Subject: Re: question relating to FFT

Posted by pgrigis on Mon, 02 Mar 2009 23:21:59 GMT

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Hu wrote:
> On Mar 2, 2:37 pm, Paolo <pgri...@gmail.com> wrote:
>> Hu wrote:
>>> Hi, there
>>> I try to use FFT function to smooth a curve (an array), and the code
>>> is like this:
>>
                                                    :****FAST FOURIER
>>> FUNCTION FOURIER, ARRAY
FLITER
      FILTER=1.0/(1.0+DIST(152)/4.0)^2
>>>
>>>
      newARRAY=FFT(FFT(ARRAY,-1)*FILTER,1)
      RETURN, newARRAY
>>> END
>>
>>> when I got an array X (has 152 elements) and use this function like :
>>
>>> Y = FOURIER(X)
>>> I got an result Y with 152 elements, but all the elements are complex
>>> number, but How can I got an array filled with regular number, not
>>> complex number?
>>
>> To get real number,
>> you can take the REAL_PART or the ABS of your array.
>> But you are using a very strange filter indeed...
>>
>> Ciao.
>> Paolo
>>
>>
>>
>>> I mean, I want to use the result to calculate regression relationship
>>> with other array.
>>
> Thank you ,and Why do you say it's strange? I want to denoise the
> whole curve( store as array) to make it more reasonable.
Try plot, dist(152)
Does that look like what you want?
Ciao,
Paolo
```