Subject: Re: how to use wavelet transformation function in IDL?
Posted by Chris W on Mon, 12 Jan 2009 17:17:15 GMT
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On Jan 12, 10:49 am, Hu <jha...@gmail.com> wrote:
> Hi, there
> I got a time-series data array (suppose array X), Now I want to use
> wavelet functions in IDL library to filter the array, so that I can
> remove the abnormal data elements and make the time-series data more
> reasonable.
>
> Which functions should I use?
>
> In fact, I check some methods like WV_FN_COIFLET, or WV_DENOISE, but
> it dose not work, and the online help has no examples about this
> parts. So, I will be appreciate if you can give me an example. Many
> thanks.

Here are the steps I have used with the discrete wavelet transform:
(see idl help on wv_dwt)

;;Get information about the chosen wavelet:
;; could use any of the wv_fn_****** functions
info = wv_fn_symlet(12,scaling,wvx, ioff, joff)

nl = 3 ;; depth of the transform
;;Take the wavelet transform:
xdwt = wv_dwt(image, scaling,wvx, ioff, joff , n_levels=nl)

;;operate on xdwt, e.g, to get rid of noise
.....
newdwt = ...

;; inverse the transform with the inverse keyword
idwt = wv_dwt(newdwt,scaling,wvx,ioff,joff, N_LEVELS=nl, INVERSE=1)

Subject: Re: how to use wavelet transformation function in IDL?
Posted by jkj on Tue, 13 Jan 2009 13:25:28 GMT
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On Jan 12, 11:17 am, Chris W <cwood1...@gmail.com> wrote:
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We have been using this IDL wavelet toolkit:

http://paos.colorado.edu/research/wavelets/

-Kevin

Subject: Re: how to use wavelet transformation function in IDL?
Posted by Hu on Thu, 15 Jan 2009 22:01:44 GMT
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Really thank you two guys, I will check the website.
