Subject: Re: Using Haar wavelet with wv_cwt
Posted by benjamin.castellani on Fri, 13 Oct 2017 17:12:44 GMT
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On Sunday, December 18, 2016 at 12:32:21 PM UTC-7, owentr...@gmail.com wrote:
> Hi all,
> I've been trying to use wv_cwt to perform the wavelet transform on a 1d time series. It works fine with the morlet and paul wavelets but I cannot use it with the Haar wavelet. All I get in the console is "Keyword parameters not allowed in call."
>
> Any thoughts?
>
> Many thanks,
> Owen

I apologize that our wavelet documentation is a little "light" and confusing. The issue is that the Haar wavelet family is of type discrete. WV_CWT is for continuous wavelets only. You will want to use WV_DWT (for discrete).

You need to run WV_FN_HAAR separately first to create your coefficients based on the order you define.
Then you input all that information into WV_DWT to develop create wavelet transform.

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Example:

```
coefficents_parameters = wv_fn_haar(1,scaling,wavelet,ioff,joff)
data = randomu(1,64)
part_wv = wv_dwt(data, wavelet,scaling,ioff,joff, N_LEVELS=3)
```

Does this make sense? For continuous families, you can use WV_CWT directly. For discrete families, you must wave the WV_FN_FAMILYNAME function first, then WV_DWT.

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Hope this helps.

P.S. I will look into making this more clear in the IDL Documentation Center.

Ben Castellani
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