08 Apr 2009 12:23:59 GMT

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Hi all,
just to let you know, I now figured it out.

I messed it up with

- a. wrong dimensions of "F", which has to be the same as "fit"
- b. bad use of the * "simple" matrix product.

To simplify matrix products I reformed the S matrix as [n,size,size]
to [n,m], where m=size*size, and so A to [3,m]. I then used the
function

```
iv=replicate(1,(size(x,/dimensions))[0])  
bx = EXP(-x#A[1,*])  
F = (iv#A[0,*]) * bx + iv#A[2,*]
```

where x is now [n] and F is [n,m]. The procedure

```
fit=mpcurvefit(x,dummyS,W,A,sigma,function_name='expmap',chi sq=chisq,  
noderivative,/quiet)
```

now works, with fit=[n,m], and produces the same results as the double
forloop procedure does. The funny thing is: it is one hundred times
slower. Maybe there is a lesson to learn here.

Have fun,
Bas
