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Subject: Re: Question relating to IDL wavelet methods  
Posted by [mccreigh](#) on Fri, 16 Jan 2009 19:59:10 GMT  
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People typeicall pad with zeros.

see

[http://paos.colorado.edu/research/wavelets/wave\\_idl/wavelet.pro](http://paos.colorado.edu/research/wavelets/wave_idl/wavelet.pro)

particularly it has a bulit-in method for doing it within the routine  
that you can just snatch

PAD = if set, then pad the time series with enough zeroes to get  
; N up to the next higher power of 2. This prevents wraparound  
; from the end of the time series to the beginning, and also  
; speeds up the FFT's used to do the wavelet transform.  
; This will not eliminate all edge effects (see COI below).

wonder why CT didnt bother putting this in the RSI/ITT production  
code? :)

You really should read everything from the Torrence and Como stuff at  
the site, including the paper and the code. It's highly informative,  
plus there are examples.

On Jan 16, 12:01 pm, Hu <jha...@gmail.com> wrote:

```
> Hi, there
> I got an array X which having 152 elements, and I want to use some
> wavelet methods to remove noise (abnormal elements), Here is my code
> in IDL
>
> ;;////////////////////////////////////
> ;;generate array X with 152 elements
> X=[....]
>
> ;;get information of specific wavelet (DAUBECHIES)
> infomation=WV_FN_DAUBECHIES(8,scaling,wavelet,ioff,joff)
>
> ;;define stop level
> nl=3
>
> ;;perform wavelet transformation
> xdwt = wv_dwt(X,scaling,wavelet,ioff,joff,n_levels=nl)      ;;-----
> here is the error source
>
> ;; denoise
```

```
> newdwt=wav_denoise(xdwt,'DAUBECHIES',3)
>
> ;;inverse wavelet transform
> idwt = wav_dwt(newdwt,scaling,wvx,ioff,joff,N_LEVELS=nl,INVERSE=1)
> help,idwt
> print,'idwt is',idwt
> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;; //
>
> The error information is:
> WV_DWT: Input array dimensions must be less than 4 or a power of 2.
>
> Can anybody here tell me the reason why this happened? and how can it
> be solved?
>
> Thanks
>
> Hu
```

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