Subject: Re: Approximate convolution - for loop problem
Posted by Sam on Mon, 22 Dec 2008 22:19:39 GMT
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It seems more memory demanding and I can not allocate the memory for
it.
Well, thank you for the suggestions. Best Regards, Sam.

On Dec 22, 10:31 am, Wox <s...@nomail.com> wrote:
> On Sun, 21 Dec 2008 09:32:40 -0800 (PST), samuel.le...@gmail.com
> wrote:
>
>> nsamp=n_elements(signal)
>> const1 = exp(-tsamp/taubolo)
>> const2 = 1.-const1
>
>> bolo_signal = const2*signal
>> for ii= 1L,nsamp-1L do begin
>> bolo_signal[ii] += const1*bolo_signal[ii-1]
>> endfor
>
>> where tsamp and taubolo are scalars. Is there any way to avoid the for
>> loop in this case? The hope is to speed up the execution.
>
> This is without loop. Not sure it's faster though.
>
> a=[1.,2.,3.,4.]
> c=0.5
> n=n_elements(a)
>
> a=reform([reform(rebin([a,0],n+1,n-1,/sample),n*n-1),a[0]],n ,n)
> i=REBIN(LINDGEN(n), n, n)
> j=REBIN(TRANSPOSE(LINDGEN(n)), n, n)
> a*= i ge j
>
> c=rebin(c^reverse(indgen(n)),n,n,/sample)
> a=reverse(total(a*c,1))
> print,a