Subject: power law fitting for errors on both coordinates
Posted by jiajianshen on Tue, 11 Apr 2006 02:14:23 GMT
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I have a data set, which should be a power law, y=a*x^b, both x, y has their own error measurements. In astronomy, one usually do the log base and then do a linear fitting to the data (FITEXY).

My advisor hope me do the fitting in the power, not the log based linear relation. My question is that will the result by the power law fitting significantly different from the log based linear fitting? The error is symmetric in normal coordinate, but it will be unsymmetric in log base, and there is error propagation problem when doing log base.

Do you have any suggestion to do a power law fitting for both x and y coordinates have their own error measurements? Any information is highly appreciated.

Thanks,

Jiajian