
Subject: Re: MPFIT2DPEAK with constraints
Posted by [Craig Markwardt](#) on Fri, 10 Oct 2003 03:00:26 GMT
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c.carrano@att.net (Charles Carrano) writes:
> Greetings. I'm trying to understand how Craig
> Markwardt's peak fitting function MPFIT2DPEAK
> works when you wish to require that certain
> parameters be held constant.
>
> Specifically, I know that my data should peak
> at the origin and so I'd like to force the
> fitted Gaussian to peak there as well.
>
> Despite specifying that A[4] and A[5] be
> fixed using the PARINFO structure, the fitted
> Gaussian is not centered at the origin.
> Supplying PARINFO to MPFIT2DPEAK does change
> the fit but it actually makes it slightly worse.
> Anyone know what I might be doing wrong?

Greetings--

> zfit = mpfit2dpeak(z, a1, x, y, /tilt, PARINFO=pi)

The documented way to enter the initial parameters to MPFIT2DPEAK is using the ESTIMATES keyword.

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: MPFIT2DPEAK with constraints
Posted by [c.carrano](#) on Fri, 10 Oct 2003 14:51:18 GMT
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Craig Markwardt <craigmnet@REMOVEcow.physics.wisc.edu> wrote in message news:<onzng9lrud.fsf@cow.physics.wisc.edu>...
> c.carrano@att.net (Charles Carrano) writes:
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>
> Craig

Thank you. I had inadvertently confused the functions of the parinfo.value and ESTIMATES parameters. Passing ESTIMATES=a0 to mpfit2dpeak fixes the sample code above. Thank you for your help and, of course, your valuable software contribution to the scientific community.

- Charles
