Subject: Re: idl and pv-wave Posted by Achim Hein on Fri, 24 Jan 1997 08:00:00 GMT

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decre wrote:
> Achim Hein wrote:
>> Matt Delaney wrote:
>>>
>> In my opinion IDL allows more powerful tools especially graphic
>> input/output-tools additionally there are some little mistakes in the
>> WAVE/FFT algorithm.
>>
>> Achim
>>
>>
> Wooops!
> I'm new to pv-wave and intend to use it for fft, a.o.
> Can you comment on those little mistakes in the WAVE/FFT?
>
> Many thanks,
> Michel Decre
Try the following:
wave>test=findgen(4097)
wave>print,max(test-fft(test,-1),1))
wave>(31.3898,0.350983)
In IDL you will get as result:
IDL>test=findgen(4097)
IDL>print,max(test-fft(test,-1),1))
IDL>(0.000244141,1.39110e-05)
```

If you try to evaluate this FFT with a 4096-length, the results in both programs are quite equal.

There was a discussion some month ago with Sergei Senin...: In his opinion:

> <There seems to be no mistake, but simply no check in the procedure <for the number of elements in the array being 2<sup>X</sup>.

But I think:

- > It seems so, but I think a Fourier-Transform-Algorithm has to
- > run for every array length
- > <No, it shouldn't (at least in what is called classical FFT) but a

- <\*programme\*, based on the algorithm should.</pre>
- > <Sergei Senin
- > <ss@ee.port.ac.uk, http://www.ee.port.ac.uk:80/~ss-www/

Is there any 'mistake'-archive for IDL/WAVE?

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