## Subject: orthogonal distance regression
Posted by Steve.Morris on Mon, 24 Oct 2005 15:59:32 GMT
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Does anybody know if somewhere on the net there's a package to perform orthogonal distance regression ?

I have found odrpack from netlibe.org, but I was just wondering whether an already idl cocked package exists...

More generally, if anybody has already used such a technique, advices or tutorial are welcome :)

Thanks in advance!
S.

## Subject: Re: orthogonal distance regression
Posted by Paolo Grigis on Tue, 25 Oct 2005 07:38:41 GMT
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For *linear* regression, there exist sixlin.pro by W. Landsman from the IDL astronomy library:

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

It computes 6 different kind of linear regression (x vs. y, y vs. x, orthogonal etc.).

The programs implements the procedure described in

Isobe, Feigelson, Akritas, and Babu, Astrophysical Journal
Vol. 364, p. 104 (1990)

which has a nice overview of the effect of the different linear regression methods for data sets where the spread of the data is large. This of course apply not only to astronomy but to other fields as well.

Ciao,
Paolo


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## Subject: Re: orthogonal distance regression
Posted by Craig Markwardt on Tue, 25 Oct 2005 15:37:21 GMT
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Steve.Morris@libero.it writes:
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ODR has been discussed before on this newsgroup. I'm not aware of any
package in IDL. A curve fitting program like MPFIT would need to be
modified pretty significantly to accomodate the ODR aspects. [*] In
the past I've referred people to ODRPACK and they've been very happy
(except that it's not native IDL).

Craig

[*] - actually, the changes are not huge. It might be an interesting
project for someone.

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