
Subject: Re: weighted total least-squares regression
Posted by [wlandsman](#) on Wed, 04 Nov 2009 20:54:18 GMT
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On Nov 4, 2:14 pm, nata <bernat.puigdomen...@gmail.com> wrote:

> Hi gurus,
> I'm trying to find a routine to compute the weighted total least-
> squares regression.
> Does somebody know where can I found a routine to compute it ?
>

My understanding (from Wikipedia) is that weighted total least-squares regression refers to fitting with errors in both coordinates. (sixlin.pro is for fitting a straight line where the errors are not given.) If you are just fitting a straight line you could try fitexy (<http://idlastro.gsfc.nasa.gov/ftp/pro/math/fitexy.pro>) or Craig Markwardt's linefitex (<http://www.physics.wisc.edu/~craigm/idl/down/linefitex.pro>) which uses MPFIT. These routines are different implementations of the "Numerical Recipes" chapter.

But if you really want to do it right (though in a less straightforward and much more computationally expensive way), then I would use Brandon Kelley's Bayesian (Markov Chain Monte Carlo) program linmix_err

http://idlastro.gsfc.nasa.gov/ftp/pro/math/linmix_err.pro

--Wayne
