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Subject: digital\_filter

Posted by [claire.maraldi](#) on Mon, 28 Jan 2008 14:46:07 GMT

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Hi,

I have a problem of comprehension with the digital filter tool.

I have an array "X" of n elements, the delta between two elements is  
"1unit"

I would like to creat a pass band filter between 1unit and 60 units

In IDL I write

```
; Filtre : 1unit<T<60unit ;  
delta=1. ;  
f_low=1./(60.*1.)  
f_high=1./(1.*1.)  
a_ripple=50. & nterms=40.  
coeff=DIGITAL_FILTER(f_low*2*delta, f_high*2*delta, a_ripple, nterms)
```

```
X_filter=convol(REFORM(X),coeff,/EDGE_TRUNCATE)
```

Then when I compute FFT(X\_filter), I see than my signal has been cut  
between 1 unit and more than 60units (about 100 units). Are my  
definitions of f\_low and f\_high wrong, or is this a problem related to  
the digital\_filter function ?

Thanks

Claire

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