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Subject: Re: wavelet software for idl  
Posted by [hahn](#) on Wed, 06 Sep 1995 07:00:00 GMT  
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"Christian Oehreneder (PHOTO-Dissertand)" <coehrene> wrote:

> Schalom!

> I need wavelet software for IDL. Who knows where i can get it?

> Thanks in advance

> Chris

Version 3.6.1 of IDL has lib/demo/lib/xdemo/wvltool.pro  
a demo program for wavelet transformation. However,  
I couldn't find this program in version 4.0 of IDL. What did  
I overlook ?

I've read that some time ago that the wavelet transformation  
has been patented in the U.S. and is about to replace JPEG  
(and MPEG) in the near future. If that were the case I think we  
will no longer find a wavelet program in IDL. Any ideas on that ?

Norbert Hahn

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Subject: Re: wavelet software for idl  
Posted by [hahn](#) on Thu, 07 Sep 1995 07:00:00 GMT  
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kspencer@s.psych.uiuc.edu (Kevin Spencer) wrote:

> Wavelet routines, from Numerical Recipes in C, were incorporated in  
> IDL 3.6. I haven't installed IDL 4.0 yet, but I'm sure they're there --  
> look in the "Numerical Recipes" part of the online help.

Heureka!

The function is now called WTN. Usage is similar to FFT. The new  
algorithm may optionally use double precision.

Thanks

Norbert

> -----

> Kevin Spencer

> Cognitive Psychophysiology Laboratory and Beckman Institute

> University of Illinois at Urbana-Champaign

> kspencer@p300.cpl.uiuc.edu / kspencer@psych.uiuc.edu

> -----

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Subject: Re: wavelet software for idl  
Posted by [rivers](#) on Thu, 07 Sep 1995 07:00:00 GMT  
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In article <42ljh7\$7eq@vixen.cso.uiuc.edu>, kspencer@s.psych.uiuc.edu (Kevin Spencer) writes:  
> Wavelet routines, from Numerical Recipes in C, were incorporated in  
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In IDL 4.0.1 the function is WTN(), wavelet transform. This is a built-in (i.e. non-library) routine. There is also /lib/obsolete/nr\_wtn.pro, which is written in IDL.

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Subject: Re: wavelet software for idl  
Posted by [agrap](#)s on Thu, 07 Sep 1995 07:00:00 GMT  
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hahn@hrz.th-darmstadt.de (Norbert Hahn) writes:

> I've read that some time ago that the wavelet transformation  
> has been patented in the U.S. and is about to replace JPEG  
> (and MPEG) in the near future. If that were the case I think we  
> will no longer find a wavelet program in IDL. Any ideas on that ?

Do you remember where you read that? I'm finding it really hard to believe. The wavelet transform, wavelet packet transform, etc. are in use all through the sciences. There is currently alot of wavelet software out there (see my wavelet page at <http://www.amara.com/current/wavelet.html>).

There are elements in the wavelet field that are being patented. I know that some folks at Yale are applying for a patent on the best basis algorithm for selecting wavelet packets.

Replacing JPEG and MPEG with wavelets is a good idea. It's more robust and handles signal degradation alot better.

Amara

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\*\*\*\*\*

"That's the whole problem with science. You've got a bunch of empiricists  
trying to describe things of unimaginable wonder." - Calvin (& Hobbes)

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