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Subject: Re: scalogram

Posted by [Achim Hein](#) on Tue, 27 May 1997 07:00:00 GMT

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Harald Dankworth wrote:

>  
> Hi,  
>  
> I use IDL to compute the wavelet coefficients of a signal and  
> present them as a scalogram. The wavelet coefficients are non-uniformly  
> distributed over the time-scale plane. My problem is: how do I  
> interpolate the intermediate values?

As I understand you right, you have got the problem that you have  
evaluated coefficients and these values do not correspondent to an  
equidistant axis - where you came from.

So, you have to do an interpolation to 'fit' the nonequidistant  
'distributed' values in equidistant samples.

If these remarks are correct, there are some methods to 'fit' your  
values or let us say there are methods to resample your values.

You can look for any kind of linear or bilinear interpolation.

Furthermore there are the spline interpolations and that's what I  
recommend.

Additionally in IDL you have a wonderful simply routine to interpolate  
with cubic splines. For some more information look the online help for  
SPLINE.

Cheers

Achim

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